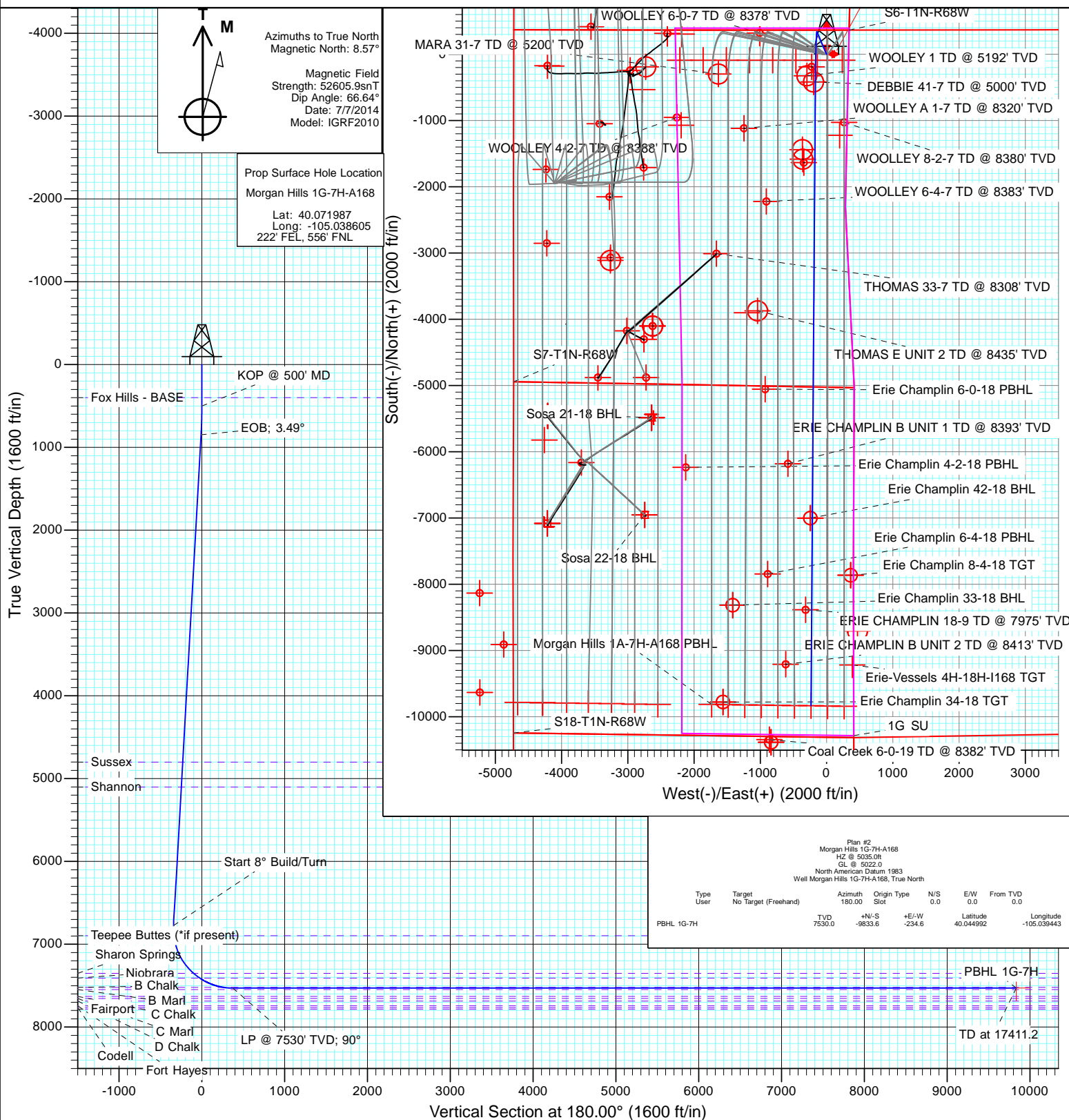


Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0		KOP @ 500' MD
3	848.7	3.49	336.99	848.4	9.8	-4.1	1.00	336.99	-9.8		EOB; 3.49°
4	6785.3	3.49	336.99	6774.1	342.1	-145.3	0.00	0.00	-342.1		Start 3° Build/Turn
5	7950.2	90.00	180.40	7530.0	-372.9	-168.6	8.00	-156.55	372.9		LP @ 7530' TVD; 90°
6	17411.2	90.00	180.40	7530.0	-9833.6	-234.6	0.00	0.00	9833.6	PBHL 1G-7H	TD at 17411.2



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	HZ @ 5035.0ft
Project:	DJ Wattenberg	MD Reference:	HZ @ 5035.0ft
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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	Morgan Hills 1G-7H-A168					
Well Position	+N/-S	0.0 ft	Northing:	1,269,408.38 ft	Latitude:	40.071987
	+E/-W	0.0 ft	Easting:	3,129,130.70 ft	Longitude:	-105.038605
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	5,022.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/7/2014	8.57	66.64	52,606

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	180.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
848.7	3.49	336.99	848.4	9.8	-4.1	1.00	1.00	0.00	336.99	
6,785.3	3.49	336.99	6,774.1	342.1	-145.3	0.00	0.00	0.00	0.00	
7,950.2	90.00	180.40	7,530.0	-372.9	-168.6	8.00	7.43	-13.44	-156.55	
17,411.2	90.00	180.40	7,530.0	-9,833.6	-234.6	0.00	0.00	0.00	0.00	PBHL 1G-7H

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	HZ @ 5035.0ft
Project:	DJ Wattenberg	MD Reference:	HZ @ 5035.0ft
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500' MD
600.0	1.00	336.99	600.0	0.8	-0.3	-0.8	1.00	1.00	
700.0	2.00	336.99	700.0	3.2	-1.4	-3.2	1.00	1.00	
800.0	3.00	336.99	799.9	7.2	-3.1	-7.2	1.00	1.00	
848.7	3.49	336.99	848.4	9.8	-4.1	-9.8	1.00	1.00	EOB; 3.49°
900.0	3.49	336.99	899.7	12.6	-5.4	-12.6	0.00	0.00	
1,000.0	3.49	336.99	999.5	18.2	-7.7	-18.2	0.00	0.00	
1,100.0	3.49	336.99	1,099.3	23.8	-10.1	-23.8	0.00	0.00	
1,200.0	3.49	336.99	1,199.1	29.4	-12.5	-29.4	0.00	0.00	
1,300.0	3.49	336.99	1,298.9	35.0	-14.9	-35.0	0.00	0.00	
1,400.0	3.49	336.99	1,398.8	40.6	-17.3	-40.6	0.00	0.00	
1,500.0	3.49	336.99	1,498.6	46.2	-19.6	-46.2	0.00	0.00	
1,600.0	3.49	336.99	1,598.4	51.8	-22.0	-51.8	0.00	0.00	
1,700.0	3.49	336.99	1,698.2	57.4	-24.4	-57.4	0.00	0.00	
1,800.0	3.49	336.99	1,798.0	63.0	-26.8	-63.0	0.00	0.00	
1,900.0	3.49	336.99	1,897.8	68.6	-29.1	-68.6	0.00	0.00	
2,000.0	3.49	336.99	1,997.7	74.2	-31.5	-74.2	0.00	0.00	
2,100.0	3.49	336.99	2,097.5	79.8	-33.9	-79.8	0.00	0.00	
2,200.0	3.49	336.99	2,197.3	85.4	-36.3	-85.4	0.00	0.00	
2,300.0	3.49	336.99	2,297.1	91.0	-38.6	-91.0	0.00	0.00	
2,400.0	3.49	336.99	2,396.9	96.6	-41.0	-96.6	0.00	0.00	
2,500.0	3.49	336.99	2,496.7	102.2	-43.4	-102.2	0.00	0.00	
2,600.0	3.49	336.99	2,596.5	107.8	-45.8	-107.8	0.00	0.00	
2,700.0	3.49	336.99	2,696.4	113.4	-48.2	-113.4	0.00	0.00	
2,800.0	3.49	336.99	2,796.2	119.0	-50.5	-119.0	0.00	0.00	
2,900.0	3.49	336.99	2,896.0	124.6	-52.9	-124.6	0.00	0.00	
3,000.0	3.49	336.99	2,995.8	130.2	-55.3	-130.2	0.00	0.00	
3,100.0	3.49	336.99	3,095.6	135.8	-57.7	-135.8	0.00	0.00	
3,200.0	3.49	336.99	3,195.4	141.4	-60.0	-141.4	0.00	0.00	
3,300.0	3.49	336.99	3,295.2	147.0	-62.4	-147.0	0.00	0.00	
3,400.0	3.49	336.99	3,395.1	152.6	-64.8	-152.6	0.00	0.00	
3,500.0	3.49	336.99	3,494.9	158.2	-67.2	-158.2	0.00	0.00	
3,600.0	3.49	336.99	3,594.7	163.8	-69.6	-163.8	0.00	0.00	
3,700.0	3.49	336.99	3,694.5	169.4	-71.9	-169.4	0.00	0.00	
3,800.0	3.49	336.99	3,794.3	175.0	-74.3	-175.0	0.00	0.00	
3,900.0	3.49	336.99	3,894.1	180.6	-76.7	-180.6	0.00	0.00	
4,000.0	3.49	336.99	3,994.0	186.2	-79.1	-186.2	0.00	0.00	
4,100.0	3.49	336.99	4,093.8	191.8	-81.4	-191.8	0.00	0.00	
4,200.0	3.49	336.99	4,193.6	197.4	-83.8	-197.4	0.00	0.00	
4,300.0	3.49	336.99	4,293.4	202.9	-86.2	-202.9	0.00	0.00	
4,400.0	3.49	336.99	4,393.2	208.5	-88.6	-208.5	0.00	0.00	
4,500.0	3.49	336.99	4,493.0	214.1	-90.9	-214.1	0.00	0.00	
4,600.0	3.49	336.99	4,592.8	219.7	-93.3	-219.7	0.00	0.00	
4,700.0	3.49	336.99	4,692.7	225.3	-95.7	-225.3	0.00	0.00	
4,800.0	3.49	336.99	4,792.5	230.9	-98.1	-230.9	0.00	0.00	
4,809.5	3.49	336.99	4,802.0	231.5	-98.3	-231.5	0.00	0.00	Sussex
4,900.0	3.49	336.99	4,892.3	236.5	-100.5	-236.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	HZ @ 5035.0ft
Project:	DJ Wattenberg	MD Reference:	HZ @ 5035.0ft
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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	3.49	336.99	4,992.1	242.1	-102.8	-242.1	0.00	0.00	
5,100.0	3.49	336.99	5,091.9	247.7	-105.2	-247.7	0.00	0.00	
5,110.1	3.49	336.99	5,102.0	248.3	-105.5	-248.3	0.00	0.00	Shannon
5,200.0	3.49	336.99	5,191.7	253.3	-107.6	-253.3	0.00	0.00	
5,300.0	3.49	336.99	5,291.5	258.9	-110.0	-258.9	0.00	0.00	
5,400.0	3.49	336.99	5,391.4	264.5	-112.3	-264.5	0.00	0.00	
5,500.0	3.49	336.99	5,491.2	270.1	-114.7	-270.1	0.00	0.00	
5,600.0	3.49	336.99	5,591.0	275.7	-117.1	-275.7	0.00	0.00	
5,700.0	3.49	336.99	5,690.8	281.3	-119.5	-281.3	0.00	0.00	
5,800.0	3.49	336.99	5,790.6	286.9	-121.9	-286.9	0.00	0.00	
5,900.0	3.49	336.99	5,890.4	292.5	-124.2	-292.5	0.00	0.00	
6,000.0	3.49	336.99	5,990.3	298.1	-126.6	-298.1	0.00	0.00	
6,100.0	3.49	336.99	6,090.1	303.7	-129.0	-303.7	0.00	0.00	
6,200.0	3.49	336.99	6,189.9	309.3	-131.4	-309.3	0.00	0.00	
6,300.0	3.49	336.99	6,289.7	314.9	-133.7	-314.9	0.00	0.00	
6,400.0	3.49	336.99	6,389.5	320.5	-136.1	-320.5	0.00	0.00	
6,500.0	3.49	336.99	6,489.3	326.1	-138.5	-326.1	0.00	0.00	
6,600.0	3.49	336.99	6,589.1	331.7	-140.9	-331.7	0.00	0.00	
6,700.0	3.49	336.99	6,689.0	337.3	-143.2	-337.3	0.00	0.00	
6,785.3	3.49	336.99	6,774.1	342.1	-145.3	-342.1	0.00	0.00	Start 8° Build/Turn
6,800.0	2.45	325.94	6,788.8	342.7	-145.6	-342.7	8.00	-7.03	
6,850.0	2.42	215.39	6,838.8	342.8	-146.8	-342.8	8.00	-0.07	
6,900.0	6.14	193.41	6,888.6	339.3	-148.1	-339.3	8.00	7.44	
6,909.5	6.88	191.98	6,898.0	338.3	-148.3	-338.3	8.00	7.81	Teepee Buttes (*if present)
6,950.0	10.08	188.23	6,938.1	332.4	-149.3	-332.4	8.00	7.89	
7,000.0	14.05	185.95	6,987.0	322.0	-150.6	-322.0	8.00	7.94	
7,050.0	18.03	184.66	7,035.0	308.2	-151.8	-308.2	8.00	7.97	
7,100.0	22.02	183.83	7,082.0	291.2	-153.1	-291.2	8.00	7.98	
7,150.0	26.01	183.24	7,127.7	270.9	-154.3	-270.9	8.00	7.99	
7,200.0	30.01	182.80	7,171.8	247.4	-155.6	-247.4	8.00	7.99	
7,250.0	34.01	182.46	7,214.2	221.0	-156.8	-221.0	8.00	7.99	
7,300.0	38.00	182.18	7,254.6	191.6	-158.0	-191.6	8.00	7.99	
7,350.0	42.00	181.94	7,292.9	159.5	-159.1	-159.5	8.00	7.99	
7,400.0	46.00	181.74	7,328.9	124.8	-160.2	-124.8	8.00	8.00	
7,434.1	48.73	181.62	7,352.0	99.7	-161.0	-99.7	8.00	8.00	Sharon Springs
7,450.0	49.99	181.56	7,362.3	87.6	-161.3	-87.6	8.00	8.00	
7,500.0	53.99	181.41	7,393.1	48.3	-162.3	-48.3	8.00	8.00	
7,529.6	56.36	181.32	7,410.0	24.0	-162.9	-24.0	8.00	8.00	Niobrara
7,550.0	57.99	181.27	7,421.1	6.8	-163.3	-6.8	8.00	8.00	
7,600.0	61.99	181.14	7,446.1	-36.4	-164.2	36.4	8.00	8.00	
7,650.0	65.99	181.02	7,468.0	-81.4	-165.0	81.4	8.00	8.00	
7,700.0	69.99	180.91	7,486.7	-127.7	-165.8	127.7	8.00	8.00	
7,750.0	73.98	180.80	7,502.2	-175.2	-166.5	175.2	8.00	8.00	
7,800.0	77.98	180.70	7,514.3	-223.7	-167.1	223.7	8.00	8.00	
7,836.6	80.91	180.62	7,521.0	-259.7	-167.6	259.7	8.00	8.00	B Chalk
7,850.0	81.98	180.60	7,523.0	-273.0	-167.7	273.0	8.00	8.00	
7,900.0	85.98	180.50	7,528.2	-322.7	-168.2	322.7	8.00	8.00	
7,950.2	90.00	180.40	7,530.0	-372.9	-168.6	372.9	8.00	8.00	LP @ 7530' TVD; 90°
8,000.0	90.00	180.40	7,530.0	-422.6	-168.9	422.6	0.00	0.00	
8,100.0	90.00	180.40	7,530.0	-522.6	-169.6	522.6	0.00	0.00	
8,200.0	90.00	180.40	7,530.0	-622.6	-170.3	622.6	0.00	0.00	
8,300.0	90.00	180.40	7,530.0	-722.6	-171.0	722.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	HZ @ 5035.0ft
Project:	DJ Wattenberg	MD Reference:	HZ @ 5035.0ft
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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
8,400.0	90.00	180.40	7,530.0	-822.6	-171.7	822.6	0.00	0.00	
8,500.0	90.00	180.40	7,530.0	-922.6	-172.4	922.6	0.00	0.00	
8,600.0	90.00	180.40	7,530.0	-1,022.6	-173.1	1,022.6	0.00	0.00	
8,700.0	90.00	180.40	7,530.0	-1,122.6	-173.8	1,122.6	0.00	0.00	
8,800.0	90.00	180.40	7,530.0	-1,222.6	-174.5	1,222.6	0.00	0.00	
8,900.0	90.00	180.40	7,530.0	-1,322.6	-175.2	1,322.6	0.00	0.00	
9,000.0	90.00	180.40	7,530.0	-1,422.6	-175.9	1,422.6	0.00	0.00	
9,100.0	90.00	180.40	7,530.0	-1,522.6	-176.6	1,522.6	0.00	0.00	
9,200.0	90.00	180.40	7,530.0	-1,622.6	-177.3	1,622.6	0.00	0.00	
9,300.0	90.00	180.40	7,530.0	-1,722.6	-178.0	1,722.6	0.00	0.00	
9,400.0	90.00	180.40	7,530.0	-1,822.6	-178.7	1,822.6	0.00	0.00	
9,500.0	90.00	180.40	7,530.0	-1,922.6	-179.4	1,922.6	0.00	0.00	
9,600.0	90.00	180.40	7,530.0	-2,022.6	-180.1	2,022.6	0.00	0.00	
9,700.0	90.00	180.40	7,530.0	-2,122.6	-180.8	2,122.6	0.00	0.00	
9,800.0	90.00	180.40	7,530.0	-2,222.6	-181.5	2,222.6	0.00	0.00	
9,900.0	90.00	180.40	7,530.0	-2,322.6	-182.2	2,322.6	0.00	0.00	
10,000.0	90.00	180.40	7,530.0	-2,422.6	-182.9	2,422.6	0.00	0.00	
10,100.0	90.00	180.40	7,530.0	-2,522.6	-183.6	2,522.6	0.00	0.00	
10,200.0	90.00	180.40	7,530.0	-2,622.6	-184.3	2,622.6	0.00	0.00	
10,300.0	90.00	180.40	7,530.0	-2,722.6	-185.0	2,722.6	0.00	0.00	
10,400.0	90.00	180.40	7,530.0	-2,822.6	-185.7	2,822.6	0.00	0.00	
10,500.0	90.00	180.40	7,530.0	-2,922.6	-186.4	2,922.6	0.00	0.00	
10,600.0	90.00	180.40	7,530.0	-3,022.6	-187.1	3,022.6	0.00	0.00	
10,700.0	90.00	180.40	7,530.0	-3,122.6	-187.8	3,122.6	0.00	0.00	
10,800.0	90.00	180.40	7,530.0	-3,222.6	-188.5	3,222.6	0.00	0.00	
10,900.0	90.00	180.40	7,530.0	-3,322.6	-189.2	3,322.6	0.00	0.00	
11,000.0	90.00	180.40	7,530.0	-3,422.6	-189.9	3,422.6	0.00	0.00	
11,100.0	90.00	180.40	7,530.0	-3,522.6	-190.6	3,522.6	0.00	0.00	
11,200.0	90.00	180.40	7,530.0	-3,622.5	-191.3	3,622.5	0.00	0.00	
11,300.0	90.00	180.40	7,530.0	-3,722.5	-192.0	3,722.5	0.00	0.00	
11,400.0	90.00	180.40	7,530.0	-3,822.5	-192.6	3,822.5	0.00	0.00	
11,500.0	90.00	180.40	7,530.0	-3,922.5	-193.3	3,922.5	0.00	0.00	
11,600.0	90.00	180.40	7,530.0	-4,022.5	-194.0	4,022.5	0.00	0.00	
11,700.0	90.00	180.40	7,530.0	-4,122.5	-194.7	4,122.5	0.00	0.00	
11,800.0	90.00	180.40	7,530.0	-4,222.5	-195.4	4,222.5	0.00	0.00	
11,900.0	90.00	180.40	7,530.0	-4,322.5	-196.1	4,322.5	0.00	0.00	
12,000.0	90.00	180.40	7,530.0	-4,422.5	-196.8	4,422.5	0.00	0.00	
12,100.0	90.00	180.40	7,530.0	-4,522.5	-197.5	4,522.5	0.00	0.00	
12,200.0	90.00	180.40	7,530.0	-4,622.5	-198.2	4,622.5	0.00	0.00	
12,300.0	90.00	180.40	7,530.0	-4,722.5	-198.9	4,722.5	0.00	0.00	
12,400.0	90.00	180.40	7,530.0	-4,822.5	-199.6	4,822.5	0.00	0.00	
12,500.0	90.00	180.40	7,530.0	-4,922.5	-200.3	4,922.5	0.00	0.00	
12,600.0	90.00	180.40	7,530.0	-5,022.5	-201.0	5,022.5	0.00	0.00	
12,700.0	90.00	180.40	7,530.0	-5,122.5	-201.7	5,122.5	0.00	0.00	
12,800.0	90.00	180.40	7,530.0	-5,222.5	-202.4	5,222.5	0.00	0.00	
12,900.0	90.00	180.40	7,530.0	-5,322.5	-203.1	5,322.5	0.00	0.00	
13,000.0	90.00	180.40	7,530.0	-5,422.5	-203.8	5,422.5	0.00	0.00	
13,100.0	90.00	180.40	7,530.0	-5,522.5	-204.5	5,522.5	0.00	0.00	
13,200.0	90.00	180.40	7,530.0	-5,622.5	-205.2	5,622.5	0.00	0.00	
13,300.0	90.00	180.40	7,530.0	-5,722.5	-205.9	5,722.5	0.00	0.00	
13,400.0	90.00	180.40	7,530.0	-5,822.5	-206.6	5,822.5	0.00	0.00	
13,500.0	90.00	180.40	7,530.0	-5,922.5	-207.3	5,922.5	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	HZ @ 5035.0ft
Project:	DJ Wattenberg	MD Reference:	HZ @ 5035.0ft
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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
13,600.0	90.00	180.40	7,530.0	-6,022.5	-208.0	6,022.5	0.00	0.00	
13,700.0	90.00	180.40	7,530.0	-6,122.5	-208.7	6,122.5	0.00	0.00	
13,800.0	90.00	180.40	7,530.0	-6,222.5	-209.4	6,222.5	0.00	0.00	
13,900.0	90.00	180.40	7,530.0	-6,322.5	-210.1	6,322.5	0.00	0.00	
14,000.0	90.00	180.40	7,530.0	-6,422.5	-210.8	6,422.5	0.00	0.00	
14,100.0	90.00	180.40	7,530.0	-6,522.5	-211.5	6,522.5	0.00	0.00	
14,200.0	90.00	180.40	7,530.0	-6,622.5	-212.2	6,622.5	0.00	0.00	
14,300.0	90.00	180.40	7,530.0	-6,722.5	-212.9	6,722.5	0.00	0.00	
14,400.0	90.00	180.40	7,530.0	-6,822.5	-213.6	6,822.5	0.00	0.00	
14,500.0	90.00	180.40	7,530.0	-6,922.5	-214.3	6,922.5	0.00	0.00	
14,600.0	90.00	180.40	7,530.0	-7,022.5	-215.0	7,022.5	0.00	0.00	
14,700.0	90.00	180.40	7,530.0	-7,122.5	-215.7	7,122.5	0.00	0.00	
14,800.0	90.00	180.40	7,530.0	-7,222.5	-216.4	7,222.5	0.00	0.00	
14,900.0	90.00	180.40	7,530.0	-7,322.5	-217.1	7,322.5	0.00	0.00	
15,000.0	90.00	180.40	7,530.0	-7,422.5	-217.8	7,422.5	0.00	0.00	
15,100.0	90.00	180.40	7,530.0	-7,522.5	-218.5	7,522.5	0.00	0.00	
15,200.0	90.00	180.40	7,530.0	-7,622.5	-219.2	7,622.5	0.00	0.00	
15,300.0	90.00	180.40	7,530.0	-7,722.4	-219.9	7,722.4	0.00	0.00	
15,400.0	90.00	180.40	7,530.0	-7,822.4	-220.6	7,822.4	0.00	0.00	
15,500.0	90.00	180.40	7,530.0	-7,922.4	-221.3	7,922.4	0.00	0.00	
15,600.0	90.00	180.40	7,530.0	-8,022.4	-222.0	8,022.4	0.00	0.00	
15,700.0	90.00	180.40	7,530.0	-8,122.4	-222.7	8,122.4	0.00	0.00	
15,800.0	90.00	180.40	7,530.0	-8,222.4	-223.4	8,222.4	0.00	0.00	
15,900.0	90.00	180.40	7,530.0	-8,322.4	-224.1	8,322.4	0.00	0.00	
16,000.0	90.00	180.40	7,530.0	-8,422.4	-224.8	8,422.4	0.00	0.00	
16,100.0	90.00	180.40	7,530.0	-8,522.4	-225.5	8,522.4	0.00	0.00	
16,200.0	90.00	180.40	7,530.0	-8,622.4	-226.2	8,622.4	0.00	0.00	
16,300.0	90.00	180.40	7,530.0	-8,722.4	-226.9	8,722.4	0.00	0.00	
16,400.0	90.00	180.40	7,530.0	-8,822.4	-227.6	8,822.4	0.00	0.00	
16,500.0	90.00	180.40	7,530.0	-8,922.4	-228.3	8,922.4	0.00	0.00	
16,600.0	90.00	180.40	7,530.0	-9,022.4	-229.0	9,022.4	0.00	0.00	
16,700.0	90.00	180.40	7,530.0	-9,122.4	-229.6	9,122.4	0.00	0.00	
16,800.0	90.00	180.40	7,530.0	-9,222.4	-230.3	9,222.4	0.00	0.00	
16,900.0	90.00	180.40	7,530.0	-9,322.4	-231.0	9,322.4	0.00	0.00	
17,000.0	90.00	180.40	7,530.0	-9,422.4	-231.7	9,422.4	0.00	0.00	
17,100.0	90.00	180.40	7,530.0	-9,522.4	-232.4	9,522.4	0.00	0.00	
17,200.0	90.00	180.40	7,530.0	-9,622.4	-233.1	9,622.4	0.00	0.00	
17,300.0	90.00	180.40	7,530.0	-9,722.4	-233.8	9,722.4	0.00	0.00	
17,400.0	90.00	180.40	7,530.0	-9,822.4	-234.5	9,822.4	0.00	0.00	
17,411.2	90.00	180.40	7,530.0	-9,833.6	-234.6	9,833.6	0.00	0.00	TD at 17411.2

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL 1G-7H	0.00	0.00	7,530.0	-9,833.6	-234.6	1,259,573.64	3,128,947.25	40.044992	-105.039443
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	HZ @ 5035.0ft
Project:	DJ Wattenberg	MD Reference:	HZ @ 5035.0ft
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
400.0	400.0	Fox Hills - BASE				
4,809.5	4,802.0	Sussex				
5,110.1	5,102.0	Shannon				
6,909.5	6,898.0	Teepee Buttes (*if present)				
7,434.1	7,352.0	Sharon Springs				
7,529.6	7,410.0	Niobrara				
7,836.6	7,521.0	B Chalk				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
500.0	500.0	0.0	0.0	KOP @ 500' MD	
848.7	848.4	9.8	-4.1	EOB; 3.49°	
6,785.3	6,774.1	342.1	-145.3	Start 8° Build/Turn	
7,950.2	7,530.0	-372.9	-168.6	LP @ 7530' TVD; 90°	
17,411.2	7,530.0	-9,833.6	-234.6	TD at 17411.2	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Morgan Hills 1G-7H-A168

HZ

Plan #2

Anticollision Report

03 September, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
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	9/3/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	17,411.2	Plan #2 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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 0-6-6 (EXISTING) - ENCANA WELL - SURVE	100.0	46.0	3,612.6	3,612.4	10,000.000	CC, ES
BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE	14,800.0	7,771.0	9,968.2	9,825.6	69.908	SF
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	6,844.7	6,743.5	3,445.0	3,420.6	140.760	CC
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	6,850.0	6,748.1	3,445.1	3,420.6	140.674	ES
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	15,200.0	7,384.9	9,987.7	9,838.6	66.991	SF
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	1,291.3	1,074.0	3,584.3	3,580.2	870.704	CC
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	1,300.0	1,074.0	3,584.3	3,580.2	867.341	ES
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	14,400.0	7,420.7	9,972.8	9,834.7	72.207	SF
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	1,475.3	1,260.6	3,592.3	3,587.5	747.230	CC
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	1,500.0	1,274.9	3,592.4	3,587.5	735.896	ES
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	15,700.0	7,376.0	9,957.6	9,794.8	61.160	SF
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	6,823.8	6,678.5	3,421.0	3,397.1	142.832	CC, ES
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	14,700.0	7,174.1	9,956.0	9,816.8	71.537	SF
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	12,474.5	7,560.0	2,524.2	2,417.6	23.671	CC
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	12,500.0	7,560.0	2,524.3	2,417.2	23.575	ES
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	13,500.0	7,560.0	2,724.6	2,600.1	21.891	SF
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	1,181.4	963.2	3,592.3	3,588.4	922.624	CC
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	1,200.0	972.9	3,592.3	3,588.4	909.028	ES
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	14,100.0	5,493.5	9,958.5	9,842.8	86.065	SF
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	6,937.3	6,999.4	3,387.6	3,347.9	85.211	CC
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	6,950.0	7,011.0	3,387.6	3,347.9	85.187	ES
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	15,900.0	7,631.0	9,343.4	9,168.3	53.349	SF
BECKY 1 (EXISTING) - FOUNDATION WELL - NO SUR	5,418.3	5,010.0	5,399.9	5,381.7	296.939	CC, ES
BECKY 1 (EXISTING) - FOUNDATION WELL - NO SUR	11,900.0	5,010.0	9,946.4	9,880.6	151.158	SF
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	6,839.4	6,753.1	5,231.8	5,208.0	219.632	CC, ES
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	12,600.0	7,455.0	9,980.0	9,876.2	96.149	SF
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	6,845.9	6,763.7	5,123.1	5,099.0	212.824	CC
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	6,850.0	6,767.8	5,123.1	5,099.0	212.718	ES
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	13,100.0	7,459.0	9,956.3	9,843.8	88.508	SF
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	6,839.9	6,748.7	6,087.2	6,063.4	255.410	CC, ES
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	11,700.0	7,450.0	9,916.6	9,828.4	112.431	SF
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	6,838.7	6,753.5	4,240.9	4,217.1	178.177	CC, ES
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,500.0	7,456.0	9,954.5	9,835.0	83.339	SF
BILLINGS 21-7 (EXISTING) - KPK WELL - SURVEYS	5,124.9	5,126.0	2,660.2	2,650.1	264.499	CC, ES
BILLINGS 21-7 (EXISTING) - KPK WELL - SURVEYS	17,100.0	5,126.0	9,967.7	9,843.7	80.403	SF
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	2,160.3	1,850.4	3,996.3	3,989.3	571.040	CC, ES
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	12,900.0	7,440.0	9,927.9	9,814.2	87.309	SF
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	1,533.9	1,436.0	2,065.2	2,059.9	395.171	CC, ES
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	15,600.0	7,515.0	9,912.8	9,752.3	61.749	SF
ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO SUR	13,760.8	7,565.0	374.5	250.4	3.016	CC, ES
ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO SUR	13,800.0	7,565.0	376.6	251.7	3.016	SF
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	16,788.1	7,560.0	387.1	210.0	2.187	CC
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	16,800.0	7,560.0	387.2	210.0	2.185	ES, SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	166.3	167.3	60.2	59.6	112.056	CC
Morgan Hills 1A-7H-A168 - HZ - Plan #2	200.0	201.0	60.2	59.5	91.936	ES
Morgan Hills 1A-7H-A168 - HZ - Plan #2	17,411.2	17,589.7	1,500.2	1,150.9	4.295	SF
Morgan Hills 1B-7H-A168 - HZ - Plan #2	232.0	233.0	50.1	49.3	65.388	CC
Morgan Hills 1B-7H-A168 - HZ - Plan #2	300.0	300.6	50.3	49.3	50.172	ES
Morgan Hills 1B-7H-A168 - HZ - Plan #2	17,411.2	17,775.9	1,272.8	929.5	3.707	SF
Morgan Hills 1C-7H-A168 - HZ - Plan #2	300.0	300.0	40.0	39.0	39.947	CC, ES
Morgan Hills 1C-7H-A168 - HZ - Plan #2	17,411.2	17,490.0	1,000.1	650.8	2.863	SF
Morgan Hills 1D-7H-A168 - HZ - Plan #2	333.4	333.4	30.2	29.1	27.027	CC
Morgan Hills 1D-7H-A168 - HZ - Plan #2	400.0	399.8	30.4	29.1	22.530	ES

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)						
Morgan Hills 1D-7H-A168 - HZ - Plan #2	17,411.2	17,701.3	787.6	454.3	2.363	SF
Morgan Hills 1E-7H-A168 - HZ - Plan #2	400.0	400.0	20.1	18.8	14.916	CC, ES
Morgan Hills 1E-7H-A168 - HZ - Plan #2	17,411.2	17,440.2	500.1	150.7	1.431	Level 3, SF
Morgan Hills 1F-7H-A168 - HZ - Plan #2	433.6	433.6	10.1	8.6	6.862	CC
Morgan Hills 1F-7H-A168 - HZ - Plan #2	500.0	499.9	10.2	8.6	6.030	ES
Morgan Hills 1F-7H-A168 - HZ - Plan #2	17,411.2	17,664.2	346.6	91.1	1.357	Level 3, SF
Morgan Hills 1H-7H-A168 - HZ - Plan #2	500.0	500.0	9.8	8.1	5.762	CC, ES
Morgan Hills 1H-7H-A168 - HZ - Plan #2	17,411.2	17,649.4	346.6	91.1	1.356	Level 3, SF
Morgan Hills 1I-7H-A168 - HZ - Plan #2	500.0	500.0	19.9	18.2	11.689	CC, ES
Morgan Hills 1I-7H-A168 - HZ - Plan #2	17,411.2	17,414.0	500.0	150.6	1.431	Level 3, SF
Sosa 11-18 - DD - DD	13,077.3	7,606.9	4,000.8	3,884.1	34.266	CC
Sosa 11-18 - DD - DD	13,100.0	7,607.0	4,000.9	3,883.8	34.151	ES
Sosa 11-18 - DD - DD	15,500.0	7,616.6	4,677.2	4,518.2	29.416	SF
Sosa 11-18 - DD - Plan #1	13,064.5	7,591.3	4,004.4	3,887.8	34.350	CC
Sosa 11-18 - DD - Plan #1	13,100.0	7,591.3	4,004.6	3,887.4	34.171	ES
Sosa 11-18 - DD - Plan #1	15,500.0	7,591.3	4,686.9	4,527.9	29.471	SF
Sosa 12-18 - DD - DD	14,712.9	7,664.5	3,988.1	3,838.9	26.721	CC
Sosa 12-18 - DD - DD	14,800.0	7,664.3	3,989.1	3,838.3	26.458	ES
Sosa 12-18 - DD - DD	16,600.0	7,658.5	4,412.0	4,229.8	24.214	SF
Sosa 12-18 - DD - Plan #3	14,685.6	7,635.1	3,999.0	3,850.6	26.953	CC
Sosa 12-18 - DD - Plan #3	14,800.0	7,635.1	4,000.6	3,850.3	26.606	ES
Sosa 12-18 - DD - Plan #3	16,600.0	7,635.1	4,433.6	4,251.8	24.386	SF
Sosa 21-18 - DD (Gyro) - DD	13,699.3	1,500.0	6,910.4	6,851.9	118.219	CC
Sosa 21-18 - DD (Gyro) - DD	13,800.0	1,500.0	6,911.1	6,851.8	116.502	ES
Sosa 21-18 - DD (Gyro) - DD	17,411.2	1,500.0	7,844.2	7,753.7	86.593	SF
Sosa 21-18 - DD (MWD) - DD	13,076.2	7,622.4	2,442.5	2,325.8	20.921	CC
Sosa 21-18 - DD (MWD) - DD	13,100.0	7,622.0	2,442.6	2,325.5	20.849	ES
Sosa 21-18 - DD (MWD) - DD	14,000.0	7,605.3	2,611.3	2,478.5	19.667	SF
Sosa 21-18 - DD (MWD) - Plan #2	13,079.3	7,654.2	2,436.3	2,319.5	20.858	CC
Sosa 21-18 - DD (MWD) - Plan #2	13,100.0	7,654.2	2,436.4	2,319.3	20.795	ES
Sosa 21-18 - DD (MWD) - Plan #2	14,000.0	7,654.2	2,604.5	2,471.7	19.607	SF
Sosa 22-18 - DD - DD	14,564.5	7,684.8	2,515.1	2,370.4	17.377	CC
Sosa 22-18 - DD - DD	14,600.0	7,685.0	2,515.4	2,370.0	17.304	ES
Sosa 22-18 - DD - DD	15,300.0	7,687.8	2,620.4	2,462.9	16.629	SF
Sosa 22-18 - DD - Plan #2	14,548.0	7,648.1	2,530.2	2,386.0	17.545	CC
Sosa 22-18 - DD - Plan #2	14,600.0	7,648.1	2,530.8	2,385.6	17.439	ES
Sosa 22-18 - DD - Plan #2	15,300.0	7,648.1	2,639.6	2,482.3	16.777	SF
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	13,768.8	7,634.3	3,502.2	3,377.8	28.160	CC
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	13,800.0	7,634.5	3,502.3	3,377.4	28.039	ES
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	15,500.0	7,642.3	3,906.7	3,752.2	25.278	SF
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	11,677.3	4,993.0	4,495.9	4,425.2	63.516	CC
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	11,700.0	4,993.0	4,496.0	4,424.9	63.226	ES
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	15,900.0	4,993.0	6,168.0	6,036.0	46.719	SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	11,899.8	7,533.9	2,564.7	2,472.7	27.892	CC
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	11,900.0	7,533.9	2,564.7	2,472.7	27.891	ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	13,100.0	7,525.0	2,831.6	2,718.8	25.113	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	11,771.2	7,497.0	2,818.9	2,729.3	31.491	CC
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	11,800.0	7,497.0	2,819.0	2,729.0	31.318	ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	13,300.0	7,497.0	3,206.7	3,090.7	27.636	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	12,478.8	7,535.2	3,253.4	3,147.1	30.596	CC
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	12,500.0	7,535.1	3,253.5	3,146.8	30.491	ES
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	14,200.0	7,529.5	3,680.6	3,544.4	27.011	SF
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	10,597.5	7,781.9	1,476.4	1,395.1	18.150	CC

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)						
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	10,600.0	7,781.9	1,476.4	1,395.0	18.141	ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	11,100.0	7,782.9	1,559.6	1,469.6	17.338	SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	10,457.9	7,490.0	4,037.9	3,970.9	60.310	CC
Thomas 7-12 (Existing) - Existing - NO SURVEYS	10,500.0	7,490.0	4,038.1	3,970.4	59.676	ES
Thomas 7-12 (Existing) - Existing - NO SURVEYS	14,700.0	7,490.0	5,856.6	5,716.2	41.708	SF
Thomas 7-14 (Existing) - Existing - NO SURVEYS	11,696.1	5,000.0	3,478.8	3,417.7	56.918	CC
Thomas 7-14 (Existing) - Existing - NO SURVEYS	11,700.0	5,000.0	3,478.8	3,417.6	56.874	ES
Thomas 7-14 (Existing) - Existing - NO SURVEYS	14,100.0	5,000.0	4,228.6	4,138.2	46.773	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	10,667.4	7,496.0	3,074.1	3,003.6	43.585	CC
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	10,700.0	7,496.0	3,074.3	3,003.2	43.246	ES
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	13,000.0	7,496.0	3,859.0	3,748.1	34.823	SF
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	10,710.0	5,000.0	3,960.3	3,906.5	73.720	CC
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	10,800.0	5,000.0	3,961.3	3,906.4	72.135	ES
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	14,700.0	5,000.0	5,621.7	5,514.2	52.284	SF
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	0.0	0.0	2,982.4			
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	16,900.0	7,472.5	9,928.7	9,750.1	55.611	SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	9,343.7	7,590.0	4,058.0	4,009.5	83.688	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	9,400.0	7,590.0	4,058.4	4,009.0	82.142	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	15,500.0	7,590.0	7,373.4	7,218.9	47.706	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,872.0	7,643.4	2,808.3	2,780.1	99.761	CC
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	7,900.0	7,644.9	2,808.5	2,780.1	98.957	ES
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	13,800.0	7,239.9	6,571.3	6,447.7	53.164	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	9,310.7	7,746.5	2,580.1	2,516.9	40.799	CC, ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	11,100.0	7,750.6	3,139.9	3,046.5	33.618	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	0.0	14.3	2,986.3			
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	11,900.0	7,860.4	3,759.9	3,645.7	32.923	SF
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	7,306.1	7,379.6	2,255.8	2,226.4	76.676	CC, ES
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	12,900.0	7,526.5	6,036.3	5,924.0	53.788	SF
WOOLLEY 41-7 (EXISTING) - ENCANA WELL - NO SU	7,764.4	7,503.0	58.6	31.5	2.159	CC, ES, SF
WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WELL - N	500.0	504.0	1,623.8	1,622.1	938.742	CC, ES
WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WELL - N	5,400.0	5,193.0	1,875.5	1,856.6	99.692	SF
WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA - NO S	9,213.8	7,535.0	166.6	120.3	3.599	CC, ES, SF
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU	8,701.4	7,551.0	1,074.2	1,035.9	28.038	CC, ES
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU	9,200.0	7,551.0	1,184.3	1,138.2	25.692	SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,643.5	7,639.8	3,259.5	3,221.9	86.698	CC
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,700.0	7,641.1	3,260.0	3,221.5	84.822	ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	13,900.0	7,700.0	6,184.1	6,057.4	48.810	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	9,571.6	7,253.7	4,311.3	4,259.8	83.633	CC
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	9,600.0	7,253.8	4,311.4	4,259.4	82.884	ES
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	16,000.0	7,258.3	7,740.2	7,577.8	47.660	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	9,414.7	7,423.3	3,948.1	3,898.5	79.737	CC
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	9,500.0	7,381.3	3,948.7	3,897.9	77.806	ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	15,100.0	7,050.0	6,818.2	6,672.5	46.811	SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	9,394.9	7,620.2	3,594.7	3,545.1	72.437	CC
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	9,500.0	7,572.9	3,595.8	3,544.6	70.264	ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	14,100.0	7,300.0	5,840.1	5,710.8	45.150	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	7,800.0	9,097.6	3,329.7	3,280.7	68.025	ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	7,920.0	8,978.8	3,329.2	3,281.3	69.497	CC
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	13,400.0	7,150.0	5,149.8	5,033.4	44.260	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	9,248.0	7,915.7	2,892.8	2,844.4	59.722	CC
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	9,300.0	7,882.9	2,893.0	2,844.0	58.974	ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	12,500.0	7,400.0	4,173.0	4,071.4	41.053	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	7,750.0	8,969.2	2,612.4	2,562.9	52.807	ES

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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-Becky 2F-7H-E168 - Hz - Plan #2	7,913.6	8,808.2	2,611.5	2,563.7	54.581	CC
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	11,600.0	7,300.0	3,570.2	3,483.9	41.362	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	8,915.6	8,189.9	2,315.1	2,268.6	49.804	CC
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	9,000.0	8,128.7	2,315.5	2,268.4	49.157	ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	11,200.0	7,570.9	3,006.3	2,926.4	37.605	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	9,121.4	7,981.5	1,844.3	1,796.9	38.943	CC, ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	10,500.0	7,581.5	2,180.8	2,113.8	32.528	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	17,391.5	15,981.1	4,435.3	4,121.2	14.121	CC
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	17,411.2	15,981.1	4,435.3	4,120.9	14.106	ES, SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	17,392.5	15,969.8	4,060.7	3,746.6	12.927	CC
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	17,411.2	15,969.8	4,060.8	3,746.3	12.913	ES, SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	17,397.4	15,974.5	3,697.5	3,383.4	11.772	CC
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	17,411.2	15,974.5	3,697.5	3,383.2	11.763	ES, SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	14,044.4	12,658.4	3,327.3	3,129.6	16.829	CC
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	17,411.2	15,968.6	3,370.5	3,056.8	10.741	ES, SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	10,777.5	9,411.6	3,017.2	2,930.7	34.898	CC
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	17,411.2	16,036.2	3,021.7	2,707.7	9.621	ES, SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	17,404.9	16,087.8	2,673.0	2,359.1	8.516	CC
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	17,411.2	16,087.8	2,673.0	2,359.0	8.513	ES, SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	17,406.1	16,148.7	2,324.7	2,011.3	7.417	CC
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	17,411.2	16,148.7	2,324.7	2,011.2	7.415	ES, SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 46-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	-60.76	1,764.4	-3,152.4	3,612.8					
100.0	100.0	46.0	46.0	0.2	0.1	-60.76	1,764.5	-3,152.4	3,612.6	3,612.4	0.21	N/A CC, ES		
200.0	200.0	127.9	127.9	0.3	0.2	-60.76	1,764.9	-3,152.7	3,613.2	3,612.6	0.53	6,856.996		
300.0	300.0	210.5	210.5	0.5	0.3	-60.75	1,765.8	-3,153.2	3,614.2	3,613.4	0.85	4,273.636		
400.0	400.0	286.0	286.0	0.7	0.5	-60.74	1,767.1	-3,153.8	3,615.8	3,614.6	1.15	3,138.543		
500.0	500.0	344.0	344.0	0.8	0.6	-60.73	1,768.3	-3,154.7	3,618.2	3,616.8	1.43	2,534.249		
600.0	600.0	404.0	403.9	1.0	0.7	-37.69	1,769.9	-3,156.3	3,621.2	3,619.5	1.71	2,118.568		
700.0	700.0	465.0	464.8	1.2	0.8	-37.69	1,771.9	-3,158.8	3,624.1	3,622.1	1.99	1,819.819		
800.0	799.9	497.9	497.7	1.4	0.9	-37.68	1,773.1	-3,160.6	3,627.0	3,624.8	2.23	1,629.196		
848.7	848.4	526.0	525.7	1.5	0.9	-37.69	1,774.1	-3,162.5	3,628.5	3,626.1	2.36	1,536.188		
900.0	899.7	543.1	542.7	1.6	1.0	-37.70	1,774.7	-3,163.8	3,630.2	3,627.7	2.48	1,461.182		
1,000.0	999.5	586.0	585.4	1.8	1.1	-37.73	1,776.2	-3,167.6	3,634.8	3,632.1	2.74	1,326.592		
1,100.0	1,099.3	647.0	646.1	2.0	1.2	-37.79	1,778.0	-3,174.0	3,640.6	3,637.6	3.03	1,202.240		
1,200.0	1,199.1	727.5	726.0	2.2	1.4	-37.90	1,779.4	-3,183.7	3,647.3	3,644.0	3.35	1,087.366		
1,300.0	1,298.9	822.8	820.5	2.4	1.7	-38.03	1,780.7	-3,195.8	3,654.4	3,650.7	3.71	984.905		
1,400.0	1,398.8	897.1	894.1	2.6	1.9	-38.12	1,782.0	-3,205.4	3,661.8	3,657.8	4.03	908.643		
1,500.0	1,498.6	964.5	960.9	2.8	2.1	-38.21	1,783.5	-3,214.6	3,670.1	3,665.7	4.34	845.719		
1,600.0	1,598.4	1,029.4	1,025.1	3.0	2.3	-38.30	1,784.8	-3,224.1	3,679.3	3,674.6	4.65	791.521		
1,700.0	1,698.2	1,099.1	1,093.9	3.2	2.5	-38.42	1,785.6	-3,235.5	3,689.4	3,684.4	4.97	742.025		
1,800.0	1,798.0	1,190.0	1,183.3	3.4	2.8	-38.60	1,785.1	-3,251.3	3,699.9	3,694.5	5.35	691.836		
1,900.0	1,897.8	1,254.0	1,246.2	3.6	3.0	-38.73	1,784.4	-3,263.1	3,711.0	3,705.4	5.67	654.309		
2,000.0	1,997.7	1,340.0	1,330.6	3.8	3.3	-38.92	1,783.5	-3,279.7	3,723.0	3,717.0	6.05	615.588		
2,100.0	2,097.5	1,383.6	1,373.3	4.0	3.5	-39.01	1,783.0	-3,288.6	3,735.9	3,729.6	6.34	589.687		
2,200.0	2,197.3	1,425.0	1,413.7	4.2	3.7	-39.11	1,782.6	-3,297.5	3,750.1	3,743.5	6.62	566.672		
2,300.0	2,297.1	1,484.8	1,472.0	4.4	3.9	-39.25	1,781.9	-3,311.3	3,765.6	3,758.6	6.95	541.748		
2,400.0	2,396.9	1,511.0	1,497.3	4.6	4.1	-39.31	1,781.6	-3,317.6	3,782.5	3,775.3	7.20	525.264		
2,500.0	2,496.7	1,596.0	1,579.4	4.8	4.5	-39.54	1,780.4	-3,339.8	3,800.7	3,793.1	7.61	499.301		
2,600.0	2,596.5	1,619.7	1,602.1	5.0	4.6	-39.60	1,780.0	-3,346.4	3,820.2	3,812.3	7.87	485.659		
2,700.0	2,696.4	1,682.0	1,661.6	5.2	4.9	-39.78	1,778.8	-3,364.9	3,841.3	3,833.1	8.23	466.808		
2,800.0	2,796.2	1,718.9	1,696.7	5.4	5.2	-39.90	1,777.9	-3,376.3	3,863.5	3,855.0	8.53	452.935		
2,900.0	2,896.0	1,769.0	1,744.1	5.6	5.4	-40.06	1,776.3	-3,392.4	3,886.8	3,878.0	8.87	438.192		
3,000.0	2,995.8	1,824.7	1,796.7	5.8	5.8	-40.24	1,774.4	-3,410.9	3,911.3	3,902.0	9.24	423.401		
3,100.0	3,095.6	1,877.4	1,846.1	6.0	6.1	-40.42	1,772.6	-3,429.2	3,937.0	3,927.4	9.59	410.330		
3,200.0	3,195.4	1,943.6	1,907.9	6.2	6.6	-40.64	1,770.6	-3,452.5	3,963.6	3,953.6	10.00	396.552		
3,300.0	3,295.2	2,047.1	2,004.6	6.4	7.2	-40.98	1,767.3	-3,489.3	3,990.4	3,979.9	10.53	379.122		
3,400.0	3,395.1	2,128.1	2,080.1	6.6	7.8	-41.25	1,764.5	-3,518.3	4,017.5	4,006.5	10.98	365.804		
3,500.0	3,494.9	2,236.6	2,181.5	6.8	8.5	-41.61	1,761.2	-3,557.0	4,044.7	4,033.2	11.52	350.964		
3,600.0	3,594.7	2,346.6	2,284.4	7.0	9.2	-41.95	1,757.8	-3,595.7	4,071.6	4,059.5	12.07	337.448		
3,700.0	3,694.5	2,443.9	2,375.6	7.2	9.9	-42.25	1,755.2	-3,629.6	4,098.4	4,085.8	12.56	326.198		
3,800.0	3,794.3	2,541.0	2,466.6	7.4	10.5	-42.55	1,752.2	-3,663.4	4,125.2	4,112.1	13.06	315.837		
3,900.0	3,894.1	2,627.0	2,547.1	7.6	11.1	-42.81	1,749.3	-3,693.5	4,152.2	4,138.6	13.53	306.923		
4,000.0	3,994.0	2,763.1	2,674.6	7.8	12.0	-43.23	1,743.9	-3,740.8	4,178.7	4,164.5	14.15	295.241		
4,100.0	4,093.8	2,848.1	2,754.4	8.0	12.5	-43.48	1,741.0	-3,769.9	4,205.1	4,190.5	14.60	288.106		
4,200.0	4,193.6	2,970.0	2,869.2	8.2	13.3	-43.81	1,738.7	-3,810.8	4,231.4	4,216.3	15.13	279.685		
4,300.0	4,293.4	3,031.9	2,927.5	8.4	13.7	-43.98	1,737.1	-3,831.5	4,257.8	4,242.3	15.51	274.443		
4,400.0	4,393.2	3,092.1	2,983.9	8.6	14.1	-44.15	1,734.9	-3,852.6	4,285.1	4,269.2	15.89	269.748		
4,500.0	4,493.0	3,161.2	3,048.4	8.8	14.6	-44.35	1,733.0	-3,877.1	4,313.2	4,296.9	16.28	264.979		
4,600.0	4,592.8	3,241.2	3,123.1	9.0	15.1	-44.56	1,731.5	-3,905.6	4,341.8	4,325.1	16.69	260.071		
4,700.0	4,692.7	3,372.3	3,246.0	9.3	16.0	-44.90	1,729.2	-3,951.4	4,369.9	4,352.6	17.25	253.355		
4,800.0	4,792.5	3,474.4	3,341.7	9.5	16.6	-45.16	1,727.4	-3,986.9	4,397.9	4,380.2	17.72	248.199		
4,900.0	4,892.3	3,577.6	3,438.5	9.7	17.3	-45.43	1,725.0	-4,022.7	4,425.7	4,407.5	18.20	243.153		
5,000.0	4,992.1	3,670.2	3,525.2	9.9	17.9	-45.68	1,721.8	-4,055.1	4,453.6	4,434.9	18.66	238.642		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 46-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	5,091.9	3,777.9	3,626.0	10.1	18.7	-45.97	1,717.8	-4,092.8	4,481.5	4,462.4	19.16	233.906		
5,200.0	5,191.7	3,869.2	3,711.6	10.3	19.3	-46.21	1,714.5	-4,124.4	4,509.1	4,489.5	19.60	230.060		
5,300.0	5,291.5	3,940.4	3,778.3	10.5	19.7	-46.38	1,712.8	-4,149.1	4,537.3	4,517.3	19.98	227.105		
5,400.0	5,391.4	4,027.5	3,859.9	10.7	20.3	-46.60	1,710.6	-4,179.7	4,565.8	4,545.4	20.40	223.767		
5,500.0	5,491.2	4,104.4	3,931.7	10.9	20.8	-46.79	1,708.3	-4,206.8	4,594.6	4,573.8	20.80	220.851		
5,600.0	5,591.0	4,170.0	3,992.9	11.1	21.3	-46.95	1,706.5	-4,230.5	4,624.1	4,602.9	21.17	218.410		
5,700.0	5,690.8	4,213.7	4,033.5	11.3	21.6	-47.06	1,705.3	-4,246.6	4,654.4	4,633.0	21.48	216.659		
5,800.0	5,790.6	4,300.3	4,113.7	11.5	22.2	-47.28	1,702.9	-4,279.1	4,685.6	4,663.7	21.91	213.889		
5,900.0	5,890.4	4,513.0	4,312.1	11.7	23.7	-47.81	1,695.5	-4,355.6	4,714.5	4,691.8	22.67	207.985		
6,000.0	5,990.3	4,581.8	4,376.4	11.9	24.2	-47.98	1,692.9	-4,379.9	4,743.4	4,720.4	23.04	205.919		
6,100.0	6,090.1	6,231.4	5,987.3	12.1	29.9	-50.23	1,675.8	-4,678.9	4,752.6	4,726.6	25.97	183.036		
6,200.0	6,189.9	6,326.8	6,082.7	12.3	30.0	-50.29	1,675.4	-4,680.3	4,750.0	4,723.7	26.26	180.872		
6,300.0	6,289.7	6,425.9	6,181.8	12.5	30.1	-50.34	1,676.1	-4,681.4	4,747.5	4,720.9	26.56	178.732		
6,400.0	6,389.5	6,535.6	6,291.5	12.7	30.2	-50.39	1,677.7	-4,682.4	4,744.8	4,718.0	26.87	176.581		
6,500.0	6,489.3	6,639.9	6,395.8	12.9	30.3	-50.43	1,679.6	-4,683.0	4,742.0	4,714.9	27.18	174.472		
6,600.0	6,589.1	6,741.7	6,497.5	13.1	30.3	-50.47	1,681.1	-4,683.6	4,739.2	4,711.7	27.49	172.413		
6,700.0	6,689.0	6,864.8	6,620.6	13.3	30.4	-50.52	1,682.7	-4,684.1	4,736.1	4,708.2	27.83	170.207		
6,785.3	6,774.1	6,959.0	6,714.8	13.5	30.5	-50.57	1,683.5	-4,684.3	4,733.1	4,705.0	28.10	168.423		
6,800.0	6,788.8	6,973.7	6,729.5	13.5	30.5	-39.50	1,683.6	-4,684.3	4,732.6	4,704.5	28.15	168.093		
6,850.0	6,838.8	7,023.6	6,779.4	13.6	30.5	71.09	1,684.0	-4,684.3	4,731.6	4,703.3	28.29	167.274		
6,876.8	6,865.6	7,050.3	6,806.2	13.6	30.5	87.54	1,684.2	-4,684.4	4,731.5	4,703.1	28.33	167.008		
6,900.0	6,888.6	7,073.3	6,829.2	13.6	30.6	93.07	1,684.4	-4,684.4	4,731.6	4,703.2	28.36	166.837		
6,950.0	6,938.1	7,115.8	6,871.6	13.7	30.6	98.20	1,684.7	-4,684.5	4,732.5	4,704.2	28.36	166.859		
7,000.0	6,987.0	7,155.6	6,911.4	13.7	30.6	100.37	1,685.1	-4,684.6	4,734.6	4,706.3	28.30	167.278		
7,050.0	7,035.0	7,194.7	6,950.5	13.6	30.7	101.50	1,685.6	-4,684.7	4,737.7	4,709.5	28.19	168.043		
7,100.0	7,082.0	7,232.7	6,988.5	13.6	30.7	102.12	1,686.2	-4,684.9	4,742.0	4,713.9	28.04	169.125		
7,150.0	7,127.7	7,306.5	7,062.3	13.5	30.7	102.63	1,687.4	-4,685.2	4,747.2	4,719.3	27.93	169.942		
7,200.0	7,171.8	7,432.1	7,187.9	13.5	30.8	103.29	1,688.8	-4,684.2	4,752.9	4,725.0	27.94	170.131		
7,250.0	7,214.2	7,477.5	7,233.3	13.4	30.8	103.38	1,689.2	-4,683.5	4,759.3	4,731.6	27.73	171.620		
7,300.0	7,254.6	7,520.7	7,276.5	13.4	30.8	103.33	1,689.6	-4,682.7	4,766.8	4,739.3	27.52	173.228		
7,350.0	7,292.9	7,561.5	7,317.2	13.3	30.8	103.16	1,690.0	-4,682.0	4,775.3	4,748.0	27.31	174.877		
7,400.0	7,328.9	7,599.0	7,354.8	13.3	30.9	102.85	1,690.4	-4,681.3	4,785.0	4,757.9	27.11	176.490		
7,450.0	7,362.3	7,627.2	7,383.0	13.3	30.9	102.37	1,690.7	-4,680.8	4,795.8	4,768.9	26.94	178.020		
7,500.0	7,393.1	7,652.7	7,408.5	13.4	30.9	101.75	1,690.9	-4,680.4	4,807.8	4,780.9	26.81	179.294		
7,550.0	7,421.1	7,676.0	7,431.8	13.5	30.9	101.01	1,691.0	-4,680.0	4,820.8	4,794.1	26.75	180.201		
7,600.0	7,446.1	7,697.0	7,452.7	13.6	30.9	100.14	1,691.1	-4,679.8	4,835.0	4,808.2	26.76	180.659		
7,650.0	7,468.0	7,715.5	7,471.3	13.8	30.9	99.14	1,691.1	-4,679.6	4,850.2	4,823.4	26.85	180.613		
7,700.0	7,486.7	7,731.5	7,487.2	14.0	31.0	98.02	1,691.0	-4,679.4	4,866.4	4,839.4	27.03	180.047		
7,750.0	7,502.2	7,744.8	7,500.6	14.2	31.0	96.76	1,691.0	-4,679.3	4,883.6	4,856.3	27.29	178.980		
7,800.0	7,514.3	7,755.4	7,511.1	14.6	31.0	95.38	1,690.9	-4,679.2	4,901.7	4,874.1	27.62	177.469		
7,850.0	7,523.0	7,771.0	7,526.7	14.9	31.0	93.97	1,690.9	-4,679.1	4,920.5	4,892.5	28.03	175.532		
7,900.0	7,528.2	7,771.0	7,526.7	15.3	31.0	92.29	1,690.9	-4,679.1	4,940.1	4,911.6	28.49	173.422		
7,950.2	7,530.0	7,771.0	7,526.7	15.8	31.0	90.52	1,690.9	-4,679.1	4,960.4	4,931.4	28.99	171.098		
8,000.0	7,530.0	7,771.0	7,526.7	16.2	31.0	90.52	1,690.9	-4,679.1	4,981.0	4,951.5	29.48	168.990		
8,100.0	7,530.0	7,771.0	7,526.7	17.3	31.0	90.52	1,690.9	-4,679.1	5,023.6	4,993.1	30.54	164.490		
8,200.0	7,530.0	7,771.0	7,526.7	18.4	31.0	90.52	1,690.9	-4,679.1	5,067.9	5,036.1	31.71	159.803		
8,300.0	7,530.0	7,771.0	7,526.7	19.7	31.0	90.52	1,690.9	-4,679.1	5,113.7	5,080.7	32.97	155.086		
8,400.0	7,530.0	7,771.0	7,526.7	21.0	31.0	90.52	1,690.9	-4,679.1	5,161.0	5,126.7	34.30	150.445		
8,500.0	7,530.0	7,771.0	7,526.7	22.4	31.0	90.52	1,690.9	-4,679.1	5,209.8	5,174.1	35.70	145.952		
8,600.0	7,530.0	7,771.0	7,526.7	23.8	31.0	90.52	1,690.9	-4,679.1	5,260.1	5,223.0	37.13	141.650		
8,700.0	7,530.0	7,771.0	7,526.7	25.3	31.0	90.52	1,690.9	-4,679.1	5,311.8	5,273.2	38.61	137.563		
8,800.0	7,530.0	7,771.0	7,526.7	26.8	31.0	90.52	1,690.9	-4,679.1	5,364.8	5,324.7	40.13	133.700		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 46-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	7,530.0	7,771.0	7,526.7	28.3	31.0	90.52	1,690.9	-4,679.1	5,419.2	5,377.5	41.67	130.062		
9,000.0	7,530.0	7,771.0	7,526.7	29.9	31.0	90.52	1,690.9	-4,679.1	5,474.9	5,431.6	43.23	126.643		
9,100.0	7,530.0	7,771.0	7,526.7	31.4	31.0	90.52	1,690.9	-4,679.1	5,531.8	5,487.0	44.81	123.436		
9,200.0	7,530.0	7,771.0	7,526.7	33.0	31.0	90.52	1,690.9	-4,679.1	5,589.9	5,543.5	46.42	120.429		
9,300.0	7,530.0	7,771.0	7,526.7	34.7	31.0	90.52	1,690.9	-4,679.1	5,649.2	5,601.2	48.03	117.611		
9,400.0	7,530.0	7,771.0	7,526.7	36.3	31.0	90.52	1,690.9	-4,679.1	5,709.6	5,660.0	49.66	114.970		
9,500.0	7,530.0	7,771.0	7,526.7	37.9	31.0	90.52	1,690.9	-4,679.1	5,771.2	5,719.9	51.30	112.493		
9,600.0	7,530.0	7,771.0	7,526.7	39.6	31.0	90.52	1,690.9	-4,679.1	5,833.7	5,780.8	52.95	110.170		
9,700.0	7,530.0	7,771.0	7,526.7	41.2	31.0	90.52	1,690.9	-4,679.1	5,897.4	5,842.8	54.61	107.988		
9,800.0	7,530.0	7,771.0	7,526.7	42.9	31.0	90.52	1,690.9	-4,679.1	5,962.0	5,905.7	56.28	105.939		
9,900.0	7,530.0	7,771.0	7,526.7	44.5	31.0	90.52	1,690.9	-4,679.1	6,027.6	5,969.6	57.95	104.012		
10,000.0	7,530.0	7,771.0	7,526.7	46.2	31.0	90.52	1,690.9	-4,679.1	6,094.1	6,034.5	59.63	102.199		
10,100.0	7,530.0	7,771.0	7,526.7	47.9	31.0	90.52	1,690.9	-4,679.1	6,161.5	6,100.2	61.31	100.491		
10,200.0	7,530.0	7,771.0	7,526.7	49.6	31.0	90.52	1,690.9	-4,679.1	6,229.8	6,166.8	63.00	98.881		
10,300.0	7,530.0	7,771.0	7,526.7	51.3	31.0	90.52	1,690.9	-4,679.1	6,299.0	6,234.3	64.70	97.361		
10,400.0	7,530.0	7,771.0	7,526.7	53.0	31.0	90.52	1,690.9	-4,679.1	6,369.0	6,302.6	66.39	95.926		
10,500.0	7,530.0	7,771.0	7,526.7	54.7	31.0	90.52	1,690.9	-4,679.1	6,439.7	6,371.6	68.10	94.569		
10,600.0	7,530.0	7,771.0	7,526.7	56.4	31.0	90.52	1,690.9	-4,679.1	6,511.3	6,441.5	69.80	93.284		
10,700.0	7,530.0	7,771.0	7,526.7	58.1	31.0	90.52	1,690.9	-4,679.1	6,583.5	6,512.0	71.51	92.068		
10,800.0	7,530.0	7,771.0	7,526.7	59.8	31.0	90.52	1,690.9	-4,679.1	6,656.5	6,583.3	73.22	90.914		
10,900.0	7,530.0	7,771.0	7,526.7	61.5	31.0	90.52	1,690.9	-4,679.1	6,730.2	6,655.3	74.93	89.820		
11,000.0	7,530.0	7,771.0	7,526.7	63.2	31.0	90.52	1,690.9	-4,679.1	6,804.6	6,727.9	76.65	88.780		
11,100.0	7,530.0	7,771.0	7,526.7	64.9	31.0	90.52	1,690.9	-4,679.1	6,879.6	6,801.2	78.36	87.792		
11,200.0	7,530.0	7,771.0	7,526.7	66.6	31.0	90.52	1,690.9	-4,679.1	6,955.2	6,875.1	80.08	86.852		
11,300.0	7,530.0	7,771.0	7,526.7	68.4	31.0	90.52	1,690.9	-4,679.1	7,031.4	6,949.6	81.80	85.957		
11,400.0	7,530.0	7,771.0	7,526.7	70.1	31.0	90.52	1,690.9	-4,679.1	7,108.3	7,024.8	83.52	85.105		
11,500.0	7,530.0	7,771.0	7,526.7	71.8	31.0	90.52	1,690.9	-4,679.1	7,185.7	7,100.4	85.25	84.292		
11,600.0	7,530.0	7,771.0	7,526.7	73.5	31.0	90.52	1,690.9	-4,679.1	7,263.6	7,176.7	86.97	83.516		
11,700.0	7,530.0	7,771.0	7,526.7	75.3	31.0	90.52	1,690.9	-4,679.1	7,342.1	7,253.4	88.70	82.775		
11,800.0	7,530.0	7,771.0	7,526.7	77.0	31.0	90.52	1,690.9	-4,679.1	7,421.1	7,330.7	90.43	82.067		
11,900.0	7,530.0	7,771.0	7,526.7	78.7	31.0	90.52	1,690.9	-4,679.1	7,500.6	7,408.5	92.16	81.390		
12,000.0	7,530.0	7,771.0	7,526.7	80.4	31.0	90.52	1,690.9	-4,679.1	7,580.6	7,486.7	93.89	80.743		
12,100.0	7,530.0	7,771.0	7,526.7	82.2	31.0	90.52	1,690.9	-4,679.1	7,661.1	7,565.5	95.62	80.122		
12,200.0	7,530.0	7,771.0	7,526.7	83.9	31.0	90.52	1,690.9	-4,679.1	7,742.0	7,644.7	97.35	79.528		
12,300.0	7,530.0	7,771.0	7,526.7	85.6	31.0	90.52	1,690.9	-4,679.1	7,823.4	7,724.3	99.08	78.958		
12,400.0	7,530.0	7,771.0	7,526.7	87.4	31.0	90.52	1,690.9	-4,679.1	7,905.2	7,804.3	100.82	78.412		
12,500.0	7,530.0	7,771.0	7,526.7	89.1	31.0	90.52	1,690.9	-4,679.1	7,987.4	7,884.8	102.55	77.887		
12,600.0	7,530.0	7,771.0	7,526.7	90.8	31.0	90.52	1,690.9	-4,679.1	8,070.0	7,965.7	104.29	77.383		
12,700.0	7,530.0	7,771.0	7,526.7	92.6	31.0	90.52	1,690.9	-4,679.1	8,153.0	8,046.9	106.02	76.899		
12,800.0	7,530.0	7,771.0	7,526.7	94.3	31.0	90.52	1,690.9	-4,679.1	8,236.3	8,128.6	107.76	76.433		
12,900.0	7,530.0	7,771.0	7,526.7	96.0	31.0	90.52	1,690.9	-4,679.1	8,320.1	8,210.6	109.50	75.985		
13,000.0	7,530.0	7,771.0	7,526.7	97.8	31.0	90.52	1,690.9	-4,679.1	8,404.2	8,292.9	111.23	75.554		
13,100.0	7,530.0	7,771.0	7,526.7	99.5	31.0	90.52	1,690.9	-4,679.1	8,488.6	8,375.6	112.97	75.139		
13,200.0	7,530.0	7,771.0	7,526.7	101.3	31.0	90.52	1,690.9	-4,679.1	8,573.4	8,458.7	114.71	74.739		
13,300.0	7,530.0	7,771.0	7,526.7	103.0	31.0	90.52	1,690.9	-4,679.1	8,658.5	8,542.0	116.45	74.353		
13,400.0	7,530.0	7,771.0	7,526.7	104.7	31.0	90.52	1,690.9	-4,679.1	8,743.9	8,625.7	118.19	73.981		
13,500.0	7,530.0	7,771.0	7,526.7	106.5	31.0	90.52	1,690.9	-4,679.1	8,829.6	8,709.7	119.93	73.622		
13,600.0	7,530.0	7,771.0	7,526.7	108.2	31.0	90.52	1,690.9	-4,679.1	8,915.6	8,793.9	121.67	73.276		
13,700.0	7,530.0	7,771.0	7,526.7	110.0	31.0	90.52	1,690.9	-4,679.1	9,001.9	8,878.5	123.41	72.941		
13,800.0	7,530.0	7,771.0	7,526.7	111.7	31.0	90.52	1,690.9	-4,679.1	9,088.5	8,963.3	125.16	72.618		
13,900.0	7,530.0	7,771.0	7,526.7	113.4	31.0	90.52	1,690.9	-4,679.1	9,175.4	9,048.5	126.90	72.305		
14,000.0	7,530.0	7,771.0	7,526.7	115.2	31.0	90.52	1,690.9	-4,679.1	9,262.5	9,133.8	128.64	72.003		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design													S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - S		Offset Site Error:		0.0 ft
Survey Program:													46-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	Separation	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	Centres	(ft)	Axis	Factor					
14,100.0	7,530.0	7,771.0	7,526.7	116.9	31.0	90.52	1,690.9	-4,679.1	9,349.9	9,219.5	130.38	71.711					
14,200.0	7,530.0	7,771.0	7,526.7	118.7	31.0	90.52	1,690.9	-4,679.1	9,437.5	9,305.4	132.13	71.428					
14,300.0	7,530.0	7,771.0	7,526.7	120.4	31.0	90.52	1,690.9	-4,679.1	9,525.4	9,391.5	133.87	71.154					
14,400.0	7,530.0	7,771.0	7,526.7	122.1	31.0	90.52	1,690.9	-4,679.1	9,613.5	9,477.9	135.61	70.889					
14,500.0	7,530.0	7,771.0	7,526.7	123.9	31.0	90.52	1,690.9	-4,679.1	9,701.8	9,564.5	137.36	70.632					
14,600.0	7,530.0	7,771.0	7,526.7	125.6	31.0	90.52	1,690.9	-4,679.1	9,790.4	9,651.3	139.10	70.383					
14,700.0	7,530.0	7,771.0	7,526.7	127.4	31.0	90.52	1,690.9	-4,679.1	9,879.2	9,738.3	140.85	70.142					
14,800.0	7,530.0	7,771.0	7,526.7	129.1	31.0	90.52	1,690.9	-4,679.1	9,968.2	9,825.6	142.59	69.908 SF					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 100-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	-60.56	1,778.2	-3,151.3	3,618.8					
100.0	100.0	48.3	48.3	0.2	0.1	-60.56	1,778.2	-3,151.2	3,618.3	3,618.1	0.24	N/A		
200.0	200.0	142.9	142.9	0.3	0.2	-60.56	1,778.1	-3,151.0	3,618.1	3,617.5	0.58	6,282.779		
208.2	208.2	149.2	149.2	0.3	0.3	-60.56	1,778.1	-3,151.0	3,618.1	3,617.5	0.60	6,019.114		
300.0	300.0	219.5	219.5	0.5	0.4	-60.56	1,778.2	-3,151.2	3,618.3	3,617.4	0.88	4,093.111		
400.0	400.0	300.0	300.0	0.7	0.5	-60.56	1,778.5	-3,151.8	3,619.2	3,618.0	1.20	3,018.200		
500.0	500.0	388.4	388.4	0.8	0.7	-60.57	1,778.9	-3,153.0	3,620.6	3,619.1	1.53	2,368.778		
600.0	600.0	471.0	471.0	1.0	0.8	-37.57	1,779.2	-3,154.4	3,621.6	3,619.7	1.85	1,960.943		
700.0	700.0	568.1	568.0	1.2	1.0	-37.59	1,780.3	-3,156.1	3,621.6	3,619.4	2.19	1,652.522		
800.0	799.9	647.3	647.2	1.4	1.1	-37.61	1,782.1	-3,157.1	3,620.3	3,617.8	2.51	1,443.766		
848.7	848.4	680.3	680.2	1.5	1.2	-37.62	1,783.1	-3,157.6	3,619.5	3,616.8	2.65	1,364.623		
900.0	899.7	717.4	717.3	1.6	1.3	-37.63	1,784.4	-3,158.2	3,618.7	3,615.9	2.81	1,287.510		
1,000.0	999.5	800.0	799.8	1.8	1.4	-37.64	1,788.0	-3,159.7	3,617.6	3,614.4	3.14	1,152.599		
1,100.0	1,099.3	886.8	886.5	2.0	1.6	-37.65	1,792.1	-3,161.5	3,616.9	3,613.4	3.48	1,040.598		
1,200.0	1,199.1	987.7	987.2	2.2	1.8	-37.67	1,796.8	-3,163.8	3,616.3	3,612.5	3.84	941.909		
1,300.0	1,298.9	1,112.9	1,112.3	2.4	2.0	-37.68	1,802.3	-3,166.3	3,615.4	3,611.1	4.25	851.163		
1,400.0	1,398.8	1,213.7	1,213.0	2.6	2.2	-37.70	1,806.6	-3,168.0	3,614.1	3,609.5	4.61	783.440		
1,500.0	1,498.6	1,321.4	1,320.5	2.8	2.4	-37.71	1,811.0	-3,169.7	3,612.7	3,607.7	4.99	723.878		
1,600.0	1,598.4	1,419.1	1,418.2	3.0	2.6	-37.73	1,814.6	-3,171.3	3,611.1	3,605.8	5.35	674.976		
1,700.0	1,698.2	1,500.0	1,499.0	3.2	2.7	-37.75	1,817.7	-3,173.0	3,610.0	3,604.3	5.68	635.625		
1,800.0	1,798.0	1,642.5	1,641.4	3.4	3.0	-37.77	1,823.2	-3,175.1	3,608.3	3,602.2	6.12	589.467		
1,900.0	1,897.8	1,743.1	1,741.9	3.6	3.2	-37.79	1,826.8	-3,176.1	3,606.1	3,599.6	6.49	555.858		
2,000.0	1,997.7	1,848.5	1,847.3	3.8	3.4	-37.81	1,830.7	-3,177.3	3,604.1	3,597.2	6.86	525.125		
2,100.0	2,097.5	1,988.1	1,986.8	4.0	3.6	-37.83	1,835.6	-3,177.7	3,601.3	3,594.0	7.30	493.264		
2,200.0	2,197.3	2,096.5	2,095.1	4.2	3.8	-37.85	1,838.6	-3,177.6	3,597.7	3,590.1	7.68	468.423		
2,300.0	2,297.1	2,218.6	2,217.2	4.4	4.1	-37.89	1,841.0	-3,177.4	3,593.7	3,585.7	8.08	444.690		
2,400.0	2,396.9	2,313.8	2,312.4	4.6	4.2	-37.92	1,842.8	-3,177.3	3,589.7	3,581.2	8.44	425.520		
2,500.0	2,496.7	2,455.1	2,453.7	4.8	4.5	-37.98	1,844.1	-3,176.4	3,584.7	3,575.9	8.87	404.212		
2,600.0	2,596.5	2,539.5	2,538.1	5.0	4.6	-38.02	1,844.6	-3,175.8	3,579.6	3,570.4	9.20	389.005		
2,700.0	2,696.4	2,613.3	2,611.9	5.2	4.7	-38.05	1,845.4	-3,175.7	3,575.2	3,565.7	9.52	375.661		
2,800.0	2,796.2	2,700.0	2,698.6	5.4	4.9	-38.09	1,846.5	-3,175.8	3,571.2	3,561.3	9.85	362.373		
2,900.0	2,896.0	2,788.3	2,786.8	5.6	5.0	-38.13	1,847.4	-3,176.4	3,567.5	3,557.3	10.19	349.991		
3,000.0	2,995.8	2,890.8	2,889.3	5.8	5.2	-38.20	1,847.8	-3,177.9	3,564.1	3,553.6	10.55	337.695		
3,100.0	3,095.6	2,990.7	2,989.2	6.0	5.4	-38.27	1,847.7	-3,179.4	3,560.7	3,549.7	10.91	326.342		
3,200.0	3,195.4	3,104.8	3,103.4	6.2	5.6	-38.35	1,847.7	-3,180.9	3,557.0	3,545.7	11.29	314.946		
3,300.0	3,295.2	3,200.0	3,198.5	6.4	5.7	-38.42	1,847.9	-3,181.9	3,553.3	3,541.6	11.64	305.147		
3,400.0	3,395.1	3,290.3	3,288.8	6.6	5.9	-38.48	1,848.0	-3,183.1	3,549.7	3,537.7	11.99	296.152		
3,500.0	3,494.9	3,394.2	3,392.7	6.8	6.1	-38.56	1,847.8	-3,184.7	3,546.2	3,533.9	12.35	287.139		
3,600.0	3,594.7	3,515.6	3,514.1	7.0	6.3	-38.66	1,847.0	-3,186.3	3,542.3	3,529.6	12.75	277.928		
3,700.0	3,694.5	3,600.0	3,598.5	7.2	6.4	-38.72	1,846.7	-3,187.3	3,538.4	3,525.3	13.08	270.566		
3,800.0	3,794.3	3,676.5	3,675.0	7.4	6.6	-38.77	1,846.8	-3,188.4	3,535.0	3,521.6	13.40	263.852		
3,900.0	3,894.1	3,759.8	3,758.3	7.6	6.7	-38.83	1,847.4	-3,189.9	3,532.2	3,518.5	13.73	257.297		
4,000.0	3,994.0	3,859.6	3,858.0	7.8	6.9	-38.90	1,847.7	-3,192.3	3,529.7	3,515.7	14.09	250.555		
4,100.0	4,093.8	3,949.3	3,947.7	8.0	7.0	-38.97	1,848.2	-3,194.3	3,527.2	3,512.8	14.43	244.431		
4,200.0	4,193.6	4,039.0	4,037.4	8.2	7.2	-39.03	1,848.8	-3,196.7	3,525.2	3,510.4	14.77	238.631		
4,300.0	4,293.4	4,142.6	4,140.9	8.4	7.4	-39.11	1,849.4	-3,199.6	3,523.1	3,508.0	15.14	232.713		
