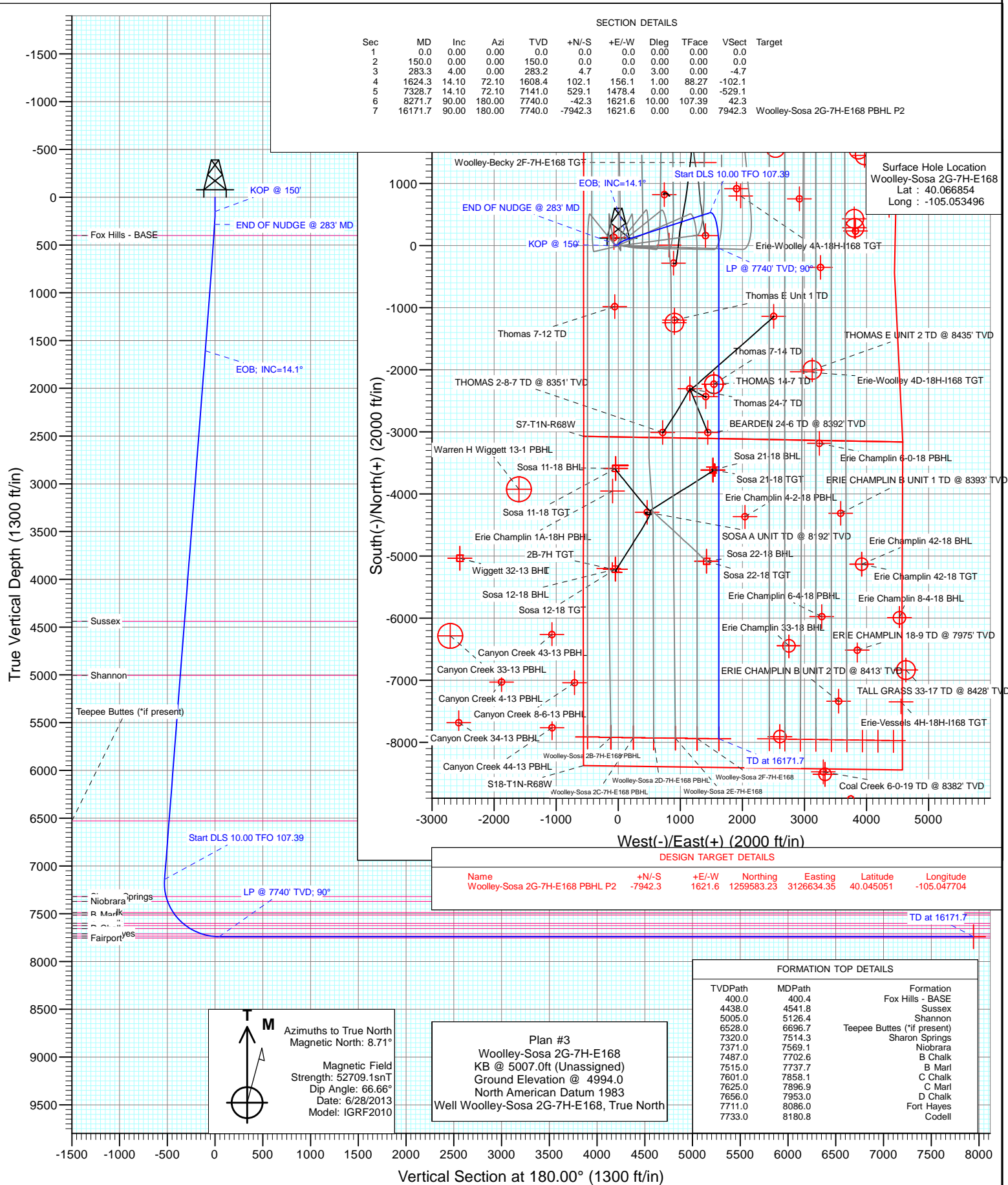




Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)
Well: Woolley-Sosa 2G-7H-E168
Wellbore: HZ
Design: Plan #3



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-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 2G-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 2G-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,517.23 ft	Latitude:	40.066854
	+E/-W	0.0 ft	Easting:	3,124,972.80 ft	Longitude:	-105.053496
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	8.71	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	
150.0	0.00	0.00	150.0	0.0	0.0	0.00	0.00	0.00	0.00	
283.3	4.00	0.00	283.2	4.7	0.0	3.00	3.00	0.00	0.00	
1,624.3	14.10	72.10	1,608.4	102.1	156.1	1.00	0.75	5.38	88.27	
7,328.7	14.10	72.10	7,141.0	529.1	1,478.4	0.00	0.00	0.00	0.00	
8,271.7	90.00	180.00	7,740.0	-42.3	1,621.6	10.00	8.05	11.44	107.39	
16,171.7	90.00	180.00	7,740.0	-7,942.3	1,621.6	0.00	0.00	0.00	0.00	Woolley-Sosa 2G-7H-

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-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 2G-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	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	KOP @ 150'
200.0	1.50	0.00	200.0	0.7	0.0	-0.7	3.00	3.00	
283.3	4.00	0.00	283.2	4.7	0.0	-4.7	3.00	3.00	END OF NUDGE @ 283' MD
300.0	4.01	2.38	299.9	5.8	0.0	-5.8	1.00	0.05	
400.0	4.20	16.13	399.6	12.8	1.2	-12.8	1.00	0.19	
400.4	4.20	16.13	400.0	12.9	1.2	-12.9	0.00	0.00	Fox Hills - BASE
500.0	4.61	28.07	499.3	19.9	4.1	-19.9	1.00	0.41	
600.0	5.17	37.75	598.9	27.0	8.7	-27.0	1.00	0.57	
700.0	5.86	45.34	698.5	34.1	15.1	-34.1	1.00	0.69	
800.0	6.63	51.27	797.9	41.3	23.3	-41.3	1.00	0.77	
900.0	7.45	55.94	897.1	48.6	33.1	-48.6	1.00	0.82	
1,000.0	8.31	59.66	996.2	55.9	44.7	-55.9	1.00	0.86	
1,100.0	9.20	62.68	1,095.0	63.2	58.1	-63.2	1.00	0.89	
1,200.0	10.11	65.17	1,193.6	70.5	73.1	-70.5	1.00	0.91	
1,300.0	11.03	67.25	1,291.9	77.9	89.9	-77.9	1.00	0.92	
1,400.0	11.97	69.01	1,389.9	85.3	108.4	-85.3	1.00	0.94	
1,500.0	12.91	70.51	1,487.6	92.8	128.6	-92.8	1.00	0.95	
1,600.0	13.87	71.81	1,584.8	100.2	150.6	-100.2	1.00	0.95	
1,624.3	14.10	72.10	1,608.4	102.1	156.1	-102.1	1.00	0.96	EOB; INC=14.1°
1,700.0	14.10	72.10	1,681.8	107.7	173.7	-107.7	0.00	0.00	
1,800.0	14.10	72.10	1,778.8	115.2	196.9	-115.2	0.00	0.00	
1,900.0	14.10	72.10	1,875.8	122.7	220.0	-122.7	0.00	0.00	
2,000.0	14.10	72.10	1,972.8	130.2	243.2	-130.2	0.00	0.00	
2,100.0	14.10	72.10	2,069.8	137.7	266.4	-137.7	0.00	0.00	
2,200.0	14.10	72.10	2,166.8	145.2	289.6	-145.2	0.00	0.00	
2,300.0	14.10	72.10	2,263.8	152.6	312.8	-152.6	0.00	0.00	
2,400.0	14.10	72.10	2,360.8	160.1	335.9	-160.1	0.00	0.00	
2,500.0	14.10	72.10	2,457.7	167.6	359.1	-167.6	0.00	0.00	
2,600.0	14.10	72.10	2,554.7	175.1	382.3	-175.1	0.00	0.00	
2,700.0	14.10	72.10	2,651.7	182.6	405.5	-182.6	0.00	0.00	
2,800.0	14.10	72.10	2,748.7	190.1	428.7	-190.1	0.00	0.00	
2,900.0	14.10	72.10	2,845.7	197.6	451.8	-197.6	0.00	0.00	
3,000.0	14.10	72.10	2,942.7	205.0	475.0	-205.0	0.00	0.00	
3,100.0	14.10	72.10	3,039.7	212.5	498.2	-212.5	0.00	0.00	
3,200.0	14.10	72.10	3,136.7	220.0	521.4	-220.0	0.00	0.00	
3,300.0	14.10	72.10	3,233.6	227.5	544.6	-227.5	0.00	0.00	
3,400.0	14.10	72.10	3,330.6	235.0	567.7	-235.0	0.00	0.00	
3,500.0	14.10	72.10	3,427.6	242.5	590.9	-242.5	0.00	0.00	
3,600.0	14.10	72.10	3,524.6	250.0	614.1	-250.0	0.00	0.00	
3,700.0	14.10	72.10	3,621.6	257.4	637.3	-257.4	0.00	0.00	
3,800.0	14.10	72.10	3,718.6	264.9	660.5	-264.9	0.00	0.00	
3,900.0	14.10	72.10	3,815.6	272.4	683.6	-272.4	0.00	0.00	
4,000.0	14.10	72.10	3,912.6	279.9	706.8	-279.9	0.00	0.00	
4,100.0	14.10	72.10	4,009.5	287.4	730.0	-287.4	0.00	0.00	
4,200.0	14.10	72.10	4,106.5	294.9	753.2	-294.9	0.00	0.00	
4,300.0	14.10	72.10	4,203.5	302.4	776.4	-302.4	0.00	0.00	
4,400.0	14.10	72.10	4,300.5	309.8	799.5	-309.8	0.00	0.00	
4,500.0	14.10	72.10	4,397.5	317.3	822.7	-317.3	0.00	0.00	
4,541.8	14.10	72.10	4,438.0	320.5	832.4	-320.5	0.00	0.00	Sussex
4,600.0	14.10	72.10	4,494.5	324.8	845.9	-324.8	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-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 2G-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
4,700.0	14.10	72.10	4,591.5	332.3	869.1	-332.3	0.00	0.00	
4,800.0	14.10	72.10	4,688.5	339.8	892.3	-339.8	0.00	0.00	
4,900.0	14.10	72.10	4,785.4	347.3	915.4	-347.3	0.00	0.00	
5,000.0	14.10	72.10	4,882.4	354.8	938.6	-354.8	0.00	0.00	
5,100.0	14.10	72.10	4,979.4	362.2	961.8	-362.2	0.00	0.00	
5,126.4	14.10	72.10	5,005.0	364.2	967.9	-364.2	0.00	0.00	Shannon
5,200.0	14.10	72.10	5,076.4	369.7	985.0	-369.7	0.00	0.00	
5,300.0	14.10	72.10	5,173.4	377.2	1,008.2	-377.2	0.00	0.00	
5,400.0	14.10	72.10	5,270.4	384.7	1,031.3	-384.7	0.00	0.00	
5,500.0	14.10	72.10	5,367.4	392.2	1,054.5	-392.2	0.00	0.00	
5,600.0	14.10	72.10	5,464.4	399.7	1,077.7	-399.7	0.00	0.00	
5,700.0	14.10	72.10	5,561.4	407.2	1,100.9	-407.2	0.00	0.00	
5,800.0	14.10	72.10	5,658.3	414.6	1,124.1	-414.6	0.00	0.00	
5,900.0	14.10	72.10	5,755.3	422.1	1,147.2	-422.1	0.00	0.00	
6,000.0	14.10	72.10	5,852.3	429.6	1,170.4	-429.6	0.00	0.00	
6,100.0	14.10	72.10	5,949.3	437.1	1,193.6	-437.1	0.00	0.00	
6,200.0	14.10	72.10	6,046.3	444.6	1,216.8	-444.6	0.00	0.00	
6,300.0	14.10	72.10	6,143.3	452.1	1,240.0	-452.1	0.00	0.00	
6,400.0	14.10	72.10	6,240.3	459.6	1,263.1	-459.6	0.00	0.00	
6,500.0	14.10	72.10	6,337.3	467.0	1,286.3	-467.0	0.00	0.00	
6,600.0	14.10	72.10	6,434.2	474.5	1,309.5	-474.5	0.00	0.00	
6,696.7	14.10	72.10	6,528.0	481.8	1,331.9	-481.8	0.00	0.00	Teepee Buttes (*if present)
6,700.0	14.10	72.10	6,531.2	482.0	1,332.7	-482.0	0.00	0.00	
6,800.0	14.10	72.10	6,628.2	489.5	1,355.9	-489.5	0.00	0.00	
6,900.0	14.10	72.10	6,725.2	497.0	1,379.0	-497.0	0.00	0.00	
7,000.0	14.10	72.10	6,822.2	504.5	1,402.2	-504.5	0.00	0.00	
7,100.0	14.10	72.10	6,919.2	512.0	1,425.4	-512.0	0.00	0.00	
7,200.0	14.10	72.10	7,016.2	519.4	1,448.6	-519.4	0.00	0.00	
7,300.0	14.10	72.10	7,113.2	526.9	1,471.8	-526.9	0.00	0.00	
7,328.7	14.10	72.10	7,141.0	529.1	1,478.4	-529.1	0.00	0.00	Start DLS 10.00 TFO 107.39
7,400.0	13.73	102.02	7,210.3	530.0	1,495.0	-530.0	10.00	-0.51	
7,500.0	18.50	134.42	7,306.5	516.4	1,518.0	-516.4	10.00	4.77	
7,514.3	19.50	137.55	7,320.0	513.0	1,521.2	-513.0	10.00	7.00	Sharon Springs
7,569.1	23.73	147.07	7,371.0	497.0	1,533.4	-497.0	10.00	7.72	Niobrara
7,600.0	26.31	151.10	7,399.0	485.8	1,540.1	-485.8	10.00	8.35	
7,700.0	35.19	160.19	7,484.9	439.2	1,560.6	-439.2	10.00	8.88	
7,702.6	35.43	160.37	7,487.0	437.8	1,561.1	-437.8	10.00	9.16	B Chalk
7,737.7	38.66	162.62	7,515.0	417.7	1,567.8	-417.7	10.00	9.22	B Marl
7,800.0	44.50	165.92	7,561.6	377.9	1,578.9	-377.9	10.00	9.36	
7,858.1	50.01	168.43	7,601.0	336.3	1,588.4	-336.3	10.00	9.48	C Chalk
7,896.9	53.72	169.90	7,625.0	306.3	1,594.1	-306.3	10.00	9.55	C Marl
7,900.0	54.01	170.01	7,626.8	303.9	1,594.5	-303.9	10.00	9.58	
7,953.0	59.10	171.78	7,656.0	260.2	1,601.5	-260.2	10.00	9.60	D Chalk
8,000.0	63.64	173.20	7,678.5	219.3	1,606.9	-219.3	10.00	9.64	
8,086.0	71.96	175.54	7,711.0	140.2	1,614.6	-140.2	10.00	9.68	Fort Hayes
8,100.0	73.32	175.89	7,715.2	126.8	1,615.6	-126.8	10.00	9.70	
8,180.8	81.16	177.87	7,733.0	48.3	1,619.9	-48.3	10.00	9.71	Codell
8,200.0	83.03	178.33	7,735.6	29.2	1,620.5	-29.2	10.00	9.72	
8,271.7	90.00	180.00	7,740.0	-42.3	1,621.6	42.3	10.00	9.72	LP @ 7740' TVD; 90°
8,300.0	90.00	180.00	7,740.0	-70.6	1,621.6	70.6	0.00	0.00	
8,400.0	90.00	180.00	7,740.0	-170.6	1,621.6	170.6	0.00	0.00	
8,500.0	90.00	180.00	7,740.0	-270.6	1,621.6	270.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-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 2G-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
8,600.0	90.00	180.00	7,740.0	-370.6	1,621.6	370.6	0.00	0.00	
8,700.0	90.00	180.00	7,740.0	-470.6	1,621.6	470.6	0.00	0.00	
8,800.0	90.00	180.00	7,740.0	-570.6	1,621.6	570.6	0.00	0.00	
8,900.0	90.00	180.00	7,740.0	-670.6	1,621.6	670.6	0.00	0.00	
9,000.0	90.00	180.00	7,740.0	-770.6	1,621.6	770.6	0.00	0.00	
9,100.0	90.00	180.00	7,740.0	-870.6	1,621.6	870.6	0.00	0.00	
9,200.0	90.00	180.00	7,740.0	-970.6	1,621.6	970.6	0.00	0.00	
9,300.0	90.00	180.00	7,740.0	-1,070.6	1,621.6	1,070.6	0.00	0.00	
9,400.0	90.00	180.00	7,740.0	-1,170.6	1,621.6	1,170.6	0.00	0.00	
9,500.0	90.00	180.00	7,740.0	-1,270.6	1,621.6	1,270.6	0.00	0.00	
9,600.0	90.00	180.00	7,740.0	-1,370.6	1,621.6	1,370.6	0.00	0.00	
9,700.0	90.00	180.00	7,740.0	-1,470.6	1,621.6	1,470.6	0.00	0.00	
9,800.0	90.00	180.00	7,740.0	-1,570.6	1,621.6	1,570.6	0.00	0.00	
9,900.0	90.00	180.00	7,740.0	-1,670.6	1,621.6	1,670.6	0.00	0.00	
10,000.0	90.00	180.00	7,740.0	-1,770.6	1,621.6	1,770.6	0.00	0.00	
10,100.0	90.00	180.00	7,740.0	-1,870.6	1,621.6	1,870.6	0.00	0.00	
10,200.0	90.00	180.00	7,740.0	-1,970.6	1,621.6	1,970.6	0.00	0.00	
10,300.0	90.00	180.00	7,740.0	-2,070.6	1,621.6	2,070.6	0.00	0.00	
10,400.0	90.00	180.00	7,740.0	-2,170.6	1,621.6	2,170.6	0.00	0.00	
10,500.0	90.00	180.00	7,740.0	-2,270.6	1,621.6	2,270.6	0.00	0.00	
10,600.0	90.00	180.00	7,740.0	-2,370.6	1,621.6	2,370.6	0.00	0.00	
10,700.0	90.00	180.00	7,740.0	-2,470.6	1,621.6	2,470.6	0.00	0.00	
10,800.0	90.00	180.00	7,740.0	-2,570.6	1,621.6	2,570.6	0.00	0.00	
10,900.0	90.00	180.00	7,740.0	-2,670.6	1,621.6	2,670.6	0.00	0.00	
11,000.0	90.00	180.00	7,740.0	-2,770.6	1,621.6	2,770.6	0.00	0.00	
11,100.0	90.00	180.00	7,740.0	-2,870.6	1,621.6	2,870.6	0.00	0.00	
11,200.0	90.00	180.00	7,740.0	-2,970.6	1,621.6	2,970.6	0.00	0.00	
11,300.0	90.00	180.00	7,740.0	-3,070.6	1,621.6	3,070.6	0.00	0.00	
11,400.0	90.00	180.00	7,740.0	-3,170.6	1,621.6	3,170.6	0.00	0.00	
11,500.0	90.00	180.00	7,740.0	-3,270.6	1,621.6	3,270.6	0.00	0.00	
11,600.0	90.00	180.00	7,740.0	-3,370.6	1,621.6	3,370.6	0.00	0.00	
11,700.0	90.00	180.00	7,740.0	-3,470.6	1,621.6	3,470.6	0.00	0.00	
11,800.0	90.00	180.00	7,740.0	-3,570.6	1,621.6	3,570.6	0.00	0.00	
11,900.0	90.00	180.00	7,740.0	-3,670.6	1,621.6	3,670.6	0.00	0.00	
12,000.0	90.00	180.00	7,740.0	-3,770.6	1,621.6	3,770.6	0.00	0.00	
12,100.0	90.00	180.00	7,740.0	-3,870.6	1,621.6	3,870.6	0.00	0.00	
12,200.0	90.00	180.00	7,740.0	-3,970.6	1,621.6	3,970.6	0.00	0.00	
12,300.0	90.00	180.00	7,740.0	-4,070.6	1,621.6	4,070.6	0.00	0.00	
12,400.0	90.00	180.00	7,740.0	-4,170.6	1,621.6	4,170.6	0.00	0.00	
12,500.0	90.00	180.00	7,740.0	-4,270.6	1,621.6	4,270.6	0.00	0.00	
12,600.0	90.00	180.00	7,740.0	-4,370.6	1,621.6	4,370.6	0.00	0.00	
12,700.0	90.00	180.00	7,740.0	-4,470.6	1,621.6	4,470.6	0.00	0.00	
12,800.0	90.00	180.00	7,740.0	-4,570.6	1,621.6	4,570.6	0.00	0.00	
12,900.0	90.00	180.00	7,740.0	-4,670.6	1,621.6	4,670.6	0.00	0.00	
13,000.0	90.00	180.00	7,740.0	-4,770.6	1,621.6	4,770.6	0.00	0.00	
13,100.0	90.00	180.00	7,740.0	-4,870.6	1,621.6	4,870.6	0.00	0.00	
13,200.0	90.00	180.00	7,740.0	-4,970.6	1,621.6	4,970.6	0.00	0.00	
13,300.0	90.00	180.00	7,740.0	-5,070.6	1,621.6	5,070.6	0.00	0.00	
13,400.0	90.00	180.00	7,740.0	-5,170.6	1,621.6	5,170.6	0.00	0.00	
13,500.0	90.00	180.00	7,740.0	-5,270.6	1,621.6	5,270.6	0.00	0.00	
13,600.0	90.00	180.00	7,740.0	-5,370.6	1,621.6	5,370.6	0.00	0.00	
13,700.0	90.00	180.00	7,740.0	-5,470.6	1,621.6	5,470.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-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 2G-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
13,800.0	90.00	180.00	7,740.0	-5,570.6	1,621.6	5,570.6	0.00	0.00	
13,900.0	90.00	180.00	7,740.0	-5,670.6	1,621.6	5,670.6	0.00	0.00	
14,000.0	90.00	180.00	7,740.0	-5,770.6	1,621.6	5,770.6	0.00	0.00	
14,100.0	90.00	180.00	7,740.0	-5,870.6	1,621.6	5,870.6	0.00	0.00	
14,200.0	90.00	180.00	7,740.0	-5,970.6	1,621.6	5,970.6	0.00	0.00	
14,300.0	90.00	180.00	7,740.0	-6,070.6	1,621.6	6,070.6	0.00	0.00	
14,400.0	90.00	180.00	7,740.0	-6,170.6	1,621.6	6,170.6	0.00	0.00	
14,500.0	90.00	180.00	7,740.0	-6,270.6	1,621.6	6,270.6	0.00	0.00	
14,600.0	90.00	180.00	7,740.0	-6,370.6	1,621.6	6,370.6	0.00	0.00	
14,700.0	90.00	180.00	7,740.0	-6,470.6	1,621.6	6,470.6	0.00	0.00	
14,800.0	90.00	180.00	7,740.0	-6,570.6	1,621.6	6,570.6	0.00	0.00	
14,900.0	90.00	180.00	7,740.0	-6,670.6	1,621.6	6,670.6	0.00	0.00	
15,000.0	90.00	180.00	7,740.0	-6,770.6	1,621.6	6,770.6	0.00	0.00	
15,100.0	90.00	180.00	7,740.0	-6,870.6	1,621.6	6,870.6	0.00	0.00	
15,200.0	90.00	180.00	7,740.0	-6,970.6	1,621.6	6,970.6	0.00	0.00	
15,300.0	90.00	180.00	7,740.0	-7,070.6	1,621.6	7,070.6	0.00	0.00	
15,400.0	90.00	180.00	7,740.0	-7,170.6	1,621.6	7,170.6	0.00	0.00	
15,500.0	90.00	180.00	7,740.0	-7,270.6	1,621.6	7,270.6	0.00	0.00	
15,600.0	90.00	180.00	7,740.0	-7,370.6	1,621.6	7,370.6	0.00	0.00	
15,700.0	90.00	180.00	7,740.0	-7,470.6	1,621.6	7,470.6	0.00	0.00	
15,800.0	90.00	180.00	7,740.0	-7,570.6	1,621.6	7,570.6	0.00	0.00	
15,900.0	90.00	180.00	7,740.0	-7,670.6	1,621.6	7,670.6	0.00	0.00	
16,000.0	90.00	180.00	7,740.0	-7,770.6	1,621.6	7,770.6	0.00	0.00	
16,100.0	90.00	180.00	7,740.0	-7,870.6	1,621.6	7,870.6	0.00	0.00	
16,171.7	90.00	180.00	7,740.0	-7,942.3	1,621.6	7,942.3	0.00	0.00	TD at 16171.7

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 2G-7H-E1 - plan misses target center by 7.1ft at 16171.7ft MD (7740.0 TVD, -7942.3 N, 1621.6 E) - Point	0.00	0.00	7,747.0	-7,942.6	1,622.7	1,259,582.87	3,126,635.47	40.045050	-105.047700
Woolley-Sosa 2G-7H-E1 - plan hits target center - Point	0.00	0.00	7,740.0	-7,942.3	1,621.6	1,259,583.23	3,126,634.35	40.045051	-105.047704

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-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 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
400.4	400.0	Fox Hills - BASE				
4,541.8	4,438.0	Sussex				
5,126.4	5,005.0	Shannon				
6,696.7	6,528.0	Teepee Buttes (*if present)				
7,514.3	7,320.0	Sharon Springs				
7,569.1	7,371.0	Niobrara				
7,702.6	7,487.0	B Chalk				
7,737.7	7,515.0	B Marl				
7,858.1	7,601.0	C Chalk				
7,896.9	7,625.0	C Marl				
7,953.0	7,656.0	D Chalk				
8,086.0	7,711.0	Fort Hayes				
8,180.8	7,733.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
150.0	150.0	0.0	0.0	KOP @ 150'	
283.3	283.2	4.7	0.0	END OF NUDGE @ 283' MD	
1,624.3	1,608.4	102.1	156.1	EOB; INC=14.1°	
7,328.7	7,141.0	529.1	1,478.4	Start DLS 10.00 TFO 107.39	
8,271.7	7,740.0	-42.3	1,621.6	LP @ 7740' TVD; 90°	
16,171.7	7,740.0	-7,942.3	1,621.6	TD at 16171.7	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Woolley-Sosa 2G-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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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	16,171.7	Plan #3 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	11,200.0	7,798.0	181.9	102.6	2.295	ES, SF
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	11,239.0	7,798.0	177.7	102.9	2.376	CC
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	15,567.1	7,798.0	1,930.0	1,785.1	13.319	CC
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	15,600.0	7,798.0	1,930.3	1,784.4	13.227	ES
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	16,000.0	7,798.0	1,978.0	1,822.6	12.733	SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	8,045.2	9,468.0	844.7	797.2	17.787	CC
Morgan Hills 1A-7H-A168 - HZ - Plan #2	16,171.7	17,588.6	847.2	543.4	2.788	ES, SF
Morgan Hills 1B-7H-A168 - HZ - Plan #2	8,271.3	9,870.7	1,061.5	1,009.2	20.326	CC
Morgan Hills 1B-7H-A168 - HZ - Plan #2	16,171.7	17,771.1	1,062.8	746.5	3.360	ES, SF
Morgan Hills 1C-7H-A168 - HZ - Plan #2	16,171.7	17,488.8	1,334.2	1,022.8	4.285	CC, ES, SF
Morgan Hills 1D-7H-A168 - HZ - Plan #2	8,271.3	9,789.5	1,561.5	1,509.3	29.929	CC
Morgan Hills 1D-7H-A168 - HZ - Plan #2	16,171.7	17,689.9	1,562.8	1,246.5	4.942	ES, SF
Morgan Hills 1E-7H-A168 - HZ - Plan #2	8,270.7	9,524.2	1,827.0	1,775.2	35.268	CC
Morgan Hills 1E-7H-A168 - HZ - Plan #2	16,171.7	17,425.1	1,828.4	1,514.8	5.830	ES, SF
Morgan Hills 1F-7H-A168 - HZ - Plan #2	8,262.7	9,729.7	2,033.8	1,982.0	39.224	CC
Morgan Hills 1F-7H-A168 - HZ - Plan #2	16,171.7	17,638.6	2,062.7	1,746.5	6.524	ES, SF
Sosa 11-18 - DD - DD	11,800.0	7,833.2	1,658.6	1,574.0	19.594	SF
Sosa 11-18 - DD - DD	11,833.1	7,833.4	1,658.3	1,573.7	19.610	CC, ES
Sosa 12-18 - DD - DD	13,467.4	7,894.4	1,655.3	1,538.6	14.191	CC, ES
Sosa 12-18 - DD - DD	13,500.0	7,894.4	1,655.6	1,538.8	14.175	SF
Sosa 21-18 - DD (MWD) - DD	11,836.1	7,904.0	105.4	20.7	1.245	Level 2, CC, ES, SF
Sosa 22-18 - DD - DD	13,300.0	7,900.9	182.9	65.8	1.562	ES, SF
Sosa 22-18 - DD - DD	13,329.5	7,900.9	180.5	68.0	1.605	CC
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	12,500.0	7,778.4	1,158.6	1,066.4	12.563	SF
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	12,527.5	7,778.5	1,158.3	1,066.2	12.581	CC, ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,600.0	7,765.0	221.9	156.4	3.388	SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,662.8	7,764.8	212.8	152.4	3.523	CC, ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,400.0	7,735.0	486.3	424.6	7.885	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,500.0	7,735.0	468.7	409.5	7.909	ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,533.8	7,735.0	467.5	409.5	8.054	CC
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	11,200.0	7,817.2	908.6	834.0	12.182	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	11,237.8	7,817.1	907.8	833.4	12.206	CC, ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	9,369.4	8,018.4	883.2	832.0	17.256	CC, ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	9,600.0	8,018.2	912.8	858.0	16.647	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,300.0	7,734.0	726.7	684.4	17.196	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,428.2	7,734.0	715.3	674.9	17.717	CC, ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	735.9	822.2	128.3	125.4	44.220	CC, ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,200.0	1,281.6	154.3	149.3	31.218	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	6,887.5	6,729.3	1,094.5	1,054.0	27.038	CC
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,000.0	6,835.2	1,095.0	1,053.8	26.534	ES
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,400.0	7,200.0	1,108.8	1,065.0	25.278	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	8,049.5	7,972.3	204.6	161.8	4.776	CC, ES, SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	4,105.8	4,313.0	289.8	252.2	7.692	CC, ES, SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	5,000.9	4,922.1	510.3	481.6	17.780	CC
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	5,100.0	5,017.2	510.9	481.6	17.410	ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	5,500.0	5,399.9	529.6	498.1	16.815	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	150.0	150.0	7.6	7.1	15.802	CC
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	200.0	200.0	7.6	6.9	11.607	ES
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	283.3	283.3	8.6	7.7	9.011	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	150.0	150.0	14.8	14.4	31.018	CC
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	200.0	200.0	14.8	14.2	22.720	ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	400.0	399.6	18.8	17.4	13.590	SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	150.0	150.0	22.4	21.9	46.820	CC

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	200.0	200.0	22.4	21.7	34.275	ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	700.0	698.3	35.2	32.7	14.183	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	150.0	150.0	29.9	29.5	62.622	CC
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	200.0	200.0	30.0	29.3	45.834	ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	800.0	797.0	44.6	41.6	15.259	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	150.0	150.0	37.5	37.0	78.424	CC
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	283.3	283.2	37.8	36.8	39.395	ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	1,500.0	1,491.5	98.9	92.3	14.890	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	150.0	150.0	45.1	44.6	94.229	CC
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	283.3	283.2	45.3	44.4	47.260	ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	7,650.0	7,696.1	184.6	149.9	5.313	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	7,995.0	7,951.4	50.4	21.4	1.739	CC, ES, SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	150.0	150.0	59.9	59.4	125.246	CC
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	200.0	200.0	59.9	59.2	91.659	ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	3,500.0	3,458.6	348.7	324.4	14.356	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	186.9	186.9	45.1	44.5	74.172	CC
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	200.0	200.0	45.1	44.4	68.950	ES
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	16,171.7	15,949.8	2,115.1	1,832.3	7.478	SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	187.1	187.1	37.5	36.9	61.656	CC
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	283.3	283.2	37.7	36.8	39.348	ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	16,148.0	15,706.0	1,756.5	1,476.3	6.270	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	187.1	187.1	29.9	29.3	49.233	CC
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	283.3	283.2	30.3	29.3	31.539	ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	16,171.7	15,953.0	1,376.4	1,093.6	4.866	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	187.1	187.1	22.7	22.1	37.270	CC
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	200.0	200.0	22.7	22.0	34.691	ES
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	16,157.5	15,805.8	1,077.0	800.8	3.900	SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	187.5	187.5	15.1	14.5	24.785	CC
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	200.0	200.0	15.1	14.5	23.130	ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	16,162.2	16,084.2	699.9	416.6	2.470	SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	187.5	187.5	7.6	6.9	12.393	CC
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	200.0	200.0	7.6	6.9	11.571	ES
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	16,171.7	15,841.7	424.4	189.5	1.806	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	153.37	-2,303.6	1,154.9	2,577.0					
100.0	100.0	85.0	85.0	0.2	0.1	153.37	-2,303.6	1,154.9	2,576.9	2,576.7	0.28		9,320.660	
150.0	150.0	135.0	135.0	0.2	0.2	153.37	-2,303.6	1,154.9	2,576.9	2,576.5	0.45		5,767.241	
200.0	200.0	185.0	185.0	0.3	0.3	153.37	-2,303.6	1,154.9	2,577.5	2,576.9	0.62		4,147.199	
283.3	283.2	268.2	268.2	0.5	0.4	153.36	-2,303.6	1,154.9	2,581.1	2,580.2	0.92		2,819.814	
300.0	299.9	284.9	284.9	0.5	0.5	150.99	-2,303.6	1,154.9	2,582.1	2,581.1	0.97		2,649.875	
400.0	399.6	384.6	384.6	0.7	0.6	137.31	-2,303.6	1,154.9	2,587.9	2,586.5	1.34		1,937.654	
500.0	499.3	484.3	484.3	0.9	0.8	125.49	-2,303.6	1,154.9	2,592.9	2,591.2	1.71		1,518.404	
600.0	598.9	584.0	584.0	1.2	1.0	115.97	-2,303.6	1,154.9	2,597.2	2,595.1	2.09		1,240.852	
700.0	698.5	683.5	683.5	1.4	1.2	108.58	-2,303.6	1,154.9	2,600.8	2,598.3	2.49		1,042.813	
800.0	797.9	782.9	782.9	1.6	1.3	102.89	-2,303.6	1,154.9	2,603.8	2,600.8	2.91		894.017	
900.0	897.1	882.1	882.1	1.9	1.5	98.50	-2,303.6	1,154.9	2,606.0	2,602.7	3.35		777.949	
1,000.0	996.2	981.2	981.2	2.2	1.7	95.09	-2,303.6	1,154.9	2,607.6	2,603.8	3.81		684.815	
1,100.0	1,095.0	1,080.0	1,080.0	2.5	1.9	92.42	-2,303.6	1,154.9	2,608.6	2,604.3	4.29		608.428	
1,200.0	1,193.6	1,178.6	1,178.6	2.8	2.0	90.33	-2,303.6	1,154.9	2,609.0	2,604.2	4.79		544.677	
1,300.0	1,291.9	1,276.9	1,276.9	3.2	2.2	88.68	-2,303.6	1,154.9	2,608.8	2,603.5	5.32		490.715	
1,400.0	1,389.9	1,374.9	1,374.9	3.5	2.4	87.40	-2,303.6	1,154.9	2,608.1	2,602.3	5.87		444.503	
1,500.0	1,487.6	1,472.6	1,472.6	3.9	2.5	86.40	-2,303.6	1,154.9	2,606.9	2,600.5	6.44		404.541	
1,600.0	1,584.8	1,536.6	1,536.6	4.4	2.7	85.47	-2,303.9	1,155.0	2,605.7	2,598.7	6.99		372.871	
1,624.3	1,608.4	1,548.9	1,548.9	4.5	2.7	85.25	-2,304.0	1,155.0	2,605.6	2,598.5	7.12		366.136	
1,640.6	1,624.2	1,557.2	1,557.2	4.6	2.7	85.30	-2,304.2	1,155.1	2,605.6	2,598.4	7.20		361.730	
1,700.0	1,681.8	1,600.0	1,600.0	4.8	2.8	85.53	-2,305.3	1,155.6	2,606.0	2,598.4	7.54		345.603	
1,800.0	1,778.8	1,638.2	1,638.1	5.3	2.8	85.73	-2,306.7	1,156.2	2,608.0	2,600.0	8.05		324.054	
1,900.0	1,875.8	1,700.0	1,699.8	5.7	2.9	86.06	-2,310.1	1,157.5	2,612.2	2,603.6	8.60		303.735	
2,000.0	1,972.8	1,739.5	1,739.3	6.2	3.0	86.27	-2,312.9	1,158.7	2,618.1	2,609.0	9.11		287.434	
2,100.0	2,069.8	1,800.0	1,799.5	6.6	3.1	86.59	-2,318.2	1,160.8	2,626.1	2,616.4	9.66		271.955	
2,200.0	2,166.8	1,840.4	1,839.6	7.1	3.2	86.80	-2,322.3	1,162.5	2,635.9	2,625.8	10.16		259.414	
2,300.0	2,263.8	1,900.0	1,898.7	7.5	3.3	87.11	-2,329.5	1,165.5	2,647.7	2,637.0	10.70		247.394	
2,400.0	2,360.8	1,940.6	1,938.9	8.0	3.4	87.32	-2,334.9	1,167.7	2,661.3	2,650.1	11.20		237.637	
2,500.0	2,457.7	2,000.0	1,997.5	8.4	3.6	87.62	-2,343.9	1,171.4	2,676.9	2,665.2	11.73		228.139	
2,600.0	2,554.7	2,039.9	2,036.7	8.9	3.7	87.83	-2,350.6	1,174.1	2,694.3	2,682.1	12.22		220.515	
2,700.0	2,651.7	2,102.4	2,098.0	9.4	3.9	88.14	-2,361.9	1,178.7	2,713.4	2,700.7	12.75		212.764	
2,800.0	2,748.7	2,197.8	2,191.5	9.8	4.1	88.61	-2,379.5	1,186.0	2,733.2	2,719.8	13.37		204.398	
2,900.0	2,845.7	2,293.2	2,285.0	10.3	4.4	89.07	-2,397.1	1,193.2	2,753.1	2,739.1	13.99		196.779	
3,000.0	2,942.7	2,388.7	2,378.5	10.8	4.7	89.53	-2,414.7	1,200.4	2,773.3	2,758.7	14.61		189.813	
3,100.0	3,039.7	2,484.1	2,472.0	11.2	5.0	89.98	-2,432.3	1,207.6	2,793.6	2,778.3	15.23		183.421	
3,200.0	3,136.7	2,579.5	2,565.5	11.7	5.4	90.42	-2,450.0	1,214.8	2,814.0	2,798.2	15.85		177.535	
3,300.0	3,233.6	2,674.9	2,659.0	12.2	5.7	90.86	-2,467.6	1,222.0	2,834.7	2,818.2	16.47		172.097	
3,400.0	3,330.6	2,770.3	2,752.5	12.6	6.0	91.29	-2,485.2	1,229.2	2,855.5	2,838.4	17.09		167.060	
3,500.0	3,427.6	2,865.7	2,846.0	13.1	6.3	91.72	-2,502.8	1,236.4	2,876.5	2,858.7	17.71		162.381	
3,600.0	3,524.6	2,961.1	2,939.5	13.6	6.7	92.14	-2,520.4	1,243.6	2,897.6	2,879.3	18.34		158.023	
3,700.0	3,621.6	3,056.5	3,033.0	14.0	7.0	92.56	-2,538.0	1,250.8	2,918.9	2,899.9	18.96		153.956	
3,800.0	3,718.6	3,151.9	3,126.5	14.5	7.4	92.97	-2,555.6	1,258.0	2,940.3	2,920.7	19.58		150.150	
3,900.0	3,815.6	3,247.4	3,220.0	15.0	7.7	93.37	-2,573.2	1,265.2	2,961.9	2,941.7	20.21		146.582	
4,000.0	3,912.6	3,342.8	3,313.5	15.4	8.1	93.77	-2,590.8	1,272.4	2,983.6	2,962.8	20.83		143.231	
4,100.0	4,009.5	3,438.2	3,407.0	15.9	8.4	94.16	-2,608.4	1,279.6	3,005.5	2,984.0	21.46		140.077	
4,200.0	4,106.5	3,533.6	3,500.5	16.4	8.8	94.55	-2,626.0	1,286.8	3,027.5	3,005.4	22.08		137.105	
4,300.0	4,203.5	3,629.0	3,593.9	16.8	9.1	94.93	-2,643.6	1,294.1	3,049.6	3,026.9	22.71		134.298	
4,400.0	4,300.5	3,724.4	3,687.4	17.3	9.5	95.30	-2,661.2	1,301.3	3,071.9	3,048.6	23.33		131.644	
4,500.0	4,397.5	3,819.8	3,780.9	17.8	9.8	95.68	-2,678.8	1,308.5	3,094.3	3,070.3	23.96		129.131	
4,600.0	4,494.5	3,915.2	3,874.4	18.2	10.2	96.04	-2,696.4	1,315.7	3,116.8	3,092.2	24.59		126.748	
4,700.0	4,591.5	4,010.6	3,967.9	18.7	10.6	96.40	-2,714.0	1,322.9	3,139.5	3,114.3	25.22		124.486	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,800.0	4,688.5	4,106.0	4,061.4	19.2	10.9	96.76	-2,731.6	1,330.1	3,162.2	3,136.4	25.85	122.335		
4,900.0	4,785.4	4,201.5	4,154.9	19.6	11.3	97.11	-2,749.2	1,337.3	3,185.1	3,158.7	26.48	120.287		
5,000.0	4,882.4	4,296.9	4,248.4	20.1	11.6	97.46	-2,766.8	1,344.5	3,208.1	3,181.0	27.11	118.337		
5,100.0	4,979.4	4,392.3	4,341.9	20.6	12.0	97.80	-2,784.4	1,351.7	3,231.3	3,203.5	27.74	116.476		
5,200.0	5,076.4	4,487.7	4,435.4	21.0	12.4	98.13	-2,802.0	1,358.9	3,254.5	3,226.1	28.37	114.699		
5,300.0	5,173.4	4,583.1	4,528.9	21.5	12.7	98.47	-2,819.6	1,366.1	3,277.8	3,248.8	29.01	113.001		
5,400.0	5,270.4	4,678.5	4,622.4	22.0	13.1	98.79	-2,837.2	1,373.3	3,301.3	3,271.7	29.64	111.377		
5,500.0	5,367.4	4,773.9	4,715.9	22.5	13.5	99.12	-2,854.8	1,380.5	3,324.8	3,294.6	30.27	109.822		
5,600.0	5,464.4	4,869.3	4,809.4	22.9	13.8	99.43	-2,872.4	1,387.7	3,348.5	3,317.6	30.91	108.332		
5,700.0	5,561.4	4,964.7	4,902.9	23.4	14.2	99.75	-2,890.0	1,394.9	3,372.3	3,340.7	31.55	106.903		
5,800.0	5,658.3	5,060.2	4,996.4	23.9	14.6	100.06	-2,907.7	1,402.2	3,396.1	3,363.9	32.18	105.531		
5,900.0	5,755.3	5,155.6	5,089.9	24.3	14.9	100.37	-2,925.3	1,409.4	3,420.1	3,387.2	32.82	104.213		
6,000.0	5,852.3	5,251.0	5,183.4	24.8	15.3	100.67	-2,942.9	1,416.6	3,444.1	3,410.7	33.46	102.947		
6,100.0	5,949.3	6,007.3	5,934.3	25.3	17.0	103.35	-3,009.7	1,443.9	3,455.8	3,420.1	35.69	96.820		
6,200.0	6,046.3	6,104.2	6,031.3	25.7	17.1	103.73	-3,009.7	1,443.9	3,461.7	3,425.4	36.30	95.361		
6,300.0	6,143.3	6,201.2	6,128.3	26.2	17.2	104.11	-3,009.7	1,443.9	3,467.7	3,430.8	36.91	93.960		
6,400.0	6,240.3	6,298.2	6,225.3	26.7	17.3	104.48	-3,009.7	1,443.9	3,473.9	3,436.4	37.51	92.614		
6,500.0	6,337.3	6,395.2	6,322.3	27.1	17.4	104.86	-3,009.7	1,443.9	3,480.3	3,442.2	38.11	91.320		
6,600.0	6,434.2	6,492.2	6,419.3	27.6	17.5	105.24	-3,009.7	1,443.9	3,486.8	3,448.1	38.71	90.077		
6,700.0	6,531.2	6,589.2	6,516.2	28.1	17.6	105.61	-3,009.7	1,443.9	3,493.4	3,454.1	39.30	88.881		
6,800.0	6,628.2	6,686.2	6,613.2	28.5	17.7	105.99	-3,009.7	1,443.9	3,500.3	3,460.4	39.90	87.730		
6,900.0	6,725.2	6,783.2	6,710.2	29.0	17.8	106.36	-3,009.7	1,443.9	3,507.2	3,466.8	40.49	86.622		
7,000.0	6,822.2	6,880.1	6,807.2	29.5	17.9	106.73	-3,009.7	1,443.9	3,514.4	3,473.3	41.08	85.555		
7,100.0	6,919.2	6,977.1	6,904.2	30.0	18.0	107.10	-3,009.7	1,443.9	3,521.7	3,480.0	41.66	84.526		
7,200.0	7,016.2	7,074.1	7,001.2	30.4	18.2	107.47	-3,009.7	1,443.9	3,529.1	3,486.9	42.25	83.535		
7,300.0	7,113.2	7,171.1	7,098.2	30.9	18.3	107.83	-3,009.7	1,443.9	3,536.7	3,493.9	42.83	82.580		
7,328.7	7,141.0	7,199.0	7,126.0	31.0	18.3	107.94	-3,009.7	1,443.9	3,538.9	3,495.9	42.99	82.312		
7,350.0	7,161.7	7,219.6	7,146.7	31.1	18.3	99.61	-3,009.7	1,443.9	3,540.2	3,497.0	43.12	82.105		
7,400.0	7,210.3	7,268.2	7,195.3	31.3	18.4	79.12	-3,009.7	1,443.9	3,540.0	3,496.6	43.41	81.552		
7,450.0	7,258.7	7,316.6	7,243.7	31.5	18.5	61.30	-3,009.7	1,443.9	3,535.6	3,491.9	43.70	80.909		
7,500.0	7,306.5	7,364.5	7,291.5	31.7	18.5	48.29	-3,009.7	1,443.9	3,526.8	3,482.8	43.99	80.181		
7,550.0	7,353.4	7,411.4	7,338.4	31.8	18.6	39.39	-3,009.7	1,443.9	3,513.8	3,469.6	44.27	79.373		
7,600.0	7,399.0	7,456.9	7,384.0	31.9	18.6	33.29	-3,009.7	1,443.9	3,496.8	3,452.2	44.55	78.490		
7,650.0	7,442.9	7,500.9	7,427.9	32.0	18.7	29.03	-3,009.7	1,443.9	3,475.7	3,430.9	44.82	77.541		
7,700.0	7,484.9	7,542.8	7,469.9	32.1	18.7	26.02	-3,009.7	1,443.9	3,450.8	3,405.7	45.09	76.530		
7,750.0	7,524.5	7,582.5	7,509.6	32.1	18.8	23.87	-3,009.7	1,443.9	3,422.2	3,376.9	45.35	75.466		
7,800.0	7,561.6	7,619.6	7,546.6	32.1	18.8	22.37	-3,009.7	1,443.9	3,390.2	3,344.6	45.60	74.354		
7,850.0	7,595.8	7,653.7	7,580.8	32.2	18.9	21.38	-3,009.7	1,443.9	3,355.1	3,309.2	45.83	73.203		
7,900.0	7,626.8	7,684.8	7,611.8	32.2	18.9	20.82	-3,009.7	1,443.9	3,316.9	3,270.9	46.06	72.020		
7,950.0	7,654.5	7,712.4	7,639.5	32.2	18.9	20.70	-3,009.7	1,443.9	3,276.2	3,229.9	46.27	70.812		
8,000.0	7,678.5	7,736.5	7,663.5	32.3	19.0	21.04	-3,009.7	1,443.9	3,233.1	3,186.6	46.46	69.588		
8,050.0	7,698.8	7,756.8	7,683.8	32.3	19.0	21.99	-3,009.7	1,443.9	3,188.0	3,141.3	46.64	68.354		
8,100.0	7,715.2	7,773.1	7,700.2	32.3	19.0	23.88	-3,009.7	1,443.9	3,141.2	3,094.4	46.80	67.120		
8,150.0	7,727.5	7,785.4	7,712.5	32.4	19.0	27.56	-3,009.7	1,443.9	3,093.1	3,046.1	46.94	65.892		
8,200.0	7,735.6	7,793.6	7,720.7	32.4	19.0	35.80	-3,009.7	1,443.9	3,044.0	2,996.9	47.06	64.678		
8,250.0	7,739.6	7,797.6	7,724.6	32.4	19.0	61.69	-3,009.7	1,443.9	2,994.3	2,947.1	47.17	63.486		
8,271.7	7,740.0	7,798.0	7,725.0	32.5	19.0	90.00	-3,009.7	1,443.9	2,972.7	2,925.5	47.20	62.975		
8,300.0	7,740.0	7,798.0	7,725.0	32.5	19.0	90.00	-3,009.7	1,443.9	2,944.4	2,897.2	47.25	62.309		
8,400.0	7,740.0	7,798.0	7,725.0	32.7	19.0	90.00	-3,009.7	1,443.9	2,844.6	2,797.2	47.44	59.965		
8,500.0	7,740.0	7,798.0	7,725.0	33.0	19.0	90.00	-3,009.7	1,443.9	2,744.8	2,697.2	47.63	57.631		
8,600.0	7,740.0	7,798.0	7,725.0	33.4	19.0	90.00	-3,009.7	1,443.9	2,645.0	2,597.2	47.83	55.306		
8,700.0	7,740.0	7,798.0	7,725.0	33.8	19.0	90.00	-3,009.7	1,443.9	2,545.3	2,497.2	48.03	52.990		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
8,800.0	7,740.0	7,798.0	7,725.0	34.4	19.0	90.00	-3,009.7	1,443.9	2,445.5	2,397.3	48.25	50.684		
8,900.0	7,740.0	7,798.0	7,725.0	35.0	19.0	90.00	-3,009.7	1,443.9	2,345.8	2,297.3	48.48	48.388		
9,000.0	7,740.0	7,798.0	7,725.0	35.7	19.0	90.00	-3,009.7	1,443.9	2,246.1	2,197.4	48.72	46.102		
9,100.0	7,740.0	7,798.0	7,725.0	36.4	19.0	90.00	-3,009.7	1,443.9	2,146.4	2,097.4	48.98	43.825		
9,200.0	7,740.0	7,798.0	7,725.0	37.3	19.0	90.00	-3,009.7	1,443.9	2,046.8	1,997.5	49.25	41.559		
9,300.0	7,740.0	7,798.0	7,725.0	38.2	19.0	90.00	-3,009.7	1,443.9	1,947.2	1,897.6	49.54	39.303		
9,400.0	7,740.0	7,798.0	7,725.0	39.1	19.0	90.00	-3,009.7	1,443.9	1,847.6	1,797.8	49.86	37.058		
9,500.0	7,740.0	7,798.0	7,725.0	40.1	19.0	90.00	-3,009.7	1,443.9	1,748.1	1,697.9	50.20	34.823		
9,600.0	7,740.0	7,798.0	7,725.0	41.2	19.0	90.00	-3,009.7	1,443.9	1,648.6	1,598.1	50.57	32.600		
9,700.0	7,740.0	7,798.0	7,725.0	42.3	19.0	90.00	-3,009.7	1,443.9	1,549.3	1,498.3	50.98	30.389		
9,800.0	7,740.0	7,798.0	7,725.0	43.5	19.0	90.00	-3,009.7	1,443.9	1,450.0	1,398.5	51.44	28.190		
9,900.0	7,740.0	7,798.0	7,725.0	44.7	19.0	90.00	-3,009.7	1,443.9	1,350.8	1,298.8	51.94	26.005		
10,000.0	7,740.0	7,798.0	7,725.0	45.9	19.0	90.00	-3,009.7	1,443.9	1,251.7	1,199.2	52.52	23.834		
10,100.0	7,740.0	7,798.0	7,725.0	47.1	19.0	90.00	-3,009.7	1,443.9	1,152.8	1,099.6	53.18	21.680		
10,200.0	7,740.0	7,798.0	7,725.0	48.4	19.0	90.00	-3,009.7	1,443.9	1,054.1	1,000.2	53.94	19.543		
10,300.0	7,740.0	7,798.0	7,725.0	49.8	19.0	90.00	-3,009.7	1,443.9	955.7	900.9	54.84	17.428		
10,400.0	7,740.0	7,798.0	7,725.0	51.1	19.0	90.00	-3,009.7	1,443.9	857.7	801.7	55.92	15.338		
10,500.0	7,740.0	7,798.0	7,725.0	52.5	19.0	90.00	-3,009.7	1,443.9	760.1	702.9	57.24	13.278		
10,600.0	7,740.0	7,798.0	7,725.0	53.9	19.0	90.00	-3,009.7	1,443.9	663.3	604.4	58.91	11.259		
10,700.0	7,740.0	7,798.0	7,725.0	55.3	19.0	90.00	-3,009.7	1,443.9	567.6	506.5	61.07	9.294		
10,800.0	7,740.0	7,798.0	7,725.0	56.7	19.0	90.00	-3,009.7	1,443.9	473.6	409.7	63.94	7.407		
10,900.0	7,740.0	7,798.0	7,725.0	58.2	19.0	90.00	-3,009.7	1,443.9	382.8	314.9	67.88	5.639		
11,000.0	7,740.0	7,798.0	7,725.0	59.7	19.0	90.00	-3,009.7	1,443.9	297.8	224.6	73.22	4.068		
11,100.0	7,740.0	7,798.0	7,725.0	61.2	19.0	90.00	-3,009.7	1,443.9	225.6	146.4	79.25	2.847		
11,200.0	7,740.0	7,798.0	7,725.0	62.7	19.0	90.00	-3,009.7	1,443.9	181.9	102.6	79.28	2.295 ES, SF		
11,239.0	7,740.0	7,798.0	7,725.0	63.2	19.0	90.00	-3,009.7	1,443.9	177.7	102.9	74.78	2.376 CC		
11,300.0	7,740.0	7,798.0	7,725.0	64.2	19.0	90.00	-3,009.7	1,443.9	187.8	124.7	63.11	2.977		
11,400.0	7,740.0	7,798.0	7,725.0	65.7	19.0	90.00	-3,009.7	1,443.9	239.7	195.2	44.58	5.378		
11,500.0	7,740.0	7,798.0	7,725.0	67.2	19.0	90.00	-3,009.7	1,443.9	315.7	279.8	35.88	8.798		
11,600.0	7,740.0	7,798.0	7,725.0	68.8	19.0	90.00	-3,009.7	1,443.9	402.3	368.3	34.00	11.833		
11,700.0	7,740.0	7,798.0	7,725.0	70.3	19.0	90.00	-3,009.7	1,443.9	494.0	459.4	34.65	14.259		
11,800.0	7,740.0	7,798.0	7,725.0	71.9	19.0	90.00	-3,009.7	1,443.9	588.4	552.5	35.89	16.394		
11,900.0	7,740.0	7,798.0	7,725.0	73.5	19.0	90.00	-3,009.7	1,443.9	684.4	647.3	37.15	18.425		
12,000.0	7,740.0	7,798.0	7,725.0	75.1	19.0	90.00	-3,009.7	1,443.9	781.4	743.2	38.27	20.421		
12,100.0	7,740.0	7,798.0	7,725.0	76.6	19.0	90.00	-3,009.7	1,443.9	879.1	839.9	39.24	22.405		
12,200.0	7,740.0	7,798.0	7,725.0	78.2	19.0	90.00	-3,009.7	1,443.9	977.2	937.2	40.07	24.387		
12,300.0	7,740.0	7,798.0	7,725.0	79.8	19.0	90.00	-3,009.7	1,443.9	1,075.7	1,034.9	40.80	26.368		
12,400.0	7,740.0	7,798.0	7,725.0	81.5	19.0	90.00	-3,009.7	1,443.9	1,174.5	1,133.0	41.43	28.348		
12,500.0	7,740.0	7,798.0	7,725.0	83.1	19.0	90.00	-3,009.7	1,443.9	1,273.4	1,231.4	41.99	30.326		
12,600.0	7,740.0	7,798.0	7,725.0	84.7	19.0	90.00	-3,009.7	1,443.9	1,372.5	1,330.0	42.49	32.303		
12,700.0	7,740.0	7,798.0	7,725.0	86.3	19.0	90.00	-3,009.7	1,443.9	1,471.7	1,428.8	42.94	34.276		
12,800.0	7,740.0	7,798.0	7,725.0	88.0	19.0	90.00	-3,009.7	1,443.9	1,571.0	1,527.7	43.34	36.246		
12,900.0	7,740.0	7,798.0	7,725.0	89.6	19.0	90.00	-3,009.7	1,443.9	1,670.4	1,626.7	43.71	38.213		
13,000.0	7,740.0	7,798.0	7,725.0	91.2	19.0	90.00	-3,009.7	1,443.9	1,769.9	1,725.8	44.06	40.175		
13,100.0	7,740.0	7,798.0	7,725.0	92.9	19.0	90.00	-3,009.7	1,443.9	1,869.4	1,825.0	44.37	42.132		
13,200.0	7,740.0	7,798.0	7,725.0	94.5	19.0	90.00	-3,009.7	1,443.9	1,969.0	1,924.3	44.66	44.084		
13,300.0	7,740.0	7,798.0	7,725.0	96.2	19.0	90.00	-3,009.7	1,443.9	2,068.6	2,023.7	44.94	46.031		
13,400.0	7,740.0	7,798.0	7,725.0	97.8	19.0	90.00	-3,009.7	1,443.9	2,168.2	2,123.0	45.20	47.972		
13,500.0	7,740.0	7,798.0	7,725.0	99.5	19.0	90.00	-3,009.7	1,443.9	2,267.9	2,222.5	45.44	49.908		
13,600.0	7,740.0	7,798.0	7,725.0	101.2	19.0	90.00	-3,009.7	1,443.9	2,367.6	2,322.0	45.67	51.838		
13,700.0	7,740.0	7,798.0	7,725.0	102.8	19.0	90.00	-3,009.7	1,443.9	2,467.4	2,421.5	45.89	53.762		
13,800.0	7,740.0	7,798.0	7,725.0	104.5	19.0	90.00	-3,009.7	1,443.9	2,567.1	2,521.0	46.11	55.680		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P											Offset Site Error:		0.0 ft
Survey Program: 0-MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
13,900.0	7,740.0	7,798.0	7,725.0	106.2	19.0	90.00	-3,009.7	1,443.9	2,666.9	2,620.6	46.31	57.592	
14,000.0	7,740.0	7,798.0	7,725.0	107.8	19.0	90.00	-3,009.7	1,443.9	2,766.7	2,720.2	46.50	59.497	
14,100.0	7,740.0	7,798.0	7,725.0	109.5	19.0	90.00	-3,009.7	1,443.9	2,866.5	2,819.8	46.69	61.397	
14,200.0	7,740.0	7,798.0	7,725.0	111.2	19.0	90.00	-3,009.7	1,443.9	2,966.3	2,919.4	46.87	63.290	
14,300.0	7,740.0	7,798.0	7,725.0	112.9	19.0	90.00	-3,009.7	1,443.9	3,066.1	3,019.1	47.04	65.178	
14,400.0	7,740.0	7,798.0	7,725.0	114.6	19.0	90.00	-3,009.7	1,443.9	3,165.9	3,118.7	47.21	67.058	
14,500.0	7,740.0	7,798.0	7,725.0	116.3	19.0	90.00	-3,009.7	1,443.9	3,265.8	3,218.4	47.38	68.933	
14,600.0	7,740.0	7,798.0	7,725.0	117.9	19.0	90.00	-3,009.7	1,443.9	3,365.6	3,318.1	47.54	70.801	
14,700.0	7,740.0	7,798.0	7,725.0	119.6	19.0	90.00	-3,009.7	1,443.9	3,465.5	3,417.8	47.69	72.663	
14,800.0	7,740.0	7,798.0	7,725.0	121.3	19.0	90.00	-3,009.7	1,443.9	3,565.4	3,517.5	47.85	74.519	
14,900.0	7,740.0	7,798.0	7,725.0	123.0	19.0	90.00	-3,009.7	1,443.9	3,665.3	3,617.3	47.99	76.368	
15,000.0	7,740.0	7,798.0	7,725.0	124.7	19.0	90.00	-3,009.7	1,443.9	3,765.1	3,717.0	48.14	78.211	
15,100.0	7,740.0	7,798.0	7,725.0	126.4	19.0	90.00	-3,009.7	1,443.9	3,865.0	3,816.8	48.28	80.048	
15,200.0	7,740.0	7,798.0	7,725.0	128.1	19.0	90.00	-3,009.7	1,443.9	3,964.9	3,916.5	48.42	81.878	
15,300.0	7,740.0	7,798.0	7,725.0	129.8	19.0	90.00	-3,009.7	1,443.9	4,064.8	4,016.3	48.56	83.703	
15,400.0	7,740.0	7,798.0	7,725.0	131.5	19.0	90.00	-3,009.7	1,443.9	4,164.7	4,116.0	48.70	85.520	
15,500.0	7,740.0	7,798.0	7,725.0	133.2	19.0	90.00	-3,009.7	1,443.9	4,264.7	4,215.8	48.83	87.332	
15,600.0	7,740.0	7,798.0	7,725.0	134.9	19.0	90.00	-3,009.7	1,443.9	4,364.6	4,315.6	48.96	89.137	
15,700.0	7,740.0	7,798.0	7,725.0	136.6	19.0	90.00	-3,009.7	1,443.9	4,464.5	4,415.4	49.09	90.936	
15,800.0	7,740.0	7,798.0	7,725.0	138.3	19.0	90.00	-3,009.7	1,443.9	4,564.4	4,515.2	49.22	92.729	
15,900.0	7,740.0	7,798.0	7,725.0	140.0	19.0	90.00	-3,009.7	1,443.9	4,664.3	4,615.0	49.35	94.516	
16,000.0	7,740.0	7,798.0	7,725.0	141.7	19.0	90.00	-3,009.7	1,443.9	4,764.3	4,714.8	49.48	96.296	
16,100.0	7,740.0	7,798.0	7,725.0	143.5	19.0	90.00	-3,009.7	1,443.9	4,864.2	4,814.6	49.60	98.071	
16,171.7	7,740.0	7,798.0	7,725.0	144.7	19.0	90.00	-3,009.7	1,443.9	4,935.8	4,886.1	49.69	99.338	

