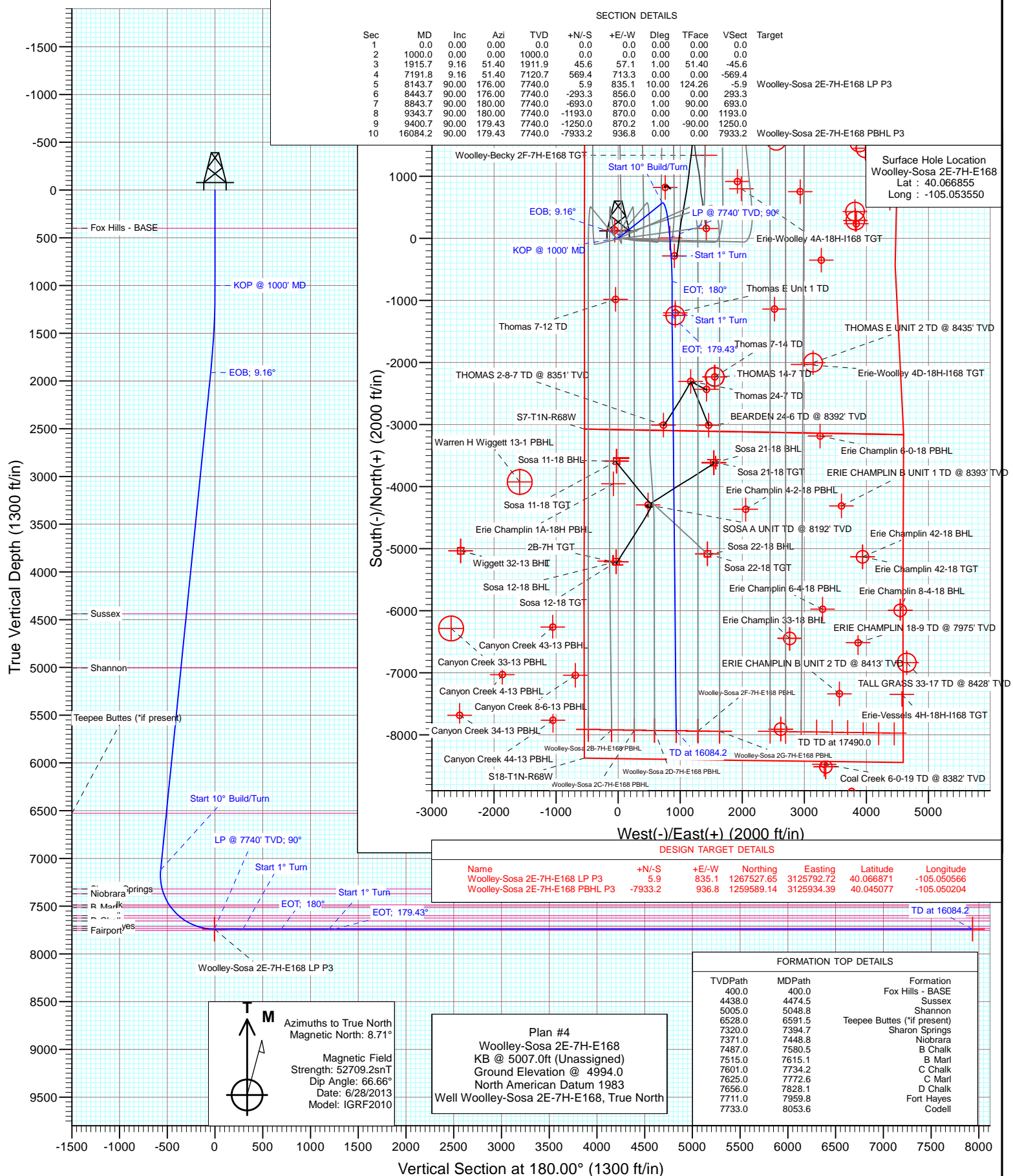




Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)
Well: Woolley-Sosa 2E-7H-E168
Wellbore: HZ
Design: Plan #4



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-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 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #4		

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 2E-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,517.52 ft	Latitude:	40.066855
	+E/-W	0.0 ft	Easting:	3,124,957.68 ft	Longitude:	-105.053550
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 #4			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	180.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,915.7	9.16	51.40	1,911.9	45.6	57.1	1.00	1.00	0.00	51.40	
7,191.8	9.16	51.40	7,120.7	569.4	713.3	0.00	0.00	0.00	0.00	
8,143.7	90.00	176.00	7,740.0	5.9	835.1	10.00	8.49	13.09	124.26	Woolley-Sosa 2E-7H-
8,443.7	90.00	176.00	7,740.0	-293.3	856.0	0.00	0.00	0.00	0.00	
8,843.7	90.00	180.00	7,740.0	-693.0	870.0	1.00	0.00	1.00	90.00	
9,343.7	90.00	180.00	7,740.0	-1,193.0	870.0	0.00	0.00	0.00	0.00	
9,400.7	90.00	179.43	7,740.0	-1,250.0	870.2	1.00	0.00	-1.00	-90.00	
16,084.2	90.00	179.43	7,740.0	-7,933.2	936.8	0.00	0.00	0.00	0.00	Woolley-Sosa 2E-7H-

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-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 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #4		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 1000' MD
1,100.0	1.00	51.40	1,100.0	0.5	0.7	-0.5	1.00	1.00	
1,200.0	2.00	51.40	1,200.0	2.2	2.7	-2.2	1.00	1.00	
1,300.0	3.00	51.40	1,299.9	4.9	6.1	-4.9	1.00	1.00	
1,400.0	4.00	51.40	1,399.7	8.7	10.9	-8.7	1.00	1.00	
1,500.0	5.00	51.40	1,499.4	13.6	17.0	-13.6	1.00	1.00	
1,600.0	6.00	51.40	1,598.9	19.6	24.5	-19.6	1.00	1.00	
1,700.0	7.00	51.40	1,698.3	26.6	33.4	-26.6	1.00	1.00	
1,800.0	8.00	51.40	1,797.4	34.8	43.6	-34.8	1.00	1.00	
1,900.0	9.00	51.40	1,896.3	44.0	55.1	-44.0	1.00	1.00	
1,915.7	9.16	51.40	1,911.8	45.6	57.1	-45.6	1.00	1.00	EOB; 9.16°
2,000.0	9.16	51.40	1,995.0	53.9	67.5	-53.9	0.00	0.00	
2,100.0	9.16	51.40	2,093.8	63.9	80.0	-63.9	0.00	0.00	
2,200.0	9.16	51.40	2,192.5	73.8	92.4	-73.8	0.00	0.00	
2,300.0	9.16	51.40	2,291.2	83.7	104.9	-83.7	0.00	0.00	
2,400.0	9.16	51.40	2,389.9	93.6	117.3	-93.6	0.00	0.00	
2,500.0	9.16	51.40	2,488.7	103.6	129.7	-103.6	0.00	0.00	
2,600.0	9.16	51.40	2,587.4	113.5	142.2	-113.5	0.00	0.00	
2,700.0	9.16	51.40	2,686.1	123.4	154.6	-123.4	0.00	0.00	
2,800.0	9.16	51.40	2,784.8	133.4	167.1	-133.4	0.00	0.00	
2,900.0	9.16	51.40	2,883.6	143.3	179.5	-143.3	0.00	0.00	
3,000.0	9.16	51.40	2,982.3	153.2	191.9	-153.2	0.00	0.00	
3,100.0	9.16	51.40	3,081.0	163.1	204.4	-163.1	0.00	0.00	
3,200.0	9.16	51.40	3,179.7	173.1	216.8	-173.1	0.00	0.00	
3,300.0	9.16	51.40	3,278.5	183.0	229.2	-183.0	0.00	0.00	
3,400.0	9.16	51.40	3,377.2	192.9	241.7	-192.9	0.00	0.00	
3,500.0	9.16	51.40	3,475.9	202.9	254.1	-202.9	0.00	0.00	
3,600.0	9.16	51.40	3,574.6	212.8	266.6	-212.8	0.00	0.00	
3,700.0	9.16	51.40	3,673.4	222.7	279.0	-222.7	0.00	0.00	
3,800.0	9.16	51.40	3,772.1	232.6	291.4	-232.6	0.00	0.00	
3,900.0	9.16	51.40	3,870.8	242.6	303.9	-242.6	0.00	0.00	
4,000.0	9.16	51.40	3,969.5	252.5	316.3	-252.5	0.00	0.00	
4,100.0	9.16	51.40	4,068.3	262.4	328.7	-262.4	0.00	0.00	
4,200.0	9.16	51.40	4,167.0	272.4	341.2	-272.4	0.00	0.00	
4,300.0	9.16	51.40	4,265.7	282.3	353.6	-282.3	0.00	0.00	
4,400.0	9.16	51.40	4,364.4	292.2	366.1	-292.2	0.00	0.00	
4,474.5	9.16	51.40	4,438.0	299.6	375.3	-299.6	0.00	0.00	Sussex
4,500.0	9.16	51.40	4,463.2	302.2	378.5	-302.2	0.00	0.00	
4,600.0	9.16	51.40	4,561.9	312.1	390.9	-312.1	0.00	0.00	
4,700.0	9.16	51.40	4,660.6	322.0	403.4	-322.0	0.00	0.00	
4,800.0	9.16	51.40	4,759.3	331.9	415.8	-331.9	0.00	0.00	
4,900.0	9.16	51.40	4,858.1	341.9	428.2	-341.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-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 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #4		

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	9.16	51.40	4,956.8	351.8	440.7	-351.8	0.00	0.00	
5,048.8	9.16	51.40	5,005.0	356.6	446.8	-356.6	0.00	0.00	Shannon
5,100.0	9.16	51.40	5,055.5	361.7	453.1	-361.7	0.00	0.00	
5,200.0	9.16	51.40	5,154.2	371.7	465.6	-371.7	0.00	0.00	
5,300.0	9.16	51.40	5,253.0	381.6	478.0	-381.6	0.00	0.00	
5,400.0	9.16	51.40	5,351.7	391.5	490.4	-391.5	0.00	0.00	
5,500.0	9.16	51.40	5,450.4	401.4	502.9	-401.4	0.00	0.00	
5,600.0	9.16	51.40	5,549.1	411.4	515.3	-411.4	0.00	0.00	
5,700.0	9.16	51.40	5,647.9	421.3	527.7	-421.3	0.00	0.00	
5,800.0	9.16	51.40	5,746.6	431.2	540.2	-431.2	0.00	0.00	
5,900.0	9.16	51.40	5,845.3	441.2	552.6	-441.2	0.00	0.00	
6,000.0	9.16	51.40	5,944.1	451.1	565.1	-451.1	0.00	0.00	
6,100.0	9.16	51.40	6,042.8	461.0	577.5	-461.0	0.00	0.00	
6,200.0	9.16	51.40	6,141.5	470.9	589.9	-470.9	0.00	0.00	
6,300.0	9.16	51.40	6,240.2	480.9	602.4	-480.9	0.00	0.00	
6,400.0	9.16	51.40	6,339.0	490.8	614.8	-490.8	0.00	0.00	
6,500.0	9.16	51.40	6,437.7	500.7	627.2	-500.7	0.00	0.00	
6,591.5	9.16	51.40	6,528.0	509.8	638.6	-509.8	0.00	0.00	Teepee Buttes (*if present)
6,600.0	9.16	51.40	6,536.4	510.7	639.7	-510.7	0.00	0.00	
6,700.0	9.16	51.40	6,635.1	520.6	652.1	-520.6	0.00	0.00	
6,800.0	9.16	51.40	6,733.9	530.5	664.6	-530.5	0.00	0.00	
6,900.0	9.16	51.40	6,832.6	540.4	677.0	-540.4	0.00	0.00	
7,000.0	9.16	51.40	6,931.3	550.4	689.4	-550.4	0.00	0.00	
7,100.0	9.16	51.40	7,030.0	560.3	701.9	-560.3	0.00	0.00	
7,191.8	9.16	51.40	7,120.7	569.4	713.3	-569.4	0.00	0.00	Start 10° Build/Turn
7,200.0	8.72	55.86	7,128.8	570.2	714.3	-570.2	9.96	-5.29	
7,300.0	9.42	122.86	7,227.8	570.0	727.5	-570.0	10.00	0.69	
7,394.7	16.85	150.01	7,320.0	553.9	740.9	-553.9	10.00	7.85	Sharon Springs
7,400.0	17.32	150.82	7,325.1	552.5	741.7	-552.5	10.00	8.94	
7,448.8	21.80	156.62	7,371.0	537.9	748.8	-537.9	10.00	9.18	Niobrara
7,500.0	26.65	160.67	7,417.7	518.3	756.4	-518.3	10.00	9.47	
7,580.5	34.42	164.83	7,487.0	479.2	768.3	-479.2	10.00	9.65	B Chalk
7,600.0	36.32	165.60	7,502.9	468.3	771.2	-468.3	10.00	9.74	
7,615.1	37.80	166.15	7,515.0	459.4	773.4	-459.4	10.00	9.76	B Marl
7,700.0	46.12	168.67	7,578.0	404.1	785.7	-404.1	10.00	9.80	
7,734.2	49.48	169.49	7,601.0	379.3	790.5	-379.3	10.00	9.84	C Chalk
7,772.6	53.27	170.32	7,625.0	349.7	795.7	-349.7	10.00	9.86	C Marl
7,800.0	55.97	170.86	7,640.8	327.7	799.4	-327.7	10.00	9.87	
7,828.1	58.75	171.38	7,656.0	304.3	803.0	-304.3	10.00	9.88	D Chalk
7,900.0	65.86	172.59	7,689.4	241.3	811.9	-241.3	10.00	9.89	
7,959.8	71.78	173.50	7,711.0	186.0	818.6	-186.0	10.00	9.90	Fort Hayes
8,000.0	75.76	174.07	7,722.2	147.6	822.8	-147.6	10.00	9.91	
8,053.6	81.07	174.81	7,733.0	95.3	827.9	-95.3	10.00	9.91	Codell
8,100.0	85.67	175.42	7,738.4	49.4	831.8	-49.4	10.00	9.91	
8,143.7	90.00	176.00	7,740.0	5.9	835.1	-5.9	10.00	9.91	LP @ 7740' TVD; 90°
8,200.0	90.00	176.00	7,740.0	-50.3	839.0	50.3	0.00	0.00	
8,300.0	90.00	176.00	7,740.0	-150.0	846.0	150.0	0.00	0.00	
8,400.0	90.00	176.00	7,740.0	-249.8	853.0	249.8	0.00	0.00	
8,443.7	90.00	176.00	7,740.0	-293.4	856.0	293.4	0.00	0.00	Start 1° Turn
8,500.0	90.00	176.56	7,740.0	-349.5	859.7	349.5	1.00	0.00	
8,600.0	90.00	177.56	7,740.0	-449.4	864.8	449.4	1.00	0.00	
8,700.0	90.00	178.56	7,740.0	-549.3	868.2	549.3	1.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-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 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #4		

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
8,800.0	90.00	179.56	7,740.0	-649.3	869.8	649.3	1.00	0.00	
8,843.7	90.00	180.00	7,740.0	-693.0	870.0	693.0	1.00	0.00	EOT; 180°
8,900.0	90.00	180.00	7,740.0	-749.3	870.0	749.3	0.00	0.00	
9,000.0	90.00	180.00	7,740.0	-849.3	870.0	849.3	0.00	0.00	
9,100.0	90.00	180.00	7,740.0	-949.3	870.0	949.3	0.00	0.00	
9,200.0	90.00	180.00	7,740.0	-1,049.3	870.0	1,049.3	0.00	0.00	
9,300.0	90.00	180.00	7,740.0	-1,149.3	870.0	1,149.3	0.00	0.00	
9,343.7	90.00	180.00	7,740.0	-1,193.0	870.0	1,193.0	0.00	0.00	Start 1° Turn
9,400.0	90.00	179.44	7,740.0	-1,249.3	870.2	1,249.3	1.00	0.00	
9,400.7	90.00	179.43	7,740.0	-1,250.0	870.2	1,250.0	1.00	0.00	EOT; 179.43°
9,500.0	90.00	179.43	7,740.0	-1,349.3	871.2	1,349.3	0.00	0.00	
9,600.0	90.00	179.43	7,740.0	-1,449.3	872.2	1,449.3	0.00	0.00	
9,700.0	90.00	179.43	7,740.0	-1,549.3	873.2	1,549.3	0.00	0.00	
9,800.0	90.00	179.43	7,740.0	-1,649.3	874.2	1,649.3	0.00	0.00	
9,900.0	90.00	179.43	7,740.0	-1,749.3	875.2	1,749.3	0.00	0.00	
10,000.0	90.00	179.43	7,740.0	-1,849.3	876.2	1,849.3	0.00	0.00	
10,100.0	90.00	179.43	7,740.0	-1,949.3	877.2	1,949.3	0.00	0.00	
10,200.0	90.00	179.43	7,740.0	-2,049.3	878.2	2,049.3	0.00	0.00	
10,300.0	90.00	179.43	7,740.0	-2,149.3	879.2	2,149.3	0.00	0.00	
10,400.0	90.00	179.43	7,740.0	-2,249.3	880.2	2,249.3	0.00	0.00	
10,500.0	90.00	179.43	7,740.0	-2,349.3	881.2	2,349.3	0.00	0.00	
10,600.0	90.00	179.43	7,740.0	-2,449.3	882.2	2,449.3	0.00	0.00	
10,700.0	90.00	179.43	7,740.0	-2,549.3	883.2	2,549.3	0.00	0.00	
10,800.0	90.00	179.43	7,740.0	-2,649.3	884.2	2,649.3	0.00	0.00	
10,900.0	90.00	179.43	7,740.0	-2,749.3	885.2	2,749.3	0.00	0.00	
11,000.0	90.00	179.43	7,740.0	-2,849.3	886.2	2,849.3	0.00	0.00	
11,100.0	90.00	179.43	7,740.0	-2,949.2	887.2	2,949.2	0.00	0.00	
11,200.0	90.00	179.43	7,740.0	-3,049.2	888.2	3,049.2	0.00	0.00	
11,300.0	90.00	179.43	7,740.0	-3,149.2	889.2	3,149.2	0.00	0.00	
11,400.0	90.00	179.43	7,740.0	-3,249.2	890.1	3,249.2	0.00	0.00	
11,500.0	90.00	179.43	7,740.0	-3,349.2	891.1	3,349.2	0.00	0.00	
11,600.0	90.00	179.43	7,740.0	-3,449.2	892.1	3,449.2	0.00	0.00	
11,700.0	90.00	179.43	7,740.0	-3,549.2	893.1	3,549.2	0.00	0.00	
11,800.0	90.00	179.43	7,740.0	-3,649.2	894.1	3,649.2	0.00	0.00	
11,900.0	90.00	179.43	7,740.0	-3,749.2	895.1	3,749.2	0.00	0.00	
12,000.0	90.00	179.43	7,740.0	-3,849.2	896.1	3,849.2	0.00	0.00	
12,100.0	90.00	179.43	7,740.0	-3,949.2	897.1	3,949.2	0.00	0.00	
12,200.0	90.00	179.43	7,740.0	-4,049.2	898.1	4,049.2	0.00	0.00	
12,300.0	90.00	179.43	7,740.0	-4,149.2	899.1	4,149.2	0.00	0.00	
12,400.0	90.00	179.43	7,740.0	-4,249.2	900.1	4,249.2	0.00	0.00	
12,500.0	90.00	179.43	7,740.0	-4,349.2	901.1	4,349.2	0.00	0.00	
12,600.0	90.00	179.43	7,740.0	-4,449.2	902.1	4,449.2	0.00	0.00	
12,700.0	90.00	179.43	7,740.0	-4,549.2	903.1	4,549.2	0.00	0.00	
12,800.0	90.00	179.43	7,740.0	-4,649.2	904.1	4,649.2	0.00	0.00	
12,900.0	90.00	179.43	7,740.0	-4,749.2	905.1	4,749.2	0.00	0.00	
13,000.0	90.00	179.43	7,740.0	-4,849.2	906.1	4,849.2	0.00	0.00	
13,100.0	90.00	179.43	7,740.0	-4,949.1	907.1	4,949.1	0.00	0.00	
13,200.0	90.00	179.43	7,740.0	-5,049.1	908.1	5,049.1	0.00	0.00	
13,300.0	90.00	179.43	7,740.0	-5,149.1	909.1	5,149.1	0.00	0.00	
13,400.0	90.00	179.43	7,740.0	-5,249.1	910.1	5,249.1	0.00	0.00	
13,500.0	90.00	179.43	7,740.0	-5,349.1	911.1	5,349.1	0.00	0.00	
13,600.0	90.00	179.43	7,740.0	-5,449.1	912.0	5,449.1	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-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 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #4		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
13,700.0	90.00	179.43	7,740.0	-5,549.1	913.0	5,549.1	0.00	0.00	
13,800.0	90.00	179.43	7,740.0	-5,649.1	914.0	5,649.1	0.00	0.00	
13,900.0	90.00	179.43	7,740.0	-5,749.1	915.0	5,749.1	0.00	0.00	
14,000.0	90.00	179.43	7,740.0	-5,849.1	916.0	5,849.1	0.00	0.00	
14,100.0	90.00	179.43	7,740.0	-5,949.1	917.0	5,949.1	0.00	0.00	
14,200.0	90.00	179.43	7,740.0	-6,049.1	918.0	6,049.1	0.00	0.00	
14,300.0	90.00	179.43	7,740.0	-6,149.1	919.0	6,149.1	0.00	0.00	
14,400.0	90.00	179.43	7,740.0	-6,249.1	920.0	6,249.1	0.00	0.00	
14,500.0	90.00	179.43	7,740.0	-6,349.1	921.0	6,349.1	0.00	0.00	
14,600.0	90.00	179.43	7,740.0	-6,449.1	922.0	6,449.1	0.00	0.00	
14,700.0	90.00	179.43	7,740.0	-6,549.1	923.0	6,549.1	0.00	0.00	
14,800.0	90.00	179.43	7,740.0	-6,649.1	924.0	6,649.1	0.00	0.00	
14,900.0	90.00	179.43	7,740.0	-6,749.1	925.0	6,749.1	0.00	0.00	
15,000.0	90.00	179.43	7,740.0	-6,849.1	926.0	6,849.1	0.00	0.00	
15,100.0	90.00	179.43	7,740.0	-6,949.0	927.0	6,949.0	0.00	0.00	
15,200.0	90.00	179.43	7,740.0	-7,049.0	928.0	7,049.0	0.00	0.00	
15,300.0	90.00	179.43	7,740.0	-7,149.0	929.0	7,149.0	0.00	0.00	
15,400.0	90.00	179.43	7,740.0	-7,249.0	930.0	7,249.0	0.00	0.00	
15,500.0	90.00	179.43	7,740.0	-7,349.0	931.0	7,349.0	0.00	0.00	
15,600.0	90.00	179.43	7,740.0	-7,449.0	932.0	7,449.0	0.00	0.00	
15,700.0	90.00	179.43	7,740.0	-7,549.0	933.0	7,549.0	0.00	0.00	
15,800.0	90.00	179.43	7,740.0	-7,649.0	933.9	7,649.0	0.00	0.00	
15,900.0	90.00	179.43	7,740.0	-7,749.0	934.9	7,749.0	0.00	0.00	
16,000.0	90.00	179.43	7,740.0	-7,849.0	935.9	7,849.0	0.00	0.00	
16,084.2	90.00	179.43	7,740.0	-7,933.2	936.8	7,933.2	0.00	0.00	TD at 16084.2

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Woolley-Sosa 2E-7H-E1 - plan hits target center - Point	0.00	0.00	7,740.0	5.9	835.1	1,267,527.65	3,125,792.72	40.066871	-105.050566
Woolley-Sosa 2E-7H-E1 - plan misses target center by 7.1ft at 16083.1ft MD (7740.0 TVD, -7932.1 N, 936.8 E) - Point	0.00	0.00	7,747.0	-7,932.1	937.9	1,259,590.24	3,125,935.50	40.045080	-105.050200
Woolley-Sosa 2E-7H-E1 - plan misses target center by 350.1ft at 16084.2ft MD (7740.0 TVD, -7933.2 N, 936.8 E) - Point	0.00	0.00	7,747.0	-7,937.9	1,286.7	1,259,586.18	3,126,284.37	40.045064	-105.048954
Woolley-Sosa 2E-7H-E1 - plan hits target center - Point	0.00	0.00	7,740.0	-7,933.2	936.8	1,259,589.14	3,125,934.39	40.045077	-105.050204

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-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 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #4		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
400.0	400.0	Fox Hills - BASE				
4,474.5	4,438.0	Sussex				
5,048.8	5,005.0	Shannon				
6,591.5	6,528.0	Teepee Buttes (*if present)				
7,394.7	7,320.0	Sharon Springs				
7,448.8	7,371.0	Niobrara				
7,580.5	7,487.0	B Chalk				
7,615.1	7,515.0	B Marl				
7,734.2	7,601.0	C Chalk				
7,772.6	7,625.0	C Marl				
7,828.1	7,656.0	D Chalk				
7,959.8	7,711.0	Fort Hayes				
8,053.6	7,733.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.0	1,000.0	0.0	0.0	KOP @ 1000' MD	
1,915.7	1,911.8	45.6	57.1	EOB; 9.16°	
7,191.8	7,120.7	569.4	713.3	Start 10° Build/Turn	
8,143.7	7,740.0	5.9	835.1	LP @ 7740' TVD; 90°	
8,443.7	7,740.0	-293.4	856.0	Start 1° Turn	
8,843.7	7,740.0	-693.0	870.0	EOT; 180°	
9,343.7	7,740.0	-1,193.0	870.0	Start 1° Turn	
9,400.7	7,740.0	-1,250.0	870.2	EOT; 179.43°	
16,084.2	7,740.0	-7,933.2	936.8	TD at 16084.2	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Woolley-Sosa 2E-7H-E168

HZ

Plan #4

Anticollision Report

25 June, 2015

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Reference	Plan #4		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	6/24/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	16,084.2	Plan #4 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	11,166.5	7,798.0	571.2	496.2	7.615	CC
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	11,200.0	7,798.0	572.2	495.7	7.479	ES
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	11,300.0	7,798.0	586.6	506.9	7.361	SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	16,084.2	17,579.0	1,531.4	1,219.3	4.907	CC, ES, SF
Morgan Hills 1B-7H-A168 - HZ - Plan #2	16,084.2	17,761.5	1,762.7	1,446.8	5.580	CC, ES, SF
Morgan Hills 1C-7H-A168 - HZ - Plan #2	16,084.2	17,482.9	2,026.8	1,712.9	6.457	CC, ES, SF
Sosa 11-18 - DD - DD	11,700.0	7,833.8	916.4	831.7	10.814	SF
Sosa 11-18 - DD - DD	11,745.7	7,834.1	915.3	830.7	10.821	CC, ES
Sosa 12-18 - DD - DD	13,380.0	7,889.3	928.5	812.0	7.969	CC, ES
Sosa 12-18 - DD - DD	13,400.0	7,889.3	928.7	812.0	7.959	SF
Sosa 21-18 - DD (MWD) - DD	11,763.9	7,918.9	637.4	552.7	7.520	CC, ES
Sosa 21-18 - DD (MWD) - DD	11,800.0	7,918.1	638.4	553.0	7.472	SF
Sosa 22-18 - DD - DD	13,256.8	7,892.8	547.5	434.8	4.855	CC
Sosa 22-18 - DD - DD	13,300.0	7,892.8	549.2	433.9	4.763	ES, SF
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	12,445.1	7,758.6	422.4	330.4	4.588	CC, ES, SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,590.0	7,760.2	541.8	481.2	8.943	CC
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,600.0	7,760.2	541.9	480.9	8.881	ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,700.0	7,759.8	552.9	488.3	8.566	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,458.3	7,735.0	288.4	230.2	4.956	CC, ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	10,500.0	7,735.0	291.4	230.9	4.818	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	11,157.9	7,815.2	158.9	84.5	2.135	CC, ES, SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	9,133.9	7,728.0	910.8	873.7	24.507	CC, ES, SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	9,349.9	7,734.0	51.4	11.1	1.276	Level 3, CC, ES, SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,677.7	1,764.1	135.8	129.7	22.287	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,700.0	1,786.3	135.9	129.7	21.972	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	2,200.0	2,280.5	156.8	148.5	18.997	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,245.4	7,155.9	1,120.6	1,093.4	41.285	CC
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,250.0	7,159.7	1,120.6	1,093.4	41.253	ES
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,450.0	7,334.7	1,155.3	1,126.8	40.651	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	8,049.5	8,009.1	598.0	555.0	13.918	CC
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	8,050.0	8,009.2	598.0	555.0	13.917	ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	8,100.0	8,014.8	600.4	557.2	13.885	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	8,442.3	8,172.6	52.4	1.0	1.020	Level 2, CC, ES, SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	7,263.7	7,233.7	276.7	246.9	9.278	CC, ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	7,300.0	7,270.2	277.9	247.7	9.210	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	736.7	737.3	10.8	8.2	4.149	CC, ES
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	800.0	800.5	11.4	8.6	4.062	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	746.8	747.1	24.2	21.6	9.354	CC
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	800.0	800.1	24.3	21.6	8.773	ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	1,400.0	1,399.6	31.0	26.1	6.363	SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	600.0	600.0	37.5	35.5	18.304	CC, ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	2,000.0	1,994.4	72.5	65.1	9.761	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	500.0	500.0	45.1	43.4	26.508	CC, ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	7,578.7	7,829.4	76.8	45.0	2.419	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	400.0	400.0	52.6	51.3	38.951	CC, ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	7,897.0	7,835.3	87.8	59.4	3.096	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	300.0	300.0	60.2	59.2	60.069	CC, ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	7,191.8	7,270.1	708.7	669.5	18.092	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	203.3	203.3	67.5	66.8	101.528	CC
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	300.0	299.4	67.7	66.7	67.614	ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #3	8,800.0	7,535.8	1,028.3	984.1	23.258	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	200.0	200.0	75.0	74.4	114.915	CC, ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	9,300.0	7,400.0	1,759.6	1,704.5	31.926	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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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 2A-7H-E168 - Hz - Plan #3	200.0	200.0	29.9	29.3	45.878	CC, ES
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	16,084.2	15,949.8	1,415.1	1,132.3	5.004	SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	300.0	300.0	22.4	21.4	22.350	CC, ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	16,059.7	15,706.0	1,067.2	791.6	3.872	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	674.7	674.8	13.3	11.0	5.725	CC
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	700.0	700.1	13.3	10.9	5.535	ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	16,084.2	15,953.0	676.5	393.6	2.392	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	734.7	734.8	5.8	3.3	2.307	CC, ES
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	16,084.2	15,805.8	424.4	189.4	1.806	SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	300.0	300.0	7.6	6.6	7.543	CC, ES
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	16,084.2	15,837.0	424.4	188.7	1.800	SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	187.5	187.5	15.1	14.5	24.785	CC
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	200.0	200.0	15.1	14.5	23.129	ES
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	16,084.2	16,162.2	699.9	416.6	2.470	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
0.0	0.0	0.0	0.0	0.0	0.0	153.08	-2,304.0	1,170.0	2,584.1					
100.0	100.0	85.0	85.0	0.2	0.1	153.08	-2,304.0	1,170.0	2,584.1	2,583.8	0.28	9,346.475		
200.0	200.0	185.0	185.0	0.3	0.3	153.08	-2,304.0	1,170.0	2,584.1	2,583.4	0.62	4,158.762		
300.0	300.0	285.0	285.0	0.5	0.5	153.08	-2,304.0	1,170.0	2,584.1	2,583.1	0.97	2,662.832		
400.0	400.0	385.0	385.0	0.7	0.6	153.08	-2,304.0	1,170.0	2,584.1	2,582.7	1.32	1,958.388		
500.0	500.0	485.0	485.0	0.8	0.8	153.08	-2,304.0	1,170.0	2,584.1	2,582.4	1.67	1,548.688		
600.0	600.0	585.0	585.0	1.0	1.0	153.08	-2,304.0	1,170.0	2,584.1	2,582.0	2.02	1,280.751		
700.0	700.0	685.0	685.0	1.2	1.2	153.08	-2,304.0	1,170.0	2,584.1	2,581.7	2.37	1,091.851		
800.0	800.0	785.0	785.0	1.4	1.3	153.08	-2,304.0	1,170.0	2,584.1	2,581.4	2.72	951.511		
900.0	900.0	885.0	885.0	1.5	1.5	153.08	-2,304.0	1,170.0	2,584.1	2,581.0	3.06	843.139		
1,000.0	1,000.0	985.0	985.0	1.7	1.7	153.08	-2,304.0	1,170.0	2,584.1	2,580.7	3.41	756.929		
1,100.0	1,100.0	1,085.0	1,085.0	1.9	1.9	101.70	-2,304.0	1,170.0	2,584.2	2,580.5	3.76	686.719		
1,200.0	1,200.0	1,185.0	1,185.0	2.1	2.0	101.75	-2,304.0	1,170.0	2,584.8	2,580.7	4.11	628.307		
1,300.0	1,299.9	1,284.9	1,284.9	2.3	2.2	101.83	-2,304.0	1,170.0	2,585.7	2,581.2	4.47	578.714		
1,400.0	1,399.7	1,384.7	1,384.7	2.4	2.4	101.95	-2,304.0	1,170.0	2,586.9	2,582.1	4.83	535.833		
1,500.0	1,499.4	1,484.4	1,484.4	2.6	2.6	102.11	-2,304.0	1,170.0	2,588.6	2,583.4	5.20	498.156		
1,600.0	1,598.9	1,544.1	1,544.1	2.8	2.7	102.20	-2,304.3	1,170.1	2,591.2	2,585.7	5.51	470.614		
1,700.0	1,698.3	1,600.0	1,600.0	3.1	2.8	102.29	-2,305.6	1,170.7	2,596.1	2,590.3	5.82	445.899		
1,800.0	1,797.4	1,648.2	1,648.1	3.3	2.9	102.36	-2,307.6	1,171.5	2,603.2	2,597.1	6.14	423.973		
1,900.0	1,896.3	1,700.0	1,699.8	3.6	2.9	102.44	-2,310.5	1,172.6	2,612.5	2,606.1	6.48	403.062		
1,915.7	1,911.9	1,700.0	1,699.8	3.6	2.9	102.43	-2,310.5	1,172.6	2,614.2	2,607.7	6.52	400.884		
2,000.0	1,995.0	1,751.0	1,750.7	3.8	3.0	102.61	-2,314.2	1,174.2	2,624.0	2,617.1	6.83	384.117		
2,100.0	2,093.8	1,800.0	1,799.5	4.1	3.1	102.78	-2,318.5	1,176.0	2,637.2	2,630.0	7.18	367.251		
2,200.0	2,192.5	1,852.8	1,851.9	4.4	3.2	102.96	-2,324.1	1,178.2	2,652.3	2,644.8	7.54	351.653		
2,300.0	2,291.2	1,900.0	1,898.7	4.7	3.3	103.13	-2,329.8	1,180.6	2,669.2	2,661.3	7.89	338.155		
2,400.0	2,389.9	1,953.4	1,951.5	5.0	3.5	103.32	-2,337.1	1,183.6	2,687.9	2,679.7	8.26	325.448		
2,500.0	2,488.7	2,000.0	1,997.5	5.3	3.6	103.48	-2,344.3	1,186.5	2,708.4	2,699.8	8.61	314.596		
2,600.0	2,587.4	2,052.5	2,049.1	5.6	3.7	103.66	-2,353.2	1,190.1	2,730.7	2,721.7	8.97	304.352		
2,700.0	2,686.1	2,126.9	2,122.0	5.9	3.9	103.92	-2,366.8	1,195.7	2,754.4	2,745.0	9.38	293.542		
2,800.0	2,784.8	2,222.7	2,215.9	6.2	4.2	104.24	-2,384.5	1,203.0	2,778.4	2,768.6	9.84	282.248		
2,900.0	2,883.6	2,318.6	2,309.8	6.5	4.5	104.56	-2,402.2	1,210.2	2,802.5	2,792.2	10.31	271.943		
3,000.0	2,982.3	2,414.4	2,403.8	6.9	4.8	104.87	-2,419.9	1,217.4	2,826.7	2,815.9	10.77	262.508		
3,100.0	3,081.0	2,510.3	2,497.7	7.2	5.1	105.18	-2,437.6	1,224.7	2,850.9	2,839.7	11.23	253.842		
3,200.0	3,179.7	2,606.1	2,591.6	7.5	5.4	105.48	-2,455.2	1,231.9	2,875.2	2,863.5	11.69	245.858		
3,300.0	3,278.5	2,702.0	2,685.6	7.8	5.8	105.78	-2,472.9	1,239.2	2,899.6	2,887.5	12.16	238.481		
3,400.0	3,377.2	2,797.8	2,779.5	8.1	6.1	106.07	-2,490.6	1,246.4	2,924.1	2,911.5	12.62	231.644		
3,500.0	3,475.9	2,893.7	2,873.4	8.4	6.4	106.36	-2,508.3	1,253.6	2,948.7	2,935.6	13.09	225.294		
3,600.0	3,574.6	2,989.5	2,967.3	8.8	6.8	106.65	-2,526.0	1,260.9	2,973.3	2,959.7	13.55	219.380		
3,700.0	3,673.4	3,085.4	3,061.3	9.1	7.1	106.93	-2,543.7	1,268.1	2,998.0	2,983.9	14.02	213.861		
3,800.0	3,772.1	3,181.3	3,155.2	9.4	7.5	107.20	-2,561.4	1,275.3	3,022.7	3,008.2	14.48	208.700		
3,900.0	3,870.8	3,277.1	3,249.1	9.7	7.8	107.47	-2,579.0	1,282.6	3,047.5	3,032.6	14.95	203.862		
4,000.0	3,969.5	3,373.0	3,343.0	10.0	8.2	107.74	-2,596.7	1,289.8	3,072.4	3,057.0	15.41	199.319		
4,100.0	4,068.3	3,468.8	3,437.0	10.4	8.5	108.00	-2,614.4	1,297.1	3,097.4	3,081.5	15.88	195.045		
4,200.0	4,167.0	3,564.7	3,530.9	10.7	8.9	108.26	-2,632.1	1,304.3	3,122.4	3,106.0	16.35	191.017		
4,300.0	4,265.7	3,660.5	3,624.8	11.0	9.2	108.51	-2,649.8	1,311.5	3,147.4	3,130.6	16.81	187.215		
4,400.0	4,364.4	3,756.4	3,718.8	11.3	9.6	108.76	-2,667.5	1,318.8	3,172.6	3,155.3	17.28	183.621		
4,500.0	4,463.2	3,852.2	3,812.7	11.7	10.0	109.01	-2,685.1	1,326.0	3,197.8	3,180.0	17.74	180.217		
4,600.0	4,561.9	3,948.1	3,906.6	12.0	10.3	109.25	-2,702.8	1,333.3	3,223.0	3,204.8	18.21	176.990		
4,700.0	4,660.6	4,043.9	4,000.5	12.3	10.7	109.49	-2,720.5	1,340.5	3,248.3	3,229.6	18.68	173.926		
4,800.0	4,759.3	4,139.8	4,094.5	12.6	11.0	109.72	-2,738.2	1,347.7	3,273.6	3,254.5	19.14	171.013		
4,900.0	4,858.1	4,235.6	4,188.4	13.0	11.4	109.95	-2,755.9	1,355.0	3,299.0	3,279.4	19.61	168.241		
5,000.0	4,956.8	4,331.5	4,282.3	13.3	11.8	110.18	-2,773.6	1,362.2	3,324.5	3,304.4	20.08	165.599		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
5,100.0	5,055.5	4,427.3	4,376.2	13.6	12.1	110.40	-2,791.3	1,369.5	3,350.0	3,329.4	20.54	163.078		
5,200.0	5,154.2	4,523.2	4,470.2	13.9	12.5	110.63	-2,808.9	1,376.7	3,375.5	3,354.5	21.01	160.671		
5,300.0	5,253.0	4,619.0	4,564.1	14.3	12.9	110.84	-2,826.6	1,383.9	3,401.1	3,379.6	21.48	158.370		
5,400.0	5,351.7	4,714.9	4,658.0	14.6	13.2	111.06	-2,844.3	1,391.2	3,426.7	3,404.8	21.94	156.167		
5,500.0	5,450.4	4,810.7	4,751.9	14.9	13.6	111.27	-2,862.0	1,398.4	3,452.4	3,430.0	22.41	154.058		
5,600.0	5,549.1	4,906.6	4,845.9	15.3	14.0	111.48	-2,879.7	1,405.7	3,478.1	3,455.3	22.88	152.036		
5,700.0	5,647.9	5,002.4	4,939.8	15.6	14.3	111.68	-2,897.4	1,412.9	3,503.9	3,480.6	23.34	150.095		
5,800.0	5,746.6	5,098.3	5,033.7	15.9	14.7	111.89	-2,915.1	1,420.1	3,529.7	3,505.9	23.81	148.232		
5,900.0	5,845.3	5,194.1	5,127.7	16.2	15.1	112.09	-2,932.7	1,427.4	3,555.6	3,531.3	24.28	146.441		
6,000.0	5,944.1	6,002.0	5,929.1	16.6	17.0	113.85	-3,010.0	1,459.0	3,574.7	3,548.4	26.27	136.074		
6,100.0	6,042.8	6,100.7	6,027.8	16.9	17.1	114.08	-3,010.0	1,459.0	3,581.2	3,554.5	26.74	133.927		
6,200.0	6,141.5	6,199.5	6,126.5	17.2	17.2	114.31	-3,010.0	1,459.0	3,587.8	3,560.6	27.21	131.859		
6,300.0	6,240.2	6,298.2	6,225.2	17.5	17.3	114.53	-3,010.0	1,459.0	3,594.5	3,566.8	27.68	129.868		
6,400.0	6,339.0	6,396.9	6,324.0	17.9	17.4	114.76	-3,010.0	1,459.0	3,601.2	3,573.0	28.15	127.948		
6,500.0	6,437.7	6,495.6	6,422.7	18.2	17.5	114.99	-3,010.0	1,459.0	3,607.9	3,579.3	28.61	126.097		
6,600.0	6,536.4	6,594.4	6,521.4	18.5	17.6	115.22	-3,010.0	1,459.0	3,614.8	3,585.7	29.08	124.311		
6,700.0	6,635.1	6,693.1	6,620.1	18.9	17.7	115.44	-3,010.0	1,459.0	3,621.6	3,592.1	29.54	122.586		
6,800.0	6,733.9	6,791.8	6,718.9	19.2	17.8	115.67	-3,010.0	1,459.0	3,628.6	3,598.6	30.01	120.920		
6,900.0	6,832.6	6,890.5	6,817.6	19.5	17.9	115.89	-3,010.0	1,459.0	3,635.6	3,605.1	30.47	119.310		
7,000.0	6,931.3	6,989.3	6,916.3	19.8	18.1	116.11	-3,010.0	1,459.0	3,642.6	3,611.7	30.93	117.753		
7,100.0	7,030.0	7,088.0	7,015.0	20.2	18.2	116.33	-3,010.0	1,459.0	3,649.7	3,618.3	31.40	116.247		
7,191.8	7,120.7	7,178.6	7,105.7	20.5	18.3	116.54	-3,010.0	1,459.0	3,656.3	3,624.5	31.82	114.906		
7,200.0	7,128.8	7,186.7	7,113.8	20.5	18.3	112.16	-3,010.0	1,459.0	3,656.8	3,625.0	31.86	114.788		
7,250.0	7,178.3	7,236.2	7,163.3	20.6	18.4	77.67	-3,010.0	1,459.0	3,657.6	3,625.5	32.08	114.015		
7,300.0	7,227.8	7,285.7	7,212.8	20.7	18.4	45.98	-3,010.0	1,459.0	3,654.0	3,621.7	32.29	113.146		
7,350.0	7,276.8	7,334.8	7,261.8	20.8	18.5	28.17	-3,010.0	1,459.0	3,646.1	3,613.6	32.50	112.185		
7,400.0	7,325.1	7,383.0	7,310.1	20.8	18.5	18.58	-3,010.0	1,459.0	3,634.0	3,601.3	32.70	111.140		
7,450.0	7,372.2	7,430.1	7,357.2	20.8	18.6	12.84	-3,010.0	1,459.0	3,617.8	3,584.9	32.88	110.015		
7,500.0	7,417.7	7,475.7	7,402.7	20.8	18.6	9.01	-3,010.0	1,459.0	3,597.6	3,564.5	33.06	108.818		
7,550.0	7,461.4	7,519.4	7,446.4	20.7	18.7	6.21	-3,010.0	1,459.0	3,573.5	3,540.2	33.22	107.557		
7,600.0	7,502.9	7,560.9	7,487.9	20.7	18.8	3.99	-3,010.0	1,459.0	3,545.7	3,512.3	33.37	106.239		
7,650.0	7,541.9	7,599.8	7,526.9	20.6	18.8	2.06	-3,010.0	1,459.0	3,514.4	3,480.9	33.51	104.872		
7,700.0	7,578.0	7,636.0	7,563.1	20.5	18.8	0.25	-3,010.0	1,459.0	3,479.9	3,446.3	33.63	103.466		
7,750.0	7,611.1	7,669.1	7,596.1	20.4	18.9	-1.59	-3,010.0	1,459.0	3,442.4	3,408.7	33.74	102.027		
7,800.0	7,640.8	7,698.8	7,625.9	20.4	18.9	-3.64	-3,010.0	1,459.0	3,402.2	3,368.4	33.83	100.565		
7,850.0	7,667.0	7,725.0	7,652.0	20.3	19.0	-6.11	-3,010.0	1,459.0	3,359.7	3,325.8	33.91	99.089		
7,900.0	7,689.4	7,747.4	7,674.4	20.3	19.0	-9.34	-3,010.0	1,459.0	3,315.1	3,281.1	33.96	97.608		
7,950.0	7,707.9	7,765.8	7,692.9	20.3	19.0	-13.95	-3,010.0	1,459.0	3,268.8	3,234.8	34.00	96.130		
8,000.0	7,722.2	7,780.2	7,707.2	20.3	19.0	-21.24	-3,010.0	1,459.0	3,221.1	3,187.0	34.03	94.665		
8,050.0	7,732.4	7,790.4	7,717.4	20.3	19.0	-34.11	-3,010.0	1,459.0	3,172.4	3,138.4	34.03	93.221		
8,100.0	7,738.4	7,796.3	7,723.4	20.4	19.0	-58.45	-3,010.0	1,459.0	3,123.1	3,089.1	34.02	91.806		
8,143.7	7,740.0	7,798.0	7,725.0	20.5	19.0	-90.00	-3,010.0	1,459.0	3,079.8	3,045.8	33.99	90.600		
8,200.0	7,740.0	7,798.0	7,725.0	20.6	19.0	-90.00	-3,010.0	1,459.0	3,024.0	2,990.1	33.96	89.059		
8,300.0	7,740.0	7,798.0	7,725.0	21.0	19.0	-90.00	-3,010.0	1,459.0	2,925.0	2,891.1	33.88	86.334		
8,400.0	7,740.0	7,798.0	7,725.0	21.5	19.0	-90.00	-3,010.0	1,459.0	2,826.0	2,792.2	33.79	83.623		
8,443.7	7,740.0	7,798.0	7,725.0	21.8	19.0	-90.00	-3,010.0	1,459.0	2,782.8	2,749.0	33.75	82.444		
8,500.0	7,740.0	7,798.0	7,725.0	22.2	19.0	-90.00	-3,010.0	1,459.0	2,727.2	2,693.5	33.69	80.944		
8,600.0	7,740.0	7,798.0	7,725.0	22.9	19.0	-90.00	-3,010.0	1,459.0	2,628.7	2,595.1	33.55	78.355		
8,700.0	7,740.0	7,798.0	7,725.0	23.7	19.0	-90.00	-3,010.0	1,459.0	2,530.6	2,497.2	33.37	75.842		
8,800.0	7,740.0	7,798.0	7,725.0	24.6	19.0	-90.00	-3,010.0	1,459.0	2,433.1	2,400.0	33.15	73.403		
8,843.7	7,740.0	7,798.0	7,725.0	25.1	19.0	-90.00	-3,010.0	1,459.0	2,390.7	2,357.7	33.04	72.356		
8,900.0	7,740.0	7,798.0	7,725.0	25.6	19.0	-90.00	-3,010.0	1,459.0	2,336.2	2,303.3	32.90	71.010		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
9,000.0	7,740.0	7,798.0	7,725.0	26.7	19.0	-90.00	-3,010.0	1,459.0	2,239.5	2,206.9	32.64	68.620		
9,100.0	7,740.0	7,798.0	7,725.0	27.8	19.0	-90.00	-3,010.0	1,459.0	2,143.2	2,110.9	32.36	66.225		
9,200.0	7,740.0	7,798.0	7,725.0	29.0	19.0	-90.00	-3,010.0	1,459.0	2,047.3	2,015.2	32.08	63.820		
9,300.0	7,740.0	7,798.0	7,725.0	30.2	19.0	-90.00	-3,010.0	1,459.0	1,951.7	1,919.9	31.79	61.395		
9,343.7	7,740.0	7,798.0	7,725.0	30.8	19.0	-90.00	-3,010.0	1,459.0	1,910.1	1,878.4	31.66	60.326		
9,400.7	7,740.0	7,798.0	7,725.0	31.6	19.0	-90.00	-3,010.0	1,459.0	1,855.8	1,824.3	31.50	58.907		
9,500.0	7,740.0	7,798.0	7,725.0	32.9	19.0	-90.00	-3,010.0	1,459.0	1,761.6	1,730.4	31.24	56.389		
9,600.0	7,740.0	7,798.0	7,725.0	34.3	19.0	-90.00	-3,010.0	1,459.0	1,667.4	1,636.4	31.00	53.788		
9,700.0	7,740.0	7,798.0	7,725.0	35.7	19.0	-90.00	-3,010.0	1,459.0	1,573.8	1,543.0	30.80	51.095		
9,800.0	7,740.0	7,798.0	7,725.0	37.1	19.0	-90.00	-3,010.0	1,459.0	1,481.1	1,450.4	30.68	48.274		
9,900.0	7,740.0	7,798.0	7,725.0	38.6	19.0	-90.00	-3,010.0	1,459.0	1,389.3	1,358.6	30.68	45.288		
10,000.0	7,740.0	7,798.0	7,725.0	40.1	19.0	-90.00	-3,010.0	1,459.0	1,298.8	1,268.0	30.86	42.092		
10,100.0	7,740.0	7,798.0	7,725.0	41.6	19.0	-90.00	-3,010.0	1,459.0	1,209.8	1,178.5	31.30	38.653		
10,200.0	7,740.0	7,798.0	7,725.0	43.1	19.0	-90.00	-3,010.0	1,459.0	1,122.7	1,090.5	32.11	34.961		
10,300.0	7,740.0	7,798.0	7,725.0	44.7	19.0	-90.00	-3,010.0	1,459.0	1,037.8	1,004.4	33.42	31.055		
10,400.0	7,740.0	7,798.0	7,725.0	46.3	19.0	-90.00	-3,010.0	1,459.0	955.9	920.5	35.36	27.031		
10,500.0	7,740.0	7,798.0	7,725.0	47.8	19.0	-90.00	-3,010.0	1,459.0	877.8	839.7	38.09	23.044		
10,600.0	7,740.0	7,798.0	7,725.0	49.4	19.0	-90.00	-3,010.0	1,459.0	804.5	762.7	41.73	19.277		
10,700.0	7,740.0	7,798.0	7,725.0	51.0	19.0	-90.00	-3,010.0	1,459.0	737.5	691.1	46.37	15.903		
10,800.0	7,740.0	7,798.0	7,725.0	52.6	19.0	-90.00	-3,010.0	1,459.0	678.7	626.7	52.01	13.049		
10,900.0	7,740.0	7,798.0	7,725.0	54.2	19.0	-90.00	-3,010.0	1,459.0	630.3	571.9	58.43	10.787		
11,000.0	7,740.0	7,798.0	7,725.0	55.9	19.0	-90.00	-3,010.0	1,459.0	595.0	529.8	65.18	9.129		
11,100.0	7,740.0	7,798.0	7,725.0	57.5	19.0	-90.00	-3,010.0	1,459.0	575.1	503.6	71.48	8.045		
11,166.5	7,740.0	7,798.0	7,725.0	58.6	19.0	-90.00	-3,010.0	1,459.0	571.2	496.2	75.01	7.615 CC		
11,200.0	7,740.0	7,798.0	7,725.0	59.1	19.0	-90.00	-3,010.0	1,459.0	572.2	495.7	76.51	7.479 ES		
11,300.0	7,740.0	7,798.0	7,725.0	60.8	19.0	-90.00	-3,010.0	1,459.0	586.6	506.9	79.70	7.361 SF		
11,400.0	7,740.0	7,798.0	7,725.0	62.4	19.0	-90.00	-3,010.0	1,459.0	617.1	536.1	81.00	7.618		
11,500.0	7,740.0	7,798.0	7,725.0	64.1	19.0	-90.00	-3,010.0	1,459.0	661.5	580.7	80.80	8.187		
11,600.0	7,740.0	7,798.0	7,725.0	65.8	19.0	-90.00	-3,010.0	1,459.0	717.1	637.5	79.61	9.008		
11,700.0	7,740.0	7,798.0	7,725.0	67.4	19.0	-90.00	-3,010.0	1,459.0	781.6	703.7	77.90	10.034		
11,800.0	7,740.0	7,798.0	7,725.0	69.1	19.0	-90.00	-3,010.0	1,459.0	853.0	777.1	75.98	11.227		
11,900.0	7,740.0	7,798.0	7,725.0	70.8	19.0	-90.00	-3,010.0	1,459.0	929.7	855.7	74.06	12.553		
12,000.0	7,740.0	7,798.0	7,725.0	72.5	19.0	-90.00	-3,010.0	1,459.0	1,010.5	938.3	72.23	13.989		
12,100.0	7,740.0	7,798.0	7,725.0	74.1	19.0	-90.00	-3,010.0	1,459.0	1,094.4	1,023.9	70.55	15.514		
12,200.0	7,740.0	7,798.0	7,725.0	75.8	19.0	-90.00	-3,010.0	1,459.0	1,180.9	1,111.9	69.01	17.111		
12,300.0	7,740.0	7,798.0	7,725.0	77.5	19.0	-90.00	-3,010.0	1,459.0	1,269.3	1,201.7	67.63	18.768		
12,400.0	7,740.0	7,798.0	7,725.0	79.2	19.0	-90.00	-3,010.0	1,459.0	1,359.4	1,293.0	66.39	20.474		
12,500.0	7,740.0	7,798.0	7,725.0	80.9	19.0	-90.00	-3,010.0	1,459.0	1,450.7	1,385.4	65.29	22.221		
12,600.0	7,740.0	7,798.0	7,725.0	82.6	19.0	-90.00	-3,010.0	1,459.0	1,543.2	1,478.9	64.30	24.001		
12,700.0	7,740.0	7,798.0	7,725.0	84.3	19.0	-90.00	-3,010.0	1,459.0	1,636.5	1,573.1	63.41	25.809		
12,800.0	7,740.0	7,798.0	7,725.0	86.0	19.0	-90.00	-3,010.0	1,459.0	1,730.5	1,667.9	62.61	27.639		
12,900.0	7,740.0	7,798.0	7,725.0	87.7	19.0	-90.00	-3,010.0	1,459.0	1,825.2	1,763.3	61.90	29.489		
13,000.0	7,740.0	7,798.0	7,725.0	89.4	19.0	-90.00	-3,010.0	1,459.0	1,920.5	1,859.2	61.25	31.354		
13,100.0	7,740.0	7,798.0	7,725.0	91.1	19.0	-90.00	-3,010.0	1,459.0	2,016.2	1,955.5	60.67	33.231		
13,200.0	7,740.0	7,798.0	7,725.0	92.8	19.0	-90.00	-3,010.0	1,459.0	2,112.2	2,052.1	60.15	35.119		
13,300.0	7,740.0	7,798.0	7,725.0	94.5	19.0	-90.00	-3,010.0	1,459.0	2,208.7	2,149.0	59.67	37.015		
13,400.0	7,740.0	7,798.0	7,725.0	96.3	19.0	-90.00	-3,010.0	1,459.0	2,305.4	2,246.2	59.24	38.917		
13,500.0	7,740.0	7,798.0	7,725.0	98.0	19.0	-90.00	-3,010.0	1,459.0	2,402.4	2,343.6	58.85	40.824		
13,600.0	7,740.0	7,798.0	7,725.0	99.7	19.0	-90.00	-3,010.0	1,459.0	2,499.7	2,441.2	58.49	42.735		
13,700.0	7,740.0	7,798.0	7,725.0	101.4	19.0	-90.00	-3,010.0	1,459.0	2,597.1	2,539.0	58.17	44.648		
13,800.0	7,740.0	7,798.0	7,725.0	103.1	19.0	-90.00	-3,010.0	1,459.0	2,694.8	2,636.9	57.87	46.563		
13,900.0	7,740.0	7,798.0	7,725.0	104.8	19.0	-90.00	-3,010.0	1,459.0	2,792.6	2,735.0	57.61	48.478		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	7,798.0	7,725.0	106.6	19.0	-90.00	-3,010.0	1,459.0	2,890.5	2,833.2	57.36	50.393		
14,100.0	7,740.0	7,798.0	7,725.0	108.3	19.0	-90.00	-3,010.0	1,459.0	2,988.6	2,931.5	57.14	52.307		
14,200.0	7,740.0	7,798.0	7,725.0	110.0	19.0	-90.00	-3,010.0	1,459.0	3,086.9	3,029.9	56.93	54.220		
14,300.0	7,740.0	7,798.0	7,725.0	111.7	19.0	-90.00	-3,010.0	1,459.0	3,185.2	3,128.4	56.75	56.131		
14,400.0	7,740.0	7,798.0	7,725.0	113.5	19.0	-90.00	-3,010.0	1,459.0	3,283.6	3,227.0	56.58	58.040		
14,500.0	7,740.0	7,798.0	7,725.0	115.2	19.0	-90.00	-3,010.0	1,459.0	3,382.1	3,325.7	56.42	59.946		
14,600.0	7,740.0	7,798.0	7,725.0	116.9	19.0	-90.00	-3,010.0	1,459.0	3,480.7	3,424.5	56.28	61.849		
14,700.0	7,740.0	7,798.0	7,725.0	118.6	19.0	-90.00	-3,010.0	1,459.0	3,579.4	3,523.3	56.15	63.748		
14,800.0	7,740.0	7,798.0	7,725.0	120.4	19.0	-90.00	-3,010.0	1,459.0	3,678.2	3,622.1	56.03	65.644		
14,900.0	7,740.0	7,798.0	7,725.0	122.1	19.0	-90.00	-3,010.0	1,459.0	3,777.0	3,721.1	55.93	67.536		
15,000.0	7,740.0	7,798.0	7,725.0	123.8	19.0	-90.00	-3,010.0	1,459.0	3,875.9	3,820.0	55.83	69.423		
15,100.0	7,740.0	7,798.0	7,725.0	125.6	19.0	-90.00	-3,010.0	1,459.0	3,974.8	3,919.1	55.74	71.307		
15,200.0	7,740.0	7,798.0	7,725.0	127.3	19.0	-90.00	-3,010.0	1,459.0	4,073.8	4,018.1	55.66	73.185		
15,300.0	7,740.0	7,798.0	7,725.0	129.0	19.0	-90.00	-3,010.0	1,459.0	4,172.8	4,117.2	55.59	75.059		
15,400.0	7,740.0	7,798.0	7,725.0	130.7	19.0	-90.00	-3,010.0	1,459.0	4,271.9	4,216.4	55.53	76.928		
15,500.0	7,740.0	7,798.0	7,725.0	132.5	19.0	-90.00	-3,010.0	1,459.0	4,371.0	4,315.6	55.48	78.793		
15,600.0	7,740.0	7,798.0	7,725.0	134.2	19.0	-90.00	-3,010.0	1,459.0	4,470.2	4,414.8	55.43	80.652		
15,700.0	7,740.0	7,798.0	7,725.0	135.9	19.0	-90.00	-3,010.0	1,459.0	4,569.4	4,514.0	55.38	82.506		
15,800.0	7,740.0	7,798.0	7,725.0	137.7	19.0	-90.00	-3,010.0	1,459.0	4,668.6	4,613.3	55.35	84.354		
15,900.0	7,740.0	7,798.0	7,725.0	139.4	19.0	-90.00	-3,010.0	1,459.0	4,767.9	4,712.6	55.31	86.198		
16,000.0	7,740.0	7,798.0	7,725.0	141.1	19.0	-90.00	-3,010.0	1,459.0	4,867.2	4,811.9	55.29	88.035		
16,084.2	7,740.0	7,798.0	7,725.0	142.6	19.0	-90.00	-3,010.0	1,459.0	4,950.8	4,895.5	55.27	89.578		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	29.0	29.0	0.0	0.0	65.60	1,870.2	4,122.3	4,526.7					
100.0	100.0	129.0	129.0	0.2	0.2	65.60	1,870.2	4,122.3	4,526.7	4,526.3	0.35	N/A		
200.0	200.0	278.0	278.0	0.3	0.5	65.59	1,870.3	4,121.8	4,526.5	4,525.8	0.79	5,735.978		
300.0	300.0	546.7	546.5	0.5	1.0	65.52	1,872.5	4,112.1	4,523.6	4,522.2	1.44	3,134.703		
400.0	400.0	813.8	812.6	0.7	1.6	65.34	1,877.5	4,090.3	4,516.9	4,514.8	2.13	2,122.047		
500.0	500.0	1,078.3	1,074.8	0.8	2.3	65.08	1,885.2	4,056.8	4,506.6	4,503.8	2.87	1,571.349		
600.0	600.0	1,339.0	1,331.5	1.0	3.2	64.71	1,895.4	4,012.3	4,492.8	4,489.1	3.68	1,221.697		
700.0	700.0	1,595.1	1,581.3	1.2	4.2	64.26	1,907.9	3,957.6	4,475.4	4,470.8	4.57	980.151		
800.0	800.0	1,731.8	1,713.8	1.4	4.9	63.98	1,915.6	3,924.3	4,455.6	4,450.5	5.16	863.280		
900.0	900.0	1,828.6	1,807.4	1.5	5.3	63.78	1,921.0	3,900.6	4,435.8	4,430.2	5.64	786.095		
1,000.0	1,000.0	1,925.4	1,901.1	1.7	5.8	63.58	1,926.5	3,876.8	4,416.0	4,409.9	6.13	720.528		
1,100.0	1,100.0	2,022.0	1,994.6	1.9	6.2	12.02	1,931.9	3,853.0	4,395.5	4,388.8	6.62	664.136		
1,200.0	1,200.0	2,118.3	2,087.8	2.1	6.7	11.86	1,937.3	3,829.4	4,373.3	4,366.2	7.11	615.099		
1,300.0	1,299.9	2,214.3	2,180.7	2.3	7.1	11.72	1,942.7	3,805.8	4,349.5	4,341.9	7.60	572.058		
1,400.0	1,399.7	2,310.0	2,273.2	2.4	7.6	11.57	1,948.1	3,782.3	4,324.1	4,316.0	8.10	533.967		
1,500.0	1,499.4	2,405.2	2,365.4	2.6	8.0	11.44	1,953.5	3,758.9	4,297.1	4,288.5	8.59	500.003		
1,600.0	1,598.9	2,500.0	2,457.2	2.8	8.5	11.30	1,958.8	3,735.6	4,268.5	4,259.5	9.09	469.518		
1,700.0	1,698.3	2,594.4	2,548.5	3.1	8.9	11.18	1,964.2	3,712.4	4,238.4	4,228.8	9.59	441.989		
1,800.0	1,797.4	2,688.3	2,639.4	3.3	9.4	11.05	1,969.4	3,689.4	4,206.6	4,196.5	10.09	416.994		
1,900.0	1,896.3	2,781.7	2,729.7	3.6	9.8	10.94	1,974.7	3,666.4	4,173.3	4,162.7	10.59	394.186		
1,915.7	1,911.9	2,796.3	2,743.9	3.6	9.9	10.92	1,975.5	3,662.8	4,167.9	4,157.2	10.67	390.777		
2,000.0	1,995.0	2,874.7	2,819.8	3.8	10.3	10.76	1,979.9	3,643.6	4,138.9	4,127.8	11.09	373.316		
2,100.0	2,093.8	2,967.8	2,909.8	4.1	10.7	10.57	1,985.2	3,620.7	4,104.6	4,093.0	11.59	354.176		
2,200.0	2,192.5	3,060.8	2,999.8	4.4	11.2	10.38	1,990.4	3,597.8	4,070.3	4,058.2	12.09	336.564		
2,300.0	2,291.2	3,153.9	3,089.9	4.7	11.6	10.19	1,995.7	3,575.0	4,036.0	4,023.4	12.60	320.307		
2,400.0	2,389.9	3,246.9	3,179.9	5.0	12.1	9.99	2,000.9	3,552.1	4,001.8	3,988.7	13.11	305.258		
2,500.0	2,488.7	3,339.9	3,270.0	5.3	12.5	9.79	2,006.2	3,529.3	3,967.7	3,954.1	13.62	291.289		
2,600.0	2,587.4	3,433.0	3,360.0	5.6	13.0	9.58	2,011.4	3,506.4	3,933.6	3,919.4	14.13	278.291		
2,700.0	2,686.1	3,526.0	3,450.0	5.9	13.4	9.38	2,016.6	3,483.5	3,899.5	3,884.9	14.65	266.166		
2,800.0	2,784.8	3,619.1	3,540.1	6.2	13.9	9.16	2,021.9	3,460.7	3,865.5	3,850.3	15.17	254.831		
2,900.0	2,883.6	3,712.1	3,630.1	6.5	14.3	8.95	2,027.1	3,437.8	3,831.5	3,815.8	15.69	244.213		
3,000.0	2,982.3	3,805.2	3,720.1	6.9	14.8	8.73	2,032.4	3,415.0	3,797.6	3,781.4	16.21	234.247		
3,100.0	3,081.0	3,898.2	3,810.2	7.2	15.2	8.51	2,037.6	3,392.1	3,763.7	3,747.0	16.74	224.874		
3,200.0	3,179.7	3,991.2	3,900.2	7.5	15.7	8.28	2,042.8	3,369.3	3,729.9	3,712.6	17.26	216.046		
3,300.0	3,278.5	4,084.3	3,990.3	7.8	16.1	8.05	2,048.1	3,346.4	3,696.1	3,678.3	17.79	207.715		
3,400.0	3,377.2	4,177.3	4,080.3	8.1	16.6	7.81	2,053.3	3,323.5	3,662.4	3,644.1	18.33	199.843		
3,500.0	3,475.9	4,270.4	4,170.3	8.4	17.0	7.57	2,058.6	3,300.7	3,628.8	3,609.9	18.86	192.392		
3,600.0	3,574.6	4,363.4	4,260.4	8.8	17.5	7.33	2,063.8	3,277.8	3,595.2	3,575.8	19.40	185.330		
3,700.0	3,673.4	4,456.4	4,350.4	9.1	17.9	7.08	2,069.0	3,255.0	3,561.6	3,541.7	19.94	178.629		
3,800.0	3,772.1	4,549.5	4,440.4	9.4	18.4	6.83	2,074.3	3,232.1	3,528.2	3,507.7	20.48	172.262		
3,900.0	3,870.8	4,642.5	4,530.5	9.7	18.8	6.57	2,079.5	3,209.2	3,494.8	3,473.7	21.03	166.204		
4,000.0	3,969.5	4,735.6	4,620.5	10.0	19.3	6.31	2,084.8	3,186.4	3,461.4	3,439.8	21.58	160.434		
4,100.0	4,068.3	4,828.6	4,710.6	10.4	19.7	6.04	2,090.0	3,163.5	3,428.1	3,406.0	22.13	154.934		
4,200.0	4,167.0	4,921.7	4,800.6	10.7	20.2	5.77	2,095.2	3,140.7	3,394.9	3,372.3	22.68	149.683		
4,300.0	4,265.7	5,014.7	4,890.6	11.0	20.6	5.49	2,100.5	3,117.8	3,361.8	3,338.6	23.24	144.667		
4,400.0	4,364.4	5,107.7	4,980.7	11.3	21.1	5.21	2,105.7	3,095.0	3,328.7	3,304.9	23.80	139.871		
4,500.0	4,463.2	5,200.8	5,070.7	11.7	21.5	4.92	2,111.0	3,072.1	3,295.8	3,271.4	24.36	135.280		
4,600.0	4,561.9	5,293.8	5,160.8	12.0	22.0	4.63	2,116.2	3,049.2	3,262.9	3,237.9	24.93	130.882		
4,700.0	4,660.6	5,386.9	5,250.8	12.3	22.4	4.33	2,121.5	3,026.4	3,230.0	3,204.5	25.50	126.665		
4,800.0	4,759.3	5,479.9	5,340.8	12.6	22.9	4.02	2,126.7	3,003.5	3,197.3	3,171.2	26.07	122.620		
4,900.0	4,858.1	5,572.9	5,430.9	13.0	23.3	3.71	2,131.9	2,980.7	3,164.6	3,138.0	26.65	118.735		
5,000.0	4,956.8	5,666.0	5,520.9	13.3	23.8	3.39	2,137.2	2,957.8	3,132.1	3,104.8	27.23	115.003		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,055.5	5,759.0	5,610.9	13.6	24.2	3.06	2,142.4	2,935.0	3,099.6	3,071.8	27.82	111.413	
5,200.0	5,154.2	5,852.1	5,701.0	13.9	24.7	2.73	2,147.7	2,912.1	3,067.2	3,038.8	28.41	107.960	
5,300.0	5,253.0	5,924.2	5,753.0	14.3	42.9	46.59	381.9	2,448.1	2,989.1	2,957.9	31.18	95.862	
5,400.0	5,351.7	9,254.2	7,530.0	14.6	42.8	46.26	391.8	2,448.1	2,907.2	2,875.5	31.70	91.701	
5,500.0	5,450.4	9,244.3	7,530.0	14.9	42.7	45.93	401.8	2,448.1	2,826.4	2,794.2	32.25	87.652	
5,600.0	5,549.1	9,234.4	7,530.0	15.3	42.6	45.59	411.7	2,448.1	2,746.9	2,714.1	32.81	83.720	
5,700.0	5,647.9	9,224.5	7,530.0	15.6	42.5	45.26	421.6	2,448.1	2,668.6	2,635.3	33.40	79.908	
5,800.0	5,746.6	9,214.5	7,530.0	15.9	42.4	44.93	431.5	2,448.1	2,591.9	2,557.9	34.00	76.222	
5,900.0	5,845.3	9,204.6	7,530.0	16.2	42.3	44.59	441.5	2,448.1	2,516.7	2,482.1	34.63	72.666	
6,000.0	5,944.1	9,194.7	7,530.0	16.6	42.2	44.26	451.4	2,448.1	2,443.3	2,408.0	35.29	69.244	
6,100.0	6,042.8	9,184.8	7,530.0	16.9	42.1	43.93	461.3	2,448.1	2,371.8	2,335.8	35.96	65.963	
6,200.0	6,141.5	9,174.8	7,530.0	17.2	42.0	43.59	471.3	2,448.1	2,302.4	2,265.7	36.65	62.828	
6,300.0	6,240.2	9,164.9	7,530.0	17.5	41.8	43.26	481.2	2,448.1	2,235.2	2,197.8	37.35	59.847	
6,400.0	6,339.0	9,155.0	7,530.0	17.9	41.7	42.92	491.1	2,448.0	2,170.5	2,132.4	38.06	57.026	
6,500.0	6,437.7	9,145.0	7,530.0	18.2	41.6	42.58	501.0	2,448.0	2,108.5	2,069.8	38.78	54.370	
6,600.0	6,536.4	9,135.1	7,530.0	18.5	41.5	42.25	511.0	2,448.0	2,049.5	2,010.0	39.50	51.886	
6,700.0	6,635.1	9,125.2	7,530.0	18.9	41.4	41.91	520.9	2,448.0	1,993.8	1,953.5	40.21	49.582	
6,800.0	6,733.9	9,115.3	7,530.0	19.2	41.3	41.57	530.8	2,448.0	1,941.5	1,900.6	40.91	47.463	
6,900.0	6,832.6	9,105.3	7,530.0	19.5	41.2	41.24	540.7	2,448.0	1,893.0	1,851.4	41.57	45.536	
7,000.0	6,931.3	9,095.4	7,530.0	19.8	41.1	40.90	550.7	2,448.0	1,848.6	1,806.4	42.20	43.808	
7,100.0	7,030.0	9,085.5	7,530.0	20.2	41.0	40.56	560.6	2,448.0	1,808.6	1,765.8	42.77	42.284	
7,191.8	7,120.7	9,076.4	7,530.0	20.5	40.9	40.25	569.7	2,448.0	1,775.9	1,732.7	43.24	41.072	
7,200.0	7,128.8	9,075.6	7,530.0	20.5	40.9	35.54	570.5	2,448.0	1,773.2	1,730.0	43.28	40.973	
7,250.0	7,178.3	9,073.5	7,530.0	20.6	40.9	-0.83	572.5	2,448.0	1,757.2	1,713.7	43.49	40.403	
7,300.0	7,227.8	9,075.8	7,530.0	20.7	40.9	-34.07	570.3	2,448.0	1,742.1	1,698.4	43.70	39.866	
7,350.0	7,276.8	9,082.4	7,530.0	20.8	41.0	-53.08	563.7	2,448.0	1,728.2	1,684.3	43.90	39.363	
7,400.0	7,325.1	9,093.3	7,530.0	20.8	41.1	-63.54	552.8	2,448.0	1,715.4	1,671.3	44.10	38.896	
7,450.0	7,372.2	9,108.4	7,530.0	20.8	41.2	-69.81	537.7	2,448.0	1,703.9	1,659.6	44.30	38.460	
7,500.0	7,417.7	9,127.5	7,530.0	20.8	41.4	-73.83	518.5	2,448.0	1,693.7	1,649.2	44.51	38.053	
7,550.0	7,461.4	9,150.6	7,530.0	20.7	41.7	-76.50	495.4	2,448.0	1,684.7	1,640.0	44.72	37.670	
7,600.0	7,502.9	9,177.5	7,530.0	20.7	42.0	-78.28	468.6	2,448.1	1,676.8	1,631.9	44.95	37.304	
7,650.0	7,541.9	9,207.9	7,530.0	20.6	42.3	-79.45	438.1	2,448.1	1,670.0	1,624.8	45.20	36.946	
7,700.0	7,578.0	9,241.7	7,530.0	20.5	42.7	-80.19	404.4	2,448.1	1,664.2	1,618.7	45.49	36.584	
7,750.0	7,611.1	9,278.5	7,530.0	20.4	43.1	-80.62	367.6	2,448.1	1,659.1	1,613.2	45.81	36.213	
7,800.0	7,640.8	9,318.1	7,530.0	20.4	43.5	-80.85	327.9	2,448.1	1,654.6	1,608.4	46.19	35.823	
7,850.0	7,667.0	9,360.2	7,530.0	20.3	44.0	-80.94	285.8	2,448.1	1,650.6	1,604.0	46.62	35.403	
7,900.0	7,689.4	9,404.5	7,530.0	20.3	44.6	-80.96	241.6	2,448.1	1,647.0	1,599.9	47.12	34.951	
7,950.0	7,707.9	9,450.6	7,530.0	20.3	45.1	-80.97	195.5	2,448.1	1,643.6	1,595.9	47.70	34.458	
8,000.0	7,722.2	9,498.2	7,530.0	20.3	45.7	-81.01	147.9	2,448.1	1,640.3	1,591.9	48.35	33.926	
8,050.0	7,732.4	9,546.9	7,530.0	20.3	46.3	-81.12	99.2	2,448.1	1,637.0	1,587.9	49.08	33.354	
8,100.0	7,738.4	9,596.4	7,530.0	20.4	46.9	-81.31	49.7	2,448.1	1,633.6	1,583.8	49.89	32.746	
8,143.7	7,740.0	9,639.9	7,530.0	20.5	47.4	-81.55	6.2	2,448.1	1,630.7	1,580.0	50.66	32.190	
8,200.0	7,740.0	9,696.1	7,530.0	20.6	48.1	-81.53	-50.0	2,448.1	1,626.8	1,575.1	51.72	31.455	
8,300.0	7,740.0	9,795.8	7,530.0	21.0	49.4	-81.50	-149.7	2,448.2	1,619.9	1,566.1	53.77	30.128	
8,400.0	7,740.0	9,895.6	7,530.0	21.5	50.7	-81.46	-249.5	2,448.2	1,613.0	1,557.0	56.01	28.800	
8,443.7	7,740.0	9,939.2	7,530.0	21.8	51.3	-81.44	-293.1	2,448.2	1,610.0	1,553.0	57.04	28.224	
8,500.0	7,740.0	9,995.4	7,530.0	22.2	52.1	-81.43	-349.3	2,448.2	1,606.4	1,548.0	58.42	27.497	
8,600.0	7,740.0	10,095.2	7,530.0	22.9	53.5	-81.41	-449.1	2,448.2	1,601.4	1,540.4	60.99	26.258	
8,700.0	7,740.0	10,195.2	7,530.0	23.7	54.9	-81.40	-549.1	2,448.2	1,598.0	1,534.4	63.68	25.096	
8,800.0	7,740.0	10,295.2	7,530.0	24.6	56.3	-81.39	-649.1	2,448.2	1,596.4	1,530.0	66.48	24.015	
8,842.7	7,740.0	10,337.9	7,530.0	25.1	56.9	-81.39	-691.8	2,448.2	1,596.3	1,528.6	67.70	23.578	
8,843.7	7,740.0	10,338.8	7,530.0	25.1	56.9	-81.39	-692.8	2,448.2	1,596.3	1,528.6	67.73	23.569	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,740.0	10,395.1	7,530.0	25.6	57.7	-81.39	-749.1	2,448.3	1,596.3	1,526.9	69.36	23.013		
9,000.0	7,740.0	10,495.1	7,530.0	26.7	59.2	-81.39	-849.1	2,448.3	1,596.3	1,524.0	72.33	22.070		
9,100.0	7,740.0	10,595.1	7,530.0	27.8	60.6	-81.39	-949.1	2,448.3	1,596.3	1,521.0	75.35	21.184		
9,200.0	7,740.0	10,695.1	7,530.0	29.0	62.1	-81.39	-1,049.1	2,448.3	1,596.3	1,517.9	78.43	20.353		
9,300.0	7,740.0	10,795.1	7,530.0	30.2	63.6	-81.39	-1,149.1	2,448.3	1,596.4	1,514.8	81.56	19.574		
9,343.7	7,740.0	10,838.8	7,530.0	30.8	64.3	-81.39	-1,192.8	2,448.3	1,596.4	1,513.4	82.93	19.249		
9,400.7	7,740.0	10,895.9	7,530.0	31.6	65.1	-81.39	-1,249.8	2,448.3	1,596.1	1,511.4	84.74	18.836		
9,500.0	7,740.0	10,995.1	7,530.0	32.9	66.6	-81.38	-1,349.1	2,448.4	1,595.1	1,507.2	87.91	18.146		
9,600.0	7,740.0	11,095.1	7,530.0	34.3	68.2	-81.38	-1,449.1	2,448.4	1,594.2	1,503.0	91.12	17.495		
9,700.0	7,740.0	11,195.1	7,530.0	35.7	69.7	-81.37	-1,549.1	2,448.4	1,593.2	1,498.8	94.36	16.883		
9,800.0	7,740.0	11,295.1	7,530.0	37.1	71.3	-81.37	-1,649.0	2,448.4	1,592.2	1,494.6	97.63	16.309		
9,900.0	7,740.0	11,395.1	7,530.0	38.6	72.8	-81.36	-1,749.0	2,448.4	1,591.3	1,490.4	100.91	15.770		
10,000.0	7,740.0	11,495.1	7,530.0	40.1	74.4	-81.36	-1,849.0	2,448.4	1,590.3	1,486.1	104.20	15.262		
10,100.0	7,740.0	11,595.1	7,530.0	41.6	76.0	-81.35	-1,949.0	2,448.5	1,589.3	1,481.8	107.51	14.783		
10,200.0	7,740.0	11,695.1	7,530.0	43.1	77.6	-81.35	-2,049.0	2,448.5	1,588.4	1,477.5	110.83	14.331		
10,300.0	7,740.0	11,795.1	7,530.0	44.7	79.2	-81.34	-2,149.0	2,448.5	1,587.4	1,473.2	114.16	13.905		
10,400.0	7,740.0	11,895.1	7,530.0	46.3	80.8	-81.33	-2,249.0	2,448.5	1,586.4	1,468.9	117.50	13.501		
10,500.0	7,740.0	11,995.1	7,530.0	47.8	82.4	-81.33	-2,349.0	2,448.5	1,585.5	1,464.6	120.85	13.119		
10,600.0	7,740.0	12,095.1	7,530.0	49.4	84.0	-81.32	-2,449.0	2,448.5	1,584.5	1,460.3	124.21	12.757		
10,700.0	7,740.0	12,195.1	7,530.0	51.0	85.6	-81.32	-2,549.0	2,448.6	1,583.5	1,455.9	127.57	12.413		
10,800.0	7,740.0	12,295.1	7,530.0	52.6	87.2	-81.31	-2,649.0	2,448.6	1,582.5	1,451.6	130.94	12.086		
10,900.0	7,740.0	12,395.1	7,530.0	54.2	88.9	-81.31	-2,749.0	2,448.6	1,581.6	1,447.3	134.32	11.775		
11,000.0	7,740.0	12,495.1	7,530.0	55.9	90.5	-81.30	-2,849.0	2,448.6	1,580.6	1,442.9	137.70	11.479		
11,100.0	7,740.0	12,595.1	7,530.0	57.5	92.1	-81.30	-2,949.0	2,448.6	1,579.6	1,438.6	141.09	11.196		
11,200.0	7,740.0	12,695.1	7,530.0	59.1	93.8	-81.29	-3,049.0	2,448.6	1,578.7	1,434.2	144.48	10.927		
11,300.0	7,740.0	12,795.1	7,530.0	60.8	95.4	-81.29	-3,149.0	2,448.7	1,577.7	1,429.8	147.87	10.669		
11,400.0	7,740.0	12,895.1	7,530.0	62.4	97.1	-81.28	-3,249.0	2,448.7	1,576.7	1,425.5	151.27	10.423		
11,500.0	7,740.0	12,995.0	7,530.0	64.1	98.7	-81.28	-3,349.0	2,448.7	1,575.8	1,421.1	154.67	10.188		
11,600.0	7,740.0	13,095.0	7,530.0	65.8	100.4	-81.27	-3,449.0	2,448.7	1,574.8	1,416.7	158.08	9.962		
11,700.0	7,740.0	13,195.0	7,530.0	67.4	102.1	-81.26	-3,549.0	2,448.7	1,573.8	1,412.4	161.48	9.746		
11,800.0	7,740.0	13,295.0	7,530.0	69.1	103.7	-81.26	-3,649.0	2,448.7	1,572.9	1,408.0	164.89	9.539		
11,900.0	7,740.0	13,395.0	7,530.0	70.8	105.4	-81.25	-3,748.9	2,448.8	1,571.9	1,403.6	168.31	9.340		
12,000.0	7,740.0	13,495.0	7,530.0	72.5	107.1	-81.25	-3,848.9	2,448.8	1,570.9	1,399.2	171.72	9.148		
12,100.0	7,740.0	13,595.0	7,530.0	74.1	108.7	-81.24	-3,948.9	2,448.8	1,570.0	1,394.8	175.14	8.964		
12,200.0	7,740.0	13,695.0	7,530.0	75.8	110.4	-81.24	-4,048.9	2,448.8	1,569.0	1,390.4	178.56	8.787		
12,300.0	7,740.0	13,795.0	7,530.0	77.5	112.1	-81.23	-4,148.9	2,448.8	1,568.0	1,386.1	181.98	8.617		
12,400.0	7,740.0	13,895.0	7,530.0	79.2	113.8	-81.23	-4,248.9	2,448.8	1,567.1	1,381.7	185.40	8.452		
12,500.0	7,740.0	13,995.0	7,530.0	80.9	115.5	-81.22	-4,348.9	2,448.9	1,566.1	1,377.3	188.82	8.294		
12,600.0	7,740.0	14,095.0	7,530.0	82.6	117.1	-81.22	-4,448.9	2,448.9	1,565.1	1,372.9	192.25	8.141		
12,700.0	7,740.0	14,195.0	7,530.0	84.3	118.8	-81.21	-4,548.9	2,448.9	1,564.2	1,368.5	195.67	7.994		
12,800.0	7,740.0	14,295.0	7,530.0	86.0	120.5	-81.21	-4,648.9	2,448.9	1,563.2	1,364.1	199.10	7.851		
12,900.0	7,740.0	14,395.0	7,530.0	87.7	122.2	-81.20	-4,748.9	2,448.9	1,562.2	1,359.7	202.53	7.713		
13,000.0	7,740.0	14,495.0	7,530.0	89.4	123.9	-81.19	-4,848.9	2,448.9	1,561.3	1,355.3	205.96	7.580		
13,100.0	7,740.0	14,595.0	7,530.0	91.1	125.6	-81.19	-4,948.9	2,449.0	1,560.3	1,350.9	209.39	7.451		
13,200.0	7,740.0	14,695.0	7,530.0	92.8	127.3	-81.18	-5,048.9	2,449.0	1,559.3	1,346.5	212.83	7.327		
13,300.0	7,740.0	14,795.0	7,530.0	94.5	129.0	-81.18	-5,148.9	2,449.0	1,558.4	1,342.1	216.26	7.206		
13,400.0	7,740.0	14,895.0	7,530.0	96.3	130.7	-81.17	-5,248.9	2,449.0	1,557.4	1,337.7	219.70	7.089		
13,500.0	7,740.0	14,995.0	7,530.0	98.0	132.4	-81.17	-5,348.9	2,449.0	1,556.4	1,333.3	223.13	6.975		
13,600.0	7,740.0	15,094.9	7,530.0	99.7	134.1	-81.16	-5,448.9	2,449.0	1,555.5	1,328.9	226.57	6.865		
13,700.0	7,740.0	15,194.9	7,530.0	101.4	135.8	-81.16	-5,548.9	2,449.1	1,554.5	1,324.5	230.00	6.759		
13,800.0	7,740.0	15,294.9	7,530.0	103.1	137.5	-81.15	-5,648.9	2,449.1	1,553.5	1,320.1	233.44	6.655		
13,900.0	7,740.0	15,394.9	7,530.0	104.8	139.2	-81.14	-5,748.9	2,449.1	1,552.6	1,315.7	236.88	6.554		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	15,494.9	7,530.0	106.6	140.9	-81.14	-5,848.8	2,449.1	1,551.6	1,311.3	240.32	6.456		
14,100.0	7,740.0	15,594.9	7,530.0	108.3	142.6	-81.13	-5,948.8	2,449.1	1,550.6	1,306.9	243.76	6.361		
14,200.0	7,740.0	15,694.9	7,530.0	110.0	144.3	-81.13	-6,048.8	2,449.1	1,549.7	1,302.5	247.20	6.269		
14,300.0	7,740.0	15,794.9	7,530.0	111.7	146.0	-81.12	-6,148.8	2,449.2	1,548.7	1,298.0	250.64	6.179		
14,400.0	7,740.0	15,894.9	7,530.0	113.5	147.7	-81.12	-6,248.8	2,449.2	1,547.7	1,293.6	254.08	6.091		
14,500.0	7,740.0	15,994.9	7,530.0	115.2	149.4	-81.11	-6,348.8	2,449.2	1,546.8	1,289.2	257.52	6.006		
14,600.0	7,740.0	16,094.9	7,530.0	116.9	151.2	-81.11	-6,448.8	2,449.2	1,545.8	1,284.8	260.97	5.923		
14,700.0	7,740.0	16,194.9	7,530.0	118.6	152.9	-81.10	-6,548.8	2,449.2	1,544.8	1,280.4	264.41	5.843		
14,800.0	7,740.0	16,294.9	7,530.0	120.4	154.6	-81.09	-6,648.8	2,449.2	1,543.9	1,276.0	267.85	5.764		
14,900.0	7,740.0	16,394.9	7,530.0	122.1	156.3	-81.09	-6,748.8	2,449.3	1,542.9	1,271.6	271.29	5.687		
15,000.0	7,740.0	16,494.9	7,530.0	123.8	158.0	-81.08	-6,848.8	2,449.3	1,541.9	1,267.2	274.74	5.612		
15,100.0	7,740.0	16,594.9	7,530.0	125.6	159.7	-81.08	-6,948.8	2,449.3	1,541.0	1,262.8	278.18	5.539		
15,200.0	7,740.0	16,694.9	7,530.0	127.3	161.5	-81.07	-7,048.8	2,449.3	1,540.0	1,258.4	281.63	5.468		
15,300.0	7,740.0	16,794.9	7,530.0	129.0	163.2	-81.07	-7,148.8	2,449.3	1,539.0	1,253.9	285.07	5.399		
15,400.0	7,740.0	16,894.9	7,530.0	130.7	164.9	-81.06	-7,248.8	2,449.3	1,538.1	1,249.5	288.52	5.331		
15,500.0	7,740.0	16,994.9	7,530.0	132.5	166.6	-81.05	-7,348.8	2,449.4	1,537.1	1,245.1	291.96	5.265		
15,600.0	7,740.0	17,094.9	7,530.0	134.2	168.3	-81.05	-7,448.8	2,449.4	1,536.1	1,240.7	295.41	5.200		
15,700.0	7,740.0	17,194.8	7,530.0	135.9	170.1	-81.04	-7,548.8	2,449.4	1,535.2	1,236.3	298.86	5.137		
15,800.0	7,740.0	17,294.8	7,530.0	137.7	171.8	-81.04	-7,648.8	2,449.4	1,534.2	1,231.9	302.30	5.075		
15,900.0	7,740.0	17,394.8	7,530.0	139.4	173.5	-81.03	-7,748.8	2,449.4	1,533.2	1,227.5	305.75	5.015		
16,000.0	7,740.0	17,494.8	7,530.0	141.1	175.2	-81.03	-7,848.8	2,449.4	1,532.3	1,223.1	309.20	4.956		
16,084.2	7,740.0	17,579.0	7,530.0	142.6	176.7	-81.02	-7,932.9	2,449.4	1,531.4	1,219.3	312.10	4.907 CC, ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	29.0	29.0	0.0	0.0	65.65	1,870.2	4,132.4	4,535.9					
100.0	100.0	129.0	129.0	0.2	0.2	65.65	1,870.2	4,132.4	4,535.9	4,535.5	0.35	N/A		
200.0	200.0	229.0	229.0	0.3	0.4	65.65	1,870.2	4,132.4	4,535.9	4,535.2	0.70	6,448.801		
300.0	300.0	453.7	453.7	0.5	0.8	65.62	1,871.1	4,128.9	4,534.8	4,533.5	1.27	3,564.246		
400.0	400.0	710.8	710.3	0.7	1.3	65.50	1,875.0	4,114.5	4,530.3	4,528.4	1.92	2,363.231		
500.0	500.0	966.0	964.2	0.8	1.9	65.29	1,881.7	4,089.2	4,522.4	4,519.8	2.60	1,737.288		
600.0	600.0	1,218.5	1,213.9	1.0	2.6	64.99	1,891.3	4,053.5	4,511.1	4,507.7	3.35	1,347.301		
700.0	700.0	1,464.5	1,455.4	1.2	3.5	64.60	1,903.3	4,008.5	4,496.5	4,492.3	4.16	1,081.511		
800.0	800.0	1,562.2	1,551.0	1.4	3.9	64.43	1,908.6	3,988.7	4,480.4	4,475.8	4.60	972.965		
900.0	900.0	1,660.0	1,646.6	1.5	4.3	64.25	1,913.9	3,968.8	4,464.3	4,459.2	5.06	882.912		
1,000.0	1,000.0	1,757.8	1,742.1	1.7	4.7	64.08	1,919.2	3,949.0	4,448.2	4,442.7	5.51	807.073		
1,100.0	1,100.0	1,855.4	1,837.6	1.9	5.1	12.54	1,924.5	3,929.2	4,431.4	4,425.4	5.97	742.320		
1,200.0	1,200.0	1,952.8	1,932.8	2.1	5.4	12.41	1,929.8	3,909.4	4,412.9	4,406.4	6.43	686.350		
1,300.0	1,299.9	2,050.0	2,027.8	2.3	5.8	12.29	1,935.1	3,889.7	4,392.7	4,385.9	6.89	637.479		
1,400.0	1,399.7	2,146.8	2,122.5	2.4	6.2	12.17	1,940.4	3,870.0	4,371.0	4,363.6	7.35	594.423		
1,500.0	1,499.4	2,243.3	2,216.8	2.6	6.6	12.06	1,945.6	3,850.5	4,347.6	4,339.8	7.82	556.185		
1,600.0	1,598.9	2,339.4	2,310.8	2.8	7.0	11.96	1,950.8	3,831.0	4,322.6	4,314.3	8.28	521.980		
1,700.0	1,698.3	2,435.1	2,404.4	3.1	7.4	11.86	1,956.0	3,811.5	4,296.0	4,287.2	8.75	491.186		
1,800.0	1,797.4	2,530.4	2,497.6	3.3	7.8	11.77	1,961.2	3,792.2	4,267.7	4,258.5	9.21	463.299		
1,900.0	1,896.3	2,625.3	2,590.3	3.6	8.2	11.69	1,966.3	3,772.9	4,237.9	4,228.2	9.68	437.913		
1,915.7	1,911.9	2,640.2	2,604.8	3.6	8.2	11.67	1,967.1	3,769.9	4,233.0	4,223.3	9.75	434.122		
2,000.0	1,995.0	2,719.8	2,682.7	3.8	8.6	11.55	1,971.5	3,753.8	4,207.0	4,196.9	10.14	414.738		
2,100.0	2,093.8	2,814.3	2,775.1	4.1	8.9	11.40	1,976.6	3,734.6	4,176.1	4,165.5	10.61	393.538		
2,200.0	2,192.5	2,908.9	2,867.6	4.4	9.3	11.25	1,981.7	3,715.4	4,145.3	4,134.2	11.08	374.077		
2,300.0	2,291.2	3,003.4	2,960.0	4.7	9.7	11.09	1,986.9	3,696.2	4,114.5	4,102.9	11.55	356.153		
2,400.0	2,389.9	3,098.0	3,052.4	5.0	10.1	10.94	1,992.0	3,677.0	4,083.7	4,071.7	12.03	339.593		
2,500.0	2,488.7	3,192.5	3,144.9	5.3	10.5	10.78	1,997.1	3,657.8	4,052.9	4,040.4	12.50	324.251		
2,600.0	2,587.4	3,287.0	3,237.3	5.6	10.9	10.62	2,002.3	3,638.6	4,022.2	4,009.2	12.97	309.999		
2,700.0	2,686.1	3,381.6	3,329.7	5.9	11.3	10.45	2,007.4	3,619.5	3,991.5	3,978.1	13.45	296.726		
2,800.0	2,784.8	3,476.1	3,422.1	6.2	11.7	10.29	2,012.5	3,600.3	3,960.8	3,946.9	13.93	284.336		
2,900.0	2,883.6	3,570.6	3,514.6	6.5	12.0	10.12	2,017.7	3,581.1	3,930.2	3,915.8	14.41	272.745		
3,000.0	2,982.3	3,665.2	3,607.0	6.9	12.4	9.95	2,022.8	3,561.9	3,899.6	3,884.7	14.89	261.879		
3,100.0	3,081.0	3,759.7	3,699.4	7.2	12.8	9.77	2,027.9	3,542.7	3,869.0	3,853.7	15.37	251.672		
3,200.0	3,179.7	3,854.3	3,791.9	7.5	13.2	9.60	2,033.1	3,523.5	3,838.5	3,822.6	15.86	242.068		
3,300.0	3,278.5	3,948.8	3,884.3	7.8	13.6	9.42	2,038.2	3,504.3	3,808.0	3,791.6	16.34	233.015		
3,400.0	3,377.2	4,043.3	3,976.7	8.1	14.0	9.24	2,043.3	3,485.2	3,777.5	3,760.7	16.83	224.467		
3,500.0	3,475.9	4,137.9	4,069.1	8.4	14.4	9.05	2,048.4	3,466.0	3,747.1	3,729.8	17.32	216.384		
3,600.0	3,574.6	4,232.4	4,161.6	8.8	14.8	8.86	2,053.6	3,446.8	3,716.7	3,698.9	17.81	208.729		
3,700.0	3,673.4	4,326.9	4,254.0	9.1	15.1	8.67	2,058.7	3,427.6	3,686.3	3,668.0	18.30	201.470		
3,800.0	3,772.1	4,421.5	4,346.4	9.4	15.5	8.48	2,063.8	3,408.4	3,656.0	3,637.2	18.79	194.577		
3,900.0	3,870.8	4,516.0	4,438.8	9.7	15.9	8.28	2,069.0	3,389.2	3,625.7	3,606.4	19.28	188.022		
4,000.0	3,969.5	4,610.6	4,531.3	10.0	16.3	8.08	2,074.1	3,370.0	3,595.5	3,575.7	19.78	181.784		
4,100.0	4,068.3	4,705.1	4,623.7	10.4	16.7	7.87	2,079.2	3,350.9	3,565.3	3,545.0	20.28	175.838		
4,200.0	4,167.0	4,799.6	4,716.1	10.7	17.1	7.67	2,084.4	3,331.7	3,535.1	3,514.3	20.77	170.165		
4,300.0	4,265.7	4,894.2	4,808.6	11.0	17.5	7.45	2,089.5	3,312.5	3,505.0	3,483.7	21.27	164.748		
4,400.0	4,364.4	4,988.7	4,901.0	11.3	17.9	7.24	2,094.6	3,293.3	3,474.9	3,453.1	21.78	159.569		
4,500.0	4,463.2	5,083.2	4,993.4	11.7	18.3	7.02	2,099.8	3,274.1	3,444.9	3,422.6	22.28	154.613		
4,600.0	4,561.9	5,177.8	5,085.8	12.0	18.6	6.80	2,104.9	3,254.9	3,414.9	3,392.1	22.79	149.867		
4,700.0	4,660.6	5,272.3	5,178.3	12.3	19.0	6.57	2,110.0	3,235.7	3,385.0	3,361.7	23.29	145.317		
4,800.0	4,759.3	5,366.8	5,270.7	12.6	19.4	6.34	2,115.2	3,216.6	3,355.1	3,331.3	23.80	140.952		
4,900.0	4,858.1	5,461.4	5,363.1	13.0	19.8	6.11	2,120.3	3,197.4	3,325.3	3,301.0	24.31	136.761		
5,000.0	4,956.8	5,555.9	5,455.5	13.3	20.2	5.87	2,125.4	3,178.2	3,295.5	3,270.7	24.83	132.734		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,055.5	5,650.5	5,548.0	13.6	20.6	5.63	2,130.6	3,159.0	3,265.8	3,240.4	25.34	128.861	
5,200.0	5,154.2	5,745.0	5,640.4	13.9	21.0	5.38	2,135.7	3,139.8	3,236.1	3,210.3	25.86	125.135	
5,300.0	5,253.0	5,839.5	5,732.8	14.3	21.4	5.13	2,140.8	3,120.6	3,206.5	3,180.1	26.38	121.547	
5,400.0	5,351.7	5,934.1	5,825.3	14.6	21.8	4.87	2,146.0	3,101.4	3,177.0	3,150.1	26.90	118.090	
5,500.0	5,450.4	6,028.6	5,917.7	14.9	22.2	4.61	2,151.1	3,082.3	3,147.5	3,120.0	27.43	114.756	
5,600.0	5,549.1	6,116.9	7,770.0	15.3	39.8	45.55	411.7	2,698.1	3,093.3	3,060.4	32.95	93.882	
5,700.0	5,647.9	9,407.0	7,770.0	15.6	39.6	45.26	421.7	2,698.1	3,015.2	2,981.7	33.48	90.059	
5,800.0	5,746.6	9,397.1	7,770.0	15.9	39.5	44.96	431.6	2,698.1	2,938.4	2,904.4	34.03	86.349	
5,900.0	5,845.3	9,387.1	7,770.0	16.2	39.4	44.67	441.5	2,698.1	2,863.0	2,828.4	34.60	82.752	
6,000.0	5,944.1	9,377.2	7,770.0	16.6	39.3	44.37	451.4	2,698.1	2,789.0	2,753.9	35.18	79.277	
6,100.0	6,042.8	9,367.3	7,770.0	16.9	39.2	44.08	461.4	2,698.1	2,716.8	2,681.0	35.78	75.927	
6,200.0	6,141.5	9,357.3	7,770.0	17.2	39.1	43.78	471.3	2,698.1	2,646.2	2,609.8	36.40	72.706	
6,300.0	6,240.2	9,347.4	7,770.0	17.5	38.9	43.48	481.2	2,698.1	2,577.6	2,540.6	37.02	69.620	
6,400.0	6,339.0	9,337.5	7,770.0	17.9	38.8	43.19	491.1	2,698.1	2,511.1	2,473.4	37.66	66.671	
6,500.0	6,437.7	9,327.6	7,770.0	18.2	38.7	42.89	501.1	2,698.1	2,446.8	2,408.5	38.31	63.866	
6,600.0	6,536.4	9,317.6	7,770.0	18.5	38.6	42.59	511.0	2,698.1	2,384.9	2,346.0	38.96	61.209	
6,700.0	6,635.1	9,307.7	7,770.0	18.9	38.5	42.29	520.9	2,698.1	2,325.7	2,286.1	39.62	58.705	
6,800.0	6,733.9	9,297.8	7,770.0	19.2	38.4	42.00	530.9	2,698.1	2,269.2	2,229.0	40.26	56.358	
6,900.0	6,832.6	9,287.9	7,770.0	19.5	38.3	41.70	540.8	2,698.0	2,215.8	2,174.9	40.90	54.172	
7,000.0	6,931.3	9,277.9	7,770.0	19.8	38.1	41.40	550.7	2,698.0	2,165.7	2,124.1	41.52	52.155	
7,100.0	7,030.0	9,268.0	7,770.0	20.2	38.0	41.10	560.6	2,698.0	2,119.0	2,076.9	42.12	50.311	
7,191.8	7,120.7	9,258.9	7,770.0	20.5	37.9	40.83	569.8	2,698.0	2,079.4	2,036.8	42.63	48.774	
7,200.0	7,128.8	9,258.1	7,770.0	20.5	37.9	36.04	570.5	2,698.0	2,076.1	2,033.4	42.68	48.645	
7,250.0	7,178.3	9,256.0	7,770.0	20.6	37.9	-0.84	572.6	2,698.0	2,055.8	2,012.9	42.93	47.888	
7,300.0	7,227.8	9,258.3	7,770.0	20.7	37.9	-34.62	570.3	2,698.0	2,036.3	1,993.1	43.19	47.151	
7,350.0	7,276.8	9,264.9	7,770.0	20.8	38.0	-54.22	563.7	2,698.0	2,017.7	1,974.2	43.45	46.439	
7,400.0	7,325.1	9,275.8	7,770.0	20.8	38.1	-65.28	552.8	2,698.0	2,000.1	1,956.4	43.71	45.755	
7,450.0	7,372.2	9,290.9	7,770.0	20.8	38.3	-72.17	537.8	2,698.0	1,983.7	1,939.7	43.99	45.099	
7,500.0	7,417.7	9,310.0	7,770.0	20.8	38.5	-76.82	518.6	2,698.1	1,968.4	1,924.1	44.27	44.466	
7,550.0	7,461.4	9,333.2	7,770.0	20.7	38.8	-80.12	495.5	2,698.1	1,954.3	1,909.8	44.56	43.855	
7,600.0	7,502.9	9,360.0	7,770.0	20.7	39.1	-82.53	468.6	2,698.1	1,941.5	1,896.6	44.88	43.261	
7,650.0	7,541.9	9,390.5	7,770.0	20.6	39.5	-84.31	438.2	2,698.1	1,929.8	1,884.6	45.22	42.681	
7,700.0	7,578.0	9,424.2	7,770.0	20.5	39.9	-85.64	404.4	2,698.1	1,919.3	1,873.7	45.59	42.102	
7,750.0	7,611.1	9,461.0	7,770.0	20.4	40.3	-86.64	367.6	2,698.1	1,909.8	1,863.8	46.00	41.521	
7,800.0	7,640.8	9,500.7	7,770.0	20.4	40.8	-87.39	328.0	2,698.1	1,901.3	1,854.9	46.45	40.933	
7,850.0	7,667.0	9,542.8	7,770.0	20.3	41.3	-87.95	285.9	2,698.1	1,893.7	1,846.8	46.96	40.327	
7,900.0	7,689.4	9,587.0	7,770.0	20.3	41.9	-88.40	241.6	2,698.1	1,886.9	1,839.4	47.53	39.703	
7,950.0	7,707.9	9,633.1	7,770.0	20.3	42.4	-88.77	195.5	2,698.1	1,880.8	1,832.7	48.16	39.056	
8,000.0	7,722.2	9,680.7	7,770.0	20.3	43.1	-89.10	147.9	2,698.1	1,875.4	1,826.5	48.86	38.386	
8,050.0	7,732.4	9,729.4	7,770.0	20.3	43.7	-89.41	99.2	2,698.1	1,870.6	1,821.0	49.62	37.696	
8,100.0	7,738.4	9,778.9	7,770.0	20.4	44.3	-89.74	49.8	2,698.1	1,866.3	1,815.9	50.46	36.989	
8,143.7	7,740.0	9,822.4	7,770.0	20.5	44.9	-90.03	6.2	2,698.1	1,863.1	1,811.8	51.24	36.363	
8,200.0	7,740.0	9,878.6	7,770.0	20.6	45.7	-90.03	-49.9	2,698.1	1,859.1	1,806.8	52.30	35.545	
8,300.0	7,740.0	9,978.3	7,770.0	21.0	47.1	-90.03	-149.7	2,698.2	1,852.2	1,797.8	54.37	34.066	
8,400.0	7,740.0	10,078.1	7,770.0	21.5	48.4	-90.03	-249.5	2,698.2	1,845.2	1,788.6	56.64	32.581	
8,443.7	7,740.0	10,121.7	7,770.0	21.8	49.1	-90.03	-293.0	2,698.2	1,842.2	1,784.5	57.68	31.937	
8,500.0	7,740.0	10,177.9	7,770.0	22.2	49.9	-90.03	-349.2	2,698.2	1,838.5	1,779.5	59.08	31.121	
8,600.0	7,740.0	10,277.7	7,770.0	22.9	51.3	-90.03	-449.1	2,698.2	1,833.4	1,771.8	61.67	29.729	
8,700.0	7,740.0	10,377.7	7,770.0	23.7	52.7	-90.03	-549.0	2,698.2	1,830.1	1,765.7	64.40	28.419	
8,800.0	7,740.0	10,477.7	7,770.0	24.6	54.2	-90.03	-649.0	2,698.2	1,828.5	1,761.2	67.23	27.198	
8,842.7	7,740.0	10,520.4	7,770.0	25.1	54.9	-90.03	-691.8	2,698.3	1,828.3	1,759.8	68.47	26.703	
8,843.7	7,740.0	10,521.3	7,770.0	25.1	54.9	-90.03	-692.7	2,698.3	1,828.3	1,759.8	68.50	26.692	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
8,900.0	7,740.0	10,577.7	7,770.0	25.6	55.7	-90.03	-749.0	2,698.3	1,828.3	1,758.2	70.15	26.062		
9,000.0	7,740.0	10,677.7	7,770.0	26.7	57.2	-90.03	-849.0	2,698.3	1,828.3	1,755.2	73.15	24.994		
9,100.0	7,740.0	10,777.7	7,770.0	27.8	58.7	-90.03	-949.0	2,698.3	1,828.3	1,752.1	76.21	23.990		
9,200.0	7,740.0	10,877.7	7,770.0	29.0	60.3	-90.03	-1,049.0	2,698.3	1,828.4	1,749.0	79.33	23.048		
9,300.0	7,740.0	10,977.7	7,770.0	30.2	61.8	-90.03	-1,149.0	2,698.3	1,828.4	1,745.9	82.49	22.166		
9,343.7	7,740.0	11,021.3	7,770.0	30.8	62.5	-90.03	-1,192.7	2,698.3	1,828.4	1,744.5	83.88	21.798		
9,400.7	7,740.0	11,078.4	7,770.0	31.6	63.4	-90.03	-1,249.7	2,698.3	1,828.1	1,742.4	85.71	21.330		
9,500.0	7,740.0	11,177.7	7,770.0	32.9	64.9	-90.03	-1,349.0	2,698.4	1,827.1	1,738.2	88.91	20.550		
9,600.0	7,740.0	11,277.7	7,770.0	34.3	66.5	-90.03	-1,449.0	2,698.4	1,826.2	1,734.0	92.17	19.813		
9,700.0	7,740.0	11,377.6	7,770.0	35.7	68.1	-90.03	-1,549.0	2,698.4	1,825.2	1,729.7	95.45	19.122		
9,800.0	7,740.0	11,477.6	7,770.0	37.1	69.7	-90.03	-1,649.0	2,698.4	1,824.2	1,725.4	98.75	18.473		
9,900.0	7,740.0	11,577.6	7,770.0	38.6	71.3	-90.03	-1,749.0	2,698.4	1,823.2	1,721.2	102.07	17.863		
10,000.0	7,740.0	11,677.6	7,770.0	40.1	72.9	-90.03	-1,849.0	2,698.4	1,822.2	1,716.8	105.40	17.289		
10,100.0	7,740.0	11,777.6	7,770.0	41.6	74.5	-90.03	-1,949.0	2,698.5	1,821.3	1,712.5	108.75	16.748		
10,200.0	7,740.0	11,877.6	7,770.0	43.1	76.1	-90.03	-2,049.0	2,698.5	1,820.3	1,708.2	112.11	16.237		
10,300.0	7,740.0	11,977.6	7,770.0	44.7	77.8	-90.03	-2,149.0	2,698.5	1,819.3	1,703.8	115.48	15.754		
10,400.0	7,740.0	12,077.6	7,770.0	46.3	79.4	-90.03	-2,249.0	2,698.5	1,818.3	1,699.5	118.86	15.298		
10,500.0	7,740.0	12,177.6	7,770.0	47.8	81.0	-90.03	-2,349.0	2,698.5	1,817.3	1,695.1	122.25	14.866		
10,600.0	7,740.0	12,277.6	7,770.0	49.4	82.7	-90.03	-2,449.0	2,698.5	1,816.4	1,690.7	125.65	14.456		
10,700.0	7,740.0	12,377.6	7,770.0	51.0	84.3	-90.03	-2,549.0	2,698.6	1,815.4	1,686.3	129.05	14.067		
10,800.0	7,740.0	12,477.6	7,770.0	52.6	86.0	-90.03	-2,649.0	2,698.6	1,814.4	1,681.9	132.46	13.698		
10,900.0	7,740.0	12,577.6	7,770.0	54.2	87.6	-90.03	-2,749.0	2,698.6	1,813.4	1,677.6	135.88	13.346		
11,000.0	7,740.0	12,677.6	7,770.0	55.9	89.3	-90.03	-2,848.9	2,698.6	1,812.4	1,673.2	139.30	13.011		
11,100.0	7,740.0	12,777.6	7,770.0	57.5	91.0	-90.03	-2,948.9	2,698.6	1,811.5	1,668.7	142.72	12.692		
11,200.0	7,740.0	12,877.6	7,770.0	59.1	92.6	-90.03	-3,048.9	2,698.6	1,810.5	1,664.3	146.16	12.387		
11,300.0	7,740.0	12,977.6	7,770.0	60.8	94.3	-90.03	-3,148.9	2,698.7	1,809.5	1,659.9	149.59	12.096		
11,400.0	7,740.0	13,077.6	7,770.0	62.4	96.0	-90.03	-3,248.9	2,698.7	1,808.5	1,655.5	153.03	11.818		
11,500.0	7,740.0	13,177.6	7,770.0	64.1	97.6	-90.03	-3,348.9	2,698.7	1,807.6	1,651.1	156.47	11.552		
11,600.0	7,740.0	13,277.6	7,770.0	65.8	99.3	-90.03	-3,448.9	2,698.7	1,806.6	1,646.7	159.92	11.297		
11,700.0	7,740.0	13,377.6	7,770.0	67.4	101.0	-90.03	-3,548.9	2,698.7	1,805.6	1,642.2	163.37	11.052		
11,800.0	7,740.0	13,477.5	7,770.0	69.1	102.7	-90.03	-3,648.9	2,698.7	1,804.6	1,637.8	166.82	10.818		
11,900.0	7,740.0	13,577.5	7,770.0	70.8	104.4	-90.03	-3,748.9	2,698.8	1,803.6	1,633.4	170.27	10.593		
12,000.0	7,740.0	13,677.5	7,770.0	72.5	106.0	-90.03	-3,848.9	2,698.8	1,802.7	1,628.9	173.73	10.376		
12,100.0	7,740.0	13,777.5	7,770.0	74.1	107.7	-90.03	-3,948.9	2,698.8	1,801.7	1,624.5	177.19	10.168		
12,200.0	7,740.0	13,877.5	7,770.0	75.8	109.4	-90.03	-4,048.9	2,698.8	1,800.7	1,620.1	180.65	9.968		
12,300.0	7,740.0	13,977.5	7,770.0	77.5	111.1	-90.03	-4,148.9	2,698.8	1,799.7	1,615.6	184.11	9.775		
12,400.0	7,740.0	14,077.5	7,770.0	79.2	112.8	-90.03	-4,248.9	2,698.8	1,798.7	1,611.2	187.57	9.590		
12,500.0	7,740.0	14,177.5	7,770.0	80.9	114.5	-90.03	-4,348.9	2,698.9	1,797.8	1,606.7	191.04	9.410		
12,600.0	7,740.0	14,277.5	7,770.0	82.6	116.2	-90.03	-4,448.9	2,698.9	1,796.8	1,602.3	194.51	9.238		
12,700.0	7,740.0	14,377.5	7,770.0	84.3	117.9	-90.03	-4,548.9	2,698.9	1,795.8	1,597.8	197.98	9.071		
12,800.0	7,740.0	14,477.5	7,770.0	86.0	119.6	-90.03	-4,648.9	2,698.9	1,794.8	1,593.4	201.45	8.910		
12,900.0	7,740.0	14,577.5	7,770.0	87.7	121.3	-90.03	-4,748.9	2,698.9	1,793.9	1,588.9	204.92	8.754		
13,000.0	7,740.0	14,677.5	7,770.0	89.4	123.0	-90.03	-4,848.9	2,698.9	1,792.9	1,584.5	208.39	8.603		
13,100.0	7,740.0	14,777.5	7,770.0	91.1	124.7	-90.03	-4,948.8	2,699.0	1,791.9	1,580.0	211.87	8.458		
13,200.0	7,740.0	14,877.5	7,770.0	92.8	126.4	-90.03	-5,048.8	2,699.0	1,790.9	1,575.6	215.34	8.317		
13,300.0	7,740.0	14,977.5	7,770.0	94.5	128.1	-90.03	-5,148.8	2,699.0	1,789.9	1,571.1	218.82	8.180		
13,400.0	7,740.0	15,077.5	7,770.0	96.3	129.9	-90.03	-5,248.8	2,699.0	1,789.0	1,566.7	222.30	8.047		
13,500.0	7,740.0	15,177.5	7,770.0	98.0	131.6	-90.03	-5,348.8	2,699.0	1,788.0	1,562.2	225.78	7.919		
13,600.0	7,740.0	15,277.5	7,770.0	99.7	133.3	-90.03	-5,448.8	2,699.0	1,787.0	1,557.7	229.26	7.795		
13,700.0	7,740.0	15,377.5	7,770.0	101.4	135.0	-90.03	-5,548.8	2,699.1	1,786.0	1,553.3	232.74	7.674		
13,800.0	7,740.0	15,477.5	7,770.0	103.1	136.7	-90.03	-5,648.8	2,699.1	1,785.0	1,548.8	236.22	7.557		
13,900.0	7,740.0	15,577.4	7,770.0	104.8	138.4	-90.03	-5,748.8	2,699.1	1,784.1	1,544.4	239.70	7.443		