4,400.0	4,393.2	4,260.5	4,258.8	8.6	7.6	-39.19	1,850.3	-3,202.5	3,521.0	3,505.5	15.53	226.691		
4,500.0	4,493.0	4,384.7	4,383.0	8.8	7.8	-39.27	1,851.2	-3,204.4	3,518.0	3,502.1	15.94	220.757		
4,600.0	4,592.8	4,465.3	4,463.5	9.0	8.0	-39.33	1,851.7	-3,205.7	3,514.9	3,498.7	16.26	216.114		
4,700.0	4,692.7	4,573.2	4,571.4	9.3	8.1	-39.39	1,853.0	-3,207.5	3,512.3	3,495.7	16.64	211.073		
4,800.0	4,792.5	4,674.3	4,672.5	9.5	8.3	-39.45	1,854.0	-3,208.9	3,509.3	3,492.3	17.00	206.369		
4,900.0	4,892.3	4,780.2	4,778.4	9.7	8.5	-39.51	1,855.1	-3,210.3	3,506.3	3,488.9	17.38	201.770		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													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		
5,000.0	4,992.1	4,880.5	4,878.7	9.9	8.7	-39.57	1,856.3	-3,211.5	3,503.1	3,485.4	17.74	197.450		
5,100.0	5,091.9	4,981.8	4,979.9	10.1	8.9	-39.61	1,858.1	-3,212.3	3,500.0	3,481.9	18.11	193.286		
5,200.0	5,191.7	5,083.1	5,081.3	10.3	9.1	-39.65	1,859.9	-3,213.1	3,496.8	3,478.3	18.47	189.281		
5,300.0	5,291.5	5,166.0	5,164.1	10.5	9.2	-39.69	1,861.4	-3,213.8	3,493.8	3,475.0	18.81	185.767		
5,400.0	5,391.4	5,261.8	5,259.9	10.7	9.4	-39.74	1,863.1	-3,215.3	3,491.2	3,472.1	19.16	182.182		
5,500.0	5,491.2	5,362.4	5,360.4	10.9	9.6	-39.79	1,864.6	-3,216.7	3,488.6	3,469.0	19.53	178.647		
5,600.0	5,591.0	5,477.1	5,475.1	11.1	9.8	-39.85	1,866.4	-3,218.3	3,485.8	3,465.9	19.92	175.014		
5,700.0	5,690.8	5,560.7	5,558.8	11.3	9.9	-39.89	1,867.9	-3,219.2	3,482.9	3,462.7	20.25	171.976		
5,800.0	5,790.6	5,667.9	5,665.9	11.5	10.1	-39.94	1,869.8	-3,220.9	3,480.5	3,459.9	20.63	168.721		
5,900.0	5,890.4	5,770.1	5,768.1	11.7	10.3	-39.99	1,871.5	-3,222.0	3,477.6	3,456.6	21.00	165.624		
6,000.0	5,990.3	5,853.7	5,851.7	11.9	10.4	-40.03	1,873.0	-3,223.1	3,474.9	3,453.6	21.33	162.899		
6,100.0	6,090.1	5,938.3	5,936.2	12.1	10.6	-40.08	1,874.6	-3,224.7	3,472.8	3,451.1	21.67	160.271		
6,200.0	6,189.9	6,051.1	6,049.0	12.3	10.8	-40.13	1,876.9	-3,227.0	3,470.9	3,448.9	22.06	157.371		
6,300.0	6,289.7	6,191.7	6,189.6	12.5	11.0	-40.19	1,879.7	-3,228.3	3,468.0	3,445.5	22.49	154.188		
6,400.0	6,389.5	6,339.7	6,337.5	12.7	11.3	-40.25	1,882.1	-3,227.9	3,463.8	3,440.8	22.94	150.971		
6,500.0	6,489.3	6,446.5	6,444.2	12.9	11.5	-40.26	1,884.9	-3,225.9	3,458.6	3,435.3	23.32	148.298		
6,600.0	6,589.1	6,528.3	6,526.0	13.1	11.6	-40.28	1,886.8	-3,224.8	3,453.8	3,430.2	23.66	146.002		
6,700.0	6,689.0	6,611.8	6,609.5	13.3	11.8	-40.29	1,889.2	-3,223.9	3,449.6	3,425.6	23.99	143.771		
6,785.3	6,774.1	6,690.8	6,688.5	13.5	11.9	-40.30	1,891.5	-3,223.4	3,446.2	3,421.9	24.29	141.852		
6,800.0	6,788.8	6,700.0	6,697.7	13.5	11.9	-29.24	1,891.7	-3,223.4	3,445.7	3,421.4	24.34	141.580		
6,844.7	6,833.4	6,743.5	6,741.1	13.6	12.0	74.56	1,892.9	-3,223.2	3,445.0	3,420.6	24.47	140.760 CC		
6,850.0	6,838.8	6,748.1	6,745.8	13.6	12.0	81.34	1,893.0	-3,223.2	3,445.1	3,420.6	24.49	140.674 ES		
6,900.0	6,888.6	6,791.8	6,789.5	13.6	12.1	103.27	1,894.3	-3,223.1	3,446.1	3,421.4	24.61	140.049		
6,950.0	6,938.1	6,840.7	6,838.3	13.7	12.2	108.35	1,895.9	-3,222.9	3,448.7	3,424.0	24.70	139.596		
7,000.0	6,987.0	6,890.2	6,887.8	13.7	12.3	110.46	1,897.4	-3,222.8	3,452.8	3,428.1	24.78	139.338		
7,050.0	7,035.0	6,959.1	6,956.7	13.6	12.4	111.62	1,899.1	-3,222.6	3,458.5	3,433.6	24.86	139.092		
7,100.0	7,082.0	7,028.5	7,026.1	13.6	12.5	112.29	1,900.0	-3,222.3	3,465.3	3,440.4	24.93	138.995		
7,150.0	7,127.7	7,092.0	7,089.5	13.5	12.6	112.64	1,900.6	-3,221.7	3,473.6	3,448.6	24.98	139.077		
7,200.0	7,171.8	7,130.0	7,127.6	13.5	12.7	112.59	1,900.9	-3,221.3	3,483.3	3,458.3	24.98	139.449		
7,250.0	7,214.2	7,163.1	7,160.7	13.4	12.7	112.31	1,901.3	-3,221.0	3,494.7	3,469.8	24.98	139.903		
7,300.0	7,254.6	7,200.0	7,197.5	13.4	12.8	111.90	1,901.7	-3,220.8	3,507.9	3,482.9	25.00	140.330		
7,350.0	7,292.9	7,228.0	7,225.5	13.3	12.9	111.23	1,902.0	-3,220.7	3,522.7	3,497.7	25.03	140.766		
7,400.0	7,328.9	7,260.1	7,257.6	13.3	12.9	110.45	1,902.3	-3,220.6	3,539.2	3,514.1	25.09	141.072		
7,450.0	7,362.3	7,290.1	7,287.6	13.3	13.0	109.50	1,902.5	-3,220.6	3,557.2	3,532.0	25.19	141.238		
7,500.0	7,393.1	7,316.9	7,314.4	13.4	13.0	108.36	1,902.7	-3,220.7	3,576.7	3,551.4	25.33	141.225		
7,550.0	7,421.1	7,340.7	7,338.3	13.5	13.1	107.02	1,902.8	-3,220.8	3,597.7	3,572.2	25.52	141.000		
7,600.0	7,446.1	7,362.0	7,359.5	13.6	13.1	105.49	1,902.9	-3,220.9	3,620.1	3,594.4	25.76	140.542		
7,650.0	7,468.0	7,380.5	7,378.0	13.8	13.1	103.76	1,903.1	-3,221.0	3,643.9	3,617.8	26.06	139.850		
7,700.0	7,486.7	7,400.0	7,397.5	14.0	13.2	101.89	1,903.2	-3,221.1	3,668.8	3,642.4	26.41	138.930		
7,750.0	7,502.2	7,410.6	7,408.2	14.2	13.2	99.72	1,903.3	-3,221.1	3,694.9	3,668.1	26.80	137.856		
7,800.0	7,514.3	7,422.3	7,419.8	14.6	13.2	97.41	1,903.4	-3,221.2	3,722.0	3,694.8	27.24	136.643		
7,850.0	7,523.0	7,430.6	7,428.1	14.9	13.2	94.90	1,903.5	-3,221.3	3,750.0	3,722.3	27.70	135.369		
7,900.0	7,528.2	7,435.4	7,432.9	15.3	13.2	92.20	1,903.5	-3,221.3	3,778.7	3,750.5	28.18	134.104		
7,950.2	7,530.0	7,436.7	7,434.2	15.8	13.2	89.31	1,903.5	-3,221.3	3,808.2	3,779.6	28.65	132.906		
8,000.0	7,530.0	7,436.2	7,433.8	16.2	13.2	89.30	1,903.5	-3,221.3	3,837.9	3,808.8	29.14	131.723		
8,100.0	7,530.0	7,435.4	7,432.9	17.3	13.2	89.29	1,903.5	-3,221.3	3,898.8	3,868.6	30.20	129.099		
8,200.0	7,530.0	7,434.5	7,432.1	18.4	13.2	89.27	1,903.5	-3,221.3	3,961.2	3,929.9	31.37	126.272		
8,300.0	7,530.0	7,433.7	7,431.2	19.7	13.2	89.26	1,903.5	-3,221.3	4,025.2	3,992.6	32.63	123.363		
8,400.0	7,530.0	7,432.9	7,430.4	21.0	13.2	89.24	1,903.5	-3,221.3	4,090.6	4,056.7	33.96	120.458		
8,500.0	7,530.0	7,432.0	7,429.5	22.4	13.2	89.23	1,903.5	-3,221.3	4,157.4	4,122.1	35.35	117.615		
8,600.0	7,530.0	7,431.2	7,428.7	23.8	13.2	89.21	1,903.5	-3,221.3	4,225.5	4,188.7	36.78	114.871		
8,700.0	7,530.0	7,430.3	7,427.9	25.3	13.2	89.19	1,903.5	-3,221.3	4,294.9	4,256.6	38.26	112.249		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,800.0	7,530.0	7,429.5	7,427.0	26.8	13.2	89.18	1,903.5	-3,221.3	4,365.4	4,325.7	39.77	109.759		
8,900.0	7,530.0	7,428.7	7,426.2	28.3	13.2	89.16	1,903.5	-3,221.3	4,437.1	4,395.8	41.31	107.406		
9,000.0	7,530.0	7,427.8	7,425.4	29.9	13.2	89.15	1,903.5	-3,221.2	4,509.9	4,467.0	42.87	105.189		
9,100.0	7,530.0	7,427.0	7,424.5	31.4	13.2	89.13	1,903.4	-3,221.2	4,583.6	4,539.2	44.46	103.104		
9,200.0	7,530.0	7,426.2	7,423.7	33.0	13.2	89.12	1,903.4	-3,221.2	4,658.4	4,612.4	46.06	101.146		
9,300.0	7,530.0	7,425.4	7,422.9	34.7	13.2	89.10	1,903.4	-3,221.2	4,734.1	4,686.4	47.67	99.308		
9,400.0	7,530.0	7,424.5	7,422.1	36.3	13.2	89.09	1,903.4	-3,221.2	4,810.7	4,761.4	49.30	97.583		
9,500.0	7,530.0	7,423.7	7,421.3	37.9	13.2	89.07	1,903.4	-3,221.2	4,888.1	4,837.2	50.94	95.964		
9,600.0	7,530.0	7,422.9	7,420.4	39.6	13.2	89.06	1,903.4	-3,221.2	4,966.3	4,913.8	52.59	94.444		
9,700.0	7,530.0	7,422.1	7,419.6	41.2	13.2	89.04	1,903.4	-3,221.2	5,045.3	4,991.1	54.24	93.015		
9,800.0	7,530.0	7,421.3	7,418.8	42.9	13.2	89.03	1,903.4	-3,221.2	5,125.1	5,069.2	55.91	91.672		
9,900.0	7,530.0	7,420.5	7,418.0	44.5	13.2	89.01	1,903.4	-3,221.2	5,205.5	5,147.9	57.58	90.408		
10,000.0	7,530.0	7,419.7	7,417.2	46.2	13.2	89.00	1,903.4	-3,221.2	5,286.6	5,227.4	59.26	89.218		
10,100.0	7,530.0	7,418.9	7,416.4	47.9	13.2	88.98	1,903.4	-3,221.2	5,368.3	5,307.4	60.94	88.096		
10,200.0	7,530.0	7,418.1	7,415.6	49.6	13.2	88.97	1,903.4	-3,221.2	5,450.7	5,388.1	62.63	87.037		
10,300.0	7,530.0	7,417.3	7,414.8	51.3	13.2	88.95	1,903.4	-3,221.2	5,533.6	5,469.3	64.32	86.037		
10,400.0	7,530.0	7,416.5	7,414.0	53.0	13.2	88.94	1,903.4	-3,221.2	5,617.1	5,551.1	66.01	85.091		
10,500.0	7,530.0	7,415.7	7,413.2	54.7	13.2	88.92	1,903.3	-3,221.2	5,701.1	5,633.4	67.71	84.197		
10,600.0	7,530.0	7,414.9	7,412.4	56.4	13.2	88.91	1,903.3	-3,221.2	5,785.7	5,716.2	69.41	83.349		
10,700.0	7,530.0	7,414.1	7,411.6	58.1	13.2	88.89	1,903.3	-3,221.2	5,870.7	5,799.5	71.12	82.546		
10,800.0	7,530.0	7,413.3	7,410.9	59.8	13.2	88.88	1,903.3	-3,221.2	5,956.1	5,883.3	72.83	81.784		
10,900.0	7,530.0	7,412.6	7,410.1	61.5	13.2	88.86	1,903.3	-3,221.2	6,042.1	5,967.5	74.54	81.060		
11,000.0	7,530.0	7,411.8	7,409.3	63.2	13.2	88.85	1,903.3	-3,221.2	6,128.4	6,052.2	76.25	80.371		
11,100.0	7,530.0	7,411.0	7,408.5	64.9	13.2	88.83	1,903.3	-3,221.1	6,215.2	6,137.2	77.97	79.716		
11,200.0	7,530.0	7,410.2	7,407.7	66.6	13.2	88.82	1,903.3	-3,221.1	6,302.3	6,222.6	79.68	79.092		
11,300.0	7,530.0	7,409.5	7,407.0	68.4	13.2	88.80	1,903.3	-3,221.1	6,389.9	6,308.4	81.40	78.498		
11,400.0	7,530.0	7,408.7	7,406.2	70.1	13.2	88.79	1,903.3	-3,221.1	6,477.7	6,394.6	83.12	77.930		
11,500.0	7,530.0	7,407.9	7,405.4	71.8	13.2	88.78	1,903.3	-3,221.1	6,566.0	6,481.1	84.84	77.389		
11,600.0	7,530.0	7,407.1	7,404.7	73.5	13.2	88.76	1,903.3	-3,221.1	6,654.5	6,568.0	86.57	76.872		
11,700.0	7,530.0	7,406.4	7,403.9	75.3	13.2	88.75	1,903.3	-3,221.1	6,743.4	6,655.1	88.29	76.377		
11,800.0	7,530.0	7,405.6	7,403.1	77.0	13.2	88.73	1,903.3	-3,221.1	6,832.6	6,742.6	90.02	75.904		
11,900.0	7,530.0	7,404.9	7,402.4	78.7	13.2	88.72	1,903.3	-3,221.1	6,922.1	6,830.4	91.74	75.450		
12,000.0	7,530.0	7,404.1	7,401.6	80.4	13.2	88.70	1,903.3	-3,221.1	7,011.9	6,918.4	93.47	75.016		
12,100.0	7,530.0	7,403.4	7,400.9	82.2	13.2	88.69	1,903.2	-3,221.1	7,101.9	7,006.7	95.20	74.599		
12,200.0	7,530.0	7,400.0	7,397.5	83.9	13.2	88.63	1,903.2	-3,221.1	7,192.2	7,095.3	96.92	74.205		
12,300.0	7,530.0	7,400.0	7,397.5	85.6	13.2	88.63	1,903.2	-3,221.1	7,282.8	7,184.1	98.66	73.819		
12,400.0	7,530.0	7,400.0	7,397.5	87.4	13.2	88.63	1,903.2	-3,221.1	7,373.6	7,273.2	100.39	73.449		
12,500.0	7,530.0	7,400.0	7,397.5	89.1	13.2	88.63	1,903.2	-3,221.1	7,464.7	7,362.5	102.12	73.094		
12,600.0	7,530.0	7,400.0	7,397.5	90.8	13.2	88.63	1,903.2	-3,221.1	7,555.9	7,452.1	103.86	72.751		
12,700.0	7,530.0	7,400.0	7,397.5	92.6	13.2	88.63	1,903.2	-3,221.1	7,647.4	7,541.8	105.59	72.422		
12,800.0	7,530.0	7,400.0	7,397.5	94.3	13.2	88.63	1,903.2	-3,221.1	7,739.1	7,631.8	107.33	72.105		
12,900.0	7,530.0	7,400.0	7,397.5	96.0	13.2	88.63	1,903.2	-3,221.1	7,831.0	7,721.9	109.07	71.799		
13,000.0	7,530.0	7,400.0	7,397.5	97.8	13.2	88.63	1,903.2	-3,221.1	7,923.1	7,812.3	110.81	71.505		
13,100.0	7,530.0	7,400.0	7,397.5	99.5	13.2	88.63	1,903.2	-3,221.1	8,015.4	7,902.8	112.54	71.220		
13,200.0	7,530.0	7,400.0	7,397.5	101.3	13.2	88.63	1,903.2	-3,221.1	8,107.9	7,993.6	114.28	70.946		
13,300.0	7,530.0	7,400.0	7,397.5	103.0	13.2	88.63	1,903.2	-3,221.1	8,200.5	8,084.5	116.02	70.681		
13,400.0	7,530.0	7,400.0	7,397.5	104.7	13.2	88.63	1,903.2	-3,221.1	8,293.3	8,175.6	117.76	70.425		
13,500.0	7,530.0	7,400.0	7,397.5	106.5	13.2	88.63	1,903.2	-3,221.1	8,386.3	8,266.8	119.50	70.178		
13,600.0	7,530.0	7,400.0	7,397.5	108.2	13.2	88.63	1,903.2	-3,221.1	8,479.4	8,358.2	121.24	69.939		
13,700.0	7,530.0	7,400.0	7,397.5	110.0	13.2	88.63	1,903.2	-3,221.1	8,572.7	8,449.8	122.98	69.707		
13,800.0	7,530.0	7,400.0	7,397.5	111.7	13.2	88.63	1,903.2	-3,221.1	8,666.2	8,541.5	124.72	69.483		
13,900.0	7,530.0	7,400.0	7,397.5	113.4	13.2	88.63	1,903.2	-3,221.1	8,759.8	8,633.3	126.47	69.266		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
14,000.0	7,530.0	7,400.0	7,397.5	115.2	13.2	88.63	1,903.2	-3,221.1	8,853.5	8,725.3	128.21	69.056		
14,100.0	7,530.0	7,400.0	7,397.5	116.9	13.2	88.63	1,903.2	-3,221.1	8,947.4	8,817.4	129.95	68.853		
14,200.0	7,530.0	7,400.0	7,397.5	118.7	13.2	88.63	1,903.2	-3,221.1	9,041.4	8,909.7	131.69	68.655		
14,300.0	7,530.0	7,400.0	7,397.5	120.4	13.2	88.63	1,903.2	-3,221.1	9,135.5	9,002.1	133.44	68.464		
14,400.0	7,530.0	7,400.0	7,397.5	122.1	13.2	88.63	1,903.2	-3,221.1	9,229.7	9,094.6	135.18	68.278		
14,500.0	7,530.0	7,400.0	7,397.5	123.9	13.2	88.63	1,903.2	-3,221.1	9,324.1	9,187.2	136.92	68.098		
14,600.0	7,530.0	7,400.0	7,397.5	125.6	13.2	88.63	1,903.2	-3,221.1	9,418.6	9,279.9	138.67	67.923		
14,700.0	7,530.0	7,400.0	7,397.5	127.4	13.2	88.63	1,903.2	-3,221.1	9,513.2	9,372.8	140.41	67.753		
14,800.0	7,530.0	7,400.0	7,397.5	129.1	13.2	88.63	1,903.2	-3,221.1	9,607.9	9,465.7	142.15	67.588		
14,900.0	7,530.0	7,400.0	7,397.5	130.9	13.2	88.63	1,903.2	-3,221.1	9,702.7	9,558.8	143.90	67.427		
15,000.0	7,530.0	7,400.0	7,397.5	132.6	13.2	88.63	1,903.2	-3,221.1	9,797.6	9,652.0	145.64	67.271		
15,100.0	7,530.0	7,385.4	7,382.9	134.4	13.1	88.36	1,903.1	-3,221.0	9,892.6	9,745.3	147.35	67.138		
15,200.0	7,530.0	7,384.9	7,382.4	136.1	13.1	88.35	1,903.1	-3,221.0	9,987.7	9,838.6	149.09	66.991 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 13-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 765-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	-60.04	1,800.8	-3,124.4	3,606.5					
100.0	100.0	57.0	57.0	0.2	0.1	-60.04	1,800.8	-3,124.4	3,606.2	3,606.0	0.25	N/A		
200.0	200.0	157.0	157.0	0.3	0.3	-60.04	1,800.8	-3,124.4	3,606.2	3,605.6	0.59	6,064.128		
300.0	300.0	257.0	257.0	0.5	0.4	-60.04	1,800.8	-3,124.4	3,606.2	3,605.3	0.94	3,836.009		
400.0	400.0	357.0	357.0	0.7	0.6	-60.04	1,800.8	-3,124.4	3,606.2	3,604.9	1.29	2,805.277		
500.0	500.0	457.0	457.0	0.8	0.8	-60.04	1,800.8	-3,124.4	3,606.2	3,604.6	1.63	2,211.144		
600.0	600.0	557.0	557.0	1.0	1.0	-37.04	1,800.8	-3,124.4	3,605.5	3,603.5	1.98	1,824.308		
700.0	700.0	657.0	657.0	1.2	1.1	-37.08	1,800.8	-3,124.4	3,603.4	3,601.1	2.32	1,551.583		
800.0	799.9	756.9	756.9	1.4	1.3	-37.14	1,800.8	-3,124.4	3,599.9	3,597.3	2.67	1,348.263		
848.7	848.4	795.0	795.0	1.5	1.4	-37.18	1,800.9	-3,124.5	3,597.8	3,595.0	2.82	1,274.406		
900.0	899.7	838.3	838.3	1.6	1.4	-37.20	1,801.0	-3,124.6	3,595.6	3,592.6	2.99	1,201.999		
1,000.0	999.5	933.5	933.5	1.8	1.6	-37.26	1,801.3	-3,125.1	3,591.3	3,588.0	3.34	1,075.636		
1,100.0	1,099.3	997.6	997.6	2.0	1.7	-37.30	1,801.4	-3,125.8	3,587.5	3,583.9	3.63	987.520		
1,200.0	1,199.1	1,040.5	1,040.5	2.2	1.8	-37.32	1,802.0	-3,126.6	3,585.1	3,581.2	3.89	921.433		
1,291.3	1,290.2	1,074.0	1,074.0	2.3	1.8	-37.34	1,802.9	-3,127.6	3,584.3	3,580.2	4.12	870.704 CC		
1,300.0	1,298.9	1,074.0	1,074.0	2.4	1.8	-37.34	1,802.9	-3,127.6	3,584.3	3,580.2	4.13	867.341 ES		
1,400.0	1,398.8	1,137.0	1,136.8	2.6	2.0	-37.36	1,805.7	-3,130.4	3,585.4	3,581.0	4.43	809.929		
1,500.0	1,498.6	1,159.2	1,159.0	2.8	2.0	-37.36	1,807.0	-3,131.6	3,587.9	3,583.2	4.65	771.572		
1,600.0	1,598.4	1,200.0	1,199.6	3.0	2.1	-37.38	1,809.4	-3,134.5	3,592.2	3,587.3	4.91	732.220		
1,700.0	1,698.2	1,263.0	1,262.2	3.2	2.2	-37.40	1,813.2	-3,140.1	3,597.9	3,592.7	5.20	691.798		
1,800.0	1,798.0	1,307.7	1,306.6	3.4	2.3	-37.43	1,816.0	-3,144.7	3,604.9	3,599.4	5.46	659.725		
1,900.0	1,897.8	1,354.7	1,353.2	3.6	2.4	-37.45	1,819.1	-3,149.9	3,613.2	3,607.5	5.73	630.404		
2,000.0	1,997.7	1,406.9	1,404.8	3.8	2.5	-37.48	1,823.0	-3,156.6	3,623.0	3,617.0	6.01	603.024		
2,100.0	2,097.5	1,470.1	1,467.3	4.0	2.7	-37.52	1,827.6	-3,165.3	3,633.9	3,627.6	6.30	576.437		
2,200.0	2,197.3	1,537.6	1,533.7	4.2	2.9	-37.57	1,832.7	-3,175.4	3,645.9	3,639.3	6.61	551.787		
2,300.0	2,297.1	1,636.0	1,630.8	4.4	3.2	-37.64	1,840.2	-3,190.2	3,658.0	3,651.0	6.97	525.184		
2,400.0	2,396.9	1,699.0	1,692.8	4.6	3.4	-37.68	1,845.6	-3,199.7	3,670.6	3,663.3	7.26	505.519		
2,500.0	2,496.7	1,762.0	1,754.7	4.8	3.6	-37.72	1,851.1	-3,210.1	3,684.4	3,676.9	7.56	487.551		
2,600.0	2,596.5	1,824.0	1,815.5	5.0	3.8	-37.76	1,856.9	-3,220.9	3,699.4	3,691.6	7.85	471.181		
2,700.0	2,696.4	1,887.0	1,877.1	5.2	4.0	-37.79	1,863.3	-3,232.2	3,715.2	3,707.0	8.15	455.987		
2,800.0	2,796.2	1,960.7	1,949.1	5.4	4.3	-37.82	1,871.6	-3,245.5	3,731.8	3,723.3	8.46	440.966		
2,900.0	2,896.0	2,035.1	2,021.8	5.6	4.6	-37.86	1,879.9	-3,259.2	3,748.7	3,739.9	8.78	426.996		
3,000.0	2,995.8	2,074.0	2,059.7	5.8	4.7	-37.87	1,884.5	-3,266.9	3,766.9	3,757.9	9.03	417.015		
3,100.0	3,095.6	2,136.0	2,119.8	6.0	5.0	-37.90	1,892.3	-3,279.7	3,786.4	3,777.1	9.33	405.932		
3,200.0	3,195.4	2,241.3	2,222.0	6.2	5.4	-37.94	1,905.6	-3,301.3	3,805.8	3,796.1	9.70	392.411		
3,300.0	3,295.2	2,319.0	2,297.3	6.4	5.8	-37.99	1,914.6	-3,318.4	3,826.0	3,816.0	10.02	381.838		
3,400.0	3,395.1	2,416.1	2,391.2	6.6	6.2	-38.08	1,924.6	-3,340.7	3,846.4	3,836.1	10.38	370.710		
3,500.0	3,494.9	2,518.4	2,490.4	6.8	6.6	-38.14	1,936.3	-3,363.4	3,866.7	3,855.9	10.74	359.988		
3,600.0	3,594.7	2,608.7	2,577.8	7.0	7.1	-38.19	1,947.3	-3,383.0	3,886.9	3,875.8	11.09	350.634		
3,700.0	3,694.5	2,762.0	2,726.4	7.2	7.7	-38.26	1,966.3	-3,415.3	3,906.8	3,895.3	11.54	338.556		
3,800.0	3,794.3	2,868.6	2,829.9	7.4	8.2	-38.30	1,979.4	-3,436.8	3,925.8	3,913.9	11.91	329.541		
3,900.0	3,894.1	2,977.7	2,936.0	7.6	8.7	-38.33	1,993.6	-3,458.2	3,944.5	3,932.2	12.29	320.933		
4,000.0	3,994.0	3,080.9	3,036.4	7.8	9.1	-38.34	2,007.5	-3,477.7	3,962.9	3,950.2	12.66	313.051		
4,100.0	4,093.8	3,209.6	3,161.6	8.0	9.7	-38.36	2,024.4	-3,502.2	3,981.3	3,968.3	13.07	304.578		
4,200.0	4,193.6	3,316.4	3,265.8	8.2	10.1	-38.42	2,036.1	-3,522.8	3,998.8	3,985.3	13.44	297.426		
4,300.0	4,293.4	3,457.3	3,403.2	8.4	10.7	-38.48	2,051.8	-3,549.8	4,016.5	4,002.6	13.88	289.390		
4,400.0	4,393.2	3,611.5	3,554.1	8.6	11.3	-38.52	2,069.7	-3,576.1	4,032.4	4,018.1	14.34	281.239		
4,500.0	4,493.0	3,819.0	3,758.0	8.8	12.1	-38.57	2,091.0	-3,607.3	4,045.5	4,030.6	14.89	271.688		
4,600.0	4,592.8	3,883.0	3,821.0	9.0	12.3	-38.61	2,096.0	-3,617.4	4,058.4	4,043.2	15.19	267.204		
4,700.0	4,692.7	3,924.7	3,861.9	9.3	12.5	-38.64	2,099.5	-3,624.5	4,072.5	4,057.1	15.45	263.620		
4,800.0	4,792.5	3,985.2	3,921.3	9.5	12.7	-38.66	2,105.8	-3,634.7	4,087.6	4,071.9	15.74	259.657		
4,900.0	4,892.3	4,006.0	3,941.6	9.7	12.8	-38.66	2,108.3	-3,638.2	4,104.0	4,088.1	15.97	257.047		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 13-6 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft	
Survey Program: 765-MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,992.1	4,069.0	4,003.0	9.9	13.1	-38.68	2,116.1	-3,650.0	4,121.8	4,105.5	16.26	253.432	
5,100.0	5,091.9	4,103.6	4,036.6	10.1	13.2	-38.69	2,120.5	-3,657.1	4,141.0	4,124.5	16.51	250.796	
5,200.0	5,191.7	4,184.4	4,114.9	10.3	13.6	-38.72	2,130.8	-3,674.3	4,161.1	4,144.3	16.84	247.098	
5,300.0	5,291.5	4,349.6	4,275.2	10.5	14.4	-38.83	2,147.8	-3,710.1	4,180.4	4,163.1	17.31	241.453	
5,400.0	5,391.4	4,494.5	4,416.4	10.7	15.0	-38.95	2,160.5	-3,740.4	4,198.3	4,180.6	17.75	236.500	
5,500.0	5,491.2	4,586.4	4,505.9	10.9	15.4	-39.06	2,166.4	-3,760.3	4,216.0	4,197.9	18.10	232.961	
5,600.0	5,591.0	4,752.0	4,667.5	11.1	16.1	-39.22	2,177.7	-3,794.4	4,232.7	4,214.1	18.57	227.892	
5,700.0	5,690.8	4,839.6	4,753.1	11.3	16.4	-39.27	2,186.2	-3,810.6	4,249.0	4,230.1	18.91	224.638	
5,800.0	5,790.6	4,915.9	4,827.7	11.5	16.7	-39.28	2,195.6	-3,824.2	4,265.7	4,246.5	19.24	221.745	
5,900.0	5,890.4	4,984.0	4,894.0	11.7	17.0	-39.28	2,204.8	-3,836.1	4,283.0	4,263.4	19.54	219.136	
6,000.0	5,990.3	5,137.9	5,044.1	11.9	17.7	-39.27	2,226.4	-3,862.6	4,300.2	4,280.2	20.01	214.939	
6,100.0	6,090.1	5,225.0	5,129.2	12.1	18.0	-39.25	2,239.1	-3,876.6	4,316.6	4,296.3	20.35	212.116	
6,200.0	6,189.9	5,335.7	5,237.2	12.3	18.5	-39.23	2,254.6	-3,894.9	4,333.2	4,312.4	20.73	208.982	
6,300.0	6,289.7	5,619.4	5,515.4	12.5	19.6	-39.39	2,279.7	-3,944.3	4,349.2	4,327.8	21.42	203.072	
6,400.0	6,389.5	5,693.3	5,588.2	12.7	19.8	-39.46	2,282.9	-3,956.9	4,361.7	4,339.9	21.73	200.696	
6,500.0	6,489.3	5,776.7	5,670.2	12.9	20.1	-39.54	2,287.4	-3,970.9	4,374.6	4,352.5	22.06	198.260	
6,600.0	6,589.1	5,868.5	5,760.4	13.1	20.4	-39.64	2,291.0	-3,987.5	4,387.8	4,365.4	22.41	195.791	
6,700.0	6,689.0	6,005.3	5,895.0	13.3	20.9	-39.78	2,297.7	-4,011.1	4,400.9	4,378.0	22.84	192.702	
6,785.3	6,774.1	6,078.8	5,967.4	13.5	21.2	-39.83	2,302.4	-4,022.9	4,411.5	4,388.4	23.13	190.754	
6,800.0	6,788.8	6,089.2	5,977.7	13.5	21.2	-28.94	2,303.1	-4,024.5	4,413.5	4,390.3	23.17	190.487	
6,850.0	6,838.8	6,128.6	6,016.4	13.6	21.4	81.01	2,306.1	-4,030.8	4,421.2	4,397.9	23.30	189.735	
6,900.0	6,888.6	6,320.7	6,206.1	13.6	22.0	102.51	2,319.8	-4,057.8	4,429.2	4,405.5	23.67	187.126	
6,950.0	6,938.1	6,363.5	6,248.4	13.7	22.1	107.04	2,323.0	-4,063.2	4,438.4	4,414.6	23.77	186.709	
7,000.0	6,987.0	6,632.0	6,515.0	13.7	22.8	109.31	2,339.9	-4,091.0	4,447.8	4,423.6	24.20	183.759	
7,050.0	7,035.0	7,029.8	6,911.8	13.6	23.5	111.27	2,347.5	-4,113.7	4,456.6	4,431.8	24.77	179.904	
7,100.0	7,082.0	7,073.8	6,955.9	13.6	23.5	111.68	2,348.0	-4,114.3	4,464.2	4,439.4	24.81	179.920	
7,150.0	7,127.7	7,113.2	6,995.2	13.5	23.6	111.74	2,348.6	-4,114.9	4,473.4	4,448.5	24.86	179.964	
7,200.0	7,171.8	7,158.1	7,040.1	13.5	23.6	111.59	2,349.5	-4,115.4	4,484.1	4,459.2	24.93	179.871	
7,250.0	7,214.2	7,216.3	7,098.3	13.4	23.7	111.35	2,350.3	-4,116.2	4,496.3	4,471.3	25.04	179.536	
7,300.0	7,254.6	7,277.7	7,159.7	13.4	23.8	111.00	2,350.7	-4,117.0	4,509.8	4,484.6	25.20	178.975	
7,350.0	7,292.9	7,320.3	7,202.3	13.3	23.8	110.37	2,351.0	-4,117.3	4,524.6	4,499.2	25.39	178.208	
7,400.0	7,328.9	7,353.5	7,235.5	13.3	23.9	109.52	2,351.4	-4,117.5	4,541.0	4,515.3	25.64	177.094	
7,450.0	7,362.3	7,380.0	7,262.0	13.3	23.9	108.47	2,351.8	-4,117.6	4,558.7	4,532.8	25.96	175.578	
7,500.0	7,393.1	7,407.7	7,289.7	13.4	23.9	107.28	2,352.2	-4,117.7	4,577.9	4,551.6	26.36	173.643	
7,550.0	7,421.1	7,429.4	7,311.4	13.5	23.9	105.89	2,352.6	-4,117.9	4,598.5	4,571.6	26.84	171.338	
7,600.0	7,446.1	7,448.7	7,330.7	13.6	24.0	104.32	2,353.0	-4,118.0	4,620.3	4,592.9	27.38	168.734	
7,650.0	7,468.0	7,465.4	7,347.4	13.8	24.0	102.57	2,353.3	-4,118.1	4,643.3	4,615.3	27.98	165.927	
7,700.0	7,486.7	7,479.5	7,361.4	14.0	24.0	100.65	2,353.6	-4,118.2	4,667.5	4,638.8	28.63	163.032	
7,750.0	7,502.2	7,490.9	7,372.8	14.2	24.0	98.55	2,353.9	-4,118.3	4,692.6	4,663.3	29.30	160.170	
7,800.0	7,514.3	7,505.0	7,387.0	14.6	24.0	96.36	2,354.2	-4,118.4	4,718.6	4,688.6	29.97	157.450	
7,850.0	7,523.0	7,506.2	7,388.1	14.9	24.0	93.88	2,354.2	-4,118.4	4,745.4	4,714.8	30.61	155.004	
7,900.0	7,528.2	7,513.2	7,395.2	15.3	24.0	91.37	2,354.4	-4,118.5	4,772.8	4,741.6	31.22	152.874	
7,950.2	7,530.0	7,514.2	7,396.2	15.8	24.0	88.69	2,354.4	-4,118.5	4,800.8	4,769.1	31.76	151.166	
8,000.0	7,530.0	7,512.2	7,394.2	16.2	24.0	88.66	2,354.4	-4,118.5	4,829.0	4,796.8	32.24	149.788	
8,100.0	7,530.0	7,508.3	7,390.2	17.3	24.0	88.60	2,354.3	-4,118.4	4,886.6	4,853.3	33.30	146.756	
8,200.0	7,530.0	7,505.0	7,387.0	18.4	24.0	88.56	2,354.2	-4,118.4	4,945.6	4,911.1	34.46	143.500	
8,300.0	7,530.0	7,505.0	7,387.0	19.7	24.0	88.56	2,354.2	-4,118.4	5,005.9	4,970.1	35.72	140.128	
8,400.0	7,530.0	7,505.0	7,387.0	21.0	24.0	88.56	2,354.2	-4,118.4	5,067.4	5,030.3	37.05	136.755	
8,500.0	7,530.0	7,505.0	7,387.0	22.4	24.0	88.56	2,354.2	-4,118.4	5,130.1	5,091.7	38.44	133.443	
8,600.0	7,530.0	7,505.0	7,387.0	23.8	24.0	88.56	2,354.2	-4,118.4	5,194.1	5,154.2	39.88	130.233	
8,700.0	7,530.0	7,505.0	7,387.0	25.3	24.0	88.56	2,354.2	-4,118.4	5,259.1	5,217.7	41.36	127.150	
8,800.0	7,530.0	7,505.0	7,387.0	26.8	24.0	88.56	2,354.2	-4,118.4	5,325.2	5,282.3	42.87	124.209	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 13-6 (EXISTING) - ENCANA WELL - S											Offset Site Error:		0.0 ft
Survey Program: 765-MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,530.0	7,505.0	7,387.0	28.3	24.0	88.56	2,354.2	-4,118.4	5,392.4	5,348.0	44.41	121.414	
9,000.0	7,530.0	7,505.0	7,387.0	29.9	24.0	88.56	2,354.2	-4,118.4	5,460.5	5,414.6	45.98	118.768	
9,100.0	7,530.0	7,505.0	7,387.0	31.4	24.0	88.56	2,354.2	-4,118.4	5,529.7	5,482.1	47.56	116.267	
9,200.0	7,530.0	7,487.8	7,369.8	33.0	24.0	88.31	2,353.8	-4,118.3	5,599.7	5,550.6	49.13	113.972	
9,300.0	7,530.0	7,486.2	7,368.2	34.7	24.0	88.28	2,353.8	-4,118.3	5,670.7	5,619.9	50.75	111.748	
9,400.0	7,530.0	7,484.6	7,366.6	36.3	24.0	88.26	2,353.7	-4,118.2	5,742.5	5,690.1	52.37	109.650	
9,500.0	7,530.0	7,483.0	7,365.0	37.9	24.0	88.24	2,353.7	-4,118.2	5,815.2	5,761.1	54.01	107.673	
9,600.0	7,530.0	7,481.5	7,363.4	39.6	24.0	88.22	2,353.7	-4,118.2	5,888.6	5,833.0	55.65	105.807	
9,700.0	7,530.0	7,479.9	7,361.9	41.2	24.0	88.19	2,353.6	-4,118.2	5,962.8	5,905.5	57.31	104.046	
9,800.0	7,530.0	7,478.4	7,360.4	42.9	24.0	88.17	2,353.6	-4,118.2	6,037.8	5,978.8	58.97	102.384	
9,900.0	7,530.0	7,476.9	7,358.9	44.5	24.0	88.15	2,353.6	-4,118.2	6,113.5	6,052.9	60.64	100.814	
10,000.0	7,530.0	7,475.4	7,357.4	46.2	24.0	88.13	2,353.5	-4,118.2	6,189.9	6,127.6	62.32	99.329	
10,100.0	7,530.0	7,473.9	7,355.9	47.9	24.0	88.11	2,353.5	-4,118.2	6,266.9	6,202.9	64.00	97.924	
10,200.0	7,530.0	7,472.4	7,354.4	49.6	24.0	88.09	2,353.5	-4,118.2	6,344.6	6,278.9	65.68	96.594	
10,300.0	7,530.0	7,471.0	7,352.9	51.3	24.0	88.07	2,353.4	-4,118.1	6,422.9	6,355.5	67.37	95.333	
10,400.0	7,530.0	7,469.5	7,351.5	53.0	24.0	88.04	2,353.4	-4,118.1	6,501.8	6,432.7	69.07	94.137	
10,500.0	7,530.0	7,468.1	7,350.1	54.7	24.0	88.02	2,353.4	-4,118.1	6,581.3	6,510.5	70.76	93.002	
10,600.0	7,530.0	7,466.7	7,348.6	56.4	24.0	88.00	2,353.4	-4,118.1	6,661.3	6,588.8	72.47	91.924	
10,700.0	7,530.0	7,465.3	7,347.2	58.1	24.0	87.98	2,353.3	-4,118.1	6,741.8	6,667.7	74.17	90.899	
10,800.0	7,530.0	7,463.9	7,345.8	59.8	24.0	87.96	2,353.3	-4,118.1	6,822.9	6,747.0	75.88	89.923	
10,900.0	7,530.0	7,462.5	7,344.4	61.5	24.0	87.94	2,353.3	-4,118.1	6,904.5	6,826.9	77.58	88.994	
11,000.0	7,530.0	7,461.1	7,343.1	63.2	24.0	87.92	2,353.2	-4,118.1	6,986.5	6,907.2	79.29	88.108	
11,100.0	7,530.0	7,459.7	7,341.7	64.9	24.0	87.90	2,353.2	-4,118.1	7,069.0	6,988.0	81.01	87.264	
11,200.0	7,530.0	7,458.4	7,340.4	66.6	24.0	87.88	2,353.2	-4,118.1	7,152.0	7,069.2	82.72	86.457	
11,300.0	7,530.0	7,457.1	7,339.0	68.4	24.0	87.86	2,353.2	-4,118.0	7,235.3	7,150.9	84.44	85.687	
11,400.0	7,530.0	7,455.7	7,337.7	70.1	24.0	87.85	2,353.1	-4,118.0	7,319.1	7,233.0	86.16	84.951	
11,500.0	7,530.0	7,454.4	7,336.4	71.8	24.0	87.83	2,353.1	-4,118.0	7,403.3	7,315.5	87.88	84.246	
11,600.0	7,530.0	7,453.1	7,335.1	73.5	24.0	87.81	2,353.1	-4,118.0	7,487.9	7,398.3	89.60	83.572	
11,700.0	7,530.0	7,451.8	7,333.8	75.3	24.0	87.79	2,353.1	-4,118.0	7,572.9	7,481.6	91.32	82.926	
11,800.0	7,530.0	7,450.5	7,332.5	77.0	24.0	87.77	2,353.0	-4,118.0	7,658.2	7,565.2	93.04	82.307	
11,900.0	7,530.0	7,449.3	7,331.3	78.7	24.0	87.75	2,353.0	-4,118.0	7,743.9	7,649.1	94.77	81.713	
12,000.0	7,530.0	7,448.0	7,330.0	80.4	24.0	87.73	2,353.0	-4,118.0	7,829.9	7,733.4	96.50	81.143	
12,100.0	7,530.0	7,446.8	7,328.7	82.2	24.0	87.72	2,353.0	-4,118.0	7,916.3	7,818.0	98.22	80.595	
12,200.0	7,530.0	7,445.5	7,327.5	83.9	24.0	87.70	2,352.9	-4,118.0	8,002.9	7,903.0	99.95	80.069	
12,300.0	7,530.0	7,444.3	7,326.3	85.6	24.0	87.68	2,352.9	-4,118.0	8,089.9	7,988.2	101.68	79.563	
12,400.0	7,530.0	7,443.1	7,325.1	87.4	24.0	87.66	2,352.9	-4,118.0	8,177.2	8,073.7	103.41	79.076	
12,500.0	7,530.0	7,441.9	7,323.9	89.1	24.0	87.65	2,352.9	-4,117.9	8,264.7	8,159.6	105.14	78.608	
12,600.0	7,530.0	7,440.7	7,322.7	90.8	24.0	87.63	2,352.8	-4,117.9	8,352.5	8,245.7	106.87	78.156	
12,700.0	7,530.0	7,439.5	7,321.5	92.6	24.0	87.61	2,352.8	-4,117.9	8,440.7	8,332.0	108.60	77.721	
12,800.0	7,530.0	7,438.3	7,320.3	94.3	24.0	87.59	2,352.8	-4,117.9	8,529.0	8,418.7	110.33	77.302	
12,900.0	7,530.0	7,437.1	7,319.1	96.0	24.0	87.58	2,352.8	-4,117.9	8,617.6	8,505.6	112.07	76.897	
13,000.0	7,530.0	7,436.0	7,318.0	97.8	24.0	87.56	2,352.7	-4,117.9	8,706.5	8,592.7	113.80	76.507	
13,100.0	7,530.0	7,434.8	7,316.8	99.5	24.0	87.54	2,352.7	-4,117.9	8,795.6	8,680.1	115.53	76.130	
13,200.0	7,530.0	7,433.7	7,315.7	101.3	24.0	87.53	2,352.7	-4,117.9	8,885.0	8,767.7	117.27	75.766	
13,300.0	7,530.0	7,432.6	7,314.5	103.0	24.0	87.51	2,352.7	-4,117.9	8,974.5	8,855.5	119.00	75.414	
13,400.0	7,530.0	7,431.4	7,313.4	104.7	24.0	87.50	2,352.7	-4,117.9	9,064.3	8,943.6	120.74	75.073	
13,500.0	7,530.0	7,430.3	7,312.3	106.5	23.9	87.48	2,352.6	-4,117.9	9,154.3	9,031.8	122.48	74.744	
13,600.0	7,530.0	7,429.2	7,311.2	108.2	23.9	87.46	2,352.6	-4,117.9	9,244.5	9,120.3	124.21	74.425	
13,700.0	7,530.0	7,428.1	7,310.1	110.0	23.9	87.45	2,352.6	-4,117.9	9,334.9	9,208.9	125.95	74.117	
13,800.0	7,530.0	7,427.0	7,309.0	111.7	23.9	87.43	2,352.6	-4,117.9	9,425.5	9,297.8	127.69	73.818	
13,900.0	7,530.0	7,426.0	7,307.9	113.4	23.9	87.42	2,352.6	-4,117.8	9,516.2	9,386.8	129.42	73.528	
14,000.0	7,530.0	7,424.9	7,306.9	115.2	23.9	87.40	2,352.5	-4,117.8	9,607.2	9,476.1	131.16	73.248	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design													S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 13-6 (EXISTING) - ENCANA WELL - S		Offset Site Error:		0.0 ft	
Survey Program: 765-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	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis							
14,100.0	7,530.0	7,423.8	7,305.8	116.9	23.9	87.39	2,352.5	-4,117.8	9,698.4	9,565.5	132.90	72.976						
14,200.0	7,530.0	7,422.8	7,304.8	118.7	23.9	87.37	2,352.5	-4,117.8	9,789.7	9,655.0	134.64	72.712						
14,300.0	7,530.0	7,421.7	7,303.7	120.4	23.9	87.36	2,352.5	-4,117.8	9,881.1	9,744.8	136.38	72.455						
14,400.0	7,530.0	7,420.7	7,302.7	122.1	23.9	87.34	2,352.5	-4,117.8	9,972.8	9,834.7	138.11	72.207 SF						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 14-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 797-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-60.98	1,753.5	-3,160.8	3,614.8					
100.0	100.0	55.3	55.3	0.2	0.1	-60.98	1,753.5	-3,160.8	3,614.6	3,614.3	0.25	N/A		
200.0	200.0	152.4	152.4	0.3	0.3	-60.98	1,753.4	-3,160.9	3,614.7	3,614.1	0.59	6,149.657		
300.0	300.0	249.4	249.4	0.5	0.4	-60.98	1,753.4	-3,161.1	3,614.8	3,613.9	0.93	3,891.916		
400.0	400.0	346.5	346.5	0.7	0.6	-60.99	1,753.3	-3,161.4	3,615.1	3,613.8	1.27	2,846.910		
500.0	500.0	443.5	443.5	0.8	0.8	-60.99	1,753.3	-3,161.8	3,615.4	3,613.8	1.61	2,244.418		
600.0	600.0	540.6	540.6	1.0	0.9	-38.00	1,753.2	-3,162.3	3,615.2	3,613.2	1.95	1,853.393		
700.0	700.0	637.6	637.6	1.2	1.1	-38.04	1,753.0	-3,163.0	3,613.6	3,611.3	2.29	1,576.609		
800.0	799.9	734.6	734.6	1.4	1.3	-38.10	1,752.9	-3,163.7	3,610.7	3,608.1	2.64	1,370.224		
848.7	848.4	781.7	781.7	1.5	1.3	-38.14	1,752.8	-3,164.1	3,608.9	3,606.1	2.80	1,287.584		
900.0	899.7	830.7	830.7	1.6	1.4	-38.18	1,752.8	-3,164.5	3,606.8	3,603.8	2.98	1,210.050		
1,000.0	999.5	925.5	925.5	1.8	1.6	-38.24	1,752.7	-3,165.4	3,602.8	3,599.4	3.33	1,082.579		
1,100.0	1,099.3	1,012.8	1,012.8	2.0	1.7	-38.30	1,752.6	-3,166.4	3,599.0	3,595.3	3.66	982.427		
1,200.0	1,199.1	1,081.1	1,081.1	2.2	1.9	-38.36	1,752.3	-3,167.7	3,595.8	3,591.8	3.97	906.296		
1,300.0	1,298.9	1,144.0	1,143.9	2.4	2.0	-38.43	1,751.4	-3,170.2	3,593.7	3,589.4	4.26	842.699		
1,400.0	1,398.8	1,210.3	1,210.1	2.6	2.1	-38.52	1,749.7	-3,174.0	3,592.6	3,588.1	4.57	785.743		
1,475.3	1,473.9	1,260.6	1,260.2	2.7	2.2	-38.60	1,747.9	-3,177.4	3,592.3	3,587.5	4.81	747.230 CC		
1,500.0	1,498.6	1,274.9	1,274.5	2.8	2.2	-38.63	1,747.3	-3,178.6	3,592.4	3,587.5	4.88	735.896 ES		
1,600.0	1,598.4	1,333.0	1,332.3	3.0	2.4	-38.74	1,744.5	-3,183.7	3,593.3	3,588.1	5.18	693.340		
1,700.0	1,698.2	1,400.0	1,398.8	3.2	2.5	-38.89	1,740.5	-3,190.9	3,595.2	3,589.7	5.51	652.102		
1,800.0	1,798.0	1,539.6	1,536.7	3.4	2.9	-39.28	1,728.1	-3,208.1	3,597.4	3,591.4	6.04	595.786		
1,900.0	1,897.8	1,638.6	1,634.2	3.6	3.2	-39.60	1,716.1	-3,220.9	3,598.7	3,592.2	6.50	553.695		
2,000.0	1,997.7	1,712.0	1,706.1	3.8	3.4	-39.86	1,706.2	-3,231.4	3,600.6	3,593.7	6.91	521.257		
2,100.0	2,097.5	1,759.6	1,752.7	4.0	3.6	-40.04	1,699.5	-3,238.9	3,603.7	3,596.4	7.25	497.192		
2,200.0	2,197.3	1,807.0	1,798.9	4.2	3.8	-40.22	1,692.9	-3,246.9	3,608.1	3,600.5	7.59	475.433		
2,300.0	2,297.1	1,902.0	1,891.5	4.4	4.1	-40.59	1,679.7	-3,263.8	3,613.4	3,605.3	8.10	446.237		
2,400.0	2,396.9	1,944.7	1,932.9	4.6	4.3	-40.75	1,673.8	-3,271.8	3,619.7	3,611.3	8.44	428.983		
2,500.0	2,496.7	1,997.0	1,983.7	4.8	4.5	-40.96	1,666.6	-3,282.3	3,627.5	3,618.7	8.81	411.568		
2,600.0	2,596.5	2,043.1	2,028.2	5.0	4.7	-41.15	1,660.1	-3,292.3	3,636.7	3,627.5	9.18	395.995		
2,700.0	2,696.4	2,090.0	2,073.3	5.2	4.9	-41.35	1,653.2	-3,303.3	3,647.3	3,637.8	9.56	381.618		
2,800.0	2,796.2	2,151.4	2,132.0	5.4	5.2	-41.63	1,643.9	-3,318.4	3,659.2	3,649.2	10.00	365.899		
2,900.0	2,896.0	2,320.6	2,293.6	5.6	6.1	-42.41	1,615.6	-3,360.1	3,670.6	3,659.7	10.92	336.040		
3,000.0	2,995.8	2,383.0	2,353.1	5.8	6.4	-42.70	1,605.0	-3,375.3	3,682.0	3,670.6	11.38	323.489		
3,100.0	3,095.6	2,526.9	2,490.5	6.0	7.2	-43.36	1,580.4	-3,410.7	3,694.0	3,681.8	12.23	302.141		
3,200.0	3,195.4	2,691.2	2,646.7	6.2	8.1	-44.18	1,547.3	-3,449.2	3,703.9	3,690.8	13.19	280.904		
3,300.0	3,295.2	2,799.5	2,750.1	6.4	8.7	-44.69	1,525.8	-3,473.0	3,712.9	3,699.0	13.88	267.573		
3,400.0	3,395.1	2,934.6	2,879.3	6.6	9.4	-45.34	1,499.0	-3,502.6	3,722.2	3,707.5	14.69	253.450		
3,500.0	3,494.9	2,992.0	2,934.2	6.8	9.7	-45.61	1,487.6	-3,514.9	3,731.2	3,716.1	15.14	246.437		
3,600.0	3,594.7	3,030.0	2,970.4	7.0	9.9	-45.78	1,480.2	-3,523.3	3,741.6	3,726.1	15.51	241.311		
3,700.0	3,694.5	3,098.8	3,036.1	7.2	10.3	-46.10	1,467.1	-3,539.3	3,753.1	3,737.1	16.00	234.504		
3,800.0	3,794.3	3,235.6	3,166.7	7.4	11.0	-46.72	1,442.8	-3,571.4	3,765.5	3,748.7	16.78	224.350		
3,900.0	3,894.1	3,341.9	3,269.0	7.6	11.5	-47.17	1,424.6	-3,594.3	3,776.2	3,758.8	17.41	216.848		
4,000.0	3,994.0	3,407.0	3,331.4	7.8	11.9	-47.44	1,413.9	-3,609.3	3,788.6	3,770.7	17.87	211.955		
4,100.0	4,093.8	3,529.7	3,449.2	8.0	12.5	-47.95	1,393.6	-3,637.3	3,801.3	3,782.8	18.58	204.628		
4,200.0	4,193.6	3,618.0	3,533.6	8.2	13.0	-48.34	1,377.5	-3,657.1	3,813.4	3,794.2	19.16	199.076		
4,300.0	4,293.4	3,712.2	3,623.6	8.4	13.5	-48.76	1,359.3	-3,678.6	3,825.6	3,805.8	19.76	193.573		
4,400.0	4,393.2	3,784.0	3,692.1	8.6	13.9	-49.08	1,345.8	-3,695.1	3,838.4	3,818.2	20.26	189.449		
4,500.0	4,493.0	3,845.7	3,751.0	8.8	14.3	-49.35	1,334.7	-3,709.6	3,852.2	3,831.5	20.71	185.997		
4,600.0	4,592.8	3,929.6	3,831.1	9.0	14.7	-49.70	1,320.0	-3,729.9	3,866.8	3,845.5	21.25	181.964		
4,700.0	4,692.7	4,020.3	3,917.7	9.3	15.2	-50.09	1,304.2	-3,751.8	3,881.6	3,859.8	21.82	177.898		
4,800.0	4,792.5	4,108.7	4,002.0	9.5	15.7	-50.46	1,288.6	-3,773.4	3,896.9	3,874.5	22.38	174.160		
4,900.0	4,892.3	4,193.5	4,082.9	9.7	16.2	-50.82	1,273.7	-3,794.1	3,912.3	3,889.4	22.92	170.665		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 14-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 797-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	4,992.1	4,258.0	4,144.0		9.9	16.6	-51.10	1,261.5	-3,810.6	3,928.7	3,905.3	23.40	167.862	
5,100.0	5,091.9	4,448.0	4,325.0	10.1	17.7		-51.91	1,225.7	-3,856.0	3,943.2	3,918.9	24.36	161.870	
5,200.0	5,191.7	4,503.8	4,378.4	10.3	18.0		-52.14	1,215.8	-3,868.9	3,958.2	3,933.4	24.78	159.748	
5,300.0	5,291.5	4,547.4	4,419.9	10.5	18.2		-52.32	1,208.1	-3,879.7	3,974.8	3,949.6	25.14	158.091	
5,400.0	5,391.4	4,635.0	4,503.5	10.7	18.7		-52.66	1,193.6	-3,901.6	3,991.9	3,966.3	25.65	155.609	
5,500.0	5,491.2	4,705.3	4,570.5	10.9	19.1		-52.93	1,182.2	-3,919.4	4,009.7	3,983.5	26.13	153.471	
5,600.0	5,591.0	4,783.4	4,644.6	11.1	19.6		-53.25	1,168.7	-3,940.0	4,028.4	4,001.8	26.62	151.305	
5,700.0	5,690.8	5,103.5	4,950.6	11.3	21.3		-54.48	1,114.3	-4,016.2	4,045.3	4,017.3	27.97	144.646	
5,800.0	5,790.6	5,374.3	5,214.1	11.5	22.4		-55.34	1,076.4	-4,065.8	4,057.5	4,028.5	28.93	140.239	
5,900.0	5,890.4	5,818.8	5,654.1	11.7	23.7		-56.31	1,038.5	-4,114.1	4,063.6	4,033.6	30.00	135.451	
6,000.0	5,990.3	6,021.7	5,856.6	11.9	24.0		-56.61	1,029.0	-4,122.5	4,063.2	4,032.7	30.46	133.392	
6,100.0	6,090.1	6,125.7	5,960.6	12.1	24.1		-56.71	1,027.4	-4,125.1	4,062.1	4,031.3	30.76	132.073	
6,200.0	6,189.9	6,227.6	6,062.4	12.3	24.2		-56.80	1,026.9	-4,127.4	4,060.8	4,029.8	31.05	130.788	
6,300.0	6,289.7	6,343.8	6,178.6	12.5	24.3		-56.90	1,026.2	-4,129.7	4,059.4	4,028.0	31.36	129.459	
6,400.0	6,389.5	6,438.5	6,273.3	12.7	24.4		-56.97	1,025.8	-4,131.5	4,057.8	4,026.2	31.64	128.256	
6,500.0	6,489.3	6,530.3	6,365.1	12.9	24.5		-57.05	1,025.7	-4,133.3	4,056.4	4,024.5	31.92	127.083	
6,600.0	6,589.1	6,618.1	6,452.9	13.1	24.6		-57.11	1,025.6	-4,135.2	4,055.2	4,023.0	32.20	125.949	
6,700.0	6,689.0	6,705.6	6,540.3	13.3	24.7		-57.18	1,025.6	-4,137.4	4,054.4	4,021.9	32.48	124.824	
6,785.3	6,774.1	6,779.9	6,614.6	13.5	24.8		-57.25	1,025.4	-4,139.5	4,053.9	4,021.2	32.72	123.881	
6,800.0	6,788.8	6,792.8	6,627.4	13.5	24.8		-46.22	1,025.3	-4,139.9	4,053.9	4,021.1	32.77	123.720	
6,801.5	6,790.3	6,794.1	6,628.7	13.5	24.8		-44.57	1,025.3	-4,139.9	4,053.9	4,021.1	32.77	123.707	
6,850.0	6,838.8	6,861.1	6,695.8	13.6	24.9		64.27	1,024.9	-4,141.8	4,054.1	4,021.2	32.91	123.182	
6,900.0	6,888.6	6,942.6	6,777.2	13.6	25.0		86.24	1,024.2	-4,143.7	4,054.5	4,021.4	33.05	122.684	
6,950.0	6,938.1	7,012.7	6,847.3	13.7	25.1		91.44	1,023.3	-4,144.8	4,055.1	4,021.9	33.14	122.358	
7,000.0	6,987.0	7,061.2	6,895.8	13.7	25.1		93.71	1,022.8	-4,145.5	4,056.2	4,023.0	33.17	122.300	
7,050.0	7,035.0	7,108.8	6,943.4	13.6	25.2		94.99	1,022.4	-4,146.1	4,057.9	4,024.8	33.16	122.373	
7,100.0	7,082.0	7,155.4	6,990.0	13.6	25.2		95.81	1,022.1	-4,146.8	4,060.3	4,027.2	33.13	122.569	
7,150.0	7,127.7	7,187.0	7,021.6	13.5	25.3		96.28	1,021.9	-4,147.2	4,063.4	4,030.3	33.04	122.985	
7,200.0	7,171.8	7,235.2	7,069.8	13.5	25.3		96.68	1,021.8	-4,147.8	4,067.1	4,034.2	32.95	123.422	
7,250.0	7,214.2	7,270.3	7,104.9	13.4	25.3		96.87	1,022.0	-4,148.4	4,071.7	4,038.9	32.83	124.019	
7,300.0	7,254.6	7,303.5	7,138.1	13.4	25.4		96.94	1,022.4	-4,148.9	4,077.1	4,044.4	32.70	124.676	
7,350.0	7,292.9	7,334.7	7,169.2	13.3	25.4		96.91	1,022.9	-4,149.4	4,083.4	4,050.8	32.57	125.366	
7,400.0	7,328.9	7,376.0	7,210.6	13.3	25.4		96.90	1,023.7	-4,150.1	4,090.6	4,058.1	32.47	125.965	
7,450.0	7,362.3	7,393.2	7,227.8	13.3	25.4		96.56	1,024.2	-4,150.4	4,098.5	4,066.2	32.35	126.691	
7,500.0	7,393.1	7,422.7	7,257.2	13.4	25.5		96.28	1,024.9	-4,150.9	4,107.4	4,075.1	32.28	127.235	
7,550.0	7,421.1	7,449.4	7,283.9	13.5	25.5		95.88	1,025.5	-4,151.3	4,117.2	4,084.9	32.25	127.674	
7,600.0	7,446.1	7,473.0	7,307.6	13.6	25.5		95.38	1,026.1	-4,151.7	4,127.8	4,095.5	32.26	127.972	
7,650.0	7,468.0	7,493.7	7,328.2	13.8	25.5		94.76	1,026.6	-4,152.1	4,139.3	4,107.0	32.31	128.096	
7,700.0	7,486.7	7,514.8	7,349.2	14.0	25.6		94.07	1,027.1	-4,152.5	4,151.6	4,119.2	32.44	127.994	
7,750.0	7,502.2	7,534.7	7,369.2	14.2	25.6		93.29	1,027.5	-4,152.8	4,164.8	4,132.1	32.62	127.663	
7,800.0	7,514.3	7,550.0	7,384.5	14.6	25.6		92.37	1,027.9	-4,153.0	4,178.7	4,145.8	32.87	127.118	
7,850.0	7,523.0	7,560.6	7,395.1	14.9	25.6		91.31	1,028.1	-4,153.2	4,193.3	4,160.2	33.19	126.356	
7,900.0	7,528.2	7,566.4	7,400.8	15.3	25.6		90.12	1,028.2	-4,153.3	4,208.7	4,175.1	33.57	125.385	
7,950.2	7,530.0	7,567.3	7,401.8	15.8	25.6		88.78	1,028.3	-4,153.3	4,224.7	4,190.7	34.01	124.215	
8,000.0	7,530.0	7,565.8	7,400.3	16.2	25.6		88.76	1,028.2	-4,153.3	4,241.2	4,206.7	34.49	122.957	
8,100.0	7,530.0	7,562.7	7,397.2	17.3	25.6		88.71	1,028.2	-4,153.2	4,275.8	4,240.2	35.56	120.257	
8,200.0	7,530.0	7,559.6	7,394.1	18.4	25.6		88.67	1,028.1	-4,153.2	4,312.4	4,275.7	36.72	117.427	
8,300.0	7,530.0	7,556.5	7,390.9	19.7	25.6		88.62	1,028.0	-4,153.1	4,351.0	4,313.0	37.98	114.559	
8,400.0	7,530.0	7,553.3	7,387.8	21.0	25.6		88.58	1,027.9	-4,153.1	4,391.6	4,352.3	39.31	111.721	
8,500.0	7,530.0	7,550.1	7,384.6	22.4	25.6		88.53	1,027.9	-4,153.0	4,434.0	4,393.3	40.69	108.957	
8,600.0	7,530.0	7,546.9	7,381.4	23.8	25.6		88.49	1,027.8	-4,153.0	4,478.3	4,436.1	42.13	106.297	
8,700.0	7,530.0	7,543.7	7,378.1	25.3	25.6		88.44	1,027.7	-4,152.9	4,524.3	4,480.7	43.60	103.757	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 14-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 797-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,800.0	7,530.0	7,540.4	7,374.9	26.8	25.6	88.39	1,027.7	-4,152.9	4,572.1	4,527.0	45.11	101.347		
8,900.0	7,530.0	7,537.1	7,371.6	28.3	25.6	88.34	1,027.6	-4,152.8	4,621.5	4,574.9	46.65	99.070		
9,000.0	7,530.0	7,533.8	7,368.3	29.9	25.6	88.30	1,027.5	-4,152.8	4,672.6	4,624.3	48.21	96.924		
9,100.0	7,530.0	7,530.5	7,364.9	31.4	25.6	88.25	1,027.4	-4,152.7	4,725.2	4,675.4	49.79	94.905		
9,200.0	7,530.0	7,527.1	7,361.6	33.0	25.6	88.20	1,027.4	-4,152.7	4,779.3	4,727.9	51.38	93.010		
9,300.0	7,530.0	7,523.7	7,358.2	34.7	25.6	88.15	1,027.3	-4,152.6	4,834.9	4,781.9	53.00	91.231		
9,400.0	7,530.0	7,520.3	7,354.8	36.3	25.6	88.10	1,027.2	-4,152.6	4,891.9	4,837.3	54.62	89.561		
9,500.0	7,530.0	7,516.8	7,351.3	37.9	25.6	88.05	1,027.1	-4,152.5	4,950.2	4,894.0	56.26	87.996		
9,600.0	7,530.0	7,513.3	7,347.8	39.6	25.6	88.00	1,027.0	-4,152.5	5,009.9	4,952.0	57.90	86.527		
9,700.0	7,530.0	7,509.8	7,344.3	41.2	25.5	87.95	1,026.9	-4,152.4	5,070.9	5,011.3	59.55	85.148		
9,800.0	7,530.0	7,506.3	7,340.8	42.9	25.5	87.90	1,026.9	-4,152.3	5,133.0	5,071.8	61.21	83.854		
9,900.0	7,530.0	7,502.7	7,337.2	44.5	25.5	87.85	1,026.8	-4,152.3	5,196.4	5,133.5	62.88	82.639		
10,000.0	7,530.0	7,500.1	7,334.6	46.2	25.5	87.81	1,026.7	-4,152.2	5,260.9	5,196.3	64.56	81.494		
10,100.0	7,530.0	7,497.7	7,332.2	47.9	25.5	87.78	1,026.7	-4,152.2	5,326.4	5,260.2	66.24	80.417		
10,200.0	7,530.0	7,495.4	7,329.9	49.6	25.5	87.75	1,026.6	-4,152.1	5,393.1	5,325.1	67.92	79.403		
10,300.0	7,530.0	7,493.0	7,327.5	51.3	25.5	87.71	1,026.5	-4,152.1	5,460.7	5,391.1	69.61	78.448		
10,400.0	7,530.0	7,490.7	7,325.2	53.0	25.5	87.68	1,026.5	-4,152.1	5,529.3	5,458.0	71.30	77.548		
10,500.0	7,530.0	7,488.3	7,322.8	54.7	25.5	87.65	1,026.4	-4,152.0	5,598.9	5,525.9	73.00	76.699		
10,600.0	7,530.0	7,485.9	7,320.4	56.4	25.5	87.61	1,026.4	-4,152.0	5,669.4	5,594.7	74.70	75.897		
10,700.0	7,530.0	7,483.6	7,318.1	58.1	25.5	87.58	1,026.3	-4,151.9	5,740.8	5,664.4	76.40	75.140		
10,800.0	7,530.0	7,481.2	7,315.7	59.8	25.5	87.54	1,026.3	-4,151.9	5,813.0	5,734.9	78.11	74.424		
10,900.0	7,530.0	7,478.8	7,313.3	61.5	25.5	87.51	1,026.2	-4,151.8	5,886.0	5,806.2	79.81	73.747		
11,000.0	7,530.0	7,476.5	7,311.0	63.2	25.5	87.48	1,026.2	-4,151.8	5,959.8	5,878.3	81.52	73.106		
11,100.0	7,530.0	7,474.1	7,308.6	64.9	25.5	87.44	1,026.1	-4,151.8	6,034.3	5,951.1	83.23	72.498		
11,200.0	7,530.0	7,471.7	7,306.2	66.6	25.5	87.41	1,026.0	-4,151.7	6,109.6	6,024.7	84.95	71.922		
11,300.0	7,530.0	7,469.3	7,303.9	68.4	25.5	87.37	1,026.0	-4,151.7	6,185.6	6,098.9	86.66	71.375		
11,400.0	7,530.0	7,467.0	7,301.5	70.1	25.5	87.34	1,025.9	-4,151.6	6,262.2	6,173.9	88.38	70.856		
11,500.0	7,530.0	7,464.6	7,299.1	71.8	25.5	87.31	1,025.9	-4,151.6	6,339.5	6,249.4	90.10	70.363		
11,600.0	7,530.0	7,462.2	7,296.7	73.5	25.5	87.27	1,025.8	-4,151.6	6,417.5	6,325.7	91.82	69.894		
11,700.0	7,530.0	7,459.8	7,294.4	75.3	25.5	87.24	1,025.8	-4,151.5	6,496.0	6,402.5	93.54	69.448		
11,800.0	7,530.0	7,457.5	7,292.0	77.0	25.5	87.20	1,025.7	-4,151.5	6,575.1	6,479.9	95.26	69.024		
11,900.0	7,530.0	7,455.1	7,289.6	78.7	25.5	87.17	1,025.6	-4,151.4	6,654.8	6,557.8	96.98	68.619		
12,000.0	7,530.0	7,452.7	7,287.2	80.4	25.5	87.14	1,025.6	-4,151.4	6,735.0	6,636.3	98.70	68.234		
12,100.0	7,530.0	7,450.3	7,284.8	82.2	25.5	87.10	1,025.5	-4,151.3	6,815.7	6,715.3	100.43	67.866		
12,200.0	7,530.0	7,447.9	7,282.5	83.9	25.5	87.07	1,025.5	-4,151.3	6,897.0	6,794.8	102.15	67.515		
12,300.0	7,530.0	7,445.5	7,280.1	85.6	25.5	87.03	1,025.4	-4,151.3	6,978.7	6,874.8	103.88	67.180		
12,400.0	7,530.0	7,443.2	7,277.7	87.4	25.5	87.00	1,025.4	-4,151.2	7,060.9	6,955.3	105.61	66.860		
12,500.0	7,530.0	7,440.8	7,275.3	89.1	25.5	86.96	1,025.3	-4,151.2	7,143.6	7,036.2	107.33	66.554		
12,600.0	7,530.0	7,438.4	7,272.9	90.8	25.5	86.93	1,025.2	-4,151.1	7,226.7	7,117.6	109.06	66.262		
12,700.0	7,530.0	7,436.0	7,270.5	92.6	25.5	86.90	1,025.2	-4,151.1	7,310.2	7,199.4	110.79	65.982		
12,800.0	7,530.0	7,433.6	7,268.1	94.3	25.5	86.86	1,025.1	-4,151.1	7,394.1	7,281.6	112.52	65.714		
12,900.0	7,530.0	7,431.2	7,265.7	96.0	25.5	86.83	1,025.1	-4,151.0	7,478.4	7,364.2	114.25	65.457		
13,000.0	7,530.0	7,428.8	7,263.3	97.8	25.5	86.79	1,025.0	-4,151.0	7,563.1	7,447.1	115.98	65.211		
13,100.0	7,530.0	7,426.4	7,260.9	99.5	25.5	86.76	1,025.0	-4,150.9	7,648.2	7,530.5	117.71	64.975		
13,200.0	7,530.0	7,424.0	7,258.5	101.3	25.5	86.72	1,024.9	-4,150.9	7,733.6	7,614.1	119.44	64.748		
13,300.0	7,530.0	7,421.6	7,256.1	103.0	25.5	86.69	1,024.8	-4,150.8	7,819.4	7,698.2	121.17	64.531		
13,400.0	7,530.0	7,419.2	7,253.7	104.7	25.5	86.66	1,024.8	-4,150.8	7,905.5	7,782.6	122.90	64.323		
13,500.0	7,530.0	7,416.8	7,251.3	106.5	25.5	86.62	1,024.7	-4,150.8	7,991.9	7,867.2	124.63	64.123		
13,600.0	7,530.0	7,414.4	7,248.9	108.2	25.5	86.59	1,024.7	-4,150.7	8,078.6	7,952.3	126.37	63.930		
13,700.0	7,530.0	7,412.0	7,246.5	110.0	25.5	86.55	1,024.6	-4,150.7	8,165.7	8,037.6	128.10	63.745		
13,800.0	7,530.0	7,409.6	7,244.1	111.7	25.5	86.52	1,024.5	-4,150.6	8,253.0	8,123.2	129.83	63.567		
13,900.0	7,530.0	7,407.2	7,241.7	113.4	25.5	86.48	1,024.5	-4,150.6	8,340.6	8,209.0	131.56	63.396		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 14-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 797-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
14,000.0	7,530.0	7,404.8	7,239.3	115.2	25.5	86.45	1,024.4	-4,150.6	8,428.5	8,295.2	133.30	63.231		
14,100.0	7,530.0	7,402.4	7,236.9	116.9	25.5	86.41	1,024.4	-4,150.5	8,516.7	8,381.6	135.03	63.073		
14,200.0	7,530.0	7,400.0	7,234.5	118.7	25.5	86.38	1,024.3	-4,150.5	8,605.1	8,468.3	136.76	62.920		
14,300.0	7,530.0	7,397.6	7,232.1	120.4	25.4	86.35	1,024.3	-4,150.4	8,693.7	8,555.2	138.50	62.772		
14,400.0	7,530.0	7,395.1	7,229.7	122.1	25.4	86.31	1,024.2	-4,150.4	8,782.6	8,642.4	140.23	62.631		
14,500.0	7,530.0	7,392.7	7,227.3	123.9	25.4	86.28	1,024.1	-4,150.3	8,871.8	8,729.8	141.96	62.494		
14,600.0	7,530.0	7,390.3	7,224.9	125.6	25.4	86.24	1,024.1	-4,150.3	8,961.2	8,817.5	143.70	62.362		
14,700.0	7,530.0	7,387.9	7,222.4	127.4	25.4	86.21	1,024.0	-4,150.3	9,050.8	8,905.3	145.43	62.234		
14,800.0	7,530.0	7,385.5	7,220.0	129.1	25.4	86.17	1,024.0	-4,150.2	9,140.6	8,993.4	147.16	62.112		
14,900.0	7,530.0	7,383.1	7,217.6	130.9	25.4	86.14	1,023.9	-4,150.2	9,230.6	9,081.7	148.90	61.993		
15,000.0	7,530.0	7,380.6	7,215.2	132.6	25.4	86.10	1,023.9	-4,150.1	9,320.8	9,170.2	150.63	61.878		
15,100.0	7,530.0	7,378.2	7,212.8	134.4	25.4	86.07	1,023.8	-4,150.1	9,411.2	9,258.9	152.37	61.768		
15,200.0	7,530.0	7,376.0	7,210.6	136.1	25.4	86.04	1,023.7	-4,150.1	9,501.8	9,347.7	154.10	61.660		
15,300.0	7,530.0	7,376.0	7,210.6	137.9	25.4	86.04	1,023.7	-4,150.1	9,592.6	9,436.8	155.84	61.554		
15,400.0	7,530.0	7,376.0	7,210.6	139.6	25.4	86.04	1,023.7	-4,150.1	9,683.6	9,526.0	157.58	61.451		
15,500.0	7,530.0	7,376.0	7,210.6	141.3	25.4	86.04	1,023.7	-4,150.1	9,774.8	9,615.4	159.33	61.351		
15,600.0	7,530.0	7,376.0	7,210.6	143.1	25.4	86.04	1,023.7	-4,150.1	9,866.1	9,705.0	161.07	61.254		
15,700.0	7,530.0	7,376.0	7,210.6	144.8	25.4	86.04	1,023.7	-4,150.1	9,957.6	9,794.8	162.81	61.160 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 23-6 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-48.35	2,412.8	-2,712.4	3,630.8					
100.0	100.0	37.6	37.6	0.2	0.1	-48.35	2,412.7	-2,712.4	3,630.2	3,630.0	0.22	N/A		
200.0	200.0	135.7	135.7	0.3	0.2	-48.35	2,412.5	-2,712.4	3,630.0	3,629.5	0.56	6,444.486		
209.5	209.5	143.5	143.5	0.3	0.3	-48.35	2,412.5	-2,712.4	3,630.0	3,629.4	0.59	6,117.116		
300.0	300.0	217.9	217.9	0.5	0.4	-48.35	2,412.7	-2,712.5	3,630.2	3,629.4	0.88	4,119.193		
400.0	400.0	300.0	300.0	0.7	0.5	-48.34	2,413.2	-2,712.7	3,630.9	3,629.7	1.20	3,028.147		
500.0	500.0	390.5	390.5	0.8	0.7	-48.34	2,414.0	-2,713.3	3,631.9	3,630.4	1.53	2,371.396		
600.0	600.0	517.2	517.2	1.0	0.9	-25.34	2,414.7	-2,714.0	3,631.9	3,630.0	1.93	1,884.604		
700.0	700.0	600.0	600.0	1.2	1.0	-25.36	2,414.8	-2,714.6	3,630.2	3,628.0	2.25	1,616.068		
800.0	799.9	667.3	667.2	1.4	1.2	-25.40	2,415.1	-2,715.6	3,627.6	3,625.1	2.54	1,428.704		
848.7	848.4	700.0	700.0	1.5	1.2	-25.42	2,415.4	-2,716.2	3,626.2	3,623.5	2.68	1,352.126		
900.0	899.7	752.4	752.4	1.6	1.3	-25.45	2,416.0	-2,717.2	3,624.5	3,621.6	2.86	1,265.307		
1,000.0	999.5	862.6	862.6	1.8	1.5	-25.50	2,417.1	-2,719.4	3,621.2	3,617.9	3.24	1,119.296		
1,100.0	1,099.3	946.9	946.8	2.0	1.7	-25.55	2,417.6	-2,721.3	3,617.7	3,614.1	3.56	1,015.891		
1,200.0	1,199.1	1,026.1	1,026.0	2.2	1.8	-25.60	2,418.4	-2,723.5	3,615.0	3,611.1	3.88	932.026		
1,300.0	1,298.9	1,131.1	1,130.9	2.4	2.0	-25.66	2,419.5	-2,726.5	3,612.4	3,608.1	4.24	851.614		
1,400.0	1,398.8	1,225.6	1,225.3	2.6	2.2	-25.72	2,420.5	-2,729.3	3,609.8	3,605.2	4.59	786.995		
1,500.0	1,498.6	1,320.2	1,320.0	2.8	2.3	-25.77	2,421.7	-2,732.1	3,607.4	3,602.4	4.93	731.377		
1,600.0	1,598.4	1,426.2	1,425.8	3.0	2.5	-25.84	2,423.0	-2,735.3	3,605.0	3,599.7	5.30	680.438		
1,700.0	1,698.2	1,535.1	1,534.7	3.2	2.7	-25.91	2,423.6	-2,738.8	3,602.2	3,596.6	5.67	635.325		
1,800.0	1,798.0	1,630.2	1,629.8	3.4	2.9	-25.98	2,424.1	-2,741.8	3,599.6	3,593.5	6.02	598.183		
1,900.0	1,897.8	1,731.4	1,730.9	3.6	3.1	-26.05	2,424.6	-2,745.1	3,596.9	3,590.5	6.38	564.117		
2,000.0	1,997.7	1,835.9	1,835.3	3.8	3.3	-26.12	2,425.3	-2,748.5	3,594.2	3,587.5	6.74	533.225		
2,100.0	2,097.5	1,956.1	1,955.5	4.0	3.5	-26.20	2,425.6	-2,751.9	3,591.2	3,584.0	7.13	503.456		
2,200.0	2,197.3	2,117.9	2,117.2	4.2	3.8	-26.32	2,424.5	-2,755.7	3,587.1	3,579.5	7.60	471.929		
2,300.0	2,297.1	2,219.4	2,218.7	4.4	4.0	-26.41	2,422.9	-2,757.6	3,582.0	3,574.0	7.96	449.909		
2,400.0	2,396.9	2,312.0	2,311.3	4.6	4.1	-26.47	2,422.1	-2,758.8	3,576.9	3,568.6	8.30	430.732		
2,500.0	2,496.7	2,400.0	2,399.3	4.8	4.3	-26.52	2,422.1	-2,759.7	3,572.2	3,563.6	8.64	413.521		
2,600.0	2,596.5	2,480.7	2,480.0	5.0	4.4	-26.56	2,422.2	-2,760.8	3,568.0	3,559.0	8.96	398.166		
2,700.0	2,696.4	2,574.3	2,573.6	5.2	4.6	-26.62	2,422.4	-2,762.5	3,564.1	3,554.7	9.31	382.978		
2,800.0	2,796.2	2,679.8	2,679.0	5.4	4.8	-26.68	2,422.6	-2,764.5	3,560.2	3,550.5	9.67	368.089		
2,900.0	2,896.0	2,768.4	2,767.7	5.6	4.9	-26.73	2,423.1	-2,765.8	3,556.3	3,546.3	10.01	355.384		
3,000.0	2,995.8	2,875.5	2,874.8	5.8	5.1	-26.77	2,424.6	-2,767.1	3,552.6	3,542.2	10.37	342.471		
3,100.0	3,095.6	2,971.0	2,970.2	6.0	5.3	-26.81	2,425.7	-2,768.0	3,548.7	3,538.0	10.72	331.035		
3,200.0	3,195.4	3,065.0	3,064.2	6.2	5.4	-26.85	2,427.0	-2,769.1	3,545.1	3,534.0	11.06	320.413		
3,300.0	3,295.2	3,150.5	3,149.7	6.4	5.6	-26.88	2,428.3	-2,770.2	3,541.6	3,530.2	11.39	310.848		
3,400.0	3,395.1	3,236.2	3,235.4	6.6	5.8	-26.91	2,430.0	-2,771.6	3,538.7	3,527.0	11.72	301.860		
3,500.0	3,494.9	3,327.1	3,326.2	6.8	5.9	-26.95	2,432.0	-2,773.2	3,536.0	3,523.9	12.06	293.161		
3,600.0	3,594.7	3,409.4	3,408.5	7.0	6.1	-26.97	2,434.2	-2,774.7	3,533.7	3,521.4	12.39	285.322		
3,700.0	3,694.5	3,505.3	3,504.3	7.2	6.2	-27.00	2,436.9	-2,776.9	3,531.8	3,519.1	12.73	277.377		
3,800.0	3,794.3	3,618.7	3,617.6	7.4	6.4	-27.05	2,439.6	-2,779.5	3,529.7	3,516.6	13.11	269.209		
3,900.0	3,894.1	3,735.8	3,734.7	7.6	6.7	-27.09	2,442.1	-2,781.8	3,527.2	3,513.7	13.50	261.338		
4,000.0	3,994.0	3,846.3	3,845.2	7.8	6.9	-27.14	2,444.2	-2,783.6	3,524.2	3,510.4	13.87	254.088		
4,100.0	4,093.8	3,951.6	3,950.4	8.0	7.0	-27.18	2,446.0	-2,785.2	3,521.1	3,506.8	14.23	247.354		
4,200.0	4,193.6	4,055.4	4,054.2	8.2	7.2	-27.23	2,447.4	-2,787.0	3,517.8	3,503.2	14.60	240.986		
4,300.0	4,293.4	4,151.7	4,150.5	8.4	7.4	-27.27	2,448.6	-2,788.5	3,514.5	3,499.5	14.95	235.129		
4,400.0	4,393.2	4,251.1	4,249.8	8.6	7.6	-27.32	2,449.9	-2,790.4	3,511.4	3,496.0	15.30	229.465		
4,500.0	4,493.0	4,364.7	4,363.4	8.8	7.8	-27.38	2,450.9	-2,792.6	3,508.0	3,492.3	15.68	223.677		
4,600.0	4,592.8	4,473.1	4,471.8	9.0	8.0	-27.45	2,451.1	-2,794.7	3,504.2	3,488.2	16.06	218.261		
4,700.0	4,692.7	4,569.2	4,567.9	9.3	8.1	-27.51	2,451.4	-2,796.5	3,500.4	3,484.0	16.41	213.367		
4,800.0	4,792.5	4,673.6	4,672.3	9.5	8.3	-27.57	2,451.8	-2,798.4	3,496.7	3,479.9	16.77	208.503		
4,900.0	4,892.3	4,768.8	4,767.5	9.7	8.5	-27.63	2,452.1	-2,800.0	3,492.9	3,475.7	17.12	204.033		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 23-6 (EXISTING) - ENCANA WELL - G											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		
5,000.0	4,992.1	4,875.2	4,873.9	9.9	8.7	-27.68	2,453.0	-2,801.7	3,489.1	3,471.7	17.49	199.532		
5,100.0	5,091.9	4,973.1	4,971.7	10.1	8.9	-27.73	2,453.8	-2,802.8	3,485.2	3,467.4	17.84	195.366		
5,200.0	5,191.7	5,073.8	5,072.5	10.3	9.0	-27.79	2,454.5	-2,804.3	3,481.4	3,463.2	18.20	191.311		
5,300.0	5,291.5	5,181.7	5,180.3	10.5	9.2	-27.84	2,455.4	-2,805.6	3,477.5	3,458.9	18.57	187.287		
5,400.0	5,391.4	5,280.9	5,279.5	10.7	9.4	-27.88	2,456.4	-2,806.4	3,473.4	3,454.5	18.92	183.559		
5,500.0	5,491.2	5,381.7	5,380.3	10.9	9.6	-27.92	2,457.5	-2,807.2	3,469.3	3,450.0	19.28	179.943		
5,600.0	5,591.0	5,476.2	5,474.8	11.1	9.7	-27.96	2,458.4	-2,808.2	3,465.3	3,445.7	19.63	176.558		
5,700.0	5,690.8	5,592.1	5,590.7	11.3	9.9	-28.01	2,459.7	-2,809.0	3,461.2	3,441.2	20.01	172.968		
5,800.0	5,790.6	5,685.4	5,683.9	11.5	10.1	-28.05	2,460.8	-2,809.4	3,456.9	3,436.5	20.36	169.830		
5,900.0	5,890.4	5,776.3	5,774.8	11.7	10.3	-28.08	2,462.0	-2,809.9	3,452.8	3,432.1	20.70	166.841		
6,000.0	5,990.3	5,873.3	5,871.9	11.9	10.4	-28.12	2,463.1	-2,810.9	3,449.0	3,427.9	21.05	163.869		
6,100.0	6,090.1	5,980.6	5,979.1	12.1	10.6	-28.17	2,463.9	-2,812.2	3,445.1	3,423.6	21.42	160.858		
6,200.0	6,189.9	6,068.2	6,066.7	12.3	10.8	-28.22	2,464.7	-2,813.2	3,441.1	3,419.4	21.75	158.198		
6,300.0	6,289.7	6,160.7	6,159.2	12.5	10.9	-28.26	2,465.7	-2,814.5	3,437.6	3,415.5	22.10	155.577		
6,400.0	6,389.5	6,253.8	6,252.3	12.7	11.1	-28.30	2,467.1	-2,815.8	3,434.2	3,411.7	22.44	153.033		