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-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	58.0	58.0	0.0	0.1	154.17	-7,337.7	3,551.6	8,152.1					
100.0	100.0	158.0	158.0	0.2	0.3	154.17	-7,337.7	3,551.6	8,152.1	8,151.6	0.43	N/A		
150.0	150.0	208.0	208.0	0.2	0.4	154.17	-7,337.7	3,551.6	8,152.1	8,151.5	0.60	N/A		
200.0	200.0	258.0	258.0	0.3	0.5	154.17	-7,337.7	3,551.6	8,152.7	8,151.9	0.78	N/A		
283.3	283.2	341.2	341.2	0.5	0.6	154.13	-7,337.7	3,551.6	8,156.3	8,155.2	1.07	7,617.848		
300.0	299.9	357.9	357.9	0.5	0.6	151.75	-7,337.7	3,551.6	8,157.3	8,156.2	1.13	7,220.629		
400.0	399.6	457.6	457.6	0.7	0.8	138.01	-7,337.7	3,551.6	8,163.1	8,161.6	1.49	5,476.806		
500.0	499.3	557.3	557.3	0.9	1.0	126.10	-7,337.7	3,551.6	8,168.2	8,166.3	1.86	4,386.338		
600.0	598.9	656.9	656.9	1.2	1.1	116.47	-7,337.7	3,551.6	8,172.6	8,170.3	2.25	3,636.471		
700.0	698.5	756.5	756.5	1.4	1.3	108.94	-7,337.7	3,551.6	8,176.3	8,173.6	2.65	3,087.287		
800.0	797.9	855.9	855.9	1.6	1.5	103.09	-7,337.7	3,551.6	8,179.2	8,176.2	3.07	2,666.786		
900.0	897.1	955.1	955.1	1.9	1.7	98.52	-7,337.7	3,551.6	8,181.5	8,178.0	3.51	2,334.089		
1,000.0	996.2	1,054.2	1,054.2	2.2	1.8	94.91	-7,337.7	3,551.6	8,183.1	8,179.2	3.96	2,064.214		
1,100.0	1,095.0	1,153.0	1,153.0	2.5	2.0	92.02	-7,337.7	3,551.6	8,184.0	8,179.6	4.45	1,840.990		
1,200.0	1,193.6	1,251.6	1,251.6	2.8	2.2	89.68	-7,337.7	3,551.6	8,184.3	8,179.3	4.95	1,653.451		
1,300.0	1,291.9	1,349.9	1,349.9	3.2	2.4	87.77	-7,337.7	3,551.6	8,183.8	8,178.4	5.48	1,493.876		
1,400.0	1,389.9	1,447.9	1,447.9	3.5	2.5	86.19	-7,337.7	3,551.6	8,182.7	8,176.7	6.03	1,356.651		
1,500.0	1,487.6	1,545.6	1,545.6	3.9	2.7	84.89	-7,337.7	3,551.6	8,181.0	8,174.4	6.61	1,237.582		
1,600.0	1,584.8	1,642.8	1,642.8	4.4	2.9	83.80	-7,337.7	3,551.6	8,178.7	8,171.5	7.22	1,133.471		
1,624.3	1,608.4	1,666.4	1,666.4	4.5	2.9	83.56	-7,337.7	3,551.6	8,178.0	8,170.6	7.36	1,110.476		
1,700.0	1,681.8	1,739.8	1,739.8	4.8	3.0	83.69	-7,337.7	3,551.6	8,175.9	8,168.1	7.83	1,044.123		
1,800.0	1,778.8	1,836.8	1,836.8	5.3	3.2	83.85	-7,337.7	3,551.6	8,173.2	8,164.7	8.45	967.357		
1,900.0	1,875.8	1,933.8	1,933.8	5.7	3.4	84.02	-7,337.7	3,551.6	8,170.5	8,161.4	9.07	900.780		
2,000.0	1,972.8	2,030.8	2,030.8	6.2	3.5	84.18	-7,337.7	3,551.6	8,167.9	8,158.2	9.69	842.545		
2,100.0	2,069.8	2,127.8	2,127.8	6.6	3.7	84.35	-7,337.7	3,551.6	8,165.4	8,155.1	10.32	791.214		
2,200.0	2,166.8	2,224.8	2,224.8	7.1	3.9	84.51	-7,337.7	3,551.6	8,163.0	8,152.0	10.95	745.652		
2,300.0	2,263.8	2,321.8	2,321.8	7.5	4.1	84.68	-7,337.7	3,551.6	8,160.6	8,149.0	11.58	704.956		
2,400.0	2,360.8	2,418.8	2,418.8	8.0	4.2	84.84	-7,337.7	3,551.6	8,158.3	8,146.1	12.21	668.397		
2,500.0	2,457.7	2,515.7	2,515.7	8.4	4.4	85.01	-7,337.7	3,551.6	8,156.1	8,143.3	12.84	635.385		
2,600.0	2,554.7	2,612.7	2,612.7	8.9	4.6	85.17	-7,337.7	3,551.6	8,154.0	8,140.5	13.47	605.434		
2,700.0	2,651.7	2,709.7	2,709.7	9.4	4.7	85.34	-7,337.7	3,551.6	8,151.9	8,137.8	14.10	578.141		
2,800.0	2,748.7	2,806.7	2,806.7	9.8	4.9	85.51	-7,337.7	3,551.6	8,149.9	8,135.1	14.73	553.173		
2,900.0	2,845.7	2,903.7	2,903.7	10.3	5.1	85.67	-7,337.7	3,551.6	8,148.0	8,132.6	15.37	530.247		
3,000.0	2,942.7	3,000.7	3,000.7	10.8	5.2	85.84	-7,337.7	3,551.6	8,146.1	8,130.1	16.00	509.126		
3,100.0	3,039.7	3,097.7	3,097.7	11.2	5.4	86.00	-7,337.7	3,551.6	8,144.3	8,127.7	16.63	489.606		
3,200.0	3,136.7	3,194.7	3,194.7	11.7	5.6	86.17	-7,337.7	3,551.6	8,142.6	8,125.3	17.27	471.514		
3,300.0	3,233.6	3,291.6	3,291.6	12.2	5.7	86.33	-7,337.7	3,551.6	8,140.9	8,123.0	17.90	454.701		
3,400.0	3,330.6	3,388.6	3,388.6	12.6	5.9	86.50	-7,337.7	3,551.6	8,139.4	8,120.8	18.54	439.036		
3,500.0	3,427.6	3,485.6	3,485.6	13.1	6.1	86.67	-7,337.7	3,551.6	8,137.9	8,118.7	19.17	424.406		
3,600.0	3,524.6	3,582.6	3,582.6	13.6	6.3	86.83	-7,337.7	3,551.6	8,136.5	8,116.6	19.81	410.715		
3,700.0	3,621.6	3,679.6	3,679.6	14.0	6.4	87.00	-7,337.7	3,551.6	8,135.1	8,114.7	20.45	397.875		
3,800.0	3,718.6	3,776.6	3,776.6	14.5	6.6	87.16	-7,337.7	3,551.6	8,133.8	8,112.7	21.08	385.809		
3,900.0	3,815.6	3,873.6	3,873.6	15.0	6.8	87.33	-7,337.7	3,551.6	8,132.6	8,110.9	21.72	374.451		
4,000.0	3,912.6	3,970.6	3,970.6	15.4	6.9	87.50	-7,337.7	3,551.6	8,131.5	8,109.1	22.36	363.741		
4,100.0	4,009.5	4,067.5	4,067.5	15.9	7.1	87.66	-7,337.7	3,551.6	8,130.4	8,107.4	22.99	353.625		
4,200.0	4,106.5	4,164.5	4,164.5	16.4	7.3	87.83	-7,337.7	3,551.6	8,129.4	8,105.8	23.63	344.056		
4,300.0	4,203.5	4,261.5	4,261.5	16.8	7.4	88.00	-7,337.7	3,551.6	8,128.5	8,104.3	24.26	334.991		
4,400.0	4,300.5	4,358.5	4,358.5	17.3	7.6	88.16	-7,337.7	3,551.6	8,127.7	8,102.8	24.90	326.392		
4,500.0	4,397.5	4,455.5	4,455.5	17.8	7.8	88.33	-7,337.7	3,551.6	8,126.9	8,101.4	25.54	318.224		
4,600.0	4,494.5	4,552.5	4,552.5	18.2	7.9	88.50	-7,337.7	3,551.6	8,126.2	8,100.0	26.18	310.456		
4,700.0	4,591.5	4,649.5	4,649.5	18.7	8.1	88.66	-7,337.7	3,551.6	8,125.6	8,098.8	26.81	303.060		
4,800.0	4,688.5	4,746.5	4,746.5	19.2	8.3	88.83	-7,337.7	3,551.6	8,125.0	8,097.6	27.45	296.010		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO												Offset Site Error: 0.0 ft	
Survey Program: 8413-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	4,785.4	4,843.4	4,843.4	19.6	8.5	89.00	-7,337.7	3,551.6	8,124.6	8,096.5	28.09	289.283	
5,000.0	4,882.4	4,940.4	4,940.4	20.1	8.6	89.16	-7,337.7	3,551.6	8,124.2	8,095.4	28.72	282.856	
5,100.0	4,979.4	5,037.4	5,037.4	20.6	8.8	89.33	-7,337.7	3,551.6	8,123.8	8,094.5	29.36	276.712	
5,200.0	5,076.4	5,134.4	5,134.4	21.0	9.0	89.50	-7,337.7	3,551.6	8,123.6	8,093.6	29.99	270.831	
5,300.0	5,173.4	5,231.4	5,231.4	21.5	9.1	89.66	-7,337.7	3,551.6	8,123.4	8,092.8	30.63	265.198	
5,400.0	5,270.4	5,328.4	5,328.4	22.0	9.3	89.83	-7,337.7	3,551.6	8,123.3	8,092.0	31.27	259.798	
5,500.0	5,367.4	5,425.4	5,425.4	22.5	9.5	90.00	-7,337.7	3,551.6	8,123.2	8,091.3	31.90	254.616	
5,502.9	5,370.2	5,428.2	5,428.2	22.5	9.5	90.00	-7,337.7	3,551.6	8,123.2	8,091.3	31.92	254.469	
5,600.0	5,464.4	5,522.4	5,522.4	22.9	9.6	90.16	-7,337.7	3,551.6	8,123.3	8,090.7	32.54	249.640	
5,700.0	5,561.4	5,619.4	5,619.4	23.4	9.8	90.33	-7,337.7	3,551.6	8,123.4	8,090.2	33.18	244.858	
5,800.0	5,658.3	5,716.3	5,716.3	23.9	10.0	90.50	-7,337.7	3,551.6	8,123.6	8,089.8	33.81	240.259	
5,900.0	5,755.3	5,813.3	5,813.3	24.3	10.1	90.66	-7,337.7	3,551.6	8,123.8	8,089.4	34.45	235.834	
6,000.0	5,852.3	5,910.3	5,910.3	24.8	10.3	90.83	-7,337.7	3,551.6	8,124.1	8,089.1	35.08	231.572	
6,100.0	5,949.3	6,007.3	6,007.3	25.3	10.5	90.99	-7,337.7	3,551.6	8,124.5	8,088.8	35.72	227.464	
6,200.0	6,046.3	6,104.3	6,104.3	25.7	10.7	91.16	-7,337.7	3,551.6	8,125.0	8,088.7	36.35	223.504	
6,300.0	6,143.3	6,201.3	6,201.3	26.2	10.8	91.33	-7,337.7	3,551.6	8,125.6	8,088.6	36.99	219.683	
6,400.0	6,240.3	6,298.3	6,298.3	26.7	11.0	91.49	-7,337.7	3,551.6	8,126.2	8,088.6	37.62	215.994	
6,500.0	6,337.3	6,395.3	6,395.3	27.1	11.2	91.66	-7,337.7	3,551.6	8,126.9	8,088.6	38.26	212.431	
6,600.0	6,434.2	6,492.2	6,492.2	27.6	11.3	91.83	-7,337.7	3,551.6	8,127.6	8,088.7	38.89	208.987	
6,700.0	6,531.2	6,589.2	6,589.2	28.1	11.5	91.99	-7,337.7	3,551.6	8,128.5	8,089.0	39.52	205.657	
6,800.0	6,628.2	6,686.2	6,686.2	28.5	11.7	92.16	-7,337.7	3,551.6	8,129.4	8,089.2	40.16	202.435	
6,900.0	6,725.2	6,783.2	6,783.2	29.0	11.8	92.33	-7,337.7	3,551.6	8,130.4	8,089.6	40.79	199.317	
7,000.0	6,822.2	6,880.2	6,880.2	29.5	12.0	92.49	-7,337.7	3,551.6	8,131.4	8,090.0	41.42	196.297	
7,100.0	6,919.2	6,977.2	6,977.2	30.0	12.2	92.66	-7,337.7	3,551.6	8,132.6	8,090.5	42.06	193.371	
7,200.0	7,016.2	7,074.2	7,074.2	30.4	12.3	92.83	-7,337.7	3,551.6	8,133.8	8,091.1	42.69	190.535	
7,300.0	7,113.2	7,171.2	7,171.2	30.9	12.5	92.99	-7,337.7	3,551.6	8,135.0	8,091.7	43.32	187.785	
7,328.7	7,141.0	7,199.0	7,199.0	31.0	12.6	93.04	-7,337.7	3,551.6	8,135.4	8,091.9	43.50	187.010	
7,350.0	7,161.7	7,219.7	7,219.7	31.1	12.6	84.67	-7,337.7	3,551.6	8,135.3	8,091.7	43.63	186.445	
7,400.0	7,210.3	7,268.3	7,268.3	31.3	12.7	63.99	-7,337.7	3,551.6	8,132.1	8,088.2	43.92	185.137	
7,450.0	7,258.7	7,316.7	7,316.7	31.5	12.8	45.86	-7,337.7	3,551.6	8,124.7	8,080.5	44.20	183.831	
7,500.0	7,306.5	7,364.5	7,364.5	31.7	12.9	32.42	-7,337.7	3,551.6	8,113.1	8,068.7	44.45	182.534	
7,550.0	7,353.4	7,411.4	7,411.4	31.8	12.9	22.93	-7,337.7	3,551.6	8,097.5	8,052.8	44.68	181.251	
7,600.0	7,399.0	7,457.0	7,457.0	31.9	13.0	16.07	-7,337.7	3,551.6	8,078.0	8,033.1	44.88	179.989	
7,650.0	7,442.9	7,500.9	7,500.9	32.0	13.1	10.87	-7,337.7	3,551.6	8,054.7	8,009.6	45.06	178.754	
7,700.0	7,484.9	7,542.9	7,542.9	32.1	13.2	6.66	-7,337.7	3,551.6	8,027.7	7,982.5	45.21	177.551	
7,750.0	7,524.5	7,582.5	7,582.5	32.1	13.2	3.02	-7,337.7	3,551.6	7,997.4	7,952.0	45.34	176.385	
7,800.0	7,561.6	7,619.6	7,619.6	32.1	13.3	-0.37	-7,337.7	3,551.6	7,963.8	7,918.4	45.44	175.263	
7,850.0	7,595.8	7,653.8	7,653.8	32.2	13.4	-3.76	-7,337.7	3,551.6	7,927.4	7,881.8	45.51	174.190	
7,900.0	7,626.8	7,684.8	7,684.8	32.2	13.4	-7.41	-7,337.7	3,551.6	7,888.2	7,842.7	45.55	173.171	
7,950.0	7,654.5	7,712.5	7,712.5	32.2	13.5	-11.62	-7,337.7	3,551.6	7,846.8	7,801.2	45.56	172.212	
8,000.0	7,678.5	7,736.5	7,736.5	32.3	13.5	-16.78	-7,337.7	3,551.6	7,803.3	7,757.7	45.55	171.317	
8,050.0	7,698.8	7,756.8	7,756.8	32.3	13.5	-23.51	-7,337.7	3,551.6	7,758.1	7,712.6	45.50	170.491	
8,100.0	7,715.2	7,773.2	7,773.2	32.3	13.6	-32.68	-7,337.7	3,551.6	7,711.5	7,666.1	45.43	169.738	
8,150.0	7,727.5	7,785.5	7,785.5	32.4	13.6	-45.39	-7,337.7	3,551.6	7,664.0	7,618.7	45.33	169.064	
8,200.0	7,735.6	7,793.6	7,793.6	32.4	13.6	-62.30	-7,337.7	3,551.6	7,615.8	7,570.6	45.21	168.471	
8,250.0	7,739.6	7,797.6	7,797.6	32.4	13.6	-81.78	-7,337.7	3,551.6	7,567.4	7,522.4	45.05	167.963	
8,271.7	7,740.0	7,798.0	7,798.0	32.5	13.6	-90.00	-7,337.7	3,551.6	7,546.4	7,501.5	44.98	167.764	
8,300.0	7,740.0	7,798.0	7,798.0	32.5	13.6	-90.00	-7,337.7	3,551.6	7,519.1	7,474.2	44.89	167.509	
8,400.0	7,740.0	7,798.0	7,798.0	32.7	13.6	-90.00	-7,337.7	3,551.6	7,422.4	7,377.9	44.55	166.618	
8,500.0	7,740.0	7,798.0	7,798.0	33.0	13.6	-90.00	-7,337.7	3,551.6	7,325.9	7,281.7	44.20	165.742	
8,600.0	7,740.0	7,798.0	7,798.0	33.4	13.6	-90.00	-7,337.7	3,551.6	7,229.5	7,185.7	43.85	164.880	
8,700.0	7,740.0	7,798.0	7,798.0	33.8	13.6	-90.00	-7,337.7	3,551.6	7,133.2	7,089.7	43.49	164.033	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-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	7,740.0	7,798.0	7,798.0	34.4	13.6	-90.00	-7,337.7	3,551.6	7,037.0	6,993.9	43.12	163.200		
8,900.0	7,740.0	7,798.0	7,798.0	35.0	13.6	-90.00	-7,337.7	3,551.6	6,940.9	6,898.1	42.74	162.382		
9,000.0	7,740.0	7,798.0	7,798.0	35.7	13.6	-90.00	-7,337.7	3,551.6	6,844.9	6,802.5	42.36	161.579		
9,100.0	7,740.0	7,798.0	7,798.0	36.4	13.6	-90.00	-7,337.7	3,551.6	6,749.0	6,707.0	41.97	160.789		
9,200.0	7,740.0	7,798.0	7,798.0	37.3	13.6	-90.00	-7,337.7	3,551.6	6,653.2	6,611.6	41.58	160.012		
9,300.0	7,740.0	7,798.0	7,798.0	38.2	13.6	-90.00	-7,337.7	3,551.6	6,557.6	6,516.4	41.18	159.247		
9,400.0	7,740.0	7,798.0	7,798.0	39.1	13.6	-90.00	-7,337.7	3,551.6	6,462.1	6,421.3	40.77	158.494		
9,500.0	7,740.0	7,798.0	7,798.0	40.1	13.6	-90.00	-7,337.7	3,551.6	6,366.7	6,326.4	40.36	157.749		
9,600.0	7,740.0	7,798.0	7,798.0	41.2	13.6	-90.00	-7,337.7	3,551.6	6,271.5	6,231.5	39.94	157.011		
9,700.0	7,740.0	7,798.0	7,798.0	42.3	13.6	-90.00	-7,337.7	3,551.6	6,176.4	6,136.9	39.52	156.277		
9,800.0	7,740.0	7,798.0	7,798.0	43.5	13.6	-90.00	-7,337.7	3,551.6	6,081.5	6,042.4	39.10	155.544		
9,900.0	7,740.0	7,798.0	7,798.0	44.7	13.6	-90.00	-7,337.7	3,551.6	5,986.8	5,948.1	38.67	154.807		
10,000.0	7,740.0	7,798.0	7,798.0	45.9	13.6	-90.00	-7,337.7	3,551.6	5,892.2	5,853.9	38.25	154.062		
10,100.0	7,740.0	7,798.0	7,798.0	47.1	13.6	-90.00	-7,337.7	3,551.6	5,797.8	5,760.0	37.82	153.300		
10,200.0	7,740.0	7,798.0	7,798.0	48.4	13.6	-90.00	-7,337.7	3,551.6	5,703.6	5,666.2	37.40	152.516		
10,300.0	7,740.0	7,798.0	7,798.0	49.8	13.6	-90.00	-7,337.7	3,551.6	5,609.6	5,572.6	36.98	151.699		
10,400.0	7,740.0	7,798.0	7,798.0	51.1	13.6	-90.00	-7,337.7	3,551.6	5,515.8	5,479.2	36.57	150.837		
10,500.0	7,740.0	7,798.0	7,798.0	52.5	13.6	-90.00	-7,337.7	3,551.6	5,422.2	5,386.1	36.17	149.917		
10,600.0	7,740.0	7,798.0	7,798.0	53.9	13.6	-90.00	-7,337.7	3,551.6	5,328.9	5,293.1	35.78	148.923		
10,700.0	7,740.0	7,798.0	7,798.0	55.3	13.6	-90.00	-7,337.7	3,551.6	5,235.8	5,200.4	35.42	147.837		
10,800.0	7,740.0	7,798.0	7,798.0	56.7	13.6	-90.00	-7,337.7	3,551.6	5,143.0	5,107.9	35.07	146.636		
10,900.0	7,740.0	7,798.0	7,798.0	58.2	13.6	-90.00	-7,337.7	3,551.6	5,050.5	5,015.7	34.76	145.297		
11,000.0	7,740.0	7,798.0	7,798.0	59.7	13.6	-90.00	-7,337.7	3,551.6	4,958.2	4,923.7	34.48	143.793		
11,100.0	7,740.0	7,798.0	7,798.0	61.2	13.6	-90.00	-7,337.7	3,551.6	4,866.2	4,832.0	34.25	142.094		
11,200.0	7,740.0	7,798.0	7,798.0	62.7	13.6	-90.00	-7,337.7	3,551.6	4,774.6	4,740.5	34.06	140.172		
11,300.0	7,740.0	7,798.0	7,798.0	64.2	13.6	-90.00	-7,337.7	3,551.6	4,683.3	4,649.4	33.94	137.996		
11,400.0	7,740.0	7,798.0	7,798.0	65.7	13.6	-90.00	-7,337.7	3,551.6	4,592.4	4,558.5	33.88	135.538		
11,500.0	7,740.0	7,798.0	7,798.0	67.2	13.6	-90.00	-7,337.7	3,551.6	4,501.8	4,467.9	33.91	132.774		
11,600.0	7,740.0	7,798.0	7,798.0	68.8	13.6	-90.00	-7,337.7	3,551.6	4,411.7	4,377.7	34.02	129.687		
11,700.0	7,740.0	7,798.0	7,798.0	70.3	13.6	-90.00	-7,337.7	3,551.6	4,322.0	4,287.8	34.23	126.268		
11,800.0	7,740.0	7,798.0	7,798.0	71.9	13.6	-90.00	-7,337.7	3,551.6	4,232.8	4,198.2	34.55	122.519		
11,900.0	7,740.0	7,798.0	7,798.0	73.5	13.6	-90.00	-7,337.7	3,551.6	4,144.0	4,109.0	34.98	118.455		
12,000.0	7,740.0	7,798.0	7,798.0	75.1	13.6	-90.00	-7,337.7	3,551.6	4,055.8	4,020.2	35.54	114.103		
12,100.0	7,740.0	7,798.0	7,798.0	76.6	13.6	-90.00	-7,337.7	3,551.6	3,968.1	3,931.9	36.24	109.503		
12,200.0	7,740.0	7,798.0	7,798.0	78.2	13.6	-90.00	-7,337.7	3,551.6	3,881.0	3,844.0	37.07	104.700		
12,300.0	7,740.0	7,798.0	7,798.0	79.8	13.6	-90.00	-7,337.7	3,551.6	3,794.6	3,756.6	38.04	99.751		
12,400.0	7,740.0	7,798.0	7,798.0	81.5	13.6	-90.00	-7,337.7	3,551.6	3,708.9	3,669.7	39.16	94.711		
12,500.0	7,740.0	7,798.0	7,798.0	83.1	13.6	-90.00	-7,337.7	3,551.6	3,623.8	3,583.4	40.43	89.637		
12,600.0	7,740.0	7,798.0	7,798.0	84.7	13.6	-90.00	-7,337.7	3,551.6	3,539.6	3,497.8	41.85	84.584		
12,700.0	7,740.0	7,798.0	7,798.0	86.3	13.6	-90.00	-7,337.7	3,551.6	3,456.2	3,412.8	43.42	79.599		
12,800.0	7,740.0	7,798.0	7,798.0	88.0	13.6	-90.00	-7,337.7	3,551.6	3,373.7	3,328.6	45.15	74.724		
12,900.0	7,740.0	7,798.0	7,798.0	89.6	13.6	-90.00	-7,337.7	3,551.6	3,292.2	3,245.2	47.03	69.995		
13,000.0	7,740.0	7,798.0	7,798.0	91.2	13.6	-90.00	-7,337.7	3,551.6	3,211.7	3,162.6	49.08	65.438		
13,100.0	7,740.0	7,798.0	7,798.0	92.9	13.6	-90.00	-7,337.7	3,551.6	3,132.4	3,081.1	51.29	61.075		
13,200.0	7,740.0	7,798.0	7,798.0	94.5	13.6	-90.00	-7,337.7	3,551.6	3,054.2	3,000.6	53.66	56.921		
13,300.0	7,740.0	7,798.0	7,798.0	96.2	13.6	-90.00	-7,337.7	3,551.6	2,977.4	2,921.2	56.19	52.984		
13,400.0	7,740.0	7,798.0	7,798.0	97.8	13.6	-90.00	-7,337.7	3,551.6	2,902.0	2,843.1	58.90	49.270		
13,500.0	7,740.0	7,798.0	7,798.0	99.5	13.6	-90.00	-7,337.7	3,551.6	2,828.1	2,766.3	61.77	45.781		
13,600.0	7,740.0	7,798.0	7,798.0	101.2	13.6	-90.00	-7,337.7	3,551.6	2,755.8	2,691.0	64.82	42.514		
13,700.0	7,740.0	7,798.0	7,798.0	102.8	13.6	-90.00	-7,337.7	3,551.6	2,685.4	2,617.3	68.04	39.466		
13,800.0	7,740.0	7,798.0	7,798.0	104.5	13.6	-90.00	-7,337.7	3,551.6	2,616.8	2,545.4	71.44	36.632		
13,900.0	7,740.0	7,798.0	7,798.0	106.2	13.6	-90.00	-7,337.7	3,551.6	2,550.4	2,475.4	75.00	34.005		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-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	7,740.0	7,798.0	7,798.0	107.8	13.6	-90.00	-7,337.7	3,551.6	2,486.1	2,407.4	78.73	31.576		
14,100.0	7,740.0	7,798.0	7,798.0	109.5	13.6	-90.00	-7,337.7	3,551.6	2,424.3	2,341.7	82.63	29.339		
14,200.0	7,740.0	7,798.0	7,798.0	111.2	13.6	-90.00	-7,337.7	3,551.6	2,365.2	2,278.5	86.68	27.285		
14,300.0	7,740.0	7,798.0	7,798.0	112.9	13.6	-90.00	-7,337.7	3,551.6	2,308.8	2,217.9	90.88	25.404		
14,400.0	7,740.0	7,798.0	7,798.0	114.6	13.6	-90.00	-7,337.7	3,551.6	2,255.5	2,160.3	95.21	23.690		
14,500.0	7,740.0	7,798.0	7,798.0	116.3	13.6	-90.00	-7,337.7	3,551.6	2,205.4	2,105.7	99.65	22.132		
14,600.0	7,740.0	7,798.0	7,798.0	117.9	13.6	-90.00	-7,337.7	3,551.6	2,158.8	2,054.6	104.17	20.724		
14,700.0	7,740.0	7,798.0	7,798.0	119.6	13.6	-90.00	-7,337.7	3,551.6	2,115.9	2,007.1	108.75	19.456		
14,800.0	7,740.0	7,798.0	7,798.0	121.3	13.6	-90.00	-7,337.7	3,551.6	2,076.9	1,963.5	113.36	18.322		
14,900.0	7,740.0	7,798.0	7,798.0	123.0	13.6	-90.00	-7,337.7	3,551.6	2,042.1	1,924.1	117.95	17.314		
15,000.0	7,740.0	7,798.0	7,798.0	124.7	13.6	-90.00	-7,337.7	3,551.6	2,011.6	1,889.1	122.48	16.424		
15,100.0	7,740.0	7,798.0	7,798.0	126.4	13.6	-90.00	-7,337.7	3,551.6	1,985.7	1,858.8	126.91	15.647		
15,200.0	7,740.0	7,798.0	7,798.0	128.1	13.6	-90.00	-7,337.7	3,551.6	1,964.6	1,833.4	131.19	14.975		
15,300.0	7,740.0	7,798.0	7,798.0	129.8	13.6	-90.00	-7,337.7	3,551.6	1,948.4	1,813.1	135.28	14.403		
15,400.0	7,740.0	7,798.0	7,798.0	131.5	13.6	-90.00	-7,337.7	3,551.6	1,937.2	1,798.1	139.13	13.924		
15,500.0	7,740.0	7,798.0	7,798.0	133.2	13.6	-90.00	-7,337.7	3,551.6	1,931.2	1,788.5	142.69	13.534		
15,567.1	7,740.0	7,798.0	7,798.0	134.4	13.6	-90.00	-7,337.7	3,551.6	1,930.0	1,785.1	144.91	13.319 CC		
15,600.0	7,740.0	7,798.0	7,798.0	134.9	13.6	-90.00	-7,337.7	3,551.6	1,930.3	1,784.4	145.94	13.227 ES		
15,700.0	7,740.0	7,798.0	7,798.0	136.6	13.6	-90.00	-7,337.7	3,551.6	1,934.6	1,785.7	148.84	12.998		
15,800.0	7,740.0	7,798.0	7,798.0	138.3	13.6	-90.00	-7,337.7	3,551.6	1,944.0	1,792.6	151.38	12.842		
15,900.0	7,740.0	7,798.0	7,798.0	140.0	13.6	-90.00	-7,337.7	3,551.6	1,958.5	1,805.0	153.55	12.755		
16,000.0	7,740.0	7,798.0	7,798.0	141.7	13.6	-90.00	-7,337.7	3,551.6	1,978.0	1,822.6	155.34	12.733 SF		
16,100.0	7,740.0	7,798.0	7,798.0	143.5	13.6	-90.00	-7,337.7	3,551.6	2,002.2	1,845.5	156.76	12.772		
16,171.7	7,740.0	7,798.0	7,798.0	144.7	13.6	-90.00	-7,337.7	3,551.6	2,022.5	1,864.9	157.56	12.836		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	29.0	29.0	0.0	0.0	65.51	1,870.5	4,107.2	4,513.1					
100.0	100.0	129.0	129.0	0.2	0.2	65.51	1,870.5	4,107.2	4,513.1	4,512.7	0.35	N/A		
150.0	150.0	179.0	179.0	0.2	0.3	65.51	1,870.5	4,107.2	4,513.1	4,512.6	0.53	8,534.034		
200.0	200.0	277.5	277.5	0.3	0.5	65.54	1,870.7	4,106.7	4,512.7	4,511.9	0.79	5,720.560		
283.3	283.2	499.7	499.6	0.5	0.9	65.71	1,872.3	4,099.6	4,508.8	4,507.5	1.34	3,361.470		
300.0	299.9	544.1	543.9	0.5	1.0	63.35	1,872.9	4,097.1	4,507.6	4,506.1	1.46	3,097.730		
400.0	399.6	809.0	807.9	0.7	1.5	49.62	1,877.8	4,075.7	4,497.0	4,494.9	2.16	2,086.380		
500.0	499.3	1,070.7	1,067.3	0.9	2.3	37.56	1,885.3	4,042.8	4,481.3	4,478.4	2.90	1,543.386		
600.0	598.9	1,327.4	1,320.1	1.2	3.1	27.64	1,895.3	3,999.4	4,460.4	4,456.7	3.71	1,202.514		
700.0	698.5	1,577.6	1,564.4	1.4	4.2	19.66	1,907.4	3,946.6	4,434.6	4,430.0	4.58	968.416		
800.0	797.9	1,722.7	1,704.9	1.6	4.8	13.40	1,915.4	3,911.5	4,404.7	4,399.5	5.20	847.860		
900.0	897.1	1,816.7	1,795.9	1.9	5.3	8.45	1,920.7	3,888.4	4,373.1	4,367.5	5.66	772.297		
1,000.0	996.2	1,910.1	1,886.3	2.2	5.7	4.43	1,926.0	3,865.4	4,340.1	4,334.0	6.13	708.212		
1,100.0	1,095.0	2,002.9	1,976.1	2.5	6.1	1.10	1,931.2	3,842.6	4,305.6	4,299.0	6.59	653.116		
1,200.0	1,193.6	2,095.0	2,065.2	2.8	6.6	-1.73	1,936.4	3,820.0	4,269.7	4,262.6	7.06	605.170		
1,300.0	1,291.9	2,186.4	2,153.7	3.2	7.0	-4.17	1,941.5	3,797.5	4,232.4	4,224.9	7.52	562.995		
1,400.0	1,389.9	2,277.1	2,241.5	3.5	7.4	-6.32	1,946.7	3,775.3	4,193.7	4,185.7	7.98	525.533		
1,500.0	1,487.6	2,367.1	2,328.5	3.9	7.9	-8.23	1,951.7	3,753.2	4,153.6	4,145.1	8.44	491.960		
1,600.0	1,584.8	2,456.3	2,414.8	4.4	8.3	-9.98	1,956.7	3,731.2	4,112.1	4,103.2	8.91	461.626		
1,624.3	1,608.4	2,477.8	2,435.6	4.5	8.4	-10.38	1,958.0	3,726.0	4,101.9	4,092.8	9.02	454.688		
1,700.0	1,681.8	2,544.9	2,500.6	4.8	8.7	-10.59	1,961.7	3,709.5	4,069.7	4,060.4	9.38	433.999		
1,800.0	1,778.8	2,633.5	2,586.3	5.3	9.1	-10.88	1,966.7	3,687.7	4,027.4	4,017.6	9.85	408.738		
1,900.0	1,875.8	2,722.0	2,672.0	5.7	9.6	-11.18	1,971.7	3,666.0	3,985.2	3,974.9	10.34	385.568		
2,000.0	1,972.8	2,810.6	2,757.7	6.2	10.0	-11.48	1,976.7	3,644.2	3,943.0	3,932.2	10.82	364.254		
2,100.0	2,069.8	2,899.2	2,843.5	6.6	10.4	-11.79	1,981.7	3,622.4	3,901.0	3,889.7	11.32	344.592		
2,200.0	2,166.8	2,987.8	2,929.2	7.1	10.8	-12.11	1,986.7	3,600.7	3,859.1	3,847.2	11.82	326.405		
2,300.0	2,263.8	3,076.4	3,014.9	7.5	11.3	-12.43	1,991.7	3,578.9	3,817.2	3,804.9	12.33	309.540		
2,400.0	2,360.8	3,165.0	3,100.6	8.0	11.7	-12.76	1,996.7	3,557.1	3,775.5	3,762.6	12.85	293.864		
2,500.0	2,457.7	3,253.5	3,186.3	8.4	12.1	-13.09	2,001.7	3,535.4	3,733.9	3,720.5	13.37	279.261		
2,600.0	2,554.7	3,342.1	3,272.1	8.9	12.5	-13.43	2,006.6	3,513.6	3,692.4	3,678.5	13.90	265.629		
2,700.0	2,651.7	3,430.7	3,357.8	9.4	13.0	-13.78	2,011.6	3,491.8	3,651.0	3,636.5	14.44	252.878		
2,800.0	2,748.7	3,519.3	3,443.5	9.8	13.4	-14.14	2,016.6	3,470.1	3,609.7	3,594.7	14.98	240.928		
2,900.0	2,845.7	3,607.9	3,529.2	10.3	13.8	-14.51	2,021.6	3,448.3	3,568.5	3,553.0	15.54	229.709		
3,000.0	2,942.7	3,696.5	3,615.0	10.8	14.2	-14.88	2,026.6	3,426.6	3,527.5	3,511.4	16.10	219.160		
3,100.0	3,039.7	3,785.0	3,700.7	11.2	14.7	-15.26	2,031.6	3,404.8	3,486.7	3,470.0	16.66	209.225		
3,200.0	3,136.7	3,873.6	3,786.4	11.7	15.1	-15.65	2,036.6	3,383.0	3,445.9	3,428.7	17.24	199.854		
3,300.0	3,233.6	3,962.2	3,872.1	12.2	15.5	-16.05	2,041.6	3,361.3	3,405.3	3,387.5	17.83	191.003		
3,400.0	3,330.6	4,050.8	3,957.9	12.6	16.0	-16.46	2,046.6	3,339.5	3,364.9	3,346.4	18.42	182.632		
3,500.0	3,427.6	4,139.4	4,043.6	13.1	16.4	-16.87	2,051.5	3,317.7	3,324.6	3,305.6	19.03	174.707		
3,600.0	3,524.6	4,228.0	4,129.3	13.6	16.8	-17.30	2,056.5	3,296.0	3,284.5	3,264.8	19.64	167.193		
3,700.0	3,621.6	4,316.5	4,215.0	14.0	17.2	-17.74	2,061.5	3,274.2	3,244.5	3,224.2	20.27	160.063		
3,800.0	3,718.6	4,405.1	4,300.7	14.5	17.7	-18.18	2,066.5	3,252.5	3,204.7	3,183.8	20.91	153.290		
3,900.0	3,815.6	4,493.7	4,386.5	15.0	18.1	-18.64	2,071.5	3,230.7	3,165.1	3,143.5	21.55	146.850		
4,000.0	3,912.6	4,582.3	4,472.2	15.4	18.5	-19.11	2,076.5	3,208.9	3,125.7	3,103.5	22.21	140.722		
4,100.0	4,009.5	4,670.9	4,557.9	15.9	19.0	-19.59	2,081.5	3,187.2	3,086.5	3,063.6	22.88	134.884		
4,200.0	4,106.5	4,759.5	4,643.6	16.4	19.4	-20.08	2,086.5	3,165.4	3,047.4	3,023.9	23.56	129.321		
4,300.0	4,203.5	4,848.0	4,729.4	16.8	19.8	-20.58	2,091.5	3,143.6	3,008.6	2,984.4	24.26	124.013		
4,400.0	4,300.5	4,936.6	4,815.1	17.3	20.2	-21.09	2,096.5	3,121.9	2,970.0	2,945.1	24.97	118.948		
4,500.0	4,397.5	5,025.2	4,900.8	17.8	20.7	-21.62	2,101.4	3,100.1	2,931.7	2,906.0	25.69	114.110		
4,600.0	4,494.5	5,113.8	4,986.5	18.2	21.1	-22.16	2,106.4	3,078.4	2,893.5	2,867.1	26.43	109.488		
4,700.0	4,591.5	5,202.4	5,072.3	18.7	21.5	-22.71	2,111.4	3,056.6	2,855.6	2,828.4	27.18	105.068		
4,800.0	4,688.5	5,291.0	5,158.0	19.2	22.0	-23.27	2,116.4	3,034.8	2,818.0	2,790.0	27.94	100.841		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,785.4	5,379.5	5,243.7	19.6	22.4	-23.85	2,121.4	3,013.1	2,780.6	2,751.9	28.73	96.796		
5,000.0	4,882.4	5,468.1	5,329.4	20.1	22.8	-24.45	2,126.4	2,991.3	2,743.5	2,714.0	29.52	92.924		
5,100.0	4,979.4	5,556.7	5,415.2	20.6	23.2	-25.06	2,131.4	2,969.5	2,706.7	2,676.4	30.34	89.217		
5,200.0	5,076.4	5,645.3	5,500.9	21.0	23.7	-25.68	2,136.4	2,947.8	2,670.2	2,639.0	31.17	85.667		
5,300.0	5,173.4	5,733.9	5,586.6	21.5	24.1	-26.32	2,141.4	2,926.0	2,634.0	2,602.0	32.02	82.265		
5,400.0	5,270.4	5,822.5	5,672.3	22.0	24.5	-26.98	2,146.4	2,904.3	2,598.1	2,565.2	32.89	79.006		
5,500.0	5,367.4	9,254.0	7,530.0	22.5	42.8	29.36	392.4	2,433.0	2,540.2	2,512.6	27.52	92.309		
5,600.0	5,464.4	9,246.5	7,530.0	22.9	42.7	28.88	399.9	2,433.0	2,446.3	2,418.4	27.92	87.612		
5,700.0	5,561.4	9,239.1	7,530.0	23.4	42.7	28.39	407.4	2,432.9	2,353.0	2,324.7	28.35	82.988		
5,800.0	5,658.3	9,231.6	7,530.0	23.9	42.6	27.90	414.9	2,432.9	2,260.2	2,231.4	28.81	78.441		
5,900.0	5,755.3	9,224.1	7,530.0	24.3	42.5	27.41	422.3	2,432.9	2,168.0	2,138.7	29.31	73.975		
6,000.0	5,852.3	9,216.6	7,530.0	24.8	42.4	26.92	429.8	2,432.9	2,076.6	2,046.7	29.84	69.596		
6,100.0	5,949.3	9,209.1	7,530.0	25.3	42.3	26.43	437.3	2,432.9	1,985.9	1,955.5	30.41	65.309		
6,200.0	6,046.3	9,201.7	7,530.0	25.7	42.2	25.93	444.8	2,432.9	1,896.1	1,865.1	31.02	61.121		
6,300.0	6,143.3	9,194.2	7,530.0	26.2	42.2	25.44	452.3	2,432.9	1,807.4	1,775.7	31.69	57.039		
6,400.0	6,240.3	9,186.7	7,530.0	26.7	42.1	24.94	459.8	2,432.9	1,719.8	1,687.4	32.41	53.072		
6,500.0	6,337.3	9,179.2	7,530.0	27.1	42.0	24.44	467.2	2,432.9	1,633.7	1,600.5	33.18	49.232		
6,600.0	6,434.2	9,171.7	7,530.0	27.6	41.9	23.94	474.7	2,432.9	1,549.2	1,515.2	34.03	45.531		
6,700.0	6,531.2	9,164.2	7,530.0	28.1	41.8	23.44	482.2	2,432.9	1,466.6	1,431.7	34.93	41.982		
6,800.0	6,628.2	9,156.8	7,530.0	28.5	41.8	22.94	489.7	2,432.9	1,386.3	1,350.4	35.91	38.601		
6,900.0	6,725.2	9,149.3	7,530.0	29.0	41.7	22.44	497.2	2,432.9	1,308.6	1,271.7	36.96	35.405		
7,000.0	6,822.2	9,141.8	7,530.0	29.5	41.6	21.94	504.6	2,432.9	1,234.2	1,196.1	38.07	32.414		
7,100.0	6,919.2	9,134.3	7,530.0	30.0	41.5	21.44	512.1	2,432.9	1,163.5	1,124.2	39.24	29.651		
7,200.0	7,016.2	9,126.8	7,530.0	30.4	41.4	20.93	519.6	2,432.9	1,097.3	1,056.8	40.43	27.141		
7,300.0	7,113.2	9,119.4	7,530.0	30.9	41.4	20.43	527.1	2,432.9	1,036.5	994.9	41.61	24.911		
7,328.7	7,141.0	9,117.2	7,530.0	31.0	41.3	20.28	529.2	2,432.9	1,020.1	978.2	41.93	24.327		
7,350.0	7,161.7	9,116.0	7,530.0	31.1	41.3	10.39	530.4	2,432.9	1,008.4	966.2	42.17	23.912		
7,400.0	7,210.3	9,116.3	7,530.0	31.3	41.3	-13.38	530.1	2,432.9	982.0	939.3	42.71	22.993		
7,450.0	7,258.7	9,120.9	7,530.0	31.5	41.4	-33.87	525.5	2,432.9	957.5	914.3	43.23	22.152		
7,500.0	7,306.5	9,129.9	7,530.0	31.7	41.5	-48.95	516.5	2,432.9	935.4	891.7	43.71	21.398		
7,550.0	7,353.4	9,143.1	7,530.0	31.8	41.6	-59.35	503.3	2,432.9	915.7	871.6	44.17	20.734		
7,600.0	7,399.0	9,160.5	7,530.0	31.9	41.8	-66.40	485.9	2,432.9	898.7	854.1	44.57	20.161		
7,650.0	7,442.9	9,181.9	7,530.0	32.0	42.0	-71.13	464.6	2,432.9	884.3	839.3	44.94	19.678		
7,700.0	7,484.9	9,207.1	7,530.0	32.1	42.3	-74.20	439.3	2,432.9	872.5	827.2	45.26	19.277		
7,750.0	7,524.5	9,236.1	7,530.0	32.1	42.6	-76.07	410.4	2,432.9	863.2	817.6	45.55	18.949		
7,800.0	7,561.6	9,268.4	7,530.0	32.1	43.0	-77.05	378.0	2,433.0	856.2	810.3	45.83	18.682		
7,850.0	7,595.8	9,304.0	7,530.0	32.2	43.4	-77.37	342.5	2,433.0	851.1	805.0	46.10	18.464		
7,900.0	7,626.8	9,342.4	7,530.0	32.2	43.8	-77.23	304.0	2,433.0	847.8	801.4	46.39	18.278		
7,950.0	7,654.5	9,383.5	7,530.0	32.2	44.3	-76.77	262.9	2,433.0	845.9	799.2	46.71	18.110		
8,000.0	7,678.5	9,427.0	7,530.0	32.3	44.8	-76.14	219.5	2,433.0	845.0	797.9	47.09	17.945		
8,045.2	7,697.0	9,468.0	7,530.0	32.3	45.3	-75.51	178.5	2,433.0	844.7	797.2	47.49	17.787 CC		
8,050.0	7,698.8	9,472.4	7,530.0	32.3	45.4	-75.44	174.0	2,433.0	844.7	797.2	47.54	17.771		
8,100.0	7,715.2	9,519.5	7,530.0	32.3	45.9	-74.77	127.0	2,433.0	844.9	796.9	48.07	17.577		
8,150.0	7,727.5	9,567.8	7,530.0	32.4	46.5	-74.21	78.6	2,433.0	845.3	796.6	48.70	17.357		
8,200.0	7,735.6	9,617.1	7,530.0	32.4	47.1	-73.81	29.3	2,433.0	845.7	796.2	49.44	17.107		
8,250.0	7,739.6	9,666.9	7,530.0	32.4	47.8	-73.61	-20.5	2,433.0	845.9	795.6	50.28	16.824		
8,271.7	7,740.0	9,688.6	7,530.0	32.5	48.0	-73.59	-42.1	2,433.0	845.9	795.2	50.68	16.692		
8,300.0	7,740.0	9,716.9	7,530.0	32.5	48.4	-73.59	-70.5	2,433.0	845.9	794.7	51.22	16.516		
8,400.0	7,740.0	9,816.9	7,530.0	32.7	49.7	-73.59	-170.5	2,433.0	845.9	792.7	53.25	15.885		
8,500.0	7,740.0	9,916.9	7,530.0	33.0	51.0	-73.59	-270.5	2,433.1	845.9	790.5	55.46	15.252		
8,600.0	7,740.0	10,016.9	7,530.0	33.4	52.4	-73.59	-370.5	2,433.1	846.0	788.1	57.83	14.628		
8,700.0	7,740.0	10,116.9	7,530.0	33.8	53.8	-73.59	-470.5	2,433.1	846.0	785.6	60.34	14.021		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	10,216.9	7,530.0	34.4	55.2	-73.59	-570.5	2,433.1	846.0	783.0	62.96	13.438		
8,900.0	7,740.0	10,316.9	7,530.0	35.0	56.6	-73.59	-670.5	2,433.1	846.0	780.3	65.68	12.881		
9,000.0	7,740.0	10,416.9	7,530.0	35.7	58.0	-73.59	-770.5	2,433.1	846.0	777.5	68.48	12.354		
9,100.0	7,740.0	10,516.9	7,530.0	36.4	59.5	-73.59	-870.5	2,433.2	846.0	774.7	71.35	11.857		
9,200.0	7,740.0	10,616.9	7,530.0	37.3	60.9	-73.59	-970.5	2,433.2	846.1	771.8	74.29	11.389		
9,300.0	7,740.0	10,716.9	7,530.0	38.2	62.4	-73.59	-1,070.5	2,433.2	846.1	768.8	77.27	10.950		
9,400.0	7,740.0	10,816.9	7,530.0	39.1	63.9	-73.59	-1,170.5	2,433.2	846.1	765.8	80.29	10.538		
9,500.0	7,740.0	10,916.9	7,530.0	40.1	65.4	-73.59	-1,270.5	2,433.2	846.1	762.8	83.35	10.151		
9,600.0	7,740.0	11,016.9	7,530.0	41.2	67.0	-73.59	-1,370.5	2,433.2	846.1	759.7	86.44	9.788		
9,700.0	7,740.0	11,116.9	7,530.0	42.3	68.5	-73.59	-1,470.5	2,433.3	846.1	756.6	89.56	9.447		
9,800.0	7,740.0	11,216.9	7,530.0	43.5	70.1	-73.59	-1,570.5	2,433.3	846.2	753.4	92.70	9.127		
9,900.0	7,740.0	11,316.9	7,530.0	44.7	71.6	-73.59	-1,670.5	2,433.3	846.2	750.3	95.86	8.827		
10,000.0	7,740.0	11,416.9	7,530.0	45.9	73.2	-73.59	-1,770.5	2,433.3	846.2	747.1	99.04	8.544		
10,100.0	7,740.0	11,516.9	7,530.0	47.1	74.8	-73.59	-1,870.5	2,433.3	846.2	744.0	102.24	8.277		
10,200.0	7,740.0	11,616.9	7,530.0	48.4	76.3	-73.59	-1,970.5	2,433.3	846.2	740.8	105.45	8.025		
10,300.0	7,740.0	11,716.9	7,530.0	49.8	77.9	-73.59	-2,070.5	2,433.4	846.2	737.6	108.67	7.787		
10,400.0	7,740.0	11,816.9	7,530.0	51.1	79.5	-73.60	-2,170.5	2,433.4	846.2	734.3	111.90	7.563		
10,500.0	7,740.0	11,916.9	7,530.0	52.5	81.1	-73.60	-2,270.5	2,433.4	846.3	731.1	115.14	7.350		
10,600.0	7,740.0	12,016.9	7,530.0	53.9	82.7	-73.60	-2,370.5	2,433.4	846.3	727.9	118.39	7.148		
10,700.0	7,740.0	12,116.9	7,530.0	55.3	84.4	-73.60	-2,470.5	2,433.4	846.3	724.7	121.64	6.957		
10,800.0	7,740.0	12,216.9	7,530.0	56.7	86.0	-73.60	-2,570.5	2,433.4	846.3	721.4	124.91	6.776		
10,900.0	7,740.0	12,316.9	7,530.0	58.2	87.6	-73.60	-2,670.5	2,433.5	846.3	718.1	128.18	6.603		
11,000.0	7,740.0	12,416.9	7,530.0	59.7	89.2	-73.60	-2,770.5	2,433.5	846.3	714.9	131.45	6.438		
11,100.0	7,740.0	12,516.9	7,530.0	61.2	90.9	-73.60	-2,870.5	2,433.5	846.4	711.6	134.74	6.282		
11,200.0	7,740.0	12,616.9	7,530.0	62.7	92.5	-73.60	-2,970.5	2,433.5	846.4	708.4	138.02	6.132		
11,300.0	7,740.0	12,716.9	7,530.0	64.2	94.1	-73.60	-3,070.5	2,433.5	846.4	705.1	141.31	5.989		
11,400.0	7,740.0	12,816.9	7,530.0	65.7	95.8	-73.60	-3,170.5	2,433.5	846.4	701.8	144.61	5.853		
11,500.0	7,740.0	12,916.9	7,530.0	67.2	97.4	-73.60	-3,270.5	2,433.6	846.4	698.5	147.91	5.723		
11,600.0	7,740.0	13,016.9	7,530.0	68.8	99.1	-73.60	-3,370.5	2,433.6	846.4	695.2	151.21	5.598		
11,700.0	7,740.0	13,116.9	7,530.0	70.3	100.8	-73.60	-3,470.5	2,433.6	846.5	691.9	154.51	5.478		
11,800.0	7,740.0	13,216.9	7,530.0	71.9	102.4	-73.60	-3,570.5	2,433.6	846.5	688.6	157.82	5.363		
11,900.0	7,740.0	13,316.9	7,530.0	73.5	104.1	-73.60	-3,670.5	2,433.6	846.5	685.4	161.13	5.253		
12,000.0	7,740.0	13,416.9	7,530.0	75.1	105.8	-73.60	-3,770.5	2,433.6	846.5	682.1	164.45	5.148		
12,100.0	7,740.0	13,516.9	7,530.0	76.6	107.4	-73.60	-3,870.5	2,433.7	846.5	678.8	167.76	5.046		
12,200.0	7,740.0	13,616.9	7,530.0	78.2	109.1	-73.60	-3,970.5	2,433.7	846.5	675.5	171.08	4.948		
12,300.0	7,740.0	13,716.9	7,530.0	79.8	110.8	-73.60	-4,070.5	2,433.7	846.5	672.1	174.40	4.854		
12,400.0	7,740.0	13,816.9	7,530.0	81.5	112.5	-73.60	-4,170.5	2,433.7	846.6	668.8	177.72	4.763		
12,500.0	7,740.0	13,916.9	7,530.0	83.1	114.1	-73.60	-4,270.5	2,433.7	846.6	665.5	181.05	4.676		
12,600.0	7,740.0	14,016.9	7,530.0	84.7	115.8	-73.60	-4,370.5	2,433.7	846.6	662.2	184.37	4.592		
12,700.0	7,740.0	14,116.9	7,530.0	86.3	117.5	-73.60	-4,470.5	2,433.8	846.6	658.9	187.70	4.510		
12,800.0	7,740.0	14,216.9	7,530.0	88.0	119.2	-73.60	-4,570.5	2,433.8	846.6	655.6	191.03	4.432		
12,900.0	7,740.0	14,316.9	7,530.0	89.6	120.9	-73.60	-4,670.5	2,433.8	846.6	652.3	194.36	4.356		
13,000.0	7,740.0	14,416.9	7,530.0	91.2	122.6	-73.60	-4,770.5	2,433.8	846.7	649.0	197.69	4.283		
13,100.0	7,740.0	14,516.9	7,530.0	92.9	124.3	-73.60	-4,870.5	2,433.8	846.7	645.6	201.03	4.212		
13,200.0	7,740.0	14,616.9	7,530.0	94.5	126.0	-73.60	-4,970.5	2,433.8	846.7	642.3	204.36	4.143		
13,300.0	7,740.0	14,716.9	7,530.0	96.2	127.7	-73.60	-5,070.5	2,433.9	846.7	639.0	207.70	4.077		
13,400.0	7,740.0	14,816.9	7,530.0	97.8	129.4	-73.60	-5,170.5	2,433.9	846.7	635.7	211.03	4.012		
13,500.0	7,740.0	14,916.9	7,530.0	99.5	131.0	-73.60	-5,270.5	2,433.9	846.7	632.4	214.37	3.950		
13,600.0	7,740.0	15,016.9	7,530.0	101.2	132.7	-73.61	-5,370.5	2,433.9	846.8	629.0	217.71	3.889		
13,700.0	7,740.0	15,116.9	7,530.0	102.8	134.5	-73.61	-5,470.5	2,433.9	846.8	625.7	221.05	3.831		
13,800.0	7,740.0	15,216.9	7,530.0	104.5	136.2	-73.61	-5,570.5	2,433.9	846.8	622.4	224.39	3.774		
13,900.0	7,740.0	15,316.9	7,530.0	106.2	137.9	-73.61	-5,670.5	2,434.0	846.8	619.1	227.73	3.718		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,000.0	7,740.0	15,416.9	7,530.0	107.8	139.6	-73.61	-5,770.5	2,434.0	846.8	615.7	231.08	3.665		
14,100.0	7,740.0	15,516.9	7,530.0	109.5	141.3	-73.61	-5,870.5	2,434.0	846.8	612.4	234.42	3.612		
14,200.0	7,740.0	15,616.9	7,530.0	111.2	143.0	-73.61	-5,970.5	2,434.0	846.8	609.1	237.76	3.562		
14,300.0	7,740.0	15,716.9	7,530.0	112.9	144.7	-73.61	-6,070.5	2,434.0	846.9	605.8	241.11	3.512		
14,400.0	7,740.0	15,816.9	7,530.0	114.6	146.4	-73.61	-6,170.5	2,434.0	846.9	602.4	244.45	3.464		
14,500.0	7,740.0	15,916.9	7,530.0	116.3	148.1	-73.61	-6,270.5	2,434.1	846.9	599.1	247.80	3.418		
14,600.0	7,740.0	16,016.9	7,530.0	117.9	149.8	-73.61	-6,370.5	2,434.1	846.9	595.8	251.15	3.372		
14,700.0	7,740.0	16,116.9	7,530.0	119.6	151.5	-73.61	-6,470.5	2,434.1	846.9	592.4	254.49	3.328		
14,800.0	7,740.0	16,216.9	7,530.0	121.3	153.2	-73.61	-6,570.5	2,434.1	846.9	589.1	257.84	3.285		
14,900.0	7,740.0	16,316.9	7,530.0	123.0	155.0	-73.61	-6,670.5	2,434.1	847.0	585.8	261.19	3.243		
15,000.0	7,740.0	16,416.9	7,530.0	124.7	156.7	-73.61	-6,770.5	2,434.1	847.0	582.4	264.54	3.202		
15,100.0	7,740.0	16,516.9	7,530.0	126.4	158.4	-73.61	-6,870.5	2,434.2	847.0	579.1	267.89	3.162		
15,200.0	7,740.0	16,616.9	7,530.0	128.1	160.1	-73.61	-6,970.5	2,434.2	847.0	575.8	271.24	3.123		
15,300.0	7,740.0	16,716.9	7,530.0	129.8	161.8	-73.61	-7,070.5	2,434.2	847.0	572.4	274.59	3.085		
15,400.0	7,740.0	16,816.9	7,530.0	131.5	163.5	-73.61	-7,170.5	2,434.2	847.0	569.1	277.94	3.048		
15,500.0	7,740.0	16,916.9	7,530.0	133.2	165.3	-73.61	-7,270.5	2,434.2	847.1	565.8	281.29	3.011		
15,600.0	7,740.0	17,016.9	7,530.0	134.9	167.0	-73.61	-7,370.5	2,434.2	847.1	562.4	284.64	2.976		
15,700.0	7,740.0	17,116.9	7,530.0	136.6	168.7	-73.61	-7,470.5	2,434.3	847.1	559.1	287.99	2.941		
15,800.0	7,740.0	17,216.9	7,530.0	138.3	170.4	-73.61	-7,570.5	2,434.3	847.1	555.8	291.35	2.908		
15,900.0	7,740.0	17,316.9	7,530.0	140.0	172.2	-73.61	-7,670.5	2,434.3	847.1	552.4	294.70	2.875		
16,000.0	7,740.0	17,416.9	7,530.0	141.7	173.9	-73.61	-7,770.5	2,434.3	847.1	549.1	298.05	2.842		
16,100.0	7,740.0	17,516.9	7,530.0	143.5	175.6	-73.61	-7,870.5	2,434.3	847.2	545.7	301.40	2.811		
16,171.7	7,740.0	17,588.6	7,530.0	144.7	176.8	-73.61	-7,942.1	2,434.3	847.2	543.4	303.81	2.788 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	29.0	29.0	0.0	0.0	65.57	1,870.5	4,117.3	4,522.3					
100.0	100.0	129.0	129.0	0.2	0.2	65.57	1,870.5	4,117.3	4,522.3	4,521.9	0.35	N/A		
150.0	150.0	179.0	179.0	0.2	0.3	65.57	1,870.5	4,117.3	4,522.3	4,521.7	0.53	8,551.377		
200.0	200.0	229.0	229.0	0.3	0.4	65.58	1,870.5	4,117.3	4,522.0	4,521.3	0.70	6,423.104		
283.3	283.2	409.5	409.5	0.5	0.7	65.73	1,871.1	4,115.1	4,519.7	4,518.5	1.18	3,836.078		
300.0	299.9	452.1	452.1	0.5	0.8	63.38	1,871.5	4,113.8	4,518.8	4,517.5	1.29	3,512.829		
400.0	399.6	707.2	706.7	0.7	1.3	49.70	1,875.3	4,099.7	4,510.4	4,508.4	1.95	2,316.440		
500.0	499.3	960.0	958.2	0.9	1.9	37.71	1,881.9	4,074.8	4,497.0	4,494.3	2.64	1,700.656		
600.0	598.9	1,209.0	1,204.5	1.2	2.6	27.84	1,891.2	4,039.9	4,478.6	4,475.3	3.39	1,321.228		
700.0	698.5	1,452.6	1,443.8	1.4	3.5	19.93	1,903.0	3,995.8	4,455.5	4,451.3	4.19	1,062.316		
800.0	797.9	1,554.6	1,543.5	1.6	3.9	13.79	1,908.6	3,975.1	4,429.1	4,424.5	4.65	951.811		
900.0	897.1	1,650.0	1,636.8	1.9	4.2	8.89	1,913.8	3,955.7	4,401.2	4,396.1	5.09	863.890		
1,000.0	996.2	1,744.9	1,729.6	2.2	4.6	4.92	1,918.9	3,936.5	4,371.8	4,366.3	5.53	789.991		
1,100.0	1,095.0	1,839.2	1,821.8	2.5	5.0	1.64	1,924.0	3,917.3	4,340.9	4,334.9	5.97	726.951		
1,200.0	1,193.6	1,932.9	1,913.4	2.8	5.4	-1.13	1,929.1	3,898.3	4,308.6	4,302.1	6.41	672.465		
1,300.0	1,291.9	2,026.1	2,004.4	3.2	5.7	-3.52	1,934.2	3,879.4	4,274.7	4,267.9	6.84	624.822		
1,400.0	1,389.9	2,118.5	2,094.8	3.5	6.1	-5.61	1,939.2	3,860.7	4,239.5	4,232.2	7.28	582.726		
1,500.0	1,487.6	2,210.3	2,184.6	3.9	6.5	-7.46	1,944.2	3,842.0	4,202.8	4,195.1	7.71	545.179		
1,600.0	1,584.8	2,301.3	2,273.6	4.4	6.9	-9.14	1,949.1	3,823.6	4,164.7	4,156.5	8.14	511.398		
1,624.3	1,608.4	2,323.3	2,295.1	4.5	6.9	-9.53	1,950.3	3,819.1	4,155.2	4,147.0	8.25	503.687		
1,700.0	1,681.8	2,391.9	2,362.1	4.8	7.2	-9.72	1,954.0	3,805.2	4,125.6	4,117.1	8.58	480.740		
1,800.0	1,778.8	2,482.4	2,450.6	5.3	7.6	-9.97	1,958.9	3,786.8	4,086.6	4,077.6	9.03	452.799		
1,900.0	1,875.8	2,572.9	2,539.1	5.7	8.0	-10.22	1,963.9	3,768.4	4,047.6	4,038.2	9.47	427.249		
2,000.0	1,972.8	2,663.5	2,627.6	6.2	8.3	-10.48	1,968.8	3,750.1	4,008.8	3,998.8	9.93	403.811		
2,100.0	2,069.8	2,754.0	2,716.1	6.6	8.7	-10.74	1,973.7	3,731.7	3,969.9	3,959.6	10.39	382.242		
2,200.0	2,166.8	2,844.5	2,804.7	7.1	9.1	-11.01	1,978.6	3,713.3	3,931.2	3,920.3	10.85	362.337		
2,300.0	2,263.8	2,935.0	2,893.2	7.5	9.4	-11.29	1,983.5	3,695.0	3,892.5	3,881.2	11.32	343.917		
2,400.0	2,360.8	3,025.6	2,981.7	8.0	9.8	-11.57	1,988.4	3,676.6	3,854.0	3,842.2	11.79	326.827		
2,500.0	2,457.7	3,116.1	3,070.2	8.4	10.2	-11.85	1,993.3	3,658.2	3,815.5	3,803.2	12.27	310.934		
2,600.0	2,554.7	3,206.6	3,158.7	8.9	10.5	-12.15	1,998.3	3,639.8	3,777.0	3,764.3	12.76	296.119		
2,700.0	2,651.7	3,297.2	3,247.2	9.4	10.9	-12.44	2,003.2	3,621.5	3,738.7	3,725.5	13.24	282.280		
2,800.0	2,748.7	3,387.7	3,335.7	9.8	11.3	-12.74	2,008.1	3,603.1	3,700.5	3,686.7	13.74	269.325		
2,900.0	2,845.7	3,478.2	3,424.2	10.3	11.7	-13.05	2,013.0	3,584.7	3,662.3	3,648.1	14.24	257.177		
3,000.0	2,942.7	3,568.7	3,512.7	10.8	12.0	-13.37	2,017.9	3,566.4	3,624.3	3,609.6	14.75	245.763		
3,100.0	3,039.7	3,659.3	3,601.2	11.2	12.4	-13.69	2,022.8	3,548.0	3,586.4	3,571.1	15.26	235.022		
3,200.0	3,136.7	3,749.8	3,689.7	11.7	12.8	-14.02	2,027.7	3,529.6	3,548.5	3,532.7	15.78	224.897		
3,300.0	3,233.6	3,840.3	3,778.2	12.2	13.1	-14.35	2,032.7	3,511.2	3,510.8	3,494.5	16.30	215.339		
3,400.0	3,330.6	3,930.8	3,866.7	12.6	13.5	-14.69	2,037.6	3,492.9	3,473.2	3,456.3	16.84	206.303		
3,500.0	3,427.6	4,021.4	3,955.2	13.1	13.9	-15.04	2,042.5	3,474.5	3,435.7	3,418.3	17.37	197.749		
3,600.0	3,524.6	4,111.9	4,043.7	13.6	14.3	-15.40	2,047.4	3,456.1	3,398.3	3,380.3	17.92	189.641		
3,700.0	3,621.6	4,202.4	4,132.2	14.0	14.6	-15.76	2,052.3	3,437.8	3,361.0	3,342.5	18.47	181.947		
3,800.0	3,718.6	4,292.9	4,220.7	14.5	15.0	-16.13	2,057.2	3,419.4	3,323.8	3,304.8	19.03	174.637		
3,900.0	3,815.6	4,383.5	4,309.2	15.0	15.4	-16.51	2,062.1	3,401.0	3,286.8	3,267.2	19.60	167.685		
4,000.0	3,912.6	4,474.0	4,397.8	15.4	15.8	-16.90	2,067.1	3,382.6	3,249.9	3,229.8	20.18	161.067		
4,100.0	4,009.5	4,564.5	4,486.3	15.9	16.1	-17.29	2,072.0	3,364.3	3,213.2	3,192.4	20.76	154.760		
4,200.0	4,106.5	4,655.0	4,574.8	16.4	16.5	-17.70	2,076.9	3,345.9	3,176.6	3,155.2	21.36	148.744		
4,300.0	4,203.5	4,745.6	4,663.3	16.8	16.9	-18.11	2,081.8	3,327.5	3,140.1	3,118.2	21.96	143.002		
4,400.0	4,300.5	4,836.1	4,751.8	17.3	17.2	-18.53	2,086.7	3,309.2	3,103.8	3,081.3	22.57	137.516		
4,500.0	4,397.5	4,926.6	4,840.3	17.8	17.6	-18.97	2,091.6	3,290.8	3,067.7	3,044.5	23.19	132.272		
4,600.0	4,494.5	5,017.1	4,928.8	18.2	18.0	-19.41	2,096.6	3,272.4	3,031.7	3,007.9	23.82	127.254		
4,700.0	4,591.5	5,107.7	5,017.3	18.7	18.4	-19.86	2,101.5	3,254.0	2,995.9	2,971.4	24.47	122.451		
4,800.0	4,688.5	5,198.2	5,105.8	19.2	18.7	-20.32	2,106.4	3,235.7	2,960.3	2,935.2	25.12	117.850		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,900.0	4,785.4	5,288.7	5,194.3	19.6	19.1	-20.79	2,111.3	3,217.3	2,924.8	2,899.0	25.78	113.440	
5,000.0	4,882.4	5,379.2	5,282.8	20.1	19.5	-21.28	2,116.2	3,198.9	2,889.6	2,863.1	26.46	109.211	
5,100.0	4,979.4	5,469.8	5,371.3	20.6	19.9	-21.77	2,121.1	3,180.6	2,854.5	2,827.4	27.15	105.154	
5,200.0	5,076.4	5,560.3	5,459.8	21.0	20.2	-22.28	2,126.0	3,162.2	2,819.6	2,791.8	27.85	101.260	
5,300.0	5,173.4	5,650.8	5,548.3	21.5	20.6	-22.79	2,131.0	3,143.8	2,785.0	2,756.4	28.56	97.522	
5,400.0	5,270.4	5,741.3	5,636.8	22.0	21.0	-23.32	2,135.9	3,125.4	2,750.6	2,721.3	29.28	93.930	
5,500.0	5,367.4	5,831.9	5,725.3	22.5	21.3	-23.86	2,140.8	3,107.1	2,716.4	2,686.4	30.02	90.480	
5,600.0	5,464.4	5,922.4	5,813.8	22.9	21.7	-24.42	2,145.7	3,088.7	2,682.4	2,651.6	30.77	87.163	
5,700.0	5,561.4	6,012.9	5,902.3	23.4	22.1	-24.99	2,150.6	3,070.3	2,648.7	2,617.2	31.54	83.975	
5,800.0	5,658.3	6,114.1	7,770.0	23.9	39.7	27.20	414.9	2,683.0	2,601.5	2,572.0	29.48	88.245	
5,900.0	5,755.3	6,406.6	7,770.0	24.3	39.6	26.80	422.4	2,683.0	2,510.2	2,480.3	29.94	83.846	
6,000.0	5,852.3	9,399.1	7,770.0	24.8	39.6	26.40	429.9	2,683.0	2,419.7	2,389.3	30.43	79.528	
6,100.0	5,949.3	9,391.7	7,770.0	25.3	39.5	25.99	437.4	2,683.0	2,329.9	2,298.9	30.94	75.295	
6,200.0	6,046.3	9,384.2	7,770.0	25.7	39.4	25.59	444.8	2,683.0	2,240.9	2,209.4	31.49	71.153	
6,300.0	6,143.3	9,376.7	7,770.0	26.2	39.3	25.18	452.3	2,683.0	2,152.9	2,120.8	32.08	67.108	
6,400.0	6,240.3	9,369.2	7,770.0	26.7	39.2	24.77	459.8	2,682.9	2,065.9	2,033.2	32.71	63.166	
6,500.0	6,337.3	9,361.7	7,770.0	27.1	39.1	24.37	467.3	2,682.9	1,980.2	1,946.8	33.37	59.335	
6,600.0	6,434.2	9,354.2	7,770.0	27.6	39.0	23.96	474.8	2,682.9	1,895.8	1,861.7	34.08	55.623	
6,700.0	6,531.2	9,346.8	7,770.0	28.1	38.9	23.55	482.2	2,682.9	1,812.9	1,778.1	34.84	52.037	
6,800.0	6,628.2	9,339.3	7,770.0	28.5	38.8	23.14	489.7	2,682.9	1,731.9	1,696.2	35.64	48.590	
6,900.0	6,725.2	9,331.8	7,770.0	29.0	38.8	22.73	497.2	2,682.9	1,652.9	1,616.4	36.50	45.290	
7,000.0	6,822.2	9,324.3	7,770.0	29.5	38.7	22.32	504.7	2,682.9	1,576.2	1,538.8	37.39	42.152	
7,100.0	6,919.2	9,316.8	7,770.0	30.0	38.6	21.91	512.2	2,682.9	1,502.3	1,463.9	38.34	39.187	
7,200.0	7,016.2	9,309.4	7,770.0	30.4	38.5	21.50	519.7	2,682.9	1,431.4	1,392.1	39.31	36.412	
7,300.0	7,113.2	9,301.9	7,770.0	30.9	38.4	21.08	527.1	2,682.9	1,364.2	1,323.9	40.31	33.843	
7,328.7	7,141.0	9,299.7	7,770.0	31.0	38.4	20.96	529.3	2,682.9	1,345.7	1,305.1	40.60	33.145	
7,350.0	7,161.7	9,298.5	7,770.0	31.1	38.4	10.74	530.5	2,682.9	1,332.1	1,291.3	40.81	32.642	
7,400.0	7,210.3	9,298.8	7,770.0	31.3	38.4	-13.87	530.2	2,682.9	1,301.1	1,259.8	41.31	31.499	
7,450.0	7,258.7	9,303.5	7,770.0	31.5	38.4	-35.31	525.5	2,682.9	1,271.4	1,229.6	41.81	30.407	
7,500.0	7,306.5	9,312.4	7,770.0	31.7	38.5	-51.40	516.6	2,682.9	1,243.3	1,201.0	42.33	29.375	
7,550.0	7,353.4	9,325.7	7,770.0	31.8	38.7	-62.88	503.4	2,682.9	1,217.1	1,174.3	42.84	28.409	
7,600.0	7,399.0	9,343.0	7,770.0	31.9	38.9	-71.06	486.0	2,682.9	1,192.9	1,149.6	43.36	27.513	
7,650.0	7,442.9	9,364.4	7,770.0	32.0	39.1	-76.95	464.6	2,682.9	1,170.9	1,127.1	43.87	26.688	
7,700.0	7,484.9	9,389.7	7,770.0	32.1	39.4	-81.22	439.3	2,683.0	1,151.2	1,106.8	44.39	25.934	
7,750.0	7,524.5	9,418.6	7,770.0	32.1	39.8	-84.30	410.4	2,683.0	1,133.7	1,088.8	44.91	25.245	
7,800.0	7,561.6	9,450.9	7,770.0	32.1	40.2	-86.49	378.1	2,683.0	1,118.5	1,073.1	45.44	24.616	
7,850.0	7,595.8	9,486.5	7,770.0	32.2	40.6	-88.01	342.5	2,683.0	1,105.4	1,059.5	45.98	24.042	
7,900.0	7,626.8	9,524.9	7,770.0	32.2	41.1	-89.01	304.1	2,683.0	1,094.4	1,047.9	46.55	23.512	
7,950.0	7,654.5	9,566.1	7,770.0	32.2	41.6	-89.63	262.9	2,683.0	1,085.3	1,038.2	47.14	23.021	
8,000.0	7,678.5	9,609.5	7,770.0	32.3	42.1	-89.97	219.5	2,683.0	1,077.9	1,030.1	47.78	22.559	
8,050.0	7,698.8	9,654.9	7,770.0	32.3	42.7	-90.12	174.1	2,683.0	1,072.1	1,023.6	48.47	22.118	
8,100.0	7,715.2	9,702.0	7,770.0	32.3	43.3	-90.15	127.0	2,683.0	1,067.7	1,018.5	49.21	21.694	
8,150.0	7,727.5	9,750.3	7,770.0	32.4	44.0	-90.13	78.7	2,683.0	1,064.5	1,014.5	50.02	21.281	
8,200.0	7,735.6	9,799.6	7,770.0	32.4	44.6	-90.08	29.4	2,683.0	1,062.5	1,011.6	50.88	20.881	
8,250.0	7,739.6	9,849.4	7,770.0	32.4	45.3	-90.06	-20.4	2,683.0	1,061.5	1,009.7	51.81	20.489	
8,271.3	7,740.0	9,870.7	7,770.0	32.5	45.6	-90.05	-41.7	2,683.0	1,061.5	1,009.2	52.22	20.326 CC	
8,271.7	7,740.0	9,871.1	7,770.0	32.5	45.6	-90.05	-42.1	2,683.0	1,061.5	1,009.2	52.23	20.323	
8,300.0	7,740.0	9,899.4	7,770.0	32.5	46.0	-90.05	-70.4	2,683.0	1,061.5	1,008.7	52.79	20.108	
8,400.0	7,740.0	9,999.4	7,770.0	32.7	47.3	-90.05	-170.4	2,683.1	1,061.5	1,006.6	54.90	19.333	
8,500.0	7,740.0	10,099.4	7,770.0	33.0	48.7	-90.05	-270.4	2,683.1	1,061.5	1,004.3	57.21	18.553	
8,600.0	7,740.0	10,199.4	7,770.0	33.4	50.2	-90.05	-370.4	2,683.1	1,061.5	1,001.8	59.69	17.783	
8,700.0	7,740.0	10,299.4	7,770.0	33.8	51.6	-90.05	-470.4	2,683.1	1,061.5	999.2	62.32	17.034	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,800.0	7,740.0	10,399.4	7,770.0	34.4	53.1	-90.05	-570.4	2,683.1	1,061.5	996.5	65.07	16.315	
8,900.0	7,740.0	10,499.4	7,770.0	35.0	54.5	-90.05	-670.4	2,683.1	1,061.6	993.6	67.92	15.630	
9,000.0	7,740.0	10,599.4	7,770.0	35.7	56.0	-90.05	-770.4	2,683.2	1,061.6	990.7	70.86	14.981	
9,100.0	7,740.0	10,699.4	7,770.0	36.4	57.6	-90.05	-870.4	2,683.2	1,061.6	987.7	73.87	14.371	
9,200.0	7,740.0	10,799.4	7,770.0	37.3	59.1	-90.05	-970.4	2,683.2	1,061.6	984.7	76.94	13.797	
9,300.0	7,740.0	10,899.4	7,770.0	38.2	60.6	-90.05	-1,070.4	2,683.2	1,061.6	981.6	80.07	13.259	
9,400.0	7,740.0	10,999.4	7,770.0	39.1	62.2	-90.05	-1,170.4	2,683.2	1,061.6	978.4	83.23	12.755	
9,500.0	7,740.0	11,099.4	7,770.0	40.1	63.7	-90.05	-1,270.4	2,683.2	1,061.7	975.2	86.44	12.282	
9,600.0	7,740.0	11,199.4	7,770.0	41.2	65.3	-90.05	-1,370.4	2,683.3	1,061.7	972.0	89.67	11.840	
9,700.0	7,740.0	11,299.4	7,770.0	42.3	66.9	-90.05	-1,470.4	2,683.3	1,061.7	968.8	92.93	11.424	
9,800.0	7,740.0	11,399.4	7,770.0	43.5	68.5	-90.05	-1,570.4	2,683.3	1,061.7	965.5	96.21	11.035	
9,900.0	7,740.0	11,499.4	7,770.0	44.7	70.0	-90.05	-1,670.4	2,683.3	1,061.7	962.2	99.52	10.669	
10,000.0	7,740.0	11,599.4	7,770.0	45.9	71.6	-90.05	-1,770.4	2,683.3	1,061.7	958.9	102.84	10.324	
10,100.0	7,740.0	11,699.4	7,770.0	47.1	73.3	-90.05	-1,870.4	2,683.3	1,061.8	955.6	106.18	10.000	
10,200.0	7,740.0	11,799.4	7,770.0	48.4	74.9	-90.05	-1,970.4	2,683.4	1,061.8	952.2	109.53	9.694	
10,300.0	7,740.0	11,899.4	7,770.0	49.8	76.5	-90.05	-2,070.4	2,683.4	1,061.8	948.9	112.89	9.406	
10,400.0	7,740.0	11,999.4	7,770.0	51.1	78.1	-90.05	-2,170.4	2,683.4	1,061.8	945.5	116.26	9.133	
10,500.0	7,740.0	12,099.4	7,770.0	52.5	79.8	-90.05	-2,270.4	2,683.4	1,061.8	942.2	119.64	8.875	
10,600.0	7,740.0	12,199.4	7,770.0	53.9	81.4	-90.05	-2,370.4	2,683.4	1,061.8	938.8	123.03	8.631	
10,700.0	7,740.0	12,299.4	7,770.0	55.3	83.0	-90.05	-2,470.4	2,683.4	1,061.9	935.4	126.43	8.399	
10,800.0	7,740.0	12,399.4	7,770.0	56.7	84.7	-90.05	-2,570.4	2,683.5	1,061.9	932.0	129.84	8.179	
10,900.0	7,740.0	12,499.4	7,770.0	58.2	86.3	-90.05	-2,670.4	2,683.5	1,061.9	928.6	133.25	7.969	
11,000.0	7,740.0	12,599.4	7,770.0	59.7	88.0	-90.05	-2,770.4	2,683.5	1,061.9	925.2	136.66	7.770	
11,100.0	7,740.0	12,699.4	7,770.0	61.2	89.7	-90.05	-2,870.4	2,683.5	1,061.9	921.8	140.09	7.580	
11,200.0	7,740.0	12,799.4	7,770.0	62.7	91.3	-90.05	-2,970.4	2,683.5	1,061.9	918.4	143.51	7.400	
11,300.0	7,740.0	12,899.4	7,770.0	64.2	93.0	-90.05	-3,070.4	2,683.5	1,062.0	915.0	146.95	7.227	
11,400.0	7,740.0	12,999.4	7,770.0	65.7	94.7	-90.05	-3,170.4	2,683.6	1,062.0	911.6	150.38	7.062	
11,500.0	7,740.0	13,099.4	7,770.0	67.2	96.3	-90.05	-3,270.4	2,683.6	1,062.0	908.2	153.82	6.904	
11,600.0	7,740.0	13,199.4	7,770.0	68.8	98.0	-90.05	-3,370.4	2,683.6	1,062.0	904.7	157.26	6.753	
11,700.0	7,740.0	13,299.4	7,770.0	70.3	99.7	-90.05	-3,470.4	2,683.6	1,062.0	901.3	160.71	6.608	
11,800.0	7,740.0	13,399.4	7,770.0	71.9	101.4	-90.05	-3,570.4	2,683.6	1,062.0	897.9	164.16	6.470	
11,900.0	7,740.0	13,499.4	7,770.0	73.5	103.0	-90.05	-3,670.4	2,683.6	1,062.1	894.4	167.61	6.336	
12,000.0	7,740.0	13,599.4	7,770.0	75.1	104.7	-90.05	-3,770.4	2,683.7	1,062.1	891.0	171.06	6.209	
12,100.0	7,740.0	13,699.4	7,770.0	76.6	106.4	-90.05	-3,870.4	2,683.7	1,062.1	887.6	174.52	6.086	
12,200.0	7,740.0	13,799.4	7,770.0	78.2	108.1	-90.05	-3,970.4	2,683.7	1,062.1	884.1	177.98	5.968	
12,300.0	7,740.0	13,899.4	7,770.0	79.8	109.8	-90.05	-4,070.4	2,683.7	1,062.1	880.7	181.44	5.854	
12,400.0	7,740.0	13,999.4	7,770.0	81.5	111.5	-90.05	-4,170.4	2,683.7	1,062.1	877.2	184.90	5.744	
12,500.0	7,740.0	14,099.4	7,770.0	83.1	113.2	-90.05	-4,270.4	2,683.7	1,062.2	873.8	188.37	5.639	
12,600.0	7,740.0	14,199.4	7,770.0	84.7	114.9	-90.05	-4,370.4	2,683.8	1,062.2	870.3	191.83	5.537	
12,700.0	7,740.0	14,299.4	7,770.0	86.3	116.6	-90.05	-4,470.4	2,683.8	1,062.2	866.9	195.30	5.439	
12,800.0	7,740.0	14,399.4	7,770.0	88.0	118.3	-90.05	-4,570.4	2,683.8	1,062.2	863.4	198.77	5.344	
12,900.0	7,740.0	14,499.4	7,770.0	89.6	120.0	-90.05	-4,670.4	2,683.8	1,062.2	860.0	202.24	5.252	
13,000.0	7,740.0	14,599.4	7,770.0	91.2	121.7	-90.05	-4,770.4	2,683.8	1,062.2	856.5	205.72	5.164	
13,100.0	7,740.0	14,699.4	7,770.0	92.9	123.4	-90.05	-4,870.4	2,683.8	1,062.3	853.1	209.19	5.078	
13,200.0	7,740.0	14,799.4	7,770.0	94.5	125.1	-90.05	-4,970.4	2,683.9	1,062.3	849.6	212.66	4.995	
13,300.0	7,740.0	14,899.4	7,770.0	96.2	126.8	-90.05	-5,070.4	2,683.9	1,062.3	846.1	216.14	4.915	
13,400.0	7,740.0	14,999.4	7,770.0	97.8	128.5	-90.05	-5,170.4	2,683.9	1,062.3	842.7	219.62	4.837	
13,500.0	7,740.0	15,099.4	7,770.0	99.5	130.2	-90.05	-5,270.4	2,683.9	1,062.3	839.2	223.10	4.762	
13,600.0	7,740.0	15,199.4	7,770.0	101.2	131.9	-90.05	-5,370.4	2,683.9	1,062.3	835.8	226.57	4.689	
13,700.0	7,740.0	15,299.4	7,770.0	102.8	133.7	-90.05	-5,470.4	2,683.9	1,062.4	832.3	230.05	4.618	
13,800.0	7,740.0	15,399.4	7,770.0	104.5	135.4	-90.05	-5,570.4	2,683.9	1,062.4	828.8	233.54	4.549	
13,900.0	7,740.0	15,499.4	7,770.0	106.2	137.1	-90.05	-5,670.4	2,684.0	1,062.4	825.4	237.02	4.482	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,000.0	7,740.0	15,599.4	7,770.0	107.8	138.8	-90.05	-5,770.4	2,684.0	1,062.4	821.9	240.50	4.417		
14,100.0	7,740.0	15,699.4	7,770.0	109.5	140.5	-90.05	-5,870.4	2,684.0	1,062.4	818.4	243.98	4.354		
14,200.0	7,740.0	15,799.4	7,770.0	111.2	142.2	-90.05	-5,970.4	2,684.0	1,062.4	815.0	247.47	4.293		
14,300.0	7,740.0	15,899.4	7,770.0	112.9	143.9	-90.05	-6,070.4	2,684.0	1,062.5	811.5	250.95	4.234		
14,400.0	7,740.0	15,999.4	7,770.0	114.6	145.7	-90.05	-6,170.4	2,684.0	1,062.5	808.0	254.44	4.176		
14,500.0	7,740.0	16,099.4	7,770.0	116.3	147.4	-90.05	-6,270.4	2,684.1	1,062.5	804.6	257.92	4.119		
14,600.0	7,740.0	16,199.4	7,770.0	117.9	149.1	-90.05	-6,370.4	2,684.1	1,062.5	801.1	261.41	4.064		
14,700.0	7,740.0	16,299.4	7,770.0	119.6	150.8	-90.05	-6,470.4	2,684.1	1,062.5	797.6	264.90	4.011		
14,800.0	7,740.0	16,399.4	7,770.0	121.3	152.6	-90.05	-6,570.4	2,684.1	1,062.5	794.1	268.39	3.959		
14,900.0	7,740.0	16,499.4	7,770.0	123.0	154.3	-90.05	-6,670.4	2,684.1	1,062.6	790.7	271.87	3.908		
15,000.0	7,740.0	16,599.4	7,770.0	124.7	156.0	-90.05	-6,770.4	2,684.1	1,062.6	787.2	275.36	3.859		
15,100.0	7,740.0	16,699.4	7,770.0	126.4	157.7	-90.05	-6,870.4	2,684.2	1,062.6	783.7	278.85	3.811		
15,200.0	7,740.0	16,799.4	7,770.0	128.1	159.5	-90.05	-6,970.4	2,684.2	1,062.6	780.3	282.34	3.764		
15,300.0	7,740.0	16,899.4	7,770.0	129.8	161.2	-90.05	-7,070.4	2,684.2	1,062.6	776.8	285.83	3.718		
15,400.0	7,740.0	16,999.4	7,770.0	131.5	162.9	-90.05	-7,170.4	2,684.2	1,062.6	773.3	289.32	3.673		
15,500.0	7,740.0	17,099.4	7,770.0	133.2	164.6	-90.05	-7,270.4	2,684.2	1,062.7	769.8	292.82	3.629		
15,600.0	7,740.0	17,199.4	7,770.0	134.9	166.4	-90.05	-7,370.4	2,684.2	1,062.7	766.4	296.31	3.586		
15,700.0	7,740.0	17,299.4	7,770.0	136.6	168.1	-90.05	-7,470.4	2,684.3	1,062.7	762.9	299.80	3.545		
15,800.0	7,740.0	17,399.4	7,770.0	138.3	169.8	-90.05	-7,570.4	2,684.3	1,062.7	759.4	303.29	3.504		
15,900.0	7,740.0	17,499.4	7,770.0	140.0	171.5	-90.05	-7,670.4	2,684.3	1,062.7	755.9	306.78	3.464		
16,000.0	7,740.0	17,599.4	7,770.0	141.7	173.3	-90.05	-7,770.4	2,684.3	1,062.7	752.5	310.28	3.425		
16,100.0	7,740.0	17,699.4	7,770.0	143.5	175.0	-90.05	-7,870.4	2,684.3	1,062.8	749.0	313.77	3.387		
16,171.7	7,740.0	17,771.1	7,770.0	144.7	176.2	-90.05	-7,942.1	2,684.3	1,062.8	746.5	316.28	3.360 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
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	28.0	28.0	0.0	0.0	65.62	1,870.2	4,127.4	4,531.3					
100.0	100.0	128.0	128.0	0.2	0.2	65.62	1,870.2	4,127.4	4,531.3	4,530.9	0.35	N/A		
150.0	150.0	178.0	178.0	0.2	0.3	65.62	1,870.2	4,127.4	4,531.3	4,530.8	0.53	8,596.815		
200.0	200.0	228.0	228.0	0.3	0.4	65.64	1,870.2	4,127.4	4,531.0	4,530.3	0.70	6,451.914		
283.3	283.2	326.6	326.6	0.5	0.5	65.74	1,870.2	4,127.3	4,529.4	4,528.3	1.03	4,386.005		
300.0	299.9	366.1	366.1	0.5	0.6	63.39	1,870.3	4,127.0	4,528.8	4,527.6	1.13	3,992.571		
400.0	399.6	602.7	602.6	0.7	1.0	49.76	1,872.7	4,119.8	4,522.5	4,520.7	1.75	2,585.314		
500.0	499.3	838.1	837.3	0.9	1.5	37.82	1,878.2	4,103.4	4,511.6	4,509.2	2.39	1,889.955		
600.0	598.9	1,070.9	1,068.5	1.2	2.1	28.03	1,886.7	4,078.3	4,496.1	4,493.0	3.06	1,468.311		
700.0	698.5	1,299.8	1,294.8	1.4	2.8	20.19	1,898.0	4,044.9	4,476.1	4,472.3	3.79	1,182.238		
800.0	797.9	1,405.9	1,399.2	1.6	3.2	14.08	1,903.9	4,027.2	4,453.0	4,448.8	4.24	1,051.436		
900.0	897.1	1,502.4	1,494.1	1.9	3.5	9.23	1,909.4	4,011.1	4,428.3	4,423.7	4.66	950.307		
1,000.0	996.2	1,598.4	1,588.6	2.2	3.8	5.29	1,914.8	3,995.0	4,402.1	4,397.1	5.08	866.093		
1,100.0	1,095.0	1,693.8	1,682.6	2.5	4.1	2.04	1,920.2	3,979.1	4,374.4	4,368.9	5.50	794.829		
1,200.0	1,193.6	1,788.8	1,776.0	2.8	4.5	-0.69	1,925.5	3,963.2	4,345.2	4,339.3	5.92	733.670		
1,300.0	1,291.9	1,883.1	1,868.9	3.2	4.8	-3.03	1,930.8	3,947.4	4,314.5	4,308.2	6.34	680.528		
1,400.0	1,389.9	1,976.9	1,961.2	3.5	5.1	-5.08	1,936.1	3,931.7	4,282.3	4,275.6	6.76	633.833		
1,500.0	1,487.6	2,070.1	2,052.9	3.9	5.4	-6.89	1,941.4	3,916.2	4,248.7	4,241.5	7.17	592.392		
1,600.0	1,584.8	2,162.6	2,144.0	4.4	5.8	-8.53	1,946.6	3,900.7	4,213.6	4,206.0	7.59	555.276		
1,624.3	1,608.4	2,184.9	2,166.0	4.5	5.8	-8.90	1,947.8	3,897.0	4,204.9	4,197.2	7.69	546.828		
1,700.0	1,681.8	2,254.6	2,234.6	4.8	6.1	-9.07	1,951.8	3,885.3	4,177.6	4,169.6	8.01	521.721		
1,800.0	1,778.8	2,346.6	2,325.2	5.3	6.4	-9.29	1,956.9	3,869.9	4,141.5	4,133.1	8.43	491.249		
1,900.0	1,875.8	2,438.6	2,415.7	5.7	6.7	-9.52	1,962.1	3,854.6	4,105.5	4,096.7	8.86	463.473		
2,000.0	1,972.8	2,530.7	2,506.3	6.2	7.1	-9.75	1,967.3	3,839.2	4,069.6	4,060.3	9.29	438.067		
2,100.0	2,069.8	2,622.7	2,596.9	6.6	7.4	-9.98	1,972.5	3,823.8	4,033.7	4,024.0	9.73	414.750		
2,200.0	2,166.8	2,714.7	2,687.4	7.1	7.7	-10.22	1,977.7	3,808.4	3,997.9	3,987.7	10.17	393.285		
2,300.0	2,263.8	2,806.7	2,778.0	7.5	8.0	-10.46	1,982.9	3,793.0	3,962.1	3,951.5	10.61	373.465		
2,400.0	2,360.8	2,898.7	2,868.6	8.0	8.4	-10.71	1,988.0	3,777.7	3,926.4	3,915.4	11.06	355.115		
2,500.0	2,457.7	2,990.7	2,959.2	8.4	8.7	-10.96	1,993.2	3,762.3	3,890.8	3,879.3	11.51	338.081		
2,600.0	2,554.7	3,082.7	3,049.7	8.9	9.0	-11.22	1,998.4	3,746.9	3,855.3	3,843.3	11.96	322.229		
2,700.0	2,651.7	3,174.8	3,140.3	9.4	9.3	-11.48	2,003.6	3,731.5	3,819.8	3,807.4	12.42	307.445		
2,800.0	2,748.7	3,266.8	3,230.9	9.8	9.7	-11.74	2,008.8	3,716.1	3,784.4	3,771.5	12.89	293.627		
2,900.0	2,845.7	3,358.8	3,321.4	10.3	10.0	-12.01	2,014.0	3,700.8	3,749.0	3,735.7	13.36	280.685		
3,000.0	2,942.7	3,450.8	3,412.0	10.8	10.3	-12.29	2,019.1	3,685.4	3,713.8	3,699.9	13.83	268.539		
3,100.0	3,039.7	3,542.8	3,502.6	11.2	10.6	-12.57	2,024.3	3,670.0	3,678.6	3,664.3	14.31	257.122		
3,200.0	3,136.7	3,634.8	3,593.2	11.7	11.0	-12.85	2,029.5	3,654.6	3,643.5	3,628.7	14.79	246.370		
3,300.0	3,233.6	3,726.8	3,683.7	12.2	11.3	-13.14	2,034.7	3,639.2	3,608.5	3,593.2	15.28	236.228		
3,400.0	3,330.6	3,818.9	3,774.3	12.6	11.6	-13.44	2,039.9	3,623.9	3,573.5	3,557.8	15.77	226.648		
3,500.0	3,427.6	3,910.9	3,864.9	13.1	12.0	-13.74	2,045.1	3,608.5	3,538.7	3,522.4	16.26	217.584		
3,600.0	3,524.6	4,002.9	3,955.4	13.6	12.3	-14.05	2,050.2	3,593.1	3,504.0	3,487.2	16.77	208.998		
3,700.0	3,621.6	4,094.9	4,046.0	14.0	12.6	-14.36	2,055.4	3,577.7	3,469.3	3,452.0	17.27	200.854		
3,800.0	3,718.6	4,186.9	4,136.6	14.5	12.9	-14.68	2,060.6	3,562.3	3,434.7	3,417.0	17.79	193.119		
3,900.0	3,815.6	4,278.9	4,227.2	15.0	13.3	-15.01	2,065.8	3,547.0	3,400.3	3,382.0	18.30	185.764		
4,000.0	3,912.6	4,370.9	4,317.7	15.4	13.6	-15.34	2,071.0	3,531.6	3,365.9	3,347.1	18.83	178.764		
4,100.0	4,009.5	4,463.0	4,408.3	15.9	13.9	-15.68	2,076.2	3,516.2	3,331.7	3,312.3	19.36	172.094		
4,200.0	4,106.5	4,555.0	4,498.9	16.4	14.2	-16.02	2,081.3	3,500.8	3,297.5	3,277.6	19.90	165.732		
4,300.0	4,203.5	4,647.0	4,589.4	16.8	14.6	-16.37	2,086.5	3,485.4	3,263.5	3,243.1	20.44	159.659		
4,400.0	4,300.5	4,739.0	4,680.0	17.3	14.9	-16.73	2,091.7	3,470.1	3,229.6	3,208.6	20.99	153.855		
4,500.0	4,397.5	4,831.0	4,770.6	17.8	15.2	-17.10	2,096.9	3,454.7	3,195.8	3,174.2	21.55	148.306		
4,600.0	4,494.5	4,923.0	4,861.2	18.2	15.6	-17.47	2,102.1	3,439.3	3,162.1	3,140.0	22.11	142.994		
4,700.0	4,591.5	5,015.0	4,951.7	18.7	15.9	-17.86	2,107.3	3,423.9	3,128.6	3,105.9	22.69	137.907		
4,800.0	4,688.5	5,107.1	5,042.3	19.2	16.2	-18.24	2,112.4	3,408.5	3,095.2	3,071.9	23.27	133.031		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						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	4,785.4	5,199.1	5,132.9	19.6	16.5	-18.64	2,117.6	3,393.2	3,061.9	3,038.0	23.86	128.354	
5,000.0	4,882.4	5,291.1	5,223.4	20.1	16.9	-19.05	2,122.8	3,377.8	3,028.8	3,004.3	24.45	123.867	
5,100.0	4,979.4	5,383.1	5,314.0	20.6	17.2	-19.46	2,128.0	3,362.4	2,995.8	2,970.7	25.06	119.557	
5,200.0	5,076.4	5,475.1	5,404.6	21.0	17.5	-19.89	2,133.2	3,347.0	2,962.9	2,937.3	25.67	115.416	
5,300.0	5,173.4	5,567.1	5,495.2	21.5	17.9	-20.32	2,138.4	3,331.6	2,930.3	2,904.0	26.30	111.436	
5,400.0	5,270.4	5,659.1	5,585.7	22.0	18.2	-20.76	2,143.5	3,316.3	2,897.7	2,870.8	26.93	107.608	
5,500.0	5,367.4	5,751.2	5,676.3	22.5	18.5	-21.21	2,148.7	3,300.9	2,865.4	2,837.8	27.57	103.925	
5,600.0	5,464.4	5,843.2	5,730.0	22.9	36.8	25.31	390.0	2,976.6	2,785.3	2,753.6	31.73	87.770	
5,700.0	5,561.4	5,942.1	5,530.0	23.4	36.7	25.00	397.7	2,976.7	2,699.0	2,666.8	32.24	83.715	
5,800.0	5,658.3	6,034.5	5,530.0	23.9	36.6	24.69	405.3	2,976.7	2,613.7	2,580.9	32.77	79.755	
5,900.0	5,755.3	6,126.9	5,530.0	24.3	36.5	24.38	412.9	2,976.8	2,529.4	2,496.1	33.33	75.895	
6,000.0	5,852.3	6,219.3	5,530.0	24.8	36.4	24.06	420.5	2,976.8	2,446.3	2,412.4	33.91	72.141	
6,100.0	5,949.3	6,311.7	5,530.0	25.3	36.3	23.75	428.1	2,976.8	2,364.5	2,330.0	34.52	68.497	
6,200.0	6,046.3	6,404.1	5,530.0	25.7	36.2	23.44	435.7	2,976.9	2,284.1	2,248.9	35.16	64.969	
6,300.0	6,143.3	6,496.5	5,530.0	26.2	36.1	23.13	443.3	2,976.9	2,205.3	2,169.4	35.82	61.562	
6,400.0	6,240.3	6,588.9	5,530.0	26.7	36.0	22.81	450.9	2,976.9	2,128.2	2,091.7	36.51	58.284	
6,500.0	6,337.3	6,681.3	5,530.0	27.1	35.9	22.50	458.5	2,977.0	2,053.1	2,015.8	37.23	55.142	
6,600.0	6,434.2	6,773.7	5,530.0	27.6	35.8	22.18	466.1	2,977.0	1,980.1	1,942.1	37.97	52.144	
6,700.0	6,531.2	6,866.1	5,530.0	28.1	35.7	21.87	473.7	2,977.1	1,909.6	1,870.8	38.73	49.299	
6,800.0	6,628.2	6,958.5	5,530.0	28.5	35.6	21.56	481.3	2,977.1	1,841.7	1,802.2	39.51	46.615	
6,900.0	6,725.2	7,050.9	5,530.0	29.0	35.5	21.24	488.9	2,977.1	1,776.9	1,736.6	40.29	44.103	
7,000.0	6,822.2	7,143.3	5,530.0	29.5	35.4	20.93	496.5	2,977.2	1,715.4	1,674.4	41.07	41.771	
7,100.0	6,919.2	7,235.7	5,530.0	30.0	35.3	20.61	504.1	2,977.2	1,657.7	1,615.8	41.83	39.630	
7,200.0	7,016.2	7,328.1	5,530.0	30.4	35.2	20.30	511.7	2,977.3	1,604.0	1,561.5	42.56	37.691	
7,300.0	7,113.2	7,420.5	5,530.0	30.9	35.1	19.98	519.3	2,977.3	1,555.0	1,511.7	43.23	35.966	
7,328.7	7,141.0	7,458.3	5,530.0	31.0	35.1	19.89	521.5	2,977.3	1,541.8	1,498.3	43.42	35.511	
7,350.0	7,161.7	7,491.1	5,530.0	31.1	35.1	10.37	522.7	2,977.3	1,532.2	1,488.7	43.54	35.188	
7,400.0	7,210.3	7,517.3	5,530.0	31.3	35.1	-12.67	522.5	2,977.3	1,510.8	1,466.9	43.83	34.469	
7,450.0	7,258.7	7,542.9	5,530.0	31.5	35.1	-32.67	517.9	2,977.3	1,490.7	1,446.6	44.11	33.794	
7,500.0	7,306.5	7,568.0	5,530.0	31.7	35.2	-47.50	509.0	2,977.2	1,472.3	1,427.9	44.39	33.168	
7,550.0	7,353.4	7,594.0	5,530.0	31.8	35.4	-57.87	495.8	2,977.2	1,455.6	1,411.0	44.66	32.592	
7,600.0	7,399.0	7,621.3	5,530.0	31.9	35.6	-65.09	478.5	2,977.1	1,440.7	1,395.8	44.93	32.065	
7,650.0	7,442.9	7,648.6	5,530.0	32.0	35.9	-70.16	457.2	2,977.0	1,427.6	1,382.4	45.20	31.586	
7,700.0	7,484.9	7,673.0	5,530.0	32.1	36.2	-73.74	432.0	2,976.9	1,416.4	1,370.9	45.47	31.146	
7,750.0	7,524.5	7,703.7	5,530.0	32.1	36.6	-76.24	403.1	2,976.7	1,406.8	1,361.0	45.77	30.739	
7,800.0	7,561.6	7,739.0	5,530.0	32.1	37.0	-77.95	370.8	2,976.5	1,398.9	1,352.8	46.08	30.358	
7,850.0	7,595.8	7,774.5	5,530.0	32.2	37.5	-79.06	335.3	2,976.4	1,392.4	1,346.0	46.42	29.994	
7,900.0	7,626.8	7,809.9	5,530.0	32.2	38.0	-79.75	296.9	2,976.2	1,387.3	1,340.5	46.81	29.634	
7,950.0	7,654.5	7,845.0	5,530.0	32.2	38.6	-80.11	255.8	2,976.0	1,383.3	1,336.0	47.25	29.273	
8,000.0	7,678.5	7,880.4	5,530.0	32.3	39.2	-80.26	212.4	2,975.7	1,380.2	1,332.4	47.76	28.900	
8,050.0	7,698.8	7,915.8	5,530.0	32.3	39.8	-80.27	167.0	2,975.5	1,377.9	1,329.6	48.33	28.511	
8,100.0	7,715.2	7,951.8	5,530.0	32.3	40.5	-80.20	119.9	2,975.3	1,376.2	1,327.3	48.98	28.100	
8,150.0	7,727.5	7,987.2	5,530.0	32.4	41.2	-80.11	71.6	2,975.0	1,375.1	1,325.4	49.70	27.665	
8,200.0	7,735.6	8,022.4	5,530.0	32.4	41.9	-80.05	22.3	2,974.8	1,374.3	1,323.7	50.51	27.207	
8,250.0	7,739.6	8,057.3	5,530.0	32.4	42.6	-80.02	-27.5	2,974.5	1,373.8	1,322.4	51.40	26.727	
8,271.7	7,740.0	8,088.9	5,530.0	32.5	42.9	-80.02	-49.1	2,974.4	1,373.6	1,321.8	51.81	26.515	
8,300.0	7,740.0	8,119.2	5,530.0	32.5	43.3	-80.02	-77.5	2,974.3	1,373.5	1,321.1	52.36	26.233	
8,400.0	7,740.0	8,171.2	5,530.0	32.7	44.8	-80.02	-177.5	2,973.8	1,373.0	1,318.6	54.43	25.226	
8,500.0	7,740.0	8,181.2	5,530.0	33.0	46.3	-80.01	-277.5	2,973.3	1,372.5	1,315.8	56.69	24.212	
8,600.0	7,740.0	8,171.2	5,530.0	33.4	47.8	-80.01	-377.5	2,972.7	1,372.0	1,312.9	59.11	23.211	
8,700.0	7,740.0	10,017.2	5,530.0	33.8	49.3	-80.01	-477.5	2,972.2	1,371.5	1,309.8	61.68	22.237	
8,800.0	7,740.0	10,117.2	5,530.0	34.4	50.8	-80.00	-577.4	2,971.7	1,371.0	1,306.6	64.37	21.300	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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					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			
8,900.0	7,740.0	10,217.2	7,530.0	35.0	52.4	-80.00	-677.4	2,971.2	1,370.5	1,303.3	67.16	20.406		
9,000.0	7,740.0	10,317.2	7,530.0	35.7	53.9	-80.00	-777.4	2,970.7	1,370.0	1,299.9	70.04	19.560		
9,100.0	7,740.0	10,417.2	7,530.0	36.4	55.5	-79.99	-877.4	2,970.2	1,369.5	1,296.5	72.99	18.762		
9,200.0	7,740.0	10,517.2	7,530.0	37.3	57.1	-79.99	-977.4	2,969.7	1,369.0	1,293.0	76.00	18.012		
9,300.0	7,740.0	10,617.2	7,530.0	38.2	58.7	-79.98	-1,077.4	2,969.2	1,368.5	1,289.4	79.07	17.308		
9,400.0	7,740.0	10,717.2	7,530.0	39.1	60.3	-79.98	-1,177.4	2,968.7	1,368.0	1,285.8	82.18	16.647		
9,500.0	7,740.0	10,817.2	7,530.0	40.1	61.9	-79.98	-1,277.4	2,968.2	1,367.5	1,282.2	85.32	16.027		
9,600.0	7,740.0	10,917.2	7,530.0	41.2	63.5	-79.97	-1,377.4	2,967.7	1,367.0	1,278.5	88.50	15.447		
9,700.0	7,740.0	11,017.2	7,530.0	42.3	65.2	-79.97	-1,477.4	2,967.2	1,366.5	1,274.8	91.70	14.902		
9,800.0	7,740.0	11,117.2	7,530.0	43.5	66.8	-79.97	-1,577.4	2,966.7	1,366.0	1,271.1	94.93	14.390		
9,900.0	7,740.0	11,217.2	7,530.0	44.7	68.4	-79.96	-1,677.4	2,966.2	1,365.5	1,267.3	98.17	13.909		
10,000.0	7,740.0	11,317.2	7,530.0	45.9	70.1	-79.96	-1,777.4	2,965.7	1,365.0	1,263.6	101.44	13.456		
10,100.0	7,740.0	11,417.2	7,530.0	47.1	71.7	-79.95	-1,877.4	2,965.1	1,364.5	1,259.8	104.72	13.030		
10,200.0	7,740.0	11,517.2	7,530.0	48.4	73.4	-79.95	-1,977.4	2,964.6	1,364.0	1,256.0	108.01	12.628		
10,300.0	7,740.0	11,617.2	7,530.0	49.8	75.0	-79.95	-2,077.4	2,964.1	1,363.5	1,252.2	111.32	12.248		
10,400.0	7,740.0	11,717.2	7,530.0	51.1	76.7	-79.94	-2,177.4	2,963.6	1,363.0	1,248.4	114.64	11.890		
10,500.0	7,740.0	11,817.2	7,530.0	52.5	78.4	-79.94	-2,277.4	2,963.1	1,362.5	1,244.5	117.96	11.550		
10,600.0	7,740.0	11,917.2	7,530.0	53.9	80.0	-79.94	-2,377.4	2,962.6	1,362.0	1,240.7	121.30	11.229		
10,700.0	7,740.0	12,017.2	7,530.0	55.3	81.7	-79.93	-2,477.4	2,962.1	1,361.5	1,236.9	124.64	10.923		
10,800.0	7,740.0	12,117.2	7,530.0	56.7	83.4	-79.93	-2,577.4	2,961.6	1,361.0	1,233.0	127.99	10.634		
10,900.0	7,740.0	12,217.2	7,530.0	58.2	85.1	-79.92	-2,677.4	2,961.1	1,360.5	1,229.2	131.35	10.358		
11,000.0	7,740.0	12,317.2	7,530.0	59.7	86.8	-79.92	-2,777.4	2,960.6	1,360.0	1,225.3	134.71	10.096		
11,100.0	7,740.0	12,417.2	7,530.0	61.2	88.4	-79.92	-2,877.4	2,960.1	1,359.5	1,221.4	138.08	9.846		
11,200.0	7,740.0	12,517.2	7,530.0	62.7	90.1	-79.91	-2,977.4	2,959.6	1,359.0	1,217.6	141.45	9.608		
11,300.0	7,740.0	12,617.2	7,530.0	64.2	91.8	-79.91	-3,077.4	2,959.1	1,358.5	1,213.7	144.82	9.380		
11,400.0	7,740.0	12,717.2	7,530.0	65.7	93.5	-79.91	-3,177.4	2,958.6	1,358.0	1,209.8	148.20	9.163		
11,500.0	7,740.0	12,817.2	7,530.0	67.2	95.2	-79.90	-3,277.4	2,958.0	1,357.5	1,205.9	151.59	8.955		
11,600.0	7,740.0	12,917.2	7,530.0	68.8	96.9	-79.90	-3,377.4	2,957.5	1,357.0	1,202.0	154.98	8.756		
11,700.0	7,740.0	13,017.2	7,530.0	70.3	98.6	-79.90	-3,477.4	2,957.0	1,356.5	1,198.1	158.37	8.566		
11,800.0	7,740.0	13,117.2	7,530.0	71.9	100.3	-79.89	-3,577.4	2,956.5	1,356.0	1,194.3	161.76	8.383		
11,900.0	7,740.0	13,217.2	7,530.0	73.5	102.0	-79.89	-3,677.4	2,956.0	1,355.5	1,190.4	165.16	8.208		
12,000.0	7,740.0	13,317.2	7,530.0	75.1	103.7	-79.88	-3,777.4	2,955.5	1,355.0	1,186.5	168.55	8.039		
12,100.0	7,740.0	13,417.2	7,530.0	76.6	105.4	-79.88	-3,877.4	2,955.0	1,354.5	1,182.6	171.95	7.877		
12,200.0	7,740.0	13,517.2	7,530.0	78.2	107.1	-79.88	-3,977.4	2,954.5	1,354.0	1,178.7	175.36	7.721		
12,300.0	7,740.0	13,617.2	7,530.0	79.8	108.8	-79.87	-4,077.4	2,954.0	1,353.5	1,174.8	178.76	7.572		
12,400.0	7,740.0	13,717.2	7,530.0	81.5	110.6	-79.87	-4,177.4	2,953.5	1,353.0	1,170.8	182.17	7.427		
12,500.0	7,740.0	13,817.2	7,530.0	83.1	112.3	-79.86	-4,277.4	2,953.0	1,352.5	1,166.9	185.58	7.288		
12,600.0	7,740.0	13,917.2	7,530.0	84.7	114.0	-79.86	-4,377.4	2,952.5	1,352.0	1,163.0	188.99	7.154		
12,700.0	7,740.0	14,017.2	7,530.0	86.3	115.7	-79.86	-4,477.3	2,952.0	1,351.5	1,159.1	192.40	7.024		
12,800.0	7,740.0	14,117.2	7,530.0	88.0	117.4	-79.85	-4,577.3	2,951.5	1,351.0	1,155.2	195.81	6.899		
12,900.0	7,740.0	14,217.2	7,530.0	89.6	119.1	-79.85	-4,677.3	2,950.9	1,350.5	1,151.3	199.23	6.779		
13,000.0	7,740.0	14,317.2	7,530.0	91.2	120.8	-79.85	-4,777.3	2,950.4	1,350.0	1,147.4	202.65	6.662		
13,100.0	7,740.0	14,417.2	7,530.0	92.9	122.6	-79.84	-4,877.3	2,949.9	1,349.5	1,143.5	206.06	6.549		
13,200.0	7,740.0	14,517.2	7,530.0	94.5	124.3	-79.84	-4,977.3	2,949.4	1,349.0	1,139.5	209.48	6.440		
13,300.0	7,740.0	14,617.2	7,530.0	96.2	126.0	-79.83	-5,077.3	2,948.9	1,348.5	1,135.6	212.90	6.334		
13,400.0	7,740.0	14,717.2	7,530.0	97.8	127.7	-79.83	-5,177.3	2,948.4	1,348.0	1,131.7	216.32	6.232		
13,500.0	7,740.0	14,817.2	7,530.0	99.5	129.5	-79.83	-5,277.3	2,947.9	1,347.5	1,127.8	219.74	6.132		
13,600.0	7,740.0	14,917.2	7,530.0	101.2	131.2	-79.82	-5,377.3	2,947.4	1,347.0	1,123.9	223.16	6.036		
13,700.0	7,740.0	15,017.2	7,530.0	102.8	132.9	-79.82	-5,477.3	2,946.9	1,346.5	1,119.9	226.59	5.943		
13,800.0	7,740.0	15,117.2	7,530.0	104.5	134.6	-79.82	-5,577.3	2,946.4	1,346.0	1,116.0	230.01	5.852		
13,900.0	7,740.0	15,217.2	7,530.0	106.2	136.4	-79.81	-5,677.3	2,945.9	1,345.5	1,112.1	233.44	5.764		
14,000.0	7,740.0	15,317.2	7,530.0	107.8	138.1	-79.81	-5,777.3	2,945.4	1,345.0	1,108.2	236.86	5.679		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,100.0	7,740.0	15,417.2	7,530.0	109.5	139.8	-79.80	-5,877.3	2,944.9	1,344.5	1,104.2	240.29	5.596		
14,200.0	7,740.0	15,517.2	7,530.0	111.2	141.5	-79.80	-5,977.3	2,944.4	1,344.0	1,100.3	243.71	5.515		
14,300.0	7,740.0	15,617.2	7,530.0	112.9	143.3	-79.80	-6,077.3	2,943.9	1,343.5	1,096.4	247.14	5.436		
14,400.0	7,740.0	15,717.2	7,530.0	114.6	145.0	-79.79	-6,177.3	2,943.3	1,343.0	1,092.5	250.57	5.360		
14,500.0	7,740.0	15,817.2	7,530.0	116.3	146.7	-79.79	-6,277.3	2,942.8	1,342.5	1,088.5	254.00	5.286		
14,600.0	7,740.0	15,917.2	7,530.0	117.9	148.5	-79.78	-6,377.3	2,942.3	1,342.0	1,084.6	257.43	5.213		
14,700.0	7,740.0	16,017.2	7,530.0	119.6	150.2	-79.78	-6,477.3	2,941.8	1,341.5	1,080.7	260.86	5.143		
14,800.0	7,740.0	16,117.2	7,530.0	121.3	151.9	-79.78	-6,577.3	2,941.3	1,341.0	1,076.8	264.29	5.074		
14,900.0	7,740.0	16,217.2	7,530.0	123.0	153.7	-79.77	-6,677.3	2,940.8	1,340.5	1,072.8	267.72	5.007		
15,000.0	7,740.0	16,317.2	7,530.0	124.7	155.4	-79.77	-6,777.3	2,940.3	1,340.0	1,068.9	271.15	4.942		
15,100.0	7,740.0	16,417.2	7,530.0	126.4	157.1	-79.77	-6,877.3	2,939.8	1,339.5	1,065.0	274.58	4.879		
15,200.0	7,740.0	16,517.2	7,530.0	128.1	158.9	-79.76	-6,977.3	2,939.3	1,339.0	1,061.0	278.01	4.816		
15,300.0	7,740.0	16,617.2	7,530.0	129.8	160.6	-79.76	-7,077.3	2,938.8	1,338.5	1,057.1	281.44	4.756		
15,400.0	7,740.0	16,717.2	7,530.0	131.5	162.3	-79.75	-7,177.3	2,938.3	1,338.0	1,053.2	284.88	4.697		
15,500.0	7,740.0	16,817.2	7,530.0	133.2	164.1	-79.75	-7,277.3	2,937.8	1,337.5	1,049.2	288.31	4.639		
15,600.0	7,740.0	16,917.2	7,530.0	134.9	165.8	-79.75	-7,377.3	2,937.3	1,337.1	1,045.3	291.74	4.583		
15,700.0	7,740.0	17,017.2	7,530.0	136.6	167.5	-79.74	-7,477.3	2,936.8	1,336.6	1,041.4	295.18	4.528		
15,800.0	7,740.0	17,117.2	7,530.0	138.3	169.3	-79.74	-7,577.3	2,936.2	1,336.1	1,037.4	298.61	4.474		
15,900.0	7,740.0	17,217.1	7,530.0	140.0	171.0	-79.73	-7,677.3	2,935.7	1,335.6	1,033.5	302.04	4.422		
16,000.0	7,740.0	17,317.1	7,530.0	141.7	172.7	-79.73	-7,777.3	2,935.2	1,335.1	1,029.6	305.48	4.370		
16,100.0	7,740.0	17,417.1	7,530.0	143.5	174.5	-79.73	-7,877.3	2,934.7	1,334.6	1,025.6	308.91	4.320		
16,171.7	7,740.0	17,488.8	7,530.0	144.7	175.7	-79.72	-7,948.9	2,934.4	1,334.2	1,022.8	311.37	4.285 CC, ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						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	28.0	28.0	0.0	0.0	65.67	1,870.2	4,137.1	4,540.2					
100.0	100.0	128.0	128.0	0.2	0.2	65.67	1,870.2	4,137.1	4,540.2	4,539.9	0.35	N/A		
150.0	150.0	178.0	178.0	0.2	0.3	65.67	1,870.2	4,137.1	4,540.2	4,539.7	0.53	8,613.746		
200.0	200.0	228.0	228.0	0.3	0.4	65.69	1,870.2	4,137.1	4,539.9	4,539.2	0.70	6,464.617		
283.3	283.2	311.2	311.2	0.5	0.5	65.78	1,870.2	4,137.1	4,538.3	4,537.3	1.01	4,512.393		
300.0	299.9	327.9	327.9	0.5	0.5	63.41	1,870.2	4,137.1	4,537.8	4,536.7	1.07	4,251.248		
400.0	399.6	522.2	522.2	0.7	0.9	49.80	1,871.1	4,134.7	4,533.1	4,531.5	1.60	2,827.659		
500.0	499.3	742.9	742.6	0.9	1.3	37.91	1,875.2	4,124.6	4,524.1	4,521.9	2.20	2,059.865		
600.0	598.9	962.0	960.8	1.2	1.8	28.17	1,882.3	4,106.8	4,510.9	4,508.1	2.81	1,602.574		
700.0	698.5	1,178.3	1,175.4	1.4	2.3	20.40	1,892.4	4,081.7	4,493.5	4,490.0	3.47	1,294.438		
800.0	797.9	1,279.8	1,275.9	1.6	2.6	14.33	1,897.9	4,068.0	4,473.1	4,469.2	3.89	1,150.337		
900.0	897.1	1,377.1	1,372.1	1.9	2.9	9.51	1,903.2	4,054.9	4,451.2	4,446.9	4.30	1,036.305		
1,000.0	996.2	1,473.9	1,467.9	2.2	3.2	5.61	1,908.4	4,041.8	4,427.8	4,423.1	4.70	942.056		
1,100.0	1,095.0	1,570.3	1,563.3	2.5	3.5	2.40	1,913.6	4,028.8	4,402.8	4,397.7	5.10	862.809		
1,200.0	1,193.6	1,666.2	1,658.1	2.8	3.8	-0.30	1,918.8	4,015.9	4,376.3	4,370.8	5.50	795.175		
1,300.0	1,291.9	1,761.6	1,752.5	3.2	4.0	-2.60	1,923.9	4,003.0	4,348.2	4,342.3	5.90	736.687		
1,400.0	1,389.9	1,856.5	1,846.4	3.5	4.3	-4.61	1,929.1	3,990.2	4,318.7	4,312.4	6.30	685.515		
1,500.0	1,487.6	1,950.7	1,939.7	3.9	4.6	-6.38	1,934.2	3,977.5	4,287.7	4,281.0	6.70	640.273		
1,600.0	1,584.8	2,044.4	2,032.4	4.4	4.9	-7.97	1,939.2	3,964.8	4,255.2	4,248.1	7.09	599.893		
1,624.3	1,608.4	2,067.1	2,054.8	4.5	5.0	-8.33	1,940.4	3,961.8	4,247.1	4,239.9	7.19	590.717		
1,700.0	1,681.8	2,137.7	2,124.6	4.8	5.2	-8.48	1,944.3	3,952.3	4,221.7	4,214.2	7.49	563.491		
1,800.0	1,778.8	2,230.9	2,216.9	5.3	5.5	-8.67	1,949.3	3,939.7	4,188.2	4,180.3	7.89	530.521		
1,900.0	1,875.8	2,324.2	2,309.1	5.7	5.8	-8.87	1,954.3	3,927.1	4,154.7	4,146.4	8.30	500.543		
2,000.0	1,972.8	2,417.4	2,401.4	6.2	6.0	-9.07	1,959.4	3,914.5	4,121.3	4,112.6	8.71	473.182		
2,100.0	2,069.8	2,510.6	2,493.6	6.6	6.3	-9.27	1,964.4	3,902.0	4,087.9	4,078.8	9.12	448.123		
2,200.0	2,166.8	2,603.9	2,585.9	7.1	6.6	-9.48	1,969.5	3,889.4	4,054.6	4,045.0	9.54	425.096		
2,300.0	2,263.8	2,697.1	2,678.1	7.5	6.9	-9.69	1,974.5	3,876.8	4,021.3	4,011.3	9.96	403.871		
2,400.0	2,360.8	2,790.4	2,770.4	8.0	7.2	-9.90	1,979.5	3,864.2	3,988.1	3,977.7	10.38	384.250		
2,500.0	2,457.7	2,883.6	2,862.6	8.4	7.5	-10.12	1,984.6	3,851.7	3,954.9	3,944.1	10.80	366.062		
2,600.0	2,554.7	2,976.8	2,954.9	8.9	7.8	-10.34	1,989.6	3,839.1	3,921.8	3,910.5	11.23	349.159		
2,700.0	2,651.7	3,070.1	3,047.1	9.4	8.0	-10.57	1,994.6	3,826.5	3,888.7	3,877.0	11.66	333.413		
2,800.0	2,748.7	3,163.3	3,139.4	9.8	8.3	-10.79	1,999.7	3,813.9	3,855.7	3,843.6	12.10	318.712		
2,900.0	2,845.7	3,256.5	3,231.6	10.3	8.6	-11.03	2,004.7	3,801.4	3,822.7	3,810.2	12.54	304.956		
3,000.0	2,942.7	3,349.8	3,323.8	10.8	8.9	-11.26	2,009.8	3,788.8	3,789.8	3,776.9	12.98	292.059		
3,100.0	3,039.7	3,443.0	3,416.1	11.2	9.2	-11.50	2,014.8	3,776.2	3,757.0	3,743.6	13.42	279.945		
3,200.0	3,136.7	3,536.2	3,508.3	11.7	9.5	-11.75	2,019.8	3,763.6	3,724.2	3,710.3	13.87	268.545		
3,300.0	3,233.6	3,629.5	3,600.6	12.2	9.8	-11.99	2,024.9	3,751.1	3,691.5	3,677.2	14.32	257.800		
3,400.0	3,330.6	3,722.7	3,692.8	12.6	10.0	-12.25	2,029.9	3,738.5	3,658.8	3,644.1	14.77	247.655		
3,500.0	3,427.6	3,816.0	3,785.1	13.1	10.3	-12.50	2,035.0	3,725.9	3,626.3	3,611.0	15.23	238.062		
3,600.0	3,524.6	3,909.2	3,877.3	13.6	10.6	-12.76	2,040.0	3,713.3	3,593.7	3,578.0	15.69	228.979		
3,700.0	3,621.6	4,002.4	3,969.6	14.0	10.9	-13.03	2,045.0	3,700.8	3,561.3	3,545.1	16.16	220.366		
3,800.0	3,718.6	4,095.7	4,061.8	14.5	11.2	-13.30	2,050.1	3,688.2	3,528.9	3,512.3	16.63	212.189		
3,900.0	3,815.6	4,188.9	4,154.1	15.0	11.5	-13.58	2,055.1	3,675.6	3,496.6	3,479.5	17.11	204.415		
4,000.0	3,912.6	4,282.1	4,246.3	15.4	11.8	-13.86	2,060.2	3,663.0	3,464.4	3,446.8	17.58	197.018		
4,100.0	4,009.5	4,375.4	4,338.6	15.9	12.1	-14.14	2,065.2	3,650.5	3,432.2	3,414.2	18.07	189.970		
4,200.0	4,106.5	4,468.6	4,430.8	16.4	12.3	-14.43	2,070.2	3,637.9	3,400.2	3,381.6	18.56	183.248		
4,300.0	4,203.5	4,561.9	4,523.1	16.8	12.6	-14.73	2,075.3	3,625.3	3,368.2	3,349.1	19.05	176.830		
4,400.0	4,300.5	4,655.1	4,615.3	17.3	12.9	-15.03	2,080.3	3,612.7	3,336.3	3,316.7	19.55	170.698		
4,500.0	4,397.5	4,748.3	4,707.6	17.8	13.2	-15.34	2,085.3	3,600.2	3,304.5	3,284.4	20.05	164.832		
4,600.0	4,494.5	4,841.6	4,799.8	18.2	13.5	-15.65	2,090.4	3,587.6	3,272.8	3,252.2	20.56	159.217		
4,700.0	4,591.5	4,934.8	4,892.1	18.7	13.8	-15.97	2,095.4	3,575.0	3,241.1	3,220.1	21.07	153.837		
4,800.0	4,688.5	5,028.0	4,984.3	19.2	14.1	-16.30	2,100.5	3,562.4	3,209.6	3,188.0	21.59	148.679		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	4,785.4	5,121.3	5,076.5	19.6	14.4	-16.63	2,105.5	3,549.9	3,178.2	3,156.0	22.11	143.729		
5,000.0	4,882.4	5,214.5	5,168.8	20.1	14.6	-16.97	2,110.5	3,537.3	3,146.8	3,124.2	22.64	138.977		
5,100.0	4,979.4	5,307.7	5,261.0	20.6	14.9	-17.31	2,115.6	3,524.7	3,115.6	3,092.4	23.18	134.410		
5,200.0	5,076.4	5,401.0	5,353.3	21.0	15.2	-17.66	2,120.6	3,512.1	3,084.5	3,060.8	23.72	130.020		
5,300.0	5,173.4	5,494.2	5,445.5	21.5	15.5	-18.02	2,125.7	3,499.6	3,053.5	3,029.2	24.27	125.796		
5,400.0	5,270.4	5,587.5	5,537.8	22.0	15.8	-18.38	2,130.7	3,487.0	3,022.6	2,997.7	24.83	121.731		
5,500.0	5,367.4	5,680.7	5,630.0	22.5	16.1	-18.76	2,135.7	3,474.4	2,991.8	2,966.4	25.39	117.815		
5,600.0	5,464.4	5,773.9	5,722.3	22.9	16.4	-19.14	2,140.8	3,461.8	2,961.1	2,935.2	25.97	114.042		
5,700.0	5,561.4	5,867.2	5,814.5	23.4	16.7	-19.52	2,145.8	3,449.2	2,930.6	2,904.1	26.54	110.405		
5,800.0	5,658.3	5,960.4	5,906.8	23.9	17.0	-19.92	2,150.8	3,436.7	2,900.2	2,873.1	27.13	106.897		
5,900.0	5,755.3	6,025.5	7,770.0	24.3	34.7	24.14	422.5	3,183.0	2,844.5	2,811.5	32.98	86.244		
6,000.0	5,852.3	9,318.0	7,770.0	24.8	34.6	23.87	430.0	3,183.0	2,760.7	2,727.2	33.50	82.406		
6,100.0	5,949.3	9,310.5	7,770.0	25.3	34.5	23.59	437.4	3,183.0	2,677.9	2,643.9	34.04	78.667		
6,200.0	6,046.3	9,303.0	7,770.0	25.7	34.4	23.31	444.9	3,183.0	2,596.4	2,561.8	34.60	75.030		
6,300.0	6,143.3	9,295.5	7,770.0	26.2	34.3	23.03	452.4	3,183.0	2,516.2	2,481.0	35.19	71.500		
6,400.0	6,240.3	9,288.0	7,770.0	26.7	34.2	22.75	459.9	3,183.0	2,437.4	2,401.6	35.80	68.081		
6,500.0	6,337.3	9,280.6	7,770.0	27.1	34.1	22.47	467.4	3,183.0	2,360.2	2,323.8	36.43	64.780		
6,600.0	6,434.2	9,273.1	7,770.0	27.6	34.0	22.19	474.8	3,183.0	2,284.7	2,247.7	37.09	61.603		
6,700.0	6,531.2	9,265.6	7,770.0	28.1	33.9	21.91	482.3	3,183.0	2,211.2	2,173.5	37.76	58.556		
6,800.0	6,628.2	9,258.1	7,770.0	28.5	33.8	21.63	489.8	3,183.0	2,139.8	2,101.4	38.45	55.646		
6,900.0	6,725.2	9,250.6	7,770.0	29.0	33.7	21.35	497.3	3,183.0	2,070.7	2,031.6	39.16	52.880		
7,000.0	6,822.2	9,243.2	7,770.0	29.5	33.6	21.07	504.8	3,183.0	2,004.3	1,964.4	39.87	50.264		
7,100.0	6,919.2	9,235.7	7,770.0	30.0	33.5	20.79	512.3	3,183.0	1,940.6	1,900.0	40.59	47.808		
7,200.0	7,016.2	9,228.2	7,770.0	30.4	33.4	20.51	519.7	3,183.0	1,880.1	1,838.8	41.30	45.518		
7,300.0	7,113.2	9,220.7	7,770.0	30.9	33.3	20.23	527.2	3,183.0	1,823.1	1,781.1	42.00	43.405		
7,328.7	7,141.0	9,218.6	7,770.0	31.0	33.3	20.15	529.4	3,183.0	1,807.4	1,765.2	42.20	42.831		
7,350.0	7,161.7	9,217.4	7,770.0	31.1	33.2	10.34	530.6	3,183.0	1,795.9	1,753.6	42.34	42.418		
7,400.0	7,210.3	9,217.7	7,770.0	31.3	33.2	-13.40	530.3	3,183.0	1,769.7	1,727.1	42.66	41.480		
7,450.0	7,258.7	9,222.3	7,770.0	31.5	33.3	-34.12	525.6	3,183.0	1,744.7	1,701.7	43.00	40.574		
7,500.0	7,306.5	9,231.3	7,770.0	31.7	33.4	-49.68	516.7	3,183.0	1,721.0	1,677.6	43.34	39.707		
7,550.0	7,353.4	9,244.5	7,770.0	31.8	33.6	-60.79	503.4	3,183.0	1,698.8	1,655.1	43.69	38.882		
7,600.0	7,399.0	9,261.9	7,770.0	31.9	33.8	-68.75	486.1	3,183.0	1,678.3	1,634.3	44.05	38.100		
7,650.0	7,442.9	9,283.3	7,770.0	32.0	34.1	-74.55	464.7	3,183.0	1,659.6	1,615.1	44.42	37.362		
7,700.0	7,484.9	9,308.5	7,770.0	32.1	34.5	-78.85	439.4	3,183.0	1,642.6	1,597.8	44.80	36.663		
7,750.0	7,524.5	9,337.4	7,770.0	32.1	34.9	-82.05	410.5	3,183.0	1,627.5	1,582.3	45.21	35.999		
7,800.0	7,561.6	9,369.8	7,770.0	32.1	35.3	-84.43	378.2	3,183.0	1,614.1	1,568.5	45.64	35.366		
7,850.0	7,595.8	9,405.3	7,770.0	32.2	35.8	-86.20	342.6	3,183.0	1,602.6	1,556.5	46.11	34.759		
7,900.0	7,626.8	9,443.8	7,770.0	32.2	36.3	-87.49	304.1	3,183.0	1,592.6	1,546.0	46.61	34.167		
7,950.0	7,654.5	9,484.9	7,770.0	32.2	36.9	-88.41	263.0	3,183.0	1,584.3	1,537.1	47.17	33.589		
8,000.0	7,678.5	9,528.3	7,770.0	32.3	37.5	-89.05	219.6	3,183.0	1,577.4	1,529.6	47.78	33.017		
8,050.0	7,698.8	9,573.8	7,770.0	32.3	38.2	-89.48	174.2	3,183.0	1,571.9	1,523.4	48.44	32.447		
8,100.0	7,715.2	9,620.8	7,770.0	32.3	38.9	-89.76	127.1	3,183.0	1,567.6	1,518.4	49.18	31.877		
8,150.0	7,727.5	9,669.2	7,770.0	32.4	39.6	-89.93	78.7	3,183.0	1,564.5	1,514.5	49.98	31.306		
8,200.0	7,735.6	9,718.5	7,770.0	32.4	40.3	-90.03	29.5	3,183.0	1,562.5	1,511.7	50.84	30.735		
8,250.0	7,739.6	9,768.3	7,770.0	32.4	41.1	-90.07	-20.3	3,183.0	1,561.6	1,509.8	51.76	30.168		
8,271.3	7,740.0	9,789.5	7,770.0	32.5	41.4	-90.07	-41.6	3,183.1	1,561.5	1,509.3	52.17	29.929 CC		
8,271.7	7,740.0	9,789.9	7,770.0	32.5	41.4	-90.07	-42.0	3,183.1	1,561.5	1,509.3	52.18	29.925		
8,300.0	7,740.0	9,818.3	7,770.0	32.5	41.8	-90.07	-70.3	3,183.1	1,561.5	1,508.7	52.74	29.606		
8,400.0	7,740.0	9,918.3	7,770.0	32.7	43.3	-90.07	-170.3	3,183.1	1,561.5	1,506.6	54.86	28.464		
8,500.0	7,740.0	10,018.3	7,770.0	33.0	44.8	-90.07	-270.3	3,183.1	1,561.5	1,504.3	57.17	27.314		
8,600.0	7,740.0	10,118.3	7,770.0	33.4	46.4	-90.07	-370.3	3,183.1	1,561.5	1,501.9	59.65	26.179		
8,700.0	7,740.0	10,218.3	7,770.0	33.8	48.0	-90.07	-470.3	3,183.1	1,561.5	1,499.3	62.27	25.075		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
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	
8,800.0	7,740.0	10,318.3	7,770.0	34.4	49.5	-90.07	-570.3	3,183.1	1,561.6	1,496.5	65.02	24.015		
8,900.0	7,740.0	10,418.3	7,770.0	35.0	51.1	-90.07	-670.3	3,183.2	1,561.6	1,493.7	67.88	23.006		
9,000.0	7,740.0	10,518.3	7,770.0	35.7	52.7	-90.07	-770.3	3,183.2	1,561.6	1,490.8	70.82	22.051		
9,100.0	7,740.0	10,618.3	7,770.0	36.4	54.3	-90.07	-870.3	3,183.2	1,561.6	1,487.8	73.83	21.151		
9,200.0	7,740.0	10,718.3	7,770.0	37.3	55.9	-90.07	-970.3	3,183.2	1,561.6	1,484.7	76.91	20.306		
9,300.0	7,740.0	10,818.3	7,770.0	38.2	57.5	-90.07	-1,070.3	3,183.2	1,561.6	1,481.6	80.03	19.513		
9,400.0	7,740.0	10,918.3	7,770.0	39.1	59.2	-90.07	-1,170.3	3,183.2	1,561.7	1,478.5	83.20	18.771		
9,500.0	7,740.0	11,018.3	7,770.0	40.1	60.8	-90.07	-1,270.3	3,183.3	1,561.7	1,475.3	86.40	18.075		
9,600.0	7,740.0	11,118.3	7,770.0	41.2	62.5	-90.07	-1,370.3	3,183.3	1,561.7	1,472.1	89.63	17.423		
9,700.0	7,740.0	11,218.3	7,770.0	42.3	64.1	-90.07	-1,470.3	3,183.3	1,561.7	1,468.8	92.90	16.812		
9,800.0	7,740.0	11,318.3	7,770.0	43.5	65.8	-90.07	-1,570.3	3,183.3	1,561.7	1,465.5	96.18	16.238		
9,900.0	7,740.0	11,418.3	7,770.0	44.7	67.4	-90.07	-1,670.3	3,183.3	1,561.7	1,462.3	99.48	15.699		
10,000.0	7,740.0	11,518.3	7,770.0	45.9	69.1	-90.07	-1,770.3	3,183.3	1,561.8	1,459.0	102.80	15.192		
10,100.0	7,740.0	11,618.3	7,770.0	47.1	70.7	-90.07	-1,870.3	3,183.4	1,561.8	1,455.6	106.14	14.714		
10,200.0	7,740.0	11,718.3	7,770.0	48.4	72.4	-90.07	-1,970.3	3,183.4	1,561.8	1,452.3	109.49	14.264		
10,300.0	7,740.0	11,818.3	7,770.0	49.8	74.1	-90.07	-2,070.3	3,183.4	1,561.8	1,449.0	112.85	13.839		
10,400.0	7,740.0	11,918.3	7,770.0	51.1	75.8	-90.07	-2,170.3	3,183.4	1,561.8	1,445.6	116.23	13.438		
10,500.0	7,740.0	12,018.3	7,770.0	52.5	77.5	-90.07	-2,270.3	3,183.4	1,561.8	1,442.2	119.61	13.058		
10,600.0	7,740.0	12,118.3	7,770.0	53.9	79.1	-90.07	-2,370.3	3,183.4	1,561.9	1,438.9	123.00	12.698		
10,700.0	7,740.0	12,218.3	7,770.0	55.3	80.8	-90.07	-2,470.3	3,183.5	1,561.9	1,435.5	126.40	12.357		
10,800.0	7,740.0	12,318.3	7,770.0	56.7	82.5	-90.07	-2,570.3	3,183.5	1,561.9	1,432.1	129.80	12.033		
10,900.0	7,740.0	12,418.3	7,770.0	58.2	84.2	-90.07	-2,670.3	3,183.5	1,561.9	1,428.7	133.22	11.725		
11,000.0	7,740.0	12,518.3	7,770.0	59.7	85.9	-90.07	-2,770.3	3,183.5	1,561.9	1,425.3	136.63	11.432		
11,100.0	7,740.0	12,618.3	7,770.0	61.2	87.6	-90.07	-2,870.3	3,183.5	1,561.9	1,421.9	140.06	11.152		
11,200.0	7,740.0	12,718.3	7,770.0	62.7	89.3	-90.07	-2,970.3	3,183.5	1,562.0	1,418.5	143.48	10.886		
11,300.0	7,740.0	12,818.3	7,770.0	64.2	91.0	-90.07	-3,070.3	3,183.6	1,562.0	1,415.1	146.91	10.632		
11,400.0	7,740.0	12,918.3	7,770.0	65.7	92.7	-90.07	-3,170.3	3,183.6	1,562.0	1,411.6	150.35	10.389		
11,500.0	7,740.0	13,018.3	7,770.0	67.2	94.4	-90.07	-3,270.3	3,183.6	1,562.0	1,408.2	153.79	10.157		
11,600.0	7,740.0	13,118.3	7,770.0	68.8	96.1	-90.07	-3,370.3	3,183.6	1,562.0	1,404.8	157.23	9.934		
11,700.0	7,740.0	13,218.3	7,770.0	70.3	97.8	-90.07	-3,470.3	3,183.6	1,562.0	1,401.4	160.68	9.721		
11,800.0	7,740.0	13,318.3	7,770.0	71.9	99.6	-90.07	-3,570.3	3,183.6	1,562.1	1,397.9	164.13	9.517		
11,900.0	7,740.0	13,418.3	7,770.0	73.5	101.3	-90.07	-3,670.3	3,183.7	1,562.1	1,394.5	167.58	9.321		
12,000.0	7,740.0	13,518.3	7,770.0	75.1	103.0	-90.07	-3,770.3	3,183.7	1,562.1	1,391.1	171.04	9.133		
12,100.0	7,740.0	13,618.3	7,770.0	76.6	104.7	-90.07	-3,870.3	3,183.7	1,562.1	1,387.6	174.49	8.952		
12,200.0	7,740.0	13,718.3	7,770.0	78.2	106.4	-90.07	-3,970.3	3,183.7	1,562.1	1,384.2	177.95	8.778		
12,300.0	7,740.0	13,818.3	7,770.0	79.8	108.1	-90.07	-4,070.3	3,183.7	1,562.1	1,380.7	181.41	8.611		
12,400.0	7,740.0	13,918.3	7,770.0	81.5	109.9	-90.07	-4,170.3	3,183.7	1,562.2	1,377.3	184.88	8.450		
12,500.0	7,740.0	14,018.3	7,770.0	83.1	111.6	-90.07	-4,270.3	3,183.8	1,562.2	1,373.8	188.34	8.294		
12,600.0	7,740.0	14,118.3	7,770.0	84.7	113.3	-90.07	-4,370.3	3,183.8	1,562.2	1,370.4	191.81	8.145		
12,700.0	7,740.0	14,218.3	7,770.0	86.3	115.0	-90.07	-4,470.3	3,183.8	1,562.2	1,366.9	195.27	8.000		
12,800.0	7,740.0	14,318.3	7,770.0	88.0	116.7	-90.07	-4,570.3	3,183.8	1,562.2	1,363.5	198.74	7.860		
12,900.0	7,740.0	14,418.3	7,770.0	89.6	118.5	-90.07	-4,670.3	3,183.8	1,562.2	1,360.0	202.22	7.726		
13,000.0	7,740.0	14,518.3	7,770.0	91.2	120.2	-90.07	-4,770.3	3,183.8	1,562.3	1,356.6	205.69	7.595		
13,100.0	7,740.0	14,618.3	7,770.0	92.9	121.9	-90.07	-4,870.3	3,183.9	1,562.3	1,353.1	209.16	7.469		
13,200.0	7,740.0	14,718.3	7,770.0	94.5	123.6	-90.07	-4,970.3	3,183.9	1,562.3	1,349.7	212.64	7.347		
13,300.0	7,740.0	14,818.3	7,770.0	96.2	125.4	-90.07	-5,070.3	3,183.9	1,562.3	1,346.2	216.11	7.229		
13,400.0	7,740.0	14,918.3	7,770.0	97.8	127.1	-90.07	-5,170.3	3,183.9	1,562.3	1,342.7	219.59	7.115		
13,500.0	7,740.0	15,018.3	7,770.0	99.5	128.8	-90.07	-5,270.3	3,183.9	1,562.3	1,339.3	223.07	7.004		
13,600.0	7,740.0	15,118.3	7,770.0	101.2	130.6	-90.07	-5,370.3	3,183.9	1,562.4	1,335.8	226.55	6.896		
13,700.0	7,740.0	15,218.3	7,770.0	102.8	132.3	-90.07	-5,470.3	3,184.0	1,562.4	1,332.3	230.03	6.792		
13,800.0	7,740.0	15,318.3	7,770.0	104.5	134.0	-90.07	-5,570.3	3,184.0	1,562.4	1,328.9	233.51	6.691		
13,900.0	7,740.0	15,418.3	7,770.0	106.2	135.8	-90.07	-5,670.3	3,184.0	1,562.4	1,325.4	236.99	6.593		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,740.0	15,518.3	7,770.0	107.8	137.5	-90.07	-5,770.3	3,184.0	1,562.4	1,322.0	240.47	6.497		
14,100.0	7,740.0	15,618.3	7,770.0	109.5	139.2	-90.07	-5,870.3	3,184.0	1,562.4	1,318.5	243.96	6.405		
14,200.0	7,740.0	15,718.3	7,770.0	111.2	141.0	-90.07	-5,970.3	3,184.0	1,562.5	1,315.0	247.44	6.314		
14,300.0	7,740.0	15,818.3	7,770.0	112.9	142.7	-90.07	-6,070.3	3,184.1	1,562.5	1,311.5	250.93	6.227		
14,400.0	7,740.0	15,918.3	7,770.0	114.6	144.4	-90.07	-6,170.3	3,184.1	1,562.5	1,308.1	254.41	6.142		
14,500.0	7,740.0	16,018.3	7,770.0	116.3	146.2	-90.07	-6,270.3	3,184.1	1,562.5	1,304.6	257.90	6.059		
14,600.0	7,740.0	16,118.3	7,770.0	117.9	147.9	-90.07	-6,370.3	3,184.1	1,562.5	1,301.1	261.39	5.978		
14,700.0	7,740.0	16,218.3	7,770.0	119.6	149.6	-90.07	-6,470.3	3,184.1	1,562.5	1,297.7	264.87	5.899		
14,800.0	7,740.0	16,318.3	7,770.0	121.3	151.4	-90.07	-6,570.3	3,184.1	1,562.6	1,294.2	268.36	5.823		
14,900.0	7,740.0	16,418.3	7,770.0	123.0	153.1	-90.07	-6,670.3	3,184.2	1,562.6	1,290.7	271.85	5.748		
15,000.0	7,740.0	16,518.3	7,770.0	124.7	154.8	-90.07	-6,770.3	3,184.2	1,562.6	1,287.3	275.34	5.675		
15,100.0	7,740.0	16,618.3	7,770.0	126.4	156.6	-90.07	-6,870.3	3,184.2	1,562.6	1,283.8	278.83	5.604		
15,200.0	7,740.0	16,718.3	7,770.0	128.1	158.3	-90.07	-6,970.3	3,184.2	1,562.6	1,280.3	282.32	5.535		
15,300.0	7,740.0	16,818.3	7,770.0	129.8	160.0	-90.07	-7,070.3	3,184.2	1,562.6	1,276.8	285.81	5.467		
15,400.0	7,740.0	16,918.3	7,770.0	131.5	161.8	-90.07	-7,170.3	3,184.2	1,562.7	1,273.4	289.30	5.402		
15,500.0	7,740.0	17,018.3	7,770.0	133.2	163.5	-90.07	-7,270.3	3,184.3	1,562.7	1,269.9	292.79	5.337		
15,600.0	7,740.0	17,118.3	7,770.0	134.9	165.3	-90.07	-7,370.3	3,184.3	1,562.7	1,266.4	296.28	5.274		
15,700.0	7,740.0	17,218.3	7,770.0	136.6	167.0	-90.07	-7,470.3	3,184.3	1,562.7	1,262.9	299.77	5.213		
15,800.0	7,740.0	17,318.3	7,770.0	138.3	168.7	-90.07	-7,570.3	3,184.3	1,562.7	1,259.5	303.27	5.153		
15,900.0	7,740.0	17,418.3	7,770.0	140.0	170.5	-90.07	-7,670.3	3,184.3	1,562.7	1,256.0	306.76	5.094		
16,000.0	7,740.0	17,518.3	7,770.0	141.7	172.2	-90.07	-7,770.3	3,184.3	1,562.8	1,252.5	310.25	5.037		
16,100.0	7,740.0	17,618.3	7,770.0	143.5	174.0	-90.07	-7,870.3	3,184.4	1,562.8	1,249.0	313.75	4.981		
16,171.7	7,740.0	17,689.9	7,770.0	144.7	175.2	-90.07	-7,942.0	3,184.4	1,562.8	1,246.5	316.25	4.942 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1E-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	65.73	1,870.2	4,147.2	4,549.4					
100.0	100.0	128.0	128.0	0.2	0.2	65.73	1,870.2	4,147.2	4,549.4	4,549.0	0.35	N/A		
150.0	150.0	178.0	178.0	0.2	0.3	65.73	1,870.2	4,147.2	4,549.4	4,548.9	0.53	8,631.169		
200.0	200.0	228.0	228.0	0.3	0.4	65.74	1,870.2	4,147.2	4,549.1	4,548.4	0.70	6,477.689		
283.3	283.2	311.2	311.2	0.5	0.5	65.83	1,870.2	4,147.2	4,547.5	4,546.5	1.01	4,521.479		
300.0	299.9	327.9	327.9	0.5	0.5	63.47	1,870.2	4,147.2	4,547.0	4,545.9	1.07	4,259.800		
400.0	399.6	453.4	453.4	0.7	0.8	49.83	1,870.3	4,147.0	4,543.0	4,541.5	1.48	3,065.575		
500.0	499.3	646.1	646.0	0.9	1.1	37.97	1,872.7	4,142.6	4,535.9	4,533.8	2.02	2,249.971		
600.0	598.9	838.0	837.6	1.2	1.5	28.29	1,878.1	4,132.5	4,525.1	4,522.5	2.56	1,766.152		
700.0	698.5	1,028.3	1,027.1	1.4	1.9	20.59	1,886.5	4,116.9	4,510.7	4,507.6	3.13	1,439.899		
800.0	797.9	1,152.3	1,150.2	1.6	2.2	14.53	1,893.4	4,104.2	4,493.2	4,489.7	3.58	1,253.841		
900.0	897.1	1,250.3	1,247.5	1.9	2.5	9.74	1,898.9	4,094.0	4,474.1	4,470.2	3.98	1,124.547		
1,000.0	996.2	1,347.8	1,344.3	2.2	2.7	5.87	1,904.4	4,083.8	4,453.5	4,449.1	4.37	1,018.625		
1,100.0	1,095.0	1,445.0	1,440.8	2.5	3.0	2.68	1,909.9	4,073.6	4,431.2	4,426.5	4.76	930.244		
1,200.0	1,193.6	1,541.7	1,536.8	2.8	3.2	0.02	1,915.4	4,063.5	4,407.5	4,402.3	5.15	855.316		
1,300.0	1,291.9	1,638.0	1,632.4	3.2	3.5	-2.26	1,920.8	4,053.4	4,382.2	4,376.6	5.54	790.902		
1,400.0	1,389.9	1,733.7	1,727.5	3.5	3.7	-4.23	1,926.2	4,043.4	4,355.3	4,349.4	5.93	734.840		
1,500.0	1,487.6	1,829.0	1,822.1	3.9	4.0	-5.97	1,931.6	4,033.5	4,327.0	4,320.7	6.31	685.507		
1,600.0	1,584.8	1,923.7	1,916.2	4.4	4.2	-7.53	1,936.9	4,023.6	4,297.2	4,290.5	6.70	641.660		
1,624.3	1,608.4	1,946.6	1,938.9	4.5	4.3	-7.88	1,938.2	4,021.2	4,289.7	4,282.9	6.79	631.719		
1,700.0	1,681.8	2,018.1	2,009.8	4.8	4.5	-8.01	1,942.2	4,013.7	4,266.3	4,259.2	7.08	602.278		
1,800.0	1,778.8	2,112.4	2,103.5	5.3	4.7	-8.19	1,947.6	4,003.9	4,235.4	4,227.9	7.47	566.728		
1,900.0	1,875.8	2,206.7	2,197.1	5.7	5.0	-8.36	1,952.9	3,994.0	4,204.6	4,196.7	7.87	534.502		
2,000.0	1,972.8	2,301.0	2,290.7	6.2	5.2	-8.54	1,958.2	3,984.1	4,173.7	4,165.5	8.26	505.173		
2,100.0	2,069.8	2,395.3	2,384.4	6.6	5.5	-8.72	1,963.5	3,974.3	4,143.0	4,134.3	8.66	478.379		
2,200.0	2,166.8	2,489.6	2,478.0	7.1	5.7	-8.91	1,968.8	3,964.4	4,112.2	4,103.2	9.06	453.815		
2,300.0	2,263.8	2,583.9	2,571.6	7.5	6.0	-9.10	1,974.1	3,954.6	4,081.5	4,072.1	9.47	431.222		
2,400.0	2,360.8	2,678.2	2,665.3	8.0	6.2	-9.29	1,979.5	3,944.7	4,050.9	4,041.0	9.87	410.377		
2,500.0	2,457.7	2,772.5	2,758.9	8.4	6.5	-9.48	1,984.8	3,934.9	4,020.3	4,010.0	10.28	391.091		
2,600.0	2,554.7	2,866.8	2,852.5	8.9	6.7	-9.67	1,990.1	3,925.0	3,989.7	3,979.0	10.69	373.198		
2,700.0	2,651.7	2,961.1	2,946.2	9.4	7.0	-9.87	1,995.4	3,915.2	3,959.2	3,948.1	11.10	356.555		
2,800.0	2,748.7	3,055.4	3,039.8	9.8	7.2	-10.07	2,000.7	3,905.3	3,928.7	3,917.2	11.52	341.038		
2,900.0	2,845.7	3,149.7	3,133.4	10.3	7.5	-10.28	2,006.1	3,895.4	3,898.3	3,886.3	11.94	326.538		
3,000.0	2,942.7	3,244.0	3,227.1	10.8	7.8	-10.49	2,011.4	3,885.6	3,867.9	3,855.5	12.36	312.961		
3,100.0	3,039.7	3,338.3	3,320.7	11.2	8.0	-10.70	2,016.7	3,875.7	3,837.5	3,824.8	12.78	300.222		
3,200.0	3,136.7	3,432.6	3,414.3	11.7	8.3	-10.91	2,022.0	3,865.9	3,807.3	3,794.0	13.21	288.247		
3,300.0	3,233.6	3,526.9	3,508.0	12.2	8.5	-11.13	2,027.3	3,856.0	3,777.0	3,763.4	13.64	276.970		
3,400.0	3,330.6	3,621.2	3,601.6	12.6	8.8	-11.35	2,032.7	3,846.2	3,746.8	3,732.8	14.07	266.333		
3,500.0	3,427.6	3,715.5	3,695.2	13.1	9.0	-11.58	2,038.0	3,836.3	3,716.7	3,702.2	14.50	256.284		
3,600.0	3,524.6	3,809.8	3,788.9	13.6	9.3	-11.80	2,043.3	3,826.5	3,686.6	3,671.7	14.94	246.775		
3,700.0	3,621.6	3,904.1	3,882.5	14.0	9.5	-12.04	2,048.6	3,816.6	3,656.6	3,641.2	15.38	237.765		
3,800.0	3,718.6	3,998.4	3,976.1	14.5	9.8	-12.27	2,053.9	3,806.7	3,626.6	3,610.8	15.82	229.216		
3,900.0	3,815.6	4,092.7	4,069.8	15.0	10.0	-12.51	2,059.2	3,796.9	3,596.7	3,580.4	16.27	221.094		
4,000.0	3,912.6	4,187.0	4,163.4	15.4	10.3	-12.76	2,064.6	3,787.0	3,566.8	3,550.1	16.72	213.369		
4,100.0	4,009.5	4,281.3	4,257.0	15.9	10.6	-13.00	2,069.9	3,777.2	3,537.1	3,519.9	17.17	206.012		
4,200.0	4,106.5	4,375.6	4,350.7	16.4	10.8	-13.25	2,075.2	3,767.3	3,507.3	3,489.7	17.62	198.998		
4,300.0	4,203.5	4,469.9	4,444.3	16.8	11.1	-13.51	2,080.5	3,757.5	3,477.7	3,459.6	18.08	192.304		
4,400.0	4,300.5	4,564.2	4,537.9	17.3	11.3	-13.77	2,085.8	3,747.6	3,448.1	3,429.5	18.55	185.909		
4,500.0	4,397.5	4,658.5	4,631.6	17.8	11.6	-14.03	2,091.2	3,737.8	3,418.5	3,399.5	19.01	179.794		
4,600.0	4,494.5	4,752.8	4,725.2	18.2	11.8	-14.30	2,096.5	3,727.9	3,389.1	3,369.6	19.48	173.941		
4,700.0	4,591.5	4,847.1	4,818.8	18.7	12.1	-14.58	2,101.8	3,718.0	3,359.7	3,339.7	19.96	168.335		
4,800.0	4,688.5	4,941.4	4,912.5	19.2	12.3	-14.86	2,107.1	3,708.2	3,330.4	3,309.9	20.44	162.959		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1E-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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
4,900.0	4,785.4	5,035.7	5,006.1	19.6	12.6	-15.14	2,112.4	3,698.3	3,301.1	3,280.2	20.92	157.801		
5,000.0	4,882.4	5,130.0	5,099.7	20.1	12.9	-15.43	2,117.8	3,688.5	3,272.0	3,250.5	21.41	152.849		
5,100.0	4,979.4	5,224.3	5,193.4	20.6	13.1	-15.72	2,123.1	3,678.6	3,242.9	3,221.0	21.90	148.090		
5,200.0	5,076.4	5,318.6	5,287.0	21.0	13.4	-16.02	2,128.4	3,668.8	3,213.9	3,191.5	22.39	143.513		
5,300.0	5,173.4	5,412.9	5,380.6	21.5	13.6	-16.32	2,133.7	3,658.9	3,184.9	3,162.0	22.90	139.110		
5,400.0	5,270.4	5,507.2	5,474.3	22.0	13.9	-16.63	2,139.0	3,649.1	3,156.1	3,132.7	23.40	134.870		
5,500.0	5,367.4	5,601.5	5,567.9	22.5	14.1	-16.94	2,144.3	3,639.2	3,127.4	3,103.4	23.91	130.785		
5,600.0	5,464.4	5,695.8	5,661.5	22.9	14.4	-17.26	2,149.7	3,629.3	3,098.7	3,074.3	24.43	126.847		
5,700.0	5,561.4	5,790.6	5,756.0	23.4	14.7	-17.58	2,155.0	3,619.4	3,088.9	3,069.7	24.95	122.909		
5,800.0	5,658.3	5,887.9	5,853.0	23.9	15.0	-17.90	2,160.3	3,609.5	3,079.0	3,059.8	25.47	119.000		
5,900.0	5,755.3	5,987.2	5,952.0	24.3	15.3	-18.22	2,165.6	3,599.6	3,069.1	3,049.9	25.99	115.110		
6,000.0	5,852.3	6,086.5	6,051.0	24.8	15.6	-18.54	2,170.9	3,589.7	3,059.2	3,039.9	26.51	111.240		
6,100.0	5,949.3	6,185.8	6,150.0	25.3	15.9	-18.86	2,176.2	3,579.8	3,049.3	3,029.9	27.03	107.390		
6,200.0	6,046.3	6,285.1	6,250.0	25.7	16.2	-19.18	2,181.5	3,569.9	3,039.4	3,019.9	27.55	103.560		
6,300.0	6,143.3	6,384.4	6,349.0	26.2	16.5	-19.50	2,186.8	3,560.0	3,029.5	3,009.9	28.07	99.750		
6,400.0	6,240.3	6,483.7	6,448.0	26.7	16.8	-19.82	2,192.1	3,550.1	3,019.6	3,000.0	28.59	95.960		
6,500.0	6,337.3	6,583.0	6,548.0	27.1	17.1	-20.14	2,197.4	3,540.2	3,009.7	2,990.1	29.11	92.190		
6,600.0	6,434.2	6,682.3	6,648.0	27.6	17.4	-20.46	2,202.7	3,530.3	3,000.0	2,980.2	29.63	88.440		
6,700.0	6,531.2	6,781.6	6,747.0	28.1	17.7	-20.78	2,208.0	3,520.4	2,990.1	2,970.3	30.15	84.710		
6,800.0	6,628.2	6,880.9	6,846.0	28.5	18.0	-21.10	2,213.3	3,510.5	2,980.2	2,960.4	30.67	81.000		
6,900.0	6,725.2	6,980.2	6,946.0	29.0	18.3	-21.42	2,218.6	3,500.6	2,970.3	2,950.5	31.19	77.310		
7,000.0	6,822.2	7,079.5	7,045.0	29.5	18.6	-21.74	2,223.9	3,490.7	2,960.4	2,940.6	31.71	73.640		
7,100.0	6,919.2	7,178.8	7,144.0	30.0	18.9	-22.06	2,229.2	3,480.8	2,950.5	2,930.7	32.23	69.990		
7,200.0	7,016.2	7,278.1	7,243.0	30.4	19.2	-22.38	2,234.5	3,470.9	2,940.6	2,920.8	32.75	66.360		
7,300.0	7,113.2	7,377.4	7,342.0	30.9	19.5	-22.70	2,239.8	3,461.0	2,930.7	2,910.9	33.27	62.750		
7,328.7	7,141.0	7,405.2	7,370.0	31.0	19.6	-22.82	2,241.0	3,460.0	2,930.0	2,910.0	33.40	61.500		
7,350.0	7,161.7	7,426.9	7,391.0	31.1	19.7	-22.90	2,242.2	3,459.0	2,929.1	2,909.1	33.50	60.750		
7,400.0	7,210.3	7,475.5	7,440.0	31.3	19.9	-23.06	2,245.7	3,455.1	2,925.2	2,905.2	33.71	58.500		
7,450.0	7,258.7	7,523.9	7,488.0	31.5	20.1	-23.22	2,249.1	3,451.2	2,921.3	2,901.3	33.92	56.270		
7,500.0	7,306.5	7,572.3	7,537.0	31.7	20.3	-23.38	2,252.5	3,447.3	2,917.4	2,897.4	34.13	54.060		
7,550.0	7,353.4	7,620.7	7,584.0	31.8	20.4	-23.46	2,253.7	3,446.3	2,916.4	2,896.4	34.17	53.550		
7,600.0	7,399.0	7,666.3	7,631.0	31.9	20.5	-23.54	2,254.9	3,445.3	2,915.4	2,895.4	34.21	53.040		
7,650.0	7,442.9	7,709.9	7,674.0	32.0	20.6	-23.62	2,256.1	3,444.3	2,914.5	2,894.5	34.25	52.530		
7,700.0	7,484.9	7,753.5	7,718.0	32.1	20.7	-23.70	2,257.3	3,443.3	2,913.5	2,893.5	34.29	52.020		
7,750.0	7,524.5	7,797.1	7,762.0	32.1	20.8	-23.78	2,258.5	3,442.3	2,912.6	2,892.6	34.33	51.510		
7,800.0	7,561.6	7,839.7	7,804.0	32.1	20.9	-23.86	2,259.7	3,441.3	2,911.6	2,891.6	34.37	51.000		
7,850.0	7,595.8	7,881.3	7,846.0	32.2	21.0	-23.94	2,260.9	3,440.3	2,910.7	2,890.7	34.41	50.490		
7,900.0	7,626.8	7,917.9	7,882.0	32.2	21.1	-24.02	2,262.1	3,439.3	2,909.7	2,889.7	34.45	50.000		
7,950.0	7,654.5	7,945.6	7,910.0	32.2	21.2	-24.10	2,263.3	3,438.3	2,908.8	2,888.8	34.49	49.510		
8,000.0	7,678.5	7,969.5	7,934.0	32.3	21.3	-24.18	2,264.5	3,437.3	2,907.8	2,887.8	34.53	49.020		
8,050.0	7,698.8	7,990.0	7,954.0	32.3	21.4	-24.26	2,265.7	3,436.3	2,906.9	2,886.9	34.57	48.530		
8,100.0	7,715.2	8,011.6	7,975.0	32.3	21.5	-24.34	2,266.9	3,435.3	2,905.9	2,885.9	34.61	48.040		
8,150.0	7,727.5	8,033.2	7,996.0	32.4	21.6	-24.42	2,268.1	3,434.3	2,905.0	2,885.0	34.65	47.550		
8,200.0	7,735.6	8,047.8	8,010.0	32.4	21.7	-24.50	2,269.3	3,433.3	2,904.0	2,884.0	34.69	47.060		
8,250.0	7,739.6	8,056.4	8,014.0	32.4	21.8	-24.58	2,270.5	3,432.3	2,903.1	2,883.1	34.73	46.570		
8,270.7	7,740.0	8,057.0	8,014.0	32.5	21.9	-24.62	2,271.7	3,431.3	2,902.1	2,882.1	34.77	46.080		
8,271.7	7,740.0	8,057.0	8,014.0	32.5	21.9	-24.62	2,271.7	3,431.3	2,902.1	2,882.1	34.77	46.080		
8,300.0	7,740.0	8,057.0	8,014.0	32.5	21.9	-24.62	2,271.7	3,431.3	2,902.1	2,882.1	34.77	46.080		
8,400.0	7,740.0	8,057.0	8,014.0	32.7	22.1	-24.82	2,273.3	3,431.3	2,902.1	2,882.1	34.81	45.590		
8,500.0	7,740.0	8,057.0	8,014.0	33.0	22.4	-25.02	2,275.0	3,431.3	2,902.1	2,882.1	34.85	45.100		
8,600.0	7,740.0	8,057.0	8,014.0	33.4	22.8	-25.22	2,276.7	3,431.3	2,902.1	2,882.1	34.89	44.610		
8,700.0	7,740.0	8,057.0	8,014.0	33.8	23.2	-25.42	2,278.4	3,431.3	2,902.1	2,882.1	34.93	44.120		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1E-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)				
8,800.0	7,740.0	10,053.5	7,530.0	34.4	48.1	-82.52	-570.3	3,433.1	1,827.1	1,762.6	64.55	28.308		
8,900.0	7,740.0	10,153.5	7,530.0	35.0	49.7	-82.52	-670.3	3,433.2	1,827.2	1,759.8	67.37	27.122		
9,000.0	7,740.0	10,253.5	7,530.0	35.7	51.4	-82.52	-770.3	3,433.2	1,827.2	1,756.9	70.28	25.999		
9,100.0	7,740.0	10,353.5	7,530.0	36.4	53.0	-82.52	-870.3	3,433.2	1,827.2	1,753.9	73.26	24.941		
9,200.0	7,740.0	10,453.5	7,530.0	37.3	54.6	-82.52	-970.3	3,433.2	1,827.2	1,750.9	76.30	23.947		
9,300.0	7,740.0	10,553.5	7,530.0	38.2	56.3	-82.52	-1,070.3	3,433.2	1,827.2	1,747.8	79.39	23.014		
9,400.0	7,740.0	10,653.5	7,530.0	39.1	58.0	-82.52	-1,170.3	3,433.2	1,827.2	1,744.7	82.53	22.140		
9,500.0	7,740.0	10,753.5	7,530.0	40.1	59.6	-82.52	-1,270.3	3,433.3	1,827.3	1,741.5	85.70	21.321		
9,600.0	7,740.0	10,853.5	7,530.0	41.2	61.3	-82.52	-1,370.3	3,433.3	1,827.3	1,738.4	88.91	20.553		
9,700.0	7,740.0	10,953.5	7,530.0	42.3	63.0	-82.52	-1,470.3	3,433.3	1,827.3	1,735.1	92.14	19.832		
9,800.0	7,740.0	11,053.5	7,530.0	43.5	64.7	-82.52	-1,570.3	3,433.3	1,827.3	1,731.9	95.39	19.156		
9,900.0	7,740.0	11,153.5	7,530.0	44.7	66.4	-82.52	-1,670.3	3,433.3	1,827.3	1,728.7	98.66	18.521		
10,000.0	7,740.0	11,253.5	7,530.0	45.9	68.0	-82.52	-1,770.3	3,433.3	1,827.3	1,725.4	101.95	17.923		
10,100.0	7,740.0	11,353.5	7,530.0	47.1	69.7	-82.52	-1,870.3	3,433.4	1,827.3	1,722.1	105.26	17.360		
10,200.0	7,740.0	11,453.5	7,530.0	48.4	71.4	-82.52	-1,970.3	3,433.4	1,827.4	1,718.8	108.58	16.830		
10,300.0	7,740.0	11,553.5	7,530.0	49.8	73.1	-82.52	-2,070.3	3,433.4	1,827.4	1,715.5	111.91	16.329		
10,400.0	7,740.0	11,653.5	7,530.0	51.1	74.8	-82.52	-2,170.3	3,433.4	1,827.4	1,712.1	115.26	15.855		
10,500.0	7,740.0	11,753.5	7,530.0	52.5	76.5	-82.52	-2,270.3	3,433.4	1,827.4	1,708.8	118.61	15.407		
10,600.0	7,740.0	11,853.5	7,530.0	53.9	78.2	-82.52	-2,370.3	3,433.4	1,827.4	1,705.5	121.97	14.983		
10,700.0	7,740.0	11,953.5	7,530.0	55.3	79.9	-82.52	-2,470.3	3,433.5	1,827.4	1,702.1	125.34	14.580		
10,800.0	7,740.0	12,053.5	7,530.0	56.7	81.7	-82.52	-2,570.3	3,433.5	1,827.5	1,698.8	128.71	14.198		
10,900.0	7,740.0	12,153.5	7,530.0	58.2	83.4	-82.52	-2,670.3	3,433.5	1,827.5	1,695.4	132.10	13.835		
11,000.0	7,740.0	12,253.5	7,530.0	59.7	85.1	-82.52	-2,770.3	3,433.5	1,827.5	1,692.0	135.48	13.489		
11,100.0	7,740.0	12,353.5	7,530.0	61.2	86.8	-82.52	-2,870.3	3,433.5	1,827.5	1,688.6	138.88	13.159		
11,200.0	7,740.0	12,453.5	7,530.0	62.7	88.5	-82.52	-2,970.3	3,433.5	1,827.5	1,685.3	142.27	12.845		
11,300.0	7,740.0	12,553.5	7,530.0	64.2	90.2	-82.52	-3,070.3	3,433.6	1,827.5	1,681.9	145.68	12.545		
11,400.0	7,740.0	12,653.5	7,530.0	65.7	91.9	-82.52	-3,170.3	3,433.6	1,827.6	1,678.5	149.08	12.259		
11,500.0	7,740.0	12,753.5	7,530.0	67.2	93.7	-82.52	-3,270.3	3,433.6	1,827.6	1,675.1	152.49	11.985		
11,600.0	7,740.0	12,853.5	7,530.0	68.8	95.4	-82.52	-3,370.3	3,433.6	1,827.6	1,671.7	155.91	11.722		
11,700.0	7,740.0	12,953.5	7,530.0	70.3	97.1	-82.52	-3,470.3	3,433.6	1,827.6	1,668.3	159.32	11.471		
11,800.0	7,740.0	13,053.5	7,530.0	71.9	98.8	-82.52	-3,570.3	3,433.6	1,827.6	1,664.9	162.74	11.230		
11,900.0	7,740.0	13,153.5	7,530.0	73.5	100.6	-82.52	-3,670.3	3,433.7	1,827.6	1,661.5	166.17	10.999		
12,000.0	7,740.0	13,253.5	7,530.0	75.1	102.3	-82.52	-3,770.3	3,433.7	1,827.7	1,658.1	169.59	10.777		
12,100.0	7,740.0	13,353.5	7,530.0	76.6	104.0	-82.52	-3,870.3	3,433.7	1,827.7	1,654.7	173.02	10.563		
12,200.0	7,740.0	13,453.5	7,530.0	78.2	105.7	-82.52	-3,970.3	3,433.7	1,827.7	1,651.2	176.45	10.358		
12,300.0	7,740.0	13,553.5	7,530.0	79.8	107.5	-82.52	-4,070.3	3,433.7	1,827.7	1,647.8	179.88	10.161		
12,400.0	7,740.0	13,653.5	7,530.0	81.5	109.2	-82.52	-4,170.3	3,433.7	1,827.7	1,644.4	183.31	9.970		
12,500.0	7,740.0	13,753.5	7,530.0	83.1	110.9	-82.52	-4,270.3	3,433.8	1,827.7	1,641.0	186.75	9.787		
12,600.0	7,740.0	13,853.5	7,530.0	84.7	112.7	-82.52	-4,370.3	3,433.8	1,827.8	1,637.6	190.19	9.610		
12,700.0	7,740.0	13,953.5	7,530.0	86.3	114.4	-82.52	-4,470.3	3,433.8	1,827.8	1,634.2	193.63	9.440		
12,800.0	7,740.0	14,053.5	7,530.0	88.0	116.1	-82.52	-4,570.3	3,433.8	1,827.8	1,630.7	197.07	9.275		
12,900.0	7,740.0	14,153.5	7,530.0	89.6	117.8	-82.52	-4,670.3	3,433.8	1,827.8	1,627.3	200.51	9.116		
13,000.0	7,740.0	14,253.5	7,530.0	91.2	119.6	-82.52	-4,770.3	3,433.9	1,827.8	1,623.9	203.95	8.962		
13,100.0	7,740.0	14,353.5	7,530.0	92.9	121.3	-82.52	-4,870.3	3,433.9	1,827.8	1,620.5	207.40	8.813		
13,200.0	7,740.0	14,453.5	7,530.0	94.5	123.0	-82.52	-4,970.3	3,433.9	1,827.9	1,617.0	210.84	8.669		
13,300.0	7,740.0	14,553.5	7,530.0	96.2	124.8	-82.52	-5,070.3	3,433.9	1,827.9	1,613.6	214.29	8.530		
13,400.0	7,740.0	14,653.5	7,530.0	97.8	126.5	-82.52	-5,170.3	3,433.9	1,827.9	1,610.2	217.74	8.395		
13,500.0	7,740.0	14,753.5	7,530.0	99.5	128.3	-82.52	-5,270.3	3,433.9	1,827.9	1,606.7	221.19	8.264		
13,600.0	7,740.0	14,853.5	7,530.0	101.2	130.0	-82.52	-5,370.3	3,434.0	1,827.9	1,603.3	224.64	8.137		
13,700.0	7,740.0	14,953.5	7,530.0	102.8	131.7	-82.52	-5,470.3	3,434.0	1,827.9	1,599.9	228.09	8.014		
13,800.0	7,740.0	15,053.5	7,530.0	104.5	133.5	-82.52	-5,570.3	3,434.0	1,828.0	1,596.4	231.54	7.895		
13,900.0	7,740.0	15,153.5	7,530.0	106.2	135.2	-82.52	-5,670.3	3,434.0	1,828.0	1,593.0	234.99	7.779		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1E-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				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		
14,000.0	7,740.0	15,253.5	7,530.0	107.8	136.9	-82.52	-5,770.3	3,434.0	1,828.0	1,589.6	238.45	7.666		
14,100.0	7,740.0	15,353.5	7,530.0	109.5	138.7	-82.52	-5,870.3	3,434.0	1,828.0	1,586.1	241.90	7.557		
14,200.0	7,740.0	15,453.5	7,530.0	111.2	140.4	-82.52	-5,970.3	3,434.1	1,828.0	1,582.7	245.35	7.451		
14,300.0	7,740.0	15,553.5	7,530.0	112.9	142.2	-82.52	-6,070.3	3,434.1	1,828.0	1,579.2	248.81	7.347		
14,400.0	7,740.0	15,653.5	7,530.0	114.6	143.9	-82.52	-6,170.3	3,434.1	1,828.1	1,575.8	252.27	7.247		
14,500.0	7,740.0	15,753.5	7,530.0	116.3	145.6	-82.52	-6,270.3	3,434.1	1,828.1	1,572.4	255.72	7.149		
14,600.0	7,740.0	15,853.5	7,530.0	117.9	147.4	-82.52	-6,370.3	3,434.1	1,828.1	1,568.9	259.18	7.053		
14,700.0	7,740.0	15,953.5	7,530.0	119.6	149.1	-82.52	-6,470.3	3,434.1	1,828.1	1,565.5	262.64	6.961		
14,800.0	7,740.0	16,053.5	7,530.0	121.3	150.9	-82.52	-6,570.3	3,434.2	1,828.1	1,562.0	266.10	6.870		
14,900.0	7,740.0	16,153.5	7,530.0	123.0	152.6	-82.52	-6,670.3	3,434.2	1,828.1	1,558.6	269.56	6.782		
15,000.0	7,740.0	16,253.5	7,530.0	124.7	154.3	-82.52	-6,770.3	3,434.2	1,828.2	1,555.1	273.02	6.696		
15,100.0	7,740.0	16,353.5	7,530.0	126.4	156.1	-82.52	-6,870.3	3,434.2	1,828.2	1,551.7	276.48	6.612		
15,200.0	7,740.0	16,453.5	7,530.0	128.1	157.8	-82.52	-6,970.3	3,434.2	1,828.2	1,548.3	279.94	6.531		
15,300.0	7,740.0	16,553.5	7,530.0	129.8	159.6	-82.52	-7,070.3	3,434.2	1,828.2	1,544.8	283.40	6.451		
15,400.0	7,740.0	16,653.5	7,530.0	131.5	161.3	-82.52	-7,170.3	3,434.3	1,828.2	1,541.4	286.86	6.373		
15,500.0	7,740.0	16,753.5	7,530.0	133.2	163.1	-82.52	-7,270.3	3,434.3	1,828.2	1,537.9	290.32	6.297		
15,600.0	7,740.0	16,853.5	7,530.0	134.9	164.8	-82.52	-7,370.3	3,434.3	1,828.3	1,534.5	293.79	6.223		
15,700.0	7,740.0	16,953.5	7,530.0	136.6	166.5	-82.52	-7,470.3	3,434.3	1,828.3	1,531.0	297.25	6.151		
15,800.0	7,740.0	17,053.5	7,530.0	138.3	168.3	-82.52	-7,570.3	3,434.3	1,828.3	1,527.6	300.71	6.080		
15,900.0	7,740.0	17,153.5	7,530.0	140.0	170.0	-82.52	-7,670.3	3,434.3	1,828.3	1,524.1	304.18	6.011		
16,000.0	7,740.0	17,253.5	7,530.0	141.7	171.8	-82.52	-7,770.3	3,434.4	1,828.3	1,520.7	307.64	5.943		
16,100.0	7,740.0	17,353.5	7,530.0	143.5	173.5	-82.52	-7,870.3	3,434.4	1,828.3	1,517.2	311.10	5.877		
16,171.7	7,740.0	17,425.1	7,530.0	144.7	174.8	-82.52	-7,942.0	3,434.4	1,828.4	1,514.8	313.59	5.830 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1F-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	65.78	1,870.2	4,157.3	4,558.6					
100.0	100.0	128.0	128.0	0.2	0.2	65.78	1,870.2	4,157.3	4,558.6	4,558.2	0.35	N/A		
150.0	150.0	178.0	178.0	0.2	0.3	65.78	1,870.2	4,157.3	4,558.6	4,558.1	0.53	8,648.598		
200.0	200.0	228.0	228.0	0.3	0.4	65.79	1,870.2	4,157.3	4,558.3	4,557.6	0.70	6,490.767		
283.3	283.2	311.2	311.2	0.5	0.5	65.88	1,870.2	4,157.3	4,556.7	4,555.7	1.01	4,530.569		
300.0	299.9	327.9	327.9	0.5	0.5	63.52	1,870.2	4,157.3	4,556.2	4,555.1	1.07	4,268.356		
400.0	399.6	427.6	427.6	0.7	0.7	49.86	1,870.2	4,157.3	4,552.3	4,550.8	1.44	3,168.082		
500.0	499.3	575.7	575.7	0.9	1.0	38.02	1,871.0	4,156.2	4,546.3	4,544.4	1.89	2,406.314		
600.0	598.9	737.6	737.5	1.2	1.3	28.38	1,874.5	4,151.5	4,537.4	4,535.1	2.37	1,915.429		
700.0	698.5	898.8	898.3	1.4	1.6	20.74	1,880.7	4,143.3	4,525.6	4,522.7	2.86	1,582.977		
800.0	797.9	1,023.6	1,022.7	1.6	1.9	14.72	1,887.3	4,134.6	4,511.0	4,507.7	3.29	1,370.465		
900.0	897.1	1,122.1	1,120.8	1.9	2.1	9.96	1,892.6	4,127.5	4,494.7	4,491.0	3.67	1,224.060		
1,000.0	996.2	1,220.3	1,218.6	2.2	2.3	6.12	1,897.9	4,120.4	4,476.9	4,472.8	4.05	1,105.171		
1,100.0	1,095.0	1,318.2	1,316.1	2.5	2.5	2.97	1,903.2	4,113.4	4,457.4	4,453.0	4.43	1,006.703		
1,200.0	1,193.6	1,415.7	1,413.2	2.8	2.7	0.34	1,908.5	4,106.4	4,436.4	4,431.6	4.80	923.750		
1,300.0	1,291.9	1,512.8	1,509.9	3.2	2.9	-1.90	1,913.7	4,099.4	4,413.9	4,408.7	5.18	852.825		
1,400.0	1,389.9	1,609.5	1,606.1	3.5	3.2	-3.84	1,919.0	4,092.4	4,389.8	4,384.2	5.55	791.389		
1,500.0	1,487.6	1,705.7	1,702.0	3.9	3.4	-5.54	1,924.2	4,085.5	4,364.1	4,358.2	5.92	737.554		
1,600.0	1,584.8	1,801.4	1,797.3	4.4	3.6	-7.06	1,929.4	4,078.6	4,337.0	4,330.7	6.29	689.885		
1,624.3	1,608.4	1,824.5	1,820.3	4.5	3.7	-7.40	1,930.6	4,077.0	4,330.2	4,323.8	6.38	679.098		
1,700.0	1,681.8	1,896.7	1,892.2	4.8	3.8	-7.51	1,934.5	4,071.8	4,308.8	4,302.1	6.66	647.204		
1,800.0	1,778.8	1,992.0	1,987.2	5.3	4.0	-7.66	1,939.7	4,064.9	4,280.5	4,273.5	7.03	608.790		
1,900.0	1,875.8	2,087.4	2,082.1	5.7	4.3	-7.81	1,944.8	4,058.0	4,252.3	4,244.9	7.41	574.062		
2,000.0	1,972.8	2,182.7	2,177.1	6.2	4.5	-7.96	1,950.0	4,051.2	4,224.1	4,216.3	7.79	542.532		
2,100.0	2,069.8	2,278.0	2,272.0	6.6	4.7	-8.12	1,955.2	4,044.3	4,196.0	4,187.8	8.17	513.791		
2,200.0	2,166.8	2,373.4	2,367.0	7.1	4.9	-8.27	1,960.3	4,037.5	4,167.9	4,159.3	8.55	487.496		
2,300.0	2,263.8	2,468.7	2,461.9	7.5	5.1	-8.43	1,965.5	4,030.6	4,139.8	4,130.8	8.93	463.356		
2,400.0	2,360.8	2,564.0	2,556.8	8.0	5.4	-8.59	1,970.6	4,023.7	4,111.7	4,102.4	9.32	441.122		
2,500.0	2,457.7	2,659.4	2,651.8	8.4	5.6	-8.75	1,975.8	4,016.9	4,083.7	4,073.9	9.71	420.583		
2,600.0	2,554.7	2,754.7	2,746.7	8.9	5.8	-8.92	1,981.0	4,010.0	4,055.7	4,045.6	10.10	401.554		
2,700.0	2,651.7	2,850.0	2,841.7	9.4	6.0	-9.09	1,986.1	4,003.2	4,027.7	4,017.2	10.49	383.878		
2,800.0	2,748.7	2,945.4	2,936.6	9.8	6.3	-9.25	1,991.3	3,996.3	3,999.7	3,988.8	10.89	367.419		
2,900.0	2,845.7	3,040.7	3,031.6	10.3	6.5	-9.43	1,996.4	3,989.4	3,971.8	3,960.5	11.28	352.057		
3,000.0	2,942.7	3,136.0	3,126.5	10.8	6.7	-9.60	2,001.6	3,982.6	3,944.0	3,932.3	11.68	337.687		
3,100.0	3,039.7	3,231.3	3,221.4	11.2	6.9	-9.78	2,006.8	3,975.7	3,916.1	3,904.0	12.08	324.217		
3,200.0	3,136.7	3,326.7	3,316.4	11.7	7.1	-9.96	2,011.9	3,968.8	3,888.3	3,875.8	12.48	311.566		
3,300.0	3,233.6	3,422.0	3,411.3	12.2	7.4	-10.14	2,017.1	3,962.0	3,860.5	3,847.7	12.88	299.663		
3,400.0	3,330.6	3,517.3	3,506.3	12.6	7.6	-10.32	2,022.2	3,955.1	3,832.8	3,819.5	13.29	288.445		
3,500.0	3,427.6	3,612.7	3,601.2	13.1	7.8	-10.51	2,027.4	3,948.3	3,805.1	3,791.4	13.69	277.853		
3,600.0	3,524.6	3,708.0	3,696.2	13.6	8.0	-10.70	2,032.6	3,941.4	3,777.5	3,763.4	14.10	267.838		
3,700.0	3,621.6	3,803.3	3,791.1	14.0	8.3	-10.89	2,037.7	3,934.5	3,749.8	3,735.3	14.51	258.354		
3,800.0	3,718.6	3,898.7	3,886.0	14.5	8.5	-11.08	2,042.9	3,927.7	3,722.3	3,707.3	14.93	249.361		
3,900.0	3,815.6	3,994.0	3,981.0	15.0	8.7	-11.28	2,048.0	3,920.8	3,694.7	3,679.4	15.34	240.821		
4,000.0	3,912.6	4,089.3	4,075.9	15.4	8.9	-11.48	2,053.2	3,914.0	3,667.2	3,651.5	15.76	232.702		
4,100.0	4,009.5	4,184.7	4,170.9	15.9	9.2	-11.68	2,058.4	3,907.1	3,639.8	3,623.6	16.18	224.973		
4,200.0	4,106.5	4,280.0	4,265.8	16.4	9.4	-11.89	2,063.5	3,900.2	3,612.4	3,595.8	16.60	217.607		
4,300.0	4,203.5	4,375.3	4,360.8	16.8	9.6	-12.10	2,068.7	3,893.4	3,585.0	3,568.0	17.02	210.580		
4,400.0	4,300.5	4,470.6	4,455.7	17.3	9.8	-12.31	2,073.8	3,886.5	3,557.7	3,540.3	17.45	203.868		
4,500.0	4,397.5	4,566.0	4,550.7	17.8	10.0	-12.53	2,079.0	3,879.7	3,530.4	3,512.6	17.88	197.452		
4,600.0	4,494.5	4,661.3	4,645.6	18.2	10.3	-12.75	2,084.2	3,872.8	3,503.2	3,484.9	18.31	191.312		
4,700.0	4,591.5	4,756.6	4,740.5	18.7	10.5	-12.97	2,089.3	3,865.9	3,476.0	3,457.3	18.75	185.431		
4,800.0	4,688.5	4,852.0	4,835.5	19.2	10.7	-13.20	2,094.5	3,859.1	3,448.9	3,429.7	19.18	179.794		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1F-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	
4,900.0	4,785.4	4,947.3	4,930.4	19.6	10.9	-13.43	2,099.6	3,852.2	3,421.9	3,402.2	19.62	174.385	
5,000.0	4,882.4	5,042.6	5,025.4	20.1	11.2	-13.66	2,104.8	3,845.4	3,394.8	3,374.8	20.07	169.191	
5,100.0	4,979.4	5,138.0	5,120.3	20.6	11.4	-13.90	2,109.9	3,838.5	3,367.9	3,347.4	20.51	164.200	
5,200.0	5,076.4	5,233.3	5,215.3	21.0	11.6	-14.14	2,115.1	3,831.6	3,341.0	3,320.0	20.96	159.400	
5,300.0	5,173.4	5,328.6	5,310.2	21.5	11.8	-14.38	2,120.3	3,824.8	3,314.1	3,292.7	21.41	154.781	
5,400.0	5,270.4	5,424.0	5,405.1	22.0	12.1	-14.63	2,125.4	3,817.9	3,287.3	3,265.5	21.87	150.332	
5,500.0	5,367.4	5,519.3	5,500.1	22.5	12.3	-14.88	2,130.6	3,811.1	3,260.6	3,238.3	22.33	146.046	
5,600.0	5,464.4	5,614.6	5,595.0	22.9	12.5	-15.14	2,135.7	3,804.2	3,233.9	3,211.1	22.79	141.913	
5,700.0	5,561.4	5,709.9	5,690.0	23.4	12.7	-15.40	2,140.9	3,797.3	3,207.3	3,184.1	23.25	137.925	
5,800.0	5,658.3	5,805.3	5,784.9	23.9	13.0	-15.67	2,146.1	3,790.5	3,180.8	3,157.0	23.72	134.076	
5,900.0	5,755.3	5,900.6	5,879.9	24.3	13.2	-15.94	2,151.2	3,783.6	3,154.3	3,130.1	24.20	130.358	
6,000.0	5,852.3	9,265.1	7,770.0	24.8	31.4	22.36	438.7	3,653.7	3,120.5	3,085.1	35.41	88.118	
6,100.0	5,949.3	9,257.7	7,770.0	25.3	31.3	22.15	446.1	3,653.6	3,044.0	3,008.0	35.92	84.738	
6,200.0	6,046.3	9,250.3	7,770.0	25.7	31.1	21.93	453.5	3,653.6	2,968.8	2,932.3	36.44	81.461	
6,300.0	6,143.3	9,242.9	7,770.0	26.2	31.0	21.72	460.9	3,653.6	2,895.1	2,858.1	36.98	78.291	
6,400.0	6,240.3	9,235.5	7,770.0	26.7	30.9	21.51	468.3	3,653.6	2,823.0	2,785.5	37.52	75.231	
6,500.0	6,337.3	9,228.1	7,770.0	27.1	30.8	21.30	475.7	3,653.5	2,752.6	2,714.6	38.08	72.286	
6,600.0	6,434.2	9,220.7	7,770.0	27.6	30.7	21.08	483.1	3,653.5	2,684.1	2,645.5	38.64	69.459	
6,700.0	6,531.2	9,213.3	7,770.0	28.1	30.6	20.87	490.5	3,653.5	2,617.7	2,578.4	39.21	66.754	
6,800.0	6,628.2	9,205.9	7,770.0	28.5	30.5	20.66	497.9	3,653.5	2,553.3	2,513.5	39.79	64.176	
6,900.0	6,725.2	9,198.5	7,770.0	29.0	30.4	20.44	505.3	3,653.4	2,491.3	2,451.0	40.36	61.729	
7,000.0	6,822.2	9,191.1	7,770.0	29.5	30.3	20.23	512.7	3,653.4	2,431.9	2,390.9	40.93	59.417	
7,100.0	6,919.2	9,183.7	7,770.0	30.0	30.1	20.02	520.1	3,653.4	2,375.1	2,333.6	41.49	57.246	
7,200.0	7,016.2	9,176.3	7,770.0	30.4	30.0	19.80	527.5	3,653.3	2,321.2	2,279.1	42.03	55.220	
7,300.0	7,113.2	9,168.9	7,770.0	30.9	29.9	19.59	534.9	3,653.3	2,270.4	2,227.8	42.56	53.346	
7,328.7	7,141.0	9,166.8	7,770.0	31.0	29.9	19.53	537.0	3,653.3	2,256.4	2,213.7	42.71	52.836	
7,350.0	7,161.7	9,165.6	7,770.0	31.1	29.9	9.93	538.2	3,653.3	2,246.2	2,203.4	42.81	52.470	
7,400.0	7,210.3	9,166.0	7,770.0	31.3	29.9	-13.38	537.9	3,653.3	2,222.9	2,179.8	43.05	51.635	
7,450.0	7,258.7	9,170.6	7,770.0	31.5	30.0	-33.75	533.2	3,653.3	2,200.5	2,157.2	43.30	50.820	
7,500.0	7,306.5	9,179.7	7,770.0	31.7	30.1	-49.03	524.2	3,653.4	2,179.3	2,135.8	43.56	50.027	
7,550.0	7,353.4	9,192.9	7,770.0	31.8	30.3	-59.94	510.9	3,653.4	2,159.5	2,115.6	43.84	49.261	
7,600.0	7,399.0	9,210.3	7,770.0	31.9	30.5	-67.78	493.5	3,653.5	2,141.1	2,096.9	44.13	48.518	
7,650.0	7,442.9	9,231.7	7,770.0	32.0	30.9	-73.52	472.1	3,653.5	2,124.1	2,079.7	44.44	47.797	
7,700.0	7,484.9	9,257.0	7,770.0	32.1	31.2	-77.82	446.8	3,653.6	2,108.8	2,064.0	44.78	47.097	
7,750.0	7,524.5	9,286.0	7,770.0	32.1	31.7	-81.07	417.9	3,653.7	2,095.0	2,049.9	45.14	46.414	
7,800.0	7,561.6	9,318.4	7,770.0	32.1	32.2	-83.54	385.5	3,653.9	2,082.8	2,037.2	45.53	45.740	
7,850.0	7,595.8	9,353.9	7,770.0	32.2	32.7	-85.41	349.9	3,654.0	2,072.1	2,026.1	45.97	45.069	
7,900.0	7,626.8	9,392.4	7,770.0	32.2	33.3	-86.83	311.4	3,654.1	2,062.8	2,016.4	46.46	44.400	
7,950.0	7,654.5	9,433.6	7,770.0	32.2	33.9	-87.89	270.3	3,654.3	2,055.0	2,008.0	47.00	43.720	
8,000.0	7,678.5	9,477.0	7,770.0	32.3	34.6	-88.66	226.8	3,654.4	2,048.6	2,000.9	47.61	43.032	
8,050.0	7,698.8	9,522.5	7,770.0	32.3	35.3	-89.22	181.4	3,654.6	2,043.3	1,995.1	48.27	42.330	
8,100.0	7,715.2	9,569.6	7,770.0	32.3	36.0	-89.60	134.3	3,654.8	2,039.3	1,990.3	49.01	41.614	
8,150.0	7,727.5	9,617.9	7,770.0	32.4	36.8	-89.85	85.9	3,655.0	2,036.4	1,986.6	49.81	40.887	
8,200.0	7,735.6	9,667.2	7,770.0	32.4	37.6	-90.00	36.7	3,655.1	2,034.6	1,983.9	50.68	40.150	
8,250.0	7,739.6	9,717.0	7,770.0	32.4	38.4	-90.06	-13.2	3,655.3	2,033.9	1,982.2	51.60	39.412	
8,262.7	7,739.9	9,729.7	7,770.0	32.5	38.6	-90.06	-25.8	3,655.4	2,033.8	1,982.0	51.85	39.224 CC	
8,271.7	7,740.0	9,738.7	7,770.0	32.5	38.7	-90.06	-34.8	3,655.4	2,033.8	1,981.8	52.03	39.093	
8,300.0	7,740.0	9,767.0	7,770.0	32.5	39.2	-90.06	-63.2	3,655.5	2,033.9	1,981.3	52.59	38.675	
8,400.0	7,740.0	9,867.0	7,770.0	32.7	40.8	-90.06	-163.2	3,655.9	2,034.3	1,979.6	54.72	37.178	
8,500.0	7,740.0	9,967.0	7,770.0	33.0	42.4	-90.06	-263.2	3,656.2	2,034.7	1,977.6	57.04	35.672	
8,600.0	7,740.0	10,067.0	7,770.0	33.4	44.0	-90.06	-363.2	3,656.6	2,035.0	1,975.5	59.53	34.187	
8,700.0	7,740.0	10,167.0	7,770.0	33.8	45.6	-90.06	-463.2	3,657.0	2,035.4	1,973.2	62.16	32.744	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1F-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				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)				
8,800.0	7,740.0	10,267.0	7,770.0	34.4	47.3	-90.06	-563.2	3,657.3	2,035.8	1,970.9	64.92	31.360		
8,900.0	7,740.0	10,367.0	7,770.0	35.0	48.9	-90.06	-663.2	3,657.7	2,036.1	1,968.4	67.78	30.042		
9,000.0	7,740.0	10,467.0	7,770.0	35.7	50.6	-90.06	-763.2	3,658.1	2,036.5	1,965.8	70.72	28.796		
9,100.0	7,740.0	10,567.0	7,770.0	36.4	52.3	-90.06	-863.2	3,658.4	2,036.9	1,963.1	73.74	27.623		
9,200.0	7,740.0	10,667.0	7,770.0	37.3	53.9	-90.06	-963.2	3,658.8	2,037.2	1,960.4	76.81	26.521		
9,300.0	7,740.0	10,767.0	7,770.0	38.2	55.6	-90.06	-1,063.2	3,659.2	2,037.6	1,957.7	79.94	25.489		
9,400.0	7,740.0	10,867.0	7,770.0	39.1	57.3	-90.06	-1,163.1	3,659.5	2,038.0	1,954.9	83.11	24.521		
9,500.0	7,740.0	10,967.0	7,770.0	40.1	59.0	-90.06	-1,263.1	3,659.9	2,038.3	1,952.0	86.32	23.615		
9,600.0	7,740.0	11,067.0	7,770.0	41.2	60.7	-90.06	-1,363.1	3,660.3	2,038.7	1,949.1	89.55	22.765		
9,700.0	7,740.0	11,167.0	7,770.0	42.3	62.3	-90.06	-1,463.1	3,660.6	2,039.1	1,946.2	92.82	21.969		
9,800.0	7,740.0	11,267.0	7,770.0	43.5	64.0	-90.06	-1,563.1	3,661.0	2,039.4	1,943.3	96.10	21.222		
9,900.0	7,740.0	11,367.0	7,770.0	44.7	65.7	-90.06	-1,663.1	3,661.4	2,039.8	1,940.4	99.41	20.520		
10,000.0	7,740.0	11,467.0	7,770.0	45.9	67.4	-90.06	-1,763.1	3,661.7	2,040.2	1,937.4	102.73	19.860		
10,100.0	7,740.0	11,567.0	7,770.0	47.1	69.1	-90.06	-1,863.1	3,662.1	2,040.5	1,934.5	106.07	19.238		
10,200.0	7,740.0	11,667.0	7,770.0	48.4	70.9	-90.06	-1,963.1	3,662.5	2,040.9	1,931.5	109.42	18.652		
10,300.0	7,740.0	11,767.0	7,770.0	49.8	72.6	-90.06	-2,063.1	3,662.8	2,041.3	1,928.5	112.78	18.099		
10,400.0	7,740.0	11,867.0	7,770.0	51.1	74.3	-90.06	-2,163.1	3,663.2	2,041.6	1,925.5	116.15	17.577		
10,500.0	7,740.0	11,967.0	7,770.0	52.5	76.0	-90.06	-2,263.1	3,663.6	2,042.0	1,922.5	119.54	17.083		
10,600.0	7,740.0	12,067.0	7,770.0	53.9	77.7	-90.06	-2,363.1	3,663.9	2,042.4	1,919.4	122.93	16.614		
10,700.0	7,740.0	12,167.0	7,770.0	55.3	79.4	-90.06	-2,463.1	3,664.3	2,042.7	1,916.4	126.33	16.170		
10,800.0	7,740.0	12,267.0	7,770.0	56.7	81.1	-90.06	-2,563.1	3,664.7	2,043.1	1,913.4	129.73	15.748		
10,900.0	7,740.0	12,367.0	7,770.0	58.2	82.9	-90.06	-2,663.1	3,665.0	2,043.5	1,910.3	133.14	15.348		
11,000.0	7,740.0	12,467.0	7,770.0	59.7	84.6	-90.06	-2,763.1	3,665.4	2,043.8	1,907.3	136.56	14.966		
11,100.0	7,740.0	12,567.0	7,770.0	61.2	86.3	-90.06	-2,863.1	3,665.7	2,044.2	1,904.2	139.99	14.603		
11,200.0	7,740.0	12,667.0	7,770.0	62.7	88.0	-90.06	-2,963.1	3,666.1	2,044.5	1,901.1	143.41	14.256		
11,300.0	7,740.0	12,767.0	7,770.0	64.2	89.7	-90.06	-3,063.1	3,666.5	2,044.9	1,898.1	146.85	13.926		
11,400.0	7,740.0	12,867.0	7,770.0	65.7	91.5	-90.06	-3,163.1	3,666.8	2,045.3	1,895.0	150.28	13.610		
11,500.0	7,740.0	12,967.0	7,770.0	67.2	93.2	-90.06	-3,263.1	3,667.2	2,045.6	1,891.9	153.72	13.307		
11,600.0	7,740.0	13,067.0	7,770.0	68.8	94.9	-90.06	-3,363.1	3,667.6	2,046.0	1,888.8	157.17	13.018		
11,700.0	7,740.0	13,167.0	7,770.0	70.3	96.7	-90.06	-3,463.1	3,667.9	2,046.4	1,885.8	160.61	12.741		
11,800.0	7,740.0	13,267.0	7,770.0	71.9	98.4	-90.06	-3,563.1	3,668.3	2,046.7	1,882.7	164.06	12.476		
11,900.0	7,740.0	13,367.0	7,770.0	73.5	100.1	-90.06	-3,663.1	3,668.7	2,047.1	1,879.6	167.51	12.221		
12,000.0	7,740.0	13,467.0	7,770.0	75.1	101.8	-90.06	-3,763.1	3,669.0	2,047.5	1,876.5	170.97	11.976		
12,100.0	7,740.0	13,567.0	7,770.0	76.6	103.6	-90.06	-3,863.1	3,669.4	2,047.8	1,873.4	174.42	11.741		
12,200.0	7,740.0	13,667.0	7,770.0	78.2	105.3	-90.06	-3,963.1	3,669.8	2,048.2	1,870.3	177.88	11.514		
12,300.0	7,740.0	13,767.0	7,770.0	79.8	107.0	-90.06	-4,063.1	3,670.1	2,048.6	1,867.2	181.35	11.297		
12,400.0	7,740.0	13,867.0	7,770.0	81.5	108.8	-90.06	-4,163.1	3,670.5	2,048.9	1,864.1	184.81	11.087		
12,500.0	7,740.0	13,967.0	7,770.0	83.1	110.5	-90.06	-4,263.1	3,670.9	2,049.3	1,861.0	188.27	10.885		
12,600.0	7,740.0	14,067.0	7,770.0	84.7	112.2	-90.06	-4,363.1	3,671.2	2,049.7	1,857.9	191.74	10.690		
12,700.0	7,740.0	14,167.0	7,770.0	86.3	114.0	-90.06	-4,463.1	3,671.6	2,050.0	1,854.8	195.21	10.502		
12,800.0	7,740.0	14,267.0	7,770.0	88.0	115.7	-90.06	-4,563.1	3,672.0	2,050.4	1,851.7	198.68	10.320		
12,900.0	7,740.0	14,367.0	7,770.0	89.6	117.5	-90.06	-4,663.1	3,672.3	2,050.8	1,848.6	202.15	10.145		
13,000.0	7,740.0	14,467.0	7,770.0	91.2	119.2	-90.06	-4,763.1	3,672.7	2,051.1	1,845.5	205.62	9.975		
13,100.0	7,740.0	14,567.0	7,770.0	92.9	120.9	-90.06	-4,863.1	3,673.1	2,051.5	1,842.4	209.10	9.811		
13,200.0	7,740.0	14,667.0	7,770.0	94.5	122.7	-90.06	-4,963.1	3,673.4	2,051.9	1,839.3	212.57	9.653		
13,300.0	7,740.0	14,767.0	7,770.0	96.2	124.4	-90.06	-5,063.1	3,673.8	2,052.2	1,836.2	216.05	9.499		
13,400.0	7,740.0	14,867.0	7,770.0	97.8	126.1	-90.06	-5,163.1	3,674.2	2,052.6	1,833.1	219.52	9.350		
13,500.0	7,740.0	14,967.0	7,770.0	99.5	127.9	-90.06	-5,263.1	3,674.5	2,053.0	1,830.0	223.00	9.206		
13,600.0	7,740.0	15,067.0	7,770.0	101.2	129.6	-90.06	-5,363.1	3,674.9	2,053.3	1,826.8	226.48	9.066		
13,700.0	7,740.0	15,167.0	7,770.0	102.8	131.4	-90.06	-5,463.1	3,675.3	2,053.7	1,823.7	229.96	8.931		
13,800.0	7,740.0	15,267.0	7,770.0	104.5	133.1	-90.06	-5,563.1	3,675.6	2,054.1	1,820.6	233.44	8.799		
13,900.0	7,740.0	15,367.0	7,770.0	106.2	134.8	-90.06	-5,663.1	3,676.0	2,054.4	1,817.5	236.93	8.671		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1F-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				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)			
14,000.0	7,740.0	15,467.0	7,770.0	107.8	136.6	-90.06	-5,763.1	3,676.4	2,054.8	1,814.4	240.41	8.547	
14,100.0	7,740.0	15,567.0	7,770.0	109.5	138.3	-90.06	-5,863.1	3,676.7	2,055.2	1,811.3	243.89	8.426	
14,200.0	7,740.0	15,667.0	7,770.0	111.2	140.1	-90.06	-5,963.1	3,677.1	2,055.5	1,808.1	247.38	8.309	
14,300.0	7,740.0	15,767.0	7,770.0	112.9	141.8	-90.06	-6,063.1	3,677.5	2,055.9	1,805.0	250.86	8.195	
14,400.0	7,740.0	15,867.0	7,770.0	114.6	143.6	-90.06	-6,163.1	3,677.8	2,056.3	1,801.9	254.35	8.084	
14,500.0	7,740.0	15,967.0	7,770.0	116.3	145.3	-90.06	-6,263.1	3,678.2	2,056.6	1,798.8	257.83	7.977	
14,600.0	7,740.0	16,067.0	7,770.0	117.9	147.0	-90.06	-6,363.1	3,678.6	2,057.0	1,795.7	261.32	7.872	
14,700.0	7,740.0	16,167.0	7,770.0	119.6	148.8	-90.06	-6,463.1	3,678.9	2,057.4	1,792.5	264.81	7.769	
14,800.0	7,740.0	16,267.0	7,770.0	121.3	150.5	-90.06	-6,563.1	3,679.3	2,057.7	1,789.4	268.30	7.670	
14,900.0	7,740.0	16,367.0	7,770.0	123.0	152.3	-90.06	-6,663.1	3,679.7	2,058.1	1,786.3	271.78	7.572	
15,000.0	7,740.0	16,467.0	7,770.0	124.7	154.0	-90.06	-6,763.1	3,680.0	2,058.5	1,783.2	275.27	7.478	
15,100.0	7,740.0	16,567.0	7,770.0	126.4	155.8	-90.06	-6,863.1	3,680.4	2,058.8	1,780.1	278.76	7.386	
15,200.0	7,740.0	16,667.0	7,770.0	128.1	157.5	-90.06	-6,963.1	3,680.7	2,059.2	1,776.9	282.25	7.295	
15,300.0	7,740.0	16,767.0	7,770.0	129.8	159.3	-90.06	-7,063.1	3,681.1	2,059.5	1,773.8	285.74	7.208	
15,400.0	7,740.0	16,867.0	7,770.0	131.5	161.0	-90.06	-7,163.1	3,681.5	2,059.9	1,770.7	289.24	7.122	
15,500.0	7,740.0	16,967.0	7,770.0	133.2	162.7	-90.06	-7,263.1	3,681.8	2,060.3	1,767.6	292.73	7.038	
15,600.0	7,740.0	17,067.0	7,770.0	134.9	164.5	-90.06	-7,363.1	3,682.2	2,060.6	1,764.4	296.22	6.957	
15,700.0	7,740.0	17,167.0	7,770.0	136.6	166.2	-90.06	-7,463.1	3,682.6	2,061.0	1,761.3	299.71	6.877	
15,800.0	7,740.0	17,267.0	7,770.0	138.3	168.0	-90.06	-7,563.1	3,682.9	2,061.4	1,758.2	303.20	6.799	
15,900.0	7,740.0	17,367.0	7,770.0	140.0	169.7	-90.06	-7,663.1	3,683.3	2,061.7	1,755.0	306.70	6.722	
16,000.0	7,740.0	17,467.0	7,770.0	141.7	171.5	-90.06	-7,763.1	3,683.7	2,062.1	1,751.9	310.19	6.648	
16,100.0	7,740.0	17,567.0	7,770.0	143.5	173.2	-90.06	-7,863.1	3,684.0	2,062.5	1,748.8	313.68	6.575	
16,171.7	7,740.0	17,638.6	7,770.0	144.7	174.5	-90.06	-7,934.7	3,684.3	2,062.7	1,746.5	316.19	6.524 ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	27.2	27.2	0.0	0.0	173.35	-4,267.1	497.1	4,296.0					
100.0	100.0	140.4	140.4	0.2	0.2	173.36	-4,266.9	497.1	4,295.8	4,295.4	0.39	N/A		
150.0	150.0	197.0	197.0	0.2	0.3	173.36	-4,266.6	497.0	4,295.6	4,295.0	0.58	7,443.330		
160.9	160.9	209.4	209.4	0.3	0.4	173.36	-4,266.6	496.9	4,295.5	4,294.9	0.62	6,957.131		
200.0	200.0	253.6	253.6	0.3	0.4	173.36	-4,266.3	496.8	4,295.9	4,295.1	0.76	5,641.463		
283.3	283.2	347.9	347.9	0.5	0.6	173.36	-4,265.6	496.6	4,299.2	4,298.1	1.07	4,022.088		
300.0	299.9	366.7	366.7	0.5	0.6	170.97	-4,265.4	496.5	4,300.2	4,299.0	1.13	3,804.158		
400.0	399.6	479.7	479.7	0.7	0.8	157.23	-4,264.1	496.0	4,305.9	4,304.4	1.50	2,867.130		
500.0	499.3	592.7	592.7	0.9	1.0	145.34	-4,262.5	495.4	4,311.1	4,309.2	1.88	2,293.917		
600.0	598.9	705.7	705.6	1.2	1.2	135.74	-4,260.6	494.7	4,315.9	4,313.6	2.27	1,904.175		
700.0	698.5	844.5	844.4	1.4	1.5	128.28	-4,257.7	493.5	4,320.2	4,317.5	2.71	1,592.671		
800.0	797.9	1,482.9	1,478.0	1.6	3.1	123.72	-4,202.7	445.6	4,315.2	4,311.0	4.18	1,032.924		
900.0	897.1	1,602.0	1,594.8	1.9	3.5	119.52	-4,185.6	430.6	4,305.9	4,301.2	4.70	916.666		
1,000.0	996.2	1,641.7	1,633.8	2.2	3.6	116.05	-4,180.1	425.4	4,297.1	4,292.1	5.06	849.627		
1,100.0	1,095.0	1,829.0	1,818.1	2.5	4.3	113.77	-4,154.9	403.1	4,289.5	4,283.7	5.77	742.793		
1,200.0	1,193.6	1,910.4	1,897.9	2.8	4.5	111.70	-4,142.5	393.3	4,279.6	4,273.3	6.29	680.761		
1,300.0	1,291.9	1,988.8	1,974.9	3.2	4.8	110.05	-4,131.0	383.5	4,270.3	4,263.5	6.82	626.338		
1,400.0	1,389.9	2,103.8	2,087.8	3.5	5.2	108.88	-4,114.2	369.6	4,261.2	4,253.8	7.46	571.276		
1,500.0	1,487.6	2,189.7	2,172.1	3.9	5.6	107.87	-4,101.3	359.3	4,252.0	4,244.0	8.07	526.912		
1,600.0	1,584.8	2,245.2	2,226.6	4.4	5.8	106.94	-4,093.3	352.3	4,243.6	4,234.9	8.64	491.297		
1,624.3	1,608.4	2,256.4	2,237.5	4.5	5.8	106.73	-4,091.7	350.9	4,241.7	4,232.9	8.77	483.552		
1,700.0	1,681.8	2,318.0	2,298.2	4.8	6.0	107.02	-4,083.5	343.4	4,236.3	4,227.1	9.26	457.731		
1,800.0	1,778.8	2,496.0	2,473.2	5.3	6.7	107.84	-4,057.9	323.4	4,228.5	4,218.4	10.12	417.972		
1,900.0	1,875.8	2,540.7	2,517.1	5.7	6.8	108.04	-4,051.2	318.4	4,220.5	4,209.8	10.68	395.332		
2,000.0	1,972.8	2,652.1	2,626.6	6.2	7.2	108.56	-4,035.5	305.7	4,213.5	4,202.1	11.40	369.602		
2,100.0	2,069.8	2,749.3	2,722.0	6.6	7.6	109.02	-4,020.8	293.9	4,205.8	4,193.7	12.10	347.668		
2,200.0	2,166.8	2,809.1	2,780.8	7.1	7.8	109.30	-4,012.3	287.0	4,199.1	4,186.4	12.70	330.549		
2,300.0	2,263.8	2,927.1	2,896.7	7.5	8.2	109.86	-3,995.5	273.3	4,192.8	4,179.4	13.45	311.721		
2,400.0	2,360.8	3,021.8	2,989.8	8.0	8.6	110.30	-3,981.9	262.2	4,186.6	4,172.5	14.15	295.940		
2,500.0	2,457.7	3,100.0	3,066.7	8.4	8.8	110.68	-3,970.6	253.0	4,180.7	4,165.9	14.80	282.395		
2,600.0	2,554.7	3,204.3	3,169.2	8.9	9.2	111.17	-3,955.8	240.9	4,175.2	4,159.7	15.53	268.926		
2,700.0	2,651.7	3,290.0	3,253.4	9.4	9.5	111.58	-3,943.4	230.9	4,169.9	4,153.7	16.20	257.327		
2,800.0	2,748.7	3,355.6	3,317.9	9.8	9.8	111.89	-3,934.2	223.3	4,165.2	4,148.4	16.83	247.453		
2,900.0	2,845.7	3,490.2	3,450.2	10.3	10.3	112.53	-3,915.6	207.7	4,161.1	4,143.5	17.63	236.009		
3,000.0	2,942.7	3,576.0	3,534.6	10.8	10.6	112.94	-3,903.3	197.6	4,156.7	4,138.4	18.31	227.009		
3,100.0	3,039.7	3,661.3	3,618.4	11.2	10.9	113.35	-3,891.2	187.8	4,152.7	4,133.7	18.99	218.692		
3,200.0	3,136.7	3,752.2	3,707.9	11.7	11.2	113.78	-3,878.4	177.5	4,149.0	4,129.4	19.68	210.863		
3,300.0	3,233.6	3,859.8	3,813.6	12.2	11.6	114.30	-3,863.1	165.1	4,145.6	4,125.2	20.42	203.064		
3,400.0	3,330.6	3,980.0	3,931.7	12.6	12.0	114.88	-3,845.2	151.3	4,141.8	4,120.6	21.17	195.643		
3,500.0	3,427.6	4,056.3	4,006.7	13.1	12.3	115.24	-3,833.9	143.0	4,138.3	4,116.5	21.82	189.649		
3,600.0	3,524.6	4,146.1	4,095.0	13.6	12.6	115.66	-3,820.9	133.5	4,135.4	4,112.9	22.50	183.795		
3,700.0	3,621.6	4,220.6	4,168.3	14.0	12.9	116.01	-3,810.3	125.2	4,133.0	4,109.8	23.16	178.463		
3,800.0	3,718.6	4,286.8	4,233.3	14.5	13.1	116.34	-3,801.1	117.3	4,131.4	4,107.6	23.79	173.651		
3,900.0	3,815.6	4,360.9	4,306.4	15.0	13.4	116.69	-3,791.4	108.7	4,130.8	4,106.3	24.44	169.032		
4,000.0	3,912.6	4,459.1	4,403.1	15.4	13.7	117.16	-3,778.5	97.8	4,130.3	4,105.2	25.13	164.331		
4,017.2	3,929.3	4,469.4	4,413.3	15.5	13.8	117.21	-3,777.2	96.7	4,130.3	4,105.1	25.24	163.653		
4,100.0	4,009.5	4,529.0	4,472.1	15.9	14.0	117.49	-3,769.8	90.4	4,130.7	4,104.9	25.76	160.353		
4,200.0	4,106.5	4,647.6	4,589.0	16.4	14.4	118.05	-3,754.7	77.3	4,131.1	4,104.6	26.51	155.838		
4,300.0	4,203.5	4,721.9	4,662.2	16.8	14.6	118.40	-3,745.3	69.2	4,131.9	4,104.8	27.14	152.239		
4,400.0	4,300.5	4,814.0	4,753.1	17.3	14.9	118.82	-3,733.8	59.7	4,133.1	4,105.3	27.81	148.636		
4,500.0	4,397.5	4,878.0	4,816.3	17.8	15.1	119.11	-3,726.1	53.6	4,134.8	4,106.4	28.40	145.595		
4,600.0	4,494.5	4,981.7	4,918.9	18.2	15.5	119.57	-3,714.4	44.4	4,137.4	4,108.3	29.07	142.343		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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)				
4,700.0	4,591.5	5,071.2	5,007.5	18.7	15.7	119.96	-3,703.9	37.1	4,139.6	4,109.9	29.70	139.396		
4,800.0	4,688.5	5,125.6	5,061.4	19.2	15.9	120.19	-3,698.1	32.7	4,143.0	4,112.8	30.26	136.935		
4,900.0	4,785.4	5,246.6	5,181.2	19.6	16.2	120.72	-3,685.4	21.8	4,147.2	4,116.2	30.96	133.956		
5,000.0	4,882.4	5,323.0	5,256.9	20.1	16.5	121.06	-3,677.0	15.0	4,151.0	4,119.4	31.56	131.513		
5,100.0	4,979.4	5,398.1	5,331.3	20.6	16.7	121.38	-3,669.2	8.3	4,155.6	4,123.4	32.16	129.222		
5,200.0	5,076.4	5,500.4	5,432.7	21.0	17.0	121.82	-3,658.6	-0.4	4,160.4	4,127.6	32.80	126.829		
5,300.0	5,173.4	5,581.9	5,513.5	21.5	17.2	122.17	-3,650.7	-6.9	4,165.9	4,132.5	33.40	124.732		
5,400.0	5,270.4	5,679.9	5,610.7	22.0	17.5	122.58	-3,641.0	-14.6	4,171.4	4,137.3	34.02	122.624		
5,500.0	5,367.4	5,751.6	5,681.9	22.5	17.7	122.87	-3,634.2	-19.7	4,177.4	4,142.8	34.58	120.819		
5,600.0	5,464.4	5,801.0	5,731.0	22.9	17.8	123.07	-3,629.9	-23.1	4,184.3	4,149.2	35.08	119.264		
5,700.0	5,561.4	5,863.9	5,793.6	23.4	17.9	123.31	-3,625.1	-27.3	4,192.3	4,156.7	35.60	117.747		
5,800.0	5,658.3	5,930.2	5,859.6	23.9	18.1	123.56	-3,620.9	-31.3	4,201.4	4,165.3	36.12	116.318		
5,900.0	5,755.3	6,002.3	5,931.5	24.3	18.2	123.82	-3,616.9	-34.7	4,211.2	4,174.5	36.63	114.967		
6,000.0	5,852.3	6,078.4	6,007.6	24.8	18.3	124.08	-3,613.6	-37.2	4,221.7	4,184.6	37.12	113.746		
6,100.0	5,949.3	6,147.4	6,076.5	25.3	18.4	124.29	-3,611.2	-38.1	4,232.8	4,195.2	37.58	112.634		
6,200.0	6,046.3	6,215.0	6,144.1	25.7	18.5	124.49	-3,609.7	-38.7	4,244.9	4,206.9	38.04	111.602		
6,300.0	6,143.3	6,278.0	6,207.1	26.2	18.6	124.67	-3,608.9	-39.3	4,257.9	4,219.4	38.48	110.641		
6,400.0	6,240.3	6,395.8	6,324.9	26.7	18.8	125.00	-3,606.9	-40.0	4,270.6	4,231.7	38.99	109.524		
6,500.0	6,337.3	6,470.0	6,399.1	27.1	18.8	125.20	-3,606.2	-39.2	4,283.6	4,244.2	39.43	108.647		
6,600.0	6,434.2	6,525.9	6,454.9	27.6	18.9	125.34	-3,606.0	-38.6	4,297.5	4,257.6	39.85	107.841		
6,700.0	6,531.2	6,591.0	6,520.1	28.1	19.0	125.52	-3,606.4	-39.0	4,312.5	4,272.2	40.28	107.065		
6,800.0	6,628.2	6,728.1	6,657.2	28.5	19.1	125.89	-3,606.6	-39.5	4,327.2	4,286.4	40.81	106.046		
6,900.0	6,725.2	6,850.2	6,779.3	29.0	19.2	126.21	-3,606.3	-39.3	4,341.6	4,300.3	41.31	105.106		
7,000.0	6,822.2	6,954.2	6,883.2	29.5	19.4	126.48	-3,605.4	-39.1	4,355.5	4,313.7	41.78	104.248		
7,100.0	6,919.2	7,047.3	6,976.4	30.0	19.5	126.72	-3,604.7	-38.7	4,369.4	4,327.2	42.24	103.453		
7,200.0	7,016.2	7,134.4	7,063.4	30.4	19.6	126.94	-3,604.3	-38.4	4,383.7	4,341.0	42.68	102.707		
7,300.0	7,113.2	7,249.7	7,178.7	30.9	19.7	127.23	-3,603.5	-37.8	4,397.8	4,354.7	43.17	101.881		
7,328.7	7,141.0	7,274.7	7,203.7	31.0	19.7	127.30	-3,603.3	-37.7	4,401.9	4,358.6	43.29	101.674		
7,350.0	7,161.7	7,293.1	7,222.2	31.1	19.7	118.85	-3,603.1	-37.7	4,404.5	4,361.1	43.39	101.504		
7,400.0	7,210.3	7,342.0	7,271.0	31.3	19.8	98.20	-3,602.8	-37.5	4,407.9	4,364.3	43.65	100.977		
7,450.0	7,258.7	7,378.6	7,307.6	31.5	19.8	80.33	-3,602.6	-37.4	4,407.3	4,363.4	43.91	100.364		
7,500.0	7,306.5	7,419.9	7,348.9	31.7	19.9	67.43	-3,602.4	-37.3	4,402.7	4,358.5	44.20	99.615		
7,550.0	7,353.4	7,460.3	7,389.4	31.8	19.9	58.78	-3,602.3	-37.2	4,394.1	4,349.6	44.50	98.752		
7,600.0	7,399.0	7,499.7	7,428.8	31.9	20.0	53.08	-3,602.2	-37.1	4,381.7	4,336.9	44.81	97.783		
7,650.0	7,442.9	7,537.8	7,466.8	32.0	20.0	49.39	-3,602.3	-37.0	4,365.6	4,320.4	45.14	96.718		
7,700.0	7,484.9	7,574.1	7,503.1	32.1	20.0	47.11	-3,602.3	-36.9	4,345.8	4,300.3	45.47	95.566		
7,750.0	7,524.5	7,608.6	7,537.6	32.1	20.1	45.91	-3,602.4	-36.8	4,322.5	4,276.7	45.82	94.335		
7,800.0	7,561.6	7,640.8	7,569.9	32.1	20.1	45.58	-3,602.6	-36.7	4,295.9	4,249.7	46.17	93.035		
7,850.0	7,595.8	7,670.7	7,599.7	32.2	20.2	46.02	-3,602.7	-36.7	4,266.2	4,219.7	46.54	91.676		
7,900.0	7,626.8	7,697.9	7,626.9	32.2	20.2	47.22	-3,602.9	-36.6	4,233.7	4,186.8	46.90	90.269		
7,950.0	7,654.5	7,726.0	7,655.0	32.2	20.2	49.25	-3,603.1	-36.6	4,198.5	4,151.2	47.27	88.814		
8,000.0	7,678.5	7,747.4	7,676.4	32.3	20.2	52.11	-3,603.2	-36.7	4,161.0	4,113.3	47.64	87.341		
8,050.0	7,698.8	7,769.4	7,698.4	32.3	20.3	56.03	-3,603.4	-36.7	4,121.4	4,073.3	48.01	85.839		
8,100.0	7,715.2	7,787.2	7,716.3	32.3	20.3	61.13	-3,603.5	-36.7	4,079.9	4,031.6	48.38	84.333		
8,150.0	7,727.5	7,800.7	7,729.7	32.4	20.3	67.58	-3,603.5	-36.7	4,037.0	3,988.3	48.74	82.832		
8,200.0	7,735.6	7,809.7	7,738.7	32.4	20.3	75.51	-3,603.6	-36.7	3,993.0	3,943.9	49.09	81.345		
8,250.0	7,739.6	7,814.2	7,743.2	32.4	20.3	84.88	-3,603.6	-36.7	3,948.2	3,898.7	49.43	79.881		
8,271.7	7,740.0	7,814.8	7,743.8	32.5	20.3	89.30	-3,603.6	-36.7	3,928.6	3,879.0	49.57	79.254		
8,300.0	7,740.0	7,814.9	7,743.9	32.5	20.3	89.31	-3,603.6	-36.7	3,902.9	3,853.1	49.76	78.436		
8,400.0	7,740.0	7,815.5	7,744.5	32.7	20.3	89.33	-3,603.6	-36.7	3,812.6	3,762.1	50.44	75.580		
8,500.0	7,740.0	7,816.0	7,745.1	33.0	20.3	89.35	-3,603.6	-36.7	3,722.8	3,671.6	51.15	72.775		
8,600.0	7,740.0	7,816.6	7,745.6	33.4	20.3	89.36	-3,603.6	-36.7	3,633.5	3,581.7	51.89	70.020		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,700.0	7,740.0	7,817.1	7,746.2	33.8	20.3	89.38	-3,603.6	-36.7	3,544.9	3,492.2	52.66	67.317		
8,800.0	7,740.0	7,817.7	7,746.7	34.4	20.3	89.40	-3,603.6	-36.7	3,456.8	3,403.3	53.46	64.666		
8,900.0	7,740.0	7,818.2	7,747.3	35.0	20.3	89.42	-3,603.6	-36.7	3,369.4	3,315.1	54.28	62.070		
9,000.0	7,740.0	7,818.8	7,747.8	35.7	20.3	89.44	-3,603.6	-36.7	3,282.7	3,227.6	55.15	59.528		
9,100.0	7,740.0	7,819.3	7,748.4	36.4	20.3	89.46	-3,603.6	-36.7	3,196.8	3,140.8	56.04	57.043		
9,200.0	7,740.0	7,819.9	7,748.9	37.3	20.3	89.48	-3,603.6	-36.7	3,111.8	3,054.8	56.98	54.615		
9,300.0	7,740.0	7,820.4	7,749.4	38.2	20.3	89.50	-3,603.6	-36.7	3,027.6	2,969.7	57.95	52.247		
9,400.0	7,740.0	7,821.0	7,750.0	39.1	20.3	89.51	-3,603.6	-36.7	2,944.5	2,885.5	58.96	49.941		
9,500.0	7,740.0	7,821.5	7,750.5	40.1	20.3	89.53	-3,603.6	-36.7	2,862.4	2,802.4	60.01	47.697		
9,600.0	7,740.0	7,822.0	7,751.0	41.2	20.3	89.55	-3,603.6	-36.7	2,781.5	2,720.4	61.11	45.519		
9,700.0	7,740.0	7,822.5	7,751.6	42.3	20.3	89.57	-3,603.6	-36.7	2,701.9	2,639.6	62.24	43.408		
9,800.0	7,740.0	7,823.1	7,752.1	43.5	20.3	89.59	-3,603.7	-36.7	2,623.6	2,560.2	63.42	41.367		
9,900.0	7,740.0	7,823.6	7,752.6	44.7	20.3	89.61	-3,603.7	-36.7	2,546.9	2,482.3	64.65	39.398		
10,000.0	7,740.0	7,824.1	7,753.1	45.9	20.3	89.62	-3,603.7	-36.7	2,471.9	2,406.0	65.91	37.503		
10,100.0	7,740.0	7,824.6	7,753.7	47.1	20.3	89.64	-3,603.7	-36.7	2,398.7	2,331.4	67.22	35.686		
10,200.0	7,740.0	7,825.2	7,754.2	48.4	20.3	89.66	-3,603.7	-36.7	2,327.4	2,258.9	68.56	33.949		
10,300.0	7,740.0	7,825.7	7,754.7	49.8	20.3	89.68	-3,603.7	-36.7	2,258.4	2,188.5	69.93	32.294		
10,400.0	7,740.0	7,826.2	7,755.2	51.1	20.3	89.70	-3,603.7	-36.7	2,191.7	2,120.4	71.33	30.726		
10,500.0	7,740.0	7,826.7	7,755.7	52.5	20.3	89.71	-3,603.7	-36.7	2,127.7	2,055.0	72.75	29.247		
10,600.0	7,740.0	7,827.2	7,756.2	53.9	20.3	89.73	-3,603.7	-36.7	2,066.5	1,992.3	74.17	27.861		
10,700.0	7,740.0	7,827.7	7,756.8	55.3	20.3	89.75	-3,603.7	-36.7	2,008.5	1,932.9	75.59	26.570		
10,800.0	7,740.0	7,828.2	7,757.3	56.7	20.3	89.77	-3,603.7	-36.7	1,953.8	1,876.8	76.99	25.378		
10,900.0	7,740.0	7,828.7	7,757.8	58.2	20.3	89.78	-3,603.7	-36.7	1,902.8	1,824.5	78.34	24.288		
11,000.0	7,740.0	7,829.3	7,758.3	59.7	20.3	89.80	-3,603.7	-36.7	1,855.8	1,776.2	79.63	23.305		
11,100.0	7,740.0	7,829.8	7,758.8	61.2	20.3	89.82	-3,603.7	-36.7	1,813.1	1,732.3	80.84	22.430		
11,200.0	7,740.0	7,830.3	7,759.3	62.7	20.3	89.84	-3,603.7	-36.7	1,775.1	1,693.1	81.92	21.667		
11,300.0	7,740.0	7,830.8	7,759.8	64.2	20.3	89.85	-3,603.7	-36.7	1,741.9	1,659.0	82.87	21.019		
11,400.0	7,740.0	7,831.2	7,760.3	65.7	20.3	89.87	-3,603.7	-36.7	1,713.9	1,630.3	83.65	20.490		
11,500.0	7,740.0	7,831.7	7,760.8	67.2	20.3	89.89	-3,603.7	-36.7	1,691.4	1,607.2	84.23	20.080		
11,600.0	7,740.0	7,832.2	7,761.3	68.8	20.3	89.90	-3,603.7	-36.7	1,674.6	1,590.0	84.60	19.793		
11,700.0	7,740.0	7,832.7	7,761.7	70.3	20.3	89.92	-3,603.7	-36.7	1,663.6	1,578.9	84.75	19.631		
11,800.0	7,740.0	7,833.2	7,762.2	71.9	20.3	89.94	-3,603.7	-36.7	1,658.6	1,574.0	84.65	19.594 SF		
11,833.1	7,740.0	7,833.4	7,762.4	72.4	20.3	89.94	-3,603.7	-36.7	1,658.3	1,573.7	84.57	19.610 CC, ES		
11,900.0	7,740.0	7,833.7	7,762.7	73.5	20.3	89.96	-3,603.7	-36.7	1,659.7	1,575.3	84.32	19.683		
12,000.0	7,740.0	7,834.2	7,763.2	75.1	20.3	89.97	-3,603.7	-36.7	1,666.7	1,582.9	83.76	19.899		
12,100.0	7,740.0	7,834.7	7,763.7	76.6	20.3	89.99	-3,603.7	-36.7	1,679.7	1,596.7	82.98	20.241		
12,200.0	7,740.0	7,835.2	7,764.2	78.2	20.3	90.01	-3,603.7	-36.7	1,698.4	1,616.4	82.02	20.708		
12,300.0	7,740.0	7,835.6	7,764.6	79.8	20.3	90.02	-3,603.7	-36.7	1,722.8	1,641.9	80.89	21.298		
12,400.0	7,740.0	7,836.1	7,765.1	81.5	20.3	90.04	-3,603.7	-36.7	1,752.5	1,672.9	79.63	22.008		
12,500.0	7,740.0	7,836.6	7,765.6	83.1	20.3	90.05	-3,603.7	-36.7	1,787.4	1,709.1	78.27	22.836		
12,600.0	7,740.0	7,837.1	7,766.1	84.7	20.3	90.07	-3,603.7	-36.7	1,827.1	1,750.2	76.84	23.777		
12,700.0	7,740.0	7,837.5	7,766.5	86.3	20.3	90.09	-3,603.7	-36.7	1,871.2	1,795.9	75.37	24.827		
12,800.0	7,740.0	7,838.0	7,767.0	88.0	20.3	90.10	-3,603.7	-36.7	1,919.6	1,845.7	73.88	25.983		
12,900.0	7,740.0	7,838.5	7,767.5	89.6	20.3	90.12	-3,603.7	-36.7	1,971.9	1,899.5	72.39	27.238		
13,000.0	7,740.0	7,838.9	7,768.0	91.2	20.3	90.14	-3,603.7	-36.7	2,027.7	1,956.8	70.93	28.587		
13,100.0	7,740.0	7,839.4	7,768.4	92.9	20.3	90.15	-3,603.7	-36.7	2,086.9	2,017.4	69.50	30.026		
13,200.0	7,740.0	7,839.9	7,768.9	94.5	20.3	90.17	-3,603.7	-36.7	2,149.0	2,080.9	68.12	31.548		
13,300.0	7,740.0	7,840.3	7,769.3	96.2	20.3	90.18	-3,603.7	-36.7	2,214.0	2,147.2	66.79	33.148		
13,400.0	7,740.0	7,840.8	7,769.8	97.8	20.3	90.20	-3,603.7	-36.7	2,281.5	2,216.0	65.52	34.821		
13,500.0	7,740.0	7,841.2	7,770.3	99.5	20.3	90.22	-3,603.7	-36.7	2,351.3	2,287.0	64.31	36.560		
13,600.0	7,740.0	7,841.7	7,770.7	101.2	20.3	90.23	-3,603.7	-36.7	2,423.2	2,360.0	63.17	38.362		
13,700.0	7,740.0	7,842.2	7,771.2	102.8	20.3	90.25	-3,603.7	-36.7	2,497.0	2,435.0	62.08	40.220		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,800.0	7,740.0	7,842.6	7,771.6	104.5	20.3	90.26	-3,603.7	-36.7	2,572.7	2,511.6	61.07	42.130		
13,900.0	7,740.0	7,843.1	7,772.1	106.2	20.3	90.28	-3,603.7	-36.7	2,649.9	2,589.8	60.11	44.087		
14,000.0	7,740.0	7,843.5	7,772.5	107.8	20.3	90.29	-3,603.8	-36.7	2,728.6	2,669.4	59.21	46.086		
14,100.0	7,740.0	7,844.0	7,773.0	109.5	20.3	90.31	-3,603.8	-36.7	2,808.7	2,750.3	58.36	48.124		
14,200.0	7,740.0	7,844.4	7,773.4	111.2	20.3	90.33	-3,603.8	-36.7	2,890.0	2,832.4	57.58	50.195		
14,300.0	7,740.0	7,844.9	7,773.9	112.9	20.3	90.34	-3,603.8	-36.7	2,972.5	2,915.6	56.84	52.296		
14,400.0	7,740.0	7,845.3	7,774.3	114.6	20.3	90.36	-3,603.8	-36.7	3,056.0	2,999.8	56.15	54.424		
14,500.0	7,740.0	7,845.7	7,774.8	116.3	20.4	90.37	-3,603.8	-36.7	3,140.4	3,084.9	55.51	56.575		
14,600.0	7,740.0	7,846.2	7,775.2	117.9	20.4	90.39	-3,603.8	-36.7	3,225.8	3,170.9	54.91	58.746		
14,700.0	7,740.0	7,846.6	7,775.6	119.6	20.4	90.40	-3,603.8	-36.7	3,311.9	3,257.6	54.35	60.934		
14,800.0	7,740.0	7,847.1	7,776.1	121.3	20.4	90.42	-3,603.8	-36.7	3,398.9	3,345.0	53.83	63.136		
14,900.0	7,740.0	7,847.5	7,776.5	123.0	20.4	90.43	-3,603.8	-36.7	3,486.5	3,433.1	53.35	65.349		
15,000.0	7,740.0	7,847.9	7,776.9	124.7	20.4	90.45	-3,603.8	-36.7	3,574.8	3,521.9	52.90	67.571		
15,100.0	7,740.0	7,848.4	7,777.4	126.4	20.4	90.46	-3,603.8	-36.7	3,663.7	3,611.2	52.49	69.800		
15,200.0	7,740.0	7,848.8	7,777.8	128.1	20.4	90.48	-3,603.8	-36.7	3,753.1	3,701.0	52.10	72.034		
15,300.0	7,740.0	7,849.2	7,778.2	129.8	20.4	90.49	-3,603.8	-36.7	3,843.1	3,791.3	51.74	74.271		
15,400.0	7,740.0	7,849.6	7,778.7	131.5	20.4	90.51	-3,603.8	-36.7	3,933.5	3,882.1	51.41	76.509		
15,500.0	7,740.0	7,850.1	7,779.1	133.2	20.4	90.52	-3,603.8	-36.8	4,024.4	3,973.3	51.11	78.747		
15,600.0	7,740.0	7,850.5	7,779.5	134.9	20.4	90.54	-3,603.8	-36.8	4,115.7	4,064.9	50.82	80.983		
15,700.0	7,740.0	7,850.9	7,779.9	136.6	20.4	90.55	-3,603.8	-36.8	4,207.4	4,156.9	50.56	83.216		
15,800.0	7,740.0	7,851.3	7,780.4	138.3	20.4	90.56	-3,603.8	-36.8	4,299.5	4,249.2	50.32	85.445		
15,900.0	7,740.0	7,851.8	7,780.8	140.0	20.4	90.58	-3,603.8	-36.8	4,392.0	4,341.9	50.10	87.668		
16,000.0	7,740.0	7,852.2	7,781.2	141.7	20.4	90.59	-3,603.8	-36.8	4,484.7	4,434.8	49.89	89.885		
16,100.0	7,740.0	7,852.6	7,781.6	143.5	20.4	90.61	-3,603.8	-36.8	4,577.8	4,528.1	49.71	92.095		
16,171.7	7,740.0	7,852.9	7,781.9	144.7	20.4	90.62	-3,603.8	-36.8	4,644.6	4,595.1	49.58	93.674		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	172.95	-4,267.2	527.9	4,299.7					
100.0	100.0	98.8	98.8	0.2	0.1	172.96	-4,267.6	527.0	4,300.1	4,299.8	0.30	N/A		
150.0	150.0	154.3	154.3	0.2	0.2	172.97	-4,268.1	526.2	4,300.4	4,299.9	0.48	8,874.005		
200.0	200.0	196.0	196.0	0.3	0.3	172.98	-4,268.3	525.7	4,301.3	4,300.7	0.65	6,666.429		
283.3	283.2	255.7	255.7	0.5	0.4	172.97	-4,268.9	525.1	4,306.1	4,305.2	0.90	4,808.280		
300.0	299.9	267.5	267.5	0.5	0.4	170.58	-4,269.1	525.1	4,307.4	4,306.5	0.95	4,555.951		
400.0	399.6	339.0	338.9	0.7	0.6	156.81	-4,270.3	524.6	4,315.8	4,314.5	1.25	3,458.651		
500.0	499.3	395.4	395.4	0.9	0.7	144.85	-4,271.7	524.1	4,324.9	4,323.4	1.53	2,825.828		
600.0	598.9	450.0	449.9	1.2	0.8	135.16	-4,273.7	523.5	4,334.9	4,333.1	1.82	2,382.390		
700.0	698.5	489.0	488.9	1.4	0.8	127.54	-4,275.7	523.1	4,345.9	4,343.8	2.09	2,075.632		
800.0	797.9	544.5	544.3	1.6	1.0	121.61	-4,279.1	522.4	4,358.0	4,355.6	2.41	1,805.463		
900.0	897.1	606.0	605.6	1.9	1.1	116.95	-4,283.3	521.4	4,370.8	4,368.0	2.76	1,581.662		
1,000.0	996.2	668.0	667.4	2.2	1.2	113.25	-4,288.1	520.2	4,384.1	4,381.0	3.13	1,398.552		
1,100.0	1,095.0	750.0	749.1	2.5	1.4	110.31	-4,295.1	518.4	4,398.2	4,394.6	3.57	1,233.185		
1,200.0	1,193.6	853.9	852.6	2.8	1.6	107.98	-4,303.8	515.8	4,411.8	4,407.7	4.06	1,085.762		
1,300.0	1,291.9	912.7	911.1	3.2	1.8	105.96	-4,309.1	514.3	4,426.0	4,421.5	4.50	983.427		
1,400.0	1,389.9	963.1	961.2	3.5	1.9	104.23	-4,314.1	512.9	4,441.1	4,436.1	4.95	897.601		
1,500.0	1,487.6	1,004.0	1,001.9	3.9	2.0	102.74	-4,318.6	511.6	4,457.2	4,451.8	5.40	825.069		
1,600.0	1,584.8	1,046.9	1,044.5	4.4	2.1	101.44	-4,323.9	510.3	4,474.4	4,468.5	5.89	760.085		
1,624.3	1,608.4	1,068.0	1,065.3	4.5	2.2	101.20	-4,326.6	509.6	4,478.8	4,472.8	6.03	743.084		
1,700.0	1,681.8	1,087.1	1,084.3	4.8	2.2	101.27	-4,329.3	509.0	4,492.9	4,486.5	6.37	704.882		
1,800.0	1,778.8	1,133.0	1,129.6	5.3	2.4	101.43	-4,336.1	507.5	4,512.6	4,505.7	6.87	656.466		
1,900.0	1,875.8	1,172.4	1,168.5	5.7	2.5	101.58	-4,342.3	506.0	4,533.6	4,526.2	7.36	615.747		
2,000.0	1,972.8	1,218.1	1,213.5	6.2	2.6	101.76	-4,350.1	504.0	4,555.7	4,547.8	7.87	579.194		
2,100.0	2,069.8	1,260.0	1,254.6	6.6	2.8	101.92	-4,357.6	501.6	4,579.0	4,570.6	8.36	547.723		
2,200.0	2,166.8	1,350.4	1,343.1	7.1	3.1	102.31	-4,374.6	493.9	4,603.1	4,594.1	8.98	512.526		
2,300.0	2,263.8	1,420.0	1,411.0	7.5	3.4	102.63	-4,387.5	485.9	4,627.3	4,617.7	9.56	484.156		
2,400.0	2,360.8	1,482.6	1,472.0	8.0	3.6	102.92	-4,399.5	478.2	4,652.3	4,642.2	10.12	459.929		
2,500.0	2,457.7	1,553.4	1,540.7	8.4	3.9	103.25	-4,413.9	469.6	4,678.5	4,667.8	10.69	437.534		
2,600.0	2,554.7	1,642.0	1,626.9	8.9	4.3	103.65	-4,431.7	459.1	4,704.7	4,693.4	11.32	415.710		
2,700.0	2,651.7	1,685.0	1,668.7	9.4	4.5	103.84	-4,440.6	454.0	4,731.8	4,720.0	11.82	400.452		
2,800.0	2,748.7	1,738.0	1,720.0	9.8	4.8	104.08	-4,452.2	447.6	4,760.2	4,747.9	12.34	385.811		
2,900.0	2,845.7	1,796.4	1,776.4	10.3	5.0	104.35	-4,465.5	440.2	4,789.5	4,776.6	12.88	371.974		
3,000.0	2,942.7	1,957.0	1,931.7	10.8	5.7	105.07	-4,500.7	420.3	4,818.5	4,804.8	13.70	351.680		
3,100.0	3,039.7	2,065.0	2,036.6	11.2	6.2	105.54	-4,523.4	407.5	4,846.9	4,832.5	14.37	337.176		
3,200.0	3,136.7	2,146.0	2,115.2	11.7	6.6	105.89	-4,540.3	397.4	4,875.3	4,860.4	14.97	325.686		
3,300.0	3,233.6	2,266.0	2,231.6	12.2	7.1	106.41	-4,565.3	382.5	4,904.1	4,888.4	15.67	313.004		
3,400.0	3,330.6	2,365.2	2,328.1	12.6	7.6	106.82	-4,585.5	371.3	4,932.4	4,916.1	16.30	302.688		
3,500.0	3,427.6	2,510.6	2,469.3	13.1	8.2	107.44	-4,613.9	352.3	4,960.5	4,943.4	17.09	290.262		
3,600.0	3,524.6	2,630.0	2,585.5	13.6	8.7	107.95	-4,636.0	335.8	4,987.8	4,970.0	17.79	280.397		
3,700.0	3,621.6	2,693.9	2,647.9	14.0	9.0	108.21	-4,647.8	328.1	5,015.3	4,997.0	18.31	273.957		
3,800.0	3,718.6	2,724.0	2,677.2	14.5	9.1	108.33	-4,653.7	324.6	5,043.9	5,025.1	18.72	269.372		
3,900.0	3,815.6	2,791.3	2,742.6	15.0	9.4	108.60	-4,667.2	316.6	5,073.3	5,054.0	19.25	263.501		
4,000.0	3,912.6	2,848.0	2,797.6	15.4	9.7	108.83	-4,679.1	309.3	5,103.6	5,083.9	19.74	258.482		
4,100.0	4,009.5	2,931.9	2,878.8	15.9	10.1	109.17	-4,697.0	298.5	5,134.6	5,114.3	20.31	252.785		
4,200.0	4,106.5	3,063.6	3,006.5	16.4	10.7	109.69	-4,724.6	281.6	5,165.4	5,144.4	21.02	245.711		
4,300.0	4,203.5	3,171.5	3,111.2	16.8	11.2	110.12	-4,746.6	267.6	5,195.9	5,174.2	21.66	239.935		
4,400.0	4,300.5	3,264.0	3,201.0	17.3	11.6	110.47	-4,765.2	255.8	5,226.3	5,204.1	22.24	235.027		
4,500.0	4,397.5	3,376.1	3,310.0	17.8	12.1	110.90	-4,787.5	242.1	5,256.6	5,233.8	22.87	229.875		
4,600.0	4,494.5	3,446.0	3,378.0	18.2	12.4	111.16	-4,801.4	233.7	5,287.2	5,263.8	23.37	226.218		
4,700.0	4,591.5	3,550.5	3,479.5	18.7	12.9	111.55	-4,822.7	220.4	5,318.4	5,294.4	23.98	221.802		
4,800.0	4,688.5	3,637.5	3,564.0	19.2	13.2	111.87	-4,839.8	209.5	5,349.1	5,324.6	24.53	218.091		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				
4,900.0	4,785.4	3,689.2	3,614.2	19.6	13.5	112.06	-4,850.3	202.9	5,380.6	5,355.6	24.97	215.497				
5,000.0	4,882.4	3,834.6	3,755.5	20.1	14.1	112.59	-4,879.6	184.4	5,412.2	5,386.6	25.68	210.722				
5,100.0	4,979.4	3,900.0	3,819.0	20.6	14.4	112.82	-4,892.6	176.1	5,443.7	5,417.5	26.16	208.102				
5,200.0	5,076.4	4,088.2	4,002.3	21.0	15.2	113.48	-4,928.5	153.4	5,474.3	5,447.3	26.98	202.879				
5,300.0	5,173.4	4,136.2	4,049.1	21.5	15.4	113.65	-4,937.4	147.5	5,504.9	5,477.5	27.40	200.902				
5,400.0	5,270.4	4,186.0	4,097.6	22.0	15.7	113.82	-4,947.1	141.3	5,536.5	5,508.7	27.82	199.013				
5,500.0	5,367.4	4,320.9	4,229.0	22.5	16.2	114.27	-4,973.1	125.2	5,567.9	5,539.4	28.48	195.509				
5,600.0	5,464.4	4,539.1	4,442.0	22.9	17.1	115.00	-5,012.8	99.4	5,598.9	5,569.5	29.36	190.673				
5,700.0	5,561.4	4,623.2	4,524.3	23.4	17.5	115.27	-5,027.0	90.1	5,628.3	5,598.4	29.87	188.423				
5,800.0	5,658.3	4,696.6	4,596.1	23.9	17.8	115.50	-5,039.6	81.6	5,658.2	5,627.9	30.35	186.442				
5,900.0	5,755.3	4,779.6	4,677.2	24.3	18.1	115.78	-5,053.8	71.3	5,688.4	5,657.6	30.85	184.396				
6,000.0	5,852.3	4,854.0	4,750.0	24.8	18.4	116.01	-5,066.9	62.6	5,719.0	5,687.7	31.31	182.631				
6,100.0	5,949.3	5,214.4	5,104.6	25.3	19.7	117.06	-5,122.3	29.9	5,746.0	5,713.5	32.51	176.766				
6,200.0	6,046.3	5,374.6	5,262.8	25.7	20.2	117.50	-5,143.3	16.6	5,772.1	5,738.9	33.17	173.991				
6,300.0	6,143.3	5,530.6	5,417.1	26.2	20.7	117.93	-5,162.1	4.0	5,797.3	5,763.5	33.83	171.388				
6,400.0	6,240.3	5,587.3	5,473.3	26.7	20.8	118.09	-5,168.8	-0.2	5,822.4	5,788.1	34.24	170.052				
6,500.0	6,337.3	5,853.3	5,736.9	27.1	21.6	118.77	-5,199.4	-18.2	5,848.1	5,813.0	35.12	166.512				
6,600.0	6,434.2	5,937.9	5,820.9	27.6	21.8	118.99	-5,207.4	-23.6	5,870.9	5,835.3	35.60	164.925				
6,700.0	6,531.2	6,651.6	6,532.8	28.1	22.9	120.58	-5,242.1	-41.9	5,886.9	5,849.7	37.18	158.333				
6,800.0	6,628.2	6,819.7	6,700.9	28.5	23.1	120.91	-5,242.1	-39.9	5,899.3	5,861.6	37.77	156.209				
6,900.0	6,725.2	6,902.6	6,783.8	29.0	23.1	121.07	-5,241.8	-38.8	5,911.5	5,873.3	38.23	154.620				
7,000.0	6,822.2	7,007.9	6,889.1	29.5	23.2	121.28	-5,241.3	-38.0	5,923.7	5,884.9	38.73	152.935				
7,100.0	6,919.2	7,092.6	6,973.8	30.0	23.3	121.44	-5,240.8	-37.6	5,936.0	5,896.8	39.20	151.413				
7,200.0	7,016.2	7,171.0	7,052.2	30.4	23.4	121.60	-5,240.7	-36.9	5,948.7	5,909.0	39.66	149.981				
7,300.0	7,113.2	7,306.2	7,187.4	30.9	23.5	121.86	-5,240.2	-36.0	5,961.2	5,921.0	40.21	148.254				
7,328.7	7,141.0	7,334.6	7,215.8	31.0	23.5	121.92	-5,240.0	-35.9	5,964.7	5,924.4	40.35	147.821				
7,350.0	7,161.7	7,352.4	7,233.6	31.1	23.5	113.49	-5,239.8	-35.8	5,967.0	5,926.5	40.45	147.499				
7,400.0	7,210.3	7,395.0	7,276.2	31.3	23.5	92.85	-5,239.5	-35.8	5,969.3	5,928.6	40.71	146.621				
7,450.0	7,258.7	7,435.8	7,317.0	31.5	23.6	74.99	-5,239.3	-35.7	5,967.5	5,926.5	40.98	145.618				
7,500.0	7,306.5	7,482.9	7,364.1	31.7	23.6	62.06	-5,239.0	-35.7	5,961.5	5,920.2	41.27	144.455				
7,550.0	7,353.4	7,535.6	7,416.8	31.8	23.7	53.35	-5,238.7	-35.6	5,951.4	5,909.8	41.58	143.143				
7,600.0	7,399.0	7,578.8	7,459.9	31.9	23.7	47.54	-5,238.4	-35.5	5,937.2	5,895.3	41.88	141.772				
7,650.0	7,442.9	7,616.6	7,497.8	32.0	23.7	43.70	-5,238.2	-35.4	5,919.2	5,877.0	42.18	140.326				
7,700.0	7,484.9	7,652.9	7,534.1	32.1	23.8	41.23	-5,238.1	-35.2	5,897.4	5,854.9	42.49	138.798				
7,750.0	7,524.5	7,687.2	7,568.4	32.1	23.8	39.79	-5,238.0	-35.0	5,872.0	5,829.2	42.80	137.198				
7,800.0	7,561.6	7,719.3	7,600.5	32.1	23.8	39.19	-5,238.0	-34.9	5,843.2	5,800.1	43.11	135.538				
7,850.0	7,595.8	7,761.0	7,642.2	32.2	23.9	39.41	-5,238.0	-34.6	5,811.2	5,767.8	43.44	133.776				
7,900.0	7,626.8	7,778.2	7,659.4	32.2	23.9	40.23	-5,238.0	-34.5	5,776.3	5,732.6	43.74	132.074				
7,950.0	7,654.5	7,805.9	7,687.1	32.2	23.9	41.92	-5,238.0	-34.3	5,738.7	5,694.7	44.05	130.286				
8,000.0	7,678.5	7,830.1	7,711.2	32.3	23.9	44.55	-5,238.0	-34.1	5,698.7	5,654.4	44.35	128.489				
8,050.0	7,698.8	7,850.4	7,731.6	32.3	24.0	48.33	-5,238.0	-34.0	5,656.6	5,612.0	44.65	126.693				
8,100.0	7,715.2	7,866.8	7,748.0	32.3	24.0	53.65	-5,238.0	-33.9	5,612.7	5,567.8	44.93	124.910				
8,150.0	7,727.5	7,879.2	7,760.3	32.4	24.0	60.99	-5,238.0	-33.8	5,567.4	5,522.2	45.21	123.150				
8,200.0	7,735.6	7,887.4	7,768.5	32.4	24.0	70.95	-5,238.0	-33.7	5,520.9	5,475.4	45.47	121.424				
8,250.0	7,739.6	7,891.4	7,772.5	32.4	24.0	83.88	-5,238.0	-33.7	5,473.7	5,428.0	45.71	119.742				
8,271.7	7,740.0	7,891.8	7,772.9	32.5	24.0	90.31	-5,238.0	-33.7	5,453.1	5,407.3	45.81	119.024				
8,300.0	7,740.0	7,891.8	7,773.0	32.5	24.0	90.31	-5,238.0	-33.7	5,426.1	5,380.1	45.95	118.088				
8,400.0	7,740.0	7,891.8	7,773.0	32.7	24.0	90.31	-5,238.0	-33.7	5,330.9	5,284.5	46.43	114.808				
8,500.0	7,740.0	7,891.9	7,773.1	33.0	24.0	90.31	-5,238.0	-33.7	5,236.0	5,189.0	46.93	111.566				
8,600.0	7,740.0	7,891.9	7,773.1	33.4	24.0	90.31	-5,238.0	-33.7	5,141.2	5,093.7	47.45	108.360				
8,700.0	7,740.0	7,892.0	7,773.2	33.8	24.0	90.32	-5,238.0	-33.7	5,046.6	4,998.6	47.98	105.192				
8,800.0	7,740.0	7,892.0	7,773.2	34.4	24.0	90.32	-5,238.0	-33.7	4,952.3	4,903.7	48.52	102.060				