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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	15,677.4	7,770.0	106.6	140.1	-90.03	-5,848.8	2,699.1	1,783.1	1,539.9	243.19	7.332		
14,100.0	7,740.0	15,777.4	7,770.0	108.3	141.9	-90.03	-5,948.8	2,699.1	1,782.1	1,535.4	246.67	7.225		
14,200.0	7,740.0	15,877.4	7,770.0	110.0	143.6	-90.03	-6,048.8	2,699.1	1,781.1	1,531.0	250.16	7.120		
14,300.0	7,740.0	15,977.4	7,770.0	111.7	145.3	-90.03	-6,148.8	2,699.2	1,780.1	1,526.5	253.64	7.018		
14,400.0	7,740.0	16,077.4	7,770.0	113.5	147.0	-90.03	-6,248.8	2,699.2	1,779.2	1,522.0	257.13	6.919		
14,500.0	7,740.0	16,177.4	7,770.0	115.2	148.7	-90.03	-6,348.8	2,699.2	1,778.2	1,517.6	260.61	6.823		
14,600.0	7,740.0	16,277.4	7,770.0	116.9	150.5	-90.03	-6,448.8	2,699.2	1,777.2	1,513.1	264.10	6.729		
14,700.0	7,740.0	16,377.4	7,770.0	118.6	152.2	-90.03	-6,548.8	2,699.2	1,776.2	1,508.6	267.59	6.638		
14,800.0	7,740.0	16,477.4	7,770.0	120.4	153.9	-90.03	-6,648.8	2,699.2	1,775.3	1,504.2	271.08	6.549		
14,900.0	7,740.0	16,577.4	7,770.0	122.1	155.6	-90.03	-6,748.8	2,699.3	1,774.3	1,499.7	274.57	6.462		
15,000.0	7,740.0	16,677.4	7,770.0	123.8	157.3	-90.03	-6,848.8	2,699.3	1,773.3	1,495.2	278.06	6.377		
15,100.0	7,740.0	16,777.4	7,770.0	125.6	159.1	-90.03	-6,948.8	2,699.3	1,772.3	1,490.8	281.55	6.295		
15,200.0	7,740.0	16,877.4	7,770.0	127.3	160.8	-90.03	-7,048.7	2,699.3	1,771.3	1,486.3	285.04	6.214		
15,300.0	7,740.0	16,977.4	7,770.0	129.0	162.5	-90.03	-7,148.7	2,699.3	1,770.4	1,481.8	288.53	6.136		
15,400.0	7,740.0	17,077.4	7,770.0	130.7	164.2	-90.03	-7,248.7	2,699.3	1,769.4	1,477.4	292.02	6.059		
15,500.0	7,740.0	17,177.4	7,770.0	132.5	166.0	-90.03	-7,348.7	2,699.4	1,768.4	1,472.9	295.51	5.984		
15,600.0	7,740.0	17,277.4	7,770.0	134.2	167.7	-90.03	-7,448.7	2,699.4	1,767.4	1,468.4	299.00	5.911		
15,700.0	7,740.0	17,377.4	7,770.0	135.9	169.4	-90.03	-7,548.7	2,699.4	1,766.4	1,464.0	302.49	5.840		
15,800.0	7,740.0	17,477.4	7,770.0	137.7	171.2	-90.03	-7,648.7	2,699.4	1,765.5	1,459.5	305.99	5.770		
15,900.0	7,740.0	17,577.4	7,770.0	139.4	172.9	-90.03	-7,748.7	2,699.4	1,764.5	1,455.0	309.48	5.701		
16,000.0	7,740.0	17,677.3	7,770.0	141.1	174.6	-90.03	-7,848.7	2,699.4	1,763.5	1,450.5	312.97	5.635		
16,084.2	7,740.0	17,761.5	7,770.0	142.6	176.1	-90.03	-7,932.9	2,699.5	1,762.7	1,446.8	315.91	5.580	CC, ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1C-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	28.0	28.0	0.0	0.0	65.71	1,869.8	4,142.5	4,544.9					
100.0	100.0	128.0	128.0	0.2	0.2	65.71	1,869.8	4,142.5	4,544.9	4,544.6	0.35	N/A		
200.0	200.0	228.0	228.0	0.3	0.4	65.71	1,869.8	4,142.5	4,544.9	4,544.2	0.70	6,477.715		
300.0	300.0	366.8	366.8	0.5	0.6	65.70	1,869.9	4,142.1	4,544.8	4,543.7	1.12	4,062.999		
400.0	400.0	605.1	605.0	0.7	1.1	65.64	1,872.4	4,134.8	4,542.4	4,540.7	1.72	2,646.619		
500.0	500.0	842.4	841.6	0.8	1.5	65.49	1,878.0	4,118.2	4,537.0	4,534.7	2.34	1,938.235		
600.0	600.0	1,077.8	1,075.4	1.0	2.1	65.25	1,886.7	4,092.5	4,528.6	4,525.6	3.01	1,504.376		
700.0	700.0	1,310.6	1,305.4	1.2	2.8	64.93	1,898.2	4,058.2	4,517.3	4,513.5	3.74	1,207.709		
800.0	800.0	1,412.1	1,405.3	1.4	3.2	64.77	1,903.9	4,041.3	4,504.4	4,500.3	4.18	1,078.712		
900.0	900.0	1,510.5	1,502.2	1.5	3.5	64.62	1,909.5	4,024.8	4,491.6	4,487.0	4.61	974.811		
1,000.0	1,000.0	1,609.0	1,599.1	1.7	3.8	64.46	1,915.0	4,008.4	4,478.9	4,473.8	5.04	888.108		
1,100.0	1,100.0	1,707.3	1,695.9	1.9	4.2	12.94	1,920.6	3,991.9	4,465.3	4,459.8	5.48	814.650		
1,200.0	1,200.0	1,805.5	1,792.5	2.1	4.5	12.83	1,926.1	3,975.5	4,450.1	4,444.1	5.92	751.568		
1,300.0	1,299.9	1,903.4	1,888.9	2.3	4.9	12.72	1,931.6	3,959.1	4,433.2	4,426.8	6.36	696.799		
1,400.0	1,399.7	2,001.1	1,985.0	2.4	5.2	12.62	1,937.1	3,942.8	4,414.7	4,407.9	6.80	648.784		
1,500.0	1,499.4	2,098.4	2,080.9	2.6	5.5	12.52	1,942.6	3,926.5	4,394.5	4,387.2	7.25	606.324		
1,600.0	1,598.9	2,195.5	2,176.4	2.8	5.9	12.44	1,948.1	3,910.3	4,372.7	4,365.0	7.69	568.488		
1,700.0	1,698.3	2,292.2	2,271.6	3.1	6.2	12.36	1,953.5	3,894.1	4,349.2	4,341.1	8.14	534.538		
1,800.0	1,797.4	2,388.6	2,366.4	3.3	6.6	12.28	1,958.9	3,878.0	4,324.1	4,315.6	8.58	503.885		
1,900.0	1,896.3	2,484.5	2,460.9	3.6	6.9	12.22	1,964.3	3,862.0	4,297.4	4,288.4	9.03	476.053		
1,915.7	1,911.9	2,499.6	2,475.7	3.6	6.9	12.21	1,965.2	3,859.5	4,293.1	4,284.0	9.10	471.904		
2,000.0	1,995.0	2,580.2	2,555.0	3.8	7.2	12.10	1,969.7	3,846.0	4,269.7	4,260.2	9.47	450.712		
2,100.0	2,093.8	2,675.8	2,649.2	4.1	7.6	11.98	1,975.1	3,830.0	4,241.9	4,232.0	9.92	427.594		
2,200.0	2,192.5	2,771.5	2,743.3	4.4	7.9	11.85	1,980.5	3,814.0	4,214.2	4,203.8	10.37	406.424		
2,300.0	2,291.2	2,867.1	2,837.5	4.7	8.2	11.73	1,985.9	3,798.1	4,186.5	4,175.7	10.82	386.972		
2,400.0	2,389.9	2,962.8	2,931.7	5.0	8.6	11.60	1,991.3	3,782.1	4,158.8	4,147.5	11.27	369.039		
2,500.0	2,488.7	3,058.4	3,025.8	5.3	8.9	11.47	1,996.7	3,766.1	4,131.1	4,119.4	11.72	352.456		
2,600.0	2,587.4	3,154.1	3,120.0	5.6	9.3	11.33	2,002.1	3,750.1	4,103.4	4,091.3	12.17	337.080		
2,700.0	2,686.1	3,249.8	3,214.1	5.9	9.6	11.20	2,007.4	3,734.1	4,075.8	4,063.2	12.63	322.785		
2,800.0	2,784.8	3,345.4	3,308.3	6.2	9.9	11.06	2,012.8	3,718.1	4,048.2	4,035.1	13.08	309.461		
2,900.0	2,883.6	3,441.1	3,402.4	6.5	10.3	10.92	2,018.2	3,702.1	4,020.6	4,007.1	13.54	297.015		
3,000.0	2,982.3	3,536.7	3,496.6	6.9	10.6	10.78	2,023.6	3,686.1	3,993.0	3,979.0	13.99	285.363		
3,100.0	3,081.0	3,632.4	3,590.8	7.2	11.0	10.64	2,029.0	3,670.1	3,965.5	3,951.0	14.45	274.433		
3,200.0	3,179.7	3,728.1	3,684.9	7.5	11.3	10.50	2,034.4	3,654.1	3,938.0	3,923.1	14.91	264.159		
3,300.0	3,278.5	3,823.7	3,779.1	7.8	11.6	10.35	2,039.8	3,638.2	3,910.5	3,895.1	15.37	254.486		
3,400.0	3,377.2	3,919.4	3,873.2	8.1	12.0	10.20	2,045.2	3,622.2	3,883.0	3,867.2	15.83	245.363		
3,500.0	3,475.9	4,015.0	3,967.4	8.4	12.3	10.05	2,050.6	3,606.2	3,855.5	3,839.2	16.29	236.744		
3,600.0	3,574.6	4,110.7	4,061.5	8.8	12.7	9.90	2,055.9	3,590.2	3,828.1	3,811.4	16.75	228.589		
3,700.0	3,673.4	4,206.3	4,155.7	9.1	13.0	9.75	2,061.3	3,574.2	3,800.7	3,783.5	17.21	220.862		
3,800.0	3,772.1	4,302.0	4,249.9	9.4	13.3	9.59	2,066.7	3,558.2	3,773.3	3,755.7	17.67	213.530		
3,900.0	3,870.8	4,397.7	4,344.0	9.7	13.7	9.43	2,072.1	3,542.2	3,746.0	3,727.8	18.13	206.565		
4,000.0	3,969.5	4,493.3	4,438.2	10.0	14.0	9.27	2,077.5	3,526.2	3,718.7	3,700.1	18.60	199.939		
4,100.0	4,068.3	4,589.0	4,532.3	10.4	14.4	9.11	2,082.9	3,510.2	3,691.4	3,672.3	19.06	193.628		
4,200.0	4,167.0	4,684.6	4,626.5	10.7	14.7	8.94	2,088.3	3,494.3	3,664.1	3,644.6	19.53	187.612		
4,300.0	4,265.7	4,780.3	4,720.7	11.0	15.1	8.77	2,093.7	3,478.3	3,636.9	3,616.9	20.00	181.869		
4,400.0	4,364.4	4,875.9	4,814.8	11.3	15.4	8.60	2,099.1	3,462.3	3,609.7	3,589.2	20.47	176.382		
4,500.0	4,463.2	4,971.6	4,909.0	11.7	15.7	8.43	2,104.4	3,446.3	3,582.5	3,561.6	20.93	171.134		
4,600.0	4,561.9	5,067.3	5,003.1	12.0	16.1	8.25	2,109.8	3,430.3	3,555.3	3,533.9	21.40	166.110		
4,700.0	4,660.6	5,162.9	5,097.3	12.3	16.4	8.07	2,115.2	3,414.3	3,528.2	3,506.4	21.87	161.296		
4,800.0	4,759.3	5,258.6	5,191.4	12.6	16.8	7.89	2,120.6	3,398.3	3,501.2	3,478.8	22.35	156.679		
4,900.0	4,858.1	5,354.2	5,285.6	13.0	17.1	7.71	2,126.0	3,382.3	3,474.1	3,451.3	22.82	152.248		
5,000.0	4,956.8	5,449.9	5,379.8	13.3	17.4	7.52	2,131.4	3,366.3	3,447.1	3,423.8	23.29	147.992		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1C-7H-A168 - HZ - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,055.5	5,545.6	5,473.9	13.6	17.8	7.33	2,136.8	3,350.4	3,420.1	3,396.3	23.77	143.900	
5,200.0	5,154.2	5,641.2	5,568.1	13.9	18.1	7.14	2,142.2	3,334.4	3,393.2	3,368.9	24.24	139.964	
5,300.0	5,253.0	5,736.9	5,662.2	14.3	18.5	6.94	2,147.6	3,318.4	3,366.3	3,341.6	24.72	136.174	
5,400.0	5,351.7	5,832.6	5,759.0	14.6	18.9	6.75	2,153.0	3,302.8	3,354.6	3,326.1	25.20	132.428	
5,500.0	5,450.4	5,928.3	5,854.7	14.9	19.3	6.56	2,158.4	3,287.2	3,346.3	3,316.8	25.68	128.682	
5,600.0	5,549.1	6,024.0	5,950.3	15.3	19.7	6.37	2,163.8	3,271.6	3,336.6	3,307.1	26.16	124.936	
5,700.0	5,647.9	6,119.7	6,046.0	15.6	20.1	6.18	2,169.2	3,256.0	3,326.9	3,297.4	26.64	121.190	
5,800.0	5,746.6	6,215.4	6,141.7	15.9	20.5	5.99	2,174.6	3,240.4	3,317.2	3,287.7	27.12	117.444	
5,900.0	5,845.3	6,311.1	6,237.4	16.2	20.9	5.80	2,180.0	3,224.8	3,307.5	3,278.0	27.60	113.698	
6,000.0	5,944.1	6,406.8	6,332.1	16.6	21.3	5.61	2,185.4	3,209.2	3,297.8	3,268.3	28.08	109.952	
6,100.0	6,042.8	6,502.5	6,427.8	16.9	21.7	5.42	2,190.8	3,193.6	3,288.1	3,258.6	28.56	106.206	
6,200.0	6,141.5	6,598.2	6,524.5	17.2	22.1	5.23	2,196.2	3,178.0	3,278.4	3,248.9	29.04	102.460	
6,300.0	6,240.2	6,693.9	6,619.6	17.5	22.5	5.04	2,201.6	3,162.4	3,268.7	3,239.2	29.52	98.714	
6,400.0	6,339.0	6,789.6	6,715.3	17.9	22.9	4.85	2,207.0	3,146.8	3,259.0	3,229.5	30.00	94.968	
6,500.0	6,437.7	6,885.3	6,811.0	18.2	23.3	4.66	2,212.4	3,131.2	3,249.3	3,219.8	30.48	91.222	
6,600.0	6,536.4	6,981.0	6,907.7	18.5	23.7	4.47	2,217.8	3,115.6	3,239.6	3,210.1	30.96	87.476	
6,700.0	6,635.1	7,076.7	7,002.4	18.9	24.1	4.28	2,223.2	3,100.0	3,229.9	3,200.4	31.44	83.730	
6,800.0	6,733.9	7,172.4	7,098.1	19.2	24.5	4.09	2,228.6	3,084.4	3,220.2	3,190.7	31.92	79.984	
6,900.0	6,832.6	7,268.1	7,193.8	19.5	24.9	3.90	2,234.0	3,068.8	3,210.5	3,181.0	32.40	76.238	
7,000.0	6,931.3	7,363.8	7,289.5	19.8	25.3	3.71	2,239.4	3,053.2	3,200.8	3,171.3	32.88	72.492	
7,100.0	7,030.0	7,459.5	7,385.2	20.2	25.7	3.52	2,244.8	3,037.6	3,191.1	3,161.6	33.36	68.746	
7,191.8	7,120.7	7,555.2	7,481.9	20.5	26.1	3.33	2,250.2	3,022.0	3,181.4	3,151.9	33.84	65.000	
7,200.0	7,128.8	7,563.9	7,490.6	20.5	26.1	3.33	2,250.2	3,022.0	3,181.4	3,151.9	33.84	65.000	
7,250.0	7,178.3	7,613.4	7,540.1	20.6	26.4	-0.52	2,256.7	3,006.4	3,171.7	3,142.2	34.32	61.254	
7,300.0	7,227.8	7,662.9	7,589.6	20.7	26.6	-33.56	2,263.5	2,990.8	3,162.0	3,132.5	34.80	57.508	
7,350.0	7,276.8	7,712.4	7,638.1	20.8	26.7	-52.45	2,270.7	2,975.2	3,152.3	3,122.8	35.28	53.762	
7,400.0	7,325.1	7,761.9	7,686.6	20.8	26.8	-62.86	2,277.9	2,959.6	3,142.6	3,113.1	35.76	49.984	
7,450.0	7,372.2	7,811.4	7,733.7	20.8	26.9	-69.16	2,285.1	2,944.0	3,132.9	3,103.4	36.24	46.238	
7,500.0	7,417.7	7,860.9	7,779.2	20.8	27.0	-73.27	2,292.3	2,928.4	3,123.2	3,093.7	36.72	42.492	
7,550.0	7,461.4	7,910.4	7,823.9	20.7	27.1	-76.08	2,299.5	2,912.8	3,113.5	3,084.0	37.20	38.746	
7,600.0	7,502.9	7,959.9	7,865.6	20.7	27.2	-78.06	2,306.7	2,897.2	3,103.8	3,074.3	37.68	35.000	
7,650.0	7,541.9	8,009.4	7,904.1	20.6	27.3	-79.47	2,313.9	2,881.6	3,094.1	3,064.6	38.16	31.254	
7,700.0	7,578.0	8,058.9	7,940.2	20.5	27.4	-80.47	2,321.1	2,866.0	3,084.4	3,054.9	38.64	27.508	
7,750.0	7,611.1	8,108.4	7,973.3	20.4	27.5	-81.18	2,328.3	2,850.4	3,074.7	3,045.2	39.12	23.762	
7,800.0	7,640.8	8,157.9	8,002.0	20.4	27.6	-81.68	2,335.5	2,834.8	3,065.0	3,035.5	39.60	19.984	
7,850.0	7,667.0	8,207.4	8,028.1	20.3	27.7	-82.05	2,342.7	2,819.2	3,055.3	3,025.8	40.08	16.238	
7,900.0	7,689.4	8,256.9	8,050.5	20.3	27.8	-82.34	2,350.0	2,803.6	3,045.6	3,016.1	40.56	12.492	
7,950.0	7,707.9	8,306.4	8,068.0	20.3	27.9	-82.59	2,357.2	2,788.0	3,035.9	3,006.4	41.04	8.746	
8,000.0	7,722.2	8,402.8	8,085.3	20.3	28.0	-82.83	2,364.4	2,772.4	3,026.2	2,996.7	41.52	4.968	
8,050.0	7,732.4	8,451.5	8,097.5	20.3	28.1	-83.09	2,371.6	2,756.8	3,016.5	2,987.0	42.00	1.222	
8,100.0	7,738.4	8,500.9	8,103.5	20.4	28.2	-83.38	2,378.8	2,741.2	3,006.8	2,977.3	42.48	-2.524	
8,143.7	7,740.0	8,544.4	8,105.1	20.5	28.3	-83.68	2,386.0	2,725.6	2,997.1	2,967.6	42.96	-6.278	
8,200.0	7,740.0	8,600.6	8,105.1	20.6	28.4	-83.67	2,393.2	2,710.0	2,987.4	2,957.9	43.44	-10.032	
8,300.0	7,740.0	8,700.3	8,105.1	21.0	28.5	-83.65	2,400.4	2,694.4	2,977.7	2,948.2	43.92	-13.786	
8,400.0	7,740.0	8,800.0	8,105.1	21.5	28.6	-83.62	2,407.6	2,678.8	2,967.9	2,938.5	44.40	-17.540	
8,443.7	7,740.0	8,843.6	8,105.1	21.8	28.7	-83.61	2,414.8	2,663.2	2,958.2	2,928.8	44.88	-21.294	
8,500.0	7,740.0	8,899.7	8,105.1	22.2	28.8	-83.61	2,422.0	2,647.6	2,948.5	2,919.1	45.36	-25.048	
8,600.0	7,740.0	8,999.6	8,105.1	22.9	28.9	-83.60	2,429.2	2,632.0	2,938.8	2,909.4	45.84	-28.802	
8,700.0	7,740.0	9,099.5	8,105.1	23.7	29.0	-83.59	2,436.4	2,616.4	2,929.1	2,899.7	46.32	-32.556	
8,800.0	7,740.0	9,199.5	8,105.1	24.6	29.1	-83.58	2,443.6	2,600.8	2,919.4	2,889.9	46.80	-36.310	
8,843.7	7,740.0	9,243.2	8,105.1	25.1	29.2	-83.58	2,450.8	2,585.2	2,909.7	2,880.2	47.28	-40.064	
8,900.0	7,740.0	9,299.5	8,105.1	25.6	29.3	-83.58	2,458.0	2,569.6	2,899.9	2,870.4	47.76	-43.818	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1C-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,740.0	10,399.5	7,530.0	26.7	55.2	-83.58	-860.1	2,985.4	2,128.8	2,056.0	72.84	29.227		
9,100.0	7,740.0	10,499.5	7,530.0	27.8	56.8	-83.58	-960.1	2,984.9	2,128.3	2,052.4	75.88	28.049		
9,200.0	7,740.0	10,599.5	7,530.0	29.0	58.4	-83.58	-1,060.1	2,984.4	2,127.8	2,048.9	78.97	26.944		
9,300.0	7,740.0	10,699.5	7,530.0	30.2	60.0	-83.58	-1,160.0	2,983.9	2,127.3	2,045.2	82.11	25.908		
9,343.7	7,740.0	10,743.2	7,530.0	30.8	60.7	-83.58	-1,203.7	2,983.7	2,127.1	2,043.6	83.49	25.476		
9,400.7	7,740.0	10,800.2	7,530.0	31.6	61.6	-83.57	-1,260.8	2,983.4	2,126.5	2,041.2	85.31	24.927		
9,500.0	7,740.0	10,899.5	7,530.0	32.9	63.2	-83.57	-1,360.0	2,982.9	2,125.0	2,036.6	88.49	24.014		
9,600.0	7,740.0	10,999.5	7,530.0	34.3	64.9	-83.56	-1,460.0	2,982.4	2,123.6	2,031.8	91.73	23.151		
9,700.0	7,740.0	11,099.4	7,530.0	35.7	66.5	-83.56	-1,560.0	2,981.9	2,122.1	2,027.1	94.99	22.341		
9,800.0	7,740.0	11,199.4	7,530.0	37.1	68.1	-83.56	-1,660.0	2,981.4	2,120.6	2,022.3	98.27	21.580		
9,900.0	7,740.0	11,299.4	7,530.0	38.6	69.8	-83.55	-1,760.0	2,980.9	2,119.1	2,017.5	101.56	20.865		
10,000.0	7,740.0	11,399.4	7,530.0	40.1	71.4	-83.55	-1,860.0	2,980.3	2,117.6	2,012.7	104.87	20.192		
10,100.0	7,740.0	11,499.4	7,530.0	41.6	73.1	-83.54	-1,960.0	2,979.8	2,116.1	2,007.9	108.20	19.557		
10,200.0	7,740.0	11,599.4	7,530.0	43.1	74.7	-83.54	-2,059.9	2,979.3	2,114.6	2,003.1	111.54	18.958		
10,300.0	7,740.0	11,699.4	7,530.0	44.7	76.4	-83.53	-2,159.9	2,978.8	2,113.1	1,998.2	114.89	18.393		
10,400.0	7,740.0	11,799.4	7,530.0	46.3	78.1	-83.53	-2,259.9	2,978.3	2,111.6	1,993.4	118.25	17.858		
10,500.0	7,740.0	11,899.4	7,530.0	47.8	79.7	-83.52	-2,359.9	2,977.8	2,110.1	1,988.5	121.61	17.351		
10,600.0	7,740.0	11,999.3	7,530.0	49.4	81.4	-83.52	-2,459.9	2,977.3	2,108.6	1,983.6	124.99	16.871		
10,700.0	7,740.0	12,099.3	7,530.0	51.0	83.1	-83.51	-2,559.9	2,976.8	2,107.1	1,978.8	128.37	16.415		
10,800.0	7,740.0	12,199.3	7,530.0	52.6	84.8	-83.51	-2,659.9	2,976.3	2,105.6	1,973.9	131.76	15.981		
10,900.0	7,740.0	12,299.3	7,530.0	54.2	86.5	-83.50	-2,759.9	2,975.8	2,104.1	1,969.0	135.15	15.569		
11,000.0	7,740.0	12,399.3	7,530.0	55.9	88.1	-83.50	-2,859.8	2,975.3	2,102.7	1,964.1	138.55	15.176		
11,100.0	7,740.0	12,499.3	7,530.0	57.5	89.8	-83.50	-2,959.8	2,974.8	2,101.2	1,959.2	141.96	14.802		
11,200.0	7,740.0	12,599.3	7,530.0	59.1	91.5	-83.49	-3,059.8	2,974.3	2,099.7	1,954.3	145.36	14.444		
11,300.0	7,740.0	12,699.3	7,530.0	60.8	93.2	-83.49	-3,159.8	2,973.8	2,098.2	1,949.4	148.78	14.103		
11,400.0	7,740.0	12,799.3	7,530.0	62.4	94.9	-83.48	-3,259.8	2,973.3	2,096.7	1,944.5	152.19	13.777		
11,500.0	7,740.0	12,899.2	7,530.0	64.1	96.6	-83.48	-3,359.8	2,972.7	2,095.2	1,939.6	155.61	13.464		
11,600.0	7,740.0	12,999.2	7,530.0	65.8	98.3	-83.47	-3,459.8	2,972.2	2,093.7	1,934.7	159.03	13.165		
11,700.0	7,740.0	13,099.2	7,530.0	67.4	100.0	-83.47	-3,559.8	2,971.7	2,092.2	1,929.7	162.46	12.878		
11,800.0	7,740.0	13,199.2	7,530.0	69.1	101.7	-83.46	-3,659.7	2,971.2	2,090.7	1,924.8	165.89	12.603		
11,900.0	7,740.0	13,299.2	7,530.0	70.8	103.4	-83.46	-3,759.7	2,970.7	2,089.2	1,919.9	169.32	12.339		
12,000.0	7,740.0	13,399.2	7,530.0	72.5	105.1	-83.45	-3,859.7	2,970.2	2,087.7	1,915.0	172.75	12.085		
12,100.0	7,740.0	13,499.2	7,530.0	74.1	106.8	-83.45	-3,959.7	2,969.7	2,086.2	1,910.1	176.19	11.841		
12,200.0	7,740.0	13,599.2	7,530.0	75.8	108.5	-83.44	-4,059.7	2,969.2	2,084.7	1,905.1	179.62	11.606		
12,300.0	7,740.0	13,699.1	7,530.0	77.5	110.2	-83.44	-4,159.7	2,968.7	2,083.3	1,900.2	183.06	11.380		
12,400.0	7,740.0	13,799.1	7,530.0	79.2	112.0	-83.43	-4,259.7	2,968.2	2,081.8	1,895.3	186.50	11.162		
12,500.0	7,740.0	13,899.1	7,530.0	80.9	113.7	-83.43	-4,359.7	2,967.7	2,080.3	1,890.3	189.95	10.952		
12,600.0	7,740.0	13,999.1	7,530.0	82.6	115.4	-83.43	-4,459.6	2,967.2	2,078.8	1,885.4	193.39	10.749		
12,700.0	7,740.0	14,099.1	7,530.0	84.3	117.1	-83.42	-4,559.6	2,966.7	2,077.3	1,880.4	196.84	10.553		
12,800.0	7,740.0	14,199.1	7,530.0	86.0	118.8	-83.42	-4,659.6	2,966.2	2,075.8	1,875.5	200.28	10.364		
12,900.0	7,740.0	14,299.1	7,530.0	87.7	120.5	-83.41	-4,759.6	2,965.7	2,074.3	1,870.6	203.73	10.182		
13,000.0	7,740.0	14,399.1	7,530.0	89.4	122.3	-83.41	-4,859.6	2,965.1	2,072.8	1,865.6	207.18	10.005		
13,100.0	7,740.0	14,499.1	7,530.0	91.1	124.0	-83.40	-4,959.6	2,964.6	2,071.3	1,860.7	210.63	9.834		
13,200.0	7,740.0	14,599.0	7,530.0	92.8	125.7	-83.40	-5,059.6	2,964.1	2,069.8	1,855.7	214.08	9.668		
13,300.0	7,740.0	14,699.0	7,530.0	94.5	127.4	-83.39	-5,159.6	2,963.6	2,068.3	1,850.8	217.53	9.508		
13,400.0	7,740.0	14,799.0	7,530.0	96.3	129.1	-83.39	-5,259.5	2,963.1	2,066.8	1,845.8	220.99	9.353		
13,500.0	7,740.0	14,899.0	7,530.0	98.0	130.9	-83.38	-5,359.5	2,962.6	2,065.3	1,840.9	224.44	9.202		
13,600.0	7,740.0	14,999.0	7,530.0	99.7	132.6	-83.38	-5,459.5	2,962.1	2,063.9	1,836.0	227.90	9.056		
13,700.0	7,740.0	15,099.0	7,530.0	101.4	134.3	-83.37	-5,559.5	2,961.6	2,062.4	1,831.0	231.35	8.914		
13,800.0	7,740.0	15,199.0	7,530.0	103.1	136.0	-83.37	-5,659.5	2,961.1	2,060.9	1,826.1	234.81	8.777		
13,900.0	7,740.0	15,299.0	7,530.0	104.8	137.8	-83.36	-5,759.5	2,960.6	2,059.4	1,821.1	238.27	8.643		
14,000.0	7,740.0	15,399.0	7,530.0	106.6	139.5	-83.36	-5,859.5	2,960.1	2,057.9	1,816.2	241.73	8.513		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1C-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,740.0	15,498.9	7,530.0	108.3	141.2	-83.35	-5,959.5	2,959.6	2,056.4	1,811.2	245.18	8.387		
14,200.0	7,740.0	15,598.9	7,530.0	110.0	143.0	-83.35	-6,059.4	2,959.1	2,054.9	1,806.3	248.64	8.264		
14,300.0	7,740.0	15,698.9	7,530.0	111.7	144.7	-83.34	-6,159.4	2,958.6	2,053.4	1,801.3	252.10	8.145		
14,400.0	7,740.0	15,798.9	7,530.0	113.5	146.4	-83.34	-6,259.4	2,958.0	2,051.9	1,796.3	255.56	8.029		
14,500.0	7,740.0	15,898.9	7,530.0	115.2	148.1	-83.33	-6,359.4	2,957.5	2,050.4	1,791.4	259.03	7.916		
14,600.0	7,740.0	15,998.9	7,530.0	116.9	149.9	-83.33	-6,459.4	2,957.0	2,048.9	1,786.4	262.49	7.806		
14,700.0	7,740.0	16,098.9	7,530.0	118.6	151.6	-83.32	-6,559.4	2,956.5	2,047.4	1,781.5	265.95	7.699		
14,800.0	7,740.0	16,198.9	7,530.0	120.4	153.3	-83.32	-6,659.4	2,956.0	2,045.9	1,776.5	269.41	7.594		
14,900.0	7,740.0	16,298.9	7,530.0	122.1	155.1	-83.31	-6,759.4	2,955.5	2,044.5	1,771.6	272.87	7.492		
15,000.0	7,740.0	16,398.8	7,530.0	123.8	156.8	-83.31	-6,859.3	2,955.0	2,043.0	1,766.6	276.34	7.393		
15,100.0	7,740.0	16,498.8	7,530.0	125.6	158.5	-83.30	-6,959.3	2,954.5	2,041.5	1,761.7	279.80	7.296		
15,200.0	7,740.0	16,598.8	7,530.0	127.3	160.3	-83.30	-7,059.3	2,954.0	2,040.0	1,756.7	283.27	7.202		
15,300.0	7,740.0	16,698.8	7,530.0	129.0	162.0	-83.29	-7,159.3	2,953.5	2,038.5	1,751.8	286.73	7.109		
15,400.0	7,740.0	16,798.8	7,530.0	130.7	163.7	-83.29	-7,259.3	2,953.0	2,037.0	1,746.8	290.20	7.019		
15,500.0	7,740.0	16,898.8	7,530.0	132.5	165.5	-83.28	-7,359.3	2,952.5	2,035.5	1,741.8	293.66	6.931		
15,600.0	7,740.0	16,998.8	7,530.0	134.2	167.2	-83.28	-7,459.3	2,952.0	2,034.0	1,736.9	297.13	6.846		
15,700.0	7,740.0	17,098.8	7,530.0	135.9	168.9	-83.27	-7,559.3	2,951.5	2,032.5	1,731.9	300.59	6.762		
15,800.0	7,740.0	17,198.8	7,530.0	137.7	170.7	-83.27	-7,659.2	2,951.0	2,031.0	1,727.0	304.06	6.680		
15,900.0	7,740.0	17,298.7	7,530.0	139.4	172.4	-83.26	-7,759.2	2,950.4	2,029.5	1,722.0	307.53	6.600		
16,000.0	7,740.0	17,398.7	7,530.0	141.1	174.2	-83.26	-7,859.2	2,949.9	2,028.0	1,717.0	310.99	6.521		
16,084.2	7,740.0	17,482.9	7,530.0	142.6	175.6	-83.26	-7,943.4	2,949.5	2,026.8	1,712.9	313.91	6.457	CC, ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error: 0.0 ft	
Survey Program: 811-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	27.2	27.2	0.0	0.0	173.16	-4,267.5	512.3	4,298.1					
100.0	100.0	140.4	140.4	0.2	0.2	173.16	-4,267.3	512.2	4,297.9	4,297.5	0.39	N/A		
200.0	200.0	253.6	253.6	0.3	0.4	173.16	-4,266.7	512.0	4,297.4	4,296.6	0.76	5,643.076		
300.0	300.0	366.9	366.9	0.5	0.6	173.16	-4,265.8	511.6	4,296.5	4,295.4	1.13	3,801.317		
400.0	400.0	480.1	480.1	0.7	0.8	173.17	-4,264.5	511.1	4,295.4	4,293.9	1.50	2,865.544		
500.0	500.0	593.3	593.3	0.8	1.0	173.17	-4,262.9	510.5	4,293.9	4,292.1	1.87	2,299.138		
600.0	600.0	706.5	706.4	1.0	1.2	173.18	-4,261.0	509.8	4,292.2	4,289.9	2.24	1,919.393		
700.0	700.0	850.0	849.9	1.2	1.5	173.19	-4,258.0	508.6	4,290.1	4,287.4	2.66	1,613.965		
800.0	800.0	1,485.4	1,480.4	1.4	3.1	173.75	-4,202.7	460.4	4,278.5	4,274.4	4.07	1,052.451		
900.0	900.0	1,604.3	1,597.2	1.5	3.5	173.93	-4,185.6	445.4	4,262.8	4,258.2	4.52	943.723		
1,000.0	1,000.0	1,643.2	1,635.3	1.7	3.6	173.99	-4,180.3	440.3	4,247.7	4,242.9	4.79	887.200		
1,100.0	1,100.0	1,841.8	1,830.6	1.9	4.3	123.02	-4,153.3	416.7	4,234.0	4,228.6	5.42	781.362		
1,200.0	1,200.0	1,924.0	1,911.3	2.1	4.6	123.29	-4,140.8	406.7	4,219.0	4,213.2	5.80	727.619		
1,300.0	1,299.9	1,996.9	1,982.8	2.3	4.9	123.55	-4,130.2	397.6	4,205.5	4,199.3	6.16	682.714		
1,400.0	1,399.7	2,116.0	2,099.8	2.4	5.3	123.92	-4,112.7	383.3	4,193.0	4,186.4	6.63	632.298		
1,500.0	1,499.4	2,203.4	2,185.6	2.6	5.6	124.22	-4,099.6	372.7	4,181.4	4,174.3	7.05	593.321		
1,600.0	1,598.9	2,255.3	2,236.5	2.8	5.8	124.44	-4,092.3	366.1	4,171.4	4,164.0	7.39	564.674		
1,700.0	1,698.3	2,352.4	2,332.0	3.1	6.1	124.78	-4,079.2	354.6	4,163.3	4,155.5	7.84	530.983		
1,800.0	1,797.4	2,496.0	2,473.2	3.3	6.7	125.26	-4,058.3	338.5	4,155.1	4,146.7	8.41	493.871		
1,900.0	1,896.3	2,560.0	2,536.1	3.6	6.9	125.51	-4,048.9	331.4	4,148.2	4,139.4	8.82	470.473		
1,915.7	1,911.9	2,564.2	2,540.2	3.6	6.9	125.53	-4,048.3	330.9	4,147.3	4,138.4	8.87	467.645		
2,000.0	1,995.0	2,719.0	2,692.2	3.8	7.5	126.04	-4,025.8	312.7	4,142.1	4,132.6	9.47	437.501		
2,100.0	2,093.8	2,782.0	2,754.1	4.1	7.7	126.24	-4,016.5	305.2	4,135.8	4,125.9	9.89	418.155		
2,200.0	2,192.5	2,848.1	2,819.2	4.4	7.9	126.46	-4,007.2	297.6	4,130.4	4,120.1	10.33	399.963		
2,300.0	2,291.2	2,961.4	2,930.4	4.7	8.3	126.83	-3,991.0	284.4	4,124.8	4,113.9	10.88	379.048		
2,400.0	2,389.9	3,062.4	3,029.7	5.0	8.7	127.17	-3,976.4	272.5	4,119.2	4,107.8	11.41	360.880		
2,500.0	2,488.7	3,153.3	3,119.1	5.3	9.0	127.47	-3,963.5	261.9	4,114.1	4,102.2	11.92	345.018		
2,600.0	2,587.4	3,256.0	3,220.0	5.6	9.4	127.81	-3,948.7	250.0	4,108.9	4,096.4	12.47	329.587		
2,700.0	2,686.1	3,330.9	3,293.6	5.9	9.7	128.06	-3,938.0	241.2	4,104.0	4,091.1	12.94	317.074		
2,800.0	2,784.8	3,421.2	3,382.4	6.2	10.0	128.36	-3,925.8	230.9	4,100.0	4,086.5	13.46	304.603		
2,900.0	2,883.6	3,542.7	3,501.9	6.5	10.5	128.77	-3,908.4	216.6	4,095.2	4,081.1	14.06	291.318		
3,000.0	2,982.3	3,633.2	3,590.8	6.9	10.8	129.07	-3,895.6	206.1	4,090.8	4,076.2	14.58	280.607		
3,100.0	3,081.0	3,727.7	3,683.8	7.2	11.1	129.38	-3,882.2	195.4	4,086.5	4,071.4	15.11	270.485		
3,200.0	3,179.7	3,836.0	3,790.3	7.5	11.5	129.74	-3,866.9	183.1	4,082.4	4,066.8	15.68	260.372		
3,300.0	3,278.5	3,959.0	3,911.1	7.8	12.0	130.16	-3,848.8	168.7	4,077.9	4,061.6	16.28	250.463		
3,400.0	3,377.2	4,041.6	3,992.2	8.1	12.3	130.43	-3,836.5	159.7	4,073.3	4,056.5	16.78	242.722		
3,500.0	3,475.9	4,131.7	4,080.9	8.4	12.6	130.72	-3,823.4	150.2	4,069.2	4,051.9	17.30	235.221		
3,600.0	3,574.6	4,214.9	4,162.7	8.8	12.9	130.99	-3,811.4	141.0	4,065.5	4,047.7	17.82	228.203		
3,700.0	3,673.4	4,284.7	4,231.4	9.1	13.1	131.23	-3,801.7	132.6	4,062.4	4,044.1	18.30	222.008		
3,800.0	3,772.1	4,358.6	4,304.1	9.4	13.4	131.48	-3,792.1	124.1	4,060.1	4,041.3	18.79	216.110		
3,900.0	3,870.8	4,458.6	4,402.6	9.7	13.7	131.82	-3,779.0	113.0	4,058.0	4,038.6	19.33	209.886		
4,000.0	3,969.5	4,529.0	4,472.1	10.0	14.0	132.04	-3,770.2	105.5	4,056.5	4,036.7	19.81	204.792		
4,100.0	4,068.3	4,652.1	4,593.4	10.4	14.4	132.45	-3,754.5	91.9	4,055.0	4,034.5	20.42	198.591		
4,200.0	4,167.0	4,730.4	4,670.6	10.7	14.7	132.71	-3,744.6	83.4	4,053.7	4,032.8	20.91	193.864		
4,300.0	4,265.7	4,814.0	4,753.1	11.0	14.9	132.98	-3,734.2	74.8	4,052.7	4,031.3	21.41	189.296		
4,386.4	4,351.0	4,878.0	4,816.3	11.3	15.1	133.18	-3,726.5	68.7	4,052.3	4,030.5	21.81	185.760		
4,400.0	4,364.4	4,889.2	4,827.4	11.3	15.2	133.21	-3,725.2	67.7	4,052.3	4,030.4	21.88	185.204		
4,500.0	4,463.2	4,996.3	4,933.4	11.7	15.5	133.53	-3,713.1	58.3	4,052.6	4,030.2	22.41	180.821		
4,560.5	4,522.9	5,056.1	4,992.5	11.9	15.7	133.70	-3,706.0	53.4	4,052.5	4,029.7	22.72	178.360		
4,600.0	4,561.9	5,075.2	5,011.5	12.0	15.7	133.76	-3,703.8	51.9	4,052.6	4,029.7	22.88	177.124		
4,700.0	4,660.6	5,135.2	5,070.9	12.3	15.9	133.93	-3,697.4	47.0	4,053.7	4,030.4	23.31	173.903		
4,800.0	4,759.3	5,268.6	5,203.0	12.6	16.3	134.33	-3,683.3	35.0	4,055.0	4,031.1	23.91	169.608		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
4,900.0	4,858.1	5,340.0	5,273.7	13.0	16.5	134.55	-3,675.5	28.6	4,056.2	4,031.8	24.37	166.470		
5,000.0	4,956.8	5,427.2	5,360.1	13.3	16.8	134.81	-3,666.6	20.9	4,058.0	4,033.2	24.85	163.273		
5,100.0	5,055.5	5,514.8	5,447.0	13.6	17.0	135.06	-3,657.5	13.6	4,059.9	4,034.6	25.34	160.228		
5,200.0	5,154.2	5,616.4	5,547.8	13.9	17.3	135.35	-3,647.6	5.4	4,062.4	4,036.5	25.85	157.162		
5,300.0	5,253.0	5,706.0	5,636.7	14.3	17.6	135.60	-3,638.8	-1.4	4,064.8	4,038.5	26.32	154.419		
5,400.0	5,351.7	5,768.4	5,698.6	14.6	17.7	135.77	-3,633.1	-5.8	4,067.9	4,041.2	26.74	152.146		
5,500.0	5,450.4	5,826.7	5,756.6	14.9	17.9	135.93	-3,628.2	-9.7	4,071.9	4,044.8	27.14	150.050		
5,600.0	5,549.1	5,897.0	5,826.6	15.3	18.0	136.11	-3,623.3	-14.2	4,077.1	4,049.6	27.55	147.970		
5,700.0	5,647.9	5,950.9	5,880.3	15.6	18.1	136.24	-3,620.1	-17.3	4,083.3	4,055.3	27.93	146.220		
5,800.0	5,746.6	6,024.0	5,953.2	15.9	18.3	136.40	-3,616.2	-20.4	4,090.2	4,061.9	28.32	144.425		
5,900.0	5,845.3	6,083.8	6,012.9	16.2	18.4	136.52	-3,613.7	-22.2	4,097.9	4,069.3	28.67	142.956		
6,000.0	5,944.1	6,148.0	6,077.1	16.6	18.4	136.64	-3,611.6	-23.0	4,106.4	4,077.4	29.01	141.537		
6,100.0	6,042.8	6,215.0	6,144.1	16.9	18.5	136.75	-3,610.1	-23.6	4,116.0	4,086.6	29.36	140.186		
6,200.0	6,141.5	6,283.6	6,212.7	17.2	18.6	136.87	-3,609.2	-24.3	4,126.4	4,096.7	29.71	138.884		
6,300.0	6,240.2	6,393.7	6,322.8	17.5	18.8	137.05	-3,607.3	-24.9	4,136.5	4,106.4	30.11	137.379		
6,400.0	6,339.0	6,470.0	6,399.1	17.9	18.8	137.15	-3,606.6	-24.1	4,147.0	4,116.6	30.44	136.218		
6,500.0	6,437.7	6,527.0	6,456.0	18.2	18.9	137.23	-3,606.4	-23.5	4,158.4	4,127.6	30.77	135.155		
6,600.0	6,536.4	6,606.9	6,536.0	18.5	19.0	137.35	-3,606.8	-24.0	4,170.7	4,139.6	31.12	134.012		
6,700.0	6,635.1	6,735.2	6,664.2	18.9	19.1	137.55	-3,606.9	-24.3	4,182.6	4,151.0	31.55	132.590		
6,800.0	6,733.9	6,863.1	6,792.2	19.2	19.3	137.74	-3,606.5	-24.2	4,194.1	4,162.2	31.97	131.205		
6,900.0	6,832.6	6,962.3	6,891.4	19.5	19.4	137.88	-3,605.7	-24.0	4,205.1	4,172.8	32.34	130.024		
7,000.0	6,931.3	7,054.8	6,983.8	19.8	19.5	138.01	-3,605.0	-23.6	4,216.2	4,183.5	32.71	128.912		
7,100.0	7,030.0	7,149.3	7,078.3	20.2	19.6	138.15	-3,604.6	-23.2	4,227.6	4,194.6	33.07	127.823		
7,191.8	7,120.7	7,253.9	7,182.9	20.5	19.7	138.29	-3,603.8	-22.7	4,237.8	4,204.4	33.44	126.732		
7,200.0	7,128.8	7,261.2	7,190.2	20.5	19.7	133.88	-3,603.7	-22.7	4,238.6	4,205.2	33.47	126.644		
7,250.0	7,178.3	7,305.9	7,234.9	20.6	19.8	99.28	-3,603.4	-22.5	4,241.4	4,207.7	33.66	125.992		
7,300.0	7,227.8	7,342.0	7,271.0	20.7	19.8	67.64	-3,603.1	-22.4	4,240.0	4,206.2	33.86	125.229		
7,350.0	7,276.8	7,392.5	7,321.5	20.8	19.9	50.10	-3,602.9	-22.2	4,234.5	4,200.4	34.09	124.233		
7,400.0	7,325.1	7,434.1	7,363.1	20.8	19.9	40.94	-3,602.7	-22.1	4,224.9	4,190.6	34.31	123.139		
7,450.0	7,372.2	7,474.7	7,403.8	20.8	19.9	35.84	-3,602.6	-22.0	4,211.3	4,176.7	34.54	121.910		
7,500.0	7,417.7	7,514.1	7,443.1	20.8	20.0	32.89	-3,602.6	-21.9	4,193.7	4,158.9	34.79	120.555		
7,550.0	7,461.4	7,551.9	7,481.0	20.7	20.0	31.24	-3,602.6	-21.8	4,172.4	4,137.4	35.04	119.085		
7,600.0	7,502.9	7,587.9	7,516.9	20.7	20.1	30.49	-3,602.7	-21.7	4,147.5	4,112.2	35.30	117.510		
7,650.0	7,541.9	7,633.0	7,562.0	20.6	20.1	30.50	-3,602.9	-21.6	4,119.2	4,083.6	35.58	115.786		
7,700.0	7,578.0	7,653.8	7,582.8	20.5	20.1	31.00	-3,603.0	-21.6	4,087.7	4,051.8	35.83	114.086		
7,750.0	7,611.1	7,683.3	7,612.4	20.4	20.2	32.20	-3,603.2	-21.5	4,053.1	4,017.0	36.11	112.259		
7,800.0	7,640.8	7,710.0	7,639.0	20.4	20.2	34.09	-3,603.3	-21.5	4,015.9	3,979.5	36.38	110.376		
7,850.0	7,667.0	7,735.1	7,664.1	20.3	20.2	36.83	-3,603.5	-21.5	3,976.2	3,939.5	36.67	108.441		
7,900.0	7,689.4	7,759.5	7,688.5	20.3	20.3	40.68	-3,603.7	-21.6	3,934.3	3,897.4	36.95	106.463		
7,950.0	7,707.9	7,779.7	7,708.7	20.3	20.3	45.98	-3,603.8	-21.6	3,890.6	3,853.4	37.24	104.472		
8,000.0	7,722.2	7,795.4	7,724.4	20.3	20.3	53.22	-3,603.9	-21.6	3,845.4	3,807.9	37.52	102.480		
8,050.0	7,732.4	7,806.6	7,735.7	20.3	20.3	63.01	-3,603.9	-21.6	3,799.0	3,761.2	37.80	100.500		
8,100.0	7,738.4	7,813.3	7,742.3	20.4	20.3	75.76	-3,604.0	-21.6	3,751.8	3,713.8	38.07	98.544		
8,143.7	7,740.0	7,815.3	7,744.3	20.5	20.3	88.98	-3,604.0	-21.6	3,710.2	3,671.9	38.30	96.863		
8,200.0	7,740.0	7,815.6	7,744.6	20.6	20.3	89.00	-3,604.0	-21.6	3,656.5	3,617.9	38.60	94.716		
8,300.0	7,740.0	7,816.1	7,745.2	21.0	20.3	89.02	-3,604.0	-21.6	3,561.3	3,522.2	39.16	90.950		
8,400.0	7,740.0	7,816.7	7,745.7	21.5	20.3	89.05	-3,604.0	-21.6	3,466.4	3,426.7	39.73	87.242		
8,443.7	7,740.0	7,816.9	7,745.9	21.8	20.3	89.06	-3,604.0	-21.6	3,425.0	3,385.1	39.99	85.641		
8,500.0	7,740.0	7,817.2	7,746.3	22.2	20.3	89.05	-3,604.0	-21.6	3,371.7	3,331.4	40.33	83.606		
8,600.0	7,740.0	7,817.8	7,746.8	22.9	20.3	89.03	-3,604.0	-21.6	3,276.8	3,235.9	40.92	80.077		
8,700.0	7,740.0	7,818.3	7,747.3	23.7	20.3	89.01	-3,604.0	-21.6	3,181.6	3,140.1	41.51	76.639		
8,800.0	7,740.0	7,818.9	7,747.9	24.6	20.3	88.99	-3,604.0	-21.6	3,086.2	3,044.1	42.11	73.289		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 811-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,843.7	7,740.0	7,819.1	7,748.1	25.1	20.3	88.98	-3,604.0	-21.6	3,044.5	3,002.1	42.37	71.847		
8,900.0	7,740.0	7,819.4	7,748.4	25.6	20.3	89.00	-3,604.0	-21.6	2,990.7	2,948.0	42.72	70.002		
9,000.0	7,740.0	7,820.0	7,749.0	26.7	20.3	89.03	-3,604.0	-21.6	2,895.4	2,852.0	43.37	66.763		
9,100.0	7,740.0	7,820.5	7,749.5	27.8	20.3	89.07	-3,604.0	-21.6	2,800.4	2,756.4	44.05	63.574		
9,200.0	7,740.0	7,821.0	7,750.1	29.0	20.3	89.10	-3,604.0	-21.6	2,705.8	2,661.0	44.77	60.435		
9,300.0	7,740.0	7,821.6	7,750.6	30.2	20.3	89.14	-3,604.0	-21.6	2,611.6	2,566.1	45.54	57.348		
9,343.7	7,740.0	7,821.8	7,750.8	30.8	20.3	89.15	-3,604.0	-21.6	2,570.6	2,524.7	45.89	56.017		
9,400.7	7,740.0	7,822.1	7,751.1	31.6	20.3	89.19	-3,604.0	-21.6	2,517.3	2,470.9	46.37	54.285		
9,500.0	7,740.0	7,822.6	7,751.7	32.9	20.3	89.23	-3,604.0	-21.6	2,425.1	2,377.8	47.26	51.315		
9,600.0	7,740.0	7,823.2	7,752.2	34.3	20.3	89.26	-3,604.0	-21.6	2,332.8	2,284.6	48.21	48.384		
9,700.0	7,740.0	7,823.7	7,752.7	35.7	20.3	89.29	-3,604.0	-21.6	2,241.1	2,191.9	49.24	45.517		
9,800.0	7,740.0	7,824.2	7,753.2	37.1	20.3	89.33	-3,604.0	-21.6	2,150.2	2,099.9	50.34	42.716		
9,900.0	7,740.0	7,824.8	7,753.8	38.6	20.3	89.36	-3,604.0	-21.6	2,060.2	2,008.7	51.52	39.987		
10,000.0	7,740.0	7,825.3	7,754.3	40.1	20.3	89.39	-3,604.0	-21.6	1,971.1	1,918.3	52.80	37.332		
10,100.0	7,740.0	7,825.8	7,754.8	41.6	20.3	89.42	-3,604.0	-21.6	1,883.1	1,828.9	54.18	34.757		
10,200.0	7,740.0	7,826.3	7,755.3	43.1	20.3	89.46	-3,604.0	-21.6	1,796.4	1,740.7	55.67	32.267		
10,300.0	7,740.0	7,826.8	7,755.8	44.7	20.3	89.49	-3,604.0	-21.6	1,711.1	1,653.8	57.29	29.869		
10,400.0	7,740.0	7,827.3	7,756.4	46.3	20.3	89.52	-3,604.0	-21.6	1,627.5	1,568.4	59.03	27.569		
10,500.0	7,740.0	7,827.9	7,756.9	47.8	20.3	89.55	-3,604.0	-21.6	1,545.8	1,484.9	60.92	25.375		
10,600.0	7,740.0	7,828.4	7,757.4	49.4	20.3	89.58	-3,604.0	-21.6	1,466.4	1,403.5	62.95	23.294		
10,700.0	7,740.0	7,828.9	7,757.9	51.0	20.3	89.62	-3,604.0	-21.6	1,389.7	1,324.6	65.13	21.336		
10,800.0	7,740.0	7,829.4	7,758.4	52.6	20.3	89.65	-3,604.1	-21.6	1,316.1	1,248.6	67.46	19.510		
10,900.0	7,740.0	7,829.9	7,758.9	54.2	20.3	89.68	-3,604.1	-21.6	1,246.2	1,176.3	69.90	17.827		
11,000.0	7,740.0	7,830.4	7,759.4	55.9	20.3	89.71	-3,604.1	-21.6	1,180.6	1,108.2	72.44	16.297		
11,100.0	7,740.0	7,830.9	7,759.9	57.5	20.3	89.74	-3,604.1	-21.6	1,120.1	1,045.1	75.02	14.932		
11,200.0	7,740.0	7,831.4	7,760.4	59.1	20.3	89.77	-3,604.1	-21.6	1,065.6	988.1	77.54	13.742		
11,300.0	7,740.0	7,831.9	7,760.9	60.8	20.3	89.80	-3,604.1	-21.6	1,018.0	938.1	79.91	12.740		
11,400.0	7,740.0	7,832.4	7,761.4	62.4	20.3	89.84	-3,604.1	-21.6	978.4	896.4	81.96	11.937		
11,500.0	7,740.0	7,832.9	7,761.9	64.1	20.3	89.87	-3,604.1	-21.6	947.7	864.1	83.55	11.342		
11,600.0	7,740.0	7,833.3	7,762.4	65.8	20.3	89.90	-3,604.1	-21.6	926.8	842.3	84.52	10.966		
11,700.0	7,740.0	7,833.8	7,762.8	67.4	20.3	89.93	-3,604.1	-21.6	916.4	831.7	84.74	10.814 SF		
11,745.7	7,740.0	7,834.1	7,763.1	68.2	20.3	89.94	-3,604.1	-21.6	915.3	830.7	84.58	10.821 CC, ES		
11,800.0	7,740.0	7,834.3	7,763.3	69.1	20.3	89.96	-3,604.1	-21.6	916.9	832.7	84.18	10.891		
11,900.0	7,740.0	7,834.8	7,763.8	70.8	20.3	89.99	-3,604.1	-21.6	928.2	845.3	82.88	11.199		
12,000.0	7,740.0	7,835.3	7,764.3	72.5	20.3	90.02	-3,604.1	-21.6	949.9	869.0	80.95	11.734		
12,100.0	7,740.0	7,835.8	7,764.8	74.1	20.3	90.05	-3,604.1	-21.6	981.4	902.8	78.58	12.490		
12,200.0	7,740.0	7,836.2	7,765.3	75.8	20.3	90.08	-3,604.1	-21.6	1,021.8	945.8	75.93	13.457		
12,300.0	7,740.0	7,836.7	7,765.7	77.5	20.3	90.11	-3,604.1	-21.6	1,070.0	996.8	73.17	14.622		
12,400.0	7,740.0	7,837.2	7,766.2	79.2	20.3	90.14	-3,604.1	-21.6	1,125.0	1,054.6	70.44	15.971		
12,500.0	7,740.0	7,837.7	7,766.7	80.9	20.3	90.17	-3,604.1	-21.6	1,186.0	1,118.2	67.82	17.486		
12,600.0	7,740.0	7,838.1	7,767.2	82.6	20.3	90.20	-3,604.1	-21.6	1,252.0	1,186.6	65.37	19.152		
12,700.0	7,740.0	7,838.6	7,767.6	84.3	20.3	90.23	-3,604.1	-21.6	1,322.2	1,259.1	63.11	20.951		
12,800.0	7,740.0	7,839.1	7,768.1	86.0	20.3	90.26	-3,604.1	-21.6	1,396.1	1,335.1	61.05	22.868		
12,900.0	7,740.0	7,839.5	7,768.6	87.7	20.3	90.28	-3,604.1	-21.6	1,473.1	1,413.9	59.19	24.888		
13,000.0	7,740.0	7,840.0	7,769.0	89.4	20.3	90.31	-3,604.1	-21.6	1,552.7	1,495.2	57.51	26.996		
13,100.0	7,740.0	7,840.5	7,769.5	91.1	20.3	90.34	-3,604.1	-21.6	1,634.5	1,578.5	56.01	29.180		
13,200.0	7,740.0	7,840.9	7,769.9	92.8	20.3	90.37	-3,604.1	-21.6	1,718.3	1,663.6	54.67	31.428		
13,300.0	7,740.0	7,841.4	7,770.4	94.5	20.3	90.40	-3,604.1	-21.6	1,803.7	1,750.2	53.48	33.730		
13,400.0	7,740.0	7,841.8	7,770.9	96.3	20.3	90.43	-3,604.1	-21.6	1,890.5	1,838.1	52.41	36.075		
13,500.0	7,740.0	7,842.3	7,771.3	98.0	20.3	90.46	-3,604.1	-21.6	1,978.6	1,927.2	51.45	38.455		
13,600.0	7,740.0	7,842.8	7,771.8	99.7	20.3	90.49	-3,604.1	-21.6	2,067.8	2,017.2	50.60	40.863		
13,700.0	7,740.0	7,843.2	7,772.2	101.4	20.3	90.51	-3,604.1	-21.6	2,157.9	2,108.1	49.85	43.292		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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)				
13,800.0	7,740.0	7,843.7	7,772.7	103.1	20.3	90.54	-3,604.1	-21.6	2,248.9	2,199.7	49.17	45.736		
13,900.0	7,740.0	7,844.1	7,773.1	104.8	20.3	90.57	-3,604.1	-21.6	2,340.6	2,292.0	48.57	48.190		
14,000.0	7,740.0	7,844.6	7,773.6	106.6	20.3	90.60	-3,604.1	-21.6	2,432.9	2,384.9	48.03	50.650		
14,100.0	7,740.0	7,845.0	7,774.0	108.3	20.3	90.63	-3,604.1	-21.6	2,525.9	2,478.3	47.56	53.112		
14,200.0	7,740.0	7,845.4	7,774.5	110.0	20.3	90.65	-3,604.1	-21.6	2,619.3	2,572.2	47.13	55.572		
14,300.0	7,740.0	7,845.9	7,774.9	111.7	20.4	90.68	-3,604.1	-21.6	2,713.3	2,666.5	46.76	58.028		
14,400.0	7,740.0	7,846.3	7,775.3	113.5	20.4	90.71	-3,604.1	-21.6	2,807.6	2,761.2	46.42	60.478		
14,500.0	7,740.0	7,846.8	7,775.8	115.2	20.4	90.74	-3,604.1	-21.6	2,902.3	2,856.2	46.13	62.919		
14,600.0	7,740.0	7,847.2	7,776.2	116.9	20.4	90.76	-3,604.1	-21.6	2,997.4	2,951.5	45.87	65.349		
14,700.0	7,740.0	7,847.6	7,776.7	118.6	20.4	90.79	-3,604.1	-21.6	3,092.7	3,047.1	45.64	67.768		
14,800.0	7,740.0	7,848.1	7,777.1	120.4	20.4	90.82	-3,604.1	-21.6	3,188.4	3,143.0	45.44	70.174		
14,900.0	7,740.0	7,848.5	7,777.5	122.1	20.4	90.85	-3,604.1	-21.6	3,284.3	3,239.1	45.26	72.567		
15,000.0	7,740.0	7,848.9	7,778.0	123.8	20.4	90.87	-3,604.1	-21.6	3,380.5	3,335.4	45.11	74.945		
15,100.0	7,740.0	7,849.4	7,778.4	125.6	20.4	90.90	-3,604.1	-21.6	3,476.8	3,431.9	44.97	77.308		
15,200.0	7,740.0	7,849.8	7,778.8	127.3	20.4	90.93	-3,604.1	-21.6	3,573.4	3,528.6	44.86	79.655		
15,300.0	7,740.0	7,850.2	7,779.2	129.0	20.4	90.95	-3,604.2	-21.6	3,670.2	3,625.4	44.77	81.986		
15,400.0	7,740.0	7,850.7	7,779.7	130.7	20.4	90.98	-3,604.2	-21.6	3,767.1	3,722.4	44.69	84.301		
15,500.0	7,740.0	7,851.1	7,780.1	132.5	20.4	91.01	-3,604.2	-21.6	3,864.2	3,819.5	44.62	86.600		
15,600.0	7,740.0	7,851.5	7,780.5	134.2	20.4	91.03	-3,604.2	-21.6	3,961.4	3,916.8	44.57	88.882		
15,700.0	7,740.0	7,851.9	7,780.9	135.9	20.4	91.06	-3,604.2	-21.6	4,058.7	4,014.2	44.53	91.148		
15,800.0	7,740.0	7,852.3	7,781.4	137.7	20.4	91.09	-3,604.2	-21.6	4,156.2	4,111.7	44.50	93.398		
15,900.0	7,740.0	7,852.8	7,781.8	139.4	20.4	91.11	-3,604.2	-21.6	4,253.8	4,209.4	44.48	95.631		
16,000.0	7,740.0	7,853.2	7,782.2	141.1	20.4	91.14	-3,604.2	-21.6	4,351.5	4,307.1	44.47	97.847		
16,084.2	7,740.0	7,853.5	7,782.5	142.6	20.4	91.16	-3,604.2	-21.6	4,433.9	4,389.4	44.47	99.701		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	172.75	-4,267.5	543.0	4,302.0							
100.0	100.0	99.0	99.0	0.2	0.1	172.76	-4,268.0	542.1	4,302.4	4,302.1	0.30	N/A				
200.0	200.0	196.1	196.1	0.3	0.3	172.78	-4,268.7	540.9	4,302.9	4,302.3	0.65	6,666.899				
300.0	300.0	267.9	267.8	0.5	0.4	172.79	-4,269.5	540.2	4,303.9	4,302.9	0.95	4,550.940				
400.0	400.0	339.4	339.3	0.7	0.6	172.80	-4,270.6	539.7	4,305.4	4,304.2	1.25	3,457.006				
500.0	500.0	396.3	396.2	0.8	0.7	172.81	-4,272.1	539.2	4,307.9	4,306.4	1.52	2,834.256				
600.0	600.0	450.0	449.9	1.0	0.8	172.82	-4,274.1	538.6	4,311.4	4,309.6	1.79	2,410.086				
700.0	700.0	490.7	490.5	1.2	0.9	172.83	-4,276.1	538.2	4,316.2	4,314.1	2.03	2,121.322				
800.0	800.0	548.2	548.0	1.4	1.0	172.84	-4,279.7	537.5	4,322.2	4,319.8	2.31	1,870.122				
900.0	900.0	606.0	605.6	1.5	1.1	172.86	-4,283.7	536.6	4,328.9	4,326.3	2.59	1,672.463				
1,000.0	1,000.0	680.2	679.6	1.7	1.2	172.89	-4,289.5	535.1	4,336.4	4,333.5	2.90	1,497.223				
1,100.0	1,100.0	773.9	772.9	1.9	1.4	121.47	-4,297.6	532.9	4,345.1	4,341.9	3.24	1,340.435				
1,200.0	1,200.0	862.9	861.5	2.1	1.6	121.45	-4,304.9	530.7	4,354.5	4,350.9	3.58	1,216.471				
1,300.0	1,299.9	923.2	921.6	2.3	1.8	121.42	-4,310.4	529.1	4,365.5	4,361.6	3.87	1,128.855				
1,400.0	1,399.7	972.8	970.9	2.4	1.9	121.37	-4,315.5	527.7	4,378.4	4,374.3	4.14	1,057.794				
1,500.0	1,499.4	1,004.0	1,001.9	2.6	2.0	121.28	-4,319.0	526.7	4,393.5	4,389.1	4.38	1,002.774				
1,600.0	1,598.9	1,068.0	1,065.3	2.8	2.2	121.24	-4,327.0	524.7	4,410.7	4,406.0	4.70	939.239				
1,700.0	1,698.3	1,101.2	1,098.2	3.1	2.3	121.14	-4,331.7	523.6	4,430.0	4,425.0	4.96	893.171				
1,800.0	1,797.4	1,133.0	1,129.6	3.3	2.4	121.02	-4,336.4	522.6	4,451.5	4,446.2	5.23	850.862				
1,900.0	1,896.3	1,197.0	1,192.7	3.6	2.6	120.96	-4,346.8	520.1	4,474.9	4,469.3	5.59	801.162				
1,915.7	1,911.9	1,197.0	1,192.7	3.6	2.6	120.93	-4,346.8	520.1	4,478.8	4,473.2	5.62	796.818				
2,000.0	1,995.0	1,241.0	1,236.0	3.8	2.7	121.05	-4,354.5	517.9	4,500.0	4,494.1	5.91	761.549				
2,100.0	2,093.8	1,311.0	1,304.5	4.1	3.0	121.26	-4,367.5	512.8	4,526.1	4,519.8	6.30	718.058				
2,200.0	2,192.5	1,420.0	1,411.0	4.4	3.4	121.63	-4,387.9	501.1	4,552.2	4,545.4	6.82	667.487				
2,300.0	2,291.2	1,471.5	1,461.2	4.7	3.6	121.81	-4,397.7	494.7	4,578.7	4,571.5	7.19	636.626				
2,400.0	2,389.9	1,519.8	1,508.1	5.0	3.8	121.99	-4,407.4	488.8	4,606.3	4,598.8	7.56	609.621				
2,500.0	2,488.7	1,634.5	1,619.6	5.3	4.3	122.38	-4,430.6	475.1	4,634.1	4,626.0	8.11	571.756				
2,600.0	2,587.4	1,678.8	1,662.6	5.6	4.5	122.54	-4,439.6	469.9	4,662.5	4,654.0	8.46	550.923				
2,700.0	2,686.1	1,738.0	1,720.0	5.9	4.8	122.74	-4,452.6	462.7	4,692.1	4,683.2	8.86	529.381				
2,800.0	2,784.8	1,789.8	1,770.0	6.2	5.0	122.92	-4,464.3	456.2	4,722.5	4,713.2	9.24	510.814				
2,900.0	2,883.6	1,947.7	1,922.7	6.5	5.7	123.47	-4,499.1	436.5	4,752.7	4,742.7	9.93	478.592				
3,000.0	2,982.3	2,059.9	2,031.6	6.9	6.2	123.84	-4,522.7	423.3	4,782.0	4,771.6	10.48	456.143				
3,100.0	3,081.0	2,146.0	2,115.2	7.2	6.6	124.12	-4,540.7	412.5	4,811.3	4,800.4	10.96	438.826				
3,200.0	3,179.7	2,263.9	2,229.5	7.5	7.1	124.51	-4,565.2	397.9	4,840.8	4,829.3	11.53	419.881				
3,300.0	3,278.5	2,363.6	2,326.5	7.8	7.5	124.82	-4,585.5	386.6	4,869.9	4,857.9	12.03	404.775				
3,400.0	3,377.2	2,528.4	2,486.6	8.1	8.3	125.36	-4,617.6	364.9	4,898.3	4,885.5	12.77	383.713				
3,500.0	3,475.9	2,630.0	2,585.5	8.4	8.7	125.69	-4,636.4	350.9	4,925.8	4,912.5	13.29	370.690				
3,600.0	3,574.6	2,698.0	2,651.8	8.8	9.0	125.90	-4,649.0	342.7	4,953.7	4,940.0	13.70	361.668				
3,700.0	3,673.4	2,748.5	2,701.0	9.1	9.2	126.05	-4,658.9	336.9	4,982.6	4,968.5	14.06	354.439				
3,800.0	3,772.1	2,819.0	2,769.5	9.4	9.5	126.27	-4,673.3	328.2	5,012.4	4,997.9	14.48	346.155				
3,900.0	3,870.8	2,864.5	2,813.5	9.7	9.8	126.41	-4,683.0	322.3	5,042.9	5,028.1	14.82	340.188				
4,000.0	3,969.5	2,957.6	2,903.7	10.0	10.2	126.69	-4,702.9	310.4	5,073.8	5,058.5	15.31	331.479				
4,100.0	4,068.3	3,093.0	3,035.0	10.4	10.8	127.11	-4,731.0	292.9	5,104.3	5,088.4	15.92	320.643				
4,200.0	4,167.0	3,208.2	3,146.8	10.7	11.3	127.45	-4,754.4	278.0	5,134.4	5,118.0	16.46	311.852				
4,300.0	4,265.7	3,307.0	3,242.8	11.0	11.8	127.74	-4,774.2	265.5	5,164.5	5,147.5	16.95	304.618				
4,400.0	4,364.4	3,404.6	3,337.8	11.3	12.2	128.01	-4,793.6	253.8	5,194.4	5,177.0	17.43	297.946				
4,500.0	4,463.2	3,465.0	3,396.4	11.7	12.5	128.18	-4,805.6	246.4	5,224.6	5,206.8	17.81	293.411				
4,600.0	4,561.9	3,600.4	3,528.0	12.0	13.1	128.56	-4,832.9	229.3	5,255.1	5,236.7	18.40	285.615				
4,700.0	4,660.6	3,659.7	3,585.6	12.3	13.3	128.73	-4,844.6	221.8	5,285.4	5,266.6	18.76	281.662				
4,800.0	4,759.3	3,722.0	3,646.0	12.6	13.6	128.90	-4,857.4	213.8	5,316.4	5,297.2	19.14	277.806				
4,900.0	4,858.1	3,864.2	3,784.2	13.0	14.3	129.29	-4,885.8	195.8	5,346.8	5,327.0	19.74	270.818				
5,000.0	4,956.8	4,024.5	3,940.2	13.3	15.0	129.72	-4,917.0	176.2	5,377.1	5,356.7	20.39	263.736				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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				
5,100.0	5,055.5	4,114.7	4,028.2	13.6	15.4	129.95	-4,933.7	165.3	5,406.5	5,385.6	20.83	259.513				
5,200.0	5,154.2	4,162.9	4,075.1	13.9	15.6	130.08	-4,942.9	159.3	5,436.5	5,415.3	21.15	256.992				
5,300.0	5,253.0	4,282.0	4,191.1	14.3	16.1	130.38	-4,966.1	144.8	5,467.0	5,445.3	21.67	252.277				
5,400.0	5,351.7	4,365.8	4,272.7	14.6	16.4	130.59	-4,982.0	134.8	5,497.1	5,475.0	22.09	248.813				
5,500.0	5,450.4	4,594.8	4,496.6	14.9	17.4	131.15	-5,022.6	108.4	5,525.5	5,502.6	22.90	241.256				
5,600.0	5,549.1	4,664.0	4,564.3	15.3	17.6	131.32	-5,034.3	100.6	5,553.9	5,530.6	23.27	238.630				
5,700.0	5,647.9	4,759.0	4,657.1	15.6	18.0	131.55	-5,050.6	89.0	5,582.5	5,558.8	23.72	235.303				
5,800.0	5,746.6	4,827.8	4,724.3	15.9	18.3	131.72	-5,062.6	80.7	5,611.4	5,587.3	24.08	233.000				
5,900.0	5,845.3	5,148.0	5,039.0	16.2	19.5	132.39	-5,113.5	50.6	5,638.8	5,613.7	25.06	224.993				
6,000.0	5,944.1	5,293.8	5,183.0	16.6	19.9	132.68	-5,133.3	38.4	5,663.9	5,638.3	25.59	221.291				
6,100.0	6,042.8	5,418.3	5,306.0	16.9	20.3	132.92	-5,149.1	28.1	5,688.1	5,662.0	26.07	218.144				
6,200.0	6,141.5	5,552.0	5,438.4	17.2	20.7	133.17	-5,164.9	17.5	5,711.4	5,684.8	26.57	214.970				
6,300.0	6,240.2	5,610.3	5,496.0	17.5	20.9	133.28	-5,172.0	13.3	5,735.2	5,708.3	26.88	213.326				
6,400.0	6,339.0	5,902.0	5,785.3	17.9	21.7	133.79	-5,204.4	-6.2	5,758.0	5,730.3	27.71	207.807				
6,500.0	6,437.7	5,968.2	5,851.0	18.2	21.9	133.90	-5,210.7	-10.4	5,779.3	5,751.3	28.04	206.090				
6,600.0	6,536.4	6,648.1	6,529.3	18.5	22.9	134.81	-5,242.5	-26.8	5,791.7	5,762.3	29.38	197.128				
6,700.0	6,635.1	6,817.1	6,698.3	18.9	23.1	134.98	-5,242.5	-24.8	5,802.8	5,773.0	29.83	194.505				
6,800.0	6,733.9	6,902.9	6,784.1	19.2	23.1	135.06	-5,242.2	-23.7	5,813.7	5,783.5	30.18	192.619				
6,900.0	6,832.6	7,012.0	6,893.2	19.5	23.2	135.18	-5,241.6	-22.9	5,824.4	5,793.8	30.57	190.552				
7,000.0	6,931.3	7,098.4	6,979.6	19.8	23.3	135.27	-5,241.2	-22.4	5,835.2	5,804.3	30.92	188.724				
7,100.0	7,030.0	7,171.0	7,052.2	20.2	23.4	135.34	-5,241.1	-21.8	5,846.4	5,815.1	31.25	187.075				
7,191.8	7,120.7	7,311.2	7,192.4	20.5	23.5	135.49	-5,240.5	-20.9	5,856.3	5,824.7	31.66	184.959				
7,200.0	7,128.8	7,319.9	7,201.1	20.5	23.5	131.08	-5,240.5	-20.8	5,857.2	5,825.5	31.69	184.800				
7,250.0	7,178.3	7,365.7	7,246.9	20.6	23.5	96.48	-5,240.1	-20.7	5,859.6	5,827.7	31.89	183.758				
7,300.0	7,227.8	7,409.1	7,290.3	20.7	23.6	64.84	-5,239.8	-20.6	5,857.9	5,825.8	32.09	182.571				
7,350.0	7,276.8	7,451.2	7,332.4	20.8	23.6	47.23	-5,239.6	-20.6	5,852.0	5,819.7	32.29	181.239				
7,400.0	7,325.1	7,502.7	7,383.9	20.8	23.6	38.02	-5,239.3	-20.6	5,841.8	5,809.3	32.51	179.686				
7,450.0	7,372.2	7,552.0	7,433.2	20.8	23.7	32.85	-5,239.0	-20.5	5,827.5	5,794.8	32.74	178.008				
7,500.0	7,417.7	7,592.7	7,473.9	20.8	23.7	29.78	-5,238.7	-20.4	5,809.2	5,776.3	32.96	176.269				
7,550.0	7,461.4	7,629.8	7,511.0	20.7	23.8	27.98	-5,238.6	-20.2	5,787.1	5,754.0	33.18	174.434				
7,600.0	7,502.9	7,665.1	7,546.3	20.7	23.8	27.03	-5,238.4	-20.0	5,761.4	5,728.0	33.40	172.499				
7,650.0	7,541.9	7,698.3	7,579.5	20.6	23.8	26.75	-5,238.4	-19.9	5,732.1	5,698.5	33.62	170.478				
7,700.0	7,578.0	7,729.1	7,610.3	20.5	23.8	27.04	-5,238.3	-19.7	5,699.6	5,665.8	33.85	168.384				
7,750.0	7,611.1	7,761.0	7,642.2	20.4	23.9	27.92	-5,238.3	-19.5	5,664.2	5,630.1	34.08	166.206				
7,800.0	7,640.8	7,786.6	7,667.8	20.4	23.9	29.43	-5,238.4	-19.3	5,625.9	5,591.6	34.30	164.001				
7,850.0	7,667.0	7,812.8	7,694.0	20.3	23.9	31.75	-5,238.4	-19.1	5,585.2	5,550.7	34.53	161.741				
7,900.0	7,689.4	7,835.3	7,716.5	20.3	23.9	35.12	-5,238.4	-19.0	5,542.3	5,507.5	34.75	159.469				
7,950.0	7,707.9	7,853.8	7,735.0	20.3	24.0	40.00	-5,238.4	-18.8	5,497.6	5,462.6	34.97	157.198				
8,000.0	7,722.2	7,868.2	7,749.4	20.3	24.0	47.13	-5,238.4	-18.7	5,451.3	5,416.2	35.18	154.941				
8,050.0	7,732.4	7,878.5	7,759.7	20.3	24.0	57.67	-5,238.4	-18.7	5,404.0	5,368.6	35.39	152.713				
8,100.0	7,738.4	7,884.5	7,765.6	20.4	24.0	72.94	-5,238.4	-18.6	5,355.8	5,320.2	35.58	150.526				
8,143.7	7,740.0	7,886.2	7,767.3	20.5	24.0	90.16	-5,238.4	-18.6	5,313.4	5,277.6	35.74	148.657				
8,200.0	7,740.0	7,886.2	7,767.4	20.6	24.0	90.16	-5,238.4	-18.6	5,258.6	5,222.6	35.95	146.270				
8,300.0	7,740.0	7,886.3	7,767.5	21.0	24.0	90.16	-5,238.4	-18.6	5,161.3	5,125.0	36.33	142.073				
8,400.0	7,740.0	7,886.4	7,767.6	21.5	24.0	90.17	-5,238.4	-18.6	5,064.2	5,027.5	36.72	137.926				
8,443.7	7,740.0	7,886.5	7,767.6	21.8	24.0	90.17	-5,238.4	-18.6	5,021.8	4,984.9	36.89	136.130				
8,500.0	7,740.0	7,886.5	7,767.7	22.2	24.0	90.18	-5,238.4	-18.6	4,967.1	4,930.0	37.11	133.851				
8,600.0	7,740.0	7,886.6	7,767.8	22.9	24.0	90.20	-5,238.4	-18.6	4,869.8	4,832.3	37.49	129.907				
8,700.0	7,740.0	7,886.7	7,767.8	23.7	24.0	90.22	-5,238.4	-18.6	4,772.2	4,734.3	37.85	126.067				
8,800.0	7,740.0	7,886.7	7,767.9	24.6	24.0	90.24	-5,238.4	-18.6	4,674.3	4,636.1	38.21	122.328				
8,843.7	7,740.0	7,886.8	7,767.9	25.1	24.0	90.25	-5,238.4	-18.6	4,631.4	4,593.1	38.37	120.718				
8,900.0	7,740.0	7,886.8	7,768.0	25.6	24.0	90.25	-5,238.4	-18.6	4,576.2	4,537.6	38.57	118.650				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error: 0.0 ft			
Survey Program: 56-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
9,000.0	7,740.0	7,886.8	7,768.0	26.7	24.0	90.26	-5,238.4	-18.6	4,478.1	4,439.2	38.94	115.009				
9,100.0	7,740.0	7,886.9	7,768.1	27.8	24.0	90.26	-5,238.4	-18.6	4,380.1	4,340.8	39.32	111.404				
9,200.0	7,740.0	7,886.9	7,768.1	29.0	24.0	90.26	-5,238.4	-18.6	4,282.3	4,242.6	39.71	107.836				
9,300.0	7,740.0	7,887.0	7,768.2	30.2	24.0	90.27	-5,238.4	-18.6	4,184.5	4,144.4	40.12	104.303				
9,343.7	7,740.0	7,887.0	7,768.2	30.8	24.0	90.27	-5,238.4	-18.6	4,141.8	4,101.5	40.30	102.772				
9,400.7	7,740.0	7,887.0	7,768.2	31.6	24.0	90.26	-5,238.4	-18.6	4,086.2	4,045.6	40.55	100.764				
9,500.0	7,740.0	7,887.1	7,768.3	32.9	24.0	90.26	-5,238.4	-18.6	3,989.6	3,948.6	41.00	97.298				
9,600.0	7,740.0	7,887.1	7,768.3	34.3	24.0	90.27	-5,238.4	-18.6	3,892.4	3,850.9	41.48	93.845				
9,700.0	7,740.0	7,887.2	7,768.4	35.7	24.0	90.27	-5,238.4	-18.6	3,795.4	3,753.4	41.97	90.428				
9,800.0	7,740.0	7,887.3	7,768.4	37.1	24.0	90.27	-5,238.4	-18.6	3,698.5	3,656.0	42.49	87.049				
9,900.0	7,740.0	7,887.3	7,768.5	38.6	24.0	90.28	-5,238.4	-18.6	3,601.8	3,558.7	43.03	83.707				
10,000.0	7,740.0	7,887.4	7,768.5	40.1	24.0	90.28	-5,238.4	-18.6	3,505.2	3,461.6	43.60	80.403				
10,100.0	7,740.0	7,887.4	7,768.6	41.6	24.0	90.28	-5,238.4	-18.6	3,408.9	3,364.7	44.19	77.138				
10,200.0	7,740.0	7,887.5	7,768.7	43.1	24.0	90.29	-5,238.4	-18.6	3,312.8	3,268.0	44.82	73.911				
10,300.0	7,740.0	7,887.5	7,768.7	44.7	24.0	90.29	-5,238.4	-18.6	3,216.9	3,171.5	45.49	70.725				
10,400.0	7,740.0	7,887.6	7,768.8	46.3	24.0	90.29	-5,238.4	-18.6	3,121.3	3,075.1	46.19	67.579				
10,500.0	7,740.0	7,887.7	7,768.8	47.8	24.0	90.30	-5,238.4	-18.6	3,026.0	2,979.1	46.93	64.475				
10,600.0	7,740.0	7,887.7	7,768.9	49.4	24.0	90.30	-5,238.4	-18.6	2,931.0	2,883.3	47.72	61.415				
10,700.0	7,740.0	7,887.8	7,768.9	51.0	24.0	90.30	-5,238.4	-18.6	2,836.3	2,787.7	48.57	58.399				
10,800.0	7,740.0	7,887.8	7,769.0	52.6	24.0	90.31	-5,238.4	-18.6	2,742.0	2,692.6	49.47	55.430				
10,900.0	7,740.0	7,887.9	7,769.1	54.2	24.0	90.31	-5,238.4	-18.6	2,648.1	2,597.7	50.43	52.509				
11,000.0	7,740.0	7,887.9	7,769.1	55.9	24.0	90.32	-5,238.4	-18.6	2,554.7	2,503.3	51.47	49.638				
11,100.0	7,740.0	7,888.0	7,769.2	57.5	24.0	90.32	-5,238.4	-18.6	2,461.8	2,409.3	52.58	46.821				
11,200.0	7,740.0	7,888.1	7,769.2	59.1	24.0	90.32	-5,238.4	-18.6	2,369.5	2,315.7	53.78	44.060				
11,300.0	7,740.0	7,888.1	7,769.3	60.8	24.0	90.33	-5,238.4	-18.6	2,277.9	2,222.8	55.08	41.358				
11,400.0	7,740.0	7,888.2	7,769.3	62.4	24.0	90.33	-5,238.4	-18.6	2,186.9	2,130.4	56.48	38.718				
11,500.0	7,740.0	7,888.2	7,769.4	64.1	24.0	90.33	-5,238.4	-18.6	2,096.8	2,038.8	58.01	36.145				
11,600.0	7,740.0	7,888.3	7,769.5	65.8	24.0	90.34	-5,238.4	-18.6	2,007.6	1,948.0	59.68	33.642				
11,700.0	7,740.0	7,888.3	7,769.5	67.4	24.0	90.34	-5,238.4	-18.6	1,919.5	1,858.0	61.49	31.215				
11,800.0	7,740.0	7,888.4	7,769.6	69.1	24.0	90.34	-5,238.4	-18.6	1,832.7	1,769.2	63.48	28.868				
11,900.0	7,740.0	7,888.5	7,769.6	70.8	24.0	90.35	-5,238.4	-18.6	1,747.2	1,681.5	65.66	26.608				
12,000.0	7,740.0	7,888.5	7,769.7	72.5	24.0	90.35	-5,238.4	-18.6	1,663.3	1,595.3	68.06	24.439				
12,100.0	7,740.0	7,888.6	7,769.7	74.1	24.0	90.35	-5,238.4	-18.6	1,581.3	1,510.6	70.69	22.370				
12,200.0	7,740.0	7,888.6	7,769.8	75.8	24.0	90.36	-5,238.4	-18.6	1,501.5	1,428.0	73.58	20.407				
12,300.0	7,740.0	7,888.7	7,769.9	77.5	24.0	90.36	-5,238.4	-18.6	1,424.3	1,347.5	76.75	18.558				
12,400.0	7,740.0	7,888.7	7,769.9	79.2	24.0	90.36	-5,238.4	-18.6	1,350.0	1,269.8	80.21	16.831				
12,500.0	7,740.0	7,888.8	7,770.0	80.9	24.0	90.37	-5,238.4	-18.6	1,279.3	1,195.3	83.98	15.234				
12,600.0	7,740.0	7,888.9	7,770.0	82.6	24.0	90.37	-5,238.4	-18.6	1,212.7	1,124.6	88.02	13.776				
12,700.0	7,740.0	7,888.9	7,770.1	84.3	24.0	90.37	-5,238.4	-18.6	1,150.9	1,058.6	92.32	12.466				
12,800.0	7,740.0	7,889.0	7,770.1	86.0	24.0	90.38	-5,238.4	-18.6	1,094.8	998.0	96.78	11.312				
12,900.0	7,740.0	7,889.0	7,770.2	87.7	24.0	90.38	-5,238.4	-18.6	1,045.3	944.0	101.28	10.320				
13,000.0	7,740.0	7,889.1	7,770.3	89.4	24.0	90.39	-5,238.4	-18.6	1,003.3	897.6	105.63	9.498				
13,100.0	7,740.0	7,889.1	7,770.3	91.1	24.0	90.39	-5,238.4	-18.6	969.8	860.2	109.60	8.849				
13,200.0	7,740.0	7,889.2	7,770.4	92.8	24.0	90.39	-5,238.4	-18.6	945.8	832.9	112.92	8.376				
13,300.0	7,740.0	7,889.2	7,770.4	94.5	24.0	90.40	-5,238.4	-18.6	931.9	816.6	115.35	8.079				
13,380.0	7,740.0	7,889.3	7,770.5	95.9	24.0	90.40	-5,238.4	-18.6	928.5	812.0	116.52	7.969 CC, ES				
13,400.0	7,740.0	7,889.3	7,770.5	96.3	24.0	90.40	-5,238.4	-18.6	928.7	812.0	116.70	7.959 SF				
13,500.0	7,740.0	7,889.4	7,770.5	98.0	24.0	90.40	-5,238.4	-18.6	936.2	819.4	116.87	8.011				
13,600.0	7,740.0	7,889.4	7,770.6	99.7	24.0	90.41	-5,238.4	-18.6	954.2	838.3	115.92	8.231				
13,700.0	7,740.0	7,889.5	7,770.7	101.4	24.0	90.41	-5,238.4	-18.6	982.1	868.1	114.00	8.615				
13,800.0	7,740.0	7,889.5	7,770.7	103.1	24.0	90.41	-5,238.4	-18.6	1,019.1	907.8	111.31	9.155				
13,900.0	7,740.0	7,889.6	7,770.8	104.8	24.0	90.42	-5,238.4	-18.6	1,064.2	956.1	108.09	9.845				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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)				
14,000.0	7,740.0	7,889.6	7,770.8	106.6	24.0	90.42	-5,238.4	-18.6	1,116.5	1,011.9	104.57	10.676		
14,100.0	7,740.0	7,889.7	7,770.9	108.3	24.0	90.42	-5,238.4	-18.6	1,174.9	1,074.0	100.93	11.641		
14,200.0	7,740.0	7,889.8	7,770.9	110.0	24.0	90.43	-5,238.4	-18.6	1,238.7	1,141.4	97.30	12.731		
14,300.0	7,740.0	7,889.8	7,771.0	111.7	24.0	90.43	-5,238.4	-18.6	1,307.1	1,213.3	93.78	13.938		
14,400.0	7,740.0	7,889.9	7,771.1	113.5	24.0	90.43	-5,238.4	-18.6	1,379.3	1,288.9	90.42	15.254		
14,500.0	7,740.0	7,889.9	7,771.1	115.2	24.0	90.44	-5,238.4	-18.6	1,454.8	1,367.5	87.27	16.671		
14,600.0	7,740.0	7,890.0	7,771.2	116.9	24.0	90.44	-5,238.4	-18.6	1,533.1	1,448.8	84.33	18.181		
14,700.0	7,740.0	7,890.0	7,771.2	118.6	24.0	90.44	-5,238.4	-18.6	1,613.8	1,532.2	81.61	19.775		
14,800.0	7,740.0	7,890.1	7,771.3	120.4	24.0	90.45	-5,238.4	-18.6	1,696.6	1,617.5	79.11	21.447		
14,900.0	7,740.0	7,890.2	7,771.3	122.1	24.0	90.45	-5,238.4	-18.6	1,781.1	1,704.3	76.81	23.190		
15,000.0	7,740.0	7,890.2	7,771.4	123.8	24.0	90.46	-5,238.4	-18.6	1,867.2	1,792.5	74.70	24.997		
15,100.0	7,740.0	7,890.3	7,771.4	125.6	24.0	90.46	-5,238.4	-18.6	1,954.6	1,881.8	72.77	26.861		
15,200.0	7,740.0	7,890.3	7,771.5	127.3	24.0	90.46	-5,238.4	-18.6	2,043.1	1,972.1	71.00	28.777		
15,300.0	7,740.0	7,890.4	7,771.6	129.0	24.0	90.47	-5,238.4	-18.6	2,132.7	2,063.3	69.38	30.739		
15,400.0	7,740.0	7,890.4	7,771.6	130.7	24.0	90.47	-5,238.4	-18.6	2,223.2	2,155.3	67.90	32.742		
15,500.0	7,740.0	7,890.5	7,771.7	132.5	24.0	90.47	-5,238.4	-18.6	2,314.4	2,247.8	66.54	34.780		
15,600.0	7,740.0	7,890.6	7,771.7	134.2	24.0	90.48	-5,238.4	-18.6	2,406.3	2,341.0	65.30	36.849		
15,700.0	7,740.0	7,890.6	7,771.8	135.9	24.0	90.48	-5,238.4	-18.6	2,498.9	2,434.7	64.16	38.945		
15,800.0	7,740.0	7,890.7	7,771.8	137.7	24.0	90.48	-5,238.4	-18.6	2,592.0	2,528.9	63.12	41.064		
15,900.0	7,740.0	7,890.7	7,771.9	139.4	24.0	90.49	-5,238.4	-18.6	2,685.6	2,623.4	62.16	43.203		
16,000.0	7,740.0	7,890.8	7,772.0	141.1	24.0	90.49	-5,238.4	-18.6	2,779.6	2,718.4	61.28	45.358		
16,084.2	7,740.0	7,890.8	7,772.0	142.6	24.0	90.49	-5,238.4	-18.6	2,859.1	2,798.5	60.60	47.182		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error: 0.0 ft			
Survey Program: 814-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance									Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
0.0	0.0	23.2	23.2	0.0	0.0	172.97	-4,267.5	526.3	4,299.9							
100.0	100.0	123.9	123.9	0.2	0.2	172.97	-4,267.5	526.3	4,299.8	4,299.5	0.36	N/A				
200.0	200.0	224.7	224.7	0.3	0.4	172.97	-4,267.5	526.3	4,299.8	4,299.1	0.71	6,044.529				
300.0	300.0	325.5	325.5	0.5	0.6	172.97	-4,267.4	526.3	4,299.8	4,298.7	1.06	4,062.062				
400.0	400.0	426.2	426.2	0.7	0.7	172.97	-4,267.4	526.4	4,299.7	4,298.3	1.41	3,058.805				
500.0	500.0	527.0	527.0	0.8	0.9	172.97	-4,267.3	526.4	4,299.6	4,297.9	1.75	2,452.942				
600.0	600.0	627.7	627.7	1.0	1.1	172.97	-4,267.2	526.5	4,299.5	4,297.4	2.10	2,047.386				
700.0	700.0	728.5	728.5	1.2	1.2	172.97	-4,267.0	526.5	4,299.4	4,296.9	2.45	1,756.890				
800.0	800.0	829.0	829.0	1.4	1.4	172.96	-4,266.9	526.6	4,299.3	4,296.5	2.79	1,538.486				
900.0	900.0	1,091.5	1,091.0	1.5	1.9	172.79	-4,261.4	538.7	4,298.6	4,295.1	3.45	1,246.400				
1,000.0	1,000.0	1,267.8	1,266.0	1.7	2.3	172.52	-4,249.8	557.7	4,293.1	4,289.1	4.02	1,068.464				
1,100.0	1,100.0	1,531.1	1,524.3	1.9	3.1	120.59	-4,223.9	601.0	4,285.8	4,280.8	4.96	863.713				
1,200.0	1,200.0	1,685.6	1,674.2	2.1	3.8	120.25	-4,204.5	632.6	4,277.5	4,271.7	5.72	747.718				
1,300.0	1,299.9	1,865.0	1,846.9	2.3	4.6	119.83	-4,177.3	673.0	4,267.4	4,260.7	6.64	642.773				
1,400.0	1,399.7	1,929.0	1,908.5	2.4	4.9	119.74	-4,167.6	687.5	4,258.5	4,251.4	7.11	599.265				
1,500.0	1,499.4	2,004.9	1,981.6	2.6	5.3	119.61	-4,156.6	704.8	4,251.4	4,243.7	7.63	557.124				
1,600.0	1,598.9	2,134.0	2,106.0	2.8	5.9	119.39	-4,137.7	733.4	4,244.9	4,236.5	8.40	505.628				
1,700.0	1,698.3	2,216.0	2,185.0	3.1	6.3	119.27	-4,125.6	752.0	4,239.4	4,230.4	8.99	471.694				
1,800.0	1,797.4	2,311.0	2,276.5	3.3	6.7	119.14	-4,111.8	773.5	4,234.9	4,225.3	9.64	439.354				
1,900.0	1,896.3	2,388.3	2,351.0	3.6	7.1	119.05	-4,100.7	790.5	4,231.5	4,221.3	10.23	413.564				
1,915.7	1,911.9	2,406.0	2,368.2	3.6	7.2	119.03	-4,098.2	794.4	4,231.1	4,220.8	10.35	408.773				
2,000.0	1,995.0	2,477.8	2,437.5	3.8	7.5	118.93	-4,088.4	810.1	4,229.2	4,218.3	10.88	388.532				
2,100.0	2,093.8	2,562.1	2,519.0	4.1	7.9	118.81	-4,076.9	828.4	4,227.0	4,215.5	11.52	366.817				
2,200.0	2,192.5	2,636.5	2,591.0	4.4	8.3	118.71	-4,067.3	844.7	4,225.5	4,213.4	12.13	348.411				
2,300.0	2,291.2	2,793.9	2,742.9	4.7	9.0	118.49	-4,045.5	879.5	4,223.1	4,210.0	13.12	321.954				
2,400.0	2,389.9	2,879.6	2,825.6	5.0	9.5	118.37	-4,033.6	898.5	4,220.7	4,206.9	13.79	306.061				
2,500.0	2,488.7	2,993.7	2,935.7	5.3	10.0	118.21	-4,017.7	923.9	4,218.5	4,203.9	14.60	288.963				
2,600.0	2,587.4	3,137.0	3,073.8	5.6	10.8	118.00	-3,996.5	955.9	4,215.3	4,199.7	15.56	270.881				
2,700.0	2,686.1	3,202.2	3,136.5	5.9	11.1	117.89	-3,986.7	970.8	4,212.1	4,195.9	16.16	260.660				
2,800.0	2,784.8	3,279.4	3,210.9	6.2	11.5	117.78	-3,975.8	988.3	4,209.7	4,192.9	16.82	250.255				
2,900.0	2,883.6	3,359.0	3,287.6	6.5	11.9	117.66	-3,964.7	1,006.5	4,207.7	4,190.2	17.49	240.531				
3,000.0	2,982.3	3,497.0	3,420.9	6.9	12.5	117.46	-3,946.1	1,036.8	4,206.0	4,187.6	18.42	228.330				
3,100.0	3,081.0	3,572.8	3,494.1	7.2	12.9	117.36	-3,935.4	1,053.6	4,203.8	4,184.7	19.08	220.307				
3,200.0	3,179.7	3,669.0	3,586.7	7.5	13.4	117.21	-3,922.1	1,075.8	4,201.9	4,182.0	19.85	211.646				
3,300.0	3,278.5	3,763.0	3,677.2	7.8	13.9	117.06	-3,909.0	1,097.7	4,200.0	4,179.4	20.60	203.855				
3,400.0	3,377.2	3,845.1	3,756.6	8.1	14.3	116.94	-3,898.1	1,115.6	4,198.5	4,177.2	21.28	197.285				
3,500.0	3,475.9	3,931.0	3,839.7	8.4	14.7	116.83	-3,887.2	1,134.0	4,197.5	4,175.5	21.97	191.013				
3,600.0	3,574.6	4,026.1	3,931.8	8.8	15.1	116.71	-3,875.3	1,154.6	4,196.7	4,174.0	22.72	184.723				
3,700.0	3,673.4	4,212.5	4,111.8	9.1	16.0	116.44	-3,849.5	1,195.4	4,194.6	4,170.7	23.90	175.525				
3,800.0	3,772.1	4,313.2	4,209.0	9.4	16.6	116.30	-3,834.5	1,217.5	4,191.7	4,167.0	24.68	169.833				
3,900.0	3,870.8	4,394.0	4,286.9	9.7	16.9	116.19	-3,822.6	1,235.1	4,189.0	4,163.6	25.37	165.109				
4,000.0	3,969.5	4,439.0	4,330.4	10.0	17.2	116.12	-3,816.4	1,244.7	4,187.1	4,161.2	25.89	161.719				
4,100.0	4,068.3	4,514.3	4,403.4	10.4	17.5	116.03	-3,806.8	1,260.7	4,186.2	4,159.7	26.54	157.719				
4,200.0	4,167.0	4,660.3	4,544.9	10.7	18.2	115.84	-3,788.1	1,291.5	4,185.3	4,157.8	27.52	152.093				
4,300.0	4,265.7	4,746.3	4,628.3	11.0	18.6	115.74	-3,776.8	1,309.3	4,183.9	4,155.7	28.21	148.322				
4,400.0	4,364.4	4,827.8	4,707.5	11.3	18.9	115.65	-3,766.6	1,325.2	4,182.9	4,154.1	28.85	144.992				
4,500.0	4,463.2	4,913.1	4,790.8	11.7	19.3	115.58	-3,756.6	1,340.7	4,182.4	4,152.9	29.50	141.790				
4,600.0	4,561.9	5,007.1	4,882.8	12.0	19.7	115.51	-3,745.8	1,357.2	4,182.0	4,151.8	30.17	138.610				
4,700.0	4,660.6	5,097.5	4,971.2	12.3	20.0	115.45	-3,735.8	1,372.6	4,181.8	4,151.0	30.82	135.676				
4,712.5	4,673.0	5,108.4	4,981.9	12.4	20.1	115.45	-3,734.6	1,374.5	4,181.8	4,150.9	30.90	135.330				
4,800.0	4,759.3	5,186.0	5,058.0	12.6	20.4	115.40	-3,726.3	1,387.2	4,182.0	4,150.5	31.46	132.936				
4,900.0	4,858.1	5,289.0	5,158.9	13.0	20.8	115.34	-3,715.3	1,404.7	4,182.2	4,150.0	32.16	130.036				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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			
5,000.0	4,956.8	5,386.0	5,254.0	13.3	21.1	115.29	-3,705.0	1,420.4	4,182.4	4,149.6	32.82	127.446			
5,100.0	5,055.5	5,458.9	5,325.8	13.6	21.4	115.26	-3,697.7	1,431.6	4,183.0	4,149.6	33.38	125.323			
5,200.0	5,154.2	5,529.3	5,395.0	13.9	21.7	115.23	-3,691.1	1,442.2	4,184.2	4,150.3	33.93	123.325			
5,300.0	5,253.0	5,676.3	5,539.6	14.3	22.2	115.17	-3,677.1	1,465.0	4,185.3	4,150.5	34.76	120.408			
5,400.0	5,351.7	5,745.3	5,607.5	14.6	22.4	115.15	-3,670.3	1,475.3	4,186.0	4,150.7	35.30	118.592			
5,500.0	5,450.4	5,816.5	5,677.7	14.9	22.7	115.14	-3,664.3	1,485.2	4,187.7	4,151.8	35.83	116.879			
5,600.0	5,549.1	5,900.0	5,760.1	15.3	23.0	115.13	-3,657.6	1,496.7	4,189.8	4,153.4	36.40	115.101			
5,700.0	5,647.9	5,983.7	5,842.8	15.6	23.2	115.13	-3,651.2	1,507.9	4,192.3	4,155.4	36.96	113.441			
5,800.0	5,746.6	6,093.2	5,951.4	15.9	23.5	115.16	-3,644.0	1,519.9	4,195.3	4,157.7	37.54	111.762			
5,900.0	5,845.3	6,179.2	6,037.0	16.2	23.7	115.22	-3,638.5	1,527.2	4,197.8	4,159.8	38.02	110.407			
6,000.0	5,944.1	6,249.7	6,107.1	16.6	23.8	115.28	-3,634.6	1,532.3	4,201.0	4,162.5	38.45	109.248			
6,100.0	6,042.8	6,315.6	6,172.8	16.9	24.0	115.34	-3,631.6	1,536.4	4,204.8	4,166.0	38.85	108.227			
6,200.0	6,141.5	6,379.0	6,236.2	17.2	24.1	115.42	-3,629.6	1,539.4	4,209.6	4,170.4	39.22	107.323			
6,300.0	6,240.2	6,506.0	6,363.1	17.5	24.2	115.64	-3,626.3	1,541.0	4,214.3	4,174.7	39.60	106.425			
6,400.0	6,339.0	6,547.5	6,404.6	17.9	24.2	115.72	-3,625.6	1,540.6	4,219.4	4,179.5	39.89	105.768			
6,500.0	6,437.7	6,599.6	6,456.7	18.2	24.2	115.83	-3,625.6	1,539.9	4,226.1	4,185.9	40.19	105.142			
6,600.0	6,536.4	6,704.1	6,561.2	18.5	24.3	116.04	-3,625.8	1,539.7	4,233.2	4,192.6	40.56	104.375			
6,700.0	6,635.1	6,820.2	6,677.2	18.9	24.4	116.25	-3,625.3	1,540.4	4,240.0	4,199.1	40.94	103.566			
6,800.0	6,733.9	6,928.9	6,785.9	19.2	24.5	116.46	-3,624.6	1,540.7	4,246.6	4,205.3	41.31	102.793			
6,900.0	6,832.6	7,046.8	6,903.9	19.5	24.7	116.67	-3,623.5	1,541.1	4,252.9	4,211.2	41.69	102.005			
7,000.0	6,931.3	7,170.3	7,027.3	19.8	24.8	116.91	-3,621.7	1,540.9	4,258.7	4,216.6	42.07	101.226			
7,100.0	7,030.0	7,280.4	7,137.4	20.2	24.9	117.12	-3,619.6	1,540.5	4,264.0	4,221.6	42.44	100.479			
7,191.8	7,120.7	7,388.8	7,245.8	20.5	25.0	117.32	-3,617.3	1,540.2	4,268.8	4,226.1	42.78	99.788			
7,200.0	7,128.8	7,399.1	7,256.1	20.5	25.0	112.94	-3,617.1	1,540.1	4,269.2	4,226.4	42.81	99.725			
7,250.0	7,178.3	7,448.4	7,305.3	20.6	25.1	78.42	-3,615.9	1,539.8	4,268.8	4,225.8	42.97	99.337			
7,300.0	7,227.8	7,493.0	7,350.0	20.7	25.1	46.71	-3,614.9	1,539.2	4,264.1	4,220.9	43.13	98.874			
7,350.0	7,276.8	7,540.9	7,397.8	20.8	25.1	28.90	-3,613.9	1,538.5	4,255.1	4,211.8	43.27	98.331			
7,400.0	7,325.1	7,585.2	7,442.1	20.8	25.2	19.30	-3,613.0	1,537.7	4,242.0	4,198.6	43.41	97.717			
7,450.0	7,372.2	7,633.6	7,490.5	20.8	25.2	13.57	-3,612.1	1,536.8	4,224.7	4,181.2	43.54	97.022			
7,500.0	7,417.7	7,680.3	7,537.2	20.8	25.3	9.76	-3,611.2	1,535.9	4,203.5	4,159.8	43.67	96.258			
7,550.0	7,461.4	7,721.3	7,578.1	20.7	25.3	6.98	-3,610.4	1,535.1	4,178.4	4,134.6	43.78	95.435			
7,600.0	7,502.9	7,756.2	7,613.0	20.7	25.3	4.78	-3,609.8	1,534.4	4,149.8	4,105.9	43.89	94.559			
7,650.0	7,541.9	7,788.9	7,645.8	20.6	25.3	2.90	-3,609.2	1,533.8	4,117.7	4,073.7	43.98	93.630			
7,700.0	7,578.0	7,829.5	7,686.4	20.5	25.4	1.16	-3,608.5	1,532.9	4,082.5	4,038.4	44.07	92.638			
7,750.0	7,611.1	7,871.0	7,727.8	20.4	25.4	-0.62	-3,607.8	1,532.0	4,044.3	4,000.2	44.15	91.597			
7,800.0	7,640.8	7,903.5	7,760.4	20.4	25.4	-2.59	-3,607.1	1,531.3	4,003.4	3,959.2	44.22	90.527			
7,850.0	7,667.0	7,927.0	7,783.8	20.3	25.5	-4.97	-3,606.6	1,530.9	3,960.3	3,916.0	44.28	89.435			
7,900.0	7,689.4	7,946.9	7,803.7	20.3	25.5	-8.13	-3,606.2	1,530.5	3,915.1	3,870.8	44.33	88.322			
7,950.0	7,707.9	7,963.2	7,819.9	20.3	25.5	-12.74	-3,605.9	1,530.2	3,868.3	3,824.0	44.36	87.197			
8,000.0	7,722.2	7,975.6	7,832.4	20.3	25.5	-20.33	-3,605.6	1,530.0	3,820.3	3,775.9	44.39	86.066			
8,050.0	7,732.4	7,987.0	7,843.8	20.3	25.5	-34.83	-3,605.4	1,529.8	3,771.3	3,726.9	44.40	84.934			
8,100.0	7,738.4	7,987.0	7,843.8	20.4	25.5	-64.01	-3,605.4	1,529.8	3,721.8	3,677.4	44.40	83.820			
8,143.7	7,740.0	7,987.0	7,843.8	20.5	25.5	-100.38	-3,605.4	1,529.8	3,678.4	3,634.1	44.40	82.855			
8,200.0	7,740.0	7,987.0	7,843.8	20.6	25.5	-100.38	-3,605.4	1,529.8	3,622.6	3,578.2	44.39	81.614			
8,300.0	7,740.0	7,987.0	7,843.8	21.0	25.5	-100.38	-3,605.4	1,529.8	3,523.3	3,479.0	44.37	79.417			
8,400.0	7,740.0	7,987.0	7,843.8	21.5	25.5	-100.38	-3,605.4	1,529.8	3,424.2	3,379.8	44.34	77.228			
8,443.7	7,740.0	7,983.5	7,840.3	21.8	25.5	-99.93	-3,605.5	1,529.8	3,380.9	3,336.6	44.32	76.278			
8,500.0	7,740.0	7,982.4	7,839.2	22.2	25.5	-99.13	-3,605.5	1,529.8	3,325.1	3,280.8	44.30	75.063			
8,600.0	7,740.0	7,980.4	7,837.2	22.9	25.5	-97.97	-3,605.6	1,529.9	3,226.3	3,182.1	44.23	72.949			
8,700.0	7,740.0	7,978.5	7,835.3	23.7	25.5	-97.05	-3,605.6	1,529.9	3,127.9	3,083.8	44.13	70.878			
8,800.0	7,740.0	7,976.6	7,833.4	24.6	25.5	-96.30	-3,605.6	1,529.9	3,029.9	2,985.9	44.01	68.850			
8,843.7	7,740.0	7,975.8	7,832.6	25.1	25.5	-96.02	-3,605.6	1,530.0	2,987.3	2,943.3	43.95	67.973			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
8,900.0	7,740.0	7,974.7	7,831.5	25.6	25.5	-95.93	-3,605.7	1,530.0	2,932.4	2,888.5	43.87	66.845		
9,000.0	7,740.0	7,972.9	7,829.6	26.7	25.5	-95.76	-3,605.7	1,530.0	2,835.1	2,791.4	43.72	64.842		
9,100.0	7,740.0	7,971.0	7,827.8	27.8	25.5	-95.60	-3,605.7	1,530.0	2,738.0	2,694.4	43.57	62.839		
9,200.0	7,740.0	7,969.1	7,825.9	29.0	25.5	-95.44	-3,605.8	1,530.1	2,641.0	2,597.6	43.41	60.833		
9,300.0	7,740.0	7,967.2	7,824.0	30.2	25.5	-95.28	-3,605.8	1,530.1	2,544.4	2,501.1	43.26	58.822		
9,343.7	7,740.0	7,966.4	7,823.2	30.8	25.5	-95.21	-3,605.8	1,530.1	2,502.2	2,459.0	43.19	57.942		
9,400.7	7,740.0	7,965.3	7,822.1	31.6	25.5	-95.30	-3,605.9	1,530.1	2,447.2	2,404.1	43.10	56.781		
9,500.0	7,740.0	7,963.4	7,820.2	32.9	25.5	-95.13	-3,605.9	1,530.2	2,351.5	2,308.6	42.95	54.747		
9,600.0	7,740.0	7,961.5	7,818.2	34.3	25.5	-94.96	-3,605.9	1,530.2	2,255.4	2,212.6	42.81	52.684		
9,700.0	7,740.0	7,959.5	7,816.3	35.7	25.5	-94.79	-3,606.0	1,530.3	2,159.7	2,117.0	42.68	50.600		
9,800.0	7,740.0	7,957.6	7,814.4	37.1	25.5	-94.61	-3,606.0	1,530.3	2,064.4	2,021.8	42.57	48.489		
9,900.0	7,740.0	7,955.7	7,812.5	38.6	25.5	-94.44	-3,606.0	1,530.3	1,969.5	1,927.0	42.50	46.342		
10,000.0	7,740.0	7,953.7	7,810.5	40.1	25.5	-94.27	-3,606.1	1,530.4	1,875.2	1,832.7	42.47	44.149		
10,100.0	7,740.0	7,951.8	7,808.6	41.6	25.5	-94.09	-3,606.1	1,530.4	1,781.5	1,739.0	42.52	41.899		
10,200.0	7,740.0	7,949.8	7,806.6	43.1	25.5	-93.92	-3,606.2	1,530.4	1,688.5	1,645.9	42.66	39.580		
10,300.0	7,740.0	7,947.9	7,804.7	44.7	25.5	-93.74	-3,606.2	1,530.5	1,596.4	1,553.5	42.94	37.180		
10,400.0	7,740.0	7,945.9	7,802.7	46.3	25.5	-93.57	-3,606.2	1,530.5	1,505.3	1,461.9	43.39	34.692		
10,500.0	7,740.0	7,944.0	7,800.8	47.8	25.5	-93.39	-3,606.3	1,530.5	1,415.3	1,371.3	44.07	32.114		
10,600.0	7,740.0	7,942.0	7,798.8	49.4	25.5	-93.22	-3,606.3	1,530.6	1,326.8	1,281.8	45.05	29.454		
10,700.0	7,740.0	7,940.1	7,796.8	51.0	25.5	-93.04	-3,606.4	1,530.6	1,240.1	1,193.7	46.38	26.736		
10,800.0	7,740.0	7,938.1	7,794.9	52.6	25.5	-92.86	-3,606.4	1,530.7	1,155.5	1,107.3	48.14	24.000		
10,900.0	7,740.0	7,936.1	7,792.9	54.2	25.5	-92.69	-3,606.4	1,530.7	1,073.5	1,023.1	50.40	21.299		
11,000.0	7,740.0	7,934.1	7,790.9	55.9	25.5	-92.51	-3,606.5	1,530.7	994.8	941.6	53.21	18.696		
11,100.0	7,740.0	7,932.1	7,788.9	57.5	25.5	-92.33	-3,606.5	1,530.8	920.3	863.7	56.61	16.257		
11,200.0	7,740.0	7,930.1	7,786.9	59.1	25.5	-92.15	-3,606.6	1,530.8	851.0	790.4	60.60	14.043		
11,300.0	7,740.0	7,928.2	7,785.0	60.8	25.5	-91.97	-3,606.6	1,530.9	788.3	723.2	65.12	12.106		
11,400.0	7,740.0	7,926.2	7,783.0	62.4	25.5	-91.79	-3,606.6	1,530.9	734.0	664.0	70.00	10.485		
11,500.0	7,740.0	7,924.2	7,781.0	64.1	25.5	-91.61	-3,606.7	1,530.9	689.9	614.9	74.94	9.206		
11,600.0	7,740.0	7,922.2	7,778.9	65.8	25.5	-91.43	-3,606.7	1,531.0	658.2	578.7	79.47	8.282		
11,700.0	7,740.0	7,920.1	7,776.9	67.4	25.5	-91.25	-3,606.8	1,531.0	640.6	557.5	83.10	7.709		
11,763.9	7,740.0	7,918.9	7,775.7	68.5	25.5	-91.14	-3,606.8	1,531.0	637.4	552.7	84.76	7.520 CC, ES		
11,800.0	7,740.0	7,918.1	7,774.9	69.1	25.4	-91.07	-3,606.8	1,531.0	638.4	553.0	85.45	7.472 SF		
11,900.0	7,740.0	7,916.1	7,772.9	70.8	25.4	-90.89	-3,606.8	1,531.1	651.8	565.3	86.43	7.541		
12,000.0	7,740.0	7,914.1	7,770.9	72.5	25.4	-90.71	-3,606.9	1,531.1	679.7	593.4	86.30	7.876		
12,100.0	7,740.0	7,912.1	7,768.9	74.1	25.4	-90.53	-3,606.9	1,531.2	720.6	635.1	85.46	8.432		
12,200.0	7,740.0	7,910.0	7,766.8	75.8	25.4	-90.34	-3,607.0	1,531.2	772.3	688.0	84.24	9.167		
12,300.0	7,740.0	7,908.0	7,764.8	77.5	25.4	-90.16	-3,607.0	1,531.3	832.8	749.9	82.86	10.051		
12,400.0	7,740.0	7,905.9	7,762.7	79.2	25.4	-89.98	-3,607.1	1,531.3	900.4	819.0	81.44	11.056		
12,500.0	7,740.0	7,903.9	7,760.7	80.9	25.4	-89.79	-3,607.1	1,531.3	973.6	893.6	80.04	12.165		
12,600.0	7,740.0	7,901.8	7,758.6	82.6	25.4	-89.61	-3,607.1	1,531.4	1,051.2	972.5	78.70	13.358		
12,700.0	7,740.0	7,899.8	7,756.6	84.3	25.4	-89.42	-3,607.2	1,531.4	1,132.3	1,054.9	77.44	14.623		
12,800.0	7,740.0	7,897.7	7,754.5	86.0	25.4	-89.24	-3,607.2	1,531.5	1,216.3	1,140.0	76.27	15.947		
12,900.0	7,740.0	7,895.7	7,752.5	87.7	25.4	-89.05	-3,607.3	1,531.5	1,302.5	1,227.3	75.20	17.321		
13,000.0	7,740.0	7,893.6	7,750.4	89.4	25.4	-88.87	-3,607.3	1,531.6	1,390.5	1,316.3	74.22	18.736		
13,100.0	7,740.0	7,892.0	7,748.8	91.1	25.4	-88.73	-3,607.3	1,531.6	1,480.1	1,406.8	73.33	20.185		
13,200.0	7,740.0	7,892.0	7,748.8	92.8	25.4	-88.73	-3,607.3	1,531.6	1,570.9	1,498.4	72.52	21.663		
13,300.0	7,740.0	7,887.7	7,744.5	94.5	25.4	-88.34	-3,607.4	1,531.7	1,662.8	1,591.0	71.78	23.166		
13,400.0	7,740.0	7,885.8	7,742.6	96.3	25.4	-88.17	-3,607.5	1,531.7	1,755.5	1,684.4	71.11	24.689		
13,500.0	7,740.0	7,883.9	7,740.7	98.0	25.4	-88.00	-3,607.5	1,531.8	1,849.1	1,778.6	70.50	26.228		
13,600.0	7,740.0	7,882.0	7,738.8	99.7	25.4	-87.83	-3,607.6	1,531.8	1,943.2	1,873.3	69.95	27.782		
13,700.0	7,740.0	7,880.2	7,737.0	101.4	25.4	-87.66	-3,607.6	1,531.8	2,037.9	1,968.5	69.44	29.347		
13,800.0	7,740.0	7,878.3	7,735.2	103.1	25.4	-87.50	-3,607.6	1,531.9	2,133.1	2,064.1	68.98	30.923		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,740.0	7,876.5	7,733.3	104.8	25.4	-87.34	-3,607.7	1,531.9	2,228.7	2,160.2	68.56	32.506		
14,000.0	7,740.0	7,874.7	7,731.5	106.6	25.4	-87.18	-3,607.7	1,532.0	2,324.7	2,256.5	68.18	34.096		
14,100.0	7,740.0	7,873.0	7,729.8	108.3	25.4	-87.02	-3,607.7	1,532.0	2,421.0	2,353.2	67.83	35.691		
14,200.0	7,740.0	7,871.2	7,728.0	110.0	25.4	-86.86	-3,607.8	1,532.0	2,517.6	2,450.1	67.51	37.291		
14,300.0	7,740.0	7,869.5	7,726.3	111.7	25.4	-86.71	-3,607.8	1,532.1	2,614.4	2,547.2	67.22	38.893		
14,400.0	7,740.0	7,867.7	7,724.6	113.5	25.4	-86.55	-3,607.8	1,532.1	2,711.5	2,644.6	66.95	40.499		
14,500.0	7,740.0	7,866.0	7,722.8	115.2	25.4	-86.40	-3,607.9	1,532.1	2,808.8	2,742.1	66.71	42.105		
14,600.0	7,740.0	7,864.3	7,721.2	116.9	25.4	-86.25	-3,607.9	1,532.2	2,906.3	2,839.8	66.48	43.713		
14,700.0	7,740.0	7,862.7	7,719.5	118.6	25.4	-86.10	-3,607.9	1,532.2	3,003.9	2,937.6	66.28	45.322		
14,800.0	7,740.0	7,861.0	7,717.8	120.4	25.4	-85.95	-3,608.0	1,532.2	3,101.7	3,035.6	66.09	46.930		
14,900.0	7,740.0	7,859.3	7,716.2	122.1	25.4	-85.80	-3,608.0	1,532.3	3,199.6	3,133.7	65.92	48.538		
15,000.0	7,740.0	7,857.7	7,714.5	123.8	25.4	-85.66	-3,608.0	1,532.3	3,297.6	3,231.9	65.76	50.146		
15,100.0	7,740.0	7,856.1	7,712.9	125.6	25.4	-85.52	-3,608.1	1,532.3	3,395.8	3,330.1	65.62	51.752		
15,200.0	7,740.0	7,854.5	7,711.3	127.3	25.4	-85.37	-3,608.1	1,532.4	3,494.0	3,428.5	65.48	53.356		
15,300.0	7,740.0	7,852.9	7,709.8	129.0	25.4	-85.23	-3,608.1	1,532.4	3,592.4	3,527.0	65.36	54.959		
15,400.0	7,740.0	7,851.4	7,708.2	130.7	25.4	-85.09	-3,608.1	1,532.4	3,690.8	3,625.6	65.25	56.560		
15,500.0	7,740.0	7,849.8	7,706.6	132.5	25.4	-84.96	-3,608.2	1,532.5	3,789.3	3,724.2	65.15	58.159		
15,600.0	7,740.0	7,848.3	7,705.1	134.2	25.4	-84.82	-3,608.2	1,532.5	3,887.9	3,822.9	65.06	59.755		
15,700.0	7,740.0	7,846.7	7,703.6	135.9	25.4	-84.68	-3,608.2	1,532.5	3,986.6	3,921.6	64.98	61.349		
15,800.0	7,740.0	7,845.2	7,702.1	137.7	25.4	-84.55	-3,608.3	1,532.6	4,085.3	4,020.4	64.91	62.940		
15,900.0	7,740.0	7,843.7	7,700.6	139.4	25.4	-84.42	-3,608.3	1,532.6	4,184.1	4,119.3	64.84	64.528		
16,000.0	7,740.0	7,842.2	7,699.1	141.1	25.4	-84.28	-3,608.3	1,532.6	4,282.9	4,218.2	64.78	66.113		
16,084.2	7,740.0	7,841.0	7,697.8	142.6	25.4	-84.17	-3,608.3	1,532.7	4,366.2	4,301.5	64.74	67.445		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	33.7	33.7	0.0	0.0	172.56	-4,267.5	557.1	4,303.7					
100.0	100.0	118.0	118.0	0.2	0.2	172.56	-4,267.4	557.3	4,303.6	4,303.3	0.33		N/A	
200.0	200.0	178.0	178.0	0.3	0.3	172.55	-4,267.9	557.9	4,304.4	4,303.8	0.61		7,036.904	
300.0	300.0	207.9	207.8	0.5	0.3	172.54	-4,268.5	558.6	4,306.4	4,305.6	0.84		5,123.723	
400.0	400.0	270.0	269.9	0.7	0.5	172.52	-4,270.4	560.7	4,309.8	4,308.6	1.13		3,821.969	
500.0	500.0	298.6	298.4	0.8	0.5	172.50	-4,271.6	562.1	4,314.3	4,312.9	1.36		3,178.589	
600.0	600.0	362.0	361.6	1.0	0.7	172.46	-4,275.0	565.8	4,320.2	4,318.6	1.65		2,611.519	
700.0	700.0	362.0	361.6	1.2	0.7	172.46	-4,275.0	565.8	4,327.4	4,325.6	1.83		2,368.943	
800.0	800.0	426.1	425.4	1.4	0.8	172.40	-4,279.6	570.7	4,335.8	4,333.6	2.13		2,031.470	
900.0	900.0	454.0	453.1	1.5	0.9	172.38	-4,282.0	573.2	4,345.6	4,343.3	2.36		1,838.151	
1,000.0	1,000.0	512.0	510.5	1.7	1.1	172.31	-4,287.6	578.8	4,356.7	4,354.1	2.67		1,633.115	
1,100.0	1,100.0	546.0	544.1	1.9	1.2	120.76	-4,291.3	582.4	4,369.6	4,366.7	2.92		1,498.982	
1,200.0	1,200.0	599.8	597.1	2.1	1.4	120.57	-4,297.7	588.8	4,384.5	4,381.3	3.23		1,359.298	
1,300.0	1,299.9	642.0	638.6	2.3	1.5	120.38	-4,303.2	594.6	4,401.6	4,398.1	3.51		1,255.206	
1,400.0	1,399.7	700.3	695.7	2.4	1.8	120.15	-4,311.3	603.4	4,420.7	4,416.8	3.85		1,148.961	
1,500.0	1,499.4	833.5	826.0	2.6	2.3	119.86	-4,330.1	623.9	4,440.8	4,436.4	4.40		1,009.429	
1,600.0	1,598.9	903.6	894.6	2.8	2.5	119.64	-4,339.8	634.0	4,461.5	4,456.7	4.78		932.397	
1,700.0	1,698.3	940.0	930.2	3.1	2.7	119.43	-4,345.1	639.5	4,483.9	4,478.8	5.09		881.119	
1,800.0	1,797.4	1,004.0	992.6	3.3	3.0	119.19	-4,355.0	650.0	4,508.1	4,502.6	5.50		820.324	
1,900.0	1,896.3	1,048.9	1,036.2	3.6	3.2	118.94	-4,362.5	657.8	4,534.3	4,528.5	5.86		773.407	
1,915.7	1,911.9	1,068.0	1,054.6	3.6	3.3	118.90	-4,365.7	661.2	4,538.6	4,532.7	5.96		761.464	
2,000.0	1,995.0	1,119.9	1,104.9	3.8	3.5	118.88	-4,374.8	670.7	4,561.9	4,555.6	6.33		720.866	
2,100.0	2,093.8	1,204.7	1,186.8	4.1	3.9	118.86	-4,389.6	686.6	4,589.8	4,582.9	6.85		670.287	
2,200.0	2,192.5	1,385.9	1,362.2	4.4	4.8	118.82	-4,420.5	719.8	4,617.4	4,609.7	7.70		600.044	
2,300.0	2,291.2	1,477.2	1,450.9	4.7	5.2	118.80	-4,435.0	736.5	4,643.6	4,635.3	8.25		563.057	
2,400.0	2,389.9	1,564.3	1,535.3	5.0	5.6	118.79	-4,449.1	752.1	4,670.0	4,661.3	8.78		531.678	
2,500.0	2,488.7	1,641.0	1,609.8	5.3	5.9	118.78	-4,461.7	765.7	4,696.8	4,687.5	9.29		505.663	
2,600.0	2,587.4	1,722.2	1,688.4	5.6	6.3	118.76	-4,475.4	780.5	4,723.9	4,714.1	9.82		481.053	
2,700.0	2,686.1	1,801.8	1,765.5	5.9	6.7	118.74	-4,488.9	795.4	4,751.3	4,741.0	10.35		459.157	
2,800.0	2,784.8	1,941.9	1,900.9	6.2	7.4	118.70	-4,512.4	822.0	4,778.5	4,767.5	11.10		430.569	
2,900.0	2,883.6	2,021.0	1,977.6	6.5	7.8	118.68	-4,525.5	836.9	4,805.4	4,793.8	11.63		413.288	
3,000.0	2,982.3	2,117.0	2,070.6	6.9	8.2	118.66	-4,541.4	854.6	4,832.5	4,820.2	12.21		395.621	
3,100.0	3,081.0	2,182.0	2,133.5	7.2	8.5	118.65	-4,552.4	866.6	4,859.7	4,847.0	12.69		382.873	
3,200.0	3,179.7	2,334.8	2,281.6	7.5	9.2	118.63	-4,578.6	893.8	4,887.2	4,873.7	13.47		362.831	
3,300.0	3,278.5	2,431.8	2,375.7	7.8	9.7	118.61	-4,594.1	911.4	4,913.5	4,899.5	14.07		349.237	
3,400.0	3,377.2	2,497.0	2,438.8	8.1	10.0	118.59	-4,604.9	923.7	4,940.5	4,925.9	14.56		339.347	
3,500.0	3,475.9	2,607.4	2,545.7	8.4	10.5	118.58	-4,623.6	943.9	4,967.8	4,952.6	15.19		326.979	
3,600.0	3,574.6	2,707.8	2,643.1	8.8	11.0	118.57	-4,640.2	961.2	4,994.5	4,978.8	15.79		316.377	
3,700.0	3,673.4	2,813.9	2,746.2	9.1	11.5	118.56	-4,657.9	979.5	5,021.4	5,005.0	16.41		306.038	
3,800.0	3,772.1	2,910.7	2,840.2	9.4	11.9	118.55	-4,673.3	997.2	5,047.6	5,030.6	17.01		296.784	
3,900.0	3,870.8	2,975.0	2,902.4	9.7	12.2	118.53	-4,684.2	1,009.0	5,074.8	5,057.3	17.49		290.213	
4,000.0	3,969.5	3,013.2	2,939.3	10.0	12.4	118.53	-4,691.0	1,016.0	5,102.6	5,084.8	17.87		285.606	
4,100.0	4,068.3	3,078.5	3,002.4	10.4	12.7	118.52	-4,703.0	1,027.8	5,131.3	5,112.9	18.34		279.753	
4,200.0	4,167.0	3,188.7	3,108.9	10.7	13.3	118.51	-4,723.0	1,047.6	5,159.6	5,140.6	18.98		271.806	
4,300.0	4,265.7	3,346.0	3,261.0	11.0	14.0	118.48	-4,751.2	1,076.5	5,187.9	5,168.1	19.81		261.903	
4,400.0	4,364.4	3,499.4	3,409.4	11.3	14.8	118.44	-4,776.3	1,105.7	5,214.8	5,194.2	20.64		252.710	
4,500.0	4,463.2	3,569.4	3,477.2	11.7	15.1	118.42	-4,787.7	1,119.2	5,241.5	5,220.3	21.15		247.882	
4,600.0	4,561.9	3,658.5	3,563.4	12.0	15.5	118.40	-4,802.4	1,136.3	5,268.5	5,246.7	21.72		242.506	
4,700.0	4,660.6	3,764.0	3,665.6	12.3	16.0	118.38	-4,819.9	1,155.6	5,295.4	5,273.0	22.35		236.894	
4,800.0	4,759.3	3,858.8	3,757.5	12.6	16.5	118.37	-4,835.7	1,172.6	5,322.3	5,299.4	22.94		232.021	
4,900.0	4,858.1	3,993.1	3,888.0	13.0	17.1	118.36	-4,857.5	1,195.9	5,348.7	5,325.1	23.67		225.993	
5,000.0	4,956.8	4,085.3	3,977.5	13.3	17.5	118.35	-4,872.2	1,212.6	5,375.0	5,350.7	24.25		221.669	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,055.5	4,207.2	4,096.0	13.6	18.0	118.34	-4,891.2	1,233.6	5,400.8	5,375.8	24.92	216.681		
5,200.0	5,154.2	4,282.9	4,169.6	13.9	18.4	118.34	-4,903.3	1,246.1	5,426.8	5,401.3	25.42	213.473		
5,300.0	5,253.0	4,618.2	4,498.0	14.3	19.7	118.42	-4,950.7	1,294.2	5,450.2	5,423.5	26.73	203.906		
5,400.0	5,351.7	4,702.2	4,580.6	14.6	20.0	118.45	-4,961.1	1,305.5	5,472.3	5,445.0	27.25	200.818		
5,500.0	5,450.4	4,767.3	4,644.5	14.9	20.2	118.46	-4,969.4	1,314.7	5,494.7	5,467.0	27.71	198.312		
5,600.0	5,549.1	4,848.7	4,724.4	15.3	20.5	118.48	-4,980.2	1,326.0	5,517.7	5,489.5	28.21	195.606		
5,700.0	5,647.9	5,148.1	5,019.8	15.6	21.5	118.62	-5,014.7	1,361.2	5,537.9	5,508.6	29.31	188.941		
5,800.0	5,746.6	5,229.9	5,100.5	15.9	21.8	118.65	-5,022.9	1,370.9	5,557.5	5,527.7	29.81	186.430		
5,900.0	5,845.3	5,320.8	5,190.2	16.2	22.1	118.68	-5,032.4	1,382.1	5,577.4	5,547.1	30.34	183.861		
6,000.0	5,944.1	5,599.9	5,466.7	16.6	22.9	118.83	-5,057.2	1,410.9	5,595.2	5,563.9	31.31	178.704		
6,100.0	6,042.8	5,693.0	5,559.2	16.9	23.1	118.90	-5,064.2	1,418.7	5,611.8	5,580.0	31.80	176.450		
6,200.0	6,141.5	5,772.3	5,638.0	17.2	23.3	118.96	-5,070.7	1,425.4	5,628.9	5,596.6	32.26	174.468		
6,300.0	6,240.2	6,421.4	6,285.6	17.5	24.3	119.68	-5,096.6	1,449.0	5,641.4	5,607.8	33.56	168.084		
6,400.0	6,339.0	6,525.7	6,389.9	17.9	24.3	119.84	-5,096.2	1,448.2	5,648.9	5,614.9	33.99	166.214		
6,500.0	6,437.7	6,613.6	6,477.8	18.2	24.4	119.97	-5,095.9	1,447.6	5,656.5	5,622.1	34.40	164.442		
6,600.0	6,536.4	6,694.0	6,558.2	18.5	24.5	120.08	-5,095.9	1,447.4	5,664.5	5,629.7	34.80	162.758		
6,700.0	6,635.1	6,798.3	6,662.5	18.9	24.6	120.23	-5,096.0	1,447.5	5,672.6	5,637.4	35.24	160.972		
6,800.0	6,733.9	6,891.6	6,755.8	19.2	24.6	120.35	-5,095.9	1,447.9	5,680.7	5,645.0	35.67	159.274		
6,900.0	6,832.6	6,980.0	6,844.2	19.5	24.7	120.47	-5,095.9	1,448.5	5,688.9	5,652.8	36.09	157.638		
7,000.0	6,931.3	7,054.2	6,918.4	19.8	24.8	120.57	-5,096.0	1,449.1	5,697.4	5,660.9	36.49	156.115		
7,100.0	7,030.0	7,161.0	7,025.2	20.2	24.9	120.70	-5,096.6	1,450.1	5,706.2	5,669.3	36.94	154.477		
7,191.8	7,120.7	7,246.1	7,110.3	20.5	25.0	120.82	-5,097.0	1,450.7	5,714.3	5,676.9	37.33	153.086		
7,200.0	7,128.8	7,253.4	7,117.6	20.5	25.0	116.43	-5,097.0	1,450.7	5,714.9	5,677.6	37.36	152.965		
7,250.0	7,178.3	7,294.0	7,158.2	20.6	25.0	81.88	-5,097.2	1,450.9	5,716.5	5,678.9	37.56	152.186		
7,300.0	7,227.8	7,332.8	7,197.0	20.7	25.1	50.18	-5,097.6	1,451.1	5,713.8	5,676.0	37.76	151.325		
7,350.0	7,276.8	7,375.7	7,239.9	20.8	25.1	32.40	-5,098.0	1,451.4	5,706.9	5,668.9	37.96	150.351		
7,400.0	7,325.1	7,429.4	7,293.6	20.8	25.2	22.89	-5,098.4	1,451.8	5,695.7	5,657.5	38.17	149.222		
7,450.0	7,372.2	7,481.8	7,346.0	20.8	25.2	17.27	-5,098.9	1,452.2	5,680.2	5,641.8	38.37	148.022		
7,500.0	7,417.7	7,532.5	7,396.7	20.8	25.3	13.62	-5,099.2	1,452.6	5,660.7	5,622.1	38.57	146.759		
7,550.0	7,461.4	7,581.1	7,445.3	20.7	25.3	11.05	-5,099.6	1,453.0	5,637.1	5,598.4	38.76	145.441		
7,600.0	7,502.9	7,627.3	7,491.4	20.7	25.4	9.13	-5,099.8	1,453.4	5,609.8	5,570.9	38.94	144.075		
7,650.0	7,541.9	7,670.6	7,534.8	20.6	25.4	7.60	-5,100.0	1,453.8	5,579.0	5,539.9	39.10	142.672		
7,700.0	7,578.0	7,710.8	7,575.0	20.5	25.5	6.31	-5,100.2	1,454.2	5,544.8	5,505.5	39.26	141.238		
7,750.0	7,611.1	7,747.6	7,611.7	20.4	25.5	5.15	-5,100.3	1,454.6	5,507.5	5,468.1	39.40	139.782		
7,800.0	7,640.8	7,780.6	7,644.8	20.4	25.5	4.00	-5,100.4	1,454.9	5,467.5	5,428.0	39.53	138.313		
7,850.0	7,667.0	7,809.6	7,673.8	20.3	25.6	2.78	-5,100.4	1,455.2	5,425.0	5,385.4	39.65	136.840		
7,900.0	7,689.4	7,834.5	7,698.6	20.3	25.6	1.31	-5,100.5	1,455.5	5,380.4	5,340.7	39.75	135.371		
7,950.0	7,707.9	7,854.9	7,719.1	20.3	25.6	-0.68	-5,100.5	1,455.7	5,334.0	5,294.2	39.83	133.915		
8,000.0	7,722.2	7,870.8	7,735.0	20.3	25.6	-3.82	-5,100.5	1,455.9	5,286.2	5,246.3	39.90	132.479		
8,050.0	7,732.4	7,882.1	7,746.3	20.3	25.6	-10.01	-5,100.5	1,456.0	5,237.3	5,197.3	39.96	131.073		
8,100.0	7,738.4	7,888.7	7,752.9	20.4	25.7	-27.87	-5,100.5	1,456.1	5,187.7	5,147.7	40.00	129.704		
8,143.7	7,740.0	7,890.6	7,754.7	20.5	25.7	-88.20	-5,100.5	1,456.1	5,144.1	5,104.1	40.02	128.542		
8,200.0	7,740.0	7,890.6	7,754.8	20.6	25.7	-88.21	-5,100.5	1,456.1	5,087.8	5,047.8	40.04	127.060		
8,300.0	7,740.0	7,890.8	7,754.9	21.0	25.7	-88.24	-5,100.5	1,456.1	4,988.0	4,947.9	40.08	124.439		
8,400.0	7,740.0	7,890.9	7,755.0	21.5	25.7	-88.26	-5,100.5	1,456.1	4,888.1	4,848.0	40.12	121.830		
8,443.7	7,740.0	7,890.9	7,755.1	21.8	25.7	-88.27	-5,100.5	1,456.1	4,844.5	4,804.4	40.14	120.695		
8,500.0	7,740.0	7,891.0	7,755.1	22.2	25.7	-88.55	-5,100.5	1,456.1	4,788.3	4,748.1	40.15	119.258		
8,600.0	7,740.0	7,891.1	7,755.2	22.9	25.7	-88.87	-5,100.5	1,456.1	4,688.6	4,648.4	40.14	116.793		
8,700.0	7,740.0	7,891.1	7,755.3	23.7	25.7	-89.07	-5,100.5	1,456.1	4,589.0	4,548.9	40.11	114.421		
8,800.0	7,740.0	7,891.2	7,755.3	24.6	25.7	-89.20	-5,100.5	1,456.1	4,489.6	4,449.6	40.04	112.138		
8,843.7	7,740.0	7,891.2	7,755.4	25.1	25.7	-89.25	-5,100.5	1,456.1	4,446.3	4,406.3	40.00	111.163		
8,900.0	7,740.0	7,891.2	7,755.4	25.6	25.7	-89.25	-5,100.5	1,456.1	4,390.5	4,350.5	39.95	109.910		