6,500.0	6,489.3	6,349.1	6,347.6	12.9	11.3	-28.35	2,468.1	-2,817.7	3,431.0	3,408.2	22.79	150.548		
6,600.0	6,589.1	6,454.7	6,453.2	13.1	11.5	-28.41	2,469.1	-2,819.7	3,427.8	3,404.6	23.16	148.020		
6,700.0	6,689.0	6,555.0	6,553.5	13.3	11.6	-28.48	2,469.7	-2,821.8	3,424.4	3,400.9	23.52	145.620		
6,785.3	6,774.1	6,638.6	6,637.0	13.5	11.8	-28.53	2,470.4	-2,823.5	3,421.6	3,397.8	23.82	143.656		
6,800.0	6,788.8	6,653.9	6,652.3	13.5	11.8	-17.47	2,470.5	-2,823.8	3,421.2	3,397.4	23.87	143.310		
6,823.8	6,812.5	6,678.5	6,676.9	13.6	11.9	33.15	2,470.8	-2,824.2	3,421.0	3,397.1	23.95	142.832 CC, ES		
6,850.0	6,838.8	6,700.0	6,698.4	13.6	11.9	93.03	2,471.0	-2,824.6	3,421.3	3,397.3	24.02	142.430		
6,900.0	6,888.6	6,742.0	6,740.3	13.6	12.0	114.86	2,471.4	-2,825.5	3,423.6	3,399.5	24.13	141.906		
6,950.0	6,938.1	6,779.4	6,777.8	13.7	12.0	119.77	2,471.7	-2,826.4	3,428.2	3,404.0	24.19	141.728		
7,000.0	6,987.0	6,819.8	6,818.2	13.7	12.1	121.67	2,472.1	-2,827.6	3,435.1	3,410.9	24.23	141.795		
7,050.0	7,035.0	6,863.9	6,862.2	13.6	12.2	122.49	2,472.5	-2,829.0	3,444.3	3,420.0	24.24	142.074		
7,100.0	7,082.0	6,906.7	6,905.0	13.6	12.3	122.73	2,472.9	-2,830.4	3,455.5	3,431.3	24.24	142.575		
7,150.0	7,127.7	6,947.4	6,945.7	13.5	12.4	122.60	2,473.4	-2,831.8	3,468.9	3,444.7	24.21	143.261		
7,200.0	7,171.8	6,986.7	6,985.0	13.5	12.4	122.19	2,473.8	-2,833.2	3,484.4	3,460.2	24.18	144.074		
7,250.0	7,214.2	7,023.7	7,021.9	13.4	12.5	121.53	2,474.2	-2,834.5	3,501.9	3,477.8	24.16	144.958		
7,300.0	7,254.6	7,058.3	7,056.5	13.4	12.6	120.64	2,474.7	-2,835.8	3,521.5	3,497.3	24.15	145.842		
7,350.0	7,292.9	7,090.8	7,089.0	13.3	12.6	119.53	2,475.3	-2,836.9	3,543.0	3,518.8	24.16	146.645		
7,400.0	7,328.9	7,135.7	7,133.8	13.3	12.7	118.36	2,476.3	-2,838.3	3,566.3	3,542.1	24.23	147.212		
7,450.0	7,362.3	7,182.9	7,181.0	13.3	12.8	117.05	2,477.4	-2,839.5	3,591.2	3,566.9	24.34	147.543		
7,500.0	7,393.1	7,219.1	7,217.2	13.4	12.9	115.42	2,478.4	-2,840.1	3,617.8	3,593.2	24.51	147.625		
7,550.0	7,421.1	7,247.7	7,245.8	13.5	12.9	113.47	2,479.2	-2,840.6	3,645.8	3,621.1	24.74	147.385		
7,600.0	7,446.1	7,272.9	7,270.9	13.6	12.9	111.25	2,479.9	-2,840.9	3,675.4	3,650.4	25.04	146.785		
7,650.0	7,468.0	7,294.5	7,292.6	13.8	13.0	108.74	2,480.6	-2,841.1	3,706.4	3,680.9	25.41	145.841		
7,700.0	7,486.7	7,316.3	7,314.3	14.0	13.0	105.99	2,481.3	-2,841.3	3,738.5	3,712.7	25.85	144.598		
7,750.0	7,502.2	7,335.0	7,333.1	14.2	13.1	102.95	2,482.0	-2,841.4	3,771.8	3,745.4	26.35	143.148		
7,800.0	7,514.3	7,349.1	7,347.1	14.6	13.1	99.60	2,482.5	-2,841.4	3,806.0	3,779.1	26.88	141.610		
7,850.0	7,523.0	7,358.4	7,356.4	14.9	13.1	95.93	2,482.8	-2,841.4	3,841.0	3,813.6	27.41	140.117		
7,900.0	7,528.2	7,363.0	7,361.0	15.3	13.1	92.00	2,483.0	-2,841.4	3,876.6	3,848.7	27.93	138.804		
7,950.2	7,530.0	7,362.9	7,360.9	15.8	13.1	87.81	2,483.0	-2,841.4	3,912.9	3,884.5	28.40	137.788		
8,000.0	7,530.0	7,360.5	7,358.5	16.2	13.1	87.76	2,482.9	-2,841.4	3,949.1	3,920.2	28.88	136.762		
8,100.0	7,530.0	7,355.7	7,353.7	17.3	13.1	87.65	2,482.7	-2,841.4	4,022.8	3,992.9	29.93	134.404		
8,200.0	7,530.0	7,350.9	7,348.9	18.4	13.1	87.55	2,482.5	-2,841.4	4,097.6	4,066.5	31.09	131.789		
8,300.0	7,530.0	7,346.2	7,344.3	19.7	13.1	87.45	2,482.4	-2,841.4	4,173.4	4,141.1	32.34	129.045		
8,400.0	7,530.0	7,341.6	7,339.6	21.0	13.1	87.36	2,482.2	-2,841.4	4,250.3	4,216.6	33.66	126.266		
8,500.0	7,530.0	7,337.1	7,335.1	22.4	13.1	87.26	2,482.1	-2,841.4	4,328.0	4,293.0	35.04	123.517		
8,600.0	7,530.0	7,332.6	7,330.6	23.8	13.1	87.16	2,481.9	-2,841.4	4,406.7	4,370.2	36.47	120.841		
8,700.0	7,530.0	7,328.1	7,326.2	25.3	13.0	87.07	2,481.7	-2,841.4	4,486.2	4,448.3	37.93	118.264		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 23-6 (EXISTING) - ENCANA WELL - G													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	Factor		
8,800.0	7,530.0	7,323.8	7,321.8	26.8	13.0	86.98	2,481.6	-2,841.3	4,566.5	4,527.1	39.43	115.802		
8,900.0	7,530.0	7,319.4	7,317.5	28.3	13.0	86.89	2,481.4	-2,841.3	4,647.6	4,606.7	40.96	113.462		
9,000.0	7,530.0	7,315.2	7,313.2	29.9	13.0	86.79	2,481.3	-2,841.3	4,729.4	4,686.9	42.51	111.246		
9,100.0	7,530.0	7,311.0	7,309.0	31.4	13.0	86.71	2,481.2	-2,841.3	4,811.9	4,767.8	44.08	109.152		
9,200.0	7,530.0	7,306.8	7,304.9	33.0	13.0	86.62	2,481.0	-2,841.2	4,895.0	4,849.4	45.67	107.177		
9,300.0	7,530.0	7,302.7	7,300.8	34.7	13.0	86.53	2,480.9	-2,841.2	4,978.8	4,931.5	47.28	105.315		
9,400.0	7,530.0	7,300.0	7,298.1	36.3	13.0	86.47	2,480.8	-2,841.2	5,063.1	5,014.2	48.89	103.553		
9,500.0	7,530.0	7,300.0	7,298.1	37.9	13.0	86.47	2,480.8	-2,841.2	5,148.0	5,097.5	50.53	101.879		
9,600.0	7,530.0	7,293.0	7,291.0	39.6	13.0	86.32	2,480.6	-2,841.1	5,233.5	5,181.3	52.16	100.337		
9,700.0	7,530.0	7,290.0	7,288.1	41.2	13.0	86.26	2,480.5	-2,841.1	5,319.4	5,265.6	53.81	98.863		
9,800.0	7,530.0	7,287.1	7,285.2	42.9	13.0	86.20	2,480.4	-2,841.0	5,405.8	5,350.4	55.46	97.472		
9,900.0	7,530.0	7,284.3	7,282.3	44.5	13.0	86.14	2,480.3	-2,841.0	5,492.7	5,435.6	57.12	96.159		
10,000.0	7,530.0	7,281.5	7,279.5	46.2	13.0	86.08	2,480.2	-2,841.0	5,580.0	5,521.2	58.79	94.918		
10,100.0	7,530.0	7,278.7	7,276.8	47.9	13.0	86.02	2,480.1	-2,841.0	5,667.8	5,607.3	60.46	93.744		
10,200.0	7,530.0	7,275.9	7,274.0	49.6	13.0	85.96	2,480.0	-2,840.9	5,755.9	5,693.7	62.14	92.633		
10,300.0	7,530.0	7,273.2	7,271.3	51.3	12.9	85.91	2,479.9	-2,840.9	5,844.4	5,780.6	63.82	91.580		
10,400.0	7,530.0	7,270.6	7,268.7	53.0	12.9	85.85	2,479.8	-2,840.9	5,933.3	5,867.8	65.50	90.582		
10,500.0	7,530.0	7,268.0	7,266.0	54.7	12.9	85.79	2,479.8	-2,840.8	6,022.5	5,955.3	67.19	89.634		
10,600.0	7,530.0	7,265.4	7,263.4	56.4	12.9	85.74	2,479.7	-2,840.8	6,112.1	6,043.2	68.88	88.734		
10,700.0	7,530.0	7,262.8	7,260.9	58.1	12.9	85.69	2,479.6	-2,840.8	6,201.9	6,131.4	70.57	87.878		
10,800.0	7,530.0	7,260.3	7,258.4	59.8	12.9	85.63	2,479.5	-2,840.7	6,292.1	6,219.8	72.27	87.063		
10,900.0	7,530.0	7,257.8	7,255.9	61.5	12.9	85.58	2,479.5	-2,840.7	6,382.6	6,308.6	73.97	86.287		
11,000.0	7,530.0	7,255.3	7,253.4	63.2	12.9	85.53	2,479.4	-2,840.7	6,473.3	6,397.7	75.67	85.547		
11,100.0	7,530.0	7,252.9	7,251.0	64.9	12.9	85.48	2,479.3	-2,840.6	6,564.3	6,487.0	77.37	84.840		
11,200.0	7,530.0	7,250.5	7,248.6	66.6	12.9	85.43	2,479.2	-2,840.6	6,655.6	6,576.5	79.08	84.166		
11,300.0	7,530.0	7,248.2	7,246.2	68.4	12.9	85.38	2,479.2	-2,840.6	6,747.1	6,666.4	80.78	83.521		
11,400.0	7,530.0	7,245.8	7,243.9	70.1	12.9	85.33	2,479.1	-2,840.5	6,838.9	6,756.4	82.49	82.905		
11,500.0	7,530.0	7,243.5	7,241.6	71.8	12.9	85.28	2,479.0	-2,840.5	6,930.9	6,846.7	84.20	82.315		
11,600.0	7,530.0	7,241.2	7,239.3	73.5	12.9	85.23	2,479.0	-2,840.5	7,023.1	6,937.2	85.91	81.750		
11,700.0	7,530.0	7,239.0	7,237.1	75.3	12.9	85.18	2,478.9	-2,840.4	7,115.5	7,027.9	87.62	81.208		
11,800.0	7,530.0	7,236.8	7,234.9	77.0	12.9	85.13	2,478.8	-2,840.4	7,208.1	7,118.8	89.33	80.688		
11,900.0	7,530.0	7,234.6	7,232.7	78.7	12.9	85.09	2,478.8	-2,840.4	7,300.9	7,209.9	91.05	80.189		
12,000.0	7,530.0	7,232.4	7,230.5	80.4	12.9	85.04	2,478.7	-2,840.3	7,393.9	7,301.1	92.76	79.709		
12,100.0	7,530.0	7,230.3	7,228.4	82.2	12.9	85.00	2,478.7	-2,840.3	7,487.1	7,392.6	94.48	79.249		
12,200.0	7,530.0	7,228.2	7,226.3	83.9	12.9	84.95	2,478.6	-2,840.3	7,580.4	7,484.2	96.19	78.805		
12,300.0	7,530.0	7,226.1	7,224.2	85.6	12.9	84.91	2,478.5	-2,840.2	7,673.9	7,576.0	97.91	78.379		
12,400.0	7,530.0	7,224.1	7,222.1	87.4	12.9	84.87	2,478.5	-2,840.2	7,767.6	7,668.0	99.63	77.968		
12,500.0	7,530.0	7,222.0	7,220.1	89.1	12.9	84.82	2,478.4	-2,840.2	7,861.4	7,760.1	101.34	77.572		
12,600.0	7,530.0	7,220.0	7,218.1	90.8	12.9	84.78	2,478.4	-2,840.1	7,955.4	7,852.4	103.06	77.191		
12,700.0	7,530.0	7,218.0	7,216.1	92.6	12.8	84.74	2,478.3	-2,840.1	8,049.5	7,944.8	104.78	76.823		
12,800.0	7,530.0	7,216.1	7,214.2	94.3	12.8	84.70	2,478.3	-2,840.1	8,143.8	8,037.3	106.50	76.467		
12,900.0	7,530.0	7,214.1	7,212.2	96.0	12.8	84.66	2,478.2	-2,840.0	8,238.2	8,130.0	108.22	76.124		
13,000.0	7,530.0	7,200.0	7,198.1	97.8	12.8	84.36	2,477.9	-2,839.8	8,332.7	8,222.9	109.88	75.838		
13,100.0	7,530.0	7,200.0	7,198.1	99.5	12.8	84.36	2,477.9	-2,839.8	8,427.4	8,315.8	111.61	75.510		
13,200.0	7,530.0	7,200.0	7,198.1	101.3	12.8	84.36	2,477.9	-2,839.8	8,522.2	8,408.8	113.34	75.194		
13,300.0	7,530.0	7,200.0	7,198.1	103.0	12.8	84.36	2,477.9	-2,839.8	8,617.1	8,502.0	115.07	74.887		
13,400.0	7,530.0	7,200.0	7,198.1	104.7	12.8	84.36	2,477.9	-2,839.8	8,712.1	8,595.3	116.80	74.590		
13,500.0	7,530.0	7,200.0	7,198.1	106.5	12.8	84.36	2,477.9	-2,839.8	8,807.2	8,688.7	118.53	74.302		
13,600.0	7,530.0	7,200.0	7,198.1	108.2	12.8	84.36	2,477.9	-2,839.8	8,902.4	8,782.1	120.26	74.024		
13,700.0	7,530.0	7,199.1	7,197.2	110.0	12.8	84.34	2,477.8	-2,839.8	8,997.7	8,875.7	121.99	73.757		
13,800.0	7,530.0	7,196.5	7,194.6	111.7	12.8	84.28	2,477.8	-2,839.7	9,093.2	8,969.4	123.71	73.504		
13,900.0	7,530.0	7,193.9	7,192.0	113.4	12.8	84.23	2,477.7	-2,839.7	9,188.7	9,063.3	125.43	73.259		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design													S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 23-6 (EXISTING) - ENCANA WELL - G		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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	Centres	(ft)	Axis	Factor					
14,000.0	7,530.0	7,191.3	7,189.5	115.2	12.8	84.17	2,477.6	-2,839.6	9,284.3	9,157.2	127.15	73.021					
14,100.0	7,530.0	7,188.8	7,186.9	116.9	12.8	84.12	2,477.6	-2,839.6	9,380.0	9,251.1	128.86	72.790					
14,200.0	7,530.0	7,186.3	7,184.4	118.7	12.8	84.07	2,477.5	-2,839.5	9,475.8	9,345.2	130.58	72.566					
14,300.0	7,530.0	7,183.8	7,181.9	120.4	12.8	84.02	2,477.4	-2,839.5	9,571.7	9,439.4	132.30	72.348					
14,400.0	7,530.0	7,181.3	7,179.5	122.1	12.8	83.96	2,477.4	-2,839.4	9,667.6	9,533.6	134.02	72.137					
14,500.0	7,530.0	7,178.9	7,177.0	123.9	12.8	83.91	2,477.3	-2,839.4	9,763.7	9,627.9	135.74	71.931					
14,600.0	7,530.0	7,176.5	7,174.6	125.6	12.8	83.86	2,477.3	-2,839.3	9,859.8	9,722.4	137.45	71.732					
14,700.0	7,530.0	7,174.1	7,172.2	127.4	12.8	83.81	2,477.2	-2,839.3	9,956.0	9,816.8	139.17	71.537 SF					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P														Offset Site Error:	0.0 ft
Survey Program: O-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	-144.17	-4,173.3	-3,013.2	5,147.6						
100.0	100.0	57.0	57.0	0.2	0.1	-144.17	-4,173.3	-3,013.2	5,147.4	5,147.2	0.24	N/A			
200.0	200.0	157.0	157.0	0.3	0.2	-144.17	-4,173.3	-3,013.2	5,147.4	5,146.9	0.57	8,991.358			
300.0	300.0	257.0	257.0	0.5	0.4	-144.17	-4,173.3	-3,013.2	5,147.4	5,146.5	0.92	5,585.606			
400.0	400.0	357.0	357.0	0.7	0.6	-144.17	-4,173.3	-3,013.2	5,147.4	5,146.2	1.27	4,051.120			
500.0	500.0	457.0	457.0	0.8	0.8	-144.17	-4,173.3	-3,013.2	5,147.4	5,145.8	1.62	3,178.044			
600.0	600.0	557.0	557.0	1.0	0.9	-121.16	-4,173.3	-3,013.2	5,147.9	5,145.9	1.97	2,614.434			
700.0	700.0	657.0	657.0	1.2	1.1	-121.18	-4,173.3	-3,013.2	5,149.2	5,146.9	2.32	2,219.433			
800.0	799.9	756.9	756.9	1.4	1.3	-121.20	-4,173.3	-3,013.2	5,151.5	5,148.8	2.67	1,925.821			
848.7	848.4	805.4	805.4	1.5	1.4	-121.21	-4,173.3	-3,013.2	5,152.9	5,150.1	2.85	1,808.502			
900.0	899.7	856.7	856.7	1.6	1.5	-121.24	-4,173.3	-3,013.2	5,154.5	5,151.5	3.03	1,698.807			
1,000.0	999.5	956.5	956.5	1.8	1.6	-121.30	-4,173.3	-3,013.2	5,157.7	5,154.3	3.40	1,518.704			
1,100.0	1,099.3	1,056.3	1,056.3	2.0	1.8	-121.36	-4,173.3	-3,013.2	5,160.9	5,157.1	3.76	1,372.658			
1,200.0	1,199.1	1,156.1	1,156.1	2.2	2.0	-121.42	-4,173.3	-3,013.2	5,164.0	5,159.9	4.12	1,251.990			
1,300.0	1,298.9	1,256.0	1,256.0	2.4	2.2	-121.47	-4,173.3	-3,013.2	5,167.2	5,162.7	4.49	1,150.699			
1,400.0	1,398.8	1,355.8	1,355.8	2.6	2.3	-121.53	-4,173.3	-3,013.2	5,170.4	5,165.5	4.86	1,064.515			
1,500.0	1,498.6	1,455.6	1,455.6	2.8	2.5	-121.59	-4,173.3	-3,013.2	5,173.6	5,168.4	5.22	990.323			
1,600.0	1,598.4	1,528.1	1,528.1	3.0	2.6	-121.63	-4,173.5	-3,013.1	5,176.9	5,171.4	5.54	933.753			
1,700.0	1,698.2	1,600.0	1,600.0	3.2	2.8	-121.69	-4,174.9	-3,012.5	5,181.2	5,175.3	5.86	883.608			
1,800.0	1,798.0	1,629.1	1,629.1	3.4	2.8	-121.71	-4,176.0	-3,012.1	5,186.3	5,180.2	6.11	848.892			
1,900.0	1,897.8	1,700.0	1,699.8	3.6	2.9	-121.79	-4,179.8	-3,010.5	5,192.5	5,186.0	6.43	807.555			
2,000.0	1,997.7	1,729.4	1,729.1	3.8	3.0	-121.83	-4,181.8	-3,009.7	5,199.5	5,192.8	6.68	778.540			
2,100.0	2,097.5	1,800.0	1,799.5	4.0	3.1	-121.93	-4,187.9	-3,007.2	5,207.6	5,200.6	7.00	743.506			
2,200.0	2,197.3	1,828.6	1,827.9	4.2	3.2	-121.98	-4,190.8	-3,006.1	5,216.5	5,209.2	7.26	719.008			
2,300.0	2,297.1	1,900.0	1,898.7	4.4	3.3	-122.10	-4,199.1	-3,002.6	5,226.5	5,218.9	7.59	688.458			
2,400.0	2,396.9	1,926.7	1,925.1	4.6	3.4	-122.15	-4,202.7	-3,001.2	5,237.4	5,229.5	7.84	667.692			
2,500.0	2,496.7	2,000.0	1,997.5	4.8	3.6	-122.30	-4,213.6	-2,996.7	5,249.4	5,241.2	8.20	640.273			
2,600.0	2,596.5	2,023.3	2,020.4	5.0	3.6	-122.35	-4,217.4	-2,995.1	5,262.2	5,253.7	8.45	622.835			
2,700.0	2,696.4	2,075.0	2,071.2	5.2	3.8	-122.47	-4,226.6	-2,991.4	5,276.1	5,267.3	8.77	601.819			
2,800.0	2,796.2	2,163.5	2,157.9	5.4	4.0	-122.68	-4,242.9	-2,984.7	5,290.5	5,281.4	9.18	576.152			
2,900.0	2,896.0	2,260.1	2,252.6	5.6	4.3	-122.91	-4,260.7	-2,977.4	5,305.1	5,295.5	9.63	551.036			
3,000.0	2,995.8	2,356.7	2,347.2	5.8	4.6	-123.13	-4,278.5	-2,970.1	5,319.8	5,309.7	10.08	527.697			
3,100.0	3,095.6	2,453.3	2,441.9	6.0	4.9	-123.36	-4,296.4	-2,962.8	5,334.5	5,324.0	10.54	506.044			
3,200.0	3,195.4	2,549.9	2,536.6	6.2	5.3	-123.58	-4,314.2	-2,955.5	5,349.3	5,338.3	11.01	485.968			
3,300.0	3,295.2	2,646.5	2,631.2	6.4	5.6	-123.81	-4,332.0	-2,948.3	5,364.2	5,352.8	11.48	467.351			
3,400.0	3,395.1	2,743.1	2,725.9	6.6	5.9	-124.03	-4,349.8	-2,941.0	5,379.2	5,367.3	11.95	450.075			
3,500.0	3,494.9	2,839.7	2,820.5	6.8	6.2	-124.25	-4,367.7	-2,933.7	5,394.3	5,381.9	12.43	434.027			
3,600.0	3,594.7	2,936.3	2,915.2	7.0	6.6	-124.47	-4,385.5	-2,926.4	5,409.5	5,396.6	12.91	419.101			
3,700.0	3,694.5	3,032.9	3,009.8	7.2	6.9	-124.69	-4,403.3	-2,919.1	5,424.7	5,411.3	13.39	405.200			
3,800.0	3,794.3	3,129.5	3,104.5	7.4	7.3	-124.91	-4,421.1	-2,911.8	5,440.0	5,426.2	13.87	392.232			
3,900.0	3,894.1	3,226.1	3,199.2	7.6	7.6	-125.12	-4,439.0	-2,904.5	5,455.4	5,441.1	14.35	380.117			
4,000.0	3,994.0	3,322.7	3,293.8	7.8	8.0	-125.34	-4,456.8	-2,897.2	5,470.9	5,456.1	14.84	368.780			
4,100.0	4,093.8	3,419.3	3,388.5	8.0	8.3	-125.55	-4,474.6	-2,889.9	5,486.4	5,471.1	15.32	358.155			
4,200.0	4,193.6	3,515.9	3,483.1	8.2	8.7	-125.76	-4,492.4	-2,882.6	5,502.1	5,486.3	15.80	348.183			
4,300.0	4,293.4	3,612.5	3,577.8	8.4	9.1	-125.98	-4,510.3	-2,875.3	5,517.8	5,501.5	16.29	338.807			
4,400.0	4,393.2	3,709.1	3,672.5	8.6	9.4	-126.19	-4,528.1	-2,868.0	5,533.6	5,516.8	16.77	329.981			
4,500.0	4,493.0	3,805.7	3,767.1	8.8	9.8	-126.40	-4,545.9	-2,860.7	5,549.4	5,532.2	17.25	321.659			
4,600.0	4,592.8	3,902.3	3,861.8	9.0	10.1	-126.60	-4,563.7	-2,853.4	5,565.4	5,547.6	17.74	313.803			
4,700.0	4,692.7	3,998.9	3,956.4	9.3	10.5	-126.81	-4,581.6	-2,846.1	5,581.4	5,563.2	18.22	306.375			
4,800.0	4,792.5	4,095.5	4,051.1	9.5	10.9	-127.02	-4,599.4	-2,838.9	5,597.5	5,578.8	18.70	299.344			
4,900.0	4,892.3	4,192.1	4,145.8	9.7	11.2	-127.22	-4,617.2	-2,831.6	5,613.6	5,594.4	19.18	292.680			
5,000.0	4,992.1	4,288.7	4,240.4	9.9	11.6	-127.42	-4,635.0	-2,824.3	5,629.8	5,610.2	19.66	286.356			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	5,091.9	4,385.3	4,335.1	10.1	12.0	-127.63	-4,652.9	-2,817.0	5,646.1	5,626.0	20.14	280.348		
5,200.0	5,191.7	4,481.9	4,429.7	10.3	12.3	-127.83	-4,670.7	-2,809.7	5,662.5	5,641.9	20.62	274.634		
5,300.0	5,291.5	4,578.5	4,524.4	10.5	12.7	-128.03	-4,688.5	-2,802.4	5,679.0	5,657.9	21.10	269.195		
5,400.0	5,391.4	4,675.1	4,619.1	10.7	13.1	-128.23	-4,706.3	-2,795.1	5,695.5	5,673.9	21.57	264.010		
5,500.0	5,491.2	4,771.7	4,713.7	10.9	13.5	-128.43	-4,724.2	-2,787.8	5,712.1	5,690.0	22.05	259.064		
5,600.0	5,591.0	4,868.3	4,808.4	11.1	13.8	-128.62	-4,742.0	-2,780.5	5,728.7	5,706.2	22.52	254.341		
5,700.0	5,690.8	4,964.9	4,903.0	11.3	14.2	-128.82	-4,759.8	-2,773.2	5,745.4	5,722.4	23.00	249.826		
5,800.0	5,790.6	5,061.5	4,997.7	11.5	14.6	-129.01	-4,777.6	-2,765.9	5,762.2	5,738.7	23.47	245.508		
5,900.0	5,890.4	5,158.1	5,092.4	11.7	14.9	-129.21	-4,795.5	-2,758.6	5,779.1	5,755.1	23.94	241.373		
6,000.0	5,990.3	5,254.7	5,187.3	11.9	15.0	-129.29	-4,813.4	-2,751.3	5,796.0	5,771.6	24.41	237.248		
6,100.0	6,090.1	5,351.3	5,282.9	12.1	15.1	-129.34	-4,831.3	-2,744.0	5,812.9	5,784.1	24.88	233.123		
6,200.0	6,189.9	5,447.9	5,374.9	12.3	15.2	-129.38	-4,849.2	-2,736.7	5,830.2	5,800.4	25.35	229.000		
6,300.0	6,289.7	5,544.5	5,466.7	12.5	15.3	-129.43	-4,867.1	-2,729.4	5,847.5	5,816.7	25.82	224.875		
6,400.0	6,389.5	5,641.1	5,558.5	12.7	15.4	-129.48	-4,885.0	-2,722.1	5,864.8	5,833.0	26.29	220.750		
6,500.0	6,489.3	5,737.7	5,649.7	12.9	15.5	-129.52	-4,902.9	-2,714.8	5,882.1	5,849.3	26.76	216.625		
6,600.0	6,589.1	5,833.9	5,741.9	13.1	15.6	-129.57	-4,920.8	-2,707.5	5,899.4	5,866.6	27.23	212.500		
6,700.0	6,688.9	5,930.1	5,827.1	13.3	15.7	-129.61	-4,938.7	-2,699.9	5,916.7	5,883.9	27.70	208.375		
6,785.3	6,774.1	6,004.0	6,004.0	13.5	15.8	-129.65	-4,956.6	-2,692.3	5,934.0	5,901.2	28.17	204.250		
6,800.0	6,788.8	6,018.7	6,018.7	13.5	15.9	-129.64	-4,974.5	-2,684.7	5,951.3	5,918.5	28.64	200.125		
6,850.0	6,838.8	6,068.7	6,068.7	13.6	16.0	-129.63	-4,992.4	-2,677.1	5,968.6	5,935.8	29.11	196.000		
6,900.0	6,888.6	6,118.6	6,118.6	13.6	16.1	-129.62	-5,010.3	-2,669.5	5,985.9	5,952.9	29.58	191.875		
6,950.0	6,938.1	6,168.6	6,168.6	13.7	16.2	-129.61	-5,028.2	-2,661.9	6,003.2	5,970.2	30.05	187.750		
7,000.0	6,987.0	6,218.6	6,218.6	13.7	16.3	-129.60	-5,046.1	-2,654.3	6,020.5	5,987.5	30.52	183.625		
7,050.0	7,035.0	6,268.6	6,268.6	13.6	16.4	-129.59	-5,064.0	-2,646.7	6,037.8	5,999.8	31.00	179.500		
7,100.0	7,082.0	6,318.6	6,318.6	13.6	16.5	-129.58	-5,081.9	-2,639.1	6,055.1	6,012.1	31.47	175.375		
7,150.0	7,127.7	6,368.6	6,368.6	13.5	16.6	-129.57	-5,099.8	-2,631.5	6,071.4	6,024.4	31.94	171.250		
7,200.0	7,171.8	6,418.6	6,418.6	13.5	16.7	-129.56	-5,117.7	-2,623.9	6,087.7	6,036.7	32.41	167.125		
7,250.0	7,214.2	6,468.6	6,468.6	13.4	16.8	-129.55	-5,135.6	-2,616.3	6,104.0	6,049.0	32.88	163.000		
7,300.0	7,254.6	6,518.6	6,518.6	13.4	16.9	-129.54	-5,153.5	-2,608.7	6,120.3	6,061.3	33.35	158.875		
7,350.0	7,292.9	6,568.6	6,568.6	13.3	17.0	-129.53	-5,171.4	-2,601.1	6,136.6	6,073.6	33.82	154.750		
7,400.0	7,328.9	6,618.6	6,618.6	13.3	17.1	-129.52	-5,189.3	-2,593.5	6,152.9	6,085.9	34.29	150.625		
7,450.0	7,362.3	6,668.6	6,668.6	13.3	17.2	-129.51	-5,207.2	-2,585.9	6,168.6	6,098.2	34.76	146.500		
7,500.0	7,393.1	6,718.6	6,718.6	13.4	17.3	-129.50	-5,225.1	-2,578.3	6,184.9	6,110.5	35.23	142.375		
7,550.0	7,421.1	6,768.6	6,768.6	13.5	17.4	-129.49	-5,243.0	-2,570.7	6,201.2	6,122.8	35.70	138.250		
7,600.0	7,446.1	6,818.6	6,818.6	13.6	17.5	-129.48	-5,260.9	-2,563.1	6,217.5	6,135.1	36.17	134.125		
7,650.0	7,468.0	6,868.6	6,868.6	13.8	17.6	-129.47	-5,278.8	-2,555.5	6,233.8	6,147.4	36.64	130.000		
7,700.0	7,486.7	6,918.6	6,918.6	14.0	17.7	-129.46	-5,296.7	-2,547.9	6,250.1	6,159.7	37.11	125.875		
7,750.0	7,502.2	6,968.6	6,968.6	14.2	17.8	-129.45	-5,314.6	-2,540.3	6,266.4	6,172.0	37.58	121.750		
7,800.0	7,514.3	7,018.6	7,018.6	14.6	17.9	-129.44	-5,332.5	-2,532.7	6,282.7	6,184.3	38.05	117.625		
7,850.0	7,523.0	7,068.6	7,068.6	14.9	18.0	-129.43	-5,350.4	-2,525.1	6,298.6	6,196.6	38.52	113.500		
7,900.0	7,528.2	7,118.6	7,118.6	15.3	18.1	-129.42	-5,368.3	-2,517.5	6,314.9	6,208.9	38.99	109.375		
7,950.2	7,530.0	7,168.6	7,168.6	15.8	18.2	-129.41	-5,386.2	-2,509.9	6,331.2	6,221.2	39.46	105.250		
8,000.0	7,530.0	7,218.6	7,218.6	16.2	18.3	-129.40	-5,404.1	-2,502.3	6,347.5	6,233.5	39.93	101.125		
8,100.0	7,530.0	7,268.6	7,268.6	17.3	18.4	-129.39	-5,422.0	-2,494.7	6,363.8	6,245.8	40.40	97.000		
8,200.0	7,530.0	7,318.6	7,318.6	18.4	18.5	-129.38	-5,439.9	-2,487.1	6,380.1	6,258.1	40.87	92.875		
8,300.0	7,530.0	7,368.6	7,368.6	19.7	18.6	-129.37	-5,457.8	-2,479.5	6,396.4	6,270.4	41.34	88.750		
8,400.0	7,530.0	7,418.6	7,418.6	21.0	18.7	-129.36	-5,475.7	-2,471.9	6,412.7	6,282.7	41.81	84.625		
8,500.0	7,530.0	7,468.6	7,468.6	22.4	18.8	-129.35	-5,493.6	-2,464.3	6,428.6	6,295.0	42.28	80.500		
8,600.0	7,530.0	7,518.6	7,518.6	23.8	18.9	-129.34	-5,511.5	-2,456.7	6,444.9	6,307.3	42.75	76.375		
8,700.0	7,530.0	7,568.6	7,568.6	25.3	19.0	-129.33	-5,529.4	-2,449.1	6,461.2	6,319.6	43.22	72.250		
8,800.0	7,530.0	7,618.6	7,618.6	26.8	19.1	-129.32	-5,547.3	-2,441.5	6,477.5	6,331.9	43.69	68.125		
8,900.0	7,530.0	7,668.6	7,668.6	28.3	19.2	-129.31	-5,565.2	-2,433.9	6,493.8	6,344.2	44.16	64.000		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 24-6 (EXISTING) - ENCANA WELL - P												Offset Site Error:	0.0 ft
Survey Program: O-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,530.0	7,560.0	7,487.0	29.9	18.7	90.00	-4,879.4	-2,724.3	4,294.6	4,246.9	47.76	89.927	
9,100.0	7,530.0	7,560.0	7,487.0	31.4	18.7	90.00	-4,879.4	-2,724.3	4,214.1	4,164.8	49.34	85.409	
9,200.0	7,530.0	7,560.0	7,487.0	33.0	18.7	90.00	-4,879.4	-2,724.3	4,134.5	4,083.5	50.94	81.160	
9,300.0	7,530.0	7,560.0	7,487.0	34.7	18.7	90.00	-4,879.4	-2,724.3	4,055.7	4,003.2	52.56	77.166	
9,400.0	7,530.0	7,560.0	7,487.0	36.3	18.7	90.00	-4,879.4	-2,724.3	3,977.9	3,923.8	54.19	73.410	
9,500.0	7,530.0	7,560.0	7,487.0	37.9	18.7	90.00	-4,879.4	-2,724.3	3,901.2	3,845.3	55.83	69.878	
9,600.0	7,530.0	7,560.0	7,487.0	39.6	18.7	90.00	-4,879.4	-2,724.3	3,825.5	3,768.0	57.48	66.555	
9,700.0	7,530.0	7,560.0	7,487.0	41.2	18.7	90.00	-4,879.4	-2,724.3	3,750.9	3,691.8	59.14	63.427	
9,800.0	7,530.0	7,560.0	7,487.0	42.9	18.7	90.00	-4,879.4	-2,724.3	3,677.6	3,616.8	60.80	60.483	
9,900.0	7,530.0	7,560.0	7,487.0	44.5	18.7	90.00	-4,879.4	-2,724.3	3,605.5	3,543.0	62.48	57.709	
10,000.0	7,530.0	7,560.0	7,487.0	46.2	18.7	90.00	-4,879.4	-2,724.3	3,534.8	3,470.6	64.16	55.097	
10,100.0	7,530.0	7,560.0	7,487.0	47.9	18.7	90.00	-4,879.4	-2,724.3	3,465.5	3,399.7	65.84	52.635	
10,200.0	7,530.0	7,560.0	7,487.0	49.6	18.7	90.00	-4,879.4	-2,724.3	3,397.8	3,330.2	67.53	50.315	
10,300.0	7,530.0	7,560.0	7,487.0	51.3	18.7	90.00	-4,879.4	-2,724.3	3,331.7	3,262.4	69.22	48.129	
10,400.0	7,530.0	7,560.0	7,487.0	53.0	18.7	90.00	-4,879.4	-2,724.3	3,267.3	3,196.4	70.92	46.069	
10,500.0	7,530.0	7,560.0	7,487.0	54.7	18.7	90.00	-4,879.4	-2,724.3	3,204.7	3,132.1	72.62	44.129	
10,600.0	7,530.0	7,560.0	7,487.0	56.4	18.7	90.00	-4,879.4	-2,724.3	3,144.1	3,069.8	74.33	42.301	
10,700.0	7,530.0	7,560.0	7,487.0	58.1	18.7	90.00	-4,879.4	-2,724.3	3,085.5	3,009.5	76.03	40.581	
10,800.0	7,530.0	7,560.0	7,487.0	59.8	18.7	90.00	-4,879.4	-2,724.3	3,029.1	2,951.4	77.74	38.962	
10,900.0	7,530.0	7,560.0	7,487.0	61.5	18.7	90.00	-4,879.4	-2,724.3	2,975.0	2,895.5	79.46	37.442	
11,000.0	7,530.0	7,560.0	7,487.0	63.2	18.7	90.00	-4,879.4	-2,724.3	2,923.3	2,842.1	81.17	36.014	
11,100.0	7,530.0	7,560.0	7,487.0	64.9	18.7	90.00	-4,879.4	-2,724.3	2,874.2	2,791.3	82.89	34.675	
11,200.0	7,530.0	7,560.0	7,487.0	66.6	18.7	90.00	-4,879.4	-2,724.3	2,827.7	2,743.1	84.61	33.421	
11,300.0	7,530.0	7,560.0	7,487.0	68.4	18.7	90.00	-4,879.4	-2,724.3	2,784.1	2,697.7	86.33	32.250	
11,400.0	7,530.0	7,560.0	7,487.0	70.1	18.7	90.00	-4,879.4	-2,724.3	2,743.4	2,655.3	88.05	31.157	
11,500.0	7,530.0	7,560.0	7,487.0	71.8	18.7	90.00	-4,879.4	-2,724.3	2,705.8	2,616.0	89.77	30.140	
11,600.0	7,530.0	7,560.0	7,487.0	73.5	18.7	90.00	-4,879.4	-2,724.3	2,671.4	2,579.9	91.50	29.196	
11,700.0	7,530.0	7,560.0	7,487.0	75.3	18.7	90.00	-4,879.4	-2,724.3	2,640.3	2,547.1	93.23	28.322	
11,800.0	7,530.0	7,560.0	7,487.0	77.0	18.7	90.00	-4,879.4	-2,724.3	2,612.8	2,517.8	94.95	27.516	
11,900.0	7,530.0	7,560.0	7,487.0	78.7	18.7	90.00	-4,879.4	-2,724.3	2,588.7	2,492.1	96.68	26.776	
12,000.0	7,530.0	7,560.0	7,487.0	80.4	18.7	90.00	-4,879.4	-2,724.3	2,568.4	2,470.0	98.41	26.098	
12,100.0	7,530.0	7,560.0	7,487.0	82.2	18.7	90.00	-4,879.4	-2,724.3	2,551.8	2,451.7	100.14	25.481	
12,200.0	7,530.0	7,560.0	7,487.0	83.9	18.7	90.00	-4,879.4	-2,724.3	2,539.1	2,437.2	101.88	24.923	
12,300.0	7,530.0	7,560.0	7,487.0	85.6	18.7	90.00	-4,879.4	-2,724.3	2,530.2	2,426.6	103.61	24.421	
12,400.0	7,530.0	7,560.0	7,487.0	87.4	18.7	90.00	-4,879.4	-2,724.3	2,525.3	2,420.0	105.34	23.972	
12,474.5	7,530.0	7,560.0	7,487.0	88.7	18.7	90.00	-4,879.4	-2,724.3	2,524.2	2,417.6	106.64	23.671 CC	
12,500.0	7,530.0	7,560.0	7,487.0	89.1	18.7	90.00	-4,879.4	-2,724.3	2,524.3	2,417.2	107.08	23.575 ES	
12,600.0	7,530.0	7,560.0	7,487.0	90.8	18.7	90.00	-4,879.4	-2,724.3	2,527.3	2,418.5	108.81	23.226	
12,700.0	7,530.0	7,560.0	7,487.0	92.6	18.7	90.00	-4,879.4	-2,724.3	2,534.3	2,423.7	110.55	22.924	
12,800.0	7,530.0	7,560.0	7,487.0	94.3	18.7	90.00	-4,879.4	-2,724.3	2,545.1	2,432.8	112.29	22.666	
12,900.0	7,530.0	7,560.0	7,487.0	96.0	18.7	90.00	-4,879.4	-2,724.3	2,559.8	2,445.8	114.02	22.450	
13,000.0	7,530.0	7,560.0	7,487.0	97.8	18.7	90.00	-4,879.4	-2,724.3	2,578.3	2,462.6	115.76	22.273	
13,100.0	7,530.0	7,560.0	7,487.0	99.5	18.7	90.00	-4,879.4	-2,724.3	2,600.5	2,483.0	117.50	22.132	
13,200.0	7,530.0	7,560.0	7,487.0	101.3	18.7	90.00	-4,879.4	-2,724.3	2,626.4	2,507.2	119.24	22.026	
13,300.0	7,530.0	7,560.0	7,487.0	103.0	18.7	90.00	-4,879.4	-2,724.3	2,655.8	2,534.8	120.98	21.952	
13,400.0	7,530.0	7,560.0	7,487.0	104.7	18.7	90.00	-4,879.4	-2,724.3	2,688.5	2,565.8	122.72	21.908	
13,500.0	7,530.0	7,560.0	7,487.0	106.5	18.7	90.00	-4,879.4	-2,724.3	2,724.6	2,600.1	124.46	21.891 SF	
13,600.0	7,530.0	7,560.0	7,487.0	108.2	18.7	90.00	-4,879.4	-2,724.3	2,763.8	2,637.6	126.20	21.900	
13,700.0	7,530.0	7,560.0	7,487.0	110.0	18.7	90.00	-4,879.4	-2,724.3	2,806.0	2,678.0	127.94	21.932	
13,800.0	7,530.0	7,560.0	7,487.0	111.7	18.7	90.00	-4,879.4	-2,724.3	2,851.1	2,721.4	129.68	21.985	
13,900.0	7,530.0	7,560.0	7,487.0	113.4	18.7	90.00	-4,879.4	-2,724.3	2,898.9	2,767.5	131.43	22.057	
14,000.0	7,530.0	7,560.0	7,487.0	115.2	18.7	90.00	-4,879.4	-2,724.3	2,949.4	2,816.2	133.17	22.148	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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				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)			Total Uncertainty Axis	
14,100.0	7,530.0	7,560.0	7,487.0	116.9	18.7	90.00	-4,879.4	-2,724.3	3,002.3	2,867.4	134.91	22.254		
14,200.0	7,530.0	7,560.0	7,487.0	118.7	18.7	90.00	-4,879.4	-2,724.3	3,057.6	2,921.0	136.65	22.375		
14,300.0	7,530.0	7,560.0	7,487.0	120.4	18.7	90.00	-4,879.4	-2,724.3	3,115.1	2,976.7	138.40	22.509		
14,400.0	7,530.0	7,560.0	7,487.0	122.1	18.7	90.00	-4,879.4	-2,724.3	3,174.8	3,034.6	140.14	22.654		
14,500.0	7,530.0	7,560.0	7,487.0	123.9	18.7	90.00	-4,879.4	-2,724.3	3,236.4	3,094.5	141.89	22.810		
14,600.0	7,530.0	7,560.0	7,487.0	125.6	18.7	90.00	-4,879.4	-2,724.3	3,299.9	3,156.3	143.63	22.975		
14,700.0	7,530.0	7,560.0	7,487.0	127.4	18.7	90.00	-4,879.4	-2,724.3	3,365.2	3,219.8	145.38	23.148		
14,800.0	7,530.0	7,560.0	7,487.0	129.1	18.7	90.00	-4,879.4	-2,724.3	3,432.1	3,285.0	147.12	23.329		
14,900.0	7,530.0	7,560.0	7,487.0	130.9	18.7	90.00	-4,879.4	-2,724.3	3,500.7	3,351.8	148.87	23.516		
15,000.0	7,530.0	7,560.0	7,487.0	132.6	18.7	90.00	-4,879.4	-2,724.3	3,570.7	3,420.1	150.61	23.708		
15,100.0	7,530.0	7,560.0	7,487.0	134.4	18.7	90.00	-4,879.4	-2,724.3	3,642.1	3,489.7	152.36	23.905		
15,200.0	7,530.0	7,560.0	7,487.0	136.1	18.7	90.00	-4,879.4	-2,724.3	3,714.8	3,560.7	154.10	24.106		
15,300.0	7,530.0	7,560.0	7,487.0	137.9	18.7	90.00	-4,879.4	-2,724.3	3,788.8	3,633.0	155.85	24.311		
15,400.0	7,530.0	7,560.0	7,487.0	139.6	18.7	90.00	-4,879.4	-2,724.3	3,864.0	3,706.4	157.59	24.518		
15,500.0	7,530.0	7,560.0	7,487.0	141.3	18.7	90.00	-4,879.4	-2,724.3	3,940.2	3,780.9	159.34	24.728		
15,600.0	7,530.0	7,560.0	7,487.0	143.1	18.7	90.00	-4,879.4	-2,724.3	4,017.5	3,856.4	161.09	24.940		
15,700.0	7,530.0	7,560.0	7,487.0	144.8	18.7	90.00	-4,879.4	-2,724.3	4,095.8	3,933.0	162.83	25.153		
15,800.0	7,530.0	7,560.0	7,487.0	146.6	18.7	90.00	-4,879.4	-2,724.3	4,175.0	4,010.4	164.58	25.367		
15,900.0	7,530.0	7,560.0	7,487.0	148.3	18.7	90.00	-4,879.4	-2,724.3	4,255.1	4,088.8	166.33	25.582		
16,000.0	7,530.0	7,560.0	7,487.0	150.1	18.7	90.00	-4,879.4	-2,724.3	4,336.0	4,167.9	168.08	25.798		
16,100.0	7,530.0	7,560.0	7,487.0	151.8	18.7	90.00	-4,879.4	-2,724.3	4,417.7	4,247.9	169.82	26.013		
16,200.0	7,530.0	7,560.0	7,487.0	153.6	18.7	90.00	-4,879.4	-2,724.3	4,500.1	4,328.5	171.57	26.229		
16,300.0	7,530.0	7,560.0	7,487.0	155.3	18.7	90.00	-4,879.4	-2,724.3	4,583.2	4,409.9	173.32	26.444		
16,400.0	7,530.0	7,560.0	7,487.0	157.1	18.7	90.00	-4,879.4	-2,724.3	4,667.0	4,492.0	175.07	26.659		
16,500.0	7,530.0	7,560.0	7,487.0	158.8	18.7	90.00	-4,879.4	-2,724.3	4,751.5	4,574.6	176.81	26.873		
16,600.0	7,530.0	7,560.0	7,487.0	160.6	18.7	90.00	-4,879.4	-2,724.3	4,836.5	4,657.9	178.56	27.086		
16,700.0	7,530.0	7,560.0	7,487.0	162.3	18.7	90.00	-4,879.4	-2,724.3	4,922.0	4,741.7	180.31	27.298		
16,800.0	7,530.0	7,560.0	7,487.0	164.1	18.7	90.00	-4,879.4	-2,724.3	5,008.2	4,826.1	182.06	27.508		
16,900.0	7,530.0	7,560.0	7,487.0	165.8	18.7	90.00	-4,879.4	-2,724.3	5,094.8	4,911.0	183.81	27.718		
17,000.0	7,530.0	7,560.0	7,487.0	167.6	18.7	90.00	-4,879.4	-2,724.3	5,181.9	4,996.3	185.56	27.926		
17,100.0	7,530.0	7,560.0	7,487.0	169.3	18.7	90.00	-4,879.4	-2,724.3	5,269.4	5,082.1	187.31	28.133		
17,200.0	7,530.0	7,560.0	7,487.0	171.1	18.7	90.00	-4,879.4	-2,724.3	5,357.4	5,168.4	189.05	28.338		
17,300.0	7,530.0	7,560.0	7,487.0	172.8	18.7	90.00	-4,879.4	-2,724.3	5,445.8	5,255.0	190.80	28.542		
17,400.0	7,530.0	7,560.0	7,487.0	174.5	18.7	90.00	-4,879.4	-2,724.3	5,534.6	5,342.1	192.55	28.744		
17,411.2	7,530.0	7,560.0	7,487.0	174.7	18.7	90.00	-4,879.4	-2,724.3	5,544.7	5,351.9	192.75	28.766		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P														Offset Site Error:	0.0 ft
Survey Program: 775-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	-60.26	1,789.9	-3,132.8	3,608.3						
100.0	100.0	56.0	56.0	0.2	0.1	-60.26	1,789.9	-3,132.8	3,608.1	3,607.8	0.25	N/A			
200.0	200.0	156.0	156.0	0.3	0.3	-60.26	1,789.9	-3,132.8	3,608.1	3,607.5	0.59	6,073.330			
300.0	300.0	256.0	256.0	0.5	0.4	-60.26	1,789.9	-3,132.8	3,608.1	3,607.1	0.94	3,837.456			
400.0	400.0	356.0	356.0	0.7	0.6	-60.26	1,789.9	-3,132.8	3,608.1	3,606.8	1.29	2,804.858			
500.0	500.0	456.0	456.0	0.8	0.8	-60.26	1,789.9	-3,132.8	3,608.1	3,606.4	1.63	2,210.144			
600.0	600.0	556.0	556.0	1.0	1.0	-37.26	1,789.9	-3,132.8	3,607.4	3,605.4	1.98	1,823.122			
700.0	700.0	656.0	656.0	1.2	1.1	-37.30	1,789.9	-3,132.8	3,605.3	3,602.9	2.33	1,550.355			
800.0	799.9	755.9	755.9	1.4	1.3	-37.36	1,789.9	-3,132.8	3,601.8	3,599.1	2.67	1,347.048			
848.7	848.4	775.0	775.0	1.5	1.3	-37.38	1,789.9	-3,132.8	3,599.7	3,596.9	2.79	1,288.573			
900.0	899.7	775.0	775.0	1.6	1.3	-37.38	1,789.9	-3,132.8	3,598.0	3,595.2	2.89	1,246.618			
993.3	992.8	775.0	775.0	1.8	1.3	-37.38	1,789.9	-3,132.8	3,596.8	3,593.8	3.06	1,177.189			
1,000.0	999.5	775.0	775.0	1.8	1.3	-37.38	1,789.9	-3,132.8	3,596.8	3,593.8	3.07	1,172.528			
1,100.0	1,099.3	920.9	920.8	2.0	1.8	-37.43	1,793.4	-3,133.9	3,592.7	3,589.1	3.64	987.742			
1,181.4	1,180.6	963.2	963.1	2.1	1.9	-37.43	1,795.8	-3,134.7	3,592.3	3,588.4	3.89	922.624 CC			
1,200.0	1,199.1	972.9	972.7	2.2	1.9	-37.43	1,796.4	-3,134.9	3,592.3	3,588.4	3.95	909.028 ES			
1,300.0	1,298.9	1,024.9	1,024.6	2.4	2.1	-37.41	1,800.2	-3,136.1	3,593.2	3,589.0	4.26	842.618			
1,400.0	1,398.8	1,076.9	1,076.3	2.6	2.3	-37.39	1,805.0	-3,137.6	3,595.5	3,590.9	4.58	785.873			
1,500.0	1,498.6	1,128.7	1,127.8	2.8	2.4	-37.36	1,810.6	-3,139.5	3,599.1	3,594.2	4.88	736.871			
1,600.0	1,598.4	1,180.5	1,179.1	3.0	2.6	-37.31	1,817.1	-3,141.5	3,604.0	3,598.8	5.19	694.173			
1,700.0	1,698.2	1,232.1	1,230.1	3.2	2.8	-37.26	1,824.5	-3,143.9	3,610.2	3,604.8	5.50	656.681			
1,800.0	1,798.0	1,380.6	1,376.1	3.4	3.3	-37.05	1,850.6	-3,152.3	3,620.4	3,614.3	6.02	600.903			
1,900.0	1,897.8	1,380.6	1,376.1	3.6	3.3	-37.05	1,850.6	-3,152.3	3,627.3	3,621.1	6.21	584.146			
2,000.0	1,997.7	1,390.4	1,385.7	3.8	3.3	-37.04	1,852.5	-3,152.9	3,637.0	3,630.6	6.42	566.189			
2,100.0	2,097.5	1,489.3	1,482.3	4.0	3.7	-36.87	1,872.3	-3,159.2	3,647.9	3,641.0	6.90	528.526			
2,200.0	2,197.3	1,588.1	1,579.0	4.2	4.1	-36.71	1,892.0	-3,165.6	3,658.7	3,651.4	7.38	495.861			
2,300.0	2,297.1	1,687.0	1,675.7	4.4	4.5	-36.55	1,911.8	-3,171.9	3,669.6	3,661.8	7.85	467.259			
2,400.0	2,396.9	1,785.9	1,772.3	4.6	4.9	-36.39	1,931.5	-3,178.3	3,680.5	3,672.2	8.33	442.003			
2,500.0	2,496.7	1,884.7	1,869.0	4.8	5.3	-36.23	1,951.3	-3,184.6	3,691.5	3,682.7	8.80	419.539			
2,600.0	2,596.5	1,983.6	1,965.7	5.0	5.7	-36.07	1,971.0	-3,190.9	3,702.4	3,693.2	9.27	399.428			
2,700.0	2,696.4	2,082.4	2,062.3	5.2	6.1	-35.91	1,990.8	-3,197.3	3,713.4	3,703.7	9.74	381.317			
2,800.0	2,796.2	2,181.3	2,159.0	5.4	6.5	-35.75	2,010.5	-3,203.6	3,724.5	3,714.3	10.21	364.924			
2,900.0	2,896.0	2,280.2	2,255.7	5.6	6.9	-35.59	2,030.3	-3,209.9	3,735.5	3,724.9	10.67	350.014			
3,000.0	2,995.8	2,379.0	2,352.3	5.8	7.3	-35.44	2,050.0	-3,216.3	3,746.6	3,735.5	11.14	336.396			
3,100.0	3,095.6	2,477.9	2,449.0	6.0	7.7	-35.28	2,069.8	-3,222.6	3,757.7	3,746.1	11.60	323.909			
3,200.0	3,195.4	2,576.8	2,545.7	6.2	8.1	-35.13	2,089.5	-3,229.0	3,768.9	3,756.8	12.06	312.419			
3,300.0	3,295.2	2,675.6	2,642.3	6.4	8.5	-34.98	2,109.3	-3,235.3	3,780.0	3,767.5	12.52	301.810			
3,400.0	3,395.1	2,774.5	2,739.0	6.6	8.9	-34.83	2,129.0	-3,241.6	3,791.2	3,778.2	12.98	291.985			
3,500.0	3,494.9	2,873.4	2,835.6	6.8	9.3	-34.67	2,148.8	-3,248.0	3,802.4	3,789.0	13.44	282.861			
3,600.0	3,594.7	2,972.2	2,932.3	7.0	9.7	-34.52	2,168.5	-3,254.3	3,813.7	3,799.8	13.90	274.366			
3,700.0	3,694.5	3,071.1	3,029.0	7.2	10.1	-34.37	2,188.3	-3,260.6	3,824.9	3,810.6	14.36	266.437			
3,800.0	3,794.3	3,170.0	3,125.6	7.4	10.5	-34.23	2,208.0	-3,267.0	3,836.2	3,821.4	14.81	259.019			
3,900.0	3,894.1	3,268.8	3,222.3	7.6	10.9	-34.08	2,227.8	-3,273.3	3,847.6	3,832.3	15.26	252.065			
4,000.0	3,994.0	3,367.7	3,319.0	7.8	11.2	-33.93	2,247.5	-3,279.7	3,858.9	3,843.2	15.72	245.533			
4,100.0	4,093.8	3,466.5	3,415.6	8.0	11.6	-33.79	2,267.3	-3,286.0	3,870.3	3,854.1	16.17	239.386			
4,200.0	4,193.6	3,565.4	3,512.3	8.2	12.0	-33.64	2,287.0	-3,292.3	3,881.7	3,865.1	16.62	233.591			
4,300.0	4,293.4	3,664.3	3,609.0	8.4	12.4	-33.50	2,306.8	-3,298.7	3,893.1	3,876.0	17.07	228.119			
4,400.0	4,393.2	3,763.1	3,705.6	8.6	12.8	-33.35	2,326.5	-3,305.0	3,904.5	3,887.0	17.51	222.943			
4,500.0	4,493.0	3,862.0	3,802.3	8.8	13.2	-33.21	2,346.3	-3,311.3	3,916.0	3,898.1	17.96	218.041			
4,600.0	4,592.8	3,960.9	3,899.0	9.0	13.6	-33.07	2,366.0	-3,317.7	3,927.5	3,909.1	18.41	213.392			
4,700.0	4,692.7	4,059.7	3,995.6	9.3	14.0	-32.93	2,385.8	-3,324.0	3,939.0	3,920.2	18.85	208.976			
4,800.0	4,792.5	4,158.6	4,092.3	9.5	14.4	-32.79	2,405.5	-3,330.4	3,950.6	3,931.3	19.29	204.776			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 775-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	4,892.3	4,257.5	4,188.9	9.7	14.8	-32.65	2,425.3	-3,336.7	3,962.1	3,942.4	19.73	200.778		
5,000.0	4,992.1	4,356.3	4,285.6	9.9	15.2	-32.51	2,445.0	-3,343.0	3,973.7	3,953.5	20.17	196.966		
5,100.0	5,091.9	4,455.2	4,382.3	10.1	15.6	-32.37	2,464.8	-3,349.4	3,985.3	3,964.7	20.61	193.329		
5,200.0	5,191.7	4,554.1	4,478.9	10.3	16.0	-32.24	2,484.5	-3,355.7	3,997.0	3,975.9	21.05	189.855		
5,300.0	5,291.5	4,652.9	4,575.6	10.5	16.4	-32.10	2,504.2	-3,362.0	4,008.6	3,987.1	21.49	186.534		
5,400.0	5,391.4	4,751.8	4,672.3	10.7	16.8	-31.96	2,524.0	-3,368.4	4,020.3	3,998.4	21.93	183.354		
5,500.0	5,491.2	4,850.6	4,768.9	10.9	17.2	-31.83	2,543.7	-3,374.7	4,032.0	4,009.6	22.36	180.309		
5,600.0	5,591.0	4,949.5	4,865.6	11.1	17.6	-31.70	2,563.5	-3,381.1	4,043.7	4,020.9	22.80	177.389		
5,700.0	5,690.8	5,048.4	4,962.3	11.3	18.0	-31.56	2,583.2	-3,387.4	4,055.5	4,032.2	23.23	174.586		
5,800.0	5,790.6	5,147.2	5,058.9	11.5	18.4	-31.43	2,603.0	-3,393.7	4,067.2	4,043.6	23.66	171.895		
5,900.0	5,890.4	5,246.1	5,155.6	11.7	18.8	-31.30	2,622.7	-3,400.1	4,079.0	4,054.9	24.09	169.309		
6,000.0	5,990.3	5,345.0	5,252.2	11.9	19.2	-31.17	2,642.5	-3,406.4	4,090.8	4,066.3	24.52	166.821		
6,100.0	6,090.1	5,443.8	5,348.9	12.1	19.6	-31.04	2,662.2	-3,412.8	4,102.7	4,077.7	24.95	164.427		
6,200.0	6,189.9	5,542.7	5,445.6	12.3	20.0	-30.91	2,682.0	-3,419.1	4,114.5	4,089.1	25.38	162.120		
6,300.0	6,289.7	5,641.6	5,542.2	12.5	20.4	-30.78	2,701.7	-3,425.4	4,126.4	4,100.6	25.81	159.898		
6,400.0	6,389.5	5,740.4	5,638.9	12.7	20.8	-30.65	2,721.5	-3,431.8	4,138.3	4,112.0	26.23	157.754		
6,500.0	6,489.3	5,839.3	5,735.6	12.9	21.2	-30.53	2,741.2	-3,438.1	4,150.2	4,123.5	26.66	155.685		
6,600.0	6,589.1	5,938.2	5,832.2	13.1	21.6	-30.40	2,761.0	-3,444.4	4,162.1	4,135.0	27.08	153.687		
6,700.0	6,689.0	6,037.0	5,928.9	13.3	22.0	-30.27	2,780.7	-3,450.8	4,174.1	4,146.6	27.50	151.757		
6,785.3	6,774.1	6,121.3	6,011.3	13.5	22.3	-30.17	2,797.6	-3,456.2	4,184.3	4,156.4	27.86	150.163		
6,800.0	6,788.8	6,135.9	6,025.5	13.5	22.4	-19.24	2,800.5	-3,457.1	4,186.1	4,158.2	27.95	149.775		
6,850.0	6,838.8	6,184.8	6,073.4	13.6	22.6	90.86	2,810.3	-3,460.3	4,193.8	4,165.5	28.23	148.533		
6,900.0	6,888.6	6,232.9	6,120.5	13.6	22.8	112.28	2,819.9	-3,463.3	4,203.4	4,174.9	28.53	147.351		
6,950.0	6,938.1	6,280.0	6,166.5	13.7	23.0	116.79	2,829.3	-3,466.4	4,215.1	4,186.2	28.83	146.206		
7,000.0	6,987.0	6,325.8	6,211.3	13.7	23.2	118.28	2,838.4	-3,469.3	4,228.7	4,199.5	29.15	145.071		
7,050.0	7,035.0	6,370.1	6,254.6	13.6	23.3	118.66	2,847.3	-3,472.1	4,244.2	4,214.7	29.49	143.917		
7,100.0	7,082.0	6,412.7	6,296.3	13.6	23.5	118.45	2,855.8	-3,474.9	4,261.6	4,231.8	29.86	142.714		
7,150.0	7,127.7	6,453.4	6,336.0	13.5	23.7	117.84	2,863.9	-3,477.5	4,280.9	4,250.6	30.27	141.434		
7,200.0	7,171.8	6,491.9	6,373.7	13.5	23.8	116.93	2,871.6	-3,479.9	4,301.9	4,271.2	30.72	140.054		
7,250.0	7,214.2	6,528.2	6,409.1	13.4	24.0	115.75	2,878.8	-3,482.3	4,324.6	4,293.4	31.21	138.557		
7,300.0	7,254.6	6,561.9	6,442.1	13.4	24.1	114.32	2,885.6	-3,484.4	4,349.0	4,317.2	31.76	136.938		
7,350.0	7,292.9	7,375.4	7,248.9	13.3	25.1	120.15	2,966.3	-3,510.3	4,371.4	4,340.0	31.38	139.293		
7,400.0	7,328.9	7,411.4	7,284.9	13.3	25.2	118.98	2,966.3	-3,510.3	4,392.9	4,361.0	31.83	137.998		
7,450.0	7,362.3	7,444.9	7,318.3	13.3	25.2	117.60	2,966.3	-3,510.3	4,416.2	4,383.8	32.36	136.473		
7,500.0	7,393.1	7,475.6	7,349.1	13.4	25.2	115.99	2,966.3	-3,510.3	4,441.2	4,408.2	32.96	134.724		
7,550.0	7,421.1	7,503.6	7,377.1	13.5	25.3	114.14	2,966.3	-3,510.3	4,467.8	4,434.1	33.65	132.777		
7,600.0	7,446.1	7,528.6	7,402.1	13.6	25.3	112.04	2,966.3	-3,510.3	4,495.9	4,461.5	34.41	130.674		
7,650.0	7,468.0	7,550.5	7,424.0	13.8	25.3	109.68	2,966.3	-3,510.3	4,525.4	4,490.2	35.22	128.478		
7,700.0	7,486.7	7,569.3	7,442.7	14.0	25.3	107.05	2,966.3	-3,510.3	4,556.1	4,520.1	36.08	126.268		
7,750.0	7,502.2	7,584.7	7,458.2	14.2	25.3	104.15	2,966.3	-3,510.3	4,588.0	4,551.1	36.96	124.134		
7,800.0	7,514.3	7,596.8	7,470.3	14.6	25.3	100.97	2,966.3	-3,510.3	4,620.9	4,583.1	37.82	122.176		
7,850.0	7,523.0	7,605.5	7,479.0	14.9	25.4	97.54	2,966.3	-3,510.3	4,654.7	4,616.0	38.63	120.493		
7,900.0	7,528.2	7,610.8	7,484.2	15.3	25.4	93.88	2,966.3	-3,510.3	4,689.0	4,649.7	39.34	119.179		
7,950.2	7,530.0	7,612.5	7,486.0	15.8	25.4	90.00	2,966.3	-3,510.3	4,724.1	4,684.2	39.93	118.311		
8,000.0	7,530.0	7,612.5	7,486.0	16.2	25.4	90.00	2,966.3	-3,510.3	4,759.2	4,718.8	40.41	117.764		
8,100.0	7,530.0	7,612.5	7,486.0	17.3	25.4	90.00	2,966.3	-3,510.3	4,830.4	4,788.9	41.48	116.456		
8,200.0	7,530.0	7,612.5	7,486.0	18.4	25.4	90.00	2,966.3	-3,510.3	4,902.6	4,860.0	42.65	114.948		
8,300.0	7,530.0	7,612.5	7,486.0	19.7	25.4	90.00	2,966.3	-3,510.3	4,975.8	4,931.9	43.91	113.317		
8,400.0	7,530.0	7,612.5	7,486.0	21.0	25.4	90.00	2,966.3	-3,510.3	5,050.0	5,004.7	45.24	111.620		
8,500.0	7,530.0	7,612.5	7,486.0	22.4	25.4	90.00	2,966.3	-3,510.3	5,125.0	5,078.3	46.63	109.899		
8,600.0	7,530.0	7,612.5	7,486.0	23.8	25.4	90.00	2,966.3	-3,510.3	5,200.8	5,152.7	48.07	108.187		
8,700.0	7,530.0	7,612.5	7,486.0	25.3	25.4	90.00	2,966.3	-3,510.3	5,277.4	5,227.9	49.55	106.505		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 775-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,800.0	7,530.0	7,612.5	7,486.0	26.8	25.4	90.00	2,966.3	-3,510.3	5,354.9	5,303.8	51.06	104.866		
8,900.0	7,530.0	7,612.5	7,486.0	28.3	25.4	90.00	2,966.3	-3,510.3	5,433.0	5,380.4	52.60	103.281		
9,000.0	7,530.0	7,612.5	7,486.0	29.9	25.4	90.00	2,966.3	-3,510.3	5,511.9	5,457.7	54.17	101.754		
9,100.0	7,530.0	7,612.5	7,486.0	31.4	25.4	90.00	2,966.3	-3,510.3	5,591.4	5,535.6	55.75	100.289		
9,200.0	7,530.0	7,612.5	7,486.0	33.0	25.4	90.00	2,966.3	-3,510.3	5,671.6	5,614.2	57.35	98.887		
9,300.0	7,530.0	7,612.5	7,486.0	34.7	25.4	90.00	2,966.3	-3,510.3	5,752.4	5,693.4	58.97	97.547		
9,400.0	7,530.0	7,612.5	7,486.0	36.3	25.4	90.00	2,966.3	-3,510.3	5,833.8	5,773.2	60.60	96.267		
9,500.0	7,530.0	7,612.5	7,486.0	37.9	25.4	90.00	2,966.3	-3,510.3	5,915.8	5,853.5	62.24	95.047		
9,600.0	7,530.0	7,612.5	7,486.0	39.6	25.4	90.00	2,966.3	-3,510.3	5,998.3	5,934.4	63.89	93.884		
9,700.0	7,530.0	7,612.5	7,486.0	41.2	25.4	90.00	2,966.3	-3,510.3	6,081.3	6,015.8	65.55	92.775		
9,800.0	7,530.0	7,612.5	7,486.0	42.9	25.4	90.00	2,966.3	-3,510.3	6,164.9	6,097.6	67.22	91.718		
9,900.0	7,530.0	7,612.5	7,486.0	44.5	25.4	90.00	2,966.3	-3,510.3	6,248.9	6,180.0	68.89	90.710		
10,000.0	7,530.0	6,310.6	6,196.4	46.2	23.1	68.78	2,835.4	-3,468.3	6,332.7	6,268.5	64.23	98.597		
10,100.0	7,530.0	6,290.7	6,176.9	47.9	23.0	68.48	2,831.4	-3,467.0	6,415.6	6,350.0	65.61	97.790		
10,200.0	7,530.0	6,270.7	6,157.4	49.6	22.9	68.19	2,827.4	-3,465.8	6,498.9	6,431.9	66.98	97.028		
10,300.0	7,530.0	6,250.8	6,137.9	51.3	22.9	67.89	2,823.4	-3,464.5	6,582.6	6,514.3	68.35	96.306		
10,400.0	7,530.0	6,230.9	6,118.4	53.0	22.8	67.59	2,819.5	-3,463.2	6,666.7	6,597.0	69.72	95.624		
10,500.0	7,530.0	6,210.9	6,099.0	54.7	22.7	67.30	2,815.5	-3,461.9	6,751.2	6,680.1	71.08	94.978		
10,600.0	7,530.0	6,191.0	6,079.5	56.4	22.6	67.00	2,811.5	-3,460.7	6,836.0	6,763.6	72.44	94.368		
10,700.0	7,530.0	6,171.1	6,060.0	58.1	22.5	66.71	2,807.5	-3,459.4	6,921.2	6,847.4	73.79	93.791		
10,800.0	7,530.0	6,151.1	6,040.5	59.8	22.5	66.42	2,803.5	-3,458.1	7,006.7	6,931.5	75.14	93.247		
10,900.0	7,530.0	6,131.2	6,021.0	61.5	22.4	66.13	2,799.5	-3,456.8	7,092.5	7,016.0	76.48	92.732		
11,000.0	7,530.0	6,111.3	6,001.5	63.2	22.3	65.84	2,795.6	-3,455.5	7,178.7	7,100.9	77.82	92.245		
11,100.0	7,530.0	6,091.4	5,982.0	64.9	22.2	65.55	2,791.6	-3,454.3	7,265.1	7,186.0	79.15	91.786		
11,200.0	7,530.0	6,071.4	5,962.5	66.6	22.1	65.26	2,787.6	-3,453.0	7,351.9	7,271.4	80.48	91.353		
11,300.0	7,530.0	6,051.5	5,943.1	68.4	22.1	64.98	2,783.6	-3,451.7	7,438.9	7,357.1	81.80	90.944		
11,400.0	7,530.0	6,031.6	5,923.6	70.1	22.0	64.69	2,779.6	-3,450.4	7,526.2	7,443.1	83.11	90.558		
11,500.0	7,530.0	6,011.6	5,904.1	71.8	21.9	64.41	2,775.7	-3,449.2	7,613.7	7,529.3	84.41	90.195		
11,600.0	7,530.0	5,991.7	5,884.6	73.5	21.8	64.12	2,771.7	-3,447.9	7,701.5	7,615.8	85.71	89.853		
11,700.0	7,530.0	5,971.8	5,865.1	75.3	21.7	63.84	2,767.7	-3,446.6	7,789.6	7,702.6	87.00	89.531		
11,800.0	7,530.0	5,951.8	5,845.6	77.0	21.7	63.56	2,763.7	-3,445.3	7,877.8	7,789.5	88.29	89.228		
11,900.0	7,530.0	5,931.9	5,826.1	78.7	21.6	63.28	2,759.7	-3,444.0	7,966.3	7,876.8	89.57	88.944		
12,000.0	7,530.0	5,912.0	5,806.6	80.4	21.5	63.00	2,755.8	-3,442.8	8,055.1	7,964.2	90.84	88.677		
12,100.0	7,530.0	5,892.1	5,787.2	82.2	21.4	62.72	2,751.8	-3,441.5	8,144.0	8,051.9	92.10	88.427		
12,200.0	7,530.0	5,872.1	5,767.7	83.9	21.3	62.45	2,747.8	-3,440.2	8,233.1	8,139.8	93.35	88.193		
12,300.0	7,530.0	5,852.2	5,748.2	85.6	21.3	62.17	2,743.8	-3,438.9	8,322.5	8,227.9	94.60	87.975		
12,400.0	7,530.0	5,832.3	5,728.7	87.4	21.2	61.90	2,739.8	-3,437.7	8,412.0	8,316.2	95.84	87.771		
12,500.0	7,530.0	5,812.3	5,709.2	89.1	21.1	61.62	2,735.8	-3,436.4	8,501.7	8,404.7	97.07	87.581		
12,600.0	7,530.0	5,792.4	5,689.7	90.8	21.0	61.35	2,731.9	-3,435.1	8,591.6	8,493.3	98.30	87.404		
12,700.0	7,530.0	5,772.5	5,670.2	92.6	20.9	61.08	2,727.9	-3,433.8	8,681.7	8,582.2	99.51	87.241		
12,800.0	7,530.0	5,752.5	5,650.8	94.3	20.9	60.81	2,723.9	-3,432.5	8,772.0	8,671.2	100.72	87.090		
12,900.0	7,530.0	5,732.6	5,631.3	96.0	20.8	60.54	2,719.9	-3,431.3	8,862.4	8,760.4	101.92	86.951		
13,000.0	7,530.0	5,712.7	5,611.8	97.8	20.7	60.28	2,715.9	-3,430.0	8,952.9	8,849.8	103.12	86.823		
13,100.0	7,530.0	5,692.8	5,592.3	99.5	20.6	60.01	2,712.0	-3,428.7	9,043.7	8,939.4	104.30	86.706		
13,200.0	7,530.0	5,672.8	5,572.8	101.3	20.5	59.75	2,708.0	-3,427.4	9,134.5	9,029.1	105.48	86.600		
13,300.0	7,530.0	5,652.9	5,553.3	103.0	20.5	59.48	2,704.0	-3,426.2	9,225.6	9,118.9	106.65	86.505		
13,400.0	7,530.0	5,633.0	5,533.8	104.7	20.4	59.22	2,700.0	-3,424.9	9,316.7	9,208.9	107.81	86.419		
13,500.0	7,530.0	5,613.0	5,514.3	106.5	20.3	58.96	2,696.0	-3,423.6	9,408.0	9,299.1	108.96	86.342		
13,600.0	7,530.0	5,593.1	5,494.9	108.2	20.2	58.70	2,692.1	-3,422.3	9,499.5	9,389.4	110.11	86.275		
13,700.0	7,530.0	5,573.2	5,475.4	110.0	20.1	58.44	2,688.1	-3,421.0	9,591.0	9,479.8	111.24	86.216		
13,800.0	7,530.0	5,553.2	5,455.9	111.7	20.1	58.19	2,684.1	-3,419.8	9,682.7	9,570.3	112.37	86.167		
13,900.0	7,530.0	5,533.3	5,436.4	113.4	20.0	57.93	2,680.1	-3,418.5	9,774.5	9,661.0	113.49	86.125		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design											S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P		Offset Site Error:		0.0 ft
Survey Program:											775-Geolink MWD		Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Total	Separation			
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Uncertainty	Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	Axis				
14,000.0	7,530.0	5,513.4	5,416.9	115.2	19.9	57.68	2,676.1	-3,417.2	9,866.5	9,751.8	114.60	86.091			
14,100.0	7,530.0	5,493.5	5,397.4	116.9	19.8	57.42	2,672.1	-3,415.9	9,958.5	9,842.8	115.71	86.065 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S														Offset Site Error:	0.0 ft
Survey Program: 76-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	-61.20	1,742.5	-3,169.2	3,616.9						
100.0	100.0	369.8	369.0	0.2	0.7	-61.33	1,726.0	-3,156.9	3,611.5	3,610.8	0.77	4,660.684			
200.0	200.0	461.2	459.9	0.3	1.0	-61.44	1,716.4	-3,153.3	3,603.0	3,601.9	1.11	3,233.688			
300.0	300.0	549.2	547.1	0.5	1.2	-61.58	1,705.2	-3,151.0	3,594.7	3,593.2	1.46	2,468.007			
400.0	400.0	617.0	614.2	0.7	1.4	-61.71	1,695.4	-3,150.3	3,586.8	3,585.0	1.77	2,023.445			
500.0	500.0	678.0	674.5	0.8	1.6	-61.85	1,685.9	-3,150.7	3,580.0	3,578.0	2.09	1,716.919			
600.0	600.0	735.5	731.3	1.0	1.8	-39.02	1,676.9	-3,152.0	3,573.9	3,571.3	2.61	1,371.473			
700.0	700.0	802.7	797.6	1.2	2.0	-39.24	1,666.4	-3,154.3	3,567.5	3,564.5	2.99	1,192.431			
800.0	799.9	869.0	863.0	1.4	2.2	-39.49	1,656.1	-3,157.1	3,560.6	3,557.2	3.37	1,055.342			
848.7	848.4	914.8	908.2	1.5	2.3	-39.66	1,648.8	-3,159.4	3,557.0	3,553.4	3.62	982.391			
900.0	899.7	980.2	972.5	1.6	2.6	-39.89	1,637.5	-3,163.1	3,553.2	3,549.2	3.96	897.184			
1,000.0	999.5	1,172.0	1,159.4	1.8	3.4	-40.69	1,596.1	-3,174.1	3,543.6	3,538.7	4.93	718.239			
1,100.0	1,099.3	1,256.0	1,240.9	2.0	3.7	-41.06	1,576.1	-3,178.7	3,533.3	3,527.8	5.49	643.918			
1,200.0	1,199.1	1,336.3	1,318.8	2.2	4.1	-41.42	1,557.4	-3,183.7	3,523.9	3,517.9	6.03	584.117			
1,300.0	1,298.9	1,418.5	1,398.4	2.4	4.5	-41.81	1,537.6	-3,189.1	3,514.9	3,508.3	6.60	532.687			
1,400.0	1,398.8	1,468.0	1,446.3	2.6	4.7	-42.04	1,525.7	-3,192.8	3,506.9	3,499.8	7.02	499.806			
1,500.0	1,498.6	1,554.0	1,529.5	2.8	5.1	-42.45	1,505.1	-3,200.1	3,499.9	3,492.3	7.61	459.679			
1,600.0	1,598.4	1,740.5	1,708.3	3.0	6.1	-43.44	1,454.5	-3,215.9	3,491.7	3,482.9	8.81	396.336			
1,700.0	1,698.2	1,846.2	1,808.9	3.2	6.7	-44.04	1,423.3	-3,224.8	3,483.2	3,473.6	9.59	363.255			
1,800.0	1,798.0	1,937.7	1,896.1	3.4	7.2	-44.55	1,396.7	-3,231.6	3,474.2	3,463.9	10.26	338.455			
1,900.0	1,897.8	1,982.0	1,938.7	3.6	7.4	-44.78	1,384.8	-3,234.9	3,466.4	3,455.8	10.68	324.604			
2,000.0	1,997.7	2,035.0	1,989.7	3.8	7.6	-45.05	1,371.2	-3,239.3	3,460.2	3,449.1	11.14	310.627			
2,100.0	2,097.5	2,194.5	2,142.8	4.0	8.5	-45.90	1,329.0	-3,253.8	3,454.9	3,442.7	12.18	283.623			
2,200.0	2,197.3	2,274.8	2,219.7	4.2	8.9	-46.34	1,306.6	-3,260.3	3,448.2	3,435.4	12.81	269.107			
2,300.0	2,297.1	2,333.7	2,275.9	4.4	9.2	-46.68	1,289.9	-3,265.8	3,442.7	3,429.4	13.34	258.122			
2,400.0	2,396.9	2,417.5	2,355.7	4.6	9.7	-47.17	1,265.7	-3,274.4	3,438.2	3,424.2	14.01	245.356			
2,500.0	2,496.7	2,529.4	2,462.1	4.8	10.3	-47.82	1,233.3	-3,285.7	3,433.9	3,419.1	14.84	231.438			
2,600.0	2,596.5	2,707.4	2,631.7	5.0	11.3	-48.85	1,181.4	-3,301.0	3,428.6	3,412.5	16.06	213.548			
2,700.0	2,696.4	2,782.8	2,703.0	5.2	11.8	-49.31	1,157.8	-3,307.1	3,422.6	3,405.9	16.70	204.887			
2,800.0	2,796.2	2,838.0	2,755.2	5.4	12.1	-49.66	1,140.3	-3,312.2	3,417.8	3,400.5	17.24	198.276			
2,900.0	2,896.0	2,923.0	2,835.6	5.6	12.6	-50.18	1,113.9	-3,320.4	3,414.0	3,396.1	17.93	190.410			
3,000.0	2,995.8	3,044.0	2,950.6	5.8	13.3	-50.90	1,077.8	-3,330.6	3,409.6	3,390.8	18.82	181.190			
3,100.0	3,095.6	3,094.0	2,998.1	6.0	13.6	-51.20	1,063.0	-3,335.2	3,406.6	3,387.3	19.30	176.515			
3,200.0	3,195.4	3,160.7	3,061.5	6.2	13.9	-51.60	1,043.4	-3,342.2	3,405.0	3,385.1	19.88	171.256			
3,300.0	3,295.2	3,266.0	3,161.5	6.4	14.5	-52.23	1,012.3	-3,353.0	3,403.6	3,382.9	20.68	164.584			
3,400.0	3,395.1	3,351.0	3,242.1	6.6	15.0	-52.75	987.0	-3,362.0	3,402.9	3,381.5	21.38	159.150			
3,416.4	3,411.4	3,351.0	3,242.1	6.6	15.0	-52.75	987.0	-3,362.0	3,402.8	3,381.4	21.41	158.913			
3,500.0	3,494.9	3,437.0	3,323.7	6.8	15.5	-53.27	961.4	-3,371.6	3,403.0	3,381.0	22.07	154.223			
3,600.0	3,594.7	3,522.0	3,404.4	7.0	16.0	-53.78	936.4	-3,380.8	3,403.3	3,380.6	22.76	149.559			
3,700.0	3,694.5	3,608.0	3,486.1	7.2	16.5	-54.30	911.3	-3,390.3	3,404.3	3,380.9	23.43	145.288			
3,800.0	3,794.3	3,697.2	3,571.1	7.4	17.0	-54.82	886.2	-3,400.2	3,405.8	3,381.7	24.11	141.246			
3,900.0	3,894.1	3,909.0	3,772.9	7.6	18.2	-56.06	825.1	-3,420.7	3,406.4	3,380.9	25.48	133.678			
4,000.0	3,994.0	4,036.0	3,894.3	7.8	18.8	-56.79	789.1	-3,429.7	3,404.9	3,378.6	26.34	129.256			
4,100.0	4,093.8	4,103.1	3,958.7	8.0	19.2	-57.17	770.5	-3,434.4	3,403.7	3,376.8	26.89	126.559			
4,160.7	4,154.4	4,145.2	3,998.9	8.2	19.4	-57.41	758.6	-3,437.6	3,403.5	3,376.3	27.24	124.967			
4,200.0	4,193.6	4,174.0	4,026.4	8.2	19.6	-57.57	750.6	-3,439.9	3,403.6	3,376.2	27.46	123.929			
4,300.0	4,293.4	4,243.4	4,092.7	8.4	20.0	-57.97	730.8	-3,445.8	3,404.5	3,376.4	28.05	121.385			
4,400.0	4,393.2	4,330.1	4,174.8	8.6	20.5	-58.50	704.3	-3,454.1	3,406.3	3,377.6	28.73	118.551			
4,500.0	4,493.0	4,447.7	4,286.8	8.8	21.1	-59.20	670.0	-3,464.4	3,408.0	3,378.4	29.55	115.337			
4,600.0	4,592.8	4,569.3	4,403.3	9.0	21.8	-59.88	636.6	-3,474.1	3,409.4	3,379.1	30.36	112.296			
4,700.0	4,692.7	4,788.2	4,613.0	9.3	22.9	-61.12	574.9	-3,486.4	3,408.9	3,377.2	31.67	107.645			
4,800.0	4,792.5	4,861.0	4,683.0	9.5	23.3	-61.51	555.2	-3,489.4	3,407.4	3,375.2	32.21	105.800			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 76-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
4,900.0	4,892.3	4,949.5	4,768.6	9.7	23.7	-61.97	533.1	-3,493.4	3,406.8	3,374.0	32.79	103.911		
5,000.0	4,992.1	5,082.7	4,898.3	9.9	24.2	-62.59	503.3	-3,498.3	3,405.8	3,372.3	33.51	101.625		
5,100.0	5,091.9	5,176.6	4,990.2	10.1	24.6	-63.00	483.8	-3,501.1	3,404.6	3,370.5	34.06	99.963		
5,200.0	5,191.7	5,284.8	5,096.3	10.3	25.0	-63.45	463.1	-3,504.4	3,403.6	3,369.0	34.62	98.304		
5,300.0	5,291.5	5,411.2	5,221.1	10.5	25.4	-63.91	442.7	-3,506.9	3,402.0	3,366.8	35.19	96.687		
5,400.0	5,391.4	5,503.7	5,312.8	10.7	25.6	-64.19	431.1	-3,508.4	3,400.3	3,364.7	35.59	95.528		
5,500.0	5,491.2	5,598.8	5,407.4	10.9	25.8	-64.43	421.9	-3,509.7	3,398.7	3,362.7	35.97	94.482		
5,600.0	5,591.0	5,678.3	5,486.7	11.1	25.9	-64.60	416.2	-3,511.2	3,397.5	3,361.2	36.29	93.615		
5,700.0	5,690.8	5,768.2	5,576.4	11.3	26.1	-64.77	411.5	-3,513.1	3,396.9	3,360.3	36.60	92.806		
5,800.0	5,790.6	5,865.2	5,673.4	11.5	26.2	-64.92	408.1	-3,515.3	3,396.4	3,359.5	36.89	92.080		
5,900.0	5,890.4	5,957.7	5,765.8	11.7	26.3	-65.03	406.4	-3,517.4	3,396.1	3,358.9	37.16	91.397		
5,948.6	5,939.0	5,999.8	5,807.9	11.8	26.3	-65.08	405.9	-3,518.5	3,396.0	3,358.7	37.28	91.091		
6,000.0	5,990.3	6,044.4	5,852.5	11.9	26.3	-65.13	405.6	-3,519.7	3,396.1	3,358.7	37.41	90.772		
6,100.0	6,090.1	6,153.4	5,961.5	12.1	26.4	-65.23	405.4	-3,522.7	3,396.3	3,358.6	37.69	90.112		
6,200.0	6,189.9	6,285.4	6,093.4	12.3	26.5	-65.37	404.5	-3,525.4	3,395.8	3,357.8	37.99	89.381		
6,300.0	6,289.7	6,406.7	6,214.8	12.5	26.6	-65.50	403.8	-3,526.9	3,394.5	3,356.2	38.28	88.674		
6,400.0	6,389.5	6,506.7	6,314.7	12.7	26.7	-65.60	403.5	-3,527.7	3,392.8	3,354.2	38.54	88.025		
6,500.0	6,489.3	6,604.0	6,412.0	12.9	26.8	-65.68	403.8	-3,528.7	3,391.3	3,352.5	38.80	87.399		
6,600.0	6,589.1	6,693.1	6,501.1	13.1	26.8	-65.76	404.3	-3,529.8	3,389.9	3,350.9	39.06	86.790		
6,700.0	6,689.0	6,785.1	6,593.1	13.3	26.9	-65.84	404.8	-3,531.0	3,388.9	3,349.5	39.32	86.195		
