

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-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 2C-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 2C-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,517.44 ft	Latitude:	40.066855
	+E/-W	0.0 ft	Easting:	3,124,942.85 ft	Longitude:	-105.053603
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,994.0 ft

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

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

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
899.9	5.00	26.34	899.3	19.5	9.7	1.00	1.00	0.00	26.34	
7,147.2	5.00	26.34	7,122.8	507.4	251.3	0.00	0.00	0.00	0.00	
8,092.0	90.00	180.00	7,740.0	-63.8	275.2	10.00	9.00	16.26	153.57	
15,953.0	90.00	180.00	7,740.0	-7,924.8	275.2	0.00	0.00	0.00	0.00	Woolley-Sosa 2C-7H-

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Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400' - Fox Hills - BASE
500.0	1.00	26.34	500.0	0.8	0.4	-0.8	1.00	1.00	
600.0	2.00	26.34	600.0	3.1	1.5	-3.1	1.00	1.00	
700.0	3.00	26.34	699.9	7.0	3.5	-7.0	1.00	1.00	
800.0	4.00	26.34	799.7	12.5	6.2	-12.5	1.00	1.00	
899.9	5.00	26.34	899.3	19.5	9.7	-19.5	1.00	1.00	EOB; Inc=5.0°
900.0	5.00	26.34	899.4	19.5	9.7	-19.5	0.15	0.15	
1,000.0	5.00	26.34	999.0	27.3	13.5	-27.3	0.00	0.00	
1,100.0	5.00	26.34	1,098.6	35.2	17.4	-35.2	0.00	0.00	
1,200.0	5.00	26.34	1,198.2	43.0	21.3	-43.0	0.00	0.00	
1,300.0	5.00	26.34	1,297.8	50.8	25.1	-50.8	0.00	0.00	
1,400.0	5.00	26.34	1,397.5	58.6	29.0	-58.6	0.00	0.00	
1,500.0	5.00	26.34	1,497.1	66.4	32.9	-66.4	0.00	0.00	
1,600.0	5.00	26.34	1,596.7	74.2	36.7	-74.2	0.00	0.00	
1,700.0	5.00	26.34	1,696.3	82.0	40.6	-82.0	0.00	0.00	
1,800.0	5.00	26.34	1,795.9	89.8	44.5	-89.8	0.00	0.00	
1,900.0	5.00	26.34	1,895.6	97.6	48.3	-97.6	0.00	0.00	
2,000.0	5.00	26.34	1,995.2	105.4	52.2	-105.4	0.00	0.00	
2,100.0	5.00	26.34	2,094.8	113.2	56.1	-113.2	0.00	0.00	
2,200.0	5.00	26.34	2,194.4	121.1	59.9	-121.1	0.00	0.00	
2,300.0	5.00	26.34	2,294.0	128.9	63.8	-128.9	0.00	0.00	
2,400.0	5.00	26.34	2,393.7	136.7	67.7	-136.7	0.00	0.00	
2,500.0	5.00	26.34	2,493.3	144.5	71.5	-144.5	0.00	0.00	
2,600.0	5.00	26.34	2,592.9	152.3	75.4	-152.3	0.00	0.00	
2,700.0	5.00	26.34	2,692.5	160.1	79.3	-160.1	0.00	0.00	
2,800.0	5.00	26.34	2,792.1	167.9	83.1	-167.9	0.00	0.00	
2,900.0	5.00	26.34	2,891.8	175.7	87.0	-175.7	0.00	0.00	
3,000.0	5.00	26.34	2,991.4	183.5	90.9	-183.5	0.00	0.00	
3,100.0	5.00	26.34	3,091.0	191.3	94.7	-191.3	0.00	0.00	
3,200.0	5.00	26.34	3,190.6	199.1	98.6	-199.1	0.00	0.00	
3,300.0	5.00	26.34	3,290.2	207.0	102.5	-207.0	0.00	0.00	
3,400.0	5.00	26.34	3,389.9	214.8	106.3	-214.8	0.00	0.00	
3,500.0	5.00	26.34	3,489.5	222.6	110.2	-222.6	0.00	0.00	
3,600.0	5.00	26.34	3,589.1	230.4	114.1	-230.4	0.00	0.00	
3,700.0	5.00	26.34	3,688.7	238.2	117.9	-238.2	0.00	0.00	
3,800.0	5.00	26.34	3,788.3	246.0	121.8	-246.0	0.00	0.00	
3,900.0	5.00	26.34	3,888.0	253.8	125.7	-253.8	0.00	0.00	
4,000.0	5.00	26.34	3,987.6	261.6	129.6	-261.6	0.00	0.00	
4,100.0	5.00	26.34	4,087.2	269.4	133.4	-269.4	0.00	0.00	
4,200.0	5.00	26.34	4,186.8	277.2	137.3	-277.2	0.00	0.00	
4,300.0	5.00	26.34	4,286.4	285.0	141.2	-285.0	0.00	0.00	
4,400.0	5.00	26.34	4,386.1	292.9	145.0	-292.9	0.00	0.00	
4,452.1	5.00	26.34	4,438.0	296.9	147.0	-296.9	0.00	0.00	Sussex
4,500.0	5.00	26.34	4,485.7	300.7	148.9	-300.7	0.00	0.00	
4,600.0	5.00	26.34	4,585.3	308.5	152.8	-308.5	0.00	0.00	
4,700.0	5.00	26.34	4,684.9	316.3	156.6	-316.3	0.00	0.00	
4,800.0	5.00	26.34	4,784.5	324.1	160.5	-324.1	0.00	0.00	
4,900.0	5.00	26.34	4,884.1	331.9	164.4	-331.9	0.00	0.00	

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Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
5,000.0	5.00	26.34	4,983.8	339.7	168.2	-339.7	0.00	0.00	
5,021.3	5.00	26.34	5,005.0	341.4	169.0	-341.4	0.00	0.00	Shannon
5,100.0	5.00	26.34	5,083.4	347.5	172.1	-347.5	0.00	0.00	
5,200.0	5.00	26.34	5,183.0	355.3	176.0	-355.3	0.00	0.00	
5,300.0	5.00	26.34	5,282.6	363.1	179.8	-363.1	0.00	0.00	
5,400.0	5.00	26.34	5,382.2	370.9	183.7	-370.9	0.00	0.00	
5,500.0	5.00	26.34	5,481.9	378.8	187.6	-378.8	0.00	0.00	
5,600.0	5.00	26.34	5,581.5	386.6	191.4	-386.6	0.00	0.00	
5,700.0	5.00	26.34	5,681.1	394.4	195.3	-394.4	0.00	0.00	
5,800.0	5.00	26.34	5,780.7	402.2	199.2	-402.2	0.00	0.00	
5,900.0	5.00	26.34	5,880.3	410.0	203.0	-410.0	0.00	0.00	
6,000.0	5.00	26.34	5,980.0	417.8	206.9	-417.8	0.00	0.00	
6,100.0	5.00	26.34	6,079.6	425.6	210.8	-425.6	0.00	0.00	
6,200.0	5.00	26.34	6,179.2	433.4	214.6	-433.4	0.00	0.00	
6,300.0	5.00	26.34	6,278.8	441.2	218.5	-441.2	0.00	0.00	
6,400.0	5.00	26.34	6,378.4	449.0	222.4	-449.0	0.00	0.00	
6,500.0	5.00	26.34	6,478.1	456.8	226.2	-456.8	0.00	0.00	
6,550.1	5.00	26.34	6,528.0	460.8	228.2	-460.8	0.00	0.00	Teepee Buttes (*if present)
6,600.0	5.00	26.34	6,577.7	464.7	230.1	-464.7	0.00	0.00	
6,700.0	5.00	26.34	6,677.3	472.5	234.0	-472.5	0.00	0.00	
6,800.0	5.00	26.34	6,776.9	480.3	237.8	-480.3	0.00	0.00	
6,900.0	5.00	26.34	6,876.5	488.1	241.7	-488.1	0.00	0.00	
7,000.0	5.00	26.34	6,976.2	495.9	245.6	-495.9	0.00	0.00	
7,100.0	5.00	26.34	7,075.8	503.7	249.4	-503.7	0.00	0.00	
7,147.2	5.00	26.34	7,122.8	507.4	251.3	-507.4	0.00	0.00	Start build/turn @ 7147' MD
7,200.0	2.36	109.91	7,175.5	509.1	253.3	-509.1	10.01	-4.99	
7,300.0	11.03	168.51	7,274.8	499.0	257.2	-499.0	10.00	8.66	
7,346.5	15.61	172.01	7,320.0	488.4	258.9	-488.4	10.00	9.85	Sharon Springs
7,400.0	20.92	174.17	7,370.8	471.8	260.9	-471.8	10.00	9.92	
7,400.2	20.92	174.17	7,371.0	471.7	260.9	-471.7	0.00	0.00	Niobrara
7,500.0	30.88	176.28	7,460.7	428.3	264.4	-428.3	10.02	9.98	
7,531.2	33.99	176.70	7,487.0	411.6	265.4	-411.6	10.00	9.97	B Chalk
7,565.7	37.43	177.09	7,515.0	391.5	266.5	-391.5	10.00	9.98	B Marl
7,600.0	40.85	177.43	7,541.6	369.9	267.5	-369.9	10.00	9.98	
7,684.1	49.26	178.08	7,601.0	310.4	269.8	-310.4	10.00	9.98	C Chalk
7,700.0	50.84	178.19	7,611.2	298.3	270.2	-298.3	10.00	9.99	
7,722.4	53.08	178.33	7,625.0	280.6	270.7	-280.6	10.00	9.99	C Marl
7,777.7	58.60	178.64	7,656.0	234.9	271.9	-234.9	10.00	9.99	D Chalk
7,800.0	60.83	178.76	7,667.3	215.7	272.4	-215.7	10.00	9.99	
7,900.0	70.82	179.23	7,708.2	124.6	274.0	-124.6	10.00	9.99	
7,908.8	71.70	179.26	7,711.0	116.2	274.1	-116.2	10.00	9.99	Fort Hayes
8,000.0	80.81	179.64	7,732.6	27.7	274.9	-27.7	10.00	9.99	
8,002.3	81.04	179.65	7,733.0	25.5	274.9	-25.5	10.00	9.99	Codell
8,092.0	90.00	180.00	7,740.0	-63.9	275.2	63.9	9.99	9.99	LP @ 7740' TVD; 90°
8,100.0	90.00	180.00	7,740.0	-71.9	275.2	71.9	0.00	0.00	
8,200.0	90.00	180.00	7,740.0	-171.9	275.2	171.9	0.00	0.00	
8,300.0	90.00	180.00	7,740.0	-271.9	275.2	271.9	0.00	0.00	
8,400.0	90.00	180.00	7,740.0	-371.9	275.2	371.9	0.00	0.00	
8,500.0	90.00	180.00	7,740.0	-471.9	275.2	471.9	0.00	0.00	
8,600.0	90.00	180.00	7,740.0	-571.9	275.2	571.9	0.00	0.00	
8,700.0	90.00	180.00	7,740.0	-671.9	275.2	671.9	0.00	0.00	
8,800.0	90.00	180.00	7,740.0	-771.9	275.2	771.9	0.00	0.00	

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Well:	Woolley-Sosa 2C-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
8,900.0	90.00	180.00	7,740.0	-871.9	275.2	871.9	0.00	0.00	
9,000.0	90.00	180.00	7,740.0	-971.9	275.2	971.9	0.00	0.00	
9,100.0	90.00	180.00	7,740.0	-1,071.9	275.2	1,071.9	0.00	0.00	
9,200.0	90.00	180.00	7,740.0	-1,171.9	275.2	1,171.9	0.00	0.00	
9,300.0	90.00	180.00	7,740.0	-1,271.9	275.2	1,271.9	0.00	0.00	
9,400.0	90.00	180.00	7,740.0	-1,371.9	275.2	1,371.9	0.00	0.00	
9,500.0	90.00	180.00	7,740.0	-1,471.9	275.2	1,471.9	0.00	0.00	
9,600.0	90.00	180.00	7,740.0	-1,571.9	275.2	1,571.9	0.00	0.00	
9,700.0	90.00	180.00	7,740.0	-1,671.9	275.2	1,671.9	0.00	0.00	
9,800.0	90.00	180.00	7,740.0	-1,771.9	275.2	1,771.9	0.00	0.00	
9,900.0	90.00	180.00	7,740.0	-1,871.9	275.2	1,871.9	0.00	0.00	
10,000.0	90.00	180.00	7,740.0	-1,971.9	275.2	1,971.9	0.00	0.00	
10,100.0	90.00	180.00	7,740.0	-2,071.9	275.2	2,071.9	0.00	0.00	
10,200.0	90.00	180.00	7,740.0	-2,171.9	275.2	2,171.9	0.00	0.00	
10,300.0	90.00	180.00	7,740.0	-2,271.9	275.2	2,271.9	0.00	0.00	
10,400.0	90.00	180.00	7,740.0	-2,371.9	275.2	2,371.9	0.00	0.00	
10,500.0	90.00	180.00	7,740.0	-2,471.9	275.2	2,471.9	0.00	0.00	
10,600.0	90.00	180.00	7,740.0	-2,571.9	275.2	2,571.9	0.00	0.00	
10,700.0	90.00	180.00	7,740.0	-2,671.9	275.2	2,671.9	0.00	0.00	
10,800.0	90.00	180.00	7,740.0	-2,771.9	275.2	2,771.9	0.00	0.00	
10,900.0	90.00	180.00	7,740.0	-2,871.9	275.2	2,871.9	0.00	0.00	
11,000.0	90.00	180.00	7,740.0	-2,971.9	275.2	2,971.9	0.00	0.00	
11,100.0	90.00	180.00	7,740.0	-3,071.9	275.2	3,071.9	0.00	0.00	
11,200.0	90.00	180.00	7,740.0	-3,171.9	275.2	3,171.9	0.00	0.00	
11,300.0	90.00	180.00	7,740.0	-3,271.9	275.2	3,271.9	0.00	0.00	
11,400.0	90.00	180.00	7,740.0	-3,371.9	275.2	3,371.9	0.00	0.00	
11,500.0	90.00	180.00	7,740.0	-3,471.9	275.2	3,471.9	0.00	0.00	
11,600.0	90.00	180.00	7,740.0	-3,571.9	275.2	3,571.9	0.00	0.00	
11,700.0	90.00	180.00	7,740.0	-3,671.9	275.2	3,671.9	0.00	0.00	
11,800.0	90.00	180.00	7,740.0	-3,771.9	275.2	3,771.9	0.00	0.00	
11,900.0	90.00	180.00	7,740.0	-3,871.9	275.2	3,871.9	0.00	0.00	
12,000.0	90.00	180.00	7,740.0	-3,971.9	275.2	3,971.9	0.00	0.00	
12,100.0	90.00	180.00	7,740.0	-4,071.9	275.2	4,071.9	0.00	0.00	
12,200.0	90.00	180.00	7,740.0	-4,171.9	275.2	4,171.9	0.00	0.00	
12,300.0	90.00	180.00	7,740.0	-4,271.9	275.2	4,271.9	0.00	0.00	
12,400.0	90.00	180.00	7,740.0	-4,371.9	275.2	4,371.9	0.00	0.00	
12,500.0	90.00	180.00	7,740.0	-4,471.9	275.2	4,471.9	0.00	0.00	
12,600.0	90.00	180.00	7,740.0	-4,571.9	275.2	4,571.9	0.00	0.00	
12,700.0	90.00	180.00	7,740.0	-4,671.9	275.2	4,671.9	0.00	0.00	
12,800.0	90.00	180.00	7,740.0	-4,771.9	275.2	4,771.9	0.00	0.00	
12,900.0	90.00	180.00	7,740.0	-4,871.9	275.2	4,871.9	0.00	0.00	
13,000.0	90.00	180.00	7,740.0	-4,971.9	275.2	4,971.9	0.00	0.00	
13,100.0	90.00	180.00	7,740.0	-5,071.9	275.2	5,071.9	0.00	0.00	
13,200.0	90.00	180.00	7,740.0	-5,171.9	275.2	5,171.9	0.00	0.00	
13,300.0	90.00	180.00	7,740.0	-5,271.9	275.2	5,271.9	0.00	0.00	
13,400.0	90.00	180.00	7,740.0	-5,371.9	275.2	5,371.9	0.00	0.00	
13,500.0	90.00	180.00	7,740.0	-5,471.9	275.2	5,471.9	0.00	0.00	
13,600.0	90.00	180.00	7,740.0	-5,571.9	275.2	5,571.9	0.00	0.00	
13,700.0	90.00	180.00	7,740.0	-5,671.9	275.2	5,671.9	0.00	0.00	
13,800.0	90.00	180.00	7,740.0	-5,771.9	275.2	5,771.9	0.00	0.00	
13,900.0	90.00	180.00	7,740.0	-5,871.9	275.2	5,871.9	0.00	0.00	
14,000.0	90.00	180.00	7,740.0	-5,971.9	275.2	5,971.9	0.00	0.00	

Planning Report

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

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
14,100.0	90.00	180.00	7,740.0	-6,071.9	275.2	6,071.9	0.00	0.00	
14,200.0	90.00	180.00	7,740.0	-6,171.9	275.2	6,171.9	0.00	0.00	
14,300.0	90.00	180.00	7,740.0	-6,271.9	275.2	6,271.9	0.00	0.00	
14,400.0	90.00	180.00	7,740.0	-6,371.9	275.2	6,371.9	0.00	0.00	
14,500.0	90.00	180.00	7,740.0	-6,471.9	275.2	6,471.9	0.00	0.00	
14,600.0	90.00	180.00	7,740.0	-6,571.9	275.2	6,571.9	0.00	0.00	
14,700.0	90.00	180.00	7,740.0	-6,671.9	275.2	6,671.9	0.00	0.00	
14,800.0	90.00	180.00	7,740.0	-6,771.9	275.2	6,771.9	0.00	0.00	
14,900.0	90.00	180.00	7,740.0	-6,871.9	275.2	6,871.9	0.00	0.00	
15,000.0	90.00	180.00	7,740.0	-6,971.9	275.2	6,971.9	0.00	0.00	
15,100.0	90.00	180.00	7,740.0	-7,071.9	275.2	7,071.9	0.00	0.00	
15,200.0	90.00	180.00	7,740.0	-7,171.9	275.2	7,171.9	0.00	0.00	
15,300.0	90.00	180.00	7,740.0	-7,271.9	275.2	7,271.9	0.00	0.00	
15,400.0	90.00	180.00	7,740.0	-7,371.9	275.2	7,371.9	0.00	0.00	
15,500.0	90.00	180.00	7,740.0	-7,471.9	275.2	7,471.9	0.00	0.00	
15,600.0	90.00	180.00	7,740.0	-7,571.9	275.2	7,571.9	0.00	0.00	
15,700.0	90.00	180.00	7,740.0	-7,671.9	275.2	7,671.9	0.00	0.00	
15,800.0	90.00	180.00	7,740.0	-7,771.9	275.2	7,771.9	0.00	0.00	
15,900.0	90.00	180.00	7,740.0	-7,871.9	275.2	7,871.9	0.00	0.00	
15,953.0	90.00	180.00	7,740.0	-7,924.8	275.2	7,924.8	0.00	0.00	TD at 15953.0

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Woolley-Sosa 2C-7H-E1	0.00	0.00	7,740.0	-7,924.8	275.2	1,259,594.10	3,125,257.95	40.045100	-105.052620
- plan hits target center									
- Point									
Woolley-Sosa 2C-7H-E1	0.00	0.00	7,747.0	-7,924.8	275.2	1,259,594.10	3,125,257.95	40.045100	-105.052620
- plan misses target center by 7.0ft at 15953.0ft MD (7740.0 TVD, -7924.8 N, 275.2 E)									
- Point									

Planning Report

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

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
400.0	400.0	Fox Hills - BASE				
4,452.1	4,438.0	Sussex				
5,021.3	5,005.0	Shannon				
6,550.1	6,528.0	Teepee Buttes (*if present)				
7,346.5	7,320.0	Sharon Springs				
7,400.2	7,371.0	Niobrara				
7,531.2	7,487.0	B Chalk				
7,565.7	7,515.0	B Marl				
7,684.1	7,601.0	C Chalk				
7,722.4	7,625.0	C Marl				
7,777.7	7,656.0	D Chalk				
7,908.8	7,711.0	Fort Hayes				
8,002.3	7,733.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
400.0	400.0	0.0	0.0	KOP @ 400'	
899.9	899.3	19.5	9.7	EOB; Inc=5.0°	
7,147.2	7,122.8	507.4	251.3	Start build/turn @ 7147' MD	
8,092.0	7,740.0	-63.9	275.2	LP @ 7740' TVD; 90°	
15,953.0	7,740.0	-7,924.8	275.2	TD at 15953.0	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

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

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

Survey Tool Program		Date	6/24/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	15,952.8	Plan #3 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

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

Summary

Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	11,038.1	7,798.0	1,198.6	1,124.0	16.052	CC, ES
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	11,300.0	7,798.0	1,226.9	1,147.5	15.452	SF
Sosa 11-18 - DD - DD	11,632.2	7,834.7	282.0	197.5	3.338	CC, ES, SF
Sosa 12-18 - DD - DD	13,266.5	7,884.8	279.0	162.4	2.394	CC, ES, SF
Sosa 21-18 - DD (MWD) - DD	11,634.7	7,931.0	1,270.7	1,186.1	15.022	CC, ES
Sosa 21-18 - DD (MWD) - DD	11,800.0	7,927.8	1,281.4	1,195.3	14.895	SF
Sosa 22-18 - DD - DD	13,128.6	7,885.7	1,195.7	1,083.4	10.642	CC, ES
Sosa 22-18 - DD - DD	13,300.0	7,885.8	1,208.0	1,091.3	10.352	SF
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	12,326.5	7,740.7	217.5	125.6	2.367	CC, ES, SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,462.0	7,756.4	1,163.5	1,103.2	19.304	CC
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,500.0	7,756.3	1,164.1	1,103.1	19.066	ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,700.0	7,755.6	1,187.6	1,123.2	18.429	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,332.9	7,735.0	908.8	850.9	15.687	CC, ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,500.0	7,735.0	924.0	863.2	15.181	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	11,036.9	7,813.7	468.5	394.2	6.308	CC, ES, SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	9,011.3	7,728.0	301.2	264.2	8.132	CC, ES, SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,227.3	7,734.0	661.0	620.8	16.440	CC, ES
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,400.0	7,734.0	683.2	640.0	15.817	SF
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	7,170.9	7,327.7	1,157.5	1,118.3	29.545	CC, ES
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	7,200.0	7,357.7	1,158.2	1,118.9	29.503	SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,801.8	1,885.7	92.8	85.9	13.431	CC, ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	7,900.0	7,796.2	312.7	285.2	11.369	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	7,888.2	7,984.0	1,164.2	1,121.6	27.281	CC, ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	8,000.0	8,011.3	1,169.8	1,126.8	27.244	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	8,316.4	8,174.9	647.8	596.6	12.656	CC, ES, SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	7,261.0	7,297.0	616.1	589.8	23.403	CC, ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	7,300.0	7,343.9	616.6	590.3	23.373	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	722.2	723.2	23.2	20.6	9.051	CC, ES
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	800.0	800.5	25.0	22.1	8.745	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	713.0	713.2	37.6	35.1	15.125	CC, ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	7,533.2	7,742.5	200.9	170.7	6.642	SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	692.3	691.3	50.3	47.9	21.112	CC
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	700.0	699.0	50.3	47.9	20.872	ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	7,782.7	7,758.6	154.5	126.3	5.467	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	569.0	568.3	59.3	57.3	30.512	CC
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	600.0	598.9	59.3	57.3	28.927	ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	7,500.0	7,759.3	443.0	412.3	14.451	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	400.0	400.0	67.5	66.1	49.932	CC, ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	7,700.0	7,813.4	646.9	617.7	22.197	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	300.0	300.0	75.0	74.0	74.875	CC, ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	1,200.0	1,183.8	127.3	122.9	29.260	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	203.3	203.3	82.3	81.6	123.854	CC
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	300.0	299.3	82.5	81.5	82.452	ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	1,100.0	1,082.4	134.1	130.2	34.348	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	200.0	200.0	89.8	89.2	137.639	CC, ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	1,200.0	1,176.6	160.6	156.3	37.299	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	200.0	200.0	15.1	14.5	23.153	CC, ES
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	15,953.0	15,949.8	738.6	455.9	2.612	SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	300.0	300.0	7.6	6.6	7.543	CC, ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	15,947.9	15,706.0	435.7	198.0	1.833	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	572.8	572.7	6.7	4.8	3.430	CC
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	600.0	599.9	6.7	4.7	3.285	ES
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	15,953.0	15,801.3	405.2	175.0	1.760	SF

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

Anticollision Report

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

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)		Separation Factor	Warning
Offset Well - Wellbore - Design						
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	674.8	674.7	13.3	11.0	5.725	CC
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	700.0	699.9	13.3	10.9	5.535	ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	15,953.0	16,069.1	676.3	393.2	2.389	SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	300.0	300.0	22.4	21.4	22.350	CC, ES
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	15,953.0	15,828.6	1,054.1	778.3	3.822	SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	187.1	187.1	29.9	29.3	49.233	CC
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	200.0	200.0	29.9	29.3	45.824	ES
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	15,953.0	16,153.9	1,376.3	1,093.3	4.863	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	0.0	0.0	0.0	0.0	152.79	-2,304.0	1,184.8	2,590.9					
100.0	100.0	85.0	85.0	0.2	0.1	152.79	-2,304.0	1,184.8	2,590.8	2,590.5	0.28		9,370.863	
200.0	200.0	185.0	185.0	0.3	0.3	152.79	-2,304.0	1,184.8	2,590.8	2,590.2	0.62		4,169.614	
300.0	300.0	285.0	285.0	0.5	0.5	152.79	-2,304.0	1,184.8	2,590.8	2,589.8	0.97		2,669.780	
400.0	400.0	385.0	385.0	0.7	0.6	152.79	-2,304.0	1,184.8	2,590.8	2,589.5	1.32		1,963.498	
500.0	500.0	485.0	485.0	0.9	0.8	126.45	-2,304.0	1,184.8	2,591.3	2,589.7	1.67		1,552.719	
600.0	600.0	585.0	585.0	1.0	1.0	126.49	-2,304.0	1,184.8	2,592.9	2,590.9	2.02		1,283.492	
700.0	699.9	684.9	684.9	1.2	1.2	126.54	-2,304.0	1,184.8	2,595.5	2,593.1	2.38		1,092.654	
800.0	799.7	784.7	784.7	1.4	1.3	126.62	-2,304.0	1,184.8	2,599.1	2,596.4	2.74		949.724	
899.9	899.3	884.3	884.3	1.6	1.5	126.72	-2,304.0	1,184.8	2,603.8	2,600.7	3.11		838.332	
1,000.0	999.0	984.0	984.0	1.8	1.7	126.88	-2,304.0	1,184.8	2,609.1	2,605.6	3.48		749.856	
1,100.0	1,098.6	1,083.6	1,083.6	2.0	1.9	127.03	-2,304.0	1,184.8	2,614.3	2,610.4	3.86		678.147	
1,200.0	1,198.2	1,183.2	1,183.2	2.3	2.0	127.18	-2,304.0	1,184.8	2,619.6	2,615.3	4.23		618.922	
1,300.0	1,297.8	1,282.9	1,282.9	2.5	2.2	127.33	-2,304.0	1,184.8	2,624.9	2,620.3	4.61		569.246	
1,400.0	1,397.5	1,382.5	1,382.5	2.7	2.4	127.48	-2,304.0	1,184.8	2,630.2	2,625.2	4.99		527.020	
1,500.0	1,497.1	1,482.1	1,482.1	2.9	2.6	127.63	-2,304.0	1,184.8	2,635.5	2,630.1	5.37		490.710	
1,600.0	1,596.7	1,542.6	1,542.6	3.2	2.7	127.72	-2,304.3	1,185.0	2,641.4	2,635.8	5.68		464.893	
1,700.0	1,696.3	1,600.0	1,600.0	3.4	2.8	127.81	-2,305.6	1,185.5	2,649.2	2,643.2	5.99		442.527	
1,800.0	1,795.9	1,645.9	1,645.8	3.6	2.8	127.88	-2,307.4	1,186.2	2,658.7	2,652.4	6.27		424.115	
1,900.0	1,895.6	1,700.0	1,699.8	3.8	2.9	127.97	-2,310.5	1,187.5	2,670.1	2,663.5	6.56		406.755	
2,000.0	1,995.2	1,748.4	1,748.1	4.1	3.0	128.04	-2,314.0	1,188.9	2,683.2	2,676.3	6.85		391.845	
2,100.0	2,094.8	1,800.0	1,799.5	4.3	3.1	128.12	-2,318.5	1,190.8	2,698.1	2,691.0	7.13		378.193	
2,200.0	2,194.4	1,849.9	1,849.0	4.5	3.2	128.20	-2,323.8	1,192.9	2,714.8	2,707.3	7.42		366.065	
2,300.0	2,294.0	1,900.0	1,898.7	4.8	3.3	128.28	-2,329.8	1,195.4	2,733.2	2,725.5	7.70		355.185	
2,400.0	2,393.7	1,950.1	1,948.2	5.0	3.5	128.36	-2,336.7	1,198.2	2,753.3	2,745.3	7.97		345.340	
2,500.0	2,493.3	2,000.0	1,997.5	5.2	3.6	128.44	-2,344.3	1,201.3	2,775.2	2,766.9	8.25		336.533	
2,600.0	2,592.9	2,048.8	2,045.4	5.4	3.7	128.52	-2,352.5	1,204.7	2,798.7	2,790.2	8.52		328.643	
2,700.0	2,692.5	2,119.6	2,114.8	5.7	3.9	128.64	-2,365.5	1,210.0	2,823.8	2,814.9	8.83		319.722	
2,800.0	2,792.1	2,216.1	2,209.4	5.9	4.2	128.79	-2,383.3	1,217.3	2,849.1	2,839.8	9.20		309.537	
2,900.0	2,891.8	2,312.5	2,303.9	6.1	4.5	128.94	-2,401.1	1,224.6	2,874.4	2,864.8	9.58		300.155	
3,000.0	2,991.4	2,409.0	2,398.4	6.4	4.8	129.08	-2,418.9	1,231.9	2,899.7	2,889.8	9.95		291.482	
3,100.0	3,091.0	2,505.5	2,493.0	6.6	5.1	129.23	-2,436.7	1,239.1	2,925.1	2,914.7	10.32		283.443	
3,200.0	3,190.6	2,601.9	2,587.5	6.8	5.4	129.37	-2,454.5	1,246.4	2,950.4	2,939.7	10.69		275.971	
3,300.0	3,290.2	2,698.4	2,682.1	7.1	5.8	129.51	-2,472.3	1,253.7	2,975.8	2,964.7	11.06		269.006	
3,400.0	3,389.9	2,794.9	2,776.6	7.3	6.1	129.65	-2,490.1	1,261.0	3,001.2	2,989.8	11.43		262.499	
3,500.0	3,489.5	2,891.4	2,871.1	7.5	6.4	129.78	-2,507.9	1,268.3	3,026.6	3,014.8	11.80		256.407	
3,600.0	3,589.1	2,987.8	2,965.7	7.7	6.8	129.92	-2,525.7	1,275.6	3,052.1	3,039.9	12.17		250.692	
3,700.0	3,688.7	3,084.3	3,060.2	8.0	7.1	130.05	-2,543.5	1,282.9	3,077.5	3,065.0	12.54		245.319	
3,800.0	3,788.3	3,180.8	3,154.7	8.2	7.5	130.17	-2,561.3	1,290.1	3,103.0	3,090.0	12.92		240.260	
3,900.0	3,888.0	3,277.2	3,249.3	8.4	7.8	130.30	-2,579.1	1,297.4	3,128.4	3,115.2	13.29		235.486	
4,000.0	3,987.6	3,373.7	3,343.8	8.7	8.2	130.42	-2,596.9	1,304.7	3,153.9	3,140.3	13.65		230.975	
4,100.0	4,087.2	3,470.2	3,438.3	8.9	8.5	130.55	-2,614.7	1,312.0	3,179.4	3,165.4	14.02		226.705	
4,200.0	4,186.8	3,566.7	3,532.9	9.1	8.9	130.67	-2,632.5	1,319.3	3,205.0	3,190.6	14.39		222.658	
4,300.0	4,286.4	3,663.1	3,627.4	9.4	9.3	130.79	-2,650.3	1,326.6	3,230.5	3,215.7	14.76		218.817	
4,400.0	4,386.1	3,759.6	3,721.9	9.6	9.6	130.90	-2,668.1	1,333.9	3,256.0	3,240.9	15.13		215.165	
4,500.0	4,485.7	3,856.1	3,816.5	9.8	10.0	131.02	-2,685.9	1,341.2	3,281.6	3,266.1	15.50		211.690	
4,600.0	4,585.3	3,952.5	3,911.0	10.1	10.3	131.13	-2,703.6	1,348.4	3,307.2	3,291.3	15.87		208.379	
4,700.0	4,684.9	4,049.0	4,005.5	10.3	10.7	131.24	-2,721.4	1,355.7	3,332.7	3,316.5	16.24		205.221	
4,800.0	4,784.5	4,145.5	4,100.1	10.5	11.1	131.35	-2,739.2	1,363.0	3,358.3	3,341.7	16.61		202.204	
4,900.0	4,884.1	4,242.0	4,194.6	10.8	11.4	131.46	-2,757.0	1,370.3	3,383.9	3,366.9	16.98		199.321	
5,000.0	4,983.8	4,338.4	4,289.1	11.0	11.8	131.57	-2,774.8	1,377.6	3,409.5	3,392.2	17.35		196.561	
5,100.0	5,083.4	4,434.9	4,383.7	11.2	12.2	131.67	-2,792.6	1,384.9	3,435.2	3,417.5	17.71		193.918	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,200.0	5,183.0	4,531.4	4,478.2	11.4	12.5	131.77	-2,810.4	1,392.2	3,460.8	3,442.7	18.08	191.384		
5,300.0	5,282.6	4,627.8	4,572.7	11.7	12.9	131.87	-2,828.2	1,399.4	3,486.4	3,468.0	18.45	188.952		
5,400.0	5,382.2	4,724.3	4,667.3	11.9	13.3	131.97	-2,846.0	1,406.7	3,512.1	3,493.3	18.82	186.617		
5,500.0	5,481.9	4,820.8	4,761.8	12.1	13.6	132.07	-2,863.8	1,414.0	3,537.8	3,518.6	19.19	184.372		
5,600.0	5,581.5	4,917.3	4,856.3	12.4	14.0	132.17	-2,881.6	1,421.3	3,563.4	3,543.9	19.56	182.213		
5,700.0	5,681.1	5,013.7	4,950.9	12.6	14.4	132.27	-2,899.4	1,428.6	3,589.1	3,569.2	19.92	180.134		
5,800.0	5,780.7	5,110.2	5,045.4	12.8	14.7	132.36	-2,917.2	1,435.9	3,614.8	3,594.5	20.29	178.132		
5,900.0	5,880.3	5,206.7	5,139.9	13.1	15.1	132.45	-2,935.0	1,443.2	3,640.5	3,619.9	20.66	176.201		
6,000.0	5,980.0	6,037.9	5,965.0	13.3	17.0	133.26	-3,010.0	1,473.9	3,654.5	3,631.9	22.52	162.309		
6,100.0	6,079.6	6,137.5	6,064.6	13.5	17.1	133.36	-3,010.0	1,473.9	3,660.5	3,637.6	22.89	159.900		
6,200.0	6,179.2	6,237.2	6,164.2	13.8	17.2	133.46	-3,010.0	1,473.9	3,666.5	3,643.2	23.27	157.571		
6,300.0	6,278.8	6,336.8	6,263.8	14.0	17.3	133.56	-3,010.0	1,473.9	3,672.5	3,648.8	23.64	155.317		
6,400.0	6,378.4	6,436.4	6,363.5	14.2	17.4	133.66	-3,010.0	1,473.9	3,678.5	3,654.5	24.02	153.136		
6,500.0	6,478.1	6,536.0	6,463.1	14.5	17.5	133.75	-3,010.0	1,473.9	3,684.5	3,660.1	24.40	151.023		
6,600.0	6,577.7	6,635.6	6,562.7	14.7	17.7	133.85	-3,010.0	1,473.9	3,690.6	3,665.8	24.77	148.976		
6,700.0	6,677.3	6,735.3	6,662.3	14.9	17.8	133.95	-3,010.0	1,473.9	3,696.6	3,671.5	25.15	146.991		
6,800.0	6,776.9	6,834.9	6,761.9	15.1	17.9	134.05	-3,010.0	1,473.9	3,702.7	3,677.2	25.52	145.067		
6,900.0	6,876.5	6,934.5	6,861.6	15.4	18.0	134.14	-3,010.0	1,473.9	3,708.8	3,682.9	25.90	143.199		
7,000.0	6,976.2	7,034.1	6,961.2	15.6	18.1	134.24	-3,010.0	1,473.9	3,714.8	3,688.6	26.27	141.387		
7,100.0	7,075.8	7,133.7	7,060.8	15.8	18.2	134.33	-3,010.0	1,473.9	3,720.9	3,694.3	26.65	139.626		
7,147.2	7,122.8	7,180.7	7,107.8	15.9	18.3	134.38	-3,010.0	1,473.9	3,723.8	3,697.0	26.83	138.813		
7,150.0	7,125.6	7,183.5	7,110.6	16.0	18.3	132.87	-3,010.0	1,473.9	3,724.0	3,697.1	26.84	138.765		
7,200.0	7,175.5	7,233.5	7,160.5	16.0	18.4	50.99	-3,010.0	1,473.9	3,724.7	3,697.7	27.01	137.893		
7,250.0	7,225.4	7,283.3	7,210.4	16.1	18.4	1.78	-3,010.0	1,473.9	3,721.4	3,694.2	27.18	136.938		
7,300.0	7,274.8	7,332.8	7,259.8	16.0	18.5	-7.78	-3,010.0	1,473.9	3,713.9	3,686.6	27.33	135.904		
7,350.0	7,323.4	7,381.4	7,308.4	16.0	18.5	-11.79	-3,010.0	1,473.9	3,702.5	3,675.0	27.47	134.793		
7,400.0	7,370.8	7,428.8	7,355.8	15.9	18.6	-14.28	-3,010.0	1,473.9	3,687.0	3,659.4	27.60	133.612		
7,450.0	7,416.7	7,474.6	7,401.7	15.8	18.6	-16.25	-3,010.0	1,473.9	3,667.8	3,640.1	27.71	132.364		
7,500.0	7,460.7	7,518.6	7,445.7	15.7	18.7	-18.09	-3,010.0	1,473.9	3,644.8	3,617.0	27.81	131.056		
7,550.0	7,502.4	7,560.4	7,487.4	15.5	18.8	-19.99	-3,010.0	1,473.9	3,618.4	3,590.5	27.90	129.691		
7,600.0	7,541.6	7,599.6	7,526.6	15.4	18.8	-22.10	-3,010.0	1,473.9	3,588.7	3,560.7	27.98	128.276		
7,650.0	7,578.0	7,635.9	7,563.0	15.2	18.8	-24.55	-3,010.0	1,473.9	3,556.0	3,527.9	28.04	126.816		
7,700.0	7,611.2	7,669.1	7,596.2	15.1	18.9	-27.48	-3,010.0	1,473.9	3,520.4	3,492.3	28.09	125.317		
7,750.0	7,641.0	7,699.0	7,626.0	14.9	18.9	-31.06	-3,010.0	1,473.9	3,482.4	3,454.3	28.13	123.785		
7,800.0	7,667.3	7,725.2	7,652.3	14.8	19.0	-35.52	-3,010.0	1,473.9	3,442.2	3,414.0	28.16	122.225		
7,850.0	7,689.7	7,747.7	7,674.7	14.7	19.0	-41.13	-3,010.0	1,473.9	3,400.0	3,371.9	28.18	120.642		
7,900.0	7,708.2	7,766.1	7,693.2	14.7	19.0	-48.20	-3,010.0	1,473.9	3,356.4	3,328.2	28.19	119.044		
7,950.0	7,722.5	7,780.5	7,707.5	14.7	19.0	-57.00	-3,010.0	1,473.9	3,311.5	3,283.3	28.20	117.434		
8,000.0	7,732.6	7,790.6	7,717.7	14.8	19.0	-67.60	-3,010.0	1,473.9	3,265.8	3,237.6	28.20	115.820		
8,050.0	7,738.5	7,796.4	7,723.5	14.9	19.0	-79.59	-3,010.0	1,473.9	3,219.6	3,191.4	28.19	114.206		
8,092.0	7,740.0	7,798.0	7,725.0	15.0	19.0	-90.00	-3,010.0	1,473.9	3,180.7	3,152.5	28.18	112.857		
8,100.0	7,740.0	7,798.0	7,725.0	15.0	19.0	-90.00	-3,010.0	1,473.9	3,173.2	3,145.1	28.18	112.599		
8,200.0	7,740.0	7,798.0	7,725.0	15.5	19.0	-90.00	-3,010.0	1,473.9	3,080.9	3,052.7	28.18	109.337		
8,300.0	7,740.0	7,798.0	7,725.0	16.1	19.0	-90.00	-3,010.0	1,473.9	2,989.0	2,960.8	28.21	105.974		
8,400.0	7,740.0	7,798.0	7,725.0	16.9	19.0	-90.00	-3,010.0	1,473.9	2,897.7	2,869.4	28.27	102.497		
8,500.0	7,740.0	7,798.0	7,725.0	17.8	19.0	-90.00	-3,010.0	1,473.9	2,806.9	2,778.6	28.38	98.897		
8,600.0	7,740.0	7,798.0	7,725.0	18.9	19.0	-90.00	-3,010.0	1,473.9	2,716.8	2,688.3	28.55	95.164		
8,700.0	7,740.0	7,798.0	7,725.0	20.0	19.0	-90.00	-3,010.0	1,473.9	2,627.5	2,598.7	28.78	91.290		
8,800.0	7,740.0	7,798.0	7,725.0	21.2	19.0	-90.00	-3,010.0	1,473.9	2,538.9	2,509.8	29.09	87.276		
8,900.0	7,740.0	7,798.0	7,725.0	22.5	19.0	-90.00	-3,010.0	1,473.9	2,451.2	2,421.7	29.49	83.124		
9,000.0	7,740.0	7,798.0	7,725.0	23.9	19.0	-90.00	-3,010.0	1,473.9	2,364.5	2,334.5	29.99	78.845		
9,100.0	7,740.0	7,798.0	7,725.0	25.3	19.0	-90.00	-3,010.0	1,473.9	2,278.8	2,248.2	30.61	74.459		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,200.0	7,740.0	7,798.0	7,725.0	26.7	19.0	-90.00	-3,010.0	1,473.9	2,194.4	2,163.1	31.35	69.992		
9,300.0	7,740.0	7,798.0	7,725.0	28.2	19.0	-90.00	-3,010.0	1,473.9	2,111.4	2,079.1	32.25	65.478		
9,400.0	7,740.0	7,798.0	7,725.0	29.7	19.0	-90.00	-3,010.0	1,473.9	2,029.8	1,996.5	33.30	60.959		
9,500.0	7,740.0	7,798.0	7,725.0	31.3	19.0	-90.00	-3,010.0	1,473.9	1,950.0	1,915.5	34.53	56.479		
9,600.0	7,740.0	7,798.0	7,725.0	32.8	19.0	-90.00	-3,010.0	1,473.9	1,872.2	1,836.2	35.94	52.085		
9,700.0	7,740.0	7,798.0	7,725.0	34.4	19.0	-90.00	-3,010.0	1,473.9	1,796.5	1,758.9	37.56	47.824		
9,800.0	7,740.0	7,798.0	7,725.0	36.0	19.0	-90.00	-3,010.0	1,473.9	1,723.3	1,683.9	39.40	43.739		
9,900.0	7,740.0	7,798.0	7,725.0	37.6	19.0	-90.00	-3,010.0	1,473.9	1,652.9	1,611.5	41.46	39.870		
10,000.0	7,740.0	7,798.0	7,725.0	39.2	19.0	-90.00	-3,010.0	1,473.9	1,585.7	1,542.0	43.75	36.249		
10,100.0	7,740.0	7,798.0	7,725.0	40.9	19.0	-90.00	-3,010.0	1,473.9	1,522.1	1,475.9	46.26	32.902		
10,200.0	7,740.0	7,798.0	7,725.0	42.5	19.0	-90.00	-3,010.0	1,473.9	1,462.6	1,413.6	49.00	29.848		
10,300.0	7,740.0	7,798.0	7,725.0	44.2	19.0	-90.00	-3,010.0	1,473.9	1,407.7	1,355.7	51.94	27.100		
10,400.0	7,740.0	7,798.0	7,725.0	45.8	19.0	-90.00	-3,010.0	1,473.9	1,357.9	1,302.9	55.06	24.663		
10,500.0	7,740.0	7,798.0	7,725.0	47.5	19.0	-90.00	-3,010.0	1,473.9	1,313.9	1,255.6	58.30	22.537		
10,600.0	7,740.0	7,798.0	7,725.0	49.1	19.0	-90.00	-3,010.0	1,473.9	1,276.2	1,214.6	61.61	20.716		
10,700.0	7,740.0	7,798.0	7,725.0	50.8	19.0	-90.00	-3,010.0	1,473.9	1,245.4	1,180.5	64.90	19.191		
10,800.0	7,740.0	7,798.0	7,725.0	52.5	19.0	-90.00	-3,010.0	1,473.9	1,222.1	1,154.0	68.08	17.951		
10,900.0	7,740.0	7,798.0	7,725.0	54.2	19.0	-90.00	-3,010.0	1,473.9	1,206.6	1,135.5	71.06	16.980		
11,000.0	7,740.0	7,798.0	7,725.0	55.9	19.0	-90.00	-3,010.0	1,473.9	1,199.3	1,125.5	73.74	16.262		
11,038.1	7,740.0	7,798.0	7,725.0	56.5	19.0	-90.00	-3,010.0	1,473.9	1,198.6	1,124.0	74.67	16.052 CC, ES		
11,100.0	7,740.0	7,798.0	7,725.0	57.6	19.0	-90.00	-3,010.0	1,473.9	1,200.2	1,124.2	76.06	15.780		
11,200.0	7,740.0	7,798.0	7,725.0	59.3	19.0	-90.00	-3,010.0	1,473.9	1,209.5	1,131.6	77.95	15.516		
11,300.0	7,740.0	7,798.0	7,725.0	61.0	19.0	-90.00	-3,010.0	1,473.9	1,226.9	1,147.5	79.40	15.452 SF		
11,400.0	7,740.0	7,798.0	7,725.0	62.7	19.0	-90.00	-3,010.0	1,473.9	1,252.1	1,171.7	80.41	15.572		
11,500.0	7,740.0	7,798.0	7,725.0	64.4	19.0	-90.00	-3,010.0	1,473.9	1,284.6	1,203.5	81.00	15.858		
11,600.0	7,740.0	7,798.0	7,725.0	66.1	19.0	-90.00	-3,010.0	1,473.9	1,323.8	1,242.6	81.23	16.296		
11,700.0	7,740.0	7,798.0	7,725.0	67.8	19.0	-90.00	-3,010.0	1,473.9	1,369.2	1,288.1	81.16	16.871		
11,800.0	7,740.0	7,798.0	7,725.0	69.5	19.0	-90.00	-3,010.0	1,473.9	1,420.3	1,339.4	80.83	17.570		
11,900.0	7,740.0	7,798.0	7,725.0	71.2	19.0	-90.00	-3,010.0	1,473.9	1,476.3	1,396.0	80.32	18.381		
12,000.0	7,740.0	7,798.0	7,725.0	72.9	19.0	-90.00	-3,010.0	1,473.9	1,536.9	1,457.2	79.66	19.292		
12,100.0	7,740.0	7,798.0	7,725.0	74.7	19.0	-90.00	-3,010.0	1,473.9	1,601.3	1,522.4	78.91	20.294		
12,200.0	7,740.0	7,798.0	7,725.0	76.4	19.0	-90.00	-3,010.0	1,473.9	1,669.3	1,591.2	78.09	21.378		
12,300.0	7,740.0	7,798.0	7,725.0	78.1	19.0	-90.00	-3,010.0	1,473.9	1,740.4	1,663.2	77.23	22.535		
12,400.0	7,740.0	7,798.0	7,725.0	79.8	19.0	-90.00	-3,010.0	1,473.9	1,814.2	1,737.9	76.36	23.758		
12,500.0	7,740.0	7,798.0	7,725.0	81.6	19.0	-90.00	-3,010.0	1,473.9	1,890.4	1,815.0	75.50	25.040		
12,600.0	7,740.0	7,798.0	7,725.0	83.3	19.0	-90.00	-3,010.0	1,473.9	1,968.8	1,894.2	74.64	26.376		
12,700.0	7,740.0	7,798.0	7,725.0	85.0	19.0	-90.00	-3,010.0	1,473.9	2,049.0	1,975.2	73.81	27.760		
12,800.0	7,740.0	7,798.0	7,725.0	86.7	19.0	-90.00	-3,010.0	1,473.9	2,130.9	2,057.9	73.01	29.187		
12,900.0	7,740.0	7,798.0	7,725.0	88.5	19.0	-90.00	-3,010.0	1,473.9	2,214.3	2,142.1	72.24	30.653		
13,000.0	7,740.0	7,798.0	7,725.0	90.2	19.0	-90.00	-3,010.0	1,473.9	2,299.1	2,227.6	71.50	32.154		
13,100.0	7,740.0	7,798.0	7,725.0	91.9	19.0	-90.00	-3,010.0	1,473.9	2,385.0	2,314.2	70.80	33.687		
13,200.0	7,740.0	7,798.0	7,725.0	93.7	19.0	-90.00	-3,010.0	1,473.9	2,471.9	2,401.8	70.13	35.248		
13,300.0	7,740.0	7,798.0	7,725.0	95.4	19.0	-90.00	-3,010.0	1,473.9	2,559.8	2,490.3	69.50	36.834		
13,400.0	7,740.0	7,798.0	7,725.0	97.1	19.0	-90.00	-3,010.0	1,473.9	2,648.6	2,579.7	68.90	38.444		
13,500.0	7,740.0	7,798.0	7,725.0	98.9	19.0	-90.00	-3,010.0	1,473.9	2,738.2	2,669.8	68.33	40.074		
13,600.0	7,740.0	7,798.0	7,725.0	100.6	19.0	-90.00	-3,010.0	1,473.9	2,828.4	2,760.6	67.79	41.722		
13,700.0	7,740.0	7,798.0	7,725.0	102.3	19.0	-90.00	-3,010.0	1,473.9	2,919.3	2,852.0	67.28	43.387		
13,800.0	7,740.0	7,798.0	7,725.0	104.1	19.0	-90.00	-3,010.0	1,473.9	3,010.8	2,943.9	66.81	45.067		
13,900.0	7,740.0	7,798.0	7,725.0	105.8	19.0	-90.00	-3,010.0	1,473.9	3,102.7	3,036.4	66.35	46.760		
14,000.0	7,740.0	7,798.0	7,725.0	107.5	19.0	-90.00	-3,010.0	1,473.9	3,195.2	3,129.3	65.93	48.465		
14,100.0	7,740.0	7,798.0	7,725.0	109.3	19.0	-90.00	-3,010.0	1,473.9	3,288.1	3,222.6	65.53	50.180		
14,200.0	7,740.0	7,798.0	7,725.0	111.0	19.0	-90.00	-3,010.0	1,473.9	3,381.4	3,316.3	65.15	51.905		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Total	Separation					
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Uncertainty Axis	Factor					
14,300.0	7,740.0	7,798.0	7,725.0	112.8	19.0	-90.00	-3,010.0	1,473.9	3,475.1	3,410.3	64.79	53.638					
14,400.0	7,740.0	7,798.0	7,725.0	114.5	19.0	-90.00	-3,010.0	1,473.9	3,569.2	3,504.7	64.45	55.378					
14,500.0	7,740.0	7,798.0	7,725.0	116.2	19.0	-90.00	-3,010.0	1,473.9	3,663.5	3,599.4	64.13	57.124					
14,600.0	7,740.0	7,798.0	7,725.0	118.0	19.0	-90.00	-3,010.0	1,473.9	3,758.1	3,694.3	63.83	58.875					
14,700.0	7,740.0	7,798.0	7,725.0	119.7	19.0	-90.00	-3,010.0	1,473.9	3,853.0	3,789.5	63.55	60.631					
14,800.0	7,740.0	7,798.0	7,725.0	121.5	19.0	-90.00	-3,010.0	1,473.9	3,948.2	3,884.9	63.28	62.391					
14,900.0	7,740.0	7,798.0	7,725.0	123.2	19.0	-90.00	-3,010.0	1,473.9	4,043.6	3,980.6	63.03	64.154					
15,000.0	7,740.0	7,798.0	7,725.0	124.9	19.0	-90.00	-3,010.0	1,473.9	4,139.2	4,076.4	62.79	65.920					
15,100.0	7,740.0	7,798.0	7,725.0	126.7	19.0	-90.00	-3,010.0	1,473.9	4,235.0	4,172.5	62.57	67.687					
15,200.0	7,740.0	7,798.0	7,725.0	128.4	19.0	-90.00	-3,010.0	1,473.9	4,331.0	4,268.7	62.36	69.457					
15,300.0	7,740.0	7,798.0	7,725.0	130.2	19.0	-90.00	-3,010.0	1,473.9	4,427.2	4,365.1	62.16	71.227					
15,400.0	7,740.0	7,798.0	7,725.0	131.9	19.0	-90.00	-3,010.0	1,473.9	4,523.6	4,461.6	61.97	72.998					
15,500.0	7,740.0	7,798.0	7,725.0	133.7	19.0	-90.00	-3,010.0	1,473.9	4,620.1	4,558.3	61.79	74.769					
15,600.0	7,740.0	7,798.0	7,725.0	135.4	19.0	-90.00	-3,010.0	1,473.9	4,716.7	4,655.1	61.62	76.540					
15,700.0	7,740.0	7,798.0	7,725.0	137.1	19.0	-90.00	-3,010.0	1,473.9	4,813.5	4,752.0	61.47	78.311					
15,800.0	7,740.0	7,798.0	7,725.0	138.9	19.0	-90.00	-3,010.0	1,473.9	4,910.4	4,849.1	61.32	80.080					
15,900.0	7,740.0	7,798.0	7,725.0	140.6	19.0	-90.00	-3,010.0	1,473.9	5,007.4	4,946.3	61.18	81.849					
15,953.0	7,740.0	7,798.0	7,725.0	141.6	19.0	-90.00	-3,010.0	1,473.9	5,058.9	4,997.8	61.11	82.785					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	172.96	-4,267.5	527.1	4,299.9					
100.0	100.0	140.4	140.4	0.2	0.2	172.96	-4,267.3	527.0	4,299.7	4,299.3	0.39	N/A		
200.0	200.0	253.7	253.7	0.3	0.4	172.96	-4,266.7	526.8	4,299.2	4,298.4	0.76	5,645.017		
300.0	300.0	366.9	366.9	0.5	0.6	172.96	-4,265.7	526.4	4,298.3	4,297.2	1.13	3,802.631		
400.0	400.0	480.2	480.1	0.7	0.8	172.97	-4,264.5	526.0	4,297.2	4,295.7	1.50	2,866.538		
500.0	500.0	593.4	593.4	0.9	1.0	146.64	-4,262.9	525.4	4,296.4	4,294.6	1.87	2,300.100		
513.6	513.6	608.8	608.8	0.9	1.1	146.64	-4,262.7	525.3	4,296.4	4,294.5	1.92	2,239.743		
600.0	600.0	706.6	706.6	1.0	1.2	146.67	-4,261.0	524.7	4,296.9	4,294.6	2.24	1,920.246		
700.0	699.9	984.1	983.8	1.2	1.8	146.81	-4,252.4	519.3	4,298.4	4,295.5	2.90	1,482.449		
800.0	799.7	1,492.4	1,487.3	1.4	3.1	147.59	-4,201.7	474.4	4,291.8	4,287.7	4.09	1,048.973		
899.9	899.3	1,607.0	1,599.8	1.6	3.5	147.87	-4,185.3	459.9	4,282.6	4,278.0	4.54	942.346		
1,000.0	999.0	1,644.2	1,636.4	1.8	3.6	147.95	-4,180.2	455.0	4,274.8	4,270.0	4.82	886.066		
1,100.0	1,098.6	1,844.6	1,833.4	2.0	4.3	148.36	-4,152.8	431.2	4,268.0	4,262.5	5.47	779.632		
1,200.0	1,198.2	1,924.0	1,911.3	2.3	4.6	148.52	-4,140.8	421.6	4,259.0	4,253.1	5.86	726.718		
1,300.0	1,297.8	2,000.3	1,986.2	2.5	4.9	148.68	-4,129.7	412.0	4,250.5	4,244.3	6.24	681.086		
1,400.0	1,397.5	2,122.7	2,106.3	2.7	5.3	148.93	-4,111.7	397.3	4,242.1	4,235.4	6.73	630.660		
1,500.0	1,497.1	2,212.0	2,194.0	2.9	5.6	149.12	-4,098.4	386.4	4,233.6	4,226.4	7.15	592.442		
1,600.0	1,596.7	2,258.1	2,239.2	3.2	5.8	149.22	-4,091.9	380.6	4,225.8	4,218.3	7.46	566.366		
1,700.0	1,696.3	2,365.4	2,344.8	3.4	6.2	149.44	-4,077.4	367.9	4,218.8	4,210.9	7.92	532.920		
1,800.0	1,795.9	2,496.0	2,473.2	3.6	6.7	149.70	-4,058.3	353.4	4,210.5	4,202.1	8.42	499.794		
1,900.0	1,895.6	2,560.0	2,536.1	3.8	6.9	149.82	-4,048.9	346.2	4,202.7	4,193.9	8.78	478.780		
2,000.0	1,995.2	2,719.0	2,692.2	4.1	7.5	150.15	-4,025.8	327.5	4,194.7	4,185.3	9.37	447.692		
2,100.0	2,094.8	2,782.0	2,754.1	4.3	7.7	150.29	-4,016.5	320.0	4,186.6	4,176.9	9.73	430.408		
2,200.0	2,194.4	2,875.7	2,846.2	4.5	8.0	150.48	-4,003.4	309.3	4,179.4	4,169.2	10.16	411.379		
2,300.0	2,294.0	2,974.5	2,943.3	4.8	8.4	150.68	-3,989.1	297.8	4,171.7	4,161.1	10.61	393.326		
2,400.0	2,393.7	3,074.8	3,041.9	5.0	8.8	150.89	-3,974.6	285.9	4,164.1	4,153.0	11.06	376.501		
2,500.0	2,493.3	3,176.1	3,141.4	5.2	9.1	151.11	-3,960.2	274.1	4,156.8	4,145.3	11.52	360.973		
2,600.0	2,592.9	3,276.0	3,239.7	5.4	9.5	151.32	-3,945.8	262.4	4,149.3	4,137.4	11.97	346.640		
2,700.0	2,692.5	3,345.2	3,307.6	5.7	9.7	151.46	-3,936.0	254.4	4,142.2	4,129.9	12.35	335.439		
2,800.0	2,792.1	3,482.0	3,442.2	5.9	10.2	151.75	-3,917.2	238.6	4,135.7	4,122.8	12.90	320.677		
2,900.0	2,891.8	3,563.4	3,522.2	6.1	10.5	151.92	-3,905.4	229.0	4,128.4	4,115.1	13.31	310.213		
3,000.0	2,991.4	3,659.9	3,617.1	6.4	10.9	152.13	-3,891.8	217.9	4,121.4	4,107.7	13.76	299.588		
3,100.0	3,091.0	3,754.0	3,709.6	6.6	11.2	152.32	-3,878.5	207.3	4,114.6	4,100.4	14.20	289.816		
3,200.0	3,190.6	3,874.9	3,828.5	6.8	11.7	152.58	-3,861.2	193.2	4,107.6	4,092.9	14.71	279.165		
3,300.0	3,290.2	3,988.3	3,939.8	7.1	12.1	152.82	-3,844.3	180.3	4,100.0	4,084.8	15.20	269.742		
3,400.0	3,389.9	4,069.3	4,019.5	7.3	12.4	152.98	-3,832.4	171.6	4,092.8	4,077.1	15.61	262.225		
3,500.0	3,489.5	4,161.6	4,110.3	7.5	12.7	153.17	-3,819.0	161.8	4,085.8	4,069.7	16.04	254.663		
3,600.0	3,589.1	4,243.0	4,190.3	7.7	13.0	153.34	-3,807.5	152.5	4,079.1	4,062.6	16.47	247.676		
3,700.0	3,688.7	4,309.7	4,255.9	8.0	13.2	153.49	-3,798.4	144.5	4,073.1	4,056.2	16.85	241.681		
3,800.0	3,788.3	4,408.5	4,353.3	8.2	13.6	153.70	-3,785.6	133.3	4,067.7	4,050.4	17.31	234.967		
3,900.0	3,888.0	4,483.4	4,427.0	8.4	13.8	153.86	-3,775.8	125.2	4,062.4	4,044.7	17.71	229.396		
4,000.0	3,987.6	4,597.7	4,539.8	8.7	14.2	154.09	-3,761.6	112.8	4,057.8	4,039.6	18.21	222.870		
4,100.0	4,087.2	4,687.0	4,627.8	8.9	14.5	154.28	-3,750.0	102.9	4,052.6	4,034.0	18.64	217.364		
4,200.0	4,186.8	4,775.2	4,714.8	9.1	14.8	154.46	-3,739.0	93.6	4,048.0	4,029.0	19.07	212.294		
4,300.0	4,286.4	4,852.4	4,791.1	9.4	15.1	154.62	-3,729.5	85.9	4,043.6	4,024.1	19.46	207.768		
4,400.0	4,386.1	4,920.8	4,858.7	9.6	15.3	154.74	-3,721.6	79.7	4,040.0	4,020.1	19.83	203.734		
4,500.0	4,485.7	5,037.0	4,973.7	9.8	15.6	154.95	-3,708.2	69.8	4,036.4	4,016.1	20.29	198.896		
4,600.0	4,585.3	5,100.0	5,036.1	10.1	15.8	155.05	-3,701.1	64.7	4,033.2	4,012.5	20.64	195.386		
4,700.0	4,684.9	5,180.7	5,116.0	10.3	16.0	155.20	-3,692.8	57.7	4,030.9	4,009.9	21.04	191.597		
4,800.0	4,784.5	5,304.0	5,238.1	10.5	16.4	155.43	-3,679.4	46.6	4,028.0	4,006.5	21.53	187.070		
4,900.0	4,884.1	5,375.3	5,308.7	10.8	16.6	155.56	-3,671.8	40.3	4,025.7	4,003.7	21.91	183.766		
5,000.0	4,983.8	5,482.0	5,414.5	11.0	16.9	155.75	-3,660.9	31.1	4,023.6	4,001.2	22.35	179.985		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error: 0.0 ft			
Survey Program: 811-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
5,100.0	5,083.4	5,546.0	5,477.9	11.2	17.1	155.86	-3,654.5	25.9	4,021.8	3,999.1	22.70	177.136				
5,200.0	5,183.0	5,659.8	5,590.8	11.4	17.4	156.05	-3,643.3	16.9	4,020.2	3,997.0	23.16	173.591				
5,300.0	5,282.6	5,735.9	5,666.4	11.7	17.6	156.17	-3,636.0	11.3	4,018.8	3,995.3	23.53	170.828				
5,400.0	5,382.2	5,801.0	5,731.0	11.9	17.8	156.27	-3,630.3	6.8	4,018.3	3,994.4	23.87	168.370				
5,404.3	5,386.5	5,801.0	5,731.0	11.9	17.8	156.27	-3,630.3	6.8	4,018.3	3,994.4	23.87	168.309				
5,500.0	5,481.9	5,853.1	5,782.9	12.1	17.9	156.35	-3,626.2	3.4	4,018.7	3,994.6	24.17	166.254				
5,600.0	5,581.5	5,908.8	5,838.3	12.4	18.0	156.43	-3,622.6	-0.1	4,020.4	3,996.0	24.48	164.224				
5,700.0	5,681.1	5,982.0	5,911.4	12.6	18.2	156.52	-3,618.3	-3.9	4,022.9	3,998.1	24.81	162.139				
5,800.0	5,780.7	6,043.0	5,972.2	12.8	18.3	156.59	-3,615.4	-6.3	4,026.3	4,001.2	25.10	160.388				
5,900.0	5,880.3	6,120.0	6,049.1	13.1	18.4	156.65	-3,612.4	-7.9	4,030.5	4,005.1	25.40	158.674				
6,000.0	5,980.0	6,169.3	6,098.4	13.3	18.5	156.68	-3,611.0	-8.3	4,035.6	4,010.0	25.65	157.306				
6,100.0	6,079.6	6,230.2	6,159.3	13.5	18.5	156.72	-3,609.9	-8.9	4,041.9	4,015.9	25.92	155.913				
6,200.0	6,179.2	6,342.0	6,271.1	13.8	18.7	156.79	-3,608.2	-10.0	4,048.4	4,022.2	26.27	154.090				
6,300.0	6,278.8	6,420.9	6,350.0	14.0	18.8	156.83	-3,607.0	-9.9	4,054.9	4,028.4	26.55	152.715				
6,400.0	6,378.4	6,491.9	6,421.0	14.2	18.8	156.85	-3,606.4	-8.9	4,062.1	4,035.3	26.82	151.468				
6,500.0	6,478.1	6,566.0	6,495.1	14.5	18.9	156.88	-3,606.6	-8.8	4,070.2	4,043.1	27.10	150.169				
6,600.0	6,577.7	6,671.3	6,600.4	14.7	19.0	156.94	-3,607.0	-9.5	4,078.7	4,051.3	27.43	148.671				
6,700.0	6,677.3	6,776.9	6,706.0	14.9	19.2	157.00	-3,606.9	-9.5	4,086.6	4,058.8	27.76	147.200				
6,800.0	6,776.9	6,906.4	6,835.4	15.1	19.3	157.05	-3,606.2	-9.3	4,094.0	4,065.9	28.13	145.556				
6,900.0	6,876.5	7,003.1	6,932.2	15.4	19.4	157.10	-3,605.4	-9.0	4,101.3	4,072.8	28.44	144.216				
7,000.0	6,976.2	7,090.9	7,019.9	15.6	19.5	157.13	-3,604.8	-8.6	4,108.6	4,079.9	28.74	142.974				
7,100.0	7,075.8	7,208.5	7,137.6	15.8	19.6	157.18	-3,604.2	-8.1	4,116.1	4,087.0	29.08	141.534				
7,147.2	7,122.8	7,253.4	7,182.5	15.9	19.7	157.20	-3,603.8	-7.9	4,119.5	4,090.3	29.23	140.935				
7,150.0	7,125.6	7,256.0	7,185.0	16.0	19.7	155.68	-3,603.8	-7.9	4,119.7	4,090.4	29.24	140.899				
7,200.0	7,175.5	7,301.4	7,230.5	16.0	19.8	73.75	-3,603.4	-7.7	4,120.9	4,091.5	29.39	140.198				
7,250.0	7,225.4	7,342.0	7,271.0	16.1	19.8	24.68	-3,603.1	-7.6	4,117.8	4,088.2	29.54	139.386				
7,300.0	7,274.8	7,389.3	7,318.3	16.0	19.8	15.46	-3,602.9	-7.4	4,110.4	4,080.7	29.70	138.377				
7,350.0	7,323.4	7,431.3	7,360.3	16.0	19.9	11.99	-3,602.7	-7.3	4,098.9	4,069.0	29.86	137.269				
7,400.0	7,370.8	7,472.3	7,401.4	15.9	19.9	10.26	-3,602.6	-7.2	4,083.2	4,053.2	30.02	136.034				
7,450.0	7,416.7	7,512.1	7,441.1	15.8	20.0	9.31	-3,602.6	-7.1	4,063.6	4,033.4	30.17	134.680				
7,500.0	7,460.7	7,550.2	7,479.3	15.7	20.0	8.80	-3,602.6	-7.0	4,040.1	4,009.7	30.33	133.214				
7,550.0	7,502.4	7,586.5	7,515.5	15.5	20.1	8.57	-3,602.7	-6.9	4,012.9	3,982.4	30.48	131.647				
7,600.0	7,541.6	7,633.0	7,562.0	15.4	20.1	8.59	-3,602.9	-6.8	3,982.2	3,951.6	30.65	129.905				
7,650.0	7,578.0	7,653.2	7,582.2	15.2	20.1	8.77	-3,603.0	-6.7	3,948.3	3,917.5	30.79	128.239				
7,700.0	7,611.2	7,683.4	7,612.4	15.1	20.2	9.18	-3,603.2	-6.7	3,911.3	3,880.4	30.94	126.415				
7,750.0	7,641.0	7,710.6	7,639.6	14.9	20.2	9.86	-3,603.3	-6.7	3,871.6	3,840.5	31.09	124.532				
7,800.0	7,667.3	7,736.3	7,665.3	14.8	20.2	10.89	-3,603.5	-6.7	3,829.4	3,798.2	31.24	122.591				
7,850.0	7,689.7	7,760.8	7,689.8	14.7	20.3	12.45	-3,603.7	-6.7	3,785.1	3,753.7	31.39	120.600				
7,900.0	7,708.2	7,780.9	7,710.0	14.7	20.3	14.89	-3,603.8	-6.7	3,739.0	3,707.4	31.53	118.592				
7,950.0	7,722.5	7,796.7	7,725.7	14.7	20.3	19.01	-3,603.9	-6.7	3,691.3	3,659.7	31.66	116.579				
8,000.0	7,732.6	7,807.8	7,736.8	14.8	20.3	26.94	-3,603.9	-6.8	3,642.6	3,610.8	31.79	114.571				
8,050.0	7,738.5	7,814.4	7,743.4	14.9	20.3	46.13	-3,604.0	-6.8	3,593.2	3,561.3	31.92	112.582				
8,092.0	7,740.0	7,816.2	7,745.3	15.0	20.3	86.19	-3,604.0	-6.8	3,551.4	3,519.4	32.01	110.934				
8,100.0	7,740.0	7,816.3	7,745.3	15.0	20.3	86.20	-3,604.0	-6.8	3,543.4	3,511.4	32.03	110.620				
8,200.0	7,740.0	7,816.8	7,745.9	15.5	20.3	86.32	-3,604.0	-6.8	3,443.7	3,411.5	32.26	106.747				
8,300.0	7,740.0	7,817.4	7,746.4	16.1	20.3	86.43	-3,604.0	-6.8	3,344.1	3,311.6	32.49	102.919				
8,400.0	7,740.0	7,817.9	7,747.0	16.9	20.3	86.54	-3,604.0	-6.8	3,244.4	3,211.7	32.73	99.135				
8,500.0	7,740.0	7,818.5	7,747.5	17.8	20.3	86.65	-3,604.0	-6.8	3,144.8	3,111.9	32.97	95.395				
8,600.0	7,740.0	7,819.0	7,748.1	18.9	20.3	86.76	-3,604.0	-6.8	3,045.2	3,012.0	33.21	91.695				
8,700.0	7,740.0	7,819.6	7,748.6	20.0	20.3	86.87	-3,604.0	-6.8	2,945.7	2,912.2	33.46	88.036				
8,800.0	7,740.0	7,820.1	7,749.2	21.2	20.3	86.99	-3,604.0	-6.8	2,846.2	2,812.5	33.72	84.416				
8,900.0	7,740.0	7,820.7	7,749.7	22.5	20.3	87.10	-3,604.0	-6.8	2,746.7	2,712.7	33.98	80.833				

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error: 0.0 ft			
Survey Program: 811-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
9,000.0	7,740.0	7,821.2	7,750.2	23.9	20.3	87.21	-3,604.0	-6.8	2,647.2	2,613.0	34.25	77.287				
9,100.0	7,740.0	7,821.8	7,750.8	25.3	20.3	87.31	-3,604.0	-6.8	2,547.8	2,513.3	34.53	73.776				
9,200.0	7,740.0	7,822.3	7,751.3	26.7	20.3	87.42	-3,604.0	-6.8	2,448.5	2,413.6	34.83	70.300				
9,300.0	7,740.0	7,822.8	7,751.9	28.2	20.3	87.53	-3,604.0	-6.8	2,349.2	2,314.0	35.14	66.858				
9,400.0	7,740.0	7,823.4	7,752.4	29.7	20.3	87.64	-3,604.0	-6.8	2,249.9	2,214.5	35.46	63.448				
9,500.0	7,740.0	7,823.9	7,752.9	31.3	20.3	87.75	-3,604.0	-6.8	2,150.7	2,114.9	35.80	60.070				
9,600.0	7,740.0	7,824.4	7,753.4	32.8	20.3	87.85	-3,604.0	-6.8	2,051.6	2,015.5	36.17	56.723				
9,700.0	7,740.0	7,825.0	7,754.0	34.4	20.3	87.96	-3,604.0	-6.8	1,952.6	1,916.1	36.56	53.406				
9,800.0	7,740.0	7,825.5	7,754.5	36.0	20.3	88.07	-3,604.0	-6.8	1,853.7	1,816.8	36.99	50.119				
9,900.0	7,740.0	7,826.0	7,755.0	37.6	20.3	88.17	-3,604.0	-6.8	1,755.0	1,717.5	37.45	46.861				
10,000.0	7,740.0	7,826.5	7,755.5	39.2	20.3	88.28	-3,604.0	-6.8	1,656.4	1,618.4	37.96	43.633				
10,100.0	7,740.0	7,827.0	7,756.1	40.9	20.3	88.38	-3,604.0	-6.8	1,557.9	1,519.4	38.53	40.435				
10,200.0	7,740.0	7,827.5	7,756.6	42.5	20.3	88.49	-3,604.0	-6.8	1,459.7	1,420.5	39.17	37.267				
10,300.0	7,740.0	7,828.1	7,757.1	44.2	20.3	88.59	-3,604.0	-6.8	1,361.7	1,321.8	39.90	34.132				
10,400.0	7,740.0	7,828.6	7,757.6	45.8	20.3	88.70	-3,604.0	-6.8	1,264.0	1,223.3	40.73	31.031				
10,500.0	7,740.0	7,829.1	7,758.1	47.5	20.3	88.80	-3,604.0	-6.8	1,166.8	1,125.1	41.72	27.969				
10,600.0	7,740.0	7,829.6	7,758.6	49.1	20.3	88.90	-3,604.0	-6.8	1,070.0	1,027.1	42.89	24.951				
10,700.0	7,740.0	7,830.1	7,759.1	50.8	20.3	89.01	-3,604.0	-6.8	973.9	929.6	44.30	21.986				
10,800.0	7,740.0	7,830.6	7,759.6	52.5	20.3	89.11	-3,604.0	-6.8	878.7	832.6	46.03	19.089				
10,900.0	7,740.0	7,831.1	7,760.1	54.2	20.3	89.21	-3,604.1	-6.8	784.6	736.4	48.20	16.278				
11,000.0	7,740.0	7,831.6	7,760.6	55.9	20.3	89.31	-3,604.1	-6.8	692.2	641.3	50.97	13.581				
11,100.0	7,740.0	7,832.1	7,761.1	57.6	20.3	89.41	-3,604.1	-6.8	602.3	547.7	54.56	11.039				
11,200.0	7,740.0	7,832.6	7,761.6	59.3	20.3	89.51	-3,604.1	-6.8	516.1	456.8	59.27	8.707				
11,300.0	7,740.0	7,833.1	7,762.1	61.0	20.3	89.61	-3,604.1	-6.8	435.7	370.3	65.40	6.663				
11,400.0	7,740.0	7,833.6	7,762.6	62.7	20.3	89.71	-3,604.1	-6.8	365.3	292.3	72.96	5.007				
11,500.0	7,740.0	7,834.1	7,763.1	64.4	20.3	89.81	-3,604.1	-6.8	311.4	230.8	80.68	3.860				
11,600.0	7,740.0	7,834.6	7,763.6	66.1	20.3	89.91	-3,604.1	-6.8	283.8	199.1	84.73	3.350				
11,632.2	7,740.0	7,834.7	7,763.7	66.6	20.3	89.94	-3,604.1	-6.8	282.0	197.5	84.48	3.338 CC, ES, SF				
11,700.0	7,740.0	7,835.0	7,764.1	67.8	20.3	90.01	-3,604.1	-6.8	290.0	208.7	81.30	3.567				
11,800.0	7,740.0	7,835.5	7,764.5	69.5	20.3	90.11	-3,604.1	-6.8	328.1	255.4	72.73	4.511				
11,900.0	7,740.0	7,836.0	7,765.0	71.2	20.3	90.21	-3,604.1	-6.8	388.9	324.9	64.04	6.073				
12,000.0	7,740.0	7,836.5	7,765.5	72.9	20.3	90.31	-3,604.1	-6.8	463.5	406.2	57.27	8.093				
12,100.0	7,740.0	7,837.0	7,766.0	74.7	20.3	90.40	-3,604.1	-6.8	546.2	493.8	52.39	10.425				
12,200.0	7,740.0	7,837.5	7,766.5	76.4	20.3	90.50	-3,604.1	-6.8	634.0	585.0	48.93	12.957				
12,300.0	7,740.0	7,837.9	7,766.9	78.1	20.3	90.60	-3,604.1	-6.8	724.9	678.4	46.45	15.607				
12,400.0	7,740.0	7,838.4	7,767.4	79.8	20.3	90.69	-3,604.1	-6.8	817.9	773.3	44.65	18.320				
12,500.0	7,740.0	7,838.9	7,767.9	81.6	20.3	90.79	-3,604.1	-6.8	912.5	869.1	43.33	21.058				
12,600.0	7,740.0	7,839.3	7,768.4	83.3	20.3	90.88	-3,604.1	-6.8	1,008.0	965.7	42.35	23.800				
12,700.0	7,740.0	7,839.8	7,768.8	85.0	20.3	90.98	-3,604.1	-6.8	1,104.4	1,062.8	41.63	26.530				
12,800.0	7,740.0	7,840.3	7,769.3	86.7	20.3	91.07	-3,604.1	-6.8	1,201.4	1,160.3	41.08	29.241				
12,900.0	7,740.0	7,840.7	7,769.8	88.5	20.3	91.17	-3,604.1	-6.8	1,298.8	1,258.1	40.68	31.927				
13,000.0	7,740.0	7,841.2	7,770.2	90.2	20.3	91.26	-3,604.1	-6.8	1,396.6	1,356.2	40.38	34.587				
13,100.0	7,740.0	7,841.7	7,770.7	91.9	20.3	91.36	-3,604.1	-6.8	1,494.6	1,454.5	40.16	37.218				
13,200.0	7,740.0	7,842.1	7,771.1	93.7	20.3	91.45	-3,604.1	-6.8	1,592.9	1,552.9	40.00	39.821				
13,300.0	7,740.0	7,842.6	7,771.6	95.4	20.3	91.54	-3,604.1	-6.8	1,691.5	1,651.6	39.90	42.397				
13,400.0	7,740.0	7,843.0	7,772.1	97.1	20.3	91.63	-3,604.1	-6.8	1,790.1	1,750.3	39.83	44.947				
13,500.0	7,740.0	7,843.5	7,772.5	98.9	20.3	91.73	-3,604.1	-6.8	1,888.9	1,849.2	39.79	47.470				
13,600.0	7,740.0	7,843.9	7,773.0	100.6	20.3	91.82	-3,604.1	-6.8	1,987.9	1,948.1	39.78	49.968				
13,700.0	7,740.0	7,844.4	7,773.4	102.3	20.3	91.91	-3,604.1	-6.8	2,086.9	2,047.1	39.79	52.442				
13,800.0	7,740.0	7,844.8	7,773.9	104.1	20.3	92.00	-3,604.1	-6.8	2,186.0	2,146.2	39.82	54.893				
13,900.0	7,740.0	7,845.3	7,774.3	105.8	20.3	92.09	-3,604.1	-6.8	2,285.2	2,245.4	39.87	57.322				
14,000.0	7,740.0	7,845.7	7,774.8	107.5	20.4	92.18	-3,604.1	-6.8	2,384.5	2,344.6	39.92	59.729				

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD											Offset Site Error:		0.0 ft	
Survey Program: 811-MWD											Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,740.0	7,846.2	7,775.2	109.3	20.4	92.27	-3,604.1	-6.8	2,483.8	2,443.8	39.99	62.116		
14,200.0	7,740.0	7,846.6	7,775.6	111.0	20.4	92.36	-3,604.1	-6.8	2,583.2	2,543.1	40.06	64.482		
14,300.0	7,740.0	7,847.1	7,776.1	112.8	20.4	92.45	-3,604.1	-6.8	2,682.6	2,642.5	40.14	66.829		
14,400.0	7,740.0	7,847.5	7,776.5	114.5	20.4	92.54	-3,604.1	-6.8	2,782.1	2,741.9	40.23	69.157		
14,500.0	7,740.0	7,847.9	7,777.0	116.2	20.4	92.63	-3,604.1	-6.8	2,881.6	2,841.3	40.32	71.467		
14,600.0	7,740.0	7,848.4	7,777.4	118.0	20.4	92.72	-3,604.1	-6.8	2,981.1	2,940.7	40.42	73.759		
14,700.0	7,740.0	7,848.8	7,777.8	119.7	20.4	92.81	-3,604.1	-6.8	3,080.7	3,040.2	40.52	76.034		
14,800.0	7,740.0	7,849.3	7,778.3	121.5	20.4	92.89	-3,604.1	-6.8	3,180.3	3,139.7	40.62	78.292		
14,900.0	7,740.0	7,849.7	7,778.7	123.2	20.4	92.98	-3,604.1	-6.8	3,279.9	3,239.2	40.73	80.534		
15,000.0	7,740.0	7,850.1	7,779.1	124.9	20.4	93.07	-3,604.1	-6.8	3,379.5	3,338.7	40.84	82.760		
15,100.0	7,740.0	7,850.5	7,779.6	126.7	20.4	93.16	-3,604.1	-6.8	3,479.2	3,438.3	40.95	84.970		
15,200.0	7,740.0	7,851.0	7,780.0	128.4	20.4	93.24	-3,604.1	-6.8	3,578.9	3,537.8	41.06	87.164		
15,300.0	7,740.0	7,851.4	7,780.4	130.2	20.4	93.33	-3,604.1	-6.8	3,678.6	3,637.4	41.17	89.344		
15,400.0	7,740.0	7,851.8	7,780.8	131.9	20.4	93.41	-3,604.1	-6.8	3,778.3	3,737.0	41.29	91.509		
15,500.0	7,740.0	7,852.2	7,781.3	133.7	20.4	93.50	-3,604.2	-6.8	3,878.0	3,836.6	41.41	93.659		
15,600.0	7,740.0	7,852.7	7,781.7	135.4	20.4	93.59	-3,604.2	-6.8	3,977.8	3,936.2	41.52	95.796		
15,700.0	7,740.0	7,853.1	7,782.1	137.1	20.4	93.67	-3,604.2	-6.8	4,077.5	4,035.9	41.64	97.918		
15,800.0	7,740.0	7,853.5	7,782.5	138.9	20.4	93.76	-3,604.2	-6.8	4,177.3	4,135.5	41.76	100.027		
15,900.0	7,740.0	7,853.9	7,782.9	140.6	20.4	93.84	-3,604.2	-6.8	4,277.1	4,235.2	41.88	102.123		
15,953.0	7,740.0	7,854.1	7,783.2	141.6	20.4	93.88	-3,604.2	-6.8	4,329.9	4,288.0	41.95	103.227		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	17.3	17.3	0.0	0.0	172.55	-4,267.5	557.9	4,303.8					
100.0	100.0	99.2	99.2	0.2	0.1	172.56	-4,268.0	557.0	4,304.3	4,304.0	0.30	N/A		
200.0	200.0	196.2	196.2	0.3	0.3	172.58	-4,268.7	555.7	4,304.8	4,304.1	0.65	6,667.819		
300.0	300.0	267.9	267.9	0.5	0.4	172.59	-4,269.5	555.0	4,305.8	4,304.8	0.95	4,552.048		
400.0	400.0	339.4	339.4	0.7	0.6	172.60	-4,270.6	554.5	4,307.3	4,306.1	1.25	3,458.177		
500.0	500.0	396.4	396.3	0.9	0.7	146.25	-4,272.1	554.0	4,310.5	4,309.0	1.52	2,835.393		
600.0	600.0	450.0	449.9	1.0	0.8	146.24	-4,274.1	553.5	4,316.2	4,314.4	1.79	2,411.140		
700.0	699.9	490.5	490.3	1.2	0.9	146.22	-4,276.1	553.0	4,324.6	4,322.5	2.04	2,121.630		
800.0	799.7	547.5	547.2	1.4	1.0	146.20	-4,279.7	552.3	4,335.6	4,333.3	2.32	1,869.245		
899.9	899.3	606.0	605.6	1.6	1.1	146.18	-4,283.7	551.4	4,348.8	4,346.2	2.61	1,668.022		
1,000.0	999.0	668.0	667.4	1.8	1.2	146.24	-4,288.5	550.2	4,363.6	4,360.7	2.90	1,502.838		
1,100.0	1,098.6	765.3	764.3	2.0	1.4	146.35	-4,296.8	547.9	4,379.0	4,375.8	3.27	1,340.147		
1,200.0	1,198.2	859.5	858.2	2.3	1.6	146.45	-4,304.6	545.6	4,394.2	4,390.6	3.63	1,211.445		
1,300.0	1,297.8	919.3	917.7	2.5	1.8	146.52	-4,310.1	544.1	4,410.2	4,406.2	3.92	1,124.088		
1,400.0	1,397.5	969.3	967.4	2.7	1.9	146.57	-4,315.1	542.6	4,427.1	4,422.9	4.20	1,053.686		
1,500.0	1,497.1	1,004.0	1,001.9	2.9	2.0	146.62	-4,319.0	541.6	4,445.2	4,440.7	4.45	998.981		
1,600.0	1,596.7	1,068.0	1,065.3	3.2	2.2	146.69	-4,327.0	539.5	4,464.5	4,459.8	4.76	938.795		
1,700.0	1,696.3	1,097.0	1,094.1	3.4	2.3	146.73	-4,331.1	538.6	4,485.0	4,480.0	4.99	898.511		
1,800.0	1,795.9	1,133.0	1,129.6	3.6	2.4	146.78	-4,336.4	537.4	4,506.8	4,501.6	5.24	860.046		
1,900.0	1,895.6	1,197.0	1,192.7	3.8	2.6	146.86	-4,346.8	535.0	4,529.7	4,524.1	5.55	816.370		
2,000.0	1,995.2	1,237.2	1,232.3	4.1	2.7	146.92	-4,353.8	532.9	4,553.6	4,547.8	5.81	783.681		
2,100.0	2,094.8	1,306.6	1,300.2	4.3	3.0	147.05	-4,366.7	528.0	4,578.5	4,572.3	6.14	745.119		
2,200.0	2,194.4	1,420.0	1,411.0	4.5	3.4	147.30	-4,387.9	515.9	4,603.3	4,596.7	6.61	696.302		
2,300.0	2,294.0	1,471.9	1,461.5	4.8	3.6	147.43	-4,397.8	509.5	4,628.5	4,621.6	6.92	668.846		
2,400.0	2,393.7	1,524.1	1,512.3	5.0	3.8	147.55	-4,408.3	503.1	4,654.7	4,647.5	7.23	643.928		
2,500.0	2,493.3	1,639.2	1,624.1	5.2	4.3	147.82	-4,431.5	489.4	4,681.0	4,673.3	7.71	606.927		
2,600.0	2,592.9	1,681.7	1,665.5	5.4	4.5	147.92	-4,440.3	484.4	4,707.9	4,699.9	8.00	588.644		
2,700.0	2,692.5	1,738.0	1,720.0	5.7	4.8	148.05	-4,452.6	477.5	4,735.9	4,727.6	8.32	569.150		
2,800.0	2,792.1	1,803.1	1,782.8	5.9	5.1	148.21	-4,467.3	469.3	4,764.7	4,756.0	8.67	549.289		
2,900.0	2,891.8	1,963.5	1,938.0	6.1	5.8	148.59	-4,502.4	449.4	4,793.0	4,783.7	9.30	515.339		
3,000.0	2,991.4	2,081.2	2,052.3	6.4	6.3	148.85	-4,527.1	435.5	4,820.5	4,810.6	9.81	491.591		
3,100.0	3,091.0	2,162.2	2,130.9	6.6	6.7	149.03	-4,544.0	425.3	4,847.8	4,837.6	10.21	475.028		
3,200.0	3,190.6	2,290.9	2,255.8	6.8	7.2	149.32	-4,570.7	409.6	4,875.2	4,864.5	10.74	454.141		
3,300.0	3,290.2	2,405.6	2,367.4	7.1	7.7	149.56	-4,593.9	396.7	4,902.2	4,891.0	11.23	436.690		
3,400.0	3,389.9	2,571.1	2,528.1	7.3	8.5	149.94	-4,625.6	373.6	4,928.0	4,916.1	11.90	413.965		
3,500.0	3,489.5	2,664.3	2,618.9	7.5	8.9	150.15	-4,642.6	361.6	4,953.1	4,940.8	12.33	401.743		
3,600.0	3,589.1	2,724.0	2,677.2	7.7	9.1	150.27	-4,654.0	354.6	4,979.1	4,966.4	12.65	393.589		
3,700.0	3,688.7	2,767.2	2,719.2	8.0	9.3	150.36	-4,662.6	349.5	5,005.9	4,993.0	12.93	387.152		
3,800.0	3,788.3	2,819.0	2,769.5	8.2	9.5	150.47	-4,673.3	343.0	5,033.5	5,020.3	13.23	380.363		
3,900.0	3,888.0	2,899.4	2,847.4	8.4	9.9	150.64	-4,690.4	332.6	5,061.8	5,048.2	13.62	371.546		
4,000.0	3,987.6	3,035.7	2,979.4	8.7	10.6	150.93	-4,719.3	315.2	5,090.1	5,075.9	14.18	358.853		
4,100.0	4,087.2	3,142.6	3,083.1	8.9	11.0	151.15	-4,741.1	301.2	5,117.7	5,103.0	14.65	349.221		
4,200.0	4,186.8	3,247.4	3,184.9	9.1	11.5	151.37	-4,762.2	287.9	5,145.0	5,129.9	15.11	340.429		
4,300.0	4,286.4	3,360.5	3,294.8	9.4	12.0	151.59	-4,784.8	273.9	5,172.3	5,156.7	15.59	331.785		
4,400.0	4,386.1	3,440.6	3,372.7	9.6	12.4	151.74	-4,800.7	264.3	5,199.5	5,183.5	15.97	325.666		
4,500.0	4,485.7	3,544.4	3,473.5	9.8	12.8	151.95	-4,821.8	251.2	5,227.2	5,210.8	16.42	318.392		
4,600.0	4,585.3	3,639.2	3,565.7	10.1	13.3	152.13	-4,840.5	239.3	5,254.4	5,237.6	16.84	312.035		
4,700.0	4,684.9	3,697.0	3,621.8	10.3	13.5	152.24	-4,852.2	231.9	5,282.2	5,265.0	17.15	308.025		
4,800.0	4,784.5	3,842.9	3,763.5	10.5	14.2	152.52	-4,881.6	213.3	5,309.8	5,292.1	17.72	299.582		
4,900.0	4,884.1	3,937.9	3,855.9	10.8	14.6	152.70	-4,900.5	201.3	5,337.3	5,319.2	18.14	294.246		
5,000.0	4,983.8	4,091.0	4,005.1	11.0	15.2	152.97	-4,929.3	183.0	5,363.6	5,344.9	18.72	286.496		
5,100.0	5,083.4	4,149.4	4,062.0	11.2	15.5	153.08	-4,940.3	175.8	5,390.2	5,371.1	19.03	283.290		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
5,200.0	5,183.0	4,241.1	4,151.1	11.4	15.9	153.25	-4,958.2	164.5	5,417.5	5,398.0	19.42	278.902				
5,300.0	5,282.6	4,347.8	4,255.2	11.7	16.4	153.43	-4,978.6	151.8	5,444.3	5,424.4	19.87	274.004				
5,400.0	5,382.2	4,568.0	4,470.3	11.9	17.3	153.80	-5,018.0	126.2	5,470.0	5,449.4	20.62	265.237				
5,500.0	5,481.9	4,648.6	4,549.2	12.1	17.6	153.93	-5,031.7	117.2	5,494.8	5,473.8	20.98	261.860				
5,600.0	5,581.5	4,745.9	4,644.3	12.4	18.0	154.09	-5,048.4	105.5	5,520.0	5,498.6	21.40	257.933				
5,700.0	5,681.1	4,816.5	4,713.3	12.6	18.3	154.21	-5,060.6	96.8	5,545.3	5,523.5	21.73	255.237				
5,800.0	5,780.7	5,100.8	4,992.5	12.8	19.3	154.60	-5,106.8	69.5	5,570.1	5,547.5	22.59	246.598				
5,900.0	5,880.3	5,244.5	5,134.3	13.1	19.8	154.78	-5,126.8	57.3	5,592.0	5,568.9	23.08	242.338				
6,000.0	5,980.0	5,396.0	5,283.9	13.3	20.3	154.97	-5,146.3	44.8	5,612.9	5,589.3	23.58	238.053				
6,100.0	6,079.6	5,552.0	5,438.4	13.5	20.7	155.15	-5,164.9	32.3	5,632.8	5,608.7	24.08	233.899				
6,200.0	6,179.2	5,597.6	5,483.4	13.8	20.9	155.20	-5,170.4	29.0	5,652.9	5,628.6	24.33	232.381				
6,300.0	6,278.8	5,868.1	5,751.6	14.0	21.6	155.48	-5,201.2	10.8	5,673.1	5,648.0	25.06	226.350				
6,400.0	6,378.4	5,950.4	5,833.3	14.2	21.8	155.56	-5,209.0	5.6	5,690.7	5,665.3	25.39	224.156				
6,500.0	6,478.1	6,588.6	6,469.8	14.5	22.9	155.96	-5,242.0	-12.5	5,704.0	5,677.4	26.60	214.459				
6,600.0	6,577.7	6,694.9	6,576.1	14.7	23.0	155.99	-5,242.7	-11.4	5,712.5	5,685.6	26.91	212.305				
6,700.0	6,677.3	6,846.5	6,727.7	14.9	23.1	156.03	-5,242.4	-9.6	5,720.1	5,692.8	27.27	209.722				
6,800.0	6,776.9	6,955.8	6,837.0	15.1	23.2	156.05	-5,241.9	-8.4	5,727.6	5,700.0	27.59	207.562				
6,900.0	6,876.5	7,051.3	6,932.5	15.4	23.3	156.08	-5,241.4	-7.8	5,735.0	5,707.1	27.90	205.547				
7,000.0	6,976.2	7,128.4	7,009.6	15.6	23.3	156.10	-5,241.1	-7.4	5,742.6	5,714.4	28.18	203.765				
7,100.0	7,075.8	7,252.9	7,134.1	15.8	23.4	156.14	-5,240.9	-6.3	5,750.4	5,721.9	28.53	201.581				
7,147.2	7,122.8	7,310.9	7,192.1	15.9	23.5	156.15	-5,240.5	-6.0	5,753.8	5,725.2	28.69	200.553				
7,150.0	7,125.6	7,314.0	7,195.2	16.0	23.5	154.63	-5,240.5	-6.0	5,754.0	5,725.3	28.70	200.494				
7,200.0	7,175.5	7,361.9	7,243.1	16.0	23.5	72.70	-5,240.1	-5.9	5,755.2	5,726.4	28.86	199.441				
7,250.0	7,225.4	7,406.5	7,287.6	16.1	23.6	23.63	-5,239.8	-5.8	5,752.1	5,723.1	29.01	198.273				
7,300.0	7,274.8	7,449.0	7,330.2	16.0	23.6	14.38	-5,239.6	-5.8	5,744.6	5,715.5	29.16	196.984				
7,350.0	7,323.4	7,499.7	7,380.9	16.0	23.6	10.88	-5,239.3	-5.7	5,733.0	5,703.6	29.33	195.490				
7,400.0	7,370.8	7,551.2	7,432.4	15.9	23.7	9.11	-5,239.0	-5.6	5,717.1	5,687.6	29.49	193.859				
7,450.0	7,416.7	7,590.0	7,471.2	15.8	23.7	8.11	-5,238.7	-5.5	5,697.1	5,667.5	29.64	192.222				
7,500.0	7,460.7	7,627.1	7,508.3	15.7	23.7	7.52	-5,238.6	-5.4	5,673.3	5,643.5	29.78	190.484				
7,550.0	7,502.4	7,662.3	7,543.5	15.5	23.8	7.20	-5,238.4	-5.2	5,645.8	5,615.9	29.93	188.652				
7,600.0	7,541.6	7,695.4	7,576.6	15.4	23.8	7.08	-5,238.4	-5.1	5,614.9	5,584.8	30.07	186.737				
7,650.0	7,578.0	7,726.2	7,607.4	15.2	23.8	7.13	-5,238.3	-4.9	5,580.6	5,550.4	30.21	184.750				
7,700.0	7,611.2	7,761.0	7,642.2	15.1	23.9	7.36	-5,238.3	-4.6	5,543.4	5,513.1	30.35	182.651				
7,750.0	7,641.0	7,783.0	7,664.2	14.9	23.9	7.77	-5,238.3	-4.5	5,503.4	5,473.0	30.48	180.576				
7,800.0	7,667.3	7,809.3	7,690.5	14.8	23.9	8.46	-5,238.4	-4.3	5,461.0	5,430.4	30.61	178.407				
7,850.0	7,689.7	7,831.8	7,712.9	14.7	23.9	9.53	-5,238.4	-4.1	5,416.5	5,385.7	30.74	176.220				
7,900.0	7,708.2	7,850.3	7,731.4	14.7	24.0	11.25	-5,238.4	-4.0	5,370.1	5,339.3	30.86	174.026				
7,950.0	7,722.5	7,864.6	7,745.8	14.7	24.0	14.24	-5,238.4	-3.9	5,322.4	5,291.4	30.97	171.837				
8,000.0	7,732.6	7,874.8	7,756.0	14.8	24.0	20.34	-5,238.4	-3.8	5,273.5	5,242.4	31.08	169.666				
8,050.0	7,738.5	7,880.6	7,761.8	14.9	24.0	37.57	-5,238.4	-3.8	5,223.9	5,192.8	31.18	167.524				
8,092.0	7,740.0	7,882.2	7,763.4	15.0	24.0	89.87	-5,238.4	-3.8	5,182.1	5,150.8	31.26	165.756				
8,100.0	7,740.0	7,882.2	7,763.4	15.0	24.0	89.87	-5,238.4	-3.8	5,174.0	5,142.8	31.28	165.420				
8,200.0	7,740.0	7,882.2	7,763.4	15.5	24.0	89.88	-5,238.4	-3.8	5,074.2	5,042.7	31.46	161.272				
8,300.0	7,740.0	7,882.3	7,763.5	16.1	24.0	89.89	-5,238.4	-3.8	4,974.4	4,942.7	31.65	157.174				
8,400.0	7,740.0	7,882.3	7,763.5	16.9	24.0	89.90	-5,238.4	-3.8	4,874.5	4,842.7	31.83	153.124				
8,500.0	7,740.0	7,882.4	7,763.6	17.8	24.0	89.91	-5,238.4	-3.8	4,774.7	4,742.7	32.02	149.122				
8,600.0	7,740.0	7,882.4	7,763.6	18.9	24.0	89.92	-5,238.4	-3.8	4,674.9	4,642.7	32.20	145.166				
8,700.0	7,740.0	7,882.5	7,763.7	20.0	24.0	89.93	-5,238.4	-3.8	4,575.0	4,542.6	32.39	141.254				
8,800.0	7,740.0	7,882.5	7,763.7	21.2	24.0	89.94	-5,238.4	-3.8	4,475.2	4,442.7	32.57	137.384				
8,900.0	7,740.0	7,882.6	7,763.8	22.5	24.0	89.95	-5,238.4	-3.8	4,375.4	4,342.7	32.76	133.557				
9,000.0	7,740.0	7,882.6	7,763.8	23.9	24.0	89.96	-5,238.4	-3.8	4,275.6	4,242.7	32.95	129.770				
9,100.0	7,740.0	7,882.7	7,763.9	25.3	24.0	89.97	-5,238.4	-3.8	4,175.9	4,142.7	33.14	126.022				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
9,200.0	7,740.0	7,882.7	7,763.9	26.7	24.0	89.98	-5,238.4	-3.8	4,076.1	4,042.8	33.33	122.312		
9,300.0	7,740.0	7,882.8	7,764.0	28.2	24.0	89.99	-5,238.4	-3.8	3,976.3	3,942.8	33.52	118.640		
9,400.0	7,740.0	7,882.8	7,764.0	29.7	24.0	90.00	-5,238.4	-3.8	3,876.6	3,842.9	33.71	115.003		
9,500.0	7,740.0	7,882.9	7,764.1	31.3	24.0	90.01	-5,238.4	-3.8	3,776.8	3,742.9	33.90	111.401		
9,600.0	7,740.0	7,882.9	7,764.1	32.8	24.0	90.02	-5,238.4	-3.8	3,677.1	3,643.0	34.10	107.832		
9,700.0	7,740.0	7,883.0	7,764.2	34.4	24.0	90.03	-5,238.4	-3.8	3,577.4	3,543.1	34.30	104.297		
9,800.0	7,740.0	7,883.0	7,764.2	36.0	24.0	90.04	-5,238.4	-3.8	3,477.7	3,443.2	34.50	100.793		
9,900.0	7,740.0	7,883.1	7,764.3	37.6	24.0	90.05	-5,238.4	-3.8	3,378.1	3,343.4	34.71	97.320		
10,000.0	7,740.0	7,883.1	7,764.3	39.2	24.0	90.06	-5,238.4	-3.8	3,278.4	3,243.5	34.92	93.877		
10,100.0	7,740.0	7,883.2	7,764.4	40.9	24.0	90.07	-5,238.4	-3.8	3,178.8	3,143.6	35.14	90.463		
10,200.0	7,740.0	7,883.2	7,764.4	42.5	24.0	90.08	-5,238.4	-3.8	3,079.2	3,043.8	35.36	87.077		
10,300.0	7,740.0	7,883.3	7,764.5	44.2	24.0	90.09	-5,238.4	-3.8	2,979.6	2,944.0	35.59	83.719		
10,400.0	7,740.0	7,883.3	7,764.5	45.8	24.0	90.11	-5,238.4	-3.8	2,880.1	2,844.2	35.83	80.386		
10,500.0	7,740.0	7,883.4	7,764.6	47.5	24.0	90.12	-5,238.4	-3.8	2,780.6	2,744.5	36.07	77.079		
10,600.0	7,740.0	7,883.4	7,764.6	49.1	24.0	90.13	-5,238.4	-3.8	2,681.1	2,644.7	36.33	73.797		
10,700.0	7,740.0	7,883.5	7,764.7	50.8	24.0	90.14	-5,238.4	-3.8	2,581.6	2,545.0	36.60	70.538		
10,800.0	7,740.0	7,883.5	7,764.7	52.5	24.0	90.15	-5,238.4	-3.8	2,482.3	2,445.4	36.88	67.303		
10,900.0	7,740.0	7,883.6	7,764.8	54.2	24.0	90.16	-5,238.4	-3.8	2,382.9	2,345.7	37.18	64.089		
11,000.0	7,740.0	7,883.6	7,764.8	55.9	24.0	90.17	-5,238.4	-3.8	2,283.6	2,246.1	37.50	60.897		
11,100.0	7,740.0	7,883.7	7,764.9	57.6	24.0	90.18	-5,238.4	-3.8	2,184.4	2,146.6	37.84	57.725		
11,200.0	7,740.0	7,883.7	7,764.9	59.3	24.0	90.19	-5,238.4	-3.8	2,085.3	2,047.1	38.21	54.574		
11,300.0	7,740.0	7,883.8	7,765.0	61.0	24.0	90.20	-5,238.4	-3.8	1,986.2	1,947.6	38.61	51.442		
11,400.0	7,740.0	7,883.8	7,765.0	62.7	24.0	90.21	-5,238.4	-3.8	1,887.3	1,848.2	39.05	48.329		
11,500.0	7,740.0	7,883.9	7,765.1	64.4	24.0	90.22	-5,238.4	-3.8	1,788.4	1,748.9	39.54	45.234		
11,600.0	7,740.0	7,883.9	7,765.1	66.1	24.0	90.23	-5,238.4	-3.8	1,689.7	1,649.6	40.08	42.159		
11,700.0	7,740.0	7,884.0	7,765.2	67.8	24.0	90.24	-5,238.4	-3.8	1,591.2	1,550.5	40.69	39.102		
11,800.0	7,740.0	7,884.0	7,765.2	69.5	24.0	90.25	-5,238.4	-3.8	1,492.8	1,451.4	41.39	36.066		
11,900.0	7,740.0	7,884.1	7,765.3	71.2	24.0	90.26	-5,238.4	-3.8	1,394.7	1,352.5	42.20	33.052		
12,000.0	7,740.0	7,884.1	7,765.3	72.9	24.0	90.27	-5,238.4	-3.8	1,296.9	1,253.7	43.14	30.063		
12,100.0	7,740.0	7,884.2	7,765.4	74.7	24.0	90.28	-5,238.4	-3.8	1,199.4	1,155.2	44.25	27.103		
12,200.0	7,740.0	7,884.2	7,765.4	76.4	24.0	90.29	-5,238.4	-3.8	1,102.4	1,056.8	45.59	24.178		
12,300.0	7,740.0	7,884.3	7,765.5	78.1	24.0	90.30	-5,238.4	-3.8	1,006.0	958.8	47.23	21.299		
12,400.0	7,740.0	7,884.3	7,765.5	79.8	24.0	90.31	-5,238.4	-3.8	910.3	861.1	49.26	18.479		
12,500.0	7,740.0	7,884.4	7,765.6	81.6	24.0	90.32	-5,238.4	-3.8	815.7	763.9	51.83	15.737		
12,600.0	7,740.0	7,884.4	7,765.6	83.3	24.0	90.33	-5,238.4	-3.8	722.6	667.4	55.16	13.100		
12,700.0	7,740.0	7,884.5	7,765.7	85.0	24.0	90.34	-5,238.4	-3.8	631.5	571.9	59.55	10.605		
12,800.0	7,740.0	7,884.5	7,765.7	86.7	24.0	90.35	-5,238.4	-3.8	543.6	478.1	65.47	8.302		
12,900.0	7,740.0	7,884.6	7,765.8	88.5	24.0	90.36	-5,238.4	-3.8	460.6	387.0	73.61	6.257		
13,000.0	7,740.0	7,884.6	7,765.8	90.2	24.0	90.37	-5,238.4	-3.8	385.8	301.1	84.71	4.555		
13,100.0	7,740.0	7,884.7	7,765.9	91.9	24.0	90.38	-5,238.4	-3.8	324.9	226.2	98.69	3.292		
13,200.0	7,740.0	7,884.7	7,765.9	93.7	24.0	90.39	-5,238.4	-3.8	286.8	174.8	112.00	2.561		
13,266.5	7,740.0	7,884.8	7,766.0	94.8	24.0	90.40	-5,238.4	-3.8	279.0	162.4	116.56	2.394 CC, ES, SF		
13,300.0	7,740.0	7,884.8	7,766.0	95.4	24.0	90.40	-5,238.4	-3.8	281.0	164.2	116.77	2.406		
13,400.0	7,740.0	7,884.8	7,766.0	97.1	24.0	90.41	-5,238.4	-3.8	309.3	199.3	109.95	2.813		
13,500.0	7,740.0	7,884.9	7,766.1	98.9	24.0	90.42	-5,238.4	-3.8	363.8	266.0	97.84	3.718		
13,600.0	7,740.0	7,884.9	7,766.1	100.6	24.0	90.43	-5,238.4	-3.8	434.8	348.5	86.26	5.041		
13,700.0	7,740.0	7,885.0	7,766.2	102.3	24.0	90.44	-5,238.4	-3.8	515.5	438.5	76.97	6.697		
13,800.0	7,740.0	7,885.0	7,766.2	104.1	24.0	90.45	-5,238.4	-3.8	602.0	532.1	69.91	8.612		
13,900.0	7,740.0	7,885.1	7,766.3	105.8	24.0	90.46	-5,238.4	-3.8	692.2	627.6	64.57	10.720		
14,000.0	7,740.0	7,885.1	7,766.3	107.5	24.0	90.47	-5,238.4	-3.8	784.7	724.2	60.51	12.969		
14,100.0	7,740.0	7,885.2	7,766.4	109.3	24.0	90.48	-5,238.4	-3.8	878.9	821.5	57.39	15.316		
14,200.0	7,740.0	7,885.2	7,766.4	111.0	24.0	90.49	-5,238.4	-3.8	974.3	919.3	54.95	17.729		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,300.0	7,740.0	7,885.3	7,766.5	112.8	24.0	90.50	-5,238.4	-3.8	1,070.5	1,017.4	53.03	20.185		
14,400.0	7,740.0	7,885.3	7,766.5	114.5	24.0	90.52	-5,238.4	-3.8	1,167.3	1,115.8	51.51	22.664		
14,500.0	7,740.0	7,885.4	7,766.6	116.2	24.0	90.53	-5,238.4	-3.8	1,264.6	1,214.4	50.28	25.154		
14,600.0	7,740.0	7,885.4	7,766.6	118.0	24.0	90.54	-5,238.4	-3.8	1,362.4	1,313.1	49.28	27.645		
14,700.0	7,740.0	7,885.5	7,766.7	119.7	24.0	90.55	-5,238.4	-3.8	1,460.4	1,411.9	48.47	30.131		
14,800.0	7,740.0	7,885.5	7,766.7	121.5	24.0	90.56	-5,238.4	-3.8	1,558.7	1,510.8	47.80	32.606		
14,900.0	7,740.0	7,885.6	7,766.8	123.2	24.0	90.57	-5,238.4	-3.8	1,657.1	1,609.9	47.26	35.068		
15,000.0	7,740.0	7,885.6	7,766.8	124.9	24.0	90.58	-5,238.4	-3.8	1,755.8	1,709.0	46.80	37.513		
15,100.0	7,740.0	7,885.7	7,766.9	126.7	24.0	90.59	-5,238.4	-3.8	1,854.6	1,808.2	46.43	39.942		
15,200.0	7,740.0	7,885.7	7,766.9	128.4	24.0	90.60	-5,238.4	-3.8	1,953.5	1,907.4	46.12	42.353		
15,300.0	7,740.0	7,885.8	7,767.0	130.2	24.0	90.61	-5,238.4	-3.8	2,052.5	2,006.7	45.87	44.745		
15,400.0	7,740.0	7,885.8	7,767.0	131.9	24.0	90.62	-5,238.4	-3.8	2,151.6	2,106.0	45.66	47.118		
15,500.0	7,740.0	7,885.9	7,767.1	133.7	24.0	90.63	-5,238.4	-3.8	2,250.8	2,205.3	45.50	49.473		
15,600.0	7,740.0	7,885.9	7,767.1	135.4	24.0	90.64	-5,238.4	-3.8	2,350.1	2,304.7	45.36	51.809		
15,700.0	7,740.0	7,886.0	7,767.2	137.1	24.0	90.65	-5,238.4	-3.8	2,449.4	2,404.2	45.25	54.127		
15,800.0	7,740.0	7,886.0	7,767.2	138.9	24.0	90.66	-5,238.4	-3.8	2,548.8	2,503.6	45.17	56.427		
15,900.0	7,740.0	7,886.1	7,767.3	140.6	24.0	90.67	-5,238.4	-3.8	2,648.2	2,603.1	45.11	58.709		
15,953.0	7,740.0	7,886.1	7,767.3	141.6	24.0	90.67	-5,238.4	-3.8	2,700.9	2,655.8	45.08	59.911		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error: 0.0 ft			
Survey Program: 814-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning			
0.0	0.0	23.2	23.2	0.0	0.0	172.77	-4,267.5	541.1	4,301.7							
100.0	100.0	123.9	123.9	0.2	0.2	172.77	-4,267.5	541.1	4,301.7	4,301.3	0.36	N/A				
200.0	200.0	224.7	224.7	0.3	0.4	172.77	-4,267.5	541.1	4,301.6	4,300.9	0.71	6,047.153				
300.0	300.0	325.5	325.5	0.5	0.6	172.77	-4,267.4	541.2	4,301.6	4,300.5	1.06	4,063.825				
400.0	400.0	426.2	426.2	0.7	0.7	172.77	-4,267.3	541.2	4,301.5	4,300.1	1.41	3,060.132				
405.2	405.2	431.5	431.5	0.7	0.7	146.43	-4,267.3	541.2	4,301.5	4,300.1	1.42	3,021.340				
500.0	500.0	527.0	527.0	0.9	0.9	146.43	-4,267.3	541.2	4,302.2	4,300.4	1.75	2,454.195				
600.0	600.0	627.7	627.7	1.0	1.1	146.44	-4,267.1	541.3	4,304.3	4,302.2	2.10	2,048.500				
700.0	699.9	728.4	728.4	1.2	1.2	146.45	-4,267.0	541.4	4,307.8	4,305.3	2.45	1,757.431				
800.0	799.7	828.7	828.7	1.4	1.4	146.46	-4,266.9	541.5	4,312.7	4,309.9	2.80	1,538.003				
899.9	899.3	1,088.7	1,088.3	1.6	1.9	146.42	-4,261.5	553.3	4,318.6	4,315.2	3.46	1,246.633				
1,000.0	999.0	1,268.8	1,266.9	1.8	2.3	146.26	-4,249.7	572.7	4,320.4	4,316.3	4.05	1,065.580				
1,100.0	1,098.6	1,534.7	1,527.8	2.0	3.2	145.81	-4,223.5	616.5	4,319.7	4,314.7	5.02	859.710				
1,200.0	1,198.2	1,698.6	1,686.8	2.3	3.8	145.43	-4,202.7	650.4	4,317.2	4,311.4	5.84	739.409				
1,300.0	1,297.8	1,865.0	1,846.9	2.5	4.6	145.00	-4,177.3	687.9	4,311.9	4,305.2	6.72	641.776				
1,400.0	1,397.5	1,929.0	1,908.5	2.7	4.9	144.83	-4,167.6	702.4	4,307.2	4,300.0	7.19	598.648				
1,500.0	1,497.1	2,009.6	1,986.1	2.9	5.3	144.62	-4,155.9	720.7	4,303.2	4,295.5	7.74	555.774				
1,600.0	1,596.7	2,138.0	2,109.9	3.2	5.9	144.29	-4,137.0	749.1	4,299.1	4,290.6	8.50	505.703				
1,700.0	1,696.3	2,216.0	2,185.0	3.4	6.3	144.08	-4,125.6	766.8	4,295.1	4,286.1	9.06	474.071				
1,800.0	1,795.9	2,311.0	2,276.5	3.6	6.7	143.83	-4,111.8	788.3	4,291.4	4,281.7	9.68	443.154				
1,900.0	1,895.6	2,389.7	2,352.4	3.8	7.1	143.63	-4,100.5	805.6	4,287.9	4,277.6	10.24	418.760				
2,000.0	1,995.2	2,478.4	2,438.1	4.1	7.5	143.40	-4,088.3	825.1	4,285.0	4,274.1	10.84	395.379				
2,100.0	2,094.8	2,561.5	2,518.4	4.3	7.9	143.19	-4,077.0	843.1	4,282.3	4,270.9	11.41	375.194				
2,200.0	2,194.4	2,629.4	2,584.0	4.5	8.2	143.02	-4,068.2	858.0	4,280.3	4,268.4	11.92	358.936				
2,300.0	2,294.0	2,791.4	2,740.5	4.8	9.0	142.61	-4,045.9	893.8	4,277.5	4,264.6	12.87	332.293				
2,400.0	2,393.7	2,875.0	2,821.2	5.0	9.4	142.39	-4,034.2	912.3	4,274.7	4,261.3	13.47	317.425				
2,500.0	2,493.3	2,984.8	2,927.1	5.2	10.0	142.11	-4,019.0	936.8	4,272.2	4,258.0	14.19	301.153				
2,600.0	2,592.9	3,134.8	3,071.7	5.4	10.7	141.71	-3,996.8	970.2	4,268.9	4,253.8	15.11	282.542				
2,700.0	2,692.5	3,196.7	3,131.2	5.7	11.1	141.54	-3,987.5	984.4	4,265.5	4,249.9	15.61	273.168				
2,800.0	2,792.1	3,269.5	3,201.3	5.9	11.4	141.35	-3,977.2	1,000.8	4,263.0	4,246.8	16.18	263.515				
2,900.0	2,891.8	3,353.2	3,282.0	6.1	11.8	141.12	-3,965.5	1,020.1	4,260.9	4,244.1	16.79	253.756				
3,000.0	2,991.4	3,486.0	3,410.3	6.4	12.5	140.78	-3,947.6	1,049.3	4,259.3	4,241.7	17.62	241.751				
3,100.0	3,091.0	3,560.1	3,481.8	6.6	12.8	140.59	-3,937.2	1,065.5	4,257.1	4,238.9	18.19	234.058				
3,200.0	3,190.6	3,651.2	3,569.6	6.8	13.3	140.34	-3,924.6	1,086.5	4,255.3	4,236.5	18.85	225.705				
3,300.0	3,290.2	3,747.3	3,662.1	7.1	13.8	140.08	-3,911.2	1,109.0	4,253.7	4,234.2	19.54	217.719				
3,400.0	3,389.9	3,831.8	3,743.7	7.3	14.2	139.86	-3,899.8	1,127.6	4,252.3	4,232.2	20.15	211.083				
3,500.0	3,489.5	3,907.8	3,817.3	7.5	14.6	139.67	-3,890.1	1,143.9	4,251.5	4,230.8	20.71	205.284				
3,600.0	3,589.1	4,004.1	3,910.6	7.7	15.0	139.43	-3,878.0	1,164.6	4,251.1	4,229.7	21.37	198.887				
3,700.0	3,688.7	4,185.0	4,085.3	8.0	15.9	138.97	-3,853.5	1,204.2	4,249.9	4,227.4	22.45	189.279				
3,800.0	3,788.3	4,292.6	4,189.1	8.2	16.4	138.69	-3,837.5	1,227.8	4,247.5	4,224.3	23.19	183.175				
3,900.0	3,888.0	4,375.0	4,268.6	8.4	16.9	138.47	-3,825.4	1,245.8	4,245.3	4,221.5	23.80	178.343				
4,000.0	3,987.6	4,439.0	4,330.4	8.7	17.2	138.31	-3,816.4	1,259.6	4,243.7	4,219.4	24.32	174.463				
4,100.0	4,087.2	4,503.0	4,392.4	8.9	17.5	138.15	-3,808.1	1,273.1	4,243.2	4,218.4	24.84	170.835				
4,106.8	4,094.0	4,503.0	4,392.4	8.9	17.5	138.15	-3,808.1	1,273.1	4,243.2	4,218.4	24.85	170.732				
4,200.0	4,186.8	4,616.4	4,502.4	9.1	18.0	137.88	-3,793.9	1,297.1	4,243.2	4,217.7	25.58	165.856				
4,300.0	4,286.4	4,723.9	4,606.5	9.4	18.5	137.62	-3,779.7	1,319.6	4,242.6	4,216.3	26.29	161.352				
4,400.0	4,386.1	4,808.1	4,688.4	9.6	18.9	137.42	-3,769.0	1,336.3	4,242.2	4,215.3	26.87	157.875				
4,439.4	4,425.3	4,840.8	4,720.2	9.7	19.0	137.35	-3,765.0	1,342.5	4,242.2	4,215.1	27.09	156.595				
4,500.0	4,485.7	4,892.3	4,770.5	9.8	19.2	137.25	-3,759.0	1,351.9	4,242.2	4,214.8	27.43	154.648				
4,600.0	4,585.3	4,987.5	4,863.6	10.1	19.6	137.07	-3,748.1	1,368.6	4,242.5	4,214.5	28.03	151.365				
4,700.0	4,684.9	5,076.0	4,950.2	10.3	20.0	136.90	-3,738.1	1,383.8	4,243.0	4,214.4	28.59	148.396				
4,800.0	4,784.5	5,171.0	5,043.3	10.5	20.3	136.73	-3,727.9	1,399.6	4,243.7	4,214.6	29.17	145.503				