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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,000.0	7,740.0	7,891.2	7,755.4	26.7	25.7	-89.26	-5,100.5	1,456.1	4,291.4	4,251.6	39.85	107.691		
9,100.0	7,740.0	7,891.3	7,755.4	27.8	25.7	-89.26	-5,100.5	1,456.1	4,192.4	4,152.6	39.75	105.478		
9,200.0	7,740.0	7,891.3	7,755.5	29.0	25.7	-89.26	-5,100.5	1,456.1	4,093.4	4,053.7	39.64	103.271		
9,300.0	7,740.0	7,891.3	7,755.5	30.2	25.7	-89.26	-5,100.5	1,456.1	3,994.4	3,954.9	39.52	101.069		
9,343.7	7,740.0	7,891.3	7,755.5	30.8	25.7	-89.27	-5,100.5	1,456.1	3,951.2	3,911.8	39.47	100.108		
9,400.7	7,740.0	7,891.4	7,755.5	31.6	25.7	-89.22	-5,100.5	1,456.1	3,894.8	3,855.4	39.41	98.836		
9,500.0	7,740.0	7,891.4	7,755.6	32.9	25.7	-89.22	-5,100.5	1,456.1	3,796.5	3,757.2	39.30	96.614		
9,600.0	7,740.0	7,891.4	7,755.6	34.3	25.7	-89.22	-5,100.5	1,456.1	3,697.6	3,658.4	39.18	94.381		
9,700.0	7,740.0	7,891.5	7,755.6	35.7	25.7	-89.23	-5,100.5	1,456.1	3,598.7	3,559.7	39.05	92.152		
9,800.0	7,740.0	7,891.5	7,755.7	37.1	25.7	-89.23	-5,100.5	1,456.1	3,499.9	3,461.0	38.92	89.925		
9,900.0	7,740.0	7,891.6	7,755.7	38.6	25.7	-89.24	-5,100.5	1,456.1	3,401.2	3,362.4	38.78	87.699		
10,000.0	7,740.0	7,891.6	7,755.8	40.1	25.7	-89.24	-5,100.5	1,456.1	3,302.5	3,263.9	38.64	85.473		
10,100.0	7,740.0	7,891.6	7,755.8	41.6	25.7	-89.25	-5,100.5	1,456.1	3,204.0	3,165.5	38.49	83.245		
10,200.0	7,740.0	7,891.7	7,755.8	43.1	25.7	-89.25	-5,100.5	1,456.1	3,105.5	3,067.1	38.33	81.013		
10,300.0	7,740.0	7,891.7	7,755.9	44.7	25.7	-89.25	-5,100.5	1,456.1	3,007.1	2,968.9	38.17	78.775		
10,400.0	7,740.0	7,891.8	7,755.9	46.3	25.7	-89.26	-5,100.5	1,456.1	2,908.8	2,870.8	38.01	76.528		
10,500.0	7,740.0	7,891.8	7,756.0	47.8	25.7	-89.26	-5,100.5	1,456.1	2,810.7	2,772.8	37.85	74.268		
10,600.0	7,740.0	7,891.8	7,756.0	49.4	25.7	-89.27	-5,100.5	1,456.1	2,712.7	2,675.0	37.68	71.991		
10,700.0	7,740.0	7,891.9	7,756.0	51.0	25.7	-89.27	-5,100.5	1,456.1	2,614.8	2,577.3	37.52	69.692		
10,800.0	7,740.0	7,891.9	7,756.1	52.6	25.7	-89.27	-5,100.5	1,456.1	2,517.1	2,479.7	37.36	67.365		
10,900.0	7,740.0	7,891.9	7,756.1	54.2	25.7	-89.28	-5,100.5	1,456.1	2,419.6	2,382.4	37.22	65.004		
11,000.0	7,740.0	7,892.0	7,756.1	55.9	25.7	-89.28	-5,100.5	1,456.1	2,322.3	2,285.2	37.10	62.599		
11,100.0	7,740.0	7,892.0	7,756.2	57.5	25.7	-89.29	-5,100.5	1,456.1	2,225.2	2,188.2	37.00	60.141		
11,200.0	7,740.0	7,892.1	7,756.2	59.1	25.7	-89.29	-5,100.5	1,456.1	2,128.5	2,091.5	36.94	57.619		
11,300.0	7,740.0	7,892.1	7,756.3	60.8	25.7	-89.29	-5,100.5	1,456.1	2,032.0	1,995.1	36.93	55.022		
11,400.0	7,740.0	7,892.1	7,756.3	62.4	25.7	-89.30	-5,100.5	1,456.1	1,935.9	1,898.9	36.99	52.337		
11,500.0	7,740.0	7,892.2	7,756.3	64.1	25.7	-89.30	-5,100.5	1,456.1	1,840.2	1,803.0	37.14	49.552		
11,600.0	7,740.0	7,892.2	7,756.4	65.8	25.7	-89.30	-5,100.5	1,456.1	1,745.0	1,707.6	37.40	46.658		
11,700.0	7,740.0	7,892.2	7,756.4	67.4	25.7	-89.31	-5,100.5	1,456.1	1,650.3	1,612.5	37.81	43.647		
11,800.0	7,740.0	7,892.3	7,756.4	69.1	25.7	-89.31	-5,100.5	1,456.1	1,556.3	1,517.9	38.41	40.519		
11,900.0	7,740.0	7,892.3	7,756.5	70.8	25.7	-89.32	-5,100.5	1,456.1	1,463.1	1,423.9	39.24	37.284		
12,000.0	7,740.0	7,892.4	7,756.5	72.5	25.7	-89.32	-5,100.5	1,456.1	1,370.9	1,330.6	40.37	33.962		
12,100.0	7,740.0	7,892.4	7,756.5	74.1	25.7	-89.32	-5,100.5	1,456.1	1,279.9	1,238.0	41.85	30.585		
12,200.0	7,740.0	7,892.4	7,756.6	75.8	25.7	-89.33	-5,100.5	1,456.1	1,190.2	1,146.5	43.76	27.199		
12,300.0	7,740.0	7,892.5	7,756.6	77.5	25.7	-89.33	-5,100.5	1,456.1	1,102.4	1,056.2	46.20	23.859		
12,400.0	7,740.0	7,892.5	7,756.7	79.2	25.7	-89.33	-5,100.5	1,456.1	1,016.8	967.5	49.29	20.629		
12,500.0	7,740.0	7,892.5	7,756.7	80.9	25.7	-89.34	-5,100.5	1,456.1	934.1	881.0	53.16	17.573		
12,600.0	7,740.0	7,892.6	7,756.7	82.6	25.7	-89.34	-5,100.5	1,456.1	855.1	797.2	57.97	14.752		
12,700.0	7,740.0	7,892.6	7,756.8	84.3	25.7	-89.35	-5,100.5	1,456.1	780.9	717.0	63.90	12.221		
12,800.0	7,740.0	7,892.6	7,756.8	86.0	25.7	-89.35	-5,100.5	1,456.1	713.1	642.0	71.13	10.025		
12,900.0	7,740.0	7,892.7	7,756.8	87.7	25.7	-89.35	-5,100.5	1,456.1	653.6	573.8	79.72	8.198		
13,000.0	7,740.0	7,892.7	7,756.9	89.4	25.7	-89.36	-5,100.5	1,456.1	604.8	515.4	89.43	6.763		
13,100.0	7,740.0	7,892.7	7,756.9	91.1	25.7	-89.36	-5,100.5	1,456.1	569.6	470.1	99.50	5.724		
13,200.0	7,740.0	7,892.8	7,756.9	92.8	25.7	-89.36	-5,100.5	1,456.1	550.5	441.9	108.60	5.069		
13,256.8	7,740.0	7,892.8	7,757.0	93.8	25.7	-89.37	-5,100.5	1,456.1	547.5	434.8	112.78	4.855 CC		
13,300.0	7,740.0	7,892.8	7,757.0	94.5	25.7	-89.37	-5,100.5	1,456.1	549.2	433.9	115.30	4.763 ES, SF		
13,400.0	7,740.0	7,892.8	7,757.0	96.3	25.7	-89.37	-5,100.5	1,456.1	566.0	447.2	118.76	4.766		
13,500.0	7,740.0	7,892.9	7,757.0	98.0	25.7	-89.38	-5,100.5	1,456.1	599.1	480.0	119.09	5.031		
13,600.0	7,740.0	7,892.9	7,757.1	99.7	25.7	-89.38	-5,100.5	1,456.1	646.2	529.1	117.13	5.517		
13,700.0	7,740.0	7,893.0	7,757.1	101.4	25.7	-89.38	-5,100.5	1,456.1	704.4	590.6	113.84	6.188		
13,800.0	7,740.0	7,893.0	7,757.1	103.1	25.7	-89.39	-5,100.5	1,456.1	771.3	661.3	109.97	7.013		
13,900.0	7,740.0	7,893.0	7,757.2	104.8	25.7	-89.39	-5,100.5	1,456.1	844.7	738.7	106.02	7.967		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
14,000.0	7,740.0	7,893.1	7,757.2	106.6	25.7	-89.39	-5,100.5	1,456.1	923.1	820.9	102.25	9.028		
14,100.0	7,740.0	7,893.1	7,757.2	108.3	25.7	-89.40	-5,100.5	1,456.1	1,005.4	906.6	98.76	10.180		
14,200.0	7,740.0	7,893.1	7,757.3	110.0	25.7	-89.40	-5,100.5	1,456.1	1,090.6	995.0	95.61	11.407		
14,300.0	7,740.0	7,893.2	7,757.3	111.7	25.7	-89.40	-5,100.5	1,456.1	1,178.1	1,085.4	92.78	12.698		
14,400.0	7,740.0	7,893.2	7,757.3	113.5	25.7	-89.41	-5,100.5	1,456.1	1,267.5	1,177.3	90.26	14.043		
14,500.0	7,740.0	7,893.2	7,757.4	115.2	25.7	-89.41	-5,100.5	1,456.1	1,358.4	1,270.4	88.01	15.435		
14,600.0	7,740.0	7,893.3	7,757.4	116.9	25.7	-89.41	-5,100.5	1,456.1	1,450.5	1,364.5	86.01	16.865		
14,700.0	7,740.0	7,893.3	7,757.4	118.6	25.7	-89.42	-5,100.5	1,456.1	1,543.6	1,459.3	84.21	18.329		
14,800.0	7,740.0	7,893.3	7,757.5	120.4	25.7	-89.42	-5,100.5	1,456.1	1,637.4	1,554.8	82.61	19.821		
14,900.0	7,740.0	7,893.4	7,757.5	122.1	25.7	-89.42	-5,100.5	1,456.1	1,732.0	1,650.8	81.17	21.337		
15,000.0	7,740.0	7,893.4	7,757.5	123.8	25.7	-89.43	-5,100.5	1,456.1	1,827.1	1,747.3	79.88	22.874		
15,100.0	7,740.0	7,893.4	7,757.6	125.6	25.7	-89.43	-5,100.5	1,456.1	1,922.8	1,844.1	78.71	24.429		
15,200.0	7,740.0	7,893.4	7,757.6	127.3	25.7	-89.43	-5,100.5	1,456.1	2,018.8	1,941.2	77.65	25.999		
15,300.0	7,740.0	7,893.5	7,757.6	129.0	25.7	-89.44	-5,100.5	1,456.1	2,115.3	2,038.6	76.69	27.581		
15,400.0	7,740.0	7,893.5	7,757.7	130.7	25.7	-89.44	-5,100.5	1,456.1	2,212.0	2,136.2	75.82	29.174		
15,500.0	7,740.0	7,893.5	7,757.7	132.5	25.7	-89.44	-5,100.5	1,456.1	2,309.0	2,234.0	75.02	30.777		
15,600.0	7,740.0	7,893.6	7,757.7	134.2	25.7	-89.45	-5,100.5	1,456.1	2,406.3	2,332.0	74.30	32.387		
15,700.0	7,740.0	7,893.6	7,757.8	135.9	25.7	-89.45	-5,100.5	1,456.1	2,503.8	2,430.1	73.63	34.004		
15,800.0	7,740.0	7,893.6	7,757.8	137.7	25.7	-89.45	-5,100.5	1,456.1	2,601.4	2,528.4	73.02	35.626		
15,900.0	7,740.0	7,893.7	7,757.8	139.4	25.7	-89.46	-5,100.5	1,456.1	2,699.3	2,626.8	72.46	37.252		
16,000.0	7,740.0	7,893.7	7,757.9	141.1	25.7	-89.46	-5,100.5	1,456.1	2,797.3	2,725.3	71.94	38.881		
16,084.2	7,740.0	7,893.7	7,757.9	142.6	25.7	-89.46	-5,100.5	1,456.1	2,879.9	2,808.4	71.54	40.255		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		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	172.77	-4,325.8	548.7	4,360.4					
100.0	100.0	83.2	83.2	0.2	0.1	172.77	-4,326.0	548.9	4,360.7	4,360.4	0.30	N/A		
200.0	200.0	163.6	163.6	0.3	0.3	172.77	-4,326.5	549.2	4,361.4	4,360.8	0.61	7,125.215		
300.0	300.0	270.6	270.6	0.5	0.5	172.77	-4,327.6	549.1	4,362.4	4,361.5	0.97	4,482.281		
400.0	400.0	368.8	368.8	0.7	0.6	172.77	-4,328.4	548.8	4,363.2	4,361.8	1.32	3,307.408		
500.0	500.0	475.4	475.4	0.8	0.8	172.78	-4,329.3	548.7	4,364.0	4,362.3	1.68	2,598.021		
600.0	600.0	599.7	599.7	1.0	1.0	172.79	-4,329.9	548.1	4,364.4	4,362.3	2.07	2,106.879		
700.0	700.0	691.0	690.9	1.2	1.2	172.79	-4,330.1	547.6	4,364.6	4,362.2	2.41	1,814.545		
800.0	800.0	800.0	800.0	1.4	1.4	172.80	-4,330.5	546.8	4,364.9	4,362.1	2.77	1,575.239		
900.0	900.0	898.6	898.6	1.5	1.6	172.82	-4,330.7	545.7	4,365.0	4,361.9	3.12	1,399.941		
1,000.0	1,000.0	989.8	989.8	1.7	1.7	172.83	-4,331.1	544.7	4,365.2	4,361.8	3.45	1,264.266		
1,100.0	1,100.0	1,106.1	1,106.0	1.9	1.9	121.46	-4,331.5	542.9	4,365.9	4,362.0	3.83	1,139.333		
1,200.0	1,200.0	1,207.6	1,207.5	2.1	2.1	121.50	-4,331.7	541.2	4,367.2	4,363.0	4.19	1,043.152		
1,300.0	1,299.9	1,305.8	1,305.7	2.3	2.3	121.56	-4,331.9	539.2	4,369.4	4,364.9	4.54	962.601		
1,400.0	1,399.7	1,417.9	1,417.8	2.4	2.5	121.64	-4,332.0	536.5	4,372.4	4,367.5	4.92	888.474		
1,500.0	1,499.4	1,508.8	1,508.7	2.6	2.6	121.71	-4,332.1	534.8	4,376.4	4,371.1	5.27	830.237		
1,600.0	1,598.9	1,628.4	1,628.2	2.8	2.9	121.83	-4,331.8	532.4	4,381.0	4,375.3	5.68	771.074		
1,700.0	1,698.3	1,718.5	1,718.3	3.1	3.0	121.92	-4,331.7	530.6	4,386.6	4,380.6	6.05	724.952		
1,800.0	1,797.4	1,840.9	1,840.6	3.3	3.2	122.08	-4,331.1	527.4	4,392.8	4,386.3	6.49	676.657		
1,900.0	1,896.3	1,928.9	1,928.7	3.6	3.4	122.20	-4,330.7	525.1	4,400.0	4,393.1	6.89	638.920		
1,915.7	1,911.9	1,941.7	1,941.5	3.6	3.4	122.21	-4,330.7	524.7	4,401.2	4,394.3	6.95	633.481		
2,000.0	1,995.0	2,016.0	2,015.7	3.8	3.6	122.37	-4,330.6	522.7	4,408.1	4,400.8	7.29	604.868		
2,100.0	2,093.8	2,124.7	2,124.4	4.1	3.7	122.59	-4,330.2	519.9	4,416.1	4,408.4	7.73	571.047		
2,200.0	2,192.5	2,200.0	2,199.6	4.4	3.9	122.75	-4,330.2	518.0	4,424.5	4,416.4	8.12	544.658		
2,300.0	2,291.2	2,321.5	2,321.1	4.7	4.1	123.01	-4,330.2	514.3	4,432.9	4,424.3	8.60	515.277		
2,400.0	2,389.9	2,426.4	2,426.0	5.0	4.3	123.23	-4,329.9	510.8	4,441.2	4,432.1	9.06	490.460		
2,500.0	2,488.7	2,552.5	2,551.9	5.3	4.5	123.50	-4,328.8	506.5	4,448.8	4,439.2	9.55	465.937		
2,600.0	2,587.4	2,638.7	2,638.1	5.6	4.7	123.69	-4,328.0	503.7	4,456.4	4,446.5	9.97	447.031		
2,700.0	2,686.1	2,721.6	2,721.0	5.9	4.8	123.85	-4,327.5	501.7	4,464.5	4,454.2	10.38	429.949		
2,800.0	2,784.8	2,817.4	2,816.7	6.2	5.0	124.04	-4,327.1	499.6	4,472.9	4,462.1	10.82	413.286		
2,900.0	2,883.6	2,924.8	2,924.1	6.5	5.2	124.24	-4,326.4	497.8	4,481.2	4,469.9	11.28	397.228		
3,000.0	2,982.3	3,025.0	3,024.3	6.9	5.4	124.43	-4,325.7	496.3	4,489.4	4,477.7	11.73	382.782		
3,100.0	3,081.0	3,114.4	3,113.7	7.2	5.5	124.60	-4,325.2	494.7	4,497.8	4,485.6	12.16	369.966		
3,200.0	3,179.7	3,200.0	3,199.3	7.5	5.7	124.76	-4,324.7	493.2	4,506.3	4,493.7	12.58	358.242		
3,300.0	3,278.5	3,285.4	3,284.7	7.8	5.8	124.92	-4,324.5	491.9	4,515.2	4,502.2	13.00	347.344		
3,400.0	3,377.2	3,385.9	3,385.1	8.1	6.0	125.10	-4,324.6	491.0	4,524.4	4,511.0	13.45	336.503		
3,500.0	3,475.9	3,475.4	3,474.7	8.4	6.2	125.26	-4,324.7	490.3	4,533.7	4,519.8	13.87	326.807		
3,600.0	3,574.6	3,572.0	3,571.3	8.8	6.3	125.43	-4,324.9	489.4	4,543.1	4,528.8	14.31	317.428		
3,700.0	3,673.4	3,679.8	3,679.1	9.1	6.5	125.62	-4,325.0	488.5	4,552.6	4,537.8	14.77	308.202		
3,800.0	3,772.1	3,776.2	3,775.5	9.4	6.7	125.78	-4,325.0	487.9	4,561.9	4,546.7	15.21	299.939		
3,900.0	3,870.8	3,874.9	3,874.2	9.7	6.8	125.95	-4,325.1	487.2	4,571.4	4,555.7	15.65	292.041		
4,000.0	3,969.5	3,969.8	3,969.0	10.0	7.0	126.12	-4,325.2	485.9	4,580.9	4,564.8	16.09	284.698		
4,100.0	4,068.3	4,072.6	4,071.9	10.4	7.2	126.31	-4,325.4	484.1	4,590.5	4,573.9	16.54	277.497		
4,200.0	4,167.0	4,189.6	4,188.8	10.7	7.4	126.52	-4,325.3	481.7	4,599.9	4,582.8	17.02	270.272		
4,300.0	4,265.7	4,293.1	4,292.2	11.0	7.6	126.72	-4,324.9	479.4	4,609.0	4,591.5	17.47	263.771		
4,400.0	4,364.4	4,387.0	4,386.2	11.3	7.8	126.90	-4,324.6	476.7	4,618.2	4,600.3	17.91	257.863		
4,500.0	4,463.2	4,477.4	4,476.5	11.7	7.9	127.07	-4,324.4	474.6	4,627.6	4,609.2	18.34	252.370		
4,600.0	4,561.9	4,567.5	4,566.6	12.0	8.1	127.23	-4,324.4	472.9	4,637.2	4,618.4	18.76	247.151		
4,700.0	4,660.6	4,700.0	4,699.1	12.3	8.3	127.47	-4,324.1	470.5	4,646.7	4,627.4	19.26	241.204		
4,800.0	4,759.3	4,779.4	4,778.5	12.6	8.5	127.61	-4,323.6	468.9	4,655.9	4,636.2	19.67	236.691		
4,900.0	4,858.1	4,889.2	4,888.3	13.0	8.7	127.81	-4,323.3	466.6	4,665.4	4,645.2	20.13	231.745		
5,000.0	4,956.8	5,013.1	5,012.2	13.3	8.9	128.03	-4,322.3	464.6	4,674.4	4,653.8	20.61	226.758		

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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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
5,100.0	5,055.5	5,106.8	5,105.9	13.6	9.0	128.19	-4,321.3	463.5	4,683.3	4,662.2	21.04	222.562	
5,200.0	5,154.2	5,233.2	5,232.2	13.9	9.3	128.40	-4,319.7	462.0	4,691.9	4,670.4	21.53	217.945	
5,300.0	5,253.0	5,337.0	5,335.9	14.3	9.4	128.57	-4,318.0	461.1	4,700.2	4,678.2	21.97	213.916	
5,400.0	5,351.7	5,423.7	5,422.7	14.6	9.6	128.71	-4,316.6	460.5	4,708.7	4,686.3	22.39	210.337	
5,500.0	5,450.4	5,514.3	5,513.2	14.9	9.8	128.85	-4,315.5	459.6	4,717.5	4,694.7	22.81	206.844	
5,600.0	5,549.1	5,624.8	5,623.8	15.3	9.9	129.03	-4,313.9	458.7	4,726.1	4,702.8	23.26	203.176	
5,700.0	5,647.9	5,702.6	5,701.5	15.6	10.1	129.15	-4,312.9	458.3	4,734.9	4,711.3	23.66	200.152	
5,800.0	5,746.6	5,820.8	5,819.7	15.9	10.3	129.34	-4,311.4	457.6	4,743.9	4,719.7	24.12	196.651	
5,900.0	5,845.3	5,926.3	5,925.2	16.2	10.5	129.50	-4,309.7	457.2	4,752.4	4,727.8	24.57	193.453	
6,000.0	5,944.1	6,000.0	5,998.9	16.6	10.6	129.61	-4,308.8	457.1	4,761.3	4,736.4	24.95	190.814	
6,100.0	6,042.8	6,073.0	6,071.9	16.9	10.7	129.72	-4,308.2	456.9	4,770.8	4,745.5	25.34	188.292	
6,200.0	6,141.5	6,144.4	6,143.3	17.2	10.8	129.83	-4,308.0	456.4	4,780.8	4,755.1	25.72	185.891	
6,300.0	6,240.2	6,221.6	6,220.4	17.5	11.0	129.96	-4,308.3	455.6	4,791.5	4,765.4	26.11	183.522	
6,400.0	6,339.0	6,356.1	6,355.0	17.9	11.2	130.17	-4,308.6	454.6	4,802.1	4,775.5	26.60	180.516	
6,500.0	6,437.7	6,477.3	6,476.2	18.2	11.4	130.35	-4,307.9	454.0	4,811.9	4,784.8	27.07	177.747	
6,600.0	6,536.4	6,571.8	6,570.7	18.5	11.6	130.50	-4,307.2	453.3	4,821.6	4,794.1	27.49	175.385	
6,700.0	6,635.1	6,679.1	6,678.0	18.9	11.8	130.66	-4,306.5	452.5	4,831.4	4,803.4	27.93	172.958	
6,800.0	6,733.9	6,807.9	6,806.8	19.2	12.0	130.86	-4,305.1	451.6	4,840.7	4,812.3	28.41	170.364	
6,900.0	6,832.6	6,911.9	6,910.7	19.5	12.2	131.01	-4,303.5	450.8	4,849.8	4,820.9	28.85	168.109	
7,000.0	6,931.3	7,000.0	6,998.8	19.8	12.3	131.14	-4,302.2	450.6	4,858.9	4,829.6	29.25	166.092	
7,100.0	7,030.0	7,088.7	7,087.5	20.2	12.5	131.27	-4,301.1	450.9	4,868.2	4,838.6	29.66	164.138	
7,191.8	7,120.7	7,190.6	7,189.4	20.5	12.7	131.40	-4,300.0	452.2	4,876.9	4,846.8	30.07	162.210	
7,200.0	7,128.8	7,200.1	7,198.9	20.5	12.7	127.00	-4,299.9	452.4	4,877.6	4,847.5	30.10	162.033	
7,250.0	7,178.3	7,276.5	7,275.2	20.6	12.8	92.45	-4,298.8	455.1	4,879.2	4,848.8	30.36	160.692	
7,300.0	7,227.8	7,322.7	7,321.3	20.7	12.9	60.80	-4,298.1	457.6	4,876.3	4,845.8	30.58	159.458	
7,350.0	7,276.8	7,355.2	7,353.8	20.8	12.9	43.13	-4,297.6	459.5	4,869.3	4,838.6	30.78	158.201	
7,400.0	7,325.1	7,400.0	7,398.5	20.8	13.0	33.83	-4,297.3	462.4	4,858.3	4,827.3	31.00	156.696	
7,450.0	7,372.2	7,419.1	7,417.6	20.8	13.0	28.48	-4,297.2	463.7	4,843.2	4,812.0	31.19	155.279	
7,500.0	7,417.7	7,450.6	7,449.0	20.8	13.1	25.24	-4,297.1	465.7	4,824.2	4,792.8	31.40	153.630	
7,550.0	7,461.4	7,480.8	7,479.2	20.7	13.1	23.21	-4,297.0	467.5	4,801.4	4,769.8	31.61	151.879	
7,600.0	7,502.9	7,511.8	7,510.1	20.7	13.2	22.00	-4,297.1	469.2	4,775.0	4,743.1	31.83	150.015	
7,650.0	7,541.9	7,544.9	7,543.2	20.6	13.2	21.39	-4,297.2	470.8	4,745.1	4,713.0	32.05	148.036	
7,700.0	7,578.0	7,575.7	7,573.9	20.5	13.3	21.29	-4,297.3	472.2	4,711.9	4,679.6	32.27	145.994	
7,750.0	7,611.1	7,600.0	7,598.2	20.4	13.3	21.65	-4,297.5	473.2	4,675.7	4,643.2	32.49	143.932	
7,800.0	7,640.8	7,631.1	7,629.3	20.4	13.4	22.57	-4,297.7	474.3	4,636.8	4,604.0	32.71	141.754	
7,850.0	7,667.0	7,654.9	7,653.1	20.3	13.4	24.10	-4,297.8	475.2	4,595.3	4,562.4	32.92	139.585	
7,900.0	7,689.4	7,675.3	7,673.5	20.3	13.5	26.50	-4,297.9	475.9	4,551.7	4,518.6	33.13	137.406	
7,950.0	7,707.9	7,692.3	7,690.4	20.3	13.5	30.21	-4,298.1	476.4	4,506.2	4,472.9	33.32	135.229	
8,000.0	7,722.2	7,708.9	7,707.0	20.3	13.5	36.18	-4,298.2	476.9	4,459.3	4,425.7	33.52	133.043	
8,050.0	7,732.4	7,724.0	7,722.1	20.3	13.5	46.33	-4,298.3	477.3	4,411.1	4,377.4	33.71	130.869	
8,100.0	7,738.4	7,732.9	7,731.0	20.4	13.6	64.27	-4,298.3	477.6	4,362.2	4,328.3	33.88	128.752	
8,143.7	7,740.0	7,735.7	7,733.8	20.5	13.6	89.02	-4,298.3	477.7	4,319.1	4,285.1	34.02	126.956	
8,200.0	7,740.0	7,736.2	7,734.4	20.6	13.6	89.07	-4,298.3	477.7	4,263.4	4,229.2	34.20	124.670	
8,300.0	7,740.0	7,737.2	7,735.3	21.0	13.6	89.15	-4,298.3	477.7	4,164.7	4,130.1	34.52	120.647	
8,400.0	7,740.0	7,738.1	7,736.2	21.5	13.6	89.24	-4,298.4	477.7	4,065.9	4,031.1	34.85	116.671	
8,443.7	7,740.0	7,738.5	7,736.6	21.8	13.6	89.27	-4,298.4	477.7	4,022.8	3,987.9	35.00	114.949	
8,500.0	7,740.0	7,739.0	7,737.2	22.2	13.6	89.27	-4,298.4	477.8	3,967.3	3,932.1	35.18	112.763	
8,600.0	7,740.0	7,739.8	7,738.0	22.9	13.6	89.27	-4,298.4	477.8	3,868.4	3,832.9	35.50	108.983	
8,700.0	7,740.0	7,740.6	7,738.7	23.7	13.6	89.26	-4,298.4	477.8	3,769.3	3,733.5	35.79	105.309	
8,800.0	7,740.0	7,741.3	7,739.4	24.6	13.6	89.24	-4,298.4	477.8	3,670.0	3,634.0	36.07	101.737	
8,843.7	7,740.0	7,741.5	7,739.7	25.1	13.6	89.22	-4,298.4	477.8	3,626.6	3,590.4	36.19	100.200	
8,900.0	7,740.0	7,741.9	7,740.0	25.6	13.6	89.27	-4,298.4	477.8	3,570.6	3,534.3	36.35	98.228	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI												Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,740.0	7,742.5	7,740.6	26.7	13.6	89.36	-4,298.4	477.8	3,471.3	3,434.6	36.64	94.752	
9,100.0	7,740.0	7,743.0	7,741.2	27.8	13.6	89.44	-4,298.4	477.9	3,371.9	3,335.0	36.93	91.307	
9,200.0	7,740.0	7,743.6	7,741.7	29.0	13.6	89.52	-4,298.4	477.9	3,272.6	3,235.4	37.23	87.894	
9,300.0	7,740.0	7,744.2	7,742.3	30.2	13.6	89.61	-4,298.4	477.9	3,173.4	3,135.8	37.55	84.511	
9,343.7	7,740.0	7,744.4	7,742.5	30.8	13.6	89.64	-4,298.4	477.9	3,130.0	3,092.3	37.69	83.043	
9,400.7	7,740.0	7,744.7	7,742.9	31.6	13.6	89.71	-4,298.4	477.9	3,073.5	3,035.6	37.89	81.118	
9,500.0	7,740.0	7,745.3	7,743.4	32.9	13.6	89.79	-4,298.4	477.9	2,975.2	2,936.9	38.25	77.787	
9,600.0	7,740.0	7,745.9	7,744.0	34.3	13.6	89.86	-4,298.4	477.9	2,876.2	2,837.6	38.63	74.464	
9,700.0	7,740.0	7,746.4	7,744.5	35.7	13.6	89.94	-4,298.4	478.0	2,777.3	2,738.3	39.02	71.172	
9,800.0	7,740.0	7,747.0	7,745.1	37.1	13.6	90.01	-4,298.4	478.0	2,678.6	2,639.1	39.44	67.911	
9,900.0	7,740.0	7,747.5	7,745.6	38.6	13.6	90.08	-4,298.4	478.0	2,579.9	2,540.0	39.88	64.683	
10,000.0	7,740.0	7,748.0	7,746.2	40.1	13.6	90.16	-4,298.4	478.0	2,481.3	2,440.9	40.35	61.486	
10,100.0	7,740.0	7,748.5	7,746.7	41.6	13.6	90.23	-4,298.4	478.0	2,382.8	2,341.9	40.86	58.322	
10,200.0	7,740.0	7,749.0	7,747.2	43.1	13.6	90.30	-4,298.4	478.0	2,284.4	2,243.0	41.39	55.191	
10,300.0	7,740.0	7,749.5	7,747.7	44.7	13.6	90.36	-4,298.4	478.0	2,186.2	2,144.3	41.97	52.093	
10,400.0	7,740.0	7,750.0	7,748.2	46.3	13.6	90.43	-4,298.4	478.1	2,088.2	2,045.6	42.59	49.030	
10,500.0	7,740.0	7,750.5	7,748.7	47.8	13.6	90.50	-4,298.4	478.1	1,990.4	1,947.1	43.27	46.003	
10,600.0	7,740.0	7,751.0	7,749.1	49.4	13.6	90.56	-4,298.4	478.1	1,892.8	1,848.8	44.00	43.014	
10,700.0	7,740.0	7,751.5	7,749.6	51.0	13.6	90.62	-4,298.4	478.1	1,795.4	1,750.6	44.81	40.065	
10,800.0	7,740.0	7,751.9	7,750.1	52.6	13.6	90.69	-4,298.4	478.1	1,698.4	1,652.7	45.71	37.158	
10,900.0	7,740.0	7,752.4	7,750.5	54.2	13.6	90.75	-4,298.4	478.1	1,601.7	1,555.0	46.70	34.297	
11,000.0	7,740.0	7,752.8	7,751.0	55.9	13.6	90.81	-4,298.4	478.1	1,505.5	1,457.7	47.81	31.486	
11,100.0	7,740.0	7,753.3	7,751.4	57.5	13.6	90.87	-4,298.4	478.2	1,409.8	1,360.7	49.07	28.730	
11,200.0	7,740.0	7,753.7	7,751.8	59.1	13.6	90.93	-4,298.4	478.2	1,314.8	1,264.3	50.50	26.036	
11,300.0	7,740.0	7,754.1	7,752.3	60.8	13.6	90.99	-4,298.4	478.2	1,220.5	1,168.3	52.13	23.411	
11,400.0	7,740.0	7,754.6	7,752.7	62.4	13.6	91.04	-4,298.4	478.2	1,127.2	1,073.2	54.02	20.866	
11,500.0	7,740.0	7,755.0	7,753.1	64.1	13.6	91.10	-4,298.4	478.2	1,035.2	978.9	56.22	18.412	
11,600.0	7,740.0	7,755.4	7,753.5	65.8	13.6	91.16	-4,298.4	478.2	944.7	885.9	58.80	16.066	
11,700.0	7,740.0	7,755.8	7,753.9	67.4	13.6	91.21	-4,298.4	478.2	856.5	794.6	61.86	13.846	
11,800.0	7,740.0	7,756.2	7,754.3	69.1	13.6	91.27	-4,298.4	478.2	771.1	705.6	65.47	11.777	
11,900.0	7,740.0	7,756.6	7,754.7	70.8	13.6	91.32	-4,298.4	478.2	689.6	619.8	69.75	9.887	
12,000.0	7,740.0	7,757.0	7,755.1	72.5	13.6	91.37	-4,298.4	478.3	613.6	538.9	74.71	8.213	
12,100.0	7,740.0	7,757.4	7,755.5	74.1	13.6	91.42	-4,298.4	478.3	545.4	465.2	80.25	6.797	
12,200.0	7,740.0	7,757.7	7,755.9	75.8	13.6	91.47	-4,298.4	478.3	488.4	402.5	85.87	5.687	
12,300.0	7,740.0	7,758.1	7,756.2	77.5	13.6	91.52	-4,298.4	478.3	446.6	356.2	90.47	4.937	
12,400.0	7,740.0	7,758.5	7,756.6	79.2	13.6	91.57	-4,298.4	478.3	424.8	332.4	92.43	4.596	
12,445.1	7,740.0	7,758.6	7,756.8	80.0	13.6	91.60	-4,298.4	478.3	422.4	330.4	92.06	4.588 CC, ES, SF	
12,500.0	7,740.0	7,758.8	7,757.0	80.9	13.6	91.62	-4,298.4	478.3	426.0	335.5	90.52	4.706	
12,600.0	7,740.0	7,759.2	7,757.3	82.6	13.6	91.67	-4,298.4	478.3	450.0	364.8	85.14	5.285	
12,700.0	7,740.0	7,759.5	7,757.7	84.3	13.6	91.72	-4,298.4	478.3	493.4	415.4	77.98	6.327	
12,800.0	7,740.0	7,759.9	7,758.0	86.0	13.6	91.77	-4,298.4	478.3	551.8	481.0	70.71	7.803	
12,900.0	7,740.0	7,760.2	7,758.4	87.7	13.6	91.81	-4,298.4	478.3	620.8	556.6	64.23	9.666	
13,000.0	7,740.0	7,760.6	7,758.7	89.4	13.6	91.86	-4,298.4	478.4	697.4	638.6	58.81	11.859	
13,100.0	7,740.0	7,760.9	7,759.0	91.1	13.6	91.90	-4,298.4	478.4	779.4	724.9	54.43	14.318	
13,200.0	7,740.0	7,761.2	7,759.4	92.8	13.6	91.95	-4,298.4	478.4	865.1	814.2	50.94	16.984	
13,300.0	7,740.0	7,761.6	7,759.7	94.5	13.6	91.99	-4,298.4	478.4	953.6	905.4	48.16	19.799	
13,400.0	7,740.0	7,761.9	7,760.0	96.3	13.6	92.04	-4,298.4	478.4	1,044.2	998.2	45.97	22.714	
13,500.0	7,740.0	7,762.2	7,760.3	98.0	13.6	92.08	-4,298.4	478.4	1,136.4	1,092.1	44.24	25.689	
13,600.0	7,740.0	7,762.5	7,760.6	99.7	13.6	92.12	-4,298.4	478.4	1,229.8	1,186.9	42.86	28.689	
13,700.0	7,740.0	7,762.8	7,760.9	101.4	13.6	92.16	-4,298.4	478.4	1,324.1	1,282.3	41.78	31.692	
13,800.0	7,740.0	7,763.1	7,761.2	103.1	13.6	92.20	-4,298.5	478.4	1,419.3	1,378.3	40.93	34.678	
13,900.0	7,740.0	7,763.4	7,761.5	104.8	13.6	92.24	-4,298.5	478.4	1,515.0	1,474.8	40.26	37.635	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
14,000.0	7,740.0	7,763.7	7,761.8	106.6	13.6	92.29	-4,298.5	478.4	1,611.3	1,571.6	39.73	40.557		
14,100.0	7,740.0	7,764.0	7,762.1	108.3	13.6	92.33	-4,298.5	478.5	1,708.0	1,668.7	39.32	43.437		
14,200.0	7,740.0	7,764.3	7,762.4	110.0	13.6	92.36	-4,298.5	478.5	1,805.1	1,766.1	39.01	46.273		
14,300.0	7,740.0	7,764.6	7,762.7	111.7	13.6	92.40	-4,298.5	478.5	1,902.4	1,863.7	38.77	49.066		
14,400.0	7,740.0	7,764.9	7,763.0	113.5	13.6	92.44	-4,298.5	478.5	2,000.1	1,961.5	38.60	51.815		
14,500.0	7,740.0	7,765.1	7,763.3	115.2	13.6	92.48	-4,298.5	478.5	2,097.9	2,059.4	38.48	54.522		
14,600.0	7,740.0	7,765.4	7,763.6	116.9	13.6	92.52	-4,298.5	478.5	2,195.9	2,157.6	38.40	57.189		
14,700.0	7,740.0	7,765.7	7,763.8	118.6	13.6	92.55	-4,298.5	478.5	2,294.2	2,255.8	38.35	59.816		
14,800.0	7,740.0	7,766.0	7,764.1	120.4	13.6	92.59	-4,298.5	478.5	2,392.5	2,354.2	38.34	62.407		
14,900.0	7,740.0	7,766.2	7,764.4	122.1	13.6	92.63	-4,298.5	478.5	2,491.0	2,452.7	38.34	64.963		
15,000.0	7,740.0	7,766.5	7,764.6	123.8	13.6	92.66	-4,298.5	478.5	2,589.6	2,551.2	38.37	67.486		
15,100.0	7,740.0	7,766.8	7,764.9	125.6	13.6	92.70	-4,298.5	478.5	2,688.3	2,649.9	38.42	69.978		
15,200.0	7,740.0	7,767.0	7,765.1	127.3	13.6	92.73	-4,298.5	478.5	2,787.1	2,748.7	38.47	72.441		
15,300.0	7,740.0	7,767.3	7,765.4	129.0	13.6	92.77	-4,298.5	478.5	2,886.0	2,847.5	38.54	74.875		
15,400.0	7,740.0	7,767.5	7,765.6	130.7	13.6	92.80	-4,298.5	478.5	2,985.0	2,946.4	38.62	77.283		
15,500.0	7,740.0	7,767.8	7,765.9	132.5	13.6	92.83	-4,298.5	478.6	3,084.0	3,045.3	38.71	79.666		
15,600.0	7,740.0	7,768.0	7,766.1	134.2	13.6	92.87	-4,298.5	478.6	3,183.1	3,144.3	38.81	82.025		
15,700.0	7,740.0	7,768.3	7,766.4	135.9	13.6	92.90	-4,298.5	478.6	3,282.2	3,243.3	38.91	84.360		
15,800.0	7,740.0	7,768.5	7,766.6	137.7	13.6	92.93	-4,298.5	478.6	3,381.4	3,342.4	39.01	86.674		
15,900.0	7,740.0	7,768.7	7,766.9	139.4	13.6	92.97	-4,298.5	478.6	3,480.7	3,441.5	39.12	88.967		
16,000.0	7,740.0	7,769.0	7,767.1	141.1	13.6	93.00	-4,298.5	478.6	3,579.9	3,540.7	39.24	91.240		
16,084.2	7,740.0	7,769.2	7,767.3	142.6	13.6	93.02	-4,298.5	478.6	3,663.6	3,624.2	39.33	93.138		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error: 0.0 ft			
Survey Program: 1024-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	11.3	11.3	0.0	0.0	153.08	-2,304.0	1,170.0	2,584.1					
100.0	100.0	114.1	114.1	0.2	0.2	153.08	-2,304.0	1,170.0	2,584.0	2,583.7	0.35	7,420.304		
200.0	200.0	216.9	216.9	0.3	0.4	153.08	-2,303.8	1,170.0	2,583.8	2,583.1	0.70	3,692.892		
300.0	300.0	319.7	319.7	0.5	0.6	153.07	-2,303.4	1,170.0	2,583.6	2,582.5	1.05	2,457.911		
400.0	400.0	422.5	422.5	0.7	0.7	153.07	-2,303.0	1,170.0	2,583.2	2,581.8	1.40	1,841.759		
500.0	500.0	525.3	525.3	0.8	0.9	153.06	-2,302.4	1,170.0	2,582.7	2,580.9	1.75	1,472.459		
600.0	600.0	628.1	628.1	1.0	1.1	153.05	-2,301.7	1,170.0	2,582.1	2,580.0	2.11	1,226.397		
700.0	700.0	730.9	730.9	1.2	1.3	153.05	-2,300.8	1,170.1	2,581.3	2,578.9	2.46	1,050.687		
800.0	800.0	833.7	833.7	1.4	1.4	153.04	-2,299.9	1,170.1	2,580.5	2,577.7	2.81	918.918		
900.0	900.0	936.5	936.5	1.5	1.6	153.02	-2,298.8	1,170.1	2,579.6	2,576.4	3.16	816.427		
1,000.0	1,000.0	1,034.7	1,034.7	1.7	1.8	153.01	-2,297.7	1,170.1	2,578.6	2,575.1	3.50	736.012		
1,070.6	1,070.6	1,088.0	1,088.0	1.8	1.9	101.62	-2,297.3	1,170.3	2,578.3	2,574.5	3.72	693.062		
1,100.0	1,100.0	1,105.8	1,105.8	1.9	1.9	101.62	-2,297.2	1,170.4	2,578.4	2,574.6	3.80	678.015		
1,200.0	1,200.0	1,183.0	1,183.0	2.1	2.0	101.63	-2,297.5	1,171.4	2,579.7	2,575.6	4.11	627.008		
1,300.0	1,299.9	1,245.8	1,245.7	2.3	2.2	101.65	-2,298.3	1,172.5	2,582.5	2,578.1	4.40	586.512		
1,400.0	1,399.7	1,325.5	1,325.4	2.4	2.3	101.70	-2,300.1	1,174.2	2,586.8	2,582.0	4.73	547.130		
1,500.0	1,499.4	1,411.2	1,411.0	2.6	2.4	101.78	-2,302.5	1,176.3	2,591.9	2,586.9	5.07	511.032		
1,600.0	1,598.9	1,493.7	1,493.4	2.8	2.6	101.86	-2,305.0	1,178.9	2,598.1	2,592.6	5.42	479.121		
1,700.0	1,698.3	1,564.0	1,563.7	3.1	2.7	101.92	-2,307.3	1,182.0	2,605.3	2,599.6	5.77	451.842		
1,800.0	1,797.4	1,644.8	1,644.3	3.3	2.9	102.00	-2,310.1	1,186.7	2,613.9	2,607.7	6.15	425.097		
1,900.0	1,896.3	1,727.8	1,727.0	3.6	3.0	102.08	-2,313.3	1,192.7	2,623.7	2,617.1	6.56	400.187		
1,915.7	1,911.9	1,741.2	1,740.3	3.6	3.1	102.10	-2,313.8	1,193.7	2,625.3	2,618.7	6.62	396.450		
2,000.0	1,995.0	1,823.9	1,822.8	3.8	3.2	102.29	-2,317.2	1,200.1	2,634.1	2,627.1	7.00	376.236		
2,100.0	2,093.8	1,920.5	1,918.9	4.1	3.4	102.51	-2,321.2	1,207.4	2,644.6	2,637.1	7.46	354.668		
2,200.0	2,192.5	2,028.4	2,026.5	4.4	3.6	102.75	-2,325.5	1,215.7	2,655.1	2,647.2	7.94	334.348		
2,300.0	2,291.2	2,106.3	2,104.0	4.7	3.8	102.93	-2,328.8	1,221.5	2,665.7	2,657.4	8.37	318.430		
2,400.0	2,389.9	2,190.9	2,188.3	5.0	4.0	103.12	-2,332.9	1,228.3	2,677.2	2,668.4	8.82	303.545		
2,500.0	2,488.7	2,276.2	2,273.2	5.3	4.2	103.31	-2,337.3	1,235.3	2,689.1	2,679.8	9.27	289.953		
2,600.0	2,587.4	2,385.2	2,381.7	5.6	4.4	103.54	-2,343.2	1,244.7	2,701.5	2,691.7	9.78	276.247		
2,700.0	2,686.1	2,530.1	2,526.0	5.9	4.7	103.89	-2,350.1	1,254.7	2,712.5	2,702.1	10.36	261.870		
2,800.0	2,784.8	2,628.5	2,624.2	6.2	4.9	104.11	-2,353.7	1,261.6	2,722.7	2,711.8	10.85	250.976		
2,900.0	2,883.6	2,708.8	2,704.1	6.5	5.1	104.28	-2,356.8	1,267.6	2,733.3	2,722.0	11.30	241.871		
3,000.0	2,982.3	2,809.4	2,804.3	6.9	5.3	104.50	-2,361.4	1,274.9	2,744.4	2,732.6	11.80	232.642		
3,100.0	3,081.0	2,927.3	2,921.8	7.2	5.6	104.77	-2,366.3	1,283.0	2,755.1	2,742.7	12.33	223.456		
3,200.0	3,179.7	3,023.0	3,017.3	7.5	5.8	104.98	-2,369.9	1,289.6	2,765.4	2,752.6	12.82	215.728		
3,300.0	3,278.5	3,118.0	3,112.0	7.8	6.0	105.19	-2,373.6	1,296.3	2,776.0	2,762.7	13.31	208.628		
3,400.0	3,377.2	3,206.1	3,199.8	8.1	6.2	105.38	-2,377.3	1,302.6	2,786.9	2,773.2	13.78	202.209		
3,500.0	3,475.9	3,326.6	3,319.9	8.4	6.4	105.63	-2,381.9	1,311.3	2,797.6	2,783.3	14.33	195.243		
3,600.0	3,574.6	3,410.0	3,402.9	8.8	6.6	105.80	-2,384.9	1,317.8	2,808.3	2,793.5	14.80	189.750		
3,700.0	3,673.4	3,507.0	3,499.6	9.1	6.8	105.99	-2,388.7	1,325.3	2,819.3	2,804.0	15.30	184.310		
3,800.0	3,772.1	3,602.5	3,594.7	9.4	7.1	106.19	-2,392.7	1,332.1	2,830.4	2,814.6	15.79	179.258		
3,900.0	3,870.8	3,711.6	3,703.5	9.7	7.3	106.40	-2,396.9	1,340.8	2,841.4	2,825.1	16.32	174.089		
4,000.0	3,969.5	3,811.6	3,803.1	10.0	7.5	106.58	-2,400.3	1,348.9	2,852.2	2,835.4	16.83	169.462		
4,100.0	4,068.3	3,896.4	3,887.5	10.4	7.7	106.74	-2,403.7	1,355.3	2,863.4	2,846.1	17.30	165.479		
4,200.0	4,167.0	3,988.6	3,979.4	10.7	7.9	106.92	-2,407.6	1,362.8	2,874.9	2,857.1	17.80	161.537		
4,300.0	4,265.7	4,088.8	4,079.1	11.0	8.2	107.10	-2,411.8	1,371.1	2,886.6	2,868.2	18.31	157.651		
4,400.0	4,364.4	4,178.8	4,168.7	11.3	8.4	107.26	-2,415.6	1,378.6	2,898.3	2,879.5	18.80	154.182		
4,500.0	4,463.2	4,262.4	4,252.0	11.7	8.6	107.41	-2,419.5	1,385.8	2,910.6	2,891.3	19.27	151.017		
4,600.0	4,561.9	4,384.0	4,373.0	12.0	8.9	107.63	-2,425.2	1,395.7	2,922.7	2,902.9	19.83	147.372		
4,700.0	4,660.6	4,505.7	4,494.2	12.3	9.1	107.85	-2,430.1	1,405.2	2,934.1	2,913.7	20.40	143.857		
4,800.0	4,759.3	4,632.0	4,620.1	12.6	9.4	108.08	-2,434.2	1,414.7	2,944.8	2,923.8	20.97	140.457		
4,900.0	4,858.1	4,741.8	4,729.6	13.0	9.6	108.30	-2,437.3	1,421.7	2,954.7	2,933.3	21.49	137.489		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
5,000.0	4,956.8	4,869.4	4,857.0	13.3	9.9	108.58	-2,440.9	1,428.0	2,964.2	2,942.2	22.04	134.520		
5,100.0	5,055.5	5,063.7	5,051.3	13.6	10.2	109.13	-2,444.4	1,430.3	2,971.5	2,948.8	22.66	131.105		
5,200.0	5,154.2	5,160.0	5,147.5	13.9	10.3	109.41	-2,445.0	1,430.2	2,977.4	2,954.2	23.13	128.749		
5,300.0	5,253.0	5,276.0	5,263.5	14.3	10.5	109.76	-2,445.6	1,429.9	2,983.1	2,959.5	23.62	126.320		
5,400.0	5,351.7	5,386.8	5,374.3	14.6	10.7	110.08	-2,445.4	1,429.3	2,988.3	2,964.2	24.10	124.013		
5,500.0	5,450.4	5,484.8	5,472.3	14.9	10.8	110.38	-2,445.3	1,428.6	2,993.5	2,968.9	24.56	121.907		
5,600.0	5,549.1	5,588.3	5,575.8	15.3	11.0	110.69	-2,445.1	1,427.8	2,998.7	2,973.7	25.02	119.840		
5,700.0	5,647.9	5,684.6	5,672.2	15.6	11.1	110.97	-2,444.8	1,427.0	3,003.9	2,978.4	25.48	117.900		
5,800.0	5,746.6	5,786.0	5,773.6	15.9	11.3	111.27	-2,444.6	1,426.3	3,009.2	2,983.3	25.94	116.003		
5,900.0	5,845.3	5,896.3	5,883.8	16.2	11.4	111.60	-2,444.0	1,425.4	3,014.4	2,988.0	26.42	114.112		
6,000.0	5,944.1	5,998.4	5,986.0	16.6	11.6	111.90	-2,443.3	1,424.3	3,019.4	2,992.5	26.88	112.341		
6,100.0	6,042.8	6,094.7	6,082.2	16.9	11.7	112.19	-2,442.6	1,423.0	3,024.4	2,997.0	27.33	110.666		
6,200.0	6,141.5	6,182.7	6,170.2	17.2	11.9	112.43	-2,442.0	1,422.8	3,029.8	3,002.0	27.77	109.090		
6,300.0	6,240.2	6,286.0	6,273.5	17.5	12.0	112.72	-2,441.3	1,422.8	3,035.3	3,007.0	28.24	107.481		
6,400.0	6,339.0	6,386.6	6,374.1	17.9	12.2	112.99	-2,440.5	1,422.8	3,040.7	3,012.0	28.70	105.940		
6,500.0	6,437.7	6,481.8	6,469.3	18.2	12.3	113.25	-2,439.8	1,422.8	3,046.3	3,017.2	29.15	104.489		
6,600.0	6,536.4	6,579.1	6,566.6	18.5	12.5	113.52	-2,439.2	1,422.6	3,052.0	3,022.4	29.61	103.082		
6,700.0	6,635.1	6,670.8	6,658.3	18.9	12.6	113.77	-2,438.7	1,422.4	3,057.9	3,027.9	30.05	101.759		
6,800.0	6,733.9	6,762.0	6,749.5	19.2	12.8	114.02	-2,438.5	1,422.2	3,064.2	3,033.7	30.49	100.492		
6,900.0	6,832.6	6,859.1	6,846.6	19.5	12.9	114.29	-2,438.5	1,422.0	3,070.6	3,039.7	30.94	99.242		
7,000.0	6,931.3	6,954.7	6,942.2	19.8	13.1	114.55	-2,438.4	1,421.9	3,077.3	3,045.9	31.39	98.040		
7,100.0	7,030.0	7,054.1	7,041.6	20.2	13.2	114.82	-2,438.5	1,421.8	3,084.0	3,052.1	31.84	96.859		
7,191.8	7,120.7	7,155.6	7,143.1	20.5	13.4	115.09	-2,438.3	1,421.9	3,090.1	3,057.8	32.27	95.748		
7,200.0	7,128.8	7,165.9	7,153.4	20.5	13.4	110.72	-2,438.3	1,421.9	3,090.6	3,058.3	32.31	95.642		
7,250.0	7,178.3	7,228.4	7,215.9	20.6	13.5	76.27	-2,437.8	1,422.0	3,090.8	3,058.3	32.55	94.948		
7,300.0	7,227.8	7,287.6	7,275.1	20.7	13.6	44.60	-2,437.2	1,422.1	3,086.6	3,053.8	32.78	94.168		
7,350.0	7,276.8	7,333.6	7,321.1	20.8	13.7	26.77	-2,436.6	1,422.2	3,078.0	3,045.0	32.97	93.353		
7,400.0	7,325.1	7,372.2	7,359.6	20.8	13.8	17.12	-2,436.2	1,422.3	3,065.3	3,032.2	33.14	92.485		
7,450.0	7,372.2	7,415.2	7,402.7	20.8	13.8	11.32	-2,435.9	1,422.4	3,048.7	3,015.4	33.31	91.512		
7,500.0	7,417.7	7,461.5	7,449.0	20.8	13.9	7.43	-2,435.6	1,422.4	3,028.1	2,994.6	33.48	90.442		
7,550.0	7,461.4	7,503.5	7,491.0	20.7	14.0	4.54	-2,435.3	1,422.4	3,003.6	2,970.0	33.63	89.312		
7,600.0	7,502.9	7,540.4	7,527.9	20.7	14.0	2.19	-2,435.1	1,422.5	2,975.5	2,941.8	33.76	88.132		
7,650.0	7,541.9	7,578.3	7,565.8	20.6	14.1	0.10	-2,434.9	1,422.7	2,944.1	2,910.2	33.89	86.884		
7,700.0	7,578.0	7,614.1	7,601.6	20.5	14.2	-1.91	-2,434.7	1,422.8	2,909.4	2,875.4	33.99	85.586		
7,750.0	7,611.1	7,649.0	7,636.5	20.4	14.2	-4.03	-2,434.5	1,423.0	2,871.8	2,837.7	34.09	84.238		
7,800.0	7,640.8	7,677.0	7,664.5	20.4	14.3	-6.44	-2,434.3	1,423.3	2,831.5	2,797.4	34.17	82.875		
7,850.0	7,667.0	7,701.9	7,689.4	20.3	14.3	-9.39	-2,434.1	1,423.5	2,788.9	2,754.7	34.22	81.491		
7,900.0	7,689.4	7,721.1	7,708.6	20.3	14.3	-13.26	-2,434.0	1,423.6	2,744.3	2,710.1	34.26	80.104		
7,950.0	7,707.9	7,740.0	7,727.5	20.3	14.4	-18.82	-2,433.9	1,423.7	2,698.1	2,663.8	34.28	78.699		
8,000.0	7,722.2	7,750.8	7,738.3	20.3	14.4	-27.28	-2,433.9	1,423.8	2,650.5	2,616.2	34.28	77.313		
8,050.0	7,732.4	7,760.9	7,748.4	20.3	14.4	-41.41	-2,433.8	1,423.9	2,602.0	2,567.7	34.27	75.929		
8,100.0	7,738.4	7,766.8	7,754.2	20.4	14.4	-64.67	-2,433.8	1,423.9	2,552.9	2,518.6	34.24	74.567		
8,143.7	7,740.0	7,768.3	7,755.8	20.5	14.4	-90.65	-2,433.8	1,423.9	2,509.8	2,475.6	34.19	73.401		
8,200.0	7,740.0	7,768.1	7,755.6	20.6	14.4	-90.63	-2,433.8	1,423.9	2,454.3	2,420.1	34.13	71.911		
8,300.0	7,740.0	7,767.8	7,755.3	21.0	14.4	-90.59	-2,433.8	1,423.9	2,355.8	2,321.8	34.01	69.278		
8,400.0	7,740.0	7,767.5	7,755.0	21.5	14.4	-90.55	-2,433.8	1,423.9	2,257.4	2,223.6	33.87	66.660		
8,443.7	7,740.0	7,767.4	7,754.9	21.8	14.4	-90.53	-2,433.8	1,423.9	2,214.5	2,180.7	33.80	65.521		
8,500.0	7,740.0	7,767.2	7,754.7	22.2	14.4	-90.48	-2,433.8	1,423.9	2,159.3	2,125.6	33.70	64.072		
8,600.0	7,740.0	7,766.9	7,754.4	22.9	14.4	-90.41	-2,433.8	1,423.9	2,061.7	2,028.2	33.49	61.563		
8,700.0	7,740.0	7,766.6	7,754.1	23.7	14.4	-90.34	-2,433.8	1,423.9	1,964.7	1,931.5	33.23	59.123		
8,800.0	7,740.0	7,766.3	7,753.7	24.6	14.4	-90.29	-2,433.8	1,423.9	1,868.5	1,835.6	32.93	56.751		
8,843.7	7,740.0	7,766.1	7,753.6	25.1	14.4	-90.27	-2,433.8	1,423.9	1,826.8	1,794.0	32.78	55.731		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 1024-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,740.0	7,765.9	7,753.4	25.6	14.4	-90.25	-2,433.8	1,423.9	1,773.2	1,740.6	32.58	54.422		
9,000.0	7,740.0	7,765.6	7,753.0	26.7	14.4	-90.21	-2,433.8	1,423.9	1,678.5	1,646.3	32.22	52.097		
9,100.0	7,740.0	7,765.2	7,752.7	27.8	14.4	-90.17	-2,433.8	1,423.9	1,584.5	1,552.6	31.84	49.762		
9,200.0	7,740.0	7,764.9	7,752.4	29.0	14.4	-90.14	-2,433.8	1,423.9	1,491.2	1,459.7	31.46	47.403		
9,300.0	7,740.0	7,764.5	7,752.0	30.2	14.4	-90.10	-2,433.8	1,423.9	1,398.8	1,367.8	31.09	44.998		
9,343.7	7,740.0	7,764.4	7,751.9	30.8	14.4	-90.09	-2,433.8	1,423.9	1,358.8	1,327.9	30.94	43.925		
9,400.7	7,740.0	7,764.2	7,751.7	31.6	14.4	-90.07	-2,433.8	1,423.9	1,306.8	1,276.1	30.76	42.487		
9,500.0	7,740.0	7,763.9	7,751.3	32.9	14.4	-90.03	-2,433.8	1,423.9	1,217.2	1,186.7	30.52	39.877		
9,600.0	7,740.0	7,763.5	7,751.0	34.3	14.4	-90.00	-2,433.8	1,423.9	1,128.5	1,098.1	30.44	37.077		
9,700.0	7,740.0	7,763.2	7,750.7	35.7	14.4	-89.96	-2,433.8	1,423.9	1,041.9	1,011.3	30.60	34.045		
9,800.0	7,740.0	7,762.9	7,750.3	37.1	14.4	-89.93	-2,433.8	1,423.9	957.9	926.7	31.16	30.739		
9,900.0	7,740.0	7,762.5	7,750.0	38.6	14.4	-89.89	-2,433.8	1,423.9	877.3	845.0	32.29	27.172		
10,000.0	7,740.0	7,762.2	7,749.7	40.1	14.4	-89.86	-2,433.8	1,423.9	801.0	766.9	34.16	23.451		
10,100.0	7,740.0	7,761.9	7,749.3	41.6	14.4	-89.82	-2,433.8	1,423.9	730.5	693.6	36.93	19.778		
10,200.0	7,740.0	7,761.5	7,749.0	43.1	14.4	-89.79	-2,433.8	1,423.9	667.6	626.9	40.70	16.401		
10,300.0	7,740.0	7,761.2	7,748.7	44.7	14.4	-89.75	-2,433.8	1,423.9	614.5	569.1	45.41	13.534		
10,400.0	7,740.0	7,760.9	7,748.3	46.3	14.4	-89.72	-2,433.8	1,423.9	574.2	523.4	50.76	11.311		
10,500.0	7,740.0	7,760.5	7,748.0	47.8	14.4	-89.68	-2,433.8	1,423.9	549.2	493.0	56.21	9.770		
10,590.0	7,740.0	7,760.2	7,747.7	49.3	14.4	-89.65	-2,433.8	1,423.9	541.8	481.2	60.59	8.943 CC		
10,600.0	7,740.0	7,760.2	7,747.7	49.4	14.4	-89.65	-2,433.8	1,423.9	541.9	480.9	61.02	8.881 ES		
10,700.0	7,740.0	7,759.8	7,747.3	51.0	14.4	-89.61	-2,433.8	1,423.9	552.9	488.3	64.54	8.566 SF		
10,800.0	7,740.0	7,759.5	7,747.0	52.6	14.4	-89.57	-2,433.8	1,423.9	581.1	514.6	66.55	8.732		
10,900.0	7,740.0	7,759.2	7,746.7	54.2	14.4	-89.54	-2,433.8	1,423.9	624.3	557.0	67.23	9.285		
11,000.0	7,740.0	7,758.8	7,746.3	55.9	14.4	-89.50	-2,433.8	1,423.9	679.5	612.5	66.98	10.145		
11,100.0	7,740.0	7,758.5	7,746.0	57.5	14.4	-89.47	-2,433.8	1,423.9	744.1	677.9	66.18	11.244		
11,200.0	7,740.0	7,758.2	7,745.7	59.1	14.4	-89.43	-2,433.8	1,423.9	815.9	750.8	65.13	12.528		
11,300.0	7,740.0	7,757.8	7,745.3	60.8	14.4	-89.40	-2,433.8	1,423.9	893.2	829.2	63.99	13.958		
11,400.0	7,740.0	7,757.5	7,745.0	62.4	14.4	-89.36	-2,433.8	1,423.9	974.5	911.7	62.86	15.503		
11,500.0	7,740.0	7,757.2	7,744.7	64.1	14.4	-89.33	-2,433.8	1,423.9	1,059.1	997.3	61.80	17.137		
11,600.0	7,740.0	7,756.9	7,744.3	65.8	14.4	-89.29	-2,433.8	1,423.8	1,146.2	1,085.4	60.83	18.842		
11,700.0	7,740.0	7,756.5	7,744.0	67.4	14.4	-89.26	-2,433.8	1,423.8	1,235.2	1,175.3	59.95	20.605		
11,800.0	7,740.0	7,756.2	7,743.7	69.1	14.4	-89.22	-2,433.8	1,423.8	1,325.8	1,266.7	59.15	22.413		
11,900.0	7,740.0	7,755.9	7,743.3	70.8	14.4	-89.19	-2,433.8	1,423.8	1,417.7	1,359.2	58.44	24.258		
12,000.0	7,740.0	7,755.5	7,743.0	72.5	14.4	-89.15	-2,433.8	1,423.8	1,510.6	1,452.8	57.80	26.132		
12,100.0	7,740.0	7,755.2	7,742.7	74.1	14.4	-89.12	-2,433.8	1,423.8	1,604.3	1,547.1	57.23	28.030		
12,200.0	7,740.0	7,754.9	7,742.3	75.8	14.4	-89.08	-2,433.8	1,423.8	1,698.8	1,642.0	56.72	29.947		
12,300.0	7,740.0	7,754.5	7,742.0	77.5	14.4	-89.05	-2,433.9	1,423.8	1,793.8	1,737.6	56.27	31.880		
12,400.0	7,740.0	7,754.2	7,741.7	79.2	14.4	-89.01	-2,433.9	1,423.8	1,889.4	1,833.5	55.86	33.824		
12,500.0	7,740.0	7,753.9	7,741.3	80.9	14.4	-88.98	-2,433.9	1,423.8	1,985.4	1,929.9	55.49	35.778		
12,600.0	7,740.0	7,753.5	7,741.0	82.6	14.4	-88.94	-2,433.9	1,423.8	2,081.8	2,026.6	55.16	37.739		
12,700.0	7,740.0	7,753.2	7,740.7	84.3	14.4	-88.91	-2,433.9	1,423.8	2,178.5	2,123.6	54.87	39.705		
12,800.0	7,740.0	7,752.9	7,740.3	86.0	14.4	-88.87	-2,433.9	1,423.8	2,275.5	2,220.9	54.60	41.675		
12,900.0	7,740.0	7,752.5	7,740.0	87.7	14.4	-88.84	-2,433.9	1,423.8	2,372.7	2,318.4	54.36	43.648		
13,000.0	7,740.0	7,752.2	7,739.7	89.4	14.4	-88.80	-2,433.9	1,423.8	2,470.2	2,416.0	54.15	45.622		
13,100.0	7,740.0	7,751.9	7,739.4	91.1	14.4	-88.77	-2,433.9	1,423.8	2,567.8	2,513.9	53.95	47.596		
13,200.0	7,740.0	7,751.6	7,739.0	92.8	14.4	-88.73	-2,433.9	1,423.8	2,665.7	2,611.9	53.78	49.570		
13,300.0	7,740.0	7,751.2	7,738.7	94.5	14.4	-88.70	-2,433.9	1,423.8	2,763.7	2,710.0	53.62	51.542		
13,400.0	7,740.0	7,750.9	7,738.4	96.3	14.4	-88.66	-2,433.9	1,423.8	2,861.8	2,808.3	53.48	53.513		
13,500.0	7,740.0	7,750.6	7,738.0	98.0	14.4	-88.63	-2,433.9	1,423.8	2,960.0	2,906.7	53.35	55.481		
13,600.0	7,740.0	7,750.2	7,737.7	99.7	14.4	-88.59	-2,433.9	1,423.8	3,058.4	3,005.2	53.24	57.446		
13,700.0	7,740.0	7,749.9	7,737.4	101.4	14.4	-88.56	-2,433.9	1,423.8	3,156.9	3,103.7	53.14	59.408		
13,800.0	7,740.0	7,749.6	7,737.0	103.1	14.4	-88.52	-2,433.9	1,423.8	3,255.4	3,202.4	53.05	61.367		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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			
13,900.0	7,740.0	7,749.2	7,736.7	104.8	14.4	-88.49	-2,433.9	1,423.8	3,354.1	3,301.1	52.97	63.321		
14,000.0	7,740.0	7,748.9	7,736.4	106.6	14.4	-88.45	-2,433.9	1,423.8	3,452.8	3,399.9	52.90	65.272		
14,100.0	7,740.0	7,748.6	7,736.1	108.3	14.4	-88.42	-2,433.9	1,423.8	3,551.6	3,498.8	52.84	67.217		
14,200.0	7,740.0	7,748.3	7,735.7	110.0	14.4	-88.38	-2,433.9	1,423.8	3,650.5	3,597.7	52.78	69.158		
14,300.0	7,740.0	7,747.9	7,735.4	111.7	14.4	-88.35	-2,433.9	1,423.8	3,749.4	3,696.6	52.74	71.094		
14,400.0	7,740.0	7,747.6	7,735.1	113.5	14.4	-88.32	-2,433.9	1,423.8	3,848.4	3,795.7	52.70	73.025		
14,500.0	7,740.0	7,747.3	7,734.7	115.2	14.4	-88.28	-2,433.9	1,423.8	3,947.4	3,894.7	52.67	74.951		
14,600.0	7,740.0	7,746.9	7,734.4	116.9	14.4	-88.25	-2,433.9	1,423.8	4,046.5	3,993.8	52.64	76.871		
14,700.0	7,740.0	7,746.6	7,734.1	118.6	14.4	-88.21	-2,433.9	1,423.8	4,145.6	4,093.0	52.62	78.786		
14,800.0	7,740.0	7,746.3	7,733.8	120.4	14.4	-88.18	-2,433.9	1,423.8	4,244.7	4,192.1	52.60	80.695		
14,900.0	7,740.0	7,746.0	7,733.4	122.1	14.4	-88.14	-2,433.9	1,423.8	4,343.9	4,291.4	52.59	82.598		
15,000.0	7,740.0	7,745.6	7,733.1	123.8	14.4	-88.11	-2,433.9	1,423.8	4,443.2	4,390.6	52.58	84.496		
15,100.0	7,740.0	7,745.3	7,732.8	125.6	14.4	-88.07	-2,433.9	1,423.8	4,542.5	4,489.9	52.58	86.387		
15,200.0	7,740.0	7,745.0	7,732.5	127.3	14.4	-88.04	-2,433.9	1,423.8	4,641.8	4,589.2	52.58	88.273		
15,300.0	7,740.0	7,744.7	7,732.1	129.0	14.4	-88.00	-2,433.9	1,423.8	4,741.1	4,688.5	52.59	90.153		
15,400.0	7,740.0	7,744.3	7,731.8	130.7	14.4	-87.97	-2,433.9	1,423.8	4,840.4	4,787.8	52.60	92.027		
15,500.0	7,740.0	7,744.0	7,731.5	132.5	14.4	-87.93	-2,433.9	1,423.8	4,939.8	4,887.2	52.61	93.894		
15,600.0	7,740.0	7,743.7	7,731.1	134.2	14.4	-87.90	-2,433.9	1,423.8	5,039.2	4,986.6	52.63	95.756		
15,700.0	7,740.0	7,743.3	7,730.8	135.9	14.4	-87.87	-2,433.9	1,423.8	5,138.7	5,086.0	52.64	97.611		
15,800.0	7,740.0	7,743.0	7,730.5	137.7	14.4	-87.83	-2,433.9	1,423.8	5,238.1	5,185.5	52.67	99.460		
15,900.0	7,740.0	7,742.7	7,730.2	139.4	14.4	-87.80	-2,433.9	1,423.8	5,337.6	5,284.9	52.69	101.304		
16,000.0	7,740.0	7,742.4	7,729.8	141.1	14.4	-87.76	-2,433.9	1,423.8	5,437.1	5,384.4	52.72	103.140		
16,084.2	7,740.0	7,742.1	7,729.6	142.6	14.4	-87.73	-2,433.9	1,423.8	5,520.9	5,468.1	52.74	104.682		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8365-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	153.10	-2,304.8	1,169.2	2,584.3					
100.0	100.0	95.0	95.0	0.2	0.2	153.10	-2,304.8	1,169.2	2,584.3	2,584.0	0.32		8,130.760	
200.0	200.0	195.0	195.0	0.3	0.3	153.10	-2,304.8	1,169.2	2,584.3	2,583.7	0.67		3,875.095	
300.0	300.0	295.0	295.0	0.5	0.5	153.10	-2,304.8	1,169.2	2,584.3	2,583.3	1.02		2,543.709	
400.0	400.0	395.0	395.0	0.7	0.7	153.10	-2,304.8	1,169.2	2,584.3	2,583.0	1.37		1,893.240	
500.0	500.0	495.0	495.0	0.8	0.9	153.10	-2,304.8	1,169.2	2,584.3	2,582.6	1.71		1,507.696	
600.0	600.0	595.0	595.0	1.0	1.0	153.10	-2,304.8	1,169.2	2,584.3	2,582.3	2.06		1,252.612	
700.0	700.0	695.0	695.0	1.2	1.2	153.10	-2,304.8	1,169.2	2,584.3	2,581.9	2.41		1,071.351	
800.0	800.0	795.0	795.0	1.4	1.4	153.10	-2,304.8	1,169.2	2,584.3	2,581.6	2.76		935.919	
900.0	900.0	895.0	895.0	1.5	1.6	153.10	-2,304.8	1,169.2	2,584.3	2,581.2	3.11		830.884	
1,000.0	1,000.0	995.0	995.0	1.7	1.7	153.10	-2,304.8	1,169.2	2,584.3	2,580.9	3.46		747.046	
1,100.0	1,100.0	1,095.0	1,095.0	1.9	1.9	101.72	-2,304.8	1,169.2	2,584.5	2,580.7	3.81		678.582	
1,200.0	1,200.0	1,195.0	1,195.0	2.1	2.1	101.77	-2,304.8	1,169.2	2,585.1	2,580.9	4.16		621.496	
1,300.0	1,299.9	1,294.9	1,294.9	2.3	2.3	101.86	-2,304.8	1,169.2	2,585.9	2,581.4	4.51		572.939	
1,400.0	1,399.7	1,394.7	1,394.7	2.4	2.4	101.98	-2,304.8	1,169.2	2,587.2	2,582.3	4.87		530.886	
1,500.0	1,499.4	1,494.4	1,494.4	2.6	2.6	102.13	-2,304.8	1,169.2	2,588.9	2,583.6	5.24		493.885	
1,600.0	1,598.9	1,593.9	1,593.9	2.8	2.8	102.32	-2,304.8	1,169.2	2,590.9	2,585.3	5.62		460.884	
1,700.0	1,698.3	1,693.3	1,693.3	3.1	3.0	102.54	-2,304.8	1,169.2	2,593.3	2,587.3	6.02		431.118	
1,800.0	1,797.4	1,792.4	1,792.4	3.3	3.1	102.79	-2,304.8	1,169.2	2,596.2	2,589.8	6.43		404.029	
1,900.0	1,896.3	1,891.3	1,891.3	3.6	3.3	103.07	-2,304.8	1,169.2	2,599.6	2,592.7	6.86		379.207	
1,915.7	1,911.9	1,906.9	1,906.9	3.6	3.3	103.11	-2,304.8	1,169.2	2,600.1	2,593.2	6.92		375.525	
2,000.0	1,995.0	1,990.0	1,990.0	3.8	3.5	103.40	-2,304.8	1,169.2	2,603.3	2,596.0	7.30		356.840	
2,100.0	2,093.8	2,088.8	2,088.8	4.1	3.6	103.74	-2,304.8	1,169.2	2,607.0	2,599.3	7.74		336.709	
2,200.0	2,192.5	2,187.5	2,187.5	4.4	3.8	104.07	-2,304.8	1,169.2	2,610.9	2,602.7	8.20		318.562	
2,300.0	2,291.2	2,286.2	2,286.2	4.7	4.0	104.40	-2,304.8	1,169.2	2,614.9	2,606.2	8.65		302.166	
2,400.0	2,389.9	2,384.9	2,384.9	5.0	4.2	104.74	-2,304.8	1,169.2	2,618.9	2,609.8	9.12		287.312	
2,500.0	2,488.7	2,483.7	2,483.7	5.3	4.3	105.07	-2,304.8	1,169.2	2,623.1	2,613.5	9.58		273.817	
2,600.0	2,587.4	2,582.4	2,582.4	5.6	4.5	105.40	-2,304.8	1,169.2	2,627.3	2,617.2	10.05		261.518	
2,700.0	2,686.1	2,681.1	2,681.1	5.9	4.7	105.73	-2,304.8	1,169.2	2,631.6	2,621.1	10.51		250.277	
2,800.0	2,784.8	2,779.8	2,779.8	6.2	4.9	106.06	-2,304.8	1,169.2	2,636.0	2,625.0	10.98		239.972	
2,900.0	2,883.6	2,878.6	2,878.6	6.5	5.0	106.39	-2,304.8	1,169.2	2,640.5	2,629.1	11.46		230.499	
3,000.0	2,982.3	2,977.3	2,977.3	6.9	5.2	106.72	-2,304.8	1,169.2	2,645.1	2,633.2	11.93		221.767	
3,100.0	3,081.0	3,076.0	3,076.0	7.2	5.4	107.04	-2,304.8	1,169.2	2,649.8	2,637.4	12.40		213.696	
3,200.0	3,179.7	3,174.7	3,174.7	7.5	5.5	107.37	-2,304.8	1,169.2	2,654.5	2,641.7	12.87		206.218	
3,300.0	3,278.5	3,273.5	3,273.5	7.8	5.7	107.69	-2,304.8	1,169.2	2,659.4	2,646.1	13.35		199.274	
3,400.0	3,377.2	3,372.2	3,372.2	8.1	5.9	108.01	-2,304.8	1,169.2	2,664.3	2,650.5	13.82		192.810	
3,500.0	3,475.9	3,470.9	3,470.9	8.4	6.1	108.33	-2,304.8	1,169.2	2,669.4	2,655.1	14.29		186.780	
3,600.0	3,574.6	3,569.6	3,569.6	8.8	6.2	108.65	-2,304.8	1,169.2	2,674.5	2,659.7	14.76		181.145	
3,700.0	3,673.4	3,668.4	3,668.4	9.1	6.4	108.97	-2,304.8	1,169.2	2,679.6	2,664.4	15.24		175.868	
3,800.0	3,772.1	3,767.1	3,767.1	9.4	6.6	109.29	-2,304.8	1,169.2	2,684.9	2,669.2	15.71		170.918	
3,900.0	3,870.8	3,865.8	3,865.8	9.7	6.7	109.60	-2,304.8	1,169.2	2,690.3	2,674.1	16.18		166.266	
4,000.0	3,969.5	3,964.5	3,964.5	10.0	6.9	109.92	-2,304.8	1,169.2	2,695.7	2,679.1	16.65		161.887	
4,100.0	4,068.3	4,063.3	4,063.3	10.4	7.1	110.23	-2,304.8	1,169.2	2,701.3	2,684.1	17.12		157.759	
4,200.0	4,167.0	4,162.0	4,162.0	10.7	7.3	110.55	-2,304.8	1,169.2	2,706.9	2,689.3	17.59		153.862	
4,300.0	4,265.7	4,260.7	4,260.7	11.0	7.4	110.86	-2,304.8	1,169.2	2,712.5	2,694.5	18.06		150.177	
4,400.0	4,364.4	4,359.4	4,359.4	11.3	7.6	111.17	-2,304.8	1,169.2	2,718.3	2,699.8	18.53		146.689	
4,500.0	4,463.2	4,458.2	4,458.2	11.7	7.8	111.48	-2,304.8	1,169.2	2,724.2	2,705.2	19.00		143.383	
4,600.0	4,561.9	4,556.9	4,556.9	12.0	8.0	111.78	-2,304.8	1,169.2	2,730.1	2,710.6	19.47		140.245	
4,700.0	4,660.6	4,655.6	4,655.6	12.3	8.1	112.09	-2,304.8	1,169.2	2,736.1	2,716.2	19.93		137.263	
4,800.0	4,759.3	4,754.3	4,754.3	12.6	8.3	112.39	-2,304.8	1,169.2	2,742.2	2,721.8	20.40		134.428	
4,900.0	4,858.1	4,853.1	4,853.1	13.0	8.5	112.70	-2,304.8	1,169.2	2,748.4	2,727.5	20.86		131.728	
5,000.0	4,956.8	4,951.8	4,951.8	13.3	8.6	113.00	-2,304.8	1,169.2	2,754.6	2,733.3	21.33		129.154	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,055.5	5,050.5	5,050.5	13.6	8.8	113.30	-2,304.8	1,169.2	2,760.9	2,739.2	21.79	126.699		
5,200.0	5,154.2	5,149.2	5,149.2	13.9	9.0	113.60	-2,304.8	1,169.2	2,767.3	2,745.1	22.25	124.355		
5,300.0	5,253.0	5,248.0	5,248.0	14.3	9.2	113.90	-2,304.8	1,169.2	2,773.8	2,751.1	22.72	122.114		
5,400.0	5,351.7	5,346.7	5,346.7	14.6	9.3	114.19	-2,304.8	1,169.2	2,780.4	2,757.2	23.18	119.971		
5,500.0	5,450.4	5,445.4	5,445.4	14.9	9.5	114.49	-2,304.8	1,169.2	2,787.0	2,763.4	23.64	117.919		
5,600.0	5,549.1	5,544.1	5,544.1	15.3	9.7	114.78	-2,304.8	1,169.2	2,793.7	2,769.6	24.09	115.953		
5,700.0	5,647.9	5,642.9	5,642.9	15.6	9.8	115.08	-2,304.8	1,169.2	2,800.5	2,775.9	24.55	114.068		
5,800.0	5,746.6	5,741.6	5,741.6	15.9	10.0	115.37	-2,304.8	1,169.2	2,807.3	2,782.3	25.01	112.259		
5,900.0	5,845.3	5,840.3	5,840.3	16.2	10.2	115.66	-2,304.8	1,169.2	2,814.3	2,788.8	25.46	110.523		
6,000.0	5,944.1	5,939.1	5,939.1	16.6	10.4	115.95	-2,304.8	1,169.2	2,821.3	2,795.4	25.92	108.855		
6,100.0	6,042.8	6,037.8	6,037.8	16.9	10.5	116.23	-2,304.8	1,169.2	2,828.3	2,802.0	26.37	107.251		
6,200.0	6,141.5	6,136.5	6,136.5	17.2	10.7	116.52	-2,304.8	1,169.2	2,835.5	2,808.7	26.82	105.708		
6,300.0	6,240.2	6,235.2	6,235.2	17.5	10.9	116.80	-2,304.8	1,169.2	2,842.7	2,815.4	27.28	104.222		
6,400.0	6,339.0	6,334.0	6,334.0	17.9	11.1	117.09	-2,304.8	1,169.2	2,850.0	2,822.3	27.73	102.792		
6,500.0	6,437.7	6,432.7	6,432.7	18.2	11.2	117.37	-2,304.8	1,169.2	2,857.3	2,829.2	28.18	101.413		
6,600.0	6,536.4	6,531.4	6,531.4	18.5	11.4	117.65	-2,304.8	1,169.2	2,864.8	2,836.1	28.62	100.084		
6,700.0	6,635.1	6,630.1	6,630.1	18.9	11.6	117.92	-2,304.8	1,169.2	2,872.3	2,843.2	29.07	98.802		
6,800.0	6,733.9	6,728.9	6,728.9	19.2	11.7	118.20	-2,304.8	1,169.2	2,879.8	2,850.3	29.52	97.565		
6,900.0	6,832.6	6,827.6	6,827.6	19.5	11.9	118.48	-2,304.8	1,169.2	2,887.5	2,857.5	29.96	96.370		
7,000.0	6,931.3	6,926.3	6,926.3	19.8	12.1	118.75	-2,304.8	1,169.2	2,895.2	2,864.7	30.41	95.215		
7,100.0	7,030.0	7,025.0	7,025.0	20.2	12.3	119.02	-2,304.8	1,169.2	2,902.9	2,872.1	30.85	94.100		
7,191.8	7,120.7	7,115.7	7,115.7	20.5	12.4	119.27	-2,304.8	1,169.2	2,910.1	2,878.8	31.26	93.108		
7,200.0	7,128.8	7,123.8	7,123.8	20.5	12.4	114.90	-2,304.8	1,169.2	2,910.7	2,879.4	31.29	93.019		
7,250.0	7,178.3	7,173.3	7,173.3	20.6	12.5	80.43	-2,304.8	1,169.2	2,911.7	2,880.2	31.51	92.415		
7,300.0	7,227.8	7,222.8	7,222.8	20.7	12.6	48.79	-2,304.8	1,169.2	2,908.5	2,876.8	31.72	91.695		
7,350.0	7,276.8	7,271.8	7,271.8	20.8	12.7	31.06	-2,304.8	1,169.2	2,900.9	2,869.0	31.93	90.864		
7,400.0	7,325.1	7,320.1	7,320.1	20.8	12.8	21.56	-2,304.8	1,169.2	2,889.1	2,856.9	32.13	89.928		
7,450.0	7,372.2	7,367.2	7,367.2	20.8	12.9	15.95	-2,304.8	1,169.2	2,873.1	2,840.8	32.32	88.894		
7,500.0	7,417.7	7,412.7	7,412.7	20.8	12.9	12.28	-2,304.8	1,169.2	2,853.0	2,820.5	32.51	87.769		
7,550.0	7,461.4	7,456.4	7,456.4	20.7	13.0	9.69	-2,304.8	1,169.2	2,829.1	2,796.4	32.68	86.561		
7,600.0	7,502.9	7,497.9	7,497.9	20.7	13.1	7.72	-2,304.8	1,169.2	2,801.5	2,768.6	32.85	85.277		
7,650.0	7,541.9	7,536.9	7,536.9	20.6	13.2	6.12	-2,304.8	1,169.2	2,770.3	2,737.3	33.01	83.927		
7,700.0	7,578.0	7,573.0	7,573.0	20.5	13.2	4.72	-2,304.8	1,169.2	2,735.9	2,702.7	33.15	82.519		
7,750.0	7,611.1	7,606.1	7,606.1	20.4	13.3	3.40	-2,304.8	1,169.2	2,698.4	2,665.1	33.29	81.063		
7,800.0	7,640.8	7,635.8	7,635.8	20.4	13.3	2.04	-2,304.8	1,169.2	2,658.3	2,624.9	33.41	79.567		
7,850.0	7,667.0	7,662.0	7,662.0	20.3	13.4	0.51	-2,304.8	1,169.2	2,615.7	2,582.2	33.52	78.041		
7,900.0	7,689.4	7,684.4	7,684.4	20.3	13.4	-1.41	-2,304.8	1,169.2	2,571.0	2,537.4	33.61	76.495		
7,950.0	7,707.9	7,702.9	7,702.9	20.3	13.4	-4.13	-2,304.8	1,169.2	2,524.5	2,490.9	33.69	74.939		
8,000.0	7,722.2	7,717.2	7,717.2	20.3	13.5	-8.51	-2,304.8	1,169.2	2,476.7	2,442.9	33.75	73.381		
8,050.0	7,732.4	7,727.4	7,727.4	20.3	13.5	-17.12	-2,304.8	1,169.2	2,427.8	2,394.0	33.80	71.833		
8,100.0	7,738.4	7,733.4	7,733.4	20.4	13.5	-39.64	-2,304.8	1,169.2	2,378.3	2,344.4	33.83	70.303		
8,143.7	7,740.0	7,735.0	7,735.0	20.5	13.5	-90.00	-2,304.8	1,169.2	2,334.7	2,300.9	33.84	68.988		
8,200.0	7,740.0	7,735.0	7,735.0	20.6	13.5	-90.00	-2,304.8	1,169.2	2,278.6	2,244.7	33.85	67.305		
8,300.0	7,740.0	7,735.0	7,735.0	21.0	13.5	-90.00	-2,304.8	1,169.2	2,178.8	2,145.0	33.87	64.332		
8,400.0	7,740.0	7,735.0	7,735.0	21.5	13.5	-90.00	-2,304.8	1,169.2	2,079.2	2,045.3	33.88	61.377		
8,443.7	7,740.0	7,735.0	7,735.0	21.8	13.5	-90.00	-2,304.8	1,169.2	2,035.6	2,001.8	33.88	60.093		
8,500.0	7,740.0	7,735.0	7,735.0	22.2	13.5	-90.00	-2,304.8	1,169.2	1,979.6	1,945.7	33.86	58.456		
8,600.0	7,740.0	7,735.0	7,735.0	22.9	13.5	-90.00	-2,304.8	1,169.2	1,880.2	1,846.3	33.81	55.608		
8,700.0	7,740.0	7,735.0	7,735.0	23.7	13.5	-90.00	-2,304.8	1,169.2	1,781.0	1,747.3	33.71	52.826		
8,800.0	7,740.0	7,735.0	7,735.0	24.6	13.5	-90.00	-2,304.8	1,169.2	1,682.3	1,648.7	33.57	50.110		
8,843.7	7,740.0	7,735.0	7,735.0	25.1	13.5	-90.00	-2,304.8	1,169.2	1,639.3	1,605.8	33.49	48.941		
8,900.0	7,740.0	7,735.0	7,735.0	25.6	13.5	-90.00	-2,304.8	1,169.2	1,583.9	1,550.6	33.39	47.442		