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,740.0	7,892.1	7,773.3	35.0	24.0	90.32	-5,238.0	-33.7	4,858.1	4,809.0	49.09	98.966		
9,000.0	7,740.0	7,892.1	7,773.3	35.7	24.0	90.32	-5,238.0	-33.7	4,764.2	4,714.6	49.67	95.910		
9,100.0	7,740.0	7,892.2	7,773.4	36.4	24.0	90.32	-5,238.0	-33.7	4,670.6	4,620.3	50.28	92.892		
9,200.0	7,740.0	7,892.2	7,773.4	37.3	24.0	90.33	-5,238.0	-33.7	4,577.2	4,526.3	50.91	89.911		
9,300.0	7,740.0	7,892.3	7,773.5	38.2	24.0	90.33	-5,238.0	-33.7	4,484.1	4,432.6	51.56	86.970		
9,400.0	7,740.0	7,892.3	7,773.5	39.1	24.0	90.33	-5,238.0	-33.7	4,391.4	4,339.1	52.24	84.067		
9,500.0	7,740.0	7,892.4	7,773.6	40.1	24.0	90.33	-5,238.0	-33.7	4,298.9	4,246.0	52.94	81.204		
9,600.0	7,740.0	7,892.4	7,773.6	41.2	24.0	90.33	-5,238.0	-33.7	4,206.8	4,153.1	53.67	78.382		
9,700.0	7,740.0	7,892.5	7,773.7	42.3	24.0	90.33	-5,238.0	-33.7	4,115.0	4,060.6	54.43	75.600		
9,800.0	7,740.0	7,892.5	7,773.7	43.5	24.0	90.34	-5,238.0	-33.7	4,023.7	3,968.5	55.23	72.860		
9,900.0	7,740.0	7,892.6	7,773.8	44.7	24.0	90.34	-5,238.0	-33.7	3,932.8	3,876.7	56.05	70.162		
10,000.0	7,740.0	7,892.6	7,773.8	45.9	24.0	90.34	-5,238.0	-33.7	3,842.3	3,785.4	56.92	67.507		
10,100.0	7,740.0	7,892.7	7,773.9	47.1	24.0	90.34	-5,238.0	-33.7	3,752.3	3,694.5	57.82	64.897		
10,200.0	7,740.0	7,892.7	7,773.9	48.4	24.0	90.34	-5,238.0	-33.7	3,662.8	3,604.0	58.76	62.331		
10,300.0	7,740.0	7,892.8	7,774.0	49.8	24.0	90.34	-5,238.0	-33.7	3,573.9	3,514.1	59.75	59.812		
10,400.0	7,740.0	7,892.8	7,774.0	51.1	24.0	90.35	-5,238.0	-33.7	3,485.6	3,424.8	60.79	57.340		
10,500.0	7,740.0	7,892.9	7,774.1	52.5	24.0	90.35	-5,238.0	-33.7	3,397.9	3,336.0	61.87	54.916		
10,600.0	7,740.0	7,892.9	7,774.1	53.9	24.0	90.35	-5,238.0	-33.7	3,310.9	3,247.9	63.01	52.543		
10,700.0	7,740.0	7,893.0	7,774.2	55.3	24.0	90.35	-5,238.0	-33.7	3,224.7	3,160.5	64.21	50.221		
10,800.0	7,740.0	7,893.0	7,774.2	56.7	24.0	90.35	-5,238.0	-33.7	3,139.3	3,073.8	65.47	47.952		
10,900.0	7,740.0	7,893.1	7,774.3	58.2	24.0	90.35	-5,238.0	-33.7	3,054.8	2,988.0	66.79	45.737		
11,000.0	7,740.0	7,893.1	7,774.3	59.7	24.0	90.36	-5,238.0	-33.7	2,971.2	2,903.0	68.18	43.578		
11,100.0	7,740.0	7,893.2	7,774.4	61.2	24.0	90.36	-5,238.0	-33.7	2,888.7	2,819.1	69.64	41.478		
11,200.0	7,740.0	7,893.2	7,774.4	62.7	24.0	90.36	-5,238.0	-33.7	2,807.4	2,736.2	71.18	39.438		
11,300.0	7,740.0	7,893.3	7,774.5	64.2	24.0	90.36	-5,238.0	-33.7	2,727.2	2,654.4	72.80	37.459		
11,400.0	7,740.0	7,893.3	7,774.5	65.7	24.0	90.36	-5,238.0	-33.7	2,648.4	2,573.9	74.51	35.545		
11,500.0	7,740.0	7,893.4	7,774.6	67.2	24.0	90.36	-5,238.0	-33.7	2,571.1	2,494.8	76.30	33.697		
11,600.0	7,740.0	7,893.4	7,774.6	68.8	24.0	90.37	-5,238.0	-33.7	2,495.5	2,417.3	78.18	31.918		
11,700.0	7,740.0	7,893.5	7,774.7	70.3	24.0	90.37	-5,238.0	-33.7	2,421.5	2,341.4	80.16	30.210		
11,800.0	7,740.0	7,893.5	7,774.7	71.9	24.0	90.37	-5,238.0	-33.7	2,349.5	2,267.3	82.22	28.575		
11,900.0	7,740.0	7,893.6	7,774.8	73.5	24.0	90.37	-5,238.0	-33.7	2,279.7	2,195.3	84.38	27.017		
12,000.0	7,740.0	7,893.6	7,774.8	75.1	24.0	90.37	-5,238.0	-33.7	2,212.1	2,125.5	86.62	25.536		
12,100.0	7,740.0	7,893.7	7,774.9	76.6	24.0	90.38	-5,238.0	-33.7	2,147.1	2,058.1	88.95	24.137		
12,200.0	7,740.0	7,893.7	7,774.9	78.2	24.0	90.38	-5,238.0	-33.7	2,084.8	1,993.4	91.35	22.822		
12,300.0	7,740.0	7,893.8	7,775.0	79.8	24.0	90.38	-5,238.0	-33.7	2,025.6	1,931.7	93.81	21.592		
12,400.0	7,740.0	7,893.8	7,775.0	81.5	24.0	90.38	-5,238.0	-33.7	1,969.6	1,873.3	96.31	20.451		
12,500.0	7,740.0	7,893.9	7,775.1	83.1	24.0	90.38	-5,238.0	-33.7	1,917.3	1,818.4	98.83	19.400		
12,600.0	7,740.0	7,893.9	7,775.1	84.7	24.0	90.38	-5,238.0	-33.7	1,868.8	1,767.5	101.34	18.442		
12,700.0	7,740.0	7,894.0	7,775.2	86.3	24.0	90.39	-5,238.0	-33.7	1,824.5	1,720.7	103.80	17.577		
12,800.0	7,740.0	7,894.0	7,775.2	88.0	24.0	90.39	-5,238.0	-33.7	1,784.8	1,678.6	106.18	16.809		
12,900.0	7,740.0	7,894.1	7,775.3	89.6	24.0	90.39	-5,238.0	-33.7	1,749.8	1,641.4	108.43	16.138		
13,000.0	7,740.0	7,894.1	7,775.3	91.2	24.0	90.39	-5,238.0	-33.7	1,720.0	1,609.5	110.51	15.564		
13,100.0	7,740.0	7,894.2	7,775.4	92.9	24.0	90.39	-5,238.0	-33.7	1,695.6	1,583.2	112.37	15.089		
13,200.0	7,740.0	7,894.2	7,775.4	94.5	24.0	90.39	-5,238.0	-33.7	1,676.7	1,562.8	113.96	14.713		
13,300.0	7,740.0	7,894.3	7,775.5	96.2	24.0	90.40	-5,238.0	-33.7	1,663.7	1,548.5	115.25	14.435		
13,400.0	7,740.0	7,894.3	7,775.5	97.8	24.0	90.40	-5,238.0	-33.7	1,656.7	1,540.5	116.21	14.256		
13,467.4	7,740.0	7,894.4	7,775.5	99.0	24.0	90.40	-5,238.0	-33.7	1,655.3	1,538.6	116.65	14.191 CC, ES		
13,500.0	7,740.0	7,894.4	7,775.6	99.5	24.0	90.40	-5,238.0	-33.7	1,655.6	1,538.8	116.80	14.175 SF		
13,600.0	7,740.0	7,894.4	7,775.6	101.2	24.0	90.40	-5,238.0	-33.7	1,660.6	1,543.6	117.02	14.190		
13,700.0	7,740.0	7,894.5	7,775.7	102.8	24.0	90.40	-5,238.0	-33.7	1,671.5	1,554.7	116.88	14.301		
13,800.0	7,740.0	7,894.5	7,775.7	104.5	24.0	90.40	-5,238.0	-33.7	1,688.4	1,572.0	116.39	14.506		
13,900.0	7,740.0	7,894.6	7,775.8	106.2	24.0	90.41	-5,238.0	-33.7	1,710.9	1,595.3	115.58	14.803		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	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)				
14,000.0	7,740.0	7,894.6	7,775.8	107.8	24.0	90.41	-5,238.0	-33.7	1,738.8	1,624.4	114.47	15.191		
14,100.0	7,740.0	7,894.7	7,775.9	109.5	24.0	90.41	-5,238.0	-33.7	1,772.0	1,658.9	113.11	15.667		
14,200.0	7,740.0	7,894.7	7,775.9	111.2	24.0	90.41	-5,238.0	-33.7	1,810.1	1,698.6	111.54	16.229		
14,300.0	7,740.0	7,894.8	7,776.0	112.9	24.0	90.41	-5,238.0	-33.7	1,852.9	1,743.1	109.80	16.874		
14,400.0	7,740.0	7,894.8	7,776.0	114.6	24.0	90.42	-5,238.0	-33.7	1,899.9	1,792.0	107.94	17.602		
14,500.0	7,740.0	7,894.9	7,776.1	116.3	24.0	90.42	-5,238.0	-33.7	1,950.9	1,845.0	105.99	18.407		
14,600.0	7,740.0	7,894.9	7,776.1	117.9	24.0	90.42	-5,238.0	-33.7	2,005.7	1,901.7	103.98	19.289		
14,700.0	7,740.0	7,895.0	7,776.2	119.6	24.0	90.42	-5,238.0	-33.7	2,063.8	1,961.8	101.94	20.245		
14,800.0	7,740.0	7,895.0	7,776.2	121.3	24.0	90.42	-5,238.0	-33.7	2,125.0	2,025.1	99.90	21.271		
14,900.0	7,740.0	7,895.1	7,776.3	123.0	24.0	90.42	-5,238.0	-33.7	2,189.1	2,091.2	97.88	22.364		
15,000.0	7,740.0	7,895.1	7,776.3	124.7	24.0	90.43	-5,238.0	-33.7	2,255.8	2,159.9	95.90	23.523		
15,100.0	7,740.0	7,895.2	7,776.4	126.4	24.0	90.43	-5,238.0	-33.7	2,324.9	2,231.0	93.96	24.744		
15,200.0	7,740.0	7,895.2	7,776.4	128.1	24.0	90.43	-5,238.0	-33.7	2,396.2	2,304.1	92.07	26.025		
15,300.0	7,740.0	7,895.3	7,776.5	129.8	24.0	90.43	-5,238.0	-33.7	2,469.5	2,379.2	90.25	27.362		
15,400.0	7,740.0	7,895.3	7,776.5	131.5	24.0	90.43	-5,238.0	-33.7	2,544.6	2,456.1	88.50	28.753		
15,500.0	7,740.0	7,895.4	7,776.6	133.2	24.0	90.43	-5,238.0	-33.7	2,621.3	2,534.5	86.81	30.196		
15,600.0	7,740.0	7,895.4	7,776.6	134.9	24.0	90.44	-5,238.0	-33.7	2,699.6	2,614.4	85.20	31.686		
15,700.0	7,740.0	7,895.5	7,776.7	136.6	24.0	90.44	-5,238.0	-33.7	2,779.3	2,695.6	83.66	33.223		
15,800.0	7,740.0	7,895.5	7,776.7	138.3	24.0	90.44	-5,238.0	-33.7	2,860.2	2,778.0	82.18	34.803		
15,900.0	7,740.0	7,895.6	7,776.8	140.0	24.0	90.44	-5,238.0	-33.7	2,942.3	2,861.6	80.78	36.423		
16,000.0	7,740.0	7,895.6	7,776.8	141.7	24.0	90.44	-5,238.0	-33.7	3,025.5	2,946.1	79.45	38.082		
16,100.0	7,740.0	7,895.7	7,776.9	143.5	24.0	90.44	-5,238.0	-33.7	3,109.7	3,031.5	78.18	39.776		
16,171.7	7,740.0	7,895.7	7,776.9	144.7	24.0	90.45	-5,238.0	-33.7	3,170.6	3,093.3	77.31	41.011		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 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	23.2	23.2	0.0	0.0	173.17	-4,267.2	511.1	4,297.7					
100.0	100.0	123.9	123.9	0.2	0.2	173.17	-4,267.1	511.2	4,297.7	4,297.3	0.36	N/A		
150.0	150.0	174.3	174.3	0.2	0.3	173.17	-4,267.1	511.2	4,297.6	4,297.1	0.54	7,991.454		
150.6	150.6	174.9	174.9	0.2	0.3	173.17	-4,267.1	511.2	4,297.6	4,297.1	0.54	7,961.012		
200.0	200.0	224.7	224.7	0.3	0.4	173.17	-4,267.1	511.2	4,298.3	4,297.6	0.71	6,042.278		
283.3	283.2	308.6	308.6	0.5	0.5	173.16	-4,267.1	511.2	4,302.2	4,301.2	1.00	4,299.021		
300.0	299.9	325.3	325.3	0.5	0.6	170.77	-4,267.1	511.2	4,303.3	4,302.3	1.06	4,065.057		
400.0	399.6	425.8	425.8	0.7	0.7	157.02	-4,267.0	511.2	4,310.1	4,308.7	1.41	3,060.399		
500.0	499.3	526.3	526.3	0.9	0.9	145.09	-4,266.9	511.3	4,316.7	4,314.9	1.76	2,446.756		
600.0	598.9	626.7	626.7	1.2	1.1	135.46	-4,266.8	511.3	4,323.1	4,321.0	2.13	2,029.782		
700.0	698.5	727.0	727.0	1.4	1.2	127.94	-4,266.7	511.4	4,329.4	4,326.8	2.51	1,725.965		
800.0	797.9	827.2	827.2	1.6	1.4	122.10	-4,266.5	511.5	4,335.4	4,332.5	2.90	1,493.336		
900.0	897.1	1,164.6	1,163.7	1.9	2.1	117.65	-4,256.7	530.4	4,340.8	4,337.0	3.78	1,148.426		
1,000.0	996.2	1,277.1	1,275.1	2.2	2.3	113.95	-4,248.7	543.9	4,341.0	4,336.6	4.31	1,006.990		
1,100.0	1,095.0	1,550.1	1,542.8	2.5	3.2	110.85	-4,221.3	589.5	4,338.2	4,332.8	5.41	801.733		
1,200.0	1,193.6	1,788.7	1,773.4	2.8	4.2	108.22	-4,188.9	640.9	4,333.1	4,326.4	6.65	651.524		
1,300.0	1,291.9	1,883.7	1,864.9	3.2	4.7	106.17	-4,174.0	662.1	4,325.4	4,318.0	7.39	585.352		
1,400.0	1,389.9	1,945.3	1,924.2	3.5	5.0	104.48	-4,164.8	676.1	4,318.3	4,310.2	8.02	538.241		
1,500.0	1,487.6	2,033.5	2,009.2	3.9	5.4	103.04	-4,152.1	696.1	4,311.6	4,302.8	8.80	490.159		
1,600.0	1,584.8	2,155.9	2,127.1	4.4	6.0	101.82	-4,134.0	723.1	4,304.2	4,294.5	9.75	441.499		
1,624.3	1,608.4	2,173.7	2,144.3	4.5	6.1	101.56	-4,131.4	727.2	4,302.5	4,292.5	9.93	433.067		
1,700.0	1,681.8	2,238.1	2,206.2	4.8	6.4	101.55	-4,122.0	742.0	4,297.1	4,286.6	10.55	407.247		
1,800.0	1,778.8	2,339.2	2,303.6	5.3	6.9	101.55	-4,107.3	764.5	4,289.9	4,278.5	11.43	375.276		
1,900.0	1,875.8	2,411.7	2,373.7	5.7	7.2	101.55	-4,097.1	780.5	4,283.2	4,271.0	12.19	351.273		
2,000.0	1,972.8	2,506.9	2,465.7	6.2	7.7	101.56	-4,084.0	801.4	4,276.9	4,263.8	13.05	327.690		
2,100.0	2,069.8	2,583.1	2,539.3	6.6	8.0	101.57	-4,073.8	817.9	4,270.8	4,257.0	13.83	308.735		
2,200.0	2,166.8	2,716.6	2,668.3	7.1	8.7	101.57	-4,056.2	847.4	4,265.1	4,250.2	14.87	286.776		
2,300.0	2,263.8	2,820.0	2,768.1	7.5	9.2	101.58	-4,041.5	870.2	4,258.3	4,242.5	15.78	269.811		
2,400.0	2,360.8	2,912.2	2,857.1	8.0	9.6	101.58	-4,028.7	890.6	4,251.8	4,235.2	16.65	255.367		
2,500.0	2,457.7	3,042.4	2,982.7	8.4	10.3	101.59	-4,010.3	919.5	4,245.2	4,227.5	17.68	240.090		
2,600.0	2,554.7	3,163.3	3,099.1	8.9	10.9	101.58	-3,992.1	946.9	4,237.4	4,218.7	18.70	226.660		
2,700.0	2,651.7	3,232.0	3,165.2	9.4	11.2	101.58	-3,982.1	962.4	4,230.2	4,210.8	19.47	217.321		
2,800.0	2,748.7	3,311.6	3,241.9	9.8	11.6	101.57	-3,970.9	980.6	4,223.7	4,203.4	20.29	208.116		
2,900.0	2,845.7	3,387.9	3,315.5	10.3	12.0	101.57	-3,960.5	997.9	4,217.5	4,196.4	21.10	199.901		
3,000.0	2,942.7	3,521.8	3,444.9	10.8	12.7	101.58	-3,942.2	1,027.1	4,211.2	4,189.0	22.15	190.153		
3,100.0	3,039.7	3,606.3	3,526.3	11.2	13.1	101.58	-3,930.4	1,046.1	4,204.7	4,181.7	23.00	182.843		
3,200.0	3,136.7	3,709.0	3,625.2	11.7	13.6	101.56	-3,916.2	1,070.1	4,198.3	4,174.4	23.94	175.335		
3,300.0	3,233.6	3,793.8	3,706.9	12.2	14.0	101.56	-3,904.5	1,089.4	4,192.0	4,167.3	24.78	169.174		
3,400.0	3,330.6	3,871.0	3,781.7	12.6	14.4	101.57	-3,894.4	1,106.1	4,186.3	4,160.7	25.58	163.672		
3,500.0	3,427.6	3,954.8	3,862.8	13.1	14.8	101.58	-3,883.9	1,124.0	4,181.0	4,154.6	26.40	158.356		
3,600.0	3,524.6	4,131.1	4,033.3	13.6	15.6	101.60	-3,860.9	1,162.5	4,175.6	4,148.0	27.64	151.081		
3,700.0	3,621.6	4,256.5	4,154.3	14.0	16.3	101.60	-3,842.5	1,190.0	4,168.3	4,139.7	28.66	145.456		
3,800.0	3,718.6	4,346.7	4,241.3	14.5	16.7	101.61	-3,829.2	1,209.7	4,160.9	4,131.4	29.52	140.944		
3,900.0	3,815.6	4,415.4	4,307.6	15.0	17.1	101.62	-3,819.2	1,224.6	4,153.8	4,123.5	30.29	137.135		
4,000.0	3,912.6	4,471.9	4,362.3	15.4	17.3	101.63	-3,811.7	1,236.6	4,147.7	4,116.7	31.00	133.797		
4,100.0	4,009.5	4,555.3	4,443.1	15.9	17.7	101.64	-3,801.3	1,254.2	4,142.6	4,110.8	31.82	130.186		
4,200.0	4,106.5	4,689.3	4,573.0	16.4	18.3	101.67	-3,783.9	1,282.5	4,136.8	4,104.0	32.85	125.927		
4,300.0	4,203.5	4,757.0	4,638.7	16.8	18.7	101.69	-3,775.1	1,296.3	4,131.1	4,097.5	33.60	122.967		
4,400.0	4,300.5	4,846.3	4,725.5	17.3	19.0	101.73	-3,764.0	1,313.6	4,125.8	4,091.4	34.39	119.977		
4,500.0	4,397.5	4,930.7	4,808.0	17.8	19.4	101.79	-3,754.2	1,328.8	4,121.1	4,086.0	35.16	117.220		
4,600.0	4,494.5	5,022.1	4,897.4	18.2	19.7	101.85	-3,743.8	1,344.7	4,116.6	4,080.7	35.94	114.535		
4,700.0	4,591.5	5,109.3	4,982.8	18.7	20.1	101.93	-3,734.1	1,359.5	4,112.4	4,075.7	36.70	112.047		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 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)			
4,800.0	4,688.5	5,198.5	5,070.3	19.2	20.4	102.01	-3,724.6	1,374.1	4,108.5	4,071.1	37.47	109.663	
4,900.0	4,785.4	5,298.0	5,167.7	19.6	20.8	102.09	-3,713.9	1,391.1	4,104.7	4,066.4	38.27	107.252	
5,000.0	4,882.4	5,393.0	5,260.9	20.1	21.2	102.18	-3,703.9	1,406.4	4,100.9	4,061.9	39.03	105.059	
5,100.0	4,979.4	5,462.1	5,328.9	20.6	21.4	102.25	-3,697.0	1,416.9	4,097.7	4,058.0	39.71	103.199	
5,200.0	5,076.4	5,532.8	5,398.5	21.0	21.7	102.33	-3,690.4	1,427.7	4,095.2	4,054.8	40.38	101.409	
5,300.0	5,173.4	5,680.7	5,543.9	21.5	22.2	102.49	-3,676.3	1,450.6	4,092.3	4,051.0	41.31	99.057	
5,400.0	5,270.4	5,744.8	5,607.0	22.0	22.4	102.56	-3,670.0	1,460.2	4,089.4	4,047.4	41.96	97.461	
5,500.0	5,367.4	5,811.8	5,673.1	22.5	22.7	102.65	-3,664.3	1,469.4	4,087.4	4,044.8	42.60	95.949	
5,600.0	5,464.4	5,889.8	5,750.1	22.9	22.9	102.75	-3,658.0	1,480.1	4,086.0	4,042.8	43.27	94.427	
5,700.0	5,561.4	5,976.1	5,835.3	23.4	23.2	102.87	-3,651.4	1,491.8	4,085.1	4,041.1	43.95	92.939	
5,800.0	5,658.3	6,047.3	5,905.8	23.9	23.4	102.99	-3,646.6	1,500.2	4,084.8	4,040.2	44.56	91.664	
5,900.0	5,755.3	6,150.1	6,008.0	24.3	23.6	103.19	-3,639.9	1,509.7	4,084.6	4,039.4	45.20	90.358	
5,907.5	5,762.6	6,155.0	6,012.9	24.4	23.6	103.20	-3,639.6	1,510.1	4,084.6	4,039.4	45.25	90.275	
6,000.0	5,852.3	6,219.0	6,076.6	24.8	23.8	103.34	-3,635.9	1,515.0	4,085.0	4,039.3	45.75	89.282	
6,100.0	5,949.3	6,283.0	6,140.3	25.3	23.9	103.49	-3,632.6	1,519.4	4,086.2	4,039.9	46.28	88.292	
6,200.0	6,046.3	6,336.4	6,193.6	25.7	24.0	103.63	-3,630.5	1,522.4	4,088.4	4,041.7	46.76	87.441	
6,300.0	6,143.3	6,402.2	6,259.3	26.2	24.1	103.81	-3,628.7	1,525.0	4,091.8	4,044.5	47.22	86.645	
6,400.0	6,240.3	6,506.0	6,363.1	26.7	24.2	104.14	-3,625.9	1,525.9	4,095.2	4,047.5	47.68	85.888	
6,500.0	6,337.3	6,543.9	6,401.0	27.1	24.2	104.27	-3,625.2	1,525.5	4,099.5	4,051.4	48.08	85.267	
6,600.0	6,434.2	6,587.9	6,445.0	27.6	24.2	104.42	-3,625.2	1,524.9	4,105.4	4,057.0	48.47	84.696	
6,700.0	6,531.2	6,701.1	6,558.1	28.1	24.3	104.80	-3,625.4	1,524.6	4,111.9	4,063.0	48.95	84.002	
6,800.0	6,628.2	6,816.1	6,673.1	28.5	24.4	105.17	-3,625.0	1,525.2	4,118.0	4,068.6	49.44	83.301	
6,900.0	6,725.2	6,921.8	6,778.8	29.0	24.5	105.51	-3,624.3	1,525.6	4,124.0	4,074.1	49.91	82.636	
7,000.0	6,822.2	7,035.5	6,892.6	29.5	24.6	105.87	-3,623.2	1,525.9	4,129.8	4,079.4	50.38	81.971	
7,100.0	6,919.2	7,150.7	7,007.8	30.0	24.8	106.25	-3,621.6	1,525.9	4,135.3	4,084.5	50.85	81.327	
7,200.0	7,016.2	7,265.0	7,122.0	30.4	24.9	106.62	-3,619.5	1,525.5	4,140.5	4,089.2	51.31	80.696	
7,300.0	7,113.2	7,373.4	7,230.4	30.9	25.0	106.98	-3,617.3	1,525.1	4,145.7	4,093.9	51.77	80.086	
7,328.7	7,141.0	7,405.9	7,262.9	31.0	25.0	107.08	-3,616.5	1,525.0	4,147.1	4,095.2	51.90	79.913	
7,350.0	7,161.7	7,425.0	7,282.0	31.1	25.0	98.74	-3,616.1	1,524.8	4,147.7	4,095.7	51.99	79.786	
7,400.0	7,210.3	7,469.9	7,326.8	31.3	25.1	78.22	-3,615.1	1,524.4	4,146.2	4,094.0	52.20	79.435	
7,450.0	7,258.7	7,513.2	7,370.1	31.5	25.1	60.36	-3,614.1	1,523.8	4,140.4	4,088.0	52.40	79.012	
7,500.0	7,306.5	7,554.5	7,411.5	31.7	25.1	47.30	-3,613.3	1,523.1	4,130.5	4,077.9	52.60	78.520	
7,550.0	7,353.4	7,598.4	7,455.3	31.8	25.2	38.34	-3,612.4	1,522.4	4,116.3	4,063.5	52.80	77.956	
7,600.0	7,399.0	7,644.6	7,501.5	31.9	25.2	32.19	-3,611.5	1,521.5	4,098.1	4,045.1	53.00	77.323	
7,650.0	7,442.9	7,689.0	7,545.9	32.0	25.3	27.87	-3,610.7	1,520.7	4,076.0	4,022.8	53.19	76.628	
7,700.0	7,484.9	7,726.6	7,583.4	32.1	25.3	24.76	-3,609.9	1,519.9	4,050.0	3,996.6	53.37	75.880	
7,750.0	7,524.5	7,759.6	7,616.4	32.1	25.3	22.48	-3,609.3	1,519.2	4,020.5	3,966.9	53.55	75.084	
7,800.0	7,561.6	7,790.4	7,647.3	32.1	25.3	20.82	-3,608.8	1,518.6	3,987.7	3,933.9	53.71	74.241	
7,850.0	7,595.8	7,828.8	7,685.7	32.2	25.4	19.69	-3,608.2	1,517.8	3,951.7	3,897.8	53.88	73.348	
7,900.0	7,626.8	7,867.4	7,724.2	32.2	25.4	18.98	-3,607.5	1,517.0	3,912.8	3,858.8	54.03	72.416	
7,950.0	7,654.5	7,899.1	7,755.9	32.2	25.4	18.63	-3,606.8	1,516.3	3,871.3	3,817.1	54.18	71.457	
8,000.0	7,678.5	7,921.3	7,778.1	32.3	25.5	18.62	-3,606.4	1,515.9	3,827.6	3,773.2	54.31	70.479	
8,050.0	7,698.8	7,939.8	7,796.6	32.3	25.5	19.07	-3,606.0	1,515.5	3,781.9	3,727.4	54.43	69.486	
8,100.0	7,715.2	7,954.6	7,811.4	32.3	25.5	20.24	-3,605.7	1,515.2	3,734.6	3,680.1	54.53	68.485	
8,150.0	7,727.5	7,965.5	7,822.3	32.4	25.5	22.86	-3,605.5	1,515.0	3,686.1	3,631.5	54.62	67.482	
8,200.0	7,735.6	7,972.4	7,829.2	32.4	25.5	29.76	-3,605.3	1,514.9	3,636.8	3,582.1	54.70	66.484	
8,250.0	7,739.6	7,975.3	7,832.0	32.4	25.5	65.70	-3,605.3	1,514.9	3,586.9	3,532.2	54.76	65.497	
8,271.7	7,740.0	7,975.2	7,832.0	32.5	25.5	122.88	-3,605.3	1,514.9	3,565.3	3,510.5	54.79	65.073	
8,300.0	7,740.0	7,974.7	7,831.5	32.5	25.5	122.67	-3,605.3	1,514.9	3,537.0	3,482.1	54.82	64.519	
8,400.0	7,740.0	7,972.7	7,829.5	32.7	25.5	121.94	-3,605.3	1,514.9	3,437.0	3,382.1	54.94	62.565	
8,500.0	7,740.0	7,970.8	7,827.6	33.0	25.5	121.20	-3,605.4	1,514.9	3,337.1	3,282.0	55.05	60.617	
8,600.0	7,740.0	7,968.9	7,825.7	33.4	25.5	120.44	-3,605.4	1,515.0	3,237.2	3,182.0	55.17	58.675	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Factor	
8,700.0	7,740.0	7,966.9	7,823.7	33.8	25.5	119.67	-3,605.5	1,515.0	3,137.2	3,082.0	55.29	56.739	
8,800.0	7,740.0	7,965.0	7,821.8	34.4	25.5	118.89	-3,605.5	1,515.0	3,037.3	2,981.9	55.42	54.808	
8,900.0	7,740.0	7,963.1	7,819.8	35.0	25.5	118.09	-3,605.5	1,515.1	2,937.4	2,881.9	55.55	52.883	
9,000.0	7,740.0	7,961.1	7,817.9	35.7	25.5	117.27	-3,605.6	1,515.1	2,837.5	2,781.8	55.68	50.964	
9,100.0	7,740.0	7,959.2	7,815.9	36.4	25.5	116.44	-3,605.6	1,515.1	2,737.6	2,681.8	55.81	49.050	
9,200.0	7,740.0	7,957.2	7,814.0	37.3	25.5	115.60	-3,605.6	1,515.2	2,637.7	2,581.7	55.95	47.142	
9,300.0	7,740.0	7,955.2	7,812.0	38.2	25.5	114.74	-3,605.7	1,515.2	2,537.8	2,481.7	56.10	45.240	
9,400.0	7,740.0	7,953.3	7,810.1	39.1	25.5	113.87	-3,605.7	1,515.3	2,437.9	2,381.7	56.25	43.344	
9,500.0	7,740.0	7,951.3	7,808.1	40.1	25.5	112.98	-3,605.8	1,515.3	2,338.0	2,281.6	56.40	41.453	
9,600.0	7,740.0	7,949.3	7,806.1	41.2	25.5	112.08	-3,605.8	1,515.3	2,238.1	2,181.6	56.56	39.569	
9,700.0	7,740.0	7,947.3	7,804.1	42.3	25.5	111.16	-3,605.8	1,515.4	2,138.3	2,081.5	56.73	37.690	
9,800.0	7,740.0	7,945.4	7,802.2	43.5	25.5	110.24	-3,605.9	1,515.4	2,038.4	1,981.5	56.91	35.816	
9,900.0	7,740.0	7,943.4	7,800.2	44.7	25.5	109.29	-3,605.9	1,515.4	1,938.6	1,881.5	57.10	33.949	
10,000.0	7,740.0	7,941.4	7,798.2	45.9	25.5	108.33	-3,606.0	1,515.5	1,838.8	1,781.5	57.30	32.088	
10,100.0	7,740.0	7,939.4	7,796.2	47.1	25.5	107.36	-3,606.0	1,515.5	1,739.0	1,681.4	57.52	30.233	
10,200.0	7,740.0	7,937.4	7,794.2	48.4	25.5	106.38	-3,606.0	1,515.6	1,639.2	1,581.4	57.75	28.383	
10,300.0	7,740.0	7,935.4	7,792.2	49.8	25.5	105.38	-3,606.1	1,515.6	1,539.4	1,481.4	58.00	26.541	
10,400.0	7,740.0	7,933.4	7,790.2	51.1	25.5	104.37	-3,606.1	1,515.6	1,439.7	1,381.4	58.28	24.704	
10,500.0	7,740.0	7,931.4	7,788.2	52.5	25.5	103.35	-3,606.2	1,515.7	1,340.0	1,281.4	58.58	22.874	
10,600.0	7,740.0	7,929.3	7,786.1	53.9	25.5	102.32	-3,606.2	1,515.7	1,240.3	1,181.4	58.92	21.052	
10,700.0	7,740.0	7,927.3	7,784.1	55.3	25.5	101.28	-3,606.3	1,515.8	1,140.8	1,081.5	59.30	19.236	
10,800.0	7,740.0	7,925.3	7,782.1	56.7	25.5	100.22	-3,606.3	1,515.8	1,041.3	981.5	59.74	17.428	
10,900.0	7,740.0	7,923.3	7,780.1	58.2	25.5	99.16	-3,606.3	1,515.8	941.8	881.6	60.26	15.629	
11,000.0	7,740.0	7,921.2	7,778.0	59.7	25.5	98.08	-3,606.4	1,515.9	842.6	781.7	60.88	13.840	
11,100.0	7,740.0	7,919.2	7,776.0	61.2	25.5	97.00	-3,606.4	1,515.9	743.5	681.8	61.63	12.063	
11,200.0	7,740.0	7,917.1	7,773.9	62.7	25.4	95.91	-3,606.5	1,516.0	644.7	582.1	62.59	10.300	
11,300.0	7,740.0	7,915.1	7,771.9	64.2	25.4	94.81	-3,606.5	1,516.0	546.3	482.4	63.84	8.557	
11,400.0	7,740.0	7,913.0	7,769.8	65.7	25.4	93.70	-3,606.5	1,516.0	448.6	383.0	65.57	6.841	
11,500.0	7,740.0	7,911.0	7,767.8	67.2	25.4	92.59	-3,606.6	1,516.1	352.2	284.1	68.11	5.171	
11,600.0	7,740.0	7,908.9	7,765.7	68.8	25.4	91.47	-3,606.6	1,516.1	258.5	186.4	72.10	3.586	
11,700.0	7,740.0	7,906.8	7,763.7	70.3	25.4	90.35	-3,606.7	1,516.2	172.1	93.5	78.66	2.188	
11,800.0	7,740.0	7,904.8	7,761.6	71.9	25.4	89.22	-3,606.7	1,516.2	111.4	25.1	86.27	1.291	Level 3
11,836.1	7,740.0	7,904.0	7,760.8	72.5	25.4	88.82	-3,606.7	1,516.2	105.4	20.7	84.64	1.245	Level 2, CC, ES, SF
11,900.0	7,740.0	7,902.7	7,759.5	73.5	25.4	88.10	-3,606.8	1,516.2	123.2	54.2	69.01	1.786	
12,000.0	7,740.0	7,900.6	7,757.4	75.1	25.4	86.96	-3,606.8	1,516.3	194.8	145.4	49.40	3.943	
12,100.0	7,740.0	7,898.5	7,755.3	76.6	25.4	85.83	-3,606.8	1,516.3	284.1	237.9	46.14	6.157	
12,200.0	7,740.0	7,896.4	7,753.3	78.2	25.4	84.70	-3,606.9	1,516.4	378.8	331.5	47.28	8.011	
12,300.0	7,740.0	7,894.3	7,751.2	79.8	25.4	83.57	-3,606.9	1,516.4	475.6	426.8	48.76	9.753	
12,400.0	7,740.0	7,892.3	7,749.1	81.5	25.4	82.44	-3,607.0	1,516.5	573.5	523.5	50.00	11.470	
12,500.0	7,740.0	7,890.2	7,747.0	83.1	25.4	81.36	-3,607.0	1,516.5	672.0	621.1	50.99	13.179	
12,600.0	7,740.0	7,888.2	7,745.1	84.7	25.4	80.30	-3,607.1	1,516.6	770.9	719.2	51.79	14.887	
12,700.0	7,740.0	7,886.3	7,743.1	86.3	25.4	79.26	-3,607.1	1,516.6	870.1	817.7	52.44	16.593	
12,800.0	7,740.0	7,884.3	7,741.2	88.0	25.4	78.24	-3,607.1	1,516.6	969.4	916.4	52.98	18.296	
12,900.0	7,740.0	7,882.4	7,739.2	89.6	25.4	77.23	-3,607.2	1,516.7	1,068.9	1,015.4	53.45	19.997	
13,000.0	7,740.0	7,880.5	7,737.3	91.2	25.4	76.24	-3,607.2	1,516.7	1,168.4	1,114.5	53.86	21.695	
13,100.0	7,740.0	7,878.6	7,735.5	92.9	25.4	75.27	-3,607.3	1,516.8	1,268.0	1,213.8	54.21	23.389	
13,200.0	7,740.0	7,876.8	7,733.6	94.5	25.4	74.32	-3,607.3	1,516.8	1,367.7	1,313.1	54.53	25.080	
13,300.0	7,740.0	7,874.9	7,731.7	96.2	25.4	73.38	-3,607.3	1,516.8	1,467.4	1,412.5	54.82	26.767	
13,400.0	7,740.0	7,873.1	7,729.9	97.8	25.4	72.46	-3,607.4	1,516.9	1,567.1	1,512.0	55.08	28.450	
13,500.0	7,740.0	7,871.3	7,728.1	99.5	25.4	71.56	-3,607.4	1,516.9	1,666.9	1,611.5	55.32	30.129	
13,600.0	7,740.0	7,869.5	7,726.3	101.2	25.4	70.68	-3,607.4	1,516.9	1,766.7	1,711.1	55.55	31.803	
13,700.0	7,740.0	7,867.7	7,724.6	102.8	25.4	69.81	-3,607.5	1,517.0	1,866.5	1,810.7	55.76	33.473	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
13,800.0	7,740.0	7,866.0	7,722.8	104.5	25.4	68.96	-3,607.5	1,517.0	1,966.3	1,910.3	55.96	35.139		
13,900.0	7,740.0	7,864.2	7,721.1	106.2	25.4	68.13	-3,607.5	1,517.1	2,066.1	2,010.0	56.14	36.800		
14,000.0	7,740.0	7,862.5	7,719.3	107.8	25.4	67.32	-3,607.6	1,517.1	2,166.0	2,109.7	56.32	38.457		
14,100.0	7,740.0	7,860.8	7,717.6	109.5	25.4	66.52	-3,607.6	1,517.1	2,265.9	2,209.4	56.49	40.109		
14,200.0	7,740.0	7,859.1	7,716.0	111.2	25.4	65.74	-3,607.6	1,517.2	2,365.7	2,309.1	56.66	41.756		
14,300.0	7,740.0	7,857.5	7,714.3	112.9	25.4	64.98	-3,607.7	1,517.2	2,465.6	2,408.8	56.81	43.399		
14,400.0	7,740.0	7,855.8	7,712.6	114.6	25.4	64.23	-3,607.7	1,517.2	2,565.5	2,508.6	56.96	45.038		
14,500.0	7,740.0	7,854.2	7,711.0	116.3	25.4	63.50	-3,607.7	1,517.3	2,665.4	2,608.3	57.11	46.671		
14,600.0	7,740.0	7,852.6	7,709.4	117.9	25.4	62.78	-3,607.8	1,517.3	2,765.3	2,708.1	57.25	48.300		
14,700.0	7,740.0	7,850.9	7,707.8	119.6	25.4	62.08	-3,607.8	1,517.3	2,865.2	2,807.9	57.39	49.925		
14,800.0	7,740.0	7,849.4	7,706.2	121.3	25.4	61.40	-3,607.8	1,517.4	2,965.2	2,907.6	57.53	51.544		
14,900.0	7,740.0	7,847.8	7,704.6	123.0	25.4	60.72	-3,607.8	1,517.4	3,065.1	3,007.4	57.66	53.160		
15,000.0	7,740.0	7,846.2	7,703.0	124.7	25.4	60.07	-3,607.9	1,517.4	3,165.0	3,107.2	57.79	54.770		
15,100.0	7,740.0	7,844.7	7,701.5	126.4	25.4	59.43	-3,607.9	1,517.5	3,264.9	3,207.0	57.91	56.376		
15,200.0	7,740.0	7,843.1	7,700.0	128.1	25.4	58.80	-3,607.9	1,517.5	3,364.9	3,306.8	58.04	57.977		
15,300.0	7,740.0	7,841.6	7,698.5	129.8	25.4	58.18	-3,608.0	1,517.5	3,464.8	3,406.7	58.16	59.574		
15,400.0	7,740.0	7,840.1	7,697.0	131.5	25.4	57.58	-3,608.0	1,517.6	3,564.8	3,506.5	58.28	61.166		
15,500.0	7,740.0	7,838.6	7,695.5	133.2	25.4	56.99	-3,608.0	1,517.6	3,664.7	3,606.3	58.40	62.753		
15,600.0	7,740.0	7,837.2	7,694.0	134.9	25.4	56.42	-3,608.0	1,517.6	3,764.6	3,706.1	58.51	64.336		
15,700.0	7,740.0	7,835.7	7,692.5	136.6	25.4	55.85	-3,608.1	1,517.7	3,864.6	3,806.0	58.63	65.915		
15,800.0	7,740.0	7,834.2	7,691.1	138.3	25.4	55.30	-3,608.1	1,517.7	3,964.5	3,905.8	58.74	67.488		
15,900.0	7,740.0	7,832.8	7,689.6	140.0	25.4	54.76	-3,608.1	1,517.7	4,064.5	4,005.6	58.86	69.058		
16,000.0	7,740.0	7,831.4	7,688.2	141.7	25.4	54.23	-3,608.1	1,517.8	4,164.4	4,105.5	58.97	70.622		
16,100.0	7,740.0	7,830.0	7,686.8	143.5	25.4	53.72	-3,608.2	1,517.8	4,264.4	4,205.3	59.08	72.182		
16,171.7	7,740.0	7,829.0	7,685.8	144.7	25.4	53.35	-3,608.2	1,517.8	4,336.0	4,276.9	59.16	73.298		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	33.7	33.7	0.0	0.0	172.76	-4,267.1	542.0	4,301.4					
100.0	100.0	118.0	118.0	0.2	0.2	172.76	-4,267.0	542.2	4,301.3	4,301.0	0.33	N/A		
150.0	150.0	140.5	140.5	0.2	0.2	172.76	-4,267.1	542.3	4,301.5	4,301.1	0.46	9,381.211		
200.0	200.0	178.0	178.0	0.3	0.3	172.75	-4,267.5	542.8	4,302.8	4,302.2	0.61	7,034.020		
283.3	283.2	178.0	178.0	0.5	0.3	172.73	-4,267.5	542.8	4,308.4	4,307.7	0.76	5,690.613		
300.0	299.9	207.9	207.9	0.5	0.3	170.33	-4,268.1	543.5	4,309.9	4,309.0	0.84	5,125.667		
400.0	399.6	270.0	269.9	0.7	0.5	156.51	-4,270.0	545.6	4,320.0	4,318.9	1.13	3,820.454		
500.0	499.3	298.3	298.2	0.9	0.5	144.49	-4,271.2	546.9	4,331.1	4,329.7	1.37	3,164.001		
600.0	598.9	362.0	361.6	1.2	0.7	134.73	-4,274.6	550.7	4,343.5	4,341.8	1.69	2,576.893		
700.0	698.5	362.0	361.6	1.4	0.7	127.04	-4,274.6	550.7	4,356.8	4,354.9	1.89	2,305.854		
800.0	797.9	425.2	424.5	1.6	0.8	121.02	-4,279.1	555.5	4,371.2	4,368.9	2.24	1,948.077		
900.0	897.1	454.0	453.1	1.9	0.9	116.24	-4,281.6	558.0	4,386.8	4,384.3	2.54	1,725.538		
1,000.0	996.2	510.4	509.0	2.2	1.1	112.41	-4,287.1	563.5	4,403.5	4,400.5	2.93	1,502.264		
1,100.0	1,095.0	546.0	544.1	2.5	1.2	109.27	-4,290.9	567.3	4,421.2	4,417.9	3.29	1,342.816		
1,200.0	1,193.6	598.1	595.5	2.8	1.4	106.67	-4,297.1	573.5	4,439.9	4,436.2	3.73	1,189.088		
1,300.0	1,291.9	642.0	638.6	3.2	1.5	104.46	-4,302.8	579.5	4,459.6	4,455.4	4.18	1,067.671		
1,400.0	1,389.9	698.6	694.0	3.5	1.8	102.57	-4,310.7	588.0	4,480.2	4,475.5	4.69	954.321		
1,500.0	1,487.6	830.3	822.8	3.9	2.3	101.03	-4,329.3	608.3	4,500.9	4,495.4	5.46	825.022		
1,600.0	1,584.8	901.0	892.1	4.4	2.5	99.65	-4,339.1	618.5	4,521.0	4,514.9	6.07	745.065		
1,624.3	1,608.4	915.3	906.0	4.5	2.6	99.34	-4,341.2	620.6	4,525.9	4,519.7	6.21	728.645		
1,700.0	1,681.8	940.0	930.2	4.8	2.7	99.37	-4,344.7	624.4	4,541.8	4,535.2	6.60	688.244		
1,800.0	1,778.8	1,004.0	992.6	5.3	3.0	99.46	-4,354.6	634.9	4,563.6	4,556.4	7.22	631.941		
1,900.0	1,875.8	1,048.3	1,035.5	5.7	3.2	99.51	-4,362.0	642.6	4,586.5	4,578.7	7.79	589.081		
2,000.0	1,972.8	1,120.4	1,105.3	6.2	3.5	99.58	-4,374.5	655.7	4,610.3	4,601.9	8.45	545.288		
2,100.0	2,069.8	1,206.1	1,188.2	6.6	3.9	99.66	-4,389.5	671.7	4,634.4	4,625.2	9.18	505.015		
2,200.0	2,166.8	1,388.5	1,364.8	7.1	4.8	99.85	-4,420.5	705.2	4,658.2	4,647.9	10.25	454.338		
2,300.0	2,263.8	1,479.5	1,453.1	7.5	5.2	99.94	-4,435.0	721.8	4,680.7	4,669.7	11.00	425.545		
2,400.0	2,360.8	1,566.5	1,537.5	8.0	5.6	100.02	-4,449.1	737.4	4,703.4	4,691.7	11.73	401.035		
2,500.0	2,457.7	1,641.0	1,609.8	8.4	5.9	100.10	-4,461.4	750.6	4,726.4	4,714.0	12.41	380.783		
2,600.0	2,554.7	1,727.3	1,693.4	8.9	6.4	100.19	-4,475.9	766.4	4,749.9	4,736.7	13.15	361.150		
2,700.0	2,651.7	1,807.1	1,770.6	9.4	6.7	100.26	-4,489.5	781.3	4,773.6	4,759.7	13.87	344.229		
2,800.0	2,748.7	1,948.5	1,907.4	9.8	7.4	100.38	-4,513.1	808.1	4,797.0	4,782.2	14.83	323.462		
2,900.0	2,845.7	2,024.1	1,980.6	10.3	7.8	100.44	-4,525.6	822.3	4,820.2	4,804.7	15.53	310.372		
3,000.0	2,942.7	2,117.0	2,070.6	10.8	8.2	100.53	-4,541.1	839.5	4,843.5	4,827.2	16.30	297.221		
3,100.0	3,039.7	2,187.2	2,138.5	11.2	8.5	100.59	-4,553.0	852.4	4,867.2	4,850.2	16.97	286.764		
3,200.0	3,136.7	2,345.4	2,291.8	11.7	9.3	100.75	-4,579.9	880.6	4,891.0	4,873.0	17.98	271.989		
3,300.0	3,233.6	2,438.1	2,381.8	12.2	9.7	100.83	-4,594.7	897.5	4,913.6	4,894.9	18.76	261.975		
3,400.0	3,330.6	2,497.0	2,438.8	12.6	10.0	100.88	-4,604.5	908.6	4,937.0	4,917.6	19.40	254.519		
3,500.0	3,427.6	2,622.7	2,560.6	13.1	10.6	100.99	-4,625.8	931.4	4,960.6	4,940.3	20.29	244.530		
3,600.0	3,524.6	2,714.8	2,650.0	13.6	11.0	101.08	-4,641.0	947.3	4,983.8	4,962.8	21.04	236.892		
3,700.0	3,621.6	2,835.4	2,767.0	14.0	11.6	101.20	-4,661.0	968.2	5,007.1	4,985.2	21.91	228.498		
3,800.0	3,718.6	2,917.5	2,846.7	14.5	12.0	101.27	-4,674.1	983.3	5,029.8	5,007.2	22.64	222.132		
3,900.0	3,815.6	2,975.0	2,902.4	15.0	12.2	101.32	-4,683.8	993.9	5,053.4	5,030.1	23.27	217.163		
4,000.0	3,912.6	3,021.8	2,947.6	15.4	12.5	101.36	-4,692.2	1,002.4	5,077.9	5,054.0	23.85	212.926		
4,100.0	4,009.5	3,131.7	3,053.8	15.9	13.0	101.45	-4,712.4	1,022.3	5,103.0	5,078.3	24.68	206.737		
4,200.0	4,106.5	3,198.5	3,118.4	16.4	13.3	101.51	-4,724.5	1,034.3	5,127.9	5,102.5	25.34	202.326		
4,300.0	4,203.5	3,369.0	3,283.2	16.8	14.1	101.65	-4,754.7	1,065.7	5,152.4	5,126.0	26.45	194.793		
4,400.0	4,300.5	3,513.8	3,423.4	17.3	14.8	101.75	-4,778.3	1,093.4	5,175.5	5,148.0	27.46	188.462		
4,500.0	4,397.5	3,589.3	3,496.5	17.8	15.2	101.80	-4,790.6	1,107.9	5,198.6	5,170.5	28.17	184.519		
4,600.0	4,494.5	3,681.3	3,585.5	18.2	15.6	101.87	-4,805.8	1,125.4	5,222.1	5,193.1	28.95	180.366		
4,700.0	4,591.5	3,780.2	3,681.3	18.7	16.1	101.95	-4,822.2	1,143.4	5,245.4	5,215.7	29.75	176.323		
4,800.0	4,688.5	3,880.1	3,778.2	19.2	16.6	102.03	-4,838.8	1,161.2	5,268.9	5,238.4	30.54	172.497		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,900.0	4,785.4	4,010.8	3,905.2	19.6	17.2	102.15	-4,859.9	1,184.0	5,291.8	5,260.3	31.47	168.135	
5,000.0	4,882.4	4,123.5	4,014.6	20.1	17.7	102.24	-4,877.9	1,204.2	5,314.6	5,282.2	32.32	164.415	
5,100.0	4,979.4	4,213.0	4,101.7	20.6	18.1	102.31	-4,891.8	1,219.5	5,336.9	5,303.8	33.07	161.368	
5,200.0	5,076.4	4,290.3	4,176.9	21.0	18.4	102.39	-4,904.1	1,232.2	5,359.7	5,325.9	33.75	158.783	
5,300.0	5,173.4	4,611.8	4,491.8	21.5	19.6	102.76	-4,949.6	1,278.3	5,380.0	5,344.7	35.30	152.387	
5,400.0	5,270.4	4,701.2	4,579.6	22.0	20.0	102.87	-4,960.6	1,290.3	5,399.0	5,363.0	36.03	149.865	
5,500.0	5,367.4	4,766.8	4,644.1	22.5	20.2	102.95	-4,969.0	1,299.6	5,418.4	5,381.7	36.66	147.806	
5,600.0	5,464.4	4,845.4	4,721.2	22.9	20.5	103.04	-4,979.4	1,310.4	5,438.3	5,401.0	37.33	145.685	
5,700.0	5,561.4	5,133.8	5,005.6	23.4	21.5	103.43	-5,012.9	1,344.4	5,456.3	5,417.6	38.65	141.159	
5,800.0	5,658.3	5,219.7	5,090.4	23.9	21.8	103.55	-5,021.5	1,354.6	5,473.0	5,433.7	39.34	139.113	
5,900.0	5,755.3	5,300.7	5,170.4	24.3	22.0	103.65	-5,029.9	1,364.5	5,490.2	5,450.1	40.02	137.194	
6,000.0	5,852.3	5,541.6	5,408.8	24.8	22.7	104.00	-5,052.2	1,390.6	5,506.0	5,464.9	41.13	133.865	
6,100.0	5,949.3	5,667.7	5,534.1	25.3	23.0	104.20	-5,061.9	1,401.5	5,520.4	5,478.5	41.88	131.806	
6,200.0	6,046.3	5,741.0	5,606.9	25.7	23.2	104.32	-5,067.7	1,407.7	5,535.0	5,492.5	42.50	130.236	
6,300.0	6,143.3	5,980.8	5,845.4	26.2	23.8	104.74	-5,084.8	1,425.0	5,549.2	5,505.7	43.48	127.632	
6,400.0	6,240.3	6,416.3	6,280.6	26.7	24.3	105.72	-5,096.2	1,434.0	5,558.4	5,513.9	44.51	124.870	
6,500.0	6,337.3	6,518.3	6,382.6	27.1	24.3	105.97	-5,095.9	1,433.1	5,564.9	5,519.8	45.08	123.437	
6,600.0	6,434.2	6,599.0	6,463.2	27.6	24.4	106.17	-5,095.6	1,432.6	5,571.5	5,525.8	45.64	122.079	
6,700.0	6,531.2	6,679.1	6,543.3	28.1	24.5	106.37	-5,095.5	1,432.3	5,578.4	5,532.2	46.19	120.763	
6,800.0	6,628.2	6,794.0	6,658.2	28.5	24.6	106.64	-5,095.6	1,432.4	5,585.7	5,538.9	46.79	119.384	
6,900.0	6,725.2	6,886.9	6,751.1	29.0	24.6	106.86	-5,095.5	1,432.8	5,592.8	5,545.4	47.36	118.089	
7,000.0	6,822.2	6,980.0	6,844.2	29.5	24.7	107.08	-5,095.5	1,433.4	5,600.0	5,552.1	47.94	116.824	
7,100.0	6,919.2	7,050.9	6,915.1	30.0	24.8	107.24	-5,095.6	1,434.0	5,607.7	5,559.2	48.49	115.653	
7,200.0	7,016.2	7,151.9	7,016.1	30.4	24.9	107.47	-5,096.2	1,434.9	5,615.7	5,566.6	49.07	114.443	
7,300.0	7,113.2	7,242.9	7,107.1	30.9	25.0	107.68	-5,096.6	1,435.5	5,623.7	5,574.1	49.64	113.300	
7,328.7	7,141.0	7,266.0	7,130.2	31.0	25.0	107.74	-5,096.7	1,435.6	5,626.0	5,576.3	49.79	112.986	
7,350.0	7,161.7	7,283.9	7,148.1	31.1	25.0	99.37	-5,096.8	1,435.7	5,627.4	5,577.5	49.91	112.744	
7,400.0	7,210.3	7,323.0	7,187.2	31.3	25.1	78.79	-5,097.1	1,435.9	5,627.6	5,577.4	50.19	112.124	
7,450.0	7,258.7	7,362.3	7,226.5	31.5	25.1	60.87	-5,097.5	1,436.2	5,623.5	5,573.0	50.47	111.428	
7,500.0	7,306.5	7,415.8	7,280.0	31.7	25.2	47.80	-5,098.0	1,436.6	5,615.2	5,564.4	50.77	110.610	
7,550.0	7,353.4	7,468.3	7,332.5	31.8	25.2	38.82	-5,098.4	1,437.0	5,602.5	5,551.4	51.06	109.726	
7,600.0	7,399.0	7,519.3	7,383.5	31.9	25.3	32.64	-5,098.8	1,437.4	5,585.7	5,534.3	51.35	108.784	
7,650.0	7,442.9	7,568.5	7,432.7	32.0	25.3	28.29	-5,099.1	1,437.8	5,564.8	5,513.1	51.63	107.789	
7,700.0	7,484.9	7,615.5	7,479.7	32.1	25.4	25.16	-5,099.4	1,438.2	5,540.0	5,488.1	51.90	106.748	
7,750.0	7,524.5	7,659.9	7,524.1	32.1	25.4	22.89	-5,099.6	1,438.6	5,511.5	5,459.3	52.16	105.669	
7,800.0	7,561.6	7,701.4	7,565.5	32.1	25.5	21.23	-5,099.8	1,439.0	5,479.5	5,427.1	52.41	104.558	
7,850.0	7,595.8	7,739.6	7,603.8	32.2	25.5	20.05	-5,099.9	1,439.4	5,444.3	5,391.6	52.64	103.423	
7,900.0	7,626.8	7,774.3	7,638.4	32.2	25.5	19.26	-5,100.0	1,439.7	5,406.1	5,353.2	52.86	102.271	
7,950.0	7,654.5	7,805.1	7,669.3	32.2	25.6	18.83	-5,100.1	1,440.1	5,365.2	5,312.2	53.06	101.109	
8,000.0	7,678.5	7,832.0	7,696.1	32.3	25.6	18.76	-5,100.1	1,440.3	5,322.0	5,268.8	53.25	99.944	
8,050.0	7,698.8	7,854.6	7,718.7	32.3	25.6	19.14	-5,100.1	1,440.6	5,276.8	5,223.4	53.42	98.784	
8,100.0	7,715.2	7,872.8	7,736.9	32.3	25.6	20.17	-5,100.1	1,440.8	5,229.9	5,176.3	53.57	97.636	
8,150.0	7,727.5	7,886.5	7,750.6	32.4	25.6	22.42	-5,100.1	1,440.9	5,181.7	5,128.0	53.69	96.507	
8,200.0	7,735.6	7,895.5	7,759.7	32.4	25.7	27.96	-5,100.2	1,441.0	5,132.5	5,078.7	53.80	95.404	
8,250.0	7,739.6	7,899.9	7,764.1	32.4	25.7	50.55	-5,100.2	1,441.1	5,082.7	5,028.9	53.88	94.333	
8,271.7	7,740.0	7,900.4	7,764.5	32.5	25.7	90.48	-5,100.2	1,441.1	5,061.1	5,007.2	53.91	93.877	
8,300.0	7,740.0	7,900.4	7,764.5	32.5	25.7	90.48	-5,100.2	1,441.1	5,032.8	4,978.8	53.95	93.283	
8,400.0	7,740.0	7,900.4	7,764.5	32.7	25.7	90.48	-5,100.2	1,441.1	4,932.9	4,878.8	54.09	91.191	
8,500.0	7,740.0	7,900.4	7,764.5	33.0	25.7	90.48	-5,100.2	1,441.1	4,832.9	4,778.7	54.24	89.107	
8,600.0	7,740.0	7,900.4	7,764.5	33.4	25.7	90.49	-5,100.2	1,441.1	4,733.0	4,678.6	54.38	87.029	
8,700.0	7,740.0	7,900.4	7,764.6	33.8	25.7	90.49	-5,100.2	1,441.1	4,633.1	4,578.5	54.53	84.958	
8,800.0	7,740.0	7,900.4	7,764.6	34.4	25.7	90.49	-5,100.2	1,441.1	4,533.1	4,478.5	54.69	82.893	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD												Offset Site Error:	0.0 ft
Survey Program: 41-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor	
8,900.0	7,740.0	7,900.4	7,764.6	35.0	25.7	90.50	-5,100.2	1,441.1	4,433.2	4,378.4	54.84	80.836	
9,000.0	7,740.0	7,900.4	7,764.6	35.7	25.7	90.50	-5,100.2	1,441.1	4,333.3	4,278.3	55.00	78.785	
9,100.0	7,740.0	7,900.4	7,764.6	36.4	25.7	90.51	-5,100.2	1,441.1	4,233.4	4,178.2	55.16	76.741	
9,200.0	7,740.0	7,900.5	7,764.6	37.3	25.7	90.51	-5,100.2	1,441.1	4,133.5	4,078.2	55.33	74.704	
9,300.0	7,740.0	7,900.5	7,764.6	38.2	25.7	90.51	-5,100.2	1,441.1	4,033.6	3,978.1	55.50	72.674	
9,400.0	7,740.0	7,900.5	7,764.6	39.1	25.7	90.52	-5,100.2	1,441.1	3,933.7	3,878.0	55.68	70.650	
9,500.0	7,740.0	7,900.5	7,764.6	40.1	25.7	90.52	-5,100.2	1,441.1	3,833.8	3,777.9	55.86	68.633	
9,600.0	7,740.0	7,900.5	7,764.7	41.2	25.7	90.52	-5,100.2	1,441.1	3,733.9	3,677.9	56.05	66.623	
9,700.0	7,740.0	7,900.5	7,764.7	42.3	25.7	90.53	-5,100.2	1,441.1	3,634.0	3,577.8	56.24	64.620	
9,800.0	7,740.0	7,900.5	7,764.7	43.5	25.7	90.53	-5,100.2	1,441.1	3,534.2	3,477.7	56.43	62.624	
9,900.0	7,740.0	7,900.5	7,764.7	44.7	25.7	90.53	-5,100.2	1,441.1	3,434.3	3,377.7	56.64	60.635	
10,000.0	7,740.0	7,900.5	7,764.7	45.9	25.7	90.53	-5,100.2	1,441.1	3,334.4	3,277.6	56.85	58.652	
10,100.0	7,740.0	7,900.5	7,764.7	47.1	25.7	90.54	-5,100.2	1,441.1	3,234.6	3,177.5	57.07	56.677	
10,200.0	7,740.0	7,900.6	7,764.7	48.4	25.7	90.54	-5,100.2	1,441.1	3,134.7	3,077.4	57.30	54.708	
10,300.0	7,740.0	7,900.6	7,764.7	49.8	25.7	90.54	-5,100.2	1,441.1	3,034.9	2,977.4	57.54	52.746	
10,400.0	7,740.0	7,900.6	7,764.7	51.1	25.7	90.55	-5,100.2	1,441.1	2,935.1	2,877.3	57.79	50.792	
10,500.0	7,740.0	7,900.6	7,764.7	52.5	25.7	90.55	-5,100.2	1,441.1	2,835.3	2,777.3	58.05	48.844	
10,600.0	7,740.0	7,900.6	7,764.8	53.9	25.7	90.55	-5,100.2	1,441.1	2,735.5	2,677.2	58.32	46.904	
10,700.0	7,740.0	7,900.6	7,764.8	55.3	25.7	90.56	-5,100.2	1,441.1	2,635.7	2,577.1	58.61	44.971	
10,800.0	7,740.0	7,900.6	7,764.8	56.7	25.7	90.56	-5,100.2	1,441.1	2,536.0	2,477.1	58.91	43.045	
10,900.0	7,740.0	7,900.6	7,764.8	58.2	25.7	90.56	-5,100.2	1,441.1	2,436.2	2,377.0	59.24	41.127	
11,000.0	7,740.0	7,900.6	7,764.8	59.7	25.7	90.57	-5,100.2	1,441.1	2,336.5	2,276.9	59.58	39.216	
11,100.0	7,740.0	7,900.6	7,764.8	61.2	25.7	90.57	-5,100.2	1,441.1	2,236.8	2,176.9	59.95	37.313	
11,200.0	7,740.0	7,900.7	7,764.8	62.7	25.7	90.57	-5,100.2	1,441.1	2,137.2	2,076.8	60.34	35.418	
11,300.0	7,740.0	7,900.7	7,764.8	64.2	25.7	90.58	-5,100.2	1,441.1	2,037.6	1,976.8	60.77	33.532	
11,400.0	7,740.0	7,900.7	7,764.8	65.7	25.7	90.58	-5,100.2	1,441.1	1,938.0	1,876.7	61.22	31.654	
11,500.0	7,740.0	7,900.7	7,764.8	67.2	25.7	90.58	-5,100.2	1,441.1	1,838.4	1,776.7	61.72	29.784	
11,600.0	7,740.0	7,900.7	7,764.9	68.8	25.7	90.59	-5,100.2	1,441.1	1,738.9	1,676.7	62.27	27.925	
11,700.0	7,740.0	7,900.7	7,764.9	70.3	25.7	90.59	-5,100.2	1,441.1	1,639.5	1,576.6	62.88	26.075	
11,800.0	7,740.0	7,900.7	7,764.9	71.9	25.7	90.59	-5,100.2	1,441.1	1,540.2	1,476.6	63.55	24.235	
11,900.0	7,740.0	7,900.7	7,764.9	73.5	25.7	90.59	-5,100.2	1,441.1	1,440.9	1,376.6	64.30	22.408	
12,000.0	7,740.0	7,900.7	7,764.9	75.1	25.7	90.60	-5,100.2	1,441.1	1,341.7	1,276.6	65.16	20.592	
12,100.0	7,740.0	7,900.7	7,764.9	76.6	25.7	90.60	-5,100.2	1,441.1	1,242.7	1,176.6	66.13	18.791	
12,200.0	7,740.0	7,900.8	7,764.9	78.2	25.7	90.60	-5,100.2	1,441.1	1,143.9	1,076.6	67.26	17.006	
12,300.0	7,740.0	7,900.8	7,764.9	79.8	25.7	90.61	-5,100.2	1,441.1	1,045.3	976.7	68.59	15.240	
12,400.0	7,740.0	7,900.8	7,764.9	81.5	25.7	90.61	-5,100.2	1,441.1	946.9	876.7	70.17	13.495	
12,500.0	7,740.0	7,900.8	7,764.9	83.1	25.7	90.61	-5,100.2	1,441.1	849.0	776.9	72.08	11.777	
12,600.0	7,740.0	7,900.8	7,765.0	84.7	25.7	90.62	-5,100.2	1,441.1	751.5	677.1	74.46	10.093	
12,700.0	7,740.0	7,900.8	7,765.0	86.3	25.7	90.62	-5,100.2	1,441.1	654.9	577.4	77.48	8.453	
12,800.0	7,740.0	7,900.8	7,765.0	88.0	25.7	90.62	-5,100.2	1,441.1	559.5	478.0	81.43	6.871	
12,900.0	7,740.0	7,900.8	7,765.0	89.6	25.7	90.62	-5,100.2	1,441.1	465.9	379.2	86.74	5.372	
13,000.0	7,740.0	7,900.8	7,765.0	91.2	25.7	90.63	-5,100.2	1,441.1	375.7	281.7	94.08	3.994	
13,100.0	7,740.0	7,900.8	7,765.0	92.9	25.7	90.63	-5,100.2	1,441.1	292.0	187.9	104.15	2.804	
13,200.0	7,740.0	7,900.8	7,765.0	94.5	25.7	90.63	-5,100.2	1,441.1	222.2	106.5	115.65	1.921	
13,300.0	7,740.0	7,900.9	7,765.0	96.2	25.7	90.64	-5,100.2	1,441.1	182.9	65.8	117.09	1.562 ES, SF	
13,329.5	7,740.0	7,900.9	7,765.0	96.7	25.7	90.64	-5,100.2	1,441.1	180.5	68.0	112.46	1.605 CC	
13,400.0	7,740.0	7,900.9	7,765.0	97.8	25.7	90.64	-5,100.2	1,441.1	193.8	100.3	93.44	2.074	
13,500.0	7,740.0	7,900.9	7,765.0	99.5	25.7	90.64	-5,100.2	1,441.1	248.3	181.6	66.68	3.723	
13,600.0	7,740.0	7,900.9	7,765.0	101.2	25.7	90.64	-5,100.2	1,441.1	325.2	273.7	51.48	6.317	
13,700.0	7,740.0	7,900.9	7,765.1	102.8	25.7	90.65	-5,100.2	1,441.1	412.1	367.7	44.37	9.288	
13,800.0	7,740.0	7,900.9	7,765.1	104.5	25.7	90.65	-5,100.2	1,441.1	503.9	462.2	41.68	12.089	
13,900.0	7,740.0	7,900.9	7,765.1	106.2	25.7	90.65	-5,100.2	1,441.1	598.3	557.1	41.21	14.521	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis			
14,000.0	7,740.0	7,900.9	7,765.1	107.8	25.7	90.66	-5,100.2	1,441.1	694.3	652.6	41.70	16.649		
14,100.0	7,740.0	7,900.9	7,765.1	109.5	25.7	90.66	-5,100.2	1,441.1	791.3	748.7	42.57	18.589		
14,200.0	7,740.0	7,900.9	7,765.1	111.2	25.7	90.66	-5,100.2	1,441.1	889.0	845.4	43.53	20.422		
14,300.0	7,740.0	7,900.9	7,765.1	112.9	25.7	90.66	-5,100.2	1,441.1	987.1	942.6	44.47	22.196		
14,400.0	7,740.0	7,901.0	7,765.1	114.6	25.7	90.67	-5,100.2	1,441.1	1,085.6	1,040.2	45.35	23.935		
14,500.0	7,740.0	7,901.0	7,765.1	116.3	25.7	90.67	-5,100.2	1,441.1	1,184.3	1,138.1	46.16	25.654		
14,600.0	7,740.0	7,901.0	7,765.1	117.9	25.7	90.67	-5,100.2	1,441.1	1,283.2	1,236.3	46.90	27.360		
14,700.0	7,740.0	7,901.0	7,765.1	119.6	25.7	90.68	-5,100.2	1,441.1	1,382.3	1,334.7	47.57	29.056		
14,800.0	7,740.0	7,901.0	7,765.1	121.3	25.7	90.68	-5,100.2	1,441.1	1,481.5	1,433.3	48.19	30.746		
14,900.0	7,740.0	7,901.0	7,765.2	123.0	25.7	90.68	-5,100.2	1,441.1	1,580.8	1,532.0	48.75	32.430		
15,000.0	7,740.0	7,901.0	7,765.2	124.7	25.7	90.68	-5,100.2	1,441.1	1,680.2	1,630.9	49.26	34.109		
15,100.0	7,740.0	7,901.0	7,765.2	126.4	25.7	90.69	-5,100.2	1,441.1	1,779.6	1,729.9	49.73	35.783		
15,200.0	7,740.0	7,901.0	7,765.2	128.1	25.7	90.69	-5,100.2	1,441.1	1,879.1	1,829.0	50.17	37.453		
15,300.0	7,740.0	7,901.0	7,765.2	129.8	25.7	90.69	-5,100.2	1,441.1	1,978.7	1,928.1	50.58	39.119		
15,400.0	7,740.0	7,901.0	7,765.2	131.5	25.7	90.69	-5,100.2	1,441.1	2,078.3	2,027.3	50.96	40.781		
15,500.0	7,740.0	7,901.1	7,765.2	133.2	25.7	90.70	-5,100.2	1,441.1	2,177.9	2,126.6	51.32	42.439		
15,600.0	7,740.0	7,901.1	7,765.2	134.9	25.7	90.70	-5,100.2	1,441.1	2,277.6	2,226.0	51.66	44.092		
15,700.0	7,740.0	7,901.1	7,765.2	136.6	25.7	90.70	-5,100.2	1,441.1	2,377.3	2,325.3	51.97	45.741		
15,800.0	7,740.0	7,901.1	7,765.2	138.3	25.7	90.71	-5,100.2	1,441.1	2,477.0	2,424.8	52.27	47.386		
15,900.0	7,740.0	7,901.1	7,765.2	140.0	25.7	90.71	-5,100.2	1,441.1	2,576.8	2,524.2	52.56	49.026		
16,000.0	7,740.0	7,901.1	7,765.2	141.7	25.7	90.71	-5,100.2	1,441.1	2,676.5	2,623.7	52.83	50.662		
16,100.0	7,740.0	7,901.1	7,765.3	143.5	25.7	90.71	-5,100.2	1,441.1	2,776.3	2,723.2	53.09	52.294		
16,171.7	7,740.0	7,901.1	7,765.3	144.7	25.7	90.72	-5,100.2	1,441.1	2,847.8	2,794.6	53.27	53.461		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTI													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	172.97	-4,325.4	533.5	4,358.2					
100.0	100.0	83.2	83.2	0.2	0.1	172.97	-4,325.6	533.7	4,358.5	4,358.2	0.30	N/A		
150.0	150.0	123.3	123.3	0.2	0.2	172.96	-4,325.8	533.9	4,358.8	4,358.3	0.45	9,591.253		
200.0	200.0	163.7	163.7	0.3	0.3	172.96	-4,326.1	534.1	4,359.8	4,359.2	0.61	7,121.991		
283.3	283.2	249.0	249.0	0.5	0.4	172.95	-4,327.0	534.1	4,364.7	4,363.8	0.91	4,813.900		
300.0	299.9	270.3	270.3	0.5	0.5	170.56	-4,327.2	534.0	4,366.0	4,365.0	0.97	4,487.077		
400.0	399.6	368.4	368.4	0.7	0.6	156.80	-4,328.0	533.6	4,373.5	4,372.2	1.32	3,309.012		
500.0	499.3	474.4	474.3	0.9	0.8	144.88	-4,328.9	533.6	4,381.0	4,379.3	1.69	2,591.452		
600.0	598.9	598.1	598.1	1.2	1.0	135.27	-4,329.5	533.0	4,387.9	4,385.8	2.10	2,088.936		
700.0	698.5	689.4	689.4	1.4	1.2	127.74	-4,329.7	532.5	4,394.5	4,392.0	2.47	1,781.477		
800.0	797.9	797.9	797.9	1.6	1.4	121.92	-4,330.1	531.7	4,400.9	4,398.0	2.88	1,528.148		
900.0	897.1	895.3	895.3	1.9	1.6	117.37	-4,330.3	530.6	4,407.1	4,403.8	3.29	1,338.824		
1,000.0	996.2	985.3	985.3	2.2	1.7	113.78	-4,330.7	529.7	4,413.3	4,409.6	3.71	1,188.893		
1,100.0	1,095.0	1,099.6	1,099.5	2.5	1.9	110.96	-4,331.1	527.9	4,419.4	4,415.2	4.20	1,052.699		
1,200.0	1,193.6	1,200.0	1,199.9	2.8	2.1	108.68	-4,331.3	526.3	4,425.1	4,420.4	4.68	944.772		
1,300.0	1,291.9	1,294.6	1,294.5	3.2	2.3	106.82	-4,331.5	524.4	4,430.8	4,425.6	5.19	854.436		
1,400.0	1,389.9	1,406.9	1,406.8	3.5	2.5	105.36	-4,331.6	521.6	4,436.3	4,430.5	5.75	772.113		
1,500.0	1,487.6	1,493.3	1,493.2	3.9	2.6	104.09	-4,331.7	519.9	4,441.7	4,435.4	6.29	706.685		
1,600.0	1,584.8	1,614.5	1,614.3	4.4	2.8	103.15	-4,331.5	517.6	4,447.0	4,440.0	6.92	643.050		
1,624.3	1,608.4	1,633.8	1,633.7	4.5	2.9	102.92	-4,331.4	517.2	4,448.2	4,441.1	7.05	630.723		
1,700.0	1,681.8	1,700.0	1,699.8	4.8	3.0	103.14	-4,331.3	515.8	4,452.2	4,444.7	7.49	594.250		
1,800.0	1,778.8	1,819.7	1,819.4	5.3	3.2	103.54	-4,330.9	512.9	4,457.5	4,449.3	8.13	547.943		
1,900.0	1,875.8	1,900.0	1,899.8	5.7	3.3	103.81	-4,330.5	510.7	4,462.7	4,454.0	8.71	512.393		
2,000.0	1,972.8	1,987.6	1,987.3	6.2	3.5	104.11	-4,330.2	508.4	4,468.3	4,459.0	9.30	480.530		
2,100.0	2,069.8	2,100.0	2,099.7	6.6	3.7	104.48	-4,330.0	505.4	4,474.1	4,464.1	9.93	450.417		
2,200.0	2,166.8	2,173.5	2,173.2	7.1	3.8	104.73	-4,329.8	503.5	4,480.1	4,469.6	10.50	426.739		
2,300.0	2,263.8	2,283.2	2,282.8	7.5	4.0	105.10	-4,329.9	500.5	4,486.5	4,475.4	11.13	403.090		
2,400.0	2,360.8	2,379.7	2,379.3	8.0	4.2	105.43	-4,329.7	497.2	4,492.7	4,481.0	11.74	382.741		
2,500.0	2,457.7	2,516.0	2,515.4	8.4	4.5	105.89	-4,328.8	492.6	4,498.8	4,486.3	12.42	362.268		
2,600.0	2,554.7	2,600.0	2,599.4	8.9	4.6	106.18	-4,328.0	489.8	4,504.5	4,491.5	13.00	346.423		
2,700.0	2,651.7	2,685.9	2,685.3	9.4	4.8	106.46	-4,327.3	487.4	4,510.7	4,497.2	13.59	331.970		
2,800.0	2,748.7	2,775.2	2,774.5	9.8	4.9	106.75	-4,326.9	485.4	4,517.4	4,503.2	14.18	318.616		
2,900.0	2,845.7	2,879.3	2,878.7	10.3	5.1	107.08	-4,326.4	483.4	4,524.1	4,509.3	14.79	305.848		
3,000.0	2,942.7	2,983.2	2,982.6	10.8	5.3	107.41	-4,325.7	481.9	4,530.8	4,515.4	15.40	294.120		
3,100.0	3,039.7	3,071.2	3,070.5	11.2	5.4	107.69	-4,325.0	480.4	4,537.7	4,521.7	15.99	283.800		
3,200.0	3,136.7	3,164.5	3,163.8	11.7	5.6	107.98	-4,324.6	478.6	4,544.8	4,528.2	16.58	274.099		
3,300.0	3,233.6	3,247.6	3,246.9	12.2	5.8	108.24	-4,324.2	477.3	4,552.2	4,535.1	17.15	265.393		
3,400.0	3,330.6	3,331.9	3,331.1	12.6	5.9	108.50	-4,324.2	476.3	4,560.1	4,542.4	17.72	257.279		
3,500.0	3,427.6	3,430.6	3,429.8	13.1	6.1	108.80	-4,324.2	475.5	4,568.2	4,549.8	18.32	249.352		
3,600.0	3,524.6	3,517.6	3,516.9	13.6	6.2	109.06	-4,324.4	474.8	4,576.5	4,557.6	18.89	242.217		
3,700.0	3,621.6	3,617.9	3,617.2	14.0	6.4	109.36	-4,324.6	473.9	4,585.0	4,565.5	19.49	235.245		
3,800.0	3,718.6	3,723.5	3,722.8	14.5	6.6	109.67	-4,324.7	473.1	4,593.4	4,573.3	20.09	228.600		
3,900.0	3,815.6	3,816.0	3,815.3	15.0	6.7	109.94	-4,324.7	472.6	4,602.0	4,581.3	20.67	222.609		
4,000.0	3,912.6	3,910.8	3,910.1	15.4	6.9	110.22	-4,324.8	471.6	4,610.7	4,589.4	21.26	216.913		
4,100.0	4,009.5	4,000.9	4,000.2	15.9	7.1	110.50	-4,324.9	470.3	4,619.6	4,597.8	21.83	211.626		
4,200.0	4,106.5	4,104.7	4,104.0	16.4	7.3	110.82	-4,325.1	468.3	4,628.7	4,606.3	22.43	206.393		
4,300.0	4,203.5	4,219.5	4,218.7	16.8	7.5	111.17	-4,324.8	466.0	4,637.6	4,614.6	23.04	201.270		
4,400.0	4,300.5	4,314.4	4,313.6	17.3	7.6	111.46	-4,324.5	463.6	4,646.5	4,622.9	23.62	196.712		
4,500.0	4,397.5	4,406.3	4,405.4	17.8	7.8	111.75	-4,324.2	461.1	4,655.6	4,631.4	24.19	192.442		
4,600.0	4,494.5	4,500.0	4,499.1	18.2	8.0	112.04	-4,324.0	459.0	4,664.9	4,640.1	24.76	188.382		
4,700.0	4,591.5	4,586.0	4,585.1	18.7	8.1	112.30	-4,324.0	457.4	4,674.5	4,649.2	25.32	184.623		
4,800.0	4,688.5	4,717.5	4,716.6	19.2	8.3	112.69	-4,323.6	455.0	4,683.9	4,657.9	25.96	180.460		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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					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	4,785.4	4,800.0	4,799.1	19.6	8.5	112.94	-4,323.2	453.4	4,693.3	4,666.8	26.50	177.092	
5,000.0	4,882.4	4,906.3	4,905.3	20.1	8.7	113.26	-4,322.8	451.1	4,703.0	4,675.9	27.09	173.609	
5,100.0	4,979.4	5,028.7	5,027.7	20.6	8.9	113.61	-4,321.7	449.3	4,712.1	4,684.4	27.70	170.106	
5,200.0	5,076.4	5,125.8	5,124.8	21.0	9.1	113.89	-4,320.8	448.1	4,721.3	4,693.0	28.27	167.022	
5,300.0	5,173.4	5,249.5	5,248.5	21.5	9.3	114.25	-4,319.1	446.7	4,730.3	4,701.4	28.88	163.802	
5,400.0	5,270.4	5,348.6	5,347.6	22.0	9.5	114.52	-4,317.4	445.9	4,739.0	4,709.5	29.44	160.951	
5,500.0	5,367.4	5,433.0	5,432.0	22.5	9.6	114.76	-4,316.1	445.3	4,747.9	4,718.0	29.98	158.357	
5,600.0	5,464.4	5,524.5	5,523.5	22.9	9.8	115.02	-4,315.0	444.3	4,757.3	4,726.8	30.53	155.814	
5,700.0	5,561.4	5,631.5	5,630.5	23.4	10.0	115.32	-4,313.4	443.5	4,766.5	4,735.4	31.11	153.237	
5,800.0	5,658.3	5,710.9	5,709.8	23.9	10.1	115.53	-4,312.4	443.1	4,776.1	4,744.5	31.63	151.000	
5,900.0	5,755.3	5,827.7	5,826.7	24.3	10.3	115.85	-4,311.0	442.4	4,785.7	4,753.5	32.22	148.546	
6,000.0	5,852.3	5,930.4	5,929.3	24.8	10.5	116.13	-4,309.3	442.1	4,795.1	4,762.3	32.78	146.290	
6,100.0	5,949.3	6,000.0	5,998.9	25.3	10.6	116.31	-4,308.4	442.0	4,804.9	4,771.6	33.28	144.378	
6,200.0	6,046.3	6,073.2	6,072.1	25.7	10.7	116.51	-4,307.8	441.8	4,815.3	4,781.5	33.79	142.522	
6,300.0	6,143.3	6,141.6	6,140.5	26.2	10.8	116.69	-4,307.7	441.3	4,826.3	4,792.0	34.28	140.786	
6,400.0	6,240.3	6,212.8	6,211.7	26.7	11.0	116.89	-4,307.9	440.5	4,838.0	4,803.2	34.78	139.111	
6,500.0	6,337.3	6,346.4	6,345.3	27.1	11.2	117.24	-4,308.3	439.6	4,849.8	4,814.4	35.39	137.053	
6,600.0	6,434.2	6,468.8	6,467.7	27.6	11.4	117.56	-4,307.6	439.0	4,860.8	4,824.8	35.97	135.124	
6,700.0	6,531.2	6,561.5	6,560.3	28.1	11.6	117.81	-4,306.9	438.2	4,871.8	4,835.3	36.50	133.461	
6,800.0	6,628.2	6,665.3	6,664.2	28.5	11.8	118.08	-4,306.2	437.5	4,883.0	4,845.9	37.05	131.785	
6,900.0	6,725.2	6,789.4	6,788.3	29.0	12.0	118.41	-4,305.0	436.6	4,893.9	4,856.3	37.64	130.034	
7,000.0	6,822.2	6,896.9	6,895.7	29.5	12.2	118.69	-4,303.4	435.8	4,904.5	4,866.3	38.19	128.435	
7,100.0	6,919.2	6,992.1	6,990.9	30.0	12.3	118.94	-4,302.0	435.5	4,915.1	4,876.4	38.71	126.959	
7,200.0	7,016.2	7,079.4	7,078.3	30.4	12.5	119.16	-4,300.9	435.7	4,925.9	4,886.7	39.23	125.577	
7,300.0	7,113.2	7,203.9	7,202.7	30.9	12.7	119.45	-4,299.5	437.4	4,936.8	4,897.0	39.80	124.040	
7,328.7	7,141.0	7,273.6	7,272.4	31.0	12.8	119.60	-4,298.5	439.8	4,939.7	4,899.7	40.02	123.432	
7,350.0	7,161.7	7,300.0	7,298.7	31.1	12.8	111.21	-4,298.1	441.2	4,941.3	4,901.2	40.14	123.091	
7,400.0	7,210.3	7,342.1	7,340.8	31.3	12.9	90.60	-4,297.4	443.6	4,942.2	4,901.8	40.42	122.285	
7,450.0	7,258.7	7,376.8	7,375.4	31.5	13.0	72.74	-4,297.1	445.8	4,939.0	4,898.3	40.69	121.392	
7,500.0	7,306.5	7,400.0	7,398.5	31.7	13.0	59.75	-4,296.9	447.3	4,931.7	4,890.7	40.95	120.440	
7,550.0	7,353.4	7,440.3	7,438.7	31.8	13.1	50.98	-4,296.7	450.0	4,920.4	4,879.1	41.25	119.289	
7,600.0	7,399.0	7,469.6	7,468.0	31.9	13.1	45.10	-4,296.7	451.7	4,905.2	4,863.6	41.54	118.095	
7,650.0	7,442.9	7,500.0	7,498.3	32.0	13.2	41.17	-4,296.7	453.4	4,886.1	4,844.3	41.83	116.804	
7,700.0	7,484.9	7,530.1	7,528.4	32.1	13.2	38.61	-4,296.8	455.0	4,863.4	4,821.3	42.13	115.429	
7,750.0	7,524.5	7,560.8	7,559.1	32.1	13.3	37.06	-4,296.9	456.4	4,837.2	4,794.8	42.44	113.975	
7,800.0	7,561.6	7,600.0	7,598.2	32.1	13.3	36.39	-4,297.1	458.1	4,807.6	4,764.8	42.77	112.417	
7,850.0	7,595.8	7,617.6	7,615.8	32.2	13.4	36.33	-4,297.2	458.7	4,774.8	4,731.8	43.05	110.903	
7,900.0	7,626.8	7,644.0	7,642.1	32.2	13.4	37.05	-4,297.4	459.7	4,739.1	4,695.8	43.36	109.299	
7,950.0	7,654.5	7,667.5	7,665.7	32.2	13.4	38.53	-4,297.5	460.5	4,700.8	4,657.1	43.66	107.672	
8,000.0	7,678.5	7,688.1	7,686.2	32.3	13.5	40.93	-4,297.7	461.1	4,660.0	4,616.1	43.95	106.030	
8,050.0	7,698.8	7,709.0	7,707.1	32.3	13.5	44.56	-4,297.8	461.8	4,617.2	4,573.0	44.24	104.369	
8,100.0	7,715.2	7,732.0	7,730.1	32.3	13.6	49.94	-4,298.0	462.4	4,572.6	4,528.1	44.53	102.690	
8,150.0	7,727.5	7,749.3	7,747.4	32.4	13.6	57.66	-4,298.0	462.9	4,526.6	4,481.8	44.80	101.039	
8,200.0	7,735.6	7,760.7	7,758.9	32.4	13.6	68.61	-4,298.1	463.2	4,479.4	4,434.3	45.05	99.423	
8,250.0	7,739.6	7,766.3	7,764.5	32.4	13.6	83.46	-4,298.1	463.4	4,431.5	4,386.2	45.29	97.851	
8,271.7	7,740.0	7,767.0	7,765.1	32.5	13.6	90.99	-4,298.1	463.4	4,410.6	4,365.3	45.39	97.182	
8,300.0	7,740.0	7,767.1	7,765.2	32.5	13.6	91.00	-4,298.1	463.4	4,383.3	4,337.8	45.51	96.310	
8,400.0	7,740.0	7,767.4	7,765.6	32.7	13.6	91.02	-4,298.1	463.4	4,286.9	4,241.0	45.97	93.254	
8,500.0	7,740.0	7,767.8	7,765.9	33.0	13.6	91.04	-4,298.1	463.4	4,190.8	4,144.3	46.44	90.231	
8,600.0	7,740.0	7,768.2	7,766.3	33.4	13.6	91.05	-4,298.1	463.5	4,094.7	4,047.8	46.94	87.241	
8,700.0	7,740.0	7,768.5	7,766.6	33.8	13.6	91.07	-4,298.1	463.5	3,998.9	3,951.5	47.45	84.284	
8,800.0	7,740.0	7,768.9	7,767.0	34.4	13.6	91.09	-4,298.1	463.5	3,903.3	3,855.3	47.98	81.361	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI											Offset Site Error: 0.0 ft		
Survey Program: 100-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
8,900.0	7,740.0	7,769.2	7,767.3	35.0	13.6	91.10	-4,298.1	463.5	3,807.9	3,759.4	48.53	78.472	
9,000.0	7,740.0	7,769.5	7,767.7	35.7	13.6	91.12	-4,298.1	463.5	3,712.8	3,663.7	49.10	75.618	
9,100.0	7,740.0	7,769.9	7,768.0	36.4	13.6	91.14	-4,298.1	463.5	3,617.9	3,568.2	49.70	72.800	
9,200.0	7,740.0	7,770.2	7,768.3	37.3	13.6	91.15	-4,298.1	463.5	3,523.3	3,473.0	50.32	70.017	
9,300.0	7,740.0	7,770.5	7,768.6	38.2	13.6	91.17	-4,298.1	463.5	3,429.1	3,378.1	50.97	67.272	
9,400.0	7,740.0	7,770.8	7,768.9	39.1	13.6	91.18	-4,298.1	463.5	3,335.1	3,283.4	51.66	64.564	
9,500.0	7,740.0	7,771.1	7,769.3	40.1	13.6	91.20	-4,298.1	463.5	3,241.5	3,189.1	52.37	61.895	
9,600.0	7,740.0	7,771.4	7,769.6	41.2	13.6	91.21	-4,298.1	463.5	3,148.3	3,095.2	53.12	59.267	
9,700.0	7,740.0	7,771.7	7,769.9	42.3	13.6	91.23	-4,298.1	463.5	3,055.6	3,001.6	53.91	56.679	
9,800.0	7,740.0	7,772.0	7,770.1	43.5	13.6	91.24	-4,298.1	463.6	2,963.3	2,908.5	54.74	54.134	
9,900.0	7,740.0	7,772.3	7,770.4	44.7	13.6	91.26	-4,298.1	463.6	2,871.5	2,815.9	55.61	51.634	
10,000.0	7,740.0	7,772.6	7,770.7	45.9	13.6	91.27	-4,298.1	463.6	2,780.3	2,723.7	56.53	49.179	
10,100.0	7,740.0	7,772.9	7,771.0	47.1	13.6	91.29	-4,298.1	463.6	2,689.7	2,632.2	57.51	46.772	
10,200.0	7,740.0	7,773.1	7,771.3	48.4	13.6	91.30	-4,298.1	463.6	2,599.8	2,541.3	58.53	44.415	
10,300.0	7,740.0	7,773.4	7,771.5	49.8	13.6	91.31	-4,298.1	463.6	2,510.7	2,451.0	59.62	42.109	
10,400.0	7,740.0	7,773.7	7,771.8	51.1	13.6	91.33	-4,298.1	463.6	2,422.4	2,361.6	60.77	39.859	
10,500.0	7,740.0	7,773.9	7,772.1	52.5	13.6	91.34	-4,298.1	463.6	2,335.0	2,273.0	61.99	37.665	
10,600.0	7,740.0	7,774.2	7,772.3	53.9	13.6	91.35	-4,298.1	463.6	2,248.8	2,185.5	63.29	35.532	
10,700.0	7,740.0	7,774.5	7,772.6	55.3	13.6	91.36	-4,298.1	463.6	2,163.7	2,099.0	64.66	33.461	
10,800.0	7,740.0	7,774.7	7,772.8	56.7	13.6	91.38	-4,298.1	463.6	2,079.9	2,013.8	66.12	31.458	
10,900.0	7,740.0	7,775.0	7,773.1	58.2	13.6	91.39	-4,298.1	463.6	1,997.6	1,929.9	67.66	29.526	
11,000.0	7,740.0	7,775.2	7,773.3	59.7	13.6	91.40	-4,298.1	463.6	1,917.0	1,847.7	69.29	27.668	
11,100.0	7,740.0	7,775.4	7,773.6	61.2	13.6	91.41	-4,298.1	463.7	1,838.3	1,767.3	71.01	25.889	
11,200.0	7,740.0	7,775.7	7,773.8	62.7	13.6	91.42	-4,298.1	463.7	1,761.8	1,689.0	72.82	24.195	
11,300.0	7,740.0	7,775.9	7,774.0	64.2	13.6	91.44	-4,298.1	463.7	1,687.7	1,613.0	74.71	22.590	
11,400.0	7,740.0	7,776.1	7,774.3	65.7	13.6	91.45	-4,298.1	463.7	1,616.4	1,539.8	76.68	21.080	
11,500.0	7,740.0	7,776.4	7,774.5	67.2	13.6	91.46	-4,298.1	463.7	1,548.4	1,469.6	78.72	19.670	
11,600.0	7,740.0	7,776.6	7,774.7	68.8	13.6	91.47	-4,298.1	463.7	1,483.9	1,403.1	80.79	18.368	
11,700.0	7,740.0	7,776.8	7,774.9	70.3	13.6	91.48	-4,298.1	463.7	1,423.5	1,340.6	82.86	17.179	
11,800.0	7,740.0	7,777.0	7,775.1	71.9	13.6	91.49	-4,298.1	463.7	1,367.8	1,282.9	84.90	16.110	
11,900.0	7,740.0	7,777.2	7,775.3	73.5	13.6	91.50	-4,298.1	463.7	1,317.3	1,230.5	86.85	15.168	
12,000.0	7,740.0	7,777.4	7,775.6	75.1	13.6	91.51	-4,298.1	463.7	1,272.7	1,184.1	88.62	14.361	
12,100.0	7,740.0	7,777.6	7,775.8	76.6	13.6	91.52	-4,298.1	463.7	1,234.7	1,144.5	90.16	13.695	
12,200.0	7,740.0	7,777.8	7,776.0	78.2	13.6	91.53	-4,298.1	463.7	1,203.7	1,112.3	91.36	13.176	
12,300.0	7,740.0	7,778.0	7,776.2	79.8	13.6	91.54	-4,298.1	463.7	1,180.4	1,088.3	92.14	12.811	
12,400.0	7,740.0	7,778.2	7,776.4	81.5	13.6	91.55	-4,298.1	463.7	1,165.3	1,072.8	92.45	12.605	
12,500.0	7,740.0	7,778.4	7,776.6	83.1	13.6	91.56	-4,298.1	463.7	1,158.6	1,066.4	92.22	12.563 SF	
12,527.5	7,740.0	7,778.5	7,776.6	83.5	13.6	91.56	-4,298.1	463.7	1,158.3	1,066.2	92.06	12.581 CC, ES	
12,600.0	7,740.0	7,778.6	7,776.8	84.7	13.6	91.57	-4,298.1	463.7	1,160.5	1,069.1	91.46	12.689	
12,700.0	7,740.0	7,778.8	7,776.9	86.3	13.6	91.58	-4,298.1	463.7	1,171.0	1,080.9	90.18	12.985	
12,800.0	7,740.0	7,779.0	7,777.1	88.0	13.6	91.59	-4,298.1	463.7	1,189.9	1,101.4	88.45	13.452	
12,900.0	7,740.0	7,779.2	7,777.3	89.6	13.6	91.60	-4,298.1	463.8	1,216.7	1,130.3	86.35	14.090	
13,000.0	7,740.0	7,779.4	7,777.5	91.2	13.6	91.61	-4,298.1	463.8	1,250.9	1,167.0	83.97	14.897	
13,100.0	7,740.0	7,779.6	7,777.7	92.9	13.6	91.62	-4,298.1	463.8	1,292.0	1,210.6	81.41	15.870	
13,200.0	7,740.0	7,779.7	7,777.9	94.5	13.6	91.63	-4,298.1	463.8	1,339.3	1,260.6	78.76	17.005	
13,300.0	7,740.0	7,779.9	7,778.0	96.2	13.6	91.63	-4,298.1	463.8	1,392.2	1,316.1	76.09	18.296	
13,400.0	7,740.0	7,780.1	7,778.2	97.8	13.6	91.64	-4,298.1	463.8	1,450.1	1,376.6	73.47	19.738	
13,500.0	7,740.0	7,780.3	7,778.4	99.5	13.6	91.65	-4,298.1	463.8	1,512.4	1,441.5	70.93	21.321	
13,600.0	7,740.0	7,780.4	7,778.6	101.2	13.6	91.66	-4,298.1	463.8	1,578.6	1,510.0	68.51	23.040	
13,700.0	7,740.0	7,780.6	7,778.7	102.8	13.6	91.67	-4,298.1	463.8	1,648.1	1,581.9	66.23	24.883	
13,800.0	7,740.0	7,780.8	7,778.9	104.5	13.6	91.68	-4,298.1	463.8	1,720.7	1,656.6	64.10	26.844	
13,900.0	7,740.0	7,780.9	7,779.1	106.2	13.6	91.68	-4,298.1	463.8	1,795.9	1,733.8	62.12	28.911	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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)						
14,000.0	7,740.0	7,781.1	7,779.2	107.8	13.6	91.69	-4,298.1	463.8	1,873.4	1,813.2	60.29	31.076		
14,100.0	7,740.0	7,781.3	7,779.4	109.5	13.6	91.70	-4,298.1	463.8	1,953.0	1,894.4	58.60	33.329		
14,200.0	7,740.0	7,781.4	7,779.5	111.2	13.6	91.71	-4,298.1	463.8	2,034.4	1,977.4	57.05	35.660		
14,300.0	7,740.0	7,781.6	7,779.7	112.9	13.6	91.72	-4,298.1	463.8	2,117.4	2,061.7	55.63	38.059		
14,400.0	7,740.0	7,781.7	7,779.8	114.6	13.6	91.72	-4,298.1	463.8	2,201.8	2,147.4	54.34	40.518		
14,500.0	7,740.0	7,781.9	7,780.0	116.3	13.6	91.73	-4,298.1	463.8	2,287.4	2,234.3	53.16	43.027		
14,600.0	7,740.0	7,782.0	7,780.1	117.9	13.6	91.74	-4,298.1	463.8	2,374.2	2,322.1	52.09	45.579		
14,700.0	7,740.0	7,782.2	7,780.3	119.6	13.6	91.75	-4,298.1	463.8	2,462.0	2,410.8	51.12	48.164		
14,800.0	7,740.0	7,782.3	7,780.4	121.3	13.6	91.75	-4,298.1	463.8	2,550.6	2,500.4	50.23	50.777		
14,900.0	7,740.0	7,782.5	7,780.6	123.0	13.6	91.76	-4,298.1	463.8	2,640.1	2,590.7	49.43	53.411		
15,000.0	7,740.0	7,782.6	7,780.7	124.7	13.6	91.77	-4,298.1	463.8	2,730.3	2,681.6	48.71	56.058		
15,100.0	7,740.0	7,782.7	7,780.9	126.4	13.6	91.77	-4,298.1	463.9	2,821.2	2,773.2	48.05	58.714		
15,200.0	7,740.0	7,782.9	7,781.0	128.1	13.6	91.78	-4,298.1	463.9	2,912.7	2,865.2	47.46	61.373		
15,300.0	7,740.0	7,783.0	7,781.1	129.8	13.6	91.79	-4,298.1	463.9	3,004.7	2,957.8	46.93	64.031		
15,400.0	7,740.0	7,783.2	7,781.3	131.5	13.6	91.80	-4,298.1	463.9	3,097.2	3,050.8	46.45	66.683		
15,500.0	7,740.0	7,783.3	7,781.4	133.2	13.6	91.80	-4,298.1	463.9	3,190.2	3,144.2	46.02	69.328		
15,600.0	7,740.0	7,783.4	7,781.6	134.9	13.6	91.81	-4,298.1	463.9	3,283.6	3,237.9	45.63	71.961		
15,700.0	7,740.0	7,783.6	7,781.7	136.6	13.6	91.82	-4,298.1	463.9	3,377.3	3,332.0	45.28	74.579		
15,800.0	7,740.0	7,783.7	7,781.8	138.3	13.6	91.82	-4,298.1	463.9	3,471.4	3,426.4	44.98	77.182		
15,900.0	7,740.0	7,783.8	7,781.9	140.0	13.6	91.83	-4,298.1	463.9	3,565.8	3,521.1	44.70	79.766		
16,000.0	7,740.0	7,784.0	7,782.1	141.7	13.6	91.83	-4,298.1	463.9	3,660.6	3,616.1	44.46	82.331		
16,100.0	7,740.0	7,784.1	7,782.2	143.5	13.6	91.84	-4,298.1	463.9	3,755.6	3,711.3	44.25	84.875		
16,171.7	7,740.0	7,784.2	7,782.3	144.7	13.6	91.85	-4,298.1	463.9	3,823.8	3,779.7	44.11	86.685		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	153.37	-2,303.7	1,154.9	2,576.9					
100.0	100.0	114.1	114.1	0.2	0.2	153.37	-2,303.6	1,154.9	2,576.9	2,576.5	0.35	7,399.946		
150.0	150.0	165.5	165.5	0.2	0.3	153.37	-2,303.5	1,154.9	2,576.8	2,576.3	0.52	4,918.047		
153.8	153.8	169.5	169.5	0.2	0.3	153.37	-2,303.5	1,154.9	2,576.8	2,576.3	0.54	4,794.735		
200.0	200.0	216.9	216.9	0.3	0.4	153.37	-2,303.4	1,154.9	2,577.3	2,576.6	0.70	3,682.770		
283.3	283.2	302.5	302.5	0.5	0.5	153.36	-2,303.1	1,154.9	2,580.6	2,579.6	1.00	2,591.873		
300.0	299.9	319.6	319.6	0.5	0.6	150.99	-2,303.1	1,154.9	2,581.6	2,580.6	1.06	2,446.648		
400.0	399.6	422.2	422.2	0.7	0.7	137.32	-2,302.6	1,154.9	2,587.0	2,585.6	1.42	1,823.393		
500.0	499.3	524.7	524.7	0.9	0.9	125.49	-2,302.0	1,154.9	2,591.5	2,589.7	1.79	1,445.062		
600.0	598.9	627.2	627.2	1.2	1.1	115.98	-2,301.3	1,154.9	2,595.2	2,593.0	2.18	1,189.738		
700.0	698.5	729.7	729.7	1.4	1.3	108.59	-2,300.5	1,154.9	2,598.1	2,595.5	2.58	1,005.127		
800.0	797.9	832.0	832.0	1.6	1.4	102.90	-2,299.5	1,155.0	2,600.2	2,597.2	3.01	865.059		
900.0	897.1	934.1	934.1	1.9	1.6	98.52	-2,298.5	1,155.0	2,601.5	2,598.1	3.45	754.974		
1,000.0	996.2	1,024.0	1,024.0	2.2	1.8	95.08	-2,297.4	1,155.0	2,602.1	2,598.2	3.89	669.685		
1,100.0	1,095.0	1,102.9	1,102.8	2.5	1.9	92.34	-2,296.8	1,155.3	2,602.6	2,598.3	4.33	600.980		
1,200.0	1,193.6	1,183.0	1,183.0	2.8	2.0	90.16	-2,297.1	1,156.3	2,603.7	2,598.9	4.80	542.273		
1,300.0	1,291.9	1,240.6	1,240.5	3.2	2.1	88.32	-2,297.9	1,157.3	2,605.3	2,600.0	5.26	495.690		
1,400.0	1,389.9	1,317.5	1,317.5	3.5	2.3	86.90	-2,299.6	1,158.9	2,607.4	2,601.6	5.77	451.902		
1,500.0	1,487.6	1,402.1	1,402.0	3.9	2.4	85.79	-2,301.9	1,160.9	2,609.5	2,603.1	6.32	412.657		
1,600.0	1,584.8	1,484.6	1,484.4	4.4	2.6	84.89	-2,304.3	1,163.5	2,611.6	2,604.7	6.90	378.430		
1,624.3	1,608.4	1,503.7	1,503.4	4.5	2.6	84.70	-2,304.9	1,164.2	2,612.2	2,605.1	7.04	370.945		
1,700.0	1,681.8	1,564.0	1,563.7	4.8	2.7	84.99	-2,306.9	1,166.9	2,614.1	2,606.6	7.48	349.274		
1,800.0	1,778.8	1,637.2	1,636.7	5.3	2.9	85.31	-2,309.5	1,171.1	2,617.6	2,609.5	8.06	324.647		
1,900.0	1,875.8	1,719.1	1,718.4	5.7	3.0	85.66	-2,312.6	1,177.0	2,622.0	2,613.3	8.66	302.702		
2,000.0	1,972.8	1,812.9	1,811.8	6.2	3.2	86.04	-2,316.4	1,184.1	2,626.9	2,617.6	9.29	282.804		
2,100.0	2,069.8	1,909.6	1,908.2	6.6	3.4	86.44	-2,320.4	1,191.5	2,632.0	2,622.1	9.93	265.166		
2,200.0	2,166.8	2,013.9	2,012.1	7.1	3.6	86.86	-2,324.6	1,199.5	2,637.2	2,626.6	10.58	249.237		
2,300.0	2,263.8	2,096.4	2,094.2	7.5	3.8	87.20	-2,328.0	1,205.6	2,642.6	2,631.4	11.19	236.086		
2,400.0	2,360.8	2,178.5	2,176.0	8.0	3.9	87.54	-2,331.9	1,212.2	2,648.8	2,637.0	11.81	224.357		
2,500.0	2,457.7	2,265.1	2,262.1	8.4	4.1	87.88	-2,336.3	1,219.2	2,655.6	2,643.2	12.43	213.620		
2,600.0	2,554.7	2,362.9	2,359.5	8.9	4.4	88.27	-2,341.7	1,227.8	2,663.0	2,649.9	13.08	203.557		
2,700.0	2,651.7	2,502.9	2,498.9	9.4	4.6	88.85	-2,348.6	1,237.7	2,669.5	2,655.7	13.82	193.139		
2,800.0	2,748.7	2,611.8	2,607.5	9.8	4.9	89.30	-2,352.7	1,245.2	2,675.0	2,660.5	14.50	184.500		
2,900.0	2,845.7	2,694.1	2,689.5	10.3	5.1	89.62	-2,355.8	1,251.4	2,680.9	2,665.7	15.12	177.328		
3,000.0	2,942.7	2,785.8	2,780.8	10.8	5.3	89.99	-2,360.0	1,258.1	2,687.5	2,671.7	15.76	170.546		
3,100.0	3,039.7	2,901.0	2,895.7	11.2	5.5	90.46	-2,364.9	1,266.2	2,693.8	2,677.4	16.45	163.762		
3,200.0	3,136.7	3,004.0	2,998.3	11.7	5.7	90.88	-2,368.8	1,273.2	2,699.9	2,682.8	17.12	157.741		
3,300.0	3,233.6	3,094.0	3,088.1	12.2	5.9	91.24	-2,372.2	1,279.5	2,706.2	2,688.4	17.75	152.436		
3,400.0	3,330.6	3,185.1	3,178.9	12.6	6.1	91.60	-2,376.0	1,285.9	2,712.9	2,694.5	18.39	147.482		
3,500.0	3,427.6	3,303.2	3,296.5	13.1	6.4	92.07	-2,380.7	1,294.6	2,719.6	2,700.5	19.10	142.406		
3,600.0	3,524.6	3,390.9	3,383.9	13.6	6.6	92.40	-2,383.8	1,301.1	2,726.1	2,706.4	19.74	138.122		
3,700.0	3,621.6	3,482.5	3,475.2	14.0	6.8	92.75	-2,387.3	1,308.3	2,733.1	2,712.7	20.38	134.098		
3,800.0	3,718.6	3,575.4	3,567.8	14.5	7.0	93.11	-2,391.2	1,315.1	2,740.4	2,719.4	21.03	130.331		
3,900.0	3,815.6	3,666.3	3,678.2	15.0	7.2	93.52	-2,395.6	1,323.5	2,747.7	2,726.0	21.72	126.493		
4,000.0	3,912.6	3,785.0	3,776.6	15.4	7.5	93.88	-2,399.0	1,331.6	2,754.8	2,732.4	22.39	123.041		
4,100.0	4,009.5	3,871.1	3,862.3	15.9	7.7	94.20	-2,402.3	1,338.3	2,762.1	2,739.1	23.02	119.992		
4,200.0	4,106.5	3,963.5	3,954.4	16.4	7.9	94.54	-2,406.2	1,345.5	2,770.1	2,746.4	23.67	117.026		
4,300.0	4,203.5	4,063.7	4,054.1	16.8	8.1	94.90	-2,410.3	1,353.9	2,778.1	2,753.8	24.34	114.133		
4,400.0	4,300.5	4,155.0	4,145.0	17.3	8.3	95.22	-2,414.2	1,361.5	2,786.4	2,761.4	24.99	111.505		
4,500.0	4,397.5	4,240.2	4,229.8	17.8	8.5	95.52	-2,418.1	1,368.7	2,795.1	2,769.5	25.62	109.085		
4,600.0	4,494.5	4,346.9	4,336.0	18.2	8.8	95.90	-2,423.1	1,377.8	2,804.1	2,777.8	26.31	106.584		
4,700.0	4,591.5	4,468.7	4,457.3	18.7	9.1	96.33	-2,428.3	1,387.2	2,812.6	2,785.6	27.03	104.051		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,800.0	4,688.5	4,584.5	4,572.7	19.2	9.3	96.75	-2,432.4	1,396.1	2,820.4	2,792.7	27.74	101.689	
4,900.0	4,785.4	4,697.6	4,685.5	19.6	9.6	97.16	-2,435.7	1,403.9	2,827.7	2,799.3	28.42	99.480	
5,000.0	4,882.4	4,803.0	4,790.7	20.1	9.8	97.57	-2,438.7	1,410.1	2,834.8	2,805.8	29.08	97.476	
5,100.0	4,979.4	4,930.1	4,917.7	20.6	10.0	98.12	-2,442.1	1,414.4	2,841.6	2,811.8	29.76	95.494	
5,200.0	5,076.4	5,083.7	5,071.2	21.0	10.2	98.85	-2,444.2	1,415.1	2,846.7	2,816.2	30.45	93.481	
5,300.0	5,173.4	5,180.6	5,168.2	21.5	10.4	99.33	-2,444.8	1,415.1	2,851.3	2,820.2	31.05	91.837	
5,400.0	5,270.4	5,295.4	5,283.0	22.0	10.5	99.89	-2,445.2	1,414.7	2,855.8	2,824.1	31.67	90.183	
5,500.0	5,367.4	5,397.7	5,385.3	22.5	10.7	100.39	-2,445.0	1,414.1	2,859.9	2,827.6	32.26	88.645	
5,600.0	5,464.4	5,494.7	5,482.2	22.9	10.8	100.87	-2,444.9	1,413.4	2,864.3	2,831.5	32.85	87.202	
5,700.0	5,561.4	5,595.8	5,583.3	23.4	11.0	101.37	-2,444.7	1,412.6	2,868.9	2,835.4	33.44	85.802	
5,800.0	5,658.3	5,690.3	5,677.9	23.9	11.1	101.83	-2,444.4	1,411.8	2,873.5	2,839.5	34.01	84.484	
5,900.0	5,755.3	5,790.4	5,777.9	24.3	11.3	102.32	-2,444.2	1,411.1	2,878.5	2,843.9	34.60	83.204	
6,000.0	5,852.3	5,897.2	5,884.7	24.8	11.4	102.85	-2,443.7	1,410.2	2,883.3	2,848.2	35.18	81.951	
6,100.0	5,949.3	5,996.0	5,983.5	25.3	11.6	103.33	-2,443.0	1,409.2	2,888.2	2,852.5	35.76	80.776	
6,200.0	6,046.3	6,091.9	6,079.4	25.7	11.7	103.80	-2,442.3	1,408.0	2,893.3	2,856.9	36.32	79.656	
6,300.0	6,143.3	6,185.6	6,173.1	26.2	11.9	104.25	-2,441.6	1,407.7	2,898.6	2,861.7	36.89	78.574	
6,400.0	6,240.3	6,285.3	6,272.9	26.7	12.0	104.71	-2,441.0	1,407.7	2,904.2	2,866.7	37.46	77.518	
6,500.0	6,337.3	6,384.6	6,372.1	27.1	12.2	105.17	-2,440.1	1,407.7	2,909.8	2,871.8	38.04	76.503	
6,600.0	6,434.2	6,477.8	6,465.3	27.6	12.3	105.60	-2,439.5	1,407.7	2,915.7	2,877.1	38.59	75.549	
6,700.0	6,531.2	6,572.4	6,559.9	28.1	12.5	106.04	-2,438.8	1,407.5	2,921.9	2,882.7	39.15	74.634	
6,800.0	6,628.2	6,663.0	6,650.5	28.5	12.6	106.46	-2,438.4	1,407.3	2,928.4	2,888.7	39.70	73.770	
6,900.0	6,725.2	6,752.3	6,739.8	29.0	12.8	106.87	-2,438.2	1,407.1	2,935.3	2,895.1	40.24	72.949	
7,000.0	6,822.2	6,847.1	6,834.6	29.5	12.9	107.31	-2,438.1	1,406.9	2,942.6	2,901.8	40.78	72.150	
7,100.0	6,919.2	6,942.4	6,929.9	30.0	13.1	107.74	-2,438.1	1,406.8	2,950.1	2,908.8	41.33	71.379	
7,200.0	7,016.2	7,038.9	7,026.4	30.4	13.2	108.18	-2,438.1	1,406.7	2,957.9	2,916.0	41.87	70.636	
7,300.0	7,113.2	7,147.2	7,134.7	30.9	13.4	108.66	-2,438.0	1,406.7	2,965.7	2,923.2	42.44	69.883	
7,328.7	7,141.0	7,183.1	7,170.6	31.0	13.5	108.82	-2,437.8	1,406.8	2,967.8	2,925.2	42.61	69.656	
7,350.0	7,161.7	7,209.8	7,197.3	31.1	13.5	100.53	-2,437.6	1,406.8	2,969.0	2,926.3	42.73	69.479	
7,400.0	7,210.3	7,268.3	7,255.8	31.3	13.6	80.12	-2,437.1	1,407.0	2,968.5	2,925.5	43.02	69.001	
7,450.0	7,258.7	7,320.1	7,307.6	31.5	13.7	62.37	-2,436.4	1,407.1	2,963.6	2,920.3	43.30	68.443	
7,500.0	7,306.5	7,358.3	7,345.7	31.7	13.7	49.37	-2,436.0	1,407.2	2,954.6	2,911.0	43.56	67.830	
7,550.0	7,353.4	7,397.1	7,384.6	31.8	13.8	40.49	-2,435.7	1,407.2	2,941.4	2,897.6	43.82	67.132	
7,600.0	7,399.0	7,442.7	7,430.2	31.9	13.9	34.47	-2,435.3	1,407.3	2,924.2	2,880.1	44.08	66.336	
7,650.0	7,442.9	7,486.7	7,474.2	32.0	13.9	30.31	-2,435.0	1,407.3	2,903.1	2,858.7	44.34	65.468	
7,700.0	7,484.9	7,526.2	7,513.6	32.1	14.0	27.40	-2,434.8	1,407.3	2,878.1	2,833.5	44.60	64.537	
7,750.0	7,524.5	7,564.4	7,551.9	32.1	14.1	25.39	-2,434.6	1,407.5	2,849.5	2,804.7	44.84	63.543	
7,800.0	7,561.6	7,601.2	7,588.6	32.1	14.1	24.05	-2,434.4	1,407.6	2,817.5	2,772.4	45.09	62.493	
7,850.0	7,595.8	7,638.0	7,625.5	32.2	14.2	23.30	-2,434.2	1,407.8	2,782.4	2,737.0	45.32	61.390	
7,900.0	7,626.8	7,672.9	7,660.4	32.2	14.3	23.07	-2,433.9	1,408.1	2,744.2	2,698.7	45.55	60.244	
7,950.0	7,654.5	7,696.8	7,684.3	32.2	14.3	23.27	-2,433.7	1,408.3	2,703.5	2,657.7	45.76	59.083	
8,000.0	7,678.5	7,716.8	7,704.2	32.3	14.3	24.04	-2,433.6	1,408.5	2,660.4	2,614.5	45.95	57.901	
8,050.0	7,698.8	7,733.6	7,721.1	32.3	14.4	25.60	-2,433.6	1,408.6	2,615.4	2,569.3	46.12	56.702	
8,100.0	7,715.2	7,748.6	7,736.1	32.3	14.4	28.45	-2,433.5	1,408.7	2,568.7	2,522.4	46.29	55.491	
8,150.0	7,727.5	7,760.8	7,748.3	32.4	14.4	33.71	-2,433.5	1,408.8	2,520.7	2,474.3	46.44	54.276	
8,200.0	7,735.6	7,768.9	7,756.4	32.4	14.4	44.53	-2,433.4	1,408.8	2,471.7	2,425.2	46.58	53.069	
8,250.0	7,739.6	7,772.7	7,760.2	32.4	14.4	71.32	-2,433.4	1,408.8	2,422.2	2,375.5	46.69	51.877	
8,271.7	7,740.0	7,773.0	7,760.5	32.5	14.4	92.55	-2,433.4	1,408.8	2,400.6	2,353.9	46.74	51.364	
8,300.0	7,740.0	7,772.9	7,760.4	32.5	14.4	92.53	-2,433.4	1,408.8	2,372.4	2,325.6	46.80	50.696	
8,400.0	7,740.0	7,772.6	7,760.1	32.7	14.4	92.43	-2,433.4	1,408.8	2,272.8	2,225.8	47.02	48.342	
8,500.0	7,740.0	7,772.2	7,759.7	33.0	14.4	92.34	-2,433.4	1,408.8	2,173.3	2,126.0	47.25	46.000	
8,600.0	7,740.0	7,771.9	7,759.4	33.4	14.4	92.25	-2,433.4	1,408.8	2,073.8	2,026.3	47.49	43.668	
8,700.0	7,740.0	7,771.6	7,759.0	33.8	14.4	92.16	-2,433.4	1,408.8	1,974.3	1,926.6	47.75	41.348	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,800.0	7,740.0	7,771.2	7,758.7	34.4	14.4	92.06	-2,433.4	1,408.8	1,874.9	1,826.9	48.03	39.039	
8,900.0	7,740.0	7,770.9	7,758.3	35.0	14.4	91.97	-2,433.4	1,408.8	1,775.6	1,727.3	48.33	36.742	
9,000.0	7,740.0	7,770.5	7,758.0	35.7	14.4	91.88	-2,433.4	1,408.8	1,676.4	1,627.7	48.65	34.457	
9,100.0	7,740.0	7,770.2	7,757.6	36.4	14.4	91.79	-2,433.4	1,408.8	1,577.3	1,528.3	49.01	32.185	
9,200.0	7,740.0	7,769.8	7,757.3	37.3	14.4	91.69	-2,433.4	1,408.8	1,478.2	1,428.8	49.39	29.927	
9,300.0	7,740.0	7,769.5	7,757.0	38.2	14.4	91.60	-2,433.4	1,408.8	1,379.3	1,329.5	49.82	27.684	
9,400.0	7,740.0	7,769.1	7,756.6	39.1	14.4	91.51	-2,433.4	1,408.8	1,280.6	1,230.3	50.31	25.457	
9,500.0	7,740.0	7,768.8	7,756.3	40.1	14.4	91.42	-2,433.4	1,408.8	1,182.1	1,131.3	50.85	23.248	
9,600.0	7,740.0	7,768.5	7,755.9	41.2	14.4	91.33	-2,433.4	1,408.8	1,083.9	1,032.5	51.47	21.058	
9,700.0	7,740.0	7,768.1	7,755.6	42.3	14.4	91.23	-2,433.4	1,408.8	986.1	933.9	52.20	18.892	
9,800.0	7,740.0	7,767.8	7,755.3	43.5	14.4	91.14	-2,433.4	1,408.8	888.7	835.6	53.05	16.753	
9,900.0	7,740.0	7,767.4	7,754.9	44.7	14.4	91.05	-2,433.4	1,408.8	792.0	737.9	54.06	14.649	
10,000.0	7,740.0	7,767.1	7,754.6	45.9	14.4	90.96	-2,433.4	1,408.8	696.2	640.9	55.30	12.588	
10,100.0	7,740.0	7,766.8	7,754.2	47.1	14.4	90.87	-2,433.4	1,408.8	601.7	544.9	56.85	10.585	
10,200.0	7,740.0	7,766.4	7,753.9	48.4	14.4	90.77	-2,433.4	1,408.8	509.4	450.6	58.79	8.665	
10,300.0	7,740.0	7,766.1	7,753.5	49.8	14.4	90.68	-2,433.4	1,408.8	420.6	359.4	61.24	6.869	
10,400.0	7,740.0	7,765.7	7,753.2	51.1	14.4	90.59	-2,433.4	1,408.8	338.2	274.0	64.15	5.272	
10,500.0	7,740.0	7,765.4	7,752.9	52.5	14.4	90.50	-2,433.4	1,408.8	268.0	201.3	66.70	4.017	
10,600.0	7,740.0	7,765.0	7,752.5	53.9	14.4	90.41	-2,433.4	1,408.8	221.9	156.4	65.49	3.388 SF	
10,662.8	7,740.0	7,764.8	7,752.3	54.8	14.4	90.35	-2,433.4	1,408.8	212.8	152.4	60.40	3.523 CC, ES	
10,700.0	7,740.0	7,764.7	7,752.2	55.3	14.4	90.31	-2,433.4	1,408.8	216.0	160.1	55.88	3.866	
10,800.0	7,740.0	7,764.4	7,751.8	56.7	14.4	90.22	-2,433.4	1,408.8	253.2	210.1	43.04	5.882	
10,900.0	7,740.0	7,764.0	7,751.5	58.2	14.4	90.13	-2,433.5	1,408.8	318.6	283.2	35.44	8.992	
11,000.0	7,740.0	7,763.7	7,751.2	59.7	14.4	90.04	-2,433.5	1,408.8	398.7	365.3	33.36	11.952	
11,100.0	7,740.0	7,763.3	7,750.8	61.2	14.4	89.95	-2,433.5	1,408.8	486.2	452.3	33.86	14.360	
11,200.0	7,740.0	7,763.0	7,750.5	62.7	14.4	89.86	-2,433.5	1,408.8	577.8	542.7	35.06	16.479	
11,300.0	7,740.0	7,762.7	7,750.1	64.2	14.4	89.77	-2,433.5	1,408.8	671.8	635.4	36.31	18.500	
11,400.0	7,740.0	7,762.3	7,749.8	65.7	14.4	89.67	-2,433.5	1,408.8	767.3	729.8	37.43	20.499	
11,500.0	7,740.0	7,762.0	7,749.5	67.2	14.4	89.58	-2,433.5	1,408.8	863.8	825.4	38.40	22.496	
11,600.0	7,740.0	7,761.6	7,749.1	68.8	14.4	89.49	-2,433.5	1,408.8	961.0	921.8	39.23	24.498	
11,700.0	7,740.0	7,761.3	7,748.8	70.3	14.4	89.40	-2,433.5	1,408.8	1,058.8	1,018.8	39.94	26.506	
11,800.0	7,740.0	7,761.0	7,748.4	71.9	14.4	89.31	-2,433.5	1,408.8	1,156.9	1,116.3	40.57	28.517	
11,900.0	7,740.0	7,760.6	7,748.1	73.5	14.4	89.22	-2,433.5	1,408.8	1,255.3	1,214.2	41.12	30.530	
12,000.0	7,740.0	7,760.3	7,747.8	75.1	14.4	89.13	-2,433.5	1,408.8	1,354.0	1,312.4	41.60	32.544	
12,100.0	7,740.0	7,760.0	7,747.4	76.6	14.4	89.04	-2,433.5	1,408.8	1,452.8	1,410.8	42.04	34.557	
12,200.0	7,740.0	7,759.6	7,747.1	78.2	14.4	88.94	-2,433.5	1,408.8	1,551.8	1,509.4	42.44	36.568	
12,300.0	7,740.0	7,759.3	7,746.7	79.8	14.4	88.85	-2,433.5	1,408.7	1,650.9	1,608.1	42.80	38.576	
12,400.0	7,740.0	7,758.9	7,746.4	81.5	14.4	88.76	-2,433.5	1,408.7	1,750.1	1,707.0	43.13	40.581	
12,500.0	7,740.0	7,758.6	7,746.1	83.1	14.4	88.67	-2,433.5	1,408.7	1,849.4	1,806.0	43.43	42.581	
12,600.0	7,740.0	7,758.3	7,745.7	84.7	14.4	88.58	-2,433.5	1,408.7	1,948.8	1,905.1	43.72	44.577	
12,700.0	7,740.0	7,757.9	7,745.4	86.3	14.4	88.49	-2,433.5	1,408.7	2,048.2	2,004.2	43.98	46.569	
12,800.0	7,740.0	7,757.6	7,745.1	88.0	14.4	88.40	-2,433.5	1,408.7	2,147.7	2,103.5	44.23	48.555	
12,900.0	7,740.0	7,757.3	7,744.7	89.6	14.4	88.31	-2,433.5	1,408.7	2,247.2	2,202.8	44.47	50.535	
13,000.0	7,740.0	7,756.9	7,744.4	91.2	14.4	88.22	-2,433.5	1,408.7	2,346.8	2,302.1	44.69	52.510	
13,100.0	7,740.0	7,756.6	7,744.0	92.9	14.4	88.13	-2,433.5	1,408.7	2,446.4	2,401.5	44.91	54.479	
13,200.0	7,740.0	7,756.2	7,743.7	94.5	14.4	88.04	-2,433.5	1,408.7	2,546.1	2,500.9	45.11	56.442	
13,300.0	7,740.0	7,755.9	7,743.4	96.2	14.4	87.95	-2,433.5	1,408.7	2,645.7	2,600.4	45.30	58.399	
13,400.0	7,740.0	7,755.6	7,743.0	97.8	14.4	87.86	-2,433.5	1,408.7	2,745.4	2,699.9	45.49	60.350	
13,500.0	7,740.0	7,755.2	7,742.7	99.5	14.4	87.76	-2,433.5	1,408.7	2,845.1	2,799.4	45.67	62.294	
13,600.0	7,740.0	7,754.9	7,742.4	101.2	14.4	87.67	-2,433.5	1,408.7	2,944.8	2,899.0	45.85	64.232	
13,700.0	7,740.0	7,754.6	7,742.0	102.8	14.4	87.58	-2,433.5	1,408.7	3,044.6	2,998.6	46.02	66.164	
13,800.0	7,740.0	7,754.2	7,741.7	104.5	14.4	87.49	-2,433.5	1,408.7	3,144.3	3,098.2	46.18	68.089	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,740.0	7,753.9	7,741.4	106.2	14.4	87.40	-2,433.5	1,408.7	3,244.1	3,197.8	46.34	70.008		
14,000.0	7,740.0	7,753.5	7,741.0	107.8	14.4	87.31	-2,433.5	1,408.7	3,343.9	3,297.4	46.49	71.920		
14,100.0	7,740.0	7,753.2	7,740.7	109.5	14.4	87.22	-2,433.5	1,408.7	3,443.7	3,397.1	46.65	73.826		
14,200.0	7,740.0	7,752.9	7,740.4	111.2	14.4	87.13	-2,433.5	1,408.7	3,543.5	3,496.7	46.79	75.725		
14,300.0	7,740.0	7,752.5	7,740.0	112.9	14.4	87.04	-2,433.5	1,408.7	3,643.4	3,596.4	46.94	77.618		
14,400.0	7,740.0	7,752.2	7,739.7	114.6	14.4	86.95	-2,433.5	1,408.7	3,743.2	3,696.1	47.08	79.504		
14,500.0	7,740.0	7,751.9	7,739.3	116.3	14.4	86.86	-2,433.5	1,408.7	3,843.0	3,795.8	47.22	81.384		
14,600.0	7,740.0	7,751.5	7,739.0	117.9	14.4	86.77	-2,433.5	1,408.7	3,942.9	3,895.5	47.36	83.257		
14,700.0	7,740.0	7,751.2	7,738.7	119.6	14.4	86.68	-2,433.5	1,408.7	4,042.7	3,995.2	47.49	85.123		
14,800.0	7,740.0	7,750.9	7,738.3	121.3	14.4	86.59	-2,433.5	1,408.7	4,142.6	4,095.0	47.63	86.983		
14,900.0	7,740.0	7,750.5	7,738.0	123.0	14.4	86.50	-2,433.5	1,408.7	4,242.5	4,194.7	47.76	88.837		
15,000.0	7,740.0	7,750.2	7,737.7	124.7	14.4	86.41	-2,433.5	1,408.7	4,342.3	4,294.5	47.88	90.684		
15,100.0	7,740.0	7,749.9	7,737.3	126.4	14.4	86.33	-2,433.5	1,408.7	4,442.2	4,394.2	48.01	92.524		
15,200.0	7,740.0	7,749.5	7,737.0	128.1	14.4	86.24	-2,433.5	1,408.7	4,542.1	4,494.0	48.14	94.358		
15,300.0	7,740.0	7,749.2	7,736.7	129.8	14.4	86.15	-2,433.5	1,408.7	4,642.0	4,593.7	48.26	96.186		
15,400.0	7,740.0	7,748.9	7,736.3	131.5	14.4	86.06	-2,433.5	1,408.7	4,741.9	4,693.5	48.38	98.007		
15,500.0	7,740.0	7,748.5	7,736.0	133.2	14.4	85.97	-2,433.5	1,408.7	4,841.8	4,793.3	48.50	99.821		
15,600.0	7,740.0	7,748.2	7,735.7	134.9	14.4	85.88	-2,433.5	1,408.7	4,941.7	4,893.1	48.62	101.629		
15,700.0	7,740.0	7,747.9	7,735.3	136.6	14.4	85.79	-2,433.5	1,408.7	5,041.6	4,992.9	48.74	103.431		
15,800.0	7,740.0	7,747.5	7,735.0	138.3	14.4	85.70	-2,433.5	1,408.7	5,141.5	5,092.7	48.86	105.227		
15,900.0	7,740.0	7,747.2	7,734.7	140.0	14.4	85.61	-2,433.5	1,408.7	5,241.4	5,192.5	48.98	107.016		
16,000.0	7,740.0	7,746.9	7,734.3	141.7	14.4	85.52	-2,433.5	1,408.7	5,341.4	5,292.3	49.09	108.799		
16,100.0	7,740.0	7,746.5	7,734.0	143.5	14.4	85.43	-2,433.5	1,408.7	5,441.3	5,392.1	49.21	110.575		
16,171.7	7,740.0	7,746.3	7,733.8	144.7	14.4	85.37	-2,433.5	1,408.7	5,512.9	5,463.6	49.29	111.844		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 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	153.40	-2,304.4	1,154.1	2,577.2					
100.0	100.0	95.0	95.0	0.2	0.2	153.40	-2,304.4	1,154.1	2,577.2	2,576.9	0.32	8,108.323		
150.0	150.0	145.0	145.0	0.2	0.3	153.40	-2,304.4	1,154.1	2,577.2	2,576.7	0.49	5,234.200		
200.0	200.0	195.0	195.0	0.3	0.3	153.40	-2,304.4	1,154.1	2,577.8	2,577.1	0.67	3,864.396		
283.3	283.2	278.2	278.2	0.5	0.5	153.39	-2,304.4	1,154.1	2,581.4	2,580.4	0.96	2,686.442		
300.0	299.9	294.9	294.9	0.5	0.5	151.01	-2,304.4	1,154.1	2,582.4	2,581.4	1.02	2,531.823		
400.0	399.6	394.6	394.6	0.7	0.7	137.34	-2,304.4	1,154.1	2,588.2	2,586.8	1.38	1,873.982		
500.0	499.3	494.3	494.3	0.9	0.9	125.51	-2,304.4	1,154.1	2,593.2	2,591.4	1.75	1,479.152		
600.0	598.9	593.9	593.9	1.2	1.0	116.00	-2,304.4	1,154.1	2,597.5	2,595.4	2.14	1,214.594		
700.0	698.5	693.5	693.5	1.4	1.2	108.60	-2,304.4	1,154.1	2,601.1	2,598.6	2.54	1,024.259		
800.0	797.9	792.9	792.9	1.6	1.4	102.91	-2,304.4	1,154.1	2,604.1	2,601.1	2.96	880.383		
900.0	897.1	892.1	892.1	1.9	1.6	98.52	-2,304.4	1,154.1	2,606.3	2,602.9	3.40	767.630		
1,000.0	996.2	991.2	991.2	2.2	1.7	95.11	-2,304.4	1,154.1	2,607.9	2,604.1	3.85	676.825		
1,100.0	1,095.0	1,090.0	1,090.0	2.5	1.9	92.45	-2,304.4	1,154.1	2,608.9	2,604.6	4.33	602.127		
1,200.0	1,193.6	1,188.6	1,188.6	2.8	2.1	90.35	-2,304.4	1,154.1	2,609.3	2,604.5	4.84	539.632		
1,300.0	1,291.9	1,286.9	1,286.9	3.2	2.2	88.71	-2,304.4	1,154.1	2,609.2	2,603.8	5.36	486.625		
1,400.0	1,389.9	1,384.9	1,384.9	3.5	2.4	87.42	-2,304.4	1,154.1	2,608.5	2,602.6	5.91	441.151		
1,500.0	1,487.6	1,482.6	1,482.6	3.9	2.6	86.42	-2,304.4	1,154.1	2,607.3	2,600.8	6.49	401.768		
1,600.0	1,584.8	1,579.8	1,579.8	4.4	2.8	85.67	-2,304.4	1,154.1	2,605.6	2,598.5	7.09	367.382		
1,624.3	1,608.4	1,603.4	1,603.4	4.5	2.8	85.51	-2,304.4	1,154.1	2,605.2	2,597.9	7.24	359.795		
1,700.0	1,681.8	1,676.8	1,676.8	4.8	2.9	85.91	-2,304.4	1,154.1	2,603.7	2,596.0	7.70	337.929		
1,800.0	1,778.8	1,773.8	1,773.8	5.3	3.1	86.42	-2,304.4	1,154.1	2,602.0	2,593.7	8.32	312.698		
1,900.0	1,875.8	1,870.8	1,870.8	5.7	3.3	86.94	-2,304.4	1,154.1	2,600.6	2,591.7	8.94	290.879		
2,000.0	1,972.8	1,967.8	1,967.8	6.2	3.4	87.46	-2,304.4	1,154.1	2,599.4	2,589.8	9.56	271.848		
2,100.0	2,069.8	2,064.8	2,064.8	6.6	3.6	87.98	-2,304.4	1,154.1	2,598.4	2,588.2	10.18	255.120		
2,200.0	2,166.8	2,161.8	2,161.8	7.1	3.8	88.51	-2,304.4	1,154.1	2,597.6	2,586.8	10.81	240.316		
2,300.0	2,263.8	2,258.8	2,258.8	7.5	3.9	89.03	-2,304.4	1,154.1	2,597.1	2,585.6	11.43	227.131		
2,400.0	2,360.8	2,355.8	2,355.8	8.0	4.1	89.55	-2,304.4	1,154.1	2,596.8	2,584.7	12.06	215.321		
2,486.8	2,444.9	2,439.9	2,439.9	8.4	4.3	90.00	-2,304.4	1,154.1	2,596.7	2,584.1	12.60	206.035		
2,500.0	2,457.7	2,452.7	2,452.7	8.4	4.3	90.07	-2,304.4	1,154.1	2,596.7	2,584.0	12.69	204.690		
2,600.0	2,554.7	2,549.7	2,549.7	8.9	4.5	90.59	-2,304.4	1,154.1	2,596.8	2,583.5	13.31	195.074		
2,700.0	2,651.7	2,646.7	2,646.7	9.4	4.6	91.11	-2,304.4	1,154.1	2,597.2	2,583.2	13.94	186.339		
2,800.0	2,748.7	2,743.7	2,743.7	9.8	4.8	91.63	-2,304.4	1,154.1	2,597.8	2,583.2	14.56	178.375		
2,900.0	2,845.7	2,840.7	2,840.7	10.3	5.0	92.15	-2,304.4	1,154.1	2,598.6	2,583.4	15.19	171.087		
3,000.0	2,942.7	2,937.7	2,937.7	10.8	5.1	92.67	-2,304.4	1,154.1	2,599.7	2,583.9	15.81	164.397		
3,100.0	3,039.7	3,034.7	3,034.7	11.2	5.3	93.19	-2,304.4	1,154.1	2,601.0	2,584.5	16.44	158.236		
3,200.0	3,136.7	3,131.7	3,131.7	11.7	5.5	93.71	-2,304.4	1,154.1	2,602.5	2,585.4	17.06	152.546		
3,300.0	3,233.6	3,228.6	3,228.6	12.2	5.6	94.23	-2,304.4	1,154.1	2,604.2	2,586.5	17.68	147.279		
3,400.0	3,330.6	3,325.6	3,325.6	12.6	5.8	94.75	-2,304.4	1,154.1	2,606.2	2,587.9	18.30	142.392		
3,500.0	3,427.6	3,422.6	3,422.6	13.1	6.0	95.27	-2,304.4	1,154.1	2,608.4	2,589.4	18.92	137.846		
3,600.0	3,524.6	3,519.6	3,519.6	13.6	6.1	95.78	-2,304.4	1,154.1	2,610.8	2,591.2	19.54	133.609		
3,700.0	3,621.6	3,616.6	3,616.6	14.0	6.3	96.30	-2,304.4	1,154.1	2,613.4	2,593.3	20.16	129.653		
3,800.0	3,718.6	3,713.6	3,713.6	14.5	6.5	96.81	-2,304.4	1,154.1	2,616.3	2,595.5	20.77	125.952		
3,900.0	3,815.6	3,810.6	3,810.6	15.0	6.7	97.33	-2,304.4	1,154.1	2,619.4	2,598.0	21.39	122.485		
4,000.0	3,912.6	3,907.6	3,907.6	15.4	6.8	97.84	-2,304.4	1,154.1	2,622.7	2,600.7	22.00	119.230		
4,100.0	4,009.5	4,004.5	4,004.5	15.9	7.0	98.35	-2,304.4	1,154.1	2,626.2	2,603.6	22.61	116.171		
4,200.0	4,106.5	4,101.5	4,101.5	16.4	7.2	98.86	-2,304.4	1,154.1	2,630.0	2,606.8	23.21	113.292		
4,300.0	4,203.5	4,198.5	4,198.5	16.8	7.3	99.37	-2,304.4	1,154.1	2,634.0	2,610.1	23.82	110.579		
4,400.0	4,300.5	4,295.5	4,295.5	17.3	7.5	99.87	-2,304.4	1,154.1	2,638.2	2,613.7	24.42	108.019		
4,500.0	4,397.5	4,392.5	4,392.5	17.8	7.7	100.38	-2,304.4	1,154.1	2,642.6	2,617.5	25.02	105.600		
4,600.0	4,494.5	4,489.5	4,489.5	18.2	7.8	100.88	-2,304.4	1,154.1	2,647.2	2,621.6	25.62	103.313		
4,700.0	4,591.5	4,586.5	4,586.5	18.7	8.0	101.39	-2,304.4	1,154.1	2,652.0	2,625.8	26.22	101.148		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,800.0	4,688.5	4,683.5	4,683.5	19.2	8.2	101.89	-2,304.4	1,154.1	2,657.1	2,630.3	26.81	99.096		
4,900.0	4,785.4	4,780.4	4,780.4	19.6	8.3	102.38	-2,304.4	1,154.1	2,662.4	2,635.0	27.40	97.149		
5,000.0	4,882.4	4,877.4	4,877.4	20.1	8.5	102.88	-2,304.4	1,154.1	2,667.9	2,639.9	27.99	95.302		
5,100.0	4,979.4	4,974.4	4,974.4	20.6	8.7	103.37	-2,304.4	1,154.1	2,673.6	2,645.0	28.58	93.546		
5,200.0	5,076.4	5,071.4	5,071.4	21.0	8.9	103.87	-2,304.4	1,154.1	2,679.5	2,650.3	29.16	91.877		
5,300.0	5,173.4	5,168.4	5,168.4	21.5	9.0	104.36	-2,304.4	1,154.1	2,685.6	2,655.8	29.74	90.289		
5,400.0	5,270.4	5,265.4	5,265.4	22.0	9.2	104.85	-2,304.4	1,154.1	2,691.9	2,661.6	30.32	88.777		
5,500.0	5,367.4	5,362.4	5,362.4	22.5	9.4	105.33	-2,304.4	1,154.1	2,698.4	2,667.5	30.90	87.336		
5,600.0	5,464.4	5,459.4	5,459.4	22.9	9.5	105.81	-2,304.4	1,154.1	2,705.1	2,673.7	31.47	85.962		
5,700.0	5,561.4	5,556.4	5,556.4	23.4	9.7	106.30	-2,304.4	1,154.1	2,712.1	2,680.0	32.04	84.651		
5,800.0	5,658.3	5,653.3	5,653.3	23.9	9.9	106.78	-2,304.4	1,154.1	2,719.2	2,686.6	32.60	83.400		
5,900.0	5,755.3	5,750.3	5,750.3	24.3	10.0	107.25	-2,304.4	1,154.1	2,726.5	2,693.4	33.17	82.205		
6,000.0	5,852.3	5,847.3	5,847.3	24.8	10.2	107.73	-2,304.4	1,154.1	2,734.1	2,700.3	33.73	81.063		
6,100.0	5,949.3	5,944.3	5,944.3	25.3	10.4	108.20	-2,304.4	1,154.1	2,741.8	2,707.5	34.28	79.972		
6,200.0	6,046.3	6,041.3	6,041.3	25.7	10.5	108.67	-2,304.4	1,154.1	2,749.7	2,714.9	34.84	78.928		
6,300.0	6,143.3	6,138.3	6,138.3	26.2	10.7	109.13	-2,304.4	1,154.1	2,757.8	2,722.4	35.39	77.929		
6,400.0	6,240.3	6,235.3	6,235.3	26.7	10.9	109.60	-2,304.4	1,154.1	2,766.1	2,730.2	35.94	76.973		
6,500.0	6,337.3	6,332.3	6,332.3	27.1	11.1	110.06	-2,304.4	1,154.1	2,774.6	2,738.1	36.48	76.057		
6,600.0	6,434.2	6,429.2	6,429.2	27.6	11.2	110.52	-2,304.4	1,154.1	2,783.3	2,746.2	37.02	75.180		
6,700.0	6,531.2	6,526.2	6,526.2	28.1	11.4	110.97	-2,304.4	1,154.1	2,792.1	2,754.6	37.56	74.339		
6,800.0	6,628.2	6,623.2	6,623.2	28.5	11.6	111.43	-2,304.4	1,154.1	2,801.2	2,763.1	38.09	73.534		
6,900.0	6,725.2	6,720.2	6,720.2	29.0	11.7	111.88	-2,304.4	1,154.1	2,810.4	2,771.8	38.63	72.761		
7,000.0	6,822.2	6,817.2	6,817.2	29.5	11.9	112.32	-2,304.4	1,154.1	2,819.8	2,780.7	39.15	72.020		
7,100.0	6,919.2	6,914.2	6,914.2	30.0	12.1	112.77	-2,304.4	1,154.1	2,829.4	2,789.7	39.68	71.309		
7,200.0	7,016.2	7,011.2	7,011.2	30.4	12.2	113.21	-2,304.4	1,154.1	2,839.2	2,799.0	40.20	70.627		
7,300.0	7,113.2	7,108.2	7,108.2	30.9	12.4	113.65	-2,304.4	1,154.1	2,849.1	2,808.4	40.72	69.972		
7,328.7	7,141.0	7,136.0	7,136.0	31.0	12.5	113.78	-2,304.4	1,154.1	2,852.0	2,811.1	40.87	69.789		
7,350.0	7,161.7	7,156.7	7,156.7	31.1	12.5	105.44	-2,304.4	1,154.1	2,853.7	2,812.8	40.98	69.643		
7,400.0	7,210.3	7,205.3	7,205.3	31.3	12.6	84.98	-2,304.4	1,154.1	2,854.8	2,813.6	41.24	69.217		
7,450.0	7,258.7	7,253.7	7,253.7	31.5	12.7	67.25	-2,304.4	1,154.1	2,851.6	2,810.1	41.52	68.686		
7,500.0	7,306.5	7,301.5	7,301.5	31.7	12.7	54.38	-2,304.4	1,154.1	2,844.1	2,802.4	41.79	68.055		
7,550.0	7,353.4	7,348.4	7,348.4	31.8	12.8	45.67	-2,304.4	1,154.1	2,832.5	2,790.4	42.07	67.329		
7,600.0	7,399.0	7,394.0	7,394.0	31.9	12.9	39.83	-2,304.4	1,154.1	2,816.8	2,774.4	42.35	66.514		
7,650.0	7,442.9	7,437.9	7,437.9	32.0	13.0	35.91	-2,304.4	1,154.1	2,797.0	2,754.4	42.63	65.616		
7,700.0	7,484.9	7,479.9	7,479.9	32.1	13.1	33.31	-2,304.4	1,154.1	2,773.5	2,730.6	42.90	64.644		
7,750.0	7,524.5	7,519.5	7,519.5	32.1	13.1	31.69	-2,304.4	1,154.1	2,746.3	2,703.2	43.18	63.604		
7,800.0	7,561.6	7,556.6	7,556.6	32.1	13.2	30.85	-2,304.4	1,154.1	2,715.7	2,672.3	43.45	62.503		
7,850.0	7,595.8	7,590.8	7,590.8	32.2	13.2	30.69	-2,304.4	1,154.1	2,681.9	2,638.2	43.72	61.350		
7,900.0	7,626.8	7,621.8	7,621.8	32.2	13.3	31.19	-2,304.4	1,154.1	2,645.2	2,601.2	43.97	60.152		
7,950.0	7,654.5	7,649.5	7,649.5	32.2	13.4	32.41	-2,304.4	1,154.1	2,605.8	2,561.6	44.23	58.919		
8,000.0	7,678.5	7,673.5	7,673.5	32.3	13.4	34.51	-2,304.4	1,154.1	2,564.0	2,519.6	44.47	57.657		
8,050.0	7,698.8	7,693.8	7,693.8	32.3	13.4	37.77	-2,304.4	1,154.1	2,520.2	2,475.5	44.70	56.375		
8,100.0	7,715.2	7,710.2	7,710.2	32.3	13.5	42.74	-2,304.4	1,154.1	2,474.7	2,429.7	44.93	55.082		
8,150.0	7,727.5	7,722.5	7,722.5	32.4	13.5	50.37	-2,304.4	1,154.1	2,427.7	2,382.6	45.14	53.786		
8,200.0	7,735.6	7,730.6	7,730.6	32.4	13.5	62.24	-2,304.4	1,154.1	2,379.8	2,334.4	45.33	52.494		
8,250.0	7,739.6	7,734.6	7,734.6	32.4	13.5	80.25	-2,304.4	1,154.1	2,331.1	2,285.6	45.52	51.216		
8,271.7	7,740.0	7,735.0	7,735.0	32.5	13.5	90.00	-2,304.4	1,154.1	2,309.9	2,264.3	45.59	50.666		
8,300.0	7,740.0	7,735.0	7,735.0	32.5	13.5	90.00	-2,304.4	1,154.1	2,282.2	2,236.5	45.69	49.948		
8,400.0	7,740.0	7,735.0	7,735.0	32.7	13.5	90.00	-2,304.4	1,154.1	2,184.4	2,138.3	46.06	47.426		
8,500.0	7,740.0	7,735.0	7,735.0	33.0	13.5	90.00	-2,304.4	1,154.1	2,086.8	2,040.4	46.45	44.926		
8,600.0	7,740.0	7,735.0	7,735.0	33.4	13.5	90.00	-2,304.4	1,154.1	1,989.5	1,942.6	46.87	42.449		
8,700.0	7,740.0	7,735.0	7,735.0	33.8	13.5	90.00	-2,304.4	1,154.1	1,892.4	1,845.1	47.32	39.994		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	7,735.0	7,735.0	34.4	13.5	90.00	-2,304.4	1,154.1	1,795.7	1,747.9	47.80	37.565		
8,900.0	7,740.0	7,735.0	7,735.0	35.0	13.5	90.00	-2,304.4	1,154.1	1,699.4	1,651.0	48.33	35.163		
9,000.0	7,740.0	7,735.0	7,735.0	35.7	13.5	90.00	-2,304.4	1,154.1	1,603.5	1,554.6	48.90	32.790		
9,100.0	7,740.0	7,735.0	7,735.0	36.4	13.5	90.00	-2,304.4	1,154.1	1,508.1	1,458.6	49.53	30.451		
9,200.0	7,740.0	7,735.0	7,735.0	37.3	13.5	90.00	-2,304.4	1,154.1	1,413.3	1,363.1	50.21	28.147		
9,300.0	7,740.0	7,735.0	7,735.0	38.2	13.5	90.00	-2,304.4	1,154.1	1,319.4	1,268.4	50.97	25.884		
9,400.0	7,740.0	7,735.0	7,735.0	39.1	13.5	90.00	-2,304.4	1,154.1	1,226.4	1,174.6	51.82	23.668		
9,500.0	7,740.0	7,735.0	7,735.0	40.1	13.5	90.00	-2,304.4	1,154.1	1,134.6	1,081.8	52.75	21.507		
9,600.0	7,740.0	7,735.0	7,735.0	41.2	13.5	90.00	-2,304.4	1,154.1	1,044.3	990.5	53.80	19.410		
9,700.0	7,740.0	7,735.0	7,735.0	42.3	13.5	90.00	-2,304.4	1,154.1	955.9	900.9	54.97	17.390		
9,800.0	7,740.0	7,735.0	7,735.0	43.5	13.5	90.00	-2,304.4	1,154.1	870.1	813.8	56.27	15.464		
9,900.0	7,740.0	7,735.0	7,735.0	44.7	13.5	90.00	-2,304.4	1,154.1	787.6	729.9	57.68	13.654		
10,000.0	7,740.0	7,735.0	7,735.0	45.9	13.5	90.00	-2,304.4	1,154.1	709.6	650.4	59.17	11.992		
10,100.0	7,740.0	7,735.0	7,735.0	47.1	13.5	90.00	-2,304.4	1,154.1	637.8	577.1	60.63	10.519		
10,200.0	7,740.0	7,735.0	7,735.0	48.4	13.5	90.00	-2,304.4	1,154.1	574.5	512.6	61.83	9.291		
10,300.0	7,740.0	7,735.0	7,735.0	49.8	13.5	90.00	-2,304.4	1,154.1	522.7	460.4	62.37	8.381		
10,400.0	7,740.0	7,735.0	7,735.0	51.1	13.5	90.00	-2,304.4	1,154.1	486.3	424.6	61.68	7.885 SF		
10,500.0	7,740.0	7,735.0	7,735.0	52.5	13.5	90.00	-2,304.4	1,154.1	468.7	409.5	59.27	7.909 ES		
10,533.8	7,740.0	7,735.0	7,735.0	53.0	13.5	90.00	-2,304.4	1,154.1	467.5	409.5	58.05	8.054 CC		
10,600.0	7,740.0	7,735.0	7,735.0	53.9	13.5	90.00	-2,304.4	1,154.1	472.2	417.0	55.16	8.560		
10,700.0	7,740.0	7,735.0	7,735.0	55.3	13.5	90.00	-2,304.4	1,154.1	496.2	446.1	50.08	9.908		
10,800.0	7,740.0	7,735.0	7,735.0	56.7	13.5	90.00	-2,304.4	1,154.1	538.0	493.0	45.04	11.945		
10,900.0	7,740.0	7,735.0	7,735.0	58.2	13.5	90.00	-2,304.4	1,154.1	593.9	553.1	40.79	14.559		
11,000.0	7,740.0	7,735.0	7,735.0	59.7	13.5	90.00	-2,304.4	1,154.1	660.3	622.6	37.65	17.538		
11,100.0	7,740.0	7,735.0	7,735.0	61.2	13.5	90.00	-2,304.4	1,154.1	734.3	698.7	35.57	20.643		
11,200.0	7,740.0	7,735.0	7,735.0	62.7	13.5	90.00	-2,304.4	1,154.1	813.9	779.5	34.37	23.681		
11,300.0	7,740.0	7,735.0	7,735.0	64.2	13.5	90.00	-2,304.4	1,154.1	897.6	863.8	33.80	26.556		
11,400.0	7,740.0	7,735.0	7,735.0	65.7	13.5	90.00	-2,304.4	1,154.1	984.3	950.7	33.65	29.248		
11,500.0	7,740.0	7,735.0	7,735.0	67.2	13.5	90.00	-2,304.4	1,154.1	1,073.4	1,039.6	33.77	31.782		
11,600.0	7,740.0	7,735.0	7,735.0	68.8	13.5	90.00	-2,304.4	1,154.1	1,164.2	1,130.2	34.05	34.194		
11,700.0	7,740.0	7,735.0	7,735.0	70.3	13.5	90.00	-2,304.4	1,154.1	1,256.4	1,222.0	34.41	36.517		
11,800.0	7,740.0	7,735.0	7,735.0	71.9	13.5	90.00	-2,304.4	1,154.1	1,349.8	1,315.0	34.81	38.777		
11,900.0	7,740.0	7,735.0	7,735.0	73.5	13.5	90.00	-2,304.4	1,154.1	1,444.0	1,408.8	35.23	40.991		
12,000.0	7,740.0	7,735.0	7,735.0	75.1	13.5	90.00	-2,304.4	1,154.1	1,539.0	1,503.3	35.65	43.174		
12,100.0	7,740.0	7,735.0	7,735.0	76.6	13.5	90.00	-2,304.4	1,154.1	1,634.5	1,598.5	36.06	45.332		
12,200.0	7,740.0	7,735.0	7,735.0	78.2	13.5	90.00	-2,304.4	1,154.1	1,730.6	1,694.1	36.45	47.473		
12,300.0	7,740.0	7,735.0	7,735.0	79.8	13.5	90.00	-2,304.4	1,154.1	1,827.1	1,790.2	36.84	49.600		
12,400.0	7,740.0	7,735.0	7,735.0	81.5	13.5	90.00	-2,304.4	1,154.1	1,923.9	1,886.7	37.20	51.715		
12,500.0	7,740.0	7,735.0	7,735.0	83.1	13.5	90.00	-2,304.4	1,154.1	2,021.0	1,983.5	37.55	53.821		
12,600.0	7,740.0	7,735.0	7,735.0	84.7	13.5	90.00	-2,304.4	1,154.1	2,118.5	2,080.6	37.89	55.917		
12,700.0	7,740.0	7,735.0	7,735.0	86.3	13.5	90.00	-2,304.4	1,154.1	2,216.1	2,177.9	38.20	58.006		
12,800.0	7,740.0	7,735.0	7,735.0	88.0	13.5	90.00	-2,304.4	1,154.1	2,313.9	2,275.4	38.51	60.087		
12,900.0	7,740.0	7,735.0	7,735.0	89.6	13.5	90.00	-2,304.4	1,154.1	2,412.0	2,373.2	38.80	62.160		
13,000.0	7,740.0	7,735.0	7,735.0	91.2	13.5	90.00	-2,304.4	1,154.1	2,510.1	2,471.1	39.08	64.227		
13,100.0	7,740.0	7,735.0	7,735.0	92.9	13.5	90.00	-2,304.4	1,154.1	2,608.5	2,569.1	39.35	66.286		
13,200.0	7,740.0	7,735.0	7,735.0	94.5	13.5	90.00	-2,304.4	1,154.1	2,706.9	2,667.3	39.61	68.339		
13,300.0	7,740.0	7,735.0	7,735.0	96.2	13.5	90.00	-2,304.4	1,154.1	2,805.5	2,765.6	39.86	70.384		
13,400.0	7,740.0	7,735.0	7,735.0	97.8	13.5	90.00	-2,304.4	1,154.1	2,904.1	2,864.0	40.10	72.423		
13,500.0	7,740.0	7,735.0	7,735.0	99.5	13.5	90.00	-2,304.4	1,154.1	3,002.8	2,962.5	40.33	74.454		
13,600.0	7,740.0	7,735.0	7,735.0	101.2	13.5	90.00	-2,304.4	1,154.1	3,101.7	3,061.1	40.56	76.478		
13,700.0	7,740.0	7,735.0	7,735.0	102.8	13.5	90.00	-2,304.4	1,154.1	3,200.6	3,159.8	40.77	78.495		
13,800.0	7,740.0	7,735.0	7,735.0	104.5	13.5	90.00	-2,304.4	1,154.1	3,299.5	3,258.5	40.99	80.505		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
13,900.0	7,740.0	7,735.0	7,735.0	106.2	13.5	90.00	-2,304.4	1,154.1	3,398.5	3,357.3	41.19	82.507	
14,000.0	7,740.0	7,735.0	7,735.0	107.8	13.5	90.00	-2,304.4	1,154.1	3,497.6	3,456.2	41.39	84.503	
14,100.0	7,740.0	7,735.0	7,735.0	109.5	13.5	90.00	-2,304.4	1,154.1	3,596.7	3,555.1	41.59	86.491	
14,200.0	7,740.0	7,735.0	7,735.0	111.2	13.5	90.00	-2,304.4	1,154.1	3,695.9	3,654.1	41.78	88.471	
14,300.0	7,740.0	7,735.0	7,735.0	112.9	13.5	90.00	-2,304.4	1,154.1	3,795.1	3,753.2	41.96	90.445	
14,400.0	7,740.0	7,735.0	7,735.0	114.6	13.5	90.00	-2,304.4	1,154.1	3,894.4	3,852.2	42.14	92.410	
14,500.0	7,740.0	7,735.0	7,735.0	116.3	13.5	90.00	-2,304.4	1,154.1	3,993.7	3,951.4	42.32	94.369	
14,600.0	7,740.0	7,735.0	7,735.0	117.9	13.5	90.00	-2,304.4	1,154.1	4,093.0	4,050.5	42.49	96.320	
14,700.0	7,740.0	7,735.0	7,735.0	119.6	13.5	90.00	-2,304.4	1,154.1	4,192.4	4,149.7	42.66	98.264	
14,800.0	7,740.0	7,735.0	7,735.0	121.3	13.5	90.00	-2,304.4	1,154.1	4,291.8	4,248.9	42.83	100.200	
14,900.0	7,740.0	7,735.0	7,735.0	123.0	13.5	90.00	-2,304.4	1,154.1	4,391.2	4,348.2	43.00	102.129	
15,000.0	7,740.0	7,735.0	7,735.0	124.7	13.5	90.00	-2,304.4	1,154.1	4,490.6	4,447.5	43.16	104.050	
15,100.0	7,740.0	7,735.0	7,735.0	126.4	13.5	90.00	-2,304.4	1,154.1	4,590.1	4,546.8	43.32	105.964	
15,200.0	7,740.0	7,735.0	7,735.0	128.1	13.5	90.00	-2,304.4	1,154.1	4,689.6	4,646.1	43.47	107.871	
15,300.0	7,740.0	7,735.0	7,735.0	129.8	13.5	90.00	-2,304.4	1,154.1	4,789.1	4,745.5	43.63	109.770	
15,400.0	7,740.0	7,735.0	7,735.0	131.5	13.5	90.00	-2,304.4	1,154.1	4,888.6	4,844.8	43.78	111.662	
15,500.0	7,740.0	7,735.0	7,735.0	133.2	13.5	90.00	-2,304.4	1,154.1	4,988.2	4,944.2	43.93	113.546	
15,600.0	7,740.0	7,735.0	7,735.0	134.9	13.5	90.00	-2,304.4	1,154.1	5,087.7	5,043.7	44.08	115.423	
15,700.0	7,740.0	7,735.0	7,735.0	136.6	13.5	90.00	-2,304.4	1,154.1	5,187.3	5,143.1	44.23	117.293	
15,800.0	7,740.0	7,735.0	7,735.0	138.3	13.5	90.00	-2,304.4	1,154.1	5,286.9	5,242.6	44.37	119.155	
15,900.0	7,740.0	7,735.0	7,735.0	140.0	13.5	90.00	-2,304.4	1,154.1	5,386.5	5,342.0	44.51	121.011	
16,000.0	7,740.0	7,735.0	7,735.0	141.7	13.5	90.00	-2,304.4	1,154.1	5,486.2	5,441.5	44.65	122.858	
16,100.0	7,740.0	7,735.0	7,735.0	143.5	13.5	90.00	-2,304.4	1,154.1	5,585.8	5,541.0	44.79	124.699	
16,171.7	7,740.0	7,735.0	7,735.0	144.7	13.5	90.00	-2,304.4	1,154.1	5,657.2	5,612.3	44.89	126.014	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	153.66	-2,332.8	1,154.9	2,603.0					
100.0	100.0	118.2	118.2	0.2	0.2	153.66	-2,332.7	1,154.7	2,602.9	2,602.5	0.36	7,299.259		
150.0	150.0	171.4	171.4	0.2	0.3	153.67	-2,332.6	1,154.5	2,602.7	2,602.2	0.54	4,855.091		
159.0	159.0	180.9	180.9	0.3	0.3	153.67	-2,332.6	1,154.5	2,602.7	2,602.1	0.57	4,579.723		
200.0	200.0	224.6	224.6	0.3	0.4	153.67	-2,332.5	1,154.2	2,603.1	2,602.3	0.72	3,637.024		
283.3	283.2	313.2	313.2	0.5	0.6	153.68	-2,332.2	1,153.6	2,606.1	2,605.1	1.02	2,560.628		
300.0	299.9	330.9	330.9	0.5	0.6	151.31	-2,332.1	1,153.5	2,607.0	2,606.0	1.08	2,417.268		
400.0	399.6	437.1	437.1	0.7	0.8	137.67	-2,331.6	1,152.4	2,611.9	2,610.5	1.45	1,801.988		
500.0	499.3	543.3	543.2	0.9	1.0	125.88	-2,330.9	1,151.0	2,615.8	2,614.0	1.83	1,428.428		
600.0	598.9	649.3	649.2	1.2	1.1	116.41	-2,330.1	1,149.4	2,618.8	2,616.6	2.23	1,176.297		
700.0	698.5	755.1	755.1	1.4	1.3	109.06	-2,329.1	1,147.5	2,620.9	2,618.3	2.64	993.978		
800.0	797.9	852.9	852.8	1.6	1.5	103.41	-2,328.1	1,145.4	2,622.1	2,619.0	3.05	859.344		
900.0	897.1	907.0	906.9	1.9	1.6	98.92	-2,327.8	1,144.8	2,623.6	2,620.2	3.41	769.520		
1,000.0	996.2	982.2	982.1	2.2	1.7	95.44	-2,328.4	1,144.4	2,625.8	2,622.0	3.83	686.160		
1,100.0	1,095.0	1,046.7	1,046.6	2.5	1.8	92.68	-2,330.0	1,143.3	2,628.4	2,624.2	4.25	618.496		
1,200.0	1,193.6	1,107.8	1,107.6	2.8	1.9	90.47	-2,332.7	1,141.8	2,631.9	2,627.2	4.70	560.565		
1,300.0	1,291.9	1,171.3	1,170.9	3.2	2.1	88.72	-2,336.6	1,139.9	2,636.2	2,631.1	5.17	510.383		
1,400.0	1,389.9	1,251.0	1,250.4	3.5	2.2	87.40	-2,342.6	1,136.8	2,641.1	2,635.4	5.70	463.330		
1,500.0	1,487.6	1,358.4	1,357.4	3.9	2.4	86.55	-2,350.7	1,132.2	2,645.3	2,639.0	6.32	418.577		
1,600.0	1,584.8	1,445.6	1,444.2	4.4	2.6	85.82	-2,357.7	1,128.1	2,649.5	2,642.6	6.93	382.472		
1,624.3	1,608.4	1,472.1	1,470.6	4.5	2.7	85.70	-2,359.8	1,126.9	2,650.5	2,643.4	7.09	373.934		
1,700.0	1,681.8	1,537.4	1,535.5	4.8	2.8	86.14	-2,365.0	1,123.9	2,653.7	2,646.1	7.55	351.261		
1,800.0	1,778.8	1,615.0	1,612.9	5.3	3.0	86.67	-2,371.5	1,120.2	2,658.5	2,650.4	8.16	325.850		
1,900.0	1,875.8	1,687.0	1,684.4	5.7	3.1	87.17	-2,378.3	1,116.4	2,664.5	2,655.8	8.75	304.352		
2,000.0	1,972.8	1,761.0	1,757.9	6.2	3.3	87.69	-2,386.1	1,112.3	2,671.7	2,662.4	9.36	285.504		
2,100.0	2,069.8	1,848.1	1,844.2	6.6	3.5	88.32	-2,396.0	1,106.8	2,679.8	2,669.8	10.00	267.900		
2,200.0	2,166.8	1,912.3	1,907.8	7.1	3.7	88.80	-2,403.8	1,102.1	2,688.9	2,678.3	10.59	253.857		
2,300.0	2,263.8	1,980.2	1,974.9	7.5	3.9	89.31	-2,412.9	1,097.1	2,699.5	2,688.3	11.19	241.193		
2,400.0	2,360.8	2,048.0	2,041.8	8.0	4.1	89.83	-2,422.5	1,091.6	2,711.1	2,699.3	11.79	229.890		
2,500.0	2,457.7	2,120.3	2,113.0	8.4	4.3	90.39	-2,433.6	1,085.3	2,724.0	2,711.6	12.41	219.498		
2,600.0	2,554.7	2,224.3	2,215.2	8.9	4.7	91.20	-2,450.1	1,076.2	2,737.8	2,724.7	13.11	208.780		
2,700.0	2,651.7	2,323.7	2,313.1	9.4	5.0	91.95	-2,465.2	1,067.8	2,751.7	2,737.9	13.80	199.392		
2,800.0	2,748.7	2,427.6	2,415.4	9.8	5.3	92.73	-2,480.7	1,058.8	2,765.6	2,751.1	14.50	190.721		
2,900.0	2,845.7	2,520.6	2,507.0	10.3	5.6	93.44	-2,494.5	1,050.2	2,779.9	2,764.7	15.17	183.232		
3,000.0	2,942.7	2,611.0	2,595.9	10.8	5.9	94.13	-2,508.1	1,041.1	2,794.6	2,778.8	15.83	176.500		
3,100.0	3,039.7	2,696.5	2,680.0	11.2	6.2	94.78	-2,521.0	1,032.8	2,809.9	2,793.4	16.47	170.623		
3,200.0	3,136.7	2,780.0	2,762.2	11.7	6.5	95.39	-2,533.8	1,025.4	2,826.0	2,808.9	17.09	165.378		
3,300.0	3,233.6	2,867.4	2,868.0	12.2	6.8	96.16	-2,550.1	1,016.3	2,842.4	2,824.7	17.77	159.916		
3,400.0	3,330.6	2,974.0	2,953.3	12.6	7.1	96.77	-2,563.0	1,009.0	2,859.1	2,840.7	18.39	155.444		
3,500.0	3,427.6	3,079.4	3,057.1	13.1	7.5	97.51	-2,578.5	999.9	2,875.9	2,856.8	19.07	150.838		
3,600.0	3,524.6	3,163.0	3,139.5	13.6	7.8	98.09	-2,591.0	992.6	2,893.3	2,873.6	19.67	147.121		
3,700.0	3,621.6	3,281.0	3,255.8	14.0	8.2	98.90	-2,608.0	982.4	2,910.6	2,890.3	20.36	142.940		
3,800.0	3,718.6	3,368.0	3,341.7	14.5	8.4	99.48	-2,620.2	975.4	2,928.1	2,907.1	20.96	139.715		
3,900.0	3,815.6	3,448.0	3,420.5	15.0	8.7	100.02	-2,631.8	968.7	2,946.3	2,924.7	21.53	136.826		
4,000.0	3,912.6	3,515.1	3,486.6	15.4	9.0	100.47	-2,642.0	962.5	2,965.4	2,943.4	22.07	134.382		
4,100.0	4,009.5	3,621.8	3,591.5	15.9	9.3	101.19	-2,658.5	952.4	2,985.3	2,962.6	22.71	131.431		
4,200.0	4,106.5	3,735.8	3,703.8	16.4	9.7	101.94	-2,675.2	942.2	3,004.7	2,981.3	23.37	128.546		
4,300.0	4,203.5	3,840.8	3,807.4	16.8	10.0	102.61	-2,689.9	933.6	3,024.0	3,000.0	23.99	126.040		
4,400.0	4,300.5	3,937.1	3,902.4	17.3	10.4	103.21	-2,703.2	925.3	3,043.3	3,018.7	24.59	123.759		
4,500.0	4,397.5	4,019.0	3,983.2	17.8	10.6	103.73	-2,714.6	917.9	3,063.1	3,038.0	25.14	121.858		
4,600.0	4,494.5	4,092.9	4,056.0	18.2	10.9	104.20	-2,725.3	910.9	3,083.7	3,058.1	25.66	120.161		
4,700.0	4,591.5	4,165.3	4,127.2	18.7	11.2	104.67	-2,736.2	903.5	3,105.3	3,079.1	26.17	118.643		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,800.0	4,688.5	4,256.0	4,216.4	19.2	11.5	105.23	-2,750.2	894.9	3,127.5	3,100.8	26.73	117.001		
4,900.0	4,785.4	4,428.8	4,386.7	19.6	12.1	106.28	-2,774.6	879.1	3,148.9	3,121.3	27.53	114.372		
5,000.0	4,882.4	4,500.4	4,457.3	20.1	12.3	106.70	-2,784.0	872.6	3,169.6	3,141.6	28.02	113.106		
5,100.0	4,979.4	4,572.9	4,528.9	20.6	12.5	107.13	-2,794.2	865.9	3,191.4	3,162.9	28.51	111.937		
5,200.0	5,076.4	4,674.3	4,628.9	21.0	12.9	107.72	-2,807.9	856.9	3,213.1	3,184.0	29.08	110.500		
5,300.0	5,173.4	4,731.6	4,685.4	21.5	13.1	108.05	-2,816.1	851.7	3,235.9	3,206.4	29.51	109.655		
5,400.0	5,270.4	4,863.1	4,814.7	22.0	13.5	108.81	-2,835.9	839.1	3,259.9	3,229.7	30.16	108.079		
5,500.0	5,367.4	4,973.2	4,923.4	22.5	13.9	109.43	-2,850.6	829.1	3,282.3	3,251.5	30.74	106.771		
5,600.0	5,464.4	5,061.8	5,010.9	22.9	14.2	109.92	-2,862.3	820.9	3,304.9	3,273.6	31.25	105.741		
5,700.0	5,561.4	5,159.6	5,107.4	23.4	14.5	110.45	-2,875.3	812.2	3,327.8	3,296.0	31.78	104.705		
5,800.0	5,658.3	5,243.9	5,190.7	23.9	14.8	110.89	-2,886.6	805.5	3,351.0	3,318.7	32.26	103.867		
5,900.0	5,755.3	5,377.4	5,322.7	24.3	15.2	111.56	-2,904.0	795.5	3,374.0	3,341.1	32.89	102.596		
6,000.0	5,852.3	5,468.0	5,412.3	24.8	15.5	112.03	-2,915.1	787.9	3,396.6	3,363.2	33.39	101.739		
6,100.0	5,949.3	5,543.0	5,486.4	25.3	15.7	112.41	-2,924.6	781.5	3,419.9	3,386.1	33.83	101.085		
6,200.0	6,046.3	5,615.0	5,557.4	25.7	16.0	112.77	-2,934.2	775.2	3,444.0	3,409.8	34.27	100.497		
6,300.0	6,143.3	5,737.5	5,678.4	26.2	16.3	113.39	-2,950.4	764.5	3,468.3	3,433.5	34.85	99.533		
6,400.0	6,240.3	5,883.8	5,823.2	26.7	16.8	114.09	-2,967.5	752.7	3,491.2	3,455.8	35.48	98.394		
6,500.0	6,337.3	5,959.0	5,897.7	27.1	17.0	114.45	-2,976.2	746.7	3,514.3	3,478.4	35.92	97.845		
6,600.0	6,434.2	6,144.9	6,082.0	27.6	17.5	115.29	-2,996.5	734.3	3,537.1	3,500.5	36.63	96.560		
6,700.0	6,531.2	6,593.1	6,529.4	28.1	18.2	117.04	-3,015.7	722.2	3,550.6	3,512.9	37.79	93.957		
6,800.0	6,628.2	6,724.3	6,660.6	28.5	18.4	117.50	-3,015.3	722.1	3,561.8	3,523.4	38.31	92.964		
6,900.0	6,725.2	6,822.7	6,758.9	29.0	18.5	117.85	-3,014.7	721.8	3,572.7	3,533.9	38.79	92.110		
7,000.0	6,822.2	6,936.0	6,872.2	29.5	18.6	118.25	-3,013.6	721.5	3,583.5	3,544.2	39.28	91.222		
7,100.0	6,919.2	7,029.7	6,965.9	30.0	18.7	118.58	-3,012.5	721.2	3,594.3	3,554.6	39.75	90.422		
7,200.0	7,016.2	7,121.2	7,057.4	30.4	18.8	118.90	-3,011.5	720.6	3,605.4	3,565.2	40.21	89.655		
7,300.0	7,113.2	7,202.1	7,138.3	30.9	18.9	119.19	-3,010.9	719.9	3,616.8	3,576.2	40.66	88.952		
7,328.7	7,141.0	7,231.0	7,167.2	31.0	18.9	119.30	-3,010.7	719.6	3,620.2	3,579.4	40.80	88.739		
7,350.0	7,161.7	7,245.7	7,182.0	31.1	18.9	119.90	-3,010.6	719.5	3,622.4	3,581.5	40.89	88.588		
7,400.0	7,210.3	7,301.2	7,237.5	31.3	19.0	90.40	-3,010.3	718.6	3,624.4	3,583.3	41.15	88.070		
7,450.0	7,258.7	7,348.6	7,284.8	31.5	19.1	72.64	-3,009.8	717.8	3,622.1	3,580.7	41.41	87.466		
7,500.0	7,306.5	7,389.2	7,325.5	31.7	19.1	59.75	-3,009.5	717.1	3,615.7	3,574.1	41.67	86.775		
7,550.0	7,353.4	7,430.0	7,366.2	31.8	19.2	51.06	-3,009.3	716.5	3,605.3	3,563.4	41.93	85.979		
7,600.0	7,399.0	7,474.1	7,410.3	31.9	19.2	45.30	-3,009.2	715.8	3,590.9	3,548.7	42.21	85.074		
7,650.0	7,442.9	7,516.7	7,452.9	32.0	19.3	41.51	-3,009.0	715.2	3,572.5	3,530.0	42.49	84.081		
7,700.0	7,484.9	7,558.2	7,494.4	32.1	19.3	39.10	-3,008.9	714.7	3,550.3	3,507.6	42.77	83.007		
7,750.0	7,524.5	7,597.5	7,533.7	32.1	19.4	37.71	-3,008.9	714.3	3,524.6	3,481.5	43.06	81.861		
7,800.0	7,561.6	7,634.4	7,570.6	32.1	19.4	37.15	-3,008.8	714.0	3,495.4	3,452.1	43.34	80.650		
7,850.0	7,595.8	7,672.2	7,608.4	32.2	19.5	37.38	-3,008.7	713.7	3,463.0	3,419.4	43.63	79.376		
7,900.0	7,626.8	7,708.5	7,644.7	32.2	19.5	38.38	-3,008.7	713.6	3,427.7	3,383.8	43.92	78.051		
7,950.0	7,654.5	7,740.7	7,676.9	32.2	19.5	40.19	-3,008.6	713.6	3,389.6	3,345.4	44.20	76.692		
8,000.0	7,678.5	7,764.3	7,700.5	32.3	19.6	42.89	-3,008.5	713.7	3,349.2	3,304.7	44.47	75.318		
8,050.0	7,698.8	7,784.0	7,720.2	32.3	19.6	46.79	-3,008.5	713.7	3,306.7	3,261.9	44.73	73.928		
8,100.0	7,715.2	7,799.9	7,736.1	32.3	19.6	52.28	-3,008.4	713.7	3,262.4	3,217.4	44.98	72.528		
8,150.0	7,727.5	7,811.9	7,748.1	32.4	19.6	59.91	-3,008.4	713.8	3,216.8	3,171.5	45.22	71.129		
8,200.0	7,735.6	7,819.8	7,756.0	32.4	19.6	70.32	-3,008.4	713.8	3,170.0	3,124.6	45.46	69.740		
8,250.0	7,739.6	7,823.5	7,759.7	32.4	19.6	83.86	-3,008.4	713.8	3,122.6	3,076.9	45.67	68.368		
8,271.7	7,740.0	7,823.9	7,760.1	32.5	19.6	90.57	-3,008.4	713.8	3,101.9	3,056.1	45.77	67.778		
8,300.0	7,740.0	7,823.8	7,760.0	32.5	19.6	90.57	-3,008.4	713.8	3,074.8	3,028.9	45.89	67.008		
8,400.0	7,740.0	7,823.6	7,759.8	32.7	19.6	90.55	-3,008.4	713.8	2,979.4	2,933.1	46.33	64.309		
8,500.0	7,740.0	7,823.4	7,759.6	33.0	19.6	90.54	-3,008.4	713.8	2,884.3	2,837.5	46.79	61.639		
8,600.0	7,740.0	7,823.2	7,759.4	33.4	19.6	90.53	-3,008.4	713.8	2,789.6	2,742.3	47.28	58.998		
8,700.0	7,740.0	7,822.9	7,759.1	33.8	19.6	90.51	-3,008.4	713.8	2,695.2	2,647.4	47.80	56.387		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	7,822.7	7,758.9	34.4	19.6	90.50	-3,008.4	713.8	2,601.3	2,553.0	48.35	53.807		
8,900.0	7,740.0	7,822.5	7,758.7	35.0	19.6	90.48	-3,008.4	713.8	2,507.8	2,458.9	48.92	51.260		
9,000.0	7,740.0	7,822.3	7,758.5	35.7	19.6	90.47	-3,008.4	713.8	2,414.9	2,365.3	49.54	48.748		
9,100.0	7,740.0	7,822.0	7,758.2	36.4	19.6	90.46	-3,008.4	713.8	2,322.5	2,272.3	50.19	46.271		
9,200.0	7,740.0	7,821.8	7,758.0	37.3	19.6	90.44	-3,008.4	713.8	2,230.8	2,179.9	50.89	43.834		
9,300.0	7,740.0	7,821.6	7,757.8	38.2	19.6	90.43	-3,008.4	713.8	2,139.9	2,088.2	51.64	41.437		
9,400.0	7,740.0	7,821.4	7,757.6	39.1	19.6	90.41	-3,008.4	713.8	2,049.8	1,997.3	52.44	39.084		
9,500.0	7,740.0	7,821.1	7,757.3	40.1	19.6	90.40	-3,008.4	713.8	1,960.6	1,907.3	53.31	36.778		
9,600.0	7,740.0	7,820.9	7,757.1	41.2	19.6	90.38	-3,008.4	713.8	1,872.5	1,818.3	54.24	34.524		
9,700.0	7,740.0	7,820.7	7,756.9	42.3	19.6	90.37	-3,008.4	713.8	1,785.7	1,730.5	55.24	32.325		
9,800.0	7,740.0	7,820.4	7,756.6	43.5	19.6	90.36	-3,008.4	713.8	1,700.4	1,644.0	56.33	30.186		
9,900.0	7,740.0	7,820.2	7,756.4	44.7	19.6	90.34	-3,008.4	713.8	1,616.7	1,559.2	57.50	28.114		
10,000.0	7,740.0	7,820.0	7,756.2	45.9	19.6	90.33	-3,008.4	713.8	1,535.0	1,476.2	58.78	26.116		
10,100.0	7,740.0	7,819.7	7,755.9	47.1	19.6	90.31	-3,008.4	713.8	1,455.5	1,395.4	60.15	24.200		
10,200.0	7,740.0	7,819.5	7,755.7	48.4	19.6	90.30	-3,008.4	713.8	1,378.8	1,317.2	61.62	22.375		
10,300.0	7,740.0	7,819.3	7,755.5	49.8	19.6	90.28	-3,008.4	713.8	1,305.2	1,242.0	63.20	20.651		
10,400.0	7,740.0	7,819.1	7,755.3	51.1	19.6	90.27	-3,008.4	713.8	1,235.3	1,170.4	64.87	19.041		
10,500.0	7,740.0	7,818.8	7,755.0	52.5	19.6	90.25	-3,008.4	713.8	1,169.8	1,103.2	66.62	17.560		
10,600.0	7,740.0	7,818.6	7,754.8	53.9	19.6	90.24	-3,008.4	713.8	1,109.4	1,041.0	68.40	16.221		
10,700.0	7,740.0	7,818.4	7,754.6	55.3	19.6	90.22	-3,008.4	713.8	1,055.1	985.0	70.14	15.043		
10,800.0	7,740.0	7,818.1	7,754.3	56.7	19.6	90.21	-3,008.4	713.8	1,007.8	936.1	71.77	14.043		
10,900.0	7,740.0	7,817.9	7,754.1	58.2	19.6	90.19	-3,008.4	713.8	968.6	895.5	73.16	13.240		
11,000.0	7,740.0	7,817.7	7,753.9	59.7	19.6	90.18	-3,008.4	713.8	938.4	864.3	74.18	12.651		
11,100.0	7,740.0	7,817.4	7,753.6	61.2	19.6	90.16	-3,008.4	713.8	918.2	843.5	74.69	12.294		
11,200.0	7,740.0	7,817.2	7,753.4	62.7	19.6	90.15	-3,008.4	713.8	908.6	834.0	74.59	12.182 SF		
11,237.8	7,740.0	7,817.1	7,753.3	63.2	19.6	90.14	-3,008.4	713.8	907.8	833.4	74.38	12.206 CC, ES		
11,300.0	7,740.0	7,816.9	7,753.1	64.2	19.6	90.13	-3,008.4	713.8	909.9	836.1	73.83	12.325		
11,400.0	7,740.0	7,816.7	7,752.9	65.7	19.6	90.12	-3,008.4	713.8	922.2	849.8	72.44	12.730		
11,500.0	7,740.0	7,816.5	7,752.7	67.2	19.6	90.10	-3,008.4	713.8	944.9	874.4	70.53	13.398		
11,600.0	7,740.0	7,816.2	7,752.4	68.8	19.6	90.09	-3,008.4	713.8	977.4	909.2	68.23	14.325		
11,700.0	7,740.0	7,816.0	7,752.2	70.3	19.6	90.07	-3,008.4	713.8	1,018.7	953.0	65.71	15.504		
11,800.0	7,740.0	7,815.8	7,752.0	71.9	19.6	90.06	-3,008.4	713.8	1,067.8	1,004.7	63.11	16.920		
11,900.0	7,740.0	7,815.5	7,751.7	73.5	19.6	90.04	-3,008.4	713.8	1,123.7	1,063.1	60.55	18.559		
12,000.0	7,740.0	7,815.3	7,751.5	75.1	19.6	90.03	-3,008.4	713.8	1,185.4	1,127.3	58.11	20.398		
12,100.0	7,740.0	7,815.0	7,751.2	76.6	19.6	90.01	-3,008.4	713.8	1,252.0	1,196.2	55.85	22.417		
12,200.0	7,740.0	7,814.8	7,751.0	78.2	19.6	90.00	-3,008.4	713.8	1,322.9	1,269.1	53.80	24.590		
12,300.0	7,740.0	7,814.6	7,750.8	79.8	19.6	89.98	-3,008.4	713.8	1,397.3	1,345.3	51.96	26.894		
12,400.0	7,740.0	7,814.3	7,750.5	81.5	19.6	89.97	-3,008.4	713.8	1,474.8	1,424.4	50.33	29.302		
12,500.0	7,740.0	7,814.1	7,750.3	83.1	19.6	89.95	-3,008.4	713.8	1,554.8	1,505.9	48.91	31.792		
12,600.0	7,740.0	7,813.8	7,750.0	84.7	19.6	89.94	-3,008.4	713.8	1,637.0	1,589.3	47.67	34.342		
12,700.0	7,740.0	7,813.6	7,749.8	86.3	19.6	89.92	-3,008.4	713.8	1,721.1	1,674.5	46.60	36.933		
12,800.0	7,740.0	7,813.3	7,749.5	88.0	19.6	89.91	-3,008.4	713.8	1,806.8	1,761.2	45.69	39.547		
12,900.0	7,740.0	7,813.1	7,749.3	89.6	19.6	89.89	-3,008.4	713.8	1,894.0	1,849.1	44.91	42.171		
13,000.0	7,740.0	7,812.8	7,749.0	91.2	19.6	89.88	-3,008.4	713.8	1,982.3	1,938.1	44.26	44.793		
13,100.0	7,740.0	7,812.6	7,748.8	92.9	19.6	89.86	-3,008.4	713.8	2,071.7	2,028.0	43.70	47.403		
13,200.0	7,740.0	7,812.4	7,748.6	94.5	19.6	89.85	-3,008.4	713.8	2,162.1	2,118.8	43.24	49.996		
13,300.0	7,740.0	7,812.1	7,748.3	96.2	19.6	89.83	-3,008.4	713.8	2,253.2	2,210.3	42.87	52.565		
13,400.0	7,740.0	7,811.9	7,748.1	97.8	19.6	89.81	-3,008.4	713.8	2,345.1	2,302.5	42.56	55.107		
13,500.0	7,740.0	7,811.6	7,747.8	99.5	19.6	89.80	-3,008.4	713.8	2,437.6	2,395.3	42.30	57.620		
13,600.0	7,740.0	7,811.4	7,747.6	101.2	19.6	89.78	-3,008.4	713.8	2,530.7	2,488.6	42.11	60.102		
13,700.0	7,740.0	7,811.1	7,747.3	102.8	19.6	89.77	-3,008.4	713.8	2,624.3	2,582.3	41.95	62.554		
13,800.0	7,740.0	7,810.9	7,747.1	104.5	19.6	89.75	-3,008.4	713.8	2,718.3	2,676.5	41.84	64.975		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,740.0	7,810.6	7,746.8	106.2	19.6	89.74	-3,008.4	713.8	2,812.8	2,771.0	41.75	67.365		
14,000.0	7,740.0	7,810.4	7,746.6	107.8	19.6	89.72	-3,008.4	713.8	2,907.6	2,865.9	41.70	69.726		
14,100.0	7,740.0	7,810.1	7,746.3	109.5	19.6	89.70	-3,008.4	713.8	3,002.7	2,961.1	41.67	72.058		
14,200.0	7,740.0	7,809.9	7,746.1	111.2	19.6	89.69	-3,008.4	713.8	3,098.2	3,056.5	41.66	74.363		
14,300.0	7,740.0	7,809.6	7,745.8	112.9	19.6	89.67	-3,008.4	713.8	3,194.0	3,152.3	41.67	76.640		
14,400.0	7,740.0	7,809.4	7,745.6	114.6	19.6	89.66	-3,008.4	713.8	3,290.0	3,248.3	41.70	78.893		
14,500.0	7,740.0	7,809.1	7,745.3	116.3	19.6	89.64	-3,008.4	713.8	3,386.2	3,344.4	41.74	81.121		
14,600.0	7,740.0	7,808.8	7,745.0	117.9	19.6	89.62	-3,008.4	713.8	3,482.6	3,440.8	41.79	83.327		
14,700.0	7,740.0	7,808.6	7,744.8	119.6	19.6	89.61	-3,008.4	713.7	3,579.3	3,537.4	41.86	85.510		
14,800.0	7,740.0	7,808.3	7,744.5	121.3	19.6	89.59	-3,008.4	713.7	3,676.1	3,634.2	41.93	87.672		
14,900.0	7,740.0	7,808.1	7,744.3	123.0	19.6	89.58	-3,008.4	713.7	3,773.1	3,731.1	42.01	89.814		
15,000.0	7,740.0	7,807.8	7,744.0	124.7	19.6	89.56	-3,008.4	713.7	3,870.2	3,828.1	42.10	91.937		
15,100.0	7,740.0	7,807.6	7,743.8	126.4	19.6	89.54	-3,008.4	713.7	3,967.5	3,925.3	42.19	94.041		
15,200.0	7,740.0	7,807.3	7,743.5	128.1	19.6	89.53	-3,008.4	713.7	4,064.9	4,022.6	42.29	96.128		
15,300.0	7,740.0	7,807.1	7,743.3	129.8	19.6	89.51	-3,008.4	713.7	4,162.4	4,120.0	42.39	98.198		
15,400.0	7,740.0	7,806.8	7,743.0	131.5	19.6	89.49	-3,008.4	713.7	4,260.1	4,217.6	42.49	100.252		
15,500.0	7,740.0	7,806.5	7,742.7	133.2	19.6	89.48	-3,008.4	713.7	4,357.8	4,315.2	42.60	102.289		
15,600.0	7,740.0	7,806.3	7,742.5	134.9	19.6	89.46	-3,008.4	713.7	4,455.7	4,413.0	42.71	104.312		
15,700.0	7,740.0	7,806.0	7,742.2	136.6	19.6	89.45	-3,008.4	713.7	4,553.6	4,510.8	42.83	106.321		
15,800.0	7,740.0	7,805.8	7,742.0	138.3	19.6	89.43	-3,008.4	713.7	4,651.7	4,608.7	42.95	108.315		
15,900.0	7,740.0	7,805.5	7,741.7	140.0	19.6	89.41	-3,008.4	713.7	4,749.8	4,706.7	43.06	110.296		
16,000.0	7,740.0	7,805.2	7,741.4	141.7	19.6	89.40	-3,008.4	713.7	4,848.0	4,804.8	43.18	112.263		
16,100.0	7,740.0	7,805.0	7,741.2	143.5	19.6	89.38	-3,008.4	713.7	4,946.2	4,902.9	43.31	114.218		
16,171.7	7,740.0	7,804.8	7,741.0	144.7	19.6	89.37	-3,008.4	713.7	5,016.7	4,973.3	43.39	115.611		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	153.52	-2,318.2	1,154.9	2,590.0					
100.0	100.0	74.4	74.4	0.2	0.1	153.51	-2,318.5	1,155.5	2,590.7	2,590.5	0.26	N/A		
150.0	150.0	116.0	116.0	0.2	0.2	153.50	-2,318.8	1,156.3	2,591.5	2,591.1	0.42	6,216.925		
200.0	200.0	176.1	176.0	0.3	0.3	153.45	-2,318.9	1,158.3	2,592.9	2,592.3	0.61	4,226.322		
283.3	283.2	309.3	309.0	0.5	0.6	153.28	-2,315.9	1,165.6	2,596.9	2,595.9	1.03	2,525.179		
300.0	299.9	333.3	332.9	0.5	0.6	150.87	-2,314.9	1,167.3	2,597.8	2,596.7	1.11	2,338.454		
400.0	399.6	465.7	464.6	0.7	0.9	136.93	-2,306.6	1,178.9	2,601.9	2,600.3	1.63	1,600.983		
500.0	499.3	583.0	580.4	0.9	1.3	124.75	-2,295.8	1,193.8	2,604.4	2,602.2	2.19	1,191.143		
600.0	598.9	710.2	704.8	1.2	1.8	114.74	-2,280.2	1,214.9	2,605.2	2,602.4	2.89	902.645		
700.0	698.5	823.6	814.7	1.4	2.3	106.80	-2,263.4	1,237.2	2,604.5	2,600.9	3.62	720.293		
800.0	797.9	936.3	923.9	1.6	2.8	100.58	-2,246.6	1,259.2	2,603.0	2,598.6	4.38	594.475		
900.0	897.1	1,137.8	1,116.6	1.9	3.9	95.25	-2,207.0	1,302.7	2,596.8	2,591.1	5.72	453.816		
1,000.0	996.2	1,244.8	1,217.7	2.2	4.6	91.18	-2,182.9	1,328.3	2,589.3	2,582.6	6.64	389.751		
1,100.0	1,095.0	1,326.7	1,295.1	2.5	5.0	87.96	-2,164.5	1,347.9	2,581.2	2,573.7	7.42	347.650		
1,200.0	1,193.6	1,401.5	1,366.2	2.8	5.5	85.34	-2,148.9	1,365.1	2,573.2	2,565.0	8.19	314.155		
1,300.0	1,291.9	1,478.3	1,438.9	3.2	5.9	83.13	-2,133.0	1,384.0	2,565.5	2,556.5	9.01	284.628		
1,400.0	1,389.9	1,601.5	1,555.4	3.5	6.7	81.13	-2,107.3	1,414.7	2,557.0	2,546.8	10.14	252.223		
1,500.0	1,487.6	1,717.7	1,665.0	3.9	7.4	79.44	-2,081.7	1,443.7	2,546.7	2,535.5	11.25	226.471		
1,600.0	1,584.8	1,809.3	1,751.6	4.4	7.9	78.07	-2,061.8	1,466.2	2,535.7	2,523.5	12.23	207.397		
1,624.3	1,608.4	1,835.8	1,776.6	4.5	8.1	77.76	-2,056.1	1,472.6	2,532.9	2,520.4	12.49	202.794		
1,700.0	1,681.8	1,915.8	1,852.2	4.8	8.6	77.61	-2,038.6	1,491.9	2,523.9	2,510.6	13.30	189.710		
1,800.0	1,778.8	2,007.1	1,938.6	5.3	9.1	77.43	-2,018.7	1,513.9	2,512.1	2,497.8	14.28	175.878		
1,900.0	1,875.8	2,090.5	2,017.8	5.7	9.6	77.29	-2,001.4	1,533.4	2,500.8	2,485.6	15.21	164.412		
2,000.0	1,972.8	2,192.3	2,114.4	6.2	10.2	77.11	-1,980.5	1,557.6	2,489.9	2,473.7	16.27	153.064		
2,100.0	2,069.8	2,289.9	2,206.7	6.6	10.8	76.92	-1,959.8	1,581.5	2,478.9	2,461.6	17.30	143.277		
2,200.0	2,166.8	2,385.1	2,296.9	7.1	11.4	76.73	-1,939.8	1,604.8	2,468.1	2,449.7	18.32	134.704		
2,300.0	2,263.8	2,492.3	2,398.5	7.5	12.0	76.53	-1,917.5	1,630.7	2,457.3	2,437.9	19.39	126.701		
2,400.0	2,360.8	2,579.1	2,481.0	8.0	12.5	76.38	-1,899.7	1,651.0	2,446.4	2,426.0	20.36	120.181		
2,500.0	2,457.7	2,705.0	2,600.5	8.4	13.3	76.15	-1,873.8	1,680.9	2,435.6	2,414.1	21.53	113.132		
2,600.0	2,554.7	2,779.5	2,671.1	8.9	13.7	76.01	-1,858.2	1,698.6	2,424.5	2,402.0	22.44	108.052		
2,700.0	2,651.7	2,896.0	2,781.3	9.4	14.4	75.76	-1,833.2	1,727.3	2,413.5	2,389.9	23.60	102.283		
2,800.0	2,748.7	2,991.0	2,871.1	9.8	15.0	75.55	-1,812.7	1,750.5	2,402.3	2,377.7	24.61	97.598		
2,900.0	2,845.7	3,099.2	2,973.5	10.3	15.7	75.33	-1,789.7	1,776.8	2,391.3	2,365.6	25.72	92.986		
3,000.0	2,942.7	3,203.4	3,071.8	10.8	16.3	75.08	-1,766.5	1,802.4	2,379.7	2,352.9	26.81	88.755		
3,100.0	3,039.7	3,285.9	3,149.6	11.2	16.8	74.88	-1,748.2	1,823.1	2,368.5	2,340.7	27.78	85.260		
3,200.0	3,136.7	3,382.0	3,240.5	11.7	17.4	74.67	-1,727.8	1,846.5	2,357.7	2,328.9	28.80	81.870		
3,300.0	3,233.6	3,467.5	3,321.7	12.2	17.9	74.51	-1,710.4	1,866.7	2,347.3	2,317.6	29.75	78.912		
3,400.0	3,330.6	3,591.1	3,439.1	12.6	18.6	74.27	-1,684.8	1,895.8	2,336.4	2,305.5	30.91	75.592		
3,500.0	3,427.6	3,684.2	3,527.6	13.1	19.2	74.09	-1,665.5	1,917.4	2,325.5	2,293.6	31.90	72.897		
3,600.0	3,524.6	3,780.3	3,618.8	13.6	19.8	73.90	-1,645.4	1,940.1	2,314.7	2,281.7	32.92	70.302		
3,700.0	3,621.6	3,865.6	3,699.5	14.0	20.3	73.70	-1,627.5	1,961.1	2,304.4	2,270.5	33.90	67.974		
3,800.0	3,718.6	3,984.2	3,811.3	14.5	21.0	73.40	-1,601.9	1,990.9	2,293.9	2,258.8	35.07	65.408		
3,900.0	3,815.6	4,084.1	3,905.6	15.0	21.6	73.15	-1,579.9	2,015.7	2,282.9	2,246.8	36.13	63.184		
4,000.0	3,912.6	4,176.8	3,993.1	15.4	22.2	72.92	-1,559.7	2,038.7	2,272.3	2,235.1	37.14	61.173		
4,100.0	4,009.5	4,275.4	4,086.5	15.9	22.8	72.69	-1,538.9	2,062.7	2,261.8	2,223.6	38.18	59.244		
4,200.0	4,106.5	4,376.2	4,182.1	16.4	23.4	72.47	-1,517.8	2,086.6	2,251.3	2,212.1	39.21	57.414		
4,300.0	4,203.5	4,473.1	4,274.3	16.8	23.9	72.27	-1,498.0	2,109.1	2,240.8	2,200.6	40.21	55.724		
4,400.0	4,300.5	4,580.5	4,376.6	17.3	24.6	72.07	-1,476.4	2,133.4	2,230.3	2,189.1	41.26	54.061		
4,500.0	4,397.5	4,674.4	4,466.0	17.8	25.1	71.88	-1,457.1	2,154.9	2,219.6	2,177.3	42.26	52.526		
4,600.0	4,494.5	4,767.0	4,553.9	18.2	25.6	71.68	-1,438.0	2,176.8	2,209.3	2,166.1	43.23	51.104		
4,700.0	4,591.5	4,878.1	4,659.3	18.7	26.3	71.43	-1,414.7	2,202.9	2,198.8	2,154.4	44.34	49.594		
4,800.0	4,688.5	4,968.0	4,744.6	19.2	26.8	71.23	-1,396.1	2,224.2	2,188.5	2,143.2	45.30	48.308		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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			
4,900.0	4,785.4	5,078.9	4,850.0	19.6	27.5	70.99	-1,373.2	2,249.9	2,178.0	2,131.7	46.36	46.978		
5,000.0	4,882.4	5,192.8	4,958.5	20.1	28.1	70.76	-1,349.6	2,275.3	2,167.0	2,119.6	47.43	45.685		
5,100.0	4,979.4	5,281.4	5,042.8	20.6	28.7	70.57	-1,330.9	2,295.3	2,155.8	2,107.4	48.39	44.552		
5,200.0	5,076.4	5,388.1	5,144.5	21.0	29.2	70.35	-1,308.9	2,318.9	2,144.8	2,095.4	49.40	43.415		
5,300.0	5,173.4	5,474.5	5,227.5	21.5	29.7	70.24	-1,292.5	2,336.4	2,134.0	2,083.7	50.30	42.428		
5,400.0	5,270.4	5,543.2	5,293.6	22.0	30.1	70.15	-1,280.0	2,350.5	2,124.0	2,072.9	51.12	41.549		
5,500.0	5,367.4	5,613.5	5,361.1	22.5	30.4	70.06	-1,268.0	2,365.9	2,115.8	2,063.8	51.94	40.734		
5,600.0	5,464.4	5,758.6	5,500.8	22.9	31.2	69.89	-1,243.5	2,396.6	2,107.2	2,054.1	53.09	39.693		
5,700.0	5,561.4	5,850.5	5,589.6	23.4	31.6	69.81	-1,228.1	2,414.5	2,097.6	2,043.7	53.96	38.877		
5,800.0	5,658.3	5,956.2	5,692.4	23.9	32.0	69.80	-1,211.8	2,433.1	2,087.9	2,033.1	54.85	38.069		
5,900.0	5,755.3	6,067.6	5,801.2	24.3	32.5	69.86	-1,196.1	2,450.4	2,078.0	2,022.3	55.73	37.289		
6,000.0	5,852.3	6,169.8	5,901.6	24.8	32.9	69.97	-1,182.2	2,464.2	2,067.2	2,010.7	56.54	36.565		
6,100.0	5,949.3	6,259.7	5,990.4	25.3	33.1	70.16	-1,172.4	2,474.2	2,057.0	1,999.8	57.27	35.917		
6,200.0	6,046.3	6,356.7	6,086.6	25.7	33.4	70.44	-1,163.5	2,483.1	2,047.1	1,989.1	57.99	35.301		
6,300.0	6,143.3	6,449.0	6,178.3	26.2	33.6	70.76	-1,156.4	2,490.0	2,037.3	1,978.6	58.68	34.721		
6,400.0	6,240.3	6,543.6	6,272.6	26.7	33.7	71.16	-1,150.6	2,495.5	2,027.8	1,968.5	59.30	34.195		
6,500.0	6,337.3	6,635.3	6,364.1	27.1	33.9	71.62	-1,146.8	2,499.1	2,018.8	1,958.9	59.92	33.691		
6,600.0	6,434.2	6,726.2	6,454.9	27.6	34.0	72.11	-1,143.8	2,501.9	2,010.2	1,949.7	60.52	33.217		
6,700.0	6,531.2	6,808.5	6,537.2	28.1	34.0	72.60	-1,142.6	2,503.5	2,002.5	1,941.4	61.08	32.786		
6,800.0	6,628.2	6,925.0	6,653.7	28.5	34.1	73.34	-1,141.5	2,504.6	1,995.0	1,933.3	61.65	32.359		
6,900.0	6,725.2	7,012.3	6,741.0	29.0	34.2	73.93	-1,141.1	2,504.2	1,987.3	1,925.2	62.19	31.956		
7,000.0	6,822.2	7,103.6	6,832.3	29.5	34.2	74.55	-1,141.1	2,504.1	1,980.4	1,917.7	62.73	31.569		
7,100.0	6,919.2	7,200.4	6,929.1	30.0	34.3	75.21	-1,141.0	2,504.2	1,973.9	1,910.6	63.27	31.197		
7,200.0	7,016.2	7,310.8	7,039.5	30.4	34.4	75.96	-1,140.7	2,504.0	1,967.3	1,903.5	63.82	30.827		
7,300.0	7,113.2	7,401.0	7,129.7	30.9	34.4	76.58	-1,140.1	2,504.0	1,960.8	1,896.4	64.35	30.470		
7,328.7	7,141.0	7,429.3	7,157.9	31.0	34.5	76.77	-1,139.9	2,504.1	1,959.0	1,894.5	64.51	30.370		
7,350.0	7,161.7	7,448.5	7,177.2	31.1	34.5	68.41	-1,139.8	2,504.1	1,957.4	1,892.8	64.61	30.295		
7,400.0	7,210.3	7,493.8	7,222.5	31.3	34.5	47.67	-1,139.7	2,504.3	1,951.0	1,886.2	64.82	30.098		
7,450.0	7,258.7	7,539.7	7,268.4	31.5	34.5	29.34	-1,139.6	2,504.4	1,941.0	1,876.0	65.00	29.864		
7,500.0	7,306.5	7,587.7	7,316.4	31.7	34.6	15.56	-1,139.5	2,504.5	1,927.5	1,862.3	65.13	29.594		
7,550.0	7,353.4	7,634.1	7,362.8	31.8	34.6	5.56	-1,139.5	2,504.5	1,910.4	1,845.2	65.23	29.289		
7,600.0	7,399.0	7,677.2	7,405.9	31.9	34.6	-1.99	-1,139.6	2,504.5	1,889.9	1,824.7	65.28	28.951		
7,650.0	7,442.9	7,719.0	7,447.7	32.0	34.6	-8.08	-1,139.7	2,504.5	1,866.3	1,801.0	65.29	28.583		
7,700.0	7,484.9	7,763.2	7,491.9	32.1	34.7	-13.44	-1,139.8	2,504.5	1,839.6	1,774.3	65.27	28.185		
7,750.0	7,524.5	7,804.9	7,533.6	32.1	34.7	-18.49	-1,139.9	2,504.4	1,809.9	1,744.7	65.20	27.761		
7,800.0	7,561.6	7,841.3	7,570.0	32.1	34.7	-23.57	-1,139.9	2,504.4	1,777.7	1,712.6	65.08	27.315		
7,850.0	7,595.8	7,874.3	7,603.0	32.2	34.8	-28.91	-1,139.9	2,504.4	1,743.2	1,678.3	64.92	26.852		
7,900.0	7,626.8	7,904.3	7,633.0	32.2	34.8	-34.73	-1,140.0	2,504.5	1,706.7	1,642.0	64.70	26.377		
7,950.0	7,654.5	7,932.4	7,661.1	32.2	34.8	-41.20	-1,140.0	2,504.6	1,668.5	1,604.1	64.43	25.896		
8,000.0	7,678.5	7,957.1	7,685.8	32.3	34.8	-48.38	-1,140.0	2,504.7	1,629.0	1,564.9	64.10	25.413		
8,050.0	7,698.8	7,977.9	7,706.6	32.3	34.8	-56.16	-1,140.0	2,504.7	1,588.6	1,524.9	63.71	24.934		
8,100.0	7,715.2	7,994.7	7,723.3	32.3	34.8	-64.32	-1,140.0	2,504.7	1,547.7	1,484.4	63.26	24.467		
8,150.0	7,727.5	8,007.2	7,735.9	32.4	34.8	-72.48	-1,140.0	2,504.8	1,506.7	1,443.9	62.73	24.017		
8,200.0	7,735.6	8,015.4	7,744.1	32.4	34.9	-80.22	-1,140.0	2,504.8	1,465.9	1,403.8	62.14	23.590		
8,250.0	7,739.6	8,019.4	7,748.1	32.4	34.9	-87.18	-1,140.0	2,504.8	1,425.9	1,364.5	61.47	23.195		
8,271.7	7,740.0	8,019.8	7,748.5	32.5	34.9	-89.90	-1,140.0	2,504.8	1,408.9	1,347.8	61.17	23.035		
8,300.0	7,740.0	8,019.7	7,748.4	32.5	34.9	-89.90	-1,140.0	2,504.8	1,387.0	1,326.2	60.74	22.833		
8,400.0	7,740.0	8,019.6	7,748.3	32.7	34.9	-89.89	-1,140.0	2,504.8	1,311.4	1,252.3	59.12	22.184		
8,500.0	7,740.0	8,019.5	7,748.2	33.0	34.9	-89.88	-1,140.0	2,504.8	1,239.3	1,182.1	57.26	21.643		
8,600.0	7,740.0	8,019.3	7,748.0	33.4	34.9	-89.87	-1,140.0	2,504.8	1,171.3	1,116.1	55.19	21.222		
8,700.0	7,740.0	8,019.2	7,747.9	33.8	34.9	-89.86	-1,140.0	2,504.8	1,108.2	1,055.2	52.98	20.917		
8,800.0	7,740.0	8,019.1	7,747.8	34.4	34.9	-89.86	-1,140.0	2,504.8	1,050.9	1,000.1	50.79	20.689		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	
8,900.0	7,740.0	8,019.0	7,747.7	35.0	34.9	-89.85	-1,140.0	2,504.8	1,000.2	951.3	48.93	20.440	
9,000.0	7,740.0	8,018.9	7,747.6	35.7	34.9	-89.84	-1,140.0	2,504.8	957.4	909.5	47.81	20.023	
9,100.0	7,740.0	8,018.7	7,747.4	36.4	34.9	-89.83	-1,140.0	2,504.8	923.4	875.7	47.72	19.351	
9,200.0	7,740.0	8,018.6	7,747.3	37.3	34.9	-89.83	-1,140.0	2,504.8	899.3	850.7	48.57	18.516	
9,300.0	7,740.0	8,018.5	7,747.2	38.2	34.9	-89.82	-1,140.0	2,504.8	885.9	835.9	50.02	17.711	
9,369.4	7,740.0	8,018.4	7,747.1	38.8	34.9	-89.81	-1,140.0	2,504.8	883.2	832.0	51.18	17.256	CC, ES
9,400.0	7,740.0	8,018.4	7,747.1	39.1	34.9	-89.81	-1,140.0	2,504.8	883.8	832.1	51.70	17.094	
9,500.0	7,740.0	8,018.3	7,747.0	40.1	34.9	-89.80	-1,140.0	2,504.8	892.8	839.5	53.34	16.737	
9,600.0	7,740.0	8,018.2	7,746.9	41.2	34.9	-89.80	-1,140.0	2,504.8	912.8	858.0	54.83	16.647	SF
9,700.0	7,740.0	8,018.1	7,746.8	42.3	34.9	-89.79	-1,140.0	2,504.8	943.1	886.9	56.16	16.794	
9,800.0	7,740.0	8,018.0	7,746.7	43.5	34.9	-89.78	-1,140.0	2,504.8	982.6	925.2	57.36	17.129	
9,900.0	7,740.0	8,017.9	7,746.5	44.7	34.9	-89.78	-1,140.0	2,504.8	1,030.4	971.8	58.54	17.601	
10,000.0	7,740.0	8,017.7	7,746.4	45.9	34.9	-89.77	-1,140.0	2,504.8	1,085.2	1,025.5	59.74	18.168	
10,100.0	7,740.0	8,017.6	7,746.3	47.1	34.9	-89.76	-1,140.0	2,504.8	1,146.2	1,085.3	60.97	18.799	
10,200.0	7,740.0	8,017.5	7,746.2	48.4	34.9	-89.75	-1,140.0	2,504.8	1,212.4	1,150.2	62.23	19.484	
10,300.0	7,740.0	8,017.4	7,746.1	49.8	34.9	-89.75	-1,140.0	2,504.8	1,283.0	1,219.5	63.46	20.217	
10,400.0	7,740.0	8,017.3	7,746.0	51.1	34.9	-89.74	-1,140.0	2,504.8	1,357.3	1,292.7	64.64	20.998	
10,500.0	7,740.0	8,017.2	7,745.9	52.5	34.9	-89.74	-1,140.0	2,504.8	1,434.7	1,369.0	65.73	21.826	
10,600.0	7,740.0	8,017.1	7,745.8	53.9	34.9	-89.73	-1,140.0	2,504.8	1,514.8	1,448.0	66.74	22.697	
10,700.0	7,740.0	8,017.0	7,745.7	55.3	34.9	-89.72	-1,140.0	2,504.8	1,597.1	1,529.4	67.64	23.610	
10,800.0	7,740.0	8,016.9	7,745.6	56.7	34.9	-89.72	-1,140.0	2,504.8	1,681.3	1,612.8	68.46	24.559	
10,900.0	7,740.0	8,016.8	7,745.5	58.2	34.9	-89.71	-1,140.0	2,504.8	1,767.2	1,698.0	69.19	25.541	
11,000.0	7,740.0	8,016.7	7,745.4	59.7	34.9	-89.70	-1,140.0	2,504.8	1,854.4	1,784.6	69.84	26.552	
11,100.0	7,740.0	8,016.6	7,745.3	61.2	34.9	-89.70	-1,140.0	2,504.8	1,943.0	1,872.5	70.43	27.587	
11,200.0	7,740.0	8,016.6	7,745.2	62.7	34.9	-89.69	-1,140.0	2,504.8	2,032.5	1,961.6	70.96	28.645	
11,300.0	7,740.0	8,016.5	7,745.2	64.2	34.9	-89.68	-1,140.0	2,504.8	2,123.0	2,051.6	71.43	29.722	
11,400.0	7,740.0	8,016.4	7,745.1	65.7	34.9	-89.68	-1,140.0	2,504.8	2,214.4	2,142.5	71.86	30.816	
11,500.0	7,740.0	8,016.3	7,745.0	67.2	34.9	-89.67	-1,140.0	2,504.8	2,306.4	2,234.2	72.25	31.925	
11,600.0	7,740.0	8,016.2	7,744.9	68.8	34.9	-89.67	-1,140.0	2,504.8	2,399.1	2,326.5	72.60	33.046	
11,700.0	7,740.0	8,016.1	7,744.8	70.3	34.9	-89.66	-1,140.0	2,504.8	2,492.4	2,419.4	72.92	34.178	
11,800.0	7,740.0	8,016.0	7,744.7	71.9	34.9	-89.66	-1,140.0	2,504.8	2,586.1	2,512.9	73.22	35.320	
11,900.0	7,740.0	8,015.9	7,744.6	73.5	34.9	-89.65	-1,140.0	2,504.8	2,680.3	2,606.8	73.49	36.471	
12,000.0	7,740.0	8,015.8	7,744.5	75.1	34.9	-89.64	-1,140.0	2,504.8	2,774.9	2,701.2	73.74	37.629	
12,100.0	7,740.0	8,015.7	7,744.4	76.6	34.9	-89.64	-1,140.0	2,504.8	2,869.9	2,795.9	73.98	38.794	
12,200.0	7,740.0	8,015.7	7,744.3	78.2	34.9	-89.63	-1,140.0	2,504.8	2,965.2	2,891.0	74.20	39.964	
12,300.0	7,740.0	8,015.6	7,744.3	79.8	34.9	-89.63	-1,140.0	2,504.8	3,060.8	2,986.4	74.40	41.140	
12,400.0	7,740.0	8,015.5	7,744.2	81.5	34.9	-89.62	-1,140.0	2,504.8	3,156.7	3,082.1	74.59	42.320	
12,500.0	7,740.0	8,015.4	7,744.1	83.1	34.9	-89.62	-1,140.0	2,504.8	3,252.8	3,178.0	74.77	43.503	
12,600.0	7,740.0	8,015.3	7,744.0	84.7	34.9	-89.61	-1,140.0	2,504.8	3,349.2	3,274.2	74.94	44.690	
12,700.0	7,740.0	8,015.2	7,743.9	86.3	34.9	-89.61	-1,140.0	2,504.8	3,445.7	3,370.6	75.10	45.880	
12,800.0	7,740.0	8,015.2	7,743.8	88.0	34.9	-89.60	-1,140.0	2,504.8	3,542.5	3,467.2	75.26	47.072	
12,900.0	7,740.0	8,015.1	7,743.8	89.6	34.9	-89.60	-1,140.0	2,504.8	3,639.4	3,564.0	75.40	48.266	
13,000.0	7,740.0	8,015.0	7,743.7	91.2	34.9	-89.59	-1,140.0	2,504.8	3,736.5	3,661.0	75.54	49.462	
13,100.0	7,740.0	8,014.9	7,743.6	92.9	34.9	-89.58	-1,140.0	2,504.8	3,833.7	3,758.1	75.68	50.659	
13,200.0	7,740.0	8,014.8	7,743.5	94.5	34.9	-89.58	-1,140.0	2,504.8	3,931.1	3,855.3	75.81	51.858	
13,300.0	7,740.0	8,014.8	7,743.5	96.2	34.9	-89.57	-1,140.0	2,504.8	4,028.6	3,952.7	75.93	53.057	
13,400.0	7,740.0	8,014.7	7,743.4	97.8	34.9	-89.57	-1,140.0	2,504.8	4,126.2	4,050.2	76.05	54.257	
13,500.0	7,740.0	8,014.6	7,743.3	99.5	34.9	-89.56	-1,140.0	2,504.8	4,224.0	4,147.8	76.17	55.458	
13,600.0	7,740.0	8,014.5	7,743.2	101.2	34.9	-89.56	-1,140.0	2,504.8	4,321.8	4,245.5	76.28	56.659	
13,700.0	7,740.0	8,014.5	7,743.1	102.8	34.9	-89.55	-1,140.0	2,504.8	4,419.8	4,343.4	76.39	57.861	
13,800.0	7,740.0	8,014.4	7,743.1	104.5	34.9	-89.55	-1,140.0	2,504.8	4,517.8	4,441.3	76.49	59.062	
13,900.0	7,740.0	8,014.3	7,743.0	106.2	34.9	-89.55	-1,140.0	2,504.8	4,615.9	4,539.3	76.60	60.263	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,000.0	7,740.0	8,014.2	7,742.9	107.8	34.9	-89.54	-1,140.0	2,504.8	4,714.1	4,637.4	76.70	61.465		
14,100.0	7,740.0	8,014.2	7,742.9	109.5	34.9	-89.54	-1,140.0	2,504.8	4,812.4	4,735.6	76.79	62.665		
14,200.0	7,740.0	8,014.1	7,742.8	111.2	34.9	-89.53	-1,140.0	2,504.8	4,910.7	4,833.8	76.89	63.866		
14,300.0	7,740.0	8,014.0	7,742.7	112.9	34.9	-89.53	-1,140.0	2,504.8	5,009.1	4,932.1	76.99	65.066		
14,400.0	7,740.0	8,013.9	7,742.6	114.6	34.9	-89.52	-1,140.0	2,504.8	5,107.6	5,030.5	77.08	66.265		
14,500.0	7,740.0	8,013.9	7,742.6	116.3	34.9	-89.52	-1,140.0	2,504.8	5,206.1	5,128.9	77.17	67.463		
14,600.0	7,740.0	8,013.8	7,742.5	117.9	34.9	-89.51	-1,140.0	2,504.8	5,304.7	5,227.4	77.26	68.661		
14,700.0	7,740.0	8,013.7	7,742.4	119.6	34.9	-89.51	-1,140.0	2,504.8	5,403.3	5,325.9	77.35	69.858		
14,800.0	7,740.0	8,013.7	7,742.4	121.3	34.9	-89.50	-1,140.0	2,504.8	5,502.0	5,424.5	77.43	71.054		
14,900.0	7,740.0	8,013.6	7,742.3	123.0	34.9	-89.50	-1,140.0	2,504.8	5,600.7	5,523.2	77.52	72.249		
15,000.0	7,740.0	8,013.5	7,742.2	124.7	34.9	-89.50	-1,140.0	2,504.8	5,699.5	5,621.9	77.60	73.443		
15,100.0	7,740.0	8,013.5	7,742.2	126.4	34.9	-89.49	-1,140.0	2,504.8	5,798.3	5,720.6	77.69	74.636		
15,200.0	7,740.0	8,013.4	7,742.1	128.1	34.9	-89.49	-1,140.0	2,504.8	5,897.1	5,819.4	77.77	75.828		
15,300.0	7,740.0	8,013.3	7,742.0	129.8	34.9	-89.48	-1,140.0	2,504.8	5,996.0	5,918.2	77.85	77.018		
15,400.0	7,740.0	8,013.3	7,742.0	131.5	34.9	-89.48	-1,140.0	2,504.8	6,094.9	6,017.0	77.93	78.207		
15,500.0	7,740.0	8,013.2	7,741.9	133.2	34.9	-89.47	-1,140.0	2,504.8	6,193.9	6,115.9	78.01	79.396		
15,600.0	7,740.0	8,013.1	7,741.8	134.9	34.9	-89.47	-1,140.0	2,504.8	6,292.9	6,214.8	78.09	80.582		
15,700.0	7,740.0	8,013.1	7,741.8	136.6	34.9	-89.47	-1,140.0	2,504.8	6,391.9	6,313.8	78.17	81.768		
15,800.0	7,740.0	8,013.0	7,741.7	138.3	34.9	-89.46	-1,140.0	2,504.8	6,491.0	6,412.7	78.25	82.952		
15,900.0	7,740.0	8,013.0	7,741.6	140.0	34.9	-89.46	-1,140.0	2,504.8	6,590.1	6,511.7	78.33	84.134		
16,000.0	7,740.0	8,012.9	7,741.6	141.7	34.9	-89.45	-1,140.0	2,504.8	6,689.2	6,610.8	78.41	85.316		
16,100.0	7,740.0	8,012.8	7,741.5	143.5	34.9	-89.45	-1,140.0	2,504.8	6,788.3	6,709.8	78.48	86.495		
16,171.7	7,740.0	8,012.8	7,741.5	144.7	34.9	-89.45	-1,140.0	2,504.8	6,859.4	6,780.8	78.54	87.340		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	142.91	-1,198.8	906.3	1,502.9					
100.0	100.0	94.0	94.0	0.2	0.2	142.91	-1,198.8	906.3	1,502.8	1,502.5	0.32	4,754.289		
150.0	150.0	144.0	144.0	0.2	0.3	142.91	-1,198.8	906.3	1,502.8	1,502.4	0.49	3,063.061		
200.0	200.0	194.0	194.0	0.3	0.3	142.92	-1,198.8	906.3	1,503.4	1,502.7	0.67	2,259.177		
283.3	283.2	277.2	277.2	0.5	0.5	142.95	-1,198.8	906.3	1,506.6	1,505.6	0.96	1,566.446		
300.0	299.9	293.9	293.9	0.5	0.5	140.59	-1,198.8	906.3	1,507.5	1,506.4	1.02	1,475.620		
400.0	399.6	393.6	393.6	0.7	0.7	127.03	-1,198.8	906.3	1,512.4	1,511.0	1.39	1,089.192		
500.0	499.3	493.3	493.3	0.9	0.9	115.34	-1,198.8	906.3	1,516.3	1,514.5	1.77	857.873		
600.0	598.9	592.9	592.9	1.2	1.0	105.98	-1,198.8	906.3	1,519.3	1,517.1	2.16	703.349		
700.0	698.5	692.5	692.5	1.4	1.2	98.76	-1,198.8	906.3	1,521.3	1,518.7	2.57	592.489		
800.0	797.9	791.9	791.9	1.6	1.4	93.26	-1,198.8	906.3	1,522.4	1,519.4	2.99	508.879		
900.0	897.1	891.1	891.1	1.9	1.6	89.08	-1,198.8	906.3	1,522.6	1,519.2	3.43	443.456		
1,000.0	996.2	990.2	990.2	2.2	1.7	85.91	-1,198.8	906.3	1,522.0	1,518.1	3.89	390.808		
1,100.0	1,095.0	1,089.0	1,089.0	2.5	1.9	83.50	-1,198.8	906.3	1,520.6	1,516.2	4.38	347.498		
1,200.0	1,193.6	1,187.6	1,187.6	2.8	2.1	81.68	-1,198.8	906.3	1,518.4	1,513.5	4.88	311.237		
1,300.0	1,291.9	1,285.9	1,285.9	3.2	2.2	80.33	-1,198.8	906.3	1,515.4	1,510.0	5.40	280.440		
1,400.0	1,389.9	1,383.9	1,383.9	3.5	2.4	79.37	-1,198.8	906.3	1,511.8	1,505.9	5.95	253.973		
1,500.0	1,487.6	1,481.6	1,481.6	3.9	2.6	78.72	-1,198.8	906.3	1,507.6	1,501.1	6.53	231.003		
1,600.0	1,584.8	1,578.8	1,578.8	4.4	2.8	78.34	-1,198.8	906.3	1,502.9	1,495.8	7.13	210.904		
1,624.3	1,608.4	1,602.4	1,602.4	4.5	2.8	78.28	-1,198.8	906.3	1,501.7	1,494.4	7.27	206.458		
1,700.0	1,681.8	1,675.8	1,675.8	4.8	2.9	78.95	-1,198.8	906.3	1,497.9	1,490.2	7.74	193.634		
1,800.0	1,778.8	1,772.8	1,772.8	5.3	3.1	79.84	-1,198.8	906.3	1,493.3	1,485.0	8.35	178.830		
1,900.0	1,875.8	1,869.8	1,869.8	5.7	3.3	80.74	-1,198.8	906.3	1,489.1	1,480.1	8.97	166.029		
2,000.0	1,972.8	1,966.8	1,966.8	6.2	3.4	81.64	-1,198.8	906.3	1,485.2	1,475.6	9.59	154.872		
2,100.0	2,069.8	2,063.8	2,063.8	6.6	3.6	82.54	-1,198.8	906.3	1,481.8	1,471.6	10.21	145.078		
2,200.0	2,166.8	2,160.8	2,160.8	7.1	3.8	83.45	-1,198.8	906.3	1,478.7	1,467.9	10.84	136.426		
2,300.0	2,263.8	2,257.8	2,257.8	7.5	3.9	84.36	-1,198.8	906.3	1,476.1	1,464.6	11.47	128.739		
2,400.0	2,360.8	2,354.8	2,354.8	8.0	4.1	85.28	-1,198.8	906.3	1,473.8	1,461.7	12.09	121.875		
2,500.0	2,457.7	2,451.7	2,451.7	8.4	4.3	86.19	-1,198.8	906.3	1,471.9	1,459.2	12.72	115.718		
2,600.0	2,554.7	2,548.7	2,548.7	8.9	4.4	87.11	-1,198.8	906.3	1,470.4	1,457.1	13.35	110.171		
2,700.0	2,651.7	2,645.7	2,645.7	9.4	4.6	88.03	-1,198.8	906.3	1,469.4	1,455.4	13.97	105.155		
2,800.0	2,748.7	2,742.7	2,742.7	9.8	4.8	88.95	-1,198.8	906.3	1,468.7	1,454.1	14.60	100.605		
2,900.0	2,845.7	2,839.7	2,839.7	10.3	5.0	89.87	-1,198.8	906.3	1,468.5	1,453.2	15.22	96.464		
2,913.7	2,858.9	2,852.9	2,852.9	10.4	5.0	90.00	-1,198.8	906.3	1,468.5	1,453.2	15.31	95.927		
3,000.0	2,942.7	2,936.7	2,936.7	10.8	5.1	90.80	-1,198.8	906.3	1,468.6	1,452.8	15.85	92.685		
3,100.0	3,039.7	3,033.7	3,033.7	11.2	5.3	91.72	-1,198.8	906.3	1,469.2	1,452.7	16.47	89.229		
3,200.0	3,136.7	3,130.7	3,130.7	11.7	5.5	92.64	-1,198.8	906.3	1,470.1	1,453.0	17.08	86.059		
3,300.0	3,233.6	3,227.6	3,227.6	12.2	5.6	93.56	-1,198.8	906.3	1,471.5	1,453.8	17.70	83.147		
3,400.0	3,330.6	3,324.6	3,324.6	12.6	5.8	94.47	-1,198.8	906.3	1,473.2	1,454.9	18.31	80.466		
3,500.0	3,427.6	3,421.6	3,421.6	13.1	6.0	95.39	-1,198.8	906.3	1,475.4	1,456.5	18.92	77.993		
3,600.0	3,524.6	3,518.6	3,518.6	13.6	6.1	96.30	-1,198.8	906.3	1,477.9	1,458.4	19.52	75.710		
3,700.0	3,621.6	3,615.6	3,615.6	14.0	6.3	97.21	-1,198.8	906.3	1,480.9	1,460.8	20.12	73.599		
3,800.0	3,718.6	3,712.6	3,712.6	14.5	6.5	98.12	-1,198.8	906.3	1,484.2	1,463.5	20.72	71.643		
3,900.0	3,815.6	3,809.6	3,809.6	15.0	6.6	99.02	-1,198.8	906.3	1,488.0	1,466.7	21.31	69.830		
4,000.0	3,912.6	3,906.6	3,906.6	15.4	6.8	99.91	-1,198.8	906.3	1,492.1	1,470.2	21.90	68.148		
4,100.0	4,009.5	4,003.5	4,003.5	15.9	7.0	100.81	-1,198.8	906.3	1,496.6	1,474.1	22.48	66.586		
4,200.0	4,106.5	4,100.5	4,100.5	16.4	7.2	101.69	-1,198.8	906.3	1,501.5	1,478.5	23.05	65.133		
4,300.0	4,203.5	4,197.5	4,197.5	16.8	7.3	102.57	-1,198.8	906.3	1,506.8	1,483.2	23.62	63.782		
4,400.0	4,300.5	4,294.5	4,294.5	17.3	7.5	103.45	-1,198.8	906.3	1,512.4	1,488.2	24.19	62.524		
4,500.0	4,397.5	4,391.5	4,391.5	17.8	7.7	104.32	-1,198.8	906.3	1,518.5	1,493.7	24.75	61.353		
4,600.0	4,494.5	4,488.5	4,488.5	18.2	7.8	105.18	-1,198.8	906.3	1,524.8	1,499.5	25.30	60.261		
4,700.0	4,591.5	4,585.5	4,585.5	18.7	8.0	106.03	-1,198.8	906.3	1,531.6	1,505.7	25.85	59.244		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
4,800.0	4,688.5	4,682.5	4,682.5	19.2	8.2	106.88	-1,198.8	906.3	1,538.7	1,512.3	26.39	58.296		
4,900.0	4,785.4	4,779.4	4,779.4	19.6	8.3	107.72	-1,198.8	906.3	1,546.1	1,519.2	26.93	57.412		
5,000.0	4,882.4	4,876.4	4,876.4	20.1	8.5	108.55	-1,198.8	906.3	1,553.9	1,526.5	27.46	56.588		
5,100.0	4,979.4	4,973.4	4,973.4	20.6	8.7	109.38	-1,198.8	906.3	1,562.1	1,534.1	27.98	55.819		
5,200.0	5,076.4	5,070.4	5,070.4	21.0	8.8	110.20	-1,198.8	906.3	1,570.5	1,542.0	28.50	55.103		
5,300.0	5,173.4	5,167.4	5,167.4	21.5	9.0	111.00	-1,198.8	906.3	1,579.3	1,550.3	29.01	54.434		
5,400.0	5,270.4	5,264.4	5,264.4	22.0	9.2	111.80	-1,198.8	906.3	1,588.5	1,558.9	29.52	53.812		
5,500.0	5,367.4	5,361.4	5,361.4	22.5	9.4	112.59	-1,198.8	906.3	1,597.9	1,567.9	30.02	53.232		
5,600.0	5,464.4	5,458.4	5,458.4	22.9	9.5	113.37	-1,198.8	906.3	1,607.7	1,577.1	30.51	52.691		
5,700.0	5,561.4	5,555.4	5,555.4	23.4	9.7	114.15	-1,198.8	906.3	1,617.7	1,586.7	31.00	52.188		
5,800.0	5,658.3	5,652.3	5,652.3	23.9	9.9	114.91	-1,198.8	906.3	1,628.1	1,596.6	31.48	51.721		
5,900.0	5,755.3	5,749.3	5,749.3	24.3	10.0	115.66	-1,198.8	906.3	1,638.8	1,606.8	31.95	51.286		
6,000.0	5,852.3	5,846.3	5,846.3	24.8	10.2	116.41	-1,198.8	906.3	1,649.7	1,617.3	32.42	50.882		
6,100.0	5,949.3	5,943.3	5,943.3	25.3	10.4	117.14	-1,198.8	906.3	1,661.0	1,628.1	32.89	50.507		
6,200.0	6,046.3	6,040.3	6,040.3	25.7	10.5	117.87	-1,198.8	906.3	1,672.5	1,639.1	33.34	50.160		
6,300.0	6,143.3	6,137.3	6,137.3	26.2	10.7	118.58	-1,198.8	906.3	1,684.3	1,650.5	33.79	49.839		
6,400.0	6,240.3	6,234.3	6,234.3	26.7	10.9	119.29	-1,198.8	906.3	1,696.3	1,662.1	34.24	49.542		
6,500.0	6,337.3	6,331.3	6,331.3	27.1	11.1	119.98	-1,198.8	906.3	1,708.7	1,674.0	34.68	49.268		
6,600.0	6,434.2	6,428.2	6,428.2	27.6	11.2	120.67	-1,198.8	906.3	1,721.2	1,686.1	35.12	49.015		
6,700.0	6,531.2	6,525.2	6,525.2	28.1	11.4	121.35	-1,198.8	906.3	1,734.1	1,698.5	35.55	48.784		
6,800.0	6,628.2	6,622.2	6,622.2	28.5	11.6	122.02	-1,198.8	906.3	1,747.2	1,711.2	35.97	48.571		
6,900.0	6,725.2	6,719.2	6,719.2	29.0	11.7	122.67	-1,198.8	906.3	1,760.5	1,724.1	36.39	48.376		
7,000.0	6,822.2	6,816.2	6,816.2	29.5	11.9	123.32	-1,198.8	906.3	1,774.0	1,737.2	36.81	48.199		
7,100.0	6,919.2	6,913.2	6,913.2	30.0	12.1	123.96	-1,198.8	906.3	1,787.8	1,750.6	37.22	48.038		
7,200.0	7,016.2	7,010.2	7,010.2	30.4	12.2	124.59	-1,198.8	906.3	1,801.8	1,764.2	37.62	47.893		
7,300.0	7,113.2	7,107.2	7,107.2	30.9	12.4	125.21	-1,198.8	906.3	1,816.0	1,778.0	38.02	47.762		
7,328.7	7,141.0	7,135.0	7,135.0	31.0	12.5	125.39	-1,198.8	906.3	1,820.2	1,782.0	38.14	47.727		
7,350.0	7,161.7	7,155.7	7,155.7	31.1	12.5	117.03	-1,198.8	906.3	1,822.9	1,784.6	38.22	47.688		
7,400.0	7,210.3	7,204.3	7,204.3	31.3	12.6	96.59	-1,198.8	906.3	1,826.3	1,787.8	38.44	47.506		
7,450.0	7,258.7	7,252.7	7,252.7	31.5	12.7	78.98	-1,198.8	906.3	1,825.7	1,787.0	38.67	47.212		
7,500.0	7,306.5	7,300.5	7,300.5	31.7	12.7	66.34	-1,198.8	906.3	1,821.0	1,782.1	38.90	46.809		
7,550.0	7,353.4	7,347.4	7,347.4	31.8	12.8	57.97	-1,198.8	906.3	1,812.4	1,773.2	39.14	46.302		
7,600.0	7,399.0	7,393.0	7,393.0	31.9	12.9	52.58	-1,198.8	906.3	1,799.9	1,760.5	39.39	45.697		
7,650.0	7,442.9	7,436.9	7,436.9	32.0	13.0	49.24	-1,198.8	906.3	1,783.7	1,744.0	39.64	45.002		
7,700.0	7,484.9	7,478.9	7,478.9	32.1	13.1	47.36	-1,198.8	906.3	1,763.8	1,723.9	39.89	44.222		
7,750.0	7,524.5	7,518.5	7,518.5	32.1	13.1	46.59	-1,198.8	906.3	1,740.6	1,700.5	40.14	43.365		
7,800.0	7,561.6	7,555.6	7,555.6	32.1	13.2	46.76	-1,198.8	906.3	1,714.2	1,673.8	40.39	42.441		
7,850.0	7,595.8	7,589.8	7,589.8	32.2	13.2	47.77	-1,198.8	906.3	1,684.9	1,644.2	40.64	41.456		
7,900.0	7,626.8	7,620.8	7,620.8	32.2	13.3	49.58	-1,198.8	906.3	1,652.8	1,611.9	40.89	40.419		
7,950.0	7,654.5	7,648.5	7,648.5	32.2	13.3	52.22	-1,198.8	906.3	1,618.3	1,577.2	41.14	39.340		
8,000.0	7,678.5	7,672.5	7,672.5	32.3	13.4	55.73	-1,198.8	906.3	1,581.8	1,540.4	41.38	38.226		
8,050.0	7,698.8	7,692.8	7,692.8	32.3	13.4	60.16	-1,198.8	906.3	1,543.4	1,501.8	41.61	37.088		
8,100.0	7,715.2	7,709.2	7,709.2	32.3	13.5	65.54	-1,198.8	906.3	1,503.5	1,461.7	41.84	35.933		
8,150.0	7,727.5	7,721.5	7,721.5	32.4	13.5	71.85	-1,198.8	906.3	1,462.5	1,420.4	42.06	34.770		
8,200.0	7,735.6	7,729.6	7,729.6	32.4	13.5	78.95	-1,198.8	906.3	1,420.6	1,378.4	42.27	33.608		
8,250.0	7,739.6	7,733.6	7,733.6	32.4	13.5	86.60	-1,198.8	906.3	1,378.3	1,335.8	42.47	32.455		
8,271.7	7,740.0	7,734.0	7,734.0	32.5	13.5	90.00	-1,198.8	906.3	1,359.9	1,317.3	42.55	31.958		
8,300.0	7,740.0	7,734.0	7,734.0	32.5	13.5	90.00	-1,198.8	906.3	1,335.9	1,293.2	42.66	31.313		
8,400.0	7,740.0	7,734.0	7,734.0	32.7	13.5	90.00	-1,198.8	906.3	1,252.5	1,209.5	43.05	29.096		
8,500.0	7,740.0	7,734.0	7,734.0	33.0	13.5	90.00	-1,198.8	906.3	1,171.8	1,128.4	43.43	26.983		
8,600.0	7,740.0	7,734.0	7,734.0	33.4	13.5	90.00	-1,198.8	906.3	1,094.3	1,050.5	43.79	24.991		
8,700.0	7,740.0	7,734.0	7,734.0	33.8	13.5	90.00	-1,198.8	906.3	1,020.8	976.6	44.11	23.143		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
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
8,800.0	7,740.0	7,734.0	7,734.0	34.4	13.5	90.00	-1,198.8	906.3	952.0	907.7	44.34	21.469	
8,900.0	7,740.0	7,734.0	7,734.0	35.0	13.5	90.00	-1,198.8	906.3	889.2	844.7	44.45	20.003	
9,000.0	7,740.0	7,734.0	7,734.0	35.7	13.5	90.00	-1,198.8	906.3	833.7	789.3	44.37	18.789	
9,100.0	7,740.0	7,734.0	7,734.0	36.4	13.5	90.00	-1,198.8	906.3	787.0	743.0	44.02	17.878	
9,200.0	7,740.0	7,734.0	7,734.0	37.3	13.5	90.00	-1,198.8	906.3	750.8	707.5	43.33	17.327	
9,300.0	7,740.0	7,734.0	7,734.0	38.2	13.5	90.00	-1,198.8	906.3	726.7	684.4	42.26	17.196 SF	
9,400.0	7,740.0	7,734.0	7,734.0	39.1	13.5	90.00	-1,198.8	906.3	715.8	675.0	40.83	17.533	
9,428.2	7,740.0	7,734.0	7,734.0	39.4	13.5	90.00	-1,198.8	906.3	715.3	674.9	40.37	17.717 CC, ES	
9,500.0	7,740.0	7,734.0	7,734.0	40.1	13.5	90.00	-1,198.8	906.3	718.9	679.7	39.13	18.370	
9,600.0	7,740.0	7,734.0	7,734.0	41.2	13.5	90.00	-1,198.8	906.3	735.6	698.3	37.35	19.694	
9,700.0	7,740.0	7,734.0	7,734.0	42.3	13.5	90.00	-1,198.8	906.3	765.2	729.5	35.67	21.451	
9,800.0	7,740.0	7,734.0	7,734.0	43.5	13.5	90.00	-1,198.8	906.3	806.1	771.9	34.25	23.538	
9,900.0	7,740.0	7,734.0	7,734.0	44.7	13.5	90.00	-1,198.8	906.3	856.9	823.7	33.17	25.834	
10,000.0	7,740.0	7,734.0	7,734.0	45.9	13.5	90.00	-1,198.8	906.3	915.7	883.3	32.44	28.226	
10,100.0	7,740.0	7,734.0	7,734.0	47.1	13.5	90.00	-1,198.8	906.3	981.3	949.3	32.03	30.633	
10,200.0	7,740.0	7,734.0	7,734.0	48.4	13.5	90.00	-1,198.8	906.3	1,052.3	1,020.4	31.88	33.011	
10,300.0	7,740.0	7,734.0	7,734.0	49.8	13.5	90.00	-1,198.8	906.3	1,127.7	1,095.8	31.90	35.345	
10,400.0	7,740.0	7,734.0	7,734.0	51.1	13.5	90.00	-1,198.8	906.3	1,206.6	1,174.6	32.06	37.639	
10,500.0	7,740.0	7,734.0	7,734.0	52.5	13.5	90.00	-1,198.8	906.3	1,288.5	1,256.3	32.30	39.899	
10,600.0	7,740.0	7,734.0	7,734.0	53.9	13.5	90.00	-1,198.8	906.3	1,372.8	1,340.3	32.58	42.135	
10,700.0	7,740.0	7,734.0	7,734.0	55.3	13.5	90.00	-1,198.8	906.3	1,459.1	1,426.2	32.90	44.356	
10,800.0	7,740.0	7,734.0	7,734.0	56.7	13.5	90.00	-1,198.8	906.3	1,547.1	1,513.8	33.22	46.567	
10,900.0	7,740.0	7,734.0	7,734.0	58.2	13.5	90.00	-1,198.8	906.3	1,636.4	1,602.8	33.55	48.772	
11,000.0	7,740.0	7,734.0	7,734.0	59.7	13.5	90.00	-1,198.8	906.3	1,726.9	1,693.0	33.88	50.974	
11,100.0	7,740.0	7,734.0	7,734.0	61.2	13.5	90.00	-1,198.8	906.3	1,818.4	1,784.2	34.20	53.173	
11,200.0	7,740.0	7,734.0	7,734.0	62.7	13.5	90.00	-1,198.8	906.3	1,910.7	1,876.2	34.51	55.370	
11,300.0	7,740.0	7,734.0	7,734.0	64.2	13.5	90.00	-1,198.8	906.3	2,003.8	1,969.0	34.81	57.566	
11,400.0	7,740.0	7,734.0	7,734.0	65.7	13.5	90.00	-1,198.8	906.3	2,097.5	2,062.4	35.10	59.760	
11,500.0	7,740.0	7,734.0	7,734.0	67.2	13.5	90.00	-1,198.8	906.3	2,191.8	2,156.4	35.38	61.951	
11,600.0	7,740.0	7,734.0	7,734.0	68.8	13.5	90.00	-1,198.8	906.3	2,286.5	2,250.9	35.65	64.140	
11,700.0	7,740.0	7,734.0	7,734.0	70.3	13.5	90.00	-1,198.8	906.3	2,381.7	2,345.8	35.91	66.325	
11,800.0	7,740.0	7,734.0	7,734.0	71.9	13.5	90.00	-1,198.8	906.3	2,477.3	2,441.1	36.16	68.506	
11,900.0	7,740.0	7,734.0	7,734.0	73.5	13.5	90.00	-1,198.8	906.3	2,573.2	2,536.8	36.40	70.684	
12,000.0	7,740.0	7,734.0	7,734.0	75.1	13.5	90.00	-1,198.8	906.3	2,669.4	2,632.8	36.64	72.856	
12,100.0	7,740.0	7,734.0	7,734.0	76.6	13.5	90.00	-1,198.8	906.3	2,765.9	2,729.0	36.87	75.023	
12,200.0	7,740.0	7,734.0	7,734.0	78.2	13.5	90.00	-1,198.8	906.3	2,862.6	2,825.5	37.09	77.185	
12,300.0	7,740.0	7,734.0	7,734.0	79.8	13.5	90.00	-1,198.8	906.3	2,959.5	2,922.2	37.30	79.340	
12,400.0	7,740.0	7,734.0	7,734.0	81.5	13.5	90.00	-1,198.8	906.3	3,056.7	3,019.1	37.51	81.489	
12,500.0	7,740.0	7,734.0	7,734.0	83.1	13.5	90.00	-1,198.8	906.3	3,154.0	3,116.3	37.71	83.632	
12,600.0	7,740.0	7,734.0	7,734.0	84.7	13.5	90.00	-1,198.8	906.3	3,251.4	3,213.5	37.91	85.767	
12,700.0	7,740.0	7,734.0	7,734.0	86.3	13.5	90.00	-1,198.8	906.3	3,349.1	3,311.0	38.10	87.896	
12,800.0	7,740.0	7,734.0	7,734.0	88.0	13.5	90.00	-1,198.8	906.3	3,446.8	3,408.5	38.29	90.017	
12,900.0	7,740.0	7,734.0	7,734.0	89.6	13.5	90.00	-1,198.8	906.3	3,544.7	3,506.2	38.47	92.130	
13,000.0	7,740.0	7,734.0	7,734.0	91.2	13.5	90.00	-1,198.8	906.3	3,642.7	3,604.0	38.66	94.236	
13,100.0	7,740.0	7,734.0	7,734.0	92.9	13.5	90.00	-1,198.8	906.3	3,740.8	3,702.0	38.83	96.334	
13,200.0	7,740.0	7,734.0	7,734.0	94.5	13.5	90.00	-1,198.8	906.3	3,839.0	3,800.0	39.00	98.424	
13,300.0	7,740.0	7,734.0	7,734.0	96.2	13.5	90.00	-1,198.8	906.3	3,937.3	3,898.1	39.17	100.506	
13,400.0	7,740.0	7,734.0	7,734.0	97.8	13.5	90.00	-1,198.8	906.3	4,035.7	3,996.3	39.34	102.579	
13,500.0	7,740.0	7,734.0	7,734.0	99.5	13.5	90.00	-1,198.8	906.3	4,134.1	4,094.6	39.51	104.645	
13,600.0	7,740.0	7,734.0	7,734.0	101.2	13.5	90.00	-1,198.8	906.3	4,232.7	4,193.0	39.67	106.702	
13,700.0	7,740.0	7,734.0	7,734.0	102.8	13.5	90.00	-1,198.8	906.3	4,331.3	4,291.4	39.83	108.750	
13,800.0	7,740.0	7,734.0	7,734.0	104.5	13.5	90.00	-1,198.8	906.3	4,429.9	4,389.9	39.98	110.791	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU										Offset Site Error:		0.0 ft	
Survey Program: 8332-Geolink MWD										Offset Well Error:		0.0 ft	
Reference				Offset			Semi Major Axis		Distance				Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
13,900.0	7,740.0	7,734.0	7,734.0	106.2	13.5	90.00	-1,198.8	906.3	4,528.6	4,488.5	40.14	112.823	
14,000.0	7,740.0	7,734.0	7,734.0	107.8	13.5	90.00	-1,198.8	906.3	4,627.4	4,587.1	40.29	114.846	
14,100.0	7,740.0	7,734.0	7,734.0	109.5	13.5	90.00	-1,198.8	906.3	4,726.2	4,685.8	40.44	116.861	
14,200.0	7,740.0	7,734.0	7,734.0	111.2	13.5	90.00	-1,198.8	906.3	4,825.1	4,784.5	40.59	118.867	
14,300.0	7,740.0	7,734.0	7,734.0	112.9	13.5	90.00	-1,198.8	906.3	4,924.0	4,883.3	40.74	120.865	
14,400.0	7,740.0	7,734.0	7,734.0	114.6	13.5	90.00	-1,198.8	906.3	5,023.0	4,982.1	40.89	122.854	
14,500.0	7,740.0	7,734.0	7,734.0	116.3	13.5	90.00	-1,198.8	906.3	5,122.0	5,080.9	41.03	124.835	
14,600.0	7,740.0	7,734.0	7,734.0	117.9	13.5	90.00	-1,198.8	906.3	5,221.0	5,179.8	41.17	126.807	
14,700.0	7,740.0	7,734.0	7,734.0	119.6	13.5	90.00	-1,198.8	906.3	5,320.1	5,278.8	41.31	128.771	
14,800.0	7,740.0	7,734.0	7,734.0	121.3	13.5	90.00	-1,198.8	906.3	5,419.2	5,377.7	41.45	130.726	
14,900.0	7,740.0	7,734.0	7,734.0	123.0	13.5	90.00	-1,198.8	906.3	5,518.3	5,476.7	41.59	132.673	
15,000.0	7,740.0	7,734.0	7,734.0	124.7	13.5	90.00	-1,198.8	906.3	5,617.5	5,575.8	41.73	134.612	
15,100.0	7,740.0	7,734.0	7,734.0	126.4	13.5	90.00	-1,198.8	906.3	5,716.7	5,674.8	41.87	136.542	
15,200.0	7,740.0	7,734.0	7,734.0	128.1	13.5	90.00	-1,198.8	906.3	5,815.9	5,773.9	42.00	138.463	
15,300.0	7,740.0	7,734.0	7,734.0	129.8	13.5	90.00	-1,198.8	906.3	5,915.2	5,873.1	42.14	140.376	
15,400.0	7,740.0	7,734.0	7,734.0	131.5	13.5	90.00	-1,198.8	906.3	6,014.5	5,972.2	42.27	142.281	
15,500.0	7,740.0	7,734.0	7,734.0	133.2	13.5	90.00	-1,198.8	906.3	6,113.8	6,071.4	42.40	144.178	
15,600.0	7,740.0	7,734.0	7,734.0	134.9	13.5	90.00	-1,198.8	906.3	6,213.1	6,170.6	42.54	146.066	
15,700.0	7,740.0	7,734.0	7,734.0	136.6	13.5	90.00	-1,198.8	906.3	6,312.4	6,269.8	42.67	147.946	
15,800.0	7,740.0	7,734.0	7,734.0	138.3	13.5	90.00	-1,198.8	906.3	6,411.8	6,369.0	42.80	149.818	
15,900.0	7,740.0	7,734.0	7,734.0	140.0	13.5	90.00	-1,198.8	906.3	6,511.2	6,468.3	42.93	151.682	
16,000.0	7,740.0	7,734.0	7,734.0	141.7	13.5	90.00	-1,198.8	906.3	6,610.6	6,567.5	43.06	153.537	
16,100.0	7,740.0	7,734.0	7,734.0	143.5	13.5	90.00	-1,198.8	906.3	6,710.0	6,666.8	43.18	155.385	
16,171.7	7,740.0	7,734.0	7,734.0	144.7	13.5	90.00	-1,198.8	906.3	6,781.3	6,738.0	43.27	156.704	