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
4,900.0	4,884.1	5,262.9	5,133.3	10.8	20.7	136.57	-3,718.1	1,415.1	4,244.7	4,215.0	29.75	142.700		
5,000.0	4,983.8	5,366.7	5,235.1	11.0	21.1	136.39	-3,707.0	1,432.2	4,245.7	4,215.3	30.35	139.892		
5,100.0	5,083.4	5,445.4	5,312.5	11.2	21.4	136.26	-3,699.0	1,444.4	4,246.8	4,215.9	30.85	137.671		
5,200.0	5,183.0	5,515.7	5,381.7	11.4	21.6	136.15	-3,692.3	1,455.0	4,248.6	4,217.3	31.31	135.686		
5,300.0	5,282.6	5,657.5	5,521.0	11.7	22.1	135.93	-3,679.0	1,476.9	4,250.6	4,218.6	32.05	132.637		
5,400.0	5,382.2	5,734.6	5,596.9	11.9	22.4	135.81	-3,671.3	1,488.6	4,252.0	4,219.5	32.53	130.698		
5,500.0	5,481.9	5,802.9	5,664.3	12.1	22.6	135.72	-3,665.4	1,498.2	4,254.2	4,221.2	32.97	129.028		
5,600.0	5,581.5	5,880.4	5,740.8	12.4	22.9	135.62	-3,659.1	1,508.8	4,256.9	4,223.5	33.44	127.307		
5,700.0	5,681.1	5,974.7	5,833.9	12.6	23.2	135.51	-3,651.9	1,521.6	4,260.0	4,226.1	33.95	125.481		
5,800.0	5,780.7	6,092.6	5,950.8	12.8	23.5	135.40	-3,644.0	1,534.7	4,263.4	4,229.0	34.48	123.662		
5,900.0	5,880.3	6,182.7	6,040.4	13.1	23.7	135.35	-3,638.3	1,542.3	4,266.2	4,231.3	34.89	122.281		
6,000.0	5,980.0	6,256.3	6,113.7	13.3	23.9	135.33	-3,634.3	1,547.5	4,269.5	4,234.3	35.25	121.134		
6,100.0	6,079.6	6,324.7	6,181.9	13.5	24.0	135.32	-3,631.3	1,551.8	4,273.5	4,237.9	35.56	120.163		
6,200.0	6,179.2	6,417.7	6,274.8	13.8	24.1	135.34	-3,628.6	1,555.3	4,278.2	4,242.3	35.88	119.248		
6,300.0	6,278.8	6,528.6	6,385.7	14.0	24.2	135.42	-3,625.8	1,555.6	4,282.0	4,245.9	36.16	118.423		
6,400.0	6,378.4	6,571.0	6,428.1	14.2	24.2	135.46	-3,625.5	1,555.1	4,287.1	4,250.7	36.38	117.857		
6,500.0	6,478.1	6,640.9	6,498.0	14.5	24.3	135.52	-3,625.7	1,554.4	4,293.2	4,256.6	36.62	117.221		
6,600.0	6,577.7	6,749.9	6,607.0	14.7	24.4	135.61	-3,625.6	1,554.8	4,299.5	4,262.5	36.92	116.440		
6,700.0	6,677.3	6,866.3	6,723.4	14.9	24.5	135.69	-3,625.0	1,555.4	4,305.4	4,268.1	37.23	115.641		
6,800.0	6,776.9	6,976.2	6,833.2	15.1	24.6	135.77	-3,624.2	1,555.7	4,311.0	4,273.4	37.53	114.866		
6,900.0	6,876.5	7,100.6	6,957.7	15.4	24.7	135.86	-3,622.7	1,555.9	4,316.2	4,278.3	37.84	114.052		
7,000.0	6,976.2	7,229.6	7,086.6	15.6	24.8	135.96	-3,620.6	1,555.5	4,320.8	4,282.6	38.16	113.234		
7,100.0	7,075.8	7,330.1	7,187.1	15.8	24.9	136.04	-3,618.6	1,555.2	4,325.1	4,286.6	38.45	112.494		
7,147.2	7,122.8	7,392.6	7,249.6	15.9	25.0	136.09	-3,617.2	1,555.0	4,327.0	4,288.4	38.60	112.105		
7,150.0	7,125.6	7,396.4	7,253.3	16.0	25.0	134.57	-3,617.1	1,555.0	4,327.1	4,288.5	38.61	112.082		
7,200.0	7,175.5	7,448.9	7,305.9	16.0	25.1	52.65	-3,615.9	1,554.6	4,326.7	4,288.0	38.74	111.697		
7,250.0	7,225.4	7,500.0	7,356.9	16.1	25.1	3.42	-3,614.8	1,554.0	4,322.1	4,283.3	38.85	111.238		
7,300.0	7,274.8	7,545.2	7,402.2	16.0	25.1	-6.14	-3,613.8	1,553.3	4,313.4	4,274.5	38.96	110.721		
7,350.0	7,323.4	7,591.5	7,448.4	16.0	25.2	-10.15	-3,612.9	1,552.4	4,300.8	4,261.7	39.05	110.125		
7,400.0	7,370.8	7,640.7	7,497.6	15.9	25.2	-12.63	-3,612.0	1,551.5	4,284.1	4,245.0	39.14	109.448		
7,450.0	7,416.7	7,688.1	7,545.0	15.8	25.3	-14.57	-3,611.0	1,550.6	4,263.6	4,224.4	39.22	108.701		
7,500.0	7,460.7	7,728.3	7,585.2	15.7	25.3	-16.35	-3,610.2	1,549.8	4,239.4	4,200.1	39.29	107.898		
7,550.0	7,502.4	7,763.9	7,620.7	15.5	25.3	-18.18	-3,609.6	1,549.1	4,211.8	4,172.5	39.35	107.039		
7,600.0	7,541.6	7,799.0	7,655.9	15.4	25.3	-20.21	-3,609.0	1,548.4	4,181.0	4,141.6	39.40	106.118		
7,650.0	7,578.0	7,842.2	7,699.1	15.2	25.4	-22.63	-3,608.3	1,547.5	4,147.1	4,107.7	39.45	105.119		
7,700.0	7,611.2	7,883.9	7,740.7	15.1	25.4	-25.57	-3,607.5	1,546.6	4,110.4	4,070.9	39.50	104.066		
7,750.0	7,641.0	7,912.6	7,769.4	14.9	25.4	-29.16	-3,606.9	1,546.0	4,071.2	4,031.7	39.53	102.983		
7,800.0	7,667.3	7,935.8	7,792.6	14.8	25.5	-33.67	-3,606.4	1,545.5	4,029.9	3,990.3	39.56	101.863		
7,850.0	7,689.7	7,955.4	7,812.2	14.7	25.5	-39.46	-3,606.0	1,545.2	3,986.7	3,947.1	39.59	100.712		
7,900.0	7,708.2	7,971.4	7,828.2	14.7	25.5	-46.97	-3,605.7	1,544.9	3,942.0	3,902.4	39.61	99.533		
7,950.0	7,722.5	7,987.0	7,843.8	14.7	25.5	-56.72	-3,605.4	1,544.6	3,896.2	3,856.6	39.62	98.329		
8,000.0	7,732.6	7,992.2	7,848.9	14.8	25.5	-68.57	-3,605.3	1,544.5	3,849.6	3,810.0	39.64	97.120		
8,050.0	7,738.5	7,996.7	7,853.5	14.9	25.5	-82.29	-3,605.2	1,544.4	3,802.6	3,762.9	39.65	95.898		
8,092.0	7,740.0	7,997.4	7,854.2	15.0	25.5	-94.11	-3,605.2	1,544.4	3,763.1	3,723.4	39.66	94.872		
8,100.0	7,740.0	7,997.3	7,854.0	15.0	25.5	-94.10	-3,605.2	1,544.4	3,755.5	3,715.8	39.67	94.675		
8,200.0	7,740.0	7,995.4	7,852.2	15.5	25.5	-94.02	-3,605.2	1,544.5	3,661.6	3,621.8	39.71	92.210		
8,300.0	7,740.0	7,993.5	7,850.3	16.1	25.5	-93.93	-3,605.3	1,544.5	3,568.0	3,528.2	39.77	89.707		
8,400.0	7,740.0	7,991.7	7,848.5	16.9	25.5	-93.85	-3,605.3	1,544.5	3,474.7	3,434.9	39.86	87.163		
8,500.0	7,740.0	7,989.8	7,846.6	17.8	25.5	-93.77	-3,605.4	1,544.6	3,381.9	3,341.9	39.99	84.575		
8,600.0	7,740.0	7,987.0	7,843.8	18.9	25.5	-93.64	-3,605.4	1,544.6	3,289.4	3,249.3	40.14	81.940		
8,700.0	7,740.0	7,987.0	7,843.8	20.0	25.5	-93.64	-3,605.4	1,544.6	3,197.4	3,157.1	40.34	79.253		
8,800.0	7,740.0	7,987.0	7,843.8	21.2	25.5	-93.64	-3,605.4	1,544.6	3,105.9	3,065.3	40.59	76.514		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
8,900.0	7,740.0	7,982.4	7,839.2	22.5	25.5	-93.44	-3,605.5	1,544.7	3,015.0	2,974.1	40.89	73.726		
9,000.0	7,740.0	7,980.6	7,837.4	23.9	25.5	-93.35	-3,605.5	1,544.7	2,924.6	2,883.4	41.26	70.886		
9,100.0	7,740.0	7,978.8	7,835.6	25.3	25.5	-93.27	-3,605.6	1,544.7	2,834.9	2,793.2	41.69	67.998		
9,200.0	7,740.0	7,976.9	7,833.7	26.7	25.5	-93.19	-3,605.6	1,544.8	2,745.9	2,703.7	42.20	65.067		
9,300.0	7,740.0	7,975.1	7,831.9	28.2	25.5	-93.11	-3,605.6	1,544.8	2,657.7	2,614.9	42.80	62.101		
9,400.0	7,740.0	7,973.3	7,830.0	29.7	25.5	-93.02	-3,605.7	1,544.8	2,570.3	2,526.8	43.48	59.110		
9,500.0	7,740.0	7,971.4	7,828.2	31.3	25.5	-92.94	-3,605.7	1,544.9	2,483.9	2,439.6	44.27	56.104		
9,600.0	7,740.0	7,969.6	7,826.3	32.8	25.5	-92.86	-3,605.8	1,544.9	2,398.5	2,353.3	45.17	53.099		
9,700.0	7,740.0	7,967.7	7,824.5	34.4	25.5	-92.77	-3,605.8	1,544.9	2,314.3	2,268.1	46.19	50.109		
9,800.0	7,740.0	7,965.8	7,822.6	36.0	25.5	-92.69	-3,605.8	1,545.0	2,231.4	2,184.1	47.33	47.151		
9,900.0	7,740.0	7,964.0	7,820.8	37.6	25.5	-92.60	-3,605.9	1,545.0	2,150.0	2,101.4	48.60	44.241		
10,000.0	7,740.0	7,962.1	7,818.9	39.2	25.5	-92.52	-3,605.9	1,545.0	2,070.2	2,020.2	50.01	41.398		
10,100.0	7,740.0	7,960.2	7,817.0	40.9	25.5	-92.44	-3,605.9	1,545.1	1,992.2	1,940.6	51.56	38.639		
10,200.0	7,740.0	7,958.4	7,815.1	42.5	25.5	-92.35	-3,606.0	1,545.1	1,916.3	1,863.0	53.26	35.979		
10,300.0	7,740.0	7,956.5	7,813.3	44.2	25.5	-92.27	-3,606.0	1,545.1	1,842.6	1,787.5	55.11	33.435		
10,400.0	7,740.0	7,954.6	7,811.4	45.8	25.5	-92.18	-3,606.1	1,545.2	1,771.5	1,714.4	57.11	31.021		
10,500.0	7,740.0	7,952.7	7,809.5	47.5	25.5	-92.10	-3,606.1	1,545.2	1,703.4	1,644.1	59.25	28.749		
10,600.0	7,740.0	7,950.8	7,807.6	49.1	25.5	-92.01	-3,606.1	1,545.3	1,638.5	1,577.0	61.53	26.630		
10,700.0	7,740.0	7,948.9	7,805.7	50.8	25.5	-91.93	-3,606.2	1,545.3	1,577.3	1,513.4	63.93	24.674		
10,800.0	7,740.0	7,947.0	7,803.8	52.5	25.5	-91.84	-3,606.2	1,545.3	1,520.2	1,453.8	66.42	22.888		
10,900.0	7,740.0	7,945.1	7,801.9	54.2	25.5	-91.75	-3,606.2	1,545.4	1,467.7	1,398.7	68.98	21.278		
11,000.0	7,740.0	7,943.2	7,800.0	55.9	25.5	-91.67	-3,606.3	1,545.4	1,420.3	1,348.7	71.55	19.850		
11,100.0	7,740.0	7,941.3	7,798.1	57.6	25.5	-91.58	-3,606.3	1,545.4	1,378.5	1,304.4	74.10	18.604		
11,200.0	7,740.0	7,939.4	7,796.2	59.3	25.5	-91.50	-3,606.4	1,545.5	1,342.9	1,266.4	76.55	17.543		
11,300.0	7,740.0	7,937.5	7,794.3	61.0	25.5	-91.41	-3,606.4	1,545.5	1,314.0	1,235.1	78.85	16.665		
11,400.0	7,740.0	7,935.6	7,792.3	62.7	25.5	-91.32	-3,606.4	1,545.5	1,292.1	1,211.2	80.92	15.969		
11,500.0	7,740.0	7,933.6	7,790.4	64.4	25.5	-91.24	-3,606.5	1,545.6	1,277.8	1,195.1	82.70	15.450		
11,600.0	7,740.0	7,931.7	7,788.5	66.1	25.5	-91.15	-3,606.5	1,545.6	1,271.1	1,187.0	84.16	15.103		
11,634.7	7,740.0	7,931.0	7,787.8	66.7	25.5	-91.12	-3,606.5	1,545.6	1,270.7	1,186.1	84.59	15.022 CC, ES		
11,700.0	7,740.0	7,929.8	7,786.6	67.8	25.5	-91.06	-3,606.6	1,545.7	1,272.3	1,187.1	85.27	14.921		
11,800.0	7,740.0	7,927.8	7,784.6	69.5	25.5	-90.97	-3,606.6	1,545.7	1,281.4	1,195.3	86.03	14.895 SF		
11,900.0	7,740.0	7,925.9	7,782.7	71.2	25.5	-90.89	-3,606.6	1,545.7	1,298.1	1,211.6	86.45	15.015		
12,000.0	7,740.0	7,923.9	7,780.7	72.9	25.5	-90.80	-3,606.7	1,545.8	1,322.1	1,235.5	86.58	15.270		
12,100.0	7,740.0	7,922.0	7,778.8	74.7	25.5	-90.71	-3,606.7	1,545.8	1,353.2	1,266.7	86.48	15.648		
12,200.0	7,740.0	7,920.0	7,776.8	76.4	25.5	-90.62	-3,606.8	1,545.8	1,390.7	1,304.5	86.18	16.137		
12,300.0	7,740.0	7,918.1	7,774.9	78.1	25.4	-90.53	-3,606.8	1,545.9	1,434.3	1,348.5	85.75	16.726		
12,400.0	7,740.0	7,916.1	7,772.9	79.8	25.4	-90.45	-3,606.8	1,545.9	1,483.3	1,398.0	85.22	17.405		
12,500.0	7,740.0	7,914.1	7,770.9	81.6	25.4	-90.36	-3,606.9	1,546.0	1,537.2	1,452.6	84.63	18.165		
12,600.0	7,740.0	7,912.2	7,769.0	83.3	25.4	-90.27	-3,606.9	1,546.0	1,595.6	1,511.7	83.99	18.998		
12,700.0	7,740.0	7,910.2	7,767.0	85.0	25.4	-90.18	-3,607.0	1,546.0	1,658.0	1,574.7	83.33	19.897		
12,800.0	7,740.0	7,908.2	7,765.0	86.7	25.4	-90.09	-3,607.0	1,546.1	1,724.0	1,641.3	82.66	20.856		
12,900.0	7,740.0	7,906.2	7,763.0	88.5	25.4	-90.00	-3,607.0	1,546.1	1,793.0	1,711.1	81.99	21.870		
13,000.0	7,740.0	7,904.2	7,761.1	90.2	25.4	-89.91	-3,607.1	1,546.2	1,864.9	1,783.6	81.32	22.934		
13,100.0	7,740.0	7,902.3	7,759.1	91.9	25.4	-89.82	-3,607.1	1,546.2	1,939.3	1,858.7	80.66	24.043		
13,200.0	7,740.0	7,900.3	7,757.1	93.7	25.4	-89.73	-3,607.2	1,546.3	2,015.9	1,935.9	80.02	25.193		
13,300.0	7,740.0	7,898.3	7,755.1	95.4	25.4	-89.64	-3,607.2	1,546.3	2,094.5	2,015.1	79.40	26.380		
13,400.0	7,740.0	7,896.3	7,753.1	97.1	25.4	-89.55	-3,607.2	1,546.3	2,174.8	2,096.0	78.79	27.601		
13,500.0	7,740.0	7,894.2	7,751.1	98.9	25.4	-89.46	-3,607.3	1,546.4	2,256.7	2,178.5	78.21	28.853		
13,600.0	7,740.0	7,892.0	7,748.8	100.6	25.4	-89.36	-3,607.3	1,546.4	2,340.0	2,262.3	77.66	30.133		
13,700.0	7,740.0	7,892.0	7,748.8	102.3	25.4	-89.36	-3,607.3	1,546.4	2,424.6	2,347.4	77.12	31.438		
13,800.0	7,740.0	7,892.0	7,748.8	104.1	25.4	-89.36	-3,607.3	1,546.4	2,510.3	2,433.6	76.61	32.765		
13,900.0	7,740.0	7,886.7	7,743.5	105.8	25.4	-89.12	-3,607.4	1,546.5	2,597.0	2,520.8	76.13	34.114		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	7,884.8	7,741.7	107.5	25.4	-89.04	-3,607.5	1,546.6	2,684.6	2,609.0	75.66	35.481		
14,100.0	7,740.0	7,883.0	7,739.9	109.3	25.4	-88.96	-3,607.5	1,546.6	2,773.1	2,697.9	75.22	36.865		
14,200.0	7,740.0	7,881.3	7,738.1	111.0	25.4	-88.88	-3,607.6	1,546.7	2,862.3	2,787.5	74.80	38.265		
14,300.0	7,740.0	7,879.5	7,736.3	112.8	25.4	-88.80	-3,607.6	1,546.7	2,952.2	2,877.8	74.41	39.677		
14,400.0	7,740.0	7,877.8	7,734.6	114.5	25.4	-88.72	-3,607.6	1,546.7	3,042.8	2,968.8	74.03	41.103		
14,500.0	7,740.0	7,876.0	7,732.8	116.2	25.4	-88.64	-3,607.7	1,546.8	3,133.9	3,060.2	73.67	42.539		
14,600.0	7,740.0	7,874.3	7,731.1	118.0	25.4	-88.56	-3,607.7	1,546.8	3,225.6	3,152.2	73.33	43.985		
14,700.0	7,740.0	7,872.6	7,729.4	119.7	25.4	-88.49	-3,607.7	1,546.8	3,317.7	3,244.7	73.01	45.440		
14,800.0	7,740.0	7,870.9	7,727.8	121.5	25.4	-88.41	-3,607.8	1,546.9	3,410.3	3,337.6	72.71	46.903		
14,900.0	7,740.0	7,869.3	7,726.1	123.2	25.4	-88.34	-3,607.8	1,546.9	3,503.2	3,430.8	72.42	48.373		
15,000.0	7,740.0	7,867.6	7,724.4	124.9	25.4	-88.26	-3,607.8	1,546.9	3,596.6	3,524.5	72.15	49.850		
15,100.0	7,740.0	7,866.0	7,722.8	126.7	25.4	-88.19	-3,607.9	1,547.0	3,690.3	3,618.4	71.89	51.332		
15,200.0	7,740.0	7,864.4	7,721.2	128.4	25.4	-88.12	-3,607.9	1,547.0	3,784.3	3,712.7	71.65	52.819		
15,300.0	7,740.0	7,862.8	7,719.6	130.2	25.4	-88.04	-3,607.9	1,547.0	3,878.7	3,807.2	71.42	54.310		
15,400.0	7,740.0	7,861.2	7,718.0	131.9	25.4	-87.97	-3,608.0	1,547.1	3,973.3	3,902.1	71.20	55.805		
15,500.0	7,740.0	7,859.6	7,716.4	133.7	25.4	-87.90	-3,608.0	1,547.1	4,068.1	3,997.1	70.99	57.303		
15,600.0	7,740.0	7,858.0	7,714.9	135.4	25.4	-87.83	-3,608.0	1,547.1	4,163.2	4,092.4	70.80	58.803		
15,700.0	7,740.0	7,856.5	7,713.3	137.1	25.4	-87.76	-3,608.0	1,547.2	4,258.5	4,187.9	70.62	60.306		
15,800.0	7,740.0	7,855.0	7,711.8	138.9	25.4	-87.69	-3,608.1	1,547.2	4,354.1	4,283.6	70.44	61.811		
15,900.0	7,740.0	7,853.4	7,710.3	140.6	25.4	-87.63	-3,608.1	1,547.2	4,449.8	4,379.5	70.28	63.317		
15,953.0	7,740.0	7,852.6	7,709.5	141.6	25.4	-87.59	-3,608.1	1,547.3	4,500.5	4,430.4	70.19	64.115		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	33.6	33.6	0.0	0.0	172.37	-4,267.5	571.9	4,305.6					
100.0	100.0	118.0	118.0	0.2	0.2	172.36	-4,267.4	572.1	4,305.5	4,305.2	0.33	N/A		
200.0	200.0	178.0	178.0	0.3	0.3	172.36	-4,267.9	572.8	4,306.4	4,305.7	0.61	7,040.133		
300.0	300.0	207.7	207.7	0.5	0.3	172.35	-4,268.5	573.4	4,308.3	4,307.5	0.84	5,128.112		
400.0	400.0	270.0	269.9	0.7	0.5	172.32	-4,270.4	575.6	4,311.7	4,310.6	1.13	3,823.881		
500.0	500.0	298.2	298.1	0.9	0.5	145.94	-4,271.6	576.9	4,316.9	4,315.6	1.36	3,181.994		
600.0	600.0	362.0	361.6	1.0	0.7	145.86	-4,275.0	580.7	4,325.1	4,323.4	1.66	2,612.930		
700.0	699.9	362.0	361.6	1.2	0.7	145.80	-4,275.0	580.7	4,335.8	4,334.0	1.83	2,368.775		
800.0	799.7	425.2	424.5	1.4	0.8	145.70	-4,279.5	585.5	4,349.2	4,347.1	2.14	2,030.661		
899.9	899.3	454.0	453.1	1.6	0.9	145.59	-4,282.0	588.0	4,365.5	4,363.1	2.38	1,832.155		
1,000.0	999.0	510.2	508.7	1.8	1.1	145.57	-4,287.4	593.4	4,383.7	4,381.0	2.69	1,627.387		
1,100.0	1,098.6	546.0	544.1	2.0	1.2	145.55	-4,291.3	597.2	4,403.2	4,400.2	2.96	1,488.895		
1,200.0	1,198.2	597.0	594.4	2.3	1.4	145.51	-4,297.3	603.3	4,423.8	4,420.5	3.27	1,351.664		
1,300.0	1,297.8	642.0	638.6	2.5	1.5	145.47	-4,303.2	609.5	4,445.7	4,442.1	3.57	1,244.674		
1,400.0	1,397.5	695.2	690.7	2.7	1.7	145.41	-4,310.6	617.4	4,468.6	4,464.7	3.90	1,144.422		
1,500.0	1,497.1	825.8	818.4	2.9	2.2	145.27	-4,329.0	637.6	4,492.0	4,487.5	4.45	1,008.945		
1,600.0	1,596.7	897.5	888.6	3.2	2.5	145.20	-4,339.0	647.9	4,514.9	4,510.0	4.83	934.164		
1,700.0	1,696.3	940.0	930.2	3.4	2.7	145.16	-4,345.1	654.4	4,538.6	4,533.5	5.14	883.844		
1,800.0	1,795.9	1,004.0	992.6	3.6	3.0	145.08	-4,355.0	664.8	4,563.3	4,557.8	5.51	828.347		
1,900.0	1,895.6	1,041.8	1,029.3	3.8	3.2	145.03	-4,361.3	671.4	4,589.2	4,583.4	5.80	790.618		
2,000.0	1,995.2	1,107.4	1,092.8	4.1	3.5	144.94	-4,372.6	683.3	4,616.0	4,609.8	6.19	745.307		
2,100.0	2,094.8	1,191.3	1,173.9	4.3	3.9	144.83	-4,387.2	698.9	4,643.1	4,636.5	6.65	698.681		
2,200.0	2,194.4	1,354.3	1,331.6	4.5	4.6	144.60	-4,415.4	728.9	4,670.3	4,662.9	7.36	634.573		
2,300.0	2,294.0	1,465.4	1,439.4	4.8	5.1	144.46	-4,433.1	749.2	4,695.9	4,688.0	7.90	594.214		
2,400.0	2,393.7	1,549.7	1,521.2	5.0	5.5	144.35	-4,446.7	764.3	4,721.7	4,713.3	8.35	565.462		
2,500.0	2,493.3	1,625.1	1,594.3	5.2	5.9	144.25	-4,459.1	777.7	4,747.8	4,739.0	8.77	541.558		
2,600.0	2,592.9	1,707.3	1,674.0	5.4	6.3	144.15	-4,472.9	792.6	4,774.3	4,765.1	9.21	518.169		
2,700.0	2,692.5	1,788.0	1,752.1	5.7	6.6	144.04	-4,486.6	807.7	4,801.1	4,791.4	9.66	497.210		
2,800.0	2,792.1	1,925.0	1,884.6	5.9	7.3	143.86	-4,509.7	833.6	4,827.9	4,817.6	10.30	468.753		
2,900.0	2,891.8	2,003.3	1,960.5	6.1	7.7	143.75	-4,522.5	848.4	4,854.2	4,843.5	10.73	452.328		
3,000.0	2,991.4	2,106.3	2,060.2	6.4	8.2	143.62	-4,539.6	867.5	4,880.8	4,869.5	11.25	434.010		
3,100.0	3,091.0	2,170.8	2,122.7	6.6	8.5	143.54	-4,550.5	879.3	4,907.5	4,895.8	11.63	422.111		
3,200.0	3,190.6	2,309.9	2,257.4	6.8	9.1	143.38	-4,574.5	904.3	4,934.7	4,922.4	12.25	402.917		
3,300.0	3,290.2	2,403.0	2,347.8	7.1	9.5	143.28	-4,589.5	920.9	4,960.6	4,947.9	12.73	389.741		
3,400.0	3,389.9	2,474.7	2,417.2	7.3	9.9	143.19	-4,601.1	934.3	4,986.9	4,973.8	13.14	379.533		
3,500.0	3,489.5	2,572.6	2,512.0	7.5	10.4	143.07	-4,617.7	952.5	5,013.9	5,000.3	13.63	367.881		
3,600.0	3,589.1	2,689.0	2,624.9	7.7	10.9	142.94	-4,637.1	972.8	5,040.3	5,026.1	14.17	355.722		
3,700.0	3,688.7	2,784.0	2,717.2	8.0	11.3	142.85	-4,652.9	989.2	5,066.7	5,052.1	14.64	346.141		
3,800.0	3,788.3	2,880.0	2,810.3	8.2	11.8	142.74	-4,668.4	1,006.3	5,092.8	5,077.6	15.13	336.663		
3,900.0	3,888.0	2,948.0	2,876.2	8.4	12.1	142.66	-4,679.5	1,018.9	5,119.2	5,103.7	15.51	329.999		
4,000.0	3,987.6	3,000.2	2,926.7	8.7	12.4	142.60	-4,688.6	1,028.4	5,146.6	5,130.8	15.84	324.884		
4,100.0	4,087.2	3,071.0	2,995.1	8.9	12.7	142.53	-4,701.6	1,041.3	5,174.8	5,158.6	16.23	318.836		
4,200.0	4,186.8	3,174.9	3,095.6	9.1	13.2	142.42	-4,720.5	1,059.9	5,202.9	5,186.2	16.73	310.960		
4,300.0	4,286.4	3,318.7	3,234.6	9.4	13.9	142.27	-4,746.5	1,086.3	5,231.1	5,213.7	17.38	301.014		
4,400.0	4,386.1	3,482.6	3,393.2	9.6	14.7	142.08	-4,773.7	1,117.3	5,258.1	5,240.0	18.11	290.302		
4,500.0	4,485.7	3,547.0	3,455.5	9.8	15.0	142.01	-4,784.0	1,129.7	5,284.4	5,265.9	18.49	285.790		
4,600.0	4,585.3	3,632.7	3,538.4	10.1	15.4	141.91	-4,798.1	1,146.1	5,311.2	5,292.2	18.94	280.361		
4,700.0	4,684.9	3,739.4	3,641.8	10.3	15.9	141.79	-4,815.8	1,166.0	5,337.9	5,318.5	19.46	274.327		
4,800.0	4,784.5	3,829.9	3,729.5	10.5	16.3	141.70	-4,830.8	1,182.2	5,364.6	5,344.7	19.91	269.414		
4,900.0	4,884.1	3,973.9	3,869.3	10.8	17.0	141.57	-4,854.4	1,207.3	5,391.0	5,370.5	20.54	262.459		
5,000.0	4,983.8	4,061.6	3,954.5	11.0	17.4	141.48	-4,868.4	1,223.2	5,417.1	5,396.1	20.99	258.103		
5,100.0	5,083.4	4,189.9	4,079.2	11.2	18.0	141.36	-4,888.5	1,245.5	5,442.8	5,421.2	21.56	252.443		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error: 0.0 ft			
Survey Program: 41-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
5,200.0	5,183.0	4,268.2	4,155.4	11.4	18.3	141.30	-4,900.9	1,258.6	5,468.5	5,446.5	21.95	249.097				
5,300.0	5,282.6	4,610.5	4,490.5	11.7	19.6	141.09	-4,949.8	1,308.1	5,492.2	5,469.1	23.11	237.696				
5,400.0	5,382.2	4,691.8	4,570.4	11.9	19.9	141.05	-4,959.8	1,318.9	5,513.9	5,490.4	23.50	234.611				
5,500.0	5,481.9	4,759.5	4,636.9	12.1	20.2	141.01	-4,968.4	1,328.5	5,536.0	5,512.1	23.86	232.065				
5,600.0	5,581.5	4,838.4	4,714.4	12.4	20.5	140.96	-4,978.8	1,339.4	5,558.6	5,534.3	24.23	229.376				
5,700.0	5,681.1	5,142.0	5,013.7	12.6	21.5	140.85	-5,014.0	1,375.3	5,578.5	5,553.4	25.19	221.483				
5,800.0	5,780.7	5,224.9	5,095.6	12.8	21.8	140.81	-5,022.4	1,385.2	5,597.7	5,572.1	25.57	218.882				
5,900.0	5,880.3	5,308.1	5,177.7	13.1	22.0	140.78	-5,031.1	1,395.4	5,617.3	5,591.3	25.96	216.367				
6,000.0	5,980.0	5,610.9	5,477.6	13.3	22.9	140.69	-5,058.0	1,426.7	5,634.5	5,607.7	26.85	209.868				
6,100.0	6,079.6	5,697.8	5,563.9	13.5	23.1	140.69	-5,064.6	1,434.0	5,650.5	5,623.3	27.21	207.631				
6,200.0	6,179.2	5,783.3	5,648.9	13.8	23.3	140.68	-5,071.5	1,441.1	5,667.0	5,639.4	27.57	205.518				
6,300.0	6,278.8	6,467.3	6,331.5	14.0	24.3	140.89	-5,096.4	1,463.5	5,676.0	5,647.2	28.79	197.175				
6,400.0	6,378.4	6,564.8	6,429.0	14.2	24.4	140.96	-5,096.0	1,462.7	5,682.2	5,653.1	29.11	195.221				
6,500.0	6,478.1	6,643.1	6,507.3	14.5	24.4	141.00	-5,095.8	1,462.4	5,688.6	5,659.2	29.41	193.436				
6,600.0	6,577.7	6,728.3	6,592.5	14.7	24.5	141.05	-5,096.0	1,462.2	5,695.5	5,665.8	29.72	191.636				
6,700.0	6,677.3	6,836.3	6,700.5	14.9	24.6	141.11	-5,095.9	1,462.5	5,702.3	5,672.2	30.06	189.672				
6,800.0	6,776.9	6,931.2	6,795.4	15.1	24.7	141.15	-5,095.9	1,463.0	5,709.2	5,678.8	30.39	187.835				
6,900.0	6,876.5	7,013.9	6,878.1	15.4	24.8	141.19	-5,095.9	1,463.6	5,716.1	5,685.4	30.71	186.124				
7,000.0	6,976.2	7,088.2	6,952.4	15.6	24.8	141.23	-5,096.2	1,464.3	5,723.6	5,692.5	31.02	184.524				
7,100.0	7,075.8	7,202.7	7,066.9	15.8	25.0	141.28	-5,096.7	1,465.3	5,731.0	5,699.6	31.37	182.669				
7,147.2	7,122.8	7,246.2	7,110.4	15.9	25.0	141.31	-5,096.9	1,465.5	5,734.5	5,703.0	31.53	181.893				
7,150.0	7,125.6	7,248.8	7,113.0	16.0	25.0	139.79	-5,097.0	1,465.5	5,734.7	5,703.1	31.54	181.847				
7,200.0	7,175.5	7,290.3	7,154.5	16.0	25.0	57.89	-5,097.2	1,465.7	5,736.1	5,704.4	31.68	181.034				
7,250.0	7,225.4	7,329.1	7,193.3	16.1	25.1	8.73	-5,097.5	1,465.9	5,733.3	5,701.4	31.82	180.164				
7,300.0	7,274.8	7,370.3	7,234.5	16.0	25.1	-0.71	-5,097.9	1,466.2	5,726.3	5,694.4	31.96	179.194				
7,350.0	7,323.4	7,424.0	7,288.2	16.0	25.2	-4.56	-5,098.4	1,466.6	5,715.2	5,683.1	32.10	178.023				
7,400.0	7,370.8	7,476.4	7,340.6	15.9	25.2	-6.81	-5,098.8	1,467.0	5,699.9	5,667.7	32.24	176.791				
7,450.0	7,416.7	7,527.1	7,391.3	15.8	25.3	-8.47	-5,099.2	1,467.4	5,680.6	5,648.3	32.37	175.503				
7,500.0	7,460.7	7,575.8	7,439.9	15.7	25.3	-9.90	-5,099.5	1,467.8	5,657.5	5,625.0	32.48	174.164				
7,550.0	7,502.4	7,621.9	7,486.1	15.5	25.4	-11.31	-5,099.8	1,468.2	5,630.6	5,598.0	32.59	172.779				
7,600.0	7,541.6	7,665.2	7,529.4	15.4	25.4	-12.81	-5,100.0	1,468.6	5,600.3	5,567.6	32.68	171.356				
7,650.0	7,578.0	7,705.3	7,569.5	15.2	25.5	-14.53	-5,100.1	1,469.0	5,566.7	5,534.0	32.76	169.901				
7,700.0	7,611.2	7,742.0	7,606.1	15.1	25.5	-16.58	-5,100.3	1,469.4	5,530.2	5,497.3	32.84	168.419				
7,750.0	7,641.0	7,774.9	7,639.0	14.9	25.5	-19.13	-5,100.4	1,469.7	5,491.0	5,458.1	32.90	166.918				
7,800.0	7,667.3	7,803.8	7,667.9	14.8	25.6	-22.42	-5,100.4	1,470.0	5,449.3	5,416.4	32.95	165.404				
7,850.0	7,689.7	7,828.4	7,692.6	14.7	25.6	-26.82	-5,100.5	1,470.3	5,405.7	5,372.7	32.99	163.883				
7,900.0	7,708.2	7,848.7	7,712.9	14.7	25.6	-32.92	-5,100.5	1,470.5	5,360.3	5,327.3	33.01	162.362				
7,950.0	7,722.5	7,864.5	7,728.6	14.7	25.6	-41.65	-5,100.5	1,470.6	5,313.6	5,280.5	33.03	160.847				
8,000.0	7,732.6	7,875.6	7,739.7	14.8	25.6	-54.31	-5,100.5	1,470.8	5,265.8	5,232.8	33.05	159.345				
8,050.0	7,738.5	7,882.0	7,746.1	14.9	25.6	-71.87	-5,100.5	1,470.8	5,217.5	5,184.4	33.05	157.862				
8,092.0	7,740.0	7,883.7	7,747.8	15.0	25.6	-89.27	-5,100.5	1,470.8	5,176.7	5,143.6	33.05	156.637				
8,100.0	7,740.0	7,883.7	7,747.8	15.0	25.6	-89.27	-5,100.5	1,470.8	5,168.8	5,135.8	33.05	156.404				
8,200.0	7,740.0	7,883.7	7,747.9	15.5	25.6	-89.27	-5,100.5	1,470.8	5,071.6	5,038.6	33.04	153.490				
8,300.0	7,740.0	7,883.8	7,747.9	16.1	25.6	-89.28	-5,100.5	1,470.8	4,974.5	4,941.4	33.04	150.548				
8,400.0	7,740.0	7,883.8	7,748.0	16.9	25.6	-89.28	-5,100.5	1,470.8	4,877.5	4,844.4	33.05	147.575				
8,500.0	7,740.0	7,883.9	7,748.0	17.8	25.6	-89.28	-5,100.5	1,470.9	4,780.6	4,747.5	33.07	144.568				
8,600.0	7,740.0	7,883.9	7,748.1	18.9	25.6	-89.28	-5,100.5	1,470.9	4,683.8	4,650.7	33.10	141.523				
8,700.0	7,740.0	7,883.9	7,748.1	20.0	25.6	-89.29	-5,100.5	1,470.9	4,587.2	4,554.1	33.14	138.439				
8,800.0	7,740.0	7,884.0	7,748.1	21.2	25.6	-89.29	-5,100.5	1,470.9	4,490.8	4,457.6	33.19	135.312				
8,900.0	7,740.0	7,884.0	7,748.2	22.5	25.6	-89.29	-5,100.5	1,470.9	4,394.4	4,361.2	33.26	132.139				
9,000.0	7,740.0	7,884.1	7,748.2	23.9	25.6	-89.29	-5,100.5	1,470.9	4,298.3	4,265.0	33.34	128.918				
9,100.0	7,740.0	7,884.1	7,748.3	25.3	25.6	-89.29	-5,100.5	1,470.9	4,202.3	4,168.9	33.45	125.646				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
9,200.0	7,740.0	7,884.1	7,748.3	26.7	25.6	-89.30	-5,100.5	1,470.9	4,106.6	4,073.0	33.57	122.321		
9,300.0	7,740.0	7,884.2	7,748.3	28.2	25.6	-89.30	-5,100.5	1,470.9	4,011.0	3,977.3	33.72	118.942		
9,400.0	7,740.0	7,884.2	7,748.4	29.7	25.6	-89.30	-5,100.5	1,470.9	3,915.7	3,881.8	33.90	115.508		
9,500.0	7,740.0	7,884.3	7,748.4	31.3	25.6	-89.30	-5,100.5	1,470.9	3,820.6	3,786.5	34.11	112.019		
9,600.0	7,740.0	7,884.3	7,748.5	32.8	25.6	-89.30	-5,100.5	1,470.9	3,725.7	3,691.4	34.35	108.474		
9,700.0	7,740.0	7,884.4	7,748.5	34.4	25.6	-89.31	-5,100.5	1,470.9	3,631.2	3,596.5	34.62	104.876		
9,800.0	7,740.0	7,884.4	7,748.6	36.0	25.6	-89.31	-5,100.5	1,470.9	3,536.9	3,501.9	34.94	101.226		
9,900.0	7,740.0	7,884.4	7,748.6	37.6	25.6	-89.31	-5,100.5	1,470.9	3,442.9	3,407.6	35.30	97.528		
10,000.0	7,740.0	7,884.5	7,748.6	39.2	25.6	-89.31	-5,100.5	1,470.9	3,349.3	3,313.6	35.71	93.787		
10,100.0	7,740.0	7,884.5	7,748.7	40.9	25.6	-89.31	-5,100.5	1,470.9	3,256.1	3,220.0	36.18	90.008		
10,200.0	7,740.0	7,884.6	7,748.7	42.5	25.6	-89.32	-5,100.5	1,470.9	3,163.3	3,126.6	36.70	86.199		
10,300.0	7,740.0	7,884.6	7,748.8	44.2	25.6	-89.32	-5,100.5	1,470.9	3,071.0	3,033.7	37.28	82.369		
10,400.0	7,740.0	7,884.6	7,748.8	45.8	25.6	-89.32	-5,100.5	1,470.9	2,979.1	2,941.2	37.94	78.525		
10,500.0	7,740.0	7,884.7	7,748.8	47.5	25.6	-89.32	-5,100.5	1,470.9	2,887.8	2,849.1	38.67	74.679		
10,600.0	7,740.0	7,884.7	7,748.9	49.1	25.6	-89.32	-5,100.5	1,470.9	2,797.1	2,757.6	39.48	70.843		
10,700.0	7,740.0	7,884.8	7,748.9	50.8	25.6	-89.32	-5,100.5	1,470.9	2,707.0	2,666.6	40.39	67.028		
10,800.0	7,740.0	7,884.8	7,749.0	52.5	25.6	-89.33	-5,100.5	1,470.9	2,617.7	2,576.3	41.39	63.247		
10,900.0	7,740.0	7,884.8	7,749.0	54.2	25.6	-89.33	-5,100.5	1,470.9	2,529.1	2,486.7	42.50	59.513		
11,000.0	7,740.0	7,884.9	7,749.0	55.9	25.6	-89.33	-5,100.5	1,470.9	2,441.5	2,397.8	43.72	55.839		
11,100.0	7,740.0	7,884.9	7,749.1	57.6	25.6	-89.33	-5,100.5	1,470.9	2,354.8	2,309.7	45.08	52.240		
11,200.0	7,740.0	7,885.0	7,749.1	59.3	25.6	-89.33	-5,100.5	1,470.9	2,269.2	2,222.7	46.57	48.728		
11,300.0	7,740.0	7,885.0	7,749.2	61.0	25.6	-89.34	-5,100.5	1,470.9	2,184.9	2,136.7	48.21	45.316		
11,400.0	7,740.0	7,885.0	7,749.2	62.7	25.6	-89.34	-5,100.5	1,470.9	2,101.9	2,051.9	50.03	42.016		
11,500.0	7,740.0	7,885.1	7,749.2	64.4	25.6	-89.34	-5,100.5	1,470.9	2,020.5	1,968.4	52.02	38.841		
11,600.0	7,740.0	7,885.1	7,749.3	66.1	25.6	-89.34	-5,100.5	1,470.9	1,940.7	1,886.5	54.21	35.800		
11,700.0	7,740.0	7,885.2	7,749.3	67.8	25.6	-89.34	-5,100.5	1,470.9	1,863.0	1,806.4	56.62	32.904		
11,800.0	7,740.0	7,885.2	7,749.4	69.5	25.6	-89.35	-5,100.5	1,470.9	1,787.5	1,728.2	59.26	30.161		
11,900.0	7,740.0	7,885.2	7,749.4	71.2	25.6	-89.35	-5,100.5	1,470.9	1,714.4	1,652.3	62.16	27.581		
12,000.0	7,740.0	7,885.3	7,749.4	72.9	25.6	-89.35	-5,100.5	1,470.9	1,644.3	1,578.9	65.33	25.170		
12,100.0	7,740.0	7,885.3	7,749.5	74.7	25.6	-89.35	-5,100.5	1,470.9	1,577.3	1,508.5	68.78	22.934		
12,200.0	7,740.0	7,885.3	7,749.5	76.4	25.6	-89.35	-5,100.5	1,470.9	1,514.0	1,441.5	72.51	20.879		
12,300.0	7,740.0	7,885.4	7,749.5	78.1	25.6	-89.35	-5,100.5	1,470.9	1,454.8	1,378.3	76.54	19.008		
12,400.0	7,740.0	7,885.4	7,749.6	79.8	25.6	-89.36	-5,100.5	1,470.9	1,400.2	1,319.4	80.82	17.325		
12,500.0	7,740.0	7,885.5	7,749.6	81.6	25.6	-89.36	-5,100.5	1,470.9	1,350.9	1,265.6	85.33	15.831		
12,600.0	7,740.0	7,885.5	7,749.7	83.3	25.6	-89.36	-5,100.5	1,470.9	1,307.4	1,217.4	89.99	14.527		
12,700.0	7,740.0	7,885.5	7,749.7	85.0	25.6	-89.36	-5,100.5	1,470.9	1,270.2	1,175.5	94.71	13.412		
12,800.0	7,740.0	7,885.6	7,749.7	86.7	25.6	-89.36	-5,100.5	1,470.9	1,240.1	1,140.7	99.36	12.480		
12,900.0	7,740.0	7,885.6	7,749.8	88.5	25.6	-89.37	-5,100.5	1,470.9	1,217.4	1,113.6	103.80	11.728		
13,000.0	7,740.0	7,885.6	7,749.8	90.2	25.6	-89.37	-5,100.5	1,470.9	1,202.6	1,094.8	107.88	11.148		
13,100.0	7,740.0	7,885.7	7,749.8	91.9	25.6	-89.37	-5,100.5	1,470.9	1,196.1	1,084.6	111.45	10.732		
13,128.6	7,740.0	7,885.7	7,749.8	92.4	25.6	-89.37	-5,100.5	1,470.9	1,195.7	1,083.4	112.36	10.642 CC, ES		
13,200.0	7,740.0	7,885.7	7,749.9	93.7	25.6	-89.37	-5,100.5	1,470.9	1,197.9	1,083.5	114.41	10.470		
13,300.0	7,740.0	7,885.8	7,749.9	95.4	25.6	-89.37	-5,100.5	1,470.9	1,208.0	1,091.3	116.69	10.352 SF		
13,400.0	7,740.0	7,885.8	7,749.9	97.1	25.6	-89.37	-5,100.5	1,470.9	1,226.1	1,107.9	118.26	10.369		
13,500.0	7,740.0	7,885.8	7,750.0	98.9	25.6	-89.38	-5,100.5	1,470.9	1,252.1	1,132.9	119.14	10.510		
13,600.0	7,740.0	7,885.9	7,750.0	100.6	25.6	-89.38	-5,100.5	1,470.9	1,285.3	1,165.9	119.39	10.766		
13,700.0	7,740.0	7,885.9	7,750.1	102.3	25.6	-89.38	-5,100.5	1,470.9	1,325.2	1,206.1	119.10	11.128		
13,800.0	7,740.0	7,885.9	7,750.1	104.1	25.6	-89.38	-5,100.5	1,470.9	1,371.3	1,253.0	118.35	11.587		
13,900.0	7,740.0	7,886.0	7,750.1	105.8	25.6	-89.38	-5,100.5	1,470.9	1,422.9	1,305.7	117.26	12.135		
14,000.0	7,740.0	7,886.0	7,750.2	107.5	25.6	-89.38	-5,100.5	1,470.9	1,479.5	1,363.6	115.90	12.766		
14,100.0	7,740.0	7,886.0	7,750.2	109.3	25.6	-89.39	-5,100.5	1,470.9	1,540.6	1,426.2	114.36	13.472		
14,200.0	7,740.0	7,886.1	7,750.2	111.0	25.6	-89.39	-5,100.5	1,470.9	1,605.5	1,492.8	112.70	14.246		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,300.0	7,740.0	7,886.1	7,750.3	112.8	25.6	-89.39	-5,100.5	1,470.9	1,673.9	1,562.9	110.97	15.084		
14,400.0	7,740.0	7,886.1	7,750.3	114.5	25.6	-89.39	-5,100.5	1,470.9	1,745.3	1,636.1	109.22	15.980		
14,500.0	7,740.0	7,886.2	7,750.3	116.2	25.6	-89.39	-5,100.5	1,470.9	1,819.5	1,712.0	107.47	16.929		
14,600.0	7,740.0	7,886.2	7,750.4	118.0	25.6	-89.39	-5,100.5	1,470.9	1,896.0	1,790.2	105.76	17.927		
14,700.0	7,740.0	7,886.2	7,750.4	119.7	25.6	-89.40	-5,100.5	1,470.9	1,974.6	1,870.5	104.09	18.970		
14,800.0	7,740.0	7,886.3	7,750.4	121.5	25.6	-89.40	-5,100.5	1,470.9	2,055.1	1,952.6	102.48	20.054		
14,900.0	7,740.0	7,886.3	7,750.5	123.2	25.6	-89.40	-5,100.5	1,470.9	2,137.2	2,036.2	100.93	21.176		
15,000.0	7,740.0	7,886.3	7,750.5	124.9	25.6	-89.40	-5,100.5	1,470.9	2,220.8	2,121.3	99.44	22.332		
15,100.0	7,740.0	7,886.4	7,750.5	126.7	25.6	-89.40	-5,100.5	1,470.9	2,305.7	2,207.6	98.03	23.521		
15,200.0	7,740.0	7,886.4	7,750.6	128.4	25.6	-89.40	-5,100.5	1,470.9	2,391.7	2,295.0	96.68	24.738		
15,300.0	7,740.0	7,886.4	7,750.6	130.2	25.6	-89.41	-5,100.5	1,470.9	2,478.8	2,383.4	95.40	25.983		
15,400.0	7,740.0	7,886.5	7,750.6	131.9	25.6	-89.41	-5,100.5	1,470.9	2,566.9	2,472.7	94.19	27.252		
15,500.0	7,740.0	7,886.5	7,750.7	133.7	25.6	-89.41	-5,100.5	1,470.9	2,655.8	2,562.7	93.04	28.544		
15,600.0	7,740.0	7,886.6	7,750.7	135.4	25.6	-89.41	-5,100.5	1,470.9	2,745.4	2,653.5	91.95	29.857		
15,700.0	7,740.0	7,886.6	7,750.7	137.1	25.6	-89.41	-5,100.5	1,470.9	2,835.8	2,744.9	90.92	31.189		
15,800.0	7,740.0	7,886.6	7,750.8	138.9	25.6	-89.41	-5,100.5	1,470.9	2,926.8	2,836.8	89.95	32.539		
15,900.0	7,740.0	7,886.7	7,750.8	140.6	25.6	-89.42	-5,100.5	1,470.9	3,018.3	2,929.3	89.02	33.905		
15,953.0	7,740.0	7,886.7	7,750.8	141.6	25.6	-89.42	-5,100.5	1,470.9	3,067.0	2,978.5	88.55	34.634		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	172.58	-4,325.8	563.5	4,362.3				
100.0	100.0	83.1	83.1	0.2	0.1	172.58	-4,326.0	563.7	4,362.6	4,362.3	0.30	N/A	
200.0	200.0	163.6	163.6	0.3	0.3	172.57	-4,326.5	564.0	4,363.3	4,362.7	0.61	7,128.912	
300.0	300.0	270.7	270.7	0.5	0.5	172.58	-4,327.6	564.0	4,364.3	4,363.3	0.97	4,483.601	
400.0	400.0	368.9	368.8	0.7	0.6	172.58	-4,328.4	563.6	4,365.0	4,363.7	1.32	3,308.778	
500.0	500.0	475.4	475.4	0.9	0.8	146.24	-4,329.2	563.5	4,366.6	4,364.9	1.68	2,599.220	
600.0	600.0	599.8	599.7	1.0	1.0	146.26	-4,329.8	562.9	4,369.2	4,367.1	2.07	2,107.797	
700.0	699.9	690.8	690.8	1.2	1.2	146.27	-4,330.1	562.5	4,373.0	4,370.6	2.41	1,814.986	
800.0	799.7	800.0	800.0	1.4	1.4	146.30	-4,330.5	561.6	4,378.3	4,375.6	2.78	1,574.257	
899.9	899.3	897.9	897.9	1.6	1.6	146.33	-4,330.7	560.6	4,385.0	4,381.9	3.14	1,397.855	
1,000.0	999.0	988.8	988.8	1.8	1.7	146.40	-4,331.1	559.6	4,392.5	4,389.0	3.48	1,261.067	
1,100.0	1,098.6	1,104.5	1,104.5	2.0	1.9	146.50	-4,331.5	557.8	4,400.0	4,396.1	3.87	1,135.601	
1,200.0	1,198.2	1,205.8	1,205.7	2.3	2.1	146.59	-4,331.7	556.1	4,407.2	4,403.0	4.24	1,039.097	
1,300.0	1,297.8	1,303.1	1,303.0	2.5	2.3	146.67	-4,331.9	554.1	4,414.5	4,409.9	4.60	959.000	
1,400.0	1,397.5	1,415.9	1,415.8	2.7	2.5	146.78	-4,332.0	551.4	4,421.6	4,416.6	4.99	885.510	
1,500.0	1,497.1	1,505.5	1,505.4	2.9	2.6	146.86	-4,332.0	549.6	4,428.7	4,423.4	5.34	829.168	
1,600.0	1,596.7	1,626.7	1,626.6	3.2	2.9	146.96	-4,331.8	547.3	4,435.5	4,429.8	5.75	771.861	
1,700.0	1,696.3	1,715.9	1,715.7	3.4	3.0	147.04	-4,331.7	545.5	4,442.5	4,436.4	6.10	728.872	
1,800.0	1,795.9	1,840.1	1,839.9	3.6	3.2	147.16	-4,331.1	542.3	4,449.1	4,442.5	6.51	683.647	
1,900.0	1,895.6	1,929.0	1,928.7	3.8	3.4	147.24	-4,330.7	539.9	4,455.6	4,448.8	6.86	649.787	
2,000.0	1,995.2	2,017.3	2,017.0	4.1	3.6	147.32	-4,330.6	537.6	4,462.5	4,455.3	7.21	619.325	
2,100.0	2,094.8	2,126.3	2,126.0	4.3	3.7	147.43	-4,330.2	534.7	4,469.2	4,461.6	7.59	588.745	
2,200.0	2,194.4	2,200.0	2,199.6	4.5	3.9	147.49	-4,330.2	532.8	4,476.3	4,468.4	7.91	565.700	
2,300.0	2,294.0	2,326.1	2,325.7	4.8	4.1	147.62	-4,330.2	529.0	4,483.3	4,475.0	8.33	538.069	
2,400.0	2,393.7	2,437.0	2,436.5	5.0	4.3	147.73	-4,329.9	525.3	4,490.1	4,481.4	8.72	514.698	
2,500.0	2,493.3	2,559.5	2,559.0	5.2	4.5	147.86	-4,328.8	521.1	4,496.2	4,487.0	9.14	492.108	
2,600.0	2,592.9	2,645.2	2,644.6	5.4	4.7	147.94	-4,328.0	518.4	4,502.3	4,492.9	9.48	474.913	
2,700.0	2,692.5	2,729.7	2,729.1	5.7	4.8	148.01	-4,327.4	516.4	4,508.9	4,499.1	9.82	459.126	
2,800.0	2,792.1	2,827.7	2,827.1	5.9	5.0	148.10	-4,327.0	514.3	4,515.7	4,505.5	10.18	443.372	
2,900.0	2,891.8	2,935.4	2,934.7	6.1	5.2	148.18	-4,326.4	512.5	4,522.3	4,511.7	10.56	428.067	
3,000.0	2,991.4	3,035.0	3,034.3	6.4	5.4	148.26	-4,325.6	511.0	4,528.8	4,517.9	10.93	414.327	
3,100.0	3,091.0	3,126.9	3,126.2	6.6	5.5	148.33	-4,325.1	509.3	4,535.5	4,524.2	11.28	401.979	
3,200.0	3,190.6	3,219.9	3,219.2	6.8	5.7	148.41	-4,324.7	507.7	4,542.3	4,530.7	11.64	390.345	
3,300.0	3,290.2	3,300.0	3,299.3	7.1	5.8	148.47	-4,324.6	506.6	4,549.5	4,537.5	11.97	380.203	
3,400.0	3,389.9	3,400.0	3,399.3	7.3	6.0	148.53	-4,324.6	505.7	4,556.9	4,544.6	12.33	369.592	
3,500.0	3,489.5	3,488.6	3,487.9	7.5	6.2	148.59	-4,324.7	505.0	4,564.4	4,551.7	12.67	360.154	
3,600.0	3,589.1	3,588.3	3,587.6	7.7	6.3	148.66	-4,324.9	504.1	4,572.0	4,558.9	13.04	350.688	
3,700.0	3,688.7	3,698.3	3,697.6	8.0	6.5	148.74	-4,325.0	503.2	4,579.5	4,566.0	13.42	341.278	
3,800.0	3,788.3	3,792.4	3,791.6	8.2	6.7	148.80	-4,325.0	502.7	4,586.9	4,573.1	13.77	333.084	
3,900.0	3,888.0	3,895.0	3,894.2	8.4	6.9	148.86	-4,325.1	501.8	4,594.4	4,580.2	14.14	324.905	
4,000.0	3,987.6	3,989.8	3,989.1	8.7	7.1	148.94	-4,325.3	500.4	4,601.9	4,587.4	14.50	317.435	
4,100.0	4,087.2	4,098.2	4,097.4	8.9	7.2	149.02	-4,325.4	498.4	4,609.3	4,594.4	14.88	309.789	
4,200.0	4,186.8	4,216.3	4,215.5	9.1	7.5	149.12	-4,325.2	496.0	4,616.5	4,601.2	15.28	302.159	
4,300.0	4,286.4	4,319.4	4,318.5	9.4	7.6	149.20	-4,324.8	493.5	4,623.4	4,607.7	15.65	295.383	
4,400.0	4,386.1	4,412.9	4,412.0	9.6	7.8	149.29	-4,324.5	490.9	4,630.4	4,614.4	16.01	289.259	
4,500.0	4,485.7	4,500.0	4,499.1	9.8	8.0	149.36	-4,324.4	489.0	4,637.5	4,621.2	16.35	283.651	
4,600.0	4,585.3	4,593.3	4,592.4	10.1	8.1	149.43	-4,324.4	487.3	4,644.9	4,628.2	16.70	278.093	
4,700.0	4,684.9	4,725.6	4,724.7	10.3	8.4	149.53	-4,323.9	484.8	4,651.9	4,634.7	17.13	271.611	
4,800.0	4,784.5	4,805.5	4,804.6	10.5	8.5	149.60	-4,323.6	483.2	4,658.9	4,641.4	17.46	266.889	
4,900.0	4,884.1	4,929.6	4,928.6	10.8	8.7	149.70	-4,323.0	480.6	4,665.8	4,648.0	17.87	261.168	
5,000.0	4,983.8	5,041.1	5,040.2	11.0	8.9	149.77	-4,322.0	479.1	4,672.3	4,654.1	18.25	256.030	
5,100.0	5,083.4	5,148.2	5,147.2	11.2	9.1	149.85	-4,320.9	477.8	4,678.8	4,660.1	18.62	251.212	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,200.0	5,183.0	5,269.9	5,268.8	11.4	9.3	149.93	-4,319.1	476.5	4,684.8	4,665.8	19.03	246.234	
5,300.0	5,282.6	5,364.9	5,363.9	11.7	9.5	149.98	-4,317.5	475.7	4,690.6	4,671.2	19.38	242.047	
5,400.0	5,382.2	5,452.8	5,451.7	11.9	9.6	150.04	-4,316.2	475.0	4,696.7	4,676.9	19.72	238.171	
5,500.0	5,481.9	5,557.7	5,556.6	12.1	9.8	150.11	-4,314.9	474.0	4,702.9	4,682.8	20.09	234.087	
5,600.0	5,581.5	5,651.3	5,650.2	12.4	10.0	150.16	-4,313.5	473.4	4,708.9	4,688.5	20.44	230.375	
5,700.0	5,681.1	5,743.8	5,742.8	12.6	10.2	150.22	-4,312.4	472.9	4,715.3	4,694.5	20.79	226.826	
5,800.0	5,780.7	5,865.0	5,863.9	12.8	10.4	150.29	-4,310.7	472.2	4,721.5	4,700.3	21.19	222.851	
5,900.0	5,880.3	5,951.6	5,950.5	13.1	10.5	150.33	-4,309.3	472.0	4,727.4	4,705.9	21.52	219.643	
6,000.0	5,980.0	6,025.3	6,024.2	13.3	10.6	150.37	-4,308.5	471.9	4,733.9	4,712.1	21.84	216.786	
6,100.0	6,079.6	6,100.0	6,098.9	13.5	10.8	150.42	-4,308.1	471.6	4,740.9	4,718.8	22.15	214.018	
6,200.0	6,179.2	6,173.9	6,172.8	13.8	10.9	150.46	-4,308.1	471.0	4,748.4	4,726.0	22.47	211.359	
6,300.0	6,278.8	6,268.6	6,267.5	14.0	11.1	150.52	-4,308.5	470.0	4,756.4	4,733.6	22.82	208.452	
6,400.0	6,378.4	6,418.8	6,417.7	14.2	11.3	150.61	-4,308.3	469.2	4,763.9	4,740.6	23.27	204.718	
6,500.0	6,478.1	6,519.9	6,518.7	14.5	11.5	150.67	-4,307.6	468.5	4,770.7	4,747.1	23.63	201.861	
6,600.0	6,577.7	6,616.4	6,615.2	14.7	11.7	150.73	-4,306.9	467.8	4,777.6	4,753.6	23.99	199.165	
6,700.0	6,677.3	6,736.2	6,735.1	14.9	11.9	150.80	-4,306.0	466.9	4,784.4	4,760.0	24.39	196.200	
6,800.0	6,776.9	6,856.7	6,855.6	15.1	12.1	150.87	-4,304.3	466.0	4,790.6	4,765.8	24.78	193.301	
6,900.0	6,876.5	6,952.9	6,951.8	15.4	12.3	150.92	-4,302.9	465.5	4,796.7	4,771.6	25.14	190.829	
7,000.0	6,976.2	7,040.2	7,039.1	15.6	12.4	150.97	-4,301.7	465.5	4,803.0	4,777.5	25.47	188.558	
7,100.0	7,075.8	7,131.2	7,130.1	15.8	12.6	151.01	-4,300.7	466.0	4,809.5	4,783.7	25.81	186.320	
7,147.2	7,122.8	7,181.3	7,180.1	15.9	12.7	151.02	-4,300.1	466.8	4,812.6	4,786.6	25.99	185.202	
7,150.0	7,125.6	7,184.3	7,183.1	16.0	12.7	149.50	-4,300.1	466.9	4,812.8	4,786.8	26.00	185.135	
7,200.0	7,175.5	7,243.4	7,242.2	16.0	12.8	67.57	-4,299.3	468.5	4,813.6	4,787.4	26.19	183.822	
7,250.0	7,225.4	7,300.0	7,298.7	16.1	12.8	18.44	-4,298.4	471.1	4,810.0	4,783.6	26.37	182.399	
7,300.0	7,274.8	7,333.9	7,332.6	16.0	12.9	9.10	-4,297.9	473.1	4,802.0	4,775.5	26.51	181.108	
7,350.0	7,323.4	7,364.7	7,363.3	16.0	12.9	5.44	-4,297.5	475.0	4,790.0	4,763.3	26.65	179.721	
7,400.0	7,370.8	7,400.0	7,398.5	15.9	13.0	3.46	-4,297.2	477.3	4,774.0	4,747.2	26.80	178.155	
7,450.0	7,416.7	7,427.3	7,425.8	15.8	13.1	2.20	-4,297.1	479.1	4,754.0	4,727.1	26.93	176.552	
7,500.0	7,460.7	7,459.2	7,457.6	15.7	13.1	1.28	-4,297.0	481.1	4,730.3	4,703.2	27.06	174.780	
7,550.0	7,502.4	7,500.0	7,498.3	15.5	13.2	0.53	-4,297.1	483.4	4,703.0	4,675.7	27.22	172.800	
7,600.0	7,541.6	7,522.5	7,520.8	15.4	13.2	-0.12	-4,297.1	484.6	4,672.1	4,644.8	27.34	170.920	
7,650.0	7,578.0	7,555.5	7,553.7	15.2	13.3	-0.75	-4,297.2	486.1	4,638.0	4,610.5	27.47	168.829	
7,700.0	7,611.2	7,585.6	7,583.9	15.1	13.3	-1.40	-4,297.4	487.4	4,600.9	4,573.3	27.60	166.687	
7,750.0	7,641.0	7,613.3	7,611.5	14.9	13.4	-2.15	-4,297.5	488.5	4,561.0	4,533.3	27.73	164.498	
7,800.0	7,667.3	7,638.1	7,636.3	14.8	13.4	-3.06	-4,297.7	489.4	4,518.7	4,490.9	27.85	162.276	
7,850.0	7,689.7	7,659.5	7,657.6	14.7	13.4	-4.26	-4,297.8	490.2	4,474.2	4,446.3	27.96	160.039	
7,900.0	7,708.2	7,677.1	7,675.3	14.7	13.5	-6.02	-4,297.9	490.7	4,428.0	4,399.9	28.06	157.799	
7,950.0	7,722.5	7,690.9	7,689.1	14.7	13.5	-8.90	-4,298.0	491.2	4,380.3	4,352.1	28.16	155.569	
8,000.0	7,732.6	7,701.2	7,699.4	14.8	13.5	-14.57	-4,298.1	491.5	4,331.4	4,303.2	28.24	153.355	
8,050.0	7,738.5	7,710.1	7,708.2	14.9	13.5	-30.45	-4,298.2	491.7	4,281.9	4,253.6	28.33	151.148	
8,092.0	7,740.0	7,712.7	7,710.8	15.0	13.5	-81.04	-4,298.2	491.8	4,240.1	4,211.7	28.39	149.345	
8,100.0	7,740.0	7,712.8	7,710.9	15.0	13.5	-81.06	-4,298.2	491.8	4,232.0	4,203.6	28.40	149.004	
8,200.0	7,740.0	7,713.7	7,711.8	15.5	13.5	-81.30	-4,298.2	491.9	4,132.2	4,103.6	28.54	144.789	
8,300.0	7,740.0	7,714.6	7,712.7	16.1	13.5	-81.53	-4,298.2	491.9	4,032.3	4,003.6	28.67	140.623	
8,400.0	7,740.0	7,715.5	7,713.6	16.9	13.5	-81.77	-4,298.2	491.9	3,932.4	3,903.6	28.81	136.502	
8,500.0	7,740.0	7,716.4	7,714.5	17.8	13.5	-81.99	-4,298.2	491.9	3,832.6	3,803.7	28.94	132.425	
8,600.0	7,740.0	7,717.2	7,715.4	18.9	13.5	-82.22	-4,298.2	492.0	3,732.8	3,703.7	29.07	128.393	
8,700.0	7,740.0	7,718.1	7,716.2	20.0	13.5	-82.44	-4,298.2	492.0	3,632.9	3,603.7	29.20	124.402	
8,800.0	7,740.0	7,718.9	7,717.0	21.2	13.5	-82.65	-4,298.2	492.0	3,533.1	3,503.8	29.33	120.452	
8,900.0	7,740.0	7,719.7	7,717.9	22.5	13.5	-82.86	-4,298.2	492.0	3,433.3	3,403.9	29.46	116.542	
9,000.0	7,740.0	7,720.5	7,718.6	23.9	13.5	-83.07	-4,298.2	492.1	3,333.5	3,304.0	29.59	112.671	
9,100.0	7,740.0	7,721.3	7,719.4	25.3	13.5	-83.28	-4,298.3	492.1	3,233.8	3,204.1	29.71	108.836	

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 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
9,200.0	7,740.0	7,722.1	7,720.2	26.7	13.5	-83.48	-4,298.3	492.1	3,134.0	3,104.2	29.84	105.038	
9,300.0	7,740.0	7,722.8	7,721.0	28.2	13.5	-83.67	-4,298.3	492.1	3,034.2	3,004.3	29.96	101.275	
9,400.0	7,740.0	7,723.6	7,721.7	29.7	13.5	-83.87	-4,298.3	492.1	2,934.5	2,904.4	30.08	97.545	
9,500.0	7,740.0	7,724.3	7,722.4	31.3	13.5	-84.06	-4,298.3	492.2	2,834.8	2,804.6	30.21	93.848	
9,600.0	7,740.0	7,725.0	7,723.1	32.8	13.5	-84.25	-4,298.3	492.2	2,735.1	2,704.8	30.33	90.182	
9,700.0	7,740.0	7,725.7	7,723.8	34.4	13.5	-84.43	-4,298.3	492.2	2,635.4	2,605.0	30.45	86.546	
9,800.0	7,740.0	7,726.4	7,724.5	36.0	13.5	-84.61	-4,298.3	492.2	2,535.8	2,505.2	30.57	82.939	
9,900.0	7,740.0	7,727.1	7,725.2	37.6	13.5	-84.79	-4,298.3	492.2	2,436.2	2,405.5	30.70	79.358	
10,000.0	7,740.0	7,727.7	7,725.9	39.2	13.6	-84.97	-4,298.3	492.3	2,336.6	2,305.8	30.82	75.804	
10,100.0	7,740.0	7,728.4	7,726.5	40.9	13.6	-85.14	-4,298.3	492.3	2,237.1	2,206.1	30.95	72.273	
10,200.0	7,740.0	7,729.0	7,727.2	42.5	13.6	-85.31	-4,298.3	492.3	2,137.6	2,106.5	31.09	68.764	
10,300.0	7,740.0	7,729.7	7,727.8	44.2	13.6	-85.48	-4,298.3	492.3	2,038.1	2,006.9	31.22	65.276	
10,400.0	7,740.0	7,730.3	7,728.5	45.8	13.6	-85.64	-4,298.3	492.3	1,938.7	1,907.3	31.37	61.806	
10,500.0	7,740.0	7,730.9	7,729.1	47.5	13.6	-85.80	-4,298.3	492.4	1,839.4	1,807.8	31.52	58.351	
10,600.0	7,740.0	7,731.5	7,729.7	49.1	13.6	-85.96	-4,298.3	492.4	1,740.1	1,708.4	31.69	54.909	
10,700.0	7,740.0	7,732.1	7,730.3	50.8	13.6	-86.12	-4,298.3	492.4	1,640.9	1,609.1	31.88	51.476	
10,800.0	7,740.0	7,732.7	7,730.9	52.5	13.6	-86.28	-4,298.3	492.4	1,541.9	1,509.8	32.09	48.049	
10,900.0	7,740.0	7,733.3	7,731.4	54.2	13.6	-86.43	-4,298.3	492.4	1,443.0	1,410.6	32.34	44.623	
11,000.0	7,740.0	7,733.9	7,732.0	55.9	13.6	-86.58	-4,298.3	492.4	1,344.2	1,311.6	32.63	41.195	
11,100.0	7,740.0	7,734.4	7,732.6	57.6	13.6	-86.73	-4,298.3	492.5	1,245.6	1,212.6	32.99	37.758	
11,200.0	7,740.0	7,735.0	7,733.1	59.3	13.6	-86.87	-4,298.3	492.5	1,147.3	1,113.8	33.44	34.308	
11,300.0	7,740.0	7,735.5	7,733.7	61.0	13.6	-87.01	-4,298.3	492.5	1,049.3	1,015.2	34.02	30.840	
11,400.0	7,740.0	7,736.1	7,734.2	62.7	13.6	-87.16	-4,298.3	492.5	951.7	916.9	34.79	27.353	
11,500.0	7,740.0	7,736.6	7,734.7	64.4	13.6	-87.29	-4,298.3	492.5	854.6	818.8	35.84	23.847	
11,600.0	7,740.0	7,737.1	7,735.3	66.1	13.6	-87.43	-4,298.3	492.5	758.3	721.0	37.29	20.336	
11,700.0	7,740.0	7,737.6	7,735.8	67.8	13.6	-87.57	-4,298.3	492.5	663.2	623.8	39.36	16.848	
11,800.0	7,740.0	7,738.1	7,736.3	69.5	13.6	-87.70	-4,298.3	492.6	569.6	527.3	42.38	13.441	
11,900.0	7,740.0	7,738.6	7,736.8	71.2	13.6	-87.83	-4,298.3	492.6	478.7	431.9	46.88	10.212	
12,000.0	7,740.0	7,739.1	7,737.3	72.9	13.6	-87.96	-4,298.3	492.6	392.3	338.6	53.70	7.306	
12,100.0	7,740.0	7,739.6	7,737.7	74.7	13.6	-88.09	-4,298.3	492.6	314.0	250.1	63.94	4.911	
12,200.0	7,740.0	7,740.1	7,738.2	76.4	13.6	-88.21	-4,298.4	492.6	251.6	173.7	77.88	3.231	
12,300.0	7,740.0	7,740.6	7,738.7	78.1	13.6	-88.34	-4,298.4	492.6	219.1	128.8	90.35	2.425	
12,326.5	7,740.0	7,740.7	7,738.8	78.6	13.6	-88.37	-4,298.4	492.6	217.5	125.6	91.90	2.367	CC, ES, SF
12,400.0	7,740.0	7,741.0	7,739.2	79.8	13.6	-88.46	-4,298.4	492.6	229.6	138.8	90.77	2.529	
12,500.0	7,740.0	7,741.5	7,739.6	81.6	13.6	-88.58	-4,298.4	492.7	278.2	196.9	81.35	3.420	
12,600.0	7,740.0	7,741.9	7,740.1	83.3	13.6	-88.70	-4,298.4	492.7	349.5	278.1	71.35	4.898	
12,700.0	7,740.0	7,742.4	7,740.5	85.0	13.6	-88.82	-4,298.4	492.7	432.2	368.5	63.76	6.779	
12,800.0	7,740.0	7,742.8	7,740.9	86.7	13.6	-88.93	-4,298.4	492.7	521.1	462.7	58.36	8.929	
12,900.0	7,740.0	7,743.2	7,741.4	88.5	13.6	-89.05	-4,298.4	492.7	613.4	558.9	54.51	11.252	
13,000.0	7,740.0	7,743.7	7,741.8	90.2	13.6	-89.16	-4,298.4	492.7	707.8	656.1	51.70	13.689	
13,100.0	7,740.0	7,744.1	7,742.2	91.9	13.6	-89.27	-4,298.4	492.7	803.5	753.9	49.61	16.196	
13,200.0	7,740.0	7,744.5	7,742.6	93.7	13.6	-89.38	-4,298.4	492.7	900.2	852.2	48.02	18.746	
13,300.0	7,740.0	7,744.9	7,743.1	95.4	13.6	-89.49	-4,298.4	492.8	997.5	950.7	46.79	21.321	
13,400.0	7,740.0	7,745.3	7,743.5	97.1	13.6	-89.60	-4,298.4	492.8	1,095.3	1,049.5	45.81	23.908	
13,500.0	7,740.0	7,745.7	7,743.9	98.9	13.6	-89.70	-4,298.4	492.8	1,193.5	1,148.5	45.04	26.498	
13,600.0	7,740.0	7,746.1	7,744.3	100.6	13.6	-89.80	-4,298.4	492.8	1,291.9	1,247.5	44.42	29.085	
13,700.0	7,740.0	7,746.5	7,744.6	102.3	13.6	-89.91	-4,298.4	492.8	1,390.6	1,346.7	43.92	31.666	
13,800.0	7,740.0	7,746.9	7,745.0	104.1	13.6	-90.01	-4,298.4	492.8	1,489.5	1,446.0	43.51	34.237	
13,900.0	7,740.0	7,747.3	7,745.4	105.8	13.6	-90.11	-4,298.4	492.8	1,588.5	1,545.3	43.17	36.796	
14,000.0	7,740.0	7,747.7	7,745.8	107.5	13.6	-90.21	-4,298.4	492.8	1,687.6	1,644.7	42.89	39.342	
14,100.0	7,740.0	7,748.0	7,746.2	109.3	13.6	-90.31	-4,298.4	492.8	1,786.8	1,744.1	42.67	41.874	
14,200.0	7,740.0	7,748.4	7,746.5	111.0	13.6	-90.40	-4,298.4	492.9	1,886.1	1,843.6	42.49	44.392	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)						
14,300.0	7,740.0	7,748.8	7,746.9	112.8	13.6	-90.50	-4,298.4	492.9	1,985.4	1,943.1	42.34	46.894		
14,400.0	7,740.0	7,749.1	7,747.2	114.5	13.6	-90.59	-4,298.4	492.9	2,084.9	2,042.7	42.22	49.381		
14,500.0	7,740.0	7,749.5	7,747.6	116.2	13.6	-90.68	-4,298.4	492.9	2,184.4	2,142.2	42.13	51.853		
14,600.0	7,740.0	7,749.8	7,748.0	118.0	13.6	-90.78	-4,298.4	492.9	2,283.9	2,241.8	42.05	54.308		
14,700.0	7,740.0	7,750.2	7,748.3	119.7	13.6	-90.87	-4,298.4	492.9	2,383.4	2,341.4	42.00	56.749		
14,800.0	7,740.0	7,750.5	7,748.6	121.5	13.6	-90.96	-4,298.4	492.9	2,483.0	2,441.1	41.96	59.173		
14,900.0	7,740.0	7,750.8	7,749.0	123.2	13.6	-91.05	-4,298.4	492.9	2,582.7	2,540.7	41.94	61.583		
15,000.0	7,740.0	7,751.2	7,749.3	124.9	13.6	-91.13	-4,298.4	492.9	2,682.3	2,640.4	41.93	63.977		
15,100.0	7,740.0	7,751.5	7,749.6	126.7	13.6	-91.22	-4,298.4	492.9	2,782.0	2,740.1	41.93	66.355		
15,200.0	7,740.0	7,751.8	7,750.0	128.4	13.6	-91.30	-4,298.4	492.9	2,881.7	2,839.8	41.93	68.719		
15,300.0	7,740.0	7,752.1	7,750.3	130.2	13.6	-91.39	-4,298.4	493.0	2,981.4	2,939.5	41.95	71.068		
15,400.0	7,740.0	7,752.5	7,750.6	131.9	13.6	-91.47	-4,298.4	493.0	3,081.2	3,039.2	41.98	73.402		
15,500.0	7,740.0	7,752.8	7,750.9	133.7	13.6	-91.55	-4,298.4	493.0	3,180.9	3,138.9	42.01	75.721		
15,600.0	7,740.0	7,753.1	7,751.2	135.4	13.6	-91.64	-4,298.4	493.0	3,280.7	3,238.7	42.05	78.026		
15,700.0	7,740.0	7,753.4	7,751.5	137.1	13.6	-91.72	-4,298.4	493.0	3,380.5	3,338.4	42.09	80.316		
15,800.0	7,740.0	7,753.7	7,751.8	138.9	13.6	-91.80	-4,298.4	493.0	3,480.3	3,438.2	42.14	82.593		
15,900.0	7,740.0	7,754.0	7,752.1	140.6	13.6	-91.88	-4,298.4	493.0	3,580.1	3,537.9	42.19	84.855		
15,953.0	7,740.0	7,754.2	7,752.3	141.6	13.6	-91.92	-4,298.4	493.0	3,633.0	3,590.7	42.22	86.048		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	11.3	11.3	0.0	0.0	152.79	-2,304.0	1,184.8	2,590.8					
100.0	100.0	114.1	114.1	0.2	0.2	152.78	-2,303.9	1,184.8	2,590.8	2,590.4	0.35	7,439.548		
200.0	200.0	216.9	216.9	0.3	0.4	152.78	-2,303.7	1,184.8	2,590.6	2,589.9	0.70	3,702.473		
300.0	300.0	319.7	319.7	0.5	0.6	152.78	-2,303.4	1,184.8	2,590.3	2,589.3	1.05	2,464.290		
400.0	400.0	422.5	422.5	0.7	0.7	152.77	-2,303.0	1,184.9	2,589.9	2,588.5	1.40	1,846.541		
447.9	447.9	471.8	471.8	0.8	0.8	126.43	-2,302.7	1,184.9	2,589.8	2,588.2	1.57	1,648.487		
500.0	500.0	525.3	525.3	0.9	0.9	126.44	-2,302.4	1,184.9	2,589.9	2,588.2	1.75	1,476.282		
600.0	600.0	628.1	628.1	1.0	1.1	126.47	-2,301.7	1,184.9	2,590.9	2,588.8	2.11	1,229.047		
700.0	699.9	730.8	730.8	1.2	1.3	126.53	-2,300.8	1,184.9	2,592.8	2,590.3	2.47	1,051.537		
800.0	799.7	833.5	833.5	1.4	1.4	126.61	-2,299.9	1,184.9	2,595.6	2,592.7	2.83	917.330		
899.9	899.3	936.0	936.0	1.6	1.6	126.71	-2,298.8	1,184.9	2,599.3	2,596.1	3.20	811.969		
1,000.0	999.0	1,034.2	1,034.2	1.8	1.8	126.85	-2,297.7	1,184.9	2,603.5	2,600.0	3.57	729.273		
1,100.0	1,098.6	1,104.9	1,104.9	2.0	1.9	126.95	-2,297.2	1,185.2	2,608.4	2,604.5	3.90	669.573		
1,200.0	1,198.2	1,183.0	1,183.0	2.3	2.0	127.05	-2,297.5	1,186.2	2,614.5	2,610.2	4.24	617.218		
1,300.0	1,297.8	1,243.8	1,243.7	2.5	2.2	127.13	-2,298.3	1,187.3	2,621.6	2,617.1	4.55	576.701		
1,400.0	1,397.5	1,322.6	1,322.5	2.7	2.3	127.23	-2,300.1	1,189.0	2,629.9	2,625.0	4.89	537.972		
1,500.0	1,497.1	1,408.0	1,407.8	2.9	2.4	127.34	-2,302.4	1,191.0	2,638.7	2,633.4	5.24	503.205		
1,600.0	1,596.7	1,490.5	1,490.3	3.2	2.6	127.44	-2,304.9	1,193.7	2,648.1	2,642.5	5.59	473.307		
1,700.0	1,696.3	1,564.0	1,563.7	3.4	2.7	127.51	-2,307.3	1,196.8	2,658.2	2,652.3	5.93	448.229		
1,800.0	1,795.9	1,641.5	1,641.0	3.6	2.9	127.57	-2,310.0	1,201.3	2,669.3	2,663.0	6.28	425.242		
1,900.0	1,895.6	1,723.9	1,723.1	3.8	3.0	127.60	-2,313.1	1,207.3	2,681.2	2,674.5	6.63	404.177		
2,000.0	1,995.2	1,819.6	1,818.5	4.1	3.2	127.64	-2,317.0	1,214.6	2,693.5	2,686.4	7.02	383.794		
2,100.0	2,094.8	1,916.6	1,915.1	4.3	3.4	127.68	-2,321.0	1,221.9	2,705.8	2,698.4	7.41	365.306		
2,200.0	2,194.4	2,024.6	2,022.7	4.5	3.6	127.72	-2,325.3	1,230.2	2,718.1	2,710.2	7.82	347.654		
2,300.0	2,294.0	2,103.6	2,101.4	4.8	3.8	127.75	-2,328.6	1,236.1	2,730.4	2,722.2	8.17	334.112		
2,400.0	2,393.7	2,187.5	2,185.0	5.0	4.0	127.78	-2,332.7	1,242.8	2,743.6	2,735.0	8.54	321.395		
2,500.0	2,493.3	2,273.0	2,270.1	5.2	4.2	127.81	-2,337.1	1,249.9	2,757.1	2,748.2	8.91	309.603		
2,600.0	2,592.9	2,380.6	2,377.0	5.4	4.4	127.85	-2,343.0	1,259.1	2,771.1	2,761.8	9.32	297.367		
2,700.0	2,692.5	2,528.5	2,524.5	5.7	4.7	127.93	-2,350.0	1,269.4	2,783.7	2,773.9	9.81	283.668		
2,800.0	2,792.1	2,627.3	2,622.9	5.9	4.9	127.97	-2,353.6	1,276.3	2,795.4	2,785.2	10.21	273.766		
2,900.0	2,891.8	2,707.8	2,703.2	6.1	5.1	128.00	-2,356.8	1,282.3	2,807.5	2,797.0	10.57	265.633		
3,000.0	2,991.4	2,808.5	2,803.5	6.4	5.3	128.05	-2,361.4	1,289.7	2,820.1	2,809.2	10.97	257.090		
3,100.0	3,091.0	2,928.0	2,922.6	6.6	5.6	128.11	-2,366.3	1,297.9	2,832.2	2,820.8	11.41	248.265		
3,200.0	3,190.6	3,023.0	3,017.3	6.8	5.8	128.15	-2,369.9	1,304.5	2,843.9	2,832.1	11.80	241.055		
3,300.0	3,290.2	3,118.0	3,112.0	7.1	6.0	128.19	-2,373.6	1,311.1	2,855.8	2,843.7	12.19	234.360		
3,400.0	3,389.9	3,206.4	3,200.1	7.3	6.2	128.23	-2,377.3	1,317.5	2,868.1	2,855.5	12.56	228.299		
3,500.0	3,489.5	3,327.9	3,321.2	7.5	6.4	128.28	-2,381.9	1,326.2	2,880.0	2,867.0	13.01	221.364		
3,600.0	3,589.1	3,409.9	3,402.9	7.7	6.6	128.30	-2,384.9	1,332.6	2,891.9	2,878.5	13.38	216.182		
3,700.0	3,688.7	3,508.7	3,501.3	8.0	6.8	128.33	-2,388.7	1,340.2	2,904.2	2,890.4	13.78	210.812		
3,800.0	3,788.3	3,604.9	3,597.1	8.2	7.1	128.37	-2,392.8	1,347.1	2,916.5	2,902.3	14.17	205.837		
3,900.0	3,888.0	3,712.4	3,704.2	8.4	7.3	128.40	-2,396.9	1,355.7	2,928.7	2,914.1	14.59	200.678		
4,000.0	3,987.6	3,813.1	3,804.6	8.7	7.5	128.41	-2,400.4	1,363.8	2,940.6	2,925.6	15.00	196.019		
4,100.0	4,087.2	3,898.8	3,889.9	8.9	7.7	128.44	-2,403.8	1,370.3	2,952.9	2,937.5	15.37	192.075		
4,200.0	4,186.8	3,989.8	3,980.5	9.1	7.9	128.46	-2,407.6	1,377.7	2,965.5	2,949.8	15.76	188.154		
4,300.0	4,286.4	4,090.4	4,080.7	9.4	8.2	128.48	-2,411.8	1,386.1	2,978.2	2,962.1	16.17	184.181		
4,400.0	4,386.1	4,180.2	4,170.1	9.6	8.4	128.50	-2,415.7	1,393.5	2,991.1	2,974.5	16.55	180.681		
4,500.0	4,485.7	4,263.5	4,253.0	9.8	8.6	128.52	-2,419.6	1,400.7	3,004.4	2,987.4	16.92	177.511		
4,600.0	4,585.3	4,390.3	4,379.3	10.1	8.9	128.55	-2,425.5	1,411.0	3,017.4	3,000.0	17.39	173.521		
4,700.0	4,684.9	4,510.6	4,499.1	10.3	9.1	128.59	-2,430.2	1,420.4	3,029.7	3,011.9	17.84	169.791		
4,800.0	4,784.5	4,642.0	4,630.0	10.5	9.4	128.62	-2,434.5	1,430.2	3,041.2	3,022.9	18.32	166.020		
4,900.0	4,884.1	4,752.5	4,740.3	10.8	9.7	128.67	-2,437.6	1,437.2	3,052.0	3,033.2	18.74	162.850		
5,000.0	4,983.8	4,910.0	4,897.6	11.0	10.0	128.79	-2,442.0	1,444.0	3,061.8	3,042.6	19.23	159.188		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 1024-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,083.4	5,090.6	5,078.1	11.2	10.2	129.02	-2,444.6	1,445.1	3,068.7	3,048.9	19.74	155.434		
5,200.0	5,183.0	5,193.2	5,180.8	11.4	10.4	129.15	-2,445.2	1,445.0	3,074.7	3,054.6	20.12	152.839		
5,300.0	5,282.6	5,317.5	5,305.1	11.7	10.6	129.32	-2,445.6	1,444.6	3,080.4	3,059.8	20.53	150.064		
5,400.0	5,382.2	5,417.1	5,404.7	11.9	10.7	129.46	-2,445.3	1,443.9	3,085.4	3,064.5	20.90	147.657		
5,500.0	5,481.9	5,521.2	5,508.8	12.1	10.9	129.60	-2,445.2	1,443.2	3,090.6	3,069.3	21.27	145.291		
5,600.0	5,581.5	5,624.5	5,612.0	12.4	11.0	129.74	-2,445.0	1,442.3	3,095.6	3,073.9	21.65	143.007		
5,700.0	5,681.1	5,721.0	5,708.5	12.6	11.2	129.87	-2,444.7	1,441.6	3,100.6	3,078.6	22.01	140.869		
5,800.0	5,780.7	5,826.3	5,813.9	12.8	11.3	130.01	-2,444.4	1,440.8	3,105.7	3,083.3	22.39	138.713		
5,900.0	5,880.3	5,937.2	5,924.7	13.1	11.5	130.16	-2,443.7	1,439.8	3,110.4	3,087.6	22.78	136.564		
6,000.0	5,980.0	6,040.0	6,027.5	13.3	11.6	130.30	-2,443.0	1,438.6	3,114.9	3,091.7	23.15	134.561		
6,100.0	6,079.6	6,127.4	6,114.9	13.5	11.8	130.42	-2,442.4	1,437.7	3,119.5	3,096.0	23.50	132.741		
6,200.0	6,179.2	6,221.6	6,209.1	13.8	11.9	130.53	-2,441.8	1,437.7	3,124.6	3,100.7	23.87	130.924		
6,300.0	6,278.8	6,326.6	6,314.1	14.0	12.1	130.65	-2,441.0	1,437.7	3,129.6	3,105.3	24.25	129.064		
6,400.0	6,378.4	6,423.5	6,411.0	14.2	12.2	130.76	-2,440.2	1,437.6	3,134.5	3,109.9	24.62	127.329		
6,500.0	6,478.1	6,523.0	6,510.5	14.5	12.4	130.88	-2,439.5	1,437.6	3,139.5	3,114.6	24.99	125.634		
6,600.0	6,577.7	6,618.8	6,606.3	14.7	12.5	130.99	-2,438.9	1,437.3	3,144.6	3,119.3	25.36	124.023		
6,700.0	6,677.3	6,709.2	6,696.7	14.9	12.7	131.10	-2,438.6	1,437.1	3,149.9	3,124.2	25.71	122.513		
6,800.0	6,776.9	6,806.1	6,793.6	15.1	12.8	131.22	-2,438.5	1,437.0	3,155.5	3,129.4	26.08	121.007		
6,900.0	6,876.5	6,901.6	6,889.1	15.4	13.0	131.34	-2,438.4	1,436.7	3,161.1	3,134.7	26.44	119.554		
7,000.0	6,976.2	6,999.9	6,987.4	15.6	13.2	131.45	-2,438.4	1,436.7	3,166.9	3,140.1	26.81	118.126		
7,100.0	7,075.8	7,101.1	7,088.6	15.8	13.3	131.58	-2,438.4	1,436.6	3,172.6	3,145.5	27.18	116.711		
7,147.2	7,122.8	7,156.9	7,144.4	15.9	13.4	131.64	-2,438.3	1,436.7	3,175.3	3,147.9	27.38	115.992		
7,150.0	7,125.6	7,160.5	7,148.0	16.0	13.4	130.13	-2,438.3	1,436.7	3,175.5	3,148.1	27.39	115.947		
7,200.0	7,175.5	7,223.2	7,210.7	16.0	13.5	48.25	-2,437.9	1,436.8	3,175.8	3,148.2	27.58	115.143		
7,250.0	7,225.4	7,282.5	7,270.0	16.1	13.6	-1.00	-2,437.2	1,436.9	3,172.0	3,144.2	27.76	114.275		
7,300.0	7,274.8	7,330.5	7,318.0	16.0	13.7	-10.62	-2,436.6	1,437.1	3,164.0	3,136.1	27.90	113.402		
7,350.0	7,323.4	7,369.7	7,357.1	16.0	13.8	-14.72	-2,436.2	1,437.1	3,152.2	3,124.2	28.02	112.514		
7,400.0	7,370.8	7,412.8	7,400.2	15.9	13.8	-17.31	-2,435.9	1,437.2	3,136.7	3,108.5	28.13	111.523		
7,450.0	7,416.7	7,459.8	7,447.3	15.8	13.9	-19.43	-2,435.6	1,437.2	3,117.4	3,089.2	28.23	110.429		
7,500.0	7,460.7	7,502.0	7,489.5	15.7	14.0	-21.43	-2,435.3	1,437.2	3,094.5	3,066.2	28.31	109.291		
7,550.0	7,502.4	7,538.0	7,525.5	15.5	14.0	-23.51	-2,435.1	1,437.3	3,068.3	3,040.0	28.38	108.121		
7,600.0	7,541.6	7,575.4	7,562.9	15.4	14.1	-25.85	-2,434.9	1,437.5	3,039.0	3,010.6	28.44	106.874		
7,650.0	7,578.0	7,611.3	7,598.8	15.2	14.1	-28.58	-2,434.7	1,437.6	3,006.7	2,978.2	28.48	105.571		
7,700.0	7,611.2	7,644.7	7,632.1	15.1	14.2	-31.84	-2,434.5	1,437.8	2,971.7	2,943.2	28.51	104.221		
7,750.0	7,641.0	7,674.5	7,662.0	14.9	14.3	-35.77	-2,434.3	1,438.1	2,934.4	2,905.8	28.53	102.835		
7,800.0	7,667.3	7,697.8	7,685.3	14.8	14.3	-40.50	-2,434.1	1,438.3	2,894.9	2,866.4	28.54	101.439		
7,850.0	7,689.7	7,717.6	7,705.1	14.7	14.3	-46.27	-2,434.0	1,438.4	2,853.7	2,825.2	28.53	100.016		
7,900.0	7,708.2	7,733.9	7,721.4	14.7	14.4	-53.26	-2,433.9	1,438.5	2,811.0	2,782.5	28.52	98.570		
7,950.0	7,722.5	7,747.4	7,734.9	14.7	14.4	-61.58	-2,433.9	1,438.6	2,767.3	2,738.8	28.50	97.101		
8,000.0	7,732.6	7,757.4	7,744.9	14.8	14.4	-71.11	-2,433.8	1,438.7	2,722.8	2,694.3	28.48	95.617		
8,050.0	7,738.5	7,763.1	7,750.6	14.9	14.4	-81.38	-2,433.8	1,438.7	2,677.9	2,649.5	28.45	94.129		
8,092.0	7,740.0	7,764.5	7,752.0	15.0	14.4	-90.05	-2,433.8	1,438.7	2,640.2	2,611.8	28.43	92.880		
8,100.0	7,740.0	7,764.5	7,752.0	15.0	14.4	-90.05	-2,433.8	1,438.7	2,633.0	2,604.5	28.42	92.641		
8,200.0	7,740.0	7,764.2	7,751.6	15.5	14.4	-90.03	-2,433.8	1,438.7	2,543.6	2,515.3	28.39	89.610		
8,300.0	7,740.0	7,763.8	7,751.3	16.1	14.4	-90.01	-2,433.8	1,438.7	2,455.1	2,426.8	28.39	86.469		
8,400.0	7,740.0	7,763.5	7,750.9	16.9	14.4	-90.00	-2,433.8	1,438.7	2,367.6	2,339.1	28.46	83.202		
8,500.0	7,740.0	7,763.1	7,750.6	17.8	14.4	-89.98	-2,433.8	1,438.7	2,281.0	2,252.4	28.59	79.795		
8,600.0	7,740.0	7,762.8	7,750.3	18.9	14.4	-89.96	-2,433.8	1,438.7	2,195.6	2,166.8	28.80	76.239		
8,700.0	7,740.0	7,762.4	7,749.9	20.0	14.4	-89.95	-2,433.8	1,438.7	2,111.4	2,082.3	29.11	72.531		
8,800.0	7,740.0	7,762.1	7,749.6	21.2	14.4	-89.93	-2,433.8	1,438.7	2,028.7	1,999.2	29.54	68.677		
8,900.0	7,740.0	7,761.8	7,749.2	22.5	14.4	-89.91	-2,433.8	1,438.7	1,947.7	1,917.6	30.11	64.695		
9,000.0	7,740.0	7,761.4	7,748.9	23.9	14.4	-89.90	-2,433.8	1,438.7	1,868.4	1,837.6	30.82	60.615		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Factor	
9,100.0	7,740.0	7,761.1	7,748.5	25.3	14.4	-89.88	-2,433.8	1,438.7	1,791.3	1,759.6	31.71	56.480	
9,200.0	7,740.0	7,760.7	7,748.2	26.7	14.4	-89.86	-2,433.8	1,438.7	1,716.5	1,683.7	32.79	52.344	
9,300.0	7,740.0	7,760.4	7,747.9	28.2	14.4	-89.85	-2,433.8	1,438.7	1,644.3	1,610.3	34.07	48.264	
9,400.0	7,740.0	7,760.1	7,747.5	29.7	14.4	-89.83	-2,433.8	1,438.7	1,575.3	1,539.7	35.56	44.301	
9,500.0	7,740.0	7,759.7	7,747.2	31.3	14.4	-89.81	-2,433.8	1,438.7	1,509.7	1,472.4	37.26	40.515	
9,600.0	7,740.0	7,759.4	7,746.8	32.8	14.4	-89.79	-2,433.8	1,438.7	1,448.0	1,408.8	39.18	36.957	
9,700.0	7,740.0	7,759.0	7,746.5	34.4	14.4	-89.78	-2,433.8	1,438.7	1,390.8	1,349.5	41.31	33.671	
9,800.0	7,740.0	7,758.7	7,746.2	36.0	14.4	-89.76	-2,433.8	1,438.7	1,338.6	1,295.0	43.62	30.688	
9,900.0	7,740.0	7,758.3	7,745.8	37.6	14.4	-89.74	-2,433.8	1,438.7	1,292.1	1,246.0	46.09	28.032	
10,000.0	7,740.0	7,758.0	7,745.5	39.2	14.4	-89.73	-2,433.8	1,438.7	1,251.8	1,203.2	48.68	25.714	
10,100.0	7,740.0	7,757.7	7,745.1	40.9	14.4	-89.71	-2,433.8	1,438.7	1,218.5	1,167.2	51.33	23.737	
10,200.0	7,740.0	7,757.3	7,744.8	42.5	14.4	-89.69	-2,433.8	1,438.7	1,192.6	1,138.6	53.97	22.097	
10,300.0	7,740.0	7,757.0	7,744.5	44.2	14.4	-89.68	-2,433.8	1,438.7	1,174.7	1,118.2	56.52	20.783	
10,400.0	7,740.0	7,756.6	7,744.1	45.8	14.4	-89.66	-2,433.8	1,438.7	1,165.1	1,106.2	58.91	19.779	
10,462.0	7,740.0	7,756.4	7,743.9	46.8	14.4	-89.65	-2,433.8	1,438.7	1,163.5	1,103.2	60.27	19.304 CC	
10,500.0	7,740.0	7,756.3	7,743.8	47.5	14.4	-89.64	-2,433.8	1,438.7	1,164.1	1,103.1	61.06	19.066 ES	
10,600.0	7,740.0	7,756.0	7,743.4	49.1	14.4	-89.63	-2,433.8	1,438.7	1,171.7	1,108.7	62.91	18.624	
10,700.0	7,740.0	7,755.6	7,743.1	50.8	14.4	-89.61	-2,433.8	1,438.7	1,187.6	1,123.2	64.44	18.429 SF	
10,800.0	7,740.0	7,755.3	7,742.8	52.5	14.4	-89.59	-2,433.8	1,438.7	1,211.6	1,146.0	65.63	18.460	
10,900.0	7,740.0	7,755.0	7,742.4	54.2	14.4	-89.58	-2,433.8	1,438.7	1,243.2	1,176.7	66.50	18.695	
11,000.0	7,740.0	7,754.6	7,742.1	55.9	14.4	-89.56	-2,433.8	1,438.7	1,281.9	1,214.8	67.07	19.113	
11,100.0	7,740.0	7,754.3	7,741.7	57.6	14.4	-89.54	-2,433.8	1,438.7	1,327.0	1,259.6	67.38	19.695	
11,200.0	7,740.0	7,753.9	7,741.4	59.3	14.4	-89.53	-2,433.8	1,438.7	1,377.8	1,310.4	67.47	20.422	
11,300.0	7,740.0	7,753.6	7,741.1	61.0	14.4	-89.51	-2,433.8	1,438.7	1,433.9	1,366.5	67.39	21.279	
11,400.0	7,740.0	7,753.3	7,740.7	62.7	14.4	-89.49	-2,433.8	1,438.7	1,494.5	1,427.4	67.17	22.250	
11,500.0	7,740.0	7,752.9	7,740.4	64.4	14.4	-89.48	-2,433.8	1,438.7	1,559.2	1,492.4	66.85	23.323	
11,600.0	7,740.0	7,752.6	7,740.1	66.1	14.4	-89.46	-2,433.8	1,438.7	1,627.5	1,561.1	66.47	24.486	
11,700.0	7,740.0	7,752.2	7,739.7	67.8	14.4	-89.44	-2,433.8	1,438.7	1,699.0	1,632.9	66.03	25.729	
11,800.0	7,740.0	7,751.9	7,739.4	69.5	14.4	-89.43	-2,433.8	1,438.7	1,773.1	1,707.6	65.57	27.043	
11,900.0	7,740.0	7,751.6	7,739.0	71.2	14.4	-89.41	-2,433.9	1,438.7	1,849.8	1,784.7	65.09	28.419	
12,000.0	7,740.0	7,751.2	7,738.7	72.9	14.4	-89.39	-2,433.9	1,438.6	1,928.5	1,863.9	64.61	29.850	
12,100.0	7,740.0	7,750.9	7,738.4	74.7	14.4	-89.38	-2,433.9	1,438.6	2,009.2	1,945.1	64.13	31.331	
12,200.0	7,740.0	7,750.6	7,738.0	76.4	14.4	-89.36	-2,433.9	1,438.6	2,091.5	2,027.9	63.66	32.855	
12,300.0	7,740.0	7,750.2	7,737.7	78.1	14.4	-89.34	-2,433.9	1,438.6	2,175.3	2,112.1	63.20	34.417	
12,400.0	7,740.0	7,749.9	7,737.4	79.8	14.4	-89.33	-2,433.9	1,438.6	2,260.5	2,197.7	62.77	36.014	
12,500.0	7,740.0	7,749.6	7,737.0	81.6	14.4	-89.31	-2,433.9	1,438.6	2,346.8	2,284.4	62.35	37.641	
12,600.0	7,740.0	7,749.2	7,736.7	83.3	14.4	-89.29	-2,433.9	1,438.6	2,434.1	2,372.2	61.94	39.296	
12,700.0	7,740.0	7,748.9	7,736.4	85.0	14.4	-89.28	-2,433.9	1,438.6	2,522.4	2,460.8	61.56	40.974	
12,800.0	7,740.0	7,748.5	7,736.0	86.7	14.4	-89.26	-2,433.9	1,438.6	2,611.5	2,550.3	61.20	42.673	
12,900.0	7,740.0	7,748.2	7,735.7	88.5	14.4	-89.25	-2,433.9	1,438.6	2,701.4	2,640.6	60.86	44.391	
13,000.0	7,740.0	7,747.9	7,735.3	90.2	14.4	-89.23	-2,433.9	1,438.6	2,792.0	2,731.5	60.53	46.125	
13,100.0	7,740.0	7,747.5	7,735.0	91.9	14.4	-89.21	-2,433.9	1,438.6	2,883.2	2,823.0	60.22	47.874	
13,200.0	7,740.0	7,747.2	7,734.7	93.7	14.4	-89.20	-2,433.9	1,438.6	2,975.0	2,915.0	59.94	49.636	
13,300.0	7,740.0	7,746.9	7,734.3	95.4	14.4	-89.18	-2,433.9	1,438.6	3,067.3	3,007.6	59.66	51.409	
13,400.0	7,740.0	7,746.5	7,734.0	97.1	14.4	-89.16	-2,433.9	1,438.6	3,160.0	3,100.6	59.41	53.192	
13,500.0	7,740.0	7,746.2	7,733.7	98.9	14.4	-89.15	-2,433.9	1,438.6	3,253.2	3,194.0	59.17	54.983	
13,600.0	7,740.0	7,745.9	7,733.3	100.6	14.4	-89.13	-2,433.9	1,438.6	3,346.8	3,287.8	58.94	56.781	
13,700.0	7,740.0	7,745.5	7,733.0	102.3	14.4	-89.11	-2,433.9	1,438.6	3,440.7	3,382.0	58.73	58.586	
13,800.0	7,740.0	7,745.2	7,732.7	104.1	14.4	-89.10	-2,433.9	1,438.6	3,535.0	3,476.4	58.53	60.396	
13,900.0	7,740.0	7,744.9	7,732.3	105.8	14.4	-89.08	-2,433.9	1,438.6	3,629.6	3,571.2	58.34	62.210	
14,000.0	7,740.0	7,744.5	7,732.0	107.5	14.4	-89.06	-2,433.9	1,438.6	3,724.4	3,666.2	58.17	64.028	
14,100.0	7,740.0	7,744.2	7,731.7	109.3	14.4	-89.05	-2,433.9	1,438.6	3,819.5	3,761.5	58.00	65.849	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,200.0	7,740.0	7,743.9	7,731.3	111.0	14.4	-89.03	-2,433.9	1,438.6	3,914.9	3,857.1	57.85	67.672		
14,300.0	7,740.0	7,743.5	7,731.0	112.8	14.4	-89.01	-2,433.9	1,438.6	4,010.5	3,952.8	57.71	69.497		
14,400.0	7,740.0	7,743.2	7,730.7	114.5	14.4	-89.00	-2,433.9	1,438.6	4,106.3	4,048.7	57.57	71.322		
14,500.0	7,740.0	7,742.9	7,730.3	116.2	14.4	-88.98	-2,433.9	1,438.6	4,202.3	4,144.8	57.45	73.148		
14,600.0	7,740.0	7,742.5	7,730.0	118.0	14.4	-88.97	-2,433.9	1,438.6	4,298.5	4,241.1	57.33	74.975		
14,700.0	7,740.0	7,742.2	7,729.7	119.7	14.4	-88.95	-2,433.9	1,438.6	4,394.8	4,337.6	57.22	76.800		
14,800.0	7,740.0	7,741.9	7,729.3	121.5	14.4	-88.93	-2,433.9	1,438.6	4,491.3	4,434.2	57.12	78.625		
14,900.0	7,740.0	7,741.5	7,729.0	123.2	14.4	-88.92	-2,433.9	1,438.6	4,588.0	4,531.0	57.03	80.449		
15,000.0	7,740.0	7,741.2	7,728.7	124.9	14.4	-88.90	-2,433.9	1,438.6	4,684.8	4,627.8	56.94	82.272		
15,100.0	7,740.0	7,740.9	7,728.3	126.7	14.4	-88.88	-2,433.9	1,438.6	4,781.7	4,724.9	56.86	84.092		
15,200.0	7,740.0	7,740.0	7,727.5	128.4	14.4	-88.84	-2,433.9	1,438.6	4,878.8	4,822.0	56.79	85.913		
15,300.0	7,740.0	7,740.0	7,727.5	130.2	14.4	-88.84	-2,433.9	1,438.6	4,975.9	4,919.2	56.72	87.728		
15,400.0	7,740.0	7,739.8	7,727.2	131.9	14.4	-88.83	-2,433.9	1,438.6	5,073.2	5,016.6	56.66	89.542		
15,500.0	7,740.0	7,739.2	7,726.7	133.7	14.4	-88.80	-2,433.9	1,438.6	5,170.6	5,114.0	56.60	91.354		
15,600.0	7,740.0	7,738.6	7,726.1	135.4	14.4	-88.77	-2,433.9	1,438.6	5,268.1	5,211.5	56.55	93.163		
15,700.0	7,740.0	7,738.0	7,725.5	137.1	14.4	-88.74	-2,433.9	1,438.6	5,365.7	5,309.2	56.50	94.969		
15,800.0	7,740.0	7,737.4	7,724.8	138.9	14.4	-88.71	-2,433.9	1,438.6	5,463.3	5,406.9	56.46	96.771		
15,900.0	7,740.0	7,736.7	7,724.2	140.6	14.4	-88.68	-2,433.9	1,438.6	5,561.1	5,504.7	56.42	98.571		
15,953.0	7,740.0	7,736.4	7,723.9	141.6	14.4	-88.66	-2,433.9	1,438.6	5,612.9	5,556.5	56.40	99.522		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 8365-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	152.81	-2,304.7	1,184.0	2,591.1						
100.0	100.0	95.0	95.0	0.2	0.2	152.81	-2,304.7	1,184.0	2,591.1	2,590.8	0.32	8,151.956			
200.0	200.0	195.0	195.0	0.3	0.3	152.81	-2,304.7	1,184.0	2,591.1	2,590.4	0.67	3,885.197			
300.0	300.0	295.0	295.0	0.5	0.5	152.81	-2,304.7	1,184.0	2,591.1	2,590.1	1.02	2,550.341			
400.0	400.0	395.0	395.0	0.7	0.7	152.81	-2,304.7	1,184.0	2,591.1	2,589.7	1.37	1,898.175			
500.0	500.0	495.0	495.0	0.9	0.9	126.48	-2,304.7	1,184.0	2,591.6	2,589.9	1.71	1,511.625			
600.0	600.0	595.0	595.0	1.0	1.0	126.51	-2,304.7	1,184.0	2,593.2	2,591.1	2.07	1,255.326			
700.0	699.9	694.9	694.9	1.2	1.2	126.57	-2,304.7	1,184.0	2,595.8	2,593.3	2.42	1,072.214			
800.0	799.7	794.7	794.7	1.4	1.4	126.65	-2,304.7	1,184.0	2,599.4	2,596.6	2.78	934.282			
899.9	899.3	894.3	894.3	1.6	1.6	126.75	-2,304.7	1,184.0	2,604.1	2,600.9	3.15	826.314			
1,000.0	999.0	994.0	994.0	1.8	1.7	126.90	-2,304.7	1,184.0	2,609.3	2,605.8	3.52	740.258			
1,100.0	1,098.6	1,093.6	1,093.6	2.0	1.9	127.05	-2,304.7	1,184.0	2,614.6	2,610.7	3.90	670.314			
1,200.0	1,198.2	1,193.2	1,193.2	2.3	2.1	127.20	-2,304.7	1,184.0	2,619.9	2,615.6	4.28	612.412			
1,300.0	1,297.8	1,292.8	1,292.8	2.5	2.3	127.35	-2,304.7	1,184.0	2,625.2	2,620.5	4.66	563.754			
1,400.0	1,397.5	1,392.5	1,392.5	2.7	2.4	127.51	-2,304.7	1,184.0	2,630.5	2,625.4	5.04	522.326			
1,500.0	1,497.1	1,492.1	1,492.1	2.9	2.6	127.66	-2,304.7	1,184.0	2,635.8	2,630.4	5.42	486.652			
1,600.0	1,596.7	1,591.7	1,591.7	3.2	2.8	127.80	-2,304.7	1,184.0	2,641.1	2,635.3	5.80	455.626			
1,700.0	1,696.3	1,691.3	1,691.3	3.4	3.0	127.95	-2,304.7	1,184.0	2,646.5	2,640.3	6.18	428.405			
1,800.0	1,795.9	1,790.9	1,790.9	3.6	3.1	128.10	-2,304.7	1,184.0	2,651.9	2,645.3	6.56	404.336			
1,900.0	1,895.6	1,890.6	1,890.6	3.8	3.3	128.25	-2,304.7	1,184.0	2,657.3	2,650.3	6.94	382.906			
2,000.0	1,895.2	1,890.2	1,890.2	4.1	3.5	128.40	-2,304.7	1,184.0	2,662.7	2,655.4	7.32	363.708			
2,100.0	2,094.8	2,089.8	2,089.8	4.3	3.6	128.54	-2,304.7	1,184.0	2,668.1	2,660.4	7.70	346.412			
2,200.0	2,194.4	2,189.4	2,189.4	4.5	3.8	128.69	-2,304.7	1,184.0	2,673.6	2,665.5	8.08	330.751			
2,300.0	2,294.0	2,289.0	2,289.0	4.8	4.0	128.83	-2,304.7	1,184.0	2,679.0	2,670.6	8.46	316.505			
2,400.0	2,393.7	2,388.7	2,388.7	5.0	4.2	128.98	-2,304.7	1,184.0	2,684.5	2,675.7	8.85	303.492			
2,500.0	2,493.3	2,488.3	2,488.3	5.2	4.3	129.12	-2,304.7	1,184.0	2,690.0	2,680.8	9.23	291.559			
2,600.0	2,592.9	2,587.9	2,587.9	5.4	4.5	129.26	-2,304.7	1,184.0	2,695.6	2,685.9	9.61	280.578			
2,700.0	2,692.5	2,687.5	2,687.5	5.7	4.7	129.41	-2,304.7	1,184.0	2,701.1	2,691.1	9.99	270.440			
2,800.0	2,792.1	2,787.1	2,787.1	5.9	4.9	129.55	-2,304.7	1,184.0	2,706.6	2,696.3	10.37	261.052			
2,900.0	2,891.8	2,886.8	2,886.8	6.1	5.0	129.69	-2,304.7	1,184.0	2,712.2	2,701.5	10.75	252.334			
3,000.0	2,991.4	2,986.4	2,986.4	6.4	5.2	129.83	-2,304.7	1,184.0	2,717.8	2,706.7	11.13	244.217			
3,100.0	3,091.0	3,086.0	3,086.0	6.6	5.4	129.97	-2,304.7	1,184.0	2,723.4	2,711.9	11.51	236.642			
3,200.0	3,190.6	3,185.6	3,185.6	6.8	5.6	130.11	-2,304.7	1,184.0	2,729.0	2,717.1	11.89	229.556			
3,300.0	3,290.2	3,285.2	3,285.2	7.1	5.7	130.25	-2,304.7	1,184.0	2,734.7	2,722.4	12.27	222.914			
3,400.0	3,389.9	3,384.9	3,384.9	7.3	5.9	130.39	-2,304.7	1,184.0	2,740.3	2,727.7	12.65	216.675			
3,500.0	3,489.5	3,484.5	3,484.5	7.5	6.1	130.53	-2,304.7	1,184.0	2,746.0	2,732.9	13.03	210.804			
3,600.0	3,589.1	3,584.1	3,584.1	7.7	6.3	130.67	-2,304.7	1,184.0	2,751.7	2,738.2	13.41	205.269			
3,700.0	3,688.7	3,683.7	3,683.7	8.0	6.4	130.80	-2,304.7	1,184.0	2,757.4	2,743.6	13.78	200.043			
3,800.0	3,788.3	3,783.3	3,783.3	8.2	6.6	130.94	-2,304.7	1,184.0	2,763.1	2,748.9	14.16	195.100			
3,900.0	3,888.0	3,883.0	3,883.0	8.4	6.8	131.08	-2,304.7	1,184.0	2,768.8	2,754.3	14.54	190.419			
4,000.0	3,987.6	3,982.6	3,982.6	8.7	7.0	131.21	-2,304.7	1,184.0	2,774.5	2,759.6	14.92	185.979			
4,100.0	4,087.2	4,082.2	4,082.2	8.9	7.1	131.35	-2,304.7	1,184.0	2,780.3	2,765.0	15.30	181.762			
4,200.0	4,186.8	4,181.8	4,181.8	9.1	7.3	131.48	-2,304.7	1,184.0	2,786.1	2,770.4	15.67	177.752			
4,300.0	4,286.4	4,281.4	4,281.4	9.4	7.5	131.61	-2,304.7	1,184.0	2,791.9	2,775.8	16.05	173.933			
4,400.0	4,386.1	4,381.1	4,381.1	9.6	7.6	131.75	-2,304.7	1,184.0	2,797.7	2,781.3	16.43	170.294			
4,500.0	4,485.7	4,480.7	4,480.7	9.8	7.8	131.88	-2,304.7	1,184.0	2,803.5	2,786.7	16.81	166.820			
4,600.0	4,585.3	4,580.3	4,580.3	10.1	8.0	132.01	-2,304.7	1,184.0	2,809.3	2,792.2	17.18	163.503			
4,700.0	4,684.9	4,679.9	4,679.9	10.3	8.2	132.14	-2,304.7	1,184.0	2,815.2	2,797.6	17.56	160.330			
4,800.0	4,784.5	4,779.5	4,779.5	10.5	8.3	132.27	-2,304.7	1,184.0	2,821.1	2,803.1	17.94	157.293			
4,900.0	4,884.1	4,879.1	4,879.1	10.8	8.5	132.40	-2,304.7	1,184.0	2,826.9	2,808.6	18.31	154.384			
5,000.0	4,983.8	4,978.8	4,978.8	11.0	8.7	132.53	-2,304.7	1,184.0	2,832.8	2,814.1	18.69	151.595			
5,100.0	5,083.4	5,078.4	5,078.4	11.2	8.9	132.66	-2,304.7	1,184.0	2,838.7	2,819.7	19.06	148.918			