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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
9,000.0	7,740.0	7,735.0	7,735.0	26.7	13.5	-90.00	-2,304.8	1,169.2	1,485.9	1,452.7	33.17	44.793		
9,100.0	7,740.0	7,735.0	7,735.0	27.8	13.5	-90.00	-2,304.8	1,169.2	1,388.1	1,355.1	32.92	42.160		
9,200.0	7,740.0	7,735.0	7,735.0	29.0	13.5	-90.00	-2,304.8	1,169.2	1,290.6	1,257.9	32.64	39.541		
9,300.0	7,740.0	7,735.0	7,735.0	30.2	13.5	-90.00	-2,304.8	1,169.2	1,193.5	1,161.2	32.32	36.934		
9,343.7	7,740.0	7,735.0	7,735.0	30.8	13.5	-90.00	-2,304.8	1,169.2	1,151.3	1,119.1	32.16	35.797		
9,400.7	7,740.0	7,735.0	7,735.0	31.6	13.5	-90.00	-2,304.8	1,169.2	1,096.2	1,064.3	31.96	34.303		
9,500.0	7,740.0	7,735.0	7,735.0	32.9	13.5	-90.00	-2,304.8	1,169.2	1,000.8	969.2	31.58	31.690		
9,600.0	7,740.0	7,735.0	7,735.0	34.3	13.5	-90.00	-2,304.8	1,169.2	905.5	874.3	31.18	29.038		
9,700.0	7,740.0	7,735.0	7,735.0	35.7	13.5	-90.00	-2,304.8	1,169.2	811.3	780.5	30.81	26.335		
9,800.0	7,740.0	7,735.0	7,735.0	37.1	13.5	-90.00	-2,304.8	1,169.2	718.7	688.2	30.55	23.528		
9,900.0	7,740.0	7,735.0	7,735.0	38.6	13.5	-90.00	-2,304.8	1,169.2	628.4	597.8	30.61	20.533		
10,000.0	7,740.0	7,735.0	7,735.0	40.1	13.5	-90.00	-2,304.8	1,169.2	541.5	510.2	31.38	17.257		
10,100.0	7,740.0	7,735.0	7,735.0	41.6	13.5	-90.00	-2,304.8	1,169.2	460.0	426.4	33.55	13.711		
10,200.0	7,740.0	7,735.0	7,735.0	43.1	13.5	-90.00	-2,304.8	1,169.2	387.2	349.2	37.97	10.199		
10,300.0	7,740.0	7,735.0	7,735.0	44.7	13.5	-90.00	-2,304.8	1,169.2	329.0	283.9	45.11	7.294		
10,400.0	7,740.0	7,735.0	7,735.0	46.3	13.5	-90.00	-2,304.8	1,169.2	294.3	240.5	53.80	5.470		
10,458.3	7,740.0	7,735.0	7,735.0	47.2	13.5	-90.00	-2,304.8	1,169.2	288.4	230.2	58.19	4.956 CC, ES		
10,500.0	7,740.0	7,735.0	7,735.0	47.8	13.5	-90.00	-2,304.8	1,169.2	291.4	230.9	60.48	4.818 SF		
10,600.0	7,740.0	7,735.0	7,735.0	49.4	13.5	-90.00	-2,304.8	1,169.2	321.3	258.7	62.60	5.133		
10,700.0	7,740.0	7,735.0	7,735.0	51.0	13.5	-90.00	-2,304.8	1,169.2	376.3	314.8	61.44	6.124		
10,800.0	7,740.0	7,735.0	7,735.0	52.6	13.5	-90.00	-2,304.8	1,169.2	447.1	387.9	59.19	7.554		
10,900.0	7,740.0	7,735.0	7,735.0	54.2	13.5	-90.00	-2,304.8	1,169.2	527.5	470.5	56.93	9.265		
11,000.0	7,740.0	7,735.0	7,735.0	55.9	13.5	-90.00	-2,304.8	1,169.2	613.7	558.7	55.00	11.158		
11,100.0	7,740.0	7,735.0	7,735.0	57.5	13.5	-90.00	-2,304.8	1,169.2	703.5	650.1	53.41	13.171		
11,200.0	7,740.0	7,735.0	7,735.0	59.1	13.5	-90.00	-2,304.8	1,169.2	795.8	743.6	52.13	15.265		
11,300.0	7,740.0	7,735.0	7,735.0	60.8	13.5	-90.00	-2,304.8	1,169.2	889.7	838.6	51.09	17.414		
11,400.0	7,740.0	7,735.0	7,735.0	62.4	13.5	-90.00	-2,304.8	1,169.2	984.8	934.6	50.25	19.600		
11,500.0	7,740.0	7,735.0	7,735.0	64.1	13.5	-90.00	-2,304.8	1,169.2	1,080.8	1,031.3	49.55	21.813		
11,600.0	7,740.0	7,735.0	7,735.0	65.8	13.5	-90.00	-2,304.8	1,169.2	1,177.5	1,128.5	48.98	24.042		
11,700.0	7,740.0	7,735.0	7,735.0	67.4	13.5	-90.00	-2,304.8	1,169.2	1,274.7	1,226.2	48.50	26.283		
11,800.0	7,740.0	7,735.0	7,735.0	69.1	13.5	-90.00	-2,304.8	1,169.2	1,372.3	1,324.2	48.10	28.531		
11,900.0	7,740.0	7,735.0	7,735.0	70.8	13.5	-90.00	-2,304.8	1,169.2	1,470.2	1,422.5	47.76	30.782		
12,000.0	7,740.0	7,735.0	7,735.0	72.5	13.5	-90.00	-2,304.8	1,169.2	1,568.4	1,520.9	47.48	33.034		
12,100.0	7,740.0	7,735.0	7,735.0	74.1	13.5	-90.00	-2,304.8	1,169.2	1,666.8	1,619.6	47.24	35.284		
12,200.0	7,740.0	7,735.0	7,735.0	75.8	13.5	-90.00	-2,304.8	1,169.2	1,765.4	1,718.3	47.04	37.531		
12,300.0	7,740.0	7,735.0	7,735.0	77.5	13.5	-90.00	-2,304.8	1,169.2	1,864.1	1,817.2	46.87	39.775		
12,400.0	7,740.0	7,735.0	7,735.0	79.2	13.5	-90.00	-2,304.8	1,169.2	1,963.0	1,916.2	46.72	42.014		
12,500.0	7,740.0	7,735.0	7,735.0	80.9	13.5	-90.00	-2,304.8	1,169.2	2,061.9	2,015.3	46.60	44.246		
12,600.0	7,740.0	7,735.0	7,735.0	82.6	13.5	-90.00	-2,304.8	1,169.2	2,161.0	2,114.5	46.50	46.472		
12,700.0	7,740.0	7,735.0	7,735.0	84.3	13.5	-90.00	-2,304.8	1,169.2	2,260.1	2,213.7	46.42	48.692		
12,800.0	7,740.0	7,735.0	7,735.0	86.0	13.5	-90.00	-2,304.8	1,169.2	2,359.3	2,313.0	46.35	50.904		
12,900.0	7,740.0	7,735.0	7,735.0	87.7	13.5	-90.00	-2,304.8	1,169.2	2,458.6	2,412.3	46.29	53.108		
13,000.0	7,740.0	7,735.0	7,735.0	89.4	13.5	-90.00	-2,304.8	1,169.2	2,558.0	2,511.7	46.25	55.304		
13,100.0	7,740.0	7,735.0	7,735.0	91.1	13.5	-90.00	-2,304.8	1,169.2	2,657.4	2,611.1	46.22	57.492		
13,200.0	7,740.0	7,735.0	7,735.0	92.8	13.5	-90.00	-2,304.8	1,169.2	2,756.8	2,710.6	46.20	59.672		
13,300.0	7,740.0	7,735.0	7,735.0	94.5	13.5	-90.00	-2,304.8	1,169.2	2,856.3	2,810.1	46.19	61.843		
13,400.0	7,740.0	7,735.0	7,735.0	96.3	13.5	-90.00	-2,304.8	1,169.2	2,955.8	2,909.6	46.18	64.006		
13,500.0	7,740.0	7,735.0	7,735.0	98.0	13.5	-90.00	-2,304.8	1,169.2	3,055.3	3,009.1	46.18	66.160		
13,600.0	7,740.0	7,735.0	7,735.0	99.7	13.5	-90.00	-2,304.8	1,169.2	3,154.9	3,108.7	46.19	68.305		
13,700.0	7,740.0	7,735.0	7,735.0	101.4	13.5	-90.00	-2,304.8	1,169.2	3,254.5	3,208.3	46.20	70.441		
13,800.0	7,740.0	7,735.0	7,735.0	103.1	13.5	-90.00	-2,304.8	1,169.2	3,354.1	3,307.9	46.22	72.568		
13,900.0	7,740.0	7,735.0	7,735.0	104.8	13.5	-90.00	-2,304.8	1,169.2	3,453.7	3,407.5	46.24	74.687		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8365-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
14,000.0	7,740.0	7,735.0	7,735.0	106.6	13.5	-90.00	-2,304.8	1,169.2	3,553.4	3,507.1	46.27	76.796		
14,100.0	7,740.0	7,735.0	7,735.0	108.3	13.5	-90.00	-2,304.8	1,169.2	3,653.1	3,606.8	46.30	78.897		
14,200.0	7,740.0	7,735.0	7,735.0	110.0	13.5	-90.00	-2,304.8	1,169.2	3,752.8	3,706.4	46.34	80.988		
14,300.0	7,740.0	7,735.0	7,735.0	111.7	13.5	-90.00	-2,304.8	1,169.2	3,852.5	3,806.1	46.38	83.071		
14,400.0	7,740.0	7,735.0	7,735.0	113.5	13.5	-90.00	-2,304.8	1,169.2	3,952.2	3,905.8	46.42	85.144		
14,500.0	7,740.0	7,735.0	7,735.0	115.2	13.5	-90.00	-2,304.8	1,169.2	4,051.9	4,005.5	46.46	87.209		
14,600.0	7,740.0	7,735.0	7,735.0	116.9	13.5	-90.00	-2,304.8	1,169.2	4,151.7	4,105.2	46.51	89.264		
14,700.0	7,740.0	7,735.0	7,735.0	118.6	13.5	-90.00	-2,304.8	1,169.2	4,251.4	4,204.9	46.56	91.311		
14,800.0	7,740.0	7,735.0	7,735.0	120.4	13.5	-90.00	-2,304.8	1,169.2	4,351.2	4,304.6	46.61	93.349		
14,900.0	7,740.0	7,735.0	7,735.0	122.1	13.5	-90.00	-2,304.8	1,169.2	4,451.0	4,404.3	46.67	95.378		
15,000.0	7,740.0	7,735.0	7,735.0	123.8	13.5	-90.00	-2,304.8	1,169.2	4,550.8	4,504.1	46.72	97.399		
15,100.0	7,740.0	7,735.0	7,735.0	125.6	13.5	-90.00	-2,304.8	1,169.2	4,650.6	4,603.8	46.78	99.410		
15,200.0	7,740.0	7,735.0	7,735.0	127.3	13.5	-90.00	-2,304.8	1,169.2	4,750.4	4,703.6	46.84	101.413		
15,300.0	7,740.0	7,735.0	7,735.0	129.0	13.5	-90.00	-2,304.8	1,169.2	4,850.2	4,803.3	46.90	103.407		
15,400.0	7,740.0	7,735.0	7,735.0	130.7	13.5	-90.00	-2,304.8	1,169.2	4,950.1	4,903.1	46.97	105.392		
15,500.0	7,740.0	7,735.0	7,735.0	132.5	13.5	-90.00	-2,304.8	1,169.2	5,049.9	5,002.9	47.03	107.369		
15,600.0	7,740.0	7,735.0	7,735.0	134.2	13.5	-90.00	-2,304.8	1,169.2	5,149.7	5,102.6	47.10	109.337		
15,700.0	7,740.0	7,735.0	7,735.0	135.9	13.5	-90.00	-2,304.8	1,169.2	5,249.6	5,202.4	47.17	111.297		
15,800.0	7,740.0	7,735.0	7,735.0	137.7	13.5	-90.00	-2,304.8	1,169.2	5,349.4	5,302.2	47.24	113.248		
15,900.0	7,740.0	7,735.0	7,735.0	139.4	13.5	-90.00	-2,304.8	1,169.2	5,449.3	5,402.0	47.31	115.191		
16,000.0	7,740.0	7,735.0	7,735.0	141.1	13.5	-90.00	-2,304.8	1,169.2	5,549.2	5,501.8	47.38	117.126		
16,084.2	7,740.0	7,735.0	7,735.0	142.6	13.5	-90.00	-2,304.8	1,169.2	5,633.2	5,585.8	47.44	118.748		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	153.37	-2,333.2	1,170.0	2,610.1					
100.0	100.0	118.2	118.2	0.2	0.2	153.37	-2,333.1	1,169.8	2,609.9	2,609.6	0.36		7,317.901	
200.0	200.0	224.7	224.7	0.3	0.4	153.38	-2,332.8	1,169.3	2,609.5	2,608.8	0.72		3,646.313	
300.0	300.0	331.2	331.2	0.5	0.6	153.39	-2,332.5	1,168.6	2,608.9	2,607.8	1.07		2,427.645	
400.0	400.0	437.7	437.7	0.7	0.8	153.40	-2,331.9	1,167.5	2,608.0	2,606.6	1.43		1,819.159	
500.0	500.0	544.1	544.1	0.8	1.0	153.42	-2,331.2	1,166.1	2,606.9	2,605.1	1.79		1,454.260	
600.0	600.0	650.6	650.6	1.0	1.1	153.45	-2,330.4	1,164.5	2,605.5	2,603.3	2.15		1,211.021	
700.0	700.0	757.0	757.0	1.2	1.3	153.48	-2,329.4	1,162.5	2,603.8	2,601.3	2.51		1,037.252	
800.0	800.0	854.7	854.6	1.4	1.5	153.51	-2,328.4	1,160.5	2,602.0	2,599.1	2.85		911.551	
893.8	893.8	904.5	904.4	1.5	1.6	153.52	-2,328.2	1,159.9	2,601.1	2,598.0	3.11		837.680	
900.0	900.0	909.3	909.2	1.5	1.6	153.52	-2,328.2	1,159.9	2,601.1	2,598.0	3.12		832.493	
1,000.0	1,000.0	986.3	986.2	1.7	1.7	153.53	-2,328.9	1,159.4	2,601.6	2,598.2	3.44		757.334	
1,100.0	1,100.0	1,060.0	1,059.9	1.9	1.9	102.18	-2,330.9	1,158.1	2,603.4	2,599.7	3.74		695.460	
1,200.0	1,200.0	1,115.6	1,115.4	2.1	2.0	102.23	-2,333.5	1,156.7	2,606.9	2,602.9	4.03		647.486	
1,300.0	1,299.9	1,184.4	1,184.0	2.3	2.1	102.33	-2,337.9	1,154.5	2,612.2	2,607.9	4.33		602.693	
1,400.0	1,399.7	1,276.9	1,276.1	2.4	2.3	102.53	-2,345.1	1,150.8	2,618.7	2,614.0	4.70		556.754	
1,500.0	1,499.4	1,377.7	1,376.5	2.6	2.5	102.79	-2,352.6	1,146.4	2,625.3	2,620.2	5.10		514.600	
1,600.0	1,598.9	1,474.0	1,472.5	2.8	2.7	103.07	-2,360.3	1,141.9	2,632.7	2,627.2	5.50		478.274	
1,700.0	1,698.3	1,564.5	1,562.5	3.1	2.9	103.36	-2,367.6	1,137.8	2,640.7	2,634.8	5.91		446.777	
1,800.0	1,797.4	1,641.8	1,639.4	3.3	3.0	103.62	-2,374.3	1,134.0	2,649.8	2,643.5	6.31		419.836	
1,900.0	1,896.3	1,715.8	1,713.0	3.6	3.2	103.89	-2,381.7	1,129.9	2,660.2	2,653.5	6.73		395.482	
1,915.7	1,911.9	1,727.3	1,724.4	3.6	3.2	103.93	-2,382.9	1,129.3	2,662.0	2,655.2	6.79		391.892	
2,000.0	1,995.0	1,798.1	1,794.7	3.8	3.4	104.32	-2,390.6	1,125.2	2,671.9	2,664.7	7.18		372.303	
2,100.0	2,093.8	1,882.1	1,877.9	4.1	3.6	104.79	-2,400.4	1,119.4	2,684.1	2,676.4	7.65		351.063	
2,200.0	2,192.5	1,952.0	1,947.0	4.4	3.8	105.19	-2,409.4	1,114.3	2,697.4	2,689.4	8.09		333.567	
2,300.0	2,291.2	2,028.2	2,022.3	4.7	4.1	105.65	-2,420.1	1,108.4	2,711.9	2,703.3	8.56		316.929	
2,400.0	2,389.9	2,098.2	2,091.2	5.0	4.3	106.07	-2,430.5	1,102.3	2,727.1	2,718.1	9.02		302.455	
2,500.0	2,488.7	2,185.2	2,176.8	5.3	4.5	106.61	-2,444.4	1,094.6	2,743.6	2,734.1	9.53		287.996	
2,600.0	2,587.4	2,290.3	2,280.2	5.6	4.9	107.24	-2,460.5	1,085.8	2,759.9	2,749.8	10.09		273.626	
2,700.0	2,686.1	2,400.8	2,389.1	5.9	5.2	107.89	-2,477.1	1,076.3	2,776.2	2,765.5	10.67		260.306	
2,800.0	2,784.8	2,498.4	2,485.1	6.2	5.5	108.47	-2,491.6	1,067.5	2,792.4	2,781.2	11.21		249.068	
2,900.0	2,883.6	2,595.5	2,580.6	6.5	5.9	109.05	-2,506.1	1,057.8	2,808.8	2,797.1	11.77		238.734	
3,000.0	2,982.3	2,685.0	2,668.7	6.9	6.2	109.58	-2,519.7	1,049.0	2,825.6	2,813.3	12.29		230.003	
3,100.0	3,081.0	2,760.1	2,742.6	7.2	6.4	110.02	-2,531.1	1,042.2	2,843.1	2,830.3	12.76		222.901	
3,200.0	3,179.7	2,871.0	2,851.8	7.5	6.8	110.63	-2,548.0	1,032.8	2,861.0	2,847.6	13.33		214.672	
3,300.0	3,278.5	2,960.5	2,940.0	7.8	7.1	111.12	-2,561.3	1,025.3	2,878.8	2,864.9	13.83		208.100	
3,400.0	3,377.2	3,067.0	3,044.9	8.1	7.4	111.70	-2,577.1	1,016.1	2,896.7	2,882.3	14.39		201.292	
3,500.0	3,475.9	3,149.9	3,126.6	8.4	7.7	112.15	-2,589.3	1,008.9	2,914.8	2,899.9	14.87		195.983	
3,600.0	3,574.6	3,274.2	3,249.1	8.8	8.1	112.81	-2,607.4	998.1	2,932.9	2,917.4	15.47		189.560	
3,700.0	3,673.4	3,362.0	3,335.7	9.1	8.4	113.26	-2,619.7	991.0	2,950.9	2,934.9	15.96		184.941	
3,800.0	3,772.1	3,448.0	3,420.5	9.4	8.7	113.70	-2,632.2	983.8	2,969.5	2,953.0	16.44		180.605	
3,900.0	3,870.8	3,518.7	3,490.1	9.7	9.0	114.08	-2,642.9	977.3	2,988.8	2,971.9	16.88		177.017	
4,000.0	3,969.5	3,628.4	3,598.0	10.0	9.3	114.65	-2,659.9	966.9	3,008.6	2,991.1	17.44		172.552	
4,100.0	4,068.3	3,742.1	3,710.0	10.4	9.7	115.23	-2,676.5	956.7	3,027.8	3,009.8	17.99		168.301	
4,200.0	4,167.0	3,844.4	3,811.0	10.7	10.1	115.72	-2,690.8	948.4	3,046.9	3,028.4	18.50		164.713	
4,300.0	4,265.7	3,947.1	3,912.3	11.0	10.4	116.22	-2,705.0	939.5	3,065.9	3,046.9	19.02		161.223	
4,400.0	4,364.4	4,029.5	3,993.6	11.3	10.7	116.62	-2,716.5	932.1	3,085.2	3,065.8	19.47		158.452	
4,500.0	4,463.2	4,115.0	4,077.7	11.7	11.0	117.05	-2,728.9	923.7	3,105.2	3,085.2	19.94		155.697	
4,600.0	4,561.9	4,183.4	4,144.9	12.0	11.2	117.39	-2,739.3	916.9	3,125.8	3,105.5	20.35		153.588	
4,700.0	4,660.6	4,281.9	4,241.8	12.3	11.6	117.86	-2,754.5	907.7	3,147.1	3,126.2	20.85		150.970	
4,800.0	4,759.3	4,448.7	4,406.4	12.6	12.1	118.64	-2,777.6	892.4	3,166.8	3,145.3	21.53		147.064	
4,900.0	4,858.1	4,518.1	4,474.8	13.0	12.4	118.96	-2,786.8	886.1	3,186.4	3,164.5	21.93		145.270	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error: 0.0 ft			
Survey Program: 838-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,956.8	4,624.0	4,579.3	13.3	12.7	119.44	-2,801.5	876.4	3,206.9	3,184.4	22.43	142.941		
5,100.0	5,055.5	4,687.0	4,641.4	13.6	12.9	119.72	-2,810.0	870.9	3,227.3	3,204.4	22.81	141.496		
5,200.0	5,154.2	4,753.3	4,706.8	13.9	13.2	120.01	-2,819.8	864.8	3,248.8	3,225.6	23.19	140.070		
5,300.0	5,253.0	4,912.8	4,863.8	14.3	13.7	120.73	-2,842.9	849.6	3,270.4	3,246.6	23.85	137.150		
5,400.0	5,351.7	5,009.3	4,959.1	14.6	14.0	121.14	-2,855.7	840.9	3,290.9	3,266.6	24.31	135.385		
5,500.0	5,450.4	5,102.8	5,051.3	14.9	14.3	121.54	-2,868.1	832.2	3,311.6	3,286.9	24.76	133.767		
5,600.0	5,549.1	5,191.9	5,139.3	15.3	14.6	121.91	-2,880.0	824.6	3,332.5	3,307.3	25.18	132.340		
5,700.0	5,647.9	5,289.4	5,235.6	15.6	14.9	122.28	-2,893.1	817.3	3,353.9	3,328.3	25.62	130.890		
5,800.0	5,746.6	5,424.1	5,368.8	15.9	15.3	122.81	-2,910.1	806.8	3,374.4	3,348.2	26.17	128.919		
5,900.0	5,845.3	5,501.1	5,444.9	16.2	15.6	123.11	-2,919.6	800.1	3,394.8	3,368.3	26.56	127.806		
6,000.0	5,944.1	5,576.2	5,519.1	16.6	15.8	123.40	-2,929.4	793.7	3,416.2	3,389.2	26.94	126.785		
6,100.0	6,042.8	5,675.8	5,617.4	16.9	16.2	123.80	-2,942.7	784.8	3,437.9	3,410.5	27.39	125.505		
6,200.0	6,141.5	5,830.8	5,770.7	17.2	16.6	124.38	-2,962.0	772.0	3,458.9	3,430.9	27.98	123.616		
6,300.0	6,240.2	5,922.9	5,862.0	17.5	16.9	124.71	-2,972.3	764.7	3,478.9	3,450.5	28.40	122.509		
6,400.0	6,339.0	6,021.6	5,959.6	17.9	17.2	125.06	-2,983.8	757.1	3,499.4	3,470.6	28.82	121.420		
6,500.0	6,437.7	6,468.9	6,405.2	18.2	18.1	126.35	-3,014.8	738.3	3,517.6	3,487.7	29.91	117.610		
6,600.0	6,536.4	6,607.9	6,544.2	18.5	18.3	126.66	-3,016.1	737.3	3,528.1	3,497.8	30.34	116.276		
6,700.0	6,635.1	6,733.2	6,669.5	18.9	18.4	126.92	-3,015.7	737.2	3,537.3	3,506.6	30.76	115.009		
6,800.0	6,733.9	6,835.8	6,772.1	19.2	18.5	127.13	-3,015.0	736.9	3,546.3	3,515.2	31.14	113.880		
6,900.0	6,832.6	6,949.0	6,885.3	19.5	18.6	127.37	-3,013.8	736.6	3,555.0	3,523.4	31.54	112.713		
7,000.0	6,931.3	7,045.2	6,981.5	19.8	18.7	127.57	-3,012.7	736.2	3,563.6	3,531.7	31.92	111.648		
7,100.0	7,030.0	7,136.0	7,072.3	20.2	18.8	127.77	-3,011.8	735.6	3,572.4	3,540.1	32.29	110.634		
7,191.8	7,120.7	7,215.1	7,151.3	20.5	18.9	127.94	-3,011.2	734.9	3,580.7	3,548.1	32.63	109.746		
7,200.0	7,128.8	7,221.8	7,158.1	20.5	18.9	123.55	-3,011.1	734.8	3,581.4	3,548.7	32.66	109.668		
7,250.0	7,178.3	7,278.5	7,214.7	20.6	19.0	89.06	-3,010.8	734.1	3,583.2	3,550.3	32.87	109.023		
7,300.0	7,227.8	7,335.0	7,271.2	20.7	19.0	57.48	-3,010.3	733.2	3,580.5	3,547.4	33.08	108.245		
7,350.0	7,276.8	7,375.6	7,311.9	20.8	19.1	39.84	-3,010.0	732.4	3,573.5	3,540.2	33.27	107.419		
7,400.0	7,325.1	7,423.0	7,359.2	20.8	19.2	30.55	-3,009.7	731.7	3,562.3	3,528.9	33.47	106.441		
7,450.0	7,372.2	7,459.6	7,395.8	20.8	19.2	25.19	-3,009.6	731.1	3,547.1	3,513.4	33.65	105.397		
7,500.0	7,417.7	7,503.3	7,439.5	20.8	19.3	21.92	-3,009.5	730.5	3,527.8	3,494.0	33.85	104.209		
7,550.0	7,461.4	7,544.9	7,481.1	20.7	19.3	19.84	-3,009.3	730.0	3,504.7	3,470.6	34.05	102.930		
7,600.0	7,502.9	7,584.4	7,520.6	20.7	19.4	18.52	-3,009.2	729.5	3,477.8	3,443.5	34.24	101.566		
7,650.0	7,541.9	7,621.4	7,557.6	20.6	19.4	17.76	-3,009.2	729.2	3,447.4	3,413.0	34.43	100.123		
7,700.0	7,578.0	7,657.2	7,593.4	20.5	19.4	17.46	-3,009.1	728.9	3,413.7	3,379.1	34.62	98.607		
7,750.0	7,611.1	7,692.9	7,629.1	20.4	19.5	17.59	-3,009.1	728.8	3,377.0	3,342.2	34.81	97.025		
7,800.0	7,640.8	7,724.9	7,661.1	20.4	19.5	18.15	-3,009.0	728.7	3,337.4	3,302.4	34.99	95.395		
7,850.0	7,667.0	7,751.9	7,688.1	20.3	19.6	19.23	-3,008.9	728.7	3,295.4	3,260.2	35.16	93.733		
7,900.0	7,689.4	7,773.5	7,709.7	20.3	19.6	21.02	-3,008.8	728.8	3,251.2	3,215.9	35.32	92.051		
7,950.0	7,707.9	7,791.2	7,727.4	20.3	19.6	23.92	-3,008.8	728.8	3,205.2	3,169.8	35.47	90.353		
8,000.0	7,722.2	7,805.0	7,741.2	20.3	19.6	28.83	-3,008.8	728.9	3,157.8	3,122.2	35.62	88.650		
8,050.0	7,732.4	7,814.8	7,751.0	20.3	19.6	37.93	-3,008.7	728.9	3,109.2	3,073.5	35.76	86.952		
8,100.0	7,738.4	7,820.5	7,756.7	20.4	19.6	57.33	-3,008.7	728.9	3,059.9	3,024.0	35.88	85.271		
8,143.7	7,740.0	7,822.0	7,758.2	20.5	19.6	91.30	-3,008.7	728.9	3,016.5	2,980.5	35.99	83.821		
8,200.0	7,740.0	7,821.9	7,758.1	20.6	19.6	91.28	-3,008.7	728.9	2,960.5	2,924.4	36.12	81.965		
8,300.0	7,740.0	7,821.6	7,757.9	21.0	19.6	91.24	-3,008.7	728.9	2,861.1	2,824.8	36.36	78.691		
8,400.0	7,740.0	7,821.4	7,757.6	21.5	19.6	91.20	-3,008.7	728.9	2,761.8	2,725.2	36.61	75.446		
8,443.7	7,740.0	7,821.4	7,757.6	21.8	19.6	91.19	-3,008.7	728.9	2,718.4	2,681.7	36.72	74.037		
8,500.0	7,740.0	7,821.2	7,757.4	22.2	19.6	91.27	-3,008.7	728.9	2,662.4	2,625.6	36.85	72.241		
8,600.0	7,740.0	7,821.0	7,757.2	22.9	19.6	91.46	-3,008.7	728.9	2,562.9	2,525.8	37.09	69.109		
8,700.0	7,740.0	7,820.8	7,757.0	23.7	19.6	91.71	-3,008.7	728.9	2,463.3	2,426.0	37.30	66.036		
8,800.0	7,740.0	7,820.6	7,756.8	24.6	19.6	92.08	-3,008.7	728.9	2,363.6	2,326.1	37.51	63.021		
8,843.7	7,740.0	7,820.5	7,756.7	25.1	19.6	92.31	-3,008.7	728.9	2,320.0	2,282.4	37.59	61.717		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error: 0.0 ft			
Survey Program: 838-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,740.0	7,820.4	7,756.6	25.6	19.6	92.26	-3,008.7	728.9	2,263.8	2,226.1	37.70	60.042	2.135 CC, ES, SF	
9,000.0	7,740.0	7,820.1	7,756.3	26.7	19.6	92.17	-3,008.7	728.9	2,164.0	2,126.1	37.91	57.085		
9,100.0	7,740.0	7,819.9	7,756.1	27.8	19.6	92.07	-3,008.7	728.9	2,064.2	2,026.1	38.12	54.148		
9,200.0	7,740.0	7,819.7	7,755.9	29.0	19.6	91.98	-3,008.7	728.9	1,964.5	1,926.1	38.34	51.232		
9,300.0	7,740.0	7,819.5	7,755.7	30.2	19.6	91.89	-3,008.7	728.9	1,864.7	1,826.2	38.58	48.337		
9,343.7	7,740.0	7,819.4	7,755.6	30.8	19.6	91.85	-3,008.7	728.9	1,821.2	1,782.5	38.68	47.078		
9,400.7	7,740.0	7,819.2	7,755.4	31.6	19.6	91.60	-3,008.7	728.9	1,764.4	1,725.5	38.84	45.432		
9,500.0	7,740.0	7,819.0	7,755.2	32.9	19.6	91.52	-3,008.7	728.9	1,665.5	1,626.4	39.12	42.579		
9,600.0	7,740.0	7,818.8	7,755.0	34.3	19.6	91.43	-3,008.7	728.9	1,566.0	1,526.6	39.42	39.727		
9,700.0	7,740.0	7,818.6	7,754.8	35.7	19.6	91.35	-3,008.7	728.9	1,466.5	1,426.8	39.75	36.896		
9,800.0	7,740.0	7,818.3	7,754.5	37.1	19.6	91.27	-3,008.7	728.9	1,367.2	1,327.1	40.11	34.086		
9,900.0	7,740.0	7,818.1	7,754.3	38.6	19.6	91.19	-3,008.7	728.9	1,267.9	1,227.4	40.51	31.298		
10,000.0	7,740.0	7,817.9	7,754.1	40.1	19.6	91.11	-3,008.7	728.9	1,168.8	1,127.8	40.96	28.532		
10,100.0	7,740.0	7,817.7	7,753.9	41.6	19.6	91.02	-3,008.7	728.9	1,069.8	1,028.3	41.48	25.788		
10,200.0	7,740.0	7,817.4	7,753.6	43.1	19.6	90.94	-3,008.7	728.9	971.0	928.9	42.09	23.069		
10,300.0	7,740.0	7,817.2	7,753.4	44.7	19.6	90.86	-3,008.7	728.9	872.5	829.7	42.82	20.377		
10,400.0	7,740.0	7,817.0	7,753.2	46.3	19.6	90.78	-3,008.7	728.9	774.4	730.7	43.71	17.716		
10,500.0	7,740.0	7,816.7	7,752.9	47.8	19.6	90.69	-3,008.7	728.9	676.8	632.0	44.85	15.092		
10,600.0	7,740.0	7,816.5	7,752.7	49.4	19.6	90.61	-3,008.7	728.9	580.1	533.7	46.35	12.516		
10,700.0	7,740.0	7,816.3	7,752.5	51.0	19.6	90.53	-3,008.7	728.9	484.7	436.3	48.43	10.009		
10,800.0	7,740.0	7,816.0	7,752.2	52.6	19.6	90.44	-3,008.7	728.9	391.6	340.1	51.48	7.607		
10,900.0	7,740.0	7,815.8	7,752.0	54.2	19.6	90.36	-3,008.7	728.9	302.9	246.7	56.24	5.386		
11,000.0	7,740.0	7,815.6	7,751.8	55.9	19.6	90.28	-3,008.7	728.9	224.0	160.1	63.88	3.507		
11,100.0	7,740.0	7,815.3	7,751.5	57.5	19.6	90.19	-3,008.7	728.9	169.1	95.8	73.28	2.308		
11,157.9	7,740.0	7,815.2	7,751.4	58.5	19.6	90.14	-3,008.7	728.9	158.9	84.5	74.40	2.135 CC, ES, SF		
11,200.0	7,740.0	7,815.1	7,751.3	59.1	19.6	90.11	-3,008.7	728.9	164.3	93.4	70.93	2.317		
11,300.0	7,740.0	7,814.9	7,751.1	60.8	19.6	90.02	-3,008.7	728.9	213.1	156.8	56.38	3.780		
11,400.0	7,740.0	7,814.6	7,750.8	62.4	19.6	89.94	-3,008.7	728.9	289.6	243.6	45.91	6.307		
11,500.0	7,740.0	7,814.4	7,750.6	64.1	19.6	89.85	-3,008.7	728.9	377.2	336.4	40.74	9.258		
11,600.0	7,740.0	7,814.2	7,750.4	65.8	19.6	89.77	-3,008.7	728.9	469.8	431.3	38.43	12.222		
11,700.0	7,740.0	7,813.9	7,750.1	67.4	19.6	89.68	-3,008.7	728.9	564.9	527.4	37.48	15.073		
11,800.0	7,740.0	7,813.7	7,749.9	69.1	19.6	89.60	-3,008.7	728.9	661.4	624.3	37.14	17.807		
11,900.0	7,740.0	7,813.5	7,749.7	70.8	19.6	89.51	-3,008.7	728.9	758.9	721.8	37.10	20.453		
12,000.0	7,740.0	7,813.2	7,749.4	72.5	19.6	89.43	-3,008.7	728.9	856.9	819.7	37.20	23.034		
12,100.0	7,740.0	7,813.0	7,749.2	74.1	19.6	89.34	-3,008.7	728.9	955.4	918.0	37.37	25.566		
12,200.0	7,740.0	7,812.7	7,748.9	75.8	19.6	89.26	-3,008.7	728.9	1,054.1	1,016.6	37.57	28.060		
12,300.0	7,740.0	7,812.5	7,748.7	77.5	19.6	89.17	-3,008.7	728.9	1,153.1	1,115.3	37.78	30.523		
12,400.0	7,740.0	7,812.3	7,748.5	79.2	19.6	89.08	-3,008.7	728.9	1,252.2	1,214.2	37.99	32.960		
12,500.0	7,740.0	7,812.0	7,748.2	80.9	19.6	89.00	-3,008.7	728.9	1,351.5	1,313.2	38.20	35.375		
12,600.0	7,740.0	7,811.8	7,748.0	82.6	19.6	88.91	-3,008.7	728.9	1,450.8	1,412.4	38.41	37.770		
12,700.0	7,740.0	7,811.5	7,747.7	84.3	19.6	88.82	-3,008.7	728.9	1,550.2	1,511.6	38.61	40.146		
12,800.0	7,740.0	7,811.3	7,747.5	86.0	19.6	88.74	-3,008.7	728.9	1,649.7	1,610.9	38.81	42.505		
12,900.0	7,740.0	7,811.1	7,747.3	87.7	19.6	88.65	-3,008.8	728.9	1,749.3	1,710.3	39.01	44.848		
13,000.0	7,740.0	7,810.8	7,747.0	89.4	19.6	88.56	-3,008.8	728.9	1,848.9	1,809.7	39.19	47.175		
13,100.0	7,740.0	7,810.6	7,746.8	91.1	19.6	88.47	-3,008.8	728.9	1,948.6	1,909.2	39.38	49.487		
13,200.0	7,740.0	7,810.3	7,746.5	92.8	19.6	88.39	-3,008.8	728.9	2,048.2	2,008.7	39.55	51.785		
13,300.0	7,740.0	7,810.1	7,746.3	94.5	19.6	88.30	-3,008.8	728.9	2,148.0	2,108.2	39.73	54.068		
13,400.0	7,740.0	7,809.8	7,746.0	96.3	19.6	88.21	-3,008.8	728.9	2,247.7	2,207.8	39.90	56.338		
13,500.0	7,740.0	7,809.6	7,745.8	98.0	19.6	88.12	-3,008.8	728.9	2,347.5	2,307.4	40.06	58.595		
13,600.0	7,740.0	7,809.4	7,745.6	99.7	19.6	88.03	-3,008.8	728.9	2,447.2	2,407.0	40.23	60.838		
13,700.0	7,740.0	7,809.1	7,745.3	101.4	19.6	87.94	-3,008.8	728.9	2,547.0	2,506.7	40.39	63.068		
13,800.0	7,740.0	7,808.9	7,745.1	103.1	19.6	87.85	-3,008.8	728.9	2,646.8	2,606.3	40.54	65.285		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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			
13,900.0	7,740.0	7,808.6	7,744.8	104.8	19.6	87.77	-3,008.8	728.9	2,746.7	2,706.0	40.70	67.490		
14,000.0	7,740.0	7,808.4	7,744.6	106.6	19.6	87.68	-3,008.8	728.9	2,846.5	2,805.7	40.85	69.683		
14,100.0	7,740.0	7,808.1	7,744.3	108.3	19.6	87.59	-3,008.8	728.9	2,946.4	2,905.4	41.00	71.864		
14,200.0	7,740.0	7,807.9	7,744.1	110.0	19.6	87.50	-3,008.8	728.9	3,046.2	3,005.1	41.15	74.032		
14,300.0	7,740.0	7,807.6	7,743.8	111.7	19.6	87.41	-3,008.8	728.9	3,146.1	3,104.8	41.29	76.189		
14,400.0	7,740.0	7,807.4	7,743.6	113.5	19.6	87.32	-3,008.8	728.9	3,246.0	3,204.5	41.44	78.334		
14,500.0	7,740.0	7,807.1	7,743.3	115.2	19.6	87.23	-3,008.8	728.9	3,345.8	3,304.3	41.58	80.467		
14,600.0	7,740.0	7,806.9	7,743.1	116.9	19.6	87.14	-3,008.8	728.9	3,445.7	3,404.0	41.72	82.589		
14,700.0	7,740.0	7,806.6	7,742.8	118.6	19.6	87.05	-3,008.8	728.9	3,545.6	3,503.8	41.86	84.699		
14,800.0	7,740.0	7,806.4	7,742.6	120.4	19.6	86.96	-3,008.8	728.9	3,645.5	3,603.5	42.00	86.799		
14,900.0	7,740.0	7,806.1	7,742.3	122.1	19.6	86.86	-3,008.8	728.9	3,745.4	3,703.3	42.14	88.887		
15,000.0	7,740.0	7,805.9	7,742.1	123.8	19.6	86.77	-3,008.8	728.9	3,845.4	3,803.1	42.27	90.964		
15,100.0	7,740.0	7,805.6	7,741.8	125.6	19.6	86.68	-3,008.8	728.9	3,945.3	3,902.9	42.41	93.031		
15,200.0	7,740.0	7,805.3	7,741.5	127.3	19.6	86.59	-3,008.8	728.9	4,045.2	4,002.7	42.54	95.086		
15,300.0	7,740.0	7,805.1	7,741.3	129.0	19.6	86.50	-3,008.8	728.9	4,145.1	4,102.4	42.68	97.131		
15,400.0	7,740.0	7,804.8	7,741.0	130.7	19.6	86.41	-3,008.8	728.9	4,245.0	4,202.2	42.81	99.166		
15,500.0	7,740.0	7,804.6	7,740.8	132.5	19.6	86.31	-3,008.8	728.9	4,345.0	4,302.0	42.94	101.190		
15,600.0	7,740.0	7,804.3	7,740.5	134.2	19.6	86.22	-3,008.8	728.9	4,444.9	4,401.8	43.07	103.204		
15,700.0	7,740.0	7,804.1	7,740.3	135.9	19.6	86.13	-3,008.8	728.9	4,544.8	4,501.7	43.20	105.207		
15,800.0	7,740.0	7,803.8	7,740.0	137.7	19.6	86.04	-3,008.8	728.9	4,644.8	4,601.5	43.33	107.201		
15,900.0	7,740.0	7,803.5	7,739.7	139.4	19.6	85.94	-3,008.8	728.9	4,744.7	4,701.3	43.46	109.184		
16,000.0	7,740.0	7,803.3	7,739.5	141.1	19.6	85.85	-3,008.8	728.9	4,844.7	4,801.1	43.58	111.158		
16,084.2	7,740.0	7,803.1	7,739.3	142.6	19.6	85.77	-3,008.8	728.9	4,928.8	4,885.1	43.69	112.812		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-177.62	-983.2	-40.9	984.1					
100.0	100.0	88.0	88.0	0.2	0.2	-177.62	-983.2	-40.9	984.0	983.7	0.31	3,219.681		
200.0	200.0	188.0	188.0	0.3	0.3	-177.62	-983.2	-40.9	984.0	983.4	0.65	1,503.043		
300.0	300.0	288.0	288.0	0.5	0.5	-177.62	-983.2	-40.9	984.0	983.0	1.00	980.350		
400.0	400.0	388.0	388.0	0.7	0.7	-177.62	-983.2	-40.9	984.0	982.7	1.35	727.394		
500.0	500.0	488.0	488.0	0.8	0.9	-177.62	-983.2	-40.9	984.0	982.3	1.70	578.202		
600.0	600.0	588.0	588.0	1.0	1.0	-177.62	-983.2	-40.9	984.0	982.0	2.05	479.794		
700.0	700.0	688.0	688.0	1.2	1.2	-177.62	-983.2	-40.9	984.0	981.6	2.40	410.012		
800.0	800.0	788.0	788.0	1.4	1.4	-177.62	-983.2	-40.9	984.0	981.3	2.75	357.951		
900.0	900.0	888.0	888.0	1.5	1.6	-177.62	-983.2	-40.9	984.0	980.9	3.10	317.621		
1,000.0	1,000.0	988.0	988.0	1.7	1.7	-177.62	-983.2	-40.9	984.0	980.6	3.45	285.459		
1,100.0	1,100.0	1,088.0	1,088.0	1.9	1.9	131.01	-983.2	-40.9	984.6	980.8	3.80	259.353		
1,200.0	1,200.0	1,188.0	1,188.0	2.1	2.1	131.12	-983.2	-40.9	986.3	982.2	4.15	237.875		
1,300.0	1,299.9	1,287.9	1,287.9	2.3	2.2	131.28	-983.2	-40.9	989.2	984.7	4.50	219.903		
1,400.0	1,399.7	1,387.7	1,387.7	2.4	2.4	131.52	-983.2	-40.9	993.2	988.4	4.85	204.641		
1,500.0	1,499.4	1,487.4	1,487.4	2.6	2.6	131.82	-983.2	-40.9	998.5	993.3	5.21	191.513		
1,600.0	1,598.9	1,586.9	1,586.9	2.8	2.8	132.17	-983.2	-40.9	1,004.9	999.3	5.58	180.097		
1,700.0	1,698.3	1,686.3	1,686.3	3.1	2.9	132.59	-983.2	-40.9	1,012.6	1,006.6	5.95	170.081		
1,800.0	1,797.4	1,785.4	1,785.4	3.3	3.1	133.06	-983.2	-40.9	1,021.5	1,015.1	6.34	161.228		
1,900.0	1,896.3	1,884.3	1,884.3	3.6	3.3	133.58	-983.2	-40.9	1,031.7	1,024.9	6.73	153.359		
1,915.7	1,911.9	1,899.9	1,899.9	3.6	3.3	133.67	-983.2	-40.9	1,033.4	1,026.6	6.79	152.210		
2,000.0	1,995.0	1,983.0	1,983.0	3.8	3.5	134.20	-983.2	-40.9	1,042.8	1,035.6	7.12	146.392		
2,100.0	2,093.8	2,081.8	2,081.8	4.1	3.6	134.82	-983.2	-40.9	1,054.0	1,046.5	7.52	140.129		
2,200.0	2,192.5	2,180.5	2,180.5	4.4	3.8	135.42	-983.2	-40.9	1,065.3	1,057.4	7.92	134.482		
2,300.0	2,291.2	2,279.2	2,279.2	4.7	4.0	136.01	-983.2	-40.9	1,076.8	1,068.5	8.32	129.377		
2,400.0	2,389.9	2,377.9	2,377.9	5.0	4.2	136.59	-983.2	-40.9	1,088.4	1,079.7	8.72	124.750		
2,500.0	2,488.7	2,476.7	2,476.7	5.3	4.3	137.16	-983.2	-40.9	1,100.1	1,090.9	9.13	120.542		
2,600.0	2,587.4	2,575.4	2,575.4	5.6	4.5	137.71	-983.2	-40.9	1,111.9	1,102.3	9.53	116.706		
2,700.0	2,686.1	2,674.1	2,674.1	5.9	4.7	138.25	-983.2	-40.9	1,123.7	1,113.8	9.93	113.197		
2,800.0	2,784.8	2,772.8	2,772.8	6.2	4.8	138.78	-983.2	-40.9	1,135.7	1,125.4	10.33	109.980		
2,900.0	2,883.6	2,871.6	2,871.6	6.5	5.0	139.31	-983.2	-40.9	1,147.8	1,137.1	10.73	107.021		
3,000.0	2,982.3	2,970.3	2,970.3	6.9	5.2	139.82	-983.2	-40.9	1,160.0	1,148.9	11.12	104.294		
3,100.0	3,081.0	3,069.0	3,069.0	7.2	5.4	140.31	-983.2	-40.9	1,172.3	1,160.7	11.52	101.773		
3,200.0	3,179.7	3,167.7	3,167.7	7.5	5.5	140.80	-983.2	-40.9	1,184.6	1,172.7	11.91	99.439		
3,300.0	3,278.5	3,266.5	3,266.5	7.8	5.7	141.28	-983.2	-40.9	1,197.1	1,184.8	12.31	97.272		
3,400.0	3,377.2	3,365.2	3,365.2	8.1	5.9	141.75	-983.2	-40.9	1,209.6	1,196.9	12.70	95.255		
3,500.0	3,475.9	3,463.9	3,463.9	8.4	6.0	142.21	-983.2	-40.9	1,222.2	1,209.1	13.09	93.376		
3,600.0	3,574.6	3,562.6	3,562.6	8.8	6.2	142.66	-983.2	-40.9	1,234.9	1,221.4	13.48	91.621		
3,700.0	3,673.4	3,661.4	3,661.4	9.1	6.4	143.10	-983.2	-40.9	1,247.6	1,233.7	13.87	89.978		
3,800.0	3,772.1	3,760.1	3,760.1	9.4	6.6	143.54	-983.2	-40.9	1,260.4	1,246.2	14.25	88.439		
3,900.0	3,870.8	3,858.8	3,858.8	9.7	6.7	143.96	-983.2	-40.9	1,273.3	1,258.7	14.64	86.994		
4,000.0	3,969.5	3,957.5	3,957.5	10.0	6.9	144.37	-983.2	-40.9	1,286.3	1,271.3	15.02	85.636		
4,100.0	4,068.3	4,056.3	4,056.3	10.4	7.1	144.78	-983.2	-40.9	1,299.3	1,283.9	15.40	84.356		
4,200.0	4,167.0	4,155.0	4,155.0	10.7	7.3	145.18	-983.2	-40.9	1,312.4	1,296.6	15.78	83.150		
4,300.0	4,265.7	4,253.7	4,253.7	11.0	7.4	145.57	-983.2	-40.9	1,325.5	1,309.4	16.16	82.011		
4,400.0	4,364.4	4,352.4	4,352.4	11.3	7.6	145.96	-983.2	-40.9	1,338.7	1,322.2	16.54	80.934		
4,500.0	4,463.2	4,451.2	4,451.2	11.7	7.8	146.33	-983.2	-40.9	1,352.0	1,335.1	16.92	79.915		
4,600.0	4,561.9	4,549.9	4,549.9	12.0	7.9	146.70	-983.2	-40.9	1,365.3	1,348.0	17.29	78.948		
4,700.0	4,660.6	4,648.6	4,648.6	12.3	8.1	147.06	-983.2	-40.9	1,378.7	1,361.1	17.67	78.031		
4,800.0	4,759.3	4,747.3	4,747.3	12.6	8.3	147.42	-983.2	-40.9	1,392.2	1,374.1	18.04	77.160		
4,900.0	4,858.1	4,846.1	4,846.1	13.0	8.5	147.77	-983.2	-40.9	1,405.6	1,387.2	18.41	76.332		
5,000.0	4,956.8	4,944.8	4,944.8	13.3	8.6	148.11	-983.2	-40.9	1,419.2	1,400.4	18.79	75.544		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
5,100.0	5,055.5	5,043.5	5,043.5	13.6	8.8	148.44	-983.2	-40.9	1,432.8	1,413.6	19.16	74.793		
5,200.0	5,154.2	5,142.2	5,142.2	13.9	9.0	148.77	-983.2	-40.9	1,446.4	1,426.9	19.53	74.076		
5,300.0	5,253.0	5,241.0	5,241.0	14.3	9.1	149.09	-983.2	-40.9	1,460.1	1,440.2	19.89	73.392		
5,400.0	5,351.7	5,339.7	5,339.7	14.6	9.3	149.41	-983.2	-40.9	1,473.8	1,453.5	20.26	72.739		
5,500.0	5,450.4	5,438.4	5,438.4	14.9	9.5	149.72	-983.2	-40.9	1,487.6	1,466.9	20.63	72.114		
5,600.0	5,549.1	5,537.1	5,537.1	15.3	9.7	150.03	-983.2	-40.9	1,501.4	1,480.4	20.99	71.517		
5,700.0	5,647.9	5,635.9	5,635.9	15.6	9.8	150.33	-983.2	-40.9	1,515.2	1,493.9	21.36	70.944		
5,800.0	5,746.6	5,734.6	5,734.6	15.9	10.0	150.62	-983.2	-40.9	1,529.1	1,507.4	21.72	70.395		
5,900.0	5,845.3	5,833.3	5,833.3	16.2	10.2	150.91	-983.2	-40.9	1,543.0	1,521.0	22.08	69.869		
6,000.0	5,944.1	5,932.1	5,932.1	16.6	10.4	151.19	-983.2	-40.9	1,557.0	1,534.6	22.45	69.364		
6,100.0	6,042.8	6,030.8	6,030.8	16.9	10.5	151.47	-983.2	-40.9	1,571.0	1,548.2	22.81	68.878		
6,200.0	6,141.5	6,129.5	6,129.5	17.2	10.7	151.75	-983.2	-40.9	1,585.1	1,561.9	23.17	68.412		
6,300.0	6,240.2	6,228.2	6,228.2	17.5	10.9	152.02	-983.2	-40.9	1,599.1	1,575.6	23.53	67.964		
6,400.0	6,339.0	6,327.0	6,327.0	17.9	11.0	152.28	-983.2	-40.9	1,613.2	1,589.4	23.89	67.532		
6,500.0	6,437.7	6,425.7	6,425.7	18.2	11.2	152.54	-983.2	-40.9	1,627.4	1,603.1	24.25	67.116		
6,600.0	6,536.4	6,524.4	6,524.4	18.5	11.4	152.80	-983.2	-40.9	1,641.6	1,617.0	24.61	66.716		
6,700.0	6,635.1	6,623.1	6,623.1	18.9	11.6	153.05	-983.2	-40.9	1,655.8	1,630.8	24.96	66.330		
6,800.0	6,733.9	6,721.9	6,721.9	19.2	11.7	153.29	-983.2	-40.9	1,670.0	1,644.7	25.32	65.957		
6,900.0	6,832.6	6,820.6	6,820.6	19.5	11.9	153.54	-983.2	-40.9	1,684.3	1,658.6	25.68	65.598		
7,000.0	6,931.3	6,919.3	6,919.3	19.8	12.1	153.77	-983.2	-40.9	1,698.6	1,672.5	26.03	65.251		
7,100.0	7,030.0	7,018.0	7,018.0	20.2	12.2	154.01	-983.2	-40.9	1,712.9	1,686.5	26.39	64.916		
7,191.8	7,120.7	7,108.7	7,108.7	20.5	12.4	154.22	-983.2	-40.9	1,726.1	1,699.4	26.71	64.618		
7,200.0	7,128.8	7,116.8	7,116.8	20.5	12.4	149.78	-983.2	-40.9	1,727.2	1,700.5	26.74	64.589		
7,250.0	7,178.3	7,166.3	7,166.3	20.6	12.5	115.10	-983.2	-40.9	1,731.9	1,705.0	26.93	64.299		
7,300.0	7,227.8	7,215.8	7,215.8	20.7	12.6	83.55	-983.2	-40.9	1,732.8	1,705.7	27.14	63.853		
7,350.0	7,276.8	7,264.8	7,264.8	20.8	12.7	66.20	-983.2	-40.9	1,730.0	1,702.7	27.35	63.256		
7,400.0	7,325.1	7,313.1	7,313.1	20.8	12.8	57.40	-983.2	-40.9	1,723.6	1,696.0	27.57	62.515		
7,450.0	7,372.2	7,360.2	7,360.2	20.8	12.8	52.79	-983.2	-40.9	1,713.5	1,685.7	27.80	61.639		
7,500.0	7,417.7	7,405.7	7,405.7	20.8	12.9	50.48	-983.2	-40.9	1,700.0	1,671.9	28.04	60.637		
7,550.0	7,461.4	7,449.4	7,449.4	20.7	13.0	49.62	-983.2	-40.9	1,683.2	1,654.9	28.28	59.520		
7,600.0	7,502.9	7,490.9	7,490.9	20.7	13.1	49.79	-983.2	-40.9	1,663.2	1,634.7	28.53	58.299		
7,650.0	7,541.9	7,529.9	7,529.9	20.6	13.1	50.79	-983.2	-40.9	1,640.4	1,611.6	28.79	56.985		
7,700.0	7,578.0	7,566.0	7,566.0	20.5	13.2	52.52	-983.2	-40.9	1,614.9	1,585.8	29.05	55.592		
7,750.0	7,611.1	7,599.1	7,599.1	20.4	13.3	54.92	-983.2	-40.9	1,587.0	1,557.7	29.32	54.131		
7,800.0	7,640.8	7,628.8	7,628.8	20.4	13.3	57.96	-983.2	-40.9	1,557.0	1,527.4	29.59	52.617		
7,850.0	7,667.0	7,655.0	7,655.0	20.3	13.4	61.59	-983.2	-40.9	1,525.3	1,495.4	29.87	51.062		
7,900.0	7,689.4	7,677.4	7,677.4	20.3	13.4	65.77	-983.2	-40.9	1,492.2	1,462.0	30.16	49.481		
7,950.0	7,707.9	7,695.9	7,695.9	20.3	13.4	70.40	-983.2	-40.9	1,457.9	1,427.4	30.44	47.887		
8,000.0	7,722.2	7,710.2	7,710.2	20.3	13.5	75.37	-983.2	-40.9	1,422.9	1,392.1	30.74	46.293		
8,050.0	7,732.4	7,720.4	7,720.4	20.3	13.5	80.51	-983.2	-40.9	1,387.5	1,356.4	31.03	44.713		
8,100.0	7,738.4	7,726.4	7,726.4	20.4	13.5	85.65	-983.2	-40.9	1,352.0	1,320.7	31.33	43.160		
8,143.7	7,740.0	7,728.0	7,728.0	20.5	13.5	90.00	-983.2	-40.9	1,321.2	1,289.6	31.58	41.833		
8,200.0	7,740.0	7,728.0	7,728.0	20.6	13.5	90.00	-983.2	-40.9	1,282.4	1,250.5	31.92	40.171		
8,300.0	7,740.0	7,728.0	7,728.0	21.0	13.5	90.00	-983.2	-40.9	1,216.8	1,184.3	32.56	37.377		
8,400.0	7,740.0	7,728.0	7,728.0	21.5	13.5	90.00	-983.2	-40.9	1,156.2	1,123.0	33.22	34.804		
8,443.7	7,740.0	7,728.0	7,728.0	21.8	13.5	90.00	-983.2	-40.9	1,131.5	1,098.0	33.52	33.757		
8,500.0	7,740.0	7,728.0	7,728.0	22.2	13.5	90.00	-983.2	-40.9	1,101.1	1,067.2	33.90	32.478		
8,600.0	7,740.0	7,728.0	7,728.0	22.9	13.5	90.00	-983.2	-40.9	1,051.2	1,016.7	34.58	30.399		
8,700.0	7,740.0	7,728.0	7,728.0	23.7	13.5	90.00	-983.2	-40.9	1,007.2	972.0	35.24	28.584		
8,800.0	7,740.0	7,728.0	7,728.0	24.6	13.5	90.00	-983.2	-40.9	969.9	934.1	35.85	27.057		
8,843.7	7,740.0	7,728.0	7,728.0	25.1	13.5	90.00	-983.2	-40.9	955.9	919.8	36.09	26.485		
8,900.0	7,740.0	7,728.0	7,728.0	25.6	13.5	90.00	-983.2	-40.9	940.4	904.0	36.38	25.846		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
9,000.0	7,740.0	7,728.0	7,728.0	26.7	13.5	90.00	-983.2	-40.9	920.6	883.8	36.81	25.010		
9,100.0	7,740.0	7,728.0	7,728.0	27.8	13.5	90.00	-983.2	-40.9	911.5	874.4	37.10	24.569		
9,133.9	7,740.0	7,728.0	7,728.0	28.2	13.5	90.00	-983.2	-40.9	910.8	873.7	37.17	24.507	CC, ES, SF	
9,200.0	7,740.0	7,728.0	7,728.0	29.0	13.5	90.00	-983.2	-40.9	913.2	876.0	37.23	24.528		
9,300.0	7,740.0	7,728.0	7,728.0	30.2	13.5	90.00	-983.2	-40.9	925.9	888.6	37.22	24.878		
9,343.7	7,740.0	7,728.0	7,728.0	30.8	13.5	90.00	-983.2	-40.9	934.7	897.5	37.17	25.149		
9,400.7	7,740.0	7,728.0	7,728.0	31.6	13.5	90.00	-983.2	-40.9	949.4	912.3	37.06	25.614		
9,500.0	7,740.0	7,728.0	7,728.0	32.9	13.5	90.00	-983.2	-40.9	982.8	946.0	36.82	26.694		
9,600.0	7,740.0	7,728.0	7,728.0	34.3	13.5	90.00	-983.2	-40.9	1,025.2	988.7	36.51	28.080		
9,700.0	7,740.0	7,728.0	7,728.0	35.7	13.5	90.00	-983.2	-40.9	1,075.2	1,039.0	36.17	29.725		
9,800.0	7,740.0	7,728.0	7,728.0	37.1	13.5	90.00	-983.2	-40.9	1,131.9	1,096.0	35.83	31.588		
9,900.0	7,740.0	7,728.0	7,728.0	38.6	13.5	90.00	-983.2	-40.9	1,194.2	1,158.7	35.51	33.633		
10,000.0	7,740.0	7,728.0	7,728.0	40.1	13.5	90.00	-983.2	-40.9	1,261.4	1,226.2	35.21	35.823		
10,100.0	7,740.0	7,728.0	7,728.0	41.6	13.5	90.00	-983.2	-40.9	1,332.8	1,297.8	34.95	38.131		
10,200.0	7,740.0	7,728.0	7,728.0	43.1	13.5	90.00	-983.2	-40.9	1,407.6	1,372.8	34.73	40.531		
10,300.0	7,740.0	7,728.0	7,728.0	44.7	13.5	90.00	-983.2	-40.9	1,485.4	1,450.8	34.54	43.003		
10,400.0	7,740.0	7,728.0	7,728.0	46.3	13.5	90.00	-983.2	-40.9	1,565.7	1,531.3	34.39	45.528		
10,500.0	7,740.0	7,728.0	7,728.0	47.8	13.5	90.00	-983.2	-40.9	1,648.1	1,613.9	34.27	48.095		
10,600.0	7,740.0	7,728.0	7,728.0	49.4	13.5	90.00	-983.2	-40.9	1,732.5	1,698.3	34.18	50.690		
10,700.0	7,740.0	7,728.0	7,728.0	51.0	13.5	90.00	-983.2	-40.9	1,818.4	1,784.3	34.11	53.306		
10,800.0	7,740.0	7,728.0	7,728.0	52.6	13.5	90.00	-983.2	-40.9	1,905.7	1,871.6	34.07	55.934		
10,900.0	7,740.0	7,728.0	7,728.0	54.2	13.5	90.00	-983.2	-40.9	1,994.1	1,960.1	34.05	58.570		
11,000.0	7,740.0	7,728.0	7,728.0	55.9	13.5	90.00	-983.2	-40.9	2,083.6	2,049.6	34.04	61.208		
11,100.0	7,740.0	7,728.0	7,728.0	57.5	13.5	90.00	-983.2	-40.9	2,174.1	2,140.0	34.05	63.845		
11,200.0	7,740.0	7,728.0	7,728.0	59.1	13.5	90.00	-983.2	-40.9	2,265.3	2,231.2	34.08	66.477		
11,300.0	7,740.0	7,728.0	7,728.0	60.8	13.5	90.00	-983.2	-40.9	2,357.3	2,323.2	34.11	69.102		
11,400.0	7,740.0	7,728.0	7,728.0	62.4	13.5	90.00	-983.2	-40.9	2,449.8	2,415.7	34.16	71.719		
11,500.0	7,740.0	7,728.0	7,728.0	64.1	13.5	90.00	-983.2	-40.9	2,543.0	2,508.8	34.21	74.326		
11,600.0	7,740.0	7,728.0	7,728.0	65.8	13.5	90.00	-983.2	-40.9	2,636.6	2,602.4	34.28	76.921		
11,700.0	7,740.0	7,728.0	7,728.0	67.4	13.5	90.00	-983.2	-40.9	2,730.7	2,696.4	34.35	79.503		
11,800.0	7,740.0	7,728.0	7,728.0	69.1	13.5	90.00	-983.2	-40.9	2,825.2	2,790.8	34.42	82.072		
11,900.0	7,740.0	7,728.0	7,728.0	70.8	13.5	90.00	-983.2	-40.9	2,920.1	2,885.6	34.51	84.628		
12,000.0	7,740.0	7,728.0	7,728.0	72.5	13.5	90.00	-983.2	-40.9	3,015.3	2,980.7	34.59	87.168		
12,100.0	7,740.0	7,728.0	7,728.0	74.1	13.5	90.00	-983.2	-40.9	3,110.8	3,076.1	34.68	89.694		
12,200.0	7,740.0	7,728.0	7,728.0	75.8	13.5	90.00	-983.2	-40.9	3,206.6	3,171.8	34.78	92.205		
12,300.0	7,740.0	7,728.0	7,728.0	77.5	13.5	90.00	-983.2	-40.9	3,302.6	3,267.7	34.87	94.700		
12,400.0	7,740.0	7,728.0	7,728.0	79.2	13.5	90.00	-983.2	-40.9	3,398.8	3,363.9	34.97	97.180		
12,500.0	7,740.0	7,728.0	7,728.0	80.9	13.5	90.00	-983.2	-40.9	3,495.3	3,460.2	35.08	99.645		
12,600.0	7,740.0	7,728.0	7,728.0	82.6	13.5	90.00	-983.2	-40.9	3,592.0	3,556.8	35.18	102.093		
12,700.0	7,740.0	7,728.0	7,728.0	84.3	13.5	90.00	-983.2	-40.9	3,688.8	3,653.5	35.29	104.526		
12,800.0	7,740.0	7,728.0	7,728.0	86.0	13.5	90.00	-983.2	-40.9	3,785.8	3,750.4	35.40	106.944		
12,900.0	7,740.0	7,728.0	7,728.0	87.7	13.5	90.00	-983.2	-40.9	3,883.0	3,847.4	35.51	109.346		
13,000.0	7,740.0	7,728.0	7,728.0	89.4	13.5	90.00	-983.2	-40.9	3,980.3	3,944.6	35.62	111.732		
13,100.0	7,740.0	7,728.0	7,728.0	91.1	13.5	90.00	-983.2	-40.9	4,077.7	4,041.9	35.74	114.103		
13,200.0	7,740.0	7,728.0	7,728.0	92.8	13.5	90.00	-983.2	-40.9	4,175.2	4,139.4	35.85	116.459		
13,300.0	7,740.0	7,728.0	7,728.0	94.5	13.5	90.00	-983.2	-40.9	4,272.9	4,236.9	35.97	118.799		
13,400.0	7,740.0	7,728.0	7,728.0	96.3	13.5	90.00	-983.2	-40.9	4,370.6	4,334.6	36.08	121.124		
13,500.0	7,740.0	7,728.0	7,728.0	98.0	13.5	90.00	-983.2	-40.9	4,468.5	4,432.3	36.20	123.434		
13,600.0	7,740.0	7,728.0	7,728.0	99.7	13.5	90.00	-983.2	-40.9	4,566.5	4,530.2	36.32	125.729		
13,700.0	7,740.0	7,728.0	7,728.0	101.4	13.5	90.00	-983.2	-40.9	4,664.5	4,628.1	36.44	128.010		
13,800.0	7,740.0	7,728.0	7,728.0	103.1	13.5	90.00	-983.2	-40.9	4,762.6	4,726.1	36.56	130.275		
13,900.0	7,740.0	7,728.0	7,728.0	104.8	13.5	90.00	-983.2	-40.9	4,860.8	4,824.2	36.68	132.527		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
14,000.0	7,740.0	7,728.0	7,728.0	106.6	13.5	90.00	-983.2	-40.9	4,959.1	4,922.3	36.80	134.764		
14,100.0	7,740.0	7,728.0	7,728.0	108.3	13.5	90.00	-983.2	-40.9	5,057.5	5,020.5	36.92	136.986		
14,200.0	7,740.0	7,728.0	7,728.0	110.0	13.5	90.00	-983.2	-40.9	5,155.9	5,118.8	37.04	139.195		
14,300.0	7,740.0	7,728.0	7,728.0	111.7	13.5	90.00	-983.2	-40.9	5,254.3	5,217.2	37.16	141.389		
14,400.0	7,740.0	7,728.0	7,728.0	113.5	13.5	90.00	-983.2	-40.9	5,352.8	5,315.6	37.28	143.570		
14,500.0	7,740.0	7,728.0	7,728.0	115.2	13.5	90.00	-983.2	-40.9	5,451.4	5,414.0	37.41	145.737		
14,600.0	7,740.0	7,728.0	7,728.0	116.9	13.5	90.00	-983.2	-40.9	5,550.1	5,512.5	37.53	147.891		
14,700.0	7,740.0	7,728.0	7,728.0	118.6	13.5	90.00	-983.2	-40.9	5,648.7	5,611.1	37.65	150.031		
14,800.0	7,740.0	7,728.0	7,728.0	120.4	13.5	90.00	-983.2	-40.9	5,747.4	5,709.7	37.77	152.158		
14,900.0	7,740.0	7,728.0	7,728.0	122.1	13.5	90.00	-983.2	-40.9	5,846.2	5,808.3	37.90	154.272		
15,000.0	7,740.0	7,728.0	7,728.0	123.8	13.5	90.00	-983.2	-40.9	5,945.0	5,907.0	38.02	156.373		
15,100.0	7,740.0	7,728.0	7,728.0	125.6	13.5	90.00	-983.2	-40.9	6,043.9	6,005.7	38.14	158.462		
15,200.0	7,740.0	7,728.0	7,728.0	127.3	13.5	90.00	-983.2	-40.9	6,142.7	6,104.5	38.26	160.537		
15,300.0	7,740.0	7,728.0	7,728.0	129.0	13.5	90.00	-983.2	-40.9	6,241.7	6,203.3	38.39	162.600		
15,400.0	7,740.0	7,728.0	7,728.0	130.7	13.5	90.00	-983.2	-40.9	6,340.6	6,302.1	38.51	164.651		
15,500.0	7,740.0	7,728.0	7,728.0	132.5	13.5	90.00	-983.2	-40.9	6,439.6	6,401.0	38.63	166.689		
15,600.0	7,740.0	7,728.0	7,728.0	134.2	13.5	90.00	-983.2	-40.9	6,538.6	6,499.9	38.76	168.715		
15,700.0	7,740.0	7,728.0	7,728.0	135.9	13.5	90.00	-983.2	-40.9	6,637.7	6,598.8	38.88	170.729		
15,800.0	7,740.0	7,728.0	7,728.0	137.7	13.5	90.00	-983.2	-40.9	6,736.7	6,697.7	39.00	172.732		
15,900.0	7,740.0	7,728.0	7,728.0	139.4	13.5	90.00	-983.2	-40.9	6,835.8	6,796.7	39.12	174.722		
16,000.0	7,740.0	7,728.0	7,728.0	141.1	13.5	90.00	-983.2	-40.9	6,935.0	6,895.7	39.25	176.701		
16,084.2	7,740.0	7,728.0	7,728.0	142.6	13.5	90.00	-983.2	-40.9	7,018.4	6,979.1	39.35	178.358		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU														Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor			
0.0	0.0	0.0	0.0	0.0	0.0	142.46	-1,199.2	921.4	1,512.3						
100.0	100.0	94.0	94.0	0.2	0.2	142.46	-1,199.2	921.4	1,512.3	1,512.0	0.32	4,784.199			
200.0	200.0	194.0	194.0	0.3	0.3	142.46	-1,199.2	921.4	1,512.3	1,511.6	0.67	2,273.564			
300.0	300.0	294.0	294.0	0.5	0.5	142.46	-1,199.2	921.4	1,512.3	1,511.3	1.01	1,491.080			
400.0	400.0	394.0	394.0	0.7	0.7	142.46	-1,199.2	921.4	1,512.3	1,510.9	1.36	1,109.297			
500.0	500.0	494.0	494.0	0.8	0.9	142.46	-1,199.2	921.4	1,512.3	1,510.6	1.71	883.167			
600.0	600.0	594.0	594.0	1.0	1.0	142.46	-1,199.2	921.4	1,512.3	1,510.2	2.06	733.619			
700.0	700.0	694.0	694.0	1.2	1.2	142.46	-1,199.2	921.4	1,512.3	1,509.9	2.41	627.383			
800.0	800.0	794.0	794.0	1.4	1.4	142.46	-1,199.2	921.4	1,512.3	1,509.5	2.76	548.024			
900.0	900.0	894.0	894.0	1.5	1.6	142.46	-1,199.2	921.4	1,512.3	1,509.2	3.11	486.487			
1,000.0	1,000.0	994.0	994.0	1.7	1.7	142.46	-1,199.2	921.4	1,512.3	1,508.8	3.46	437.374			
1,100.0	1,100.0	1,094.0	1,094.0	1.9	1.9	91.10	-1,199.2	921.4	1,512.3	1,508.5	3.81	397.248			
1,200.0	1,200.0	1,194.0	1,194.0	2.1	2.1	91.19	-1,199.2	921.4	1,512.4	1,508.2	4.16	363.747			
1,300.0	1,299.9	1,293.9	1,293.9	2.3	2.3	91.36	-1,199.2	921.4	1,512.5	1,508.0	4.51	335.206			
1,400.0	1,399.7	1,393.7	1,393.7	2.4	2.4	91.59	-1,199.2	921.4	1,512.6	1,507.7	4.87	310.444			
1,500.0	1,499.4	1,493.4	1,493.4	2.6	2.6	91.88	-1,199.2	921.4	1,512.9	1,507.6	5.24	288.615			
1,600.0	1,598.9	1,592.9	1,592.9	2.8	2.8	92.24	-1,199.2	921.4	1,513.2	1,507.6	5.62	269.108			
1,700.0	1,698.3	1,692.3	1,692.3	3.1	3.0	92.66	-1,199.2	921.4	1,513.7	1,507.7	6.02	251.482			
1,800.0	1,797.4	1,791.4	1,791.4	3.3	3.1	93.14	-1,199.2	921.4	1,514.4	1,507.9	6.43	235.417			
1,900.0	1,896.3	1,890.3	1,890.3	3.6	3.3	93.69	-1,199.2	921.4	1,515.2	1,508.4	6.87	220.679			
1,915.7	1,911.9	1,905.9	1,905.9	3.6	3.3	93.78	-1,199.2	921.4	1,515.4	1,508.5	6.94	218.493			
2,000.0	1,995.0	1,989.0	1,989.0	3.8	3.5	94.28	-1,199.2	921.4	1,516.4	1,509.1	7.31	207.404			
2,100.0	2,093.8	2,087.8	2,087.8	4.1	3.6	94.87	-1,199.2	921.4	1,517.7	1,509.9	7.76	195.475			
2,200.0	2,192.5	2,186.5	2,186.5	4.4	3.8	95.46	-1,199.2	921.4	1,519.1	1,510.9	8.22	184.742			
2,300.0	2,291.2	2,285.2	2,285.2	4.7	4.0	96.05	-1,199.2	921.4	1,520.7	1,512.0	8.69	175.065			
2,400.0	2,389.9	2,383.9	2,383.9	5.0	4.2	96.63	-1,199.2	921.4	1,522.5	1,513.3	9.15	166.316			
2,500.0	2,488.7	2,482.7	2,482.7	5.3	4.3	97.22	-1,199.2	921.4	1,524.4	1,514.8	9.62	158.385			
2,600.0	2,587.4	2,581.4	2,581.4	5.6	4.5	97.81	-1,199.2	921.4	1,526.5	1,516.4	10.10	151.175			
2,700.0	2,686.1	2,680.1	2,680.1	5.9	4.7	98.39	-1,199.2	921.4	1,528.8	1,518.2	10.57	144.601			
2,800.0	2,784.8	2,778.8	2,778.8	6.2	4.9	98.97	-1,199.2	921.4	1,531.3	1,520.2	11.05	138.590			
2,900.0	2,883.6	2,877.6	2,877.6	6.5	5.0	99.55	-1,199.2	921.4	1,533.8	1,522.3	11.53	133.079			
3,000.0	2,982.3	2,976.3	2,976.3	6.9	5.2	100.13	-1,199.2	921.4	1,536.6	1,524.6	12.00	128.013			
3,100.0	3,081.0	3,075.0	3,075.0	7.2	5.4	100.71	-1,199.2	921.4	1,539.5	1,527.0	12.48	123.344			
3,200.0	3,179.7	3,173.7	3,173.7	7.5	5.5	101.28	-1,199.2	921.4	1,542.6	1,529.6	12.96	119.031			
3,300.0	3,278.5	3,272.5	3,272.5	7.8	5.7	101.85	-1,199.2	921.4	1,545.8	1,532.4	13.44	115.037			
3,400.0	3,377.2	3,371.2	3,371.2	8.1	5.9	102.42	-1,199.2	921.4	1,549.2	1,535.3	13.92	111.332			
3,500.0	3,475.9	3,469.9	3,469.9	8.4	6.1	102.99	-1,199.2	921.4	1,552.7	1,538.4	14.39	107.887			
3,600.0	3,574.6	3,568.6	3,568.6	8.8	6.2	103.55	-1,199.2	921.4	1,556.4	1,541.6	14.87	104.679			
3,700.0	3,673.4	3,667.4	3,667.4	9.1	6.4	104.11	-1,199.2	921.4	1,560.3	1,544.9	15.34	101.684			
3,800.0	3,772.1	3,766.1	3,766.1	9.4	6.6	104.67	-1,199.2	921.4	1,564.3	1,548.5	15.82	98.885			
3,900.0	3,870.8	3,864.8	3,864.8	9.7	6.7	105.23	-1,199.2	921.4	1,568.5	1,552.2	16.29	96.264			
4,000.0	3,969.5	3,963.5	3,963.5	10.0	6.9	105.78	-1,199.2	921.4	1,572.8	1,556.0	16.77	93.806			
4,100.0	4,068.3	4,062.3	4,062.3	10.4	7.1	106.33	-1,199.2	921.4	1,577.2	1,560.0	17.24	91.498			
4,200.0	4,167.0	4,161.0	4,161.0	10.7	7.3	106.88	-1,199.2	921.4	1,581.8	1,564.1	17.71	89.327			
4,300.0	4,265.7	4,259.7	4,259.7	11.0	7.4	107.42	-1,199.2	921.4	1,586.6	1,568.4	18.18	87.283			
4,400.0	4,364.4	4,358.4	4,358.4	11.3	7.6	107.96	-1,199.2	921.4	1,591.5	1,572.8	18.64	85.356			
4,500.0	4,463.2	4,457.2	4,457.2	11.7	7.8	108.50	-1,199.2	921.4	1,596.5	1,577.4	19.11	83.538			
4,600.0	4,561.9	4,555.9	4,555.9	12.0	8.0	109.03	-1,199.2	921.4	1,601.7	1,582.1	19.58	81.819			
4,700.0	4,660.6	4,654.6	4,654.6	12.3	8.1	109.56	-1,199.2	921.4	1,607.0	1,586.9	20.04	80.194			
4,800.0	4,759.3	4,753.3	4,753.3	12.6	8.3	110.09	-1,199.2	921.4	1,612.4	1,591.9	20.50	78.654			
4,900.0	4,858.1	4,852.1	4,852.1	13.0	8.5	110.61	-1,199.2	921.4	1,618.0	1,597.1	20.96	77.196			
5,000.0	4,956.8	4,950.8	4,950.8	13.3	8.6	111.13	-1,199.2	921.4	1,623.8	1,602.4	21.42	75.812			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
5,100.0	5,055.5	5,049.5	5,049.5	13.6	8.8	111.65	-1,199.2	921.4	1,629.6	1,607.8	21.87	74.498		
5,200.0	5,154.2	5,148.2	5,148.2	13.9	9.0	112.16	-1,199.2	921.4	1,635.6	1,613.3	22.33	73.250		
5,300.0	5,253.0	5,247.0	5,247.0	14.3	9.2	112.67	-1,199.2	921.4	1,641.8	1,619.0	22.78	72.062		
5,400.0	5,351.7	5,345.7	5,345.7	14.6	9.3	113.17	-1,199.2	921.4	1,648.0	1,624.8	23.23	70.933		
5,500.0	5,450.4	5,444.4	5,444.4	14.9	9.5	113.68	-1,199.2	921.4	1,654.4	1,630.8	23.68	69.857		
5,600.0	5,549.1	5,543.1	5,543.1	15.3	9.7	114.17	-1,199.2	921.4	1,661.0	1,636.8	24.13	68.831		
5,700.0	5,647.9	5,641.9	5,641.9	15.6	9.8	114.67	-1,199.2	921.4	1,667.6	1,643.0	24.58	67.853		
5,800.0	5,746.6	5,740.6	5,740.6	15.9	10.0	115.16	-1,199.2	921.4	1,674.4	1,649.4	25.02	66.920		
5,900.0	5,845.3	5,839.3	5,839.3	16.2	10.2	115.64	-1,199.2	921.4	1,681.3	1,655.8	25.46	66.030		
6,000.0	5,944.1	5,938.1	5,938.1	16.6	10.4	116.12	-1,199.2	921.4	1,688.3	1,662.4	25.90	65.179		
6,100.0	6,042.8	6,036.8	6,036.8	16.9	10.5	116.60	-1,199.2	921.4	1,695.4	1,669.1	26.34	64.365		
6,200.0	6,141.5	6,135.5	6,135.5	17.2	10.7	117.08	-1,199.2	921.4	1,702.7	1,675.9	26.78	63.587		
6,300.0	6,240.2	6,234.2	6,234.2	17.5	10.9	117.55	-1,199.2	921.4	1,710.1	1,682.9	27.21	62.843		
6,400.0	6,339.0	6,333.0	6,333.0	17.9	11.1	118.01	-1,199.2	921.4	1,717.6	1,689.9	27.64	62.130		
6,500.0	6,437.7	6,431.7	6,431.7	18.2	11.2	118.47	-1,199.2	921.4	1,725.2	1,697.1	28.08	61.448		
6,600.0	6,536.4	6,530.4	6,530.4	18.5	11.4	118.93	-1,199.2	921.4	1,732.9	1,704.4	28.50	60.794		
6,700.0	6,635.1	6,629.1	6,629.1	18.9	11.6	119.39	-1,199.2	921.4	1,740.7	1,711.8	28.93	60.167		
6,800.0	6,733.9	6,727.9	6,727.9	19.2	11.7	119.84	-1,199.2	921.4	1,748.7	1,719.3	29.36	59.566		
6,900.0	6,832.6	6,826.6	6,826.6	19.5	11.9	120.28	-1,199.2	921.4	1,756.7	1,726.9	29.78	58.989		
7,000.0	6,931.3	6,925.3	6,925.3	19.8	12.1	120.72	-1,199.2	921.4	1,764.9	1,734.7	30.20	58.436		
7,100.0	7,030.0	7,024.0	7,024.0	20.2	12.3	121.16	-1,199.2	921.4	1,773.1	1,742.5	30.62	57.905		
7,191.8	7,120.7	7,114.7	7,114.7	20.5	12.4	121.56	-1,199.2	921.4	1,780.8	1,749.8	31.01	57.435		
7,200.0	7,128.8	7,122.8	7,122.8	20.5	12.4	117.20	-1,199.2	921.4	1,781.4	1,750.4	31.04	57.393		
7,250.0	7,178.3	7,172.3	7,172.3	20.6	12.5	82.81	-1,199.2	921.4	1,782.8	1,751.5	31.25	57.056		
7,300.0	7,227.8	7,221.8	7,221.8	20.7	12.6	51.27	-1,199.2	921.4	1,779.8	1,748.3	31.45	56.589		
7,350.0	7,276.8	7,270.8	7,270.8	20.8	12.7	33.65	-1,199.2	921.4	1,772.5	1,740.8	31.65	55.997		
7,400.0	7,325.1	7,319.1	7,319.1	20.8	12.8	24.30	-1,199.2	921.4	1,760.9	1,729.0	31.85	55.284		
7,450.0	7,372.2	7,366.2	7,366.2	20.8	12.9	18.86	-1,199.2	921.4	1,745.2	1,713.1	32.05	54.457		
7,500.0	7,417.7	7,411.7	7,411.7	20.8	12.9	15.41	-1,199.2	921.4	1,725.4	1,693.1	32.24	53.522		
7,550.0	7,461.4	7,455.4	7,455.4	20.7	13.0	13.08	-1,199.2	921.4	1,701.7	1,669.2	32.42	52.486		
7,600.0	7,502.9	7,496.9	7,496.9	20.7	13.1	11.43	-1,199.2	921.4	1,674.2	1,641.6	32.60	51.357		
7,650.0	7,541.9	7,535.9	7,535.9	20.6	13.2	10.22	-1,199.2	921.4	1,643.3	1,610.5	32.77	50.144		
7,700.0	7,578.0	7,572.0	7,572.0	20.5	13.2	9.32	-1,199.2	921.4	1,609.0	1,576.1	32.94	48.854		
7,750.0	7,611.1	7,605.1	7,605.1	20.4	13.3	8.65	-1,199.2	921.4	1,571.7	1,538.7	33.09	47.498		
7,800.0	7,640.8	7,634.8	7,634.8	20.4	13.3	8.13	-1,199.2	921.4	1,531.7	1,498.5	33.24	46.084		
7,850.0	7,667.0	7,661.0	7,661.0	20.3	13.4	7.74	-1,199.2	921.4	1,489.2	1,455.9	33.37	44.622		
7,900.0	7,689.4	7,683.4	7,683.4	20.3	13.4	7.45	-1,199.2	921.4	1,444.6	1,411.1	33.50	43.123		
7,950.0	7,707.9	7,701.9	7,701.9	20.3	13.4	7.23	-1,199.2	921.4	1,398.2	1,364.6	33.61	41.596		
8,000.0	7,722.2	7,716.2	7,716.2	20.3	13.5	7.05	-1,199.2	921.4	1,350.4	1,316.7	33.72	40.050		
8,050.0	7,732.4	7,726.4	7,726.4	20.3	13.5	6.84	-1,199.2	921.4	1,301.5	1,267.7	33.81	38.497		
8,100.0	7,738.4	7,732.4	7,732.4	20.4	13.5	6.22	-1,199.2	921.4	1,251.8	1,218.0	33.88	36.946		
8,143.7	7,740.0	7,734.0	7,734.0	20.5	13.5	-90.00	-1,199.2	921.4	1,208.2	1,174.3	33.94	35.601		
8,200.0	7,740.0	7,734.0	7,734.0	20.6	13.5	-90.00	-1,199.2	921.4	1,151.9	1,117.9	34.00	33.875		
8,300.0	7,740.0	7,734.0	7,734.0	21.0	13.5	-90.00	-1,199.2	921.4	1,051.9	1,017.8	34.12	30.827		
8,400.0	7,740.0	7,734.0	7,734.0	21.5	13.5	-90.00	-1,199.2	921.4	951.9	917.6	34.24	27.801		
8,443.7	7,740.0	7,734.0	7,734.0	21.8	13.5	-90.00	-1,199.2	921.4	908.2	873.9	34.29	26.486		
8,500.0	7,740.0	7,734.0	7,734.0	22.2	13.5	-90.00	-1,199.2	921.4	851.9	817.5	34.35	24.803		
8,600.0	7,740.0	7,734.0	7,734.0	22.9	13.5	-90.00	-1,199.2	921.4	751.9	717.5	34.41	21.851		
8,700.0	7,740.0	7,734.0	7,734.0	23.7	13.5	-90.00	-1,199.2	921.4	652.0	617.6	34.42	18.942		
8,800.0	7,740.0	7,734.0	7,734.0	24.6	13.5	-90.00	-1,199.2	921.4	552.3	517.9	34.35	16.078		
8,843.7	7,740.0	7,734.0	7,734.0	25.1	13.5	-90.00	-1,199.2	921.4	508.8	474.5	34.28	14.841		
8,900.0	7,740.0	7,734.0	7,734.0	25.6	13.5	-90.00	-1,199.2	921.4	452.8	418.6	34.16	13.256		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
9,000.0	7,740.0	7,734.0	7,734.0	26.7	13.5	-90.00	-1,199.2	921.4	353.6	319.8	33.80	10.463		
9,100.0	7,740.0	7,734.0	7,734.0	27.8	13.5	-90.00	-1,199.2	921.4	255.1	222.0	33.09	7.710		
9,200.0	7,740.0	7,734.0	7,734.0	29.0	13.5	-90.00	-1,199.2	921.4	158.4	126.9	31.54	5.024		
9,300.0	7,740.0	7,734.0	7,734.0	30.2	13.5	-90.00	-1,199.2	921.4	71.6	41.5	30.12	2.379		
9,343.7	7,740.0	7,734.0	7,734.0	30.8	13.5	-90.00	-1,199.2	921.4	51.8	13.1	38.68	1.340	Level 3	
9,349.9	7,740.0	7,734.0	7,734.0	30.9	13.5	-90.00	-1,199.2	921.4	51.4	11.1	40.33	1.276	Level 3, CC, ES, SF	
9,400.7	7,740.0	7,734.0	7,734.0	31.6	13.5	-90.00	-1,199.2	921.4	72.1	27.5	44.69	1.614		
9,500.0	7,740.0	7,734.0	7,734.0	32.9	13.5	-90.00	-1,199.2	921.4	158.3	117.2	41.10	3.852		
9,600.0	7,740.0	7,734.0	7,734.0	34.3	13.5	-90.00	-1,199.2	921.4	254.9	215.4	39.53	6.449		
9,700.0	7,740.0	7,734.0	7,734.0	35.7	13.5	-90.00	-1,199.2	921.4	353.4	314.6	38.83	9.102		
9,800.0	7,740.0	7,734.0	7,734.0	37.1	13.5	-90.00	-1,199.2	921.4	452.6	414.1	38.47	11.764		
9,900.0	7,740.0	7,734.0	7,734.0	38.6	13.5	-90.00	-1,199.2	921.4	552.1	513.8	38.28	14.422		
10,000.0	7,740.0	7,734.0	7,734.0	40.1	13.5	-90.00	-1,199.2	921.4	651.7	613.5	38.18	17.069		
10,100.0	7,740.0	7,734.0	7,734.0	41.6	13.5	-90.00	-1,199.2	921.4	751.4	713.3	38.14	19.704		
10,200.0	7,740.0	7,734.0	7,734.0	43.1	13.5	-90.00	-1,199.2	921.4	851.2	813.1	38.13	22.325		
10,300.0	7,740.0	7,734.0	7,734.0	44.7	13.5	-90.00	-1,199.2	921.4	951.0	912.9	38.14	24.932		
10,400.0	7,740.0	7,734.0	7,734.0	46.3	13.5	-90.00	-1,199.2	921.4	1,050.9	1,012.7	38.18	27.525		
10,500.0	7,740.0	7,734.0	7,734.0	47.8	13.5	-90.00	-1,199.2	921.4	1,150.8	1,112.6	38.23	30.103		
10,600.0	7,740.0	7,734.0	7,734.0	49.4	13.5	-90.00	-1,199.2	921.4	1,250.7	1,212.4	38.29	32.666		
10,700.0	7,740.0	7,734.0	7,734.0	51.0	13.5	-90.00	-1,199.2	921.4	1,350.6	1,312.3	38.35	35.215		
10,800.0	7,740.0	7,734.0	7,734.0	52.6	13.5	-90.00	-1,199.2	921.4	1,450.6	1,412.1	38.43	37.749		
10,900.0	7,740.0	7,734.0	7,734.0	54.2	13.5	-90.00	-1,199.2	921.4	1,550.5	1,512.0	38.50	40.268		
11,000.0	7,740.0	7,734.0	7,734.0	55.9	13.5	-90.00	-1,199.2	921.4	1,650.4	1,611.9	38.59	42.773		
11,100.0	7,740.0	7,734.0	7,734.0	57.5	13.5	-90.00	-1,199.2	921.4	1,750.4	1,711.7	38.67	45.263		
11,200.0	7,740.0	7,734.0	7,734.0	59.1	13.5	-90.00	-1,199.2	921.4	1,850.4	1,811.6	38.76	47.739		
11,300.0	7,740.0	7,734.0	7,734.0	60.8	13.5	-90.00	-1,199.2	921.4	1,950.3	1,911.5	38.85	50.201		
11,400.0	7,740.0	7,734.0	7,734.0	62.4	13.5	-90.00	-1,199.2	921.4	2,050.3	2,011.3	38.94	52.649		
11,500.0	7,740.0	7,734.0	7,734.0	64.1	13.5	-90.00	-1,199.2	921.4	2,150.3	2,111.2	39.04	55.083		
11,600.0	7,740.0	7,734.0	7,734.0	65.8	13.5	-90.00	-1,199.2	921.4	2,250.2	2,211.1	39.13	57.503		
11,700.0	7,740.0	7,734.0	7,734.0	67.4	13.5	-90.00	-1,199.2	921.4	2,350.2	2,311.0	39.23	59.910		
11,800.0	7,740.0	7,734.0	7,734.0	69.1	13.5	-90.00	-1,199.2	921.4	2,450.2	2,410.8	39.33	62.303		
11,900.0	7,740.0	7,734.0	7,734.0	70.8	13.5	-90.00	-1,199.2	921.4	2,550.2	2,510.7	39.43	64.682		
12,000.0	7,740.0	7,734.0	7,734.0	72.5	13.5	-90.00	-1,199.2	921.4	2,650.1	2,610.6	39.53	67.048		
12,100.0	7,740.0	7,734.0	7,734.0	74.1	13.5	-90.00	-1,199.2	921.4	2,750.1	2,710.5	39.63	69.401		
12,200.0	7,740.0	7,734.0	7,734.0	75.8	13.5	-90.00	-1,199.2	921.4	2,850.1	2,810.4	39.73	71.741		
12,300.0	7,740.0	7,734.0	7,734.0	77.5	13.5	-90.00	-1,199.2	921.4	2,950.1	2,910.3	39.83	74.068		
12,400.0	7,740.0	7,734.0	7,734.0	79.2	13.5	-90.00	-1,199.2	921.4	3,050.1	3,010.1	39.93	76.382		
12,500.0	7,740.0	7,734.0	7,734.0	80.9	13.5	-90.00	-1,199.2	921.4	3,150.1	3,110.0	40.03	78.684		
12,600.0	7,740.0	7,734.0	7,734.0	82.6	13.5	-90.00	-1,199.2	921.4	3,250.0	3,209.9	40.14	80.973		
12,700.0	7,740.0	7,734.0	7,734.0	84.3	13.5	-90.00	-1,199.2	921.4	3,350.0	3,309.8	40.24	83.249		
12,800.0	7,740.0	7,734.0	7,734.0	86.0	13.5	-90.00	-1,199.2	921.4	3,450.0	3,409.7	40.35	85.513		
12,900.0	7,740.0	7,734.0	7,734.0	87.7	13.5	-90.00	-1,199.2	921.4	3,550.0	3,509.6	40.45	87.765		
13,000.0	7,740.0	7,734.0	7,734.0	89.4	13.5	-90.00	-1,199.2	921.4	3,650.0	3,609.4	40.55	90.004		
13,100.0	7,740.0	7,734.0	7,734.0	91.1	13.5	-90.00	-1,199.2	921.4	3,750.0	3,709.3	40.66	92.232		
13,200.0	7,740.0	7,734.0	7,734.0	92.8	13.5	-90.00	-1,199.2	921.4	3,850.0	3,809.2	40.76	94.447		
13,300.0	7,740.0	7,734.0	7,734.0	94.5	13.5	-90.00	-1,199.2	921.4	3,950.0	3,909.1	40.87	96.651		
13,400.0	7,740.0	7,734.0	7,734.0	96.3	13.5	-90.00	-1,199.2	921.4	4,050.0	4,009.0	40.97	98.843		
13,500.0	7,740.0	7,734.0	7,734.0	98.0	13.5	-90.00	-1,199.2	921.4	4,150.0	4,108.9	41.08	101.024		
13,600.0	7,740.0	7,734.0	7,734.0	99.7	13.5	-90.00	-1,199.2	921.4	4,249.9	4,208.8	41.18	103.192		
13,700.0	7,740.0	7,734.0	7,734.0	101.4	13.5	-90.00	-1,199.2	921.4	4,349.9	4,308.6	41.29	105.350		
13,800.0	7,740.0	7,734.0	7,734.0	103.1	13.5	-90.00	-1,199.2	921.4	4,449.9	4,408.5	41.40	107.496		
13,900.0	7,740.0	7,734.0	7,734.0	104.8	13.5	-90.00	-1,199.2	921.4	4,549.9	4,508.4	41.50	109.631		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
14,000.0	7,740.0	7,734.0	7,734.0	106.6	13.5	-90.00	-1,199.2	921.4	4,649.9	4,608.3	41.61	111.755		
14,100.0	7,740.0	7,734.0	7,734.0	108.3	13.5	-90.00	-1,199.2	921.4	4,749.9	4,708.2	41.71	113.868		
14,200.0	7,740.0	7,734.0	7,734.0	110.0	13.5	-90.00	-1,199.2	921.4	4,849.9	4,808.1	41.82	115.970		
14,300.0	7,740.0	7,734.0	7,734.0	111.7	13.5	-90.00	-1,199.2	921.4	4,949.9	4,908.0	41.93	118.061		
14,400.0	7,740.0	7,734.0	7,734.0	113.5	13.5	-90.00	-1,199.2	921.4	5,049.9	5,007.9	42.03	120.141		
14,500.0	7,740.0	7,734.0	7,734.0	115.2	13.5	-90.00	-1,199.2	921.4	5,149.9	5,107.8	42.14	122.211		
14,600.0	7,740.0	7,734.0	7,734.0	116.9	13.5	-90.00	-1,199.2	921.4	5,249.9	5,207.6	42.25	124.270		
14,700.0	7,740.0	7,734.0	7,734.0	118.6	13.5	-90.00	-1,199.2	921.4	5,349.9	5,307.5	42.35	126.319		
14,800.0	7,740.0	7,734.0	7,734.0	120.4	13.5	-90.00	-1,199.2	921.4	5,449.9	5,407.4	42.46	128.357		
14,900.0	7,740.0	7,734.0	7,734.0	122.1	13.5	-90.00	-1,199.2	921.4	5,549.9	5,507.3	42.57	130.386		
15,000.0	7,740.0	7,734.0	7,734.0	123.8	13.5	-90.00	-1,199.2	921.4	5,649.9	5,607.2	42.67	132.403		
15,100.0	7,740.0	7,734.0	7,734.0	125.6	13.5	-90.00	-1,199.2	921.4	5,749.9	5,707.1	42.78	134.411		
15,200.0	7,740.0	7,734.0	7,734.0	127.3	13.5	-90.00	-1,199.2	921.4	5,849.9	5,807.0	42.88	136.409		
15,300.0	7,740.0	7,734.0	7,734.0	129.0	13.5	-90.00	-1,199.2	921.4	5,949.9	5,906.9	42.99	138.397		
15,400.0	7,740.0	7,734.0	7,734.0	130.7	13.5	-90.00	-1,199.2	921.4	6,049.9	6,006.8	43.10	140.375		
15,500.0	7,740.0	7,734.0	7,734.0	132.5	13.5	-90.00	-1,199.2	921.4	6,149.8	6,106.6	43.20	142.343		
15,600.0	7,740.0	7,734.0	7,734.0	134.2	13.5	-90.00	-1,199.2	921.4	6,249.8	6,206.5	43.31	144.301		
15,700.0	7,740.0	7,734.0	7,734.0	135.9	13.5	-90.00	-1,199.2	921.4	6,349.8	6,306.4	43.42	146.250		
15,800.0	7,740.0	7,734.0	7,734.0	137.7	13.5	-90.00	-1,199.2	921.4	6,449.8	6,406.3	43.52	148.189		
15,900.0	7,740.0	7,734.0	7,734.0	139.4	13.5	-90.00	-1,199.2	921.4	6,549.8	6,506.2	43.63	150.119		
16,000.0	7,740.0	7,734.0	7,734.0	141.1	13.5	-90.00	-1,199.2	921.4	6,649.8	6,606.1	43.74	152.039		
16,084.2	7,740.0	7,734.0	7,734.0	142.6	13.5	-90.00	-1,199.2	921.4	6,734.0	6,690.2	43.83	153.649		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	-22.18	131.1	-53.5	141.6					
100.0	100.0	188.0	188.0	0.2	0.3	-22.18	131.1	-53.5	141.6	141.1	0.48	294.928		
200.0	200.0	288.0	288.0	0.3	0.5	-22.18	131.1	-53.5	141.6	140.8	0.83	170.777		
300.0	300.0	388.0	388.0	0.5	0.7	-22.18	131.1	-53.5	141.6	140.4	1.18	120.185		
400.0	400.0	488.0	488.0	0.7	0.9	-22.18	131.1	-53.5	141.6	140.1	1.53	92.718		
500.0	500.0	588.0	588.0	0.8	1.0	-22.18	131.1	-53.5	141.6	139.7	1.88	75.470		
600.0	600.0	688.0	688.0	1.0	1.2	-22.18	131.1	-53.5	141.6	139.4	2.23	63.633		
700.0	700.0	788.0	788.0	1.2	1.4	-22.18	131.1	-53.5	141.6	139.0	2.57	55.005		
800.0	800.0	888.0	888.0	1.4	1.6	-22.18	131.1	-53.5	141.6	138.7	2.92	48.438		
900.0	900.0	988.0	988.0	1.5	1.7	-22.18	131.1	-53.5	141.6	138.3	3.27	43.271		
1,000.0	1,000.0	1,088.0	1,088.0	1.7	1.9	-22.18	131.1	-53.5	141.6	138.0	3.62	39.101		
1,100.0	1,100.0	1,188.0	1,188.0	1.9	2.1	-73.92	131.1	-53.5	141.4	137.4	3.97	35.600		
1,200.0	1,200.0	1,288.0	1,288.0	2.1	2.2	-74.95	131.1	-53.5	140.7	136.3	4.32	32.549		
1,300.0	1,299.9	1,387.9	1,387.9	2.3	2.4	-76.69	131.1	-53.5	139.6	134.9	4.68	29.856		
1,400.0	1,399.7	1,487.7	1,487.7	2.4	2.6	-79.16	131.1	-53.5	138.3	133.3	5.04	27.466		
1,500.0	1,499.4	1,587.4	1,587.4	2.6	2.8	-82.38	131.1	-53.5	137.1	131.6	5.41	25.356		
1,600.0	1,598.9	1,686.9	1,686.9	2.8	2.9	-86.38	131.1	-53.5	136.1	130.3	5.79	23.520		
1,677.7	1,676.1	1,764.1	1,764.1	3.0	3.1	-90.00	131.1	-53.5	135.8	129.7	6.09	22.287 CC		
1,700.0	1,698.3	1,786.3	1,786.3	3.1	3.1	-91.12	131.1	-53.5	135.9	129.7	6.18	21.972 ES		
1,800.0	1,797.4	1,885.4	1,885.4	3.3	3.3	-96.54	131.1	-53.5	136.7	130.1	6.59	20.735		
1,900.0	1,896.3	1,984.3	1,984.3	3.6	3.5	-102.51	131.1	-53.5	139.2	132.2	7.02	19.835		
1,915.7	1,911.9	1,999.9	1,999.9	3.6	3.5	-103.48	131.1	-53.5	139.8	132.7	7.09	19.728		
2,000.0	1,995.0	2,083.0	2,083.0	3.8	3.6	-108.64	131.1	-53.5	143.5	136.1	7.44	19.294		
2,100.0	2,093.8	2,181.8	2,181.8	4.1	3.8	-114.37	131.1	-53.5	149.4	141.6	7.85	19.034		
2,200.0	2,192.5	2,280.5	2,280.5	4.4	4.0	-119.62	131.1	-53.5	156.8	148.5	8.25	18.997 SF		
2,300.0	2,291.2	2,379.2	2,379.2	4.7	4.2	-124.38	131.1	-53.5	165.3	156.6	8.64	19.132		
2,400.0	2,389.9	2,477.9	2,477.9	5.0	4.3	-128.66	131.1	-53.5	174.8	165.8	9.01	19.396		
2,500.0	2,488.7	2,576.7	2,576.7	5.3	4.5	-132.48	131.1	-53.5	185.3	175.9	9.38	19.752		
2,600.0	2,587.4	2,675.4	2,675.4	5.6	4.7	-135.88	131.1	-53.5	196.4	186.7	9.74	20.174		
2,700.0	2,686.1	2,774.1	2,774.1	5.9	4.8	-138.91	131.1	-53.5	208.2	198.1	10.09	20.640		
2,800.0	2,784.8	2,872.8	2,872.8	6.2	5.0	-141.62	131.1	-53.5	220.5	210.1	10.43	21.135		
2,900.0	2,883.6	2,971.6	2,971.6	6.5	5.2	-144.04	131.1	-53.5	233.3	222.5	10.78	21.646		
3,000.0	2,982.3	3,070.3	3,070.3	6.9	5.4	-146.20	131.1	-53.5	246.4	235.3	11.12	22.163		
3,100.0	3,081.0	3,169.0	3,169.0	7.2	5.5	-148.15	131.1	-53.5	259.8	248.3	11.45	22.681		
3,200.0	3,179.7	3,267.7	3,267.7	7.5	5.7	-149.90	131.1	-53.5	273.5	261.7	11.79	23.194		
3,300.0	3,278.5	3,366.5	3,366.5	7.8	5.9	-151.49	131.1	-53.5	287.4	275.3	12.13	23.700		
3,400.0	3,377.2	3,465.2	3,465.2	8.1	6.0	-152.93	131.1	-53.5	301.5	289.1	12.46	24.195		
3,500.0	3,475.9	3,563.9	3,563.9	8.4	6.2	-154.24	131.1	-53.5	315.8	303.0	12.80	24.678		
3,600.0	3,574.6	3,662.6	3,662.6	8.8	6.4	-155.44	131.1	-53.5	330.3	317.1	13.13	25.147		
3,700.0	3,673.4	3,761.4	3,761.4	9.1	6.6	-156.53	131.1	-53.5	344.8	331.4	13.47	25.604		
3,800.0	3,772.1	3,860.1	3,860.1	9.4	6.7	-157.54	131.1	-53.5	359.5	345.7	13.80	26.046		
3,900.0	3,870.8	3,958.8	3,958.8	9.7	6.9	-158.47	131.1	-53.5	374.3	360.2	14.14	26.473		
4,000.0	3,969.5	4,057.5	4,057.5	10.0	7.1	-159.33	131.1	-53.5	389.2	374.7	14.47	26.887		
4,100.0	4,068.3	4,156.3	4,156.3	10.4	7.3	-160.13	131.1	-53.5	404.1	389.3	14.81	27.287		
4,200.0	4,167.0	4,255.0	4,255.0	10.7	7.4	-160.86	131.1	-53.5	419.1	404.0	15.15	27.673		
4,300.0	4,265.7	4,353.7	4,353.7	11.0	7.6	-161.55	131.1	-53.5	434.2	418.7	15.48	28.046		
4,400.0	4,364.4	4,452.4	4,452.4	11.3	7.8	-162.19	131.1	-53.5	449.4	433.6	15.82	28.406		
4,500.0	4,463.2	4,551.2	4,551.2	11.7	7.9	-162.79	131.1	-53.5	464.6	448.4	16.16	28.754		
4,600.0	4,561.9	4,649.9	4,649.9	12.0	8.1	-163.35	131.1	-53.5	479.8	463.3	16.49	29.090		
4,700.0	4,660.6	4,748.6	4,748.6	12.3	8.3	-163.88	131.1	-53.5	495.1	478.3	16.83	29.415		
4,800.0	4,759.3	4,847.3	4,847.3	12.6	8.5	-164.38	131.1	-53.5	510.4	493.3	17.17	29.728		
4,900.0	4,858.1	4,946.1	4,946.1	13.0	8.6	-164.84	131.1	-53.5	525.8	508.3	17.51	30.031		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis		
5,000.0	4,956.8	5,044.8	5,044.8	13.3	8.8	-165.28	131.1	-53.5	541.2	523.3	17.85	30.324	
5,100.0	5,055.5	5,143.5	5,143.5	13.6	9.0	-165.70	131.1	-53.5	556.6	538.4	18.19	30.607	
5,200.0	5,154.2	5,242.2	5,242.2	13.9	9.1	-166.09	131.1	-53.5	572.0	553.5	18.52	30.881	
5,300.0	5,253.0	5,341.0	5,341.0	14.3	9.3	-166.47	131.1	-53.5	587.5	568.6	18.86	31.145	
5,400.0	5,351.7	5,439.7	5,439.7	14.6	9.5	-166.82	131.1	-53.5	603.0	583.8	19.20	31.402	
5,500.0	5,450.4	5,538.4	5,538.4	14.9	9.7	-167.16	131.1	-53.5	618.5	599.0	19.54	31.650	
5,600.0	5,549.1	5,637.1	5,637.1	15.3	9.8	-167.47	131.1	-53.5	634.1	614.2	19.88	31.890	
5,700.0	5,647.9	5,735.9	5,735.9	15.6	10.0	-167.78	131.1	-53.5	649.6	629.4	20.22	32.123	
5,800.0	5,746.6	5,834.6	5,834.6	15.9	10.2	-168.07	131.1	-53.5	665.2	644.6	20.56	32.349	
5,900.0	5,845.3	5,933.3	5,933.3	16.2	10.4	-168.35	131.1	-53.5	680.8	659.9	20.90	32.567	
6,000.0	5,944.1	6,032.1	6,032.1	16.6	10.5	-168.61	131.1	-53.5	696.4	675.1	21.24	32.780	
6,100.0	6,042.8	6,130.8	6,130.8	16.9	10.7	-168.86	131.1	-53.5	712.0	690.4	21.58	32.985	
6,200.0	6,141.5	6,229.5	6,229.5	17.2	10.9	-169.10	131.1	-53.5	727.6	705.7	21.93	33.185	
6,300.0	6,240.2	6,328.2	6,328.2	17.5	11.0	-169.34	131.1	-53.5	743.3	721.0	22.27	33.379	
6,400.0	6,339.0	6,427.0	6,427.0	17.9	11.2	-169.56	131.1	-53.5	758.9	736.3	22.61	33.568	
6,500.0	6,437.7	6,525.7	6,525.7	18.2	11.4	-169.77	131.1	-53.5	774.6	751.6	22.95	33.751	
6,600.0	6,536.4	6,624.4	6,624.4	18.5	11.6	-169.98	131.1	-53.5	790.2	767.0	23.29	33.929	
6,700.0	6,635.1	6,723.1	6,723.1	18.9	11.7	-170.17	131.1	-53.5	805.9	782.3	23.63	34.102	
6,800.0	6,733.9	6,821.9	6,821.9	19.2	11.9	-170.36	131.1	-53.5	821.6	797.6	23.97	34.270	
6,900.0	6,832.6	6,920.6	6,920.6	19.5	12.1	-170.55	131.1	-53.5	837.3	813.0	24.32	34.434	
7,000.0	6,931.3	7,019.3	7,019.3	19.8	12.3	-170.72	131.1	-53.5	853.0	828.4	24.66	34.593	
7,100.0	7,030.0	7,118.0	7,118.0	20.2	12.4	-170.89	131.1	-53.5	868.7	843.7	25.00	34.748	
7,191.8	7,120.7	7,208.7	7,208.7	20.5	12.6	-171.04	131.1	-53.5	883.2	857.9	25.32	34.887	
7,200.0	7,128.8	7,216.8	7,216.8	20.5	12.6	-175.57	131.1	-53.5	884.4	859.1	25.34	34.899	
7,250.0	7,178.3	7,266.3	7,266.3	20.6	12.7	149.31	131.1	-53.5	891.1	865.6	25.51	34.933	
7,300.0	7,227.8	7,315.8	7,315.8	20.7	12.8	117.49	131.1	-53.5	895.8	870.1	25.67	34.892	
7,350.0	7,276.8	7,364.8	7,364.8	20.8	12.9	100.01	131.1	-53.5	898.7	872.9	25.84	34.781	
7,400.0	7,325.1	7,413.1	7,413.1	20.8	12.9	91.20	131.1	-53.5	899.9	873.9	26.00	34.604	
7,450.0	7,372.2	7,460.2	7,460.2	20.8	13.0	86.66	131.1	-53.5	899.4	873.3	26.17	34.371	
7,500.0	7,417.7	7,505.7	7,505.7	20.8	13.1	84.44	131.1	-53.5	897.6	871.3	26.33	34.092	
7,550.0	7,461.4	7,549.4	7,549.4	20.7	13.2	83.61	131.1	-53.5	894.7	868.2	26.49	33.777	
7,600.0	7,502.9	7,590.9	7,590.9	20.7	13.2	83.67	131.1	-53.5	890.9	864.3	26.64	33.440	
7,650.0	7,541.9	7,629.9	7,629.9	20.6	13.3	84.33	131.1	-53.5	886.7	859.9	26.79	33.096	
7,700.0	7,578.0	7,666.0	7,666.0	20.5	13.4	85.35	131.1	-53.5	882.4	855.5	26.94	32.758	
7,750.0	7,611.1	7,699.1	7,699.1	20.4	13.4	86.58	131.1	-53.5	878.5	851.4	27.08	32.443	
7,800.0	7,640.8	7,728.8	7,728.8	20.4	13.5	87.85	131.1	-53.5	875.2	848.0	27.21	32.164	
7,850.0	7,667.0	7,755.0	7,755.0	20.3	13.5	89.05	131.1	-53.5	873.0	845.7	27.34	31.935	
7,896.5	7,687.9	7,775.9	7,775.9	20.3	13.6	90.00	131.1	-53.5	872.3	844.9	27.45	31.778	
7,900.0	7,689.4	7,777.4	7,777.4	20.3	13.6	90.06	131.1	-53.5	872.3	844.9	27.46	31.770	
7,950.0	7,707.9	7,795.9	7,795.9	20.3	13.6	90.80	131.1	-53.5	873.4	845.8	27.57	31.679	
8,000.0	7,722.2	7,810.2	7,810.2	20.3	13.6	91.20	131.1	-53.5	876.4	848.7	27.67	31.669	
8,050.0	7,732.4	7,820.4	7,820.4	20.3	13.6	91.19	131.1	-53.5	881.6	853.8	27.77	31.746	
8,100.0	7,738.4	7,826.4	7,826.4	20.4	13.7	90.75	131.1	-53.5	889.0	861.2	27.86	31.911	
8,143.7	7,740.0	7,828.0	7,828.0	20.5	13.7	90.00	131.1	-53.5	897.3	869.4	27.93	32.125	
8,200.0	7,740.0	7,828.0	7,828.0	20.6	13.7	90.00	131.1	-53.5	910.7	882.7	28.02	32.502	
8,300.0	7,740.0	7,828.0	7,828.0	21.0	13.7	90.00	131.1	-53.5	942.4	914.2	28.18	33.445	
8,400.0	7,740.0	7,828.0	7,828.0	21.5	13.7	90.00	131.1	-53.5	983.2	954.9	28.33	34.702	
8,443.7	7,740.0	7,828.0	7,828.0	21.8	13.7	90.00	131.1	-53.5	1,003.6	975.2	28.40	35.339	
8,500.0	7,740.0	7,828.0	7,828.0	22.2	13.7	90.00	131.1	-53.5	1,031.9	1,003.4	28.49	36.221	
8,600.0	7,740.0	7,828.0	7,828.0	22.9	13.7	90.00	131.1	-53.5	1,086.4	1,057.7	28.65	37.922	
8,700.0	7,740.0	7,828.0	7,828.0	23.7	13.7	90.00	131.1	-53.5	1,145.6	1,116.8	28.81	39.769	
8,800.0	7,740.0	7,828.0	7,828.0	24.6	13.7	90.00	131.1	-53.5	1,208.9	1,180.0	28.97	41.732	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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)	
8,843.7	7,740.0	7,828.0	7,828.0	25.1	13.7	90.00	131.1	-53.5	1,237.7	1,208.7	29.04	42.620		
8,900.0	7,740.0	7,828.0	7,828.0	25.6	13.7	90.00	131.1	-53.5	1,275.9	1,246.8	29.13	43.795		
9,000.0	7,740.0	7,828.0	7,828.0	26.7	13.7	90.00	131.1	-53.5	1,346.9	1,317.6	29.30	45.972		
9,100.0	7,740.0	7,828.0	7,828.0	27.8	13.7	90.00	131.1	-53.5	1,421.3	1,391.8	29.46	48.242		
9,200.0	7,740.0	7,828.0	7,828.0	29.0	13.7	90.00	131.1	-53.5	1,498.7	1,469.1	29.63	50.589		
9,300.0	7,740.0	7,828.0	7,828.0	30.2	13.7	90.00	131.1	-53.5	1,578.7	1,548.9	29.79	52.996		
9,343.7	7,740.0	7,828.0	7,828.0	30.8	13.7	90.00	131.1	-53.5	1,614.3	1,584.5	29.86	54.064		
9,400.7	7,740.0	7,828.0	7,828.0	31.6	13.7	90.00	131.1	-53.5	1,661.6	1,631.6	29.95	55.475		
9,500.0	7,740.0	7,828.0	7,828.0	32.9	13.7	90.00	131.1	-53.5	1,745.5	1,715.4	30.11	57.968		
9,600.0	7,740.0	7,828.0	7,828.0	34.3	13.7	90.00	131.1	-53.5	1,831.6	1,801.3	30.27	60.505		
9,700.0	7,740.0	7,828.0	7,828.0	35.7	13.7	90.00	131.1	-53.5	1,919.0	1,888.6	30.43	63.062		
9,800.0	7,740.0	7,828.0	7,828.0	37.1	13.7	90.00	131.1	-53.5	2,007.6	1,977.0	30.59	65.632		
9,900.0	7,740.0	7,828.0	7,828.0	38.6	13.7	90.00	131.1	-53.5	2,097.3	2,066.5	30.75	68.212		
10,000.0	7,740.0	7,828.0	7,828.0	40.1	13.7	90.00	131.1	-53.5	2,187.8	2,156.9	30.90	70.796		
10,100.0	7,740.0	7,828.0	7,828.0	41.6	13.7	90.00	131.1	-53.5	2,279.1	2,248.0	31.06	73.381		
10,200.0	7,740.0	7,828.0	7,828.0	43.1	13.7	90.00	131.1	-53.5	2,371.1	2,339.9	31.21	75.966		
10,300.0	7,740.0	7,828.0	7,828.0	44.7	13.7	90.00	131.1	-53.5	2,463.8	2,432.4	31.37	78.547		
10,400.0	7,740.0	7,828.0	7,828.0	46.3	13.7	90.00	131.1	-53.5	2,557.0	2,525.4	31.52	81.122		
10,500.0	7,740.0	7,828.0	7,828.0	47.8	13.7	90.00	131.1	-53.5	2,650.7	2,619.0	31.67	83.690		
10,600.0	7,740.0	7,828.0	7,828.0	49.4	13.7	90.00	131.1	-53.5	2,744.8	2,713.0	31.82	86.250		
10,700.0	7,740.0	7,828.0	7,828.0	51.0	13.7	90.00	131.1	-53.5	2,839.3	2,807.4	31.97	88.800		
10,800.0	7,740.0	7,828.0	7,828.0	52.6	13.7	90.00	131.1	-53.5	2,934.2	2,902.1	32.12	91.339		
10,900.0	7,740.0	7,828.0	7,828.0	54.2	13.7	90.00	131.1	-53.5	3,029.5	2,997.2	32.27	93.867		
11,000.0	7,740.0	7,828.0	7,828.0	55.9	13.7	90.00	131.1	-53.5	3,125.0	3,092.6	32.42	96.384		
11,100.0	7,740.0	7,828.0	7,828.0	57.5	13.7	90.00	131.1	-53.5	3,220.8	3,188.2	32.57	98.887		
11,200.0	7,740.0	7,828.0	7,828.0	59.1	13.7	90.00	131.1	-53.5	3,316.8	3,284.1	32.72	101.378		
11,300.0	7,740.0	7,828.0	7,828.0	60.8	13.7	90.00	131.1	-53.5	3,413.1	3,380.3	32.86	103.855		
11,400.0	7,740.0	7,828.0	7,828.0	62.4	13.7	90.00	131.1	-53.5	3,509.6	3,476.6	33.01	106.318		
11,500.0	7,740.0	7,828.0	7,828.0	64.1	13.7	90.00	131.1	-53.5	3,606.3	3,573.1	33.16	108.768		
11,600.0	7,740.0	7,828.0	7,828.0	65.8	13.7	90.00	131.1	-53.5	3,703.1	3,669.8	33.30	111.203		
11,700.0	7,740.0	7,828.0	7,828.0	67.4	13.7	90.00	131.1	-53.5	3,800.1	3,766.7	33.44	113.625		
11,800.0	7,740.0	7,828.0	7,828.0	69.1	13.7	90.00	131.1	-53.5	3,897.3	3,863.7	33.59	116.032		
11,900.0	7,740.0	7,828.0	7,828.0	70.8	13.7	90.00	131.1	-53.5	3,994.6	3,960.9	33.73	118.424		
12,000.0	7,740.0	7,828.0	7,828.0	72.5	13.7	90.00	131.1	-53.5	4,092.0	4,058.2	33.87	120.802		
12,100.0	7,740.0	7,828.0	7,828.0	74.1	13.7	90.00	131.1	-53.5	4,189.6	4,155.6	34.02	123.166		
12,200.0	7,740.0	7,828.0	7,828.0	75.8	13.7	90.00	131.1	-53.5	4,287.3	4,253.1	34.16	125.515		
12,300.0	7,740.0	7,828.0	7,828.0	77.5	13.7	90.00	131.1	-53.5	4,385.0	4,350.7	34.30	127.850		
12,400.0	7,740.0	7,828.0	7,828.0	79.2	13.7	90.00	131.1	-53.5	4,482.9	4,448.5	34.44	130.170		
12,500.0	7,740.0	7,828.0	7,828.0	80.9	13.7	90.00	131.1	-53.5	4,580.9	4,546.3	34.58	132.476		
12,600.0	7,740.0	7,828.0	7,828.0	82.6	13.7	90.00	131.1	-53.5	4,678.9	4,644.2	34.72	134.768		
12,700.0	7,740.0	7,828.0	7,828.0	84.3	13.7	90.00	131.1	-53.5	4,777.1	4,742.2	34.86	137.045		
12,800.0	7,740.0	7,828.0	7,828.0	86.0	13.7	90.00	131.1	-53.5	4,875.3	4,840.3	35.00	139.309		
12,900.0	7,740.0	7,828.0	7,828.0	87.7	13.7	90.00	131.1	-53.5	4,973.5	4,938.4	35.13	141.558		
13,000.0	7,740.0	7,828.0	7,828.0	89.4	13.7	90.00	131.1	-53.5	5,071.9	5,036.6	35.27	143.793		
13,100.0	7,740.0	7,828.0	7,828.0	91.1	13.7	90.00	131.1	-53.5	5,170.3	5,134.9	35.41	146.015		
13,200.0	7,740.0	7,828.0	7,828.0	92.8	13.7	90.00	131.1	-53.5	5,268.8	5,233.2	35.55	148.223		
13,300.0	7,740.0	7,828.0	7,828.0	94.5	13.7	90.00	131.1	-53.5	5,367.3	5,331.6	35.68	150.417		
13,400.0	7,740.0	7,828.0	7,828.0	96.3	13.7	90.00	131.1	-53.5	5,465.9	5,430.0	35.82	152.598		
13,500.0	7,740.0	7,828.0	7,828.0	98.0	13.7	90.00	131.1	-53.5	5,564.5	5,528.5	35.95	154.765		
13,600.0	7,740.0	7,828.0	7,828.0	99.7	13.7	90.00	131.1	-53.5	5,663.2	5,627.1	36.09	156.919		
13,700.0	7,740.0	7,828.0	7,828.0	101.4	13.7	90.00	131.1	-53.5	5,761.9	5,725.7	36.22	159.060		
13,800.0	7,740.0	7,828.0	7,828.0	103.1	13.7	90.00	131.1	-53.5	5,860.7	5,824.3	36.36	161.187		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N										Offset Site Error:		0.0 ft	
Survey Program: 8325-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
13,900.0	7,740.0	7,828.0	7,828.0	104.8	13.7	90.00	131.1	-53.5	5,959.5	5,923.0	36.49	163.302	
14,000.0	7,740.0	7,828.0	7,828.0	106.6	13.7	90.00	131.1	-53.5	6,058.3	6,021.7	36.63	165.404	
14,100.0	7,740.0	7,828.0	7,828.0	108.3	13.7	90.00	131.1	-53.5	6,157.2	6,120.4	36.76	167.493	
14,200.0	7,740.0	7,828.0	7,828.0	110.0	13.7	90.00	131.1	-53.5	6,256.1	6,219.2	36.89	169.570	
14,300.0	7,740.0	7,828.0	7,828.0	111.7	13.7	90.00	131.1	-53.5	6,355.1	6,318.0	37.03	171.634	
14,400.0	7,740.0	7,828.0	7,828.0	113.5	13.7	90.00	131.1	-53.5	6,454.1	6,416.9	37.16	173.686	
14,500.0	7,740.0	7,828.0	7,828.0	115.2	13.7	90.00	131.1	-53.5	6,553.1	6,515.8	37.29	175.726	
14,600.0	7,740.0	7,828.0	7,828.0	116.9	13.7	90.00	131.1	-53.5	6,652.1	6,614.7	37.42	177.753	
14,700.0	7,740.0	7,828.0	7,828.0	118.6	13.7	90.00	131.1	-53.5	6,751.2	6,713.6	37.55	179.769	
14,800.0	7,740.0	7,828.0	7,828.0	120.4	13.7	90.00	131.1	-53.5	6,850.3	6,812.6	37.69	181.773	
14,900.0	7,740.0	7,828.0	7,828.0	122.1	13.7	90.00	131.1	-53.5	6,949.4	6,911.6	37.82	183.765	
15,000.0	7,740.0	7,828.0	7,828.0	123.8	13.7	90.00	131.1	-53.5	7,048.6	7,010.6	37.95	185.745	
15,100.0	7,740.0	7,828.0	7,828.0	125.6	13.7	90.00	131.1	-53.5	7,147.7	7,109.7	38.08	187.714	
15,200.0	7,740.0	7,828.0	7,828.0	127.3	13.7	90.00	131.1	-53.5	7,246.9	7,208.7	38.21	189.671	
15,300.0	7,740.0	7,828.0	7,828.0	129.0	13.7	90.00	131.1	-53.5	7,346.2	7,307.8	38.34	191.617	
15,400.0	7,740.0	7,828.0	7,828.0	130.7	13.7	90.00	131.1	-53.5	7,445.4	7,406.9	38.47	193.552	
15,500.0	7,740.0	7,828.0	7,828.0	132.5	13.7	90.00	131.1	-53.5	7,544.7	7,506.1	38.60	195.476	
15,600.0	7,740.0	7,828.0	7,828.0	134.2	13.7	90.00	131.1	-53.5	7,643.9	7,605.2	38.73	197.389	
15,700.0	7,740.0	7,828.0	7,828.0	135.9	13.7	90.00	131.1	-53.5	7,743.2	7,704.4	38.85	199.291	
15,800.0	7,740.0	7,828.0	7,828.0	137.7	13.7	90.00	131.1	-53.5	7,842.6	7,803.6	38.98	201.182	
15,900.0	7,740.0	7,828.0	7,828.0	139.4	13.7	90.00	131.1	-53.5	7,941.9	7,902.8	39.11	203.063	
16,000.0	7,740.0	7,828.0	7,828.0	141.1	13.7	90.00	131.1	-53.5	8,041.2	8,002.0	39.24	204.933	
16,084.2	7,740.0	7,828.0	7,828.0	142.6	13.7	90.00	131.1	-53.5	8,124.9	8,085.6	39.35	206.500	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis			
0.0	0.0	44.3	44.3	0.0	0.1	38.78	1,576.2	1,266.5	2,022.0					
100.0	100.0	141.6	141.6	0.2	0.2	38.81	1,575.9	1,267.5	2,022.4	2,022.0	0.40		5,040.700	
200.0	200.0	247.0	247.0	0.3	0.4	38.86	1,575.0	1,269.0	2,022.6	2,021.8	0.76		2,655.155	
300.0	300.0	349.2	349.2	0.5	0.6	38.89	1,574.3	1,269.9	2,022.7	2,021.5	1.11		1,814.299	
400.0	400.0	454.4	454.4	0.7	0.8	38.90	1,574.0	1,270.1	2,022.5	2,021.1	1.47		1,373.768	
500.0	500.0	556.8	556.8	0.8	1.0	38.90	1,573.7	1,269.9	2,022.2	2,020.3	1.82		1,108.338	
600.0	600.0	667.0	666.9	1.0	1.2	38.89	1,573.5	1,269.2	2,021.7	2,019.5	2.19		922.929	
700.0	700.0	778.7	778.6	1.2	1.4	38.89	1,572.5	1,268.3	2,020.4	2,017.9	2.56		789.339	
800.0	800.0	882.4	882.3	1.4	1.5	38.90	1,571.0	1,267.5	2,018.8	2,015.9	2.92		692.443	
900.0	900.0	985.8	985.7	1.5	1.7	38.92	1,569.2	1,266.9	2,017.1	2,013.8	3.27		616.762	
1,000.0	1,000.0	1,088.0	1,087.9	1.7	1.9	38.92	1,567.5	1,265.9	2,015.2	2,011.6	3.62		556.184	
1,100.0	1,100.0	1,196.3	1,196.1	1.9	2.1	-12.50	1,566.0	1,264.2	2,012.3	2,008.3	3.99		504.847	
1,200.0	1,200.0	1,295.2	1,295.1	2.1	2.3	-12.55	1,564.8	1,262.0	2,007.4	2,003.1	4.33		463.330	
1,300.0	1,299.9	1,396.8	1,396.6	2.3	2.5	-12.63	1,563.7	1,259.5	2,000.8	1,996.1	4.68		427.168	
1,400.0	1,399.7	1,492.5	1,492.3	2.4	2.6	-12.74	1,563.2	1,256.7	1,992.6	1,987.5	5.03		396.463	
1,500.0	1,499.4	1,586.8	1,586.5	2.6	2.8	-12.86	1,562.8	1,254.0	1,982.9	1,977.5	5.37		369.513	
1,600.0	1,598.9	1,690.9	1,690.6	2.8	3.0	-13.01	1,562.3	1,251.3	1,971.5	1,965.8	5.72		344.414	
1,700.0	1,698.3	1,782.3	1,782.0	3.1	3.1	-13.16	1,562.1	1,248.6	1,958.5	1,952.4	6.06		323.067	
1,800.0	1,797.4	1,879.8	1,879.4	3.3	3.3	-13.35	1,562.2	1,245.8	1,944.1	1,937.7	6.41		303.228	
1,900.0	1,896.3	1,968.8	1,968.4	3.6	3.5	-13.52	1,562.1	1,243.8	1,928.2	1,921.5	6.75		285.767	
1,915.7	1,911.9	1,982.4	1,982.0	3.6	3.5	-13.55	1,562.1	1,243.5	1,925.6	1,918.8	6.80		283.186	
2,000.0	1,995.0	2,057.9	2,057.5	3.8	3.6	-13.67	1,562.3	1,242.2	1,911.9	1,904.8	7.08		269.852	
2,100.0	2,093.8	2,154.5	2,154.1	4.1	3.8	-13.83	1,562.8	1,240.7	1,895.8	1,888.4	7.44		254.962	
2,200.0	2,192.5	2,253.2	2,252.8	4.4	4.0	-13.98	1,562.9	1,239.5	1,879.7	1,871.9	7.79		241.293	
2,300.0	2,291.2	2,352.4	2,352.0	4.7	4.1	-14.11	1,562.8	1,238.7	1,863.7	1,855.6	8.15		228.781	
2,400.0	2,389.9	2,446.7	2,446.2	5.0	4.3	-14.25	1,562.8	1,237.7	1,847.7	1,839.2	8.50		217.491	
2,500.0	2,488.7	2,534.2	2,533.8	5.3	4.5	-14.40	1,563.5	1,236.6	1,832.1	1,823.3	8.83		207.375	
2,600.0	2,587.4	2,626.5	2,626.0	5.6	4.6	-14.58	1,565.1	1,235.3	1,817.2	1,808.0	9.18		197.860	
2,700.0	2,686.1	2,733.6	2,733.1	5.9	4.8	-14.81	1,567.1	1,233.3	1,802.1	1,792.6	9.56		188.503	
2,800.0	2,784.8	2,837.4	2,836.9	6.2	5.0	-15.04	1,568.6	1,231.0	1,786.6	1,776.7	9.93		179.899	
2,900.0	2,883.6	2,931.8	2,931.2	6.5	5.2	-15.23	1,569.7	1,229.4	1,771.2	1,760.9	10.29		172.188	
3,000.0	2,982.3	3,023.8	3,023.2	6.9	5.3	-15.40	1,570.8	1,228.4	1,756.1	1,745.5	10.64		165.080	
3,100.0	3,081.0	3,118.9	3,118.3	7.2	5.5	-15.58	1,572.1	1,227.6	1,741.4	1,730.4	11.00		158.377	
3,200.0	3,179.7	3,227.9	3,227.3	7.5	5.7	-15.78	1,573.3	1,226.8	1,726.5	1,715.1	11.38		151.778	
3,300.0	3,278.5	3,341.8	3,341.2	7.8	5.9	-15.98	1,573.4	1,225.8	1,710.7	1,698.9	11.76		145.441	
3,400.0	3,377.2	3,449.7	3,449.1	8.1	6.1	-16.17	1,572.9	1,224.6	1,694.4	1,682.3	12.14		139.572	
3,500.0	3,475.9	3,557.2	3,556.6	8.4	6.3	-16.35	1,571.7	1,223.1	1,677.4	1,664.9	12.52		134.016	
3,600.0	3,574.6	3,668.9	3,668.2	8.8	6.5	-16.53	1,569.8	1,221.6	1,660.0	1,647.1	12.90		128.699	
3,700.0	3,673.4	3,761.4	3,760.7	9.1	6.6	-16.66	1,567.4	1,220.6	1,642.1	1,628.8	13.25		123.911	
3,800.0	3,772.1	3,857.2	3,856.4	9.4	6.8	-16.78	1,565.3	1,220.2	1,624.7	1,611.1	13.61		119.374	
3,900.0	3,870.8	3,967.6	3,966.8	9.7	7.0	-16.94	1,562.6	1,219.2	1,607.0	1,593.0	13.99		114.861	
4,000.0	3,969.5	4,067.2	4,066.4	10.0	7.2	-17.10	1,559.9	1,217.6	1,588.7	1,574.4	14.36		110.657	
4,100.0	4,068.3	4,168.1	4,167.2	10.4	7.3	-17.24	1,556.8	1,216.8	1,570.5	1,555.8	14.72		106.658	
4,200.0	4,167.0	4,264.3	4,263.4	10.7	7.5	-17.39	1,554.0	1,215.4	1,552.2	1,537.1	15.09		102.868	
4,300.0	4,265.7	4,362.3	4,361.3	11.0	7.7	-17.55	1,551.9	1,214.1	1,534.2	1,518.8	15.44		99.340	
4,400.0	4,364.4	4,438.8	4,437.8	11.3	7.8	-17.71	1,550.6	1,213.0	1,517.1	1,501.3	15.80		96.025	
4,500.0	4,463.2	4,529.3	4,528.3	11.7	8.0	-17.90	1,549.9	1,212.0	1,500.6	1,484.5	16.16		92.858	
4,600.0	4,561.9	4,627.2	4,626.3	12.0	8.1	-18.10	1,549.3	1,211.1	1,484.5	1,468.0	16.53		89.788	
4,700.0	4,660.6	4,729.1	4,728.2	12.3	8.3	-18.33	1,548.6	1,210.0	1,468.1	1,451.2	16.91		86.805	
4,800.0	4,759.3	4,824.6	4,823.6	12.6	8.5	-18.53	1,548.0	1,209.0	1,451.9	1,434.7	17.29		83.998	
4,900.0	4,858.1	4,924.8	4,923.8	13.0	8.7	-18.77	1,547.4	1,207.8	1,435.7	1,418.1	17.67		81.270	
5,000.0	4,956.8	5,020.3	5,019.3	13.3	8.8	-19.01	1,547.0	1,206.4	1,419.5	1,401.5	18.04		78.676	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G												Offset Site Error:	0.0 ft
Survey Program: 100-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,055.5	5,110.2	5,109.2	13.6	9.0	-19.24	1,547.1	1,205.2	1,403.9	1,385.5	18.41	76.239	
5,200.0	5,154.2	5,209.0	5,208.0	13.9	9.2	-19.50	1,547.3	1,204.3	1,388.5	1,369.7	18.80	73.864	
5,300.0	5,253.0	5,306.3	5,305.3	14.3	9.3	-19.76	1,547.7	1,203.2	1,373.2	1,354.0	19.18	71.584	
5,400.0	5,351.7	5,394.5	5,393.5	14.6	9.5	-20.02	1,548.5	1,202.1	1,358.3	1,338.8	19.56	69.451	
5,500.0	5,450.4	5,498.5	5,497.4	14.9	9.7	-20.34	1,549.7	1,200.9	1,343.8	1,323.8	19.96	67.329	
5,600.0	5,549.1	5,593.4	5,592.3	15.3	9.8	-20.64	1,550.8	1,199.6	1,329.1	1,308.8	20.35	65.319	
5,700.0	5,647.9	5,697.0	5,695.9	15.6	10.0	-20.98	1,552.0	1,198.0	1,314.5	1,293.7	20.75	63.341	
5,800.0	5,746.6	5,790.0	5,788.9	15.9	10.2	-21.29	1,553.1	1,196.8	1,299.9	1,278.7	21.14	61.477	
5,900.0	5,845.3	5,887.9	5,886.8	16.2	10.4	-21.63	1,554.5	1,195.4	1,285.6	1,264.1	21.55	59.668	
6,000.0	5,944.1	5,980.9	5,979.7	16.6	10.5	-21.96	1,556.1	1,194.2	1,271.6	1,249.7	21.94	57.947	
6,100.0	6,042.8	6,077.2	6,076.0	16.9	10.7	-22.31	1,558.0	1,193.1	1,258.0	1,235.7	22.35	56.292	
6,200.0	6,141.5	6,175.9	6,174.7	17.2	10.9	-22.65	1,559.7	1,192.6	1,244.5	1,221.8	22.76	54.690	
6,300.0	6,240.2	6,278.3	6,277.1	17.5	11.0	-23.02	1,561.5	1,191.7	1,231.0	1,207.8	23.17	53.122	
6,400.0	6,339.0	6,373.8	6,372.5	17.9	11.2	-23.38	1,563.2	1,190.9	1,217.4	1,193.8	23.58	51.621	
6,500.0	6,437.7	6,476.2	6,475.0	18.2	11.4	-23.77	1,565.1	1,189.9	1,204.0	1,180.0	24.01	50.151	
6,600.0	6,536.4	6,575.2	6,573.9	18.5	11.6	-24.18	1,566.8	1,188.6	1,190.3	1,165.9	24.43	48.721	
6,700.0	6,635.1	6,665.9	6,664.6	18.9	11.7	-24.55	1,568.6	1,187.5	1,177.0	1,152.2	24.85	47.372	
6,800.0	6,733.9	6,755.5	6,754.1	19.2	11.9	-24.94	1,571.2	1,186.6	1,164.6	1,139.3	25.26	46.097	
6,900.0	6,832.6	6,847.0	6,845.6	19.5	12.0	-25.34	1,574.2	1,186.2	1,153.0	1,127.3	25.68	44.888	
7,000.0	6,931.3	6,939.3	6,937.9	19.8	12.2	-25.71	1,577.5	1,186.6	1,141.9	1,115.8	26.10	43.745	
7,100.0	7,030.0	7,030.0	7,028.4	20.2	12.3	-26.06	1,581.1	1,187.7	1,131.6	1,105.1	26.52	42.671	
7,191.8	7,120.7	7,110.9	7,109.3	20.5	12.5	-26.36	1,584.8	1,189.2	1,123.0	1,096.1	26.90	41.749	
7,200.0	7,128.8	7,117.8	7,116.1	20.5	12.5	-30.82	1,585.1	1,189.3	1,122.3	1,095.4	26.93	41.672	
7,245.4	7,173.7	7,155.9	7,154.1	20.6	12.6	-62.27	1,587.2	1,190.1	1,120.6	1,093.4	27.14	41.285 CC	
7,250.0	7,178.3	7,159.7	7,158.0	20.6	12.6	-65.74	1,587.4	1,190.2	1,120.6	1,093.4	27.16	41.253 ES	
7,300.0	7,227.8	7,200.0	7,198.2	20.7	12.6	-97.65	1,589.9	1,191.2	1,123.1	1,095.6	27.43	40.950	
7,350.0	7,276.8	7,243.5	7,241.6	20.8	12.7	-115.52	1,592.7	1,192.4	1,129.7	1,102.0	27.72	40.749	
7,400.0	7,325.1	7,284.6	7,282.6	20.8	12.8	-124.97	1,595.6	1,193.8	1,140.5	1,112.5	28.05	40.665	
7,450.0	7,372.2	7,334.7	7,332.5	20.8	12.9	-130.48	1,599.1	1,195.8	1,155.3	1,126.8	28.42	40.651 SF	
7,500.0	7,417.7	7,389.4	7,387.1	20.8	13.0	-133.96	1,602.4	1,198.0	1,173.4	1,144.6	28.83	40.705	
7,550.0	7,461.4	7,441.1	7,438.6	20.7	13.0	-136.16	1,605.2	1,200.1	1,194.8	1,165.6	29.25	40.853	
7,600.0	7,502.9	7,490.1	7,487.5	20.7	13.1	-137.49	1,607.3	1,202.2	1,219.5	1,189.9	29.68	41.090	
7,650.0	7,541.9	7,537.1	7,534.5	20.6	13.2	-138.17	1,609.0	1,204.2	1,247.4	1,217.3	30.12	41.414	
7,700.0	7,578.0	7,581.2	7,578.5	20.5	13.3	-138.27	1,610.4	1,205.9	1,278.3	1,247.7	30.56	41.822	
7,750.0	7,611.1	7,617.6	7,614.9	20.4	13.3	-137.66	1,611.3	1,207.3	1,312.1	1,281.1	31.00	42.326	
7,800.0	7,640.8	7,646.9	7,644.2	20.4	13.4	-136.28	1,612.0	1,208.3	1,348.6	1,317.2	31.42	42.924	
7,850.0	7,667.0	7,672.5	7,669.8	20.3	13.4	-134.05	1,612.6	1,209.1	1,387.8	1,356.0	31.83	43.603	
7,900.0	7,689.4	7,694.2	7,691.4	20.3	13.5	-130.76	1,613.2	1,209.8	1,429.2	1,397.0	32.22	44.360	
7,950.0	7,707.9	7,712.1	7,709.3	20.3	13.5	-126.04	1,613.6	1,210.3	1,472.6	1,440.0	32.59	45.185	
8,000.0	7,722.2	7,725.7	7,722.9	20.3	13.5	-119.35	1,614.0	1,210.7	1,517.6	1,484.7	32.94	46.073	
8,050.0	7,732.4	7,735.1	7,732.3	20.3	13.6	-110.00	1,614.2	1,211.0	1,563.9	1,530.6	33.26	47.016	
8,100.0	7,738.4	7,740.0	7,737.2	20.4	13.6	-97.42	1,614.4	1,211.1	1,611.0	1,577.4	33.56	48.006	
8,143.7	7,740.0	7,740.7	7,737.8	20.5	13.6	-84.01	1,614.4	1,211.1	1,652.6	1,618.8	33.80	48.901	
8,200.0	7,740.0	7,739.3	7,736.5	20.6	13.6	-83.85	1,614.3	1,211.1	1,706.5	1,672.4	34.08	50.068	
8,300.0	7,740.0	7,736.9	7,734.1	21.0	13.6	-83.57	1,614.3	1,211.0	1,802.5	1,767.9	34.56	52.155	
8,400.0	7,740.0	7,734.5	7,731.7	21.5	13.5	-83.29	1,614.2	1,211.0	1,898.9	1,863.9	35.00	54.256	
8,443.7	7,740.0	7,733.5	7,730.7	21.8	13.5	-83.17	1,614.2	1,210.9	1,941.1	1,906.0	35.18	55.178	
8,500.0	7,740.0	7,732.1	7,729.3	22.2	13.5	-82.74	1,614.2	1,210.9	1,995.8	1,960.4	35.40	56.381	
8,600.0	7,740.0	7,729.7	7,726.9	22.9	13.5	-81.85	1,614.1	1,210.8	2,093.2	2,057.5	35.74	58.565	
8,700.0	7,740.0	7,727.2	7,724.4	23.7	13.5	-80.75	1,614.0	1,210.8	2,191.3	2,155.2	36.04	60.794	
8,800.0	7,740.0	7,724.7	7,721.9	24.6	13.5	-79.38	1,614.0	1,210.7	2,289.8	2,253.5	36.31	63.063	
8,843.7	7,740.0	7,723.6	7,720.7	25.1	13.5	-78.67	1,613.9	1,210.7	2,333.0	2,296.6	36.42	64.061	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
8,900.0	7,740.0	7,722.1	7,719.3	25.6	13.5	-78.44	1,613.9	1,210.6	2,388.7	2,352.1	36.55	65.345		
9,000.0	7,740.0	7,719.5	7,716.7	26.7	13.5	-78.02	1,613.8	1,210.5	2,487.7	2,450.9	36.79	67.621		
9,100.0	7,740.0	7,716.9	7,714.1	27.8	13.5	-77.60	1,613.8	1,210.5	2,586.7	2,549.7	37.01	69.892		
9,200.0	7,740.0	7,714.3	7,711.5	29.0	13.5	-77.18	1,613.7	1,210.4	2,685.8	2,648.6	37.22	72.156		
9,300.0	7,740.0	7,711.7	7,708.9	30.2	13.5	-76.76	1,613.6	1,210.3	2,785.0	2,747.6	37.43	74.413		
9,343.7	7,740.0	7,710.6	7,707.8	30.8	13.5	-76.58	1,613.6	1,210.3	2,828.3	2,790.8	37.51	75.397		
9,400.7	7,740.0	7,709.1	7,706.3	31.6	13.5	-77.36	1,613.6	1,210.2	2,884.9	2,847.3	37.63	76.667		
9,500.0	7,740.0	7,706.6	7,703.8	32.9	13.5	-76.98	1,613.5	1,210.2	2,983.4	2,945.5	37.82	78.876		
9,600.0	7,740.0	7,704.0	7,701.2	34.3	13.5	-76.60	1,613.4	1,210.1	3,082.6	3,044.6	38.01	81.093		
9,700.0	7,740.0	7,701.5	7,698.7	35.7	13.5	-76.22	1,613.4	1,210.0	3,181.9	3,143.7	38.20	83.304		
9,800.0	7,740.0	7,698.9	7,696.2	37.1	13.5	-75.85	1,613.3	1,209.9	3,281.2	3,242.8	38.37	85.507		
9,900.0	7,740.0	7,696.5	7,693.7	38.6	13.5	-75.48	1,613.3	1,209.9	3,380.5	3,342.0	38.55	87.702		
10,000.0	7,740.0	7,694.0	7,691.2	40.1	13.5	-75.12	1,613.2	1,209.8	3,479.9	3,441.2	38.71	89.890		
10,100.0	7,740.0	7,691.5	7,688.8	41.6	13.5	-74.76	1,613.1	1,209.7	3,579.3	3,540.4	38.88	92.070		
10,200.0	7,740.0	7,689.1	7,686.3	43.1	13.5	-74.40	1,613.1	1,209.6	3,678.8	3,639.7	39.04	94.242		
10,300.0	7,740.0	7,686.6	7,683.8	44.7	13.5	-74.04	1,613.0	1,209.5	3,778.2	3,739.0	39.19	96.406		
10,400.0	7,740.0	7,684.2	7,681.4	46.3	13.5	-73.69	1,612.9	1,209.5	3,877.7	3,838.4	39.34	98.563		
10,500.0	7,740.0	7,681.7	7,678.9	47.8	13.5	-73.33	1,612.9	1,209.4	3,977.2	3,937.8	39.49	100.711		
10,600.0	7,740.0	7,679.3	7,676.5	49.4	13.5	-72.98	1,612.8	1,209.3	4,076.8	4,037.2	39.64	102.851		
10,700.0	7,740.0	7,676.8	7,674.0	51.0	13.4	-72.63	1,612.8	1,209.2	4,176.4	4,136.6	39.78	104.983		
10,800.0	7,740.0	7,674.4	7,671.6	52.6	13.4	-72.28	1,612.7	1,209.2	4,275.9	4,236.0	39.92	107.107		
10,900.0	7,740.0	7,671.9	7,669.2	54.2	13.4	-71.93	1,612.6	1,209.1	4,375.5	4,335.5	40.06	109.222		
11,000.0	7,740.0	7,669.5	7,666.8	55.9	13.4	-71.59	1,612.6	1,209.0	4,475.2	4,435.0	40.20	111.330		
11,100.0	7,740.0	7,667.1	7,664.3	57.5	13.4	-71.25	1,612.5	1,208.9	4,574.8	4,534.5	40.33	113.429		
11,200.0	7,740.0	7,664.7	7,661.9	59.1	13.4	-70.90	1,612.5	1,208.8	4,674.4	4,634.0	40.46	115.520		
11,300.0	7,740.0	7,662.3	7,659.5	60.8	13.4	-70.56	1,612.4	1,208.8	4,774.1	4,733.5	40.60	117.603		
11,400.0	7,740.0	7,659.8	7,657.1	62.4	13.4	-70.23	1,612.3	1,208.7	4,873.8	4,833.0	40.72	119.677		
11,500.0	7,740.0	7,657.4	7,654.7	64.1	13.4	-69.89	1,612.3	1,208.6	4,973.5	4,932.6	40.85	121.744		
11,600.0	7,740.0	7,655.0	7,652.3	65.8	13.4	-69.56	1,612.2	1,208.5	5,073.2	5,032.2	40.98	123.802		
11,700.0	7,740.0	7,652.6	7,649.9	67.4	13.4	-69.22	1,612.2	1,208.5	5,172.9	5,131.8	41.10	125.852		
11,800.0	7,740.0	7,650.2	7,647.5	69.1	13.4	-68.89	1,612.1	1,208.4	5,272.6	5,231.4	41.23	127.893		
11,900.0	7,740.0	7,647.8	7,645.1	70.8	13.4	-68.56	1,612.0	1,208.3	5,372.3	5,331.0	41.35	129.927		
12,000.0	7,740.0	7,645.5	7,642.7	72.5	13.4	-68.24	1,612.0	1,208.2	5,472.0	5,430.6	41.47	131.952		
12,100.0	7,740.0	7,643.1	7,640.3	74.1	13.4	-67.91	1,611.9	1,208.1	5,571.8	5,530.2	41.59	133.970		
12,200.0	7,740.0	7,640.7	7,638.0	75.8	13.4	-67.59	1,611.9	1,208.1	5,671.5	5,629.8	41.71	135.979		
12,300.0	7,740.0	7,638.3	7,635.6	77.5	13.4	-67.27	1,611.8	1,208.0	5,771.3	5,729.5	41.83	137.980		
12,400.0	7,740.0	7,636.0	7,633.2	79.2	13.4	-66.95	1,611.7	1,207.9	5,871.1	5,829.1	41.94	139.973		
12,500.0	7,740.0	7,633.6	7,630.9	80.9	13.4	-66.63	1,611.7	1,207.8	5,970.8	5,928.8	42.06	141.958		
12,600.0	7,740.0	7,631.2	7,628.5	82.6	13.4	-66.32	1,611.6	1,207.7	6,070.6	6,028.4	42.18	143.935		
12,700.0	7,740.0	7,628.9	7,626.1	84.3	13.4	-66.00	1,611.6	1,207.6	6,170.4	6,128.1	42.29	145.905		
12,800.0	7,740.0	7,626.5	7,623.8	86.0	13.4	-65.69	1,611.5	1,207.6	6,270.2	6,227.8	42.40	147.866		
12,900.0	7,740.0	7,624.2	7,621.4	87.7	13.4	-65.38	1,611.4	1,207.5	6,370.0	6,327.5	42.52	149.819		
13,000.0	7,740.0	7,621.8	7,619.1	89.4	13.4	-65.08	1,611.4	1,207.4	6,469.8	6,427.2	42.63	151.764		
13,100.0	7,740.0	7,619.5	7,616.7	91.1	13.4	-64.77	1,611.3	1,207.3	6,569.6	6,526.9	42.74	153.702		
13,200.0	7,740.0	7,617.1	7,614.4	92.8	13.3	-64.47	1,611.3	1,207.2	6,669.4	6,626.6	42.85	155.632		
13,300.0	7,740.0	7,614.8	7,612.1	94.5	13.3	-64.16	1,611.2	1,207.2	6,769.2	6,726.3	42.96	157.554		
13,400.0	7,740.0	7,612.5	7,609.8	96.3	13.3	-63.86	1,611.2	1,207.1	6,869.1	6,826.0	43.07	159.468		
13,500.0	7,740.0	7,610.1	7,607.4	98.0	13.3	-63.56	1,611.1	1,207.0	6,968.9	6,925.7	43.18	161.375		
13,600.0	7,740.0	7,300.0	7,297.9	99.7	12.8	-35.67	1,596.7	1,194.4	7,068.5	7,026.0	42.50	166.316		
13,700.0	7,740.0	7,276.5	7,274.5	101.4	12.8	-34.35	1,595.0	1,193.5	7,168.1	7,125.5	42.55	168.443		
13,800.0	7,740.0	7,272.4	7,270.4	103.1	12.8	-34.12	1,594.7	1,193.4	7,267.7	7,225.1	42.66	170.366		
13,900.0	7,740.0	7,268.2	7,266.3	104.8	12.8	-33.90	1,594.4	1,193.2	7,367.4	7,324.6	42.76	172.280		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	7,264.2	7,262.2	106.6	12.7	-33.69	1,594.1	1,193.1	7,467.0	7,424.1	42.87	174.187		
14,100.0	7,740.0	7,260.1	7,258.2	108.3	12.7	-33.47	1,593.8	1,193.0	7,566.6	7,523.7	42.97	176.085		
14,200.0	7,740.0	7,256.1	7,254.2	110.0	12.7	-33.27	1,593.6	1,192.8	7,666.3	7,623.2	43.07	177.976		
14,300.0	7,740.0	7,252.1	7,250.2	111.7	12.7	-33.06	1,593.3	1,192.7	7,765.9	7,722.8	43.18	179.859		
14,400.0	7,740.0	7,248.2	7,246.3	113.5	12.7	-32.86	1,593.0	1,192.6	7,865.6	7,822.3	43.28	181.734		
14,500.0	7,740.0	7,244.3	7,242.4	115.2	12.7	-32.67	1,592.8	1,192.4	7,965.3	7,921.9	43.38	183.601		
14,600.0	7,740.0	7,240.5	7,238.6	116.9	12.7	-32.48	1,592.5	1,192.3	8,064.9	8,021.4	43.49	185.460		
14,700.0	7,740.0	7,236.7	7,234.8	118.6	12.7	-32.29	1,592.3	1,192.2	8,164.6	8,121.0	43.59	187.312		
14,800.0	7,740.0	7,232.9	7,231.0	120.4	12.7	-32.11	1,592.0	1,192.1	8,264.3	8,220.6	43.69	189.156		
14,900.0	7,740.0	7,229.2	7,227.3	122.1	12.7	-31.93	1,591.8	1,192.0	8,364.0	8,320.2	43.79	190.992		
15,000.0	7,740.0	7,225.5	7,223.6	123.8	12.7	-31.75	1,591.5	1,191.9	8,463.7	8,419.8	43.89	192.820		
15,100.0	7,740.0	7,200.0	7,198.2	125.6	12.6	-30.58	1,589.9	1,191.2	8,563.4	8,519.5	43.94	194.880		
15,200.0	7,740.0	7,200.0	7,198.2	127.3	12.6	-30.58	1,589.9	1,191.2	8,663.1	8,619.0	44.05	196.654		
15,300.0	7,740.0	7,200.0	7,198.2	129.0	12.6	-30.58	1,589.9	1,191.2	8,762.8	8,718.6	44.16	198.421		
15,400.0	7,740.0	7,200.0	7,198.2	130.7	12.6	-30.58	1,589.9	1,191.2	8,862.5	8,818.2	44.27	200.180		
15,500.0	7,740.0	7,200.0	7,198.2	132.5	12.6	-30.58	1,589.9	1,191.2	8,962.2	8,917.8	44.38	201.932		
15,600.0	7,740.0	7,200.0	7,198.2	134.2	12.6	-30.58	1,589.9	1,191.2	9,061.9	9,017.4	44.49	203.677		
15,700.0	7,740.0	7,200.0	7,198.2	135.9	12.6	-30.58	1,589.9	1,191.2	9,161.6	9,117.0	44.60	205.414		
15,800.0	7,740.0	7,200.0	7,198.2	137.7	12.6	-30.58	1,589.9	1,191.2	9,261.3	9,216.6	44.71	207.144		
15,900.0	7,740.0	7,200.0	7,198.2	139.4	12.6	-30.58	1,589.9	1,191.2	9,361.0	9,316.2	44.82	208.867		
16,000.0	7,740.0	7,200.0	7,198.2	141.1	12.6	-30.58	1,589.9	1,191.2	9,460.8	9,415.9	44.93	210.583		
16,084.2	7,740.0	7,200.0	7,198.2	142.6	12.6	-30.58	1,589.9	1,191.2	9,544.8	9,499.7	45.02	212.022		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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			
0.0	0.0	52.2	52.2	0.0	0.1	37.20	1,594.1	1,210.1	2,001.4						
100.0	100.0	151.2	151.2	0.2	0.3	37.21	1,594.1	1,210.2	2,001.4	2,001.0	0.42	4,814.694			
200.0	200.0	246.4	246.4	0.3	0.4	37.19	1,594.4	1,210.0	2,001.5	2,000.8	0.76	2,645.477			
300.0	300.0	383.1	383.1	0.5	0.7	37.16	1,594.7	1,208.7	2,001.3	2,000.1	1.17	1,710.329			
400.0	400.0	525.9	525.8	0.7	0.9	37.28	1,589.0	1,209.4	1,998.2	1,996.6	1.60	1,250.316			
500.0	500.0	811.0	807.6	0.8	1.7	38.25	1,548.8	1,220.8	1,988.6	1,986.1	2.44	813.434			
600.0	600.0	902.0	896.6	1.0	2.0	38.68	1,530.8	1,225.3	1,976.0	1,973.1	2.90	682.450			
700.0	700.0	1,124.9	1,113.7	1.2	3.0	39.82	1,481.0	1,234.9	1,961.9	1,958.1	3.79	517.380			
800.0	800.0	1,293.2	1,274.5	1.4	3.9	40.90	1,431.9	1,240.6	1,941.1	1,936.5	4.62	419.840			
900.0	900.0	1,396.5	1,372.4	1.5	4.4	41.65	1,399.2	1,244.3	1,919.1	1,913.8	5.25	365.427			
1,000.0	1,000.0	1,497.9	1,468.3	1.7	5.0	42.43	1,366.2	1,248.9	1,897.2	1,891.3	5.90	321.407			
1,100.0	1,100.0	1,580.3	1,546.0	1.9	5.5	-8.34	1,339.1	1,252.8	1,874.8	1,868.3	6.48	289.305			
1,200.0	1,200.0	1,660.0	1,621.4	2.1	6.0	-7.74	1,313.6	1,256.9	1,851.8	1,844.7	7.06	262.284			
1,300.0	1,299.9	1,759.9	1,715.7	2.3	6.6	-6.93	1,281.3	1,262.8	1,827.8	1,820.1	7.75	235.778			
1,400.0	1,399.7	1,843.0	1,794.0	2.4	7.1	-6.23	1,254.0	1,268.1	1,802.4	1,794.0	8.38	214.988			
1,500.0	1,499.4	1,967.0	1,911.0	2.6	7.8	-5.17	1,213.6	1,274.7	1,775.1	1,765.9	9.18	193.306			
1,600.0	1,598.9	2,037.0	1,977.3	2.8	8.2	-4.59	1,191.2	1,277.6	1,746.3	1,736.5	9.74	179.217			
1,700.0	1,698.3	2,101.5	2,038.5	3.1	8.6	-4.05	1,171.2	1,281.0	1,717.4	1,707.1	10.28	167.000			
1,800.0	1,797.4	2,204.1	2,136.0	3.3	9.1	-3.13	1,139.9	1,287.3	1,688.3	1,677.2	11.01	153.282			
1,900.0	1,896.3	2,307.1	2,233.4	3.6	9.8	-2.12	1,106.9	1,293.6	1,656.7	1,645.0	11.78	140.630			
1,915.7	1,911.9	2,321.7	2,247.2	3.6	9.9	-1.97	1,102.1	1,294.5	1,651.6	1,639.7	11.89	138.866			
2,000.0	1,995.0	2,400.3	2,321.3	3.8	10.3	-1.15	1,076.6	1,299.3	1,624.3	1,611.8	12.50	129.953			
2,100.0	2,093.8	2,494.4	2,410.4	4.1	10.9	-0.17	1,046.8	1,304.1	1,592.0	1,578.8	13.21	120.514			
2,200.0	2,192.5	2,586.4	2,497.6	4.4	11.4	0.81	1,017.8	1,308.4	1,560.1	1,546.2	13.92	112.084			
2,300.0	2,291.2	2,678.2	2,584.8	4.7	11.9	1.80	989.2	1,312.4	1,528.6	1,513.9	14.63	104.470			
2,400.0	2,389.9	2,801.3	2,701.4	5.0	12.7	3.23	950.0	1,317.7	1,497.2	1,481.7	15.52	96.503			
2,500.0	2,488.7	2,925.4	2,817.8	5.3	13.4	4.80	907.3	1,320.7	1,463.3	1,446.9	16.44	89.010			
2,600.0	2,587.4	3,003.7	2,890.9	5.6	13.9	5.87	879.4	1,322.9	1,429.7	1,412.5	17.18	83.228			
2,700.0	2,686.1	3,084.0	2,966.1	5.9	14.4	7.01	851.1	1,325.3	1,397.1	1,379.2	17.93	77.928			
2,800.0	2,784.8	3,172.0	3,048.5	6.2	15.0	8.31	820.3	1,328.4	1,365.8	1,347.1	18.74	72.876			
2,900.0	2,883.6	3,272.5	3,142.5	6.5	15.6	9.86	785.1	1,332.0	1,335.3	1,315.7	19.63	68.032			
3,000.0	2,982.3	3,371.7	3,235.4	6.9	16.3	11.41	750.4	1,333.8	1,304.2	1,283.7	20.50	63.617			
3,100.0	3,081.0	3,433.0	3,293.0	7.2	16.6	12.40	729.4	1,335.1	1,274.7	1,253.5	21.20	60.122			
3,200.0	3,179.7	3,501.7	3,357.8	7.5	17.0	13.52	706.8	1,337.5	1,247.7	1,225.8	21.92	56.927			
3,300.0	3,278.5	3,577.7	3,430.0	7.8	17.5	14.74	683.4	1,341.3	1,223.5	1,200.8	22.67	53.971			
3,400.0	3,377.2	3,653.1	3,501.8	8.1	17.9	15.98	660.6	1,345.6	1,201.1	1,177.6	23.42	51.281			
3,500.0	3,475.9	3,732.6	3,577.5	8.4	18.3	17.32	637.3	1,351.1	1,180.9	1,156.8	24.18	48.847			
3,600.0	3,574.6	3,845.1	3,685.9	8.8	18.8	19.08	607.7	1,357.4	1,161.7	1,136.6	25.03	46.411			
3,700.0	3,673.4	3,984.0	3,820.3	9.1	19.5	21.18	572.6	1,359.6	1,139.8	1,113.8	25.99	43.851			
3,800.0	3,772.1	4,069.3	3,901.9	9.4	20.0	22.67	548.0	1,360.2	1,117.0	1,090.2	26.80	41.683			
3,900.0	3,870.8	4,132.0	3,961.8	9.7	20.3	23.84	529.4	1,362.3	1,097.3	1,069.8	27.50	39.900			
4,000.0	3,969.5	4,218.9	4,044.3	10.0	20.9	25.58	502.5	1,366.9	1,080.2	1,051.8	28.38	38.067			
4,100.0	4,068.3	4,327.9	4,146.7	10.4	21.6	28.00	465.6	1,372.4	1,063.6	1,034.2	29.45	36.121			
4,200.0	4,167.0	4,421.0	4,233.7	10.7	22.2	30.17	432.9	1,376.2	1,047.5	1,017.1	30.41	34.448			
4,300.0	4,265.7	4,500.5	4,308.1	11.0	22.7	32.07	404.9	1,379.9	1,033.6	1,002.4	31.25	33.074			
4,400.0	4,364.4	4,585.3	4,388.1	11.3	23.1	34.03	377.1	1,384.2	1,022.1	990.0	32.06	31.877			
4,500.0	4,463.2	4,672.3	4,471.0	11.7	23.6	35.93	351.3	1,389.0	1,012.6	979.8	32.83	30.849			
4,600.0	4,561.9	4,768.8	4,563.4	12.0	24.1	38.01	323.8	1,394.3	1,004.7	971.1	33.62	29.885			
4,700.0	4,660.6	4,862.4	4,672.6	12.3	24.7	40.40	292.9	1,399.0	996.9	962.4	34.47	28.921			
4,800.0	4,759.3	4,978.4	4,765.2	12.6	25.2	42.40	267.8	1,401.6	988.9	953.8	35.17	28.120			
4,900.0	4,858.1	5,068.1	4,852.3	13.0	25.5	44.18	246.4	1,404.5	982.6	946.9	35.77	27.473			
5,000.0	4,956.8	5,174.2	4,956.1	13.3	25.9	46.09	224.7	1,408.1	977.2	940.8	36.38	26.863			