6,785.3	6,774.1	6,861.6	6,669.6	13.5	27.0	-65.90	405.4	-3,532.3	3,388.2	3,348.6	39.53	85.717		
6,800.0	6,788.8	6,874.9	6,682.8	13.5	27.0	-54.87	405.5	-3,532.5	3,388.1	3,348.5	39.56	85.639		
6,850.0	6,838.8	6,919.8	6,727.8	13.6	27.0	55.66	406.0	-3,533.4	3,387.8	3,348.1	39.66	85.430		
6,900.0	6,888.6	6,965.2	6,773.1	13.6	27.0	77.67	406.6	-3,534.3	3,387.7	3,347.9	39.72	85.280		
6,937.3	6,925.6	6,999.4	6,807.4	13.7	27.0	82.01	407.1	-3,535.0	3,387.6	3,347.9	39.76	85.211 CC		
6,950.0	6,938.1	7,011.0	6,818.9	13.7	27.0	82.92	407.3	-3,535.3	3,387.6	3,347.9	39.77	85.187 ES		
7,000.0	6,987.0	7,056.1	6,864.1	13.7	27.1	85.32	408.1	-3,536.3	3,387.7	3,347.9	39.79	85.139		
7,050.0	7,035.0	7,100.4	6,908.3	13.6	27.1	86.75	409.0	-3,537.3	3,388.0	3,348.2	39.80	85.134		
7,100.0	7,082.0	7,140.2	6,948.0	13.6	27.1	87.74	409.9	-3,538.3	3,388.5	3,348.7	39.79	85.149		
7,150.0	7,127.7	7,176.6	6,984.5	13.5	27.2	88.47	410.5	-3,539.3	3,389.3	3,349.5	39.79	85.187		
7,200.0	7,171.8	7,212.1	7,019.9	13.5	27.2	89.05	410.8	-3,540.4	3,390.5	3,350.7	39.77	85.250		
7,250.0	7,214.2	7,246.4	7,054.2	13.4	27.2	89.53	410.9	-3,541.5	3,392.0	3,352.3	39.75	85.329		
7,300.0	7,254.6	7,289.0	7,096.8	13.4	27.3	90.02	410.7	-3,543.0	3,394.1	3,354.3	39.75	85.381		
7,350.0	7,292.9	7,321.5	7,129.3	13.3	27.3	90.36	410.5	-3,544.2	3,396.5	3,356.8	39.75	85.448		
7,400.0	7,328.9	7,365.8	7,173.5	13.3	27.4	90.79	410.0	-3,545.8	3,399.4	3,359.6	39.78	85.446		
7,450.0	7,362.3	7,407.1	7,214.8	13.3	27.4	91.15	409.6	-3,547.1	3,402.7	3,362.8	39.84	85.416		
7,500.0	7,393.1	7,445.2	7,252.9	13.4	27.5	91.44	409.2	-3,548.3	3,406.5	3,366.6	39.91	85.348		
7,550.0	7,421.1	7,481.4	7,289.1	13.5	27.5	91.67	408.8	-3,549.3	3,410.9	3,370.9	40.02	85.232		
7,600.0	7,446.1	7,514.6	7,322.3	13.6	27.5	91.80	408.4	-3,550.2	3,416.0	3,375.9	40.16	85.060		
7,650.0	7,468.0	7,543.6	7,351.3	13.8	27.6	91.83	408.2	-3,550.9	3,421.8	3,381.5	40.34	84.826		
7,700.0	7,486.7	7,568.2	7,375.9	14.0	27.6	91.73	408.1	-3,551.4	3,428.4	3,387.8	40.56	84.526		
7,750.0	7,502.2	7,588.4	7,396.0	14.2	27.6	91.49	408.0	-3,551.8	3,435.7	3,394.9	40.82	84.159		
7,800.0	7,514.3	7,604.1	7,411.7	14.6	27.6	91.11	407.9	-3,552.1	3,443.9	3,402.7	41.13	83.721		
7,850.0	7,523.0	7,615.4	7,423.0	14.9	27.6	90.58	407.9	-3,552.3	3,452.8	3,411.3	41.49	83.217		
7,900.0	7,528.2	7,622.1	7,429.7	15.3	27.6	89.91	407.9	-3,552.4	3,462.6	3,420.7	41.89	82.653		
7,950.2	7,530.0	7,624.4	7,432.1	15.8	27.6	89.09	407.9	-3,552.4	3,473.2	3,430.8	42.34	82.035		
8,000.0	7,530.0	7,624.5	7,432.1	16.2	27.6	89.09	407.9	-3,552.4	3,484.4	3,441.5	42.82	81.371		
8,100.0	7,530.0	7,624.7	7,432.3	17.3	27.6	89.09	407.9	-3,552.4	3,508.9	3,465.0	43.89	79.954		
8,200.0	7,530.0	7,624.8	7,432.4	18.4	27.6	89.09	407.9	-3,552.4	3,536.0	3,491.0	45.06	78.476		
8,300.0	7,530.0	7,625.0	7,432.6	19.7	27.6	89.10	407.9	-3,552.4	3,565.8	3,519.5	46.32	76.984		
8,400.0	7,530.0	7,625.1	7,432.7	21.0	27.6	89.10	407.9	-3,552.4	3,598.1	3,550.4	47.65	75.511		
8,500.0	7,530.0	7,625.3	7,432.9	22.4	27.6	89.10	407.9	-3,552.4	3,632.9	3,583.8	49.04	74.079		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 76-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)				
8,600.0	7,530.0	7,625.4	7,433.0	23.8	27.6	89.10	407.9	-3,552.4	3,670.0	3,619.5	50.48	72.704		
8,700.0	7,530.0	7,625.5	7,433.2	25.3	27.6	89.11	407.9	-3,552.4	3,709.5	3,657.5	51.96	71.394		
8,800.0	7,530.0	7,625.7	7,433.3	26.8	27.6	89.11	407.9	-3,552.4	3,751.2	3,697.8	53.47	70.155		
8,900.0	7,530.0	7,625.8	7,433.4	28.3	27.6	89.11	407.9	-3,552.4	3,795.2	3,740.1	55.01	68.989		
9,000.0	7,530.0	7,625.9	7,433.6	29.9	27.6	89.11	407.9	-3,552.4	3,841.2	3,784.6	56.57	67.895		
9,100.0	7,530.0	7,626.1	7,433.7	31.4	27.6	89.12	407.9	-3,552.4	3,889.2	3,831.1	58.16	66.872		
9,200.0	7,530.0	7,626.2	7,433.8	33.0	27.6	89.12	407.9	-3,552.4	3,939.2	3,879.4	59.76	65.916		
9,300.0	7,530.0	7,626.3	7,434.0	34.7	27.6	89.12	407.9	-3,552.4	3,991.1	3,929.7	61.38	65.026		
9,400.0	7,530.0	7,626.5	7,434.1	36.3	27.6	89.12	407.9	-3,552.4	4,044.8	3,981.8	63.01	64.197		
9,500.0	7,530.0	7,626.6	7,434.2	37.9	27.6	89.12	407.9	-3,552.5	4,100.2	4,035.5	64.65	63.425		
9,600.0	7,530.0	7,626.7	7,434.3	39.6	27.6	89.13	407.9	-3,552.5	4,157.3	4,091.0	66.30	62.707		
9,700.0	7,530.0	7,626.8	7,434.4	41.2	27.6	89.13	407.9	-3,552.5	4,215.9	4,148.0	67.95	62.040		
9,800.0	7,530.0	7,626.9	7,434.6	42.9	27.6	89.13	407.9	-3,552.5	4,276.2	4,206.5	69.62	61.420		
9,900.0	7,530.0	7,627.0	7,434.7	44.5	27.6	89.13	407.9	-3,552.5	4,337.9	4,266.6	71.29	60.844		
10,000.0	7,530.0	7,627.2	7,434.8	46.2	27.6	89.13	407.9	-3,552.5	4,401.0	4,328.0	72.97	60.309		
10,100.0	7,530.0	7,627.3	7,434.9	47.9	27.6	89.14	407.9	-3,552.5	4,465.4	4,390.7	74.66	59.812		
10,200.0	7,530.0	7,627.4	7,435.0	49.6	27.6	89.14	407.9	-3,552.5	4,531.1	4,454.8	76.35	59.349		
10,300.0	7,530.0	7,627.5	7,435.1	51.3	27.6	89.14	407.9	-3,552.5	4,598.1	4,520.1	78.04	58.919		
10,400.0	7,530.0	7,627.6	7,435.2	53.0	27.6	89.14	407.9	-3,552.5	4,666.2	4,586.5	79.74	58.520		
10,500.0	7,530.0	7,627.7	7,435.3	54.7	27.6	89.14	407.9	-3,552.5	4,735.5	4,654.1	81.44	58.148		
10,600.0	7,530.0	7,627.8	7,435.4	56.4	27.6	89.15	407.9	-3,552.5	4,805.9	4,722.8	83.14	57.802		
10,700.0	7,530.0	7,627.9	7,435.5	58.1	27.6	89.15	407.9	-3,552.5	4,877.3	4,792.4	84.85	57.481		
10,800.0	7,530.0	7,628.0	7,435.6	59.8	27.6	89.15	407.9	-3,552.5	4,949.7	4,863.1	86.56	57.182		
10,900.0	7,530.0	7,628.1	7,435.7	61.5	27.6	89.15	407.9	-3,552.5	5,023.0	4,934.8	88.27	56.903		
11,000.0	7,530.0	7,628.2	7,435.8	63.2	27.6	89.15	407.9	-3,552.5	5,097.3	5,007.3	89.99	56.644		
11,100.0	7,530.0	7,628.3	7,435.9	64.9	27.6	89.15	407.9	-3,552.5	5,172.4	5,080.7	91.71	56.402		
11,200.0	7,530.0	7,628.4	7,436.0	66.6	27.6	89.16	407.9	-3,552.5	5,248.3	5,154.9	93.42	56.177		
11,300.0	7,530.0	7,628.5	7,436.1	68.4	27.6	89.16	407.9	-3,552.5	5,325.1	5,229.9	95.14	55.968		
11,400.0	7,530.0	7,628.6	7,436.2	70.1	27.6	89.16	407.9	-3,552.5	5,402.6	5,305.7	96.87	55.773		
11,500.0	7,530.0	7,628.7	7,436.3	71.8	27.6	89.16	407.9	-3,552.5	5,480.8	5,382.2	98.59	55.591		
11,600.0	7,530.0	7,628.8	7,436.4	73.5	27.6	89.16	407.9	-3,552.5	5,559.7	5,459.4	100.32	55.422		
11,700.0	7,530.0	7,628.9	7,436.5	75.3	27.6	89.16	407.9	-3,552.5	5,639.3	5,537.3	102.04	55.264		
11,800.0	7,530.0	7,629.0	7,436.6	77.0	27.6	89.16	407.9	-3,552.5	5,719.5	5,615.8	103.77	55.117		
11,900.0	7,530.0	7,631.0	7,438.6	78.7	27.6	89.20	407.9	-3,552.5	5,800.4	5,694.9	105.50	54.979		
12,000.0	7,530.0	7,631.0	7,438.6	80.4	27.6	89.20	407.9	-3,552.5	5,881.8	5,774.6	107.23	54.852		
12,100.0	7,530.0	7,631.0	7,438.6	82.2	27.6	89.20	407.9	-3,552.5	5,963.8	5,854.9	108.96	54.733		
12,200.0	7,530.0	7,631.0	7,438.6	83.9	27.6	89.20	407.9	-3,552.5	6,046.4	5,935.7	110.69	54.622		
12,300.0	7,530.0	7,631.0	7,438.6	85.6	27.6	89.20	407.9	-3,552.5	6,129.4	6,017.0	112.43	54.519		
12,400.0	7,530.0	7,631.0	7,438.6	87.4	27.6	89.20	407.9	-3,552.5	6,213.0	6,098.8	114.16	54.423		
12,500.0	7,530.0	7,631.0	7,438.6	89.1	27.6	89.20	407.9	-3,552.5	6,297.0	6,181.2	115.90	54.334		
12,600.0	7,530.0	7,631.0	7,438.6	90.8	27.6	89.20	407.9	-3,552.5	6,381.6	6,263.9	117.63	54.251		
12,700.0	7,530.0	7,631.0	7,438.6	92.6	27.6	89.20	407.9	-3,552.5	6,466.5	6,347.1	119.37	54.173		
12,800.0	7,530.0	7,631.0	7,438.6	94.3	27.6	89.20	407.9	-3,552.5	6,551.9	6,430.8	121.10	54.102		
12,900.0	7,530.0	7,631.0	7,438.6	96.0	27.6	89.20	407.9	-3,552.5	6,637.6	6,514.8	122.84	54.035		
13,000.0	7,530.0	7,631.0	7,438.6	97.8	27.6	89.20	407.9	-3,552.5	6,723.8	6,599.2	124.58	53.973		
13,100.0	7,530.0	7,631.0	7,438.6	99.5	27.6	89.20	407.9	-3,552.5	6,810.4	6,684.0	126.32	53.915		
13,200.0	7,530.0	7,631.0	7,438.6	101.3	27.6	89.20	407.9	-3,552.5	6,897.3	6,769.2	128.06	53.862		
13,300.0	7,530.0	7,631.0	7,438.6	103.0	27.6	89.20	407.9	-3,552.5	6,984.5	6,854.7	129.79	53.812		
13,400.0	7,530.0	7,631.0	7,438.6	104.7	27.6	89.20	407.9	-3,552.5	7,072.1	6,940.6	131.53	53.766		
13,500.0	7,530.0	7,631.0	7,438.6	106.5	27.6	89.20	407.9	-3,552.5	7,160.1	7,026.8	133.27	53.724		
13,600.0	7,530.0	7,631.0	7,438.6	108.2	27.6	89.20	407.9	-3,552.5	7,248.3	7,113.3	135.02	53.685		
13,700.0	7,530.0	7,631.0	7,438.6	110.0	27.6	89.20	407.9	-3,552.5	7,336.8	7,200.1	136.76	53.649		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 76-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,800.0	7,530.0	7,631.0	7,438.6	111.7	27.6	89.20	407.9	-3,552.5	7,425.7	7,287.2	138.50	53.616		
13,900.0	7,530.0	7,631.0	7,438.6	113.4	27.6	89.20	407.9	-3,552.5	7,514.8	7,374.6	140.24	53.585		
14,000.0	7,530.0	7,631.0	7,438.6	115.2	27.6	89.20	407.9	-3,552.5	7,604.2	7,462.2	141.98	53.557		
14,100.0	7,530.0	7,631.0	7,438.6	116.9	27.6	89.20	407.9	-3,552.5	7,693.8	7,550.1	143.73	53.531		
14,200.0	7,530.0	7,631.0	7,438.6	118.7	27.6	89.20	407.9	-3,552.5	7,783.7	7,638.2	145.47	53.508		
14,300.0	7,530.0	7,631.0	7,438.6	120.4	27.6	89.20	407.9	-3,552.5	7,873.9	7,726.6	147.21	53.487		
14,400.0	7,530.0	7,631.0	7,438.6	122.1	27.6	89.20	407.9	-3,552.5	7,964.2	7,815.3	148.96	53.467		
14,500.0	7,530.0	7,631.0	7,438.6	123.9	27.6	89.20	407.9	-3,552.5	8,054.8	7,904.1	150.70	53.450		
14,600.0	7,530.0	7,631.0	7,438.6	125.6	27.6	89.20	407.9	-3,552.5	8,145.7	7,993.2	152.44	53.434		
14,700.0	7,530.0	7,631.0	7,438.6	127.4	27.6	89.20	407.9	-3,552.5	8,236.7	8,082.5	154.19	53.420		
14,800.0	7,530.0	7,631.0	7,438.6	129.1	27.6	89.20	407.9	-3,552.5	8,327.9	8,172.0	155.93	53.407		
14,900.0	7,530.0	7,631.0	7,438.6	130.9	27.6	89.20	407.9	-3,552.5	8,419.4	8,261.7	157.68	53.396		
15,000.0	7,530.0	7,631.0	7,438.6	132.6	27.6	89.20	407.9	-3,552.5	8,511.0	8,351.6	159.42	53.386		
15,100.0	7,530.0	7,631.0	7,438.6	134.4	27.6	89.20	407.9	-3,552.5	8,602.8	8,441.7	161.17	53.378		
15,200.0	7,530.0	7,631.0	7,438.6	136.1	27.6	89.20	407.9	-3,552.5	8,694.8	8,531.9	162.91	53.371		
15,300.0	7,530.0	7,631.0	7,438.6	137.9	27.6	89.20	407.9	-3,552.5	8,787.0	8,622.3	164.66	53.364		
15,400.0	7,530.0	7,631.0	7,438.6	139.6	27.6	89.20	407.9	-3,552.5	8,879.3	8,712.9	166.41	53.359		
15,500.0	7,530.0	7,631.0	7,438.6	141.3	27.6	89.20	407.9	-3,552.5	8,971.9	8,803.7	168.15	53.355		
15,600.0	7,530.0	7,631.0	7,438.6	143.1	27.6	89.20	407.9	-3,552.5	9,064.5	8,894.6	169.90	53.352		
15,700.0	7,530.0	7,631.0	7,438.6	144.8	27.6	89.20	407.9	-3,552.5	9,157.3	8,985.7	171.65	53.350		
15,800.0	7,530.0	7,631.0	7,438.6	146.6	27.6	89.20	407.9	-3,552.5	9,250.3	9,076.9	173.39	53.349		
15,900.0	7,530.0	7,631.0	7,438.6	148.3	27.6	89.20	407.9	-3,552.5	9,343.4	9,168.3	175.14	53.349 SF		
16,000.0	7,530.0	7,631.0	7,438.6	150.1	27.6	89.20	407.9	-3,552.5	9,436.7	9,259.8	176.89	53.349		
16,100.0	7,530.0	7,631.0	7,438.6	151.8	27.6	89.20	407.9	-3,552.5	9,530.1	9,351.4	178.63	53.350		
16,200.0	7,530.0	7,631.0	7,438.6	153.6	27.6	89.20	407.9	-3,552.5	9,623.6	9,443.2	180.38	53.351		
16,300.0	7,530.0	7,631.0	7,438.6	155.3	27.6	89.20	407.9	-3,552.5	9,717.3	9,535.1	182.13	53.354		
16,400.0	7,530.0	7,631.0	7,438.6	157.1	27.6	89.20	407.9	-3,552.5	9,811.0	9,627.2	183.88	53.357		
16,500.0	7,530.0	7,631.0	7,438.6	158.8	27.6	89.20	407.9	-3,552.5	9,904.9	9,719.3	185.62	53.360		
16,600.0	7,530.0	7,631.0	7,438.6	160.6	27.6	89.20	407.9	-3,552.5	9,999.0	9,811.6	187.37	53.364		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 1 (EXISTING) - FOUNDATION WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 5010-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	-28.67	4,980.9	-2,723.9	5,677.5					
100.0	100.0	27.0	27.0	0.2	0.0	-28.67	4,980.9	-2,723.9	5,677.1	5,676.9	0.20	N/A		
200.0	200.0	127.0	127.0	0.3	0.2	-28.67	4,980.9	-2,723.9	5,677.1	5,676.5	0.55	N/A		
300.0	300.0	227.0	227.0	0.5	0.4	-28.67	4,980.9	-2,723.9	5,677.1	5,676.2	0.90	6,326.893		
400.0	400.0	327.0	327.0	0.7	0.6	-28.67	4,980.9	-2,723.9	5,677.1	5,675.8	1.25	4,554.940		
500.0	500.0	427.0	427.0	0.8	0.7	-28.67	4,980.9	-2,723.9	5,677.1	5,675.5	1.60	3,558.361		
600.0	600.0	527.0	527.0	1.0	0.9	-5.66	4,980.9	-2,723.9	5,676.2	5,674.2	1.94	2,919.424		
700.0	700.0	627.0	627.0	1.2	1.1	-5.67	4,980.9	-2,723.9	5,673.6	5,671.3	2.29	2,474.649		
800.0	799.9	726.9	726.9	1.4	1.3	-5.68	4,980.9	-2,723.9	5,669.2	5,666.6	2.64	2,147.057		
848.7	848.4	775.4	775.4	1.5	1.4	-5.68	4,980.9	-2,723.9	5,666.5	5,663.7	2.81	2,016.970		
900.0	899.7	826.7	826.7	1.6	1.4	-5.69	4,980.9	-2,723.9	5,663.4	5,660.4	2.99	1,895.035		
1,000.0	999.5	926.5	926.5	1.8	1.6	-5.69	4,980.9	-2,723.9	5,657.3	5,654.0	3.34	1,695.130		
1,100.0	1,099.3	1,026.3	1,026.3	2.0	1.8	-5.70	4,980.9	-2,723.9	5,651.3	5,647.6	3.69	1,533.059		
1,200.0	1,199.1	1,126.1	1,126.1	2.2	2.0	-5.70	4,980.9	-2,723.9	5,645.2	5,641.2	4.04	1,399.009		
1,300.0	1,298.9	1,225.9	1,225.9	2.4	2.1	-5.71	4,980.9	-2,723.9	5,639.2	5,634.8	4.38	1,286.293		
1,400.0	1,398.8	1,325.8	1,325.8	2.6	2.3	-5.72	4,980.9	-2,723.9	5,633.1	5,628.4	4.73	1,190.193		
1,500.0	1,498.6	1,425.6	1,425.6	2.8	2.5	-5.72	4,980.9	-2,723.9	5,627.1	5,622.0	5.08	1,107.288		
1,600.0	1,598.4	1,525.4	1,525.4	3.0	2.7	-5.73	4,980.9	-2,723.9	5,621.0	5,615.6	5.43	1,035.034		
1,700.0	1,698.2	1,625.2	1,625.2	3.2	2.8	-5.73	4,980.9	-2,723.9	5,615.0	5,609.2	5.78	971.504		
1,800.0	1,798.0	1,725.0	1,725.0	3.4	3.0	-5.74	4,980.9	-2,723.9	5,608.9	5,602.8	6.13	915.207		
1,900.0	1,897.8	1,824.8	1,824.8	3.6	3.2	-5.75	4,980.9	-2,723.9	5,602.9	5,596.4	6.48	864.974		
2,000.0	1,997.7	1,924.7	1,924.7	3.8	3.4	-5.75	4,980.9	-2,723.9	5,596.8	5,590.0	6.83	819.876		
2,100.0	2,097.5	2,024.5	2,024.5	4.0	3.5	-5.76	4,980.9	-2,723.9	5,590.8	5,583.6	7.18	779.164		
2,200.0	2,197.3	2,124.3	2,124.3	4.2	3.7	-5.77	4,980.9	-2,723.9	5,584.7	5,577.2	7.52	742.228		
2,300.0	2,297.1	2,224.1	2,224.1	4.4	3.9	-5.77	4,980.9	-2,723.9	5,578.7	5,570.8	7.87	708.565		
2,400.0	2,396.9	2,323.9	2,323.9	4.6	4.1	-5.78	4,980.9	-2,723.9	5,572.6	5,564.4	8.22	677.759		
2,500.0	2,496.7	2,423.7	2,423.7	4.8	4.2	-5.79	4,980.9	-2,723.9	5,566.6	5,558.0	8.57	649.461		
2,600.0	2,596.5	2,523.5	2,523.5	5.0	4.4	-5.79	4,980.9	-2,723.9	5,560.5	5,551.6	8.92	623.377		
2,700.0	2,696.4	2,623.4	2,623.4	5.2	4.6	-5.80	4,980.9	-2,723.9	5,554.5	5,545.2	9.27	599.257		
2,800.0	2,796.2	2,723.2	2,723.2	5.4	4.8	-5.80	4,980.9	-2,723.9	5,548.4	5,538.8	9.62	576.887		
2,900.0	2,896.0	2,823.0	2,823.0	5.6	4.9	-5.81	4,980.9	-2,723.9	5,542.4	5,532.4	9.97	556.083		
3,000.0	2,995.8	2,922.8	2,922.8	5.8	5.1	-5.82	4,980.9	-2,723.9	5,536.3	5,526.0	10.32	536.686		
3,100.0	3,095.6	3,022.6	3,022.6	6.0	5.3	-5.82	4,980.9	-2,723.9	5,530.3	5,519.6	10.66	518.559		
3,200.0	3,195.4	3,122.4	3,122.4	6.2	5.4	-5.83	4,980.9	-2,723.9	5,524.2	5,513.2	11.01	501.580		
3,300.0	3,295.2	3,222.2	3,222.2	6.4	5.6	-5.84	4,980.9	-2,723.9	5,518.2	5,506.8	11.36	485.644		
3,400.0	3,395.1	3,322.1	3,322.1	6.6	5.8	-5.84	4,980.9	-2,723.9	5,512.1	5,500.4	11.71	470.657		
3,500.0	3,494.9	3,421.9	3,421.9	6.8	6.0	-5.85	4,980.9	-2,723.9	5,506.1	5,494.0	12.06	456.538		
3,600.0	3,594.7	3,521.7	3,521.7	7.0	6.1	-5.86	4,980.9	-2,723.9	5,500.0	5,487.6	12.41	443.213		
3,700.0	3,694.5	3,621.5	3,621.5	7.2	6.3	-5.86	4,980.9	-2,723.9	5,494.0	5,481.2	12.76	430.616		
3,800.0	3,794.3	3,721.3	3,721.3	7.4	6.5	-5.87	4,980.9	-2,723.9	5,487.9	5,474.8	13.11	418.690		
3,900.0	3,894.1	3,821.1	3,821.1	7.6	6.7	-5.87	4,980.9	-2,723.9	5,481.9	5,468.4	13.46	407.383		
4,000.0	3,994.0	3,921.0	3,921.0	7.8	6.8	-5.88	4,980.9	-2,723.9	5,475.8	5,462.0	13.81	396.647		
4,100.0	4,093.8	4,020.8	4,020.8	8.0	7.0	-5.89	4,980.9	-2,723.9	5,469.8	5,455.6	14.15	386.441		
4,200.0	4,193.6	4,120.6	4,120.6	8.2	7.2	-5.89	4,980.9	-2,723.9	5,463.7	5,449.2	14.50	376.726		
4,300.0	4,293.4	4,220.4	4,220.4	8.4	7.4	-5.90	4,980.9	-2,723.9	5,457.7	5,442.8	14.85	367.467		
4,400.0	4,393.2	4,320.2	4,320.2	8.6	7.5	-5.91	4,980.9	-2,723.9	5,451.6	5,436.4	15.20	358.633		
4,500.0	4,493.0	4,420.0	4,420.0	8.8	7.7	-5.91	4,980.9	-2,723.9	5,445.6	5,430.0	15.55	350.196		
4,600.0	4,592.8	4,519.8	4,519.8	9.0	7.9	-5.92	4,980.9	-2,723.9	5,439.5	5,423.6	15.90	342.129		
4,700.0	4,692.7	4,619.7	4,619.7	9.3	8.1	-5.93	4,980.9	-2,723.9	5,433.5	5,417.2	16.25	334.408		
4,800.0	4,792.5	4,719.5	4,719.5	9.5	8.2	-5.93	4,980.9	-2,723.9	5,427.4	5,410.8	16.60	327.013		
4,900.0	4,892.3	4,819.3	4,819.3	9.7	8.4	-5.94	4,980.9	-2,723.9	5,421.4	5,404.4	16.95	319.921		
5,000.0	4,992.1	4,919.1	4,919.1	9.9	8.6	-5.95	4,980.9	-2,723.9	5,415.3	5,398.0	17.29	313.116		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 1 (EXISTING) - FOUNDATION WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 5010-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	5,091.9	5,010.0	5,010.0	10.1	8.7	-5.95	4,980.9	-2,723.9	5,409.3	5,391.7	17.63	306.851		
5,200.0	5,191.7	5,010.0	5,010.0	10.3	8.7	-5.95	4,980.9	-2,723.9	5,404.3	5,386.5	17.80	303.557		
5,300.0	5,291.5	5,010.0	5,010.0	10.5	8.7	-5.95	4,980.9	-2,723.9	5,401.2	5,383.2	17.98	300.430		
5,400.0	5,391.4	5,010.0	5,010.0	10.7	8.7	-5.95	4,980.9	-2,723.9	5,400.0	5,381.8	18.15	297.464		
5,418.3	5,409.6	5,010.0	5,010.0	10.7	8.7	-5.95	4,980.9	-2,723.9	5,399.9	5,381.7	18.19	296.939	CC, ES	
5,500.0	5,491.2	5,010.0	5,010.0	10.9	8.7	-5.95	4,980.9	-2,723.9	5,400.5	5,382.2	18.33	294.657		
5,600.0	5,591.0	5,010.0	5,010.0	11.1	8.7	-5.95	4,980.9	-2,723.9	5,403.0	5,384.5	18.50	292.003		
5,700.0	5,690.8	5,010.0	5,010.0	11.3	8.7	-5.95	4,980.9	-2,723.9	5,407.3	5,388.6	18.68	289.497		
5,800.0	5,790.6	5,010.0	5,010.0	11.5	8.7	-5.95	4,980.9	-2,723.9	5,413.4	5,394.5	18.85	287.136		
5,900.0	5,890.4	5,010.0	5,010.0	11.7	8.7	-5.95	4,980.9	-2,723.9	5,421.4	5,402.3	19.03	284.914		
6,000.0	5,990.3	5,010.0	5,010.0	11.9	8.7	-5.95	4,980.9	-2,723.9	5,431.2	5,412.0	19.20	282.829		
6,100.0	6,090.1	5,010.0	5,010.0	12.1	8.7	-5.95	4,980.9	-2,723.9	5,442.8	5,423.4	19.38	280.875		
6,200.0	6,189.9	5,010.0	5,010.0	12.3	8.7	-5.95	4,980.9	-2,723.9	5,456.2	5,436.7	19.55	279.048		
6,300.0	6,289.7	5,010.0	5,010.0	12.5	8.7	-5.95	4,980.9	-2,723.9	5,471.4	5,451.7	19.73	277.345		
6,400.0	6,389.5	5,010.0	5,010.0	12.7	8.7	-5.95	4,980.9	-2,723.9	5,488.4	5,468.5	19.90	275.761		
6,500.0	6,489.3	5,010.0	5,010.0	12.9	8.7	-5.95	4,980.9	-2,723.9	5,507.2	5,487.1	20.08	274.293		
6,600.0	6,589.1	5,010.0	5,010.0	13.1	8.7	-5.95	4,980.9	-2,723.9	5,527.7	5,507.5	20.25	272.936		
6,700.0	6,689.0	5,010.0	5,010.0	13.3	8.7	-5.95	4,980.9	-2,723.9	5,550.0	5,529.5	20.43	271.687		
6,785.3	6,774.1	5,010.0	5,010.0	13.5	8.7	-5.95	4,980.9	-2,723.9	5,570.3	5,549.7	20.58	270.704		
6,800.0	6,788.8	5,010.0	5,010.0	13.5	8.7	4.93	4,980.9	-2,723.9	5,574.0	5,553.4	20.61	270.471		
6,850.0	6,838.8	5,010.0	5,010.0	13.6	8.7	114.81	4,980.9	-2,723.9	5,588.9	5,568.3	20.68	270.222		
6,900.0	6,888.6	5,010.0	5,010.0	13.6	8.7	135.95	4,980.9	-2,723.9	5,607.1	5,586.4	20.71	270.764		
6,950.0	6,938.1	5,010.0	5,010.0	13.7	8.7	140.09	4,980.9	-2,723.9	5,628.4	5,607.7	20.69	272.035		
7,000.0	6,987.0	5,010.0	5,010.0	13.7	8.7	141.13	4,980.9	-2,723.9	5,652.7	5,632.0	20.63	273.958		
7,050.0	7,035.0	5,010.0	5,010.0	13.6	8.7	140.93	4,980.9	-2,723.9	5,679.8	5,659.2	20.55	276.425		
7,100.0	7,082.0	5,010.0	5,010.0	13.6	8.7	139.99	4,980.9	-2,723.9	5,709.5	5,689.1	20.44	279.291		
7,150.0	7,127.7	5,010.0	5,010.0	13.5	8.7	138.48	4,980.9	-2,723.9	5,741.8	5,721.4	20.34	282.357		
7,200.0	7,171.8	5,010.0	5,010.0	13.5	8.7	136.44	4,980.9	-2,723.9	5,776.3	5,756.0	20.24	285.361		
7,250.0	7,214.2	5,010.0	5,010.0	13.4	8.7	133.84	4,980.9	-2,723.9	5,812.8	5,792.7	20.19	287.973		
7,300.0	7,254.6	5,010.0	5,010.0	13.4	8.7	130.65	4,980.9	-2,723.9	5,851.3	5,831.1	20.19	289.811		
7,350.0	7,292.9	5,010.0	5,010.0	13.3	8.7	126.77	4,980.9	-2,723.9	5,891.4	5,871.1	20.28	290.492		
7,400.0	7,328.9	5,010.0	5,010.0	13.3	8.7	122.14	4,980.9	-2,723.9	5,932.8	5,912.4	20.48	289.733		
7,450.0	7,362.3	5,010.0	5,010.0	13.3	8.7	116.67	4,980.9	-2,723.9	5,975.5	5,954.7	20.78	287.508		
7,500.0	7,393.1	5,010.0	5,010.0	13.4	8.7	110.32	4,980.9	-2,723.9	6,019.1	5,997.9	21.18	284.195		
7,550.0	7,421.1	5,010.0	5,010.0	13.5	8.7	103.14	4,980.9	-2,723.9	6,063.4	6,041.8	21.61	280.633		
7,600.0	7,446.1	5,010.0	5,010.0	13.6	8.7	95.28	4,980.9	-2,723.9	6,108.2	6,086.2	21.97	277.983		
7,650.0	7,468.0	5,010.0	5,010.0	13.8	8.7	87.03	4,980.9	-2,723.9	6,153.3	6,131.1	22.18	277.390		
7,700.0	7,486.7	5,010.0	5,010.0	14.0	8.7	78.76	4,980.9	-2,723.9	6,198.4	6,176.2	22.17	279.594		
7,750.0	7,502.2	5,010.0	5,010.0	14.2	8.7	70.85	4,980.9	-2,723.9	6,243.3	6,221.3	21.93	284.700		
7,800.0	7,514.3	5,010.0	5,010.0	14.6	8.7	63.59	4,980.9	-2,723.9	6,287.8	6,266.3	21.52	292.199		
7,850.0	7,523.0	5,010.0	5,010.0	14.9	8.7	57.13	4,980.9	-2,723.9	6,331.7	6,310.7	21.02	301.177		
7,900.0	7,528.2	5,010.0	5,010.0	15.3	8.7	51.50	4,980.9	-2,723.9	6,374.9	6,354.3	20.53	310.571		
7,950.2	7,530.0	5,010.0	5,010.0	15.8	8.7	46.66	4,980.9	-2,723.9	6,417.2	6,397.1	20.09	319.412		
8,000.0	7,530.0	5,010.0	5,010.0	16.2	8.7	46.66	4,980.9	-2,723.9	6,458.6	6,438.2	20.44	315.920		
8,100.0	7,530.0	5,010.0	5,010.0	17.3	8.7	46.66	4,980.9	-2,723.9	6,542.2	6,521.0	21.21	308.380		
8,200.0	7,530.0	5,010.0	5,010.0	18.4	8.7	46.66	4,980.9	-2,723.9	6,626.3	6,604.3	22.06	300.418		
8,300.0	7,530.0	5,010.0	5,010.0	19.7	8.7	46.66	4,980.9	-2,723.9	6,710.8	6,687.9	22.96	292.300		
8,400.0	7,530.0	5,010.0	5,010.0	21.0	8.7	46.66	4,980.9	-2,723.9	6,795.8	6,771.8	23.91	284.218		
8,500.0	7,530.0	5,010.0	5,010.0	22.4	8.7	46.66	4,980.9	-2,723.9	6,881.1	6,856.2	24.90	276.306		
8,600.0	7,530.0	5,010.0	5,010.0	23.8	8.7	46.66	4,980.9	-2,723.9	6,966.8	6,940.9	25.93	268.650		
8,700.0	7,530.0	5,010.0	5,010.0	25.3	8.7	46.66	4,980.9	-2,723.9	7,052.9	7,025.9	26.99	261.305		
8,800.0	7,530.0	5,010.0	5,010.0	26.8	8.7	46.66	4,980.9	-2,723.9	7,139.4	7,111.3	28.07	254.298		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 1 (EXISTING) - FOUNDATION WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 5010-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	7,530.0	5,010.0	5,010.0	28.3	8.7	46.66	4,980.9	-2,723.9	7,226.2	7,197.0	29.18	247.642		
9,000.0	7,530.0	5,010.0	5,010.0	29.9	8.7	46.66	4,980.9	-2,723.9	7,313.3	7,283.0	30.30	241.337		
9,100.0	7,530.0	5,010.0	5,010.0	31.4	8.7	46.66	4,980.9	-2,723.9	7,400.8	7,369.4	31.44	235.374		
9,200.0	7,530.0	5,010.0	5,010.0	33.0	8.7	46.66	4,980.9	-2,723.9	7,488.6	7,456.0	32.60	229.741		
9,300.0	7,530.0	5,010.0	5,010.0	34.7	8.7	46.66	4,980.9	-2,723.9	7,576.7	7,542.9	33.76	224.423		
9,400.0	7,530.0	5,010.0	5,010.0	36.3	8.7	46.66	4,980.9	-2,723.9	7,665.1	7,630.1	34.94	219.403		
9,500.0	7,530.0	5,010.0	5,010.0	37.9	8.7	46.66	4,980.9	-2,723.9	7,753.7	7,717.6	36.12	214.663		
9,600.0	7,530.0	5,010.0	5,010.0	39.6	8.7	46.66	4,980.9	-2,723.9	7,842.7	7,805.4	37.31	210.186		
9,700.0	7,530.0	5,010.0	5,010.0	41.2	8.7	46.66	4,980.9	-2,723.9	7,931.9	7,893.4	38.51	205.955		
9,800.0	7,530.0	5,010.0	5,010.0	42.9	8.7	46.66	4,980.9	-2,723.9	8,021.3	7,981.6	39.72	201.954		
9,900.0	7,530.0	5,010.0	5,010.0	44.5	8.7	46.66	4,980.9	-2,723.9	8,111.0	8,070.1	40.93	198.167		
10,000.0	7,530.0	5,010.0	5,010.0	46.2	8.7	46.66	4,980.9	-2,723.9	8,201.0	8,158.8	42.15	194.581		
10,100.0	7,530.0	5,010.0	5,010.0	47.9	8.7	46.66	4,980.9	-2,723.9	8,291.2	8,247.8	43.37	191.180		
10,200.0	7,530.0	5,010.0	5,010.0	49.6	8.7	46.66	4,980.9	-2,723.9	8,381.6	8,337.0	44.59	187.954		
10,300.0	7,530.0	5,010.0	5,010.0	51.3	8.7	46.66	4,980.9	-2,723.9	8,472.2	8,426.3	45.82	184.890		
10,400.0	7,530.0	5,010.0	5,010.0	53.0	8.7	46.66	4,980.9	-2,723.9	8,563.0	8,515.9	47.06	181.977		
10,500.0	7,530.0	5,010.0	5,010.0	54.7	8.7	46.66	4,980.9	-2,723.9	8,654.0	8,605.7	48.29	179.206		
10,600.0	7,530.0	5,010.0	5,010.0	56.4	8.7	46.66	4,980.9	-2,723.9	8,745.2	8,695.7	49.53	176.567		
10,700.0	7,530.0	5,010.0	5,010.0	58.1	8.7	46.66	4,980.9	-2,723.9	8,836.6	8,785.9	50.77	174.052		
10,800.0	7,530.0	5,010.0	5,010.0	59.8	8.7	46.66	4,980.9	-2,723.9	8,928.2	8,876.2	52.01	171.653		
10,900.0	7,530.0	5,010.0	5,010.0	61.5	8.7	46.66	4,980.9	-2,723.9	9,020.0	8,966.7	53.26	169.362		
11,000.0	7,530.0	5,010.0	5,010.0	63.2	8.7	46.66	4,980.9	-2,723.9	9,111.9	9,057.4	54.51	167.173		
11,100.0	7,530.0	5,010.0	5,010.0	64.9	8.7	46.66	4,980.9	-2,723.9	9,204.0	9,148.3	55.76	165.079		
11,200.0	7,530.0	5,010.0	5,010.0	66.6	8.7	46.66	4,980.9	-2,723.9	9,296.3	9,239.3	57.01	163.075		
11,300.0	7,530.0	5,010.0	5,010.0	68.4	8.7	46.66	4,980.9	-2,723.9	9,388.8	9,330.5	58.26	161.156		
11,400.0	7,530.0	5,010.0	5,010.0	70.1	8.7	46.66	4,980.9	-2,723.9	9,481.3	9,421.8	59.51	159.316		
11,500.0	7,530.0	5,010.0	5,010.0	71.8	8.7	46.66	4,980.9	-2,723.9	9,574.1	9,513.3	60.77	157.551		
11,600.0	7,530.0	5,010.0	5,010.0	73.5	8.7	46.66	4,980.9	-2,723.9	9,667.0	9,604.9	62.02	155.856		
11,700.0	7,530.0	5,010.0	5,010.0	75.3	8.7	46.66	4,980.9	-2,723.9	9,760.0	9,696.7	63.28	154.228		
11,800.0	7,530.0	5,010.0	5,010.0	77.0	8.7	46.66	4,980.9	-2,723.9	9,853.1	9,788.6	64.54	152.663		
11,900.0	7,530.0	5,010.0	5,010.0	78.7	8.7	46.66	4,980.9	-2,723.9	9,946.4	9,880.6	65.80	151.158 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 2-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error:	0.0 ft
Survey Program: 8164-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	-37.71	4,424.0	-3,420.4	5,592.5					
100.0	100.0	25.0	25.0	0.2	0.0	-37.71	4,424.0	-3,420.4	5,592.0	5,591.8	0.20	N/A		
200.0	200.0	125.0	125.0	0.3	0.2	-37.71	4,424.0	-3,420.4	5,592.0	5,591.5	0.54	N/A		
300.0	300.0	225.0	225.0	0.5	0.4	-37.71	4,424.0	-3,420.4	5,592.0	5,591.1	0.89	6,256.455		
400.0	400.0	325.0	325.0	0.7	0.6	-37.71	4,424.0	-3,420.4	5,592.0	5,590.8	1.24	4,499.308		
500.0	500.0	425.0	425.0	0.8	0.7	-37.71	4,424.0	-3,420.4	5,592.0	5,590.4	1.59	3,512.742		
600.0	600.0	525.0	525.0	1.0	0.9	-14.70	4,424.0	-3,420.4	5,591.2	5,589.3	1.94	2,880.816		
700.0	700.0	625.0	625.0	1.2	1.1	-14.72	4,424.0	-3,420.4	5,588.7	5,586.4	2.29	2,441.062		
800.0	799.9	724.9	724.9	1.4	1.3	-14.74	4,424.0	-3,420.4	5,584.4	5,581.8	2.64	2,117.104		
848.7	848.4	773.4	773.4	1.5	1.4	-14.75	4,424.0	-3,420.4	5,581.8	5,579.0	2.81	1,988.427		
900.0	899.7	824.7	824.7	1.6	1.4	-14.76	4,424.0	-3,420.4	5,578.8	5,575.8	2.99	1,867.859		
1,000.0	999.5	924.5	924.5	1.8	1.6	-14.78	4,424.0	-3,420.4	5,572.9	5,569.5	3.34	1,670.227		
1,100.0	1,099.3	1,024.3	1,024.3	2.0	1.8	-14.79	4,424.0	-3,420.4	5,567.0	5,563.3	3.69	1,510.046		
1,200.0	1,199.1	1,124.1	1,124.1	2.2	2.0	-14.81	4,424.0	-3,420.4	5,561.1	5,557.1	4.04	1,377.604		
1,300.0	1,298.9	1,223.9	1,223.9	2.4	2.1	-14.82	4,424.0	-3,420.4	5,555.2	5,550.9	4.39	1,266.278		
1,400.0	1,398.8	1,323.8	1,323.8	2.6	2.3	-14.84	4,424.0	-3,420.4	5,549.4	5,544.6	4.74	1,171.396		
1,500.0	1,498.6	1,423.6	1,423.6	2.8	2.5	-14.86	4,424.0	-3,420.4	5,543.5	5,538.4	5.09	1,089.567		
1,600.0	1,598.4	1,523.4	1,523.4	3.0	2.7	-14.87	4,424.0	-3,420.4	5,537.6	5,532.2	5.44	1,018.273		
1,700.0	1,698.2	1,623.2	1,623.2	3.2	2.8	-14.89	4,424.0	-3,420.4	5,531.7	5,525.9	5.79	955.604		
1,800.0	1,798.0	1,723.0	1,723.0	3.4	3.0	-14.90	4,424.0	-3,420.4	5,525.8	5,519.7	6.14	900.086		
1,900.0	1,897.8	1,822.8	1,822.8	3.6	3.2	-14.92	4,424.0	-3,420.4	5,520.0	5,513.5	6.49	850.560		
2,000.0	1,997.7	1,922.7	1,922.7	3.8	3.4	-14.94	4,424.0	-3,420.4	5,514.1	5,507.3	6.84	806.107		
2,100.0	2,097.5	2,022.5	2,022.5	4.0	3.5	-14.95	4,424.0	-3,420.4	5,508.2	5,501.0	7.19	765.986		
2,200.0	2,197.3	2,122.3	2,122.3	4.2	3.7	-14.97	4,424.0	-3,420.4	5,502.3	5,494.8	7.54	729.593		
2,300.0	2,297.1	2,222.1	2,222.1	4.4	3.9	-14.99	4,424.0	-3,420.4	5,496.5	5,488.6	7.89	696.432		
2,400.0	2,396.9	2,321.9	2,321.9	4.6	4.1	-15.00	4,424.0	-3,420.4	5,490.6	5,482.3	8.24	666.090		
2,500.0	2,496.7	2,421.7	2,421.7	4.8	4.2	-15.02	4,424.0	-3,420.4	5,484.7	5,476.1	8.59	638.224		
2,600.0	2,596.5	2,521.5	2,521.5	5.0	4.4	-15.04	4,424.0	-3,420.4	5,478.8	5,469.9	8.94	612.542		
2,700.0	2,696.4	2,621.4	2,621.4	5.2	4.6	-15.05	4,424.0	-3,420.4	5,473.0	5,463.7	9.30	588.796		
2,800.0	2,796.2	2,721.2	2,721.2	5.4	4.7	-15.07	4,424.0	-3,420.4	5,467.1	5,457.4	9.65	566.777		
2,900.0	2,896.0	2,821.0	2,821.0	5.6	4.9	-15.09	4,424.0	-3,420.4	5,461.2	5,451.2	10.00	546.302		
3,000.0	2,995.8	2,920.8	2,920.8	5.8	5.1	-15.10	4,424.0	-3,420.4	5,455.4	5,445.0	10.35	527.214		
3,100.0	3,095.6	3,020.6	3,020.6	6.0	5.3	-15.12	4,424.0	-3,420.4	5,449.5	5,438.8	10.70	509.378		
3,200.0	3,195.4	3,120.4	3,120.4	6.2	5.4	-15.13	4,424.0	-3,420.4	5,443.6	5,432.6	11.05	492.673		
3,300.0	3,295.2	3,220.2	3,220.2	6.4	5.6	-15.15	4,424.0	-3,420.4	5,437.7	5,426.3	11.40	476.996		
3,400.0	3,395.1	3,320.1	3,320.1	6.6	5.8	-15.17	4,424.0	-3,420.4	5,431.9	5,420.1	11.75	462.255		
3,500.0	3,494.9	3,419.9	3,419.9	6.8	6.0	-15.19	4,424.0	-3,420.4	5,426.0	5,413.9	12.10	448.368		
3,600.0	3,594.7	3,519.7	3,519.7	7.0	6.1	-15.20	4,424.0	-3,420.4	5,420.1	5,407.7	12.45	435.263		
3,700.0	3,694.5	3,619.5	3,619.5	7.2	6.3	-15.22	4,424.0	-3,420.4	5,414.3	5,401.5	12.80	422.876		
3,800.0	3,794.3	3,719.3	3,719.3	7.4	6.5	-15.24	4,424.0	-3,420.4	5,408.4	5,395.2	13.15	411.149		
3,900.0	3,894.1	3,819.1	3,819.1	7.6	6.7	-15.25	4,424.0	-3,420.4	5,402.5	5,389.0	13.51	400.032		
4,000.0	3,994.0	3,919.0	3,919.0	7.8	6.8	-15.27	4,424.0	-3,420.4	5,396.7	5,382.8	13.86	389.477		
4,100.0	4,093.8	4,018.8	4,018.8	8.0	7.0	-15.29	4,424.0	-3,420.4	5,390.8	5,376.6	14.21	379.443		
4,200.0	4,193.6	4,118.6	4,118.6	8.2	7.2	-15.30	4,424.0	-3,420.4	5,384.9	5,370.4	14.56	369.893		
4,300.0	4,293.4	4,218.4	4,218.4	8.4	7.4	-15.32	4,424.0	-3,420.4	5,379.1	5,364.1	14.91	360.792		
4,400.0	4,393.2	4,318.2	4,318.2	8.6	7.5	-15.34	4,424.0	-3,420.4	5,373.2	5,357.9	15.26	352.110		
4,500.0	4,493.0	4,418.0	4,418.0	8.8	7.7	-15.36	4,424.0	-3,420.4	5,367.3	5,351.7	15.61	343.818		
4,600.0	4,592.8	4,517.8	4,517.8	9.0	7.9	-15.37	4,424.0	-3,420.4	5,361.5	5,345.5	15.96	335.890		
4,700.0	4,692.7	4,617.7	4,617.7	9.3	8.1	-15.39	4,424.0	-3,420.4	5,355.6	5,339.3	16.31	328.303		
4,800.0	4,792.5	4,717.5	4,717.5	9.5	8.2	-15.41	4,424.0	-3,420.4	5,349.7	5,333.1	16.66	321.035		
4,900.0	4,892.3	4,817.3	4,817.3	9.7	8.4	-15.42	4,424.0	-3,420.4	5,343.9	5,326.9	17.02	314.068		
5,000.0	4,992.1	4,917.1	4,917.1	9.9	8.6	-15.44	4,424.0	-3,420.4	5,338.0	5,320.6	17.37	307.381		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 2-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error:	0.0 ft
Survey Program: 8164-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	5,091.9	5,016.9	5,016.9	10.1	8.8	-15.46	4,424.0	-3,420.4	5,332.1	5,314.4	17.72	300.960		
5,200.0	5,191.7	5,116.7	5,116.7	10.3	8.9	-15.48	4,424.0	-3,420.4	5,326.3	5,308.2	18.07	294.788		
5,300.0	5,291.5	5,216.5	5,216.5	10.5	9.1	-15.49	4,424.0	-3,420.4	5,320.4	5,302.0	18.42	288.851		
5,400.0	5,391.4	5,316.4	5,316.4	10.7	9.3	-15.51	4,424.0	-3,420.4	5,314.6	5,295.8	18.77	283.136		
5,500.0	5,491.2	5,416.2	5,416.2	10.9	9.5	-15.53	4,424.0	-3,420.4	5,308.7	5,289.6	19.12	277.630		
5,600.0	5,591.0	5,516.0	5,516.0	11.1	9.6	-15.55	4,424.0	-3,420.4	5,302.8	5,283.4	19.47	272.324		
5,700.0	5,690.8	5,615.8	5,615.8	11.3	9.8	-15.56	4,424.0	-3,420.4	5,297.0	5,277.2	19.82	267.204		
5,800.0	5,790.6	5,715.6	5,715.6	11.5	10.0	-15.58	4,424.0	-3,420.4	5,291.1	5,270.9	20.17	262.263		
5,900.0	5,890.4	5,815.4	5,815.4	11.7	10.1	-15.60	4,424.0	-3,420.4	5,285.3	5,264.7	20.53	257.491		
6,000.0	5,990.3	5,915.3	5,915.3	11.9	10.3	-15.62	4,424.0	-3,420.4	5,279.4	5,258.5	20.88	252.880		
6,100.0	6,090.1	6,015.1	6,015.1	12.1	10.5	-15.64	4,424.0	-3,420.4	5,273.5	5,252.3	21.23	248.420		
6,200.0	6,189.9	6,114.9	6,114.9	12.3	10.7	-15.65	4,424.0	-3,420.4	5,267.7	5,246.1	21.58	244.106		
6,300.0	6,289.7	6,214.7	6,214.7	12.5	10.8	-15.67	4,424.0	-3,420.4	5,261.8	5,239.9	21.93	239.930		
6,400.0	6,389.5	6,314.5	6,314.5	12.7	11.0	-15.69	4,424.0	-3,420.4	5,256.0	5,233.7	22.28	235.886		
6,500.0	6,489.3	6,414.3	6,414.3	12.9	11.2	-15.71	4,424.0	-3,420.4	5,250.1	5,227.5	22.63	231.966		
6,600.0	6,589.1	6,514.1	6,514.1	13.1	11.4	-15.72	4,424.0	-3,420.4	5,244.3	5,221.3	22.98	228.167		
6,700.0	6,689.0	6,614.0	6,614.0	13.3	11.5	-15.74	4,424.0	-3,420.4	5,238.4	5,215.1	23.34	224.482		
6,785.3	6,774.1	6,699.1	6,699.1	13.5	11.7	-15.76	4,424.0	-3,420.4	5,233.4	5,209.8	23.64	221.426		
6,800.0	6,788.8	6,713.8	6,713.8	13.5	11.7	-4.69	4,424.0	-3,420.4	5,232.7	5,209.0	23.69	220.864		
6,839.4	6,828.1	6,753.1	6,753.1	13.6	11.8	90.00	4,424.0	-3,420.4	5,231.8	5,208.0	23.82	219.632	CC, ES	
6,850.0	6,838.8	6,763.8	6,763.8	13.6	11.8	105.86	4,424.0	-3,420.4	5,231.9	5,208.0	23.85	219.355		
6,900.0	6,888.6	6,813.6	6,813.6	13.6	11.9	127.73	4,424.0	-3,420.4	5,233.8	5,209.9	23.96	218.419		
6,950.0	6,938.1	6,863.1	6,863.1	13.7	12.0	132.68	4,424.0	-3,420.4	5,238.5	5,214.4	24.03	218.034		
7,000.0	6,987.0	6,912.0	6,912.0	13.7	12.1	134.62	4,424.0	-3,420.4	5,245.8	5,221.7	24.04	218.168		
7,050.0	7,035.0	6,960.0	6,960.0	13.6	12.1	135.44	4,424.0	-3,420.4	5,255.8	5,231.7	24.02	218.783		
7,100.0	7,082.0	7,007.0	7,007.0	13.6	12.2	135.67	4,424.0	-3,420.4	5,268.4	5,244.4	23.97	219.824		
7,150.0	7,127.7	7,052.7	7,052.7	13.5	12.3	135.52	4,424.0	-3,420.4	5,283.5	5,259.7	23.88	221.223		
7,200.0	7,171.8	7,096.8	7,096.8	13.5	12.4	135.07	4,424.0	-3,420.4	5,301.2	5,277.4	23.78	222.892		
7,250.0	7,214.2	7,139.2	7,139.2	13.4	12.5	134.36	4,424.0	-3,420.4	5,321.4	5,297.7	23.68	224.718		
7,300.0	7,254.6	7,179.6	7,179.6	13.4	12.5	133.40	4,424.0	-3,420.4	5,343.9	5,320.3	23.59	226.563		
7,350.0	7,292.9	7,217.9	7,217.9	13.3	12.6	132.19	4,424.0	-3,420.4	5,368.6	5,345.1	23.52	228.261		
7,400.0	7,328.9	7,253.9	7,253.9	13.3	12.7	130.71	4,424.0	-3,420.4	5,395.6	5,372.1	23.50	229.627		
7,450.0	7,362.3	7,287.3	7,287.3	13.3	12.7	128.95	4,424.0	-3,420.4	5,424.6	5,401.0	23.54	230.460		
7,500.0	7,393.1	7,318.1	7,318.1	13.4	12.8	126.88	4,424.0	-3,420.4	5,455.5	5,431.8	23.66	230.569		
7,550.0	7,421.1	7,346.1	7,346.1	13.5	12.8	124.47	4,424.0	-3,420.4	5,488.2	5,464.3	23.88	229.801		
7,600.0	7,446.1	7,371.1	7,371.1	13.6	12.9	121.68	4,424.0	-3,420.4	5,522.5	5,498.3	24.21	228.067		
7,650.0	7,468.0	7,393.0	7,393.0	13.8	12.9	118.49	4,424.0	-3,420.4	5,558.4	5,533.7	24.66	225.379		
7,700.0	7,486.7	7,411.7	7,411.7	14.0	12.9	114.84	4,424.0	-3,420.4	5,595.6	5,570.3	25.22	221.869		
7,750.0	7,502.2	7,427.2	7,427.2	14.2	13.0	110.74	4,424.0	-3,420.4	5,633.9	5,608.0	25.87	217.791		
7,800.0	7,514.3	7,439.3	7,439.3	14.6	13.0	106.17	4,424.0	-3,420.4	5,673.2	5,646.6	26.57	213.498		
7,850.0	7,523.0	7,448.0	7,448.0	14.9	13.0	101.14	4,424.0	-3,420.4	5,713.3	5,686.0	27.28	209.400		
7,900.0	7,528.2	7,453.2	7,453.2	15.3	13.0	95.73	4,424.0	-3,420.4	5,753.9	5,726.0	27.95	205.902		
7,950.2	7,530.0	7,455.0	7,455.0	15.8	13.0	90.00	4,424.0	-3,420.4	5,795.2	5,766.7	28.50	203.331		
8,000.0	7,530.0	7,455.0	7,455.0	16.2	13.0	90.00	4,424.0	-3,420.4	5,836.3	5,807.3	28.98	201.357		
8,100.0	7,530.0	7,455.0	7,455.0	17.3	13.0	90.00	4,424.0	-3,420.4	5,919.2	5,889.1	30.05	196.977		
8,200.0	7,530.0	7,455.0	7,455.0	18.4	13.0	90.00	4,424.0	-3,420.4	6,002.6	5,971.4	31.22	192.252		
8,300.0	7,530.0	7,455.0	7,455.0	19.7	13.0	90.00	4,424.0	-3,420.4	6,086.6	6,054.1	32.48	187.379		
8,400.0	7,530.0	7,455.0	7,455.0	21.0	13.0	90.00	4,424.0	-3,420.4	6,171.0	6,137.2	33.81	182.496		
8,500.0	7,530.0	7,455.0	7,455.0	22.4	13.0	90.00	4,424.0	-3,420.4	6,255.9	6,220.7	35.20	177.698		
8,600.0	7,530.0	7,455.0	7,455.0	23.8	13.0	90.00	4,424.0	-3,420.4	6,341.2	6,304.5	36.64	173.049		
8,700.0	7,530.0	7,455.0	7,455.0	25.3	13.0	90.00	4,424.0	-3,420.4	6,426.9	6,388.8	38.12	168.584		
8,800.0	7,530.0	7,455.0	7,455.0	26.8	13.0	90.00	4,424.0	-3,420.4	6,513.1	6,473.4	39.64	164.324		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 2-6 (EXISTING) - NOBLE WELL - NO SUR														Offset Site Error:	0.0 ft
Survey Program: 8164-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			
8,900.0	7,530.0	7,455.0	7,455.0	28.3	13.0	90.00	4,424.0	-3,420.4	6,599.6	6,558.4	41.18	160.278			
9,000.0	7,530.0	7,455.0	7,455.0	29.9	13.0	90.00	4,424.0	-3,420.4	6,686.5	6,643.8	42.74	156.446			
9,100.0	7,530.0	7,455.0	7,455.0	31.4	13.0	90.00	4,424.0	-3,420.4	6,773.8	6,729.5	44.32	152.823			
9,200.0	7,530.0	7,455.0	7,455.0	33.0	13.0	90.00	4,424.0	-3,420.4	6,861.4	6,815.5	45.93	149.402			
9,300.0	7,530.0	7,455.0	7,455.0	34.7	13.0	90.00	4,424.0	-3,420.4	6,949.4	6,901.8	47.54	146.172			
9,400.0	7,530.0	7,455.0	7,455.0	36.3	13.0	90.00	4,424.0	-3,420.4	7,037.7	6,988.5	49.17	143.124			
9,500.0	7,530.0	7,455.0	7,455.0	37.9	13.0	90.00	4,424.0	-3,420.4	7,126.3	7,075.4	50.81	140.247			
9,600.0	7,530.0	7,455.0	7,455.0	39.6	13.0	90.00	4,424.0	-3,420.4	7,215.1	7,162.7	52.46	137.530			
9,700.0	7,530.0	7,455.0	7,455.0	41.2	13.0	90.00	4,424.0	-3,420.4	7,304.3	7,250.2	54.12	134.963			
9,800.0	7,530.0	7,455.0	7,455.0	42.9	13.0	90.00	4,424.0	-3,420.4	7,393.8	7,338.0	55.79	132.535			
9,900.0	7,530.0	7,455.0	7,455.0	44.5	13.0	90.00	4,424.0	-3,420.4	7,483.5	7,426.0	57.46	130.237			
10,000.0	7,530.0	7,455.0	7,455.0	46.2	13.0	90.00	4,424.0	-3,420.4	7,573.5	7,514.3	59.14	128.061			
10,100.0	7,530.0	7,455.0	7,455.0	47.9	13.0	90.00	4,424.0	-3,420.4	7,663.7	7,602.9	60.82	125.997			
10,200.0	7,530.0	7,455.0	7,455.0	49.6	13.0	90.00	4,424.0	-3,420.4	7,754.1	7,691.6	62.51	124.040			
10,300.0	7,530.0	7,455.0	7,455.0	51.3	13.0	90.00	4,424.0	-3,420.4	7,844.8	7,780.6	64.21	122.180			
10,400.0	7,530.0	7,455.0	7,455.0	53.0	13.0	90.00	4,424.0	-3,420.4	7,935.8	7,869.9	65.90	120.412			
10,500.0	7,530.0	7,455.0	7,455.0	54.7	13.0	90.00	4,424.0	-3,420.4	8,026.9	7,959.3	67.61	118.730			
10,600.0	7,530.0	7,455.0	7,455.0	56.4	13.0	90.00	4,424.0	-3,420.4	8,118.2	8,048.9	69.31	117.129			
10,700.0	7,530.0	7,455.0	7,455.0	58.1	13.0	90.00	4,424.0	-3,420.4	8,209.8	8,138.8	71.02	115.602			
10,800.0	7,530.0	7,455.0	7,455.0	59.8	13.0	90.00	4,424.0	-3,420.4	8,301.5	8,228.8	72.73	114.145			
10,900.0	7,530.0	7,455.0	7,455.0	61.5	13.0	90.00	4,424.0	-3,420.4	8,393.5	8,319.0	74.44	112.754			
11,000.0	7,530.0	7,455.0	7,455.0	63.2	13.0	90.00	4,424.0	-3,420.4	8,485.6	8,409.4	76.16	111.424			
11,100.0	7,530.0	7,455.0	7,455.0	64.9	13.0	90.00	4,424.0	-3,420.4	8,577.9	8,500.0	77.87	110.153			
11,200.0	7,530.0	7,455.0	7,455.0	66.6	13.0	90.00	4,424.0	-3,420.4	8,670.3	8,590.7	79.59	108.935			
11,300.0	7,530.0	7,455.0	7,455.0	68.4	13.0	90.00	4,424.0	-3,420.4	8,762.9	8,681.6	81.31	107.769			
11,400.0	7,530.0	7,455.0	7,455.0	70.1	13.0	90.00	4,424.0	-3,420.4	8,855.7	8,772.7	83.03	106.651			
11,500.0	7,530.0	7,455.0	7,455.0	71.8	13.0	90.00	4,424.0	-3,420.4	8,948.7	8,863.9	84.76	105.579			
11,600.0	7,530.0	7,455.0	7,455.0	73.5	13.0	90.00	4,424.0	-3,420.4	9,041.8	8,955.3	86.48	104.549			
11,700.0	7,530.0	7,455.0	7,455.0	75.3	13.0	90.00	4,424.0	-3,420.4	9,135.0	9,046.8	88.21	103.559			
11,800.0	7,530.0	7,455.0	7,455.0	77.0	13.0	90.00	4,424.0	-3,420.4	9,228.4	9,138.4	89.94	102.608			
11,900.0	7,530.0	7,455.0	7,455.0	78.7	13.0	90.00	4,424.0	-3,420.4	9,321.9	9,230.2	91.67	101.693			
12,000.0	7,530.0	7,455.0	7,455.0	80.4	13.0	90.00	4,424.0	-3,420.4	9,415.5	9,322.2	93.40	100.812			
12,100.0	7,530.0	7,455.0	7,455.0	82.2	13.0	90.00	4,424.0	-3,420.4	9,509.3	9,414.2	95.13	99.963			
12,200.0	7,530.0	7,455.0	7,455.0	83.9	13.0	90.00	4,424.0	-3,420.4	9,603.2	9,506.4	96.86	99.145			
12,300.0	7,530.0	7,455.0	7,455.0	85.6	13.0	90.00	4,424.0	-3,420.4	9,697.3	9,598.7	98.59	98.356			
12,400.0	7,530.0	7,455.0	7,455.0	87.4	13.0	90.00	4,424.0	-3,420.4	9,791.4	9,691.1	100.33	97.594			
12,500.0	7,530.0	7,455.0	7,455.0	89.1	13.0	90.00	4,424.0	-3,420.4	9,885.7	9,783.6	102.06	96.859			
12,600.0	7,530.0	7,455.0	7,455.0	90.8	13.0	90.00	4,424.0	-3,420.4	9,980.0	9,876.2	103.80	96.149 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 4 (EXISTING) - MARTIN EXP WELL - NO														Offset Site Error:	0.0 ft
Survey Program: 8200-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	-47.88	3,661.3	-4,049.8	5,460.0						
100.0	100.0	29.0	29.0	0.2	0.1	-47.88	3,661.3	-4,049.8	5,459.5	5,459.3	0.20	N/A			
200.0	200.0	129.0	129.0	0.3	0.2	-47.88	3,661.3	-4,049.8	5,459.5	5,458.9	0.55	9,895.387			
300.0	300.0	229.0	229.0	0.5	0.4	-47.88	3,661.3	-4,049.8	5,459.5	5,458.6	0.90	6,060.821			
400.0	400.0	329.0	329.0	0.7	0.6	-47.88	3,661.3	-4,049.8	5,459.5	5,458.2	1.25	4,368.126			
500.0	500.0	429.0	429.0	0.8	0.7	-47.88	3,661.3	-4,049.8	5,459.5	5,457.9	1.60	3,414.507			
600.0	600.0	529.0	529.0	1.0	0.9	-24.88	3,661.3	-4,049.8	5,458.7	5,456.8	1.95	2,802.365			
700.0	700.0	629.0	629.0	1.2	1.1	-24.90	3,661.3	-4,049.8	5,456.3	5,454.0	2.30	2,375.514			
800.0	799.9	728.9	728.9	1.4	1.3	-24.94	3,661.3	-4,049.8	5,452.4	5,449.7	2.65	2,060.333			
848.7	848.4	777.4	777.4	1.5	1.4	-24.96	3,661.3	-4,049.8	5,449.9	5,447.1	2.82	1,934.939			
900.0	899.7	828.7	828.7	1.6	1.4	-24.97	3,661.3	-4,049.8	5,447.0	5,444.0	3.00	1,817.459			
1,000.0	999.5	928.5	928.5	1.8	1.6	-25.00	3,661.3	-4,049.8	5,441.5	5,438.2	3.35	1,624.804			
1,100.0	1,099.3	1,028.3	1,028.3	2.0	1.8	-25.03	3,661.3	-4,049.8	5,436.0	5,432.3	3.70	1,468.612			
1,200.0	1,199.1	1,128.1	1,128.1	2.2	2.0	-25.06	3,661.3	-4,049.8	5,430.5	5,426.4	4.05	1,339.465			
1,300.0	1,298.9	1,227.9	1,227.9	2.4	2.1	-25.08	3,661.3	-4,049.8	5,425.0	5,420.6	4.41	1,230.919			
1,400.0	1,398.8	1,327.8	1,327.8	2.6	2.3	-25.11	3,661.3	-4,049.8	5,419.5	5,414.7	4.76	1,138.423			
1,500.0	1,498.6	1,427.6	1,427.6	2.8	2.5	-25.14	3,661.3	-4,049.8	5,414.0	5,408.9	5.11	1,058.669			
1,600.0	1,598.4	1,527.4	1,527.4	3.0	2.7	-25.16	3,661.3	-4,049.8	5,408.5	5,403.0	5.47	989.200			
1,700.0	1,698.2	1,627.2	1,627.2	3.2	2.8	-25.19	3,661.3	-4,049.8	5,403.0	5,397.1	5.82	928.151			
1,800.0	1,798.0	1,727.0	1,727.0	3.4	3.0	-25.22	3,661.3	-4,049.8	5,397.5	5,391.3	6.18	874.080			
1,900.0	1,897.8	1,826.8	1,826.8	3.6	3.2	-25.25	3,661.3	-4,049.8	5,392.0	5,385.4	6.53	825.858			
2,000.0	1,997.7	1,926.7	1,926.7	3.8	3.4	-25.27	3,661.3	-4,049.8	5,386.5	5,379.6	6.88	782.586			
2,100.0	2,097.5	2,026.5	2,026.5	4.0	3.5	-25.30	3,661.3	-4,049.8	5,381.0	5,373.7	7.24	743.540			
2,200.0	2,197.3	2,126.3	2,126.3	4.2	3.7	-25.33	3,661.3	-4,049.8	5,375.5	5,367.9	7.59	708.129			
2,300.0	2,297.1	2,226.1	2,226.1	4.4	3.9	-25.36	3,661.3	-4,049.8	5,370.0	5,362.0	7.95	675.871			
2,400.0	2,396.9	2,325.9	2,325.9	4.6	4.1	-25.39	3,661.3	-4,049.8	5,364.5	5,356.2	8.30	646.361			
2,500.0	2,496.7	2,425.7	2,425.7	4.8	4.2	-25.41	3,661.3	-4,049.8	5,359.0	5,350.3	8.65	619.263			
2,600.0	2,596.5	2,525.5	2,525.5	5.0	4.4	-25.44	3,661.3	-4,049.8	5,353.5	5,344.5	9.01	594.294			
2,700.0	2,696.4	2,625.4	2,625.4	5.2	4.6	-25.47	3,661.3	-4,049.8	5,348.0	5,338.6	9.36	571.212			
2,800.0	2,796.2	2,725.2	2,725.2	5.4	4.8	-25.50	3,661.3	-4,049.8	5,342.5	5,332.8	9.72	549.812			
2,900.0	2,896.0	2,825.0	2,825.0	5.6	4.9	-25.53	3,661.3	-4,049.8	5,337.0	5,326.9	10.07	529.915			
3,000.0	2,995.8	2,924.8	2,924.8	5.8	5.1	-25.55	3,661.3	-4,049.8	5,331.5	5,321.1	10.43	511.370			
3,100.0	3,095.6	3,024.6	3,024.6	6.0	5.3	-25.58	3,661.3	-4,049.8	5,326.0	5,315.2	10.78	494.042			
3,200.0	3,195.4	3,124.4	3,124.4	6.2	5.5	-25.61	3,661.3	-4,049.8	5,320.5	5,309.4	11.14	477.817			
3,300.0	3,295.2	3,224.2	3,224.2	6.4	5.6	-25.64	3,661.3	-4,049.8	5,315.0	5,303.6	11.49	462.592			
3,400.0	3,395.1	3,324.1	3,324.1	6.6	5.8	-25.67	3,661.3	-4,049.8	5,309.6	5,297.7	11.84	448.277			
3,500.0	3,494.9	3,423.9	3,423.9	6.8	6.0	-25.70	3,661.3	-4,049.8	5,304.1	5,291.9	12.20	434.793			
3,600.0	3,594.7	3,523.7	3,523.7	7.0	6.2	-25.72	3,661.3	-4,049.8	5,298.6	5,286.0	12.55	422.071			
3,700.0	3,694.5	3,623.5	3,623.5	7.2	6.3	-25.75	3,661.3	-4,049.8	5,293.1	5,280.2	12.91	410.046			
3,800.0	3,794.3	3,723.3	3,723.3	7.4	6.5	-25.78	3,661.3	-4,049.8	5,287.6	5,274.4	13.26	398.664			
3,900.0	3,894.1	3,823.1	3,823.1	7.6	6.7	-25.81	3,661.3	-4,049.8	5,282.2	5,268.5	13.62	387.875			
4,000.0	3,994.0	3,923.0	3,923.0	7.8	6.8	-25.84	3,661.3	-4,049.8	5,276.7	5,262.7	13.97	377.632			
4,100.0	4,093.8	4,022.8	4,022.8	8.0	7.0	-25.87	3,661.3	-4,049.8	5,271.2	5,256.9	14.33	367.896			
4,200.0	4,193.6	4,122.6	4,122.6	8.2	7.2	-25.90	3,661.3	-4,049.8	5,265.7	5,251.1	14.68	358.630			
4,300.0	4,293.4	4,222.4	4,222.4	8.4	7.4	-25.93	3,661.3	-4,049.8	5,260.3	5,245.2	15.04	349.801			
4,400.0	4,393.2	4,322.2	4,322.2	8.6	7.5	-25.95	3,661.3	-4,049.8	5,254.8	5,239.4	15.39	341.378			
4,500.0	4,493.0	4,422.0	4,422.0	8.8	7.7	-25.98	3,661.3	-4,049.8	5,249.3	5,233.6	15.75	333.335			
4,600.0	4,592.8	4,521.8	4,521.8	9.0	7.9	-26.01	3,661.3	-4,049.8	5,243.9	5,227.8	16.10	325.646			
4,700.0	4,692.7	4,621.7	4,621.7	9.3	8.1	-26.04	3,661.3	-4,049.8	5,238.4	5,221.9	16.46	318.288			
4,800.0	4,792.5	4,721.5	4,721.5	9.5	8.2	-26.07	3,661.3	-4,049.8	5,232.9	5,216.1	16.81	311.240			
4,900.0	4,892.3	4,821.3	4,821.3	9.7	8.4	-26.10	3,661.3	-4,049.8	5,227.5	5,210.3	17.17	304.483			
5,000.0	4,992.1	4,921.1	4,921.1	9.9	8.6	-26.13	3,661.3	-4,049.8	5,222.0	5,204.5	17.52	298.000			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 4 (EXISTING) - MARTIN EXP WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8200-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	5,091.9	5,020.9	5,020.9	10.1	8.8	-26.16	3,661.3	-4,049.8	5,216.5	5,198.7	17.88	291.774		
5,200.0	5,191.7	5,120.7	5,120.7	10.3	8.9	-26.19	3,661.3	-4,049.8	5,211.1	5,192.8	18.23	285.791		
5,300.0	5,291.5	5,220.5	5,220.5	10.5	9.1	-26.22	3,661.3	-4,049.8	5,205.6	5,187.0	18.59	280.035		
5,400.0	5,391.4	5,320.4	5,320.4	10.7	9.3	-26.25	3,661.3	-4,049.8	5,200.2	5,181.2	18.94	274.495		
5,500.0	5,491.2	5,420.2	5,420.2	10.9	9.5	-26.28	3,661.3	-4,049.8	5,194.7	5,175.4	19.30	269.159		
5,600.0	5,591.0	5,520.0	5,520.0	11.1	9.6	-26.31	3,661.3	-4,049.8	5,189.3	5,169.6	19.66	264.015		
5,700.0	5,690.8	5,619.8	5,619.8	11.3	9.8	-26.34	3,661.3	-4,049.8	5,183.8	5,163.8	20.01	259.054		
5,800.0	5,790.6	5,719.6	5,719.6	11.5	10.0	-26.37	3,661.3	-4,049.8	5,178.4	5,158.0	20.37	254.265		
5,900.0	5,890.4	5,819.4	5,819.4	11.7	10.2	-26.40	3,661.3	-4,049.8	5,172.9	5,152.2	20.72	249.641		
6,000.0	5,990.3	5,919.3	5,919.3	11.9	10.3	-26.43	3,661.3	-4,049.8	5,167.5	5,146.4	21.08	245.172		
6,100.0	6,090.1	6,019.1	6,019.1	12.1	10.5	-26.46	3,661.3	-4,049.8	5,162.0	5,140.6	21.43	240.851		
6,200.0	6,189.9	6,118.9	6,118.9	12.3	10.7	-26.49	3,661.3	-4,049.8	5,156.6	5,134.8	21.79	236.671		
6,300.0	6,289.7	6,218.7	6,218.7	12.5	10.9	-26.52	3,661.3	-4,049.8	5,151.1	5,129.0	22.14	232.625		
6,400.0	6,389.5	6,318.5	6,318.5	12.7	11.0	-26.55	3,661.3	-4,049.8	5,145.7	5,123.2	22.50	228.706		
6,500.0	6,489.3	6,418.3	6,418.3	12.9	11.2	-26.58	3,661.3	-4,049.8	5,140.2	5,117.4	22.85	224.909		
6,600.0	6,589.1	6,518.1	6,518.1	13.1	11.4	-26.61	3,661.3	-4,049.8	5,134.8	5,111.6	23.21	221.229		
6,700.0	6,689.0	6,618.0	6,618.0	13.3	11.6	-26.64	3,661.3	-4,049.8	5,129.4	5,105.8	23.57	217.659		
6,785.3	6,774.1	6,703.1	6,703.1	13.5	11.7	-26.66	3,661.3	-4,049.8	5,124.7	5,100.8	23.87	214.699		
6,800.0	6,788.8	6,717.8	6,717.8	13.5	11.7	-15.59	3,661.3	-4,049.8	5,124.0	5,100.1	23.92	214.174		
6,845.9	6,834.7	6,763.7	6,763.7	13.6	11.8	90.00	3,661.3	-4,049.8	5,123.1	5,099.0	24.07	212.824 CC		
6,850.0	6,838.8	6,767.8	6,767.8	13.6	11.8	94.98	3,661.3	-4,049.8	5,123.1	5,099.0	24.08	212.718 ES		
6,900.0	6,888.6	6,817.6	6,817.6	13.6	11.9	116.87	3,661.3	-4,049.8	5,124.4	5,100.2	24.21	211.703		
6,950.0	6,938.1	6,867.1	6,867.1	13.7	12.0	121.85	3,661.3	-4,049.8	5,127.9	5,103.6	24.29	211.107		
7,000.0	6,987.0	6,916.0	6,916.0	13.7	12.1	123.82	3,661.3	-4,049.8	5,133.7	5,109.4	24.34	210.903		
7,050.0	7,035.0	6,964.0	6,964.0	13.6	12.2	124.68	3,661.3	-4,049.8	5,141.7	5,117.4	24.36	211.051		
7,100.0	7,082.0	7,011.0	7,011.0	13.6	12.2	124.96	3,661.3	-4,049.8	5,151.9	5,127.6	24.36	211.503		
7,150.0	7,127.7	7,056.7	7,056.7	13.5	12.3	124.87	3,661.3	-4,049.8	5,164.3	5,139.9	24.34	212.198		
7,200.0	7,171.8	7,100.8	7,100.8	13.5	12.4	124.50	3,661.3	-4,049.8	5,178.8	5,154.5	24.31	213.060		
7,250.0	7,214.2	7,143.2	7,143.2	13.4	12.5	123.88	3,661.3	-4,049.8	5,195.4	5,171.1	24.28	214.002		
7,300.0	7,254.6	7,183.6	7,183.6	13.4	12.5	123.05	3,661.3	-4,049.8	5,214.0	5,189.7	24.26	214.921		
7,350.0	7,292.9	7,221.9	7,221.9	13.3	12.6	121.99	3,661.3	-4,049.8	5,234.5	5,210.3	24.27	215.706		
7,400.0	7,328.9	7,257.9	7,257.9	13.3	12.7	120.72	3,661.3	-4,049.8	5,257.0	5,232.7	24.31	216.241		
7,450.0	7,362.3	7,291.3	7,291.3	13.3	12.7	119.22	3,661.3	-4,049.8	5,281.3	5,256.8	24.40	216.412		
7,500.0	7,393.1	7,322.1	7,322.1	13.4	12.8	117.48	3,661.3	-4,049.8	5,307.2	5,282.7	24.56	216.121		
7,550.0	7,421.1	7,350.1	7,350.1	13.5	12.8	115.49	3,661.3	-4,049.8	5,334.8	5,310.0	24.78	215.300		
7,600.0	7,446.1	7,375.1	7,375.1	13.6	12.9	113.24	3,661.3	-4,049.8	5,363.9	5,338.8	25.07	213.922		
7,650.0	7,468.0	7,397.0	7,397.0	13.8	12.9	110.72	3,661.3	-4,049.8	5,394.4	5,368.9	25.44	212.010		
7,700.0	7,486.7	7,415.7	7,415.7	14.0	12.9	107.93	3,661.3	-4,049.8	5,426.1	5,400.2	25.88	209.644		
7,750.0	7,502.2	7,431.2	7,431.2	14.2	13.0	104.85	3,661.3	-4,049.8	5,458.8	5,432.5	26.38	206.950		
7,800.0	7,514.3	7,443.3	7,443.3	14.6	13.0	101.49	3,661.3	-4,049.8	5,492.6	5,465.7	26.91	204.096		
7,850.0	7,523.0	7,452.0	7,452.0	14.9	13.0	97.88	3,661.3	-4,049.8	5,527.1	5,499.7	27.46	201.266		
7,900.0	7,528.2	7,457.2	7,457.2	15.3	13.0	94.04	3,661.3	-4,049.8	5,562.3	5,534.3	28.00	198.641		
7,950.2	7,530.0	7,459.0	7,459.0	15.8	13.0	90.00	3,661.3	-4,049.8	5,598.1	5,569.6	28.51	196.367		
8,000.0	7,530.0	7,459.0	7,459.0	16.2	13.0	90.00	3,661.3	-4,049.8	5,633.8	5,604.8	28.99	194.325		
8,100.0	7,530.0	7,459.0	7,459.0	17.3	13.0	90.00	3,661.3	-4,049.8	5,706.2	5,676.2	30.06	189.846		
8,200.0	7,530.0	7,459.0	7,459.0	18.4	13.0	90.00	3,661.3	-4,049.8	5,779.5	5,748.3	31.23	185.065		
8,300.0	7,530.0	7,459.0	7,459.0	19.7	13.0	90.00	3,661.3	-4,049.8	5,853.5	5,821.0	32.49	180.166		
8,400.0	7,530.0	7,459.0	7,459.0	21.0	13.0	90.00	3,661.3	-4,049.8	5,928.3	5,894.5	33.82	175.284		
8,500.0	7,530.0	7,459.0	7,459.0	22.4	13.0	90.00	3,661.3	-4,049.8	6,003.9	5,968.7	35.21	170.507		
8,600.0	7,530.0	7,459.0	7,459.0	23.8	13.0	90.00	3,661.3	-4,049.8	6,080.1	6,043.5	36.65	165.893		
8,700.0	7,530.0	7,459.0	7,459.0	25.3	13.0	90.00	3,661.3	-4,049.8	6,157.1	6,118.9	38.13	161.475		
8,800.0	7,530.0	7,459.0	7,459.0	26.8	13.0	90.00	3,661.3	-4,049.8	6,234.6	6,195.0	39.64	157.272		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 4 (EXISTING) - MARTIN EXP WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8200-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	7,530.0	7,459.0	7,459.0	28.3	13.0	90.00	3,661.3	-4,049.8	6,312.8	6,271.7	41.18	153.288		
9,000.0	7,530.0	7,459.0	7,459.0	29.9	13.0	90.00	3,661.3	-4,049.8	6,391.7	6,348.9	42.75	149.522		
9,100.0	7,530.0	7,459.0	7,459.0	31.4	13.0	90.00	3,661.3	-4,049.8	6,471.1	6,426.7	44.33	145.970		
9,200.0	7,530.0	7,459.0	7,459.0	33.0	13.0	90.00	3,661.3	-4,049.8	6,551.0	6,505.1	45.93	142.621		
9,300.0	7,530.0	7,459.0	7,459.0	34.7	13.0	90.00	3,661.3	-4,049.8	6,631.5	6,584.0	47.55	139.466		
9,400.0	7,530.0	7,459.0	7,459.0	36.3	13.0	90.00	3,661.3	-4,049.8	6,712.6	6,663.4	49.18	136.494		
9,500.0	7,530.0	7,459.0	7,459.0	37.9	13.0	90.00	3,661.3	-4,049.8	6,794.1	6,743.3	50.82	133.692		
9,600.0	7,530.0	7,459.0	7,459.0	39.6	13.0	90.00	3,661.3	-4,049.8	6,876.1	6,823.7	52.47	131.051		
9,700.0	7,530.0	7,459.0	7,459.0	41.2	13.0	90.00	3,661.3	-4,049.8	6,958.6	6,904.5	54.13	128.559		
9,800.0	7,530.0	7,459.0	7,459.0	42.9	13.0	90.00	3,661.3	-4,049.8	7,041.6	6,985.8	55.79	126.206		
9,900.0	7,530.0	7,459.0	7,459.0	44.5	13.0	90.00	3,661.3	-4,049.8	7,125.0	7,067.5	57.47	123.983		
10,000.0	7,530.0	7,459.0	7,459.0	46.2	13.0	90.00	3,661.3	-4,049.8	7,208.8	7,149.7	59.15	121.880		
10,100.0	7,530.0	7,459.0	7,459.0	47.9	13.0	90.00	3,661.3	-4,049.8	7,293.0	7,232.2	60.83	119.890		
10,200.0	7,530.0	7,459.0	7,459.0	49.6	13.0	90.00	3,661.3	-4,049.8	7,377.6	7,315.1	62.52	118.003		
10,300.0	7,530.0	7,459.0	7,459.0	51.3	13.0	90.00	3,661.3	-4,049.8	7,462.6	7,398.4	64.21	116.215		
10,400.0	7,530.0	7,459.0	7,459.0	53.0	13.0	90.00	3,661.3	-4,049.8	7,548.0	7,482.1	65.91	114.516		
10,500.0	7,530.0	7,459.0	7,459.0	54.7	13.0	90.00	3,661.3	-4,049.8	7,633.7	7,566.1	67.61	112.903		
10,600.0	7,530.0	7,459.0	7,459.0	56.4	13.0	90.00	3,661.3	-4,049.8	7,719.8	7,650.5	69.32	111.368		
10,700.0	7,530.0	7,459.0	7,459.0	58.1	13.0	90.00	3,661.3	-4,049.8	7,806.2	7,735.1	71.02	109.907		
10,800.0	7,530.0	7,459.0	7,459.0	59.8	13.0	90.00	3,661.3	-4,049.8	7,892.9	7,820.1	72.74	108.516		
10,900.0	7,530.0	7,459.0	7,459.0	61.5	13.0	90.00	3,661.3	-4,049.8	7,979.9	7,905.5	74.45	107.188		
11,000.0	7,530.0	7,459.0	7,459.0	63.2	13.0	90.00	3,661.3	-4,049.8	8,067.2	7,991.1	76.16	105.921		
11,100.0	7,530.0	7,459.0	7,459.0	64.9	13.0	90.00	3,661.3	-4,049.8	8,154.9	8,077.0	77.88	104.711		
11,200.0	7,530.0	7,459.0	7,459.0	66.6	13.0	90.00	3,661.3	-4,049.8	8,242.8	8,163.2	79.60	103.554		
11,300.0	7,530.0	7,459.0	7,459.0	68.4	13.0	90.00	3,661.3	-4,049.8	8,330.9	8,249.6	81.32	102.447		
11,400.0	7,530.0	7,459.0	7,459.0	70.1	13.0	90.00	3,661.3	-4,049.8	8,419.4	8,336.3	83.04	101.387		
11,500.0	7,530.0	7,459.0	7,459.0	71.8	13.0	90.00	3,661.3	-4,049.8	8,508.1	8,423.3	84.77	100.372		
11,600.0	7,530.0	7,459.0	7,459.0	73.5	13.0	90.00	3,661.3	-4,049.8	8,597.0	8,510.5	86.49	99.398		
11,700.0	7,530.0	7,459.0	7,459.0	75.3	13.0	90.00	3,661.3	-4,049.8	8,686.2	8,598.0	88.22	98.463		
11,800.0	7,530.0	7,459.0	7,459.0	77.0	13.0	90.00	3,661.3	-4,049.8	8,775.6	8,685.7	89.95	97.566		
11,900.0	7,530.0	7,459.0	7,459.0	78.7	13.0	90.00	3,661.3	-4,049.8	8,865.2	8,773.6	91.67	96.704		
12,000.0	7,530.0	7,459.0	7,459.0	80.4	13.0	90.00	3,661.3	-4,049.8	8,955.1	8,861.7	93.40	95.875		