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS												Offset Site Error:	0.0 ft
Survey Program: 8365-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,183.0	5,178.0	5,178.0	11.4	9.0	132.79	-2,304.7	1,184.0	2,844.7	2,825.2	19.44	146.347	
5,300.0	5,282.6	5,277.6	5,277.6	11.7	9.2	132.92	-2,304.7	1,184.0	2,850.6	2,830.8	19.81	143.875	
5,400.0	5,382.2	5,377.2	5,377.2	11.9	9.4	133.05	-2,304.7	1,184.0	2,856.6	2,836.4	20.19	141.498	
5,500.0	5,481.9	5,476.9	5,476.9	12.1	9.6	133.18	-2,304.7	1,184.0	2,862.5	2,842.0	20.56	139.210	
5,600.0	5,581.5	5,576.5	5,576.5	12.4	9.7	133.30	-2,304.7	1,184.0	2,868.5	2,847.6	20.94	137.005	
5,700.0	5,681.1	5,676.1	5,676.1	12.6	9.9	133.43	-2,304.7	1,184.0	2,874.5	2,853.2	21.31	134.881	
5,800.0	5,780.7	5,775.7	5,775.7	12.8	10.1	133.55	-2,304.7	1,184.0	2,880.5	2,858.8	21.69	132.831	
5,900.0	5,880.3	5,875.3	5,875.3	13.1	10.3	133.68	-2,304.7	1,184.0	2,886.5	2,864.5	22.06	130.853	
6,000.0	5,980.0	5,975.0	5,975.0	13.3	10.4	133.80	-2,304.7	1,184.0	2,892.6	2,870.1	22.43	128.943	
6,100.0	6,079.6	6,074.6	6,074.6	13.5	10.6	133.93	-2,304.7	1,184.0	2,898.6	2,875.8	22.81	127.097	
6,200.0	6,179.2	6,174.2	6,174.2	13.8	10.8	134.05	-2,304.7	1,184.0	2,904.7	2,881.5	23.18	125.312	
6,300.0	6,278.8	6,273.8	6,273.8	14.0	10.9	134.17	-2,304.7	1,184.0	2,910.8	2,887.2	23.55	123.585	
6,400.0	6,378.4	6,373.4	6,373.4	14.2	11.1	134.30	-2,304.7	1,184.0	2,916.9	2,892.9	23.93	121.914	
6,500.0	6,478.1	6,473.1	6,473.1	14.5	11.3	134.42	-2,304.7	1,184.0	2,923.0	2,898.7	24.30	120.296	
6,600.0	6,577.7	6,572.7	6,572.7	14.7	11.5	134.54	-2,304.7	1,184.0	2,929.1	2,904.4	24.67	118.729	
6,700.0	6,677.3	6,672.3	6,672.3	14.9	11.6	134.66	-2,304.7	1,184.0	2,935.2	2,910.2	25.04	117.209	
6,800.0	6,776.9	6,771.9	6,771.9	15.1	11.8	134.78	-2,304.7	1,184.0	2,941.4	2,915.9	25.41	115.735	
6,900.0	6,876.5	6,871.5	6,871.5	15.4	12.0	134.90	-2,304.7	1,184.0	2,947.5	2,921.7	25.79	114.306	
7,000.0	6,976.2	6,971.2	6,971.2	15.6	12.2	135.02	-2,304.7	1,184.0	2,953.7	2,927.5	26.16	112.918	
7,100.0	7,075.8	7,070.8	7,070.8	15.8	12.3	135.14	-2,304.7	1,184.0	2,959.9	2,933.3	26.53	111.570	
7,147.2	7,122.8	7,117.8	7,117.8	15.9	12.4	135.20	-2,304.7	1,184.0	2,962.8	2,936.1	26.70	110.948	
7,150.0	7,125.6	7,120.6	7,120.6	16.0	12.4	133.68	-2,304.7	1,184.0	2,963.0	2,936.2	26.71	110.911	
7,200.0	7,175.5	7,170.5	7,170.5	16.0	12.5	51.81	-2,304.7	1,184.0	2,963.7	2,936.9	26.89	110.222	
7,250.0	7,225.4	7,220.4	7,220.4	16.1	12.6	2.61	-2,304.7	1,184.0	2,960.4	2,933.4	27.05	109.429	
7,300.0	7,274.8	7,269.8	7,269.8	16.0	12.7	-6.93	-2,304.7	1,184.0	2,952.9	2,925.7	27.21	108.537	
7,350.0	7,323.4	7,318.4	7,318.4	16.0	12.8	-10.94	-2,304.7	1,184.0	2,941.4	2,914.1	27.35	107.550	
7,400.0	7,370.8	7,365.8	7,365.8	15.9	12.9	-13.42	-2,304.7	1,184.0	2,926.0	2,898.5	27.48	106.473	
7,450.0	7,416.7	7,411.7	7,411.7	15.8	12.9	-15.37	-2,304.7	1,184.0	2,906.6	2,879.0	27.60	105.313	
7,500.0	7,460.7	7,455.7	7,455.7	15.7	13.0	-17.20	-2,304.7	1,184.0	2,883.6	2,855.9	27.71	104.074	
7,550.0	7,502.4	7,497.4	7,497.4	15.5	13.1	-19.09	-2,304.7	1,184.0	2,857.1	2,829.3	27.80	102.765	
7,600.0	7,541.6	7,536.6	7,536.6	15.4	13.2	-21.19	-2,304.7	1,184.0	2,827.3	2,799.4	27.89	101.391	
7,650.0	7,578.0	7,573.0	7,573.0	15.2	13.2	-23.64	-2,304.7	1,184.0	2,794.4	2,766.5	27.96	99.959	
7,700.0	7,611.2	7,606.2	7,606.2	15.1	13.3	-26.58	-2,304.7	1,184.0	2,758.7	2,730.7	28.01	98.477	
7,750.0	7,641.0	7,636.0	7,636.0	14.9	13.3	-30.19	-2,304.7	1,184.0	2,720.6	2,692.5	28.06	96.953	
7,800.0	7,667.3	7,662.3	7,662.3	14.8	13.4	-34.69	-2,304.7	1,184.0	2,680.2	2,652.1	28.10	95.393	
7,850.0	7,689.7	7,684.7	7,684.7	14.7	13.4	-40.37	-2,304.7	1,184.0	2,637.9	2,609.8	28.12	93.805	
7,900.0	7,708.2	7,703.2	7,703.2	14.7	13.4	-47.56	-2,304.7	1,184.0	2,594.2	2,566.0	28.14	92.196	
7,950.0	7,722.5	7,717.5	7,717.5	14.7	13.5	-56.53	-2,304.7	1,184.0	2,549.2	2,521.0	28.14	90.575	
8,000.0	7,732.6	7,727.6	7,727.6	14.8	13.5	-67.34	-2,304.7	1,184.0	2,503.4	2,475.2	28.14	88.947	
8,050.0	7,738.5	7,733.5	7,733.5	14.9	13.5	-79.51	-2,304.7	1,184.0	2,457.1	2,429.0	28.14	87.321	
8,092.0	7,740.0	7,735.0	7,735.0	15.0	13.5	-90.00	-2,304.7	1,184.0	2,418.2	2,390.1	28.13	85.964	
8,100.0	7,740.0	7,735.0	7,735.0	15.0	13.5	-90.00	-2,304.7	1,184.0	2,410.7	2,382.6	28.13	85.704	
8,200.0	7,740.0	7,735.0	7,735.0	15.5	13.5	-90.00	-2,304.7	1,184.0	2,318.4	2,290.3	28.12	82.448	
8,300.0	7,740.0	7,735.0	7,735.0	16.1	13.5	-90.00	-2,304.7	1,184.0	2,226.8	2,198.6	28.14	79.134	
8,400.0	7,740.0	7,735.0	7,735.0	16.9	13.5	-90.00	-2,304.7	1,184.0	2,135.9	2,107.7	28.20	75.749	
8,500.0	7,740.0	7,735.0	7,735.0	17.8	13.5	-90.00	-2,304.7	1,184.0	2,045.8	2,017.5	28.30	72.283	
8,600.0	7,740.0	7,735.0	7,735.0	18.9	13.5	-90.00	-2,304.7	1,184.0	1,956.7	1,928.2	28.47	68.723	
8,700.0	7,740.0	7,735.0	7,735.0	20.0	13.5	-90.00	-2,304.7	1,184.0	1,868.7	1,840.0	28.72	65.061	
8,800.0	7,740.0	7,735.0	7,735.0	21.2	13.5	-90.00	-2,304.7	1,184.0	1,782.0	1,752.9	29.07	61.294	
8,900.0	7,740.0	7,735.0	7,735.0	22.5	13.5	-90.00	-2,304.7	1,184.0	1,696.8	1,667.2	29.55	57.427	
9,000.0	7,740.0	7,735.0	7,735.0	23.9	13.5	-90.00	-2,304.7	1,184.0	1,613.2	1,583.0	30.17	53.474	
9,100.0	7,740.0	7,735.0	7,735.0	25.3	13.5	-90.00	-2,304.7	1,184.0	1,531.6	1,500.7	30.97	49.463	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
9,200.0	7,740.0	7,735.0	7,735.0	26.7	13.5	-90.00	-2,304.7	1,184.0	1,452.3	1,420.4	31.97	45.434		
9,300.0	7,740.0	7,735.0	7,735.0	28.2	13.5	-90.00	-2,304.7	1,184.0	1,375.8	1,342.6	33.20	41.442		
9,400.0	7,740.0	7,735.0	7,735.0	29.7	13.5	-90.00	-2,304.7	1,184.0	1,302.4	1,267.7	34.68	37.550		
9,500.0	7,740.0	7,735.0	7,735.0	31.3	13.5	-90.00	-2,304.7	1,184.0	1,232.7	1,196.3	36.44	33.824		
9,600.0	7,740.0	7,735.0	7,735.0	32.8	13.5	-90.00	-2,304.7	1,184.0	1,167.5	1,129.0	38.49	30.333		
9,700.0	7,740.0	7,735.0	7,735.0	34.4	13.5	-90.00	-2,304.7	1,184.0	1,107.4	1,066.6	40.81	27.135		
9,800.0	7,740.0	7,735.0	7,735.0	36.0	13.5	-90.00	-2,304.7	1,184.0	1,053.5	1,010.1	43.39	24.280		
9,900.0	7,740.0	7,735.0	7,735.0	37.6	13.5	-90.00	-2,304.7	1,184.0	1,006.6	960.4	46.17	21.803		
10,000.0	7,740.0	7,735.0	7,735.0	39.2	13.5	-90.00	-2,304.7	1,184.0	967.8	918.8	49.06	19.726		
10,100.0	7,740.0	7,735.0	7,735.0	40.9	13.5	-90.00	-2,304.7	1,184.0	938.2	886.2	51.96	18.054		
10,200.0	7,740.0	7,735.0	7,735.0	42.5	13.5	-90.00	-2,304.7	1,184.0	918.5	863.7	54.72	16.784		
10,300.0	7,740.0	7,735.0	7,735.0	44.2	13.5	-90.00	-2,304.7	1,184.0	909.4	852.2	57.20	15.898		
10,332.9	7,740.0	7,735.0	7,735.0	44.7	13.5	-90.00	-2,304.7	1,184.0	908.8	850.9	57.93	15.687 CC, ES		
10,400.0	7,740.0	7,735.0	7,735.0	45.8	13.5	-90.00	-2,304.7	1,184.0	911.3	852.0	59.28	15.373		
10,500.0	7,740.0	7,735.0	7,735.0	47.5	13.5	-90.00	-2,304.7	1,184.0	924.0	863.2	60.87	15.181 SF		
10,600.0	7,740.0	7,735.0	7,735.0	49.1	13.5	-90.00	-2,304.7	1,184.0	947.2	885.3	61.96	15.288		
10,700.0	7,740.0	7,735.0	7,735.0	50.8	13.5	-90.00	-2,304.7	1,184.0	980.1	917.6	62.58	15.662		
10,800.0	7,740.0	7,735.0	7,735.0	52.5	13.5	-90.00	-2,304.7	1,184.0	1,021.8	959.0	62.80	16.272		
10,900.0	7,740.0	7,735.0	7,735.0	54.2	13.5	-90.00	-2,304.7	1,184.0	1,071.2	1,008.5	62.69	17.087		
11,000.0	7,740.0	7,735.0	7,735.0	55.9	13.5	-90.00	-2,304.7	1,184.0	1,127.4	1,065.0	62.35	18.081		
11,100.0	7,740.0	7,735.0	7,735.0	57.6	13.5	-90.00	-2,304.7	1,184.0	1,189.3	1,127.4	61.85	19.228		
11,200.0	7,740.0	7,735.0	7,735.0	59.3	13.5	-90.00	-2,304.7	1,184.0	1,256.1	1,194.9	61.25	20.508		
11,300.0	7,740.0	7,735.0	7,735.0	61.0	13.5	-90.00	-2,304.7	1,184.0	1,327.1	1,266.5	60.59	21.902		
11,400.0	7,740.0	7,735.0	7,735.0	62.7	13.5	-90.00	-2,304.7	1,184.0	1,401.7	1,341.7	59.91	23.394		
11,500.0	7,740.0	7,735.0	7,735.0	64.4	13.5	-90.00	-2,304.7	1,184.0	1,479.2	1,420.0	59.24	24.970		
11,600.0	7,740.0	7,735.0	7,735.0	66.1	13.5	-90.00	-2,304.7	1,184.0	1,559.3	1,500.7	58.58	26.618		
11,700.0	7,740.0	7,735.0	7,735.0	67.8	13.5	-90.00	-2,304.7	1,184.0	1,641.6	1,583.7	57.95	28.328		
11,800.0	7,740.0	7,735.0	7,735.0	69.5	13.5	-90.00	-2,304.7	1,184.0	1,725.8	1,668.4	57.35	30.091		
11,900.0	7,740.0	7,735.0	7,735.0	71.2	13.5	-90.00	-2,304.7	1,184.0	1,811.6	1,754.8	56.79	31.900		
12,000.0	7,740.0	7,735.0	7,735.0	72.9	13.5	-90.00	-2,304.7	1,184.0	1,898.7	1,842.5	56.26	33.748		
12,100.0	7,740.0	7,735.0	7,735.0	74.7	13.5	-90.00	-2,304.7	1,184.0	1,987.1	1,931.3	55.77	35.629		
12,200.0	7,740.0	7,735.0	7,735.0	76.4	13.5	-90.00	-2,304.7	1,184.0	2,076.6	2,021.2	55.32	37.539		
12,300.0	7,740.0	7,735.0	7,735.0	78.1	13.5	-90.00	-2,304.7	1,184.0	2,166.9	2,112.0	54.89	39.474		
12,400.0	7,740.0	7,735.0	7,735.0	79.8	13.5	-90.00	-2,304.7	1,184.0	2,258.1	2,203.6	54.50	41.429		
12,500.0	7,740.0	7,735.0	7,735.0	81.6	13.5	-90.00	-2,304.7	1,184.0	2,350.0	2,295.8	54.14	43.402		
12,600.0	7,740.0	7,735.0	7,735.0	83.3	13.5	-90.00	-2,304.7	1,184.0	2,442.5	2,388.7	53.81	45.390		
12,700.0	7,740.0	7,735.0	7,735.0	85.0	13.5	-90.00	-2,304.7	1,184.0	2,535.6	2,482.1	53.50	47.391		
12,800.0	7,740.0	7,735.0	7,735.0	86.7	13.5	-90.00	-2,304.7	1,184.0	2,629.2	2,576.0	53.22	49.401		
12,900.0	7,740.0	7,735.0	7,735.0	88.5	13.5	-90.00	-2,304.7	1,184.0	2,723.2	2,670.3	52.96	51.420		
13,000.0	7,740.0	7,735.0	7,735.0	90.2	13.5	-90.00	-2,304.7	1,184.0	2,817.7	2,765.0	52.72	53.446		
13,100.0	7,740.0	7,735.0	7,735.0	91.9	13.5	-90.00	-2,304.7	1,184.0	2,912.5	2,860.0	52.50	55.477		
13,200.0	7,740.0	7,735.0	7,735.0	93.7	13.5	-90.00	-2,304.7	1,184.0	3,007.7	2,955.4	52.30	57.512		
13,300.0	7,740.0	7,735.0	7,735.0	95.4	13.5	-90.00	-2,304.7	1,184.0	3,103.2	3,051.1	52.11	59.550		
13,400.0	7,740.0	7,735.0	7,735.0	97.1	13.5	-90.00	-2,304.7	1,184.0	3,198.9	3,147.0	51.94	61.590		
13,500.0	7,740.0	7,735.0	7,735.0	98.9	13.5	-90.00	-2,304.7	1,184.0	3,294.9	3,243.2	51.78	63.630		
13,600.0	7,740.0	7,735.0	7,735.0	100.6	13.5	-90.00	-2,304.7	1,184.0	3,391.2	3,339.5	51.64	65.670		
13,700.0	7,740.0	7,735.0	7,735.0	102.3	13.5	-90.00	-2,304.7	1,184.0	3,487.6	3,436.1	51.51	67.710		
13,800.0	7,740.0	7,735.0	7,735.0	104.1	13.5	-90.00	-2,304.7	1,184.0	3,584.3	3,532.9	51.39	69.748		
13,900.0	7,740.0	7,735.0	7,735.0	105.8	13.5	-90.00	-2,304.7	1,184.0	3,681.1	3,629.8	51.28	71.785		
14,000.0	7,740.0	7,735.0	7,735.0	107.5	13.5	-90.00	-2,304.7	1,184.0	3,778.1	3,726.9	51.18	73.818		
14,100.0	7,740.0	7,735.0	7,735.0	109.3	13.5	-90.00	-2,304.7	1,184.0	3,875.2	3,824.1	51.09	75.849		
14,200.0	7,740.0	7,735.0	7,735.0	111.0	13.5	-90.00	-2,304.7	1,184.0	3,972.5	3,921.5	51.01	77.877		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8365-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,300.0	7,740.0	7,735.0	7,735.0	112.8	13.5	-90.00	-2,304.7	1,184.0	4,069.9	4,019.0	50.94	79.900		
14,400.0	7,740.0	7,735.0	7,735.0	114.5	13.5	-90.00	-2,304.7	1,184.0	4,167.4	4,116.6	50.87	81.919		
14,500.0	7,740.0	7,735.0	7,735.0	116.2	13.5	-90.00	-2,304.7	1,184.0	4,265.1	4,214.3	50.81	83.934		
14,600.0	7,740.0	7,735.0	7,735.0	118.0	13.5	-90.00	-2,304.7	1,184.0	4,362.8	4,312.1	50.76	85.945		
14,700.0	7,740.0	7,735.0	7,735.0	119.7	13.5	-90.00	-2,304.7	1,184.0	4,460.7	4,410.0	50.72	87.950		
14,800.0	7,740.0	7,735.0	7,735.0	121.5	13.5	-90.00	-2,304.7	1,184.0	4,558.6	4,508.0	50.68	89.950		
14,900.0	7,740.0	7,735.0	7,735.0	123.2	13.5	-90.00	-2,304.7	1,184.0	4,656.7	4,606.0	50.65	91.944		
15,000.0	7,740.0	7,735.0	7,735.0	124.9	13.5	-90.00	-2,304.7	1,184.0	4,754.8	4,704.2	50.62	93.933		
15,100.0	7,740.0	7,735.0	7,735.0	126.7	13.5	-90.00	-2,304.7	1,184.0	4,853.0	4,802.4	50.60	95.916		
15,200.0	7,740.0	7,735.0	7,735.0	128.4	13.5	-90.00	-2,304.7	1,184.0	4,951.2	4,900.7	50.58	97.893		
15,300.0	7,740.0	7,735.0	7,735.0	130.2	13.5	-90.00	-2,304.7	1,184.0	5,049.6	4,999.0	50.56	99.864		
15,400.0	7,740.0	7,735.0	7,735.0	131.9	13.5	-90.00	-2,304.7	1,184.0	5,148.0	5,097.4	50.56	101.829		
15,500.0	7,740.0	7,735.0	7,735.0	133.7	13.5	-90.00	-2,304.7	1,184.0	5,246.4	5,195.9	50.55	103.788		
15,600.0	7,740.0	7,735.0	7,735.0	135.4	13.5	-90.00	-2,304.7	1,184.0	5,345.0	5,294.4	50.55	105.740		
15,700.0	7,740.0	7,735.0	7,735.0	137.1	13.5	-90.00	-2,304.7	1,184.0	5,443.5	5,393.0	50.55	107.685		
15,800.0	7,740.0	7,735.0	7,735.0	138.9	13.5	-90.00	-2,304.7	1,184.0	5,542.1	5,491.6	50.56	109.624		
15,900.0	7,740.0	7,735.0	7,735.0	140.6	13.5	-90.00	-2,304.7	1,184.0	5,640.8	5,590.3	50.56	111.557		
15,953.0	7,740.0	7,735.0	7,735.0	141.6	13.5	-90.00	-2,304.7	1,184.0	5,693.1	5,642.5	50.57	112.577		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	153.08	-2,333.2	1,184.8	2,616.8					
100.0	100.0	118.3	118.3	0.2	0.2	153.08	-2,333.1	1,184.7	2,616.6	2,616.3	0.36	7,335.477		
200.0	200.0	224.8	224.8	0.3	0.4	153.09	-2,332.8	1,184.2	2,616.2	2,615.5	0.72	3,655.100		
300.0	300.0	331.3	331.3	0.5	0.6	153.10	-2,332.4	1,183.4	2,615.6	2,614.5	1.07	2,433.501		
400.0	400.0	437.8	437.8	0.7	0.8	153.11	-2,331.9	1,182.3	2,614.7	2,613.2	1.43	1,823.549		
500.0	500.0	544.4	544.3	0.9	1.0	126.81	-2,331.2	1,181.0	2,614.0	2,612.2	1.79	1,457.776		
528.7	528.7	574.9	574.9	0.9	1.0	126.83	-2,331.0	1,180.5	2,614.0	2,612.1	1.90	1,378.137		
600.0	600.0	650.8	650.8	1.0	1.1	126.88	-2,330.4	1,179.3	2,614.2	2,612.1	2.15	1,213.454		
700.0	699.9	757.2	757.2	1.2	1.3	126.98	-2,329.4	1,177.4	2,615.2	2,612.7	2.52	1,038.008		
800.0	799.7	854.6	854.5	1.4	1.5	127.10	-2,328.4	1,175.3	2,617.0	2,614.1	2.88	910.017		
899.9	899.3	908.7	908.6	1.6	1.6	127.16	-2,328.2	1,174.7	2,620.9	2,617.8	3.17	827.970		
1,000.0	999.0	985.2	985.1	1.8	1.7	127.29	-2,328.9	1,174.3	2,626.7	2,623.2	3.50	750.540		
1,100.0	1,098.6	1,060.0	1,059.9	2.0	1.9	127.44	-2,330.9	1,173.0	2,633.6	2,629.8	3.84	686.487		
1,200.0	1,198.2	1,113.0	1,112.8	2.3	2.0	127.57	-2,333.3	1,171.6	2,641.8	2,637.7	4.14	638.052		
1,300.0	1,297.8	1,180.0	1,179.7	2.5	2.1	127.76	-2,337.6	1,169.5	2,651.5	2,647.0	4.47	593.400		
1,400.0	1,397.5	1,266.2	1,265.5	2.7	2.2	128.01	-2,344.2	1,166.1	2,662.1	2,657.3	4.84	549.689		
1,500.0	1,497.1	1,372.4	1,371.3	2.9	2.5	128.33	-2,352.1	1,161.5	2,672.4	2,667.2	5.26	507.896		
1,600.0	1,596.7	1,469.2	1,467.6	3.2	2.7	128.63	-2,359.9	1,156.9	2,683.2	2,677.5	5.66	473.687		
1,700.0	1,696.3	1,558.9	1,557.0	3.4	2.9	128.91	-2,367.1	1,152.8	2,694.0	2,688.0	6.05	445.034		
1,800.0	1,795.9	1,637.2	1,634.9	3.6	3.0	129.15	-2,373.9	1,149.1	2,705.5	2,699.0	6.42	421.153		
1,900.0	1,895.6	1,712.0	1,709.2	3.8	3.2	129.40	-2,381.2	1,145.0	2,717.8	2,711.0	6.79	400.294		
2,000.0	1,995.2	1,794.3	1,790.9	4.1	3.4	129.69	-2,390.2	1,140.3	2,731.0	2,723.8	7.18	380.471		
2,100.0	2,094.8	1,880.7	1,876.5	4.3	3.6	130.01	-2,400.2	1,134.4	2,744.6	2,737.0	7.58	361.858		
2,200.0	2,194.4	1,952.0	1,947.0	4.5	3.8	130.28	-2,409.4	1,129.2	2,759.2	2,751.2	7.96	346.796		
2,300.0	2,294.0	2,029.1	2,023.1	4.8	4.1	130.59	-2,420.2	1,123.1	2,774.7	2,766.4	8.35	332.240		
2,400.0	2,393.7	2,100.1	2,093.1	5.0	4.3	130.89	-2,430.7	1,117.0	2,791.0	2,782.3	8.73	319.524		
2,500.0	2,493.3	2,191.5	2,183.0	5.2	4.6	131.29	-2,445.4	1,108.9	2,808.3	2,799.1	9.18	306.050		
2,600.0	2,592.9	2,297.0	2,286.8	5.4	4.9	131.72	-2,461.5	1,100.0	2,825.3	2,815.7	9.65	292.646		
2,700.0	2,692.5	2,409.9	2,398.1	5.7	5.3	132.18	-2,478.5	1,090.3	2,842.1	2,832.0	10.16	279.794		
2,800.0	2,792.1	2,510.2	2,496.8	5.9	5.6	132.59	-2,493.4	1,081.2	2,858.7	2,848.1	10.63	268.919		
2,900.0	2,891.8	2,608.3	2,593.3	6.1	5.9	133.01	-2,508.1	1,071.3	2,875.3	2,864.2	11.10	258.974		
3,000.0	2,991.4	2,694.0	2,677.6	6.4	6.2	133.37	-2,521.0	1,063.0	2,892.2	2,880.7	11.53	250.902		
3,100.0	3,091.0	2,780.0	2,762.2	6.6	6.5	133.71	-2,534.2	1,055.4	2,909.8	2,897.8	11.95	243.551		
3,200.0	3,190.6	2,869.2	2,869.8	6.8	6.9	134.12	-2,550.7	1,046.1	2,927.4	2,915.0	12.43	235.457		
3,300.0	3,290.2	2,961.3	2,960.5	7.1	7.2	134.47	-2,564.4	1,038.4	2,944.9	2,932.1	12.87	228.887		
3,400.0	3,389.9	3,049.5	3,047.1	7.3	7.5	134.88	-2,580.4	1,029.0	2,962.3	2,949.0	13.35	221.911		
3,500.0	3,489.5	3,147.8	3,145.1	7.5	7.8	135.20	-2,593.2	1,021.5	2,980.0	2,966.3	13.76	216.522		
3,600.0	3,589.1	3,246.2	3,242.8	7.7	8.2	135.64	-2,610.8	1,011.0	2,997.3	2,983.0	14.28	209.926		
3,700.0	3,688.7	3,345.0	3,341.4	8.0	8.5	136.04	-2,622.9	1,004.0	3,014.6	2,999.9	14.69	205.273		
3,800.0	3,788.3	3,444.0	3,439.2	8.2	8.8	136.24	-2,635.0	996.9	3,032.4	3,017.3	15.09	200.998		
3,900.0	3,888.0	3,543.4	3,538.4	8.4	9.1	136.54	-2,647.4	989.3	3,050.9	3,035.4	15.49	197.001		
4,000.0	3,987.6	3,642.8	3,637.8	8.7	9.5	136.99	-2,666.1	977.9	3,069.2	3,053.2	16.01	191.752		
4,100.0	4,087.2	3,742.4	3,736.8	8.9	9.8	137.36	-2,681.7	968.4	3,087.1	3,070.6	16.47	187.427		
4,200.0	4,186.8	3,841.8	3,835.3	9.1	10.2	137.72	-2,696.9	959.6	3,104.8	3,087.8	16.94	183.322		
4,300.0	4,286.4	3,941.2	3,934.7	9.4	10.5	138.04	-2,709.8	951.1	3,122.2	3,104.9	17.36	179.851		
4,400.0	4,386.1	4,040.6	4,033.1	9.6	10.8	138.33	-2,722.0	943.3	3,140.1	3,122.4	17.77	176.753		
4,500.0	4,485.7	4,140.0	4,132.5	9.8	11.1	138.61	-2,733.7	935.3	3,158.5	3,140.4	18.15	174.005		
4,600.0	4,585.3	4,239.4	4,231.9	10.1	11.4	138.90	-2,746.6	927.2	3,177.6	3,159.1	18.54	171.350		
4,700.0	4,684.9	4,338.8	4,330.3	10.3	12.0	139.48	-2,771.9	911.1	3,196.4	3,177.2	19.20	166.446		
4,800.0	4,784.5	4,438.2	4,429.7	10.5	12.2	139.74	-2,782.6	903.7	3,213.6	3,194.0	19.59	164.080		
4,900.0	4,884.1	4,537.6	4,528.1	10.8	12.5	139.97	-2,792.7	897.0	3,231.6	3,211.7	19.94	162.077		
5,000.0	4,983.8	4,637.0	4,627.5	11.0	12.8	140.30	-2,807.1	887.6	3,249.6	3,229.2	20.38	159.429		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU												Offset Site Error: 0.0 ft			
Survey Program: 838-MWD														Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
5,100.0	5,083.4	4,729.7	4,683.5	11.2	13.1	140.50	-2,816.2	881.8	3,268.3	3,247.6	20.71	157.825			
5,200.0	5,183.0	4,861.7	4,813.4	11.4	13.5	140.93	-2,836.1	869.1	3,287.9	3,266.7	21.24	154.828			
5,300.0	5,282.6	4,974.7	4,924.9	11.7	13.9	141.27	-2,851.1	858.9	3,305.8	3,284.1	21.70	152.364			
5,400.0	5,382.2	5,071.5	5,020.5	11.9	14.2	141.56	-2,864.0	849.9	3,323.8	3,301.7	22.11	150.305			
5,500.0	5,481.9	5,163.0	5,110.8	12.1	14.5	141.83	-2,876.1	841.8	3,341.9	3,319.4	22.50	148.517			
5,600.0	5,581.5	5,243.1	5,189.9	12.4	14.8	142.05	-2,886.9	835.5	3,360.4	3,337.6	22.85	147.071			
5,700.0	5,681.1	5,387.3	5,332.4	12.6	15.2	142.43	-2,905.6	824.7	3,378.6	3,355.2	23.38	144.512			
5,800.0	5,780.7	5,481.8	5,425.9	12.8	15.5	142.68	-2,917.1	816.6	3,396.0	3,372.2	23.78	142.837			
5,900.0	5,880.3	5,552.4	5,495.7	13.1	15.7	142.88	-2,926.2	810.6	3,414.1	3,390.0	24.10	141.658			
6,000.0	5,980.0	5,647.2	5,589.2	13.3	16.1	143.14	-2,938.9	802.2	3,432.7	3,408.2	24.50	140.106			
6,100.0	6,079.6	5,786.4	5,726.8	13.5	16.5	143.51	-2,956.8	790.4	3,450.9	3,425.9	25.01	137.981			
6,200.0	6,179.2	5,905.3	5,844.5	13.8	16.8	143.81	-2,970.3	780.9	3,467.8	3,442.3	25.46	136.211			
6,300.0	6,278.8	5,991.9	5,930.3	14.0	17.1	144.02	-2,980.4	774.1	3,485.1	3,459.3	25.82	134.998			
6,400.0	6,378.4	6,161.2	6,098.2	14.2	17.6	144.39	-2,998.4	763.3	3,501.8	3,475.4	26.36	132.836			
6,500.0	6,478.1	6,514.4	6,450.7	14.5	18.1	144.90	-3,015.4	752.7	3,512.2	3,485.0	27.15	129.353			
6,600.0	6,577.7	6,665.8	6,602.1	14.7	18.3	145.03	-3,016.0	752.1	3,519.6	3,492.1	27.54	127.817			
6,700.0	6,677.3	6,776.2	6,712.5	14.9	18.4	145.13	-3,015.4	751.9	3,526.2	3,498.3	27.87	126.529			
6,800.0	6,776.9	6,890.2	6,826.4	15.1	18.5	145.22	-3,014.5	751.6	3,532.5	3,504.3	28.21	125.242			
6,900.0	6,876.5	6,993.5	6,929.8	15.4	18.7	145.31	-3,013.3	751.3	3,538.5	3,510.0	28.53	124.023			
7,000.0	6,976.2	7,090.5	7,026.7	15.6	18.8	145.39	-3,012.2	750.8	3,544.5	3,515.7	28.85	122.854			
7,100.0	7,075.8	7,180.9	7,117.1	15.8	18.9	145.47	-3,011.4	750.1	3,550.7	3,521.5	29.17	121.742			
7,147.2	7,122.8	7,220.9	7,157.2	15.9	18.9	145.51	-3,011.1	749.7	3,553.7	3,524.4	29.31	121.242			
7,150.0	7,125.6	7,223.3	7,159.6	16.0	18.9	143.99	-3,011.1	749.7	3,553.9	3,524.6	29.32	121.212			
7,200.0	7,175.5	7,283.6	7,219.9	16.0	19.0	62.12	-3,010.8	748.9	3,554.7	3,525.2	29.50	120.505			
7,250.0	7,225.4	7,339.9	7,276.1	16.1	19.1	13.00	-3,010.3	747.9	3,551.0	3,521.4	29.67	119.691			
7,300.0	7,274.8	7,380.5	7,316.7	16.0	19.1	3.61	-3,010.0	747.2	3,543.1	3,513.3	29.81	118.848			
7,350.0	7,323.4	7,423.0	7,359.2	16.0	19.2	-0.14	-3,009.7	746.5	3,531.1	3,501.2	29.96	117.875			
7,400.0	7,370.8	7,465.1	7,401.4	15.9	19.2	-2.26	-3,009.6	745.9	3,515.0	3,484.9	30.10	116.789			
7,450.0	7,416.7	7,508.9	7,445.1	15.8	19.3	-3.73	-3,009.4	745.3	3,495.0	3,464.7	30.24	115.582			
7,500.0	7,460.7	7,549.9	7,486.1	15.7	19.3	-4.94	-3,009.3	744.7	3,471.0	3,440.7	30.37	114.290			
7,550.0	7,502.4	7,588.7	7,524.9	15.5	19.4	-6.06	-3,009.2	744.3	3,443.5	3,413.0	30.50	112.913			
7,600.0	7,541.6	7,625.1	7,561.3	15.4	19.4	-7.21	-3,009.2	744.0	3,412.5	3,381.9	30.62	111.453			
7,650.0	7,578.0	7,660.2	7,596.4	15.2	19.4	-8.49	-3,009.1	743.7	3,378.3	3,347.5	30.73	109.919			
7,700.0	7,611.2	7,694.3	7,630.5	15.1	19.5	-10.00	-3,009.1	743.6	3,341.0	3,310.2	30.84	108.318			
7,750.0	7,641.0	7,724.9	7,661.1	14.9	19.5	-11.89	-3,009.0	743.6	3,301.1	3,270.2	30.95	106.664			
7,800.0	7,667.3	7,751.1	7,687.3	14.8	19.6	-14.35	-3,008.9	743.6	3,258.8	3,227.8	31.05	104.970			
7,850.0	7,689.7	7,772.5	7,708.7	14.7	19.6	-17.72	-3,008.8	743.6	3,214.5	3,183.3	31.13	103.247			
7,900.0	7,708.2	7,790.2	7,726.4	14.7	19.6	-22.64	-3,008.8	743.7	3,168.4	3,137.2	31.22	101.501			
7,950.0	7,722.5	7,803.9	7,740.1	14.7	19.6	-30.31	-3,008.8	743.7	3,120.9	3,089.6	31.29	99.742			
8,000.0	7,732.6	7,813.5	7,749.7	14.8	19.6	-43.17	-3,008.7	743.7	3,072.5	3,041.1	31.36	97.979			
8,050.0	7,738.5	7,819.0	7,755.2	14.9	19.6	-65.19	-3,008.7	743.7	3,023.4	2,991.9	31.42	96.223			
8,092.0	7,740.0	7,820.4	7,756.6	15.0	19.6	-90.68	-3,008.7	743.7	2,981.9	2,950.5	31.47	94.762			
8,100.0	7,740.0	7,820.4	7,756.6	15.0	19.6	-90.68	-3,008.7	743.7	2,974.0	2,942.5	31.48	94.483			
8,200.0	7,740.0	7,820.1	7,756.3	15.5	19.6	-90.65	-3,008.7	743.7	2,875.3	2,843.7	31.59	91.029			
8,300.0	7,740.0	7,819.9	7,756.1	16.1	19.6	-90.63	-3,008.7	743.7	2,776.7	2,745.0	31.70	87.594			
8,400.0	7,740.0	7,819.7	7,755.9	16.9	19.6	-90.60	-3,008.7	743.7	2,678.2	2,646.3	31.82	84.176			
8,500.0	7,740.0	7,819.5	7,755.7	17.8	19.6	-90.57	-3,008.7	743.7	2,579.8	2,547.8	31.94	80.773			
8,600.0	7,740.0	7,819.3	7,755.5	18.9	19.6	-90.54	-3,008.7	743.7	2,481.5	2,449.4	32.07	77.383			
8,700.0	7,740.0	7,819.0	7,755.2	20.0	19.6	-90.52	-3,008.7	743.7	2,383.4	2,351.2	32.21	74.005			
8,800.0	7,740.0	7,818.8	7,755.0	21.2	19.6	-90.49	-3,008.7	743.7	2,285.4	2,253.0	32.36	70.635			
8,900.0	7,740.0	7,818.6	7,754.8	22.5	19.6	-90.46	-3,008.7	743.7	2,187.6	2,155.1	32.52	67.271			
9,000.0	7,740.0	7,818.4	7,754.6	23.9	19.6	-90.43	-3,008.7	743.7	2,090.0	2,057.3	32.70	63.910			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,100.0	7,740.0	7,818.1	7,754.3	25.3	19.6	-90.41	-3,008.7	743.7	1,992.7	1,959.8	32.91	60.549		
9,200.0	7,740.0	7,817.9	7,754.1	26.7	19.6	-90.38	-3,008.7	743.7	1,895.7	1,862.5	33.15	57.185		
9,300.0	7,740.0	7,817.7	7,753.9	28.2	19.6	-90.35	-3,008.7	743.7	1,798.9	1,765.5	33.43	53.814		
9,400.0	7,740.0	7,817.4	7,753.6	29.7	19.6	-90.32	-3,008.7	743.7	1,702.6	1,668.8	33.76	50.433		
9,500.0	7,740.0	7,817.2	7,753.4	31.3	19.6	-90.29	-3,008.7	743.7	1,606.7	1,572.5	34.16	47.040		
9,600.0	7,740.0	7,817.0	7,753.2	32.8	19.6	-90.27	-3,008.7	743.7	1,511.3	1,476.7	34.64	43.633		
9,700.0	7,740.0	7,816.8	7,753.0	34.4	19.6	-90.24	-3,008.7	743.7	1,416.6	1,381.3	35.23	40.211		
9,800.0	7,740.0	7,816.5	7,752.7	36.0	19.6	-90.21	-3,008.7	743.7	1,322.6	1,286.7	35.96	36.779		
9,900.0	7,740.0	7,816.3	7,752.5	37.6	19.6	-90.18	-3,008.7	743.7	1,229.6	1,192.7	36.88	33.344		
10,000.0	7,740.0	7,816.1	7,752.3	39.2	19.6	-90.15	-3,008.7	743.7	1,137.8	1,099.8	38.03	29.921		
10,100.0	7,740.0	7,815.8	7,752.0	40.9	19.6	-90.13	-3,008.7	743.7	1,047.5	1,008.0	39.48	26.534		
10,200.0	7,740.0	7,815.6	7,751.8	42.5	19.6	-90.10	-3,008.7	743.7	959.1	917.8	41.31	23.217		
10,300.0	7,740.0	7,815.4	7,751.6	44.2	19.6	-90.07	-3,008.7	743.7	873.2	829.6	43.62	20.017		
10,400.0	7,740.0	7,815.1	7,751.3	45.8	19.6	-90.04	-3,008.7	743.7	790.6	744.1	46.52	16.994		
10,500.0	7,740.0	7,814.9	7,751.1	47.5	19.6	-90.01	-3,008.7	743.7	712.5	662.4	50.12	14.217		
10,600.0	7,740.0	7,814.7	7,750.9	49.1	19.6	-89.98	-3,008.7	743.7	640.6	586.1	54.48	11.759		
10,700.0	7,740.0	7,814.4	7,750.6	50.8	19.6	-89.96	-3,008.7	743.7	577.0	517.5	59.53	9.694		
10,800.0	7,740.0	7,814.2	7,750.4	52.5	19.6	-89.93	-3,008.7	743.7	525.0	460.0	64.94	8.084		
10,900.0	7,740.0	7,814.0	7,750.2	54.2	19.6	-89.90	-3,008.7	743.7	488.1	418.1	69.96	6.976		
11,000.0	7,740.0	7,813.7	7,749.9	55.9	19.6	-89.87	-3,008.7	743.7	470.0	396.4	73.52	6.392		
11,036.9	7,740.0	7,813.7	7,749.9	56.5	19.6	-89.86	-3,008.7	743.7	468.5	394.2	74.27	6.308 CC, ES, SF		
11,100.0	7,740.0	7,813.5	7,749.7	57.6	19.6	-89.84	-3,008.7	743.7	472.7	398.0	74.76	6.324		
11,200.0	7,740.0	7,813.3	7,749.5	59.3	19.6	-89.81	-3,008.7	743.7	496.1	422.4	73.67	6.734		
11,300.0	7,740.0	7,813.0	7,749.2	61.0	19.6	-89.78	-3,008.7	743.7	537.3	466.3	71.05	7.563		
11,400.0	7,740.0	7,812.8	7,749.0	62.7	19.6	-89.75	-3,008.7	743.7	592.8	524.9	67.83	8.739		
11,500.0	7,740.0	7,812.6	7,748.8	64.4	19.6	-89.72	-3,008.7	743.7	658.8	594.1	64.64	10.191		
11,600.0	7,740.0	7,812.3	7,748.5	66.1	19.6	-89.70	-3,008.7	743.7	732.5	670.8	61.78	11.857		
11,700.0	7,740.0	7,812.1	7,748.3	67.8	19.6	-89.67	-3,008.7	743.7	811.9	752.6	59.32	13.688		
11,800.0	7,740.0	7,811.8	7,748.0	69.5	19.6	-89.64	-3,008.7	743.7	895.5	838.2	57.24	15.644		
11,900.0	7,740.0	7,811.6	7,747.8	71.2	19.6	-89.61	-3,008.7	743.7	982.1	926.6	55.50	17.696		
12,000.0	7,740.0	7,811.4	7,747.6	72.9	19.6	-89.58	-3,008.7	743.7	1,071.0	1,017.0	54.04	19.820		
12,100.0	7,740.0	7,811.1	7,747.3	74.7	19.6	-89.55	-3,008.7	743.7	1,161.8	1,109.0	52.81	21.999		
12,200.0	7,740.0	7,810.9	7,747.1	76.4	19.6	-89.52	-3,008.7	743.7	1,253.9	1,202.2	51.77	24.219		
12,300.0	7,740.0	7,810.6	7,746.8	78.1	19.6	-89.49	-3,008.7	743.7	1,347.2	1,296.3	50.90	26.470		
12,400.0	7,740.0	7,810.4	7,746.6	79.8	19.6	-89.46	-3,008.7	743.7	1,441.4	1,391.2	50.15	28.743		
12,500.0	7,740.0	7,810.1	7,746.3	81.6	19.6	-89.43	-3,008.7	743.7	1,536.3	1,486.8	49.51	31.031		
12,600.0	7,740.0	7,809.9	7,746.1	83.3	19.6	-89.40	-3,008.7	743.7	1,631.8	1,582.9	48.96	33.329		
12,700.0	7,740.0	7,809.7	7,745.9	85.0	19.6	-89.37	-3,008.7	743.7	1,727.9	1,679.4	48.49	35.634		
12,800.0	7,740.0	7,809.4	7,745.6	86.7	19.6	-89.34	-3,008.7	743.7	1,824.3	1,776.2	48.08	37.942		
12,900.0	7,740.0	7,809.2	7,745.4	88.5	19.6	-89.31	-3,008.7	743.7	1,921.1	1,873.4	47.73	40.250		
13,000.0	7,740.0	7,808.9	7,745.1	90.2	19.6	-89.28	-3,008.7	743.7	2,018.3	1,970.8	47.43	42.557		
13,100.0	7,740.0	7,808.7	7,744.9	91.9	19.6	-89.25	-3,008.7	743.7	2,115.7	2,068.5	47.16	44.859		
13,200.0	7,740.0	7,808.4	7,744.6	93.7	19.6	-89.22	-3,008.7	743.7	2,213.3	2,166.4	46.93	47.157		
13,300.0	7,740.0	7,808.2	7,744.4	95.4	19.6	-89.19	-3,008.7	743.7	2,311.1	2,264.4	46.74	49.449		
13,400.0	7,740.0	7,807.9	7,744.1	97.1	19.6	-89.16	-3,008.7	743.7	2,409.1	2,362.6	46.57	51.734		
13,500.0	7,740.0	7,807.7	7,743.9	98.9	19.6	-89.13	-3,008.7	743.7	2,507.3	2,460.9	46.42	54.011		
13,600.0	7,740.0	7,807.4	7,743.6	100.6	19.6	-89.10	-3,008.8	743.7	2,605.6	2,559.3	46.30	56.279		
13,700.0	7,740.0	7,807.2	7,743.4	102.3	19.6	-89.07	-3,008.8	743.7	2,704.0	2,657.8	46.19	58.539		
13,800.0	7,740.0	7,806.9	7,743.1	104.1	19.6	-89.04	-3,008.8	743.7	2,802.6	2,756.5	46.10	60.790		
13,900.0	7,740.0	7,806.7	7,742.9	105.8	19.6	-89.01	-3,008.8	743.7	2,901.2	2,855.2	46.03	63.030		
14,000.0	7,740.0	7,806.4	7,742.6	107.5	19.6	-88.98	-3,008.8	743.7	2,999.9	2,954.0	45.97	65.261		
14,100.0	7,740.0	7,806.2	7,742.4	109.3	19.6	-88.95	-3,008.8	743.7	3,098.7	3,052.8	45.92	67.482		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error: 0.0 ft	
Survey Program: 838-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,200.0	7,740.0	7,805.9	7,742.1	111.0	19.6	-88.92	-3,008.8	743.7	3,197.6	3,151.8	45.88	69.692		
14,300.0	7,740.0	7,805.7	7,741.9	112.8	19.6	-88.88	-3,008.8	743.7	3,296.6	3,250.7	45.85	71.892		
14,400.0	7,740.0	7,805.4	7,741.6	114.5	19.6	-88.85	-3,008.8	743.7	3,395.6	3,349.8	45.84	74.082		
14,500.0	7,740.0	7,805.2	7,741.4	116.2	19.6	-88.82	-3,008.8	743.7	3,494.7	3,448.8	45.83	76.260		
14,600.0	7,740.0	7,804.9	7,741.1	118.0	19.6	-88.79	-3,008.8	743.7	3,593.8	3,548.0	45.82	78.429		
14,700.0	7,740.0	7,804.7	7,740.9	119.7	19.6	-88.76	-3,008.8	743.7	3,693.0	3,647.1	45.83	80.586		
14,800.0	7,740.0	7,804.4	7,740.6	121.5	19.6	-88.73	-3,008.8	743.7	3,792.2	3,746.3	45.84	82.733		
14,900.0	7,740.0	7,804.2	7,740.4	123.2	19.6	-88.70	-3,008.8	743.7	3,891.4	3,845.6	45.85	84.869		
15,000.0	7,740.0	7,803.9	7,740.1	124.9	19.6	-88.67	-3,008.8	743.7	3,990.7	3,944.8	45.87	86.994		
15,100.0	7,740.0	7,803.6	7,739.8	126.7	19.6	-88.63	-3,008.8	743.7	4,090.0	4,044.1	45.90	89.109		
15,200.0	7,740.0	7,803.4	7,739.6	128.4	19.6	-88.60	-3,008.8	743.7	4,189.4	4,143.5	45.93	91.213		
15,300.0	7,740.0	7,803.1	7,739.3	130.2	19.6	-88.57	-3,008.8	743.7	4,288.8	4,242.8	45.96	93.307		
15,400.0	7,740.0	7,802.9	7,739.1	131.9	19.6	-88.54	-3,008.8	743.7	4,388.2	4,342.2	46.00	95.390		
15,500.0	7,740.0	7,802.6	7,738.8	133.7	19.6	-88.51	-3,008.8	743.7	4,487.6	4,441.6	46.05	97.462		
15,600.0	7,740.0	7,802.4	7,738.6	135.4	19.6	-88.48	-3,008.8	743.7	4,587.1	4,541.0	46.09	99.524		
15,700.0	7,740.0	7,802.1	7,738.3	137.1	19.6	-88.45	-3,008.8	743.7	4,686.6	4,640.5	46.14	101.576		
15,800.0	7,740.0	7,801.8	7,738.0	138.9	19.6	-88.41	-3,008.8	743.7	4,786.1	4,739.9	46.19	103.617		
15,900.0	7,740.0	7,801.6	7,737.8	140.6	19.6	-88.38	-3,008.8	743.7	4,885.6	4,839.4	46.24	105.648		
15,953.0	7,740.0	7,801.4	7,737.6	141.6	19.6	-88.36	-3,008.8	743.7	4,938.3	4,892.1	46.27	106.720		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-178.48	-983.2	-26.0	983.6					
100.0	100.0	88.0	88.0	0.2	0.2	-178.48	-983.2	-26.0	983.5	983.2	0.31	3,218.003		
200.0	200.0	188.0	188.0	0.3	0.3	-178.48	-983.2	-26.0	983.5	982.9	0.65	1,502.260		
300.0	300.0	288.0	288.0	0.5	0.5	-178.48	-983.2	-26.0	983.5	982.5	1.00	979.839		
400.0	400.0	388.0	388.0	0.7	0.7	-178.48	-983.2	-26.0	983.5	982.2	1.35	727.015		
500.0	500.0	488.0	488.0	0.9	0.9	155.19	-983.2	-26.0	984.3	982.6	1.70	578.336		
600.0	600.0	588.0	588.0	1.0	1.0	155.24	-983.2	-26.0	986.7	984.6	2.05	480.938		
700.0	699.9	687.9	687.9	1.2	1.2	155.33	-983.2	-26.0	990.7	988.2	2.40	412.395		
800.0	799.7	787.7	787.7	1.4	1.4	155.46	-983.2	-26.0	996.2	993.5	2.75	361.693		
899.9	899.3	887.3	887.3	1.6	1.5	155.61	-983.2	-26.0	1,003.3	1,000.2	3.11	322.822		
1,000.0	999.0	987.0	987.0	1.8	1.7	155.82	-983.2	-26.0	1,011.3	1,007.8	3.46	292.020		
1,100.0	1,098.6	1,086.6	1,086.6	2.0	1.9	156.02	-983.2	-26.0	1,019.3	1,015.4	3.82	266.931		
1,200.0	1,198.2	1,186.2	1,186.2	2.3	2.1	156.22	-983.2	-26.0	1,027.2	1,023.1	4.17	246.098		
1,300.0	1,297.8	1,285.8	1,285.8	2.5	2.2	156.41	-983.2	-26.0	1,035.2	1,030.7	4.53	228.530		
1,400.0	1,397.5	1,385.5	1,385.5	2.7	2.4	156.60	-983.2	-26.0	1,043.2	1,038.3	4.89	213.520		
1,500.0	1,497.1	1,485.1	1,485.1	2.9	2.6	156.79	-983.2	-26.0	1,051.2	1,046.0	5.24	200.550		
1,600.0	1,596.7	1,584.7	1,584.7	3.2	2.8	156.98	-983.2	-26.0	1,059.2	1,053.6	5.60	189.233		
1,700.0	1,696.3	1,684.3	1,684.3	3.4	2.9	157.16	-983.2	-26.0	1,067.3	1,061.3	5.95	179.272		
1,800.0	1,795.9	1,783.9	1,783.9	3.6	3.1	157.34	-983.2	-26.0	1,075.3	1,069.0	6.31	170.440		
1,900.0	1,895.6	1,883.6	1,883.6	3.8	3.3	157.52	-983.2	-26.0	1,083.4	1,076.7	6.66	162.555		
2,000.0	1,995.2	1,983.2	1,983.2	4.1	3.5	157.69	-983.2	-26.0	1,091.4	1,084.4	7.02	155.473		
2,100.0	2,094.8	2,082.8	2,082.8	4.3	3.6	157.86	-983.2	-26.0	1,099.5	1,092.1	7.38	149.078		
2,200.0	2,194.4	2,182.4	2,182.4	4.5	3.8	158.03	-983.2	-26.0	1,107.6	1,099.8	7.73	143.275		
2,300.0	2,294.0	2,282.0	2,282.0	4.8	4.0	158.20	-983.2	-26.0	1,115.7	1,107.6	8.09	137.986		
2,400.0	2,393.7	2,381.7	2,381.7	5.0	4.2	158.36	-983.2	-26.0	1,123.8	1,115.3	8.44	133.145		
2,500.0	2,493.3	2,481.3	2,481.3	5.2	4.3	158.53	-983.2	-26.0	1,131.9	1,123.1	8.79	128.698		
2,600.0	2,592.9	2,580.9	2,580.9	5.4	4.5	158.69	-983.2	-26.0	1,140.0	1,130.8	9.15	124.599		
2,700.0	2,692.5	2,680.5	2,680.5	5.7	4.7	158.85	-983.2	-26.0	1,148.1	1,138.6	9.50	120.808		
2,800.0	2,792.1	2,780.1	2,780.1	5.9	4.9	159.00	-983.2	-26.0	1,156.3	1,146.4	9.86	117.293		
2,900.0	2,891.8	2,879.8	2,879.8	6.1	5.0	159.15	-983.2	-26.0	1,164.4	1,154.2	10.21	114.025		
3,000.0	2,991.4	2,979.4	2,979.4	6.4	5.2	159.31	-983.2	-26.0	1,172.5	1,162.0	10.57	110.977		
3,100.0	3,091.0	3,079.0	3,079.0	6.6	5.4	159.46	-983.2	-26.0	1,180.7	1,169.8	10.92	108.130		
3,200.0	3,190.6	3,178.6	3,178.6	6.8	5.5	159.60	-983.2	-26.0	1,188.9	1,177.6	11.27	105.463		
3,300.0	3,290.2	3,278.2	3,278.2	7.1	5.7	159.75	-983.2	-26.0	1,197.1	1,185.4	11.63	102.960		
3,400.0	3,389.9	3,377.9	3,377.9	7.3	5.9	159.89	-983.2	-26.0	1,205.2	1,193.3	11.98	100.607		
3,500.0	3,489.5	3,477.5	3,477.5	7.5	6.1	160.03	-983.2	-26.0	1,213.4	1,201.1	12.33	98.391		
3,600.0	3,589.1	3,577.1	3,577.1	7.7	6.2	160.17	-983.2	-26.0	1,221.6	1,208.9	12.69	96.299		
3,700.0	3,688.7	3,676.7	3,676.7	8.0	6.4	160.31	-983.2	-26.0	1,229.8	1,216.8	13.04	94.322		
3,800.0	3,788.3	3,776.3	3,776.3	8.2	6.6	160.45	-983.2	-26.0	1,238.0	1,224.6	13.39	92.451		
3,900.0	3,888.0	3,876.0	3,876.0	8.4	6.8	160.58	-983.2	-26.0	1,246.3	1,232.5	13.74	90.677		
4,000.0	3,987.6	3,975.6	3,975.6	8.7	6.9	160.71	-983.2	-26.0	1,254.5	1,240.4	14.10	88.993		
4,100.0	4,087.2	4,075.2	4,075.2	8.9	7.1	160.84	-983.2	-26.0	1,262.7	1,248.3	14.45	87.393		
4,200.0	4,186.8	4,174.8	4,174.8	9.1	7.3	160.97	-983.2	-26.0	1,271.0	1,256.1	14.80	85.870		
4,300.0	4,286.4	4,274.4	4,274.4	9.4	7.5	161.10	-983.2	-26.0	1,279.2	1,264.0	15.15	84.419		
4,400.0	4,386.1	4,374.1	4,374.1	9.6	7.6	161.22	-983.2	-26.0	1,287.4	1,271.9	15.51	83.034		
4,500.0	4,485.7	4,473.7	4,473.7	9.8	7.8	161.35	-983.2	-26.0	1,295.7	1,279.8	15.86	81.712		
4,600.0	4,585.3	4,573.3	4,573.3	10.1	8.0	161.47	-983.2	-26.0	1,304.0	1,287.8	16.21	80.449		
4,700.0	4,684.9	4,672.9	4,672.9	10.3	8.2	161.59	-983.2	-26.0	1,312.2	1,295.7	16.56	79.240		
4,800.0	4,784.5	4,772.5	4,772.5	10.5	8.3	161.71	-983.2	-26.0	1,320.5	1,303.6	16.91	78.082		
4,900.0	4,884.1	4,872.1	4,872.1	10.8	8.5	161.83	-983.2	-26.0	1,328.8	1,311.5	17.26	76.972		
5,000.0	4,983.8	4,971.8	4,971.8	11.0	8.7	161.95	-983.2	-26.0	1,337.1	1,319.5	17.61	75.907		
5,100.0	5,083.4	5,071.4	5,071.4	11.2	8.9	162.06	-983.2	-26.0	1,345.4	1,327.4	17.97	74.884		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS										Offset Site Error: 0.0 ft			
Survey Program: 7894-Geolink MWD										Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,200.0	5,183.0	5,171.0	5,171.0	11.4	9.0	162.17	-983.2	-26.0	1,353.7	1,335.3	18.32	73.901	
5,300.0	5,282.6	5,270.6	5,270.6	11.7	9.2	162.29	-983.2	-26.0	1,362.0	1,343.3	18.67	72.956	
5,400.0	5,382.2	5,370.2	5,370.2	11.9	9.4	162.40	-983.2	-26.0	1,370.3	1,351.2	19.02	72.046	
5,500.0	5,481.9	5,469.9	5,469.9	12.1	9.5	162.51	-983.2	-26.0	1,378.6	1,359.2	19.37	71.170	
5,600.0	5,581.5	5,569.5	5,569.5	12.4	9.7	162.61	-983.2	-26.0	1,386.9	1,367.2	19.72	70.326	
5,700.0	5,681.1	5,669.1	5,669.1	12.6	9.9	162.72	-983.2	-26.0	1,395.2	1,375.1	20.07	69.511	
5,800.0	5,780.7	5,768.7	5,768.7	12.8	10.1	162.83	-983.2	-26.0	1,403.5	1,383.1	20.42	68.726	
5,900.0	5,880.3	5,868.3	5,868.3	13.1	10.2	162.93	-983.2	-26.0	1,411.9	1,391.1	20.77	67.967	
6,000.0	5,980.0	5,968.0	5,968.0	13.3	10.4	163.03	-983.2	-26.0	1,420.2	1,399.1	21.12	67.233	
6,100.0	6,079.6	6,067.6	6,067.6	13.5	10.6	163.14	-983.2	-26.0	1,428.5	1,407.1	21.47	66.525	
6,200.0	6,179.2	6,167.2	6,167.2	13.8	10.8	163.24	-983.2	-26.0	1,436.9	1,415.1	21.82	65.839	
6,300.0	6,278.8	6,266.8	6,266.8	14.0	10.9	163.34	-983.2	-26.0	1,445.2	1,423.1	22.17	65.175	
6,400.0	6,378.4	6,366.4	6,366.4	14.2	11.1	163.44	-983.2	-26.0	1,453.6	1,431.1	22.52	64.533	
6,500.0	6,478.1	6,466.1	6,466.1	14.5	11.3	163.53	-983.2	-26.0	1,462.0	1,439.1	22.88	63.910	
6,600.0	6,577.7	6,565.7	6,565.7	14.7	11.5	163.63	-983.2	-26.0	1,470.3	1,447.1	23.23	63.307	
6,700.0	6,677.3	6,665.3	6,665.3	14.9	11.6	163.72	-983.2	-26.0	1,478.7	1,455.1	23.58	62.722	
6,800.0	6,776.9	6,764.9	6,764.9	15.1	11.8	163.82	-983.2	-26.0	1,487.0	1,463.1	23.93	62.154	
6,900.0	6,876.5	6,864.5	6,864.5	15.4	12.0	163.91	-983.2	-26.0	1,495.4	1,471.1	24.28	61.603	
7,000.0	6,976.2	6,964.2	6,964.2	15.6	12.2	164.00	-983.2	-26.0	1,503.8	1,479.2	24.63	61.068	
7,100.0	7,075.8	7,063.8	7,063.8	15.8	12.3	164.09	-983.2	-26.0	1,512.2	1,487.2	24.97	60.548	
7,147.2	7,122.8	7,110.8	7,110.8	15.9	12.4	164.14	-983.2	-26.0	1,516.1	1,491.0	25.14	60.308	
7,150.0	7,125.6	7,113.6	7,113.6	16.0	12.4	162.61	-983.2	-26.0	1,516.4	1,491.2	25.15	60.293	
7,200.0	7,175.5	7,163.5	7,163.5	16.0	12.5	80.70	-983.2	-26.0	1,518.2	1,492.8	25.33	59.942	
7,250.0	7,225.4	7,213.4	7,213.4	16.1	12.6	31.73	-983.2	-26.0	1,515.7	1,490.2	25.51	59.423	
7,300.0	7,274.8	7,262.8	7,262.8	16.0	12.7	22.68	-983.2	-26.0	1,509.0	1,483.3	25.69	58.742	
7,350.0	7,323.4	7,311.4	7,311.4	16.0	12.8	19.47	-983.2	-26.0	1,498.0	1,472.2	25.87	57.906	
7,400.0	7,370.8	7,358.8	7,358.8	15.9	12.8	18.11	-983.2	-26.0	1,483.0	1,456.9	26.05	56.923	
7,450.0	7,416.7	7,404.7	7,404.7	15.8	12.9	17.64	-983.2	-26.0	1,463.9	1,437.7	26.23	55.802	
7,500.0	7,460.7	7,448.7	7,448.7	15.7	13.0	17.73	-983.2	-26.0	1,441.0	1,414.6	26.42	54.553	
7,550.0	7,502.4	7,490.4	7,490.4	15.5	13.1	18.29	-983.2	-26.0	1,414.5	1,387.9	26.60	53.185	
7,600.0	7,541.6	7,529.6	7,529.6	15.4	13.1	19.27	-983.2	-26.0	1,384.5	1,357.7	26.77	51.710	
7,650.0	7,578.0	7,566.0	7,566.0	15.2	13.2	20.73	-983.2	-26.0	1,351.3	1,324.4	26.95	50.139	
7,700.0	7,611.2	7,599.2	7,599.2	15.1	13.3	22.75	-983.2	-26.0	1,315.2	1,288.1	27.13	48.483	
7,750.0	7,641.0	7,629.0	7,629.0	14.9	13.3	25.48	-983.2	-26.0	1,276.5	1,249.2	27.30	46.755	
7,800.0	7,667.3	7,655.3	7,655.3	14.8	13.4	29.17	-983.2	-26.0	1,235.4	1,207.9	27.47	44.967	
7,850.0	7,689.7	7,677.7	7,677.7	14.7	13.4	34.17	-983.2	-26.0	1,192.3	1,164.7	27.64	43.131	
7,900.0	7,708.2	7,696.2	7,696.2	14.7	13.4	40.98	-983.2	-26.0	1,147.6	1,119.8	27.81	41.260	
7,950.0	7,722.5	7,710.5	7,710.5	14.7	13.5	50.21	-983.2	-26.0	1,101.7	1,073.7	27.98	39.367	
8,000.0	7,732.6	7,720.6	7,720.6	14.8	13.5	62.33	-983.2	-26.0	1,054.8	1,026.6	28.15	37.465	
8,050.0	7,738.5	7,726.5	7,726.5	14.9	13.5	76.99	-983.2	-26.0	1,007.3	979.0	28.32	35.565	
8,092.0	7,740.0	7,728.0	7,728.0	15.0	13.5	90.00	-983.2	-26.0	967.4	939.0	28.47	33.984	
8,100.0	7,740.0	7,728.0	7,728.0	15.0	13.5	90.00	-983.2	-26.0	959.8	931.3	28.50	33.682	
8,200.0	7,740.0	7,728.0	7,728.0	15.5	13.5	90.00	-983.2	-26.0	865.4	836.6	28.87	29.972	
8,300.0	7,740.0	7,728.0	7,728.0	16.1	13.5	90.00	-983.2	-26.0	772.5	743.1	29.32	26.343	
8,400.0	7,740.0	7,728.0	7,728.0	16.9	13.5	90.00	-983.2	-26.0	681.5	651.6	29.88	22.811	
8,500.0	7,740.0	7,728.0	7,728.0	17.8	13.5	90.00	-983.2	-26.0	593.4	562.9	30.58	19.405	
8,600.0	7,740.0	7,728.0	7,728.0	18.9	13.5	90.00	-983.2	-26.0	509.8	478.3	31.51	16.178	
8,700.0	7,740.0	7,728.0	7,728.0	20.0	13.5	90.00	-983.2	-26.0	433.2	400.4	32.76	13.225	
8,800.0	7,740.0	7,728.0	7,728.0	21.2	13.5	90.00	-983.2	-26.0	368.0	333.6	34.33	10.717	
8,900.0	7,740.0	7,728.0	7,728.0	22.5	13.5	90.00	-983.2	-26.0	321.1	285.1	36.00	8.921	
9,000.0	7,740.0	7,728.0	7,728.0	23.9	13.5	90.00	-983.2	-26.0	301.5	264.4	37.01	8.146	
9,011.3	7,740.0	7,728.0	7,728.0	24.0	13.5	90.00	-983.2	-26.0	301.2	264.2	37.04	8.132 CC, ES, SF	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,100.0	7,740.0	7,728.0	7,728.0	25.3	13.5	90.00	-983.2	-26.0	314.0	277.3	36.70	8.557		
9,200.0	7,740.0	7,728.0	7,728.0	26.7	13.5	90.00	-983.2	-26.0	355.5	320.0	35.49	10.017		
9,300.0	7,740.0	7,728.0	7,728.0	28.2	13.5	90.00	-983.2	-26.0	417.2	383.0	34.20	12.202		
9,400.0	7,740.0	7,728.0	7,728.0	29.7	13.5	90.00	-983.2	-26.0	491.8	458.6	33.20	14.813		
9,500.0	7,740.0	7,728.0	7,728.0	31.3	13.5	90.00	-983.2	-26.0	574.1	541.6	32.52	17.655		
9,600.0	7,740.0	7,728.0	7,728.0	32.8	13.5	90.00	-983.2	-26.0	661.3	629.2	32.08	20.614		
9,700.0	7,740.0	7,728.0	7,728.0	34.4	13.5	90.00	-983.2	-26.0	751.7	719.9	31.81	23.630		
9,800.0	7,740.0	7,728.0	7,728.0	36.0	13.5	90.00	-983.2	-26.0	844.3	812.6	31.66	26.669		
9,900.0	7,740.0	7,728.0	7,728.0	37.6	13.5	90.00	-983.2	-26.0	938.4	906.8	31.58	29.711		
10,000.0	7,740.0	7,728.0	7,728.0	39.2	13.5	90.00	-983.2	-26.0	1,033.6	1,002.0	31.56	32.747		
10,100.0	7,740.0	7,728.0	7,728.0	40.9	13.5	90.00	-983.2	-26.0	1,129.6	1,098.0	31.58	35.768		
10,200.0	7,740.0	7,728.0	7,728.0	42.5	13.5	90.00	-983.2	-26.0	1,226.3	1,194.6	31.63	38.772		
10,300.0	7,740.0	7,728.0	7,728.0	44.2	13.5	90.00	-983.2	-26.0	1,323.4	1,291.7	31.69	41.756		
10,400.0	7,740.0	7,728.0	7,728.0	45.8	13.5	90.00	-983.2	-26.0	1,421.0	1,389.2	31.78	44.718		
10,500.0	7,740.0	7,728.0	7,728.0	47.5	13.5	90.00	-983.2	-26.0	1,518.9	1,487.0	31.87	47.658		
10,600.0	7,740.0	7,728.0	7,728.0	49.1	13.5	90.00	-983.2	-26.0	1,617.0	1,585.0	31.97	50.574		
10,700.0	7,740.0	7,728.0	7,728.0	50.8	13.5	90.00	-983.2	-26.0	1,715.4	1,683.3	32.08	53.467		
10,800.0	7,740.0	7,728.0	7,728.0	52.5	13.5	90.00	-983.2	-26.0	1,813.9	1,781.7	32.20	56.337		
10,900.0	7,740.0	7,728.0	7,728.0	54.2	13.5	90.00	-983.2	-26.0	1,912.6	1,880.3	32.32	59.183		
11,000.0	7,740.0	7,728.0	7,728.0	55.9	13.5	90.00	-983.2	-26.0	2,011.4	1,978.9	32.44	62.006		
11,100.0	7,740.0	7,728.0	7,728.0	57.6	13.5	90.00	-983.2	-26.0	2,110.3	2,077.7	32.56	64.806		
11,200.0	7,740.0	7,728.0	7,728.0	59.3	13.5	90.00	-983.2	-26.0	2,209.3	2,176.6	32.69	67.583		
11,300.0	7,740.0	7,728.0	7,728.0	61.0	13.5	90.00	-983.2	-26.0	2,308.4	2,275.6	32.82	70.338		
11,400.0	7,740.0	7,728.0	7,728.0	62.7	13.5	90.00	-983.2	-26.0	2,407.6	2,374.7	32.95	73.070		
11,500.0	7,740.0	7,728.0	7,728.0	64.4	13.5	90.00	-983.2	-26.0	2,506.9	2,473.8	33.08	75.781		
11,600.0	7,740.0	7,728.0	7,728.0	66.1	13.5	90.00	-983.2	-26.0	2,606.2	2,573.0	33.21	78.470		
11,700.0	7,740.0	7,728.0	7,728.0	67.8	13.5	90.00	-983.2	-26.0	2,705.5	2,672.2	33.34	81.137		
11,800.0	7,740.0	7,728.0	7,728.0	69.5	13.5	90.00	-983.2	-26.0	2,804.9	2,771.4	33.48	83.784		
11,900.0	7,740.0	7,728.0	7,728.0	71.2	13.5	90.00	-983.2	-26.0	2,904.4	2,870.7	33.61	86.410		
12,000.0	7,740.0	7,728.0	7,728.0	72.9	13.5	90.00	-983.2	-26.0	3,003.8	2,970.1	33.75	89.015		
12,100.0	7,740.0	7,728.0	7,728.0	74.7	13.5	90.00	-983.2	-26.0	3,103.4	3,069.5	33.88	91.600		
12,200.0	7,740.0	7,728.0	7,728.0	76.4	13.5	90.00	-983.2	-26.0	3,202.9	3,168.9	34.01	94.165		
12,300.0	7,740.0	7,728.0	7,728.0	78.1	13.5	90.00	-983.2	-26.0	3,302.5	3,268.3	34.15	96.711		
12,400.0	7,740.0	7,728.0	7,728.0	79.8	13.5	90.00	-983.2	-26.0	3,402.1	3,367.8	34.28	99.238		
12,500.0	7,740.0	7,728.0	7,728.0	81.6	13.5	90.00	-983.2	-26.0	3,501.7	3,467.3	34.42	101.746		
12,600.0	7,740.0	7,728.0	7,728.0	83.3	13.5	90.00	-983.2	-26.0	3,601.3	3,566.8	34.55	104.235		
12,700.0	7,740.0	7,728.0	7,728.0	85.0	13.5	90.00	-983.2	-26.0	3,701.0	3,666.3	34.68	106.705		
12,800.0	7,740.0	7,728.0	7,728.0	86.7	13.5	90.00	-983.2	-26.0	3,800.7	3,765.8	34.82	109.158		
12,900.0	7,740.0	7,728.0	7,728.0	88.5	13.5	90.00	-983.2	-26.0	3,900.3	3,865.4	34.95	111.593		
13,000.0	7,740.0	7,728.0	7,728.0	90.2	13.5	90.00	-983.2	-26.0	4,000.1	3,965.0	35.09	114.010		
13,100.0	7,740.0	7,728.0	7,728.0	91.9	13.5	90.00	-983.2	-26.0	4,099.8	4,064.6	35.22	116.409		
13,200.0	7,740.0	7,728.0	7,728.0	93.7	13.5	90.00	-983.2	-26.0	4,199.5	4,164.2	35.35	118.792		
13,300.0	7,740.0	7,728.0	7,728.0	95.4	13.5	90.00	-983.2	-26.0	4,299.3	4,263.8	35.48	121.158		
13,400.0	7,740.0	7,728.0	7,728.0	97.1	13.5	90.00	-983.2	-26.0	4,399.0	4,363.4	35.62	123.507		
13,500.0	7,740.0	7,728.0	7,728.0	98.9	13.5	90.00	-983.2	-26.0	4,498.8	4,463.0	35.75	125.840		
13,600.0	7,740.0	7,728.0	7,728.0	100.6	13.5	90.00	-983.2	-26.0	4,598.6	4,562.7	35.88	128.156		
13,700.0	7,740.0	7,728.0	7,728.0	102.3	13.5	90.00	-983.2	-26.0	4,698.4	4,662.3	36.01	130.457		
13,800.0	7,740.0	7,728.0	7,728.0	104.1	13.5	90.00	-983.2	-26.0	4,798.2	4,762.0	36.15	132.742		
13,900.0	7,740.0	7,728.0	7,728.0	105.8	13.5	90.00	-983.2	-26.0	4,898.0	4,861.7	36.28	135.012		
14,000.0	7,740.0	7,728.0	7,728.0	107.5	13.5	90.00	-983.2	-26.0	4,997.8	4,961.4	36.41	137.266		
14,100.0	7,740.0	7,728.0	7,728.0	109.3	13.5	90.00	-983.2	-26.0	5,097.6	5,061.1	36.54	139.505		
14,200.0	7,740.0	7,728.0	7,728.0	111.0	13.5	90.00	-983.2	-26.0	5,197.4	5,160.8	36.67	141.729		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
14,300.0	7,740.0	7,728.0	7,728.0	112.8	13.5	90.00	-983.2	-26.0	5,297.3	5,260.5	36.80	143.938	
14,400.0	7,740.0	7,728.0	7,728.0	114.5	13.5	90.00	-983.2	-26.0	5,397.1	5,360.2	36.93	146.133	
14,500.0	7,740.0	7,728.0	7,728.0	116.2	13.5	90.00	-983.2	-26.0	5,497.0	5,459.9	37.06	148.314	
14,600.0	7,740.0	7,728.0	7,728.0	118.0	13.5	90.00	-983.2	-26.0	5,596.8	5,559.6	37.19	150.481	
14,700.0	7,740.0	7,728.0	7,728.0	119.7	13.5	90.00	-983.2	-26.0	5,696.7	5,659.3	37.32	152.633	
14,800.0	7,740.0	7,728.0	7,728.0	121.5	13.5	90.00	-983.2	-26.0	5,796.5	5,759.1	37.45	154.772	
14,900.0	7,740.0	7,728.0	7,728.0	123.2	13.5	90.00	-983.2	-26.0	5,896.4	5,858.8	37.58	156.897	
15,000.0	7,740.0	7,728.0	7,728.0	124.9	13.5	90.00	-983.2	-26.0	5,996.3	5,958.6	37.71	159.009	
15,100.0	7,740.0	7,728.0	7,728.0	126.7	13.5	90.00	-983.2	-26.0	6,096.1	6,058.3	37.84	161.107	
15,200.0	7,740.0	7,728.0	7,728.0	128.4	13.5	90.00	-983.2	-26.0	6,196.0	6,158.1	37.97	163.193	
15,300.0	7,740.0	7,728.0	7,728.0	130.2	13.5	90.00	-983.2	-26.0	6,295.9	6,257.8	38.10	165.265	
15,400.0	7,740.0	7,728.0	7,728.0	131.9	13.5	90.00	-983.2	-26.0	6,395.8	6,357.6	38.22	167.325	
15,500.0	7,740.0	7,728.0	7,728.0	133.7	13.5	90.00	-983.2	-26.0	6,495.7	6,457.3	38.35	169.371	
15,600.0	7,740.0	7,728.0	7,728.0	135.4	13.5	90.00	-983.2	-26.0	6,595.6	6,557.1	38.48	171.406	
15,700.0	7,740.0	7,728.0	7,728.0	137.1	13.5	90.00	-983.2	-26.0	6,695.5	6,656.9	38.61	173.428	
15,800.0	7,740.0	7,728.0	7,728.0	138.9	13.5	90.00	-983.2	-26.0	6,795.4	6,756.6	38.73	175.438	
15,900.0	7,740.0	7,728.0	7,728.0	140.6	13.5	90.00	-983.2	-26.0	6,895.3	6,856.4	38.86	177.436	
15,953.0	7,740.0	7,728.0	7,728.0	141.6	13.5	90.00	-983.2	-26.0	6,948.2	6,909.3	38.93	178.489	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	142.02	-1,199.2	936.2	1,521.4					
100.0	100.0	94.0	94.0	0.2	0.2	142.02	-1,199.2	936.2	1,521.4	1,521.1	0.32	4,812.913		
200.0	200.0	194.0	194.0	0.3	0.3	142.02	-1,199.2	936.2	1,521.4	1,520.7	0.67	2,287.209		
300.0	300.0	294.0	294.0	0.5	0.5	142.02	-1,199.2	936.2	1,521.4	1,520.4	1.01	1,500.029		
400.0	400.0	394.0	394.0	0.7	0.7	142.02	-1,199.2	936.2	1,521.4	1,520.0	1.36	1,115.955		
500.0	500.0	494.0	494.0	0.9	0.9	115.70	-1,199.2	936.2	1,521.8	1,520.0	1.71	888.464		
600.0	600.0	594.0	594.0	1.0	1.0	115.78	-1,199.2	936.2	1,522.9	1,520.8	2.06	737.602		
700.0	699.9	693.9	693.9	1.2	1.2	115.91	-1,199.2	936.2	1,524.8	1,522.4	2.42	629.701		
800.0	799.7	793.7	793.7	1.4	1.4	116.09	-1,199.2	936.2	1,527.5	1,524.7	2.79	548.284		
899.9	899.3	893.3	893.3	1.6	1.6	116.32	-1,199.2	936.2	1,530.9	1,527.8	3.16	484.430		
1,000.0	999.0	993.0	993.0	1.8	1.7	116.61	-1,199.2	936.2	1,534.8	1,531.3	3.54	433.606		
1,100.0	1,098.6	1,092.6	1,092.6	2.0	1.9	116.90	-1,199.2	936.2	1,538.8	1,534.9	3.92	392.363		
1,200.0	1,198.2	1,192.2	1,192.2	2.3	2.1	117.19	-1,199.2	936.2	1,542.8	1,538.4	4.31	358.284		
1,300.0	1,297.8	1,291.8	1,291.8	2.5	2.3	117.48	-1,199.2	936.2	1,546.8	1,542.1	4.69	329.697		
1,400.0	1,397.5	1,391.5	1,391.5	2.7	2.4	117.76	-1,199.2	936.2	1,550.8	1,545.7	5.08	305.403		
1,500.0	1,497.1	1,491.1	1,491.1	2.9	2.6	118.05	-1,199.2	936.2	1,554.9	1,549.4	5.47	284.518		
1,600.0	1,596.7	1,590.7	1,590.7	3.2	2.8	118.33	-1,199.2	936.2	1,559.0	1,553.2	5.85	266.385		
1,700.0	1,696.3	1,690.3	1,690.3	3.4	3.0	118.61	-1,199.2	936.2	1,563.2	1,557.0	6.24	250.500		
1,800.0	1,795.9	1,789.9	1,789.9	3.6	3.1	118.89	-1,199.2	936.2	1,567.4	1,560.8	6.63	236.476		
1,900.0	1,895.6	1,889.6	1,889.6	3.8	3.3	119.16	-1,199.2	936.2	1,571.6	1,564.6	7.02	224.006		
2,000.0	1,995.2	1,989.2	1,989.2	4.1	3.5	119.44	-1,199.2	936.2	1,575.9	1,568.5	7.40	212.850		
2,100.0	2,094.8	2,088.8	2,088.8	4.3	3.6	119.71	-1,199.2	936.2	1,580.2	1,572.4	7.79	202.812		
2,200.0	2,194.4	2,188.4	2,188.4	4.5	3.8	119.99	-1,199.2	936.2	1,584.6	1,576.4	8.18	193.735		
2,300.0	2,294.0	2,288.0	2,288.0	4.8	4.0	120.26	-1,199.2	936.2	1,589.0	1,580.4	8.57	185.487		
2,400.0	2,393.7	2,387.7	2,387.7	5.0	4.2	120.53	-1,199.2	936.2	1,593.4	1,584.4	8.95	177.961		
2,500.0	2,493.3	2,487.3	2,487.3	5.2	4.3	120.80	-1,199.2	936.2	1,597.9	1,588.5	9.34	171.068		
2,600.0	2,592.9	2,586.9	2,586.9	5.4	4.5	121.06	-1,199.2	936.2	1,602.3	1,592.6	9.73	164.732		
2,700.0	2,692.5	2,686.5	2,686.5	5.7	4.7	121.33	-1,199.2	936.2	1,606.9	1,596.8	10.11	158.888		
2,800.0	2,792.1	2,786.1	2,786.1	5.9	4.9	121.59	-1,199.2	936.2	1,611.4	1,600.9	10.50	153.482		
2,900.0	2,891.8	2,885.8	2,885.8	6.1	5.0	121.86	-1,199.2	936.2	1,616.0	1,605.1	10.88	148.467		
3,000.0	2,991.4	2,985.4	2,985.4	6.4	5.2	122.12	-1,199.2	936.2	1,620.7	1,609.4	11.27	143.803		
3,100.0	3,091.0	3,085.0	3,085.0	6.6	5.4	122.38	-1,199.2	936.2	1,625.3	1,613.7	11.65	139.454		
3,200.0	3,190.6	3,184.6	3,184.6	6.8	5.6	122.63	-1,199.2	936.2	1,630.0	1,618.0	12.04	135.390		
3,300.0	3,290.2	3,284.2	3,284.2	7.1	5.7	122.89	-1,199.2	936.2	1,634.7	1,622.3	12.42	131.584		
3,400.0	3,389.9	3,383.9	3,383.9	7.3	5.9	123.15	-1,199.2	936.2	1,639.5	1,626.7	12.81	128.013		
3,500.0	3,489.5	3,483.5	3,483.5	7.5	6.1	123.40	-1,199.2	936.2	1,644.3	1,631.1	13.19	124.655		
3,600.0	3,589.1	3,583.1	3,583.1	7.7	6.3	123.65	-1,199.2	936.2	1,649.1	1,635.5	13.57	121.493		
3,700.0	3,688.7	3,682.7	3,682.7	8.0	6.4	123.90	-1,199.2	936.2	1,654.0	1,640.0	13.96	118.510		
3,800.0	3,788.3	3,782.3	3,782.3	8.2	6.6	124.15	-1,199.2	936.2	1,658.9	1,644.5	14.34	115.691		
3,900.0	3,888.0	3,882.0	3,882.0	8.4	6.8	124.40	-1,199.2	936.2	1,663.8	1,649.1	14.72	113.024		
4,000.0	3,987.6	3,981.6	3,981.6	8.7	6.9	124.65	-1,199.2	936.2	1,668.7	1,653.6	15.10	110.497		
4,100.0	4,087.2	4,081.2	4,081.2	8.9	7.1	124.89	-1,199.2	936.2	1,673.7	1,658.2	15.48	108.099		
4,200.0	4,186.8	4,180.8	4,180.8	9.1	7.3	125.13	-1,199.2	936.2	1,678.7	1,662.9	15.86	105.821		
4,300.0	4,286.4	4,280.4	4,280.4	9.4	7.5	125.38	-1,199.2	936.2	1,683.8	1,667.5	16.24	103.653		
4,400.0	4,386.1	4,380.1	4,380.1	9.6	7.6	125.62	-1,199.2	936.2	1,688.8	1,672.2	16.62	101.589		
4,500.0	4,485.7	4,479.7	4,479.7	9.8	7.8	125.85	-1,199.2	936.2	1,693.9	1,676.9	17.00	99.622		
4,600.0	4,585.3	4,579.3	4,579.3	10.1	8.0	126.09	-1,199.2	936.2	1,699.1	1,681.7	17.38	97.744		
4,700.0	4,684.9	4,678.9	4,678.9	10.3	8.2	126.33	-1,199.2	936.2	1,704.2	1,686.5	17.76	95.950		
4,800.0	4,784.5	4,778.5	4,778.5	10.5	8.3	126.56	-1,199.2	936.2	1,709.4	1,691.3	18.14	94.235		
4,900.0	4,884.1	4,878.1	4,878.1	10.8	8.5	126.80	-1,199.2	936.2	1,714.6	1,696.1	18.52	92.593		
5,000.0	4,983.8	4,977.8	4,977.8	11.0	8.7	127.03	-1,199.2	936.2	1,719.9	1,701.0	18.90	91.020		
5,100.0	5,083.4	5,077.4	5,077.4	11.2	8.9	127.26	-1,199.2	936.2	1,725.2	1,705.9	19.27	89.512		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,183.0	5,177.0	5,177.0	11.4	9.0	127.49	-1,199.2	936.2	1,730.5	1,710.8	19.65	88.066		
5,300.0	5,282.6	5,276.6	5,276.6	11.7	9.2	127.72	-1,199.2	936.2	1,735.8	1,715.8	20.03	86.676		
5,400.0	5,382.2	5,376.2	5,376.2	11.9	9.4	127.94	-1,199.2	936.2	1,741.2	1,720.8	20.40	85.341		
5,500.0	5,481.9	5,475.9	5,475.9	12.1	9.6	128.17	-1,199.2	936.2	1,746.5	1,725.8	20.78	84.057		
5,600.0	5,581.5	5,575.5	5,575.5	12.4	9.7	128.39	-1,199.2	936.2	1,752.0	1,730.8	21.15	82.821		
5,700.0	5,681.1	5,675.1	5,675.1	12.6	9.9	128.61	-1,199.2	936.2	1,757.4	1,735.9	21.53	81.631		
5,800.0	5,780.7	5,774.7	5,774.7	12.8	10.1	128.83	-1,199.2	936.2	1,762.9	1,741.0	21.90	80.484		
5,900.0	5,880.3	5,874.3	5,874.3	13.1	10.3	129.05	-1,199.2	936.2	1,768.3	1,746.1	22.28	79.379		
6,000.0	5,980.0	5,974.0	5,974.0	13.3	10.4	129.27	-1,199.2	936.2	1,773.9	1,751.2	22.65	78.312		
6,100.0	6,079.6	6,073.6	6,073.6	13.5	10.6	129.49	-1,199.2	936.2	1,779.4	1,756.4	23.02	77.282		
6,200.0	6,179.2	6,173.2	6,173.2	13.8	10.8	129.70	-1,199.2	936.2	1,785.0	1,761.6	23.40	76.288		
6,300.0	6,278.8	6,272.8	6,272.8	14.0	10.9	129.92	-1,199.2	936.2	1,790.6	1,766.8	23.77	75.327		
6,400.0	6,378.4	6,372.4	6,372.4	14.2	11.1	130.13	-1,199.2	936.2	1,796.2	1,772.0	24.14	74.397		
6,500.0	6,478.1	6,472.1	6,472.1	14.5	11.3	130.34	-1,199.2	936.2	1,801.8	1,777.3	24.52	73.498		
6,600.0	6,577.7	6,571.7	6,571.7	14.7	11.5	130.55	-1,199.2	936.2	1,807.5	1,782.6	24.89	72.628		
6,700.0	6,677.3	6,671.3	6,671.3	14.9	11.6	130.76	-1,199.2	936.2	1,813.2	1,787.9	25.26	71.785		
6,800.0	6,776.9	6,770.9	6,770.9	15.1	11.8	130.97	-1,199.2	936.2	1,818.9	1,793.3	25.63	70.969		
6,900.0	6,876.5	6,870.5	6,870.5	15.4	12.0	131.17	-1,199.2	936.2	1,824.6	1,798.6	26.00	70.178		
7,000.0	6,976.2	6,970.2	6,970.2	15.6	12.2	131.38	-1,199.2	936.2	1,830.4	1,804.0	26.37	69.411		
7,100.0	7,075.8	7,069.8	7,069.8	15.8	12.3	131.58	-1,199.2	936.2	1,836.2	1,809.4	26.74	68.666		
7,147.2	7,122.8	7,116.8	7,116.8	15.9	12.4	131.68	-1,199.2	936.2	1,838.9	1,812.0	26.91	68.323		
7,150.0	7,125.6	7,119.6	7,119.6	16.0	12.4	130.17	-1,199.2	936.2	1,839.1	1,812.1	26.93	68.302		
7,200.0	7,175.5	7,169.5	7,169.5	16.0	12.5	48.32	-1,199.2	936.2	1,839.7	1,812.6	27.10	67.894		
7,250.0	7,225.4	7,219.4	7,219.4	16.1	12.6	-0.89	-1,199.2	936.2	1,836.3	1,809.1	27.26	67.371		
7,300.0	7,274.8	7,268.8	7,268.8	16.0	12.7	-10.50	-1,199.2	936.2	1,828.9	1,801.5	27.41	66.736		
7,350.0	7,323.4	7,317.4	7,317.4	16.0	12.8	-14.61	-1,199.2	936.2	1,817.5	1,790.0	27.54	65.994		
7,400.0	7,370.8	7,364.8	7,364.8	15.9	12.9	-17.25	-1,199.2	936.2	1,802.3	1,774.6	27.66	65.149		
7,450.0	7,416.7	7,410.7	7,410.7	15.8	12.9	-19.43	-1,199.2	936.2	1,783.3	1,755.5	27.77	64.209		
7,500.0	7,460.7	7,454.7	7,454.7	15.7	13.0	-21.53	-1,199.2	936.2	1,760.7	1,732.8	27.87	63.178		
7,550.0	7,502.4	7,496.4	7,496.4	15.5	13.1	-23.78	-1,199.2	936.2	1,734.7	1,706.8	27.95	62.065		
7,600.0	7,541.6	7,535.6	7,535.6	15.4	13.2	-26.32	-1,199.2	936.2	1,705.6	1,677.6	28.02	60.876		
7,650.0	7,578.0	7,572.0	7,572.0	15.2	13.2	-29.29	-1,199.2	936.2	1,673.6	1,645.5	28.07	59.621		
7,700.0	7,611.2	7,605.2	7,605.2	15.1	13.3	-32.83	-1,199.2	936.2	1,638.9	1,610.8	28.11	58.306		
7,750.0	7,641.0	7,635.0	7,635.0	14.9	13.3	-37.10	-1,199.2	936.2	1,601.9	1,573.7	28.13	56.941		
7,800.0	7,667.3	7,661.3	7,661.3	14.8	13.4	-42.27	-1,199.2	936.2	1,562.8	1,534.7	28.14	55.533		
7,850.0	7,689.7	7,683.7	7,683.7	14.7	13.4	-48.48	-1,199.2	936.2	1,522.2	1,494.0	28.14	54.093		
7,900.0	7,708.2	7,702.2	7,702.2	14.7	13.4	-55.81	-1,199.2	936.2	1,480.2	1,452.0	28.13	52.627		
7,950.0	7,722.5	7,716.5	7,716.5	14.7	13.5	-64.17	-1,199.2	936.2	1,437.2	1,409.1	28.10	51.144		
8,000.0	7,732.6	7,726.6	7,726.6	14.8	13.5	-73.26	-1,199.2	936.2	1,393.8	1,365.7	28.07	49.653		
8,050.0	7,738.5	7,732.5	7,732.5	14.9	13.5	-82.53	-1,199.2	936.2	1,350.2	1,322.2	28.04	48.161		
8,092.0	7,740.0	7,734.0	7,734.0	15.0	13.5	-90.00	-1,199.2	936.2	1,313.8	1,285.8	28.00	46.914		
8,100.0	7,740.0	7,734.0	7,734.0	15.0	13.5	-90.00	-1,199.2	936.2	1,306.8	1,278.8	28.00	46.675		
8,200.0	7,740.0	7,734.0	7,734.0	15.5	13.5	-90.00	-1,199.2	936.2	1,221.6	1,193.7	27.95	43.700		
8,300.0	7,740.0	7,734.0	7,734.0	16.1	13.5	-90.00	-1,199.2	936.2	1,138.8	1,110.8	27.98	40.694		
8,400.0	7,740.0	7,734.0	7,734.0	16.9	13.5	-90.00	-1,199.2	936.2	1,059.0	1,030.8	28.13	37.640		
8,500.0	7,740.0	7,734.0	7,734.0	17.8	13.5	-90.00	-1,199.2	936.2	982.8	954.4	28.46	34.531		
8,600.0	7,740.0	7,734.0	7,734.0	18.9	13.5	-90.00	-1,199.2	936.2	911.3	882.3	29.04	31.376		
8,700.0	7,740.0	7,734.0	7,734.0	20.0	13.5	-90.00	-1,199.2	936.2	845.6	815.6	29.96	28.224		
8,800.0	7,740.0	7,734.0	7,734.0	21.2	13.5	-90.00	-1,199.2	936.2	787.1	755.8	31.27	25.170		
8,900.0	7,740.0	7,734.0	7,734.0	22.5	13.5	-90.00	-1,199.2	936.2	737.6	704.6	33.00	22.353		
9,000.0	7,740.0	7,734.0	7,734.0	23.9	13.5	-90.00	-1,199.2	936.2	699.0	663.9	35.08	19.926		
9,100.0	7,740.0	7,734.0	7,734.0	25.3	13.5	-90.00	-1,199.2	936.2	673.2	635.8	37.36	18.016		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
9,200.0	7,740.0	7,734.0	7,734.0	26.7	13.5	-90.00	-1,199.2	936.2	661.6	622.0	39.62	16.697	CC, ES
9,227.3	7,740.0	7,734.0	7,734.0	27.1	13.5	-90.00	-1,199.2	936.2	661.0	620.8	40.21	16.440	
9,300.0	7,740.0	7,734.0	7,734.0	28.2	13.5	-90.00	-1,199.2	936.2	665.0	623.4	41.62	15.977	
9,400.0	7,740.0	7,734.0	7,734.0	29.7	13.5	-90.00	-1,199.2	936.2	683.2	640.0	43.19	15.817	SF
9,500.0	7,740.0	7,734.0	7,734.0	31.3	13.5	-90.00	-1,199.2	936.2	715.1	670.8	44.28	16.149	
9,600.0	7,740.0	7,734.0	7,734.0	32.8	13.5	-90.00	-1,199.2	936.2	758.9	713.9	44.92	16.892	
9,700.0	7,740.0	7,734.0	7,734.0	34.4	13.5	-90.00	-1,199.2	936.2	812.7	767.4	45.22	17.971	
9,800.0	7,740.0	7,734.0	7,734.0	36.0	13.5	-90.00	-1,199.2	936.2	874.6	829.3	45.27	19.318	
9,900.0	7,740.0	7,734.0	7,734.0	37.6	13.5	-90.00	-1,199.2	936.2	943.1	897.9	45.18	20.877	
10,000.0	7,740.0	7,734.0	7,734.0	39.2	13.5	-90.00	-1,199.2	936.2	1,016.9	971.9	44.99	22.603	
10,100.0	7,740.0	7,734.0	7,734.0	40.9	13.5	-90.00	-1,199.2	936.2	1,094.8	1,050.0	44.76	24.461	
10,200.0	7,740.0	7,734.0	7,734.0	42.5	13.5	-90.00	-1,199.2	936.2	1,176.1	1,131.5	44.51	26.422	
10,300.0	7,740.0	7,734.0	7,734.0	44.2	13.5	-90.00	-1,199.2	936.2	1,260.0	1,215.7	44.27	28.465	
10,400.0	7,740.0	7,734.0	7,734.0	45.8	13.5	-90.00	-1,199.2	936.2	1,346.2	1,302.1	44.03	30.573	
10,500.0	7,740.0	7,734.0	7,734.0	47.5	13.5	-90.00	-1,199.2	936.2	1,434.1	1,390.3	43.82	32.731	
10,600.0	7,740.0	7,734.0	7,734.0	49.1	13.5	-90.00	-1,199.2	936.2	1,523.6	1,479.9	43.62	34.930	
10,700.0	7,740.0	7,734.0	7,734.0	50.8	13.5	-90.00	-1,199.2	936.2	1,614.2	1,570.8	43.44	37.159	
10,800.0	7,740.0	7,734.0	7,734.0	52.5	13.5	-90.00	-1,199.2	936.2	1,706.0	1,662.7	43.28	39.413	
10,900.0	7,740.0	7,734.0	7,734.0	54.2	13.5	-90.00	-1,199.2	936.2	1,798.6	1,755.4	43.15	41.685	
11,000.0	7,740.0	7,734.0	7,734.0	55.9	13.5	-90.00	-1,199.2	936.2	1,891.9	1,848.9	43.03	43.971	
11,100.0	7,740.0	7,734.0	7,734.0	57.6	13.5	-90.00	-1,199.2	936.2	1,985.9	1,943.0	42.92	46.268	
11,200.0	7,740.0	7,734.0	7,734.0	59.3	13.5	-90.00	-1,199.2	936.2	2,080.5	2,037.7	42.83	48.571	
11,300.0	7,740.0	7,734.0	7,734.0	61.0	13.5	-90.00	-1,199.2	936.2	2,175.6	2,132.8	42.76	50.878	
11,400.0	7,740.0	7,734.0	7,734.0	62.7	13.5	-90.00	-1,199.2	936.2	2,271.0	2,228.3	42.70	53.188	
11,500.0	7,740.0	7,734.0	7,734.0	64.4	13.5	-90.00	-1,199.2	936.2	2,366.9	2,324.2	42.65	55.498	
11,600.0	7,740.0	7,734.0	7,734.0	66.1	13.5	-90.00	-1,199.2	936.2	2,463.1	2,420.4	42.61	57.807	
11,700.0	7,740.0	7,734.0	7,734.0	67.8	13.5	-90.00	-1,199.2	936.2	2,559.5	2,516.9	42.58	60.113	
11,800.0	7,740.0	7,734.0	7,734.0	69.5	13.5	-90.00	-1,199.2	936.2	2,656.3	2,613.7	42.56	62.415	
11,900.0	7,740.0	7,734.0	7,734.0	71.2	13.5	-90.00	-1,199.2	936.2	2,753.2	2,710.7	42.54	64.713	
12,000.0	7,740.0	7,734.0	7,734.0	72.9	13.5	-90.00	-1,199.2	936.2	2,850.4	2,807.9	42.54	67.006	
12,100.0	7,740.0	7,734.0	7,734.0	74.7	13.5	-90.00	-1,199.2	936.2	2,947.8	2,905.2	42.54	69.292	
12,200.0	7,740.0	7,734.0	7,734.0	76.4	13.5	-90.00	-1,199.2	936.2	3,045.3	3,002.8	42.55	71.572	
12,300.0	7,740.0	7,734.0	7,734.0	78.1	13.5	-90.00	-1,199.2	936.2	3,143.0	3,100.4	42.56	73.845	
12,400.0	7,740.0	7,734.0	7,734.0	79.8	13.5	-90.00	-1,199.2	936.2	3,240.8	3,198.2	42.58	76.110	
12,500.0	7,740.0	7,734.0	7,734.0	81.6	13.5	-90.00	-1,199.2	936.2	3,338.8	3,296.2	42.60	78.367	
12,600.0	7,740.0	7,734.0	7,734.0	83.3	13.5	-90.00	-1,199.2	936.2	3,436.9	3,394.2	42.63	80.615	
12,700.0	7,740.0	7,734.0	7,734.0	85.0	13.5	-90.00	-1,199.2	936.2	3,535.0	3,492.4	42.67	82.856	
12,800.0	7,740.0	7,734.0	7,734.0	86.7	13.5	-90.00	-1,199.2	936.2	3,633.3	3,590.6	42.70	85.087	
12,900.0	7,740.0	7,734.0	7,734.0	88.5	13.5	-90.00	-1,199.2	936.2	3,731.7	3,689.0	42.74	87.309	
13,000.0	7,740.0	7,734.0	7,734.0	90.2	13.5	-90.00	-1,199.2	936.2	3,830.2	3,787.4	42.78	89.523	
13,100.0	7,740.0	7,734.0	7,734.0	91.9	13.5	-90.00	-1,199.2	936.2	3,928.7	3,885.9	42.83	91.727	
13,200.0	7,740.0	7,734.0	7,734.0	93.7	13.5	-90.00	-1,199.2	936.2	4,027.3	3,984.4	42.88	93.921	
13,300.0	7,740.0	7,734.0	7,734.0	95.4	13.5	-90.00	-1,199.2	936.2	4,126.0	4,083.1	42.93	96.107	
13,400.0	7,740.0	7,734.0	7,734.0	97.1	13.5	-90.00	-1,199.2	936.2	4,224.7	4,181.7	42.99	98.282	
13,500.0	7,740.0	7,734.0	7,734.0	98.9	13.5	-90.00	-1,199.2	936.2	4,323.5	4,280.5	43.04	100.448	
13,600.0	7,740.0	7,734.0	7,734.0	100.6	13.5	-90.00	-1,199.2	936.2	4,422.4	4,379.3	43.10	102.605	
13,700.0	7,740.0	7,734.0	7,734.0	102.3	13.5	-90.00	-1,199.2	936.2	4,521.3	4,478.1	43.16	104.751	
13,800.0	7,740.0	7,734.0	7,734.0	104.1	13.5	-90.00	-1,199.2	936.2	4,620.2	4,577.0	43.22	106.888	
13,900.0	7,740.0	7,734.0	7,734.0	105.8	13.5	-90.00	-1,199.2	936.2	4,719.2	4,675.9	43.29	109.015	
14,000.0	7,740.0	7,734.0	7,734.0	107.5	13.5	-90.00	-1,199.2	936.2	4,818.3	4,774.9	43.36	111.132	
14,100.0	7,740.0	7,734.0	7,734.0	109.3	13.5	-90.00	-1,199.2	936.2	4,917.3	4,873.9	43.42	113.240	
14,200.0	7,740.0	7,734.0	7,734.0	111.0	13.5	-90.00	-1,199.2	936.2	5,016.4	4,972.9	43.49	115.338	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
14,300.0	7,740.0	7,734.0	7,734.0	112.8	13.5	-90.00	-1,199.2	936.2	5,115.6	5,072.0	43.56	117.426		
14,400.0	7,740.0	7,734.0	7,734.0	114.5	13.5	-90.00	-1,199.2	936.2	5,214.8	5,171.1	43.64	119.504		
14,500.0	7,740.0	7,734.0	7,734.0	116.2	13.5	-90.00	-1,199.2	936.2	5,314.0	5,270.3	43.71	121.573		
14,600.0	7,740.0	7,734.0	7,734.0	118.0	13.5	-90.00	-1,199.2	936.2	5,413.2	5,369.4	43.78	123.632		
14,700.0	7,740.0	7,734.0	7,734.0	119.7	13.5	-90.00	-1,199.2	936.2	5,512.5	5,468.6	43.86	125.681		
14,800.0	7,740.0	7,734.0	7,734.0	121.5	13.5	-90.00	-1,199.2	936.2	5,611.8	5,567.8	43.94	127.721		
14,900.0	7,740.0	7,734.0	7,734.0	123.2	13.5	-90.00	-1,199.2	936.2	5,711.1	5,667.1	44.02	129.751		
15,000.0	7,740.0	7,734.0	7,734.0	124.9	13.5	-90.00	-1,199.2	936.2	5,810.4	5,766.3	44.09	131.772		
15,100.0	7,740.0	7,734.0	7,734.0	126.7	13.5	-90.00	-1,199.2	936.2	5,909.8	5,865.6	44.17	133.783		
15,200.0	7,740.0	7,734.0	7,734.0	128.4	13.5	-90.00	-1,199.2	936.2	6,009.2	5,964.9	44.26	135.784		
15,300.0	7,740.0	7,734.0	7,734.0	130.2	13.5	-90.00	-1,199.2	936.2	6,108.6	6,064.2	44.34	137.776		
15,400.0	7,740.0	7,734.0	7,734.0	131.9	13.5	-90.00	-1,199.2	936.2	6,208.0	6,163.6	44.42	139.759		
15,500.0	7,740.0	7,734.0	7,734.0	133.7	13.5	-90.00	-1,199.2	936.2	6,307.4	6,262.9	44.50	141.733		
15,600.0	7,740.0	7,734.0	7,734.0	135.4	13.5	-90.00	-1,199.2	936.2	6,406.9	6,362.3	44.59	143.697		
15,700.0	7,740.0	7,734.0	7,734.0	137.1	13.5	-90.00	-1,199.2	936.2	6,506.4	6,461.7	44.67	145.652		
15,800.0	7,740.0	7,734.0	7,734.0	138.9	13.5	-90.00	-1,199.2	936.2	6,605.8	6,561.1	44.76	147.598		
15,900.0	7,740.0	7,734.0	7,734.0	140.6	13.5	-90.00	-1,199.2	936.2	6,705.4	6,660.5	44.84	149.535		
15,953.0	7,740.0	7,734.0	7,734.0	141.6	13.5	-90.00	-1,199.2	936.2	6,758.1	6,713.2	44.89	150.556		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft	
Survey Program: 132-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	65.3	65.3	0.0	0.1	37.35	1,606.8	1,226.3	2,021.4				
100.0	100.0	192.3	192.3	0.2	0.3	37.31	1,606.5	1,224.0	2,020.1	2,019.6	0.49	4,110.849	
200.0	200.0	329.9	329.8	0.3	0.6	37.22	1,605.0	1,219.4	2,017.2	2,016.3	0.91	2,210.135	
300.0	300.0	438.2	437.9	0.5	0.8	37.10	1,603.9	1,213.0	2,012.8	2,011.5	1.30	1,553.461	
400.0	400.0	534.1	533.5	0.7	1.0	36.90	1,605.2	1,205.3	2,009.0	2,007.3	1.68	1,195.534	
500.0	500.0	805.9	801.1	0.9	2.0	9.44	1,610.9	1,159.8	1,999.7	1,997.1	2.65	753.856	
600.0	600.0	921.4	914.0	1.0	2.4	8.89	1,610.3	1,134.8	1,983.9	1,980.7	3.21	617.914	
700.0	699.9	1,054.1	1,043.4	1.2	3.0	8.28	1,608.4	1,106.0	1,965.9	1,962.1	3.84	512.497	
800.0	799.7	1,202.1	1,186.9	1.4	3.7	7.50	1,605.2	1,069.6	1,944.2	1,939.6	4.58	424.918	
899.9	899.3	1,290.6	1,272.0	1.6	4.1	6.97	1,603.4	1,045.6	1,919.5	1,914.4	5.13	374.035	
1,000.0	999.0	1,409.4	1,386.2	1.8	4.7	6.21	1,600.5	1,013.0	1,893.7	1,887.9	5.80	326.262	
1,100.0	1,098.6	1,499.0	1,472.3	2.0	5.2	5.60	1,598.1	988.0	1,867.7	1,861.3	6.38	292.591	
1,200.0	1,198.2	1,576.8	1,546.9	2.3	5.6	5.05	1,596.7	966.1	1,842.5	1,835.6	6.92	266.107	
1,300.0	1,297.8	1,661.6	1,628.4	2.5	6.0	4.45	1,595.6	943.0	1,818.4	1,810.9	7.49	242.806	
1,400.0	1,397.5	1,769.2	1,732.0	2.7	6.6	3.68	1,593.7	913.7	1,794.2	1,786.0	8.17	219.674	
1,500.0	1,497.1	1,870.9	1,829.3	2.9	7.2	2.86	1,592.8	884.2	1,770.0	1,761.2	8.86	199.761	
1,600.0	1,596.7	1,967.5	1,921.5	3.2	7.7	2.04	1,591.6	855.4	1,745.6	1,736.1	9.54	182.935	
1,700.0	1,696.3	2,080.0	2,029.1	3.4	8.3	1.10	1,589.3	822.7	1,721.2	1,710.9	10.27	167.670	
1,800.0	1,795.9	2,145.1	2,091.6	3.6	8.7	0.58	1,587.6	804.8	1,697.2	1,686.5	10.78	157.406	
1,900.0	1,895.6	2,261.1	2,202.9	3.8	9.3	-0.42	1,585.9	772.0	1,674.4	1,662.8	11.57	144.702	
2,000.0	1,995.2	2,369.2	2,305.8	4.1	10.0	-1.45	1,583.2	738.7	1,649.8	1,637.5	12.35	133.592	
2,100.0	2,094.8	2,430.0	2,363.6	4.3	10.3	-2.06	1,582.4	720.0	1,626.7	1,613.8	12.92	125.927	
2,200.0	2,194.4	2,499.9	2,430.2	4.5	10.7	-2.77	1,582.6	698.9	1,605.7	1,592.2	13.53	118.676	
2,300.0	2,294.0	2,589.0	2,515.4	4.8	11.2	-3.68	1,583.7	672.8	1,586.2	1,571.9	14.23	111.453	
2,400.0	2,393.7	2,674.9	2,597.7	5.0	11.7	-4.56	1,584.6	648.1	1,567.3	1,552.4	14.92	105.019	
2,500.0	2,493.3	2,779.4	2,697.6	5.2	12.2	-5.66	1,586.0	617.7	1,549.1	1,533.4	15.72	98.535	
2,600.0	2,592.9	2,890.0	2,803.6	5.4	12.8	-6.84	1,586.3	585.9	1,530.4	1,513.9	16.53	92.599	
2,700.0	2,692.5	2,991.0	2,900.6	5.7	13.4	-7.87	1,585.0	558.2	1,511.3	1,494.0	17.26	87.547	
2,800.0	2,792.1	3,116.0	3,020.9	5.9	14.0	-9.15	1,582.6	524.3	1,492.4	1,474.3	18.11	82.426	
2,900.0	2,891.8	3,192.6	3,094.4	6.1	14.4	-9.98	1,580.4	502.9	1,472.7	1,453.9	18.76	78.487	
3,000.0	2,991.4	3,285.4	3,183.4	6.4	14.9	-11.03	1,579.0	476.4	1,454.5	1,435.0	19.51	74.561	
3,100.0	3,091.0	3,363.9	3,258.6	6.6	15.4	-11.95	1,577.9	454.0	1,437.0	1,416.8	20.19	71.189	
3,200.0	3,190.6	3,461.7	3,352.5	6.8	15.9	-13.09	1,577.3	426.8	1,421.0	1,400.0	20.94	67.855	
3,300.0	3,290.2	3,541.8	3,429.8	7.1	16.3	-13.99	1,576.5	405.5	1,405.4	1,383.8	21.60	65.078	
3,400.0	3,389.9	3,613.7	3,499.1	7.3	16.6	-14.82	1,576.8	386.7	1,391.8	1,369.5	22.23	62.604	
3,500.0	3,489.5	3,695.0	3,577.2	7.5	17.1	-15.84	1,578.8	364.0	1,380.2	1,357.3	22.94	60.179	
3,600.0	3,589.1	3,833.6	3,710.2	7.7	17.8	-17.61	1,581.0	325.0	1,368.7	1,344.7	23.93	57.184	
3,700.0	3,688.7	3,929.0	3,801.8	8.0	18.3	-18.82	1,580.3	298.5	1,355.6	1,330.9	24.70	54.871	
3,800.0	3,788.3	4,016.2	3,885.4	8.2	18.8	-19.97	1,580.2	273.8	1,343.5	1,318.1	25.44	52.806	
3,900.0	3,888.0	4,128.2	3,992.4	8.4	19.5	-21.53	1,579.6	240.7	1,331.8	1,305.5	26.34	50.568	
4,000.0	3,987.6	4,248.6	4,107.6	8.7	20.1	-23.22	1,576.9	205.5	1,319.3	1,292.0	27.25	48.417	
4,100.0	4,087.2	4,315.6	4,171.8	8.9	20.5	-24.16	1,575.2	186.3	1,307.2	1,279.4	27.88	46.887	
4,200.0	4,186.8	4,389.4	4,242.4	9.1	20.9	-25.21	1,575.2	165.1	1,298.2	1,269.7	28.52	45.522	
4,300.0	4,286.4	4,479.1	4,328.9	9.4	21.3	-26.40	1,575.6	141.5	1,290.5	1,261.4	29.18	44.228	
4,400.0	4,386.1	4,567.1	4,414.7	9.6	21.7	-27.43	1,576.5	121.8	1,284.1	1,254.3	29.76	43.150	
4,500.0	4,485.7	4,661.1	4,507.0	9.8	22.0	-28.39	1,578.1	104.1	1,278.6	1,248.2	30.31	42.188	
4,600.0	4,585.3	4,760.2	4,604.7	10.1	22.3	-29.29	1,579.8	87.9	1,273.4	1,242.6	30.83	41.307	
4,700.0	4,684.9	4,858.6	4,702.1	10.3	22.6	-30.11	1,581.6	73.9	1,268.5	1,237.2	31.31	40.509	
4,800.0	4,784.5	4,953.4	4,796.2	10.5	22.8	-30.83	1,583.5	61.9	1,263.9	1,232.1	31.76	39.801	
4,900.0	4,884.1	5,060.1	4,902.1	10.8	23.1	-31.57	1,585.7	50.2	1,259.4	1,227.2	32.20	39.110	
5,000.0	4,983.8	5,165.5	5,007.0	11.0	23.3	-32.25	1,587.3	39.9	1,254.4	1,221.8	32.63	38.449	
5,100.0	5,083.4	5,261.8	5,103.0	11.2	23.5	-32.82	1,588.7	31.9	1,249.4	1,216.5	33.00	37.866	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft		
Survey Program: 132-Geolink MWD										Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,183.0	5,358.2	5,199.2	11.4	23.6	-33.30	1,590.7	25.7	1,245.0	1,211.6	33.34	37.341		
5,300.0	5,282.6	5,464.9	5,305.7	11.7	23.8	-33.77	1,592.9	20.3	1,240.4	1,206.7	33.68	36.828		
5,400.0	5,382.2	5,567.3	5,408.0	11.9	23.9	-34.17	1,594.6	16.5	1,235.3	1,201.3	34.00	36.335		
5,500.0	5,481.9	5,667.4	5,508.1	12.1	24.0	-34.54	1,596.2	13.0	1,230.2	1,195.9	34.31	35.856		
5,600.0	5,581.5	5,759.6	5,600.2	12.4	24.1	-34.88	1,598.1	10.2	1,225.4	1,190.8	34.60	35.419		
5,700.0	5,681.1	5,854.0	5,694.6	12.6	24.2	-35.20	1,600.5	7.7	1,221.3	1,186.4	34.89	35.005		
5,800.0	5,780.7	5,957.1	5,797.6	12.8	24.3	-35.54	1,603.3	5.1	1,217.2	1,182.0	35.19	34.589		
5,900.0	5,880.3	6,061.6	5,902.0	13.1	24.4	-35.88	1,605.8	2.9	1,212.8	1,177.3	35.48	34.184		
6,000.0	5,980.0	6,167.6	6,008.0	13.3	24.5	-36.18	1,608.0	1.5	1,208.0	1,172.3	35.76	33.780		
6,100.0	6,079.6	6,267.9	6,108.3	13.5	24.6	-36.45	1,609.8	0.8	1,202.9	1,166.9	36.05	33.370		
6,200.0	6,179.2	6,366.8	6,207.1	13.8	24.7	-36.73	1,611.6	-0.4	1,197.9	1,161.5	36.34	32.967		
6,300.0	6,278.8	6,463.0	6,303.3	14.0	24.8	-37.03	1,613.4	-2.0	1,193.0	1,156.4	36.63	32.571		
6,400.0	6,378.4	6,560.6	6,400.9	14.2	25.0	-37.35	1,615.4	-3.9	1,188.5	1,151.6	36.92	32.188		
6,500.0	6,478.1	6,661.9	6,502.1	14.5	25.1	-37.70	1,617.5	-6.2	1,184.0	1,146.8	37.23	31.800		
6,600.0	6,577.7	6,760.5	6,600.7	14.7	25.2	-38.05	1,619.4	-8.6	1,179.5	1,142.0	37.53	31.426		
6,700.0	6,677.3	6,857.2	6,697.3	14.9	25.3	-38.39	1,621.5	-10.8	1,175.2	1,137.4	37.83	31.069		
6,800.0	6,776.9	6,955.2	6,795.3	15.1	25.4	-38.72	1,623.9	-12.7	1,171.2	1,133.1	38.12	30.727		
6,900.0	6,876.5	7,053.7	6,893.7	15.4	25.5	-39.03	1,626.5	-14.4	1,167.3	1,128.9	38.41	30.394		
7,000.0	6,976.2	7,153.6	6,993.6	15.6	25.6	-39.34	1,629.2	-15.8	1,163.6	1,124.9	38.69	30.073		
7,100.0	7,075.8	7,254.4	7,094.3	15.8	25.7	-39.64	1,632.0	-16.9	1,159.8	1,120.8	38.98	29.756		
7,147.2	7,122.8	7,303.1	7,143.0	15.9	25.8	-39.78	1,633.3	-17.3	1,157.9	1,118.8	39.11	29.606		
7,150.0	7,125.6	7,306.0	7,146.0	16.0	25.8	-41.31	1,633.4	-17.3	1,157.8	1,118.7	39.12	29.597		
7,170.9	7,146.5	7,327.7	7,167.6	16.0	25.8	-60.01	1,633.9	-17.5	1,157.5	1,118.3	39.18	29.545 CC, ES		
7,200.0	7,175.5	7,357.7	7,197.7	16.0	25.8	-123.38	1,634.7	-17.8	1,158.2	1,118.9	39.26	29.503 SF		
7,250.0	7,225.4	7,409.1	7,249.0	16.1	25.9	-172.66	1,635.9	-18.2	1,162.7	1,123.3	39.38	29.521		
7,300.0	7,274.8	7,457.7	7,297.6	16.0	25.9	177.82	1,637.1	-18.5	1,171.4	1,131.9	39.50	29.657		
7,350.0	7,323.4	7,505.3	7,345.2	16.0	25.9	173.96	1,638.3	-18.6	1,184.2	1,144.6	39.60	29.903		
7,400.0	7,370.8	7,551.7	7,391.5	15.9	26.0	171.75	1,639.5	-18.6	1,201.1	1,161.4	39.70	30.254		
7,450.0	7,416.7	7,596.3	7,436.1	15.8	26.0	170.20	1,640.7	-18.5	1,222.0	1,182.2	39.79	30.708		
7,500.0	7,460.7	7,638.7	7,478.5	15.7	26.1	168.91	1,641.9	-18.4	1,246.6	1,206.7	39.88	31.260		
7,550.0	7,502.4	7,678.8	7,518.6	15.5	26.1	167.71	1,643.1	-18.3	1,274.9	1,234.9	39.96	31.903		
7,600.0	7,541.6	7,716.3	7,556.0	15.4	26.1	166.47	1,644.2	-18.1	1,306.5	1,266.5	40.04	32.633		
7,650.0	7,578.0	7,750.8	7,590.5	15.2	26.1	165.08	1,645.3	-18.0	1,341.3	1,301.2	40.11	33.441		
7,700.0	7,611.2	7,777.0	7,616.8	15.1	26.2	163.35	1,646.2	-17.9	1,379.1	1,338.9	40.17	34.329		
7,750.0	7,641.0	7,799.5	7,639.2	14.9	26.2	161.15	1,647.0	-17.8	1,419.6	1,379.4	40.23	35.285		
7,800.0	7,667.3	7,818.7	7,658.4	14.8	26.2	158.21	1,647.8	-17.7	1,462.5	1,422.2	40.29	36.299		
7,850.0	7,689.7	7,834.7	7,674.4	14.7	26.2	154.09	1,648.5	-17.6	1,507.4	1,467.0	40.35	37.361		
7,900.0	7,708.2	7,847.3	7,687.0	14.7	26.2	147.96	1,649.1	-17.6	1,553.9	1,513.5	40.40	38.461		
7,950.0	7,722.5	7,856.5	7,696.2	14.7	26.2	138.27	1,649.6	-17.5	1,601.7	1,561.2	40.46	39.590		
8,000.0	7,732.6	7,862.4	7,702.0	14.8	26.2	122.20	1,649.9	-17.5	1,650.4	1,609.8	40.51	40.737		
8,050.0	7,738.5	7,864.8	7,704.5	14.9	26.2	97.23	1,650.0	-17.5	1,699.5	1,658.9	40.57	41.893		
8,092.0	7,740.0	7,864.3	7,704.0	15.0	26.2	73.27	1,650.0	-17.5	1,740.8	1,700.2	40.61	42.863		
8,100.0	7,740.0	7,864.0	7,703.7	15.0	26.2	73.21	1,650.0	-17.5	1,748.8	1,708.1	40.62	43.048		
8,200.0	7,740.0	7,860.2	7,699.8	15.5	26.2	72.52	1,649.8	-17.5	1,847.3	1,806.6	40.74	45.343		
8,300.0	7,740.0	7,856.4	7,696.1	16.1	26.2	71.86	1,649.6	-17.5	1,946.0	1,905.1	40.86	47.620		
8,400.0	7,740.0	7,852.8	7,692.5	16.9	26.2	71.22	1,649.4	-17.6	2,044.8	2,003.8	40.99	49.880		
8,500.0	7,740.0	7,849.3	7,688.9	17.8	26.2	70.61	1,649.2	-17.6	2,143.7	2,102.5	41.13	52.122		
8,600.0	7,740.0	7,845.8	7,685.5	18.9	26.2	70.01	1,649.0	-17.6	2,242.7	2,201.4	41.26	54.348		
8,700.0	7,740.0	7,842.5	7,682.2	20.0	26.2	69.44	1,648.9	-17.6	2,341.7	2,300.3	41.40	56.558		
8,800.0	7,740.0	7,839.2	7,678.9	21.2	26.2	68.88	1,648.7	-17.6	2,440.9	2,399.3	41.55	58.751		
8,900.0	7,740.0	7,836.0	7,675.7	22.5	26.2	68.34	1,648.6	-17.6	2,540.1	2,498.4	41.69	60.929		
9,000.0	7,740.0	7,832.9	7,672.6	23.9	26.2	67.82	1,648.4	-17.6	2,639.3	2,597.5	41.83	63.092		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft	
Survey Program: 132-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,100.0	7,740.0	7,829.9	7,669.6	25.3	26.2	67.32	1,648.3	-17.6	2,738.6	2,696.6	41.98	65.239	
9,200.0	7,740.0	7,827.0	7,666.7	26.7	26.2	66.83	1,648.2	-17.7	2,838.0	2,795.8	42.12	67.371	
9,300.0	7,740.0	7,824.1	7,663.8	28.2	26.2	66.36	1,648.0	-17.7	2,937.4	2,895.1	42.27	69.489	
9,400.0	7,740.0	7,821.3	7,661.0	29.7	26.2	65.90	1,647.9	-17.7	3,036.8	2,994.4	42.42	71.593	
9,500.0	7,740.0	7,818.5	7,658.2	31.3	26.2	65.46	1,647.8	-17.7	3,136.2	3,093.7	42.56	73.682	
9,600.0	7,740.0	7,815.9	7,655.6	32.8	26.2	65.03	1,647.7	-17.7	3,235.7	3,193.0	42.71	75.758	
9,700.0	7,740.0	7,813.2	7,653.0	34.4	26.2	64.61	1,647.6	-17.7	3,335.2	3,292.4	42.86	77.820	
9,800.0	7,740.0	7,810.7	7,650.4	36.0	26.2	64.20	1,647.5	-17.7	3,434.8	3,391.8	43.01	79.869	
9,900.0	7,740.0	7,808.2	7,647.9	37.6	26.2	63.81	1,647.4	-17.7	3,534.3	3,491.2	43.15	81.905	
10,000.0	7,740.0	7,805.8	7,645.5	39.2	26.2	63.43	1,647.3	-17.7	3,633.9	3,590.6	43.30	83.927	
10,100.0	7,740.0	7,803.4	7,643.1	40.9	26.2	63.06	1,647.2	-17.8	3,733.5	3,690.1	43.44	85.937	
10,200.0	7,740.0	7,801.1	7,640.8	42.5	26.2	62.70	1,647.1	-17.8	3,833.1	3,789.6	43.59	87.935	
10,300.0	7,740.0	7,798.8	7,638.5	44.2	26.2	62.35	1,647.0	-17.8	3,932.8	3,889.0	43.74	89.920	
10,400.0	7,740.0	7,796.5	7,636.3	45.8	26.2	62.01	1,646.9	-17.8	4,032.4	3,988.6	43.88	91.894	
10,500.0	7,740.0	7,794.4	7,634.1	47.5	26.2	61.68	1,646.8	-17.8	4,132.1	4,088.1	44.03	93.855	
10,600.0	7,740.0	7,795.0	7,594.8	49.1	26.2	56.07	1,645.4	-18.0	4,232.1	4,188.0	44.11	95.941	
10,700.0	7,740.0	7,755.0	7,594.8	50.8	26.2	56.07	1,645.4	-18.0	4,331.7	4,287.5	44.26	97.872	
10,800.0	7,740.0	7,755.0	7,594.8	52.5	26.2	56.07	1,645.4	-18.0	4,431.4	4,387.0	44.41	99.792	
10,900.0	7,740.0	7,755.0	7,594.8	54.2	26.2	56.07	1,645.4	-18.0	4,531.1	4,486.5	44.55	101.701	
11,000.0	7,740.0	7,755.0	7,594.8	55.9	26.2	56.07	1,645.4	-18.0	4,630.8	4,586.1	44.70	103.598	
11,100.0	7,740.0	7,755.0	7,594.8	57.6	26.2	56.07	1,645.4	-18.0	4,730.5	4,685.7	44.85	105.485	
11,200.0	7,740.0	7,755.0	7,594.8	59.3	26.2	56.07	1,645.4	-18.0	4,830.2	4,785.3	44.99	107.361	
11,300.0	7,740.0	7,755.0	7,594.8	61.0	26.2	56.07	1,645.4	-18.0	4,930.0	4,884.8	45.14	109.226	
11,400.0	7,740.0	7,755.0	7,594.8	62.7	26.2	56.07	1,645.4	-18.0	5,029.7	4,984.5	45.28	111.080	
11,500.0	7,740.0	7,755.0	7,594.8	64.4	26.2	56.07	1,645.4	-18.0	5,129.5	5,084.1	45.42	112.924	
11,600.0	7,740.0	7,755.0	7,594.8	66.1	26.2	56.07	1,645.4	-18.0	5,229.3	5,183.7	45.57	114.759	
11,700.0	7,740.0	7,755.0	7,594.8	67.8	26.2	56.07	1,645.4	-18.0	5,329.0	5,283.3	45.71	116.582	
11,800.0	7,740.0	7,755.0	7,594.8	69.5	26.2	56.07	1,645.4	-18.0	5,428.8	5,383.0	45.85	118.396	
11,900.0	7,740.0	7,755.0	7,594.8	71.2	26.2	56.07	1,645.4	-18.0	5,528.6	5,482.6	45.99	120.200	
12,000.0	7,740.0	7,755.0	7,594.8	72.9	26.2	56.07	1,645.4	-18.0	5,628.4	5,582.3	46.14	121.995	
12,100.0	7,740.0	7,755.0	7,594.8	74.7	26.2	56.07	1,645.4	-18.0	5,728.2	5,681.9	46.28	123.780	
12,200.0	7,740.0	7,755.0	7,594.8	76.4	26.2	56.07	1,645.4	-18.0	5,828.0	5,781.6	46.42	125.555	
12,300.0	7,740.0	7,755.0	7,594.8	78.1	26.2	56.07	1,645.4	-18.0	5,927.8	5,881.3	46.56	127.321	
12,400.0	7,740.0	7,755.0	7,594.8	79.8	26.2	56.07	1,645.4	-18.0	6,027.7	5,981.0	46.70	129.077	
12,500.0	7,740.0	7,755.0	7,594.8	81.6	26.2	56.07	1,645.4	-18.0	6,127.5	6,080.7	46.84	130.825	
12,600.0	7,740.0	7,755.0	7,594.8	83.3	26.2	56.07	1,645.4	-18.0	6,227.3	6,180.4	46.98	132.563	
12,700.0	7,740.0	7,755.0	7,594.8	85.0	26.2	56.07	1,645.4	-18.0	6,327.2	6,280.1	47.11	134.292	
12,800.0	7,740.0	7,755.0	7,594.8	86.7	26.2	56.07	1,645.4	-18.0	6,427.0	6,379.8	47.25	136.013	
12,900.0	7,740.0	7,755.0	7,594.8	88.5	26.2	56.07	1,645.4	-18.0	6,526.9	6,479.5	47.39	137.725	
13,000.0	7,740.0	7,755.0	7,594.8	90.2	26.2	56.07	1,645.4	-18.0	6,626.7	6,579.2	47.53	139.428	
13,100.0	7,740.0	7,755.0	7,594.8	91.9	26.2	56.07	1,645.4	-18.0	6,726.6	6,678.9	47.67	141.122	
13,200.0	7,740.0	7,742.9	7,582.7	93.7	26.1	54.48	1,645.1	-18.0	6,826.4	6,778.7	47.78	142.861	
13,300.0	7,740.0	7,740.2	7,579.9	95.4	26.1	54.13	1,645.0	-18.0	6,926.3	6,878.4	47.92	144.551	
13,400.0	7,740.0	7,737.4	7,577.2	97.1	26.1	53.78	1,644.9	-18.0	7,026.2	6,978.1	48.05	146.233	
13,500.0	7,740.0	7,734.7	7,574.5	98.9	26.1	53.44	1,644.8	-18.0	7,126.0	7,077.9	48.18	147.906	
13,600.0	7,740.0	7,732.0	7,571.8	100.6	26.1	53.10	1,644.7	-18.1	7,225.9	7,177.6	48.31	149.572	
13,700.0	7,740.0	7,729.3	7,569.1	102.3	26.1	52.76	1,644.6	-18.1	7,325.8	7,277.3	48.44	151.230	
13,800.0	7,740.0	7,726.6	7,566.4	104.1	26.1	52.43	1,644.6	-18.1	7,425.7	7,377.1	48.57	152.879	
13,900.0	7,740.0	7,723.9	7,563.7	105.8	26.1	52.11	1,644.5	-18.1	7,525.5	7,476.8	48.70	154.521	
14,000.0	7,740.0	7,721.3	7,561.0	107.5	26.1	51.78	1,644.4	-18.1	7,625.4	7,576.6	48.83	156.156	
14,100.0	7,740.0	7,718.6	7,558.4	109.3	26.1	51.46	1,644.3	-18.1	7,725.3	7,676.3	48.96	157.782	
14,200.0	7,740.0	7,715.9	7,555.7	111.0	26.1	51.15	1,644.2	-18.1	7,825.2	7,776.1	49.09	159.401	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S													Offset Site Error: 0.0 ft
Survey Program: 132-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
14,300.0	7,740.0	7,713.3	7,553.1	112.8	26.1	50.84	1,644.2	-18.1	7,925.1	7,875.8	49.22	161.013	
14,400.0	7,740.0	7,710.7	7,550.4	114.5	26.1	50.53	1,644.1	-18.1	8,024.9	7,975.6	49.35	162.617	
14,500.0	7,740.0	7,708.0	7,547.8	116.2	26.1	50.23	1,644.0	-18.2	8,124.8	8,075.4	49.48	164.213	
14,600.0	7,740.0	7,705.4	7,545.2	118.0	26.1	49.93	1,643.9	-18.2	8,224.7	8,175.1	49.61	165.803	
14,700.0	7,740.0	7,702.8	7,542.6	119.7	26.1	49.63	1,643.8	-18.2	8,324.6	8,274.9	49.73	167.385	
14,800.0	7,740.0	7,700.2	7,540.0	121.5	26.1	49.34	1,643.8	-18.2	8,424.5	8,374.7	49.86	168.960	
14,900.0	7,740.0	7,697.6	7,537.4	123.2	26.1	49.05	1,643.7	-18.2	8,524.4	8,474.4	49.99	170.528	
15,000.0	7,740.0	7,695.0	7,534.8	124.9	26.1	48.76	1,643.6	-18.2	8,624.3	8,574.2	50.12	172.089	
15,100.0	7,740.0	7,692.4	7,532.2	126.7	26.1	48.48	1,643.5	-18.2	8,724.2	8,674.0	50.24	173.643	
15,200.0	7,740.0	7,689.9	7,529.7	128.4	26.1	48.20	1,643.4	-18.2	8,824.1	8,773.7	50.37	175.190	
15,300.0	7,740.0	7,687.3	7,527.1	130.2	26.1	47.93	1,643.4	-18.2	8,924.0	8,873.5	50.50	176.730	
15,400.0	7,740.0	7,684.8	7,524.6	131.9	26.1	47.65	1,643.3	-18.2	9,023.9	8,973.3	50.62	178.263	
15,500.0	7,740.0	7,682.2	7,522.0	133.7	26.1	47.39	1,643.2	-18.3	9,123.8	9,073.1	50.75	179.790	
15,600.0	7,740.0	7,679.7	7,519.5	135.4	26.1	47.12	1,643.1	-18.3	9,223.7	9,172.8	50.87	181.310	
15,700.0	7,740.0	7,677.1	7,516.9	137.1	26.1	46.86	1,643.1	-18.3	9,323.6	9,272.6	51.00	182.824	
15,800.0	7,740.0	7,674.6	7,514.4	138.9	26.1	46.60	1,643.0	-18.3	9,423.5	9,372.4	51.12	184.330	
15,900.0	7,740.0	7,672.1	7,511.9	140.6	26.1	46.34	1,642.9	-18.3	9,523.4	9,472.2	51.25	185.831	
15,953.0	7,740.0	7,670.8	7,510.6	141.6	26.1	46.21	1,642.9	-18.3	9,576.3	9,525.0	51.31	186.623	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	88.0	88.0	0.0	0.2	-16.41	131.1	-38.6	136.7					
100.0	100.0	188.0	188.0	0.2	0.3	-16.41	131.1	-38.6	136.7	136.2	0.48	284.724		
200.0	200.0	288.0	288.0	0.3	0.5	-16.41	131.1	-38.6	136.7	135.9	0.83	164.869		
300.0	300.0	388.0	388.0	0.5	0.7	-16.41	131.1	-38.6	136.7	135.5	1.18	116.027		
400.0	400.0	488.0	488.0	0.7	0.9	-16.41	131.1	-38.6	136.7	135.2	1.53	89.510		
500.0	500.0	588.0	588.0	0.9	1.0	-43.01	131.1	-38.6	136.1	134.2	1.88	72.508		
600.0	600.0	688.0	688.0	1.0	1.2	-43.78	131.1	-38.6	134.2	131.9	2.23	60.238		
700.0	699.9	787.9	787.9	1.2	1.4	-45.12	131.1	-38.6	131.1	128.5	2.58	50.772		
800.0	799.7	887.7	887.7	1.4	1.5	-47.11	131.1	-38.6	126.8	123.9	2.94	43.121		
899.9	899.3	987.3	987.3	1.6	1.7	-49.85	131.1	-38.6	121.6	118.3	3.31	36.741		
1,000.0	999.0	1,087.0	1,087.0	1.8	1.9	-53.13	131.1	-38.6	116.2	112.5	3.69	31.505		
1,100.0	1,098.6	1,186.6	1,186.6	2.0	2.1	-56.72	131.1	-38.6	111.1	107.1	4.07	27.296		
1,200.0	1,198.2	1,286.2	1,286.2	2.3	2.2	-60.63	131.1	-38.6	106.6	102.1	4.46	23.880		
1,300.0	1,297.8	1,385.8	1,385.8	2.5	2.4	-64.86	131.1	-38.6	102.6	97.7	4.86	21.096		
1,400.0	1,397.5	1,485.5	1,485.5	2.7	2.6	-69.40	131.1	-38.6	99.2	93.9	5.27	18.829		
1,500.0	1,497.1	1,585.1	1,585.1	2.9	2.8	-74.24	131.1	-38.6	96.5	90.8	5.68	16.991		
1,600.0	1,596.7	1,684.7	1,684.7	3.2	2.9	-79.31	131.1	-38.6	94.5	88.4	6.09	15.515		
1,700.0	1,696.3	1,784.3	1,784.3	3.4	3.1	-84.56	131.1	-38.6	93.2	86.7	6.50	14.348		
1,800.0	1,795.9	1,883.9	1,883.9	3.6	3.3	-89.90	131.1	-38.6	92.8	85.9	6.90	13.445		
1,801.8	1,797.7	1,885.7	1,885.7	3.6	3.3	-90.00	131.1	-38.6	92.8	85.9	6.91	13.431 CC, ES		
1,900.0	1,895.6	1,983.6	1,983.6	3.8	3.5	-95.25	131.1	-38.6	93.2	85.9	7.30	12.767		
2,000.0	1,995.2	2,083.2	2,083.2	4.1	3.6	-100.50	131.1	-38.6	94.4	86.7	7.69	12.280		
2,100.0	2,094.8	2,182.8	2,182.8	4.3	3.8	-105.59	131.1	-38.6	96.4	88.3	8.06	11.951		
2,200.0	2,194.4	2,282.4	2,282.4	4.5	4.0	-110.43	131.1	-38.6	99.1	90.7	8.43	11.753		
2,300.0	2,294.0	2,382.0	2,382.0	4.8	4.2	-114.99	131.1	-38.6	102.5	93.7	8.79	11.662		
2,400.0	2,393.7	2,481.7	2,481.7	5.0	4.3	-119.23	131.1	-38.6	106.4	97.3	9.13	11.655		
2,500.0	2,493.3	2,581.3	2,581.3	5.2	4.5	-123.15	131.1	-38.6	111.0	101.5	9.47	11.714		
2,600.0	2,592.9	2,680.9	2,680.9	5.4	4.7	-126.75	131.1	-38.6	116.0	106.2	9.81	11.825		
2,700.0	2,692.5	2,780.5	2,780.5	5.7	4.9	-130.04	131.1	-38.6	121.4	111.3	10.14	11.974		
2,800.0	2,792.1	2,880.1	2,880.1	5.9	5.0	-133.04	131.1	-38.6	127.2	116.7	10.47	12.151		
2,900.0	2,891.8	2,979.8	2,979.8	6.1	5.2	-135.77	131.1	-38.6	133.3	122.5	10.80	12.348		
3,000.0	2,991.4	3,079.4	3,079.4	6.4	5.4	-138.26	131.1	-38.6	139.7	128.6	11.12	12.560		
3,100.0	3,091.0	3,179.0	3,179.0	6.6	5.5	-140.53	131.1	-38.6	146.3	134.9	11.45	12.780		
3,200.0	3,190.6	3,278.6	3,278.6	6.8	5.7	-142.60	131.1	-38.6	153.2	141.4	11.78	13.006		
3,300.0	3,290.2	3,378.2	3,378.2	7.1	5.9	-144.49	131.1	-38.6	160.2	148.1	12.10	13.234		
3,400.0	3,389.9	3,477.9	3,477.9	7.3	6.1	-146.22	131.1	-38.6	167.4	154.9	12.43	13.461		
3,500.0	3,489.5	3,577.5	3,577.5	7.5	6.2	-147.81	131.1	-38.6	174.7	161.9	12.76	13.687		
3,600.0	3,589.1	3,677.1	3,677.1	7.7	6.4	-149.27	131.1	-38.6	182.1	169.0	13.09	13.910		
3,700.0	3,688.7	3,776.7	3,776.7	8.0	6.6	-150.61	131.1	-38.6	189.7	176.2	13.42	14.130		
3,800.0	3,788.3	3,876.3	3,876.3	8.2	6.8	-151.85	131.1	-38.6	197.3	183.6	13.76	14.344		
3,900.0	3,888.0	3,976.0	3,976.0	8.4	6.9	-153.00	131.1	-38.6	205.0	191.0	14.09	14.554		
4,000.0	3,987.6	4,075.6	4,075.6	8.7	7.1	-154.06	131.1	-38.6	212.9	198.4	14.42	14.758		
4,100.0	4,087.2	4,175.2	4,175.2	8.9	7.3	-155.05	131.1	-38.6	220.7	206.0	14.76	14.957		
4,200.0	4,186.8	4,274.8	4,274.8	9.1	7.5	-155.97	131.1	-38.6	228.7	213.6	15.09	15.150		
4,300.0	4,286.4	4,374.4	4,374.4	9.4	7.6	-156.83	131.1	-38.6	236.7	221.2	15.43	15.338		
4,400.0	4,386.1	4,474.1	4,474.1	9.6	7.8	-157.63	131.1	-38.6	244.7	228.9	15.77	15.520		
4,500.0	4,485.7	4,573.7	4,573.7	9.8	8.0	-158.39	131.1	-38.6	252.8	236.7	16.10	15.697		
4,600.0	4,585.3	4,673.3	4,673.3	10.1	8.2	-159.09	131.1	-38.6	260.9	244.5	16.44	15.868		
4,700.0	4,684.9	4,772.9	4,772.9	10.3	8.3	-159.75	131.1	-38.6	269.1	252.3	16.78	16.034		
4,800.0	4,784.5	4,872.5	4,872.5	10.5	8.5	-160.37	131.1	-38.6	277.3	260.1	17.12	16.195		
4,900.0	4,884.1	4,972.1	4,972.1	10.8	8.7	-160.96	131.1	-38.6	285.5	268.0	17.46	16.351		
5,000.0	4,983.8	5,071.8	5,071.8	11.0	8.9	-161.52	131.1	-38.6	293.7	275.9	17.80	16.502		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,100.0	5,083.4	5,171.4	5,171.4	11.2	9.0	-162.04	131.1	-38.6	302.0	283.9	18.14	16.649		
5,200.0	5,183.0	5,271.0	5,271.0	11.4	9.2	-162.54	131.1	-38.6	310.3	291.8	18.48	16.791		
5,300.0	5,282.6	5,370.6	5,370.6	11.7	9.4	-163.01	131.1	-38.6	318.7	299.8	18.82	16.928		
5,400.0	5,382.2	5,470.2	5,470.2	11.9	9.5	-163.45	131.1	-38.6	327.0	307.8	19.17	17.062		
5,500.0	5,481.9	5,569.9	5,569.9	12.1	9.7	-163.88	131.1	-38.6	335.4	315.9	19.51	17.192		
5,600.0	5,581.5	5,669.5	5,669.5	12.4	9.9	-164.28	131.1	-38.6	343.7	323.9	19.85	17.318		
5,700.0	5,681.1	5,769.1	5,769.1	12.6	10.1	-164.66	131.1	-38.6	352.1	332.0	20.19	17.440		
5,800.0	5,780.7	5,868.7	5,868.7	12.8	10.2	-165.03	131.1	-38.6	360.6	340.0	20.54	17.558		
5,900.0	5,880.3	5,968.3	5,968.3	13.1	10.4	-165.38	131.1	-38.6	369.0	348.1	20.88	17.673		
6,000.0	5,980.0	6,068.0	6,068.0	13.3	10.6	-165.71	131.1	-38.6	377.4	356.2	21.22	17.785		
6,100.0	6,079.6	6,167.6	6,167.6	13.5	10.8	-166.03	131.1	-38.6	385.9	364.3	21.57	17.894		
6,200.0	6,179.2	6,267.2	6,267.2	13.8	10.9	-166.34	131.1	-38.6	394.3	372.4	21.91	17.999		
6,300.0	6,278.8	6,366.8	6,366.8	14.0	11.1	-166.63	131.1	-38.6	402.8	380.6	22.25	18.102		
6,400.0	6,378.4	6,466.4	6,466.4	14.2	11.3	-166.91	131.1	-38.6	411.3	388.7	22.60	18.202		
6,500.0	6,478.1	6,566.1	6,566.1	14.5	11.5	-167.18	131.1	-38.6	419.8	396.9	22.94	18.299		
6,600.0	6,577.7	6,665.7	6,665.7	14.7	11.6	-167.44	131.1	-38.6	428.3	405.0	23.29	18.393		
6,700.0	6,677.3	6,765.3	6,765.3	14.9	11.8	-167.69	131.1	-38.6	436.8	413.2	23.63	18.485		
6,800.0	6,776.9	6,864.9	6,864.9	15.1	12.0	-167.93	131.1	-38.6	445.3	421.4	23.97	18.575		
6,900.0	6,876.5	6,964.5	6,964.5	15.4	12.2	-168.16	131.1	-38.6	453.9	429.5	24.32	18.662		
7,000.0	6,976.2	7,064.2	7,064.2	15.6	12.3	-168.38	131.1	-38.6	462.4	437.7	24.66	18.747		
7,100.0	7,075.8	7,163.8	7,163.8	15.8	12.5	-168.59	131.1	-38.6	470.9	445.9	25.01	18.830		
7,147.2	7,122.8	7,210.8	7,210.8	15.9	12.6	-168.69	131.1	-38.6	475.0	449.8	25.17	18.868		
7,150.0	7,125.6	7,213.6	7,213.6	16.0	12.6	-170.23	131.1	-38.6	475.2	450.0	25.18	18.870		
7,200.0	7,175.5	7,263.5	7,263.5	16.0	12.7	107.76	131.1	-38.6	477.5	452.2	25.35	18.837		
7,250.0	7,225.4	7,313.4	7,313.4	16.1	12.8	59.11	131.1	-38.6	476.5	450.9	25.52	18.668		
7,300.0	7,274.8	7,362.8	7,362.8	16.0	12.9	50.82	131.1	-38.6	472.0	446.3	25.70	18.369		
7,350.0	7,323.4	7,411.4	7,411.4	16.0	12.9	48.79	131.1	-38.6	464.3	438.4	25.87	17.949		
7,400.0	7,370.8	7,458.8	7,458.8	15.9	13.0	49.09	131.1	-38.6	453.6	427.5	26.04	17.419		
7,450.0	7,416.7	7,504.7	7,504.7	15.8	13.1	50.78	131.1	-38.6	440.1	413.9	26.21	16.794		
7,500.0	7,460.7	7,548.7	7,548.7	15.7	13.2	53.54	131.1	-38.6	424.4	398.0	26.38	16.090		
7,550.0	7,502.4	7,590.4	7,590.4	15.5	13.2	57.24	131.1	-38.6	406.9	380.3	26.54	15.330		
7,600.0	7,541.6	7,629.6	7,629.6	15.4	13.3	61.76	131.1	-38.6	388.2	361.5	26.70	14.540		
7,650.0	7,578.0	7,666.0	7,666.0	15.2	13.4	66.92	131.1	-38.6	369.3	342.4	26.86	13.751		
7,700.0	7,611.2	7,699.2	7,699.2	15.1	13.4	72.45	131.1	-38.6	351.2	324.1	27.00	13.003		
7,750.0	7,641.0	7,729.0	7,729.0	14.9	13.5	77.97	131.1	-38.6	335.0	307.9	27.15	12.341		
7,800.0	7,667.3	7,755.3	7,755.3	14.8	13.5	83.09	131.1	-38.6	322.3	295.0	27.28	11.816		
7,850.0	7,689.7	7,777.7	7,777.7	14.7	13.6	87.42	131.1	-38.6	314.4	287.0	27.39	11.477		
7,888.2	7,704.2	7,792.2	7,792.2	14.7	13.6	90.00	131.1	-38.6	312.5	285.0	27.48	11.371		
7,900.0	7,708.2	7,796.2	7,796.2	14.7	13.6	90.65	131.1	-38.6	312.7	285.2	27.50	11.369 SF		
7,950.0	7,722.5	7,810.5	7,810.5	14.7	13.6	92.58	131.1	-38.6	317.9	290.3	27.59	11.519		
8,000.0	7,732.6	7,820.6	7,820.6	14.8	13.6	93.08	131.1	-38.6	330.2	302.5	27.68	11.928		
8,050.0	7,738.5	7,826.5	7,826.5	14.9	13.7	92.06	131.1	-38.6	349.1	321.4	27.76	12.578		
8,092.0	7,740.0	7,828.0	7,828.0	15.0	13.7	90.00	131.1	-38.6	369.5	341.6	27.82	13.282		
8,100.0	7,740.0	7,828.0	7,828.0	15.0	13.7	90.00	131.1	-38.6	373.8	345.9	27.83	13.432		
8,200.0	7,740.0	7,828.0	7,828.0	15.5	13.7	90.00	131.1	-38.6	436.2	408.3	27.98	15.594		
8,300.0	7,740.0	7,828.0	7,828.0	16.1	13.7	90.00	131.1	-38.6	510.8	482.7	28.13	18.157		
8,400.0	7,740.0	7,828.0	7,828.0	16.9	13.7	90.00	131.1	-38.6	592.9	564.6	28.29	20.954		
8,500.0	7,740.0	7,828.0	7,828.0	17.8	13.7	90.00	131.1	-38.6	679.8	651.3	28.46	23.886		
8,600.0	7,740.0	7,828.0	7,828.0	18.9	13.7	90.00	131.1	-38.6	769.9	741.3	28.63	26.895		
8,700.0	7,740.0	7,828.0	7,828.0	20.0	13.7	90.00	131.1	-38.6	862.2	833.4	28.79	29.945		
8,800.0	7,740.0	7,828.0	7,828.0	21.2	13.7	90.00	131.1	-38.6	956.0	927.0	28.96	33.014		
8,900.0	7,740.0	7,828.0	7,828.0	22.5	13.7	90.00	131.1	-38.6	1,051.0	1,021.8	29.12	36.089		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,740.0	7,828.0	7,828.0	23.9	13.7	90.00	131.1	-38.6	1,146.8	1,117.5	29.28	39.160		
9,100.0	7,740.0	7,828.0	7,828.0	25.3	13.7	90.00	131.1	-38.6	1,243.3	1,213.8	29.45	42.220		
9,200.0	7,740.0	7,828.0	7,828.0	26.7	13.7	90.00	131.1	-38.6	1,340.3	1,310.7	29.61	45.266		
9,300.0	7,740.0	7,828.0	7,828.0	28.2	13.7	90.00	131.1	-38.6	1,437.7	1,407.9	29.77	48.294		
9,400.0	7,740.0	7,828.0	7,828.0	29.7	13.7	90.00	131.1	-38.6	1,535.4	1,505.5	29.93	51.302		
9,500.0	7,740.0	7,828.0	7,828.0	31.3	13.7	90.00	131.1	-38.6	1,633.4	1,603.4	30.09	54.290		
9,600.0	7,740.0	7,828.0	7,828.0	32.8	13.7	90.00	131.1	-38.6	1,731.7	1,701.4	30.25	57.255		
9,700.0	7,740.0	7,828.0	7,828.0	34.4	13.7	90.00	131.1	-38.6	1,830.1	1,799.7	30.40	60.197		
9,800.0	7,740.0	7,828.0	7,828.0	36.0	13.7	90.00	131.1	-38.6	1,928.7	1,898.2	30.56	63.117		
9,900.0	7,740.0	7,828.0	7,828.0	37.6	13.7	90.00	131.1	-38.6	2,027.5	1,996.7	30.71	66.013		
10,000.0	7,740.0	7,828.0	7,828.0	39.2	13.7	90.00	131.1	-38.6	2,126.3	2,095.4	30.87	68.885		
10,100.0	7,740.0	7,828.0	7,828.0	40.9	13.7	90.00	131.1	-38.6	2,225.3	2,194.2	31.02	71.734		
10,200.0	7,740.0	7,828.0	7,828.0	42.5	13.7	90.00	131.1	-38.6	2,324.3	2,293.1	31.17	74.560		
10,300.0	7,740.0	7,828.0	7,828.0	44.2	13.7	90.00	131.1	-38.6	2,423.4	2,392.1	31.33	77.363		
10,400.0	7,740.0	7,828.0	7,828.0	45.8	13.7	90.00	131.1	-38.6	2,522.6	2,491.1	31.48	80.143		
10,500.0	7,740.0	7,828.0	7,828.0	47.5	13.7	90.00	131.1	-38.6	2,621.9	2,590.2	31.63	82.900		
10,600.0	7,740.0	7,828.0	7,828.0	49.1	13.7	90.00	131.1	-38.6	2,721.2	2,689.4	31.78	85.635		
10,700.0	7,740.0	7,828.0	7,828.0	50.8	13.7	90.00	131.1	-38.6	2,820.5	2,788.6	31.93	88.348		
10,800.0	7,740.0	7,828.0	7,828.0	52.5	13.7	90.00	131.1	-38.6	2,919.9	2,887.9	32.07	91.038		
10,900.0	7,740.0	7,828.0	7,828.0	54.2	13.7	90.00	131.1	-38.6	3,019.4	2,987.1	32.22	93.707		
11,000.0	7,740.0	7,828.0	7,828.0	55.9	13.7	90.00	131.1	-38.6	3,118.8	3,086.5	32.37	96.355		
11,100.0	7,740.0	7,828.0	7,828.0	57.6	13.7	90.00	131.1	-38.6	3,218.4	3,185.8	32.51	98.982		
11,200.0	7,740.0	7,828.0	7,828.0	59.3	13.7	90.00	131.1	-38.6	3,317.9	3,285.2	32.66	101.588		
11,300.0	7,740.0	7,828.0	7,828.0	61.0	13.7	90.00	131.1	-38.6	3,417.5	3,384.7	32.81	104.173		
11,400.0	7,740.0	7,828.0	7,828.0	62.7	13.7	90.00	131.1	-38.6	3,517.0	3,484.1	32.95	106.738		
11,500.0	7,740.0	7,828.0	7,828.0	64.4	13.7	90.00	131.1	-38.6	3,616.7	3,583.6	33.09	109.284		
11,600.0	7,740.0	7,828.0	7,828.0	66.1	13.7	90.00	131.1	-38.6	3,716.3	3,683.1	33.24	111.809		
11,700.0	7,740.0	7,828.0	7,828.0	67.8	13.7	90.00	131.1	-38.6	3,815.9	3,782.6	33.38	114.316		
11,800.0	7,740.0	7,828.0	7,828.0	69.5	13.7	90.00	131.1	-38.6	3,915.6	3,882.1	33.52	116.804		
11,900.0	7,740.0	7,828.0	7,828.0	71.2	13.7	90.00	131.1	-38.6	4,015.3	3,981.6	33.66	119.272		
12,000.0	7,740.0	7,828.0	7,828.0	72.9	13.7	90.00	131.1	-38.6	4,115.0	4,081.2	33.81	121.723		
12,100.0	7,740.0	7,828.0	7,828.0	74.7	13.7	90.00	131.1	-38.6	4,214.7	4,180.8	33.95	124.155		
12,200.0	7,740.0	7,828.0	7,828.0	76.4	13.7	90.00	131.1	-38.6	4,314.4	4,280.4	34.09	126.569		
12,300.0	7,740.0	7,828.0	7,828.0	78.1	13.7	90.00	131.1	-38.6	4,414.2	4,380.0	34.23	128.966		
12,400.0	7,740.0	7,828.0	7,828.0	79.8	13.7	90.00	131.1	-38.6	4,513.9	4,479.6	34.37	131.345		
12,500.0	7,740.0	7,828.0	7,828.0	81.6	13.7	90.00	131.1	-38.6	4,613.7	4,579.2	34.51	133.707		
12,600.0	7,740.0	7,828.0	7,828.0	83.3	13.7	90.00	131.1	-38.6	4,713.5	4,678.8	34.64	136.053		
12,700.0	7,740.0	7,828.0	7,828.0	85.0	13.7	90.00	131.1	-38.6	4,813.3	4,778.5	34.78	138.381		
12,800.0	7,740.0	7,828.0	7,828.0	86.7	13.7	90.00	131.1	-38.6	4,913.0	4,878.1	34.92	140.693		
12,900.0	7,740.0	7,828.0	7,828.0	88.5	13.7	90.00	131.1	-38.6	5,012.8	4,977.8	35.06	142.989		
13,000.0	7,740.0	7,828.0	7,828.0	90.2	13.7	90.00	131.1	-38.6	5,112.7	5,077.5	35.19	145.269		
13,100.0	7,740.0	7,828.0	7,828.0	91.9	13.7	90.00	131.1	-38.6	5,212.5	5,177.1	35.33	147.533		
13,200.0	7,740.0	7,828.0	7,828.0	93.7	13.7	90.00	131.1	-38.6	5,312.3	5,276.8	35.47	149.782		
13,300.0	7,740.0	7,828.0	7,828.0	95.4	13.7	90.00	131.1	-38.6	5,412.1	5,376.5	35.60	152.015		
13,400.0	7,740.0	7,828.0	7,828.0	97.1	13.7	90.00	131.1	-38.6	5,512.0	5,476.2	35.74	154.233		
13,500.0	7,740.0	7,828.0	7,828.0	98.9	13.7	90.00	131.1	-38.6	5,611.8	5,575.9	35.87	156.436		
13,600.0	7,740.0	7,828.0	7,828.0	100.6	13.7	90.00	131.1	-38.6	5,711.6	5,675.6	36.01	158.625		
13,700.0	7,740.0	7,828.0	7,828.0	102.3	13.7	90.00	131.1	-38.6	5,811.5	5,775.4	36.14	160.799		
13,800.0	7,740.0	7,828.0	7,828.0	104.1	13.7	90.00	131.1	-38.6	5,911.4	5,875.1	36.28	162.958		
13,900.0	7,740.0	7,828.0	7,828.0	105.8	13.7	90.00	131.1	-38.6	6,011.2	5,974.8	36.41	165.104		
14,000.0	7,740.0	7,828.0	7,828.0	107.5	13.7	90.00	131.1	-38.6	6,111.1	6,074.5	36.54	167.235		
14,100.0	7,740.0	7,828.0	7,828.0	109.3	13.7	90.00	131.1	-38.6	6,210.9	6,174.3	36.67	169.353		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,200.0	7,740.0	7,828.0	7,828.0	111.0	13.7	90.00	131.1	-38.6	6,310.8	6,274.0	36.81	171.457			
14,300.0	7,740.0	7,828.0	7,828.0	112.8	13.7	90.00	131.1	-38.6	6,410.7	6,373.8	36.94	173.547			
14,400.0	7,740.0	7,828.0	7,828.0	114.5	13.7	90.00	131.1	-38.6	6,510.6	6,473.5	37.07	175.624			
14,500.0	7,740.0	7,828.0	7,828.0	116.2	13.7	90.00	131.1	-38.6	6,610.5	6,573.3	37.20	177.689			
14,600.0	7,740.0	7,828.0	7,828.0	118.0	13.7	90.00	131.1	-38.6	6,710.4	6,673.0	37.33	179.740			
14,700.0	7,740.0	7,828.0	7,828.0	119.7	13.7	90.00	131.1	-38.6	6,810.3	6,772.8	37.46	181.778			
14,800.0	7,740.0	7,828.0	7,828.0	121.5	13.7	90.00	131.1	-38.6	6,910.1	6,872.6	37.60	183.804			
14,900.0	7,740.0	7,828.0	7,828.0	123.2	13.7	90.00	131.1	-38.6	7,010.0	6,972.3	37.73	185.817			
15,000.0	7,740.0	7,828.0	7,828.0	124.9	13.7	90.00	131.1	-38.6	7,109.9	7,072.1	37.86	187.818			
15,100.0	7,740.0	7,828.0	7,828.0	126.7	13.7	90.00	131.1	-38.6	7,209.8	7,171.9	37.99	189.807			
15,200.0	7,740.0	7,828.0	7,828.0	128.4	13.7	90.00	131.1	-38.6	7,309.8	7,271.6	38.11	191.783			
15,300.0	7,740.0	7,828.0	7,828.0	130.2	13.7	90.00	131.1	-38.6	7,409.7	7,371.4	38.24	193.748			
15,400.0	7,740.0	7,828.0	7,828.0	131.9	13.7	90.00	131.1	-38.6	7,509.6	7,471.2	38.37	195.701			
15,500.0	7,740.0	7,828.0	7,828.0	133.7	13.7	90.00	131.1	-38.6	7,609.5	7,571.0	38.50	197.642			
15,600.0	7,740.0	7,828.0	7,828.0	135.4	13.7	90.00	131.1	-38.6	7,709.4	7,670.8	38.63	199.572			
15,700.0	7,740.0	7,828.0	7,828.0	137.1	13.7	90.00	131.1	-38.6	7,809.3	7,770.6	38.76	201.490			
15,800.0	7,740.0	7,828.0	7,828.0	138.9	13.7	90.00	131.1	-38.6	7,909.2	7,870.4	38.89	203.398			
15,900.0	7,740.0	7,828.0	7,828.0	140.6	13.7	90.00	131.1	-38.6	8,009.2	7,970.2	39.01	205.294			
15,953.0	7,740.0	7,828.0	7,828.0	141.6	13.7	90.00	131.1	-38.6	8,062.1	8,023.0	39.08	206.293			