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	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)						
0.0	0.0	88.0	88.0	0.0	0.2	-27.54	131.5	-68.6	148.3					
100.0	100.0	188.0	188.0	0.2	0.3	-27.54	131.5	-68.6	148.3	147.8	0.48	308.871		
150.0	150.0	238.0	238.0	0.2	0.4	-27.54	131.5	-68.6	148.3	147.7	0.65	226.530		
200.0	200.0	288.0	288.0	0.3	0.5	-27.66	131.5	-68.6	147.7	146.9	0.83	178.116		
283.3	283.2	371.2	371.2	0.5	0.6	-28.45	131.5	-68.6	144.2	143.1	1.12	128.333		
300.0	299.9	387.9	387.9	0.5	0.7	-31.07	131.5	-68.6	143.2	142.0	1.18	121.047		
400.0	399.6	487.6	487.6	0.7	0.9	-46.66	131.5	-68.6	137.7	136.1	1.55	88.992		
500.0	499.3	587.3	587.3	0.9	1.0	-61.22	131.5	-68.6	133.2	131.3	1.93	69.145		
600.0	598.9	686.9	686.9	1.2	1.2	-74.30	131.5	-68.6	130.0	127.7	2.32	55.920		
700.0	698.5	786.5	786.5	1.4	1.4	-86.05	131.5	-68.6	128.4	125.6	2.74	46.792		
735.9	734.2	822.2	822.2	1.5	1.4	-90.00	131.5	-68.6	128.3	125.4	2.90	44.220 CC, ES		
800.0	797.9	885.9	885.9	1.6	1.5	-96.75	131.5	-68.6	128.7	125.5	3.18	40.457		
900.0	897.1	985.1	985.1	1.9	1.7	-106.61	131.5	-68.6	131.2	127.6	3.63	36.158		
1,000.0	996.2	1,084.2	1,084.2	2.2	1.9	-115.70	131.5	-68.6	136.2	132.2	4.08	33.406		
1,100.0	1,095.0	1,183.0	1,183.0	2.5	2.1	-123.99	131.5	-68.6	143.9	139.4	4.52	31.849		
1,200.0	1,193.6	1,281.6	1,281.6	2.8	2.2	-131.45	131.5	-68.6	154.3	149.3	4.94	31.218 SF		
1,300.0	1,291.9	1,379.9	1,379.9	3.2	2.4	-138.04	131.5	-68.6	167.3	162.0	5.35	31.298		
1,400.0	1,389.9	1,477.9	1,477.9	3.5	2.6	-143.79	131.5	-68.6	182.9	177.2	5.73	31.922		
1,500.0	1,487.6	1,575.6	1,575.6	3.9	2.8	-148.75	131.5	-68.6	201.0	194.9	6.10	32.960		
1,600.0	1,584.8	1,672.8	1,672.8	4.4	2.9	-153.01	131.5	-68.6	221.3	214.9	6.45	34.312		
1,624.3	1,608.4	1,696.4	1,696.4	4.5	3.0	-153.95	131.5	-68.6	226.6	220.1	6.53	34.680		
1,700.0	1,681.8	1,769.8	1,769.8	4.8	3.1	-155.85	131.5	-68.6	243.4	236.6	6.79	35.836		
1,800.0	1,778.8	1,866.8	1,866.8	5.3	3.3	-157.99	131.5	-68.6	265.9	258.8	7.13	37.313		
1,900.0	1,875.8	1,963.8	1,963.8	5.7	3.4	-159.79	131.5	-68.6	288.7	281.3	7.46	38.720		
2,000.0	1,972.8	2,060.8	2,060.8	6.2	3.6	-161.33	131.5	-68.6	311.8	304.0	7.78	40.053		
2,100.0	2,069.8	2,157.8	2,157.8	6.6	3.8	-162.66	131.5	-68.6	335.0	326.9	8.11	41.308		
2,200.0	2,166.8	2,254.8	2,254.8	7.1	3.9	-163.82	131.5	-68.6	358.4	350.0	8.44	42.489		
2,300.0	2,263.8	2,351.8	2,351.8	7.5	4.1	-164.84	131.5	-68.6	381.9	373.2	8.76	43.598		
2,400.0	2,360.8	2,448.8	2,448.8	8.0	4.3	-165.74	131.5	-68.6	405.5	396.4	9.08	44.640		
2,500.0	2,457.7	2,545.7	2,545.7	8.4	4.4	-166.54	131.5	-68.6	429.2	419.8	9.41	45.617		
2,600.0	2,554.7	2,642.7	2,642.7	8.9	4.6	-167.25	131.5	-68.6	453.0	443.2	9.73	46.535		
2,700.0	2,651.7	2,739.7	2,739.7	9.4	4.8	-167.90	131.5	-68.6	476.8	466.7	10.06	47.398		
2,800.0	2,748.7	2,836.7	2,836.7	9.8	5.0	-168.48	131.5	-68.6	500.7	490.3	10.39	48.209		
2,900.0	2,845.7	2,933.7	2,933.7	10.3	5.1	-169.01	131.5	-68.6	524.6	513.9	10.71	48.973		
3,000.0	2,942.7	3,030.7	3,030.7	10.8	5.3	-169.50	131.5	-68.6	548.5	537.5	11.04	49.693		
3,100.0	3,039.7	3,127.7	3,127.7	11.2	5.5	-169.94	131.5	-68.6	572.5	561.2	11.37	50.372		
3,200.0	3,136.7	3,224.7	3,224.7	11.7	5.6	-170.35	131.5	-68.6	596.6	584.9	11.69	51.013		
3,300.0	3,233.6	3,321.6	3,321.6	12.2	5.8	-170.73	131.5	-68.6	620.6	608.6	12.02	51.619		
3,400.0	3,330.6	3,418.6	3,418.6	12.6	6.0	-171.07	131.5	-68.6	644.7	632.3	12.35	52.192		
3,500.0	3,427.6	3,515.6	3,515.6	13.1	6.1	-171.40	131.5	-68.6	668.8	656.1	12.68	52.736		
3,600.0	3,524.6	3,612.6	3,612.6	13.6	6.3	-171.70	131.5	-68.6	692.9	679.9	13.01	53.251		
3,700.0	3,621.6	3,709.6	3,709.6	14.0	6.5	-171.98	131.5	-68.6	717.0	703.7	13.34	53.740		
3,800.0	3,718.6	3,806.6	3,806.6	14.5	6.6	-172.24	131.5	-68.6	741.1	727.5	13.67	54.205		
3,900.0	3,815.6	3,903.6	3,903.6	15.0	6.8	-172.49	131.5	-68.6	765.3	751.3	14.00	54.647		
4,000.0	3,912.6	4,000.6	4,000.6	15.4	7.0	-172.72	131.5	-68.6	789.5	775.1	14.34	55.069		
4,100.0	4,009.5	4,097.5	4,097.5	15.9	7.2	-172.94	131.5	-68.6	813.6	799.0	14.67	55.470		
4,200.0	4,106.5	4,194.5	4,194.5	16.4	7.3	-173.14	131.5	-68.6	837.8	822.8	15.00	55.853		
4,300.0	4,203.5	4,291.5	4,291.5	16.8	7.5	-173.34	131.5	-68.6	862.0	846.7	15.33	56.219		
4,400.0	4,300.5	4,388.5	4,388.5	17.3	7.7	-173.52	131.5	-68.6	886.2	870.6	15.67	56.569		
4,500.0	4,397.5	4,485.5	4,485.5	17.8	7.8	-173.69	131.5	-68.6	910.5	894.5	16.00	56.903		
4,600.0	4,494.5	4,582.5	4,582.5	18.2	8.0	-173.85	131.5	-68.6	934.7	918.3	16.33	57.224		
4,700.0	4,591.5	4,679.5	4,679.5	18.7	8.2	-174.01	131.5	-68.6	958.9	942.2	16.67	57.531		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,800.0	4,688.5	4,776.5	4,776.5	19.2	8.3	-174.16	131.5	-68.6	983.2	966.1	17.00	57.825		
4,900.0	4,785.4	4,873.4	4,873.4	19.6	8.5	-174.30	131.5	-68.6	1,007.4	990.1	17.34	58.107		
5,000.0	4,882.4	4,970.4	4,970.4	20.1	8.7	-174.43	131.5	-68.6	1,031.6	1,014.0	17.67	58.379		
5,100.0	4,979.4	5,067.4	5,067.4	20.6	8.8	-174.56	131.5	-68.6	1,055.9	1,037.9	18.01	58.639		
5,200.0	5,076.4	5,164.4	5,164.4	21.0	9.0	-174.68	131.5	-68.6	1,080.2	1,061.8	18.34	58.890		
5,300.0	5,173.4	5,261.4	5,261.4	21.5	9.2	-174.80	131.5	-68.6	1,104.4	1,085.7	18.68	59.132		
5,400.0	5,270.4	5,358.4	5,358.4	22.0	9.4	-174.91	131.5	-68.6	1,128.7	1,109.7	19.01	59.364		
5,500.0	5,367.4	5,455.4	5,455.4	22.5	9.5	-175.02	131.5	-68.6	1,153.0	1,133.6	19.35	59.588		
5,600.0	5,464.4	5,552.4	5,552.4	22.9	9.7	-175.12	131.5	-68.6	1,177.2	1,157.5	19.68	59.804		
5,700.0	5,561.4	5,649.4	5,649.4	23.4	9.9	-175.22	131.5	-68.6	1,201.5	1,181.5	20.02	60.012		
5,800.0	5,658.3	5,746.3	5,746.3	23.9	10.0	-175.32	131.5	-68.6	1,225.8	1,205.4	20.36	60.213		
5,900.0	5,755.3	5,843.3	5,843.3	24.3	10.2	-175.41	131.5	-68.6	1,250.1	1,229.4	20.69	60.408		
6,000.0	5,852.3	5,940.3	5,940.3	24.8	10.4	-175.50	131.5	-68.6	1,274.4	1,253.3	21.03	60.595		
6,100.0	5,949.3	6,037.3	6,037.3	25.3	10.5	-175.58	131.5	-68.6	1,298.6	1,277.3	21.37	60.777		
6,200.0	6,046.3	6,134.3	6,134.3	25.7	10.7	-175.66	131.5	-68.6	1,322.9	1,301.2	21.70	60.953		
6,300.0	6,143.3	6,231.3	6,231.3	26.2	10.9	-175.74	131.5	-68.6	1,347.2	1,325.2	22.04	61.123		
6,400.0	6,240.3	6,328.3	6,328.3	26.7	11.0	-175.82	131.5	-68.6	1,371.5	1,349.1	22.38	61.287		
6,500.0	6,337.3	6,425.3	6,425.3	27.1	11.2	-175.89	131.5	-68.6	1,395.8	1,373.1	22.72	61.447		
6,600.0	6,434.2	6,522.2	6,522.2	27.6	11.4	-175.96	131.5	-68.6	1,420.1	1,397.1	23.05	61.602		
6,700.0	6,531.2	6,619.2	6,619.2	28.1	11.6	-176.03	131.5	-68.6	1,444.4	1,421.0	23.39	61.752		
6,800.0	6,628.2	6,716.2	6,716.2	28.5	11.7	-176.09	131.5	-68.6	1,468.7	1,445.0	23.73	61.897		
6,900.0	6,725.2	6,813.2	6,813.2	29.0	11.9	-176.16	131.5	-68.6	1,493.0	1,469.0	24.07	62.038		
7,000.0	6,822.2	6,910.2	6,910.2	29.5	12.1	-176.22	131.5	-68.6	1,517.3	1,492.9	24.40	62.175		
7,100.0	6,919.2	7,007.2	7,007.2	30.0	12.2	-176.28	131.5	-68.6	1,541.7	1,516.9	24.74	62.309		
7,200.0	7,016.2	7,104.2	7,104.2	30.4	12.4	-176.34	131.5	-68.6	1,566.0	1,540.9	25.08	62.438		
7,300.0	7,113.2	7,201.2	7,201.2	30.9	12.6	-176.39	131.5	-68.6	1,590.3	1,564.9	25.42	62.564		
7,328.7	7,141.0	7,229.0	7,229.0	31.0	12.6	-176.41	131.5	-68.6	1,597.3	1,571.8	25.52	62.599		
7,350.0	7,161.7	7,249.7	7,249.7	31.1	12.7	-176.48	131.5	-68.6	1,602.3	1,576.8	25.59	62.625		
7,400.0	7,210.3	7,298.3	7,298.3	31.3	12.7	-176.51	131.5	-68.6	1,613.5	1,587.8	25.75	62.666		
7,450.0	7,258.7	7,346.7	7,346.7	31.5	12.8	-176.58	131.5	-68.6	1,623.6	1,597.7	25.91	62.663		
7,500.0	7,306.5	7,394.5	7,394.5	31.7	12.9	-176.65	131.5	-68.6	1,632.6	1,606.5	26.07	62.619		
7,550.0	7,353.4	7,441.4	7,441.4	31.8	13.0	-176.72	131.5	-68.6	1,640.4	1,614.2	26.23	62.537		
7,600.0	7,399.0	7,487.0	7,487.0	31.9	13.1	-176.79	131.5	-68.6	1,647.2	1,620.8	26.39	62.419		
7,650.0	7,442.9	7,530.9	7,530.9	32.0	13.1	-176.86	131.5	-68.6	1,653.0	1,626.5	26.55	62.272		
7,700.0	7,484.9	7,572.9	7,572.9	32.1	13.2	-176.93	131.5	-68.6	1,658.0	1,631.3	26.70	62.101		
7,750.0	7,524.5	7,612.5	7,612.5	32.1	13.3	-177.00	131.5	-68.6	1,662.2	1,635.4	26.85	61.913		
7,800.0	7,561.6	7,649.6	7,649.6	32.1	13.4	-177.07	131.5	-68.6	1,665.8	1,638.8	26.99	61.715		
7,850.0	7,595.8	7,683.8	7,683.8	32.2	13.4	-177.14	131.5	-68.6	1,669.1	1,641.9	27.13	61.512		
7,900.0	7,626.8	7,714.8	7,714.8	32.2	13.5	-177.21	131.5	-68.6	1,672.0	1,644.7	27.27	61.313		
7,950.0	7,654.5	7,742.5	7,742.5	32.2	13.5	-177.28	131.5	-68.6	1,674.9	1,647.5	27.40	61.123		
8,000.0	7,678.5	7,766.5	7,766.5	32.3	13.6	-177.35	131.5	-68.6	1,677.8	1,650.2	27.53	60.947		
8,050.0	7,698.8	7,786.8	7,786.8	32.3	13.6	-177.42	131.5	-68.6	1,680.8	1,653.2	27.65	60.792		
8,100.0	7,715.2	7,803.2	7,803.2	32.3	13.6	-177.49	131.5	-68.6	1,684.2	1,656.5	27.77	60.659		
8,150.0	7,727.5	7,815.5	7,815.5	32.4	13.6	-177.56	131.5	-68.6	1,688.0	1,660.1	27.88	60.551		
8,200.0	7,735.6	7,823.6	7,823.6	32.4	13.7	-177.63	131.5	-68.6	1,692.2	1,664.2	27.98	60.470		
8,250.0	7,739.6	7,827.6	7,827.6	32.4	13.7	-177.70	131.5	-68.6	1,696.9	1,668.8	28.09	60.414		
8,271.7	7,740.0	7,828.0	7,828.0	32.5	13.7	-177.77	131.5	-68.6	1,699.1	1,670.9	28.13	60.399		
8,300.0	7,740.0	7,828.0	7,828.0	32.5	13.7	-177.84	131.5	-68.6	1,702.2	1,674.0	28.19	60.389		
8,400.0	7,740.0	7,828.0	7,828.0	32.7	13.7	-177.91	131.5	-68.6	1,716.9	1,688.6	28.39	60.480		
8,500.0	7,740.0	7,828.0	7,828.0	33.0	13.7	-177.98	131.5	-68.6	1,737.3	1,708.7	28.59	60.759		
8,600.0	7,740.0	7,828.0	7,828.0	33.4	13.7	-178.05	131.5	-68.6	1,763.2	1,734.4	28.80	61.216		
8,700.0	7,740.0	7,828.0	7,828.0	33.8	13.7	-178.12	131.5	-68.6	1,794.2	1,765.2	29.01	61.844		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	7,828.0	7,828.0	34.4	13.7	90.00	131.5	-68.6	1,830.2	1,801.0	29.22	62.630		
8,900.0	7,740.0	7,828.0	7,828.0	35.0	13.7	90.00	131.5	-68.6	1,870.8	1,841.4	29.43	63.566		
9,000.0	7,740.0	7,828.0	7,828.0	35.7	13.7	90.00	131.5	-68.6	1,915.8	1,886.2	29.64	64.638		
9,100.0	7,740.0	7,828.0	7,828.0	36.4	13.7	90.00	131.5	-68.6	1,964.9	1,935.1	29.84	65.837		
9,200.0	7,740.0	7,828.0	7,828.0	37.3	13.7	90.00	131.5	-68.6	2,017.7	1,987.7	30.05	67.151		
9,300.0	7,740.0	7,828.0	7,828.0	38.2	13.7	90.00	131.5	-68.6	2,074.0	2,043.8	30.25	68.570		
9,400.0	7,740.0	7,828.0	7,828.0	39.1	13.7	90.00	131.5	-68.6	2,133.6	2,103.1	30.44	70.083		
9,500.0	7,740.0	7,828.0	7,828.0	40.1	13.7	90.00	131.5	-68.6	2,196.0	2,165.4	30.64	71.681		
9,600.0	7,740.0	7,828.0	7,828.0	41.2	13.7	90.00	131.5	-68.6	2,261.2	2,230.4	30.83	73.355		
9,700.0	7,740.0	7,828.0	7,828.0	42.3	13.7	90.00	131.5	-68.6	2,328.8	2,297.8	31.01	75.096		
9,800.0	7,740.0	7,828.0	7,828.0	43.5	13.7	90.00	131.5	-68.6	2,398.7	2,367.5	31.19	76.898		
9,900.0	7,740.0	7,828.0	7,828.0	44.7	13.7	90.00	131.5	-68.6	2,470.7	2,439.3	31.37	78.753		
10,000.0	7,740.0	7,828.0	7,828.0	45.9	13.7	90.00	131.5	-68.6	2,544.5	2,513.0	31.55	80.655		
10,100.0	7,740.0	7,828.0	7,828.0	47.1	13.7	90.00	131.5	-68.6	2,620.1	2,588.4	31.72	82.598		
10,200.0	7,740.0	7,828.0	7,828.0	48.4	13.7	90.00	131.5	-68.6	2,697.3	2,665.4	31.89	84.577		
10,300.0	7,740.0	7,828.0	7,828.0	49.8	13.7	90.00	131.5	-68.6	2,775.9	2,743.9	32.06	86.588		
10,400.0	7,740.0	7,828.0	7,828.0	51.1	13.7	90.00	131.5	-68.6	2,855.9	2,823.7	32.22	88.626		
10,500.0	7,740.0	7,828.0	7,828.0	52.5	13.7	90.00	131.5	-68.6	2,937.1	2,904.7	32.39	90.687		
10,600.0	7,740.0	7,828.0	7,828.0	53.9	13.7	90.00	131.5	-68.6	3,019.5	2,986.9	32.55	92.768		
10,700.0	7,740.0	7,828.0	7,828.0	55.3	13.7	90.00	131.5	-68.6	3,102.8	3,070.1	32.71	94.866		
10,800.0	7,740.0	7,828.0	7,828.0	56.7	13.7	90.00	131.5	-68.6	3,187.2	3,154.3	32.86	96.978		
10,900.0	7,740.0	7,828.0	7,828.0	58.2	13.7	90.00	131.5	-68.6	3,272.4	3,239.4	33.02	99.102		
11,000.0	7,740.0	7,828.0	7,828.0	59.7	13.7	90.00	131.5	-68.6	3,358.4	3,325.2	33.17	101.236		
11,100.0	7,740.0	7,828.0	7,828.0	61.2	13.7	90.00	131.5	-68.6	3,445.2	3,411.9	33.33	103.377		
11,200.0	7,740.0	7,828.0	7,828.0	62.7	13.7	90.00	131.5	-68.6	3,532.7	3,499.2	33.48	105.523		
11,300.0	7,740.0	7,828.0	7,828.0	64.2	13.7	90.00	131.5	-68.6	3,620.8	3,587.2	33.63	107.674		
11,400.0	7,740.0	7,828.0	7,828.0	65.7	13.7	90.00	131.5	-68.6	3,709.5	3,675.7	33.78	109.828		
11,500.0	7,740.0	7,828.0	7,828.0	67.2	13.7	90.00	131.5	-68.6	3,798.8	3,764.9	33.92	111.983		
11,600.0	7,740.0	7,828.0	7,828.0	68.8	13.7	90.00	131.5	-68.6	3,888.6	3,854.6	34.07	114.138		
11,700.0	7,740.0	7,828.0	7,828.0	70.3	13.7	90.00	131.5	-68.6	3,978.9	3,944.7	34.21	116.293		
11,800.0	7,740.0	7,828.0	7,828.0	71.9	13.7	90.00	131.5	-68.6	4,069.7	4,035.3	34.36	118.445		
11,900.0	7,740.0	7,828.0	7,828.0	73.5	13.7	90.00	131.5	-68.6	4,160.8	4,126.3	34.50	120.595		
12,000.0	7,740.0	7,828.0	7,828.0	75.1	13.7	90.00	131.5	-68.6	4,252.4	4,217.8	34.65	122.742		
12,100.0	7,740.0	7,828.0	7,828.0	76.6	13.7	90.00	131.5	-68.6	4,344.4	4,309.6	34.79	124.885		
12,200.0	7,740.0	7,828.0	7,828.0	78.2	13.7	90.00	131.5	-68.6	4,436.7	4,401.7	34.93	127.023		
12,300.0	7,740.0	7,828.0	7,828.0	79.8	13.7	90.00	131.5	-68.6	4,529.3	4,494.2	35.07	129.156		
12,400.0	7,740.0	7,828.0	7,828.0	81.5	13.7	90.00	131.5	-68.6	4,622.2	4,587.0	35.21	131.283		
12,500.0	7,740.0	7,828.0	7,828.0	83.1	13.7	90.00	131.5	-68.6	4,715.4	4,680.1	35.35	133.405		
12,600.0	7,740.0	7,828.0	7,828.0	84.7	13.7	90.00	131.5	-68.6	4,808.9	4,773.4	35.49	135.519		
12,700.0	7,740.0	7,828.0	7,828.0	86.3	13.7	90.00	131.5	-68.6	4,902.7	4,867.0	35.62	137.627		
12,800.0	7,740.0	7,828.0	7,828.0	88.0	13.7	90.00	131.5	-68.6	4,996.6	4,960.9	35.76	139.728		
12,900.0	7,740.0	7,828.0	7,828.0	89.6	13.7	90.00	131.5	-68.6	5,090.9	5,055.0	35.90	141.821		
13,000.0	7,740.0	7,828.0	7,828.0	91.2	13.7	90.00	131.5	-68.6	5,185.3	5,149.3	36.03	143.907		
13,100.0	7,740.0	7,828.0	7,828.0	92.9	13.7	90.00	131.5	-68.6	5,279.9	5,243.8	36.17	145.984		
13,200.0	7,740.0	7,828.0	7,828.0	94.5	13.7	90.00	131.5	-68.6	5,374.8	5,338.5	36.30	148.054		
13,300.0	7,740.0	7,828.0	7,828.0	96.2	13.7	90.00	131.5	-68.6	5,469.8	5,433.3	36.44	150.115		
13,400.0	7,740.0	7,828.0	7,828.0	97.8	13.7	90.00	131.5	-68.6	5,565.0	5,528.4	36.57	152.168		
13,500.0	7,740.0	7,828.0	7,828.0	99.5	13.7	90.00	131.5	-68.6	5,660.3	5,623.6	36.70	154.212		
13,600.0	7,740.0	7,828.0	7,828.0	101.2	13.7	90.00	131.5	-68.6	5,755.8	5,719.0	36.84	156.247		
13,700.0	7,740.0	7,828.0	7,828.0	102.8	13.7	90.00	131.5	-68.6	5,851.5	5,814.5	36.97	158.274		
13,800.0	7,740.0	7,828.0	7,828.0	104.5	13.7	90.00	131.5	-68.6	5,947.3	5,910.2	37.10	160.292		
13,900.0	7,740.0	7,828.0	7,828.0	106.2	13.7	90.00	131.5	-68.6	6,043.3	6,006.0	37.24	162.301		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	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)				
14,000.0	7,740.0	7,828.0	7,828.0	107.8	13.7	90.00	131.5	-68.6	6,139.3	6,102.0	37.37	164.300		
14,100.0	7,740.0	7,828.0	7,828.0	109.5	13.7	90.00	131.5	-68.6	6,235.5	6,198.0	37.50	166.291		
14,200.0	7,740.0	7,828.0	7,828.0	111.2	13.7	90.00	131.5	-68.6	6,331.9	6,294.2	37.63	168.273		
14,300.0	7,740.0	7,828.0	7,828.0	112.9	13.7	90.00	131.5	-68.6	6,428.3	6,390.5	37.76	170.245		
14,400.0	7,740.0	7,828.0	7,828.0	114.6	13.7	90.00	131.5	-68.6	6,524.8	6,486.9	37.89	172.208		
14,500.0	7,740.0	7,828.0	7,828.0	116.3	13.7	90.00	131.5	-68.6	6,621.5	6,583.4	38.02	174.162		
14,600.0	7,740.0	7,828.0	7,828.0	117.9	13.7	90.00	131.5	-68.6	6,718.2	6,680.0	38.15	176.107		
14,700.0	7,740.0	7,828.0	7,828.0	119.6	13.7	90.00	131.5	-68.6	6,815.0	6,776.7	38.28	178.043		
14,800.0	7,740.0	7,828.0	7,828.0	121.3	13.7	90.00	131.5	-68.6	6,911.9	6,873.5	38.41	179.969		
14,900.0	7,740.0	7,828.0	7,828.0	123.0	13.7	90.00	131.5	-68.6	7,008.9	6,970.4	38.53	181.887		
15,000.0	7,740.0	7,828.0	7,828.0	124.7	13.7	90.00	131.5	-68.6	7,106.0	7,067.4	38.66	183.795		
15,100.0	7,740.0	7,828.0	7,828.0	126.4	13.7	90.00	131.5	-68.6	7,203.2	7,164.4	38.79	185.694		
15,200.0	7,740.0	7,828.0	7,828.0	128.1	13.7	90.00	131.5	-68.6	7,300.4	7,261.5	38.92	187.583		
15,300.0	7,740.0	7,828.0	7,828.0	129.8	13.7	90.00	131.5	-68.6	7,397.8	7,358.7	39.05	189.464		
15,400.0	7,740.0	7,828.0	7,828.0	131.5	13.7	90.00	131.5	-68.6	7,495.2	7,456.0	39.17	191.336		
15,500.0	7,740.0	7,828.0	7,828.0	133.2	13.7	90.00	131.5	-68.6	7,592.6	7,553.3	39.30	193.198		
15,600.0	7,740.0	7,828.0	7,828.0	134.9	13.7	90.00	131.5	-68.6	7,690.1	7,650.7	39.43	195.052		
15,700.0	7,740.0	7,828.0	7,828.0	136.6	13.7	90.00	131.5	-68.6	7,787.7	7,748.2	39.55	196.896		
15,800.0	7,740.0	7,828.0	7,828.0	138.3	13.7	90.00	131.5	-68.6	7,885.4	7,845.7	39.68	198.732		
15,900.0	7,740.0	7,828.0	7,828.0	140.0	13.7	90.00	131.5	-68.6	7,983.1	7,943.3	39.80	200.558		
16,000.0	7,740.0	7,828.0	7,828.0	141.7	13.7	90.00	131.5	-68.6	8,080.8	8,040.9	39.93	202.376		
16,100.0	7,740.0	7,828.0	7,828.0	143.5	13.7	90.00	131.5	-68.6	8,178.7	8,138.6	40.06	204.185		
16,171.7	7,740.0	7,828.0	7,828.0	144.7	13.7	90.00	131.5	-68.6	8,248.8	8,208.6	40.14	205.476		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Tooface (")	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)						
0.0	0.0	44.3	44.3	0.0	0.1	38.44	1,576.6	1,251.4	2,012.9					
100.0	100.0	141.8	141.8	0.2	0.2	38.47	1,576.3	1,252.4	2,013.3	2,012.9	0.40	5,012.816		
150.0	150.0	196.2	196.2	0.2	0.3	38.49	1,575.8	1,253.2	2,013.4	2,012.8	0.59	3,439.801		
200.0	200.0	247.2	247.2	0.3	0.4	38.54	1,575.3	1,253.9	2,012.9	2,012.2	0.76	2,640.273		
283.3	283.2	332.1	332.0	0.5	0.6	38.70	1,574.8	1,254.7	2,009.9	2,008.8	1.06	1,892.105		
300.0	299.9	349.1	349.1	0.5	0.6	36.33	1,574.7	1,254.8	2,008.9	2,007.8	1.12	1,789.447		
400.0	399.6	453.9	453.9	0.7	0.8	22.69	1,574.4	1,255.0	2,002.6	2,001.1	1.49	1,348.079		
500.0	499.3	556.0	556.0	0.9	1.0	10.79	1,574.1	1,254.8	1,994.9	1,993.1	1.84	1,084.853		
600.0	598.9	665.3	665.3	1.2	1.2	1.10	1,573.9	1,254.1	1,986.0	1,983.8	2.20	902.347		
700.0	698.5	776.3	776.3	1.4	1.4	-6.56	1,572.9	1,253.2	1,975.2	1,972.6	2.56	770.474		
800.0	797.9	879.3	879.2	1.6	1.5	-12.60	1,571.4	1,252.4	1,962.9	1,960.0	2.91	673.958		
900.0	897.1	981.5	981.5	1.9	1.7	-17.41	1,569.6	1,251.9	1,949.4	1,946.1	3.26	597.727		
1,000.0	996.2	1,082.5	1,082.4	2.2	1.9	-21.35	1,568.0	1,250.8	1,934.6	1,931.0	3.61	535.618		
1,100.0	1,095.0	1,188.3	1,188.2	2.5	2.1	-24.66	1,566.5	1,249.2	1,918.5	1,914.5	3.98	482.461		
1,200.0	1,193.6	1,286.3	1,286.1	2.8	2.3	-27.50	1,565.2	1,247.1	1,901.1	1,896.8	4.34	438.283		
1,300.0	1,291.9	1,385.3	1,385.1	3.2	2.4	-29.99	1,564.2	1,244.7	1,882.7	1,878.0	4.71	399.428		
1,400.0	1,389.9	1,479.5	1,479.3	3.5	2.6	-32.23	1,563.6	1,242.0	1,863.3	1,858.2	5.10	365.504		
1,500.0	1,487.6	1,572.1	1,571.9	3.9	2.8	-34.27	1,563.3	1,239.3	1,843.1	1,837.6	5.50	335.151		
1,600.0	1,584.8	1,671.3	1,671.0	4.4	2.9	-36.18	1,562.8	1,236.7	1,822.2	1,816.2	5.93	307.035		
1,624.3	1,608.4	1,696.0	1,695.7	4.5	3.0	-36.64	1,562.7	1,236.0	1,816.9	1,810.8	6.04	300.600		
1,700.0	1,681.8	1,763.2	1,762.8	4.8	3.1	-37.00	1,562.5	1,234.1	1,800.5	1,794.1	6.38	282.406		
1,800.0	1,778.8	1,856.5	1,856.2	5.3	3.3	-37.53	1,562.6	1,231.3	1,779.3	1,772.5	6.83	260.421		
1,900.0	1,875.8	1,947.4	1,947.0	5.7	3.4	-38.03	1,562.5	1,229.1	1,758.3	1,751.0	7.30	240.995		
2,000.0	1,972.8	2,034.6	2,034.2	6.2	3.6	-38.52	1,562.6	1,227.5	1,738.0	1,730.3	7.76	223.851		
2,100.0	2,069.8	2,127.0	2,126.6	6.6	3.7	-39.05	1,563.1	1,226.0	1,718.3	1,710.0	8.25	208.262		
2,200.0	2,166.8	2,226.0	2,225.5	7.1	3.9	-39.61	1,563.3	1,224.7	1,698.7	1,689.9	8.76	194.005		
2,300.0	2,263.8	2,322.1	2,321.6	7.5	4.1	-40.15	1,563.2	1,223.9	1,679.2	1,670.0	9.26	181.263		
2,400.0	2,360.8	2,418.6	2,418.1	8.0	4.3	-40.71	1,563.1	1,222.9	1,659.9	1,650.1	9.78	169.688		
2,500.0	2,457.7	2,500.0	2,499.5	8.4	4.4	-41.21	1,563.5	1,222.0	1,641.1	1,630.8	10.29	159.553		
2,600.0	2,554.7	2,590.5	2,590.0	8.9	4.6	-41.79	1,564.8	1,220.7	1,623.1	1,612.3	10.81	150.080		
2,700.0	2,651.7	2,691.5	2,691.0	9.4	4.7	-42.47	1,566.7	1,219.0	1,605.5	1,594.2	11.37	141.174		
2,800.0	2,748.7	2,796.5	2,795.9	9.8	4.9	-43.20	1,568.4	1,216.8	1,587.8	1,575.9	11.95	132.897		
2,900.0	2,845.7	2,892.5	2,891.9	10.3	5.1	-43.88	1,569.7	1,214.9	1,570.0	1,557.5	12.51	125.463		
3,000.0	2,942.7	2,984.2	2,983.6	10.8	5.3	-44.52	1,570.7	1,213.7	1,552.6	1,539.6	13.08	118.713		
3,100.0	3,039.7	3,076.1	3,075.5	11.2	5.4	-45.16	1,571.9	1,212.8	1,535.8	1,522.1	13.65	112.500		
3,200.0	3,136.7	3,176.5	3,175.9	11.7	5.6	-45.87	1,573.2	1,212.1	1,519.3	1,505.0	14.25	106.649		
3,300.0	3,233.6	3,290.0	3,289.4	12.2	5.8	-46.68	1,573.8	1,211.2	1,502.4	1,487.5	14.87	101.052		
3,400.0	3,330.6	3,392.2	3,391.6	12.6	6.0	-47.42	1,573.6	1,210.2	1,484.8	1,469.3	15.48	95.929		
3,500.0	3,427.6	3,501.0	3,500.4	13.1	6.2	-48.23	1,572.8	1,208.8	1,467.0	1,450.9	16.11	91.076		
3,600.0	3,524.6	3,602.5	3,601.8	13.6	6.3	-49.00	1,571.5	1,207.4	1,448.8	1,432.1	16.73	86.588		
3,700.0	3,621.6	3,713.0	3,712.4	14.0	6.5	-49.85	1,569.0	1,205.9	1,430.2	1,412.8	17.37	82.312		
3,800.0	3,718.6	3,800.0	3,799.3	14.5	6.7	-50.50	1,566.9	1,205.3	1,411.7	1,393.8	17.99	78.469		
3,900.0	3,815.6	3,899.8	3,899.1	15.0	6.9	-51.27	1,564.6	1,204.8	1,393.8	1,375.2	18.63	74.806		
4,000.0	3,912.6	4,004.6	4,003.9	15.4	7.0	-52.13	1,562.0	1,203.4	1,375.6	1,356.3	19.29	71.300		
4,100.0	4,009.5	4,102.3	4,101.5	15.9	7.2	-52.94	1,559.2	1,202.3	1,357.4	1,337.4	19.95	68.037		
4,200.0	4,106.5	4,200.0	4,199.1	16.4	7.4	-53.76	1,556.2	1,201.3	1,339.3	1,318.7	20.62	64.961		
4,300.0	4,203.5	4,291.8	4,290.8	16.8	7.6	-54.57	1,553.7	1,199.9	1,321.6	1,300.3	21.29	62.082		
4,400.0	4,300.5	4,376.6	4,375.7	17.3	7.7	-55.35	1,551.9	1,198.7	1,304.8	1,282.9	21.96	59.416		
4,500.0	4,397.5	4,463.4	4,462.4	17.8	7.9	-56.16	1,550.8	1,197.6	1,289.2	1,266.6	22.64	56.933		
4,600.0	4,494.5	4,555.0	4,554.0	18.2	8.0	-57.03	1,550.1	1,196.7	1,274.6	1,251.2	23.34	54.603		
4,700.0	4,591.5	4,653.2	4,652.2	18.7	8.2	-57.99	1,549.5	1,195.7	1,260.4	1,236.3	24.06	52.390		
4,800.0	4,688.5	4,750.4	4,749.4	19.2	8.4	-58.96	1,548.8	1,194.6	1,246.3	1,221.5	24.78	50.296		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,900.0	4,785.4	4,845.6	4,844.6	19.6	8.5	-59.92	1,548.2	1,193.7	1,232.8	1,207.3	25.51	48.334		
5,000.0	4,882.4	4,941.6	4,940.6	20.1	8.7	-60.93	1,547.7	1,192.5	1,219.7	1,193.4	26.24	46.477		
5,100.0	4,979.4	5,033.8	5,032.8	20.6	8.9	-61.93	1,547.4	1,191.1	1,207.1	1,180.1	26.98	44.738		
5,200.0	5,076.4	5,125.0	5,124.0	21.0	9.0	-62.93	1,547.5	1,189.9	1,195.5	1,167.8	27.72	43.121		
5,300.0	5,173.4	5,222.9	5,221.9	21.5	9.2	-64.01	1,547.7	1,189.0	1,184.4	1,155.9	28.48	41.586		
5,400.0	5,270.4	5,315.4	5,314.3	22.0	9.4	-65.06	1,548.1	1,188.0	1,173.9	1,144.6	29.23	40.153		
5,500.0	5,367.4	5,403.0	5,402.0	22.5	9.5	-66.07	1,549.0	1,186.9	1,164.4	1,134.4	29.98	38.833		
5,600.0	5,464.4	5,505.1	5,504.0	22.9	9.7	-67.27	1,550.1	1,185.7	1,155.5	1,124.8	30.76	37.561		
5,700.0	5,561.4	5,596.2	5,595.1	23.4	9.8	-68.36	1,551.2	1,184.4	1,147.2	1,115.6	31.53	36.387		
5,800.0	5,658.3	5,698.9	5,697.8	23.9	10.0	-69.61	1,552.4	1,182.9	1,139.3	1,107.0	32.31	35.259		
5,900.0	5,755.3	5,790.3	5,789.2	24.3	10.2	-70.73	1,553.5	1,181.7	1,132.0	1,098.9	33.08	34.221		
6,000.0	5,852.3	5,885.9	5,884.7	24.8	10.4	-71.92	1,554.9	1,180.3	1,125.4	1,091.5	33.85	33.247		
6,100.0	5,949.3	5,977.6	5,976.5	25.3	10.5	-73.07	1,556.4	1,179.1	1,119.6	1,085.0	34.61	32.347		
6,200.0	6,046.3	6,076.0	6,074.8	25.7	10.7	-74.30	1,558.3	1,178.0	1,114.6	1,079.2	35.38	31.501		
6,300.0	6,143.3	6,172.9	6,171.7	26.2	10.9	-75.50	1,560.0	1,177.5	1,109.9	1,073.8	36.14	30.709		
6,400.0	6,240.3	6,271.2	6,270.0	26.7	11.0	-76.74	1,561.8	1,176.7	1,105.8	1,068.9	36.90	29.963		
6,500.0	6,337.3	6,366.7	6,365.5	27.1	11.2	-77.96	1,563.4	1,175.8	1,102.1	1,064.5	37.66	29.268		
6,600.0	6,434.2	6,463.1	6,461.8	27.6	11.4	-79.19	1,565.2	1,175.0	1,099.1	1,060.7	38.40	28.622		
6,700.0	6,531.2	6,560.6	6,559.4	28.1	11.5	-80.46	1,566.9	1,173.6	1,096.7	1,057.6	39.15	28.015		
6,800.0	6,628.2	6,657.1	6,656.0	28.5	11.7	-81.65	1,568.6	1,172.6	1,094.9	1,055.1	39.87	27.465		
6,887.5	6,713.0	6,729.3	6,728.0	29.0	11.8	-82.65	1,570.7	1,171.7	1,094.5	1,054.0	40.48	27.038 CC		
6,900.0	6,725.2	6,740.9	6,739.5	29.0	11.8	-82.80	1,571.1	1,171.6	1,094.5	1,053.9	40.57	26.979		
7,000.0	6,822.2	6,835.2	6,833.8	29.5	12.0	-83.99	1,574.2	1,171.1	1,095.0	1,053.8	41.27	26.534 ES		
7,100.0	6,919.2	6,932.4	6,930.9	30.0	12.2	-85.17	1,577.6	1,171.4	1,096.2	1,054.2	41.96	26.122		
7,200.0	7,016.2	7,026.4	7,024.9	30.4	12.3	-86.26	1,581.3	1,172.6	1,097.9	1,055.2	42.64	25.750		
7,300.0	7,113.2	7,115.8	7,114.2	30.9	12.5	-87.27	1,585.4	1,174.1	1,100.6	1,057.3	43.28	25.427		
7,328.7	7,141.0	7,140.4	7,138.7	31.0	12.5	-87.53	1,586.7	1,174.6	1,101.6	1,058.1	43.46	25.345		
7,350.0	7,161.7	7,158.6	7,156.9	31.1	12.6	-96.16	1,587.7	1,175.1	1,102.8	1,059.2	43.59	25.298		
7,400.0	7,210.3	7,200.0	7,198.2	31.3	12.6	-117.40	1,590.2	1,176.1	1,108.8	1,065.0	43.87	25.278 SF		
7,450.0	7,258.7	7,247.7	7,245.7	31.5	12.7	-136.09	1,593.4	1,177.4	1,119.3	1,075.2	44.13	25.362		
7,500.0	7,306.5	7,293.0	7,291.0	31.7	12.8	-150.02	1,596.5	1,179.1	1,133.9	1,089.5	44.37	25.559		
7,550.0	7,353.4	7,348.2	7,345.9	31.8	12.9	-160.00	1,600.3	1,181.3	1,152.4	1,107.8	44.61	25.835		
7,600.0	7,399.0	7,403.8	7,401.4	31.9	13.0	-167.29	1,603.6	1,183.5	1,174.2	1,129.4	44.82	26.199		
7,650.0	7,442.9	7,457.8	7,455.3	32.0	13.1	-172.86	1,606.3	1,185.7	1,199.3	1,154.3	45.00	26.651		
7,700.0	7,484.9	7,508.9	7,506.4	32.1	13.2	-177.35	1,608.4	1,187.9	1,227.5	1,182.4	45.15	27.188		
7,750.0	7,524.5	7,554.2	7,551.5	32.1	13.2	178.78	1,610.0	1,189.8	1,258.7	1,213.5	45.26	27.811		
7,800.0	7,561.6	7,596.7	7,594.0	32.1	13.3	175.22	1,611.1	1,191.4	1,292.8	1,247.5	45.34	28.512		
7,850.0	7,595.8	7,629.7	7,627.0	32.2	13.4	171.67	1,612.0	1,192.6	1,329.6	1,284.2	45.39	29.296		
7,900.0	7,626.8	7,659.1	7,656.3	32.2	13.4	167.90	1,612.7	1,193.6	1,369.0	1,323.6	45.40	30.152		
7,950.0	7,654.5	7,685.0	7,682.2	32.2	13.5	163.61	1,613.3	1,194.4	1,410.6	1,365.2	45.40	31.071		
8,000.0	7,678.5	7,707.4	7,704.6	32.3	13.5	158.41	1,613.9	1,195.1	1,454.3	1,408.9	45.38	32.049		
8,050.0	7,698.8	7,726.2	7,723.4	32.3	13.5	151.73	1,614.4	1,195.6	1,499.6	1,454.2	45.34	33.076		
8,100.0	7,715.2	7,741.0	7,738.2	32.3	13.6	142.72	1,614.7	1,196.0	1,546.2	1,500.9	45.28	34.147		
8,150.0	7,727.5	7,751.9	7,749.1	32.4	13.6	130.27	1,615.0	1,196.3	1,593.7	1,548.5	45.21	35.253		
8,200.0	7,735.6	7,758.7	7,755.9	32.4	13.6	113.64	1,615.2	1,196.5	1,641.9	1,596.8	45.12	36.387		
8,250.0	7,739.6	7,761.3	7,758.5	32.4	13.6	94.21	1,615.3	1,196.6	1,690.4	1,645.4	45.03	37.541		
8,271.7	7,740.0	7,761.2	7,758.4	32.5	13.6	85.88	1,615.3	1,196.6	1,711.4	1,666.4	44.99	38.044		
8,300.0	7,740.0	7,760.5	7,757.7	32.5	13.6	85.78	1,615.2	1,196.6	1,738.9	1,693.9	44.93	38.702		
8,400.0	7,740.0	7,758.0	7,755.2	32.7	13.6	85.45	1,615.2	1,196.5	1,836.0	1,791.2	44.75	41.025		
8,500.0	7,740.0	7,755.6	7,752.8	33.0	13.6	85.13	1,615.1	1,196.4	1,933.4	1,888.8	44.60	43.350		
8,600.0	7,740.0	7,753.1	7,750.3	33.4	13.6	84.80	1,615.1	1,196.4	2,031.0	1,986.6	44.47	45.675		
8,700.0	7,740.0	7,750.7	7,747.8	33.8	13.6	84.47	1,615.0	1,196.3	2,128.9	2,084.6	44.35	48.000		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	7,748.2	7,745.4	34.4	13.6	84.14	1,614.9	1,196.2	2,227.0	2,182.7	44.25	50.322		
8,900.0	7,740.0	7,745.7	7,742.9	35.0	13.6	83.82	1,614.9	1,196.2	2,325.2	2,281.0	44.17	52.641		
9,000.0	7,740.0	7,743.3	7,740.5	35.7	13.6	83.49	1,614.8	1,196.1	2,423.5	2,379.4	44.10	54.955		
9,100.0	7,740.0	7,740.8	7,738.0	36.4	13.6	83.17	1,614.7	1,196.0	2,522.0	2,478.0	44.04	57.265		
9,200.0	7,740.0	7,738.4	7,735.5	37.3	13.6	82.84	1,614.7	1,196.0	2,620.6	2,576.6	43.99	59.570		
9,300.0	7,740.0	7,735.9	7,733.1	38.2	13.6	82.52	1,614.6	1,195.9	2,719.3	2,675.4	43.95	61.869		
9,400.0	7,740.0	7,733.4	7,730.6	39.1	13.5	82.19	1,614.6	1,195.8	2,818.1	2,774.2	43.92	64.161		
9,500.0	7,740.0	7,731.0	7,728.2	40.1	13.5	81.87	1,614.5	1,195.8	2,917.0	2,873.1	43.90	66.447		
9,600.0	7,740.0	7,728.5	7,725.7	41.2	13.5	81.55	1,614.4	1,195.7	3,015.9	2,972.0	43.88	68.726		
9,700.0	7,740.0	7,726.0	7,723.2	42.3	13.5	81.22	1,614.4	1,195.6	3,114.9	3,071.1	43.87	70.997		
9,800.0	7,740.0	7,723.6	7,720.8	43.5	13.5	80.90	1,614.3	1,195.6	3,214.0	3,170.1	43.87	73.261		
9,900.0	7,740.0	7,721.1	7,718.3	44.7	13.5	80.58	1,614.2	1,195.5	3,313.1	3,269.2	43.87	75.518		
10,000.0	7,740.0	7,718.7	7,715.9	45.9	13.5	80.26	1,614.2	1,195.4	3,412.3	3,368.4	43.88	77.766		
10,100.0	7,740.0	7,716.2	7,713.4	47.1	13.5	79.94	1,614.1	1,195.3	3,511.5	3,467.6	43.89	80.007		
10,200.0	7,740.0	7,713.7	7,710.9	48.4	13.5	79.62	1,614.1	1,195.3	3,610.8	3,566.9	43.91	82.240		
10,300.0	7,740.0	7,711.3	7,708.5	49.8	13.5	79.31	1,614.0	1,195.2	3,710.1	3,666.1	43.92	84.464		
10,400.0	7,740.0	7,708.8	7,706.0	51.1	13.5	78.99	1,613.9	1,195.1	3,809.4	3,765.4	43.95	86.680		
10,500.0	7,740.0	7,706.3	7,703.5	52.5	13.5	78.67	1,613.9	1,195.0	3,908.8	3,864.8	43.97	88.888		
10,600.0	7,740.0	7,703.9	7,701.1	53.9	13.5	78.36	1,613.8	1,195.0	4,008.1	3,964.1	44.00	91.087		
10,700.0	7,740.0	7,701.4	7,698.6	55.3	13.5	78.04	1,613.7	1,194.9	4,107.6	4,063.5	44.04	93.278		
10,800.0	7,740.0	7,700.0	7,697.2	56.7	13.5	77.86	1,613.7	1,194.8	4,207.0	4,162.9	44.07	95.455		
10,900.0	7,740.0	7,696.6	7,693.8	58.2	13.5	77.43	1,613.6	1,194.7	4,306.5	4,262.4	44.11	97.634		
11,000.0	7,740.0	7,694.2	7,691.4	59.7	13.5	77.13	1,613.6	1,194.7	4,406.0	4,361.8	44.15	99.798		
11,100.0	7,740.0	7,691.8	7,689.1	61.2	13.5	76.83	1,613.5	1,194.6	4,505.5	4,461.3	44.19	101.955		
11,200.0	7,740.0	7,689.5	7,686.7	62.7	13.5	76.53	1,613.4	1,194.5	4,605.0	4,560.8	44.24	104.102		
11,300.0	7,740.0	7,687.1	7,684.3	64.2	13.5	76.23	1,613.4	1,194.5	4,704.6	4,660.3	44.28	106.241		
11,400.0	7,740.0	7,684.7	7,681.9	65.7	13.5	75.93	1,613.3	1,194.4	4,804.2	4,759.8	44.33	108.371		
11,500.0	7,740.0	7,682.4	7,679.6	67.2	13.5	75.64	1,613.3	1,194.3	4,903.7	4,859.4	44.38	110.493		
11,600.0	7,740.0	7,680.0	7,677.2	68.8	13.5	75.34	1,613.2	1,194.2	5,003.3	4,958.9	44.43	112.606		
11,700.0	7,740.0	7,677.6	7,674.9	70.3	13.5	75.05	1,613.1	1,194.2	5,103.0	5,058.5	44.49	114.711		
11,800.0	7,740.0	7,675.3	7,672.5	71.9	13.4	74.76	1,613.1	1,194.1	5,202.6	5,158.1	44.54	116.807		
11,900.0	7,740.0	7,672.9	7,670.2	73.5	13.4	74.47	1,613.0	1,194.0	5,302.2	5,257.6	44.60	118.894		
12,000.0	7,740.0	7,670.6	7,667.8	75.1	13.4	74.18	1,613.0	1,193.9	5,401.9	5,357.2	44.65	120.973		
12,100.0	7,740.0	7,668.2	7,665.5	76.6	13.4	73.89	1,612.9	1,193.9	5,501.6	5,456.8	44.71	123.043		
12,200.0	7,740.0	7,665.9	7,663.1	78.2	13.4	73.61	1,612.9	1,193.8	5,601.2	5,556.5	44.77	125.105		
12,300.0	7,740.0	7,663.6	7,660.8	79.8	13.4	73.32	1,612.8	1,193.7	5,700.9	5,656.1	44.83	127.158		
12,400.0	7,740.0	7,661.2	7,658.5	81.5	13.4	73.04	1,612.7	1,193.6	5,800.6	5,755.7	44.90	129.203		
12,500.0	7,740.0	7,658.9	7,656.2	83.1	13.4	72.76	1,612.7	1,193.5	5,900.3	5,855.4	44.96	131.240		
12,600.0	7,740.0	7,656.6	7,653.8	84.7	13.4	72.48	1,612.6	1,193.5	6,000.0	5,955.0	45.02	133.268		
12,700.0	7,740.0	7,654.3	7,651.5	86.3	13.4	72.20	1,612.6	1,193.4	6,099.8	6,054.7	45.09	135.287		
12,800.0	7,740.0	7,651.9	7,649.2	88.0	13.4	71.92	1,612.5	1,193.3	6,199.5	6,154.3	45.15	137.299		
12,900.0	7,740.0	7,649.6	7,646.9	89.6	13.4	71.65	1,612.4	1,193.2	6,299.2	6,254.0	45.22	139.302		
13,000.0	7,740.0	7,647.3	7,644.6	91.2	13.4	71.37	1,612.4	1,193.2	6,399.0	6,353.7	45.29	141.297		
13,100.0	7,740.0	7,645.0	7,642.3	92.9	13.4	71.10	1,612.3	1,193.1	6,498.7	6,453.4	45.36	143.283		
13,200.0	7,740.0	7,642.7	7,640.0	94.5	13.4	70.83	1,612.3	1,193.0	6,598.5	6,553.1	45.42	145.261		
13,300.0	7,740.0	7,640.4	7,637.7	96.2	13.4	70.56	1,612.2	1,192.9	6,698.3	6,652.8	45.49	147.232		
13,400.0	7,740.0	7,638.1	7,635.4	97.8	13.4	70.29	1,612.2	1,192.9	6,798.0	6,752.5	45.57	149.194		
13,500.0	7,740.0	7,635.8	7,633.1	99.5	13.4	70.02	1,612.1	1,192.8	6,897.8	6,852.2	45.64	151.148		
13,600.0	7,740.0	7,633.5	7,630.8	101.2	13.4	69.75	1,612.0	1,192.7	6,997.6	6,951.9	45.71	153.093		
13,700.0	7,740.0	7,631.3	7,628.5	102.8	13.4	69.49	1,612.0	1,192.6	7,097.4	7,051.6	45.78	155.031		
13,800.0	7,740.0	7,629.0	7,626.2	104.5	13.4	69.23	1,611.9	1,192.5	7,197.2	7,151.3	45.85	156.961		
13,900.0	7,740.0	7,626.7	7,624.0	106.2	13.4	68.96	1,611.9	1,192.5	7,297.0	7,251.1	45.93	158.883		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
14,000.0	7,740.0	7,624.4	7,621.7	107.8	13.4	68.70	1,611.8	1,192.4	7,396.8	7,350.8	46.00	160.797		
14,100.0	7,740.0	7,622.1	7,619.4	109.5	13.4	68.44	1,611.8	1,192.3	7,496.6	7,450.5	46.08	162.703		
14,200.0	7,740.0	7,619.9	7,617.2	111.2	13.4	68.19	1,611.7	1,192.2	7,596.4	7,550.3	46.15	164.602		
14,300.0	7,740.0	7,270.2	7,268.2	112.9	12.8	40.41	1,594.9	1,178.2	7,696.0	7,650.7	45.32	169.825		
14,400.0	7,740.0	7,265.9	7,263.9	114.6	12.7	40.19	1,594.6	1,178.0	7,795.6	7,750.2	45.39	171.750		
14,500.0	7,740.0	7,261.6	7,259.7	116.3	12.7	39.97	1,594.3	1,177.9	7,895.2	7,849.7	45.46	173.667		
14,600.0	7,740.0	7,257.4	7,255.4	117.9	12.7	39.75	1,594.0	1,177.8	7,994.8	7,949.3	45.53	175.576		
14,700.0	7,740.0	7,253.2	7,251.3	119.6	12.7	39.54	1,593.7	1,177.6	8,094.4	8,048.8	45.61	177.477		
14,800.0	7,740.0	7,249.1	7,247.2	121.3	12.7	39.34	1,593.5	1,177.5	8,194.1	8,148.4	45.68	179.370		
14,900.0	7,740.0	7,245.0	7,243.1	123.0	12.7	39.14	1,593.2	1,177.3	8,293.7	8,247.9	45.76	181.254		
15,000.0	7,740.0	7,241.0	7,239.1	124.7	12.7	38.94	1,592.9	1,177.2	8,393.3	8,347.5	45.83	183.131		
15,100.0	7,740.0	7,237.0	7,235.1	126.4	12.7	38.74	1,592.6	1,177.1	8,493.0	8,447.1	45.91	185.000		
15,200.0	7,740.0	7,233.0	7,231.1	128.1	12.7	38.55	1,592.4	1,177.0	8,592.6	8,546.7	45.98	186.861		
15,300.0	7,740.0	7,229.1	7,227.2	129.8	12.7	38.37	1,592.1	1,176.9	8,692.3	8,646.2	46.06	188.713		
15,400.0	7,740.0	7,225.2	7,223.3	131.5	12.7	38.18	1,591.9	1,176.7	8,792.0	8,745.8	46.14	190.558		
15,500.0	7,740.0	7,221.4	7,219.5	133.2	12.7	38.00	1,591.6	1,176.6	8,891.6	8,845.4	46.22	192.395		
15,600.0	7,740.0	7,200.0	7,198.2	134.9	12.6	37.02	1,590.2	1,176.1	8,991.3	8,945.1	46.25	194.409		
15,700.0	7,740.0	7,200.0	7,198.2	136.6	12.6	37.02	1,590.2	1,176.1	9,091.0	9,044.7	46.34	196.192		
15,800.0	7,740.0	7,200.0	7,198.2	138.3	12.6	37.02	1,590.2	1,176.1	9,190.7	9,144.2	46.43	197.967		
15,900.0	7,740.0	7,200.0	7,198.2	140.0	12.6	37.02	1,590.2	1,176.1	9,290.3	9,243.8	46.51	199.734		
16,000.0	7,740.0	7,200.0	7,198.2	141.7	12.6	37.02	1,590.2	1,176.1	9,390.0	9,343.4	46.60	201.494		
16,100.0	7,740.0	7,200.0	7,198.2	143.5	12.6	37.02	1,590.2	1,176.1	9,489.7	9,443.0	46.69	203.246		
16,171.7	7,740.0	7,200.0	7,198.2	144.7	12.6	37.02	1,590.2	1,176.1	9,561.2	9,514.4	46.75	204.497		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	52.2	52.2	0.0	0.1	36.85	1,594.4	1,195.0	1,992.6					
100.0	100.0	151.2	151.2	0.2	0.3	36.85	1,594.4	1,195.1	1,992.6	1,992.2	0.42	4,793.733		
150.0	150.0	199.0	199.0	0.2	0.3	36.85	1,594.5	1,195.0	1,992.6	1,992.0	0.59	3,397.761		
200.0	200.0	246.3	246.3	0.3	0.4	36.86	1,594.8	1,194.8	1,992.2	1,991.5	0.76	2,632.546		
283.3	283.2	348.4	348.4	0.5	0.6	36.98	1,595.3	1,194.0	1,988.9	1,987.8	1.09	1,830.776		
300.0	299.9	382.4	382.4	0.5	0.7	34.63	1,595.1	1,193.6	1,987.8	1,986.6	1.18	1,690.120		
400.0	399.6	525.0	524.8	0.7	0.9	21.09	1,589.4	1,194.3	1,978.5	1,976.9	1.61	1,229.768		
500.0	499.3	800.2	797.0	0.9	1.7	10.17	1,551.3	1,205.2	1,961.7	1,959.3	2.43	808.250		
600.0	598.9	894.0	888.8	1.2	2.0	0.84	1,532.8	1,209.8	1,940.7	1,937.8	2.88	673.820		
700.0	698.5	1,082.8	1,072.9	1.4	2.8	-5.94	1,492.0	1,218.5	1,917.6	1,913.9	3.65	525.938		
800.0	797.9	1,275.7	1,257.9	1.6	3.8	-10.91	1,437.7	1,224.8	1,886.8	1,882.2	4.54	415.340		
900.0	897.1	1,380.9	1,357.6	1.9	4.3	-15.09	1,404.5	1,228.6	1,853.3	1,848.1	5.16	358.969		
1,000.0	996.2	1,476.5	1,448.0	2.2	4.9	-18.40	1,373.6	1,232.8	1,818.7	1,812.9	5.77	315.049		
1,100.0	1,095.0	1,562.4	1,529.1	2.5	5.4	-21.06	1,345.3	1,236.8	1,783.1	1,776.7	6.35	280.585		
1,200.0	1,193.6	1,640.3	1,602.7	2.8	5.9	-23.27	1,320.3	1,240.7	1,747.2	1,740.2	6.92	252.655		
1,300.0	1,291.9	1,730.4	1,687.9	3.2	6.4	-25.00	1,291.3	1,245.9	1,710.9	1,703.3	7.55	226.582		
1,400.0	1,389.9	1,820.2	1,772.5	3.5	6.9	-26.40	1,261.9	1,251.5	1,673.3	1,665.1	8.21	203.889		
1,500.0	1,487.6	1,932.8	1,878.7	3.9	7.6	-27.43	1,225.1	1,258.2	1,635.0	1,626.0	8.96	182.552		
1,600.0	1,584.8	2,014.9	1,956.4	4.4	8.1	-28.54	1,198.6	1,261.5	1,594.6	1,585.0	9.58	166.530		
1,624.3	1,608.4	2,037.0	1,977.3	4.5	8.2	-28.78	1,191.6	1,262.5	1,584.8	1,575.0	9.74	162.774		
1,700.0	1,681.8	2,080.4	2,018.4	4.8	8.4	-28.53	1,178.0	1,264.7	1,554.6	1,544.5	10.14	153.376		
1,800.0	1,778.8	2,160.7	2,094.8	5.3	8.9	-28.06	1,153.7	1,269.6	1,516.2	1,505.4	10.77	140.780		
1,900.0	1,875.8	2,270.5	2,198.8	5.7	9.5	-27.35	1,119.2	1,276.2	1,477.1	1,465.6	11.55	127.872		
2,000.0	1,972.8	2,365.1	2,288.0	6.2	10.1	-26.66	1,088.4	1,282.1	1,437.6	1,425.3	12.28	117.081		
2,100.0	2,069.8	2,457.7	2,375.7	6.6	10.7	-25.98	1,058.7	1,287.2	1,398.1	1,385.1	12.98	107.701		
2,200.0	2,166.8	2,548.9	2,462.1	7.1	11.2	-25.31	1,030.0	1,291.6	1,358.7	1,345.0	13.68	99.329		
2,300.0	2,263.8	2,641.5	2,549.9	7.5	11.7	-24.61	1,001.0	1,295.7	1,319.4	1,305.0	14.37	91.790		
2,400.0	2,360.8	2,729.3	2,633.3	8.0	12.2	-23.91	973.6	1,299.6	1,280.3	1,265.2	15.07	84.972		
2,500.0	2,457.7	2,811.0	2,766.9	8.4	13.1	-22.63	926.8	1,304.5	1,239.4	1,223.4	15.96	77.657		
2,600.0	2,554.7	2,963.5	2,853.4	8.9	13.7	-21.67	894.1	1,306.6	1,196.7	1,180.0	16.71	71.635		
2,700.0	2,651.7	3,047.2	2,931.6	9.4	14.2	-20.70	864.3	1,309.2	1,154.7	1,137.3	17.43	66.255		
2,800.0	2,748.7	3,128.9	3,008.2	9.8	14.7	-19.72	835.7	1,311.7	1,113.4	1,095.2	18.15	61.334		
2,900.0	2,845.7	3,218.4	3,091.8	10.3	15.3	-18.55	804.5	1,315.1	1,073.0	1,054.1	18.91	56.732		
3,000.0	2,942.7	3,323.2	3,190.0	10.8	16.0	-17.10	767.7	1,318.0	1,032.1	1,012.4	19.71	52.363		
3,100.0	3,039.7	3,403.6	3,265.4	11.2	16.5	-15.95	739.8	1,319.3	991.1	970.7	20.44	48.490		
3,200.0	3,136.7	3,471.7	3,329.5	11.7	16.9	-14.92	716.8	1,321.2	952.0	930.9	21.13	45.055		
3,300.0	3,233.6	3,541.8	3,395.9	12.2	17.3	-13.84	694.8	1,324.3	915.7	893.9	21.82	41.972		
3,400.0	3,330.6	3,624.2	3,474.2	12.6	17.7	-12.52	669.7	1,328.7	881.1	858.6	22.55	39.082		
3,500.0	3,427.6	3,701.1	3,547.5	13.1	18.2	-11.20	646.7	1,333.8	848.4	825.2	23.26	36.475		
3,600.0	3,524.6	3,791.0	3,633.6	13.6	18.6	-9.68	621.8	1,339.8	817.4	793.4	23.97	34.097		
3,700.0	3,621.6	3,909.5	3,748.3	14.0	19.2	-7.89	592.5	1,343.9	785.6	760.9	24.70	31.806		
3,800.0	3,718.6	4,021.7	3,856.5	14.5	19.7	-5.94	562.4	1,344.7	751.0	725.5	25.47	29.487		
3,900.0	3,815.6	4,097.0	3,928.4	15.0	20.2	-4.34	540.1	1,345.8	716.8	690.6	26.22	27.333		
4,000.0	3,912.6	4,177.9	4,005.5	15.4	20.6	-2.36	515.8	1,349.6	685.9	658.9	27.05	25.359		
4,100.0	4,009.5	4,277.5	4,099.5	15.9	21.2	0.50	483.5	1,354.9	656.1	628.0	28.05	23.391		
4,200.0	4,106.5	4,375.3	4,191.0	16.4	21.9	3.76	449.3	1,359.3	626.3	597.2	29.13	21.500		
4,300.0	4,203.5	4,460.1	4,270.3	16.8	22.4	6.85	419.4	1,362.8	598.2	568.0	30.20	19.807		
4,400.0	4,300.5	4,544.8	4,349.8	17.3	22.9	10.10	390.4	1,367.0	573.2	541.9	31.27	18.329		
4,500.0	4,397.5	4,631.8	4,432.3	17.8	23.4	13.39	363.4	1,371.6	551.1	518.7	32.32	17.051		
4,600.0	4,494.5	4,722.8	4,519.4	18.2	23.9	16.83	337.2	1,376.7	531.6	498.2	33.38	15.924		
4,700.0	4,591.5	4,821.5	4,613.9	18.7	24.4	20.72	309.6	1,381.7	513.9	479.4	34.50	14.895		
4,800.0	4,688.5	4,923.8	4,712.5	19.2	24.9	24.89	282.2	1,385.0	496.9	461.3	35.63	13.945		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,900.0	4,785.4	5,014.2	4,799.9	19.6	25.3	28.66	259.3	1,387.6	481.7	445.2	36.57	13.173	
5,000.0	4,882.4	5,109.8	4,892.9	20.1	25.7	32.52	237.7	1,390.9	469.0	431.6	37.43	12.532	
5,100.0	4,979.4	5,213.1	4,994.3	20.6	26.1	36.49	218.1	1,394.1	457.2	419.0	38.22	11.964	
5,200.0	5,076.4	5,314.1	5,094.0	21.0	26.4	40.22	202.1	1,396.6	445.8	406.9	38.87	11.467	
5,300.0	5,173.4	5,415.9	5,194.8	21.5	26.7	43.94	188.0	1,398.6	434.9	395.5	39.43	11.031	
5,400.0	5,270.4	5,520.0	5,298.2	22.0	26.9	47.71	175.9	1,399.8	424.1	384.3	39.88	10.634	
5,500.0	5,367.4	5,624.9	5,402.7	22.5	27.1	51.42	166.8	1,400.1	412.9	372.7	40.23	10.264	
5,600.0	5,464.4	5,724.4	5,502.0	22.9	27.2	54.83	160.6	1,400.6	402.0	361.5	40.46	9.937	
5,700.0	5,561.4	5,833.9	5,611.4	23.4	27.3	58.27	157.9	1,401.8	390.8	350.1	40.62	9.621	
5,800.0	5,658.3	5,935.4	5,712.9	23.9	27.4	61.63	157.7	1,400.5	377.4	336.8	40.70	9.275	
5,900.0	5,755.3	6,027.8	5,805.4	24.3	27.5	64.81	157.4	1,400.2	366.1	325.4	40.72	8.992	
6,000.0	5,852.3	6,125.3	5,902.8	24.8	27.5	68.22	157.2	1,400.9	356.8	316.2	40.67	8.774	
6,100.0	5,949.3	6,224.3	6,001.9	25.3	27.6	71.81	157.5	1,401.5	348.4	307.9	40.55	8.592	
6,200.0	6,046.3	6,320.3	6,097.9	25.7	27.7	75.40	158.1	1,402.2	341.3	300.9	40.39	8.450	
6,300.0	6,143.3	6,416.7	6,194.2	26.2	27.7	79.08	158.5	1,403.4	336.0	295.8	40.20	8.359	
6,400.0	6,240.3	6,514.6	6,292.1	26.7	27.8	82.94	158.8	1,404.5	332.3	292.3	40.01	8.306	
6,500.0	6,337.3	6,611.9	6,389.4	27.1	27.8	86.90	159.1	1,405.1	330.0	290.2	39.84	8.283	
6,577.4	6,412.3	6,686.7	6,464.3	27.5	27.9	89.98	159.3	1,405.6	329.5	289.7	39.78	8.283	
6,600.0	6,434.2	6,708.6	6,486.2	27.6	27.9	90.89	159.4	1,405.7	329.5	289.8	39.77	8.286	
6,700.0	6,531.2	6,805.3	6,582.8	28.1	28.0	94.85	159.5	1,406.4	330.9	291.0	39.83	8.307	
6,800.0	6,628.2	6,901.9	6,679.4	28.5	28.1	98.76	159.4	1,407.2	334.0	294.0	40.05	8.340	
6,900.0	6,725.2	6,998.7	6,776.2	29.0	28.1	102.57	159.3	1,408.0	339.0	298.5	40.43	8.385	
7,000.0	6,822.2	7,095.7	6,873.2	29.5	28.2	106.26	159.0	1,409.0	345.5	304.6	40.92	8.443	
7,100.0	6,919.2	7,190.6	6,968.0	30.0	28.3	109.70	158.5	1,410.1	353.8	312.3	41.50	8.526	
7,200.0	7,016.2	7,285.8	7,063.3	30.4	28.4	112.93	157.2	1,411.5	364.1	322.0	42.12	8.645	
7,300.0	7,113.2	7,384.5	7,162.0	30.9	28.5	116.14	156.0	1,412.7	375.6	332.9	42.73	8.791	
7,328.7	7,141.0	7,412.8	7,190.3	31.0	28.5	117.05	155.8	1,412.8	379.1	336.2	42.90	8.836	
7,350.0	7,161.7	7,433.8	7,211.3	31.1	28.6	109.29	155.6	1,413.0	381.3	338.2	43.03	8.861	
7,400.0	7,210.3	7,482.6	7,260.1	31.3	28.6	90.23	155.3	1,413.0	383.6	340.2	43.34	8.851	
7,450.0	7,258.7	7,530.9	7,308.3	31.5	28.6	74.06	155.0	1,412.8	382.0	338.3	43.65	8.751	
7,500.0	7,306.5	7,578.4	7,355.9	31.7	28.7	63.00	154.9	1,412.3	376.7	332.7	43.98	8.565	
7,550.0	7,353.4	7,624.9	7,402.3	31.8	28.7	56.41	154.7	1,411.6	367.8	323.5	44.31	8.300	
7,600.0	7,399.0	7,670.7	7,448.2	31.9	28.7	53.11	154.6	1,410.8	355.5	310.9	44.66	7.961	
7,650.0	7,442.9	7,715.0	7,492.4	32.0	28.8	52.21	154.5	1,410.1	340.3	295.2	45.01	7.560	
7,700.0	7,484.9	7,757.3	7,534.7	32.1	28.8	53.22	154.4	1,409.6	322.3	277.0	45.34	7.109	
7,750.0	7,524.5	7,797.3	7,574.7	32.1	28.9	55.90	154.4	1,409.2	302.3	256.7	45.62	6.625	
7,800.0	7,561.6	7,834.8	7,612.2	32.1	28.9	60.10	154.3	1,408.9	280.9	235.1	45.81	6.132	
7,850.0	7,595.8	7,869.3	7,646.7	32.2	28.9	65.58	154.3	1,408.6	259.2	213.4	45.79	5.661	
7,900.0	7,626.8	7,900.6	7,678.0	32.2	28.9	71.95	154.4	1,408.4	238.7	193.3	45.45	5.253	
7,950.0	7,654.5	7,928.3	7,705.7	32.2	28.9	78.59	154.5	1,408.2	221.2	176.6	44.64	4.955	
8,000.0	7,678.5	7,952.3	7,729.8	32.3	29.0	84.76	154.6	1,408.1	209.1	165.5	43.53	4.803	
8,049.5	7,698.6	7,972.3	7,749.8	32.3	29.0	89.73	154.7	1,408.0	204.6	161.8	42.85	4.776	CC, ES, SF
8,050.0	7,698.8	7,972.5	7,749.9	32.3	29.0	89.77	154.7	1,408.0	204.6	161.8	42.85	4.776	
8,100.0	7,715.2	7,988.7	7,766.1	32.3	29.0	93.13	154.7	1,407.9	209.6	166.3	43.27	4.844	
8,150.0	7,727.5	8,000.8	7,778.2	32.4	29.0	94.57	154.8	1,407.9	224.1	179.9	44.20	5.070	
8,200.0	7,735.6	8,008.7	7,786.1	32.4	29.0	93.95	154.8	1,407.8	247.0	202.2	44.84	5.509	
8,250.0	7,739.6	8,012.4	7,789.8	32.4	29.0	91.27	154.9	1,407.8	276.5	231.5	45.02	6.142	
8,271.7	7,740.0	8,012.6	7,790.1	32.5	29.0	89.48	154.9	1,407.8	290.8	245.8	44.99	6.463	
8,300.0	7,740.0	8,012.5	7,789.9	32.5	29.0	89.44	154.9	1,407.8	310.7	265.8	44.90	6.920	
8,400.0	7,740.0	8,011.9	7,789.4	32.7	29.0	89.29	154.9	1,407.8	389.4	345.0	44.41	8.768	
8,500.0	7,740.0	8,011.4	7,788.8	33.0	29.0	89.14	154.9	1,407.8	476.1	432.1	44.02	10.817	
8,600.0	7,740.0	8,010.8	7,788.3	33.4	29.0	89.00	154.9	1,407.8	567.3	523.5	43.80	12.953	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,700.0	7,740.0	8,010.3	7,787.7	33.8	29.0	88.85	154.9	1,407.8	661.0	617.3	43.70	15.125	
8,800.0	7,740.0	8,009.8	7,787.2	34.4	29.0	88.71	154.9	1,407.8	756.3	712.6	43.68	17.313	
8,900.0	7,740.0	8,009.2	7,786.6	35.0	29.0	88.56	154.9	1,407.8	852.7	809.0	43.71	19.507	
9,000.0	7,740.0	8,008.7	7,786.1	35.7	29.0	88.42	154.8	1,407.8	949.8	906.1	43.77	21.701	
9,100.0	7,740.0	8,008.1	7,785.6	36.4	29.0	88.27	154.8	1,407.9	1,047.5	1,003.7	43.84	23.892	
9,200.0	7,740.0	8,007.6	7,785.0	37.3	29.0	88.13	154.8	1,407.9	1,145.6	1,101.7	43.93	26.079	
9,300.0	7,740.0	8,007.1	7,784.5	38.2	29.0	87.99	154.8	1,407.9	1,244.0	1,199.9	44.02	28.261	
9,400.0	7,740.0	8,006.5	7,784.0	39.1	29.0	87.84	154.8	1,407.9	1,342.6	1,298.5	44.11	30.436	
9,500.0	7,740.0	8,006.0	7,783.4	40.1	29.0	87.70	154.8	1,407.9	1,441.4	1,397.2	44.21	32.605	
9,600.0	7,740.0	8,005.5	7,782.9	41.2	29.0	87.56	154.8	1,407.9	1,540.4	1,496.1	44.31	34.767	
9,700.0	7,740.0	8,004.9	7,782.4	42.3	29.0	87.42	154.8	1,407.9	1,639.5	1,595.0	44.40	36.922	
9,800.0	7,740.0	8,004.4	7,781.8	43.5	29.0	87.27	154.8	1,407.9	1,738.6	1,694.1	44.50	39.070	
9,900.0	7,740.0	8,003.9	7,781.3	44.7	29.0	87.13	154.8	1,407.9	1,837.9	1,793.3	44.60	41.210	
10,000.0	7,740.0	8,003.3	7,780.8	45.9	29.0	86.99	154.8	1,407.9	1,937.3	1,892.6	44.70	43.342	
10,100.0	7,740.0	8,002.8	7,780.2	47.1	29.0	86.85	154.8	1,407.9	2,036.7	1,991.9	44.79	45.468	
10,200.0	7,740.0	8,002.3	7,779.7	48.4	29.0	86.71	154.8	1,407.9	2,136.2	2,091.3	44.89	47.585	
10,300.0	7,740.0	8,001.8	7,779.2	49.8	29.0	86.57	154.8	1,407.9	2,235.7	2,190.7	44.99	49.695	
10,400.0	7,740.0	8,001.2	7,778.7	51.1	29.0	86.43	154.8	1,407.9	2,335.2	2,290.2	45.08	51.797	
10,500.0	7,740.0	8,000.7	7,778.1	52.5	29.0	86.29	154.8	1,407.9	2,434.8	2,389.7	45.18	53.891	
10,600.0	7,740.0	8,000.2	7,777.6	53.9	29.0	86.15	154.8	1,407.9	2,534.5	2,489.2	45.28	55.978	
10,700.0	7,740.0	7,999.7	7,777.1	55.3	29.0	86.01	154.8	1,407.9	2,634.1	2,588.8	45.37	58.057	
10,800.0	7,740.0	7,999.2	7,776.6	56.7	29.0	85.87	154.8	1,407.9	2,733.8	2,688.3	45.47	60.128	
10,900.0	7,740.0	7,998.6	7,776.1	58.2	29.0	85.73	154.8	1,407.9	2,833.5	2,788.0	45.56	62.192	
11,000.0	7,740.0	7,998.1	7,775.5	59.7	29.0	85.59	154.8	1,407.9	2,933.2	2,887.6	45.66	64.247	
11,100.0	7,740.0	7,997.6	7,775.0	61.2	29.0	85.46	154.8	1,407.9	3,033.0	2,987.2	45.75	66.296	
11,200.0	7,740.0	7,997.1	7,774.5	62.7	29.0	85.32	154.8	1,407.9	3,132.7	3,086.9	45.84	68.336	
11,300.0	7,740.0	7,996.6	7,774.0	64.2	29.0	85.18	154.8	1,407.9	3,232.5	3,186.6	45.94	70.369	
11,400.0	7,740.0	7,996.1	7,773.5	65.7	29.0	85.04	154.8	1,407.9	3,332.3	3,286.3	46.03	72.394	
11,500.0	7,740.0	7,995.5	7,773.0	67.2	29.0	84.91	154.8	1,407.9	3,432.1	3,386.0	46.12	74.412	
11,600.0	7,740.0	7,995.0	7,772.4	68.8	29.0	84.77	154.8	1,407.9	3,531.9	3,485.7	46.22	76.422	
11,700.0	7,740.0	7,994.5	7,771.9	70.3	29.0	84.63	154.8	1,407.9	3,631.7	3,585.4	46.31	78.424	
11,800.0	7,740.0	7,994.0	7,771.4	71.9	29.0	84.50	154.8	1,407.9	3,731.6	3,685.2	46.40	80.419	
11,900.0	7,740.0	7,993.5	7,770.9	73.5	29.0	84.36	154.8	1,407.9	3,831.4	3,784.9	46.49	82.407	
12,000.0	7,740.0	7,993.0	7,770.4	75.1	29.0	84.23	154.8	1,407.9	3,931.2	3,884.7	46.59	84.386	
12,100.0	7,740.0	7,992.5	7,769.9	76.6	29.0	84.09	154.8	1,407.9	4,031.1	3,984.4	46.68	86.359	
12,200.0	7,740.0	7,992.0	7,769.4	78.2	29.0	83.96	154.8	1,407.9	4,131.0	4,084.2	46.77	88.324	
12,300.0	7,740.0	7,991.5	7,768.9	79.8	29.0	83.82	154.8	1,407.9	4,230.8	4,184.0	46.86	90.282	
12,400.0	7,740.0	7,991.0	7,768.4	81.5	29.0	83.69	154.8	1,407.9	4,330.7	4,283.7	46.95	92.232	
12,500.0	7,740.0	7,990.5	7,767.9	83.1	29.0	83.56	154.8	1,407.9	4,430.6	4,383.5	47.05	94.175	
12,600.0	7,740.0	7,990.0	7,767.4	84.7	29.0	83.42	154.7	1,407.9	4,530.5	4,483.3	47.14	96.111	
12,700.0	7,740.0	7,989.4	7,766.9	86.3	29.0	83.29	154.7	1,407.9	4,630.4	4,583.1	47.23	98.039	
12,800.0	7,740.0	7,988.9	7,766.4	88.0	29.0	83.16	154.7	1,407.9	4,730.2	4,682.9	47.32	99.960	
12,900.0	7,740.0	7,988.4	7,765.9	89.6	29.0	83.02	154.7	1,407.9	4,830.1	4,782.7	47.41	101.874	
13,000.0	7,740.0	7,987.9	7,765.4	91.2	29.0	82.89	154.7	1,407.9	4,930.0	4,882.5	47.50	103.781	
13,100.0	7,740.0	7,987.4	7,764.9	92.9	29.0	82.76	154.7	1,407.9	5,030.0	4,982.4	47.60	105.681	
13,200.0	7,740.0	7,987.0	7,764.4	94.5	29.0	82.63	154.7	1,407.9	5,129.9	5,082.2	47.69	107.573	
13,300.0	7,740.0	7,986.5	7,763.9	96.2	29.0	82.50	154.7	1,407.9	5,229.8	5,182.0	47.78	109.459	
13,400.0	7,740.0	7,986.0	7,763.4	97.8	29.0	82.37	154.7	1,407.9	5,329.7	5,281.8	47.87	111.337	
13,500.0	7,740.0	7,985.5	7,762.9	99.5	29.0	82.24	154.7	1,408.0	5,429.6	5,381.7	47.96	113.209	
13,600.0	7,740.0	7,985.0	7,762.4	101.2	29.0	82.11	154.7	1,408.0	5,529.5	5,481.5	48.05	115.073	
13,700.0	7,740.0	7,984.5	7,761.9	102.8	29.0	81.98	154.7	1,408.0	5,629.5	5,581.3	48.14	116.930	
13,800.0	7,740.0	7,984.0	7,761.4	104.5	29.0	81.85	154.7	1,408.0	5,729.4	5,681.2	48.23	118.781	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,740.0	7,983.5	7,760.9	106.2	29.0	81.72	154.7	1,408.0	5,829.3	5,781.0	48.33	120.625		
14,000.0	7,740.0	7,983.0	7,760.4	107.8	29.0	81.59	154.7	1,408.0	5,929.3	5,880.8	48.42	122.461		
14,100.0	7,740.0	7,982.5	7,759.9	109.5	29.0	81.46	154.7	1,408.0	6,029.2	5,980.7	48.51	124.291		
14,200.0	7,740.0	7,982.0	7,759.4	111.2	29.0	81.33	154.7	1,408.0	6,129.1	6,080.5	48.60	126.114		
14,300.0	7,740.0	7,981.5	7,759.0	112.9	29.0	81.21	154.7	1,408.0	6,229.1	6,180.4	48.69	127.930		
14,400.0	7,740.0	7,981.1	7,758.5	114.6	29.0	81.08	154.7	1,408.0	6,329.0	6,280.2	48.78	129.740		
14,500.0	7,740.0	7,980.6	7,758.0	116.3	29.0	80.95	154.7	1,408.0	6,428.9	6,380.1	48.87	131.543		
14,600.0	7,740.0	7,980.1	7,757.5	117.9	29.0	80.83	154.7	1,408.0	6,528.9	6,479.9	48.96	133.339		
14,700.0	7,740.0	7,979.6	7,757.0	119.6	29.0	80.70	154.7	1,408.0	6,628.8	6,579.8	49.06	135.128		
14,800.0	7,740.0	7,979.1	7,756.5	121.3	29.0	80.57	154.7	1,408.0	6,728.8	6,679.6	49.15	136.911		
14,900.0	7,740.0	7,978.6	7,756.1	123.0	29.0	80.45	154.7	1,408.0	6,828.7	6,779.5	49.24	138.688		
15,000.0	7,740.0	7,973.0	7,750.4	124.7	29.0	78.98	154.7	1,408.0	6,928.7	6,879.4	49.32	140.492		
15,100.0	7,740.0	7,973.0	7,750.4	126.4	29.0	78.98	154.7	1,408.0	7,028.6	6,979.2	49.41	142.252		
15,200.0	7,740.0	7,973.0	7,750.4	128.1	29.0	78.98	154.7	1,408.0	7,128.6	7,079.1	49.50	144.006		
15,300.0	7,740.0	7,973.0	7,750.4	129.8	29.0	78.98	154.7	1,408.0	7,228.5	7,178.9	49.59	145.753		
15,400.0	7,740.0	7,973.0	7,750.4	131.5	29.0	78.98	154.7	1,408.0	7,328.5	7,278.8	49.69	147.493		
15,500.0	7,740.0	7,973.0	7,750.4	133.2	29.0	78.98	154.7	1,408.0	7,428.5	7,378.7	49.78	149.228		
15,600.0	7,740.0	7,973.0	7,750.4	134.9	29.0	78.98	154.7	1,408.0	7,528.4	7,478.5	49.87	150.955		
15,700.0	7,740.0	7,973.0	7,750.4	136.6	29.0	78.98	154.7	1,408.0	7,628.4	7,578.4	49.96	152.677		
15,800.0	7,740.0	7,973.0	7,750.4	138.3	29.0	78.98	154.7	1,408.0	7,728.3	7,678.3	50.06	154.392		
15,900.0	7,740.0	7,973.0	7,750.4	140.0	29.0	78.98	154.7	1,408.0	7,828.3	7,778.1	50.15	156.100		
16,000.0	7,740.0	7,973.0	7,750.4	141.7	29.0	78.98	154.7	1,408.0	7,928.3	7,878.0	50.24	157.803		
16,100.0	7,740.0	7,973.0	7,750.4	143.5	29.0	78.98	154.7	1,408.0	8,028.2	7,977.9	50.33	159.499		
16,171.7	7,740.0	7,973.0	7,750.4	144.7	29.0	78.98	154.7	1,408.0	8,099.8	8,049.4	50.40	160.710		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	105.6	105.5	0.0	0.2	37.00	1,584.2	1,193.8	1,984.3					
100.0	100.0	306.0	305.7	0.2	0.6	37.06	1,574.6	1,189.1	1,979.2	1,978.5	0.69	2,874.801		
150.0	150.0	404.2	403.4	0.2	0.8	37.15	1,565.7	1,186.2	1,974.7	1,973.7	0.95	2,071.091		
200.0	200.0	502.8	501.3	0.3	1.1	37.43	1,553.8	1,183.2	1,968.4	1,967.1	1.23	1,601.516		
283.3	283.2	584.5	582.1	0.5	1.4	37.91	1,542.4	1,181.2	1,954.7	1,953.1	1.55	1,264.266		
300.0	299.9	614.4	611.7	0.5	1.5	35.61	1,537.9	1,180.7	1,951.6	1,950.0	1.64	1,189.534		
400.0	399.6	752.3	747.5	0.7	1.9	22.26	1,514.2	1,178.2	1,930.5	1,928.4	2.13	905.370		
500.0	499.3	865.8	858.9	0.9	2.4	10.63	1,492.4	1,176.7	1,907.4	1,904.8	2.59	737.810		
600.0	598.9	934.9	926.7	1.2	2.6	1.06	1,479.6	1,176.3	1,883.9	1,881.0	2.93	642.290		
700.0	698.5	1,069.1	1,058.5	1.4	3.1	-6.23	1,454.1	1,175.4	1,859.4	1,856.0	3.45	539.316		
800.0	797.9	1,284.0	1,267.4	1.6	4.1	-11.55	1,403.9	1,170.7	1,829.6	1,825.4	4.21	434.874		
900.0	897.1	1,425.2	1,402.7	1.9	4.8	-15.87	1,363.9	1,165.4	1,793.8	1,789.0	4.81	373.097		
1,000.0	996.2	1,546.0	1,517.6	2.2	5.5	-19.33	1,326.9	1,160.7	1,755.4	1,750.0	5.38	326.056		
1,100.0	1,095.0	1,665.0	1,630.0	2.5	6.2	-22.09	1,288.3	1,156.0	1,714.5	1,708.5	5.98	286.798		
1,200.0	1,193.6	1,851.0	1,803.2	2.8	7.5	-23.91	1,221.0	1,147.4	1,669.9	1,663.0	6.85	243.843		
1,300.0	1,291.9	1,945.9	1,890.0	3.2	8.1	-25.77	1,183.0	1,142.3	1,620.8	1,613.4	7.46	217.280		
1,400.0	1,389.9	2,054.8	1,989.0	3.5	9.0	-27.21	1,138.0	1,136.9	1,570.1	1,562.0	8.14	192.925		
1,500.0	1,487.6	2,150.5	2,075.5	3.9	9.7	-28.47	1,097.4	1,132.1	1,517.7	1,508.9	8.80	172.390		
1,600.0	1,584.8	2,275.3	2,186.9	4.4	10.7	-29.23	1,041.4	1,126.3	1,463.0	1,453.4	9.64	151.840		
1,624.3	1,608.4	2,304.7	2,212.8	4.5	10.9	-29.39	1,027.6	1,124.8	1,449.2	1,439.4	9.84	147.342		
1,700.0	1,681.8	2,364.2	2,265.4	4.8	11.4	-28.89	1,000.0	1,121.3	1,405.9	1,395.6	10.32	136.179		
1,800.0	1,778.8	2,438.8	2,331.5	5.3	12.0	-28.25	965.8	1,116.6	1,349.1	1,338.1	10.96	123.039		
1,900.0	1,875.8	2,507.4	2,392.6	5.7	12.6	-27.63	934.7	1,112.4	1,293.0	1,281.4	11.60	111.483		
2,000.0	1,972.8	2,576.9	2,454.8	6.2	13.1	-26.96	904.0	1,108.7	1,238.0	1,225.8	12.24	101.106		
2,100.0	2,069.8	2,663.5	2,532.7	6.6	13.8	-26.13	866.5	1,103.2	1,183.4	1,170.4	12.95	91.414		
2,200.0	2,166.8	2,735.0	2,596.9	7.1	14.4	-25.38	835.5	1,098.7	1,128.8	1,115.2	13.63	82.830		
2,300.0	2,263.8	2,805.2	2,660.1	7.5	14.9	-24.55	805.1	1,095.2	1,075.3	1,061.0	14.33	75.027		
2,400.0	2,360.8	2,922.8	2,765.9	8.0	15.8	-23.02	754.1	1,088.8	1,021.9	1,006.7	15.20	67.238		
2,500.0	2,457.7	3,001.6	2,836.5	8.4	16.5	-21.88	719.4	1,083.3	967.3	951.3	15.96	60.595		
2,600.0	2,554.7	3,090.7	2,916.4	8.9	17.2	-20.51	680.6	1,076.3	912.7	896.0	16.76	54.467		
2,700.0	2,651.7	3,166.3	2,984.3	9.4	17.7	-19.25	648.2	1,070.0	858.5	841.0	17.54	48.939		
2,800.0	2,748.7	3,259.0	3,067.5	9.8	18.5	-17.49	608.0	1,062.1	804.4	786.0	18.41	43.687		
2,900.0	2,845.7	3,330.3	3,131.2	10.3	19.0	-15.89	576.5	1,056.5	750.8	731.5	19.31	38.884		
3,000.0	2,942.7	3,422.8	3,213.9	10.8	19.8	-13.49	535.7	1,049.6	698.2	677.9	20.31	34.387		
3,100.0	3,039.7	3,497.5	3,280.6	11.2	20.4	-11.27	502.5	1,043.5	645.9	624.5	21.35	30.254		
3,200.0	3,136.7	3,574.1	3,349.0	11.7	21.0	-8.61	468.5	1,038.4	595.6	573.1	22.50	26.467		
3,300.0	3,233.6	3,659.2	3,425.0	12.2	21.7	-5.18	430.7	1,032.9	547.0	523.2	23.81	22.979		
3,400.0	3,330.6	3,745.4	3,502.2	12.6	22.4	-1.21	392.8	1,026.2	499.3	474.1	25.24	19.784		
3,500.0	3,427.6	3,828.1	3,576.6	13.1	23.0	3.11	357.5	1,018.8	453.6	426.7	26.81	16.918		
3,600.0	3,524.6	3,909.4	3,650.5	13.6	23.6	7.85	324.5	1,011.0	410.6	382.0	28.54	14.385		
3,700.0	3,621.6	3,988.5	3,722.6	14.0	24.2	13.22	292.7	1,003.9	371.6	341.1	30.50	12.184		
3,800.0	3,718.6	4,068.1	3,795.1	14.5	24.8	19.56	260.3	997.9	338.4	305.7	32.66	10.360		
3,900.0	3,815.6	4,149.3	3,868.7	15.0	25.4	27.06	226.7	992.1	311.9	277.0	34.87	8.942		
4,000.0	3,912.6	4,223.4	3,935.7	15.4	26.0	34.66	195.2	988.4	295.5	258.9	36.56	8.081		
4,100.0	4,009.5	4,308.2	4,012.3	15.9	26.6	43.79	159.0	985.2	289.9	252.2	37.65	7.698		
4,105.8	4,015.2	4,313.0	4,016.7	15.9	26.7	44.32	156.9	985.0	289.8	252.2	37.68	7.692 CC, ES, SF		
4,200.0	4,106.5	4,392.6	4,088.7	16.4	27.2	52.82	123.4	982.0	294.3	256.6	37.68	7.812		
4,300.0	4,203.5	4,468.4	4,156.9	16.8	27.9	60.75	90.4	979.0	309.4	272.9	36.53	8.469		
4,400.0	4,300.5	4,547.2	4,226.5	17.3	28.5	68.67	53.7	975.0	335.1	300.3	34.75	9.643		
4,500.0	4,397.5	4,629.4	4,298.8	17.8	29.2	76.08	14.9	970.1	368.6	335.8	32.81	11.237		
4,600.0	4,494.5	4,721.4	4,380.5	18.2	30.0	83.02	-27.1	965.0	407.0	375.7	31.22	13.034		
4,700.0	4,591.5	4,826.8	4,476.2	18.7	30.7	89.29	-70.9	960.7	446.0	415.8	30.22	14.760		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
4,800.0	4,688.5	4,932.6	4,574.4	19.2	31.4	94.38	-110.1	956.6	483.8	454.4	29.46	16.422	
4,900.0	4,785.4	5,037.9	4,673.6	19.6	32.0	98.73	-145.2	951.4	520.2	491.3	28.89	18.005	
5,000.0	4,882.4	5,146.9	4,777.3	20.1	32.6	102.55	-178.4	946.4	555.9	527.3	28.59	19.443	
5,100.0	4,979.4	5,264.2	4,890.5	20.6	33.2	106.03	-208.8	941.8	588.5	559.9	28.57	20.597	
5,200.0	5,076.4	5,393.1	5,016.5	21.0	33.6	109.32	-235.3	937.7	617.1	588.3	28.78	21.442	
5,300.0	5,173.4	5,500.6	5,122.5	21.5	34.0	111.76	-253.2	934.9	643.0	614.0	28.99	22.178	
5,400.0	5,270.4	5,630.6	5,251.2	22.0	34.3	114.52	-270.5	931.2	666.6	637.2	29.40	22.677	
5,500.0	5,367.4	5,745.1	5,365.3	22.5	34.5	116.84	-281.0	927.8	687.2	657.3	29.82	23.042	
5,600.0	5,464.4	5,866.3	5,486.2	22.9	34.7	119.13	-287.7	925.1	704.8	674.5	30.33	23.239	
5,700.0	5,561.4	5,979.4	5,599.2	23.4	34.8	121.15	-290.9	923.3	720.5	689.6	30.88	23.334	
5,800.0	5,658.3	6,087.7	5,707.5	23.9	34.8	123.07	-291.4	921.3	734.6	703.1	31.46	23.352	
5,900.0	5,755.3	6,184.1	5,803.9	24.3	34.9	124.72	-291.3	919.6	748.9	716.8	32.08	23.347	
6,000.0	5,852.3	6,279.5	5,899.3	24.8	34.9	126.29	-291.3	917.9	763.9	731.2	32.71	23.353	
6,100.0	5,949.3	6,375.8	5,995.6	25.3	35.0	127.81	-291.4	916.2	779.6	746.2	33.35	23.375	
6,200.0	6,046.3	6,472.7	6,092.5	25.7	35.0	129.27	-291.6	914.7	795.7	761.8	33.99	23.412	
6,300.0	6,143.3	6,574.1	6,193.8	26.2	35.1	130.73	-291.5	913.3	812.2	777.6	34.63	23.455	
6,400.0	6,240.3	6,675.6	6,295.4	26.7	35.1	132.10	-291.0	912.5	828.4	793.2	35.25	23.500	
6,500.0	6,337.3	6,769.9	6,389.7	27.1	35.2	133.32	-290.5	912.0	845.0	809.1	35.87	23.560	
6,600.0	6,434.2	6,864.5	6,484.3	27.6	35.3	134.50	-290.3	911.4	862.3	825.8	36.46	23.647	
6,700.0	6,531.2	6,959.9	6,579.7	28.1	35.3	135.64	-290.3	910.6	880.1	843.0	37.05	23.757	
6,800.0	6,628.2	7,055.0	6,674.8	28.5	35.4	136.73	-290.3	909.8	898.4	860.8	37.61	23.888	
6,900.0	6,725.2	7,149.6	6,769.3	29.0	35.4	137.79	-290.5	908.7	917.3	879.1	38.16	24.040	
7,000.0	6,822.2	7,245.0	6,864.8	29.5	35.5	138.83	-290.8	907.4	936.7	898.0	38.69	24.211	
7,100.0	6,919.2	7,341.1	6,960.8	30.0	35.6	139.83	-291.1	906.0	956.4	917.2	39.20	24.396	
7,200.0	7,016.2	7,437.6	7,057.3	30.4	35.6	140.81	-291.3	904.5	976.5	936.8	39.70	24.596	
7,300.0	7,113.2	7,534.2	7,153.9	30.9	35.7	141.76	-291.4	902.7	996.8	956.7	40.18	24.806	
7,328.7	7,141.0	7,562.2	7,181.9	31.0	35.7	142.03	-291.5	902.2	1,002.7	962.4	40.32	24.869	
7,350.0	7,161.7	7,582.9	7,202.6	31.1	35.7	133.61	-291.5	901.8	1,006.8	966.3	40.43	24.903	
7,400.0	7,210.3	7,631.7	7,251.4	31.3	35.8	113.11	-291.4	900.9	1,013.8	973.1	40.72	24.896	
7,450.0	7,258.7	7,680.3	7,300.0	31.5	35.8	95.60	-291.4	899.9	1,017.4	976.4	41.06	24.781	
7,500.0	7,306.5	7,728.6	7,348.3	31.7	35.8	83.22	-291.3	899.0	1,017.7	976.2	41.43	24.562	
7,550.0	7,353.4	7,776.4	7,396.0	31.8	35.9	75.23	-291.2	898.1	1,014.6	972.7	41.84	24.246	
7,600.0	7,399.0	7,822.8	7,442.4	31.9	35.9	70.36	-291.0	897.2	1,008.4	966.1	42.30	23.840	
7,650.0	7,442.9	7,867.4	7,487.1	32.0	35.9	67.63	-290.7	896.3	999.2	956.4	42.79	23.353	
7,700.0	7,484.9	7,911.0	7,530.6	32.1	36.0	66.46	-290.4	895.5	987.3	944.0	43.31	22.793	
7,750.0	7,524.5	7,952.9	7,572.5	32.1	36.0	66.47	-290.1	894.8	972.9	929.0	43.88	22.172	
7,800.0	7,561.6	7,992.0	7,611.6	32.1	36.0	67.37	-289.7	894.3	956.3	911.8	44.47	21.502	
7,850.0	7,595.8	8,028.1	7,647.7	32.2	36.0	68.99	-289.4	893.9	937.9	892.8	45.10	20.798	
7,900.0	7,626.8	8,060.7	7,680.3	32.2	36.0	71.17	-289.1	893.6	918.1	872.3	45.74	20.073	
7,950.0	7,654.5	8,088.3	7,707.9	32.2	36.0	73.68	-288.8	893.5	897.2	850.8	46.39	19.340	
8,000.0	7,678.5	8,112.3	7,731.9	32.3	36.1	76.46	-288.5	893.3	875.8	828.8	47.05	18.614	
8,050.0	7,698.8	8,132.5	7,752.1	32.3	36.1	79.34	-288.3	893.2	854.3	806.6	47.71	17.908	
8,100.0	7,715.2	8,148.6	7,768.2	32.3	36.1	82.19	-288.2	893.2	833.2	784.9	48.34	17.235	
8,150.0	7,727.5	8,160.6	7,780.2	32.4	36.1	84.86	-288.0	893.1	812.8	763.9	48.95	16.606	
8,200.0	7,735.6	8,168.4	7,788.0	32.4	36.1	87.24	-288.0	893.1	793.6	744.1	49.50	16.031	
8,250.0	7,739.6	8,171.9	7,791.5	32.4	36.1	89.24	-287.9	893.1	775.9	725.9	50.00	15.518	
8,271.7	7,740.0	8,172.1	7,791.7	32.5	36.1	89.98	-287.9	893.1	768.8	718.6	50.20	15.316	
8,300.0	7,740.0	8,171.8	7,791.4	32.5	36.1	89.95	-287.9	893.1	760.2	709.8	50.43	15.075	
8,400.0	7,740.0	8,170.8	7,790.4	32.7	36.1	89.87	-287.9	893.1	737.9	686.8	51.07	14.450	
8,500.0	7,740.0	8,169.7	7,789.3	33.0	36.1	89.79	-288.0	893.1	728.7	677.3	51.38	14.182	
8,517.4	7,740.0	8,169.5	7,789.1	33.1	36.1	89.77	-288.0	893.1	728.5	677.1	51.42	14.168	
8,600.0	7,740.0	8,168.7	7,788.3	33.4	36.1	89.71	-288.0	893.1	733.2	681.8	51.41	14.260	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 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)				
8,700.0	7,740.0	8,167.6	7,787.2	33.8	36.1	89.62	-288.0	893.1	751.1	699.8	51.23	14.662		
8,800.0	7,740.0	8,166.6	7,786.2	34.4	36.1	89.54	-288.0	893.1	781.4	730.5	50.89	15.356		
8,900.0	7,740.0	8,165.5	7,785.1	35.0	36.1	89.46	-288.0	893.1	822.9	772.4	50.44	16.313		
9,000.0	7,740.0	8,164.5	7,784.1	35.7	36.1	89.38	-288.0	893.1	873.9	823.9	49.93	17.503		
9,100.0	7,740.0	8,163.5	7,783.1	36.4	36.1	89.30	-288.0	893.1	932.8	883.5	49.37	18.895		
9,200.0	7,740.0	8,162.4	7,782.0	37.3	36.1	89.21	-288.0	893.1	998.3	949.5	48.80	20.458		
9,300.0	7,740.0	8,161.4	7,781.0	38.2	36.1	89.13	-288.0	893.1	1,069.2	1,021.0	48.24	22.165		
9,400.0	7,740.0	8,160.3	7,779.9	39.1	36.1	89.05	-288.0	893.1	1,144.4	1,096.7	47.70	23.990		
9,500.0	7,740.0	8,159.3	7,778.9	40.1	36.1	88.97	-288.1	893.1	1,223.2	1,176.0	47.20	25.913		
9,600.0	7,740.0	8,158.3	7,777.8	41.2	36.1	88.89	-288.1	893.1	1,304.9	1,258.1	46.75	27.915		
9,700.0	7,740.0	8,157.2	7,776.8	42.3	36.1	88.81	-288.1	893.1	1,389.0	1,342.6	46.33	29.980		
9,800.0	7,740.0	8,156.2	7,775.8	43.5	36.1	88.72	-288.1	893.1	1,475.0	1,429.1	45.96	32.095		
9,900.0	7,740.0	8,155.1	7,774.7	44.7	36.1	88.64	-288.1	893.1	1,562.8	1,517.1	45.63	34.251		
10,000.0	7,740.0	8,154.1	7,773.7	45.9	36.1	88.56	-288.1	893.1	1,651.9	1,606.6	45.33	36.439		
10,100.0	7,740.0	8,153.0	7,772.6	47.1	36.1	88.48	-288.1	893.1	1,742.2	1,697.1	45.07	38.652		
10,200.0	7,740.0	8,152.0	7,771.6	48.4	36.1	88.40	-288.1	893.1	1,833.5	1,788.7	44.85	40.884		
10,300.0	7,740.0	8,151.0	7,770.6	49.8	36.1	88.31	-288.1	893.2	1,925.7	1,881.0	44.65	43.129		
10,400.0	7,740.0	8,149.9	7,769.5	51.1	36.1	88.23	-288.2	893.2	2,018.6	1,974.1	44.48	45.385		
10,500.0	7,740.0	8,148.9	7,768.5	52.5	36.1	88.15	-288.2	893.2	2,112.2	2,067.8	44.33	47.648		
10,600.0	7,740.0	8,147.8	7,767.4	53.9	36.1	88.07	-288.2	893.2	2,206.3	2,162.1	44.20	49.915		
10,700.0	7,740.0	8,146.8	7,766.4	55.3	36.1	87.99	-288.2	893.2	2,300.9	2,256.8	44.09	52.184		
10,800.0	7,740.0	8,145.7	7,765.3	56.7	36.1	87.90	-288.2	893.2	2,396.0	2,352.0	44.00	54.453		
10,900.0	7,740.0	8,144.7	7,764.3	58.2	36.1	87.82	-288.2	893.2	2,491.4	2,447.5	43.92	56.720		
11,000.0	7,740.0	8,143.7	7,763.2	59.7	36.1	87.74	-288.2	893.2	2,587.2	2,543.3	43.86	58.985		
11,100.0	7,740.0	8,142.6	7,762.2	61.2	36.1	87.66	-288.2	893.2	2,683.3	2,639.5	43.81	61.245		
11,200.0	7,740.0	8,141.6	7,761.2	62.7	36.1	87.58	-288.2	893.2	2,779.7	2,735.9	43.77	63.501		
11,300.0	7,740.0	8,140.5	7,760.1	64.2	36.1	87.49	-288.3	893.2	2,876.3	2,832.5	43.75	65.751		
11,400.0	7,740.0	8,139.5	7,759.1	65.7	36.1	87.41	-288.3	893.2	2,973.1	2,929.4	43.73	67.994		
11,500.0	7,740.0	8,138.4	7,758.0	67.2	36.1	87.33	-288.3	893.2	3,070.2	3,026.5	43.72	70.230		
11,600.0	7,740.0	8,137.4	7,757.0	68.8	36.1	87.25	-288.3	893.2	3,167.4	3,123.7	43.71	72.459		
11,700.0	7,740.0	8,136.3	7,755.9	70.3	36.1	87.17	-288.3	893.2	3,264.8	3,221.1	43.72	74.680		
11,800.0	7,740.0	8,135.3	7,754.9	71.9	36.1	87.08	-288.3	893.2	3,362.3	3,318.6	43.73	76.893		
11,900.0	7,740.0	8,134.3	7,753.9	73.5	36.1	87.00	-288.3	893.2	3,460.0	3,416.3	43.74	79.098		
12,000.0	7,740.0	8,133.2	7,752.8	75.1	36.1	86.92	-288.3	893.2	3,557.8	3,514.1	43.77	81.294		
12,100.0	7,740.0	8,132.2	7,751.8	76.6	36.1	86.84	-288.3	893.2	3,655.8	3,612.0	43.79	83.481		
12,200.0	7,740.0	8,131.1	7,750.7	78.2	36.1	86.76	-288.3	893.2	3,753.8	3,710.0	43.82	85.658		
12,300.0	7,740.0	8,130.1	7,749.7	79.8	36.1	86.67	-288.4	893.2	3,852.0	3,808.1	43.86	87.827		
12,400.0	7,740.0	8,129.0	7,748.6	81.5	36.1	86.59	-288.4	893.3	3,950.2	3,906.3	43.90	89.987		
12,500.0	7,740.0	8,128.0	7,747.6	83.1	36.1	86.51	-288.4	893.3	4,048.5	4,004.6	43.94	92.137		
12,600.0	7,740.0	8,126.9	7,746.5	84.7	36.1	86.43	-288.4	893.3	4,146.9	4,102.9	43.99	94.277		
12,700.0	7,740.0	8,125.9	7,745.5	86.3	36.1	86.35	-288.4	893.3	4,245.4	4,201.4	44.04	96.409		
12,800.0	7,740.0	8,124.9	7,744.5	88.0	36.1	86.27	-288.4	893.3	4,343.9	4,299.9	44.09	98.530		
12,900.0	7,740.0	8,123.8	7,743.4	89.6	36.1	86.18	-288.4	893.3	4,442.6	4,398.4	44.14	100.642		
13,000.0	7,740.0	8,122.8	7,742.4	91.2	36.1	86.10	-288.4	893.3	4,541.2	4,497.0	44.20	102.745		
13,100.0	7,740.0	8,121.7	7,741.3	92.9	36.1	86.02	-288.4	893.3	4,640.0	4,595.7	44.26	104.838		
13,200.0	7,740.0	8,120.7	7,740.3	94.5	36.1	85.94	-288.5	893.3	4,738.7	4,694.4	44.32	106.922		
13,300.0	7,740.0	8,119.6	7,739.2	96.2	36.1	85.86	-288.5	893.3	4,837.6	4,793.2	44.38	108.995		
13,400.0	7,740.0	8,118.6	7,738.2	97.8	36.1	85.77	-288.5	893.3	4,936.4	4,892.0	44.45	111.060		
13,500.0	7,740.0	8,117.5	7,737.1	99.5	36.1	85.69	-288.5	893.3	5,035.4	4,990.8	44.52	113.115		
13,600.0	7,740.0	8,116.5	7,736.1	101.2	36.1	85.61	-288.5	893.3	5,134.3	5,089.7	44.58	115.160		
13,700.0	7,740.0	8,115.5	7,735.1	102.8	36.1	85.53	-288.5	893.3	5,233.3	5,188.7	44.65	117.197		
13,800.0	7,740.0	8,114.4	7,734.0	104.5	36.1	85.45	-288.5	893.3	5,332.4	5,287.6	44.73	119.223		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
13,900.0	7,740.0	8,113.4	7,733.0	106.2	36.1	85.37	-288.5	893.3	5,431.4	5,386.6	44.80	121.241		
14,000.0	7,740.0	8,112.3	7,731.9	107.8	36.1	85.28	-288.5	893.3	5,530.5	5,485.7	44.87	123.249		
14,100.0	7,740.0	8,111.3	7,730.9	109.5	36.1	85.20	-288.6	893.3	5,629.7	5,584.7	44.95	125.247		
14,200.0	7,740.0	8,110.2	7,729.8	111.2	36.1	85.12	-288.6	893.4	5,728.9	5,683.8	45.03	127.237		
14,300.0	7,740.0	8,109.2	7,728.8	112.9	36.1	85.04	-288.6	893.4	5,828.1	5,783.0	45.10	129.217		
14,400.0	7,740.0	8,108.1	7,727.7	114.6	36.1	84.96	-288.6	893.4	5,927.3	5,882.1	45.18	131.188		
14,500.0	7,740.0	8,107.1	7,726.7	116.3	36.1	84.87	-288.6	893.4	6,026.5	5,981.3	45.26	133.151		
14,600.0	7,740.0	8,106.0	7,725.6	117.9	36.1	84.79	-288.6	893.4	6,125.8	6,080.5	45.34	135.104		
14,700.0	7,740.0	8,105.0	7,724.6	119.6	36.1	84.71	-288.6	893.4	6,225.1	6,179.7	45.42	137.048		
14,800.0	7,740.0	8,103.9	7,723.5	121.3	36.1	84.63	-288.6	893.4	6,324.4	6,278.9	45.50	138.983		
14,900.0	7,740.0	8,102.9	7,722.5	123.0	36.1	84.55	-288.6	893.4	6,423.8	6,378.2	45.59	140.910		
15,000.0	7,740.0	8,101.9	7,721.5	124.7	36.1	84.47	-288.6	893.4	6,523.1	6,477.4	45.67	142.827		
15,100.0	7,740.0	8,100.8	7,720.4	126.4	36.1	84.38	-288.7	893.4	6,622.5	6,576.7	45.76	144.736		
15,200.0	7,740.0	8,099.8	7,719.4	128.1	36.1	84.30	-288.7	893.4	6,721.9	6,676.0	45.84	146.636		
15,300.0	7,740.0	8,098.7	7,718.3	129.8	36.1	84.22	-288.7	893.4	6,821.3	6,775.4	45.93	148.528		
15,400.0	7,740.0	8,097.7	7,717.3	131.5	36.1	84.14	-288.7	893.4	6,920.7	6,874.7	46.01	150.411		
15,500.0	7,740.0	8,096.6	7,716.2	133.2	36.1	84.06	-288.7	893.4	7,020.2	6,974.1	46.10	152.285		
15,600.0	7,740.0	8,095.6	7,715.2	134.9	36.0	83.98	-288.7	893.4	7,119.6	7,073.5	46.19	154.151		
15,700.0	7,740.0	8,094.5	7,714.1	136.6	36.0	83.90	-288.7	893.4	7,219.1	7,172.8	46.27	156.008		
15,800.0	7,740.0	8,093.5	7,713.1	138.3	36.0	83.81	-288.7	893.4	7,318.6	7,272.2	46.36	157.857		
15,900.0	7,740.0	8,092.4	7,712.0	140.0	36.0	83.73	-288.7	893.4	7,418.1	7,371.7	46.45	159.698		
16,000.0	7,740.0	8,091.4	7,711.0	141.7	36.0	83.65	-288.8	893.5	7,517.6	7,471.1	46.54	161.531		
16,100.0	7,740.0	8,090.3	7,709.9	143.5	36.0	83.57	-288.8	893.5	7,617.2	7,570.5	46.63	163.355		
16,171.7	7,740.0	8,089.6	7,709.2	144.7	36.0	83.51	-288.8	893.5	7,688.5	7,641.8	46.69	164.657		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	45.89	801.4	826.8	1,151.5				
100.0	100.0	121.9	121.9	0.2	0.2	45.92	801.6	827.8	1,152.5	1,152.1	0.37	3,153.322	
150.0	150.0	169.2	169.2	0.2	0.3	45.95	801.8	828.7	1,153.2	1,152.7	0.54	2,151.523	
200.0	200.0	220.0	220.0	0.3	0.4	45.99	801.9	829.8	1,153.6	1,152.9	0.71	1,618.315	
283.3	283.2	314.7	314.6	0.5	0.6	46.23	802.1	831.0	1,151.7	1,150.7	1.03	1,116.600	
300.0	299.9	332.6	332.6	0.5	0.6	43.90	802.1	831.1	1,151.0	1,149.9	1.09	1,052.132	
400.0	399.6	435.9	435.9	0.7	0.8	30.37	802.2	831.3	1,145.5	1,144.0	1.46	785.537	
500.0	499.3	535.2	535.2	0.9	0.9	18.56	802.6	831.2	1,138.8	1,137.0	1.81	628.725	
600.0	598.9	638.6	638.6	1.2	1.1	8.96	802.7	831.1	1,130.5	1,128.3	2.17	521.723	
700.0	698.5	742.9	742.8	1.4	1.3	1.37	802.7	830.8	1,120.7	1,118.2	2.52	444.772	
800.0	797.9	846.6	846.5	1.6	1.5	-4.66	802.5	829.6	1,108.9	1,106.0	2.87	386.577	
900.0	897.1	945.6	945.6	1.9	1.7	-9.51	802.7	828.2	1,095.9	1,092.7	3.21	341.602	
1,000.0	996.2	1,046.5	1,046.4	2.2	1.8	-13.48	802.4	827.0	1,081.4	1,077.8	3.55	304.510	
1,100.0	1,095.0	1,146.4	1,146.4	2.5	2.0	-16.82	802.0	825.8	1,065.6	1,061.7	3.90	273.542	
1,200.0	1,193.6	1,246.9	1,246.9	2.8	2.2	-19.74	801.7	824.1	1,048.3	1,044.0	4.25	246.909	
1,300.0	1,291.9	1,342.2	1,342.1	3.2	2.3	-22.32	801.6	822.4	1,029.7	1,025.1	4.60	224.091	
1,400.0	1,389.9	1,435.4	1,435.3	3.5	2.5	-24.68	801.9	820.9	1,010.5	1,005.6	4.95	204.012	
1,500.0	1,487.6	1,533.1	1,533.0	3.9	2.7	-26.91	802.4	819.4	990.4	985.0	5.33	185.678	
1,600.0	1,584.8	1,630.4	1,630.3	4.4	2.9	-29.05	802.8	817.8	968.9	963.2	5.73	169.007	
1,624.3	1,608.4	1,652.4	1,652.2	4.5	2.9	-29.55	802.9	817.5	963.6	957.8	5.83	165.275	
1,700.0	1,681.8	1,722.2	1,722.1	4.8	3.0	-30.13	803.4	816.5	947.2	941.1	6.14	154.214	
1,800.0	1,778.8	1,818.5	1,818.3	5.3	3.2	-30.97	804.3	815.3	925.9	919.3	6.57	140.832	
1,900.0	1,875.8	1,915.1	1,914.9	5.7	3.4	-31.87	805.3	813.9	904.8	897.7	7.02	128.813	
2,000.0	1,972.8	2,008.1	2,007.9	6.2	3.5	-32.78	806.6	812.6	884.1	876.6	7.48	118.126	
2,100.0	2,069.8	2,100.0	2,099.8	6.6	3.7	-33.72	808.2	811.6	864.2	856.3	7.96	108.586	
2,200.0	2,166.8	2,191.9	2,191.7	7.1	3.8	-34.69	810.2	811.0	845.2	836.8	8.45	100.024	
2,300.0	2,263.8	2,287.6	2,287.3	7.5	4.0	-35.75	812.5	810.7	826.8	817.8	8.96	92.241	
2,400.0	2,360.8	2,388.1	2,387.8	8.0	4.2	-36.88	814.6	810.5	808.5	799.0	9.50	85.110	
2,500.0	2,457.7	2,489.2	2,488.9	8.4	4.4	-38.05	816.1	810.3	790.0	780.0	10.05	78.601	
2,600.0	2,554.7	2,587.6	2,587.3	8.9	4.5	-39.22	817.2	810.1	771.6	760.9	10.62	72.684	
2,700.0	2,651.7	2,686.7	2,686.4	9.4	4.7	-40.47	818.1	809.7	753.2	742.0	11.20	67.258	
2,800.0	2,748.7	2,783.0	2,782.7	9.8	4.9	-41.73	818.9	809.3	735.1	723.3	11.80	62.313	
2,900.0	2,845.7	2,881.5	2,881.2	10.3	5.0	-43.09	819.7	808.9	717.3	704.9	12.42	57.768	
3,000.0	2,942.7	2,978.8	2,978.5	10.8	5.2	-44.53	820.5	808.1	699.8	686.7	13.06	53.580	
3,100.0	3,039.7	3,076.3	3,076.0	11.2	5.4	-46.08	821.4	806.8	682.7	668.9	13.73	49.727	
3,200.0	3,136.7	3,174.7	3,174.3	11.7	5.6	-47.70	822.2	805.6	665.9	651.5	14.42	46.185	
3,300.0	3,233.6	3,271.0	3,270.7	12.2	5.7	-49.40	822.9	804.1	649.6	634.4	15.13	42.930	
3,400.0	3,330.6	3,365.4	3,365.0	12.6	5.9	-51.16	823.9	802.6	634.0	618.2	15.86	39.969	
3,500.0	3,427.6	3,460.2	3,459.8	13.1	6.1	-52.98	825.2	801.4	619.6	603.0	16.62	37.289	
3,600.0	3,524.6	3,553.7	3,553.3	13.6	6.2	-54.81	826.5	800.8	606.1	588.7	17.38	34.876	
3,700.0	3,621.6	3,646.0	3,645.6	14.0	6.4	-56.67	828.5	800.6	594.1	575.9	18.16	32.722	
3,800.0	3,718.6	3,742.1	3,741.6	14.5	6.6	-58.66	831.1	800.7	583.4	564.5	18.95	30.783	
3,900.0	3,815.6	3,844.1	3,843.6	15.0	6.7	-60.90	833.5	800.2	573.1	553.4	19.78	28.973	
4,000.0	3,912.6	3,945.8	3,945.3	15.4	6.9	-63.20	834.9	799.7	562.7	542.1	20.62	27.292	
4,100.0	4,009.5	4,046.5	4,046.0	15.9	7.1	-65.59	835.7	798.7	552.6	531.2	21.47	25.744	
4,200.0	4,106.5	4,144.7	4,144.2	16.4	7.3	-68.09	835.9	796.9	542.8	520.4	22.32	24.313	
4,300.0	4,203.5	4,240.8	4,240.2	16.8	7.4	-70.65	836.3	794.8	534.2	511.1	23.18	23.046	
4,400.0	4,300.5	4,339.2	4,338.7	17.3	7.6	-73.29	836.3	793.2	526.5	502.5	24.03	21.909	
4,500.0	4,397.5	4,434.2	4,433.6	17.8	7.8	-75.88	836.4	791.8	520.0	495.1	24.87	20.911	
4,600.0	4,494.5	4,526.3	4,525.7	18.2	8.0	-78.53	836.9	789.7	515.2	489.5	25.68	20.061	
4,700.0	4,591.5	4,619.5	4,618.9	18.7	8.1	-81.25	838.4	787.3	512.7	486.3	26.48	19.366	
4,800.0	4,688.5	4,720.8	4,720.1	19.2	8.3	-84.19	839.6	785.2	511.2	483.9	27.26	18.755	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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)				
4,900.0	4,785.4	4,818.9	4,818.2	19.6	8.5	-87.06	840.4	783.2	510.5	482.5	27.99	18.239		
5,000.0	4,882.4	4,921.2	4,920.5	20.1	8.7	-89.99	840.4	781.9	510.3	481.6	28.70	17.784		
5,000.9	4,883.3	4,922.1	4,921.4	20.1	8.7	-90.02	840.4	781.9	510.3	481.6	28.70	17.780 CC		
5,100.0	4,979.4	5,017.2	5,016.5	20.6	8.8	-92.75	840.0	780.7	510.9	481.6	29.35	17.410 ES		
5,200.0	5,076.4	5,110.3	5,109.6	21.0	9.0	-95.42	840.0	779.3	513.3	483.4	29.95	17.140		
5,300.0	5,173.4	5,204.9	5,204.2	21.5	9.2	-98.11	840.5	777.7	517.5	487.0	30.51	16.963		
5,400.0	5,270.4	5,302.2	5,301.5	22.0	9.3	-100.86	840.9	775.6	523.0	492.0	31.02	16.859		
5,500.0	5,367.4	5,399.9	5,399.1	22.5	9.5	-103.51	841.5	774.1	529.6	498.1	31.50	16.815 SF		
5,600.0	5,464.4	5,498.6	5,497.8	22.9	9.7	-106.07	842.0	773.1	537.1	505.1	31.94	16.818		
5,700.0	5,561.4	5,593.8	5,593.0	23.4	9.8	-108.49	842.4	772.0	545.6	513.2	32.32	16.878		
5,800.0	5,658.3	5,687.9	5,687.1	23.9	10.0	-110.83	842.9	770.6	555.4	522.7	32.67	17.001		
5,900.0	5,755.3	5,784.4	5,783.5	24.3	10.2	-113.18	843.4	768.6	566.5	533.6	32.98	17.177		
6,000.0	5,852.3	5,880.4	5,879.6	24.8	10.3	-115.45	843.8	766.5	578.6	545.4	33.26	17.397		
6,100.0	5,949.3	5,977.9	5,977.0	25.3	10.5	-117.65	844.4	764.5	591.7	558.1	33.52	17.652		
6,200.0	6,046.3	6,074.5	6,073.6	25.7	10.7	-119.75	844.7	762.6	605.4	571.6	33.75	17.939		
6,300.0	6,143.3	6,170.7	6,169.8	26.2	10.9	-121.80	844.6	760.2	620.0	586.0	33.94	18.264		
6,400.0	6,240.3	6,267.7	6,266.8	26.7	11.0	-123.78	844.4	757.8	635.3	601.2	34.13	18.617		
6,500.0	6,337.3	6,365.8	6,364.8	27.1	11.2	-125.67	844.4	755.7	651.2	616.9	34.30	18.986		
6,600.0	6,434.2	6,459.3	6,458.3	27.6	11.4	-127.35	844.7	753.9	667.7	633.3	34.46	19.378		
6,700.0	6,531.2	6,558.4	6,557.4	28.1	11.5	-128.99	845.7	752.0	685.3	650.6	34.64	19.784		
6,800.0	6,628.2	6,656.8	6,655.8	28.5	11.7	-130.55	846.3	750.8	702.5	667.7	34.81	20.183		
6,900.0	6,725.2	6,754.7	6,753.6	29.0	11.9	-132.02	847.0	749.4	720.4	685.5	34.97	20.600		
7,000.0	6,822.2	6,850.6	6,849.5	29.5	12.1	-133.42	847.2	748.2	738.4	703.3	35.12	21.025		
7,100.0	6,919.2	6,942.1	6,941.1	30.0	12.2	-134.72	847.4	746.4	757.5	722.2	35.25	21.489		
7,200.0	7,016.2	7,040.5	7,039.4	30.4	12.4	-136.05	847.8	744.2	777.3	741.9	35.40	21.959		
7,300.0	7,113.2	7,139.8	7,138.7	30.9	12.6	-137.34	847.6	742.6	796.7	761.2	35.54	22.414		
7,328.7	7,141.0	7,165.1	7,164.0	31.0	12.6	-137.67	847.5	742.0	802.4	766.8	35.58	22.556		
7,350.0	7,161.7	7,183.8	7,182.6	31.1	12.7	-146.71	847.4	741.6	806.9	771.3	35.59	22.669		
7,400.0	7,210.3	7,229.2	7,228.1	31.3	12.7	-168.84	847.2	740.4	818.8	783.2	35.64	22.973		
7,450.0	7,258.7	7,275.4	7,274.3	31.5	12.8	-171.75	846.9	738.9	832.5	796.8	35.72	23.308		
7,500.0	7,306.5	7,323.0	7,321.8	31.7	12.9	-157.23	846.3	737.3	847.9	812.0	35.82	23.671		
7,550.0	7,353.4	7,372.1	7,370.8	31.8	13.0	-146.86	844.8	735.3	864.5	828.6	35.93	24.060		
7,600.0	7,399.0	7,455.3	7,453.8	31.9	13.1	-139.86	840.0	732.4	882.1	846.0	36.09	24.444		
7,650.0	7,442.9	7,531.5	7,529.7	32.0	13.3	-134.93	832.9	732.8	898.3	862.1	36.19	24.822		
7,700.0	7,484.9	7,576.9	7,574.9	32.1	13.3	-130.90	829.5	734.0	915.6	879.2	36.34	25.195		
7,750.0	7,524.5	7,614.3	7,612.3	32.1	13.4	-127.55	827.4	735.4	934.5	897.9	36.52	25.586		
7,800.0	7,561.6	7,643.4	7,641.4	32.1	13.4	-124.43	826.1	736.3	955.3	918.6	36.71	26.024		
7,850.0	7,595.8	7,669.9	7,667.9	32.2	13.5	-121.49	825.2	737.0	978.3	941.4	36.90	26.514		
7,900.0	7,626.8	7,700.0	7,697.9	32.2	13.5	-118.86	824.5	737.6	1,003.2	966.1	37.08	27.052		
7,950.0	7,654.5	7,719.9	7,717.8	32.2	13.6	-115.81	824.1	737.9	1,030.0	992.7	37.25	27.648		
8,000.0	7,678.5	7,744.6	7,742.5	32.3	13.6	-112.98	823.6	738.4	1,058.4	1,021.0	37.42	28.284		
8,050.0	7,698.8	7,765.4	7,763.3	32.3	13.6	-109.88	823.3	738.8	1,088.4	1,050.8	37.57	28.967		
8,100.0	7,715.2	7,782.2	7,780.1	32.3	13.7	-106.43	823.1	739.1	1,119.7	1,082.0	37.71	29.697		
8,150.0	7,727.5	7,794.9	7,792.8	32.4	13.7	-102.61	823.0	739.4	1,152.4	1,114.6	37.82	30.470		
8,200.0	7,735.6	7,800.0	7,797.9	32.4	13.7	-98.19	822.9	739.5	1,186.1	1,148.2	37.91	31.286		
8,250.0	7,739.6	7,807.4	7,805.2	32.4	13.7	-93.85	822.8	739.7	1,220.6	1,182.6	37.99	32.124		
8,271.7	7,740.0	7,808.0	7,805.8	32.5	13.7	-91.81	822.8	739.7	1,235.7	1,197.7	38.02	32.497		
8,300.0	7,740.0	7,808.2	7,806.1	32.5	13.7	-91.82	822.8	739.7	1,255.7	1,217.6	38.06	32.993		
8,400.0	7,740.0	7,809.1	7,807.0	32.7	13.7	-91.88	822.8	739.7	1,328.7	1,290.5	38.15	34.825		
8,500.0	7,740.0	7,810.1	7,807.9	33.0	13.7	-91.94	822.8	739.7	1,405.0	1,366.8	38.21	36.768		
8,600.0	7,740.0	7,811.0	7,808.8	33.4	13.7	-92.00	822.8	739.7	1,484.2	1,445.9	38.25	38.803		
8,700.0	7,740.0	7,811.8	7,809.7	33.8	13.7	-92.06	822.8	739.7	1,565.7	1,527.4	38.27	40.911		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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)				
8,800.0	7,740.0	7,812.7	7,810.6	34.4	13.7	92.12	822.8	739.8	1,649.3	1,611.0	38.28	43.080		
8,900.0	7,740.0	7,813.6	7,811.4	35.0	13.7	92.17	822.8	739.8	1,734.6	1,696.3	38.29	45.299		
9,000.0	7,740.0	7,814.4	7,812.3	35.7	13.7	92.23	822.8	739.8	1,821.4	1,783.1	38.30	47.557		
9,100.0	7,740.0	7,815.3	7,813.1	36.4	13.7	92.28	822.7	739.8	1,909.5	1,871.2	38.31	49.847		
9,200.0	7,740.0	7,816.1	7,814.0	37.3	13.7	92.34	822.7	739.8	1,998.7	1,960.4	38.32	52.163		
9,300.0	7,740.0	7,816.9	7,814.8	38.2	13.7	92.39	822.7	739.9	2,088.9	2,050.6	38.33	54.499		
9,400.0	7,740.0	7,817.7	7,815.6	39.1	13.7	92.44	822.7	739.9	2,179.9	2,141.6	38.35	56.850		
9,500.0	7,740.0	7,818.5	7,816.4	40.1	13.7	92.49	822.7	739.9	2,271.7	2,233.4	38.37	59.212		
9,600.0	7,740.0	7,819.3	7,817.2	41.2	13.7	92.54	822.7	739.9	2,364.2	2,325.8	38.39	61.583		
9,700.0	7,740.0	7,820.1	7,818.0	42.3	13.7	92.60	822.7	739.9	2,457.3	2,418.8	38.42	63.960		
9,800.0	7,740.0	7,820.9	7,818.7	43.5	13.7	92.65	822.7	739.9	2,550.8	2,512.4	38.45	66.339		
9,900.0	7,740.0	7,821.6	7,819.5	44.7	13.7	92.69	822.7	740.0	2,644.9	2,606.4	38.49	68.720		
10,000.0	7,740.0	7,822.4	7,820.2	45.9	13.7	92.74	822.7	740.0	2,739.4	2,700.8	38.53	71.100		
10,100.0	7,740.0	7,823.1	7,821.0	47.1	13.7	92.79	822.7	740.0	2,834.2	2,795.6	38.57	73.478		
10,200.0	7,740.0	7,823.9	7,821.7	48.4	13.7	92.84	822.7	740.0	2,929.4	2,890.8	38.62	75.852		
10,300.0	7,740.0	7,824.6	7,822.5	49.8	13.7	92.89	822.7	740.0	3,024.9	2,986.2	38.67	78.222		
10,400.0	7,740.0	7,825.3	7,823.2	51.1	13.7	92.93	822.7	740.0	3,120.7	3,082.0	38.72	80.586		
10,500.0	7,740.0	7,826.0	7,823.9	52.5	13.7	92.98	822.6	740.0	3,216.7	3,178.0	38.78	82.944		
10,600.0	7,740.0	7,826.7	7,824.6	53.9	13.7	93.02	822.6	740.1	3,313.0	3,274.2	38.84	85.295		
10,700.0	7,740.0	7,827.4	7,825.3	55.3	13.7	93.07	822.6	740.1	3,409.5	3,370.6	38.90	87.639		
10,800.0	7,740.0	7,828.1	7,825.9	56.7	13.7	93.11	822.6	740.1	3,506.2	3,467.2	38.97	89.974		
10,900.0	7,740.0	7,828.8	7,826.6	58.2	13.8	93.16	822.6	740.1	3,603.1	3,564.0	39.04	92.301		
11,000.0	7,740.0	7,829.4	7,827.3	59.7	13.8	93.20	822.6	740.1	3,700.1	3,661.0	39.11	94.619		
11,100.0	7,740.0	7,830.1	7,828.0	61.2	13.8	93.24	822.6	740.1	3,797.3	3,758.1	39.18	96.927		
11,200.0	7,740.0	7,830.7	7,828.6	62.7	13.8	93.29	822.6	740.1	3,894.6	3,855.4	39.25	99.226		
11,300.0	7,740.0	7,831.4	7,829.2	64.2	13.8	93.33	822.6	740.2	3,992.1	3,952.7	39.32	101.515		
11,400.0	7,740.0	7,832.0	7,829.9	65.7	13.8	93.37	822.6	740.2	4,089.6	4,050.2	39.40	103.794		
11,500.0	7,740.0	7,832.7	7,830.5	67.2	13.8	93.41	822.6	740.2	4,187.3	4,147.9	39.48	106.062		
11,600.0	7,740.0	7,833.3	7,831.1	68.8	13.8	93.45	822.6	740.2	4,285.1	4,245.6	39.56	108.321		
11,700.0	7,740.0	7,833.9	7,831.8	70.3	13.8	93.49	822.6	740.2	4,383.0	4,343.4	39.64	110.569		
11,800.0	7,740.0	7,834.5	7,832.4	71.9	13.8	93.53	822.6	740.2	4,481.0	4,441.3	39.72	112.806		
11,900.0	7,740.0	7,835.1	7,833.0	73.5	13.8	93.57	822.6	740.2	4,579.1	4,539.3	39.81	115.032		
12,000.0	7,740.0	7,835.7	7,833.6	75.1	13.8	93.61	822.6	740.3	4,677.3	4,637.4	39.89	117.248		
12,100.0	7,740.0	7,836.3	7,834.2	76.6	13.8	93.65	822.6	740.3	4,775.5	4,735.5	39.98	119.453		
12,200.0	7,740.0	7,836.9	7,834.7	78.2	13.8	93.68	822.6	740.3	4,873.8	4,833.8	40.07	121.647		
12,300.0	7,740.0	7,837.5	7,835.3	79.8	13.8	93.72	822.5	740.3	4,972.2	4,932.1	40.15	123.830		
12,400.0	7,740.0	7,838.0	7,835.9	81.5	13.8	93.76	822.5	740.3	5,070.7	5,030.4	40.24	126.002		
12,500.0	7,740.0	7,838.6	7,836.5	83.1	13.8	93.79	822.5	740.3	5,169.2	5,128.8	40.33	128.164		
12,600.0	7,740.0	7,839.2	7,837.0	84.7	13.8	93.83	822.5	740.3	5,267.7	5,227.3	40.42	130.314		
12,700.0	7,740.0	7,839.7	7,837.6	86.3	13.8	93.87	822.5	740.3	5,366.3	5,325.8	40.51	132.454		
12,800.0	7,740.0	7,840.3	7,838.1	88.0	13.8	93.90	822.5	740.3	5,465.0	5,424.4	40.61	134.583		
12,900.0	7,740.0	7,840.8	7,838.7	89.6	13.8	93.94	822.5	740.4	5,563.7	5,523.0	40.70	136.701		
13,000.0	7,740.0	7,841.3	7,839.2	91.2	13.8	93.97	822.5	740.4	5,662.4	5,621.7	40.79	138.808		
13,100.0	7,740.0	7,841.9	7,839.7	92.9	13.8	94.01	822.5	740.4	5,761.2	5,720.4	40.89	140.905		
13,200.0	7,740.0	7,842.4	7,840.2	94.5	13.8	94.04	822.5	740.4	5,860.1	5,819.1	40.98	142.991		
13,300.0	7,740.0	7,842.9	7,840.8	96.2	13.8	94.07	822.5	740.4	5,959.0	5,917.9	41.08	145.066		
13,400.0	7,740.0	7,843.4	7,841.3	97.8	13.8	94.11	822.5	740.4	6,057.9	6,016.7	41.17	147.131		
13,500.0	7,740.0	7,843.9	7,841.8	99.5	13.8	94.14	822.5	740.4	6,156.8	6,115.5	41.27	149.185		
13,600.0	7,740.0	7,844.4	7,842.3	101.2	13.8	94.17	822.5	740.4	6,255.8	6,214.4	41.37	151.228		
13,700.0	7,740.0	7,844.9	7,842.8	102.8	13.8	94.21	822.5	740.4	6,354.8	6,313.3	41.46	153.261		
13,800.0	7,740.0	7,845.4	7,843.3	104.5	13.8	94.24	822.5	740.5	6,453.9	6,412.3	41.56	155.284		
13,900.0	7,740.0	7,845.9	7,843.8	106.2	13.8	94.27	822.5	740.5	6,552.9	6,511.3	41.66	157.296		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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)						
14,000.0	7,740.0	7,846.4	7,844.3	107.8	13.8	94.30	822.5	740.5	6,652.0	6,610.3	41.76	159.299		
14,100.0	7,740.0	7,846.9	7,844.7	109.5	13.8	94.33	822.5	740.5	6,751.2	6,709.3	41.86	161.291		
14,200.0	7,740.0	7,847.4	7,845.2	111.2	13.8	94.36	822.5	740.5	6,850.3	6,808.4	41.96	163.272		
14,300.0	7,740.0	7,847.8	7,845.7	112.9	13.8	94.39	822.5	740.5	6,949.5	6,907.4	42.06	165.244		
14,400.0	7,740.0	7,848.3	7,846.2	114.6	13.8	94.42	822.5	740.5	7,048.7	7,006.5	42.16	167.206		
14,500.0	7,740.0	7,848.8	7,846.6	116.3	13.8	94.45	822.5	740.5	7,147.9	7,105.7	42.26	169.158		
14,600.0	7,740.0	7,849.2	7,847.1	117.9	13.8	94.48	822.5	740.5	7,247.2	7,204.8	42.36	171.100		
14,700.0	7,740.0	7,849.7	7,847.5	119.6	13.8	94.51	822.5	740.5	7,346.4	7,304.0	42.46	173.032		
14,800.0	7,740.0	7,850.1	7,848.0	121.3	13.8	94.54	822.5	740.5	7,445.7	7,403.1	42.56	174.954		
14,900.0	7,740.0	7,850.6	7,848.4	123.0	13.8	94.57	822.4	740.6	7,545.0	7,502.3	42.66	176.867		
15,000.0	7,740.0	7,851.0	7,848.9	124.7	13.8	94.60	822.4	740.6	7,644.3	7,601.6	42.76	178.770		
15,100.0	7,740.0	7,851.5	7,849.3	126.4	13.8	94.63	822.4	740.6	7,743.7	7,700.8	42.86	180.664		
15,200.0	7,740.0	7,851.9	7,849.7	128.1	13.8	94.66	822.4	740.6	7,843.0	7,800.0	42.96	182.548		
15,300.0	7,740.0	7,852.3	7,850.2	129.8	13.8	94.68	822.4	740.6	7,942.4	7,899.3	43.07	184.423		
15,400.0	7,740.0	7,852.7	7,850.6	131.5	13.8	94.71	822.4	740.6	8,041.8	7,998.6	43.17	186.289		
15,500.0	7,740.0	7,853.2	7,851.0	133.2	13.8	94.74	822.4	740.6	8,141.2	8,097.9	43.27	188.145		
15,600.0	7,740.0	7,853.6	7,851.4	134.9	13.8	94.76	822.4	740.6	8,240.6	8,197.2	43.37	189.992		
15,700.0	7,740.0	7,854.0	7,851.8	136.6	13.8	94.79	822.4	740.6	8,340.0	8,296.5	43.48	191.830		
15,800.0	7,740.0	7,854.4	7,852.3	138.3	13.8	94.82	822.4	740.6	8,439.5	8,395.9	43.58	193.659		
15,900.0	7,740.0	7,854.8	7,852.7	140.0	13.8	94.84	822.4	740.6	8,538.9	8,495.2	43.68	195.479		
16,000.0	7,740.0	7,855.2	7,853.1	141.7	13.8	94.87	822.4	740.7	8,638.4	8,594.6	43.79	197.290		
16,100.0	7,740.0	7,855.6	7,853.5	143.5	13.8	94.90	822.4	740.7	8,737.9	8,694.0	43.89	199.092		
16,171.7	7,740.0	7,855.9	7,853.7	144.7	13.8	94.91	822.4	740.7	8,809.2	8,765.2	43.96	200.378		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	90.03	0.0	7.6	7.6					
100.0	100.0	100.0	100.0	0.2	0.2	90.03	0.0	7.6	7.6	7.3	0.30	24.883		
150.0	150.0	150.0	150.0	0.2	0.2	90.03	0.0	7.6	7.6	7.1	0.48	15.802 CC		
150.1	150.1	150.1	150.1	0.2	0.2	90.03	0.0	7.6	7.6	7.1	0.48	15.789		
200.0	200.0	200.0	200.0	0.3	0.3	94.98	0.0	7.6	7.6	6.9	0.65	11.607 ES		
283.3	283.2	283.3	283.3	0.5	0.5	125.14	-0.3	7.0	8.6	7.7	0.95	9.011 SF		
300.0	299.9	299.9	299.9	0.5	0.5	130.27	-0.4	6.8	9.2	8.2	1.01	9.098		
400.0	399.6	399.5	399.4	0.7	0.7	150.78	-1.7	4.5	15.0	13.6	1.36	10.976		
500.0	499.3	498.7	498.5	0.9	0.9	159.66	-3.9	0.8	24.0	22.3	1.71	14.049		
600.0	598.9	597.3	597.0	1.2	1.1	163.26	-6.9	-4.4	36.4	34.3	2.06	17.678		
700.0	698.5	696.7	696.2	1.4	1.3	164.73	-9.5	-10.3	50.6	48.2	2.41	20.998		
800.0	797.9	795.6	794.9	1.6	1.5	165.56	-10.9	-16.1	65.5	62.8	2.76	23.746		
900.0	897.1	894.0	893.1	1.9	1.7	166.00	-12.3	-21.9	82.2	79.0	3.11	26.445		
1,000.0	996.2	992.1	991.0	2.2	1.9	166.30	-13.6	-27.7	100.5	97.0	3.45	29.109		
1,100.0	1,095.0	1,089.8	1,088.6	2.5	2.0	166.56	-14.9	-33.4	120.5	116.7	3.80	31.742		
1,200.0	1,193.6	1,187.3	1,185.8	2.8	2.2	166.82	-16.2	-39.1	142.1	138.0	4.14	34.350		
1,300.0	1,291.9	1,284.3	1,282.7	3.2	2.4	167.08	-17.5	-44.9	165.4	160.9	4.48	36.941		
1,400.0	1,389.9	1,380.9	1,379.1	3.5	2.6	167.35	-18.8	-50.5	190.3	185.5	4.82	39.517		
1,500.0	1,487.6	1,477.1	1,475.1	3.9	2.8	167.61	-20.1	-56.2	216.9	211.8	5.15	42.082		
1,600.0	1,584.8	1,572.8	1,570.7	4.4	3.0	167.87	-21.4	-61.8	245.1	239.7	5.49	44.640		
1,624.3	1,608.4	1,596.0	1,593.8	4.5	3.1	167.93	-21.7	-63.2	252.2	246.7	5.57	45.260		
1,700.0	1,681.8	1,668.2	1,665.9	4.8	3.2	169.01	-22.7	-67.4	274.6	268.8	5.83	47.114		
1,800.0	1,778.8	1,763.5	1,761.1	5.3	3.4	170.19	-24.0	-73.0	304.2	298.0	6.16	49.344		
1,900.0	1,875.8	1,858.9	1,856.2	5.7	3.6	171.15	-25.3	-78.6	333.9	327.4	6.50	51.357		
2,000.0	1,972.8	1,954.2	1,951.4	6.2	3.8	171.96	-26.6	-84.2	363.7	356.8	6.84	53.181		
2,100.0	2,069.8	2,049.6	2,046.6	6.6	4.0	172.65	-27.8	-89.8	393.5	386.3	7.18	54.841		
2,200.0	2,166.8	2,144.9	2,141.7	7.1	4.2	173.24	-29.1	-95.4	423.4	415.9	7.51	56.357		
2,300.0	2,263.8	2,240.3	2,236.9	7.5	4.4	173.76	-30.4	-101.0	453.3	445.4	7.85	57.748		
2,400.0	2,360.8	2,335.6	2,332.1	8.0	4.6	174.21	-31.7	-106.6	483.2	475.0	8.19	59.028		
2,500.0	2,457.7	2,431.0	2,427.3	8.4	4.8	174.61	-33.0	-112.3	513.2	504.7	8.52	60.209		
2,600.0	2,554.7	2,526.3	2,522.4	8.9	5.0	174.96	-34.3	-117.9	543.2	534.3	8.86	61.302		
2,700.0	2,651.7	2,621.7	2,617.6	9.4	5.2	175.28	-35.6	-123.5	573.2	564.0	9.20	62.317		
2,800.0	2,748.7	2,717.0	2,712.8	9.8	5.4	175.56	-36.8	-129.1	603.2	593.7	9.53	63.261		
2,900.0	2,845.7	2,812.4	2,808.0	10.3	5.5	175.82	-38.1	-134.7	633.2	623.3	9.87	64.142		
3,000.0	2,942.7	2,907.7	2,903.1	10.8	5.7	176.05	-39.4	-140.3	663.3	653.0	10.21	64.966		
3,100.0	3,039.7	3,003.1	2,998.3	11.2	5.9	176.27	-40.7	-145.9	693.3	682.8	10.55	65.739		
3,200.0	3,136.7	3,098.4	3,093.5	11.7	6.1	176.47	-42.0	-151.5	723.4	712.5	10.88	66.464		
3,300.0	3,233.6	3,193.7	3,188.7	12.2	6.3	176.65	-43.3	-157.1	753.4	742.2	11.22	67.146		
3,400.0	3,330.6	3,289.1	3,283.8	12.6	6.5	176.81	-44.5	-162.7	783.5	771.9	11.56	67.789		
3,500.0	3,427.6	3,384.4	3,379.0	13.1	6.7	176.97	-45.8	-168.3	813.6	801.7	11.90	68.396		
3,600.0	3,524.6	3,479.8	3,474.2	13.6	6.9	177.11	-47.1	-173.9	843.7	831.4	12.23	68.970		
3,700.0	3,621.6	3,575.1	3,569.4	14.0	7.1	177.25	-48.4	-179.5	873.7	861.2	12.57	69.513		
3,800.0	3,718.6	3,670.5	3,664.5	14.5	7.3	177.37	-49.7	-185.1	903.8	890.9	12.91	70.029		
3,900.0	3,815.6	3,765.8	3,759.7	15.0	7.5	177.49	-51.0	-190.7	933.9	920.7	13.24	70.518		
4,000.0	3,912.6	3,861.2	3,854.9	15.4	7.7	177.60	-52.3	-196.3	964.0	950.4	13.58	70.983		
4,100.0	4,009.5	3,956.5	3,950.1	15.9	7.9	177.70	-53.5	-201.9	994.1	980.2	13.92	71.426		
4,200.0	4,106.5	4,051.9	4,045.2	16.4	8.1	177.80	-54.8	-207.5	1,024.2	1,010.0	14.26	71.849		
4,300.0	4,203.5	4,147.2	4,140.4	16.8	8.3	177.89	-56.1	-213.1	1,054.3	1,039.7	14.59	72.252		
4,400.0	4,300.5	4,242.6	4,235.6	17.3	8.5	177.97	-57.4	-218.7	1,084.4	1,069.5	14.93	72.637		
4,500.0	4,397.5	4,337.9	4,330.8	17.8	8.7	178.06	-58.7	-224.3	1,114.5	1,099.3	15.27	73.005		
4,600.0	4,494.5	4,433.3	4,425.9	18.2	8.8	178.13	-60.0	-229.9	1,144.6	1,129.0	15.60	73.357		
4,700.0	4,591.5	4,528.6	4,521.1	18.7	9.0	178.21	-61.3	-235.5	1,174.8	1,158.8	15.94	73.694		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
4,800.0	4,688.5	4,624.0	4,616.3	19.2	9.2	178.28	-62.5	-241.2	1,204.9	1,188.6	16.28	74.018				
4,900.0	4,785.4	4,719.3	4,711.5	19.6	9.4	178.34	-63.8	-246.8	1,235.0	1,218.4	16.62	74.329				
5,000.0	4,882.4	4,814.7	4,806.6	20.1	9.6	178.41	-65.1	-252.4	1,265.1	1,248.2	16.95	74.627				
5,100.0	4,979.4	4,910.0	4,901.8	20.6	9.8	178.47	-66.4	-258.0	1,295.2	1,277.9	17.29	74.914				
5,200.0	5,076.4	5,005.4	4,997.0	21.0	10.0	178.52	-67.7	-263.6	1,325.3	1,307.7	17.63	75.189				
5,300.0	5,173.4	5,100.7	5,092.2	21.5	10.2	178.58	-69.0	-269.2	1,355.5	1,337.5	17.96	75.455				
5,400.0	5,270.4	5,196.1	5,187.3	22.0	10.4	178.63	-70.3	-274.8	1,385.6	1,367.3	18.30	75.711				
5,500.0	5,367.4	5,291.4	5,282.5	22.5	10.6	178.68	-71.5	-280.4	1,415.7	1,397.1	18.64	75.958				
5,600.0	5,464.4	5,386.8	5,377.7	22.9	10.8	178.73	-72.8	-286.0	1,445.8	1,426.9	18.98	76.195				
5,700.0	5,561.4	5,482.1	5,472.9	23.4	11.0	178.78	-74.1	-291.6	1,476.0	1,456.6	19.31	76.425				
5,800.0	5,658.3	5,577.4	5,568.0	23.9	11.2	178.82	-75.4	-297.2	1,506.1	1,486.4	19.65	76.647				
5,900.0	5,755.3	5,672.8	5,663.2	24.3	11.4	178.86	-76.7	-302.8	1,536.2	1,516.2	19.99	76.861				
6,000.0	5,852.3	5,768.1	5,758.4	24.8	11.6	178.90	-78.0	-308.4	1,566.3	1,546.0	20.32	77.069				
6,100.0	5,949.3	5,863.5	5,853.6	25.3	11.8	178.94	-79.3	-314.0	1,596.5	1,575.8	20.66	77.269				
6,200.0	6,046.3	5,958.8	5,948.7	25.7	12.0	178.98	-80.5	-319.6	1,626.6	1,605.6	21.00	77.463				
6,300.0	6,143.3	6,054.2	6,043.9	26.2	12.2	179.02	-81.8	-325.2	1,656.7	1,635.4	21.34	77.652				
6,400.0	6,240.3	6,149.5	6,139.1	26.7	12.3	179.05	-83.1	-330.8	1,686.9	1,665.2	21.67	77.834				
6,500.0	6,337.3	6,244.9	6,234.3	27.1	12.5	179.09	-84.4	-336.4	1,717.0	1,695.0	22.01	78.011				
6,600.0	6,434.2	6,340.2	6,329.4	27.6	12.7	179.12	-85.7	-342.0	1,747.1	1,724.8	22.35	78.182				
6,700.0	6,531.2	6,435.6	6,424.6	28.1	12.9	179.15	-87.0	-347.6	1,777.2	1,754.6	22.68	78.348				
6,800.0	6,628.2	6,530.9	6,519.8	28.5	13.1	179.18	-88.3	-353.2	1,807.4	1,784.4	23.02	78.510				
6,900.0	6,725.2	6,626.3	6,614.9	29.0	13.3	179.21	-89.5	-358.8	1,837.5	1,814.1	23.36	78.667				
7,000.0	6,822.2	6,721.6	6,710.1	29.5	13.5	179.24	-90.8	-364.4	1,867.6	1,843.9	23.70	78.819				
7,100.0	6,919.2	6,817.0	6,805.3	30.0	13.7	179.27	-92.1	-370.1	1,897.8	1,873.7	24.03	78.967				
7,200.0	7,016.2	6,912.3	6,900.5	30.4	13.9	179.30	-93.4	-375.7	1,927.9	1,903.5	24.37	79.111				
7,300.0	7,113.2	7,007.7	6,995.6	30.9	14.1	179.32	-94.7	-381.3	1,958.0	1,933.3	24.71	79.251				
7,328.7	7,141.0	7,035.1	7,023.0	31.0	14.2	179.33	-95.0	-382.9	1,966.7	1,941.9	24.80	79.291				
7,350.0	7,161.7	7,055.4	7,043.3	31.1	14.2	170.32	-95.3	-384.1	1,973.0	1,948.1	24.87	79.316				
7,400.0	7,210.3	7,103.2	7,091.0	31.3	14.3	148.41	-96.0	-386.9	1,986.8	1,961.8	25.04	79.341				
7,450.0	7,258.7	7,129.7	7,117.0	31.5	14.7	150.38	-96.7	-389.7	1,990.7	1,966.4	25.12	79.366				
7,469.3	7,277.3	7,126.7	7,114.0	31.6	14.7	144.63	-97.0	-392.5	1,990.6	1,968.1	25.12	79.381				
7,500.0	7,306.5	7,120.7	7,108.0	31.7	14.6	136.90	-97.7	-395.3	1,990.8	1,968.3	25.12	79.396				
7,550.0	7,353.4	7,107.5	7,094.0	31.8	14.5	127.28	-98.4	-398.0	1,992.1	1,969.8	25.12	79.411				
7,600.0	7,399.0	7,090.2	7,076.0	31.9	14.3	120.23	-98.8	-400.7	1,994.5	1,972.4	25.12	79.426				
7,650.0	7,442.9	7,079.0	7,064.0	32.0	14.1	114.04	-99.4	-403.4	1,997.8	1,976.4	25.12	79.441				
7,700.0	7,484.9	7,068.8	7,053.0	32.1	13.9	108.72	-100.0	-406.1	2,001.4	1,970.9	25.12	79.456				
7,750.0	7,524.5	7,057.5	7,041.0	32.1	13.7	104.53	-100.5	-408.8	2,005.3	1,975.5	25.12	79.471				
7,800.0	7,561.6	7,046.4	7,029.0	32.1	13.5	101.08	-101.0	-411.5	2,009.6	1,980.2	25.12	79.486				
7,850.0	7,595.8	7,035.2	7,017.0	32.2	13.3	98.17	-101.5	-414.2	2,014.0	1,985.1	25.12	79.501				
7,900.0	7,626.8	7,024.0	7,005.0	32.2	13.1	95.65	-102.0	-416.9	2,018.5	1,990.0	25.12	79.516				
7,950.0	7,654.5	7,012.8	6,992.0	32.2	12.9	93.44	-102.5	-419.6	2,023.1	1,994.8	25.12	79.531				
8,000.0	7,678.5	7,001.6	6,980.0	32.3	12.7	91.50	-103.0	-422.3	2,027.5	1,999.6	25.12	79.546				
8,050.0	7,698.8	6,990.4	6,968.0	32.3	12.5	89.78	-103.5	-425.0	2,031.8	2,004.1	25.12	79.561				
8,100.0	7,715.2	6,984.4	6,961.3	32.3	12.3	88.27	-104.0	-427.7	2,035.9	2,008.2	25.12	79.576				
8,150.0	7,727.5	6,969.6	6,946.0	32.4	12.1	86.95	-104.5	-430.4	2,039.5	2,012.0	25.12	79.591				
8,200.0	7,735.6	6,931.4	6,908.0	32.4	11.9	85.81	-105.0	-433.1	2,042.7	2,015.3	25.12	79.606				
8,250.0	7,739.6	6,900.0	6,875.0	32.4	11.7	84.78	-105.5	-435.8	2,045.4	2,018.1	25.12	79.621				
8,271.7	7,740.0	6,869.7	6,844.0	32.5	11.5	84.51	-106.0	-438.5	2,046.4	2,019.0	25.12	79.636				
8,300.0	7,740.0	6,838.0	6,812.0	32.5	11.3	84.19	-106.5	-441.2	2,047.7	2,020.3	25.12	79.651				
8,400.0	7,740.0	6,806.0	6,779.0	32.7	11.1	83.16	-107.0	-443.9	2,054.6	2,027.1	25.12	79.666				
8,500.0	7,740.0	6,774.0	6,747.0	33.0	10.9	82.45	-107.5	-446.6	2,065.1	2,037.5	25.12	79.681				
8,600.0	7,740.0	6,742.0	6,715.0	33.4	10.7	81.53	-108.0	-449.3	2,079.5	2,051.7	25.12	79.696				