12,100.0	7,530.0	7,459.0	7,459.0	82.2	13.0	90.00	3,661.3	-4,049.8	9,045.2	8,950.0	95.14	95.077		
12,200.0	7,530.0	7,459.0	7,459.0	83.9	13.0	90.00	3,661.3	-4,049.8	9,135.5	9,038.6	96.87	94.309		
12,300.0	7,530.0	7,459.0	7,459.0	85.6	13.0	90.00	3,661.3	-4,049.8	9,225.9	9,127.3	98.60	93.569		
12,400.0	7,530.0	7,459.0	7,459.0	87.4	13.0	90.00	3,661.3	-4,049.8	9,316.6	9,216.3	100.33	92.856		
12,500.0	7,530.0	7,459.0	7,459.0	89.1	13.0	90.00	3,661.3	-4,049.8	9,407.5	9,305.4	102.07	92.168		
12,600.0	7,530.0	7,459.0	7,459.0	90.8	13.0	90.00	3,661.3	-4,049.8	9,498.5	9,394.7	103.80	91.504		
12,700.0	7,530.0	7,459.0	7,459.0	92.6	13.0	90.00	3,661.3	-4,049.8	9,589.7	9,484.2	105.54	90.863		
12,800.0	7,530.0	7,459.0	7,459.0	94.3	13.0	90.00	3,661.3	-4,049.8	9,681.1	9,573.9	107.28	90.244		
12,900.0	7,530.0	7,459.0	7,459.0	96.0	13.0	90.00	3,661.3	-4,049.8	9,772.7	9,663.7	109.01	89.646		
13,000.0	7,530.0	7,459.0	7,459.0	97.8	13.0	90.00	3,661.3	-4,049.8	9,864.4	9,753.7	110.75	89.067		
13,100.0	7,530.0	7,459.0	7,459.0	99.5	13.0	90.00	3,661.3	-4,049.8	9,956.3	9,843.8	112.49	88.508 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 5-6 (EXISTING) - FOUNDATION WELL - N													Offset Site Error:	0.0 ft
Survey Program: 7771-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	-38.93	5,013.9	-4,050.1	6,445.8					
100.0	100.0	20.0	20.0	0.2	0.0	-38.93	5,013.9	-4,050.1	6,445.4	6,445.2	0.19	N/A		
200.0	200.0	120.0	120.0	0.3	0.2	-38.93	5,013.9	-4,050.1	6,445.4	6,444.8	0.54	N/A		
300.0	300.0	220.0	220.0	0.5	0.4	-38.93	5,013.9	-4,050.1	6,445.4	6,444.5	0.89	7,282.256		
400.0	400.0	320.0	320.0	0.7	0.6	-38.93	5,013.9	-4,050.1	6,445.4	6,444.1	1.23	5,222.547		
500.0	500.0	420.0	420.0	0.8	0.7	-38.93	5,013.9	-4,050.1	6,445.4	6,443.8	1.58	4,071.084		
600.0	600.0	520.0	520.0	1.0	0.9	-15.92	5,013.9	-4,050.1	6,444.5	6,442.6	1.93	3,335.465		
700.0	700.0	620.0	620.0	1.2	1.1	-15.94	5,013.9	-4,050.1	6,442.0	6,439.7	2.28	2,824.493		
800.0	799.9	719.9	719.9	1.4	1.3	-15.96	5,013.9	-4,050.1	6,437.8	6,435.2	2.63	2,448.569		
848.7	848.4	768.4	768.4	1.5	1.3	-15.97	5,013.9	-4,050.1	6,435.2	6,432.4	2.80	2,299.375		
900.0	899.7	819.7	819.7	1.6	1.4	-15.98	5,013.9	-4,050.1	6,432.2	6,429.2	2.98	2,159.656		
1,000.0	999.5	919.5	919.5	1.8	1.6	-16.00	5,013.9	-4,050.1	6,426.3	6,423.0	3.33	1,930.745		
1,100.0	1,099.3	1,019.3	1,019.3	2.0	1.8	-16.01	5,013.9	-4,050.1	6,420.5	6,416.8	3.68	1,745.317		
1,200.0	1,199.1	1,119.1	1,119.1	2.2	2.0	-16.03	5,013.9	-4,050.1	6,414.6	6,410.6	4.03	1,592.075		
1,300.0	1,298.9	1,218.9	1,218.9	2.4	2.1	-16.04	5,013.9	-4,050.1	6,408.8	6,404.4	4.38	1,463.320		
1,400.0	1,398.8	1,318.8	1,318.8	2.6	2.3	-16.06	5,013.9	-4,050.1	6,402.9	6,398.2	4.73	1,353.621		
1,500.0	1,498.6	1,418.6	1,418.6	2.8	2.5	-16.07	5,013.9	-4,050.1	6,397.1	6,392.0	5.08	1,259.045		
1,600.0	1,598.4	1,518.4	1,518.4	3.0	2.7	-16.09	5,013.9	-4,050.1	6,391.2	6,385.8	5.43	1,176.668		
1,700.0	1,698.2	1,618.2	1,618.2	3.2	2.8	-16.10	5,013.9	-4,050.1	6,385.4	6,379.6	5.78	1,104.275		
1,800.0	1,798.0	1,718.0	1,718.0	3.4	3.0	-16.12	5,013.9	-4,050.1	6,379.5	6,373.4	6.13	1,040.156		
1,900.0	1,897.8	1,817.8	1,817.8	3.6	3.2	-16.13	5,013.9	-4,050.1	6,373.7	6,367.2	6.48	982.969		
2,000.0	1,997.7	1,917.7	1,917.7	3.8	3.3	-16.15	5,013.9	-4,050.1	6,367.9	6,361.0	6.84	931.650		
2,100.0	2,097.5	2,017.5	2,017.5	4.0	3.5	-16.16	5,013.9	-4,050.1	6,362.0	6,354.8	7.19	885.338		
2,200.0	2,197.3	2,117.3	2,117.3	4.2	3.7	-16.18	5,013.9	-4,050.1	6,356.2	6,348.6	7.54	843.337		
2,300.0	2,297.1	2,217.1	2,217.1	4.4	3.9	-16.19	5,013.9	-4,050.1	6,350.3	6,342.4	7.89	805.070		
2,400.0	2,396.9	2,316.9	2,316.9	4.6	4.0	-16.21	5,013.9	-4,050.1	6,344.5	6,336.3	8.24	770.062		
2,500.0	2,496.7	2,416.7	2,416.7	4.8	4.2	-16.22	5,013.9	-4,050.1	6,338.7	6,330.1	8.59	737.913		
2,600.0	2,596.5	2,516.5	2,516.5	5.0	4.4	-16.24	5,013.9	-4,050.1	6,332.8	6,323.9	8.94	708.287		
2,700.0	2,696.4	2,616.4	2,616.4	5.2	4.6	-16.25	5,013.9	-4,050.1	6,327.0	6,317.7	9.29	680.899		
2,800.0	2,796.2	2,716.2	2,716.2	5.4	4.7	-16.27	5,013.9	-4,050.1	6,321.1	6,311.5	9.64	655.503		
2,900.0	2,896.0	2,816.0	2,816.0	5.6	4.9	-16.29	5,013.9	-4,050.1	6,315.3	6,305.3	9.99	631.890		
3,000.0	2,995.8	2,915.8	2,915.8	5.8	5.1	-16.30	5,013.9	-4,050.1	6,309.5	6,299.1	10.35	609.880		
3,100.0	3,095.6	3,015.6	3,015.6	6.0	5.3	-16.32	5,013.9	-4,050.1	6,303.6	6,292.9	10.70	589.313		
3,200.0	3,195.4	3,115.4	3,115.4	6.2	5.4	-16.33	5,013.9	-4,050.1	6,297.8	6,286.7	11.05	570.054		
3,300.0	3,295.2	3,215.2	3,215.2	6.4	5.6	-16.35	5,013.9	-4,050.1	6,291.9	6,280.6	11.40	551.980		
3,400.0	3,395.1	3,315.1	3,315.1	6.6	5.8	-16.36	5,013.9	-4,050.1	6,286.1	6,274.4	11.75	534.986		
3,500.0	3,494.9	3,414.9	3,414.9	6.8	6.0	-16.38	5,013.9	-4,050.1	6,280.3	6,268.2	12.10	518.977		
3,600.0	3,594.7	3,514.7	3,514.7	7.0	6.1	-16.39	5,013.9	-4,050.1	6,274.4	6,262.0	12.45	503.871		
3,700.0	3,694.5	3,614.5	3,614.5	7.2	6.3	-16.41	5,013.9	-4,050.1	6,268.6	6,255.8	12.80	489.594		
3,800.0	3,794.3	3,714.3	3,714.3	7.4	6.5	-16.43	5,013.9	-4,050.1	6,262.8	6,249.6	13.15	476.078		
3,900.0	3,894.1	3,814.1	3,814.1	7.6	6.7	-16.44	5,013.9	-4,050.1	6,256.9	6,243.4	13.51	463.265		
4,000.0	3,994.0	3,914.0	3,914.0	7.8	6.8	-16.46	5,013.9	-4,050.1	6,251.1	6,237.2	13.86	451.101		
4,100.0	4,093.8	4,013.8	4,013.8	8.0	7.0	-16.47	5,013.9	-4,050.1	6,245.3	6,231.1	14.21	439.538		
4,200.0	4,193.6	4,113.6	4,113.6	8.2	7.2	-16.49	5,013.9	-4,050.1	6,239.4	6,224.9	14.56	428.533		
4,300.0	4,293.4	4,213.4	4,213.4	8.4	7.4	-16.50	5,013.9	-4,050.1	6,233.6	6,218.7	14.91	418.046		
4,400.0	4,393.2	4,313.2	4,313.2	8.6	7.5	-16.52	5,013.9	-4,050.1	6,227.8	6,212.5	15.26	408.041		
4,500.0	4,493.0	4,413.0	4,413.0	8.8	7.7	-16.54	5,013.9	-4,050.1	6,221.9	6,206.3	15.61	398.487		
4,600.0	4,592.8	4,512.8	4,512.8	9.0	7.9	-16.55	5,013.9	-4,050.1	6,216.1	6,200.2	15.97	389.352		
4,700.0	4,692.7	4,612.7	4,612.7	9.3	8.1	-16.57	5,013.9	-4,050.1	6,210.3	6,194.0	16.32	380.611		
4,800.0	4,792.5	4,712.5	4,712.5	9.5	8.2	-16.58	5,013.9	-4,050.1	6,204.5	6,187.8	16.67	372.238		
4,900.0	4,892.3	4,812.3	4,812.3	9.7	8.4	-16.60	5,013.9	-4,050.1	6,198.6	6,181.6	17.02	364.210		
5,000.0	4,992.1	4,912.1	4,912.1	9.9	8.6	-16.62	5,013.9	-4,050.1	6,192.8	6,175.4	17.37	356.507		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 5-6 (EXISTING) - FOUNDATION WELL - N													Offset Site Error:	0.0 ft
Survey Program: 7771-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	5,091.9	5,011.9	5,011.9	10.1	8.7	-16.63	5,013.9	-4,050.1	6,187.0	6,169.2	17.72	349.110		
5,200.0	5,191.7	5,111.7	5,111.7	10.3	8.9	-16.65	5,013.9	-4,050.1	6,181.1	6,163.1	18.07	342.000		
5,300.0	5,291.5	5,211.5	5,211.5	10.5	9.1	-16.66	5,013.9	-4,050.1	6,175.3	6,156.9	18.42	335.160		
5,400.0	5,391.4	5,311.4	5,311.4	10.7	9.3	-16.68	5,013.9	-4,050.1	6,169.5	6,150.7	18.78	328.577		
5,500.0	5,491.2	5,411.2	5,411.2	10.9	9.4	-16.70	5,013.9	-4,050.1	6,163.7	6,144.5	19.13	322.235		
5,600.0	5,591.0	5,511.0	5,511.0	11.1	9.6	-16.71	5,013.9	-4,050.1	6,157.8	6,138.4	19.48	316.122		
5,700.0	5,690.8	5,610.8	5,610.8	11.3	9.8	-16.73	5,013.9	-4,050.1	6,152.0	6,132.2	19.83	310.226		
5,800.0	5,790.6	5,710.6	5,710.6	11.5	10.0	-16.75	5,013.9	-4,050.1	6,146.2	6,126.0	20.18	304.535		
5,900.0	5,890.4	5,810.4	5,810.4	11.7	10.1	-16.76	5,013.9	-4,050.1	6,140.4	6,119.8	20.53	299.038		
6,000.0	5,990.3	5,910.3	5,910.3	11.9	10.3	-16.78	5,013.9	-4,050.1	6,134.5	6,113.7	20.89	293.727		
6,100.0	6,090.1	6,010.1	6,010.1	12.1	10.5	-16.80	5,013.9	-4,050.1	6,128.7	6,107.5	21.24	288.591		
6,200.0	6,189.9	6,109.9	6,109.9	12.3	10.7	-16.81	5,013.9	-4,050.1	6,122.9	6,101.3	21.59	283.622		
6,300.0	6,289.7	6,209.7	6,209.7	12.5	10.8	-16.83	5,013.9	-4,050.1	6,117.1	6,095.1	21.94	278.812		
6,400.0	6,389.5	6,309.5	6,309.5	12.7	11.0	-16.84	5,013.9	-4,050.1	6,111.3	6,089.0	22.29	274.154		
6,500.0	6,489.3	6,409.3	6,409.3	12.9	11.2	-16.86	5,013.9	-4,050.1	6,105.4	6,082.8	22.64	269.640		
6,600.0	6,589.1	6,509.1	6,509.1	13.1	11.4	-16.88	5,013.9	-4,050.1	6,099.6	6,076.6	22.99	265.265		
6,700.0	6,689.0	6,609.0	6,609.0	13.3	11.5	-16.89	5,013.9	-4,050.1	6,093.8	6,070.4	23.35	261.020		
6,785.3	6,774.1	6,694.1	6,694.1	13.5	11.7	-16.91	5,013.9	-4,050.1	6,088.8	6,065.2	23.65	257.502		
6,800.0	6,788.8	6,708.8	6,708.8	13.5	11.7	-5.84	5,013.9	-4,050.1	6,088.1	6,064.4	23.70	256.855		
6,839.9	6,828.7	6,748.7	6,748.7	13.6	11.8	90.00	5,013.9	-4,050.1	6,087.2	6,063.4	23.83	255.410	CC, ES	
6,850.0	6,838.8	6,758.8	6,758.8	13.6	11.8	104.71	5,013.9	-4,050.1	6,087.3	6,063.4	23.86	255.104		
6,900.0	6,888.6	6,808.6	6,808.6	13.6	11.9	126.58	5,013.9	-4,050.1	6,089.2	6,065.2	23.97	253.986		
6,950.0	6,938.1	6,858.1	6,858.1	13.7	12.0	131.52	5,013.9	-4,050.1	6,093.7	6,069.6	24.04	253.473		
7,000.0	6,987.0	6,907.0	6,907.0	13.7	12.1	133.45	5,013.9	-4,050.1	6,100.8	6,076.8	24.06	253.530		
7,050.0	7,035.0	6,955.0	6,955.0	13.6	12.1	134.25	5,013.9	-4,050.1	6,110.6	6,086.6	24.05	254.109		
7,100.0	7,082.0	7,002.0	7,002.0	13.6	12.2	134.47	5,013.9	-4,050.1	6,123.0	6,099.0	24.00	255.145		
7,150.0	7,127.7	7,047.7	7,047.7	13.5	12.3	134.30	5,013.9	-4,050.1	6,137.9	6,113.9	23.92	256.559		
7,200.0	7,171.8	7,091.8	7,091.8	13.5	12.4	133.83	5,013.9	-4,050.1	6,155.2	6,131.4	23.83	258.245		
7,250.0	7,214.2	7,134.2	7,134.2	13.4	12.5	133.09	5,013.9	-4,050.1	6,175.0	6,151.2	23.74	260.075		
7,300.0	7,254.6	7,174.6	7,174.6	13.4	12.5	132.11	5,013.9	-4,050.1	6,197.1	6,173.4	23.66	261.890		
7,350.0	7,292.9	7,212.9	7,212.9	13.3	12.6	130.87	5,013.9	-4,050.1	6,221.4	6,197.7	23.61	263.506		
7,400.0	7,328.9	7,248.9	7,248.9	13.3	12.7	129.38	5,013.9	-4,050.1	6,247.8	6,224.2	23.60	264.717		
7,450.0	7,362.3	7,282.3	7,282.3	13.3	12.7	127.60	5,013.9	-4,050.1	6,276.2	6,252.6	23.66	265.311		
7,500.0	7,393.1	7,313.1	7,313.1	13.4	12.8	125.53	5,013.9	-4,050.1	6,306.5	6,282.8	23.79	265.090		
7,550.0	7,421.1	7,341.1	7,341.1	13.5	12.8	123.12	5,013.9	-4,050.1	6,338.6	6,314.6	24.02	263.901		
7,600.0	7,446.1	7,366.1	7,366.1	13.6	12.9	120.37	5,013.9	-4,050.1	6,372.3	6,348.0	24.35	261.670		
7,650.0	7,468.0	7,388.0	7,388.0	13.8	12.9	117.22	5,013.9	-4,050.1	6,407.5	6,382.7	24.79	258.431		
7,700.0	7,486.7	7,406.7	7,406.7	14.0	12.9	113.67	5,013.9	-4,050.1	6,443.9	6,418.6	25.34	254.340		
7,750.0	7,502.2	7,422.2	7,422.2	14.2	13.0	109.70	5,013.9	-4,050.1	6,481.5	6,455.5	25.96	249.677		
7,800.0	7,514.3	7,434.3	7,434.3	14.6	13.0	105.31	5,013.9	-4,050.1	6,520.0	6,493.4	26.63	244.812		
7,850.0	7,523.0	7,443.0	7,443.0	14.9	13.0	100.53	5,013.9	-4,050.1	6,559.3	6,532.0	27.31	240.161		
7,900.0	7,528.2	7,448.2	7,448.2	15.3	13.0	95.40	5,013.9	-4,050.1	6,599.1	6,571.2	27.95	236.128		
7,950.2	7,530.0	7,450.0	7,450.0	15.8	13.0	90.00	5,013.9	-4,050.1	6,639.6	6,611.1	28.49	233.027		
8,000.0	7,530.0	7,450.0	7,450.0	16.2	13.0	90.00	5,013.9	-4,050.1	6,679.8	6,650.8	28.98	230.528		
8,100.0	7,530.0	7,450.0	7,450.0	17.3	13.0	90.00	5,013.9	-4,050.1	6,761.0	6,731.0	30.04	225.056		
8,200.0	7,530.0	7,450.0	7,450.0	18.4	13.0	90.00	5,013.9	-4,050.1	6,842.7	6,811.5	31.21	219.221		
8,300.0	7,530.0	7,450.0	7,450.0	19.7	13.0	90.00	5,013.9	-4,050.1	6,925.0	6,892.5	32.47	213.247		
8,400.0	7,530.0	7,450.0	7,450.0	21.0	13.0	90.00	5,013.9	-4,050.1	7,007.6	6,973.8	33.81	207.292		
8,500.0	7,530.0	7,450.0	7,450.0	22.4	13.0	90.00	5,013.9	-4,050.1	7,090.8	7,055.6	35.20	201.463		
8,600.0	7,530.0	7,450.0	7,450.0	23.8	13.0	90.00	5,013.9	-4,050.1	7,174.3	7,137.7	36.64	195.831		
8,700.0	7,530.0	7,450.0	7,450.0	25.3	13.0	90.00	5,013.9	-4,050.1	7,258.3	7,220.2	38.11	190.434		
8,800.0	7,530.0	7,450.0	7,450.0	26.8	13.0	90.00	5,013.9	-4,050.1	7,342.6	7,303.0	39.63	185.295		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 5-6 (EXISTING) - FOUNDATION WELL - N													Offset Site Error:	0.0 ft
Survey Program: 7771-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	7,530.0	7,450.0	7,450.0	28.3	13.0	90.00	5,013.9	-4,050.1	7,427.4	7,386.2	41.17	180.420		
9,000.0	7,530.0	7,450.0	7,450.0	29.9	13.0	90.00	5,013.9	-4,050.1	7,512.5	7,469.8	42.73	175.808		
9,100.0	7,530.0	7,450.0	7,450.0	31.4	13.0	90.00	5,013.9	-4,050.1	7,598.0	7,553.7	44.32	171.452		
9,200.0	7,530.0	7,450.0	7,450.0	33.0	13.0	90.00	5,013.9	-4,050.1	7,683.9	7,637.9	45.92	167.341		
9,300.0	7,530.0	7,450.0	7,450.0	34.7	13.0	90.00	5,013.9	-4,050.1	7,770.0	7,722.5	47.53	163.464		
9,400.0	7,530.0	7,450.0	7,450.0	36.3	13.0	90.00	5,013.9	-4,050.1	7,856.6	7,807.4	49.16	159.807		
9,500.0	7,530.0	7,450.0	7,450.0	37.9	13.0	90.00	5,013.9	-4,050.1	7,943.4	7,892.6	50.80	156.356		
9,600.0	7,530.0	7,450.0	7,450.0	39.6	13.0	90.00	5,013.9	-4,050.1	8,030.5	7,978.1	52.45	153.098		
9,700.0	7,530.0	7,450.0	7,450.0	41.2	13.0	90.00	5,013.9	-4,050.1	8,117.9	8,063.8	54.11	150.020		
9,800.0	7,530.0	7,450.0	7,450.0	42.9	13.0	90.00	5,013.9	-4,050.1	8,205.7	8,149.9	55.78	147.111		
9,900.0	7,530.0	7,450.0	7,450.0	44.5	13.0	90.00	5,013.9	-4,050.1	8,293.7	8,236.2	57.45	144.359		
10,000.0	7,530.0	7,450.0	7,450.0	46.2	13.0	90.00	5,013.9	-4,050.1	8,381.9	8,322.8	59.13	141.752		
10,100.0	7,530.0	7,450.0	7,450.0	47.9	13.0	90.00	5,013.9	-4,050.1	8,470.4	8,409.6	60.82	139.281		
10,200.0	7,530.0	7,450.0	7,450.0	49.6	13.0	90.00	5,013.9	-4,050.1	8,559.2	8,496.7	62.50	136.937		
10,300.0	7,530.0	7,450.0	7,450.0	51.3	13.0	90.00	5,013.9	-4,050.1	8,648.2	8,584.0	64.20	134.711		
10,400.0	7,530.0	7,450.0	7,450.0	53.0	13.0	90.00	5,013.9	-4,050.1	8,737.5	8,671.6	65.90	132.595		
10,500.0	7,530.0	7,450.0	7,450.0	54.7	13.0	90.00	5,013.9	-4,050.1	8,827.0	8,759.4	67.60	130.582		
10,600.0	7,530.0	7,450.0	7,450.0	56.4	13.0	90.00	5,013.9	-4,050.1	8,916.7	8,847.4	69.30	128.665		
10,700.0	7,530.0	7,450.0	7,450.0	58.1	13.0	90.00	5,013.9	-4,050.1	9,006.6	8,935.6	71.01	126.838		
10,800.0	7,530.0	7,450.0	7,450.0	59.8	13.0	90.00	5,013.9	-4,050.1	9,096.8	9,024.1	72.72	125.094		
10,900.0	7,530.0	7,450.0	7,450.0	61.5	13.0	90.00	5,013.9	-4,050.1	9,187.1	9,112.7	74.43	123.430		
11,000.0	7,530.0	7,450.0	7,450.0	63.2	13.0	90.00	5,013.9	-4,050.1	9,277.7	9,201.5	76.15	121.839		
11,100.0	7,530.0	7,450.0	7,450.0	64.9	13.0	90.00	5,013.9	-4,050.1	9,368.4	9,290.5	77.86	120.318		
11,200.0	7,530.0	7,450.0	7,450.0	66.6	13.0	90.00	5,013.9	-4,050.1	9,459.3	9,379.7	79.58	118.862		
11,300.0	7,530.0	7,450.0	7,450.0	68.4	13.0	90.00	5,013.9	-4,050.1	9,550.4	9,469.1	81.30	117.467		
11,400.0	7,530.0	7,450.0	7,450.0	70.1	13.0	90.00	5,013.9	-4,050.1	9,641.7	9,558.7	83.03	116.129		
11,500.0	7,530.0	7,450.0	7,450.0	71.8	13.0	90.00	5,013.9	-4,050.1	9,733.2	9,648.4	84.75	114.846		
11,600.0	7,530.0	7,450.0	7,450.0	73.5	13.0	90.00	5,013.9	-4,050.1	9,824.8	9,738.3	86.47	113.614		
11,700.0	7,530.0	7,450.0	7,450.0	75.3	13.0	90.00	5,013.9	-4,050.1	9,916.6	9,828.4	88.20	112.431 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 7-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error:	0.0 ft
Survey Program: 7756-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	-36.35	3,707.4	-2,728.5	4,603.8					
100.0	100.0	26.0	26.0	0.2	0.0	-36.35	3,707.4	-2,728.5	4,603.2	4,603.0	0.20	N/A		
200.0	200.0	126.0	126.0	0.3	0.2	-36.35	3,707.4	-2,728.5	4,603.2	4,602.7	0.55	8,423.293		
300.0	300.0	226.0	226.0	0.5	0.4	-36.35	3,707.4	-2,728.5	4,603.2	4,602.3	0.90	5,140.095		
400.0	400.0	326.0	326.0	0.7	0.6	-36.35	3,707.4	-2,728.5	4,603.2	4,602.0	1.24	3,698.506		
500.0	500.0	426.0	426.0	0.8	0.7	-36.35	3,707.4	-2,728.5	4,603.2	4,601.6	1.59	2,888.421		
600.0	600.0	526.0	526.0	1.0	0.9	-13.35	3,707.4	-2,728.5	4,602.4	4,600.4	1.94	2,369.202		
700.0	700.0	626.0	626.0	1.2	1.1	-13.36	3,707.4	-2,728.5	4,599.8	4,597.5	2.29	2,007.654		
800.0	799.9	725.9	725.9	1.4	1.3	-13.38	3,707.4	-2,728.5	4,595.6	4,592.9	2.64	1,741.166		
848.7	848.4	774.4	774.4	1.5	1.4	-13.40	3,707.4	-2,728.5	4,592.9	4,590.1	2.81	1,635.273		
900.0	899.7	825.7	825.7	1.6	1.4	-13.40	3,707.4	-2,728.5	4,589.8	4,586.9	2.99	1,536.029		
1,000.0	999.5	925.5	925.5	1.8	1.6	-13.42	3,707.4	-2,728.5	4,583.9	4,580.6	3.34	1,373.337		
1,100.0	1,099.3	1,025.3	1,025.3	2.0	1.8	-13.44	3,707.4	-2,728.5	4,578.0	4,574.3	3.69	1,241.457		
1,200.0	1,199.1	1,125.1	1,125.1	2.2	2.0	-13.46	3,707.4	-2,728.5	4,572.1	4,568.1	4.04	1,132.403		
1,300.0	1,298.9	1,224.9	1,224.9	2.4	2.1	-13.47	3,707.4	-2,728.5	4,566.2	4,561.8	4.39	1,040.725		
1,400.0	1,398.8	1,324.8	1,324.8	2.6	2.3	-13.49	3,707.4	-2,728.5	4,560.3	4,555.5	4.74	962.579		
1,500.0	1,498.6	1,244.6	1,244.6	2.8	2.5	-13.51	3,707.4	-2,728.5	4,554.4	4,549.3	5.09	895.178		
1,600.0	1,598.4	1,524.4	1,524.4	3.0	2.7	-13.53	3,707.4	-2,728.5	4,548.4	4,543.0	5.44	836.450		
1,700.0	1,698.2	1,624.2	1,624.2	3.2	2.8	-13.55	3,707.4	-2,728.5	4,542.5	4,536.7	5.79	784.822		
1,800.0	1,798.0	1,724.0	1,724.0	3.4	3.0	-13.56	3,707.4	-2,728.5	4,536.6	4,530.5	6.14	739.081		
1,900.0	1,897.8	1,823.8	1,823.8	3.6	3.2	-13.58	3,707.4	-2,728.5	4,530.7	4,524.2	6.49	698.274		
2,000.0	1,997.7	1,923.7	1,923.7	3.8	3.4	-13.60	3,707.4	-2,728.5	4,524.8	4,518.0	6.84	661.645		
2,100.0	2,097.5	2,023.5	2,023.5	4.0	3.5	-13.62	3,707.4	-2,728.5	4,518.9	4,511.7	7.19	628.583		
2,200.0	2,197.3	2,123.3	2,123.3	4.2	3.7	-13.64	3,707.4	-2,728.5	4,513.0	4,505.4	7.54	598.592		
2,300.0	2,297.1	2,223.1	2,223.1	4.4	3.9	-13.65	3,707.4	-2,728.5	4,507.1	4,499.2	7.89	571.263		
2,400.0	2,396.9	2,322.9	2,322.9	4.6	4.1	-13.67	3,707.4	-2,728.5	4,501.2	4,492.9	8.24	546.256		
2,500.0	2,496.7	2,422.7	2,422.7	4.8	4.2	-13.69	3,707.4	-2,728.5	4,495.2	4,486.7	8.59	523.288		
2,600.0	2,596.5	2,522.5	2,522.5	5.0	4.4	-13.71	3,707.4	-2,728.5	4,489.3	4,480.4	8.94	502.120		
2,700.0	2,696.4	2,622.4	2,622.4	5.2	4.6	-13.73	3,707.4	-2,728.5	4,483.4	4,474.1	9.29	482.547		
2,800.0	2,796.2	2,722.2	2,722.2	5.4	4.8	-13.75	3,707.4	-2,728.5	4,477.5	4,467.9	9.64	464.396		
2,900.0	2,896.0	2,822.0	2,822.0	5.6	4.9	-13.77	3,707.4	-2,728.5	4,471.6	4,461.6	9.99	447.518		
3,000.0	2,995.8	2,921.8	2,921.8	5.8	5.1	-13.78	3,707.4	-2,728.5	4,465.7	4,455.4	10.34	431.783		
3,100.0	3,095.6	3,021.6	3,021.6	6.0	5.3	-13.80	3,707.4	-2,728.5	4,459.8	4,449.1	10.69	417.078		
3,200.0	3,195.4	3,121.4	3,121.4	6.2	5.4	-13.82	3,707.4	-2,728.5	4,453.9	4,442.8	11.04	403.307		
3,300.0	3,295.2	3,221.2	3,221.2	6.4	5.6	-13.84	3,707.4	-2,728.5	4,448.0	4,436.6	11.39	390.382		
3,400.0	3,395.1	3,321.1	3,321.1	6.6	5.8	-13.86	3,707.4	-2,728.5	4,442.1	4,430.3	11.74	378.229		
3,500.0	3,494.9	3,420.9	3,420.9	6.8	6.0	-13.88	3,707.4	-2,728.5	4,436.2	4,424.1	12.09	366.779		
3,600.0	3,594.7	3,520.7	3,520.7	7.0	6.1	-13.90	3,707.4	-2,728.5	4,430.3	4,417.8	12.45	355.974		
3,700.0	3,694.5	3,620.5	3,620.5	7.2	6.3	-13.92	3,707.4	-2,728.5	4,424.4	4,411.6	12.80	345.761		
3,800.0	3,794.3	3,720.3	3,720.3	7.4	6.5	-13.93	3,707.4	-2,728.5	4,418.5	4,405.3	13.15	336.092		
3,900.0	3,894.1	3,820.1	3,820.1	7.6	6.7	-13.95	3,707.4	-2,728.5	4,412.6	4,399.1	13.50	326.925		
4,000.0	3,994.0	3,920.0	3,920.0	7.8	6.8	-13.97	3,707.4	-2,728.5	4,406.7	4,392.8	13.85	318.222		
4,100.0	4,093.8	4,019.8	4,019.8	8.0	7.0	-13.99	3,707.4	-2,728.5	4,400.8	4,386.6	14.20	309.949		
4,200.0	4,193.6	4,119.6	4,119.6	8.2	7.2	-14.01	3,707.4	-2,728.5	4,394.9	4,380.3	14.55	302.074		
4,300.0	4,293.4	4,219.4	4,219.4	8.4	7.4	-14.03	3,707.4	-2,728.5	4,389.0	4,374.1	14.90	294.570		
4,400.0	4,393.2	4,319.2	4,319.2	8.6	7.5	-14.05	3,707.4	-2,728.5	4,383.1	4,367.8	15.25	287.410		
4,500.0	4,493.0	4,419.0	4,419.0	8.8	7.7	-14.07	3,707.4	-2,728.5	4,377.2	4,361.6	15.60	280.572		
4,600.0	4,592.8	4,518.8	4,518.8	9.0	7.9	-14.09	3,707.4	-2,728.5	4,371.3	4,355.3	15.95	274.034		
4,700.0	4,692.7	4,618.7	4,618.7	9.3	8.1	-14.11	3,707.4	-2,728.5	4,365.4	4,349.1	16.30	267.778		
4,800.0	4,792.5	4,718.5	4,718.5	9.5	8.2	-14.13	3,707.4	-2,728.5	4,359.5	4,342.8	16.65	261.785		
4,900.0	4,892.3	4,818.3	4,818.3	9.7	8.4	-14.15	3,707.4	-2,728.5	4,353.6	4,336.6	17.00	256.039		
5,000.0	4,992.1	4,918.1	4,918.1	9.9	8.6	-14.17	3,707.4	-2,728.5	4,347.7	4,330.3	17.35	250.525		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 7-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error:	0.0 ft
Survey Program: 7756-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	5,091.9	5,017.9	5,017.9	10.1	8.8	-14.19	3,707.4	-2,728.5	4,341.8	4,324.1	17.70	245.229		
5,200.0	5,191.7	5,117.7	5,117.7	10.3	8.9	-14.21	3,707.4	-2,728.5	4,335.9	4,317.8	18.06	240.139		
5,300.0	5,291.5	5,217.5	5,217.5	10.5	9.1	-14.22	3,707.4	-2,728.5	4,330.0	4,311.6	18.41	235.243		
5,400.0	5,391.4	5,317.4	5,317.4	10.7	9.3	-14.24	3,707.4	-2,728.5	4,324.1	4,305.3	18.76	230.530		
5,500.0	5,491.2	5,417.2	5,417.2	10.9	9.5	-14.26	3,707.4	-2,728.5	4,318.2	4,299.1	19.11	225.989		
5,600.0	5,591.0	5,517.0	5,517.0	11.1	9.6	-14.28	3,707.4	-2,728.5	4,312.3	4,292.8	19.46	221.612		
5,700.0	5,690.8	5,616.8	5,616.8	11.3	9.8	-14.30	3,707.4	-2,728.5	4,306.4	4,286.6	19.81	217.391		
5,800.0	5,790.6	5,716.6	5,716.6	11.5	10.0	-14.32	3,707.4	-2,728.5	4,300.5	4,280.3	20.16	213.316		
5,900.0	5,890.4	5,816.4	5,816.4	11.7	10.2	-14.34	3,707.4	-2,728.5	4,294.6	4,274.1	20.51	209.380		
6,000.0	5,990.3	5,916.3	5,916.3	11.9	10.3	-14.36	3,707.4	-2,728.5	4,288.7	4,267.9	20.86	205.576		
6,100.0	6,090.1	6,016.1	6,016.1	12.1	10.5	-14.38	3,707.4	-2,728.5	4,282.8	4,261.6	21.21	201.898		
6,200.0	6,189.9	6,115.9	6,115.9	12.3	10.7	-14.40	3,707.4	-2,728.5	4,276.9	4,255.4	21.56	198.340		
6,300.0	6,289.7	6,215.7	6,215.7	12.5	10.8	-14.43	3,707.4	-2,728.5	4,271.0	4,249.1	21.91	194.896		
6,400.0	6,389.5	6,315.5	6,315.5	12.7	11.0	-14.45	3,707.4	-2,728.5	4,265.2	4,242.9	22.27	191.560		
6,500.0	6,489.3	6,415.3	6,415.3	12.9	11.2	-14.47	3,707.4	-2,728.5	4,259.3	4,236.6	22.62	188.328		
6,600.0	6,589.1	6,515.1	6,515.1	13.1	11.4	-14.49	3,707.4	-2,728.5	4,253.4	4,230.4	22.97	185.194		
6,700.0	6,689.0	6,615.0	6,615.0	13.3	11.5	-14.51	3,707.4	-2,728.5	4,247.5	4,224.2	23.32	182.154		
6,785.3	6,774.1	6,700.1	6,700.1	13.5	11.7	-14.52	3,707.4	-2,728.5	4,242.5	4,218.8	23.62	179.634		
6,800.0	6,788.8	6,714.8	6,714.8	13.5	11.7	-3.46	3,707.4	-2,728.5	4,241.7	4,218.0	23.67	179.170		
6,838.7	6,827.5	6,753.5	6,753.5	13.6	11.8	90.00	3,707.4	-2,728.5	4,240.9	4,217.1	23.80	178.177	CC, ES	
6,850.0	6,838.8	6,764.8	6,764.8	13.6	11.8	107.10	3,707.4	-2,728.5	4,241.0	4,217.1	23.83	177.941		
6,900.0	6,888.6	6,814.6	6,814.6	13.6	11.9	128.97	3,707.4	-2,728.5	4,243.0	4,219.0	23.94	177.211		
6,950.0	6,938.1	6,864.1	6,864.1	13.7	12.0	133.94	3,707.4	-2,728.5	4,247.7	4,223.7	24.00	176.961		
7,000.0	6,987.0	6,913.0	6,913.0	13.7	12.1	135.89	3,707.4	-2,728.5	4,255.2	4,231.2	24.02	177.169		
7,050.0	7,035.0	6,961.0	6,961.0	13.6	12.1	136.73	3,707.4	-2,728.5	4,265.4	4,241.4	23.99	177.803		
7,100.0	7,082.0	7,008.0	7,008.0	13.6	12.2	137.00	3,707.4	-2,728.5	4,278.2	4,254.3	23.92	178.821		
7,150.0	7,127.7	7,053.7	7,053.7	13.5	12.3	136.88	3,707.4	-2,728.5	4,293.7	4,269.9	23.83	180.170		
7,200.0	7,171.8	7,097.8	7,097.8	13.5	12.4	136.47	3,707.4	-2,728.5	4,311.8	4,288.1	23.72	181.780		
7,250.0	7,214.2	7,140.2	7,140.2	13.4	12.5	135.80	3,707.4	-2,728.5	4,332.3	4,308.7	23.60	183.560		
7,300.0	7,254.6	7,180.6	7,180.6	13.4	12.5	134.89	3,707.4	-2,728.5	4,355.3	4,331.8	23.49	185.397		
7,350.0	7,292.9	7,218.9	7,218.9	13.3	12.6	133.72	3,707.4	-2,728.5	4,380.6	4,357.2	23.41	187.151		
7,400.0	7,328.9	7,254.9	7,254.9	13.3	12.7	132.28	3,707.4	-2,728.5	4,408.1	4,384.7	23.37	188.660		
7,450.0	7,362.3	7,288.3	7,288.3	13.3	12.7	130.56	3,707.4	-2,728.5	4,437.7	4,414.3	23.39	189.748		
7,500.0	7,393.1	7,319.1	7,319.1	13.4	12.8	128.52	3,707.4	-2,728.5	4,469.3	4,445.8	23.49	190.235		
7,550.0	7,421.1	7,347.1	7,347.1	13.5	12.8	126.12	3,707.4	-2,728.5	4,502.7	4,479.0	23.70	189.968		
7,600.0	7,446.1	7,372.1	7,372.1	13.6	12.9	123.32	3,707.4	-2,728.5	4,537.8	4,513.8	24.03	188.846		
7,650.0	7,468.0	7,394.0	7,394.0	13.8	12.9	120.07	3,707.4	-2,728.5	4,574.5	4,550.0	24.48	186.853		
7,700.0	7,486.7	7,412.7	7,412.7	14.0	12.9	116.34	3,707.4	-2,728.5	4,612.5	4,587.5	25.06	184.086		
7,750.0	7,502.2	7,428.2	7,428.2	14.2	13.0	112.08	3,707.4	-2,728.5	4,651.7	4,626.0	25.73	180.760		
7,800.0	7,514.3	7,440.3	7,440.3	14.6	13.0	107.29	3,707.4	-2,728.5	4,691.9	4,665.5	26.48	177.197		
7,850.0	7,523.0	7,449.0	7,449.0	14.9	13.0	101.97	3,707.4	-2,728.5	4,733.0	4,705.7	27.23	173.790		
7,900.0	7,528.2	7,454.2	7,454.2	15.3	13.0	96.18	3,707.4	-2,728.5	4,774.6	4,746.7	27.93	170.942		
7,950.2	7,530.0	7,456.0	7,456.0	15.8	13.0	90.00	3,707.4	-2,728.5	4,816.8	4,788.3	28.50	168.993		
8,000.0	7,530.0	7,456.0	7,456.0	16.2	13.0	90.00	3,707.4	-2,728.5	4,858.9	4,829.9	28.99	167.626		
8,100.0	7,530.0	7,456.0	7,456.0	17.3	13.0	90.00	3,707.4	-2,728.5	4,943.8	4,913.7	30.05	164.508		
8,200.0	7,530.0	7,456.0	7,456.0	18.4	13.0	90.00	3,707.4	-2,728.5	5,029.3	4,998.0	31.22	161.068		
8,300.0	7,530.0	7,456.0	7,456.0	19.7	13.0	90.00	3,707.4	-2,728.5	5,115.3	5,082.8	32.48	157.468		
8,400.0	7,530.0	7,456.0	7,456.0	21.0	13.0	90.00	3,707.4	-2,728.5	5,201.8	5,167.9	33.82	153.824		
8,500.0	7,530.0	7,456.0	7,456.0	22.4	13.0	90.00	3,707.4	-2,728.5	5,288.7	5,253.5	35.21	150.219		
8,600.0	7,530.0	7,456.0	7,456.0	23.8	13.0	90.00	3,707.4	-2,728.5	5,376.2	5,339.5	36.65	146.706		
8,700.0	7,530.0	7,456.0	7,456.0	25.3	13.0	90.00	3,707.4	-2,728.5	5,464.0	5,425.9	38.12	143.319		
8,800.0	7,530.0	7,456.0	7,456.0	26.8	13.0	90.00	3,707.4	-2,728.5	5,552.3	5,512.6	39.64	140.078		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 7-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error:	0.0 ft
Survey Program: 7756-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	7,530.0	7,456.0	7,456.0	28.3	13.0	90.00	3,707.4	-2,728.5	5,640.9	5,599.8	41.18	136.990		
9,000.0	7,530.0	7,456.0	7,456.0	29.9	13.0	90.00	3,707.4	-2,728.5	5,730.0	5,687.2	42.74	134.060		
9,100.0	7,530.0	7,456.0	7,456.0	31.4	13.0	90.00	3,707.4	-2,728.5	5,819.4	5,775.0	44.33	131.285		
9,200.0	7,530.0	7,456.0	7,456.0	33.0	13.0	90.00	3,707.4	-2,728.5	5,909.1	5,863.2	45.93	128.661		
9,300.0	7,530.0	7,456.0	7,456.0	34.7	13.0	90.00	3,707.4	-2,728.5	5,999.2	5,951.6	47.54	126.181		
9,400.0	7,530.0	7,456.0	7,456.0	36.3	13.0	90.00	3,707.4	-2,728.5	6,089.5	6,040.4	49.17	123.838		
9,500.0	7,530.0	7,456.0	7,456.0	37.9	13.0	90.00	3,707.4	-2,728.5	6,180.2	6,129.4	50.81	121.624		
9,600.0	7,530.0	7,456.0	7,456.0	39.6	13.0	90.00	3,707.4	-2,728.5	6,271.1	6,218.7	52.46	119.532		
9,700.0	7,530.0	7,456.0	7,456.0	41.2	13.0	90.00	3,707.4	-2,728.5	6,362.4	6,308.2	54.12	117.554		
9,800.0	7,530.0	7,456.0	7,456.0	42.9	13.0	90.00	3,707.4	-2,728.5	6,453.8	6,398.0	55.79	115.683		
9,900.0	7,530.0	7,456.0	7,456.0	44.5	13.0	90.00	3,707.4	-2,728.5	6,545.6	6,488.1	57.46	113.911		
10,000.0	7,530.0	7,456.0	7,456.0	46.2	13.0	90.00	3,707.4	-2,728.5	6,637.5	6,578.4	59.14	112.232		
10,100.0	7,530.0	7,456.0	7,456.0	47.9	13.0	90.00	3,707.4	-2,728.5	6,729.7	6,668.9	60.83	110.639		
10,200.0	7,530.0	7,456.0	7,456.0	49.6	13.0	90.00	3,707.4	-2,728.5	6,822.1	6,759.6	62.52	109.128		
10,300.0	7,530.0	7,456.0	7,456.0	51.3	13.0	90.00	3,707.4	-2,728.5	6,914.8	6,850.6	64.21	107.692		
10,400.0	7,530.0	7,456.0	7,456.0	53.0	13.0	90.00	3,707.4	-2,728.5	7,007.6	6,941.7	65.91	106.326		
10,500.0	7,530.0	7,456.0	7,456.0	54.7	13.0	90.00	3,707.4	-2,728.5	7,100.6	7,033.0	67.61	105.027		
10,600.0	7,530.0	7,456.0	7,456.0	56.4	13.0	90.00	3,707.4	-2,728.5	7,193.8	7,124.5	69.31	103.789		
10,700.0	7,530.0	7,456.0	7,456.0	58.1	13.0	90.00	3,707.4	-2,728.5	7,287.2	7,216.2	71.02	102.609		
10,800.0	7,530.0	7,456.0	7,456.0	59.8	13.0	90.00	3,707.4	-2,728.5	7,380.8	7,308.1	72.73	101.482		
10,900.0	7,530.0	7,456.0	7,456.0	61.5	13.0	90.00	3,707.4	-2,728.5	7,474.5	7,400.1	74.44	100.407		
11,000.0	7,530.0	7,456.0	7,456.0	63.2	13.0	90.00	3,707.4	-2,728.5	7,568.4	7,492.3	76.16	99.379		
11,100.0	7,530.0	7,456.0	7,456.0	64.9	13.0	90.00	3,707.4	-2,728.5	7,662.5	7,584.6	77.87	98.395		
11,200.0	7,530.0	7,456.0	7,456.0	66.6	13.0	90.00	3,707.4	-2,728.5	7,756.7	7,677.1	79.59	97.454		
11,300.0	7,530.0	7,456.0	7,456.0	68.4	13.0	90.00	3,707.4	-2,728.5	7,851.0	7,769.7	81.31	96.552		
11,400.0	7,530.0	7,456.0	7,456.0	70.1	13.0	90.00	3,707.4	-2,728.5	7,945.5	7,862.4	83.04	95.687		
11,500.0	7,530.0	7,456.0	7,456.0	71.8	13.0	90.00	3,707.4	-2,728.5	8,040.1	7,955.3	84.76	94.857		
11,600.0	7,530.0	7,456.0	7,456.0	73.5	13.0	90.00	3,707.4	-2,728.5	8,134.8	8,048.3	86.49	94.060		
11,700.0	7,530.0	7,456.0	7,456.0	75.3	13.0	90.00	3,707.4	-2,728.5	8,229.7	8,141.5	88.21	93.294		
11,800.0	7,530.0	7,456.0	7,456.0	77.0	13.0	90.00	3,707.4	-2,728.5	8,324.7	8,234.7	89.94	92.558		
11,900.0	7,530.0	7,456.0	7,456.0	78.7	13.0	90.00	3,707.4	-2,728.5	8,419.8	8,328.1	91.67	91.850		
12,000.0	7,530.0	7,456.0	7,456.0	80.4	13.0	90.00	3,707.4	-2,728.5	8,515.0	8,421.6	93.40	91.168		
12,100.0	7,530.0	7,456.0	7,456.0	82.2	13.0	90.00	3,707.4	-2,728.5	8,610.3	8,515.2	95.13	90.511		
12,200.0	7,530.0	7,456.0	7,456.0	83.9	13.0	90.00	3,707.4	-2,728.5	8,705.7	8,608.9	96.86	89.877		
12,300.0	7,530.0	7,456.0	7,456.0	85.6	13.0	90.00	3,707.4	-2,728.5	8,801.3	8,702.7	98.60	89.266		
12,400.0	7,530.0	7,456.0	7,456.0	87.4	13.0	90.00	3,707.4	-2,728.5	8,896.9	8,796.6	100.33	88.677		
12,500.0	7,530.0	7,456.0	7,456.0	89.1	13.0	90.00	3,707.4	-2,728.5	8,992.6	8,890.5	102.06	88.108		
12,600.0	7,530.0	7,456.0	7,456.0	90.8	13.0	90.00	3,707.4	-2,728.5	9,088.4	8,984.6	103.80	87.558		
12,700.0	7,530.0	7,456.0	7,456.0	92.6	13.0	90.00	3,707.4	-2,728.5	9,184.3	9,078.8	105.54	87.026		
12,800.0	7,530.0	7,456.0	7,456.0	94.3	13.0	90.00	3,707.4	-2,728.5	9,280.3	9,173.0	107.27	86.512		
12,900.0	7,530.0	7,456.0	7,456.0	96.0	13.0	90.00	3,707.4	-2,728.5	9,376.4	9,267.4	109.01	86.014		
13,000.0	7,530.0	7,456.0	7,456.0	97.8	13.0	90.00	3,707.4	-2,728.5	9,472.5	9,361.8	110.75	85.533		
13,100.0	7,530.0	7,456.0	7,456.0	99.5	13.0	90.00	3,707.4	-2,728.5	9,568.8	9,456.3	112.49	85.066		
13,200.0	7,530.0	7,456.0	7,456.0	101.3	13.0	90.00	3,707.4	-2,728.5	9,665.1	9,550.9	114.23	84.614		
13,300.0	7,530.0	7,456.0	7,456.0	103.0	13.0	90.00	3,707.4	-2,728.5	9,761.5	9,645.5	115.96	84.176		
13,400.0	7,530.0	7,456.0	7,456.0	104.7	13.0	90.00	3,707.4	-2,728.5	9,857.9	9,740.2	117.70	83.751		
13,500.0	7,530.0	7,456.0	7,456.0	106.5	13.0	90.00	3,707.4	-2,728.5	9,954.5	9,835.0	119.45	83.339 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BILLINGS 21-7 (EXISTING) - KPK WELL - SURVE													Offset Site Error:	0.0 ft
Survey Program: 903-													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-95.93	-297.5	-2,861.6	2,877.2					
100.0	100.0	114.7	114.7	0.2	0.0	-95.94	-297.6	-2,861.9	2,877.4	2,877.2	0.15	N/A		
200.0	200.0	202.3	202.3	0.3	0.0	-95.94	-297.9	-2,862.6	2,878.2	2,877.8	0.33	8,817.304		
300.0	300.0	289.8	289.8	0.5	0.0	-95.95	-298.4	-2,863.6	2,879.4	2,878.9	0.50	5,747.551		
400.0	400.0	377.4	377.3	0.7	0.0	-95.96	-299.0	-2,865.0	2,881.0	2,880.3	0.68	4,264.852		
500.0	500.0	464.9	464.8	0.8	0.0	-95.97	-299.8	-2,866.7	2,883.1	2,882.2	0.85	3,391.567		
600.0	600.0	552.4	552.3	1.0	0.0	-72.97	-300.8	-2,868.8	2,885.4	2,884.3	1.03	2,814.878		
700.0	700.0	639.8	639.7	1.2	0.0	-73.01	-301.9	-2,871.3	2,887.5	2,886.3	1.20	2,401.611		
800.0	799.9	727.2	727.0	1.4	0.0	-73.08	-303.3	-2,874.1	2,889.6	2,888.3	1.38	2,086.767		
848.7	848.4	769.7	769.5	1.5	0.0	-73.13	-304.0	-2,875.6	2,890.6	2,889.2	1.48	1,958.816		
900.0	899.7	814.5	814.2	1.6	0.0	-73.19	-304.7	-2,877.3	2,891.7	2,890.2	1.57	1,838.707		
1,000.0	999.5	903.0	902.7	1.8	0.0	-73.32	-306.4	-2,880.9	2,894.2	2,892.5	1.76	1,640.872		
1,100.0	1,099.3	1,010.0	1,009.5	2.0	0.0	-73.47	-308.6	-2,885.3	2,896.8	2,894.9	1.96	1,480.073		
1,200.0	1,199.1	1,118.6	1,118.0	2.2	0.0	-73.63	-310.8	-2,889.4	2,899.1	2,897.0	2.15	1,347.012		
1,300.0	1,298.9	1,227.2	1,226.6	2.4	0.0	-73.80	-313.2	-2,893.2	2,901.2	2,898.8	2.35	1,235.271		
1,400.0	1,398.8	1,335.8	1,335.1	2.6	0.0	-73.96	-315.6	-2,896.6	2,902.9	2,900.3	2.55	1,140.209		
1,500.0	1,498.6	1,444.4	1,443.6	2.8	0.0	-74.13	-318.1	-2,899.7	2,904.3	2,901.6	2.74	1,058.408		
1,600.0	1,598.4	1,553.0	1,552.1	3.0	0.0	-74.29	-320.6	-2,902.5	2,905.5	2,902.5	2.94	987.306		
1,700.0	1,698.2	1,657.5	1,656.6	3.2	0.0	-74.46	-323.1	-2,904.9	2,906.4	2,903.3	3.14	924.969		
1,800.0	1,798.0	1,760.4	1,759.4	3.4	0.0	-74.61	-325.2	-2,907.1	2,907.2	2,903.9	3.34	869.925		
1,900.0	1,897.8	1,863.3	1,862.3	3.6	0.0	-74.76	-327.1	-2,909.3	2,908.0	2,904.4	3.54	820.976		
2,000.0	1,997.7	1,966.2	1,965.2	3.8	0.0	-74.91	-328.8	-2,911.4	2,908.6	2,904.9	3.74	777.172		
2,100.0	2,097.5	2,069.2	2,068.1	4.0	0.0	-75.05	-330.2	-2,913.4	2,909.2	2,905.2	3.94	737.745		
2,200.0	2,197.3	2,172.2	2,171.1	4.2	0.0	-75.19	-331.3	-2,915.3	2,909.6	2,905.5	4.14	702.074		
2,300.0	2,297.1	2,275.2	2,274.1	4.4	0.0	-75.32	-332.2	-2,917.2	2,910.0	2,905.6	4.35	669.649		
2,400.0	2,396.9	2,378.3	2,377.2	4.6	0.0	-75.44	-332.8	-2,919.0	2,910.3	2,905.7	4.55	640.045		
2,500.0	2,496.7	2,477.8	2,476.7	4.8	0.0	-75.56	-333.1	-2,920.7	2,910.5	2,905.7	4.75	612.925		
2,600.0	2,596.5	2,577.0	2,575.9	5.0	0.0	-75.66	-332.7	-2,922.5	2,910.7	2,905.8	4.95	588.005		
2,700.0	2,696.4	2,676.3	2,675.1	5.2	0.0	-75.75	-331.9	-2,924.4	2,911.0	2,905.9	5.15	565.032		
2,800.0	2,796.2	2,775.6	2,774.4	5.4	0.0	-75.84	-330.5	-2,926.5	2,911.3	2,906.0	5.35	543.787		
2,900.0	2,896.0	3,260.6	3,258.1	5.6	0.0	-76.21	-316.9	-2,903.3	2,903.3	2,897.8	5.56	522.459		
3,000.0	2,995.8	3,330.5	3,327.6	5.8	0.0	-76.25	-313.8	-2,896.0	2,890.9	2,885.1	5.76	501.978		
3,100.0	3,095.6	3,423.5	3,420.0	6.0	0.0	-76.32	-310.4	-2,887.1	2,879.4	2,873.4	5.96	483.021		
3,200.0	3,195.4	3,558.9	3,554.7	6.2	0.0	-76.45	-306.5	-2,872.9	2,867.2	2,861.0	6.16	465.169		
3,300.0	3,295.2	3,667.2	3,662.2	6.4	0.0	-76.55	-303.0	-2,860.6	2,854.0	2,847.6	6.37	448.307		
3,400.0	3,395.1	3,748.1	3,742.6	6.6	0.0	-76.62	-300.1	-2,851.7	2,841.1	2,834.6	6.57	432.531		
3,500.0	3,494.9	3,820.6	3,814.7	6.8	0.0	-76.68	-297.4	-2,844.3	2,829.0	2,822.2	6.77	417.808		
3,600.0	3,594.7	3,896.0	3,889.7	7.0	0.0	-76.73	-294.4	-2,837.4	2,817.9	2,810.9	6.97	404.087		
3,700.0	3,694.5	3,956.2	3,949.6	7.2	0.0	-76.77	-292.1	-2,832.6	2,807.9	2,800.8	7.18	391.293		
3,800.0	3,794.3	4,028.2	4,021.4	7.4	0.0	-76.83	-289.5	-2,827.6	2,799.1	2,791.7	7.38	379.353		
3,900.0	3,894.1	4,197.8	4,190.5	7.6	0.0	-76.92	-282.0	-2,815.7	2,790.5	2,782.9	7.58	368.065		
4,000.0	3,994.0	4,337.5	4,329.2	7.8	0.0	-76.93	-271.6	-2,802.9	2,778.7	2,771.0	7.78	356.986		
4,100.0	4,093.8	4,439.2	4,429.9	8.0	0.0	-76.87	-261.3	-2,793.2	2,766.3	2,758.3	7.99	346.391		
4,200.0	4,193.6	4,520.7	4,510.6	8.2	0.0	-76.82	-252.6	-2,785.8	2,754.1	2,745.9	8.19	336.359		
4,300.0	4,293.4	4,649.6	4,638.2	8.4	0.0	-76.74	-238.9	-2,774.3	2,742.2	2,733.8	8.39	326.851		
4,400.0	4,393.2	4,758.1	4,745.5	8.6	0.0	-76.66	-226.9	-2,763.5	2,729.1	2,720.5	8.59	317.648		
4,500.0	4,493.0	4,843.0	4,829.5	8.8	0.0	-76.62	-218.2	-2,755.1	2,716.2	2,707.4	8.79	308.882		
4,600.0	4,592.8	4,925.0	4,910.8	9.0	0.0	-76.57	-209.9	-2,747.4	2,703.9	2,694.9	9.00	300.572		
4,700.0	4,692.7	5,023.1	5,007.9	9.3	0.0	-76.51	-199.9	-2,738.6	2,691.9	2,682.7	9.20	292.670		
4,800.0	4,792.5	5,121.8	5,105.7	9.5	0.0	-76.45	-189.5	-2,729.7	2,679.9	2,670.5	9.40	285.109		
4,900.0	4,892.3	5,126.0	5,109.8	9.7	0.0	-76.45	-189.0	-2,729.4	2,669.7	2,660.1	9.60	278.029		
5,000.0	4,992.1	5,126.0	5,109.8	9.9	0.0	-76.45	-189.0	-2,729.4	2,663.1	2,653.3	9.80	271.619		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BILLINGS 21-7 (EXISTING) - KPK WELL - SURVE													Offset Site Error:	0.0 ft
Survey Program: 903-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)						
5,100.0	5,091.9	5,126.0	5,109.8	10.1	0.0	-76.45	-189.0	-2,729.4	2,660.3	2,650.3	10.01	265.842	CC, ES	
5,124.9	5,116.8	5,126.0	5,109.8	10.1	0.0	-76.45	-189.0	-2,729.4	2,660.2	2,650.1	10.06	264.499		
5,200.0	5,191.7	5,126.0	5,109.8	10.3	0.0	-76.45	-189.0	-2,729.4	2,661.2	2,651.0	10.21	260.663		
5,300.0	5,291.5	5,126.0	5,109.8	10.5	0.0	-76.45	-189.0	-2,729.4	2,665.9	2,655.5	10.41	256.045		
5,400.0	5,391.4	5,126.0	5,109.8	10.7	0.0	-76.45	-189.0	-2,729.4	2,674.4	2,663.7	10.61	251.954		
5,500.0	5,491.2	5,126.0	5,109.8	10.9	0.0	-76.45	-189.0	-2,729.4	2,686.5	2,675.7	10.82	248.359		
5,600.0	5,591.0	5,126.0	5,109.8	11.1	0.0	-76.45	-189.0	-2,729.4	2,702.3	2,691.2	11.02	245.226		
5,700.0	5,690.8	5,126.0	5,109.8	11.3	0.0	-76.45	-189.0	-2,729.4	2,721.6	2,710.4	11.22	242.526		
5,800.0	5,790.6	5,126.0	5,109.8	11.5	0.0	-76.45	-189.0	-2,729.4	2,744.5	2,733.1	11.42	240.228		
5,900.0	5,890.4	5,126.0	5,109.8	11.7	0.0	-76.45	-189.0	-2,729.4	2,770.8	2,759.2	11.63	238.305		
6,000.0	5,990.3	5,126.0	5,109.8	11.9	0.0	-76.45	-189.0	-2,729.4	2,800.4	2,788.6	11.83	236.729		
6,100.0	6,090.1	5,126.0	5,109.8	12.1	0.0	-76.45	-189.0	-2,729.4	2,833.3	2,821.2	12.03	235.473		
6,200.0	6,189.9	5,126.0	5,109.8	12.3	0.0	-76.45	-189.0	-2,729.4	2,869.2	2,857.0	12.23	234.513		
6,300.0	6,289.7	5,126.0	5,109.8	12.5	0.0	-76.45	-189.0	-2,729.4	2,908.2	2,895.7	12.44	233.825		
6,400.0	6,389.5	5,126.0	5,109.8	12.7	0.0	-76.45	-189.0	-2,729.4	2,950.0	2,937.3	12.64	233.387		
6,500.0	6,489.3	5,126.0	5,109.8	12.9	0.0	-76.45	-189.0	-2,729.4	2,994.6	2,981.7	12.84	233.176		
6,600.0	6,589.1	5,126.0	5,109.8	13.1	0.0	-76.45	-189.0	-2,729.4	3,041.8	3,028.7	13.05	233.175		
6,700.0	6,689.0	5,126.0	5,109.8	13.3	0.0	-76.45	-189.0	-2,729.4	3,091.5	3,078.3	13.25	233.363		
6,785.3	6,774.1	5,126.0	5,109.8	13.5	0.0	-76.45	-189.0	-2,729.4	3,135.8	3,122.4	13.42	233.660		
6,800.0	6,788.8	5,126.0	5,109.8	13.5	0.0	-66.14	-189.0	-2,729.4	3,143.6	3,130.2	13.46	233.611		
6,850.0	6,838.8	5,126.0	5,109.8	13.6	0.0	41.92	-189.0	-2,729.4	3,170.1	3,156.6	13.55	234.028		
6,900.0	6,888.6	5,126.0	5,109.8	13.6	0.0	61.45	-189.0	-2,729.4	3,196.5	3,182.9	13.60	235.081		
6,950.0	6,938.1	5,126.0	5,109.8	13.7	0.0	64.23	-189.0	-2,729.4	3,222.6	3,209.0	13.61	236.775		
7,000.0	6,987.0	5,126.0	5,109.8	13.7	0.0	64.18	-189.0	-2,729.4	3,248.4	3,234.9	13.59	239.106		
7,050.0	7,035.0	5,126.0	5,109.8	13.6	0.0	63.22	-189.0	-2,729.4	3,273.8	3,260.3	13.52	242.062		
7,100.0	7,082.0	5,126.0	5,109.8	13.6	0.0	61.91	-189.0	-2,729.4	3,298.6	3,285.1	13.43	245.621		
7,150.0	7,127.7	5,126.0	5,109.8	13.5	0.0	60.46	-189.0	-2,729.4	3,322.6	3,309.3	13.30	249.747		
7,200.0	7,171.8	5,126.0	5,109.8	13.5	0.0	58.98	-189.0	-2,729.4	3,346.0	3,332.8	13.15	254.388		
7,250.0	7,214.2	5,126.0	5,109.8	13.4	0.0	57.52	-189.0	-2,729.4	3,368.4	3,355.4	12.98	259.470		
7,300.0	7,254.6	5,126.0	5,109.8	13.4	0.0	56.11	-189.0	-2,729.4	3,389.8	3,377.0	12.80	264.894		
7,350.0	7,292.9	5,126.0	5,109.8	13.3	0.0	54.78	-189.0	-2,729.4	3,410.3	3,397.6	12.61	270.529		
7,400.0	7,328.9	5,126.0	5,109.8	13.3	0.0	53.54	-189.0	-2,729.4	3,429.5	3,417.1	12.42	276.208		
7,450.0	7,362.3	5,126.0	5,109.8	13.3	0.0	52.39	-189.0	-2,729.4	3,447.6	3,435.4	12.24	281.726		
7,500.0	7,393.1	5,126.0	5,109.8	13.4	0.0	51.34	-189.0	-2,729.4	3,464.4	3,452.3	12.08	286.840		
7,550.0	7,421.1	5,126.0	5,109.8	13.5	0.0	50.38	-189.0	-2,729.4	3,479.8	3,467.9	11.95	291.277		
7,600.0	7,446.1	5,126.0	5,109.8	13.6	0.0	49.53	-189.0	-2,729.4	3,493.9	3,482.0	11.85	294.749		
7,650.0	7,468.0	5,126.0	5,109.8	13.8	0.0	48.78	-189.0	-2,729.4	3,506.5	3,494.7	11.81	296.979		
7,700.0	7,486.7	5,126.0	5,109.8	14.0	0.0	48.12	-189.0	-2,729.4	3,517.6	3,505.8	11.81	297.728		
7,750.0	7,502.2	5,126.0	5,109.8	14.2	0.0	47.56	-189.0	-2,729.4	3,527.2	3,515.3	11.88	296.831		
7,800.0	7,514.3	5,126.0	5,109.8	14.6	0.0	47.10	-189.0	-2,729.4	3,535.2	3,523.2	12.02	294.216		
7,850.0	7,523.0	5,126.0	5,109.8	14.9	0.0	46.73	-189.0	-2,729.4	3,541.6	3,529.4	12.22	289.922		
7,900.0	7,528.2	5,126.0	5,109.8	15.3	0.0	46.45	-189.0	-2,729.4	3,546.4	3,533.9	12.48	284.092		
7,950.2	7,530.0	5,126.0	5,109.8	15.8	0.0	46.27	-189.0	-2,729.4	3,549.6	3,536.8	12.82	276.913		
8,000.0	7,530.0	5,126.0	5,109.8	16.2	0.0	46.27	-189.0	-2,729.4	3,552.3	3,539.1	13.17	269.735		
8,100.0	7,530.0	5,126.0	5,109.8	17.3	0.0	46.27	-189.0	-2,729.4	3,559.8	3,545.8	13.94	255.440		
8,200.0	7,530.0	5,126.0	5,109.8	18.4	0.0	46.27	-189.0	-2,729.4	3,570.0	3,555.2	14.77	241.668		
8,300.0	7,530.0	5,126.0	5,109.8	19.7	0.0	46.27	-189.0	-2,729.4	3,583.0	3,567.4	15.67	228.683		
8,400.0	7,530.0	5,126.0	5,109.8	21.0	0.0	46.27	-189.0	-2,729.4	3,598.8	3,582.2	16.61	216.619		
8,500.0	7,530.0	5,126.0	5,109.8	22.4	0.0	46.27	-189.0	-2,729.4	3,617.2	3,599.6	17.60	205.521		
8,600.0	7,530.0	5,126.0	5,109.8	23.8	0.0	46.27	-189.0	-2,729.4	3,638.3	3,619.7	18.62	195.376		
8,700.0	7,530.0	5,126.0	5,109.8	25.3	0.0	46.27	-189.0	-2,729.4	3,662.1	3,642.4	19.67	186.141		
8,800.0	7,530.0	5,126.0	5,109.8	26.8	0.0	46.27	-189.0	-2,729.4	3,688.3	3,667.6	20.75	177.751		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BILLINGS 21-7 (EXISTING) - KPK WELL - SURVE													Offset Site Error:	0.0 ft
Survey Program: 903-Reference													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,530.0	5,126.0	5,109.8	28.3	0.0	46.27	-189.0	-2,729.4	3,717.1	3,695.3	21.85	170.137		
9,000.0	7,530.0	5,126.0	5,109.8	29.9	0.0	46.27	-189.0	-2,729.4	3,748.4	3,725.4	22.96	163.228		
9,100.0	7,530.0	5,126.0	5,109.8	31.4	0.0	46.27	-189.0	-2,729.4	3,782.0	3,757.9	24.10	156.956		
9,200.0	7,530.0	5,126.0	5,109.8	33.0	0.0	46.27	-189.0	-2,729.4	3,817.9	3,792.7	25.24	151.258		
9,300.0	7,530.0	5,126.0	5,109.8	34.7	0.0	46.27	-189.0	-2,729.4	3,856.1	3,829.7	26.40	146.074		
9,400.0	7,530.0	5,126.0	5,109.8	36.3	0.0	46.27	-189.0	-2,729.4	3,896.5	3,868.9	27.57	141.352		
9,500.0	7,530.0	5,126.0	5,109.8	37.9	0.0	46.27	-189.0	-2,729.4	3,939.0	3,910.3	28.74	137.045		
9,600.0	7,530.0	5,126.0	5,109.8	39.6	0.0	46.27	-189.0	-2,729.4	3,983.6	3,953.7	29.93	133.109		
9,700.0	7,530.0	5,126.0	5,109.8	41.2	0.0	46.27	-189.0	-2,729.4	4,030.2	3,999.0	31.12	129.507		
9,800.0	7,530.0	5,126.0	5,109.8	42.9	0.0	46.27	-189.0	-2,729.4	4,078.6	4,046.3	32.32	126.206		
9,900.0	7,530.0	5,126.0	5,109.8	44.5	0.0	46.27	-189.0	-2,729.4	4,129.0	4,095.5	33.52	123.176		
10,000.0	7,530.0	5,126.0	5,109.8	46.2	0.0	46.27	-189.0	-2,729.4	4,181.1	4,146.4	34.73	120.389		
10,100.0	7,530.0	5,126.0	5,109.8	47.9	0.0	46.27	-189.0	-2,729.4	4,234.9	4,199.0	35.94	117.823		
10,200.0	7,530.0	5,126.0	5,109.8	49.6	0.0	46.27	-189.0	-2,729.4	4,290.4	4,253.3	37.16	115.456		
10,300.0	7,530.0	5,126.0	5,109.8	51.3	0.0	46.27	-189.0	-2,729.4	4,347.5	4,309.1	38.38	113.270		
10,400.0	7,530.0	5,126.0	5,109.8	53.0	0.0	46.27	-189.0	-2,729.4	4,406.1	4,366.5	39.61	111.248		
10,500.0	7,530.0	5,126.0	5,109.8	54.7	0.0	46.27	-189.0	-2,729.4	4,466.2	4,425.4	40.83	109.375		
10,600.0	7,530.0	5,126.0	5,109.8	56.4	0.0	46.27	-189.0	-2,729.4	4,527.7	4,485.7	42.06	107.638		
10,700.0	7,530.0	5,126.0	5,109.8	58.1	0.0	46.27	-189.0	-2,729.4	4,590.6	4,547.3	43.30	106.025		
10,800.0	7,530.0	5,126.0	5,109.8	59.8	0.0	46.27	-189.0	-2,729.4	4,654.8	4,610.2	44.53	104.524		
10,900.0	7,530.0	5,126.0	5,109.8	61.5	0.0	46.27	-189.0	-2,729.4	4,720.2	4,674.4	45.77	103.127		
11,000.0	7,530.0	5,126.0	5,109.8	63.2	0.0	46.27	-189.0	-2,729.4	4,786.8	4,739.7	47.01	101.825		
11,100.0	7,530.0	5,126.0	5,109.8	64.9	0.0	46.27	-189.0	-2,729.4	4,854.5	4,806.2	48.25	100.609		
11,200.0	7,530.0	5,126.0	5,109.8	66.6	0.0	46.27	-189.0	-2,729.4	4,923.3	4,873.8	49.49	99.474		
11,300.0	7,530.0	5,126.0	5,109.8	68.4	0.0	46.27	-189.0	-2,729.4	4,993.2	4,942.5	50.74	98.411		
11,400.0	7,530.0	5,126.0	5,109.8	70.1	0.0	46.27	-189.0	-2,729.4	5,064.1	5,012.2	51.98	97.417		
11,500.0	7,530.0	5,126.0	5,109.8	71.8	0.0	46.27	-189.0	-2,729.4	5,136.0	5,082.8	53.23	96.484		
11,600.0	7,530.0	5,126.0	5,109.8	73.5	0.0	46.27	-189.0	-2,729.4	5,208.8	5,154.3	54.48	95.609		
11,700.0	7,530.0	5,126.0	5,109.8	75.3	0.0	46.27	-189.0	-2,729.4	5,282.5	5,226.8	55.73	94.787		
11,800.0	7,530.0	5,126.0	5,109.8	77.0	0.0	46.27	-189.0	-2,729.4	5,357.1	5,300.1	56.98	94.015		
11,900.0	7,530.0	5,126.0	5,109.8	78.7	0.0	46.27	-189.0	-2,729.4	5,432.4	5,374.2	58.23	93.288		
12,000.0	7,530.0	5,126.0	5,109.8	80.4	0.0	46.27	-189.0	-2,729.4	5,508.6	5,449.1	59.49	92.603		
12,100.0	7,530.0	5,126.0	5,109.8	82.2	0.0	46.27	-189.0	-2,729.4	5,585.5	5,524.7	60.74	91.958		
12,200.0	7,530.0	5,126.0	5,109.8	83.9	0.0	46.27	-189.0	-2,729.4	5,663.1	5,601.1	61.99	91.349		
12,300.0	7,530.0	5,126.0	5,109.8	85.6	0.0	46.27	-189.0	-2,729.4	5,741.4	5,678.2	63.25	90.774		
12,400.0	7,530.0	5,126.0	5,109.8	87.4	0.0	46.27	-189.0	-2,729.4	5,820.4	5,755.9	64.51	90.230		
12,500.0	7,530.0	5,126.0	5,109.8	89.1	0.0	46.27	-189.0	-2,729.4	5,900.0	5,834.3	65.76	89.717		
12,600.0	7,530.0	5,126.0	5,109.8	90.8	0.0	46.27	-189.0	-2,729.4	5,980.2	5,913.2	67.02	89.230		
12,700.0	7,530.0	5,126.0	5,109.8	92.6	0.0	46.27	-189.0	-2,729.4	6,061.1	5,992.8	68.28	88.770		
12,800.0	7,530.0	5,126.0	5,109.8	94.3	0.0	46.27	-189.0	-2,729.4	6,142.4	6,072.9	69.54	88.333		
12,900.0	7,530.0	5,126.0	5,109.8	96.0	0.0	46.27	-189.0	-2,729.4	6,224.4	6,153.6	70.80	87.919		
13,000.0	7,530.0	5,126.0	5,109.8	97.8	0.0	46.27	-189.0	-2,729.4	6,306.8	6,234.8	72.06	87.526		
13,100.0	7,530.0	5,126.0	5,109.8	99.5	0.0	46.27	-189.0	-2,729.4	6,389.8	6,316.4	73.32	87.153		
13,200.0	7,530.0	5,126.0	5,109.8	101.3	0.0	46.27	-189.0	-2,729.4	6,473.2	6,398.6	74.58	86.798		
13,300.0	7,530.0	5,126.0	5,109.8	103.0	0.0	46.27	-189.0	-2,729.4	6,557.1	6,481.2	75.84	86.460		
13,400.0	7,530.0	5,126.0	5,109.8	104.7	0.0	46.27	-189.0	-2,729.4	6,641.4	6,564.3	77.10	86.139		
13,500.0	7,530.0	5,126.0	5,109.8	106.5	0.0	46.27	-189.0	-2,729.4	6,726.2	6,647.8	78.36	85.834		
13,600.0	7,530.0	5,126.0	5,109.8	108.2	0.0	46.27	-189.0	-2,729.4	6,811.4	6,731.7	79.63	85.542		
13,700.0	7,530.0	5,126.0	5,109.8	110.0	0.0	46.27	-189.0	-2,729.4	6,896.9	6,816.1	80.89	85.265		
13,800.0	7,530.0	5,126.0	5,109.8	111.7	0.0	46.27	-189.0	-2,729.4	6,982.9	6,900.8	82.15	85.000		
13,900.0	7,530.0	5,126.0	5,109.8	113.4	0.0	46.27	-189.0	-2,729.4	7,069.2	6,985.8	83.42	84.747		
14,000.0	7,530.0	5,126.0	5,109.8	115.2	0.0	46.27	-189.0	-2,729.4	7,155.9	7,071.3	84.68	84.506		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BILLINGS 21-7 (EXISTING) - KPK WELL - SURVE										Offset Site Error:		0.0 ft	
Survey Program: 903-										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,530.0	5,126.0	5,109.8	116.9	0.0	46.27	-189.0	-2,729.4	7,243.0	7,157.0	85.94	84.275	
14,200.0	7,530.0	5,126.0	5,109.8	118.7	0.0	46.27	-189.0	-2,729.4	7,330.3	7,243.1	87.21	84.055	
14,300.0	7,530.0	5,126.0	5,109.8	120.4	0.0	46.27	-189.0	-2,729.4	7,418.0	7,329.5	88.47	83.844	
14,400.0	7,530.0	5,126.0	5,109.8	122.1	0.0	46.27	-189.0	-2,729.4	7,506.0	7,416.3	89.74	83.643	
14,500.0	7,530.0	5,126.0	5,109.8	123.9	0.0	46.27	-189.0	-2,729.4	7,594.3	7,503.3	91.00	83.450	
14,600.0	7,530.0	5,126.0	5,109.8	125.6	0.0	46.27	-189.0	-2,729.4	7,682.9	7,590.6	92.27	83.265	
14,700.0	7,530.0	5,126.0	5,109.8	127.4	0.0	46.27	-189.0	-2,729.4	7,771.7	7,678.2	93.54	83.088	
14,800.0	7,530.0	5,126.0	5,109.8	129.1	0.0	46.27	-189.0	-2,729.4	7,860.8	7,766.0	94.80	82.918	
14,900.0	7,530.0	5,126.0	5,109.8	130.9	0.0	46.27	-189.0	-2,729.4	7,950.2	7,854.1	96.07	82.756	
15,000.0	7,530.0	5,126.0	5,109.8	132.6	0.0	46.27	-189.0	-2,729.4	8,039.8	7,942.5	97.33	82.600	
15,100.0	7,530.0	5,126.0	5,109.8	134.4	0.0	46.27	-189.0	-2,729.4	8,129.7	8,031.1	98.60	82.450	
15,200.0	7,530.0	5,126.0	5,109.8	136.1	0.0	46.27	-189.0	-2,729.4	8,219.8	8,119.9	99.87	82.306	
15,300.0	7,530.0	5,126.0	5,109.8	137.9	0.0	46.27	-189.0	-2,729.4	8,310.1	8,209.0	101.14	82.168	
15,400.0	7,530.0	5,126.0	5,109.8	139.6	0.0	46.27	-189.0	-2,729.4	8,400.7	8,298.3	102.40	82.035	
15,500.0	7,530.0	5,126.0	5,109.8	141.3	0.0	46.27	-189.0	-2,729.4	8,491.4	8,387.8	103.67	81.908	
15,600.0	7,530.0	5,126.0	5,109.8	143.1	0.0	46.27	-189.0	-2,729.4	8,582.4	8,477.5	104.94	81.785	
15,700.0	7,530.0	5,126.0	5,109.8	144.8	0.0	46.27	-189.0	-2,729.4	8,673.6	8,567.4	106.21	81.667	
15,800.0	7,530.0	5,126.0	5,109.8	146.6	0.0	46.27	-189.0	-2,729.4	8,764.9	8,657.5	107.47	81.554	
15,900.0	7,530.0	5,126.0	5,109.8	148.3	0.0	46.27	-189.0	-2,729.4	8,856.5	8,747.7	108.74	81.444	
16,000.0	7,530.0	5,126.0	5,109.8	150.1	0.0	46.27	-189.0	-2,729.4	8,948.2	8,838.2	110.01	81.339	
16,100.0	7,530.0	5,126.0	5,109.8	151.8	0.0	46.27	-189.0	-2,729.4	9,040.1	8,928.8	111.28	81.238	
16,200.0	7,530.0	5,126.0	5,109.8	153.6	0.0	46.27	-189.0	-2,729.4	9,132.2	9,019.6	112.55	81.140	
16,300.0	7,530.0	5,126.0	5,109.8	155.3	0.0	46.27	-189.0	-2,729.4	9,224.4	9,110.6	113.82	81.046	
16,400.0	7,530.0	5,126.0	5,109.8	157.1	0.0	46.27	-189.0	-2,729.4	9,316.8	9,201.7	115.09	80.955	
16,500.0	7,530.0	5,126.0	5,109.8	158.8	0.0	46.27	-189.0	-2,729.4	9,409.4	9,293.0	116.35	80.868	
16,600.0	7,530.0	5,126.0	5,109.8	160.6	0.0	46.27	-189.0	-2,729.4	9,502.1	9,384.4	117.62	80.783	
16,700.0	7,530.0	5,126.0	5,109.8	162.3	0.0	46.27	-189.0	-2,729.4	9,594.9	9,476.0	118.89	80.702	
16,800.0	7,530.0	5,126.0	5,109.8	164.1	0.0	46.27	-189.0	-2,729.4	9,687.9	9,567.7	120.16	80.623	
16,900.0	7,530.0	5,126.0	5,109.8	165.8	0.0	46.27	-189.0	-2,729.4	9,781.0	9,659.6	121.43	80.547	
17,000.0	7,530.0	5,126.0	5,109.8	167.6	0.0	46.27	-189.0	-2,729.4	9,874.3	9,751.6	122.70	80.474	
17,100.0	7,530.0	5,126.0	5,109.8	169.3	0.0	46.27	-189.0	-2,729.4	9,967.7	9,843.7	123.97	80.403 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 40-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	-23.97	3,719.3	-1,653.4	4,070.8					
100.0	100.0	41.1	41.1	0.2	0.1	-23.97	3,719.3	-1,653.4	4,070.3	4,070.0	0.22	N/A		
200.0	200.0	153.0	153.0	0.3	0.3	-23.97	3,719.0	-1,653.4	4,070.0	4,069.4	0.59	6,858.902		
300.0	300.0	264.6	264.6	0.5	0.5	-23.97	3,718.4	-1,653.4	4,069.5	4,068.5	0.96	4,227.284		
400.0	400.0	376.0	376.0	0.7	0.7	-23.98	3,717.4	-1,653.3	4,068.7	4,067.3	1.33	3,055.364		
500.0	500.0	487.8	487.8	0.8	0.9	-23.98	3,716.1	-1,653.2	4,067.6	4,065.9	1.70	2,390.707		
600.0	600.0	599.7	599.6	1.0	1.1	-0.98	3,714.5	-1,653.1	4,065.3	4,063.2	2.07	1,962.718		
700.0	700.0	710.7	710.6	1.2	1.2	-0.99	3,712.5	-1,653.0	4,061.0	4,058.6	2.44	1,665.048		
800.0	799.9	822.3	822.2	1.4	1.4	-1.01	3,710.2	-1,652.8	4,054.7	4,051.9	2.81	1,444.426		
848.7	848.4	876.1	876.1	1.5	1.5	-1.01	3,708.9	-1,652.7	4,050.9	4,047.9	2.99	1,356.969		
900.0	899.7	920.0	919.9	1.6	1.6	-1.02	3,707.9	-1,652.7	4,046.7	4,043.5	3.15	1,284.002		
1,000.0	999.5	991.1	991.0	1.8	1.7	-1.03	3,706.4	-1,653.0	4,038.9	4,035.4	3.45	1,170.411		
1,100.0	1,099.3	1,065.0	1,064.9	2.0	1.9	-1.05	3,705.2	-1,653.9	4,031.8	4,028.0	3.76	1,073.541		
1,200.0	1,199.1	1,133.5	1,133.3	2.2	2.0	-1.08	3,704.2	-1,655.5	4,025.4	4,021.3	4.05	993.527		
1,300.0	1,298.9	1,200.0	1,199.8	2.4	2.1	-1.11	3,703.8	-1,657.2	4,019.8	4,015.4	4.34	925.314		
1,400.0	1,398.8	1,269.1	1,268.9	2.6	2.2	-1.13	3,703.9	-1,659.1	4,015.0	4,010.3	4.64	865.021		
1,500.0	1,498.6	1,333.9	1,333.7	2.8	2.3	-1.15	3,704.6	-1,660.9	4,011.0	4,006.0	4.93	813.463		
1,600.0	1,598.4	1,406.7	1,406.4	3.0	2.5	-1.17	3,706.1	-1,662.7	4,007.8	4,002.6	5.23	765.796		
1,700.0	1,698.2	1,499.3	1,499.0	3.2	2.6	-1.19	3,708.4	-1,665.3	4,005.1	3,999.5	5.57	718.815		
1,800.0	1,798.0	1,593.2	1,592.8	3.4	2.8	-1.22	3,710.5	-1,668.3	4,002.4	3,996.5	5.91	676.870		
1,900.0	1,897.8	1,676.1	1,675.6	3.6	2.9	-1.25	3,712.7	-1,671.2	4,000.1	3,993.9	6.23	641.574		
2,000.0	1,997.7	1,773.5	1,772.9	3.8	3.1	-1.27	3,715.3	-1,674.4	3,997.8	3,991.3	6.58	607.405		
2,100.0	2,097.5	1,821.5	1,820.9	4.0	3.2	-1.29	3,717.0	-1,676.1	3,996.5	3,989.6	6.84	584.152		
2,160.3	2,157.6	1,850.4	1,849.8	4.1	3.3	-1.29	3,718.3	-1,677.2	3,996.3	3,989.3	7.00	571.040	CC, ES	
2,200.0	2,197.3	1,869.4	1,868.7	4.2	3.3	-1.30	3,719.3	-1,678.0	3,996.4	3,989.3	7.10	562.742		
2,300.0	2,297.1	1,920.0	1,919.1	4.4	3.4	-1.31	3,722.3	-1,680.4	3,997.6	3,990.2	7.37	542.734		
2,400.0	2,396.9	1,976.6	1,975.5	4.6	3.5	-1.33	3,726.2	-1,683.4	4,000.0	3,992.4	7.64	523.509		
2,500.0	2,496.7	2,040.0	2,038.6	4.8	3.6	-1.35	3,731.2	-1,686.7	4,003.3	3,995.3	7.93	504.998		
2,600.0	2,596.5	2,097.9	2,096.2	5.0	3.7	-1.36	3,736.2	-1,689.9	4,007.5	3,999.3	8.20	488.447		
2,700.0	2,696.4	2,160.0	2,157.9	5.2	3.9	-1.38	3,742.3	-1,694.0	4,012.9	4,004.4	8.49	472.686		
2,800.0	2,796.2	2,213.6	2,211.1	5.4	4.0	-1.39	3,747.9	-1,697.7	4,019.3	4,010.6	8.76	458.836		
2,900.0	2,896.0	2,259.8	2,256.8	5.6	4.1	-1.41	3,753.3	-1,701.2	4,026.9	4,017.9	9.02	446.603		
3,000.0	2,995.8	2,299.5	2,296.0	5.8	4.2	-1.42	3,758.4	-1,704.3	4,035.9	4,026.7	9.26	435.747		
3,100.0	3,095.6	2,342.7	2,338.6	6.0	4.3	-1.43	3,764.5	-1,708.0	4,046.4	4,036.9	9.51	425.320		
3,200.0	3,195.4	2,400.0	2,395.0	6.2	4.4	-1.45	3,773.3	-1,713.5	4,058.2	4,048.4	9.79	414.483		
3,300.0	3,295.2	2,440.0	2,434.3	6.4	4.6	-1.47	3,780.0	-1,717.5	4,071.2	4,061.2	10.04	405.617		
3,400.0	3,395.1	2,480.0	2,473.4	6.6	4.7	-1.48	3,787.1	-1,721.6	4,085.6	4,075.4	10.28	397.328		
3,500.0	3,494.9	2,520.0	2,512.4	6.8	4.8	-1.49	3,794.8	-1,725.8	4,101.5	4,090.9	10.53	389.567		
3,600.0	3,594.7	2,560.0	2,551.3	7.0	4.9	-1.50	3,803.0	-1,730.2	4,118.6	4,107.8	10.77	382.270		
3,700.0	3,694.5	2,619.2	2,608.8	7.2	5.1	-1.52	3,815.5	-1,737.2	4,136.8	4,125.8	11.05	374.228		
3,800.0	3,794.3	2,680.0	2,667.6	7.4	5.3	-1.53	3,829.0	-1,744.4	4,156.0	4,144.7	11.34	366.606		
3,900.0	3,894.1	2,739.6	2,725.1	7.6	5.6	-1.54	3,842.7	-1,751.6	4,176.1	4,164.5	11.62	359.482		
4,000.0	3,994.0	2,800.0	2,783.3	7.8	5.8	-1.56	3,857.0	-1,759.6	4,197.2	4,185.3	11.90	352.712		
4,100.0	4,093.8	2,965.7	2,943.1	8.0	6.5	-1.62	3,895.0	-1,781.5	4,217.5	4,205.1	12.37	340.910		
4,200.0	4,193.6	3,071.3	3,045.1	8.2	6.9	-1.67	3,918.5	-1,795.3	4,237.3	4,224.5	12.74	332.717		
4,300.0	4,293.4	3,190.6	3,160.5	8.4	7.4	-1.72	3,944.5	-1,811.1	4,256.6	4,243.5	13.13	324.300		