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	52.2	52.2	0.0	0.1	37.54	1,594.1	1,225.0	2,010.4					
100.0	100.0	151.2	151.2	0.2	0.3	37.54	1,594.1	1,225.0	2,010.4	2,010.0	0.42	4,836.153		
200.0	200.0	246.5	246.5	0.3	0.4	37.53	1,594.4	1,224.8	2,010.6	2,009.8	0.76	2,657.001		
300.0	300.0	383.4	383.4	0.5	0.7	37.50	1,594.7	1,223.6	2,010.3	2,009.1	1.17	1,717.298		
400.0	400.0	525.4	525.3	0.7	0.9	37.61	1,589.0	1,224.3	2,007.3	2,005.7	1.60	1,256.653		
500.0	500.0	811.0	807.6	0.9	1.7	12.27	1,548.8	1,235.6	1,996.9	1,994.4	2.45	816.253		
600.0	600.0	902.0	896.6	1.0	2.0	12.75	1,530.8	1,240.2	1,981.9	1,979.0	2.90	683.871		
700.0	699.9	1,113.7	1,102.9	1.2	2.9	13.96	1,483.9	1,249.4	1,963.8	1,960.1	3.76	522.487		
800.0	799.7	1,287.3	1,268.9	1.4	3.8	15.23	1,433.7	1,255.2	1,937.5	1,932.9	4.61	420.327		
899.9	899.3	1,389.6	1,365.9	1.6	4.4	16.14	1,401.4	1,258.9	1,908.4	1,903.2	5.24	364.428		
1,000.0	999.0	1,486.7	1,457.6	1.8	5.0	16.99	1,369.9	1,263.2	1,878.7	1,872.8	5.87	319.856		
1,100.0	1,098.6	1,570.0	1,536.2	2.0	5.4	17.75	1,342.5	1,267.1	1,849.2	1,842.8	6.46	286.107		
1,200.0	1,198.2	1,647.7	1,609.7	2.3	5.9	18.48	1,317.6	1,271.0	1,820.9	1,813.9	7.04	258.511		
1,300.0	1,297.8	1,740.4	1,697.3	2.5	6.4	19.38	1,287.7	1,276.5	1,793.5	1,785.8	7.71	232.476		
1,400.0	1,397.5	1,827.6	1,779.5	2.7	7.0	20.28	1,259.1	1,281.9	1,766.3	1,757.9	8.38	210.743		
1,500.0	1,497.1	1,949.0	1,894.0	2.9	7.7	21.55	1,219.5	1,288.8	1,739.5	1,730.3	9.20	189.109		
1,600.0	1,596.7	2,025.5	1,966.4	3.2	8.1	22.33	1,194.8	1,291.9	1,712.4	1,702.6	9.81	174.497		
1,700.0	1,696.3	2,088.8	2,026.4	3.4	8.5	22.99	1,175.0	1,295.1	1,687.0	1,676.6	10.37	162.601		
1,800.0	1,795.9	2,177.9	2,111.1	3.6	9.0	23.95	1,148.0	1,300.6	1,663.4	1,652.3	11.07	150.243		
1,900.0	1,895.6	2,286.0	2,213.5	3.8	9.6	25.18	1,113.8	1,307.1	1,639.4	1,627.5	11.90	137.815		
2,000.0	1,995.2	2,381.3	2,303.4	4.1	10.2	26.32	1,082.7	1,313.0	1,615.7	1,603.0	12.67	127.523		
2,100.0	2,094.8	2,478.1	2,395.0	4.3	10.8	27.47	1,051.9	1,318.1	1,592.3	1,578.9	13.44	118.493		
2,200.0	2,194.4	2,570.5	2,482.6	4.5	11.3	28.58	1,022.8	1,322.5	1,569.4	1,555.2	14.20	110.556		
2,300.0	2,294.0	2,665.2	2,572.4	4.8	11.8	29.72	993.3	1,326.7	1,547.0	1,532.1	14.97	103.374		
2,400.0	2,393.7	2,773.6	2,675.2	5.0	12.5	31.09	959.1	1,331.6	1,525.3	1,509.5	15.83	96.354		
2,500.0	2,493.3	2,910.0	2,803.4	5.2	13.3	32.93	912.7	1,335.3	1,501.3	1,484.4	16.87	88.980		
2,600.0	2,592.9	2,997.0	2,884.7	5.4	13.9	34.19	881.8	1,337.5	1,477.4	1,459.7	17.70	83.457		
2,700.0	2,692.5	3,082.3	2,964.4	5.7	14.4	35.46	851.7	1,340.1	1,454.8	1,436.3	18.52	78.538		
2,800.0	2,792.1	3,158.1	3,035.5	5.9	14.9	36.60	825.2	1,342.7	1,433.6	1,414.2	19.31	74.232		
2,900.0	2,891.8	3,263.5	3,134.1	6.1	15.6	38.25	788.3	1,346.6	1,413.5	1,393.2	20.27	69.734		
3,000.0	2,991.4	3,368.7	3,232.7	6.4	16.2	39.90	751.5	1,348.6	1,392.9	1,371.7	21.21	65.661		
3,100.0	3,091.0	3,433.0	3,293.0	6.6	16.6	40.92	729.4	1,349.9	1,373.9	1,351.9	21.95	62.601		
3,200.0	3,190.6	3,499.2	3,355.4	6.8	17.0	41.97	707.6	1,352.3	1,357.5	1,334.9	22.66	59.910		
3,300.0	3,290.2	3,574.6	3,427.1	7.1	17.4	43.13	684.4	1,356.0	1,344.0	1,320.6	23.41	57.408		
3,400.0	3,389.9	3,649.9	3,498.8	7.3	17.9	44.30	661.6	1,360.2	1,332.3	1,308.1	24.16	55.154		
3,500.0	3,489.5	3,729.0	3,574.2	7.5	18.3	45.53	638.3	1,365.7	1,322.9	1,298.0	24.89	53.142		
3,600.0	3,589.1	3,851.2	3,691.8	7.7	18.9	47.28	606.2	1,372.5	1,314.3	1,288.5	25.78	50.982		
3,700.0	3,688.7	3,994.9	3,830.8	8.0	19.6	49.25	569.6	1,374.5	1,302.6	1,275.9	26.76	48.676		
3,800.0	3,788.3	4,074.3	3,906.7	8.2	20.0	50.48	546.5	1,375.1	1,290.5	1,263.0	27.50	46.928		
3,900.0	3,888.0	4,132.0	3,961.8	8.4	20.3	51.41	529.4	1,377.2	1,281.6	1,253.5	28.12	45.579		
4,000.0	3,987.6	4,222.3	4,047.5	8.7	20.9	52.95	501.4	1,382.0	1,275.2	1,246.2	28.95	44.050		
4,100.0	4,087.2	4,334.8	4,153.2	8.9	21.6	55.02	463.2	1,387.6	1,269.1	1,239.1	29.95	42.369		
4,200.0	4,186.8	4,427.6	4,239.9	9.1	22.2	56.79	430.5	1,391.3	1,263.4	1,232.5	30.81	40.999		
4,300.0	4,286.4	4,507.1	4,314.3	9.4	22.7	58.31	402.7	1,395.1	1,259.6	1,228.1	31.55	39.923		
4,400.0	4,386.1	4,592.7	4,395.1	9.6	23.2	59.86	374.9	1,399.4	1,257.8	1,225.6	32.26	38.991		
4,459.2	4,445.0	4,643.5	4,443.5	9.7	23.5	60.73	359.6	1,402.2	1,257.6	1,224.9	32.65	38.516		
4,500.0	4,485.7	4,680.6	4,479.0	9.8	23.7	61.34	348.9	1,404.3	1,257.7	1,224.7	32.93	38.195		
4,600.0	4,585.3	4,781.7	4,575.8	10.1	24.2	62.99	320.2	1,409.8	1,258.6	1,224.9	33.64	37.410		
4,700.0	4,684.9	4,905.4	4,694.8	10.3	24.8	64.93	286.7	1,414.5	1,259.0	1,224.5	34.44	36.557		
4,742.3	4,727.0	4,945.7	4,733.6	10.4	25.0	65.55	276.1	1,415.5	1,258.8	1,224.1	34.69	36.283		
4,800.0	4,784.5	4,995.2	4,781.5	10.5	25.2	66.29	263.6	1,416.9	1,259.1	1,224.1	35.01	35.966		
4,900.0	4,884.1	5,084.9	4,868.6	10.8	25.6	67.55	242.7	1,420.0	1,260.6	1,225.1	35.52	35.490		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,000.0	4,983.8	5,197.4	4,978.8	11.0	26.0	68.94	220.5	1,423.6	1,262.3	1,226.3	36.06	35.002		
5,100.0	5,083.4	5,304.7	5,084.7	11.2	26.3	70.11	203.1	1,426.3	1,263.5	1,227.0	36.54	34.583		
5,200.0	5,183.0	5,414.6	5,193.5	11.4	26.7	71.19	187.8	1,428.5	1,264.4	1,227.4	36.98	34.192		
5,300.0	5,282.6	5,528.8	5,306.9	11.7	26.9	72.19	174.7	1,429.8	1,264.4	1,227.0	37.39	33.818		
5,400.0	5,382.2	5,640.1	5,417.8	11.9	27.1	73.02	165.4	1,430.1	1,263.3	1,225.6	37.74	33.477		
5,500.0	5,481.9	5,733.9	5,511.5	12.1	27.2	73.62	159.8	1,430.6	1,262.4	1,224.4	38.03	33.199		
5,600.0	5,581.5	5,878.0	5,655.5	12.4	27.4	74.27	157.3	1,431.3	1,261.1	1,222.8	38.30	32.923		
5,700.0	5,681.1	5,962.7	5,740.3	12.6	27.4	74.61	157.3	1,430.2	1,257.5	1,219.0	38.56	32.612		
5,800.0	5,780.7	6,052.0	5,829.5	12.8	27.5	74.96	157.0	1,430.3	1,255.3	1,216.5	38.81	32.343		
5,900.0	5,880.3	6,147.1	5,924.6	13.1	27.5	75.33	156.8	1,431.0	1,253.8	1,214.7	39.05	32.104		
6,000.0	5,980.0	6,247.8	6,025.4	13.3	27.6	75.69	157.3	1,431.6	1,252.1	1,212.8	39.30	31.860		
6,100.0	6,079.6	6,342.0	6,119.5	13.5	27.7	76.02	157.8	1,432.4	1,250.7	1,211.2	39.55	31.627		
6,200.0	6,179.2	6,440.2	6,217.7	13.8	27.7	76.38	158.2	1,433.6	1,249.8	1,210.0	39.79	31.405		
6,300.0	6,278.8	6,545.3	6,322.9	14.0	27.8	76.76	158.5	1,434.6	1,248.6	1,208.6	40.05	31.176		
6,400.0	6,378.4	6,645.9	6,423.5	14.2	27.9	77.13	158.9	1,435.3	1,247.2	1,206.9	40.30	30.944		
6,500.0	6,478.1	6,744.7	6,522.2	14.5	27.9	77.50	159.1	1,435.9	1,245.9	1,205.3	40.56	30.719		
6,600.0	6,577.7	6,842.7	6,620.2	14.7	28.0	77.87	159.1	1,436.7	1,244.7	1,203.9	40.81	30.497		
6,700.0	6,677.3	6,940.8	6,718.3	14.9	28.1	78.25	159.0	1,437.5	1,243.7	1,202.6	41.07	30.284		
6,800.0	6,776.9	7,039.2	6,816.7	15.1	28.2	78.64	158.8	1,438.4	1,242.9	1,201.6	41.32	30.076		
6,900.0	6,876.5	7,135.6	6,913.1	15.4	28.3	79.02	158.5	1,439.3	1,242.3	1,200.7	41.58	29.873		
6,973.8	6,950.1	7,204.5	6,982.0	15.5	28.3	79.31	158.0	1,440.2	1,242.1	1,200.3	41.78	29.730		
7,000.0	6,976.2	7,228.9	7,006.4	15.6	28.4	79.41	157.7	1,440.6	1,242.1	1,200.3	41.85	29.682		
7,100.0	7,075.8	7,331.7	7,109.1	15.8	28.5	79.86	156.2	1,442.1	1,242.4	1,200.3	42.11	29.501		
7,147.2	7,122.8	7,384.5	7,162.0	15.9	28.5	80.09	155.7	1,442.6	1,242.3	1,200.0	42.24	29.409		
7,150.0	7,125.6	7,387.7	7,165.1	16.0	28.5	78.58	155.6	1,442.6	1,242.2	1,200.0	42.25	29.403		
7,200.0	7,175.5	7,443.9	7,221.3	16.0	28.6	-3.34	155.2	1,442.9	1,241.2	1,198.8	42.35	29.307		
7,250.0	7,225.4	7,502.7	7,280.2	16.1	28.6	-52.81	154.8	1,442.9	1,238.6	1,196.1	42.44	29.183		
7,300.0	7,274.8	7,561.3	7,338.8	16.0	28.7	-62.84	154.6	1,442.5	1,234.4	1,191.9	42.51	29.035		
7,350.0	7,323.4	7,618.9	7,396.3	16.0	28.7	-67.53	154.4	1,441.6	1,228.8	1,186.2	42.57	28.866		
7,400.0	7,370.8	7,664.3	7,441.7	15.9	28.7	-70.68	154.3	1,440.8	1,222.1	1,179.4	42.60	28.684		
7,450.0	7,416.7	7,707.2	7,484.6	15.8	28.8	-73.31	154.2	1,440.2	1,214.7	1,172.1	42.63	28.496		
7,500.0	7,460.7	7,748.3	7,525.7	15.7	28.8	-75.74	154.1	1,439.6	1,206.9	1,164.3	42.63	28.308		
7,550.0	7,502.4	7,787.4	7,564.8	15.5	28.8	-78.07	154.0	1,439.2	1,199.0	1,156.3	42.63	28.123		
7,600.0	7,541.6	7,825.4	7,602.8	15.4	28.9	-80.37	154.0	1,438.9	1,191.2	1,148.5	42.62	27.948		
7,650.0	7,578.0	7,861.1	7,638.5	15.2	28.9	-82.60	154.0	1,438.6	1,183.8	1,141.2	42.60	27.786		
7,700.0	7,611.2	7,893.7	7,671.1	15.1	28.9	-84.68	154.0	1,438.4	1,177.1	1,134.5	42.59	27.640		
7,750.0	7,641.0	7,922.8	7,700.2	14.9	28.9	-86.57	154.1	1,438.2	1,171.5	1,128.9	42.58	27.513		
7,800.0	7,667.3	7,948.3	7,725.7	14.8	29.0	-88.20	154.2	1,438.1	1,167.3	1,124.7	42.59	27.408		
7,850.0	7,689.7	7,970.0	7,747.5	14.7	29.0	-89.51	154.3	1,438.0	1,164.8	1,122.2	42.62	27.328		
7,888.2	7,704.2	7,984.0	7,761.5	14.7	29.0	-90.28	154.4	1,437.9	1,164.2	1,121.6	42.68	27.281 CC, ES		
7,900.0	7,708.2	7,987.9	7,765.3	14.7	29.0	-90.47	154.4	1,437.9	1,164.3	1,121.6	42.69	27.273		
7,950.0	7,722.5	8,001.7	7,779.1	14.7	29.0	-91.02	154.5	1,437.8	1,165.9	1,123.1	42.79	27.245		
8,000.0	7,732.6	8,011.3	7,788.7	14.8	29.0	-91.14	154.5	1,437.8	1,169.8	1,126.8	42.94	27.244 SF		
8,050.0	7,738.5	8,016.7	7,794.2	14.9	29.0	-90.80	154.5	1,437.8	1,175.9	1,132.8	43.12	27.273		
8,092.0	7,740.0	8,018.0	7,795.4	15.0	29.0	-90.17	154.5	1,437.8	1,182.9	1,139.6	43.29	27.322		
8,100.0	7,740.0	8,018.0	7,795.4	15.0	29.0	-90.17	154.5	1,437.8	1,184.4	1,141.1	43.33	27.334		
8,200.0	7,740.0	8,017.4	7,794.9	15.5	29.0	-90.14	154.5	1,437.8	1,207.5	1,163.7	43.84	27.545		
8,300.0	7,740.0	8,016.9	7,794.3	16.1	29.0	-90.11	154.5	1,437.8	1,238.3	1,193.9	44.40	27.888		
8,400.0	7,740.0	8,016.4	7,793.8	16.9	29.0	-90.09	154.5	1,437.8	1,276.2	1,231.2	44.97	28.379		
8,500.0	7,740.0	8,015.8	7,793.2	17.8	29.0	-90.06	154.5	1,437.8	1,320.6	1,275.1	45.50	29.024		
8,600.0	7,740.0	8,015.3	7,792.7	18.9	29.0	-90.03	154.5	1,437.8	1,370.8	1,324.9	45.97	29.819		
8,700.0	7,740.0	8,014.8	7,792.2	20.0	29.0	-90.01	154.5	1,437.8	1,426.4	1,380.0	46.37	30.758		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
8,800.0	7,740.0	8,014.2	7,791.6	21.2	29.0	-89.98	154.5	1,437.8	1,486.5	1,439.8	46.71	31.827		
8,900.0	7,740.0	8,013.7	7,791.1	22.5	29.0	-89.96	154.5	1,437.8	1,550.8	1,503.8	46.98	33.012		
9,000.0	7,740.0	8,013.2	7,790.6	23.9	29.0	-89.93	154.5	1,437.8	1,618.7	1,571.5	47.19	34.302		
9,100.0	7,740.0	8,012.6	7,790.1	25.3	29.0	-89.90	154.5	1,437.8	1,689.8	1,642.5	47.36	35.682		
9,200.0	7,740.0	8,012.1	7,789.5	26.7	29.0	-89.88	154.5	1,437.8	1,763.8	1,716.3	47.49	37.142		
9,300.0	7,740.0	8,011.6	7,789.0	28.2	29.0	-89.85	154.5	1,437.8	1,840.1	1,792.6	47.58	38.671		
9,400.0	7,740.0	8,011.1	7,788.5	29.7	29.0	-89.83	154.5	1,437.8	1,918.7	1,871.0	47.66	40.260		
9,500.0	7,740.0	8,010.5	7,788.0	31.3	29.0	-89.80	154.5	1,437.8	1,999.2	1,951.5	47.71	41.900		
9,600.0	7,740.0	8,010.0	7,787.4	32.8	29.0	-89.77	154.5	1,437.8	2,081.3	2,033.6	47.75	43.584		
9,700.0	7,740.0	8,009.5	7,786.9	34.4	29.0	-89.75	154.5	1,437.8	2,165.0	2,117.2	47.79	45.307		
9,800.0	7,740.0	8,009.0	7,786.4	36.0	29.0	-89.72	154.5	1,437.8	2,250.0	2,202.2	47.81	47.063		
9,900.0	7,740.0	8,008.5	7,785.9	37.6	29.0	-89.70	154.5	1,437.8	2,336.2	2,288.4	47.83	48.847		
10,000.0	7,740.0	8,007.9	7,785.3	39.2	29.0	-89.67	154.5	1,437.8	2,423.4	2,375.6	47.84	50.655		
10,100.0	7,740.0	8,007.4	7,784.8	40.9	29.0	-89.65	154.5	1,437.8	2,511.6	2,463.8	47.86	52.484		
10,200.0	7,740.0	8,006.9	7,784.3	42.5	29.0	-89.62	154.5	1,437.8	2,600.7	2,552.8	47.87	54.331		
10,300.0	7,740.0	8,006.4	7,783.8	44.2	29.0	-89.60	154.5	1,437.8	2,690.5	2,642.6	47.88	56.192		
10,400.0	7,740.0	8,005.9	7,783.3	45.8	29.0	-89.57	154.5	1,437.8	2,781.0	2,733.1	47.89	58.066		
10,500.0	7,740.0	8,005.3	7,782.8	47.5	29.0	-89.54	154.5	1,437.8	2,872.2	2,824.3	47.91	59.951		
10,600.0	7,740.0	8,004.8	7,782.3	49.1	29.0	-89.52	154.5	1,437.8	2,963.9	2,916.0	47.93	61.844		
10,700.0	7,740.0	8,004.3	7,781.7	50.8	29.0	-89.49	154.5	1,437.8	3,056.1	3,008.2	47.94	63.744		
10,800.0	7,740.0	8,003.8	7,781.2	52.5	29.0	-89.47	154.5	1,437.8	3,148.8	3,100.9	47.96	65.650		
10,900.0	7,740.0	8,003.3	7,780.7	54.2	29.0	-89.44	154.5	1,437.8	3,242.0	3,194.0	47.99	67.560		
11,000.0	7,740.0	8,002.8	7,780.2	55.9	29.0	-89.42	154.5	1,437.8	3,335.5	3,287.5	48.01	69.474		
11,100.0	7,740.0	8,002.3	7,779.7	57.6	29.0	-89.39	154.5	1,437.8	3,429.4	3,381.4	48.04	71.390		
11,200.0	7,740.0	8,001.8	7,779.2	59.3	29.0	-89.37	154.5	1,437.8	3,523.7	3,475.6	48.07	73.307		
11,300.0	7,740.0	8,001.3	7,778.7	61.0	29.0	-89.34	154.5	1,437.8	3,618.2	3,570.1	48.10	75.226		
11,400.0	7,740.0	8,000.8	7,778.2	62.7	29.0	-89.32	154.4	1,437.8	3,713.1	3,664.9	48.13	77.144		
11,500.0	7,740.0	8,000.3	7,777.7	64.4	29.0	-89.29	154.4	1,437.8	3,808.2	3,760.0	48.17	79.061		
11,600.0	7,740.0	7,999.8	7,777.2	66.1	29.0	-89.27	154.4	1,437.8	3,903.5	3,855.3	48.20	80.978		
11,700.0	7,740.0	7,999.2	7,776.7	67.8	29.0	-89.24	154.4	1,437.8	3,999.1	3,950.8	48.24	82.892		
11,800.0	7,740.0	7,998.7	7,776.2	69.5	29.0	-89.22	154.4	1,437.8	4,094.9	4,046.6	48.29	84.805		
11,900.0	7,740.0	7,998.2	7,775.7	71.2	29.0	-89.19	154.4	1,437.8	4,190.8	4,142.5	48.33	86.715		
12,000.0	7,740.0	7,997.7	7,775.2	72.9	29.0	-89.17	154.4	1,437.8	4,287.0	4,238.6	48.37	88.623		
12,100.0	7,740.0	7,997.2	7,774.7	74.7	29.0	-89.15	154.4	1,437.8	4,383.3	4,334.9	48.42	90.527		
12,200.0	7,740.0	7,996.7	7,774.2	76.4	29.0	-89.12	154.4	1,437.8	4,479.8	4,431.4	48.47	92.428		
12,300.0	7,740.0	7,996.3	7,773.7	78.1	29.0	-89.10	154.4	1,437.8	4,576.5	4,528.0	48.52	94.325		
12,400.0	7,740.0	7,995.8	7,773.2	79.8	29.0	-89.07	154.4	1,437.9	4,673.3	4,624.7	48.57	96.219		
12,500.0	7,740.0	7,995.3	7,772.7	81.6	29.0	-89.05	154.4	1,437.9	4,770.2	4,721.6	48.62	98.108		
12,600.0	7,740.0	7,994.8	7,772.2	83.3	29.0	-89.02	154.4	1,437.9	4,867.2	4,818.6	48.68	99.993		
12,700.0	7,740.0	7,994.3	7,771.7	85.0	29.0	-89.00	154.4	1,437.9	4,964.4	4,915.7	48.73	101.873		
12,800.0	7,740.0	7,993.8	7,771.2	86.7	29.0	-88.97	154.4	1,437.9	5,061.7	5,012.9	48.79	103.749		
12,900.0	7,740.0	7,993.3	7,770.7	88.5	29.0	-88.95	154.4	1,437.9	5,159.0	5,110.2	48.85	105.620		
13,000.0	7,740.0	7,992.8	7,770.2	90.2	29.0	-88.93	154.4	1,437.9	5,256.5	5,207.6	48.90	107.487		
13,100.0	7,740.0	7,992.3	7,769.7	91.9	29.0	-88.90	154.4	1,437.9	5,354.1	5,305.1	48.96	109.348		
13,200.0	7,740.0	7,991.8	7,769.2	93.7	29.0	-88.88	154.4	1,437.9	5,451.7	5,402.7	49.02	111.204		
13,300.0	7,740.0	7,991.3	7,768.7	95.4	29.0	-88.85	154.4	1,437.9	5,549.5	5,500.4	49.09	113.055		
13,400.0	7,740.0	7,990.8	7,768.3	97.1	29.0	-88.83	154.4	1,437.9	5,647.3	5,598.1	49.15	114.901		
13,500.0	7,740.0	7,990.4	7,767.8	98.9	29.0	-88.81	154.4	1,437.9	5,745.2	5,696.0	49.21	116.741		
13,600.0	7,740.0	7,989.9	7,767.3	100.6	29.0	-88.78	154.4	1,437.9	5,843.2	5,793.9	49.28	118.576		
13,700.0	7,740.0	7,989.4	7,766.8	102.3	29.0	-88.76	154.4	1,437.9	5,941.2	5,891.8	49.34	120.405		
13,800.0	7,740.0	7,988.9	7,766.3	104.1	29.0	-88.73	154.4	1,437.9	6,039.3	5,989.9	49.41	122.229		
13,900.0	7,740.0	7,988.4	7,765.8	105.8	29.0	-88.71	154.4	1,437.9	6,137.4	6,088.0	49.48	124.048		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	7,987.9	7,765.3	107.5	29.0	-88.69	154.4	1,437.9	6,235.7	6,186.1	49.54	125.861		
14,100.0	7,740.0	7,987.4	7,764.9	109.3	29.0	-88.66	154.4	1,437.9	6,333.9	6,284.3	49.61	127.668		
14,200.0	7,740.0	7,987.0	7,764.4	111.0	29.0	-88.64	154.4	1,437.9	6,432.3	6,382.6	49.68	129.469		
14,300.0	7,740.0	7,986.5	7,763.9	112.8	29.0	-88.62	154.4	1,437.9	6,530.6	6,480.9	49.75	131.265		
14,400.0	7,740.0	7,986.0	7,763.4	114.5	29.0	-88.59	154.4	1,437.9	6,629.1	6,579.2	49.82	133.055		
14,500.0	7,740.0	7,985.5	7,762.9	116.2	29.0	-88.57	154.4	1,437.9	6,727.5	6,677.6	49.89	134.839		
14,600.0	7,740.0	7,985.1	7,762.5	118.0	29.0	-88.55	154.4	1,437.9	6,826.1	6,776.1	49.96	136.618		
14,700.0	7,740.0	7,984.6	7,762.0	119.7	29.0	-88.52	154.4	1,437.9	6,924.6	6,874.6	50.04	138.390		
14,800.0	7,740.0	7,984.1	7,761.5	121.5	29.0	-88.50	154.4	1,437.9	7,023.2	6,973.1	50.11	140.157		
14,900.0	7,740.0	7,983.6	7,761.0	123.2	29.0	-88.47	154.4	1,437.9	7,121.8	7,071.7	50.18	141.918		
15,000.0	7,740.0	7,983.2	7,760.6	124.9	29.0	-88.45	154.4	1,437.9	7,220.5	7,170.3	50.26	143.674		
15,100.0	7,740.0	7,982.7	7,760.1	126.7	29.0	-88.43	154.4	1,437.9	7,319.2	7,268.9	50.33	145.423		
15,200.0	7,740.0	7,982.2	7,759.6	128.4	29.0	-88.41	154.4	1,437.9	7,418.0	7,367.6	50.41	147.167		
15,300.0	7,740.0	7,981.7	7,759.2	130.2	29.0	-88.38	154.3	1,437.9	7,516.8	7,466.3	50.48	148.904		
15,400.0	7,740.0	7,981.3	7,758.7	131.9	29.0	-88.36	154.3	1,437.9	7,615.6	7,565.0	50.56	150.636		
15,500.0	7,740.0	7,980.8	7,758.2	133.7	29.0	-88.34	154.3	1,437.9	7,714.4	7,663.8	50.63	152.363		
15,600.0	7,740.0	7,973.0	7,750.4	135.4	29.0	-87.95	154.3	1,438.0	7,813.3	7,762.6	50.69	154.129		
15,700.0	7,740.0	7,973.0	7,750.4	137.1	29.0	-87.95	154.3	1,438.0	7,912.2	7,861.4	50.77	155.841		
15,800.0	7,740.0	7,973.0	7,750.4	138.9	29.0	-87.95	154.3	1,438.0	8,011.1	7,960.3	50.85	157.547		
15,900.0	7,740.0	7,973.0	7,750.4	140.6	29.0	-87.95	154.3	1,438.0	8,110.1	8,059.1	50.93	159.248		
15,953.0	7,740.0	7,973.0	7,750.4	141.6	29.0	-87.95	154.3	1,438.0	8,162.5	8,111.5	50.97	160.145		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft	
Survey Program: 41-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	106.4	106.4	0.0	0.2	37.69	1,583.8	1,223.7	2,002.2				
100.0	100.0	307.7	307.3	0.2	0.6	37.75	1,574.1	1,219.0	1,997.0	1,996.3	0.69	2,887.113	
200.0	200.0	503.8	502.2	0.3	1.1	37.99	1,553.3	1,213.1	1,986.7	1,985.5	1.23	1,611.718	
300.0	300.0	617.9	615.1	0.5	1.5	38.22	1,537.0	1,210.6	1,974.1	1,972.5	1.64	1,200.393	
400.0	400.0	755.6	750.8	0.7	1.9	38.60	1,513.2	1,208.1	1,959.2	1,957.1	2.13	918.416	
500.0	500.0	868.4	861.5	0.9	2.4	12.67	1,491.6	1,206.6	1,942.5	1,939.9	2.59	751.214	
600.0	600.0	940.5	932.3	1.0	2.6	12.97	1,478.2	1,206.2	1,925.0	1,922.0	2.95	653.608	
700.0	699.9	1,083.0	1,072.2	1.2	3.2	13.56	1,450.9	1,205.2	1,905.6	1,902.2	3.49	545.779	
800.0	799.7	1,307.7	1,290.2	1.4	4.2	14.70	1,397.1	1,199.8	1,880.0	1,875.7	4.30	436.982	
899.9	899.3	1,442.3	1,419.0	1.6	4.9	15.57	1,358.4	1,194.7	1,848.2	1,843.3	4.91	376.488	
1,000.0	999.0	1,563.6	1,534.3	1.8	5.6	16.39	1,320.9	1,190.0	1,814.1	1,808.6	5.51	329.015	
1,100.0	1,098.6	1,686.3	1,650.1	2.0	6.3	17.30	1,280.8	1,185.0	1,778.9	1,772.7	6.15	289.076	
1,200.0	1,198.2	1,878.1	1,828.1	2.3	7.7	18.98	1,210.0	1,175.7	1,740.3	1,733.1	7.11	244.655	
1,300.0	1,297.8	1,972.9	1,914.6	2.5	8.3	19.96	1,171.6	1,171.1	1,699.5	1,691.7	7.78	218.519	
1,400.0	1,397.5	2,080.3	2,012.2	2.7	9.1	21.15	1,126.9	1,165.5	1,658.2	1,649.6	8.52	194.639	
1,500.0	1,497.1	2,184.6	2,106.2	2.9	10.0	22.42	1,082.1	1,160.4	1,616.6	1,607.3	9.31	173.690	
1,600.0	1,596.7	2,315.3	2,222.2	3.2	11.0	24.23	1,022.3	1,154.1	1,573.6	1,563.4	10.28	153.034	
1,700.0	1,696.3	2,397.2	2,294.6	3.4	11.7	25.41	984.4	1,149.2	1,530.2	1,519.2	11.04	138.571	
1,800.0	1,795.9	2,473.0	2,361.9	3.6	12.3	26.54	949.9	1,144.4	1,487.9	1,476.1	11.80	126.089	
1,900.0	1,895.6	2,538.6	2,420.5	3.8	12.8	27.55	920.5	1,140.6	1,447.0	1,434.5	12.53	115.468	
2,000.0	1,995.2	2,624.3	2,497.4	4.1	13.5	28.90	883.0	1,135.8	1,407.7	1,394.3	13.37	105.293	
2,100.0	2,094.8	2,712.3	2,576.5	4.3	14.2	30.31	845.1	1,130.0	1,368.8	1,354.5	14.25	96.043	
2,200.0	2,194.4	2,778.9	2,636.4	4.5	14.7	31.46	816.0	1,126.3	1,331.2	1,316.1	15.07	88.336	
2,300.0	2,294.0	2,883.3	2,730.5	4.8	15.5	33.34	771.2	1,121.4	1,295.7	1,279.6	16.12	80.401	
2,400.0	2,393.7	2,980.3	2,817.4	5.0	16.3	35.17	728.4	1,114.7	1,258.8	1,241.7	17.16	73.363	
2,500.0	2,493.3	3,077.5	2,904.5	5.2	17.1	37.09	686.0	1,107.4	1,222.8	1,204.6	18.22	67.107	
2,600.0	2,592.9	3,156.4	2,975.4	5.4	17.7	38.69	652.0	1,100.8	1,187.6	1,168.3	19.22	61.800	
2,700.0	2,692.5	3,258.7	3,067.2	5.7	18.5	40.87	607.7	1,092.1	1,153.4	1,133.0	20.38	56.584	
2,800.0	2,792.1	3,324.8	3,126.3	5.9	19.0	42.39	578.6	1,086.8	1,120.5	1,099.1	21.41	52.329	
2,900.0	2,891.8	3,427.0	3,217.6	6.1	19.8	44.85	533.5	1,079.2	1,089.7	1,067.0	22.68	48.044	
3,000.0	2,991.4	3,498.9	3,281.8	6.4	20.4	46.67	501.6	1,073.4	1,059.9	1,036.0	23.81	44.508	
3,100.0	3,091.0	3,574.7	3,349.5	6.6	21.0	48.67	467.9	1,068.3	1,032.9	1,007.9	25.00	41.323	
3,200.0	3,190.6	3,668.7	3,433.5	6.8	21.8	51.26	426.1	1,062.2	1,008.2	981.9	26.31	38.316	
3,300.0	3,290.2	3,764.5	3,519.4	7.1	22.5	53.96	384.1	1,054.5	984.4	956.8	27.63	35.633	
3,400.0	3,389.9	3,854.2	3,600.3	7.3	23.2	56.48	346.4	1,046.3	962.2	933.4	28.85	33.347	
3,500.0	3,489.5	3,936.2	3,674.9	7.5	23.8	58.78	313.4	1,038.5	942.2	912.2	30.01	31.392	
3,600.0	3,589.1	4,011.3	3,743.3	7.7	24.4	60.95	283.1	1,032.0	925.1	894.0	31.12	29.729	
3,700.0	3,688.7	4,093.3	3,818.0	8.0	25.0	63.41	249.6	1,026.1	911.5	879.2	32.25	28.262	
3,800.0	3,788.3	4,167.4	3,885.1	8.2	25.5	65.71	218.7	1,020.9	900.7	867.4	33.29	27.054	
3,900.0	3,888.0	4,234.8	3,946.0	8.4	26.1	67.85	190.0	1,018.0	894.6	860.4	34.21	26.149	
4,000.0	3,987.6	4,323.9	4,026.5	8.7	26.7	70.72	152.0	1,014.5	891.8	856.6	35.23	25.315	
4,045.8	4,033.2	4,362.1	4,061.1	8.8	27.0	71.94	135.8	1,013.0	891.5	855.9	35.64	25.015	
4,100.0	4,087.2	4,408.5	4,103.2	8.9	27.4	73.41	116.4	1,011.4	891.9	855.8	36.12	24.694	
4,200.0	4,186.8	4,496.3	4,181.6	9.1	28.1	76.34	77.2	1,007.6	894.9	857.9	37.00	24.186	
4,300.0	4,286.4	4,588.3	4,262.7	9.4	28.9	79.54	33.8	1,002.5	900.4	862.6	37.82	23.807	
4,400.0	4,386.1	4,673.2	4,337.5	9.6	29.6	82.45	-5.9	997.4	908.8	870.4	38.43	23.646	
4,500.0	4,485.7	4,760.4	4,415.7	9.8	30.3	85.23	-44.3	993.3	920.3	881.3	38.92	23.646	
4,600.0	4,585.3	4,865.4	4,511.9	10.1	31.0	88.24	-86.1	989.1	933.2	893.8	39.43	23.668	
4,700.0	4,684.9	4,985.9	4,624.5	10.3	31.7	91.32	-128.7	984.1	946.2	906.3	39.95	23.685	
4,800.0	4,784.5	5,085.3	4,718.6	10.5	32.3	93.64	-160.4	979.1	958.5	918.3	40.25	23.813	
4,900.0	4,884.1	5,198.8	4,827.2	10.8	32.9	96.01	-192.8	974.2	971.1	930.6	40.55	23.950	
5,000.0	4,983.8	5,317.0	4,941.9	11.0	33.4	98.12	-221.0	969.8	982.7	941.9	40.80	24.084	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,083.4	5,431.6	5,054.5	11.2	33.7	99.81	-242.3	966.6	992.8	951.8	41.01	24.207		
5,200.0	5,183.0	5,546.4	5,167.8	11.4	34.1	101.31	-260.6	963.5	1,002.1	960.9	41.20	24.322		
5,300.0	5,282.6	5,676.8	5,297.2	11.7	34.4	102.73	-275.5	959.9	1,008.8	967.4	41.39	24.375		
5,400.0	5,382.2	5,795.8	5,415.8	11.9	34.6	103.83	-284.7	956.4	1,013.6	972.1	41.52	24.411		
5,500.0	5,481.9	5,903.9	5,523.8	12.1	34.7	104.62	-289.5	954.5	1,017.3	975.6	41.64	24.428		
5,600.0	5,581.5	6,024.4	5,644.3	12.4	34.8	105.36	-291.7	952.4	1,019.5	977.7	41.77	24.407		
5,700.0	5,681.1	6,127.6	5,747.4	12.6	34.8	105.92	-291.7	950.5	1,020.4	978.5	41.90	24.352		
5,800.0	5,780.7	6,226.0	5,845.8	12.8	34.9	106.44	-291.6	948.8	1,021.5	979.5	42.04	24.298		
5,900.0	5,880.3	6,324.4	5,944.2	13.1	35.0	106.97	-291.7	947.1	1,022.8	980.6	42.17	24.252		
6,000.0	5,980.0	6,423.2	6,043.0	13.3	35.0	107.50	-291.8	945.4	1,024.3	982.0	42.31	24.210		
6,100.0	6,079.6	6,522.0	6,141.8	13.5	35.1	108.02	-292.0	943.9	1,025.9	983.5	42.43	24.177		
6,200.0	6,179.2	6,620.7	6,240.5	13.8	35.1	108.51	-291.7	942.8	1,027.7	985.1	42.56	24.149		
6,300.0	6,278.8	6,719.0	6,338.8	14.0	35.2	108.96	-291.1	942.2	1,029.6	987.0	42.70	24.116		
6,400.0	6,378.4	6,817.0	6,436.8	14.2	35.2	109.42	-290.7	941.6	1,031.8	989.0	42.83	24.089		
6,500.0	6,478.1	6,916.1	6,535.9	14.5	35.3	109.90	-290.6	940.9	1,034.2	991.2	42.97	24.066		
6,600.0	6,577.7	7,015.5	6,635.2	14.7	35.4	110.38	-290.6	940.1	1,036.6	993.5	43.11	24.047		
6,700.0	6,677.3	7,116.2	6,735.9	14.9	35.4	110.88	-290.8	939.1	1,039.1	995.9	43.25	24.027		
6,800.0	6,776.9	7,216.7	6,836.4	15.1	35.5	111.39	-291.1	937.8	1,041.6	998.2	43.38	24.010		
6,900.0	6,876.5	7,316.8	6,936.6	15.4	35.6	111.91	-291.4	936.3	1,044.1	1,000.6	43.52	23.993		
7,000.0	6,976.2	7,418.2	7,037.9	15.6	35.6	112.43	-291.7	934.7	1,046.6	1,002.9	43.65	23.977		
7,100.0	7,075.8	7,520.5	7,140.2	15.8	35.7	112.96	-291.8	932.9	1,048.9	1,005.1	43.78	23.957		
7,147.2	7,122.8	7,568.1	7,187.8	15.9	35.7	113.21	-291.8	932.0	1,049.9	1,006.1	43.84	23.947		
7,150.0	7,125.6	7,571.0	7,190.6	16.0	35.7	111.71	-291.8	932.0	1,050.0	1,006.1	43.85	23.947		
7,200.0	7,175.5	7,621.2	7,240.9	16.0	35.8	29.89	-291.8	931.0	1,049.2	1,005.3	43.91	23.893		
7,250.0	7,225.4	7,671.5	7,291.1	16.1	35.8	-19.47	-291.8	930.0	1,045.1	1,001.1	44.01	23.747		
7,300.0	7,274.8	7,721.4	7,341.1	16.0	35.8	-29.40	-291.7	929.1	1,037.7	993.6	44.14	23.512		
7,350.0	7,323.4	7,771.4	7,391.0	16.0	35.9	-34.03	-291.6	928.1	1,027.0	982.8	44.29	23.188		
7,400.0	7,370.8	7,820.0	7,439.6	15.9	35.9	-37.37	-291.4	927.2	1,013.2	968.7	44.48	22.781		
7,450.0	7,416.7	7,867.0	7,486.6	15.8	35.9	-40.45	-291.1	926.3	996.4	951.7	44.69	22.294		
7,500.0	7,460.7	7,910.3	7,530.0	15.7	36.0	-43.59	-290.8	925.4	976.9	932.0	44.94	21.739		
7,550.0	7,502.4	7,950.3	7,570.0	15.5	36.0	-46.99	-290.5	924.8	955.1	909.9	45.21	21.123		
7,600.0	7,541.6	7,987.8	7,607.5	15.4	36.0	-50.74	-290.1	924.3	931.2	885.7	45.52	20.456		
7,650.0	7,578.0	8,022.5	7,642.1	15.2	36.0	-54.88	-289.8	923.9	905.7	859.8	45.86	19.748		
7,700.0	7,611.2	8,054.2	7,673.8	15.1	36.0	-59.36	-289.5	923.6	878.9	832.7	46.23	19.012		
7,750.0	7,641.0	8,083.0	7,702.6	14.9	36.0	-64.14	-289.2	923.5	851.4	804.8	46.63	18.260		
7,800.0	7,667.3	8,108.4	7,728.0	14.8	36.1	-69.04	-288.9	923.3	823.6	776.6	47.05	17.507		
7,850.0	7,689.7	8,130.0	7,749.6	14.7	36.1	-73.87	-288.7	923.2	796.1	748.6	47.49	16.765		
7,900.0	7,708.2	8,147.7	7,767.3	14.7	36.1	-78.42	-288.5	923.1	769.5	721.5	47.95	16.049		
7,950.0	7,722.5	8,161.3	7,780.9	14.7	36.1	-82.51	-288.4	923.1	744.2	695.8	48.41	15.373		
8,000.0	7,732.6	8,170.8	7,790.4	14.8	36.1	-85.98	-288.3	923.0	721.1	672.2	48.88	14.750		
8,050.0	7,738.5	8,176.0	7,795.6	14.9	36.1	-88.72	-288.2	923.0	700.5	651.1	49.35	14.194		
8,092.0	7,740.0	8,177.1	7,796.7	15.0	36.1	-90.42	-288.2	923.0	685.6	635.8	49.73	13.787		
8,100.0	7,740.0	8,177.1	7,796.6	15.0	36.1	-90.41	-288.2	923.0	683.0	633.2	49.80	13.716		
8,200.0	7,740.0	8,176.0	7,795.6	15.5	36.1	-90.32	-288.2	923.0	658.2	607.6	50.59	13.011		
8,300.0	7,740.0	8,175.0	7,794.6	16.1	36.1	-90.23	-288.3	923.0	648.0	596.9	51.12	12.676		
8,316.4	7,740.0	8,174.9	7,794.5	16.2	36.1	-90.22	-288.3	923.0	647.8	596.6	51.19	12.656 CC, ES, SF		
8,400.0	7,740.0	8,174.0	7,793.6	16.9	36.1	-90.14	-288.3	923.0	653.2	601.9	51.26	12.742		
8,500.0	7,740.0	8,173.0	7,792.6	17.8	36.1	-90.05	-288.3	923.0	673.3	622.4	50.92	13.223		
8,600.0	7,740.0	8,172.0	7,791.6	18.9	36.1	-89.97	-288.3	923.0	707.2	657.0	50.14	14.103		
8,700.0	7,740.0	8,171.0	7,790.6	20.0	36.1	-89.88	-288.3	923.0	752.8	703.8	49.06	15.344		
8,800.0	7,740.0	8,170.0	7,789.6	21.2	36.1	-89.79	-288.3	923.0	808.4	760.5	47.84	16.897		
8,900.0	7,740.0	8,169.0	7,788.6	22.5	36.1	-89.70	-288.3	923.0	871.9	825.3	46.60	18.710		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor	
9,000.0	7,740.0	8,168.0	7,787.6	23.9	36.1	-89.61	-288.3	923.0	941.8	896.3	45.43	20.731		
9,100.0	7,740.0	8,167.0	7,786.6	25.3	36.1	-89.52	-288.3	923.0	1,016.7	972.3	44.37	22.914		
9,200.0	7,740.0	8,166.0	7,785.6	26.7	36.1	-89.43	-288.4	923.0	1,095.6	1,052.2	43.44	25.220		
9,300.0	7,740.0	8,165.0	7,784.6	28.2	36.1	-89.34	-288.4	923.0	1,177.7	1,135.1	42.65	27.615		
9,400.0	7,740.0	8,164.0	7,783.6	29.7	36.1	-89.25	-288.4	923.0	1,262.4	1,220.5	41.98	30.075		
9,500.0	7,740.0	8,163.0	7,782.5	31.3	36.1	-89.16	-288.4	923.0	1,349.2	1,307.8	41.42	32.576		
9,600.0	7,740.0	8,161.9	7,781.5	32.8	36.1	-89.07	-288.4	923.1	1,437.8	1,396.8	40.96	35.104		
9,700.0	7,740.0	8,160.9	7,780.5	34.4	36.1	-88.99	-288.4	923.1	1,527.7	1,487.1	40.58	37.646		
9,800.0	7,740.0	8,159.9	7,779.5	36.0	36.1	-88.90	-288.4	923.1	1,618.8	1,578.5	40.28	40.193		
9,900.0	7,740.0	8,158.9	7,778.5	37.6	36.1	-88.81	-288.4	923.1	1,710.9	1,670.9	40.03	42.737		
10,000.0	7,740.0	8,157.9	7,777.5	39.2	36.1	-88.72	-288.4	923.1	1,803.9	1,764.0	39.84	45.274		
10,100.0	7,740.0	8,156.9	7,776.5	40.9	36.1	-88.63	-288.4	923.1	1,897.5	1,857.8	39.70	47.801		
10,200.0	7,740.0	8,155.9	7,775.5	42.5	36.1	-88.54	-288.5	923.1	1,991.8	1,952.2	39.59	50.315		
10,300.0	7,740.0	8,154.9	7,774.5	44.2	36.1	-88.45	-288.5	923.1	2,086.6	2,047.1	39.51	52.814		
10,400.0	7,740.0	8,153.9	7,773.5	45.8	36.1	-88.36	-288.5	923.1	2,181.9	2,142.4	39.46	55.298		
10,500.0	7,740.0	8,152.9	7,772.5	47.5	36.1	-88.27	-288.5	923.1	2,277.6	2,238.1	39.43	57.766		
10,600.0	7,740.0	8,151.9	7,771.5	49.1	36.1	-88.18	-288.5	923.1	2,373.6	2,334.2	39.42	60.217		
10,700.0	7,740.0	8,150.9	7,770.4	50.8	36.1	-88.09	-288.5	923.1	2,470.0	2,430.5	39.42	62.651		
10,800.0	7,740.0	8,149.8	7,769.4	52.5	36.1	-88.01	-288.5	923.1	2,566.6	2,527.1	39.44	65.069		
10,900.0	7,740.0	8,148.8	7,768.4	54.2	36.1	-87.92	-288.5	923.1	2,663.5	2,624.0	39.48	67.471		
11,000.0	7,740.0	8,147.8	7,767.4	55.9	36.1	-87.83	-288.5	923.1	2,760.6	2,721.0	39.52	69.856		
11,100.0	7,740.0	8,146.8	7,766.4	57.6	36.1	-87.74	-288.5	923.1	2,857.9	2,818.3	39.57	72.226		
11,200.0	7,740.0	8,145.8	7,765.4	59.3	36.1	-87.65	-288.6	923.1	2,955.3	2,915.7	39.63	74.579		
11,300.0	7,740.0	8,144.8	7,764.4	61.0	36.1	-87.56	-288.6	923.1	3,053.0	3,013.3	39.69	76.917		
11,400.0	7,740.0	8,143.8	7,763.4	62.7	36.1	-87.47	-288.6	923.1	3,150.8	3,111.0	39.76	79.241		
11,500.0	7,740.0	8,142.8	7,762.4	64.4	36.1	-87.38	-288.6	923.1	3,248.7	3,208.9	39.84	81.549		
11,600.0	7,740.0	8,141.8	7,761.4	66.1	36.1	-87.29	-288.6	923.1	3,346.7	3,306.8	39.92	83.843		
11,700.0	7,740.0	8,140.8	7,760.4	67.8	36.1	-87.20	-288.6	923.1	3,444.9	3,404.9	40.00	86.122		
11,800.0	7,740.0	8,139.8	7,759.4	69.5	36.1	-87.12	-288.6	923.1	3,543.2	3,503.1	40.09	88.388		
11,900.0	7,740.0	8,138.7	7,758.3	71.2	36.1	-87.03	-288.6	923.2	3,641.5	3,601.3	40.18	90.640		
12,000.0	7,740.0	8,137.7	7,757.3	72.9	36.1	-86.94	-288.6	923.2	3,740.0	3,699.7	40.27	92.878		
12,100.0	7,740.0	8,136.7	7,756.3	74.7	36.1	-86.85	-288.6	923.2	3,838.5	3,798.1	40.36	95.103		
12,200.0	7,740.0	8,135.7	7,755.3	76.4	36.1	-86.76	-288.7	923.2	3,937.1	3,896.6	40.46	97.315		
12,300.0	7,740.0	8,134.7	7,754.3	78.1	36.1	-86.67	-288.7	923.2	4,035.7	3,995.2	40.55	99.515		
12,400.0	7,740.0	8,133.7	7,753.3	79.8	36.1	-86.58	-288.7	923.2	4,134.5	4,093.8	40.65	101.701		
12,500.0	7,740.0	8,132.7	7,752.3	81.6	36.1	-86.49	-288.7	923.2	4,233.3	4,192.5	40.75	103.876		
12,600.0	7,740.0	8,131.7	7,751.3	83.3	36.1	-86.40	-288.7	923.2	4,332.1	4,291.2	40.85	106.038		
12,700.0	7,740.0	8,130.7	7,750.3	85.0	36.1	-86.31	-288.7	923.2	4,431.0	4,390.0	40.96	108.188		
12,800.0	7,740.0	8,129.7	7,749.3	86.7	36.1	-86.23	-288.7	923.2	4,529.9	4,488.9	41.06	110.326		
12,900.0	7,740.0	8,128.6	7,748.2	88.5	36.1	-86.14	-288.7	923.2	4,628.9	4,587.8	41.16	112.452		
13,000.0	7,740.0	8,127.6	7,747.2	90.2	36.1	-86.05	-288.7	923.2	4,728.0	4,686.7	41.27	114.567		
13,100.0	7,740.0	8,126.6	7,746.2	91.9	36.1	-85.96	-288.8	923.2	4,827.0	4,785.7	41.37	116.671		
13,200.0	7,740.0	8,125.6	7,745.2	93.7	36.1	-85.87	-288.8	923.2	4,926.1	4,884.7	41.48	118.763		
13,300.0	7,740.0	8,124.6	7,744.2	95.4	36.1	-85.78	-288.8	923.2	5,025.3	4,983.7	41.58	120.844		
13,400.0	7,740.0	8,123.6	7,743.2	97.1	36.1	-85.69	-288.8	923.2	5,124.5	5,082.8	41.69	122.914		
13,500.0	7,740.0	8,122.6	7,742.2	98.9	36.1	-85.60	-288.8	923.2	5,223.7	5,181.9	41.80	124.973		
13,600.0	7,740.0	8,121.6	7,741.2	100.6	36.1	-85.52	-288.8	923.2	5,322.9	5,281.0	41.91	127.022		
13,700.0	7,740.0	8,120.6	7,740.2	102.3	36.1	-85.43	-288.8	923.2	5,422.2	5,380.2	42.01	129.060		
13,800.0	7,740.0	8,119.6	7,739.2	104.1	36.1	-85.34	-288.8	923.2	5,521.5	5,479.3	42.12	131.087		
13,900.0	7,740.0	8,118.5	7,738.1	105.8	36.1	-85.25	-288.8	923.3	5,620.8	5,578.5	42.23	133.104		
14,000.0	7,740.0	8,117.5	7,737.1	107.5	36.1	-85.16	-288.8	923.3	5,720.1	5,677.8	42.34	135.111		
14,100.0	7,740.0	8,116.5	7,736.1	109.3	36.1	-85.07	-288.9	923.3	5,819.5	5,777.0	42.44	137.107		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,200.0	7,740.0	8,115.5	7,735.1	111.0	36.1	-84.98	-288.9	923.3	5,918.9	5,876.3	42.55	139.094		
14,300.0	7,740.0	8,114.5	7,734.1	112.8	36.1	-84.89	-288.9	923.3	6,018.3	5,975.6	42.66	141.071		
14,400.0	7,740.0	8,113.5	7,733.1	114.5	36.1	-84.81	-288.9	923.3	6,117.7	6,074.9	42.77	143.037		
14,500.0	7,740.0	8,112.5	7,732.1	116.2	36.1	-84.72	-288.9	923.3	6,217.1	6,174.3	42.88	144.994		
14,600.0	7,740.0	8,111.5	7,731.1	118.0	36.1	-84.63	-288.9	923.3	6,316.6	6,273.6	42.99	146.941		
14,700.0	7,740.0	8,110.5	7,730.1	119.7	36.1	-84.54	-288.9	923.3	6,416.1	6,373.0	43.10	148.879		
14,800.0	7,740.0	8,109.4	7,729.0	121.5	36.1	-84.45	-288.9	923.3	6,515.6	6,472.4	43.20	150.807		
14,900.0	7,740.0	8,108.4	7,728.0	123.2	36.1	-84.36	-288.9	923.3	6,615.1	6,571.8	43.31	152.726		
15,000.0	7,740.0	8,107.4	7,727.0	124.9	36.1	-84.27	-288.9	923.3	6,714.6	6,671.2	43.42	154.636		
15,100.0	7,740.0	8,106.4	7,726.0	126.7	36.1	-84.19	-289.0	923.3	6,814.1	6,770.6	43.53	156.536		
15,200.0	7,740.0	8,105.4	7,725.0	128.4	36.1	-84.10	-289.0	923.3	6,913.7	6,870.0	43.64	158.427		
15,300.0	7,740.0	8,104.4	7,724.0	130.2	36.1	-84.01	-289.0	923.3	7,013.2	6,969.5	43.75	160.309		
15,400.0	7,740.0	8,103.4	7,723.0	131.9	36.1	-83.92	-289.0	923.3	7,112.8	7,068.9	43.86	162.182		
15,500.0	7,740.0	8,102.4	7,722.0	133.7	36.1	-83.83	-289.0	923.3	7,212.4	7,168.4	43.97	164.046		
15,600.0	7,740.0	8,101.3	7,720.9	135.4	36.1	-83.74	-289.0	923.3	7,312.0	7,267.9	44.07	165.902		
15,700.0	7,740.0	8,100.3	7,719.9	137.1	36.1	-83.66	-289.0	923.4	7,411.6	7,367.4	44.18	167.748		
15,800.0	7,740.0	8,099.3	7,718.9	138.9	36.1	-83.57	-289.0	923.4	7,511.2	7,466.9	44.29	169.586		
15,900.0	7,740.0	8,098.3	7,717.9	140.6	36.1	-83.48	-289.0	923.4	7,610.8	7,566.4	44.40	171.416		
15,953.0	7,740.0	8,097.8	7,717.4	141.6	36.1	-83.43	-289.0	923.4	7,663.6	7,619.1	44.46	172.381		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	33.0	33.0	0.0	0.1	46.92	801.1	856.8	1,172.9					
100.0	100.0	121.4	121.4	0.2	0.2	46.95	801.3	857.8	1,173.9	1,173.6	0.36	3,219.674		
200.0	200.0	219.4	219.3	0.3	0.4	47.00	801.6	859.7	1,175.5	1,174.8	0.71	1,652.971		
300.0	300.0	332.6	332.5	0.5	0.6	47.04	801.7	861.0	1,176.5	1,175.4	1.08	1,086.189		
400.0	400.0	436.3	436.3	0.7	0.8	47.04	801.8	861.2	1,176.7	1,175.3	1.44	818.251		
500.0	500.0	535.9	535.9	0.9	0.9	20.70	802.3	861.1	1,176.1	1,174.4	1.79	658.494		
600.0	600.0	639.7	639.6	1.0	1.1	20.75	802.4	861.0	1,173.6	1,171.5	2.14	547.921		
700.0	699.9	744.8	744.7	1.2	1.3	20.84	802.3	860.7	1,169.3	1,166.8	2.50	467.564		
800.0	799.7	848.9	848.9	1.4	1.5	20.93	802.2	859.5	1,162.7	1,159.8	2.86	406.632		
899.9	899.3	948.6	948.5	1.6	1.7	21.05	802.3	858.2	1,154.5	1,151.3	3.21	359.453		
1,000.0	999.0	1,050.1	1,050.0	1.8	1.8	21.18	802.0	856.9	1,145.2	1,141.7	3.57	320.921		
1,100.0	1,098.6	1,151.3	1,151.2	2.0	2.0	21.31	801.7	855.7	1,136.0	1,132.0	3.93	289.369		
1,200.0	1,198.2	1,253.1	1,253.0	2.3	2.2	21.43	801.3	854.0	1,126.4	1,122.1	4.28	262.917		
1,300.0	1,297.8	1,349.2	1,349.1	2.5	2.4	21.53	801.2	852.2	1,116.9	1,112.2	4.63	241.020		
1,400.0	1,397.5	1,444.4	1,444.3	2.7	2.5	21.63	801.6	850.7	1,107.8	1,102.9	4.98	222.335		
1,500.0	1,497.1	1,545.0	1,544.9	2.9	2.7	21.72	802.1	849.2	1,099.0	1,093.6	5.34	205.754		
1,600.0	1,596.7	1,643.5	1,643.3	3.2	2.9	21.82	802.5	847.6	1,089.9	1,084.2	5.70	191.334		
1,700.0	1,696.3	1,738.5	1,738.3	3.4	3.0	21.91	803.2	846.3	1,081.3	1,075.3	6.05	178.837		
1,800.0	1,795.9	1,838.0	1,837.8	3.6	3.2	21.99	804.1	845.0	1,072.9	1,066.5	6.40	167.526		
1,900.0	1,895.6	1,936.7	1,936.5	3.8	3.4	22.07	805.2	843.5	1,064.4	1,057.6	6.76	157.426		
2,000.0	1,995.2	2,031.0	2,030.8	4.1	3.6	22.14	806.6	842.2	1,056.3	1,049.1	7.11	148.527		
2,100.0	2,094.8	2,123.6	2,123.4	4.3	3.7	22.20	808.3	841.4	1,048.8	1,041.3	7.46	140.601		
2,200.0	2,194.4	2,219.5	2,219.3	4.5	3.9	22.27	810.5	840.9	1,041.8	1,034.0	7.81	133.346		
2,300.0	2,294.0	2,318.5	2,318.2	4.8	4.1	22.34	812.8	840.6	1,035.1	1,026.9	8.17	126.672		
2,400.0	2,393.7	2,422.8	2,422.5	5.0	4.2	22.44	814.9	840.3	1,028.1	1,019.6	8.54	120.406		
2,500.0	2,493.3	2,525.8	2,525.5	5.2	4.4	22.57	816.2	840.2	1,020.8	1,011.9	8.90	114.647		
2,600.0	2,592.9	2,627.5	2,627.2	5.4	4.6	22.71	817.2	839.9	1,013.2	1,003.9	9.27	109.339		
2,700.0	2,692.5	2,728.9	2,728.6	5.7	4.8	22.85	818.1	839.4	1,005.4	995.8	9.63	104.410		
2,800.0	2,792.1	2,828.0	2,827.7	5.9	5.0	23.00	818.9	839.1	997.6	987.6	9.99	99.877		
2,900.0	2,891.8	2,931.3	2,931.0	6.1	5.1	23.14	819.7	838.5	989.7	979.3	10.36	95.571		
3,000.0	2,991.4	3,032.9	3,032.6	6.4	5.3	23.26	820.7	837.3	981.4	970.7	10.72	91.552		
3,100.0	3,091.0	3,133.8	3,133.4	6.6	5.5	23.38	821.5	836.1	973.0	962.0	11.08	87.799		
3,200.0	3,190.6	3,235.7	3,235.3	6.8	5.7	23.50	822.3	834.6	964.4	953.0	11.45	84.245		
3,300.0	3,290.2	3,333.5	3,333.1	7.1	5.8	23.60	823.2	833.1	955.8	944.0	11.81	80.947		
3,400.0	3,389.9	3,428.7	3,428.3	7.3	6.0	23.69	824.4	831.7	947.5	935.3	12.16	77.901		
3,500.0	3,489.5	3,522.8	3,522.4	7.5	6.2	23.80	825.7	830.9	939.7	927.2	12.52	75.078		
3,600.0	3,589.1	3,615.2	3,614.8	7.7	6.3	23.91	827.4	830.6	932.7	919.8	12.87	72.477		
3,700.0	3,688.7	3,709.2	3,708.8	8.0	6.5	24.00	829.8	830.6	926.4	913.2	13.22	70.060		
3,800.0	3,788.3	3,818.3	3,817.8	8.2	6.7	24.09	832.6	830.3	919.9	906.3	13.60	67.627		
3,900.0	3,888.0	3,923.9	3,923.4	8.4	6.9	24.23	834.3	829.8	912.5	898.5	13.97	65.301		
4,000.0	3,987.6	4,031.5	4,031.0	8.7	7.1	24.39	835.3	828.8	904.5	890.1	14.35	63.037		
4,100.0	4,087.2	4,139.0	4,138.4	8.9	7.3	24.55	835.5	826.9	895.3	880.6	14.72	60.811		
4,200.0	4,186.8	4,237.2	4,236.6	9.1	7.4	24.67	835.9	824.8	886.0	870.9	15.09	58.732		
4,300.0	4,286.4	4,335.1	4,334.5	9.4	7.6	24.83	836.0	823.2	876.8	861.4	15.45	56.763		
4,400.0	4,386.1	4,435.2	4,434.7	9.6	7.8	25.02	836.0	821.8	867.8	852.0	15.81	54.880		
4,500.0	4,485.7	4,535.7	4,535.1	9.8	8.0	25.13	836.7	819.4	858.5	842.3	16.18	53.056		
4,600.0	4,585.3	4,630.6	4,630.0	10.1	8.1	25.19	838.2	817.0	849.6	833.1	16.54	51.368		
4,700.0	4,684.9	4,732.0	4,731.3	10.3	8.3	25.29	839.3	815.0	840.9	824.0	16.91	49.734		
4,800.0	4,784.5	4,832.7	4,832.0	10.5	8.5	25.43	840.1	812.9	831.8	814.6	17.27	48.156		
4,900.0	4,884.1	4,931.4	4,930.7	10.8	8.7	25.64	840.0	811.7	823.0	805.3	17.64	46.657		
5,000.0	4,983.8	5,032.7	5,031.9	11.0	8.8	25.87	839.6	810.4	813.9	795.9	18.01	45.195		
5,100.0	5,083.4	5,130.6	5,129.8	11.2	9.0	26.06	839.8	809.0	805.0	786.6	18.37	43.808		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL										Offset Site Error:		0.0 ft	
Survey Program: 100-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,183.0	5,232.5	5,231.7	11.4	9.2	26.23	840.3	807.0	796.0	777.2	18.75	42.462	
5,300.0	5,282.6	5,330.6	5,329.9	11.7	9.4	26.40	840.7	805.0	786.7	767.6	19.11	41.164	
5,400.0	5,382.2	5,423.7	5,422.9	11.9	9.5	26.57	841.3	803.8	778.3	758.8	19.47	39.968	
5,500.0	5,481.9	5,526.1	5,525.3	12.1	9.7	26.80	841.7	802.7	769.9	750.1	19.85	38.795	
5,600.0	5,581.5	5,626.1	5,625.3	12.4	9.9	27.01	842.2	801.5	761.5	741.3	20.22	37.665	
5,700.0	5,681.1	5,729.7	5,728.8	12.6	10.1	27.20	842.8	799.7	752.7	732.1	20.59	36.553	
5,800.0	5,780.7	5,830.9	5,830.0	12.8	10.3	27.39	843.2	797.5	743.4	722.5	20.96	35.464	
5,900.0	5,880.3	5,928.9	5,928.0	13.1	10.4	27.57	843.7	795.4	734.3	713.0	21.33	34.420	
6,000.0	5,980.0	6,029.3	6,028.4	13.3	10.6	27.76	844.2	793.5	725.3	703.6	21.71	33.417	
6,100.0	6,079.6	6,133.8	6,132.9	13.5	10.8	27.99	844.3	791.1	715.7	693.6	22.08	32.412	
6,200.0	6,179.2	6,232.7	6,231.7	13.8	11.0	28.21	844.1	788.6	705.9	683.4	22.45	31.437	
6,300.0	6,278.8	6,329.9	6,329.0	14.0	11.1	28.44	844.0	786.3	696.3	673.5	22.83	30.504	
6,400.0	6,378.4	6,426.4	6,425.4	14.2	11.3	28.68	844.1	784.5	687.1	663.9	23.20	29.618	
6,500.0	6,478.1	6,523.3	6,522.3	14.5	11.5	28.87	845.0	782.5	678.4	654.8	23.57	28.778	
6,600.0	6,577.7	6,620.7	6,619.7	14.7	11.7	29.10	845.7	781.2	670.0	646.1	23.95	27.982	
6,700.0	6,677.3	6,721.7	6,720.6	14.9	11.8	29.35	846.5	779.8	661.7	637.4	24.32	27.204	
6,800.0	6,776.9	6,822.5	6,821.5	15.1	12.0	29.64	846.8	778.6	653.3	628.6	24.70	26.446	
6,900.0	6,876.5	6,926.1	6,925.1	15.4	12.2	29.94	847.0	776.7	644.3	619.3	25.09	25.686	
7,000.0	6,976.2	7,025.5	7,024.4	15.6	12.4	30.18	847.4	774.4	635.1	609.7	25.46	24.942	
7,100.0	7,075.8	7,124.9	7,123.7	15.8	12.5	30.51	847.3	772.8	626.1	600.3	25.84	24.227	
7,147.2	7,122.8	7,175.4	7,174.3	15.9	12.6	30.68	847.1	771.8	621.7	595.7	26.03	23.887	
7,150.0	7,125.6	7,178.5	7,177.3	16.0	12.6	29.14	847.1	771.7	621.4	595.4	26.04	23.867	
7,200.0	7,175.5	7,232.0	7,230.8	16.0	12.7	-53.15	846.9	770.2	617.7	591.6	26.19	23.584	
7,250.0	7,225.4	7,285.3	7,284.1	16.1	12.8	-102.78	846.4	768.5	616.2	589.9	26.31	23.421	
7,261.0	7,236.3	7,297.0	7,295.8	16.1	12.9	-106.03	846.3	768.1	616.1	589.8	26.33	23.403 CC, ES	
7,300.0	7,274.8	7,343.9	7,342.7	16.0	12.9	-112.85	845.4	766.4	616.6	590.3	26.38	23.373 SF	
7,350.0	7,323.4	7,400.0	7,398.7	16.0	13.0	-117.31	843.2	764.0	618.8	592.4	26.43	23.416	
7,400.0	7,370.8	7,447.4	7,446.0	15.9	13.1	-119.87	840.3	762.5	623.5	597.1	26.46	23.568	
7,450.0	7,416.7	7,491.3	7,489.7	15.8	13.2	-121.51	836.5	762.2	631.3	604.9	26.48	23.840	
7,500.0	7,460.7	7,527.5	7,525.7	15.7	13.2	-122.43	832.9	762.7	642.5	616.0	26.51	24.232	
7,550.0	7,502.4	7,560.0	7,558.1	15.5	13.3	-122.90	830.3	763.5	657.4	630.9	26.56	24.757	
7,600.0	7,541.6	7,600.0	7,598.0	15.4	13.4	-123.40	827.8	764.8	676.2	649.6	26.62	25.403	
7,650.0	7,578.0	7,623.7	7,621.6	15.2	13.4	-122.88	826.6	765.6	698.5	671.8	26.71	26.150	
7,700.0	7,611.2	7,656.6	7,654.5	15.1	13.5	-122.51	825.3	766.6	724.0	697.2	26.84	26.973	
7,750.0	7,641.0	7,685.7	7,683.6	14.9	13.5	-121.61	824.4	767.3	752.7	725.7	27.01	27.869	
7,800.0	7,667.3	7,710.8	7,708.7	14.8	13.6	-120.05	823.9	767.7	784.4	757.2	27.21	28.832	
7,850.0	7,689.7	7,732.2	7,730.1	14.7	13.6	-117.71	823.5	768.1	818.9	791.5	27.43	29.857	
7,900.0	7,708.2	7,749.8	7,747.7	14.7	13.6	-114.42	823.2	768.4	855.9	828.2	27.67	30.937	
7,950.0	7,722.5	7,763.5	7,761.4	14.7	13.6	-110.00	823.0	768.7	895.1	867.2	27.91	32.067	
8,000.0	7,732.6	7,773.3	7,771.2	14.8	13.7	-104.28	822.9	768.9	936.1	907.9	28.16	33.238	
8,050.0	7,738.5	7,779.2	7,777.1	14.9	13.7	-97.15	822.8	769.0	978.5	950.1	28.41	34.443	
8,092.0	7,740.0	7,781.1	7,778.9	15.0	13.7	-90.11	822.8	769.0	1,014.8	986.2	28.61	35.474	
8,100.0	7,740.0	7,781.1	7,779.0	15.0	13.7	-90.12	822.8	769.0	1,021.9	993.2	28.65	35.673	
8,200.0	7,740.0	7,782.3	7,780.1	15.5	13.7	-90.25	822.7	769.1	1,110.5	1,081.4	29.10	38.159	
8,300.0	7,740.0	7,783.4	7,781.2	16.1	13.7	-90.37	822.7	769.1	1,200.9	1,171.3	29.53	40.663	
8,400.0	7,740.0	7,784.4	7,782.3	16.9	13.7	-90.50	822.7	769.1	1,292.7	1,262.7	29.94	43.182	
8,500.0	7,740.0	7,785.5	7,783.4	17.8	13.7	-90.62	822.7	769.1	1,385.6	1,355.3	30.31	45.712	
8,600.0	7,740.0	7,786.6	7,784.4	18.9	13.7	-90.74	822.7	769.2	1,479.5	1,448.8	30.66	48.250	
8,700.0	7,740.0	7,787.6	7,785.4	20.0	13.7	-90.86	822.7	769.2	1,574.1	1,543.1	30.99	50.793	
8,800.0	7,740.0	7,788.6	7,786.5	21.2	13.7	-90.98	822.7	769.2	1,669.3	1,638.0	31.30	53.336	
8,900.0	7,740.0	7,789.6	7,787.5	22.5	13.7	-91.10	822.7	769.2	1,765.1	1,733.5	31.59	55.879	
9,000.0	7,740.0	7,790.6	7,788.4	23.9	13.7	-91.21	822.6	769.2	1,861.3	1,829.4	31.86	58.418	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
9,100.0	7,740.0	7,800.0	7,797.9	25.3	13.7	-92.30	822.5	769.4	1,957.9	1,925.8	32.14	60.919		
9,200.0	7,740.0	7,800.0	7,797.9	26.7	13.7	-92.30	822.5	769.4	2,054.8	2,022.4	32.39	63.448		
9,300.0	7,740.0	7,800.0	7,797.9	28.2	13.7	-92.30	822.5	769.4	2,152.0	2,119.4	32.62	65.971		
9,400.0	7,740.0	7,800.0	7,797.9	29.7	13.7	-92.30	822.5	769.4	2,249.5	2,216.6	32.85	68.485		
9,500.0	7,740.0	7,800.0	7,797.9	31.3	13.7	-92.30	822.5	769.4	2,347.1	2,314.1	33.06	70.990		
9,600.0	7,740.0	7,800.0	7,797.9	32.8	13.7	-92.30	822.5	769.4	2,445.0	2,411.7	33.27	73.485		
9,700.0	7,740.0	7,800.0	7,797.9	34.4	13.7	-92.30	822.5	769.4	2,543.0	2,509.5	33.47	75.970		
9,800.0	7,740.0	7,800.0	7,797.9	36.0	13.7	-92.30	822.5	769.4	2,641.1	2,607.5	33.67	78.444		
9,900.0	7,740.0	7,800.0	7,797.9	37.6	13.7	-92.30	822.5	769.4	2,739.4	2,705.6	33.86	80.906		
10,000.0	7,740.0	7,800.0	7,797.9	39.2	13.7	-92.30	822.5	769.4	2,837.8	2,803.8	34.04	83.357		
10,100.0	7,740.0	7,800.0	7,797.9	40.9	13.7	-92.30	822.5	769.4	2,936.4	2,902.1	34.23	85.795		
10,200.0	7,740.0	7,800.0	7,797.9	42.5	13.7	-92.30	822.5	769.4	3,035.0	3,000.6	34.40	88.222		
10,300.0	7,740.0	7,800.0	7,797.9	44.2	13.7	-92.30	822.5	769.4	3,133.7	3,099.1	34.57	90.636		
10,400.0	7,740.0	7,800.0	7,797.9	45.8	13.7	-92.30	822.5	769.4	3,232.5	3,197.7	34.74	93.038		
10,500.0	7,740.0	7,800.0	7,797.9	47.5	13.7	-92.30	822.5	769.4	3,331.3	3,296.4	34.91	95.428		
10,600.0	7,740.0	7,800.0	7,797.9	49.1	13.7	-92.30	822.5	769.4	3,430.3	3,395.2	35.07	97.805		
10,700.0	7,740.0	7,800.0	7,797.9	50.8	13.7	-92.30	822.5	769.4	3,529.2	3,494.0	35.23	100.169		
10,800.0	7,740.0	7,800.0	7,797.9	52.5	13.7	-92.30	822.5	769.4	3,628.3	3,592.9	35.39	102.521		
10,900.0	7,740.0	7,800.0	7,797.9	54.2	13.7	-92.30	822.5	769.4	3,727.4	3,691.8	35.55	104.860		
11,000.0	7,740.0	7,800.0	7,797.9	55.9	13.7	-92.30	822.5	769.4	3,826.5	3,790.8	35.70	107.186		
11,100.0	7,740.0	7,800.0	7,797.9	57.6	13.7	-92.30	822.5	769.4	3,925.7	3,889.8	35.85	109.500		
11,200.0	7,740.0	7,800.0	7,797.9	59.3	13.7	-92.30	822.5	769.4	4,024.9	3,988.9	36.00	111.801		
11,300.0	7,740.0	7,800.0	7,797.9	61.0	13.7	-92.30	822.5	769.4	4,124.2	4,088.0	36.15	114.090		
11,400.0	7,740.0	7,800.0	7,797.9	62.7	13.7	-92.30	822.5	769.4	4,223.5	4,187.2	36.29	116.366		
11,500.0	7,740.0	7,812.0	7,809.8	64.4	13.7	-93.68	822.4	769.7	4,322.8	4,286.3	36.47	118.537		
11,600.0	7,740.0	7,812.7	7,810.6	66.1	13.7	-93.77	822.4	769.7	4,422.1	4,385.5	36.61	120.781		
11,700.0	7,740.0	7,813.5	7,811.3	67.8	13.7	-93.85	822.4	769.7	4,521.5	4,484.8	36.76	123.012		
11,800.0	7,740.0	7,814.2	7,812.0	69.5	13.7	-93.94	822.4	769.7	4,620.9	4,584.0	36.90	125.232		
11,900.0	7,740.0	7,814.9	7,812.8	71.2	13.7	-94.02	822.4	769.8	4,720.4	4,683.3	37.04	127.438		
12,000.0	7,740.0	7,815.6	7,813.5	72.9	13.7	-94.11	822.4	769.8	4,819.8	4,782.6	37.18	129.633		
12,100.0	7,740.0	7,816.3	7,814.2	74.7	13.7	-94.19	822.4	769.8	4,919.3	4,882.0	37.32	131.816		
12,200.0	7,740.0	7,817.1	7,814.9	76.4	13.7	-94.27	822.4	769.8	5,018.8	4,981.3	37.46	133.987		
12,300.0	7,740.0	7,817.7	7,815.6	78.1	13.7	-94.35	822.4	769.8	5,118.3	5,080.7	37.59	136.145		
12,400.0	7,740.0	7,818.4	7,816.3	79.8	13.7	-94.43	822.4	769.8	5,217.9	5,180.1	37.73	138.292		
12,500.0	7,740.0	7,819.1	7,817.0	81.6	13.7	-94.51	822.3	769.8	5,317.4	5,279.6	37.87	140.427		
12,600.0	7,740.0	7,819.8	7,817.6	83.3	13.7	-94.58	822.3	769.9	5,417.0	5,379.0	38.00	142.551		
12,700.0	7,740.0	7,820.5	7,818.3	85.0	13.7	-94.66	822.3	769.9	5,516.6	5,478.4	38.13	144.663		
12,800.0	7,740.0	7,821.1	7,819.0	86.7	13.7	-94.73	822.3	769.9	5,616.2	5,577.9	38.27	146.763		
12,900.0	7,740.0	7,821.8	7,819.6	88.5	13.7	-94.81	822.3	769.9	5,715.8	5,677.4	38.40	148.853		
13,000.0	7,740.0	7,822.4	7,820.3	90.2	13.7	-94.88	822.3	769.9	5,815.4	5,776.9	38.53	150.930		
13,100.0	7,740.0	7,823.1	7,820.9	91.9	13.7	-94.96	822.3	769.9	5,915.1	5,876.4	38.66	152.997		
13,200.0	7,740.0	7,823.7	7,821.5	93.7	13.7	-95.03	822.3	769.9	6,014.7	5,975.9	38.79	155.053		
13,300.0	7,740.0	7,824.3	7,822.2	95.4	13.7	-95.10	822.3	770.0	6,114.4	6,075.5	38.92	157.097		
13,400.0	7,740.0	7,824.9	7,822.8	97.1	13.7	-95.17	822.3	770.0	6,214.1	6,175.0	39.05	159.131		
13,500.0	7,740.0	7,825.5	7,823.4	98.9	13.7	-95.24	822.3	770.0	6,313.7	6,274.6	39.18	161.154		
13,600.0	7,740.0	7,826.2	7,824.0	100.6	13.7	-95.31	822.3	770.0	6,413.4	6,374.1	39.31	163.166		
13,700.0	7,740.0	7,826.8	7,824.6	102.3	13.7	-95.38	822.3	770.0	6,513.1	6,473.7	39.43	165.167		
13,800.0	7,740.0	7,827.3	7,825.2	104.1	13.7	-95.45	822.3	770.0	6,612.9	6,573.3	39.56	167.158		
13,900.0	7,740.0	7,827.9	7,825.8	105.8	13.7	-95.52	822.3	770.0	6,712.6	6,672.9	39.69	169.138		
14,000.0	7,740.0	7,828.5	7,826.4	107.5	13.7	-95.58	822.3	770.0	6,812.3	6,772.5	39.81	171.108		
14,100.0	7,740.0	7,829.1	7,826.9	109.3	13.8	-95.65	822.3	770.1	6,912.0	6,872.1	39.94	173.068		
14,200.0	7,740.0	7,829.7	7,827.5	111.0	13.8	-95.71	822.3	770.1	7,011.8	6,971.7	40.06	175.018		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	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)				
14,300.0	7,740.0	7,830.2	7,828.1	112.8	13.8	-95.78	822.2	770.1	7,111.5	7,071.3	40.19	176.957		
14,400.0	7,740.0	7,830.8	7,828.6	114.5	13.8	-95.84	822.2	770.1	7,211.3	7,171.0	40.31	178.886		
14,500.0	7,740.0	7,831.3	7,829.2	116.2	13.8	-95.91	822.2	770.1	7,311.1	7,270.6	40.44	180.806		
14,600.0	7,740.0	7,831.9	7,829.7	118.0	13.8	-95.97	822.2	770.1	7,410.8	7,370.3	40.56	182.715		
14,700.0	7,740.0	7,832.4	7,830.3	119.7	13.8	-96.03	822.2	770.1	7,510.6	7,469.9	40.68	184.615		
14,800.0	7,740.0	7,833.0	7,830.8	121.5	13.8	-96.09	822.2	770.1	7,610.4	7,569.6	40.81	186.505		
14,900.0	7,740.0	7,833.5	7,831.4	123.2	13.8	-96.15	822.2	770.2	7,710.2	7,669.3	40.93	188.386		
15,000.0	7,740.0	7,834.0	7,831.9	124.9	13.8	-96.21	822.2	770.2	7,810.0	7,768.9	41.05	190.256		
15,100.0	7,740.0	7,834.6	7,832.4	126.7	13.8	-96.27	822.2	770.2	7,909.8	7,868.6	41.17	192.118		
15,200.0	7,740.0	7,835.1	7,832.9	128.4	13.8	-96.33	822.2	770.2	8,009.6	7,968.3	41.29	193.970		
15,300.0	7,740.0	7,835.6	7,833.4	130.2	13.8	-96.39	822.2	770.2	8,109.4	8,068.0	41.41	195.813		
15,400.0	7,740.0	7,836.1	7,834.0	131.9	13.8	-96.45	822.2	770.2	8,209.2	8,167.7	41.53	197.646		
15,500.0	7,740.0	7,836.6	7,834.5	133.7	13.8	-96.51	822.2	770.2	8,309.0	8,267.4	41.66	199.470		
15,600.0	7,740.0	7,837.1	7,835.0	135.4	13.8	-96.56	822.2	770.2	8,408.8	8,367.1	41.78	201.286		
15,700.0	7,740.0	7,837.6	7,835.5	137.1	13.8	-96.62	822.2	770.2	8,508.7	8,466.8	41.90	203.092		
15,800.0	7,740.0	7,838.1	7,835.9	138.9	13.8	-96.68	822.2	770.2	8,608.5	8,566.5	42.02	204.889		
15,900.0	7,740.0	7,838.6	7,836.4	140.6	13.8	-96.73	822.2	770.3	8,708.3	8,666.2	42.13	206.678		
15,953.0	7,740.0	7,838.8	7,836.7	141.6	13.8	-96.76	822.2	770.3	8,761.2	8,719.0	42.20	207.621		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	90.56	-0.4	37.5	37.5					
100.0	100.0	100.0	100.0	0.2	0.2	90.56	-0.4	37.5	37.5	37.2	0.30	123.501		
200.0	200.0	200.0	200.0	0.3	0.3	90.56	-0.4	37.5	37.5	36.9	0.65	57.458		
300.0	300.0	300.6	300.6	0.5	0.5	91.26	-0.8	36.7	36.8	35.7	1.00	36.643		
400.0	400.0	401.1	401.0	0.7	0.7	93.53	-2.1	34.4	34.5	33.2	1.35	25.496		
500.0	500.0	501.4	501.2	0.9	0.9	73.28	-4.3	30.6	30.7	29.0	1.71	17.955		
600.0	600.0	601.4	601.0	1.0	1.1	87.59	-7.4	25.3	26.0	23.9	2.08	12.491		
700.0	699.9	701.0	700.5	1.2	1.3	110.66	-10.0	19.4	23.3	20.8	2.47	9.413		
722.2	722.0	723.2	722.6	1.3	1.3	116.37	-10.3	18.1	23.2	20.6	2.56	9.051 CC, ES		
800.0	799.7	800.5	799.8	1.4	1.5	136.51	-11.4	13.5	25.0	22.1	2.86	8.745 SF		
899.9	899.3	899.6	898.7	1.6	1.7	157.04	-12.7	7.7	32.3	29.1	3.20	10.085		
1,000.0	999.0	998.8	997.7	1.8	1.9	169.34	-14.0	1.9	43.0	39.5	3.54	12.149		
1,100.0	1,098.6	1,097.9	1,096.7	2.0	2.1	176.55	-15.4	-4.0	54.9	51.0	3.88	14.134		
1,200.0	1,198.2	1,197.0	1,195.6	2.3	2.3	-178.84	-16.7	-9.8	67.3	63.1	4.23	15.909		
1,300.0	1,297.8	1,296.1	1,294.5	2.5	2.5	-175.68	-18.0	-15.6	80.0	75.5	4.58	17.465		
1,400.0	1,397.5	1,395.2	1,393.4	2.7	2.7	-173.39	-19.4	-21.4	92.9	88.0	4.94	18.826		
1,500.0	1,497.1	1,494.4	1,492.4	2.9	2.9	-171.66	-20.7	-27.3	106.0	100.7	5.29	20.020		
1,600.0	1,596.7	1,593.5	1,591.3	3.2	3.1	-170.31	-22.1	-33.1	119.0	113.4	5.65	21.072		
1,700.0	1,696.3	1,692.6	1,690.2	3.4	3.3	-169.23	-23.4	-38.9	132.2	126.2	6.01	22.004		
1,800.0	1,795.9	1,791.7	1,789.1	3.6	3.5	-168.34	-24.7	-44.7	145.3	139.0	6.36	22.836		
1,900.0	1,895.6	1,890.8	1,888.1	3.8	3.7	-167.60	-26.1	-50.6	158.5	151.8	6.72	23.580		
2,000.0	1,995.2	1,989.9	1,987.0	4.1	3.9	-166.98	-27.4	-56.4	171.8	164.7	7.08	24.251		
2,100.0	2,094.8	2,089.0	2,085.9	4.3	4.1	-166.44	-28.7	-62.2	185.0	177.6	7.44	24.859		
2,200.0	2,194.4	2,188.1	2,184.8	4.5	4.3	-165.98	-30.1	-68.0	198.3	190.5	7.80	25.411		
2,300.0	2,294.0	2,287.2	2,283.8	4.8	4.5	-165.57	-31.4	-73.9	211.5	203.4	8.16	25.915		
2,400.0	2,393.7	2,386.3	2,382.7	5.0	4.7	-165.21	-32.7	-79.7	224.8	216.3	8.52	26.376		
2,500.0	2,493.3	2,485.4	2,481.6	5.2	4.9	-164.89	-34.1	-85.5	238.1	229.2	8.88	26.801		
2,600.0	2,592.9	2,584.5	2,580.5	5.4	5.1	-164.61	-35.4	-91.3	251.4	242.1	9.24	27.193		
2,700.0	2,692.5	2,683.6	2,679.5	5.7	5.3	-164.35	-36.7	-97.2	264.7	255.1	9.61	27.555		
2,800.0	2,792.1	2,782.7	2,778.4	5.9	5.5	-164.12	-38.1	-103.0	278.0	268.0	9.97	27.891		
2,900.0	2,891.8	2,881.8	2,877.3	6.1	5.7	-163.91	-39.4	-108.8	291.3	280.9	10.33	28.204		
3,000.0	2,991.4	2,980.9	2,976.2	6.4	5.9	-163.72	-40.8	-114.6	304.6	293.9	10.69	28.496		
3,100.0	3,091.0	3,080.0	3,075.2	6.6	6.1	-163.54	-42.1	-120.5	317.9	306.8	11.05	28.769		
3,200.0	3,190.6	3,179.1	3,174.1	6.8	6.3	-163.38	-43.4	-126.3	331.2	319.8	11.41	29.025		
3,300.0	3,290.2	3,278.3	3,273.0	7.1	6.5	-163.23	-44.8	-132.1	344.5	332.7	11.77	29.265		
3,400.0	3,389.9	3,377.4	3,371.9	7.3	6.7	-163.09	-46.1	-137.9	357.8	345.7	12.13	29.490		
3,500.0	3,489.5	3,476.5	3,470.9	7.5	6.9	-162.96	-47.4	-143.8	371.2	358.7	12.50	29.703		
3,600.0	3,589.1	3,575.6	3,569.8	7.7	7.1	-162.84	-48.8	-149.6	384.5	371.6	12.86	29.903		
3,700.0	3,688.7	3,674.7	3,668.7	8.0	7.3	-162.73	-50.1	-155.4	397.8	384.6	13.22	30.093		
3,800.0	3,788.3	3,773.8	3,767.6	8.2	7.5	-162.63	-51.4	-161.2	411.1	397.5	13.58	30.273		
3,900.0	3,888.0	3,872.9	3,866.6	8.4	7.7	-162.53	-52.8	-167.1	424.4	410.5	13.94	30.443		
4,000.0	3,987.6	3,972.0	3,965.5	8.7	7.9	-162.44	-54.1	-172.9	437.8	423.5	14.30	30.605		
4,100.0	4,087.2	4,071.1	4,064.4	8.9	8.1	-162.35	-55.5	-178.7	451.1	436.4	14.67	30.758		
4,200.0	4,186.8	4,170.2	4,163.4	9.1	8.3	-162.27	-56.8	-184.5	464.4	449.4	15.03	30.905		
4,300.0	4,286.4	4,269.3	4,262.3	9.4	8.5	-162.19	-58.1	-190.4	477.8	462.4	15.39	31.044		
4,400.0	4,386.1	4,368.4	4,361.2	9.6	8.7	-162.12	-59.5	-196.2	491.1	475.3	15.75	31.177		
4,500.0	4,485.7	4,467.5	4,460.1	9.8	8.9	-162.05	-60.8	-202.0	504.4	488.3	16.11	31.304		
4,600.0	4,585.3	4,566.6	4,559.1	10.1	9.1	-161.99	-62.1	-207.8	517.7	501.3	16.48	31.426		
4,700.0	4,684.9	4,665.7	4,658.0	10.3	9.3	-161.92	-63.5	-213.7	531.1	514.2	16.84	31.542		
4,800.0	4,784.5	4,764.8	4,756.9	10.5	9.5	-161.87	-64.8	-219.5	544.4	527.2	17.20	31.653		
4,900.0	4,884.1	4,863.9	4,855.8	10.8	9.7	-161.81	-66.1	-225.3	557.7	540.2	17.56	31.760		
5,000.0	4,983.8	4,963.1	4,954.8	11.0	9.9	-161.76	-67.5	-231.1	571.1	553.2	17.92	31.863		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,100.0	5,083.4	5,062.2	5,053.7	11.2	10.1	-161.70	-68.8	-237.0	584.4	566.1	18.29	31.961	
5,200.0	5,183.0	5,161.3	5,152.6	11.4	10.3	-161.66	-70.1	-242.8	597.7	579.1	18.65	32.055	
5,300.0	5,282.6	5,260.4	5,251.5	11.7	10.5	-161.61	-71.5	-248.6	611.1	592.1	19.01	32.146	
5,400.0	5,382.2	5,359.5	5,350.5	11.9	10.7	-161.56	-72.8	-254.4	624.4	605.0	19.37	32.234	
5,500.0	5,481.9	5,458.6	5,449.4	12.1	10.9	-161.52	-74.2	-260.3	637.8	618.0	19.73	32.318	
5,600.0	5,581.5	5,557.7	5,548.3	12.4	11.1	-161.48	-75.5	-266.1	651.1	631.0	20.10	32.400	
5,700.0	5,681.1	5,656.8	5,647.2	12.6	11.3	-161.44	-76.8	-271.9	664.4	644.0	20.46	32.478	
5,800.0	5,780.7	5,755.9	5,746.2	12.8	11.5	-161.40	-78.2	-277.7	677.8	656.9	20.82	32.554	
5,900.0	5,880.3	5,855.0	5,845.1	13.1	11.7	-161.37	-79.5	-283.6	691.1	669.9	21.18	32.627	
6,000.0	5,980.0	5,954.1	5,944.0	13.3	11.9	-161.33	-80.8	-289.4	704.4	682.9	21.54	32.697	
6,100.0	6,079.6	6,053.2	6,042.9	13.5	12.2	-161.30	-82.2	-295.2	717.8	695.9	21.91	32.766	
6,200.0	6,179.2	6,152.3	6,141.9	13.8	12.4	-161.27	-83.5	-301.0	731.1	708.8	22.27	32.832	
6,300.0	6,278.8	6,251.4	6,240.8	14.0	12.6	-161.23	-84.8	-306.9	744.4	721.8	22.63	32.896	
6,400.0	6,378.4	6,350.5	6,339.7	14.2	12.8	-161.20	-86.2	-312.7	757.8	734.8	22.99	32.958	
6,500.0	6,478.1	6,449.6	6,438.6	14.5	13.0	-161.18	-87.5	-318.5	771.1	747.8	23.35	33.018	
6,600.0	6,577.7	6,548.7	6,537.6	14.7	13.2	-161.15	-88.9	-324.3	784.5	760.7	23.72	33.076	
6,700.0	6,677.3	6,647.8	6,636.5	14.9	13.4	-161.12	-90.2	-330.2	797.8	773.7	24.08	33.132	
6,800.0	6,776.9	6,747.0	6,735.4	15.1	13.6	-161.09	-91.5	-336.0	811.1	786.7	24.44	33.187	
6,900.0	6,876.5	6,846.1	6,834.3	15.4	13.8	-161.07	-92.9	-341.8	824.5	799.7	24.80	33.240	
7,000.0	6,976.2	6,945.2	6,933.3	15.6	14.0	-161.04	-94.2	-347.6	837.8	812.6	25.17	33.292	
7,100.0	7,075.8	7,044.3	7,032.2	15.8	14.2	-161.02	-95.5	-353.5	851.2	825.6	25.53	33.342	
7,147.2	7,122.8	7,091.0	7,078.8	15.9	14.3	-161.01	-96.2	-356.2	857.4	831.7	25.70	33.365	
7,150.0	7,125.6	7,093.8	7,081.6	16.0	14.3	-162.55	-96.2	-356.4	857.8	832.1	25.71	33.366	
7,200.0	7,175.5	8,113.8	7,740.0	16.0	18.6	160.75	509.1	-395.1	859.7	833.3	26.45	32.500	
7,250.0	7,225.4	8,110.9	7,740.0	16.1	18.5	115.22	506.2	-395.1	829.4	802.2	27.13	30.568	
7,300.0	7,274.8	8,103.7	7,740.0	16.0	18.4	108.71	499.0	-395.1	801.2	773.4	27.74	28.877	
7,350.0	7,323.4	8,092.2	7,740.0	16.0	18.3	107.14	487.5	-395.1	775.6	747.3	28.27	27.430	
7,400.0	7,370.8	8,067.0	7,739.8	15.9	18.1	105.82	462.3	-395.1	752.7	724.1	28.64	26.282	
7,450.0	7,416.7	8,016.6	7,736.5	15.8	17.6	102.92	412.0	-394.9	732.3	703.5	28.78	25.446	
7,500.0	7,460.7	7,975.3	7,730.4	15.7	17.3	100.81	371.2	-394.6	714.3	685.4	28.90	24.720	
7,550.0	7,502.4	7,939.0	7,722.7	15.5	17.0	99.01	335.7	-394.1	698.9	670.0	28.95	24.143	
7,600.0	7,541.6	7,905.6	7,713.6	15.4	16.7	97.29	303.6	-393.6	686.3	657.4	28.92	23.729	
7,650.0	7,578.0	7,874.1	7,703.3	15.2	16.5	95.54	273.8	-393.0	676.5	647.7	28.82	23.475	
7,700.0	7,611.2	7,844.0	7,692.0	15.1	16.3	93.69	245.9	-392.3	669.5	640.9	28.63	23.382	
7,750.0	7,641.0	7,814.7	7,679.6	14.9	16.1	91.73	219.4	-391.6	665.2	636.8	28.39	23.427	
7,800.0	7,667.3	7,786.2	7,666.3	14.8	16.0	89.63	194.2	-390.8	663.5	635.4	28.12	23.600	
7,808.8	7,671.5	7,781.2	7,663.8	14.8	15.9	89.24	189.9	-390.7	663.5	635.4	28.07	23.639	
7,850.0	7,689.7	7,758.2	7,651.9	14.7	15.8	87.41	170.2	-390.0	664.3	636.5	27.82	23.876	
7,900.0	7,708.2	7,730.6	7,636.7	14.7	15.7	85.07	147.2	-389.1	667.3	639.7	27.54	24.226	
7,950.0	7,722.5	7,703.3	7,620.6	14.7	15.6	82.65	125.2	-388.1	672.2	644.9	27.29	24.630	
8,000.0	7,732.6	7,676.3	7,603.6	14.8	15.5	80.18	104.3	-387.1	678.8	651.7	27.10	25.050	
8,050.0	7,738.5	7,650.0	7,586.1	14.9	15.4	77.71	84.6	-386.1	686.9	659.9	26.96	25.475	
8,092.0	7,740.0	7,627.2	7,570.2	15.0	15.3	75.58	68.3	-385.1	694.5	667.6	26.91	25.810	
8,100.0	7,740.0	7,623.0	7,567.2	15.0	15.3	75.33	65.3	-385.0	696.1	669.2	26.90	25.873	
8,200.0	7,740.0	7,575.3	7,531.8	15.5	15.2	72.44	33.5	-382.9	720.1	693.2	26.96	26.713	
8,300.0	7,740.0	7,535.5	7,500.3	16.1	15.1	69.94	9.3	-381.0	753.1	725.9	27.20	27.685	
8,400.0	7,740.0	7,500.0	7,470.8	16.9	15.0	67.64	-10.4	-379.3	794.6	767.1	27.53	28.864	
8,500.0	7,740.0	7,474.2	7,448.7	17.8	14.9	65.96	-23.6	-378.0	844.1	816.2	27.93	30.223	
8,600.0	7,740.0	7,450.0	7,427.4	18.9	14.9	64.38	-35.0	-376.7	900.5	872.1	28.39	31.715	
8,700.0	7,740.0	7,429.7	7,409.2	20.0	14.9	63.06	-43.9	-375.7	963.0	934.2	28.82	33.419	
8,800.0	7,740.0	7,400.0	7,382.0	21.2	14.8	61.13	-55.7	-374.1	1,030.8	1,001.7	29.15	35.360	
8,900.0	7,740.0	7,400.0	7,382.0	22.5	14.8	61.13	-55.7	-374.1	1,102.6	1,073.0	29.62	37.232	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,740.0	7,382.7	7,365.8	23.9	14.8	60.01	-62.0	-373.1	1,178.2	1,148.3	29.93	39.362		
9,100.0	7,740.0	7,370.6	7,354.5	25.3	14.8	59.24	-66.0	-372.4	1,256.9	1,226.7	30.25	41.556		
9,200.0	7,740.0	7,350.0	7,334.9	26.7	14.7	57.93	-72.4	-371.3	1,338.3	1,307.8	30.49	43.897		
9,300.0	7,740.0	7,350.0	7,334.9	28.2	14.7	57.93	-72.4	-371.3	1,421.6	1,390.8	30.80	46.154		
9,400.0	7,740.0	7,350.0	7,334.9	29.7	14.7	57.93	-72.4	-371.3	1,506.9	1,475.8	31.09	48.474		
9,500.0	7,740.0	7,350.0	7,334.9	31.3	14.7	57.93	-72.4	-371.3	1,593.9	1,562.6	31.35	50.844		
9,600.0	7,740.0	7,326.4	7,312.3	32.8	14.7	56.46	-78.8	-370.0	1,681.8	1,650.3	31.49	53.405		
9,700.0	7,740.0	7,319.9	7,305.9	34.4	14.7	56.05	-80.4	-369.6	1,771.1	1,739.4	31.70	55.878		
9,800.0	7,740.0	7,300.0	7,286.6	36.0	14.7	54.84	-84.9	-368.4	1,861.7	1,829.8	31.83	58.481		
9,900.0	7,740.0	7,300.0	7,286.6	37.6	14.7	54.84	-84.9	-368.4	1,952.8	1,920.7	32.05	60.936		
10,000.0	7,740.0	7,300.0	7,286.6	39.2	14.7	54.84	-84.9	-368.4	2,044.7	2,012.4	32.25	63.404		
10,100.0	7,740.0	7,300.0	7,286.6	40.9	14.7	54.84	-84.9	-368.4	2,137.3	2,104.9	32.44	65.882		
10,200.0	7,740.0	7,300.0	7,286.6	42.5	14.7	54.84	-84.9	-368.4	2,230.6	2,197.9	32.63	68.364		
10,300.0	7,740.0	7,300.0	7,286.6	44.2	14.7	54.84	-84.9	-368.4	2,324.4	2,291.6	32.81	70.849		
10,400.0	7,740.0	7,300.0	7,286.6	45.8	14.7	54.84	-84.9	-368.4	2,418.7	2,385.7	32.98	73.333		
10,500.0	7,740.0	7,300.0	7,286.6	47.5	14.7	54.84	-84.9	-368.4	2,513.5	2,480.3	33.15	75.815		
10,600.0	7,740.0	7,300.0	7,286.6	49.1	14.7	54.84	-84.9	-368.4	2,608.6	2,575.3	33.32	78.292		
10,700.0	7,740.0	7,276.6	7,263.6	50.8	14.6	53.44	-89.3	-367.1	2,703.6	2,670.2	33.40	80.949		
10,800.0	7,740.0	7,273.7	7,260.8	52.5	14.6	53.27	-89.7	-366.9	2,799.3	2,765.7	33.55	83.436		
10,900.0	7,740.0	7,270.9	7,258.1	54.2	14.6	53.10	-90.2	-366.8	2,895.2	2,861.5	33.70	85.914		
11,000.0	7,740.0	7,250.0	7,237.4	55.9	14.6	51.89	-93.1	-365.5	2,991.8	2,958.0	33.78	88.562		
11,100.0	7,740.0	7,250.0	7,237.4	57.6	14.6	51.89	-93.1	-365.5	3,088.1	3,054.2	33.94	90.995		
11,200.0	7,740.0	7,250.0	7,237.4	59.3	14.6	51.89	-93.1	-365.5	3,184.7	3,150.6	34.09	93.419		
11,300.0	7,740.0	7,250.0	7,237.4	61.0	14.6	51.89	-93.1	-365.5	3,281.4	3,247.2	34.24	95.833		
11,400.0	7,740.0	7,250.0	7,237.4	62.7	14.6	51.89	-93.1	-365.5	3,378.4	3,344.0	34.39	98.235		
11,500.0	7,740.0	7,250.0	7,237.4	64.4	14.6	51.89	-93.1	-365.5	3,475.5	3,441.0	34.54	100.626		
11,600.0	7,740.0	7,250.0	7,237.4	66.1	14.6	51.89	-93.1	-365.5	3,572.8	3,538.1	34.69	103.006		
11,700.0	7,740.0	7,250.0	7,237.4	67.8	14.6	51.89	-93.1	-365.5	3,670.3	3,635.4	34.83	105.373		
11,800.0	7,740.0	7,250.0	7,237.4	69.5	14.6	51.89	-93.1	-365.5	3,767.8	3,732.9	34.98	107.728		
11,900.0	7,740.0	7,250.0	7,237.4	71.2	14.6	51.89	-93.1	-365.5	3,865.5	3,830.4	35.12	110.071		
12,000.0	7,740.0	7,250.0	7,237.4	72.9	14.6	51.89	-93.1	-365.5	3,963.4	3,928.1	35.26	112.402		
12,100.0	7,740.0	7,250.0	7,237.4	74.7	14.6	51.89	-93.1	-365.5	4,061.3	4,025.9	35.40	114.719		
12,200.0	7,740.0	7,250.0	7,237.4	76.4	14.6	51.89	-93.1	-365.5	4,159.3	4,123.7	35.54	117.024		
12,300.0	7,740.0	7,250.0	7,237.4	78.1	14.6	51.89	-93.1	-365.5	4,257.4	4,221.7	35.68	119.316		
12,400.0	7,740.0	7,250.0	7,237.4	79.8	14.6	51.89	-93.1	-365.5	4,355.6	4,319.8	35.82	121.595		
12,500.0	7,740.0	7,250.0	7,237.4	81.6	14.6	51.89	-93.1	-365.5	4,453.9	4,417.9	35.96	123.862		
12,600.0	7,740.0	7,250.0	7,237.4	83.3	14.6	51.89	-93.1	-365.5	4,552.2	4,516.1	36.10	126.115		
12,700.0	7,740.0	7,250.0	7,237.4	85.0	14.6	51.89	-93.1	-365.5	4,650.6	4,614.4	36.23	128.356		
12,800.0	7,740.0	7,250.0	7,237.4	86.7	14.6	51.89	-93.1	-365.5	4,749.1	4,712.8	36.37	130.583		
12,900.0	7,740.0	7,250.0	7,237.4	88.5	14.6	51.89	-93.1	-365.5	4,847.7	4,811.2	36.50	132.798		
13,000.0	7,740.0	7,250.0	7,237.4	90.2	14.6	51.89	-93.1	-365.5	4,946.3	4,909.6	36.64	135.001		
13,100.0	7,740.0	7,250.0	7,237.4	91.9	14.6	51.89	-93.1	-365.5	5,044.9	5,008.2	36.77	137.190		
13,200.0	7,740.0	7,250.0	7,237.4	93.7	14.6	51.89	-93.1	-365.5	5,143.7	5,106.8	36.91	139.367		
13,300.0	7,740.0	7,250.0	7,237.4	95.4	14.6	51.89	-93.1	-365.5	5,242.4	5,205.4	37.04	141.531		
13,400.0	7,740.0	7,250.0	7,237.4	97.1	14.6	51.89	-93.1	-365.5	5,341.2	5,304.1	37.17	143.683		
13,500.0	7,740.0	7,250.0	7,237.4	98.9	14.6	51.89	-93.1	-365.5	5,440.1	5,402.8	37.31	145.822		
13,600.0	7,740.0	7,250.0	7,237.4	100.6	14.6	51.89	-93.1	-365.5	5,539.0	5,501.5	37.44	147.949		
13,700.0	7,740.0	7,250.0	7,237.4	102.3	14.6	51.89	-93.1	-365.5	5,637.9	5,600.3	37.57	150.064		
13,800.0	7,740.0	7,250.0	7,237.4	104.1	14.6	51.89	-93.1	-365.5	5,736.9	5,699.2	37.70	152.167		
13,900.0	7,740.0	7,250.0	7,237.4	105.8	14.6	51.89	-93.1	-365.5	5,835.9	5,798.1	37.83	154.257		
14,000.0	7,740.0	7,250.0	7,237.4	107.5	14.6	51.89	-93.1	-365.5	5,934.9	5,897.0	37.96	156.336		
14,100.0	7,740.0	7,227.0	7,214.5	109.3	14.5	50.58	-95.4	-364.2	6,033.5	5,995.5	38.02	158.677		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,200.0	7,740.0	7,226.3	7,213.8	111.0	14.5	50.55	-95.5	-364.2	6,132.6	6,094.4	38.15	160.741			
14,300.0	7,740.0	7,225.6	7,213.1	112.8	14.5	50.51	-95.5	-364.1	6,231.7	6,193.4	38.28	162.794			
14,400.0	7,740.0	7,224.9	7,212.5	114.5	14.5	50.47	-95.6	-364.1	6,330.8	6,292.4	38.41	164.835			
14,500.0	7,740.0	7,224.3	7,211.8	116.2	14.5	50.44	-95.6	-364.0	6,429.9	6,391.4	38.53	166.864			
14,600.0	7,740.0	7,223.7	7,211.2	118.0	14.5	50.40	-95.7	-364.0	6,529.1	6,490.4	38.66	168.882			
14,700.0	7,740.0	7,223.1	7,210.6	119.7	14.5	50.37	-95.7	-364.0	6,628.3	6,589.5	38.79	170.888			
14,800.0	7,740.0	7,200.0	7,187.6	121.5	14.5	49.11	-97.0	-362.6	6,728.0	6,689.2	38.85	173.191			
14,900.0	7,740.0	7,200.0	7,187.6	123.2	14.5	49.11	-97.0	-362.6	6,827.2	6,788.3	38.98	175.168			
15,000.0	7,740.0	7,200.0	7,187.6	124.9	14.5	49.11	-97.0	-362.6	6,926.5	6,887.4	39.10	177.134			
15,100.0	7,740.0	7,200.0	7,187.6	126.7	14.5	49.11	-97.0	-362.6	7,025.7	6,986.5	39.23	179.089			
15,200.0	7,740.0	7,200.0	7,187.6	128.4	14.5	49.11	-97.0	-362.6	7,125.0	7,085.7	39.36	181.034			
15,300.0	7,740.0	7,200.0	7,187.6	130.2	14.5	49.11	-97.0	-362.6	7,224.3	7,184.9	39.48	182.967			
15,400.0	7,740.0	7,200.0	7,187.6	131.9	14.5	49.11	-97.0	-362.6	7,323.7	7,284.0	39.61	184.890			
15,500.0	7,740.0	7,200.0	7,187.6	133.7	14.5	49.11	-97.0	-362.6	7,423.0	7,383.3	39.74	186.802			
15,600.0	7,740.0	7,200.0	7,187.6	135.4	14.5	49.11	-97.0	-362.6	7,522.4	7,482.5	39.86	188.704			
15,700.0	7,740.0	7,200.0	7,187.6	137.1	14.5	49.11	-97.0	-362.6	7,621.7	7,581.8	39.99	190.595			
15,800.0	7,740.0	7,200.0	7,187.6	138.9	14.5	49.11	-97.0	-362.6	7,721.1	7,681.0	40.11	192.476			
15,900.0	7,740.0	7,200.0	7,187.6	140.6	14.5	49.11	-97.0	-362.6	7,820.5	7,780.3	40.24	194.347			
15,953.0	7,740.0	7,200.0	7,187.6	141.6	14.5	49.11	-97.0	-362.6	7,873.2	7,832.9	40.31	195.334			