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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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
5,100.0	5,055.5	5,280.3	5,060.6	13.6	26.3	47.82	206.8	1,410.9	971.4	934.5	36.92	26.313	
5,200.0	5,154.2	5,385.1	5,164.3	13.9	26.6	49.42	191.6	1,413.2	965.5	928.1	37.41	25.809	
5,300.0	5,253.0	5,495.6	5,273.9	14.3	26.8	50.98	178.1	1,414.7	959.0	921.1	37.87	25.325	
5,400.0	5,351.7	5,608.3	5,386.1	14.6	27.1	52.43	167.7	1,415.2	951.7	913.4	38.28	24.860	
5,500.0	5,450.4	5,704.8	5,482.4	14.9	27.2	53.54	161.3	1,415.5	943.9	905.3	38.63	24.437	
5,600.0	5,549.1	5,813.4	5,591.0	15.3	27.3	54.58	157.7	1,416.8	936.6	897.7	38.93	24.059	
5,700.0	5,647.9	5,931.7	5,709.3	15.6	27.4	55.58	157.3	1,415.7	926.4	887.2	39.22	23.619	
5,800.0	5,746.6	6,018.1	5,795.6	15.9	27.5	56.31	157.1	1,415.3	917.0	877.5	39.51	23.210	
5,900.0	5,845.3	6,113.7	5,891.2	16.2	27.5	57.11	156.8	1,415.9	908.9	869.1	39.79	22.844	
6,000.0	5,944.1	6,215.2	5,992.7	16.6	27.6	57.95	157.1	1,416.6	900.8	860.8	40.06	22.486	
6,100.0	6,042.8	6,310.8	6,088.3	16.9	27.6	58.73	157.6	1,417.3	892.9	852.6	40.34	22.136	
6,200.0	6,141.5	6,406.0	6,183.5	17.2	27.7	59.52	158.1	1,418.4	885.6	845.0	40.61	21.808	
6,300.0	6,240.2	6,508.5	6,286.0	17.5	27.8	60.40	158.4	1,419.5	878.5	837.6	40.89	21.486	
6,400.0	6,339.0	6,609.5	6,387.0	17.9	27.8	61.28	158.8	1,420.2	871.2	830.0	41.16	21.166	
6,500.0	6,437.7	6,707.5	6,485.0	18.2	27.9	62.16	159.0	1,420.9	864.1	822.6	41.43	20.855	
6,600.0	6,536.4	6,805.2	6,582.7	18.5	28.0	63.06	159.1	1,421.5	857.3	815.6	41.70	20.558	
6,700.0	6,635.1	6,902.8	6,680.3	18.9	28.1	63.97	159.1	1,422.3	850.8	808.9	41.97	20.274	
6,800.0	6,733.9	7,000.6	6,778.1	19.2	28.1	64.91	158.9	1,423.2	844.8	802.5	42.23	20.003	
6,900.0	6,832.6	7,098.5	6,876.0	19.5	28.2	65.86	158.7	1,424.1	839.1	796.6	42.49	19.747	
7,000.0	6,931.3	7,192.2	6,969.7	19.8	28.3	66.79	158.1	1,425.2	833.9	791.2	42.75	19.505	
7,100.0	7,030.0	7,287.3	7,064.8	20.2	28.4	67.78	156.9	1,426.6	829.7	786.7	43.01	19.291	
7,191.8	7,120.7	7,385.7	7,163.1	20.5	28.5	68.83	155.6	1,427.8	825.7	782.5	43.24	19.095	
7,200.0	7,128.8	7,394.4	7,171.9	20.5	28.5	64.48	155.5	1,427.8	825.3	782.0	43.26	19.076	
7,250.0	7,178.3	7,448.1	7,225.6	20.6	28.6	29.93	155.1	1,428.1	821.2	777.8	43.36	18.940	
7,300.0	7,227.8	7,502.9	7,280.4	20.7	28.6	-2.24	154.8	1,428.1	814.4	770.9	43.45	18.744	
7,350.0	7,276.8	7,557.2	7,334.6	20.8	28.7	-20.98	154.6	1,427.7	804.8	761.3	43.52	18.491	
7,400.0	7,325.1	7,610.4	7,387.9	20.8	28.7	-31.97	154.4	1,426.9	792.6	749.0	43.59	18.184	
7,450.0	7,372.2	7,657.4	7,434.8	20.8	28.7	-39.52	154.3	1,426.1	778.1	734.4	43.64	17.830	
7,500.0	7,417.7	7,701.2	7,478.6	20.8	28.8	-45.55	154.2	1,425.4	761.7	718.1	43.67	17.441	
7,550.0	7,461.4	7,743.2	7,520.6	20.7	28.8	-50.94	154.1	1,424.9	743.9	700.2	43.69	17.025	
7,600.0	7,502.9	7,783.1	7,560.6	20.7	28.8	-56.09	154.0	1,424.4	724.9	681.2	43.69	16.593	
7,650.0	7,541.9	7,821.5	7,598.9	20.6	28.9	-61.19	154.0	1,424.1	705.3	661.6	43.65	16.157	
7,700.0	7,578.0	7,857.4	7,634.9	20.5	28.9	-66.27	154.0	1,423.8	685.4	641.8	43.58	15.730	
7,750.0	7,611.1	7,890.3	7,667.7	20.4	28.9	-71.22	154.0	1,423.6	666.0	622.6	43.46	15.323	
7,800.0	7,640.8	7,919.7	7,697.1	20.4	28.9	-75.90	154.1	1,423.4	647.7	604.4	43.32	14.952	
7,850.0	7,667.0	7,945.5	7,722.9	20.3	29.0	-80.15	154.2	1,423.3	631.3	588.1	43.15	14.630	
7,900.0	7,689.4	7,967.4	7,744.8	20.3	29.0	-83.82	154.3	1,423.2	617.4	574.4	42.99	14.363	
7,950.0	7,707.9	7,985.4	7,762.8	20.3	29.0	-86.78	154.4	1,423.1	606.9	564.0	42.87	14.156	
8,000.0	7,722.2	7,999.4	7,776.8	20.3	29.0	-88.94	154.4	1,423.0	600.2	557.4	42.85	14.008	
8,049.5	7,732.3	8,009.1	7,786.5	20.3	29.0	-90.21	154.5	1,423.0	598.0	555.0	42.97	13.918 CC	
8,050.0	7,732.4	8,009.2	7,786.6	20.3	29.0	-90.22	154.5	1,423.0	598.0	555.0	42.97	13.917 ES	
8,100.0	7,738.4	8,014.8	7,792.2	20.4	29.0	-90.59	154.5	1,422.9	600.4	557.2	43.24	13.885 SF	
8,143.7	7,740.0	8,016.1	7,793.5	20.5	29.0	-90.15	154.5	1,422.9	606.3	562.8	43.58	13.912	
8,200.0	7,740.0	8,015.8	7,793.2	20.6	29.0	-90.12	154.5	1,422.9	618.8	574.7	44.12	14.024	
8,300.0	7,740.0	8,015.2	7,792.7	21.0	29.0	-90.06	154.5	1,422.9	652.4	607.3	45.12	14.459	
8,400.0	7,740.0	8,014.7	7,792.1	21.5	29.0	-90.01	154.5	1,422.9	698.8	652.9	45.93	15.214	
8,443.7	7,740.0	8,014.4	7,791.8	21.8	29.0	-89.99	154.5	1,422.9	722.5	676.3	46.20	15.639	
8,500.0	7,740.0	8,014.1	7,791.5	22.2	29.0	-89.95	154.5	1,422.9	755.9	709.4	46.46	16.269	
8,600.0	7,740.0	8,013.6	7,791.0	22.9	29.0	-89.90	154.5	1,422.9	822.4	775.6	46.74	17.595	
8,700.0	7,740.0	8,013.0	7,790.4	23.7	29.0	-89.84	154.5	1,422.9	896.2	849.4	46.85	19.130	
8,800.0	7,740.0	8,012.5	7,789.9	24.6	29.0	-89.78	154.5	1,422.9	975.8	928.9	46.86	20.825	
8,843.7	7,740.0	8,012.2	7,789.6	25.1	29.0	-89.76	154.5	1,422.9	1,012.0	965.1	46.84	21.603	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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
8,900.0	7,740.0	8,011.9	7,789.3	25.6	29.0	-89.72	154.5	1,422.9	1,059.6	1,012.8	46.82	22.631	
9,000.0	7,740.0	8,011.4	7,788.8	26.7	29.0	-89.67	154.5	1,423.0	1,146.1	1,099.3	46.76	24.508	
9,100.0	7,740.0	8,010.9	7,788.3	27.8	29.0	-89.61	154.5	1,423.0	1,234.6	1,187.9	46.70	26.439	
9,200.0	7,740.0	8,010.3	7,787.7	29.0	29.0	-89.56	154.5	1,423.0	1,324.8	1,278.1	46.63	28.410	
9,300.0	7,740.0	8,009.8	7,787.2	30.2	29.0	-89.50	154.5	1,423.0	1,416.3	1,369.7	46.57	30.411	
9,343.7	7,740.0	8,009.6	7,787.0	30.8	29.0	-89.48	154.5	1,423.0	1,456.6	1,410.0	46.55	31.293	
9,400.7	7,740.0	8,009.3	7,786.7	31.6	29.0	-89.46	154.5	1,423.0	1,509.4	1,462.9	46.52	32.446	
9,500.0	7,740.0	8,008.7	7,786.1	32.9	29.0	-89.41	154.5	1,423.0	1,601.8	1,555.4	46.47	34.467	
9,600.0	7,740.0	8,008.2	7,785.6	34.3	29.0	-89.35	154.5	1,423.0	1,695.7	1,649.3	46.44	36.516	
9,700.0	7,740.0	8,007.7	7,785.1	35.7	29.0	-89.30	154.5	1,423.0	1,790.3	1,743.9	46.41	38.575	
9,800.0	7,740.0	8,007.1	7,784.6	37.1	29.0	-89.25	154.5	1,423.0	1,885.4	1,839.0	46.39	40.641	
9,900.0	7,740.0	8,006.6	7,784.0	38.6	29.0	-89.19	154.5	1,423.0	1,981.0	1,934.6	46.38	42.710	
10,000.0	7,740.0	8,006.1	7,783.5	40.1	29.0	-89.14	154.5	1,423.0	2,077.0	2,030.7	46.38	44.783	
10,100.0	7,740.0	8,005.6	7,783.0	41.6	29.0	-89.09	154.5	1,423.0	2,173.4	2,127.0	46.39	46.856	
10,200.0	7,740.0	8,005.0	7,782.4	43.1	29.0	-89.03	154.5	1,423.0	2,270.1	2,223.7	46.40	48.928	
10,300.0	7,740.0	8,004.5	7,781.9	44.7	29.0	-88.98	154.5	1,423.0	2,367.1	2,320.7	46.41	50.999	
10,400.0	7,740.0	8,004.0	7,781.4	46.3	29.0	-88.93	154.5	1,423.0	2,464.3	2,417.8	46.44	53.068	
10,500.0	7,740.0	8,003.5	7,780.9	47.8	29.0	-88.88	154.5	1,423.0	2,561.7	2,515.2	46.46	55.133	
10,600.0	7,740.0	8,002.9	7,780.3	49.4	29.0	-88.82	154.4	1,423.0	2,659.3	2,612.8	46.50	57.195	
10,700.0	7,740.0	8,002.4	7,779.8	51.0	29.0	-88.77	154.4	1,423.0	2,757.1	2,710.6	46.53	59.253	
10,800.0	7,740.0	8,001.9	7,779.3	52.6	29.0	-88.72	154.4	1,423.0	2,855.0	2,808.5	46.57	61.306	
10,900.0	7,740.0	8,001.4	7,778.8	54.2	29.0	-88.66	154.4	1,423.0	2,953.1	2,906.5	46.61	63.354	
11,000.0	7,740.0	8,000.9	7,778.3	55.9	29.0	-88.61	154.4	1,423.0	3,051.3	3,004.7	46.66	65.397	
11,100.0	7,740.0	8,000.3	7,777.8	57.5	29.0	-88.56	154.4	1,423.0	3,149.6	3,102.9	46.71	67.434	
11,200.0	7,740.0	7,999.8	7,777.2	59.1	29.0	-88.51	154.4	1,423.0	3,248.0	3,201.3	46.76	69.465	
11,300.0	7,740.0	7,999.3	7,776.7	60.8	29.0	-88.46	154.4	1,423.0	3,346.6	3,299.7	46.81	71.491	
11,400.0	7,740.0	7,998.8	7,776.2	62.4	29.0	-88.40	154.4	1,423.0	3,445.2	3,398.3	46.87	73.510	
11,500.0	7,740.0	7,998.3	7,775.7	64.1	29.0	-88.35	154.4	1,423.0	3,543.8	3,496.9	46.92	75.523	
11,600.0	7,740.0	7,997.8	7,775.2	65.8	29.0	-88.30	154.4	1,423.0	3,642.6	3,595.6	46.98	77.530	
11,700.0	7,740.0	7,997.3	7,774.7	67.4	29.0	-88.25	154.4	1,423.0	3,741.4	3,694.3	47.04	79.530	
11,800.0	7,740.0	7,996.7	7,774.2	69.1	29.0	-88.20	154.4	1,423.0	3,840.3	3,793.2	47.11	81.524	
11,900.0	7,740.0	7,996.2	7,773.7	70.8	29.0	-88.15	154.4	1,423.0	3,939.2	3,892.0	47.17	83.511	
12,000.0	7,740.0	7,995.7	7,773.1	72.5	29.0	-88.09	154.4	1,423.0	4,038.2	3,990.9	47.23	85.492	
12,100.0	7,740.0	7,995.2	7,772.6	74.1	29.0	-88.04	154.4	1,423.0	4,137.2	4,089.9	47.30	87.466	
12,200.0	7,740.0	7,994.7	7,772.1	75.8	29.0	-87.99	154.4	1,423.0	4,236.3	4,188.9	47.37	89.433	
12,300.0	7,740.0	7,994.2	7,771.6	77.5	29.0	-87.94	154.4	1,423.0	4,335.4	4,288.0	47.44	91.393	
12,400.0	7,740.0	7,993.7	7,771.1	79.2	29.0	-87.89	154.4	1,423.0	4,434.6	4,387.1	47.51	93.347	
12,500.0	7,740.0	7,993.2	7,770.6	80.9	29.0	-87.84	154.4	1,423.0	4,533.8	4,486.2	47.58	95.293	
12,600.0	7,740.0	7,992.7	7,770.1	82.6	29.0	-87.79	154.4	1,423.0	4,633.0	4,585.4	47.65	97.233	
12,700.0	7,740.0	7,992.2	7,769.6	84.3	29.0	-87.74	154.4	1,423.0	4,732.3	4,684.5	47.72	99.166	
12,800.0	7,740.0	7,991.7	7,769.1	86.0	29.0	-87.69	154.4	1,423.0	4,831.6	4,783.8	47.79	101.092	
12,900.0	7,740.0	7,991.2	7,768.6	87.7	29.0	-87.64	154.4	1,423.0	4,930.9	4,883.0	47.87	103.011	
13,000.0	7,740.0	7,990.7	7,768.1	89.4	29.0	-87.59	154.4	1,423.0	5,030.2	4,982.3	47.94	104.924	
13,100.0	7,740.0	7,990.2	7,767.6	91.1	29.0	-87.54	154.4	1,423.0	5,129.6	5,081.6	48.02	106.829	
13,200.0	7,740.0	7,989.7	7,767.1	92.8	29.0	-87.49	154.4	1,423.0	5,229.0	5,180.9	48.09	108.728	
13,300.0	7,740.0	7,989.2	7,766.6	94.5	29.0	-87.44	154.4	1,423.0	5,328.4	5,280.3	48.17	110.619	
13,400.0	7,740.0	7,988.7	7,766.1	96.3	29.0	-87.39	154.4	1,423.0	5,427.9	5,379.6	48.25	112.504	
13,500.0	7,740.0	7,988.2	7,765.6	98.0	29.0	-87.34	154.4	1,423.1	5,527.3	5,479.0	48.32	114.382	
13,600.0	7,740.0	7,987.7	7,765.1	99.7	29.0	-87.29	154.4	1,423.1	5,626.8	5,578.4	48.40	116.254	
13,700.0	7,740.0	7,987.2	7,764.6	101.4	29.0	-87.24	154.4	1,423.1	5,726.3	5,677.8	48.48	118.118	
13,800.0	7,740.0	7,986.7	7,764.1	103.1	29.0	-87.19	154.4	1,423.1	5,825.8	5,777.3	48.56	119.976	
13,900.0	7,740.0	7,986.2	7,763.7	104.8	29.0	-87.14	154.4	1,423.1	5,925.4	5,876.7	48.64	121.827	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	7,985.7	7,763.2	106.6	29.0	-87.09	154.4	1,423.1	6,024.9	5,976.2	48.72	123.671		
14,100.0	7,740.0	7,985.3	7,762.7	108.3	29.0	-87.04	154.4	1,423.1	6,124.5	6,075.7	48.80	125.508		
14,200.0	7,740.0	7,984.8	7,762.2	110.0	29.0	-86.99	154.4	1,423.1	6,224.0	6,175.2	48.88	127.339		
14,300.0	7,740.0	7,984.3	7,761.7	111.7	29.0	-86.94	154.4	1,423.1	6,323.6	6,274.7	48.96	129.163		
14,400.0	7,740.0	7,983.8	7,761.2	113.5	29.0	-86.89	154.3	1,423.1	6,423.2	6,374.2	49.04	130.981		
14,500.0	7,740.0	7,983.3	7,760.7	115.2	29.0	-86.84	154.3	1,423.1	6,522.9	6,473.7	49.12	132.791		
14,600.0	7,740.0	7,982.8	7,760.2	116.9	29.0	-86.79	154.3	1,423.1	6,622.5	6,573.3	49.20	134.595		
14,700.0	7,740.0	7,982.3	7,759.8	118.6	29.0	-86.74	154.3	1,423.1	6,722.1	6,672.8	49.28	136.393		
14,800.0	7,740.0	7,981.9	7,759.3	120.4	29.0	-86.70	154.3	1,423.1	6,821.8	6,772.4	49.37	138.184		
14,900.0	7,740.0	7,981.4	7,758.8	122.1	29.0	-86.65	154.3	1,423.1	6,921.4	6,872.0	49.45	139.968		
15,000.0	7,740.0	7,980.9	7,758.3	123.8	29.0	-86.60	154.3	1,423.1	7,021.1	6,971.6	49.53	141.746		
15,100.0	7,740.0	7,980.4	7,757.8	125.6	29.0	-86.55	154.3	1,423.1	7,120.8	7,071.1	49.62	143.517		
15,200.0	7,740.0	7,979.9	7,757.3	127.3	29.0	-86.50	154.3	1,423.1	7,220.5	7,170.8	49.70	145.282		
15,300.0	7,740.0	7,979.3	7,756.4	129.0	29.0	-85.80	154.3	1,423.1	7,320.1	7,270.4	49.77	147.083		
15,400.0	7,740.0	7,979.0	7,755.4	130.7	29.0	-85.80	154.3	1,423.1	7,419.9	7,370.0	49.85	148.832		
15,500.0	7,740.0	7,979.0	7,755.4	132.5	29.0	-85.80	154.3	1,423.1	7,519.6	7,469.6	49.94	150.574		
15,600.0	7,740.0	7,979.0	7,755.4	134.2	29.0	-85.80	154.3	1,423.1	7,619.3	7,569.3	50.02	152.311		
15,700.0	7,740.0	7,979.0	7,755.4	135.9	29.0	-85.80	154.3	1,423.1	7,719.0	7,668.9	50.11	154.040		
15,800.0	7,740.0	7,979.0	7,755.4	137.7	29.0	-85.80	154.3	1,423.1	7,818.7	7,768.5	50.20	155.764		
15,900.0	7,740.0	7,979.0	7,755.4	139.4	29.0	-85.80	154.3	1,423.1	7,918.5	7,868.2	50.28	157.481		
16,000.0	7,740.0	7,979.0	7,755.4	141.1	29.0	-85.80	154.3	1,423.1	8,018.2	7,967.9	50.37	159.192		
16,084.2	7,740.0	7,979.0	7,755.4	142.6	29.0	-85.80	154.3	1,423.1	8,102.2	8,051.8	50.44	160.627		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	106.0	106.0	0.0	0.2	37.35	1,583.8	1,208.9	1,993.2					
100.0	100.0	306.8	306.5	0.2	0.6	37.42	1,574.2	1,204.2	1,988.0	1,987.3	0.69	2,880.982		
200.0	200.0	503.3	501.8	0.3	1.1	37.65	1,553.4	1,198.3	1,977.7	1,976.5	1.23	1,606.851		
300.0	300.0	617.3	614.5	0.5	1.5	37.88	1,537.1	1,195.7	1,965.1	1,963.4	1.64	1,197.245		
400.0	400.0	755.4	750.6	0.7	1.9	38.26	1,513.3	1,193.2	1,950.1	1,948.0	2.13	915.816		
500.0	500.0	868.4	861.5	0.8	2.4	38.63	1,491.6	1,191.8	1,934.1	1,931.6	2.58	749.376		
600.0	600.0	941.1	932.8	1.0	2.6	38.87	1,478.1	1,191.4	1,919.1	1,916.2	2.94	652.570		
700.0	700.0	1,086.0	1,075.0	1.2	3.2	39.38	1,450.3	1,190.4	1,903.8	1,900.3	3.49	545.319		
800.0	800.0	1,315.3	1,297.5	1.4	4.2	40.34	1,395.0	1,184.7	1,883.7	1,879.4	4.31	436.965		
900.0	900.0	1,450.9	1,427.2	1.5	5.0	41.02	1,355.9	1,179.5	1,858.9	1,854.0	4.92	378.042		
1,000.0	1,000.0	1,575.9	1,545.9	1.7	5.7	41.73	1,317.0	1,174.7	1,832.6	1,827.0	5.53	331.547		
1,100.0	1,100.0	1,713.6	1,675.7	1.9	6.5	-8.85	1,271.4	1,169.0	1,804.0	1,797.8	6.22	290.220		
1,200.0	1,200.0	1,896.4	1,844.8	2.1	7.8	-7.55	1,202.7	1,159.8	1,769.6	1,762.5	7.13	248.075		
1,300.0	1,299.9	2,001.9	1,940.9	2.3	8.6	-6.68	1,159.6	1,154.9	1,732.0	1,724.2	7.82	221.500		
1,400.0	1,399.7	2,105.3	2,034.7	2.4	9.3	-5.77	1,116.3	1,149.4	1,692.0	1,683.5	8.52	198.537		
1,500.0	1,499.4	2,222.2	2,139.7	2.6	10.3	-4.59	1,065.3	1,144.0	1,649.9	1,640.6	9.34	176.580		
1,600.0	1,598.9	2,342.0	2,245.8	2.8	11.3	-3.21	1,009.8	1,137.8	1,604.3	1,594.1	10.22	157.011		
1,700.0	1,698.3	2,420.8	2,315.6	3.1	11.9	-2.26	973.6	1,132.8	1,557.3	1,546.4	10.91	142.731		
1,800.0	1,797.4	2,492.3	2,379.1	3.3	12.5	-1.36	941.2	1,128.4	1,509.6	1,498.0	11.59	130.283		
1,900.0	1,896.3	2,560.0	2,439.6	3.6	13.0	-0.46	911.0	1,124.7	1,461.9	1,449.6	12.26	119.202		
1,915.7	1,911.9	2,569.5	2,448.2	3.6	13.1	-0.33	906.8	1,124.2	1,454.4	1,442.0	12.36	117.629		
2,000.0	1,995.0	2,646.3	2,517.2	3.8	13.7	0.73	873.6	1,119.5	1,414.0	1,401.0	13.02	108.614		
2,100.0	2,093.8	2,730.5	2,592.9	4.1	14.3	1.95	837.1	1,114.1	1,366.4	1,352.6	13.81	98.955		
2,200.0	2,192.5	2,790.4	2,646.7	4.4	14.8	2.88	811.0	1,110.9	1,320.1	1,305.6	14.52	90.935		
2,300.0	2,291.2	2,910.0	2,754.5	4.7	15.7	4.88	759.4	1,104.8	1,275.0	1,259.5	15.54	82.051		
2,400.0	2,389.9	2,990.8	2,826.8	5.0	16.4	6.32	723.8	1,099.2	1,228.5	1,212.1	16.41	74.865		
2,500.0	2,488.7	3,084.0	2,910.3	5.3	17.1	8.06	683.1	1,092.0	1,182.6	1,165.2	17.35	68.142		
2,600.0	2,587.4	3,160.9	2,979.4	5.6	17.7	9.56	650.1	1,085.6	1,137.3	1,119.1	18.26	62.301		
2,700.0	2,686.1	3,259.0	3,067.5	5.9	18.5	11.64	607.6	1,077.3	1,092.8	1,073.5	19.31	56.581		
2,800.0	2,784.8	3,326.1	3,127.4	6.2	19.0	13.19	578.0	1,071.9	1,049.2	1,028.9	20.29	51.711		
2,900.0	2,883.6	3,424.0	3,215.0	6.5	19.8	15.64	534.8	1,064.6	1,007.4	985.9	21.47	46.911		
3,000.0	2,982.3	3,496.3	3,279.5	6.9	20.4	17.58	502.7	1,058.7	966.2	943.7	22.59	42.781		
3,100.0	3,081.0	3,570.7	3,346.0	7.2	21.0	19.72	469.6	1,053.7	927.7	904.0	23.77	39.034		
3,200.0	3,179.7	3,659.3	3,425.1	7.5	21.7	22.44	430.3	1,048.0	891.4	866.3	25.08	35.536		
3,300.0	3,278.5	3,751.3	3,507.4	7.8	22.4	25.41	389.9	1,040.8	856.0	829.5	26.44	32.370		
3,400.0	3,377.2	3,837.0	3,584.7	8.1	23.1	28.28	353.4	1,033.1	822.3	794.6	27.76	29.618		
3,500.0	3,475.9	3,918.5	3,658.8	8.4	23.7	31.04	320.5	1,025.3	791.0	761.9	29.06	27.218		
3,600.0	3,574.6	3,994.7	3,728.2	8.8	24.2	33.78	289.8	1,018.5	762.7	732.4	30.35	25.132		
3,700.0	3,673.4	4,072.6	3,799.1	9.1	24.8	36.74	258.1	1,012.7	738.3	706.6	31.65	23.323		
3,800.0	3,772.1	4,152.3	3,871.4	9.4	25.4	39.96	225.0	1,007.0	717.2	684.2	32.96	21.758		
3,900.0	3,870.8	4,219.0	3,931.7	9.7	25.9	42.79	196.7	1,003.7	701.4	667.3	34.09	20.572		
4,000.0	3,969.5	4,304.0	4,008.5	10.0	26.6	46.51	160.4	1,000.5	690.4	655.2	35.29	19.566		
4,100.0	4,068.3	4,386.7	4,083.4	10.4	27.2	50.15	125.5	997.3	683.5	647.1	36.31	18.825		
4,200.0	4,167.0	4,469.5	4,157.9	10.7	27.9	53.93	89.5	994.1	680.8	643.5	37.22	18.289		
4,208.0	4,174.9	4,475.9	4,163.6	10.7	27.9	54.23	86.6	993.8	680.7	643.5	37.28	18.258		
4,300.0	4,265.7	4,556.5	4,234.7	11.0	28.6	58.12	48.9	989.6	682.5	644.5	38.00	17.959		
4,400.0	4,364.4	4,640.4	4,308.5	11.3	29.3	62.19	9.3	984.5	688.6	650.1	38.51	17.879		
4,500.0	4,463.2	4,725.7	4,384.4	11.7	30.0	66.13	-29.4	979.9	699.1	660.3	38.79	18.021		
4,600.0	4,561.9	4,826.4	4,475.9	12.0	30.7	70.35	-71.1	975.8	712.7	673.6	39.05	18.251		
4,700.0	4,660.6	4,933.4	4,575.2	12.3	31.4	74.37	-110.8	971.7	727.4	688.2	39.22	18.549		
4,800.0	4,759.3	5,044.5	4,679.8	12.6	32.1	78.18	-147.6	966.2	741.8	702.5	39.30	18.875		
4,900.0	4,858.1	5,149.9	4,780.1	13.0	32.6	81.48	-179.6	961.4	757.0	717.7	39.23	19.294		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,000.0	4,956.8	5,265.5	4,891.8	13.3	33.2	84.66	-209.4	956.8	771.4	732.2	39.19	19.684		
5,100.0	5,055.5	5,387.8	5,011.4	13.6	33.6	87.53	-234.7	952.9	784.1	744.9	39.12	20.040		
5,200.0	5,154.2	5,497.5	5,119.4	13.9	34.0	89.79	-253.1	950.1	795.4	756.4	39.01	20.389		
5,300.0	5,253.0	5,629.1	5,249.8	14.3	34.3	92.26	-270.7	946.4	804.9	766.0	38.93	20.679		
5,400.0	5,351.7	5,746.2	5,366.3	14.6	34.5	94.21	-281.5	942.9	811.8	773.0	38.80	20.925		
5,500.0	5,450.4	5,860.6	5,480.6	14.9	34.7	95.88	-287.9	940.3	816.7	778.0	38.67	21.120		
5,600.0	5,549.1	5,977.8	5,597.6	15.3	34.8	97.41	-291.3	938.4	820.2	781.6	38.56	21.269		
5,700.0	5,647.9	6,088.5	5,708.3	15.6	34.8	98.77	-291.8	936.4	821.9	783.4	38.46	21.371		
5,800.0	5,746.6	6,186.1	5,806.0	15.9	34.9	99.94	-291.6	934.6	823.5	785.2	38.37	21.465		
5,900.0	5,845.3	6,283.5	5,903.3	16.2	34.9	101.10	-291.7	932.9	825.7	787.4	38.27	21.573		
6,000.0	5,944.1	6,381.3	6,001.1	16.6	35.0	102.26	-291.8	931.3	828.3	790.1	38.17	21.698		
6,100.0	6,042.8	6,479.5	6,099.3	16.9	35.1	103.42	-291.9	929.7	831.2	793.2	38.07	21.834		
6,200.0	6,141.5	6,579.5	6,199.2	17.2	35.1	104.56	-291.9	928.4	834.5	796.6	37.97	21.981		
6,300.0	6,240.2	6,679.2	6,299.0	17.5	35.1	105.64	-291.3	927.6	837.9	800.1	37.88	22.120		
6,400.0	6,339.0	6,775.8	6,395.6	17.9	35.2	106.67	-290.9	927.1	841.7	803.9	37.81	22.261		
6,500.0	6,437.7	6,872.9	6,492.6	18.2	35.3	107.71	-290.7	926.4	846.1	808.3	37.74	22.417		
6,600.0	6,536.4	6,970.8	6,590.5	18.5	35.3	108.76	-290.6	925.7	850.8	813.1	37.67	22.584		
6,700.0	6,635.1	7,069.0	6,688.7	18.9	35.4	109.81	-290.7	924.8	855.9	818.3	37.61	22.758		
6,800.0	6,733.9	7,167.3	6,787.0	19.2	35.5	110.86	-290.9	923.6	861.3	823.8	37.54	22.941		
6,900.0	6,832.6	7,265.9	6,885.6	19.5	35.5	111.92	-291.2	922.2	867.1	829.6	37.48	23.132		
7,000.0	6,931.3	7,364.6	6,984.3	19.8	35.6	112.98	-291.5	920.8	873.1	835.7	37.43	23.327		
7,100.0	7,030.0	7,464.9	7,084.6	20.2	35.7	114.05	-291.7	919.1	879.3	841.9	37.38	23.522		
7,191.8	7,120.7	7,556.8	7,176.5	20.5	35.7	115.02	-291.8	917.4	885.1	847.8	37.35	23.700		
7,200.0	7,128.8	7,564.9	7,184.6	20.5	35.7	110.71	-291.8	917.2	885.6	848.2	37.34	23.715		
7,250.0	7,178.3	7,614.7	7,234.4	20.6	35.8	76.60	-291.8	916.3	885.9	848.6	37.33	23.733		
7,300.0	7,227.8	7,664.5	7,284.2	20.7	35.8	45.27	-291.8	915.3	882.0	844.7	37.33	23.629		
7,350.0	7,276.8	7,713.9	7,333.6	20.8	35.8	27.78	-291.7	914.4	873.8	836.5	37.34	23.403		
7,400.0	7,325.1	7,763.4	7,383.1	20.8	35.9	18.50	-291.6	913.4	861.4	824.1	37.36	23.059		
7,450.0	7,372.2	7,811.6	7,431.3	20.8	35.9	13.05	-291.4	912.5	844.8	807.5	37.39	22.597		
7,500.0	7,417.7	7,858.2	7,477.8	20.8	35.9	9.51	-291.2	911.6	824.2	786.8	37.42	22.023		
7,550.0	7,461.4	7,902.4	7,522.0	20.7	35.9	7.00	-290.8	910.7	799.7	762.2	37.47	21.343		
7,600.0	7,502.9	7,943.7	7,563.3	20.7	36.0	5.04	-290.5	910.0	771.5	733.9	37.52	20.562		
7,650.0	7,541.9	7,982.4	7,602.0	20.6	36.0	3.38	-290.2	909.5	739.8	702.2	37.58	19.685		
7,700.0	7,578.0	8,018.3	7,637.9	20.5	36.0	1.82	-289.9	909.1	704.9	667.2	37.66	18.720		
7,750.0	7,611.1	8,051.0	7,670.6	20.4	36.0	0.21	-289.5	908.8	667.1	629.3	37.74	17.675		
7,800.0	7,640.8	8,080.2	7,699.8	20.4	36.0	-1.64	-289.2	908.6	626.5	588.7	37.84	16.559		
7,850.0	7,667.0	8,105.9	7,725.5	20.3	36.1	-3.98	-289.0	908.5	583.7	545.7	37.95	15.381		
7,900.0	7,689.4	8,127.7	7,747.3	20.3	36.1	-7.25	-288.8	908.4	538.8	500.7	38.08	14.151		
7,950.0	7,707.9	8,145.6	7,765.2	20.3	36.1	-12.31	-288.6	908.3	492.2	454.0	38.23	12.876		
8,000.0	7,722.2	8,159.5	7,779.1	20.3	36.1	-20.96	-288.4	908.2	444.3	405.9	38.41	11.569		
8,050.0	7,732.4	8,169.1	7,788.7	20.3	36.1	-37.18	-288.3	908.2	395.6	356.9	38.64	10.237		
8,100.0	7,738.4	8,174.5	7,794.1	20.4	36.1	-65.76	-288.3	908.2	346.3	307.3	38.94	8.892		
8,143.7	7,740.0	8,175.7	7,795.3	20.5	36.1	-93.59	-288.3	908.2	303.2	263.9	39.29	7.715		
8,200.0	7,740.0	8,175.1	7,794.7	20.6	36.1	-92.95	-288.3	908.2	247.9	207.9	39.93	6.208		
8,300.0	7,740.0	8,174.1	7,793.7	21.0	36.1	-91.81	-288.3	908.2	151.6	109.5	42.10	3.602		
8,400.0	7,740.0	8,173.0	7,792.6	21.5	36.1	-90.66	-288.3	908.2	67.3	18.9	48.41	1.391 Level 3		
8,442.3	7,740.0	8,172.6	7,792.2	21.8	36.1	-90.18	-288.3	908.2	52.4	1.0	51.36	1.020 Level 2, CC, ES, SF		
8,443.7	7,740.0	8,172.6	7,792.2	21.8	36.1	-90.16	-288.3	908.2	52.4	1.1	51.34	1.021 Level 2		
8,500.0	7,740.0	8,172.0	7,791.6	22.2	36.1	-89.52	-288.3	908.2	78.1	34.9	43.25	1.806		
8,600.0	7,740.0	8,170.9	7,790.5	22.9	36.1	-88.31	-288.3	908.2	166.8	129.8	37.05	4.503		
8,700.0	7,740.0	8,169.9	7,789.5	23.7	36.1	-86.91	-288.3	908.2	264.1	227.5	36.57	7.222		
8,800.0	7,740.0	8,168.9	7,788.5	24.6	36.1	-85.08	-288.3	908.2	363.1	326.4	36.66	9.903		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
8,843.7	7,740.0	8,168.4	7,788.0	25.1	36.1	-84.04	-288.3	908.2	406.5	369.8	36.73	11.068		
8,900.0	7,740.0	8,167.8	7,787.4	25.6	36.1	-83.19	-288.3	908.2	462.6	425.8	36.82	12.564		
9,000.0	7,740.0	8,166.8	7,786.4	26.7	36.1	-81.69	-288.4	908.2	562.3	525.3	36.98	15.206		
9,100.0	7,740.0	8,165.8	7,785.4	27.8	36.1	-80.19	-288.4	908.2	662.1	625.0	37.13	17.831		
9,200.0	7,740.0	8,164.8	7,784.4	29.0	36.1	-78.72	-288.4	908.2	762.0	724.7	37.28	20.440		
9,300.0	7,740.0	8,163.8	7,783.3	30.2	36.1	-77.25	-288.4	908.2	861.8	824.4	37.42	23.032		
9,343.7	7,740.0	8,163.3	7,782.9	30.8	36.1	-76.62	-288.4	908.2	905.5	868.0	37.48	24.160		
9,400.7	7,740.0	8,162.7	7,782.3	31.6	36.1	-78.49	-288.4	908.2	962.5	924.9	37.56	25.624		
9,500.0	7,740.0	8,161.7	7,781.3	32.9	36.1	-77.31	-288.4	908.2	1,061.6	1,023.9	37.70	28.161		
9,600.0	7,740.0	8,160.7	7,780.3	34.3	36.1	-76.14	-288.4	908.2	1,161.5	1,123.7	37.83	30.702		
9,700.0	7,740.0	8,159.6	7,779.2	35.7	36.1	-74.98	-288.4	908.2	1,261.4	1,223.5	37.96	33.228		
9,800.0	7,740.0	8,158.6	7,778.2	37.1	36.1	-73.84	-288.4	908.2	1,361.4	1,323.3	38.09	35.740		
9,900.0	7,740.0	8,157.6	7,777.2	38.6	36.1	-72.70	-288.4	908.2	1,461.3	1,423.1	38.22	38.237		
10,000.0	7,740.0	8,156.6	7,776.2	40.1	36.1	-71.58	-288.5	908.2	1,561.3	1,522.9	38.34	40.719		
10,100.0	7,740.0	8,155.5	7,775.1	41.6	36.1	-70.48	-288.5	908.2	1,661.2	1,622.7	38.47	43.187		
10,200.0	7,740.0	8,154.5	7,774.1	43.1	36.1	-69.39	-288.5	908.2	1,761.2	1,722.6	38.59	45.642		
10,300.0	7,740.0	8,153.5	7,773.1	44.7	36.1	-68.31	-288.5	908.3	1,861.1	1,822.4	38.71	48.082		
10,400.0	7,740.0	8,152.5	7,772.0	46.3	36.1	-67.25	-288.5	908.3	1,961.1	1,922.3	38.83	50.508		
10,500.0	7,740.0	8,151.4	7,771.0	47.8	36.1	-66.21	-288.5	908.3	2,061.1	2,022.1	38.95	52.921		
10,600.0	7,740.0	8,150.4	7,770.0	49.4	36.1	-65.19	-288.5	908.3	2,161.0	2,122.0	39.06	55.321		
10,700.0	7,740.0	8,149.4	7,769.0	51.0	36.1	-64.18	-288.5	908.3	2,261.0	2,221.8	39.18	57.707		
10,800.0	7,740.0	8,148.3	7,767.9	52.6	36.1	-63.18	-288.5	908.3	2,361.0	2,321.7	39.30	60.079		
10,900.0	7,740.0	8,147.3	7,766.9	54.2	36.1	-62.21	-288.5	908.3	2,460.9	2,421.5	39.41	62.439		
11,000.0	7,740.0	8,146.3	7,765.9	55.9	36.1	-61.25	-288.6	908.3	2,560.9	2,521.4	39.53	64.786		
11,100.0	7,740.0	8,145.3	7,764.9	57.5	36.1	-60.31	-288.6	908.3	2,660.9	2,621.3	39.64	67.120		
11,200.0	7,740.0	8,144.2	7,763.8	59.1	36.1	-59.39	-288.6	908.3	2,760.9	2,721.1	39.76	69.441		
11,300.0	7,740.0	8,143.2	7,762.8	60.8	36.1	-58.48	-288.6	908.3	2,860.9	2,821.0	39.87	71.749		
11,400.0	7,740.0	8,142.2	7,761.8	62.4	36.1	-57.59	-288.6	908.3	2,960.8	2,920.9	39.99	74.046		
11,500.0	7,740.0	8,141.1	7,760.7	64.1	36.1	-56.72	-288.6	908.3	3,060.8	3,020.7	40.10	76.329		
11,600.0	7,740.0	8,140.1	7,759.7	65.8	36.1	-55.87	-288.6	908.3	3,160.8	3,120.6	40.21	78.601		
11,700.0	7,740.0	8,139.1	7,758.7	67.4	36.1	-55.03	-288.6	908.3	3,260.8	3,220.5	40.33	80.860		
11,800.0	7,740.0	8,138.1	7,757.6	69.1	36.1	-54.21	-288.6	908.3	3,360.8	3,320.3	40.44	83.108		
11,900.0	7,740.0	8,137.0	7,756.6	70.8	36.1	-53.41	-288.7	908.3	3,460.8	3,420.2	40.55	85.343		
12,000.0	7,740.0	8,136.0	7,755.6	72.5	36.1	-52.62	-288.7	908.3	3,560.7	3,520.1	40.66	87.567		
12,100.0	7,740.0	8,135.0	7,754.6	74.1	36.1	-51.85	-288.7	908.3	3,660.7	3,620.0	40.78	89.779		
12,200.0	7,740.0	8,133.9	7,753.5	75.8	36.1	-51.09	-288.7	908.3	3,760.7	3,719.8	40.89	91.979		
12,300.0	7,740.0	8,132.9	7,752.5	77.5	36.1	-50.35	-288.7	908.3	3,860.7	3,819.7	41.00	94.168		
12,400.0	7,740.0	8,131.9	7,751.5	79.2	36.1	-49.63	-288.7	908.4	3,960.7	3,919.6	41.11	96.345		
12,500.0	7,740.0	8,130.8	7,750.4	80.9	36.1	-48.92	-288.7	908.4	4,060.7	4,019.5	41.22	98.512		
12,600.0	7,740.0	8,129.8	7,749.4	82.6	36.1	-48.23	-288.7	908.4	4,160.7	4,119.3	41.33	100.667		
12,700.0	7,740.0	8,128.8	7,748.4	84.3	36.1	-47.55	-288.7	908.4	4,260.7	4,219.2	41.44	102.811		
12,800.0	7,740.0	8,127.7	7,747.3	86.0	36.1	-46.89	-288.8	908.4	4,360.6	4,319.1	41.55	104.944		
12,900.0	7,740.0	8,126.7	7,746.3	87.7	36.1	-46.24	-288.8	908.4	4,460.6	4,419.0	41.66	107.066		
13,000.0	7,740.0	8,125.7	7,745.3	89.4	36.1	-45.60	-288.8	908.4	4,560.6	4,518.8	41.77	109.177		
13,100.0	7,740.0	8,124.7	7,744.3	91.1	36.1	-44.98	-288.8	908.4	4,660.6	4,618.7	41.88	111.278		
13,200.0	7,740.0	8,123.6	7,743.2	92.8	36.1	-44.37	-288.8	908.4	4,760.6	4,718.6	41.99	113.368		
13,300.0	7,740.0	8,122.6	7,742.2	94.5	36.1	-43.77	-288.8	908.4	4,860.6	4,818.5	42.10	115.447		
13,400.0	7,740.0	8,121.6	7,741.2	96.3	36.1	-43.19	-288.8	908.4	4,960.6	4,918.4	42.21	117.516		
13,500.0	7,740.0	8,120.5	7,740.1	98.0	36.1	-42.62	-288.8	908.4	5,060.6	5,018.2	42.32	119.575		
13,600.0	7,740.0	8,119.5	7,739.1	99.7	36.1	-42.06	-288.8	908.4	5,160.6	5,118.1	42.43	121.624		
13,700.0	7,740.0	8,118.5	7,738.1	101.4	36.1	-41.51	-288.8	908.4	5,260.6	5,218.0	42.54	123.662		
13,800.0	7,740.0	8,117.4	7,737.0	103.1	36.1	-40.98	-288.9	908.4	5,360.5	5,317.9	42.65	125.690		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,740.0	8,116.4	7,736.0	104.8	36.1	-40.46	-288.9	908.4	5,460.5	5,417.8	42.76	127.708		
14,000.0	7,740.0	8,115.4	7,735.0	106.6	36.1	-39.94	-288.9	908.4	5,560.5	5,517.7	42.87	129.717		
14,100.0	7,740.0	8,114.3	7,733.9	108.3	36.1	-39.44	-288.9	908.4	5,660.5	5,617.5	42.98	131.715		
14,200.0	7,740.0	8,113.3	7,732.9	110.0	36.1	-38.95	-288.9	908.4	5,760.5	5,717.4	43.08	133.704		
14,300.0	7,740.0	8,112.3	7,731.9	111.7	36.1	-38.47	-288.9	908.5	5,860.5	5,817.3	43.19	135.683		
14,400.0	7,740.0	8,111.2	7,730.8	113.5	36.1	-38.00	-288.9	908.5	5,960.5	5,917.2	43.30	137.652		
14,500.0	7,740.0	8,110.2	7,729.8	115.2	36.1	-37.54	-288.9	908.5	6,060.5	6,017.1	43.41	139.612		
14,600.0	7,740.0	8,109.2	7,728.8	116.9	36.1	-37.08	-288.9	908.5	6,160.5	6,117.0	43.52	141.563		
14,700.0	7,740.0	8,108.1	7,727.7	118.6	36.1	-36.64	-289.0	908.5	6,260.5	6,216.8	43.63	143.504		
14,800.0	7,740.0	8,107.1	7,726.7	120.4	36.1	-36.21	-289.0	908.5	6,360.5	6,316.7	43.73	145.436		
14,900.0	7,740.0	8,106.1	7,725.7	122.1	36.1	-35.78	-289.0	908.5	6,460.4	6,416.6	43.84	147.359		
15,000.0	7,740.0	8,105.0	7,724.6	123.8	36.1	-35.37	-289.0	908.5	6,560.4	6,516.5	43.95	149.272		
15,100.0	7,740.0	8,104.0	7,723.6	125.6	36.1	-34.96	-289.0	908.5	6,660.4	6,616.4	44.06	151.177		
15,200.0	7,740.0	8,103.0	7,722.6	127.3	36.1	-34.56	-289.0	908.5	6,760.4	6,716.3	44.16	153.072		
15,300.0	7,740.0	8,101.9	7,721.5	129.0	36.1	-34.17	-289.0	908.5	6,860.4	6,816.1	44.27	154.959		
15,400.0	7,740.0	8,100.9	7,720.5	130.7	36.1	-33.79	-289.0	908.5	6,960.4	6,916.0	44.38	156.836		
15,500.0	7,740.0	8,099.9	7,719.5	132.5	36.1	-33.41	-289.0	908.5	7,060.4	7,015.9	44.49	158.705		
15,600.0	7,740.0	8,098.8	7,718.4	134.2	36.1	-33.04	-289.0	908.5	7,160.4	7,115.8	44.59	160.566		
15,700.0	7,740.0	8,097.8	7,717.4	135.9	36.1	-32.68	-289.1	908.5	7,260.4	7,215.7	44.70	162.417		
15,800.0	7,740.0	8,096.8	7,716.4	137.7	36.1	-32.32	-289.1	908.5	7,360.4	7,315.6	44.81	164.260		
15,900.0	7,740.0	8,095.7	7,715.3	139.4	36.1	-31.98	-289.1	908.5	7,460.4	7,415.5	44.92	166.094		
16,000.0	7,740.0	8,094.7	7,714.3	141.1	36.0	-31.64	-289.1	908.6	7,560.4	7,515.3	45.02	167.920		
16,084.2	7,740.0	8,093.8	7,713.4	142.6	36.0	-31.35	-289.1	908.6	7,644.6	7,599.4	45.11	169.451		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL											Offset Site Error: 0.0 ft		
Survey Program: 100-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	33.0	33.0	0.0	0.1	46.42	801.1	841.9	1,162.1				
100.0	100.0	121.7	121.7	0.2	0.2	46.45	801.3	842.9	1,163.1	1,162.8	0.37	3,186.289	
200.0	200.0	219.7	219.7	0.3	0.4	46.51	801.6	844.9	1,164.7	1,164.0	0.71	1,636.317	
300.0	300.0	332.7	332.6	0.5	0.6	46.55	801.7	846.2	1,165.7	1,164.6	1.08	1,076.002	
400.0	400.0	436.3	436.2	0.7	0.8	46.55	801.8	846.4	1,165.9	1,164.4	1.44	810.715	
500.0	500.0	535.9	535.9	0.8	0.9	46.53	802.3	846.3	1,166.1	1,164.4	1.79	652.921	
600.0	600.0	639.7	639.7	1.0	1.1	46.52	802.3	846.2	1,166.1	1,164.0	2.14	544.511	
700.0	700.0	744.9	744.8	1.2	1.3	46.52	802.3	845.9	1,165.9	1,163.4	2.50	466.470	
800.0	800.0	849.1	849.1	1.4	1.5	46.48	802.2	844.6	1,164.9	1,162.1	2.86	407.956	
900.0	900.0	949.3	949.2	1.5	1.7	46.43	802.3	843.3	1,164.1	1,160.9	3.20	363.221	
1,000.0	1,000.0	1,051.2	1,051.1	1.7	1.8	46.40	802.0	842.1	1,162.9	1,159.4	3.56	326.935	
1,100.0	1,100.0	1,152.9	1,152.8	1.9	2.0	-5.04	801.6	840.8	1,160.9	1,157.0	3.91	296.963	
1,200.0	1,200.0	1,255.0	1,254.9	2.1	2.2	-5.10	801.3	839.1	1,156.9	1,152.7	4.26	271.427	
1,300.0	1,299.9	1,351.1	1,351.0	2.3	2.4	-5.18	801.2	837.4	1,151.2	1,146.6	4.61	249.980	
1,400.0	1,399.7	1,446.4	1,446.3	2.4	2.5	-5.28	801.6	835.9	1,144.2	1,139.3	4.95	231.306	
1,500.0	1,499.4	1,547.2	1,547.0	2.6	2.7	-5.40	802.1	834.3	1,135.7	1,130.4	5.30	214.353	
1,600.0	1,598.9	1,645.2	1,645.1	2.8	2.9	-5.52	802.5	832.7	1,125.2	1,119.6	5.64	199.331	
1,700.0	1,698.3	1,739.8	1,739.7	3.1	3.0	-5.66	803.2	831.4	1,113.5	1,107.5	5.99	186.010	
1,800.0	1,797.4	1,838.7	1,838.5	3.3	3.2	-5.82	804.1	830.1	1,100.3	1,093.9	6.34	173.667	
1,900.0	1,896.3	1,936.5	1,936.3	3.6	3.4	-6.01	805.2	828.7	1,085.3	1,078.6	6.68	162.384	
1,915.7	1,911.9	1,951.4	1,951.2	3.6	3.4	-6.04	805.4	828.5	1,082.8	1,076.0	6.74	160.713	
2,000.0	1,995.0	2,029.8	2,029.6	3.8	3.6	-6.20	806.5	827.4	1,069.5	1,062.5	7.02	152.261	
2,100.0	2,093.8	2,121.4	2,121.2	4.1	3.7	-6.39	808.3	826.6	1,054.4	1,047.0	7.36	143.210	
2,200.0	2,192.5	2,216.3	2,216.1	4.4	3.9	-6.59	810.4	826.0	1,039.7	1,032.0	7.71	134.913	
2,300.0	2,291.2	2,314.3	2,314.0	4.7	4.1	-6.79	812.7	825.8	1,025.4	1,017.3	8.06	127.275	
2,400.0	2,389.9	2,418.0	2,417.7	5.0	4.2	-6.99	814.8	825.5	1,010.8	1,002.4	8.42	120.113	
2,500.0	2,488.7	2,520.5	2,520.2	5.3	4.4	-7.17	816.1	825.3	995.8	987.0	8.77	113.525	
2,600.0	2,587.4	2,621.2	2,620.9	5.6	4.6	-7.34	817.2	825.1	980.6	971.4	9.12	107.460	
2,700.0	2,686.1	2,721.9	2,721.6	5.9	4.8	-7.52	818.0	824.6	965.1	955.6	9.48	101.818	
2,800.0	2,784.8	2,819.8	2,819.5	6.2	4.9	-7.70	818.8	824.3	949.7	939.8	9.83	96.626	
2,900.0	2,883.6	2,921.7	2,921.4	6.5	5.1	-7.89	819.6	823.7	934.1	923.9	10.18	91.712	
3,000.0	2,982.3	3,022.0	3,021.7	6.9	5.3	-8.12	820.6	822.6	918.2	907.7	10.54	87.115	
3,100.0	3,081.0	3,121.6	3,121.3	7.2	5.5	-8.36	821.4	821.4	902.3	891.4	10.89	82.817	
3,200.0	3,179.7	3,222.6	3,222.2	7.5	5.7	-8.61	822.2	820.0	886.1	874.9	11.25	78.750	
3,300.0	3,278.5	3,319.8	3,319.4	7.8	5.8	-8.88	823.0	818.4	869.9	858.3	11.61	74.955	
3,400.0	3,377.2	3,414.5	3,414.1	8.1	6.0	-9.17	824.2	817.0	854.1	842.2	11.96	71.430	
3,500.0	3,475.9	3,509.0	3,508.6	8.4	6.2	-9.44	825.5	816.1	838.8	826.5	12.31	68.147	
3,600.0	3,574.6	3,600.0	3,599.6	8.8	6.3	-9.70	827.1	815.8	824.1	811.4	12.65	65.120	
3,700.0	3,673.4	3,693.6	3,693.1	9.1	6.5	-9.98	829.4	815.8	810.2	797.2	13.01	62.294	
3,800.0	3,772.1	3,799.4	3,798.9	9.4	6.7	-10.34	832.2	815.6	796.4	783.0	13.38	59.529	
3,900.0	3,870.8	3,904.7	3,904.2	9.7	6.9	-10.69	834.0	815.0	781.7	768.0	13.75	56.863	
4,000.0	3,969.5	4,008.4	4,007.9	10.0	7.0	-11.02	835.1	814.3	766.4	752.3	14.12	54.295	
4,100.0	4,068.3	4,116.2	4,115.6	10.4	7.2	-11.39	835.5	812.6	750.0	735.5	14.49	51.767	
4,200.0	4,167.0	4,212.9	4,212.4	10.7	7.4	-11.77	835.8	810.5	733.3	718.5	14.85	49.372	
4,300.0	4,265.7	4,311.5	4,310.9	11.0	7.6	-12.15	836.0	808.7	716.7	701.5	15.22	47.096	
4,400.0	4,364.4	4,408.8	4,408.2	11.3	7.7	-12.51	836.0	807.4	700.3	684.7	15.58	44.936	
4,500.0	4,463.2	4,508.8	4,508.2	11.7	7.9	-12.96	836.4	805.3	683.8	667.8	15.96	42.845	
4,600.0	4,561.9	4,600.7	4,600.1	12.0	8.1	-13.48	837.7	802.9	667.8	651.4	16.33	40.883	
4,700.0	4,660.6	4,702.0	4,701.3	12.3	8.3	-14.04	839.1	800.7	652.1	635.4	16.72	39.006	
4,800.0	4,759.3	4,802.7	4,802.0	12.6	8.4	-14.59	839.9	798.7	636.1	619.0	17.10	37.192	
4,900.0	4,858.1	4,901.6	4,900.9	13.0	8.6	-15.08	840.1	797.2	620.0	602.5	17.48	35.460	
5,000.0	4,956.8	5,002.6	5,001.9	13.3	8.8	-15.55	839.7	796.0	603.6	585.8	17.87	33.785	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL											Offset Site Error: 0.0 ft		
Survey Program: 100-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,055.5	5,097.8	5,097.1	13.6	9.0	-16.06	839.6	794.6	587.4	569.2	18.25	32.182	
5,200.0	5,154.2	5,196.8	5,196.0	13.9	9.1	-16.67	840.1	792.9	571.5	552.8	18.65	30.644	
5,300.0	5,253.0	5,297.3	5,296.6	14.3	9.3	-17.36	840.5	790.8	555.4	536.4	19.06	29.149	
5,400.0	5,351.7	5,390.1	5,389.3	14.6	9.5	-17.99	841.0	789.3	539.8	520.3	19.46	27.740	
5,500.0	5,450.4	5,491.0	5,490.2	14.9	9.7	-18.67	841.6	788.3	524.6	504.7	19.87	26.403	
5,600.0	5,549.1	5,588.9	5,588.1	15.3	9.8	-19.37	842.0	787.1	509.2	489.0	20.29	25.104	
5,700.0	5,647.9	5,688.8	5,688.0	15.6	10.0	-20.17	842.6	785.7	494.0	473.2	20.71	23.846	
5,800.0	5,746.6	5,789.2	5,788.4	15.9	10.2	-21.09	843.1	783.6	478.4	457.3	21.16	22.614	
5,900.0	5,845.3	5,886.9	5,886.1	16.2	10.4	-22.04	843.5	781.5	462.9	441.3	21.61	21.420	
6,000.0	5,944.1	5,984.8	5,983.9	16.6	10.5	-23.05	844.0	779.5	447.7	425.6	22.07	20.279	
6,100.0	6,042.8	6,086.8	6,085.9	16.9	10.7	-24.17	844.3	777.4	432.3	409.8	22.55	19.169	
6,200.0	6,141.5	6,185.7	6,184.8	17.2	10.9	-25.37	844.2	774.9	416.6	393.5	23.05	18.073	
6,300.0	6,240.2	6,283.4	6,282.5	17.5	11.1	-26.63	844.0	772.5	401.1	377.5	23.56	17.021	
6,400.0	6,339.0	6,380.6	6,379.6	17.9	11.2	-27.95	844.0	770.5	386.0	361.9	24.09	16.022	
6,500.0	6,437.7	6,476.2	6,475.2	18.2	11.4	-29.34	844.4	768.7	371.7	347.0	24.64	15.081	
6,600.0	6,536.4	6,574.6	6,573.6	18.5	11.6	-30.91	845.5	766.9	358.1	332.9	25.22	14.200	
6,700.0	6,635.1	6,673.3	6,672.3	18.9	11.8	-32.49	846.1	765.7	344.7	318.9	25.81	13.357	
6,800.0	6,733.9	6,773.1	6,772.1	19.2	11.9	-34.24	846.7	764.3	331.5	305.1	26.43	12.545	
6,900.0	6,832.6	6,872.7	6,871.7	19.5	12.1	-36.10	846.9	763.0	318.2	291.2	27.07	11.755	
7,000.0	6,931.3	6,970.7	6,969.6	19.8	12.3	-38.22	847.1	760.9	305.2	277.5	27.77	10.991	
7,100.0	7,030.0	7,070.3	7,069.2	20.2	12.5	-40.58	847.4	758.7	292.7	264.2	28.50	10.270	
7,191.8	7,120.7	7,161.8	7,160.7	20.5	12.6	-42.82	847.2	757.2	281.2	252.0	29.20	9.631	
7,200.0	7,128.8	7,169.9	7,168.8	20.5	12.6	-47.46	847.1	757.0	280.2	251.0	29.26	9.576	
7,250.0	7,178.3	7,219.9	7,218.7	20.6	12.7	-83.65	846.9	755.8	276.9	247.2	29.70	9.323	
7,263.7	7,191.8	7,233.7	7,232.5	20.6	12.7	-94.09	846.8	755.4	276.7	246.9	29.83	9.278 CC, ES	
7,300.0	7,227.8	7,270.2	7,269.1	20.7	12.8	-117.12	846.6	754.2	277.9	247.7	30.17	9.210 SF	
7,350.0	7,276.8	7,322.2	7,321.0	20.8	12.9	-136.80	845.9	752.4	283.2	252.5	30.66	9.235	
7,400.0	7,325.1	7,376.6	7,375.3	20.8	13.0	-148.35	844.3	750.2	292.2	261.0	31.14	9.382	
7,450.0	7,372.2	7,431.9	7,430.5	20.8	13.1	-155.96	841.4	748.0	304.6	273.1	31.57	9.648	
7,500.0	7,417.7	7,488.5	7,486.9	20.8	13.2	-161.23	836.7	747.4	320.1	288.2	31.91	10.032	
7,550.0	7,461.4	7,531.2	7,529.5	20.7	13.3	-164.71	832.6	748.0	339.1	306.9	32.26	10.512	
7,600.0	7,502.9	7,568.5	7,566.5	20.7	13.3	-167.25	829.7	748.9	363.0	330.4	32.58	11.140	
7,650.0	7,541.9	7,600.0	7,598.0	20.6	13.4	-169.16	827.7	750.0	391.4	358.5	32.86	11.908	
7,700.0	7,578.0	7,636.5	7,634.4	20.5	13.4	-170.84	826.0	751.2	423.7	390.6	33.08	12.808	
7,750.0	7,611.1	7,666.5	7,664.4	20.4	13.5	-172.26	825.0	752.0	459.7	426.4	33.28	13.812	
7,800.0	7,640.8	7,700.0	7,697.9	20.4	13.5	-173.64	824.1	752.7	499.0	465.5	33.45	14.917	
7,850.0	7,667.0	7,718.0	7,715.9	20.3	13.6	-174.79	823.7	753.0	540.9	507.3	33.60	16.099	
7,900.0	7,689.4	7,740.2	7,738.1	20.3	13.6	-176.08	823.3	753.4	585.1	551.4	33.72	17.352	
7,950.0	7,707.9	7,758.5	7,756.4	20.3	13.6	-177.55	823.1	753.7	631.2	597.4	33.82	18.662	
8,000.0	7,722.2	7,772.8	7,770.7	20.3	13.7	-179.56	822.9	754.0	678.8	644.9	33.91	20.019	
8,050.0	7,732.4	7,783.1	7,780.9	20.3	13.7	176.92	822.7	754.2	727.6	693.6	33.98	21.411	
8,100.0	7,738.4	7,789.2	7,787.1	20.4	13.7	167.40	822.7	754.4	777.1	743.1	34.04	22.829	
8,143.7	7,740.0	7,791.3	7,789.2	20.5	13.7	115.47	822.6	754.4	820.7	786.7	34.08	24.080	
8,200.0	7,740.0	7,792.0	7,789.9	20.6	13.7	116.82	822.6	754.4	877.0	842.9	34.14	25.691	
8,300.0	7,740.0	7,793.2	7,791.1	21.0	13.7	119.12	822.6	754.5	977.0	942.8	34.24	28.537	
8,400.0	7,740.0	7,794.4	7,792.2	21.5	13.7	121.29	822.6	754.5	1,077.0	1,042.6	34.34	31.361	
8,443.7	7,740.0	7,794.9	7,792.7	21.8	13.7	122.20	822.6	754.5	1,120.6	1,086.2	34.39	32.589	
8,500.0	7,740.0	7,800.0	7,797.9	22.2	13.7	119.86	822.5	754.6	1,176.9	1,142.5	34.45	34.164	
8,600.0	7,740.0	7,800.0	7,797.9	22.9	13.7	109.53	822.5	754.6	1,276.9	1,242.3	34.53	36.973	
8,700.0	7,740.0	7,800.0	7,797.9	23.7	13.7	104.09	822.5	754.6	1,376.7	1,342.1	34.61	39.775	
8,800.0	7,740.0	7,800.0	7,797.9	24.6	13.7	100.82	822.5	754.6	1,476.5	1,441.8	34.69	42.568	
8,843.7	7,740.0	7,800.0	7,797.9	25.1	13.7	99.77	822.5	754.6	1,520.1	1,485.3	34.72	43.783	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
8,900.0	7,740.0	7,800.0	7,797.9	25.6	13.7	99.77	822.5	754.6	1,576.2	1,541.5	34.76	45.341		
9,000.0	7,740.0	7,800.0	7,797.9	26.7	13.7	99.77	822.5	754.6	1,676.0	1,641.1	34.85	48.094		
9,100.0	7,740.0	7,800.0	7,797.9	27.8	13.7	99.77	822.5	754.6	1,775.7	1,740.8	34.94	50.828		
9,200.0	7,740.0	7,800.0	7,797.9	29.0	13.7	99.77	822.5	754.6	1,875.5	1,840.5	35.03	53.544		
9,300.0	7,740.0	7,800.0	7,797.9	30.2	13.7	99.77	822.5	754.6	1,975.3	1,940.2	35.12	56.241		
9,343.7	7,740.0	7,800.0	7,797.9	30.8	13.7	99.77	822.5	754.6	2,018.9	1,983.8	35.16	57.414		
9,400.7	7,740.0	7,800.0	7,797.9	31.6	13.7	101.81	822.5	754.6	2,075.9	2,040.7	35.23	58.932		
9,500.0	7,740.0	7,800.0	7,797.9	32.9	13.7	101.81	822.5	754.6	2,175.1	2,139.7	35.33	61.569		
9,600.0	7,740.0	7,800.0	7,797.9	34.3	13.7	101.81	822.5	754.6	2,275.0	2,239.5	35.43	64.206		
9,700.0	7,740.0	7,800.0	7,797.9	35.7	13.7	101.81	822.5	754.6	2,374.9	2,339.4	35.54	66.826		
9,800.0	7,740.0	7,807.9	7,805.7	37.1	13.7	106.31	822.4	754.8	2,474.8	2,439.1	35.66	69.393		
9,900.0	7,740.0	7,808.8	7,806.6	38.6	13.7	106.79	822.4	754.8	2,574.7	2,538.9	35.77	71.973		
10,000.0	7,740.0	7,809.6	7,807.5	40.1	13.7	107.27	822.4	754.8	2,674.7	2,638.8	35.88	74.535		
10,100.0	7,740.0	7,810.5	7,808.3	41.6	13.7	107.74	822.4	754.8	2,774.6	2,738.6	36.00	77.079		
10,200.0	7,740.0	7,811.3	7,809.2	43.1	13.7	108.20	822.4	754.8	2,874.5	2,838.4	36.11	79.607		
10,300.0	7,740.0	7,812.1	7,810.0	44.7	13.7	108.65	822.4	754.9	2,974.5	2,938.2	36.22	82.118		
10,400.0	7,740.0	7,812.9	7,810.8	46.3	13.7	109.10	822.4	754.9	3,074.4	3,038.1	36.33	84.613		
10,500.0	7,740.0	7,813.8	7,811.6	47.8	13.7	109.54	822.4	754.9	3,174.4	3,137.9	36.45	87.091		
10,600.0	7,740.0	7,814.6	7,812.4	49.4	13.7	109.97	822.4	754.9	3,274.3	3,237.7	36.56	89.553		
10,700.0	7,740.0	7,815.3	7,813.2	51.0	13.7	110.39	822.4	754.9	3,374.3	3,337.6	36.68	91.999		
10,800.0	7,740.0	7,816.1	7,814.0	52.6	13.7	110.81	822.4	755.0	3,474.2	3,437.4	36.79	94.429		
10,900.0	7,740.0	7,816.9	7,814.7	54.2	13.7	111.22	822.4	755.0	3,574.2	3,537.3	36.91	96.844		
11,000.0	7,740.0	7,817.7	7,815.5	55.9	13.7	111.62	822.4	755.0	3,674.1	3,637.1	37.02	99.243		
11,100.0	7,740.0	7,818.4	7,816.3	57.5	13.7	112.02	822.3	755.0	3,774.1	3,737.0	37.14	101.627		
11,200.0	7,740.0	7,819.1	7,817.0	59.1	13.7	112.41	822.3	755.0	3,874.1	3,836.8	37.25	103.996		
11,300.0	7,740.0	7,819.9	7,817.7	60.8	13.7	112.79	822.3	755.0	3,974.0	3,936.7	37.37	106.350		
11,400.0	7,740.0	7,820.6	7,818.5	62.4	13.7	113.17	822.3	755.0	4,074.0	4,036.5	37.48	108.690		
11,500.0	7,740.0	7,821.3	7,819.2	64.1	13.7	113.54	822.3	755.1	4,174.0	4,136.4	37.60	111.015		
11,600.0	7,740.0	7,822.0	7,819.9	65.8	13.7	113.90	822.3	755.1	4,273.9	4,236.2	37.71	113.325		
11,700.0	7,740.0	7,822.7	7,820.6	67.4	13.7	114.26	822.3	755.1	4,373.9	4,336.1	37.83	115.621		
11,800.0	7,740.0	7,823.4	7,821.3	69.1	13.7	114.61	822.3	755.1	4,473.9	4,435.9	37.95	117.904		
11,900.0	7,740.0	7,824.1	7,822.0	70.8	13.7	114.96	822.3	755.1	4,573.9	4,535.8	38.06	120.172		
12,000.0	7,740.0	7,824.8	7,822.7	72.5	13.7	115.30	822.3	755.1	4,673.8	4,635.7	38.18	122.426		
12,100.0	7,740.0	7,825.5	7,823.3	74.1	13.7	115.64	822.3	755.2	4,773.8	4,735.5	38.29	124.668		
12,200.0	7,740.0	7,826.1	7,824.0	75.8	13.7	115.97	822.3	755.2	4,873.8	4,835.4	38.41	126.895		
12,300.0	7,740.0	7,826.8	7,824.7	77.5	13.7	116.29	822.3	755.2	4,973.8	4,935.2	38.52	129.109		
12,400.0	7,740.0	7,827.4	7,825.3	79.2	13.7	116.61	822.3	755.2	5,073.7	5,035.1	38.64	131.311		
12,500.0	7,740.0	7,828.1	7,825.9	80.9	13.7	116.92	822.3	755.2	5,173.7	5,135.0	38.75	133.499		
12,600.0	7,740.0	7,828.7	7,826.6	82.6	13.8	117.23	822.3	755.2	5,273.7	5,234.8	38.87	135.674		
12,700.0	7,740.0	7,829.4	7,827.2	84.3	13.8	117.54	822.2	755.2	5,373.7	5,334.7	38.99	137.837		
12,800.0	7,740.0	7,830.0	7,827.8	86.0	13.8	117.84	822.2	755.2	5,473.7	5,434.6	39.10	139.987		
12,900.0	7,740.0	7,830.6	7,828.4	87.7	13.8	118.13	822.2	755.3	5,573.6	5,534.4	39.22	142.124		
13,000.0	7,740.0	7,831.2	7,829.1	89.4	13.8	118.42	822.2	755.3	5,673.6	5,634.3	39.33	144.250		
13,100.0	7,740.0	7,831.8	7,829.7	91.1	13.8	118.71	822.2	755.3	5,773.6	5,734.2	39.45	146.363		
13,200.0	7,740.0	7,832.4	7,830.3	92.8	13.8	118.99	822.2	755.3	5,873.6	5,834.0	39.56	148.464		
13,300.0	7,740.0	7,833.0	7,830.9	94.5	13.8	119.27	822.2	755.3	5,973.6	5,933.9	39.68	150.553		
13,400.0	7,740.0	7,833.6	7,831.4	96.3	13.8	119.54	822.2	755.3	6,073.6	6,033.8	39.79	152.630		
13,500.0	7,740.0	7,834.2	7,832.0	98.0	13.8	119.81	822.2	755.3	6,173.5	6,133.6	39.91	154.696		
13,600.0	7,740.0	7,834.7	7,832.6	99.7	13.8	120.07	822.2	755.3	6,273.5	6,233.5	40.02	156.750		
13,700.0	7,740.0	7,835.3	7,833.2	101.4	13.8	120.34	822.2	755.4	6,373.5	6,333.4	40.14	158.792		
13,800.0	7,740.0	7,835.9	7,833.7	103.1	13.8	120.59	822.2	755.4	6,473.5	6,433.2	40.25	160.824		
13,900.0	7,740.0	7,836.4	7,834.3	104.8	13.8	120.85	822.2	755.4	6,573.5	6,533.1	40.37	162.844		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	7,837.0	7,834.8	106.6	13.8	121.09	822.2	755.4	6,673.5	6,633.0	40.48	164.853		
14,100.0	7,740.0	7,837.5	7,835.4	108.3	13.8	121.34	822.2	755.4	6,773.4	6,732.9	40.60	166.850		
14,200.0	7,740.0	7,838.1	7,835.9	110.0	13.8	121.58	822.2	755.4	6,873.4	6,832.7	40.71	168.837		
14,300.0	7,740.0	7,838.6	7,836.4	111.7	13.8	121.82	822.2	755.4	6,973.4	6,932.6	40.82	170.814		
14,400.0	7,740.0	7,839.1	7,837.0	113.5	13.8	122.06	822.2	755.4	7,073.4	7,032.5	40.94	172.779		
14,500.0	7,740.0	7,839.6	7,837.5	115.2	13.8	122.29	822.2	755.4	7,173.4	7,132.3	41.05	174.734		
14,600.0	7,740.0	7,840.2	7,838.0	116.9	13.8	122.51	822.2	755.5	7,273.4	7,232.2	41.17	176.678		
14,700.0	7,740.0	7,840.7	7,838.5	118.6	13.8	122.74	822.2	755.5	7,373.4	7,332.1	41.28	178.612		
14,800.0	7,740.0	7,841.2	7,839.0	120.4	13.8	122.96	822.2	755.5	7,473.4	7,432.0	41.40	180.536		
14,900.0	7,740.0	7,841.7	7,839.5	122.1	13.8	123.18	822.1	755.5	7,573.4	7,531.8	41.51	182.449		
15,000.0	7,740.0	7,842.2	7,840.0	123.8	13.8	123.39	822.1	755.5	7,673.3	7,631.7	41.62	184.353		
15,100.0	7,740.0	7,842.7	7,840.5	125.6	13.8	123.61	822.1	755.5	7,773.3	7,731.6	41.74	186.246		
15,200.0	7,740.0	7,843.2	7,841.0	127.3	13.8	123.82	822.1	755.5	7,873.3	7,831.5	41.85	188.130		
15,300.0	7,740.0	7,843.7	7,841.5	129.0	13.8	124.02	822.1	755.5	7,973.3	7,931.3	41.96	190.003		
15,400.0	7,740.0	7,844.1	7,842.0	130.7	13.8	124.23	822.1	755.5	8,073.3	8,031.2	42.08	191.867		
15,500.0	7,740.0	7,844.6	7,842.5	132.5	13.8	124.43	822.1	755.5	8,173.3	8,131.1	42.19	193.721		
15,600.0	7,740.0	7,845.1	7,842.9	134.2	13.8	124.63	822.1	755.6	8,273.3	8,231.0	42.30	195.566		
15,700.0	7,740.0	7,845.6	7,843.4	135.9	13.8	124.82	822.1	755.6	8,373.3	8,330.9	42.42	197.401		
15,800.0	7,740.0	7,846.0	7,843.9	137.7	13.8	125.01	822.1	755.6	8,473.3	8,430.7	42.53	199.227		
15,900.0	7,740.0	7,846.5	7,844.3	139.4	13.8	125.20	822.1	755.6	8,573.3	8,530.6	42.64	201.044		
16,000.0	7,740.0	7,846.9	7,844.8	141.1	13.8	125.39	822.1	755.6	8,673.2	8,630.5	42.76	202.851		
16,084.2	7,740.0	7,847.3	7,845.2	142.6	13.8	125.55	822.1	755.6	8,757.4	8,714.6	42.85	204.366		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		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	90.94	-0.4	22.7	22.7					
100.0	100.0	100.0	100.0	0.2	0.2	90.94	-0.4	22.7	22.7	22.4	0.30	74.660		
200.0	200.0	200.0	200.0	0.3	0.3	90.94	-0.4	22.7	22.7	22.0	0.65	34.735		
300.0	300.0	300.3	300.3	0.5	0.5	92.12	-0.8	21.9	21.9	20.9	1.00	21.870		
400.0	400.0	400.6	400.6	0.7	0.7	96.19	-2.1	19.6	19.6	18.4	1.35	14.590		
500.0	500.0	500.7	500.6	0.8	0.9	105.25	-4.3	15.8	16.4	14.7	1.71	9.602		
600.0	600.0	600.7	600.4	1.0	1.1	124.98	-7.4	10.5	12.9	10.8	2.09	6.168		
700.0	700.0	700.6	700.1	1.2	1.3	155.39	-10.0	4.6	11.0	8.5	2.47	4.449		
736.7	736.7	737.3	736.7	1.3	1.3	167.08	-10.5	2.4	10.8	8.2	2.60	4.149 CC, ES		
800.0	800.0	800.5	799.8	1.4	1.5	-173.47	-11.4	-1.3	11.4	8.6	2.82	4.062 SF		
900.0	900.0	900.3	899.4	1.5	1.7	-150.59	-12.7	-7.2	14.6	11.5	3.14	4.648		
1,000.0	1,000.0	1,000.1	999.0	1.7	1.9	-137.17	-14.1	-13.0	19.2	15.7	3.47	5.526		
1,100.0	1,100.0	1,099.9	1,098.6	1.9	2.1	179.44	-15.4	-18.9	25.3	21.5	3.81	6.634		
1,200.0	1,200.0	1,199.5	1,198.1	2.1	2.3	-175.94	-16.7	-24.8	33.4	29.3	4.16	8.043		
1,300.0	1,299.9	1,299.0	1,297.4	2.3	2.5	-173.41	-18.1	-30.6	43.4	38.9	4.50	9.643		
1,400.0	1,399.7	1,398.3	1,396.5	2.4	2.7	-172.07	-19.4	-36.4	55.2	50.3	4.85	11.377		
1,500.0	1,499.4	1,497.4	1,495.4	2.6	2.9	-171.42	-20.8	-42.3	68.7	63.5	5.20	13.209		
1,600.0	1,598.9	1,596.2	1,594.1	2.8	3.1	-171.16	-22.1	-48.1	83.9	78.3	5.55	15.119		
1,700.0	1,698.3	1,694.8	1,692.4	3.1	3.3	-171.12	-23.4	-53.9	100.8	94.9	5.90	17.091		
1,800.0	1,797.4	1,793.1	1,790.5	3.3	3.5	-171.22	-24.8	-59.6	119.4	113.1	6.24	19.114		
1,900.0	1,896.3	1,891.0	1,888.3	3.6	3.7	-171.39	-26.1	-65.4	139.7	133.1	6.59	21.180		
1,915.7	1,911.9	1,906.4	1,903.6	3.6	3.7	-171.42	-26.3	-66.3	143.0	136.4	6.65	21.509		
2,000.0	1,995.0	1,988.7	1,985.8	3.8	3.9	-171.60	-27.4	-71.1	161.0	154.1	6.94	23.197		
2,100.0	2,093.8	2,086.3	2,083.3	4.1	4.1	-171.76	-28.7	-76.9	182.4	175.2	7.29	25.024		
2,200.0	2,192.5	2,184.0	2,180.8	4.4	4.3	-171.89	-30.0	-82.6	203.8	196.2	7.64	26.684		
2,300.0	2,291.2	2,281.7	2,278.3	4.7	4.5	-172.00	-31.3	-88.4	225.3	217.3	7.99	28.199		
2,400.0	2,389.9	2,379.4	2,375.8	5.0	4.7	-172.08	-32.7	-94.1	246.7	238.3	8.34	29.588		
2,500.0	2,488.7	2,477.1	2,473.3	5.3	4.9	-172.15	-34.0	-99.8	268.1	259.4	8.69	30.864		
2,600.0	2,587.4	2,574.7	2,570.8	5.6	5.1	-172.22	-35.3	-105.6	289.5	280.4	9.03	32.042		
2,700.0	2,686.1	2,672.4	2,668.3	5.9	5.3	-172.27	-36.6	-111.3	310.9	301.5	9.38	33.133		
2,800.0	2,784.8	2,770.1	2,765.8	6.2	5.5	-172.32	-37.9	-117.1	332.3	322.6	9.73	34.145		
2,900.0	2,883.6	2,867.8	2,863.3	6.5	5.7	-172.36	-39.2	-122.8	353.7	343.6	10.08	35.087		
3,000.0	2,982.3	2,965.5	2,960.8	6.9	5.9	-172.39	-40.6	-128.6	375.1	364.7	10.43	35.966		
3,100.0	3,081.0	3,063.1	3,058.3	7.2	6.1	-172.42	-41.9	-134.3	396.5	385.8	10.78	36.788		
3,200.0	3,179.7	3,160.8	3,155.8	7.5	6.3	-172.45	-43.2	-140.0	417.9	406.8	11.13	37.558		
3,300.0	3,278.5	3,258.5	3,253.3	7.8	6.5	-172.48	-44.5	-145.8	439.4	427.9	11.48	38.282		
3,400.0	3,377.2	3,356.2	3,350.8	8.1	6.7	-172.50	-45.8	-151.5	460.8	448.9	11.83	38.963		
3,500.0	3,475.9	3,453.9	3,448.3	8.4	6.9	-172.52	-47.1	-157.3	482.2	470.0	12.17	39.604		
3,600.0	3,574.6	3,551.5	3,545.8	8.8	7.1	-172.54	-48.5	-163.0	503.6	491.1	12.52	40.210		
3,700.0	3,673.4	3,649.2	3,643.3	9.1	7.3	-172.56	-49.8	-168.7	525.0	512.1	12.87	40.783		
3,800.0	3,772.1	3,746.9	3,740.8	9.4	7.5	-172.58	-51.1	-174.5	546.4	533.2	13.22	41.326		
3,900.0	3,870.8	3,844.6	3,838.3	9.7	7.7	-172.59	-52.4	-180.2	567.8	554.2	13.57	41.840		
4,000.0	3,969.5	3,942.3	3,935.8	10.0	7.8	-172.61	-53.7	-186.0	589.2	575.3	13.92	42.329		
4,100.0	4,068.3	4,040.0	4,033.3	10.4	8.0	-172.62	-55.0	-191.7	610.6	596.4	14.27	42.794		
4,200.0	4,167.0	4,137.6	4,130.8	10.7	8.2	-172.63	-56.4	-197.5	632.1	617.4	14.62	43.237		
4,300.0	4,265.7	4,235.3	4,228.3	11.0	8.4	-172.65	-57.7	-203.2	653.5	638.5	14.97	43.659		
4,400.0	4,364.4	4,333.0	4,325.8	11.3	8.6	-172.66	-59.0	-208.9	674.9	659.6	15.32	44.062		
4,500.0	4,463.2	4,430.7	4,423.3	11.7	8.8	-172.67	-60.3	-214.7	696.3	680.6	15.67	44.446		
4,600.0	4,561.9	4,528.4	4,520.8	12.0	9.0	-172.68	-61.6	-220.4	717.7	701.7	16.01	44.814		
4,700.0	4,660.6	4,626.0	4,618.4	12.3	9.2	-172.69	-62.9	-226.2	739.1	722.7	16.36	45.167		
4,800.0	4,759.3	4,723.7	4,715.9	12.6	9.4	-172.69	-64.3	-231.9	760.5	743.8	16.71	45.504		
4,900.0	4,858.1	4,821.4	4,813.4	13.0	9.6	-172.70	-65.6	-237.6	781.9	764.9	17.06	45.828		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3											Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,956.8	4,919.1	4,910.9	13.3	9.8	-172.71	-66.9	-243.4	803.3	785.9	17.41	46.139		
5,100.0	5,055.5	5,016.8	5,008.4	13.6	10.0	-172.72	-68.2	-249.1	824.8	807.0	17.76	46.437		
5,200.0	5,154.2	5,114.4	5,105.9	13.9	10.2	-172.72	-69.5	-254.9	846.2	828.1	18.11	46.724		
5,300.0	5,253.0	5,212.1	5,203.4	14.3	10.4	-172.73	-70.8	-260.6	867.6	849.1	18.46	47.000		
5,400.0	5,351.7	5,309.8	5,300.9	14.6	10.6	-172.74	-72.2	-266.4	889.0	870.2	18.81	47.266		
5,500.0	5,450.4	5,407.5	5,398.4	14.9	10.8	-172.74	-73.5	-272.1	910.4	891.2	19.16	47.522		
5,600.0	5,549.1	5,505.2	5,495.9	15.3	11.0	-172.75	-74.8	-277.8	931.8	912.3	19.51	47.769		
5,700.0	5,647.9	5,602.8	5,593.4	15.6	11.2	-172.75	-76.1	-283.6	953.2	933.4	19.86	48.007		
5,800.0	5,746.6	5,700.5	5,690.9	15.9	11.4	-172.76	-77.4	-289.3	974.6	954.4	20.20	48.237		
5,900.0	5,845.3	5,798.2	5,788.4	16.2	11.6	-172.76	-78.7	-295.1	996.0	975.5	20.55	48.459		
6,000.0	5,944.1	5,895.9	5,885.9	16.6	11.8	-172.77	-80.1	-300.8	1,017.5	996.5	20.90	48.674		
6,100.0	6,042.8	5,993.6	5,983.4	16.9	12.0	-172.77	-81.4	-306.5	1,038.9	1,017.6	21.25	48.882		
6,200.0	6,141.5	6,091.2	6,080.9	17.2	12.2	-172.78	-82.7	-312.3	1,060.3	1,038.7	21.60	49.083		
6,300.0	6,240.2	6,188.9	6,178.4	17.5	12.4	-172.78	-84.0	-318.0	1,081.7	1,059.7	21.95	49.277		
6,400.0	6,339.0	6,286.6	6,275.9	17.9	12.6	-172.79	-85.3	-323.8	1,103.1	1,080.8	22.30	49.466		
6,500.0	6,437.7	6,384.3	6,373.4	18.2	12.8	-172.79	-86.6	-329.5	1,124.5	1,101.9	22.65	49.648		
6,600.0	6,536.4	6,482.0	6,470.9	18.5	13.0	-172.79	-88.0	-335.2	1,145.9	1,122.9	23.00	49.826		
6,700.0	6,635.1	6,579.7	6,568.4	18.9	13.2	-172.80	-89.3	-341.0	1,167.3	1,144.0	23.35	49.997		
6,800.0	6,733.9	6,677.3	6,665.9	19.2	13.4	-172.80	-90.6	-346.7	1,188.7	1,165.0	23.70	50.164		
6,900.0	6,832.6	6,775.0	6,763.4	19.5	13.6	-172.80	-91.9	-352.5	1,210.2	1,186.1	24.05	50.326		
7,000.0	6,931.3	6,872.7	6,860.9	19.8	13.8	-172.81	-93.2	-358.2	1,231.6	1,207.2	24.40	50.483		
7,100.0	7,030.0	6,970.4	6,958.4	20.2	14.0	-172.81	-94.5	-364.0	1,253.0	1,228.2	24.74	50.636		
7,191.8	7,120.7	7,060.1	7,048.0	20.5	14.2	-172.81	-95.8	-369.2	1,272.6	1,247.6	25.07	50.772		
7,200.0	7,128.8	7,068.1	7,055.9	20.5	14.2	-177.37	-95.9	-369.7	1,274.4	1,249.3	25.09	50.784		
7,250.0	7,178.3	8,177.0	7,740.0	20.6	19.2	179.25	572.3	-410.0	1,262.6	1,231.3	31.25	40.403		
7,300.0	7,227.8	8,174.7	7,740.0	20.7	19.2	148.98	570.0	-410.0	1,247.5	1,215.8	31.65	39.413		
7,350.0	7,276.8	8,168.1	7,740.0	20.8	19.1	132.20	563.4	-410.0	1,234.6	1,202.7	31.94	38.656		
7,400.0	7,325.1	8,157.2	7,740.0	20.8	19.0	123.26	552.5	-410.0	1,224.1	1,192.0	32.10	38.129		
7,450.0	7,372.2	8,142.2	7,740.0	20.8	18.8	117.82	537.4	-410.0	1,215.9	1,183.8	32.14	37.829		
7,500.0	7,417.7	8,123.0	7,740.0	20.8	18.6	113.98	518.3	-410.0	1,210.1	1,178.0	32.06	37.749		
7,550.0	7,461.4	8,099.9	7,740.0	20.7	18.4	110.92	495.2	-410.0	1,206.4	1,174.5	31.85	37.881		
7,600.0	7,502.9	8,064.6	7,739.8	20.7	18.1	107.91	459.9	-410.0	1,204.7	1,173.3	31.44	38.319		
7,639.9	7,534.2	8,020.3	7,736.9	20.6	17.7	105.11	415.7	-409.8	1,204.4	1,173.5	30.90	38.979		
7,650.0	7,541.9	8,009.8	7,735.7	20.6	17.6	104.45	405.3	-409.7	1,204.4	1,173.6	30.77	39.142		
7,700.0	7,578.0	7,961.9	7,727.8	20.5	17.2	101.46	358.0	-409.3	1,205.2	1,175.0	30.19	39.923		
7,750.0	7,611.1	7,918.6	7,717.4	20.4	16.8	98.79	316.0	-408.6	1,207.1	1,177.4	29.67	40.683		
7,800.0	7,640.8	7,878.7	7,704.9	20.4	16.5	96.33	278.1	-407.9	1,210.0	1,180.8	29.21	41.432		
7,850.0	7,667.0	7,841.2	7,690.9	20.3	16.3	94.03	243.4	-407.1	1,213.9	1,185.1	28.79	42.169		
7,900.0	7,689.4	7,805.6	7,675.5	20.3	16.1	91.86	211.3	-406.2	1,218.5	1,190.1	28.42	42.881		
7,950.0	7,707.9	7,771.4	7,658.8	20.3	15.9	89.80	181.4	-405.2	1,223.8	1,195.7	28.10	43.552		
8,000.0	7,722.2	7,738.4	7,641.1	20.3	15.7	87.84	153.6	-404.2	1,229.7	1,201.8	27.83	44.181		
8,050.0	7,732.4	7,706.3	7,622.4	20.3	15.6	85.98	127.6	-403.1	1,235.9	1,208.2	27.62	44.750		
8,100.0	7,738.4	7,675.0	7,602.7	20.4	15.5	84.23	103.2	-401.9	1,242.3	1,214.8	27.46	45.241		
8,143.7	7,740.0	7,650.0	7,586.1	20.5	15.4	82.85	84.6	-400.9	1,248.0	1,220.7	27.37	45.603		
8,200.0	7,740.0	7,615.6	7,562.0	20.6	15.3	81.75	60.2	-399.5	1,256.1	1,228.8	27.30	46.018		
8,300.0	7,740.0	7,566.2	7,524.7	21.0	15.1	80.06	27.7	-397.3	1,274.2	1,246.9	27.31	46.663		
8,400.0	7,740.0	7,525.5	7,492.1	21.5	15.0	78.58	3.5	-395.4	1,297.7	1,270.2	27.45	47.281		
8,443.7	7,740.0	7,509.9	7,479.2	21.8	15.0	78.00	-5.1	-394.6	1,309.6	1,282.1	27.53	47.574		
8,500.0	7,740.0	7,500.0	7,470.8	22.2	15.0	77.67	-10.5	-394.1	1,326.4	1,298.8	27.67	47.932		
8,600.0	7,740.0	7,463.3	7,439.2	22.9	14.9	76.34	-28.9	-392.3	1,359.2	1,331.3	27.91	48.706		
8,700.0	7,740.0	7,450.0	7,427.4	23.7	14.9	75.92	-35.0	-391.6	1,396.1	1,367.9	28.26	49.401		
8,800.0	7,740.0	7,419.0	7,399.5	24.6	14.8	74.82	-48.3	-389.9	1,436.7	1,408.1	28.57	50.294		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
8,843.7	7,740.0	7,400.0	7,382.0	25.1	14.8	74.12	-55.7	-388.9	1,455.7	1,427.0	28.69	50.736	
8,900.0	7,740.0	7,400.0	7,382.0	25.6	14.8	74.12	-55.7	-388.9	1,481.2	1,452.3	28.91	51.237	
9,000.0	7,740.0	7,400.0	7,382.0	26.7	14.8	74.12	-55.7	-388.9	1,530.6	1,501.3	29.29	52.262	
9,100.0	7,740.0	7,372.9	7,356.6	27.8	14.8	73.04	-65.3	-387.4	1,584.1	1,554.5	29.59	53.539	
9,200.0	7,740.0	7,350.0	7,334.9	29.0	14.7	72.13	-72.4	-386.1	1,642.0	1,612.1	29.89	54.938	
9,300.0	7,740.0	7,350.0	7,334.9	30.2	14.7	72.13	-72.4	-386.1	1,703.4	1,673.2	30.23	56.349	
9,343.7	7,740.0	7,350.0	7,334.9	30.8	14.7	72.13	-72.4	-386.1	1,731.4	1,701.0	30.37	57.003	
9,400.7	7,740.0	7,350.0	7,334.9	31.6	14.7	71.97	-72.4	-386.1	1,769.0	1,738.5	30.55	57.898	
9,500.0	7,740.0	7,350.0	7,334.9	32.9	14.7	71.97	-72.4	-386.1	1,837.3	1,806.4	30.86	59.543	
9,600.0	7,740.0	7,325.3	7,311.2	34.3	14.7	70.97	-79.1	-384.7	1,908.2	1,877.2	31.08	61.397	
9,700.0	7,740.0	7,318.4	7,304.5	35.7	14.7	70.69	-80.8	-384.3	1,981.8	1,950.5	31.34	63.243	
9,800.0	7,740.0	7,300.0	7,286.6	37.1	14.7	69.94	-84.9	-383.3	2,057.7	2,026.2	31.55	65.223	
9,900.0	7,740.0	7,300.0	7,286.6	38.6	14.7	69.94	-84.9	-383.3	2,135.3	2,103.5	31.80	67.151	
10,000.0	7,740.0	7,300.0	7,286.6	40.1	14.7	69.94	-84.9	-383.3	2,214.7	2,182.7	32.04	69.131	
10,100.0	7,740.0	7,300.0	7,286.6	41.6	14.7	69.94	-84.9	-383.3	2,295.7	2,263.5	32.26	71.155	
10,200.0	7,740.0	7,300.0	7,286.6	43.1	14.7	69.94	-84.9	-383.3	2,378.2	2,345.7	32.48	73.217	
10,300.0	7,740.0	7,300.0	7,286.6	44.7	14.7	69.94	-84.9	-383.3	2,462.0	2,429.3	32.69	75.311	
10,400.0	7,740.0	7,300.0	7,286.6	46.3	14.7	69.94	-84.9	-383.3	2,546.9	2,514.0	32.89	77.431	
10,500.0	7,740.0	7,300.0	7,286.6	47.8	14.7	69.94	-84.9	-383.3	2,632.9	2,599.8	33.09	79.574	
10,600.0	7,740.0	7,276.8	7,263.8	49.4	14.6	69.00	-89.2	-381.9	2,719.3	2,686.1	33.21	81.881	
10,700.0	7,740.0	7,273.7	7,260.8	51.0	14.6	68.88	-89.7	-381.8	2,807.0	2,773.6	33.39	84.078	
10,800.0	7,740.0	7,270.7	7,257.9	52.6	14.6	68.76	-90.2	-381.6	2,895.4	2,861.8	33.56	86.285	
10,900.0	7,740.0	7,250.0	7,237.4	54.2	14.6	67.92	-93.1	-380.4	2,984.9	2,951.2	33.67	88.647	
11,000.0	7,740.0	7,250.0	7,237.4	55.9	14.6	67.92	-93.1	-380.4	3,074.6	3,040.8	33.84	90.849	
11,100.0	7,740.0	7,250.0	7,237.4	57.5	14.6	67.92	-93.1	-380.4	3,164.9	3,130.9	34.01	93.056	
11,200.0	7,740.0	7,250.0	7,237.4	59.1	14.6	67.92	-93.1	-380.4	3,255.9	3,221.7	34.18	95.267	
11,300.0	7,740.0	7,250.0	7,237.4	60.8	14.6	67.92	-93.1	-380.4	3,347.3	3,313.0	34.34	97.480	
11,400.0	7,740.0	7,250.0	7,237.4	62.4	14.6	67.92	-93.1	-380.4	3,439.2	3,404.7	34.50	99.694	
11,500.0	7,740.0	7,250.0	7,237.4	64.1	14.6	67.92	-93.1	-380.4	3,531.5	3,496.9	34.65	101.907	
11,600.0	7,740.0	7,250.0	7,237.4	65.8	14.6	67.92	-93.1	-380.4	3,624.3	3,589.5	34.81	104.119	
11,700.0	7,740.0	7,250.0	7,237.4	67.4	14.6	67.92	-93.1	-380.4	3,717.4	3,682.5	34.96	106.328	
11,800.0	7,740.0	7,250.0	7,237.4	69.1	14.6	67.92	-93.1	-380.4	3,810.9	3,775.8	35.11	108.533	
11,900.0	7,740.0	7,250.0	7,237.4	70.8	14.6	67.92	-93.1	-380.4	3,904.7	3,869.4	35.26	110.734	
12,000.0	7,740.0	7,250.0	7,237.4	72.5	14.6	67.92	-93.1	-380.4	3,998.8	3,963.4	35.41	112.929	
12,100.0	7,740.0	7,250.0	7,237.4	74.1	14.6	67.92	-93.1	-380.4	4,093.2	4,057.6	35.56	115.119	
12,200.0	7,740.0	7,250.0	7,237.4	75.8	14.6	67.92	-93.1	-380.4	4,187.8	4,152.1	35.70	117.302	
12,300.0	7,740.0	7,250.0	7,237.4	77.5	14.6	67.92	-93.1	-380.4	4,282.7	4,246.9	35.84	119.479	
12,400.0	7,740.0	7,250.0	7,237.4	79.2	14.6	67.92	-93.1	-380.4	4,377.8	4,341.8	35.99	121.648	
12,500.0	7,740.0	7,250.0	7,237.4	80.9	14.6	67.92	-93.1	-380.4	4,473.1	4,437.0	36.13	123.810	
12,600.0	7,740.0	7,250.0	7,237.4	82.6	14.6	67.92	-93.1	-380.4	4,568.7	4,532.4	36.27	125.964	
12,700.0	7,740.0	7,250.0	7,237.4	84.3	14.6	67.92	-93.1	-380.4	4,664.4	4,628.0	36.41	128.109	
12,800.0	7,740.0	7,250.0	7,237.4	86.0	14.6	67.92	-93.1	-380.4	4,760.3	4,723.7	36.55	130.246	
12,900.0	7,740.0	7,250.0	7,237.4	87.7	14.6	67.92	-93.1	-380.4	4,856.3	4,819.6	36.69	132.374	
13,000.0	7,740.0	7,250.0	7,237.4	89.4	14.6	67.92	-93.1	-380.4	4,952.5	4,915.7	36.82	134.494	
13,100.0	7,740.0	7,250.0	7,237.4	91.1	14.6	67.92	-93.1	-380.4	5,048.9	5,011.9	36.96	136.604	
13,200.0	7,740.0	7,250.0	7,237.4	92.8	14.6	67.92	-93.1	-380.4	5,145.4	5,108.3	37.10	138.705	
13,300.0	7,740.0	7,250.0	7,237.4	94.5	14.6	67.92	-93.1	-380.4	5,242.0	5,204.8	37.23	140.796	
13,400.0	7,740.0	7,250.0	7,237.4	96.3	14.6	67.92	-93.1	-380.4	5,338.8	5,301.4	37.37	142.878	
13,500.0	7,740.0	7,250.0	7,237.4	98.0	14.6	67.92	-93.1	-380.4	5,435.7	5,398.2	37.50	144.951	
13,600.0	7,740.0	7,250.0	7,237.4	99.7	14.6	67.92	-93.1	-380.4	5,532.6	5,495.0	37.63	147.014	
13,700.0	7,740.0	7,227.4	7,214.9	101.4	14.5	67.01	-95.4	-379.1	5,629.2	5,591.5	37.70	149.308	
13,800.0	7,740.0	7,226.6	7,214.1	103.1	14.5	66.98	-95.5	-379.0	5,726.4	5,688.6	37.83	151.361	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	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)				
13,900.0	7,740.0	7,225.8	7,213.4	104.8	14.5	66.95	-95.5	-379.0	5,823.6	5,785.7	37.96	153.405		
14,000.0	7,740.0	7,225.1	7,212.7	106.6	14.5	66.92	-95.6	-378.9	5,921.0	5,882.9	38.09	155.438		
14,100.0	7,740.0	7,224.4	7,212.0	108.3	14.5	66.89	-95.6	-378.9	6,018.4	5,980.2	38.22	157.461		
14,200.0	7,740.0	7,223.7	7,211.3	110.0	14.5	66.87	-95.7	-378.8	6,115.9	6,077.6	38.35	159.475		
14,300.0	7,740.0	7,223.1	7,210.6	111.7	14.5	66.84	-95.7	-378.8	6,213.5	6,175.0	38.48	161.478		
14,400.0	7,740.0	7,200.0	7,187.6	113.5	14.5	65.92	-97.0	-377.5	6,311.6	6,273.1	38.54	163.754		
14,500.0	7,740.0	7,200.0	7,187.6	115.2	14.5	65.92	-97.0	-377.5	6,409.3	6,370.7	38.67	165.731		
14,600.0	7,740.0	7,200.0	7,187.6	116.9	14.5	65.92	-97.0	-377.5	6,507.1	6,468.3	38.80	167.699		
14,700.0	7,740.0	7,200.0	7,187.6	118.6	14.5	65.92	-97.0	-377.5	6,605.0	6,566.0	38.93	169.656		
14,800.0	7,740.0	7,200.0	7,187.6	120.4	14.5	65.92	-97.0	-377.5	6,702.9	6,663.8	39.06	171.604		
14,900.0	7,740.0	7,200.0	7,187.6	122.1	14.5	65.92	-97.0	-377.5	6,800.8	6,761.7	39.19	173.542		
15,000.0	7,740.0	7,200.0	7,187.6	123.8	14.5	65.92	-97.0	-377.5	6,898.9	6,859.6	39.32	175.470		
15,100.0	7,740.0	7,200.0	7,187.6	125.6	14.5	65.92	-97.0	-377.5	6,997.0	6,957.5	39.44	177.389		
15,200.0	7,740.0	7,200.0	7,187.6	127.3	14.5	65.92	-97.0	-377.5	7,095.1	7,055.5	39.57	179.298		
15,300.0	7,740.0	7,200.0	7,187.6	129.0	14.5	65.92	-97.0	-377.5	7,193.3	7,153.6	39.70	181.197		
15,400.0	7,740.0	7,200.0	7,187.6	130.7	14.5	65.92	-97.0	-377.5	7,291.5	7,251.7	39.83	183.087		
15,500.0	7,740.0	7,200.0	7,187.6	132.5	14.5	65.92	-97.0	-377.5	7,389.8	7,349.9	39.95	184.967		
15,600.0	7,740.0	7,200.0	7,187.6	134.2	14.5	65.92	-97.0	-377.5	7,488.1	7,448.1	40.08	186.838		
15,700.0	7,740.0	7,200.0	7,187.6	135.9	14.5	65.92	-97.0	-377.5	7,586.5	7,546.3	40.20	188.700		
15,800.0	7,740.0	7,200.0	7,187.6	137.7	14.5	65.92	-97.0	-377.5	7,684.9	7,644.6	40.33	190.552		
15,900.0	7,740.0	7,200.0	7,187.6	139.4	14.5	65.92	-97.0	-377.5	7,783.4	7,742.9	40.46	192.396		
16,000.0	7,740.0	7,200.0	7,187.6	141.1	14.5	65.92	-97.0	-377.5	7,881.9	7,841.3	40.58	194.229		
16,084.2	7,740.0	7,200.0	7,187.6	142.6	14.5	65.92	-97.0	-377.5	7,964.8	7,924.1	40.69	195.766		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	90.71	-0.4	29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.71	-0.4	29.9	29.9	29.6	0.30	98.619		
200.0	200.0	200.0	200.0	0.3	0.3	90.71	-0.4	29.9	29.9	29.3	0.65	45.882		
300.0	300.0	300.0	300.0	0.5	0.5	90.71	-0.4	29.9	29.9	28.9	1.00	29.895		
400.0	400.0	400.3	400.3	0.7	0.7	92.04	-1.0	29.4	29.4	28.1	1.35	21.750		
500.0	500.0	500.6	500.5	0.8	0.9	96.31	-3.1	27.7	27.9	26.2	1.70	16.350		
600.0	600.0	600.7	600.6	1.0	1.0	104.46	-6.4	24.9	25.7	23.6	2.06	12.454		
700.0	700.0	700.4	700.1	1.2	1.2	113.99	-9.9	22.2	24.3	21.9	2.42	10.047		
746.8	746.8	747.1	746.8	1.3	1.3	117.48	-11.2	21.5	24.2	21.6	2.59	9.354 CC		
800.0	800.0	800.1	799.9	1.4	1.4	120.47	-12.3	21.0	24.3	21.6	2.77	8.773 ES		
900.0	900.0	900.0	899.7	1.5	1.6	123.17	-13.8	21.1	25.2	22.1	3.12	8.075		
1,000.0	1,000.0	1,000.0	999.7	1.7	1.7	124.54	-14.9	21.7	26.3	22.8	3.47	7.581		
1,100.0	1,100.0	1,100.0	1,099.7	1.9	1.9	76.17	-16.0	22.2	27.2	23.4	3.82	7.123		
1,200.0	1,200.0	1,199.9	1,199.6	2.1	2.1	82.51	-17.2	22.8	27.9	23.7	4.17	6.690		
1,300.0	1,299.9	1,299.8	1,299.5	2.3	2.3	91.94	-18.3	23.4	28.9	24.4	4.52	6.396		
1,400.0	1,399.7	1,399.6	1,399.3	2.4	2.4	103.66	-19.4	23.9	31.0	26.1	4.87	6.363 SF		
1,500.0	1,499.4	1,499.3	1,498.9	2.6	2.6	116.13	-20.5	24.5	34.9	29.7	5.23	6.685		
1,600.0	1,598.9	1,598.8	1,598.4	2.8	2.8	127.65	-21.6	25.1	41.2	35.7	5.58	7.385		
1,700.0	1,698.3	1,698.1	1,697.7	3.1	3.0	137.25	-22.8	25.6	50.0	44.1	5.94	8.419		
1,800.0	1,797.4	1,797.2	1,796.8	3.3	3.1	144.81	-23.9	26.2	61.2	54.9	6.30	9.721		
1,900.0	1,896.3	1,896.1	1,895.7	3.6	3.3	150.62	-25.0	26.7	74.6	68.0	6.65	11.224		
1,915.7	1,911.9	1,911.6	1,911.2	3.6	3.3	151.40	-25.2	26.8	76.9	70.2	6.70	11.476		
2,000.0	1,995.0	1,994.7	1,994.4	3.8	3.5	154.99	-26.1	27.3	89.6	82.6	7.00	12.802		
2,100.0	2,093.8	2,093.4	2,093.0	4.1	3.7	158.11	-27.2	27.9	104.9	97.6	7.35	14.283		
2,200.0	2,192.5	2,192.1	2,191.7	4.4	3.8	160.43	-28.3	28.4	120.5	112.8	7.70	15.660		
2,300.0	2,291.2	2,290.8	2,290.4	4.7	4.0	162.22	-29.4	29.0	136.2	128.2	8.04	16.937		
2,400.0	2,389.9	2,389.4	2,389.0	5.0	4.2	163.64	-30.5	29.5	152.1	143.7	8.39	18.120		
2,500.0	2,488.7	2,488.1	2,487.7	5.3	4.4	164.79	-31.6	30.1	168.0	159.2	8.74	19.217		
2,600.0	2,587.4	2,586.8	2,586.4	5.6	4.5	165.74	-32.8	30.7	183.9	174.8	9.09	20.236		
2,700.0	2,686.1	2,685.5	2,685.0	5.9	4.7	166.54	-33.9	31.2	199.9	190.5	9.44	21.184		
2,800.0	2,784.8	2,784.1	2,783.7	6.2	4.9	167.22	-35.0	31.8	216.0	206.2	9.79	22.069		
2,900.0	2,883.6	2,882.8	2,882.4	6.5	5.0	167.80	-36.1	32.3	232.0	221.9	10.13	22.895		
3,000.0	2,982.3	2,981.5	2,981.0	6.9	5.2	168.32	-37.2	32.9	248.1	237.6	10.48	23.668		
3,100.0	3,081.0	3,080.2	3,079.7	7.2	5.4	168.76	-38.3	33.5	264.2	253.4	10.83	24.393		
3,200.0	3,179.7	3,178.9	3,178.4	7.5	5.6	169.16	-39.4	34.0	280.3	269.1	11.18	25.074		
3,300.0	3,278.5	3,277.5	3,277.1	7.8	5.7	169.51	-40.5	34.6	296.4	284.9	11.53	25.714		
3,400.0	3,377.2	3,376.2	3,375.7	8.1	5.9	169.83	-41.6	35.1	312.5	300.7	11.88	26.319		
3,500.0	3,475.9	3,474.9	3,474.4	8.4	6.1	170.12	-42.7	35.7	328.7	316.5	12.22	26.889		
3,600.0	3,574.6	3,573.6	3,573.1	8.8	6.3	170.38	-43.9	36.2	344.8	332.3	12.57	27.428		
3,700.0	3,673.4	3,672.2	3,671.7	9.1	6.4	170.61	-45.0	36.8	361.0	348.1	12.92	27.939		
3,800.0	3,772.1	3,770.9	3,770.4	9.4	6.6	170.83	-46.1	37.4	377.1	363.9	13.27	28.423		
3,900.0	3,870.8	3,869.6	3,869.1	9.7	6.8	171.03	-47.2	37.9	393.3	379.7	13.62	28.883		
4,000.0	3,969.5	3,968.3	3,967.7	10.0	7.0	171.21	-48.3	38.5	409.5	395.5	13.97	29.321		
4,100.0	4,068.3	4,066.9	4,066.4	10.4	7.1	171.38	-49.4	39.0	425.6	411.3	14.31	29.737		
4,200.0	4,167.0	4,165.6	4,165.1	10.7	7.3	171.54	-50.5	39.6	441.8	427.2	14.66	30.134		
4,300.0	4,265.7	4,264.3	4,263.7	11.0	7.5	171.68	-51.6	40.2	458.0	443.0	15.01	30.512		
4,400.0	4,364.4	4,363.0	4,362.4	11.3	7.7	171.82	-52.7	40.7	474.2	458.8	15.36	30.874		
4,500.0	4,463.2	4,461.6	4,461.1	11.7	7.8	171.94	-53.8	41.3	490.4	474.6	15.71	31.219		
4,600.0	4,561.9	4,560.3	4,559.7	12.0	8.0	172.06	-54.9	41.8	506.5	490.5	16.05	31.550		
4,700.0	4,660.6	4,659.0	4,658.4	12.3	8.2	172.17	-56.1	42.4	522.7	506.3	16.40	31.867		
4,800.0	4,759.3	4,757.7	4,757.1	12.6	8.3	172.28	-57.2	43.0	538.9	522.2	16.75	32.171		
4,900.0	4,858.1	4,856.4	4,855.8	13.0	8.5	172.37	-58.3	43.5	555.1	538.0	17.10	32.462		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,000.0	4,956.8	4,955.0	4,954.4	13.3	8.7	172.47	-59.4	44.1	571.3	553.8	17.45	32.742	
5,100.0	5,055.5	5,053.7	5,053.1	13.6	8.9	172.55	-60.5	44.6	587.5	569.7	17.80	33.012	
5,200.0	5,154.2	5,152.4	5,151.8	13.9	9.0	172.64	-61.6	45.2	603.7	585.5	18.14	33.270	
5,300.0	5,253.0	5,251.1	5,250.4	14.3	9.2	172.72	-62.7	45.7	619.9	601.4	18.49	33.520	
5,400.0	5,351.7	5,349.7	5,349.1	14.6	9.4	172.79	-63.8	46.3	636.1	617.2	18.84	33.760	
5,500.0	5,450.4	5,448.4	5,447.8	14.9	9.6	172.86	-64.9	46.9	652.3	633.1	19.19	33.991	
5,600.0	5,549.1	5,547.1	5,546.4	15.3	9.7	172.93	-66.0	47.4	668.5	648.9	19.54	34.214	
5,700.0	5,647.9	5,645.8	5,645.1	15.6	9.9	172.99	-67.1	48.0	684.7	664.8	19.89	34.429	
5,800.0	5,746.6	5,744.4	5,743.8	15.9	10.1	173.05	-68.3	48.5	700.9	680.6	20.23	34.637	
5,900.0	5,845.3	5,843.1	5,842.4	16.2	10.3	173.11	-69.4	49.1	717.1	696.5	20.58	34.838	
6,000.0	5,944.1	5,941.8	5,941.1	16.6	10.4	173.17	-70.5	49.7	733.3	712.3	20.93	35.033	
6,100.0	6,042.8	6,040.5	6,039.8	16.9	10.6	173.22	-71.6	50.2	749.5	728.2	21.28	35.221	
6,200.0	6,141.5	6,139.1	6,138.4	17.2	10.8	173.27	-72.7	50.8	765.7	744.0	21.63	35.403	
6,300.0	6,240.2	6,237.8	6,237.1	17.5	10.9	173.32	-73.8	51.3	781.9	759.9	21.98	35.579	
6,400.0	6,339.0	6,336.5	6,335.8	17.9	11.1	173.37	-74.9	51.9	798.1	775.7	22.32	35.750	
6,500.0	6,437.7	6,435.2	6,434.4	18.2	11.3	173.42	-76.0	52.5	814.3	791.6	22.67	35.915	
6,600.0	6,536.4	6,533.8	6,533.1	18.5	11.5	173.46	-77.1	53.0	830.5	807.5	23.02	36.076	
6,700.0	6,635.1	6,632.5	6,631.8	18.9	11.6	173.50	-78.2	53.6	846.7	823.3	23.37	36.232	
6,800.0	6,733.9	6,731.2	6,730.5	19.2	11.8	173.54	-79.4	54.1	862.9	839.2	23.72	36.383	
6,900.0	6,832.6	6,829.9	6,829.1	19.5	12.0	173.58	-80.5	54.7	879.1	855.0	24.07	36.530	
7,000.0	6,931.3	7,875.6	7,500.0	19.8	16.9	-146.54	539.2	47.5	857.7	830.9	26.77	32.044	
7,100.0	7,030.0	7,885.3	7,500.0	20.2	17.0	-145.76	548.9	47.4	805.8	777.3	28.50	28.278	
7,191.8	7,120.7	7,894.2	7,500.0	20.5	17.1	-145.04	557.8	47.2	766.6	736.5	30.09	25.473	
7,200.0	7,128.8	7,895.0	7,500.0	20.5	17.1	-149.06	558.5	47.2	763.5	733.3	30.23	25.256	
7,250.0	7,178.3	7,896.9	7,500.0	20.6	17.1	178.30	560.5	47.2	746.6	715.6	30.99	24.093	
7,300.0	7,227.8	7,894.5	7,500.0	20.7	17.1	147.80	558.1	47.2	732.8	701.2	31.59	23.195	
7,350.0	7,276.8	7,887.8	7,500.0	20.8	17.0	130.52	551.4	47.3	722.6	690.6	32.03	22.562	
7,400.0	7,325.1	7,876.8	7,500.0	20.8	16.9	120.82	540.4	47.5	716.0	683.7	32.26	22.191	
7,450.0	7,372.2	7,861.6	7,500.0	20.8	16.7	114.38	525.2	47.8	712.9	680.6	32.29	22.074	
7,470.6	7,391.1	7,854.1	7,500.0	20.8	16.6	112.19	517.7	47.9	712.6	680.3	32.24	22.100	
7,500.0	7,417.7	7,842.3	7,500.0	20.8	16.5	109.34	505.9	48.1	713.1	681.0	32.12	22.200	
7,550.0	7,461.4	7,818.5	7,499.9	20.7	16.2	104.86	482.1	48.5	716.4	684.7	31.76	22.556	
7,600.0	7,502.9	7,792.6	7,498.9	20.7	16.0	100.71	456.2	49.0	722.3	691.0	31.29	23.085	
7,650.0	7,541.9	7,766.7	7,496.7	20.6	15.7	96.84	430.4	49.4	730.5	699.8	30.77	23.740	
7,700.0	7,578.0	7,740.9	7,493.4	20.5	15.4	93.15	404.8	49.8	740.7	710.5	30.22	24.506	
7,750.0	7,611.1	7,715.1	7,489.0	20.4	15.2	89.60	379.5	50.3	752.5	722.8	29.67	25.361	
7,800.0	7,640.8	7,689.4	7,483.4	20.4	14.9	86.17	354.4	50.7	765.6	736.4	29.13	26.285	
7,850.0	7,667.0	7,663.8	7,476.7	20.3	14.7	82.88	329.6	51.1	779.6	751.0	28.60	27.255	
7,900.0	7,689.4	7,638.2	7,468.9	20.3	14.5	79.73	305.2	51.5	794.3	766.2	28.12	28.249	
7,950.0	7,707.9	7,612.6	7,460.0	20.3	14.3	76.75	281.2	51.8	809.4	781.7	27.68	29.243	
8,000.0	7,722.2	7,587.0	7,450.1	20.3	14.1	73.95	257.6	52.2	824.6	797.3	27.29	30.217	
8,050.0	7,732.4	7,561.5	7,439.2	20.3	13.9	71.36	234.6	52.5	839.7	812.7	26.96	31.150	
8,100.0	7,738.4	7,535.9	7,427.3	20.4	13.8	68.99	212.0	52.9	854.4	827.7	26.68	32.023	
8,143.7	7,740.0	7,513.7	7,416.0	20.5	13.6	67.10	192.8	53.1	866.8	840.3	26.48	32.728	
8,200.0	7,740.0	7,485.8	7,400.9	20.6	13.5	66.19	169.4	53.5	883.3	857.1	26.28	33.608	
8,300.0	7,740.0	7,450.0	7,379.9	21.0	13.3	64.93	140.4	53.8	917.3	891.2	26.14	35.092	
8,400.0	7,740.0	7,400.0	7,347.6	21.5	13.1	63.06	102.3	54.3	956.9	931.1	25.89	36.955	
8,443.7	7,740.0	7,384.4	7,336.8	21.8	13.0	62.45	91.0	54.5	976.1	950.2	25.88	37.722	
8,500.0	7,740.0	7,364.9	7,323.0	22.2	12.9	61.81	77.3	54.6	1,002.1	976.2	25.86	38.747	
8,600.0	7,740.0	7,333.4	7,299.6	22.9	12.8	60.79	56.2	54.9	1,051.4	1,025.5	25.89	40.609	
8,700.0	7,740.0	7,300.0	7,273.6	23.7	12.8	59.70	35.2	55.1	1,104.7	1,078.7	25.92	42.612	
8,800.0	7,740.0	7,280.7	7,258.0	24.6	12.7	59.23	23.8	55.2	1,161.4	1,135.3	26.10	44.507	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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 (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
8,843.7	7,740.0	7,270.7	7,249.8	25.1	12.7	58.97	18.1	55.3	1,187.3	1,161.1	26.16	45.388			
8,900.0	7,740.0	7,250.0	7,232.5	25.6	12.6	58.08	6.7	55.4	1,221.8	1,195.6	26.18	46.669			
9,000.0	7,740.0	7,250.0	7,232.5	26.7	12.6	58.08	6.7	55.4	1,286.0	1,259.5	26.51	48.520			
9,100.0	7,740.0	7,221.1	7,207.7	27.8	12.6	56.83	-8.1	55.5	1,353.8	1,327.2	26.61	50.871			
9,200.0	7,740.0	7,200.0	7,189.1	29.0	12.6	55.92	-18.1	55.6	1,424.9	1,398.1	26.77	53.224			
9,300.0	7,740.0	7,200.0	7,189.1	30.2	12.6	55.92	-18.1	55.6	1,498.8	1,471.8	27.07	55.374			
9,343.7	7,740.0	7,200.0	7,189.1	30.8	12.6	55.92	-18.1	55.6	1,532.1	1,504.9	27.19	56.343			
9,400.7	7,740.0	7,177.5	7,168.9	31.6	12.5	54.56	-28.0	55.6	1,575.8	1,548.6	27.21	57.908			
9,500.0	7,740.0	7,150.0	7,143.7	32.9	12.5	53.38	-39.0	55.7	1,654.6	1,627.3	27.32	60.563			
9,600.0	7,740.0	7,150.0	7,143.7	34.3	12.5	53.38	-39.0	55.7	1,735.3	1,707.8	27.59	62.905			
9,700.0	7,740.0	7,150.0	7,143.7	35.7	12.5	53.38	-39.0	55.7	1,818.0	1,790.1	27.84	65.300			
9,800.0	7,740.0	7,150.0	7,143.7	37.1	12.5	53.38	-39.0	55.7	1,902.3	1,874.2	28.08	67.740			
9,900.0	7,740.0	7,127.0	7,122.3	38.6	12.4	52.41	-47.2	55.7	1,987.5	1,959.3	28.20	70.476			
10,000.0	7,740.0	7,100.0	7,096.7	40.1	12.4	51.28	-55.8	55.7	2,074.5	2,046.2	28.30	73.309			
10,100.0	7,740.0	7,100.0	7,096.7	41.6	12.4	51.28	-55.8	55.7	2,161.9	2,133.4	28.52	75.799			
10,200.0	7,740.0	7,100.0	7,096.7	43.1	12.4	51.28	-55.8	55.7	2,250.4	2,221.6	28.74	78.308			
10,300.0	7,740.0	7,100.0	7,096.7	44.7	12.4	51.28	-55.8	55.7	2,339.8	2,310.8	28.95	80.830			
10,400.0	7,740.0	7,100.0	7,096.7	46.3	12.4	51.28	-55.8	55.7	2,430.0	2,400.8	29.15	83.363			
10,500.0	7,740.0	7,100.0	7,096.7	47.8	12.4	51.28	-55.8	55.7	2,520.9	2,491.6	29.35	85.902			
10,600.0	7,740.0	7,100.0	7,096.7	49.4	12.4	51.28	-55.8	55.7	2,612.6	2,583.0	29.54	88.443			
10,700.0	7,740.0	7,077.6	7,075.1	51.0	12.4	50.36	-62.0	55.7	2,704.3	2,674.6	29.64	91.236			
10,800.0	7,740.0	7,073.0	7,070.7	52.6	12.4	50.18	-63.2	55.7	2,796.8	2,767.0	29.81	93.823			
10,900.0	7,740.0	7,050.0	7,048.3	54.2	12.3	49.25	-68.5	55.7	2,890.1	2,860.2	29.91	96.641			
11,000.0	7,740.0	7,050.0	7,048.3	55.9	12.3	49.25	-68.5	55.7	2,983.4	2,953.3	30.09	99.159			
11,100.0	7,740.0	7,050.0	7,048.3	57.5	12.3	49.25	-68.5	55.7	3,077.1	3,046.8	30.26	101.671			
11,200.0	7,740.0	7,050.0	7,048.3	59.1	12.3	49.25	-68.5	55.7	3,171.1	3,140.7	30.44	104.177			
11,300.0	7,740.0	7,050.0	7,048.3	60.8	12.3	49.25	-68.5	55.7	3,265.6	3,234.9	30.61	106.675			
11,400.0	7,740.0	7,050.0	7,048.3	62.4	12.3	49.25	-68.5	55.7	3,360.3	3,329.5	30.78	109.165			
11,500.0	7,740.0	7,050.0	7,048.3	64.1	12.3	49.25	-68.5	55.7	3,455.3	3,424.4	30.95	111.645			
11,600.0	7,740.0	7,050.0	7,048.3	65.8	12.3	49.25	-68.5	55.7	3,550.7	3,519.5	31.11	114.114			
11,700.0	7,740.0	7,050.0	7,048.3	67.4	12.3	49.25	-68.5	55.7	3,646.2	3,614.9	31.28	116.573			
11,800.0	7,740.0	7,050.0	7,048.3	69.1	12.3	49.25	-68.5	55.7	3,742.0	3,710.6	31.44	119.021			
11,900.0	7,740.0	7,050.0	7,048.3	70.8	12.3	49.25	-68.5	55.7	3,838.0	3,806.4	31.60	121.456			
12,000.0	7,740.0	7,050.0	7,048.3	72.5	12.3	49.25	-68.5	55.7	3,934.2	3,902.5	31.76	123.879			
12,100.0	7,740.0	7,050.0	7,048.3	74.1	12.3	49.25	-68.5	55.7	4,030.6	3,998.7	31.92	126.290			
12,200.0	7,740.0	7,050.0	7,048.3	75.8	12.3	49.25	-68.5	55.7	4,127.2	4,095.1	32.07	128.688			
12,300.0	7,740.0	7,027.4	7,026.1	77.5	12.3	48.36	-72.9	55.6	4,223.4	4,191.3	32.16	131.336			
12,400.0	7,740.0	7,025.3	7,024.1	79.2	12.3	48.28	-73.2	55.6	4,320.2	4,287.9	32.31	133.731			
12,500.0	7,740.0	7,023.4	7,022.2	80.9	12.3	48.20	-73.6	55.6	4,417.1	4,384.7	32.45	136.112			
12,600.0	7,740.0	7,000.0	6,999.0	82.6	12.3	47.30	-77.0	55.6	4,514.6	4,482.1	32.53	138.762			
12,700.0	7,740.0	7,000.0	6,999.0	84.3	12.3	47.30	-77.0	55.6	4,611.7	4,579.0	32.69	141.091			
12,800.0	7,740.0	7,000.0	6,999.0	86.0	12.3	47.30	-77.0	55.6	4,708.9	4,676.1	32.84	143.406			
12,900.0	7,740.0	7,000.0	6,999.0	87.7	12.3	47.30	-77.0	55.6	4,806.2	4,773.3	32.99	145.708			
13,000.0	7,740.0	7,000.0	6,999.0	89.4	12.3	47.30	-77.0	55.6	4,903.7	4,870.5	33.13	147.997			
13,100.0	7,740.0	7,000.0	6,999.0	91.1	12.3	47.30	-77.0	55.6	5,001.2	4,967.9	33.28	150.272			
13,200.0	7,740.0	7,000.0	6,999.0	92.8	12.3	47.30	-77.0	55.6	5,098.8	5,065.4	33.43	152.535			
13,300.0	7,740.0	7,000.0	6,999.0	94.5	12.3	47.30	-77.0	55.6	5,196.6	5,163.0	33.57	154.783			
13,400.0	7,740.0	7,000.0	6,999.0	96.3	12.3	47.30	-77.0	55.6	5,294.4	5,260.7	33.72	157.019			
13,500.0	7,740.0	7,000.0	6,999.0	98.0	12.3	47.30	-77.0	55.6	5,392.3	5,358.4	33.86	159.241			
13,600.0	7,740.0	7,000.0	6,999.0	99.7	12.3	47.30	-77.0	55.6	5,490.2	5,456.2	34.01	161.450			
13,700.0	7,740.0	7,000.0	6,999.0	101.4	12.3	47.30	-77.0	55.6	5,588.3	5,554.1	34.15	163.646			
13,800.0	7,740.0	7,000.0	6,999.0	103.1	12.3	47.30	-77.0	55.6	5,686.4	5,652.1	34.29	165.829			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis			
13,900.0	7,740.0	7,000.0	6,999.0	104.8	12.3	47.30	-77.0	55.6	5,784.5	5,750.1	34.43	167.999		
14,000.0	7,740.0	7,000.0	6,999.0	106.6	12.3	47.30	-77.0	55.6	5,882.8	5,848.2	34.57	170.156		
14,100.0	7,740.0	7,000.0	6,999.0	108.3	12.3	47.30	-77.0	55.6	5,981.0	5,946.3	34.71	172.300		
14,200.0	7,740.0	7,000.0	6,999.0	110.0	12.3	47.30	-77.0	55.6	6,079.4	6,044.5	34.85	174.432		
14,300.0	7,740.0	7,000.0	6,999.0	111.7	12.3	47.30	-77.0	55.6	6,177.8	6,142.8	34.99	176.550		
14,400.0	7,740.0	7,000.0	6,999.0	113.5	12.3	47.30	-77.0	55.6	6,276.2	6,241.1	35.13	178.656		
14,500.0	7,740.0	7,000.0	6,999.0	115.2	12.3	47.30	-77.0	55.6	6,374.7	6,339.5	35.27	180.750		
14,600.0	7,740.0	7,000.0	6,999.0	116.9	12.3	47.30	-77.0	55.6	6,473.3	6,437.9	35.41	182.831		
14,700.0	7,740.0	7,000.0	6,999.0	118.6	12.3	47.30	-77.0	55.6	6,571.9	6,536.3	35.54	184.900		
14,800.0	7,740.0	7,000.0	6,999.0	120.4	12.3	47.30	-77.0	55.6	6,670.5	6,634.8	35.68	186.956		
14,900.0	7,740.0	7,000.0	6,999.0	122.1	12.3	47.30	-77.0	55.6	6,769.2	6,733.3	35.82	189.000		
15,000.0	7,740.0	7,000.0	6,999.0	123.8	12.3	47.30	-77.0	55.6	6,867.9	6,831.9	35.95	191.033		
15,100.0	7,740.0	7,000.0	6,999.0	125.6	12.3	47.30	-77.0	55.6	6,966.6	6,930.5	36.09	193.053		
15,200.0	7,740.0	7,000.0	6,999.0	127.3	12.3	47.30	-77.0	55.6	7,065.4	7,029.2	36.22	195.062		
15,300.0	7,740.0	7,000.0	6,999.0	129.0	12.3	47.30	-77.0	55.6	7,164.2	7,127.9	36.36	197.059		
15,400.0	7,740.0	7,000.0	6,999.0	130.7	12.3	47.30	-77.0	55.6	7,263.1	7,226.6	36.49	199.044		
15,500.0	7,740.0	7,000.0	6,999.0	132.5	12.3	47.30	-77.0	55.6	7,361.9	7,325.3	36.62	201.018		
15,600.0	7,740.0	7,000.0	6,999.0	134.2	12.3	47.30	-77.0	55.6	7,460.8	7,424.1	36.76	202.980		
15,700.0	7,740.0	7,000.0	6,999.0	135.9	12.3	47.30	-77.0	55.6	7,559.8	7,522.9	36.89	204.931		
15,800.0	7,740.0	7,000.0	6,999.0	137.7	12.3	47.30	-77.0	55.6	7,658.7	7,621.7	37.02	206.871		
15,900.0	7,740.0	7,000.0	6,999.0	139.4	12.3	47.30	-77.0	55.6	7,757.7	7,720.6	37.15	208.799		
16,000.0	7,740.0	7,000.0	6,999.0	141.1	12.3	47.30	-77.0	55.6	7,856.7	7,819.5	37.29	210.717		
16,084.2	7,740.0	7,000.0	6,999.0	142.6	12.3	47.30	-77.0	55.6	7,940.1	7,902.7	37.40	212.323		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
0.0	0.0	0.0	0.0	0.0	0.0	90.58	-0.4	37.5	37.5				
100.0	100.0	100.0	100.0	0.2	0.2	90.58	-0.4	37.5	37.5	37.2	0.30	123.501	
200.0	200.0	200.0	200.0	0.3	0.3	90.58	-0.4	37.5	37.5	36.9	0.65	57.458	
300.0	300.0	300.0	300.0	0.5	0.5	90.58	-0.4	37.5	37.5	36.5	1.00	37.438	
400.0	400.0	400.0	400.0	0.7	0.7	90.58	-0.4	37.5	37.5	36.2	1.35	27.764	
500.0	500.0	500.0	500.0	0.8	0.8	90.58	-0.4	37.5	37.5	35.8	1.70	22.063	
600.0	600.0	600.0	600.0	1.0	1.0	90.58	-0.4	37.5	37.5	35.5	2.05	18.304	CC, ES
700.0	700.0	699.3	699.3	1.2	1.2	90.71	-0.5	38.4	38.4	36.0	2.40	16.009	
800.0	800.0	798.6	798.6	1.4	1.4	91.06	-0.8	40.9	41.0	38.2	2.74	14.927	
900.0	900.0	897.8	897.7	1.5	1.6	91.56	-1.2	45.2	45.3	42.2	3.09	14.651	
1,000.0	1,000.0	997.5	997.2	1.7	1.7	92.08	-1.8	50.6	50.7	47.3	3.44	14.759	
1,100.0	1,100.0	1,097.4	1,096.9	1.9	1.9	41.66	-2.4	56.1	55.6	51.8	3.79	14.681	
1,200.0	1,200.0	1,197.3	1,196.7	2.1	2.1	43.62	-3.1	61.6	59.2	55.1	4.14	14.308	
1,300.0	1,299.9	1,297.2	1,296.5	2.3	2.3	46.51	-3.7	67.1	61.6	57.1	4.49	13.731	
1,400.0	1,399.7	1,397.1	1,396.2	2.4	2.5	50.39	-4.3	72.6	63.1	58.3	4.85	13.021	
1,500.0	1,499.4	1,496.9	1,495.9	2.6	2.7	55.33	-4.9	78.0	63.8	58.6	5.21	12.243	
1,600.0	1,598.9	1,596.7	1,595.5	2.8	2.9	61.48	-5.5	83.5	64.2	58.6	5.60	11.462	
1,700.0	1,698.3	1,696.4	1,695.0	3.1	3.1	68.90	-6.1	89.0	64.6	58.6	6.01	10.747	
1,800.0	1,797.4	1,795.9	1,794.4	3.3	3.3	77.55	-6.7	94.4	65.7	59.2	6.46	10.172	
1,900.0	1,896.3	1,895.2	1,893.5	3.6	3.5	87.16	-7.3	99.9	68.1	61.2	6.94	9.819	
1,915.7	1,911.9	1,910.8	1,909.1	3.6	3.5	88.73	-7.4	100.8	68.7	61.7	7.02	9.790	
2,000.0	1,995.0	1,994.4	1,992.6	3.8	3.7	96.77	-7.9	105.3	72.5	65.1	7.43	9.761	SF
2,100.0	2,093.8	2,093.6	2,091.6	4.1	3.9	105.12	-8.5	110.8	78.7	70.8	7.90	9.956	
2,200.0	2,192.5	2,192.8	2,190.7	4.4	4.1	112.15	-9.1	116.2	86.3	77.9	8.36	10.325	
2,300.0	2,291.2	2,292.0	2,289.7	4.7	4.3	117.97	-9.7	121.7	94.9	86.1	8.79	10.801	
2,400.0	2,389.9	2,391.2	2,388.8	5.0	4.5	122.79	-10.3	127.1	104.4	95.2	9.21	11.338	
2,500.0	2,488.7	2,490.4	2,487.8	5.3	4.7	126.78	-10.9	132.6	114.5	104.9	9.62	11.906	
2,600.0	2,587.4	2,589.6	2,586.9	5.6	4.8	130.12	-11.5	138.0	125.1	115.1	10.02	12.483	
2,700.0	2,686.1	2,688.8	2,685.9	5.9	5.0	132.94	-12.1	143.4	136.0	125.6	10.42	13.056	
2,800.0	2,784.8	2,788.0	2,784.9	6.2	5.2	135.33	-12.7	148.9	147.2	136.4	10.81	13.617	
2,900.0	2,883.6	2,887.2	2,884.0	6.5	5.4	137.38	-13.3	154.3	158.6	147.4	11.20	14.161	
3,000.0	2,982.3	2,986.4	2,983.0	6.9	5.6	139.15	-13.9	159.8	170.2	158.6	11.59	14.686	
3,100.0	3,081.0	3,085.6	3,082.1	7.2	5.8	140.70	-14.5	165.2	182.0	170.0	11.98	15.190	
3,200.0	3,179.7	3,184.7	3,181.1	7.5	6.0	142.06	-15.1	170.7	193.8	181.4	12.37	15.673	
3,300.0	3,278.5	3,283.9	3,280.2	7.8	6.2	143.26	-15.8	176.1	205.7	193.0	12.75	16.134	
3,400.0	3,377.2	3,383.1	3,379.2	8.1	6.4	144.33	-16.4	181.5	217.8	204.6	13.14	16.575	
3,500.0	3,475.9	3,482.3	3,478.3	8.4	6.6	145.29	-17.0	187.0	229.9	216.3	13.52	16.997	
3,600.0	3,574.6	3,581.5	3,577.3	8.8	6.8	146.16	-17.6	192.4	242.0	228.1	13.91	17.399	
3,700.0	3,673.4	3,680.7	3,676.4	9.1	7.0	146.94	-18.2	197.9	254.2	239.9	14.29	17.783	
3,800.0	3,772.1	3,779.9	3,775.4	9.4	7.2	147.64	-18.8	203.3	266.4	251.8	14.68	18.149	
3,900.0	3,870.8	3,879.1	3,874.4	9.7	7.4	148.29	-19.4	208.8	278.7	263.6	15.07	18.500	
4,000.0	3,969.5	3,978.3	3,973.5	10.0	7.6	148.88	-20.0	214.2	291.0	275.6	15.45	18.835	
4,100.0	4,068.3	4,077.5	4,072.5	10.4	7.8	149.43	-20.6	219.6	303.3	287.5	15.84	19.156	
4,200.0	4,167.0	4,176.7	4,171.6	10.7	8.0	149.93	-21.2	225.1	315.7	299.5	16.22	19.462	
4,300.0	4,265.7	4,275.9	4,270.6	11.0	8.2	150.39	-21.8	230.5	328.1	311.5	16.61	19.756	
4,400.0	4,364.4	4,375.1	4,369.7	11.3	8.4	150.82	-22.4	236.0	340.5	323.5	16.99	20.038	
4,500.0	4,463.2	4,474.3	4,468.7	11.7	8.6	151.22	-23.0	241.4	352.9	335.5	17.38	20.308	
4,600.0	4,561.9	4,573.5	4,567.8	12.0	8.8	151.59	-23.6	246.9	365.3	347.6	17.76	20.567	
4,700.0	4,660.6	4,672.7	4,666.8	12.3	9.0	151.94	-24.2	252.3	377.8	359.6	18.15	20.816	
4,800.0	4,759.3	4,771.9	4,765.9	12.6	9.2	152.27	-24.8	257.7	390.2	371.7	18.53	21.055	
4,900.0	4,858.1	4,871.1	4,864.9	13.0	9.4	152.57	-25.4	263.2	402.7	383.8	18.92	21.285	
5,000.0	4,956.8	4,970.3	4,963.9	13.3	9.6	152.86	-26.0	268.6	415.2	395.9	19.31	21.507	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		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	5,055.5	5,069.5	5,063.0	13.6	9.8	153.13	-26.6	274.1	427.7	408.0	19.69	21.720	
5,200.0	5,154.2	5,168.7	5,162.0	13.9	10.0	153.38	-27.2	279.5	440.2	420.1	20.08	21.925	
5,300.0	5,253.0	5,267.9	5,261.1	14.3	10.2	153.63	-27.8	285.0	452.7	432.2	20.46	22.123	
5,400.0	5,351.7	5,367.1	5,360.1	14.6	10.4	153.85	-28.4	290.4	465.2	444.4	20.85	22.314	
5,500.0	5,450.4	5,466.3	5,459.2	14.9	10.6	154.07	-29.0	295.8	477.7	456.5	21.23	22.498	
5,600.0	5,549.1	5,565.5	5,558.2	15.3	10.8	154.27	-29.6	301.3	490.3	468.7	21.62	22.676	
5,700.0	5,647.9	5,664.7	5,657.3	15.6	11.0	154.47	-30.2	306.7	502.8	480.8	22.01	22.848	
5,800.0	5,746.6	5,763.9	5,756.3	15.9	11.2	154.65	-30.8	312.2	515.4	493.0	22.39	23.015	
5,900.0	5,845.3	5,863.1	5,855.4	16.2	11.4	154.83	-31.4	317.6	527.9	505.1	22.78	23.175	
6,000.0	5,944.1	5,962.3	5,954.4	16.6	11.6	155.00	-32.1	323.1	540.5	517.3	23.16	23.331	
6,100.0	6,042.8	6,061.5	6,053.5	16.9	11.8	155.16	-32.7	328.5	553.0	529.5	23.55	23.482	
6,200.0	6,141.5	6,160.7	6,152.5	17.2	11.9	155.31	-33.3	334.0	565.6	541.6	23.94	23.627	
6,300.0	6,240.2	6,259.9	6,251.5	17.5	12.1	155.46	-33.9	339.4	578.1	553.8	24.32	23.769	
6,400.0	6,339.0	6,359.0	6,350.6	17.9	12.3	155.60	-34.5	344.8	590.7	566.0	24.71	23.906	
6,500.0	6,437.7	6,458.2	6,449.6	18.2	12.5	155.74	-35.1	350.3	603.3	578.2	25.10	24.039	
6,600.0	6,536.4	6,557.4	6,548.7	18.5	12.7	155.87	-35.7	355.7	615.8	590.4	25.48	24.168	
6,700.0	6,635.1	6,656.6	6,647.7	18.9	12.9	155.99	-36.3	361.2	628.4	602.6	25.87	24.294	
6,800.0	6,733.9	6,755.8	6,746.8	19.2	13.1	156.11	-36.9	366.6	641.0	614.7	26.25	24.415	
6,900.0	6,832.6	6,855.0	6,845.8	19.5	13.3	156.22	-37.5	372.1	653.6	626.9	26.64	24.534	
7,000.0	6,931.3	6,954.2	6,944.9	19.8	13.5	156.33	-38.1	377.5	666.2	639.1	27.03	24.649	
7,100.0	7,030.0	7,053.4	7,043.9	20.2	13.7	156.44	-38.7	382.9	678.8	651.3	27.41	24.760	
7,191.8	7,120.7	8,107.8	7,740.0	20.5	18.7	-151.15	564.1	410.6	689.3	668.1	21.24	32.460	
7,200.0	7,128.8	8,108.5	7,740.0	20.5	18.7	-154.24	564.9	410.6	682.6	661.2	21.36	31.951	
7,250.0	7,178.3	8,110.5	7,740.0	20.6	18.7	178.54	566.8	410.5	641.7	619.5	22.17	28.944	
7,300.0	7,227.8	8,108.1	7,740.0	20.7	18.7	152.79	564.5	410.6	602.4	579.3	23.05	26.134	
7,350.0	7,276.8	8,101.4	7,740.0	20.8	18.6	139.50	557.7	410.7	565.2	541.2	23.99	23.560	
7,400.0	7,325.1	8,090.4	7,740.0	20.8	18.5	133.08	546.7	410.9	530.7	505.7	24.97	21.254	
7,450.0	7,372.2	8,071.4	7,740.0	20.8	18.3	128.82	527.7	411.2	499.5	473.6	25.86	19.314	
7,500.0	7,417.7	8,031.6	7,738.2	20.8	17.9	123.30	488.0	411.8	471.5	445.2	26.31	17.921	
7,550.0	7,461.4	7,996.1	7,734.2	20.7	17.5	118.94	452.8	412.2	447.0	420.1	26.90	16.620	
7,600.0	7,502.9	7,963.3	7,728.6	20.7	17.2	115.08	420.4	412.5	426.5	399.0	27.53	15.495	
7,650.0	7,541.9	7,932.2	7,721.7	20.6	16.9	111.40	390.1	412.6	410.5	382.3	28.11	14.600	
7,700.0	7,578.0	7,902.2	7,713.4	20.5	16.7	107.69	361.3	412.7	399.1	370.5	28.58	13.963	
7,750.0	7,611.1	7,873.2	7,704.0	20.4	16.4	103.85	333.9	412.6	392.6	363.7	28.90	13.584	
7,793.0	7,636.9	7,848.7	7,694.9	20.4	16.3	100.41	311.1	412.5	390.9	361.9	29.03	13.465	
7,800.0	7,640.8	7,844.7	7,693.4	20.4	16.2	99.83	307.5	412.5	390.9	361.9	29.04	13.463	
7,850.0	7,667.0	7,816.8	7,681.7	20.3	16.0	95.65	282.0	412.3	393.8	364.8	29.02	13.571	
7,900.0	7,689.4	7,789.2	7,669.0	20.3	15.8	91.32	257.6	412.1	400.7	371.8	28.86	13.883	
7,950.0	7,707.9	7,761.9	7,655.3	20.3	15.7	86.91	234.0	411.7	411.1	382.4	28.63	14.360	
8,000.0	7,722.2	7,734.9	7,640.6	20.3	15.5	82.50	211.3	411.3	424.3	395.9	28.36	14.960	
8,050.0	7,732.4	7,708.0	7,625.0	20.3	15.4	78.16	189.4	410.8	439.8	411.7	28.11	15.646	
8,100.0	7,738.4	7,681.3	7,608.5	20.4	15.3	73.98	168.5	410.3	456.8	428.9	27.89	16.377	
8,143.7	7,740.0	7,658.1	7,593.4	20.5	15.1	70.51	150.9	409.8	472.6	444.9	27.75	17.032	
8,200.0	7,740.0	7,629.6	7,573.9	20.6	15.0	68.25	130.2	409.1	495.0	467.3	27.63	17.913	
8,300.0	7,740.0	7,585.3	7,541.5	21.0	14.9	64.68	99.9	407.8	542.1	514.5	27.58	19.659	
8,400.0	7,740.0	7,550.0	7,514.1	21.5	14.8	61.86	77.7	406.7	597.8	570.1	27.73	21.560	
8,443.7	7,740.0	7,533.0	7,500.5	21.8	14.7	60.51	67.6	406.1	624.5	596.8	27.76	22.499	
8,500.0	7,740.0	7,515.6	7,486.2	22.2	14.7	59.38	57.7	405.5	660.7	632.8	27.89	23.692	
8,600.0	7,740.0	7,500.0	7,473.1	22.9	14.6	58.65	49.2	404.9	728.9	700.5	28.37	25.688	
8,700.0	7,740.0	7,464.4	7,442.5	23.7	14.5	56.52	31.1	403.6	800.8	772.4	28.46	28.142	
8,800.0	7,740.0	7,450.0	7,429.8	24.6	14.5	56.10	24.3	403.0	876.3	847.5	28.86	30.365	
8,843.7	7,740.0	7,450.0	7,429.8	25.1	14.5	56.40	24.3	403.0	910.4	881.3	29.11	31.276	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,740.0	7,425.7	7,408.0	25.6	14.4	54.64	13.7	402.0	954.7	925.6	29.07	32.836		
9,000.0	7,740.0	7,400.0	7,384.4	26.7	14.4	52.84	3.4	400.9	1,036.1	1,006.9	29.26	35.413		
9,100.0	7,740.0	7,400.0	7,384.4	27.8	14.4	52.84	3.4	400.9	1,119.9	1,090.2	29.72	37.687		
9,200.0	7,740.0	7,383.1	7,368.8	29.0	14.4	51.69	-2.8	400.1	1,205.8	1,175.8	29.93	40.285		
9,300.0	7,740.0	7,371.9	7,358.2	30.2	14.3	50.93	-6.6	399.6	1,293.3	1,263.2	30.19	42.834		
9,343.7	7,740.0	7,367.3	7,353.9	30.8	14.3	50.63	-8.1	399.4	1,332.1	1,301.8	30.31	43.953		
9,400.7	7,740.0	7,350.0	7,337.4	31.6	14.3	48.77	-13.5	398.6	1,383.3	1,352.9	30.34	45.592		
9,500.0	7,740.0	7,350.0	7,337.4	32.9	14.3	48.77	-13.5	398.6	1,473.0	1,442.4	30.65	48.056		
9,600.0	7,740.0	7,350.0	7,337.4	34.3	14.3	48.77	-13.5	398.6	1,564.6	1,533.6	30.94	50.571		
9,700.0	7,740.0	7,350.0	7,337.4	35.7	14.3	48.77	-13.5	398.6	1,657.1	1,625.9	31.20	53.108		
9,800.0	7,740.0	7,329.8	7,318.1	37.1	14.3	47.50	-19.2	397.6	1,750.0	1,718.7	31.31	55.887		
9,900.0	7,740.0	7,323.5	7,312.0	38.6	14.2	47.10	-20.8	397.3	1,843.7	1,812.2	31.51	58.514		
10,000.0	7,740.0	7,300.0	7,289.2	40.1	14.2	45.69	-26.3	396.2	1,938.3	1,906.7	31.59	61.366		
10,100.0	7,740.0	7,300.0	7,289.2	41.6	14.2	45.69	-26.3	396.2	2,032.9	2,001.1	31.81	63.912		
10,200.0	7,740.0	7,300.0	7,289.2	43.1	14.2	45.69	-26.3	396.2	2,127.9	2,095.9	32.02	66.458		
10,300.0	7,740.0	7,300.0	7,289.2	44.7	14.2	45.69	-26.3	396.2	2,223.4	2,191.2	32.22	69.004		
10,400.0	7,740.0	7,300.0	7,289.2	46.3	14.2	45.69	-26.3	396.2	2,319.3	2,286.9	32.42	71.545		
10,500.0	7,740.0	7,300.0	7,289.2	47.8	14.2	45.69	-26.3	396.2	2,415.5	2,382.9	32.61	74.081		
10,600.0	7,740.0	7,300.0	7,289.2	49.4	14.2	45.69	-26.3	396.2	2,512.0	2,479.2	32.79	76.609		
10,700.0	7,740.0	7,300.0	7,289.2	51.0	14.2	45.69	-26.3	396.2	2,608.8	2,575.8	32.97	79.129		
10,800.0	7,740.0	7,300.0	7,289.2	52.6	14.2	45.69	-26.3	396.2	2,705.8	2,672.6	33.14	81.639		
10,900.0	7,740.0	7,300.0	7,289.2	54.2	14.2	45.69	-26.3	396.2	2,803.0	2,769.7	33.31	84.139		
11,000.0	7,740.0	7,277.3	7,266.9	55.9	14.2	44.38	-30.7	395.0	2,899.9	2,866.5	33.38	86.877		
11,100.0	7,740.0	7,274.4	7,264.1	57.5	14.2	44.23	-31.2	394.9	2,997.3	2,963.8	33.53	89.384		
11,200.0	7,740.0	7,271.8	7,261.5	59.1	14.2	44.08	-31.6	394.8	3,094.9	3,061.2	33.69	91.876		
11,300.0	7,740.0	7,250.0	7,240.0	60.8	14.1	42.89	-34.8	393.6	3,193.0	3,159.2	33.75	94.597		
11,400.0	7,740.0	7,250.0	7,240.0	62.4	14.1	42.89	-34.8	393.6	3,290.8	3,256.8	33.91	97.031		
11,500.0	7,740.0	7,250.0	7,240.0	64.1	14.1	42.89	-34.8	393.6	3,388.7	3,354.6	34.07	99.453		
11,600.0	7,740.0	7,250.0	7,240.0	65.8	14.1	42.89	-34.8	393.6	3,486.7	3,452.4	34.23	101.861		
11,700.0	7,740.0	7,250.0	7,240.0	67.4	14.1	42.89	-34.8	393.6	3,584.8	3,550.4	34.38	104.256		
11,800.0	7,740.0	7,250.0	7,240.0	69.1	14.1	42.89	-34.8	393.6	3,683.0	3,648.5	34.54	106.639		
11,900.0	7,740.0	7,250.0	7,240.0	70.8	14.1	42.89	-34.8	393.6	3,781.3	3,746.6	34.69	109.007		
12,000.0	7,740.0	7,250.0	7,240.0	72.5	14.1	42.89	-34.8	393.6	3,879.7	3,844.9	34.84	111.363		
12,100.0	7,740.0	7,250.0	7,240.0	74.1	14.1	42.89	-34.8	393.6	3,978.2	3,943.2	34.99	113.705		
12,200.0	7,740.0	7,250.0	7,240.0	75.8	14.1	42.89	-34.8	393.6	4,076.7	4,041.6	35.13	116.033		
12,300.0	7,740.0	7,250.0	7,240.0	77.5	14.1	42.89	-34.8	393.6	4,175.4	4,140.1	35.28	118.348		
12,400.0	7,740.0	7,250.0	7,240.0	79.2	14.1	42.89	-34.8	393.6	4,274.1	4,238.6	35.43	120.649		
12,500.0	7,740.0	7,250.0	7,240.0	80.9	14.1	42.89	-34.8	393.6	4,372.8	4,337.2	35.57	122.936		
12,600.0	7,740.0	7,250.0	7,240.0	82.6	14.1	42.89	-34.8	393.6	4,471.6	4,435.9	35.71	125.210		
12,700.0	7,740.0	7,250.0	7,240.0	84.3	14.1	42.89	-34.8	393.6	4,570.5	4,534.6	35.85	127.471		
12,800.0	7,740.0	7,250.0	7,240.0	86.0	14.1	42.89	-34.8	393.6	4,669.4	4,633.4	36.00	129.718		
12,900.0	7,740.0	7,250.0	7,240.0	87.7	14.1	42.89	-34.8	393.6	4,768.3	4,732.2	36.14	131.952		
13,000.0	7,740.0	7,250.0	7,240.0	89.4	14.1	42.89	-34.8	393.6	4,867.3	4,831.0	36.28	134.173		
13,100.0	7,740.0	7,250.0	7,240.0	91.1	14.1	42.89	-34.8	393.6	4,966.3	4,929.9	36.42	136.381		
13,200.0	7,740.0	7,250.0	7,240.0	92.8	14.1	42.89	-34.8	393.6	5,065.4	5,028.8	36.55	138.575		
13,300.0	7,740.0	7,250.0	7,240.0	94.5	14.1	42.89	-34.8	393.6	5,164.5	5,127.8	36.69	140.756		
13,400.0	7,740.0	7,250.0	7,240.0	96.3	14.1	42.89	-34.8	393.6	5,263.6	5,226.8	36.83	142.925		
13,500.0	7,740.0	7,250.0	7,240.0	98.0	14.1	42.89	-34.8	393.6	5,362.8	5,325.9	36.96	145.080		
13,600.0	7,740.0	7,250.0	7,240.0	99.7	14.1	42.89	-34.8	393.6	5,462.0	5,424.9	37.10	147.223		
13,700.0	7,740.0	7,250.0	7,240.0	101.4	14.1	42.89	-34.8	393.6	5,561.2	5,524.0	37.24	149.354		
13,800.0	7,740.0	7,250.0	7,240.0	103.1	14.1	42.89	-34.8	393.6	5,660.5	5,623.1	37.37	151.471		
13,900.0	7,740.0	7,250.0	7,240.0	104.8	14.1	42.89	-34.8	393.6	5,759.8	5,722.3	37.50	153.577		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
14,000.0	7,740.0	7,250.0	7,240.0	106.6	14.1	42.89	-34.8	393.6	5,859.1	5,821.5	37.64	155.670		
14,100.0	7,740.0	7,250.0	7,240.0	108.3	14.1	42.89	-34.8	393.6	5,958.4	5,920.7	37.77	157.750		
14,200.0	7,740.0	7,250.0	7,240.0	110.0	14.1	42.89	-34.8	393.6	6,057.8	6,019.9	37.90	159.819		
14,300.0	7,740.0	7,250.0	7,240.0	111.7	14.1	42.89	-34.8	393.6	6,157.2	6,119.1	38.04	161.876		
14,400.0	7,740.0	7,250.0	7,240.0	113.5	14.1	42.89	-34.8	393.6	6,256.5	6,218.4	38.17	163.921		
14,500.0	7,740.0	7,226.9	7,217.1	115.2	14.1	41.69	-37.3	392.4	6,355.5	6,317.2	38.23	166.258		
14,600.0	7,740.0	7,226.2	7,216.4	116.9	14.1	41.65	-37.3	392.4	6,454.9	6,416.5	38.36	168.289		
14,700.0	7,740.0	7,225.5	7,215.7	118.6	14.1	41.62	-37.4	392.3	6,554.3	6,515.8	38.48	170.309		
14,800.0	7,740.0	7,224.8	7,215.0	120.4	14.1	41.58	-37.4	392.3	6,653.7	6,615.1	38.61	172.318		
14,900.0	7,740.0	7,224.2	7,214.4	122.1	14.1	41.55	-37.5	392.3	6,753.2	6,714.4	38.74	174.315		
15,000.0	7,740.0	7,223.6	7,213.7	123.8	14.1	41.52	-37.6	392.2	6,852.6	6,813.8	38.87	176.300		
15,100.0	7,740.0	7,200.0	7,190.3	125.6	14.0	40.36	-39.0	391.0	6,952.6	6,913.7	38.93	178.611		
15,200.0	7,740.0	7,200.0	7,190.3	127.3	14.0	40.36	-39.0	391.0	7,052.1	7,013.0	39.06	180.566		
15,300.0	7,740.0	7,200.0	7,190.3	129.0	14.0	40.36	-39.0	391.0	7,151.5	7,112.4	39.18	182.510		
15,400.0	7,740.0	7,200.0	7,190.3	130.7	14.0	40.36	-39.0	391.0	7,251.0	7,211.7	39.31	184.444		
15,500.0	7,740.0	7,200.0	7,190.3	132.5	14.0	40.36	-39.0	391.0	7,350.6	7,311.1	39.44	186.366		
15,600.0	7,740.0	7,200.0	7,190.3	134.2	14.0	40.36	-39.0	391.0	7,450.1	7,410.5	39.57	188.278		
15,700.0	7,740.0	7,200.0	7,190.3	135.9	14.0	40.36	-39.0	391.0	7,549.6	7,509.9	39.70	190.179		
15,800.0	7,740.0	7,200.0	7,190.3	137.7	14.0	40.36	-39.0	391.0	7,649.2	7,609.3	39.82	192.070		
15,900.0	7,740.0	7,200.0	7,190.3	139.4	14.0	40.36	-39.0	391.0	7,748.7	7,708.8	39.95	193.951		
16,000.0	7,740.0	7,200.0	7,190.3	141.1	14.0	40.36	-39.0	391.0	7,848.3	7,808.2	40.08	195.821		
16,084.2	7,740.0	7,200.0	7,190.3	142.6	14.0	40.36	-39.0	391.0	7,932.1	7,892.0	40.19	197.388		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	90.48	-0.4	45.1	45.1						
100.0	100.0	100.0	100.0	0.2	0.2	90.48	-0.4	45.1	45.1	44.8	0.30	148.383			
200.0	200.0	200.0	200.0	0.3	0.3	90.48	-0.4	45.1	45.1	44.4	0.65	69.034			
300.0	300.0	300.0	300.0	0.5	0.5	90.48	-0.4	45.1	45.1	44.1	1.00	44.980			
400.0	400.0	400.0	400.0	0.7	0.7	90.48	-0.4	45.1	45.1	43.7	1.35	33.358			
500.0	500.0	500.0	500.0	0.8	0.8	90.48	-0.4	45.1	45.1	43.4	1.70	26.508	CC, ES		
600.0	600.0	599.2	599.2	1.0	1.0	90.59	-0.5	45.9	45.9	43.9	2.05	22.430			
700.0	700.0	698.4	698.3	1.2	1.2	90.88	-0.7	48.5	48.5	46.1	2.39	20.259			
800.0	800.0	797.4	797.3	1.4	1.4	91.31	-1.2	52.7	52.8	50.1	2.74	19.272			
900.0	900.0	896.3	895.9	1.5	1.6	91.80	-1.8	58.7	58.8	55.8	3.09	19.070			
1,000.0	1,000.0	994.9	994.3	1.7	1.8	92.30	-2.7	66.3	66.6	63.2	3.43	19.417			
1,100.0	1,100.0	1,093.9	1,092.8	1.9	2.0	41.75	-3.7	75.5	75.2	71.5	3.78	19.927			
1,200.0	1,200.0	1,193.5	1,192.0	2.1	2.2	43.25	-4.7	84.9	82.9	78.7	4.12	20.089			
1,300.0	1,299.9	1,293.3	1,291.3	2.3	2.4	45.28	-5.7	94.4	89.3	84.8	4.48	19.951			
1,400.0	1,399.7	1,393.1	1,390.6	2.4	2.7	47.80	-6.7	103.9	94.7	89.8	4.83	19.590			
1,500.0	1,499.4	1,492.8	1,490.0	2.6	2.9	50.83	-7.7	113.4	99.1	93.9	5.20	19.063			
1,600.0	1,598.9	1,592.6	1,589.2	2.8	3.1	54.37	-8.8	122.8	102.8	97.2	5.58	18.418			
1,700.0	1,698.3	1,692.2	1,688.4	3.1	3.3	58.45	-9.8	132.3	105.9	99.9	5.98	17.695			
1,800.0	1,797.4	1,791.8	1,787.6	3.3	3.6	63.08	-10.8	141.8	108.7	102.3	6.42	16.931			
1,900.0	1,896.3	1,891.3	1,886.6	3.6	3.8	68.27	-11.8	151.2	111.5	104.6	6.90	16.170			
1,915.7	1,911.9	1,906.9	1,902.1	3.6	3.9	69.13	-12.0	152.7	112.0	105.0	6.98	16.054			
2,000.0	1,995.0	1,990.6	1,985.5	3.8	4.0	73.70	-12.8	160.6	114.9	107.5	7.41	15.508			
2,100.0	2,093.8	2,090.0	2,084.4	4.1	4.3	78.80	-13.8	170.1	119.3	111.4	7.95	15.013			
2,200.0	2,192.5	2,189.3	2,183.3	4.4	4.5	83.51	-14.9	179.5	124.6	116.1	8.50	14.659			
2,300.0	2,291.2	2,288.7	2,282.2	4.7	4.8	87.81	-15.9	188.9	130.6	121.6	9.06	14.423			
2,400.0	2,389.9	2,388.0	2,381.1	5.0	5.0	91.72	-16.9	198.4	137.4	127.8	9.62	14.281			
2,500.0	2,488.7	2,487.4	2,480.0	5.3	5.2	95.25	-17.9	207.8	144.7	134.5	10.18	14.214			
2,600.0	2,587.4	2,586.7	2,578.9	5.6	5.5	98.43	-18.9	217.3	152.5	141.7	10.73	14.206			
2,700.0	2,686.1	2,686.1	2,677.8	5.9	5.7	101.29	-19.9	226.7	160.7	149.4	11.28	14.243			
2,800.0	2,784.8	2,785.4	2,776.7	6.2	5.9	103.88	-21.0	236.1	169.3	157.4	11.82	14.315			
2,900.0	2,883.6	2,884.8	2,875.6	6.5	6.2	106.21	-22.0	245.6	178.2	165.8	12.36	14.411			
3,000.0	2,982.3	2,984.1	2,974.5	6.9	6.4	108.31	-23.0	255.0	187.3	174.4	12.89	14.527			
3,100.0	3,081.0	3,083.5	3,073.4	7.2	6.7	110.22	-24.0	264.4	196.7	183.3	13.42	14.656			
3,200.0	3,179.7	3,182.9	3,172.3	7.5	6.9	111.96	-25.0	273.9	206.3	192.3	13.94	14.795			
3,300.0	3,278.5	3,282.2	3,271.2	7.8	7.1	113.54	-26.0	283.3	216.0	201.6	14.46	14.940			
3,400.0	3,377.2	3,381.6	3,370.1	8.1	7.4	114.98	-27.1	292.8	225.9	211.0	14.98	15.088			
3,500.0	3,475.9	3,480.9	3,469.0	8.4	7.6	116.30	-28.1	302.2	236.0	220.5	15.49	15.239			
3,600.0	3,574.6	3,580.3	3,567.9	8.8	7.8	117.51	-29.1	311.6	246.1	230.1	15.99	15.390			
3,700.0	3,673.4	3,679.6	3,666.8	9.1	8.1	118.63	-30.1	321.1	256.4	239.9	16.50	15.540			
3,800.0	3,772.1	3,779.0	3,765.7	9.4	8.3	119.66	-31.1	330.5	266.7	249.7	17.00	15.689			
3,900.0	3,870.8	3,878.3	3,864.6	9.7	8.6	120.61	-32.1	339.9	277.1	259.6	17.50	15.836			
4,000.0	3,969.5	3,977.7	3,963.4	10.0	8.8	121.50	-33.1	349.4	287.6	269.6	18.00	15.980			
4,100.0	4,068.3	4,077.0	4,062.3	10.4	9.0	122.32	-34.2	358.8	298.2	279.7	18.50	16.121			
4,200.0	4,167.0	4,176.4	4,161.2	10.7	9.3	123.09	-35.2	368.3	308.8	289.8	18.99	16.259			
4,300.0	4,265.7	4,275.7	4,260.1	11.0	9.5	123.80	-36.2	377.7	319.4	300.0	19.49	16.394			
4,400.0	4,364.4	4,375.1	4,359.0	11.3	9.8	124.47	-37.2	387.1	330.2	310.2	19.98	16.526			
4,500.0	4,463.2	4,474.5	4,457.9	11.7	10.0	125.10	-38.2	396.6	340.9	320.4	20.47	16.654			
4,600.0	4,561.9	4,573.8	4,556.8	12.0	10.2	125.69	-39.2	406.0	351.7	330.7	20.96	16.779			
4,700.0	4,660.6	4,673.2	4,655.7	12.3	10.5	126.24	-40.3	415.5	362.5	341.1	21.45	16.900			
4,800.0	4,759.3	4,772.5	4,754.6	12.6	10.7	126.76	-41.3	424.9	373.4	351.4	21.94	17.018			
4,900.0	4,858.1	4,871.9	4,853.5	13.0	11.0	127.25	-42.3	434.3	384.2	361.8	22.43	17.132			
5,000.0	4,956.8	4,971.2	4,952.4	13.3	11.2	127.72	-43.3	443.8	395.1	372.2	22.91	17.244			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5											Offset Site Error: 0.0 ft		
Survey Program: O-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,055.5	5,070.6	5,051.3	13.6	11.4	128.16	-44.3	453.2	406.1	382.7	23.40	17.352	
5,200.0	5,154.2	5,169.9	5,150.2	13.9	11.7	128.57	-45.3	462.6	417.0	393.1	23.89	17.457	
5,300.0	5,253.0	5,269.3	5,249.1	14.3	11.9	128.97	-46.4	472.1	428.0	403.6	24.37	17.559	
5,400.0	5,351.7	5,368.6	5,348.0	14.6	12.2	129.34	-47.4	481.5	439.0	414.1	24.86	17.659	
5,500.0	5,450.4	5,468.0	5,446.9	14.9	12.4	129.70	-48.4	491.0	450.0	424.7	25.35	17.755	
5,600.0	5,549.1	5,567.3	5,545.8	15.3	12.6	130.04	-49.4	500.4	461.0	435.2	25.83	17.849	
5,700.0	5,647.9	5,666.7	5,644.7	15.6	12.9	130.37	-50.4	509.8	472.1	445.8	26.31	17.940	
5,800.0	5,746.6	5,766.1	5,743.6	15.9	13.1	130.68	-51.4	519.3	483.1	456.3	26.80	18.028	
5,900.0	5,845.3	5,865.4	5,842.5	16.2	13.4	130.97	-52.5	528.7	494.2	466.9	27.28	18.114	
6,000.0	5,944.1	5,964.8	5,941.4	16.6	13.6	131.25	-53.5	538.1	505.3	477.5	27.77	18.198	
6,100.0	6,042.8	6,064.1	6,040.3	16.9	13.8	131.52	-54.5	547.6	516.4	488.1	28.25	18.280	
6,200.0	6,141.5	6,163.5	6,139.2	17.2	14.1	131.78	-55.5	557.0	527.5	498.7	28.73	18.359	
6,300.0	6,240.2	6,262.8	6,238.1	17.5	14.3	132.03	-56.5	566.5	538.6	509.4	29.21	18.436	
6,400.0	6,339.0	6,362.2	6,337.0	17.9	14.6	132.27	-57.5	575.9	549.7	520.0	29.70	18.511	
6,500.0	6,437.7	6,461.5	6,435.9	18.2	14.8	132.50	-58.6	585.3	560.9	530.7	30.18	18.584	
6,600.0	6,536.4	6,560.9	6,534.8	18.5	15.0	132.72	-59.6	594.8	572.0	541.3	30.66	18.655	
6,700.0	6,635.1	6,660.2	6,633.7	18.9	15.3	132.93	-60.6	604.2	583.1	552.0	31.14	18.724	
6,800.0	6,733.9	6,759.6	6,732.6	19.2	15.5	133.13	-61.6	613.6	594.3	562.7	31.63	18.792	
6,900.0	6,832.6	6,858.9	6,831.5	19.5	15.8	133.33	-62.6	623.1	605.5	573.4	32.11	18.858	
7,000.0	6,931.3	7,899.1	7,500.0	19.8	20.5	178.38	550.3	693.4	568.7	553.0	15.75	36.113	
7,100.0	7,030.0	7,909.1	7,500.0	20.2	20.6	-176.26	560.4	693.5	470.0	454.1	15.95	29.471	
7,191.8	7,120.7	7,918.4	7,500.0	20.5	20.7	-170.61	569.6	693.6	379.8	363.6	16.22	23.416	
7,200.0	7,128.8	7,919.1	7,500.0	20.5	20.7	-170.82	570.4	693.6	371.8	355.6	16.25	22.878	
7,250.0	7,178.3	7,921.3	7,500.0	20.6	20.7	179.92	572.5	693.6	322.9	306.4	16.49	19.583	
7,300.0	7,227.8	7,919.1	7,500.0	20.7	20.7	166.04	570.3	693.6	274.3	257.5	16.84	16.288	
7,350.0	7,276.8	7,912.6	7,500.0	20.8	20.6	157.37	563.8	693.5	226.9	209.5	17.44	13.008	
7,400.0	7,325.1	7,901.8	7,500.0	20.8	20.5	150.80	553.0	693.4	181.5	162.9	18.54	9.788	
7,450.0	7,372.2	7,886.8	7,500.0	20.8	20.4	143.39	538.0	693.2	139.5	118.8	20.64	6.757	
7,500.0	7,417.7	7,867.7	7,500.0	20.8	20.2	133.34	518.9	693.0	103.8	79.3	24.56	4.228	
7,550.0	7,461.4	7,843.9	7,499.8	20.7	20.0	118.70	495.2	692.8	80.8	50.9	29.85	2.706	
7,578.7	7,485.5	7,829.4	7,499.3	20.7	19.8	108.66	480.7	692.6	76.8	45.0	31.72	2.419 SF	
7,600.0	7,502.9	7,818.6	7,498.7	20.7	19.7	100.85	469.9	692.4	78.9	47.2	31.75	2.487	
7,650.0	7,541.9	7,793.4	7,496.4	20.6	19.5	82.77	444.8	691.9	98.1	69.2	28.85	3.399	
7,700.0	7,578.0	7,768.2	7,493.1	20.5	19.3	67.13	419.8	691.3	127.9	102.0	25.95	4.930	
7,750.0	7,611.1	7,743.0	7,488.6	20.4	19.1	55.06	395.0	690.6	161.8	137.5	24.29	6.662	
7,800.0	7,640.8	7,717.8	7,483.1	20.4	18.9	46.16	370.5	689.9	196.7	173.2	23.49	8.374	
7,850.0	7,667.0	7,692.7	7,476.6	20.3	18.7	39.63	346.2	689.0	231.5	208.3	23.22	9.972	
7,900.0	7,689.4	7,667.5	7,468.9	20.3	18.5	34.79	322.3	688.0	265.5	242.3	23.26	11.416	
7,950.0	7,707.9	7,650.0	7,463.0	20.3	18.4	31.52	305.8	687.3	298.6	274.6	24.06	12.411	
8,000.0	7,722.2	7,617.2	7,450.6	20.3	18.2	28.31	275.5	685.8	330.1	306.2	23.89	13.818	
8,050.0	7,732.4	7,600.0	7,443.4	20.3	18.1	26.33	259.9	684.9	360.3	335.5	24.85	14.499	
8,100.0	7,738.4	7,566.9	7,428.2	20.4	17.9	24.41	230.5	683.1	388.7	363.8	24.89	15.617	
8,143.7	7,740.0	7,550.0	7,419.8	20.5	17.8	23.29	215.9	682.2	412.3	386.6	25.67	16.061	
8,200.0	7,740.0	7,517.5	7,402.5	20.6	17.6	22.78	188.4	680.3	442.8	416.8	26.04	17.005	
8,300.0	7,740.0	7,472.8	7,376.2	21.0	17.4	22.02	152.5	677.4	502.3	475.1	27.12	18.518	
8,400.0	7,740.0	7,433.2	7,350.6	21.5	17.2	21.32	122.3	674.6	567.4	539.3	28.10	20.190	
8,443.7	7,740.0	7,417.3	7,339.8	21.8	17.2	21.04	110.8	673.4	597.3	568.8	28.49	20.963	
8,500.0	7,740.0	7,400.0	7,327.6	22.2	17.1	21.24	98.5	672.2	637.2	608.1	29.04	21.941	
8,600.0	7,740.0	7,366.8	7,303.3	22.9	17.0	21.57	76.1	669.6	710.6	680.9	29.74	23.895	
8,700.0	7,740.0	7,350.0	7,290.5	23.7	16.9	22.31	65.3	668.3	787.3	756.6	30.71	25.637	
8,800.0	7,740.0	7,300.0	7,250.6	24.6	16.8	22.27	35.4	664.1	866.4	835.7	30.70	28.223	
8,843.7	7,740.0	7,300.0	7,250.6	25.1	16.8	22.81	35.4	664.1	901.4	870.2	31.18	28.908	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5										Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD										Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
8,900.0	7,740.0	7,300.0	7,250.6	25.6	16.8	22.81	35.4	664.1	947.5	915.7	31.74	29.852	
9,000.0	7,740.0	7,272.2	7,227.4	26.7	16.7	22.10	20.4	661.8	1,030.8	998.7	32.06	32.149	
9,100.0	7,740.0	7,250.0	7,208.3	27.8	16.7	21.57	9.2	659.8	1,116.0	1,083.6	32.43	34.410	
9,200.0	7,740.0	7,250.0	7,208.3	29.0	16.7	21.57	9.2	659.8	1,203.0	1,169.9	33.08	36.363	
9,300.0	7,740.0	7,223.8	7,185.3	30.2	16.6	20.96	-3.1	657.5	1,291.0	1,257.8	33.26	38.818	
9,343.7	7,740.0	7,217.9	7,180.0	30.8	16.6	20.82	-5.7	657.0	1,329.9	1,296.5	33.41	39.806	
9,400.7	7,740.0	7,200.0	7,163.9	31.6	16.5	19.37	-13.3	655.3	1,381.2	1,347.7	33.47	41.269	
9,500.0	7,740.0	7,200.0	7,163.9	32.9	16.5	19.37	-13.3	655.3	1,470.9	1,437.0	33.92	43.361	
9,600.0	7,740.0	7,200.0	7,163.9	34.3	16.5	19.37	-13.3	655.3	1,562.4	1,528.1	34.33	45.517	
9,700.0	7,740.0	7,177.6	7,143.4	35.7	16.5	18.94	-22.1	653.3	1,654.3	1,619.9	34.45	48.015	
9,800.0	7,740.0	7,150.0	7,117.7	37.1	16.4	18.43	-31.8	650.7	1,747.5	1,713.0	34.51	50.632	
9,900.0	7,740.0	7,150.0	7,117.7	38.6	16.4	18.43	-31.8	650.7	1,840.6	1,805.7	34.84	52.834	
10,000.0	7,740.0	7,150.0	7,117.7	40.1	16.4	18.43	-31.8	650.7	1,934.3	1,899.2	35.13	55.058	
10,100.0	7,740.0	7,150.0	7,117.7	41.6	16.4	18.43	-31.8	650.7	2,028.7	1,993.3	35.41	57.298	
10,200.0	7,740.0	7,150.0	7,117.7	43.1	16.4	18.43	-31.8	650.7	2,123.6	2,087.9	35.66	59.549	
10,300.0	7,740.0	7,150.0	7,117.7	44.7	16.4	18.43	-31.8	650.7	2,218.9	2,183.0	35.90	61.808	
10,400.0	7,740.0	7,125.6	7,094.6	46.3	16.4	18.00	-39.3	648.5	2,313.9	2,278.0	35.94	64.380	
10,500.0	7,740.0	7,100.0	7,070.0	47.8	16.3	17.58	-46.1	646.0	2,410.1	2,374.2	35.97	66.995	
10,600.0	7,740.0	7,100.0	7,070.0	49.4	16.3	17.58	-46.1	646.0	2,506.0	2,469.8	36.19	69.242	
10,700.0	7,740.0	7,100.0	7,070.0	51.0	16.3	17.58	-46.1	646.0	2,602.1	2,565.7	36.40	71.490	
10,800.0	7,740.0	7,100.0	7,070.0	52.6	16.3	17.58	-46.1	646.0	2,698.5	2,661.9	36.60	73.737	
10,900.0	7,740.0	7,100.0	7,070.0	54.2	16.3	17.58	-46.1	646.0	2,795.2	2,758.4	36.79	75.981	
11,000.0	7,740.0	7,100.0	7,070.0	55.9	16.3	17.58	-46.1	646.0	2,892.1	2,855.1	36.97	78.222	
11,100.0	7,740.0	7,100.0	7,070.0	57.5	16.3	17.58	-46.1	646.0	2,989.2	2,952.0	37.15	80.458	
11,200.0	7,740.0	7,100.0	7,070.0	59.1	16.3	17.58	-46.1	646.0	3,086.5	3,049.1	37.33	82.689	
11,300.0	7,740.0	7,100.0	7,070.0	60.8	16.3	17.58	-46.1	646.0	3,183.9	3,146.4	37.50	84.913	
11,400.0	7,740.0	7,100.0	7,070.0	62.4	16.3	17.58	-46.1	646.0	3,281.5	3,243.9	37.66	87.131	
11,500.0	7,740.0	7,100.0	7,070.0	64.1	16.3	17.58	-46.1	646.0	3,379.3	3,341.5	37.82	89.341	
11,600.0	7,740.0	7,076.7	7,047.4	65.8	16.3	17.21	-51.4	643.8	3,476.6	3,438.7	37.85	91.841	
11,700.0	7,740.0	7,073.8	7,044.6	67.4	16.3	17.16	-51.9	643.6	3,574.5	3,536.5	38.00	94.071	
11,800.0	7,740.0	7,050.0	7,021.3	69.1	16.2	16.81	-56.2	641.3	3,672.9	3,634.8	38.02	96.592	
11,900.0	7,740.0	7,050.0	7,021.3	70.8	16.2	16.81	-56.2	641.3	3,770.8	3,732.6	38.18	98.764	
12,000.0	7,740.0	7,050.0	7,021.3	72.5	16.2	16.81	-56.2	641.3	3,868.9	3,830.5	38.33	100.927	
12,100.0	7,740.0	7,050.0	7,021.3	74.1	16.2	16.81	-56.2	641.3	3,967.0	3,928.5	38.48	103.081	
12,200.0	7,740.0	7,050.0	7,021.3	75.8	16.2	16.81	-56.2	641.3	4,065.2	4,026.6	38.63	105.227	
12,300.0	7,740.0	7,050.0	7,021.3	77.5	16.2	16.81	-56.2	641.3	4,163.6	4,124.8	38.78	107.363	
12,400.0	7,740.0	7,050.0	7,021.3	79.2	16.2	16.81	-56.2	641.3	4,262.0	4,223.0	38.93	109.490	
12,500.0	7,740.0	7,050.0	7,021.3	80.9	16.2	16.81	-56.2	641.3	4,360.4	4,321.4	39.07	111.608	
12,600.0	7,740.0	7,050.0	7,021.3	82.6	16.2	16.81	-56.2	641.3	4,459.0	4,419.8	39.21	113.715	
12,700.0	7,740.0	7,050.0	7,021.3	84.3	16.2	16.81	-56.2	641.3	4,557.6	4,518.2	39.35	115.813	
12,800.0	7,740.0	7,050.0	7,021.3	86.0	16.2	16.81	-56.2	641.3	4,656.2	4,616.7	39.49	117.902	
12,900.0	7,740.0	7,050.0	7,021.3	87.7	16.2	16.81	-56.2	641.3	4,755.0	4,715.3	39.63	119.980	
13,000.0	7,740.0	7,050.0	7,021.3	89.4	16.2	16.81	-56.2	641.3	4,853.7	4,814.0	39.77	122.049	
13,100.0	7,740.0	7,050.0	7,021.3	91.1	16.2	16.81	-56.2	641.3	4,952.5	4,912.6	39.91	124.108	
13,200.0	7,740.0	7,050.0	7,021.3	92.8	16.2	16.81	-56.2	641.3	5,051.4	5,011.4	40.04	126.157	
13,300.0	7,740.0	7,050.0	7,021.3	94.5	16.2	16.81	-56.2	641.3	5,150.3	5,110.1	40.18	128.196	
13,400.0	7,740.0	7,050.0	7,021.3	96.3	16.2	16.81	-56.2	641.3	5,249.3	5,209.0	40.31	130.225	
13,500.0	7,740.0	7,050.0	7,021.3	98.0	16.2	16.81	-56.2	641.3	5,348.3	5,307.8	40.44	132.244	
13,600.0	7,740.0	7,050.0	7,021.3	99.7	16.2	16.81	-56.2	641.3	5,447.3	5,406.7	40.57	134.254	
13,700.0	7,740.0	7,050.0	7,021.3	101.4	16.2	16.81	-56.2	641.3	5,546.4	5,505.6	40.71	136.253	
13,800.0	7,740.0	7,050.0	7,021.3	103.1	16.2	16.81	-56.2	641.3	5,645.5	5,604.6	40.84	138.243	
13,900.0	7,740.0	7,050.0	7,021.3	104.8	16.2	16.81	-56.2	641.3	5,744.6	5,703.6	40.97	140.223	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		
14,000.0	7,740.0	7,050.0	7,021.3	106.6	16.2	16.81	-56.2	641.3	5,843.7	5,802.6	41.10	142.193		
14,100.0	7,740.0	7,050.0	7,021.3	108.3	16.2	16.81	-56.2	641.3	5,942.9	5,901.7	41.23	144.154		
14,200.0	7,740.0	7,050.0	7,021.3	110.0	16.2	16.81	-56.2	641.3	6,042.1	6,000.8	41.35	146.105		
14,300.0	7,740.0	7,050.0	7,021.3	111.7	16.2	16.81	-56.2	641.3	6,141.4	6,099.9	41.48	148.046		
14,400.0	7,740.0	7,050.0	7,021.3	113.5	16.2	16.81	-56.2	641.3	6,240.6	6,199.0	41.61	149.977		
14,500.0	7,740.0	7,050.0	7,021.3	115.2	16.2	16.81	-56.2	641.3	6,339.9	6,298.2	41.74	151.900		
14,600.0	7,740.0	7,026.4	6,998.1	116.9	16.2	16.47	-59.5	639.0	6,438.7	6,396.9	41.77	154.164		
14,700.0	7,740.0	7,025.5	6,997.1	118.6	16.1	16.46	-59.6	638.9	6,538.0	6,496.1	41.89	156.083		
14,800.0	7,740.0	7,024.5	6,996.2	120.4	16.1	16.44	-59.7	638.8	6,637.3	6,595.3	42.01	157.992		
14,900.0	7,740.0	7,023.6	6,995.3	122.1	16.1	16.43	-59.9	638.8	6,736.6	6,694.5	42.13	159.891		
15,000.0	7,740.0	7,000.0	6,971.9	123.8	16.1	16.11	-62.1	636.5	6,836.4	6,794.3	42.16	162.152		
15,100.0	7,740.0	7,000.0	6,971.9	125.6	16.1	16.11	-62.1	636.5	6,935.8	6,893.5	42.29	164.020		
15,200.0	7,740.0	7,000.0	6,971.9	127.3	16.1	16.11	-62.1	636.5	7,035.1	6,992.7	42.41	165.878		
15,300.0	7,740.0	7,000.0	6,971.9	129.0	16.1	16.11	-62.1	636.5	7,134.5	7,091.9	42.54	167.728		
15,400.0	7,740.0	7,000.0	6,971.9	130.7	16.1	16.11	-62.1	636.5	7,233.9	7,191.2	42.66	169.568		
15,500.0	7,740.0	7,000.0	6,971.9	132.5	16.1	16.11	-62.1	636.5	7,333.2	7,290.5	42.78	171.400		
15,600.0	7,740.0	7,000.0	6,971.9	134.2	16.1	16.11	-62.1	636.5	7,432.7	7,389.8	42.91	173.223		
15,700.0	7,740.0	7,000.0	6,971.9	135.9	16.1	16.11	-62.1	636.5	7,532.1	7,489.1	43.03	175.036		
15,800.0	7,740.0	7,000.0	6,971.9	137.7	16.1	16.11	-62.1	636.5	7,631.5	7,588.4	43.15	176.842		
15,900.0	7,740.0	7,000.0	6,971.9	139.4	16.1	16.11	-62.1	636.5	7,731.0	7,687.7	43.28	178.638		
16,000.0	7,740.0	7,000.0	6,971.9	141.1	16.1	16.11	-62.1	636.5	7,830.5	7,787.1	43.40	180.426		
16,084.2	7,740.0	7,000.0	6,971.9	142.6	16.1	16.11	-62.1	636.5	7,914.2	7,870.7	43.50	181.925		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3												Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.41	-0.4	52.6	52.6					
100.0	100.0	100.0	100.0	0.2	0.2	90.41	-0.4	52.6	52.6	52.3	0.30	173.266		
200.0	200.0	200.0	200.0	0.3	0.3	90.41	-0.4	52.6	52.6	52.0	0.65	80.610		
300.0	300.0	300.0	300.0	0.5	0.5	90.41	-0.4	52.6	52.6	51.6	1.00	52.523		
400.0	400.0	400.0	400.0	0.7	0.7	90.41	-0.4	52.6	52.6	51.3	1.35	38.951 CC, ES		
500.0	500.0	499.1	499.1	0.8	0.8	90.46	-0.4	53.5	53.5	51.8	1.70	31.493		
600.0	600.0	598.1	598.1	1.0	1.0	90.62	-0.6	56.0	56.1	54.0	2.05	27.418		
700.0	700.0	697.0	696.9	1.2	1.2	90.85	-0.9	60.3	60.4	58.0	2.39	25.253		
800.0	800.0	795.7	795.4	1.4	1.4	91.12	-1.3	66.2	66.4	63.7	2.74	24.272		
900.0	900.0	894.2	893.6	1.5	1.6	91.41	-1.8	73.9	74.2	71.1	3.08	24.077		
1,000.0	1,000.0	992.4	991.4	1.7	1.8	91.69	-2.4	83.1	83.6	80.2	3.42	24.430		
1,100.0	1,100.0	1,090.4	1,088.7	1.9	2.1	40.81	-3.2	94.1	94.1	90.4	3.76	25.006		
1,200.0	1,200.0	1,189.7	1,187.2	2.1	2.3	41.88	-4.0	106.1	104.4	100.2	4.11	25.376		
1,300.0	1,299.9	1,289.2	1,286.1	2.3	2.6	43.35	-4.8	118.2	113.4	108.9	4.46	25.396		
1,400.0	1,399.7	1,388.8	1,384.9	2.4	2.8	45.18	-5.7	130.3	121.2	116.4	4.82	25.146		
1,500.0	1,499.4	1,488.5	1,483.8	2.6	3.1	47.36	-6.5	142.5	128.0	122.8	5.18	24.685		
1,600.0	1,598.9	1,588.1	1,582.8	2.8	3.3	49.88	-7.3	154.6	133.8	128.2	5.56	24.053		
1,700.0	1,698.3	1,687.8	1,681.6	3.1	3.6	52.75	-8.1	166.7	138.8	132.8	5.96	23.286		
1,800.0	1,797.4	1,787.3	1,780.5	3.3	3.9	55.99	-8.9	178.8	143.1	136.7	6.38	22.414		
1,900.0	1,896.3	1,886.8	1,879.2	3.6	4.1	59.61	-9.8	190.9	147.0	140.2	6.85	21.465		
1,915.7	1,911.9	1,902.5	1,894.8	3.6	4.2	60.21	-9.9	192.8	147.6	140.7	6.93	21.313		
2,000.0	1,995.0	1,986.3	1,977.9	3.8	4.4	63.43	-10.6	203.0	151.0	143.6	7.35	20.547		
2,100.0	2,093.8	2,085.7	2,076.6	4.1	4.7	67.05	-11.4	215.1	155.6	147.7	7.87	19.758		
2,200.0	2,192.5	2,185.1	2,175.3	4.4	4.9	70.45	-12.2	227.1	160.8	152.3	8.42	19.086		
2,300.0	2,291.2	2,284.5	2,273.9	4.7	5.2	73.64	-13.1	239.2	166.5	157.5	8.99	18.520		
2,400.0	2,389.9	2,383.9	2,372.6	5.0	5.5	76.60	-13.9	251.3	172.7	163.1	9.57	18.044		
2,500.0	2,488.7	2,483.4	2,471.3	5.3	5.8	79.35	-14.7	263.4	179.3	169.2	10.16	17.648		
2,600.0	2,587.4	2,582.8	2,570.0	5.6	6.0	81.91	-15.5	275.5	186.3	175.6	10.76	17.320		
2,700.0	2,686.1	2,682.2	2,668.7	5.9	6.3	84.27	-16.3	287.6	193.7	182.3	11.36	17.050		
2,800.0	2,784.8	2,781.6	2,767.3	6.2	6.6	86.46	-17.2	299.7	201.4	189.4	11.96	16.830		
2,900.0	2,883.6	2,881.0	2,866.0	6.5	6.8	88.49	-18.0	311.7	209.3	196.7	12.57	16.651		
3,000.0	2,982.3	2,980.5	2,964.7	6.9	7.1	90.36	-18.8	323.8	217.5	204.3	13.17	16.507		
3,100.0	3,081.0	3,079.9	3,063.4	7.2	7.4	92.10	-19.6	335.9	225.9	212.1	13.78	16.392		
3,200.0	3,179.7	3,179.3	3,162.1	7.5	7.7	93.72	-20.4	348.0	234.5	220.1	14.38	16.302		
3,300.0	3,278.5	3,278.7	3,260.7	7.8	7.9	95.22	-21.3	360.1	243.2	228.2	14.98	16.233		
3,400.0	3,377.2	3,378.1	3,359.4	8.1	8.2	96.61	-22.1	372.2	252.1	236.6	15.58	16.181		
3,500.0	3,475.9	3,477.6	3,458.1	8.4	8.5	97.91	-22.9	384.3	261.2	245.0	16.18	16.144		
3,600.0	3,574.6	3,577.0	3,556.8	8.8	8.8	99.12	-23.7	396.3	270.4	253.6	16.77	16.119		
3,700.0	3,673.4	3,676.4	3,655.5	9.1	9.0	100.26	-24.5	408.4	279.7	262.3	17.37	16.104		
3,800.0	3,772.1	3,775.8	3,754.1	9.4	9.3	101.31	-25.4	420.5	289.1	271.1	17.96	16.098		
3,900.0	3,870.8	3,875.2	3,852.8	9.7	9.6	102.31	-26.2	432.6	298.6	280.0	18.55	16.099		
4,000.0	3,969.5	3,974.7	3,951.5	10.0	9.8	103.24	-27.0	444.7	308.1	289.0	19.13	16.106		
4,100.0	4,068.3	4,074.1	4,050.2	10.4	10.1	104.11	-27.8	456.8	317.8	298.1	19.72	16.117		
4,200.0	4,167.0	4,173.5	4,148.8	10.7	10.4	104.94	-28.7	468.9	327.5	307.2	20.30	16.133		
4,300.0	4,265.7	4,272.9	4,247.5	11.0	10.7	105.71	-29.5	481.0	337.3	316.4	20.88	16.153		
4,400.0	4,364.4	4,372.3	4,346.2	11.3	10.9	106.44	-30.3	493.0	347.1	325.6	21.46	16.175		
4,500.0	4,463.2	4,471.7	4,444.9	11.7	11.2	107.14	-31.1	505.1	357.0	334.9	22.04	16.200		
4,600.0	4,561.9	4,571.2	4,543.6	12.0	11.5	107.79	-31.9	517.2	366.9	344.3	22.61	16.226		
4,700.0	4,660.6	4,670.6	4,642.2	12.3	11.8	108.41	-32.8	529.3	376.9	353.7	23.19	16.254		
4,800.0	4,759.3	4,770.0	4,740.9	12.6	12.0	109.00	-33.6	541.4	386.9	363.2	23.76	16.284		
4,900.0	4,858.1	4,869.4	4,839.6	13.0	12.3	109.55	-34.4	553.5	397.0	372.7	24.33	16.314		
5,000.0	4,956.8	4,968.8	4,938.3	13.3	12.6	110.09	-35.2	565.6	407.1	382.2	24.91	16.345		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,055.5	5,068.3	5,037.0	13.6	12.9	110.59	-36.0	577.6	417.2	391.7	25.48	16.377		
5,200.0	5,154.2	5,167.7	5,135.6	13.9	13.1	111.07	-36.9	589.7	427.4	401.3	26.05	16.409		
5,300.0	5,253.0	5,267.1	5,234.3	14.3	13.4	111.53	-37.7	601.8	437.6	411.0	26.61	16.441		
5,400.0	5,351.7	5,366.5	5,333.0	14.6	13.7	111.97	-38.5	613.9	447.8	420.6	27.18	16.474		
5,500.0	5,450.4	5,465.9	5,431.7	14.9	14.0	112.38	-39.3	626.0	458.0	430.3	27.75	16.506		
5,600.0	5,549.1	5,565.4	5,530.4	15.3	14.2	112.78	-40.1	638.1	468.3	440.0	28.31	16.539		
5,700.0	5,647.9	5,664.8	5,629.0	15.6	14.5	113.17	-41.0	650.2	478.6	449.7	28.88	16.571		
5,800.0	5,746.6	5,764.2	5,727.7	15.9	14.8	113.53	-41.8	662.2	488.9	459.4	29.44	16.603		
5,900.0	5,845.3	5,863.6	5,826.4	16.2	15.1	113.89	-42.6	674.3	499.2	469.2	30.01	16.635		
6,000.0	5,944.1	5,963.0	5,925.1	16.6	15.3	114.22	-43.4	686.4	509.5	479.0	30.57	16.667		
6,100.0	6,042.8	6,062.5	6,023.8	16.9	15.6	114.55	-44.3	698.5	519.9	488.8	31.14	16.698		
6,200.0	6,141.5	6,161.9	6,122.4	17.2	15.9	114.86	-45.1	710.6	530.3	498.6	31.70	16.729		
6,300.0	6,240.2	6,261.3	6,221.1	17.5	16.1	115.16	-45.9	722.7	540.7	508.4	32.26	16.760		
6,400.0	6,339.0	6,360.7	6,319.8	17.9	16.4	115.44	-46.7	734.8	551.1	518.3	32.82	16.790		
6,500.0	6,437.7	6,460.1	6,418.5	18.2	16.7	115.72	-47.5	746.8	561.5	528.1	33.38	16.820		
6,600.0	6,536.4	6,559.6	6,517.1	18.5	17.0	115.99	-48.4	758.9	571.9	538.0	33.94	16.850		
6,700.0	6,635.1	6,659.0	6,615.8	18.9	17.2	116.25	-49.2	771.0	582.4	547.9	34.50	16.879		
6,800.0	6,733.9	6,758.4	6,714.5	19.2	17.5	116.49	-50.0	783.1	592.8	557.8	35.06	16.907		
6,900.0	6,832.6	6,857.8	6,813.2	19.5	17.8	116.73	-50.8	795.2	603.3	567.7	35.62	16.936		
7,000.0	6,931.3	6,957.2	6,911.9	19.8	18.1	116.97	-51.6	807.3	613.8	577.6	36.18	16.963		
7,100.0	7,030.0	7,056.7	7,010.5	20.2	18.3	117.19	-52.5	819.4	624.2	587.5	36.74	16.991		
7,191.8	7,120.7	7,148.0	7,101.2	20.5	18.6	117.39	-53.2	830.5	633.9	596.6	37.25	17.016		
7,200.0	7,128.8	7,156.1	7,109.2	20.5	18.6	113.01	-53.3	831.5	634.7	597.4	37.30	17.016		
7,250.0	7,178.3	8,172.7	7,740.0	20.6	23.2	-2.21	573.9	903.2	590.6	572.7	17.93	32.937		
7,300.0	7,227.8	8,170.4	7,740.0	20.7	23.1	-57.74	571.5	903.2	541.5	523.4	18.16	29.820		
7,350.0	7,276.8	8,163.7	7,740.0	20.8	23.1	-90.84	564.9	903.3	493.0	474.6	18.40	26.794		
7,400.0	7,325.1	8,152.8	7,740.0	20.8	23.0	-109.22	553.9	903.4	445.3	426.7	18.66	23.871		
7,450.0	7,372.2	8,137.6	7,740.0	20.8	22.9	-119.87	538.8	903.5	399.0	380.0	18.94	21.068		
7,500.0	7,417.7	8,118.1	7,740.0	20.8	22.7	-126.16	519.2	903.7	354.3	335.1	19.27	18.389		
7,550.0	7,461.4	8,070.8	7,738.0	20.7	22.3	-125.62	472.0	903.8	310.9	290.2	20.68	15.031		
7,600.0	7,502.9	8,029.7	7,733.2	20.7	22.0	-124.20	431.2	903.6	268.2	245.9	22.27	12.044		
7,650.0	7,541.9	7,992.5	7,726.3	20.6	21.7	-121.68	394.6	903.1	226.7	202.7	23.97	9.455		
7,700.0	7,578.0	7,957.9	7,717.8	20.5	21.5	-117.69	361.1	902.3	187.0	161.2	25.79	7.251		
7,750.0	7,611.1	7,925.1	7,707.9	20.4	21.3	-111.73	329.9	901.4	150.3	122.6	27.67	5.431		
7,800.0	7,640.8	7,893.7	7,696.7	20.4	21.1	-103.19	300.5	900.3	118.5	89.1	29.35	4.038		
7,850.0	7,667.0	7,863.2	7,684.4	20.3	20.9	-91.62	272.7	899.0	95.7	65.8	29.93	3.197		
7,897.0	7,688.2	7,835.3	7,671.9	20.3	20.8	-78.25	247.8	897.7	87.8	59.4	28.35	3.096 SF		
7,900.0	7,689.4	7,833.6	7,671.1	20.3	20.8	-77.34	246.3	897.6	87.8	59.6	28.19	3.115		
7,950.0	7,707.9	7,804.5	7,656.7	20.3	20.6	-62.09	221.1	896.1	97.2	71.3	25.89	3.755		
8,000.0	7,722.2	7,775.9	7,641.3	20.3	20.5	-48.21	197.0	894.4	118.8	93.3	25.59	4.643		
8,050.0	7,732.4	7,750.0	7,626.3	20.3	20.4	-37.63	175.9	892.7	146.4	119.5	26.92	5.440		
8,100.0	7,738.4	7,719.8	7,607.7	20.4	20.2	-28.56	152.3	890.7	176.4	148.3	28.03	6.293		
8,143.7	7,740.0	7,700.0	7,594.8	20.5	20.2	-23.52	137.3	889.2	203.1	173.4	29.70	6.838		
8,200.0	7,740.0	7,666.1	7,571.7	20.6	20.0	-19.27	112.7	886.6	239.1	208.4	30.70	7.786		
8,300.0	7,740.0	7,620.5	7,538.2	21.0	19.9	-14.69	81.8	882.8	309.5	276.8	32.77	9.446		
8,400.0	7,740.0	7,582.1	7,508.4	21.5	19.7	-11.66	58.1	879.3	386.1	351.8	34.30	11.258		
8,443.7	7,740.0	7,567.3	7,496.4	21.8	19.7	-10.65	49.4	878.0	421.1	386.2	34.84	12.085		
8,500.0	7,740.0	7,550.0	7,482.2	22.2	19.7	-8.81	39.7	876.3	467.2	431.7	35.46	13.176		
8,600.0	7,740.0	7,522.1	7,458.6	22.9	19.6	-5.87	25.0	873.5	551.7	515.3	36.33	15.186		
8,700.0	7,740.0	7,500.0	7,439.5	23.7	19.5	-3.29	14.2	871.3	638.7	601.6	37.07	17.229		
8,800.0	7,740.0	7,477.7	7,419.7	24.6	19.5	-0.74	4.0	869.0	727.7	690.1	37.59	19.358		
8,843.7	7,740.0	7,469.5	7,412.4	25.1	19.4	0.33	0.5	868.1	767.0	729.2	37.81	20.287		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	7,450.0	7,394.8	25.6	19.4	0.66	-7.5	866.0	818.3	780.4	37.87	21.608	
9,000.0	7,740.0	7,450.0	7,394.8	26.7	19.4	0.66	-7.5	866.0	909.9	871.3	38.59	23.580	
9,100.0	7,740.0	7,429.8	7,376.2	27.8	19.3	0.97	-15.1	863.8	1,002.6	963.8	38.83	25.819	
9,200.0	7,740.0	7,417.4	7,364.7	29.0	19.3	1.15	-19.4	862.4	1,096.2	1,057.0	39.15	28.003	
9,300.0	7,740.0	7,400.0	7,348.3	30.2	19.3	1.39	-25.1	860.5	1,190.5	1,151.2	39.34	30.263	
9,343.7	7,740.0	7,400.0	7,348.3	30.8	19.3	1.39	-25.1	860.5	1,231.9	1,192.3	39.51	31.176	
9,400.7	7,740.0	7,400.0	7,348.3	31.6	19.3	-0.36	-25.1	860.5	1,286.1	1,246.3	39.72	32.374	
9,500.0	7,740.0	7,400.0	7,348.3	32.9	19.3	-0.36	-25.1	860.5	1,381.0	1,340.9	40.05	34.482	
9,600.0	7,740.0	7,379.3	7,328.7	34.3	19.2	0.00	-31.2	858.1	1,476.6	1,436.5	40.12	36.805	
9,700.0	7,740.0	7,371.9	7,321.6	35.7	19.2	0.12	-33.2	857.3	1,572.8	1,532.5	40.32	39.011	
9,800.0	7,740.0	7,350.0	7,300.6	37.1	19.1	0.45	-38.6	854.7	1,669.7	1,629.3	40.36	41.370	
9,900.0	7,740.0	7,350.0	7,300.6	38.6	19.1	0.45	-38.6	854.7	1,766.3	1,725.7	40.60	43.507	
10,000.0	7,740.0	7,350.0	7,300.6	40.1	19.1	0.45	-38.6	854.7	1,863.3	1,822.5	40.82	45.648	
10,100.0	7,740.0	7,350.0	7,300.6	41.6	19.1	0.45	-38.6	854.7	1,960.7	1,919.6	41.03	47.791	
10,200.0	7,740.0	7,350.0	7,300.6	43.1	19.1	0.45	-38.6	854.7	2,058.2	2,017.0	41.22	49.934	
10,300.0	7,740.0	7,350.0	7,300.6	44.7	19.1	0.45	-38.6	854.7	2,156.0	2,114.6	41.40	52.075	
10,400.0	7,740.0	7,350.0	7,300.6	46.3	19.1	0.45	-38.6	854.7	2,254.0	2,212.5	41.58	54.213	
10,500.0	7,740.0	7,350.0	7,300.6	47.8	19.1	0.45	-38.6	854.7	2,352.2	2,310.5	41.74	56.347	
10,600.0	7,740.0	7,326.8	7,278.0	49.4	19.1	0.77	-43.5	852.0	2,449.9	2,408.2	41.74	58.690	
10,700.0	7,740.0	7,323.3	7,274.7	51.0	19.1	0.81	-44.1	851.6	2,548.2	2,506.3	41.88	60.844	
10,800.0	7,740.0	7,300.0	7,251.8	52.6	19.0	1.11	-47.9	848.9	2,647.0	2,605.1	41.88	63.206	
10,900.0	7,740.0	7,300.0	7,251.8	54.2	19.0	1.11	-47.9	848.9	2,745.3	2,703.3	42.03	65.312	
11,000.0	7,740.0	7,300.0	7,251.8	55.9	19.0	1.11	-47.9	848.9	2,843.8	2,801.6	42.19	67.411	
11,100.0	7,740.0	7,300.0	7,251.8	57.5	19.0	1.11	-47.9	848.9	2,942.4	2,900.0	42.33	69.504	
11,200.0	7,740.0	7,300.0	7,251.8	59.1	19.0	1.11	-47.9	848.9	3,041.0	2,998.5	42.48	71.590	
11,300.0	7,740.0	7,300.0	7,251.8	60.8	19.0	1.11	-47.9	848.9	3,139.8	3,097.1	42.62	73.669	
11,400.0	7,740.0	7,300.0	7,251.8	62.4	19.0	1.11	-47.9	848.9	3,238.6	3,195.8	42.76	75.740	
11,500.0	7,740.0	7,300.0	7,251.8	64.1	19.0	1.11	-47.9	848.9	3,337.5	3,294.6	42.90	77.803	
11,600.0	7,740.0	7,300.0	7,251.8	65.8	19.0	1.11	-47.9	848.9	3,436.4	3,393.4	43.03	79.857	
11,700.0	7,740.0	7,300.0	7,251.8	67.4	19.0	1.11	-47.9	848.9	3,535.4	3,492.3	43.17	81.904	
11,800.0	7,740.0	7,300.0	7,251.8	69.1	19.0	1.11	-47.9	848.9	3,634.5	3,591.2	43.30	83.943	
11,900.0	7,740.0	7,300.0	7,251.8	70.8	19.0	1.11	-47.9	848.9	3,733.6	3,690.2	43.43	85.973	
12,000.0	7,740.0	7,300.0	7,251.8	72.5	19.0	1.11	-47.9	848.9	3,832.8	3,789.2	43.56	87.994	
12,100.0	7,740.0	7,300.0	7,251.8	74.1	19.0	1.11	-47.9	848.9	3,932.0	3,888.3	43.69	90.007	
12,200.0	7,740.0	7,300.0	7,251.8	75.8	19.0	1.11	-47.9	848.9	4,031.2	3,987.4	43.81	92.012	
12,300.0	7,740.0	7,300.0	7,251.8	77.5	19.0	1.11	-47.9	848.9	4,130.5	4,086.6	43.94	94.007	
12,400.0	7,740.0	7,300.0	7,251.8	79.2	19.0	1.11	-47.9	848.9	4,229.8	4,185.8	44.06	95.994	
12,500.0	7,740.0	7,300.0	7,251.8	80.9	19.0	1.11	-47.9	848.9	4,329.2	4,285.0	44.19	97.972	