4,400.0	4,393.2	3,272.6	3,239.7	8.6	7.8	-1.76	3,962.0	-1,822.6	4,276.0	4,262.6	13.45	317.923		
4,500.0	4,493.0	3,389.0	3,352.3	8.8	8.3	-1.83	3,986.6	-1,839.5	4,295.3	4,281.5	13.84	310.387		
4,600.0	4,592.8	3,505.6	3,465.0	9.0	8.8	-1.90	4,011.0	-1,856.1	4,314.5	4,300.3	14.23	303.265		
4,700.0	4,692.7	3,670.4	3,625.0	9.3	9.5	-1.98	4,044.0	-1,878.0	4,332.2	4,317.5	14.70	294.690		
4,800.0	4,792.5	3,768.2	3,720.1	9.5	9.9	-2.02	4,063.5	-1,889.8	4,349.5	4,334.4	15.05	289.004		
4,900.0	4,892.3	3,858.4	3,807.8	9.7	10.3	-2.05	4,081.7	-1,900.3	4,366.7	4,351.3	15.38	283.839		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 40-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	4,992.1	3,920.0	3,867.7		9.9	10.6	-2.07	4,094.4	-1,907.7	4,384.6	4,368.9	15.67	279.829	
5,100.0	5,091.9	3,995.6	3,941.0	10.1	10.9		-2.09	4,110.6	-1,916.9	4,403.2	4,387.2	15.98	275.594	
5,200.0	5,191.7	4,093.0	4,035.3	10.3	11.3		-2.11	4,132.0	-1,928.2	4,422.0	4,405.7	16.32	270.928	
5,300.0	5,291.5	4,167.4	4,107.4	10.5	11.7		-2.12	4,148.5	-1,936.6	4,441.0	4,424.3	16.63	267.122	
5,400.0	5,391.4	4,286.7	4,222.8	10.7	12.2		-2.12	4,175.7	-1,949.8	4,460.5	4,443.5	17.01	262.294	
5,500.0	5,491.2	4,409.8	4,342.1	10.9	12.8		-2.15	4,202.0	-1,964.1	4,478.8	4,461.4	17.40	257.443	
5,600.0	5,591.0	4,467.0	4,397.6		11.1	13.0	-2.17	4,214.3	-1,971.3	4,497.6	4,479.9	17.67	254.477	
5,700.0	5,690.8	4,526.2	4,454.7	11.3	13.3		-2.19	4,227.4	-1,979.0	4,517.2	4,499.3	17.95	251.605	
5,800.0	5,790.6	4,600.0	4,526.0	11.5	13.7		-2.22	4,244.1	-1,989.0	4,537.6	4,519.3	18.26	248.493	
5,900.0	5,890.4	4,766.7	4,686.9	11.7	14.4		-2.29	4,280.6	-2,011.9	4,557.3	4,538.6	18.73	243.260	
6,000.0	5,990.3	6,007.6	5,911.4	11.9	17.8		-2.59	4,410.7	-2,096.5	4,560.1	4,539.0	21.09	216.202	
6,100.0	6,090.1	6,126.6	6,030.4	12.1	18.0		-2.58	4,411.3	-2,095.5	4,554.1	4,532.6	21.47	212.125	
6,200.0	6,189.9	6,200.0	6,103.8	12.3	18.0		-2.57	4,411.7	-2,095.0	4,548.2	4,526.4	21.77	208.931	
6,300.0	6,289.7	6,287.5	6,191.3	12.5	18.1		-2.57	4,412.4	-2,094.8	4,542.8	4,520.7	22.09	205.613	
6,400.0	6,389.5	6,380.2	6,284.0	12.7	18.2		-2.57	4,413.3	-2,094.8	4,537.6	4,515.1	22.43	202.320	
6,500.0	6,489.3	6,463.3	6,367.1	12.9	18.3		-2.56	4,414.4	-2,094.6	4,532.6	4,509.8	22.74	199.284	
6,600.0	6,589.1	6,556.5	6,460.3	13.1	18.5		-2.55	4,416.0	-2,094.3	4,527.9	4,504.9	23.08	196.202	
6,700.0	6,689.0	6,704.2	6,608.0	13.3	18.6		-2.54	4,417.9	-2,093.6	4,522.8	4,499.3	23.51	192.414	
6,785.3	6,774.1	6,774.5	6,678.3	13.5	18.7		-2.53	4,418.5	-2,093.3	4,518.1	4,494.3	23.77	190.037	
6,800.0	6,788.8	6,786.9	6,690.6	13.5	18.7	8.52		4,418.6	-2,093.2	4,517.4	4,493.6	23.81	189.714	
6,827.0	6,815.7	6,810.8	6,714.6	13.6	18.8	69.68		4,418.9	-2,093.1	4,516.9	4,493.1	23.87	189.264	
6,850.0	6,838.8	6,832.4	6,736.2	13.6	18.8	119.05		4,419.1	-2,093.0	4,517.3	4,493.4	23.90	189.023	
6,900.0	6,888.6	6,880.0	6,783.8	13.6	18.9	140.91		4,419.7	-2,092.7	4,520.3	4,496.4	23.92	188.987	
6,950.0	6,938.1	6,937.0	6,840.8	13.7	18.9	145.89		4,420.4	-2,092.4	4,526.5	4,502.6	23.89	189.477	
7,000.0	6,987.0	7,002.6	6,906.4	13.7	19.0	147.90		4,421.1	-2,092.0	4,535.6	4,511.8	23.81	190.468	
7,050.0	7,035.0	7,079.1	6,982.9	13.6	19.1	148.85		4,421.5	-2,091.1	4,547.5	4,523.8	23.70	191.882	
7,100.0	7,082.0	7,136.3	7,040.0	13.6	19.1	149.22		4,421.8	-2,090.0	4,562.3	4,538.8	23.51	194.085	
7,150.0	7,127.7	7,181.6	7,085.3	13.5	19.2	149.21		4,422.1	-2,089.0	4,579.9	4,556.7	23.26	196.892	
7,200.0	7,171.8	7,217.3	7,121.0	13.5	19.2	148.88		4,422.3	-2,088.1	4,600.5	4,577.5	22.98	200.155	
7,250.0	7,214.2	7,249.4	7,153.1	13.4	19.3	148.28		4,422.6	-2,087.4	4,624.0	4,601.3	22.71	203.619	
7,300.0	7,254.6	7,280.0	7,183.7	13.4	19.3	147.43		4,422.8	-2,086.9	4,650.2	4,627.7	22.46	207.013	
7,350.0	7,292.9	7,301.0	7,204.7	13.3	19.3	146.27		4,423.0	-2,086.8	4,679.1	4,656.8	22.27	210.094	
7,400.0	7,328.9	7,320.0	7,223.7	13.3	19.3	144.79		4,423.1	-2,086.8	4,710.6	4,688.4	22.18	212.344	
7,450.0	7,362.3	7,344.5	7,248.2	13.3	19.4	143.02		4,423.3	-2,087.0	4,744.3	4,722.1	22.24	213.280	
7,500.0	7,393.1	7,365.5	7,269.2	13.4	19.4	140.83		4,423.4	-2,087.4	4,780.3	4,757.8	22.50	212.500	
7,550.0	7,421.1	7,389.3	7,293.0	13.5	19.4	138.22		4,423.5	-2,087.9	4,818.2	4,795.3	22.98	209.677	
7,600.0	7,446.1	7,410.5	7,314.2	13.6	19.5	135.05		4,423.7	-2,088.3	4,857.9	4,834.2	23.74	204.669	
7,650.0	7,468.0	7,428.9	7,332.6	13.8	19.5	131.19		4,423.8	-2,088.6	4,899.2	4,874.4	24.79	197.606	
7,700.0	7,486.7	7,440.0	7,343.7	14.0	19.5	126.43		4,423.9	-2,088.8	4,941.8	4,915.6	26.17	188.860	
7,750.0	7,502.2	7,453.4	7,357.1	14.2	19.5	120.77		4,424.0	-2,089.0	4,985.6	4,957.8	27.79	179.389	
7,800.0	7,514.3	7,461.0	7,364.7	14.6	19.5	113.93		4,424.1	-2,089.1	5,030.3	5,000.8	29.58	170.067	
7,850.0	7,523.0	7,466.3	7,370.0	14.9	19.5	105.95		4,424.2	-2,089.2	5,075.8	5,044.5	31.31	162.125	
7,900.0	7,528.2	7,469.3	7,373.0	15.3	19.6	96.96		4,424.2	-2,089.3	5,121.7	5,089.1	32.69	156.683	
7,950.2	7,530.0	7,470.1	7,373.8	15.8	19.6	87.27		4,424.2	-2,089.3	5,168.2	5,134.8	33.43	154.596	
8,000.0	7,530.0	7,469.6	7,373.3	16.2	19.6	87.26		4,424.2	-2,089.3	5,214.3	5,180.4	33.91	153.758	
8,100.0	7,530.0	7,468.8	7,372.5	17.3	19.6	87.23		4,424.2	-2,089.3	5,307.1	5,272.1	34.97	151.742	
8,200.0	7,530.0	7,468.0	7,371.7	18.4	19.5	87.21		4,424.2	-2,089.2	5,400.2	5,364.0	36.14	149.409	
8,300.0	7,530.0	7,467.2	7,370.9	19.7	19.5	87.18		4,424.2	-2,089.2	5,493.5	5,456.1	37.40	146.885	
8,400.0	7,530.0	7,466.4	7,370.1	21.0	19.5	87.16		4,424.2	-2,089.2	5,587.1	5,548.3	38.73	144.264	
8,500.0	7,530.0	7,465.6	7,369.3	22.4	19.5	87.14		4,424.2	-2,089.2	5,680.8	5,640.7	40.12	141.614	
8,600.0	7,530.0	7,464.8	7,368.5	23.8	19.5	87.12		4,424.2	-2,089.2	5,774.8	5,733.3	41.55	138.984	
8,700.0	7,530.0	7,464.1	7,367.8	25.3	19.5	87.09		4,424.2	-2,089.2	5,869.0	5,826.0	43.03	136.408	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 40-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)						
8,800.0	7,530.0	7,463.3	7,367.0	26.8	19.5	87.07	4,424.2	-2,089.2	5,963.4	5,918.9	44.53	133.906		
8,900.0	7,530.0	7,462.6	7,366.3	28.3	19.5	87.05	4,424.2	-2,089.2	6,057.9	6,011.9	46.07	131.493		
9,000.0	7,530.0	7,461.9	7,365.6	29.9	19.5	87.03	4,424.1	-2,089.2	6,152.7	6,105.0	47.63	129.174		
9,100.0	7,530.0	7,461.2	7,364.9	31.4	19.5	87.01	4,424.1	-2,089.1	6,247.6	6,198.3	49.21	126.954		
9,200.0	7,530.0	7,460.5	7,364.2	33.0	19.5	86.99	4,424.1	-2,089.1	6,342.6	6,291.8	50.81	124.833		
9,300.0	7,530.0	7,459.8	7,363.5	34.7	19.5	86.97	4,424.1	-2,089.1	6,437.8	6,385.4	52.42	122.810		
9,400.0	7,530.0	7,459.1	7,362.8	36.3	19.5	86.95	4,424.1	-2,089.1	6,533.1	6,479.1	54.05	120.881		
9,500.0	7,530.0	7,458.5	7,362.2	37.9	19.5	86.93	4,424.1	-2,089.1	6,628.6	6,572.9	55.68	119.044		
9,600.0	7,530.0	7,457.8	7,361.5	39.6	19.5	86.91	4,424.1	-2,089.1	6,724.2	6,666.9	57.33	117.294		
9,700.0	7,530.0	7,457.2	7,360.8	41.2	19.5	86.89	4,424.1	-2,089.1	6,820.0	6,761.0	58.98	115.627		
9,800.0	7,530.0	7,456.5	7,360.2	42.9	19.5	86.87	4,424.1	-2,089.1	6,915.8	6,855.2	60.64	114.039		
9,900.0	7,530.0	7,455.9	7,359.6	44.5	19.5	86.85	4,424.1	-2,089.1	7,011.8	6,949.5	62.31	112.525		
10,000.0	7,530.0	7,455.3	7,359.0	46.2	19.5	86.84	4,424.1	-2,089.0	7,107.9	7,043.9	63.99	111.081		
10,100.0	7,530.0	7,454.7	7,358.4	47.9	19.5	86.82	4,424.1	-2,089.0	7,204.0	7,138.4	65.67	109.704		
10,200.0	7,530.0	7,454.1	7,357.8	49.6	19.5	86.80	4,424.1	-2,089.0	7,300.3	7,233.0	67.35	108.389		
10,300.0	7,530.0	7,453.5	7,357.2	51.3	19.5	86.78	4,424.0	-2,089.0	7,396.7	7,327.7	69.04	107.133		
10,400.0	7,530.0	7,452.9	7,356.6	53.0	19.5	86.77	4,424.0	-2,089.0	7,493.2	7,422.5	70.74	105.933		
10,500.0	7,530.0	7,452.3	7,356.0	54.7	19.5	86.75	4,424.0	-2,089.0	7,589.8	7,517.4	72.43	104.785		
10,600.0	7,530.0	7,451.8	7,355.4	56.4	19.5	86.73	4,424.0	-2,089.0	7,686.4	7,612.3	74.13	103.686		
10,700.0	7,530.0	7,451.2	7,354.9	58.1	19.5	86.72	4,424.0	-2,089.0	7,783.2	7,707.4	75.83	102.634		
10,800.0	7,530.0	7,450.6	7,354.3	59.8	19.5	86.70	4,424.0	-2,089.0	7,880.0	7,802.5	77.54	101.625		
10,900.0	7,530.0	7,450.1	7,353.8	61.5	19.5	86.68	4,424.0	-2,089.0	7,976.9	7,897.7	79.25	100.658		
11,000.0	7,530.0	7,449.0	7,353.7	63.2	19.5	86.39	4,423.9	-2,088.8	8,073.9	7,993.0	80.92	99.771		
11,100.0	7,530.0	7,449.0	7,343.7	64.9	19.5	86.39	4,423.9	-2,088.8	8,171.0	8,088.3	82.64	98.877		
11,200.0	7,530.0	7,449.0	7,343.7	66.6	19.5	86.39	4,423.9	-2,088.8	8,268.1	8,183.7	84.35	98.017		
11,300.0	7,530.0	7,449.0	7,343.7	68.4	19.5	86.39	4,423.9	-2,088.8	8,365.3	8,279.2	86.07	97.191		
11,400.0	7,530.0	7,449.0	7,343.7	70.1	19.5	86.39	4,423.9	-2,088.8	8,462.5	8,374.7	87.79	96.396		
11,500.0	7,530.0	7,449.0	7,343.7	71.8	19.5	86.39	4,423.9	-2,088.8	8,559.9	8,470.3	89.51	95.630		
11,600.0	7,530.0	7,449.0	7,343.7	73.5	19.5	86.39	4,423.9	-2,088.8	8,657.2	8,566.0	91.23	94.893		
11,700.0	7,530.0	7,449.0	7,343.7	75.3	19.5	86.39	4,423.9	-2,088.8	8,754.7	8,661.7	92.95	94.182		
11,800.0	7,530.0	7,449.0	7,343.7	77.0	19.5	86.39	4,423.9	-2,088.8	8,852.2	8,757.5	94.68	93.496		
11,900.0	7,530.0	7,449.0	7,343.7	78.7	19.5	86.39	4,423.9	-2,088.8	8,949.7	8,853.3	96.40	92.835		
12,000.0	7,530.0	7,449.0	7,343.7	80.4	19.5	86.39	4,423.9	-2,088.8	9,047.3	8,949.2	98.13	92.196		
12,100.0	7,530.0	7,449.0	7,343.7	82.2	19.5	86.39	4,423.9	-2,088.8	9,145.0	9,045.1	99.86	91.579		
12,200.0	7,530.0	7,449.0	7,343.7	83.9	19.5	86.39	4,423.9	-2,088.8	9,242.7	9,141.1	101.59	90.982		
12,300.0	7,530.0	7,449.0	7,343.7	85.6	19.5	86.39	4,423.9	-2,088.8	9,340.4	9,237.1	103.32	90.405		
12,400.0	7,530.0	7,449.0	7,343.7	87.4	19.5	86.39	4,423.9	-2,088.8	9,438.2	9,333.2	105.05	89.847		
12,500.0	7,530.0	7,449.0	7,343.7	89.1	19.5	86.39	4,423.9	-2,088.8	9,536.1	9,429.3	106.78	89.307		
12,600.0	7,530.0	7,449.0	7,343.7	90.8	19.5	86.39	4,423.9	-2,088.8	9,634.0	9,525.5	108.51	88.784		
12,700.0	7,530.0	7,449.0	7,343.7	92.6	19.5	86.39	4,423.9	-2,088.8	9,731.9	9,621.7	110.24	88.277		
12,800.0	7,530.0	7,449.0	7,343.7	94.3	19.5	86.39	4,423.9	-2,088.8	9,829.9	9,717.9	111.98	87.785		
12,900.0	7,530.0	7,449.0	7,343.7	96.0	19.5	86.39	4,423.9	-2,088.8	9,927.9	9,814.2	113.71	87.309 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 771-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	10.0	10.0	0.0	0.0	-60.56	1,029.9	-1,824.6	2,095.2					
100.0	100.0	109.6	109.6	0.2	0.2	-60.56	1,029.9	-1,824.6	2,095.2	2,094.9	0.34	6,098.260		
200.0	200.0	209.3	209.3	0.3	0.4	-60.56	1,029.8	-1,824.7	2,095.2	2,094.5	0.69	3,026.805		
300.0	300.0	308.9	308.9	0.5	0.5	-60.57	1,029.6	-1,824.8	2,095.3	2,094.2	1.04	2,012.992		
400.0	400.0	408.5	408.5	0.7	0.7	-60.57	1,029.5	-1,825.0	2,095.3	2,093.9	1.39	1,507.950		
500.0	500.0	508.2	508.2	0.8	0.9	-60.58	1,029.2	-1,825.2	2,095.4	2,093.7	1.74	1,205.525		
600.0	600.0	607.8	607.8	1.0	1.1	-37.60	1,029.0	-1,825.5	2,094.8	2,092.7	2.09	1,003.844		
700.0	700.0	707.4	707.4	1.2	1.2	-37.67	1,028.7	-1,825.8	2,092.9	2,090.4	2.44	859.112		
800.0	799.9	801.1	801.1	1.4	1.4	-37.77	1,028.3	-1,826.1	2,089.6	2,086.8	2.78	752.534		
848.7	848.4	841.7	841.7	1.5	1.5	-37.82	1,028.3	-1,826.4	2,087.7	2,084.8	2.93	711.455		
900.0	899.7	891.6	891.6	1.6	1.6	-37.87	1,028.5	-1,826.9	2,085.7	2,082.6	3.11	669.749		
1,000.0	999.5	994.6	994.6	1.8	1.7	-37.98	1,028.9	-1,827.4	2,081.5	2,078.1	3.48	598.975		
1,100.0	1,099.3	1,090.5	1,090.4	2.0	1.9	-38.08	1,029.1	-1,828.3	2,077.7	2,073.9	3.83	543.175		
1,200.0	1,199.1	1,190.2	1,190.2	2.2	2.1	-38.20	1,029.1	-1,829.2	2,073.6	2,069.4	4.18	495.773		
1,300.0	1,298.9	1,278.1	1,278.1	2.4	2.2	-38.29	1,029.5	-1,830.3	2,070.2	2,065.7	4.52	458.023		
1,400.0	1,398.8	1,364.8	1,364.7	2.6	2.4	-38.38	1,030.4	-1,831.3	2,066.9	2,062.1	4.86	425.721		
1,500.0	1,498.6	1,436.0	1,435.9	2.8	2.5	-38.42	1,032.4	-1,832.8	2,065.3	2,060.1	5.16	400.000		
1,533.9	1,532.4	1,436.0	1,435.9	2.8	2.5	-38.42	1,032.4	-1,832.8	2,065.2	2,059.9	5.23	395.171	CC, ES	
1,600.0	1,598.4	1,487.4	1,487.3	3.0	2.6	-38.45	1,034.6	-1,834.6	2,065.5	2,060.0	5.44	379.806		
1,700.0	1,698.2	1,553.1	1,552.8	3.2	2.7	-38.48	1,037.9	-1,837.9	2,067.4	2,061.7	5.74	360.301		
1,800.0	1,798.0	1,625.0	1,624.4	3.4	2.9	-38.50	1,042.4	-1,842.2	2,070.9	2,064.8	6.05	342.348		
1,900.0	1,897.8	1,689.5	1,688.5	3.6	3.0	-38.50	1,047.6	-1,846.5	2,075.9	2,069.5	6.35	326.935		
2,000.0	1,997.7	1,762.9	1,761.4	3.8	3.2	-38.47	1,055.0	-1,851.9	2,082.4	2,075.7	6.67	312.323		
2,100.0	2,097.5	1,839.9	1,837.6	4.0	3.4	-38.40	1,064.3	-1,857.6	2,090.0	2,083.0	7.00	298.755		
2,200.0	2,197.3	1,910.0	1,906.7	4.2	3.5	-38.29	1,074.6	-1,862.9	2,098.9	2,091.6	7.31	286.935		
2,300.0	2,297.1	1,987.9	1,983.2	4.4	3.8	-38.13	1,087.8	-1,868.8	2,109.1	2,101.4	7.66	275.329		
2,400.0	2,396.9	2,080.9	2,074.4	4.6	4.0	-37.91	1,105.0	-1,875.8	2,119.9	2,111.9	8.04	263.600		
2,500.0	2,496.7	2,174.2	2,165.7	4.8	4.3	-37.67	1,122.7	-1,882.8	2,131.0	2,122.5	8.43	252.659		
2,600.0	2,596.5	2,286.0	2,275.1	5.0	4.7	-37.39	1,144.1	-1,890.9	2,142.0	2,133.2	8.87	241.487		
2,700.0	2,696.4	2,372.3	2,359.8	5.2	5.0	-37.19	1,160.1	-1,897.4	2,153.0	2,143.8	9.25	232.678		
2,800.0	2,796.2	2,478.6	2,463.8	5.4	5.3	-36.93	1,180.1	-1,905.5	2,164.2	2,154.6	9.69	223.406		
2,900.0	2,896.0	2,574.0	2,557.2	5.6	5.7	-36.69	1,198.6	-1,912.2	2,175.3	2,165.2	10.11	215.237		
3,000.0	2,995.8	2,651.0	2,632.3	5.8	6.0	-36.48	1,214.3	-1,917.7	2,187.1	2,176.6	10.48	208.616		
3,100.0	3,095.6	2,750.6	2,729.6	6.0	6.4	-36.22	1,234.5	-1,925.5	2,199.4	2,188.5	10.91	201.577		
3,200.0	3,195.4	2,881.5	2,857.6	6.2	6.8	-35.89	1,260.1	-1,934.9	2,210.8	2,199.4	11.42	193.558		
3,300.0	3,295.2	2,972.1	2,946.2	6.4	7.2	-35.67	1,277.4	-1,941.3	2,221.9	2,210.1	11.83	187.842		
3,400.0	3,395.1	3,068.9	3,041.0	6.6	7.5	-35.44	1,296.1	-1,948.2	2,233.2	2,221.0	12.26	182.220		
3,500.0	3,494.9	3,164.6	3,134.6	6.8	7.9	-35.20	1,315.1	-1,954.9	2,244.8	2,232.1	12.68	176.995		
3,600.0	3,594.7	3,273.4	3,241.0	7.0	8.3	-34.93	1,336.5	-1,962.2	2,256.0	2,242.9	13.14	171.694		
3,700.0	3,694.5	3,358.8	3,324.6	7.2	8.6	-34.73	1,352.9	-1,968.3	2,267.5	2,253.9	13.54	167.517		
3,800.0	3,794.3	3,436.9	3,400.9	7.4	9.0	-34.55	1,368.4	-1,974.4	2,279.8	2,265.9	13.91	163.842		
3,900.0	3,894.1	3,544.5	3,506.0	7.6	9.4	-34.30	1,389.9	-1,983.0	2,292.4	2,278.0	14.37	159.562		
4,000.0	3,994.0	3,644.6	3,603.8	7.8	9.8	-34.08	1,409.6	-1,990.7	2,304.6	2,289.8	14.80	155.731		
4,100.0	4,093.8	3,758.1	3,714.6	8.0	10.2	-33.81	1,432.4	-1,999.6	2,317.3	2,302.1	15.27	151.768		
4,200.0	4,193.6	3,882.9	3,836.7	8.2	10.7	-33.50	1,457.0	-2,006.9	2,328.0	2,312.2	15.77	147.602		
4,300.0	4,293.4	3,977.8	3,929.5	8.4	11.1	-33.26	1,476.2	-2,012.1	2,338.9	2,322.7	16.20	144.344		
4,400.0	4,393.2	4,078.8	4,028.3	8.6	11.5	-33.00	1,496.6	-2,017.8	2,349.8	2,333.2	16.64	141.223		
4,500.0	4,493.0	4,150.5	4,098.5	8.8	11.8	-32.85	1,510.4	-2,022.7	2,361.2	2,344.2	16.99	138.971		
4,600.0	4,592.8	4,225.7	4,172.1	9.0	12.1	-32.70	1,524.7	-2,029.1	2,373.9	2,356.6	17.35	136.811		
4,700.0	4,692.7	4,322.8	4,266.9	9.3	12.4	-32.51	1,543.8	-2,037.5	2,387.2	2,369.5	17.77	134.323		
4,800.0	4,792.5	4,463.5	4,404.3	9.5	13.0	-32.20	1,572.1	-2,047.8	2,399.7	2,381.4	18.30	131.156		
4,900.0	4,892.3	4,541.8	4,480.9	9.7	13.3	-32.04	1,587.3	-2,053.3	2,411.6	2,392.9	18.67	129.139		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 771-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	4,992.1	4,629.2	4,566.2		9.9	13.7	-31.84	1,605.3	-2,059.6	2,424.3	2,405.2	19.07	127.096	
5,100.0	5,091.9	4,717.1	4,651.9	10.1	14.1	-31.63	1,623.8	-2,066.0	2,437.4	2,417.9	19.48	125.141		
5,200.0	5,191.7	4,991.4	4,921.3	10.3	15.0	-31.16	1,671.7	-2,084.1	2,448.9	2,428.7	20.25	120.950		
5,300.0	5,291.5	5,366.7	5,295.5	10.5	15.6	-31.17	1,691.9	-2,092.6	2,446.3	2,425.3	21.05	116.217		
5,400.0	5,391.4	5,456.7	5,385.5	10.7	15.7	-31.25	1,692.0	-2,093.1	2,441.6	2,420.2	21.37	114.261		
5,500.0	5,491.2	5,550.9	5,479.7	10.9	15.8	-31.32	1,692.3	-2,093.7	2,437.1	2,415.4	21.70	112.329		
5,600.0	5,591.0	5,642.8	5,571.6	11.1	15.9	-31.38	1,693.0	-2,094.5	2,433.0	2,411.0	22.02	110.484		
5,700.0	5,690.8	5,737.3	5,666.1	11.3	16.0	-31.45	1,693.8	-2,095.4	2,429.1	2,406.7	22.35	108.685		
5,800.0	5,790.6	5,828.0	5,756.8	11.5	16.2	-31.52	1,694.5	-2,096.8	2,425.6	2,402.9	22.67	106.986		
5,900.0	5,890.4	5,932.4	5,861.2	11.7	16.3	-31.60	1,695.5	-2,098.2	2,422.1	2,399.0	23.02	105.217		
6,000.0	5,990.3	6,034.2	5,962.9	11.9	16.4	-31.67	1,696.7	-2,099.4	2,418.5	2,395.2	23.36	103.513		
6,100.0	6,090.1	6,138.0	6,066.8	12.1	16.6	-31.75	1,697.8	-2,100.4	2,414.8	2,391.0	23.71	101.841		
6,200.0	6,189.9	6,236.3	6,165.0	12.3	16.7	-31.82	1,698.5	-2,101.6	2,411.0	2,386.9	24.05	100.263		
6,300.0	6,289.7	6,331.3	6,260.1	12.5	16.8	-31.90	1,699.1	-2,102.9	2,407.3	2,383.0	24.38	98.730		
6,400.0	6,389.5	6,431.9	6,360.6	12.7	17.0	-31.96	1,700.6	-2,104.0	2,403.9	2,379.1	24.73	97.211		
6,500.0	6,489.3	6,516.8	6,445.5	12.9	17.1	-32.02	1,701.7	-2,105.0	2,400.5	2,375.5	25.05	95.825		
6,600.0	6,589.1	6,666.5	6,595.2	13.1	17.3	-32.13	1,703.5	-2,106.9	2,397.3	2,371.8	25.47	94.121		
6,700.0	6,689.0	6,763.2	6,691.9	13.3	17.4	-32.21	1,703.3	-2,107.3	2,392.4	2,366.5	25.81	92.699		
6,785.3	6,774.1	6,843.2	6,771.8	13.5	17.5	-32.28	1,703.4	-2,107.6	2,388.3	2,362.2	26.09	91.530		
6,800.0	6,788.8	6,857.2	6,785.9	13.5	17.5	-21.21	1,703.4	-2,107.6	2,387.7	2,361.6	26.13	91.367		
6,842.8	6,831.5	6,898.2	6,826.8	13.6	17.6	79.70	1,703.6	-2,107.8	2,387.0	2,360.7	26.23	90.985		
6,850.0	6,838.8	6,905.1	6,833.8	13.6	17.6	89.35	1,703.6	-2,107.9	2,387.0	2,360.7	26.25	90.928		
6,900.0	6,888.6	6,951.6	6,880.3	13.6	17.6	111.28	1,703.8	-2,108.1	2,388.3	2,362.0	26.35	90.639		
6,950.0	6,938.1	6,994.1	6,922.7	13.7	17.7	116.31	1,704.0	-2,108.4	2,391.7	2,365.3	26.43	90.499		
7,000.0	6,987.0	7,038.0	6,966.7	13.7	17.7	118.38	1,704.4	-2,108.8	2,397.2	2,370.7	26.49	90.479		
7,050.0	7,035.0	7,095.1	7,023.7	13.6	17.8	119.45	1,704.9	-2,109.2	2,404.7	2,378.1	26.56	90.530		
7,100.0	7,082.0	7,147.4	7,076.1	13.6	17.9	119.99	1,705.3	-2,109.4	2,414.0	2,387.3	26.62	90.686		
7,150.0	7,127.7	7,187.0	7,115.6	13.5	17.9	120.09	1,705.6	-2,109.6	2,425.3	2,398.6	26.67	90.929		
7,200.0	7,171.8	7,228.0	7,156.6	13.5	18.0	119.96	1,706.0	-2,109.8	2,438.7	2,411.9	26.74	91.207		
7,250.0	7,214.2	7,275.5	7,204.2	13.4	18.1	119.70	1,706.4	-2,110.1	2,454.1	2,427.2	26.82	91.497		
7,300.0	7,254.6	7,324.0	7,252.6	13.4	18.1	119.30	1,706.7	-2,110.3	2,471.3	2,444.3	26.93	91.769		
7,350.0	7,292.9	7,356.5	7,285.2	13.3	18.2	118.52	1,706.8	-2,110.4	2,490.4	2,463.3	27.09	91.944		
7,400.0	7,328.9	7,386.4	7,315.0	13.3	18.2	117.51	1,707.1	-2,110.5	2,511.6	2,484.3	27.30	92.005		
7,450.0	7,362.3	7,419.0	7,347.6	13.3	18.2	116.36	1,707.3	-2,110.8	2,534.6	2,507.1	27.57	91.943		
7,500.0	7,393.1	7,443.4	7,372.0	13.4	18.3	114.87	1,707.5	-2,111.0	2,559.6	2,531.7	27.92	91.687		
7,550.0	7,421.1	7,471.0	7,399.6	13.5	18.3	113.23	1,707.8	-2,111.2	2,586.2	2,557.9	28.33	91.280		
7,600.0	7,446.1	7,495.6	7,424.3	13.6	18.4	111.31	1,708.0	-2,111.4	2,614.5	2,585.7	28.83	90.698		
7,650.0	7,468.0	7,517.2	7,445.8	13.8	18.4	109.09	1,708.1	-2,111.7	2,644.4	2,615.0	29.39	89.960		
7,700.0	7,486.7	7,535.3	7,463.9	14.0	18.4	106.55	1,708.3	-2,111.8	2,675.6	2,645.6	30.03	89.104		
7,750.0	7,502.2	7,550.0	7,478.6	14.2	18.4	103.68	1,708.4	-2,111.9	2,708.1	2,677.4	30.71	88.197		
7,800.0	7,514.3	7,561.3	7,489.9	14.6	18.4	100.47	1,708.5	-2,112.0	2,741.8	2,710.4	31.40	87.317		
7,850.0	7,523.0	7,569.2	7,497.8	14.9	18.5	96.93	1,708.6	-2,112.1	2,776.4	2,744.3	32.08	86.552		
7,900.0	7,528.2	7,573.6	7,502.3	15.3	18.5	93.07	1,708.7	-2,112.1	2,811.8	2,779.1	32.70	85.990		
7,950.2	7,530.0	7,574.7	7,503.4	15.8	18.5	88.93	1,708.7	-2,112.1	2,848.1	2,814.9	33.23	85.713		
8,000.0	7,530.0	7,574.2	7,502.8	16.2	18.5	88.91	1,708.7	-2,112.1	2,884.4	2,850.7	33.71	85.565		
8,100.0	7,530.0	7,573.0	7,501.6	17.3	18.5	88.88	1,708.7	-2,112.1	2,958.6	2,923.8	34.77	85.082		
8,200.0	7,530.0	7,571.8	7,500.5	18.4	18.5	88.84	1,708.7	-2,112.1	3,034.3	2,998.3	35.94	84.417		
8,300.0	7,530.0	7,570.7	7,499.3	19.7	18.5	88.81	1,708.6	-2,112.1	3,111.3	3,074.1	37.20	83.634		
8,400.0	7,530.0	7,569.6	7,498.2	21.0	18.5	88.78	1,708.6	-2,112.1	3,189.7	3,151.1	38.53	82.781		
8,500.0	7,530.0	7,568.5	7,497.1	22.4	18.5	88.75	1,708.6	-2,112.1	3,269.2	3,229.3	39.92	81.894		
8,600.0	7,530.0	7,567.4	7,496.0	23.8	18.5	88.71	1,708.6	-2,112.0	3,349.8	3,308.4	41.36	80.998		
8,700.0	7,530.0	7,566.4	7,495.0	25.3	18.5	88.68	1,708.6	-2,112.0	3,431.4	3,388.6	42.83	80.111		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 771-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,800.0	7,530.0	7,565.3	7,493.9	26.8	18.5	88.65	1,708.6	-2,112.0	3,514.0	3,469.6	44.34	79.245		
8,900.0	7,530.0	7,564.3	7,492.9	28.3	18.5	88.62	1,708.6	-2,112.0	3,597.4	3,551.6	45.88	78.408		
9,000.0	7,530.0	7,563.3	7,491.9	29.9	18.4	88.59	1,708.6	-2,112.0	3,681.7	3,634.3	47.44	77.603		
9,100.0	7,530.0	7,562.3	7,490.9	31.4	18.4	88.56	1,708.5	-2,112.0	3,766.8	3,717.7	49.02	76.834		
9,200.0	7,530.0	7,561.3	7,489.9	33.0	18.4	88.53	1,708.5	-2,112.0	3,852.5	3,801.9	50.62	76.101		
9,300.0	7,530.0	7,560.3	7,489.0	34.7	18.4	88.51	1,708.5	-2,112.0	3,939.0	3,886.7	52.24	75.405		
9,400.0	7,530.0	7,559.4	7,488.0	36.3	18.4	88.48	1,708.5	-2,112.0	4,026.1	3,972.2	53.86	74.744		
9,500.0	7,530.0	7,558.4	7,487.1	37.9	18.4	88.45	1,708.5	-2,112.0	4,113.7	4,058.2	55.50	74.118		
9,600.0	7,530.0	7,557.5	7,486.1	39.6	18.4	88.42	1,708.5	-2,112.0	4,201.9	4,144.8	57.15	73.524		
9,700.0	7,530.0	7,556.6	7,485.2	41.2	18.4	88.40	1,708.5	-2,112.0	4,290.6	4,231.8	58.81	72.962		
9,800.0	7,530.0	7,555.7	7,484.3	42.9	18.4	88.37	1,708.5	-2,112.0	4,379.9	4,319.4	60.47	72.430		
9,900.0	7,530.0	7,554.8	7,483.4	44.5	18.4	88.35	1,708.5	-2,112.0	4,469.5	4,407.4	62.14	71.926		
10,000.0	7,530.0	7,553.9	7,482.6	46.2	18.4	88.32	1,708.5	-2,112.0	4,559.6	4,495.8	63.82	71.448		
10,100.0	7,530.0	7,553.1	7,481.7	47.9	18.4	88.29	1,708.4	-2,112.0	4,650.1	4,584.6	65.50	70.995		
10,200.0	7,530.0	7,552.2	7,480.8	49.6	18.4	88.27	1,708.4	-2,111.9	4,741.0	4,673.8	67.19	70.566		
10,300.0	7,530.0	7,551.4	7,480.0	51.3	18.4	88.24	1,708.4	-2,111.9	4,832.2	4,763.4	68.88	70.158		
10,400.0	7,530.0	7,550.6	7,479.2	53.0	18.4	88.22	1,708.4	-2,111.9	4,923.8	4,853.3	70.57	69.771		
10,500.0	7,530.0	7,549.7	7,478.4	54.7	18.4	88.20	1,708.4	-2,111.9	5,015.7	4,943.5	72.27	69.403		
10,600.0	7,530.0	7,548.9	7,477.6	56.4	18.4	88.17	1,708.4	-2,111.9	5,107.9	5,034.0	73.97	69.053		
10,700.0	7,530.0	7,548.1	7,476.8	58.1	18.4	88.15	1,708.4	-2,111.9	5,200.4	5,124.8	75.68	68.720		
10,800.0	7,530.0	7,547.4	7,476.0	59.8	18.4	88.13	1,708.4	-2,111.9	5,293.2	5,215.8	77.38	68.402		
10,900.0	7,530.0	7,546.6	7,475.2	61.5	18.4	88.10	1,708.4	-2,111.9	5,386.2	5,307.1	79.09	68.100		
11,000.0	7,530.0	7,545.8	7,474.4	63.2	18.4	88.08	1,708.4	-2,111.9	5,479.5	5,398.7	80.80	67.812		
11,100.0	7,530.0	7,545.1	7,473.7	64.9	18.4	88.06	1,708.4	-2,111.9	5,573.0	5,490.5	82.52	67.536		
11,200.0	7,530.0	7,544.3	7,473.0	66.6	18.4	88.04	1,708.4	-2,111.9	5,666.7	5,582.5	84.23	67.273		
11,300.0	7,530.0	7,543.6	7,472.2	68.4	18.4	88.02	1,708.4	-2,111.9	5,760.7	5,674.7	85.95	67.022		
11,400.0	7,530.0	7,542.9	7,471.5	70.1	18.4	88.00	1,708.3	-2,111.9	5,854.8	5,767.1	87.67	66.781		
11,500.0	7,530.0	7,542.2	7,470.8	71.8	18.4	87.98	1,708.3	-2,111.9	5,949.1	5,859.8	89.39	66.551		
11,600.0	7,530.0	7,541.5	7,470.1	73.5	18.4	87.95	1,708.3	-2,111.9	6,043.7	5,952.5	91.11	66.330		
11,700.0	7,530.0	7,540.8	7,469.4	75.3	18.4	87.93	1,708.3	-2,111.9	6,138.3	6,045.5	92.84	66.119		
11,800.0	7,530.0	7,540.1	7,468.7	77.0	18.4	87.91	1,708.3	-2,111.9	6,233.2	6,138.6	94.56	65.916		
11,900.0	7,530.0	7,539.4	7,468.0	78.7	18.4	87.89	1,708.3	-2,111.8	6,328.2	6,231.9	96.29	65.721		
12,000.0	7,530.0	7,538.7	7,467.3	80.4	18.4	87.87	1,708.3	-2,111.8	6,423.4	6,325.4	98.02	65.534		
12,100.0	7,530.0	7,538.1	7,466.7	82.2	18.4	87.86	1,708.3	-2,111.8	6,518.7	6,418.9	99.74	65.354		
12,200.0	7,530.0	7,537.4	7,466.0	83.9	18.4	87.84	1,708.3	-2,111.8	6,614.1	6,512.6	101.47	65.181		
12,300.0	7,530.0	7,536.8	7,465.4	85.6	18.4	87.82	1,708.3	-2,111.8	6,709.7	6,606.5	103.20	65.015		
12,400.0	7,530.0	7,536.1	7,464.7	87.4	18.4	87.80	1,708.3	-2,111.8	6,805.4	6,700.5	104.93	64.855		
12,500.0	7,530.0	7,535.5	7,464.1	89.1	18.4	87.78	1,708.3	-2,111.8	6,901.2	6,794.6	106.66	64.701		
12,600.0	7,530.0	7,534.9	7,463.5	90.8	18.4	87.76	1,708.3	-2,111.8	6,997.2	6,888.8	108.40	64.552		
12,700.0	7,530.0	7,534.2	7,462.9	92.6	18.4	87.74	1,708.3	-2,111.8	7,093.2	6,983.1	110.13	64.409		
12,800.0	7,530.0	7,533.6	7,462.3	94.3	18.4	87.73	1,708.3	-2,111.8	7,189.4	7,077.5	111.86	64.270		
12,900.0	7,530.0	7,533.0	7,461.7	96.0	18.4	87.71	1,708.3	-2,111.8	7,285.7	7,172.1	113.60	64.137		
13,000.0	7,530.0	7,532.4	7,461.1	97.8	18.4	87.69	1,708.2	-2,111.8	7,382.0	7,266.7	115.33	64.008		
13,100.0	7,530.0	7,531.9	7,460.5	99.5	18.4	87.67	1,708.2	-2,111.8	7,478.5	7,361.4	117.07	63.883		
13,200.0	7,530.0	7,531.3	7,459.9	101.3	18.4	87.66	1,708.2	-2,111.8	7,575.0	7,456.2	118.80	63.762		
13,300.0	7,530.0	7,531.0	7,443.6	103.0	18.4	87.18	1,708.1	-2,111.6	7,671.7	7,551.2	120.48	63.679		
13,400.0	7,530.0	7,515.0	7,443.6	104.7	18.4	87.18	1,708.1	-2,111.6	7,768.4	7,646.2	122.21	63.565		
13,500.0	7,530.0	7,515.0	7,443.6	106.5	18.4	87.18	1,708.1	-2,111.6	7,865.2	7,741.3	123.95	63.454		
13,600.0	7,530.0	7,515.0	7,443.6	108.2	18.4	87.18	1,708.1	-2,111.6	7,962.1	7,836.4	125.69	63.347		
13,700.0	7,530.0	7,515.0	7,443.6	110.0	18.4	87.18	1,708.1	-2,111.6	8,059.1	7,931.6	127.43	63.243		
13,800.0	7,530.0	7,515.0	7,443.6	111.7	18.4	87.18	1,708.1	-2,111.6	8,156.1	8,026.9	129.17	63.143		
13,900.0	7,530.0	7,515.0	7,443.6	113.4	18.4	87.18	1,708.1	-2,111.6	8,253.2	8,122.3	130.91	63.045		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 771-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	7,530.0	7,515.0	7,443.6	115.2	18.4	87.18	1,708.1	-2,111.6	8,350.4	8,217.7	132.65	62.951		
14,100.0	7,530.0	7,515.0	7,443.6	116.9	18.4	87.18	1,708.1	-2,111.6	8,447.6	8,313.2	134.39	62.859		
14,200.0	7,530.0	7,515.0	7,443.6	118.7	18.4	87.18	1,708.1	-2,111.6	8,544.9	8,408.8	136.13	62.770		
14,300.0	7,530.0	7,515.0	7,443.6	120.4	18.4	87.18	1,708.1	-2,111.6	8,642.3	8,504.4	137.87	62.683		
14,400.0	7,530.0	7,515.0	7,443.6	122.1	18.4	87.18	1,708.1	-2,111.6	8,739.7	8,600.1	139.61	62.599		
14,500.0	7,530.0	7,515.0	7,443.6	123.9	18.4	87.18	1,708.1	-2,111.6	8,837.2	8,695.8	141.36	62.517		
14,600.0	7,530.0	7,515.0	7,443.6	125.6	18.4	87.18	1,708.1	-2,111.6	8,934.7	8,791.6	143.10	62.437		
14,700.0	7,530.0	7,515.0	7,443.6	127.4	18.4	87.18	1,708.1	-2,111.6	9,032.3	8,887.5	144.84	62.360		
14,800.0	7,530.0	7,515.0	7,443.6	129.1	18.4	87.18	1,708.1	-2,111.6	9,130.0	8,983.4	146.58	62.285		
14,900.0	7,530.0	7,515.0	7,443.6	130.9	18.4	87.18	1,708.1	-2,111.6	9,227.7	9,079.3	148.33	62.211		
15,000.0	7,530.0	7,515.0	7,443.6	132.6	18.4	87.18	1,708.1	-2,111.6	9,325.4	9,175.3	150.07	62.140		
15,100.0	7,530.0	7,515.0	7,443.6	134.4	18.4	87.18	1,708.1	-2,111.6	9,423.2	9,271.4	151.81	62.071		
15,200.0	7,530.0	7,515.0	7,443.6	136.1	18.4	87.18	1,708.1	-2,111.6	9,521.0	9,367.5	153.56	62.003		
15,300.0	7,530.0	7,515.0	7,443.6	137.9	18.4	87.18	1,708.1	-2,111.6	9,618.9	9,463.6	155.30	61.937		
15,400.0	7,530.0	7,515.0	7,443.6	139.6	18.4	87.18	1,708.1	-2,111.6	9,716.8	9,559.8	157.05	61.873		
15,500.0	7,530.0	7,515.0	7,443.6	141.3	18.4	87.18	1,708.1	-2,111.6	9,814.8	9,656.0	158.79	61.810		
15,600.0	7,530.0	7,515.0	7,443.6	143.1	18.4	87.18	1,708.1	-2,111.6	9,912.8	9,752.3	160.53	61.749 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8393-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	35.0	35.0	0.0	0.1	-174.61	-6,180.7	-583.7	6,208.2					
100.0	100.0	135.0	135.0	0.2	0.2	-174.61	-6,180.7	-583.7	6,208.2	6,207.8	0.39	N/A		
200.0	200.0	235.0	235.0	0.3	0.4	-174.61	-6,180.7	-583.7	6,208.2	6,207.4	0.74	8,426.741		
300.0	300.0	335.0	335.0	0.5	0.6	-174.61	-6,180.7	-583.7	6,208.2	6,207.1	1.09	5,717.676		
400.0	400.0	435.0	435.0	0.7	0.8	-174.61	-6,180.7	-583.7	6,208.2	6,206.7	1.43	4,326.708		
500.0	500.0	535.0	535.0	0.8	0.9	-174.61	-6,180.7	-583.7	6,208.2	6,206.4	1.78	3,480.089		
600.0	600.0	635.0	635.0	1.0	1.1	-151.59	-6,180.7	-583.7	6,208.9	6,206.8	2.13	2,911.021		
700.0	700.0	735.0	735.0	1.2	1.3	-151.60	-6,180.7	-583.7	6,211.2	6,208.8	2.48	2,502.458		
800.0	799.9	834.9	834.9	1.4	1.5	-151.60	-6,180.7	-583.7	6,215.1	6,212.3	2.83	2,194.661		
848.7	848.4	883.4	883.4	1.5	1.5	-151.60	-6,180.7	-583.7	6,217.5	6,214.5	3.00	2,070.826		
900.0	899.7	934.7	934.7	1.6	1.6	-151.61	-6,180.7	-583.7	6,220.3	6,217.1	3.18	1,954.020		
1,000.0	999.5	1,034.5	1,034.5	1.8	1.8	-151.64	-6,180.7	-583.7	6,225.6	6,222.1	3.54	1,760.576		
1,100.0	1,099.3	1,134.3	1,134.3	2.0	2.0	-151.66	-6,180.7	-583.7	6,231.0	6,227.1	3.89	1,602.007		
1,200.0	1,199.1	1,234.1	1,234.1	2.2	2.2	-151.69	-6,180.7	-583.7	6,236.3	6,232.1	4.24	1,469.714		
1,300.0	1,298.9	1,333.9	1,333.9	2.4	2.3	-151.72	-6,180.7	-583.7	6,241.7	6,237.1	4.60	1,357.693		
1,400.0	1,398.8	1,433.8	1,433.8	2.6	2.5	-151.74	-6,180.7	-583.7	6,247.0	6,242.1	4.95	1,261.636		
1,500.0	1,498.6	1,533.6	1,533.6	2.8	2.7	-151.77	-6,180.7	-583.7	6,252.4	6,247.1	5.31	1,178.367		
1,600.0	1,598.4	1,633.4	1,633.4	3.0	2.9	-151.80	-6,180.7	-583.7	6,257.8	6,252.1	5.66	1,105.501		
1,700.0	1,698.2	1,733.2	1,733.2	3.2	3.0	-151.82	-6,180.7	-583.7	6,263.1	6,257.1	6.02	1,041.206		
1,800.0	1,798.0	1,833.0	1,833.0	3.4	3.2	-151.85	-6,180.7	-583.7	6,268.5	6,262.1	6.37	984.059		
1,900.0	1,897.8	1,932.8	1,932.8	3.6	3.4	-151.87	-6,180.7	-583.7	6,273.8	6,267.1	6.72	932.932		
2,000.0	1,997.7	2,032.7	2,032.7	3.8	3.5	-151.90	-6,180.7	-583.7	6,279.2	6,272.1	7.08	886.924		
2,100.0	2,097.5	2,132.5	2,132.5	4.0	3.7	-151.93	-6,180.7	-583.7	6,284.6	6,277.1	7.43	845.304		
2,200.0	2,197.3	2,232.3	2,232.3	4.2	3.9	-151.95	-6,180.7	-583.7	6,289.9	6,282.2	7.79	807.473		
2,300.0	2,297.1	2,332.1	2,332.1	4.4	4.1	-151.98	-6,180.7	-583.7	6,295.3	6,287.2	8.14	772.937		
2,400.0	2,396.9	2,431.9	2,431.9	4.6	4.2	-152.00	-6,180.7	-583.7	6,300.7	6,292.2	8.50	741.285		
2,500.0	2,496.7	2,531.7	2,531.7	4.8	4.4	-152.03	-6,180.7	-583.7	6,306.1	6,297.2	8.85	712.170		
2,600.0	2,596.5	2,631.5	2,631.5	5.0	4.6	-152.06	-6,180.7	-583.7	6,311.4	6,302.2	9.21	685.299		
2,700.0	2,696.4	2,731.4	2,731.4	5.2	4.8	-152.08	-6,180.7	-583.7	6,316.8	6,307.2	9.56	660.422		
2,800.0	2,796.2	2,831.2	2,831.2	5.4	4.9	-152.11	-6,180.7	-583.7	6,322.2	6,312.3	9.92	637.326		
2,900.0	2,896.0	2,931.0	2,931.0	5.6	5.1	-152.13	-6,180.7	-583.7	6,327.6	6,317.3	10.27	615.827		
3,000.0	2,995.8	3,030.8	3,030.8	5.8	5.3	-152.16	-6,180.7	-583.7	6,332.9	6,322.3	10.63	595.763		
3,100.0	3,095.6	3,130.6	3,130.6	6.0	5.5	-152.19	-6,180.7	-583.7	6,338.3	6,327.3	10.99	576.997		
3,200.0	3,195.4	3,230.4	3,230.4	6.2	5.6	-152.21	-6,180.7	-583.7	6,343.7	6,332.4	11.34	559.407		
3,300.0	3,295.2	3,330.2	3,330.2	6.4	5.8	-152.24	-6,180.7	-583.7	6,349.1	6,337.4	11.70	542.885		
3,400.0	3,395.1	3,430.1	3,430.1	6.6	6.0	-152.26	-6,180.7	-583.7	6,354.5	6,342.4	12.05	527.337		
3,500.0	3,494.9	3,529.9	3,529.9	6.8	6.2	-152.29	-6,180.7	-583.7	6,359.9	6,347.5	12.41	512.679		
3,600.0	3,594.7	3,629.7	3,629.7	7.0	6.3	-152.31	-6,180.7	-583.7	6,365.2	6,352.5	12.76	498.838		
3,700.0	3,694.5	3,729.5	3,729.5	7.2	6.5	-152.34	-6,180.7	-583.7	6,370.6	6,357.5	13.12	485.746		
3,800.0	3,794.3	3,829.3	3,829.3	7.4	6.7	-152.36	-6,180.7	-583.7	6,376.0	6,362.6	13.47	473.345		
3,900.0	3,894.1	3,929.1	3,929.1	7.6	6.9	-152.39	-6,180.7	-583.7	6,381.4	6,367.6	13.83	461.582		
4,000.0	3,994.0	4,029.0	4,029.0	7.8	7.0	-152.41	-6,180.7	-583.7	6,386.8	6,372.6	14.18	450.408		
4,100.0	4,093.8	4,128.8	4,128.8	8.0	7.2	-152.44	-6,180.7	-583.7	6,392.2	6,377.7	14.53	439.780		
4,200.0	4,193.6	4,228.6	4,228.6	8.2	7.4	-152.46	-6,180.7	-583.7	6,397.6	6,382.7	14.89	429.659		
4,300.0	4,293.4	4,328.4	4,328.4	8.4	7.6	-152.49	-6,180.7	-583.7	6,403.0	6,387.7	15.24	420.010		
4,400.0	4,393.2	4,428.2	4,428.2	8.6	7.7	-152.51	-6,180.7	-583.7	6,408.4	6,392.8	15.60	410.801		
4,500.0	4,493.0	4,528.0	4,528.0	8.8	7.9	-152.54	-6,180.7	-583.7	6,413.8	6,397.8	15.95	402.001		
4,600.0	4,592.8	4,627.8	4,627.8	9.0	8.1	-152.56	-6,180.7	-583.7	6,419.2	6,402.9	16.31	393.585		
4,700.0	4,692.7	4,727.7	4,727.7	9.3	8.3	-152.59	-6,180.7	-583.7	6,424.6	6,407.9	16.66	385.528		
4,800.0	4,792.5	4,827.5	4,827.5	9.5	8.4	-152.61	-6,180.7	-583.7	6,430.0	6,413.0	17.02	377.808		
4,900.0	4,892.3	4,927.3	4,927.3	9.7	8.6	-152.64	-6,180.7	-583.7	6,435.4	6,418.0	17.37	370.403		
5,000.0	4,992.1	5,027.1	5,027.1	9.9	8.8	-152.66	-6,180.7	-583.7	6,440.8	6,423.1	17.73	363.295		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8393-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	5,091.9	5,126.9	5,126.9	10.1	8.9	-152.69	-6,180.7	-583.7	6,446.2	6,428.1	18.08	356.467		
5,200.0	5,191.7	5,226.7	5,226.7	10.3	9.1	-152.71	-6,180.7	-583.7	6,451.6	6,433.2	18.44	349.901		
5,300.0	5,291.5	5,326.5	5,326.5	10.5	9.3	-152.74	-6,180.7	-583.7	6,457.0	6,438.2	18.79	343.584		
5,400.0	5,391.4	5,426.4	5,426.4	10.7	9.5	-152.76	-6,180.7	-583.7	6,462.4	6,443.3	19.15	337.501		
5,500.0	5,491.2	5,526.2	5,526.2	10.9	9.6	-152.79	-6,180.7	-583.7	6,467.8	6,448.3	19.50	331.640		
5,600.0	5,591.0	5,626.0	5,626.0	11.1	9.8	-152.81	-6,180.7	-583.7	6,473.2	6,453.4	19.86	325.989		
5,700.0	5,690.8	5,725.8	5,725.8	11.3	10.0	-152.84	-6,180.7	-583.7	6,478.6	6,458.4	20.21	320.536		
5,800.0	5,790.6	5,825.6	5,825.6	11.5	10.2	-152.86	-6,180.7	-583.7	6,484.1	6,463.5	20.57	315.272		
5,900.0	5,890.4	5,925.4	5,925.4	11.7	10.3	-152.89	-6,180.7	-583.7	6,489.5	6,468.6	20.92	310.186		
6,000.0	5,990.3	6,025.3	6,025.3	11.9	10.5	-152.91	-6,180.7	-583.7	6,494.9	6,473.6	21.28	305.271		
6,100.0	6,090.1	6,125.1	6,125.1	12.1	10.7	-152.94	-6,180.7	-583.7	6,500.3	6,478.7	21.63	300.516		
6,200.0	6,189.9	6,224.9	6,224.9	12.3	10.9	-152.96	-6,180.7	-583.7	6,505.7	6,483.7	21.99	295.916		
6,300.0	6,289.7	6,324.7	6,324.7	12.5	11.0	-152.98	-6,180.7	-583.7	6,511.1	6,488.8	22.34	291.462		
6,400.0	6,389.5	6,424.5	6,424.5	12.7	11.2	-153.01	-6,180.7	-583.7	6,516.6	6,493.9	22.69	287.147		
6,500.0	6,489.3	6,524.3	6,524.3	12.9	11.4	-153.03	-6,180.7	-583.7	6,522.0	6,498.9	23.05	282.966		
6,600.0	6,589.1	6,624.1	6,624.1	13.1	11.6	-153.06	-6,180.7	-583.7	6,527.4	6,504.0	23.40	278.911		
6,700.0	6,689.0	6,724.0	6,724.0	13.3	11.7	-153.08	-6,180.7	-583.7	6,532.8	6,509.1	23.76	274.977		
6,785.3	6,774.1	6,809.1	6,809.1	13.5	11.9	-153.10	-6,180.7	-583.7	6,537.5	6,513.4	24.06	271.716		
6,800.0	6,788.8	6,823.8	6,823.8	13.5	11.9	-142.08	-6,180.7	-583.7	6,538.1	6,514.0	24.12	271.084		
6,850.0	6,838.8	6,873.8	6,873.8	13.6	12.0	-31.58	-6,180.7	-583.7	6,538.1	6,513.8	24.26	269.448		
6,900.0	6,888.6	6,923.6	6,923.6	13.6	12.1	-9.64	-6,180.7	-583.7	6,534.5	6,510.2	24.33	268.573		
6,950.0	6,938.1	6,973.1	6,973.1	13.7	12.2	-4.48	-6,180.7	-583.7	6,527.5	6,503.2	24.32	268.448		
7,000.0	6,987.0	7,022.0	7,022.0	13.7	12.3	-2.21	-6,180.7	-583.7	6,517.1	6,492.9	24.22	269.067		
7,050.0	7,035.0	7,070.0	7,070.0	13.6	12.3	-0.90	-6,180.7	-583.7	6,503.3	6,479.2	24.05	270.432		
7,100.0	7,082.0	7,117.0	7,117.0	13.6	12.4	-0.03	-6,180.7	-583.7	6,486.2	6,462.4	23.80	272.547		
7,150.0	7,127.7	7,162.7	7,162.7	13.5	12.5	0.63	-6,180.7	-583.7	6,465.8	6,442.3	23.48	275.419		
7,200.0	7,171.8	7,206.8	7,206.8	13.5	12.6	1.16	-6,180.7	-583.7	6,442.3	6,419.3	23.09	279.055		
7,250.0	7,214.2	7,249.2	7,249.2	13.4	12.7	1.64	-6,180.7	-583.7	6,415.8	6,393.2	22.63	283.458		
7,300.0	7,254.6	7,289.6	7,289.6	13.4	12.7	2.09	-6,180.7	-583.7	6,386.5	6,364.3	22.13	288.625		
7,350.0	7,292.9	7,327.9	7,327.9	13.3	12.8	2.54	-6,180.7	-583.7	6,354.4	6,332.8	21.57	294.536		
7,400.0	7,328.9	7,363.9	7,363.9	13.3	12.9	3.02	-6,180.7	-583.7	6,319.7	6,298.7	20.99	301.143		
7,450.0	7,362.3	7,397.3	7,397.3	13.3	12.9	3.56	-6,180.7	-583.7	6,282.5	6,262.2	20.37	308.360		
7,500.0	7,393.1	7,428.1	7,428.1	13.4	13.0	4.18	-6,180.7	-583.7	6,243.2	6,223.4	19.75	316.035		
7,550.0	7,421.1	7,456.1	7,456.1	13.5	13.0	4.93	-6,180.7	-583.7	6,201.8	6,182.6	19.15	323.923		
7,600.0	7,446.1	7,481.1	7,481.1	13.6	13.1	5.88	-6,180.7	-583.7	6,158.5	6,140.0	18.57	331.629		
7,650.0	7,468.0	7,503.0	7,503.0	13.8	13.1	7.12	-6,180.7	-583.7	6,113.7	6,095.6	18.06	338.537		
7,700.0	7,486.7	7,521.7	7,521.7	14.0	13.1	8.83	-6,180.7	-583.7	6,067.4	6,049.7	17.66	343.632		
7,750.0	7,502.2	7,537.2	7,537.2	14.2	13.2	11.37	-6,180.7	-583.7	6,019.9	6,002.5	17.44	345.124		
7,800.0	7,514.3	7,549.3	7,549.3	14.6	13.2	15.50	-6,180.7	-583.7	5,971.5	5,953.9	17.60	339.353		
7,850.0	7,523.0	7,558.0	7,558.0	14.9	13.2	23.27	-6,180.7	-583.7	5,922.3	5,903.7	18.65	317.632		
7,900.0	7,528.2	7,563.2	7,563.2	15.3	13.2	41.59	-6,180.7	-583.7	5,872.7	5,850.3	22.40	262.120		
7,950.2	7,530.0	7,565.0	7,565.0	15.8	13.2	90.00	-6,180.7	-583.7	5,822.6	5,793.9	28.69	202.926		
8,000.0	7,530.0	7,565.0	7,565.0	16.2	13.2	90.00	-6,180.7	-583.7	5,773.0	5,743.8	29.18	197.863		
8,100.0	7,530.0	7,565.0	7,565.0	17.3	13.2	90.00	-6,180.7	-583.7	5,673.2	5,642.9	30.24	187.592		
8,200.0	7,530.0	7,565.0	7,565.0	18.4	13.2	90.00	-6,180.7	-583.7	5,573.4	5,542.0	31.41	177.415		
8,300.0	7,530.0	7,565.0	7,565.0	19.7	13.2	90.00	-6,180.7	-583.7	5,473.6	5,441.0	32.67	167.519		
8,400.0	7,530.0	7,565.0	7,565.0	21.0	13.2	90.00	-6,180.7	-583.7	5,373.9	5,339.9	34.01	158.026		
8,500.0	7,530.0	7,565.0	7,565.0	22.4	13.2	90.00	-6,180.7	-583.7	5,274.1	5,238.7	35.40	148.999		
8,600.0	7,530.0	7,565.0	7,565.0	23.8	13.2	90.00	-6,180.7	-583.7	5,174.4	5,137.5	36.84	140.471		
8,700.0	7,530.0	7,565.0	7,565.0	25.3	13.2	90.00	-6,180.7	-583.7	5,074.7	5,036.3	38.31	132.446		
8,800.0	7,530.0	7,565.0	7,565.0	26.8	13.2	90.00	-6,180.7	-583.7	4,974.9	4,935.1	39.83	124.912		
8,900.0	7,530.0	7,565.0	7,565.0	28.3	13.2	90.00	-6,180.7	-583.7	4,875.2	4,833.9	41.37	117.850		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8393-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	7,530.0	7,565.0	7,565.0	29.9	13.2	90.00	-6,180.7	-583.7	4,775.5	4,732.6	42.93	111.234		
9,100.0	7,530.0	7,565.0	7,565.0	31.4	13.2	90.00	-6,180.7	-583.7	4,675.8	4,631.3	44.52	105.036		
9,200.0	7,530.0	7,565.0	7,565.0	33.0	13.2	90.00	-6,180.7	-583.7	4,576.2	4,530.0	46.12	99.227		
9,300.0	7,530.0	7,565.0	7,565.0	34.7	13.2	90.00	-6,180.7	-583.7	4,476.5	4,428.8	47.73	93.779		
9,400.0	7,530.0	7,565.0	7,565.0	36.3	13.2	90.00	-6,180.7	-583.7	4,376.9	4,327.5	49.36	88.666		
9,500.0	7,530.0	7,565.0	7,565.0	37.9	13.2	90.00	-6,180.7	-583.7	4,277.2	4,226.2	51.00	83.861		
9,600.0	7,530.0	7,565.0	7,565.0	39.6	13.2	90.00	-6,180.7	-583.7	4,177.6	4,125.0	52.65	79.341		
9,700.0	7,530.0	7,565.0	7,565.0	41.2	13.2	90.00	-6,180.7	-583.7	4,078.0	4,023.7	54.31	75.084		
9,800.0	7,530.0	7,565.0	7,565.0	42.9	13.2	90.00	-6,180.7	-583.7	3,978.5	3,922.5	55.98	71.070		
9,900.0	7,530.0	7,565.0	7,565.0	44.5	13.2	90.00	-6,180.7	-583.7	3,878.9	3,821.3	57.65	67.281		
10,000.0	7,530.0	7,565.0	7,565.0	46.2	13.2	90.00	-6,180.7	-583.7	3,779.4	3,720.1	59.33	63.700		
10,100.0	7,530.0	7,565.0	7,565.0	47.9	13.2	90.00	-6,180.7	-583.7	3,679.9	3,618.9	61.02	60.311		
10,200.0	7,530.0	7,565.0	7,565.0	49.6	13.2	90.00	-6,180.7	-583.7	3,580.5	3,517.7	62.71	57.100		
10,300.0	7,530.0	7,565.0	7,565.0	51.3	13.2	90.00	-6,180.7	-583.7	3,481.0	3,416.6	64.40	54.054		
10,400.0	7,530.0	7,565.0	7,565.0	53.0	13.2	90.00	-6,180.7	-583.7	3,381.6	3,315.5	66.10	51.162		
10,500.0	7,530.0	7,565.0	7,565.0	54.7	13.2	90.00	-6,180.7	-583.7	3,282.2	3,214.5	67.80	48.412		
10,600.0	7,530.0	7,565.0	7,565.0	56.4	13.2	90.00	-6,180.7	-583.7	3,182.9	3,113.4	69.50	45.796		
10,700.0	7,530.0	7,565.0	7,565.0	58.1	13.2	90.00	-6,180.7	-583.7	3,083.6	3,012.4	71.21	43.304		
10,800.0	7,530.0	7,565.0	7,565.0	59.8	13.2	90.00	-6,180.7	-583.7	2,984.4	2,911.5	72.92	40.927		
10,900.0	7,530.0	7,565.0	7,565.0	61.5	13.2	90.00	-6,180.7	-583.7	2,885.2	2,810.6	74.63	38.659		
11,000.0	7,530.0	7,565.0	7,565.0	63.2	13.2	90.00	-6,180.7	-583.7	2,786.1	2,709.8	76.35	36.492		
11,100.0	7,530.0	7,565.0	7,565.0	64.9	13.2	90.00	-6,180.7	-583.7	2,687.0	2,609.0	78.06	34.421		
11,200.0	7,530.0	7,565.0	7,565.0	66.6	13.2	90.00	-6,180.7	-583.7	2,588.1	2,508.3	79.78	32.439		
11,300.0	7,530.0	7,565.0	7,565.0	68.4	13.2	90.00	-6,180.7	-583.7	2,489.1	2,407.6	81.50	30.540		
11,400.0	7,530.0	7,565.0	7,565.0	70.1	13.2	90.00	-6,180.7	-583.7	2,390.3	2,307.1	83.23	28.721		
11,500.0	7,530.0	7,565.0	7,565.0	71.8	13.2	90.00	-6,180.7	-583.7	2,291.6	2,206.7	84.95	26.976		
11,600.0	7,530.0	7,565.0	7,565.0	73.5	13.2	90.00	-6,180.7	-583.7	2,193.0	2,106.4	86.68	25.302		
11,700.0	7,530.0	7,565.0	7,565.0	75.3	13.2	90.00	-6,180.7	-583.7	2,094.6	2,006.2	88.40	23.694		
11,800.0	7,530.0	7,565.0	7,565.0	77.0	13.2	90.00	-6,180.7	-583.7	1,996.3	1,906.1	90.13	22.149		
11,900.0	7,530.0	7,565.0	7,565.0	78.7	13.2	90.00	-6,180.7	-583.7	1,898.1	1,806.3	91.86	20.663		
12,000.0	7,530.0	7,565.0	7,565.0	80.4	13.2	90.00	-6,180.7	-583.7	1,800.2	1,706.6	93.59	19.235		
12,100.0	7,530.0	7,565.0	7,565.0	82.2	13.2	90.00	-6,180.7	-583.7	1,702.5	1,607.2	95.32	17.861		
12,200.0	7,530.0	7,565.0	7,565.0	83.9	13.2	90.00	-6,180.7	-583.7	1,605.1	1,508.1	97.05	16.539		
12,300.0	7,530.0	7,565.0	7,565.0	85.6	13.2	90.00	-6,180.7	-583.7	1,508.1	1,409.3	98.79	15.266		
12,400.0	7,530.0	7,565.0	7,565.0	87.4	13.2	90.00	-6,180.7	-583.7	1,411.4	1,310.9	100.52	14.041		
12,500.0	7,530.0	7,565.0	7,565.0	89.1	13.2	90.00	-6,180.7	-583.7	1,315.3	1,213.0	102.25	12.863		
12,600.0	7,530.0	7,565.0	7,565.0	90.8	13.2	90.00	-6,180.7	-583.7	1,219.7	1,115.7	103.99	11.729		
12,700.0	7,530.0	7,565.0	7,565.0	92.6	13.2	90.00	-6,180.7	-583.7	1,125.0	1,019.3	105.73	10.641		
12,800.0	7,530.0	7,565.0	7,565.0	94.3	13.2	90.00	-6,180.7	-583.7	1,031.2	923.8	107.46	9.596		
12,900.0	7,530.0	7,565.0	7,565.0	96.0	13.2	90.00	-6,180.7	-583.7	938.8	829.6	109.20	8.597		
13,000.0	7,530.0	7,565.0	7,565.0	97.8	13.2	90.00	-6,180.7	-583.7	848.0	737.1	110.94	7.644		
13,100.0	7,530.0	7,565.0	7,565.0	99.5	13.2	90.00	-6,180.7	-583.7	759.6	646.9	112.68	6.741		
13,200.0	7,530.0	7,565.0	7,565.0	101.3	13.2	90.00	-6,180.7	-583.7	674.4	560.0	114.42	5.894		
13,300.0	7,530.0	7,565.0	7,565.0	103.0	13.2	90.00	-6,180.7	-583.7	593.8	477.7	116.15	5.112		
13,400.0	7,530.0	7,565.0	7,565.0	104.7	13.2	90.00	-6,180.7	-583.7	520.1	402.2	117.89	4.411		
13,500.0	7,530.0	7,565.0	7,565.0	106.5	13.2	90.00	-6,180.7	-583.7	456.4	336.8	119.64	3.815		
13,600.0	7,530.0	7,565.0	7,565.0	108.2	13.2	90.00	-6,180.7	-583.7	407.6	286.2	121.38	3.358		
13,700.0	7,530.0	7,565.0	7,565.0	110.0	13.2	90.00	-6,180.7	-583.7	379.4	256.3	123.12	3.082		
13,760.8	7,530.0	7,565.0	7,565.0	111.0	13.2	90.00	-6,180.7	-583.7	374.5	250.4	124.18	3.016 CC, ES		
13,800.0	7,530.0	7,565.0	7,565.0	111.7	13.2	90.00	-6,180.7	-583.7	376.6	251.7	124.86	3.016 SF		
13,900.0	7,530.0	7,565.0	7,565.0	113.4	13.2	90.00	-6,180.7	-583.7	399.6	273.0	126.60	3.156		
14,000.0	7,530.0	7,565.0	7,565.0	115.2	13.2	90.00	-6,180.7	-583.7	444.4	316.0	128.34	3.462		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO													Offset Site Error: 0.0 ft	
Survey Program: 8393-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
14,100.0	7,530.0	7,565.0	7,565.0	116.9	13.2	90.00	-6,180.7	-583.7	505.3	375.2	130.09	3.884		
14,200.0	7,530.0	7,565.0	7,565.0	118.7	13.2	90.00	-6,180.7	-583.7	577.2	445.4	131.83	4.378		
14,300.0	7,530.0	7,565.0	7,565.0	120.4	13.2	90.00	-6,180.7	-583.7	656.5	522.9	133.57	4.915		
14,400.0	7,530.0	7,565.0	7,565.0	122.1	13.2	90.00	-6,180.7	-583.7	740.8	605.5	135.32	5.475		
14,500.0	7,530.0	7,565.0	7,565.0	123.9	13.2	90.00	-6,180.7	-583.7	828.7	691.6	137.06	6.046		
14,600.0	7,530.0	7,565.0	7,565.0	125.6	13.2	90.00	-6,180.7	-583.7	919.0	780.2	138.81	6.621		
14,700.0	7,530.0	7,565.0	7,565.0	127.4	13.2	90.00	-6,180.7	-583.7	1,011.1	870.6	140.55	7.194		
14,800.0	7,530.0	7,565.0	7,565.0	129.1	13.2	90.00	-6,180.7	-583.7	1,104.6	962.3	142.30	7.763		
14,900.0	7,530.0	7,565.0	7,565.0	130.9	13.2	90.00	-6,180.7	-583.7	1,199.2	1,055.1	144.04	8.325		
15,000.0	7,530.0	7,565.0	7,565.0	132.6	13.2	90.00	-6,180.7	-583.7	1,294.6	1,148.8	145.79	8.880		
15,100.0	7,530.0	7,565.0	7,565.0	134.4	13.2	90.00	-6,180.7	-583.7	1,390.6	1,243.0	147.53	9.426		
15,200.0	7,530.0	7,565.0	7,565.0	136.1	13.2	90.00	-6,180.7	-583.7	1,487.1	1,337.8	149.28	9.962		
15,300.0	7,530.0	7,565.0	7,565.0	137.9	13.2	90.00	-6,180.7	-583.7	1,584.1	1,433.1	151.02	10.489		
15,400.0	7,530.0	7,565.0	7,565.0	139.6	13.2	90.00	-6,180.7	-583.7	1,681.4	1,528.7	152.77	11.006		
15,500.0	7,530.0	7,565.0	7,565.0	141.3	13.2	90.00	-6,180.7	-583.7	1,779.1	1,624.5	154.52	11.514		
15,600.0	7,530.0	7,565.0	7,565.0	143.1	13.2	90.00	-6,180.7	-583.7	1,876.9	1,720.7	156.26	12.011		
15,700.0	7,530.0	7,565.0	7,565.0	144.8	13.2	90.00	-6,180.7	-583.7	1,975.0	1,817.0	158.01	12.499		
15,800.0	7,530.0	7,565.0	7,565.0	146.6	13.2	90.00	-6,180.7	-583.7	2,073.3	1,913.5	159.76	12.978		
15,900.0	7,530.0	7,565.0	7,565.0	148.3	13.2	90.00	-6,180.7	-583.7	2,171.7	2,010.2	161.50	13.447		
16,000.0	7,530.0	7,565.0	7,565.0	150.1	13.2	90.00	-6,180.7	-583.7	2,270.3	2,107.0	163.25	13.907		
16,100.0	7,530.0	7,565.0	7,565.0	151.8	13.2	90.00	-6,180.7	-583.7	2,369.0	2,204.0	165.00	14.358		
16,200.0	7,530.0	7,565.0	7,565.0	153.6	13.2	90.00	-6,180.7	-583.7	2,467.8	2,301.0	166.75	14.800		
16,300.0	7,530.0	7,565.0	7,565.0	155.3	13.2	90.00	-6,180.7	-583.7	2,566.7	2,398.2	168.49	15.233		
16,400.0	7,530.0	7,565.0	7,565.0	157.1	13.2	90.00	-6,180.7	-583.7	2,665.6	2,495.4	170.24	15.658		
16,500.0	7,530.0	7,565.0	7,565.0	158.8	13.2	90.00	-6,180.7	-583.7	2,764.7	2,592.7	171.99	16.075		
16,600.0	7,530.0	7,565.0	7,565.0	160.6	13.2	90.00	-6,180.7	-583.7	2,863.8	2,690.0	173.74	16.483		
16,700.0	7,530.0	7,565.0	7,565.0	162.3	13.2	90.00	-6,180.7	-583.7	2,963.0	2,787.5	175.49	16.884		
16,800.0	7,530.0	7,565.0	7,565.0	164.1	13.2	90.00	-6,180.7	-583.7	3,062.2	2,884.9	177.23	17.278		
16,900.0	7,530.0	7,565.0	7,565.0	165.8	13.2	90.00	-6,180.7	-583.7	3,161.5	2,982.5	178.98	17.663		
17,000.0	7,530.0	7,565.0	7,565.0	167.6	13.2	90.00	-6,180.7	-583.7	3,260.8	3,080.0	180.73	18.042		
17,100.0	7,530.0	7,565.0	7,565.0	169.3	13.2	90.00	-6,180.7	-583.7	3,360.1	3,177.6	182.48	18.414		
17,200.0	7,530.0	7,565.0	7,565.0	171.1	13.2	90.00	-6,180.7	-583.7	3,459.5	3,275.3	184.23	18.778		
17,300.0	7,530.0	7,565.0	7,565.0	172.8	13.2	90.00	-6,180.7	-583.7	3,559.0	3,373.0	185.98	19.136		
17,400.0	7,530.0	7,565.0	7,565.0	174.5	13.2	90.00	-6,180.7	-583.7	3,658.4	3,470.7	187.73	19.488		
17,411.2	7,530.0	7,565.0	7,565.0	174.7	13.2	90.00	-6,180.7	-583.7	3,669.6	3,481.7	187.92	19.527		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program:		8413-Geolink MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	30.0	30.0	0.0	0.1	-176.16	-9,207.8	-617.3	9,228.5					
100.0	100.0	130.0	130.0	0.2	0.2	-176.16	-9,207.8	-617.3	9,228.5	9,228.1	0.38	N/A		
200.0	200.0	230.0	230.0	0.3	0.4	-176.16	-9,207.8	-617.3	9,228.5	9,227.8	0.73	N/A		
300.0	300.0	330.0	330.0	0.5	0.6	-176.16	-9,207.8	-617.3	9,228.5	9,227.4	1.08	8,568.219		
400.0	400.0	430.0	430.0	0.7	0.8	-176.16	-9,207.8	-617.3	9,228.5	9,227.1	1.43	6,471.029		
500.0	500.0	530.0	530.0	0.8	0.9	-176.16	-9,207.8	-617.3	9,228.5	9,226.7	1.78	5,198.600		
600.0	600.0	630.0	630.0	1.0	1.1	-153.15	-9,207.8	-617.3	9,229.3	9,227.1	2.12	4,344.882		
700.0	700.0	730.0	730.0	1.2	1.3	-153.15	-9,207.8	-617.3	9,231.6	9,229.1	2.47	3,732.598		
800.0	799.9	829.9	829.9	1.4	1.4	-153.14	-9,207.8	-617.3	9,235.5	9,232.7	2.82	3,271.665		
848.7	848.4	878.4	878.4	1.5	1.5	-153.14	-9,207.8	-617.3	9,238.0	9,235.0	2.99	3,086.285		
900.0	899.7	929.7	929.7	1.6	1.6	-153.15	-9,207.8	-617.3	9,240.7	9,237.6	3.17	2,911.447		
1,000.0	999.5	1,029.5	1,029.5	1.8	1.8	-153.17	-9,207.8	-617.3	9,246.2	9,242.6	3.53	2,622.024		
1,100.0	1,099.3	1,129.3	1,129.3	2.0	2.0	-153.18	-9,207.8	-617.3	9,251.6	9,247.7	3.88	2,384.891		
1,200.0	1,199.1	1,229.1	1,229.1	2.2	2.1	-153.20	-9,207.8	-617.3	9,257.0	9,252.8	4.23	2,187.118		
1,300.0	1,298.9	1,328.9	1,328.9	2.4	2.3	-153.22	-9,207.8	-617.3	9,262.5	9,257.9	4.59	2,019.696		
1,400.0	1,398.8	1,428.8	1,428.8	2.6	2.5	-153.23	-9,207.8	-617.3	9,267.9	9,262.9	4.94	1,876.160		
1,500.0	1,498.6	1,528.6	1,528.6	2.8	2.7	-153.25	-9,207.8	-617.3	9,273.3	9,268.0	5.29	1,751.754		
1,600.0	1,598.4	1,628.4	1,628.4	3.0	2.8	-153.27	-9,207.8	-617.3	9,278.8	9,273.1	5.65	1,642.903		
1,700.0	1,698.2	1,728.2	1,728.2	3.2	3.0	-153.28	-9,207.8	-617.3	9,284.2	9,278.2	6.00	1,546.867		
1,800.0	1,798.0	1,828.0	1,828.0	3.4	3.2	-153.30	-9,207.8	-617.3	9,289.6	9,283.3	6.36	1,461.515		
1,900.0	1,897.8	1,927.8	1,927.8	3.6	3.4	-153.32	-9,207.8	-617.3	9,295.1	9,288.3	6.71	1,385.159		
2,000.0	1,997.7	2,027.7	2,027.7	3.8	3.5	-153.34	-9,207.8	-617.3	9,300.5	9,293.4	7.06	1,316.453		
2,100.0	2,097.5	2,127.5	2,127.5	4.0	3.7	-153.35	-9,207.8	-617.3	9,305.9	9,298.5	7.42	1,254.301		
2,200.0	2,197.3	2,227.3	2,227.3	4.2	3.9	-153.37	-9,207.8	-617.3	9,311.4	9,303.6	7.77	1,197.812		
2,300.0	2,297.1	2,327.1	2,327.1	4.4	4.1	-153.39	-9,207.8	-617.3	9,316.8	9,308.7	8.13	1,146.244		
2,400.0	2,396.9	2,426.9	2,426.9	4.6	4.2	-153.40	-9,207.8	-617.3	9,322.2	9,313.8	8.48	1,098.984		
2,500.0	2,496.7	2,526.7	2,526.7	4.8	4.4	-153.42	-9,207.8	-617.3	9,327.7	9,318.8	8.84	1,055.513		
2,600.0	2,596.5	2,626.5	2,626.5	5.0	4.6	-153.44	-9,207.8	-617.3	9,333.1	9,323.9	9.19	1,015.393		
2,700.0	2,696.4	2,726.4	2,726.4	5.2	4.8	-153.45	-9,207.8	-617.3	9,338.6	9,329.0	9.55	978.252		
2,800.0	2,796.2	2,826.2	2,826.2	5.4	4.9	-153.47	-9,207.8	-617.3	9,344.0	9,334.1	9.90	943.771		
2,900.0	2,896.0	2,926.0	2,926.0	5.6	5.1	-153.49	-9,207.8	-617.3	9,349.5	9,339.2	10.26	911.673		
3,000.0	2,995.8	3,025.8	3,025.8	5.8	5.3	-153.50	-9,207.8	-617.3	9,354.9	9,344.3	10.61	881.720		
3,100.0	3,095.6	3,125.6	3,125.6	6.0	5.5	-153.52	-9,207.8	-617.3	9,360.3	9,349.4	10.96	853.704		
3,200.0	3,195.4	3,225.4	3,225.4	6.2	5.6	-153.54	-9,207.8	-617.3	9,365.8	9,354.5	11.32	827.443		
3,300.0	3,295.2	3,325.2	3,325.2	6.4	5.8	-153.55	-9,207.8	-617.3	9,371.2	9,359.6	11.67	802.777		
3,400.0	3,395.1	3,425.1	3,425.1	6.6	6.0	-153.57	-9,207.8	-617.3	9,376.7	9,364.7	12.03	779.566		
3,500.0	3,494.9	3,524.9	3,524.9	6.8	6.2	-153.59	-9,207.8	-617.3	9,382.1	9,369.7	12.38	757.684		
3,600.0	3,594.7	3,624.7	3,624.7	7.0	6.3	-153.60	-9,207.8	-617.3	9,387.6	9,374.8	12.74	737.021		
3,700.0	3,694.5	3,724.5	3,724.5	7.2	6.5	-153.62	-9,207.8	-617.3	9,393.0	9,379.9	13.09	717.477		
3,800.0	3,794.3	3,824.3	3,824.3	7.4	6.7	-153.63	-9,207.8	-617.3	9,398.5	9,385.0	13.45	698.965		
3,900.0	3,894.1	3,924.1	3,924.1	7.6	6.8	-153.65	-9,207.8	-617.3	9,403.9	9,390.1	13.80	681.403		
4,000.0	3,994.0	4,024.0	4,024.0	7.8	7.0	-153.67	-9,207.8	-617.3	9,409.4	9,395.2	14.16	664.722		
4,100.0	4,093.8	4,123.8	4,123.8	8.0	7.2	-153.68	-9,207.8	-617.3	9,414.8	9,400.3	14.51	648.857		
4,200.0	4,193.6	4,223.6	4,223.6	8.2	7.4	-153.70	-9,207.8	-617.3	9,420.3	9,405.4	14.86	633.748		
4,300.0	4,293.4	4,323.4	4,323.4	8.4	7.5	-153.72	-9,207.8	-617.3	9,425.7	9,410.5	15.22	619.344		
4,400.0	4,393.2	4,423.2	4,423.2	8.6	7.7	-153.73	-9,207.8	-617.3	9,431.2	9,415.6	15.57	605.596		
4,500.0	4,493.0	4,523.0	4,523.0	8.8	7.9	-153.75	-9,207.8	-617.3	9,436.7	9,420.7	15.93	592.460		
4,600.0	4,592.8	4,622.8	4,622.8	9.0	8.1	-153.77	-9,207.8	-617.3	9,442.1	9,425.8	16.28	579.897		
4,700.0	4,692.7	4,722.7	4,722.7	9.3	8.2	-153.78	-9,207.8	-617.3	9,447.6	9,430.9	16.64	567.869		
4,800.0	4,792.5	4,822.5	4,822.5	9.5	8.4	-153.80	-9,207.8	-617.3	9,453.0	9,436.0	16.99	556.344		
4,900.0	4,892.3	4,922.3	4,922.3	9.7	8.6	-153.81	-9,207.8	-617.3	9,458.5	9,441.1	17.35	545.289		
5,000.0	4,992.1	5,022.1	5,022.1	9.9	8.8	-153.83	-9,207.8	-617.3	9,463.9	9,446.2	17.70	534.678		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,121.9	5,121.9	10.1	8.9	-153.85	-9,207.8	-617.3	9,469.4	9,451.4	18.05	524.484		
5,200.0	5,191.7	5,221.7	5,221.7	10.3	9.1	-153.86	-9,207.8	-617.3	9,474.9	9,456.5	18.41	514.683		
5,300.0	5,291.5	5,321.5	5,321.5	10.5	9.3	-153.88	-9,207.8	-617.3	9,480.3	9,461.6	18.76	505.253		
5,400.0	5,391.4	5,421.4	5,421.4	10.7	9.5	-153.90	-9,207.8	-617.3	9,485.8	9,466.7	19.12	496.172		
5,500.0	5,491.2	5,521.2	5,521.2	10.9	9.6	-153.91	-9,207.8	-617.3	9,491.3	9,471.8	19.47	487.422		
5,600.0	5,591.0	5,621.0	5,621.0	11.1	9.8	-153.93	-9,207.8	-617.3	9,496.7	9,476.9	19.83	478.986		
5,700.0	5,690.8	5,720.8	5,720.8	11.3	10.0	-153.94	-9,207.8	-617.3	9,502.2	9,482.0	20.18	470.846		
5,800.0	5,790.6	5,820.6	5,820.6	11.5	10.2	-153.96	-9,207.8	-617.3	9,507.6	9,487.1	20.54	462.987		
5,900.0	5,890.4	5,920.4	5,920.4	11.7	10.3	-153.98	-9,207.8	-617.3	9,513.1	9,492.2	20.89	455.395		
6,000.0	5,990.3	6,020.3	6,020.3	11.9	10.5	-153.99	-9,207.8	-617.3	9,518.6	9,497.3	21.24	448.056		
6,100.0	6,090.1	6,120.1	6,120.1	12.1	10.7	-154.01	-9,207.8	-617.3	9,524.1	9,502.5	21.60	440.959		
6,200.0	6,189.9	6,219.9	6,219.9	12.3	10.9	-154.02	-9,207.8	-617.3	9,529.5	9,507.6	21.95	434.091		
6,300.0	6,289.7	6,319.7	6,319.7	12.5	11.0	-154.04	-9,207.8	-617.3	9,535.0	9,512.7	22.31	427.441		
6,400.0	6,389.5	6,419.5	6,419.5	12.7	11.2	-154.06	-9,207.8	-617.3	9,540.5	9,517.8	22.66	421.000		
6,500.0	6,489.3	6,519.3	6,519.3	12.9	11.4	-154.07	-9,207.8	-617.3	9,545.9	9,522.9	23.02	414.757		
6,600.0	6,589.1	6,619.1	6,619.1	13.1	11.6	-154.09	-9,207.8	-617.3	9,551.4	9,528.0	23.37	408.704		