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	90.47	-0.4	44.8	44.8					
100.0	100.0	100.0	100.0	0.2	0.2	90.47	-0.4	44.8	44.8	44.5	0.30	147.461		
200.0	200.0	200.0	200.0	0.3	0.3	90.47	-0.4	44.8	44.8	44.1	0.65	68.605		
300.0	300.0	300.0	300.0	0.5	0.5	90.47	-0.4	44.8	44.8	43.8	1.00	44.701		
400.0	400.0	400.5	400.5	0.7	0.7	91.35	-1.0	44.2	44.2	42.9	1.35	32.711		
500.0	500.0	500.9	500.8	0.9	0.9	68.89	-3.1	42.5	42.3	40.6	1.71	24.815		
600.0	600.0	601.0	600.9	1.0	1.0	77.76	-6.4	39.7	39.3	37.3	2.07	19.027		
700.0	699.9	700.3	700.0	1.2	1.2	90.40	-9.9	37.1	37.6	35.2	2.44	15.436		
713.0	712.9	713.2	712.9	1.2	1.2	92.14	-10.3	36.8	37.6	35.1	2.48	15.125 CC, ES		
800.0	799.7	799.6	799.4	1.4	1.4	103.56	-12.3	35.8	38.7	35.9	2.81	13.780		
899.9	899.3	899.0	898.8	1.6	1.6	115.26	-13.8	35.9	42.4	39.2	3.17	13.374		
1,000.0	999.0	998.7	998.4	1.8	1.7	124.98	-14.9	36.5	48.1	44.5	3.53	13.615		
1,100.0	1,098.6	1,098.2	1,097.9	2.0	1.9	132.49	-16.0	37.1	54.8	50.9	3.88	14.111		
1,200.0	1,198.2	1,197.8	1,197.5	2.3	2.1	138.29	-17.1	37.6	62.3	58.1	4.23	14.708		
1,300.0	1,297.8	1,297.3	1,297.0	2.5	2.3	142.81	-18.3	38.2	70.3	65.7	4.58	15.329		
1,400.0	1,397.5	1,396.9	1,396.5	2.7	2.4	146.40	-19.4	38.8	78.6	73.6	4.93	15.935		
1,500.0	1,497.1	1,496.4	1,496.1	2.9	2.6	149.29	-20.5	39.3	87.1	81.9	5.28	16.510		
1,600.0	1,596.7	1,595.9	1,595.6	3.2	2.8	151.66	-21.6	39.9	95.9	90.2	5.62	17.046		
1,700.0	1,696.3	1,695.5	1,695.1	3.4	3.0	153.64	-22.7	40.4	104.7	98.8	5.97	17.542		
1,800.0	1,795.9	1,795.0	1,794.7	3.6	3.1	155.30	-23.8	41.0	113.7	107.4	6.32	18.000		
1,900.0	1,895.6	1,894.6	1,894.2	3.8	3.3	156.72	-25.0	41.6	122.8	116.1	6.67	18.422		
2,000.0	1,995.2	1,994.1	1,993.8	4.1	3.5	157.94	-26.1	42.1	131.9	124.9	7.01	18.811		
2,100.0	2,094.8	2,093.7	2,093.3	4.3	3.7	159.01	-27.2	42.7	141.1	133.7	7.36	19.170		
2,200.0	2,194.4	2,193.2	2,192.8	4.5	3.8	159.94	-28.3	43.3	150.3	142.6	7.71	19.502		
2,300.0	2,294.0	2,292.8	2,292.4	4.8	4.0	160.77	-29.4	43.8	159.6	151.5	8.06	19.809		
2,400.0	2,393.7	2,392.3	2,391.9	5.0	4.2	161.50	-30.6	44.4	168.9	160.5	8.40	20.094		
2,500.0	2,493.3	2,491.9	2,491.4	5.2	4.4	162.16	-31.7	45.0	178.2	169.4	8.75	20.359		
2,600.0	2,592.9	2,591.4	2,591.0	5.4	4.5	162.75	-32.8	45.5	187.5	178.4	9.10	20.605		
2,700.0	2,692.5	2,691.0	2,690.5	5.7	4.7	163.29	-33.9	46.1	196.9	187.4	9.45	20.835		
2,800.0	2,792.1	2,790.5	2,790.1	5.9	4.9	163.78	-35.0	46.6	206.2	196.4	9.80	21.051		
2,900.0	2,891.8	2,890.0	2,889.6	6.1	5.1	164.23	-36.2	47.2	215.6	205.5	10.14	21.252		
3,000.0	2,991.4	2,989.6	2,989.1	6.4	5.2	164.63	-37.3	47.8	225.0	214.5	10.49	21.441		
3,100.0	3,091.0	3,089.1	3,088.7	6.6	5.4	165.01	-38.4	48.3	234.4	223.5	10.84	21.619		
3,200.0	3,190.6	3,188.7	3,188.2	6.8	5.6	165.36	-39.5	48.9	243.8	232.6	11.19	21.787		
3,300.0	3,290.2	3,288.2	3,287.8	7.1	5.8	165.68	-40.6	49.5	253.2	241.7	11.54	21.945		
3,400.0	3,389.9	3,387.8	3,387.3	7.3	5.9	165.98	-41.8	50.0	262.6	250.8	11.89	22.094		
3,500.0	3,489.5	3,487.3	3,486.8	7.5	6.1	166.25	-42.9	50.6	272.1	259.8	12.24	22.236		
3,600.0	3,589.1	3,586.9	3,586.4	7.7	6.3	166.51	-44.0	51.2	281.5	268.9	12.58	22.369		
3,700.0	3,688.7	3,686.4	3,685.9	8.0	6.5	166.75	-45.1	51.7	291.0	278.0	12.93	22.496		
3,800.0	3,788.3	3,786.0	3,785.4	8.2	6.6	166.98	-46.2	52.3	300.4	287.1	13.28	22.617		
3,900.0	3,888.0	3,885.5	3,885.0	8.4	6.8	167.19	-47.4	52.8	309.9	296.2	13.63	22.732		
4,000.0	3,987.6	3,985.0	3,984.5	8.7	7.0	167.39	-48.5	53.4	319.3	305.3	13.98	22.841		
4,100.0	4,087.2	4,084.6	4,084.1	8.9	7.2	167.58	-49.6	54.0	328.8	314.4	14.33	22.945		
4,200.0	4,186.8	4,184.1	4,183.6	9.1	7.3	167.76	-50.7	54.5	338.2	323.6	14.68	23.044		
4,300.0	4,286.4	4,283.7	4,283.1	9.4	7.5	167.93	-51.8	55.1	347.7	332.7	15.03	23.139		
4,400.0	4,386.1	4,383.2	4,382.7	9.6	7.7	168.09	-52.9	55.7	357.2	341.8	15.38	23.230		
4,500.0	4,485.7	4,482.8	4,482.2	9.8	7.9	168.24	-54.1	56.2	366.6	350.9	15.72	23.317		
4,600.0	4,585.3	4,582.3	4,581.7	10.1	8.0	168.39	-55.2	56.8	376.1	360.0	16.07	23.400		
4,700.0	4,684.9	4,681.9	4,681.3	10.3	8.2	168.52	-56.3	57.4	385.6	369.2	16.42	23.480		
4,800.0	4,784.5	4,781.4	4,780.8	10.5	8.4	168.65	-57.4	57.9	395.1	378.3	16.77	23.557		
4,900.0	4,884.1	4,881.0	4,880.4	10.8	8.6	168.78	-58.5	58.5	404.6	387.4	17.12	23.630		
5,000.0	4,983.8	4,980.5	4,979.9	11.0	8.7	168.89	-59.7	59.0	414.0	396.6	17.47	23.701		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,083.4	5,080.1	5,079.4	11.2	8.9	169.01	-60.8	59.6	423.5	405.7	17.82	23.769		
5,200.0	5,183.0	5,179.6	5,179.0	11.4	9.1	169.12	-61.9	60.2	433.0	414.8	18.17	23.834		
5,300.0	5,282.6	5,279.1	5,278.5	11.7	9.3	169.22	-63.0	60.7	442.5	424.0	18.52	23.897		
5,400.0	5,382.2	5,378.7	5,378.0	11.9	9.4	169.32	-64.1	61.3	452.0	433.1	18.87	23.958		
5,500.0	5,481.9	5,478.2	5,477.6	12.1	9.6	169.41	-65.3	61.9	461.5	442.3	19.22	24.017		
5,600.0	5,581.5	5,577.8	5,577.1	12.4	9.8	169.50	-66.4	62.4	471.0	451.4	19.56	24.073		
5,700.0	5,681.1	5,677.3	5,676.7	12.6	10.0	169.59	-67.5	63.0	480.5	460.6	19.91	24.128		
5,800.0	5,780.7	5,776.9	5,776.2	12.8	10.1	169.68	-68.6	63.6	490.0	469.7	20.26	24.181		
5,900.0	5,880.3	5,876.4	5,875.7	13.1	10.3	169.76	-69.7	64.1	499.5	478.8	20.61	24.232		
6,000.0	5,980.0	5,976.0	5,975.3	13.3	10.5	169.84	-70.9	64.7	508.9	488.0	20.96	24.281		
6,100.0	6,079.6	6,075.5	6,074.8	13.5	10.7	169.91	-72.0	65.2	518.4	497.1	21.31	24.329		
6,200.0	6,179.2	6,175.1	6,174.4	13.8	10.8	169.98	-73.1	65.8	527.9	506.3	21.66	24.375		
6,300.0	6,278.8	6,274.6	6,273.9	14.0	11.0	170.05	-74.2	66.4	537.4	515.4	22.01	24.420		
6,400.0	6,378.4	6,374.1	6,373.4	14.2	11.2	170.12	-75.3	66.9	546.9	524.6	22.36	24.463		
6,500.0	6,478.1	6,473.7	6,473.0	14.5	11.4	170.19	-76.4	67.5	556.4	533.7	22.71	24.506		
6,600.0	6,577.7	6,573.2	6,572.5	14.7	11.5	170.25	-77.6	68.1	565.9	542.9	23.06	24.547		
6,700.0	6,677.3	6,672.8	6,672.0	14.9	11.7	170.31	-78.7	68.6	575.4	552.0	23.40	24.586		
6,800.0	6,776.9	6,772.3	6,771.6	15.1	11.9	170.37	-79.8	69.2	584.9	561.2	23.75	24.625		
6,900.0	6,876.5	6,871.9	6,871.1	15.4	12.1	170.43	-80.9	69.8	594.4	570.3	24.10	24.662		
7,000.0	6,976.2	6,972.1	6,971.4	15.6	12.4	170.49	-82.0	70.4	603.9	579.4	24.45	24.698		
7,100.0	7,075.8	7,071.7	7,071.0	15.8	12.6	170.55	-83.1	71.0	613.4	588.5	24.80	24.734		
7,147.2	7,122.8	7,118.7	7,118.0	15.9	12.7	170.61	-84.2	71.6	622.9	597.6	25.15	24.770		
7,150.0	7,125.6	7,121.5	7,120.8	16.0	12.8	170.67	-85.3	72.2	632.4	606.7	25.50	24.806		
7,200.0	7,175.5	7,171.4	7,170.7	16.2	13.0	170.73	-86.4	72.8	641.9	615.8	25.85	24.842		
7,250.0	7,225.4	7,221.3	7,220.6	16.4	13.2	170.79	-87.5	73.4	651.4	624.9	26.20	24.878		
7,300.0	7,274.8	7,270.7	7,270.0	16.6	13.4	170.85	-88.6	74.0	660.9	634.0	26.55	24.914		
7,350.0	7,323.4	7,319.3	7,318.6	16.8	13.6	170.91	-89.7	74.6	670.4	643.1	26.90	24.950		
7,400.0	7,370.8	7,366.7	7,366.0	17.0	13.8	170.97	-90.8	75.2	679.9	652.2	27.25	24.986		
7,450.0	7,416.7	7,412.6	7,411.9	17.2	14.0	171.03	-91.9	75.8	689.4	661.3	27.60	25.022		
7,500.0	7,460.7	7,456.6	7,455.9	17.4	14.2	171.09	-93.0	76.4	698.9	670.4	27.95	25.058		
7,533.2	7,488.6	7,484.5	7,483.8	17.6	14.4	171.15	-94.1	77.0	708.4	679.5	28.30	25.094		
7,550.0	7,502.4	7,498.3	7,497.6	17.8	14.6	171.21	-95.2	77.6	717.9	688.6	28.65	25.130		
7,600.0	7,541.6	7,537.5	7,536.8	18.0	14.8	171.27	-96.3	78.2	727.4	697.7	29.00	25.166		
7,650.0	7,578.0	7,573.9	7,573.2	18.2	15.0	171.33	-97.4	78.8	736.9	706.8	29.35	25.202		
7,700.0	7,611.2	7,607.1	7,606.4	18.4	15.2	171.39	-98.5	79.4	746.4	715.9	29.70	25.238		
7,750.0	7,641.0	7,636.9	7,636.2	18.6	15.4	171.45	-99.6	80.0	755.9	725.0	30.05	25.274		
7,800.0	7,667.3	7,663.2	7,662.5	18.8	15.6	171.51	-100.7	80.6	765.4	734.1	30.40	25.310		
7,850.0	7,689.7	7,685.6	7,684.9	19.0	15.8	171.57	-101.8	81.2	774.9	743.2	30.75	25.346		
7,900.0	7,708.2	7,704.1	7,703.4	19.2	16.0	171.63	-102.9	81.8	784.4	752.3	31.10	25.382		
7,950.0	7,722.5	7,718.4	7,717.7	19.4	16.2	171.69	-104.0	82.4	793.9	761.4	31.45	25.418		
8,000.0	7,732.6	7,728.5	7,727.8	19.6	16.4	171.75	-105.1	83.0	803.4	770.5	31.80	25.454		
8,050.0	7,738.5	7,734.4	7,733.7	19.8	16.6	171.81	-106.2	83.6	812.9	779.6	32.15	25.490		
8,092.0	7,740.0	7,735.9	7,735.2	20.0	16.8	171.87	-107.3	84.2	822.4	788.7	32.50	25.526		
8,100.0	7,740.0	7,735.9	7,735.2	20.2	17.0	171.93	-108.4	84.8	831.9	797.8	32.85	25.562		
8,200.0	7,740.0	7,735.9	7,735.2	20.4	17.2	171.99	-109.5	85.4	841.4	806.9	33.20	25.598		
8,300.0	7,740.0	7,735.9	7,735.2	20.6	17.4	172.05	-110.6	86.0	850.9	816.0	33.55	25.634		
8,400.0	7,740.0	7,735.9	7,735.2	20.8	17.6	172.11	-111.7	86.6	860.4	825.1	33.90	25.670		
8,500.0	7,740.0	7,735.9	7,735.2	21.0	17.8	172.17	-112.8	87.2	869.9	834.2	34.25	25.706		
8,600.0	7,740.0	7,735.9	7,735.2	21.2	18.0	172.23	-113.9	87.8	879.4	843.3	34.60	25.742		
8,700.0	7,740.0	7,735.9	7,735.2	21.4	18.2	172.29	-115.0	88.4	888.9	852.4	34.95	25.778		
8,800.0	7,740.0	7,735.9	7,735.2	21.6	18.4	172.35	-116.1	89.0	898.4	861.5	35.30	25.814		
8,900.0	7,740.0	7,735.9	7,735.2	21.8	18.6	172.41	-117.2	89.6	907.9	870.6	35.65	25.850		