12,600.0	7,740.0	7,300.0	7,251.8	82.6	19.0	1.11	-47.9	848.9	4,428.6	4,384.3	44.31	99.942	
12,700.0	7,740.0	7,300.0	7,251.8	84.3	19.0	1.11	-47.9	848.9	4,528.0	4,483.5	44.43	101.903	
12,800.0	7,740.0	7,300.0	7,251.8	86.0	19.0	1.11	-47.9	848.9	4,627.4	4,582.8	44.56	103.855	
12,900.0	7,740.0	7,300.0	7,251.8	87.7	19.0	1.11	-47.9	848.9	4,726.8	4,682.2	44.68	105.798	
13,000.0	7,740.0	7,300.0	7,251.8	89.4	19.0	1.11	-47.9	848.9	4,826.3	4,781.5	44.80	107.733	
13,100.0	7,740.0	7,300.0	7,251.8	91.1	19.0	1.11	-47.9	848.9	4,925.8	4,880.9	44.92	109.659	
13,200.0	7,740.0	7,276.8	7,229.0	92.8	18.9	1.37	-50.8	846.1	5,024.8	4,979.9	44.92	111.858	
13,300.0	7,740.0	7,275.8	7,227.9	94.5	18.9	1.38	-50.9	846.0	5,124.3	5,079.3	45.04	113.781	
13,400.0	7,740.0	7,274.8	7,227.0	96.3	18.9	1.39	-51.0	845.8	5,223.8	5,178.7	45.15	115.696	
13,500.0	7,740.0	7,273.9	7,226.0	98.0	18.9	1.40	-51.1	845.7	5,323.3	5,278.1	45.27	117.601	
13,600.0	7,740.0	7,272.9	7,225.1	99.7	18.9	1.41	-51.1	845.6	5,422.9	5,377.5	45.38	119.498	
13,700.0	7,740.0	7,250.0	7,202.4	101.4	18.9	1.65	-52.9	842.9	5,522.9	5,477.5	45.38	121.690	
13,800.0	7,740.0	7,250.0	7,202.4	103.1	18.9	1.65	-52.9	842.9	5,622.4	5,576.9	45.50	123.560	
13,900.0	7,740.0	7,250.0	7,202.4	104.8	18.9	1.65	-52.9	842.9	5,722.0	5,676.4	45.62	125.421	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
14,000.0	7,740.0	7,250.0	7,202.4	106.6	18.9	1.65	-52.9	842.9	5,821.6	5,775.8	45.74	127.274		
14,100.0	7,740.0	7,250.0	7,202.4	108.3	18.9	1.65	-52.9	842.9	5,921.1	5,875.3	45.86	129.119		
14,200.0	7,740.0	7,250.0	7,202.4	110.0	18.9	1.65	-52.9	842.9	6,020.7	5,974.7	45.98	130.955		
14,300.0	7,740.0	7,250.0	7,202.4	111.7	18.9	1.65	-52.9	842.9	6,120.3	6,074.2	46.09	132.784		
14,400.0	7,740.0	7,250.0	7,202.4	113.5	18.9	1.65	-52.9	842.9	6,220.0	6,173.7	46.21	134.604		
14,500.0	7,740.0	7,250.0	7,202.4	115.2	18.9	1.65	-52.9	842.9	6,319.6	6,273.3	46.33	136.416		
14,600.0	7,740.0	7,250.0	7,202.4	116.9	18.9	1.65	-52.9	842.9	6,419.2	6,372.8	46.44	138.220		
14,700.0	7,740.0	7,250.0	7,202.4	118.6	18.9	1.65	-52.9	842.9	6,518.9	6,472.3	46.56	140.016		
14,800.0	7,740.0	7,250.0	7,202.4	120.4	18.9	1.65	-52.9	842.9	6,618.5	6,571.9	46.67	141.804		
14,900.0	7,740.0	7,250.0	7,202.4	122.1	18.9	1.65	-52.9	842.9	6,718.2	6,671.4	46.79	143.584		
15,000.0	7,740.0	7,250.0	7,202.4	123.8	18.9	1.65	-52.9	842.9	6,817.9	6,771.0	46.90	145.356		
15,100.0	7,740.0	7,250.0	7,202.4	125.6	18.9	1.65	-52.9	842.9	6,917.6	6,870.6	47.02	147.121		
15,200.0	7,740.0	7,250.0	7,202.4	127.3	18.9	1.65	-52.9	842.9	7,017.3	6,970.2	47.13	148.877		
15,300.0	7,740.0	7,250.0	7,202.4	129.0	18.9	1.65	-52.9	842.9	7,117.0	7,069.8	47.25	150.626		
15,400.0	7,740.0	7,250.0	7,202.4	130.7	18.9	1.65	-52.9	842.9	7,216.7	7,169.4	47.36	152.368		
15,500.0	7,740.0	7,250.0	7,202.4	132.5	18.9	1.65	-52.9	842.9	7,316.4	7,269.0	47.48	154.101		
15,600.0	7,740.0	7,250.0	7,202.4	134.2	18.9	1.65	-52.9	842.9	7,416.2	7,368.6	47.59	155.827		
15,700.0	7,740.0	7,250.0	7,202.4	135.9	18.9	1.65	-52.9	842.9	7,515.9	7,468.2	47.71	157.546		
15,800.0	7,740.0	7,250.0	7,202.4	137.7	18.9	1.65	-52.9	842.9	7,615.7	7,567.8	47.82	159.257		
15,900.0	7,740.0	7,250.0	7,202.4	139.4	18.9	1.65	-52.9	842.9	7,715.4	7,667.5	47.93	160.961		
16,000.0	7,740.0	7,250.0	7,202.4	141.1	18.9	1.65	-52.9	842.9	7,815.2	7,767.1	48.05	162.657		
16,084.2	7,740.0	7,250.0	7,202.4	142.6	18.9	1.65	-52.9	842.9	7,899.2	7,851.0	48.14	164.080		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.70	-0.7	60.2	60.2						
100.0	100.0	100.0	100.0	0.2	0.2	90.70	-0.7	60.2	60.2	59.9	0.30	198.160			
200.0	200.0	200.0	200.0	0.3	0.3	90.70	-0.7	60.2	60.2	59.5	0.65	92.192			
300.0	300.0	300.0	300.0	0.5	0.5	90.70	-0.7	60.2	60.2	59.2	1.00	60.069 CC, ES			
400.0	400.0	399.0	399.0	0.7	0.7	90.58	-0.6	61.0	61.0	59.7	1.35	45.244			
500.0	500.0	497.9	497.8	0.8	0.9	90.25	-0.3	63.6	63.6	61.9	1.70	37.504			
600.0	600.0	596.6	596.5	1.0	1.0	89.75	0.3	67.8	67.9	65.8	2.04	33.238			
700.0	700.0	695.3	694.9	1.2	1.2	89.15	1.1	73.7	73.9	71.5	2.39	30.936			
800.0	800.0	793.6	793.0	1.4	1.4	88.51	2.1	81.2	81.6	78.8	2.73	29.854			
900.0	900.0	891.7	890.7	1.5	1.7	87.88	3.4	90.4	91.0	87.9	3.08	29.581			
1,000.0	1,000.0	989.5	987.8	1.7	1.9	87.28	4.8	101.2	102.1	98.7	3.42	29.875			
1,100.0	1,100.0	1,086.9	1,084.4	1.9	2.2	35.51	6.5	113.6	114.2	110.4	3.76	30.388			
1,200.0	1,200.0	1,184.1	1,180.6	2.1	2.4	35.59	8.4	127.6	126.6	122.5	4.10	30.883			
1,300.0	1,299.9	1,281.0	1,276.2	2.3	2.7	36.00	10.5	143.2	139.2	134.8	4.44	31.357			
1,400.0	1,399.7	1,377.7	1,371.4	2.4	3.1	36.65	12.8	160.3	152.1	147.3	4.78	31.804			
1,500.0	1,499.4	1,475.0	1,466.8	2.6	3.4	37.48	15.3	179.1	165.3	160.2	5.14	32.181			
1,600.0	1,598.9	1,574.2	1,564.0	2.8	3.8	38.53	18.0	198.6	177.5	172.0	5.51	32.231			
1,700.0	1,698.3	1,673.5	1,661.3	3.1	4.2	39.78	20.6	218.2	188.5	182.6	5.89	31.982			
1,800.0	1,797.4	1,772.9	1,758.7	3.3	4.5	41.23	23.3	237.7	198.3	192.0	6.30	31.474			
1,900.0	1,896.3	1,872.3	1,856.2	3.6	4.9	42.86	25.9	257.3	206.9	200.2	6.73	30.740			
1,915.7	1,911.9	1,888.0	1,871.5	3.6	5.0	43.13	26.3	260.4	208.2	201.4	6.80	30.607			
2,000.0	1,995.0	1,971.8	1,953.7	3.8	5.3	44.61	28.6	276.9	214.9	207.7	7.19	29.905			
2,100.0	2,093.8	2,071.2	2,051.2	4.1	5.7	46.25	31.2	296.5	223.0	215.4	7.66	29.122			
2,200.0	2,192.5	2,170.7	2,148.6	4.4	6.1	47.78	33.9	316.1	231.4	223.2	8.15	28.389			
2,300.0	2,291.2	2,270.2	2,246.1	4.7	6.4	49.20	36.5	335.6	239.8	231.2	8.66	27.706			
2,400.0	2,389.9	2,369.7	2,343.6	5.0	6.8	50.52	39.1	355.2	248.4	239.3	9.18	27.071			
2,500.0	2,488.7	2,469.1	2,441.1	5.3	7.2	51.75	41.8	374.8	257.2	247.5	9.71	26.480			
2,600.0	2,587.4	2,568.6	2,538.6	5.6	7.6	52.90	44.4	394.4	266.0	255.7	10.26	25.932			
2,700.0	2,686.1	2,668.1	2,636.1	5.9	8.0	53.98	47.1	414.0	274.9	264.1	10.81	25.423			
2,800.0	2,784.8	2,767.5	2,733.6	6.2	8.4	54.98	49.7	433.5	284.0	272.6	11.38	24.952			
2,900.0	2,883.6	2,867.0	2,831.1	6.5	8.8	55.93	52.4	453.1	293.1	281.1	11.96	24.515			
3,000.0	2,982.3	2,966.5	2,928.5	6.9	9.1	56.82	55.0	472.7	302.3	289.7	12.54	24.109			
3,100.0	3,081.0	3,066.0	3,026.0	7.2	9.5	57.66	57.7	492.3	311.5	298.4	13.13	23.732			
3,200.0	3,179.7	3,165.4	3,123.5	7.5	9.9	58.44	60.3	511.9	320.8	307.1	13.72	23.382			
3,300.0	3,278.5	3,264.9	3,221.0	7.8	10.3	59.19	63.0	531.5	330.2	315.9	14.32	23.056			
3,400.0	3,377.2	3,364.4	3,318.5	8.1	10.7	59.89	65.6	551.0	339.7	324.7	14.93	22.753			
3,500.0	3,475.9	3,463.8	3,416.0	8.4	11.1	60.56	68.3	570.6	349.1	333.6	15.54	22.470			
3,600.0	3,574.6	3,563.3	3,513.5	8.8	11.5	61.19	70.9	590.2	358.6	342.5	16.15	22.206			
3,700.0	3,673.4	3,662.8	3,611.0	9.1	11.9	61.78	73.6	609.8	368.2	351.4	16.77	21.959			
3,800.0	3,772.1	3,762.2	3,708.5	9.4	12.3	62.35	76.2	629.4	377.8	360.4	17.39	21.728			
3,900.0	3,870.8	3,861.7	3,805.9	9.7	12.6	62.89	78.9	649.0	387.4	369.4	18.01	21.511			
4,000.0	3,969.5	3,961.2	3,903.4	10.0	13.0	63.40	81.5	668.5	397.1	378.5	18.64	21.308			
4,100.0	4,068.3	4,060.7	4,000.9	10.4	13.4	63.89	84.2	688.1	406.8	387.5	19.26	21.116			
4,200.0	4,167.0	4,160.1	4,098.4	10.7	13.8	64.35	86.8	707.7	416.5	396.6	19.89	20.936			
4,300.0	4,265.7	4,259.6	4,195.9	11.0	14.2	64.80	89.4	727.3	426.3	405.7	20.53	20.767			
4,400.0	4,364.4	4,359.1	4,293.4	11.3	14.6	65.22	92.1	746.9	436.0	414.9	21.16	20.607			
4,500.0	4,463.2	4,458.5	4,390.9	11.7	15.0	65.63	94.7	766.5	445.8	424.0	21.79	20.456			
4,600.0	4,561.9	4,558.0	4,488.4	12.0	15.4	66.02	97.4	786.0	455.7	433.2	22.43	20.313			
4,700.0	4,660.6	4,657.5	4,585.8	12.3	15.8	66.39	100.0	805.6	465.5	442.4	23.07	20.178			
4,800.0	4,759.3	4,757.0	4,683.3	12.6	16.2	66.74	102.7	825.2	475.3	451.6	23.71	20.049			
4,900.0	4,858.1	4,856.4	4,780.8	13.0	16.6	67.09	105.3	844.8	485.2	460.9	24.35	19.928			
5,000.0	4,956.8	4,955.9	4,878.3	13.3	16.9	67.41	108.0	864.4	495.1	470.1	24.99	19.812			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
5,100.0	5,055.5	5,055.4	4,975.8	13.6	17.3	67.73	110.6	884.0	505.0	479.4	25.63	19.702	
5,200.0	5,154.2	5,154.8	5,073.3	13.9	17.7	68.03	113.3	903.5	514.9	488.7	26.28	19.598	
5,300.0	5,253.0	5,254.3	5,170.8	14.3	18.1	68.32	115.9	923.1	524.9	497.9	26.92	19.498	
5,400.0	5,351.7	5,353.8	5,268.3	14.6	18.5	68.61	118.6	942.7	534.8	507.2	27.56	19.403	
5,500.0	5,450.4	5,453.2	5,365.7	14.9	18.9	68.88	121.2	962.3	544.8	516.6	28.21	19.312	
5,600.0	5,549.1	5,552.7	5,463.2	15.3	19.3	69.14	123.9	981.9	554.7	525.9	28.85	19.225	
5,700.0	5,647.9	5,652.2	5,560.7	15.6	19.7	69.39	126.5	1,001.5	564.7	535.2	29.50	19.142	
5,800.0	5,746.6	5,751.7	5,658.2	15.9	20.1	69.63	129.2	1,021.0	574.7	544.6	30.15	19.063	
5,900.0	5,845.3	5,851.1	5,755.7	16.2	20.5	69.87	131.8	1,040.6	584.7	553.9	30.80	18.987	
6,000.0	5,944.1	5,950.6	5,853.2	16.6	20.9	70.09	134.4	1,060.2	594.7	563.3	31.44	18.914	
6,100.0	6,042.8	6,050.1	5,950.7	16.9	21.2	70.31	137.1	1,079.8	604.7	572.7	32.09	18.844	
6,200.0	6,141.5	6,149.5	6,048.2	17.2	21.6	70.53	139.7	1,099.4	614.8	582.0	32.74	18.777	
6,300.0	6,240.2	6,249.0	6,145.6	17.5	22.0	70.73	142.4	1,119.0	624.8	591.4	33.39	18.713	
6,400.0	6,339.0	6,348.5	6,243.1	17.9	22.4	70.93	145.0	1,138.5	634.9	600.8	34.04	18.651	
6,500.0	6,437.7	6,448.0	6,340.6	18.2	22.8	71.12	147.7	1,158.1	644.9	610.2	34.69	18.591	
6,600.0	6,536.4	6,547.4	6,438.1	18.5	23.2	71.31	150.3	1,177.7	655.0	619.6	35.34	18.534	
6,700.0	6,635.1	6,646.9	6,535.6	18.9	23.6	71.49	153.0	1,197.3	665.0	629.0	35.99	18.478	
6,800.0	6,733.9	6,746.4	6,633.1	19.2	24.0	71.67	155.6	1,216.9	675.1	638.5	36.64	18.425	
6,900.0	6,832.6	6,845.8	6,730.6	19.5	24.4	71.84	158.3	1,236.5	685.2	647.9	37.29	18.374	
7,000.0	6,931.3	6,945.3	6,828.1	19.8	24.8	72.00	160.9	1,256.0	695.3	657.3	37.94	18.324	
7,100.0	7,030.0	7,044.8	6,925.5	20.2	25.2	72.16	163.6	1,275.6	705.3	666.8	38.59	18.276	
7,191.8	7,120.7	7,270.1	7,141.7	20.5	26.1	70.27	202.7	1,319.3	708.7	669.5	39.17	18.092 SF	
7,200.0	7,128.8	7,294.0	7,163.4	20.5	26.2	65.25	211.8	1,323.8	707.9	668.8	39.10	18.105	
7,250.0	7,178.3	7,421.5	7,271.4	20.6	26.9	25.25	275.2	1,346.0	698.5	660.2	38.29	18.242	
7,300.0	7,227.8	7,512.6	7,338.8	20.7	27.4	-12.97	334.7	1,360.0	684.0	646.7	37.31	18.330	
7,350.0	7,276.8	7,572.7	7,377.9	20.8	27.8	-36.71	379.6	1,368.3	667.6	631.1	36.46	18.312	
7,400.0	7,325.1	7,610.4	7,399.9	20.8	28.0	-50.97	409.9	1,373.0	651.5	615.8	35.70	18.252	
7,450.0	7,372.2	7,632.7	7,412.0	20.8	28.1	-60.00	428.4	1,375.5	637.2	602.3	34.94	18.240	
7,500.0	7,417.7	7,644.3	7,418.0	20.8	28.2	-65.83	438.3	1,376.8	625.6	591.5	34.09	18.354	
7,550.0	7,461.4	7,648.4	7,420.1	20.7	28.3	-69.51	441.7	1,377.3	617.2	584.1	33.10	18.645	
7,600.0	7,502.9	7,647.0	7,419.4	20.7	28.2	-71.63	440.5	1,377.1	612.3	580.3	31.99	19.143	
7,642.8	7,536.5	7,642.5	7,417.1	20.6	28.2	-72.50	436.7	1,376.6	611.0	580.0	30.95	19.742	
7,650.0	7,541.9	7,641.5	7,416.6	20.6	28.2	-72.57	435.8	1,376.5	611.0	580.2	30.77	19.856	
7,700.0	7,578.0	7,633.0	7,412.2	20.5	28.2	-72.56	428.6	1,375.6	613.3	583.7	29.53	20.770	
7,750.0	7,611.1	7,622.1	7,406.4	20.4	28.1	-71.79	419.5	1,374.3	618.9	590.5	28.34	21.836	
7,800.0	7,640.8	7,609.4	7,399.4	20.4	28.0	-70.40	409.0	1,372.8	627.5	600.2	27.31	22.976	
7,850.0	7,667.0	7,600.0	7,394.0	20.3	27.9	-68.92	401.4	1,371.7	638.9	612.3	26.54	24.075	
7,900.0	7,689.4	7,579.8	7,382.2	20.3	27.8	-66.25	385.2	1,369.2	652.4	626.4	26.06	25.037	
7,950.0	7,707.9	7,563.4	7,372.1	20.3	27.7	-63.68	372.4	1,367.1	667.9	641.9	25.93	25.757	
8,000.0	7,722.2	7,550.0	7,363.7	20.3	27.6	-61.20	362.2	1,365.3	684.7	658.6	26.19	26.143	
8,050.0	7,732.4	7,528.4	7,349.5	20.3	27.5	-58.06	346.1	1,362.3	702.6	675.9	26.66	26.356	
8,100.0	7,738.4	7,500.0	7,330.1	20.4	27.3	-54.54	325.8	1,358.2	721.2	694.0	27.24	26.480	
8,143.7	7,740.0	7,500.0	7,330.1	20.5	27.3	-53.01	325.8	1,358.2	737.6	709.2	28.40	25.969	
8,200.0	7,740.0	7,472.8	7,310.5	20.6	27.2	-51.44	307.4	1,354.1	760.1	730.6	29.50	25.761	
8,300.0	7,740.0	7,450.0	7,293.5	21.0	27.0	-50.11	292.6	1,350.6	806.2	774.0	32.13	25.088	
8,400.0	7,740.0	7,400.0	7,254.2	21.5	26.8	-47.17	262.8	1,342.4	859.3	825.1	34.11	25.191	
8,443.7	7,740.0	7,400.0	7,254.2	21.8	26.8	-47.17	262.8	1,342.4	884.3	848.9	35.38	24.993	
8,500.0	7,740.0	7,400.0	7,254.2	22.2	26.8	-46.87	262.8	1,342.4	918.7	881.8	36.92	24.884	
8,600.0	7,740.0	7,350.0	7,212.5	22.9	26.5	-43.34	236.6	1,333.8	984.3	945.9	38.40	25.632	
8,700.0	7,740.0	7,350.0	7,212.5	23.7	26.5	-42.61	236.6	1,333.8	1,054.9	1,014.4	40.53	26.025	
8,800.0	7,740.0	7,327.4	7,193.0	24.6	26.4	-40.47	226.0	1,329.8	1,130.1	1,088.1	41.94	26.942	
8,843.7	7,740.0	7,320.3	7,186.8	25.1	26.4	-39.66	222.8	1,328.6	1,164.1	1,121.6	42.53	27.371	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
8,900.0	7,740.0	7,300.0	7,168.8	25.6	26.3	-38.53	214.2	1,324.9	1,209.0	1,165.9	43.05	28.084	
9,000.0	7,740.0	7,300.0	7,168.8	26.7	26.3	-38.53	214.2	1,324.9	1,290.1	1,245.7	44.38	29.068	
9,100.0	7,740.0	7,300.0	7,168.8	27.8	26.3	-38.53	214.2	1,324.9	1,373.7	1,328.2	45.52	30.178	
9,200.0	7,740.0	7,273.5	7,144.8	29.0	26.1	-37.09	203.9	1,320.0	1,458.6	1,412.4	46.15	31.602	
9,300.0	7,740.0	7,250.0	7,123.2	30.2	26.0	-35.85	195.8	1,315.6	1,545.4	1,498.7	46.73	33.072	
9,343.7	7,740.0	7,250.0	7,123.2	30.8	26.0	-35.85	195.8	1,315.6	1,583.6	1,536.5	47.08	33.636	
9,400.7	7,740.0	7,250.0	7,123.2	31.6	26.0	-36.70	195.8	1,315.6	1,633.7	1,586.2	47.51	34.385	
9,500.0	7,740.0	7,250.0	7,123.2	32.9	26.0	-36.70	195.8	1,315.6	1,722.0	1,673.8	48.19	35.730	
9,600.0	7,740.0	7,250.0	7,123.2	34.3	26.0	-36.70	195.8	1,315.6	1,812.0	1,763.2	48.80	37.132	
9,700.0	7,740.0	7,229.8	7,104.5	35.7	25.9	-35.65	189.5	1,311.8	1,902.6	1,853.4	49.12	38.730	
9,800.0	7,740.0	7,223.1	7,098.2	37.1	25.9	-35.30	187.6	1,310.5	1,994.1	1,944.5	49.55	40.247	
9,900.0	7,740.0	7,200.0	7,076.3	38.6	25.8	-34.14	181.5	1,306.0	2,086.6	2,036.9	49.76	41.936	
10,000.0	7,740.0	7,200.0	7,076.3	40.1	25.8	-34.14	181.5	1,306.0	2,179.3	2,129.1	50.17	43.438	
10,100.0	7,740.0	7,200.0	7,076.3	41.6	25.8	-34.14	181.5	1,306.0	2,272.6	2,222.0	50.55	44.959	
10,200.0	7,740.0	7,200.0	7,076.3	43.1	25.8	-34.14	181.5	1,306.0	2,366.4	2,315.5	50.89	46.498	
10,300.0	7,740.0	7,200.0	7,076.3	44.7	25.8	-34.14	181.5	1,306.0	2,460.7	2,409.5	51.21	48.050	
10,400.0	7,740.0	7,200.0	7,076.3	46.3	25.8	-34.14	181.5	1,306.0	2,555.5	2,504.0	51.51	49.614	
10,500.0	7,740.0	7,200.0	7,076.3	47.8	25.8	-34.14	181.5	1,306.0	2,650.6	2,598.8	51.78	51.187	
10,600.0	7,740.0	7,200.0	7,076.3	49.4	25.8	-34.14	181.5	1,306.0	2,746.1	2,694.0	52.04	52.768	
10,700.0	7,740.0	7,200.0	7,076.3	51.0	25.8	-34.14	181.5	1,306.0	2,841.9	2,789.6	52.28	54.355	
10,800.0	7,740.0	7,176.6	7,053.9	52.6	25.7	-32.99	176.2	1,301.5	2,937.4	2,885.1	52.32	56.147	
10,900.0	7,740.0	7,173.3	7,050.8	54.2	25.7	-32.84	175.6	1,300.9	3,033.5	2,981.0	52.51	57.772	
11,000.0	7,740.0	7,150.0	7,028.3	55.9	25.6	-31.74	171.4	1,296.3	3,130.3	3,077.8	52.52	59.598	
11,100.0	7,740.0	7,150.0	7,028.3	57.5	25.6	-31.74	171.4	1,296.3	3,226.8	3,174.1	52.73	61.197	
11,200.0	7,740.0	7,150.0	7,028.3	59.1	25.6	-31.74	171.4	1,296.3	3,323.5	3,270.6	52.92	62.798	
11,300.0	7,740.0	7,150.0	7,028.3	60.8	25.6	-31.74	171.4	1,296.3	3,420.4	3,367.3	53.11	64.401	
11,400.0	7,740.0	7,150.0	7,028.3	62.4	25.6	-31.74	171.4	1,296.3	3,517.4	3,464.1	53.29	66.005	
11,500.0	7,740.0	7,150.0	7,028.3	64.1	25.6	-31.74	171.4	1,296.3	3,614.6	3,561.2	53.46	67.609	
11,600.0	7,740.0	7,150.0	7,028.3	65.8	25.6	-31.74	171.4	1,296.3	3,712.0	3,658.3	53.63	69.212	
11,700.0	7,740.0	7,150.0	7,028.3	67.4	25.6	-31.74	171.4	1,296.3	3,809.5	3,755.7	53.79	70.815	
11,800.0	7,740.0	7,150.0	7,028.3	69.1	25.6	-31.74	171.4	1,296.3	3,907.1	3,853.1	53.95	72.417	
11,900.0	7,740.0	7,150.0	7,028.3	70.8	25.6	-31.74	171.4	1,296.3	4,004.8	3,950.7	54.11	74.018	
12,000.0	7,740.0	7,150.0	7,028.3	72.5	25.6	-31.74	171.4	1,296.3	4,102.7	4,048.4	54.26	75.617	
12,100.0	7,740.0	7,150.0	7,028.3	74.1	25.6	-31.74	171.4	1,296.3	4,200.6	4,146.2	54.40	77.214	
12,200.0	7,740.0	7,150.0	7,028.3	75.8	25.6	-31.74	171.4	1,296.3	4,298.7	4,244.1	54.55	78.809	
12,300.0	7,740.0	7,150.0	7,028.3	77.5	25.6	-31.74	171.4	1,296.3	4,396.8	4,342.1	54.69	80.401	
12,400.0	7,740.0	7,150.0	7,028.3	79.2	25.6	-31.74	171.4	1,296.3	4,495.0	4,440.2	54.82	81.991	
12,500.0	7,740.0	7,150.0	7,028.3	80.9	25.6	-31.74	171.4	1,296.3	4,593.3	4,538.3	54.96	83.578	
12,600.0	7,740.0	7,150.0	7,028.3	82.6	25.6	-31.74	171.4	1,296.3	4,691.7	4,636.6	55.09	85.162	
12,700.0	7,740.0	7,150.0	7,028.3	84.3	25.6	-31.74	171.4	1,296.3	4,790.1	4,734.9	55.22	86.743	
12,800.0	7,740.0	7,150.0	7,028.3	86.0	25.6	-31.74	171.4	1,296.3	4,888.6	4,833.2	55.35	88.321	
12,900.0	7,740.0	7,150.0	7,028.3	87.7	25.6	-31.74	171.4	1,296.3	4,987.1	4,931.6	55.48	89.895	
13,000.0	7,740.0	7,150.0	7,028.3	89.4	25.6	-31.74	171.4	1,296.3	5,085.7	5,030.1	55.60	91.466	
13,100.0	7,740.0	7,150.0	7,028.3	91.1	25.6	-31.74	171.4	1,296.3	5,184.4	5,128.7	55.73	93.034	
13,200.0	7,740.0	7,150.0	7,028.3	92.8	25.6	-31.74	171.4	1,296.3	5,283.1	5,227.3	55.85	94.597	
13,300.0	7,740.0	7,150.0	7,028.3	94.5	25.6	-31.74	171.4	1,296.3	5,381.9	5,325.9	55.97	96.158	
13,400.0	7,740.0	7,126.6	7,005.6	96.3	25.5	-30.67	168.2	1,291.7	5,480.2	5,424.2	55.92	97.997	
13,500.0	7,740.0	7,125.5	7,004.5	98.0	25.5	-30.62	168.0	1,291.5	5,579.0	5,522.9	56.03	99.565	
13,600.0	7,740.0	7,124.4	7,003.5	99.7	25.5	-30.58	167.9	1,291.3	5,677.8	5,621.6	56.14	101.129	
13,700.0	7,740.0	7,123.4	7,002.5	101.4	25.5	-30.53	167.8	1,291.1	5,776.7	5,720.4	56.25	102.689	
13,800.0	7,740.0	7,100.0	6,979.6	103.1	25.4	-29.51	165.6	1,286.5	5,876.1	5,819.9	56.20	104.549	
13,900.0	7,740.0	7,100.0	6,979.6	104.8	25.4	-29.51	165.6	1,286.5	5,975.0	5,918.6	56.32	106.090	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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 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		
14,000.0	7,740.0	7,100.0	6,979.6	106.6	25.4	-29.51	165.6	1,286.5	6,073.9	6,017.5	56.44	107.627		
14,100.0	7,740.0	7,100.0	6,979.6	108.3	25.4	-29.51	165.6	1,286.5	6,172.9	6,116.3	56.55	109.159		
14,200.0	7,740.0	7,100.0	6,979.6	110.0	25.4	-29.51	165.6	1,286.5	6,271.9	6,215.2	56.66	110.688		
14,300.0	7,740.0	7,100.0	6,979.6	111.7	25.4	-29.51	165.6	1,286.5	6,370.9	6,314.2	56.78	112.213		
14,400.0	7,740.0	7,100.0	6,979.6	113.5	25.4	-29.51	165.6	1,286.5	6,470.0	6,413.1	56.89	113.733		
14,500.0	7,740.0	7,100.0	6,979.6	115.2	25.4	-29.51	165.6	1,286.5	6,569.1	6,512.1	57.00	115.250		
14,600.0	7,740.0	7,100.0	6,979.6	116.9	25.4	-29.51	165.6	1,286.5	6,668.2	6,611.1	57.11	116.762		
14,700.0	7,740.0	7,100.0	6,979.6	118.6	25.4	-29.51	165.6	1,286.5	6,767.4	6,710.2	57.22	118.269		
14,800.0	7,740.0	7,100.0	6,979.6	120.4	25.4	-29.51	165.6	1,286.5	6,866.6	6,809.2	57.33	119.773		
14,900.0	7,740.0	7,100.0	6,979.6	122.1	25.4	-29.51	165.6	1,286.5	6,965.8	6,908.3	57.44	121.272		
15,000.0	7,740.0	7,100.0	6,979.6	123.8	25.4	-29.51	165.6	1,286.5	7,065.0	7,007.4	57.55	122.767		
15,100.0	7,740.0	7,100.0	6,979.6	125.6	25.4	-29.51	165.6	1,286.5	7,164.2	7,106.6	57.66	124.258		
15,200.0	7,740.0	7,100.0	6,979.6	127.3	25.4	-29.51	165.6	1,286.5	7,263.5	7,205.7	57.76	125.744		
15,300.0	7,740.0	7,100.0	6,979.6	129.0	25.4	-29.51	165.6	1,286.5	7,362.8	7,304.9	57.87	127.226		
15,400.0	7,740.0	7,100.0	6,979.6	130.7	25.4	-29.51	165.6	1,286.5	7,462.1	7,404.1	57.98	128.704		
15,500.0	7,740.0	7,100.0	6,979.6	132.5	25.4	-29.51	165.6	1,286.5	7,561.4	7,503.3	58.09	130.178		
15,600.0	7,740.0	7,100.0	6,979.6	134.2	25.4	-29.51	165.6	1,286.5	7,660.7	7,602.5	58.19	131.647		
15,700.0	7,740.0	7,100.0	6,979.6	135.9	25.4	-29.51	165.6	1,286.5	7,760.1	7,701.8	58.30	133.112		
15,800.0	7,740.0	7,100.0	6,979.6	137.7	25.4	-29.51	165.6	1,286.5	7,859.5	7,801.1	58.40	134.572		
15,900.0	7,740.0	7,100.0	6,979.6	139.4	25.4	-29.51	165.6	1,286.5	7,958.8	7,900.3	58.51	136.028		
16,000.0	7,740.0	7,100.0	6,979.6	141.1	25.4	-29.51	165.6	1,286.5	8,058.2	7,999.6	58.61	137.480		
16,084.2	7,740.0	7,100.0	6,979.6	142.6	25.4	-29.51	165.6	1,286.5	8,142.0	8,083.2	58.70	138.699		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
0.0	0.0	0.0	0.0	0.0	0.0	90.63	-0.7	67.5	67.5				
100.0	100.0	100.0	100.0	0.2	0.2	90.63	-0.7	67.5	67.5	67.2	0.30	222.120	
200.0	200.0	200.0	200.0	0.3	0.3	90.63	-0.7	67.5	67.5	66.8	0.65	103.339	
203.3	203.3	203.3	203.3	0.3	0.3	90.63	-0.7	67.5	67.5	66.8	0.66	101.528 CC	
300.0	300.0	299.4	299.4	0.5	0.5	90.66	-0.8	67.7	67.7	66.7	1.00	67.614 ES	
400.0	400.0	398.2	398.2	0.7	0.7	90.89	-1.1	69.3	69.4	68.0	1.35	51.476	
500.0	500.0	497.0	496.9	0.8	0.9	91.31	-1.7	72.7	72.8	71.1	1.69	42.960	
600.0	600.0	595.6	595.4	1.0	1.0	91.88	-2.6	77.7	77.9	75.9	2.04	38.182	
700.0	700.0	693.9	693.5	1.2	1.2	92.53	-3.7	84.4	84.7	82.3	2.39	35.518	
800.0	800.0	792.1	791.3	1.4	1.5	93.21	-5.2	92.7	93.2	90.5	2.73	34.166	
900.0	900.0	889.9	888.5	1.5	1.7	93.87	-6.9	102.6	103.5	100.4	3.07	33.686	
1,000.0	1,000.0	987.3	985.3	1.7	1.9	94.49	-9.0	114.1	115.4	112.0	3.41	33.814	
1,100.0	1,100.0	1,084.4	1,081.4	1.9	2.2	43.84	-11.3	127.2	128.4	124.6	3.75	34.220	
1,200.0	1,200.0	1,181.1	1,177.0	2.1	2.5	44.96	-13.9	141.8	141.9	137.8	4.09	34.684	
1,300.0	1,299.9	1,277.6	1,272.1	2.3	2.8	46.34	-16.7	158.0	155.8	151.4	4.43	35.197	
1,400.0	1,399.7	1,373.7	1,366.5	2.4	3.2	47.90	-19.8	175.6	170.4	165.7	4.77	35.743	
1,500.0	1,499.4	1,469.4	1,460.2	2.6	3.5	49.58	-23.2	194.7	185.7	180.5	5.11	36.302	
1,600.0	1,598.9	1,564.6	1,553.1	2.8	3.9	51.33	-26.8	215.3	201.6	196.2	5.47	36.849	
1,700.0	1,698.3	1,659.5	1,645.3	3.1	4.4	53.11	-30.7	237.3	218.4	212.5	5.85	37.358	
1,800.0	1,797.4	1,754.1	1,736.9	3.3	4.8	54.89	-34.8	260.8	236.0	229.7	6.24	37.797	
1,900.0	1,896.3	1,853.2	1,832.6	3.6	5.3	56.59	-38.4	286.1	253.4	246.7	6.70	37.819	
1,915.7	1,911.9	1,868.9	1,847.7	3.6	5.3	56.83	-38.8	290.1	256.0	249.2	6.77	37.791	
2,000.0	1,995.0	1,952.7	1,928.8	3.8	5.7	58.03	-40.2	311.7	270.0	262.8	7.18	37.573	
2,100.0	2,093.8	2,055.1	2,027.8	4.1	6.2	59.13	-40.7	337.8	285.9	278.2	7.70	37.136	
2,200.0	2,192.5	2,158.4	2,128.1	4.4	6.7	60.24	-41.2	362.3	300.3	292.1	8.23	36.475	
2,300.0	2,291.2	2,257.3	2,224.4	4.7	7.1	61.25	-41.6	385.1	314.1	305.4	8.76	35.844	
2,400.0	2,389.9	2,356.2	2,320.6	5.0	7.5	62.17	-42.0	407.8	328.1	318.7	9.31	35.244	
2,500.0	2,488.7	2,455.1	2,416.9	5.3	8.0	63.02	-42.4	430.6	342.0	332.2	9.86	34.678	
2,600.0	2,587.4	2,554.0	2,513.1	5.6	8.4	63.80	-42.8	453.4	356.1	345.7	10.43	34.146	
2,700.0	2,686.1	2,652.9	2,609.3	5.9	8.8	64.52	-43.2	476.1	370.2	359.2	11.00	33.646	
2,800.0	2,784.8	2,751.8	2,705.6	6.2	9.3	65.19	-43.7	498.9	384.4	372.8	11.58	33.180	
2,900.0	2,883.6	2,850.7	2,801.8	6.5	9.7	65.82	-44.1	521.7	398.6	386.4	12.17	32.743	
3,000.0	2,982.3	2,949.6	2,898.1	6.9	10.1	66.39	-44.5	544.4	412.8	400.1	12.77	32.336	
3,100.0	3,081.0	3,048.5	2,994.3	7.2	10.6	66.93	-44.9	567.2	427.1	413.8	13.37	31.955	
3,200.0	3,179.7	3,147.4	3,090.5	7.5	11.0	67.44	-45.3	590.0	441.5	427.5	13.97	31.598	
3,300.0	3,278.5	3,246.3	3,186.8	7.8	11.5	67.91	-45.7	612.7	455.8	441.3	14.58	31.265	
3,400.0	3,377.2	3,345.2	3,283.0	8.1	11.9	68.36	-46.1	635.5	470.2	455.0	15.19	30.953	
3,500.0	3,475.9	3,444.1	3,379.2	8.4	12.3	68.78	-46.5	658.3	484.6	468.8	15.81	30.661	
3,600.0	3,574.6	3,543.0	3,475.5	8.8	12.8	69.17	-46.9	681.0	499.1	482.7	16.42	30.387	
3,700.0	3,673.4	3,641.9	3,571.7	9.1	13.2	69.54	-47.4	703.8	513.5	496.5	17.05	30.129	
3,800.0	3,772.1	3,740.8	3,668.0	9.4	13.7	69.90	-47.8	726.6	528.0	510.4	17.67	29.886	
3,900.0	3,870.8	3,839.6	3,764.2	9.7	14.1	70.23	-48.2	749.3	542.5	524.2	18.29	29.658	
4,000.0	3,969.5	3,938.5	3,860.4	10.0	14.5	70.54	-48.6	772.1	557.0	538.1	18.92	29.442	
4,100.0	4,068.3	4,037.4	3,956.7	10.4	15.0	70.84	-49.0	794.9	571.6	552.0	19.55	29.239	
4,200.0	4,167.0	4,136.3	4,052.9	10.7	15.4	71.13	-49.4	817.6	586.1	566.0	20.18	29.047	
4,300.0	4,265.7	4,235.2	4,149.2	11.0	15.9	71.40	-49.8	840.4	600.7	579.9	20.81	28.865	
4,400.0	4,364.4	4,334.1	4,245.4	11.3	16.3	71.66	-50.2	863.2	615.3	593.8	21.44	28.693	
4,500.0	4,463.2	4,433.0	4,341.6	11.7	16.7	71.90	-50.6	885.9	629.9	607.8	22.08	28.529	
4,600.0	4,561.9	4,531.9	4,437.9	12.0	17.2	72.14	-51.1	908.7	644.5	621.7	22.71	28.374	
4,700.0	4,660.6	4,630.8	4,534.1	12.3	17.6	72.36	-51.5	931.4	659.1	635.7	23.35	28.226	
4,800.0	4,759.3	4,729.7	4,630.3	12.6	18.1	72.58	-51.9	954.2	673.7	649.7	23.99	28.086	
4,900.0	4,858.1	4,828.6	4,726.6	13.0	18.5	72.78	-52.3	977.0	688.3	663.7	24.62	27.952	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,956.8	4,927.5	4,822.8	13.3	18.9	72.98	-52.7	999.7	702.9	677.7	25.26	27.825		
5,100.0	5,055.5	5,026.4	4,919.1	13.6	19.4	73.17	-53.1	1,022.5	717.6	691.7	25.90	27.703		
5,200.0	5,154.2	5,125.3	5,015.3	13.9	19.8	73.35	-53.5	1,045.3	732.2	705.7	26.54	27.586		
5,300.0	5,253.0	5,224.2	5,111.5	14.3	20.3	73.53	-53.9	1,068.0	746.9	719.7	27.18	27.475		
5,400.0	5,351.7	5,323.1	5,207.8	14.6	20.7	73.69	-54.4	1,090.8	761.5	733.7	27.83	27.369		
5,500.0	5,450.4	5,422.0	5,304.0	14.9	21.2	73.86	-54.8	1,113.6	776.2	747.8	28.47	27.267		
5,600.0	5,549.1	5,520.9	5,400.2	15.3	21.6	74.01	-55.2	1,136.3	790.9	761.8	29.11	27.169		
5,700.0	5,647.9	5,619.8	5,496.5	15.6	22.0	74.16	-55.6	1,159.1	805.6	775.8	29.75	27.075		
5,800.0	5,746.6	5,718.7	5,592.7	15.9	22.5	74.31	-56.0	1,181.9	820.3	789.9	30.40	26.985		
5,900.0	5,845.3	5,817.5	5,689.0	16.2	22.9	74.44	-56.4	1,204.6	834.9	803.9	31.04	26.899		
6,000.0	5,944.1	5,916.4	5,785.2	16.6	23.4	74.58	-56.8	1,227.4	849.6	818.0	31.68	26.816		
6,100.0	6,042.8	6,015.3	5,881.4	16.9	23.8	74.71	-57.2	1,250.2	864.3	832.0	32.33	26.735		
6,200.0	6,141.5	6,114.2	5,977.7	17.2	24.2	74.83	-57.6	1,272.9	879.0	846.1	32.97	26.658		
6,300.0	6,240.2	6,213.1	6,073.9	17.5	24.7	74.96	-58.1	1,295.7	893.8	860.1	33.62	26.584		
6,400.0	6,339.0	6,312.0	6,170.2	17.9	25.1	75.07	-58.5	1,318.5	908.5	874.2	34.27	26.513		
6,500.0	6,437.7	6,410.9	6,266.4	18.2	25.6	75.19	-58.9	1,341.2	923.2	888.3	34.91	26.444		
6,600.0	6,536.4	6,509.8	6,362.6	18.5	26.0	75.30	-59.3	1,364.0	937.9	902.3	35.56	26.377		
6,700.0	6,635.1	6,608.7	6,458.9	18.9	26.5	75.40	-59.7	1,386.8	952.6	916.4	36.20	26.313		
6,800.0	6,733.9	6,707.6	6,555.1	19.2	26.9	75.51	-60.1	1,409.5	967.3	930.5	36.85	26.250		
6,900.0	6,832.6	6,806.5	6,651.3	19.5	27.3	75.61	-60.5	1,432.3	982.1	944.6	37.50	26.190		
7,000.0	6,931.3	6,905.4	6,747.6	19.8	27.8	75.71	-60.9	1,455.1	996.8	958.7	38.14	26.132		
7,100.0	7,030.0	7,004.3	6,843.8	20.2	28.2	75.80	-61.3	1,477.8	1,011.5	972.7	38.79	26.076		
7,191.8	7,120.7	7,095.1	6,932.2	20.5	28.6	75.88	-61.7	1,498.7	1,025.1	985.7	39.39	26.026		
7,200.0	7,128.8	7,103.2	6,940.1	20.5	28.7	71.58	-61.8	1,500.6	1,026.2	986.8	39.44	26.022		
7,250.0	7,178.3	7,152.9	6,988.4	20.6	28.9	37.30	-62.0	1,512.0	1,031.7	992.0	39.67	26.006		
7,300.0	7,227.8	7,202.6	7,036.8	20.7	29.1	5.50	-62.2	1,523.5	1,034.2	994.4	39.80	25.986		
7,350.0	7,276.8	7,251.9	7,084.8	20.8	29.3	-12.74	-62.4	1,534.8	1,033.9	994.1	39.82	25.964		
7,400.0	7,325.1	7,300.6	7,132.2	20.8	29.6	-23.08	-62.6	1,546.0	1,030.8	991.1	39.73	25.947		
7,450.0	7,372.2	8,283.7	7,740.0	20.8	33.9	-76.83	542.3	1,686.6	1,007.2	976.5	30.77	32.735		
7,500.0	7,417.7	8,264.5	7,740.0	20.8	33.8	-81.81	523.1	1,686.7	984.6	953.7	30.85	31.920		
7,550.0	7,461.4	8,183.0	7,735.9	20.7	33.4	-81.87	441.8	1,686.2	963.8	932.2	31.67	30.435		
7,600.0	7,502.9	8,091.9	7,718.3	20.7	32.9	-80.34	352.6	1,682.5	943.5	911.0	32.55	28.987		
7,650.0	7,541.9	8,034.7	7,700.3	20.6	32.6	-80.16	298.5	1,678.5	924.4	891.7	32.73	28.243		
7,700.0	7,578.0	7,990.8	7,682.9	20.5	32.4	-80.27	258.3	1,674.6	906.9	874.4	32.52	27.890		
7,750.0	7,611.1	7,953.3	7,665.8	20.4	32.3	-80.34	225.2	1,670.7	891.2	859.1	32.04	27.815		
7,800.0	7,640.8	7,919.4	7,648.6	20.4	32.1	-80.27	196.3	1,666.8	877.3	846.0	31.38	27.954		
7,850.0	7,667.0	7,887.8	7,631.0	20.3	32.0	-80.01	170.4	1,662.8	865.4	834.8	30.62	28.267		
7,900.0	7,689.4	7,857.7	7,613.0	20.3	31.9	-79.54	146.6	1,658.7	855.5	825.7	29.81	28.700		
7,950.0	7,707.9	7,828.7	7,594.5	20.3	31.7	-78.87	124.7	1,654.4	847.4	818.4	29.03	29.186		
8,000.0	7,722.2	7,800.4	7,575.4	20.3	31.6	-78.00	104.2	1,650.0	841.2	812.9	28.37	29.655		
8,050.0	7,732.4	7,772.6	7,555.8	20.3	31.5	-76.94	85.1	1,645.4	836.9	809.0	27.89	30.009		
8,100.0	7,738.4	7,745.3	7,535.6	20.4	31.4	-75.71	67.2	1,640.8	834.2	806.5	27.64	30.179		
8,143.7	7,740.0	7,721.6	7,517.5	20.5	31.3	-74.51	52.6	1,636.6	833.1	805.4	27.66	30.121		
8,157.1	7,740.0	7,714.5	7,512.0	20.5	31.3	-74.11	48.4	1,635.3	833.0	805.3	27.71	30.063		
8,200.0	7,740.0	7,693.4	7,495.2	20.6	31.2	-72.91	36.2	1,631.4	833.8	805.8	28.01	29.763		
8,300.0	7,740.0	7,650.0	7,459.3	21.0	31.0	-70.36	13.2	1,623.0	842.1	812.6	29.56	28.489		
8,400.0	7,740.0	7,619.1	7,432.8	21.5	30.9	-68.49	-1.4	1,616.8	859.9	827.8	32.15	26.750		
8,443.7	7,740.0	7,600.0	7,416.1	21.8	30.8	-67.31	-9.8	1,612.9	870.8	837.4	33.33	26.128		
8,500.0	7,740.0	7,600.0	7,416.1	22.2	30.8	-67.25	-9.8	1,612.9	887.6	852.2	35.31	25.136		
8,600.0	7,740.0	7,570.4	7,389.6	22.9	30.7	-65.23	-21.5	1,606.7	925.4	887.0	38.34	24.134		
8,700.0	7,740.0	7,550.0	7,371.1	23.7	30.6	-63.72	-28.8	1,602.4	972.7	931.3	41.44	23.470		
8,800.0	7,740.0	7,535.8	7,358.0	24.6	30.6	-62.51	-33.4	1,599.3	1,028.3	984.1	44.21	23.258 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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
8,843.7	7,740.0	7,529.5	7,352.2	25.1	30.5	-61.96	-35.4	1,597.9	1,054.9	1,009.6	45.30	23.285	
8,900.0	7,740.0	7,522.0	7,345.2	25.6	30.5	-61.48	-37.6	1,596.3	1,090.8	1,044.2	46.62	23.400	
9,000.0	7,740.0	7,500.0	7,324.6	26.7	30.4	-60.07	-43.7	1,591.4	1,158.5	1,109.9	48.58	23.850	
9,100.0	7,740.0	7,500.0	7,324.6	27.8	30.4	-60.07	-43.7	1,591.4	1,230.2	1,179.7	50.50	24.360	
9,200.0	7,740.0	7,500.0	7,324.6	29.0	30.4	-60.07	-43.7	1,591.4	1,305.5	1,253.4	52.14	25.041	
9,300.0	7,740.0	7,482.5	7,308.1	30.2	30.3	-58.95	-47.9	1,587.6	1,383.7	1,330.4	53.32	25.952	
9,343.7	7,740.0	7,479.2	7,305.0	30.8	30.3	-58.75	-48.6	1,586.8	1,418.7	1,364.9	53.83	26.358	
9,400.7	7,740.0	7,475.2	7,301.2	31.6	30.3	-58.91	-49.5	1,585.9	1,465.0	1,410.5	54.45	26.906	
9,500.0	7,740.0	7,468.8	7,295.1	32.9	30.3	-58.51	-50.8	1,584.5	1,546.9	1,491.5	55.41	27.917	
9,600.0	7,740.0	7,450.0	7,277.1	34.3	30.2	-57.33	-54.3	1,580.3	1,631.4	1,575.3	56.11	29.078	
9,700.0	7,740.0	7,450.0	7,277.1	35.7	30.2	-57.33	-54.3	1,580.3	1,717.3	1,660.4	56.89	30.185	
9,800.0	7,740.0	7,450.0	7,277.1	37.1	30.2	-57.33	-54.3	1,580.3	1,804.6	1,747.0	57.58	31.341	
9,900.0	7,740.0	7,450.0	7,277.1	38.6	30.2	-57.33	-54.3	1,580.3	1,893.2	1,835.0	58.18	32.539	
10,000.0	7,740.0	7,450.0	7,277.1	40.1	30.2	-57.33	-54.3	1,580.3	1,982.9	1,924.2	58.72	33.771	
10,100.0	7,740.0	7,450.0	7,277.1	41.6	30.2	-57.33	-54.3	1,580.3	2,073.5	2,014.3	59.19	35.031	
10,200.0	7,740.0	7,450.0	7,277.1	43.1	30.2	-57.33	-54.3	1,580.3	2,164.9	2,105.3	59.61	36.316	
10,300.0	7,740.0	7,450.0	7,277.1	44.7	30.2	-57.33	-54.3	1,580.3	2,257.1	2,197.1	60.00	37.621	
10,400.0	7,740.0	7,450.0	7,277.1	46.3	30.2	-57.33	-54.3	1,580.3	2,349.9	2,289.6	60.34	38.944	
10,500.0	7,740.0	7,428.8	7,256.7	47.8	30.1	-56.02	-57.6	1,575.5	2,442.8	2,382.4	60.46	40.407	
10,600.0	7,740.0	7,426.3	7,254.3	49.4	30.1	-55.87	-57.9	1,574.9	2,536.6	2,475.9	60.72	41.772	
10,700.0	7,740.0	7,423.9	7,252.0	51.0	30.1	-55.72	-58.2	1,574.3	2,630.8	2,569.8	60.97	43.148	
10,800.0	7,740.0	7,421.7	7,249.8	52.6	30.1	-55.58	-58.5	1,573.8	2,725.4	2,664.2	61.20	44.533	
10,900.0	7,740.0	7,400.0	7,228.9	54.2	30.0	-54.27	-60.7	1,568.9	2,820.8	2,759.6	61.23	46.067	
11,000.0	7,740.0	7,400.0	7,228.9	55.9	30.0	-54.27	-60.7	1,568.9	2,916.0	2,854.6	61.45	47.452	
11,100.0	7,740.0	7,400.0	7,228.9	57.5	30.0	-54.27	-60.7	1,568.9	3,011.6	2,949.9	61.66	48.842	
11,200.0	7,740.0	7,400.0	7,228.9	59.1	30.0	-54.27	-60.7	1,568.9	3,107.4	3,045.5	61.85	50.238	
11,300.0	7,740.0	7,400.0	7,228.9	60.8	30.0	-54.27	-60.7	1,568.9	3,203.5	3,141.4	62.04	51.637	
11,400.0	7,740.0	7,400.0	7,228.9	62.4	30.0	-54.27	-60.7	1,568.9	3,299.8	3,237.6	62.21	53.040	
11,500.0	7,740.0	7,400.0	7,228.9	64.1	30.0	-54.27	-60.7	1,568.9	3,396.3	3,333.9	62.38	54.445	
11,600.0	7,740.0	7,400.0	7,228.9	65.8	30.0	-54.27	-60.7	1,568.9	3,493.0	3,430.5	62.54	55.853	
11,700.0	7,740.0	7,400.0	7,228.9	67.4	30.0	-54.27	-60.7	1,568.9	3,589.9	3,527.2	62.69	57.261	
11,800.0	7,740.0	7,400.0	7,228.9	69.1	30.0	-54.27	-60.7	1,568.9	3,687.0	3,624.1	62.84	58.671	
11,900.0	7,740.0	7,400.0	7,228.9	70.8	30.0	-54.27	-60.7	1,568.9	3,784.2	3,721.2	62.98	60.082	
12,000.0	7,740.0	7,400.0	7,228.9	72.5	30.0	-54.27	-60.7	1,568.9	3,881.5	3,818.4	63.12	61.493	
12,100.0	7,740.0	7,400.0	7,228.9	74.1	30.0	-54.27	-60.7	1,568.9	3,979.0	3,915.8	63.26	62.904	
12,200.0	7,740.0	7,400.0	7,228.9	75.8	30.0	-54.27	-60.7	1,568.9	4,076.6	4,013.3	63.39	64.315	
12,300.0	7,740.0	7,400.0	7,228.9	77.5	30.0	-54.27	-60.7	1,568.9	4,174.4	4,110.8	63.51	65.726	
12,400.0	7,740.0	7,400.0	7,228.9	79.2	30.0	-54.27	-60.7	1,568.9	4,272.2	4,208.6	63.64	67.135	
12,500.0	7,740.0	7,400.0	7,228.9	80.9	30.0	-54.27	-60.7	1,568.9	4,370.1	4,306.4	63.76	68.544	
12,600.0	7,740.0	7,400.0	7,228.9	82.6	30.0	-54.27	-60.7	1,568.9	4,468.1	4,404.3	63.87	69.952	
12,700.0	7,740.0	7,400.0	7,228.9	84.3	30.0	-54.27	-60.7	1,568.9	4,566.2	4,502.2	63.99	71.358	
12,800.0	7,740.0	7,400.0	7,228.9	86.0	30.0	-54.27	-60.7	1,568.9	4,664.4	4,600.3	64.10	72.763	
12,900.0	7,740.0	7,400.0	7,228.9	87.7	30.0	-54.27	-60.7	1,568.9	4,762.7	4,698.5	64.22	74.166	
13,000.0	7,740.0	7,400.0	7,228.9	89.4	30.0	-54.27	-60.7	1,568.9	4,861.0	4,796.7	64.33	75.567	
13,100.0	7,740.0	7,400.0	7,228.9	91.1	30.0	-54.27	-60.7	1,568.9	4,959.4	4,895.0	64.44	76.966	
13,200.0	7,740.0	7,400.0	7,228.9	92.8	30.0	-54.27	-60.7	1,568.9	5,057.9	4,993.3	64.54	78.364	
13,300.0	7,740.0	7,400.0	7,228.9	94.5	30.0	-54.27	-60.7	1,568.9	5,156.4	5,091.7	64.65	79.759	
13,400.0	7,740.0	7,400.0	7,228.9	96.3	30.0	-54.27	-60.7	1,568.9	5,255.0	5,190.2	64.75	81.153	
13,500.0	7,740.0	7,400.0	7,228.9	98.0	30.0	-54.27	-60.7	1,568.9	5,353.6	5,288.7	64.86	82.544	
13,600.0	7,740.0	7,400.0	7,228.9	99.7	30.0	-54.27	-60.7	1,568.9	5,452.3	5,387.3	64.96	83.932	
13,700.0	7,740.0	7,400.0	7,228.9	101.4	30.0	-54.27	-60.7	1,568.9	5,551.0	5,485.9	65.06	85.318	
13,800.0	7,740.0	7,400.0	7,228.9	103.1	30.0	-54.27	-60.7	1,568.9	5,649.8	5,584.6	65.16	86.702	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
13,900.0	7,740.0	7,400.0	7,228.9	104.8	30.0	-54.27	-60.7	1,568.9	5,748.6	5,683.3	65.26	88.083		
14,000.0	7,740.0	7,400.0	7,228.9	106.6	30.0	-54.27	-60.7	1,568.9	5,847.4	5,782.1	65.36	89.462		
14,100.0	7,740.0	7,400.0	7,228.9	108.3	30.0	-54.27	-60.7	1,568.9	5,946.3	5,880.9	65.46	90.838		
14,200.0	7,740.0	7,400.0	7,228.9	110.0	30.0	-54.27	-60.7	1,568.9	6,045.3	5,979.7	65.56	92.211		
14,300.0	7,740.0	7,400.0	7,228.9	111.7	30.0	-54.27	-60.7	1,568.9	6,144.2	6,078.6	65.66	93.582		
14,400.0	7,740.0	7,400.0	7,228.9	113.5	30.0	-54.27	-60.7	1,568.9	6,243.2	6,177.5	65.75	94.949		
14,500.0	7,740.0	7,400.0	7,228.9	115.2	30.0	-54.27	-60.7	1,568.9	6,342.3	6,276.4	65.85	96.314		
14,600.0	7,740.0	7,400.0	7,228.9	116.9	30.0	-54.27	-60.7	1,568.9	6,441.3	6,375.4	65.95	97.677		
14,700.0	7,740.0	7,400.0	7,228.9	118.6	30.0	-54.27	-60.7	1,568.9	6,540.4	6,474.4	66.04	99.036		
14,800.0	7,740.0	7,400.0	7,228.9	120.4	30.0	-54.27	-60.7	1,568.9	6,639.5	6,573.4	66.14	100.392		
14,900.0	7,740.0	7,400.0	7,228.9	122.1	30.0	-54.27	-60.7	1,568.9	6,738.7	6,672.4	66.23	101.746		
15,000.0	7,740.0	7,400.0	7,228.9	123.8	30.0	-54.27	-60.7	1,568.9	6,837.8	6,771.5	66.32	103.096		
15,100.0	7,740.0	7,400.0	7,228.9	125.6	30.0	-54.27	-60.7	1,568.9	6,937.0	6,870.6	66.42	104.444		
15,200.0	7,740.0	7,400.0	7,228.9	127.3	30.0	-54.27	-60.7	1,568.9	7,036.2	6,969.7	66.51	105.788		
15,300.0	7,740.0	7,400.0	7,228.9	129.0	30.0	-54.27	-60.7	1,568.9	7,135.5	7,068.9	66.61	107.130		
15,400.0	7,740.0	7,400.0	7,228.9	130.7	30.0	-54.27	-60.7	1,568.9	7,234.7	7,168.0	66.70	108.468		
15,500.0	7,740.0	7,400.0	7,228.9	132.5	30.0	-54.27	-60.7	1,568.9	7,334.0	7,267.2	66.79	109.804		
15,600.0	7,740.0	7,400.0	7,228.9	134.2	30.0	-54.27	-60.7	1,568.9	7,433.3	7,366.4	66.88	111.136		
15,700.0	7,740.0	7,400.0	7,228.9	135.9	30.0	-54.27	-60.7	1,568.9	7,532.6	7,465.6	66.98	112.465		
15,800.0	7,740.0	7,400.0	7,228.9	137.7	30.0	-54.27	-60.7	1,568.9	7,631.9	7,564.9	67.07	113.792		
15,900.0	7,740.0	7,400.0	7,228.9	139.4	30.0	-54.27	-60.7	1,568.9	7,731.3	7,664.1	67.16	115.115		
16,000.0	7,740.0	7,400.0	7,228.9	141.1	30.0	-54.27	-60.7	1,568.9	7,830.6	7,763.4	67.25	116.435		
16,084.2	7,740.0	7,400.0	7,228.9	142.6	30.0	-54.27	-60.7	1,568.9	7,914.3	7,847.0	67.33	117.544		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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			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	247.002		
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 CC, ES		
300.0	300.0	298.7	298.7	0.5	0.5	90.58	-0.8	75.9	75.9	74.9	1.00	75.913		
400.0	400.0	397.3	397.3	0.7	0.7	90.62	-0.8	78.4	78.5	77.1	1.35	58.296		
500.0	500.0	495.9	495.7	0.8	0.9	90.68	-1.0	82.6	82.8	81.1	1.69	48.922		
600.0	600.0	594.2	593.9	1.0	1.1	90.75	-1.2	88.6	88.8	86.7	2.04	43.589		
700.0	700.0	692.3	691.7	1.2	1.3	90.83	-1.4	96.1	96.5	94.1	2.38	40.537		
800.0	800.0	790.2	789.1	1.4	1.5	90.91	-1.7	105.4	105.9	103.2	2.72	38.897		
900.0	900.0	887.6	886.0	1.5	1.7	90.99	-2.0	116.2	117.1	114.0	3.06	38.195		
1,000.0	1,000.0	984.7	982.3	1.7	2.0	91.07	-2.4	128.6	129.9	126.5	3.40	38.147		
1,100.0	1,100.0	1,081.4	1,078.0	1.9	2.3	39.87	-2.8	142.6	143.7	140.0	3.74	38.393		
1,200.0	1,200.0	1,177.9	1,173.1	2.1	2.6	40.42	-3.3	158.2	157.9	153.8	4.08	38.692		
1,300.0	1,299.9	1,274.0	1,267.7	2.3	2.9	41.22	-3.8	175.3	172.4	168.0	4.42	39.027		
1,400.0	1,399.7	1,369.8	1,361.7	2.4	3.3	42.22	-4.4	194.0	187.4	182.6	4.76	39.379		
1,500.0	1,499.4	1,465.3	1,455.0	2.6	3.7	43.35	-5.1	214.1	202.8	197.7	5.11	39.730		
1,600.0	1,598.9	1,560.4	1,547.6	2.8	4.1	44.58	-5.7	235.7	218.7	213.3	5.46	40.059		
1,700.0	1,698.3	1,655.1	1,639.5	3.1	4.5	45.87	-6.4	258.7	235.2	229.4	5.83	40.344		
1,800.0	1,797.4	1,749.5	1,730.7	3.3	5.0	47.21	-7.2	283.1	252.2	246.0	6.22	40.562		
1,900.0	1,896.3	1,843.4	1,821.0	3.6	5.5	48.56	-8.0	309.0	269.8	263.2	6.63	40.693		
1,915.7	1,911.9	1,858.2	1,835.1	3.6	5.5	48.78	-8.1	313.2	272.7	266.0	6.70	40.707		
2,000.0	1,995.0	1,936.9	1,910.4	3.8	6.0	49.96	-8.8	336.1	288.5	281.4	7.07	40.830		
2,100.0	2,093.8	2,029.9	1,998.9	4.1	6.5	51.15	-9.7	364.6	308.9	301.4	7.52	41.100		
2,200.0	2,192.5	2,126.0	2,090.0	4.4	7.1	52.18	-10.7	395.1	330.5	322.5	8.00	41.326		
2,300.0	2,291.2	2,223.4	2,182.4	4.7	7.6	53.10	-11.6	426.1	352.3	343.8	8.50	41.439		
2,400.0	2,389.9	2,320.9	2,274.8	5.0	8.2	53.91	-12.6	457.1	374.2	365.2	9.02	41.494		
2,500.0	2,488.7	2,418.3	2,367.2	5.3	8.8	54.63	-13.6	488.1	396.1	386.6	9.54	41.505		
2,600.0	2,587.4	2,515.8	2,459.6	5.6	9.4	55.28	-14.5	519.1	418.1	408.0	10.08	41.483		
2,700.0	2,686.1	2,613.2	2,552.0	5.9	9.9	55.86	-15.5	550.1	440.1	429.5	10.62	41.437		
2,800.0	2,784.8	2,710.7	2,644.4	6.2	10.5	56.38	-16.4	581.1	462.2	451.0	11.17	41.374		
2,900.0	2,883.6	2,808.1	2,736.7	6.5	11.1	56.86	-17.4	612.1	484.3	472.6	11.73	41.299		
3,000.0	2,982.3	2,905.6	2,829.1	6.9	11.7	57.30	-18.4	643.1	506.4	494.1	12.29	41.215		
3,100.0	3,081.0	3,003.0	2,921.5	7.2	12.3	57.70	-19.3	674.1	528.6	515.7	12.85	41.126		
3,200.0	3,179.7	3,100.5	3,013.9	7.5	12.9	58.07	-20.3	705.1	550.7	537.3	13.42	41.033		
3,300.0	3,278.5	3,197.9	3,106.3	7.8	13.4	58.41	-21.3	736.1	572.9	558.9	14.00	40.939		
3,400.0	3,377.2	3,295.4	3,198.7	8.1	14.0	58.72	-22.2	767.1	595.2	580.6	14.57	40.844		
3,500.0	3,475.9	3,392.8	3,291.0	8.4	14.6	59.01	-23.2	798.1	617.4	602.2	15.15	40.749		
3,600.0	3,574.6	3,490.3	3,383.4	8.8	15.2	59.28	-24.1	829.1	639.6	623.9	15.73	40.656		
3,700.0	3,673.4	3,587.7	3,475.8	9.1	15.8	59.54	-25.1	860.1	661.9	645.6	16.32	40.564		
3,800.0	3,772.1	3,685.2	3,568.2	9.4	16.4	59.77	-26.1	891.1	684.2	667.3	16.90	40.474		
3,900.0	3,870.8	3,782.6	3,660.6	9.7	17.0	60.00	-27.0	922.1	706.4	689.0	17.49	40.386		
4,000.0	3,969.5	3,880.1	3,753.0	10.0	17.6	60.20	-28.0	953.1	728.7	710.7	18.08	40.301		
4,100.0	4,068.3	3,977.5	3,845.4	10.4	18.2	60.40	-28.9	984.1	751.0	732.4	18.67	40.218		
4,200.0	4,167.0	4,075.0	3,937.7	10.7	18.7	60.58	-29.9	1,015.1	773.3	754.1	19.27	40.137		
4,300.0	4,265.7	4,172.4	4,030.1	11.0	19.3	60.76	-30.9	1,046.1	795.7	775.8	19.86	40.059		
4,400.0	4,364.4	4,269.9	4,122.5	11.3	19.9	60.92	-31.8	1,077.1	818.0	797.5	20.46	39.983		
4,500.0	4,463.2	4,367.3	4,214.9	11.7	20.5	61.08	-32.8	1,108.1	840.3	819.2	21.05	39.910		
4,600.0	4,561.9	4,464.8	4,307.3	12.0	21.1	61.23	-33.8	1,139.1	862.6	841.0	21.65	39.839		
4,700.0	4,660.6	4,562.2	4,399.7	12.3	21.7	61.37	-34.7	1,170.1	885.0	862.7	22.25	39.771		
4,800.0	4,759.3	4,659.7	4,492.0	12.6	22.3	61.50	-35.7	1,201.1	907.3	884.5	22.85	39.704		
4,900.0	4,858.1	4,757.1	4,584.4	13.0	22.9	61.63	-36.6	1,232.1	929.7	906.2	23.45	39.640		
5,000.0	4,956.8	4,854.6	4,676.8	13.3	23.5	61.75	-37.6	1,263.0	952.0	928.0	24.05	39.578		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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			
5,100.0	5,055.5	4,952.1	4,769.2	13.6	24.1	61.86	-38.6	1,294.0	974.4	949.7	24.66	39.518		
5,200.0	5,154.2	5,049.5	4,861.6	13.9	24.7	61.97	-39.5	1,325.0	996.7	971.5	25.26	39.460		
5,300.0	5,253.0	5,147.0	4,954.0	14.3	25.2	62.08	-40.5	1,356.0	1,019.1	993.2	25.86	39.404		
5,400.0	5,351.7	5,244.4	5,046.4	14.6	25.8	62.18	-41.5	1,387.0	1,041.4	1,015.0	26.47	39.350		
5,500.0	5,450.4	5,341.9	5,138.7	14.9	26.4	62.28	-42.4	1,418.0	1,063.8	1,036.7	27.07	39.298		
5,600.0	5,549.1	5,439.3	5,231.1	15.3	27.0	62.37	-43.4	1,449.0	1,086.2	1,058.5	27.68	39.247		
5,700.0	5,647.9	5,536.8	5,323.5	15.6	27.6	62.46	-44.3	1,480.0	1,108.6	1,080.3	28.28	39.198		
5,800.0	5,746.6	5,634.2	5,415.9	15.9	28.2	62.55	-45.3	1,511.0	1,130.9	1,102.0	28.89	39.150		
5,900.0	5,845.3	5,731.7	5,508.3	16.2	28.8	62.63	-46.3	1,542.0	1,153.3	1,123.8	29.49	39.104		
6,000.0	5,944.1	5,829.1	5,600.7	16.6	29.4	62.71	-47.2	1,573.0	1,175.7	1,145.6	30.10	39.059		
6,100.0	6,042.8	5,926.6	5,693.0	16.9	30.0	62.78	-48.2	1,604.0	1,198.1	1,167.4	30.71	39.016		
6,200.0	6,141.5	6,024.0	5,785.4	17.2	30.6	62.86	-49.1	1,635.0	1,220.4	1,189.1	31.31	38.974		
6,300.0	6,240.2	6,121.5	5,877.8	17.5	31.2	62.93	-50.1	1,666.0	1,242.8	1,210.9	31.92	38.933		
6,400.0	6,339.0	6,218.9	5,970.2	17.9	31.8	62.99	-51.1	1,697.0	1,265.2	1,232.7	32.53	38.893		
6,500.0	6,437.7	6,316.4	6,062.6	18.2	32.3	63.06	-52.0	1,728.0	1,287.6	1,254.5	33.14	38.855		
6,600.0	6,536.4	6,413.8	6,155.0	18.5	32.9	63.12	-53.0	1,759.0	1,310.0	1,276.3	33.75	38.818		
6,700.0	6,635.1	6,511.3	6,247.4	18.9	33.5	63.19	-54.0	1,790.0	1,332.4	1,298.0	34.36	38.781		
6,800.0	6,733.9	6,608.7	6,339.7	19.2	34.1	63.25	-54.9	1,821.0	1,354.8	1,319.8	34.97	38.746		
6,900.0	6,832.6	6,706.2	6,432.1	19.5	34.7	63.30	-55.9	1,852.0	1,377.2	1,341.6	35.58	38.712		
7,000.0	6,931.3	6,803.6	6,524.5	19.8	35.3	63.36	-56.8	1,883.0	1,399.6	1,363.4	36.18	38.678		
7,100.0	7,030.0	6,901.1	6,616.9	20.2	35.9	63.41	-57.8	1,914.0	1,422.0	1,385.2	36.79	38.646		
7,191.8	7,120.7	6,990.6	6,701.7	20.5	36.4	63.46	-58.7	1,942.5	1,442.5	1,405.2	37.35	38.617		
7,200.0	7,128.8	6,998.5	6,709.3	20.5	36.5	59.22	-58.8	1,945.0	1,444.3	1,406.9	37.40	38.616		
7,250.0	7,178.3	7,047.5	6,755.7	20.6	36.8	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,300.0	7,227.8	7,097.0	6,802.1	20.7	37.1	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,350.0	7,276.8	7,146.0	6,849.5	20.8	37.4	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,400.0	7,325.1	7,195.1	6,896.9	20.9	37.7	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,450.0	7,372.2	7,244.2	6,944.3	21.0	38.0	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,500.0	7,417.7	7,289.7	6,991.7	21.1	38.3	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,550.0	7,461.4	7,334.1	7,039.1	21.2	38.6	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,600.0	7,502.9	7,381.6	7,086.6	21.3	38.9	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,650.0	7,541.9	7,429.1	7,134.1	21.4	39.2	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,700.0	7,578.0	7,476.6	7,181.6	21.5	39.5	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,750.0	7,611.1	7,519.1	7,229.1	21.6	39.8	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,800.0	7,640.8	7,567.6	7,276.6	21.7	40.1	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,850.0	7,667.0	7,593.8	7,302.8	21.8	40.4	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,900.0	7,689.4	7,616.2	7,325.2	21.9	40.7	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
7,950.0	7,707.9	7,634.7	7,342.7	22.0	41.0	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,000.0	7,722.2	7,649.0	7,357.0	22.1	41.3	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,050.0	7,732.4	7,659.2	7,367.2	22.2	41.6	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,055.5	7,733.3	7,660.1	7,368.1	22.3	41.7	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,100.0	7,738.4	7,665.0	7,373.0	22.4	41.8	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,143.7	7,740.0	7,666.6	7,374.6	22.5	41.9	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,200.0	7,740.0	7,666.6	7,374.6	22.6	42.0	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,300.0	7,740.0	7,666.6	7,374.6	22.7	42.1	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,400.0	7,740.0	7,666.6	7,374.6	22.8	42.2	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,443.7	7,740.0	7,666.6	7,374.6	22.9	42.3	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,500.0	7,740.0	7,666.6	7,374.6	23.0	42.4	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,600.0	7,740.0	7,666.6	7,374.6	23.1	42.5	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,700.0	7,740.0	7,666.6	7,374.6	23.2	42.6	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,800.0	7,740.0	7,666.6	7,374.6	23.3	42.7	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		
8,843.7	7,740.0	7,666.6	7,374.6	23.4	42.8	25.41	-59.2	1,960.6	1,454.1	1,416.5	37.60	38.671		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4										Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD										Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
8,900.0	7,740.0	7,432.7	7,118.5	25.6	39.0	-62.80	-29.7	2,079.1	1,538.2	1,493.2	45.01	34.176	
9,000.0	7,740.0	7,418.3	7,105.4	26.7	38.9	-62.23	-34.3	2,075.2	1,587.3	1,539.5	47.77	33.230	
9,100.0	7,740.0	7,400.0	7,088.7	27.8	38.9	-61.51	-39.5	2,070.1	1,640.8	1,590.5	50.30	32.619	
9,200.0	7,740.0	7,400.0	7,088.7	29.0	38.9	-61.51	-39.5	2,070.1	1,698.3	1,645.5	52.81	32.156	
9,300.0	7,740.0	7,400.0	7,088.7	30.2	38.9	-61.51	-39.5	2,070.1	1,759.6	1,704.5	55.11	31.926 SF	
9,343.7	7,740.0	7,381.7	7,071.8	30.8	38.8	-60.78	-44.2	2,064.9	1,787.2	1,731.4	55.85	32.001	
9,400.7	7,740.0	7,377.0	7,067.4	31.6	38.7	-60.84	-45.3	2,063.5	1,824.2	1,767.2	56.97	32.018	
9,500.0	7,740.0	7,369.7	7,060.6	32.9	38.7	-60.55	-47.0	2,061.4	1,890.6	1,831.8	58.80	32.154	
9,600.0	7,740.0	7,350.0	7,042.2	34.3	38.6	-59.77	-51.0	2,055.6	1,960.3	1,900.0	60.33	32.495	
9,700.0	7,740.0	7,350.0	7,042.2	35.7	38.6	-59.77	-51.0	2,055.6	2,032.2	1,970.3	61.90	32.831	
9,800.0	7,740.0	7,350.0	7,042.2	37.1	38.6	-59.77	-51.0	2,055.6	2,106.5	2,043.2	63.32	33.266	
9,900.0	7,740.0	7,350.0	7,042.2	38.6	38.6	-59.77	-51.0	2,055.6	2,182.8	2,118.2	64.61	33.784	
10,000.0	7,740.0	7,350.0	7,042.2	40.1	38.6	-59.77	-51.0	2,055.6	2,260.9	2,195.2	65.78	34.374	
10,100.0	7,740.0	7,350.0	7,042.2	41.6	38.6	-59.77	-51.0	2,055.6	2,340.8	2,273.9	66.83	35.025	
10,200.0	7,740.0	7,350.0	7,042.2	43.1	38.6	-59.77	-51.0	2,055.6	2,422.1	2,354.3	67.79	35.729	
10,300.0	7,740.0	7,350.0	7,042.2	44.7	38.6	-59.77	-51.0	2,055.6	2,504.8	2,436.1	68.66	36.478	
10,400.0	7,740.0	7,327.5	7,021.0	46.3	38.5	-58.87	-54.8	2,048.9	2,588.2	2,519.0	69.21	37.394	
10,500.0	7,740.0	7,324.4	7,018.2	47.8	38.4	-58.75	-55.2	2,048.0	2,673.1	2,603.1	69.91	38.236	
10,600.0	7,740.0	7,321.6	7,015.5	49.4	38.4	-58.64	-55.6	2,047.1	2,758.9	2,688.4	70.55	39.107	
10,700.0	7,740.0	7,300.0	6,995.1	51.0	38.3	-57.78	-58.2	2,040.6	2,846.0	2,775.1	70.92	40.128	
10,800.0	7,740.0	7,300.0	6,995.1	52.6	38.3	-57.78	-58.2	2,040.6	2,933.6	2,862.1	71.49	41.034	
10,900.0	7,740.0	7,300.0	6,995.1	54.2	38.3	-57.78	-58.2	2,040.6	3,021.9	2,949.8	72.01	41.962	
11,000.0	7,740.0	7,300.0	6,995.1	55.9	38.3	-57.78	-58.2	2,040.6	3,110.9	3,038.4	72.50	42.910	
11,100.0	7,740.0	7,300.0	6,995.1	57.5	38.3	-57.78	-58.2	2,040.6	3,200.5	3,127.6	72.95	43.875	
11,200.0	7,740.0	7,300.0	6,995.1	59.1	38.3	-57.78	-58.2	2,040.6	3,290.8	3,217.4	73.36	44.856	
11,300.0	7,740.0	7,300.0	6,995.1	60.8	38.3	-57.78	-58.2	2,040.6	3,381.6	3,307.8	73.75	45.851	
11,400.0	7,740.0	7,300.0	6,995.1	62.4	38.3	-57.78	-58.2	2,040.6	3,472.9	3,398.8	74.12	46.858	
11,500.0	7,740.0	7,300.0	6,995.1	64.1	38.3	-57.78	-58.2	2,040.6	3,564.7	3,490.2	74.46	47.876	
11,600.0	7,740.0	7,300.0	6,995.1	65.8	38.3	-57.78	-58.2	2,040.6	3,656.9	3,582.1	74.78	48.905	
11,700.0	7,740.0	7,300.0	6,995.1	67.4	38.3	-57.78	-58.2	2,040.6	3,749.5	3,674.4	75.08	49.942	
11,800.0	7,740.0	7,300.0	6,995.1	69.1	38.3	-57.78	-58.2	2,040.6	3,842.5	3,767.1	75.36	50.988	
11,900.0	7,740.0	7,300.0	6,995.1	70.8	38.3	-57.78	-58.2	2,040.6	3,935.8	3,860.2	75.63	52.041	
12,000.0	7,740.0	7,300.0	6,995.1	72.5	38.3	-57.78	-58.2	2,040.6	4,029.4	3,953.6	75.88	53.101	
12,100.0	7,740.0	7,300.0	6,995.1	74.1	38.3	-57.78	-58.2	2,040.6	4,123.4	4,047.3	76.12	54.166	
12,200.0	7,740.0	7,300.0	6,995.1	75.8	38.3	-57.78	-58.2	2,040.6	4,217.6	4,141.2	76.35	55.237	
12,300.0	7,740.0	7,300.0	6,995.1	77.5	38.3	-57.78	-58.2	2,040.6	4,312.1	4,235.5	76.57	56.313	
12,400.0	7,740.0	7,300.0	6,995.1	79.2	38.3	-57.78	-58.2	2,040.6	4,406.8	4,330.0	76.78	57.394	
12,500.0	7,740.0	7,300.0	6,995.1	80.9	38.3	-57.78	-58.2	2,040.6	4,501.8	4,424.8	76.98	58.478	
12,600.0	7,740.0	7,300.0	6,995.1	82.6	38.3	-57.78	-58.2	2,040.6	4,596.9	4,519.7	77.17	59.565	
12,700.0	7,740.0	7,300.0	6,995.1	84.3	38.3	-57.78	-58.2	2,040.6	4,692.3	4,614.9	77.36	60.656	
12,800.0	7,740.0	7,300.0	6,995.1	86.0	38.3	-57.78	-58.2	2,040.6	4,787.8	4,710.3	77.54	61.749	
12,900.0	7,740.0	7,300.0	6,995.1	87.7	38.3	-57.78	-58.2	2,040.6	4,883.6	4,805.9	77.71	62.845	
13,000.0	7,740.0	7,300.0	6,995.1	89.4	38.3	-57.78	-58.2	2,040.6	4,979.5	4,901.6	77.87	63.944	
13,100.0	7,740.0	7,300.0	6,995.1	91.1	38.3	-57.78	-58.2	2,040.6	5,075.5	4,997.5	78.03	65.044	
13,200.0	7,740.0	7,300.0	6,995.1	92.8	38.3	-57.78	-58.2	2,040.6	5,171.8	5,093.6	78.19	66.146	
13,300.0	7,740.0	7,300.0	6,995.1	94.5	38.3	-57.78	-58.2	2,040.6	5,268.1	5,189.8	78.34	67.249	
13,400.0	7,740.0	7,300.0	6,995.1	96.3	38.3	-57.78	-58.2	2,040.6	5,364.6	5,286.1	78.48	68.353	
13,500.0	7,740.0	7,300.0	6,995.1	98.0	38.3	-57.78	-58.2	2,040.6	5,461.2	5,382.6	78.62	69.459	
13,600.0	7,740.0	7,300.0	6,995.1	99.7	38.3	-57.78	-58.2	2,040.6	5,557.9	5,479.2	78.76	70.565	
13,700.0	7,740.0	7,300.0	6,995.1	101.4	38.3	-57.78	-58.2	2,040.6	5,654.8	5,575.9	78.90	71.672	
13,800.0	7,740.0	7,300.0	6,995.1	103.1	38.3	-57.78	-58.2	2,040.6	5,751.7	5,672.7	79.03	72.780	
13,900.0	7,740.0	7,300.0	6,995.1	104.8	38.3	-57.78	-58.2	2,040.6	5,848.8	5,769.6	79.16	73.888	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	7,300.0	6,995.1	106.6	38.3	-57.78	-58.2	2,040.6	5,945.9	5,866.6	79.28	74.997		
14,100.0	7,740.0	7,300.0	6,995.1	108.3	38.3	-57.78	-58.2	2,040.6	6,043.2	5,963.8	79.41	76.105		
14,200.0	7,740.0	7,300.0	6,995.1	110.0	38.3	-57.78	-58.2	2,040.6	6,140.5	6,061.0	79.53	77.214		
14,300.0	7,740.0	7,300.0	6,995.1	111.7	38.3	-57.78	-58.2	2,040.6	6,237.9	6,158.3	79.64	78.323		
14,400.0	7,740.0	7,277.1	6,973.4	113.5	38.2	-56.88	-60.1	2,033.5	6,335.0	6,255.4	79.51	79.670		
14,500.0	7,740.0	7,276.6	6,972.9	115.2	38.2	-56.86	-60.1	2,033.3	6,432.5	6,352.9	79.62	80.786		
14,600.0	7,740.0	7,276.1	6,972.5	116.9	38.2	-56.84	-60.1	2,033.2	6,530.1	6,450.4	79.73	81.902		
14,700.0	7,740.0	7,275.7	6,972.0	118.6	38.2	-56.82	-60.1	2,033.0	6,627.8	6,548.0	79.84	83.017		
14,800.0	7,740.0	7,275.2	6,971.6	120.4	38.2	-56.80	-60.2	2,032.9	6,725.6	6,645.7	79.94	84.132		
14,900.0	7,740.0	7,274.8	6,971.2	122.1	38.2	-56.79	-60.2	2,032.8	6,823.4	6,743.4	80.04	85.246		
15,000.0	7,740.0	7,274.4	6,970.8	123.8	38.2	-56.77	-60.2	2,032.6	6,921.3	6,841.2	80.15	86.360		
15,100.0	7,740.0	7,273.9	6,970.4	125.6	38.2	-56.75	-60.2	2,032.5	7,019.3	6,939.0	80.25	87.472		
15,200.0	7,740.0	7,273.5	6,970.0	127.3	38.2	-56.74	-60.3	2,032.4	7,117.3	7,036.9	80.34	88.584		
15,300.0	7,740.0	7,273.1	6,969.6	129.0	38.2	-56.72	-60.3	2,032.2	7,215.3	7,134.9	80.44	89.695		
15,400.0	7,740.0	7,250.0	6,947.7	130.7	38.0	-55.81	-61.1	2,025.0	7,313.9	7,233.6	80.29	91.089		
15,500.0	7,740.0	7,250.0	6,947.7	132.5	38.0	-55.81	-61.1	2,025.0	7,412.1	7,331.7	80.39	92.196		
15,600.0	7,740.0	7,250.0	6,947.7	134.2	38.0	-55.81	-61.1	2,025.0	7,510.3	7,429.8	80.49	93.302		
15,700.0	7,740.0	7,250.0	6,947.7	135.9	38.0	-55.81	-61.1	2,025.0	7,608.5	7,527.9	80.59	94.407		
15,800.0	7,740.0	7,250.0	6,947.7	137.7	38.0	-55.81	-61.1	2,025.0	7,706.8	7,626.1	80.69	95.511		
15,900.0	7,740.0	7,250.0	6,947.7	139.4	38.0	-55.81	-61.1	2,025.0	7,805.1	7,724.4	80.79	96.613		
16,000.0	7,740.0	7,250.0	6,947.7	141.1	38.0	-55.81	-61.1	2,025.0	7,903.5	7,822.6	80.88	97.715		
16,084.2	7,740.0	7,250.0	6,947.7	142.6	38.0	-55.81	-61.1	2,025.0	7,986.4	7,905.4	80.96	98.642		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.02	0.0	-29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	-90.02	0.0	-29.9	29.9	29.6	0.30	98.612	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-29.9	29.9	29.3	0.65	45.878		
300.0	300.0	299.7	299.7	0.5	0.5	-88.76	0.7	-30.5	30.5	29.5	1.00	30.448		
400.0	400.0	399.3	399.2	0.7	0.7	-85.23	2.7	-32.1	32.2	30.9	1.35	23.840		
500.0	500.0	498.7	498.6	0.8	0.9	-80.16	6.0	-34.8	35.4	33.7	1.71	20.750		
600.0	600.0	598.0	597.7	1.0	1.1	-74.47	10.7	-38.6	40.2	38.1	2.06	19.507		
700.0	700.0	697.1	696.5	1.2	1.3	-68.94	16.7	-43.5	46.7	44.3	2.41	19.386		
800.0	800.0	796.2	795.1	1.4	1.5	-64.07	24.0	-49.4	55.1	52.3	2.76	19.960		
900.0	900.0	895.7	894.2	1.5	1.7	-60.36	31.6	-55.5	64.1	61.0	3.11	20.608		
1,000.0	1,000.0	995.2	993.2	1.7	2.0	-57.57	39.1	-61.6	73.3	69.8	3.46	21.191		
1,100.0	1,100.0	1,094.7	1,092.2	1.9	2.2	-107.30	46.7	-67.7	82.9	79.1	3.81	21.761		
1,200.0	1,200.0	1,194.2	1,191.3	2.1	2.4	-106.98	54.3	-73.8	93.0	88.8	4.16	22.340		
1,300.0	1,299.9	1,293.6	1,290.2	2.3	2.7	-107.63	61.8	-79.9	103.6	99.1	4.52	22.904		
1,400.0	1,399.7	1,393.0	1,389.1	2.4	2.9	-108.97	69.4	-86.0	114.8	109.9	4.90	23.451		
1,500.0	1,499.4	1,492.2	1,487.8	2.6	3.2	-110.79	76.9	-92.1	126.7	121.4	5.28	23.986		
1,600.0	1,598.9	1,591.2	1,586.4	2.8	3.4	-112.94	84.4	-98.2	139.4	133.7	5.69	24.519		
1,700.0	1,698.3	1,690.1	1,684.8	3.1	3.6	-115.30	91.9	-104.3	153.0	146.9	6.10	25.060		
1,800.0	1,797.4	1,788.8	1,783.0	3.3	3.9	-117.77	99.4	-110.4	167.6	161.0	6.54	25.621		
1,900.0	1,896.3	1,887.2	1,880.9	3.6	4.1	-120.29	106.9	-116.4	183.4	176.4	7.00	26.212		
1,915.7	1,911.9	1,902.7	1,896.3	3.6	4.1	-120.69	108.1	-117.4	186.0	178.9	7.07	26.311		
2,000.0	1,995.0	1,985.4	1,978.7	3.8	4.3	-122.78	114.4	-122.4	200.1	192.6	7.46	26.832		
2,100.0	2,093.8	2,083.7	2,076.5	4.1	4.6	-124.90	121.9	-128.5	217.1	209.2	7.92	27.417		
2,200.0	2,192.5	2,181.9	2,174.2	4.4	4.8	-126.72	129.3	-134.5	234.4	226.0	8.38	27.967		
2,300.0	2,291.2	2,280.2	2,272.0	4.7	5.1	-128.29	136.8	-140.6	251.8	243.0	8.84	28.484		
2,400.0	2,389.9	2,378.4	2,369.8	5.0	5.3	-129.65	144.3	-146.6	269.5	260.2	9.30	28.969		
2,500.0	2,488.7	2,476.7	2,467.5	5.3	5.5	-130.84	151.7	-152.6	287.2	277.5	9.76	29.424		
2,600.0	2,587.4	2,574.9	2,565.3	5.6	5.8	-131.90	159.2	-158.7	305.1	294.9	10.22	29.850		
2,700.0	2,686.1	2,673.1	2,663.1	5.9	6.0	-132.84	166.7	-164.7	323.0	312.4	10.68	30.251		
2,800.0	2,784.8	2,771.4	2,760.9	6.2	6.3	-133.68	174.1	-170.7	341.1	329.9	11.14	30.627		
2,900.0	2,883.6	2,869.6	2,858.6	6.5	6.5	-134.44	181.6	-176.8	359.2	347.6	11.59	30.982		
3,000.0	2,982.3	2,967.9	2,956.4	6.9	6.7	-135.12	189.1	-182.8	377.3	365.3	12.05	31.315		
3,100.0	3,081.0	3,066.1	3,054.2	7.2	7.0	-135.74	196.5	-188.8	395.5	383.0	12.51	31.629		
3,200.0	3,179.7	3,164.4	3,152.0	7.5	7.2	-136.31	204.0	-194.9	413.8	400.8	12.96	31.926		
3,300.0	3,278.5	3,262.6	3,249.7	7.8	7.5	-136.83	211.5	-200.9	432.1	418.6	13.42	32.206		
3,400.0	3,377.2	3,360.8	3,347.5	8.1	7.7	-137.31	218.9	-207.0	450.4	436.5	13.87	32.472		
3,500.0	3,475.9	3,459.1	3,445.3	8.4	7.9	-137.75	226.4	-213.0	468.7	454.4	14.32	32.723		
3,600.0	3,574.6	3,557.3	3,543.0	8.8	8.2	-138.15	233.9	-219.0	487.1	472.3	14.78	32.961		
3,700.0	3,673.4	3,655.6	3,640.8	9.1	8.4	-138.53	241.3	-225.1	505.5	490.2	15.23	33.188		
3,800.0	3,772.1	3,753.8	3,738.6	9.4	8.7	-138.88	248.8	-231.1	523.9	508.2	15.68	33.403		
3,900.0	3,870.8	3,852.1	3,836.4	9.7	8.9	-139.21	256.3	-237.1	542.3	526.1	16.14	33.607		
4,000.0	3,969.5	3,950.3	3,934.1	10.0	9.1	-139.51	263.7	-243.2	560.7	544.1	16.59	33.802		
4,100.0	4,068.3	4,048.5	4,031.9	10.4	9.4	-139.80	271.2	-249.2	579.2	562.1	17.04	33.988		
4,200.0	4,167.0	4,146.8	4,129.7	10.7	9.6	-140.06	278.7	-255.3	597.6	580.1	17.49	34.166		
4,300.0	4,265.7	4,245.0	4,227.5	11.0	9.8	-140.32	286.1	-261.3	616.1	598.2	17.94	34.335		
4,400.0	4,364.4	4,343.3	4,325.2	11.3	10.1	-140.55	293.6	-267.3	634.6	616.2	18.40	34.498		
4,500.0	4,463.2	4,441.5	4,423.0	11.7	10.3	-140.78	301.1	-273.4	653.1	634.3	18.85	34.653		
4,600.0	4,561.9	4,539.8	4,520.8	12.0	10.6	-140.99	308.5	-279.4	671.6	652.3	19.30	34.802		
4,700.0	4,660.6	4,638.0	4,618.5	12.3	10.8	-141.19	316.0	-285.4	690.1	670.4	19.75	34.944		
4,800.0	4,759.3	4,736.2	4,716.3	12.6	11.0	-141.38	323.5	-291.5	708.6	688.4	20.20	35.081		
4,900.0	4,858.1	4,834.5	4,814.1	13.0	11.3	-141.56	330.9	-297.5	727.2	706.5	20.65	35.212		
5,000.0	4,956.8	4,932.7	4,911.9	13.3	11.5	-141.73	338.4	-303.6	745.7	724.6	21.10	35.339		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
5,100.0	5,055.5	5,031.0	5,009.6	13.6	11.8	-141.89	345.9	-309.6	764.3	742.7	21.55	35.460	
5,200.0	5,154.2	5,129.2	5,107.4	13.9	12.0	-142.05	353.3	-315.6	782.8	760.8	22.00	35.577	
5,300.0	5,253.0	5,227.5	5,205.2	14.3	12.2	-142.20	360.8	-321.7	801.4	778.9	22.45	35.690	
5,400.0	5,351.7	5,325.7	5,303.0	14.6	12.5	-142.34	368.3	-327.7	819.9	797.0	22.90	35.798	
5,500.0	5,450.4	5,424.0	5,400.7	14.9	12.7	-142.47	375.7	-333.7	838.5	815.1	23.35	35.903	
5,600.0	5,549.1	5,522.2	5,498.5	15.3	13.0	-142.60	383.2	-339.8	857.0	833.2	23.80	36.004	
5,700.0	5,647.9	5,620.4	5,596.3	15.6	13.2	-142.73	390.7	-345.8	875.6	851.4	24.25	36.102	
5,800.0	5,746.6	5,718.7	5,694.0	15.9	13.4	-142.85	398.1	-351.8	894.2	869.5	24.70	36.196	
5,900.0	5,845.3	5,816.9	5,791.8	16.2	13.7	-142.96	405.6	-357.9	912.8	887.6	25.15	36.287	
6,000.0	5,944.1	5,915.2	5,889.6	16.6	13.9	-143.07	413.1	-363.9	931.4	905.7	25.60	36.375	
6,100.0	6,042.8	6,013.4	5,987.4	16.9	14.2	-143.17	420.5	-370.0	949.9	923.9	26.05	36.460	
6,200.0	6,141.5	6,111.7	6,085.1	17.2	14.4	-143.27	428.0	-376.0	968.5	942.0	26.50	36.543	
6,300.0	6,240.2	6,209.9	6,182.9	17.5	14.6	-143.37	435.5	-382.0	987.1	960.2	26.95	36.623	
6,400.0	6,339.0	6,308.1	6,280.7	17.9	14.9	-143.46	442.9	-388.1	1,005.7	978.3	27.40	36.700	
6,500.0	6,437.7	6,406.4	6,378.5	18.2	15.1	-143.55	450.4	-394.1	1,024.3	996.5	27.85	36.775	
6,600.0	6,536.4	6,504.6	6,476.2	18.5	15.4	-143.64	457.9	-400.1	1,042.9	1,014.6	28.30	36.848	
6,700.0	6,635.1	6,602.9	6,574.0	18.9	15.6	-143.73	465.3	-406.2	1,061.5	1,032.8	28.75	36.919	
6,800.0	6,733.9	6,701.1	6,671.8	19.2	15.8	-143.81	472.8	-412.2	1,080.1	1,050.9	29.20	36.988	
6,900.0	6,832.6	6,799.4	6,769.5	19.5	16.1	-143.88	480.3	-418.3	1,098.7	1,069.1	29.65	37.055	
7,000.0	6,931.3	6,897.6	6,867.3	19.8	16.3	-143.96	487.7	-424.3	1,117.3	1,087.2	30.10	37.119	
7,100.0	7,030.0	6,995.8	6,965.1	20.2	16.6	-144.03	495.2	-430.3	1,135.9	1,105.4	30.55	37.182	
7,191.8	7,120.7	7,086.1	7,054.9	20.5	16.8	-144.10	502.1	-435.9	1,153.0	1,122.1	30.96	37.239	
7,200.0	7,128.8	7,094.1	7,062.9	20.5	16.8	-148.66	502.7	-436.4	1,154.5	1,123.5	31.00	37.245	
7,250.0	7,178.3	7,143.1	7,111.7	20.6	16.9	175.89	506.4	-439.4	1,163.9	1,132.7	31.18	37.329	
7,300.0	7,227.8	7,188.4	7,156.8	20.7	17.0	143.44	508.9	-442.2	1,173.4	1,142.1	31.29	37.506	
7,350.0	7,276.8	7,232.5	7,200.8	20.8	17.1	124.94	508.1	-444.9	1,183.1	1,151.8	31.31	37.788	
7,400.0	7,325.1	7,277.0	7,245.0	20.8	17.1	114.73	503.9	-447.6	1,193.0	1,161.7	31.26	38.161	
7,450.0	7,372.2	7,321.9	7,289.1	20.8	17.1	108.45	496.1	-450.3	1,202.9	1,171.8	31.15	38.622	
7,500.0	7,417.7	7,367.3	7,332.9	20.8	17.0	104.20	484.7	-453.0	1,212.9	1,181.9	30.97	39.167	
7,550.0	7,461.4	7,413.1	7,376.2	20.7	17.0	101.09	469.8	-455.7	1,222.8	1,192.0	30.73	39.788	
7,600.0	7,502.9	7,459.6	7,418.6	20.7	16.9	98.71	451.2	-458.3	1,232.5	1,202.1	30.45	40.479	
7,650.0	7,541.9	7,506.6	7,460.0	20.6	16.8	96.81	428.8	-460.9	1,242.1	1,212.0	30.13	41.229	
7,700.0	7,578.0	7,554.4	7,499.9	20.5	16.7	95.27	402.7	-463.4	1,251.5	1,221.7	29.78	42.024	
7,750.0	7,611.1	7,603.0	7,538.2	20.4	16.5	93.99	372.9	-465.7	1,260.5	1,231.1	29.42	42.846	
7,800.0	7,640.8	7,652.5	7,574.4	20.4	16.4	92.93	339.3	-468.0	1,269.1	1,240.1	29.06	43.671	
7,850.0	7,667.0	7,702.8	7,608.1	20.3	16.3	92.06	302.1	-470.0	1,277.3	1,248.6	28.72	44.469	
7,900.0	7,689.4	7,754.1	7,639.0	20.3	16.2	91.35	261.2	-471.9	1,285.0	1,256.5	28.42	45.207	
7,950.0	7,707.9	7,806.4	7,666.7	20.3	16.1	90.77	216.8	-473.6	1,292.1	1,263.9	28.18	45.846	
8,000.0	7,722.2	7,859.8	7,690.6	20.3	16.0	90.34	169.1	-475.1	1,298.5	1,270.5	28.02	46.343	
8,050.0	7,732.4	7,914.2	7,710.3	20.3	16.0	90.02	118.5	-476.3	1,304.2	1,276.3	27.95	46.662	
8,100.0	7,738.4	7,969.7	7,725.3	20.4	16.0	89.83	65.1	-477.3	1,309.2	1,281.2	27.99	46.769	
8,143.7	7,740.0	8,019.0	7,734.3	20.5	16.0	89.75	16.6	-477.8	1,313.0	1,284.8	28.13	46.677	
8,200.0	7,740.0	8,083.9	7,739.8	20.6	16.2	89.99	-48.0	-478.2	1,317.2	1,288.7	28.45	46.300	
8,300.0	7,740.0	8,185.9	7,740.0	21.0	16.6	90.00	-150.0	-478.2	1,324.2	1,294.8	29.32	45.157	
8,400.0	7,740.0	8,285.6	7,740.0	21.5	17.1	90.00	-249.8	-478.2	1,331.1	1,300.6	30.56	43.555	
8,443.7	7,740.0	8,329.2	7,740.0	21.8	17.4	90.00	-293.3	-478.2	1,334.2	1,303.0	31.22	42.738	
8,500.0	7,740.0	8,385.4	7,740.0	22.2	17.8	90.00	-349.5	-478.2	1,337.8	1,305.7	32.14	41.629	
8,600.0	7,740.0	8,485.3	7,740.0	22.9	18.7	90.00	-449.4	-478.2	1,343.0	1,309.0	34.00	39.496	
8,700.0	7,740.0	8,585.2	7,740.0	23.7	19.6	90.00	-549.3	-478.2	1,346.3	1,310.2	36.11	37.281	
8,800.0	7,740.0	8,685.2	7,740.0	24.6	20.7	90.00	-649.3	-478.2	1,348.0	1,309.5	38.43	35.078	
8,843.7	7,740.0	8,728.9	7,740.0	25.1	21.2	90.00	-693.0	-478.2	1,348.1	1,308.6	39.50	34.132	
8,900.0	7,740.0	8,785.2	7,740.0	25.6	21.9	90.00	-749.3	-478.2	1,348.1	1,307.2	40.91	32.951	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,740.0	8,885.2	7,740.0	26.7	23.1	90.00	-849.3	-478.2	1,348.1	1,304.6	43.54	30.963		
9,100.0	7,740.0	8,985.2	7,740.0	27.8	24.4	90.00	-949.3	-478.2	1,348.1	1,301.9	46.28	29.128		
9,200.0	7,740.0	9,085.2	7,740.0	29.0	25.7	90.00	-1,049.3	-478.2	1,348.1	1,299.0	49.12	27.443		
9,300.0	7,740.0	9,185.2	7,740.0	30.2	27.1	90.00	-1,149.3	-478.2	1,348.1	1,296.1	52.05	25.902		
9,343.7	7,740.0	9,228.9	7,740.0	30.8	27.8	90.00	-1,193.0	-478.2	1,348.1	1,294.8	53.35	25.271		
9,400.7	7,740.0	9,285.9	7,740.0	31.6	28.6	90.00	-1,250.0	-478.2	1,348.4	1,293.4	55.06	24.490		
9,500.0	7,740.0	9,385.2	7,740.0	32.9	30.0	90.00	-1,349.3	-478.2	1,349.4	1,291.3	58.09	23.231		
9,600.0	7,740.0	9,485.2	7,740.0	34.3	31.5	90.00	-1,449.3	-478.2	1,350.4	1,289.2	61.19	22.071		
9,700.0	7,740.0	9,585.2	7,740.0	35.7	33.1	90.00	-1,549.3	-478.2	1,351.4	1,287.1	64.33	21.009		
9,800.0	7,740.0	9,685.2	7,740.0	37.1	34.6	90.00	-1,649.3	-478.2	1,352.4	1,284.9	67.50	20.035		
9,900.0	7,740.0	9,785.2	7,740.0	38.6	36.2	90.00	-1,749.3	-478.2	1,353.4	1,282.7	70.71	19.140		
10,000.0	7,740.0	9,885.2	7,740.0	40.1	37.8	90.00	-1,849.3	-478.2	1,354.4	1,280.4	73.95	18.316		
10,100.0	7,740.0	9,985.2	7,740.0	41.6	39.4	90.00	-1,949.3	-478.2	1,355.4	1,278.2	77.21	17.556		
10,200.0	7,740.0	10,085.2	7,740.0	43.1	41.0	90.00	-2,049.3	-478.2	1,356.4	1,275.9	80.49	16.853		
10,300.0	7,740.0	10,185.2	7,740.0	44.7	42.6	90.00	-2,149.3	-478.2	1,357.4	1,273.6	83.78	16.201		
10,400.0	7,740.0	10,285.1	7,740.0	46.3	44.2	90.00	-2,249.3	-478.2	1,358.4	1,271.3	87.10	15.596		
10,500.0	7,740.0	10,385.1	7,740.0	47.8	45.9	90.00	-2,349.3	-478.2	1,359.4	1,268.9	90.43	15.033		
10,600.0	7,740.0	10,485.1	7,740.0	49.4	47.5	90.00	-2,449.3	-478.2	1,360.4	1,266.6	93.77	14.507		
10,700.0	7,740.0	10,585.1	7,740.0	51.0	49.2	90.00	-2,549.3	-478.2	1,361.4	1,264.2	97.12	14.017		
10,800.0	7,740.0	10,685.1	7,740.0	52.6	50.8	90.00	-2,649.3	-478.2	1,362.4	1,261.9	100.49	13.557		
10,900.0	7,740.0	10,785.1	7,740.0	54.2	52.5	90.00	-2,749.3	-478.2	1,363.3	1,259.5	103.86	13.126		
11,000.0	7,740.0	10,885.1	7,740.0	55.9	54.2	90.00	-2,849.3	-478.2	1,364.3	1,257.1	107.25	12.722		
11,100.0	7,740.0	10,985.1	7,740.0	57.5	55.8	90.00	-2,949.2	-478.2	1,365.3	1,254.7	110.64	12.341		
11,200.0	7,740.0	11,085.1	7,740.0	59.1	57.5	90.00	-3,049.2	-478.2	1,366.3	1,252.3	114.03	11.982		
11,300.0	7,740.0	11,185.1	7,740.0	60.8	59.2	90.00	-3,149.2	-478.2	1,367.3	1,249.9	117.44	11.643		
11,400.0	7,740.0	11,285.1	7,740.0	62.4	60.9	90.00	-3,249.2	-478.2	1,368.3	1,247.5	120.85	11.323		
11,500.0	7,740.0	11,385.1	7,740.0	64.1	62.6	90.00	-3,349.2	-478.2	1,369.3	1,245.1	124.26	11.019		
11,600.0	7,740.0	11,485.1	7,740.0	65.8	64.3	90.00	-3,449.2	-478.2	1,370.3	1,242.6	127.68	10.732		
11,700.0	7,740.0	11,585.1	7,740.0	67.4	66.0	90.00	-3,549.2	-478.2	1,371.3	1,240.2	131.11	10.459		
11,800.0	7,740.0	11,685.1	7,740.0	69.1	67.7	90.00	-3,649.2	-478.2	1,372.3	1,237.8	134.54	10.200		
11,900.0	7,740.0	11,785.1	7,740.0	70.8	69.4	90.00	-3,749.2	-478.2	1,373.3	1,235.3	137.97	9.953		
12,000.0	7,740.0	11,885.1	7,740.0	72.5	71.1	90.00	-3,849.2	-478.2	1,374.3	1,232.9	141.41	9.719		
12,100.0	7,740.0	11,985.1	7,740.0	74.1	72.8	90.00	-3,949.2	-478.2	1,375.3	1,230.4	144.85	9.495		
12,200.0	7,740.0	12,085.1	7,740.0	75.8	74.5	90.00	-4,049.2	-478.2	1,376.3	1,228.0	148.29	9.281		
12,300.0	7,740.0	12,185.1	7,740.0	77.5	76.3	90.00	-4,149.2	-478.2	1,377.3	1,225.5	151.74	9.077		
12,400.0	7,740.0	12,285.0	7,740.0	79.2	78.0	90.00	-4,249.2	-478.2	1,378.3	1,223.1	155.19	8.881		
12,500.0	7,740.0	12,385.0	7,740.0	80.9	79.7	90.00	-4,349.2	-478.2	1,379.3	1,220.6	158.64	8.694		
12,600.0	7,740.0	12,485.0	7,740.0	82.6	81.4	90.00	-4,449.2	-478.2	1,380.3	1,218.2	162.10	8.515		
12,700.0	7,740.0	12,585.0	7,740.0	84.3	83.1	90.00	-4,549.2	-478.2	1,381.3	1,215.7	165.55	8.343		
12,800.0	7,740.0	12,685.0	7,740.0	86.0	84.8	90.00	-4,649.2	-478.2	1,382.3	1,213.3	169.01	8.179		
12,900.0	7,740.0	12,785.0	7,740.0	87.7	86.6	90.00	-4,749.2	-478.2	1,383.3	1,210.8	172.47	8.020		
13,000.0	7,740.0	12,885.0	7,740.0	89.4	88.3	90.00	-4,849.2	-478.2	1,384.3	1,208.3	175.93	7.868		
13,100.0	7,740.0	12,985.0	7,740.0	91.1	90.0	90.00	-4,949.1	-478.2	1,385.3	1,205.9	179.40	7.722		
13,200.0	7,740.0	13,085.0	7,740.0	92.8	91.7	90.00	-5,049.1	-478.2	1,386.2	1,203.4	182.86	7.581		
13,300.0	7,740.0	13,185.0	7,740.0	94.5	93.5	90.00	-5,149.1	-478.2	1,387.2	1,200.9	186.33	7.445		
13,400.0	7,740.0	13,285.0	7,740.0	96.3	95.2	90.00	-5,249.1	-478.2	1,388.2	1,198.4	189.80	7.314		
13,500.0	7,740.0	13,385.0	7,740.0	98.0	96.9	90.00	-5,349.1	-478.2	1,389.2	1,196.0	193.27	7.188		
13,600.0	7,740.0	13,485.0	7,740.0	99.7	98.7	90.00	-5,449.1	-478.2	1,390.2	1,193.5	196.74	7.066		
13,700.0	7,740.0	13,585.0	7,740.0	101.4	100.4	90.00	-5,549.1	-478.2	1,391.2	1,191.0	200.22	6.949		
13,800.0	7,740.0	13,685.0	7,740.0	103.1	102.1	90.00	-5,649.1	-478.2	1,392.2	1,188.5	203.69	6.835		
13,900.0	7,740.0	13,785.0	7,740.0	104.8	103.9	90.00	-5,749.1	-478.2	1,393.2	1,186.1	207.17	6.725		
14,000.0	7,740.0	13,885.0	7,740.0	106.6	105.6	90.00	-5,849.1	-478.2	1,394.2	1,183.6	210.64	6.619		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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 Depth (ft)	Vertical Depth (ft)	Measured Depth Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,740.0	13,985.0	7,740.0	108.3	107.3	90.00	-5,949.1	-478.2	1,395.2	1,181.1	214.12	6.516		
14,200.0	7,740.0	14,085.0	7,740.0	110.0	109.1	90.00	-6,049.1	-478.2	1,396.2	1,178.6	217.60	6.416		
14,300.0	7,740.0	14,185.0	7,740.0	111.7	110.8	90.00	-6,149.1	-478.2	1,397.2	1,176.1	221.08	6.320		
14,400.0	7,740.0	14,284.9	7,740.0	113.5	112.5	90.00	-6,249.1	-478.2	1,398.2	1,173.6	224.56	6.226		
14,500.0	7,740.0	14,384.9	7,740.0	115.2	114.3	90.00	-6,349.1	-478.2	1,399.2	1,171.2	228.04	6.136		
14,600.0	7,740.0	14,484.9	7,740.0	116.9	116.0	90.00	-6,449.1	-478.2	1,400.2	1,168.7	231.52	6.048		
14,700.0	7,740.0	14,584.9	7,740.0	118.6	117.7	90.00	-6,549.1	-478.2	1,401.2	1,166.2	235.00	5.962		
14,800.0	7,740.0	14,684.9	7,740.0	120.4	119.5	90.00	-6,649.1	-478.2	1,402.2	1,163.7	238.49	5.879		
14,900.0	7,740.0	14,784.9	7,740.0	122.1	121.2	90.00	-6,749.1	-478.2	1,403.2	1,161.2	241.97	5.799		
15,000.0	7,740.0	14,884.9	7,740.0	123.8	123.0	90.00	-6,849.1	-478.2	1,404.2	1,158.7	245.46	5.721		
15,100.0	7,740.0	14,984.9	7,740.0	125.6	124.7	90.00	-6,949.0	-478.2	1,405.2	1,156.2	248.94	5.645		
15,200.0	7,740.0	15,084.9	7,740.0	127.3	126.4	90.00	-7,049.0	-478.2	1,406.2	1,153.7	252.43	5.571		
15,300.0	7,740.0	15,184.9	7,740.0	129.0	128.2	90.00	-7,149.0	-478.2	1,407.2	1,151.2	255.91	5.499		
15,400.0	7,740.0	15,284.9	7,740.0	130.7	129.9	90.00	-7,249.0	-478.2	1,408.2	1,148.7	259.40	5.428		
15,500.0	7,740.0	15,384.9	7,740.0	132.5	131.7	90.00	-7,349.0	-478.2	1,409.1	1,146.3	262.89	5.360		
15,600.0	7,740.0	15,484.9	7,740.0	134.2	133.4	90.00	-7,449.0	-478.2	1,410.1	1,143.8	266.38	5.294		
15,700.0	7,740.0	15,584.9	7,740.0	135.9	135.1	90.00	-7,549.0	-478.2	1,411.1	1,141.3	269.87	5.229		
15,800.0	7,740.0	15,684.9	7,740.0	137.7	136.9	90.00	-7,649.0	-478.2	1,412.1	1,138.8	273.36	5.166		
15,900.0	7,740.0	15,784.9	7,740.0	139.4	138.6	90.00	-7,749.0	-478.2	1,413.1	1,136.3	276.85	5.104		
16,000.0	7,740.0	15,884.9	7,740.0	141.1	140.4	90.00	-7,849.0	-478.2	1,414.1	1,133.8	280.34	5.044		
16,084.2	7,740.0	15,949.8	7,740.0	142.6	141.5	90.00	-7,913.9	-478.2	1,415.1	1,132.3	282.80	5.004 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.02	0.0	-22.4	22.4					
100.0	100.0	100.0	100.0	0.2	0.2	-90.02	0.0	-22.4	22.4	22.1	0.30	73.728		
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	0.0	-22.4	22.4	21.7	0.65	34.301		
300.0	300.0	300.0	300.0	0.5	0.5	-90.02	0.0	-22.4	22.4	21.4	1.00	22.350 CC, ES		
400.0	400.0	399.7	399.7	0.7	0.7	-88.36	0.7	-22.9	23.0	21.6	1.35	16.997		
500.0	500.0	499.4	499.4	0.8	0.9	-83.86	2.6	-24.6	24.8	23.1	1.70	14.563		
600.0	600.0	599.0	598.8	1.0	1.0	-77.72	6.0	-27.4	28.1	26.0	2.05	13.677		
700.0	700.0	698.4	698.0	1.2	1.2	-71.29	10.6	-31.3	33.1	30.7	2.40	13.769		
800.0	800.0	798.1	797.5	1.4	1.4	-65.99	15.9	-35.8	39.2	36.5	2.75	14.243		
900.0	900.0	897.9	897.1	1.5	1.6	-62.15	21.3	-40.2	45.6	42.5	3.10	14.693		
1,000.0	1,000.0	997.6	996.6	1.7	1.8	-59.26	26.6	-44.7	52.1	48.7	3.45	15.100		
1,100.0	1,100.0	1,097.4	1,096.1	1.9	2.1	-109.16	31.9	-49.2	59.0	55.2	3.80	15.528		
1,200.0	1,200.0	1,197.1	1,195.5	2.1	2.3	-109.38	37.2	-53.7	66.5	62.4	4.16	16.011		
1,300.0	1,299.9	1,297.1	1,295.3	2.3	2.5	-110.20	43.1	-57.5	74.4	69.9	4.52	16.462		
1,400.0	1,399.7	1,397.2	1,395.1	2.4	2.7	-110.83	50.2	-60.1	82.4	77.5	4.90	16.832		
1,500.0	1,499.4	1,497.0	1,494.6	2.6	2.9	-111.41	58.4	-61.6	90.6	85.3	5.29	17.139		
1,600.0	1,598.9	1,596.6	1,593.9	2.8	3.1	-112.67	66.7	-62.8	99.4	93.7	5.69	17.460		
1,700.0	1,698.3	1,696.1	1,693.0	3.1	3.3	-114.54	75.0	-64.1	108.9	102.8	6.12	17.808		
1,800.0	1,797.4	1,795.5	1,792.0	3.3	3.5	-116.84	83.3	-65.3	119.3	112.8	6.56	18.193		
1,900.0	1,896.3	1,894.6	1,890.8	3.6	3.8	-119.43	91.5	-66.5	130.7	123.7	7.02	18.630		
1,915.7	1,911.9	1,910.2	1,906.3	3.6	3.8	-119.85	92.8	-66.7	132.6	125.6	7.09	18.705		
2,000.0	1,995.0	1,993.7	1,989.5	3.8	4.0	-122.04	99.8	-67.8	143.0	135.5	7.48	19.107		
2,100.0	2,093.8	2,092.7	2,088.2	4.1	4.2	-124.26	108.1	-69.0	155.5	147.6	7.95	19.559		
2,200.0	2,192.5	2,191.8	2,186.9	4.4	4.4	-126.15	116.3	-70.3	168.2	159.8	8.42	19.985		
2,300.0	2,291.2	2,290.8	2,285.6	4.7	4.6	-127.77	124.6	-71.5	181.1	172.2	8.89	20.384		
2,400.0	2,389.9	2,389.9	2,384.3	5.0	4.9	-129.18	132.8	-72.7	194.1	184.8	9.35	20.758		
2,500.0	2,488.7	2,488.9	2,483.0	5.3	5.1	-130.41	141.1	-74.0	207.2	197.4	9.82	21.109		
2,600.0	2,587.4	2,588.0	2,581.7	5.6	5.3	-131.49	149.3	-75.2	220.4	210.1	10.28	21.439		
2,700.0	2,686.1	2,687.0	2,680.4	5.9	5.5	-132.45	157.6	-76.4	233.6	222.9	10.74	21.747		
2,800.0	2,784.8	2,786.1	2,779.0	6.2	5.8	-133.31	165.9	-77.7	247.0	235.7	11.21	22.037		
2,900.0	2,883.6	2,885.1	2,877.7	6.5	6.0	-134.08	174.1	-78.9	260.3	248.6	11.67	22.309		
3,000.0	2,982.3	2,984.1	2,976.4	6.9	6.2	-134.77	182.4	-80.2	273.7	261.6	12.13	22.566		
3,100.0	3,081.0	3,083.2	3,075.1	7.2	6.4	-135.40	190.6	-81.4	287.1	274.5	12.59	22.807		
3,200.0	3,179.7	3,182.2	3,173.8	7.5	6.7	-135.98	198.9	-82.6	300.6	287.6	13.05	23.035		
3,300.0	3,278.5	3,281.3	3,272.5	7.8	6.9	-136.50	207.2	-83.9	314.1	300.6	13.51	23.250		
3,400.0	3,377.2	3,380.3	3,371.2	8.1	7.1	-136.98	215.4	-85.1	327.6	313.6	13.97	23.453		
3,500.0	3,475.9	3,479.4	3,469.9	8.4	7.3	-137.43	223.7	-86.3	341.1	326.7	14.43	23.645		
3,600.0	3,574.6	3,578.4	3,568.6	8.8	7.6	-137.84	231.9	-87.6	354.7	339.8	14.89	23.828		
3,700.0	3,673.4	3,677.5	3,667.3	9.1	7.8	-138.21	240.2	-88.8	368.3	352.9	15.34	24.001		
3,800.0	3,772.1	3,776.5	3,766.0	9.4	8.0	-138.57	248.4	-90.1	381.9	366.1	15.80	24.165		
3,900.0	3,870.8	3,875.6	3,864.7	9.7	8.2	-138.89	256.7	-91.3	395.5	379.2	16.26	24.321		
4,000.0	3,969.5	3,974.6	3,963.4	10.0	8.4	-139.20	265.0	-92.5	409.1	392.4	16.72	24.470		
4,100.0	4,068.3	4,073.7	4,062.1	10.4	8.7	-139.49	273.2	-93.8	422.7	405.5	17.17	24.612		
4,200.0	4,167.0	4,172.7	4,160.8	10.7	8.9	-139.76	281.5	-95.0	436.3	418.7	17.63	24.748		
4,300.0	4,265.7	4,271.8	4,259.5	11.0	9.1	-140.01	289.7	-96.2	450.0	431.9	18.09	24.877		
4,400.0	4,364.4	4,370.8	4,358.1	11.3	9.3	-140.24	298.0	-97.5	463.6	445.1	18.54	25.000		
4,500.0	4,463.2	4,469.8	4,456.8	11.7	9.6	-140.47	306.3	-98.7	477.3	458.3	19.00	25.119		
4,600.0	4,561.9	4,568.9	4,555.5	12.0	9.8	-140.68	314.5	-100.0	490.9	471.5	19.46	25.232		
4,700.0	4,660.6	4,667.9	4,654.2	12.3	10.0	-140.88	322.8	-101.2	504.6	484.7	19.91	25.340		
4,800.0	4,759.3	4,767.0	4,752.9	12.6	10.2	-141.07	331.0	-102.4	518.3	497.9	20.37	25.444		
4,900.0	4,858.1	4,866.0	4,851.6	13.0	10.5	-141.25	339.3	-103.7	532.0	511.1	20.82	25.544		
5,000.0	4,956.8	4,965.1	4,950.3	13.3	10.7	-141.42	347.5	-104.9	545.6	524.4	21.28	25.640		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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 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		
5,100.0	5,055.5	5,064.1	5,049.0	13.6	10.9	-141.58	355.8	-106.1	559.3	537.6	21.74	25.733		
5,200.0	5,154.2	5,163.2	5,147.7	13.9	11.2	-141.74	364.1	-107.4	573.0	550.8	22.19	25.821		
5,300.0	5,253.0	5,262.2	5,246.4	14.3	11.4	-141.88	372.3	-108.6	586.7	564.1	22.65	25.907		
5,400.0	5,351.7	5,361.3	5,345.1	14.6	11.6	-142.02	380.6	-109.9	600.4	577.3	23.10	25.989		
5,500.0	5,450.4	5,460.3	5,443.8	14.9	11.8	-142.16	388.8	-111.1	614.1	590.6	23.56	26.069		
5,600.0	5,549.1	5,559.4	5,542.5	15.3	12.1	-142.29	397.1	-112.3	627.8	603.8	24.01	26.145		
5,700.0	5,647.9	5,658.4	5,641.2	15.6	12.3	-142.41	405.4	-113.6	641.5	617.1	24.47	26.219		
5,800.0	5,746.6	5,757.4	5,739.9	15.9	12.5	-142.53	413.6	-114.8	655.3	630.3	24.92	26.291		
5,900.0	5,845.3	5,856.5	5,838.6	16.2	12.7	-142.64	421.9	-116.0	669.0	643.6	25.38	26.360		
6,000.0	5,944.1	5,955.5	5,937.2	16.6	13.0	-142.75	430.1	-117.3	682.7	656.9	25.83	26.427		
6,100.0	6,042.8	6,054.6	6,035.9	16.9	13.2	-142.85	438.4	-118.5	696.4	670.1	26.29	26.491		
6,200.0	6,141.5	6,153.6	6,134.6	17.2	13.4	-142.95	446.7	-119.8	710.1	683.4	26.74	26.554		
6,300.0	6,240.2	6,252.7	6,233.3	17.5	13.6	-143.05	454.9	-121.0	723.9	696.7	27.20	26.614		
6,400.0	6,339.0	6,351.7	6,332.0	17.9	13.9	-143.14	463.2	-122.2	737.6	709.9	27.65	26.673		
6,500.0	6,437.7	6,450.8	6,430.7	18.2	14.1	-143.23	471.4	-123.5	751.3	723.2	28.11	26.730		
6,600.0	6,536.4	6,549.8	6,529.4	18.5	14.3	-143.32	479.7	-124.7	765.0	736.5	28.56	26.785		
6,700.0	6,635.1	6,648.9	6,628.1	18.9	14.5	-143.40	487.9	-125.9	778.8	749.8	29.02	26.839		
6,800.0	6,733.9	6,747.9	6,726.8	19.2	14.8	-143.48	496.2	-127.2	792.5	763.0	29.47	26.891		
6,900.0	6,832.6	6,847.0	6,825.5	19.5	15.0	-143.56	504.5	-128.4	806.2	776.3	29.93	26.941		
7,000.0	6,931.3	6,943.1	6,921.4	19.8	15.2	-143.74	510.9	-129.6	820.1	789.7	30.32	27.048		
7,100.0	7,030.0	7,033.4	7,011.3	20.2	15.2	-144.75	504.7	-130.7	834.7	804.2	30.44	27.423		
7,191.8	7,120.7	7,110.4	7,086.6	20.5	15.1	-146.34	488.3	-131.7	849.6	819.2	30.33	28.009		
7,200.0	7,128.8	7,117.0	7,092.8	20.5	15.1	-151.05	486.5	-131.8	851.0	820.7	30.31	28.074		
7,250.0	7,178.3	7,156.5	7,130.2	20.6	15.0	172.50	473.7	-132.2	860.0	829.9	30.15	28.524		
7,300.0	7,227.8	7,195.2	7,166.0	20.7	14.9	138.95	458.8	-132.7	869.5	839.6	29.94	29.043		
7,350.0	7,276.8	7,233.3	7,200.0	20.8	14.8	119.39	441.8	-133.1	879.4	849.7	29.69	29.622		
7,400.0	7,325.1	7,270.8	7,232.4	20.8	14.7	108.18	422.8	-133.5	889.6	860.2	29.41	30.249		
7,450.0	7,372.2	7,307.9	7,263.1	20.8	14.6	100.95	402.1	-133.9	899.8	870.7	29.11	30.916		
7,500.0	7,417.7	7,350.0	7,296.3	20.8	14.4	95.74	376.1	-134.3	910.1	881.3	28.76	31.643		
7,550.0	7,461.4	7,380.7	7,319.2	20.7	14.3	91.89	355.7	-134.6	920.2	891.8	28.47	32.326		
7,600.0	7,502.9	7,416.7	7,344.6	20.7	14.2	88.75	330.3	-134.9	930.1	902.0	28.15	33.043		
7,650.0	7,541.9	7,450.0	7,366.7	20.6	14.1	86.19	305.4	-135.2	939.7	911.9	27.85	33.739		
7,700.0	7,578.0	7,487.9	7,390.1	20.5	13.9	84.01	275.5	-135.5	948.9	921.4	27.56	34.433		
7,750.0	7,611.1	7,523.3	7,410.0	20.4	13.8	82.19	246.3	-135.7	957.6	930.3	27.30	35.072		
7,800.0	7,640.8	7,558.5	7,428.0	20.4	13.8	80.65	216.1	-136.0	965.7	938.7	27.08	35.657		
7,850.0	7,667.0	7,600.0	7,446.8	20.3	13.7	79.36	179.1	-136.2	973.3	946.4	26.89	36.190		
7,900.0	7,689.4	7,628.7	7,458.3	20.3	13.6	78.31	152.7	-136.3	980.0	953.2	26.79	36.582		
7,950.0	7,707.9	7,663.8	7,470.4	20.3	13.6	77.47	119.8	-136.5	986.1	959.3	26.72	36.899		
8,000.0	7,722.2	7,700.0	7,480.8	20.3	13.6	76.82	85.1	-136.6	991.3	964.6	26.71	37.108		
8,050.0	7,732.4	7,734.1	7,488.6	20.3	13.6	76.36	51.9	-136.7	995.8	969.0	26.78	37.183		
8,100.0	7,738.4	7,769.4	7,494.5	20.4	13.7	76.09	17.1	-136.8	999.4	972.4	26.91	37.136		
8,143.7	7,740.0	7,800.0	7,497.9	20.5	13.8	76.00	-13.3	-136.8	1,001.8	974.7	27.07	37.007		
8,200.0	7,740.0	7,840.4	7,499.9	20.6	13.9	76.15	-53.6	-136.9	1,005.0	977.6	27.36	36.736		
8,300.0	7,740.0	7,936.8	7,500.0	21.0	14.3	76.25	-150.0	-136.9	1,011.7	983.5	28.22	35.846		
8,400.0	7,740.0	8,036.6	7,500.0	21.5	14.9	76.34	-249.8	-136.9	1,018.5	989.0	29.46	34.576		
8,443.7	7,740.0	8,080.1	7,500.0	21.8	15.3	76.38	-293.3	-136.9	1,021.5	991.4	30.10	33.939		
8,500.0	7,740.0	8,136.3	7,500.0	22.2	15.7	76.44	-349.5	-136.9	1,025.0	994.0	31.02	33.045		
8,600.0	7,740.0	8,236.2	7,500.0	22.9	16.7	76.51	-449.4	-136.9	1,030.0	997.1	32.86	31.344		
8,700.0	7,740.0	8,336.2	7,500.0	23.7	17.8	76.57	-549.3	-136.9	1,033.3	998.3	34.94	29.572		
8,800.0	7,740.0	8,436.1	7,500.0	24.6	18.9	76.59	-649.3	-136.9	1,034.9	997.7	37.22	27.807		
8,843.7	7,740.0	8,479.8	7,500.0	25.1	19.5	76.59	-693.0	-136.9	1,035.0	996.8	38.26	27.052		
8,900.0	7,740.0	8,536.1	7,500.0	25.6	20.2	76.59	-749.3	-136.9	1,035.0	995.4	39.66	26.101		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
9,000.0	7,740.0	8,636.1	7,500.0	26.7	21.5	76.59	-849.3	-136.9	1,035.0	992.8	42.23	24.510	
9,100.0	7,740.0	8,736.1	7,500.0	27.8	22.9	76.59	-949.3	-136.9	1,035.0	990.1	44.91	23.045	
9,200.0	7,740.0	8,836.1	7,500.0	29.0	24.3	76.59	-1,049.3	-136.9	1,035.0	987.3	47.69	21.702	
9,300.0	7,740.0	8,936.1	7,500.0	30.2	25.8	76.59	-1,149.3	-136.9	1,035.0	984.5	50.55	20.475	
9,343.7	7,740.0	8,979.8	7,500.0	30.8	26.4	76.59	-1,193.0	-136.9	1,035.0	983.2	51.82	19.974	
9,400.7	7,740.0	9,036.9	7,500.0	31.6	27.3	76.60	-1,250.0	-136.9	1,035.3	981.8	53.49	19.354	
9,500.0	7,740.0	9,136.1	7,500.0	32.9	28.8	76.61	-1,349.3	-136.9	1,036.3	979.8	56.45	18.356	
9,600.0	7,740.0	9,236.1	7,500.0	34.3	30.4	76.62	-1,449.3	-136.9	1,037.2	977.8	59.48	17.438	
9,700.0	7,740.0	9,336.1	7,500.0	35.7	32.0	76.63	-1,549.3	-136.9	1,038.2	975.7	62.55	16.599	
9,800.0	7,740.0	9,436.1	7,500.0	37.1	33.6	76.65	-1,649.3	-136.9	1,039.2	973.5	65.65	15.829	
9,900.0	7,740.0	9,536.1	7,500.0	38.6	35.2	76.66	-1,749.3	-136.9	1,040.2	971.4	68.78	15.122	
10,000.0	7,740.0	9,636.1	7,500.0	40.1	36.8	76.67	-1,849.3	-136.9	1,041.1	969.2	71.94	14.472	
10,100.0	7,740.0	9,736.1	7,500.0	41.6	38.4	76.68	-1,949.3	-136.9	1,042.1	967.0	75.12	13.871	
10,200.0	7,740.0	9,836.1	7,500.0	43.1	40.1	76.70	-2,049.3	-136.9	1,043.1	964.7	78.33	13.317	
10,300.0	7,740.0	9,936.1	7,500.0	44.7	41.7	76.71	-2,149.3	-136.9	1,044.0	962.5	81.55	12.803	
10,400.0	7,740.0	10,036.1	7,500.0	46.3	43.4	76.72	-2,249.3	-136.9	1,045.0	960.2	84.78	12.326	
10,500.0	7,740.0	10,136.1	7,500.0	47.8	45.1	76.73	-2,349.3	-136.9	1,046.0	957.9	88.03	11.882	
10,600.0	7,740.0	10,236.1	7,500.0	49.4	46.7	76.75	-2,449.3	-136.9	1,046.9	955.6	91.30	11.468	
10,700.0	7,740.0	10,336.1	7,500.0	51.0	48.4	76.76	-2,549.3	-136.9	1,047.9	953.3	94.57	11.081	
10,800.0	7,740.0	10,436.1	7,500.0	52.6	50.1	76.77	-2,649.3	-136.9	1,048.9	951.0	97.85	10.719	
10,900.0	7,740.0	10,536.1	7,500.0	54.2	51.8	76.78	-2,749.3	-136.9	1,049.8	948.7	101.15	10.379	
11,000.0	7,740.0	10,636.1	7,500.0	55.9	53.5	76.80	-2,849.3	-136.9	1,050.8	946.4	104.45	10.060	
11,100.0	7,740.0	10,736.1	7,500.0	57.5	55.2	76.81	-2,949.2	-136.9	1,051.8	944.0	107.76	9.760	
11,200.0	7,740.0	10,836.0	7,500.0	59.1	56.9	76.82	-3,049.2	-136.9	1,052.8	941.7	111.08	9.478	
11,300.0	7,740.0	10,936.0	7,500.0	60.8	58.6	76.83	-3,149.2	-136.9	1,053.7	939.3	114.40	9.211	
11,400.0	7,740.0	11,036.0	7,500.0	62.4	60.3	76.85	-3,249.2	-136.9	1,054.7	937.0	117.73	8.958	
11,500.0	7,740.0	11,136.0	7,500.0	64.1	62.0	76.86	-3,349.2	-136.9	1,055.7	934.6	121.07	8.720	
11,600.0	7,740.0	11,236.0	7,500.0	65.8	63.7	76.87	-3,449.2	-136.9	1,056.6	932.2	124.41	8.493	
11,700.0	7,740.0	11,336.0	7,500.0	67.4	65.4	76.88	-3,549.2	-136.9	1,057.6	929.8	127.75	8.279	
11,800.0	7,740.0	11,436.0	7,500.0	69.1	67.1	76.90	-3,649.2	-136.9	1,058.6	927.5	131.10	8.075	
11,900.0	7,740.0	11,536.0	7,500.0	70.8	68.9	76.91	-3,749.2	-136.9	1,059.5	925.1	134.45	7.880	
12,000.0	7,740.0	11,636.0	7,500.0	72.5	70.6	76.92	-3,849.2	-136.9	1,060.5	922.7	137.81	7.695	
12,100.0	7,740.0	11,736.0	7,500.0	74.1	72.3	76.93	-3,949.2	-136.9	1,061.5	920.3	141.17	7.519	
12,200.0	7,740.0	11,836.0	7,500.0	75.8	74.0	76.94	-4,049.2	-136.9	1,062.4	917.9	144.53	7.351	
12,300.0	7,740.0	11,936.0	7,500.0	77.5	75.8	76.96	-4,149.2	-136.9	1,063.4	915.5	147.90	7.190	
12,400.0	7,740.0	12,036.0	7,500.0	79.2	77.5	76.97	-4,249.2	-136.9	1,064.4	913.1	151.27	7.036	
12,500.0	7,740.0	12,136.0	7,500.0	80.9	79.2	76.98	-4,349.2	-136.9	1,065.4	910.7	154.64	6.889	
12,600.0	7,740.0	12,236.0	7,500.0	82.6	80.9	76.99	-4,449.2	-136.9	1,066.3	908.3	158.02	6.748	
12,700.0	7,740.0	12,336.0	7,500.0	84.3	82.7	77.00	-4,549.2	-136.9	1,067.3	905.9	161.40	6.613	
12,800.0	7,740.0	12,436.0	7,500.0	86.0	84.4	77.02	-4,649.2	-136.9	1,068.3	903.5	164.78	6.483	
12,900.0	7,740.0	12,536.0	7,500.0	87.7	86.1	77.03	-4,749.2	-136.9	1,069.2	901.1	168.16	6.358	
13,000.0	7,740.0	12,636.0	7,500.0	89.4	87.9	77.04	-4,849.2	-136.9	1,070.2	898.7	171.54	6.239	
13,100.0	7,740.0	12,736.0	7,500.0	91.1	89.6	77.05	-4,949.1	-136.9	1,071.2	896.2	174.93	6.123	
13,200.0	7,740.0	12,835.9	7,500.0	92.8	91.3	77.06	-5,049.1	-136.9	1,072.1	893.8	178.32	6.013	
13,300.0	7,740.0	12,935.9	7,500.0	94.5	93.1	77.08	-5,149.1	-136.9	1,073.1	891.4	181.71	5.906	
13,400.0	7,740.0	13,046.9	7,500.0	96.3	95.0	77.09	-5,260.1	-136.6	1,073.8	888.4	185.42	5.791	
13,500.0	7,740.0	13,149.0	7,500.0	98.0	96.8	77.08	-5,362.2	-135.3	1,073.6	884.7	188.86	5.685	
13,600.0	7,740.0	13,249.0	7,500.0	99.7	98.5	77.08	-5,462.2	-134.0	1,073.3	881.1	192.24	5.583	
13,700.0	7,740.0	13,349.0	7,500.0	101.4	100.2	77.08	-5,562.2	-132.8	1,073.1	877.5	195.63	5.485	
13,800.0	7,740.0	13,449.0	7,500.0	103.1	102.0	77.07	-5,662.2	-131.5	1,072.9	873.8	199.01	5.391	
13,900.0	7,740.0	13,549.0	7,500.0	104.8	103.7	77.07	-5,762.2	-130.3	1,072.6	870.2	202.40	5.299	
14,000.0	7,740.0	13,649.0	7,500.0	106.6	105.4	77.07	-5,862.2	-129.0	1,072.4	866.6	205.79	5.211	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,740.0	13,749.0	7,500.0	108.3	107.2	77.06	-5,962.2	-127.8	1,072.1	862.9	209.18	5.125		
14,200.0	7,740.0	13,849.0	7,500.0	110.0	108.9	77.06	-6,062.2	-126.5	1,071.9	859.3	212.57	5.042		
14,300.0	7,740.0	13,949.0	7,500.0	111.7	110.7	77.06	-6,162.2	-125.3	1,071.6	855.6	215.96	4.962		
14,400.0	7,740.0	14,049.0	7,500.0	113.5	112.4	77.05	-6,262.1	-124.0	1,071.4	852.0	219.35	4.884		
14,500.0	7,740.0	14,149.0	7,500.0	115.2	114.1	77.05	-6,362.1	-122.8	1,071.1	848.4	222.74	4.809		
14,600.0	7,740.0	14,249.0	7,500.0	116.9	115.9	77.05	-6,462.1	-121.5	1,070.9	844.7	226.14	4.735		
14,700.0	7,740.0	14,349.0	7,500.0	118.6	117.6	77.05	-6,562.1	-120.3	1,070.6	841.1	229.53	4.664		
14,800.0	7,740.0	14,449.0	7,500.0	120.4	119.4	77.04	-6,662.1	-119.0	1,070.4	837.4	232.92	4.595		
14,900.0	7,740.0	14,549.0	7,500.0	122.1	121.1	77.04	-6,762.1	-117.8	1,070.1	833.8	236.32	4.528		
15,000.0	7,740.0	14,649.0	7,500.0	123.8	122.9	77.04	-6,862.1	-116.5	1,069.9	830.1	239.71	4.463		
15,100.0	7,740.0	14,749.0	7,500.0	125.6	124.6	77.03	-6,962.1	-115.3	1,069.6	826.5	243.11	4.400		
15,200.0	7,740.0	14,849.0	7,500.0	127.3	126.3	77.03	-7,062.1	-114.0	1,069.4	822.9	246.50	4.338		
15,300.0	7,740.0	14,949.0	7,500.0	129.0	128.1	77.03	-7,162.1	-112.8	1,069.1	819.2	249.90	4.278		
15,400.0	7,740.0	15,049.0	7,500.0	130.7	129.8	77.02	-7,262.1	-111.5	1,068.9	815.6	253.30	4.220		
15,500.0	7,740.0	15,149.0	7,500.0	132.5	131.6	77.02	-7,362.1	-110.3	1,068.6	811.9	256.70	4.163		
15,600.0	7,740.0	15,249.0	7,500.0	134.2	133.3	77.02	-7,462.0	-109.0	1,068.4	808.3	260.09	4.108		
15,700.0	7,740.0	15,349.0	7,500.0	135.9	135.1	77.02	-7,562.0	-107.8	1,068.1	804.6	263.49	4.054		
15,800.0	7,740.0	15,449.0	7,500.0	137.7	136.8	77.01	-7,662.0	-106.5	1,067.9	801.0	266.89	4.001		
15,900.0	7,740.0	15,549.0	7,500.0	139.4	138.6	77.01	-7,762.0	-105.3	1,067.6	797.3	270.29	3.950		
16,000.0	7,740.0	15,649.0	7,500.0	141.1	140.3	77.01	-7,862.0	-104.0	1,067.4	793.7	273.69	3.900		
16,059.7	7,740.0	15,706.0	7,500.0	142.2	141.3	77.00	-7,919.0	-103.3	1,067.2	791.6	275.64	3.872 SF		
16,084.2	7,740.0	15,706.0	7,500.0	142.6	141.3	77.00	-7,919.0	-103.3	1,067.5	791.8	275.70	3.872		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.03	0.0	-14.8	14.8					
100.0	100.0	100.0	100.0	0.2	0.2	-90.03	0.0	-14.8	14.8	14.5	0.30	48.845		
200.0	200.0	200.0	200.0	0.3	0.3	-90.03	0.0	-14.8	14.8	14.2	0.65	22.725		
300.0	300.0	300.0	300.0	0.5	0.5	-90.03	0.0	-14.8	14.8	13.8	1.00	14.807		
400.0	400.0	400.0	400.0	0.7	0.7	-90.03	0.0	-14.8	14.8	13.5	1.35	10.981		
500.0	500.0	500.1	500.1	0.8	0.9	-86.93	0.8	-14.4	14.5	12.8	1.70	8.507		
600.0	600.0	600.1	600.1	1.0	1.0	-76.76	3.1	-13.3	13.6	11.6	2.05	6.646		
674.7	674.7	674.8	674.7	1.2	1.2	-63.66	5.9	-11.9	13.3	11.0	2.32	5.725 CC		
700.0	700.0	700.1	699.9	1.2	1.2	-58.21	7.0	-11.3	13.3	10.9	2.41	5.535 ES		
800.0	800.0	799.8	799.5	1.4	1.4	-34.70	12.5	-8.6	15.2	12.4	2.77	5.483		
900.0	900.0	899.3	898.7	1.5	1.6	-14.91	19.5	-5.2	20.2	17.1	3.12	6.473		
1,000.0	1,000.0	998.9	997.9	1.7	1.8	-2.80	27.3	-1.3	27.4	23.9	3.46	7.901		
1,100.0	1,100.0	1,098.6	1,097.2	1.9	2.0	-48.29	35.0	2.5	34.7	30.8	3.81	9.095		
1,200.0	1,200.0	1,198.4	1,196.6	2.1	2.3	-46.17	42.8	6.4	41.0	36.8	4.16	9.840		
1,300.0	1,299.9	1,298.3	1,296.1	2.3	2.5	-46.13	50.6	10.2	46.1	41.5	4.52	10.191		
1,400.0	1,399.7	1,398.2	1,395.7	2.4	2.7	-47.55	58.4	14.1	50.0	45.1	4.89	10.226		
1,500.0	1,499.4	1,498.1	1,495.2	2.6	2.9	-50.19	66.2	18.0	52.8	47.5	5.27	10.018		
1,600.0	1,598.9	1,598.0	1,594.7	2.8	3.2	-54.01	74.0	21.8	54.7	49.0	5.68	9.632		
1,700.0	1,698.3	1,697.9	1,694.2	3.1	3.4	-59.08	81.8	25.7	55.9	49.8	6.12	9.133		
1,800.0	1,797.4	1,797.7	1,793.6	3.3	3.6	-65.47	89.6	29.6	56.7	50.1	6.61	8.589		
1,900.0	1,896.3	1,897.4	1,893.0	3.6	3.8	-73.22	97.4	33.4	57.8	50.6	7.15	8.079		
1,915.7	1,911.9	1,913.1	1,908.6	3.6	3.9	-74.56	98.6	34.0	58.0	50.7	7.24	8.008		
2,000.0	1,995.0	1,997.0	1,992.2	3.8	4.1	-81.64	105.2	37.3	59.6	51.9	7.73	7.717		
2,100.0	2,093.8	2,096.6	2,091.4	4.1	4.3	-89.42	113.0	41.1	62.7	54.4	8.30	7.553		
2,200.0	2,192.5	2,196.2	2,190.6	4.4	4.5	-96.36	120.8	45.0	66.8	57.9	8.86	7.543		
2,300.0	2,291.2	2,295.8	2,289.9	4.7	4.7	-102.43	128.5	48.8	71.8	62.4	9.39	7.646		
2,400.0	2,389.9	2,395.4	2,389.1	5.0	5.0	-107.66	136.3	52.7	77.5	67.6	9.89	7.828		
2,500.0	2,488.7	2,495.0	2,488.3	5.3	5.2	-112.15	144.1	56.5	83.7	73.3	10.38	8.063		
2,600.0	2,587.4	2,594.6	2,587.6	5.6	5.4	-116.00	151.9	60.4	90.4	79.5	10.85	8.330		
2,700.0	2,686.1	2,694.2	2,686.8	5.9	5.7	-119.31	159.6	64.2	97.4	86.1	11.30	8.617		
2,800.0	2,784.8	2,793.8	2,786.0	6.2	5.9	-122.16	167.4	68.1	104.7	92.9	11.74	8.913		
2,900.0	2,883.6	2,893.5	2,885.2	6.5	6.1	-124.64	175.2	71.9	112.2	100.0	12.18	9.211		
3,000.0	2,982.3	2,993.1	2,984.5	6.9	6.3	-126.81	183.0	75.8	119.9	107.3	12.61	9.507		
3,100.0	3,081.0	3,092.7	3,083.7	7.2	6.6	-128.71	190.8	79.6	127.8	114.7	13.04	9.799		
3,200.0	3,179.7	3,192.3	3,182.9	7.5	6.8	-130.39	198.5	83.5	135.8	122.3	13.46	10.083		
3,300.0	3,278.5	3,291.9	3,282.1	7.8	7.0	-131.88	206.3	87.3	143.9	130.0	13.89	10.359		
3,400.0	3,377.2	3,391.5	3,381.4	8.1	7.3	-133.21	214.1	91.2	152.0	137.7	14.31	10.626		
3,500.0	3,475.9	3,491.1	3,480.6	8.4	7.5	-134.41	221.9	95.0	160.3	145.6	14.73	10.884		
3,600.0	3,574.6	3,590.7	3,579.8	8.8	7.7	-135.49	229.6	98.9	168.6	153.4	15.14	11.132		
3,700.0	3,673.4	3,690.3	3,679.1	9.1	8.0	-136.47	237.4	102.7	177.0	161.4	15.56	11.371		
3,800.0	3,772.1	3,789.9	3,778.3	9.4	8.2	-137.35	245.2	106.6	185.4	169.4	15.98	11.600		
3,900.0	3,870.8	3,889.5	3,877.5	9.7	8.4	-138.17	253.0	110.4	193.8	177.4	16.40	11.821		
4,000.0	3,969.5	3,989.1	3,976.7	10.0	8.6	-138.91	260.8	114.3	202.3	185.5	16.81	12.033		
4,100.0	4,068.3	4,088.7	4,076.0	10.4	8.9	-139.59	268.5	118.1	210.8	193.6	17.23	12.237		
4,200.0	4,167.0	4,188.3	4,175.2	10.7	9.1	-140.22	276.3	122.0	219.4	201.7	17.64	12.432		
4,300.0	4,265.7	4,287.9	4,274.4	11.0	9.3	-140.81	284.1	125.9	227.9	209.9	18.06	12.621		
4,400.0	4,364.4	4,387.5	4,373.6	11.3	9.6	-141.35	291.9	129.7	236.5	218.1	18.48	12.801		
4,500.0	4,463.2	4,487.2	4,472.9	11.7	9.8	-141.85	299.7	133.6	245.1	226.2	18.89	12.975		
4,600.0	4,561.9	4,586.8	4,572.1	12.0	10.0	-142.32	307.4	137.4	253.8	234.5	19.31	13.143		
4,700.0	4,660.6	4,686.4	4,671.3	12.3	10.3	-142.76	315.2	141.3	262.4	242.7	19.72	13.304		
4,800.0	4,759.3	4,786.0	4,770.6	12.6	10.5	-143.17	323.0	145.1	271.1	250.9	20.14	13.459		
4,900.0	4,858.1	4,885.6	4,869.8	13.0	10.7	-143.55	330.8	149.0	279.7	259.2	20.56	13.609		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,000.0	4,956.8	4,985.2	4,969.0	13.3	10.9	-143.91	338.5	152.8	288.4	267.5	20.97	13.753		
5,100.0	5,055.5	5,084.8	5,068.2	13.6	11.2	-144.25	346.3	156.7	297.1	275.7	21.39	13.892		
5,200.0	5,154.2	5,184.4	5,167.5	13.9	11.4	-144.58	354.1	160.5	305.8	284.0	21.81	14.026		
5,300.0	5,253.0	5,284.0	5,266.7	14.3	11.6	-144.88	361.9	164.4	314.5	292.3	22.22	14.155		
5,400.0	5,351.7	5,383.6	5,365.9	14.6	11.9	-145.17	369.7	168.2	323.3	300.6	22.64	14.280		
5,500.0	5,450.4	5,483.2	5,465.1	14.9	12.1	-145.44	377.4	172.1	332.0	308.9	23.05	14.401		
5,600.0	5,549.1	5,582.8	5,564.4	15.3	12.3	-145.70	385.2	175.9	340.7	317.3	23.47	14.517		
5,700.0	5,647.9	5,682.4	5,663.6	15.6	12.6	-145.94	393.0	179.8	349.5	325.6	23.89	14.630		
5,800.0	5,746.6	5,782.0	5,762.8	15.9	12.8	-146.17	400.8	183.6	358.2	333.9	24.30	14.740		
5,900.0	5,845.3	5,881.6	5,862.1	16.2	13.0	-146.40	408.6	187.5	367.0	342.3	24.72	14.845		
6,000.0	5,944.1	5,981.2	5,961.3	16.6	13.3	-146.61	416.3	191.3	375.7	350.6	25.14	14.948		
6,100.0	6,042.8	6,080.9	6,060.5	16.9	13.5	-146.81	424.1	195.2	384.5	358.9	25.55	15.047		
6,200.0	6,141.5	6,180.5	6,159.7	17.2	13.7	-147.00	431.9	199.0	393.3	367.3	25.97	15.143		
6,300.0	6,240.2	6,280.1	6,259.0	17.5	13.9	-147.19	439.7	202.9	402.0	375.7	26.39	15.237		
6,400.0	6,339.0	6,379.7	6,358.2	17.9	14.2	-147.36	447.4	206.7	410.8	384.0	26.80	15.327		
6,500.0	6,437.7	6,479.3	6,457.4	18.2	14.4	-147.53	455.2	210.6	419.6	392.4	27.22	15.415		
6,600.0	6,536.4	6,578.9	6,556.6	18.5	14.6	-147.69	463.0	214.4	428.4	400.7	27.64	15.501		
6,700.0	6,635.1	6,678.5	6,655.9	18.9	14.9	-147.85	470.8	218.3	437.2	409.1	28.05	15.583		
6,800.0	6,733.9	6,778.1	6,755.1	19.2	15.1	-148.00	478.6	222.1	446.0	417.5	28.47	15.664		
6,900.0	6,832.6	6,877.7	6,854.3	19.5	15.3	-148.14	486.3	226.0	454.8	425.9	28.89	15.742		
7,000.0	6,931.3	6,977.3	6,953.6	19.8	15.6	-148.28	494.1	229.8	463.6	434.2	29.30	15.818		
7,100.0	7,030.0	7,076.9	7,052.8	20.2	15.8	-148.42	501.9	233.7	472.4	442.6	29.72	15.893		
7,191.8	7,120.7	7,166.3	7,141.9	20.5	16.0	-148.57	508.6	237.2	480.5	450.4	30.08	15.976		
7,200.0	7,128.8	7,173.7	7,149.2	20.5	16.0	-153.09	508.8	237.4	481.2	451.1	30.09	15.991		
7,250.0	7,178.3	7,218.5	7,194.0	20.6	16.0	171.63	508.5	239.2	486.0	455.9	30.16	16.117		
7,300.0	7,227.8	7,263.2	7,238.5	20.7	16.1	139.25	504.7	240.9	491.1	460.9	30.16	16.279		
7,350.0	7,276.8	7,307.7	7,282.4	20.8	16.0	120.85	497.5	242.6	496.3	466.2	30.12	16.477		
7,400.0	7,325.1	7,350.0	7,323.4	20.8	16.0	110.78	487.5	244.2	501.7	471.7	30.04	16.700		
7,450.0	7,372.2	7,396.6	7,367.6	20.8	15.9	104.67	473.0	245.9	507.2	477.3	29.89	16.966		
7,500.0	7,417.7	7,440.9	7,408.5	20.8	15.8	100.61	455.9	247.5	512.8	483.0	29.72	17.252		
7,550.0	7,461.4	7,485.3	7,447.9	20.7	15.7	97.72	435.7	249.0	518.4	488.9	29.52	17.559		
7,600.0	7,502.9	7,529.7	7,485.7	20.7	15.6	95.57	412.4	250.5	524.0	494.7	29.30	17.884		
7,650.0	7,541.9	7,574.2	7,521.7	20.6	15.4	93.93	386.3	251.9	529.5	500.5	29.06	18.220		
7,700.0	7,578.0	7,618.8	7,555.6	20.5	15.3	92.65	357.4	253.2	535.0	506.2	28.82	18.563		
7,750.0	7,611.1	7,663.5	7,587.2	20.4	15.2	91.65	325.8	254.4	540.3	511.8	28.58	18.904		
7,800.0	7,640.8	7,708.4	7,616.5	20.4	15.0	90.87	291.7	255.6	545.5	517.2	28.36	19.235		
7,850.0	7,667.0	7,753.6	7,643.0	20.3	14.9	90.28	255.2	256.6	550.6	522.4	28.17	19.547		
7,900.0	7,689.4	7,800.0	7,667.3	20.3	14.8	89.86	215.6	257.6	555.4	527.4	28.00	19.835		
7,950.0	7,707.9	7,844.7	7,687.5	20.3	14.7	89.56	175.8	258.3	559.9	532.0	27.90	20.069		
8,000.0	7,722.2	7,890.7	7,705.0	20.3	14.7	89.41	133.3	259.0	564.2	536.4	27.85	20.256		
8,050.0	7,732.4	7,937.1	7,719.2	20.3	14.7	89.37	89.1	259.6	568.2	540.4	27.88	20.382		
8,100.0	7,738.4	7,983.9	7,729.8	20.4	14.7	89.45	43.6	260.0	571.9	543.9	27.98	20.438		
8,143.7	7,740.0	8,025.1	7,736.1	20.5	14.8	89.61	2.9	260.2	574.9	546.7	28.15	20.425		
8,200.0	7,740.0	8,078.9	7,739.9	20.6	14.9	89.99	-50.8	260.4	578.6	550.2	28.45	20.339		
8,300.0	7,740.0	8,178.1	7,740.0	21.0	15.3	90.00	-150.0	260.4	585.6	556.3	29.32	19.973		
8,400.0	7,740.0	8,277.9	7,740.0	21.5	15.9	90.00	-249.8	260.4	592.6	562.0	30.56	19.392		
8,443.7	7,740.0	8,321.5	7,740.0	21.8	16.3	90.00	-293.3	260.4	595.6	564.4	31.21	19.087		
8,500.0	7,740.0	8,377.7	7,740.0	22.2	16.7	90.00	-349.5	260.4	599.3	567.1	32.13	18.651		
8,600.0	7,740.0	8,477.5	7,740.0	22.9	17.6	90.00	-449.4	260.4	604.4	570.4	34.00	17.778		
8,700.0	7,740.0	8,577.5	7,740.0	23.7	18.6	90.00	-549.3	260.4	607.8	571.7	36.11	16.833		
8,800.0	7,740.0	8,677.5	7,740.0	24.6	19.7	90.00	-649.3	260.4	609.4	571.0	38.42	15.861		
8,843.7	7,740.0	8,721.1	7,740.0	25.1	20.3	90.00	-693.0	260.4	609.6	570.1	39.49	15.437		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,900.0	7,740.0	8,777.5	7,740.0	25.6	21.0	90.00	-749.3	260.4	609.6	568.7	40.91	14.902	
9,000.0	7,740.0	8,877.5	7,740.0	26.7	22.2	90.00	-849.3	260.4	609.6	566.1	43.53	14.003	
9,100.0	7,740.0	8,977.5	7,740.0	27.8	23.6	90.00	-949.3	260.4	609.6	563.3	46.28	13.172	
9,200.0	7,740.0	9,077.5	7,740.0	29.0	25.0	90.00	-1,049.3	260.4	609.6	560.5	49.12	12.410	
9,300.0	7,740.0	9,177.5	7,740.0	30.2	26.4	90.00	-1,149.3	260.4	609.6	557.5	52.04	11.714	
9,343.7	7,740.0	9,221.1	7,740.0	30.8	27.1	90.00	-1,193.0	260.4	609.6	556.2	53.34	11.428	
9,400.7	7,740.0	9,278.2	7,740.0	31.6	27.9	90.00	-1,250.0	260.4	609.9	554.8	55.05	11.078	
9,500.0	7,740.0	9,377.4	7,740.0	32.9	29.4	90.00	-1,349.3	260.4	610.9	552.8	58.08	10.517	
9,600.0	7,740.0	9,477.4	7,740.0	34.3	30.9	90.00	-1,449.3	260.4	611.9	550.7	61.18	10.001	
9,700.0	7,740.0	9,577.4	7,740.0	35.7	32.5	90.00	-1,549.3	260.4	612.8	548.5	64.32	9.528	
9,800.0	7,740.0	9,677.4	7,740.0	37.1	34.0	90.00	-1,649.3	260.4	613.8	546.3	67.50	9.094	
9,900.0	7,740.0	9,777.4	7,740.0	38.6	35.6	90.00	-1,749.3	260.4	614.8	544.1	70.71	8.696	
10,000.0	7,740.0	9,877.4	7,740.0	40.1	37.2	90.00	-1,849.3	260.4	615.8	541.9	73.94	8.329	
10,100.0	7,740.0	9,977.4	7,740.0	41.6	38.9	90.00	-1,949.3	260.4	616.8	539.6	77.20	7.990	
10,200.0	7,740.0	10,077.4	7,740.0	43.1	40.5	90.00	-2,049.3	260.4	617.8	537.3	80.48	7.677	
10,300.0	7,740.0	10,177.4	7,740.0	44.7	42.1	90.00	-2,149.3	260.4	618.8	535.0	83.78	7.386	
10,400.0	7,740.0	10,277.4	7,740.0	46.3	43.8	90.00	-2,249.3	260.4	619.8	532.7	87.09	7.117	
10,500.0	7,740.0	10,377.4	7,740.0	47.8	45.4	90.00	-2,349.3	260.4	620.8	530.4	90.42	6.866	
10,600.0	7,740.0	10,477.4	7,740.0	49.4	47.1	90.00	-2,449.3	260.4	621.8	528.0	93.77	6.632	
10,700.0	7,740.0	10,577.4	7,740.0	51.0	48.8	90.00	-2,549.3	260.4	622.8	525.7	97.12	6.413	
10,800.0	7,740.0	10,677.4	7,740.0	52.6	50.4	90.00	-2,649.3	260.4	623.8	523.3	100.48	6.208	
10,900.0	7,740.0	10,777.4	7,740.0	54.2	52.1	90.00	-2,749.3	260.4	624.8	520.9	103.86	6.016	
11,000.0	7,740.0	10,877.4	7,740.0	55.9	53.8	90.00	-2,849.3	260.4	625.8	518.5	107.24	5.835	
11,100.0	7,740.0	10,977.4	7,740.0	57.5	55.5	90.00	-2,949.2	260.4	626.8	516.2	110.63	5.666	
11,200.0	7,740.0	11,077.4	7,740.0	59.1	57.2	90.00	-3,049.2	260.4	627.8	513.8	114.03	5.505	
11,300.0	7,740.0	11,177.4	7,740.0	60.8	58.9	90.00	-3,149.2	260.4	628.8	511.3	117.43	5.354	
11,400.0	7,740.0	11,277.4	7,740.0	62.4	60.6	90.00	-3,249.2	260.4	629.8	508.9	120.84	5.211	
11,500.0	7,740.0	11,377.3	7,740.0	64.1	62.3	90.00	-3,349.2	260.4	630.8	506.5	124.26	5.076	
11,600.0	7,740.0	11,477.3	7,740.0	65.8	64.0	90.00	-3,449.2	260.4	631.8	504.1	127.68	4.948	
11,700.0	7,740.0	11,577.3	7,740.0	67.4	65.7	90.00	-3,549.2	260.4	632.8	501.7	131.10	4.826	
11,800.0	7,740.0	11,677.3	7,740.0	69.1	67.4	90.00	-3,649.2	260.4	633.8	499.2	134.53	4.711	
11,900.0	7,740.0	11,777.3	7,740.0	70.8	69.1	90.00	-3,749.2	260.4	634.7	496.8	137.97	4.601	
12,000.0	7,740.0	11,877.3	7,740.0	72.5	70.8	90.00	-3,849.2	260.4	635.7	494.3	141.40	4.496	
12,100.0	7,740.0	11,977.3	7,740.0	74.1	72.6	90.00	-3,949.2	260.4	636.7	491.9	144.85	4.396	
12,200.0	7,740.0	12,077.3	7,740.0	75.8	74.3	90.00	-4,049.2	260.4	637.7	489.4	148.29	4.301	
12,300.0	7,740.0	12,177.3	7,740.0	77.5	76.0	90.00	-4,149.2	260.4	638.7	487.0	151.74	4.210	
12,400.0	7,740.0	12,277.3	7,740.0	79.2	77.7	90.00	-4,249.2	260.4	639.7	484.5	155.18	4.122	
12,500.0	7,740.0	12,377.3	7,740.0	80.9	79.4	90.00	-4,349.2	260.4	640.7	482.1	158.64	4.039	
12,600.0	7,740.0	12,477.3	7,740.0	82.6	81.2	90.00	-4,449.2	260.4	641.7	479.6	162.09	3.959	
12,700.0	7,740.0	12,577.3	7,740.0	84.3	82.9	90.00	-4,549.2	260.4	642.7	477.2	165.55	3.882	
12,800.0	7,740.0	12,677.3	7,740.0	86.0	84.6	90.00	-4,649.2	260.4	643.7	474.7	169.01	3.809	
12,900.0	7,740.0	12,777.3	7,740.0	87.7	86.3	90.00	-4,749.2	260.4	644.7	472.2	172.47	3.738	
13,000.0	7,740.0	12,877.3	7,740.0	89.4	88.1	90.00	-4,849.2	260.4	645.7	469.8	175.93	3.670	
13,100.0	7,740.0	12,977.3	7,740.0	91.1	89.8	90.00	-4,949.1	260.4	646.7	467.3	179.39	3.605	
13,200.0	7,740.0	13,077.3	7,740.0	92.8	91.5	90.00	-5,049.1	260.4	647.7	464.8	182.86	3.542	
13,300.0	7,740.0	13,177.3	7,740.0	94.5	93.3	90.00	-5,149.1	260.4	648.7	462.4	186.33	3.481	
13,400.0	7,740.0	13,277.3	7,740.0	96.3	95.0	90.00	-5,249.1	260.4	649.7	459.9	189.80	3.423	
13,500.0	7,740.0	13,377.2	7,740.0	98.0	96.7	90.00	-5,349.1	260.4	650.7	457.4	193.27	3.367	
13,600.0	7,740.0	13,477.2	7,740.0	99.7	98.5	90.00	-5,449.1	260.4	651.7	454.9	196.74	3.312	
13,700.0	7,740.0	13,577.2	7,740.0	101.4	100.2	90.00	-5,549.1	260.4	652.7	452.5	200.21	3.260	
13,800.0	7,740.0	13,677.2	7,740.0	103.1	101.9	90.00	-5,649.1	260.4	653.7	450.0	203.69	3.209	
13,900.0	7,740.0	13,777.2	7,740.0	104.8	103.7	90.00	-5,749.1	260.4	654.7	447.5	207.16	3.160	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	13,877.2	7,740.0	106.6	105.4	90.00	-5,849.1	260.4	655.7	445.0	210.64	3.113		
14,100.0	7,740.0	13,977.2	7,740.0	108.3	107.1	90.00	-5,949.1	260.4	656.7	442.5	214.12	3.067		
14,200.0	7,740.0	14,077.2	7,740.0	110.0	108.9	90.00	-6,049.1	260.4	657.6	440.1	217.59	3.022		
14,300.0	7,740.0	14,177.2	7,740.0	111.7	110.6	90.00	-6,149.1	260.4	658.6	437.6	221.07	2.979		
14,400.0	7,740.0	14,277.2	7,740.0	113.5	112.4	90.00	-6,249.1	260.4	659.6	435.1	224.55	2.938		
14,500.0	7,740.0	14,377.2	7,740.0	115.2	114.1	90.00	-6,349.1	260.4	660.6	432.6	228.03	2.897		
14,600.0	7,740.0	14,477.2	7,740.0	116.9	115.8	90.00	-6,449.1	260.4	661.6	430.1	231.52	2.858		
14,700.0	7,740.0	14,577.2	7,740.0	118.6	117.6	90.00	-6,549.1	260.4	662.6	427.6	235.00	2.820		
14,800.0	7,740.0	14,677.2	7,740.0	120.4	119.3	90.00	-6,649.1	260.4	663.6	425.1	238.48	2.783		
14,900.0	7,740.0	14,777.2	7,740.0	122.1	121.1	90.00	-6,749.1	260.4	664.6	422.6	241.97	2.747		
15,000.0	7,740.0	14,877.2	7,740.0	123.8	122.8	90.00	-6,849.1	260.4	665.6	420.2	245.45	2.712		
15,100.0	7,740.0	14,977.2	7,740.0	125.6	124.5	90.00	-6,949.0	260.4	666.6	417.7	248.94	2.678		
15,200.0	7,740.0	15,077.2	7,740.0	127.3	126.3	90.00	-7,049.0	260.4	667.6	415.2	252.42	2.645		
15,300.0	7,740.0	15,177.2	7,740.0	129.0	128.0	90.00	-7,149.0	260.4	668.6	412.7	255.91	2.613		
15,400.0	7,740.0	15,277.2	7,740.0	130.7	129.8	90.00	-7,249.0	260.4	669.6	410.2	259.40	2.581		
15,500.0	7,740.0	15,377.1	7,740.0	132.5	131.5	90.00	-7,349.0	260.4	670.6	407.7	262.89	2.551		
15,600.0	7,740.0	15,477.1	7,740.0	134.2	133.3	90.00	-7,449.0	260.4	671.6	405.2	266.37	2.521		
15,700.0	7,740.0	15,577.1	7,740.0	135.9	135.0	90.00	-7,549.0	260.4	672.6	402.7	269.86	2.492		
15,800.0	7,740.0	15,677.1	7,740.0	137.7	136.7	90.00	-7,649.0	260.4	673.6	400.2	273.35	2.464		
15,900.0	7,740.0	15,777.1	7,740.0	139.4	138.5	90.00	-7,749.0	260.4	674.6	397.7	276.84	2.437		
16,000.0	7,740.0	15,877.1	7,740.0	141.1	140.2	90.00	-7,849.0	260.4	675.6	395.2	280.33	2.410		
16,084.2	7,740.0	15,953.0	7,740.0	142.6	141.6	90.00	-7,924.8	260.4	676.5	393.6	282.85	2.392 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.06	0.0	-7.6	7.6					
100.0	100.0	100.0	100.0	0.2	0.2	-90.06	0.0	-7.6	7.6	7.3	0.30	24.883		
200.0	200.0	200.0	200.0	0.3	0.3	-90.06	0.0	-7.6	7.6	6.9	0.65	11.577		
300.0	300.0	300.0	300.0	0.5	0.5	-90.06	0.0	-7.6	7.6	6.6	1.00	7.543		
400.0	400.0	400.0	400.0	0.7	0.7	-90.06	0.0	-7.6	7.6	6.2	1.35	5.594		
500.0	500.0	500.0	500.0	0.8	0.8	-90.06	0.0	-7.6	7.6	5.9	1.70	4.445		
600.0	600.0	600.1	600.1	1.0	1.0	-84.56	0.7	-7.0	7.0	5.0	2.05	3.432		
700.0	700.0	700.1	700.0	1.2	1.2	-63.26	2.7	-5.3	6.0	3.6	2.40	2.488		
734.7	734.7	734.8	734.7	1.3	1.3	-50.52	3.7	-4.5	5.8	3.3	2.53	2.307 CC, ES		
800.0	800.0	800.0	799.9	1.4	1.4	-22.96	6.1	-2.6	6.6	3.8	2.76	2.385		
900.0	900.0	899.7	899.4	1.5	1.6	6.91	10.7	1.3	10.8	7.7	3.10	3.497		
1,000.0	1,000.0	999.2	998.5	1.7	1.8	20.47	16.8	6.3	18.0	14.5	3.44	5.213		
1,100.0	1,100.0	1,098.4	1,097.3	1.9	2.0	-25.11	24.1	12.3	26.4	22.6	3.79	6.968		
1,200.0	1,200.0	1,197.5	1,195.8	2.1	2.2	-22.69	32.7	19.4	35.0	30.9	4.13	8.484		
1,300.0	1,299.9	1,297.2	1,294.7	2.3	2.5	-21.86	42.1	27.1	43.0	38.6	4.48	9.604		
1,400.0	1,399.7	1,396.9	1,393.7	2.4	2.7	-22.02	51.5	34.9	49.4	44.6	4.84	10.221		
1,500.0	1,499.4	1,496.8	1,492.9	2.6	3.0	-22.84	60.9	42.6	54.2	49.0	5.19	10.436		
1,600.0	1,598.9	1,596.8	1,592.1	2.8	3.2	-24.22	70.3	50.4	57.4	51.8	5.56	10.324		
1,700.0	1,698.3	1,696.7	1,691.3	3.1	3.5	-26.20	79.8	58.2	59.0	53.1	5.93	9.948		
1,800.0	1,797.4	1,796.7	1,790.5	3.3	3.8	-28.86	89.2	65.9	59.2	52.9	6.33	9.356		
1,900.0	1,896.3	1,896.6	1,889.7	3.6	4.0	-32.41	98.6	73.7	58.0	51.3	6.76	8.592		
1,915.7	1,911.9	1,912.4	1,905.3	3.6	4.1	-33.07	100.1	74.9	57.7	50.9	6.83	8.459		
2,000.0	1,995.0	1,996.5	1,988.8	3.8	4.3	-36.76	108.0	81.4	56.2	49.0	7.22	7.778		
2,100.0	2,093.8	2,096.4	2,088.0	4.1	4.6	-41.39	117.4	89.2	54.7	46.9	7.74	7.065		
2,200.0	2,192.5	2,196.3	2,187.1	4.4	4.8	-46.24	126.8	96.9	53.5	45.2	8.30	6.449		
2,300.0	2,291.2	2,296.2	2,286.2	4.7	5.1	-51.28	136.3	104.7	52.8	43.9	8.91	5.925		
2,400.0	2,389.9	2,396.1	2,385.4	5.0	5.4	-56.41	145.7	112.4	52.5	42.9	9.56	5.488		
2,426.5	2,416.1	2,422.5	2,411.6	5.1	5.4	-57.78	148.2	114.5	52.4	42.7	9.74	5.386		
2,500.0	2,488.7	2,496.0	2,484.5	5.3	5.6	-61.57	155.1	120.2	52.6	42.3	10.24	5.132		
2,600.0	2,587.4	2,595.8	2,583.7	5.6	5.9	-66.66	164.5	127.9	53.1	42.1	10.94	4.850		
2,700.0	2,686.1	2,695.7	2,682.8	5.9	6.2	-71.62	173.9	135.7	54.0	42.4	11.65	4.635		
2,800.0	2,784.8	2,795.6	2,781.9	6.2	6.5	-76.38	183.3	143.5	55.3	43.0	12.36	4.478		
2,900.0	2,883.6	2,895.5	2,881.1	6.5	6.7	-80.88	192.7	151.2	57.0	44.0	13.05	4.370		
3,000.0	2,982.3	2,995.4	2,980.2	6.9	7.0	-85.10	202.2	159.0	59.0	45.3	13.72	4.304		
3,100.0	3,081.0	3,095.3	3,079.4	7.2	7.3	-89.03	211.6	166.7	61.4	47.0	14.37	4.271		
3,200.0	3,179.7	3,195.2	3,178.5	7.5	7.6	-92.65	221.0	174.5	63.9	49.0	14.99	4.266		
3,300.0	3,278.5	3,295.1	3,277.6	7.8	7.8	-95.98	230.4	182.2	66.8	51.2	15.59	4.283		
3,400.0	3,377.2	3,394.9	3,376.8	8.1	8.1	-99.03	239.8	190.0	69.8	53.6	16.17	4.317		
3,500.0	3,475.9	3,494.8	3,475.9	8.4	8.4	-101.82	249.2	197.7	73.0	56.3	16.73	4.365		
3,600.0	3,574.6	3,594.7	3,575.1	8.8	8.6	-104.37	258.6	205.5	76.4	59.1	17.27	4.423		
3,700.0	3,673.4	3,694.6	3,674.2	9.1	8.9	-106.70	268.1	213.2	79.9	62.1	17.79	4.489		
3,800.0	3,772.1	3,794.5	3,773.3	9.4	9.2	-108.84	277.5	221.0	83.5	65.2	18.31	4.561		
3,900.0	3,870.8	3,894.4	3,872.5	9.7	9.5	-110.79	286.9	228.7	87.2	68.4	18.81	4.637		
4,000.0	3,969.5	3,994.3	3,971.6	10.0	9.7	-112.58	296.3	236.5	91.1	71.7	19.31	4.716		
4,100.0	4,068.3	4,094.2	4,070.8	10.4	10.0	-114.22	305.7	244.2	95.0	75.2	19.80	4.797		
4,200.0	4,167.0	4,194.0	4,169.9	10.7	10.3	-115.74	315.1	252.0	98.9	78.7	20.28	4.879		
4,300.0	4,265.7	4,293.9	4,269.0	11.0	10.6	-117.13	324.5	259.8	103.0	82.2	20.76	4.961		
4,400.0	4,364.4	4,393.8	4,368.2	11.3	10.8	-118.42	334.0	267.5	107.1	85.9	21.23	5.044		
4,500.0	4,463.2	4,493.7	4,467.3	11.7	11.1	-119.62	343.4	275.3	111.2	89.5	21.70	5.126		
4,600.0	4,561.9	4,593.6	4,566.5	12.0	11.4	-120.73	352.8	283.0	115.4	93.3	22.17	5.207		
4,700.0	4,660.6	4,693.5	4,665.6	12.3	11.7	-121.76	362.2	290.8	119.7	97.0	22.63	5.287		
4,800.0	4,759.3	4,793.4	4,764.8	12.6	11.9	-122.72	371.6	298.5	123.9	100.8	23.09	5.366		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #3												Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
4,900.0	4,858.1	4,893.3	4,863.9	13.0	12.2	-123.61	381.0	306.3	128.2	104.7	23.55	5.444		
5,000.0	4,956.8	4,993.2	4,963.0	13.3	12.5	-124.45	390.4	314.0	132.6	108.5	24.01	5.520		
5,100.0	5,055.5	5,093.0	5,062.2	13.6	12.8	-125.23	399.8	321.8	136.9	112.4	24.47	5.595		
5,200.0	5,154.2	5,192.9	5,161.3	13.9	13.0	-125.97	409.3	329.5	141.3	116.4	24.93	5.668		
5,300.0	5,253.0	5,292.8	5,260.5	14.3	13.3	-126.66	418.7	337.3	145.7	120.3	25.39	5.740		
5,400.0	5,351.7	5,392.7	5,359.6	14.6	13.6	-127.31	428.1	345.0	150.1	124.3	25.84	5.809		
5,500.0	5,450.4	5,492.6	5,458.7	14.9	13.9	-127.92	437.5	352.8	154.6	128.3	26.30	5.878		
5,600.0	5,549.1	5,592.5	5,557.9	15.3	14.1	-128.50	446.9	360.6	159.0	132.3	26.75	5.944		
5,700.0	5,647.9	5,692.4	5,657.0	15.6	14.4	-129.05	456.3	368.3	163.5	136.3	27.21	6.009		
5,800.0	5,746.6	5,792.3	5,756.2	15.9	14.7	-129.57	465.7	376.1	168.0	140.3	27.66	6.073		
5,900.0	5,845.3	5,892.1	5,855.3	16.2	15.0	-130.06	475.2	383.8	172.5	144.4	28.12	6.135		
6,000.0	5,944.1	5,992.0	5,954.4	16.6	15.2	-130.52	484.6	391.6	177.0	148.4	28.57	6.195		
6,100.0	6,042.8	6,091.9	6,053.6	16.9	15.5	-130.97	494.0	399.3	181.5	152.5	29.02	6.254		
6,200.0	6,141.5	6,191.8	6,152.7	17.2	15.8	-131.39	503.4	407.1	186.1	156.6	29.48	6.311		
6,300.0	6,240.2	6,291.7	6,251.9	17.5	16.1	-131.79	512.8	414.8	190.6	160.7	29.93	6.368		
6,400.0	6,339.0	6,391.6	6,351.0	17.9	16.3	-132.17	522.2	422.6	195.2	164.8	30.39	6.422		
6,500.0	6,437.7	6,491.5	6,450.1	18.2	16.6	-132.54	531.6	430.3	199.7	168.9	30.84	6.476		
6,600.0	6,536.4	6,591.4	6,549.3	18.5	16.9	-132.88	541.1	438.1	204.3	173.0	31.29	6.528		
6,700.0	6,635.1	6,691.2	6,648.4	18.9	17.2	-133.22	550.5	445.8	208.9	177.1	31.75	6.578		
6,800.0	6,733.9	6,791.1	6,747.6	19.2	17.4	-133.54	559.9	453.6	213.4	181.2	32.20	6.628		
6,900.0	6,832.6	6,891.0	6,846.7	19.5	17.7	-133.84	569.3	461.4	218.0	185.4	32.66	6.676		
7,000.0	6,931.3	6,994.2	6,949.4	19.8	17.9	-135.39	574.2	469.4	222.1	189.3	32.76	6.778		
7,100.0	7,030.0	7,094.0	7,048.0	20.2	17.9	-141.09	561.9	477.1	225.5	193.8	31.70	7.113		
7,191.8	7,120.7	7,176.9	7,127.3	20.5	17.8	-148.79	538.8	483.3	232.1	202.2	29.94	7.753		
7,200.0	7,128.8	7,183.8	7,133.8	20.5	17.8	-154.02	536.4	483.8	233.0	203.3	29.76	7.830		
7,250.0	7,178.3	7,225.5	7,171.9	20.6	17.7	166.46	520.0	486.8	239.8	211.1	28.72	8.351		
7,300.0	7,227.8	7,266.0	7,207.9	20.7	17.6	130.11	501.5	489.6	248.4	220.6	27.80	8.935		
7,350.0	7,276.8	7,305.6	7,241.6	20.8	17.5	108.05	481.0	492.2	258.3	231.3	27.00	9.565		
7,400.0	7,325.1	7,344.4	7,273.2	20.8	17.4	94.65	458.6	494.7	269.2	242.9	26.33	10.226		
7,450.0	7,372.2	7,382.4	7,302.7	20.8	17.3	85.55	434.7	497.0	280.8	255.1	25.76	10.902		
7,500.0	7,417.7	7,419.8	7,330.0	20.8	17.2	78.82	409.4	499.2	292.8	267.5	25.27	11.586		
7,550.0	7,461.4	7,456.6	7,355.3	20.7	17.0	73.58	382.7	501.1	304.8	280.0	24.85	12.266		
7,600.0	7,502.9	7,492.9	7,378.5	20.7	16.9	69.36	354.8	502.9	316.7	292.2	24.49	12.934		
7,650.0	7,541.9	7,528.8	7,399.7	20.6	16.8	65.91	325.9	504.6	328.3	304.1	24.18	13.578		
7,700.0	7,578.0	7,564.4	7,418.8	20.5	16.7	63.05	296.0	506.1	339.4	315.5	23.92	14.193		
7,750.0	7,611.1	7,600.0	7,436.1	20.4	16.6	60.68	264.9	507.4	349.9	326.2	23.70	14.766		
7,800.0	7,640.8	7,634.5	7,451.0	20.4	16.5	58.73	233.7	508.6	359.7	336.2	23.53	15.286		
7,850.0	7,667.0	7,669.2	7,464.1	20.3	16.5	57.14	201.6	509.6	368.7	345.3	23.42	15.746		
7,900.0	7,689.4	7,700.0	7,474.0	20.3	16.4	55.88	172.5	510.4	376.9	353.5	23.31	16.165		
7,950.0	7,707.9	7,738.2	7,484.1	20.3	16.4	54.86	135.7	511.2	384.0	360.7	23.34	16.453		
8,000.0	7,722.2	7,772.4	7,491.1	20.3	16.4	54.12	102.2	511.7	390.2	366.8	23.39	16.684		
8,050.0	7,732.4	7,800.0	7,495.3	20.3	16.4	53.60	74.9	512.1	395.4	372.0	23.44	16.865		
8,100.0	7,738.4	7,840.8	7,499.1	20.4	16.4	53.35	34.3	512.4	399.4	375.8	23.64	16.897		
8,143.7	7,740.0	7,873.6	7,500.0	20.5	16.5	53.31	1.6	512.4	402.1	378.3	23.83	16.878		
8,200.0	7,740.0	7,925.4	7,500.0	20.6	16.6	53.62	-50.3	512.4	405.3	381.1	24.19	16.755		
8,300.0	7,740.0	8,025.1	7,500.0	21.0	17.0	54.20	-150.0	512.4	410.9	385.8	25.08	16.386		
8,400.0	7,740.0	8,124.9	7,500.0	21.5	17.5	54.76	-249.8	512.4	416.6	390.3	26.26	15.864		
8,443.7	7,740.0	8,168.5	7,500.0	21.8	17.8	55.00	-293.3	512.4	419.1	392.2	26.86	15.600		
8,500.0	7,740.0	8,224.7	7,500.0	22.2	18.2	55.30	-349.5	512.4	422.1	394.4	27.71	15.235		
8,600.0	7,740.0	8,324.5	7,500.0	22.9	19.0	55.71	-449.4	512.4	426.3	396.9	29.36	14.518		
8,700.0	7,740.0	8,424.5	7,500.0	23.7	20.0	55.98	-549.3	512.4	429.1	397.9	31.20	13.755		
8,800.0	7,740.0	8,524.5	7,500.0	24.6	21.0	56.11	-649.3	512.4	430.5	397.3	33.17	12.977		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,843.7	7,740.0	8,568.1	7,500.0	25.1	21.5	56.13	-693.0	512.4	430.6	396.5	34.07	12.639		
8,900.0	7,740.0	8,624.5	7,500.0	25.6	22.1	56.13	-749.3	512.4	430.6	395.3	35.25	12.214		
9,000.0	7,740.0	8,724.5	7,500.0	26.7	23.4	56.13	-849.3	512.4	430.6	393.2	37.45	11.499		
9,100.0	7,740.0	8,824.5	7,500.0	27.8	24.6	56.13	-949.3	512.4	430.6	390.9	39.73	10.837		
9,200.0	7,740.0	8,924.5	7,500.0	29.0	26.0	56.13	-1,049.3	512.4	430.6	388.5	42.10	10.228		
9,300.0	7,740.0	9,024.5	7,500.0	30.2	27.4	56.13	-1,149.3	512.4	430.6	386.1	44.53	9.670		
9,343.7	7,740.0	9,068.1	7,500.0	30.8	28.0	56.13	-1,193.0	512.4	430.6	385.0	45.61	9.441		
9,400.7	7,740.0	9,125.2	7,500.0	31.6	28.8	56.15	-1,250.0	512.4	430.8	383.8	47.05	9.158		
9,500.0	7,740.0	9,224.5	7,500.0	32.9	30.2	56.22	-1,349.3	512.4	431.7	382.1	49.60	8.704		
9,600.0	7,740.0	9,324.5	7,500.0	34.3	31.7	56.29	-1,449.3	512.4	432.5	380.3	52.21	8.284		
9,700.0	7,740.0	9,424.4	7,500.0	35.7	33.2	56.37	-1,549.3	512.4	433.3	378.5	54.86	7.898		
9,800.0	7,740.0	9,524.4	7,500.0	37.1	34.8	56.44	-1,649.3	512.4	434.1	376.6	57.55	7.544		
9,900.0	7,740.0	9,624.4	7,500.0	38.6	36.3	56.51	-1,749.3	512.4	435.0	374.7	60.27	7.218		
10,000.0	7,740.0	9,724.4	7,500.0	40.1	37.9	56.58	-1,849.3	512.4	435.8	372.8	63.01	6.916		
10,100.0	7,740.0	9,824.4	7,500.0	41.6	39.5	56.66	-1,949.3	512.4	436.6	370.9	65.78	6.638		
10,200.0	7,740.0	9,924.4	7,500.0	43.1	41.1	56.73	-2,049.3	512.4	437.5	368.9	68.57	6.380		
10,300.0	7,740.0	10,024.4	7,500.0	44.7	42.7	56.80	-2,149.3	512.4	438.3	366.9	71.38	6.140		
10,400.0	7,740.0	10,124.4	7,500.0	46.3	44.3	56.87	-2,249.3	512.4	439.1	364.9	74.21	5.918		
10,500.0	7,740.0	10,224.4	7,500.0	47.8	46.0	56.94	-2,349.3	512.4	440.0	362.9	77.05	5.710		
10,600.0	7,740.0	10,324.4	7,500.0	49.4	47.6	57.01	-2,449.3	512.4	440.8	360.9	79.92	5.516		
10,700.0	7,740.0	10,424.4	7,500.0	51.0	49.3	57.08	-2,549.3	512.4	441.6	358.8	82.79	5.334		
10,800.0	7,740.0	10,524.4	7,500.0	52.6	50.9	57.15	-2,649.3	512.4	442.5	356.8	85.68	5.164		
10,900.0	7,740.0	10,624.4	7,500.0	54.2	52.6	57.22	-2,749.3	512.4	443.3	354.7	88.58	5.005		
11,000.0	7,740.0	10,724.4	7,500.0	55.9	54.3	57.29	-2,849.3	512.4	444.1	352.7	91.49	4.855		
11,100.0	7,740.0	10,824.4	7,500.0	57.5	55.9	57.36	-2,949.2	512.4	445.0	350.6	94.41	4.713		
11,200.0	7,740.0	10,924.4	7,500.0	59.1	57.6	57.43	-3,049.2	512.4	445.8	348.5	97.35	4.580		
11,300.0	7,740.0	11,024.4	7,500.0	60.8	59.3	57.50	-3,149.2	512.4	446.7	346.4	100.29	4.454		
11,400.0	7,740.0	11,124.4	7,500.0	62.4	61.0	57.57	-3,249.2	512.4	447.5	344.3	103.24	4.335		
11,500.0	7,740.0	11,224.4	7,500.0	64.1	62.7	57.63	-3,349.2	512.4	448.3	342.1	106.20	4.222		
11,600.0	7,740.0	11,324.4	7,500.0	65.8	64.6	57.61	-3,461.4	513.9	448.1	338.2	109.86	4.079		
11,700.0	7,740.0	11,450.6	7,500.0	67.4	66.5	57.28	-3,575.3	519.9	444.5	331.3	113.22	3.926		
11,800.0	7,740.0	11,550.4	7,500.0	69.1	68.2	56.86	-3,674.9	526.8	439.5	323.9	115.60	3.802		
11,900.0	7,740.0	11,650.3	7,500.0	70.8	70.0	56.42	-3,774.5	533.8	434.5	316.6	117.95	3.684		
12,000.0	7,740.0	11,750.1	7,500.0	72.5	71.7	55.98	-3,874.1	540.8	429.5	309.3	120.25	3.572		
12,100.0	7,740.0	11,849.9	7,500.0	74.1	73.4	55.53	-3,973.6	547.7	424.6	302.1	122.51	3.466		
12,200.0	7,740.0	11,949.7	7,500.0	75.8	75.1	55.07	-4,073.2	554.7	419.7	294.9	124.71	3.365		
12,300.0	7,740.0	12,049.6	7,500.0	77.5	76.8	54.60	-4,172.8	561.7	414.8	287.9	126.86	3.269		
12,400.0	7,740.0	12,149.4	7,500.0	79.2	78.5	54.11	-4,272.4	568.6	409.9	280.9	128.96	3.178		
12,500.0	7,740.0	12,243.6	7,500.0	80.9	80.2	53.68	-4,366.3	574.8	405.5	274.7	130.75	3.101		
12,600.0	7,740.0	12,333.3	7,500.0	82.6	81.7	53.48	-4,456.1	578.1	403.3	270.8	132.52	3.043		
12,635.9	7,740.0	12,365.6	7,500.0	83.2	82.3	53.46	-4,488.3	578.6	403.1	269.9	133.23	3.026		
12,700.0	7,740.0	12,427.2	7,500.0	84.3	83.3	53.49	-4,549.9	578.8	403.4	268.6	134.88	2.991		
12,800.0	7,740.0	12,527.2	7,500.0	86.0	85.0	53.56	-4,649.9	579.0	404.0	266.3	137.77	2.933		
12,900.0	7,740.0	12,627.2	7,500.0	87.7	86.8	53.62	-4,749.9	579.3	404.7	264.0	140.66	2.877		
13,000.0	7,740.0	12,727.2	7,500.0	89.4	88.5	53.69	-4,849.9	579.5	405.3	261.7	143.57	2.823		
13,100.0	7,740.0	12,827.2	7,500.0	91.1	90.2	53.75	-4,949.9	579.8	405.9	259.4	146.48	2.771		
13,200.0	7,740.0	12,927.2	7,500.0	92.8	91.9	53.81	-5,049.9	580.0	406.5	257.1	149.39	2.721		
13,300.0	7,740.0	13,027.2	7,500.0	94.5	93.6	53.88	-5,149.9	580.2	407.1	254.8	152.31	2.673		
13,400.0	7,740.0	13,127.2	7,500.0	96.3	95.4	53.94	-5,249.9	580.5	407.7	252.5	155.24	2.626		
13,500.0	7,740.0	13,227.2	7,500.0	98.0	97.1	54.00	-5,349.9	580.7	408.3	250.2	158.17	2.582		
13,600.0	7,740.0	13,327.2	7,500.0	99.7	98.8	54.06	-5,449.9	580.9	408.9	247.8	161.10	2.538		
13,700.0	7,740.0	13,427.2	7,500.0	101.4	100.6	54.13	-5,549.9	581.2	409.6	245.5	164.04	2.497		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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)				
13,800.0	7,740.0	13,527.2	7,500.0	103.1	102.3	54.19	-5,649.9	581.4	410.2	243.2	166.98	2.456		
13,900.0	7,740.0	13,627.2	7,500.0	104.8	104.0	54.25	-5,749.9	581.6	410.8	240.9	169.93	2.417		
14,000.0	7,740.0	13,727.2	7,500.0	106.6	105.7	54.31	-5,849.9	581.9	411.4	238.5	172.89	2.380		
14,100.0	7,740.0	13,827.2	7,500.0	108.3	107.5	54.37	-5,949.9	582.1	412.0	236.2	175.85	2.343		
14,200.0	7,740.0	13,927.2	7,500.0	110.0	109.2	54.43	-6,049.9	582.4	412.6	233.8	178.81	2.308		
14,300.0	7,740.0	14,027.2	7,500.0	111.7	110.9	54.50	-6,149.9	582.6	413.3	231.5	181.78	2.273		
14,400.0	7,740.0	14,127.2	7,500.0	113.5	112.7	54.56	-6,249.9	582.8	413.9	229.1	184.75	2.240		
14,500.0	7,740.0	14,227.2	7,500.0	115.2	114.4	54.62	-6,349.9	583.1	414.5	226.8	187.73	2.208		
14,600.0	7,740.0	14,327.2	7,500.0	116.9	116.1	54.68	-6,449.9	583.3	415.1	224.4	190.71	2.177		
14,700.0	7,740.0	14,427.2	7,500.0	118.6	117.9	54.74	-6,549.9	583.5	415.7	222.0	193.69	2.146		
14,800.0	7,740.0	14,527.2	7,500.0	120.4	119.6	54.80	-6,649.9	583.8	416.3	219.7	196.68	2.117		
14,900.0	7,740.0	14,627.2	7,500.0	122.1	121.4	54.86	-6,749.9	584.0	417.0	217.3	199.68	2.088		
15,000.0	7,740.0	14,727.2	7,500.0	123.8	123.1	54.92	-6,849.9	584.3	417.6	214.9	202.68	2.060		
15,100.0	7,740.0	14,827.1	7,500.0	125.6	124.8	54.98	-6,949.9	584.5	418.2	212.5	205.68	2.033		
15,200.0	7,740.0	14,927.1	7,500.0	127.3	126.6	55.04	-7,049.9	584.7	418.8	210.1	208.68	2.007		
15,300.0	7,740.0	15,027.1	7,500.0	129.0	128.3	55.10	-7,149.9	585.0	419.4	207.8	211.69	1.981		
15,400.0	7,740.0	15,127.1	7,500.0	130.7	130.0	55.16	-7,249.9	585.2	420.1	205.4	214.71	1.956		
15,500.0	7,740.0	15,227.1	7,500.0	132.5	131.8	55.22	-7,349.8	585.4	420.7	203.0	217.73	1.932		
15,600.0	7,740.0	15,327.1	7,500.0	134.2	133.5	55.27	-7,449.8	585.7	421.3	200.6	220.75	1.909		
15,700.0	7,740.0	15,427.1	7,500.0	135.9	135.3	55.33	-7,549.8	585.9	421.9	198.2	223.77	1.886		
15,800.0	7,740.0	15,527.1	7,500.0	137.7	137.0	55.39	-7,649.8	586.2	422.6	195.8	226.80	1.863		
15,900.0	7,740.0	15,627.1	7,500.0	139.4	138.7	55.45	-7,749.8	586.4	423.2	193.4	229.84	1.841		
16,000.0	7,740.0	15,727.1	7,500.0	141.1	140.5	55.51	-7,849.8	586.6	423.8	190.9	232.87	1.820		
16,084.2	7,740.0	15,805.8	7,500.0	142.6	141.9	55.55	-7,928.5	586.8	424.4	189.4	234.98	1.806 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	7.6	7.6						
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	7.6	7.6	7.3	0.30	24.883			
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	7.6	7.6	6.9	0.65	11.577			
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	7.6	7.6	6.6	1.00	7.543 CC, ES			
400.0	400.0	399.9	399.9	0.7	0.7	87.61	0.3	8.4	8.4	7.0	1.35	6.192			
500.0	500.0	499.7	499.6	0.8	0.9	82.60	1.4	10.7	10.8	9.1	1.70	6.379			
600.0	600.0	599.4	599.2	1.0	1.0	77.98	3.1	14.7	15.1	13.0	2.05	7.361			
700.0	700.0	698.9	698.5	1.2	1.2	74.65	5.6	20.3	21.1	18.7	2.39	8.801			
800.0	800.0	798.1	797.5	1.4	1.4	72.42	8.7	27.4	28.8	26.1	2.74	10.523			
900.0	900.0	897.1	896.0	1.5	1.7	70.92	12.5	36.0	38.3	35.3	3.08	12.430			
1,000.0	1,000.0	995.7	994.0	1.7	1.9	69.90	16.9	46.2	49.6	46.1	3.43	14.464			
1,100.0	1,100.0	1,094.0	1,091.5	1.9	2.2	17.98	22.0	57.9	61.7	57.9	3.77	16.370			
1,200.0	1,200.0	1,192.1	1,188.5	2.1	2.5	17.97	27.8	71.1	73.9	69.8	4.11	17.975			
1,300.0	1,299.9	1,290.0	1,285.1	2.3	2.8	18.25	34.2	85.7	86.1	81.6	4.45	19.346			
1,400.0	1,399.7	1,387.7	1,381.2	2.4	3.1	18.70	41.3	101.9	98.4	93.6	4.79	20.532			
1,500.0	1,499.4	1,485.1	1,476.7	2.6	3.5	19.28	49.0	119.4	110.7	105.6	5.13	21.567			
1,600.0	1,598.9	1,584.3	1,573.7	2.8	3.8	19.97	57.2	138.2	122.4	116.9	5.49	22.298			
1,700.0	1,698.3	1,683.7	1,671.0	3.1	4.2	20.81	65.4	157.1	132.5	126.6	5.85	22.639			
1,800.0	1,797.4	1,783.3	1,768.4	3.3	4.6	21.79	73.7	176.0	141.0	134.8	6.22	22.654			
1,900.0	1,896.3	1,883.0	1,866.0	3.6	5.0	22.93	82.0	194.9	148.0	141.3	6.61	22.391			
1,915.7	1,911.9	1,898.8	1,881.4	3.6	5.1	23.12	83.3	197.9	148.9	142.2	6.67	22.328			
2,000.0	1,995.0	1,982.8	1,963.6	3.8	5.4	24.15	90.2	213.8	153.9	146.9	7.00	21.980			
2,100.0	2,093.8	2,082.6	2,061.2	4.1	5.8	25.28	98.5	232.7	160.0	152.6	7.41	21.591			
2,200.0	2,192.5	2,182.4	2,158.8	4.4	6.2	26.34	106.8	251.6	166.0	158.2	7.82	21.225			
2,300.0	2,291.2	2,282.1	2,256.4	4.7	6.6	27.31	115.1	270.6	172.2	163.9	8.25	20.878			
2,400.0	2,389.9	2,381.9	2,354.0	5.0	7.0	28.23	123.4	289.5	178.4	169.7	8.68	20.550			
2,500.0	2,488.7	2,481.7	2,451.7	5.3	7.4	29.07	131.6	308.4	184.6	175.5	9.12	20.240			
2,600.0	2,587.4	2,581.4	2,549.3	5.6	7.8	29.87	139.9	327.3	190.8	181.3	9.57	19.946			
2,700.0	2,686.1	2,681.2	2,646.9	5.9	8.2	30.61	148.2	346.2	197.1	187.1	10.02	19.667			
2,800.0	2,784.8	2,781.0	2,744.5	6.2	8.6	31.31	156.5	365.1	203.5	193.0	10.49	19.404			
2,900.0	2,883.6	2,880.7	2,842.1	6.5	9.0	31.97	164.7	384.0	209.8	198.9	10.95	19.154			
3,000.0	2,982.3	2,980.5	2,939.7	6.9	9.4	32.58	173.0	403.0	216.2	204.8	11.43	18.917			
3,100.0	3,081.0	3,080.3	3,037.3	7.2	9.8	33.16	181.3	421.9	222.6	210.7	11.91	18.693			
3,200.0	3,179.7	3,180.1	3,134.9	7.5	10.2	33.71	189.6	440.8	229.0	216.6	12.39	18.480			
3,300.0	3,278.5	3,279.8	3,232.5	7.8	10.6	34.23	197.8	459.7	235.5	222.6	12.88	18.278			
3,400.0	3,377.2	3,379.6	3,330.1	8.1	11.0	34.72	206.1	478.6	241.9	228.6	13.38	18.087			
3,500.0	3,475.9	3,479.4	3,427.8	8.4	11.4	35.19	214.4	497.5	248.4	234.5	13.87	17.905			
3,600.0	3,574.6	3,579.1	3,525.4	8.8	11.8	35.63	222.7	516.5	254.9	240.5	14.38	17.733			
3,700.0	3,673.4	3,678.9	3,623.0	9.1	12.2	36.05	231.0	535.4	261.4	246.5	14.88	17.569			
3,800.0	3,772.1	3,778.7	3,720.6	9.4	12.6	36.45	239.2	554.3	267.9	252.6	15.39	17.413			
3,900.0	3,870.8	3,878.4	3,818.2	9.7	13.0	36.83	247.5	573.2	274.5	258.6	15.90	17.265			
4,000.0	3,969.5	3,978.2	3,915.8	10.0	13.4	37.19	255.8	592.1	281.0	264.6	16.41	17.123			
4,100.0	4,068.3	4,078.0	4,013.4	10.4	13.8	37.54	264.1	611.0	287.6	270.7	16.93	16.989			
4,200.0	4,167.0	4,177.8	4,111.0	10.7	14.2	37.87	272.3	630.0	294.2	276.7	17.45	16.860			
4,300.0	4,265.7	4,277.5	4,208.6	11.0	14.6	38.19	280.6	648.9	300.7	282.8	17.97	16.738			
4,400.0	4,364.4	4,377.3	4,306.2	11.3	15.0	38.49	288.9	667.8	307.3	288.8	18.49	16.621			
4,500.0	4,463.2	4,477.1	4,403.9	11.7	15.4	38.78	297.2	686.7	313.9	294.9	19.01	16.509			
4,600.0	4,561.9	4,576.8	4,501.5	12.0	15.8	39.06	305.5	705.6	320.5	301.0	19.54	16.402			
4,700.0	4,660.6	4,676.6	4,599.1	12.3	16.2	39.32	313.7	724.5	327.1	307.1	20.07	16.300			
4,800.0	4,759.3	4,776.4	4,696.7	12.6	16.7	39.58	322.0	743.5	333.7	313.1	20.60	16.202			
4,900.0	4,858.1	4,876.1	4,794.3	13.0	17.1	39.83	330.3	762.4	340.4	319.2	21.13	16.108			
5,000.0	4,956.8	4,975.9	4,891.9	13.3	17.5	40.06	338.6	781.3	347.0	325.3	21.66	16.018			