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
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	
8,700.0	7,740.0	7,435.9	7,414.8	33.8	14.9	80.89	-40.9	-405.9	2,097.9	2,069.9	28.06	74.755		
8,800.0	7,740.0	7,414.2	7,395.1	34.4	14.8	80.34	-49.9	-404.8	2,120.4	2,092.1	28.35	74.808		
8,900.0	7,740.0	7,400.0	7,382.0	35.0	14.8	79.98	-55.4	-404.0	2,147.0	2,118.4	28.65	74.932		
9,000.0	7,740.0	7,379.9	7,363.2	35.7	14.8	79.46	-62.6	-402.9	2,177.6	2,148.6	28.96	75.202		
9,100.0	7,740.0	7,366.2	7,350.3	36.4	14.8	79.10	-67.1	-402.1	2,212.0	2,182.7	29.27	75.561		
9,200.0	7,740.0	7,350.0	7,334.9	37.3	14.7	78.68	-72.0	-401.2	2,250.2	2,220.6	29.59	76.043		
9,300.0	7,740.0	7,350.0	7,334.9	38.2	14.7	78.68	-72.0	-401.2	2,292.0	2,262.0	29.93	76.583		
9,400.0	7,740.0	7,350.0	7,334.9	39.1	14.7	78.68	-72.0	-401.2	2,337.3	2,307.0	30.26	77.242		
9,500.0	7,740.0	7,325.7	7,311.5	40.1	14.7	78.03	-78.6	-399.9	2,385.5	2,355.0	30.54	78.103		
9,600.0	7,740.0	7,318.1	7,304.2	41.2	14.7	77.83	-80.5	-399.4	2,437.0	2,406.1	30.85	78.999		
9,700.0	7,740.0	7,300.0	7,286.6	42.3	14.7	77.35	-84.5	-398.4	2,491.4	2,460.3	31.13	80.041		
9,800.0	7,740.0	7,300.0	7,286.6	43.5	14.7	77.35	-84.5	-398.4	2,548.4	2,517.0	31.43	81.089		
9,900.0	7,740.0	7,300.0	7,286.6	44.7	14.7	77.35	-84.5	-398.4	2,608.0	2,576.3	31.72	82.224		
10,000.0	7,740.0	7,300.0	7,286.6	45.9	14.7	77.35	-84.5	-398.4	2,670.0	2,638.0	32.00	83.438		
10,100.0	7,740.0	7,300.0	7,286.6	47.1	14.7	77.35	-84.5	-398.4	2,734.2	2,702.0	32.27	84.727		
10,200.0	7,740.0	7,300.0	7,286.6	48.4	14.7	77.35	-84.5	-398.4	2,800.6	2,768.0	32.53	86.084		
10,300.0	7,740.0	7,300.0	7,286.6	49.8	14.7	77.35	-84.5	-398.4	2,868.9	2,836.1	32.79	87.502		
10,400.0	7,740.0	7,277.4	7,264.5	51.1	14.6	76.74	-88.8	-397.1	2,938.6	2,905.6	32.98	89.094		
10,500.0	7,740.0	7,274.0	7,261.0	52.5	14.6	76.65	-89.3	-396.9	3,010.2	2,977.0	33.21	90.636		
10,600.0	7,740.0	7,270.7	7,257.9	53.9	14.6	76.56	-89.8	-396.7	3,083.5	3,050.0	33.43	92.225		
10,700.0	7,740.0	7,250.0	7,237.4	55.3	14.6	76.01	-92.7	-395.5	3,158.4	3,124.8	33.61	93.974		
10,800.0	7,740.0	7,250.0	7,237.4	56.7	14.6	76.01	-92.7	-395.5	3,234.4	3,200.5	33.82	95.621		
10,900.0	7,740.0	7,250.0	7,237.4	58.2	14.6	76.01	-92.7	-395.5	3,311.6	3,277.6	34.03	97.304		
11,000.0	7,740.0	7,250.0	7,237.4	59.7	14.6	76.01	-92.7	-395.5	3,390.0	3,355.8	34.24	99.018		
11,100.0	7,740.0	7,250.0	7,237.4	61.2	14.6	76.01	-92.7	-395.5	3,469.6	3,435.1	34.43	100.760		
11,200.0	7,740.0	7,250.0	7,237.4	62.7	14.6	76.01	-92.7	-395.5	3,550.1	3,515.5	34.63	102.527		
11,300.0	7,740.0	7,250.0	7,237.4	64.2	14.6	76.01	-92.7	-395.5	3,631.7	3,596.8	34.81	104.317		
11,400.0	7,740.0	7,250.0	7,237.4	65.7	14.6	76.01	-92.7	-395.5	3,714.1	3,679.1	35.00	106.127		
11,500.0	7,740.0	7,250.0	7,237.4	67.2	14.6	76.01	-92.7	-395.5	3,797.4	3,762.2	35.18	107.955		
11,600.0	7,740.0	7,250.0	7,237.4	68.8	14.6	76.01	-92.7	-395.5	3,881.5	3,846.1	35.35	109.798		
11,700.0	7,740.0	7,250.0	7,237.4	70.3	14.6	76.01	-92.7	-395.5	3,966.3	3,930.7	35.52	111.656		
11,800.0	7,740.0	7,250.0	7,237.4	71.9	14.6	76.01	-92.7	-395.5	4,051.8	4,016.1	35.69	113.524		
11,900.0	7,740.0	7,250.0	7,237.4	73.5	14.6	76.01	-92.7	-395.5	4,137.9	4,102.1	35.86	115.404		
12,000.0	7,740.0	7,250.0	7,237.4	75.1	14.6	76.01	-92.7	-395.5	4,224.7	4,188.7	36.02	117.292		
12,100.0	7,740.0	7,250.0	7,237.4	76.6	14.6	76.01	-92.7	-395.5	4,312.0	4,275.8	36.18	119.187		
12,200.0	7,740.0	7,250.0	7,237.4	78.2	14.6	76.01	-92.7	-395.5	4,399.9	4,363.6	36.34	121.089		
12,300.0	7,740.0	7,250.0	7,237.4	79.8	14.6	76.01	-92.7	-395.5	4,488.3	4,451.8	36.49	122.996		
12,400.0	7,740.0	7,250.0	7,237.4	81.5	14.6	76.01	-92.7	-395.5	4,577.2	4,540.5	36.64	124.906		
12,500.0	7,740.0	7,250.0	7,237.4	83.1	14.6	76.01	-92.7	-395.5	4,666.5	4,629.7	36.80	126.820		
12,600.0	7,740.0	7,250.0	7,237.4	84.7	14.6	76.01	-92.7	-395.5	4,756.2	4,719.3	36.95	128.736		
12,700.0	7,740.0	7,250.0	7,237.4	86.3	14.6	76.01	-92.7	-395.5	4,846.3	4,809.2	37.09	130.653		
12,800.0	7,740.0	7,250.0	7,237.4	88.0	14.6	76.01	-92.7	-395.5	4,936.9	4,899.6	37.24	132.571		
12,900.0	7,740.0	7,250.0	7,237.4	89.6	14.6	76.01	-92.7	-395.5	5,027.7	4,990.4	37.38	134.489		
13,000.0	7,740.0	7,250.0	7,237.4	91.2	14.6	76.01	-92.7	-395.5	5,119.0	5,081.4	37.53	136.406		
13,100.0	7,740.0	7,250.0	7,237.4	92.9	14.6	76.01	-92.7	-395.5	5,210.5	5,172.8	37.67	138.321		
13,200.0	7,740.0	7,250.0	7,237.4	94.5	14.6	76.01	-92.7	-395.5	5,302.3	5,264.5	37.81	140.235		
13,300.0	7,740.0	7,227.0	7,214.6	96.2	14.5	75.39	-95.1	-394.2	5,394.0	5,356.1	37.89	142.360		
13,400.0	7,740.0	7,226.2	7,213.7	97.8	14.5	75.37	-95.1	-394.1	5,486.4	5,448.4	38.03	144.278		
13,500.0	7,740.0	7,225.4	7,212.9	99.5	14.5	75.35	-95.2	-394.1	5,579.0	5,540.9	38.16	146.193		
13,600.0	7,740.0	7,224.6	7,212.2	101.2	14.5	75.33	-95.2	-394.0	5,671.9	5,633.6	38.30	148.104		
13,700.0	7,740.0	7,223.9	7,211.4	102.8	14.5	75.31	-95.3	-394.0	5,765.0	5,726.6	38.43	150.011		
13,800.0	7,740.0	7,223.2	7,210.7	104.5	14.5	75.29	-95.4	-393.9	5,858.4	5,819.8	38.56	151.914		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,740.0	7,200.0	7,187.6	106.2	14.5	74.66	-96.6	-392.6	5,952.4	5,913.8	38.64	154.065		
14,000.0	7,740.0	7,200.0	7,187.6	107.8	14.5	74.66	-96.6	-392.6	6,046.2	6,007.4	38.77	155.952		
14,100.0	7,740.0	7,200.0	7,187.6	109.5	14.5	74.66	-96.6	-392.6	6,140.1	6,101.2	38.90	157.834		
14,200.0	7,740.0	7,200.0	7,187.6	111.2	14.5	74.66	-96.6	-392.6	6,234.2	6,195.2	39.03	159.712		
14,300.0	7,740.0	7,200.0	7,187.6	112.9	14.5	74.66	-96.6	-392.6	6,328.5	6,289.4	39.17	161.583		
14,400.0	7,740.0	7,200.0	7,187.6	114.6	14.5	74.66	-96.6	-392.6	6,423.0	6,383.7	39.30	163.450		
14,500.0	7,740.0	7,200.0	7,187.6	116.3	14.5	74.66	-96.6	-392.6	6,517.7	6,478.2	39.43	165.310		
14,600.0	7,740.0	7,200.0	7,187.6	117.9	14.5	74.66	-96.6	-392.6	6,612.5	6,572.9	39.56	167.165		
14,700.0	7,740.0	7,200.0	7,187.6	119.6	14.5	74.66	-96.6	-392.6	6,707.4	6,667.7	39.69	169.014		
14,800.0	7,740.0	7,200.0	7,187.6	121.3	14.5	74.66	-96.6	-392.6	6,802.5	6,762.7	39.81	170.856		
14,900.0	7,740.0	7,200.0	7,187.6	123.0	14.5	74.66	-96.6	-392.6	6,897.8	6,857.8	39.94	172.692		
15,000.0	7,740.0	7,200.0	7,187.6	124.7	14.5	74.66	-96.6	-392.6	6,993.1	6,953.1	40.07	174.522		
15,100.0	7,740.0	7,200.0	7,187.6	126.4	14.5	74.66	-96.6	-392.6	7,088.6	7,048.4	40.20	176.346		
15,200.0	7,740.0	7,200.0	7,187.6	128.1	14.5	74.66	-96.6	-392.6	7,184.3	7,143.9	40.32	178.162		
15,300.0	7,740.0	7,200.0	7,187.6	129.8	14.5	74.66	-96.6	-392.6	7,280.0	7,239.5	40.45	179.972		
15,400.0	7,740.0	7,200.0	7,187.6	131.5	14.5	74.66	-96.6	-392.6	7,375.9	7,335.3	40.58	181.776		
15,500.0	7,740.0	7,200.0	7,187.6	133.2	14.5	74.66	-96.6	-392.6	7,471.8	7,431.1	40.70	183.573		
15,600.0	7,740.0	7,200.0	7,187.6	134.9	14.5	74.66	-96.6	-392.6	7,567.9	7,527.1	40.83	185.362		
15,700.0	7,740.0	7,200.0	7,187.6	136.6	14.5	74.66	-96.6	-392.6	7,664.0	7,623.1	40.95	187.145		
15,800.0	7,740.0	7,200.0	7,187.6	138.3	14.5	74.66	-96.6	-392.6	7,760.3	7,719.2	41.08	188.921		
15,900.0	7,740.0	7,200.0	7,187.6	140.0	14.5	74.66	-96.6	-392.6	7,856.7	7,815.5	41.20	190.691		
16,000.0	7,740.0	7,200.0	7,187.6	141.7	14.5	74.66	-96.6	-392.6	7,953.1	7,911.8	41.33	192.453		
16,100.0	7,740.0	7,200.0	7,187.6	143.5	14.5	74.66	-96.6	-392.6	8,049.6	8,008.2	41.45	194.208		
16,171.7	7,740.0	7,200.0	7,187.6	144.7	14.5	74.66	-96.6	-392.6	8,118.9	8,077.3	41.54	195.461		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	90.02	0.0	14.8	14.8					
100.0	100.0	100.0	100.0	0.2	0.2	90.02	0.0	14.8	14.8	14.5	0.30	48.845		
150.0	150.0	150.0	150.0	0.2	0.2	90.02	0.0	14.8	14.8	14.4	0.48	31.018 CC		
150.2	150.2	150.2	150.2	0.2	0.2	90.02	0.0	14.8	14.8	14.4	0.48	30.983		
200.0	200.0	200.0	200.0	0.3	0.3	92.54	0.0	14.8	14.8	14.2	0.65	22.720 ES		
283.3	283.2	283.2	283.2	0.5	0.5	107.39	0.0	14.8	15.5	14.6	0.96	16.227		
300.0	299.9	299.9	299.9	0.5	0.5	109.03	0.0	14.8	15.9	14.9	1.02	15.609		
400.0	399.6	399.6	399.6	0.7	0.7	119.66	-0.7	14.3	18.8	17.4	1.38	13.590 SF		
500.0	499.3	498.9	498.9	0.9	0.9	131.07	-2.6	12.6	24.1	22.4	1.73	13.906		
600.0	598.9	597.8	597.7	1.2	1.0	140.07	-5.9	9.9	33.0	30.9	2.07	15.907		
700.0	698.5	697.2	697.0	1.4	1.2	144.75	-9.4	7.2	44.3	41.9	2.41	18.363		
800.0	797.9	797.0	796.7	1.6	1.4	146.55	-11.9	5.9	56.0	53.3	2.76	20.302		
900.0	897.1	896.9	896.6	1.9	1.6	147.48	-13.4	6.0	67.7	64.6	3.11	21.753		
1,000.0	996.2	995.9	995.6	2.2	1.7	148.54	-14.5	6.5	80.1	76.6	3.46	23.134		
1,100.0	1,095.0	1,094.7	1,094.4	2.5	1.9	149.87	-15.6	7.1	93.9	90.0	3.81	24.620		
1,200.0	1,193.6	1,193.3	1,193.0	2.8	2.1	151.32	-16.7	7.7	109.1	104.9	4.16	26.207		
1,300.0	1,291.9	1,291.6	1,291.3	3.2	2.3	152.77	-17.8	8.2	125.9	121.4	4.51	27.889		
1,400.0	1,389.9	1,389.6	1,389.3	3.5	2.4	154.19	-18.9	8.8	144.2	139.4	4.86	29.656		
1,500.0	1,487.6	1,487.3	1,487.0	3.9	2.6	155.53	-20.0	9.3	164.2	159.0	5.21	31.500		
1,600.0	1,584.8	1,584.6	1,584.3	4.4	2.8	156.78	-21.1	9.9	185.8	180.2	5.56	33.411		
1,624.3	1,608.4	1,608.2	1,607.8	4.5	2.8	157.07	-21.4	10.0	191.3	185.6	5.64	33.886		
1,700.0	1,681.8	1,681.6	1,681.3	4.8	2.9	158.78	-22.2	10.4	208.7	202.8	5.91	35.326		
1,800.0	1,778.8	1,778.7	1,778.3	5.3	3.1	160.66	-23.3	11.0	231.8	225.6	6.25	37.079		
1,900.0	1,875.8	1,875.7	1,875.3	5.7	3.3	162.19	-24.4	11.5	255.2	248.6	6.60	38.678		
2,000.0	1,972.8	1,972.7	1,972.4	6.2	3.5	163.46	-25.5	12.1	278.7	271.7	6.94	40.140		
2,100.0	2,069.8	2,069.8	2,069.4	6.6	3.6	164.54	-26.6	12.6	302.3	295.0	7.29	41.479		
2,200.0	2,166.8	2,166.8	2,166.4	7.1	3.8	165.46	-27.7	13.2	326.0	318.4	7.63	42.709		
2,300.0	2,263.8	2,263.8	2,263.4	7.5	4.0	166.25	-28.8	13.7	349.8	341.8	7.98	43.842		
2,400.0	2,360.8	2,360.8	2,360.4	8.0	4.1	166.95	-29.8	14.3	373.6	365.3	8.32	44.888		
2,500.0	2,457.7	2,457.9	2,457.5	8.4	4.3	167.56	-30.9	14.8	397.5	388.8	8.67	45.857		
2,600.0	2,554.7	2,554.9	2,554.5	8.9	4.5	168.10	-32.0	15.4	421.4	412.4	9.01	46.755		
2,700.0	2,651.7	2,651.9	2,651.5	9.4	4.6	168.59	-33.1	15.9	445.3	435.9	9.36	47.591		
2,800.0	2,748.7	2,748.9	2,748.5	9.8	4.8	169.02	-34.2	16.5	469.3	459.6	9.70	48.370		
2,900.0	2,845.7	2,846.0	2,845.5	10.3	5.0	169.41	-35.3	17.0	493.3	483.2	10.05	49.098		
3,000.0	2,942.7	2,943.0	2,942.6	10.8	5.2	169.77	-36.4	17.6	517.3	506.9	10.39	49.781		
3,100.0	3,039.7	3,040.0	3,039.6	11.2	5.3	170.10	-37.5	18.1	541.3	530.6	10.74	50.421		
3,200.0	3,136.7	3,137.1	3,136.6	11.7	5.5	170.39	-38.6	18.7	565.3	554.3	11.08	51.022		
3,300.0	3,233.6	3,234.1	3,233.6	12.2	5.7	170.67	-39.7	19.2	589.4	578.0	11.42	51.589		
3,400.0	3,330.6	3,331.1	3,330.6	12.6	5.8	170.92	-40.8	19.8	613.4	601.7	11.77	52.123		
3,500.0	3,427.6	3,428.1	3,427.7	13.1	6.0	171.15	-41.8	20.3	637.5	625.4	12.11	52.628		
3,600.0	3,524.6	3,525.2	3,524.7	13.6	6.2	171.36	-42.9	20.9	661.6	649.2	12.46	53.106		
3,700.0	3,621.6	3,622.2	3,621.7	14.0	6.3	171.57	-44.0	21.4	685.7	672.9	12.80	53.559		
3,800.0	3,718.6	3,719.2	3,718.7	14.5	6.5	171.75	-45.1	22.0	709.8	696.7	13.15	53.989		
3,900.0	3,815.6	3,816.2	3,815.7	15.0	6.7	171.93	-46.2	22.5	733.9	720.4	13.49	54.397		
4,000.0	3,912.6	3,913.3	3,912.8	15.4	6.9	172.09	-47.3	23.1	758.0	744.2	13.84	54.786		
4,100.0	4,009.5	4,010.3	4,009.8	15.9	7.0	172.24	-48.4	23.6	782.1	768.0	14.18	55.155		
4,200.0	4,106.5	4,107.3	4,106.8	16.4	7.2	172.39	-49.5	24.2	806.3	791.7	14.53	55.508		
4,300.0	4,203.5	4,204.4	4,203.8	16.8	7.4	172.52	-50.6	24.7	830.4	815.5	14.87	55.845		
4,400.0	4,300.5	4,301.4	4,300.8	17.3	7.5	172.65	-51.7	25.3	854.5	839.3	15.21	56.167		
4,500.0	4,397.5	4,398.4	4,397.8	17.8	7.7	172.77	-52.8	25.8	878.7	863.1	15.56	56.475		
4,600.0	4,494.5	4,495.4	4,494.9	18.2	7.9	172.89	-53.8	26.4	902.8	886.9	15.90	56.769		
4,700.0	4,591.5	4,592.5	4,591.9	18.7	8.1	173.00	-54.9	26.9	926.9	910.7	16.25	57.052		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
4,800.0	4,688.5	4,689.5	4,688.9	19.2	8.2	173.10	-56.0	27.5	951.1	934.5	16.59	57.323		
4,900.0	4,785.4	4,786.5	4,785.9	19.6	8.4	173.20	-57.1	28.0	975.2	958.3	16.94	57.583		
5,000.0	4,882.4	4,883.5	4,882.9	20.1	8.6	173.29	-58.2	28.6	999.4	982.1	17.28	57.833		
5,100.0	4,979.4	4,980.6	4,980.0	20.6	8.7	173.38	-59.3	29.1	1,023.5	1,005.9	17.63	58.073		
5,200.0	5,076.4	5,077.6	5,077.0	21.0	8.9	173.46	-60.4	29.7	1,047.7	1,029.7	17.97	58.304		
5,300.0	5,173.4	5,174.6	5,174.0	21.5	9.1	173.55	-61.5	30.2	1,071.9	1,053.5	18.31	58.527		
5,400.0	5,270.4	5,271.7	5,271.0	22.0	9.2	173.62	-62.6	30.7	1,096.0	1,077.4	18.66	58.741		
5,500.0	5,367.4	5,368.7	5,368.0	22.5	9.4	173.70	-63.7	31.3	1,120.2	1,101.2	19.00	58.948		
5,600.0	5,464.4	5,465.7	5,465.1	22.9	9.6	173.77	-64.8	31.8	1,144.3	1,125.0	19.35	59.148		
5,700.0	5,561.4	5,562.7	5,562.1	23.4	9.8	173.84	-65.8	32.4	1,168.5	1,148.8	19.69	59.341		
5,800.0	5,658.3	5,659.8	5,659.1	23.9	9.9	173.90	-66.9	32.9	1,192.7	1,172.6	20.04	59.527		
5,900.0	5,755.3	5,756.8	5,756.1	24.3	10.1	173.96	-68.0	33.5	1,216.8	1,196.5	20.38	59.707		
6,000.0	5,852.3	5,853.8	5,853.1	24.8	10.3	174.02	-69.1	34.0	1,241.0	1,220.3	20.72	59.881		
6,100.0	5,949.3	5,950.8	5,950.2	25.3	10.4	174.08	-70.2	34.6	1,265.2	1,244.1	21.07	60.049		
6,200.0	6,046.3	6,047.9	6,047.2	25.7	10.6	174.14	-71.3	35.1	1,289.3	1,267.9	21.41	60.212		
6,300.0	6,143.3	6,144.9	6,144.2	26.2	10.8	174.19	-72.4	35.7	1,313.5	1,291.8	21.76	60.370		
6,400.0	6,240.3	6,241.9	6,241.2	26.7	11.0	174.24	-73.5	36.2	1,337.7	1,315.6	22.10	60.523		
6,500.0	6,337.3	6,339.0	6,338.2	27.1	11.1	174.29	-74.6	36.8	1,361.9	1,339.4	22.45	60.671		
6,600.0	6,434.2	6,436.0	6,435.3	27.6	11.3	174.34	-75.7	37.3	1,386.0	1,363.3	22.79	60.815		
6,700.0	6,531.2	6,533.0	6,532.3	28.1	11.5	174.39	-76.8	37.9	1,410.2	1,387.1	23.14	60.955		
6,800.0	6,628.2	6,630.0	6,629.3	28.5	11.6	174.43	-77.8	38.4	1,434.4	1,410.9	23.48	61.091		
6,900.0	6,725.2	6,727.1	6,726.3	29.0	11.8	174.48	-78.9	39.0	1,458.6	1,434.7	23.82	61.223		
7,000.0	6,822.2	6,824.1	6,823.3	29.5	12.0	174.52	-80.0	39.5	1,482.8	1,458.6	24.17	61.351		
7,100.0	6,919.2	6,921.1	6,920.4	30.0	12.1	174.56	-81.1	40.1	1,506.9	1,482.4	24.51	61.475		
7,200.0	7,016.2	7,018.0	7,017.3	30.4	12.3	174.59	-82.2	40.6	1,531.0	1,505.3	24.85	61.599		
7,300.0	7,113.2	7,115.0	7,114.3	30.9	12.5	174.62	-83.3	41.1	1,555.1	1,529.4	25.19	61.723		
7,328.7	7,141.0	7,142.8	7,141.3	31.0	12.6	174.64	-83.8	41.3	1,563.3	1,537.5	25.35	61.781		
7,340.5	7,152.5	7,154.3	7,153.6	31.1	12.7	174.65	-84.3	41.4	1,571.5	1,545.7	25.51	61.839		
7,350.0	7,161.7	7,163.5	7,163.0	31.1	12.8	174.65	-84.3	41.4	1,579.7	1,553.9	25.67	61.897		
7,400.0	7,210.3	7,212.1	7,211.6	31.3	12.9	174.67	-85.4	41.6	1,603.9	1,578.1	26.01	62.021		
7,450.0	7,258.7	7,260.5	7,260.0	31.5	13.0	174.69	-86.5	41.8	1,628.1	1,602.3	26.35	62.145		
7,500.0	7,306.5	7,308.3	7,308.0	31.7	13.1	174.71	-87.6	42.0	1,652.3	1,626.5	26.69	62.269		
7,550.0	7,353.4	7,355.2	7,355.0	31.8	13.2	174.72	-88.7	42.1	1,676.5	1,650.7	27.03	62.393		
7,600.0	7,399.0	7,400.8	7,400.5	31.9	13.3	174.73	-89.8	42.2	1,700.7	1,674.9	27.37	62.517		
7,650.0	7,442.9	7,444.7	7,444.5	32.0	13.4	174.74	-90.9	42.3	1,724.9	1,699.1	27.71	62.641		
7,700.0	7,484.9	7,486.7	7,486.5	32.1	13.5	174.75	-92.0	42.4	1,749.1	1,723.3	28.05	62.765		
7,750.0	7,524.5	7,526.3	7,526.1	32.1	13.6	174.76	-93.1	42.5	1,773.3	1,747.5	28.39	62.889		
7,800.0	7,561.6	7,563.4	7,563.2	32.1	13.7	174.77	-94.2	42.6	1,797.5	1,771.7	28.73	63.013		
7,850.0	7,595.8	7,597.6	7,597.4	32.2	13.8	174.78	-95.3	42.7	1,821.7	1,795.9	29.07	63.137		
7,900.0	7,626.8	7,628.6	7,628.4	32.2	13.9	174.79	-96.4	42.8	1,845.9	1,820.1	29.41	63.261		
7,950.0	7,654.5	7,656.3	7,656.1	32.2	14.0	174.80	-97.5	42.9	1,870.1	1,844.3	29.75	63.385		
8,000.0	7,678.5	7,680.3	7,680.1	32.3	14.1	174.81	-98.6	43.0	1,894.3	1,868.5	30.09	63.509		
8,050.0	7,698.8	7,699.9	7,699.5	32.3	14.2	174.82	-99.7	43.1	1,918.5	1,892.7	30.43	63.633		
8,100.0	7,715.2	7,716.3	7,716.0	32.3	14.3	174.83	-100.8	43.2	1,942.7	1,916.9	30.77	63.757		
8,150.0	7,727.5	7,728.6	7,728.3	32.4	14.4	174.84	-101.9	43.3	1,966.9	1,941.1	31.11	63.881		
8,200.0	7,735.6	7,736.7	7,736.4	32.4	14.5	174.85	-103.0	43.4	1,991.1	1,965.3	31.45	64.005		
8,250.0	7,739.6	7,740.7	7,740.4	32.4	14.6	174.86	-104.1	43.5	2,015.3	1,989.5	31.79	64.129		
8,271.7	7,740.0	7,740.9	7,740.6	32.5	14.7	174.87	-105.2	43.6	2,039.5	2,013.7	32.13	64.253		
8,300.0	7,740.0	7,740.9	7,740.6	32.5	14.8	174.88	-106.3	43.7	2,063.7	2,037.9	32.47	64.377		
8,400.0	7,740.0	7,740.9	7,740.6	32.7	14.9	174.89	-107.4	43.8	2,087.9	2,062.1	32.81	64.501		
8,500.0	7,740.0	7,740.9	7,740.6	33.0	15.0	174.90	-108.5	43.9	2,112.1	2,086.3	33.15	64.625		
8,600.0	7,740.0	7,740.9	7,740.6	33.4	15.1	174.91	-109.6	44.0	2,136.3	2,110.5	33.49	64.749		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,700.0	7,740.0	7,324.7	7,292.9	33.8	12.8	74.22	50.9	39.8	1,724.5	1,697.4	27.05	63.742	
8,800.0	7,740.0	7,300.0	7,273.6	34.4	12.8	73.57	35.6	40.0	1,756.8	1,729.7	27.15	64.707	
8,900.0	7,740.0	7,274.0	7,252.6	35.0	12.7	72.87	20.3	40.1	1,793.3	1,766.0	27.26	65.797	
9,000.0	7,740.0	7,250.0	7,232.5	35.7	12.6	72.21	7.1	40.3	1,833.8	1,806.4	27.38	66.987	
9,100.0	7,740.0	7,233.7	7,218.6	36.4	12.6	71.75	-1.4	40.3	1,878.2	1,850.7	27.55	68.186	
9,200.0	7,740.0	7,200.0	7,189.1	37.3	12.6	70.79	-17.7	40.5	1,926.5	1,898.9	27.63	69.737	
9,300.0	7,740.0	7,200.0	7,189.1	38.2	12.6	70.79	-17.7	40.5	1,977.9	1,950.0	27.88	70.948	
9,400.0	7,740.0	7,200.0	7,189.1	39.1	12.6	70.79	-17.7	40.5	2,032.9	2,004.8	28.13	72.277	
9,500.0	7,740.0	7,174.3	7,166.0	40.1	12.5	70.05	-28.9	40.5	2,090.7	2,062.4	28.25	74.010	
9,600.0	7,740.0	7,150.0	7,143.7	41.2	12.5	69.34	-38.6	40.6	2,151.6	2,123.2	28.37	75.831	
9,700.0	7,740.0	7,150.0	7,143.7	42.3	12.5	69.34	-38.6	40.6	2,214.9	2,186.3	28.61	77.418	
9,800.0	7,740.0	7,150.0	7,143.7	43.5	12.5	69.34	-38.6	40.6	2,280.8	2,252.0	28.84	79.087	
9,900.0	7,740.0	7,150.0	7,143.7	44.7	12.5	69.34	-38.6	40.6	2,349.2	2,320.1	29.06	80.828	
10,000.0	7,740.0	7,125.2	7,120.5	45.9	12.4	68.60	-47.5	40.6	2,419.2	2,390.0	29.18	82.912	
10,100.0	7,740.0	7,100.0	7,096.7	47.1	12.4	67.86	-55.5	40.6	2,491.6	2,462.3	29.29	85.074	
10,200.0	7,740.0	7,100.0	7,096.7	48.4	12.4	67.86	-55.5	40.6	2,565.4	2,535.9	29.50	86.965	
10,300.0	7,740.0	7,100.0	7,096.7	49.8	12.4	67.86	-55.5	40.6	2,640.9	2,611.2	29.71	88.901	
10,400.0	7,740.0	7,100.0	7,096.7	51.1	12.4	67.86	-55.5	40.6	2,717.9	2,688.0	29.91	90.879	
10,500.0	7,740.0	7,100.0	7,096.7	52.5	12.4	67.86	-55.5	40.6	2,796.5	2,766.4	30.10	92.893	
10,600.0	7,740.0	7,100.0	7,096.7	53.9	12.4	67.86	-55.5	40.6	2,876.3	2,846.0	30.30	94.938	
10,700.0	7,740.0	7,100.0	7,096.7	55.3	12.4	67.86	-55.5	40.6	2,957.4	2,926.9	30.49	97.010	
10,800.0	7,740.0	7,076.7	7,074.3	56.7	12.4	67.16	-61.9	40.6	3,039.1	3,008.5	30.59	99.363	
10,900.0	7,740.0	7,072.2	7,069.9	58.2	12.4	67.03	-63.0	40.6	3,122.2	3,091.4	30.75	101.524	
11,000.0	7,740.0	7,050.0	7,048.3	59.7	12.3	66.37	-68.2	40.6	3,206.4	3,175.6	30.85	103.923	
11,100.0	7,740.0	7,050.0	7,048.3	61.2	12.3	66.37	-68.2	40.6	3,291.2	3,260.1	31.03	106.057	
11,200.0	7,740.0	7,050.0	7,048.3	62.7	12.3	66.37	-68.2	40.6	3,376.7	3,345.5	31.21	108.204	
11,300.0	7,740.0	7,050.0	7,048.3	64.2	12.3	66.37	-68.2	40.6	3,463.0	3,431.7	31.38	110.361	
11,400.0	7,740.0	7,050.0	7,048.3	65.7	12.3	66.37	-68.2	40.6	3,550.1	3,518.5	31.55	112.527	
11,500.0	7,740.0	7,050.0	7,048.3	67.2	12.3	66.37	-68.2	40.6	3,637.8	3,606.1	31.72	114.699	
11,600.0	7,740.0	7,050.0	7,048.3	68.8	12.3	66.37	-68.2	40.6	3,726.1	3,694.3	31.88	116.876	
11,700.0	7,740.0	7,050.0	7,048.3	70.3	12.3	66.37	-68.2	40.6	3,815.1	3,783.0	32.04	119.056	
11,800.0	7,740.0	7,050.0	7,048.3	71.9	12.3	66.37	-68.2	40.6	3,904.5	3,872.3	32.21	121.238	
11,900.0	7,740.0	7,050.0	7,048.3	73.5	12.3	66.37	-68.2	40.6	3,994.4	3,962.1	32.36	123.420	
12,000.0	7,740.0	7,050.0	7,048.3	75.1	12.3	66.37	-68.2	40.6	4,084.9	4,052.3	32.52	125.602	
12,100.0	7,740.0	7,050.0	7,048.3	76.6	12.3	66.37	-68.2	40.6	4,175.7	4,143.0	32.68	127.783	
12,200.0	7,740.0	7,050.0	7,048.3	78.2	12.3	66.37	-68.2	40.6	4,267.0	4,234.1	32.83	129.961	
12,300.0	7,740.0	7,050.0	7,048.3	79.8	12.3	66.37	-68.2	40.6	4,358.6	4,325.6	32.99	132.136	
12,400.0	7,740.0	7,027.1	7,025.9	81.5	12.3	65.69	-72.6	40.5	4,450.1	4,417.1	33.07	134.569	
12,500.0	7,740.0	7,025.1	7,023.9	83.1	12.3	65.63	-72.9	40.5	4,542.4	4,509.2	33.21	136.759	
12,600.0	7,740.0	7,023.2	7,021.9	84.7	12.3	65.57	-73.2	40.5	4,635.0	4,601.6	33.36	138.942	
12,700.0	7,740.0	7,000.0	6,999.0	86.3	12.3	64.89	-76.6	40.4	4,728.2	4,694.8	33.44	141.394	
12,800.0	7,740.0	7,000.0	6,999.0	88.0	12.3	64.89	-76.6	40.4	4,821.3	4,787.7	33.59	143.541	
12,900.0	7,740.0	7,000.0	6,999.0	89.6	12.3	64.89	-76.6	40.4	4,914.7	4,880.9	33.74	145.681	
13,000.0	7,740.0	7,000.0	6,999.0	91.2	12.3	64.89	-76.6	40.4	5,008.3	4,974.4	33.88	147.815	
13,100.0	7,740.0	7,000.0	6,999.0	92.9	12.3	64.89	-76.6	40.4	5,102.1	5,068.1	34.03	149.941	
13,200.0	7,740.0	7,000.0	6,999.0	94.5	12.3	64.89	-76.6	40.4	5,196.2	5,162.0	34.17	152.061	
13,300.0	7,740.0	7,000.0	6,999.0	96.2	12.3	64.89	-76.6	40.4	5,290.5	5,256.1	34.32	154.172	
13,400.0	7,740.0	7,000.0	6,999.0	97.8	12.3	64.89	-76.6	40.4	5,385.0	5,350.5	34.46	156.276	
13,500.0	7,740.0	7,000.0	6,999.0	99.5	12.3	64.89	-76.6	40.4	5,479.7	5,445.1	34.60	158.372	
13,600.0	7,740.0	7,000.0	6,999.0	101.2	12.3	64.89	-76.6	40.4	5,574.5	5,539.8	34.74	160.459	
13,700.0	7,740.0	7,000.0	6,999.0	102.8	12.3	64.89	-76.6	40.4	5,669.6	5,634.7	34.88	162.538	
13,800.0	7,740.0	7,000.0	6,999.0	104.5	12.3	64.89	-76.6	40.4	5,764.8	5,729.8	35.02	164.608	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
13,900.0	7,740.0	7,000.0	6,999.0	106.2	12.3	64.89	-76.6	40.4	5,860.2	5,825.0	35.16	166.670	
14,000.0	7,740.0	7,000.0	6,999.0	107.8	12.3	64.89	-76.6	40.4	5,955.7	5,920.4	35.30	168.722	
14,100.0	7,740.0	7,000.0	6,999.0	109.5	12.3	64.89	-76.6	40.4	6,051.4	6,016.0	35.44	170.765	
14,200.0	7,740.0	7,000.0	6,999.0	111.2	12.3	64.89	-76.6	40.4	6,147.2	6,111.6	35.57	172.800	
14,300.0	7,740.0	7,000.0	6,999.0	112.9	12.3	64.89	-76.6	40.4	6,243.2	6,207.4	35.71	174.825	
14,400.0	7,740.0	7,000.0	6,999.0	114.6	12.3	64.89	-76.6	40.4	6,339.2	6,303.4	35.85	176.841	
14,500.0	7,740.0	7,000.0	6,999.0	116.3	12.3	64.89	-76.6	40.4	6,435.4	6,399.4	35.98	178.847	
14,600.0	7,740.0	7,000.0	6,999.0	117.9	12.3	64.89	-76.6	40.4	6,531.7	6,495.6	36.12	180.844	
14,700.0	7,740.0	7,000.0	6,999.0	119.6	12.3	64.89	-76.6	40.4	6,628.1	6,591.9	36.25	182.832	
14,800.0	7,740.0	7,000.0	6,999.0	121.3	12.3	64.89	-76.6	40.4	6,724.7	6,688.3	36.39	184.810	
14,900.0	7,740.0	7,000.0	6,999.0	123.0	12.3	64.89	-76.6	40.4	6,821.3	6,784.8	36.52	186.779	
15,000.0	7,740.0	7,000.0	6,999.0	124.7	12.3	64.89	-76.6	40.4	6,918.0	6,881.3	36.65	188.739	
15,100.0	7,740.0	7,000.0	6,999.0	126.4	12.3	64.89	-76.6	40.4	7,014.8	6,978.0	36.79	190.689	
15,200.0	7,740.0	7,000.0	6,999.0	128.1	12.3	64.89	-76.6	40.4	7,111.7	7,074.8	36.92	192.629	
15,300.0	7,740.0	7,000.0	6,999.0	129.8	12.3	64.89	-76.6	40.4	7,208.7	7,171.6	37.05	194.560	
15,400.0	7,740.0	7,000.0	6,999.0	131.5	12.3	64.89	-76.6	40.4	7,305.7	7,268.6	37.18	196.482	
15,500.0	7,740.0	7,000.0	6,999.0	133.2	12.3	64.89	-76.6	40.4	7,402.9	7,365.6	37.31	198.394	
15,600.0	7,740.0	7,000.0	6,999.0	134.9	12.3	64.89	-76.6	40.4	7,500.1	7,462.6	37.44	200.297	
15,700.0	7,740.0	7,000.0	6,999.0	136.6	12.3	64.89	-76.6	40.4	7,597.4	7,559.8	37.58	202.190	
15,800.0	7,740.0	7,000.0	6,999.0	138.3	12.3	64.89	-76.6	40.4	7,694.7	7,657.0	37.71	204.075	
15,900.0	7,740.0	7,000.0	6,999.0	140.0	12.3	64.89	-76.6	40.4	7,792.2	7,754.3	37.84	205.949	
16,000.0	7,740.0	7,000.0	6,999.0	141.7	12.3	64.89	-76.6	40.4	7,889.6	7,851.7	37.96	207.815	
16,100.0	7,740.0	7,000.0	6,999.0	143.5	12.3	64.89	-76.6	40.4	7,987.2	7,949.1	38.09	209.671	
16,171.7	7,740.0	7,000.0	6,999.0	144.7	12.3	64.89	-76.6	40.4	8,057.1	8,019.0	38.19	210.996	