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 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
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)				
9,000.0	7,740.0	7,218.1	7,205.1	23.9	12.6	20.96	-9.5	70.3	1,119.9	1,094.0	25.88	43.268		
9,100.0	7,740.0	7,200.0	7,189.1	25.3	12.6	20.39	-18.1	70.4	1,206.6	1,180.5	26.17	46.108		
9,200.0	7,740.0	7,200.0	7,189.1	26.7	12.6	20.39	-18.1	70.4	1,294.9	1,268.3	26.57	48.734		
9,300.0	7,740.0	7,175.2	7,166.8	28.2	12.5	19.66	-28.9	70.5	1,384.0	1,357.2	26.75	51.734		
9,400.0	7,740.0	7,150.0	7,143.7	29.7	12.5	18.95	-39.0	70.5	1,474.5	1,447.6	26.92	54.778		
9,500.0	7,740.0	7,150.0	7,143.7	31.3	12.5	18.95	-39.0	70.5	1,565.5	1,538.2	27.23	57.481		
9,600.0	7,740.0	7,150.0	7,143.7	32.8	12.5	18.95	-39.0	70.5	1,657.5	1,630.0	27.53	60.214		
9,700.0	7,740.0	7,150.0	7,143.7	34.4	12.5	18.95	-39.0	70.5	1,750.4	1,722.6	27.80	62.969		
9,800.0	7,740.0	7,125.3	7,120.7	36.0	12.4	18.29	-47.8	70.5	1,843.3	1,815.4	27.92	66.019		
9,900.0	7,740.0	7,100.0	7,096.7	37.6	12.4	17.65	-55.8	70.6	1,937.5	1,909.4	28.04	69.102		
10,000.0	7,740.0	7,100.0	7,096.7	39.2	12.4	17.65	-55.8	70.6	2,031.5	2,003.2	28.28	71.842		
10,100.0	7,740.0	7,100.0	7,096.7	40.9	12.4	17.65	-55.8	70.6	2,126.1	2,097.6	28.51	74.585		
10,200.0	7,740.0	7,100.0	7,096.7	42.5	12.4	17.65	-55.8	70.6	2,221.1	2,192.4	28.72	77.326		
10,300.0	7,740.0	7,100.0	7,096.7	44.2	12.4	17.65	-55.8	70.6	2,316.6	2,287.7	28.93	80.064		
10,400.0	7,740.0	7,100.0	7,096.7	45.8	12.4	17.65	-55.8	70.6	2,412.4	2,383.3	29.14	82.795		
10,500.0	7,740.0	7,100.0	7,096.7	47.5	12.4	17.65	-55.8	70.6	2,508.6	2,479.3	29.33	85.517		
10,600.0	7,740.0	7,076.4	7,074.0	49.1	12.4	17.08	-62.3	70.5	2,604.5	2,575.0	29.43	88.488		
10,700.0	7,740.0	7,071.9	7,069.7	50.8	12.4	16.98	-63.5	70.5	2,700.9	2,671.3	29.60	91.233		
10,800.0	7,740.0	7,050.0	7,048.3	52.5	12.3	16.49	-68.5	70.5	2,797.9	2,768.2	29.71	94.186		
10,900.0	7,740.0	7,050.0	7,048.3	54.2	12.3	16.49	-68.5	70.5	2,894.7	2,864.8	29.89	96.845		
11,000.0	7,740.0	7,050.0	7,048.3	55.9	12.3	16.49	-68.5	70.5	2,991.6	2,961.5	30.07	99.491		
11,100.0	7,740.0	7,050.0	7,048.3	57.6	12.3	16.49	-68.5	70.5	3,088.8	3,058.5	30.25	102.123		
11,200.0	7,740.0	7,050.0	7,048.3	59.3	12.3	16.49	-68.5	70.5	3,186.1	3,155.7	30.42	104.741		
11,300.0	7,740.0	7,050.0	7,048.3	61.0	12.3	16.49	-68.5	70.5	3,283.6	3,253.0	30.59	107.344		
11,400.0	7,740.0	7,050.0	7,048.3	62.7	12.3	16.49	-68.5	70.5	3,381.2	3,350.4	30.76	109.932		
11,500.0	7,740.0	7,050.0	7,048.3	64.4	12.3	16.49	-68.5	70.5	3,478.9	3,448.0	30.92	112.504		
11,600.0	7,740.0	7,050.0	7,048.3	66.1	12.3	16.49	-68.5	70.5	3,576.8	3,545.7	31.09	115.061		
11,700.0	7,740.0	7,050.0	7,048.3	67.8	12.3	16.49	-68.5	70.5	3,674.8	3,643.6	31.25	117.602		
11,800.0	7,740.0	7,050.0	7,048.3	69.5	12.3	16.49	-68.5	70.5	3,772.9	3,741.5	31.41	120.127		
11,900.0	7,740.0	7,050.0	7,048.3	71.2	12.3	16.49	-68.5	70.5	3,871.1	3,839.6	31.57	122.635		
12,000.0	7,740.0	7,050.0	7,048.3	72.9	12.3	16.49	-68.5	70.5	3,969.4	3,937.7	31.72	125.128		
12,100.0	7,740.0	7,050.0	7,048.3	74.7	12.3	16.49	-68.5	70.5	4,067.8	4,035.9	31.88	127.604		
12,200.0	7,740.0	7,026.7	7,025.5	76.4	12.3	15.99	-73.0	70.5	4,165.7	4,133.8	31.96	130.333		
12,300.0	7,740.0	7,024.7	7,023.5	78.1	12.3	15.95	-73.3	70.5	4,264.2	4,232.0	32.11	132.800		
12,400.0	7,740.0	7,022.7	7,021.5	79.8	12.3	15.91	-73.7	70.5	4,362.6	4,330.4	32.26	135.250		
12,500.0	7,740.0	7,000.0	6,999.0	81.6	12.3	15.45	-77.0	70.4	4,461.6	4,429.3	32.34	137.957		
12,600.0	7,740.0	7,000.0	6,999.0	83.3	12.3	15.45	-77.0	70.4	4,560.2	4,527.7	32.49	140.350		
12,700.0	7,740.0	7,000.0	6,999.0	85.0	12.3	15.45	-77.0	70.4	4,658.8	4,626.1	32.64	142.727		
12,800.0	7,740.0	7,000.0	6,999.0	86.7	12.3	15.45	-77.0	70.4	4,757.4	4,724.6	32.79	145.088		
12,900.0	7,740.0	7,000.0	6,999.0	88.5	12.3	15.45	-77.0	70.4	4,856.1	4,823.2	32.94	147.434		
13,000.0	7,740.0	7,000.0	6,999.0	90.2	12.3	15.45	-77.0	70.4	4,954.9	4,921.8	33.08	149.764		
13,100.0	7,740.0	7,000.0	6,999.0	91.9	12.3	15.45	-77.0	70.4	5,053.7	5,020.5	33.23	152.080		
13,200.0	7,740.0	7,000.0	6,999.0	93.7	12.3	15.45	-77.0	70.4	5,152.6	5,119.2	33.38	154.380		
13,300.0	7,740.0	7,000.0	6,999.0	95.4	12.3	15.45	-77.0	70.4	5,251.5	5,218.0	33.52	156.665		
13,400.0	7,740.0	7,000.0	6,999.0	97.1	12.3	15.45	-77.0	70.4	5,350.4	5,316.8	33.66	158.936		
13,500.0	7,740.0	7,000.0	6,999.0	98.9	12.3	15.45	-77.0	70.4	5,449.4	5,415.6	33.81	161.192		
13,600.0	7,740.0	7,000.0	6,999.0	100.6	12.3	15.45	-77.0	70.4	5,548.4	5,514.5	33.95	163.433		
13,700.0	7,740.0	7,000.0	6,999.0	102.3	12.3	15.45	-77.0	70.4	5,647.5	5,613.4	34.09	165.659		
13,800.0	7,740.0	7,000.0	6,999.0	104.1	12.3	15.45	-77.0	70.4	5,746.6	5,712.3	34.23	167.872		
13,900.0	7,740.0	7,000.0	6,999.0	105.8	12.3	15.45	-77.0	70.4	5,845.7	5,811.3	34.37	170.070		
14,000.0	7,740.0	7,000.0	6,999.0	107.5	12.3	15.45	-77.0	70.4	5,944.8	5,910.3	34.51	172.254		
14,100.0	7,740.0	7,000.0	6,999.0	109.3	12.3	15.45	-77.0	70.4	6,044.0	6,009.3	34.65	174.424		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
14,200.0	7,740.0	7,000.0	6,999.0	111.0	12.3	15.45	-77.0	70.4	6,143.2	6,108.4	34.79	176.580		
14,300.0	7,740.0	7,000.0	6,999.0	112.8	12.3	15.45	-77.0	70.4	6,242.4	6,207.5	34.93	178.722		
14,400.0	7,740.0	7,000.0	6,999.0	114.5	12.3	15.45	-77.0	70.4	6,341.7	6,306.6	35.07	180.851		
14,500.0	7,740.0	7,000.0	6,999.0	116.2	12.3	15.45	-77.0	70.4	6,440.9	6,405.7	35.20	182.967		
14,600.0	7,740.0	7,000.0	6,999.0	118.0	12.3	15.45	-77.0	70.4	6,540.2	6,504.9	35.34	185.070		
14,700.0	7,740.0	7,000.0	6,999.0	119.7	12.3	15.45	-77.0	70.4	6,639.6	6,604.1	35.48	187.159		
14,800.0	7,740.0	7,000.0	6,999.0	121.5	12.3	15.45	-77.0	70.4	6,738.9	6,703.3	35.61	189.235		
14,900.0	7,740.0	7,000.0	6,999.0	123.2	12.3	15.45	-77.0	70.4	6,838.2	6,802.5	35.75	191.299		
15,000.0	7,740.0	7,000.0	6,999.0	124.9	12.3	15.45	-77.0	70.4	6,937.6	6,901.7	35.88	193.349		
15,100.0	7,740.0	7,000.0	6,999.0	126.7	12.3	15.45	-77.0	70.4	7,037.0	7,001.0	36.02	195.387		
15,200.0	7,740.0	7,000.0	6,999.0	128.4	12.3	15.45	-77.0	70.4	7,136.4	7,100.3	36.15	197.413		
15,300.0	7,740.0	7,000.0	6,999.0	130.2	12.3	15.45	-77.0	70.4	7,235.9	7,199.6	36.28	199.427		
15,400.0	7,740.0	7,000.0	6,999.0	131.9	12.3	15.45	-77.0	70.4	7,335.3	7,298.9	36.42	201.428		
15,500.0	7,740.0	7,000.0	6,999.0	133.7	12.3	15.45	-77.0	70.4	7,434.8	7,398.2	36.55	203.417		
15,600.0	7,740.0	7,000.0	6,999.0	135.4	12.3	15.45	-77.0	70.4	7,534.2	7,497.5	36.68	205.394		
15,700.0	7,740.0	7,000.0	6,999.0	137.1	12.3	15.45	-77.0	70.4	7,633.7	7,596.9	36.81	207.359		
15,800.0	7,740.0	7,000.0	6,999.0	138.9	12.3	15.45	-77.0	70.4	7,733.2	7,696.3	36.95	209.313		
15,900.0	7,740.0	7,000.0	6,999.0	140.6	12.3	15.45	-77.0	70.4	7,832.7	7,795.6	37.08	211.255		
15,953.0	7,740.0	7,000.0	6,999.0	141.6	12.3	15.45	-77.0	70.4	7,885.4	7,848.3	37.15	212.279		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 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		
200.0	200.0	200.0	200.0	0.3	0.3	90.41	-0.4	52.3	52.3	51.7	0.65	80.182		
300.0	300.0	300.0	300.0	0.5	0.5	90.41	-0.4	52.3	52.3	51.3	1.00	52.244		
400.0	400.0	400.0	400.0	0.7	0.7	90.41	-0.4	52.3	52.3	51.0	1.35	38.744		
500.0	500.0	500.0	500.0	0.9	0.8	64.93	-0.4	52.3	52.0	50.3	1.70	30.559		
600.0	600.0	600.0	600.0	1.0	1.0	67.61	-0.4	52.3	50.9	48.9	2.05	24.804		
692.3	692.1	691.3	691.3	1.2	1.2	71.79	-0.5	53.1	50.3	47.9	2.38	21.112 CC		
700.0	699.9	699.0	699.0	1.2	1.2	72.21	-0.5	53.2	50.3	47.9	2.41	20.872 ES		
800.0	799.7	798.0	797.9	1.4	1.4	78.53	-0.7	55.7	51.3	48.5	2.77	18.493		
899.9	899.3	896.7	896.6	1.6	1.6	85.84	-1.2	60.0	54.5	51.3	3.15	17.270		
1,000.0	999.0	996.2	996.0	1.8	1.7	92.75	-1.8	65.4	59.6	56.0	3.54	16.812		
1,100.0	1,098.6	1,095.9	1,095.4	2.0	1.9	98.49	-2.4	70.9	65.4	61.5	3.94	16.619		
1,200.0	1,198.2	1,195.5	1,194.9	2.3	2.1	103.26	-3.0	76.3	71.8	67.5	4.33	16.582		
1,300.0	1,297.8	1,295.1	1,294.4	2.5	2.3	107.23	-3.6	81.8	78.6	73.9	4.73	16.637		
1,400.0	1,397.5	1,394.8	1,393.9	2.7	2.5	110.55	-4.2	87.3	85.8	80.6	5.12	16.744		
1,500.0	1,497.1	1,494.4	1,493.4	2.9	2.7	113.36	-4.9	92.7	93.1	87.6	5.52	16.879		
1,600.0	1,596.7	1,594.0	1,592.8	3.2	2.9	115.75	-5.5	98.2	100.7	94.8	5.91	17.030		
1,700.0	1,696.3	1,693.7	1,692.3	3.4	3.1	117.80	-6.1	103.7	108.4	102.1	6.31	17.185		
1,800.0	1,795.9	1,793.3	1,791.8	3.6	3.3	119.58	-6.7	109.1	116.2	109.5	6.70	17.341		
1,900.0	1,895.6	1,892.9	1,891.3	3.8	3.5	121.14	-7.3	114.6	124.2	117.1	7.10	17.493		
2,000.0	1,995.2	1,992.6	1,990.8	4.1	3.7	122.50	-7.9	120.1	132.2	124.7	7.49	17.641		
2,100.0	2,094.8	2,092.2	2,090.2	4.3	3.9	123.71	-8.5	125.5	140.2	132.3	7.89	17.782		
2,200.0	2,194.4	2,191.8	2,189.7	4.5	4.1	124.79	-9.1	131.0	148.4	140.1	8.28	17.917		
2,300.0	2,294.0	2,291.5	2,289.2	4.8	4.3	125.76	-9.7	136.5	156.5	147.9	8.68	18.045		
2,400.0	2,393.7	2,391.1	2,388.7	5.0	4.5	126.63	-10.3	141.9	164.8	155.7	9.07	18.166		
2,500.0	2,493.3	2,490.7	2,488.2	5.2	4.7	127.41	-10.9	147.4	173.0	163.5	9.46	18.281		
2,600.0	2,592.9	2,590.4	2,587.6	5.4	4.9	128.13	-11.5	152.9	181.3	171.4	9.86	18.390		
2,700.0	2,692.5	2,690.0	2,687.1	5.7	5.0	128.78	-12.1	158.3	189.6	179.3	10.25	18.494		
2,800.0	2,792.1	2,789.6	2,786.6	5.9	5.2	129.38	-12.7	163.8	197.9	187.3	10.65	18.591		
2,900.0	2,891.8	2,889.3	2,886.1	6.1	5.4	129.93	-13.3	169.3	206.3	195.2	11.04	18.684		
3,000.0	2,991.4	2,988.9	2,985.6	6.4	5.6	130.44	-13.9	174.7	214.6	203.2	11.43	18.772		
3,100.0	3,091.0	3,088.5	3,085.0	6.6	5.8	130.91	-14.6	180.2	223.0	211.2	11.83	18.855		
3,200.0	3,190.6	3,188.2	3,184.5	6.8	6.0	131.34	-15.2	185.7	231.4	219.2	12.22	18.934		
3,300.0	3,290.2	3,287.8	3,284.0	7.1	6.2	131.74	-15.8	191.1	239.8	227.2	12.61	19.009		
3,400.0	3,389.9	3,387.4	3,383.5	7.3	6.4	132.12	-16.4	196.6	248.2	235.2	13.01	19.081		
3,500.0	3,489.5	3,487.0	3,483.0	7.5	6.6	132.47	-17.0	202.1	256.6	243.2	13.40	19.149		
3,600.0	3,589.1	3,586.7	3,582.4	7.7	6.8	132.80	-17.6	207.5	265.1	251.3	13.80	19.214		
3,700.0	3,688.7	3,686.3	3,681.9	8.0	7.0	133.11	-18.2	213.0	273.5	259.3	14.19	19.276		
3,800.0	3,788.3	3,785.9	3,781.4	8.2	7.2	133.40	-18.8	218.5	282.0	267.4	14.58	19.335		
3,900.0	3,888.0	3,885.6	3,880.9	8.4	7.4	133.68	-19.4	223.9	290.4	275.5	14.98	19.391		
4,000.0	3,987.6	3,985.2	3,980.4	8.7	7.6	133.94	-20.0	229.4	298.9	283.5	15.37	19.445		
4,100.0	4,087.2	4,084.8	4,079.8	8.9	7.8	134.18	-20.6	234.9	307.4	291.6	15.76	19.497		
4,200.0	4,186.8	4,184.5	4,179.3	9.1	8.0	134.41	-21.2	240.3	315.8	299.7	16.16	19.546		
4,300.0	4,286.4	4,284.1	4,278.8	9.4	8.2	134.63	-21.8	245.8	324.3	307.8	16.55	19.594		
4,400.0	4,386.1	4,383.7	4,378.3	9.6	8.4	134.84	-22.4	251.3	332.8	315.9	16.95	19.639		
4,500.0	4,485.7	4,483.4	4,477.8	9.8	8.6	135.04	-23.0	256.7	341.3	324.0	17.34	19.683		
4,600.0	4,585.3	4,583.0	4,577.3	10.1	8.8	135.22	-23.7	262.2	349.8	332.1	17.73	19.725		
4,700.0	4,684.9	4,682.6	4,676.7	10.3	9.0	135.40	-24.3	267.7	358.3	340.2	18.13	19.765		
4,800.0	4,784.5	4,782.3	4,776.2	10.5	9.2	135.57	-24.9	273.1	366.8	348.3	18.52	19.804		
4,900.0	4,884.1	4,881.9	4,875.7	10.8	9.4	135.74	-25.5	278.6	375.3	356.4	18.91	19.841		
5,000.0	4,983.8	4,981.5	4,975.2	11.0	9.6	135.89	-26.1	284.1	383.8	364.5	19.31	19.877		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,100.0	5,083.4	5,081.2	5,074.7	11.2	9.8	136.04	-26.7	289.5	392.3	372.6	19.70	19.912	
5,200.0	5,183.0	5,180.8	5,174.1	11.4	10.0	136.19	-27.3	295.0	400.8	380.7	20.10	19.945	
5,300.0	5,282.6	5,280.4	5,273.6	11.7	10.2	136.32	-27.9	300.5	409.3	388.8	20.49	19.978	
5,400.0	5,382.2	5,380.1	5,373.1	11.9	10.4	136.45	-28.5	306.0	417.8	397.0	20.88	20.009	
5,500.0	5,481.9	5,479.7	5,472.6	12.1	10.6	136.58	-29.1	311.4	426.4	405.1	21.28	20.039	
5,600.0	5,581.5	5,579.3	5,572.1	12.4	10.8	136.70	-29.7	316.9	434.9	413.2	21.67	20.068	
5,700.0	5,681.1	5,679.0	5,671.5	12.6	11.0	136.82	-30.3	322.4	443.4	421.3	22.06	20.096	
5,800.0	5,780.7	5,778.6	5,771.0	12.8	11.2	136.93	-30.9	327.8	451.9	429.5	22.46	20.124	
5,900.0	5,880.3	5,878.2	5,870.5	13.1	11.4	137.04	-31.5	333.3	460.4	437.6	22.85	20.150	
6,000.0	5,980.0	5,977.9	5,970.0	13.3	11.6	137.14	-32.1	338.8	469.0	445.7	23.24	20.176	
6,100.0	6,079.6	6,077.5	6,069.5	13.5	11.8	137.24	-32.7	344.2	477.5	453.9	23.64	20.200	
6,200.0	6,179.2	6,177.1	6,168.9	13.8	12.0	137.34	-33.4	349.7	486.0	462.0	24.03	20.224	
6,300.0	6,278.8	6,276.8	6,268.4	14.0	12.2	137.43	-34.0	355.2	494.6	470.1	24.43	20.248	
6,400.0	6,378.4	6,376.4	6,367.9	14.2	12.4	137.52	-34.6	360.6	503.1	478.3	24.82	20.270	
6,500.0	6,478.1	6,476.0	6,467.4	14.5	12.6	137.61	-35.2	366.1	511.6	486.4	25.21	20.292	
6,600.0	6,577.7	6,575.7	6,566.9	14.7	12.8	137.69	-35.8	371.6	520.2	494.6	25.61	20.314	
6,700.0	6,677.3	6,675.3	6,666.3	14.9	13.0	137.77	-36.4	377.0	528.7	502.7	26.00	20.334	
6,800.0	6,776.9	6,774.9	6,765.8	15.1	13.2	137.85	-37.0	382.5	537.2	510.8	26.39	20.354	
6,900.0	6,876.5	6,874.5	6,865.3	15.4	13.4	137.93	-37.6	388.0	545.8	519.0	26.79	20.374	
7,000.0	6,976.2	6,974.2	6,964.8	15.6	13.6	138.00	-38.2	393.4	554.3	527.1	27.18	20.393	
7,100.0	7,075.8	7,073.8	7,064.3	15.8	13.8	138.08	-38.8	398.9	562.8	535.3	27.57	20.412	
7,147.2	7,122.8	7,120.8	7,111.2	15.9	13.9	138.11	-39.1	401.5	566.9	539.1	27.76	20.420	
7,150.0	7,125.6	7,123.6	7,114.0	16.0	13.9	136.60	-39.1	401.6	567.1	539.3	27.77	20.421	
7,200.0	7,175.5	7,173.6	7,163.9	16.0	14.0	54.68	-39.4	404.4	569.0	541.1	27.96	20.351	
7,250.0	7,225.4	7,812.5	7,679.8	16.1	16.0	-19.54	278.2	427.1	536.7	515.4	21.34	25.152	
7,300.0	7,274.8	7,898.5	7,712.3	16.0	16.6	-58.38	357.8	427.5	490.2	470.0	20.26	24.201	
7,350.0	7,323.4	7,913.3	7,716.6	16.0	16.8	-80.99	371.9	427.5	443.1	422.7	20.47	21.646	
7,400.0	7,370.8	7,908.6	7,715.3	15.9	16.7	-93.76	367.4	427.5	396.6	375.6	21.06	18.833	
7,450.0	7,416.7	7,895.9	7,711.5	15.8	16.6	-100.91	355.3	427.5	351.3	329.4	21.87	16.063	
7,500.0	7,460.7	7,879.2	7,706.1	15.7	16.5	-104.58	339.6	427.5	307.7	284.9	22.87	13.455	
7,550.0	7,502.4	7,860.2	7,699.3	15.5	16.3	-105.77	321.8	427.4	266.6	242.6	24.05	11.085	
7,600.0	7,541.6	7,839.8	7,691.4	15.4	16.2	-104.99	302.9	427.3	229.1	203.7	25.40	9.018	
7,650.0	7,578.0	7,818.3	7,682.4	15.2	16.0	-102.45	283.4	427.2	196.7	169.8	26.82	7.332	
7,700.0	7,611.2	7,796.2	7,672.4	15.1	15.9	-98.24	263.7	427.0	171.8	143.8	28.03	6.129	
7,750.0	7,641.0	7,773.6	7,661.3	14.9	15.8	-92.42	244.0	426.7	157.3	128.8	28.52	5.515	
7,782.7	7,658.6	7,758.6	7,653.6	14.8	15.7	-87.82	231.2	426.5	154.5	126.3	28.27	5.467 SF	
7,800.0	7,667.3	7,750.6	7,649.3	14.8	15.6	-85.17	224.4	426.4	155.3	127.3	27.96	5.554	
7,850.0	7,689.7	7,727.4	7,636.4	14.7	15.5	-76.87	205.1	426.0	165.3	138.6	26.74	6.184	
7,900.0	7,708.2	7,703.9	7,622.5	14.7	15.4	-68.09	186.1	425.6	184.7	159.1	25.60	7.214	
7,950.0	7,722.5	7,680.2	7,607.8	14.7	15.2	-59.48	167.6	425.1	210.0	185.0	24.95	8.417	
8,000.0	7,732.6	7,656.4	7,592.2	14.8	15.1	-51.58	149.6	424.6	238.7	213.9	24.75	9.643	
8,050.0	7,738.5	7,632.5	7,575.8	14.9	15.0	-44.68	132.2	424.0	269.0	244.1	24.87	10.815	
8,092.0	7,740.0	7,612.3	7,561.5	15.0	15.0	-39.70	118.1	423.4	294.8	269.7	25.12	11.736	
8,100.0	7,740.0	7,608.5	7,558.7	15.0	15.0	-39.25	115.4	423.3	299.8	274.6	25.18	11.907	
8,200.0	7,740.0	7,565.0	7,525.9	15.5	14.8	-34.44	86.9	422.0	366.6	340.6	25.98	14.110	
8,300.0	7,740.0	7,528.4	7,496.7	16.1	14.7	-30.89	64.9	420.8	440.3	413.5	26.77	16.449	
8,400.0	7,740.0	7,500.0	7,473.1	16.9	14.6	-28.44	49.2	419.8	519.1	491.6	27.51	18.869	
8,500.0	7,740.0	7,471.0	7,448.2	17.8	14.5	-26.18	34.3	418.7	601.6	573.6	28.05	21.451	
8,600.0	7,740.0	7,450.0	7,429.8	18.9	14.5	-24.69	24.4	417.8	687.1	658.5	28.57	24.048	
8,700.0	7,740.0	7,428.6	7,410.6	20.0	14.5	-23.28	14.9	416.9	774.8	745.8	28.97	26.741	
8,800.0	7,740.0	7,400.0	7,384.4	21.2	14.4	-21.56	3.4	415.7	864.4	835.2	29.22	29.584	
8,900.0	7,740.0	7,400.0	7,384.4	22.5	14.4	-21.56	3.4	415.7	955.1	925.4	29.71	32.146	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
9,000.0	7,740.0	7,383.1	7,368.7	23.9	14.4	-20.62	-2.8	415.0	1,047.1	1,017.2	29.98	34.933	
9,100.0	7,740.0	7,371.2	7,357.5	25.3	14.3	-20.00	-6.9	414.4	1,140.1	1,109.9	30.24	37.702	
9,200.0	7,740.0	7,350.0	7,337.4	26.7	14.3	-18.95	-13.5	413.4	1,234.1	1,203.7	30.40	40.588	
9,300.0	7,740.0	7,350.0	7,337.4	28.2	14.3	-18.95	-13.5	413.4	1,328.4	1,297.7	30.71	43.260	
9,400.0	7,740.0	7,350.0	7,337.4	29.7	14.3	-18.95	-13.5	413.4	1,423.5	1,392.5	30.98	45.949	
9,500.0	7,740.0	7,350.0	7,337.4	31.3	14.3	-18.95	-13.5	413.4	1,519.2	1,488.0	31.23	48.649	
9,600.0	7,740.0	7,327.4	7,315.8	32.8	14.3	-17.92	-19.8	412.4	1,614.8	1,583.5	31.33	51.547	
9,700.0	7,740.0	7,320.9	7,309.5	34.4	14.2	-17.63	-21.5	412.0	1,711.1	1,679.6	31.51	54.297	
9,800.0	7,740.0	7,300.0	7,289.2	36.0	14.2	-16.76	-26.3	411.0	1,808.0	1,776.3	31.61	57.187	
9,900.0	7,740.0	7,300.0	7,289.2	37.6	14.2	-16.76	-26.3	411.0	1,904.7	1,872.9	31.82	59.855	
10,000.0	7,740.0	7,300.0	7,289.2	39.2	14.2	-16.76	-26.3	411.0	2,001.7	1,969.7	32.02	62.518	
10,100.0	7,740.0	7,300.0	7,289.2	40.9	14.2	-16.76	-26.3	411.0	2,099.1	2,066.9	32.21	65.172	
10,200.0	7,740.0	7,300.0	7,289.2	42.5	14.2	-16.76	-26.3	411.0	2,196.6	2,164.2	32.39	67.816	
10,300.0	7,740.0	7,300.0	7,289.2	44.2	14.2	-16.76	-26.3	411.0	2,294.4	2,261.8	32.57	70.450	
10,400.0	7,740.0	7,300.0	7,289.2	45.8	14.2	-16.76	-26.3	411.0	2,392.4	2,359.6	32.74	73.071	
10,500.0	7,740.0	7,300.0	7,289.2	47.5	14.2	-16.76	-26.3	411.0	2,490.5	2,457.6	32.91	75.678	
10,600.0	7,740.0	7,300.0	7,289.2	49.1	14.2	-16.76	-26.3	411.0	2,588.8	2,555.7	33.07	78.273	
10,700.0	7,740.0	7,277.1	7,266.7	50.8	14.2	-15.88	-30.7	409.9	2,686.6	2,653.5	33.14	81.063	
10,800.0	7,740.0	7,274.1	7,263.8	52.5	14.2	-15.77	-31.2	409.7	2,785.0	2,751.7	33.29	83.655	
10,900.0	7,740.0	7,271.3	7,261.0	54.2	14.2	-15.67	-31.7	409.6	2,883.4	2,850.0	33.44	86.230	
11,000.0	7,740.0	7,250.0	7,240.0	55.9	14.1	-14.92	-34.8	408.5	2,982.3	2,948.8	33.51	88.993	
11,100.0	7,740.0	7,250.0	7,240.0	57.6	14.1	-14.92	-34.8	408.5	3,080.8	3,047.2	33.67	91.508	
11,200.0	7,740.0	7,250.0	7,240.0	59.3	14.1	-14.92	-34.8	408.5	3,179.5	3,145.6	33.82	94.008	
11,300.0	7,740.0	7,250.0	7,240.0	61.0	14.1	-14.92	-34.8	408.5	3,278.2	3,244.2	33.97	96.494	
11,400.0	7,740.0	7,250.0	7,240.0	62.7	14.1	-14.92	-34.8	408.5	3,377.0	3,342.8	34.12	98.964	
11,500.0	7,740.0	7,250.0	7,240.0	64.4	14.1	-14.92	-34.8	408.5	3,475.8	3,441.5	34.27	101.419	
11,600.0	7,740.0	7,250.0	7,240.0	66.1	14.1	-14.92	-34.8	408.5	3,574.7	3,540.3	34.42	103.859	
11,700.0	7,740.0	7,250.0	7,240.0	67.8	14.1	-14.92	-34.8	408.5	3,673.7	3,639.1	34.57	106.284	
11,800.0	7,740.0	7,250.0	7,240.0	69.5	14.1	-14.92	-34.8	408.5	3,772.7	3,738.0	34.71	108.693	
11,900.0	7,740.0	7,250.0	7,240.0	71.2	14.1	-14.92	-34.8	408.5	3,871.8	3,837.0	34.85	111.088	
12,000.0	7,740.0	7,250.0	7,240.0	72.9	14.1	-14.92	-34.8	408.5	3,970.9	3,935.9	35.00	113.467	
12,100.0	7,740.0	7,250.0	7,240.0	74.7	14.1	-14.92	-34.8	408.5	4,070.1	4,035.0	35.14	115.832	
12,200.0	7,740.0	7,250.0	7,240.0	76.4	14.1	-14.92	-34.8	408.5	4,169.3	4,134.0	35.28	118.181	
12,300.0	7,740.0	7,250.0	7,240.0	78.1	14.1	-14.92	-34.8	408.5	4,268.6	4,233.1	35.42	120.516	
12,400.0	7,740.0	7,250.0	7,240.0	79.8	14.1	-14.92	-34.8	408.5	4,367.8	4,332.3	35.56	122.836	
12,500.0	7,740.0	7,250.0	7,240.0	81.6	14.1	-14.92	-34.8	408.5	4,467.2	4,431.5	35.70	125.142	
12,600.0	7,740.0	7,250.0	7,240.0	83.3	14.1	-14.92	-34.8	408.5	4,566.5	4,530.7	35.83	127.433	
12,700.0	7,740.0	7,250.0	7,240.0	85.0	14.1	-14.92	-34.8	408.5	4,665.9	4,629.9	35.97	129.709	
12,800.0	7,740.0	7,250.0	7,240.0	86.7	14.1	-14.92	-34.8	408.5	4,765.3	4,729.1	36.11	131.972	
12,900.0	7,740.0	7,250.0	7,240.0	88.5	14.1	-14.92	-34.8	408.5	4,864.7	4,828.4	36.24	134.220	
13,000.0	7,740.0	7,250.0	7,240.0	90.2	14.1	-14.92	-34.8	408.5	4,964.1	4,927.7	36.38	136.454	
13,100.0	7,740.0	7,250.0	7,240.0	91.9	14.1	-14.92	-34.8	408.5	5,063.6	5,027.1	36.51	138.675	
13,200.0	7,740.0	7,250.0	7,240.0	93.7	14.1	-14.92	-34.8	408.5	5,163.1	5,126.4	36.65	140.881	
13,300.0	7,740.0	7,250.0	7,240.0	95.4	14.1	-14.92	-34.8	408.5	5,262.6	5,225.8	36.78	143.074	
13,400.0	7,740.0	7,250.0	7,240.0	97.1	14.1	-14.92	-34.8	408.5	5,362.1	5,325.2	36.92	145.254	
13,500.0	7,740.0	7,250.0	7,240.0	98.9	14.1	-14.92	-34.8	408.5	5,461.6	5,424.6	37.05	147.420	
13,600.0	7,740.0	7,250.0	7,240.0	100.6	14.1	-14.92	-34.8	408.5	5,561.2	5,524.0	37.18	149.573	
13,700.0	7,740.0	7,250.0	7,240.0	102.3	14.1	-14.92	-34.8	408.5	5,660.8	5,623.5	37.31	151.712	
13,800.0	7,740.0	7,250.0	7,240.0	104.1	14.1	-14.92	-34.8	408.5	5,760.4	5,722.9	37.44	153.839	
13,900.0	7,740.0	7,250.0	7,240.0	105.8	14.1	-14.92	-34.8	408.5	5,860.0	5,822.4	37.58	155.953	
14,000.0	7,740.0	7,226.7	7,216.9	107.5	14.1	-14.16	-37.3	407.2	5,959.1	5,921.4	37.63	158.341	
14,100.0	7,740.0	7,226.0	7,216.1	109.3	14.1	-14.14	-37.3	407.2	6,058.7	6,020.9	37.76	160.440	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)					
14,200.0	7,740.0	7,225.2	7,215.4	111.0	14.1	-14.12	-37.4	407.2	6,158.3	6,120.4	37.89	162.527			
14,300.0	7,740.0	7,224.5	7,214.7	112.8	14.1	-14.10	-37.5	407.1	6,257.9	6,219.9	38.02	164.601			
14,400.0	7,740.0	7,223.8	7,214.0	114.5	14.1	-14.07	-37.5	407.1	6,357.5	6,319.4	38.15	166.663			
14,500.0	7,740.0	7,223.2	7,213.3	116.2	14.1	-14.05	-37.6	407.0	6,457.2	6,418.9	38.27	168.712			
14,600.0	7,740.0	7,200.0	7,190.3	118.0	14.0	-13.36	-39.0	405.8	6,557.3	6,519.0	38.33	171.064			
14,700.0	7,740.0	7,200.0	7,190.3	119.7	14.0	-13.36	-39.0	405.8	6,656.9	6,618.5	38.46	173.082			
14,800.0	7,740.0	7,200.0	7,190.3	121.5	14.0	-13.36	-39.0	405.8	6,756.6	6,718.0	38.59	175.088			
14,900.0	7,740.0	7,200.0	7,190.3	123.2	14.0	-13.36	-39.0	405.8	6,856.2	6,817.5	38.72	177.083			
15,000.0	7,740.0	7,200.0	7,190.3	124.9	14.0	-13.36	-39.0	405.8	6,955.9	6,917.0	38.85	179.066			
15,100.0	7,740.0	7,200.0	7,190.3	126.7	14.0	-13.36	-39.0	405.8	7,055.6	7,016.6	38.97	181.038			
15,200.0	7,740.0	7,200.0	7,190.3	128.4	14.0	-13.36	-39.0	405.8	7,155.2	7,116.1	39.10	182.998			
15,300.0	7,740.0	7,200.0	7,190.3	130.2	14.0	-13.36	-39.0	405.8	7,254.9	7,215.7	39.23	184.947			
15,400.0	7,740.0	7,200.0	7,190.3	131.9	14.0	-13.36	-39.0	405.8	7,354.6	7,315.3	39.35	186.886			
15,500.0	7,740.0	7,200.0	7,190.3	133.7	14.0	-13.36	-39.0	405.8	7,454.3	7,414.9	39.48	188.813			
15,600.0	7,740.0	7,200.0	7,190.3	135.4	14.0	-13.36	-39.0	405.8	7,554.1	7,514.5	39.61	190.730			
15,700.0	7,740.0	7,200.0	7,190.3	137.1	14.0	-13.36	-39.0	405.8	7,653.8	7,614.1	39.73	192.636			
15,800.0	7,740.0	7,200.0	7,190.3	138.9	14.0	-13.36	-39.0	405.8	7,753.5	7,713.7	39.86	194.531			
15,900.0	7,740.0	7,200.0	7,190.3	140.6	14.0	-13.36	-39.0	405.8	7,853.3	7,813.3	39.98	196.416			
15,953.0	7,740.0	7,200.0	7,190.3	141.6	14.0	-13.36	-39.0	405.8	7,906.1	7,866.0	40.05	197.409			

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	90.36	-0.4	59.9	59.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.36	-0.4	59.9	59.9	59.6	0.30	197.227		
200.0	200.0	200.0	200.0	0.3	0.3	90.36	-0.4	59.9	59.9	59.2	0.65	91.758		
300.0	300.0	300.0	300.0	0.5	0.5	90.36	-0.4	59.9	59.9	58.9	1.00	59.787		
400.0	400.0	400.0	400.0	0.7	0.7	90.36	-0.4	59.9	59.9	58.5	1.35	44.338		
500.0	500.0	500.0	500.0	0.9	0.8	64.77	-0.4	59.9	59.5	57.8	1.70	35.003		
569.0	569.0	568.3	568.3	1.0	1.0	66.21	-0.4	60.3	59.3	57.3	1.94	30.512 CC		
600.0	600.0	598.9	598.9	1.0	1.0	67.11	-0.5	60.7	59.3	57.3	2.05	28.927 ES		
700.0	699.9	697.8	697.8	1.2	1.2	70.99	-0.7	63.3	60.3	57.9	2.41	25.082		
800.0	799.7	796.6	796.6	1.4	1.4	76.08	-1.2	67.5	62.9	60.2	2.77	22.710		
899.9	899.3	895.1	894.7	1.6	1.6	81.88	-1.8	73.4	67.4	64.2	3.15	21.397		
1,000.0	999.0	993.5	992.9	1.8	1.8	87.22	-2.6	81.0	74.1	70.6	3.54	20.944		
1,100.0	1,098.6	1,092.3	1,091.3	2.0	2.0	91.28	-3.6	90.1	82.8	78.8	3.93	21.039		
1,200.0	1,198.2	1,191.8	1,190.3	2.3	2.2	94.50	-4.6	99.6	92.0	87.7	4.34	21.207		
1,300.0	1,297.8	1,291.2	1,289.3	2.5	2.4	97.14	-5.7	109.0	101.5	96.7	4.75	21.375		
1,400.0	1,397.5	1,390.7	1,388.3	2.7	2.6	99.32	-6.7	118.5	111.1	106.0	5.16	21.535		
1,500.0	1,497.1	1,490.1	1,487.3	2.9	2.9	101.15	-7.7	127.9	120.9	115.3	5.58	21.684		
1,600.0	1,596.7	1,589.6	1,586.2	3.2	3.1	102.71	-8.7	137.4	130.8	124.8	5.99	21.820		
1,700.0	1,696.3	1,689.0	1,685.2	3.4	3.3	104.04	-9.7	146.8	140.8	134.4	6.42	21.944		
1,800.0	1,795.9	1,788.5	1,784.2	3.6	3.6	105.20	-10.7	156.3	150.8	144.0	6.84	22.057		
1,900.0	1,895.6	1,887.9	1,883.2	3.8	3.8	106.21	-11.8	165.7	160.9	153.7	7.26	22.160		
2,000.0	1,995.2	1,987.4	1,982.2	4.1	4.0	107.11	-12.8	175.2	171.1	163.4	7.69	22.254		
2,100.0	2,094.8	2,086.8	2,081.2	4.3	4.3	107.90	-13.8	184.6	181.2	173.1	8.11	22.339		
2,200.0	2,194.4	2,186.3	2,180.2	4.5	4.5	108.61	-14.8	194.1	191.4	182.9	8.54	22.418		
2,300.0	2,294.0	2,285.7	2,279.2	4.8	4.7	109.25	-15.8	203.5	201.7	192.7	8.97	22.490		
2,400.0	2,393.7	2,385.2	2,378.2	5.0	5.0	109.83	-16.9	212.9	211.9	202.5	9.40	22.557		
2,500.0	2,493.3	2,484.6	2,477.2	5.2	5.2	110.35	-17.9	222.4	222.2	212.4	9.82	22.618		
2,600.0	2,592.9	2,584.1	2,576.2	5.4	5.5	110.82	-18.9	231.8	232.5	222.2	10.25	22.675		
2,700.0	2,692.5	2,683.5	2,675.2	5.7	5.7	111.26	-19.9	241.3	242.8	232.1	10.68	22.728		
2,800.0	2,792.1	2,783.0	2,774.2	5.9	5.9	111.66	-20.9	250.7	253.1	242.0	11.11	22.777		
2,900.0	2,891.8	2,882.4	2,873.2	6.1	6.2	112.03	-21.9	260.2	263.4	251.9	11.54	22.823		
3,000.0	2,991.4	2,981.9	2,972.2	6.4	6.4	112.37	-23.0	269.6	273.8	261.8	11.97	22.866		
3,100.0	3,091.0	3,081.3	3,071.2	6.6	6.7	112.69	-24.0	279.1	284.1	271.7	12.40	22.906		
3,200.0	3,190.6	3,180.8	3,170.2	6.8	6.9	112.98	-25.0	288.5	294.5	281.6	12.84	22.943		
3,300.0	3,290.2	3,280.2	3,269.2	7.1	7.1	113.26	-26.0	298.0	304.8	291.6	13.27	22.979		
3,400.0	3,389.9	3,379.7	3,368.2	7.3	7.4	113.51	-27.0	307.4	315.2	301.5	13.70	23.012		
3,500.0	3,489.5	3,479.1	3,467.2	7.5	7.6	113.75	-28.0	316.9	325.6	311.5	14.13	23.043		
3,600.0	3,589.1	3,578.6	3,566.2	7.7	7.8	113.98	-29.1	326.3	336.0	321.4	14.56	23.073		
3,700.0	3,688.7	3,678.0	3,665.2	8.0	8.1	114.19	-30.1	335.8	346.4	331.4	14.99	23.101		
3,800.0	3,788.3	3,777.5	3,764.2	8.2	8.3	114.39	-31.1	345.2	356.7	341.3	15.43	23.127		
3,900.0	3,888.0	3,876.9	3,863.2	8.4	8.6	114.58	-32.1	354.7	367.1	351.3	15.86	23.153		
4,000.0	3,987.6	3,976.4	3,962.2	8.7	8.8	114.75	-33.1	364.1	377.5	361.2	16.29	23.177		
4,100.0	4,087.2	4,075.8	4,061.2	8.9	9.0	114.92	-34.1	373.5	387.9	371.2	16.72	23.199		
4,200.0	4,186.8	4,175.3	4,160.2	9.1	9.3	115.08	-35.2	383.0	398.3	381.2	17.15	23.221		
4,300.0	4,286.4	4,274.7	4,259.2	9.4	9.5	115.23	-36.2	392.4	408.7	391.2	17.59	23.242		
4,400.0	4,386.1	4,374.2	4,358.1	9.6	9.8	115.38	-37.2	401.9	419.2	401.1	18.02	23.261		
4,500.0	4,485.7	4,473.7	4,457.1	9.8	10.0	115.51	-38.2	411.3	429.6	411.1	18.45	23.280		
4,600.0	4,585.3	4,573.1	4,556.1	10.1	10.2	115.64	-39.2	420.8	440.0	421.1	18.88	23.298		
4,700.0	4,684.9	4,672.6	4,655.1	10.3	10.5	115.77	-40.2	430.2	450.4	431.1	19.32	23.316		
4,800.0	4,784.5	4,772.0	4,754.1	10.5	10.7	115.89	-41.3	439.7	460.8	441.1	19.75	23.332		
4,900.0	4,884.1	4,871.5	4,853.1	10.8	11.0	116.00	-42.3	449.1	471.2	451.1	20.18	23.348		
5,000.0	4,983.8	4,970.9	4,952.1	11.0	11.2	116.11	-43.3	458.6	481.7	461.0	20.62	23.363		

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 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,100.0	5,083.4	5,070.4	5,051.1	11.2	11.4	116.21	-44.3	468.0	492.1	471.0	21.05	23.378	
5,200.0	5,183.0	5,169.8	5,150.1	11.4	11.7	116.31	-45.3	477.5	502.5	481.0	21.48	23.392	
5,300.0	5,282.6	5,269.3	5,249.1	11.7	11.9	116.41	-46.3	486.9	512.9	491.0	21.92	23.405	
5,400.0	5,382.2	5,368.7	5,348.1	11.9	12.2	116.50	-47.4	496.4	523.4	501.0	22.35	23.418	
5,500.0	5,481.9	5,468.2	5,447.1	12.1	12.4	116.59	-48.4	505.8	533.8	511.0	22.78	23.431	
5,600.0	5,581.5	5,567.6	5,546.1	12.4	12.6	116.67	-49.4	515.2	544.2	521.0	23.21	23.443	
5,700.0	5,681.1	5,667.1	5,645.1	12.6	12.9	116.75	-50.4	524.7	554.7	531.0	23.65	23.455	
5,800.0	5,780.7	5,766.5	5,744.1	12.8	13.1	116.83	-51.4	534.1	565.1	541.0	24.08	23.466	
5,900.0	5,880.3	5,866.0	5,843.1	13.1	13.4	116.91	-52.5	543.6	575.5	551.0	24.51	23.477	
6,000.0	5,980.0	5,965.4	5,942.1	13.3	13.6	116.98	-53.5	553.0	586.0	561.0	24.95	23.487	
6,100.0	6,079.6	6,064.9	6,041.1	13.5	13.8	117.05	-54.5	562.5	596.4	571.0	25.38	23.497	
6,200.0	6,179.2	6,164.3	6,140.1	13.8	14.1	117.12	-55.5	571.9	606.8	581.0	25.81	23.507	
6,300.0	6,278.8	6,263.8	6,239.1	14.0	14.3	117.19	-56.5	581.4	617.3	591.0	26.25	23.517	
6,400.0	6,378.4	6,363.2	6,338.1	14.2	14.6	117.25	-57.5	590.8	627.7	601.0	26.68	23.526	
6,500.0	6,478.1	6,462.7	6,437.1	14.5	14.8	117.31	-58.6	600.3	638.1	611.0	27.12	23.535	
6,600.0	6,577.7	6,562.1	6,536.1	14.7	15.0	117.37	-59.6	609.7	648.6	621.0	27.55	23.543	
6,700.0	6,677.3	6,661.6	6,635.1	14.9	15.3	117.43	-60.6	619.2	659.0	631.0	27.98	23.552	
6,800.0	6,776.9	6,761.0	6,734.1	15.1	15.5	117.48	-61.6	628.6	669.5	641.0	28.42	23.560	
6,900.0	6,876.5	6,860.5	6,833.1	15.4	15.8	117.54	-62.6	638.1	679.9	651.1	28.85	23.568	
7,000.0	6,976.2	7,200.0	7,163.9	15.6	16.5	115.03	-13.3	670.2	689.1	659.9	29.17	23.618	
7,100.0	7,075.8	7,804.9	7,497.6	15.8	19.6	74.06	456.2	707.0	624.1	598.7	25.38	24.588	
7,147.2	7,122.8	7,834.6	7,499.5	15.9	19.9	70.32	485.9	707.5	592.1	565.9	26.16	22.634	
7,150.0	7,125.6	7,835.8	7,499.6	16.0	19.9	68.40	487.1	707.5	590.2	564.0	26.21	22.517	
7,200.0	7,175.5	7,845.2	7,499.9	16.0	20.0	-18.88	496.4	707.6	558.4	531.2	27.18	20.540	
7,250.0	7,225.4	7,841.2	7,499.8	16.1	20.0	-71.06	492.5	707.6	529.2	501.0	28.18	18.779	
7,300.0	7,274.8	7,830.4	7,499.4	16.0	19.9	-81.97	481.6	707.4	503.4	474.3	29.11	17.294	
7,350.0	7,323.4	7,815.6	7,498.5	16.0	19.7	-86.11	466.9	707.2	481.6	451.7	29.89	16.112	
7,400.0	7,370.8	7,798.3	7,497.0	15.9	19.6	-87.69	449.7	706.8	464.0	433.6	30.44	15.244	
7,450.0	7,416.7	7,779.4	7,494.7	15.8	19.4	-87.82	430.9	706.4	451.1	420.4	30.71	14.690	
7,500.0	7,460.7	7,759.3	7,491.6	15.7	19.2	-86.94	411.1	705.9	443.0	412.3	30.65	14.451 SF	
7,550.0	7,502.4	7,738.4	7,487.7	15.5	19.1	-85.29	390.5	705.3	439.7	409.4	30.29	14.518	
7,559.8	7,510.3	7,734.2	7,486.8	15.5	19.0	-84.89	386.4	705.2	439.6	409.5	30.18	14.565	
7,600.0	7,541.6	7,716.8	7,482.9	15.4	18.9	-83.01	369.5	704.7	441.1	411.4	29.66	14.873	
7,650.0	7,578.0	7,694.8	7,477.2	15.2	18.7	-80.23	348.3	703.9	446.7	417.8	28.83	15.492	
7,700.0	7,611.2	7,672.4	7,470.5	15.1	18.6	-77.05	326.9	703.0	456.0	428.1	27.92	16.331	
7,750.0	7,641.0	7,650.0	7,463.0	14.9	18.4	-73.62	305.8	702.1	468.5	441.5	27.01	17.344	
7,800.0	7,667.3	7,626.7	7,454.3	14.8	18.2	-69.94	284.2	701.0	483.5	457.3	26.20	18.455	
7,850.0	7,689.7	7,600.0	7,443.4	14.7	18.1	-65.91	259.9	699.7	500.5	475.0	25.50	19.627	
7,900.0	7,708.2	7,580.2	7,434.5	14.7	18.0	-62.52	242.2	698.7	518.8	493.7	25.04	20.715	
7,950.0	7,722.5	7,550.0	7,419.8	14.7	17.8	-58.44	215.9	697.0	538.1	513.4	24.68	21.804	
8,000.0	7,732.6	7,533.1	7,411.0	14.8	17.7	-55.50	201.5	696.0	557.7	533.0	24.66	22.612	
8,050.0	7,738.5	7,500.0	7,392.5	14.9	17.5	-51.74	174.1	694.0	577.5	552.9	24.61	23.470	
8,092.0	7,740.0	7,489.5	7,386.3	15.0	17.5	-49.77	165.7	693.3	593.8	568.8	24.93	23.819	
8,100.0	7,740.0	7,485.7	7,384.0	15.0	17.5	-49.57	162.6	693.1	596.9	571.9	24.97	23.900	
8,200.0	7,740.0	7,450.0	7,361.7	15.5	17.3	-47.68	134.9	690.6	640.1	614.3	25.84	24.770	
8,300.0	7,740.0	7,400.0	7,327.6	16.1	17.1	-44.96	98.5	687.0	690.5	663.9	26.60	25.956	
8,400.0	7,740.0	7,368.3	7,304.4	16.9	17.0	-43.22	77.1	684.6	747.6	719.9	27.64	27.049	
8,500.0	7,740.0	7,350.0	7,290.5	17.8	16.9	-42.22	65.3	683.1	810.5	781.8	28.76	28.181	
8,600.0	7,740.0	7,300.0	7,250.6	18.9	16.8	-39.53	35.4	679.0	878.3	848.9	29.34	29.938	
8,700.0	7,740.0	7,300.0	7,250.6	20.0	16.8	-39.53	35.4	679.0	950.2	919.7	30.43	31.220	
8,800.0	7,740.0	7,267.5	7,223.4	21.2	16.7	-37.82	17.9	676.2	1,025.4	994.4	31.01	33.069	
8,900.0	7,740.0	7,250.0	7,208.3	22.5	16.7	-36.92	9.2	674.7	1,103.9	1,072.2	31.65	34.882	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
9,000.0	7,740.0	7,232.2	7,192.8	23.9	16.6	-36.02	0.8	673.1	1,184.8	1,152.6	32.21	36.781	
9,100.0	7,740.0	7,217.3	7,179.5	25.3	16.6	-35.28	-6.0	671.7	1,267.9	1,235.2	32.69	38.780	
9,200.0	7,740.0	7,200.0	7,163.9	26.7	16.5	-34.43	-13.3	670.2	1,352.9	1,319.8	33.08	40.898	
9,300.0	7,740.0	7,200.0	7,163.9	28.2	16.5	-34.43	-13.3	670.2	1,439.4	1,405.9	33.57	42.878	
9,400.0	7,740.0	7,180.4	7,145.9	29.7	16.5	-33.50	-21.0	668.4	1,527.2	1,493.3	33.85	45.121	
9,500.0	7,740.0	7,170.2	7,136.5	31.3	16.5	-33.02	-24.8	667.4	1,616.2	1,582.0	34.17	47.304	
9,600.0	7,740.0	7,150.0	7,117.7	32.8	16.4	-32.10	-31.7	665.6	1,706.4	1,672.0	34.39	49.620	
9,700.0	7,740.0	7,150.0	7,117.7	34.4	16.4	-32.10	-31.7	665.6	1,797.1	1,762.4	34.72	51.759	
9,800.0	7,740.0	7,150.0	7,117.7	36.0	16.4	-32.10	-31.7	665.6	1,888.8	1,853.8	35.02	53.929	
9,900.0	7,740.0	7,150.0	7,117.7	37.6	16.4	-32.10	-31.7	665.6	1,981.3	1,946.0	35.30	56.123	
10,000.0	7,740.0	7,130.3	7,099.1	39.2	16.4	-31.22	-37.9	663.7	2,074.1	2,038.7	35.44	58.522	
10,100.0	7,740.0	7,124.1	7,093.1	40.9	16.4	-30.95	-39.7	663.1	2,167.6	2,132.0	35.65	60.801	
10,200.0	7,740.0	7,100.0	7,070.0	42.5	16.3	-29.93	-46.1	660.9	2,262.0	2,226.2	35.74	63.281	
10,300.0	7,740.0	7,100.0	7,070.0	44.2	16.3	-29.93	-46.1	660.9	2,356.2	2,320.2	35.97	65.505	
10,400.0	7,740.0	7,100.0	7,070.0	45.8	16.3	-29.93	-46.1	660.9	2,450.9	2,414.7	36.18	67.734	
10,500.0	7,740.0	7,100.0	7,070.0	47.5	16.3	-29.93	-46.1	660.9	2,546.0	2,509.6	36.39	69.968	
10,600.0	7,740.0	7,100.0	7,070.0	49.1	16.3	-29.93	-46.1	660.9	2,641.4	2,604.8	36.58	72.204	
10,700.0	7,740.0	7,100.0	7,070.0	50.8	16.3	-29.93	-46.1	660.9	2,737.2	2,700.4	36.77	74.440	
10,800.0	7,740.0	7,100.0	7,070.0	52.5	16.3	-29.93	-46.1	660.9	2,833.3	2,796.3	36.95	76.675	
10,900.0	7,740.0	7,100.0	7,070.0	54.2	16.3	-29.93	-46.1	660.9	2,929.6	2,892.5	37.13	78.907	
11,000.0	7,740.0	7,100.0	7,070.0	55.9	16.3	-29.93	-46.1	660.9	3,026.2	2,988.9	37.30	81.135	
11,100.0	7,740.0	7,100.0	7,070.0	57.6	16.3	-29.93	-46.1	660.9	3,123.0	3,085.5	37.46	83.359	
11,200.0	7,740.0	7,076.2	7,046.9	59.3	16.3	-28.95	-51.5	658.6	3,219.4	3,181.9	37.51	85.824	
11,300.0	7,740.0	7,073.2	7,044.0	61.0	16.3	-28.83	-52.1	658.3	3,316.4	3,278.7	37.66	88.067	
11,400.0	7,740.0	7,050.0	7,021.3	62.7	16.2	-27.92	-56.2	656.1	3,414.0	3,376.2	37.70	90.545	
11,500.0	7,740.0	7,050.0	7,021.3	64.4	16.2	-27.92	-56.2	656.1	3,511.2	3,473.3	37.86	92.739	
11,600.0	7,740.0	7,050.0	7,021.3	66.1	16.2	-27.92	-56.2	656.1	3,608.5	3,570.5	38.01	94.926	
11,700.0	7,740.0	7,050.0	7,021.3	67.8	16.2	-27.92	-56.2	656.1	3,706.0	3,667.8	38.16	97.105	
11,800.0	7,740.0	7,050.0	7,021.3	69.5	16.2	-27.92	-56.2	656.1	3,803.6	3,765.3	38.31	99.277	
11,900.0	7,740.0	7,050.0	7,021.3	71.2	16.2	-27.92	-56.2	656.1	3,901.4	3,862.9	38.46	101.441	
12,000.0	7,740.0	7,050.0	7,021.3	72.9	16.2	-27.92	-56.2	656.1	3,999.2	3,960.6	38.60	103.596	
12,100.0	7,740.0	7,050.0	7,021.3	74.7	16.2	-27.92	-56.2	656.1	4,097.2	4,058.4	38.75	105.742	
12,200.0	7,740.0	7,050.0	7,021.3	76.4	16.2	-27.92	-56.2	656.1	4,195.2	4,156.4	38.89	107.880	
12,300.0	7,740.0	7,050.0	7,021.3	78.1	16.2	-27.92	-56.2	656.1	4,293.4	4,254.4	39.03	110.008	
12,400.0	7,740.0	7,050.0	7,021.3	79.8	16.2	-27.92	-56.2	656.1	4,391.6	4,352.5	39.17	112.127	
12,500.0	7,740.0	7,050.0	7,021.3	81.6	16.2	-27.92	-56.2	656.1	4,489.9	4,450.6	39.30	114.237	
12,600.0	7,740.0	7,050.0	7,021.3	83.3	16.2	-27.92	-56.2	656.1	4,588.3	4,548.9	39.44	116.337	
12,700.0	7,740.0	7,050.0	7,021.3	85.0	16.2	-27.92	-56.2	656.1	4,686.8	4,647.2	39.57	118.428	
12,800.0	7,740.0	7,050.0	7,021.3	86.7	16.2	-27.92	-56.2	656.1	4,785.3	4,745.6	39.71	120.510	
12,900.0	7,740.0	7,050.0	7,021.3	88.5	16.2	-27.92	-56.2	656.1	4,883.8	4,844.0	39.84	122.581	
13,000.0	7,740.0	7,050.0	7,021.3	90.2	16.2	-27.92	-56.2	656.1	4,982.5	4,942.5	39.97	124.643	
13,100.0	7,740.0	7,050.0	7,021.3	91.9	16.2	-27.92	-56.2	656.1	5,081.2	5,041.1	40.11	126.695	
13,200.0	7,740.0	7,050.0	7,021.3	93.7	16.2	-27.92	-56.2	656.1	5,179.9	5,139.7	40.24	128.738	
13,300.0	7,740.0	7,050.0	7,021.3	95.4	16.2	-27.92	-56.2	656.1	5,278.7	5,238.3	40.37	130.771	
13,400.0	7,740.0	7,050.0	7,021.3	97.1	16.2	-27.92	-56.2	656.1	5,377.5	5,337.0	40.50	132.794	
13,500.0	7,740.0	7,050.0	7,021.3	98.9	16.2	-27.92	-56.2	656.1	5,476.4	5,435.8	40.62	134.807	
13,600.0	7,740.0	7,050.0	7,021.3	100.6	16.2	-27.92	-56.2	656.1	5,575.3	5,534.5	40.75	136.811	
13,700.0	7,740.0	7,050.0	7,021.3	102.3	16.2	-27.92	-56.2	656.1	5,674.2	5,633.4	40.88	138.805	
13,800.0	7,740.0	7,050.0	7,021.3	104.1	16.2	-27.92	-56.2	656.1	5,773.2	5,732.2	41.01	140.789	
13,900.0	7,740.0	7,026.9	6,998.5	105.8	16.2	-27.06	-59.5	653.9	5,871.7	5,830.7	41.04	143.072	
14,000.0	7,740.0	7,025.8	6,997.5	107.5	16.2	-27.02	-59.6	653.8	5,970.7	5,929.6	41.16	145.053	
14,100.0	7,740.0	7,024.8	6,996.5	109.3	16.1	-26.98	-59.7	653.7	6,069.8	6,028.5	41.28	147.024	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,200.0	7,740.0	7,023.8	6,995.5	111.0	16.1	-26.94	-59.8	653.6	6,168.8	6,127.4	41.41	148.985		
14,300.0	7,740.0	7,000.0	6,971.9	112.8	16.1	-26.09	-62.1	651.3	6,268.4	6,227.0	41.44	151.277		
14,400.0	7,740.0	7,000.0	6,971.9	114.5	16.1	-26.09	-62.1	651.3	6,367.5	6,325.9	41.56	153.206		
14,500.0	7,740.0	7,000.0	6,971.9	116.2	16.1	-26.09	-62.1	651.3	6,466.6	6,424.9	41.69	155.126		
14,600.0	7,740.0	7,000.0	6,971.9	118.0	16.1	-26.09	-62.1	651.3	6,565.8	6,523.9	41.81	157.036		
14,700.0	7,740.0	7,000.0	6,971.9	119.7	16.1	-26.09	-62.1	651.3	6,664.9	6,623.0	41.93	158.937		
14,800.0	7,740.0	7,000.0	6,971.9	121.5	16.1	-26.09	-62.1	651.3	6,764.1	6,722.0	42.06	160.829		
14,900.0	7,740.0	7,000.0	6,971.9	123.2	16.1	-26.09	-62.1	651.3	6,863.3	6,821.1	42.18	162.711		
15,000.0	7,740.0	7,000.0	6,971.9	124.9	16.1	-26.09	-62.1	651.3	6,962.5	6,920.2	42.30	164.584		
15,100.0	7,740.0	7,000.0	6,971.9	126.7	16.1	-26.09	-62.1	651.3	7,061.8	7,019.4	42.43	166.449		
15,200.0	7,740.0	7,000.0	6,971.9	128.4	16.1	-26.09	-62.1	651.3	7,161.1	7,118.5	42.55	168.304		
15,300.0	7,740.0	7,000.0	6,971.9	130.2	16.1	-26.09	-62.1	651.3	7,260.4	7,217.7	42.67	170.150		
15,400.0	7,740.0	7,000.0	6,971.9	131.9	16.1	-26.09	-62.1	651.3	7,359.7	7,316.9	42.79	171.988		
15,500.0	7,740.0	7,000.0	6,971.9	133.7	16.1	-26.09	-62.1	651.3	7,459.0	7,416.1	42.91	173.817		
15,600.0	7,740.0	7,000.0	6,971.9	135.4	16.1	-26.09	-62.1	651.3	7,558.4	7,515.3	43.03	175.636		
15,700.0	7,740.0	7,000.0	6,971.9	137.1	16.1	-26.09	-62.1	651.3	7,657.7	7,614.6	43.15	177.447		
15,800.0	7,740.0	7,000.0	6,971.9	138.9	16.1	-26.09	-62.1	651.3	7,757.1	7,713.8	43.28	179.250		
15,900.0	7,740.0	7,000.0	6,971.9	140.6	16.1	-26.09	-62.1	651.3	7,856.5	7,813.1	43.40	181.044		
15,953.0	7,740.0	7,000.0	6,971.9	141.6	16.1	-26.09	-62.1	651.3	7,909.1	7,865.7	43.46	181.990		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total 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	90.31	-0.4	67.5	67.5					
100.0	100.0	100.0	100.0	0.2	0.2	90.31	-0.4	67.5	67.5	67.1	0.30	222.110		
200.0	200.0	200.0	200.0	0.3	0.3	90.31	-0.4	67.5	67.5	66.8	0.65	103.334		
300.0	300.0	300.0	300.0	0.5	0.5	90.31	-0.4	67.5	67.5	66.5	1.00	67.329		
400.0	400.0	400.0	400.0	0.7	0.7	90.31	-0.4	67.5	67.5	66.1	1.35	49.932 CC, ES		
500.0	500.0	498.8	498.8	0.9	0.8	64.66	-0.4	68.3	67.9	66.2	1.70	40.004		
600.0	600.0	597.6	597.6	1.0	1.0	66.68	-0.6	70.9	69.4	67.4	2.05	33.914		
700.0	699.9	696.3	696.1	1.2	1.2	69.85	-0.9	75.1	72.1	69.7	2.40	30.031		
800.0	799.7	794.8	794.5	1.4	1.4	73.87	-1.3	81.0	76.3	73.5	2.77	27.569		
899.9	899.3	893.0	892.4	1.6	1.6	78.41	-1.8	88.6	82.0	78.9	3.14	26.095		
1,000.0	999.0	991.1	990.1	1.8	1.8	82.64	-2.4	97.8	89.9	86.3	3.53	25.437		
1,100.0	1,098.6	1,088.9	1,087.3	2.0	2.1	85.87	-3.2	108.7	99.7	95.8	3.93	25.378		
1,200.0	1,198.2	1,188.0	1,185.6	2.3	2.3	88.35	-4.0	120.8	110.7	106.4	4.34	25.537		
1,300.0	1,297.8	1,287.3	1,284.2	2.5	2.6	90.39	-4.8	132.8	122.0	117.2	4.75	25.670		
1,400.0	1,397.5	1,386.6	1,382.7	2.7	2.8	92.08	-5.6	144.9	133.3	128.1	5.17	25.781		
1,500.0	1,497.1	1,485.9	1,481.3	2.9	3.1	93.50	-6.4	157.0	144.8	139.2	5.59	25.874		
1,600.0	1,596.7	1,585.2	1,579.8	3.2	3.3	94.72	-7.3	169.0	156.3	150.3	6.02	25.952		
1,700.0	1,696.3	1,684.5	1,678.4	3.4	3.6	95.77	-8.1	181.1	167.9	161.4	6.45	26.017		
1,800.0	1,795.9	1,783.7	1,776.9	3.6	3.9	96.68	-8.9	193.2	179.5	172.6	6.88	26.072		
1,900.0	1,895.6	1,883.0	1,875.5	3.8	4.1	97.48	-9.7	205.3	191.2	183.9	7.32	26.120		
2,000.0	1,995.2	1,982.3	1,974.0	4.1	4.4	98.19	-10.5	217.3	202.9	195.1	7.76	26.160		
2,100.0	2,094.8	2,081.6	2,072.5	4.3	4.7	98.82	-11.4	229.4	214.6	206.4	8.19	26.195		
2,200.0	2,194.4	2,180.9	2,171.1	4.5	4.9	99.39	-12.2	241.5	226.4	217.7	8.63	26.226		
2,300.0	2,294.0	2,280.2	2,269.6	4.8	5.2	99.90	-13.0	253.5	238.2	229.1	9.07	26.253		
2,400.0	2,393.7	2,379.4	2,368.2	5.0	5.5	100.36	-13.8	265.6	249.9	240.4	9.51	26.276		
2,500.0	2,493.3	2,478.7	2,466.7	5.2	5.7	100.78	-14.6	277.7	261.8	251.8	9.95	26.297		
2,600.0	2,592.9	2,578.0	2,565.3	5.4	6.0	101.17	-15.5	289.7	273.6	263.2	10.40	26.316		
2,700.0	2,692.5	2,677.3	2,663.8	5.7	6.3	101.52	-16.3	301.8	285.4	274.6	10.84	26.332		
2,800.0	2,792.1	2,776.6	2,762.3	5.9	6.6	101.84	-17.1	313.9	297.2	286.0	11.28	26.347		
2,900.0	2,891.8	2,875.9	2,860.9	6.1	6.8	102.14	-17.9	325.9	309.1	297.4	11.73	26.360		
3,000.0	2,991.4	2,975.1	2,959.4	6.4	7.1	102.42	-18.7	338.0	321.0	308.8	12.17	26.373		
3,100.0	3,091.0	3,074.4	3,058.0	6.6	7.4	102.68	-19.6	350.1	332.8	320.2	12.61	26.384		
3,200.0	3,190.6	3,173.7	3,156.5	6.8	7.6	102.92	-20.4	362.2	344.7	331.6	13.06	26.394		
3,300.0	3,290.2	3,273.0	3,255.1	7.1	7.9	103.14	-21.2	374.2	356.6	343.1	13.50	26.403		
3,400.0	3,389.9	3,372.3	3,353.6	7.3	8.2	103.35	-22.0	386.3	368.5	354.5	13.95	26.412		
3,500.0	3,489.5	3,471.6	3,452.1	7.5	8.5	103.55	-22.8	398.4	380.3	365.9	14.40	26.419		
3,600.0	3,589.1	3,570.8	3,550.7	7.7	8.7	103.73	-23.7	410.4	392.2	377.4	14.84	26.427		
3,700.0	3,688.7	3,670.1	3,649.2	8.0	9.0	103.91	-24.5	422.5	404.1	388.8	15.29	26.433		
3,800.0	3,788.3	3,769.4	3,747.8	8.2	9.3	104.07	-25.3	434.6	416.0	400.3	15.73	26.439		
3,900.0	3,888.0	3,868.7	3,846.3	8.4	9.6	104.22	-26.1	446.6	427.9	411.7	16.18	26.445		
4,000.0	3,987.6	3,968.0	3,944.9	8.7	9.8	104.37	-26.9	458.7	439.8	423.2	16.63	26.450		
4,100.0	4,087.2	4,067.2	4,043.4	8.9	10.1	104.51	-27.8	470.8	451.7	434.7	17.08	26.455		
4,200.0	4,186.8	4,166.5	4,141.9	9.1	10.4	104.64	-28.6	482.9	463.6	446.1	17.52	26.460		
4,300.0	4,286.4	4,265.8	4,240.5	9.4	10.6	104.76	-29.4	494.9	475.5	457.6	17.97	26.465		
4,400.0	4,386.1	4,365.1	4,339.0	9.6	10.9	104.88	-30.2	507.0	487.5	469.0	18.42	26.469		
4,500.0	4,485.7	4,464.4	4,437.6	9.8	11.2	105.00	-31.0	519.1	499.4	480.5	18.86	26.473		
4,600.0	4,585.3	4,563.7	4,536.1	10.1	11.5	105.10	-31.9	531.1	511.3	492.0	19.31	26.476		
4,700.0	4,684.9	4,662.9	4,634.7	10.3	11.7	105.21	-32.7	543.2	523.2	503.5	19.76	26.480		
4,800.0	4,784.5	4,762.2	4,733.2	10.5	12.0	105.31	-33.5	555.3	535.1	514.9	20.21	26.483		
4,900.0	4,884.1	4,861.5	4,831.7	10.8	12.3	105.40	-34.3	567.3	547.1	526.4	20.65	26.486		
5,000.0	4,983.8	4,960.8	4,930.3	11.0	12.6	105.49	-35.1	579.4	559.0	537.9	21.10	26.489		
5,100.0	5,083.4	5,060.1	5,028.8	11.2	12.8	105.58	-36.0	591.5	570.9	549.4	21.55	26.492		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,200.0	5,183.0	5,159.4	5,127.4	11.4	13.1	105.66	-36.8	603.5	582.8	560.8	22.00		26.494	
5,300.0	5,282.6	5,258.6	5,225.9	11.7	13.4	105.74	-37.6	615.6	594.8	572.3	22.45		26.497	
5,400.0	5,382.2	5,357.9	5,324.5	11.9	13.7	105.81	-38.4	627.7	606.7	583.8	22.89		26.499	
5,500.0	5,481.9	5,457.2	5,423.0	12.1	13.9	105.89	-39.2	639.8	618.6	595.3	23.34		26.501	
5,600.0	5,581.5	5,556.5	5,521.5	12.4	14.2	105.96	-40.1	651.8	630.5	606.8	23.79		26.504	
5,700.0	5,681.1	5,655.8	5,620.1	12.6	14.5	106.03	-40.9	663.9	642.5	618.2	24.24		26.506	
5,800.0	5,780.7	5,755.1	5,718.6	12.8	14.8	106.09	-41.7	676.0	654.4	629.7	24.69		26.508	
5,900.0	5,880.3	5,854.3	5,817.2	13.1	15.0	106.15	-42.5	688.0	666.3	641.2	25.14		26.509	
6,000.0	5,980.0	5,953.6	5,915.7	13.3	15.3	106.22	-43.3	700.1	678.3	652.7	25.58		26.511	
6,100.0	6,079.6	6,052.9	6,014.3	13.5	15.6	106.27	-44.2	712.2	690.2	664.2	26.03		26.513	
6,200.0	6,179.2	6,152.2	6,112.8	13.8	15.8	106.33	-45.0	724.2	702.1	675.7	26.48		26.515	
6,300.0	6,278.8	6,251.5	6,211.3	14.0	16.1	106.39	-45.8	736.3	714.1	687.1	26.93		26.516	
6,400.0	6,378.4	6,350.8	6,309.9	14.2	16.4	106.44	-46.6	748.4	726.0	698.6	27.38		26.518	
6,500.0	6,478.1	6,450.0	6,408.4	14.5	16.7	106.49	-47.4	760.5	737.9	710.1	27.83		26.519	
6,600.0	6,577.7	6,549.3	6,507.0	14.7	16.9	106.54	-48.3	772.5	749.9	721.6	28.28		26.521	
6,700.0	6,677.3	6,648.6	6,605.5	14.9	17.2	106.59	-49.1	784.6	761.8	733.1	28.72		26.522	
6,800.0	6,776.9	6,747.9	6,704.1	15.1	17.5	106.63	-49.9	796.7	773.8	744.6	29.17		26.523	
6,900.0	6,876.5	6,847.2	6,802.6	15.4	17.8	106.68	-50.7	808.7	785.7	756.1	29.62		26.525	
7,000.0	6,976.2	6,946.5	6,901.1	15.6	18.0	106.72	-51.5	820.8	797.6	767.6	30.07		26.526	
7,100.0	7,075.8	7,045.7	6,999.7	15.8	18.3	106.77	-52.4	832.9	809.6	779.1	30.52		26.527	
7,147.2	7,122.8	7,092.6	7,046.2	15.9	18.4	106.79	-52.8	838.6	815.2	784.5	30.73		26.527	
7,150.0	7,125.6	7,095.4	7,049.0	16.0	18.5	105.29	-52.8	838.9	815.5	784.8	30.74		26.527	
7,200.0	7,175.5	7,145.2	7,098.4	16.0	18.6	23.56	-53.2	845.0	819.9	788.9	30.92		26.512	
7,250.0	7,225.4	7,194.9	7,147.8	16.1	18.7	-25.77	-53.6	851.0	821.2	790.1	31.05		26.445	
7,300.0	7,274.8	7,858.9	7,682.6	16.0	20.9	-65.55	268.8	913.7	806.4	777.4	28.98		27.829	
7,350.0	7,323.4	7,933.6	7,710.6	16.0	21.3	-79.07	337.9	916.5	777.5	748.6	28.86		26.938	
7,400.0	7,370.8	7,934.0	7,710.7	15.9	21.3	-84.20	338.3	916.5	750.5	721.2	29.21		25.689	
7,450.0	7,416.7	7,920.6	7,706.4	15.8	21.3	-86.98	325.6	916.1	725.8	696.3	29.53		24.579	
7,500.0	7,460.7	7,902.2	7,699.9	15.7	21.1	-88.56	308.4	915.4	703.9	674.2	29.73		23.676	
7,550.0	7,502.4	7,881.5	7,692.0	15.5	21.0	-89.34	289.3	914.6	684.9	655.1	29.80		22.986	
7,600.0	7,541.6	7,859.5	7,682.8	15.4	20.9	-89.50	269.3	913.7	669.0	639.3	29.71		22.519	
7,650.0	7,578.0	7,836.7	7,672.5	15.2	20.8	-89.17	249.0	912.6	656.3	626.8	29.49		22.260	
7,700.0	7,611.2	7,813.4	7,661.2	15.1	20.7	-88.39	228.7	911.4	646.9	617.7	29.14		22.197 SF	
7,750.0	7,641.0	7,789.8	7,648.9	14.9	20.5	-87.23	208.6	910.1	640.7	611.9	28.72		22.307	
7,800.0	7,667.3	7,765.9	7,635.6	14.8	20.4	-85.73	188.8	908.6	637.6	609.3	28.27		22.557	
7,826.9	7,679.8	7,752.9	7,628.0	14.8	20.4	-84.79	178.3	907.8	637.2	609.1	28.02		22.736	
7,850.0	7,689.7	7,741.8	7,621.4	14.7	20.3	-83.92	169.4	907.0	637.5	609.6	27.82		22.910	
7,900.0	7,708.2	7,717.6	7,606.3	14.7	20.2	-81.85	150.6	905.4	640.1	612.6	27.45		23.314	
7,950.0	7,722.5	7,693.3	7,590.4	14.7	20.1	-79.56	132.3	903.6	645.2	618.0	27.19		23.728	
8,000.0	7,732.6	7,668.9	7,573.7	14.8	20.0	-77.10	114.7	901.7	652.4	625.3	27.07		24.099	
8,050.0	7,738.5	7,644.5	7,556.1	14.9	19.9	-74.51	97.8	899.7	661.5	634.4	27.11		24.405	
8,092.0	7,740.0	7,623.9	7,540.9	15.0	19.9	-72.27	84.1	897.9	670.3	643.0	27.26		24.590	
8,100.0	7,740.0	7,620.0	7,537.9	15.0	19.9	-72.01	81.6	897.6	672.1	644.8	27.30		24.619	
8,200.0	7,740.0	7,576.2	7,503.7	15.5	19.7	-69.08	54.6	893.6	699.7	671.6	28.08		24.917	
8,300.0	7,740.0	7,540.1	7,473.9	16.1	19.6	-66.60	34.4	890.2	736.7	707.5	29.23		25.207	
8,400.0	7,740.0	7,500.0	7,439.5	16.9	19.5	-63.81	14.2	886.1	782.7	752.3	30.43		25.721	
8,500.0	7,740.0	7,484.6	7,425.9	17.8	19.5	-62.73	7.1	884.5	836.3	804.4	31.87		26.240	
8,600.0	7,740.0	7,463.1	7,406.6	18.9	19.4	-61.23	-2.2	882.2	896.8	863.7	33.10		27.090	
8,700.0	7,740.0	7,450.0	7,394.8	20.0	19.4	-60.31	-7.4	880.8	963.0	928.8	34.24		28.125	
8,800.0	7,740.0	7,428.5	7,375.0	21.2	19.3	-58.83	-15.5	878.5	1,034.0	998.9	35.12		29.444	
8,900.0	7,740.0	7,400.0	7,348.3	22.5	19.3	-56.87	-25.1	875.3	1,109.3	1,073.4	35.87		30.928	
9,000.0	7,740.0	7,400.0	7,348.3	23.9	19.3	-56.87	-25.1	875.3	1,187.4	1,150.7	36.69		32.359	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
9,100.0	7,740.0	7,400.0	7,348.3	25.3	19.3	-56.87	-25.1	875.3	1,268.6	1,231.2	37.40	33.919		
9,200.0	7,740.0	7,381.6	7,330.9	26.7	19.2	-55.62	-30.6	873.2	1,351.9	1,314.0	37.87	35.700		
9,300.0	7,740.0	7,372.9	7,322.6	28.2	19.2	-55.04	-33.0	872.2	1,437.2	1,398.9	38.34	37.488		
9,400.0	7,740.0	7,350.0	7,300.6	29.7	19.1	-53.52	-38.6	869.6	1,524.4	1,485.8	38.65	39.441		
9,500.0	7,740.0	7,350.0	7,300.6	31.3	19.1	-53.52	-38.6	869.6	1,612.6	1,573.5	39.07	41.273		
9,600.0	7,740.0	7,350.0	7,300.6	32.8	19.1	-53.52	-38.6	869.6	1,702.1	1,662.7	39.45	43.151		
9,700.0	7,740.0	7,350.0	7,300.6	34.4	19.1	-53.52	-38.6	869.6	1,792.7	1,752.9	39.78	45.065		
9,800.0	7,740.0	7,350.0	7,300.6	36.0	19.1	-53.52	-38.6	869.6	1,884.3	1,844.2	40.08	47.008		
9,900.0	7,740.0	7,350.0	7,300.6	37.6	19.1	-53.52	-38.6	869.6	1,976.6	1,936.3	40.36	48.974		
10,000.0	7,740.0	7,330.6	7,281.7	39.2	19.1	-52.26	-42.7	867.3	2,069.3	2,028.8	40.50	51.092		
10,100.0	7,740.0	7,326.4	7,277.6	40.9	19.1	-51.99	-43.6	866.8	2,162.8	2,122.1	40.72	53.118		
10,200.0	7,740.0	7,322.4	7,273.7	42.5	19.1	-51.74	-44.3	866.3	2,256.9	2,215.9	40.92	55.153		
10,300.0	7,740.0	7,300.0	7,251.8	44.2	19.0	-50.32	-47.9	863.7	2,351.7	2,310.7	41.00	57.352		
10,400.0	7,740.0	7,300.0	7,251.8	45.8	19.0	-50.32	-47.9	863.7	2,446.5	2,405.3	41.21	59.370		
10,500.0	7,740.0	7,300.0	7,251.8	47.5	19.0	-50.32	-47.9	863.7	2,541.7	2,500.3	41.40	61.392		
10,600.0	7,740.0	7,300.0	7,251.8	49.1	19.0	-50.32	-47.9	863.7	2,637.2	2,595.6	41.59	63.417		
10,700.0	7,740.0	7,300.0	7,251.8	50.8	19.0	-50.32	-47.9	863.7	2,733.1	2,691.3	41.76	65.445		
10,800.0	7,740.0	7,300.0	7,251.8	52.5	19.0	-50.32	-47.9	863.7	2,829.2	2,787.3	41.93	67.473		
10,900.0	7,740.0	7,300.0	7,251.8	54.2	19.0	-50.32	-47.9	863.7	2,925.6	2,883.5	42.10	69.500		
11,000.0	7,740.0	7,300.0	7,251.8	55.9	19.0	-50.32	-47.9	863.7	3,022.3	2,980.0	42.25	71.525		
11,100.0	7,740.0	7,300.0	7,251.8	57.6	19.0	-50.32	-47.9	863.7	3,119.1	3,076.7	42.41	73.548		
11,200.0	7,740.0	7,300.0	7,251.8	59.3	19.0	-50.32	-47.9	863.7	3,216.2	3,173.6	42.56	75.568		
11,300.0	7,740.0	7,300.0	7,251.8	61.0	19.0	-50.32	-47.9	863.7	3,313.4	3,270.7	42.71	77.584		
11,400.0	7,740.0	7,300.0	7,251.8	62.7	19.0	-50.32	-47.9	863.7	3,410.8	3,367.9	42.85	79.596		
11,500.0	7,740.0	7,300.0	7,251.8	64.4	19.0	-50.32	-47.9	863.7	3,508.3	3,465.3	42.99	81.603		
11,600.0	7,740.0	7,300.0	7,251.8	66.1	19.0	-50.32	-47.9	863.7	3,606.0	3,562.8	43.13	83.605		
11,700.0	7,740.0	7,300.0	7,251.8	67.8	19.0	-50.32	-47.9	863.7	3,703.7	3,660.5	43.27	85.601		
11,800.0	7,740.0	7,300.0	7,251.8	69.5	19.0	-50.32	-47.9	863.7	3,801.6	3,758.2	43.40	87.591		
11,900.0	7,740.0	7,300.0	7,251.8	71.2	19.0	-50.32	-47.9	863.7	3,899.7	3,856.1	43.54	89.575		
12,000.0	7,740.0	7,300.0	7,251.8	72.9	19.0	-50.32	-47.9	863.7	3,997.8	3,954.1	43.67	91.553		
12,100.0	7,740.0	7,300.0	7,251.8	74.7	19.0	-50.32	-47.9	863.7	4,096.0	4,052.2	43.80	93.524		
12,200.0	7,740.0	7,300.0	7,251.8	76.4	19.0	-50.32	-47.9	863.7	4,194.2	4,150.3	43.92	95.488		
12,300.0	7,740.0	7,277.0	7,229.2	78.1	18.9	-48.91	-50.7	860.9	4,292.1	4,248.1	43.94	97.678		
12,400.0	7,740.0	7,275.8	7,228.0	79.8	18.9	-48.84	-50.9	860.8	4,390.5	4,346.4	44.06	99.643		
12,500.0	7,740.0	7,274.7	7,226.9	81.6	18.9	-48.77	-51.0	860.7	4,488.9	4,444.7	44.18	101.601		
12,600.0	7,740.0	7,273.6	7,225.8	83.3	18.9	-48.70	-51.1	860.5	4,587.4	4,543.1	44.30	103.551		
12,700.0	7,740.0	7,272.5	7,224.7	85.0	18.9	-48.63	-51.2	860.4	4,686.0	4,641.6	44.42	105.493		
12,800.0	7,740.0	7,250.0	7,202.4	86.7	18.9	-47.30	-52.9	857.7	4,785.1	4,740.7	44.44	107.685		
12,900.0	7,740.0	7,250.0	7,202.4	88.5	18.9	-47.30	-52.9	857.7	4,883.7	4,839.2	44.56	109.603		
13,000.0	7,740.0	7,250.0	7,202.4	90.2	18.9	-47.30	-52.9	857.7	4,982.4	4,937.8	44.68	111.512		
13,100.0	7,740.0	7,250.0	7,202.4	91.9	18.9	-47.30	-52.9	857.7	5,081.2	5,036.4	44.80	113.414		
13,200.0	7,740.0	7,250.0	7,202.4	93.7	18.9	-47.30	-52.9	857.7	5,180.0	5,135.1	44.92	115.309		
13,300.0	7,740.0	7,250.0	7,202.4	95.4	18.9	-47.30	-52.9	857.7	5,278.8	5,233.8	45.04	117.196		
13,400.0	7,740.0	7,250.0	7,202.4	97.1	18.9	-47.30	-52.9	857.7	5,377.7	5,332.6	45.16	119.076		
13,500.0	7,740.0	7,250.0	7,202.4	98.9	18.9	-47.30	-52.9	857.7	5,476.7	5,431.4	45.28	120.947		
13,600.0	7,740.0	7,250.0	7,202.4	100.6	18.9	-47.30	-52.9	857.7	5,575.6	5,530.2	45.40	122.811		
13,700.0	7,740.0	7,250.0	7,202.4	102.3	18.9	-47.30	-52.9	857.7	5,674.6	5,629.1	45.52	124.668		
13,800.0	7,740.0	7,250.0	7,202.4	104.1	18.9	-47.30	-52.9	857.7	5,773.7	5,728.0	45.64	126.517		
13,900.0	7,740.0	7,250.0	7,202.4	105.8	18.9	-47.30	-52.9	857.7	5,872.7	5,827.0	45.75	128.358		
14,000.0	7,740.0	7,250.0	7,202.4	107.5	18.9	-47.30	-52.9	857.7	5,971.8	5,926.0	45.87	130.192		
14,100.0	7,740.0	7,250.0	7,202.4	109.3	18.9	-47.30	-52.9	857.7	6,071.0	6,025.0	45.99	132.017		
14,200.0	7,740.0	7,250.0	7,202.4	111.0	18.9	-47.30	-52.9	857.7	6,170.1	6,124.0	46.10	133.836		