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 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,055.5	5,075.7	4,989.5	13.6	17.9	40.29	346.8	800.2	353.6	331.4	22.20	15.931		
5,200.0	5,154.2	5,175.5	5,087.1	13.9	18.3	40.51	355.1	819.1	360.3	337.5	22.73	15.848		
5,300.0	5,253.0	5,275.2	5,184.7	14.3	18.7	40.72	363.4	838.0	366.9	343.6	23.27	15.769		
5,400.0	5,351.7	5,375.0	5,282.3	14.6	19.1	40.93	371.7	857.0	373.6	349.8	23.81	15.692		
5,500.0	5,450.4	5,474.8	5,380.0	14.9	19.5	41.12	379.9	875.9	380.2	355.9	24.34	15.618		
5,600.0	5,549.1	5,574.5	5,477.6	15.3	19.9	41.31	388.2	894.8	386.9	362.0	24.88	15.547		
5,700.0	5,647.9	5,674.3	5,575.2	15.6	20.3	41.50	396.5	913.7	393.5	368.1	25.42	15.479		
5,800.0	5,746.6	5,774.1	5,672.8	15.9	20.7	41.68	404.8	932.6	400.2	374.2	25.97	15.413		
5,900.0	5,845.3	5,873.8	5,770.4	16.2	21.1	41.85	413.1	951.5	406.9	380.4	26.51	15.349		
6,000.0	5,944.1	5,973.6	5,868.0	16.6	21.5	42.01	421.3	970.5	413.5	386.5	27.05	15.288		
6,100.0	6,042.8	6,073.4	5,965.6	16.9	21.9	42.18	429.6	989.4	420.2	392.6	27.59	15.229		
6,200.0	6,141.5	6,173.2	6,063.2	17.2	22.3	42.33	437.9	1,008.3	426.9	398.8	28.14	15.171		
6,300.0	6,240.2	6,272.9	6,160.8	17.5	22.7	42.48	446.2	1,027.2	433.6	404.9	28.68	15.116		
6,400.0	6,339.0	6,372.7	6,258.4	17.9	23.1	42.63	454.4	1,046.1	440.3	411.0	29.23	15.063		
6,500.0	6,437.7	6,472.5	6,356.1	18.2	23.5	42.77	462.7	1,065.0	447.0	417.2	29.78	15.011		
6,600.0	6,536.4	6,572.2	6,453.7	18.5	23.9	42.91	471.0	1,084.0	453.7	423.3	30.32	14.961		
6,700.0	6,635.1	6,672.0	6,551.3	18.9	24.3	43.04	479.3	1,102.9	460.3	429.5	30.87	14.913		
6,800.0	6,733.9	6,771.8	6,648.9	19.2	24.8	43.17	487.6	1,121.8	467.0	435.6	31.42	14.866		
6,900.0	6,832.6	6,871.5	6,746.5	19.5	25.2	43.30	495.8	1,140.7	473.7	441.8	31.97	14.820		
7,000.0	6,931.3	6,971.3	6,844.1	19.8	25.6	43.42	504.1	1,159.6	480.4	447.9	32.51	14.776		
7,100.0	7,030.0	7,066.9	6,937.8	20.2	25.9	43.77	510.0	1,177.8	487.4	454.3	33.08	14.733		
7,191.8	7,120.7	7,150.0	7,019.0	20.5	26.2	45.36	504.0	1,193.5	495.2	461.3	33.89	14.611		
7,200.0	7,128.8	7,156.1	7,024.9	20.5	26.2	41.19	503.1	1,194.7	496.0	462.0	33.96	14.607		
7,250.0	7,178.3	7,200.0	7,067.2	20.6	26.3	8.18	494.6	1,202.9	500.8	466.4	34.35	14.579		
7,300.0	7,227.8	7,241.5	7,106.5	20.7	26.3	-22.11	483.6	1,210.5	505.4	470.9	34.54	14.631		
7,350.0	7,276.8	7,283.3	7,145.2	20.8	26.4	-38.55	469.6	1,218.0	509.8	475.2	34.60	14.736		
7,400.0	7,325.1	7,324.7	7,182.3	20.8	26.4	-46.82	452.9	1,225.2	513.9	479.4	34.49	14.899		
7,450.0	7,372.2	7,365.6	7,217.9	20.8	26.5	-51.29	433.8	1,232.1	517.6	483.4	34.24	15.117		
7,500.0	7,417.7	7,406.2	7,251.6	20.8	26.5	-53.88	412.4	1,238.6	520.9	487.0	33.85	15.388		
7,550.0	7,461.4	7,450.0	7,286.4	20.7	26.5	-55.41	386.5	1,245.3	523.7	490.3	33.45	15.659		
7,600.0	7,502.9	7,486.3	7,313.6	20.7	26.5	-56.48	363.1	1,250.6	526.0	493.3	32.73	16.073		
7,650.0	7,541.9	7,526.0	7,341.7	20.6	26.5	-57.17	335.6	1,256.1	527.8	495.8	32.04	16.475		
7,700.0	7,578.0	7,565.5	7,367.7	20.5	26.5	-57.67	306.3	1,261.1	529.0	497.7	31.29	16.905		
7,750.0	7,611.1	7,600.0	7,388.7	20.4	26.5	-58.10	279.2	1,265.2	529.6	499.2	30.37	17.436		
7,800.0	7,640.8	7,644.0	7,413.1	20.4	26.5	-58.42	243.0	1,269.9	529.5	499.8	29.75	17.802		
7,850.0	7,667.0	7,683.0	7,432.5	20.3	26.5	-58.76	209.3	1,273.6	528.9	499.9	29.01	18.232		
7,900.0	7,689.4	7,722.0	7,449.5	20.3	26.5	-59.12	174.4	1,276.9	527.6	499.2	28.34	18.617		
7,950.0	7,707.9	7,761.0	7,464.1	20.3	26.5	-59.52	138.4	1,279.8	525.6	497.8	27.77	18.929		
8,000.0	7,722.2	7,800.0	7,476.4	20.3	26.5	-59.98	101.4	1,282.2	523.1	495.7	27.33	19.139		
8,050.0	7,732.4	7,838.9	7,486.1	20.3	26.5	-60.49	63.8	1,284.0	519.9	492.8	27.05	19.221		
8,100.0	7,738.4	7,878.0	7,493.3	20.4	26.6	-61.06	25.4	1,285.4	516.1	489.2	26.94	19.161		
8,143.7	7,740.0	7,912.3	7,497.5	20.5	26.6	-61.63	-8.6	1,286.2	512.4	485.4	27.01	18.969		
8,200.0	7,740.0	7,956.6	7,499.9	20.6	26.7	-61.73	-52.9	1,286.7	508.0	480.8	27.27	18.628		
8,300.0	7,740.0	8,053.8	7,500.0	21.0	26.9	-61.37	-150.0	1,286.7	501.9	473.8	28.04	17.898		
8,400.0	7,740.0	8,153.5	7,500.0	21.5	27.2	-60.99	-249.8	1,286.7	495.7	466.7	29.08	17.047		
8,443.7	7,740.0	8,197.1	7,500.0	21.8	27.4	-60.81	-293.3	1,286.7	493.1	463.5	29.61	16.654		
8,500.0	7,740.0	8,253.3	7,500.0	22.2	27.7	-60.62	-349.5	1,286.7	489.9	459.5	30.39	16.122		
8,600.0	7,740.0	8,353.2	7,500.0	22.9	28.2	-60.35	-449.4	1,286.7	485.4	453.5	31.93	15.204		
8,700.0	7,740.0	8,453.1	7,500.0	23.7	28.8	-60.16	-549.3	1,286.7	482.5	448.8	33.68	14.326		
8,800.0	7,740.0	8,553.1	7,500.0	24.6	29.5	-60.07	-649.3	1,286.7	481.1	445.5	35.61	13.508		
8,843.7	7,740.0	8,596.8	7,500.0	25.1	29.9	-60.06	-693.0	1,286.7	480.9	444.4	36.50	13.175		
8,843.7	7,740.0	8,596.8	7,500.0	25.1	29.9	-60.06	-693.0	1,286.7	480.9	444.4	36.50	13.175		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,740.0	8,653.1	7,500.0	25.6	30.3	-60.06	-749.3	1,286.7	480.9	443.2	37.71	12.755		
9,000.0	7,740.0	8,753.1	7,500.0	26.7	31.2	-60.06	-849.3	1,286.7	480.9	441.0	39.93	12.046		
9,100.0	7,740.0	8,853.1	7,500.0	27.8	32.2	-60.06	-949.3	1,286.7	480.9	438.7	42.25	11.384		
9,200.0	7,740.0	8,953.1	7,500.0	29.0	33.2	-60.06	-1,049.3	1,286.7	480.9	436.3	44.66	10.770		
9,300.0	7,740.0	9,053.1	7,500.0	30.2	34.3	-60.06	-1,149.3	1,286.7	480.9	433.8	47.14	10.202		
9,343.7	7,740.0	9,096.8	7,500.0	30.8	34.8	-60.06	-1,193.0	1,286.7	480.9	432.7	48.24	9.969		
9,400.7	7,740.0	9,153.8	7,500.0	31.6	35.4	-60.05	-1,250.0	1,286.7	480.7	431.0	49.70	9.672		
9,500.0	7,740.0	9,253.1	7,500.0	32.9	36.6	-59.99	-1,349.3	1,286.7	479.8	427.6	52.26	9.182		
9,600.0	7,740.0	9,353.1	7,500.0	34.3	37.9	-59.93	-1,449.3	1,286.7	479.0	424.1	54.87	8.729		
9,700.0	7,740.0	9,453.1	7,500.0	35.7	39.1	-59.87	-1,549.3	1,286.7	478.1	420.6	57.53	8.311		
9,800.0	7,740.0	9,553.1	7,500.0	37.1	40.4	-59.81	-1,649.3	1,286.7	477.3	417.0	60.21	7.926		
9,900.0	7,740.0	9,653.1	7,500.0	38.6	41.8	-59.75	-1,749.3	1,286.7	476.4	413.5	62.93	7.571		
10,000.0	7,740.0	9,753.1	7,500.0	40.1	43.1	-59.69	-1,849.3	1,286.7	475.5	409.9	65.66	7.242		
10,100.0	7,740.0	9,853.1	7,500.0	41.6	44.5	-59.63	-1,949.3	1,286.7	474.7	406.3	68.41	6.938		
10,200.0	7,740.0	9,953.1	7,500.0	43.1	46.0	-59.57	-2,049.3	1,286.7	473.8	402.6	71.18	6.656		
10,300.0	7,740.0	10,053.0	7,500.0	44.7	47.4	-59.50	-2,149.3	1,286.7	473.0	399.0	73.97	6.394		
10,400.0	7,740.0	10,153.0	7,500.0	46.3	48.9	-59.44	-2,249.3	1,286.7	472.1	395.3	76.76	6.150		
10,500.0	7,740.0	10,253.0	7,500.0	47.8	50.4	-59.38	-2,349.3	1,286.7	471.2	391.7	79.57	5.923		
10,600.0	7,740.0	10,353.0	7,500.0	49.4	51.9	-59.32	-2,449.3	1,286.7	470.4	388.0	82.38	5.710		
10,700.0	7,740.0	10,453.0	7,500.0	51.0	53.4	-59.26	-2,549.3	1,286.7	469.5	384.3	85.20	5.511		
10,800.0	7,740.0	10,553.0	7,500.0	52.6	54.9	-59.20	-2,649.3	1,286.7	468.7	380.6	88.03	5.324		
10,900.0	7,740.0	10,653.0	7,500.0	54.2	56.5	-59.13	-2,749.3	1,286.7	467.8	377.0	90.86	5.149		
11,000.0	7,740.0	10,753.0	7,500.0	55.9	58.0	-59.07	-2,849.3	1,286.7	467.0	373.3	93.70	4.984		
11,100.0	7,740.0	10,853.0	7,500.0	57.5	59.6	-59.01	-2,949.2	1,286.7	466.1	369.6	96.54	4.828		
11,200.0	7,740.0	10,953.0	7,500.0	59.1	61.2	-58.95	-3,049.2	1,286.7	465.3	365.9	99.39	4.681		
11,300.0	7,740.0	11,053.0	7,500.0	60.8	62.8	-58.88	-3,149.2	1,286.7	464.4	362.2	102.23	4.543		
11,400.0	7,740.0	11,153.0	7,500.0	62.4	64.4	-58.82	-3,249.2	1,286.7	463.6	358.5	105.08	4.411		
11,500.0	7,740.0	11,253.0	7,500.0	64.1	66.0	-58.75	-3,349.2	1,286.7	462.7	354.8	107.93	4.287		
11,600.0	7,740.0	11,353.0	7,500.0	65.8	67.6	-58.69	-3,449.2	1,286.7	461.9	351.1	110.78	4.169		
11,700.0	7,740.0	11,453.0	7,500.0	67.4	69.2	-58.63	-3,549.2	1,286.7	461.0	347.4	113.63	4.057		
11,800.0	7,740.0	11,553.0	7,500.0	69.1	70.8	-58.56	-3,649.2	1,286.7	460.2	343.7	116.48	3.950		
11,900.0	7,740.0	11,653.0	7,500.0	70.8	72.4	-58.50	-3,749.2	1,286.7	459.3	340.0	119.33	3.849		
12,000.0	7,740.0	11,753.0	7,500.0	72.5	74.1	-58.43	-3,849.2	1,286.7	458.5	336.3	122.18	3.752		
12,100.0	7,740.0	11,853.0	7,500.0	74.1	75.7	-58.37	-3,949.2	1,286.7	457.6	332.6	125.03	3.660		
12,200.0	7,740.0	11,953.0	7,500.0	75.8	77.4	-58.30	-4,049.2	1,286.7	456.8	328.9	127.87	3.572		
12,300.0	7,740.0	12,052.9	7,500.0	77.5	79.0	-58.24	-4,149.2	1,286.7	455.9	325.2	130.72	3.488		
12,400.0	7,740.0	12,152.9	7,500.0	79.2	80.7	-58.17	-4,249.2	1,286.7	455.1	321.5	133.56	3.407		
12,500.0	7,740.0	12,252.9	7,500.0	80.9	82.3	-58.10	-4,349.2	1,286.7	454.2	317.8	136.40	3.330		
12,600.0	7,740.0	12,352.9	7,500.0	82.6	84.0	-58.04	-4,449.2	1,286.7	453.4	314.1	139.24	3.256		
12,700.0	7,740.0	12,452.9	7,500.0	84.3	85.7	-57.97	-4,549.2	1,286.7	452.5	310.5	142.08	3.185		
12,800.0	7,740.0	12,552.9	7,500.0	86.0	87.3	-57.90	-4,649.2	1,286.7	451.7	306.8	144.91	3.117		
12,900.0	7,740.0	12,652.9	7,500.0	87.7	89.0	-57.84	-4,749.2	1,286.7	450.8	303.1	147.74	3.052		
13,000.0	7,740.0	12,752.9	7,500.0	89.4	90.7	-57.77	-4,849.2	1,286.7	450.0	299.4	150.57	2.989		
13,100.0	7,740.0	12,852.9	7,500.0	91.1	92.4	-57.70	-4,949.1	1,286.7	449.2	295.8	153.39	2.928		
13,200.0	7,740.0	12,952.9	7,500.0	92.8	94.1	-57.63	-5,049.1	1,286.7	448.3	292.1	156.21	2.870		
13,300.0	7,740.0	13,052.9	7,500.0	94.5	95.7	-57.56	-5,149.1	1,286.7	447.5	288.5	159.03	2.814		
13,400.0	7,740.0	13,152.9	7,500.0	96.3	97.4	-57.50	-5,249.1	1,286.7	446.6	284.8	161.84	2.760		
13,500.0	7,740.0	13,252.9	7,500.0	98.0	99.1	-57.43	-5,349.1	1,286.7	445.8	281.1	164.65	2.708		
13,600.0	7,740.0	13,352.9	7,500.0	99.7	100.8	-57.36	-5,449.1	1,286.7	445.0	277.5	167.46	2.657		
13,700.0	7,740.0	13,452.9	7,500.0	101.4	102.5	-57.29	-5,549.1	1,286.7	444.1	273.9	170.26	2.608		
13,800.0	7,740.0	13,552.9	7,500.0	103.1	104.2	-57.22	-5,649.1	1,286.7	443.3	270.2	173.06	2.561		
13,900.0	7,740.0	13,652.9	7,500.0	104.8	105.9	-57.15	-5,749.1	1,286.7	442.5	266.6	175.86	2.516		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,740.0	13,752.9	7,500.0	106.6	107.6	-57.08	-5,849.1	1,286.7	441.6	263.0	178.65	2.472		
14,100.0	7,740.0	13,852.9	7,500.0	108.3	109.3	-57.01	-5,949.1	1,286.7	440.8	259.3	181.43	2.429		
14,200.0	7,740.0	13,952.9	7,500.0	110.0	111.0	-56.94	-6,049.1	1,286.7	439.9	255.7	184.21	2.388		
14,300.0	7,740.0	14,052.8	7,500.0	111.7	112.7	-56.87	-6,149.1	1,286.7	439.1	252.1	186.99	2.348		
14,400.0	7,740.0	14,152.8	7,500.0	113.5	114.4	-56.80	-6,249.1	1,286.7	438.3	248.5	189.76	2.310		
14,500.0	7,740.0	14,252.8	7,500.0	115.2	116.1	-56.73	-6,349.1	1,286.7	437.4	244.9	192.53	2.272		
14,600.0	7,740.0	14,352.8	7,500.0	116.9	117.8	-56.65	-6,449.1	1,286.7	436.6	241.3	195.30	2.236		
14,700.0	7,740.0	14,452.8	7,500.0	118.6	119.5	-56.58	-6,549.1	1,286.7	435.8	237.7	198.05	2.200		
14,800.0	7,740.0	14,552.8	7,500.0	120.4	121.3	-56.51	-6,649.1	1,286.7	435.0	234.1	200.81	2.166		
14,900.0	7,740.0	14,652.8	7,500.0	122.1	123.0	-56.44	-6,749.1	1,286.7	434.1	230.6	203.56	2.133		
15,000.0	7,740.0	14,752.8	7,500.0	123.8	124.7	-56.36	-6,849.1	1,286.7	433.3	227.0	206.30	2.100		
15,100.0	7,740.0	14,852.8	7,500.0	125.6	126.4	-56.29	-6,949.0	1,286.7	432.5	223.4	209.04	2.069		
15,200.0	7,740.0	14,952.8	7,500.0	127.3	128.1	-56.22	-7,049.0	1,286.7	431.6	219.9	211.77	2.038		
15,300.0	7,740.0	15,052.8	7,500.0	129.0	129.8	-56.14	-7,149.0	1,286.7	430.8	216.3	214.50	2.008		
15,400.0	7,740.0	15,152.8	7,500.0	130.7	131.6	-56.07	-7,249.0	1,286.7	430.0	212.8	217.22	1.979		
15,500.0	7,740.0	15,252.8	7,500.0	132.5	133.3	-56.00	-7,349.0	1,286.7	429.2	209.2	219.94	1.951		
15,600.0	7,740.0	15,352.8	7,500.0	134.2	135.0	-55.92	-7,449.0	1,286.7	428.3	205.7	222.65	1.924		
15,700.0	7,740.0	15,452.8	7,500.0	135.9	136.7	-55.85	-7,549.0	1,286.7	427.5	202.2	225.36	1.897		
15,800.0	7,740.0	15,552.8	7,500.0	137.7	138.4	-55.77	-7,649.0	1,286.7	426.7	198.6	228.06	1.871		
15,900.0	7,740.0	15,652.8	7,500.0	139.4	140.2	-55.70	-7,749.0	1,286.7	425.9	195.1	230.75	1.846		
16,000.0	7,740.0	15,752.8	7,500.0	141.1	141.9	-55.62	-7,849.0	1,286.7	425.0	191.6	233.44	1.821		
16,084.2	7,740.0	15,837.0	7,500.0	142.6	143.3	-55.56	-7,933.2	1,286.7	424.4	188.7	235.70	1.800 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	91.40	-0.4	15.1	15.1					
100.0	100.0	100.0	100.0	0.2	0.2	91.40	-0.4	15.1	15.1	14.8	0.30	49.781		
187.5	187.5	187.5	187.5	0.3	0.3	90.00	0.0	15.1	15.1	14.5	0.61	24.785 CC		
200.0	200.0	200.0	200.0	0.3	0.3	88.92	0.3	15.1	15.1	14.5	0.65	23.129 ES		
300.0	300.0	299.7	299.6	0.5	0.5	70.27	5.4	15.1	16.1	15.1	1.02	15.784		
400.0	400.0	399.2	398.8	0.7	0.7	52.71	12.4	16.3	20.5	19.1	1.37	14.916		
500.0	500.0	498.6	497.9	0.8	0.9	44.61	19.4	19.2	27.4	25.6	1.72	15.915		
600.0	600.0	597.8	596.8	1.0	1.2	41.88	26.5	23.7	35.7	33.6	2.06	17.326		
700.0	700.0	696.9	695.4	1.2	1.4	41.82	33.6	30.0	45.3	42.9	2.40	18.844		
800.0	800.0	795.7	793.6	1.4	1.6	43.06	40.7	38.0	56.0	53.3	2.74	20.419		
900.0	900.0	894.2	891.4	1.5	1.9	44.90	47.8	47.6	68.0	64.9	3.08	22.052		
1,000.0	1,000.0	992.3	988.6	1.7	2.2	47.00	54.9	58.9	81.4	77.9	3.43	23.751		
1,100.0	1,100.0	1,090.2	1,085.3	1.9	2.5	-2.27	62.1	71.8	95.2	91.4	3.76	25.287		
1,200.0	1,200.0	1,187.8	1,181.6	2.1	2.8	-0.15	69.3	86.3	108.7	104.6	4.10	26.502		
1,300.0	1,299.9	1,285.2	1,277.4	2.3	3.1	1.97	76.5	102.4	122.1	117.6	4.44	27.483		
1,400.0	1,399.7	1,382.4	1,372.7	2.4	3.5	4.10	83.7	120.2	135.2	130.4	4.78	28.292		
1,500.0	1,499.4	1,479.4	1,467.5	2.6	3.9	6.24	90.9	139.4	148.2	143.1	5.12	28.973		
1,600.0	1,598.9	1,576.1	1,561.6	2.8	4.3	8.40	98.1	160.3	161.2	155.7	5.45	29.558		
1,700.0	1,698.3	1,673.9	1,656.5	3.1	4.7	10.56	105.4	182.7	173.9	168.1	5.80	29.995		
1,800.0	1,797.4	1,773.0	1,752.6	3.3	5.1	12.59	112.8	205.7	185.4	179.3	6.16	30.113		
1,900.0	1,896.3	1,872.3	1,848.9	3.6	5.6	14.50	120.3	228.7	195.4	188.9	6.52	29.955		
1,915.7	1,911.9	1,887.9	1,864.1	3.6	5.7	14.79	121.4	232.4	196.9	190.3	6.58	29.908		
2,000.0	1,995.0	1,971.7	1,945.3	3.8	6.0	16.33	127.7	251.8	204.6	197.7	6.90	29.647		
2,100.0	2,093.8	2,071.0	2,041.7	4.1	6.5	18.01	135.1	274.8	213.9	206.6	7.29	29.358		
2,200.0	2,192.5	2,170.4	2,138.1	4.4	6.9	19.55	142.6	297.8	223.4	215.7	7.68	29.084		
2,300.0	2,291.2	2,269.8	2,234.5	4.7	7.4	20.96	150.0	320.9	233.0	224.9	8.08	28.822		
2,400.0	2,389.9	2,369.2	2,330.8	5.0	7.8	22.26	157.5	343.9	242.7	234.2	8.50	28.568		
2,500.0	2,488.7	2,468.5	2,427.2	5.3	8.3	23.46	164.9	366.9	252.6	243.7	8.92	28.322		
2,600.0	2,587.4	2,567.9	2,523.6	5.6	8.8	24.57	172.3	390.0	262.6	253.2	9.35	28.083		
2,700.0	2,686.1	2,667.3	2,620.0	5.9	9.2	25.60	179.8	413.0	272.6	262.8	9.79	27.851		
2,800.0	2,784.8	2,766.7	2,716.4	6.2	9.7	26.55	187.2	436.1	282.7	272.5	10.24	27.626		
2,900.0	2,883.6	2,866.1	2,812.8	6.5	10.1	27.44	194.6	459.1	293.0	282.3	10.69	27.408		
3,000.0	2,982.3	2,965.4	2,909.2	6.9	10.6	28.27	202.1	482.1	303.2	292.1	11.15	27.197		
3,100.0	3,081.0	3,064.8	3,005.5	7.2	11.1	29.04	209.5	505.2	313.6	302.0	11.62	26.994		
3,200.0	3,179.7	3,164.2	3,101.9	7.5	11.5	29.77	217.0	528.2	324.0	311.9	12.09	26.798		
3,300.0	3,278.5	3,263.6	3,198.3	7.8	12.0	30.45	224.4	551.2	334.4	321.8	12.57	26.609		
3,400.0	3,377.2	3,363.0	3,294.7	8.1	12.5	31.09	231.8	574.3	344.9	331.8	13.05	26.427		
3,500.0	3,475.9	3,462.3	3,391.1	8.4	12.9	31.69	239.3	597.3	355.4	341.9	13.54	26.253		
3,600.0	3,574.6	3,561.7	3,487.5	8.8	13.4	32.25	246.7	620.3	365.9	351.9	14.03	26.085		
3,700.0	3,673.4	3,661.1	3,583.9	9.1	13.8	32.79	254.2	643.4	376.5	362.0	14.52	25.924		
3,800.0	3,772.1	3,760.5	3,680.2	9.4	14.3	33.29	261.6	666.4	387.2	372.1	15.02	25.770		
3,900.0	3,870.8	3,859.8	3,776.6	9.7	14.8	33.77	269.0	689.4	397.8	382.3	15.53	25.622		
4,000.0	3,969.5	3,959.2	3,873.0	10.0	15.2	34.23	276.5	712.5	408.5	392.4	16.03	25.480		
4,100.0	4,068.3	4,058.6	3,969.4	10.4	15.7	34.66	283.9	735.5	419.2	402.6	16.54	25.344		
4,200.0	4,167.0	4,158.0	4,065.8	10.7	16.2	35.06	291.4	758.6	429.9	412.8	17.05	25.213		
4,300.0	4,265.7	4,257.4	4,162.2	11.0	16.6	35.45	298.8	781.6	440.6	423.1	17.56	25.088		
4,400.0	4,364.4	4,356.7	4,258.5	11.3	17.1	35.82	306.2	804.6	451.4	433.3	18.08	24.967		
4,500.0	4,463.2	4,456.1	4,354.9	11.7	17.6	36.18	313.7	827.7	462.2	443.6	18.60	24.852		
4,600.0	4,561.9	4,555.5	4,451.3	12.0	18.0	36.51	321.1	850.7	473.0	453.8	19.12	24.741		
4,700.0	4,660.6	4,654.9	4,547.7	12.3	18.5	36.84	328.6	873.7	483.8	464.1	19.64	24.634		
4,800.0	4,759.3	4,754.2	4,644.1	12.6	19.0	37.14	336.0	896.8	494.6	474.4	20.16	24.532		
4,900.0	4,858.1	4,853.6	4,740.5	13.0	19.4	37.44	343.4	919.8	505.4	484.8	20.69	24.433		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,000.0	4,956.8	4,953.0	4,836.9	13.3	19.9	37.72	350.9	942.8	516.3	495.1	21.21	24.338	
5,100.0	5,055.5	5,052.4	4,933.2	13.6	20.4	37.99	358.3	965.9	527.2	505.4	21.74	24.247	
5,200.0	5,154.2	5,151.8	5,029.6	13.9	20.8	38.25	365.8	988.9	538.0	515.8	22.27	24.160	
5,300.0	5,253.0	5,251.1	5,126.0	14.3	21.3	38.50	373.2	1,012.0	548.9	526.1	22.80	24.075	
5,400.0	5,351.7	5,350.5	5,222.4	14.6	21.7	38.74	380.6	1,035.0	559.8	536.5	23.33	23.994	
5,500.0	5,450.4	5,449.9	5,318.8	14.9	22.2	38.97	388.1	1,058.0	570.7	546.8	23.86	23.915	
5,600.0	5,549.1	5,549.3	5,415.2	15.3	22.7	39.19	395.5	1,081.1	581.6	557.2	24.40	23.840	
5,700.0	5,647.9	5,648.6	5,511.5	15.6	23.1	39.41	402.9	1,104.1	592.5	567.6	24.93	23.767	
5,800.0	5,746.6	5,748.0	5,607.9	15.9	23.6	39.61	410.4	1,127.1	603.5	578.0	25.47	23.696	
5,900.0	5,845.3	5,847.4	5,704.3	16.2	24.1	39.81	417.8	1,150.2	614.4	588.4	26.00	23.628	
6,000.0	5,944.1	5,946.8	5,800.7	16.6	24.5	40.00	425.3	1,173.2	625.3	598.8	26.54	23.562	
6,100.0	6,042.8	6,046.2	5,897.1	16.9	25.0	40.19	432.7	1,196.2	636.3	609.2	27.08	23.499	
6,200.0	6,141.5	6,145.5	5,993.5	17.2	25.5	40.37	440.1	1,219.3	647.2	619.6	27.62	23.437	
6,300.0	6,240.2	6,244.9	6,089.9	17.5	25.9	40.54	447.6	1,242.3	658.2	630.1	28.16	23.378	
6,400.0	6,339.0	6,344.3	6,186.2	17.9	26.4	40.71	455.0	1,265.3	669.2	640.5	28.69	23.320	
6,500.0	6,437.7	6,443.7	6,282.6	18.2	26.9	40.87	462.5	1,288.4	680.2	650.9	29.24	23.265	
6,600.0	6,536.4	6,543.0	6,379.0	18.5	27.3	41.03	469.9	1,311.4	691.1	661.4	29.78	23.211	
6,700.0	6,635.1	6,642.4	6,475.4	18.9	27.8	41.18	477.3	1,334.5	702.1	671.8	30.32	23.158	
6,800.0	6,733.9	6,741.8	6,571.8	19.2	28.3	41.33	484.8	1,357.5	713.1	682.2	30.86	23.108	
6,900.0	6,832.6	6,841.2	6,668.2	19.5	28.7	41.47	492.2	1,380.5	724.1	692.7	31.40	23.059	
7,000.0	6,931.3	6,940.6	6,764.5	19.8	29.2	41.61	499.7	1,403.6	735.1	703.1	31.95	23.011	
7,100.0	7,030.0	7,039.9	6,860.9	20.2	29.7	41.74	507.1	1,426.6	746.1	713.6	32.49	22.965	
7,191.8	7,120.7	7,131.2	6,949.4	20.5	30.1	41.86	513.9	1,447.8	756.2	723.2	32.99	22.923	
7,200.0	7,128.8	7,139.3	6,957.3	20.5	30.1	37.56	514.5	1,449.6	757.1	724.1	33.03	22.922	
7,250.0	7,178.3	7,189.0	7,005.5	20.6	30.4	3.31	518.3	1,461.1	762.2	729.0	33.15	22.990	
7,300.0	7,227.8	7,238.4	7,053.4	20.7	30.6	-28.45	522.0	1,472.6	766.7	733.6	33.09	23.171	
7,350.0	7,276.8	7,287.1	7,100.6	20.8	30.8	-46.61	525.6	1,483.9	770.8	737.9	32.85	23.465	
7,400.0	7,325.1	7,334.5	7,146.6	20.8	31.1	-56.78	529.1	1,494.9	774.4	742.0	32.43	23.881	
7,450.0	7,372.2	7,380.4	7,191.2	20.8	31.2	-63.13	530.3	1,505.5	777.9	746.0	31.88	24.403	
7,500.0	7,417.7	7,427.5	7,237.0	20.8	31.4	-67.52	527.6	1,516.5	781.3	750.1	31.28	24.975	
7,550.0	7,461.4	7,476.1	7,283.7	20.7	31.6	-70.83	520.8	1,527.6	784.7	754.0	30.67	25.581	
7,600.0	7,502.9	7,526.1	7,331.2	20.7	31.7	-73.50	509.6	1,539.0	787.8	757.8	30.07	26.199	
7,650.0	7,541.9	7,577.8	7,379.0	20.6	31.8	-75.76	493.6	1,550.4	790.9	761.4	29.51	26.802	
7,700.0	7,578.0	7,631.4	7,426.8	20.5	31.9	-77.74	472.5	1,561.8	793.7	764.7	29.01	27.364	
7,750.0	7,611.1	7,686.9	7,474.1	20.4	32.0	-79.53	445.8	1,573.1	796.3	767.7	28.58	27.858	
7,800.0	7,640.8	7,744.5	7,520.3	20.4	32.1	-81.18	413.3	1,584.2	798.6	770.3	28.26	28.262	
7,850.0	7,667.0	7,804.2	7,564.6	20.3	32.2	-82.71	374.6	1,594.8	800.6	772.5	28.03	28.560	
7,900.0	7,689.4	7,866.3	7,606.3	20.3	32.2	-84.14	329.7	1,604.7	802.1	774.2	27.91	28.742	
7,950.0	7,707.9	7,930.7	7,644.2	20.3	32.2	-85.49	278.6	1,613.8	803.1	775.2	27.87	28.814	
8,000.0	7,722.2	7,997.3	7,677.3	20.3	32.3	-86.73	221.3	1,621.7	803.6	775.6	27.91	28.788	
8,050.0	7,732.4	8,066.1	7,704.5	20.3	32.3	-87.88	158.5	1,628.2	803.4	775.3	28.03	28.656	
8,100.0	7,738.4	8,136.9	7,724.7	20.4	32.3	-88.90	90.9	1,633.0	802.4	774.2	28.20	28.449	
8,143.7	7,740.0	8,200.1	7,735.7	20.5	32.4	-89.69	28.8	1,635.7	800.9	772.5	28.39	28.214	
8,200.0	7,740.0	8,279.3	7,740.0	20.6	32.5	-90.00	-50.2	1,636.7	797.7	769.0	28.70	27.798	
8,300.0	7,740.0	8,379.0	7,740.0	21.0	32.7	-90.00	-150.0	1,636.7	790.7	761.1	29.57	26.743	
8,400.0	7,740.0	8,478.8	7,740.0	21.5	32.9	-90.00	-249.8	1,636.7	783.7	752.9	30.80	25.446	
8,443.7	7,740.0	8,522.4	7,740.0	21.8	33.1	-90.00	-293.3	1,636.7	780.7	749.2	31.45	24.826	
8,500.0	7,740.0	8,578.6	7,740.0	22.2	33.3	-90.00	-349.5	1,636.7	777.0	744.7	32.37	24.007	
8,600.0	7,740.0	8,678.4	7,740.0	22.9	33.7	-90.00	-449.4	1,636.7	771.9	737.7	34.22	22.555	
8,700.0	7,740.0	8,778.4	7,740.0	23.7	34.2	-90.00	-549.3	1,636.7	768.5	732.2	36.32	21.157	
8,800.0	7,740.0	8,878.4	7,740.0	24.6	34.8	-90.00	-649.3	1,636.7	766.9	728.3	38.63	19.852	
8,843.7	7,740.0	8,922.0	7,740.0	25.1	35.1	-90.00	-693.0	1,636.7	766.7	727.0	39.69	19.317	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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	
8,843.7	7,740.0	8,922.0	7,740.0	25.1	35.1	-90.00	-693.0	1,636.7	766.7	727.0	39.69	19.317	
8,900.0	7,740.0	8,978.4	7,740.0	25.6	35.5	-90.00	-749.3	1,636.7	766.7	725.6	41.11	18.652	
9,000.0	7,740.0	9,078.4	7,740.0	26.7	36.3	-90.00	-849.3	1,636.7	766.7	723.0	43.72	17.536	
9,100.0	7,740.0	9,178.4	7,740.0	27.8	37.1	-90.00	-949.3	1,636.7	766.7	720.3	46.46	16.503	
9,200.0	7,740.0	9,278.4	7,740.0	29.0	38.0	-90.00	-1,049.3	1,636.7	766.7	717.4	49.29	15.555	
9,300.0	7,740.0	9,378.4	7,740.0	30.2	38.9	-90.00	-1,149.3	1,636.7	766.7	714.5	52.21	14.686	
9,343.7	7,740.0	9,422.0	7,740.0	30.8	39.3	-90.00	-1,193.0	1,636.7	766.7	713.2	53.50	14.330	
9,400.7	7,740.0	9,479.1	7,740.0	31.6	39.9	-90.00	-1,250.0	1,636.7	766.5	711.2	55.22	13.881	
9,500.0	7,740.0	9,578.4	7,740.0	32.9	41.0	-90.00	-1,349.3	1,636.7	765.5	707.2	58.24	13.144	
9,600.0	7,740.0	9,678.3	7,740.0	34.3	42.1	-90.00	-1,449.3	1,636.7	764.5	703.1	61.33	12.465	
9,700.0	7,740.0	9,778.3	7,740.0	35.7	43.2	-90.00	-1,549.3	1,636.7	763.5	699.0	64.47	11.843	
9,800.0	7,740.0	9,878.3	7,740.0	37.1	44.4	-90.00	-1,649.3	1,636.7	762.5	694.8	67.64	11.273	
9,900.0	7,740.0	9,978.3	7,740.0	38.6	45.6	-90.00	-1,749.3	1,636.7	761.5	690.6	70.84	10.749	
10,000.0	7,740.0	10,078.3	7,740.0	40.1	46.9	-90.00	-1,849.3	1,636.7	760.5	686.4	74.07	10.267	
10,100.0	7,740.0	10,178.3	7,740.0	41.6	48.2	-90.00	-1,949.3	1,636.7	759.5	682.2	77.33	9.822	
10,200.0	7,740.0	10,278.3	7,740.0	43.1	49.5	-90.00	-2,049.3	1,636.7	758.5	677.9	80.60	9.410	
10,300.0	7,740.0	10,378.3	7,740.0	44.7	50.8	-90.00	-2,149.3	1,636.7	757.5	673.6	83.90	9.029	
10,400.0	7,740.0	10,478.3	7,740.0	46.3	52.2	-90.00	-2,249.3	1,636.7	756.5	669.3	87.21	8.674	
10,500.0	7,740.0	10,578.3	7,740.0	47.8	53.6	-90.00	-2,349.3	1,636.7	755.5	665.0	90.54	8.345	
10,600.0	7,740.0	10,678.3	7,740.0	49.4	55.0	-90.00	-2,449.3	1,636.7	754.5	660.6	93.88	8.037	
10,700.0	7,740.0	10,778.3	7,740.0	51.0	56.4	-90.00	-2,549.3	1,636.7	753.5	656.3	97.23	7.750	
10,800.0	7,740.0	10,878.3	7,740.0	52.6	57.9	-90.00	-2,649.3	1,636.7	752.5	651.9	100.59	7.481	
10,900.0	7,740.0	10,978.3	7,740.0	54.2	59.3	-90.00	-2,749.3	1,636.7	751.5	647.6	103.96	7.229	
11,000.0	7,740.0	11,078.3	7,740.0	55.9	60.8	-90.00	-2,849.3	1,636.7	750.5	643.2	107.35	6.992	
11,100.0	7,740.0	11,178.3	7,740.0	57.5	62.3	-90.00	-2,949.2	1,636.7	749.5	638.8	110.73	6.769	
11,200.0	7,740.0	11,278.3	7,740.0	59.1	63.8	-90.00	-3,049.2	1,636.7	748.5	634.4	114.13	6.559	
11,300.0	7,740.0	11,378.3	7,740.0	60.8	65.4	-90.00	-3,149.2	1,636.7	747.5	630.0	117.53	6.360	
11,400.0	7,740.0	11,478.3	7,740.0	62.4	66.9	-90.00	-3,249.2	1,636.7	746.6	625.6	120.94	6.173	
11,500.0	7,740.0	11,578.3	7,740.0	64.1	68.4	-90.00	-3,349.2	1,636.7	745.6	621.2	124.35	5.995	
11,600.0	7,740.0	11,678.2	7,740.0	65.8	70.0	-90.00	-3,449.2	1,636.7	744.6	616.8	127.77	5.827	
11,700.0	7,740.0	11,778.2	7,740.0	67.4	71.6	-90.00	-3,549.2	1,636.7	743.6	612.4	131.20	5.668	
11,800.0	7,740.0	11,878.2	7,740.0	69.1	73.1	-90.00	-3,649.2	1,636.7	742.6	607.9	134.63	5.516	
11,900.0	7,740.0	11,978.2	7,740.0	70.8	74.7	-90.00	-3,749.2	1,636.7	741.6	603.5	138.06	5.371	
12,000.0	7,740.0	12,078.2	7,740.0	72.5	76.3	-90.00	-3,849.2	1,636.7	740.6	599.1	141.49	5.234	
12,100.0	7,740.0	12,178.2	7,740.0	74.1	77.9	-90.00	-3,949.2	1,636.7	739.6	594.6	144.93	5.103	
12,200.0	7,740.0	12,278.2	7,740.0	75.8	79.5	-90.00	-4,049.2	1,636.7	738.6	590.2	148.38	4.978	
12,300.0	7,740.0	12,378.2	7,740.0	77.5	81.1	-90.00	-4,149.2	1,636.7	737.6	585.8	151.82	4.858	
12,400.0	7,740.0	12,478.2	7,740.0	79.2	82.7	-90.00	-4,249.2	1,636.7	736.6	581.3	155.27	4.744	
12,500.0	7,740.0	12,578.2	7,740.0	80.9	84.3	-90.00	-4,349.2	1,636.7	735.6	576.9	158.72	4.635	
12,600.0	7,740.0	12,678.2	7,740.0	82.6	86.0	-90.00	-4,449.2	1,636.7	734.6	572.4	162.17	4.530	
12,700.0	7,740.0	12,778.2	7,740.0	84.3	87.6	-90.00	-4,549.2	1,636.7	733.6	568.0	165.63	4.429	
12,800.0	7,740.0	12,878.2	7,740.0	86.0	89.2	-90.00	-4,649.2	1,636.7	732.6	563.5	169.09	4.333	
12,900.0	7,740.0	12,978.2	7,740.0	87.7	90.9	-90.00	-4,749.2	1,636.7	731.6	559.1	172.55	4.240	
13,000.0	7,740.0	13,078.2	7,740.0	89.4	92.5	-90.00	-4,849.2	1,636.7	730.6	554.6	176.01	4.151	
13,100.0	7,740.0	13,178.2	7,740.0	91.1	94.2	-90.00	-4,949.1	1,636.7	729.6	550.2	179.47	4.065	
13,200.0	7,740.0	13,278.2	7,740.0	92.8	95.8	-90.00	-5,049.1	1,636.7	728.6	545.7	182.94	3.983	
13,300.0	7,740.0	13,378.2	7,740.0	94.5	97.5	-90.00	-5,149.1	1,636.7	727.6	541.2	186.40	3.904	
13,400.0	7,740.0	13,478.2	7,740.0	96.3	99.1	-90.00	-5,249.1	1,636.7	726.6	536.8	189.87	3.827	
13,500.0	7,740.0	13,578.2	7,740.0	98.0	100.8	-90.00	-5,349.1	1,636.7	725.6	532.3	193.34	3.753	
13,600.0	7,740.0	13,678.2	7,740.0	99.7	102.5	-90.00	-5,449.1	1,636.7	724.7	527.8	196.81	3.682	
13,700.0	7,740.0	13,778.1	7,740.0	101.4	104.1	-90.00	-5,549.1	1,636.7	723.7	523.4	200.29	3.613	
13,800.0	7,740.0	13,878.1	7,740.0	103.1	105.8	-90.00	-5,649.1	1,636.7	722.7	518.9	203.76	3.547	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	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							
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)				
13,900.0	7,740.0	13,978.1	7,740.0	104.8	107.5	-90.00	-5,749.1	1,636.7	721.7	514.4	207.24	3.482		
14,000.0	7,740.0	14,078.1	7,740.0	106.6	109.2	-90.00	-5,849.1	1,636.7	720.7	510.0	210.71	3.420		
14,100.0	7,740.0	14,178.1	7,740.0	108.3	110.8	-90.00	-5,949.1	1,636.7	719.7	505.5	214.19	3.360		
14,200.0	7,740.0	14,278.1	7,740.0	110.0	112.5	-90.00	-6,049.1	1,636.7	718.7	501.0	217.67	3.302		
14,300.0	7,740.0	14,378.1	7,740.0	111.7	114.2	-90.00	-6,149.1	1,636.7	717.7	496.5	221.14	3.245		
14,400.0	7,740.0	14,478.1	7,740.0	113.5	115.9	-90.00	-6,249.1	1,636.7	716.7	492.1	224.62	3.191		
14,500.0	7,740.0	14,578.1	7,740.0	115.2	117.6	-90.00	-6,349.1	1,636.7	715.7	487.6	228.11	3.138		
14,600.0	7,740.0	14,678.1	7,740.0	116.9	119.3	-90.00	-6,449.1	1,636.7	714.7	483.1	231.59	3.086		
14,700.0	7,740.0	14,778.1	7,740.0	118.6	121.0	-90.00	-6,549.1	1,636.7	713.7	478.6	235.07	3.036		
14,800.0	7,740.0	14,878.1	7,740.0	120.4	122.6	-90.00	-6,649.1	1,636.7	712.7	474.2	238.55	2.988		
14,900.0	7,740.0	14,978.1	7,740.0	122.1	124.3	-90.00	-6,749.1	1,636.7	711.7	469.7	242.04	2.941		
15,000.0	7,740.0	15,078.1	7,740.0	123.8	126.0	-90.00	-6,849.1	1,636.7	710.7	465.2	245.52	2.895		
15,100.0	7,740.0	15,178.1	7,740.0	125.6	127.7	-90.00	-6,949.0	1,636.7	709.7	460.7	249.01	2.850		
15,200.0	7,740.0	15,278.1	7,740.0	127.3	129.4	-90.00	-7,049.0	1,636.7	708.7	456.2	252.49	2.807		
15,300.0	7,740.0	15,378.1	7,740.0	129.0	131.1	-90.00	-7,149.0	1,636.7	707.7	451.8	255.98	2.765		
15,400.0	7,740.0	15,478.1	7,740.0	130.7	132.8	-90.00	-7,249.0	1,636.7	706.7	447.3	259.46	2.724		
15,500.0	7,740.0	15,578.1	7,740.0	132.5	134.5	-90.00	-7,349.0	1,636.7	705.7	442.8	262.95	2.684		
15,600.0	7,740.0	15,678.1	7,740.0	134.2	136.2	-90.00	-7,449.0	1,636.7	704.7	438.3	266.44	2.645		
15,700.0	7,740.0	15,778.0	7,740.0	135.9	138.0	-90.00	-7,549.0	1,636.7	703.7	433.8	269.93	2.607		
15,800.0	7,740.0	15,878.0	7,740.0	137.7	139.7	-90.00	-7,649.0	1,636.7	702.8	429.3	273.42	2.570		
15,900.0	7,740.0	15,978.0	7,740.0	139.4	141.4	-90.00	-7,749.0	1,636.7	701.8	424.8	276.91	2.534		
16,000.0	7,740.0	16,078.0	7,740.0	141.1	143.1	-90.00	-7,849.0	1,636.7	700.8	420.4	280.40	2.499		
16,084.2	7,740.0	16,162.2	7,740.0	142.6	144.5	-90.00	-7,933.2	1,636.7	699.9	416.6	283.34	2.470 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Sosa 2E-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Sosa 2E-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #4	Offset TVD Reference:	Offset Datum