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.03	0.0	22.4	22.4					
100.0	100.0	100.0	100.0	0.2	0.2	90.03	0.0	22.4	22.4	22.1	0.30	73.728		
150.0	150.0	150.0	150.0	0.2	0.2	90.03	0.0	22.4	22.4	21.9	0.48	46.820		
150.0	150.0	150.0	150.0	0.2	0.2	90.03	0.0	22.4	22.4	21.9	0.48	46.820 CC		
200.0	200.0	200.0	200.0	0.3	0.3	91.71	0.0	22.4	22.4	21.7	0.65	34.275 ES		
283.3	283.2	283.2	283.2	0.5	0.5	101.74	0.0	22.4	22.9	21.9	0.96	23.852		
300.0	299.9	299.9	299.9	0.5	0.5	102.19	0.0	22.4	23.1	22.1	1.02	22.642		
400.0	399.6	399.6	399.6	0.7	0.7	105.02	0.0	22.4	24.8	23.4	1.39	17.780		
500.0	499.3	499.3	499.3	0.9	0.8	109.27	0.0	22.4	27.0	25.3	1.76	15.323		
600.0	598.9	598.9	598.9	1.2	1.0	115.36	0.0	22.4	30.3	28.1	2.13	14.233		
700.0	698.5	698.3	698.3	1.4	1.2	121.21	-0.1	23.2	35.2	32.7	2.48	14.183 SF		
800.0	797.9	797.7	797.6	1.6	1.4	125.08	-0.4	25.8	41.8	39.0	2.84	14.705		
900.0	897.1	897.1	897.0	1.9	1.6	127.39	-0.9	30.0	49.5	46.3	3.22	15.394		
1,000.0	996.2	996.6	996.3	2.2	1.7	129.24	-1.5	35.5	58.1	54.5	3.60	16.116		
1,100.0	1,095.0	1,096.0	1,095.6	2.5	1.9	131.73	-2.1	40.9	67.5	63.5	3.99	16.918		
1,200.0	1,193.6	1,195.2	1,194.6	2.8	2.1	134.56	-2.7	46.4	78.0	73.6	4.37	17.842		
1,300.0	1,291.9	1,294.2	1,293.5	3.2	2.3	137.50	-3.3	51.8	89.7	85.0	4.74	18.907		
1,400.0	1,389.9	1,393.1	1,392.2	3.5	2.5	140.40	-3.9	57.2	102.9	97.8	5.11	20.114		
1,500.0	1,487.6	1,491.6	1,490.6	3.9	2.7	143.15	-4.5	62.6	117.6	112.1	5.48	21.458		
1,600.0	1,584.8	1,589.9	1,588.7	4.4	2.9	145.71	-5.1	68.0	133.9	128.0	5.84	22.928		
1,624.3	1,608.4	1,613.7	1,612.5	4.5	2.9	146.30	-5.2	69.3	138.1	132.1	5.92	23.305		
1,700.0	1,681.8	1,688.0	1,686.7	4.8	3.1	148.84	-5.7	73.4	151.4	145.3	6.19	24.468		
1,800.0	1,778.8	1,786.1	1,784.6	5.3	3.3	151.58	-6.3	78.8	169.5	163.0	6.54	25.912		
1,900.0	1,875.8	1,884.1	1,882.5	5.7	3.5	153.79	-6.9	84.2	187.9	181.0	6.89	27.249		
2,000.0	1,972.8	1,982.2	1,980.4	6.2	3.6	155.61	-7.5	89.6	206.4	199.2	7.25	28.483		
2,100.0	2,069.8	2,080.3	2,078.3	6.6	3.8	157.12	-8.1	94.9	225.2	217.6	7.60	29.622		
2,200.0	2,166.8	2,178.3	2,176.2	7.1	4.0	158.41	-8.7	100.3	244.1	236.1	7.96	30.674		
2,300.0	2,263.8	2,276.4	2,274.2	7.5	4.2	159.50	-9.3	105.7	263.0	254.7	8.31	31.646		
2,400.0	2,360.8	2,374.5	2,372.1	8.0	4.4	160.45	-9.8	111.1	282.1	273.4	8.67	32.547		
2,500.0	2,457.7	2,472.5	2,470.0	8.4	4.6	161.28	-10.4	116.5	301.2	292.2	9.02	33.382		
2,600.0	2,554.7	2,570.6	2,567.9	8.9	4.8	162.02	-11.0	121.8	320.4	311.0	9.38	34.159		
2,700.0	2,651.7	2,668.7	2,665.8	9.4	5.0	162.66	-11.6	127.2	339.6	329.9	9.74	34.883		
2,800.0	2,748.7	2,766.7	2,763.7	9.8	5.2	163.24	-12.2	132.6	358.9	348.8	10.09	35.559		
2,900.0	2,845.7	2,864.8	2,861.7	10.3	5.4	163.76	-12.8	138.0	378.2	367.7	10.45	36.191		
3,000.0	2,942.7	2,962.9	2,959.6	10.8	5.6	164.23	-13.4	143.4	397.5	386.7	10.81	36.784		
3,100.0	3,039.7	3,060.9	3,057.5	11.2	5.8	164.66	-14.0	148.7	416.9	405.7	11.16	37.340		
3,200.0	3,136.7	3,159.0	3,155.4	11.7	6.0	165.05	-14.6	154.1	436.2	424.7	11.52	37.863		
3,300.0	3,233.6	3,257.1	3,253.3	12.2	6.2	165.40	-15.2	159.5	455.6	443.7	11.88	38.356		
3,400.0	3,330.6	3,355.1	3,351.2	12.6	6.4	165.73	-15.8	164.9	475.0	462.8	12.24	38.821		
3,500.0	3,427.6	3,453.2	3,449.2	13.1	6.6	166.03	-16.4	170.3	494.4	481.8	12.59	39.260		
3,600.0	3,524.6	3,551.3	3,547.1	13.6	6.8	166.31	-17.0	175.7	513.8	500.9	12.95	39.676		
3,700.0	3,621.6	3,649.3	3,645.0	14.0	7.0	166.57	-17.6	181.0	533.3	520.0	13.31	40.071		
3,800.0	3,718.6	3,747.4	3,742.9	14.5	7.1	166.81	-18.2	186.4	552.7	539.0	13.67	40.445		
3,900.0	3,815.6	3,845.5	3,840.8	15.0	7.3	167.03	-18.8	191.8	572.2	558.1	14.02	40.800		
4,000.0	3,912.6	3,943.5	3,938.7	15.4	7.5	167.24	-19.4	197.2	591.6	577.2	14.38	41.139		
4,100.0	4,009.5	4,041.6	4,036.7	15.9	7.7	167.43	-20.0	202.6	611.1	596.3	14.74	41.461		
4,200.0	4,106.5	4,139.7	4,134.6	16.4	7.9	167.62	-20.6	207.9	630.6	615.5	15.10	41.768		
4,300.0	4,203.5	4,237.7	4,232.5	16.8	8.1	167.79	-21.2	213.3	650.0	634.6	15.45	42.061		
4,400.0	4,300.5	4,335.8	4,330.4	17.3	8.3	167.95	-21.8	218.7	669.5	653.7	15.81	42.342		
4,500.0	4,397.5	4,433.9	4,428.3	17.8	8.5	168.10	-22.4	224.1	689.0	672.8	16.17	42.610		
4,600.0	4,494.5	4,531.9	4,526.2	18.2	8.7	168.25	-23.0	229.5	708.5	692.0	16.53	42.867		
4,700.0	4,591.5	4,630.0	4,624.2	18.7	8.9	168.39	-23.6	234.8	728.0	711.1	16.89	43.113		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,800.0	4,688.5	4,728.0	4,722.1	19.2	9.1	168.52	-24.2	240.2	747.5	730.3	17.24	43.349	
4,900.0	4,785.4	4,826.1	4,820.0	19.6	9.3	168.64	-24.8	245.6	767.0	749.4	17.60	43.575	
5,000.0	4,882.4	4,924.2	4,917.9	20.1	9.5	168.76	-25.4	251.0	786.5	768.6	17.96	43.793	
5,100.0	4,979.4	5,022.2	5,015.8	20.6	9.7	168.87	-26.0	256.4	806.0	787.7	18.32	44.002	
5,200.0	5,076.4	5,120.3	5,113.7	21.0	9.9	168.97	-26.6	261.8	825.5	806.9	18.68	44.203	
5,300.0	5,173.4	5,218.4	5,211.7	21.5	10.1	169.08	-27.2	267.1	845.1	826.0	19.03	44.397	
5,400.0	5,270.4	5,316.4	5,309.6	22.0	10.3	169.17	-27.8	272.5	864.6	845.2	19.39	44.584	
5,500.0	5,367.4	5,414.5	5,407.5	22.5	10.5	169.26	-28.4	277.9	884.1	864.3	19.75	44.764	
5,600.0	5,464.4	5,512.6	5,505.4	22.9	10.7	169.35	-28.9	283.3	903.6	883.5	20.11	44.938	
5,700.0	5,561.4	5,610.6	5,603.3	23.4	10.9	169.44	-29.5	288.7	923.1	902.7	20.47	45.106	
5,800.0	5,658.3	5,708.7	5,701.2	23.9	11.0	169.52	-30.1	294.0	942.7	921.8	20.82	45.268	
5,900.0	5,755.3	5,806.8	5,799.2	24.3	11.2	169.60	-30.7	299.4	962.2	941.0	21.18	45.425	
6,000.0	5,852.3	5,904.8	5,897.1	24.8	11.4	169.67	-31.3	304.8	981.7	960.2	21.54	45.576	
6,100.0	5,949.3	6,002.9	5,995.0	25.3	11.6	169.74	-31.9	310.2	1,001.3	979.4	21.90	45.723	
6,200.0	6,046.3	6,101.0	6,092.9	25.7	11.8	169.81	-32.5	315.6	1,020.8	998.5	22.26	45.865	
6,300.0	6,143.3	6,199.0	6,190.8	26.2	12.0	169.88	-33.1	320.9	1,040.3	1,017.7	22.61	46.002	
6,400.0	6,240.3	6,297.1	6,288.7	26.7	12.2	169.94	-33.7	326.3	1,059.9	1,036.9	22.97	46.135	
6,500.0	6,337.3	6,395.2	6,386.7	27.1	12.4	170.00	-34.3	331.7	1,079.4	1,056.1	23.33	46.264	
6,600.0	6,434.2	6,493.2	6,484.6	27.6	12.6	170.06	-34.9	337.1	1,098.9	1,075.3	23.69	46.390	
6,700.0	6,531.2	6,591.3	6,582.5	28.1	12.8	170.12	-35.5	342.5	1,118.5	1,094.4	24.05	46.511	
6,800.0	6,628.2	6,689.4	6,680.4	28.5	13.0	170.18	-36.1	347.8	1,138.0	1,113.6	24.41	46.629	
6,900.0	6,725.2	6,787.4	6,778.3	29.0	13.2	170.23	-36.7	353.2	1,157.6	1,132.8	24.76	46.744	
7,000.0	6,822.2	6,885.5	6,876.2	29.5	13.4	170.28	-37.3	358.6	1,177.1	1,152.0	25.12	46.856	
7,100.0	6,919.2	6,983.6	6,974.2	30.0	13.6	170.33	-37.9	364.0	1,196.6	1,171.2	25.48	46.964	
7,200.0	7,016.2	7,081.6	7,072.1	30.4	13.8	170.38	-38.5	369.4	1,216.2	1,190.4	25.84	47.069	
7,300.0	7,113.2	7,305.5	7,294.6	30.9	14.2	171.12	-24.7	381.3	1,235.4	1,209.1	26.31	46.962	
7,328.7	7,141.0	7,724.8	7,634.9	31.0	15.5	-178.93	203.3	396.0	1,233.5	1,207.8	25.77	47.872	
7,350.0	7,161.7	7,850.4	7,695.6	31.1	16.3	178.09	313.0	397.4	1,229.4	1,202.7	26.78	45.906	
7,400.0	7,210.3	7,950.3	7,725.9	31.3	17.1	163.04	408.1	397.4	1,218.7	1,190.2	28.59	42.629	
7,450.0	7,258.7	7,972.6	7,730.4	31.5	17.3	147.07	430.0	397.3	1,209.2	1,179.8	29.39	41.144	
7,500.0	7,306.5	7,972.1	7,730.3	31.7	17.3	134.63	429.4	397.3	1,201.3	1,171.5	29.74	40.391	
7,550.0	7,353.4	7,961.9	7,728.4	31.8	17.2	125.63	419.5	397.4	1,195.2	1,165.4	29.88	40.000	
7,600.0	7,399.0	7,946.9	7,725.2	31.9	17.1	118.99	404.7	397.5	1,191.0	1,161.1	29.90	39.832	
7,650.0	7,442.9	7,929.0	7,720.9	32.0	16.9	113.87	387.4	397.5	1,188.6	1,158.7	29.85	39.812	
7,699.5	7,484.5	7,909.5	7,715.6	32.1	16.7	109.75	368.7	397.6	1,187.8	1,158.0	29.76	39.919	
7,700.0	7,484.9	7,909.3	7,715.5	32.1	16.7	109.72	368.5	397.6	1,187.8	1,158.0	29.75	39.920	
7,750.0	7,524.5	7,888.5	7,709.1	32.1	16.6	106.18	348.7	397.6	1,188.6	1,158.9	29.62	40.122	
7,800.0	7,561.6	7,866.8	7,701.7	32.1	16.4	103.07	328.3	397.5	1,190.8	1,161.3	29.47	40.402	
7,850.0	7,595.8	7,844.6	7,693.3	32.2	16.2	100.25	307.7	397.4	1,194.2	1,164.9	29.30	40.752	
7,900.0	7,626.8	7,821.9	7,684.0	32.2	16.1	97.64	287.0	397.3	1,198.8	1,169.6	29.14	41.144	
7,950.0	7,654.5	7,800.0	7,674.1	32.2	15.9	95.25	267.5	397.1	1,204.3	1,175.3	28.98	41.561	
8,000.0	7,678.5	7,775.6	7,662.4	32.3	15.8	92.91	246.1	396.8	1,210.5	1,181.7	28.80	42.036	
8,050.0	7,698.8	7,750.0	7,649.0	32.3	15.6	90.67	224.3	396.4	1,217.4	1,188.8	28.60	42.562	
8,100.0	7,715.2	7,728.6	7,637.1	32.3	15.5	88.73	206.5	396.1	1,224.6	1,196.2	28.50	42.975	
8,150.0	7,727.5	7,700.0	7,620.2	32.4	15.3	86.66	183.4	395.6	1,232.2	1,203.9	28.30	43.542	
8,200.0	7,735.6	7,681.1	7,608.4	32.4	15.3	85.08	168.7	395.2	1,239.8	1,211.6	28.26	43.865	
8,250.0	7,739.6	7,650.0	7,587.9	32.4	15.1	83.25	145.3	394.5	1,247.4	1,219.4	28.09	44.417	
8,271.7	7,740.0	7,650.0	7,587.9	32.5	15.1	82.94	145.3	394.5	1,250.6	1,222.5	28.19	44.370	
8,300.0	7,740.0	7,633.6	7,576.6	32.5	15.0	82.42	133.4	394.0	1,255.0	1,226.9	28.12	44.631	
8,400.0	7,740.0	7,600.0	7,552.5	32.7	14.9	81.32	110.0	393.1	1,274.0	1,245.8	28.18	45.211	
8,500.0	7,740.0	7,550.0	7,514.1	33.0	14.8	79.59	78.1	391.6	1,298.3	1,270.2	28.06	46.266	
8,600.0	7,740.0	7,523.7	7,492.8	33.4	14.7	78.65	62.6	390.7	1,328.1	1,299.9	28.23	47.054	

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

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Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
8,700.0	7,740.0	7,500.0	7,473.1	33.8	14.6	77.77	49.5	389.8	1,363.5	1,335.0	28.42	47.981		
8,800.0	7,740.0	7,473.3	7,450.2	34.4	14.6	76.77	35.8	388.8	1,404.1	1,375.5	28.58	49.127		
8,900.0	7,740.0	7,450.0	7,429.8	35.0	14.5	75.88	24.7	387.9	1,449.7	1,420.9	28.78	50.375		
9,000.0	7,740.0	7,450.0	7,429.8	35.7	14.5	75.88	24.7	387.9	1,500.3	1,471.0	29.21	51.362		
9,100.0	7,740.0	7,418.9	7,401.7	36.4	14.4	74.68	11.2	386.6	1,554.7	1,525.4	29.32	53.034		
9,200.0	7,740.0	7,400.0	7,384.4	37.3	14.4	73.95	3.8	385.8	1,613.4	1,583.8	29.55	54.608		
9,300.0	7,740.0	7,400.0	7,384.4	38.2	14.4	73.95	3.8	385.8	1,675.7	1,645.8	29.93	55.982		
9,400.0	7,740.0	7,380.6	7,366.4	39.1	14.4	73.19	-3.3	384.9	1,741.1	1,711.0	30.12	57.808		
9,500.0	7,740.0	7,370.3	7,356.7	40.1	14.3	72.79	-6.8	384.4	1,809.6	1,779.2	30.40	59.533		
9,600.0	7,740.0	7,350.0	7,337.4	41.2	14.3	71.99	-13.2	383.5	1,880.8	1,850.3	30.57	61.517		
9,700.0	7,740.0	7,350.0	7,337.4	42.3	14.3	71.99	-13.2	383.5	1,954.2	1,923.3	30.90	63.249		
9,800.0	7,740.0	7,350.0	7,337.4	43.5	14.3	71.99	-13.2	383.5	2,029.9	1,998.7	31.20	65.052		
9,900.0	7,740.0	7,350.0	7,337.4	44.7	14.3	71.99	-13.2	383.5	2,107.6	2,076.1	31.50	66.918		
10,000.0	7,740.0	7,350.0	7,337.4	45.9	14.3	71.99	-13.2	383.5	2,187.1	2,155.3	31.77	68.838		
10,100.0	7,740.0	7,324.9	7,313.4	47.1	14.2	71.00	-20.1	382.3	2,267.6	2,235.8	31.87	71.147		
10,200.0	7,740.0	7,300.0	7,289.2	48.4	14.2	70.03	-25.9	381.1	2,350.3	2,318.3	31.97	73.527		
10,300.0	7,740.0	7,300.0	7,289.2	49.8	14.2	70.03	-25.9	381.1	2,433.7	2,401.5	32.21	75.547		
10,400.0	7,740.0	7,300.0	7,289.2	51.1	14.2	70.03	-25.9	381.1	2,518.3	2,485.8	32.45	77.599		
10,500.0	7,740.0	7,300.0	7,289.2	52.5	14.2	70.03	-25.9	381.1	2,604.0	2,571.3	32.68	79.677		
10,600.0	7,740.0	7,300.0	7,289.2	53.9	14.2	70.03	-25.9	381.1	2,690.7	2,657.8	32.90	81.776		
10,700.0	7,740.0	7,300.0	7,289.2	55.3	14.2	70.03	-25.9	381.1	2,778.2	2,745.1	33.12	83.894		
10,800.0	7,740.0	7,300.0	7,289.2	56.7	14.2	70.03	-25.9	381.1	2,866.6	2,833.3	33.32	86.027		
10,900.0	7,740.0	7,300.0	7,289.2	58.2	14.2	70.03	-25.9	381.1	2,955.7	2,922.2	33.52	88.172		
11,000.0	7,740.0	7,300.0	7,289.2	59.7	14.2	70.03	-25.9	381.1	3,045.5	3,011.8	33.72	90.326		
11,100.0	7,740.0	7,300.0	7,289.2	61.2	14.2	70.03	-25.9	381.1	3,136.0	3,102.1	33.91	92.489		
11,200.0	7,740.0	7,300.0	7,289.2	62.7	14.2	70.03	-25.9	381.1	3,227.0	3,192.9	34.09	94.656		
11,300.0	7,740.0	7,277.2	7,266.8	64.2	14.2	69.14	-30.3	379.9	3,318.0	3,283.8	34.16	97.118		
11,400.0	7,740.0	7,274.6	7,264.2	65.7	14.2	69.04	-30.8	379.8	3,409.8	3,375.5	34.33	99.324		
11,500.0	7,740.0	7,272.1	7,261.8	67.2	14.2	68.94	-31.2	379.7	3,502.1	3,467.6	34.49	101.529		
11,600.0	7,740.0	7,250.0	7,240.0	68.8	14.1	68.09	-34.4	378.5	3,595.2	3,560.6	34.57	104.010		
11,700.0	7,740.0	7,250.0	7,240.0	70.3	14.1	68.09	-34.4	378.5	3,688.2	3,653.4	34.74	106.177		
11,800.0	7,740.0	7,250.0	7,240.0	71.9	14.1	68.09	-34.4	378.5	3,781.5	3,746.6	34.90	108.343		
11,900.0	7,740.0	7,250.0	7,240.0	73.5	14.1	68.09	-34.4	378.5	3,875.2	3,840.1	35.07	110.506		
12,000.0	7,740.0	7,250.0	7,240.0	75.1	14.1	68.09	-34.4	378.5	3,969.2	3,933.9	35.23	112.665		
12,100.0	7,740.0	7,250.0	7,240.0	76.6	14.1	68.09	-34.4	378.5	4,063.4	4,028.0	35.39	114.820		
12,200.0	7,740.0	7,250.0	7,240.0	78.2	14.1	68.09	-34.4	378.5	4,158.0	4,122.4	35.55	116.971		
12,300.0	7,740.0	7,250.0	7,240.0	79.8	14.1	68.09	-34.4	378.5	4,252.8	4,217.1	35.70	119.116		
12,400.0	7,740.0	7,250.0	7,240.0	81.5	14.1	68.09	-34.4	378.5	4,347.8	4,311.9	35.86	121.254		
12,500.0	7,740.0	7,250.0	7,240.0	83.1	14.1	68.09	-34.4	378.5	4,443.0	4,407.0	36.01	123.387		
12,600.0	7,740.0	7,250.0	7,240.0	84.7	14.1	68.09	-34.4	378.5	4,538.5	4,502.3	36.16	125.513		
12,700.0	7,740.0	7,250.0	7,240.0	86.3	14.1	68.09	-34.4	378.5	4,634.1	4,597.8	36.31	127.631		
12,800.0	7,740.0	7,250.0	7,240.0	88.0	14.1	68.09	-34.4	378.5	4,729.9	4,693.5	36.46	129.743		
12,900.0	7,740.0	7,250.0	7,240.0	89.6	14.1	68.09	-34.4	378.5	4,825.9	4,789.3	36.60	131.846		
13,000.0	7,740.0	7,250.0	7,240.0	91.2	14.1	68.09	-34.4	378.5	4,922.0	4,885.3	36.75	133.942		
13,100.0	7,740.0	7,250.0	7,240.0	92.9	14.1	68.09	-34.4	378.5	5,018.3	4,981.5	36.89	136.029		
13,200.0	7,740.0	7,250.0	7,240.0	94.5	14.1	68.09	-34.4	378.5	5,114.8	5,077.8	37.03	138.109		
13,300.0	7,740.0	7,250.0	7,240.0	96.2	14.1	68.09	-34.4	378.5	5,211.4	5,174.2	37.18	140.179		
13,400.0	7,740.0	7,250.0	7,240.0	97.8	14.1	68.09	-34.4	378.5	5,308.1	5,270.7	37.32	142.241		
13,500.0	7,740.0	7,250.0	7,240.0	99.5	14.1	68.09	-34.4	378.5	5,404.9	5,367.4	37.46	144.295		
13,600.0	7,740.0	7,250.0	7,240.0	101.2	14.1	68.09	-34.4	378.5	5,501.8	5,464.2	37.60	146.339		
13,700.0	7,740.0	7,250.0	7,240.0	102.8	14.1	68.09	-34.4	378.5	5,598.9	5,561.1	37.73	148.375		
13,800.0	7,740.0	7,250.0	7,240.0	104.5	14.1	68.09	-34.4	378.5	5,696.0	5,658.1	37.87	150.401		

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)
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Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
13,900.0	7,740.0	7,250.0	7,240.0	106.2	14.1	68.09	-34.4	378.5	5,793.2	5,755.2	38.01	152.418	
14,000.0	7,740.0	7,250.0	7,240.0	107.8	14.1	68.09	-34.4	378.5	5,890.6	5,852.4	38.14	154.427	
14,100.0	7,740.0	7,250.0	7,240.0	109.5	14.1	68.09	-34.4	378.5	5,988.0	5,949.7	38.28	156.426	
14,200.0	7,740.0	7,250.0	7,240.0	111.2	14.1	68.09	-34.4	378.5	6,085.5	6,047.1	38.41	158.415	
14,300.0	7,740.0	7,250.0	7,240.0	112.9	14.1	68.09	-34.4	378.5	6,183.1	6,144.5	38.55	160.396	
14,400.0	7,740.0	7,250.0	7,240.0	114.6	14.1	68.09	-34.4	378.5	6,280.8	6,242.1	38.68	162.367	
14,500.0	7,740.0	7,250.0	7,240.0	116.3	14.1	68.09	-34.4	378.5	6,378.5	6,339.7	38.82	164.329	
14,600.0	7,740.0	7,250.0	7,240.0	117.9	14.1	68.09	-34.4	378.5	6,476.3	6,437.3	38.95	166.282	
14,700.0	7,740.0	7,250.0	7,240.0	119.6	14.1	68.09	-34.4	378.5	6,574.2	6,535.1	39.08	168.225	
14,800.0	7,740.0	7,250.0	7,240.0	121.3	14.1	68.09	-34.4	378.5	6,672.1	6,632.9	39.21	170.160	
14,900.0	7,740.0	7,250.0	7,240.0	123.0	14.1	68.09	-34.4	378.5	6,770.1	6,730.7	39.34	172.085	
15,000.0	7,740.0	7,250.0	7,240.0	124.7	14.1	68.09	-34.4	378.5	6,868.1	6,828.7	39.47	174.000	
15,100.0	7,740.0	7,226.3	7,216.5	126.4	14.1	67.18	-37.0	377.3	6,965.7	6,926.2	39.53	176.232	
15,200.0	7,740.0	7,225.7	7,215.8	128.1	14.1	67.16	-37.0	377.2	7,063.8	7,024.2	39.65	178.140	
15,300.0	7,740.0	7,225.1	7,215.2	129.8	14.1	67.13	-37.1	377.2	7,162.0	7,122.2	39.78	180.037	
15,400.0	7,740.0	7,224.4	7,214.6	131.5	14.1	67.11	-37.1	377.2	7,260.3	7,220.3	39.91	181.926	
15,500.0	7,740.0	7,223.8	7,214.0	133.2	14.1	67.09	-37.2	377.1	7,358.5	7,318.5	40.03	183.805	
15,600.0	7,740.0	7,223.2	7,213.4	134.9	14.1	67.07	-37.2	377.1	7,456.9	7,416.7	40.16	185.675	
15,700.0	7,740.0	7,200.0	7,190.3	136.6	14.0	66.19	-38.6	375.9	7,555.7	7,515.5	40.22	187.878	
15,800.0	7,740.0	7,200.0	7,190.3	138.3	14.0	66.19	-38.6	375.9	7,654.1	7,613.7	40.34	189.722	
15,900.0	7,740.0	7,200.0	7,190.3	140.0	14.0	66.19	-38.6	375.9	7,752.5	7,712.0	40.47	191.558	
16,000.0	7,740.0	7,200.0	7,190.3	141.7	14.0	66.19	-38.6	375.9	7,851.0	7,810.4	40.60	193.384	
16,100.0	7,740.0	7,200.0	7,190.3	143.5	14.0	66.19	-38.6	375.9	7,949.5	7,908.8	40.72	195.201	
16,171.7	7,740.0	7,200.0	7,190.3	144.7	14.0	66.19	-38.6	375.9	8,020.1	7,979.3	40.82	196.498	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
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		
150.0	150.0	150.0	150.0	0.2	0.2	90.02	0.0	29.9	29.9	29.5	0.48	62.622 CC		
150.0	150.0	150.0	150.0	0.2	0.2	90.02	0.0	29.9	29.9	29.5	0.48	62.621		
200.0	200.0	200.0	200.0	0.3	0.3	91.28	0.0	29.9	30.0	29.3	0.65	45.834 ES		
283.3	283.2	283.2	283.2	0.5	0.5	98.83	0.0	29.9	30.3	29.3	0.96	31.598		
300.0	299.9	299.9	299.9	0.5	0.5	98.62	0.0	29.9	30.5	29.5	1.02	29.849		
400.0	399.6	399.6	399.6	0.7	0.7	97.90	0.0	29.9	31.5	30.1	1.40	22.527		
500.0	499.3	499.3	499.3	0.9	0.8	99.48	0.0	29.9	32.6	30.8	1.78	18.362		
600.0	598.9	598.5	598.5	1.2	1.0	103.01	-0.1	30.8	34.9	32.8	2.15	16.226		
700.0	698.5	697.8	697.7	1.4	1.2	106.67	-0.4	33.3	39.0	36.5	2.53	15.420		
800.0	797.9	797.0	796.9	1.6	1.4	109.71	-0.8	37.6	44.6	41.6	2.92	15.259 SF		
900.0	897.1	896.4	896.0	1.9	1.6	111.97	-1.5	43.6	51.2	47.8	3.33	15.372		
1,000.0	996.2	995.7	995.1	2.2	1.8	113.58	-2.3	51.3	58.5	54.8	3.76	15.570		
1,100.0	1,095.0	1,095.2	1,094.1	2.5	2.0	114.86	-3.3	60.5	66.5	62.3	4.22	15.772		
1,200.0	1,193.6	1,194.7	1,193.1	2.8	2.2	116.88	-4.3	69.9	74.9	70.2	4.69	15.990		
1,300.0	1,291.9	1,294.0	1,292.1	3.2	2.4	119.54	-5.3	79.4	83.9	78.8	5.15	16.286		
1,400.0	1,389.9	1,393.3	1,390.8	3.5	2.7	122.62	-6.3	88.8	93.8	88.1	5.61	16.701		
1,500.0	1,487.6	1,492.3	1,489.4	3.9	2.9	125.89	-7.4	98.2	104.7	98.6	6.06	17.262		
1,600.0	1,584.8	1,591.1	1,587.8	4.4	3.1	129.22	-8.4	107.6	116.8	110.3	6.50	17.978		
1,624.3	1,608.4	1,615.1	1,611.7	4.5	3.2	130.02	-8.6	109.9	120.0	113.4	6.60	18.180		
1,700.0	1,681.8	1,689.8	1,686.0	4.8	3.3	133.21	-9.4	116.9	130.2	123.3	6.91	18.835		
1,800.0	1,778.8	1,788.5	1,784.3	5.3	3.6	136.71	-10.4	126.3	144.2	136.8	7.32	19.696		
1,900.0	1,875.8	1,887.2	1,882.5	5.7	3.8	139.59	-11.4	135.7	158.6	150.8	7.72	20.533		
2,000.0	1,972.8	1,985.8	1,980.7	6.2	4.0	141.99	-12.4	145.1	173.3	165.2	8.12	21.332		
2,100.0	2,069.8	2,084.5	2,078.9	6.6	4.3	144.01	-13.4	154.4	188.3	179.7	8.52	22.089		
2,200.0	2,166.8	2,183.2	2,177.1	7.1	4.5	145.73	-14.4	163.8	203.4	194.5	8.92	22.801		
2,300.0	2,263.8	2,281.8	2,275.4	7.5	4.7	147.22	-15.4	173.2	218.8	209.5	9.32	23.470		
2,400.0	2,360.8	2,380.5	2,373.6	8.0	5.0	148.51	-16.4	182.6	234.2	224.5	9.72	24.097		
2,500.0	2,457.7	2,479.2	2,471.8	8.4	5.2	149.63	-17.5	191.9	249.8	239.7	10.12	24.685		
2,600.0	2,554.7	2,577.8	2,570.0	8.9	5.4	150.63	-18.5	201.3	265.4	254.9	10.52	25.236		
2,700.0	2,651.7	2,676.5	2,668.2	9.4	5.7	151.52	-19.5	210.7	281.2	270.2	10.92	25.752		
2,800.0	2,748.7	2,775.2	2,766.4	9.8	5.9	152.31	-20.5	220.0	296.9	285.6	11.32	26.238		
2,900.0	2,845.7	2,873.9	2,864.7	10.3	6.2	153.02	-21.5	229.4	312.8	301.0	11.72	26.694		
3,000.0	2,942.7	2,972.5	2,962.9	10.8	6.4	153.66	-22.5	238.8	328.6	316.5	12.12	27.123		
3,100.0	3,039.7	3,071.2	3,061.1	11.2	6.6	154.25	-23.5	248.2	344.5	332.0	12.52	27.527		
3,200.0	3,136.7	3,169.9	3,159.3	11.7	6.9	154.78	-24.5	257.5	360.4	347.5	12.92	27.909		
3,300.0	3,233.6	3,268.5	3,257.5	12.2	7.1	155.27	-25.5	266.9	376.4	363.1	13.32	28.269		
3,400.0	3,330.6	3,367.2	3,355.8	12.6	7.3	155.72	-26.5	276.3	392.4	378.7	13.72	28.610		
3,500.0	3,427.6	3,465.9	3,454.0	13.1	7.6	156.13	-27.5	285.7	408.4	394.3	14.12	28.933		
3,600.0	3,524.6	3,564.5	3,552.2	13.6	7.8	156.51	-28.6	295.0	424.4	409.9	14.52	29.239		
3,700.0	3,621.6	3,663.2	3,650.4	14.0	8.0	156.86	-29.6	304.4	440.5	425.6	14.92	29.530		
3,800.0	3,718.6	3,761.9	3,748.6	14.5	8.3	157.19	-30.6	313.8	456.5	441.2	15.32	29.807		
3,900.0	3,815.6	3,860.5	3,846.8	15.0	8.5	157.50	-31.6	323.1	472.6	456.9	15.72	30.070		
4,000.0	3,912.6	3,959.2	3,945.1	15.4	8.8	157.79	-32.6	332.5	488.7	472.6	16.12	30.320		
4,100.0	4,009.5	4,057.9	4,043.3	15.9	9.0	158.06	-33.6	341.9	504.8	488.3	16.52	30.559		
4,200.0	4,106.5	4,156.6	4,141.5	16.4	9.2	158.31	-34.6	351.3	520.9	504.0	16.92	30.787		
4,300.0	4,203.5	4,255.2	4,239.7	16.8	9.5	158.54	-35.6	360.6	537.0	519.7	17.32	31.005		
4,400.0	4,300.5	4,353.9	4,337.9	17.3	9.7	158.77	-36.6	370.0	553.1	535.4	17.72	31.214		
4,500.0	4,397.5	4,452.6	4,436.2	17.8	9.9	158.98	-37.6	379.4	569.3	551.1	18.12	31.413		
4,600.0	4,494.5	4,551.2	4,534.4	18.2	10.2	159.18	-38.6	388.8	585.4	566.9	18.52	31.604		
4,700.0	4,591.5	4,649.9	4,632.6	18.7	10.4	159.36	-39.7	398.1	601.5	582.6	18.92	31.788		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,800.0	4,688.5	4,748.6	4,730.8	19.2	10.7	159.54	-40.7	407.5	617.7	598.4	19.32	31.964	
4,900.0	4,785.4	4,847.2	4,829.0	19.6	10.9	159.71	-41.7	416.9	633.8	614.1	19.73	32.133	
5,000.0	4,882.4	4,945.9	4,927.2	20.1	11.1	159.87	-42.7	426.2	650.0	629.9	20.13	32.295	
5,100.0	4,979.4	5,044.6	5,025.5	20.6	11.4	160.02	-43.7	435.6	666.2	645.6	20.53	32.451	
5,200.0	5,076.4	5,143.3	5,123.7	21.0	11.6	160.17	-44.7	445.0	682.3	661.4	20.93	32.602	
5,300.0	5,173.4	5,241.9	5,221.9	21.5	11.9	160.31	-45.7	454.4	698.5	677.2	21.33	32.747	
5,400.0	5,270.4	5,340.6	5,320.1	22.0	12.1	160.44	-46.7	463.7	714.7	693.0	21.73	32.887	
5,500.0	5,367.4	5,439.3	5,418.3	22.5	12.3	160.57	-47.7	473.1	730.9	708.7	22.13	33.021	
5,600.0	5,464.4	5,537.9	5,516.6	22.9	12.6	160.69	-48.7	482.5	747.1	724.5	22.53	33.151	
5,700.0	5,561.4	5,636.6	5,614.8	23.4	12.8	160.81	-49.7	491.9	763.2	740.3	22.94	33.277	
5,800.0	5,658.3	5,735.3	5,713.0	23.9	13.0	160.92	-50.8	501.2	779.4	756.1	23.34	33.398	
5,900.0	5,755.3	5,833.9	5,811.2	24.3	13.3	161.02	-51.8	510.6	795.6	771.9	23.74	33.516	
6,000.0	5,852.3	5,932.6	5,909.4	24.8	13.5	161.13	-52.8	520.0	811.8	787.7	24.14	33.629	
6,100.0	5,949.3	6,031.3	6,007.6	25.3	13.8	161.22	-53.8	529.3	828.0	803.5	24.54	33.739	
6,200.0	6,046.3	6,129.9	6,105.9	25.7	14.0	161.32	-54.8	538.7	844.2	819.3	24.94	33.846	
6,300.0	6,143.3	6,228.6	6,204.1	26.2	14.2	161.41	-55.8	548.1	860.4	835.1	25.34	33.949	
6,400.0	6,240.3	6,327.3	6,302.3	26.7	14.5	161.50	-56.8	557.5	876.6	850.9	25.75	34.049	
6,500.0	6,337.3	6,426.0	6,400.5	27.1	14.7	161.58	-57.8	566.8	892.8	866.7	26.15	34.146	
6,600.0	6,434.2	6,524.6	6,498.7	27.6	14.9	161.66	-58.8	576.2	909.0	882.5	26.55	34.240	
6,700.0	6,531.2	6,623.3	6,597.0	28.1	15.2	161.74	-59.8	585.6	925.3	898.3	26.95	34.331	
6,800.0	6,628.2	6,722.0	6,695.2	28.5	15.4	161.82	-60.8	595.0	941.5	914.1	27.35	34.419	
6,900.0	6,725.2	6,820.6	6,793.4	29.0	15.7	161.89	-61.9	604.3	957.7	929.9	27.75	34.506	
7,000.0	6,822.2	6,919.3	6,891.6	29.5	15.9	161.96	-62.9	613.7	973.9	945.7	28.16	34.589	
7,100.0	6,919.2	7,018.2	7,000.0	30.0	20.2	-164.04	519.8	677.9	946.6	918.3	28.34	33.398	
7,200.0	7,016.2	7,115.9	7,000.0	30.4	20.3	-163.52	527.5	678.0	909.9	880.1	29.82	30.516	
7,300.0	7,113.2	7,213.6	7,000.0	30.9	20.4	-163.01	535.2	678.1	883.0	851.8	31.19	28.313	
7,328.7	7,141.0	7,241.8	7,000.0	31.0	20.4	-162.86	537.5	678.1	877.2	845.6	31.55	27.806	
7,350.0	7,161.7	7,262.4	7,000.0	31.1	20.4	-170.81	538.7	678.1	873.5	841.7	31.79	27.475	
7,400.0	7,210.3	7,310.9	7,000.0	31.3	20.4	-169.18	538.5	678.1	866.8	834.5	32.24	26.881	
7,450.0	7,258.7	7,359.4	7,000.0	31.5	20.3	-151.26	534.0	678.1	862.9	830.4	32.53	26.528	
7,490.9	7,297.8	7,398.5	7,000.0	31.6	20.3	-139.76	527.1	678.0	862.0	829.4	32.63	26.417	
7,500.0	7,306.5	7,407.2	7,000.0	31.7	20.3	-137.56	525.2	678.0	862.0	829.4	32.64	26.411	
7,550.0	7,353.4	7,454.1	7,000.0	31.8	20.1	-127.41	512.1	677.8	863.9	831.3	32.57	26.524	
7,600.0	7,399.0	7,500.7	7,000.0	31.9	20.0	-119.51	494.3	677.6	868.4	836.0	32.32	26.865	
7,650.0	7,442.9	7,543.6	7,000.0	32.0	19.8	-113.14	475.2	677.4	875.1	843.1	32.02	27.333	
7,700.0	7,484.9	7,586.1	7,000.0	32.1	19.6	-107.75	455.2	677.0	883.8	852.2	31.68	27.903	
7,750.0	7,524.5	7,626.2	7,000.0	32.1	19.4	-102.99	434.6	676.6	894.3	863.0	31.33	28.549	
7,800.0	7,561.6	7,663.5	7,000.0	32.1	19.3	-98.69	413.6	676.0	906.3	875.3	30.97	29.262	
7,850.0	7,595.8	7,698.8	7,000.0	32.2	19.1	-94.73	392.3	675.4	919.4	888.8	30.63	30.019	
7,900.0	7,626.8	7,730.8	7,000.0	32.2	18.9	-91.04	370.9	674.8	933.3	903.0	30.30	30.803	
7,950.0	7,654.5	7,760.0	7,000.0	32.2	18.8	-87.82	353.6	674.1	947.9	917.8	30.13	31.459	
8,000.0	7,678.5	7,786.0	7,000.0	32.3	18.6	-84.42	327.8	673.1	962.8	933.0	29.73	32.386	
8,050.0	7,698.8	7,807.3	7,000.0	32.3	18.4	-81.46	306.2	672.1	977.7	948.2	29.48	33.165	
8,100.0	7,715.2	7,823.7	7,000.0	32.3	18.3	-78.77	285.2	671.1	992.5	963.2	29.29	33.882	
8,150.0	7,727.5	7,836.0	7,000.0	32.4	18.1	-76.16	260.3	669.8	1,007.0	978.0	29.01	34.710	
8,200.0	7,735.6	7,844.1	7,000.0	32.4	18.0	-74.10	243.4	668.8	1,020.8	991.8	29.02	35.182	
8,250.0	7,739.6	7,849.1	7,000.0	32.4	17.8	-71.94	216.3	667.1	1,034.1	1,005.3	28.73	35.998	
8,271.7	7,740.0	7,850.0	7,000.0	32.5	17.8	-71.46	216.3	667.1	1,039.4	1,010.5	28.97	35.879	
8,300.0	7,740.0	7,850.0	7,000.0	32.5	17.7	-71.04	203.3	666.2	1,046.6	1,017.7	28.90	36.220	
8,400.0	7,740.0	7,850.0	7,000.0	32.7	17.5	-70.06	174.5	664.0	1,075.5	1,046.4	29.12	36.937	
8,500.0	7,740.0	7,850.0	7,000.0	33.0	17.3	-68.51	135.3	660.7	1,109.6	1,080.6	28.96	38.310	
8,600.0	7,740.0	7,850.0	7,000.0	33.4	17.2	-67.46	111.7	658.4	1,149.0	1,119.7	29.25	39.282	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,700.0	7,740.0	7,400.0	7,327.6	33.8	17.1	66.85	98.9	657.0	1,193.6	1,163.8	29.83	40.018	
8,800.0	7,740.0	7,350.0	7,290.5	34.4	16.9	65.10	65.7	653.2	1,242.9	1,213.2	29.69	41.858	
8,900.0	7,740.0	7,334.1	7,278.1	35.0	16.9	64.53	55.8	651.9	1,296.7	1,266.4	30.26	42.849	
9,000.0	7,740.0	7,300.0	7,250.6	35.7	16.8	63.29	35.8	649.0	1,354.8	1,324.4	30.45	44.501	
9,100.0	7,740.0	7,300.0	7,250.6	36.4	16.8	63.29	35.8	649.0	1,416.6	1,385.4	31.23	45.362	
9,200.0	7,740.0	7,273.2	7,228.2	37.3	16.7	62.30	21.3	646.7	1,481.9	1,450.4	31.48	47.071	
9,300.0	7,740.0	7,250.0	7,208.3	38.2	16.7	61.44	9.5	644.7	1,550.4	1,518.6	31.79	48.775	
9,400.0	7,740.0	7,250.0	7,208.3	39.1	16.7	61.44	9.5	644.7	1,621.6	1,589.2	32.41	50.029	
9,500.0	7,740.0	7,227.9	7,189.0	40.1	16.6	60.62	-0.9	642.8	1,695.3	1,662.7	32.63	51.956	
9,600.0	7,740.0	7,200.0	7,163.9	41.2	16.5	59.58	-12.9	640.2	1,771.5	1,738.7	32.82	53.973	
9,700.0	7,740.0	7,200.0	7,163.9	42.3	16.5	59.58	-12.9	640.2	1,849.3	1,815.9	33.33	55.488	
9,800.0	7,740.0	7,200.0	7,163.9	43.5	16.5	59.58	-12.9	640.2	1,929.1	1,895.3	33.79	57.088	
9,900.0	7,740.0	7,200.0	7,163.9	44.7	16.5	59.58	-12.9	640.2	2,010.7	1,976.5	34.22	58.760	
10,000.0	7,740.0	7,174.6	7,140.7	45.9	16.5	58.65	-22.8	637.9	2,093.2	2,058.9	34.34	60.953	
10,100.0	7,740.0	7,150.0	7,117.7	47.1	16.4	57.74	-31.4	635.6	2,177.6	2,143.2	34.44	63.226	
10,200.0	7,740.0	7,150.0	7,117.7	48.4	16.4	57.74	-31.4	635.6	2,262.7	2,227.9	34.80	65.018	
10,300.0	7,740.0	7,150.0	7,117.7	49.8	16.4	57.74	-31.4	635.6	2,349.0	2,313.9	35.14	66.853	
10,400.0	7,740.0	7,150.0	7,117.7	51.1	16.4	57.74	-31.4	635.6	2,436.3	2,400.9	35.45	68.722	
10,500.0	7,740.0	7,150.0	7,117.7	52.5	16.4	57.74	-31.4	635.6	2,524.6	2,488.8	35.75	70.622	
10,600.0	7,740.0	7,150.0	7,117.7	53.9	16.4	57.74	-31.4	635.6	2,613.7	2,577.7	36.03	72.547	
10,700.0	7,740.0	7,126.9	7,095.8	55.3	16.4	56.90	-38.5	633.5	2,703.0	2,666.9	36.10	74.875	
10,800.0	7,740.0	7,121.7	7,090.9	56.7	16.4	56.71	-40.0	633.0	2,793.3	2,757.0	36.31	76.919	
10,900.0	7,740.0	7,100.0	7,070.0	58.2	16.3	55.93	-45.7	630.9	2,884.5	2,848.1	36.39	79.271	
11,000.0	7,740.0	7,100.0	7,070.0	59.7	16.3	55.93	-45.7	630.9	2,975.8	2,939.1	36.63	81.244	
11,100.0	7,740.0	7,100.0	7,070.0	61.2	16.3	55.93	-45.7	630.9	3,067.6	3,030.7	36.86	83.229	
11,200.0	7,740.0	7,100.0	7,070.0	62.7	16.3	55.93	-45.7	630.9	3,159.9	3,122.8	37.08	85.222	
11,300.0	7,740.0	7,100.0	7,070.0	64.2	16.3	55.93	-45.7	630.9	3,252.7	3,215.4	37.29	87.223	
11,400.0	7,740.0	7,100.0	7,070.0	65.7	16.3	55.93	-45.7	630.9	3,345.9	3,308.4	37.50	89.229	
11,500.0	7,740.0	7,100.0	7,070.0	67.2	16.3	55.93	-45.7	630.9	3,439.5	3,401.8	37.70	91.239	
11,600.0	7,740.0	7,100.0	7,070.0	68.8	16.3	55.93	-45.7	630.9	3,533.4	3,495.5	37.89	93.251	
11,700.0	7,740.0	7,100.0	7,070.0	70.3	16.3	55.93	-45.7	630.9	3,627.7	3,589.6	38.08	95.266	
11,800.0	7,740.0	7,100.0	7,070.0	71.9	16.3	55.93	-45.7	630.9	3,722.2	3,684.0	38.26	97.280	
11,900.0	7,740.0	7,100.0	7,070.0	73.5	16.3	55.93	-45.7	630.9	3,817.1	3,778.6	38.44	99.294	
12,000.0	7,740.0	7,077.3	7,048.0	75.1	16.3	55.12	-50.9	628.8	3,911.6	3,873.2	38.48	101.655	
12,100.0	7,740.0	7,074.6	7,045.4	76.6	16.3	55.03	-51.4	628.5	4,006.8	3,968.2	38.64	103.705	
12,200.0	7,740.0	7,072.1	7,043.0	78.2	16.3	54.94	-51.9	628.3	4,102.3	4,063.5	38.79	105.751	
12,300.0	7,740.0	7,050.0	7,021.3	79.8	16.2	54.17	-55.9	626.2	4,198.3	4,159.4	38.83	108.116	
12,400.0	7,740.0	7,050.0	7,021.3	81.5	16.2	54.17	-55.9	626.2	4,294.0	4,255.0	39.00	110.112	
12,500.0	7,740.0	7,050.0	7,021.3	83.1	16.2	54.17	-55.9	626.2	4,389.9	4,350.8	39.16	112.104	
12,600.0	7,740.0	7,050.0	7,021.3	84.7	16.2	54.17	-55.9	626.2	4,486.0	4,446.7	39.32	114.092	
12,700.0	7,740.0	7,050.0	7,021.3	86.3	16.2	54.17	-55.9	626.2	4,582.3	4,542.8	39.48	116.075	
12,800.0	7,740.0	7,050.0	7,021.3	88.0	16.2	54.17	-55.9	626.2	4,678.7	4,639.1	39.63	118.053	
12,900.0	7,740.0	7,050.0	7,021.3	89.6	16.2	54.17	-55.9	626.2	4,775.3	4,735.5	39.79	120.026	
13,000.0	7,740.0	7,050.0	7,021.3	91.2	16.2	54.17	-55.9	626.2	4,872.0	4,832.0	39.94	121.993	
13,100.0	7,740.0	7,050.0	7,021.3	92.9	16.2	54.17	-55.9	626.2	4,968.8	4,928.7	40.09	123.954	
13,200.0	7,740.0	7,050.0	7,021.3	94.5	16.2	54.17	-55.9	626.2	5,065.8	5,025.5	40.23	125.909	
13,300.0	7,740.0	7,050.0	7,021.3	96.2	16.2	54.17	-55.9	626.2	5,162.8	5,122.5	40.38	127.858	
13,400.0	7,740.0	7,050.0	7,021.3	97.8	16.2	54.17	-55.9	626.2	5,260.0	5,219.5	40.52	129.800	
13,500.0	7,740.0	7,050.0	7,021.3	99.5	16.2	54.17	-55.9	626.2	5,357.3	5,316.6	40.67	131.735	
13,600.0	7,740.0	7,050.0	7,021.3	101.2	16.2	54.17	-55.9	626.2	5,454.7	5,413.9	40.81	133.664	
13,700.0	7,740.0	7,050.0	7,021.3	102.8	16.2	54.17	-55.9	626.2	5,552.2	5,511.2	40.95	135.585	
13,800.0	7,740.0	7,050.0	7,021.3	104.5	16.2	54.17	-55.9	626.2	5,649.7	5,608.7	41.09	137.500	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,900.0	7,740.0	7,050.0	7,021.3	106.2	16.2	54.17	-55.9	626.2	5,747.4	5,706.2	41.23	139.407		
14,000.0	7,740.0	7,050.0	7,021.3	107.8	16.2	54.17	-55.9	626.2	5,845.1	5,803.8	41.36	141.307		
14,100.0	7,740.0	7,050.0	7,021.3	109.5	16.2	54.17	-55.9	626.2	5,942.9	5,901.4	41.50	143.200		
14,200.0	7,740.0	7,050.0	7,021.3	111.2	16.2	54.17	-55.9	626.2	6,040.8	5,999.2	41.64	145.085		
14,300.0	7,740.0	7,050.0	7,021.3	112.9	16.2	54.17	-55.9	626.2	6,138.8	6,097.0	41.77	146.963		
14,400.0	7,740.0	7,050.0	7,021.3	114.6	16.2	54.17	-55.9	626.2	6,236.8	6,194.9	41.90	148.833		
14,500.0	7,740.0	7,050.0	7,021.3	116.3	16.2	54.17	-55.9	626.2	6,334.8	6,292.8	42.04	150.696		
14,600.0	7,740.0	7,050.0	7,021.3	117.9	16.2	54.17	-55.9	626.2	6,433.0	6,390.8	42.17	152.551		
14,700.0	7,740.0	7,050.0	7,021.3	119.6	16.2	54.17	-55.9	626.2	6,531.2	6,488.9	42.30	154.399		
14,800.0	7,740.0	7,050.0	7,021.3	121.3	16.2	54.17	-55.9	626.2	6,629.4	6,587.0	42.43	156.238		
14,900.0	7,740.0	7,050.0	7,021.3	123.0	16.2	54.17	-55.9	626.2	6,727.7	6,685.1	42.56	158.071		
15,000.0	7,740.0	7,050.0	7,021.3	124.7	16.2	54.17	-55.9	626.2	6,826.1	6,783.4	42.69	159.895		
15,100.0	7,740.0	7,050.0	7,021.3	126.4	16.2	54.17	-55.9	626.2	6,924.4	6,881.6	42.82	161.712		
15,200.0	7,740.0	7,026.9	6,998.5	128.1	16.2	53.38	-59.1	624.0	7,022.4	6,979.5	42.85	163.892		
15,300.0	7,740.0	7,026.0	6,997.7	129.8	16.2	53.35	-59.2	623.9	7,120.8	7,077.9	42.97	165.709		
15,400.0	7,740.0	7,025.1	6,996.8	131.5	16.1	53.32	-59.3	623.8	7,219.3	7,176.2	43.10	167.518		
15,500.0	7,740.0	7,024.3	6,995.9	133.2	16.1	53.29	-59.4	623.7	7,317.8	7,274.6	43.22	169.319		
15,600.0	7,740.0	7,023.4	6,995.1	134.9	16.1	53.26	-59.5	623.6	7,416.4	7,373.1	43.34	171.112		
15,700.0	7,740.0	7,000.0	6,971.9	136.6	16.1	52.48	-61.7	621.4	7,515.5	7,472.1	43.37	173.288		
15,800.0	7,740.0	7,000.0	6,971.9	138.3	16.1	52.48	-61.7	621.4	7,614.1	7,570.6	43.50	175.052		
15,900.0	7,740.0	7,000.0	6,971.9	140.0	16.1	52.48	-61.7	621.4	7,712.7	7,669.1	43.62	176.809		
16,000.0	7,740.0	7,000.0	6,971.9	141.7	16.1	52.48	-61.7	621.4	7,811.4	7,767.6	43.75	178.558		
16,100.0	7,740.0	7,000.0	6,971.9	143.5	16.1	52.48	-61.7	621.4	7,910.1	7,866.2	43.87	180.300		
16,171.7	7,740.0	7,000.0	6,971.9	144.7	16.1	52.48	-61.7	621.4	7,980.8	7,936.9	43.96	181.543		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.01	0.0	37.5	37.5					
100.0	100.0	100.0	100.0	0.2	0.2	90.01	0.0	37.5	37.5	37.2	0.30	123.495		
150.0	150.0	150.0	150.0	0.2	0.2	90.01	0.0	37.5	37.5	37.0	0.48	78.424 CC		
150.2	150.2	150.2	150.2	0.2	0.2	90.01	0.0	37.5	37.5	37.0	0.48	78.325		
200.0	200.0	200.0	200.0	0.3	0.3	91.01	0.0	37.5	37.5	36.9	0.65	57.394		
283.3	283.2	283.2	283.2	0.5	0.5	97.06	0.0	37.5	37.8	36.8	0.96	39.395 ES		
300.0	299.9	299.9	299.9	0.5	0.5	96.43	0.0	37.5	37.9	36.9	1.02	37.128		
400.0	399.6	399.6	399.6	0.7	0.7	93.32	0.0	37.5	38.5	37.1	1.40	27.511		
500.0	499.3	498.7	498.7	0.9	0.8	92.06	-0.1	38.4	39.6	37.9	1.78	22.242		
600.0	598.9	597.8	597.8	1.2	1.0	92.35	-0.2	40.9	42.2	40.0	2.17	19.419		
700.0	698.5	696.9	696.8	1.4	1.2	93.52	-0.5	45.2	45.9	43.3	2.57	17.860		
800.0	797.9	796.1	795.8	1.6	1.4	95.01	-0.9	51.2	50.7	47.7	2.99	16.967		
900.0	897.1	895.2	894.6	1.9	1.6	96.49	-1.5	58.8	56.3	52.9	3.43	16.416		
1,000.0	996.2	994.4	993.3	2.2	1.8	97.81	-2.1	68.2	62.6	58.7	3.91	16.031		
1,100.0	1,095.0	1,093.6	1,091.9	2.5	2.1	98.94	-2.8	79.3	69.4	65.0	4.42	15.717		
1,200.0	1,193.6	1,193.2	1,190.7	2.8	2.3	100.44	-3.7	91.4	76.5	71.5	4.96	15.421		
1,300.0	1,291.9	1,292.7	1,289.6	3.2	2.6	102.83	-4.5	103.5	83.6	78.0	5.52	15.146		
1,400.0	1,389.9	1,392.2	1,388.3	3.5	2.8	105.90	-5.3	115.6	90.9	84.9	6.08	14.954		
1,500.0	1,487.6	1,491.5	1,486.8	3.9	3.1	109.47	-6.1	127.7	98.9	92.3	6.64	14.890 SF		
1,600.0	1,584.8	1,590.7	1,585.3	4.4	3.3	113.36	-7.0	139.8	107.7	100.5	7.19	14.985		
1,624.3	1,608.4	1,614.7	1,609.1	4.5	3.4	114.34	-7.2	142.7	110.0	102.7	7.32	15.039		
1,700.0	1,681.8	1,689.7	1,683.6	4.8	3.6	118.08	-7.8	151.8	117.6	109.9	7.70	15.261		
1,800.0	1,778.8	1,788.7	1,781.8	5.3	3.9	122.32	-8.6	163.8	128.2	120.0	8.20	15.634		
1,900.0	1,875.8	1,887.7	1,880.1	5.7	4.1	125.90	-9.4	175.9	139.4	130.7	8.68	16.060		
2,000.0	1,972.8	1,986.8	1,978.4	6.2	4.4	128.95	-10.2	187.9	151.0	141.9	9.15	16.509		
2,100.0	2,069.8	2,085.8	2,076.7	6.6	4.7	131.55	-11.0	200.0	163.0	153.4	9.61	16.966		
2,200.0	2,166.8	2,184.8	2,175.0	7.1	4.9	133.80	-11.9	212.0	175.3	165.3	10.07	17.419		
2,300.0	2,263.8	2,283.8	2,273.3	7.5	5.2	135.75	-12.7	224.0	187.9	177.3	10.52	17.861		
2,400.0	2,360.8	2,382.8	2,371.5	8.0	5.5	137.45	-13.5	236.1	200.6	189.6	10.97	18.288		
2,500.0	2,457.7	2,481.9	2,469.8	8.4	5.8	138.95	-14.3	248.1	213.5	202.1	11.42	18.699		
2,600.0	2,554.7	2,580.9	2,568.1	8.9	6.0	140.28	-15.1	260.1	226.5	214.6	11.86	19.091		
2,700.0	2,651.7	2,679.9	2,666.4	9.4	6.3	141.47	-15.9	272.2	239.6	227.3	12.31	19.466		
2,800.0	2,748.7	2,778.9	2,764.7	9.8	6.6	142.53	-16.8	284.2	252.8	240.0	12.75	19.822		
2,900.0	2,845.7	2,877.9	2,863.0	10.3	6.8	143.48	-17.6	296.3	266.1	252.9	13.20	20.162		
3,000.0	2,942.7	2,977.0	2,961.2	10.8	7.1	144.35	-18.4	308.3	279.4	265.8	13.64	20.484		
3,100.0	3,039.7	3,076.0	3,059.5	11.2	7.4	145.13	-19.2	320.3	292.8	278.7	14.08	20.791		
3,200.0	3,136.7	3,175.0	3,157.8	11.7	7.7	145.85	-20.0	332.4	306.3	291.7	14.53	21.083		
3,300.0	3,233.6	3,274.0	3,256.1	12.2	7.9	146.51	-20.9	344.4	319.8	304.8	14.97	21.361		
3,400.0	3,330.6	3,373.1	3,354.4	12.6	8.2	147.11	-21.7	356.4	333.3	317.9	15.41	21.625		
3,500.0	3,427.6	3,472.1	3,452.7	13.1	8.5	147.67	-22.5	368.5	346.9	331.0	15.86	21.877		
3,600.0	3,524.6	3,571.1	3,550.9	13.6	8.7	148.18	-23.3	380.5	360.5	344.2	16.30	22.117		
3,700.0	3,621.6	3,670.1	3,649.2	14.0	9.0	148.66	-24.1	392.6	374.1	357.3	16.74	22.345		
3,800.0	3,718.6	3,769.1	3,747.5	14.5	9.3	149.11	-24.9	404.6	387.7	370.5	17.18	22.564		
3,900.0	3,815.6	3,868.2	3,845.8	15.0	9.6	149.52	-25.8	416.6	401.4	383.8	17.63	22.772		
4,000.0	3,912.6	3,967.2	3,944.1	15.4	9.8	149.91	-26.6	428.7	415.1	397.0	18.07	22.972		
4,100.0	4,009.5	4,066.2	4,042.4	15.9	10.1	150.27	-27.4	440.7	428.8	410.3	18.51	23.162		
4,200.0	4,106.5	4,165.2	4,140.6	16.4	10.4	150.61	-28.2	452.7	442.5	423.6	18.96	23.345		
4,300.0	4,203.5	4,264.2	4,238.9	16.8	10.6	150.93	-29.0	464.8	456.2	436.8	19.40	23.520		
4,400.0	4,300.5	4,363.3	4,337.2	17.3	10.9	151.23	-29.9	476.8	470.0	450.1	19.84	23.687		
4,500.0	4,397.5	4,462.3	4,435.5	17.8	11.2	151.51	-30.7	488.9	483.8	463.5	20.28	23.848		
4,600.0	4,494.5	4,561.3	4,533.8	18.2	11.5	151.78	-31.5	500.9	497.5	476.8	20.73	24.003		
4,700.0	4,591.5	4,660.3	4,632.1	18.7	11.7	152.03	-32.3	512.9	511.3	490.1	21.17	24.151		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
4,800.0	4,688.5	4,759.3	4,730.3	19.2	12.0	152.27	-33.1	525.0	525.1	503.5	21.61	24.294	
4,900.0	4,785.4	4,858.4	4,828.6	19.6	12.3	152.50	-33.9	537.0	538.9	516.8	22.06	24.432	
5,000.0	4,882.4	4,957.4	4,926.9	20.1	12.6	152.71	-34.8	549.0	552.7	530.2	22.50	24.564	
5,100.0	4,979.4	5,056.4	5,025.2	20.6	12.8	152.92	-35.6	561.1	566.5	543.6	22.94	24.691	
5,200.0	5,076.4	5,155.4	5,123.5	21.0	13.1	153.12	-36.4	573.1	580.3	556.9	23.39	24.814	
5,300.0	5,173.4	5,254.5	5,221.8	21.5	13.4	153.30	-37.2	585.2	594.2	570.3	23.83	24.933	
5,400.0	5,270.4	5,353.5	5,320.0	22.0	13.6	153.48	-38.0	597.2	608.0	583.7	24.27	25.047	
5,500.0	5,367.4	5,452.5	5,418.3	22.5	13.9	153.65	-38.8	609.2	621.8	597.1	24.72	25.157	
5,600.0	5,464.4	5,551.5	5,516.6	22.9	14.2	153.81	-39.7	621.3	635.7	610.5	25.16	25.264	
5,700.0	5,561.4	5,650.5	5,614.9	23.4	14.5	153.97	-40.5	633.3	649.5	623.9	25.60	25.367	
5,800.0	5,658.3	5,749.6	5,713.2	23.9	14.7	154.12	-41.3	645.4	663.4	637.3	26.05	25.467	
5,900.0	5,755.3	5,848.6	5,811.5	24.3	15.0	154.26	-42.1	657.4	677.2	650.7	26.49	25.564	
6,000.0	5,852.3	5,947.6	5,909.7	24.8	15.3	154.40	-42.9	669.4	691.1	664.2	26.94	25.657	
6,100.0	5,949.3	6,046.6	6,008.0	25.3	15.6	154.53	-43.8	681.5	705.0	677.6	27.38	25.748	
6,200.0	6,046.3	6,145.6	6,106.3	25.7	15.8	154.66	-44.6	693.5	718.8	691.0	27.82	25.836	
6,300.0	6,143.3	6,244.7	6,204.6	26.2	16.1	154.78	-45.4	705.5	732.7	704.4	28.27	25.921	
6,400.0	6,240.3	6,343.7	6,302.9	26.7	16.4	154.90	-46.2	717.6	746.6	717.9	28.71	26.003	
6,500.0	6,337.3	6,442.7	6,401.2	27.1	16.7	155.01	-47.0	729.6	760.4	731.3	29.15	26.084	
6,600.0	6,434.2	6,541.7	6,499.4	27.6	16.9	155.12	-47.8	741.7	774.3	744.7	29.60	26.161	
6,700.0	6,531.2	6,640.8	6,597.7	28.1	17.2	155.23	-48.7	753.7	788.2	758.2	30.04	26.237	
6,800.0	6,628.2	6,739.8	6,696.0	28.5	17.5	155.33	-49.5	765.7	802.1	771.6	30.49	26.311	
6,900.0	6,725.2	6,838.8	6,794.3	29.0	17.7	155.43	-50.3	777.8	816.0	785.1	30.93	26.382	
7,000.0	6,822.2	6,937.8	6,892.6	29.5	18.0	155.52	-51.1	789.8	829.9	798.5	31.37	26.451	
7,100.0	6,919.2	7,036.8	6,990.9	30.0	18.3	155.62	-51.9	801.8	843.8	812.0	31.82	26.519	
7,200.0	7,016.2	7,135.9	7,089.1	30.4	18.6	155.70	-52.8	813.9	857.7	825.4	32.26	26.585	
7,300.0	7,113.2	7,233.0	7,184.0	30.9	18.9	155.78	-53.6	826.0	871.6	838.6	32.70	26.651	
7,328.7	7,141.0	7,259.4	7,207.0	31.0	19.0	155.80	-53.8	828.2	874.8	841.8	32.80	26.665	
7,350.0	7,161.7	7,281.1	7,228.0	31.1	19.1	155.81	-54.0	830.3	877.9	844.9	32.90	26.679	
7,400.0	7,210.3	7,330.7	7,277.0	31.3	19.3	155.83	-54.3	834.5	882.1	849.1	33.10	26.703	
7,450.0	7,258.7	7,379.1	7,326.0	31.5	19.5	155.85	-54.6	838.7	886.3	853.3	33.30	26.727	
7,500.0	7,306.5	7,427.9	7,374.0	31.7	19.7	155.87	-54.9	842.9	890.5	857.5	33.50	26.751	
7,550.0	7,353.4	7,475.8	7,422.0	31.8	19.8	155.88	-55.1	847.1	894.7	861.7	33.70	26.775	
7,600.0	7,399.0	7,521.4	7,468.0	31.9	19.9	155.89	-55.3	851.3	898.9	865.9	33.90	26.799	
7,650.0	7,442.9	7,565.3	7,512.0	32.0	20.0	155.90	-55.5	855.5	903.1	870.1	34.10	26.823	
7,700.0	7,484.9	7,609.3	7,556.0	32.1	20.1	155.91	-55.6	859.7	907.3	874.3	34.30	26.847	
7,750.0	7,524.5	7,653.3	7,600.0	32.1	20.1	155.91	-55.6	863.9	911.5	878.5	34.50	26.871	
7,800.0	7,561.6	7,697.3	7,644.0	32.1	20.1	155.91	-55.6	868.1	915.7	882.7	34.70	26.895	
7,813.1	7,570.9	7,706.6	7,653.0	32.2	20.2	155.92	-55.7	872.3	919.9	886.9	34.90	26.919	
7,850.0	7,595.8	7,731.1	7,677.0	32.2	20.2	155.92	-55.7	876.5	924.1	891.1	35.10	26.943	
7,900.0	7,626.8	7,761.1	7,708.0	32.2	20.2	155.92	-55.7	880.7	928.3	895.3	35.30	26.967	
7,950.0	7,654.5	7,786.1	7,733.0	32.2	20.2	155.92	-55.7	884.9	932.5	899.5	35.50	26.991	
8,000.0	7,678.5	7,806.1	7,753.0	32.3	20.3	155.93	-55.8	889.1	936.7	903.7	35.70	27.015	
8,050.0	7,698.8	7,826.1	7,773.0	32.3	20.3	155.93	-55.8	893.3	940.9	907.9	35.90	27.039	
8,100.0	7,715.2	7,846.1	7,793.0	32.3	20.3	155.93	-55.8	897.5	945.1	912.1	36.10	27.063	
8,150.0	7,727.5	7,858.1	7,805.0	32.4	20.4	155.94	-55.9	901.7	949.3	916.3	36.30	27.087	
8,200.0	7,735.6	7,866.1	7,813.0	32.4	20.4	155.94	-55.9	905.9	953.5	920.5	36.50	27.111	
8,250.0	7,739.6	7,870.1	7,817.0	32.4	20.4	155.94	-55.9	909.1	956.7	923.7	36.70	27.135	
8,271.7	7,740.0	7,871.1	7,818.0	32.5	20.5	155.95	-56.0	912.3	959.9	926.9	36.90	27.159	
8,300.0	7,740.0	7,871.1	7,818.0	32.5	20.5	155.95	-56.0	915.5	963.1	930.1	37.10	27.183	
8,400.0	7,740.0	7,871.1	7,818.0	32.7	20.7	156.00	-56.2	923.5	971.1	938.1	37.50	27.243	
8,500.0	7,740.0	7,871.1	7,818.0	33.0	21.0	156.10	-56.5	931.5	979.1	946.1	37.90	27.303	
8,600.0	7,740.0	7,871.1	7,818.0	33.4	21.4	156.20	-56.8	939.5	987.1	954.1	38.30	27.363	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,700.0	7,740.0	7,550.0	7,482.2	33.8	19.7	71.27	40.1	861.2	951.6	919.3	32.23	29.521		
8,800.0	7,740.0	7,529.3	7,464.7	34.4	19.6	70.15	29.1	859.1	1,008.3	975.2	33.14	30.430		
8,900.0	7,740.0	7,500.0	7,439.5	35.0	19.5	68.56	14.6	856.2	1,070.3	1,036.6	33.75	31.713		
9,000.0	7,740.0	7,500.0	7,439.5	35.7	19.5	68.56	14.6	856.2	1,137.0	1,102.0	34.92	32.562		
9,100.0	7,740.0	7,471.7	7,414.4	36.4	19.4	67.03	1.8	853.2	1,207.3	1,171.9	35.35	34.156		
9,200.0	7,740.0	7,450.0	7,394.8	37.3	19.4	65.87	-7.1	850.9	1,281.2	1,245.3	35.88	35.705		
9,300.0	7,740.0	7,450.0	7,394.8	38.2	19.4	65.87	-7.1	850.9	1,358.0	1,321.3	36.71	36.994		
9,400.0	7,740.0	7,431.2	7,377.5	39.1	19.3	64.87	-14.2	848.8	1,437.3	1,400.1	37.16	38.675		
9,500.0	7,740.0	7,420.3	7,367.4	40.1	19.3	64.29	-18.1	847.6	1,518.8	1,481.1	37.66	40.332		
9,600.0	7,740.0	7,400.0	7,348.3	41.2	19.3	63.23	-24.8	845.4	1,602.3	1,564.3	37.92	42.259		
9,700.0	7,740.0	7,400.0	7,348.3	42.3	19.3	63.23	-24.8	845.4	1,687.1	1,648.7	38.45	43.878		
9,800.0	7,740.0	7,400.0	7,348.3	43.5	19.3	63.23	-24.8	845.4	1,773.6	1,734.6	38.93	45.559		
9,900.0	7,740.0	7,400.0	7,348.3	44.7	19.3	63.23	-24.8	845.4	1,861.4	1,822.0	39.36	47.290		
10,000.0	7,740.0	7,378.8	7,328.2	45.9	19.2	62.13	-31.0	843.0	1,949.9	1,910.4	39.52	49.344		
10,100.0	7,740.0	7,372.4	7,322.1	47.1	19.2	61.80	-32.7	842.2	2,039.6	1,999.7	39.81	51.227		
10,200.0	7,740.0	7,350.0	7,300.6	48.4	19.1	60.66	-38.3	839.6	2,130.4	2,090.4	39.92	53.369		
10,300.0	7,740.0	7,350.0	7,300.6	49.8	19.1	60.66	-38.3	839.6	2,221.5	2,181.2	40.24	55.206		
10,400.0	7,740.0	7,350.0	7,300.6	51.1	19.1	60.66	-38.3	839.6	2,313.3	2,272.8	40.54	57.064		
10,500.0	7,740.0	7,350.0	7,300.6	52.5	19.1	60.66	-38.3	839.6	2,405.8	2,365.0	40.82	58.941		
10,600.0	7,740.0	7,350.0	7,300.6	53.9	19.1	60.66	-38.3	839.6	2,498.9	2,457.8	41.08	60.831		
10,700.0	7,740.0	7,350.0	7,300.6	55.3	19.1	60.66	-38.3	839.6	2,592.4	2,551.1	41.33	62.733		
10,800.0	7,740.0	7,350.0	7,300.6	56.7	19.1	60.66	-38.3	839.6	2,686.5	2,644.9	41.56	64.644		
10,900.0	7,740.0	7,350.0	7,300.6	58.2	19.1	60.66	-38.3	839.6	2,781.0	2,739.2	41.78	66.562		
11,000.0	7,740.0	7,350.0	7,300.6	59.7	19.1	60.66	-38.3	839.6	2,875.8	2,833.8	41.99	68.485		
11,100.0	7,740.0	7,328.3	7,279.5	61.2	19.1	59.59	-42.8	837.1	2,970.5	2,928.5	42.03	70.678		
11,200.0	7,740.0	7,325.2	7,276.5	62.7	19.1	59.44	-43.4	836.7	3,065.8	3,023.6	42.20	72.644		
11,300.0	7,740.0	7,322.3	7,273.7	64.2	19.1	59.29	-43.9	836.4	3,161.4	3,119.1	42.37	74.609		
11,400.0	7,740.0	7,300.0	7,251.8	65.7	19.0	58.21	-47.6	833.7	3,257.7	3,215.3	42.40	76.835		
11,500.0	7,740.0	7,300.0	7,251.8	67.2	19.0	58.21	-47.6	833.7	3,353.7	3,311.1	42.58	78.761		
11,600.0	7,740.0	7,300.0	7,251.8	68.8	19.0	58.21	-47.6	833.7	3,449.9	3,407.1	42.76	80.686		
11,700.0	7,740.0	7,300.0	7,251.8	70.3	19.0	58.21	-47.6	833.7	3,546.3	3,503.4	42.93	82.610		
11,800.0	7,740.0	7,300.0	7,251.8	71.9	19.0	58.21	-47.6	833.7	3,642.9	3,599.8	43.10	84.531		
11,900.0	7,740.0	7,300.0	7,251.8	73.5	19.0	58.21	-47.6	833.7	3,739.7	3,696.5	43.26	86.450		
12,000.0	7,740.0	7,300.0	7,251.8	75.1	19.0	58.21	-47.6	833.7	3,836.7	3,793.3	43.42	88.365		
12,100.0	7,740.0	7,300.0	7,251.8	76.6	19.0	58.21	-47.6	833.7	3,933.8	3,890.2	43.57	90.277		
12,200.0	7,740.0	7,300.0	7,251.8	78.2	19.0	58.21	-47.6	833.7	4,031.0	3,987.3	43.73	92.185		
12,300.0	7,740.0	7,300.0	7,251.8	79.8	19.0	58.21	-47.6	833.7	4,128.4	4,084.6	43.88	94.089		
12,400.0	7,740.0	7,300.0	7,251.8	81.5	19.0	58.21	-47.6	833.7	4,225.9	4,181.9	44.03	95.988		
12,500.0	7,740.0	7,300.0	7,251.8	83.1	19.0	58.21	-47.6	833.7	4,323.6	4,279.4	44.17	97.882		
12,600.0	7,740.0	7,300.0	7,251.8	84.7	19.0	58.21	-47.6	833.7	4,421.3	4,377.0	44.31	99.770		
12,700.0	7,740.0	7,300.0	7,251.8	86.3	19.0	58.21	-47.6	833.7	4,519.1	4,474.7	44.46	101.653		
12,800.0	7,740.0	7,300.0	7,251.8	88.0	19.0	58.21	-47.6	833.7	4,617.0	4,572.4	44.60	103.531		
12,900.0	7,740.0	7,300.0	7,251.8	89.6	19.0	58.21	-47.6	833.7	4,715.0	4,670.3	44.73	105.403		
13,000.0	7,740.0	7,300.0	7,251.8	91.2	19.0	58.21	-47.6	833.7	4,813.1	4,768.3	44.87	107.269		
13,100.0	7,740.0	7,300.0	7,251.8	92.9	19.0	58.21	-47.6	833.7	4,911.3	4,866.3	45.00	109.128		
13,200.0	7,740.0	7,300.0	7,251.8	94.5	19.0	58.21	-47.6	833.7	5,009.5	4,964.4	45.14	110.982		
13,300.0	7,740.0	7,300.0	7,251.8	96.2	19.0	58.21	-47.6	833.7	5,107.8	5,062.6	45.27	112.829		
13,400.0	7,740.0	7,300.0	7,251.8	97.8	19.0	58.21	-47.6	833.7	5,206.2	5,160.8	45.40	114.670		
13,500.0	7,740.0	7,300.0	7,251.8	99.5	19.0	58.21	-47.6	833.7	5,304.6	5,259.1	45.53	116.504		
13,600.0	7,740.0	7,300.0	7,251.8	101.2	19.0	58.21	-47.6	833.7	5,403.1	5,357.5	45.66	118.332		
13,700.0	7,740.0	7,300.0	7,251.8	102.8	19.0	58.21	-47.6	833.7	5,501.7	5,455.9	45.79	120.153		
13,800.0	7,740.0	7,300.0	7,251.8	104.5	19.0	58.21	-47.6	833.7	5,600.3	5,554.4	45.92	121.968		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,740.0	7,300.0	7,251.8	106.2	19.0	58.21	-47.6	833.7	5,698.9	5,652.9	46.04	123.776		
14,000.0	7,740.0	7,300.0	7,251.8	107.8	19.0	58.21	-47.6	833.7	5,797.6	5,751.4	46.17	125.577		
14,100.0	7,740.0	7,277.1	7,229.2	109.5	18.9	57.13	-50.4	831.0	5,895.8	5,849.7	46.17	127.690		
14,200.0	7,740.0	7,276.2	7,228.3	111.2	18.9	57.09	-50.5	830.9	5,994.6	5,948.3	46.29	129.491		
14,300.0	7,740.0	7,275.3	7,227.5	112.9	18.9	57.05	-50.5	830.8	6,093.4	6,047.0	46.41	131.286		
14,400.0	7,740.0	7,274.5	7,226.6	114.6	18.9	57.01	-50.6	830.7	6,192.2	6,145.6	46.53	133.074		
14,500.0	7,740.0	7,273.6	7,225.8	116.3	18.9	56.97	-50.7	830.6	6,291.0	6,244.4	46.65	134.854		
14,600.0	7,740.0	7,250.0	7,202.4	117.9	18.9	55.89	-52.5	827.7	6,390.4	6,343.8	46.65	136.976		
14,700.0	7,740.0	7,250.0	7,202.4	119.6	18.9	55.89	-52.5	827.7	6,489.3	6,442.5	46.78	138.732		
14,800.0	7,740.0	7,250.0	7,202.4	121.3	18.9	55.89	-52.5	827.7	6,588.2	6,541.3	46.90	140.481		
14,900.0	7,740.0	7,250.0	7,202.4	123.0	18.9	55.89	-52.5	827.7	6,687.2	6,640.1	47.02	142.223		
15,000.0	7,740.0	7,250.0	7,202.4	124.7	18.9	55.89	-52.5	827.7	6,786.1	6,739.0	47.14	143.959		
15,100.0	7,740.0	7,250.0	7,202.4	126.4	18.9	55.89	-52.5	827.7	6,885.2	6,837.9	47.26	145.687		
15,200.0	7,740.0	7,250.0	7,202.4	128.1	18.9	55.89	-52.5	827.7	6,984.2	6,936.8	47.38	147.409		
15,300.0	7,740.0	7,250.0	7,202.4	129.8	18.9	55.89	-52.5	827.7	7,083.3	7,035.8	47.50	149.124		
15,400.0	7,740.0	7,250.0	7,202.4	131.5	18.9	55.89	-52.5	827.7	7,182.4	7,134.7	47.62	150.833		
15,500.0	7,740.0	7,250.0	7,202.4	133.2	18.9	55.89	-52.5	827.7	7,281.5	7,233.7	47.74	152.534		
15,600.0	7,740.0	7,250.0	7,202.4	134.9	18.9	55.89	-52.5	827.7	7,380.6	7,332.8	47.85	154.229		
15,700.0	7,740.0	7,250.0	7,202.4	136.6	18.9	55.89	-52.5	827.7	7,479.8	7,431.8	47.97	155.917		
15,800.0	7,740.0	7,250.0	7,202.4	138.3	18.9	55.89	-52.5	827.7	7,579.0	7,530.9	48.09	157.599		
15,900.0	7,740.0	7,250.0	7,202.4	140.0	18.9	55.89	-52.5	827.7	7,678.2	7,630.0	48.21	159.274		
16,000.0	7,740.0	7,250.0	7,202.4	141.7	18.9	55.89	-52.5	827.7	7,777.4	7,729.1	48.32	160.942		
16,100.0	7,740.0	7,250.0	7,202.4	143.5	18.9	55.89	-52.5	827.7	7,876.6	7,828.2	48.44	162.603		
16,171.7	7,740.0	7,250.0	7,202.4	144.7	18.9	55.89	-52.5	827.7	7,947.8	7,899.3	48.52	163.790		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor			
0.0	0.0	0.0	0.0	0.0	0.0	90.47	-0.4	45.1	45.1						
100.0	100.0	100.0	100.0	0.2	0.2	90.47	-0.4	45.1	45.1	44.8	0.30	148.383			
150.0	150.0	150.0	150.0	0.2	0.2	90.47	-0.4	45.1	45.1	44.6	0.48	94.229 CC			
200.0	200.0	200.0	200.0	0.3	0.3	91.30	-0.4	45.1	45.1	44.4	0.65	68.966			
283.3	283.2	283.2	283.2	0.5	0.5	96.34	-0.4	45.1	45.3	44.4	0.96	47.260 ES			
300.0	299.9	299.9	299.9	0.5	0.5	95.42	-0.4	45.1	45.5	44.4	1.02	44.494			
400.0	399.6	398.9	398.9	0.7	0.7	90.10	-0.3	45.9	46.6	45.2	1.40	33.292			
500.0	499.3	497.9	497.9	0.9	0.9	85.86	0.1	48.4	48.6	46.8	1.79	27.208			
600.0	598.9	597.0	596.9	1.2	1.0	83.00	0.7	52.7	51.3	49.1	2.18	23.471			
700.0	698.5	696.1	695.8	1.4	1.2	81.35	1.5	58.6	54.5	51.9	2.60	20.939			
800.0	797.9	795.3	794.6	1.6	1.4	80.53	2.5	66.3	58.0	55.0	3.04	19.069			
900.0	897.1	894.4	893.4	1.9	1.7	80.25	3.8	75.6	61.9	58.3	3.52	17.584			
1,000.0	996.2	993.7	992.0	2.2	1.9	80.31	5.2	86.6	65.8	61.8	4.03	16.334			
1,100.0	1,095.0	1,092.9	1,090.4	2.5	2.2	80.55	7.0	99.3	69.9	65.3	4.59	15.239			
1,200.0	1,193.6	1,192.2	1,188.6	2.8	2.5	80.89	8.9	113.8	74.0	68.8	5.19	14.253			
1,300.0	1,291.9	1,291.5	1,286.6	3.2	2.8	81.29	11.1	129.9	78.0	72.2	5.84	13.351			
1,400.0	1,389.9	1,390.8	1,384.3	3.5	3.1	81.71	13.5	147.7	82.0	75.5	6.55	12.519			
1,500.0	1,487.6	1,490.4	1,481.9	3.9	3.5	82.24	16.1	167.0	85.9	78.6	7.31	11.752			
1,600.0	1,584.8	1,590.3	1,579.8	4.4	3.9	83.67	18.8	186.7	89.3	81.1	8.11	11.005			
1,624.3	1,608.4	1,614.5	1,603.5	4.5	3.9	84.17	19.4	191.4	90.0	81.7	8.31	10.833			
1,700.0	1,681.8	1,690.1	1,677.6	4.8	4.2	86.63	21.4	206.3	92.4	83.4	8.93	10.347			
1,800.0	1,778.8	1,789.9	1,775.5	5.3	4.6	89.69	24.1	226.0	95.7	86.0	9.74	9.825			
1,900.0	1,875.8	1,889.8	1,873.3	5.7	5.0	92.53	26.7	245.6	99.3	88.8	10.56	9.411			
2,000.0	1,972.8	1,989.6	1,971.1	6.2	5.4	95.16	29.4	265.3	103.2	91.8	11.36	9.082			
2,100.0	2,069.8	2,089.4	2,068.9	6.6	5.7	97.60	32.1	284.9	107.2	95.1	12.16	8.819			
2,200.0	2,166.8	2,189.2	2,166.8	7.1	6.1	99.87	34.7	304.6	111.5	98.5	12.94	8.610			
2,300.0	2,263.8	2,289.0	2,264.6	7.5	6.5	101.96	37.4	324.2	115.8	102.1	13.72	8.443			
2,400.0	2,360.8	2,388.8	2,362.4	8.0	6.9	103.90	40.0	343.9	120.4	105.9	14.48	8.311			
2,500.0	2,457.7	2,488.7	2,460.2	8.4	7.3	105.69	42.7	363.5	125.0	109.8	15.24	8.205			
2,600.0	2,554.7	2,588.5	2,558.1	8.9	7.7	107.36	45.3	383.2	129.8	113.8	15.98	8.122			
2,700.0	2,651.7	2,688.3	2,655.9	9.4	8.1	108.90	48.0	402.8	134.7	118.0	16.72	8.056			
2,800.0	2,748.7	2,788.1	2,753.7	9.8	8.4	110.34	50.7	422.5	139.6	122.2	17.44	8.006			
2,900.0	2,845.7	2,887.9	2,851.6	10.3	8.8	111.68	53.3	442.1	144.7	126.5	18.16	7.968			
3,000.0	2,942.7	2,987.7	2,949.4	10.8	9.2	112.93	56.0	461.8	149.8	130.9	18.87	7.939			
3,100.0	3,039.7	3,087.6	3,047.2	11.2	9.6	114.09	58.6	481.4	155.0	135.4	19.57	7.919			
3,200.0	3,136.7	3,187.4	3,145.0	11.7	10.0	115.18	61.3	501.1	160.2	140.0	20.27	7.906			
3,300.0	3,233.6	3,287.2	3,242.9	12.2	10.4	116.20	63.9	520.7	165.5	144.6	20.96	7.898			
3,400.0	3,330.6	3,387.0	3,340.7	12.6	10.8	117.16	66.6	540.4	170.9	149.3	21.65	7.895			
3,500.0	3,427.6	3,486.8	3,438.5	13.1	11.2	118.05	69.2	560.0	176.3	154.0	22.33	7.896			
3,600.0	3,524.6	3,586.6	3,536.4	13.6	11.6	118.90	71.9	579.7	181.7	158.7	23.00	7.901			
3,700.0	3,621.6	3,686.5	3,634.2	14.0	12.0	119.69	74.6	599.3	187.2	163.5	23.67	7.908			
3,800.0	3,718.6	3,786.3	3,732.0	14.5	12.4	120.44	77.2	619.0	192.7	168.4	24.34	7.917			
3,900.0	3,815.6	3,886.1	3,829.8	15.0	12.7	121.15	79.9	638.7	198.2	173.2	25.01	7.928			
4,000.0	3,912.6	3,985.9	3,927.7	15.4	13.1	121.82	82.5	658.3	203.8	178.1	25.67	7.940			
4,100.0	4,009.5	4,085.7	4,025.5	15.9	13.5	122.45	85.2	678.0	209.4	183.1	26.33	7.954			
4,200.0	4,106.5	4,185.6	4,123.3	16.4	13.9	123.05	87.8	697.6	215.0	188.0	26.98	7.969			
4,300.0	4,203.5	4,285.4	4,221.1	16.8	14.3	123.62	90.5	717.3	220.7	193.0	27.64	7.985			
4,400.0	4,300.5	4,385.2	4,319.0	17.3	14.7	124.17	93.2	736.9	226.3	198.0	28.29	8.001			
4,500.0	4,397.5	4,485.0	4,416.8	17.8	15.1	124.68	95.8	756.6	232.0	203.1	28.94	8.018			
4,600.0	4,494.5	4,584.8	4,514.6	18.2	15.5	125.17	98.5	776.2	237.7	208.1	29.58	8.035			
4,700.0	4,591.5	4,684.6	4,612.5	18.7	15.9	125.64	101.1	795.9	243.4	213.2	30.23	8.052			
4,800.0	4,688.5	4,784.5	4,710.3	19.2	16.3	126.09	103.8	815.5	249.1	218.3	30.87	8.070			