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 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	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)				
14,300.0	7,740.0	7,250.0	7,202.4	112.8	18.9	-47.30	-52.9	857.7	6,269.3	6,223.1	46.22	135.646		
14,400.0	7,740.0	7,250.0	7,202.4	114.5	18.9	-47.30	-52.9	857.7	6,368.5	6,322.2	46.33	137.449		
14,500.0	7,740.0	7,250.0	7,202.4	116.2	18.9	-47.30	-52.9	857.7	6,467.7	6,421.3	46.45	139.245		
14,600.0	7,740.0	7,250.0	7,202.4	118.0	18.9	-47.30	-52.9	857.7	6,567.0	6,520.4	46.56	141.033		
14,700.0	7,740.0	7,250.0	7,202.4	119.7	18.9	-47.30	-52.9	857.7	6,666.3	6,619.6	46.68	142.813		
14,800.0	7,740.0	7,250.0	7,202.4	121.5	18.9	-47.30	-52.9	857.7	6,765.6	6,718.8	46.79	144.586		
14,900.0	7,740.0	7,250.0	7,202.4	123.2	18.9	-47.30	-52.9	857.7	6,864.9	6,818.0	46.91	146.352		
15,000.0	7,740.0	7,250.0	7,202.4	124.9	18.9	-47.30	-52.9	857.7	6,964.2	6,917.2	47.02	148.110		
15,100.0	7,740.0	7,250.0	7,202.4	126.7	18.9	-47.30	-52.9	857.7	7,063.6	7,016.5	47.13	149.860		
15,200.0	7,740.0	7,250.0	7,202.4	128.4	18.9	-47.30	-52.9	857.7	7,163.0	7,115.7	47.25	151.604		
15,300.0	7,740.0	7,250.0	7,202.4	130.2	18.9	-47.30	-52.9	857.7	7,262.4	7,215.0	47.36	153.340		
15,400.0	7,740.0	7,250.0	7,202.4	131.9	18.9	-47.30	-52.9	857.7	7,361.8	7,314.3	47.47	155.068		
15,500.0	7,740.0	7,250.0	7,202.4	133.7	18.9	-47.30	-52.9	857.7	7,461.2	7,413.6	47.59	156.789		
15,600.0	7,740.0	7,250.0	7,202.4	135.4	18.9	-47.30	-52.9	857.7	7,560.7	7,513.0	47.70	158.504		
15,700.0	7,740.0	7,250.0	7,202.4	137.1	18.9	-47.30	-52.9	857.7	7,660.1	7,612.3	47.81	160.210		
15,800.0	7,740.0	7,250.0	7,202.4	138.9	18.9	-47.30	-52.9	857.7	7,759.6	7,711.7	47.93	161.910		
15,900.0	7,740.0	7,250.0	7,202.4	140.6	18.9	-47.30	-52.9	857.7	7,859.1	7,811.0	48.04	163.603		
15,953.0	7,740.0	7,250.0	7,202.4	141.6	18.9	-47.30	-52.9	857.7	7,911.7	7,863.7	48.10	164.496		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	90.56	-0.7	75.0	75.0					
100.0	100.0	100.0	100.0	0.2	0.2	90.56	-0.7	75.0	75.0	74.7	0.30	247.001		
200.0	200.0	200.0	200.0	0.3	0.3	90.56	-0.7	75.0	75.0	74.4	0.65	114.915		
300.0	300.0	300.0	300.0	0.5	0.5	90.56	-0.7	75.0	75.0	74.0	1.00	74.875 CC, ES		
400.0	400.0	398.7	398.7	0.7	0.7	90.46	-0.6	75.9	75.9	74.5	1.35	56.257		
500.0	500.0	497.4	497.3	0.9	0.9	64.40	-0.3	78.4	78.0	76.3	1.70	46.032		
600.0	600.0	596.0	595.8	1.0	1.0	65.58	0.3	82.6	81.2	79.1	2.04	39.711		
700.0	699.9	694.4	694.1	1.2	1.2	67.50	1.1	88.5	85.4	83.0	2.40	35.585		
800.0	799.7	792.7	792.1	1.4	1.4	69.99	2.1	96.0	90.7	87.9	2.76	32.818		
899.9	899.3	890.8	889.7	1.6	1.7	72.86	3.3	105.2	97.3	94.2	3.14	30.948		
1,000.0	999.0	988.7	987.1	1.8	1.9	75.57	4.8	116.0	105.6	102.0	3.54	29.840		
1,100.0	1,098.6	1,086.4	1,083.9	2.0	2.2	77.56	6.5	128.4	115.6	111.6	3.94	29.338		
1,200.0	1,198.2	1,183.8	1,180.3	2.3	2.4	78.93	8.4	142.4	127.3	122.9	4.35	29.260 SF		
1,300.0	1,297.8	1,280.8	1,276.0	2.5	2.7	79.79	10.5	158.0	140.5	135.8	4.76	29.493		
1,400.0	1,397.5	1,377.4	1,371.1	2.7	3.1	80.24	12.8	175.1	155.4	150.2	5.19	29.959		
1,500.0	1,497.1	1,474.3	1,466.1	2.9	3.4	80.39	15.3	193.8	171.6	166.0	5.61	30.585		
1,600.0	1,596.7	1,572.9	1,562.8	3.2	3.8	80.47	18.0	213.2	188.3	182.2	6.05	31.123		
1,700.0	1,696.3	1,671.5	1,659.4	3.4	4.2	80.53	20.6	232.6	204.9	198.4	6.49	31.576		
1,800.0	1,795.9	1,770.1	1,756.1	3.6	4.5	80.58	23.2	252.0	221.6	214.7	6.93	31.961		
1,900.0	1,895.6	1,868.7	1,852.7	3.8	4.9	80.63	25.8	271.4	238.2	230.9	7.38	32.292		
2,000.0	1,995.2	1,967.4	1,949.3	4.1	5.3	80.67	28.4	290.8	254.9	247.1	7.82	32.580		
2,100.0	2,094.8	2,066.0	2,046.0	4.3	5.7	80.70	31.1	310.3	271.6	263.3	8.27	32.832		
2,200.0	2,194.4	2,164.6	2,142.6	4.5	6.0	80.73	33.7	329.7	288.2	279.5	8.72	33.054		
2,300.0	2,294.0	2,263.2	2,239.2	4.8	6.4	80.76	36.3	349.1	304.9	295.7	9.17	33.251		
2,400.0	2,393.7	2,361.8	2,335.9	5.0	6.8	80.79	38.9	368.5	321.5	311.9	9.62	33.427		
2,500.0	2,493.3	2,460.4	2,432.5	5.2	7.2	80.81	41.6	387.9	338.2	328.1	10.07	33.585		
2,600.0	2,592.9	2,559.0	2,529.2	5.4	7.6	80.83	44.2	407.3	354.8	344.3	10.52	33.728		
2,700.0	2,692.5	2,657.6	2,625.8	5.7	7.9	80.85	46.8	426.7	371.5	360.5	10.97	33.858		
2,800.0	2,792.1	2,756.2	2,722.4	5.9	8.3	80.86	49.4	446.1	388.2	376.7	11.42	33.975		
2,900.0	2,891.8	2,854.8	2,819.1	6.1	8.7	80.88	52.1	465.6	404.8	392.9	11.88	34.083		
3,000.0	2,991.4	2,953.4	2,915.7	6.4	9.1	80.89	54.7	485.0	421.5	409.1	12.33	34.182		
3,100.0	3,091.0	3,052.0	3,012.3	6.6	9.5	80.90	57.3	504.4	438.1	425.3	12.78	34.273		
3,200.0	3,190.6	3,150.6	3,109.0	6.8	9.9	80.92	59.9	523.8	454.8	441.5	13.24	34.357		
3,300.0	3,290.2	3,249.2	3,205.6	7.1	10.2	80.93	62.6	543.2	471.4	457.7	13.69	34.435		
3,400.0	3,389.9	3,347.8	3,302.3	7.3	10.6	80.94	65.2	562.6	488.1	473.9	14.14	34.508		
3,500.0	3,489.5	3,446.4	3,398.9	7.5	11.0	80.95	67.8	582.0	504.7	490.1	14.60	34.575		
3,600.0	3,589.1	3,545.0	3,495.5	7.7	11.4	80.96	70.4	601.4	521.4	506.3	15.05	34.638		
3,700.0	3,688.7	3,643.6	3,592.2	8.0	11.8	80.97	73.1	620.9	538.1	522.5	15.51	34.696		
3,800.0	3,788.3	3,742.2	3,688.8	8.2	12.2	80.97	75.7	640.3	554.7	538.8	15.96	34.752		
3,900.0	3,888.0	3,840.8	3,785.5	8.4	12.6	80.98	78.3	659.7	571.4	555.0	16.42	34.803		
4,000.0	3,987.6	3,939.4	3,882.1	8.7	13.0	80.99	80.9	679.1	588.0	571.2	16.87	34.852		
4,100.0	4,087.2	4,038.0	3,978.7	8.9	13.3	80.99	83.6	698.5	604.7	587.4	17.33	34.898		
4,200.0	4,186.8	4,136.6	4,075.4	9.1	13.7	81.00	86.2	717.9	621.3	603.6	17.78	34.941		
4,300.0	4,286.4	4,235.2	4,172.0	9.4	14.1	81.01	88.8	737.3	638.0	619.8	18.24	34.982		
4,400.0	4,386.1	4,333.8	4,268.6	9.6	14.5	81.01	91.4	756.7	654.7	636.0	18.69	35.021		
4,500.0	4,485.7	4,432.4	4,365.3	9.8	14.9	81.02	94.1	776.2	671.3	652.2	19.15	35.058		
4,600.0	4,585.3	4,531.0	4,461.9	10.1	15.3	81.02	96.7	795.6	688.0	668.4	19.60	35.092		
4,700.0	4,684.9	4,629.6	4,558.6	10.3	15.7	81.03	99.3	815.0	704.6	684.6	20.06	35.126		
4,800.0	4,784.5	4,728.2	4,655.2	10.5	16.0	81.03	101.9	834.4	721.3	700.8	20.52	35.157		
4,900.0	4,884.1	4,826.8	4,751.8	10.8	16.4	81.04	104.5	853.8	737.9	717.0	20.97	35.187		
5,000.0	4,983.8	4,925.4	4,848.5	11.0	16.8	81.04	107.2	873.2	754.6	733.2	21.43	35.216		
5,100.0	5,083.4	5,024.0	4,945.1	11.2	17.2	81.05	109.8	892.6	771.2	749.4	21.88	35.243		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,200.0	5,183.0	5,122.7	5,041.7	11.4	17.6	81.05	112.4	912.0	787.9	765.6	22.34	35.270		
5,300.0	5,282.6	5,221.3	5,138.4	11.7	18.0	81.05	115.0	931.5	804.6	781.8	22.80	35.295		
5,400.0	5,382.2	5,319.9	5,235.0	11.9	18.4	81.06	117.7	950.9	821.2	798.0	23.25	35.319		
5,500.0	5,481.9	5,418.5	5,331.7	12.1	18.8	81.06	120.3	970.3	837.9	814.2	23.71	35.342		
5,600.0	5,581.5	5,517.1	5,428.3	12.4	19.2	81.06	122.9	989.7	854.5	830.4	24.16	35.364		
5,700.0	5,681.1	5,615.7	5,524.9	12.6	19.5	81.07	125.5	1,009.1	871.2	846.6	24.62	35.385		
5,800.0	5,780.7	5,714.3	5,621.6	12.8	19.9	81.07	128.2	1,028.5	887.8	862.8	25.08	35.405		
5,900.0	5,880.3	5,812.9	5,718.2	13.1	20.3	81.07	130.8	1,047.9	904.5	879.0	25.53	35.425		
6,000.0	5,980.0	5,911.5	5,814.8	13.3	20.7	81.08	133.4	1,067.3	921.2	895.2	25.99	35.444		
6,100.0	6,079.6	6,010.1	5,911.5	13.5	21.1	81.08	136.0	1,086.8	937.8	911.4	26.45	35.462		
6,200.0	6,179.2	6,108.7	6,008.1	13.8	21.5	81.08	138.7	1,106.2	954.5	927.6	26.90	35.480		
6,300.0	6,278.8	6,207.3	6,104.8	14.0	21.9	81.08	141.3	1,125.6	971.1	943.8	27.36	35.497		
6,400.0	6,378.4	6,305.9	6,201.4	14.2	22.3	81.09	143.9	1,145.0	987.8	960.0	27.81	35.513		
6,500.0	6,478.1	6,404.5	6,298.0	14.5	22.6	81.09	146.5	1,164.4	1,004.4	976.2	28.27	35.529		
6,600.0	6,577.7	6,503.1	6,394.7	14.7	23.0	81.09	149.2	1,183.8	1,021.1	992.4	28.73	35.544		
6,700.0	6,677.3	6,601.7	6,491.3	14.9	23.4	81.09	151.8	1,203.2	1,037.7	1,008.6	29.18	35.558		
6,800.0	6,776.9	6,700.3	6,587.9	15.1	23.8	81.10	154.4	1,222.6	1,054.4	1,024.8	29.64	35.573		
6,900.0	6,876.5	6,798.9	6,684.6	15.4	24.2	81.10	157.0	1,242.1	1,071.1	1,041.0	30.10	35.586		
7,000.0	6,976.2	6,897.5	6,781.2	15.6	24.6	81.10	159.7	1,261.5	1,087.7	1,057.2	30.55	35.600		
7,100.0	7,075.8	6,996.1	6,877.9	15.8	25.0	81.10	162.3	1,280.9	1,104.4	1,073.4	31.01	35.613		
7,147.2	7,122.8	7,042.6	6,923.4	15.9	25.2	81.10	163.5	1,290.0	1,112.2	1,081.0	31.23	35.619		
7,150.0	7,125.6	7,045.4	6,926.2	16.0	25.2	79.63	163.6	1,290.6	1,112.7	1,081.5	31.24	35.619		
7,200.0	7,175.5	7,124.0	7,003.0	16.0	25.5	-1.94	167.9	1,306.0	1,120.0	1,088.5	31.53	35.521		
7,250.0	7,225.4	7,235.2	7,109.5	16.1	26.0	-52.39	191.1	1,327.6	1,123.7	1,091.9	31.81	35.330		
7,300.0	7,274.8	7,327.2	7,192.8	16.0	26.4	-64.11	225.9	1,344.6	1,124.2	1,092.4	31.84	35.304		
7,350.0	7,323.4	7,396.5	7,251.4	16.0	26.8	-70.27	260.9	1,356.7	1,123.1	1,091.4	31.70	35.435		
7,400.0	7,370.8	7,445.7	7,290.2	15.9	27.0	-74.35	290.0	1,364.7	1,121.6	1,090.2	31.41	35.706		
7,450.0	7,416.7	7,478.9	7,315.0	15.8	27.2	-77.11	311.5	1,369.9	1,120.7	1,089.7	31.03	36.123		
7,464.8	7,429.9	7,486.3	7,320.3	15.8	27.2	-77.72	316.4	1,371.0	1,120.7	1,089.8	30.89	36.281		
7,500.0	7,460.7	7,500.1	7,330.1	15.7	27.3	-78.86	325.9	1,373.1	1,121.0	1,090.5	30.54	36.706		
7,550.0	7,502.4	7,512.3	7,338.6	15.5	27.4	-79.83	334.5	1,374.8	1,122.8	1,092.8	30.00	37.433		
7,600.0	7,541.6	7,517.7	7,342.3	15.4	27.4	-80.16	338.4	1,375.6	1,126.3	1,096.9	29.40	38.306		
7,650.0	7,578.0	7,518.0	7,342.5	15.2	27.4	-79.96	338.6	1,375.7	1,131.5	1,102.7	28.79	39.301		
7,700.0	7,611.2	7,514.4	7,340.1	15.1	27.4	-79.32	336.0	1,375.1	1,138.3	1,110.1	28.19	40.383		
7,750.0	7,641.0	7,507.8	7,335.5	14.9	27.4	-78.33	331.3	1,374.2	1,146.7	1,119.1	27.63	41.504		
7,800.0	7,667.3	7,500.0	7,330.1	14.8	27.3	-77.11	325.9	1,373.0	1,156.4	1,129.3	27.14	42.605		
7,850.0	7,689.7	7,487.7	7,321.4	14.7	27.3	-75.53	317.4	1,371.2	1,167.3	1,140.6	26.75	43.633		
7,900.0	7,708.2	7,475.1	7,312.2	14.7	27.2	-73.83	308.9	1,369.3	1,179.2	1,152.7	26.48	44.525		
7,950.0	7,722.5	7,461.3	7,302.0	14.7	27.1	-72.00	299.9	1,367.2	1,191.9	1,165.5	26.35	45.240		
8,000.0	7,732.6	7,450.0	7,293.5	14.8	27.0	-70.24	292.6	1,365.4	1,205.1	1,178.7	26.36	45.711		
8,050.0	7,738.5	7,430.6	7,278.6	14.9	26.9	-68.13	280.7	1,362.3	1,218.6	1,192.1	26.49	46.008		
8,092.0	7,740.0	7,416.8	7,267.7	15.0	26.9	-66.47	272.4	1,360.1	1,230.1	1,203.4	26.70	46.062		
8,100.0	7,740.0	7,414.1	7,265.5	15.0	26.8	-66.37	270.9	1,359.6	1,232.3	1,205.5	26.76	46.057		
8,200.0	7,740.0	7,383.5	7,240.7	15.5	26.7	-65.17	253.8	1,354.5	1,263.0	1,235.4	27.62	45.730		
8,300.0	7,740.0	7,350.0	7,212.5	16.1	26.5	-63.83	236.6	1,348.7	1,299.7	1,270.9	28.76	45.186		
8,400.0	7,740.0	7,334.7	7,199.3	16.9	26.4	-63.21	229.3	1,346.0	1,341.8	1,311.5	30.21	44.417		
8,500.0	7,740.0	7,315.1	7,182.1	17.8	26.3	-62.40	220.5	1,342.4	1,389.1	1,357.4	31.71	43.809		
8,600.0	7,740.0	7,300.0	7,168.8	18.9	26.3	-61.78	214.2	1,339.7	1,441.3	1,408.1	33.25	43.349		
8,700.0	7,740.0	7,282.7	7,153.2	20.0	26.2	-61.06	207.4	1,336.5	1,497.9	1,463.2	34.73	43.134		
8,800.0	7,740.0	7,269.3	7,141.0	21.2	26.1	-60.50	202.4	1,334.0	1,558.6	1,522.4	36.16	43.106		
8,900.0	7,740.0	7,250.0	7,123.2	22.5	26.0	-59.69	195.8	1,330.4	1,622.9	1,585.4	37.45	43.330		
9,000.0	7,740.0	7,250.0	7,123.2	23.9	26.0	-59.69	195.8	1,330.4	1,690.3	1,651.6	38.78	43.589		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,100.0	7,740.0	7,250.0	7,123.2	25.3	26.0	-59.69	195.8	1,330.4	1,760.9	1,720.9	40.00	44.024	
9,200.0	7,740.0	7,228.2	7,103.0	26.7	25.9	-58.78	189.0	1,326.3	1,833.8	1,792.8	40.97	44.759	
9,300.0	7,740.0	7,220.3	7,095.5	28.2	25.9	-58.45	186.8	1,324.8	1,909.1	1,867.1	41.94	45.517	
9,400.0	7,740.0	7,200.0	7,076.3	29.7	25.8	-57.60	181.5	1,320.9	1,986.7	1,943.9	42.75	46.476	
9,500.0	7,740.0	7,200.0	7,076.3	31.3	25.8	-57.60	181.5	1,320.9	2,065.8	2,022.2	43.61	47.372	
9,600.0	7,740.0	7,200.0	7,076.3	32.8	25.8	-57.60	181.5	1,320.9	2,146.7	2,102.3	44.40	48.353	
9,700.0	7,740.0	7,200.0	7,076.3	34.4	25.8	-57.60	181.5	1,320.9	2,229.1	2,184.0	45.12	49.405	
9,800.0	7,740.0	7,200.0	7,076.3	36.0	25.8	-57.60	181.5	1,320.9	2,312.9	2,267.1	45.78	50.519	
9,900.0	7,740.0	7,200.0	7,076.3	37.6	25.8	-57.60	181.5	1,320.9	2,397.9	2,351.6	46.39	51.687	
10,000.0	7,740.0	7,180.1	7,057.3	39.2	25.7	-56.76	177.0	1,317.0	2,483.7	2,436.9	46.82	53.043	
10,100.0	7,740.0	7,175.9	7,053.3	40.9	25.7	-56.59	176.1	1,316.2	2,570.7	2,523.4	47.32	54.326	
10,200.0	7,740.0	7,172.0	7,049.6	42.5	25.7	-56.43	175.3	1,315.4	2,658.6	2,610.8	47.78	55.642	
10,300.0	7,740.0	7,150.0	7,028.3	44.2	25.6	-55.51	171.4	1,311.2	2,747.6	2,699.5	48.08	57.141	
10,400.0	7,740.0	7,150.0	7,028.3	45.8	25.6	-55.51	171.4	1,311.2	2,836.9	2,788.4	48.51	58.482	
10,500.0	7,740.0	7,150.0	7,028.3	47.5	25.6	-55.51	171.4	1,311.2	2,926.9	2,878.0	48.91	59.847	
10,600.0	7,740.0	7,150.0	7,028.3	49.1	25.6	-55.51	171.4	1,311.2	3,017.5	2,968.2	49.28	61.234	
10,700.0	7,740.0	7,150.0	7,028.3	50.8	25.6	-55.51	171.4	1,311.2	3,108.7	3,059.1	49.63	62.639	
10,800.0	7,740.0	7,150.0	7,028.3	52.5	25.6	-55.51	171.4	1,311.2	3,200.4	3,150.4	49.96	64.061	
10,900.0	7,740.0	7,150.0	7,028.3	54.2	25.6	-55.51	171.4	1,311.2	3,292.6	3,242.3	50.27	65.496	
11,000.0	7,740.0	7,150.0	7,028.3	55.9	25.6	-55.51	171.4	1,311.2	3,385.2	3,334.7	50.57	66.945	
11,100.0	7,740.0	7,150.0	7,028.3	57.6	25.6	-55.51	171.4	1,311.2	3,478.3	3,427.4	50.85	68.403	
11,200.0	7,740.0	7,150.0	7,028.3	59.3	25.6	-55.51	171.4	1,311.2	3,571.7	3,520.6	51.12	69.872	
11,300.0	7,740.0	7,150.0	7,028.3	61.0	25.6	-55.51	171.4	1,311.2	3,665.5	3,614.1	51.37	71.348	
11,400.0	7,740.0	7,150.0	7,028.3	62.7	25.6	-55.51	171.4	1,311.2	3,759.6	3,708.0	51.62	72.832	
11,500.0	7,740.0	7,150.0	7,028.3	64.4	25.6	-55.51	171.4	1,311.2	3,854.0	3,802.1	51.86	74.321	
11,600.0	7,740.0	7,150.0	7,028.3	66.1	25.6	-55.51	171.4	1,311.2	3,948.6	3,896.6	52.08	75.816	
11,700.0	7,740.0	7,150.0	7,028.3	67.8	25.6	-55.51	171.4	1,311.2	4,043.6	3,991.3	52.30	77.315	
11,800.0	7,740.0	7,150.0	7,028.3	69.5	25.6	-55.51	171.4	1,311.2	4,138.7	4,086.2	52.51	78.818	
11,900.0	7,740.0	7,150.0	7,028.3	71.2	25.6	-55.51	171.4	1,311.2	4,234.1	4,181.4	52.71	80.323	
12,000.0	7,740.0	7,150.0	7,028.3	72.9	25.6	-55.51	171.4	1,311.2	4,329.7	4,276.8	52.91	81.832	
12,100.0	7,740.0	7,127.9	7,006.9	74.7	25.5	-54.60	168.3	1,306.8	4,425.0	4,372.1	52.96	83.562	
12,200.0	7,740.0	7,126.5	7,005.5	76.4	25.5	-54.54	168.2	1,306.5	4,520.9	4,467.8	53.13	85.089	
12,300.0	7,740.0	7,125.2	7,004.2	78.1	25.5	-54.49	168.0	1,306.3	4,617.0	4,563.7	53.30	86.618	
12,400.0	7,740.0	7,123.9	7,003.0	79.8	25.5	-54.44	167.9	1,306.0	4,713.3	4,659.8	53.47	88.146	
12,500.0	7,740.0	7,122.7	7,001.8	81.6	25.5	-54.38	167.7	1,305.8	4,809.7	4,756.0	53.63	89.675	
12,600.0	7,740.0	7,100.0	6,979.6	83.3	25.4	-53.46	165.6	1,301.3	4,906.6	4,853.0	53.65	91.454	
12,700.0	7,740.0	7,100.0	6,979.6	85.0	25.4	-53.46	165.6	1,301.3	5,003.3	4,949.4	53.82	92.970	
12,800.0	7,740.0	7,100.0	6,979.6	86.7	25.4	-53.46	165.6	1,301.3	5,100.0	5,046.0	53.98	94.486	
12,900.0	7,740.0	7,100.0	6,979.6	88.5	25.4	-53.46	165.6	1,301.3	5,196.9	5,142.7	54.13	96.001	
13,000.0	7,740.0	7,100.0	6,979.6	90.2	25.4	-53.46	165.6	1,301.3	5,293.9	5,239.6	54.29	97.515	
13,100.0	7,740.0	7,100.0	6,979.6	91.9	25.4	-53.46	165.6	1,301.3	5,391.0	5,336.5	54.44	99.027	
13,200.0	7,740.0	7,100.0	6,979.6	93.7	25.4	-53.46	165.6	1,301.3	5,488.2	5,433.6	54.59	100.538	
13,300.0	7,740.0	7,100.0	6,979.6	95.4	25.4	-53.46	165.6	1,301.3	5,585.5	5,530.7	54.73	102.047	
13,400.0	7,740.0	7,100.0	6,979.6	97.1	25.4	-53.46	165.6	1,301.3	5,682.9	5,628.0	54.88	103.555	
13,500.0	7,740.0	7,100.0	6,979.6	98.9	25.4	-53.46	165.6	1,301.3	5,780.4	5,725.3	55.02	105.060	
13,600.0	7,740.0	7,100.0	6,979.6	100.6	25.4	-53.46	165.6	1,301.3	5,877.9	5,822.8	55.16	106.563	
13,700.0	7,740.0	7,100.0	6,979.6	102.3	25.4	-53.46	165.6	1,301.3	5,975.6	5,920.3	55.30	108.063	
13,800.0	7,740.0	7,100.0	6,979.6	104.1	25.4	-53.46	165.6	1,301.3	6,073.3	6,017.9	55.43	109.561	
13,900.0	7,740.0	7,100.0	6,979.6	105.8	25.4	-53.46	165.6	1,301.3	6,171.1	6,115.5	55.57	111.057	
14,000.0	7,740.0	7,100.0	6,979.6	107.5	25.4	-53.46	165.6	1,301.3	6,269.0	6,213.3	55.70	112.549	
14,100.0	7,740.0	7,100.0	6,979.6	109.3	25.4	-53.46	165.6	1,301.3	6,366.9	6,311.1	55.83	114.039	
14,200.0	7,740.0	7,100.0	6,979.6	111.0	25.4	-53.46	165.6	1,301.3	6,464.9	6,409.0	55.96	115.526	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	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)				
14,300.0	7,740.0	7,100.0	6,979.6	112.8	25.4	-53.46	165.6	1,301.3	6,563.0	6,506.9	56.09	117.011		
14,400.0	7,740.0	7,100.0	6,979.6	114.5	25.4	-53.46	165.6	1,301.3	6,661.1	6,604.9	56.22	118.492		
14,500.0	7,740.0	7,100.0	6,979.6	116.2	25.4	-53.46	165.6	1,301.3	6,759.3	6,702.9	56.34	119.969		
14,600.0	7,740.0	7,100.0	6,979.6	118.0	25.4	-53.46	165.6	1,301.3	6,857.5	6,801.0	56.47	121.444		
14,700.0	7,740.0	7,100.0	6,979.6	119.7	25.4	-53.46	165.6	1,301.3	6,955.8	6,899.2	56.59	122.916		
14,800.0	7,740.0	7,100.0	6,979.6	121.5	25.4	-53.46	165.6	1,301.3	7,054.1	6,997.4	56.71	124.384		
14,900.0	7,740.0	7,100.0	6,979.6	123.2	25.4	-53.46	165.6	1,301.3	7,152.5	7,095.6	56.83	125.848		
15,000.0	7,740.0	7,100.0	6,979.6	124.9	25.4	-53.46	165.6	1,301.3	7,250.9	7,193.9	56.95	127.310		
15,100.0	7,740.0	7,100.0	6,979.6	126.7	25.4	-53.46	165.6	1,301.3	7,349.3	7,292.3	57.07	128.768		
15,200.0	7,740.0	7,100.0	6,979.6	128.4	25.4	-53.46	165.6	1,301.3	7,447.8	7,390.6	57.19	130.222		
15,300.0	7,740.0	7,100.0	6,979.6	130.2	25.4	-53.46	165.6	1,301.3	7,546.4	7,489.1	57.31	131.673		
15,400.0	7,740.0	7,100.0	6,979.6	131.9	25.4	-53.46	165.6	1,301.3	7,644.9	7,587.5	57.43	133.120		
15,500.0	7,740.0	7,100.0	6,979.6	133.7	25.4	-53.46	165.6	1,301.3	7,743.6	7,686.0	57.55	134.564		
15,600.0	7,740.0	7,100.0	6,979.6	135.4	25.4	-53.46	165.6	1,301.3	7,842.2	7,784.5	57.66	136.004		
15,700.0	7,740.0	7,100.0	6,979.6	137.1	25.4	-53.46	165.6	1,301.3	7,940.9	7,883.1	57.78	137.440		
15,800.0	7,740.0	7,100.0	6,979.6	138.9	25.4	-53.46	165.6	1,301.3	8,039.6	7,981.7	57.89	138.873		
15,900.0	7,740.0	7,100.0	6,979.6	140.6	25.4	-53.46	165.6	1,301.3	8,138.3	8,080.3	58.01	140.302		
15,953.0	7,740.0	7,100.0	6,979.6	141.6	25.4	-53.46	165.6	1,301.3	8,190.6	8,132.6	58.07	141.057		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.51	-0.7	82.3	82.3					
100.0	100.0	100.0	100.0	0.2	0.2	90.51	-0.7	82.3	82.3	82.0	0.30	270.962		
200.0	200.0	200.0	200.0	0.3	0.3	90.51	-0.7	82.3	82.3	81.6	0.65	126.063		
203.3	203.3	203.3	203.3	0.3	0.3	90.51	-0.7	82.3	82.3	81.6	0.66	123.854 CC		
300.0	300.0	299.3	299.3	0.5	0.5	90.53	-0.8	82.5	82.5	81.5	1.00	82.452 ES		
400.0	400.0	397.9	397.9	0.7	0.7	90.72	-1.1	84.2	84.2	82.9	1.35	62.509		
500.0	500.0	496.4	496.3	0.9	0.9	65.22	-1.7	87.5	87.2	85.5	1.69	51.507		
600.0	600.0	594.7	594.5	1.0	1.0	67.12	-2.5	92.5	91.3	89.2	2.04	44.707		
700.0	699.9	692.9	692.4	1.2	1.2	69.87	-3.7	99.1	96.5	94.1	2.39	40.310		
800.0	799.7	790.8	790.0	1.4	1.5	73.23	-5.2	107.4	103.2	100.4	2.76	37.440		
899.9	899.3	888.2	886.9	1.6	1.7	76.96	-6.9	117.3	111.5	108.3	3.13	35.608		
1,000.0	999.0	985.5	983.5	1.8	1.9	80.54	-8.9	128.7	121.7	118.2	3.51	34.648		
1,100.0	1,098.6	1,082.4	1,079.5	2.0	2.2	83.42	-11.2	141.7	134.1	130.2	3.90	34.348 SF		
1,200.0	1,198.2	1,178.9	1,174.9	2.3	2.5	85.67	-13.8	156.3	148.3	144.0	4.30	34.502		
1,300.0	1,297.8	1,275.0	1,269.5	2.5	2.8	87.39	-16.6	172.3	164.3	159.6	4.70	34.977		
1,400.0	1,397.5	1,370.5	1,363.4	2.7	3.2	88.66	-19.7	189.8	182.1	177.0	5.10	35.684		
1,500.0	1,497.1	1,465.5	1,456.4	2.9	3.5	89.57	-23.0	208.8	201.5	196.0	5.51	36.563		
1,600.0	1,596.7	1,559.9	1,548.5	3.2	3.9	90.20	-26.6	229.1	222.5	216.5	5.92	37.574		
1,700.0	1,696.3	1,653.7	1,639.7	3.4	4.3	90.61	-30.4	250.8	245.0	238.7	6.33	38.690		
1,800.0	1,795.9	1,746.8	1,729.8	3.6	4.8	90.85	-34.5	273.7	269.0	262.3	6.74	39.898		
1,900.0	1,895.6	1,845.3	1,825.0	3.8	5.2	90.86	-38.1	298.9	293.6	286.4	7.19	40.811		
2,000.0	1,995.2	1,944.4	1,920.7	4.1	5.7	90.57	-40.1	324.4	317.5	309.9	7.65	41.502		
2,100.0	2,094.8	2,045.8	2,018.8	4.3	6.2	90.13	-40.7	350.3	340.7	332.5	8.12	41.971		
2,200.0	2,194.4	2,149.2	2,119.1	4.5	6.6	89.83	-41.1	375.0	362.3	353.7	8.59	42.178		
2,300.0	2,294.0	2,247.0	2,214.4	4.8	7.0	89.64	-41.5	397.5	383.1	374.1	9.04	42.389		
2,400.0	2,393.7	2,344.8	2,309.5	5.0	7.5	89.47	-41.9	420.1	403.9	394.4	9.49	42.578		
2,500.0	2,493.3	2,442.6	2,404.7	5.2	7.9	89.32	-42.4	442.6	424.8	414.8	9.94	42.747		
2,600.0	2,592.9	2,540.4	2,499.9	5.4	8.3	89.18	-42.8	465.1	445.6	435.2	10.39	42.898		
2,700.0	2,692.5	2,638.2	2,595.1	5.7	8.8	89.05	-43.2	487.6	466.4	455.6	10.84	43.035		
2,800.0	2,792.1	2,736.0	2,690.2	5.9	9.2	88.94	-43.6	510.1	487.2	476.0	11.29	43.160		
2,900.0	2,891.8	2,833.8	2,785.4	6.1	9.6	88.83	-44.0	532.6	508.1	496.3	11.74	43.273		
3,000.0	2,991.4	2,931.6	2,880.6	6.4	10.1	88.74	-44.4	555.1	528.9	516.7	12.19	43.376		
3,100.0	3,091.0	3,029.4	2,975.8	6.6	10.5	88.65	-44.8	577.7	549.8	537.1	12.65	43.471		
3,200.0	3,190.6	3,127.2	3,070.9	6.8	10.9	88.56	-45.2	600.2	570.6	557.5	13.10	43.559		
3,300.0	3,290.2	3,225.0	3,166.1	7.1	11.4	88.48	-45.6	622.7	591.4	577.9	13.55	43.640		
3,400.0	3,389.9	3,322.8	3,261.3	7.3	11.8	88.41	-46.0	645.2	612.3	598.3	14.01	43.715		
3,500.0	3,489.5	3,420.6	3,356.4	7.5	12.2	88.34	-46.4	667.7	633.1	618.7	14.46	43.784		
3,600.0	3,589.1	3,518.4	3,451.6	7.7	12.7	88.28	-46.8	690.2	654.0	639.1	14.91	43.849		
3,700.0	3,688.7	3,616.2	3,546.8	8.0	13.1	88.22	-47.2	712.7	674.8	659.5	15.37	43.910		
3,800.0	3,788.3	3,714.0	3,642.0	8.2	13.5	88.17	-47.6	735.2	695.7	679.8	15.82	43.966		
3,900.0	3,888.0	3,811.8	3,737.1	8.4	14.0	88.11	-48.1	757.8	716.5	700.2	16.28	44.020		
4,000.0	3,987.6	3,909.6	3,832.3	8.7	14.4	88.06	-48.5	780.3	737.4	720.6	16.73	44.070		
4,100.0	4,087.2	4,007.4	3,927.5	8.9	14.8	88.02	-48.9	802.8	758.2	741.0	17.19	44.117		
4,200.0	4,186.8	4,105.2	4,022.7	9.1	15.3	87.97	-49.3	825.3	779.1	761.4	17.64	44.161		
4,300.0	4,286.4	4,203.0	4,117.8	9.4	15.7	87.93	-49.7	847.8	799.9	781.8	18.10	44.203		
4,400.0	4,386.1	4,300.8	4,213.0	9.6	16.1	87.89	-50.1	870.3	820.7	802.2	18.55	44.243		
4,500.0	4,485.7	4,398.7	4,308.2	9.8	16.6	87.85	-50.5	892.8	841.6	822.6	19.01	44.280		
4,600.0	4,585.3	4,496.5	4,403.4	10.1	17.0	87.82	-50.9	915.4	862.4	843.0	19.46	44.316		
4,700.0	4,684.9	4,594.3	4,498.5	10.3	17.5	87.78	-51.3	937.9	883.3	863.4	19.92	44.350		
4,800.0	4,784.5	4,692.1	4,593.7	10.5	17.9	87.75	-51.7	960.4	904.1	883.8	20.37	44.382		
4,900.0	4,884.1	4,789.9	4,688.9	10.8	18.3	87.72	-52.1	982.9	925.0	904.2	20.83	44.412		
5,000.0	4,983.8	4,887.7	4,784.1	11.0	18.8	87.69	-52.5	1,005.4	945.8	924.6	21.28	44.442		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis		
5,100.0	5,083.4	4,985.5	4,879.2	11.2	19.2	87.66	-52.9	1,027.9	966.7	945.0	21.74	44.470	
5,200.0	5,183.0	5,083.3	4,974.4	11.4	19.6	87.63	-53.3	1,050.4	987.5	965.4	22.19	44.496	
5,300.0	5,282.6	5,181.1	5,069.6	11.7	20.1	87.60	-53.8	1,072.9	1,008.4	985.7	22.65	44.522	
5,400.0	5,382.2	5,278.9	5,164.7	11.9	20.5	87.58	-54.2	1,095.5	1,029.2	1,006.1	23.11	44.546	
5,500.0	5,481.9	5,376.7	5,259.9	12.1	21.0	87.56	-54.6	1,118.0	1,050.1	1,026.5	23.56	44.570	
5,600.0	5,581.5	5,474.5	5,355.1	12.4	21.4	87.53	-55.0	1,140.5	1,071.0	1,046.9	24.02	44.592	
5,700.0	5,681.1	5,572.3	5,450.3	12.6	21.8	87.51	-55.4	1,163.0	1,091.8	1,067.3	24.47	44.614	
5,800.0	5,780.7	5,670.1	5,545.4	12.8	22.3	87.49	-55.8	1,185.5	1,112.7	1,087.7	24.93	44.634	
5,900.0	5,880.3	5,767.9	5,640.6	13.1	22.7	87.47	-56.2	1,208.0	1,133.5	1,108.1	25.38	44.654	
6,000.0	5,980.0	5,865.7	5,735.8	13.3	23.1	87.45	-56.6	1,230.5	1,154.4	1,128.5	25.84	44.673	
6,100.0	6,079.6	5,963.5	5,831.0	13.5	23.6	87.43	-57.0	1,253.1	1,175.2	1,148.9	26.30	44.692	
6,200.0	6,179.2	6,061.3	5,926.1	13.8	24.0	87.41	-57.4	1,275.6	1,196.1	1,169.3	26.75	44.709	
6,300.0	6,278.8	6,159.1	6,021.3	14.0	24.4	87.39	-57.8	1,298.1	1,216.9	1,189.7	27.21	44.727	
6,400.0	6,378.4	6,256.9	6,116.5	14.2	24.9	87.37	-58.2	1,320.6	1,237.8	1,210.1	27.66	44.743	
6,500.0	6,478.1	6,354.7	6,211.7	14.5	25.3	87.36	-58.6	1,343.1	1,258.6	1,230.5	28.12	44.759	
6,600.0	6,577.7	6,452.5	6,306.8	14.7	25.8	87.34	-59.0	1,365.6	1,279.5	1,250.9	28.58	44.774	
6,700.0	6,677.3	6,550.3	6,402.0	14.9	26.2	87.32	-59.4	1,388.1	1,300.3	1,271.3	29.03	44.789	
6,800.0	6,776.9	6,648.1	6,497.2	15.1	26.6	87.31	-59.9	1,410.7	1,321.2	1,291.7	29.49	44.804	
6,900.0	6,876.5	6,745.9	6,592.4	15.4	27.1	87.29	-60.3	1,433.2	1,342.0	1,312.1	29.94	44.818	
7,000.0	6,976.2	6,843.7	6,687.5	15.6	27.5	87.28	-60.7	1,455.7	1,362.9	1,332.5	30.40	44.831	
7,100.0	7,075.8	6,941.5	6,782.7	15.8	27.9	87.27	-61.1	1,478.2	1,383.7	1,352.9	30.86	44.844	
7,147.2	7,122.8	6,987.6	6,827.6	15.9	28.2	87.26	-61.3	1,488.8	1,393.6	1,362.5	31.07	44.850	
7,150.0	7,125.6	6,990.4	6,830.3	16.0	28.2	85.79	-61.3	1,489.4	1,394.2	1,363.1	31.08	44.851	
7,200.0	7,175.5	7,039.4	6,878.0	16.0	28.4	4.63	-61.5	1,500.7	1,403.6	1,372.4	31.25	44.923	
7,250.0	7,225.4	7,088.4	6,925.7	16.1	28.6	-44.03	-61.7	1,512.0	1,411.3	1,380.0	31.32	45.057	
7,300.0	7,274.8	7,136.9	6,972.9	16.0	28.8	-53.20	-61.9	1,523.2	1,417.2	1,385.9	31.32	45.255	
7,350.0	7,323.4	7,184.7	7,019.4	16.0	29.0	-56.95	-62.1	1,534.2	1,421.4	1,390.2	31.23	45.515	
7,400.0	7,370.8	7,231.4	7,064.8	15.9	29.2	-59.26	-62.3	1,544.9	1,424.0	1,392.9	31.06	45.840	
7,450.0	7,416.7	7,276.5	7,108.7	15.8	29.4	-61.09	-62.5	1,555.3	1,424.9	1,394.1	30.82	46.231	
7,500.0	7,460.7	7,319.8	7,150.8	15.7	29.6	-62.76	-62.7	1,565.3	1,424.6	1,394.1	30.51	46.685	
7,550.0	7,502.4	7,414.5	7,242.9	15.5	30.1	-65.79	-59.3	1,587.0	1,422.8	1,392.4	30.36	46.858	
7,600.0	7,541.6	7,556.2	7,376.8	15.4	30.6	-71.20	-26.6	1,618.5	1,417.6	1,387.4	30.24	46.881	
7,650.0	7,578.0	7,621.7	7,435.1	15.2	30.9	-74.59	-0.3	1,632.2	1,411.3	1,381.5	29.75	47.439	
7,700.0	7,611.2	7,651.1	7,460.3	15.1	31.0	-76.59	13.8	1,638.1	1,405.3	1,376.0	29.27	48.015	
7,750.0	7,641.0	7,661.9	7,469.3	14.9	31.1	-77.72	19.2	1,640.2	1,400.1	1,371.3	28.75	48.696	
7,800.0	7,667.3	7,662.2	7,469.6	14.8	31.1	-78.28	19.4	1,640.2	1,395.9	1,367.7	28.27	49.384	
7,850.0	7,689.7	7,656.0	7,464.4	14.7	31.0	-78.44	16.2	1,639.0	1,392.9	1,365.0	27.84	50.030	
7,900.0	7,708.2	7,645.6	7,455.6	14.7	31.0	-78.30	11.0	1,637.0	1,390.8	1,363.3	27.50	50.582	
7,950.0	7,722.5	7,632.3	7,444.3	14.7	31.0	-77.93	4.6	1,634.3	1,389.8	1,362.6	27.26	50.980	
7,979.0	7,728.9	7,623.6	7,436.7	14.7	30.9	-77.62	0.6	1,632.6	1,389.7	1,362.5	27.19	51.108	
8,000.0	7,732.6	7,616.9	7,430.9	14.8	30.9	-77.36	-2.4	1,631.2	1,389.8	1,362.6	27.16	51.169	
8,050.0	7,738.5	7,600.0	7,416.1	14.9	30.8	-76.65	-9.7	1,627.7	1,390.5	1,363.3	27.19	51.135	
8,092.0	7,740.0	7,585.0	7,402.7	15.0	30.8	-75.97	-15.9	1,624.6	1,391.7	1,364.4	27.32	50.933	
8,100.0	7,740.0	7,582.0	7,400.1	15.0	30.7	-75.86	-17.0	1,624.0	1,392.0	1,364.7	27.36	50.878	
8,200.0	7,740.0	7,550.0	7,371.1	15.5	30.6	-74.63	-28.8	1,617.2	1,399.1	1,371.0	28.13	49.732	
8,300.0	7,740.0	7,526.7	7,349.6	16.1	30.5	-73.72	-36.2	1,612.2	1,412.6	1,383.2	29.39	48.068	
8,400.0	7,740.0	7,500.0	7,324.6	16.9	30.4	-72.67	-43.7	1,606.3	1,432.5	1,401.5	30.98	46.233	
8,500.0	7,740.0	7,500.0	7,324.6	17.8	30.4	-72.67	-43.7	1,606.3	1,458.6	1,425.7	32.93	44.297	
8,600.0	7,740.0	7,479.8	7,305.5	18.9	30.3	-71.86	-48.5	1,601.8	1,490.8	1,455.9	34.88	42.736	
8,700.0	7,740.0	7,469.2	7,295.4	20.0	30.3	-71.44	-50.7	1,599.4	1,528.7	1,491.8	36.92	41.405	
8,800.0	7,740.0	7,450.0	7,277.1	21.2	30.2	-70.67	-54.3	1,595.1	1,572.0	1,533.1	38.87	40.438	
8,900.0	7,740.0	7,450.0	7,277.1	22.5	30.2	-70.67	-54.3	1,595.1	1,620.1	1,579.3	40.85	39.662	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
9,000.0	7,740.0	7,450.0	7,277.1	23.9	30.2	-70.67	-54.3	1,595.1	1,672.8	1,630.1	42.71	39.167		
9,100.0	7,740.0	7,450.0	7,277.1	25.3	30.2	-70.67	-54.3	1,595.1	1,729.7	1,685.2	44.44	38.918		
9,200.0	7,740.0	7,450.0	7,277.1	26.7	30.2	-70.67	-54.3	1,595.1	1,790.3	1,744.3	46.05	38.881		
9,300.0	7,740.0	7,430.0	7,257.9	28.2	30.1	-69.87	-57.4	1,590.6	1,854.1	1,806.7	47.38	39.129		
9,400.0	7,740.0	7,425.9	7,253.9	29.7	30.1	-69.70	-58.0	1,589.6	1,921.0	1,872.3	48.70	39.447		
9,500.0	7,740.0	7,422.2	7,250.3	31.3	30.1	-69.55	-58.4	1,588.8	1,990.7	1,940.8	49.90	39.896		
9,600.0	7,740.0	7,418.8	7,247.0	32.8	30.1	-69.42	-58.8	1,588.0	2,062.9	2,011.9	50.99	40.457		
9,700.0	7,740.0	7,400.0	7,228.9	34.4	30.0	-68.66	-60.7	1,583.7	2,137.6	2,085.7	51.88	41.206		
9,800.0	7,740.0	7,400.0	7,228.9	36.0	30.0	-68.66	-60.7	1,583.7	2,213.9	2,161.1	52.80	41.932		
9,900.0	7,740.0	7,400.0	7,228.9	37.6	30.0	-68.66	-60.7	1,583.7	2,292.1	2,238.5	53.64	42.732		
10,000.0	7,740.0	7,400.0	7,228.9	39.2	30.0	-68.66	-60.7	1,583.7	2,371.9	2,317.5	54.41	43.597		
10,100.0	7,740.0	7,400.0	7,228.9	40.9	30.0	-68.66	-60.7	1,583.7	2,453.2	2,398.1	55.11	44.517		
10,200.0	7,740.0	7,400.0	7,228.9	42.5	30.0	-68.66	-60.7	1,583.7	2,535.8	2,480.1	55.75	45.487		
10,300.0	7,740.0	7,400.0	7,228.9	44.2	30.0	-68.66	-60.7	1,583.7	2,619.7	2,563.3	56.34	46.500		
10,400.0	7,740.0	7,400.0	7,228.9	45.8	30.0	-68.66	-60.7	1,583.7	2,704.6	2,647.7	56.88	47.550		
10,500.0	7,740.0	7,400.0	7,228.9	47.5	30.0	-68.66	-60.7	1,583.7	2,790.5	2,733.2	57.38	48.634		
10,600.0	7,740.0	7,400.0	7,228.9	49.1	30.0	-68.66	-60.7	1,583.7	2,877.4	2,819.5	57.84	49.747		
10,700.0	7,740.0	7,400.0	7,228.9	50.8	30.0	-68.66	-60.7	1,583.7	2,965.0	2,906.8	58.27	50.886		
10,800.0	7,740.0	7,400.0	7,228.9	52.5	30.0	-68.66	-60.7	1,583.7	3,053.5	2,994.8	58.67	52.048		
10,900.0	7,740.0	7,400.0	7,228.9	54.2	30.0	-68.66	-60.7	1,583.7	3,142.6	3,083.6	59.04	53.231		
11,000.0	7,740.0	7,400.0	7,228.9	55.9	30.0	-68.66	-60.7	1,583.7	3,232.4	3,173.0	59.38	54.431		
11,100.0	7,740.0	7,400.0	7,228.9	57.6	30.0	-68.66	-60.7	1,583.7	3,322.7	3,263.0	59.71	55.648		
11,200.0	7,740.0	7,400.0	7,228.9	59.3	30.0	-68.66	-60.7	1,583.7	3,413.6	3,353.6	60.02	56.879		
11,300.0	7,740.0	7,400.0	7,228.9	61.0	30.0	-68.66	-60.7	1,583.7	3,505.0	3,444.7	60.30	58.123		
11,400.0	7,740.0	7,400.0	7,228.9	62.7	30.0	-68.66	-60.7	1,583.7	3,596.8	3,536.2	60.57	59.378		
11,500.0	7,740.0	7,400.0	7,228.9	64.4	30.0	-68.66	-60.7	1,583.7	3,689.1	3,628.3	60.83	60.644		
11,600.0	7,740.0	7,400.0	7,228.9	66.1	30.0	-68.66	-60.7	1,583.7	3,781.7	3,720.7	61.08	61.918		
11,700.0	7,740.0	7,400.0	7,228.9	67.8	30.0	-68.66	-60.7	1,583.7	3,874.8	3,813.5	61.31	63.201		
11,800.0	7,740.0	7,400.0	7,228.9	69.5	30.0	-68.66	-60.7	1,583.7	3,968.1	3,906.6	61.53	64.490		
11,900.0	7,740.0	7,400.0	7,228.9	71.2	30.0	-68.66	-60.7	1,583.7	4,061.8	4,000.1	61.74	65.786		
12,000.0	7,740.0	7,400.0	7,228.9	72.9	30.0	-68.66	-60.7	1,583.7	4,155.8	4,093.8	61.95	67.088		
12,100.0	7,740.0	7,400.0	7,228.9	74.7	30.0	-68.66	-60.7	1,583.7	4,250.0	4,187.9	62.14	68.394		
12,200.0	7,740.0	7,400.0	7,228.9	76.4	30.0	-68.66	-60.7	1,583.7	4,344.5	4,282.2	62.33	69.705		
12,300.0	7,740.0	7,400.0	7,228.9	78.1	30.0	-68.66	-60.7	1,583.7	4,439.3	4,376.8	62.51	71.020		
12,400.0	7,740.0	7,400.0	7,228.9	79.8	30.0	-68.66	-60.7	1,583.7	4,534.2	4,471.6	62.68	72.338		
12,500.0	7,740.0	7,400.0	7,228.9	81.6	30.0	-68.66	-60.7	1,583.7	4,629.4	4,566.6	62.85	73.658		
12,600.0	7,740.0	7,400.0	7,228.9	83.3	30.0	-68.66	-60.7	1,583.7	4,724.8	4,661.8	63.01	74.981		
12,700.0	7,740.0	7,400.0	7,228.9	85.0	30.0	-68.66	-60.7	1,583.7	4,820.4	4,757.2	63.17	76.306		
12,800.0	7,740.0	7,400.0	7,228.9	86.7	30.0	-68.66	-60.7	1,583.7	4,916.1	4,852.8	63.33	77.633		
12,900.0	7,740.0	7,400.0	7,228.9	88.5	30.0	-68.66	-60.7	1,583.7	5,012.0	4,948.6	63.47	78.961		
13,000.0	7,740.0	7,377.1	7,206.6	90.2	29.9	-67.74	-62.2	1,578.5	5,107.6	5,044.2	63.44	80.507		
13,100.0	7,740.0	7,376.7	7,206.2	91.9	29.9	-67.72	-62.2	1,578.4	5,203.8	5,140.2	63.58	81.844		
13,200.0	7,740.0	7,376.2	7,205.8	93.7	29.9	-67.71	-62.2	1,578.3	5,300.2	5,236.4	63.72	83.182		
13,300.0	7,740.0	7,375.8	7,205.4	95.4	29.9	-67.69	-62.3	1,578.2	5,396.6	5,332.8	63.85	84.520		
13,400.0	7,740.0	7,375.4	7,205.0	97.1	29.9	-67.67	-62.3	1,578.1	5,493.2	5,429.2	63.98	85.858		
13,500.0	7,740.0	7,375.0	7,204.6	98.9	29.9	-67.66	-62.3	1,578.0	5,589.9	5,525.8	64.11	87.195		
13,600.0	7,740.0	7,374.6	7,204.2	100.6	29.9	-67.64	-62.3	1,577.9	5,686.8	5,622.5	64.23	88.533		
13,700.0	7,740.0	7,374.2	7,203.8	102.3	29.9	-67.63	-62.3	1,577.8	5,783.7	5,719.3	64.36	89.870		
13,800.0	7,740.0	7,373.9	7,203.5	104.1	29.9	-67.61	-62.3	1,577.7	5,880.7	5,816.3	64.48	91.206		
13,900.0	7,740.0	7,373.5	7,203.1	105.8	29.9	-67.60	-62.4	1,577.6	5,977.9	5,913.3	64.60	92.541		
14,000.0	7,740.0	7,373.2	7,202.8	107.5	29.9	-67.58	-62.4	1,577.6	6,075.1	6,010.4	64.71	93.876		
14,100.0	7,740.0	7,372.9	7,202.5	109.3	29.9	-67.57	-62.4	1,577.5	6,172.4	6,107.6	64.83	95.209		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,200.0	7,740.0	7,372.5	7,202.2	111.0	29.9	-67.56	-62.4	1,577.4	6,269.8	6,204.9	64.94	96.541		
14,300.0	7,740.0	7,349.2	7,179.4	112.8	29.8	-66.62	-62.8	1,572.0	6,367.8	6,302.9	64.88	98.152		
14,400.0	7,740.0	7,349.2	7,179.4	114.5	29.8	-66.62	-62.8	1,572.0	6,465.3	6,400.4	64.99	99.480		
14,500.0	7,740.0	7,349.2	7,179.4	116.2	29.8	-66.62	-62.8	1,572.0	6,563.0	6,497.9	65.10	100.808		
14,600.0	7,740.0	7,349.2	7,179.4	118.0	29.8	-66.62	-62.8	1,572.0	6,660.7	6,595.4	65.22	102.133		
14,700.0	7,740.0	7,349.2	7,179.4	119.7	29.8	-66.62	-62.8	1,572.0	6,758.4	6,693.1	65.33	103.457		
14,800.0	7,740.0	7,349.2	7,179.4	121.5	29.8	-66.62	-62.8	1,572.0	6,856.2	6,790.8	65.44	104.779		
14,900.0	7,740.0	7,349.2	7,179.4	123.2	29.8	-66.62	-62.8	1,572.0	6,954.1	6,888.6	65.54	106.099		
15,000.0	7,740.0	7,349.2	7,179.4	124.9	29.8	-66.62	-62.8	1,572.0	7,052.1	6,986.4	65.65	107.417		
15,100.0	7,740.0	7,349.2	7,179.4	126.7	29.8	-66.62	-62.8	1,572.0	7,150.1	7,084.3	65.76	108.734		
15,200.0	7,740.0	7,349.2	7,179.4	128.4	29.8	-66.62	-62.8	1,572.0	7,248.1	7,182.3	65.86	110.048		
15,300.0	7,740.0	7,349.2	7,179.4	130.2	29.8	-66.62	-62.8	1,572.0	7,346.2	7,280.3	65.97	111.360		
15,400.0	7,740.0	7,349.2	7,179.4	131.9	29.8	-66.62	-62.8	1,572.0	7,444.4	7,378.3	66.07	112.670		
15,500.0	7,740.0	7,349.2	7,179.4	133.7	29.8	-66.62	-62.8	1,572.0	7,542.6	7,476.4	66.18	113.978		
15,600.0	7,740.0	7,349.2	7,179.4	135.4	29.8	-66.62	-62.8	1,572.0	7,640.8	7,574.6	66.28	115.284		
15,700.0	7,740.0	7,349.2	7,179.4	137.1	29.8	-66.62	-62.8	1,572.0	7,739.1	7,672.8	66.38	116.588		
15,800.0	7,740.0	7,349.2	7,179.4	138.9	29.8	-66.62	-62.8	1,572.0	7,837.5	7,771.0	66.48	117.889		
15,900.0	7,740.0	7,349.2	7,179.4	140.6	29.8	-66.62	-62.8	1,572.0	7,935.9	7,869.3	66.58	119.187		
15,953.0	7,740.0	7,349.2	7,179.4	141.6	29.8	-66.62	-62.8	1,572.0	7,988.0	7,921.3	66.64	119.874		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
0.0	0.0	0.0	0.0	0.0	0.0	90.46	-0.7	89.8	89.8					
100.0	100.0	100.0	100.0	0.2	0.2	90.46	-0.7	89.8	89.8	89.5	0.30	295.844		
200.0	200.0	200.0	200.0	0.3	0.3	90.46	-0.7	89.8	89.8	89.2	0.65	137.639 CC, ES		
300.0	300.0	298.4	298.4	0.5	0.5	90.48	-0.8	90.7	90.7	89.7	1.00	90.792		
400.0	400.0	396.8	396.8	0.7	0.7	90.51	-0.8	93.2	93.3	91.9	1.34	69.355		
500.0	500.0	495.1	495.0	0.9	0.9	64.64	-1.0	97.4	97.2	95.5	1.69	57.485		
600.0	600.0	593.3	593.0	1.0	1.1	65.95	-1.1	103.3	102.1	100.1	2.04	50.091		
700.0	699.9	691.2	690.6	1.2	1.3	67.93	-1.4	110.9	108.1	105.7	2.39	45.218		
800.0	799.7	788.9	787.9	1.4	1.5	70.41	-1.7	120.1	115.4	112.6	2.75	41.908		
899.9	899.3	886.3	884.6	1.6	1.7	73.22	-2.0	130.9	124.0	120.8	3.13	39.630		
1,000.0	999.0	983.5	981.0	1.8	2.0	75.96	-2.4	143.3	134.3	130.8	3.51	38.228		
1,100.0	1,098.6	1,080.2	1,076.8	2.0	2.3	78.15	-2.8	157.3	146.6	142.7	3.91	37.518		
1,200.0	1,198.2	1,176.6	1,171.9	2.3	2.6	79.85	-3.3	172.8	160.6	156.3	4.31	37.299 SF		
1,300.0	1,297.8	1,272.6	1,266.3	2.5	2.9	81.13	-3.8	189.9	176.4	171.7	4.71	37.438		
1,400.0	1,397.5	1,368.1	1,360.0	2.7	3.3	82.05	-4.4	208.4	193.8	188.7	5.12	37.846		
1,500.0	1,497.1	1,463.0	1,452.8	2.9	3.7	82.69	-5.0	228.4	212.8	207.3	5.53	38.460		
1,600.0	1,596.7	1,557.4	1,544.7	3.2	4.1	83.10	-5.7	249.8	233.4	227.5	5.95	39.238		
1,700.0	1,696.3	1,651.1	1,635.6	3.4	4.5	83.33	-6.4	272.5	255.5	249.1	6.36	40.148		
1,800.0	1,795.9	1,744.1	1,725.5	3.6	4.9	83.42	-7.1	296.6	279.1	272.3	6.78	41.169		
1,900.0	1,895.6	1,836.5	1,814.3	3.8	5.4	83.40	-7.9	321.9	304.2	297.0	7.19	42.282		
2,000.0	1,995.2	1,928.1	1,902.0	4.1	5.9	83.31	-8.8	348.3	330.8	323.2	7.61	43.476		
2,100.0	2,094.8	2,018.9	1,988.5	4.3	6.4	83.15	-9.6	376.0	358.8	350.8	8.02	44.743		
2,200.0	2,194.4	2,112.3	2,077.1	4.5	7.0	82.95	-10.5	405.6	388.0	379.6	8.45	45.937		
2,300.0	2,294.0	2,207.9	2,167.7	4.8	7.5	82.76	-11.5	436.0	417.3	408.5	8.89	46.957		
2,400.0	2,393.7	2,303.5	2,258.3	5.0	8.1	82.61	-12.4	466.4	446.7	437.4	9.33	47.878		
2,500.0	2,493.3	2,399.1	2,348.9	5.2	8.7	82.47	-13.4	496.8	476.0	466.3	9.77	48.712		
2,600.0	2,592.9	2,494.7	2,439.6	5.4	9.2	82.34	-14.3	527.2	505.4	495.1	10.22	49.472		
2,700.0	2,692.5	2,590.3	2,530.2	5.7	9.8	82.23	-15.2	557.6	534.7	524.0	10.66	50.167		
2,800.0	2,792.1	2,685.9	2,620.8	5.9	10.4	82.14	-16.2	588.0	564.1	553.0	11.10	50.804		
2,900.0	2,891.8	2,781.4	2,711.4	6.1	10.9	82.05	-17.1	618.4	593.4	581.9	11.55	51.391		
3,000.0	2,991.4	2,877.0	2,802.1	6.4	11.5	81.97	-18.1	648.8	622.7	610.8	11.99	51.934		
3,100.0	3,091.0	2,972.6	2,892.7	6.6	12.1	81.90	-19.0	679.3	652.1	639.7	12.44	52.436		
3,200.0	3,190.6	3,068.2	2,983.3	6.8	12.7	81.83	-20.0	709.7	681.4	668.6	12.88	52.904		
3,300.0	3,290.2	3,163.8	3,073.9	7.1	13.2	81.77	-20.9	740.1	710.8	697.5	13.33	53.339		
3,400.0	3,389.9	3,259.4	3,164.6	7.3	13.8	81.71	-21.8	770.5	740.1	726.4	13.77	53.745		
3,500.0	3,489.5	3,355.0	3,255.2	7.5	14.4	81.66	-22.8	800.9	769.5	755.3	14.22	54.125		
3,600.0	3,589.1	3,450.6	3,345.8	7.7	15.0	81.61	-23.7	831.3	798.8	784.2	14.66	54.481		
3,700.0	3,688.7	3,546.2	3,436.4	8.0	15.6	81.57	-24.7	861.7	828.2	813.1	15.11	54.816		
3,800.0	3,788.3	3,641.8	3,527.1	8.2	16.1	81.53	-25.6	892.1	857.5	842.0	15.55	55.132		
3,900.0	3,888.0	3,737.4	3,617.7	8.4	16.7	81.49	-26.6	922.5	886.9	870.9	16.00	55.429		
4,000.0	3,987.6	3,833.0	3,708.3	8.7	17.3	81.45	-27.5	952.9	916.3	899.8	16.45	55.710		
4,100.0	4,087.2	3,928.6	3,798.9	8.9	17.9	81.42	-28.5	983.3	945.6	928.7	16.89	55.976		
4,200.0	4,186.8	4,024.2	3,889.5	9.1	18.4	81.39	-29.4	1,013.7	975.0	957.6	17.34	56.228		
4,300.0	4,286.4	4,119.8	3,980.2	9.4	19.0	81.35	-30.3	1,044.1	1,004.3	986.5	17.79	56.466		
4,400.0	4,386.1	4,215.3	4,070.8	9.6	19.6	81.33	-31.3	1,074.5	1,033.7	1,015.4	18.23	56.693		
4,500.0	4,485.7	4,310.9	4,161.4	9.8	20.2	81.30	-32.2	1,105.0	1,063.0	1,044.3	18.68	56.909		
4,600.0	4,585.3	4,406.5	4,252.0	10.1	20.8	81.27	-33.2	1,135.4	1,092.4	1,073.3	19.13	57.115		
4,700.0	4,684.9	4,502.1	4,342.7	10.3	21.3	81.25	-34.1	1,165.8	1,121.7	1,102.2	19.57	57.311		
4,800.0	4,784.5	4,597.7	4,433.3	10.5	21.9	81.23	-35.1	1,196.2	1,151.1	1,131.1	20.02	57.498		
4,900.0	4,884.1	4,693.3	4,523.9	10.8	22.5	81.21	-36.0	1,226.6	1,180.4	1,160.0	20.47	57.677		
5,000.0	4,983.8	4,788.9	4,614.5	11.0	23.1	81.18	-36.9	1,257.0	1,209.8	1,188.9	20.91	57.848		
5,100.0	5,083.4	4,884.5	4,705.2	11.2	23.7	81.17	-37.9	1,287.4	1,239.2	1,217.8	21.36	58.012		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,200.0	5,183.0	4,980.1	4,795.8	11.4	24.2	81.15	-38.8	1,317.8	1,268.5	1,246.7	21.81	58.169		
5,300.0	5,282.6	5,075.7	4,886.4	11.7	24.8	81.13	-39.8	1,348.2	1,297.9	1,275.6	22.25	58.319		
5,400.0	5,382.2	5,171.3	4,977.0	11.9	25.4	81.11	-40.7	1,378.6	1,327.2	1,304.5	22.70	58.464		
5,500.0	5,481.9	5,266.9	5,067.7	12.1	26.0	81.09	-41.7	1,409.0	1,356.6	1,333.4	23.15	58.603		
5,600.0	5,581.5	5,362.5	5,158.3	12.4	26.6	81.08	-42.6	1,439.4	1,385.9	1,362.3	23.60	58.736		
5,700.0	5,681.1	5,458.1	5,248.9	12.6	27.1	81.06	-43.6	1,469.8	1,415.3	1,391.2	24.04	58.865		
5,800.0	5,780.7	5,553.7	5,339.5	12.8	27.7	81.05	-44.5	1,500.2	1,444.6	1,420.2	24.49	58.988		
5,900.0	5,880.3	5,649.2	5,430.1	13.1	28.3	81.04	-45.4	1,530.6	1,474.0	1,449.1	24.94	59.107		
6,000.0	5,980.0	5,744.8	5,520.8	13.3	28.9	81.02	-46.4	1,561.1	1,503.4	1,478.0	25.38	59.222		
6,100.0	6,079.6	5,840.4	5,611.4	13.5	29.5	81.01	-47.3	1,591.5	1,532.7	1,506.9	25.83	59.333		
6,200.0	6,179.2	5,936.0	5,702.0	13.8	30.0	81.00	-48.3	1,621.9	1,562.1	1,535.8	26.28	59.440		
6,300.0	6,278.8	6,031.6	5,792.6	14.0	30.6	80.99	-49.2	1,652.3	1,591.4	1,564.7	26.73	59.544		
6,400.0	6,378.4	6,127.2	5,883.3	14.2	31.2	80.97	-50.2	1,682.7	1,620.8	1,593.6	27.17	59.644		
6,500.0	6,478.1	6,222.8	5,973.9	14.5	31.8	80.96	-51.1	1,713.1	1,650.1	1,622.5	27.62	59.740		
6,600.0	6,577.7	6,318.4	6,064.5	14.7	32.4	80.95	-52.0	1,743.5	1,679.5	1,651.4	28.07	59.834		
6,700.0	6,677.3	6,414.0	6,155.1	14.9	32.9	80.94	-53.0	1,773.9	1,708.9	1,680.3	28.52	59.925		
6,800.0	6,776.9	6,509.6	6,245.8	15.1	33.5	80.93	-53.9	1,804.3	1,738.2	1,709.2	28.96	60.012		
6,900.0	6,876.5	6,605.2	6,336.4	15.4	34.1	80.92	-54.9	1,834.7	1,767.6	1,738.2	29.41	60.097		
7,000.0	6,976.2	6,700.8	6,427.0	15.6	34.7	80.91	-55.8	1,865.1	1,796.9	1,767.1	29.86	60.180		
7,100.0	7,075.8	6,796.4	6,517.6	15.8	35.3	80.90	-56.8	1,895.5	1,826.3	1,796.0	30.31	60.260		
7,147.2	7,122.8	6,841.5	6,560.4	15.9	35.5	80.90	-57.2	1,909.9	1,840.1	1,809.6	30.52	60.297		
7,150.0	7,125.6	6,844.2	6,562.9	16.0	35.6	79.46	-57.2	1,910.7	1,841.0	1,810.4	30.53	60.299		
7,200.0	7,175.5	6,892.1	6,608.4	16.0	35.8	-1.18	-57.7	1,926.0	1,854.9	1,824.2	30.68	60.452		
7,250.0	7,225.4	6,940.0	6,653.8	16.1	36.1	-49.26	-58.2	1,941.2	1,867.6	1,836.8	30.75	60.734		
7,300.0	7,274.8	6,987.5	6,698.9	16.0	36.4	-57.80	-58.6	1,956.3	1,878.8	1,848.1	30.73	61.140		
7,350.0	7,323.4	7,034.3	6,743.2	16.0	36.7	-60.88	-59.1	1,971.2	1,888.6	1,858.0	30.63	61.670		
7,400.0	7,370.8	7,080.0	6,786.5	15.9	37.0	-62.48	-59.6	1,985.8	1,897.1	1,866.6	30.44	62.319		
7,450.0	7,416.7	7,124.3	6,828.5	15.8	37.3	-63.55	-60.0	1,999.8	1,904.2	1,874.0	30.19	63.082		
7,500.0	7,460.7	7,168.9	6,876.0	15.7	41.9	-92.13	610.8	2,159.9	1,904.7	1,873.9	30.74	61.961		
7,503.1	7,463.3	7,171.6	6,879.1	15.7	41.9	-92.13	609.2	2,160.0	1,904.7	1,874.0	30.72	62.004		
7,550.0	7,502.4	7,216.1	6,924.0	15.5	41.8	-91.92	583.5	2,162.5	1,905.3	1,874.9	30.38	62.722		
7,600.0	7,541.6	7,260.8	6,972.9	15.4	41.7	-91.40	552.6	2,165.5	1,907.2	1,877.2	29.98	63.625		
7,650.0	7,578.0	7,307.5	7,020.4	15.2	41.3	-88.39	420.4	2,175.0	1,910.0	1,880.4	29.58	64.573		
7,700.0	7,611.2	7,350.3	7,063.1	15.1	40.7	-83.07	227.2	2,170.2	1,910.9	1,881.7	29.15	65.558		
7,750.0	7,641.0	7,399.7	7,112.9	14.9	40.4	-80.77	156.5	2,161.2	1,911.4	1,882.8	28.64	66.733		
7,800.0	7,667.3	7,449.0	7,163.2	14.8	40.2	-79.26	115.3	2,153.4	1,912.2	1,884.1	28.16	67.916		
7,850.0	7,689.7	7,498.5	7,212.7	14.7	40.0	-78.03	85.7	2,146.2	1,913.4	1,885.6	27.73	69.001		
7,900.0	7,708.2	7,547.9	7,262.2	14.7	39.9	-76.94	62.1	2,139.3	1,914.8	1,887.4	27.39	69.915		
7,950.0	7,722.5	7,597.2	7,311.6	14.7	39.7	-75.90	42.2	2,132.6	1,916.3	1,889.2	27.15	70.591		
8,000.0	7,732.6	7,646.5	7,361.7	14.8	39.6	-74.91	25.1	2,125.8	1,918.0	1,891.0	27.03	70.961		
8,050.0	7,738.5	7,651.0	7,367.2	14.9	39.5	-73.95	10.1	2,119.0	1,919.8	1,892.7	27.04	70.991		
8,092.0	7,740.0	7,656.9	7,373.1	15.0	39.4	-73.17	-1.1	2,113.1	1,921.2	1,894.0	27.15	70.753		
8,100.0	7,740.0	7,662.4	7,378.6	15.0	39.4	-73.05	-3.1	2,112.0	1,921.4	1,894.3	27.18	70.683		
8,200.0	7,740.0	7,668.9	7,384.1	15.5	39.1	-71.80	-21.6	2,100.3	1,927.1	1,899.2	27.86	69.164		
8,300.0	7,740.0	7,674.4	7,389.6	16.1	39.0	-70.88	-32.6	2,091.5	1,937.2	1,908.1	29.04	66.701		
8,400.0	7,740.0	7,680.0	7,395.1	16.9	38.9	-70.21	-39.5	2,084.9	1,951.8	1,921.2	30.62	63.753		
8,500.0	7,740.0	7,685.6	7,400.6	17.8	38.7	-69.65	-44.4	2,079.4	1,971.2	1,938.7	32.46	60.725		
8,600.0	7,740.0	7,691.1	7,406.1	18.9	38.7	-69.23	-47.8	2,075.2	1,995.2	1,960.7	34.51	57.814		
8,700.0	7,740.0	7,696.7	7,411.6	20.0	38.6	-68.76	-51.0	2,070.5	2,023.7	1,987.0	36.66	55.198		
8,800.0	7,740.0	7,702.2	7,417.1	21.2	38.6	-68.76	-51.0	2,070.5	2,056.6	2,017.7	38.93	52.827		
8,900.0	7,740.0	7,707.7	7,422.6	22.5	38.5	-68.35	-53.4	2,066.3	2,093.6	2,052.5	41.11	50.926		
9,000.0	7,740.0	7,713.2	7,428.1	23.9	38.5	-68.14	-54.6	2,064.1	2,134.7	2,091.4	43.29	49.311		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
9,100.0	7,740.0	7,322.7	7,016.6	25.3	38.4	-67.96	-55.4	2,062.3	2,179.5	2,134.1	45.41	48.000			
9,200.0	7,740.0	7,317.4	7,011.6	26.7	38.4	-67.81	-56.2	2,060.7	2,227.9	2,180.4	47.44	46.962			
9,300.0	7,740.0	7,300.0	6,995.1	28.2	38.3	-67.29	-58.2	2,055.4	2,279.7	2,230.4	49.30	46.242			
9,400.0	7,740.0	7,300.0	6,995.1	29.7	38.3	-67.29	-58.2	2,055.4	2,334.5	2,283.3	51.16	45.630			
9,500.0	7,740.0	7,300.0	6,995.1	31.3	38.3	-67.29	-58.2	2,055.4	2,392.2	2,339.2	52.92	45.207			
9,600.0	7,740.0	7,300.0	6,995.1	32.8	38.3	-67.29	-58.2	2,055.4	2,452.6	2,398.0	54.57	44.948			
9,700.0	7,740.0	7,300.0	6,995.1	34.4	38.3	-67.29	-58.2	2,055.4	2,515.5	2,459.4	56.11	44.833			
9,800.0	7,740.0	7,300.0	6,995.1	36.0	38.3	-67.29	-58.2	2,055.4	2,580.8	2,523.3	57.55	44.843			
9,900.0	7,740.0	7,300.0	6,995.1	37.6	38.3	-67.29	-58.2	2,055.4	2,648.3	2,589.4	58.90	44.963			
10,000.0	7,740.0	7,300.0	6,995.1	39.2	38.3	-67.29	-58.2	2,055.4	2,717.7	2,657.6	60.16	45.179			
10,100.0	7,740.0	7,300.0	6,995.1	40.9	38.3	-67.29	-58.2	2,055.4	2,789.1	2,727.7	61.33	45.479			
10,200.0	7,740.0	7,300.0	6,995.1	42.5	38.3	-67.29	-58.2	2,055.4	2,862.1	2,799.7	62.42	45.855			
10,300.0	7,740.0	7,300.0	6,995.1	44.2	38.3	-67.29	-58.2	2,055.4	2,936.7	2,873.3	63.43	46.297			
10,400.0	7,740.0	7,300.0	6,995.1	45.8	38.3	-67.29	-58.2	2,055.4	3,012.8	2,948.4	64.38	46.799			
10,500.0	7,740.0	7,300.0	6,995.1	47.5	38.3	-67.29	-58.2	2,055.4	3,090.3	3,025.0	65.26	47.353			
10,600.0	7,740.0	7,300.0	6,995.1	49.1	38.3	-67.29	-58.2	2,055.4	3,169.0	3,102.9	66.08	47.954			
10,700.0	7,740.0	7,300.0	6,995.1	50.8	38.3	-67.29	-58.2	2,055.4	3,248.9	3,182.0	66.85	48.597			
10,800.0	7,740.0	7,278.7	6,974.9	52.5	38.2	-66.66	-59.9	2,048.8	3,329.5	3,262.1	67.38	49.416			
10,900.0	7,740.0	7,277.5	6,973.8	54.2	38.2	-66.63	-60.0	2,048.4	3,411.4	3,343.4	68.04	50.140			
11,000.0	7,740.0	7,276.4	6,972.8	55.9	38.2	-66.60	-60.1	2,048.1	3,494.3	3,425.7	68.66	50.895			
11,100.0	7,740.0	7,275.4	6,971.8	57.6	38.2	-66.57	-60.1	2,047.8	3,578.1	3,508.8	69.24	51.677			
11,200.0	7,740.0	7,274.5	6,970.9	59.3	38.2	-66.54	-60.2	2,047.5	3,662.7	3,592.9	69.78	52.485			
11,300.0	7,740.0	7,273.6	6,970.0	61.0	38.2	-66.51	-60.2	2,047.2	3,748.0	3,677.7	70.30	53.316			
11,400.0	7,740.0	7,272.7	6,969.2	62.7	38.1	-66.49	-60.3	2,046.9	3,834.0	3,763.2	70.78	54.168			
11,500.0	7,740.0	7,271.9	6,968.5	64.4	38.1	-66.47	-60.3	2,046.7	3,920.7	3,849.5	71.24	55.039			
11,600.0	7,740.0	7,250.0	6,947.7	66.1	38.0	-65.82	-61.1	2,039.8	4,008.4	3,936.9	71.46	56.094			
11,700.0	7,740.0	7,250.0	6,947.7	67.8	38.0	-65.82	-61.1	2,039.8	4,096.3	4,024.4	71.87	56.994			
11,800.0	7,740.0	7,250.0	6,947.7	69.5	38.0	-65.82	-61.1	2,039.8	4,184.7	4,112.4	72.26	57.909			
11,900.0	7,740.0	7,250.0	6,947.7	71.2	38.0	-65.82	-61.1	2,039.8	4,273.6	4,201.0	72.63	58.837			
12,000.0	7,740.0	7,250.0	6,947.7	72.9	38.0	-65.82	-61.1	2,039.8	4,363.0	4,290.0	72.99	59.778			
12,100.0	7,740.0	7,250.0	6,947.7	74.7	38.0	-65.82	-61.1	2,039.8	4,452.9	4,379.6	73.32	60.731			
12,200.0	7,740.0	7,250.0	6,947.7	76.4	38.0	-65.82	-61.1	2,039.8	4,543.2	4,469.5	73.64	61.693			
12,300.0	7,740.0	7,250.0	6,947.7	78.1	38.0	-65.82	-61.1	2,039.8	4,633.8	4,559.9	73.95	62.665			
12,400.0	7,740.0	7,250.0	6,947.7	79.8	38.0	-65.82	-61.1	2,039.8	4,724.9	4,650.7	74.24	63.646			
12,500.0	7,740.0	7,250.0	6,947.7	81.6	38.0	-65.82	-61.1	2,039.8	4,816.3	4,741.8	74.51	64.635			
12,600.0	7,740.0	7,250.0	6,947.7	83.3	38.0	-65.82	-61.1	2,039.8	4,908.0	4,833.3	74.78	65.632			
12,700.0	7,740.0	7,250.0	6,947.7	85.0	38.0	-65.82	-61.1	2,039.8	5,000.1	4,925.1	75.04	66.635			
12,800.0	7,740.0	7,250.0	6,947.7	86.7	38.0	-65.82	-61.1	2,039.8	5,092.5	5,017.2	75.28	67.645			
12,900.0	7,740.0	7,250.0	6,947.7	88.5	38.0	-65.82	-61.1	2,039.8	5,185.1	5,109.6	75.52	68.661			
13,000.0	7,740.0	7,250.0	6,947.7	90.2	38.0	-65.82	-61.1	2,039.8	5,278.0	5,202.3	75.74	69.682			
13,100.0	7,740.0	7,250.0	6,947.7	91.9	38.0	-65.82	-61.1	2,039.8	5,371.2	5,295.2	75.96	70.707			
13,200.0	7,740.0	7,250.0	6,947.7	93.7	38.0	-65.82	-61.1	2,039.8	5,464.6	5,388.4	76.17	71.738			
13,300.0	7,740.0	7,250.0	6,947.7	95.4	38.0	-65.82	-61.1	2,039.8	5,558.2	5,481.9	76.38	72.772			
13,400.0	7,740.0	7,250.0	6,947.7	97.1	38.0	-65.82	-61.1	2,039.8	5,652.1	5,575.5	76.58	73.810			
13,500.0	7,740.0	7,250.0	6,947.7	98.9	38.0	-65.82	-61.1	2,039.8	5,746.2	5,669.4	76.77	74.852			
13,600.0	7,740.0	7,250.0	6,947.7	100.6	38.0	-65.82	-61.1	2,039.8	5,840.4	5,763.5	76.95	75.896			
13,700.0	7,740.0	7,250.0	6,947.7	102.3	38.0	-65.82	-61.1	2,039.8	5,934.9	5,857.7	77.13	76.944			
13,800.0	7,740.0	7,250.0	6,947.7	104.1	38.0	-65.82	-61.1	2,039.8	6,029.5	5,952.2	77.31	77.994			
13,900.0	7,740.0	7,250.0	6,947.7	105.8	38.0	-65.82	-61.1	2,039.8	6,124.3	6,046.8	77.48	79.047			
14,000.0	7,740.0	7,250.0	6,947.7	107.5	38.0	-65.82	-61.1	2,039.8	6,219.3	6,141.6	77.64	80.102			
14,100.0	7,740.0	7,250.0	6,947.7	109.3	38.0	-65.82	-61.1	2,039.8	6,314.4	6,236.6	77.80	81.159			
14,200.0	7,740.0	7,250.0	6,947.7	111.0	38.0	-65.82	-61.1	2,039.8	6,409.6	6,331.7	77.96	82.218			

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
14,300.0	7,740.0	7,250.0	6,947.7	112.8	38.0	-65.82	-61.1	2,039.8	6,505.0	6,426.9	78.11	83.278		
14,400.0	7,740.0	7,250.0	6,947.7	114.5	38.0	-65.82	-61.1	2,039.8	6,600.6	6,522.3	78.26	84.339		
14,500.0	7,740.0	7,250.0	6,947.7	116.2	38.0	-65.82	-61.1	2,039.8	6,696.3	6,617.9	78.41	85.402		
14,600.0	7,740.0	7,250.0	6,947.7	118.0	38.0	-65.82	-61.1	2,039.8	6,792.1	6,713.5	78.55	86.466		
14,700.0	7,740.0	7,250.0	6,947.7	119.7	38.0	-65.82	-61.1	2,039.8	6,888.0	6,809.3	78.69	87.531		
14,800.0	7,740.0	7,250.0	6,947.7	121.5	38.0	-65.82	-61.1	2,039.8	6,984.0	6,905.2	78.83	88.597		
14,900.0	7,740.0	7,250.0	6,947.7	123.2	38.0	-65.82	-61.1	2,039.8	7,080.2	7,001.2	78.96	89.663		
15,000.0	7,740.0	7,250.0	6,947.7	124.9	38.0	-65.82	-61.1	2,039.8	7,176.4	7,097.3	79.10	90.730		
15,100.0	7,740.0	7,250.0	6,947.7	126.7	38.0	-65.82	-61.1	2,039.8	7,272.8	7,193.5	79.23	91.797		
15,200.0	7,740.0	7,250.0	6,947.7	128.4	38.0	-65.82	-61.1	2,039.8	7,369.2	7,289.8	79.35	92.865		
15,300.0	7,740.0	7,250.0	6,947.7	130.2	38.0	-65.82	-61.1	2,039.8	7,465.7	7,386.3	79.48	93.933		
15,400.0	7,740.0	7,250.0	6,947.7	131.9	38.0	-65.82	-61.1	2,039.8	7,562.4	7,482.8	79.60	95.001		
15,500.0	7,740.0	7,250.0	6,947.7	133.7	38.0	-65.82	-61.1	2,039.8	7,659.1	7,579.4	79.72	96.069		
15,600.0	7,740.0	7,250.0	6,947.7	135.4	38.0	-65.82	-61.1	2,039.8	7,755.9	7,676.0	79.84	97.137		
15,700.0	7,740.0	7,250.0	6,947.7	137.1	38.0	-65.82	-61.1	2,039.8	7,852.8	7,772.8	79.96	98.205		
15,800.0	7,740.0	7,250.0	6,947.7	138.9	38.0	-65.82	-61.1	2,039.8	7,949.7	7,869.6	80.08	99.273		
15,900.0	7,740.0	7,250.0	6,947.7	140.6	38.0	-65.82	-61.1	2,039.8	8,046.8	7,966.6	80.19	100.340		
15,953.0	7,740.0	7,250.0	6,947.7	141.6	38.0	-65.82	-61.1	2,039.8	8,098.2	8,017.9	80.26	100.905		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-90.02	0.0	-15.1	15.1					
100.0	100.0	100.0	100.0	0.2	0.2	-90.02	0.0	-15.1	15.1	14.8	0.30	49.767		
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-15.1	15.1	14.5	0.65	23.153	CC, ES	
300.0	300.0	299.8	299.8	0.5	0.5	-87.54	0.7	-15.7	15.7	14.7	1.00	15.644		
400.0	400.0	399.6	399.5	0.7	0.7	-81.13	2.7	-17.3	17.5	16.2	1.35	12.947		
500.0	500.0	499.2	499.1	0.9	0.9	-101.77	6.1	-20.0	21.1	19.4	1.71	12.376		
600.0	600.0	598.8	598.4	1.0	1.1	-99.44	10.8	-23.8	26.6	24.5	2.06	12.871		
700.0	699.9	698.1	697.4	1.2	1.3	-99.22	16.8	-28.7	33.7	31.3	2.43	13.874		
800.0	799.7	797.3	796.3	1.4	1.5	-100.14	24.1	-34.6	42.5	39.7	2.82	15.105		
899.9	899.3	896.8	895.2	1.6	1.7	-102.39	31.7	-40.7	52.0	48.8	3.22	16.131		
1,000.0	999.0	996.4	994.4	1.8	2.0	-104.79	39.2	-46.8	61.7	58.1	3.64	16.956		
1,100.0	1,098.6	1,095.9	1,093.4	2.0	2.2	-106.54	46.8	-52.9	71.5	67.4	4.06	17.607		
1,200.0	1,198.2	1,195.4	1,192.4	2.3	2.4	-107.87	54.4	-59.1	81.3	76.9	4.49	18.132		
1,300.0	1,297.8	1,294.9	1,291.4	2.5	2.7	-108.91	61.9	-65.2	91.2	86.3	4.91	18.562		
1,400.0	1,397.5	1,394.4	1,390.4	2.7	2.9	-109.75	69.5	-71.3	101.1	95.8	5.34	18.921		
1,500.0	1,497.1	1,493.9	1,489.5	2.9	3.2	-110.44	77.0	-77.4	111.1	105.3	5.78	19.225		
1,600.0	1,596.7	1,593.4	1,588.5	3.2	3.4	-111.01	84.6	-83.5	121.0	114.8	6.21	19.485		
1,700.0	1,696.3	1,692.9	1,687.5	3.4	3.6	-111.50	92.2	-89.6	130.9	124.3	6.64	19.710		
1,800.0	1,795.9	1,792.4	1,786.5	3.6	3.9	-111.92	99.7	-95.7	140.9	133.8	7.08	19.906		
1,900.0	1,895.6	1,891.9	1,885.5	3.8	4.1	-112.28	107.3	-101.9	150.8	143.3	7.51	20.079		
2,000.0	1,995.2	1,991.4	1,984.6	4.1	4.4	-112.60	114.9	-108.0	160.8	152.9	7.95	20.232		
2,100.0	2,094.8	2,090.9	2,083.6	4.3	4.6	-112.88	122.4	-114.1	170.8	162.4	8.38	20.369		
2,200.0	2,194.4	2,190.4	2,182.6	4.5	4.8	-113.13	130.0	-120.2	180.8	171.9	8.82	20.491		
2,300.0	2,294.0	2,289.9	2,281.6	4.8	5.1	-113.35	137.5	-126.3	190.7	181.5	9.26	20.602		
2,400.0	2,393.7	2,389.4	2,380.7	5.0	5.3	-113.56	145.1	-132.4	200.7	191.0	9.69	20.703		
2,500.0	2,493.3	2,488.9	2,479.7	5.2	5.6	-113.74	152.7	-138.5	210.7	200.6	10.13	20.794		
2,600.0	2,592.9	2,588.3	2,578.7	5.4	5.8	-113.90	160.2	-144.7	220.7	210.1	10.57	20.878		
2,700.0	2,692.5	2,687.8	2,677.7	5.7	6.1	-114.06	167.8	-150.8	230.7	219.6	11.01	20.955		
2,800.0	2,792.1	2,787.3	2,776.7	5.9	6.3	-114.19	175.3	-156.9	240.6	229.2	11.44	21.026		
2,900.0	2,891.8	2,886.8	2,875.8	6.1	6.5	-114.32	182.9	-163.0	250.6	238.7	11.88	21.092		
3,000.0	2,991.4	2,986.3	2,974.8	6.4	6.8	-114.44	190.5	-169.1	260.6	248.3	12.32	21.152		
3,100.0	3,091.0	3,085.8	3,073.8	6.6	7.0	-114.55	198.0	-175.2	270.6	257.8	12.76	21.209		
3,200.0	3,190.6	3,185.3	3,172.8	6.8	7.3	-114.65	205.6	-181.3	280.6	267.4	13.20	21.261		
3,300.0	3,290.2	3,284.8	3,271.9	7.1	7.5	-114.75	213.2	-187.5	290.6	277.0	13.64	21.311		
3,400.0	3,389.9	3,384.3	3,370.9	7.3	7.8	-114.84	220.7	-193.6	300.6	286.5	14.07	21.357		
3,500.0	3,489.5	3,483.8	3,469.9	7.5	8.0	-114.92	228.3	-199.7	310.6	296.1	14.51	21.400		
3,600.0	3,589.1	3,583.3	3,568.9	7.7	8.2	-115.00	235.8	-205.8	320.6	305.6	14.95	21.441		
3,700.0	3,688.7	3,682.8	3,667.9	8.0	8.5	-115.07	243.4	-211.9	330.6	315.2	15.39	21.479		
3,800.0	3,788.3	3,782.3	3,767.0	8.2	8.7	-115.14	251.0	-218.0	340.6	324.7	15.83	21.515		
3,900.0	3,888.0	3,881.8	3,866.0	8.4	9.0	-115.20	258.5	-224.1	350.5	334.3	16.27	21.549		
4,000.0	3,987.6	3,981.3	3,965.0	8.7	9.2	-115.26	266.1	-230.3	360.5	343.8	16.71	21.581		
4,100.0	4,087.2	4,080.8	4,064.0	8.9	9.4	-115.32	273.7	-236.4	370.5	353.4	17.15	21.612		
4,200.0	4,186.8	4,180.3	4,163.1	9.1	9.7	-115.38	281.2	-242.5	380.5	362.9	17.58	21.641		
4,300.0	4,286.4	4,279.8	4,262.1	9.4	9.9	-115.43	288.8	-248.6	390.5	372.5	18.02	21.668		
4,400.0	4,386.1	4,379.3	4,361.1	9.6	10.2	-115.48	296.3	-254.7	400.5	382.1	18.46	21.695		
4,500.0	4,485.7	4,478.8	4,460.1	9.8	10.4	-115.52	303.9	-260.8	410.5	391.6	18.90	21.720		
4,600.0	4,585.3	4,578.3	4,559.1	10.1	10.7	-115.57	311.5	-266.9	420.5	401.2	19.34	21.744		
4,700.0	4,684.9	4,677.8	4,658.2	10.3	10.9	-115.61	319.0	-273.1	430.5	410.7	19.78	21.766		
4,800.0	4,784.5	4,777.3	4,757.2	10.5	11.1	-115.65	326.6	-279.2	440.5	420.3	20.22	21.788		
4,900.0	4,884.1	4,876.8	4,856.2	10.8	11.4	-115.69	334.2	-285.3	450.5	429.9	20.66	21.809		
5,000.0	4,983.8	4,976.3	4,955.2	11.0	11.6	-115.73	341.7	-291.4	460.5	439.4	21.10	21.829		
5,100.0	5,083.4	5,075.8	5,054.3	11.2	11.9	-115.76	349.3	-297.5	470.5	449.0	21.54	21.848		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,200.0	5,183.0	5,175.3	5,153.3	11.4	12.1	-115.80	356.8	-303.6	480.5	458.5	21.97	21.866		
5,300.0	5,282.6	5,274.8	5,252.3	11.7	12.4	-115.83	364.4	-309.7	490.5	468.1	22.41	21.884		
5,400.0	5,382.2	5,374.3	5,351.3	11.9	12.6	-115.86	372.0	-315.9	500.5	477.6	22.85	21.901		
5,500.0	5,481.9	5,473.8	5,450.3	12.1	12.8	-115.89	379.5	-322.0	510.5	487.2	23.29	21.917		
5,600.0	5,581.5	5,573.3	5,549.4	12.4	13.1	-115.92	387.1	-328.1	520.5	496.8	23.73	21.933		
5,700.0	5,681.1	5,672.8	5,648.4	12.6	13.3	-115.95	394.7	-334.2	530.5	506.3	24.17	21.948		
5,800.0	5,780.7	5,772.3	5,747.4	12.8	13.6	-115.98	402.2	-340.3	540.5	515.9	24.61	21.963		
5,900.0	5,880.3	5,871.8	5,846.4	13.1	13.8	-116.00	409.8	-346.4	550.5	525.4	25.05	21.977		
6,000.0	5,980.0	5,971.3	5,945.5	13.3	14.1	-116.03	417.3	-352.5	560.5	535.0	25.49	21.990		
6,100.0	6,079.6	6,070.8	6,044.5	13.5	14.3	-116.05	424.9	-358.7	570.5	544.6	25.93	22.003		
6,200.0	6,179.2	6,170.3	6,143.5	13.8	14.5	-116.07	432.5	-364.8	580.5	554.1	26.37	22.016		
6,300.0	6,278.8	6,269.8	6,242.5	14.0	14.8	-116.10	440.0	-370.9	590.5	563.7	26.81	22.028		
6,400.0	6,378.4	6,369.3	6,341.5	14.2	15.0	-116.12	447.6	-377.0	600.5	573.2	27.25	22.040		
6,500.0	6,478.1	6,468.8	6,440.6	14.5	15.3	-116.14	455.2	-383.1	610.5	582.8	27.69	22.051		
6,600.0	6,577.7	6,568.3	6,539.6	14.7	15.5	-116.16	462.7	-389.2	620.5	592.4	28.12	22.062		
6,700.0	6,677.3	6,667.8	6,638.6	14.9	15.8	-116.18	470.3	-395.3	630.5	601.9	28.56	22.073		
6,800.0	6,776.9	6,767.3	6,737.6	15.1	16.0	-116.20	477.8	-401.5	640.5	611.5	29.00	22.083		
6,900.0	6,876.5	6,866.8	6,836.7	15.4	16.2	-116.22	485.4	-407.6	650.5	621.0	29.44	22.093		
7,000.0	6,976.2	6,966.3	6,935.7	15.6	16.5	-116.24	493.0	-413.7	660.5	630.6	29.88	22.103		
7,100.0	7,075.8	7,065.8	7,034.7	15.8	16.7	-116.25	500.5	-419.8	670.5	640.2	30.32	22.113		
7,147.2	7,122.8	7,112.7	7,081.4	15.9	16.8	-116.26	504.1	-422.7	675.2	644.7	30.53	22.117		
7,150.0	7,125.6	7,115.5	7,084.2	16.0	16.9	-117.81	504.3	-422.9	675.5	644.9	30.54	22.118		
7,200.0	7,175.5	7,165.2	7,133.6	16.0	17.0	159.94	508.0	-425.9	680.5	649.8	30.70	22.165		
7,250.0	7,225.4	7,214.9	7,183.2	16.1	17.0	110.64	508.9	-429.0	685.5	654.7	30.77	22.278		
7,300.0	7,274.8	7,264.9	7,233.0	16.0	17.1	101.15	505.4	-432.0	690.5	659.7	30.76	22.450		
7,350.0	7,323.4	7,315.2	7,282.6	16.0	17.1	97.38	497.5	-435.1	695.4	664.7	30.66	22.679		
7,400.0	7,370.8	7,365.9	7,331.7	15.9	17.0	95.33	485.1	-438.1	700.2	669.7	30.50	22.959		
7,450.0	7,416.7	7,417.0	7,379.8	15.8	17.0	94.02	468.4	-441.1	704.9	674.6	30.27	23.287		
7,500.0	7,460.7	7,468.4	7,426.5	15.7	16.9	93.10	447.2	-444.0	709.4	679.4	29.99	23.655		
7,550.0	7,502.4	7,520.2	7,471.5	15.5	16.8	92.41	421.8	-446.8	713.7	684.1	29.67	24.055		
7,600.0	7,541.6	7,572.3	7,514.3	15.4	16.6	91.87	392.1	-449.4	717.8	688.5	29.33	24.475		
7,650.0	7,578.0	7,624.8	7,554.5	15.2	16.5	91.44	358.5	-451.9	721.6	692.6	28.98	24.902		
7,700.0	7,611.2	7,677.6	7,591.7	15.1	16.3	91.09	321.1	-454.2	725.0	696.4	28.64	25.318		
7,750.0	7,641.0	7,730.7	7,625.4	14.9	16.2	90.80	280.2	-456.3	728.1	699.8	28.33	25.704		
7,800.0	7,667.3	7,784.1	7,655.4	14.8	16.1	90.57	236.0	-458.1	730.9	702.8	28.07	26.039		
7,850.0	7,689.7	7,837.8	7,681.2	14.7	16.0	90.38	189.1	-459.7	733.2	705.4	27.88	26.302		
7,900.0	7,708.2	7,891.6	7,702.7	14.7	16.0	90.24	139.7	-461.0	735.2	707.4	27.77	26.471		
7,950.0	7,722.5	7,945.7	7,719.4	14.7	16.0	90.13	88.3	-462.1	736.7	708.9	27.77	26.531		
8,000.0	7,732.6	7,999.9	7,731.3	14.8	16.0	90.05	35.5	-462.8	737.8	709.9	27.87	26.471		
8,050.0	7,738.5	8,054.1	7,738.2	14.9	16.1	90.01	-18.3	-463.2	738.4	710.3	28.09	26.283		
8,092.0	7,740.0	8,099.7	7,740.0	15.0	16.2	90.00	-63.8	-463.3	738.6	710.2	28.37	26.037		
8,100.0	7,740.0	8,107.7	7,740.0	15.0	16.3	90.00	-71.9	-463.3	738.6	710.1	28.43	25.976		
8,200.0	7,740.0	8,207.7	7,740.0	15.5	16.7	90.00	-171.9	-463.3	738.6	709.2	29.38	25.135		
8,300.0	7,740.0	8,307.7	7,740.0	16.1	17.3	90.00	-271.9	-463.3	738.6	707.8	30.71	24.051		
8,400.0	7,740.0	8,407.7	7,740.0	16.9	18.0	90.00	-371.9	-463.3	738.6	706.2	32.36	22.822		
8,500.0	7,740.0	8,507.7	7,740.0	17.8	18.9	90.00	-471.9	-463.3	738.6	704.3	34.29	21.536		
8,600.0	7,740.0	8,607.7	7,740.0	18.9	19.9	90.00	-571.9	-463.3	738.6	702.1	36.46	20.255		
8,700.0	7,740.0	8,707.7	7,740.0	20.0	21.0	90.00	-671.9	-463.3	738.6	699.7	38.83	19.021		
8,800.0	7,740.0	8,807.7	7,740.0	21.2	22.1	90.00	-771.9	-463.3	738.6	697.2	41.36	17.858		
8,900.0	7,740.0	8,907.7	7,740.0	22.5	23.4	90.00	-871.9	-463.3	738.6	694.5	44.02	16.778		
9,000.0	7,740.0	9,007.7	7,740.0	23.9	24.7	90.00	-971.9	-463.3	738.6	691.8	46.79	15.783		
9,100.0	7,740.0	9,107.7	7,740.0	25.3	26.1	90.00	-1,071.9	-463.3	738.6	688.9	49.66	14.872		

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 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,200.0	7,740.0	9,207.7	7,740.0	26.7	27.5	90.00	-1,171.9	-463.3	738.6	685.9	52.61	14.040		
9,300.0	7,740.0	9,307.7	7,740.0	28.2	28.9	90.00	-1,271.9	-463.3	738.6	682.9	55.62	13.280		
9,400.0	7,740.0	9,407.7	7,740.0	29.7	30.4	90.00	-1,371.9	-463.3	738.6	679.9	58.68	12.586		
9,500.0	7,740.0	9,507.7	7,740.0	31.3	31.9	90.00	-1,471.9	-463.3	738.6	676.8	61.79	11.952		
9,600.0	7,740.0	9,607.7	7,740.0	32.8	33.4	90.00	-1,571.9	-463.3	738.6	673.6	64.95	11.372		
9,700.0	7,740.0	9,707.7	7,740.0	34.4	35.0	90.00	-1,671.9	-463.3	738.6	670.4	68.13	10.840		
9,800.0	7,740.0	9,807.7	7,740.0	36.0	36.5	90.00	-1,771.9	-463.3	738.6	667.2	71.35	10.351		
9,900.0	7,740.0	9,907.7	7,740.0	37.6	38.1	90.00	-1,871.9	-463.3	738.6	664.0	74.60	9.901		
10,000.0	7,740.0	10,007.7	7,740.0	39.2	39.7	90.00	-1,971.9	-463.3	738.6	660.7	77.86	9.485		
10,100.0	7,740.0	10,107.7	7,740.0	40.9	41.3	90.00	-2,071.9	-463.3	738.6	657.4	81.15	9.101		
10,200.0	7,740.0	10,207.7	7,740.0	42.5	43.0	90.00	-2,171.9	-463.3	738.6	654.1	84.46	8.745		
10,300.0	7,740.0	10,307.7	7,740.0	44.2	44.6	90.00	-2,271.9	-463.3	738.6	650.8	87.78	8.414		
10,400.0	7,740.0	10,407.7	7,740.0	45.8	46.2	90.00	-2,371.9	-463.3	738.6	647.4	91.11	8.106		
10,500.0	7,740.0	10,507.7	7,740.0	47.5	47.9	90.00	-2,471.9	-463.3	738.6	644.1	94.46	7.819		
10,600.0	7,740.0	10,607.7	7,740.0	49.1	49.5	90.00	-2,571.9	-463.3	738.6	640.7	97.82	7.550		
10,700.0	7,740.0	10,707.7	7,740.0	50.8	51.2	90.00	-2,671.9	-463.3	738.6	637.4	101.19	7.299		
10,800.0	7,740.0	10,807.7	7,740.0	52.5	52.9	90.00	-2,771.9	-463.3	738.6	634.0	104.56	7.063		
10,900.0	7,740.0	10,907.7	7,740.0	54.2	54.5	90.00	-2,871.9	-463.3	738.6	630.6	107.95	6.842		
11,000.0	7,740.0	11,007.7	7,740.0	55.9	56.2	90.00	-2,971.9	-463.3	738.6	627.2	111.34	6.633		
11,100.0	7,740.0	11,107.7	7,740.0	57.6	57.9	90.00	-3,071.9	-463.3	738.6	623.8	114.74	6.437		
11,200.0	7,740.0	11,207.7	7,740.0	59.3	59.6	90.00	-3,171.9	-463.3	738.6	620.4	118.15	6.251		
11,300.0	7,740.0	11,307.7	7,740.0	61.0	61.3	90.00	-3,271.9	-463.3	738.6	617.0	121.56	6.075		
11,400.0	7,740.0	11,407.7	7,740.0	62.7	63.0	90.00	-3,371.9	-463.3	738.6	613.6	124.98	5.909		
11,500.0	7,740.0	11,507.7	7,740.0	64.4	64.7	90.00	-3,471.9	-463.3	738.6	610.2	128.40	5.752		
11,600.0	7,740.0	11,607.7	7,740.0	66.1	66.4	90.00	-3,571.9	-463.3	738.6	606.7	131.83	5.602		
11,700.0	7,740.0	11,707.7	7,740.0	67.8	68.1	90.00	-3,671.9	-463.3	738.6	603.3	135.26	5.460		
11,800.0	7,740.0	11,807.7	7,740.0	69.5	69.8	90.00	-3,771.9	-463.3	738.6	599.9	138.70	5.325		
11,900.0	7,740.0	11,907.7	7,740.0	71.2	71.5	90.00	-3,871.9	-463.3	738.6	596.4	142.14	5.196		
12,000.0	7,740.0	12,007.7	7,740.0	72.9	73.2	90.00	-3,971.9	-463.3	738.6	593.0	145.58	5.073		
12,100.0	7,740.0	12,107.7	7,740.0	74.7	74.9	90.00	-4,071.9	-463.3	738.6	589.5	149.02	4.956		
12,200.0	7,740.0	12,207.7	7,740.0	76.4	76.6	90.00	-4,171.9	-463.3	738.6	586.1	152.47	4.844		
12,300.0	7,740.0	12,307.7	7,740.0	78.1	78.4	90.00	-4,271.9	-463.3	738.6	582.6	155.92	4.737		
12,400.0	7,740.0	12,407.7	7,740.0	79.8	80.1	90.00	-4,371.9	-463.3	738.6	579.2	159.38	4.634		
12,500.0	7,740.0	12,507.7	7,740.0	81.6	81.8	90.00	-4,471.9	-463.3	738.6	575.7	162.83	4.536		
12,600.0	7,740.0	12,607.7	7,740.0	83.3	83.5	90.00	-4,571.9	-463.3	738.6	572.3	166.29	4.441		
12,700.0	7,740.0	12,707.7	7,740.0	85.0	85.2	90.00	-4,671.9	-463.3	738.6	568.8	169.75	4.351		
12,800.0	7,740.0	12,807.7	7,740.0	86.7	87.0	90.00	-4,771.9	-463.3	738.6	565.3	173.21	4.264		
12,900.0	7,740.0	12,907.7	7,740.0	88.5	88.7	90.00	-4,871.9	-463.3	738.6	561.9	176.67	4.180		
13,000.0	7,740.0	13,007.7	7,740.0	90.2	90.4	90.00	-4,971.9	-463.3	738.6	558.4	180.14	4.100		
13,100.0	7,740.0	13,107.7	7,740.0	91.9	92.1	90.00	-5,071.9	-463.3	738.6	554.9	183.61	4.022		
13,200.0	7,740.0	13,207.7	7,740.0	93.7	93.9	90.00	-5,171.9	-463.3	738.6	551.5	187.08	3.948		
13,300.0	7,740.0	13,307.7	7,740.0	95.4	95.6	90.00	-5,271.9	-463.3	738.6	548.0	190.55	3.876		
13,400.0	7,740.0	13,407.7	7,740.0	97.1	97.3	90.00	-5,371.9	-463.3	738.6	544.5	194.02	3.807		
13,500.0	7,740.0	13,507.7	7,740.0	98.9	99.1	90.00	-5,471.9	-463.3	738.6	541.1	197.49	3.740		
13,600.0	7,740.0	13,607.7	7,740.0	100.6	100.8	90.00	-5,571.9	-463.3	738.6	537.6	200.96	3.675		
13,700.0	7,740.0	13,707.7	7,740.0	102.3	102.5	90.00	-5,671.9	-463.3	738.6	534.1	204.44	3.613		
13,800.0	7,740.0	13,807.7	7,740.0	104.1	104.3	90.00	-5,771.9	-463.3	738.6	530.6	207.91	3.552		
13,900.0	7,740.0	13,907.7	7,740.0	105.8	106.0	90.00	-5,871.9	-463.3	738.6	527.2	211.39	3.494		
14,000.0	7,740.0	14,007.7	7,740.0	107.5	107.7	90.00	-5,971.9	-463.3	738.6	523.7	214.87	3.437		
14,100.0	7,740.0	14,107.7	7,740.0	109.3	109.5	90.00	-6,071.9	-463.3	738.6	520.2	218.35	3.382		
14,200.0	7,740.0	14,207.7	7,740.0	111.0	111.2	90.00	-6,171.9	-463.3	738.6	516.7	221.83	3.329		
14,300.0	7,740.0	14,307.7	7,740.0	112.8	112.9	90.00	-6,271.9	-463.3	738.6	513.2	225.31	3.278		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
14,400.0	7,740.0	14,407.7	7,740.0	114.5	114.7	90.00	-6,371.9	-463.3	738.6	509.8	228.79	3.228	
14,500.0	7,740.0	14,507.7	7,740.0	116.2	116.4	90.00	-6,471.9	-463.3	738.6	506.3	232.27	3.180	
14,600.0	7,740.0	14,607.7	7,740.0	118.0	118.1	90.00	-6,571.9	-463.3	738.6	502.8	235.76	3.133	
14,700.0	7,740.0	14,707.7	7,740.0	119.7	119.9	90.00	-6,671.9	-463.3	738.6	499.3	239.24	3.087	
14,800.0	7,740.0	14,807.7	7,740.0	121.5	121.6	90.00	-6,771.9	-463.3	738.6	495.8	242.73	3.043	
14,900.0	7,740.0	14,907.7	7,740.0	123.2	123.4	90.00	-6,871.9	-463.3	738.6	492.3	246.21	3.000	
15,000.0	7,740.0	15,007.7	7,740.0	124.9	125.1	90.00	-6,971.9	-463.3	738.6	488.9	249.70	2.958	
15,100.0	7,740.0	15,107.7	7,740.0	126.7	126.8	90.00	-7,071.9	-463.3	738.6	485.4	253.18	2.917	
15,200.0	7,740.0	15,207.7	7,740.0	128.4	128.6	90.00	-7,171.9	-463.3	738.6	481.9	256.67	2.877	
15,300.0	7,740.0	15,307.7	7,740.0	130.2	130.3	90.00	-7,271.9	-463.3	738.6	478.4	260.16	2.839	
15,400.0	7,740.0	15,407.7	7,740.0	131.9	132.1	90.00	-7,371.9	-463.3	738.6	474.9	263.65	2.801	
15,500.0	7,740.0	15,507.7	7,740.0	133.7	133.8	90.00	-7,471.9	-463.3	738.6	471.4	267.14	2.765	
15,600.0	7,740.0	15,607.7	7,740.0	135.4	135.5	90.00	-7,571.9	-463.3	738.6	467.9	270.63	2.729	
15,700.0	7,740.0	15,707.7	7,740.0	137.1	137.3	90.00	-7,671.9	-463.3	738.6	464.4	274.11	2.694	
15,800.0	7,740.0	15,807.7	7,740.0	138.9	139.0	90.00	-7,771.9	-463.3	738.6	461.0	277.61	2.660	
15,900.0	7,740.0	15,907.7	7,740.0	140.6	140.8	90.00	-7,871.9	-463.3	738.6	457.5	281.10	2.627	
15,901.3	7,740.0	15,909.0	7,740.0	140.7	140.8	90.00	-7,873.2	-463.3	738.6	457.4	281.14	2.627	
15,953.0	7,740.0	15,949.8	7,740.0	141.6	141.5	90.00	-7,913.9	-463.3	738.6	455.9	282.77	2.612 SF	

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-7.6	7.6					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-7.6	7.6	7.3	0.30	24.883		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-7.6	7.6	6.9	0.65	11.577		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-7.6	7.6	6.6	1.00	7.543 CC, ES		
400.0	400.0	399.9	399.9	0.7	0.7	-85.30	0.7	-8.1	8.1	6.8	1.35	6.029		
500.0	500.0	499.8	499.7	0.9	0.9	-105.83	2.7	-9.8	10.4	8.7	1.70	6.087		
600.0	600.0	599.5	599.4	1.0	1.0	-104.79	6.0	-12.6	14.4	12.4	2.06	7.017		
700.0	699.9	699.1	698.8	1.2	1.2	-105.93	10.6	-16.5	20.3	17.9	2.42	8.388		
800.0	799.7	798.8	798.3	1.4	1.4	-108.83	16.0	-21.0	27.4	24.6	2.80	9.779		
899.9	899.3	898.4	897.6	1.6	1.6	-113.17	21.3	-25.4	35.2	32.0	3.20	11.001		
1,000.0	999.0	998.1	997.1	1.8	1.8	-117.02	26.6	-29.9	43.5	39.9	3.60	12.082		
1,100.0	1,098.6	1,097.7	1,096.4	2.0	2.1	-119.62	31.9	-34.4	51.9	47.9	4.00	12.969		
1,200.0	1,198.2	1,197.4	1,195.8	2.3	2.3	-121.49	37.3	-38.8	60.4	56.0	4.41	13.705		
1,300.0	1,297.8	1,297.9	1,296.1	2.5	2.5	-122.50	43.2	-42.7	68.3	63.5	4.83	14.156		
1,400.0	1,397.5	1,398.7	1,396.7	2.7	2.7	-122.50	50.4	-45.3	74.8	69.5	5.25	14.243		
1,500.0	1,497.1	1,499.2	1,496.7	2.9	2.9	-121.83	58.6	-46.8	80.0	74.3	5.68	14.083		
1,600.0	1,596.7	1,599.0	1,596.3	3.2	3.1	-121.15	66.9	-48.0	85.1	79.0	6.12	13.911		
1,700.0	1,696.3	1,698.9	1,695.8	3.4	3.3	-120.54	75.2	-49.3	90.1	83.6	6.55	13.759		
1,800.0	1,795.9	1,798.8	1,795.3	3.6	3.6	-119.99	83.6	-50.5	95.2	88.2	6.99	13.624		
1,900.0	1,895.6	1,898.6	1,894.8	3.8	3.8	-119.50	91.9	-51.8	100.3	92.8	7.43	13.502		
2,000.0	1,895.2	1,998.5	1,994.3	4.1	4.0	-119.06	100.2	-53.0	105.4	97.5	7.87	13.393		
2,100.0	2,094.8	2,098.4	2,093.8	4.3	4.2	-118.66	108.5	-54.3	110.4	102.1	8.31	13.295		
2,200.0	2,194.4	2,198.2	2,193.3	4.5	4.4	-118.29	116.9	-55.5	115.5	106.8	8.75	13.205		
2,300.0	2,294.0	2,298.1	2,292.8	4.8	4.7	-117.96	125.2	-56.8	120.6	111.4	9.19	13.124		
2,400.0	2,393.7	2,398.0	2,392.3	5.0	4.9	-117.65	133.5	-58.0	125.7	116.1	9.63	13.049		
2,500.0	2,493.3	2,497.8	2,491.9	5.2	5.1	-117.36	141.8	-59.2	130.8	120.8	10.08	12.981		
2,600.0	2,592.9	2,597.7	2,591.4	5.4	5.3	-117.10	150.2	-60.5	135.9	125.4	10.52	12.918		
2,700.0	2,692.5	2,697.6	2,690.9	5.7	5.6	-116.86	158.5	-61.7	141.0	130.1	10.97	12.860		
2,800.0	2,792.1	2,797.4	2,790.4	5.9	5.8	-116.63	166.8	-63.0	146.2	134.7	11.41	12.806		
2,900.0	2,891.8	2,897.3	2,889.9	6.1	6.0	-116.42	175.2	-64.2	151.3	139.4	11.86	12.755		
3,000.0	2,991.4	2,997.2	2,989.4	6.4	6.2	-116.22	183.5	-65.5	156.4	144.1	12.30	12.709		
3,100.0	3,091.0	3,097.0	3,088.9	6.6	6.5	-116.04	191.8	-66.7	161.5	148.7	12.75	12.665		
3,200.0	3,190.6	3,196.9	3,188.4	6.8	6.7	-115.86	200.1	-68.0	166.6	153.4	13.20	12.624		
3,300.0	3,290.2	3,296.8	3,288.0	7.1	6.9	-115.70	208.5	-69.2	171.7	158.1	13.64	12.586		
3,400.0	3,389.9	3,396.7	3,387.5	7.3	7.1	-115.54	216.8	-70.5	176.9	162.8	14.09	12.550		
3,500.0	3,489.5	3,496.5	3,487.0	7.5	7.4	-115.40	225.1	-71.7	182.0	167.4	14.54	12.516		
3,600.0	3,589.1	3,596.4	3,586.5	7.7	7.6	-115.26	233.4	-73.0	187.1	172.1	14.99	12.485		
3,700.0	3,688.7	3,696.3	3,686.0	8.0	7.8	-115.13	241.8	-74.2	192.2	176.8	15.43	12.454		
3,800.0	3,788.3	3,796.1	3,785.5	8.2	8.0	-115.01	250.1	-75.5	197.3	181.5	15.88	12.426		
3,900.0	3,888.0	3,896.0	3,885.0	8.4	8.3	-114.89	258.4	-76.7	202.5	186.1	16.33	12.399		
4,000.0	3,987.6	3,995.9	3,984.5	8.7	8.5	-114.78	266.7	-78.0	207.6	190.8	16.78	12.374		
4,100.0	4,087.2	4,095.7	4,084.1	8.9	8.7	-114.67	275.1	-79.2	212.7	195.5	17.23	12.349		
4,200.0	4,186.8	4,195.6	4,183.6	9.1	9.0	-114.57	283.4	-80.5	217.9	200.2	17.67	12.326		
4,300.0	4,286.4	4,295.5	4,283.1	9.4	9.2	-114.48	291.7	-81.7	223.0	204.9	18.12	12.304		
4,400.0	4,386.1	4,395.3	4,382.6	9.6	9.4	-114.38	300.1	-83.0	228.1	209.5	18.57	12.283		
4,500.0	4,485.7	4,495.2	4,482.1	9.8	9.6	-114.30	308.4	-84.2	233.2	214.2	19.02	12.263		
4,600.0	4,585.3	4,595.1	4,581.6	10.1	9.9	-114.21	316.7	-85.4	238.4	218.9	19.47	12.244		
4,700.0	4,684.9	4,694.9	4,681.1	10.3	10.1	-114.13	325.0	-86.7	243.5	223.6	19.92	12.226		
4,800.0	4,784.5	4,794.8	4,780.6	10.5	10.3	-114.05	333.4	-87.9	248.6	228.3	20.37	12.209		
4,900.0	4,884.1	4,894.7	4,880.2	10.8	10.5	-113.98	341.7	-89.2	253.8	233.0	20.81	12.192		
5,000.0	4,983.8	4,994.5	4,979.7	11.0	10.8	-113.91	350.0	-90.4	258.9	237.6	21.26	12.176		
5,100.0	5,083.4	5,094.4	5,079.2	11.2	11.0	-113.84	358.3	-91.7	264.0	242.3	21.71	12.161		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,200.0	5,183.0	5,194.3	5,178.7	11.4	11.2	-113.78	366.7	-92.9	269.2	247.0	22.16	12.146	
5,300.0	5,282.6	5,294.1	5,278.2	11.7	11.4	-113.71	375.0	-94.2	274.3	251.7	22.61	12.132	
5,400.0	5,382.2	5,394.0	5,377.7	11.9	11.7	-113.65	383.3	-95.4	279.4	256.4	23.06	12.118	
5,500.0	5,481.9	5,493.9	5,477.2	12.1	11.9	-113.59	391.6	-96.7	284.6	261.1	23.51	12.105	
5,600.0	5,581.5	5,593.7	5,576.7	12.4	12.1	-113.54	400.0	-97.9	289.7	265.7	23.96	12.092	
5,700.0	5,681.1	5,693.6	5,676.2	12.6	12.4	-113.48	408.3	-99.2	294.8	270.4	24.41	12.080	
5,800.0	5,780.7	5,793.5	5,775.8	12.8	12.6	-113.43	416.6	-100.4	300.0	275.1	24.86	12.068	
5,900.0	5,880.3	5,893.3	5,875.3	13.1	12.8	-113.38	425.0	-101.7	305.1	279.8	25.31	12.057	
6,000.0	5,980.0	5,993.2	5,974.8	13.3	13.0	-113.33	433.3	-102.9	310.2	284.5	25.75	12.046	
6,100.0	6,079.6	6,093.1	6,074.3	13.5	13.3	-113.28	441.6	-104.2	315.4	289.2	26.20	12.035	
6,200.0	6,179.2	6,192.9	6,173.8	13.8	13.5	-113.23	449.9	-105.4	320.5	293.9	26.65	12.025	
6,300.0	6,278.8	6,292.8	6,273.3	14.0	13.7	-113.19	458.3	-106.7	325.6	298.5	27.10	12.015	
6,400.0	6,378.4	6,392.7	6,372.8	14.2	13.9	-113.14	466.6	-107.9	330.8	303.2	27.55	12.006	
6,500.0	6,478.1	6,492.5	6,472.3	14.5	14.2	-113.10	474.9	-109.2	335.9	307.9	28.00	11.996	
6,600.0	6,577.7	6,592.4	6,571.9	14.7	14.4	-113.06	483.2	-110.4	341.0	312.6	28.45	11.987	
6,700.0	6,677.3	6,692.3	6,671.4	14.9	14.6	-113.02	491.6	-111.6	346.2	317.3	28.90	11.979	
6,800.0	6,776.9	6,792.2	6,770.9	15.1	14.9	-112.98	499.9	-112.9	351.3	322.0	29.35	11.970	
6,900.0	6,876.5	6,892.0	6,870.4	15.4	15.1	-112.95	508.2	-114.1	356.5	326.7	29.80	11.962	
7,000.0	6,976.2	6,994.5	6,972.7	15.6	15.2	-114.12	509.1	-115.4	361.2	331.1	30.12	11.995	
7,100.0	7,075.8	7,091.7	7,068.5	15.8	15.1	-117.80	493.2	-116.6	366.3	336.1	30.18	12.138	
7,147.2	7,122.8	7,134.3	7,109.4	15.9	15.1	-120.16	481.2	-117.1	369.6	339.5	30.11	12.275	
7,150.0	7,125.6	7,136.8	7,111.7	16.0	15.1	-121.85	480.4	-117.2	369.8	339.7	30.10	12.285	
7,200.0	7,175.5	7,180.0	7,152.0	16.0	15.0	153.22	465.0	-117.7	374.3	344.4	29.92	12.510	
7,250.0	7,225.4	7,222.1	7,190.1	16.1	14.8	101.24	447.0	-118.2	379.7	350.0	29.66	12.802	
7,300.0	7,274.8	7,263.3	7,226.0	16.0	14.7	89.21	426.8	-118.6	385.7	356.4	29.33	13.152	
7,350.0	7,323.4	7,300.0	7,256.7	16.0	14.6	83.20	406.7	-119.0	392.3	363.3	28.94	13.555	
7,400.0	7,370.8	7,343.2	7,291.0	15.9	14.4	78.73	380.5	-119.4	399.2	370.6	28.51	13.999	
7,450.0	7,416.7	7,382.1	7,320.2	15.8	14.3	75.34	354.8	-119.8	406.2	378.2	28.06	14.477	
7,500.0	7,460.7	7,420.4	7,347.2	15.7	14.2	72.49	327.6	-120.1	413.3	385.7	27.60	14.979	
7,550.0	7,502.4	7,458.3	7,372.0	15.5	14.0	70.05	299.0	-120.4	420.4	393.2	27.13	15.493	
7,600.0	7,541.6	7,500.0	7,397.1	15.4	13.9	67.81	265.7	-120.7	427.2	400.5	26.70	16.000	
7,650.0	7,578.0	7,532.7	7,415.0	15.2	13.8	66.09	238.3	-121.0	433.6	407.4	26.27	16.506	
7,700.0	7,611.2	7,569.4	7,433.2	15.1	13.7	64.48	206.5	-121.2	439.7	413.8	25.90	16.978	
7,750.0	7,641.0	7,600.0	7,446.8	14.9	13.7	63.21	179.1	-121.4	445.2	419.7	25.54	17.429	
7,800.0	7,667.3	7,641.9	7,463.1	14.8	13.6	61.94	140.4	-121.6	450.1	424.8	25.31	17.780	
7,850.0	7,689.7	7,677.9	7,474.7	14.7	13.6	60.97	106.4	-121.7	454.3	429.2	25.13	18.079	
7,900.0	7,708.2	7,713.7	7,484.1	14.7	13.6	60.19	71.9	-121.8	457.9	432.8	25.02	18.297	
7,950.0	7,722.5	7,750.0	7,491.5	14.7	13.7	59.59	36.3	-121.9	460.6	435.6	25.00	18.424	
8,000.0	7,732.6	7,784.9	7,496.4	14.8	13.7	59.18	1.8	-122.0	462.6	437.5	25.07	18.450	
8,050.0	7,738.5	7,820.3	7,499.3	14.9	13.8	58.93	-33.5	-122.0	463.8	438.5	25.23	18.381	
8,092.0	7,740.0	7,850.6	7,500.0	15.0	13.9	58.86	-63.8	-122.0	464.1	438.7	25.43	18.248	
8,100.0	7,740.0	7,858.7	7,500.0	15.0	13.9	58.86	-71.9	-122.0	464.1	438.6	25.49	18.206	
8,200.0	7,740.0	7,958.7	7,500.0	15.5	14.4	58.86	-171.9	-122.0	464.1	437.7	26.38	17.591	
8,300.0	7,740.0	8,058.7	7,500.0	16.1	15.1	58.86	-271.9	-122.0	464.1	436.6	27.56	16.841	
8,400.0	7,740.0	8,158.7	7,500.0	16.9	15.9	58.86	-371.9	-122.0	464.1	435.1	29.00	16.004	
8,500.0	7,740.0	8,258.7	7,500.0	17.8	16.9	58.86	-471.9	-122.0	464.1	433.4	30.67	15.132	
8,600.0	7,740.0	8,358.7	7,500.0	18.9	18.0	58.86	-571.9	-122.0	464.1	431.6	32.53	14.266	
8,700.0	7,740.0	8,458.7	7,500.0	20.0	19.2	58.86	-671.9	-122.0	464.1	429.6	34.56	13.430	
8,800.0	7,740.0	8,558.7	7,500.0	21.2	20.5	58.86	-771.9	-122.0	464.1	427.4	36.72	12.639	
8,900.0	7,740.0	8,658.7	7,500.0	22.5	21.8	58.86	-871.9	-122.0	464.1	425.1	38.99	11.902	
9,000.0	7,740.0	8,758.7	7,500.0	23.9	23.2	58.86	-971.9	-122.0	464.1	422.8	41.36	11.221	
9,100.0	7,740.0	8,858.7	7,500.0	25.3	24.6	58.86	-1,071.9	-122.0	464.1	420.3	43.81	10.594	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor	
9,200.0	7,740.0	8,958.7	7,500.0	26.7	26.1	58.86	-1,171.9	-122.0	464.1	417.8	46.32	10.020	
9,300.0	7,740.0	9,058.7	7,500.0	28.2	27.6	58.86	-1,271.9	-122.0	464.1	415.2	48.89	9.493	
9,400.0	7,740.0	9,158.7	7,500.0	29.7	29.2	58.86	-1,371.9	-122.0	464.1	412.6	51.51	9.011	
9,500.0	7,740.0	9,258.7	7,500.0	31.3	30.7	58.86	-1,471.9	-122.0	464.1	410.0	54.16	8.569	
9,600.0	7,740.0	9,358.7	7,500.0	32.8	32.3	58.86	-1,571.9	-122.0	464.1	407.3	56.86	8.163	
9,700.0	7,740.0	9,458.7	7,500.0	34.4	33.9	58.86	-1,671.9	-122.0	464.1	404.5	59.58	7.790	
9,800.0	7,740.0	9,558.7	7,500.0	36.0	35.5	58.86	-1,771.9	-122.0	464.1	401.8	62.33	7.446	
9,900.0	7,740.0	9,658.7	7,500.0	37.6	37.2	58.86	-1,871.9	-122.0	464.1	399.0	65.10	7.129	
10,000.0	7,740.0	9,758.7	7,500.0	39.2	38.8	58.86	-1,971.9	-122.0	464.1	396.2	67.90	6.836	
10,100.0	7,740.0	9,858.7	7,500.0	40.9	40.4	58.86	-2,071.9	-122.0	464.1	393.4	70.71	6.564	
10,200.0	7,740.0	9,958.7	7,500.0	42.5	42.1	58.86	-2,171.9	-122.0	464.1	390.6	73.53	6.312	
10,300.0	7,740.0	10,058.7	7,500.0	44.2	43.8	58.86	-2,271.9	-122.0	464.1	387.7	76.37	6.077	
10,400.0	7,740.0	10,158.7	7,500.0	45.8	45.4	58.86	-2,371.9	-122.0	464.1	384.9	79.23	5.858	
10,500.0	7,740.0	10,258.7	7,500.0	47.5	47.1	58.86	-2,471.9	-122.0	464.1	382.0	82.09	5.654	
10,600.0	7,740.0	10,358.7	7,500.0	49.1	48.8	58.86	-2,571.9	-122.0	464.1	379.2	84.96	5.463	
10,700.0	7,740.0	10,458.7	7,500.0	50.8	50.5	58.86	-2,671.9	-122.0	464.1	376.3	87.85	5.283	
10,800.0	7,740.0	10,558.7	7,500.0	52.5	52.2	58.86	-2,771.9	-122.0	464.1	373.4	90.74	5.115	
10,900.0	7,740.0	10,658.7	7,500.0	54.2	53.9	58.86	-2,871.9	-122.0	464.1	370.5	93.64	4.957	
11,000.0	7,740.0	10,758.7	7,500.0	55.9	55.6	58.86	-2,971.9	-122.0	464.1	367.6	96.54	4.807	
11,100.0	7,740.0	10,858.7	7,500.0	57.6	57.3	58.86	-3,071.9	-122.0	464.1	364.7	99.45	4.667	
11,200.0	7,740.0	10,958.7	7,500.0	59.3	59.0	58.86	-3,171.9	-122.0	464.1	361.7	102.37	4.534	
11,300.0	7,740.0	11,058.7	7,500.0	61.0	60.7	58.86	-3,271.9	-122.0	464.1	358.8	105.29	4.408	
11,400.0	7,740.0	11,158.7	7,500.0	62.7	62.4	58.86	-3,371.9	-122.0	464.1	355.9	108.22	4.289	
11,500.0	7,740.0	11,258.7	7,500.0	64.4	64.1	58.86	-3,471.9	-122.0	464.1	353.0	111.15	4.176	
11,600.0	7,740.0	11,358.7	7,500.0	66.1	65.8	58.86	-3,571.9	-122.0	464.1	350.0	114.09	4.068	
11,700.0	7,740.0	11,458.7	7,500.0	67.8	67.5	58.86	-3,671.9	-122.0	464.1	347.1	117.03	3.966	
11,800.0	7,740.0	11,558.7	7,500.0	69.5	69.3	58.86	-3,771.9	-122.0	464.1	344.1	119.97	3.869	
11,900.0	7,740.0	11,658.7	7,500.0	71.2	71.0	58.86	-3,871.9	-122.0	464.1	341.2	122.92	3.776	
12,000.0	7,740.0	11,758.7	7,500.0	72.9	72.7	58.86	-3,971.9	-122.0	464.1	338.3	125.87	3.687	
12,100.0	7,740.0	11,858.7	7,500.0	74.7	74.4	58.86	-4,071.9	-122.0	464.1	335.3	128.82	3.603	
12,200.0	7,740.0	11,958.7	7,500.0	76.4	76.1	58.86	-4,171.9	-122.0	464.1	332.3	131.77	3.522	
12,300.0	7,740.0	12,058.7	7,500.0	78.1	77.9	58.86	-4,271.9	-122.0	464.1	329.4	134.73	3.445	
12,400.0	7,740.0	12,158.7	7,500.0	79.8	79.6	58.86	-4,371.9	-122.0	464.1	326.4	137.69	3.371	
12,500.0	7,740.0	12,258.7	7,500.0	81.6	81.3	58.86	-4,471.9	-122.0	464.1	323.5	140.65	3.300	
12,600.0	7,740.0	12,358.7	7,500.0	83.3	83.1	58.86	-4,571.9	-122.0	464.1	320.5	143.61	3.232	
12,700.0	7,740.0	12,458.7	7,500.0	85.0	84.8	58.86	-4,671.9	-122.0	464.1	317.5	146.58	3.166	
12,800.0	7,740.0	12,558.7	7,500.0	86.7	86.5	58.86	-4,771.9	-122.0	464.1	314.6	149.55	3.104	
12,900.0	7,740.0	12,658.7	7,500.0	88.5	88.3	58.86	-4,871.9	-122.0	464.1	311.6	152.51	3.043	
13,000.0	7,740.0	12,758.7	7,500.0	90.2	90.0	58.86	-4,971.9	-122.0	464.1	308.6	155.48	2.985	
13,100.0	7,740.0	12,858.7	7,500.0	91.9	91.7	58.86	-5,071.9	-122.0	464.1	305.7	158.46	2.929	
13,200.0	7,740.0	12,958.7	7,500.0	93.7	93.5	58.86	-5,171.9	-122.0	464.1	302.7	161.43	2.875	
13,300.0	7,740.0	13,063.6	7,500.0	95.4	95.3	58.83	-5,276.8	-121.5	463.7	299.3	164.46	2.820	
13,400.0	7,740.0	13,163.6	7,500.0	97.1	97.0	58.75	-5,376.8	-120.3	462.6	295.3	167.30	2.765	
13,500.0	7,740.0	13,263.6	7,500.0	98.9	98.7	58.67	-5,476.8	-119.0	461.6	291.4	170.13	2.713	
13,600.0	7,740.0	13,363.6	7,500.0	100.6	100.5	58.59	-5,576.8	-117.8	460.5	287.5	172.97	2.662	
13,700.0	7,740.0	13,463.6	7,500.0	102.3	102.2	58.51	-5,676.8	-116.5	459.4	283.6	175.79	2.613	
13,800.0	7,740.0	13,563.6	7,500.0	104.1	104.0	58.42	-5,776.8	-115.3	458.4	279.8	178.61	2.566	
13,900.0	7,740.0	13,663.6	7,500.0	105.8	105.7	58.34	-5,876.7	-114.0	457.3	275.9	181.43	2.521	
14,000.0	7,740.0	13,763.6	7,500.0	107.5	107.4	58.26	-5,976.7	-112.8	456.2	272.0	184.24	2.476	
14,100.0	7,740.0	13,863.6	7,500.0	109.3	109.2	58.18	-6,076.7	-111.5	455.2	268.1	187.05	2.433	
14,200.0	7,740.0	13,963.6	7,500.0	111.0	110.9	58.09	-6,176.7	-110.3	454.1	264.3	189.85	2.392	
14,300.0	7,740.0	14,063.6	7,500.0	112.8	112.7	58.01	-6,276.7	-109.0	453.0	260.4	192.64	2.352	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,400.0	7,740.0	14,163.6	7,500.0	114.5	114.4	57.93	-6,376.7	-107.8	452.0	256.6	195.43	2.313		
14,500.0	7,740.0	14,263.6	7,500.0	116.2	116.1	57.84	-6,476.6	-106.5	450.9	252.7	198.21	2.275		
14,600.0	7,740.0	14,363.5	7,500.0	118.0	117.9	57.76	-6,576.6	-105.3	449.9	248.9	200.99	2.238		
14,700.0	7,740.0	14,463.5	7,500.0	119.7	119.6	57.67	-6,676.6	-104.0	448.8	245.0	203.76	2.203		
14,800.0	7,740.0	14,563.5	7,500.0	121.5	121.4	57.59	-6,776.6	-102.8	447.8	241.2	206.53	2.168		
14,900.0	7,740.0	14,663.5	7,500.0	123.2	123.1	57.50	-6,876.6	-101.5	446.7	237.4	209.29	2.134		
15,000.0	7,740.0	14,763.5	7,500.0	124.9	124.9	57.41	-6,976.6	-100.3	445.6	233.6	212.04	2.102		
15,100.0	7,740.0	14,863.5	7,500.0	126.7	126.6	57.33	-7,076.6	-99.0	444.6	229.8	214.79	2.070		
15,200.0	7,740.0	14,963.5	7,500.0	128.4	128.3	57.24	-7,176.5	-97.8	443.5	226.0	217.52	2.039		
15,300.0	7,740.0	15,063.5	7,500.0	130.2	130.1	57.15	-7,276.5	-96.5	442.5	222.2	220.26	2.009		
15,400.0	7,740.0	15,163.5	7,500.0	131.9	131.8	57.06	-7,376.5	-95.3	441.4	218.5	222.98	1.980		
15,500.0	7,740.0	15,263.5	7,500.0	133.7	133.6	56.98	-7,476.5	-94.0	440.4	214.7	225.70	1.951		
15,600.0	7,740.0	15,363.5	7,500.0	135.4	135.3	56.89	-7,576.5	-92.8	439.3	210.9	228.42	1.923		
15,700.0	7,740.0	15,463.5	7,500.0	137.1	137.1	56.80	-7,676.5	-91.5	438.3	207.2	231.12	1.896		
15,800.0	7,740.0	15,563.5	7,500.0	138.9	138.8	56.71	-7,776.4	-90.3	437.2	203.4	233.82	1.870		
15,900.0	7,740.0	15,663.4	7,500.0	140.6	140.6	56.62	-7,876.4	-89.0	436.2	199.7	236.51	1.844		
15,947.9	7,740.0	15,706.0	7,500.0	141.5	141.3	56.58	-7,919.0	-88.5	435.7	198.0	237.69	1.833 SF		
15,953.0	7,740.0	15,706.0	7,500.0	141.6	141.3	56.58	-7,919.0	-88.5	435.8	198.1	237.69	1.833		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	90.00	0.0	7.3	7.3					
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	7.3	7.3	7.0	0.30	23.962		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	7.3	7.3	6.6	0.65	11.148		
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	7.3	7.3	6.3	1.00	7.264		
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	7.3	7.3	5.9	1.35	5.387		
500.0	500.0	500.0	500.0	0.9	0.8	70.13	0.0	7.3	6.9	5.2	1.70	4.078		
572.8	572.8	572.7	572.7	1.0	1.0	80.79	0.4	7.6	6.7	4.8	1.96	3.430 CC		
600.0	600.0	599.9	599.9	1.0	1.0	85.00	0.7	7.8	6.7	4.7	2.05	3.285 ES		
700.0	699.9	699.9	699.8	1.2	1.2	99.51	2.7	9.5	7.4	5.0	2.41	3.071		
800.0	799.7	799.9	799.7	1.4	1.4	110.38	6.1	12.3	8.9	6.1	2.79	3.177		
899.9	899.3	899.8	899.5	1.6	1.6	117.23	10.8	16.1	10.9	7.7	3.18	3.432		
1,000.0	999.0	999.9	999.3	1.8	1.8	117.86	16.8	21.1	13.0	9.4	3.58	3.623		
1,100.0	1,098.6	1,099.9	1,098.8	2.0	2.0	111.73	24.2	27.2	14.7	10.7	4.02	3.652		
1,200.0	1,198.2	1,199.9	1,198.1	2.3	2.2	100.89	33.0	34.4	16.5	12.0	4.50	3.674		
1,300.0	1,297.8	1,299.8	1,297.3	2.5	2.5	89.78	42.4	42.2	19.0	14.0	4.96	3.831		
1,400.0	1,397.5	1,399.7	1,396.5	2.7	2.7	81.47	51.8	49.9	22.0	16.6	5.40	4.078		
1,500.0	1,497.1	1,499.6	1,495.6	2.9	3.0	75.25	61.2	57.7	25.4	19.6	5.82	4.360		
1,600.0	1,596.7	1,599.5	1,594.8	3.2	3.3	70.53	70.6	65.4	29.0	22.7	6.24	4.647		
1,700.0	1,696.3	1,699.4	1,694.0	3.4	3.5	66.88	80.0	73.2	32.7	26.1	6.65	4.925		
1,800.0	1,795.9	1,799.3	1,793.1	3.6	3.8	63.98	89.4	81.0	36.6	29.5	7.05	5.188		
1,900.0	1,895.6	1,899.3	1,892.3	3.8	4.0	61.64	98.9	88.7	40.5	33.1	7.45	5.435		
2,000.0	1,995.2	1,999.2	1,991.5	4.1	4.3	59.71	108.3	96.5	44.5	36.6	7.86	5.664		
2,100.0	2,094.8	2,099.1	2,090.6	4.3	4.6	58.11	117.7	104.2	48.5	40.3	8.26	5.876		
2,200.0	2,194.4	2,199.0	2,189.8	4.5	4.8	56.75	127.1	112.0	52.6	43.9	8.66	6.072		
2,300.0	2,294.0	2,298.9	2,288.9	4.8	5.1	55.58	136.5	119.7	56.7	47.6	9.06	6.254		
2,400.0	2,393.7	2,398.8	2,388.1	5.0	5.4	54.57	145.9	127.5	60.8	51.3	9.46	6.423		
2,500.0	2,493.3	2,498.7	2,487.3	5.2	5.7	53.69	155.4	135.2	64.9	55.0	9.86	6.579		
2,600.0	2,592.9	2,598.6	2,586.4	5.4	5.9	52.92	164.8	143.0	69.0	58.8	10.26	6.725		
2,700.0	2,692.5	2,698.5	2,685.6	5.7	6.2	52.23	174.2	150.8	73.2	62.5	10.67	6.861		
2,800.0	2,792.1	2,798.5	2,784.8	5.9	6.5	51.62	183.6	158.5	77.3	66.3	11.07	6.988		
2,900.0	2,891.8	2,898.4	2,883.9	6.1	6.7	51.07	193.0	166.3	81.5	70.0	11.47	7.106		
3,000.0	2,991.4	2,998.3	2,983.1	6.4	7.0	50.57	202.4	174.0	85.7	73.8	11.87	7.218		
3,100.0	3,091.0	3,098.2	3,082.2	6.6	7.3	50.12	211.9	181.8	89.8	77.6	12.27	7.322		
3,200.0	3,190.6	3,198.1	3,181.4	6.8	7.6	49.71	221.3	189.5	94.0	81.3	12.67	7.420		
3,300.0	3,290.2	3,298.0	3,280.6	7.1	7.8	49.34	230.7	197.3	98.2	85.1	13.07	7.512		
3,400.0	3,389.9	3,397.9	3,379.7	7.3	8.1	48.99	240.1	205.0	102.4	88.9	13.47	7.600		
3,500.0	3,489.5	3,497.8	3,478.9	7.5	8.4	48.67	249.5	212.8	106.6	92.7	13.87	7.682		
3,600.0	3,589.1	3,597.7	3,578.1	7.7	8.7	48.38	258.9	220.5	110.8	96.5	14.28	7.760		
3,700.0	3,688.7	3,697.6	3,677.2	8.0	8.9	48.11	268.3	228.3	115.0	100.3	14.68	7.834		
3,800.0	3,788.3	3,797.6	3,776.4	8.2	9.2	47.85	277.8	236.1	119.2	104.1	15.08	7.904		
3,900.0	3,888.0	3,897.5	3,875.5	8.4	9.5	47.62	287.2	243.8	123.4	107.9	15.48	7.970		
4,000.0	3,987.6	3,997.4	3,974.7	8.7	9.7	47.40	296.6	251.6	127.6	111.7	15.88	8.033		
4,100.0	4,087.2	4,097.3	4,073.9	8.9	10.0	47.19	306.0	259.3	131.8	115.5	16.28	8.094		
4,200.0	4,186.8	4,197.2	4,173.0	9.1	10.3	47.00	315.4	267.1	136.0	119.3	16.68	8.151		
4,300.0	4,286.4	4,297.1	4,272.2	9.4	10.6	46.81	324.8	274.8	140.2	123.1	17.09	8.206		
4,400.0	4,386.1	4,397.0	4,371.4	9.6	10.8	46.64	334.3	282.6	144.4	126.9	17.49	8.258		
4,500.0	4,485.7	4,496.9	4,470.5	9.8	11.1	46.48	343.7	290.3	148.6	130.7	17.89	8.308		
4,600.0	4,585.3	4,596.8	4,569.7	10.1	11.4	46.33	353.1	298.1	152.8	134.6	18.29	8.356		
4,700.0	4,684.9	4,696.8	4,668.8	10.3	11.7	46.18	362.5	305.9	157.1	138.4	18.69	8.402		
4,800.0	4,784.5	4,796.7	4,768.0	10.5	11.9	46.05	371.9	313.6	161.3	142.2	19.09	8.446		
4,900.0	4,884.1	4,896.6	4,867.2	10.8	12.2	45.92	381.3	321.4	165.5	146.0	19.50	8.488		
5,000.0	4,983.8	4,996.5	4,966.3	11.0	12.5	45.79	390.8	329.1	169.7	149.8	19.90	8.528		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,083.4	5,096.4	5,065.5	11.2	12.8	45.68	400.2	336.9	173.9	153.6	20.30	8.567		
5,200.0	5,183.0	5,196.3	5,164.7	11.4	13.0	45.56	409.6	344.6	178.1	157.4	20.70	8.605		
5,300.0	5,282.6	5,296.2	5,263.8	11.7	13.3	45.46	419.0	352.4	182.4	161.3	21.10	8.641		
5,400.0	5,382.2	5,396.1	5,363.0	11.9	13.6	45.36	428.4	360.1	186.6	165.1	21.51	8.676		
5,500.0	5,481.9	5,496.0	5,462.2	12.1	13.9	45.26	437.8	367.9	190.8	168.9	21.91	8.709		
5,600.0	5,581.5	5,595.9	5,561.3	12.4	14.1	45.17	447.3	375.7	195.0	172.7	22.31	8.742		
5,700.0	5,681.1	5,695.9	5,660.5	12.6	14.4	45.08	456.7	383.4	199.2	176.5	22.71	8.773		
5,800.0	5,780.7	5,795.8	5,759.6	12.8	14.7	44.99	466.1	391.2	203.5	180.3	23.11	8.803		
5,900.0	5,880.3	5,895.7	5,858.8	13.1	15.0	44.91	475.5	398.9	207.7	184.2	23.51	8.832		
6,000.0	5,980.0	5,995.6	5,958.0	13.3	15.2	44.83	484.9	406.7	211.9	188.0	23.92	8.860		
6,100.0	6,079.6	6,095.5	6,057.1	13.5	15.5	44.75	494.3	414.4	216.1	191.8	24.32	8.887		
6,200.0	6,179.2	6,195.4	6,156.3	13.8	15.8	44.68	503.7	422.2	220.3	195.6	24.72	8.914		
6,300.0	6,278.8	6,295.3	6,255.5	14.0	16.1	44.61	513.2	429.9	224.6	199.4	25.12	8.939		
6,400.0	6,378.4	6,395.2	6,354.6	14.2	16.3	44.54	522.6	437.7	228.8	203.3	25.52	8.964		
6,500.0	6,478.1	6,495.1	6,453.8	14.5	16.6	44.48	532.0	445.5	233.0	207.1	25.93	8.988		
6,600.0	6,577.7	6,595.0	6,552.9	14.7	16.9	44.42	541.4	453.2	237.2	210.9	26.33	9.011		
6,700.0	6,677.3	6,695.0	6,652.1	14.9	17.2	44.35	550.8	461.0	241.5	214.7	26.73	9.034		
6,800.0	6,776.9	6,794.9	6,751.3	15.1	17.4	44.30	560.2	468.7	245.7	218.6	27.13	9.055		
6,900.0	6,876.5	6,894.8	6,850.4	15.4	17.7	44.24	569.7	476.5	249.9	222.4	27.53	9.077		
7,000.0	6,976.2	7,006.8	6,962.0	15.6	17.9	45.60	573.6	485.2	252.3	224.2	28.10	8.978		
7,100.0	7,075.8	7,117.0	7,070.3	15.8	17.9	51.44	566.7	493.7	250.0	220.8	29.15	8.577		
7,147.2	7,122.8	7,164.8	7,115.9	15.9	17.9	55.42	542.9	497.2	248.6	218.9	29.77	8.351		
7,150.0	7,125.6	7,167.5	7,118.5	16.0	17.9	54.15	542.0	497.4	248.6	218.8	29.81	8.338		
7,180.4	7,156.0	7,197.0	7,145.9	16.0	17.8	22.19	531.5	499.6	248.3	218.1	30.18	8.225		
7,200.0	7,175.5	7,215.6	7,163.0	16.0	17.8	-23.37	524.2	500.9	248.4	218.0	30.39	8.172		
7,250.0	7,225.4	7,262.0	7,204.4	16.1	17.7	-68.11	503.4	504.2	249.8	219.0	30.78	8.115		
7,300.0	7,274.8	7,307.1	7,242.8	16.0	17.5	-73.15	480.2	507.2	252.7	221.8	30.96	8.165		
7,350.0	7,323.4	7,350.0	7,277.7	16.0	17.4	-72.71	455.3	509.9	257.0	226.1	30.88	8.322		
7,400.0	7,370.8	7,393.6	7,311.0	15.9	17.3	-70.61	427.4	512.5	262.4	231.8	30.63	8.566		
7,450.0	7,416.7	7,435.3	7,340.9	15.8	17.1	-68.09	398.3	514.8	268.7	238.6	30.18	8.904		
7,500.0	7,460.7	7,476.2	7,368.0	15.7	17.0	-65.44	367.9	517.0	275.7	246.2	29.58	9.322		
7,550.0	7,502.4	7,516.2	7,392.5	15.5	16.8	-62.84	336.2	518.9	283.2	254.4	28.87	9.810		
7,600.0	7,541.6	7,555.6	7,414.3	15.4	16.7	-60.37	303.4	520.6	291.0	262.9	28.10	10.355		
7,650.0	7,578.0	7,594.4	7,433.6	15.2	16.6	-58.08	269.8	522.1	298.8	271.5	27.30	10.943		
7,700.0	7,611.2	7,632.7	7,450.3	15.1	16.5	-55.97	235.4	523.4	306.5	280.0	26.53	11.555		
7,750.0	7,641.0	7,670.5	7,464.5	14.9	16.5	-54.07	200.4	524.5	314.0	288.2	25.80	12.171		
7,800.0	7,667.3	7,707.9	7,476.3	14.8	16.4	-52.37	164.9	525.4	321.0	295.9	25.15	12.766		
7,850.0	7,689.7	7,750.0	7,486.8	14.7	16.4	-50.73	124.2	526.2	327.7	303.0	24.69	13.273		
7,900.0	7,708.2	7,781.7	7,492.7	14.7	16.4	-49.56	93.0	526.7	333.6	309.4	24.21	13.778		
7,950.0	7,722.5	7,818.2	7,497.3	14.7	16.4	-48.43	56.8	527.1	338.9	315.0	23.96	14.143		
8,000.0	7,732.6	7,854.5	7,499.7	14.8	16.5	-47.48	20.7	527.3	343.5	319.6	23.88	14.385		
8,050.0	7,738.5	7,897.0	7,500.0	14.9	16.5	-46.67	-21.9	527.3	347.0	323.1	23.97	14.479		
8,092.0	7,740.0	7,939.0	7,500.0	15.0	16.6	-46.40	-63.8	527.3	348.0	323.9	24.19	14.386		
8,100.0	7,740.0	7,947.0	7,500.0	15.0	16.7	-46.40	-71.9	527.3	348.0	323.8	24.25	14.355		
8,200.0	7,740.0	8,047.0	7,500.0	15.5	17.1	-46.40	-171.9	527.3	348.0	323.0	25.02	13.909		
8,300.0	7,740.0	8,147.0	7,500.0	16.1	17.6	-46.40	-271.9	527.3	348.0	322.0	26.03	13.371		
8,400.0	7,740.0	8,247.0	7,500.0	16.9	18.4	-46.40	-371.9	527.3	348.0	320.8	27.24	12.778		
8,500.0	7,740.0	8,347.0	7,500.0	17.8	19.2	-46.40	-471.9	527.3	348.0	319.4	28.62	12.159		
8,600.0	7,740.0	8,447.0	7,500.0	18.9	20.2	-46.40	-571.9	527.3	348.0	317.9	30.16	11.538		
8,700.0	7,740.0	8,547.0	7,500.0	20.0	21.3	-46.40	-671.9	527.3	348.0	316.2	31.84	10.933		
8,800.0	7,740.0	8,647.0	7,500.0	21.2	22.4	-46.40	-771.9	527.3	348.0	314.4	33.62	10.353		
8,900.0	7,740.0	8,747.0	7,500.0	22.5	23.6	-46.40	-871.9	527.3	348.0	312.6	35.49	9.806		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,740.0	8,847.0	7,500.0	23.9	24.9	-46.40	-971.9	527.3	348.0	310.6	37.45	9.293	
9,100.0	7,740.0	8,947.0	7,500.0	25.3	26.3	-46.40	-1,071.9	527.3	348.0	308.6	39.48	8.817	
9,200.0	7,740.0	9,047.0	7,500.0	26.7	27.7	-46.40	-1,171.9	527.3	348.0	306.5	41.56	8.375	
9,300.0	7,740.0	9,147.0	7,500.0	28.2	29.1	-46.40	-1,271.9	527.3	348.0	304.4	43.69	7.966	
9,400.0	7,740.0	9,247.0	7,500.0	29.7	30.6	-46.40	-1,371.9	527.3	348.0	302.2	45.87	7.587	
9,500.0	7,740.0	9,347.0	7,500.0	31.3	32.1	-46.40	-1,471.9	527.3	348.0	300.0	48.09	7.238	
9,600.0	7,740.0	9,447.0	7,500.0	32.8	33.6	-46.40	-1,571.9	527.3	348.0	297.7	50.33	6.915	
9,700.0	7,740.0	9,547.0	7,500.0	34.4	35.1	-46.40	-1,671.9	527.3	348.0	295.4	52.61	6.616	
9,800.0	7,740.0	9,647.0	7,500.0	36.0	36.7	-46.40	-1,771.9	527.3	348.0	293.1	54.91	6.339	
9,900.0	7,740.0	9,747.0	7,500.0	37.6	38.3	-46.40	-1,871.9	527.3	348.0	290.8	57.23	6.082	
10,000.0	7,740.0	9,847.0	7,500.0	39.2	39.9	-46.40	-1,971.9	527.3	348.0	288.5	59.57	5.843	
10,100.0	7,740.0	9,947.0	7,500.0	40.9	41.5	-46.40	-2,071.9	527.3	348.0	286.1	61.93	5.620	
10,200.0	7,740.0	10,047.0	7,500.0	42.5	43.1	-46.40	-2,171.9	527.3	348.0	283.8	64.30	5.413	
10,300.0	7,740.0	10,147.0	7,500.0	44.2	44.7	-46.40	-2,271.9	527.3	348.0	281.4	66.68	5.219	
10,400.0	7,740.0	10,247.0	7,500.0	45.8	46.3	-46.40	-2,371.9	527.3	348.0	279.0	69.08	5.038	
10,500.0	7,740.0	10,347.0	7,500.0	47.5	48.0	-46.40	-2,471.9	527.3	348.0	276.6	71.49	4.869	
10,600.0	7,740.0	10,447.0	7,500.0	49.1	49.6	-46.40	-2,571.9	527.3	348.0	274.1	73.91	4.709	
10,700.0	7,740.0	10,547.0	7,500.0	50.8	51.3	-46.40	-2,671.9	527.3	348.0	271.7	76.34	4.559	
10,800.0	7,740.0	10,647.0	7,500.0	52.5	53.0	-46.40	-2,771.9	527.3	348.0	269.3	78.77	4.418	
10,900.0	7,740.0	10,747.0	7,500.0	54.2	54.6	-46.40	-2,871.9	527.3	348.0	266.8	81.21	4.286	
11,000.0	7,740.0	10,847.0	7,500.0	55.9	56.3	-46.40	-2,971.9	527.3	348.0	264.4	83.66	4.160	
11,100.0	7,740.0	10,947.0	7,500.0	57.6	58.0	-46.40	-3,071.9	527.3	348.0	261.9	86.12	4.041	
11,200.0	7,740.0	11,047.0	7,500.0	59.3	59.7	-46.40	-3,171.9	527.3	348.0	259.5	88.58	3.929	
11,300.0	7,740.0	11,147.0	7,500.0	61.0	61.4	-46.40	-3,271.9	527.3	348.0	257.0	91.05	3.823	
11,310.1	7,740.0	11,157.1	7,500.0	61.1	61.5	-46.40	-3,282.0	527.3	348.0	256.8	91.30	3.812	
11,400.0	7,740.0	11,246.8	7,500.0	62.7	63.1	-46.41	-3,371.6	527.3	348.1	254.5	93.52	3.722	
11,500.0	7,740.0	11,338.7	7,500.0	64.4	64.6	-46.58	-3,463.5	528.8	349.3	252.9	96.39	3.624	
11,600.0	7,740.0	11,430.3	7,500.0	66.1	66.2	-47.08	-3,555.1	533.3	352.9	253.2	99.68	3.540	
11,700.0	7,740.0	11,528.9	7,500.0	67.8	67.9	-47.83	-3,653.3	540.2	358.0	254.7	103.29	3.466	
11,800.0	7,740.0	11,628.6	7,500.0	69.5	69.6	-48.57	-3,752.9	547.1	363.2	256.3	106.91	3.397	
11,900.0	7,740.0	11,728.4	7,500.0	71.2	71.3	-49.28	-3,852.4	554.1	368.4	257.9	110.56	3.333	
12,000.0	7,740.0	11,828.1	7,500.0	72.9	73.0	-49.98	-3,951.9	561.0	373.8	259.5	114.22	3.272	
12,100.0	7,740.0	11,927.9	7,500.0	74.7	74.7	-50.66	-4,051.4	568.0	379.1	261.2	117.89	3.216	
12,200.0	7,740.0	12,027.6	7,500.0	76.4	76.4	-51.32	-4,150.9	575.0	384.6	263.0	121.57	3.163	
12,300.0	7,740.0	12,127.4	7,500.0	78.1	78.2	-51.96	-4,250.4	581.9	390.0	264.8	125.26	3.114	
12,400.0	7,740.0	12,231.2	7,500.0	79.8	80.0	-52.58	-4,354.0	588.9	395.4	266.4	128.95	3.066	
12,500.0	7,740.0	12,343.5	7,500.0	81.6	81.9	-52.95	-4,466.3	593.1	398.4	266.2	132.15	3.014	
12,600.0	7,740.0	12,448.4	7,500.0	83.3	83.7	-53.00	-4,571.1	593.7	398.8	263.9	134.91	2.956	
12,700.0	7,740.0	12,548.4	7,500.0	85.0	85.4	-53.02	-4,671.1	593.9	399.0	261.3	137.71	2.897	
12,800.0	7,740.0	12,648.4	7,500.0	86.7	87.1	-53.04	-4,771.1	594.2	399.2	258.7	140.51	2.841	
12,900.0	7,740.0	12,748.4	7,500.0	88.5	88.8	-53.06	-4,871.1	594.4	399.4	256.0	143.32	2.786	
13,000.0	7,740.0	12,848.4	7,500.0	90.2	90.6	-53.08	-4,971.1	594.6	399.5	253.4	146.13	2.734	
13,100.0	7,740.0	12,948.4	7,500.0	91.9	92.3	-53.10	-5,071.1	594.9	399.7	250.8	148.94	2.684	
13,200.0	7,740.0	13,048.4	7,500.0	93.7	94.0	-53.12	-5,171.1	595.1	399.9	248.2	151.75	2.635	
13,300.0	7,740.0	13,148.4	7,500.0	95.4	95.7	-53.14	-5,271.1	595.3	400.1	245.5	154.57	2.589	
13,400.0	7,740.0	13,248.4	7,500.0	97.1	97.5	-53.16	-5,371.1	595.6	400.3	242.9	157.39	2.543	
13,500.0	7,740.0	13,348.4	7,500.0	98.9	99.2	-53.18	-5,471.1	595.8	400.5	240.3	160.21	2.500	
13,600.0	7,740.0	13,448.4	7,500.0	100.6	100.9	-53.20	-5,571.1	596.1	400.7	237.6	163.04	2.458	
13,700.0	7,740.0	13,548.4	7,500.0	102.3	102.7	-53.22	-5,671.1	596.3	400.9	235.0	165.87	2.417	
13,800.0	7,740.0	13,648.4	7,500.0	104.1	104.4	-53.24	-5,771.1	596.5	401.1	232.4	168.70	2.377	
13,900.0	7,740.0	13,748.4	7,500.0	105.8	106.1	-53.26	-5,871.1	596.8	401.3	229.7	171.53	2.339	
14,000.0	7,740.0	13,848.4	7,500.0	107.5	107.8	-53.28	-5,971.1	597.0	401.4	227.1	174.36	2.302	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
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	Warning			
14,100.0	7,740.0	13,948.4	7,500.0	109.3	109.6	-53.30	-6,071.1	597.2	401.6	224.4	177.20	2.267				
14,200.0	7,740.0	14,048.4	7,500.0	111.0	111.3	-53.32	-6,171.1	597.5	401.8	221.8	180.04	2.232				
14,300.0	7,740.0	14,148.4	7,500.0	112.8	113.0	-53.34	-6,271.1	597.7	402.0	219.1	182.88	2.198				
14,400.0	7,740.0	14,248.4	7,500.0	114.5	114.8	-53.37	-6,371.1	598.0	402.2	216.5	185.73	2.166				
14,500.0	7,740.0	14,348.4	7,500.0	116.2	116.5	-53.39	-6,471.1	598.2	402.4	213.8	188.57	2.134				
14,600.0	7,740.0	14,448.4	7,500.0	118.0	118.3	-53.41	-6,571.1	598.4	402.6	211.2	191.42	2.103				
14,700.0	7,740.0	14,548.4	7,500.0	119.7	120.0	-53.43	-6,671.1	598.7	402.8	208.5	194.27	2.073				
14,800.0	7,740.0	14,648.4	7,500.0	121.5	121.7	-53.45	-6,771.1	598.9	403.0	205.8	197.13	2.044				
14,900.0	7,740.0	14,748.4	7,500.0	123.2	123.5	-53.47	-6,871.1	599.1	403.2	203.2	199.98	2.016				
15,000.0	7,740.0	14,848.4	7,500.0	124.9	125.2	-53.49	-6,971.1	599.4	403.3	200.5	202.84	1.989				
15,100.0	7,740.0	14,948.4	7,500.0	126.7	126.9	-53.51	-7,071.1	599.6	403.5	197.8	205.69	1.962				
15,200.0	7,740.0	15,048.4	7,500.0	128.4	128.7	-53.53	-7,171.1	599.9	403.7	195.2	208.55	1.936				
15,300.0	7,740.0	15,148.4	7,500.0	130.2	130.4	-53.55	-7,271.1	600.1	403.9	192.5	211.42	1.911				
15,400.0	7,740.0	15,248.4	7,500.0	131.9	132.2	-53.57	-7,371.1	600.3	404.1	189.8	214.28	1.886				
15,500.0	7,740.0	15,348.4	7,500.0	133.7	133.9	-53.59	-7,471.1	600.6	404.3	187.2	217.15	1.862				
15,600.0	7,740.0	15,448.4	7,500.0	135.4	135.6	-53.61	-7,571.1	600.8	404.5	184.5	220.01	1.838				
15,700.0	7,740.0	15,548.4	7,500.0	137.1	137.4	-53.63	-7,671.1	601.0	404.7	181.8	222.88	1.816				
15,800.0	7,740.0	15,648.4	7,500.0	138.9	139.1	-53.65	-7,771.1	601.3	404.9	179.1	225.76	1.793				
15,900.0	7,740.0	15,748.4	7,500.0	140.6	140.9	-53.67	-7,871.1	601.5	405.1	176.4	228.63	1.772				
15,953.0	7,740.0	15,801.3	7,500.0	141.6	141.8	-53.68	-7,924.0	601.6	405.2	175.0	230.15	1.760 SF				