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

Offset Depths are relative to Offset Datum

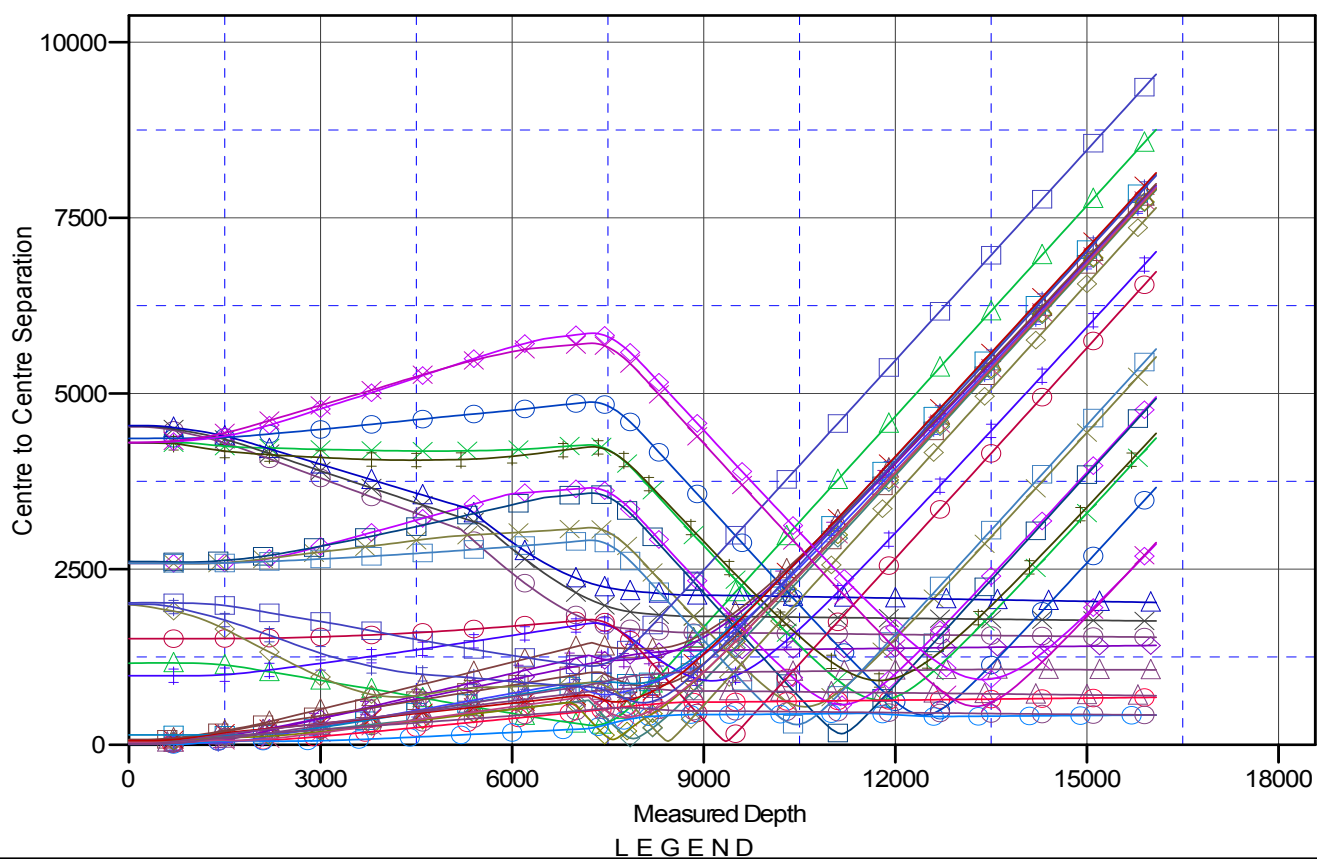
Central Meridian is -105.500000 °

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.29°

Ladder Plot



Woolley-Sosa 2D-7H-E168, HZ, Plan #3 V0	Thomas 7-12 (Existing), Existing, NO SURVEYS V0	Woolley-Sosa 2D-7H-E168, HZ, Plan #3
Woolley-Sosa 2E-7H-E168, HZ, Plan #3 V0	THOMAS 2-8-7 (EXISTING), ENCANA WELL, SURVEYS V0	Woolley-Sosa 2B-7H-E168, HZ, Plan #3
Woolley-Sosa 2F-7H-E168, HZ, Plan #3 V0	SOSAA UNIT 1 (EXISTING), EXISTING, EXISTING V0	Sosa 11-18, DD, DD V0
Woolley-Sosa 2G-7H-E168, HZ, Plan #3 V0	THOMAS E UNIT 1 (EXISTING), Existing, NO SURVEYS V0	Woolley-Sosa 2F-7H-E168, HZ, Plan #3
Woolley-Sosa 2H-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2C-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2G-7H-E168, HZ, Plan #3
Woolley-Sosa 2I-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2D-7H-E168, HZ, Plan #3 V0	Sosa 12-18, DD, DD V0
Woolley-Sosa 2J-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2E-7H-E168, HZ, Plan #3 V0	Sosa 22-18, DD, DD V0
Woolley-Sosa 2K-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2F-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2L-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2G-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2M-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2H-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2N-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2I-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2O-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2J-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2P-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2K-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2Q-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2L-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2R-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2M-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2S-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2N-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2T-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2O-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2U-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2P-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2V-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2Q-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2W-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2R-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2X-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2S-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2Y-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2T-7H-E168, HZ, Plan #3 V0	
Woolley-Sosa 2Z-7H-E168, HZ, Plan #3 V0	Woolley-Sosa 2U-7H-E168, HZ, Plan #3 V0	

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