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,785.4	4,884.3	4,808.1	19.6	16.7	126.51	106.4	835.2	254.9	223.4	31.51	8.088		
5,000.0	4,882.4	4,984.1	4,905.9	20.1	17.1	126.92	109.1	854.8	260.6	228.5	32.16	8.105		
5,100.0	4,979.4	5,083.9	5,003.8	20.6	17.4	127.31	111.8	874.5	266.4	233.6	32.79	8.123		
5,200.0	5,076.4	5,183.7	5,101.6	21.0	17.8	127.68	114.4	894.1	272.2	238.7	33.43	8.141		
5,300.0	5,173.4	5,283.5	5,199.4	21.5	18.2	128.04	117.1	913.8	278.0	243.9	34.07	8.159		
5,400.0	5,270.4	5,383.4	5,297.3	22.0	18.6	128.38	119.7	933.4	283.8	249.1	34.71	8.176		
5,500.0	5,367.4	5,483.2	5,395.1	22.5	19.0	128.71	122.4	953.1	289.6	254.2	35.34	8.194		
5,600.0	5,464.4	5,583.0	5,492.9	22.9	19.4	129.03	125.0	972.7	295.4	259.4	35.97	8.211		
5,700.0	5,561.4	5,682.8	5,590.7	23.4	19.8	129.33	127.7	992.4	301.2	264.6	36.61	8.229		
5,800.0	5,658.3	5,782.6	5,688.6	23.9	20.2	129.62	130.3	1,012.0	307.1	269.8	37.24	8.246		
5,900.0	5,755.3	5,882.4	5,786.4	24.3	20.6	129.91	133.0	1,031.7	312.9	275.0	37.87	8.262		
6,000.0	5,852.3	5,982.3	5,884.2	24.8	21.0	130.18	135.7	1,051.3	318.8	280.3	38.50	8.279		
6,100.0	5,949.3	6,082.1	5,982.0	25.3	21.4	130.44	138.3	1,071.0	324.6	285.5	39.13	8.295		
6,200.0	6,046.3	6,181.9	6,079.9	25.7	21.8	130.69	141.0	1,090.6	330.5	290.7	39.76	8.312		
6,300.0	6,143.3	6,281.7	6,177.7	26.2	22.2	130.93	143.6	1,110.3	336.4	296.0	40.39	8.328		
6,400.0	6,240.3	6,381.5	6,275.5	26.7	22.6	131.17	146.3	1,129.9	342.2	301.2	41.02	8.343		
6,500.0	6,337.3	6,481.4	6,373.4	27.1	22.9	131.40	148.9	1,149.6	348.1	306.5	41.65	8.359		
6,600.0	6,434.2	6,581.2	6,471.2	27.6	23.3	131.62	151.6	1,169.2	354.0	311.7	42.28	8.374		
6,700.0	6,531.2	6,681.0	6,569.0	28.1	23.7	131.83	154.3	1,188.9	359.9	317.0	42.90	8.389		
6,800.0	6,628.2	6,780.8	6,666.8	28.5	24.1	132.03	156.9	1,208.5	365.8	322.3	43.53	8.404		
6,900.0	6,725.2	6,880.6	6,764.7	29.0	24.5	132.23	159.6	1,228.2	371.7	327.6	44.15	8.418		
7,000.0	6,822.2	6,980.4	6,862.5	29.5	24.9	132.43	162.2	1,247.8	377.6	332.8	44.78	8.433		
7,100.0	6,919.2	7,090.0	6,969.9	30.0	25.3	132.65	165.4	1,269.4	383.4	338.0	45.44	8.438		
7,200.0	7,016.2	7,332.0	7,197.0	30.4	26.4	137.05	228.4	1,315.5	367.5	326.0	41.51	8.853		
7,300.0	7,113.2	7,512.1	7,338.5	30.9	27.4	147.89	334.7	1,344.9	322.2	289.4	32.77	9.831		
7,328.7	7,141.0	7,551.3	7,364.5	31.0	27.6	151.97	363.5	1,350.3	306.2	275.8	30.36	10.087		
7,350.0	7,161.7	7,576.7	7,380.3	31.1	27.8	147.97	383.1	1,353.7	293.7	265.0	28.73	10.223		
7,400.0	7,210.3	7,623.8	7,407.3	31.3	28.1	138.78	421.3	1,359.4	262.7	236.9	25.74	10.204		
7,450.0	7,258.7	7,656.2	7,424.0	31.5	28.3	132.12	448.8	1,363.0	231.9	207.7	24.25	9.564		
7,500.0	7,306.5	7,677.1	7,434.0	31.7	28.5	128.04	467.1	1,365.2	205.0	180.3	24.74	8.287		
7,550.0	7,353.4	7,689.5	7,439.6	31.8	28.5	124.81	478.0	1,366.4	185.9	158.5	27.37	6.791		
7,600.0	7,399.0	7,695.3	7,442.1	31.9	28.6	121.09	483.2	1,366.9	178.4	147.2	31.28	5.706		
7,602.6	7,401.3	7,695.5	7,442.2	31.9	28.6	120.87	483.4	1,367.0	178.4	146.9	31.48	5.668		
7,650.0	7,442.9	7,696.1	7,442.5	32.0	28.6	116.20	484.0	1,367.0	184.6	149.9	34.74	5.313 SF		
7,700.0	7,484.9	7,693.1	7,441.1	32.1	28.6	109.89	481.2	1,366.7	203.2	166.3	36.83	5.517		
7,750.0	7,524.5	7,686.9	7,438.4	32.1	28.5	102.14	475.8	1,366.1	230.9	193.1	37.75	6.115		
7,800.0	7,561.6	7,678.4	7,434.5	32.1	28.5	93.23	468.2	1,365.3	264.5	226.3	38.12	6.938		
7,850.0	7,595.8	7,667.9	7,429.6	32.2	28.4	83.71	458.9	1,364.2	301.5	263.1	38.32	7.867		
7,900.0	7,626.8	7,650.0	7,420.9	32.2	28.3	73.09	443.5	1,362.3	340.3	302.5	37.80	9.002		
7,950.0	7,654.5	7,650.0	7,420.9	32.2	28.3	66.97	443.5	1,362.3	379.8	340.0	39.74	9.557		
8,000.0	7,678.5	7,627.8	7,409.4	32.3	28.1	58.08	424.6	1,359.9	419.0	379.8	39.26	10.672		
8,050.0	7,698.8	7,612.3	7,401.0	32.3	28.0	51.75	411.8	1,358.1	457.9	418.1	39.77	11.512		
8,100.0	7,715.2	7,600.0	7,394.0	32.3	27.9	46.87	401.7	1,356.6	495.8	455.1	40.71	12.179		
8,150.0	7,727.5	7,579.2	7,381.8	32.4	27.8	42.37	385.1	1,354.0	532.5	491.5	41.02	12.981		
8,200.0	7,735.6	7,550.0	7,363.7	32.4	27.6	38.47	362.5	1,350.2	568.0	527.1	40.83	13.910		
8,250.0	7,739.6	7,550.0	7,363.7	32.4	27.6	36.55	362.5	1,350.2	601.5	558.6	42.90	14.020		
8,271.7	7,740.0	7,535.9	7,354.5	32.5	27.5	35.34	352.0	1,348.2	615.4	572.6	42.80	14.381		
8,300.0	7,740.0	7,525.7	7,347.7	32.5	27.5	35.01	344.5	1,346.8	633.8	590.6	43.22	14.663		
8,400.0	7,740.0	7,500.0	7,330.1	32.7	27.3	34.19	326.2	1,343.1	701.7	656.7	45.05	15.576		
8,500.0	7,740.0	7,450.0	7,293.5	33.0	27.0	32.65	293.0	1,335.5	773.9	728.7	45.19	17.125		
8,600.0	7,740.0	7,450.0	7,293.5	33.4	27.0	32.65	293.0	1,335.5	849.5	802.0	47.46	17.898		
8,700.0	7,740.0	7,400.0	7,254.2	33.8	26.8	31.20	263.2	1,327.3	927.9	880.6	47.26	19.633		

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

Anticollision Report

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Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	7,400.0	7,254.2	34.4	26.8	31.20	263.2	1,327.3	1,008.8	960.0	48.82	20.664		
8,900.0	7,740.0	7,371.9	7,231.0	35.0	26.6	30.44	248.0	1,322.5	1,091.9	1,042.7	49.17	22.205		
9,000.0	7,740.0	7,350.0	7,212.5	35.7	26.5	29.86	237.0	1,318.7	1,176.9	1,127.3	49.62	23.719		
9,100.0	7,740.0	7,350.0	7,212.5	36.4	26.5	29.86	237.0	1,318.7	1,263.6	1,213.1	50.54	25.003		
9,200.0	7,740.0	7,325.0	7,190.9	37.3	26.4	29.23	225.3	1,314.3	1,351.3	1,300.6	50.70	26.651		
9,300.0	7,740.0	7,300.0	7,168.8	38.2	26.3	28.63	214.6	1,309.8	1,440.6	1,389.7	50.83	28.341		
9,400.0	7,740.0	7,300.0	7,168.8	39.1	26.3	28.63	214.6	1,309.8	1,530.4	1,479.0	51.44	29.752		
9,500.0	7,740.0	7,300.0	7,168.8	40.1	26.3	28.63	214.6	1,309.8	1,621.5	1,569.5	51.96	31.206		
9,600.0	7,740.0	7,279.8	7,150.6	41.2	26.2	28.16	206.6	1,306.0	1,713.1	1,661.0	52.05	32.912		
9,700.0	7,740.0	7,270.7	7,142.3	42.3	26.1	27.96	203.3	1,304.3	1,805.5	1,753.2	52.31	34.514		
9,800.0	7,740.0	7,250.0	7,123.2	43.5	26.0	27.50	196.1	1,300.5	1,898.7	1,846.3	52.35	36.268		
9,900.0	7,740.0	7,250.0	7,123.2	44.7	26.0	27.50	196.1	1,300.5	1,992.1	1,939.4	52.70	37.800		
10,000.0	7,740.0	7,250.0	7,123.2	45.9	26.0	27.50	196.1	1,300.5	2,086.1	2,033.0	53.01	39.350		
10,100.0	7,740.0	7,250.0	7,123.2	47.1	26.0	27.50	196.1	1,300.5	2,180.6	2,127.3	53.30	40.915		
10,200.0	7,740.0	7,250.0	7,123.2	48.4	26.0	27.50	196.1	1,300.5	2,275.6	2,222.0	53.55	42.492		
10,300.0	7,740.0	7,228.3	7,103.0	49.8	25.9	27.05	189.4	1,296.3	2,370.5	2,317.0	53.51	44.300		
10,400.0	7,740.0	7,222.8	7,097.8	51.1	25.9	26.94	187.8	1,295.3	2,466.0	2,412.3	53.67	45.948		
10,500.0	7,740.0	7,200.0	7,076.3	52.5	25.8	26.48	181.8	1,290.9	2,562.1	2,508.5	53.61	47.795		
10,600.0	7,740.0	7,200.0	7,076.3	53.9	25.8	26.48	181.8	1,290.9	2,658.0	2,604.2	53.82	49.390		
10,700.0	7,740.0	7,200.0	7,076.3	55.3	25.8	26.48	181.8	1,290.9	2,754.1	2,700.1	54.01	50.992		
10,800.0	7,740.0	7,200.0	7,076.3	56.7	25.8	26.48	181.8	1,290.9	2,850.6	2,796.4	54.20	52.597		
10,900.0	7,740.0	7,200.0	7,076.3	58.2	25.8	26.48	181.8	1,290.9	2,947.2	2,892.9	54.37	54.205		
11,000.0	7,740.0	7,200.0	7,076.3	59.7	25.8	26.48	181.8	1,290.9	3,044.1	2,989.6	54.54	55.815		
11,100.0	7,740.0	7,200.0	7,076.3	61.2	25.8	26.48	181.8	1,290.9	3,141.2	3,086.5	54.70	57.427		
11,200.0	7,740.0	7,200.0	7,076.3	62.7	25.8	26.48	181.8	1,290.9	3,238.5	3,183.6	54.85	59.040		
11,300.0	7,740.0	7,200.0	7,076.3	64.2	25.8	26.48	181.8	1,290.9	3,335.9	3,280.9	55.00	60.653		
11,400.0	7,740.0	7,200.0	7,076.3	65.7	25.8	26.48	181.8	1,290.9	3,433.5	3,378.3	55.14	62.266		
11,500.0	7,740.0	7,200.0	7,076.3	67.2	25.8	26.48	181.8	1,290.9	3,531.2	3,475.9	55.28	63.878		
11,600.0	7,740.0	7,176.4	7,053.8	68.8	25.7	26.04	176.6	1,286.4	3,628.4	3,573.3	55.19	65.744		
11,700.0	7,740.0	7,173.7	7,051.2	70.3	25.7	25.99	176.0	1,285.8	3,726.3	3,671.0	55.30	67.384		
11,800.0	7,740.0	7,150.0	7,028.3	71.9	25.6	25.56	171.8	1,281.2	3,824.6	3,769.4	55.21	69.273		
11,900.0	7,740.0	7,150.0	7,028.3	73.5	25.6	25.56	171.8	1,281.2	3,922.5	3,867.2	55.34	70.878		
12,000.0	7,740.0	7,150.0	7,028.3	75.1	25.6	25.56	171.8	1,281.2	4,020.5	3,965.1	55.47	72.482		
12,100.0	7,740.0	7,150.0	7,028.3	76.6	25.6	25.56	171.8	1,281.2	4,118.6	4,063.0	55.60	74.083		
12,200.0	7,740.0	7,150.0	7,028.3	78.2	25.6	25.56	171.8	1,281.2	4,216.8	4,161.1	55.72	75.681		
12,300.0	7,740.0	7,150.0	7,028.3	79.8	25.6	25.56	171.8	1,281.2	4,315.1	4,259.3	55.84	77.278		
12,400.0	7,740.0	7,150.0	7,028.3	81.5	25.6	25.56	171.8	1,281.2	4,413.4	4,357.5	55.96	78.871		
12,500.0	7,740.0	7,150.0	7,028.3	83.1	25.6	25.56	171.8	1,281.2	4,511.9	4,455.8	56.07	80.462		
12,600.0	7,740.0	7,150.0	7,028.3	84.7	25.6	25.56	171.8	1,281.2	4,610.4	4,554.2	56.19	82.049		
12,700.0	7,740.0	7,150.0	7,028.3	86.3	25.6	25.56	171.8	1,281.2	4,708.9	4,652.6	56.30	83.633		
12,800.0	7,740.0	7,150.0	7,028.3	88.0	25.6	25.56	171.8	1,281.2	4,807.5	4,751.1	56.42	85.214		
12,900.0	7,740.0	7,150.0	7,028.3	89.6	25.6	25.56	171.8	1,281.2	4,906.2	4,849.7	56.53	86.791		
13,000.0	7,740.0	7,150.0	7,028.3	91.2	25.6	25.56	171.8	1,281.2	5,004.9	4,948.3	56.64	88.365		
13,100.0	7,740.0	7,150.0	7,028.3	92.9	25.6	25.56	171.8	1,281.2	5,103.7	5,047.0	56.75	89.936		
13,200.0	7,740.0	7,150.0	7,028.3	94.5	25.6	25.56	171.8	1,281.2	5,202.5	5,145.7	56.86	91.502		
13,300.0	7,740.0	7,150.0	7,028.3	96.2	25.6	25.56	171.8	1,281.2	5,301.4	5,244.4	56.96	93.065		
13,400.0	7,740.0	7,150.0	7,028.3	97.8	25.6	25.56	171.8	1,281.2	5,400.3	5,343.2	57.07	94.624		
13,500.0	7,740.0	7,150.0	7,028.3	99.5	25.6	25.56	171.8	1,281.2	5,499.2	5,442.1	57.18	96.179		
13,600.0	7,740.0	7,150.0	7,028.3	101.2	25.6	25.56	171.8	1,281.2	5,598.2	5,541.0	57.28	97.730		
13,700.0	7,740.0	7,150.0	7,028.3	102.8	25.6	25.56	171.8	1,281.2	5,697.3	5,639.9	57.39	99.277		
13,800.0	7,740.0	7,150.0	7,028.3	104.5	25.6	25.56	171.8	1,281.2	5,796.3	5,738.8	57.49	100.820		
13,900.0	7,740.0	7,150.0	7,028.3	106.2	25.6	25.56	171.8	1,281.2	5,895.4	5,837.8	57.60	102.359		

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Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

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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	7,740.0	7,150.0	7,028.3	107.8	25.6	25.56	171.8	1,281.2	5,994.5	5,936.8	57.70	103.894		
14,100.0	7,740.0	7,150.0	7,028.3	109.5	25.6	25.56	171.8	1,281.2	6,093.7	6,035.9	57.80	105.424		
14,200.0	7,740.0	7,150.0	7,028.3	111.2	25.6	25.56	171.8	1,281.2	6,192.8	6,134.9	57.90	106.951		
14,300.0	7,740.0	7,150.0	7,028.3	112.9	25.6	25.56	171.8	1,281.2	6,292.0	6,234.0	58.01	108.473		
14,400.0	7,740.0	7,150.0	7,028.3	114.6	25.6	25.56	171.8	1,281.2	6,391.2	6,333.1	58.11	109.991		
14,500.0	7,740.0	7,150.0	7,028.3	116.3	25.6	25.56	171.8	1,281.2	6,490.5	6,432.3	58.21	111.505		
14,600.0	7,740.0	7,150.0	7,028.3	117.9	25.6	25.56	171.8	1,281.2	6,589.8	6,531.5	58.31	113.014		
14,700.0	7,740.0	7,126.4	7,005.4	119.6	25.5	25.16	168.5	1,276.6	6,688.5	6,630.3	58.24	114.853		
14,800.0	7,740.0	7,125.5	7,004.5	121.3	25.5	25.14	168.4	1,276.4	6,787.8	6,729.5	58.33	116.369		
14,900.0	7,740.0	7,124.6	7,003.7	123.0	25.5	25.13	168.3	1,276.2	6,887.1	6,828.7	58.42	117.881		
15,000.0	7,740.0	7,123.7	7,002.8	124.7	25.5	25.11	168.2	1,276.1	6,986.4	6,927.9	58.52	119.388		
15,100.0	7,740.0	7,100.0	6,979.6	126.4	25.4	24.73	166.0	1,271.4	7,086.2	7,027.8	58.45	121.243		
15,200.0	7,740.0	7,100.0	6,979.6	128.1	25.4	24.73	166.0	1,271.4	7,185.5	7,127.0	58.55	122.731		
15,300.0	7,740.0	7,100.0	6,979.6	129.8	25.4	24.73	166.0	1,271.4	7,284.9	7,226.2	58.65	124.214		
15,400.0	7,740.0	7,100.0	6,979.6	131.5	25.4	24.73	166.0	1,271.4	7,384.2	7,325.5	58.75	125.693		
15,500.0	7,740.0	7,100.0	6,979.6	133.2	25.4	24.73	166.0	1,271.4	7,483.6	7,424.7	58.85	127.167		
15,600.0	7,740.0	7,100.0	6,979.6	134.9	25.4	24.73	166.0	1,271.4	7,582.9	7,524.0	58.95	128.638		
15,700.0	7,740.0	7,100.0	6,979.6	136.6	25.4	24.73	166.0	1,271.4	7,682.3	7,623.3	59.05	130.104		
15,800.0	7,740.0	7,100.0	6,979.6	138.3	25.4	24.73	166.0	1,271.4	7,781.8	7,722.6	59.15	131.565		
15,900.0	7,740.0	7,100.0	6,979.6	140.0	25.4	24.73	166.0	1,271.4	7,881.2	7,821.9	59.25	133.023		
16,000.0	7,740.0	7,100.0	6,979.6	141.7	25.4	24.73	166.0	1,271.4	7,980.6	7,921.3	59.35	134.476		
16,100.0	7,740.0	7,100.0	6,979.6	143.5	25.4	24.73	166.0	1,271.4	8,080.1	8,020.6	59.45	135.924		
16,171.7	7,740.0	7,100.0	6,979.6	144.7	25.4	24.73	166.0	1,271.4	8,151.4	8,091.8	59.52	136.960		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.41	-0.4	52.3	52.3					
100.0	100.0	100.0	100.0	0.2	0.2	90.41	-0.4	52.3	52.3	52.0	0.30	172.344		
150.0	150.0	150.0	150.0	0.2	0.2	90.41	-0.4	52.3	52.3	51.9	0.48	109.445		
200.0	200.0	200.0	200.0	0.3	0.3	91.12	-0.4	52.3	52.3	51.7	0.65	80.098		
283.3	283.2	282.9	282.9	0.5	0.5	95.46	-0.4	52.4	52.7	51.7	0.96	54.933		
300.0	299.9	299.4	299.4	0.5	0.5	94.33	-0.4	52.5	52.9	51.9	1.02	51.807		
400.0	399.6	398.2	398.2	0.7	0.7	88.08	-0.7	54.2	54.8	53.4	1.40	39.147		
500.0	499.3	497.0	496.9	0.9	0.9	83.36	-1.3	57.6	57.6	55.8	1.78	32.275		
600.0	598.9	595.6	595.4	1.2	1.0	80.44	-2.2	62.6	61.4	59.2	2.18	28.154		
700.0	698.5	694.3	693.8	1.4	1.2	79.02	-3.4	69.3	66.0	63.5	2.59	25.502		
800.0	797.9	792.8	792.0	1.6	1.5	78.61	-4.8	77.6	71.6	68.6	3.02	23.687		
900.0	897.1	891.4	890.0	1.9	1.7	78.83	-6.6	87.7	77.9	74.4	3.48	22.365		
1,000.0	996.2	989.8	987.8	2.2	2.0	79.41	-8.7	99.3	84.9	80.9	3.98	21.340		
1,100.0	1,095.0	1,088.2	1,085.2	2.5	2.2	80.15	-11.0	112.6	92.6	88.1	4.52	20.497		
1,200.0	1,193.6	1,186.5	1,182.4	2.8	2.5	80.96	-13.6	127.5	100.9	95.7	5.10	19.771		
1,300.0	1,291.9	1,284.8	1,279.2	3.2	2.9	81.77	-16.6	144.1	109.7	103.9	5.73	19.122		
1,400.0	1,389.9	1,383.0	1,375.6	3.5	3.2	82.56	-19.8	162.3	119.0	112.5	6.42	18.527		
1,500.0	1,487.6	1,481.1	1,471.7	3.9	3.6	83.30	-23.3	182.1	128.7	121.6	7.16	17.975		
1,600.0	1,584.8	1,579.2	1,567.3	4.4	4.0	83.99	-27.0	203.5	138.9	131.0	7.96	17.457		
1,624.3	1,608.4	1,603.0	1,590.4	4.5	4.1	84.15	-28.0	208.9	141.5	133.3	8.16	17.344		
1,700.0	1,681.8	1,677.2	1,662.5	4.8	4.4	85.34	-31.1	226.5	149.8	141.0	8.80	17.028		
1,800.0	1,778.8	1,776.1	1,758.1	5.3	4.9	86.30	-35.4	251.3	161.5	151.8	9.66	16.717		
1,900.0	1,875.8	1,878.2	1,856.8	5.7	5.4	86.82	-38.6	277.4	172.3	161.7	10.57	16.301		
2,000.0	1,972.8	1,980.6	1,955.7	6.2	5.9	87.03	-40.0	303.8	181.5	170.0	11.49	15.795		
2,100.0	2,069.8	2,081.5	2,053.4	6.6	6.3	87.34	-40.5	329.1	189.6	177.2	12.39	15.305		
2,200.0	2,166.8	2,182.0	2,151.1	7.1	6.8	88.09	-40.9	352.6	197.1	183.8	13.28	14.838		
2,300.0	2,263.8	2,281.7	2,248.1	7.5	7.2	88.88	-41.3	375.6	204.5	190.3	14.18	14.423		
2,400.0	2,360.8	2,381.4	2,345.1	8.0	7.6	89.62	-41.7	398.5	211.9	196.9	15.07	14.059		
2,500.0	2,457.7	2,481.0	2,442.1	8.4	8.1	90.31	-42.2	421.5	219.4	203.4	15.97	13.735		
2,600.0	2,554.7	2,580.7	2,539.1	8.9	8.5	90.95	-42.6	444.4	226.9	210.0	16.87	13.446		
2,700.0	2,651.7	2,680.4	2,636.1	9.4	8.9	91.55	-43.0	467.4	234.4	216.6	17.78	13.188		
2,800.0	2,748.7	2,780.1	2,733.1	9.8	9.4	92.11	-43.4	490.3	242.0	223.3	18.68	12.954		
2,900.0	2,845.7	2,879.8	2,830.1	10.3	9.8	92.64	-43.8	513.3	249.5	230.0	19.58	12.744		
3,000.0	2,942.7	2,979.5	2,927.1	10.8	10.3	93.14	-44.2	536.2	257.1	236.7	20.49	12.552		
3,100.0	3,039.7	3,079.2	3,024.1	11.2	10.7	93.61	-44.6	559.2	264.8	243.4	21.39	12.377		
3,200.0	3,136.7	3,178.9	3,121.2	11.7	11.2	94.05	-45.1	582.1	272.4	250.1	22.29	12.217		
3,300.0	3,233.6	3,278.5	3,218.2	12.2	11.6	94.47	-45.5	605.0	280.0	256.8	23.20	12.071		
3,400.0	3,330.6	3,378.2	3,315.2	12.6	12.0	94.87	-45.9	628.0	287.7	263.6	24.10	11.935		
3,500.0	3,427.6	3,477.9	3,412.2	13.1	12.5	95.24	-46.3	650.9	295.4	270.3	25.01	11.811		
3,600.0	3,524.6	3,577.6	3,509.2	13.6	12.9	95.60	-46.7	673.9	303.0	277.1	25.91	11.695		
3,700.0	3,621.6	3,677.3	3,606.2	14.0	13.4	95.94	-47.1	696.8	310.7	283.9	26.82	11.588		
3,800.0	3,718.6	3,777.0	3,703.2	14.5	13.8	96.26	-47.5	719.8	318.4	290.7	27.72	11.488		
3,900.0	3,815.6	3,876.7	3,800.2	15.0	14.3	96.57	-48.0	742.7	326.1	297.5	28.62	11.394		
4,000.0	3,912.6	3,976.4	3,897.2	15.4	14.7	96.87	-48.4	765.7	333.9	304.3	29.53	11.307		
4,100.0	4,009.5	4,076.0	3,994.2	15.9	15.1	97.15	-48.8	788.6	341.6	311.2	30.43	11.225		
4,200.0	4,106.5	4,175.7	4,091.2	16.4	15.6	97.41	-49.2	811.6	349.3	318.0	31.33	11.149		
4,300.0	4,203.5	4,275.4	4,188.3	16.8	16.0	97.67	-49.6	834.5	357.1	324.8	32.24	11.077		
4,400.0	4,300.5	4,375.1	4,285.3	17.3	16.5	97.92	-50.0	857.5	364.8	331.7	33.14	11.009		
4,500.0	4,397.5	4,474.8	4,382.3	17.8	16.9	98.15	-50.5	880.4	372.6	338.6	34.04	10.945		
4,600.0	4,494.5	4,574.5	4,479.3	18.2	17.4	98.38	-50.9	903.4	380.4	345.4	34.94	10.885		
4,700.0	4,591.5	4,674.2	4,576.3	18.7	17.8	98.59	-51.3	926.3	388.1	352.3	35.85	10.827		
4,800.0	4,688.5	4,773.8	4,673.3	19.2	18.3	98.80	-51.7	949.3	395.9	359.2	36.75	10.773		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,900.0	4,785.4	4,873.5	4,770.3	19.6	18.7	99.00	-52.1	972.2	403.7	366.0	37.65	10.722	
5,000.0	4,882.4	4,973.2	4,867.3	20.1	19.1	99.19	-52.5	995.2	411.5	372.9	38.55	10.673	
5,100.0	4,979.4	5,072.9	4,964.3	20.6	19.6	99.38	-52.9	1,018.1	419.3	379.8	39.45	10.627	
5,200.0	5,076.4	5,172.6	5,061.3	21.0	20.0	99.56	-53.4	1,041.1	427.1	386.7	40.35	10.583	
5,300.0	5,173.4	5,272.3	5,158.3	21.5	20.5	99.73	-53.8	1,064.0	434.9	393.6	41.26	10.541	
5,400.0	5,270.4	5,372.0	5,255.4	22.0	20.9	99.89	-54.2	1,086.9	442.7	400.5	42.16	10.500	
5,500.0	5,367.4	5,471.7	5,352.4	22.5	21.4	100.06	-54.6	1,109.9	450.5	407.4	43.06	10.462	
5,600.0	5,464.4	5,571.3	5,449.4	22.9	21.8	100.21	-55.0	1,132.8	458.3	414.3	43.96	10.425	
5,700.0	5,561.4	5,671.0	5,546.4	23.4	22.3	100.36	-55.4	1,155.8	466.1	421.2	44.86	10.390	
5,800.0	5,658.3	5,770.7	5,643.4	23.9	22.7	100.50	-55.8	1,178.7	473.9	428.1	45.76	10.357	
5,900.0	5,755.3	5,870.4	5,740.4	24.3	23.2	100.64	-56.3	1,201.7	481.7	435.1	46.66	10.325	
6,000.0	5,852.3	5,970.1	5,837.4	24.8	23.6	100.78	-56.7	1,224.6	489.5	442.0	47.56	10.294	
6,100.0	5,949.3	6,069.8	5,934.4	25.3	24.0	100.91	-57.1	1,247.6	497.4	448.9	48.46	10.264	
6,200.0	6,046.3	6,169.5	6,031.4	25.7	24.5	101.04	-57.5	1,270.5	505.2	455.8	49.36	10.236	
6,300.0	6,143.3	6,269.2	6,128.4	26.2	24.9	101.16	-57.9	1,293.5	513.0	462.8	50.25	10.208	
6,400.0	6,240.3	6,368.8	6,225.4	26.7	25.4	101.28	-58.3	1,316.4	520.8	469.7	51.15	10.182	
6,500.0	6,337.3	6,468.5	6,322.5	27.1	25.8	101.40	-58.8	1,339.4	528.7	476.6	52.05	10.156	
6,600.0	6,434.2	6,568.2	6,419.5	27.6	26.3	101.51	-59.2	1,362.3	536.5	483.6	52.95	10.132	
6,700.0	6,531.2	6,667.9	6,516.5	28.1	26.7	101.62	-59.6	1,385.3	544.3	490.5	53.85	10.108	
6,800.0	6,628.2	6,767.6	6,613.5	28.5	27.2	101.73	-60.0	1,408.2	552.2	497.4	54.75	10.086	
6,900.0	6,725.2	6,867.3	6,710.5	29.0	27.6	101.83	-60.4	1,431.2	560.0	504.4	55.65	10.064	
7,000.0	6,822.2	6,967.0	6,807.5	29.5	28.1	101.93	-60.8	1,454.1	567.9	511.3	56.55	10.043	
7,100.0	6,919.2	7,066.7	6,904.5	30.0	28.5	102.03	-61.2	1,477.1	575.7	518.3	57.44	10.022	
7,200.0	7,016.2	7,166.3	7,001.5	30.4	28.9	102.12	-61.7	1,500.0	583.6	525.2	58.34	10.002	
7,300.0	7,113.2	7,266.0	7,098.5	30.9	29.4	102.22	-62.1	1,523.0	591.4	532.2	59.24	9.983	
7,328.7	7,141.0	7,294.7	7,126.4	31.0	29.5	102.24	-62.2	1,529.5	593.7	534.2	59.50	9.978	
7,350.0	7,161.7	7,315.9	7,147.1	31.1	29.6	93.86	-62.3	1,534.4	594.9	535.2	59.69	9.967	
7,400.0	7,210.3	8,271.9	7,740.0	31.3	33.8	-42.00	530.9	1,671.6	558.4	540.7	17.64	31.645	
7,450.0	7,258.7	8,267.2	7,740.0	31.5	33.8	-84.86	526.2	1,671.6	508.8	491.1	17.74	28.688	
7,500.0	7,306.5	8,258.2	7,740.0	31.7	33.8	-107.47	517.2	1,671.6	459.9	442.1	17.82	25.813	
7,550.0	7,353.4	8,226.7	7,739.4	31.8	33.6	-117.79	485.7	1,671.7	411.9	393.0	18.91	21.784	
7,600.0	7,399.0	8,185.3	7,736.2	31.9	33.4	-122.45	444.4	1,671.1	364.1	342.9	21.21	17.171	
7,650.0	7,442.9	8,150.0	7,731.1	32.0	33.2	-125.55	409.5	1,670.1	316.8	293.2	23.61	13.419	
7,700.0	7,484.9	8,117.8	7,724.7	32.1	33.0	-127.09	378.0	1,668.8	270.1	244.1	26.05	10.370	
7,750.0	7,524.5	8,087.6	7,717.1	32.1	32.9	-126.97	348.8	1,667.1	224.2	195.7	28.50	7.868	
7,800.0	7,561.6	8,058.5	7,708.4	32.1	32.7	-124.88	321.2	1,665.2	179.5	148.6	30.95	5.800	
7,850.0	7,595.8	8,030.4	7,698.7	32.2	32.6	-120.08	294.8	1,663.0	136.5	103.1	33.34	4.093	
7,900.0	7,626.8	8,002.7	7,688.0	32.2	32.5	-111.12	269.5	1,660.6	96.4	61.1	35.35	2.727	
7,950.0	7,654.5	7,975.6	7,676.2	32.2	32.4	-95.66	245.1	1,658.0	63.4	28.3	35.06	1.808	
7,995.0	7,676.3	7,951.4	7,664.9	32.3	32.3	-75.28	223.9	1,655.4	50.4	21.4	28.96	1.739 CC, ES, SF	
8,000.0	7,678.5	7,948.7	7,663.6	32.3	32.2	-72.77	221.6	1,655.1	50.5	22.2	28.31	1.785	
8,050.0	7,698.8	7,922.1	7,650.0	32.3	32.1	-48.42	199.0	1,652.0	68.1	37.8	30.25	2.250	
8,100.0	7,715.2	7,895.7	7,635.5	32.3	32.0	-30.29	177.1	1,648.7	99.9	64.2	35.71	2.797	
8,150.0	7,727.5	7,869.5	7,620.1	32.4	31.9	-18.80	156.2	1,645.2	135.1	95.6	39.49	3.422	
8,200.0	7,735.6	7,843.4	7,603.9	32.4	31.8	-11.53	136.0	1,641.5	170.8	128.5	42.35	4.034	
8,250.0	7,739.6	7,817.4	7,587.0	32.4	31.7	-6.68	116.7	1,637.5	206.0	161.2	44.73	4.605	
8,271.7	7,740.0	7,800.0	7,575.1	32.5	31.6	-4.59	104.3	1,634.8	221.0	176.5	44.51	4.964	
8,300.0	7,740.0	7,791.8	7,569.4	32.5	31.6	-4.00	98.6	1,633.5	240.5	193.7	46.79	5.140	
8,400.0	7,740.0	7,750.0	7,539.2	32.7	31.4	-1.40	70.6	1,626.5	313.9	263.5	50.45	6.222	
8,500.0	7,740.0	7,700.0	7,500.5	33.0	31.2	0.98	40.3	1,617.5	392.5	340.9	51.64	7.601	
8,600.0	7,740.0	7,676.7	7,481.5	33.4	31.1	1.88	27.4	1,613.1	474.6	420.4	54.25	8.749	
8,700.0	7,740.0	7,650.0	7,459.3	33.8	31.0	2.79	13.6	1,607.9	559.8	504.1	55.67	10.055	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,800.0	7,740.0	7,626.0	7,438.8	34.4	30.9	3.51	2.1	1,603.1	647.3	590.6	56.73	11.411	
8,900.0	7,740.0	7,600.0	7,416.1	35.0	30.8	4.20	-9.4	1,597.8	736.7	679.3	57.36	12.843	
9,000.0	7,740.0	7,600.0	7,416.1	35.7	30.8	4.20	-9.4	1,597.8	827.6	768.9	58.72	14.094	
9,100.0	7,740.0	7,572.8	7,391.8	36.4	30.7	4.84	-20.2	1,592.1	919.4	860.5	58.89	15.611	
9,200.0	7,740.0	7,550.0	7,371.1	37.3	30.6	5.32	-28.4	1,587.2	1,012.4	953.3	59.12	17.125	
9,300.0	7,740.0	7,550.0	7,371.1	38.2	30.6	5.32	-28.4	1,587.2	1,106.1	1,046.2	59.87	18.476	
9,400.0	7,740.0	7,550.0	7,371.1	39.1	30.6	5.32	-28.4	1,587.2	1,200.8	1,140.3	60.47	19.859	
9,500.0	7,740.0	7,526.5	7,349.4	40.1	30.5	5.76	-35.9	1,582.2	1,295.6	1,235.1	60.46	21.428	
9,600.0	7,740.0	7,517.7	7,341.3	41.2	30.5	5.92	-38.5	1,580.2	1,391.1	1,330.4	60.74	22.904	
9,700.0	7,740.0	7,500.0	7,324.6	42.3	30.4	6.22	-43.3	1,576.3	1,487.2	1,426.4	60.80	24.460	
9,800.0	7,740.0	7,500.0	7,324.6	43.5	30.4	6.22	-43.3	1,576.3	1,583.4	1,522.3	61.16	25.890	
9,900.0	7,740.0	7,500.0	7,324.6	44.7	30.4	6.22	-43.3	1,576.3	1,680.1	1,618.6	61.47	27.331	
10,000.0	7,740.0	7,500.0	7,324.6	45.9	30.4	6.22	-43.3	1,576.3	1,777.1	1,715.4	61.75	28.780	
10,100.0	7,740.0	7,500.0	7,324.6	47.1	30.4	6.22	-43.3	1,576.3	1,874.5	1,812.5	61.99	30.236	
10,200.0	7,740.0	7,479.1	7,304.8	48.4	30.3	6.54	-48.3	1,571.7	1,971.6	1,909.7	61.92	31.842	
10,300.0	7,740.0	7,474.3	7,300.3	49.8	30.3	6.61	-49.3	1,570.6	2,069.2	2,007.1	62.07	33.338	
10,400.0	7,740.0	7,469.8	7,296.1	51.1	30.3	6.68	-50.3	1,569.6	2,166.9	2,104.7	62.21	34.834	
10,500.0	7,740.0	7,450.0	7,277.1	52.5	30.2	6.95	-54.0	1,565.1	2,265.1	2,203.0	62.14	36.455	
10,600.0	7,740.0	7,450.0	7,277.1	53.9	30.2	6.95	-54.0	1,565.1	2,363.1	2,300.8	62.32	37.919	
10,700.0	7,740.0	7,450.0	7,277.1	55.3	30.2	6.95	-54.0	1,565.1	2,461.2	2,398.7	62.49	39.385	
10,800.0	7,740.0	7,450.0	7,277.1	56.7	30.2	6.95	-54.0	1,565.1	2,559.5	2,496.8	62.65	40.852	
10,900.0	7,740.0	7,450.0	7,277.1	58.2	30.2	6.95	-54.0	1,565.1	2,657.9	2,595.0	62.80	42.319	
11,000.0	7,740.0	7,450.0	7,277.1	59.7	30.2	6.95	-54.0	1,565.1	2,756.4	2,693.4	62.95	43.786	
11,100.0	7,740.0	7,450.0	7,277.1	61.2	30.2	6.95	-54.0	1,565.1	2,855.0	2,791.9	63.09	45.252	
11,200.0	7,740.0	7,450.0	7,277.1	62.7	30.2	6.95	-54.0	1,565.1	2,953.7	2,890.4	63.22	46.717	
11,300.0	7,740.0	7,450.0	7,277.1	64.2	30.2	6.95	-54.0	1,565.1	3,052.5	2,989.1	63.35	48.181	
11,400.0	7,740.0	7,450.0	7,277.1	65.7	30.2	6.95	-54.0	1,565.1	3,151.3	3,087.8	63.48	49.644	
11,500.0	7,740.0	7,450.0	7,277.1	67.2	30.2	6.95	-54.0	1,565.1	3,250.2	3,186.6	63.60	51.104	
11,600.0	7,740.0	7,450.0	7,277.1	68.8	30.2	6.95	-54.0	1,565.1	3,349.2	3,285.5	63.72	52.563	
11,700.0	7,740.0	7,450.0	7,277.1	70.3	30.2	6.95	-54.0	1,565.1	3,448.3	3,384.5	63.83	54.020	
11,800.0	7,740.0	7,450.0	7,277.1	71.9	30.2	6.95	-54.0	1,565.1	3,547.4	3,483.5	63.95	55.474	
11,900.0	7,740.0	7,428.0	7,256.0	73.5	30.1	7.23	-57.3	1,560.2	3,646.1	3,582.2	63.84	57.116	
12,000.0	7,740.0	7,426.3	7,254.3	75.1	30.1	7.25	-57.6	1,559.8	3,745.2	3,681.3	63.93	58.583	
12,100.0	7,740.0	7,424.6	7,252.6	76.6	30.1	7.27	-57.8	1,559.4	3,844.4	3,780.3	64.02	60.047	
12,200.0	7,740.0	7,423.0	7,251.1	78.2	30.1	7.29	-58.0	1,559.0	3,943.6	3,879.4	64.11	61.509	
12,300.0	7,740.0	7,400.0	7,228.9	79.8	30.0	7.56	-60.4	1,553.8	4,043.2	3,979.2	64.00	63.179	
12,400.0	7,740.0	7,400.0	7,228.9	81.5	30.0	7.56	-60.4	1,553.8	4,142.4	4,078.3	64.10	64.622	
12,500.0	7,740.0	7,400.0	7,228.9	83.1	30.0	7.56	-60.4	1,553.8	4,241.7	4,177.5	64.21	66.061	
12,600.0	7,740.0	7,400.0	7,228.9	84.7	30.0	7.56	-60.4	1,553.8	4,341.0	4,276.7	64.31	67.498	
12,700.0	7,740.0	7,400.0	7,228.9	86.3	30.0	7.56	-60.4	1,553.8	4,440.3	4,375.9	64.42	68.932	
12,800.0	7,740.0	7,400.0	7,228.9	88.0	30.0	7.56	-60.4	1,553.8	4,539.6	4,475.1	64.52	70.363	
12,900.0	7,740.0	7,400.0	7,228.9	89.6	30.0	7.56	-60.4	1,553.8	4,639.0	4,574.4	64.62	71.791	
13,000.0	7,740.0	7,400.0	7,228.9	91.2	30.0	7.56	-60.4	1,553.8	4,738.4	4,673.7	64.72	73.216	
13,100.0	7,740.0	7,400.0	7,228.9	92.9	30.0	7.56	-60.4	1,553.8	4,837.8	4,773.0	64.82	74.638	
13,200.0	7,740.0	7,400.0	7,228.9	94.5	30.0	7.56	-60.4	1,553.8	4,937.2	4,872.3	64.91	76.057	
13,300.0	7,740.0	7,400.0	7,228.9	96.2	30.0	7.56	-60.4	1,553.8	5,036.7	4,971.7	65.01	77.473	
13,400.0	7,740.0	7,400.0	7,228.9	97.8	30.0	7.56	-60.4	1,553.8	5,136.2	5,071.1	65.11	78.886	
13,500.0	7,740.0	7,400.0	7,228.9	99.5	30.0	7.56	-60.4	1,553.8	5,235.7	5,170.5	65.21	80.295	
13,600.0	7,740.0	7,400.0	7,228.9	101.2	30.0	7.56	-60.4	1,553.8	5,335.2	5,269.9	65.30	81.701	
13,700.0	7,740.0	7,400.0	7,228.9	102.8	30.0	7.56	-60.4	1,553.8	5,434.7	5,369.4	65.40	83.104	
13,800.0	7,740.0	7,400.0	7,228.9	104.5	30.0	7.56	-60.4	1,553.8	5,534.3	5,468.8	65.49	84.504	
13,900.0	7,740.0	7,400.0	7,228.9	106.2	30.0	7.56	-60.4	1,553.8	5,633.9	5,568.3	65.59	85.901	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	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)	Axis	Factor		
14,000.0	7,740.0	7,400.0	7,228.9	107.8	30.0	7.56	-60.4	1,553.8	5,733.5	5,667.8	65.68	87.294		
14,100.0	7,740.0	7,400.0	7,228.9	109.5	30.0	7.56	-60.4	1,553.8	5,833.1	5,767.3	65.77	88.684		
14,200.0	7,740.0	7,400.0	7,228.9	111.2	30.0	7.56	-60.4	1,553.8	5,932.7	5,866.8	65.87	90.070		
14,300.0	7,740.0	7,400.0	7,228.9	112.9	30.0	7.56	-60.4	1,553.8	6,032.3	5,966.3	65.96	91.453		
14,400.0	7,740.0	7,400.0	7,228.9	114.6	30.0	7.56	-60.4	1,553.8	6,131.9	6,065.9	66.05	92.833		
14,500.0	7,740.0	7,400.0	7,228.9	116.3	30.0	7.56	-60.4	1,553.8	6,231.6	6,165.5	66.15	94.210		
14,600.0	7,740.0	7,400.0	7,228.9	117.9	30.0	7.56	-60.4	1,553.8	6,331.3	6,265.0	66.24	95.583		
14,700.0	7,740.0	7,400.0	7,228.9	119.6	30.0	7.56	-60.4	1,553.8	6,430.9	6,364.6	66.33	96.953		
14,800.0	7,740.0	7,400.0	7,228.9	121.3	30.0	7.56	-60.4	1,553.8	6,530.6	6,464.2	66.42	98.319		
14,900.0	7,740.0	7,400.0	7,228.9	123.0	30.0	7.56	-60.4	1,553.8	6,630.3	6,563.8	66.51	99.683		
15,000.0	7,740.0	7,400.0	7,228.9	124.7	30.0	7.56	-60.4	1,553.8	6,730.0	6,663.4	66.61	101.042		
15,100.0	7,740.0	7,400.0	7,228.9	126.4	30.0	7.56	-60.4	1,553.8	6,829.7	6,763.0	66.70	102.399		
15,200.0	7,740.0	7,400.0	7,228.9	128.1	30.0	7.56	-60.4	1,553.8	6,929.4	6,862.7	66.79	103.752		
15,300.0	7,740.0	7,400.0	7,228.9	129.8	30.0	7.56	-60.4	1,553.8	7,029.2	6,962.3	66.88	105.102		
15,400.0	7,740.0	7,400.0	7,228.9	131.5	30.0	7.56	-60.4	1,553.8	7,128.9	7,061.9	66.97	106.448		
15,500.0	7,740.0	7,400.0	7,228.9	133.2	30.0	7.56	-60.4	1,553.8	7,228.6	7,161.6	67.06	107.791		
15,600.0	7,740.0	7,400.0	7,228.9	134.9	30.0	7.56	-60.4	1,553.8	7,328.4	7,261.2	67.15	109.130		
15,700.0	7,740.0	7,400.0	7,228.9	136.6	30.0	7.56	-60.4	1,553.8	7,428.1	7,360.9	67.24	110.467		
15,800.0	7,740.0	7,400.0	7,228.9	138.3	30.0	7.56	-60.4	1,553.8	7,527.9	7,460.6	67.33	111.799		
15,900.0	7,740.0	7,400.0	7,228.9	140.0	30.0	7.56	-60.4	1,553.8	7,627.7	7,560.3	67.42	113.129		
16,000.0	7,740.0	7,400.0	7,228.9	141.7	30.0	7.56	-60.4	1,553.8	7,727.5	7,659.9	67.52	114.455		
16,100.0	7,740.0	7,400.0	7,228.9	143.5	30.0	7.56	-60.4	1,553.8	7,827.2	7,759.6	67.61	115.778		
16,171.7	7,740.0	7,400.0	7,228.9	144.7	30.0	7.56	-60.4	1,553.8	7,898.7	7,831.1	67.67	116.724		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.35	-0.4	59.9	59.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.35	-0.4	59.9	59.9	59.6	0.30	197.227		
150.0	150.0	150.0	150.0	0.2	0.2	90.35	-0.4	59.9	59.9	59.4	0.48	125.246 CC		
200.0	200.0	200.0	200.0	0.3	0.3	90.98	-0.4	59.9	59.9	59.2	0.65	91.659 ES		
283.3	283.2	282.4	282.4	0.5	0.5	94.69	-0.4	60.5	60.7	59.7	0.96	63.372		
300.0	299.9	298.8	298.8	0.5	0.5	93.38	-0.4	60.7	61.0	60.0	1.02	59.855		
400.0	399.6	397.5	397.4	0.7	0.7	85.82	-0.5	63.3	63.6	62.2	1.40	45.466		
500.0	499.3	496.1	496.0	0.9	0.9	79.63	-0.6	67.5	66.8	65.0	1.78	37.413		
600.0	598.9	594.7	594.4	1.2	1.1	75.22	-0.8	73.5	70.6	68.4	2.18	32.344		
700.0	698.5	693.3	692.7	1.4	1.3	72.38	-1.0	81.1	75.0	72.4	2.60	28.868		
800.0	797.9	791.8	790.8	1.6	1.5	70.72	-1.3	90.4	79.9	76.8	3.04	26.312		
900.0	897.1	890.4	888.7	1.9	1.7	69.87	-1.7	101.4	85.2	81.7	3.50	24.319		
1,000.0	996.2	988.8	986.3	2.2	2.0	69.55	-2.1	114.1	90.9	86.9	4.01	22.687		
1,100.0	1,095.0	1,087.3	1,083.7	2.5	2.3	69.58	-2.5	128.4	96.9	92.4	4.55	21.300		
1,200.0	1,193.6	1,185.7	1,180.8	2.8	2.6	69.81	-3.0	144.4	103.2	98.1	5.14	20.085		
1,300.0	1,291.9	1,284.1	1,277.6	3.2	3.0	70.18	-3.5	162.1	109.8	104.0	5.78	19.001		
1,400.0	1,389.9	1,382.4	1,374.0	3.5	3.3	70.61	-4.1	181.4	116.5	110.1	6.47	18.021		
1,500.0	1,487.6	1,480.8	1,470.1	3.9	3.7	71.09	-4.8	202.4	123.5	116.3	7.21	17.126		
1,600.0	1,584.8	1,579.0	1,565.8	4.4	4.2	71.59	-5.5	225.0	130.7	122.7	8.02	16.304		
1,624.3	1,608.4	1,602.9	1,588.9	4.5	4.3	71.71	-5.7	230.7	132.5	124.2	8.22	16.122		
1,700.0	1,681.8	1,677.3	1,661.0	4.8	4.6	72.78	-6.2	249.2	138.3	129.4	8.86	15.616		
1,800.0	1,778.8	1,775.5	1,755.7	5.3	5.1	73.59	-7.0	275.0	146.9	137.2	9.71	15.129		
1,900.0	1,875.8	1,873.5	1,849.8	5.7	5.6	73.80	-7.9	302.4	156.6	146.0	10.58	14.805		
2,000.0	1,972.8	1,971.4	1,943.3	6.2	6.2	73.52	-8.8	331.4	167.2	155.8	11.44	14.613		
2,100.0	2,069.8	2,069.2	2,036.2	6.6	6.7	72.83	-9.7	361.9	178.8	166.5	12.30	14.539		
2,200.0	2,166.8	2,168.4	2,130.3	7.1	7.3	72.07	-10.7	393.5	190.9	177.7	13.17	14.496		
2,300.0	2,263.8	2,267.7	2,224.4	7.5	7.9	71.40	-11.7	425.1	202.9	188.9	14.03	14.463		
2,400.0	2,360.8	2,366.9	2,318.5	8.0	8.5	70.80	-12.7	456.6	215.0	200.1	14.89	14.437		
2,500.0	2,457.7	2,466.2	2,412.5	8.4	9.1	70.26	-13.7	488.2	227.1	211.3	15.75	14.417		
2,600.0	2,554.7	2,565.4	2,506.6	8.9	9.7	69.79	-14.6	519.8	239.2	222.6	16.61	14.401		
2,700.0	2,651.7	2,664.6	2,600.7	9.4	10.2	69.35	-15.6	551.3	251.3	233.9	17.47	14.388		
2,800.0	2,748.7	2,763.9	2,694.8	9.8	10.8	68.96	-16.6	582.9	263.5	245.1	18.32	14.379		
2,900.0	2,845.7	2,863.1	2,788.9	10.3	11.4	68.60	-17.6	614.5	275.6	256.4	19.18	14.371		
3,000.0	2,942.7	2,962.4	2,883.0	10.8	12.0	68.27	-18.6	646.0	287.8	267.7	20.03	14.366		
3,100.0	3,039.7	3,061.6	2,977.1	11.2	12.6	67.97	-19.5	677.6	299.9	279.1	20.88	14.362		
3,200.0	3,136.7	3,160.9	3,071.1	11.7	13.2	67.69	-20.5	709.2	312.1	290.4	21.74	14.359		
3,300.0	3,233.6	3,260.1	3,165.2	12.2	13.8	67.43	-21.5	740.8	324.3	301.7	22.59	14.357		
3,400.0	3,330.6	3,359.4	3,259.3	12.6	14.4	67.20	-22.5	772.3	336.5	313.1	23.44	14.356		
3,500.0	3,427.6	3,458.6	3,353.4	13.1	15.0	66.97	-23.5	803.9	348.7	324.4	24.29	14.356 SF		
3,600.0	3,524.6	3,557.8	3,447.5	13.6	15.6	66.77	-24.4	835.5	360.9	335.7	25.14	14.356		
3,700.0	3,621.6	3,657.1	3,541.6	14.0	16.2	66.57	-25.4	867.0	373.1	347.1	25.99	14.357		
3,800.0	3,718.6	3,756.3	3,635.6	14.5	16.8	66.39	-26.4	898.6	385.3	358.5	26.84	14.358		
3,900.0	3,815.6	3,855.6	3,729.7	15.0	17.4	66.22	-27.4	930.2	397.5	369.8	27.68	14.359		
4,000.0	3,912.6	3,954.8	3,823.8	15.4	18.0	66.06	-28.4	961.7	409.7	381.2	28.53	14.360		
4,100.0	4,009.5	4,054.1	3,917.9	15.9	18.6	65.91	-29.3	993.3	421.9	392.6	29.38	14.362		
4,200.0	4,106.5	4,153.3	4,012.0	16.4	19.2	65.77	-30.3	1,024.9	434.2	403.9	30.23	14.364		
4,300.0	4,203.5	4,252.6	4,106.1	16.8	19.8	65.63	-31.3	1,056.4	446.4	415.3	31.07	14.366		
4,400.0	4,300.5	4,351.8	4,200.2	17.3	20.4	65.51	-32.3	1,088.0	458.6	426.7	31.92	14.368		
4,500.0	4,397.5	4,451.1	4,294.2	17.8	21.0	65.39	-33.3	1,119.6	470.8	438.1	32.76	14.370		
4,600.0	4,494.5	4,550.3	4,388.3	18.2	21.6	65.27	-34.2	1,151.1	483.1	449.5	33.61	14.373		
4,700.0	4,591.5	4,649.5	4,482.4	18.7	22.2	65.16	-35.2	1,182.7	495.3	460.8	34.46	14.375		
4,800.0	4,688.5	4,748.8	4,576.5	19.2	22.8	65.06	-36.2	1,214.3	507.5	472.2	35.30	14.377		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
4,900.0	4,785.4	4,848.0	4,670.6	19.6	23.4	64.96	-37.2	1,245.8	519.8	483.6	36.15	14.379		
5,000.0	4,882.4	4,947.3	4,764.7	20.1	24.0	64.87	-38.2	1,277.4	532.0	495.0	36.99	14.382		
5,100.0	4,979.4	5,046.5	4,858.8	20.6	24.6	64.78	-39.1	1,309.0	544.2	506.4	37.84	14.384		
5,200.0	5,076.4	5,145.8	4,952.8	21.0	25.2	64.69	-40.1	1,340.6	556.5	517.8	38.68	14.386		
5,300.0	5,173.4	5,245.0	5,046.9	21.5	25.8	64.61	-41.1	1,372.1	568.7	529.2	39.53	14.389		
5,400.0	5,270.4	5,344.3	5,141.0	22.0	26.4	64.53	-42.1	1,403.7	581.0	540.6	40.37	14.391		
5,500.0	5,367.4	5,443.5	5,235.1	22.5	27.0	64.45	-43.0	1,435.3	593.2	552.0	41.21	14.393		
5,600.0	5,464.4	5,542.7	5,329.2	22.9	27.6	64.38	-44.0	1,466.8	605.4	563.4	42.06	14.395		
5,700.0	5,561.4	5,642.0	5,423.3	23.4	28.2	64.31	-45.0	1,498.4	617.7	574.8	42.90	14.398		
5,800.0	5,658.3	5,741.2	5,517.4	23.9	28.9	64.24	-46.0	1,530.0	629.9	586.2	43.75	14.400		
5,900.0	5,755.3	5,840.5	5,611.4	24.3	29.5	64.18	-47.0	1,561.5	642.2	597.6	44.59	14.402		
6,000.0	5,852.3	5,939.7	5,705.5	24.8	30.1	64.12	-47.9	1,593.1	654.4	609.0	45.43	14.404		
6,100.0	5,949.3	6,039.0	5,799.6	25.3	30.7	64.06	-48.9	1,624.7	666.7	620.4	46.28	14.406		
6,200.0	6,046.3	6,138.2	5,893.7	25.7	31.3	64.00	-49.9	1,656.2	678.9	631.8	47.12	14.408		
6,300.0	6,143.3	6,237.5	5,987.8	26.2	31.9	63.95	-50.9	1,687.8	691.2	643.2	47.96	14.410		
6,400.0	6,240.3	6,336.7	6,081.9	26.7	32.5	63.89	-51.9	1,719.4	703.4	654.6	48.81	14.412		
6,500.0	6,337.3	6,435.9	6,175.9	27.1	33.1	63.84	-52.8	1,750.9	715.7	666.0	49.65	14.414		
6,600.0	6,434.2	6,535.2	6,270.0	27.6	33.7	63.79	-53.8	1,782.5	727.9	677.4	50.49	14.416		
6,700.0	6,531.2	6,634.4	6,364.1	28.1	34.3	63.74	-54.8	1,814.1	740.2	688.8	51.34	14.418		
6,800.0	6,628.2	6,733.7	6,458.2	28.5	34.9	63.69	-55.8	1,845.6	752.4	700.2	52.18	14.420		
6,900.0	6,725.2	6,832.9	6,552.3	29.0	35.5	63.65	-56.8	1,877.2	764.7	711.6	53.02	14.422		
7,000.0	6,822.2	6,932.2	6,646.4	29.5	36.1	63.61	-57.7	1,908.8	776.9	723.1	53.86	14.424		
7,100.0	6,919.2	7,031.4	6,740.5	30.0	36.7	63.56	-58.7	1,940.4	789.2	734.5	54.71	14.426		
7,200.0	7,016.2	7,130.7	6,834.5	30.4	37.3	63.52	-59.7	1,971.9	801.4	745.9	55.55	14.427		
7,300.0	7,113.2	7,222.8	6,928.5	30.9	37.9	63.48	-60.7	2,003.5	813.6	757.3	56.39	14.429		
7,328.7	7,141.0	7,224.3	6,956.3	31.0	38.0	63.47	-60.8	2,011.1	818.1	761.8	56.66	14.430		
7,350.0	7,161.7	7,225.0	6,977.0	31.1	38.1	63.46	-60.9	2,018.7	822.6	766.3	56.93	14.431		
7,400.0	7,210.3	7,223.6	7,026.0	31.3	38.3	63.44	-61.1	2,033.1	837.0	780.7	57.35	14.434		
7,450.0	7,258.7	7,217.9	7,075.0	31.5	38.5	63.42	-61.3	2,047.5	851.4	795.1	57.77	14.437		
7,500.0	7,306.5	7,207.9	7,124.0	31.7	38.7	63.40	-61.5	2,061.9	865.8	809.5	58.19	14.440		
7,550.0	7,353.4	7,193.6	7,173.0	31.8	38.8	63.39	-61.6	2,076.3	880.2	823.9	58.61	14.443		
7,600.0	7,399.0	7,175.3	7,222.0	31.9	38.9	63.38	-61.7	2,090.7	894.6	838.3	59.03	14.446		
7,650.0	7,442.9	7,148.5	7,271.0	32.0	39.0	63.37	-61.8	2,105.1	909.0	852.7	59.45	14.449		
7,700.0	7,484.9	7,109.9	7,319.0	32.1	39.1	63.36	-61.9	2,119.5	923.4	867.1	59.87	14.452		
7,750.0	7,524.5	7,074.1	7,368.0	32.1	39.2	63.35	-62.0	2,133.9	937.8	881.5	60.29	14.455		
7,800.0	7,561.6	7,040.3	7,417.0	32.1	39.3	63.34	-62.1	2,148.3	952.2	895.9	60.71	14.458		
7,830.8	7,583.0	7,020.1	7,448.1	32.2	39.4	63.33	-62.2	2,162.7	966.6	910.3	61.13	14.461		
7,850.0	7,595.8	7,007.8	7,481.1	32.2	39.5	63.32	-62.3	2,177.1	981.0	924.7	61.55	14.464		
7,900.0	7,626.8	7,976.5	7,472.6	32.2	39.6	63.31	-62.4	2,191.5	995.4	939.1	61.97	14.467		
7,950.0	7,654.5	7,946.0	7,462.8	32.2	39.7	63.30	-62.5	2,205.9	1009.8	953.5	62.39	14.470		
8,000.0	7,678.5	7,916.2	7,451.9	32.3	39.8	63.29	-62.6	2,220.3	1024.2	967.9	62.81	14.473		
8,050.0	7,698.8	7,886.9	7,439.8	32.3	39.9	63.28	-62.7	2,234.7	1038.6	982.3	63.23	14.476		
8,100.0	7,715.2	7,858.0	7,426.6	32.3	40.0	63.27	-62.8	2,249.1	1053.0	996.7	63.65	14.479		
8,150.0	7,727.5	7,829.5	7,412.5	32.4	40.1	63.26	-62.9	2,263.5	1067.4	1011.1	64.07	14.482		
8,200.0	7,735.6	7,800.0	7,396.6	32.4	40.2	63.25	-63.0	2,277.9	1081.8	1025.5	64.49	14.485		
8,250.0	7,739.6	7,773.3	7,381.3	32.4	40.3	63.24	-63.1	2,292.3	1096.2	1040.0	64.91	14.488		
8,271.7	7,740.0	7,761.2	7,374.1	32.5	40.4	63.23	-63.2	2,306.7	1110.6	1054.4	65.33	14.491		
8,300.0	7,740.0	7,750.0	7,367.2	32.5	40.5	63.22	-63.3	2,321.1	1125.0	1068.8	65.75	14.494		
8,400.0	7,740.0	7,700.0	7,334.6	32.7	40.7	63.20	-63.5	2,359.9	1163.8	1107.6	66.39	14.500		
8,500.0	7,740.0	7,650.0	7,299.1	33.0	41.0	63.17	-63.8	2,408.7	1202.6	1146.4	67.03	14.506		
8,600.0	7,740.0	7,618.2	7,275.2	33.4	41.4	63.13	-64.2	2,457.5	1241.4	1185.2	67.67	14.512		
8,700.0	7,740.0	7,587.1	7,250.8	33.8	41.8	63.08	-64.6	2,506.3	1280.2	1224.0	68.31	14.518		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	7,550.0	7,220.6	34.4	39.6	-42.25	19.8	2,093.4	917.1	862.4	54.69	16.769		
8,900.0	7,740.0	7,550.0	7,220.6	35.0	39.6	-42.25	19.8	2,093.4	984.4	925.8	58.64	16.787		
9,000.0	7,740.0	7,516.6	7,192.5	35.7	39.4	-40.28	3.6	2,085.6	1,055.7	994.8	60.89	17.338		
9,100.0	7,740.0	7,500.0	7,178.2	36.4	39.3	-39.31	-3.8	2,081.5	1,130.7	1,067.5	63.19	17.895		
9,200.0	7,740.0	7,482.8	7,163.2	37.3	39.3	-38.30	-11.0	2,077.2	1,208.7	1,143.7	65.06	18.580		
9,300.0	7,740.0	7,468.6	7,150.7	38.2	39.2	-37.49	-16.6	2,073.5	1,289.3	1,222.7	66.67	19.340		
9,400.0	7,740.0	7,450.0	7,134.1	39.1	39.1	-36.42	-23.5	2,068.6	1,372.2	1,304.2	67.95	20.194		
9,500.0	7,740.0	7,450.0	7,134.1	40.1	39.1	-36.42	-23.5	2,068.6	1,456.8	1,387.4	69.39	20.993		
9,600.0	7,740.0	7,450.0	7,134.1	41.2	39.1	-36.42	-23.5	2,068.6	1,543.3	1,472.6	70.62	21.854		
9,700.0	7,740.0	7,425.1	7,111.6	42.3	39.0	-35.02	-31.8	2,061.9	1,630.6	1,559.4	71.17	22.912		
9,800.0	7,740.0	7,400.0	7,088.7	43.5	38.9	-33.64	-39.1	2,054.9	1,719.7	1,648.1	71.62	24.012		
9,900.0	7,740.0	7,400.0	7,088.7	44.7	38.9	-33.64	-39.1	2,054.9	1,809.3	1,736.9	72.45	24.975		
10,000.0	7,740.0	7,400.0	7,088.7	45.9	38.9	-33.64	-39.1	2,054.9	1,900.0	1,826.8	73.17	25.968		
10,100.0	7,740.0	7,400.0	7,088.7	47.1	38.9	-33.64	-39.1	2,054.9	1,991.6	1,917.8	73.80	26.986		
10,200.0	7,740.0	7,400.0	7,088.7	48.4	38.9	-33.64	-39.1	2,054.9	2,083.9	2,009.5	74.36	28.024		
10,300.0	7,740.0	7,400.0	7,088.7	49.8	38.9	-33.64	-39.1	2,054.9	2,176.9	2,102.0	74.86	29.081		
10,400.0	7,740.0	7,378.4	7,068.7	51.1	38.7	-32.47	-44.6	2,048.8	2,270.0	2,195.1	74.96	30.281		
10,500.0	7,740.0	7,373.6	7,064.2	52.5	38.7	-32.22	-45.7	2,047.4	2,363.9	2,288.6	75.30	31.392		
10,600.0	7,740.0	7,350.0	7,042.2	53.9	38.6	-30.98	-50.6	2,040.5	2,458.6	2,383.3	75.32	32.642		
10,700.0	7,740.0	7,350.0	7,042.2	55.3	38.6	-30.98	-50.6	2,040.5	2,553.2	2,477.5	75.67	33.741		
10,800.0	7,740.0	7,350.0	7,042.2	56.7	38.6	-30.98	-50.6	2,040.5	2,648.2	2,572.2	75.99	34.848		
10,900.0	7,740.0	7,350.0	7,042.2	58.2	38.6	-30.98	-50.6	2,040.5	2,743.5	2,667.2	76.29	35.964		
11,000.0	7,740.0	7,350.0	7,042.2	59.7	38.6	-30.98	-50.6	2,040.5	2,839.1	2,762.6	76.56	37.086		
11,100.0	7,740.0	7,350.0	7,042.2	61.2	38.6	-30.98	-50.6	2,040.5	2,935.1	2,858.3	76.81	38.213		
11,200.0	7,740.0	7,350.0	7,042.2	62.7	38.6	-30.98	-50.6	2,040.5	3,031.3	2,954.3	77.04	39.346		
11,300.0	7,740.0	7,350.0	7,042.2	64.2	38.6	-30.98	-50.6	2,040.5	3,127.7	3,050.5	77.26	40.483		
11,400.0	7,740.0	7,350.0	7,042.2	65.7	38.6	-30.98	-50.6	2,040.5	3,224.4	3,146.9	77.47	41.623		
11,500.0	7,740.0	7,350.0	7,042.2	67.2	38.6	-30.98	-50.6	2,040.5	3,321.3	3,243.6	77.66	42.766		
11,600.0	7,740.0	7,350.0	7,042.2	68.8	38.6	-30.98	-50.6	2,040.5	3,418.3	3,340.5	77.84	43.912		
11,700.0	7,740.0	7,350.0	7,042.2	70.3	38.6	-30.98	-50.6	2,040.5	3,515.5	3,437.5	78.02	45.060		
11,800.0	7,740.0	7,350.0	7,042.2	71.9	38.6	-30.98	-50.6	2,040.5	3,612.9	3,534.7	78.18	46.210		
11,900.0	7,740.0	7,350.0	7,042.2	73.5	38.6	-30.98	-50.6	2,040.5	3,710.4	3,632.0	78.34	47.362		
12,000.0	7,740.0	7,327.7	7,021.2	75.1	38.5	-29.84	-54.4	2,033.9	3,807.5	3,729.3	78.21	48.682		
12,100.0	7,740.0	7,325.7	7,019.4	76.6	38.4	-29.74	-54.7	2,033.3	3,905.2	3,826.8	78.34	49.852		
12,200.0	7,740.0	7,323.9	7,017.6	78.2	38.4	-29.65	-54.9	2,032.7	4,002.9	3,924.5	78.45	51.022		
12,300.0	7,740.0	7,322.1	7,016.0	79.8	38.4	-29.56	-55.2	2,032.2	4,100.8	4,022.2	78.57	52.193		
12,400.0	7,740.0	7,300.0	6,995.1	81.5	38.3	-28.46	-57.8	2,025.4	4,199.2	4,120.7	78.43	53.540		
12,500.0	7,740.0	7,300.0	6,995.1	83.1	38.3	-28.46	-57.8	2,025.4	4,297.2	4,218.6	78.56	54.698		
12,600.0	7,740.0	7,300.0	6,995.1	84.7	38.3	-28.46	-57.8	2,025.4	4,395.2	4,316.5	78.69	55.856		
12,700.0	7,740.0	7,300.0	6,995.1	86.3	38.3	-28.46	-57.8	2,025.4	4,493.4	4,414.6	78.81	57.015		
12,800.0	7,740.0	7,300.0	6,995.1	88.0	38.3	-28.46	-57.8	2,025.4	4,591.6	4,512.7	78.93	58.173		
12,900.0	7,740.0	7,300.0	6,995.1	89.6	38.3	-28.46	-57.8	2,025.4	4,690.0	4,610.9	79.05	59.331		
13,000.0	7,740.0	7,300.0	6,995.1	91.2	38.3	-28.46	-57.8	2,025.4	4,788.3	4,709.2	79.16	60.488		
13,100.0	7,740.0	7,300.0	6,995.1	92.9	38.3	-28.46	-57.8	2,025.4	4,886.8	4,807.5	79.27	61.645		
13,200.0	7,740.0	7,300.0	6,995.1	94.5	38.3	-28.46	-57.8	2,025.4	4,985.3	4,905.9	79.38	62.801		
13,300.0	7,740.0	7,300.0	6,995.1	96.2	38.3	-28.46	-57.8	2,025.4	5,083.9	5,004.4	79.49	63.956		
13,400.0	7,740.0	7,300.0	6,995.1	97.8	38.3	-28.46	-57.8	2,025.4	5,182.5	5,102.9	79.60	65.111		
13,500.0	7,740.0	7,300.0	6,995.1	99.5	38.3	-28.46	-57.8	2,025.4	5,281.2	5,201.5	79.70	66.264		
13,600.0	7,740.0	7,300.0	6,995.1	101.2	38.3	-28.46	-57.8	2,025.4	5,379.9	5,300.1	79.80	67.417		
13,700.0	7,740.0	7,300.0	6,995.1	102.8	38.3	-28.46	-57.8	2,025.4	5,478.7	5,398.8	79.90	68.569		
13,800.0	7,740.0	7,300.0	6,995.1	104.5	38.3	-28.46	-57.8	2,025.4	5,577.5	5,497.5	80.00	69.720		
13,900.0	7,740.0	7,300.0	6,995.1	106.2	38.3	-28.46	-57.8	2,025.4	5,676.4	5,596.3	80.10	70.869		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
14,000.0	7,740.0	7,300.0	6,995.1	107.8	38.3	-28.46	-57.8	2,025.4	5,775.3	5,695.1	80.19	72.017		
14,100.0	7,740.0	7,300.0	6,995.1	109.5	38.3	-28.46	-57.8	2,025.4	5,874.2	5,793.9	80.29	73.164		
14,200.0	7,740.0	7,300.0	6,995.1	111.2	38.3	-28.46	-57.8	2,025.4	5,973.2	5,892.8	80.38	74.310		
14,300.0	7,740.0	7,300.0	6,995.1	112.9	38.3	-28.46	-57.8	2,025.4	6,072.2	5,991.7	80.48	75.454		
14,400.0	7,740.0	7,300.0	6,995.1	114.6	38.3	-28.46	-57.8	2,025.4	6,171.2	6,090.7	80.57	76.597		
14,500.0	7,740.0	7,300.0	6,995.1	116.3	38.3	-28.46	-57.8	2,025.4	6,270.3	6,189.6	80.66	77.739		
14,600.0	7,740.0	7,300.0	6,995.1	117.9	38.3	-28.46	-57.8	2,025.4	6,369.4	6,288.6	80.75	78.879		
14,700.0	7,740.0	7,300.0	6,995.1	119.6	38.3	-28.46	-57.8	2,025.4	6,468.5	6,387.7	80.84	80.017		
14,800.0	7,740.0	7,300.0	6,995.1	121.3	38.3	-28.46	-57.8	2,025.4	6,567.7	6,486.7	80.93	81.154		
14,900.0	7,740.0	7,300.0	6,995.1	123.0	38.3	-28.46	-57.8	2,025.4	6,666.8	6,585.8	81.02	82.290		
15,000.0	7,740.0	7,300.0	6,995.1	124.7	38.3	-28.46	-57.8	2,025.4	6,766.0	6,684.9	81.10	83.424		
15,100.0	7,740.0	7,300.0	6,995.1	126.4	38.3	-28.46	-57.8	2,025.4	6,865.3	6,784.1	81.19	84.556		
15,200.0	7,740.0	7,300.0	6,995.1	128.1	38.3	-28.46	-57.8	2,025.4	6,964.5	6,883.2	81.28	85.687		
15,300.0	7,740.0	7,300.0	6,995.1	129.8	38.3	-28.46	-57.8	2,025.4	7,063.8	6,982.4	81.37	86.816		
15,400.0	7,740.0	7,300.0	6,995.1	131.5	38.3	-28.46	-57.8	2,025.4	7,163.1	7,081.6	81.45	87.943		
15,500.0	7,740.0	7,300.0	6,995.1	133.2	38.3	-28.46	-57.8	2,025.4	7,262.4	7,180.8	81.54	89.069		
15,600.0	7,740.0	7,300.0	6,995.1	134.9	38.3	-28.46	-57.8	2,025.4	7,361.7	7,280.1	81.62	90.193		
15,700.0	7,740.0	7,300.0	6,995.1	136.6	38.3	-28.46	-57.8	2,025.4	7,461.1	7,379.3	81.71	91.315		
15,800.0	7,740.0	7,300.0	6,995.1	138.3	38.3	-28.46	-57.8	2,025.4	7,560.4	7,478.6	81.79	92.436		
15,900.0	7,740.0	7,300.0	6,995.1	140.0	38.3	-28.46	-57.8	2,025.4	7,659.8	7,577.9	81.88	93.554		
16,000.0	7,740.0	7,300.0	6,995.1	141.7	38.3	-28.46	-57.8	2,025.4	7,759.2	7,677.2	81.96	94.671		
16,100.0	7,740.0	7,300.0	6,995.1	143.5	38.3	-28.46	-57.8	2,025.4	7,858.6	7,776.6	82.04	95.787		
16,171.7	7,740.0	7,300.0	6,995.1	144.7	38.3	-28.46	-57.8	2,025.4	7,929.8	7,847.7	82.10	96.585		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-89.55	0.4	-45.1	45.1				
100.0	100.0	100.0	100.0	0.2	0.2	-89.55	0.4	-45.1	45.1	44.8	0.30	148.383	
150.0	150.0	150.0	150.0	0.2	0.2	-89.55	0.4	-45.1	45.1	44.6	0.48	94.229	
186.9	186.9	186.9	186.9	0.3	0.3	-90.00	0.4	-45.1	45.1	44.5	0.61	74.172 CC	
200.0	200.0	200.0	200.0	0.3	0.3	-90.38	0.4	-45.1	45.1	44.4	0.65	68.950 ES	
283.3	283.2	282.9	282.9	0.5	0.5	-94.77	0.8	-45.4	45.6	44.6	0.96	47.535	
300.0	299.9	299.4	299.4	0.5	0.5	-98.32	1.0	-45.6	45.9	44.9	1.02	44.908	
400.0	399.6	398.8	398.8	0.7	0.7	-117.44	3.0	-47.2	49.4	48.0	1.40	35.287	
500.0	499.3	498.2	498.1	0.9	0.9	-131.93	6.4	-49.9	55.7	53.9	1.78	31.239	
600.0	598.9	597.4	597.1	1.2	1.1	-141.84	11.1	-53.7	64.5	62.3	2.17	29.659	
700.0	698.5	696.2	695.6	1.4	1.3	-148.15	17.1	-58.6	75.7	73.1	2.58	29.375	
800.0	797.9	794.8	793.8	1.6	1.5	-151.99	24.3	-64.4	89.4	86.4	2.99	29.890	
900.0	897.1	893.6	892.0	1.9	1.7	-154.82	31.8	-70.5	105.1	101.7	3.41	30.820	
1,000.0	996.2	992.0	990.0	2.2	2.0	-157.08	39.3	-76.5	122.5	118.7	3.83	32.004	
1,100.0	1,095.0	1,090.1	1,087.6	2.5	2.2	-158.95	46.7	-82.5	141.8	137.5	4.25	33.365	
1,200.0	1,193.6	1,187.8	1,184.9	2.8	2.4	-160.50	54.1	-88.5	162.7	158.1	4.67	34.852	
1,300.0	1,291.9	1,285.2	1,281.8	3.2	2.7	-161.82	61.5	-94.5	185.4	180.4	5.09	36.433	
1,400.0	1,389.9	1,382.1	1,378.3	3.5	2.9	-162.96	68.9	-100.5	209.9	204.4	5.51	38.085	
1,500.0	1,487.6	1,478.6	1,474.3	3.9	3.1	-163.95	76.2	-106.4	236.0	230.1	5.93	39.793	
1,600.0	1,584.8	1,574.7	1,569.9	4.4	3.4	-164.82	83.5	-112.3	263.8	257.5	6.35	41.546	
1,624.3	1,608.4	1,597.9	1,593.0	4.5	3.4	-165.02	85.3	-113.7	270.8	264.4	6.45	41.977	
1,700.0	1,681.8	1,670.4	1,665.1	4.8	3.6	-164.77	90.8	-118.2	292.8	286.1	6.77	43.259	
1,800.0	1,778.8	1,766.0	1,760.3	5.3	3.8	-164.50	98.1	-124.1	321.9	314.7	7.19	44.775	
1,900.0	1,875.8	1,861.7	1,855.5	5.7	4.0	-164.27	105.4	-130.0	351.0	343.4	7.61	46.121	
2,000.0	1,972.8	1,957.4	1,950.7	6.2	4.3	-164.07	112.6	-135.8	380.1	372.1	8.03	47.323	
2,100.0	2,069.8	2,053.0	2,045.9	6.6	4.5	-163.91	119.9	-141.7	409.2	400.7	8.45	48.404	
2,200.0	2,166.8	2,148.7	2,141.2	7.1	4.7	-163.77	127.2	-147.6	438.3	429.4	8.88	49.380	
2,300.0	2,263.8	2,244.4	2,236.4	7.5	5.0	-163.64	134.4	-153.5	467.4	458.1	9.30	50.266	
2,400.0	2,360.8	2,340.0	2,331.6	8.0	5.2	-163.53	141.7	-159.3	496.5	486.8	9.72	51.073	
2,500.0	2,457.7	2,435.7	2,426.8	8.4	5.4	-163.43	149.0	-165.2	525.6	515.4	10.14	51.813	
2,600.0	2,554.7	2,531.4	2,522.0	8.9	5.7	-163.34	156.3	-171.1	554.7	544.1	10.57	52.492	
2,700.0	2,651.7	2,627.0	2,617.2	9.4	5.9	-163.26	163.5	-177.0	583.8	572.8	10.99	53.119	
2,800.0	2,748.7	2,722.7	2,712.4	9.8	6.1	-163.19	170.8	-182.9	612.9	601.5	11.41	53.698	
2,900.0	2,845.7	2,818.4	2,807.6	10.3	6.4	-163.12	178.1	-188.7	642.0	630.2	11.84	54.235	
3,000.0	2,942.7	2,914.0	2,902.8	10.8	6.6	-163.06	185.3	-194.6	671.1	658.9	12.26	54.735	
3,100.0	3,039.7	3,009.7	2,998.0	11.2	6.8	-163.01	192.6	-200.5	700.2	687.5	12.69	55.201	
3,200.0	3,136.7	3,105.4	3,093.3	11.7	7.1	-162.96	199.9	-206.4	729.3	716.2	13.11	55.636	
3,300.0	3,233.6	3,201.0	3,188.5	12.2	7.3	-162.91	207.2	-212.3	758.4	744.9	13.53	56.044	
3,400.0	3,330.6	3,296.7	3,283.7	12.6	7.5	-162.87	214.4	-218.1	787.5	773.6	13.96	56.427	
3,500.0	3,427.6	3,392.4	3,378.9	13.1	7.8	-162.83	221.7	-224.0	816.7	802.3	14.38	56.787	
3,600.0	3,524.6	3,488.0	3,474.1	13.6	8.0	-162.79	229.0	-229.9	845.8	831.0	14.81	57.126	
3,700.0	3,621.6	3,583.7	3,569.3	14.0	8.2	-162.76	236.2	-235.8	874.9	859.6	15.23	57.446	
3,800.0	3,718.6	3,679.4	3,664.5	14.5	8.5	-162.72	243.5	-241.6	904.0	888.3	15.65	57.748	
3,900.0	3,815.6	3,775.1	3,759.7	15.0	8.7	-162.69	250.8	-247.5	933.1	917.0	16.08	58.034	
4,000.0	3,912.6	3,870.7	3,854.9	15.4	8.9	-162.66	258.1	-253.4	962.2	945.7	16.50	58.306	
4,100.0	4,009.5	3,966.4	3,950.1	15.9	9.2	-162.64	265.3	-259.3	991.3	974.4	16.93	58.564	
4,200.0	4,106.5	4,062.1	4,045.4	16.4	9.4	-162.61	272.6	-265.2	1,020.4	1,003.1	17.35	58.809	
4,300.0	4,203.5	4,157.7	4,140.6	16.8	9.6	-162.59	279.9	-271.0	1,049.5	1,031.8	17.78	59.042	
4,400.0	4,300.5	4,253.4	4,235.8	17.3	9.9	-162.56	287.1	-276.9	1,078.6	1,060.4	18.20	59.264	
4,500.0	4,397.5	4,349.1	4,331.0	17.8	10.1	-162.54	294.4	-282.8	1,107.8	1,089.1	18.63	59.476	
4,600.0	4,494.5	4,444.7	4,426.2	18.2	10.3	-162.52	301.7	-288.7	1,136.9	1,117.8	19.05	59.679	
4,700.0	4,591.5	4,540.4	4,521.4	18.7	10.6	-162.50	309.0	-294.6	1,166.0	1,146.5	19.47	59.872	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)			
4,800.0	4,688.5	4,636.1	4,616.6	19.2	10.8	-162.48	316.2	-300.4	1,195.1	1,175.2	19.90	60.057	
4,900.0	4,785.4	4,731.7	4,711.8	19.6	11.0	-162.47	323.5	-306.3	1,224.2	1,203.9	20.32	60.235	
5,000.0	4,882.4	4,827.4	4,807.0	20.1	11.3	-162.45	330.8	-312.2	1,253.3	1,232.6	20.75	60.405	
5,100.0	4,979.4	4,923.1	4,902.2	20.6	11.5	-162.43	338.0	-318.1	1,282.4	1,261.3	21.17	60.568	
5,200.0	5,076.4	5,018.7	4,997.5	21.0	11.7	-162.42	345.3	-324.0	1,311.5	1,289.9	21.60	60.725	
5,300.0	5,173.4	5,114.4	5,092.7	21.5	12.0	-162.40	352.6	-329.8	1,340.7	1,318.6	22.02	60.875	
5,400.0	5,270.4	5,210.1	5,187.9	22.0	12.2	-162.39	359.9	-335.7	1,369.8	1,347.3	22.45	61.020	
5,500.0	5,367.4	5,305.7	5,283.1	22.5	12.4	-162.38	367.1	-341.6	1,398.9	1,376.0	22.87	61.160	
5,600.0	5,464.4	5,401.4	5,378.3	22.9	12.7	-162.36	374.4	-347.5	1,428.0	1,404.7	23.30	61.294	
5,700.0	5,561.4	5,497.1	5,473.5	23.4	12.9	-162.35	381.7	-353.3	1,457.1	1,433.4	23.72	61.424	
5,800.0	5,658.3	5,592.7	5,568.7	23.9	13.1	-162.34	388.9	-359.2	1,486.2	1,462.1	24.15	61.549	
5,900.0	5,755.3	5,688.4	5,663.9	24.3	13.4	-162.33	396.2	-365.1	1,515.3	1,490.8	24.57	61.669	
6,000.0	5,852.3	5,784.1	5,759.1	24.8	13.6	-162.32	403.5	-371.0	1,544.4	1,519.4	25.00	61.786	
6,100.0	5,949.3	5,879.8	5,854.3	25.3	13.8	-162.31	410.7	-376.9	1,573.6	1,548.1	25.42	61.898	
6,200.0	6,046.3	5,975.4	5,949.6	25.7	14.1	-162.30	418.0	-382.7	1,602.7	1,576.8	25.85	62.007	
6,300.0	6,143.3	6,071.1	6,044.8	26.2	14.3	-162.29	425.3	-388.6	1,631.8	1,605.5	26.27	62.112	
6,400.0	6,240.3	6,166.8	6,140.0	26.7	14.5	-162.28	432.6	-394.5	1,660.9	1,634.2	26.70	62.214	
6,500.0	6,337.3	6,262.4	6,235.2	27.1	14.8	-162.27	439.8	-400.4	1,690.0	1,662.9	27.12	62.313	
6,600.0	6,434.2	6,358.1	6,330.4	27.6	15.0	-162.26	447.1	-406.3	1,719.1	1,691.6	27.55	62.409	
6,700.0	6,531.2	6,453.8	6,425.6	28.1	15.2	-162.25	454.4	-412.1	1,748.2	1,720.3	27.97	62.501	
6,800.0	6,628.2	6,549.4	6,520.8	28.5	15.5	-162.24	461.6	-418.0	1,777.3	1,748.9	28.40	62.591	
6,900.0	6,725.2	6,645.1	6,616.0	29.0	15.7	-162.23	468.9	-423.9	1,806.5	1,777.6	28.82	62.678	
7,000.0	6,822.2	6,740.8	6,711.2	29.5	15.9	-162.23	476.2	-429.8	1,835.6	1,806.3	29.25	62.763	
7,100.0	6,919.2	6,836.4	6,806.4	30.0	16.2	-162.22	483.5	-435.6	1,864.7	1,835.0	29.67	62.845	
7,200.0	7,016.2	6,932.1	6,901.7	30.4	16.4	-162.21	490.7	-441.5	1,893.8	1,863.7	30.10	62.925	
7,300.0	7,113.2	7,027.8	6,996.9	30.9	16.6	-162.20	498.0	-447.4	1,922.9	1,892.4	30.52	63.003	
7,328.7	7,141.0	7,055.3	7,024.2	31.0	16.7	-162.20	500.1	-449.1	1,931.3	1,900.6	30.64	63.025	
7,350.0	7,161.7	7,075.6	7,044.5	31.1	16.8	-171.24	501.6	-450.3	1,937.5	1,906.7	30.73	63.053	
7,400.0	7,210.3	7,123.2	7,091.9	31.3	16.9	166.69	505.3	-453.3	1,952.0	1,921.1	30.90	63.175	
7,450.0	7,258.7	7,169.9	7,138.4	31.5	17.0	147.42	508.6	-456.1	1,966.4	1,935.4	31.04	63.361	
7,500.0	7,306.5	7,215.9	7,184.2	31.7	17.0	133.00	509.2	-459.0	1,980.7	1,949.6	31.10	63.697	
7,550.0	7,353.4	7,262.7	7,230.8	31.8	17.1	122.71	506.0	-461.8	1,994.8	1,963.7	31.08	64.174	
7,600.0	7,399.0	7,310.3	7,277.7	31.9	17.1	115.26	498.8	-464.7	2,008.5	1,977.5	31.00	64.790	
7,650.0	7,442.9	7,358.9	7,324.9	32.0	17.1	109.68	487.5	-467.7	2,021.8	1,991.0	30.85	65.542	
7,700.0	7,484.9	7,408.6	7,371.9	32.1	17.0	105.38	471.8	-470.6	2,034.6	2,003.9	30.63	66.422	
7,750.0	7,524.5	7,459.4	7,418.5	32.1	16.9	101.97	451.6	-473.4	2,046.7	2,016.3	30.36	67.419	
7,800.0	7,561.6	7,511.6	7,464.3	32.1	16.8	99.23	426.6	-476.3	2,058.1	2,028.1	30.04	68.517	
7,850.0	7,595.8	7,565.2	7,508.6	32.2	16.6	96.99	396.8	-479.0	2,068.7	2,039.0	29.68	69.690	
7,900.0	7,626.8	7,620.2	7,551.1	32.2	16.5	95.17	362.0	-481.6	2,078.3	2,049.0	29.31	70.900	
7,950.0	7,654.5	7,676.7	7,591.1	32.2	16.3	93.69	322.1	-484.1	2,087.0	2,058.1	28.95	72.098	
8,000.0	7,678.5	7,734.7	7,627.8	32.3	16.2	92.49	277.3	-486.4	2,094.7	2,066.1	28.61	73.217	
8,050.0	7,698.8	7,794.2	7,660.6	32.3	16.1	91.56	227.8	-488.4	2,101.2	2,072.8	28.33	74.178	
8,100.0	7,715.2	7,855.0	7,688.6	32.3	16.0	90.86	173.8	-490.1	2,106.5	2,078.3	28.13	74.885	
8,150.0	7,727.5	7,917.1	7,711.2	32.4	16.0	90.36	116.0	-491.5	2,110.5	2,082.4	28.05	75.240	
8,200.0	7,735.6	7,980.3	7,727.6	32.4	16.0	90.07	55.1	-492.5	2,113.2	2,085.1	28.11	75.186	
8,250.0	7,739.6	8,044.3	7,737.3	32.4	16.1	89.97	-8.2	-493.1	2,114.6	2,086.3	28.31	74.690	
8,271.7	7,740.0	8,072.3	7,739.3	32.5	16.1	89.98	-36.0	-493.2	2,114.8	2,086.4	28.46	74.318	
8,300.0	7,740.0	8,106.8	7,740.0	32.5	16.2	90.00	-70.6	-493.3	2,114.9	2,086.2	28.68	73.752	
8,400.0	7,740.0	8,206.8	7,740.0	32.7	16.7	90.00	-170.6	-493.3	2,114.9	2,085.3	29.62	71.400	
8,500.0	7,740.0	8,306.8	7,740.0	33.0	17.3	90.00	-270.6	-493.3	2,114.9	2,083.9	30.94	68.362	
8,600.0	7,740.0	8,406.8	7,740.0	33.4	18.0	90.00	-370.6	-493.3	2,114.9	2,082.3	32.58	64.916	
8,700.0	7,740.0	8,506.8	7,740.0	33.8	18.9	90.00	-470.6	-493.3	2,114.9	2,080.4	34.50	61.300	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
8,800.0	7,740.0	8,606.8	7,740.0	34.4	19.9	90.00	-570.6	-493.3	2,114.9	2,078.2	36.66	57.692	
8,900.0	7,740.0	8,706.8	7,740.0	35.0	20.9	90.00	-670.6	-493.3	2,114.9	2,075.9	39.01	54.210	
9,000.0	7,740.0	8,806.8	7,740.0	35.7	22.1	90.00	-770.6	-493.3	2,114.9	2,073.3	41.53	50.924	
9,100.0	7,740.0	8,906.8	7,740.0	36.4	23.4	90.00	-870.6	-493.3	2,114.9	2,070.7	44.18	47.866	
9,200.0	7,740.0	9,006.8	7,740.0	37.3	24.7	90.00	-970.6	-493.3	2,114.9	2,067.9	46.95	45.047	
9,300.0	7,740.0	9,106.8	7,740.0	38.2	26.0	90.00	-1,070.6	-493.3	2,114.9	2,065.1	49.81	42.461	
9,400.0	7,740.0	9,206.8	7,740.0	39.1	27.4	90.00	-1,170.6	-493.3	2,114.9	2,062.1	52.74	40.097	
9,500.0	7,740.0	9,306.8	7,740.0	40.1	28.9	90.00	-1,270.6	-493.3	2,114.9	2,059.1	55.75	37.936	
9,600.0	7,740.0	9,406.8	7,740.0	41.2	30.4	90.00	-1,370.6	-493.3	2,114.9	2,056.1	58.81	35.963	
9,700.0	7,740.0	9,506.8	7,740.0	42.3	31.9	90.00	-1,470.6	-493.3	2,114.9	2,053.0	61.91	34.158	
9,800.0	7,740.0	9,606.8	7,740.0	43.5	33.4	90.00	-1,570.6	-493.3	2,114.9	2,049.8	65.06	32.506	
9,900.0	7,740.0	9,706.8	7,740.0	44.7	35.0	90.00	-1,670.6	-493.3	2,114.9	2,046.6	68.24	30.990	
10,000.0	7,740.0	9,806.8	7,740.0	45.9	36.5	90.00	-1,770.6	-493.3	2,114.9	2,043.4	71.46	29.596	
10,100.0	7,740.0	9,906.8	7,740.0	47.1	38.1	90.00	-1,870.6	-493.3	2,114.9	2,040.2	74.70	28.312	
10,200.0	7,740.0	10,006.8	7,740.0	48.4	39.7	90.00	-1,970.6	-493.3	2,114.9	2,036.9	77.96	27.127	
10,300.0	7,740.0	10,106.8	7,740.0	49.8	41.3	90.00	-2,070.6	-493.3	2,114.9	2,033.6	81.24	26.031	
10,400.0	7,740.0	10,206.8	7,740.0	51.1	42.9	90.00	-2,170.6	-493.3	2,114.9	2,030.3	84.55	25.014	
10,500.0	7,740.0	10,306.8	7,740.0	52.5	44.6	90.00	-2,270.6	-493.3	2,114.9	2,027.0	87.86	24.070	
10,600.0	7,740.0	10,406.8	7,740.0	53.9	46.2	90.00	-2,370.6	-493.3	2,114.9	2,023.7	91.20	23.191	
10,700.0	7,740.0	10,506.8	7,740.0	55.3	47.9	90.00	-2,470.6	-493.3	2,114.9	2,020.3	94.54	22.370	
10,800.0	7,740.0	10,606.8	7,740.0	56.7	49.5	90.00	-2,570.6	-493.3	2,114.9	2,017.0	97.90	21.603	
10,900.0	7,740.0	10,706.8	7,740.0	58.2	51.2	90.00	-2,670.6	-493.3	2,114.9	2,013.6	101.26	20.885	
11,000.0	7,740.0	10,806.8	7,740.0	59.7	52.9	90.00	-2,770.6	-493.3	2,114.9	2,010.2	104.64	20.211	
11,100.0	7,740.0	10,906.8	7,740.0	61.2	54.5	90.00	-2,870.6	-493.3	2,114.9	2,006.9	108.02	19.578	
11,200.0	7,740.0	11,006.8	7,740.0	62.7	56.2	90.00	-2,970.6	-493.3	2,114.9	2,003.5	111.41	18.982	
11,300.0	7,740.0	11,106.8	7,740.0	64.2	57.9	90.00	-3,070.6	-493.3	2,114.9	2,000.1	114.81	18.420	
11,400.0	7,740.0	11,206.8	7,740.0	65.7	59.6	90.00	-3,170.6	-493.3	2,114.9	1,996.7	118.22	17.890	
11,500.0	7,740.0	11,306.8	7,740.0	67.2	61.3	90.00	-3,270.6	-493.3	2,114.9	1,993.2	121.63	17.388	
11,600.0	7,740.0	11,406.8	7,740.0	68.8	63.0	90.00	-3,370.6	-493.3	2,114.9	1,989.8	125.05	16.913	
11,700.0	7,740.0	11,506.8	7,740.0	70.3	64.7	90.00	-3,470.6	-493.3	2,114.9	1,986.4	128.47	16.462	
11,800.0	7,740.0	11,606.8	7,740.0	71.9	66.4	90.00	-3,570.6	-493.3	2,114.9	1,983.0	131.89	16.035	
11,900.0	7,740.0	11,706.8	7,740.0	73.5	68.1	90.00	-3,670.6	-493.3	2,114.9	1,979.6	135.32	15.628	
12,000.0	7,740.0	11,806.8	7,740.0	75.1	69.8	90.00	-3,770.6	-493.3	2,114.9	1,976.1	138.76	15.242	
12,100.0	7,740.0	11,906.8	7,740.0	76.6	71.5	90.00	-3,870.6	-493.3	2,114.9	1,972.7	142.19	14.873	
12,200.0	7,740.0	12,006.8	7,740.0	78.2	73.2	90.00	-3,970.6	-493.3	2,114.9	1,969.2	145.64	14.522	
12,300.0	7,740.0	12,106.8	7,740.0	79.8	74.9	90.00	-4,070.6	-493.3	2,114.9	1,965.8	149.08	14.186	
12,400.0	7,740.0	12,206.8	7,740.0	81.5	76.6	90.00	-4,170.6	-493.3	2,114.9	1,962.4	152.53	13.866	
12,500.0	7,740.0	12,306.8	7,740.0	83.1	78.3	90.00	-4,270.6	-493.3	2,114.9	1,958.9	155.98	13.559	
12,600.0	7,740.0	12,406.8	7,740.0	84.7	80.1	90.00	-4,370.6	-493.3	2,114.9	1,955.5	159.43	13.265	
12,700.0	7,740.0	12,506.8	7,740.0	86.3	81.8	90.00	-4,470.6	-493.3	2,114.9	1,952.0	162.88	12.984	
12,800.0	7,740.0	12,606.8	7,740.0	88.0	83.5	90.00	-4,570.6	-493.3	2,114.9	1,948.5	166.34	12.714	
12,900.0	7,740.0	12,706.8	7,740.0	89.6	85.2	90.00	-4,670.6	-493.3	2,114.9	1,945.1	169.80	12.455	
13,000.0	7,740.0	12,806.8	7,740.0	91.2	86.9	90.00	-4,770.6	-493.3	2,114.9	1,941.6	173.26	12.206	
13,100.0	7,740.0	12,906.8	7,740.0	92.9	88.7	90.00	-4,870.6	-493.3	2,114.9	1,938.2	176.72	11.967	
13,200.0	7,740.0	13,006.8	7,740.0	94.5	90.4	90.00	-4,970.6	-493.3	2,114.9	1,934.7	180.19	11.737	
13,300.0	7,740.0	13,106.8	7,740.0	96.2	92.1	90.00	-5,070.6	-493.3	2,114.9	1,931.2	183.65	11.516	
13,400.0	7,740.0	13,206.8	7,740.0	97.8	93.9	90.00	-5,170.6	-493.3	2,114.9	1,927.8	187.12	11.302	
13,500.0	7,740.0	13,306.8	7,740.0	99.5	95.6	90.00	-5,270.6	-493.3	2,114.9	1,924.3	190.59	11.096	
13,600.0	7,740.0	13,406.8	7,740.0	101.2	97.3	90.00	-5,370.6	-493.3	2,114.9	1,920.8	194.06	10.898	
13,700.0	7,740.0	13,506.8	7,740.0	102.8	99.0	90.00	-5,470.6	-493.3	2,114.9	1,917.3	197.53	10.706	
13,800.0	7,740.0	13,606.8	7,740.0	104.5	100.8	90.00	-5,570.6	-493.3	2,114.9	1,913.9	201.01	10.521	
13,900.0	7,740.0	13,706.8	7,740.0	106.2	102.5	90.00	-5,670.6	-493.3	2,114.9	1,910.4	204.48	10.343	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	13,806.8	7,740.0	107.8	104.2	90.00	-5,770.6	-493.3	2,114.9	1,906.9	207.96	10.170		
14,100.0	7,740.0	13,906.8	7,740.0	109.5	106.0	90.00	-5,870.6	-493.3	2,114.9	1,903.4	211.43	10.003		
14,200.0	7,740.0	14,006.8	7,740.0	111.2	107.7	90.00	-5,970.6	-493.3	2,114.9	1,900.0	214.91	9.841		
14,300.0	7,740.0	14,106.8	7,740.0	112.9	109.4	90.00	-6,070.6	-493.3	2,114.9	1,896.5	218.39	9.684		
14,400.0	7,740.0	14,206.8	7,740.0	114.6	111.2	90.00	-6,170.6	-493.3	2,114.9	1,893.0	221.87	9.532		
14,500.0	7,740.0	14,306.8	7,740.0	116.3	112.9	90.00	-6,270.6	-493.3	2,114.9	1,889.5	225.35	9.385		
14,600.0	7,740.0	14,406.8	7,740.0	117.9	114.7	90.00	-6,370.6	-493.3	2,114.9	1,886.1	228.83	9.242		
14,700.0	7,740.0	14,506.8	7,740.0	119.6	116.4	90.00	-6,470.6	-493.3	2,114.9	1,882.6	232.31	9.104		
14,800.0	7,740.0	14,606.8	7,740.0	121.3	118.1	90.00	-6,570.6	-493.3	2,114.9	1,879.1	235.80	8.969		
14,900.0	7,740.0	14,706.8	7,740.0	123.0	119.9	90.00	-6,670.6	-493.3	2,114.9	1,875.6	239.28	8.839		
15,000.0	7,740.0	14,806.8	7,740.0	124.7	121.6	90.00	-6,770.6	-493.3	2,114.9	1,872.1	242.76	8.712		
15,100.0	7,740.0	14,906.8	7,740.0	126.4	123.3	90.00	-6,870.6	-493.3	2,114.9	1,868.6	246.25	8.588		
15,200.0	7,740.0	15,006.8	7,740.0	128.1	125.1	90.00	-6,970.6	-493.3	2,114.9	1,865.2	249.73	8.469		
15,300.0	7,740.0	15,106.8	7,740.0	129.8	126.8	90.00	-7,070.6	-493.3	2,114.9	1,861.7	253.22	8.352		
15,400.0	7,740.0	15,206.8	7,740.0	131.5	128.6	90.00	-7,170.6	-493.3	2,114.9	1,858.2	256.71	8.239		
15,500.0	7,740.0	15,306.8	7,740.0	133.2	130.3	90.00	-7,270.6	-493.3	2,114.9	1,854.7	260.19	8.128		
15,600.0	7,740.0	15,406.8	7,740.0	134.9	132.0	90.00	-7,370.6	-493.3	2,114.9	1,851.2	263.68	8.021		
15,700.0	7,740.0	15,506.8	7,740.0	136.6	133.8	90.00	-7,470.6	-493.3	2,114.9	1,847.7	267.17	7.916		
15,800.0	7,740.0	15,606.8	7,740.0	138.3	135.5	90.00	-7,570.6	-493.3	2,114.9	1,844.2	270.66	7.814		
15,900.0	7,740.0	15,706.8	7,740.0	140.0	137.3	90.00	-7,670.6	-493.3	2,114.9	1,840.7	274.15	7.714		
16,000.0	7,740.0	15,806.8	7,740.0	141.7	139.0	90.00	-7,770.6	-493.3	2,114.9	1,837.2	277.64	7.617		
16,100.0	7,740.0	15,906.8	7,740.0	143.5	140.8	90.00	-7,870.6	-493.3	2,114.9	1,833.8	281.13	7.523		
16,100.0	7,740.0	15,906.8	7,740.0	143.5	140.8	90.00	-7,870.6	-493.3	2,114.9	1,833.8	281.13	7.523		
16,171.7	7,740.0	15,949.8	7,740.0	144.7	141.5	90.00	-7,913.5	-493.3	2,115.1	1,832.3	282.83	7.478 SF		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.45	0.4	-37.5	37.5					
100.0	100.0	100.0	100.0	0.2	0.2	-89.45	0.4	-37.5	37.5	37.2	0.30	123.501		
150.0	150.0	150.0	150.0	0.2	0.2	-89.45	0.4	-37.5	37.5	37.0	0.48	78.427		
187.1	187.1	187.1	187.1	0.3	0.3	-90.00	0.4	-37.5	37.5	36.9	0.61	61.656 CC		
200.0	200.0	200.0	200.0	0.3	0.3	-90.45	0.4	-37.5	37.5	36.9	0.65	57.387		
283.3	283.2	283.2	283.2	0.5	0.5	-96.51	0.4	-37.5	37.7	36.8	0.96	39.348 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-100.63	0.4	-37.5	37.9	36.9	1.02	37.122		
400.0	399.6	399.3	399.3	0.7	0.7	-122.78	1.0	-38.1	41.0	39.6	1.39	29.410		
500.0	499.3	498.8	498.8	0.9	0.9	-139.02	3.0	-39.7	47.0	45.2	1.76	26.633		
600.0	598.9	598.2	598.1	1.2	1.0	-149.60	6.3	-42.5	55.3	53.1	2.14	25.867		
700.0	698.5	697.3	697.0	1.4	1.2	-155.88	10.9	-46.4	65.8	63.2	2.52	26.094		
800.0	797.9	796.5	795.9	1.6	1.4	-159.84	16.2	-50.8	78.2	75.3	2.91	26.898		
900.0	897.1	895.4	894.6	1.9	1.6	-162.78	21.5	-55.2	92.5	89.2	3.30	28.028		
1,000.0	996.2	994.1	993.1	2.2	1.8	-165.02	26.8	-59.7	108.4	104.7	3.69	29.386		
1,100.0	1,095.0	1,092.5	1,091.2	2.5	2.0	-166.76	32.0	-64.1	126.1	122.0	4.08	30.911		
1,200.0	1,193.6	1,190.5	1,189.0	2.8	2.2	-168.15	37.3	-68.5	145.5	141.1	4.47	32.559		
1,300.0	1,291.9	1,290.5	1,288.7	3.2	2.5	-169.12	43.1	-72.4	166.1	161.2	4.87	34.079		
1,400.0	1,389.9	1,390.9	1,388.8	3.5	2.7	-169.63	50.1	-75.1	186.9	181.6	5.29	35.339		
1,500.0	1,487.6	1,490.3	1,487.9	3.9	2.9	-169.83	58.2	-76.6	208.1	202.4	5.71	36.445		
1,600.0	1,584.8	1,587.6	1,584.8	4.4	3.1	-169.98	66.3	-77.8	230.9	224.8	6.13	37.657		
1,624.3	1,608.4	1,611.1	1,608.3	4.5	3.1	-170.01	68.3	-78.1	236.7	230.4	6.23	37.967		
1,700.0	1,681.8	1,684.5	1,681.5	4.8	3.3	-169.30	74.4	-79.0	254.9	248.4	6.55	38.892		
1,800.0	1,778.8	1,781.5	1,778.1	5.3	3.5	-168.49	82.5	-80.2	279.0	272.1	6.98	39.977		
1,900.0	1,875.8	1,878.5	1,874.7	5.7	3.7	-167.82	90.6	-81.5	303.2	295.8	7.41	40.931		
2,000.0	1,972.8	1,975.5	1,971.4	6.2	3.9	-167.24	98.6	-82.7	327.4	319.6	7.84	41.775		
2,100.0	2,069.8	2,072.5	2,068.0	6.6	4.2	-166.75	106.7	-83.9	351.7	343.4	8.27	42.527		
2,200.0	2,166.8	2,169.4	2,164.6	7.1	4.4	-166.31	114.8	-85.1	375.9	367.2	8.70	43.200		
2,300.0	2,263.8	2,266.4	2,261.2	7.5	4.6	-165.93	122.9	-86.3	400.2	391.0	9.14	43.806		
2,400.0	2,360.8	2,363.4	2,357.9	8.0	4.8	-165.60	131.0	-87.5	424.5	414.9	9.57	44.354		
2,500.0	2,457.7	2,460.4	2,454.5	8.4	5.0	-165.30	139.1	-88.7	448.8	438.8	10.01	44.852		
2,600.0	2,554.7	2,557.3	2,551.1	8.9	5.2	-165.03	147.2	-89.9	473.1	462.6	10.44	45.306		
2,700.0	2,651.7	2,654.3	2,647.8	9.4	5.5	-164.79	155.2	-91.1	497.4	486.5	10.88	45.721		
2,800.0	2,748.7	2,751.3	2,744.4	9.8	5.7	-164.57	163.3	-92.4	521.7	510.4	11.32	46.103		
2,900.0	2,845.7	2,848.3	2,841.0	10.3	5.9	-164.36	171.4	-93.6	546.1	534.3	11.75	46.455		
3,000.0	2,942.7	2,945.2	2,937.7	10.8	6.1	-164.18	179.5	-94.8	570.4	558.2	12.19	46.780		
3,100.0	3,039.7	3,042.2	3,034.3	11.2	6.3	-164.01	187.6	-96.0	594.7	582.1	12.63	47.082		
3,200.0	3,136.7	3,139.2	3,130.9	11.7	6.6	-163.86	195.7	-97.2	619.1	606.0	13.07	47.362		
3,300.0	3,233.6	3,236.2	3,227.6	12.2	6.8	-163.71	203.8	-98.4	643.4	629.9	13.51	47.623		
3,400.0	3,330.6	3,333.2	3,324.2	12.6	7.0	-163.58	211.9	-99.6	667.8	653.9	13.95	47.867		
3,500.0	3,427.6	3,430.1	3,420.8	13.1	7.2	-163.46	219.9	-100.8	692.2	677.8	14.39	48.095		
3,600.0	3,524.6	3,527.1	3,517.5	13.6	7.4	-163.34	228.0	-102.1	716.5	701.7	14.83	48.309		
3,700.0	3,621.6	3,624.1	3,614.1	14.0	7.7	-163.23	236.1	-103.3	740.9	725.6	15.27	48.511		
3,800.0	3,718.6	3,721.1	3,710.7	14.5	7.9	-163.13	244.2	-104.5	765.3	749.5	15.71	48.700		
3,900.0	3,815.6	3,818.0	3,807.4	15.0	8.1	-163.04	252.3	-105.7	789.6	773.5	16.16	48.878		
4,000.0	3,912.6	3,915.0	3,904.0	15.4	8.3	-162.95	260.4	-106.9	814.0	797.4	16.60	49.047		
4,100.0	4,009.5	4,012.0	4,000.6	15.9	8.5	-162.87	268.5	-108.1	838.4	821.3	17.04	49.207		
4,200.0	4,106.5	4,109.0	4,097.3	16.4	8.8	-162.79	276.5	-109.3	862.8	845.3	17.48	49.358		
4,300.0	4,203.5	4,205.9	4,193.9	16.8	9.0	-162.71	284.6	-110.5	887.1	869.2	17.92	49.501		
4,400.0	4,300.5	4,302.9	4,290.5	17.3	9.2	-162.64	292.7	-111.7	911.5	893.1	18.36	49.637		
4,500.0	4,397.5	4,399.9	4,387.1	17.8	9.4	-162.57	300.8	-113.0	935.9	917.1	18.81	49.767		
4,600.0	4,494.5	4,496.9	4,483.8	18.2	9.6	-162.51	308.9	-114.2	960.3	941.0	19.25	49.890		
4,700.0	4,591.5	4,593.9	4,580.4	18.7	9.9	-162.45	317.0	-115.4	984.6	965.0	19.69	50.008		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
4,800.0	4,688.5	4,690.8	4,677.0	19.2	10.1	-162.39	325.1	-116.6	1,009.0	988.9	20.13	50.120		
4,900.0	4,785.4	4,787.8	4,773.7	19.6	10.3	-162.34	333.1	-117.8	1,033.4	1,012.8	20.57	50.227		
5,000.0	4,882.4	4,884.8	4,870.3	20.1	10.5	-162.29	341.2	-119.0	1,057.8	1,036.8	21.02	50.329		
5,100.0	4,979.4	4,981.8	4,966.9	20.6	10.7	-162.24	349.3	-120.2	1,082.2	1,060.7	21.46	50.428		
5,200.0	5,076.4	5,078.7	5,063.6	21.0	11.0	-162.19	357.4	-121.4	1,106.6	1,084.7	21.90	50.522		
5,300.0	5,173.4	5,175.7	5,160.2	21.5	11.2	-162.14	365.5	-122.6	1,131.0	1,108.6	22.35	50.612		
5,400.0	5,270.4	5,272.7	5,256.8	22.0	11.4	-162.10	373.6	-123.9	1,155.3	1,132.5	22.79	50.698		
5,500.0	5,367.4	5,369.7	5,353.5	22.5	11.6	-162.06	381.7	-125.1	1,179.7	1,156.5	23.23	50.781		
5,600.0	5,464.4	5,466.7	5,450.1	22.9	11.8	-162.02	389.7	-126.3	1,204.1	1,180.4	23.67	50.861		
5,700.0	5,561.4	5,563.6	5,546.7	23.4	12.1	-161.98	397.8	-127.5	1,228.5	1,204.4	24.12	50.938		
5,800.0	5,658.3	5,660.6	5,643.4	23.9	12.3	-161.94	405.9	-128.7	1,252.9	1,228.3	24.56	51.012		
5,900.0	5,755.3	5,757.6	5,740.0	24.3	12.5	-161.90	414.0	-129.9	1,277.3	1,252.3	25.00	51.083		
6,000.0	5,852.3	5,854.6	5,836.6	24.8	12.7	-161.87	422.1	-131.1	1,301.7	1,276.2	25.45	51.152		
6,100.0	5,949.3	5,951.5	5,933.3	25.3	12.9	-161.84	430.2	-132.3	1,326.1	1,300.2	25.89	51.218		
6,200.0	6,046.3	6,048.5	6,029.9	25.7	13.2	-161.80	438.3	-133.6	1,350.5	1,324.1	26.33	51.282		
6,300.0	6,143.3	6,145.5	6,126.5	26.2	13.4	-161.77	446.3	-134.8	1,374.8	1,348.1	26.78	51.344		
6,400.0	6,240.3	6,242.5	6,223.2	26.7	13.6	-161.74	454.4	-136.0	1,399.2	1,372.0	27.22	51.404		
6,500.0	6,337.3	6,339.4	6,319.8	27.1	13.8	-161.72	462.5	-137.2	1,423.6	1,396.0	27.66	51.462		
6,600.0	6,434.2	6,436.4	6,416.4	27.6	14.0	-161.69	470.6	-138.4	1,448.0	1,419.9	28.11	51.517		
6,700.0	6,531.2	6,533.4	6,513.1	28.1	14.3	-161.66	478.7	-139.6	1,472.4	1,443.9	28.55	51.572		
6,800.0	6,628.2	6,630.4	6,609.7	28.5	14.5	-161.63	486.8	-140.8	1,496.8	1,467.8	28.99	51.624		
6,900.0	6,725.2	6,727.4	6,706.3	29.0	14.7	-161.61	494.9	-142.0	1,521.2	1,491.8	29.44	51.675		
7,000.0	6,822.2	6,824.3	6,802.9	29.5	14.9	-161.59	502.9	-143.2	1,545.6	1,515.7	29.88	51.724		
7,100.0	6,919.2	6,921.3	6,899.6	30.0	15.1	-161.58	510.7	-144.5	1,570.0	1,539.7	30.30	51.808		
7,200.0	7,016.2	7,016.6	6,994.7	30.4	15.2	-161.97	507.3	-145.6	1,594.4	1,563.9	30.48	52.312		
7,300.0	7,113.2	7,106.1	7,082.4	30.9	15.1	-162.85	489.9	-146.7	1,619.2	1,588.9	30.38	53.300		
7,328.7	7,141.0	7,130.2	7,105.5	31.0	15.1	-163.16	482.8	-147.0	1,626.5	1,596.2	30.31	53.664		
7,350.0	7,161.7	7,147.7	7,122.0	31.1	15.0	-172.37	477.1	-147.2	1,632.0	1,601.7	30.25	53.952		
7,400.0	7,210.3	7,188.2	7,159.5	31.3	14.9	165.09	462.0	-147.7	1,644.9	1,614.8	30.05	54.736		
7,450.0	7,258.7	7,227.9	7,195.2	31.5	14.8	145.26	444.7	-148.2	1,657.9	1,628.1	29.82	55.601		
7,500.0	7,306.5	7,266.9	7,229.1	31.7	14.7	130.28	425.3	-148.6	1,670.9	1,641.3	29.56	56.532		
7,550.0	7,353.4	7,305.4	7,261.1	31.8	14.6	119.44	403.9	-149.0	1,683.6	1,654.4	29.27	57.513		
7,600.0	7,399.0	7,343.5	7,291.3	31.9	14.4	111.47	380.7	-149.4	1,696.1	1,667.2	28.98	58.532		
7,650.0	7,442.9	7,381.1	7,319.5	32.0	14.3	105.40	355.8	-149.7	1,708.2	1,679.6	28.68	59.564		
7,700.0	7,484.9	7,418.5	7,345.8	32.1	14.2	100.64	329.4	-150.1	1,719.8	1,691.4	28.38	60.589		
7,750.0	7,524.5	7,450.0	7,366.7	32.1	14.1	96.83	305.7	-150.3	1,730.8	1,702.6	28.14	61.510		
7,800.0	7,561.6	7,492.3	7,392.6	32.1	13.9	93.65	272.3	-150.6	1,741.0	1,713.2	27.84	62.532		
7,850.0	7,595.8	7,529.0	7,413.0	32.2	13.8	91.04	241.8	-150.9	1,750.5	1,722.9	27.61	63.393		
7,900.0	7,626.8	7,565.5	7,431.4	32.2	13.7	88.87	210.3	-151.1	1,759.1	1,731.6	27.42	64.153		
7,950.0	7,654.5	7,600.0	7,446.8	32.2	13.7	87.08	179.4	-151.3	1,766.7	1,739.4	27.27	64.778		
8,000.0	7,678.5	7,638.1	7,461.7	32.3	13.6	85.61	144.3	-151.5	1,773.3	1,746.1	27.17	65.266		
8,050.0	7,698.8	7,674.4	7,473.7	32.3	13.6	84.43	110.1	-151.7	1,778.9	1,751.7	27.13	65.570		
8,100.0	7,715.2	7,710.6	7,483.4	32.3	13.6	83.53	75.3	-151.8	1,783.3	1,756.2	27.14	65.698		
8,150.0	7,727.5	7,750.0	7,491.5	32.4	13.7	82.87	36.7	-151.9	1,786.6	1,759.4	27.22	65.628		
8,200.0	7,735.6	7,782.9	7,496.2	32.4	13.7	82.47	4.1	-151.9	1,788.8	1,761.4	27.37	65.353		
8,250.0	7,739.6	7,819.1	7,499.2	32.4	13.8	82.29	-31.9	-152.0	1,789.7	1,762.1	27.58	64.891		
8,271.7	7,740.0	7,834.8	7,499.8	32.5	13.9	82.29	-47.6	-152.0	1,789.8	1,762.1	27.69	64.634		
8,291.1	7,740.0	7,848.9	7,500.0	32.5	13.9	82.29	-61.7	-152.0	1,789.7	1,761.9	27.80	64.388		
8,300.0	7,740.0	7,857.8	7,500.0	32.5	13.9	82.29	-70.6	-152.0	1,789.7	1,761.9	27.86	64.232		
8,400.0	7,740.0	7,957.8	7,500.0	32.7	14.4	82.29	-170.6	-152.0	1,789.7	1,760.9	28.84	62.061		
8,500.0	7,740.0	8,057.8	7,500.0	33.0	15.1	82.29	-270.6	-152.0	1,789.7	1,759.6	30.16	59.335		
8,600.0	7,740.0	8,157.8	7,500.0	33.4	15.9	82.29	-370.6	-152.0	1,789.7	1,757.9	31.81	56.254		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
8,700.0	7,740.0	8,257.8	7,500.0	33.8	16.9	82.29	-470.6	-152.0	1,789.7	1,756.0	33.75	53.037	
8,800.0	7,740.0	8,357.8	7,500.0	34.4	18.0	82.29	-570.6	-152.0	1,789.7	1,753.8	35.91	49.841	
8,900.0	7,740.0	8,457.8	7,500.0	35.0	19.2	82.29	-670.6	-152.0	1,789.7	1,751.5	38.27	46.770	
9,000.0	7,740.0	8,557.8	7,500.0	35.7	20.5	82.29	-770.6	-152.0	1,789.7	1,748.9	40.79	43.881	
9,100.0	7,740.0	8,657.8	7,500.0	36.4	21.8	82.29	-870.6	-152.0	1,789.7	1,746.3	43.44	41.203	
9,200.0	7,740.0	8,757.8	7,500.0	37.3	23.2	82.29	-970.6	-152.0	1,789.7	1,743.5	46.20	38.741	
9,300.0	7,740.0	8,857.8	7,500.0	38.2	24.6	82.29	-1,070.6	-152.0	1,789.7	1,740.7	49.05	36.488	
9,400.0	7,740.0	8,957.8	7,500.0	39.1	26.1	82.29	-1,170.6	-152.0	1,789.7	1,737.8	51.98	34.432	
9,500.0	7,740.0	9,057.8	7,500.0	40.1	27.6	82.29	-1,270.6	-152.0	1,789.7	1,734.8	54.97	32.558	
9,600.0	7,740.0	9,157.8	7,500.0	41.2	29.2	82.29	-1,370.6	-152.0	1,789.7	1,731.7	58.02	30.848	
9,700.0	7,740.0	9,257.8	7,500.0	42.3	30.7	82.29	-1,470.6	-152.0	1,789.7	1,728.6	61.11	29.287	
9,800.0	7,740.0	9,357.8	7,500.0	43.5	32.3	82.29	-1,570.6	-152.0	1,789.7	1,725.5	64.24	27.860	
9,900.0	7,740.0	9,457.8	7,500.0	44.7	33.9	82.29	-1,670.6	-152.0	1,789.7	1,722.3	67.41	26.551	
10,000.0	7,740.0	9,557.8	7,500.0	45.9	35.5	82.29	-1,770.6	-152.0	1,789.7	1,719.1	70.60	25.350	
10,100.0	7,740.0	9,657.8	7,500.0	47.1	37.1	82.29	-1,870.6	-152.0	1,789.7	1,715.9	73.82	24.244	
10,200.0	7,740.0	9,757.8	7,500.0	48.4	38.8	82.29	-1,970.6	-152.0	1,789.7	1,712.7	77.06	23.224	
10,300.0	7,740.0	9,857.8	7,500.0	49.8	40.4	82.29	-2,070.6	-152.0	1,789.7	1,709.4	80.33	22.281	
10,400.0	7,740.0	9,957.8	7,500.0	51.1	42.1	82.29	-2,170.6	-152.0	1,789.7	1,706.1	83.61	21.407	
10,500.0	7,740.0	10,057.8	7,500.0	52.5	43.7	82.29	-2,270.6	-152.0	1,789.7	1,702.8	86.90	20.595	
10,600.0	7,740.0	10,157.8	7,500.0	53.9	45.4	82.29	-2,370.6	-152.0	1,789.7	1,699.5	90.21	19.840	
10,700.0	7,740.0	10,257.8	7,500.0	55.3	47.1	82.29	-2,470.6	-152.0	1,789.7	1,696.2	93.53	19.135	
10,800.0	7,740.0	10,357.8	7,500.0	56.7	48.8	82.29	-2,570.6	-152.0	1,789.7	1,692.9	96.86	18.477	
10,900.0	7,740.0	10,457.8	7,500.0	58.2	50.5	82.29	-2,670.6	-152.0	1,789.7	1,689.5	100.20	17.861	
11,000.0	7,740.0	10,557.8	7,500.0	59.7	52.2	82.29	-2,770.6	-152.0	1,789.7	1,686.2	103.55	17.283	
11,100.0	7,740.0	10,657.8	7,500.0	61.2	53.9	82.29	-2,870.6	-152.0	1,789.7	1,682.8	106.91	16.740	
11,200.0	7,740.0	10,757.8	7,500.0	62.7	55.5	82.29	-2,970.6	-152.0	1,789.7	1,679.5	110.28	16.229	
11,300.0	7,740.0	10,857.8	7,500.0	64.2	57.3	82.29	-3,070.6	-152.0	1,789.7	1,676.1	113.65	15.748	
11,400.0	7,740.0	10,957.8	7,500.0	65.7	59.0	82.29	-3,170.6	-152.0	1,789.7	1,672.7	117.03	15.293	
11,500.0	7,740.0	11,057.8	7,500.0	67.2	60.7	82.29	-3,270.6	-152.0	1,789.7	1,669.3	120.41	14.863	
11,600.0	7,740.0	11,157.8	7,500.0	68.8	62.4	82.29	-3,370.6	-152.0	1,789.7	1,665.9	123.80	14.456	
11,700.0	7,740.0	11,257.8	7,500.0	70.3	64.1	82.29	-3,470.6	-152.0	1,789.7	1,662.5	127.20	14.070	
11,800.0	7,740.0	11,357.8	7,500.0	71.9	65.8	82.29	-3,570.6	-152.0	1,789.7	1,659.1	130.60	13.704	
11,900.0	7,740.0	11,457.8	7,500.0	73.5	67.5	82.29	-3,670.6	-152.0	1,789.7	1,655.7	134.00	13.356	
12,000.0	7,740.0	11,557.8	7,500.0	75.1	69.2	82.29	-3,770.6	-152.0	1,789.7	1,652.3	137.41	13.025	
12,100.0	7,740.0	11,657.8	7,500.0	76.6	71.0	82.29	-3,870.6	-152.0	1,789.7	1,648.9	140.82	12.710	
12,200.0	7,740.0	11,757.8	7,500.0	78.2	72.7	82.29	-3,970.6	-152.0	1,789.7	1,645.5	144.23	12.409	
12,300.0	7,740.0	11,857.8	7,500.0	79.8	74.4	82.29	-4,070.6	-152.0	1,789.7	1,642.1	147.64	12.122	
12,400.0	7,740.0	11,957.8	7,500.0	81.5	76.1	82.29	-4,170.6	-152.0	1,789.7	1,638.7	151.06	11.848	
12,500.0	7,740.0	12,057.8	7,500.0	83.1	77.9	82.29	-4,270.6	-152.0	1,789.7	1,635.3	154.48	11.585	
12,600.0	7,740.0	12,157.8	7,500.0	84.7	79.6	82.29	-4,370.6	-152.0	1,789.7	1,631.8	157.91	11.334	
12,700.0	7,740.0	12,257.8	7,500.0	86.3	81.3	82.29	-4,470.6	-152.0	1,789.7	1,628.4	161.33	11.093	
12,800.0	7,740.0	12,357.8	7,500.0	88.0	83.0	82.29	-4,570.6	-152.0	1,789.7	1,625.0	164.76	10.863	
12,900.0	7,740.0	12,457.8	7,500.0	89.6	84.8	82.29	-4,670.6	-152.0	1,789.7	1,621.5	168.19	10.641	
13,000.0	7,740.0	12,557.8	7,500.0	91.2	86.5	82.29	-4,770.6	-152.0	1,789.7	1,618.1	171.62	10.428	
13,100.0	7,740.0	12,657.8	7,500.0	92.9	88.2	82.29	-4,870.6	-152.0	1,789.7	1,614.7	175.06	10.224	
13,200.0	7,740.0	12,757.8	7,500.0	94.5	90.0	82.29	-4,970.6	-152.0	1,789.7	1,611.2	178.49	10.027	
13,300.0	7,740.0	12,857.8	7,500.0	96.2	91.7	82.29	-5,070.6	-152.0	1,789.7	1,607.8	181.93	9.838	
13,400.0	7,740.0	12,957.8	7,500.0	97.8	93.4	82.29	-5,170.6	-152.0	1,789.7	1,604.4	185.37	9.655	
13,500.0	7,740.0	13,080.0	7,500.0	99.5	95.6	82.29	-5,292.8	-151.3	1,789.2	1,599.7	189.50	9.442	
13,600.0	7,740.0	13,180.0	7,500.0	101.2	97.3	82.29	-5,392.8	-150.0	1,787.9	1,595.0	192.93	9.267	
13,700.0	7,740.0	13,279.9	7,500.0	102.8	99.0	82.28	-5,492.8	-148.8	1,786.7	1,590.3	196.37	9.098	
13,800.0	7,740.0	13,379.9	7,500.0	104.5	100.8	82.27	-5,592.7	-147.5	1,785.4	1,585.6	199.82	8.935	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,900.0	7,740.0	13,479.9	7,500.0	106.2	102.5	82.27	-5,692.7	-146.3	1,784.2	1,580.9	203.26	8.778		
14,000.0	7,740.0	13,579.9	7,500.0	107.8	104.2	82.26	-5,792.7	-145.0	1,783.0	1,576.3	206.70	8.626		
14,100.0	7,740.0	13,679.9	7,500.0	109.5	106.0	82.26	-5,892.7	-143.8	1,781.7	1,571.6	210.14	8.479		
14,200.0	7,740.0	13,779.9	7,500.0	111.2	107.7	82.25	-5,992.7	-142.5	1,780.5	1,566.9	213.59	8.336		
14,300.0	7,740.0	13,879.9	7,500.0	112.9	109.5	82.25	-6,092.7	-141.3	1,779.2	1,562.2	217.04	8.198		
14,400.0	7,740.0	13,979.9	7,500.0	114.6	111.2	82.24	-6,192.6	-140.0	1,778.0	1,557.5	220.48	8.064		
14,500.0	7,740.0	14,079.9	7,500.0	116.3	112.9	82.24	-6,292.6	-138.8	1,776.8	1,552.8	223.93	7.935		
14,600.0	7,740.0	14,179.9	7,500.0	117.9	114.7	82.23	-6,392.6	-137.5	1,775.5	1,548.2	227.38	7.809		
14,700.0	7,740.0	14,279.9	7,500.0	119.6	116.4	82.23	-6,492.6	-136.3	1,774.3	1,543.5	230.83	7.687		
14,800.0	7,740.0	14,379.9	7,500.0	121.3	118.2	82.22	-6,592.6	-135.0	1,773.1	1,538.8	234.28	7.568		
14,900.0	7,740.0	14,479.8	7,500.0	123.0	119.9	82.21	-6,692.6	-133.8	1,771.8	1,534.1	237.72	7.453		
15,000.0	7,740.0	14,579.8	7,500.0	124.7	121.7	82.21	-6,792.5	-132.5	1,770.6	1,529.4	241.18	7.341		
15,100.0	7,740.0	14,679.8	7,500.0	126.4	123.4	82.20	-6,892.5	-131.3	1,769.3	1,524.7	244.63	7.233		
15,200.0	7,740.0	14,779.8	7,500.0	128.1	125.1	82.20	-6,992.5	-130.0	1,768.1	1,520.0	248.08	7.127		
15,300.0	7,740.0	14,879.8	7,500.0	129.8	126.9	82.19	-7,092.5	-128.8	1,766.9	1,515.3	251.53	7.024		
15,400.0	7,740.0	14,979.8	7,500.0	131.5	128.6	82.19	-7,192.5	-127.5	1,765.6	1,510.6	254.98	6.924		
15,500.0	7,740.0	15,079.8	7,500.0	133.2	130.4	82.18	-7,292.5	-126.3	1,764.4	1,505.9	258.44	6.827		
15,600.0	7,740.0	15,179.8	7,500.0	134.9	132.1	82.18	-7,392.5	-125.0	1,763.1	1,501.2	261.89	6.732		
15,700.0	7,740.0	15,279.8	7,500.0	136.6	133.9	82.17	-7,492.4	-123.8	1,761.9	1,496.6	265.34	6.640		
15,800.0	7,740.0	15,379.8	7,500.0	138.3	135.6	82.16	-7,592.4	-122.5	1,760.7	1,491.9	268.80	6.550		
15,900.0	7,740.0	15,479.8	7,500.0	140.0	137.3	82.16	-7,692.4	-121.3	1,759.4	1,487.2	272.25	6.463		
16,000.0	7,740.0	15,579.8	7,500.0	141.7	139.1	82.15	-7,792.4	-120.0	1,758.2	1,482.5	275.71	6.377		
16,100.0	7,740.0	15,679.8	7,500.0	143.5	140.8	82.15	-7,892.4	-118.8	1,756.9	1,477.8	279.16	6.294		
16,148.0	7,740.0	15,706.0	7,500.0	144.3	141.3	82.15	-7,918.6	-118.4	1,756.5	1,476.3	280.13	6.270 SF		
16,171.7	7,740.0	15,706.0	7,500.0	144.7	141.3	82.15	-7,918.6	-118.4	1,756.6	1,476.5	280.16	6.270		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	-89.31	0.4	-29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	-89.31	0.4	-29.9	29.9	29.6	0.30	98.619		
150.0	150.0	150.0	150.0	0.2	0.2	-89.31	0.4	-29.9	29.9	29.5	0.48	62.626		
187.1	187.1	187.1	187.1	0.3	0.3	-90.00	0.4	-29.9	29.9	29.3	0.61	49.233 CC		
200.0	200.0	200.0	200.0	0.3	0.3	-90.56	0.4	-29.9	29.9	29.3	0.65	45.825		
283.3	283.2	283.2	283.2	0.5	0.5	-98.14	0.4	-29.9	30.3	29.3	0.96	31.539 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-102.67	0.4	-29.9	30.5	29.4	1.02	29.827		
400.0	399.6	399.6	399.6	0.7	0.7	-127.88	0.4	-29.9	33.5	32.1	1.39	24.131		
500.0	499.3	499.9	499.9	0.9	0.9	-147.14	1.1	-29.6	38.5	36.8	1.75	22.033		
600.0	598.9	600.3	600.3	1.2	1.0	-160.05	3.5	-28.4	44.0	41.9	2.10	20.914		
700.0	698.5	700.8	700.7	1.4	1.2	-168.05	7.4	-26.4	49.5	47.0	2.46	20.136		
800.0	797.9	801.5	801.1	1.6	1.4	-172.42	13.0	-23.7	55.0	52.2	2.82	19.512		
900.0	897.1	902.1	901.4	1.9	1.6	-174.08	20.1	-20.2	60.6	57.4	3.19	18.995		
1,000.0	996.2	1,001.8	1,000.8	2.2	1.8	-174.30	27.8	-16.3	67.4	63.8	3.58	18.822		
1,100.0	1,095.0	1,101.3	1,099.9	2.5	2.0	-174.00	35.6	-12.5	75.9	71.9	3.98	19.094		
1,200.0	1,193.6	1,200.7	1,198.9	2.8	2.3	-173.51	43.4	-8.6	86.3	82.0	4.38	19.701		
1,300.0	1,291.9	1,299.8	1,297.7	3.2	2.5	-172.99	51.1	-4.8	98.6	93.8	4.80	20.561		
1,400.0	1,389.9	1,398.8	1,396.2	3.5	2.7	-172.54	58.8	-1.0	112.7	107.5	5.22	21.614		
1,500.0	1,487.6	1,497.4	1,494.5	3.9	2.9	-172.18	66.6	2.8	128.7	123.1	5.64	22.817		
1,600.0	1,584.8	1,595.7	1,592.5	4.4	3.2	-171.93	74.2	6.6	146.5	140.4	6.07	24.139		
1,624.3	1,608.4	1,619.6	1,616.2	4.5	3.2	-171.88	76.1	7.6	151.0	144.9	6.17	24.474		
1,700.0	1,681.8	1,693.9	1,690.2	4.8	3.4	-170.94	81.9	10.4	165.5	159.0	6.50	25.476		
1,800.0	1,778.8	1,792.0	1,787.9	5.3	3.6	-169.92	89.6	14.2	184.7	177.7	6.93	26.659		
1,900.0	1,875.8	1,890.1	1,885.7	5.7	3.8	-169.10	97.2	18.0	203.9	196.5	7.36	27.707		
2,000.0	1,972.8	1,988.2	1,983.4	6.2	4.0	-168.42	104.9	21.8	223.1	215.3	7.79	28.640		
2,100.0	2,069.8	2,086.3	2,081.1	6.6	4.3	-167.84	112.5	25.6	242.4	234.2	8.22	29.475		
2,200.0	2,166.8	2,184.4	2,178.8	7.1	4.5	-167.35	120.2	29.4	261.7	253.0	8.66	30.227		
2,300.0	2,263.8	2,282.5	2,276.6	7.5	4.7	-166.93	127.9	33.2	281.0	271.9	9.09	30.908		
2,400.0	2,360.8	2,380.6	2,374.3	8.0	4.9	-166.56	135.5	37.0	300.3	290.8	9.52	31.526		
2,500.0	2,457.7	2,478.7	2,472.0	8.4	5.2	-166.24	143.2	40.8	319.6	309.6	9.96	32.090		
2,600.0	2,554.7	2,576.8	2,569.7	8.9	5.4	-165.95	150.8	44.6	338.9	328.5	10.39	32.607		
2,700.0	2,651.7	2,674.9	2,667.5	9.4	5.6	-165.70	158.5	48.4	358.3	347.4	10.83	33.082		
2,800.0	2,748.7	2,773.0	2,765.2	9.8	5.8	-165.47	166.2	52.2	377.6	366.4	11.27	33.520		
2,900.0	2,845.7	2,871.1	2,862.9	10.3	6.1	-165.26	173.8	55.9	397.0	385.3	11.70	33.925		
3,000.0	2,942.7	2,969.2	2,960.6	10.8	6.3	-165.07	181.5	59.7	416.3	404.2	12.14	34.301		
3,100.0	3,039.7	3,067.3	3,058.4	11.2	6.5	-164.90	189.1	63.5	435.7	423.1	12.57	34.650		
3,200.0	3,136.7	3,165.4	3,156.1	11.7	6.7	-164.75	196.8	67.3	455.1	442.1	13.01	34.976		
3,300.0	3,233.6	3,263.5	3,253.8	12.2	7.0	-164.60	204.5	71.1	474.4	461.0	13.45	35.280		
3,400.0	3,330.6	3,361.6	3,351.6	12.6	7.2	-164.47	212.1	74.9	493.8	479.9	13.88	35.566		
3,500.0	3,427.6	3,459.7	3,449.3	13.1	7.4	-164.35	219.8	78.7	513.2	498.9	14.32	35.833		
3,600.0	3,524.6	3,557.8	3,547.0	13.6	7.7	-164.24	227.4	82.5	532.5	517.8	14.76	36.085		
3,700.0	3,621.6	3,655.9	3,644.7	14.0	7.9	-164.13	235.1	86.3	551.9	536.7	15.20	36.321		
3,800.0	3,718.6	3,754.0	3,742.5	14.5	8.1	-164.03	242.8	90.1	571.3	555.7	15.63	36.545		
3,900.0	3,815.6	3,852.0	3,840.2	15.0	8.3	-163.94	250.4	93.9	590.7	574.6	16.07	36.756		
4,000.0	3,912.6	3,950.1	3,937.9	15.4	8.6	-163.85	258.1	97.7	610.1	593.6	16.51	36.956		
4,100.0	4,009.5	4,048.2	4,035.6	15.9	8.8	-163.77	265.7	101.5	629.4	612.5	16.95	37.145		
4,200.0	4,106.5	4,146.3	4,133.4	16.4	9.0	-163.70	273.4	105.3	648.8	631.4	17.38	37.325		
4,300.0	4,203.5	4,244.4	4,231.1	16.8	9.2	-163.62	281.1	109.1	668.2	650.4	17.82	37.496		
4,400.0	4,300.5	4,342.5	4,328.8	17.3	9.5	-163.56	288.7	112.9	687.6	669.3	18.26	37.659		
4,500.0	4,397.5	4,440.6	4,426.5	17.8	9.7	-163.49	296.4	116.6	707.0	688.3	18.70	37.814		
4,600.0	4,494.5	4,538.7	4,524.3	18.2	9.9	-163.43	304.1	120.4	726.4	707.2	19.13	37.962		
4,700.0	4,591.5	4,636.8	4,622.0	18.7	10.1	-163.38	311.7	124.2	745.8	726.2	19.57	38.103		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,800.0	4,688.5	4,734.9	4,719.7	19.2	10.4	-163.32	319.4	128.0	765.2	745.1	20.01	38.238		
4,900.0	4,785.4	4,833.0	4,817.5	19.6	10.6	-163.27	327.0	131.8	784.5	764.1	20.45	38.367		
5,000.0	4,882.4	4,931.1	4,915.2	20.1	10.8	-163.22	334.7	135.6	803.9	783.0	20.89	38.490		
5,100.0	4,979.4	5,029.2	5,012.9	20.6	11.0	-163.17	342.4	139.4	823.3	802.0	21.32	38.609		
5,200.0	5,076.4	5,127.3	5,110.6	21.0	11.3	-163.13	350.0	143.2	842.7	820.9	21.76	38.722		
5,300.0	5,173.4	5,225.4	5,208.4	21.5	11.5	-163.09	357.7	147.0	862.1	839.9	22.20	38.831		
5,400.0	5,270.4	5,323.5	5,306.1	22.0	11.7	-163.05	365.3	150.8	881.5	858.9	22.64	38.936		
5,500.0	5,367.4	5,421.6	5,403.8	22.5	12.0	-163.01	373.0	154.6	900.9	877.8	23.08	39.037		
5,600.0	5,464.4	5,519.7	5,501.5	22.9	12.2	-162.97	380.7	158.4	920.3	896.8	23.52	39.134		
5,700.0	5,561.4	5,617.8	5,599.3	23.4	12.4	-162.93	388.3	162.2	939.7	915.7	23.95	39.227		
5,800.0	5,658.3	5,715.9	5,697.0	23.9	12.6	-162.90	396.0	166.0	959.1	934.7	24.39	39.317		
5,900.0	5,755.3	5,814.0	5,794.7	24.3	12.9	-162.87	403.6	169.8	978.5	953.6	24.83	39.404		
6,000.0	5,852.3	5,912.1	5,892.4	24.8	13.1	-162.83	411.3	173.5	997.9	972.6	25.27	39.488		
6,100.0	5,949.3	6,010.2	5,990.2	25.3	13.3	-162.80	419.0	177.3	1,017.2	991.5	25.71	39.569		
6,200.0	6,046.3	6,108.3	6,087.9	25.7	13.5	-162.77	426.6	181.1	1,036.6	1,010.5	26.15	39.647		
6,300.0	6,143.3	6,206.4	6,185.6	26.2	13.8	-162.74	434.3	184.9	1,056.0	1,029.5	26.59	39.723		
6,400.0	6,240.3	6,304.5	6,283.4	26.7	14.0	-162.72	441.9	188.7	1,075.4	1,048.4	27.02	39.796		
6,500.0	6,337.3	6,402.6	6,381.1	27.1	14.2	-162.69	449.6	192.5	1,094.8	1,067.4	27.46	39.867		
6,600.0	6,434.2	6,500.7	6,478.8	27.6	14.5	-162.67	457.3	196.3	1,114.2	1,086.3	27.90	39.935		
6,700.0	6,531.2	6,598.8	6,576.5	28.1	14.7	-162.64	464.9	200.1	1,133.6	1,105.3	28.34	40.002		
6,800.0	6,628.2	6,696.9	6,674.3	28.5	14.9	-162.62	472.6	203.9	1,153.0	1,124.2	28.78	40.066		
6,900.0	6,725.2	6,795.0	6,772.0	29.0	15.1	-162.59	480.2	207.7	1,172.4	1,143.2	29.22	40.128		
7,000.0	6,822.2	6,893.1	6,869.7	29.5	15.4	-162.57	487.9	211.5	1,191.8	1,162.2	29.66	40.189		
7,100.0	6,919.2	6,991.2	6,967.4	30.0	15.6	-162.55	495.6	215.3	1,211.2	1,181.1	30.09	40.248		
7,200.0	7,016.2	7,089.3	7,065.2	30.4	15.8	-162.53	503.2	219.1	1,230.6	1,200.1	30.53	40.305		
7,300.0	7,113.2	7,186.3	7,161.8	30.9	16.0	-162.57	509.5	222.8	1,250.0	1,219.1	30.91	40.436		
7,328.7	7,141.0	7,213.5	7,189.0	31.0	16.0	-162.68	509.1	223.9	1,255.6	1,224.7	30.96	40.553		
7,350.0	7,161.7	7,233.5	7,208.9	31.1	16.0	-171.61	508.0	224.6	1,259.8	1,228.8	30.98	40.671		
7,400.0	7,210.3	7,280.2	7,255.3	31.3	16.0	-166.49	502.7	226.4	1,269.6	1,238.7	30.94	41.031		
7,450.0	7,258.7	7,326.6	7,300.7	31.5	16.0	-147.28	493.8	228.2	1,279.4	1,248.6	30.84	41.481		
7,500.0	7,306.5	7,372.6	7,345.0	31.7	16.0	-132.91	481.2	229.9	1,289.1	1,258.4	30.69	42.009		
7,550.0	7,353.4	7,418.5	7,388.0	31.8	15.9	-122.65	465.3	231.6	1,298.6	1,268.1	30.48	42.607		
7,600.0	7,399.0	7,464.1	7,429.3	31.9	15.8	-115.24	446.1	233.2	1,307.8	1,277.6	30.23	43.262		
7,650.0	7,442.9	7,509.5	7,468.8	32.0	15.6	-109.70	423.7	234.7	1,316.7	1,286.8	29.95	43.963		
7,700.0	7,484.9	7,554.8	7,506.3	32.1	15.5	-105.43	398.4	236.2	1,325.2	1,295.6	29.65	44.694		
7,750.0	7,524.5	7,600.0	7,541.6	32.1	15.4	-102.05	370.2	237.6	1,333.2	1,303.9	29.34	45.437		
7,800.0	7,561.6	7,645.2	7,574.6	32.1	15.2	-99.32	339.4	238.8	1,340.7	1,311.7	29.04	46.174		
7,850.0	7,595.8	7,690.3	7,605.0	32.2	15.1	-97.09	306.1	240.0	1,347.6	1,318.9	28.75	46.878		
7,900.0	7,626.8	7,735.5	7,632.7	32.2	15.0	-95.27	270.5	241.1	1,353.9	1,325.4	28.49	47.526		
7,950.0	7,654.5	7,780.6	7,657.5	32.2	14.8	-93.78	232.8	242.1	1,359.4	1,331.1	28.27	48.093		
8,000.0	7,678.5	7,825.8	7,679.3	32.3	14.8	-92.57	193.2	242.9	1,364.2	1,336.1	28.10	48.552		
8,050.0	7,698.8	7,871.0	7,698.0	32.3	14.7	-91.62	152.0	243.6	1,368.3	1,340.3	27.99	48.879		
8,100.0	7,715.2	7,916.3	7,713.3	32.3	14.7	-90.90	109.4	244.2	1,371.5	1,343.6	27.96	49.053		
8,150.0	7,727.5	7,961.7	7,725.3	32.4	14.7	-90.39	65.6	244.7	1,374.0	1,346.0	28.01	49.059		
8,200.0	7,735.6	8,007.2	7,733.7	32.4	14.8	-90.08	21.0	245.0	1,375.5	1,347.4	28.14	48.890		
8,250.0	7,739.6	8,052.8	7,738.7	32.4	14.9	-89.97	-24.3	245.2	1,376.3	1,347.9	28.35	48.542		
8,271.7	7,740.0	8,072.6	7,739.7	32.5	14.9	-89.99	-44.1	245.2	1,376.3	1,347.9	28.48	48.330		
8,292.9	7,740.0	8,092.0	7,740.0	32.5	15.0	-90.00	-63.5	245.3	1,376.3	1,347.7	28.61	48.107		
8,300.0	7,740.0	8,099.1	7,740.0	32.5	15.0	-90.00	-70.6	245.3	1,376.3	1,347.7	28.66	48.022		
8,400.0	7,740.0	8,199.1	7,740.0	32.7	15.5	-90.00	-170.6	245.3	1,376.3	1,346.7	29.61	46.487		
8,500.0	7,740.0	8,299.1	7,740.0	33.0	16.1	-90.00	-270.6	245.3	1,376.3	1,345.4	30.92	44.508		
8,600.0	7,740.0	8,399.1	7,740.0	33.4	16.9	-90.00	-370.6	245.3	1,376.3	1,343.8	32.57	42.262		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,700.0	7,740.0	8,499.1	7,740.0	33.8	17.8	90.00	-470.6	245.3	1,376.3	1,341.8	34.49	39.906	
8,800.0	7,740.0	8,599.1	7,740.0	34.4	18.8	90.00	-570.6	245.3	1,376.3	1,339.7	36.65	37.556	
8,900.0	7,740.0	8,699.1	7,740.0	35.0	20.0	90.00	-670.6	245.3	1,376.3	1,337.3	39.00	35.288	
9,000.0	7,740.0	8,799.1	7,740.0	35.7	21.2	90.00	-770.6	245.3	1,376.3	1,334.8	41.52	33.148	
9,100.0	7,740.0	8,899.1	7,740.0	36.4	22.5	90.00	-870.6	245.3	1,376.3	1,332.1	44.17	31.157	
9,200.0	7,740.0	8,999.1	7,740.0	37.3	23.9	90.00	-970.6	245.3	1,376.3	1,329.4	46.94	29.321	
9,300.0	7,740.0	9,099.1	7,740.0	38.2	25.3	90.00	-1,070.6	245.3	1,376.3	1,326.5	49.80	27.638	
9,400.0	7,740.0	9,199.1	7,740.0	39.1	26.7	90.00	-1,170.6	245.3	1,376.3	1,323.6	52.74	26.098	
9,500.0	7,740.0	9,299.1	7,740.0	40.1	28.2	90.00	-1,270.6	245.3	1,376.3	1,320.6	55.74	24.692	
9,600.0	7,740.0	9,399.1	7,740.0	41.2	29.7	90.00	-1,370.6	245.3	1,376.3	1,317.5	58.80	23.407	
9,700.0	7,740.0	9,499.1	7,740.0	42.3	31.3	90.00	-1,470.6	245.3	1,376.3	1,314.4	61.91	22.232	
9,800.0	7,740.0	9,599.1	7,740.0	43.5	32.8	90.00	-1,570.6	245.3	1,376.3	1,311.3	65.06	21.156	
9,900.0	7,740.0	9,699.1	7,740.0	44.7	34.4	90.00	-1,670.6	245.3	1,376.3	1,308.1	68.24	20.169	
10,000.0	7,740.0	9,799.1	7,740.0	45.9	36.0	90.00	-1,770.6	245.3	1,376.3	1,304.9	71.45	19.262	
10,100.0	7,740.0	9,899.1	7,740.0	47.1	37.6	90.00	-1,870.6	245.3	1,376.3	1,301.6	74.69	18.427	
10,200.0	7,740.0	9,999.1	7,740.0	48.4	39.2	90.00	-1,970.6	245.3	1,376.3	1,298.4	77.96	17.655	
10,300.0	7,740.0	10,099.1	7,740.0	49.8	40.8	90.00	-2,070.6	245.3	1,376.3	1,295.1	81.24	16.942	
10,400.0	7,740.0	10,199.1	7,740.0	51.1	42.5	90.00	-2,170.6	245.3	1,376.3	1,291.8	84.54	16.280	
10,500.0	7,740.0	10,299.1	7,740.0	52.5	44.1	90.00	-2,270.6	245.3	1,376.3	1,288.5	87.86	15.665	
10,600.0	7,740.0	10,399.1	7,740.0	53.9	45.8	90.00	-2,370.6	245.3	1,376.3	1,285.1	91.19	15.093	
10,700.0	7,740.0	10,499.1	7,740.0	55.3	47.5	90.00	-2,470.6	245.3	1,376.3	1,281.8	94.53	14.559	
10,800.0	7,740.0	10,599.1	7,740.0	56.7	49.1	90.00	-2,570.6	245.3	1,376.3	1,278.4	97.89	14.060	
10,900.0	7,740.0	10,699.1	7,740.0	58.2	50.8	90.00	-2,670.6	245.3	1,376.3	1,275.1	101.26	13.592	
11,000.0	7,740.0	10,799.1	7,740.0	59.7	52.5	90.00	-2,770.6	245.3	1,376.3	1,271.7	104.63	13.154	
11,100.0	7,740.0	10,899.1	7,740.0	61.2	54.2	90.00	-2,870.6	245.3	1,376.3	1,268.3	108.02	12.742	
11,200.0	7,740.0	10,999.1	7,740.0	62.7	55.9	90.00	-2,970.6	245.3	1,376.3	1,264.9	111.41	12.354	
11,300.0	7,740.0	11,099.1	7,740.0	64.2	57.6	90.00	-3,070.6	245.3	1,376.3	1,261.5	114.81	11.988	
11,400.0	7,740.0	11,199.1	7,740.0	65.7	59.3	90.00	-3,170.6	245.3	1,376.3	1,258.1	118.21	11.643	
11,500.0	7,740.0	11,299.1	7,740.0	67.2	61.0	90.00	-3,270.6	245.3	1,376.3	1,254.7	121.62	11.316	
11,600.0	7,740.0	11,399.1	7,740.0	68.8	62.7	90.00	-3,370.6	245.3	1,376.3	1,251.3	125.04	11.007	
11,700.0	7,740.0	11,499.1	7,740.0	70.3	64.4	90.00	-3,470.6	245.3	1,376.3	1,247.9	128.46	10.714	
11,800.0	7,740.0	11,599.1	7,740.0	71.9	66.1	90.00	-3,570.6	245.3	1,376.3	1,244.4	131.89	10.436	
11,900.0	7,740.0	11,699.1	7,740.0	73.5	67.8	90.00	-3,670.6	245.3	1,376.3	1,241.0	135.32	10.171	
12,000.0	7,740.0	11,799.1	7,740.0	75.1	69.5	90.00	-3,770.6	245.3	1,376.3	1,237.6	138.75	9.919	
12,100.0	7,740.0	11,899.1	7,740.0	76.6	71.2	90.00	-3,870.6	245.3	1,376.3	1,234.1	142.19	9.679	
12,200.0	7,740.0	11,999.1	7,740.0	78.2	72.9	90.00	-3,970.6	245.3	1,376.3	1,230.7	145.63	9.451	
12,300.0	7,740.0	12,099.1	7,740.0	79.8	74.7	90.00	-4,070.6	245.3	1,376.3	1,227.2	149.07	9.232	
12,400.0	7,740.0	12,199.1	7,740.0	81.5	76.4	90.00	-4,170.6	245.3	1,376.3	1,223.8	152.52	9.024	
12,500.0	7,740.0	12,299.1	7,740.0	83.1	78.1	90.00	-4,270.6	245.3	1,376.3	1,220.4	155.97	8.824	
12,600.0	7,740.0	12,399.1	7,740.0	84.7	79.8	90.00	-4,370.6	245.3	1,376.3	1,216.9	159.42	8.633	
12,700.0	7,740.0	12,499.1	7,740.0	86.3	81.5	90.00	-4,470.6	245.3	1,376.3	1,213.4	162.88	8.450	
12,800.0	7,740.0	12,599.1	7,740.0	88.0	83.3	90.00	-4,570.6	245.3	1,376.3	1,210.0	166.34	8.274	
12,900.0	7,740.0	12,699.1	7,740.0	89.6	85.0	90.00	-4,670.6	245.3	1,376.3	1,206.5	169.79	8.106	
13,000.0	7,740.0	12,799.1	7,740.0	91.2	86.7	90.00	-4,770.6	245.3	1,376.3	1,203.1	173.26	7.944	
13,100.0	7,740.0	12,899.1	7,740.0	92.9	88.5	90.00	-4,870.6	245.3	1,376.3	1,199.6	176.72	7.788	
13,200.0	7,740.0	12,999.1	7,740.0	94.5	90.2	90.00	-4,970.6	245.3	1,376.3	1,196.1	180.18	7.638	
13,300.0	7,740.0	13,099.1	7,740.0	96.2	91.9	90.00	-5,070.6	245.3	1,376.3	1,192.7	183.65	7.494	
13,400.0	7,740.0	13,199.1	7,740.0	97.8	93.6	90.00	-5,170.6	245.3	1,376.3	1,189.2	187.12	7.355	
13,500.0	7,740.0	13,299.1	7,740.0	99.5	95.4	90.00	-5,270.6	245.3	1,376.3	1,185.7	190.59	7.222	
13,600.0	7,740.0	13,399.1	7,740.0	101.2	97.1	90.00	-5,370.6	245.3	1,376.3	1,182.3	194.06	7.092	
13,700.0	7,740.0	13,499.1	7,740.0	102.8	98.8	90.00	-5,470.6	245.3	1,376.3	1,178.8	197.53	6.968	
13,800.0	7,740.0	13,599.1	7,740.0	104.5	100.6	90.00	-5,570.6	245.3	1,376.3	1,175.3	201.00	6.847	