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	89.97	0.0	14.8	14.8						
100.0	100.0	100.0	100.0	0.2	0.2	89.97	0.0	14.8	14.8	14.5	0.30	48.845			
200.0	200.0	200.0	200.0	0.3	0.3	89.97	0.0	14.8	14.8	14.2	0.65	22.725			
300.0	300.0	300.0	300.0	0.5	0.5	89.97	0.0	14.8	14.8	13.8	1.00	14.807			
400.0	400.0	400.0	400.0	0.7	0.7	89.97	0.0	14.8	14.8	13.5	1.35	10.981			
500.0	500.0	500.0	500.0	0.9	0.8	66.72	0.0	14.8	14.5	12.8	1.70	8.508			
600.0	600.0	600.0	600.0	1.0	1.0	76.88	0.0	14.8	13.6	11.6	2.05	6.648			
674.8	674.7	674.7	674.7	1.2	1.2	90.00	0.0	14.8	13.3	11.0	2.32	5.725 CC			
700.0	699.9	699.9	699.9	1.2	1.2	95.42	0.0	14.8	13.3	10.9	2.41	5.535 ES			
800.0	799.7	799.7	799.7	1.4	1.4	118.94	0.0	14.8	15.2	12.4	2.77	5.481			
899.9	899.3	899.3	899.3	1.6	1.5	138.74	0.0	14.8	20.2	17.1	3.12	6.465			
1,000.0	999.0	999.0	999.0	1.8	1.7	150.86	0.0	14.8	27.4	23.9	3.47	7.891			
1,100.0	1,098.6	1,099.0	1,099.0	2.0	1.9	156.75	0.5	15.5	34.7	30.9	3.82	9.085			
1,200.0	1,198.2	1,199.3	1,199.2	2.3	2.1	158.86	2.2	17.5	41.0	36.8	4.17	9.829			
1,300.0	1,297.8	1,299.7	1,299.5	2.5	2.3	158.86	4.9	21.0	46.1	41.6	4.53	10.181			
1,400.0	1,397.5	1,400.1	1,399.8	2.7	2.4	157.41	8.7	25.7	50.0	45.1	4.90	10.217			
1,500.0	1,497.1	1,500.7	1,500.0	2.9	2.6	154.73	13.6	31.9	52.8	47.6	5.28	10.008			
1,600.0	1,596.7	1,601.2	1,600.1	3.2	2.8	150.86	19.7	39.5	54.7	49.0	5.69	9.622			
1,700.0	1,696.3	1,701.6	1,699.8	3.4	3.1	145.75	26.8	48.4	55.9	49.8	6.13	9.121			
1,800.0	1,795.9	1,801.8	1,799.2	3.6	3.3	139.29	35.0	58.6	56.8	50.1	6.62	8.577			
1,900.0	1,895.6	1,901.9	1,898.1	3.8	3.6	131.48	44.2	70.2	57.8	50.6	7.16	8.067			
2,000.0	1,995.2	2,001.5	1,996.5	4.1	3.8	123.06	54.1	82.6	59.7	51.9	7.74	7.710			
2,100.0	2,094.8	2,101.1	2,094.9	4.3	4.1	115.30	64.0	95.0	62.8	54.5	8.31	7.551			
2,200.0	2,194.4	2,200.7	2,193.2	4.5	4.4	108.38	73.9	107.3	66.9	58.0	8.87	7.546			
2,300.0	2,294.0	2,300.3	2,291.5	4.8	4.7	102.33	83.8	119.7	71.9	62.5	9.39	7.653			
2,400.0	2,393.7	2,399.9	2,389.9	5.0	5.0	97.12	93.6	132.1	77.6	67.7	9.90	7.838			
2,500.0	2,493.3	2,499.5	2,488.2	5.2	5.3	92.64	103.5	144.5	83.8	73.4	10.38	8.075			
2,600.0	2,592.9	2,599.1	2,586.5	5.4	5.6	88.81	113.4	156.9	90.5	79.7	10.85	8.345			
2,700.0	2,692.5	2,698.8	2,684.9	5.7	5.9	85.51	123.3	169.3	97.5	86.2	11.30	8.633			
2,800.0	2,792.1	2,798.4	2,783.2	5.9	6.2	82.66	133.2	181.7	104.8	93.1	11.74	8.930			
2,900.0	2,891.8	2,898.0	2,881.6	6.1	6.5	80.19	143.1	194.1	112.4	100.2	12.18	9.229			
3,000.0	2,991.4	2,997.6	2,979.9	6.4	6.8	78.03	153.0	206.5	120.1	107.5	12.61	9.526			
3,100.0	3,091.0	3,097.2	3,078.2	6.6	7.2	76.14	162.9	218.8	128.0	114.9	13.03	9.817			
3,200.0	3,190.6	3,196.8	3,176.6	6.8	7.5	74.46	172.8	231.2	135.9	122.5	13.46	10.102			
3,300.0	3,290.2	3,296.4	3,274.9	7.1	7.8	72.97	182.7	243.6	144.0	130.2	13.88	10.378			
3,400.0	3,389.9	3,396.0	3,373.2	7.3	8.1	71.65	192.5	256.0	152.2	137.9	14.30	10.645			
3,500.0	3,489.5	3,495.6	3,471.6	7.5	8.4	70.45	202.4	268.4	160.5	145.7	14.72	10.903			
3,600.0	3,589.1	3,595.2	3,569.9	7.7	8.7	69.38	212.3	280.8	168.8	153.6	15.14	11.151			
3,700.0	3,688.7	3,694.8	3,668.2	8.0	9.1	68.40	222.2	293.2	177.1	161.6	15.55	11.390			
3,800.0	3,788.3	3,794.4	3,766.6	8.2	9.4	67.51	232.1	305.6	185.6	169.6	15.97	11.620			
3,900.0	3,888.0	3,894.0	3,864.9	8.4	9.7	66.70	242.0	318.0	194.0	177.6	16.39	11.840			
4,000.0	3,987.6	3,993.6	3,963.3	8.7	10.0	65.96	251.9	330.3	202.5	185.7	16.80	12.052			
4,100.0	4,087.2	4,093.2	4,061.6	8.9	10.4	65.28	261.8	342.7	211.0	193.8	17.22	12.256			
4,200.0	4,186.8	4,192.8	4,159.9	9.1	10.7	64.65	271.7	355.1	219.6	201.9	17.63	12.452			
4,300.0	4,286.4	4,292.5	4,258.3	9.4	11.0	64.07	281.6	367.5	228.1	210.1	18.05	12.640			
4,400.0	4,386.1	4,392.1	4,356.6	9.6	11.3	63.53	291.4	379.9	236.7	218.3	18.46	12.820			
4,500.0	4,485.7	4,491.7	4,454.9	9.8	11.6	63.02	301.3	392.3	245.3	226.5	18.88	12.994			
4,600.0	4,585.3	4,591.3	4,553.3	10.1	12.0	62.56	311.2	404.7	254.0	234.7	19.30	13.161			
4,700.0	4,684.9	4,690.9	4,651.6	10.3	12.3	62.12	321.1	417.1	262.6	242.9	19.71	13.322			
4,800.0	4,784.5	4,790.5	4,749.9	10.5	12.6	61.71	331.0	429.5	271.3	251.1	20.13	13.477			
4,900.0	4,884.1	4,890.1	4,848.3	10.8	12.9	61.33	340.9	441.8	279.9	259.4	20.54	13.627			
5,000.0	4,983.8	4,989.7	4,946.6	11.0	13.3	60.96	350.8	454.2	288.6	267.7	20.96	13.771			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,083.4	5,089.3	5,045.0	11.2	13.6	60.62	360.7	466.6	297.3	275.9	21.38	13.909		
5,200.0	5,183.0	5,188.9	5,143.3	11.4	13.9	60.30	370.6	479.0	306.0	284.2	21.79	14.043		
5,300.0	5,282.6	5,288.5	5,241.6	11.7	14.2	60.00	380.5	491.4	314.7	292.5	22.21	14.172		
5,400.0	5,382.2	5,388.1	5,340.0	11.9	14.6	59.71	390.3	503.8	323.5	300.8	22.62	14.297		
5,500.0	5,481.9	5,487.7	5,438.3	12.1	14.9	59.44	400.2	516.2	332.2	309.2	23.04	14.418		
5,600.0	5,581.5	5,587.3	5,536.6	12.4	15.2	59.19	410.1	528.6	340.9	317.5	23.46	14.534		
5,700.0	5,681.1	5,686.9	5,635.0	12.6	15.5	58.94	420.0	541.0	349.7	325.8	23.87	14.647		
5,800.0	5,780.7	5,786.5	5,733.3	12.8	15.9	58.71	429.9	553.3	358.4	334.1	24.29	14.756		
5,900.0	5,880.3	5,886.2	5,831.7	13.1	16.2	58.49	439.8	565.7	367.2	342.5	24.71	14.862		
6,000.0	5,980.0	5,985.8	5,930.0	13.3	16.5	58.27	449.7	578.1	375.9	350.8	25.12	14.964		
6,100.0	6,079.6	6,085.4	6,028.3	13.5	16.8	58.07	459.6	590.5	384.7	359.2	25.54	15.063		
6,200.0	6,179.2	6,185.0	6,126.7	13.8	17.2	57.88	469.5	602.9	393.5	367.5	25.96	15.159		
6,300.0	6,278.8	6,284.6	6,225.0	14.0	17.5	57.70	479.4	615.3	402.2	375.9	26.37	15.252		
6,400.0	6,378.4	6,384.2	6,323.3	14.2	17.8	57.52	489.2	627.7	411.0	384.2	26.79	15.343		
6,500.0	6,478.1	6,483.8	6,421.7	14.5	18.1	57.35	499.1	640.1	419.8	392.6	27.21	15.431		
6,600.0	6,577.7	6,583.4	6,520.0	14.7	18.5	57.19	509.0	652.5	428.6	401.0	27.62	15.516		
6,700.0	6,677.3	6,683.0	6,618.3	14.9	18.8	57.03	518.9	664.8	437.4	409.3	28.04	15.599		
6,800.0	6,776.9	6,782.6	6,716.7	15.1	19.1	56.88	528.8	677.2	446.2	417.7	28.46	15.679		
6,900.0	6,876.5	6,882.2	6,815.0	15.4	19.5	56.74	538.7	689.6	455.0	426.1	28.87	15.757		
7,000.0	6,976.2	6,981.8	6,913.4	15.6	19.8	56.60	548.6	702.0	463.8	434.5	29.29	15.833		
7,100.0	7,075.8	7,081.4	7,011.7	15.8	20.1	56.47	558.5	714.4	472.6	442.8	29.71	15.907		
7,147.2	7,122.8	7,128.4	7,058.1	15.9	20.3	56.41	563.1	720.2	476.7	446.8	29.90	15.941		
7,150.0	7,125.6	7,131.2	7,060.9	16.0	20.3	54.91	563.4	720.6	477.0	447.0	29.92	15.943		
7,200.0	7,175.5	7,180.9	7,109.9	16.0	20.4	-26.92	568.3	726.8	481.7	451.6	30.03	16.041		
7,250.0	7,225.4	7,232.4	7,160.8	16.1	20.6	-76.23	572.0	733.3	486.9	456.9	30.01	16.223		
7,300.0	7,274.8	7,285.0	7,213.0	16.0	20.7	-85.68	571.1	740.3	492.4	462.5	29.93	16.452		
7,350.0	7,323.4	7,338.2	7,265.3	16.0	20.8	-89.36	565.3	747.7	498.2	468.4	29.79	16.723		
7,400.0	7,370.8	7,392.0	7,317.5	15.9	20.8	-91.25	554.5	755.3	504.2	474.6	29.60	17.031		
7,450.0	7,416.7	7,446.4	7,368.8	15.8	20.8	-92.35	538.7	763.3	510.3	480.9	29.38	17.370		
7,500.0	7,460.7	7,501.4	7,418.9	15.7	20.8	-93.01	517.7	771.4	516.6	487.4	29.13	17.734		
7,550.0	7,502.4	7,556.8	7,467.2	15.5	20.7	-93.38	491.7	779.7	522.8	494.0	28.86	18.116		
7,600.0	7,541.6	7,612.8	7,513.1	15.4	20.6	-93.54	460.8	787.9	529.1	500.5	28.59	18.504		
7,650.0	7,578.0	7,669.2	7,556.1	15.2	20.6	-93.55	425.3	796.1	535.2	506.9	28.34	18.888		
7,700.0	7,611.2	7,726.1	7,595.7	15.1	20.5	-93.44	385.3	804.2	541.2	513.1	28.11	19.257		
7,750.0	7,641.0	7,783.2	7,631.3	14.9	20.4	-93.22	341.2	812.0	547.1	519.1	27.92	19.597		
7,800.0	7,667.3	7,840.7	7,662.4	14.8	20.3	-92.92	293.6	819.5	552.6	524.9	27.78	19.896		
7,850.0	7,689.7	7,898.4	7,688.7	14.7	20.3	-92.54	242.8	826.5	557.9	530.2	27.70	20.141		
7,900.0	7,708.2	7,956.2	7,709.9	14.7	20.3	-92.09	189.4	833.1	562.8	535.1	27.71	20.315		
7,950.0	7,722.5	8,014.0	7,725.5	14.7	20.3	-91.58	134.1	839.0	567.4	539.6	27.80	20.411		
8,000.0	7,732.6	8,071.8	7,735.5	14.8	20.3	-91.03	77.4	844.3	571.6	543.6	27.98	20.426		
8,050.0	7,738.5	8,129.5	7,739.8	14.9	20.5	-90.43	20.1	848.9	575.3	547.0	28.25	20.366		
8,092.0	7,740.0	8,173.2	7,740.0	15.0	20.6	-90.00	-23.5	852.0	578.2	549.6	28.55	20.254		
8,100.0	7,740.0	8,181.2	7,740.0	15.0	20.6	-90.00	-31.5	852.5	578.7	550.1	28.61	20.228		
8,200.0	7,740.0	8,281.0	7,740.0	15.5	20.9	-90.00	-131.0	859.5	585.7	556.1	29.64	19.759		
8,300.0	7,740.0	8,380.7	7,740.0	16.1	21.4	-90.00	-230.5	866.4	592.7	561.6	31.03	19.100		
8,400.0	7,740.0	8,484.8	7,740.0	16.9	22.1	-90.00	-334.3	873.6	599.5	566.8	32.71	18.330		
8,500.0	7,740.0	8,596.4	7,740.0	17.8	22.9	-90.00	-445.8	879.5	604.8	570.2	34.61	17.477		
8,600.0	7,740.0	8,708.2	7,740.0	18.9	23.8	-90.00	-557.5	883.2	608.2	571.4	36.71	16.565		
8,700.0	7,740.0	8,820.0	7,740.0	20.0	24.8	-90.00	-669.4	884.7	609.5	570.6	38.98	15.636		
8,800.0	7,740.0	8,922.5	7,740.0	21.2	25.9	-90.00	-771.9	884.8	609.6	568.1	41.49	14.693		
8,900.0	7,740.0	9,022.5	7,740.0	22.5	26.9	-90.00	-871.9	884.8	609.6	565.4	44.14	13.809		
9,000.0	7,740.0	9,122.5	7,740.0	23.9	28.1	-90.00	-971.9	884.8	609.6	562.7	46.91	12.995		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
9,100.0	7,740.0	9,222.5	7,740.0	25.3	29.3	-90.00	-1,071.9	884.8	609.6	559.8	49.77	12.248	
9,200.0	7,740.0	9,322.5	7,740.0	26.7	30.5	-90.00	-1,171.9	884.8	609.6	556.9	52.71	11.565	
9,300.0	7,740.0	9,416.5	7,740.0	28.2	31.8	-90.00	-1,265.8	885.2	610.1	554.3	55.78	10.936	
9,400.0	7,740.0	9,516.5	7,740.0	29.7	33.1	-90.00	-1,365.8	886.2	611.1	552.2	58.85	10.384	
9,500.0	7,740.0	9,616.5	7,740.0	31.3	34.5	-90.00	-1,465.8	887.2	612.0	550.1	61.96	9.879	
9,600.0	7,740.0	9,716.5	7,740.0	32.8	35.9	-90.00	-1,565.8	888.2	613.0	547.9	65.11	9.416	
9,700.0	7,740.0	9,816.5	7,740.0	34.4	37.4	-90.00	-1,665.8	889.2	614.0	545.7	68.29	8.991	
9,800.0	7,740.0	9,916.5	7,740.0	36.0	38.8	-90.00	-1,765.7	890.2	615.0	543.5	71.51	8.601	
9,900.0	7,740.0	10,016.4	7,740.0	37.6	40.3	-90.00	-1,865.7	891.2	616.0	541.3	74.75	8.241	
10,000.0	7,740.0	10,116.4	7,740.0	39.2	41.9	-90.00	-1,965.7	892.2	617.0	539.0	78.02	7.909	
10,100.0	7,740.0	10,216.4	7,740.0	40.9	43.4	-90.00	-2,065.7	893.2	618.0	536.7	81.30	7.602	
10,200.0	7,740.0	10,316.4	7,740.0	42.5	44.9	-90.00	-2,165.7	894.2	619.0	534.4	84.60	7.317	
10,300.0	7,740.0	10,416.4	7,740.0	44.2	46.5	-90.00	-2,265.7	895.2	620.0	532.1	87.92	7.052	
10,400.0	7,740.0	10,516.4	7,740.0	45.8	48.1	-90.00	-2,365.7	896.2	621.0	529.8	91.26	6.805	
10,500.0	7,740.0	10,616.4	7,740.0	47.5	49.7	-90.00	-2,465.7	897.2	622.0	527.4	94.60	6.575	
10,600.0	7,740.0	10,716.4	7,740.0	49.1	51.3	-90.00	-2,565.7	898.2	623.0	525.0	97.96	6.360	
10,700.0	7,740.0	10,816.4	7,740.0	50.8	52.9	-90.00	-2,665.7	899.2	624.0	522.7	101.33	6.158	
10,800.0	7,740.0	10,916.4	7,740.0	52.5	54.5	-90.00	-2,765.6	900.2	625.0	520.3	104.70	5.969	
10,900.0	7,740.0	11,016.4	7,740.0	54.2	56.1	-90.00	-2,865.6	901.2	626.0	517.9	108.09	5.791	
11,000.0	7,740.0	11,116.4	7,740.0	55.9	57.8	-90.00	-2,965.6	902.2	627.0	515.5	111.48	5.624	
11,100.0	7,740.0	11,216.4	7,740.0	57.6	59.4	-90.00	-3,065.6	903.2	628.0	513.1	114.88	5.466	
11,200.0	7,740.0	11,316.4	7,740.0	59.3	61.1	-90.00	-3,165.6	904.1	629.0	510.7	118.29	5.317	
11,300.0	7,740.0	11,416.4	7,740.0	61.0	62.7	-90.00	-3,265.6	905.1	630.0	508.3	121.70	5.176	
11,400.0	7,740.0	11,516.4	7,740.0	62.7	64.4	-90.00	-3,365.6	906.1	631.0	505.8	125.11	5.043	
11,500.0	7,740.0	11,616.4	7,740.0	64.4	66.0	-90.00	-3,465.6	907.1	632.0	503.4	128.54	4.917	
11,600.0	7,740.0	11,716.4	7,740.0	66.1	67.7	-90.00	-3,565.6	908.1	633.0	501.0	131.96	4.796	
11,700.0	7,740.0	11,816.4	7,740.0	67.8	69.4	-90.00	-3,665.6	909.1	633.9	498.6	135.39	4.682	
11,800.0	7,740.0	11,916.4	7,740.0	69.5	71.1	-90.00	-3,765.6	910.1	634.9	496.1	138.83	4.574	
11,900.0	7,740.0	12,016.3	7,740.0	71.2	72.7	-90.00	-3,865.5	911.1	635.9	493.7	142.27	4.470	
12,000.0	7,740.0	12,116.3	7,740.0	72.9	74.4	-90.00	-3,965.5	912.1	636.9	491.2	145.71	4.371	
12,100.0	7,740.0	12,216.3	7,740.0	74.7	76.1	-90.00	-4,065.5	913.1	637.9	488.8	149.15	4.277	
12,200.0	7,740.0	12,316.3	7,740.0	76.4	77.8	-90.00	-4,165.5	914.1	638.9	486.3	152.60	4.187	
12,300.0	7,740.0	12,416.3	7,740.0	78.1	79.5	-90.00	-4,265.5	915.1	639.9	483.9	156.05	4.101	
12,400.0	7,740.0	12,516.3	7,740.0	79.8	81.2	-90.00	-4,365.5	916.1	640.9	481.4	159.50	4.018	
12,500.0	7,740.0	12,616.3	7,740.0	81.6	82.9	-90.00	-4,465.5	917.1	641.9	479.0	162.96	3.939	
12,600.0	7,740.0	12,716.3	7,740.0	83.3	84.6	-90.00	-4,565.5	918.1	642.9	476.5	166.41	3.863	
12,700.0	7,740.0	12,816.3	7,740.0	85.0	86.3	-90.00	-4,665.5	919.1	643.9	474.0	169.87	3.790	
12,800.0	7,740.0	12,916.3	7,740.0	86.7	88.0	-90.00	-4,765.5	920.1	644.9	471.6	173.33	3.721	
12,900.0	7,740.0	13,016.3	7,740.0	88.5	89.7	-90.00	-4,865.4	921.1	645.9	469.1	176.80	3.653	
13,000.0	7,740.0	13,116.3	7,740.0	90.2	91.4	-90.00	-4,965.4	922.1	646.9	466.6	180.26	3.589	
13,100.0	7,740.0	13,216.3	7,740.0	91.9	93.1	-90.00	-5,065.4	923.1	647.9	464.2	183.73	3.526	
13,200.0	7,740.0	13,316.3	7,740.0	93.7	94.8	-90.00	-5,165.4	924.1	648.9	461.7	187.20	3.466	
13,300.0	7,740.0	13,416.3	7,740.0	95.4	96.5	-90.00	-5,265.4	925.1	649.9	459.2	190.67	3.408	
13,400.0	7,740.0	13,516.3	7,740.0	97.1	98.3	-90.00	-5,365.4	926.0	650.9	456.7	194.14	3.353	
13,500.0	7,740.0	13,616.3	7,740.0	98.9	100.0	-90.00	-5,465.4	927.0	651.9	454.3	197.61	3.299	
13,600.0	7,740.0	13,716.3	7,740.0	100.6	101.7	-90.00	-5,565.4	928.0	652.9	451.8	201.08	3.247	
13,700.0	7,740.0	13,816.3	7,740.0	102.3	103.4	-90.00	-5,665.4	929.0	653.9	449.3	204.56	3.196	
13,800.0	7,740.0	13,916.3	7,740.0	104.1	105.1	-90.00	-5,765.4	930.0	654.9	446.8	208.03	3.148	
13,900.0	7,740.0	14,016.2	7,740.0	105.8	106.8	-90.00	-5,865.3	931.0	655.9	444.3	211.51	3.101	
14,000.0	7,740.0	14,116.2	7,740.0	107.5	108.6	-90.00	-5,965.3	932.0	656.8	441.9	214.99	3.055	
14,100.0	7,740.0	14,216.2	7,740.0	109.3	110.3	-90.00	-6,065.3	933.0	657.8	439.4	218.47	3.011	
14,200.0	7,740.0	14,316.2	7,740.0	111.0	112.0	-90.00	-6,165.3	934.0	658.8	436.9	221.95	2.968	

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,300.0	7,740.0	14,416.2	7,740.0	112.8	113.7	-90.00	-6,265.3	935.0	659.8	434.4	225.43	2.927		
14,400.0	7,740.0	14,516.2	7,740.0	114.5	115.5	-90.00	-6,365.3	936.0	660.8	431.9	228.91	2.887		
14,500.0	7,740.0	14,616.2	7,740.0	116.2	117.2	-90.00	-6,465.3	937.0	661.8	429.4	232.39	2.848		
14,600.0	7,740.0	14,716.2	7,740.0	118.0	118.9	-90.00	-6,565.3	938.0	662.8	426.9	235.87	2.810		
14,700.0	7,740.0	14,816.2	7,740.0	119.7	120.6	-90.00	-6,665.3	939.0	663.8	424.5	239.36	2.773		
14,800.0	7,740.0	14,916.2	7,740.0	121.5	122.4	-90.00	-6,765.3	940.0	664.8	422.0	242.84	2.738		
14,900.0	7,740.0	15,016.2	7,740.0	123.2	124.1	-90.00	-6,865.2	941.0	665.8	419.5	246.33	2.703		
15,000.0	7,740.0	15,116.2	7,740.0	124.9	125.8	-90.00	-6,965.2	942.0	666.8	417.0	249.81	2.669		
15,100.0	7,740.0	15,216.2	7,740.0	126.7	127.6	-90.00	-7,065.2	943.0	667.8	414.5	253.30	2.636		
15,200.0	7,740.0	15,316.2	7,740.0	128.4	129.3	-90.00	-7,165.2	944.0	668.8	412.0	256.79	2.604		
15,300.0	7,740.0	15,416.2	7,740.0	130.2	131.0	-90.00	-7,265.2	945.0	669.8	409.5	260.27	2.573		
15,400.0	7,740.0	15,516.2	7,740.0	131.9	132.8	-90.00	-7,365.2	946.0	670.8	407.0	263.76	2.543		
15,500.0	7,740.0	15,616.2	7,740.0	133.7	134.5	-90.00	-7,465.2	947.0	671.8	404.5	267.25	2.514		
15,600.0	7,740.0	15,716.2	7,740.0	135.4	136.2	-90.00	-7,565.2	948.0	672.8	402.0	270.74	2.485		
15,700.0	7,740.0	15,816.2	7,740.0	137.1	138.0	-90.00	-7,665.2	948.9	673.8	399.5	274.23	2.457		
15,800.0	7,740.0	15,916.2	7,740.0	138.9	139.7	-90.00	-7,765.2	949.9	674.8	397.0	277.72	2.430		
15,900.0	7,740.0	16,016.1	7,740.0	140.6	141.4	-90.00	-7,865.1	950.9	675.8	394.6	281.21	2.403		
15,953.0	7,740.0	16,069.1	7,740.0	141.6	142.3	-90.00	-7,918.1	951.5	676.3	393.2	283.06	2.389 SF		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.98	0.0	22.4	22.4				
100.0	100.0	100.0	100.0	0.2	0.2	89.98	0.0	22.4	22.4	22.1	0.30	73.728	
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	22.4	22.4	21.7	0.65	34.301	
300.0	300.0	300.0	300.0	0.5	0.5	89.98	0.0	22.4	22.4	21.4	1.00	22.350 CC, ES	
400.0	400.0	399.6	399.6	0.7	0.7	89.12	0.4	23.2	23.2	21.8	1.35	17.174	
500.0	500.0	499.2	499.2	0.9	0.9	62.23	1.4	25.6	25.2	23.5	1.70	14.828	
600.0	600.0	598.8	598.6	1.0	1.0	63.58	3.1	29.5	28.0	26.0	2.05	13.652	
700.0	699.9	698.2	697.9	1.2	1.2	66.20	5.6	35.1	31.7	29.3	2.41	13.133	
800.0	799.7	797.6	796.9	1.4	1.4	69.52	8.7	42.2	36.3	33.5	2.79	13.019	
899.9	899.3	896.7	895.6	1.6	1.7	73.06	12.5	50.8	41.9	38.7	3.18	13.165	
1,000.0	999.0	995.9	994.2	1.8	1.9	75.60	16.9	61.1	48.9	45.3	3.60	13.582	
1,100.0	1,098.6	1,094.8	1,092.3	2.0	2.2	76.45	22.1	72.8	57.3	53.3	4.02	14.240	
1,200.0	1,198.2	1,193.5	1,189.8	2.3	2.5	76.20	27.9	86.1	67.1	62.6	4.45	15.065	
1,300.0	1,297.8	1,291.8	1,286.9	2.5	2.8	75.28	34.3	100.8	78.2	73.4	4.88	16.023	
1,400.0	1,397.5	1,389.8	1,383.3	2.7	3.1	73.97	41.4	117.1	90.8	85.5	5.31	17.096	
1,500.0	1,497.1	1,487.4	1,478.9	2.9	3.5	72.49	49.2	134.7	104.9	99.1	5.74	18.273	
1,600.0	1,596.7	1,586.1	1,575.5	3.2	3.9	71.09	57.3	153.4	119.8	113.6	6.17	19.413	
1,700.0	1,696.3	1,685.0	1,672.2	3.4	4.2	70.01	65.5	172.2	134.8	128.2	6.60	20.409	
1,800.0	1,795.9	1,783.8	1,768.9	3.6	4.6	69.14	73.7	190.9	149.8	142.7	7.04	21.287	
1,900.0	1,895.6	1,882.7	1,865.6	3.8	5.0	68.42	81.9	209.6	164.8	157.3	7.47	22.065	
2,000.0	1,995.2	1,981.5	1,962.3	4.1	5.4	67.83	90.1	228.4	179.9	172.0	7.90	22.760	
2,100.0	2,094.8	2,080.4	2,059.0	4.3	5.8	67.33	98.3	247.1	194.9	186.6	8.34	23.383	
2,200.0	2,194.4	2,179.2	2,155.7	4.5	6.2	66.90	106.5	265.9	210.0	201.3	8.77	23.946	
2,300.0	2,294.0	2,278.0	2,252.4	4.8	6.6	66.53	114.7	284.6	225.1	215.9	9.21	24.455	
2,400.0	2,393.7	2,376.9	2,349.2	5.0	7.0	66.21	122.9	303.4	240.2	230.6	9.64	24.919	
2,500.0	2,493.3	2,475.7	2,445.9	5.2	7.4	65.92	131.1	322.1	255.3	245.3	10.08	25.343	
2,600.0	2,592.9	2,574.6	2,542.6	5.4	7.8	65.67	139.3	340.8	270.5	260.0	10.51	25.733	
2,700.0	2,692.5	2,673.4	2,639.3	5.7	8.1	65.44	147.5	359.6	285.6	274.6	10.95	26.091	
2,800.0	2,792.1	2,772.3	2,736.0	5.9	8.5	65.23	155.7	378.3	300.7	289.3	11.38	26.422	
2,900.0	2,891.8	2,871.1	2,832.7	6.1	8.9	65.05	163.9	397.1	315.8	304.0	11.82	26.728	
3,000.0	2,991.4	2,970.0	2,929.4	6.4	9.3	64.88	172.2	415.8	331.0	318.7	12.25	27.013	
3,100.0	3,091.0	3,068.8	3,026.1	6.6	9.7	64.73	180.4	434.5	346.1	333.4	12.69	27.278	
3,200.0	3,190.6	3,167.6	3,122.8	6.8	10.1	64.59	188.6	453.3	361.2	348.1	13.12	27.526	
3,300.0	3,290.2	3,266.5	3,219.5	7.1	10.5	64.46	196.8	472.0	376.4	362.8	13.56	27.758	
3,400.0	3,389.9	3,365.3	3,316.2	7.3	10.9	64.34	205.0	490.8	391.5	377.5	14.00	27.975	
3,500.0	3,489.5	3,464.2	3,412.9	7.5	11.3	64.23	213.2	509.5	406.7	392.2	14.43	28.179	
3,600.0	3,589.1	3,563.0	3,509.6	7.7	11.7	64.13	221.4	528.2	421.8	406.9	14.87	28.371	
3,700.0	3,688.7	3,661.9	3,606.3	8.0	12.1	64.03	229.6	547.0	437.0	421.7	15.30	28.552	
3,800.0	3,788.3	3,760.7	3,703.0	8.2	12.5	63.94	237.8	565.7	452.1	436.4	15.74	28.723	
3,900.0	3,888.0	3,859.5	3,799.7	8.4	12.9	63.86	246.0	584.5	467.3	451.1	16.18	28.885	
4,000.0	3,987.6	3,958.4	3,896.4	8.7	13.3	63.78	254.2	603.2	482.4	465.8	16.61	29.038	
4,100.0	4,087.2	4,057.2	3,993.1	8.9	13.7	63.71	262.4	621.9	497.6	480.5	17.05	29.184	
4,200.0	4,186.8	4,156.1	4,089.8	9.1	14.1	63.64	270.6	640.7	512.7	495.2	17.49	29.322	
4,300.0	4,286.4	4,254.9	4,186.5	9.4	14.5	63.57	278.8	659.4	527.9	509.9	17.92	29.453	
4,400.0	4,386.1	4,353.8	4,283.2	9.6	14.9	63.51	287.0	678.2	543.0	524.6	18.36	29.578	
4,500.0	4,485.7	4,452.6	4,379.9	9.8	15.3	63.46	295.2	696.9	558.2	539.4	18.79	29.697	
4,600.0	4,585.3	4,551.5	4,476.6	10.1	15.7	63.40	303.4	715.7	573.3	554.1	19.23	29.811	
4,700.0	4,684.9	4,650.3	4,573.3	10.3	16.1	63.35	311.6	734.4	588.5	568.8	19.67	29.920	
4,800.0	4,784.5	4,749.1	4,670.0	10.5	16.5	63.30	319.8	753.1	603.6	583.5	20.10	30.024	
4,900.0	4,884.1	4,848.0	4,766.7	10.8	16.9	63.25	328.0	771.9	618.8	598.2	20.54	30.124	
5,000.0	4,983.8	4,946.8	4,863.5	11.0	17.3	63.21	336.2	790.6	633.9	612.9	20.98	30.219	
5,100.0	5,083.4	5,045.7	4,960.2	11.2	17.7	63.16	344.4	809.4	649.1	627.7	21.41	30.311	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,200.0	5,183.0	5,144.5	5,056.9	11.4	18.1	63.12	352.6	828.1	664.2	642.4	21.85	30.399		
5,300.0	5,282.6	5,243.4	5,153.6	11.7	18.5	63.08	360.8	846.8	679.4	657.1	22.29	30.483		
5,400.0	5,382.2	5,342.2	5,250.3	11.9	18.9	63.05	369.0	865.6	694.5	671.8	22.72	30.564		
5,500.0	5,481.9	5,441.0	5,347.0	12.1	19.3	63.01	377.2	884.3	709.7	686.5	23.16	30.643		
5,600.0	5,581.5	5,539.9	5,443.7	12.4	19.8	62.98	385.4	903.1	724.9	701.3	23.60	30.718		
5,700.0	5,681.1	5,638.7	5,540.4	12.6	20.2	62.94	393.6	921.8	740.0	716.0	24.03	30.790		
5,800.0	5,780.7	5,737.6	5,637.1	12.8	20.6	62.91	401.8	940.5	755.2	730.7	24.47	30.860		
5,900.0	5,880.3	5,836.4	5,733.8	13.1	21.0	62.88	410.0	959.3	770.3	745.4	24.91	30.927		
6,000.0	5,980.0	5,935.3	5,830.5	13.3	21.4	62.85	418.2	978.0	785.5	760.1	25.34	30.993		
6,100.0	6,079.6	6,034.1	5,927.2	13.5	21.8	62.83	426.4	996.8	800.6	774.9	25.78	31.055		
6,200.0	6,179.2	6,133.0	6,023.9	13.8	22.2	62.80	434.6	1,015.5	815.8	789.6	26.22	31.116		
6,300.0	6,278.8	6,231.8	6,120.6	14.0	22.6	62.77	442.8	1,034.2	831.0	804.3	26.65	31.175		
6,400.0	6,378.4	6,330.6	6,217.3	14.2	23.0	62.75	451.0	1,053.0	846.1	819.0	27.09	31.232		
6,500.0	6,478.1	6,429.5	6,314.0	14.5	23.4	62.72	459.2	1,071.7	861.3	833.7	27.53	31.287		
6,600.0	6,577.7	6,528.3	6,410.7	14.7	23.8	62.70	467.4	1,090.5	876.4	848.5	27.97	31.340		
6,700.0	6,677.3	6,627.2	6,507.4	14.9	24.2	62.68	475.6	1,109.2	891.6	863.2	28.40	31.392		
6,800.0	6,776.9	6,726.0	6,604.1	15.1	24.6	62.66	483.8	1,128.0	906.7	877.9	28.84	31.442		
6,900.0	6,876.5	6,824.9	6,700.8	15.4	25.0	62.64	492.0	1,146.7	921.9	892.6	29.28	31.491		
7,000.0	6,976.2	6,923.7	6,797.5	15.6	25.4	62.62	500.2	1,165.4	937.1	907.4	29.71	31.538		
7,100.0	7,075.8	7,022.6	6,894.3	15.8	25.8	62.60	508.4	1,184.2	952.2	922.1	30.15	31.586		
7,147.2	7,122.8	7,069.5	6,940.3	15.9	25.9	62.72	510.0	1,193.1	959.4	929.0	30.35	31.614		
7,150.0	7,125.6	7,072.3	6,943.0	16.0	25.9	61.26	510.0	1,193.6	959.8	929.4	30.36	31.616		
7,200.0	7,175.5	7,121.6	6,991.3	16.0	26.1	-19.67	507.4	1,203.0	967.4	936.9	30.51	31.712		
7,250.0	7,225.4	7,170.5	7,038.9	16.1	26.2	-67.78	500.7	1,212.2	975.0	944.4	30.56	31.900		
7,300.0	7,274.8	7,219.2	7,085.4	16.0	26.3	-76.10	489.9	1,221.2	982.5	952.0	30.54	32.177		
7,350.0	7,323.4	7,267.5	7,130.7	16.0	26.4	-78.73	475.2	1,230.0	990.0	959.5	30.43	32.537		
7,400.0	7,370.8	7,315.6	7,174.3	15.9	26.4	-79.68	456.8	1,238.4	997.2	967.0	30.24	32.972		
7,450.0	7,416.7	7,363.5	7,216.1	15.8	26.5	-79.94	434.9	1,246.5	1,004.3	974.3	30.00	33.475		
7,500.0	7,460.7	7,411.2	7,255.7	15.7	26.5	-79.86	409.5	1,254.2	1,011.0	981.3	29.71	34.035		
7,550.0	7,502.4	7,458.7	7,293.1	15.5	26.5	-79.61	381.1	1,261.5	1,017.4	988.1	29.37	34.637		
7,600.0	7,541.6	7,506.1	7,327.8	15.4	26.5	-79.28	349.7	1,268.2	1,023.5	994.5	29.02	35.265		
7,650.0	7,578.0	7,553.3	7,359.9	15.2	26.5	-78.91	315.5	1,274.4	1,029.1	1,000.4	28.67	35.897		
7,700.0	7,611.2	7,600.0	7,388.7	15.1	26.5	-78.53	279.2	1,280.0	1,034.2	1,005.9	28.32	36.512		
7,750.0	7,641.0	7,647.4	7,414.9	14.9	26.5	-78.16	240.1	1,285.1	1,038.8	1,010.8	28.02	37.072		
7,800.0	7,667.3	7,694.4	7,437.7	14.8	26.5	-77.83	199.2	1,289.5	1,042.8	1,015.1	27.77	37.557		
7,850.0	7,689.7	7,741.3	7,457.0	14.7	26.5	-77.53	156.7	1,293.2	1,046.3	1,018.7	27.58	37.934		
7,900.0	7,708.2	7,788.1	7,472.9	14.7	26.5	-77.29	112.8	1,296.3	1,049.1	1,021.6	27.48	38.177		
7,950.0	7,722.5	7,834.9	7,485.2	14.7	26.5	-77.09	67.7	1,298.7	1,051.3	1,023.9	27.48	38.265		
8,000.0	7,732.6	7,881.6	7,493.8	14.8	26.6	-76.95	21.8	1,300.4	1,052.9	1,025.3	27.57	38.185		
8,050.0	7,738.5	7,928.3	7,498.7	14.9	26.6	-76.86	-24.6	1,301.3	1,053.8	1,026.0	27.78	37.932		
8,092.0	7,740.0	7,967.6	7,500.0	15.0	26.7	-76.84	-63.8	1,301.6	1,054.0	1,026.0	28.03	37.603		
8,100.0	7,740.0	7,975.6	7,500.0	15.0	26.7	-76.84	-71.9	1,301.6	1,054.0	1,026.0	28.09	37.522		
8,200.0	7,740.0	8,075.6	7,500.0	15.5	27.0	-76.84	-171.9	1,301.6	1,054.0	1,025.0	29.04	36.301		
8,300.0	7,740.0	8,175.6	7,500.0	16.1	27.3	-76.84	-271.9	1,301.6	1,054.0	1,023.7	30.32	34.761		
8,400.0	7,740.0	8,275.6	7,500.0	16.9	27.8	-76.84	-371.9	1,301.6	1,054.0	1,022.1	31.93	33.016		
8,500.0	7,740.0	8,375.6	7,500.0	17.8	28.3	-76.84	-471.9	1,301.6	1,054.0	1,020.2	33.80	31.187		
8,600.0	7,740.0	8,475.6	7,500.0	18.9	29.0	-76.84	-571.9	1,301.6	1,054.0	1,018.1	35.90	29.361		
8,700.0	7,740.0	8,575.6	7,500.0	20.0	29.7	-76.84	-671.9	1,301.6	1,054.0	1,015.9	38.19	27.599		
8,800.0	7,740.0	8,675.6	7,500.0	21.2	30.5	-76.84	-771.9	1,301.6	1,054.0	1,013.4	40.64	25.935		
8,900.0	7,740.0	8,775.6	7,500.0	22.5	31.4	-76.84	-871.9	1,301.6	1,054.0	1,010.8	43.22	24.386		
9,000.0	7,740.0	8,875.6	7,500.0	23.9	32.4	-76.84	-971.9	1,301.6	1,054.0	1,008.1	45.91	22.957		
9,100.0	7,740.0	8,975.6	7,500.0	25.3	33.5	-76.84	-1,071.9	1,301.6	1,054.0	1,005.4	48.70	21.645		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: O-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,200.0	7,740.0	9,075.6	7,500.0	26.7	34.5	-76.84	-1,171.9	1,301.6	1,054.0	1,002.5	51.56	20.445	
9,300.0	7,740.0	9,175.6	7,500.0	28.2	35.7	-76.84	-1,271.9	1,301.6	1,054.0	999.6	54.48	19.348	
9,400.0	7,740.0	9,275.6	7,500.0	29.7	36.9	-76.84	-1,371.9	1,301.6	1,054.0	996.6	57.46	18.345	
9,500.0	7,740.0	9,375.6	7,500.0	31.3	38.1	-76.84	-1,471.9	1,301.6	1,054.0	993.6	60.48	17.428	
9,600.0	7,740.0	9,475.6	7,500.0	32.8	39.4	-76.84	-1,571.9	1,301.6	1,054.0	990.5	63.55	16.587	
9,700.0	7,740.0	9,575.6	7,500.0	34.4	40.7	-76.84	-1,671.9	1,301.6	1,054.0	987.4	66.64	15.816	
9,800.0	7,740.0	9,675.6	7,500.0	36.0	42.1	-76.84	-1,771.9	1,301.6	1,054.0	984.3	69.77	15.107	
9,900.0	7,740.0	9,775.6	7,500.0	37.6	43.5	-76.84	-1,871.9	1,301.6	1,054.0	981.1	72.93	14.454	
10,000.0	7,740.0	9,875.6	7,500.0	39.2	44.9	-76.84	-1,971.9	1,301.6	1,054.0	977.9	76.10	13.850	
10,100.0	7,740.0	9,975.6	7,500.0	40.9	46.3	-76.84	-2,071.9	1,301.6	1,054.0	974.7	79.30	13.292	
10,200.0	7,740.0	10,075.6	7,500.0	42.5	47.7	-76.84	-2,171.9	1,301.6	1,054.0	971.5	82.51	12.774	
10,300.0	7,740.0	10,175.6	7,500.0	44.2	49.2	-76.84	-2,271.9	1,301.6	1,054.0	968.3	85.75	12.293	
10,400.0	7,740.0	10,275.6	7,500.0	45.8	50.7	-76.84	-2,371.9	1,301.6	1,054.0	965.1	88.99	11.845	
10,500.0	7,740.0	10,375.6	7,500.0	47.5	52.2	-76.84	-2,471.9	1,301.6	1,054.0	961.8	92.25	11.426	
10,600.0	7,740.0	10,475.6	7,500.0	49.1	53.7	-76.84	-2,571.9	1,301.6	1,054.0	958.5	95.51	11.036	
10,700.0	7,740.0	10,575.6	7,500.0	50.8	55.3	-76.84	-2,671.9	1,301.6	1,054.0	955.3	98.79	10.669	
10,800.0	7,740.0	10,675.6	7,500.0	52.5	56.8	-76.84	-2,771.9	1,301.6	1,054.0	952.0	102.08	10.326	
10,900.0	7,740.0	10,775.6	7,500.0	54.2	58.4	-76.84	-2,871.9	1,301.6	1,054.0	948.7	105.37	10.003	
11,000.0	7,740.0	10,875.6	7,500.0	55.9	60.0	-76.84	-2,971.9	1,301.6	1,054.0	945.4	108.68	9.699	
11,100.0	7,740.0	10,975.6	7,500.0	57.6	61.5	-76.84	-3,071.9	1,301.6	1,054.0	942.1	111.99	9.412	
11,200.0	7,740.0	11,075.6	7,500.0	59.3	63.1	-76.84	-3,171.9	1,301.6	1,054.0	938.7	115.30	9.142	
11,300.0	7,740.0	11,175.6	7,500.0	61.0	64.7	-76.84	-3,271.9	1,301.6	1,054.0	935.4	118.62	8.886	
11,400.0	7,740.0	11,275.6	7,500.0	62.7	66.3	-76.84	-3,371.9	1,301.6	1,054.0	932.1	121.95	8.643	
11,500.0	7,740.0	11,375.6	7,500.0	64.4	67.9	-76.84	-3,471.9	1,301.6	1,054.0	928.8	125.28	8.413	
11,600.0	7,740.0	11,475.6	7,500.0	66.1	69.6	-76.84	-3,571.9	1,301.6	1,054.0	925.4	128.62	8.195	
11,700.0	7,740.0	11,575.6	7,500.0	67.8	71.2	-76.84	-3,671.9	1,301.6	1,054.0	922.1	131.96	7.988	
11,800.0	7,740.0	11,675.6	7,500.0	69.5	72.8	-76.84	-3,771.9	1,301.6	1,054.0	918.7	135.30	7.790	
11,900.0	7,740.0	11,775.6	7,500.0	71.2	74.5	-76.84	-3,871.9	1,301.6	1,054.0	915.4	138.65	7.602	
12,000.0	7,740.0	11,875.6	7,500.0	72.9	76.1	-76.84	-3,971.9	1,301.6	1,054.0	912.0	142.00	7.423	
12,100.0	7,740.0	11,975.6	7,500.0	74.7	77.7	-76.84	-4,071.9	1,301.6	1,054.0	908.7	145.36	7.251	
12,200.0	7,740.0	12,075.6	7,500.0	76.4	79.4	-76.84	-4,171.9	1,301.6	1,054.1	905.3	148.72	7.088	
12,300.0	7,740.0	12,175.6	7,500.0	78.1	81.1	-76.84	-4,271.9	1,301.6	1,054.1	902.0	152.08	6.931	
12,400.0	7,740.0	12,275.6	7,500.0	79.8	82.7	-76.84	-4,371.9	1,301.6	1,054.1	898.6	155.44	6.781	
12,500.0	7,740.0	12,375.6	7,500.0	81.6	84.4	-76.84	-4,471.9	1,301.6	1,054.1	895.2	158.80	6.638	
12,600.0	7,740.0	12,475.6	7,500.0	83.3	86.1	-76.84	-4,571.9	1,301.6	1,054.1	891.9	162.17	6.500	
12,700.0	7,740.0	12,575.6	7,500.0	85.0	87.7	-76.84	-4,671.9	1,301.6	1,054.1	888.5	165.54	6.367	
12,800.0	7,740.0	12,675.6	7,500.0	86.7	89.4	-76.84	-4,771.9	1,301.6	1,054.1	885.1	168.91	6.240	
12,900.0	7,740.0	12,775.6	7,500.0	88.5	91.1	-76.84	-4,871.9	1,301.6	1,054.1	881.8	172.28	6.118	
13,000.0	7,740.0	12,875.6	7,500.0	90.2	92.8	-76.84	-4,971.9	1,301.6	1,054.1	878.4	175.66	6.001	
13,100.0	7,740.0	12,975.6	7,500.0	91.9	94.4	-76.84	-5,071.9	1,301.6	1,054.1	875.0	179.03	5.888	
13,200.0	7,740.0	13,075.6	7,500.0	93.7	96.1	-76.84	-5,171.9	1,301.6	1,054.1	871.6	182.41	5.779	
13,300.0	7,740.0	13,175.6	7,500.0	95.4	97.8	-76.84	-5,271.9	1,301.6	1,054.1	868.3	185.79	5.673	
13,400.0	7,740.0	13,275.6	7,500.0	97.1	99.5	-76.84	-5,371.9	1,301.6	1,054.1	864.9	189.17	5.572	
13,500.0	7,740.0	13,375.6	7,500.0	98.9	101.2	-76.84	-5,471.9	1,301.6	1,054.1	861.5	192.55	5.474	
13,600.0	7,740.0	13,475.6	7,500.0	100.6	102.9	-76.84	-5,571.9	1,301.6	1,054.1	858.1	195.93	5.380	
13,700.0	7,740.0	13,575.6	7,500.0	102.3	104.6	-76.84	-5,671.9	1,301.6	1,054.1	854.7	199.32	5.288	
13,800.0	7,740.0	13,675.6	7,500.0	104.1	106.3	-76.84	-5,771.9	1,301.6	1,054.1	851.3	202.70	5.200	
13,900.0	7,740.0	13,775.6	7,500.0	105.8	108.0	-76.84	-5,871.9	1,301.6	1,054.1	848.0	206.09	5.115	
14,000.0	7,740.0	13,875.6	7,500.0	107.5	109.7	-76.84	-5,971.9	1,301.6	1,054.1	844.6	209.47	5.032	
14,100.0	7,740.0	13,975.6	7,500.0	109.3	111.4	-76.84	-6,071.9	1,301.6	1,054.1	841.2	212.86	4.952	
14,200.0	7,740.0	14,075.6	7,500.0	111.0	113.1	-76.84	-6,171.9	1,301.6	1,054.1	837.8	216.25	4.874	
14,300.0	7,740.0	14,175.6	7,500.0	112.8	114.8	-76.84	-6,271.9	1,301.6	1,054.1	834.4	219.64	4.799	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	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)				
14,400.0	7,740.0	14,275.6	7,500.0	114.5	116.5	-76.84	-6,371.9	1,301.6	1,054.1	831.0	223.03	4.726		
14,500.0	7,740.0	14,375.6	7,500.0	116.2	118.2	-76.84	-6,471.9	1,301.6	1,054.1	827.6	226.42	4.655		
14,600.0	7,740.0	14,475.6	7,500.0	118.0	119.9	-76.84	-6,571.9	1,301.6	1,054.1	824.2	229.82	4.586		
14,700.0	7,740.0	14,575.6	7,500.0	119.7	121.7	-76.84	-6,671.9	1,301.6	1,054.1	820.8	233.21	4.520		
14,800.0	7,740.0	14,675.6	7,500.0	121.5	123.4	-76.84	-6,771.9	1,301.6	1,054.1	817.4	236.60	4.455		
14,900.0	7,740.0	14,775.6	7,500.0	123.2	125.1	-76.84	-6,871.9	1,301.6	1,054.1	814.1	240.00	4.392		
15,000.0	7,740.0	14,875.6	7,500.0	124.9	126.8	-76.84	-6,971.9	1,301.6	1,054.1	810.7	243.39	4.331		
15,100.0	7,740.0	14,975.6	7,500.0	126.7	128.5	-76.84	-7,071.9	1,301.6	1,054.1	807.3	246.79	4.271		
15,200.0	7,740.0	15,075.6	7,500.0	128.4	130.2	-76.84	-7,171.9	1,301.6	1,054.1	803.9	250.18	4.213		
15,300.0	7,740.0	15,175.6	7,500.0	130.2	131.9	-76.84	-7,271.9	1,301.6	1,054.1	800.5	253.58	4.157		
15,400.0	7,740.0	15,275.6	7,500.0	131.9	133.7	-76.84	-7,371.9	1,301.6	1,054.1	797.1	256.98	4.102		
15,500.0	7,740.0	15,375.6	7,500.0	133.7	135.4	-76.84	-7,471.9	1,301.6	1,054.1	793.7	260.38	4.048		
15,600.0	7,740.0	15,475.6	7,500.0	135.4	137.1	-76.84	-7,571.9	1,301.6	1,054.1	790.3	263.77	3.996		
15,700.0	7,740.0	15,575.6	7,500.0	137.1	138.8	-76.84	-7,671.9	1,301.6	1,054.1	786.9	267.17	3.945		
15,800.0	7,740.0	15,675.6	7,500.0	138.9	140.6	-76.84	-7,771.9	1,301.6	1,054.1	783.5	270.57	3.896		
15,900.0	7,740.0	15,775.6	7,500.0	140.6	142.3	-76.84	-7,871.9	1,301.6	1,054.1	780.1	273.97	3.847		
15,953.0	7,740.0	15,828.6	7,500.0	141.6	143.2	-76.84	-7,924.8	1,301.6	1,054.1	778.3	275.77	3.822 SF		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.69	-0.4	29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.69	-0.4	29.9	29.9	29.6	0.30	98.619		
187.1	187.1	187.1	187.1	0.3	0.3	90.00	0.0	29.9	29.9	29.3	0.61	49.233 CC		
200.0	200.0	200.0	200.0	0.3	0.3	89.44	0.3	29.9	29.9	29.3	0.65	45.824 ES		
300.0	300.0	299.7	299.5	0.5	0.5	79.72	5.4	30.0	30.5	29.4	1.02	29.839		
400.0	400.0	398.9	398.5	0.7	0.7	68.29	12.4	31.1	33.5	32.1	1.39	24.155		
500.0	500.0	498.1	497.4	0.9	0.9	34.63	19.4	34.0	38.5	36.7	1.74	22.070		
600.0	600.0	597.3	596.3	1.0	1.2	31.36	26.4	38.5	43.9	41.8	2.09	20.958		
700.0	699.9	696.5	695.0	1.2	1.4	30.88	33.5	44.8	49.4	46.9	2.44	20.186		
800.0	799.7	795.5	793.4	1.4	1.6	32.34	40.7	52.8	54.8	52.0	2.80	19.568		
899.9	899.3	894.4	891.5	1.6	1.9	35.21	47.8	62.5	60.4	57.2	3.17	19.057		
1,000.0	999.0	993.2	989.4	1.8	2.2	38.67	55.0	73.8	67.0	63.5	3.55	18.877		
1,100.0	1,098.6	1,091.6	1,086.7	2.0	2.5	41.95	62.2	86.8	75.5	71.5	3.94	19.147		
1,200.0	1,198.2	1,189.7	1,183.4	2.3	2.8	44.89	69.4	101.4	85.7	81.4	4.34	19.755		
1,300.0	1,297.8	1,287.3	1,279.5	2.5	3.1	47.45	76.6	117.6	97.8	93.0	4.74	20.620		
1,400.0	1,397.5	1,384.6	1,374.8	2.7	3.5	49.63	83.8	135.4	111.7	106.5	5.15	21.682		
1,500.0	1,497.1	1,481.3	1,469.3	2.9	3.9	51.46	91.0	154.7	127.3	121.8	5.56	22.898		
1,600.0	1,596.7	1,577.4	1,562.9	3.2	4.3	52.99	98.2	175.4	144.7	138.7	5.97	24.236		
1,700.0	1,696.3	1,674.4	1,657.0	3.4	4.7	54.27	105.4	197.7	163.6	157.2	6.39	25.598		
1,800.0	1,795.9	1,772.5	1,752.1	3.6	5.1	55.30	112.8	220.4	182.8	176.0	6.82	26.792		
1,900.0	1,895.6	1,870.6	1,847.3	3.8	5.6	56.14	120.1	243.2	202.0	194.7	7.25	27.846		
2,000.0	1,995.2	1,968.7	1,942.4	4.1	6.0	56.84	127.5	265.9	221.2	213.5	7.69	28.784		
2,100.0	2,094.8	2,066.8	2,037.6	4.3	6.5	57.42	134.8	288.6	240.5	232.4	8.12	29.622		
2,200.0	2,194.4	2,164.9	2,132.7	4.5	6.9	57.92	142.2	311.4	259.8	251.2	8.55	30.375		
2,300.0	2,294.0	2,263.0	2,227.8	4.8	7.4	58.35	149.5	334.1	279.1	270.1	8.99	31.056		
2,400.0	2,393.7	2,361.1	2,323.0	5.0	7.8	58.72	156.9	356.9	298.4	289.0	9.42	31.675		
2,500.0	2,493.3	2,459.2	2,418.1	5.2	8.3	59.05	164.2	379.6	317.7	307.8	9.85	32.238		
2,600.0	2,592.9	2,557.3	2,513.3	5.4	8.7	59.34	171.5	402.3	337.0	326.7	10.29	32.753		
2,700.0	2,692.5	2,655.4	2,608.4	5.7	9.2	59.59	178.9	425.1	356.4	345.7	10.73	33.227		
2,800.0	2,792.1	2,753.5	2,703.6	5.9	9.6	59.83	186.2	447.8	375.7	364.6	11.16	33.663		
2,900.0	2,891.8	2,851.6	2,798.7	6.1	10.1	60.03	193.6	470.6	395.1	383.5	11.60	34.066		
3,000.0	2,991.4	2,949.7	2,893.9	6.4	10.5	60.22	200.9	493.3	414.4	402.4	12.03	34.440		
3,100.0	3,091.0	3,047.8	2,989.0	6.6	11.0	60.40	208.3	516.0	433.8	421.3	12.47	34.787		
3,200.0	3,190.6	3,145.9	3,084.1	6.8	11.4	60.55	215.6	538.8	453.2	440.3	12.91	35.111		
3,300.0	3,290.2	3,244.0	3,179.3	7.1	11.9	60.70	222.9	561.5	472.5	459.2	13.34	35.413		
3,400.0	3,389.9	3,342.1	3,274.4	7.3	12.4	60.83	230.3	584.3	491.9	478.1	13.78	35.696		
3,500.0	3,489.5	3,440.2	3,369.6	7.5	12.8	60.96	237.6	607.0	511.3	497.1	14.22	35.961		
3,600.0	3,589.1	3,538.3	3,464.7	7.7	13.3	61.07	245.0	629.7	530.6	516.0	14.65	36.210		
3,700.0	3,688.7	3,636.4	3,559.9	8.0	13.7	61.18	252.3	652.5	550.0	534.9	15.09	36.445		
3,800.0	3,788.3	3,734.5	3,655.0	8.2	14.2	61.28	259.7	675.2	569.4	553.9	15.53	36.666		
3,900.0	3,888.0	3,832.6	3,750.2	8.4	14.6	61.37	267.0	698.0	588.8	572.8	15.97	36.875		
4,000.0	3,987.6	3,930.7	3,845.3	8.7	15.1	61.46	274.4	720.7	608.2	591.8	16.40	37.073		
4,100.0	4,087.2	4,028.8	3,940.5	8.9	15.6	61.54	281.7	743.4	627.5	610.7	16.84	37.261		
4,200.0	4,186.8	4,126.9	4,035.6	9.1	16.0	61.61	289.0	766.2	646.9	629.6	17.28	37.439		
4,300.0	4,286.4	4,225.0	4,130.7	9.4	16.5	61.69	296.4	788.9	666.3	648.6	17.72	37.608		
4,400.0	4,386.1	4,323.1	4,225.9	9.6	16.9	61.75	303.7	811.7	685.7	667.5	18.16	37.768		
4,500.0	4,485.7	4,421.2	4,321.0	9.8	17.4	61.82	311.1	834.4	705.1	686.5	18.59	37.922		
4,600.0	4,585.3	4,519.3	4,416.2	10.1	17.9	61.88	318.4	857.1	724.5	705.4	19.03	38.068		
4,700.0	4,684.9	4,617.4	4,511.3	10.3	18.3	61.94	325.8	879.9	743.9	724.4	19.47	38.207		
4,800.0	4,784.5	4,715.5	4,606.5	10.5	18.8	61.99	333.1	902.6	763.2	743.3	19.91	38.340		
4,900.0	4,884.1	4,813.6	4,701.6	10.8	19.2	62.04	340.4	925.4	782.6	762.3	20.35	38.468		
5,000.0	4,983.8	4,911.7	4,796.8	11.0	19.7	62.09	347.8	948.1	802.0	781.2	20.78	38.590		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,083.4	5,009.8	4,891.9	11.2	20.2	62.14	355.1	970.8	821.4	800.2	21.22	38.707	
5,200.0	5,183.0	5,107.9	4,987.0	11.4	20.6	62.18	362.5	993.6	840.8	819.1	21.66	38.819	
5,300.0	5,282.6	5,206.0	5,082.2	11.7	21.1	62.23	369.8	1,016.3	860.2	838.1	22.10	38.926	
5,400.0	5,382.2	5,304.1	5,177.3	11.9	21.5	62.27	377.2	1,039.1	879.6	857.1	22.54	39.030	
5,500.0	5,481.9	5,402.2	5,272.5	12.1	22.0	62.31	384.5	1,061.8	899.0	876.0	22.97	39.129	
5,600.0	5,581.5	5,500.3	5,367.6	12.4	22.5	62.34	391.8	1,084.5	918.4	895.0	23.41	39.225	
5,700.0	5,681.1	5,598.4	5,462.8	12.6	22.9	62.38	399.2	1,107.3	937.8	913.9	23.85	39.317	
5,800.0	5,780.7	5,696.5	5,557.9	12.8	23.4	62.42	406.5	1,130.0	957.2	932.9	24.29	39.406	
5,900.0	5,880.3	5,794.6	5,653.1	13.1	23.8	62.45	413.9	1,152.8	976.6	951.8	24.73	39.491	
6,000.0	5,980.0	5,892.7	5,748.2	13.3	24.3	62.48	421.2	1,175.5	995.9	970.8	25.17	39.574	
6,100.0	6,079.6	5,990.8	5,843.4	13.5	24.8	62.51	428.6	1,198.2	1,015.3	989.7	25.61	39.654	
6,200.0	6,179.2	6,088.9	5,938.5	13.8	25.2	62.54	435.9	1,221.0	1,034.7	1,008.7	26.04	39.731	
6,300.0	6,278.8	6,187.0	6,033.6	14.0	25.7	62.57	443.3	1,243.7	1,054.1	1,027.6	26.48	39.805	
6,400.0	6,378.4	6,285.1	6,128.8	14.2	26.1	62.60	450.6	1,266.4	1,073.5	1,046.6	26.92	39.877	
6,500.0	6,478.1	6,383.2	6,223.9	14.5	26.6	62.62	457.9	1,289.2	1,092.9	1,065.6	27.36	39.947	
6,600.0	6,577.7	6,481.3	6,319.1	14.7	27.1	62.65	465.3	1,311.9	1,112.3	1,084.5	27.80	40.014	
6,700.0	6,677.3	6,579.4	6,414.2	14.9	27.5	62.67	472.6	1,334.7	1,131.7	1,103.5	28.24	40.080	
6,800.0	6,776.9	6,677.5	6,509.4	15.1	28.0	62.70	480.0	1,357.4	1,151.1	1,122.4	28.68	40.143	
6,900.0	6,876.5	6,775.6	6,604.5	15.4	28.4	62.72	487.3	1,380.1	1,170.5	1,141.4	29.11	40.204	
7,000.0	6,976.2	6,873.7	6,699.7	15.6	28.9	62.74	494.7	1,402.9	1,189.9	1,160.3	29.55	40.264	
7,100.0	7,075.8	6,971.8	6,794.8	15.8	29.4	62.76	502.0	1,425.6	1,209.3	1,179.3	29.99	40.322	
7,147.2	7,122.8	7,018.0	6,839.7	15.9	29.6	62.77	505.5	1,436.3	1,218.4	1,188.2	30.20	40.348	
7,150.0	7,125.6	7,020.8	6,842.4	16.0	29.6	61.31	505.7	1,437.0	1,219.0	1,188.8	30.21	40.350	
7,200.0	7,175.5	7,069.8	6,889.9	16.0	29.8	-19.75	509.3	1,448.3	1,228.7	1,198.4	30.35	40.485	
7,250.0	7,225.4	7,118.4	6,937.0	16.1	30.0	-68.17	513.0	1,459.6	1,238.4	1,208.1	30.38	40.759	
7,300.0	7,274.8	7,166.2	6,983.4	16.0	30.3	-76.97	516.6	1,470.7	1,248.2	1,217.8	30.32	41.168	
7,350.0	7,323.4	7,212.9	7,028.7	16.0	30.5	-80.22	520.1	1,481.5	1,257.9	1,227.8	30.16	41.711	
7,400.0	7,370.8	7,258.2	7,072.6	15.9	30.7	-81.89	523.4	1,492.0	1,267.8	1,237.9	29.91	42.383	
7,450.0	7,416.7	7,301.6	7,114.7	15.8	30.9	-82.93	526.7	1,502.1	1,277.9	1,248.3	29.59	43.179	
7,500.0	7,460.7	7,345.9	7,157.7	15.7	31.1	-83.70	529.8	1,512.4	1,288.2	1,259.0	29.23	44.074	
7,550.0	7,502.4	7,397.2	7,207.6	15.5	31.3	-84.43	529.8	1,524.3	1,298.8	1,269.9	28.86	45.007	
7,600.0	7,541.6	7,452.1	7,260.7	15.4	31.5	-85.08	524.7	1,537.0	1,309.4	1,280.9	28.50	45.937	
7,650.0	7,578.0	7,511.2	7,317.1	15.2	31.7	-85.69	513.4	1,550.5	1,319.9	1,291.7	28.18	46.831	
7,700.0	7,611.2	7,575.4	7,376.7	15.1	31.8	-86.31	494.5	1,564.7	1,330.1	1,302.2	27.92	47.643	
7,750.0	7,641.0	7,645.6	7,439.1	14.9	32.0	-86.96	466.1	1,579.6	1,340.0	1,312.2	27.72	48.336	
7,800.0	7,667.3	7,722.8	7,503.3	14.8	32.1	-87.64	426.0	1,595.0	1,349.2	1,321.6	27.60	48.876	
7,850.0	7,689.7	7,808.0	7,567.3	14.7	32.2	-88.34	372.1	1,610.2	1,357.6	1,330.0	27.57	49.243	
7,900.0	7,708.2	7,901.6	7,627.7	14.7	32.2	-89.00	302.3	1,624.7	1,364.7	1,337.1	27.62	49.417	
7,950.0	7,722.5	8,003.4	7,680.0	14.7	32.3	-89.56	216.0	1,637.2	1,370.4	1,342.7	27.75	49.376	
8,000.0	7,732.6	8,111.9	7,718.5	14.8	32.3	-89.94	115.0	1,646.4	1,374.3	1,346.3	27.99	49.104	
8,050.0	7,738.5	8,224.6	7,738.1	14.9	32.4	-90.05	4.4	1,651.1	1,376.2	1,347.9	28.30	48.622	
8,092.0	7,740.0	8,292.9	7,740.0	15.0	32.5	-90.00	-63.8	1,651.5	1,376.3	1,347.7	28.61	48.108	
8,100.0	7,740.0	8,300.9	7,740.0	15.0	32.5	-90.00	-71.9	1,651.5	1,376.3	1,347.7	28.67	48.010	
8,200.0	7,740.0	8,400.9	7,740.0	15.5	32.7	-90.00	-171.9	1,651.5	1,376.3	1,346.7	29.62	46.471	
8,300.0	7,740.0	8,500.9	7,740.0	16.1	33.0	-90.00	-271.9	1,651.5	1,376.3	1,345.4	30.94	44.489	
8,400.0	7,740.0	8,600.9	7,740.0	16.9	33.4	-90.00	-371.9	1,651.5	1,376.3	1,343.7	32.58	42.241	
8,500.0	7,740.0	8,700.9	7,740.0	17.8	33.8	-90.00	-471.9	1,651.5	1,376.3	1,341.8	34.51	39.885	
8,600.0	7,740.0	8,800.9	7,740.0	18.9	34.4	-90.00	-571.9	1,651.5	1,376.3	1,339.7	36.67	37.535	
8,700.0	7,740.0	8,900.9	7,740.0	20.0	35.0	-90.00	-671.9	1,651.5	1,376.3	1,337.3	39.02	35.268	
8,800.0	7,740.0	9,000.9	7,740.0	21.2	35.7	-90.00	-771.9	1,651.5	1,376.3	1,334.8	41.54	33.129	
8,900.0	7,740.0	9,100.9	7,740.0	22.5	36.5	-90.00	-871.9	1,651.5	1,376.3	1,332.1	44.20	31.140	
9,000.0	7,740.0	9,200.9	7,740.0	23.9	37.3	-90.00	-971.9	1,651.5	1,376.3	1,329.4	46.97	29.305	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,100.0	7,740.0	9,300.9	7,740.0	25.3	38.2	-90.00	-1,071.9	1,651.5	1,376.3	1,326.5	49.83	27.623	
9,200.0	7,740.0	9,400.9	7,740.0	26.7	39.1	-90.00	-1,171.9	1,651.5	1,376.3	1,323.6	52.76	26.085	
9,300.0	7,740.0	9,500.9	7,740.0	28.2	40.2	-90.00	-1,271.9	1,651.5	1,376.3	1,320.6	55.77	24.679	
9,400.0	7,740.0	9,600.9	7,740.0	29.7	41.2	-90.00	-1,371.9	1,651.5	1,376.3	1,317.5	58.83	23.396	
9,500.0	7,740.0	9,700.9	7,740.0	31.3	42.3	-90.00	-1,471.9	1,651.5	1,376.3	1,314.4	61.94	22.222	
9,600.0	7,740.0	9,800.9	7,740.0	32.8	43.5	-90.00	-1,571.9	1,651.5	1,376.3	1,311.2	65.08	21.147	
9,700.0	7,740.0	9,900.9	7,740.0	34.4	44.7	-90.00	-1,671.9	1,651.5	1,376.3	1,308.1	68.27	20.161	
9,800.0	7,740.0	10,000.9	7,740.0	36.0	45.9	-90.00	-1,771.9	1,651.5	1,376.3	1,304.8	71.48	19.254	
9,900.0	7,740.0	10,100.9	7,740.0	37.6	47.2	-90.00	-1,871.9	1,651.5	1,376.3	1,301.6	74.72	18.419	
10,000.0	7,740.0	10,200.9	7,740.0	39.2	48.5	-90.00	-1,971.9	1,651.5	1,376.3	1,298.3	77.98	17.649	
10,100.0	7,740.0	10,300.9	7,740.0	40.9	49.8	-90.00	-2,071.9	1,651.5	1,376.3	1,295.1	81.27	16.935	
10,200.0	7,740.0	10,400.9	7,740.0	42.5	51.1	-90.00	-2,171.9	1,651.5	1,376.3	1,291.8	84.57	16.274	
10,300.0	7,740.0	10,500.9	7,740.0	44.2	52.5	-90.00	-2,271.9	1,651.5	1,376.3	1,288.4	87.89	15.660	
10,400.0	7,740.0	10,600.9	7,740.0	45.8	53.9	-90.00	-2,371.9	1,651.5	1,376.3	1,285.1	91.22	15.088	
10,500.0	7,740.0	10,700.9	7,740.0	47.5	55.3	-90.00	-2,471.9	1,651.5	1,376.3	1,281.8	94.57	14.554	
10,600.0	7,740.0	10,800.9	7,740.0	49.1	56.8	-90.00	-2,571.9	1,651.5	1,376.3	1,278.4	97.92	14.055	
10,700.0	7,740.0	10,900.9	7,740.0	50.8	58.2	-90.00	-2,671.9	1,651.5	1,376.3	1,275.0	101.29	13.588	
10,800.0	7,740.0	11,000.9	7,740.0	52.5	59.7	-90.00	-2,771.9	1,651.5	1,376.3	1,271.7	104.66	13.150	
10,900.0	7,740.0	11,100.9	7,740.0	54.2	61.2	-90.00	-2,871.9	1,651.5	1,376.3	1,268.3	108.05	12.738	
11,000.0	7,740.0	11,200.9	7,740.0	55.9	62.7	-90.00	-2,971.9	1,651.5	1,376.3	1,264.9	111.44	12.350	
11,100.0	7,740.0	11,300.9	7,740.0	57.6	64.2	-90.00	-3,071.9	1,651.5	1,376.3	1,261.5	114.84	11.985	
11,200.0	7,740.0	11,400.9	7,740.0	59.3	65.7	-90.00	-3,171.9	1,651.5	1,376.3	1,258.1	118.24	11.640	
11,300.0	7,740.0	11,500.9	7,740.0	61.0	67.2	-90.00	-3,271.9	1,651.5	1,376.3	1,254.7	121.66	11.313	
11,400.0	7,740.0	11,600.9	7,740.0	62.7	68.8	-90.00	-3,371.9	1,651.5	1,376.3	1,251.3	125.07	11.004	
11,500.0	7,740.0	11,700.9	7,740.0	64.4	70.3	-90.00	-3,471.9	1,651.5	1,376.3	1,247.8	128.49	10.711	
11,600.0	7,740.0	11,800.9	7,740.0	66.1	71.9	-90.00	-3,571.9	1,651.5	1,376.3	1,244.4	131.92	10.433	
11,700.0	7,740.0	11,900.9	7,740.0	67.8	73.5	-90.00	-3,671.9	1,651.5	1,376.3	1,241.0	135.35	10.169	
11,800.0	7,740.0	12,000.9	7,740.0	69.5	75.1	-90.00	-3,771.9	1,651.5	1,376.3	1,237.5	138.78	9.917	
11,900.0	7,740.0	12,100.9	7,740.0	71.2	76.7	-90.00	-3,871.9	1,651.5	1,376.3	1,234.1	142.22	9.677	
12,000.0	7,740.0	12,200.9	7,740.0	72.9	78.3	-90.00	-3,971.9	1,651.5	1,376.3	1,230.7	145.66	9.449	
12,100.0	7,740.0	12,300.9	7,740.0	74.7	79.9	-90.00	-4,071.9	1,651.5	1,376.3	1,227.2	149.11	9.231	
12,200.0	7,740.0	12,400.9	7,740.0	76.4	81.5	-90.00	-4,171.9	1,651.5	1,376.3	1,223.8	152.55	9.022	
12,300.0	7,740.0	12,500.9	7,740.0	78.1	83.1	-90.00	-4,271.9	1,651.5	1,376.3	1,220.3	156.00	8.822	
12,400.0	7,740.0	12,600.9	7,740.0	79.8	84.7	-90.00	-4,371.9	1,651.5	1,376.3	1,216.9	159.46	8.631	
12,500.0	7,740.0	12,700.9	7,740.0	81.6	86.3	-90.00	-4,471.9	1,651.5	1,376.3	1,213.4	162.91	8.448	
12,600.0	7,740.0	12,800.9	7,740.0	83.3	88.0	-90.00	-4,571.9	1,651.5	1,376.3	1,210.0	166.37	8.273	
12,700.0	7,740.0	12,900.9	7,740.0	85.0	89.6	-90.00	-4,671.9	1,651.5	1,376.3	1,206.5	169.83	8.104	
12,800.0	7,740.0	13,000.9	7,740.0	86.7	91.3	-90.00	-4,771.9	1,651.5	1,376.3	1,203.0	173.29	7.942	
12,900.0	7,740.0	13,100.9	7,740.0	88.5	92.9	-90.00	-4,871.9	1,651.5	1,376.3	1,199.6	176.75	7.787	
13,000.0	7,740.0	13,200.9	7,740.0	90.2	94.5	-90.00	-4,971.9	1,651.5	1,376.3	1,196.1	180.21	7.637	
13,100.0	7,740.0	13,300.9	7,740.0	91.9	96.2	-90.00	-5,071.9	1,651.5	1,376.3	1,192.6	183.68	7.493	
13,200.0	7,740.0	13,400.9	7,740.0	93.7	97.9	-90.00	-5,171.9	1,651.5	1,376.3	1,189.2	187.15	7.354	
13,300.0	7,740.0	13,500.9	7,740.0	95.4	99.5	-90.00	-5,271.9	1,651.5	1,376.3	1,185.7	190.62	7.220	
13,400.0	7,740.0	13,600.9	7,740.0	97.1	101.2	-90.00	-5,371.9	1,651.5	1,376.3	1,182.2	194.09	7.091	
13,500.0	7,740.0	13,700.9	7,740.0	98.9	102.8	-90.00	-5,471.9	1,651.5	1,376.3	1,178.8	197.56	6.967	
13,600.0	7,740.0	13,800.9	7,740.0	100.6	104.5	-90.00	-5,571.9	1,651.5	1,376.3	1,175.3	201.03	6.846	
13,700.0	7,740.0	13,900.9	7,740.0	102.3	106.2	-90.00	-5,671.9	1,651.5	1,376.3	1,171.8	204.51	6.730	
13,800.0	7,740.0	14,000.9	7,740.0	104.1	107.9	-90.00	-5,771.9	1,651.5	1,376.3	1,168.3	207.98	6.617	
13,900.0	7,740.0	14,100.9	7,740.0	105.8	109.5	-90.00	-5,871.9	1,651.5	1,376.3	1,164.9	211.46	6.509	
14,000.0	7,740.0	14,200.9	7,740.0	107.5	111.2	-90.00	-5,971.9	1,651.5	1,376.3	1,161.4	214.94	6.403	
14,100.0	7,740.0	14,300.9	7,740.0	109.3	112.9	-90.00	-6,071.9	1,651.5	1,376.3	1,157.9	218.42	6.301	
14,200.0	7,740.0	14,400.9	7,740.0	111.0	114.6	-90.00	-6,171.9	1,651.5	1,376.3	1,154.4	221.90	6.203	

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical	Measured Depth	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Total	Separation		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Uncertainty Axis	Factor		
14,300.0	7,740.0	14,500.9	7,740.0	112.8	116.3	-90.00	-6,271.9	1,651.5	1,376.3	1,150.9	225.38	6.107		
14,400.0	7,740.0	14,600.9	7,740.0	114.5	118.0	-90.00	-6,371.9	1,651.5	1,376.3	1,147.5	228.86	6.014		
14,500.0	7,740.0	14,700.9	7,740.0	116.2	119.6	-90.00	-6,471.9	1,651.5	1,376.3	1,144.0	232.34	5.924		
14,600.0	7,740.0	14,800.9	7,740.0	118.0	121.3	-90.00	-6,571.9	1,651.5	1,376.3	1,140.5	235.82	5.836		
14,700.0	7,740.0	14,900.9	7,740.0	119.7	123.0	-90.00	-6,671.9	1,651.5	1,376.3	1,137.0	239.31	5.751		
14,800.0	7,740.0	15,000.9	7,740.0	121.5	124.7	-90.00	-6,771.9	1,651.5	1,376.3	1,133.5	242.79	5.669		
14,900.0	7,740.0	15,100.9	7,740.0	123.2	126.4	-90.00	-6,871.9	1,651.5	1,376.3	1,130.1	246.28	5.589		
15,000.0	7,740.0	15,200.9	7,740.0	124.9	128.1	-90.00	-6,971.9	1,651.5	1,376.3	1,126.6	249.76	5.511		
15,100.0	7,740.0	15,300.9	7,740.0	126.7	129.8	-90.00	-7,071.9	1,651.5	1,376.3	1,123.1	253.25	5.435		
15,200.0	7,740.0	15,400.9	7,740.0	128.4	131.5	-90.00	-7,171.9	1,651.5	1,376.3	1,119.6	256.73	5.361		
15,300.0	7,740.0	15,500.9	7,740.0	130.2	133.2	-90.00	-7,271.9	1,651.5	1,376.3	1,116.1	260.22	5.289		
15,400.0	7,740.0	15,600.9	7,740.0	131.9	134.9	-90.00	-7,371.9	1,651.5	1,376.3	1,112.6	263.71	5.219		
15,500.0	7,740.0	15,700.9	7,740.0	133.7	136.6	-90.00	-7,471.9	1,651.5	1,376.3	1,109.1	267.20	5.151		
15,600.0	7,740.0	15,800.9	7,740.0	135.4	138.3	-90.00	-7,571.9	1,651.5	1,376.3	1,105.6	270.69	5.085		
15,700.0	7,740.0	15,900.9	7,740.0	137.1	140.0	-90.00	-7,671.9	1,651.5	1,376.3	1,102.2	274.18	5.020		
15,800.0	7,740.0	16,000.9	7,740.0	138.9	141.8	-90.00	-7,771.9	1,651.5	1,376.3	1,098.7	277.67	4.957		
15,900.0	7,740.0	16,100.9	7,740.0	140.6	143.5	-90.00	-7,871.9	1,651.5	1,376.3	1,095.2	281.16	4.895		
15,953.0	7,740.0	16,153.9	7,740.0	141.6	144.4	-90.00	-7,924.8	1,651.5	1,376.3	1,093.3	283.01	4.863 SF		

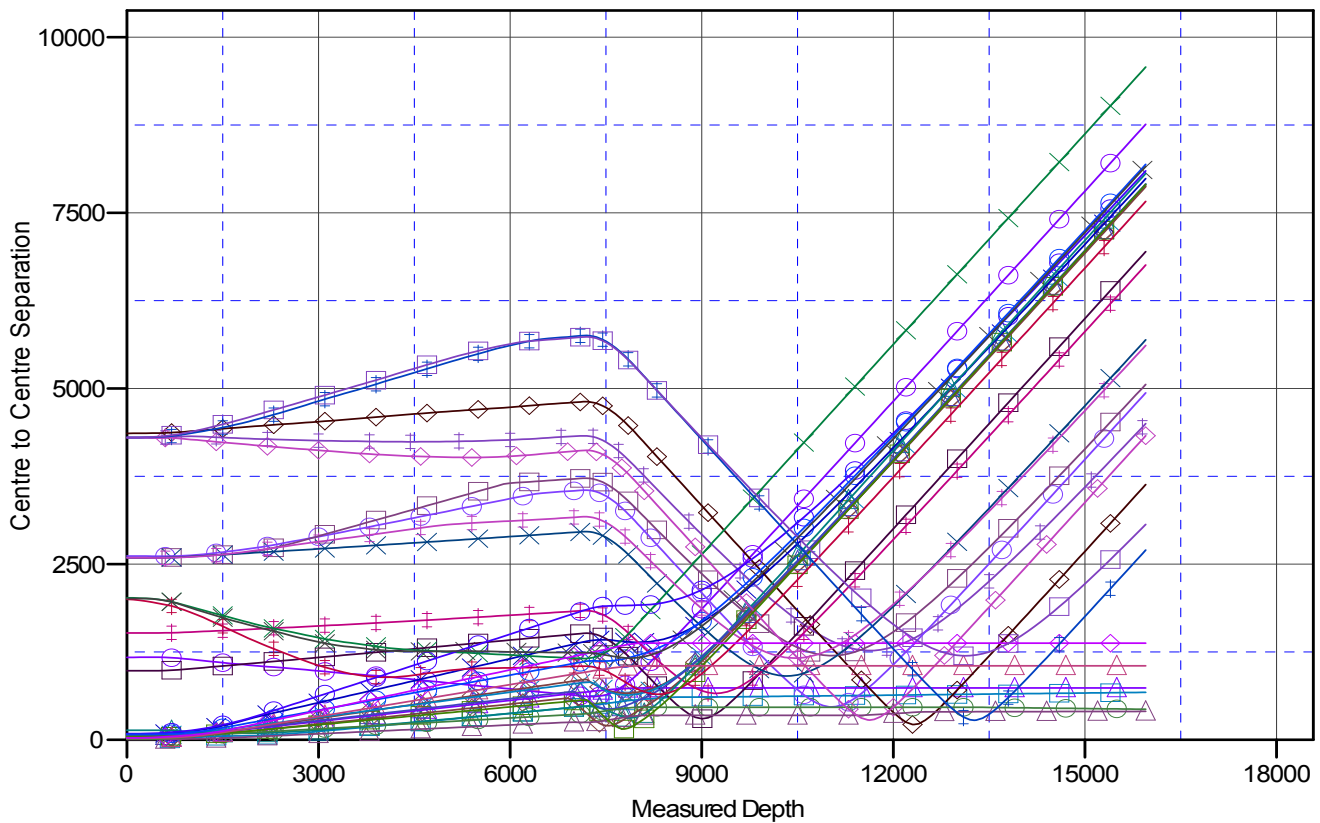
Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2C-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2C-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 2C-7H-E168
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.29°

Ladder Plot



LEGEND

1-E168, Hz, Plan #3 V0	BEARDEN 24-6 (EXISTING), ENCANA WELL, PLAN ONLY V0	Woolley-Sosa 2B-7H-E168, HZ, Plan #3
WD), DD V0	Woolley-Bekdy 2E-7H-E168, Hz, Plan #3 V0	Sosa 11-18, DD, DD V0
1-E168, Hz, Plan #4 V0	Woolley-Bekdy 2B-7H-E168, Hz, Plan #3 V0	Woolley-Bekdy 2C-7H-E168, Hz, Plan #5
1 (EXISTING), ENCANA WELL, GYRO V0	THOMAS 24-7 (Existing), Existing, NO SURVEYS V0	Woolley-Bekdy 2H-7H-E168, Hz, Plan #4
H-E168, Hz, Plan #3 V0	WOOLLEY 11-7 (EXISTING), ENCANA WELL, SURVEYS V0	Woolley-Sosa 2F-7H-E168, HZ, Plan #3
H-E168, Hz, Plan #3 V0	WOOLLEY 12-7 (EXISTING), ENCANA WELL, NO SURVEYS V0	Woolley-Bekdy 2F-7H-E168, Hz, Plan #4
ng), Existing, NO SURVEYS V0	Woolley-Bekdy 2D-7H-E168, Hz, Plan #5 V0	Woolley-Sosa 2G-7H-E168, HZ, Plan #3
(ISTING), ENCANA WELL, SURVEYS V0	THOMAS 24-7 (EXISTING), ENCANA WELL, SURVEYS V0	Sosa 12-18, DD, DD V0
(ISTING), EXISTING, EXISTING V0	Woolley-Sosa 2D-7H-E168, HZ, Plan #3 V0	Sosa 22-18, DD, DD V0

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