6,700.0	6,689.0	6,719.0	6,719.0	13.3	11.7	-154.10	-9,207.8	-617.3	9,556.9	9,533.1	23.72	402.832		
6,785.3	6,774.1	6,804.1	6,804.1	13.5	11.9	-154.12	-9,207.8	-617.3	9,561.5	9,537.5	24.03	397.962		
6,800.0	6,788.8	6,818.8	6,818.8	13.5	11.9	-143.09	-9,207.8	-617.3	9,562.2	9,538.1	24.08	397.022		
6,850.0	6,838.8	6,868.8	6,868.8	13.6	12.0	-32.59	-9,207.8	-617.3	9,562.2	9,537.9	24.23	394.616		
6,900.0	6,888.6	6,918.6	6,918.6	13.6	12.1	-10.65	-9,207.8	-617.3	9,558.6	9,534.3	24.30	393.393		
6,950.0	6,938.1	6,968.1	6,968.1	13.7	12.2	-5.51	-9,207.8	-617.3	9,551.7	9,527.4	24.28	393.335		
7,000.0	6,987.0	7,017.0	7,017.0	13.7	12.2	-3.24	-9,207.8	-617.3	9,541.2	9,517.1	24.19	394.436		
7,050.0	7,035.0	7,065.0	7,065.0	13.6	12.3	-1.96	-9,207.8	-617.3	9,527.4	9,503.4	24.02	396.698		
7,100.0	7,082.0	7,112.0	7,112.0	13.6	12.4	-1.11	-9,207.8	-617.3	9,510.3	9,486.6	23.77	400.130		
7,150.0	7,127.7	7,157.7	7,157.7	13.5	12.5	-0.50	-9,207.8	-617.3	9,490.0	9,466.5	23.45	404.749		
7,200.0	7,171.8	7,201.8	7,201.8	13.5	12.6	-0.01	-9,207.8	-617.3	9,466.5	9,443.4	23.06	410.568		
7,250.0	7,214.2	7,244.2	7,244.2	13.4	12.6	0.41	-9,207.8	-617.3	9,440.0	9,417.4	22.61	417.603		
7,300.0	7,254.6	7,284.6	7,284.6	13.4	12.7	0.79	-9,207.8	-617.3	9,410.6	9,388.5	22.10	425.857		
7,350.0	7,292.9	7,322.9	7,322.9	13.3	12.8	1.16	-9,207.8	-617.3	9,378.5	9,357.0	21.54	435.313		
7,400.0	7,328.9	7,358.9	7,358.9	13.3	12.8	1.53	-9,207.8	-617.3	9,343.8	9,322.8	20.95	445.921		
7,450.0	7,362.3	7,392.3	7,392.3	13.3	12.9	1.94	-9,207.8	-617.3	9,306.6	9,286.3	20.34	457.579		
7,500.0	7,393.1	7,423.1	7,423.1	13.4	13.0	2.39	-9,207.8	-617.3	9,267.3	9,247.5	19.71	470.103		
7,550.0	7,421.1	7,451.1	7,451.1	13.5	13.0	2.93	-9,207.8	-617.3	9,225.8	9,206.7	19.09	483.195		
7,600.0	7,446.1	7,476.1	7,476.1	13.6	13.0	3.60	-9,207.8	-617.3	9,182.6	9,164.1	18.50	496.387		
7,650.0	7,468.0	7,498.0	7,498.0	13.8	13.1	4.46	-9,207.8	-617.3	9,137.7	9,119.7	17.95	508.970		
7,700.0	7,486.7	7,516.7	7,516.7	14.0	13.1	5.66	-9,207.8	-617.3	9,091.3	9,073.8	17.49	519.856		
7,750.0	7,502.2	7,532.2	7,532.2	14.2	13.1	7.42	-9,207.8	-617.3	9,043.8	9,026.7	17.15	527.246		
7,800.0	7,514.3	7,544.3	7,544.3	14.6	13.2	10.33	-9,207.8	-617.3	8,995.4	8,978.3	17.05	527.547		
7,850.0	7,523.0	7,553.0	7,553.0	14.9	13.2	15.97	-9,207.8	-617.3	8,946.2	8,928.7	17.51	510.901		
7,900.0	7,528.2	7,558.2	7,558.2	15.3	13.2	30.84	-9,207.8	-617.3	8,896.5	8,876.3	20.17	441.155		
7,950.2	7,530.0	7,560.0	7,560.0	15.8	13.2	90.00	-9,207.8	-617.3	8,846.3	8,817.6	28.68	308.400		
8,000.0	7,530.0	7,560.0	7,560.0	16.2	13.2	90.00	-9,207.8	-617.3	8,796.6	8,767.5	29.17	301.586		
8,100.0	7,530.0	7,560.0	7,560.0	17.3	13.2	90.00	-9,207.8	-617.3	8,696.7	8,666.5	30.23	287.653		
8,200.0	7,530.0	7,560.0	7,560.0	18.4	13.2	90.00	-9,207.8	-617.3	8,596.8	8,565.4	31.41	273.733		
8,300.0	7,530.0	7,560.0	7,560.0	19.7	13.2	90.00	-9,207.8	-617.3	8,496.9	8,464.3	32.67	260.116		
8,400.0	7,530.0	7,560.0	7,560.0	21.0	13.2	90.00	-9,207.8	-617.3	8,397.0	8,363.0	34.00	246.989		
8,500.0	7,530.0	7,560.0	7,560.0	22.4	13.2	90.00	-9,207.8	-617.3	8,297.1	8,261.8	35.39	234.461		
8,600.0	7,530.0	7,560.0	7,560.0	23.8	13.2	90.00	-9,207.8	-617.3	8,197.3	8,160.4	36.83	222.587		
8,700.0	7,530.0	7,560.0	7,560.0	25.3	13.2	90.00	-9,207.8	-617.3	8,097.4	8,059.1	38.31	211.385		
8,800.0	7,530.0	7,560.0	7,560.0	26.8	13.2	90.00	-9,207.8	-617.3	7,997.5	7,957.7	39.82	200.847		
8,900.0	7,530.0	7,560.0	7,560.0	28.3	13.2	90.00	-9,207.8	-617.3	7,897.6	7,856.2	41.36	190.951		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	7,530.0	7,560.0	7,560.0	29.9	13.2	90.00	-9,207.8	-617.3	7,797.7	7,754.8	42.92	181.666		
9,100.0	7,530.0	7,560.0	7,560.0	31.4	13.2	90.00	-9,207.8	-617.3	7,697.8	7,653.3	44.51	172.955		
9,200.0	7,530.0	7,560.0	7,560.0	33.0	13.2	90.00	-9,207.8	-617.3	7,598.0	7,551.9	46.11	164.782		
9,300.0	7,530.0	7,560.0	7,560.0	34.7	13.2	90.00	-9,207.8	-617.3	7,498.1	7,450.4	47.73	157.108		
9,400.0	7,530.0	7,560.0	7,560.0	36.3	13.2	90.00	-9,207.8	-617.3	7,398.2	7,348.9	49.35	149.899		
9,500.0	7,530.0	7,560.0	7,560.0	37.9	13.2	90.00	-9,207.8	-617.3	7,298.4	7,247.4	51.00	143.119		
9,600.0	7,530.0	7,560.0	7,560.0	39.6	13.2	90.00	-9,207.8	-617.3	7,198.5	7,145.9	52.65	136.736		
9,700.0	7,530.0	7,560.0	7,560.0	41.2	13.2	90.00	-9,207.8	-617.3	7,098.7	7,044.4	54.30	130.720		
9,800.0	7,530.0	7,560.0	7,560.0	42.9	13.2	90.00	-9,207.8	-617.3	6,998.8	6,942.9	55.97	125.045		
9,900.0	7,530.0	7,560.0	7,560.0	44.5	13.2	90.00	-9,207.8	-617.3	6,899.0	6,841.3	57.64	119.683		
10,000.0	7,530.0	7,560.0	7,560.0	46.2	13.2	90.00	-9,207.8	-617.3	6,799.1	6,739.8	59.32	114.612		
10,100.0	7,530.0	7,560.0	7,560.0	47.9	13.2	90.00	-9,207.8	-617.3	6,699.3	6,638.3	61.01	109.811		
10,200.0	7,530.0	7,560.0	7,560.0	49.6	13.2	90.00	-9,207.8	-617.3	6,599.5	6,536.8	62.70	105.260		
10,300.0	7,530.0	7,560.0	7,560.0	51.3	13.2	90.00	-9,207.8	-617.3	6,499.6	6,435.3	64.39	100.941		
10,400.0	7,530.0	7,560.0	7,560.0	53.0	13.2	90.00	-9,207.8	-617.3	6,399.8	6,333.7	66.09	96.838		
10,500.0	7,530.0	7,560.0	7,560.0	54.7	13.2	90.00	-9,207.8	-617.3	6,300.0	6,232.2	67.79	92.935		
10,600.0	7,530.0	7,560.0	7,560.0	56.4	13.2	90.00	-9,207.8	-617.3	6,200.2	6,130.7	69.49	89.220		
10,700.0	7,530.0	7,560.0	7,560.0	58.1	13.2	90.00	-9,207.8	-617.3	6,100.4	6,029.2	71.20	85.678		
10,800.0	7,530.0	7,560.0	7,560.0	59.8	13.2	90.00	-9,207.8	-617.3	6,000.6	5,927.7	72.91	82.300		
10,900.0	7,530.0	7,560.0	7,560.0	61.5	13.2	90.00	-9,207.8	-617.3	5,900.8	5,826.2	74.62	79.074		
11,000.0	7,530.0	7,560.0	7,560.0	63.2	13.2	90.00	-9,207.8	-617.3	5,801.0	5,724.7	76.34	75.991		
11,100.0	7,530.0	7,560.0	7,560.0	64.9	13.2	90.00	-9,207.8	-617.3	5,701.3	5,623.2	78.06	73.041		
11,200.0	7,530.0	7,560.0	7,560.0	66.6	13.2	90.00	-9,207.8	-617.3	5,601.5	5,521.7	79.77	70.216		
11,300.0	7,530.0	7,560.0	7,560.0	68.4	13.2	90.00	-9,207.8	-617.3	5,501.7	5,420.2	81.50	67.510		
11,400.0	7,530.0	7,560.0	7,560.0	70.1	13.2	90.00	-9,207.8	-617.3	5,402.0	5,318.8	83.22	64.914		
11,500.0	7,530.0	7,560.0	7,560.0	71.8	13.2	90.00	-9,207.8	-617.3	5,302.3	5,217.3	84.94	62.422		
11,600.0	7,530.0	7,560.0	7,560.0	73.5	13.2	90.00	-9,207.8	-617.3	5,202.5	5,115.9	86.67	60.029		
11,700.0	7,530.0	7,560.0	7,560.0	75.3	13.2	90.00	-9,207.8	-617.3	5,102.8	5,014.4	88.39	57.728		
11,800.0	7,530.0	7,560.0	7,560.0	77.0	13.2	90.00	-9,207.8	-617.3	5,003.1	4,913.0	90.12	55.515		
11,900.0	7,530.0	7,560.0	7,560.0	78.7	13.2	90.00	-9,207.8	-617.3	4,903.4	4,811.6	91.85	53.385		
12,000.0	7,530.0	7,560.0	7,560.0	80.4	13.2	90.00	-9,207.8	-617.3	4,803.7	4,710.1	93.58	51.332		
12,100.0	7,530.0	7,560.0	7,560.0	82.2	13.2	90.00	-9,207.8	-617.3	4,704.1	4,608.7	95.31	49.354		
12,200.0	7,530.0	7,560.0	7,560.0	83.9	13.2	90.00	-9,207.8	-617.3	4,604.4	4,507.4	97.04	47.447		
12,300.0	7,530.0	7,560.0	7,560.0	85.6	13.2	90.00	-9,207.8	-617.3	4,504.8	4,406.0	98.78	45.605		
12,400.0	7,530.0	7,560.0	7,560.0	87.4	13.2	90.00	-9,207.8	-617.3	4,405.1	4,304.6	100.51	43.828		
12,500.0	7,530.0	7,560.0	7,560.0	89.1	13.2	90.00	-9,207.8	-617.3	4,305.5	4,203.3	102.25	42.110		
12,600.0	7,530.0	7,560.0	7,560.0	90.8	13.2	90.00	-9,207.8	-617.3	4,206.0	4,102.0	103.98	40.449		
12,700.0	7,530.0	7,560.0	7,560.0	92.6	13.2	90.00	-9,207.8	-617.3	4,106.4	4,000.7	105.72	38.843		
12,800.0	7,530.0	7,560.0	7,560.0	94.3	13.2	90.00	-9,207.8	-617.3	4,006.8	3,899.4	107.45	37.289		
12,900.0	7,530.0	7,560.0	7,560.0	96.0	13.2	90.00	-9,207.8	-617.3	3,907.3	3,798.1	109.19	35.784		
13,000.0	7,530.0	7,560.0	7,560.0	97.8	13.2	90.00	-9,207.8	-617.3	3,807.8	3,696.9	110.93	34.327		
13,100.0	7,530.0	7,560.0	7,560.0	99.5	13.2	90.00	-9,207.8	-617.3	3,708.4	3,595.7	112.67	32.914		
13,200.0	7,530.0	7,560.0	7,560.0	101.3	13.2	90.00	-9,207.8	-617.3	3,608.9	3,494.5	114.41	31.545		
13,300.0	7,530.0	7,560.0	7,560.0	103.0	13.2	90.00	-9,207.8	-617.3	3,509.5	3,393.4	116.15	30.216		
13,400.0	7,530.0	7,560.0	7,560.0	104.7	13.2	90.00	-9,207.8	-617.3	3,410.1	3,292.3	117.89	28.927		
13,500.0	7,530.0	7,560.0	7,560.0	106.5	13.2	90.00	-9,207.8	-617.3	3,310.8	3,191.2	119.63	27.676		
13,600.0	7,530.0	7,560.0	7,560.0	108.2	13.2	90.00	-9,207.8	-617.3	3,211.5	3,090.2	121.37	26.461		
13,700.0	7,530.0	7,560.0	7,560.0	110.0	13.2	90.00	-9,207.8	-617.3	3,112.3	2,989.2	123.11	25.281		
13,800.0	7,530.0	7,560.0	7,560.0	111.7	13.2	90.00	-9,207.8	-617.3	3,013.1	2,888.2	124.85	24.133		
13,900.0	7,530.0	7,560.0	7,560.0	113.4	13.2	90.00	-9,207.8	-617.3	2,913.9	2,787.3	126.59	23.018		
14,000.0	7,530.0	7,560.0	7,560.0	115.2	13.2	90.00	-9,207.8	-617.3	2,814.8	2,686.5	128.34	21.934		
14,100.0	7,530.0	7,560.0	7,560.0	116.9	13.2	90.00	-9,207.8	-617.3	2,715.8	2,585.8	130.08	20.878		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error: 0.0 ft	
Survey Program: 8413-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,200.0	7,530.0	7,560.0	7,560.0	118.7	13.2	90.00	-9,207.8	-617.3	2,616.9	2,485.1	131.82	19.852		
14,300.0	7,530.0	7,560.0	7,560.0	120.4	13.2	90.00	-9,207.8	-617.3	2,518.0	2,384.5	133.57	18.852		
14,400.0	7,530.0	7,560.0	7,560.0	122.1	13.2	90.00	-9,207.8	-617.3	2,419.3	2,284.0	135.31	17.880		
14,500.0	7,530.0	7,560.0	7,560.0	123.9	13.2	90.00	-9,207.8	-617.3	2,320.6	2,183.6	137.05	16.932		
14,600.0	7,530.0	7,560.0	7,560.0	125.6	13.2	90.00	-9,207.8	-617.3	2,222.1	2,083.3	138.80	16.010		
14,700.0	7,530.0	7,560.0	7,560.0	127.4	13.2	90.00	-9,207.8	-617.3	2,123.7	1,983.1	140.54	15.111		
14,800.0	7,530.0	7,560.0	7,560.0	129.1	13.2	90.00	-9,207.8	-617.3	2,025.4	1,883.2	142.29	14.235		
14,900.0	7,530.0	7,560.0	7,560.0	130.9	13.2	90.00	-9,207.8	-617.3	1,927.4	1,783.3	144.03	13.382		
15,000.0	7,530.0	7,560.0	7,560.0	132.6	13.2	90.00	-9,207.8	-617.3	1,829.5	1,683.7	145.78	12.550		
15,100.0	7,530.0	7,560.0	7,560.0	134.4	13.2	90.00	-9,207.8	-617.3	1,731.9	1,584.4	147.52	11.740		
15,200.0	7,530.0	7,560.0	7,560.0	136.1	13.2	90.00	-9,207.8	-617.3	1,634.6	1,485.3	149.27	10.951		
15,300.0	7,530.0	7,560.0	7,560.0	137.9	13.2	90.00	-9,207.8	-617.3	1,537.6	1,386.6	151.02	10.182		
15,400.0	7,530.0	7,560.0	7,560.0	139.6	13.2	90.00	-9,207.8	-617.3	1,441.1	1,288.3	152.76	9.433		
15,500.0	7,530.0	7,560.0	7,560.0	141.3	13.2	90.00	-9,207.8	-617.3	1,345.0	1,190.5	154.51	8.705		
15,600.0	7,530.0	7,560.0	7,560.0	143.1	13.2	90.00	-9,207.8	-617.3	1,249.6	1,093.3	156.25	7.997		
15,700.0	7,530.0	7,560.0	7,560.0	144.8	13.2	90.00	-9,207.8	-617.3	1,154.9	996.9	158.00	7.309		
15,800.0	7,530.0	7,560.0	7,560.0	146.6	13.2	90.00	-9,207.8	-617.3	1,061.2	901.5	159.75	6.643		
15,900.0	7,530.0	7,560.0	7,560.0	148.3	13.2	90.00	-9,207.8	-617.3	968.8	807.3	161.50	5.999		
16,000.0	7,530.0	7,560.0	7,560.0	150.1	13.2	90.00	-9,207.8	-617.3	878.0	714.8	163.24	5.379		
16,100.0	7,530.0	7,560.0	7,560.0	151.8	13.2	90.00	-9,207.8	-617.3	789.5	624.5	164.99	4.785		
16,200.0	7,530.0	7,560.0	7,560.0	153.6	13.2	90.00	-9,207.8	-617.3	704.1	537.3	166.74	4.223		
16,300.0	7,530.0	7,560.0	7,560.0	155.3	13.2	90.00	-9,207.8	-617.3	623.0	454.5	168.49	3.697		
16,400.0	7,530.0	7,560.0	7,560.0	157.1	13.2	90.00	-9,207.8	-617.3	548.1	377.9	170.23	3.220		
16,500.0	7,530.0	7,560.0	7,560.0	158.8	13.2	90.00	-9,207.8	-617.3	482.5	310.5	171.98	2.806		
16,600.0	7,530.0	7,560.0	7,560.0	160.6	13.2	90.00	-9,207.8	-617.3	430.4	256.6	173.73	2.477		
16,700.0	7,530.0	7,560.0	7,560.0	162.3	13.2	90.00	-9,207.8	-617.3	397.0	221.5	175.48	2.262		
16,788.1	7,530.0	7,560.0	7,560.0	163.8	13.2	90.00	-9,207.8	-617.3	387.1	210.0	177.02	2.187 CC		
16,800.0	7,530.0	7,560.0	7,560.0	164.1	13.2	90.00	-9,207.8	-617.3	387.2	210.0	177.23	2.185 ES, SF		
16,900.0	7,530.0	7,560.0	7,560.0	165.8	13.2	90.00	-9,207.8	-617.3	402.9	223.9	178.97	2.251		
17,000.0	7,530.0	7,560.0	7,560.0	167.6	13.2	90.00	-9,207.8	-617.3	441.3	260.5	180.72	2.442		
17,100.0	7,530.0	7,560.0	7,560.0	169.3	13.2	90.00	-9,207.8	-617.3	497.1	314.6	182.47	2.724		
17,200.0	7,530.0	7,560.0	7,560.0	171.1	13.2	90.00	-9,207.8	-617.3	565.2	381.0	184.22	3.068		
17,300.0	7,530.0	7,560.0	7,560.0	172.8	13.2	90.00	-9,207.8	-617.3	641.8	455.8	185.97	3.451		
17,400.0	7,530.0	7,560.0	7,560.0	174.5	13.2	90.00	-9,207.8	-617.3	724.0	536.3	187.72	3.857		
17,411.2	7,530.0	7,560.0	7,560.0	174.7	13.2	90.00	-9,207.8	-617.3	733.6	545.6	187.92	3.904		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	1.0	1.0	0.0	0.0	-89.65	0.4	-60.2	60.2					
100.0	100.0	101.0	101.0	0.2	0.2	-89.65	0.4	-60.2	60.2	59.9	0.31	197.001		
166.3	166.3	167.3	167.3	0.3	0.3	-89.65	0.4	-60.2	60.2	59.6	0.54	112.056 CC		
200.0	200.0	201.0	201.0	0.3	0.3	-89.65	0.4	-60.2	60.2	59.5	0.65	91.936 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-89.47	0.6	-61.0	61.0	60.0	1.00	60.918		
400.0	400.0	398.9	398.8	0.7	0.7	-88.98	1.1	-63.5	63.6	62.2	1.35	47.126		
500.0	500.0	497.7	497.5	0.8	0.9	-88.23	2.1	-67.7	67.8	66.1	1.70	39.974		
600.0	600.0	596.3	596.0	1.0	1.1	-64.88	3.4	-73.5	73.4	71.4	2.04	35.900		
700.0	700.0	694.8	694.2	1.2	1.3	-65.46	5.1	-81.0	79.9	77.5	2.40	33.368		
800.0	799.9	793.1	792.1	1.4	1.5	-66.74	7.2	-90.1	87.4	84.7	2.75	31.768		
848.7	848.4	840.9	839.5	1.5	1.6	-67.55	8.4	-95.1	91.5	88.5	2.93	31.223		
900.0	899.7	891.2	889.5	1.6	1.7	-68.42	9.7	-100.8	96.1	93.0	3.12	30.815		
1,000.0	999.5	989.0	986.5	1.8	2.0	-69.71	12.5	-113.0	106.4	102.9	3.49	30.479		
1,100.0	1,099.3	1,086.4	1,082.9	2.0	2.3	-70.53	15.7	-126.9	118.3	114.5	3.87	30.599		
1,200.0	1,199.1	1,183.4	1,178.6	2.2	2.6	-70.99	19.2	-142.2	131.9	127.7	4.25	31.056		
1,300.0	1,298.9	1,280.0	1,273.6	2.4	3.0	-71.16	23.1	-159.1	147.1	142.5	4.63	31.765		
1,400.0	1,398.8	1,376.1	1,367.9	2.6	3.3	-71.13	27.3	-177.4	163.8	158.8	5.02	32.671		
1,500.0	1,498.6	1,471.7	1,461.3	2.8	3.7	-70.96	31.8	-197.2	182.2	176.8	5.40	33.735		
1,600.0	1,598.4	1,566.6	1,553.7	3.0	4.1	-70.68	36.6	-218.3	202.1	196.3	5.79	34.926		
1,700.0	1,698.2	1,661.0	1,645.2	3.2	4.5	-70.33	41.8	-240.7	223.5	217.4	6.17	36.226		
1,800.0	1,798.0	1,758.5	1,739.5	3.4	5.0	-69.99	47.3	-264.7	245.8	239.2	6.56	37.455		
1,900.0	1,897.8	1,856.0	1,833.9	3.6	5.4	-69.69	52.8	-288.6	268.0	261.0	6.95	38.546		
2,000.0	1,997.7	1,953.5	1,928.2	3.8	5.9	-69.45	58.3	-312.6	290.2	282.9	7.34	39.520		
2,100.0	2,097.5	2,050.9	2,022.6	4.0	6.4	-69.24	63.8	-336.5	312.4	304.7	7.73	40.394		
2,200.0	2,197.3	2,148.4	2,116.9	4.2	6.8	-69.06	69.3	-360.5	334.7	326.5	8.13	41.184		
2,300.0	2,297.1	2,245.9	2,211.3	4.4	7.3	-68.90	74.8	-384.4	356.9	348.4	8.52	41.901		
2,400.0	2,396.9	2,343.4	2,305.6	4.6	7.7	-68.75	80.3	-408.4	379.1	370.2	8.91	42.554		
2,500.0	2,496.7	2,440.9	2,399.9	4.8	8.2	-68.63	85.8	-432.3	401.4	392.1	9.30	43.151		
2,600.0	2,596.5	2,538.4	2,494.3	5.0	8.7	-68.52	91.3	-456.3	423.6	413.9	9.69	43.700		
2,700.0	2,696.4	2,635.9	2,588.6	5.2	9.1	-68.41	96.8	-480.2	445.9	435.8	10.09	44.206		
2,800.0	2,796.2	2,733.4	2,683.0	5.4	9.6	-68.32	102.2	-504.2	468.1	457.6	10.48	44.674		
2,900.0	2,896.0	2,830.9	2,777.3	5.6	10.1	-68.24	107.7	-528.1	490.4	479.5	10.87	45.108		
3,000.0	2,995.8	2,928.4	2,871.7	5.8	10.5	-68.16	113.2	-552.1	512.6	501.3	11.26	45.511		
3,100.0	3,095.6	3,025.9	2,966.0	6.0	11.0	-68.09	118.7	-576.0	534.8	523.2	11.66	45.887		
3,200.0	3,195.4	3,123.4	3,060.4	6.2	11.5	-68.03	124.2	-600.0	557.1	545.0	12.05	46.238		
3,300.0	3,295.2	3,220.8	3,154.7	6.4	12.0	-67.97	129.7	-623.9	579.3	566.9	12.44	46.567		
3,400.0	3,395.1	3,318.3	3,249.0	6.6	12.4	-67.92	135.2	-647.9	601.6	588.8	12.83	46.876		
3,500.0	3,494.9	3,415.8	3,343.4	6.8	12.9	-67.86	140.7	-671.8	623.8	610.6	13.23	47.166		
3,600.0	3,594.7	3,513.3	3,437.7	7.0	13.4	-67.82	146.2	-695.8	646.1	632.5	13.62	47.440		
3,700.0	3,694.5	3,610.8	3,532.1	7.2	13.8	-67.77	151.7	-719.7	668.3	654.3	14.01	47.698		
3,800.0	3,794.3	3,708.3	3,626.4	7.4	14.3	-67.73	157.2	-743.7	690.6	676.2	14.40	47.942		
3,900.0	3,894.1	3,805.8	3,720.8	7.6	14.8	-67.69	162.7	-767.6	712.8	698.0	14.80	48.172		
4,000.0	3,994.0	3,903.3	3,815.1	7.8	15.2	-67.66	168.2	-791.6	735.1	719.9	15.19	48.391		
4,100.0	4,093.8	4,000.8	3,909.5	8.0	15.7	-67.62	173.7	-815.5	757.4	741.8	15.58	48.599		
4,200.0	4,193.6	4,098.3	4,003.8	8.2	16.2	-67.59	179.2	-839.5	779.6	763.6	15.98	48.796		
4,300.0	4,293.4	4,195.8	4,098.1	8.4	16.7	-67.56	184.7	-863.4	801.9	785.5	16.37	48.984		
4,400.0	4,393.2	4,293.3	4,192.5	8.6	17.1	-67.53	190.2	-887.4	824.1	807.3	16.76	49.163		
4,500.0	4,493.0	4,390.7	4,286.8	8.8	17.6	-67.50	195.7	-911.3	846.4	829.2	17.16	49.334		
4,600.0	4,592.8	4,488.2	4,381.2	9.0	18.1	-67.48	201.2	-935.3	868.6	851.1	17.55	49.497		
4,700.0	4,692.7	4,585.7	4,475.5	9.3	18.5	-67.45	206.7	-959.2	890.9	872.9	17.94	49.653		
4,800.0	4,792.5	4,683.2	4,569.9	9.5	19.0	-67.43	212.2	-983.2	913.1	894.8	18.33	49.802		
4,900.0	4,892.3	4,780.7	4,664.2	9.7	19.5	-67.41	217.7	-1,007.1	935.4	916.6	18.73	49.945		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,000.0	4,992.1	4,878.2	4,758.6	9.9	20.0	-67.38	223.2	-1,031.1	957.6	938.5	19.12	50.082	
5,100.0	5,091.9	4,975.7	4,852.9	10.1	20.4	-67.36	228.6	-1,055.0	979.9	960.4	19.51	50.214	
5,200.0	5,191.7	5,073.2	4,947.2	10.3	20.9	-67.34	234.1	-1,079.0	1,002.1	982.2	19.91	50.340	
5,300.0	5,291.5	5,170.7	5,041.6	10.5	21.4	-67.33	239.6	-1,103.0	1,024.4	1,004.1	20.30	50.461	
5,400.0	5,391.4	5,268.2	5,135.9	10.7	21.8	-67.31	245.1	-1,126.9	1,046.6	1,025.9	20.69	50.578	
5,500.0	5,491.2	5,365.7	5,230.3	10.9	22.3	-67.29	250.6	-1,150.9	1,068.9	1,047.8	21.09	50.690	
5,600.0	5,591.0	5,463.2	5,324.6	11.1	22.8	-67.27	256.1	-1,174.8	1,091.2	1,069.7	21.48	50.798	
5,700.0	5,690.8	5,560.6	5,419.0	11.3	23.3	-67.26	261.6	-1,198.8	1,113.4	1,091.5	21.87	50.902	
5,800.0	5,790.6	5,658.1	5,513.3	11.5	23.7	-67.24	267.1	-1,222.7	1,135.7	1,113.4	22.27	51.003	
5,900.0	5,890.4	5,755.6	5,607.7	11.7	24.2	-67.23	272.6	-1,246.7	1,157.9	1,135.3	22.66	51.100	
6,000.0	5,990.3	5,853.1	5,702.0	11.9	24.7	-67.22	278.1	-1,270.6	1,180.2	1,157.1	23.05	51.194	
6,100.0	6,090.1	5,950.6	5,796.3	12.1	25.2	-67.20	283.6	-1,294.6	1,202.4	1,179.0	23.45	51.284	
6,200.0	6,189.9	6,048.1	5,890.7	12.3	25.6	-67.19	289.1	-1,318.5	1,224.7	1,200.8	23.84	51.372	
6,300.0	6,289.7	6,145.6	5,985.0	12.5	26.1	-67.18	294.6	-1,342.5	1,246.9	1,222.7	24.23	51.457	
6,400.0	6,389.5	6,243.1	6,079.4	12.7	26.6	-67.16	300.1	-1,366.4	1,269.2	1,244.6	24.63	51.539	
6,500.0	6,489.3	6,340.6	6,173.7	12.9	27.0	-67.15	305.6	-1,390.4	1,291.4	1,266.4	25.02	51.618	
6,600.0	6,589.1	6,438.1	6,268.1	13.1	27.5	-67.14	311.1	-1,414.3	1,313.7	1,288.3	25.41	51.695	
6,700.0	6,689.0	6,535.6	6,362.4	13.3	28.0	-67.13	316.6	-1,438.3	1,336.0	1,310.1	25.81	51.770	
6,785.3	6,774.1	6,618.7	6,442.8	13.5	28.4	-67.12	321.3	-1,458.7	1,354.9	1,328.8	26.14	51.831	
6,800.0	6,788.8	6,633.1	6,456.8	13.5	28.5	-66.35	322.1	-1,462.2	1,358.2	1,331.9	26.26	51.730	
6,850.0	6,838.8	6,681.7	6,503.8	13.6	28.7	53.37	324.8	-1,474.2	1,369.3	1,342.7	26.60	51.475	
6,900.0	6,888.6	6,730.1	6,550.6	13.6	28.9	74.67	327.5	-1,486.0	1,380.3	1,353.4	26.89	51.330	
6,950.0	6,938.1	6,777.9	6,596.9	13.7	29.2	79.30	330.2	-1,497.8	1,391.2	1,364.1	27.12	51.297	
7,000.0	6,987.0	6,824.9	6,642.4	13.7	29.4	81.17	332.9	-1,509.3	1,402.1	1,374.8	27.29	51.375	
7,050.0	7,035.0	6,870.9	6,687.0	13.6	29.6	82.16	335.5	-1,520.6	1,412.9	1,385.5	27.41	51.553	
7,100.0	7,082.0	6,915.7	6,730.3	13.6	29.8	82.79	338.0	-1,531.7	1,423.7	1,396.3	27.47	51.821	
7,150.0	7,127.7	6,959.1	6,772.3	13.5	30.0	83.25	340.4	-1,542.3	1,434.7	1,407.2	27.50	52.162	
7,200.0	7,171.8	7,003.3	6,815.1	13.5	30.3	83.66	342.7	-1,553.2	1,445.8	1,418.3	27.50	52.581	
7,250.0	7,214.2	7,052.2	6,862.4	13.4	30.5	84.07	342.5	-1,565.2	1,457.0	1,429.6	27.44	53.107	
7,300.0	7,254.6	7,103.4	6,911.9	13.4	30.7	84.46	338.7	-1,577.8	1,468.2	1,440.9	27.34	53.696	
7,350.0	7,292.9	7,157.2	6,963.5	13.3	30.9	84.84	330.8	-1,590.9	1,479.3	1,452.1	27.23	54.333	
7,400.0	7,328.9	7,214.1	7,017.2	13.3	31.1	85.23	318.1	-1,604.5	1,490.3	1,463.2	27.10	54.999	
7,450.0	7,362.3	7,274.4	7,073.0	13.3	31.3	85.64	299.9	-1,618.6	1,501.1	1,474.1	26.97	55.667	
7,500.0	7,393.1	7,338.7	7,130.5	13.4	31.5	86.08	275.3	-1,633.2	1,511.5	1,484.7	26.85	56.304	
7,550.0	7,421.1	7,407.5	7,189.4	13.5	31.7	86.56	243.1	-1,648.2	1,521.5	1,494.7	26.76	56.863	
7,600.0	7,446.1	7,481.3	7,249.0	13.6	31.9	87.08	202.4	-1,663.3	1,530.9	1,504.2	26.73	57.283	
7,650.0	7,468.0	7,560.5	7,308.1	13.8	32.1	87.62	151.8	-1,678.3	1,539.6	1,512.8	26.78	57.484	
7,700.0	7,486.7	7,645.7	7,365.0	14.0	32.3	88.17	90.3	-1,692.8	1,547.3	1,520.4	26.97	57.374	
7,750.0	7,502.2	7,736.7	7,417.7	14.2	32.6	88.70	17.3	-1,706.2	1,554.0	1,526.7	27.34	56.843	
7,800.0	7,514.3	7,833.5	7,463.4	14.6	32.9	89.19	-67.2	-1,717.8	1,559.4	1,531.4	27.93	55.833	
7,850.0	7,523.0	7,935.4	7,499.1	14.9	33.2	89.58	-162.0	-1,726.8	1,563.3	1,534.5	28.78	54.321	
7,900.0	7,528.2	8,040.9	7,522.0	15.3	33.5	89.85	-264.8	-1,732.6	1,565.6	1,535.7	29.89	52.371	
7,950.2	7,530.0	8,149.1	7,530.0	15.8	34.0	89.96	-372.5	-1,734.7	1,566.1	1,534.8	31.26	50.107	
8,000.0	7,530.0	8,199.2	7,530.0	16.2	34.2	89.96	-422.6	-1,734.7	1,565.8	1,533.5	32.23	48.582	
8,100.0	7,530.0	8,299.2	7,530.0	17.3	34.7	89.96	-522.6	-1,734.7	1,565.1	1,530.7	34.37	45.542	
8,200.0	7,530.0	8,399.2	7,530.0	18.4	35.3	89.96	-622.6	-1,734.7	1,564.4	1,527.6	36.71	42.611	
8,300.0	7,530.0	8,499.2	7,530.0	19.7	35.9	89.96	-722.6	-1,734.7	1,563.7	1,524.4	39.23	39.855	
8,400.0	7,530.0	8,599.2	7,530.0	21.0	36.6	89.96	-822.6	-1,734.7	1,563.0	1,521.1	41.90	37.305	
8,500.0	7,530.0	8,699.2	7,530.0	22.4	37.4	89.96	-922.6	-1,734.7	1,562.3	1,517.6	44.68	34.968	
8,600.0	7,530.0	8,799.2	7,530.0	23.8	38.3	89.96	-1,022.6	-1,734.7	1,561.6	1,514.0	47.55	32.838	
8,700.0	7,530.0	8,899.2	7,530.0	25.3	39.2	89.96	-1,122.6	-1,734.7	1,560.9	1,510.4	50.51	30.902	
8,800.0	7,530.0	8,999.2	7,530.0	26.8	40.1	89.96	-1,222.6	-1,734.7	1,560.2	1,506.6	53.53	29.144	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
8,900.0	7,530.0	9,099.1	7,530.0	28.3	41.2	89.96	-1,322.6	-1,734.7	1,559.5	1,502.9	56.61	27.546		
9,000.0	7,530.0	9,199.1	7,530.0	29.9	42.2	89.96	-1,422.6	-1,734.7	1,558.8	1,499.0	59.74	26.093		
9,100.0	7,530.0	9,299.1	7,530.0	31.4	43.3	89.96	-1,522.6	-1,734.7	1,558.1	1,495.2	62.91	24.768		
9,200.0	7,530.0	9,399.1	7,530.0	33.0	44.5	89.96	-1,622.6	-1,734.7	1,557.4	1,491.3	66.11	23.558		
9,300.0	7,530.0	9,499.1	7,530.0	34.7	45.7	89.96	-1,722.6	-1,734.7	1,556.7	1,487.3	69.34	22.451		
9,400.0	7,530.0	9,599.1	7,530.0	36.3	46.9	89.96	-1,822.6	-1,734.7	1,556.0	1,483.4	72.59	21.434		
9,500.0	7,530.0	9,699.1	7,530.0	37.9	48.2	89.96	-1,922.6	-1,734.7	1,555.3	1,479.4	75.87	20.498		
9,600.0	7,530.0	9,799.1	7,530.0	39.6	49.5	89.96	-2,022.6	-1,734.7	1,554.6	1,475.4	79.17	19.636		
9,700.0	7,530.0	9,899.1	7,530.0	41.2	50.8	89.96	-2,122.6	-1,734.7	1,553.9	1,471.4	82.49	18.838		
9,800.0	7,530.0	9,999.1	7,530.0	42.9	52.1	89.96	-2,222.6	-1,734.7	1,553.2	1,467.4	85.82	18.098		
9,900.0	7,530.0	10,099.1	7,530.0	44.5	53.5	89.96	-2,322.6	-1,734.7	1,552.5	1,463.3	89.16	17.412		
10,000.0	7,530.0	10,199.1	7,530.0	46.2	54.9	89.96	-2,422.6	-1,734.7	1,551.8	1,459.3	92.52	16.772		
10,100.0	7,530.0	10,299.1	7,530.0	47.9	56.3	89.96	-2,522.6	-1,734.7	1,551.1	1,455.2	95.89	16.176		
10,200.0	7,530.0	10,399.1	7,530.0	49.6	57.8	89.96	-2,622.6	-1,734.7	1,550.4	1,451.1	99.27	15.619		
10,300.0	7,530.0	10,499.1	7,530.0	51.3	59.2	89.96	-2,722.6	-1,734.7	1,549.7	1,447.1	102.65	15.097		
10,400.0	7,530.0	10,599.1	7,530.0	53.0	60.7	89.96	-2,822.6	-1,734.7	1,549.0	1,443.0	106.05	14.607		
10,500.0	7,530.0	10,699.1	7,530.0	54.7	62.2	89.96	-2,922.6	-1,734.7	1,548.3	1,438.9	109.45	14.147		
10,600.0	7,530.0	10,799.1	7,530.0	56.4	63.7	89.96	-3,022.6	-1,734.7	1,547.6	1,434.8	112.86	13.713		
10,700.0	7,530.0	10,899.1	7,530.0	58.1	65.2	89.96	-3,122.6	-1,734.7	1,546.9	1,430.6	116.27	13.305		
10,800.0	7,530.0	10,999.1	7,530.0	59.8	66.7	89.96	-3,222.6	-1,734.7	1,546.2	1,426.5	119.69	12.919		
10,900.0	7,530.0	11,099.1	7,530.0	61.5	68.2	89.96	-3,322.6	-1,734.7	1,545.5	1,422.4	123.11	12.554		
11,000.0	7,530.0	11,199.1	7,530.0	63.2	69.8	89.96	-3,422.5	-1,734.7	1,544.8	1,418.3	126.54	12.208		
11,100.0	7,530.0	11,299.1	7,530.0	64.9	71.3	89.96	-3,522.5	-1,734.7	1,544.1	1,414.1	129.97	11.880		
11,200.0	7,530.0	11,399.1	7,530.0	66.6	72.9	89.96	-3,622.5	-1,734.7	1,543.4	1,410.0	133.41	11.569		
11,300.0	7,530.0	11,499.1	7,530.0	68.4	74.5	89.96	-3,722.5	-1,734.7	1,542.7	1,405.9	136.85	11.273		
11,400.0	7,530.0	11,599.1	7,530.0	70.1	76.1	89.96	-3,822.5	-1,734.7	1,542.0	1,401.7	140.30	10.991		
11,500.0	7,530.0	11,699.1	7,530.0	71.8	77.6	89.96	-3,922.5	-1,734.7	1,541.3	1,397.6	143.74	10.723		
11,600.0	7,530.0	11,799.1	7,530.0	73.5	79.2	89.96	-4,022.5	-1,734.7	1,540.6	1,393.4	147.19	10.467		
11,700.0	7,530.0	11,899.1	7,530.0	75.3	80.8	89.96	-4,122.5	-1,734.7	1,539.9	1,389.3	150.64	10.222		
11,800.0	7,530.0	11,999.1	7,530.0	77.0	82.4	89.96	-4,222.5	-1,734.7	1,539.2	1,385.1	154.10	9.989		
11,900.0	7,530.0	12,099.1	7,530.0	78.7	84.1	89.96	-4,322.5	-1,734.7	1,538.5	1,381.0	157.56	9.765		
12,000.0	7,530.0	12,199.1	7,530.0	80.4	85.7	89.96	-4,422.5	-1,734.7	1,537.8	1,376.8	161.02	9.551		
12,100.0	7,530.0	12,299.1	7,530.0	82.2	87.3	89.96	-4,522.5	-1,734.7	1,537.1	1,372.7	164.48	9.346		
12,200.0	7,530.0	12,399.1	7,530.0	83.9	88.9	89.96	-4,622.5	-1,734.7	1,536.4	1,368.5	167.94	9.149		
12,300.0	7,530.0	12,499.1	7,530.0	85.6	90.6	89.96	-4,722.5	-1,734.7	1,535.7	1,364.3	171.41	8.960		
12,400.0	7,530.0	12,599.1	7,530.0	87.4	92.2	89.96	-4,822.5	-1,734.7	1,535.0	1,360.2	174.87	8.778		
12,500.0	7,530.0	12,699.1	7,530.0	89.1	93.9	89.96	-4,922.5	-1,734.7	1,534.3	1,356.0	178.34	8.603		
12,600.0	7,530.0	12,799.1	7,530.0	90.8	95.5	89.96	-5,022.5	-1,734.7	1,533.7	1,351.8	181.81	8.435		
12,700.0	7,530.0	12,899.1	7,530.0	92.6	97.2	89.96	-5,122.5	-1,734.7	1,533.0	1,347.7	185.29	8.273		
12,800.0	7,530.0	12,999.1	7,530.0	94.3	98.8	89.96	-5,222.5	-1,734.7	1,532.3	1,343.5	188.76	8.118		
12,900.0	7,530.0	13,099.1	7,530.0	96.0	100.5	89.96	-5,322.5	-1,734.7	1,531.6	1,339.3	192.23	7.967		
13,000.0	7,530.0	13,199.0	7,530.0	97.8	102.1	89.96	-5,422.5	-1,734.7	1,530.9	1,335.2	195.71	7.822		
13,100.0	7,530.0	13,299.0	7,530.0	99.5	103.8	89.96	-5,522.5	-1,734.7	1,530.2	1,331.0	199.18	7.682		
13,200.0	7,530.0	13,399.0	7,530.0	101.3	105.5	89.96	-5,622.5	-1,734.7	1,529.5	1,326.8	202.66	7.547		
13,300.0	7,530.0	13,499.0	7,530.0	103.0	107.1	89.96	-5,722.5	-1,734.7	1,528.8	1,322.6	206.14	7.416		
13,400.0	7,530.0	13,599.0	7,530.0	104.7	108.8	89.96	-5,822.5	-1,734.7	1,528.1	1,318.4	209.62	7.290		
13,500.0	7,530.0	13,699.0	7,530.0	106.5	110.5	89.96	-5,922.5	-1,734.7	1,527.4	1,314.3	213.10	7.167		
13,600.0	7,530.0	13,799.0	7,530.0	108.2	112.2	89.96	-6,022.5	-1,734.7	1,526.7	1,310.1	216.58	7.049		
13,700.0	7,530.0	13,899.0	7,530.0	110.0	113.8	89.96	-6,122.5	-1,734.7	1,526.0	1,305.9	220.06	6.934		
13,800.0	7,530.0	13,999.0	7,530.0	111.7	115.5	89.96	-6,222.5	-1,734.7	1,525.3	1,301.7	223.55	6.823		
13,900.0	7,530.0	14,099.0	7,530.0	113.4	117.2	89.96	-6,322.5	-1,734.7	1,524.6	1,297.5	227.03	6.715		
14,000.0	7,530.0	14,199.0	7,530.0	115.2	118.9	89.96	-6,422.5	-1,734.7	1,523.9	1,293.4	230.52	6.611		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
14,100.0	7,530.0	14,299.0	7,530.0	116.9	120.6	89.96	-6,522.5	-1,734.7	1,523.2	1,289.2	234.00	6.509		
14,200.0	7,530.0	14,399.0	7,530.0	118.7	122.3	89.96	-6,622.5	-1,734.7	1,522.5	1,285.0	237.49	6.411		
14,300.0	7,530.0	14,499.0	7,530.0	120.4	124.0	89.96	-6,722.5	-1,734.7	1,521.8	1,280.8	240.97	6.315		
14,400.0	7,530.0	14,599.0	7,530.0	122.1	125.7	89.96	-6,822.5	-1,734.7	1,521.1	1,276.6	244.46	6.222		
14,500.0	7,530.0	14,699.0	7,530.0	123.9	127.3	89.96	-6,922.5	-1,734.7	1,520.4	1,272.4	247.95	6.132		
14,600.0	7,530.0	14,799.0	7,530.0	125.6	129.0	89.96	-7,022.5	-1,734.7	1,519.7	1,268.3	251.44	6.044		
14,700.0	7,530.0	14,899.0	7,530.0	127.4	130.7	89.96	-7,122.5	-1,734.7	1,519.0	1,264.1	254.93	5.959		
14,800.0	7,530.0	14,999.0	7,530.0	129.1	132.4	89.96	-7,222.5	-1,734.7	1,518.3	1,259.9	258.42	5.875		
14,900.0	7,530.0	15,099.0	7,530.0	130.9	134.1	89.96	-7,322.5	-1,734.7	1,517.6	1,255.7	261.91	5.794		
15,000.0	7,530.0	15,199.0	7,530.0	132.6	135.8	89.96	-7,422.5	-1,734.7	1,516.9	1,251.5	265.40	5.716		
15,100.0	7,530.0	15,299.0	7,530.0	134.4	137.6	89.96	-7,522.4	-1,734.7	1,516.2	1,247.3	268.89	5.639		
15,200.0	7,530.0	15,399.0	7,530.0	136.1	139.3	89.96	-7,622.4	-1,734.7	1,515.5	1,243.1	272.38	5.564		
15,300.0	7,530.0	15,499.0	7,530.0	137.9	141.0	89.96	-7,722.4	-1,734.7	1,514.8	1,238.9	275.87	5.491		
15,400.0	7,530.0	15,599.0	7,530.0	139.6	142.7	89.96	-7,822.4	-1,734.7	1,514.1	1,234.7	279.36	5.420		
15,500.0	7,530.0	15,699.0	7,530.0	141.3	144.4	89.96	-7,922.4	-1,734.7	1,513.4	1,230.6	282.86	5.350		
15,600.0	7,530.0	15,799.0	7,530.0	143.1	146.1	89.96	-8,022.4	-1,734.7	1,512.7	1,226.4	286.35	5.283		
15,700.0	7,530.0	15,899.0	7,530.0	144.8	147.8	89.96	-8,122.4	-1,734.7	1,512.0	1,222.2	289.84	5.217		
15,800.0	7,530.0	15,999.0	7,530.0	146.6	149.5	89.96	-8,222.4	-1,734.7	1,511.3	1,218.0	293.34	5.152		
15,900.0	7,530.0	16,099.0	7,530.0	148.3	151.2	89.96	-8,322.4	-1,734.7	1,510.6	1,213.8	296.83	5.089		
16,000.0	7,530.0	16,199.0	7,530.0	150.1	152.9	89.96	-8,422.4	-1,734.7	1,509.9	1,209.6	300.32	5.028		
16,100.0	7,530.0	16,299.0	7,530.0	151.8	154.7	89.96	-8,522.4	-1,734.7	1,509.2	1,205.4	303.82	4.968		
16,200.0	7,530.0	16,399.0	7,530.0	153.6	156.4	89.96	-8,622.4	-1,734.7	1,508.5	1,201.2	307.31	4.909		
16,300.0	7,530.0	16,499.0	7,530.0	155.3	158.1	89.96	-8,722.4	-1,734.7	1,507.8	1,197.0	310.81	4.851		
16,400.0	7,530.0	16,599.0	7,530.0	157.1	159.8	89.96	-8,822.4	-1,734.7	1,507.1	1,192.8	314.30	4.795		
16,500.0	7,530.0	16,699.0	7,530.0	158.8	161.5	89.96	-8,922.4	-1,734.7	1,506.4	1,188.6	317.80	4.740		
16,600.0	7,530.0	16,799.0	7,530.0	160.6	163.2	89.96	-9,022.4	-1,734.7	1,505.7	1,184.4	321.30	4.686		
16,700.0	7,530.0	16,899.0	7,530.0	162.3	165.0	89.96	-9,122.4	-1,734.7	1,505.0	1,180.2	324.79	4.634		
16,800.0	7,530.0	16,999.0	7,530.0	164.1	166.7	89.96	-9,222.4	-1,734.7	1,504.3	1,176.1	328.29	4.582		
16,900.0	7,530.0	17,099.0	7,530.0	165.8	168.4	89.96	-9,322.4	-1,734.7	1,503.6	1,171.9	331.79	4.532		
17,000.0	7,530.0	17,199.0	7,530.0	167.6	170.1	89.96	-9,422.4	-1,734.7	1,502.9	1,167.7	335.28	4.483		
17,100.0	7,530.0	17,298.9	7,530.0	169.3	171.8	89.96	-9,522.4	-1,734.7	1,502.2	1,163.5	338.78	4.434		
17,200.0	7,530.0	17,398.9	7,530.0	171.1	173.6	89.96	-9,622.4	-1,734.7	1,501.5	1,159.3	342.28	4.387		
17,300.0	7,530.0	17,498.9	7,530.0	172.8	175.3	89.96	-9,722.4	-1,734.7	1,500.9	1,155.1	345.77	4.341		
17,400.0	7,530.0	17,589.7	7,530.0	174.5	176.9	89.96	-9,813.2	-1,734.7	1,500.2	1,151.1	349.11	4.297		
17,401.3	7,530.0	17,589.7	7,530.0	174.6	176.9	89.96	-9,813.2	-1,734.7	1,500.2	1,151.0	349.13	4.297		
17,411.2	7,530.0	17,589.7	7,530.0	174.7	176.9	89.96	-9,813.2	-1,734.7	1,500.2	1,150.9	349.31	4.295 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	1.0	1.0	0.0	0.0	-89.58	0.4	-50.1	50.1						
100.0	100.0	101.0	101.0	0.2	0.2	-89.58	0.4	-50.1	50.1	49.8	0.31	164.016			
200.0	200.0	201.0	201.0	0.3	0.3	-89.58	0.4	-50.1	50.1	49.4	0.65	76.541			
232.0	232.0	233.0	233.0	0.4	0.4	-89.58	0.4	-50.1	50.1	49.3	0.77	65.388 CC			
300.0	300.0	300.6	300.6	0.5	0.5	-89.52	0.4	-50.3	50.3	49.3	1.00	50.172 ES			
400.0	400.0	400.0	400.0	0.7	0.7	-89.04	0.9	-52.0	52.0	50.7	1.35	38.498			
500.0	500.0	498.7	498.7	0.8	0.9	-88.18	1.8	-55.3	55.4	53.7	1.70	32.618			
600.0	600.0	597.7	597.4	1.0	1.0	-64.75	3.1	-60.3	60.1	58.0	2.05	29.359			
700.0	700.0	696.4	696.0	1.2	1.2	-65.42	4.9	-66.9	65.7	63.3	2.40	27.413			
800.0	799.9	795.0	794.2	1.4	1.5	-66.89	7.1	-75.1	72.4	69.6	2.76	26.256			
848.7	848.4	843.0	841.9	1.5	1.6	-67.82	8.3	-79.7	76.0	73.0	2.93	25.892			
900.0	899.7	893.5	892.1	1.6	1.7	-68.79	9.7	-85.0	80.1	77.0	3.12	25.655			
1,000.0	999.5	991.6	989.5	1.8	2.0	-70.15	12.8	-96.4	89.5	86.0	3.50	25.598			
1,100.0	1,099.3	1,089.5	1,086.5	2.0	2.2	-70.94	16.2	-109.4	100.5	96.6	3.87	25.944			
1,200.0	1,199.1	1,186.9	1,182.8	2.2	2.5	-71.28	20.1	-123.9	113.2	108.9	4.26	26.583			
1,300.0	1,298.9	1,284.0	1,278.4	2.4	2.9	-71.30	24.4	-140.0	127.4	122.7	4.64	27.443			
1,400.0	1,398.8	1,380.6	1,373.3	2.6	3.2	-71.09	29.1	-157.5	143.2	138.2	5.03	28.477			
1,500.0	1,498.6	1,477.0	1,467.7	2.8	3.6	-70.73	34.2	-176.5	160.5	155.1	5.42	29.647			
1,600.0	1,598.4	1,575.4	1,563.9	3.0	3.9	-70.38	39.5	-196.5	178.5	172.7	5.81	30.738			
1,700.0	1,698.2	1,673.8	1,660.0	3.2	4.3	-70.09	44.9	-216.4	196.4	190.2	6.20	31.690			
1,800.0	1,798.0	1,772.2	1,756.2	3.4	4.7	-69.84	50.2	-236.4	214.3	207.8	6.59	32.526			
1,900.0	1,897.8	1,870.5	1,852.4	3.6	5.1	-69.64	55.6	-256.4	232.3	225.3	6.98	33.266			
2,000.0	1,997.7	1,968.9	1,948.6	3.8	5.5	-69.46	60.9	-276.3	250.2	242.9	7.38	33.926			
2,100.0	2,097.5	2,067.3	2,044.8	4.0	5.9	-69.31	66.3	-296.3	268.2	260.4	7.77	34.518			
2,200.0	2,197.3	2,165.7	2,140.9	4.2	6.3	-69.18	71.6	-316.3	286.1	278.0	8.16	35.052			
2,300.0	2,297.1	2,264.0	2,237.1	4.4	6.7	-69.06	77.0	-336.2	304.1	295.5	8.56	35.536			
2,400.0	2,396.9	2,362.4	2,333.3	4.6	7.1	-68.95	82.3	-356.2	322.0	313.1	8.95	35.976			
2,500.0	2,496.7	2,460.8	2,429.5	4.8	7.5	-68.86	87.6	-376.1	340.0	330.6	9.35	36.379			
2,600.0	2,596.5	2,559.2	2,525.6	5.0	7.9	-68.78	93.0	-396.1	357.9	348.2	9.74	36.749			
2,700.0	2,696.4	2,657.5	2,621.8	5.2	8.3	-68.70	98.3	-416.1	375.9	365.8	10.13	37.090			
2,800.0	2,796.2	2,755.9	2,718.0	5.4	8.7	-68.63	103.7	-436.0	393.8	383.3	10.53	37.404			
2,900.0	2,896.0	2,854.3	2,814.2	5.6	9.1	-68.57	109.0	-456.0	411.8	400.9	10.92	37.696			
3,000.0	2,995.8	2,952.6	2,910.4	5.8	9.5	-68.51	114.4	-476.0	429.8	418.4	11.32	37.967			
3,100.0	3,095.6	3,051.0	3,006.5	6.0	9.9	-68.46	119.7	-495.9	447.7	436.0	11.71	38.219			
3,200.0	3,195.4	3,149.4	3,102.7	6.2	10.3	-68.41	125.1	-515.9	465.7	453.6	12.11	38.455			
3,300.0	3,295.2	3,247.8	3,198.9	6.4	10.7	-68.36	130.4	-535.9	483.6	471.1	12.50	38.676			
3,400.0	3,395.1	3,346.1	3,295.1	6.6	11.1	-68.32	135.7	-555.8	501.6	488.7	12.90	38.883			
3,500.0	3,494.9	3,444.5	3,391.3	6.8	11.5	-68.28	141.1	-575.8	519.5	506.2	13.30	39.077			
3,600.0	3,594.7	3,542.9	3,487.4	7.0	11.9	-68.25	146.4	-595.7	537.5	523.8	13.69	39.260			
3,700.0	3,694.5	3,641.3	3,583.6	7.2	12.3	-68.21	151.8	-615.7	555.5	541.4	14.09	39.433			
3,800.0	3,794.3	3,739.6	3,679.8	7.4	12.7	-68.18	157.1	-635.7	573.4	558.9	14.48	39.596			
3,900.0	3,894.1	3,838.0	3,776.0	7.6	13.1	-68.15	162.5	-655.6	591.4	576.5	14.88	39.751			
4,000.0	3,994.0	3,936.4	3,872.2	7.8	13.5	-68.12	167.8	-675.6	609.3	594.1	15.27	39.897			
4,100.0	4,093.8	4,034.8	3,968.3	8.0	13.9	-68.10	173.1	-695.6	627.3	611.6	15.67	40.036			
4,200.0	4,193.6	4,133.1	4,064.5	8.2	14.4	-68.07	178.5	-715.5	645.2	629.2	16.06	40.168			
4,300.0	4,293.4	4,231.5	4,160.7	8.4	14.8	-68.05	183.8	-735.5	663.2	646.7	16.46	40.293			
4,400.0	4,393.2	4,329.9	4,256.9	8.6	15.2	-68.02	189.2	-755.5	681.2	664.3	16.85	40.413			
4,500.0	4,493.0	4,428.3	4,353.0	8.8	15.6	-68.00	194.5	-775.4	699.1	681.9	17.25	40.527			
4,600.0	4,592.8	4,526.6	4,449.2	9.0	16.0	-67.98	199.9	-795.4	717.1	699.4	17.65	40.636			
4,700.0	4,692.7	4,625.0	4,545.4	9.3	16.4	-67.96	205.2	-815.3	735.0	717.0	18.04	40.740			
4,800.0	4,792.5	4,723.4	4,641.6	9.5	16.8	-67.94	210.6	-835.3	753.0	734.5	18.44	40.839			
4,900.0	4,892.3	4,821.8	4,737.8	9.7	17.2	-67.93	215.9	-855.3	770.9	752.1	18.83	40.934			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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				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	4,992.1	4,920.1	4,833.9		9.9	17.6	-67.91	221.2	-875.2	788.9	769.7	19.23	41.026	
5,100.0	5,091.9	5,018.5	4,930.1	10.1	18.0	-67.89	226.6	-895.2	806.9	787.2	19.63	41.113		
5,200.0	5,191.7	5,116.9	5,026.3	10.3	18.4	-67.88	231.9	-915.2	824.8	804.8	20.02	41.198		
5,300.0	5,291.5	5,215.2	5,122.5	10.5	18.8	-67.86	237.3	-935.1	842.8	822.4	20.42	41.278		
5,400.0	5,391.4	5,313.6	5,218.7	10.7	19.2	-67.85	242.6	-955.1	860.7	839.9	20.81	41.356		
5,500.0	5,491.2	5,412.0	5,314.8	10.9	19.6	-67.84	248.0	-975.0	878.7	857.5	21.21	41.431		
5,600.0	5,591.0	5,510.4	5,411.0	11.1	20.0	-67.82	253.3	-995.0	896.7	875.1	21.60	41.503		
5,700.0	5,690.8	5,608.7	5,507.2	11.3	20.4	-67.81	258.6	-1,015.0	914.6	892.6	22.00	41.572		
5,800.0	5,790.6	5,707.1	5,603.4	11.5	20.8	-67.80	264.0	-1,034.9	932.6	910.2	22.40	41.639		
5,900.0	5,890.4	5,805.5	5,699.5	11.7	21.2	-67.79	269.3	-1,054.9	950.5	927.7	22.79	41.704		
6,000.0	5,990.3	5,903.9	5,795.7	11.9	21.6	-67.78	274.7	-1,074.9	968.5	945.3	23.19	41.766		
6,100.0	6,090.1	6,002.2	5,891.9	12.1	22.0	-67.76	280.0	-1,094.8	986.5	962.9	23.58	41.827		
6,200.0	6,189.9	6,100.6	5,988.1	12.3	22.5	-67.75	285.4	-1,114.8	1,004.4	980.4	23.98	41.885		
6,300.0	6,289.7	6,199.0	6,084.3	12.5	22.9	-67.74	290.7	-1,134.8	1,022.4	998.0	24.38	41.941		
6,400.0	6,389.5	6,297.4	6,180.4	12.7	23.3	-67.73	296.1	-1,154.7	1,040.3	1,015.6	24.77	41.996		
6,500.0	6,489.3	6,395.7	6,276.6	12.9	23.7	-67.73	301.4	-1,174.7	1,058.3	1,033.1	25.17	42.049		
6,600.0	6,589.1	6,494.1	6,372.8	13.1	24.1	-67.72	306.7	-1,194.6	1,076.2	1,050.7	25.56	42.100		
6,700.0	6,689.0	6,592.5	6,469.0	13.3	24.5	-67.71	312.1	-1,214.6	1,094.2	1,068.2	25.96	42.149		
6,785.3	6,774.1	6,676.4	6,551.0	13.5	24.8	-67.70	316.6	-1,231.6	1,109.5	1,083.2	26.30	42.191		
6,800.0	6,788.8	6,690.9	6,565.2	13.5	24.9	-66.87	317.4	-1,234.6	1,112.2	1,085.8	26.39	42.138		
6,850.0	6,838.8	6,740.0	6,613.2	13.6	25.1	53.05	320.1	-1,244.5	1,121.1	1,094.4	26.67	42.035		
6,900.0	6,888.6	6,788.8	6,660.9	13.6	25.3	74.59	322.7	-1,254.4	1,129.9	1,103.0	26.89	42.026		
6,950.0	6,938.1	6,837.0	6,708.1	13.7	25.5	79.50	325.4	-1,264.2	1,138.6	1,111.6	27.04	42.111		
7,000.0	6,987.0	6,884.5	6,754.5	13.7	25.7	81.66	328.0	-1,273.9	1,147.3	1,120.2	27.13	42.283		
7,050.0	7,035.0	6,931.0	6,799.9	13.6	25.9	82.96	330.5	-1,283.3	1,156.1	1,128.9	27.18	42.535		
7,100.0	7,082.0	6,976.2	6,844.2	13.6	26.1	83.91	332.9	-1,292.5	1,164.9	1,137.7	27.18	42.856		
7,150.0	7,127.7	7,020.0	6,887.0	13.5	26.2	84.70	335.3	-1,301.4	1,174.0	1,146.8	27.16	43.232		
7,200.0	7,171.8	7,062.2	6,928.2	13.5	26.4	85.40	337.6	-1,309.9	1,183.4	1,156.3	27.11	43.649		
7,250.0	7,214.2	7,102.4	6,967.5	13.4	26.6	86.01	339.8	-1,318.1	1,193.4	1,166.3	27.07	44.092		
7,300.0	7,254.6	7,140.6	7,004.9	13.4	26.7	86.54	341.9	-1,325.8	1,203.9	1,176.9	27.03	44.543		
7,350.0	7,292.9	7,179.8	7,043.2	13.3	26.9	87.07	343.9	-1,333.8	1,215.2	1,188.2	27.00	45.014		
7,400.0	7,328.9	7,229.1	7,091.5	13.3	27.1	87.87	344.0	-1,343.8	1,227.1	1,200.2	26.94	45.547		
7,450.0	7,362.3	7,282.1	7,143.2	13.3	27.3	88.70	340.3	-1,354.6	1,239.4	1,212.5	26.90	46.082		
7,500.0	7,393.1	7,339.7	7,199.0	13.4	27.5	89.60	331.9	-1,366.1	1,252.1	1,225.2	26.87	46.606		
7,550.0	7,421.1	7,403.1	7,259.4	13.5	27.6	90.58	317.4	-1,378.7	1,264.9	1,238.1	26.85	47.109		
7,600.0	7,446.1	7,473.8	7,325.0	13.6	27.8	91.68	294.8	-1,392.3	1,277.8	1,251.0	26.86	47.576		
7,650.0	7,468.0	7,553.7	7,396.0	13.8	28.0	92.93	261.6	-1,407.0	1,290.5	1,263.6	26.90	47.977		
7,700.0	7,486.7	7,645.1	7,472.3	14.0	28.2	94.33	213.9	-1,422.9	1,302.7	1,275.7	26.99	48.266		
7,750.0	7,502.2	7,750.6	7,552.1	14.2	28.4	95.86	147.0	-1,439.4	1,314.0	1,286.8	27.18	48.350		
7,800.0	7,514.3	7,872.7	7,631.3	14.6	28.6	97.43	55.7	-1,455.9	1,323.8	1,296.2	27.55	48.050		
7,850.0	7,523.0	8,012.6	7,701.9	14.9	29.0	98.86	-63.9	-1,470.5	1,331.4	1,303.2	28.22	47.184		
7,900.0	7,528.2	8,168.3	7,752.0	15.3	29.5	99.90	-210.7	-1,480.9	1,336.2	1,306.9	29.34	45.546		
7,950.2	7,530.0	8,331.9	7,770.0	15.8	30.2	100.29	-372.9	-1,484.7	1,337.6	1,306.7	30.93	43.245		
8,000.0	7,530.0	8,381.7	7,770.0	16.2	30.4	100.30	-422.6	-1,484.7	1,337.3	1,305.4	31.89	41.934		
8,100.0	7,530.0	8,481.7	7,770.0	17.3	31.0	100.30	-522.6	-1,484.7	1,336.6	1,302.6	33.99	39.321		
8,200.0	7,530.0	8,581.7	7,770.0	18.4	31.7	100.31	-622.6	-1,484.7	1,335.9	1,299.6	36.30	36.805		
8,300.0	7,530.0	8,681.7	7,770.0	19.7	32.4	100.31	-722.6	-1,484.7	1,335.2	1,296.4	38.77	34.437		
8,400.0	7,530.0	8,781.7	7,770.0	21.0	33.2	100.32	-822.6	-1,484.7	1,334.5	1,293.1	41.39	32.244		
8,500.0	7,530.0	8,881.7	7,770.0	22.4	34.1	100.32	-922.6	-1,484.7	1,333.8	1,289.7	44.12	30.232		
8,600.0	7,530.0	8,981.7	7,770.0	23.8	35.0	100.33	-1,022.6	-1,484.7	1,333.2	1,286.2	46.95	28.398		
8,700.0	7,530.0	9,081.7	7,770.0	25.3	36.0	100.33	-1,122.6	-1,484.7	1,332.5	1,282.6	49.85	26.729		
8,800.0	7,530.0	9,181.7	7,770.0	26.8	37.1	100.34	-1,222.6	-1,484.7	1,331.8	1,279.0	52.82	25.213		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	9,281.7	7,770.0	28.3	38.2	100.34	-1,322.6	-1,484.7	1,331.1	1,275.2	55.85	23.835		
9,000.0	7,530.0	9,381.7	7,770.0	29.9	39.3	100.35	-1,422.6	-1,484.7	1,330.4	1,271.5	58.92	22.580		
9,100.0	7,530.0	9,481.7	7,770.0	31.4	40.5	100.35	-1,522.6	-1,484.7	1,329.7	1,267.7	62.03	21.436		
9,200.0	7,530.0	9,581.7	7,770.0	33.0	41.8	100.36	-1,622.6	-1,484.7	1,329.0	1,263.9	65.18	20.391		
9,300.0	7,530.0	9,681.7	7,770.0	34.7	43.1	100.37	-1,722.6	-1,484.7	1,328.4	1,260.0	68.35	19.434		
9,400.0	7,530.0	9,781.7	7,770.0	36.3	44.4	100.37	-1,822.6	-1,484.7	1,327.7	1,256.1	71.55	18.555		
9,500.0	7,530.0	9,881.7	7,770.0	37.9	45.7	100.38	-1,922.6	-1,484.7	1,327.0	1,252.2	74.78	17.746		
9,600.0	7,530.0	9,981.6	7,770.0	39.6	47.1	100.38	-2,022.6	-1,484.7	1,326.3	1,248.3	78.02	17.000		
9,700.0	7,530.0	10,081.6	7,770.0	41.2	48.5	100.39	-2,122.6	-1,484.7	1,325.6	1,244.3	81.28	16.309		
9,800.0	7,530.0	10,181.6	7,770.0	42.9	49.9	100.39	-2,222.6	-1,484.7	1,324.9	1,240.4	84.55	15.670		
9,900.0	7,530.0	10,281.6	7,770.0	44.5	51.3	100.40	-2,322.6	-1,484.7	1,324.2	1,236.4	87.84	15.075		
10,000.0	7,530.0	10,381.6	7,770.0	46.2	52.8	100.40	-2,422.6	-1,484.7	1,323.5	1,232.4	91.14	14.522		
10,100.0	7,530.0	10,481.6	7,770.0	47.9	54.3	100.41	-2,522.6	-1,484.7	1,322.9	1,228.4	94.45	14.006		
10,200.0	7,530.0	10,581.6	7,770.0	49.6	55.8	100.41	-2,622.6	-1,484.7	1,322.2	1,224.4	97.77	13.523		
10,300.0	7,530.0	10,681.6	7,770.0	51.3	57.3	100.42	-2,722.6	-1,484.7	1,321.5	1,220.4	101.10	13.071		
10,400.0	7,530.0	10,781.6	7,770.0	53.0	58.8	100.43	-2,822.6	-1,484.7	1,320.8	1,216.4	104.43	12.647		
10,500.0	7,530.0	10,881.6	7,770.0	54.7	60.3	100.43	-2,922.6	-1,484.7	1,320.1	1,212.3	107.78	12.249		
10,600.0	7,530.0	10,981.6	7,770.0	56.4	61.9	100.44	-3,022.6	-1,484.7	1,319.4	1,208.3	111.13	11.873		
10,700.0	7,530.0	11,081.6	7,770.0	58.1	63.4	100.44	-3,122.6	-1,484.7	1,318.7	1,204.3	114.48	11.519		
10,800.0	7,530.0	11,181.6	7,770.0	59.8	65.0	100.45	-3,222.6	-1,484.7	1,318.1	1,200.2	117.84	11.185		
10,900.0	7,530.0	11,281.6	7,770.0	61.5	66.6	100.45	-3,322.6	-1,484.7	1,317.4	1,196.2	121.21	10.869		
11,000.0	7,530.0	11,381.6	7,770.0	63.2	68.2	100.46	-3,422.6	-1,484.7	1,316.7	1,192.1	124.58	10.569		
11,100.0	7,530.0	11,481.6	7,770.0	64.9	69.8	100.46	-3,522.5	-1,484.7	1,316.0	1,188.0	127.95	10.285		
11,200.0	7,530.0	11,581.6	7,770.0	66.6	71.4	100.47	-3,622.5	-1,484.7	1,315.3	1,184.0	131.33	10.015		
11,300.0	7,530.0	11,681.6	7,770.0	68.4	73.0	100.47	-3,722.5	-1,484.7	1,314.6	1,179.9	134.71	9.759		
11,400.0	7,530.0	11,781.6	7,770.0	70.1	74.6	100.48	-3,822.5	-1,484.7	1,313.9	1,175.8	138.09	9.515		
11,500.0	7,530.0	11,881.6	7,770.0	71.8	76.2	100.49	-3,922.5	-1,484.7	1,313.2	1,171.8	141.48	9.282		
11,600.0	7,530.0	11,981.6	7,770.0	73.5	77.8	100.49	-4,022.5	-1,484.7	1,312.6	1,167.7	144.87	9.060		
11,700.0	7,530.0	12,081.6	7,770.0	75.3	79.5	100.50	-4,122.5	-1,484.7	1,311.9	1,163.6	148.26	8.848		
11,800.0	7,530.0	12,181.6	7,770.0	77.0	81.1	100.50	-4,222.5	-1,484.7	1,311.2	1,159.5	151.66	8.646		
11,900.0	7,530.0	12,281.6	7,770.0	78.7	82.7	100.51	-4,322.5	-1,484.7	1,310.5	1,155.4	155.06	8.452		
12,000.0	7,530.0	12,381.6	7,770.0	80.4	84.4	100.51	-4,422.5	-1,484.7	1,309.8	1,151.4	158.45	8.266		
12,100.0	7,530.0	12,481.6	7,770.0	82.2	86.0	100.52	-4,522.5	-1,484.7	1,309.1	1,147.3	161.86	8.088		
12,200.0	7,530.0	12,581.6	7,770.0	83.9	87.7	100.52	-4,622.5	-1,484.7	1,308.4	1,143.2	165.26	7.918		
12,300.0	7,530.0	12,681.6	7,770.0	85.6	89.4	100.53	-4,722.5	-1,484.7	1,307.8	1,139.1	168.66	7.754		
12,400.0	7,530.0	12,781.6	7,770.0	87.4	91.0	100.54	-4,822.5	-1,484.7	1,307.1	1,135.0	172.07	7.596		
12,500.0	7,530.0	12,881.6	7,770.0	89.1	92.7	100.54	-4,922.5	-1,484.7	1,306.4	1,130.9	175.48	7.445		
12,600.0	7,530.0	12,981.6	7,770.0	90.8	94.4	100.55	-5,022.5	-1,484.7	1,305.7	1,126.8	178.88	7.299		
12,700.0	7,530.0	13,081.6	7,770.0	92.6	96.0	100.55	-5,122.5	-1,484.7	1,305.0	1,122.7	182.29	7.159		
12,800.0	7,530.0	13,181.6	7,770.0	94.3	97.7	100.56	-5,222.5	-1,484.7	1,304.3	1,118.6	185.71	7.024		
12,900.0	7,530.0	13,281.6	7,770.0	96.0	99.4	100.56	-5,322.5	-1,484.7	1,303.6	1,114.5	189.12	6.893		
13,000.0	7,530.0	13,381.6	7,770.0	97.8	101.1	100.57	-5,422.5	-1,484.7	1,303.0	1,110.4	192.53	6.767		
13,100.0	7,530.0	13,481.6	7,770.0	99.5	102.7	100.58	-5,522.5	-1,484.7	1,302.3	1,106.3	195.95	6.646		
13,200.0	7,530.0	13,581.6	7,770.0	101.3	104.4	100.58	-5,622.5	-1,484.7	1,301.6	1,102.2	199.36	6.529		
13,300.0	7,530.0	13,681.6	7,770.0	103.0	106.1	100.59	-5,722.5	-1,484.7	1,300.9	1,098.1	202.78	6.415		
13,400.0	7,530.0	13,781.6	7,770.0	104.7	107.8	100.59	-5,822.5	-1,484.7	1,300.2	1,094.0	206.20	6.306		
13,500.0	7,530.0	13,881.6	7,770.0	106.5	109.5	100.60	-5,922.5	-1,484.7	1,299.5	1,089.9	209.61	6.200		
13,600.0	7,530.0	13,981.6	7,770.0	108.2	111.2	100.60	-6,022.5	-1,484.7	1,298.8	1,085.8	213.03	6.097		
13,700.0	7,530.0	14,081.5	7,770.0	110.0	112.9	100.61	-6,122.5	-1,484.7	1,298.2	1,081.7	216.45	5.997		
13,800.0	7,530.0	14,181.5	7,770.0	111.7	114.6	100.62	-6,222.5	-1,484.7	1,297.5	1,077.6	219.87	5.901		
13,900.0	7,530.0	14,281.5	7,770.0	113.4	116.3	100.62	-6,322.5	-1,484.7	1,296.8	1,073.5	223.29	5.808		
14,000.0	7,530.0	14,381.5	7,770.0	115.2	118.0	100.63	-6,422.5	-1,484.7	1,296.1	1,069.4	226.71	5.717		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
14,100.0	7,530.0	14,481.5	7,770.0	116.9	119.7	100.63	-6,522.5	-1,484.7	1,295.4	1,065.3	230.14	5.629		
14,200.0	7,530.0	14,581.5	7,770.0	118.7	121.4	100.64	-6,622.5	-1,484.7	1,294.7	1,061.2	233.56	5.543		
14,300.0	7,530.0	14,681.5	7,770.0	120.4	123.1	100.64	-6,722.5	-1,484.7	1,294.0	1,057.1	236.98	5.461		
14,400.0	7,530.0	14,781.5	7,770.0	122.1	124.8	100.65	-6,822.5	-1,484.7	1,293.4	1,052.9	240.41	5.380		
14,500.0	7,530.0	14,881.5	7,770.0	123.9	126.5	100.65	-6,922.5	-1,484.7	1,292.7	1,048.8	243.83	5.302		
14,600.0	7,530.0	14,981.5	7,770.0	125.6	128.2	100.66	-7,022.5	-1,484.7	1,292.0	1,044.7	247.25	5.225		
14,700.0	7,530.0	15,081.5	7,770.0	127.4	129.9	100.67	-7,122.5	-1,484.7	1,291.3	1,040.6	250.68	5.151		
14,800.0	7,530.0	15,181.5	7,770.0	129.1	131.6	100.67	-7,222.5	-1,484.7	1,290.6	1,036.5	254.10	5.079		
14,900.0	7,530.0	15,281.5	7,770.0	130.9	133.3	100.68	-7,322.5	-1,484.7	1,289.9	1,032.4	257.53	5.009		
15,000.0	7,530.0	15,381.5	7,770.0	132.6	135.1	100.68	-7,422.5	-1,484.7	1,289.2	1,028.3	260.95	4.940		
15,100.0	7,530.0	15,481.5	7,770.0	134.4	136.8	100.69	-7,522.5	-1,484.7	1,288.6	1,024.2	264.38	4.874		
15,200.0	7,530.0	15,581.5	7,770.0	136.1	138.5	100.70	-7,622.4	-1,484.7	1,287.9	1,020.1	267.81	4.809		
15,300.0	7,530.0	15,681.5	7,770.0	137.9	140.2	100.70	-7,722.4	-1,484.7	1,287.2	1,015.9	271.23	4.746		
15,400.0	7,530.0	15,781.5	7,770.0	139.6	141.9	100.71	-7,822.4	-1,484.7	1,286.5	1,011.8	274.66	4.684		
15,500.0	7,530.0	15,881.5	7,770.0	141.3	143.6	100.71	-7,922.4	-1,484.7	1,285.8	1,007.7	278.09	4.624		
15,600.0	7,530.0	15,981.5	7,770.0	143.1	145.4	100.72	-8,022.4	-1,484.7	1,285.1	1,003.6	281.52	4.565		
15,700.0	7,530.0	16,081.5	7,770.0	144.8	147.1	100.72	-8,122.4	-1,484.7	1,284.4	999.5	284.94	4.508		
15,800.0	7,530.0	16,181.5	7,770.0	146.6	148.8	100.73	-8,222.4	-1,484.7	1,283.8	995.4	288.37	4.452		
15,900.0	7,530.0	16,281.5	7,770.0	148.3	150.5	100.74	-8,322.4	-1,484.7	1,283.1	991.3	291.80	4.397		
16,000.0	7,530.0	16,381.5	7,770.0	150.1	152.2	100.74	-8,422.4	-1,484.7	1,282.4	987.2	295.23	4.344		
16,100.0	7,530.0	16,481.5	7,770.0	151.8	154.0	100.75	-8,522.4	-1,484.7	1,281.7	983.0	298.66	4.292		
16,200.0	7,530.0	16,581.5	7,770.0	153.6	155.7	100.75	-8,622.4	-1,484.7	1,281.0	978.9	302.08	4.241		
16,300.0	7,530.0	16,681.5	7,770.0	155.3	157.4	100.76	-8,722.4	-1,484.7	1,280.3	974.8	305.51	4.191		
16,400.0	7,530.0	16,781.5	7,770.0	157.1	159.1	100.76	-8,822.4	-1,484.7	1,279.6	970.7	308.94	4.142		
16,500.0	7,530.0	16,881.5	7,770.0	158.8	160.9	100.77	-8,922.4	-1,484.7	1,279.0	966.6	312.37	4.094		
16,600.0	7,530.0	16,981.5	7,770.0	160.6	162.6	100.78	-9,022.4	-1,484.7	1,278.3	962.5	315.80	4.048		
16,700.0	7,530.0	17,081.5	7,770.0	162.3	164.3	100.78	-9,122.4	-1,484.7	1,277.6	958.4	319.23	4.002		
16,800.0	7,530.0	17,181.5	7,770.0	164.1	166.0	100.79	-9,222.4	-1,484.7	1,276.9	954.2	322.66	3.957		
16,900.0	7,530.0	17,281.5	7,770.0	165.8	167.8	100.79	-9,322.4	-1,484.7	1,276.2	950.1	326.09	3.914		
17,000.0	7,530.0	17,381.5	7,770.0	167.6	169.5	100.80	-9,422.4	-1,484.7	1,275.5	946.0	329.52	3.871		
17,100.0	7,530.0	17,481.5	7,770.0	169.3	171.2	100.81	-9,522.4	-1,484.7	1,274.8	941.9	332.95	3.829		
17,200.0	7,530.0	17,581.5	7,770.0	171.1	173.0	100.81	-9,622.4	-1,484.7	1,274.2	937.8	336.38	3.788		
17,300.0	7,530.0	17,681.5	7,770.0	172.8	174.7	100.82	-9,722.4	-1,484.7	1,273.5	933.7	339.81	3.748		
17,400.0	7,530.0	17,775.9	7,770.0	174.5	176.3	100.82	-9,816.8	-1,484.7	1,272.8	929.7	343.14	3.709		
17,403.2	7,530.0	17,775.9	7,770.0	174.6	176.3	100.82	-9,816.8	-1,484.7	1,272.8	929.6	343.20	3.709		
17,411.2	7,530.0	17,775.9	7,770.0	174.7	176.3	100.82	-9,816.8	-1,484.7	1,272.8	929.5	343.33	3.707 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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					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	-90.00	0.0	-40.0	40.0					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-40.0	40.0	39.7	0.30	131.779		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-40.0	40.0	39.4	0.65	61.309		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-40.0	40.0	39.0	1.00	39.947 CC, ES		
400.0	400.0	399.3	399.3	0.7	0.7	-89.61	0.3	-40.8	40.8	39.5	1.35	30.260		
500.0	500.0	498.6	498.6	0.8	0.9	-88.54	1.1	-43.3	43.3	41.6	1.70	25.518		
600.0	600.0	597.8	597.6	1.0	1.0	-64.91	2.5	-47.4	47.1	45.1	2.05	23.010		
700.0	700.0	696.9	696.5	1.2	1.2	-65.58	4.4	-53.0	51.8	49.4	2.40	21.594		
800.0	799.9	795.8	795.2	1.4	1.4	-67.17	6.8	-60.3	57.5	54.7	2.76	20.834		
848.7	848.4	843.9	843.0	1.5	1.5	-68.18	8.2	-64.5	60.6	57.6	2.94	20.629		
900.0	899.7	894.5	893.5	1.6	1.7	-69.21	9.8	-69.2	64.2	61.1	3.13	20.540		
1,000.0	999.5	993.1	991.4	1.8	1.9	-70.51	13.4	-79.7	72.6	69.1	3.50	20.720		
1,100.0	1,099.3	1,091.4	1,088.9	2.0	2.2	-71.08	17.4	-91.7	82.5	78.6	3.88	21.249		
1,200.0	1,199.1	1,189.3	1,185.7	2.2	2.5	-71.12	22.0	-105.3	94.0	89.8	4.27	22.033		
1,300.0	1,298.9	1,286.9	1,282.0	2.4	2.8	-70.80	27.1	-120.4	107.1	102.5	4.66	23.011		
1,400.0	1,398.8	1,385.3	1,378.9	2.6	3.1	-70.31	32.6	-136.7	121.4	116.3	5.04	24.064		
1,500.0	1,498.6	1,484.3	1,476.3	2.8	3.4	-69.92	38.2	-153.3	135.7	130.3	5.44	24.970		
1,600.0	1,598.4	1,583.3	1,573.8	3.0	3.8	-69.59	43.8	-169.8	150.1	144.2	5.83	25.752		
1,700.0	1,698.2	1,682.2	1,671.2	3.2	4.1	-69.33	49.3	-186.4	164.4	158.2	6.22	26.433		
1,800.0	1,798.0	1,781.2	1,768.6	3.4	4.4	-69.11	54.9	-202.9	178.8	172.2	6.61	27.031		
1,900.0	1,897.8	1,880.1	1,866.0	3.6	4.8	-68.92	60.5	-219.4	193.1	186.1	7.01	27.560		
2,000.0	1,997.7	1,979.1	1,963.4	3.8	5.1	-68.76	66.1	-236.0	207.5	200.1	7.40	28.032		
2,100.0	2,097.5	2,078.1	2,060.8	4.0	5.5	-68.61	71.7	-252.5	221.8	214.0	7.80	28.455		
2,200.0	2,197.3	2,177.0	2,158.2	4.2	5.8	-68.49	77.2	-269.1	236.2	228.0	8.19	28.837		
2,300.0	2,297.1	2,276.0	2,255.6	4.4	6.2	-68.38	82.8	-285.6	250.6	242.0	8.59	29.183		
2,400.0	2,396.9	2,375.0	2,353.0	4.6	6.5	-68.28	88.4	-302.2	264.9	255.9	8.98	29.497		
2,500.0	2,496.7	2,473.9	2,450.5	4.8	6.9	-68.19	94.0	-318.7	279.3	269.9	9.38	29.785		
2,600.0	2,596.5	2,572.9	2,547.9	5.0	7.2	-68.11	99.5	-335.2	293.6	283.9	9.77	30.049		
2,700.0	2,696.4	2,671.9	2,645.3	5.2	7.6	-68.04	105.1	-351.8	308.0	297.8	10.17	30.292		
2,800.0	2,796.2	2,770.8	2,742.7	5.4	7.9	-67.97	110.7	-368.3	322.4	311.8	10.56	30.517		
2,900.0	2,896.0	2,869.8	2,840.1	5.6	8.3	-67.91	116.3	-384.9	336.7	325.8	10.96	30.725		
3,000.0	2,995.8	2,968.7	2,937.5	5.8	8.6	-67.86	121.9	-401.4	351.1	339.7	11.36	30.918		
3,100.0	3,095.6	3,067.7	3,034.9	6.0	9.0	-67.81	127.4	-417.9	365.4	353.7	11.75	31.098		
3,200.0	3,195.4	3,166.7	3,132.3	6.2	9.3	-67.76	133.0	-434.5	379.8	367.7	12.15	31.266		
3,300.0	3,295.2	3,265.6	3,229.7	6.4	9.7	-67.72	138.6	-451.0	394.2	381.6	12.54	31.424		
3,400.0	3,395.1	3,364.6	3,327.2	6.6	10.0	-67.68	144.2	-467.6	408.5	395.6	12.94	31.571		
3,500.0	3,494.9	3,463.6	3,424.6	6.8	10.4	-67.64	149.7	-484.1	422.9	409.6	13.34	31.710		
3,600.0	3,594.7	3,562.5	3,522.0	7.0	10.7	-67.60	155.3	-500.6	437.3	423.5	13.73	31.841		
3,700.0	3,694.5	3,661.5	3,619.4	7.2	11.1	-67.57	160.9	-517.2	451.6	437.5	14.13	31.964		
3,800.0	3,794.3	3,760.4	3,716.8	7.4	11.4	-67.54	166.5	-533.7	466.0	451.5	14.53	32.080		
3,900.0	3,894.1	3,859.4	3,814.2	7.6	11.8	-67.51	172.1	-550.3	480.4	465.4	14.92	32.190		
4,000.0	3,994.0	3,958.4	3,911.6	7.8	12.1	-67.48	177.6	-566.8	494.7	479.4	15.32	32.294		
4,100.0	4,093.8	4,057.3	4,009.0	8.0	12.5	-67.46	183.2	-583.3	509.1	493.4	15.72	32.393		