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,740.0	13,699.1	7,740.0	106.2	102.3	90.00	-5,670.6	245.3	1,376.3	1,171.8	204.48	6.731		
14,000.0	7,740.0	13,799.1	7,740.0	107.8	104.1	90.00	-5,770.6	245.3	1,376.3	1,168.4	207.95	6.618		
14,100.0	7,740.0	13,899.1	7,740.0	109.5	105.8	90.00	-5,870.6	245.3	1,376.3	1,164.9	211.43	6.510		
14,200.0	7,740.0	13,999.1	7,740.0	111.2	107.5	90.00	-5,970.6	245.3	1,376.3	1,161.4	214.91	6.404		
14,300.0	7,740.0	14,099.1	7,740.0	112.9	109.3	90.00	-6,070.6	245.3	1,376.3	1,157.9	218.38	6.302		
14,400.0	7,740.0	14,199.1	7,740.0	114.6	111.0	90.00	-6,170.6	245.3	1,376.3	1,154.5	221.86	6.203		
14,500.0	7,740.0	14,299.1	7,740.0	116.3	112.7	90.00	-6,270.6	245.3	1,376.3	1,151.0	225.34	6.108		
14,600.0	7,740.0	14,399.1	7,740.0	117.9	114.5	90.00	-6,370.6	245.3	1,376.3	1,147.5	228.83	6.015		
14,700.0	7,740.0	14,499.1	7,740.0	119.6	116.2	90.00	-6,470.6	245.3	1,376.3	1,144.0	232.31	5.925		
14,800.0	7,740.0	14,599.1	7,740.0	121.3	118.0	90.00	-6,570.6	245.3	1,376.3	1,140.5	235.79	5.837		
14,900.0	7,740.0	14,699.1	7,740.0	123.0	119.7	90.00	-6,670.6	245.3	1,376.3	1,137.1	239.27	5.752		
15,000.0	7,740.0	14,799.1	7,740.0	124.7	121.4	90.00	-6,770.6	245.3	1,376.3	1,133.6	242.76	5.670		
15,100.0	7,740.0	14,899.1	7,740.0	126.4	123.2	90.00	-6,870.6	245.3	1,376.3	1,130.1	246.24	5.589		
15,200.0	7,740.0	14,999.1	7,740.0	128.1	124.9	90.00	-6,970.6	245.3	1,376.3	1,126.6	249.73	5.511		
15,300.0	7,740.0	15,099.1	7,740.0	129.8	126.7	90.00	-7,070.6	245.3	1,376.3	1,123.1	253.22	5.435		
15,400.0	7,740.0	15,199.1	7,740.0	131.5	128.4	90.00	-7,170.6	245.3	1,376.3	1,119.6	256.70	5.362		
15,500.0	7,740.0	15,299.1	7,740.0	133.2	130.2	90.00	-7,270.6	245.3	1,376.3	1,116.1	260.19	5.290		
15,600.0	7,740.0	15,399.1	7,740.0	134.9	131.9	90.00	-7,370.6	245.3	1,376.3	1,112.6	263.68	5.220		
15,700.0	7,740.0	15,499.1	7,740.0	136.6	133.6	90.00	-7,470.6	245.3	1,376.3	1,109.2	267.17	5.152		
15,800.0	7,740.0	15,599.1	7,740.0	138.3	135.4	90.00	-7,570.6	245.3	1,376.3	1,105.7	270.66	5.085		
15,900.0	7,740.0	15,699.1	7,740.0	140.0	137.1	90.00	-7,670.6	245.3	1,376.3	1,102.2	274.15	5.020		
16,000.0	7,740.0	15,799.1	7,740.0	141.7	138.9	90.00	-7,770.6	245.3	1,376.3	1,098.7	277.64	4.957		
16,100.0	7,740.0	15,899.1	7,740.0	143.5	140.6	90.00	-7,870.6	245.3	1,376.3	1,095.2	281.13	4.896		
16,100.1	7,740.0	15,899.2	7,740.0	143.5	140.6	90.00	-7,870.7	245.3	1,376.3	1,095.2	281.13	4.896		
16,171.7	7,740.0	15,953.0	7,740.0	144.7	141.6	90.00	-7,924.5	245.3	1,376.4	1,093.6	282.87	4.866 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	-89.09	0.4	-22.7	22.7					
100.0	100.0	100.0	100.0	0.2	0.2	-89.09	0.4	-22.7	22.7	22.4	0.30	74.659		
150.0	150.0	150.0	150.0	0.2	0.2	-89.09	0.4	-22.7	22.7	22.2	0.48	47.411		
187.1	187.1	187.1	187.1	0.3	0.3	-90.00	0.4	-22.7	22.7	22.1	0.61	37.270 CC		
200.0	200.0	200.0	200.0	0.3	0.3	-90.74	0.4	-22.7	22.7	22.0	0.65	34.691 ES		
283.3	283.2	283.2	283.2	0.5	0.5	-100.70	0.4	-22.7	23.1	22.1	0.96	24.059		
300.0	299.9	299.9	299.9	0.5	0.5	-105.86	0.4	-22.7	23.3	22.3	1.02	22.864		
400.0	399.6	399.6	399.6	0.7	0.7	-133.64	0.4	-22.7	26.9	25.5	1.39	19.433		
500.0	499.3	499.3	499.3	0.9	0.8	-154.11	0.4	-22.7	33.1	31.4	1.74	19.081		
600.0	598.9	599.6	599.6	1.2	1.0	-167.79	1.0	-22.1	40.3	38.3	2.08	19.370		
700.0	698.5	700.1	700.1	1.4	1.2	-176.48	3.1	-20.4	47.3	44.9	2.43	19.473		
800.0	797.9	800.8	800.7	1.6	1.4	178.27	6.5	-17.7	53.8	51.1	2.78	19.405		
900.0	897.1	901.6	901.2	1.9	1.6	175.50	11.2	-13.7	60.1	57.0	3.12	19.227		
1,000.0	996.2	1,002.4	1,001.8	2.2	1.8	174.56	17.4	-8.7	66.1	62.6	3.48	18.993		
1,100.0	1,095.0	1,103.3	1,102.2	2.5	2.0	175.01	24.9	-2.5	72.0	68.2	3.84	18.745		
1,200.0	1,193.6	1,204.2	1,202.4	2.8	2.3	176.53	33.7	4.8	78.1	73.9	4.22	18.504		
1,300.0	1,291.9	1,303.8	1,301.3	3.2	2.5	178.54	43.1	12.5	85.4	80.7	4.62	18.481		
1,400.0	1,389.9	1,403.2	1,399.9	3.5	2.7	-179.44	52.5	20.3	94.6	89.6	5.03	18.794		
1,500.0	1,487.6	1,502.4	1,498.4	3.9	3.0	-177.59	61.8	28.0	105.9	100.4	5.47	19.367		
1,600.0	1,584.8	1,601.3	1,596.6	4.4	3.3	-176.00	71.1	35.6	119.1	113.2	5.91	20.144		
1,624.3	1,608.4	1,625.3	1,620.4	4.5	3.3	-175.65	73.4	37.5	122.6	116.6	6.02	20.356		
1,700.0	1,681.8	1,700.1	1,694.6	4.8	3.5	-173.88	80.5	43.3	133.8	127.4	6.37	21.003		
1,800.0	1,778.8	1,798.9	1,792.7	5.3	3.8	-171.94	89.8	51.0	148.7	141.9	6.84	21.761		
1,900.0	1,875.8	1,897.6	1,890.7	5.7	4.0	-170.36	99.1	58.6	163.8	156.5	7.30	22.427		
2,000.0	1,972.8	1,996.4	1,988.7	6.2	4.3	-169.04	108.4	66.3	179.0	171.2	7.78	23.013		
2,100.0	2,069.8	2,095.2	2,086.7	6.6	4.6	-167.93	117.7	74.0	194.2	186.0	8.25	23.533		
2,200.0	2,166.8	2,193.9	2,184.8	7.1	4.8	-166.99	127.0	81.6	209.5	200.8	8.73	23.996		
2,300.0	2,263.8	2,292.7	2,282.8	7.5	5.1	-166.17	136.3	89.3	224.9	215.7	9.21	24.410		
2,400.0	2,360.8	2,391.5	2,380.8	8.0	5.4	-165.45	145.6	97.0	240.3	230.6	9.69	24.783		
2,500.0	2,457.7	2,490.2	2,478.8	8.4	5.6	-164.82	154.9	104.6	255.7	245.5	10.18	25.119		
2,600.0	2,554.7	2,589.0	2,576.9	8.9	5.9	-164.27	164.2	112.3	271.1	260.5	10.66	25.424		
2,700.0	2,651.7	2,687.8	2,674.9	9.4	6.2	-163.77	173.5	120.0	286.6	275.4	11.15	25.702		
2,800.0	2,748.7	2,786.5	2,772.9	9.8	6.4	-163.32	182.8	127.6	302.1	290.5	11.64	25.955		
2,900.0	2,845.7	2,885.3	2,871.0	10.3	6.7	-162.92	192.2	135.3	317.6	305.5	12.13	26.188		
3,000.0	2,942.7	2,984.1	2,969.0	10.8	7.0	-162.56	201.5	143.0	333.1	320.5	12.62	26.402		
3,100.0	3,039.7	3,082.8	3,067.0	11.2	7.2	-162.23	210.8	150.6	348.6	335.5	13.11	26.600		
3,200.0	3,136.7	3,181.6	3,165.0	11.7	7.5	-161.92	220.1	158.3	364.2	350.6	13.60	26.783		
3,300.0	3,233.6	3,280.4	3,263.1	12.2	7.8	-161.64	229.4	166.0	379.7	365.7	14.09	26.953		
3,400.0	3,330.6	3,379.1	3,361.1	12.6	8.1	-161.39	238.7	173.6	395.3	380.7	14.58	27.111		
3,500.0	3,427.6	3,477.9	3,459.1	13.1	8.3	-161.15	248.0	181.3	410.9	395.8	15.07	27.258		
3,600.0	3,524.6	3,576.7	3,557.2	13.6	8.6	-160.93	257.3	189.0	426.4	410.9	15.57	27.396		
3,700.0	3,621.6	3,675.4	3,655.2	14.0	8.9	-160.72	266.6	196.6	442.0	426.0	16.06	27.525		
3,800.0	3,718.6	3,774.2	3,753.2	14.5	9.1	-160.53	275.9	204.3	457.6	441.1	16.55	27.646		
3,900.0	3,815.6	3,873.0	3,851.2	15.0	9.4	-160.35	285.2	212.0	473.2	456.2	17.05	27.760		
4,000.0	3,912.6	3,971.7	3,949.3	15.4	9.7	-160.19	294.5	219.6	488.8	471.3	17.54	27.867		
4,100.0	4,009.5	4,070.5	4,047.3	15.9	9.9	-160.03	303.8	227.3	504.4	486.4	18.03	27.969		
4,200.0	4,106.5	4,169.3	4,145.3	16.4	10.2	-159.88	313.2	235.0	520.0	501.5	18.53	28.064		
4,300.0	4,203.5	4,268.0	4,243.4	16.8	10.5	-159.74	322.5	242.6	535.6	516.6	19.02	28.155		
4,400.0	4,300.5	4,366.8	4,341.4	17.3	10.8	-159.61	331.8	250.3	551.2	531.7	19.52	28.240		
4,500.0	4,397.5	4,465.6	4,439.4	17.8	11.0	-159.49	341.1	258.0	566.8	546.8	20.01	28.322		
4,600.0	4,494.5	4,564.3	4,537.4	18.2	11.3	-159.37	350.4	265.6	582.4	561.9	20.51	28.399		
4,700.0	4,591.5	4,663.1	4,635.5	18.7	11.6	-159.26	359.7	273.3	598.0	577.0	21.00	28.473		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,800.0	4,688.5	4,761.9	4,733.5	19.2	11.8	-159.16	369.0	281.0	613.7	592.2	21.50	28.543		
4,900.0	4,785.4	4,860.6	4,831.5	19.6	12.1	-159.06	378.3	288.6	629.3	607.3	21.99	28.610		
5,000.0	4,882.4	4,959.4	4,929.6	20.1	12.4	-158.96	387.6	296.3	644.9	622.4	22.49	28.673		
5,100.0	4,979.4	5,058.2	5,027.6	20.6	12.7	-158.87	396.9	304.0	660.5	637.5	22.99	28.734		
5,200.0	5,076.4	5,157.0	5,125.6	21.0	12.9	-158.78	406.2	311.6	676.1	652.6	23.48	28.793		
5,300.0	5,173.4	5,255.7	5,223.6	21.5	13.2	-158.70	415.5	319.3	691.8	667.8	23.98	28.849		
5,400.0	5,270.4	5,354.5	5,321.7	22.0	13.5	-158.62	424.9	327.0	707.4	682.9	24.48	28.902		
5,500.0	5,367.4	5,453.3	5,419.7	22.5	13.7	-158.55	434.2	334.6	723.0	698.0	24.97	28.954		
5,600.0	5,464.4	5,552.0	5,517.7	22.9	14.0	-158.48	443.5	342.3	738.6	713.2	25.47	29.003		
5,700.0	5,561.4	5,650.8	5,615.7	23.4	14.3	-158.41	452.8	350.0	754.3	728.3	25.96	29.050		
5,800.0	5,658.3	5,749.6	5,713.8	23.9	14.6	-158.34	462.1	357.6	769.9	743.4	26.46	29.096		
5,900.0	5,755.3	5,848.3	5,811.8	24.3	14.8	-158.28	471.4	365.3	785.5	758.6	26.96	29.140		
6,000.0	5,852.3	5,947.1	5,909.8	24.8	15.1	-158.21	480.7	373.0	801.2	773.7	27.45	29.182		
6,100.0	5,949.3	6,045.9	6,007.9	25.3	15.4	-158.16	490.0	380.6	816.8	788.8	27.95	29.222		
6,200.0	6,046.3	6,144.6	6,105.9	25.7	15.7	-158.10	499.3	388.3	832.4	804.0	28.45	29.262		
6,300.0	6,143.3	6,243.4	6,203.9	26.2	15.9	-158.04	508.6	396.0	848.1	819.1	28.94	29.299		
6,400.0	6,240.3	6,342.2	6,301.9	26.7	16.2	-157.99	517.9	403.6	863.7	834.3	29.44	29.336		
6,500.0	6,337.3	6,440.9	6,400.0	27.1	16.5	-157.94	527.2	411.3	879.3	849.4	29.94	29.371		
6,600.0	6,434.2	6,539.7	6,498.0	27.6	16.7	-157.89	536.6	419.0	895.0	864.5	30.44	29.405		
6,700.0	6,531.2	6,638.5	6,596.0	28.1	17.0	-157.84	545.9	426.6	910.6	879.7	30.93	29.438		
6,800.0	6,628.2	6,737.2	6,694.1	28.5	17.3	-157.80	555.2	434.3	926.2	894.8	31.43	29.470		
6,900.0	6,725.2	6,836.0	6,792.1	29.0	17.6	-157.75	564.5	442.0	941.9	910.0	31.93	29.501		
7,000.0	6,822.2	6,936.9	6,892.2	29.5	17.8	-157.73	573.7	449.8	957.5	925.1	32.42	29.537		
7,100.0	6,919.2	7,047.6	7,002.4	30.0	17.9	-158.51	570.1	458.4	972.3	939.9	32.44	29.970		
7,200.0	7,016.2	7,150.2	7,102.1	30.4	17.9	-160.31	547.9	466.2	986.5	954.7	31.86	30.963		
7,300.0	7,113.2	7,239.9	7,184.8	30.9	17.7	-162.64	514.1	472.7	1,001.7	970.8	30.95	32.363		
7,328.7	7,141.0	7,263.0	7,205.3	31.0	17.6	-163.35	503.3	474.3	1,006.5	975.9	30.67	32.818		
7,350.0	7,161.7	7,279.6	7,219.6	31.1	17.6	-172.65	495.1	475.4	1,010.2	979.8	30.46	33.169		
7,400.0	7,210.3	7,317.8	7,251.7	31.3	17.5	164.58	474.5	477.9	1,019.4	989.5	29.96	34.027		
7,450.0	7,258.7	7,355.0	7,281.6	31.5	17.4	144.52	452.5	480.2	1,029.1	999.6	29.49	34.903		
7,500.0	7,306.5	7,391.4	7,309.4	31.7	17.3	129.31	429.2	482.4	1,039.2	1,010.2	29.04	35.783		
7,550.0	7,353.4	7,427.0	7,335.1	31.8	17.1	118.23	404.6	484.4	1,049.5	1,020.9	28.63	36.653		
7,600.0	7,399.0	7,462.0	7,358.9	31.9	17.0	110.02	379.0	486.3	1,059.9	1,031.7	28.26	37.502		
7,650.0	7,442.9	7,500.0	7,382.8	32.0	16.9	103.64	349.6	488.2	1,070.3	1,042.4	27.89	38.375		
7,700.0	7,484.9	7,530.5	7,400.6	32.1	16.8	98.70	324.9	489.6	1,080.4	1,052.8	27.64	39.084		
7,750.0	7,524.5	7,564.1	7,418.7	32.1	16.7	94.62	296.5	491.0	1,090.2	1,062.8	27.40	39.797		
7,800.0	7,561.6	7,600.0	7,436.1	32.1	16.6	91.20	265.2	492.3	1,099.6	1,072.5	27.16	40.482		
7,850.0	7,595.8	7,630.4	7,449.3	32.2	16.5	88.40	237.9	493.4	1,108.4	1,081.4	27.02	41.016		
7,900.0	7,626.8	7,663.2	7,461.9	32.2	16.5	86.00	207.6	494.4	1,116.6	1,089.7	26.90	41.509		
7,950.0	7,654.5	7,700.0	7,474.0	32.2	16.4	83.94	172.9	495.3	1,124.1	1,097.3	26.79	41.951		
8,000.0	7,678.5	7,728.0	7,481.7	32.3	16.4	82.30	145.9	495.9	1,130.7	1,103.9	26.78	42.224		
8,050.0	7,698.8	7,760.2	7,488.9	32.3	16.4	80.92	114.5	496.5	1,136.4	1,109.6	26.78	42.443		
8,100.0	7,715.2	7,800.0	7,495.3	32.3	16.4	79.75	75.3	497.0	1,141.3	1,114.4	26.81	42.571		
8,150.0	7,727.5	7,824.2	7,497.9	32.4	16.4	78.96	51.2	497.2	1,145.0	1,118.1	26.89	42.574		
8,200.0	7,735.6	7,856.1	7,499.7	32.4	16.5	78.36	19.4	497.3	1,147.8	1,120.8	27.00	42.507		
8,250.0	7,739.6	7,896.1	7,500.0	32.4	16.5	77.99	-20.6	497.3	1,149.4	1,122.2	27.19	42.277		
8,271.7	7,740.0	7,917.8	7,500.0	32.5	16.6	77.95	-42.3	497.3	1,149.6	1,122.3	27.33	42.067		
8,300.0	7,740.0	7,946.1	7,500.0	32.5	16.7	77.95	-70.6	497.3	1,149.6	1,122.0	27.53	41.750		
8,400.0	7,740.0	8,046.1	7,500.0	32.7	17.1	77.95	-170.6	497.3	1,149.6	1,121.1	28.48	40.361		
8,500.0	7,740.0	8,146.1	7,500.0	33.0	17.6	77.95	-270.6	497.3	1,149.6	1,119.8	29.80	38.581		
8,600.0	7,740.0	8,246.1	7,500.0	33.4	18.4	77.95	-370.6	497.3	1,149.6	1,118.2	31.43	36.573		
8,700.0	7,740.0	8,346.1	7,500.0	33.8	19.2	77.95	-470.6	497.3	1,149.6	1,116.2	33.34	34.478		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,740.0	8,446.1	7,500.0	34.4	20.2	77.95	-570.6	497.3	1,149.6	1,114.1	35.48	32.398		
8,900.0	7,740.0	8,546.1	7,500.0	35.0	21.2	77.95	-670.6	497.3	1,149.6	1,111.8	37.81	30.401		
9,000.0	7,740.0	8,646.1	7,500.0	35.7	22.4	77.95	-770.6	497.3	1,149.6	1,109.3	40.30	28.524		
9,100.0	7,740.0	8,746.1	7,500.0	36.4	23.6	77.95	-870.6	497.3	1,149.6	1,106.7	42.92	26.783		
9,200.0	7,740.0	8,846.1	7,500.0	37.3	24.9	77.95	-970.6	497.3	1,149.6	1,103.9	45.65	25.183		
9,300.0	7,740.0	8,946.1	7,500.0	38.2	26.3	77.95	-1,070.6	497.3	1,149.6	1,101.1	48.47	23.720		
9,400.0	7,740.0	9,046.1	7,500.0	39.1	27.7	77.95	-1,170.6	497.3	1,149.6	1,098.2	51.36	22.384		
9,500.0	7,740.0	9,146.1	7,500.0	40.1	29.1	77.95	-1,270.6	497.3	1,149.6	1,095.3	54.31	21.166		
9,600.0	7,740.0	9,246.1	7,500.0	41.2	30.6	77.95	-1,370.6	497.3	1,149.6	1,092.3	57.32	20.056		
9,700.0	7,740.0	9,346.1	7,500.0	42.3	32.1	77.95	-1,470.6	497.3	1,149.6	1,089.2	60.37	19.041		
9,800.0	7,740.0	9,446.1	7,500.0	43.5	33.6	77.95	-1,570.6	497.3	1,149.6	1,086.1	63.47	18.114		
9,900.0	7,740.0	9,546.1	7,500.0	44.7	35.1	77.95	-1,670.6	497.3	1,149.6	1,083.0	66.59	17.264		
10,000.0	7,740.0	9,646.1	7,500.0	45.9	36.7	77.95	-1,770.6	497.3	1,149.6	1,079.8	69.74	16.483		
10,100.0	7,740.0	9,746.1	7,500.0	47.1	38.3	77.95	-1,870.6	497.3	1,149.6	1,076.7	72.92	15.764		
10,200.0	7,740.0	9,846.1	7,500.0	48.4	39.8	77.95	-1,970.6	497.3	1,149.6	1,073.5	76.12	15.101		
10,300.0	7,740.0	9,946.1	7,500.0	49.8	41.4	77.95	-2,070.6	497.3	1,149.6	1,070.2	79.35	14.488		
10,400.0	7,740.0	10,046.1	7,500.0	51.1	43.1	77.95	-2,170.6	497.3	1,149.6	1,067.0	82.58	13.920		
10,500.0	7,740.0	10,146.1	7,500.0	52.5	44.7	77.95	-2,270.6	497.3	1,149.6	1,063.7	85.84	13.393		
10,600.0	7,740.0	10,246.1	7,500.0	53.9	46.3	77.95	-2,370.6	497.3	1,149.6	1,060.5	89.10	12.902		
10,700.0	7,740.0	10,346.1	7,500.0	55.3	48.0	77.95	-2,470.6	497.3	1,149.6	1,057.2	92.38	12.444		
10,800.0	7,740.0	10,446.1	7,500.0	56.7	49.6	77.95	-2,570.6	497.3	1,149.6	1,053.9	95.67	12.016		
10,900.0	7,740.0	10,546.1	7,500.0	58.2	51.3	77.95	-2,670.6	497.3	1,149.6	1,050.6	98.97	11.616		
11,000.0	7,740.0	10,646.1	7,500.0	59.7	52.9	77.95	-2,770.6	497.3	1,149.6	1,047.3	102.27	11.240		
11,100.0	7,740.0	10,746.1	7,500.0	61.2	54.6	77.95	-2,870.6	497.3	1,149.6	1,044.0	105.59	10.887		
11,200.0	7,740.0	10,846.1	7,500.0	62.7	56.3	77.95	-2,970.6	497.3	1,149.6	1,040.7	108.91	10.555		
11,300.0	7,740.0	10,946.1	7,500.0	64.2	58.0	77.95	-3,070.6	497.3	1,149.6	1,037.3	112.24	10.242		
11,400.0	7,740.0	11,046.1	7,500.0	65.7	59.7	77.95	-3,170.6	497.3	1,149.6	1,034.0	115.58	9.947		
11,500.0	7,740.0	11,146.1	7,500.0	67.2	61.3	77.95	-3,270.6	497.3	1,149.6	1,030.7	118.92	9.667		
11,600.0	7,740.0	11,247.4	7,500.0	68.8	63.1	77.95	-3,371.9	497.3	1,149.6	1,027.3	122.32	9.398		
11,700.0	7,740.0	11,411.8	7,500.0	70.3	65.9	77.90	-3,536.2	502.2	1,146.7	1,018.1	128.57	8.918		
11,800.0	7,740.0	11,524.2	7,500.0	71.9	67.8	77.82	-3,648.3	509.9	1,140.0	1,007.5	132.42	8.609		
11,900.0	7,740.0	11,624.0	7,500.0	73.5	69.5	77.74	-3,747.9	516.8	1,133.1	997.4	135.74	8.348		
12,000.0	7,740.0	11,723.7	7,500.0	75.1	71.2	77.67	-3,847.4	523.8	1,126.3	987.3	139.06	8.100		
12,100.0	7,740.0	11,823.5	7,500.0	76.6	72.9	77.59	-3,946.9	530.8	1,119.5	977.1	142.38	7.863		
12,200.0	7,740.0	11,923.2	7,500.0	78.2	74.6	77.51	-4,046.4	537.7	1,112.7	967.0	145.70	7.637		
12,300.0	7,740.0	12,023.0	7,500.0	79.8	76.4	77.44	-4,145.9	544.7	1,105.9	956.9	149.02	7.421		
12,400.0	7,740.0	12,122.7	7,500.0	81.5	78.1	77.36	-4,245.4	551.6	1,099.1	946.7	152.34	7.215		
12,500.0	7,740.0	12,214.8	7,500.0	83.1	79.7	77.28	-4,337.3	558.0	1,092.4	937.0	155.33	7.033		
12,600.0	7,740.0	12,300.0	7,500.0	84.7	81.1	77.24	-4,422.4	562.1	1,087.6	929.6	158.02	6.883		
12,700.0	7,740.0	12,360.6	7,500.0	86.3	82.2	77.22	-4,483.0	563.4	1,085.1	925.6	159.51	6.803		
12,800.0	7,740.0	12,450.8	7,500.0	88.0	83.7	77.22	-4,573.1	563.7	1,084.7	922.3	162.38	6.680		
12,900.0	7,740.0	12,550.8	7,500.0	89.6	85.4	77.21	-4,673.1	564.0	1,084.5	918.7	165.76	6.543		
13,000.0	7,740.0	12,650.8	7,500.0	91.2	87.2	77.21	-4,773.1	564.2	1,084.3	915.1	169.13	6.411		
13,100.0	7,740.0	12,750.8	7,500.0	92.9	88.9	77.21	-4,873.1	564.5	1,084.0	911.5	172.51	6.284		
13,200.0	7,740.0	12,850.8	7,500.0	94.5	90.6	77.21	-4,973.1	564.7	1,083.8	907.9	175.89	6.162		
13,300.0	7,740.0	12,950.8	7,500.0	96.2	92.3	77.20	-5,073.1	564.9	1,083.6	904.3	179.27	6.044		
13,400.0	7,740.0	13,050.8	7,500.0	97.8	94.1	77.20	-5,173.1	565.2	1,083.3	900.7	182.65	5.931		
13,500.0	7,740.0	13,150.8	7,500.0	99.5	95.8	77.20	-5,273.1	565.4	1,083.1	897.1	186.04	5.822		
13,600.0	7,740.0	13,250.8	7,500.0	101.2	97.5	77.20	-5,373.1	565.6	1,082.9	893.5	189.42	5.717		
13,700.0	7,740.0	13,350.8	7,500.0	102.8	99.2	77.19	-5,473.1	565.9	1,082.6	889.8	192.81	5.615		
13,800.0	7,740.0	13,450.8	7,500.0	104.5	101.0	77.19	-5,573.1	566.1	1,082.4	886.2	196.20	5.517		
13,900.0	7,740.0	13,550.8	7,500.0	106.2	102.7	77.19	-5,673.1	566.4	1,082.2	882.6	199.58	5.422		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,000.0	7,740.0	13,650.8	7,500.0	107.8	104.4	77.18	-5,773.1	566.6	1,082.0	879.0	202.97	5.330		
14,100.0	7,740.0	13,750.8	7,500.0	109.5	106.2	77.18	-5,873.1	566.8	1,081.7	875.4	206.36	5.242		
14,200.0	7,740.0	13,850.8	7,500.0	111.2	107.9	77.18	-5,973.1	567.1	1,081.5	871.7	209.76	5.156		
14,300.0	7,740.0	13,950.8	7,500.0	112.9	109.6	77.18	-6,073.1	567.3	1,081.3	868.1	213.15	5.073		
14,400.0	7,740.0	14,050.8	7,500.0	114.6	111.4	77.17	-6,173.1	567.5	1,081.0	864.5	216.54	4.992		
14,500.0	7,740.0	14,150.8	7,500.0	116.3	113.1	77.17	-6,273.1	567.8	1,080.8	860.9	219.93	4.914		
14,600.0	7,740.0	14,250.8	7,500.0	117.9	114.8	77.17	-6,373.1	568.0	1,080.6	857.2	223.33	4.838		
14,700.0	7,740.0	14,350.8	7,500.0	119.6	116.6	77.16	-6,473.1	568.2	1,080.3	853.6	226.72	4.765		
14,800.0	7,740.0	14,450.8	7,500.0	121.3	118.3	77.16	-6,573.1	568.5	1,080.1	850.0	230.12	4.694		
14,900.0	7,740.0	14,550.8	7,500.0	123.0	120.0	77.16	-6,673.1	568.7	1,079.9	846.4	233.51	4.624		
15,000.0	7,740.0	14,650.8	7,500.0	124.7	121.8	77.16	-6,773.1	569.0	1,079.6	842.7	236.91	4.557		
15,100.0	7,740.0	14,750.8	7,500.0	126.4	123.5	77.15	-6,873.1	569.2	1,079.4	839.1	240.31	4.492		
15,200.0	7,740.0	14,850.8	7,500.0	128.1	125.2	77.15	-6,973.1	569.4	1,079.2	835.5	243.71	4.428		
15,300.0	7,740.0	14,950.8	7,500.0	129.8	127.0	77.15	-7,073.1	569.7	1,078.9	831.8	247.10	4.366		
15,400.0	7,740.0	15,050.8	7,500.0	131.5	128.7	77.14	-7,173.1	569.9	1,078.7	828.2	250.50	4.306		
15,500.0	7,740.0	15,150.8	7,500.0	133.2	130.5	77.14	-7,273.1	570.1	1,078.5	824.6	253.90	4.248		
15,600.0	7,740.0	15,250.8	7,500.0	134.9	132.2	77.14	-7,373.1	570.4	1,078.3	821.0	257.30	4.191		
15,700.0	7,740.0	15,350.8	7,500.0	136.6	133.9	77.14	-7,473.1	570.6	1,078.0	817.3	260.70	4.135		
15,800.0	7,740.0	15,450.8	7,500.0	138.3	135.7	77.13	-7,573.1	570.9	1,077.8	813.7	264.10	4.081		
15,900.0	7,740.0	15,550.8	7,500.0	140.0	137.4	77.13	-7,673.1	571.1	1,077.6	810.1	267.50	4.028		
16,000.0	7,740.0	15,650.8	7,500.0	141.7	139.2	77.13	-7,773.1	571.3	1,077.3	806.4	270.90	3.977		
16,100.0	7,740.0	15,750.8	7,500.0	143.5	140.9	77.13	-7,873.1	571.6	1,077.1	802.8	274.31	3.927		
16,157.5	7,740.0	15,805.8	7,500.0	144.4	141.9	77.12	-7,928.1	571.7	1,077.0	800.8	276.13	3.900 SF		
16,171.7	7,740.0	15,805.8	7,500.0	144.7	141.9	77.12	-7,928.1	571.7	1,077.1	801.2	275.84	3.905		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-88.60	0.4	-15.1	15.1					
100.0	100.0	100.0	100.0	0.2	0.2	-88.60	0.4	-15.1	15.1	14.8	0.30	49.781		
150.0	150.0	150.0	150.0	0.2	0.2	-88.60	0.4	-15.1	15.1	14.6	0.48	31.613		
187.5	187.5	187.5	187.5	0.3	0.3	-90.00	0.4	-15.1	15.1	14.5	0.61	24.785 CC		
200.0	200.0	200.0	200.0	0.3	0.3	-91.08	0.4	-15.1	15.1	14.5	0.65	23.130 ES		
283.3	283.2	283.2	283.2	0.5	0.5	-105.79	0.4	-15.1	15.7	14.8	0.96	16.391		
300.0	299.9	299.9	299.9	0.5	0.5	-112.13	0.4	-15.1	16.1	15.1	1.02	15.778		
400.0	399.6	399.6	399.6	0.7	0.7	-143.45	0.4	-15.1	20.5	19.1	1.38	14.904		
500.0	499.3	499.3	499.3	0.9	0.8	-163.48	0.4	-15.1	27.4	25.7	1.72	15.901		
600.0	598.9	598.9	598.9	1.2	1.0	-175.87	0.4	-15.1	35.8	33.7	2.07	17.309		
700.0	698.5	698.5	698.5	1.4	1.2	176.49	0.4	-15.1	45.3	42.9	2.41	18.822		
800.0	797.9	797.9	797.9	1.6	1.4	171.80	0.4	-15.1	56.1	53.4	2.75	20.391		
900.0	897.1	897.1	897.1	1.9	1.5	168.99	0.4	-15.1	68.2	65.1	3.10	22.017		
1,000.0	996.2	996.2	996.2	2.2	1.7	167.37	0.4	-15.1	81.6	78.2	3.44	23.705		
1,100.0	1,095.0	1,096.6	1,096.6	2.5	1.9	166.53	0.9	-14.5	95.6	91.9	3.79	25.221		
1,200.0	1,193.6	1,197.4	1,197.4	2.8	2.1	166.22	2.5	-12.5	109.4	105.3	4.14	26.412		
1,300.0	1,291.9	1,298.4	1,298.3	3.2	2.3	166.34	5.2	-9.0	123.0	118.5	4.49	27.368		
1,400.0	1,389.9	1,399.7	1,399.4	3.5	2.4	166.81	9.1	-4.2	136.4	131.5	4.84	28.151		
1,500.0	1,487.6	1,501.2	1,500.5	3.9	2.6	167.55	14.0	2.0	149.7	144.5	5.20	28.805		
1,600.0	1,584.8	1,602.9	1,601.7	4.4	2.8	168.53	20.1	9.6	163.0	157.4	5.55	29.362		
1,624.3	1,608.4	1,627.6	1,626.3	4.5	2.9	168.80	21.8	11.7	166.2	160.6	5.64	29.482		
1,700.0	1,681.8	1,704.8	1,703.0	4.8	3.1	170.49	27.4	18.7	175.8	169.9	5.91	29.764		
1,800.0	1,778.8	1,807.1	1,804.4	5.3	3.3	172.57	35.8	29.2	187.3	181.0	6.27	29.864		
1,900.0	1,875.8	1,909.7	1,905.9	5.7	3.6	174.55	45.3	41.2	197.2	190.5	6.64	29.690		
2,000.0	1,972.8	2,009.3	2,004.2	6.2	3.9	176.35	55.2	53.6	206.3	199.3	7.02	29.393		
2,100.0	2,069.8	2,108.7	2,102.3	6.6	4.1	178.01	65.1	66.0	215.7	208.2	7.41	29.117		
2,200.0	2,166.8	2,208.1	2,200.5	7.1	4.4	179.52	75.0	78.3	225.2	217.4	7.80	28.855		
2,300.0	2,263.8	2,307.4	2,298.6	7.5	4.7	-179.09	84.8	90.7	234.8	226.6	8.21	28.604		
2,400.0	2,360.8	2,406.8	2,396.7	8.0	5.0	-177.81	94.7	103.0	244.6	236.0	8.62	28.361		
2,500.0	2,457.7	2,506.2	2,494.8	8.4	5.3	-176.63	104.6	115.4	254.5	245.4	9.05	28.125		
2,600.0	2,554.7	2,605.6	2,592.9	8.9	5.6	-175.53	114.4	127.8	264.4	255.0	9.48	27.895		
2,700.0	2,651.7	2,705.0	2,691.0	9.4	5.9	-174.52	124.3	140.1	274.5	264.6	9.92	27.672		
2,800.0	2,748.7	2,804.3	2,789.1	9.8	6.2	-173.58	134.2	152.5	284.7	274.3	10.37	27.456		
2,900.0	2,845.7	2,903.7	2,887.2	10.3	6.6	-172.70	144.0	164.8	294.9	284.1	10.82	27.247		
3,000.0	2,942.7	3,003.1	2,985.3	10.8	6.9	-171.88	153.9	177.2	305.2	293.9	11.28	27.044		
3,100.0	3,039.7	3,102.5	3,083.5	11.2	7.2	-171.12	163.8	189.6	315.5	303.8	11.75	26.848		
3,200.0	3,136.7	3,201.9	3,181.6	11.7	7.5	-170.40	173.6	201.9	325.9	313.7	12.23	26.659		
3,300.0	3,233.6	3,301.2	3,279.7	12.2	7.8	-169.73	183.5	214.3	336.4	323.7	12.70	26.476		
3,400.0	3,330.6	3,400.6	3,377.8	12.6	8.1	-169.10	193.4	226.6	346.9	333.7	13.19	26.301		
3,500.0	3,427.6	3,500.0	3,475.9	13.1	8.4	-168.51	203.2	239.0	357.4	343.7	13.68	26.132		
3,600.0	3,524.6	3,599.4	3,574.0	13.6	8.8	-167.95	213.1	251.4	367.9	353.8	14.17	25.970		
3,700.0	3,621.6	3,698.7	3,672.1	14.0	9.1	-167.42	223.0	263.7	378.5	363.9	14.66	25.815		
3,800.0	3,718.6	3,798.1	3,770.2	14.5	9.4	-166.92	232.8	276.1	389.2	374.0	15.16	25.665		
3,900.0	3,815.6	3,897.5	3,868.3	15.0	9.7	-166.45	242.7	288.4	399.8	384.2	15.67	25.522		
4,000.0	3,912.6	3,996.9	3,966.5	15.4	10.0	-166.00	252.6	300.8	410.5	394.3	16.17	25.384		
4,100.0	4,009.5	4,096.3	4,064.6	15.9	10.4	-165.57	262.4	313.2	421.2	404.5	16.68	25.252		
4,200.0	4,106.5	4,195.6	4,162.7	16.4	10.7	-165.17	272.3	325.5	431.9	414.7	17.19	25.125		
4,300.0	4,203.5	4,295.0	4,260.8	16.8	11.0	-164.78	282.2	337.9	442.7	425.0	17.70	25.003		
4,400.0	4,300.5	4,394.4	4,358.9	17.3	11.3	-164.41	292.0	350.2	453.4	435.2	18.22	24.886		
4,500.0	4,397.5	4,493.8	4,457.0	17.8	11.6	-164.06	301.9	362.6	464.2	445.5	18.74	24.774		
4,600.0	4,494.5	4,593.1	4,555.1	18.2	12.0	-163.73	311.8	375.0	475.0	455.7	19.26	24.666		
4,700.0	4,591.5	4,692.5	4,653.2	18.7	12.3	-163.41	321.6	387.3	485.8	466.0	19.78	24.562		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,800.0	4,688.5	4,791.9	4,751.4	19.2	12.6	-163.10	331.5	399.7	496.6	476.3	20.30	24.462	
4,900.0	4,785.4	4,891.3	4,849.5	19.6	12.9	-162.81	341.4	412.0	507.5	486.7	20.83	24.366	
5,000.0	4,882.4	4,990.7	4,947.6	20.1	13.3	-162.53	351.2	424.4	518.3	497.0	21.35	24.274	
5,100.0	4,979.4	5,090.0	5,045.7	20.6	13.6	-162.26	361.1	436.8	529.2	507.3	21.88	24.185	
5,200.0	5,076.4	5,189.4	5,143.8	21.0	13.9	-162.01	371.0	449.1	540.1	517.7	22.41	24.099	
5,300.0	5,173.4	5,288.8	5,241.9	21.5	14.2	-161.76	380.8	461.5	551.0	528.0	22.94	24.017	
5,400.0	5,270.4	5,388.2	5,340.0	22.0	14.6	-161.52	390.7	473.8	561.9	538.4	23.47	23.937	
5,500.0	5,367.4	5,487.5	5,438.1	22.5	14.9	-161.29	400.6	486.2	572.8	548.8	24.00	23.861	
5,600.0	5,464.4	5,586.9	5,536.2	22.9	15.2	-161.07	410.4	498.6	583.7	559.1	24.54	23.787	
5,700.0	5,561.4	5,686.3	5,634.4	23.4	15.5	-160.86	420.3	510.9	594.6	569.5	25.07	23.715	
5,800.0	5,658.3	5,785.7	5,732.5	23.9	15.9	-160.65	430.2	523.3	605.5	579.9	25.61	23.646	
5,900.0	5,755.3	5,885.1	5,830.6	24.3	16.2	-160.46	440.0	535.6	616.5	590.3	26.14	23.580	
6,000.0	5,852.3	5,984.4	5,928.7	24.8	16.5	-160.26	449.9	548.0	627.4	600.7	26.68	23.515	
6,100.0	5,949.3	6,083.8	6,026.8	25.3	16.8	-160.08	459.8	560.4	638.4	611.1	27.22	23.453	
6,200.0	6,046.3	6,183.2	6,124.9	25.7	17.2	-159.90	469.6	572.7	649.3	621.6	27.76	23.393	
6,300.0	6,143.3	6,282.6	6,223.0	26.2	17.5	-159.73	479.5	585.1	660.3	632.0	28.30	23.335	
6,400.0	6,240.3	6,382.0	6,321.1	26.7	17.8	-159.56	489.4	597.5	671.3	642.4	28.84	23.278	
6,500.0	6,337.3	6,481.3	6,419.2	27.1	18.1	-159.40	499.2	609.8	682.2	652.8	29.38	23.224	
6,600.0	6,434.2	6,580.7	6,517.4	27.6	18.5	-159.25	509.1	622.2	693.2	663.3	29.92	23.171	
6,700.0	6,531.2	6,680.1	6,615.5	28.1	18.8	-159.10	519.0	634.5	704.2	673.7	30.46	23.120	
6,800.0	6,628.2	6,779.5	6,713.6	28.5	19.1	-158.95	528.8	646.9	715.2	684.2	31.00	23.070	
6,900.0	6,725.2	6,878.8	6,811.7	29.0	19.4	-158.81	538.7	659.3	726.2	694.6	31.54	23.022	
7,000.0	6,822.2	6,978.2	6,909.8	29.5	19.8	-158.67	548.6	671.6	737.2	705.1	32.09	22.975	
7,100.0	6,919.2	7,077.6	7,007.9	30.0	20.1	-158.54	558.4	684.0	748.2	715.5	32.63	22.929	
7,200.0	7,016.2	7,177.0	7,106.0	30.4	20.4	-158.41	568.3	696.3	759.2	726.0	33.17	22.885	
7,300.0	7,113.2	7,294.2	7,222.0	30.9	20.7	-158.93	570.8	711.6	769.2	735.8	33.34	23.069	
7,328.7	7,141.0	7,327.9	7,255.2	31.0	20.7	-159.41	567.2	716.2	771.6	738.4	33.20	23.243	
7,350.0	7,161.7	7,352.4	7,279.2	31.1	20.8	-168.38	563.3	719.7	773.3	740.3	33.05	23.397	
7,400.0	7,210.3	7,409.2	7,333.8	31.3	20.8	169.61	550.4	727.9	777.2	744.6	32.60	23.842	
7,450.0	7,258.7	7,464.6	7,385.6	31.5	20.8	150.28	532.6	736.0	780.9	748.9	32.06	24.358	
7,500.0	7,306.5	7,518.7	7,434.3	31.7	20.7	135.77	510.5	744.0	784.4	753.0	31.47	24.925	
7,550.0	7,353.4	7,571.5	7,479.5	31.8	20.7	125.37	484.4	751.9	787.7	756.8	30.86	25.522	
7,600.0	7,399.0	7,623.1	7,521.3	31.9	20.6	117.81	455.0	759.5	790.7	760.4	30.27	26.125	
7,650.0	7,442.9	7,673.6	7,559.3	32.0	20.5	112.10	422.7	766.8	793.5	763.8	29.71	26.711	
7,700.0	7,484.9	7,723.0	7,593.7	32.1	20.5	107.66	387.9	773.8	795.9	766.7	29.20	27.256	
7,750.0	7,524.5	7,771.4	7,624.3	32.1	20.4	104.09	351.0	780.5	798.1	769.3	28.77	27.739	
7,800.0	7,561.6	7,818.9	7,651.1	32.1	20.3	101.17	312.4	786.7	799.9	771.5	28.43	28.141	
7,850.0	7,595.8	7,865.4	7,674.3	32.2	20.3	98.74	272.5	792.6	801.4	773.3	28.17	28.451	
7,900.0	7,626.8	7,911.2	7,693.9	32.2	20.3	96.70	231.5	798.1	802.5	774.5	28.00	28.661	
7,950.0	7,654.5	7,956.1	7,709.8	32.2	20.3	94.98	189.8	803.1	803.3	775.3	27.92	28.770	
8,000.0	7,678.5	8,000.0	7,722.2	32.3	20.3	93.55	148.0	807.7	803.6	775.6	27.92	28.781	
8,050.0	7,698.8	8,044.1	7,731.4	32.3	20.3	92.35	105.1	811.9	803.4	775.4	28.00	28.694	
8,100.0	7,715.2	8,087.1	7,737.2	32.3	20.4	91.37	62.6	815.7	802.9	774.7	28.15	28.521	
8,150.0	7,727.5	8,129.7	7,739.8	32.4	20.5	90.60	20.3	819.0	801.8	773.5	28.35	28.287	
8,200.0	7,735.6	8,176.7	7,740.0	32.4	20.6	90.03	-26.6	822.3	800.2	771.6	28.65	27.930	
8,250.0	7,739.6	8,226.4	7,740.0	32.4	20.7	89.90	-76.3	825.7	797.7	768.6	29.10	27.410	
8,271.7	7,740.0	8,248.0	7,740.0	32.5	20.8	90.00	-97.8	827.2	796.3	766.9	29.33	27.147	
8,300.0	7,740.0	8,276.3	7,740.0	32.5	20.9	90.00	-126.0	829.2	794.3	764.7	29.65	26.789	
8,400.0	7,740.0	8,376.1	7,740.0	32.7	21.4	90.00	-225.5	836.2	787.3	756.3	31.02	25.382	
8,500.0	7,740.0	8,472.0	7,740.0	33.0	22.0	90.00	-321.2	842.8	780.4	747.9	32.57	23.959	
8,600.0	7,740.0	8,559.9	7,740.0	33.4	22.6	90.00	-409.0	847.8	774.7	740.6	34.08	22.735	
8,700.0	7,740.0	8,647.9	7,740.0	33.8	23.3	90.00	-496.9	851.5	770.5	734.8	35.70	21.582	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,800.0	7,740.0	8,736.1	7,740.0	34.4	24.1	90.00	-585.0	853.8	767.9	730.4	37.44	20.509		
8,900.0	7,740.0	8,824.2	7,740.0	35.0	24.9	90.00	-673.2	854.8	766.8	727.5	39.27	19.525		
8,922.2	7,740.0	8,843.8	7,740.0	35.1	25.1	90.00	-692.8	854.8	766.7	727.0	39.70	19.315		
9,000.0	7,740.0	8,921.6	7,740.0	35.7	25.8	90.00	-770.6	854.8	766.7	725.1	41.66	18.404		
9,100.0	7,740.0	9,021.6	7,740.0	36.4	26.9	90.00	-870.6	854.8	766.7	722.4	44.31	17.305		
9,200.0	7,740.0	9,121.6	7,740.0	37.3	28.1	90.00	-970.6	854.8	766.7	719.7	47.07	16.291		
9,300.0	7,740.0	9,221.6	7,740.0	38.2	29.3	90.00	-1,070.6	854.8	766.7	716.8	49.92	15.360		
9,400.0	7,740.0	9,321.6	7,740.0	39.1	30.5	90.00	-1,170.6	854.8	766.7	713.9	52.85	14.509		
9,500.0	7,740.0	9,429.3	7,740.0	40.1	31.9	90.00	-1,278.2	855.4	766.2	709.9	56.31	13.606		
9,600.0	7,740.0	9,529.3	7,740.0	41.2	33.3	90.00	-1,378.2	856.4	765.2	705.8	59.38	12.887		
9,700.0	7,740.0	9,629.3	7,740.0	42.3	34.7	90.00	-1,478.2	857.4	764.2	701.7	62.49	12.229		
9,800.0	7,740.0	9,729.3	7,740.0	43.5	36.1	90.00	-1,578.2	858.4	763.2	697.6	65.64	11.627		
9,900.0	7,740.0	9,829.2	7,740.0	44.7	37.6	90.00	-1,678.2	859.4	762.2	693.4	68.83	11.075		
10,000.0	7,740.0	9,929.2	7,740.0	45.9	39.0	90.00	-1,778.2	860.4	761.2	689.2	72.04	10.567		
10,100.0	7,740.0	10,029.2	7,740.0	47.1	40.5	90.00	-1,878.2	861.4	760.2	685.0	75.28	10.098		
10,200.0	7,740.0	10,129.2	7,740.0	48.4	42.1	90.00	-1,978.2	862.4	759.2	680.7	78.55	9.666		
10,300.0	7,740.0	10,229.2	7,740.0	49.8	43.6	90.00	-2,078.2	863.4	758.2	676.4	81.83	9.266		
10,400.0	7,740.0	10,329.2	7,740.0	51.1	45.1	90.00	-2,178.1	864.4	757.2	672.1	85.13	8.895		
10,500.0	7,740.0	10,429.2	7,740.0	52.5	46.7	90.00	-2,278.1	865.4	756.3	667.8	88.45	8.550		
10,600.0	7,740.0	10,529.2	7,740.0	53.9	48.3	90.00	-2,378.1	866.4	755.3	663.5	91.79	8.229		
10,700.0	7,740.0	10,629.2	7,740.0	55.3	49.9	90.00	-2,478.1	867.4	754.3	659.1	95.13	7.929		
10,800.0	7,740.0	10,729.2	7,740.0	56.7	51.5	90.00	-2,578.1	868.4	753.3	654.8	98.49	7.648		
10,900.0	7,740.0	10,829.2	7,740.0	58.2	53.1	90.00	-2,678.1	869.3	752.3	650.4	101.85	7.386		
11,000.0	7,740.0	10,929.2	7,740.0	59.7	54.7	90.00	-2,778.1	870.3	751.3	646.0	105.23	7.139		
11,100.0	7,740.0	11,029.2	7,740.0	61.2	56.3	90.00	-2,878.1	871.3	750.3	641.7	108.61	6.908		
11,200.0	7,740.0	11,129.2	7,740.0	62.7	58.0	90.00	-2,978.1	872.3	749.3	637.3	112.00	6.690		
11,300.0	7,740.0	11,229.2	7,740.0	64.2	59.6	90.00	-3,078.1	873.3	748.3	632.9	115.40	6.484		
11,400.0	7,740.0	11,329.2	7,740.0	65.7	61.3	90.00	-3,178.0	874.3	747.3	628.5	118.81	6.290		
11,500.0	7,740.0	11,429.2	7,740.0	67.2	62.9	90.00	-3,278.0	875.3	746.3	624.1	122.22	6.106		
11,600.0	7,740.0	11,529.2	7,740.0	68.8	64.6	90.00	-3,378.0	876.3	745.3	619.7	125.64	5.932		
11,700.0	7,740.0	11,629.2	7,740.0	70.3	66.3	90.00	-3,478.0	877.3	744.3	615.2	129.06	5.767		
11,800.0	7,740.0	11,729.2	7,740.0	71.9	67.9	90.00	-3,578.0	878.3	743.3	610.8	132.48	5.611		
11,900.0	7,740.0	11,829.2	7,740.0	73.5	69.6	90.00	-3,678.0	879.3	742.3	606.4	135.91	5.462		
12,000.0	7,740.0	11,929.1	7,740.0	75.1	71.3	90.00	-3,778.0	880.3	741.3	602.0	139.35	5.320		
12,100.0	7,740.0	12,029.1	7,740.0	76.6	73.0	90.00	-3,878.0	881.3	740.3	597.5	142.78	5.185		
12,200.0	7,740.0	12,129.1	7,740.0	78.2	74.6	90.00	-3,978.0	882.3	739.3	593.1	146.23	5.056		
12,300.0	7,740.0	12,229.1	7,740.0	79.8	76.3	90.00	-4,078.0	883.3	738.3	588.7	149.67	4.933		
12,400.0	7,740.0	12,329.1	7,740.0	81.5	78.0	90.00	-4,177.9	884.3	737.3	584.2	153.12	4.816		
12,500.0	7,740.0	12,429.1	7,740.0	83.1	79.7	90.00	-4,277.9	885.3	736.3	579.8	156.57	4.703		
12,600.0	7,740.0	12,529.1	7,740.0	84.7	81.4	90.00	-4,377.9	886.3	735.3	575.3	160.02	4.595		
12,700.0	7,740.0	12,629.1	7,740.0	86.3	83.1	90.00	-4,477.9	887.3	734.4	570.9	163.47	4.492		
12,800.0	7,740.0	12,729.1	7,740.0	88.0	84.8	90.00	-4,577.9	888.3	733.4	566.4	166.93	4.393		
12,900.0	7,740.0	12,829.1	7,740.0	89.6	86.5	90.00	-4,677.9	889.3	732.4	562.0	170.39	4.298		
13,000.0	7,740.0	12,929.1	7,740.0	91.2	88.2	90.00	-4,777.9	890.3	731.4	557.5	173.85	4.207		
13,100.0	7,740.0	13,029.1	7,740.0	92.9	89.9	90.00	-4,877.9	891.2	730.4	553.1	177.31	4.119		
13,200.0	7,740.0	13,129.1	7,740.0	94.5	91.6	90.00	-4,977.9	892.2	729.4	548.6	180.78	4.035		
13,300.0	7,740.0	13,229.1	7,740.0	96.2	93.3	90.00	-5,077.9	893.2	728.4	544.1	184.24	3.953		
13,400.0	7,740.0	13,329.1	7,740.0	97.8	95.0	90.00	-5,177.8	894.2	727.4	539.7	187.71	3.875		
13,500.0	7,740.0	13,429.1	7,740.0	99.5	96.8	90.00	-5,277.8	895.2	726.4	535.2	191.18	3.800		
13,600.0	7,740.0	13,529.1	7,740.0	101.2	98.5	90.00	-5,377.8	896.2	725.4	530.7	194.65	3.727		
13,700.0	7,740.0	13,629.1	7,740.0	102.8	100.2	90.00	-5,477.8	897.2	724.4	526.3	198.12	3.656		
13,800.0	7,740.0	13,729.1	7,740.0	104.5	101.9	90.00	-5,577.8	898.2	723.4	521.8	201.59	3.588		

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 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
13,900.0	7,740.0	13,829.1	7,740.0	106.2	103.6	90.00	-5,677.8	899.2	722.4	517.3	205.07	3.523	
14,000.0	7,740.0	13,929.0	7,740.0	107.8	105.3	90.00	-5,777.8	900.2	721.4	512.9	208.54	3.459	
14,100.0	7,740.0	14,029.0	7,740.0	109.5	107.1	90.00	-5,877.8	901.2	720.4	508.4	212.02	3.398	
14,200.0	7,740.0	14,129.0	7,740.0	111.2	108.8	90.00	-5,977.8	902.2	719.4	503.9	215.50	3.338	
14,300.0	7,740.0	14,229.0	7,740.0	112.9	110.5	90.00	-6,077.8	903.2	718.4	499.5	218.97	3.281	
14,400.0	7,740.0	14,329.0	7,740.0	114.6	112.2	90.00	-6,177.7	904.2	717.4	495.0	222.45	3.225	
14,500.0	7,740.0	14,429.0	7,740.0	116.3	114.0	90.00	-6,277.7	905.2	716.4	490.5	225.93	3.171	
14,600.0	7,740.0	14,529.0	7,740.0	117.9	115.7	90.00	-6,377.7	906.2	715.4	486.0	229.42	3.119	
14,700.0	7,740.0	14,629.0	7,740.0	119.6	117.4	90.00	-6,477.7	907.2	714.4	481.5	232.90	3.068	
14,800.0	7,740.0	14,729.0	7,740.0	121.3	119.1	90.00	-6,577.7	908.2	713.4	477.1	236.38	3.018	
14,900.0	7,740.0	14,829.0	7,740.0	123.0	120.9	90.00	-6,677.7	909.2	712.5	472.6	239.86	2.970	
15,000.0	7,740.0	14,929.0	7,740.0	124.7	122.6	90.00	-6,777.7	910.2	711.5	468.1	243.35	2.924	
15,100.0	7,740.0	15,029.0	7,740.0	126.4	124.3	90.00	-6,877.7	911.2	710.5	463.6	246.83	2.878	
15,200.0	7,740.0	15,129.0	7,740.0	128.1	126.1	90.00	-6,977.7	912.1	709.5	459.1	250.32	2.834	
15,300.0	7,740.0	15,229.0	7,740.0	129.8	127.8	90.00	-7,077.7	913.1	708.5	454.7	253.80	2.791	
15,400.0	7,740.0	15,329.0	7,740.0	131.5	129.5	90.00	-7,177.6	914.1	707.5	450.2	257.29	2.750	
15,500.0	7,740.0	15,429.0	7,740.0	133.2	131.2	90.00	-7,277.6	915.1	706.5	445.7	260.78	2.709	
15,600.0	7,740.0	15,529.0	7,740.0	134.9	133.0	90.00	-7,377.6	916.1	705.5	441.2	264.27	2.670	
15,700.0	7,740.0	15,629.0	7,740.0	136.6	134.7	90.00	-7,477.6	917.1	704.5	436.7	267.75	2.631	
15,800.0	7,740.0	15,729.0	7,740.0	138.3	136.4	90.00	-7,577.6	918.1	703.5	432.3	271.24	2.594	
15,900.0	7,740.0	15,829.0	7,740.0	140.0	138.2	90.00	-7,677.6	919.1	702.5	427.8	274.73	2.557	
16,000.0	7,740.0	15,928.9	7,740.0	141.7	139.9	90.00	-7,777.6	920.1	701.5	423.3	278.22	2.521	
16,100.0	7,740.0	16,028.9	7,740.0	143.5	141.6	90.00	-7,877.6	921.1	700.5	418.8	281.71	2.487	
16,162.2	7,740.0	16,084.2	7,740.0	144.5	142.6	90.00	-7,932.8	921.7	699.9	416.6	283.34	2.470 SF	
16,171.7	7,740.0	16,084.2	7,740.0	144.7	142.6	90.00	-7,932.8	921.7	700.0	417.1	282.88	2.475	

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-87.21	0.4	-7.6	7.6					
100.0	100.0	100.0	100.0	0.2	0.2	-87.21	0.4	-7.6	7.6	7.3	0.30	24.913		
150.0	150.0	150.0	150.0	0.2	0.2	-87.21	0.4	-7.6	7.6	7.1	0.48	15.821		
187.5	187.5	187.5	187.5	0.3	0.3	-90.00	0.4	-7.6	7.6	6.9	0.61	12.393	CC	
200.0	200.0	200.0	200.0	0.3	0.3	-92.17	0.4	-7.6	7.6	6.9	0.65	11.571	ES	
283.3	283.2	283.2	283.2	0.5	0.5	-119.49	0.4	-7.6	8.7	7.7	0.96	9.089		
300.0	299.9	299.9	299.9	0.5	0.5	-128.01	0.4	-7.6	9.3	8.3	1.02	9.197		
400.0	399.6	399.8	399.8	0.7	0.7	-162.83	0.7	-6.8	14.5	13.1	1.36	10.645		
500.0	499.3	499.9	499.8	0.9	0.9	176.94	1.8	-4.4	20.0	18.3	1.71	11.732		
600.0	598.9	600.0	599.9	1.2	1.0	163.44	3.5	-0.4	25.2	23.1	2.06	12.249		
700.0	698.5	700.2	699.9	1.4	1.2	154.01	6.0	5.2	29.9	27.5	2.42	12.340		
800.0	797.9	800.5	799.9	1.6	1.4	147.31	9.1	12.5	34.0	31.2	2.81	12.133		
900.0	897.1	900.9	899.8	1.9	1.7	142.57	13.0	21.3	37.6	34.4	3.21	11.722		
1,000.0	996.2	1,001.3	999.5	2.2	1.9	139.27	17.6	31.7	40.6	37.0	3.63	11.176		
1,100.0	1,095.0	1,101.8	1,099.2	2.5	2.2	137.09	22.8	43.8	43.0	38.9	4.08	10.548		
1,200.0	1,193.6	1,202.3	1,198.6	2.8	2.5	135.83	28.8	57.4	44.9	40.3	4.54	9.880		
1,300.0	1,291.9	1,302.8	1,297.7	3.2	2.8	135.35	35.5	72.6	46.2	41.2	5.02	9.204		
1,400.0	1,389.9	1,403.4	1,396.6	3.5	3.2	135.60	42.8	89.5	47.0	41.5	5.50	8.544		
1,500.0	1,487.6	1,504.0	1,495.1	3.9	3.5	136.54	50.9	107.9	47.3	41.4	5.98	7.924		
1,600.0	1,584.8	1,603.9	1,592.9	4.4	3.9	138.90	59.2	126.8	48.1	41.7	6.38	7.536		
1,624.3	1,608.4	1,628.2	1,616.6	4.5	4.0	139.75	61.2	131.4	48.4	42.0	6.46	7.495		
1,700.0	1,681.8	1,703.8	1,690.7	4.8	4.3	143.30	67.5	145.8	49.8	43.1	6.69	7.435		
1,800.0	1,778.8	1,803.7	1,788.4	5.3	4.7	147.68	75.8	164.7	51.8	44.8	6.97	7.432		
1,900.0	1,875.8	1,903.6	1,886.1	5.7	5.1	151.72	84.0	183.7	54.1	46.9	7.22	7.492		
2,000.0	1,972.8	2,003.5	1,983.9	6.2	5.5	155.42	92.3	202.6	56.6	49.2	7.46	7.592		
2,100.0	2,069.8	2,103.4	2,081.6	6.6	5.9	158.78	100.6	221.6	59.4	51.7	7.69	7.715		
2,200.0	2,166.8	2,203.3	2,179.4	7.1	6.3	161.84	108.9	240.5	62.3	54.4	7.94	7.848		
2,300.0	2,263.8	2,303.2	2,277.1	7.5	6.7	164.62	117.2	259.4	65.4	57.2	8.20	7.980		
2,400.0	2,360.8	2,403.2	2,374.8	8.0	7.1	167.13	125.5	278.4	68.6	60.2	8.47	8.104		
2,500.0	2,457.7	2,503.1	2,472.6	8.4	7.5	169.42	133.8	297.3	72.0	63.2	8.76	8.217		
2,600.0	2,554.7	2,603.0	2,570.3	8.9	7.9	171.50	142.1	316.3	75.5	66.4	9.07	8.316		
2,700.0	2,651.7	2,702.9	2,668.1	9.4	8.3	173.40	150.4	335.2	79.0	69.6	9.41	8.401		
2,800.0	2,748.7	2,802.8	2,765.8	9.8	8.7	175.13	158.6	354.2	82.7	72.9	9.76	8.472		
2,900.0	2,845.7	2,902.7	2,863.5	10.3	9.1	176.71	166.9	373.1	86.4	76.2	10.13	8.530		
3,000.0	2,942.7	3,002.6	2,961.3	10.8	9.5	178.17	175.2	392.0	90.1	79.6	10.51	8.576		
3,100.0	3,039.7	3,102.5	3,059.0	11.2	9.9	179.50	183.5	411.0	93.9	83.0	10.91	8.612		
3,200.0	3,136.7	3,202.4	3,156.8	11.7	10.3	-179.27	191.8	429.9	97.8	86.5	11.32	8.639		
3,300.0	3,233.6	3,302.3	3,254.5	12.2	10.7	-178.13	200.1	448.9	101.7	90.0	11.75	8.659		
3,400.0	3,330.6	3,402.2	3,352.3	12.6	11.1	-177.08	208.4	467.8	105.7	93.5	12.18	8.673		
3,500.0	3,427.6	3,502.1	3,450.0	13.1	11.5	-176.10	216.7	486.7	109.6	97.0	12.63	8.681		
3,600.0	3,524.6	3,602.0	3,547.7	13.6	11.9	-175.19	224.9	505.7	113.6	100.6	13.08	8.686		
3,700.0	3,621.6	3,701.9	3,645.5	14.0	12.3	-174.35	233.2	524.6	117.7	104.1	13.55	8.687		
3,800.0	3,718.6	3,801.8	3,743.2	14.5	12.7	-173.56	241.5	543.6	121.7	107.7	14.02	8.685		
3,900.0	3,815.6	3,901.7	3,841.0	15.0	13.1	-172.82	249.8	562.5	125.8	111.3	14.49	8.682		
4,000.0	3,912.6	4,001.6	3,938.7	15.4	13.5	-172.13	258.1	581.5	129.9	114.9	14.97	8.676		
4,100.0	4,009.5	4,101.5	4,036.4	15.9	13.9	-171.48	266.4	600.4	134.0	118.6	15.46	8.669		
4,200.0	4,106.5	4,201.4	4,134.2	16.4	14.3	-170.87	274.7	619.3	138.2	122.2	15.95	8.662		
4,300.0	4,203.5	4,301.3	4,231.9	16.8	14.7	-170.29	283.0	638.3	142.3	125.9	16.44	8.653		
4,400.0	4,300.5	4,401.2	4,329.7	17.3	15.1	-169.75	291.3	657.2	146.5	129.5	16.94	8.644		
4,500.0	4,397.5	4,501.1	4,427.4	17.8	15.5	-169.23	299.5	676.2	150.6	133.2	17.44	8.635		
4,600.0	4,494.5	4,601.0	4,525.1	18.2	15.9	-168.75	307.8	695.1	154.8	136.9	17.95	8.625		
4,700.0	4,591.5	4,700.9	4,622.9	18.7	16.3	-168.29	316.1	714.0	159.0	140.6	18.46	8.616		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
4,800.0	4,688.5	4,800.8	4,720.6	19.2	16.8	-167.85	324.4	733.0	163.2	144.3	18.97	8.606		
4,900.0	4,785.4	4,900.8	4,818.4	19.6	17.2	-167.44	332.7	751.9	167.4	148.0	19.48	8.596		
5,000.0	4,882.4	5,000.7	4,916.1	20.1	17.6	-167.05	341.0	770.9	171.7	151.7	19.99	8.586		
5,100.0	4,979.4	5,100.6	5,013.9	20.6	18.0	-166.67	349.3	789.8	175.9	155.4	20.51	8.577		
5,200.0	5,076.4	5,200.5	5,111.6	21.0	18.4	-166.32	357.6	808.8	180.1	159.1	21.02	8.567		
5,300.0	5,173.4	5,300.4	5,209.3	21.5	18.8	-165.97	365.8	827.7	184.4	162.8	21.54	8.558		
5,400.0	5,270.4	5,400.3	5,307.1	22.0	19.2	-165.65	374.1	846.6	188.6	166.5	22.06	8.549		
5,500.0	5,367.4	5,500.2	5,404.8	22.5	19.6	-165.34	382.4	865.6	192.9	170.3	22.58	8.540		
5,600.0	5,464.4	5,600.1	5,502.6	22.9	20.0	-165.04	390.7	884.5	197.1	174.0	23.11	8.531		
5,700.0	5,561.4	5,700.0	5,600.3	23.4	20.4	-164.76	399.0	903.5	201.4	177.8	23.63	8.523		
5,800.0	5,658.3	5,799.9	5,698.0	23.9	20.8	-164.48	407.3	922.4	205.7	181.5	24.15	8.515		
5,900.0	5,755.3	5,899.8	5,795.8	24.3	21.2	-164.22	415.6	941.4	209.9	185.3	24.68	8.507		
6,000.0	5,852.3	5,999.7	5,893.5	24.8	21.6	-163.97	423.9	960.3	214.2	189.0	25.20	8.499		
6,100.0	5,949.3	6,099.6	5,991.3	25.3	22.0	-163.73	432.2	979.2	218.5	192.8	25.73	8.492		
6,200.0	6,046.3	6,199.5	6,089.0	25.7	22.4	-163.49	440.4	998.2	222.8	196.5	26.26	8.484		
6,300.0	6,143.3	6,299.4	6,186.7	26.2	22.8	-163.27	448.7	1,017.1	227.1	200.3	26.79	8.477		
6,400.0	6,240.3	6,399.3	6,284.5	26.7	23.2	-163.06	457.0	1,036.1	231.4	204.0	27.32	8.470		
6,500.0	6,337.3	6,499.2	6,382.2	27.1	23.6	-162.85	465.3	1,055.0	235.7	207.8	27.84	8.463		
6,600.0	6,434.2	6,599.1	6,480.0	27.6	24.1	-162.65	473.6	1,073.9	240.0	211.6	28.37	8.457		
6,700.0	6,531.2	6,699.0	6,577.7	28.1	24.5	-162.46	481.9	1,092.9	244.3	215.4	28.90	8.451		
6,800.0	6,628.2	6,798.9	6,675.5	28.5	24.9	-162.27	490.2	1,111.8	248.6	219.1	29.44	8.445		
6,900.0	6,725.2	6,898.8	6,773.2	29.0	25.3	-162.09	498.5	1,130.8	252.9	222.9	29.97	8.439		
7,000.0	6,822.2	6,998.7	6,870.9	29.5	25.7	-161.91	506.7	1,149.7	257.2	226.7	30.50	8.433		
7,100.0	6,919.2	7,098.6	6,968.8	30.0	26.0	-162.95	509.5	1,168.7	261.5	231.1	30.36	8.612		
7,200.0	7,016.2	7,194.1	7,061.6	30.4	26.3	-167.31	496.3	1,186.7	266.8	238.2	28.63	9.322		
7,300.0	7,113.2	7,280.9	7,142.9	30.9	26.4	-173.85	470.8	1,202.4	276.7	250.2	26.52	10.434		
7,328.7	7,141.0	7,303.8	7,163.7	31.0	26.4	-175.91	462.0	1,206.5	281.0	255.0	26.07	10.778		
7,350.0	7,161.7	7,320.4	7,178.5	31.1	26.4	173.83	455.2	1,209.3	284.7	258.8	25.83	11.021		
7,400.0	7,210.3	7,358.6	7,211.8	31.3	26.5	148.99	437.6	1,215.8	294.1	268.5	25.53	11.517		
7,450.0	7,258.7	7,400.0	7,246.6	31.5	26.5	126.83	416.2	1,222.5	304.5	278.9	25.61	11.893		
7,500.0	7,306.5	7,432.6	7,272.8	31.7	26.5	110.38	397.5	1,227.6	315.6	289.9	25.65	12.301		
7,550.0	7,353.4	7,468.7	7,300.6	31.8	26.5	98.04	375.1	1,233.0	327.0	301.2	25.82	12.667		
7,600.0	7,399.0	7,500.0	7,323.5	31.9	26.5	89.02	354.2	1,237.4	338.5	312.8	25.74	13.153		
7,650.0	7,442.9	7,539.1	7,350.5	32.0	26.5	81.73	326.4	1,242.7	349.9	323.9	25.99	13.461		
7,700.0	7,484.9	7,573.7	7,372.8	32.1	26.5	76.13	300.3	1,247.0	360.8	334.9	25.96	13.901		
7,750.0	7,524.5	7,608.0	7,393.3	32.1	26.5	71.63	273.2	1,250.9	371.3	345.5	25.83	14.374		
7,800.0	7,561.6	7,641.9	7,412.0	32.1	26.5	67.96	245.1	1,254.6	381.1	355.4	25.63	14.867		
7,850.0	7,595.8	7,675.5	7,428.9	32.2	26.5	64.96	216.2	1,257.8	390.1	364.7	25.38	15.369		
7,900.0	7,626.8	7,708.9	7,444.0	32.2	26.5	62.50	186.6	1,260.8	398.2	373.1	25.08	15.875		
7,950.0	7,654.5	7,750.0	7,460.3	32.2	26.5	60.37	149.0	1,263.9	405.4	380.2	25.21	16.083		
8,000.0	7,678.5	7,775.2	7,468.9	32.3	26.5	58.88	125.3	1,265.6	411.4	386.9	24.47	16.814		
8,050.0	7,698.8	7,800.0	7,476.4	32.3	26.5	57.69	101.8	1,267.0	416.5	392.7	23.82	17.489		
8,100.0	7,715.2	7,841.0	7,486.5	32.3	26.5	56.67	62.1	1,269.0	420.3	396.3	23.95	17.549		
8,150.0	7,727.5	7,873.8	7,492.6	32.4	26.6	56.01	29.9	1,270.2	423.0	399.2	23.81	17.763		
8,200.0	7,735.6	7,900.0	7,496.2	32.4	26.6	55.63	4.0	1,270.9	424.5	401.0	23.51	18.058		
8,250.0	7,739.6	7,939.2	7,499.4	32.4	26.7	55.51	-35.1	1,271.5	424.8	401.1	23.67	17.941		
8,271.7	7,740.0	7,953.4	7,499.8	32.5	26.7	55.54	-49.3	1,271.6	424.5	400.8	23.70	17.909		
8,292.8	7,740.0	7,967.5	7,500.0	32.5	26.7	55.56	-63.4	1,271.6	424.3	400.6	23.75	17.869		
8,300.0	7,740.0	7,974.7	7,500.0	32.5	26.7	55.56	-70.6	1,271.6	424.3	400.5	23.80	17.829		
8,400.0	7,740.0	8,074.7	7,500.0	32.7	27.0	55.56	-170.6	1,271.6	424.3	399.6	24.71	17.173		
8,500.0	7,740.0	8,174.7	7,500.0	33.0	27.3	55.56	-270.6	1,271.6	424.3	398.4	25.90	16.384		
8,600.0	7,740.0	8,274.7	7,500.0	33.4	27.8	55.56	-370.6	1,271.6	424.3	397.0	27.35	15.516		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,700.0	7,740.0	8,374.7	7,500.0	33.8	28.3	55.56	-470.6	1,271.6	424.3	395.3	29.01	14.625		
8,800.0	7,740.0	8,474.7	7,500.0	34.4	29.0	55.56	-570.6	1,271.6	424.3	393.5	30.86	13.749		
8,900.0	7,740.0	8,574.7	7,500.0	35.0	29.7	55.56	-670.6	1,271.6	424.3	391.5	32.87	12.911		
9,000.0	7,740.0	8,674.7	7,500.0	35.7	30.5	55.56	-770.6	1,271.6	424.3	389.4	35.00	12.126		
9,100.0	7,740.0	8,774.7	7,500.0	36.4	31.4	55.56	-870.6	1,271.6	424.3	387.1	37.23	11.398		
9,200.0	7,740.0	8,874.7	7,500.0	37.3	32.4	55.56	-970.6	1,271.6	424.3	384.8	39.55	10.730		
9,300.0	7,740.0	8,974.7	7,500.0	38.2	33.4	55.56	-1,070.6	1,271.6	424.3	382.4	41.94	10.118		
9,400.0	7,740.0	9,074.7	7,500.0	39.1	34.5	55.56	-1,170.6	1,271.6	424.3	380.0	44.39	9.558		
9,500.0	7,740.0	9,174.7	7,500.0	40.1	35.7	55.56	-1,270.6	1,271.6	424.3	377.4	46.90	9.048		
9,600.0	7,740.0	9,274.7	7,500.0	41.2	36.9	55.56	-1,370.6	1,271.6	424.3	374.9	49.45	8.582		
9,700.0	7,740.0	9,374.7	7,500.0	42.3	38.1	55.56	-1,470.6	1,271.6	424.3	372.3	52.03	8.155		
9,800.0	7,740.0	9,474.7	7,500.0	43.5	39.4	55.56	-1,570.6	1,271.6	424.3	369.7	54.65	7.765		
9,900.0	7,740.0	9,574.7	7,500.0	44.7	40.7	55.56	-1,670.6	1,271.6	424.3	367.1	57.29	7.406		
10,000.0	7,740.0	9,674.7	7,500.0	45.9	42.1	55.56	-1,770.6	1,271.6	424.3	364.4	59.96	7.077		
10,100.0	7,740.0	9,774.7	7,500.0	47.1	43.4	55.56	-1,870.6	1,271.6	424.3	361.7	62.65	6.773		
10,200.0	7,740.0	9,874.7	7,500.0	48.4	44.9	55.56	-1,970.6	1,271.6	424.3	359.0	65.36	6.493		
10,300.0	7,740.0	9,974.7	7,500.0	49.8	46.3	55.56	-2,070.6	1,271.6	424.3	356.3	68.08	6.233		
10,400.0	7,740.0	10,074.7	7,500.0	51.1	47.7	55.56	-2,170.6	1,271.6	424.3	353.5	70.82	5.992		
10,500.0	7,740.0	10,174.7	7,500.0	52.5	49.2	55.56	-2,270.6	1,271.6	424.3	350.8	73.57	5.768		
10,600.0	7,740.0	10,274.7	7,500.0	53.9	50.7	55.56	-2,370.6	1,271.6	424.3	348.0	76.33	5.559		
10,700.0	7,740.0	10,374.7	7,500.0	55.3	52.2	55.56	-2,470.6	1,271.6	424.3	345.2	79.10	5.365		
10,800.0	7,740.0	10,474.7	7,500.0	56.7	53.7	55.56	-2,570.6	1,271.6	424.3	342.5	81.88	5.182		
10,900.0	7,740.0	10,574.7	7,500.0	58.2	55.3	55.56	-2,670.6	1,271.6	424.3	339.7	84.67	5.012		
11,000.0	7,740.0	10,674.7	7,500.0	59.7	56.8	55.56	-2,770.6	1,271.6	424.3	336.9	87.47	4.852		
11,100.0	7,740.0	10,774.7	7,500.0	61.2	58.4	55.56	-2,870.6	1,271.6	424.3	334.1	90.27	4.701		
11,200.0	7,740.0	10,874.7	7,500.0	62.7	59.9	55.56	-2,970.6	1,271.6	424.3	331.3	93.08	4.559		
11,300.0	7,740.0	10,974.7	7,500.0	64.2	61.5	55.56	-3,070.6	1,271.6	424.3	328.5	95.89	4.425		
11,400.0	7,740.0	11,074.7	7,500.0	65.7	63.1	55.56	-3,170.6	1,271.6	424.3	325.6	98.71	4.299		
11,500.0	7,740.0	11,174.7	7,500.0	67.2	64.7	55.56	-3,270.6	1,271.6	424.3	322.8	101.53	4.179		
11,600.0	7,740.0	11,274.7	7,500.0	68.8	66.3	55.56	-3,370.6	1,271.6	424.3	320.0	104.36	4.066		
11,700.0	7,740.0	11,374.7	7,500.0	70.3	67.9	55.56	-3,470.6	1,271.6	424.3	317.2	107.19	3.959		
11,800.0	7,740.0	11,474.7	7,500.0	71.9	69.5	55.56	-3,570.6	1,271.6	424.3	314.3	110.03	3.857		
11,900.0	7,740.0	11,574.7	7,500.0	73.5	71.2	55.56	-3,670.6	1,271.6	424.3	311.5	112.87	3.760		
12,000.0	7,740.0	11,674.7	7,500.0	75.1	72.8	55.56	-3,770.6	1,271.6	424.3	308.6	115.71	3.667		
12,100.0	7,740.0	11,774.7	7,500.0	76.6	74.4	55.56	-3,870.6	1,271.6	424.3	305.8	118.55	3.579		
12,200.0	7,740.0	11,874.7	7,500.0	78.2	76.1	55.56	-3,970.6	1,271.6	424.3	302.9	121.40	3.495		
12,300.0	7,740.0	11,974.7	7,500.0	79.8	77.7	55.56	-4,070.6	1,271.6	424.3	300.1	124.25	3.415		
12,400.0	7,740.0	12,074.7	7,500.0	81.5	79.4	55.56	-4,170.6	1,271.6	424.3	297.2	127.10	3.339		
12,500.0	7,740.0	12,174.7	7,500.0	83.1	81.0	55.56	-4,270.6	1,271.6	424.3	294.4	129.96	3.265		
12,600.0	7,740.0	12,274.7	7,500.0	84.7	82.7	55.56	-4,370.6	1,271.6	424.3	291.5	132.82	3.195		
12,700.0	7,740.0	12,374.7	7,500.0	86.3	84.4	55.56	-4,470.6	1,271.6	424.3	288.7	135.67	3.128		
12,800.0	7,740.0	12,474.7	7,500.0	88.0	86.0	55.56	-4,570.6	1,271.6	424.3	285.8	138.53	3.063		
12,900.0	7,740.0	12,574.7	7,500.0	89.6	87.7	55.56	-4,670.6	1,271.6	424.3	283.0	141.40	3.001		
13,000.0	7,740.0	12,674.7	7,500.0	91.2	89.4	55.56	-4,770.6	1,271.6	424.3	280.1	144.26	2.942		
13,100.0	7,740.0	12,774.7	7,500.0	92.9	91.1	55.56	-4,870.6	1,271.6	424.3	277.2	147.13	2.884		
13,200.0	7,740.0	12,874.7	7,500.0	94.5	92.7	55.56	-4,970.6	1,271.6	424.3	274.4	149.99	2.829		
13,300.0	7,740.0	12,974.7	7,500.0	96.2	94.4	55.56	-5,070.6	1,271.6	424.3	271.5	152.86	2.776		
13,400.0	7,740.0	13,074.7	7,500.0	97.8	96.1	55.56	-5,170.6	1,271.6	424.3	268.6	155.73	2.725		
13,500.0	7,740.0	13,174.7	7,500.0	99.5	97.8	55.56	-5,270.6	1,271.6	424.3	265.8	158.60	2.676		
13,600.0	7,740.0	13,274.7	7,500.0	101.2	99.5	55.56	-5,370.6	1,271.6	424.3	262.9	161.47	2.628		
13,700.0	7,740.0	13,374.7	7,500.0	102.8	101.2	55.56	-5,470.6	1,271.6	424.3	260.0	164.34	2.582		
13,800.0	7,740.0	13,474.7	7,500.0	104.5	102.9	55.56	-5,570.6	1,271.6	424.3	257.1	167.22	2.538		

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

Anticollision Report

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

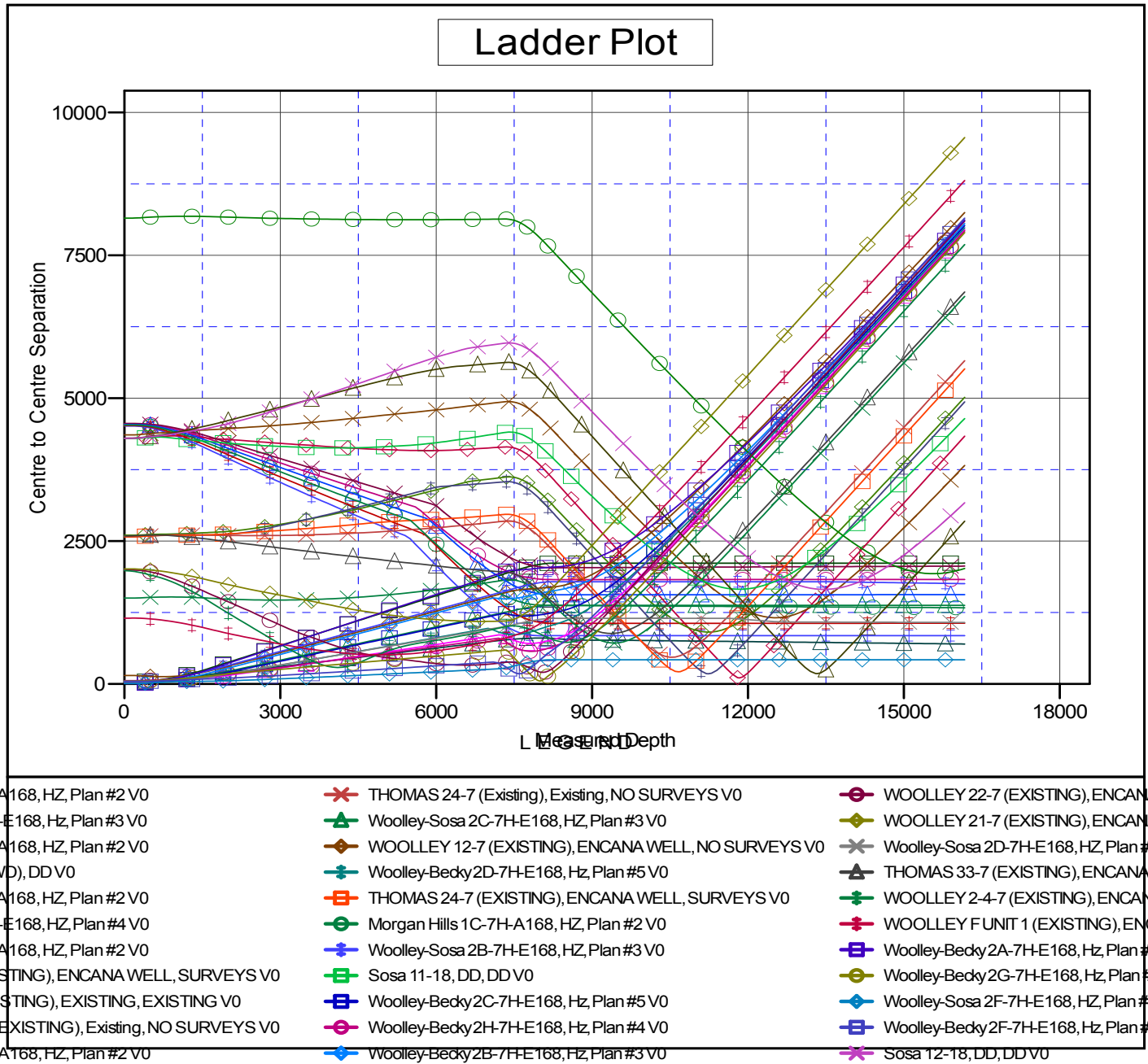
Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
13,900.0	7,740.0	13,574.7	7,500.0	106.2	104.6	55.56	-5,670.6	1,271.6	424.3	254.3	170.09	2.495		
14,000.0	7,740.0	13,674.7	7,500.0	107.8	106.3	55.56	-5,770.6	1,271.6	424.3	251.4	172.97	2.453		
14,100.0	7,740.0	13,774.7	7,500.0	109.5	108.0	55.56	-5,870.6	1,271.6	424.3	248.5	175.84	2.413		
14,200.0	7,740.0	13,874.7	7,500.0	111.2	109.7	55.56	-5,970.6	1,271.6	424.3	245.6	178.72	2.374		
14,300.0	7,740.0	13,974.7	7,500.0	112.9	111.4	55.56	-6,070.6	1,271.6	424.3	242.8	181.60	2.337		
14,400.0	7,740.0	14,074.7	7,500.0	114.6	113.1	55.56	-6,170.6	1,271.6	424.3	239.9	184.47	2.300		
14,500.0	7,740.0	14,174.7	7,500.0	116.3	114.8	55.56	-6,270.6	1,271.6	424.3	237.0	187.35	2.265		
14,600.0	7,740.0	14,274.7	7,500.0	117.9	116.5	55.56	-6,370.6	1,271.6	424.3	234.1	190.23	2.231		
14,700.0	7,740.0	14,374.7	7,500.0	119.6	118.2	55.56	-6,470.6	1,271.6	424.3	231.2	193.11	2.197		
14,800.0	7,740.0	14,474.7	7,500.0	121.3	119.9	55.56	-6,570.6	1,271.6	424.3	228.4	196.00	2.165		
14,900.0	7,740.0	14,574.7	7,500.0	123.0	121.6	55.56	-6,670.6	1,271.6	424.3	225.5	198.88	2.134		
15,000.0	7,740.0	14,674.7	7,500.0	124.7	123.3	55.56	-6,770.6	1,271.6	424.3	222.6	201.76	2.103		
15,100.0	7,740.0	14,774.7	7,500.0	126.4	125.1	55.56	-6,870.6	1,271.6	424.3	219.7	204.64	2.074		
15,200.0	7,740.0	14,874.7	7,500.0	128.1	126.8	55.56	-6,970.6	1,271.6	424.3	216.8	207.53	2.045		
15,300.0	7,740.0	14,974.7	7,500.0	129.8	128.5	55.56	-7,070.6	1,271.6	424.4	213.9	210.41	2.017		
15,400.0	7,740.0	15,074.7	7,500.0	131.5	130.2	55.56	-7,170.6	1,271.6	424.4	211.1	213.29	1.990		
15,500.0	7,740.0	15,174.7	7,500.0	133.2	131.9	55.56	-7,270.6	1,271.6	424.4	208.2	216.18	1.963		
15,600.0	7,740.0	15,274.7	7,500.0	134.9	133.7	55.56	-7,370.6	1,271.6	424.4	205.3	219.06	1.937		
15,700.0	7,740.0	15,374.7	7,500.0	136.6	135.4	55.56	-7,470.6	1,271.6	424.4	202.4	221.95	1.912		
15,800.0	7,740.0	15,474.7	7,500.0	138.3	137.1	55.56	-7,570.6	1,271.6	424.4	199.5	224.84	1.887		
15,900.0	7,740.0	15,574.7	7,500.0	140.0	138.8	55.56	-7,670.6	1,271.6	424.4	196.6	227.72	1.863		
16,000.0	7,740.0	15,674.7	7,500.0	141.7	140.5	55.56	-7,770.6	1,271.6	424.4	193.7	230.61	1.840		
16,100.0	7,740.0	15,774.7	7,500.0	143.5	142.3	55.56	-7,870.6	1,271.6	424.4	190.9	233.50	1.817		
16,106.3	7,740.0	15,781.0	7,500.0	143.6	142.4	55.56	-7,876.9	1,271.6	424.4	190.7	233.68	1.816		
16,171.7	7,740.0	15,841.7	7,500.0	144.7	143.4	55.56	-7,937.5	1,271.6	424.4	189.5	234.92	1.806 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2G-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2G-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 2G-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