4,200.0	4,193.6	4,156.3	4,106.4	8.2	12.8	-67.43	188.8	-599.9	523.4	507.3	16.11	32.487		
4,300.0	4,293.4	4,255.3	4,203.9	8.4	13.2	-67.41	194.4	-616.4	537.8	521.3	16.51	32.577		
4,400.0	4,393.2	4,354.2	4,301.3	8.6	13.5	-67.39	199.9	-633.0	552.2	535.3	16.91	32.662		
4,500.0	4,493.0	4,453.2	4,398.7	8.8	13.9	-67.37	205.5	-649.5	566.5	549.2	17.30	32.743		
4,600.0	4,592.8	4,552.1	4,496.1	9.0	14.2	-67.35	211.1	-666.0	580.9	563.2	17.70	32.821		
4,700.0	4,692.7	4,651.1	4,593.5	9.3	14.6	-67.33	216.7	-682.6	595.3	577.2	18.10	32.895		
4,800.0	4,792.5	4,750.1	4,690.9	9.5	14.9	-67.31	222.3	-699.1	609.6	591.1	18.49	32.966		
4,900.0	4,892.3	4,849.0	4,788.3	9.7	15.3	-67.29	227.8	-715.7	624.0	605.1	18.89	33.034		
5,000.0	4,992.1	4,948.0	4,885.7	9.9	15.6	-67.28	233.4	-732.2	638.4	619.1	19.29	33.099		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,047.0	4,983.1	10.1	16.0	-67.26	239.0	-748.7	652.7	633.0	19.68	33.161		
5,200.0	5,191.7	5,145.9	5,080.6	10.3	16.4	-67.25	244.6	-765.3	667.1	647.0	20.08	33.221		
5,300.0	5,291.5	5,244.9	5,178.0	10.5	16.7	-67.23	250.1	-781.8	681.5	661.0	20.48	33.279		
5,400.0	5,391.4	5,343.8	5,275.4	10.7	17.1	-67.22	255.7	-798.4	695.8	674.9	20.87	33.334		
5,500.0	5,491.2	5,442.8	5,372.8	10.9	17.4	-67.20	261.3	-814.9	710.2	688.9	21.27	33.387		
5,600.0	5,591.0	5,541.8	5,470.2	11.1	17.8	-67.19	266.9	-831.5	724.6	702.9	21.67	33.439		
5,700.0	5,690.8	5,640.7	5,567.6	11.3	18.1	-67.18	272.5	-848.0	738.9	716.9	22.07	33.488		
5,800.0	5,790.6	5,739.7	5,665.0	11.5	18.5	-67.17	278.0	-864.5	753.3	730.8	22.46	33.536		
5,900.0	5,890.4	5,838.7	5,762.4	11.7	18.8	-67.16	283.6	-881.1	767.6	744.8	22.86	33.582		
6,000.0	5,990.3	5,937.6	5,859.8	11.9	19.2	-67.15	289.2	-897.6	782.0	758.8	23.26	33.626		
6,100.0	6,090.1	6,036.6	5,957.3	12.1	19.5	-67.14	294.8	-914.2	796.4	772.7	23.65	33.669		
6,200.0	6,189.9	6,135.5	6,054.7	12.3	19.9	-67.12	300.3	-930.7	810.7	786.7	24.05	33.711		
6,300.0	6,289.7	6,234.5	6,152.1	12.5	20.2	-67.12	305.9	-947.2	825.1	800.7	24.45	33.751		
6,400.0	6,389.5	6,333.5	6,249.5	12.7	20.6	-67.11	311.5	-963.8	839.5	814.6	24.84	33.790		
6,500.0	6,489.3	6,432.4	6,346.9	12.9	20.9	-67.10	317.1	-980.3	853.8	828.6	25.24	33.827		
6,600.0	6,589.1	6,531.4	6,444.3	13.1	21.3	-67.09	322.7	-996.9	868.2	842.6	25.64	33.864		
6,700.0	6,689.0	6,630.4	6,541.7	13.3	21.7	-67.08	328.2	-1,013.4	882.6	856.5	26.04	33.899		
6,785.3	6,774.1	6,714.7	6,624.8	13.5	22.0	-67.07	333.0	-1,027.5	894.8	868.4	26.37	33.928		
6,800.0	6,788.8	6,729.3	6,639.1	13.5	22.0	-56.20	333.8	-1,029.9	896.9	870.5	26.46	33.903		
6,850.0	6,838.8	6,778.7	6,687.7	13.6	22.2	53.91	336.6	-1,038.2	904.1	877.4	26.69	33.879		
6,900.0	6,888.6	6,827.8	6,736.1	13.6	22.4	75.66	339.4	-1,046.4	911.2	884.3	26.85	33.934		
6,950.0	6,938.1	6,876.3	6,783.8	13.7	22.5	80.81	342.1	-1,054.5	918.3	891.3	26.96	34.065		
7,000.0	6,987.0	6,925.2	6,832.0	13.7	22.7	83.17	343.3	-1,062.7	925.4	898.5	27.00	34.281		
7,050.0	7,035.0	6,974.9	6,880.9	13.6	22.8	84.55	341.0	-1,071.0	932.6	905.6	26.99	34.556		
7,100.0	7,082.0	7,025.5	6,930.4	13.6	23.0	85.47	335.2	-1,079.5	939.8	912.8	26.94	34.885		
7,150.0	7,127.7	7,077.0	6,980.3	13.5	23.1	86.15	325.7	-1,088.0	946.8	920.0	26.85	35.259		
7,200.0	7,171.8	7,129.4	7,030.2	13.5	23.2	86.69	312.2	-1,096.6	953.8	927.1	26.74	35.666		
7,250.0	7,214.2	7,182.8	7,080.0	13.4	23.3	87.13	294.8	-1,105.1	960.7	934.0	26.62	36.094		
7,300.0	7,254.6	7,237.3	7,129.2	13.4	23.4	87.52	273.2	-1,113.6	967.3	940.8	26.48	36.525		
7,350.0	7,292.9	7,292.8	7,177.6	13.3	23.5	87.85	247.3	-1,122.0	973.7	947.4	26.36	36.939		
7,400.0	7,328.9	7,349.4	7,224.8	13.3	23.5	88.16	217.0	-1,130.2	979.9	953.6	26.26	37.311		
7,450.0	7,362.3	7,407.2	7,270.3	13.3	23.6	88.44	182.4	-1,138.1	985.7	959.5	26.21	37.613		
7,500.0	7,393.1	7,466.0	7,313.7	13.4	23.7	88.69	143.4	-1,145.7	991.2	964.9	26.21	37.814		
7,550.0	7,421.1	7,525.9	7,354.5	13.5	23.8	88.92	100.2	-1,152.8	996.2	969.9	26.29	37.889		
7,600.0	7,446.1	7,586.9	7,392.2	13.6	23.9	89.14	52.7	-1,159.5	1,000.8	974.3	26.47	37.813		
7,650.0	7,468.0	7,648.8	7,426.2	13.8	24.0	89.33	1.4	-1,165.6	1,004.8	978.1	26.75	37.570		
7,700.0	7,486.7	7,711.7	7,456.2	14.0	24.2	89.50	-53.6	-1,171.0	1,008.3	981.2	27.15	37.136		
7,750.0	7,502.2	7,775.4	7,481.6	14.2	24.4	89.65	-111.8	-1,175.6	1,011.3	983.6	27.69	36.527		
7,800.0	7,514.3	7,839.7	7,502.0	14.6	24.6	89.78	-172.7	-1,179.4	1,013.6	985.2	28.35	35.759		
7,850.0	7,523.0	7,904.7	7,517.0	14.9	24.9	89.88	-235.7	-1,182.3	1,015.3	986.1	29.13	34.850		
7,900.0	7,528.2	7,970.0	7,526.4	15.3	25.2	89.95	-300.3	-1,184.2	1,016.3	986.2	30.04	33.827		
7,950.2	7,530.0	8,035.9	7,530.0	15.8	25.6	90.00	-366.1	-1,185.1	1,016.6	985.5	31.06	32.731		
8,000.0	7,530.0	8,087.1	7,530.0	16.2	25.9	90.00	-417.3	-1,185.4	1,016.5	984.5	32.04	31.725		
8,100.0	7,530.0	8,187.1	7,530.0	17.3	26.5	90.00	-517.3	-1,185.9	1,016.3	982.2	34.17	29.741		
8,200.0	7,530.0	8,287.1	7,530.0	18.4	27.3	90.00	-617.3	-1,186.5	1,016.2	979.7	36.51	27.829		
8,300.0	7,530.0	8,387.1	7,530.0	19.7	28.1	90.00	-717.3	-1,187.0	1,016.0	977.0	39.03	26.030		
8,400.0	7,530.0	8,487.1	7,530.0	21.0	29.1	90.00	-817.3	-1,187.5	1,015.8	974.1	41.69	24.365		
8,500.0	7,530.0	8,587.1	7,530.0	22.4	30.1	90.00	-917.3	-1,188.0	1,015.6	971.2	44.47	22.839		
8,600.0	7,530.0	8,687.1	7,530.0	23.8	31.1	90.00	-1,017.3	-1,188.6	1,015.5	968.1	47.35	21.448		
8,700.0	7,530.0	8,787.1	7,530.0	25.3	32.3	90.00	-1,117.3	-1,189.1	1,015.3	965.0	50.30	20.184		
8,800.0	7,530.0	8,887.1	7,530.0	26.8	33.5	90.00	-1,217.3	-1,189.6	1,015.1	961.8	53.32	19.037		
8,900.0	7,530.0	8,987.1	7,530.0	28.3	34.7	90.00	-1,317.3	-1,190.1	1,014.9	958.5	56.40	17.994		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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				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	7,530.0	9,087.1	7,530.0	29.9	36.0	90.00	-1,417.3	-1,190.7	1,014.8	955.2	59.53	17.046		
9,100.0	7,530.0	9,187.1	7,530.0	31.4	37.3	90.00	-1,517.3	-1,191.2	1,014.6	951.9	62.70	16.183		
9,200.0	7,530.0	9,287.1	7,530.0	33.0	38.6	90.00	-1,617.3	-1,191.7	1,014.4	948.5	65.90	15.394		
9,300.0	7,530.0	9,387.1	7,530.0	34.7	40.0	90.00	-1,717.3	-1,192.2	1,014.3	945.1	69.13	14.672		
9,400.0	7,530.0	9,487.1	7,530.0	36.3	41.4	90.00	-1,817.3	-1,192.7	1,014.1	941.7	72.39	14.009		
9,500.0	7,530.0	9,587.1	7,530.0	37.9	42.9	90.00	-1,917.3	-1,193.3	1,013.9	938.2	75.67	13.400		
9,600.0	7,530.0	9,687.1	7,530.0	39.6	44.3	90.00	-2,017.3	-1,193.8	1,013.7	934.8	78.97	12.838		
9,700.0	7,530.0	9,787.1	7,530.0	41.2	45.8	90.00	-2,117.3	-1,194.3	1,013.6	931.3	82.28	12.318		
9,800.0	7,530.0	9,887.1	7,530.0	42.9	47.3	90.00	-2,217.3	-1,194.8	1,013.4	927.8	85.61	11.837		
9,900.0	7,530.0	9,987.1	7,530.0	44.5	48.8	90.00	-2,317.3	-1,195.4	1,013.2	924.2	88.96	11.390		
10,000.0	7,530.0	10,087.1	7,530.0	46.2	50.4	90.00	-2,417.3	-1,195.9	1,013.0	920.7	92.32	10.973		
10,100.0	7,530.0	10,187.1	7,530.0	47.9	51.9	90.00	-2,517.3	-1,196.4	1,012.9	917.2	95.68	10.585		
10,200.0	7,530.0	10,287.1	7,530.0	49.6	53.5	90.00	-2,617.3	-1,196.9	1,012.7	913.6	99.06	10.223		
10,300.0	7,530.0	10,387.1	7,530.0	51.3	55.0	90.00	-2,717.3	-1,197.5	1,012.5	910.1	102.45	9.883		
10,400.0	7,530.0	10,487.1	7,530.0	53.0	56.6	90.00	-2,817.3	-1,198.0	1,012.3	906.5	105.84	9.564		
10,500.0	7,530.0	10,587.1	7,530.0	54.7	58.2	90.00	-2,917.3	-1,198.5	1,012.2	902.9	109.25	9.265		
10,600.0	7,530.0	10,687.1	7,530.0	56.4	59.8	90.00	-3,017.3	-1,199.0	1,012.0	899.3	112.65	8.983		
10,700.0	7,530.0	10,787.1	7,530.0	58.1	61.4	90.00	-3,117.3	-1,199.6	1,011.8	895.7	116.07	8.717		
10,800.0	7,530.0	10,887.1	7,530.0	59.8	63.0	90.00	-3,217.3	-1,200.1	1,011.6	892.1	119.49	8.466		
10,900.0	7,530.0	10,987.1	7,530.0	61.5	64.7	90.00	-3,317.3	-1,200.6	1,011.5	888.5	122.91	8.229		
11,000.0	7,530.0	11,087.1	7,530.0	63.2	66.3	90.00	-3,417.3	-1,201.1	1,011.3	884.9	126.34	8.004		
11,100.0	7,530.0	11,187.1	7,530.0	64.9	67.9	90.00	-3,517.3	-1,201.7	1,011.1	881.3	129.78	7.791		
11,200.0	7,530.0	11,287.1	7,530.0	66.6	69.6	90.00	-3,617.3	-1,202.2	1,010.9	877.7	133.21	7.589		
11,300.0	7,530.0	11,387.1	7,530.0	68.4	71.2	90.00	-3,717.3	-1,202.7	1,010.8	874.1	136.65	7.397		
11,400.0	7,530.0	11,487.1	7,530.0	70.1	72.9	90.00	-3,817.2	-1,203.2	1,010.6	870.5	140.10	7.213		
11,500.0	7,530.0	11,587.1	7,530.0	71.8	74.5	90.00	-3,917.2	-1,203.7	1,010.4	866.9	143.55	7.039		
11,600.0	7,530.0	11,687.1	7,530.0	73.5	76.2	90.00	-4,017.2	-1,204.3	1,010.2	863.2	147.00	6.873		
11,700.0	7,530.0	11,787.1	7,530.0	75.3	77.9	90.00	-4,117.2	-1,204.8	1,010.1	859.6	150.45	6.714		
11,800.0	7,530.0	11,887.1	7,530.0	77.0	79.5	90.00	-4,217.2	-1,205.3	1,009.9	856.0	153.90	6.562		
11,900.0	7,530.0	11,987.1	7,530.0	78.7	81.2	90.00	-4,317.2	-1,205.8	1,009.7	852.4	157.36	6.417		
12,000.0	7,530.0	12,087.1	7,530.0	80.4	82.9	90.00	-4,417.2	-1,206.4	1,009.5	848.7	160.82	6.277		
12,100.0	7,530.0	12,187.1	7,530.0	82.2	84.6	90.00	-4,517.2	-1,206.9	1,009.4	845.1	164.28	6.144		
12,200.0	7,530.0	12,287.1	7,530.0	83.9	86.2	90.00	-4,617.2	-1,207.4	1,009.2	841.4	167.75	6.016		
12,300.0	7,530.0	12,387.1	7,530.0	85.6	87.9	90.00	-4,717.2	-1,207.9	1,009.0	837.8	171.21	5.893		
12,400.0	7,530.0	12,487.1	7,530.0	87.4	89.6	90.00	-4,817.2	-1,208.5	1,008.8	834.2	174.68	5.775		
12,500.0	7,530.0	12,587.1	7,530.0	89.1	91.3	90.00	-4,917.2	-1,209.0	1,008.7	830.5	178.15	5.662		
12,600.0	7,530.0	12,687.1	7,530.0	90.8	93.0	90.00	-5,017.2	-1,209.5	1,008.5	826.9	181.62	5.553		
12,700.0	7,530.0	12,787.1	7,530.0	92.6	94.7	90.00	-5,117.2	-1,210.0	1,008.3	823.2	185.09	5.448		
12,800.0	7,530.0	12,887.1	7,530.0	94.3	96.4	90.00	-5,217.2	-1,210.6	1,008.1	819.6	188.57	5.346		
12,900.0	7,530.0	12,987.1	7,530.0	96.0	98.1	90.00	-5,317.2	-1,211.1	1,008.0	815.9	192.04	5.249		
13,000.0	7,530.0	13,087.1	7,530.0	97.8	99.8	90.00	-5,417.2	-1,211.6	1,007.8	812.3	195.52	5.155		
13,100.0	7,530.0	13,187.1	7,530.0	99.5	101.5	90.00	-5,517.2	-1,212.1	1,007.6	808.6	198.99	5.064		
13,200.0	7,530.0	13,287.1	7,530.0	101.3	103.2	90.00	-5,617.2	-1,212.7	1,007.5	805.0	202.47	4.976		
13,300.0	7,530.0	13,387.1	7,530.0	103.0	104.9	90.00	-5,717.2	-1,213.2	1,007.3	801.3	205.95	4.891		
13,400.0	7,530.0	13,487.1	7,530.0	104.7	106.6	90.00	-5,817.2	-1,213.7	1,007.1	797.7	209.43	4.809		
13,500.0	7,530.0	13,587.1	7,530.0	106.5	108.3	90.00	-5,917.2	-1,214.2	1,006.9	794.0	212.91	4.729		
13,600.0	7,530.0	13,687.1	7,530.0	108.2	110.0	90.00	-6,017.2	-1,214.7	1,006.8	790.4	216.39	4.652		
13,700.0	7,530.0	13,787.1	7,530.0	110.0	111.8	90.00	-6,117.2	-1,215.3	1,006.6	786.7	219.88	4.578		
13,800.0	7,530.0	13,887.1	7,530.0	111.7	113.5	90.00	-6,217.2	-1,215.8	1,006.4	783.0	223.36	4.506		
13,900.0	7,530.0	13,987.1	7,530.0	113.4	115.2	90.00	-6,317.2	-1,216.3	1,006.2	779.4	226.84	4.436		
14,000.0	7,530.0	14,087.1	7,530.0	115.2	116.9	90.00	-6,417.2	-1,216.8	1,006.1	775.7	230.33	4.368		
14,100.0	7,530.0	14,187.1	7,530.0	116.9	118.6	90.00	-6,517.2	-1,217.4	1,005.9	772.1	233.81	4.302		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
14,200.0	7,530.0	14,287.1	7,530.0	118.7	120.3	90.00	-6,617.2	-1,217.9	1,005.7	768.4	237.30	4.238		
14,300.0	7,530.0	14,387.1	7,530.0	120.4	122.1	90.00	-6,717.2	-1,218.4	1,005.5	764.7	240.79	4.176		
14,400.0	7,530.0	14,487.1	7,530.0	122.1	123.8	90.00	-6,817.2	-1,218.9	1,005.4	761.1	244.27	4.116		
14,500.0	7,530.0	14,587.1	7,530.0	123.9	125.5	90.00	-6,917.2	-1,219.5	1,005.2	757.4	247.76	4.057		
14,600.0	7,530.0	14,687.1	7,530.0	125.6	127.2	90.00	-7,017.2	-1,220.0	1,005.0	753.8	251.25	4.000		
14,700.0	7,530.0	14,787.1	7,530.0	127.4	128.9	90.00	-7,117.2	-1,220.5	1,004.8	750.1	254.74	3.945		
14,800.0	7,530.0	14,887.1	7,530.0	129.1	130.7	90.00	-7,217.2	-1,221.0	1,004.7	746.4	258.23	3.891		
14,900.0	7,530.0	14,987.1	7,530.0	130.9	132.4	90.00	-7,317.2	-1,221.6	1,004.5	742.8	261.72	3.838		
15,000.0	7,530.0	15,087.1	7,530.0	132.6	134.1	90.00	-7,417.2	-1,222.1	1,004.3	739.1	265.21	3.787		
15,100.0	7,530.0	15,187.1	7,530.0	134.4	135.8	90.00	-7,517.2	-1,222.6	1,004.1	735.4	268.70	3.737		
15,200.0	7,530.0	15,287.1	7,530.0	136.1	137.6	90.00	-7,617.2	-1,223.1	1,004.0	731.8	272.19	3.688		
15,300.0	7,530.0	15,387.1	7,530.0	137.9	139.3	90.00	-7,717.2	-1,223.6	1,003.8	728.1	275.68	3.641		
15,400.0	7,530.0	15,487.1	7,530.0	139.6	141.0	90.00	-7,817.2	-1,224.2	1,003.6	724.4	279.18	3.595		
15,500.0	7,530.0	15,587.1	7,530.0	141.3	142.7	90.00	-7,917.2	-1,224.7	1,003.4	720.8	282.67	3.550		
15,600.0	7,530.0	15,687.1	7,530.0	143.1	144.5	90.00	-8,017.2	-1,225.2	1,003.3	717.1	286.16	3.506		
15,700.0	7,530.0	15,787.1	7,530.0	144.8	146.2	90.00	-8,117.2	-1,225.7	1,003.1	713.4	289.66	3.463		
15,800.0	7,530.0	15,887.1	7,530.0	146.6	147.9	90.00	-8,217.2	-1,226.3	1,002.9	709.8	293.15	3.421		
15,900.0	7,530.0	15,987.1	7,530.0	148.3	149.7	90.00	-8,317.2	-1,226.8	1,002.7	706.1	296.64	3.380		
16,000.0	7,530.0	16,087.1	7,530.0	150.1	151.4	90.00	-8,417.2	-1,227.3	1,002.6	702.4	300.14	3.340		
16,100.0	7,530.0	16,187.1	7,530.0	151.8	153.1	90.00	-8,517.2	-1,227.8	1,002.4	698.8	303.63	3.301		
16,200.0	7,530.0	16,287.1	7,530.0	153.6	154.9	90.00	-8,617.2	-1,228.4	1,002.2	695.1	307.13	3.263		
16,300.0	7,530.0	16,387.1	7,530.0	155.3	156.6	90.00	-8,717.2	-1,228.9	1,002.0	691.4	310.62	3.226		
16,400.0	7,530.0	16,487.1	7,530.0	157.1	158.3	90.00	-8,817.2	-1,229.4	1,001.9	687.8	314.12	3.189		
16,500.0	7,530.0	16,587.1	7,530.0	158.8	160.1	90.00	-8,917.2	-1,229.9	1,001.7	684.1	317.62	3.154		
16,600.0	7,530.0	16,687.1	7,530.0	160.6	161.8	90.00	-9,017.2	-1,230.5	1,001.5	680.4	321.11	3.119		
16,700.0	7,530.0	16,787.1	7,530.0	162.3	163.5	90.00	-9,117.2	-1,231.0	1,001.3	676.7	324.61	3.085		
16,800.0	7,530.0	16,887.1	7,530.0	164.1	165.3	90.00	-9,217.2	-1,231.5	1,001.2	673.1	328.11	3.051		
16,900.0	7,530.0	16,987.1	7,530.0	165.8	167.0	90.00	-9,317.2	-1,232.0	1,001.0	669.4	331.60	3.019		
17,000.0	7,530.0	17,087.1	7,530.0	167.6	168.7	90.00	-9,417.2	-1,232.6	1,000.8	665.7	335.10	2.987		
17,100.0	7,530.0	17,187.1	7,530.0	169.3	170.5	90.00	-9,517.2	-1,233.1	1,000.6	662.1	338.60	2.955		
17,200.0	7,530.0	17,287.1	7,530.0	171.1	172.2	90.00	-9,617.2	-1,233.6	1,000.5	658.4	342.09	2.925		
17,300.0	7,530.0	17,387.1	7,530.0	172.8	173.9	90.00	-9,717.2	-1,234.1	1,000.3	654.7	345.59	2.894		
17,400.0	7,530.0	17,487.1	7,530.0	174.5	175.7	90.00	-9,817.2	-1,234.6	1,000.1	651.0	349.09	2.865		
17,404.7	7,530.0	17,490.0	7,530.0	174.6	175.7	90.00	-9,820.1	-1,234.7	1,000.1	650.9	349.23	2.864		
17,411.2	7,530.0	17,490.0	7,530.0	174.7	175.7	90.00	-9,820.1	-1,234.7	1,000.1	650.8	349.34	2.863 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1D-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-30.2	30.2					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-30.2	30.2	29.9	0.30	99.526		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-30.2	30.2	29.6	0.65	46.303		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-30.2	30.2	29.2	1.00	30.170		
333.4	333.4	333.4	333.4	0.6	0.6	-90.00	0.0	-30.2	30.2	29.1	1.12	27.027 CC		
400.0	400.0	399.8	399.8	0.7	0.7	-89.85	0.1	-30.4	30.4	29.1	1.35	22.530 ES		
500.0	500.0	499.2	499.2	0.8	0.9	-88.71	0.7	-32.0	32.0	30.3	1.70	18.866		
600.0	600.0	598.6	598.6	1.0	1.0	-64.98	2.0	-35.2	34.9	32.9	2.05	17.061		
700.0	700.0	698.0	697.8	1.2	1.2	-65.83	3.9	-40.0	38.7	36.3	2.40	16.137		
800.0	799.9	797.2	796.7	1.4	1.4	-67.79	6.5	-46.4	43.5	40.7	2.76	15.748		
848.7	848.4	845.4	844.8	1.5	1.5	-69.01	8.0	-50.1	46.1	43.2	2.94	15.694		
900.0	899.7	896.3	895.4	1.6	1.6	-70.19	9.7	-54.4	49.3	46.2	3.13	15.745		
1,000.0	999.5	995.2	993.8	1.8	1.9	-71.50	13.5	-63.9	56.6	53.1	3.51	16.149		
1,100.0	1,099.3	1,093.8	1,091.7	2.0	2.1	-71.82	17.9	-75.0	65.6	61.7	3.89	16.851		
1,200.0	1,199.1	1,192.3	1,189.3	2.2	2.4	-71.49	23.0	-87.6	76.0	71.7	4.28	17.770		
1,300.0	1,298.9	1,291.7	1,287.6	2.4	2.7	-71.01	28.4	-101.0	87.1	82.4	4.67	18.668		
1,400.0	1,398.8	1,391.0	1,385.9	2.6	3.0	-70.64	33.7	-114.4	98.2	93.2	5.06	19.422		
1,500.0	1,498.6	1,490.4	1,484.2	2.8	3.2	-70.35	39.1	-127.8	109.3	103.9	5.45	20.065		
1,600.0	1,598.4	1,589.8	1,582.5	3.0	3.5	-70.11	44.5	-141.2	120.5	114.6	5.84	20.618		
1,700.0	1,698.2	1,689.2	1,680.9	3.2	3.8	-69.91	49.9	-154.6	131.6	125.3	6.24	21.099		
1,800.0	1,798.0	1,788.6	1,779.2	3.4	4.1	-69.74	55.2	-168.0	142.7	136.1	6.63	21.520		
1,900.0	1,897.8	1,887.9	1,877.5	3.6	4.4	-69.60	60.6	-181.4	153.8	146.8	7.03	21.893		
2,000.0	1,997.7	1,987.3	1,975.8	3.8	4.7	-69.47	66.0	-194.8	164.9	157.5	7.42	22.225		
2,100.0	2,097.5	2,086.7	2,074.2	4.0	5.0	-69.37	71.3	-208.2	176.1	168.3	7.82	22.523		
2,200.0	2,197.3	2,186.1	2,172.5	4.2	5.3	-69.27	76.7	-221.6	187.2	179.0	8.21	22.791		
2,300.0	2,297.1	2,285.4	2,270.8	4.4	5.6	-69.18	82.1	-235.0	198.3	189.7	8.61	23.033		
2,400.0	2,396.9	2,384.8	2,369.1	4.6	5.9	-69.11	87.5	-248.4	209.4	200.4	9.01	23.254		
2,500.0	2,496.7	2,484.2	2,467.5	4.8	6.2	-69.04	92.8	-261.8	220.6	211.2	9.40	23.455		
2,600.0	2,596.5	2,583.6	2,565.8	5.0	6.5	-68.98	98.2	-275.2	231.7	221.9	9.80	23.640		
2,700.0	2,696.4	2,683.0	2,664.1	5.2	6.8	-68.92	103.6	-288.6	242.8	232.6	10.20	23.810		
2,800.0	2,796.2	2,782.3	2,762.4	5.4	7.2	-68.87	109.0	-302.0	253.9	243.4	10.60	23.967		
2,900.0	2,896.0	2,881.7	2,860.8	5.6	7.5	-68.82	114.3	-315.4	265.1	254.1	10.99	24.113		
3,000.0	2,995.8	2,981.1	2,959.1	5.8	7.8	-68.78	119.7	-328.8	276.2	264.8	11.39	24.248		
3,100.0	3,095.6	3,080.5	3,057.4	6.0	8.1	-68.74	125.1	-342.2	287.3	275.5	11.79	24.373		
3,200.0	3,195.4	3,179.9	3,155.7	6.2	8.4	-68.71	130.5	-355.6	298.5	286.3	12.19	24.490		
3,300.0	3,295.2	3,279.2	3,254.1	6.4	8.7	-68.67	135.8	-369.0	309.6	297.0	12.58	24.600		
3,400.0	3,395.1	3,378.6	3,352.4	6.6	9.0	-68.64	141.2	-382.5	320.7	307.7	12.98	24.703		
3,500.0	3,494.9	3,478.0	3,450.7	6.8	9.3	-68.61	146.6	-395.9	331.8	318.5	13.38	24.800		
3,600.0	3,594.7	3,577.4	3,549.0	7.0	9.6	-68.58	151.9	-409.3	343.0	329.2	13.78	24.891		
3,700.0	3,694.5	3,676.8	3,647.4	7.2	9.9	-68.56	157.3	-422.7	354.1	339.9	14.18	24.976		
3,800.0	3,794.3	3,776.1	3,745.7	7.4	10.2	-68.53	162.7	-436.1	365.2	350.6	14.58	25.057		
3,900.0	3,894.1	3,875.5	3,844.0	7.6	10.5	-68.51	168.1	-449.5	376.3	361.4	14.97	25.134		
4,000.0	3,994.0	3,974.9	3,942.3	7.8	10.8	-68.49	173.4	-462.9	387.5	372.1	15.37	25.206		
4,100.0	4,093.8	4,074.3	4,040.7	8.0	11.1	-68.47	178.8	-476.3	398.6	382.8	15.77	25.275		
4,200.0	4,193.6	4,173.6	4,139.0	8.2	11.4	-68.45	184.2	-489.7	409.7	393.6	16.17	25.341		
4,300.0	4,293.4	4,273.0	4,237.3	8.4	11.7	-68.43	189.6	-503.1	420.9	404.3	16.57	25.403		
4,400.0	4,393.2	4,372.4	4,335.6	8.6	12.0	-68.41	194.9	-516.5	432.0	415.0	16.97	25.462		
4,500.0	4,493.0	4,471.8	4,433.9	8.8	12.4	-68.40	200.3	-529.9	443.1	425.7	17.36	25.518		
4,600.0	4,592.8	4,571.2	4,532.3	9.0	12.7	-68.38	205.7	-543.3	454.2	436.5	17.76	25.572		
4,700.0	4,692.7	4,670.5	4,630.6	9.3	13.0	-68.36	211.0	-556.7	465.4	447.2	18.16	25.624		
4,800.0	4,792.5	4,769.9	4,728.9	9.5	13.3	-68.35	216.4	-570.1	476.5	457.9	18.56	25.673		
4,900.0	4,892.3	4,869.3	4,827.2	9.7	13.6	-68.34	221.8	-583.5	487.6	468.7	18.96	25.720		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1D-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,992.1	4,968.7	4,925.6		9.9	13.9	-68.32	227.2	-596.9	498.8	479.4	19.36	25.765	
5,100.0	5,091.9	5,068.1	5,023.9	10.1	14.2	-68.31	232.5	-610.3	509.9	490.1	19.76	25.808		
5,200.0	5,191.7	5,167.4	5,122.2	10.3	14.5	-68.30	237.9	-623.7	521.0	500.9	20.15	25.850		
5,300.0	5,291.5	5,266.8	5,220.5	10.5	14.8	-68.29	243.3	-637.1	532.1	511.6	20.55	25.890		
5,400.0	5,391.4	5,366.2	5,318.9	10.7	15.1	-68.28	248.7	-650.5	543.3	522.3	20.95	25.928		
5,500.0	5,491.2	5,465.6	5,417.2	10.9	15.4	-68.27	254.0	-663.9	554.4	533.0	21.35	25.965		
5,600.0	5,591.0	5,565.0	5,515.5	11.1	15.7	-68.26	259.4	-677.3	565.5	543.8	21.75	26.001		
5,700.0	5,690.8	5,664.3	5,613.8	11.3	16.0	-68.25	264.8	-690.7	576.6	554.5	22.15	26.035		
5,800.0	5,790.6	5,763.7	5,712.2	11.5	16.3	-68.24	270.1	-704.1	587.8	565.2	22.55	26.068		
5,900.0	5,890.4	5,863.1	5,810.5	11.7	16.7	-68.23	275.5	-717.5	598.9	576.0	22.95	26.100		
6,000.0	5,990.3	5,962.5	5,908.8	11.9	17.0	-68.22	280.9	-730.9	610.0	586.7	23.35	26.131		
6,100.0	6,090.1	6,061.8	6,007.1	12.1	17.3	-68.21	286.3	-744.3	621.2	597.4	23.74	26.161		
6,200.0	6,189.9	6,161.2	6,105.5	12.3	17.6	-68.20	291.6	-757.7	632.3	608.1	24.14	26.189		
6,300.0	6,289.7	6,260.6	6,203.8	12.5	17.9	-68.20	297.0	-771.1	643.4	618.9	24.54	26.217		
6,400.0	6,389.5	6,360.0	6,302.1	12.7	18.2	-68.19	302.4	-784.5	654.5	629.6	24.94	26.244		
6,500.0	6,489.3	6,459.4	6,400.4	12.9	18.5	-68.18	307.8	-797.9	665.7	640.3	25.34	26.270		
6,600.0	6,589.1	6,558.7	6,498.8	13.1	18.8	-68.17	313.1	-811.3	676.8	651.1	25.74	26.295		
6,700.0	6,689.0	6,658.1	6,597.1	13.3	19.1	-68.17	318.5	-824.8	687.9	661.8	26.14	26.320		
6,785.3	6,774.1	6,742.8	6,680.9	13.5	19.4	-68.16	323.1	-836.2	697.4	670.9	26.48	26.340		
6,800.0	6,788.8	6,757.5	6,695.4	13.5	19.4	-57.25	323.9	-838.2	699.1	672.5	26.55	26.329		
6,850.0	6,838.8	6,807.1	6,744.5	13.6	19.6	53.04	326.6	-844.8	704.5	677.8	26.74	26.344		
6,900.0	6,888.6	6,856.4	6,793.3	13.6	19.7	75.05	329.2	-851.5	709.9	683.1	26.87	26.420		
6,950.0	6,938.1	6,905.2	6,841.5	13.7	19.9	80.51	331.9	-858.1	715.3	688.4	26.94	26.556		
7,000.0	6,987.0	6,953.1	6,889.0	13.7	20.0	83.30	334.5	-864.5	720.8	693.8	26.94	26.750		
7,050.0	7,035.0	7,000.1	6,935.4	13.6	20.2	85.29	337.0	-870.9	726.5	699.6	26.91	26.998		
7,100.0	7,082.0	7,045.8	6,980.7	13.6	20.3	86.99	339.5	-877.0	732.6	705.8	26.84	27.296		
7,150.0	7,127.7	7,090.3	7,024.7	13.5	20.4	88.55	341.9	-883.0	739.4	712.6	26.75	27.640		
7,200.0	7,171.8	7,139.6	7,073.5	13.5	20.6	90.17	342.6	-889.7	746.8	720.2	26.62	28.049		
7,250.0	7,214.2	7,190.8	7,124.2	13.4	20.7	91.68	339.9	-896.6	754.7	728.2	26.49	28.488		
7,300.0	7,254.6	7,244.3	7,176.7	13.4	20.8	93.14	333.1	-903.8	763.1	736.7	26.36	28.948		
7,350.0	7,292.9	7,300.2	7,231.0	13.3	20.9	94.54	321.8	-911.2	771.9	745.6	26.24	29.416		
7,400.0	7,328.9	7,359.0	7,286.8	13.3	21.0	95.92	305.3	-918.8	780.9	754.7	26.13	29.880		
7,450.0	7,362.3	7,420.8	7,344.0	13.3	21.0	97.26	283.1	-926.6	790.1	764.0	26.06	30.320		
7,500.0	7,393.1	7,486.2	7,402.1	13.4	21.1	98.58	254.3	-934.5	799.2	773.2	26.02	30.716		
7,550.0	7,421.1	7,555.3	7,460.4	13.5	21.2	99.86	218.1	-942.4	808.3	782.2	26.04	31.043		
7,600.0	7,446.1	7,628.4	7,518.1	13.6	21.2	101.10	173.9	-950.3	816.9	790.8	26.13	31.269		
7,650.0	7,468.0	7,705.8	7,573.9	13.8	21.3	102.28	120.8	-957.9	825.1	798.8	26.30	31.372		
7,700.0	7,486.7	7,787.6	7,626.4	14.0	21.4	103.37	58.6	-965.1	832.5	805.9	26.59	31.309		
7,750.0	7,502.2	7,873.7	7,673.6	14.2	21.6	104.34	-13.0	-971.5	838.9	811.9	27.00	31.072		
7,800.0	7,514.3	7,963.7	7,713.5	14.6	21.8	105.17	-93.4	-976.9	844.1	816.5	27.57	30.613		
7,850.0	7,523.0	8,057.0	7,744.0	14.9	22.2	105.80	-181.5	-981.1	847.9	819.5	28.30	29.954		
7,900.0	7,528.2	8,152.7	7,763.3	15.3	22.6	106.22	-275.1	-983.7	850.1	820.9	29.21	29.107		
7,950.2	7,530.0	8,250.3	7,770.0	15.8	23.2	106.39	-372.4	-984.6	850.6	820.4	30.27	28.101		
8,000.0	7,530.0	8,300.5	7,770.0	16.2	23.5	106.40	-422.6	-984.6	850.3	819.1	31.20	27.249		
8,100.0	7,530.0	8,400.5	7,770.0	17.3	24.2	106.41	-522.6	-984.6	849.6	816.4	33.25	25.552		
8,200.0	7,530.0	8,500.5	7,770.0	18.4	25.1	106.42	-622.6	-984.6	849.0	813.5	35.50	23.916		
8,300.0	7,530.0	8,600.5	7,770.0	19.7	26.0	106.44	-722.6	-984.6	848.3	810.4	37.91	22.376		
8,400.0	7,530.0	8,700.5	7,770.0	21.0	27.0	106.45	-822.6	-984.6	847.6	807.2	40.46	20.950		
8,500.0	7,530.0	8,800.5	7,770.0	22.4	28.1	106.46	-922.6	-984.6	847.0	803.8	43.12	19.642		
8,600.0	7,530.0	8,900.5	7,770.0	23.8	29.3	106.48	-1,022.6	-984.6	846.3	800.4	45.87	18.448		
8,700.0	7,530.0	9,000.5	7,770.0	25.3	30.5	106.49	-1,122.6	-984.6	845.6	796.9	48.70	17.363		
8,800.0	7,530.0	9,100.5	7,770.0	26.8	31.7	106.50	-1,222.6	-984.6	844.9	793.4	51.60	16.376		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1D-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,530.0	9,200.5	7,770.0	28.3	33.0	106.52	-1,322.6	-984.6	844.3	789.7	54.54	15.480		
9,000.0	7,530.0	9,300.5	7,770.0	29.9	34.4	106.53	-1,422.6	-984.6	843.6	786.1	57.53	14.663		
9,100.0	7,530.0	9,400.5	7,770.0	31.4	35.7	106.54	-1,522.6	-984.6	842.9	782.4	60.56	13.918		
9,200.0	7,530.0	9,500.5	7,770.0	33.0	37.2	106.56	-1,622.6	-984.6	842.3	778.6	63.63	13.238		
9,300.0	7,530.0	9,600.5	7,770.0	34.7	38.6	106.57	-1,722.6	-984.6	841.6	774.9	66.72	12.614		
9,400.0	7,530.0	9,700.5	7,770.0	36.3	40.1	106.58	-1,822.6	-984.6	840.9	771.1	69.83	12.042		
9,500.0	7,530.0	9,800.5	7,770.0	37.9	41.5	106.60	-1,922.6	-984.6	840.3	767.3	72.97	11.515		
9,600.0	7,530.0	9,900.5	7,770.0	39.6	43.1	106.61	-2,022.6	-984.6	839.6	763.5	76.13	11.029		
9,700.0	7,530.0	10,000.5	7,770.0	41.2	44.6	106.62	-2,122.6	-984.6	838.9	759.6	79.30	10.580		
9,800.0	7,530.0	10,100.5	7,770.0	42.9	46.1	106.64	-2,222.6	-984.6	838.3	755.8	82.48	10.163		
9,900.0	7,530.0	10,200.5	7,770.0	44.5	47.7	106.65	-2,322.6	-984.6	837.6	751.9	85.68	9.776		
10,000.0	7,530.0	10,300.5	7,770.0	46.2	49.2	106.66	-2,422.6	-984.6	836.9	748.0	88.89	9.415		
10,100.0	7,530.0	10,400.5	7,770.0	47.9	50.8	106.68	-2,522.6	-984.6	836.2	744.1	92.11	9.079		
10,200.0	7,530.0	10,500.5	7,770.0	49.6	52.4	106.69	-2,622.6	-984.6	835.6	740.2	95.34	8.764		
10,300.0	7,530.0	10,600.5	7,770.0	51.3	54.0	106.71	-2,722.6	-984.6	834.9	736.3	98.58	8.470		
10,400.0	7,530.0	10,700.5	7,770.0	53.0	55.6	106.72	-2,822.6	-984.6	834.2	732.4	101.82	8.193		
10,500.0	7,530.0	10,800.5	7,770.0	54.7	57.3	106.73	-2,922.6	-984.6	833.6	728.5	105.07	7.933		
10,600.0	7,530.0	10,900.5	7,770.0	56.4	58.9	106.75	-3,022.6	-984.6	832.9	724.6	108.33	7.689		
10,700.0	7,530.0	11,000.5	7,770.0	58.1	60.5	106.76	-3,122.6	-984.6	832.2	720.6	111.59	7.458		
10,800.0	7,530.0	11,100.5	7,770.0	59.8	62.2	106.78	-3,222.6	-984.6	831.6	716.7	114.86	7.240		
10,900.0	7,530.0	11,200.5	7,770.0	61.5	63.8	106.79	-3,322.6	-984.6	830.9	712.8	118.13	7.034		
11,000.0	7,530.0	11,300.5	7,770.0	63.2	65.5	106.80	-3,422.6	-984.6	830.2	708.8	121.40	6.839		
11,100.0	7,530.0	11,400.5	7,770.0	64.9	67.1	106.82	-3,522.5	-984.6	829.6	704.9	124.68	6.653		
11,200.0	7,530.0	11,500.5	7,770.0	66.6	68.8	106.83	-3,622.5	-984.6	828.9	700.9	127.96	6.478		
11,300.0	7,530.0	11,600.5	7,770.0	68.4	70.4	106.84	-3,722.5	-984.6	828.2	697.0	131.25	6.310		
11,400.0	7,530.0	11,700.4	7,770.0	70.1	72.1	106.86	-3,822.5	-984.6	827.6	693.0	134.54	6.151		
11,500.0	7,530.0	11,800.4	7,770.0	71.8	73.8	106.87	-3,922.5	-984.6	826.9	689.1	137.83	6.000		
11,600.0	7,530.0	11,900.4	7,770.0	73.5	75.5	106.89	-4,022.5	-984.6	826.2	685.1	141.12	5.855		
11,700.0	7,530.0	12,000.4	7,770.0	75.3	77.2	106.90	-4,122.5	-984.6	825.6	681.1	144.41	5.717		
11,800.0	7,530.0	12,100.4	7,770.0	77.0	78.8	106.92	-4,222.5	-984.6	824.9	677.2	147.71	5.585		
11,900.0	7,530.0	12,200.4	7,770.0	78.7	80.5	106.93	-4,322.5	-984.6	824.2	673.2	151.01	5.458		
12,000.0	7,530.0	12,300.4	7,770.0	80.4	82.2	106.94	-4,422.5	-984.6	823.6	669.2	154.31	5.337		
12,100.0	7,530.0	12,400.4	7,770.0	82.2	83.9	106.96	-4,522.5	-984.6	822.9	665.3	157.61	5.221		
12,200.0	7,530.0	12,500.4	7,770.0	83.9	85.6	106.97	-4,622.5	-984.6	822.2	661.3	160.91	5.110		
12,300.0	7,530.0	12,600.4	7,770.0	85.6	87.3	106.99	-4,722.5	-984.6	821.6	657.3	164.22	5.003		
12,400.0	7,530.0	12,700.4	7,770.0	87.4	89.0	107.00	-4,822.5	-984.6	820.9	653.4	167.52	4.900		
12,500.0	7,530.0	12,800.4	7,770.0	89.1	90.7	107.01	-4,922.5	-984.6	820.2	649.4	170.83	4.801		
12,600.0	7,530.0	12,900.4	7,770.0	90.8	92.4	107.03	-5,022.5	-984.6	819.5	645.4	174.13	4.706		
12,700.0	7,530.0	13,000.4	7,770.0	92.6	94.1	107.04	-5,122.5	-984.6	818.9	641.4	177.44	4.615		
12,800.0	7,530.0	13,100.4	7,770.0	94.3	95.8	107.06	-5,222.5	-984.6	818.2	637.5	180.75	4.527		
12,900.0	7,530.0	13,200.4	7,770.0	96.0	97.5	107.07	-5,322.5	-984.6	817.5	633.5	184.06	4.442		
13,000.0	7,530.0	13,300.4	7,770.0	97.8	99.3	107.09	-5,422.5	-984.6	816.9	629.5	187.37	4.360		
13,100.0	7,530.0	13,400.4	7,770.0	99.5	101.0	107.10	-5,522.5	-984.6	816.2	625.5	190.68	4.281		
13,200.0	7,530.0	13,500.4	7,770.0	101.3	102.7	107.11	-5,622.5	-984.6	815.5	621.6	193.99	4.204		
13,300.0	7,530.0	13,600.4	7,770.0	103.0	104.4	107.13	-5,722.5	-984.6	814.9	617.6	197.30	4.130		
13,400.0	7,530.0	13,700.4	7,770.0	104.7	106.1	107.14	-5,822.5	-984.6	814.2	613.6	200.61	4.059		
13,500.0	7,530.0	13,800.4	7,770.0	106.5	107.8	107.16	-5,922.5	-984.6	813.5	609.6	203.93	3.989		
13,600.0	7,530.0	13,900.4	7,770.0	108.2	109.6	107.17	-6,022.5	-984.6	812.9	605.6	207.24	3.922		
13,700.0	7,530.0	14,000.4	7,770.0	110.0	111.3	107.19	-6,122.5	-984.6	812.2	601.7	210.55	3.858		
13,800.0	7,530.0	14,100.4	7,770.0	111.7	113.0	107.20	-6,222.5	-984.6	811.5	597.7	213.86	3.795		
13,900.0	7,530.0	14,200.4	7,770.0	113.4	114.7	107.22	-6,322.5	-984.6	810.9	593.7	217.18	3.734		
14,000.0	7,530.0	14,300.4	7,770.0	115.2	116.4	107.23	-6,422.5	-984.6	810.2	589.7	220.49	3.675		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1D-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	14,400.4	7,770.0	116.9	118.2	107.25	-6,522.5	-984.6	809.5	585.7	223.80	3.617		
14,200.0	7,530.0	14,500.4	7,770.0	118.7	119.9	107.26	-6,622.5	-984.6	808.9	581.8	227.12	3.561		
14,300.0	7,530.0	14,600.4	7,770.0	120.4	121.6	107.28	-6,722.5	-984.6	808.2	577.8	230.43	3.507		
14,400.0	7,530.0	14,700.4	7,770.0	122.1	123.3	107.29	-6,822.5	-984.6	807.5	573.8	233.74	3.455		
14,500.0	7,530.0	14,800.4	7,770.0	123.9	125.1	107.30	-6,922.5	-984.6	806.9	569.8	237.06	3.404		
14,600.0	7,530.0	14,900.4	7,770.0	125.6	126.8	107.32	-7,022.5	-984.6	806.2	565.8	240.37	3.354		
14,700.0	7,530.0	15,000.4	7,770.0	127.4	128.5	107.33	-7,122.5	-984.6	805.5	561.9	243.69	3.306		
14,800.0	7,530.0	15,100.4	7,770.0	129.1	130.3	107.35	-7,222.5	-984.6	804.9	557.9	247.00	3.259		
14,900.0	7,530.0	15,200.4	7,770.0	130.9	132.0	107.36	-7,322.5	-984.6	804.2	553.9	250.31	3.213		
15,000.0	7,530.0	15,300.4	7,770.0	132.6	133.7	107.38	-7,422.5	-984.6	803.5	549.9	253.63	3.168		
15,100.0	7,530.0	15,400.4	7,770.0	134.4	135.4	107.39	-7,522.5	-984.6	802.9	545.9	256.94	3.125		
15,200.0	7,530.0	15,500.4	7,770.0	136.1	137.2	107.41	-7,622.4	-984.6	802.2	542.0	260.25	3.082		
15,300.0	7,530.0	15,600.4	7,770.0	137.9	138.9	107.42	-7,722.4	-984.6	801.5	538.0	263.56	3.041		
15,400.0	7,530.0	15,700.4	7,770.0	139.6	140.6	107.44	-7,822.4	-984.6	800.9	534.0	266.88	3.001		
15,500.0	7,530.0	15,800.3	7,770.0	141.3	142.4	107.45	-7,922.4	-984.6	800.2	530.0	270.19	2.962		
15,600.0	7,530.0	15,900.3	7,770.0	143.1	144.1	107.47	-8,022.4	-984.6	799.6	526.0	273.50	2.923		
15,700.0	7,530.0	16,000.3	7,770.0	144.8	145.8	107.48	-8,122.4	-984.6	798.9	522.1	276.81	2.886		
15,800.0	7,530.0	16,100.3	7,770.0	146.6	147.6	107.50	-8,222.4	-984.6	798.2	518.1	280.13	2.850		
15,900.0	7,530.0	16,200.3	7,770.0	148.3	149.3	107.51	-8,322.4	-984.6	797.6	514.1	283.44	2.814		
16,000.0	7,530.0	16,300.3	7,770.0	150.1	151.0	107.53	-8,422.4	-984.7	796.9	510.1	286.75	2.779		
16,100.0	7,530.0	16,400.3	7,770.0	151.8	152.8	107.54	-8,522.4	-984.7	796.2	506.2	290.06	2.745		
16,200.0	7,530.0	16,500.3	7,770.0	153.6	154.5	107.56	-8,622.4	-984.7	795.6	502.2	293.37	2.712		
16,300.0	7,530.0	16,600.3	7,770.0	155.3	156.3	107.57	-8,722.4	-984.7	794.9	498.2	296.68	2.679		
16,400.0	7,530.0	16,700.3	7,770.0	157.1	158.0	107.59	-8,822.4	-984.7	794.2	494.2	299.99	2.648		
16,500.0	7,530.0	16,800.3	7,770.0	158.8	159.7	107.60	-8,922.4	-984.7	793.6	490.3	303.30	2.616		
16,600.0	7,530.0	16,900.3	7,770.0	160.6	161.5	107.62	-9,022.4	-984.7	792.9	486.3	306.61	2.586		
16,700.0	7,530.0	17,000.3	7,770.0	162.3	163.2	107.63	-9,122.4	-984.7	792.2	482.3	309.92	2.556		
16,800.0	7,530.0	17,100.3	7,770.0	164.1	164.9	107.65	-9,222.4	-984.7	791.6	478.3	313.22	2.527		
16,900.0	7,530.0	17,200.3	7,770.0	165.8	166.7	107.67	-9,322.4	-984.7	790.9	474.4	316.53	2.499		
17,000.0	7,530.0	17,300.3	7,770.0	167.6	168.4	107.68	-9,422.4	-984.7	790.2	470.4	319.84	2.471		
17,100.0	7,530.0	17,400.3	7,770.0	169.3	170.2	107.70	-9,522.4	-984.7	789.6	466.4	323.15	2.443		
17,200.0	7,530.0	17,500.3	7,770.0	171.1	171.9	107.71	-9,622.4	-984.7	788.9	462.5	326.45	2.417		
17,300.0	7,530.0	17,600.3	7,770.0	172.8	173.6	107.73	-9,722.4	-984.7	788.2	458.5	329.76	2.390		
17,400.0	7,530.0	17,700.3	7,770.0	174.5	175.4	107.74	-9,822.4	-984.7	787.6	454.5	333.07	2.365		
17,406.3	7,530.0	17,701.3	7,770.0	174.7	175.4	107.74	-9,823.4	-984.7	787.6	454.4	333.19	2.364		
17,411.2	7,530.0	17,701.3	7,770.0	174.7	175.4	107.74	-9,823.4	-984.7	787.6	454.3	333.27	2.363 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1E-7H-A168 - HZ - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-20.1	20.1						
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-20.1	20.1	19.8	0.30	66.350			
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-20.1	20.1	19.5	0.65	30.869			
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-20.1	20.1	19.1	1.00	20.113			
400.0	400.0	400.0	400.0	0.7	0.7	-90.00	0.0	-20.1	20.1	18.8	1.35	14.916 CC, ES			
500.0	500.0	499.7	499.7	0.8	0.8	-88.87	0.4	-20.9	20.9	19.2	1.70	12.310			
600.0	600.0	599.3	599.3	1.0	1.0	-64.85	1.6	-23.2	22.9	20.8	2.05	11.169			
700.0	700.0	698.9	698.8	1.2	1.2	-65.82	3.7	-27.0	25.7	23.3	2.40	10.690			
800.0	799.9	798.4	798.1	1.4	1.4	-68.12	6.6	-32.3	29.3	26.6	2.76	10.614			
848.7	848.4	846.8	846.3	1.5	1.5	-69.53	8.3	-35.5	31.4	28.5	2.94	10.680			
900.0	899.7	897.8	897.2	1.6	1.6	-70.79	10.3	-39.2	34.0	30.8	3.14	10.838			
1,000.0	999.5	997.1	996.0	1.8	1.8	-71.71	14.8	-47.5	40.1	36.5	3.52	11.396			
1,100.0	1,099.3	1,096.3	1,094.6	2.0	2.1	-71.25	20.1	-57.3	47.6	43.7	3.90	12.200			
1,200.0	1,199.1	1,195.9	1,193.5	2.2	2.3	-70.56	25.7	-67.7	55.6	51.4	4.29	12.978			
1,300.0	1,298.9	1,295.6	1,292.5	2.4	2.6	-70.05	31.3	-78.1	63.7	59.0	4.68	13.622			
1,400.0	1,398.8	1,395.3	1,391.5	2.6	2.8	-69.65	36.9	-88.6	71.8	66.7	5.07	14.163			
1,500.0	1,498.6	1,495.0	1,490.4	2.8	3.1	-69.33	42.6	-99.0	79.9	74.4	5.46	14.624			
1,600.0	1,598.4	1,594.6	1,589.4	3.0	3.3	-69.07	48.2	-109.4	87.9	82.1	5.85	15.021			
1,700.0	1,698.2	1,694.3	1,688.4	3.2	3.6	-68.86	53.8	-119.8	96.0	89.8	6.25	15.367			
1,800.0	1,798.0	1,794.0	1,787.3	3.4	3.9	-68.67	59.4	-130.2	104.1	97.4	6.64	15.670			
1,900.0	1,897.8	1,893.7	1,886.3	3.6	4.1	-68.52	65.1	-140.6	112.2	105.1	7.04	15.939			
2,000.0	1,997.7	1,993.3	1,985.3	3.8	4.4	-68.38	70.7	-151.1	120.2	112.8	7.43	16.178			
2,100.0	2,097.5	2,093.0	2,084.2	4.0	4.7	-68.26	76.3	-161.5	128.3	120.5	7.83	16.392			
2,200.0	2,197.3	2,192.7	2,183.2	4.2	4.9	-68.16	81.9	-171.9	136.4	128.2	8.22	16.585			
2,300.0	2,297.1	2,292.3	2,282.2	4.4	5.2	-68.07	87.5	-182.3	144.5	135.9	8.62	16.759			
2,400.0	2,396.9	2,392.0	2,381.1	4.6	5.5	-67.98	93.2	-192.7	152.6	143.5	9.02	16.918			
2,500.0	2,496.7	2,491.7	2,480.1	4.8	5.7	-67.91	98.8	-203.1	160.6	151.2	9.41	17.063			
2,600.0	2,596.5	2,591.4	2,579.1	5.0	6.0	-67.84	104.4	-213.6	168.7	158.9	9.81	17.197			
2,700.0	2,696.4	2,691.0	2,678.0	5.2	6.3	-67.78	110.0	-224.0	176.8	166.6	10.21	17.319			
2,800.0	2,796.2	2,790.7	2,777.0	5.4	6.5	-67.73	115.7	-234.4	184.9	174.3	10.61	17.432			
2,900.0	2,896.0	2,890.4	2,876.0	5.6	6.8	-67.67	121.3	-244.8	193.0	182.0	11.00	17.537			
3,000.0	2,995.8	2,990.1	2,974.9	5.8	7.1	-67.63	126.9	-255.2	201.0	189.6	11.40	17.634			
3,100.0	3,095.6	3,089.7	3,073.9	6.0	7.3	-67.58	132.5	-265.6	209.1	197.3	11.80	17.725			
3,200.0	3,195.4	3,189.4	3,172.9	6.2	7.6	-67.54	138.2	-276.1	217.2	205.0	12.20	17.810			
3,300.0	3,295.2	3,289.1	3,271.8	6.4	7.9	-67.51	143.8	-286.5	225.3	212.7	12.59	17.889			
3,400.0	3,395.1	3,388.8	3,370.8	6.6	8.1	-67.47	149.4	-296.9	233.4	220.4	12.99	17.963			
3,500.0	3,494.9	3,488.4	3,469.8	6.8	8.4	-67.44	155.0	-307.3	241.5	228.1	13.39	18.033			
3,600.0	3,594.7	3,588.1	3,568.8	7.0	8.7	-67.41	160.7	-317.7	249.5	235.8	13.79	18.098			
3,700.0	3,694.5	3,687.8	3,667.7	7.2	8.9	-67.38	166.3	-328.1	257.6	243.4	14.19	18.160			
3,800.0	3,794.3	3,787.4	3,766.7	7.4	9.2	-67.35	171.9	-338.6	265.7	251.1	14.58	18.219			
3,900.0	3,894.1	3,887.1	3,865.7	7.6	9.5	-67.33	177.5	-349.0	273.8	258.8	14.98	18.274			
4,000.0	3,994.0	3,986.8	3,964.6	7.8	9.8	-67.31	183.1	-359.4	281.9	266.5	15.38	18.326			
4,100.0	4,093.8	4,086.5	4,063.6	8.0	10.0	-67.28	188.8	-369.8	290.0	274.2	15.78	18.376			
4,200.0	4,193.6	4,186.1	4,162.6	8.2	10.3	-67.26	194.4	-380.2	298.0	281.9	16.18	18.423			
4,300.0	4,293.4	4,285.8	4,261.5	8.4	10.6	-67.24	200.0	-390.6	306.1	289.5	16.58	18.468			
4,400.0	4,393.2	4,385.5	4,360.5	8.6	10.8	-67.22	205.6	-401.0	314.2	297.2	16.97	18.511			
4,500.0	4,493.0	4,485.2	4,459.5	8.8	11.1	-67.21	211.3	-411.5	322.3	304.9	17.37	18.552			
4,600.0	4,592.8	4,584.8	4,558.4	9.0	11.4	-67.19	216.9	-421.9	330.4	312.6	17.77	18.590			
4,700.0	4,692.7	4,684.5	4,657.4	9.3	11.6	-67.17	222.5	-432.3	338.4	320.3	18.17	18.628			
4,800.0	4,792.5	4,784.2	4,756.4	9.5	11.9	-67.16	228.1	-442.7	346.5	328.0	18.57	18.663			
4,900.0	4,892.3	4,883.8	4,855.3	9.7	12.2	-67.14	233.8	-453.1	354.6	335.6	18.97	18.697			
5,000.0	4,992.1	4,983.5	4,954.3	9.9	12.5	-67.13	239.4	-463.5	362.7	343.3	19.36	18.730			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1E-7H-A168 - HZ - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	5,091.9	5,083.2	5,053.3	10.1	12.7	-67.11	245.0	-474.0	370.8	351.0	19.76	18.761	
5,200.0	5,191.7	5,182.9	5,152.2	10.3	13.0	-67.10	250.6	-484.4	378.9	358.7	20.16	18.791	
5,300.0	5,291.5	5,282.5	5,251.2	10.5	13.3	-67.09	256.2	-494.8	386.9	366.4	20.56	18.820	
5,400.0	5,391.4	5,382.2	5,350.2	10.7	13.5	-67.08	261.9	-505.2	395.0	374.1	20.96	18.848	
5,500.0	5,491.2	5,481.9	5,449.1	10.9	13.8	-67.06	267.5	-515.6	403.1	381.8	21.36	18.874	
5,600.0	5,591.0	5,581.6	5,548.1	11.1	14.1	-67.05	273.1	-526.0	411.2	389.4	21.76	18.900	
5,700.0	5,690.8	5,681.2	5,647.1	11.3	14.4	-67.04	278.7	-536.5	419.3	397.1	22.15	18.925	
5,800.0	5,790.6	5,780.9	5,746.0	11.5	14.6	-67.03	284.4	-546.9	427.4	404.8	22.55	18.949	
5,900.0	5,890.4	5,880.6	5,845.0	11.7	14.9	-67.02	290.0	-557.3	435.4	412.5	22.95	18.972	
6,000.0	5,990.3	5,980.2	5,944.0	11.9	15.2	-67.01	295.6	-567.7	443.5	420.2	23.35	18.994	
6,100.0	6,090.1	6,079.9	6,042.9	12.1	15.4	-67.00	301.2	-578.1	451.6	427.9	23.75	19.015	
6,200.0	6,189.9	6,179.6	6,141.9	12.3	15.7	-67.00	306.9	-588.5	459.7	435.5	24.15	19.036	
6,300.0	6,289.7	6,279.3	6,240.9	12.5	16.0	-66.99	312.5	-599.0	467.8	443.2	24.55	19.056	
6,400.0	6,389.5	6,378.9	6,339.8	12.7	16.2	-66.98	318.1	-609.4	475.9	450.9	24.95	19.076	
6,500.0	6,489.3	6,478.6	6,438.8	12.9	16.5	-66.97	323.7	-619.8	483.9	458.6	25.34	19.095	
6,600.0	6,589.1	6,578.3	6,537.8	13.1	16.8	-66.96	329.4	-630.2	492.0	466.3	25.74	19.113	
6,700.0	6,689.0	6,678.0	6,636.7	13.3	17.1	-66.96	335.0	-640.6	500.1	474.0	26.14	19.130	
6,785.3	6,774.1	6,762.9	6,721.1	13.5	17.3	-66.95	339.8	-649.5	507.0	480.5	26.48	19.145	
6,800.0	6,788.8	6,777.6	6,735.7	13.5	17.3	-56.00	340.6	-651.0	508.2	481.6	26.55	19.143	
6,850.0	6,838.8	6,827.4	6,785.1	13.6	17.5	54.49	343.4	-656.2	512.2	485.5	26.71	19.177	
6,900.0	6,888.6	6,877.2	6,834.7	13.6	17.6	76.55	343.9	-661.5	516.2	489.4	26.80	19.261	
6,950.0	6,938.1	6,927.4	6,884.5	13.7	17.7	81.80	341.0	-666.7	520.2	493.4	26.84	19.380	
7,000.0	6,987.0	6,977.8	6,934.2	13.7	17.7	84.15	334.5	-671.9	524.2	497.3	26.84	19.531	
7,050.0	7,035.0	7,028.6	6,983.6	13.6	17.8	85.51	324.4	-677.1	528.1	501.3	26.79	19.711	
7,100.0	7,082.0	7,079.6	7,032.5	13.6	17.8	86.41	310.8	-682.3	531.9	505.2	26.71	19.914	
7,150.0	7,127.7	7,130.9	7,080.6	13.5	17.8	87.06	293.6	-687.3	535.6	509.0	26.60	20.133	
7,200.0	7,171.8	7,182.6	7,127.6	13.5	17.9	87.56	272.8	-692.3	539.1	512.7	26.48	20.360	
7,250.0	7,214.2	7,234.5	7,173.3	13.4	17.9	87.96	248.5	-697.1	542.6	516.2	26.35	20.587	
7,300.0	7,254.6	7,286.7	7,217.3	13.4	17.9	88.29	220.8	-701.7	545.8	519.6	26.24	20.802	
7,350.0	7,292.9	7,339.3	7,259.4	13.3	17.9	88.57	189.8	-706.2	548.9	522.8	26.15	20.994	
7,400.0	7,328.9	7,392.1	7,299.4	13.3	17.9	88.81	155.5	-710.4	551.8	525.7	26.09	21.148	
7,450.0	7,362.3	7,445.1	7,336.9	13.3	17.9	89.02	118.3	-714.3	554.4	528.4	26.09	21.251	
7,500.0	7,393.1	7,498.4	7,371.7	13.4	18.0	89.20	78.1	-718.0	556.9	530.7	26.16	21.291	
7,550.0	7,421.1	7,552.0	7,403.6	13.5	18.1	89.35	35.2	-721.3	559.0	532.7	26.30	21.256	
7,600.0	7,446.1	7,605.7	7,432.3	13.6	18.2	89.49	-10.1	-724.4	561.0	534.4	26.54	21.138	
7,650.0	7,468.0	7,659.7	7,457.7	13.8	18.3	89.61	-57.6	-727.0	562.6	535.7	26.87	20.934	
7,700.0	7,486.7	7,713.8	7,479.5	14.0	18.5	89.71	-107.1	-729.3	563.9	536.6	27.32	20.645	
7,750.0	7,502.2	7,768.0	7,497.5	14.2	18.7	89.80	-158.2	-731.2	565.0	537.1	27.86	20.277	
7,800.0	7,514.3	7,822.4	7,511.7	14.6	19.0	89.87	-210.6	-732.7	565.7	537.2	28.51	19.839	
7,850.0	7,523.0	7,876.8	7,521.9	14.9	19.3	89.93	-264.1	-733.8	566.1	536.9	29.27	19.344	
7,900.0	7,528.2	7,931.3	7,528.0	15.3	19.6	89.97	-318.2	-734.4	566.3	536.2	30.11	18.804	
7,950.2	7,530.0	7,986.0	7,530.0	15.8	20.0	90.00	-372.9	-734.6	566.1	535.0	31.04	18.235	
8,000.0	7,530.0	8,035.7	7,530.0	16.2	20.4	90.00	-422.6	-734.6	565.7	533.7	32.03	17.664	
8,100.0	7,530.0	8,135.7	7,530.0	17.3	21.2	90.00	-522.6	-734.6	565.0	530.9	34.16	16.541	
8,200.0	7,530.0	8,235.7	7,530.0	18.4	22.1	90.00	-622.6	-734.6	564.3	527.8	36.50	15.460	
8,300.0	7,530.0	8,335.7	7,530.0	19.7	23.2	90.00	-722.6	-734.6	563.6	524.6	39.02	14.444	
8,400.0	7,530.0	8,435.7	7,530.0	21.0	24.3	90.00	-822.6	-734.6	562.9	521.2	41.69	13.504	
8,500.0	7,530.0	8,535.7	7,530.0	22.4	25.5	90.00	-922.6	-734.6	562.2	517.8	44.47	12.644	
8,600.0	7,530.0	8,635.7	7,530.0	23.8	26.8	90.00	-1,022.6	-734.6	561.5	514.2	47.34	11.861	
8,700.0	7,530.0	8,735.7	7,530.0	25.3	28.1	90.00	-1,122.6	-734.6	560.8	510.5	50.30	11.149	
8,800.0	7,530.0	8,835.7	7,530.0	26.8	29.4	90.00	-1,222.6	-734.6	560.1	506.8	53.33	10.504	
8,900.0	7,530.0	8,935.7	7,530.0	28.3	30.8	90.00	-1,322.6	-734.6	559.4	503.0	56.41	9.918	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1E-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
9,000.0	7,530.0	9,035.7	7,530.0	29.9	32.3	90.00	-1,422.6	-734.6	558.7	499.2	59.53	9.385		
9,100.0	7,530.0	9,135.7	7,530.0	31.4	33.7	90.00	-1,522.6	-734.6	558.0	495.3	62.70	8.900		
9,200.0	7,530.0	9,235.7	7,530.0	33.0	35.2	90.00	-1,622.6	-734.6	557.3	491.4	65.91	8.457		
9,300.0	7,530.0	9,335.7	7,530.0	34.7	36.7	90.00	-1,722.6	-734.6	556.6	487.5	69.14	8.051		
9,400.0	7,530.0	9,435.7	7,530.0	36.3	38.3	90.00	-1,822.6	-734.6	555.9	483.6	72.49	7.679		
9,500.0	7,530.0	9,535.7	7,530.0	37.9	39.8	90.00	-1,922.6	-734.6	555.2	479.6	75.68	7.337		
9,600.0	7,530.0	9,635.7	7,530.0	39.6	41.4	90.00	-2,022.6	-734.6	554.6	475.6	78.98	7.022		
9,700.0	7,530.0	9,735.7	7,530.0	41.2	43.0	90.00	-2,122.6	-734.6	553.9	471.6	82.29	6.730		
9,800.0	7,530.0	9,835.7	7,530.0	42.9	44.6	90.00	-2,222.6	-734.6	553.2	467.5	85.63	6.460		
9,900.0	7,530.0	9,935.7	7,530.0	44.5	46.2	90.00	-2,322.6	-734.6	552.5	463.5	88.97	6.209		
10,000.0	7,530.0	10,035.7	7,530.0	46.2	47.8	90.00	-2,422.6	-734.6	551.8	459.4	92.33	5.976		
10,100.0	7,530.0	10,135.7	7,530.0	47.9	49.4	90.00	-2,522.6	-734.6	551.1	455.4	95.70	5.758		
10,200.0	7,530.0	10,235.7	7,530.0	49.6	51.1	90.00	-2,622.6	-734.6	550.4	451.3	99.08	5.555		
10,300.0	7,530.0	10,335.7	7,530.0	51.3	52.7	90.00	-2,722.6	-734.6	549.7	447.2	102.46	5.364		
10,400.0	7,530.0	10,435.7	7,530.0	53.0	54.4	90.00	-2,822.6	-734.6	549.0	443.1	105.86	5.186		
10,500.0	7,530.0	10,535.7	7,530.0	54.7	56.0	90.00	-2,922.6	-734.6	548.3	439.0	109.26	5.018		
10,600.0	7,530.0	10,635.7	7,530.0	56.4	57.7	90.00	-3,022.6	-734.6	547.6	434.9	112.67	4.860		
10,700.0	7,530.0	10,735.7	7,530.0	58.1	59.3	90.00	-3,122.6	-734.6	546.9	430.8	116.08	4.711		
10,800.0	7,530.0	10,835.7	7,530.0	59.8	61.0	90.00	-3,222.6	-734.6	546.2	426.7	119.50	4.570		
10,900.0	7,530.0	10,935.7	7,530.0	61.5	62.7	90.00	-3,322.6	-734.6	545.5	422.5	122.93	4.437		
11,000.0	7,530.0	11,035.7	7,530.0	63.2	64.4	90.00	-3,422.6	-734.6	544.8	418.4	126.36	4.311		
11,100.0	7,530.0	11,135.7	7,530.0	64.9	66.1	90.00	-3,522.5	-734.6	544.1	414.3	129.79	4.192		
11,200.0	7,530.0	11,235.7	7,530.0	66.6	67.7	90.00	-3,622.5	-734.6	543.4	410.2	133.23	4.079		
11,300.0	7,530.0	11,335.7	7,530.0	68.4	69.4	90.00	-3,722.5	-734.6	542.7	406.0	136.67	3.971		
11,400.0	7,530.0	11,435.7	7,530.0	70.1	71.1	90.00	-3,822.5	-734.6	542.0	401.9	140.12	3.868		
11,500.0	7,530.0	11,535.7	7,530.0	71.8	72.8	90.00	-3,922.5	-734.6	541.3	397.7	143.56	3.770		
11,600.0	7,530.0	11,635.7	7,530.0	73.5	74.5	90.00	-4,022.5	-734.6	540.6	393.6	147.01	3.677		
11,700.0	7,530.0	11,735.7	7,530.0	75.3	76.2	90.00	-4,122.5	-734.6	539.9	389.4	150.47	3.588		
11,800.0	7,530.0	11,835.7	7,530.0	77.0	77.9	90.00	-4,222.5	-734.6	539.2	385.3	153.92	3.503		
11,900.0	7,530.0	11,935.6	7,530.0	78.7	79.6	90.00	-4,322.5	-734.6	538.5	381.1	157.38	3.422		
12,000.0	7,530.0	12,035.6	7,530.0	80.4	81.3	90.00	-4,422.5	-734.6	537.8	377.0	160.84	3.344		
12,100.0	7,530.0	12,135.6	7,530.0	82.2	83.1	90.00	-4,522.5	-734.6	537.1	372.8	164.30	3.269		
12,200.0	7,530.0	12,235.6	7,530.0	83.9	84.8	90.00	-4,622.5	-734.6	536.4	368.6	167.77	3.197		
12,300.0	7,530.0	12,335.6	7,530.0	85.6	86.5	90.00	-4,722.5	-734.6	535.7	364.5	171.23	3.129		
12,400.0	7,530.0	12,435.6	7,530.0	87.4	88.2	90.00	-4,822.5	-734.6	535.0	360.3	174.70	3.062		
12,500.0	7,530.0	12,535.6	7,530.0	89.1	89.9	90.00	-4,922.5	-734.6	534.3	356.1	178.17	2.999		
12,600.0	7,530.0	12,635.6	7,530.0	90.8	91.6	90.00	-5,022.5	-734.6	533.6	352.0	181.64	2.938		
12,700.0	7,530.0	12,735.6	7,530.0	92.6	93.4	90.00	-5,122.5	-734.6	532.9	347.8	185.11	2.879		
12,800.0	7,530.0	12,835.6	7,530.0	94.3	95.1	90.00	-5,222.5	-734.6	532.2	343.6	188.58	2.822		
12,900.0	7,530.0	12,935.6	7,530.0	96.0	96.8	90.00	-5,322.5	-734.6	531.5	339.5	192.06	2.767		
13,000.0	7,530.0	13,035.6	7,530.0	97.8	98.5	90.00	-5,422.5	-734.6	530.8	335.3	195.54	2.715		
13,100.0	7,530.0	13,135.6	7,530.0	99.5	100.2	90.00	-5,522.5	-734.6	530.1	331.1	199.01	2.664		
13,200.0	7,530.0	13,235.6	7,530.0	101.3	102.0	90.00	-5,622.5	-734.6	529.4	326.9	202.49	2.615		
13,300.0	7,530.0	13,335.6	7,530.0	103.0	103.7	90.00	-5,722.5	-734.6	528.7	322.8	205.97	2.567		
13,400.0	7,530.0	13,435.6	7,530.0	104.7	105.4	90.00	-5,822.5	-734.6	528.0	318.6	209.45	2.521		
13,500.0	7,530.0	13,535.6	7,530.0	106.5	107.2	90.00	-5,922.5	-734.6	527.3	314.4	212.93	2.477		
13,600.0	7,530.0	13,635.6	7,530.0	108.2	108.9	90.00	-6,022.5	-734.6	526.6	310.2	216.41	2.433		
13,700.0	7,530.0	13,735.6	7,530.0	110.0	110.6	90.00	-6,122.5	-734.6	525.9	306.0	219.89	2.392		
13,800.0	7,530.0	13,835.6	7,530.0	111.7	112.3	90.00	-6,222.5	-734.6	525.2	301.9	223.38	2.351		
13,900.0	7,530.0	13,935.6	7,530.0	113.4	114.1	90.00	-6,322.5	-734.6	524.5	297.7	226.86	2.312		
14,000.0	7,530.0	14,035.6	7,530.0	115.2	115.8	90.00	-6,422.5	-734.6	523.8	293.5	230.35	2.274		
14,100.0	7,530.0	14,135.6	7,530.0	116.9	117.5	90.00	-6,522.5	-734.6	523.1	289.3	233.83	2.237		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1E-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
14,200.0	7,530.0	14,235.6	7,530.0	118.7	119.3	90.00	-6,622.5	-734.6	522.4	285.1	237.32	2.201		
14,300.0	7,530.0	14,335.6	7,530.0	120.4	121.0	90.00	-6,722.5	-734.6	521.7	280.9	240.81	2.167		
14,400.0	7,530.0	14,435.6	7,530.0	122.1	122.7	90.00	-6,822.5	-734.6	521.0	276.8	244.29	2.133		
14,500.0	7,530.0	14,535.6	7,530.0	123.9	124.5	90.00	-6,922.5	-734.6	520.3	272.6	247.78	2.100		
14,600.0	7,530.0	14,635.6	7,530.0	125.6	126.2	90.00	-7,022.5	-734.6	519.6	268.4	251.27	2.068		
14,700.0	7,530.0	14,735.6	7,530.0	127.4	127.9	90.00	-7,122.5	-734.6	519.0	264.2	254.76	2.037		
14,800.0	7,530.0	14,835.6	7,530.0	129.1	129.7	90.00	-7,222.5	-734.6	518.3	260.0	258.25	2.007		
14,900.0	7,530.0	14,935.6	7,530.0	130.9	131.4	90.00	-7,322.5	-734.6	517.6	255.8	261.74	1.977		
15,000.0	7,530.0	15,035.6	7,530.0	132.6	133.2	90.00	-7,422.5	-734.6	516.9	251.6	265.23	1.949		
15,100.0	7,530.0	15,135.6	7,530.0	134.4	134.9	90.00	-7,522.5	-734.6	516.2	247.4	268.72	1.921		
15,200.0	7,530.0	15,235.6	7,530.0	136.1	136.6	90.00	-7,622.4	-734.6	515.5	243.2	272.21	1.894		
15,300.0	7,530.0	15,335.6	7,530.0	137.9	138.4	90.00	-7,722.4	-734.6	514.8	239.1	275.70	1.867		
15,400.0	7,530.0	15,435.6	7,530.0	139.6	140.1	90.00	-7,822.4	-734.6	514.1	234.9	279.20	1.841		
15,500.0	7,530.0	15,535.6	7,530.0	141.3	141.8	90.00	-7,922.4	-734.6	513.4	230.7	282.69	1.816		
15,600.0	7,530.0	15,635.6	7,530.0	143.1	143.6	90.00	-8,022.4	-734.6	512.7	226.5	286.18	1.791		
15,700.0	7,530.0	15,735.6	7,530.0	144.8	145.3	90.00	-8,122.4	-734.6	512.0	222.3	289.67	1.767		
15,800.0	7,530.0	15,835.6	7,530.0	146.6	147.1	90.00	-8,222.4	-734.6	511.3	218.1	293.17	1.744		
15,900.0	7,530.0	15,935.6	7,530.0	148.3	148.8	90.00	-8,322.4	-734.6	510.6	213.9	296.66	1.721		
16,000.0	7,530.0	16,035.5	7,530.0	150.1	150.6	90.00	-8,422.4	-734.6	509.9	209.7	300.16	1.699		
16,100.0	7,530.0	16,135.5	7,530.0	151.8	152.3	90.00	-8,522.4	-734.6	509.2	205.5	303.65	1.677		
16,200.0	7,530.0	16,235.5	7,530.0	153.6	154.0	90.00	-8,622.4	-734.6	508.5	201.3	307.15	1.655		
16,300.0	7,530.0	16,335.5	7,530.0	155.3	155.8	90.00	-8,722.4	-734.6	507.8	197.1	310.64	1.635		
16,400.0	7,530.0	16,435.5	7,530.0	157.1	157.5	90.00	-8,822.4	-734.6	507.1	192.9	314.14	1.614		
16,500.0	7,530.0	16,535.5	7,530.0	158.8	159.3	90.00	-8,922.4	-734.6	506.4	188.8	317.63	1.594		
16,600.0	7,530.0	16,635.5	7,530.0	160.6	161.0	90.00	-9,022.4	-734.6	505.7	184.6	321.13	1.575		
16,700.0	7,530.0	16,735.5	7,530.0	162.3	162.7	90.00	-9,122.4	-734.6	505.0	180.4	324.63	1.556		
16,800.0	7,530.0	16,835.5	7,530.0	164.1	164.5	90.00	-9,222.4	-734.6	504.3	176.2	328.12	1.537		
16,900.0	7,530.0	16,935.5	7,530.0	165.8	166.2	90.00	-9,322.4	-734.6	503.6	172.0	331.62	1.519		
17,000.0	7,530.0	17,035.5	7,530.0	167.6	168.0	90.00	-9,422.4	-734.6	502.9	167.8	335.12	1.501		
17,100.0	7,530.0	17,135.5	7,530.0	169.3	169.7	90.00	-9,522.4	-734.6	502.2	163.6	338.61	1.483 Level 3		
17,200.0	7,530.0	17,235.5	7,530.0	171.1	171.5	90.00	-9,622.4	-734.6	501.5	159.4	342.11	1.466 Level 3		
17,300.0	7,530.0	17,335.5	7,530.0	172.8	173.2	90.00	-9,722.4	-734.6	500.8	155.2	345.61	1.449 Level 3		
17,400.0	7,530.0	17,435.5	7,530.0	174.5	175.0	90.00	-9,822.4	-734.6	500.1	151.0	349.11	1.433 Level 3		
17,408.2	7,530.0	17,440.2	7,530.0	174.7	175.0	90.00	-9,827.1	-734.6	500.1	150.7	349.33	1.431 Level 3		
17,411.2	7,530.0	17,440.2	7,530.0	174.7	175.0	90.00	-9,827.1	-734.6	500.1	150.7	349.39	1.431 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1F-7H-A168 - HZ - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-10.1	10.1						
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-10.1	10.1	9.8	0.30	33.175			
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-10.1	10.1	9.4	0.65	15.434			
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-10.1	10.1	9.1	1.00	10.057			
400.0	400.0	400.0	400.0	0.7	0.7	-90.00	0.0	-10.1	10.1	8.7	1.35	7.458			
433.6	433.6	433.6	433.6	0.7	0.7	-90.00	0.0	-10.1	10.1	8.6	1.47	6.862 CC			
500.0	500.0	499.9	499.9	0.8	0.8	-89.27	0.1	-10.2	10.2	8.6	1.70	6.030 ES			
600.0	600.0	599.8	599.8	1.0	1.0	-65.08	1.2	-11.6	11.3	9.3	2.05	5.517			
700.0	700.0	699.6	699.5	1.2	1.2	-66.70	3.3	-14.4	13.1	10.7	2.40	5.436			
800.0	799.9	799.4	799.1	1.4	1.4	-69.93	6.4	-18.6	15.6	12.8	2.76	5.625			
848.7	848.4	847.9	847.6	1.5	1.5	-71.76	8.3	-21.1	17.0	14.1	2.95	5.786			
900.0	899.7	899.1	898.6	1.6	1.6	-73.09	10.6	-24.1	18.9	15.8	3.14	6.022			
1,000.0	999.5	998.8	998.0	1.8	1.8	-72.93	15.7	-31.0	23.4	19.9	3.52	6.654			
1,100.0	1,099.3	1,098.7	1,097.4	2.0	2.0	-72.27	21.1	-38.2	28.2	24.3	3.91	7.230			
1,200.0	1,199.1	1,198.6	1,196.9	2.2	2.2	-71.80	26.5	-45.4	33.1	28.8	4.29	7.699			
1,300.0	1,298.9	1,298.4	1,296.4	2.4	2.5	-71.45	32.0	-52.6	37.9	33.2	4.69	8.086			
1,400.0	1,398.8	1,398.3	1,395.9	2.6	2.7	-71.18	37.4	-59.7	42.7	37.6	5.08	8.411			
1,500.0	1,498.6	1,498.2	1,495.3	2.8	2.9	-70.97	42.8	-66.9	47.5	42.1	5.47	8.688			
1,600.0	1,598.4	1,598.1	1,594.8	3.0	3.1	-70.79	48.2	-74.1	52.4	46.5	5.87	8.926			
1,700.0	1,698.2	1,698.0	1,694.3	3.2	3.4	-70.65	53.6	-81.3	57.2	50.9	6.26	9.132			
1,800.0	1,798.0	1,797.9	1,793.8	3.4	3.6	-70.52	59.0	-88.5	62.0	55.3	6.66	9.314			
1,900.0	1,897.8	1,897.7	1,893.3	3.6	3.8	-70.42	64.4	-95.7	66.8	59.8	7.05	9.474			
2,000.0	1,997.7	1,997.6	1,992.7	3.8	4.1	-70.33	69.8	-102.9	71.7	64.2	7.45	9.616			
2,100.0	2,097.5	2,097.5	2,092.2	4.0	4.3	-70.25	75.2	-110.1	76.5	68.6	7.85	9.744			
2,200.0	2,197.3	2,197.4	2,191.7	4.2	4.5	-70.17	80.6	-117.2	81.3	73.1	8.25	9.859			
2,300.0	2,297.1	2,297.3	2,291.2	4.4	4.7	-70.11	86.0	-124.4	86.1	77.5	8.64	9.962			
2,400.0	2,396.9	2,397.2	2,390.6	4.6	5.0	-70.06	91.4	-131.6	91.0	81.9	9.04	10.057			
2,500.0	2,496.7	2,497.0	2,490.1	4.8	5.2	-70.01	96.8	-138.8	95.8	86.3	9.44	10.143			
2,600.0	2,596.5	2,596.9	2,589.6	5.0	5.4	-69.96	102.3	-146.0	100.6	90.8	9.84	10.222			
2,700.0	2,696.4	2,696.8	2,689.1	5.2	5.7	-69.92	107.7	-153.2	105.4	95.2	10.24	10.295			
2,800.0	2,796.2	2,796.7	2,788.6	5.4	5.9	-69.88	113.1	-160.4	110.3	99.6	10.64	10.362			
2,900.0	2,896.0	2,896.6	2,888.0	5.6	6.1	-69.85	118.5	-167.5	115.1	104.0	11.04	10.424			
3,000.0	2,995.8	2,996.5	2,987.5	5.8	6.4	-69.82	123.9	-174.7	119.9	108.5	11.44	10.482			
3,100.0	3,095.6	3,096.3	3,087.0	6.0	6.6	-69.79	129.3	-181.9	124.7	112.9	11.84	10.536			
3,200.0	3,195.4	3,196.2	3,186.5	6.2	6.8	-69.76	134.7	-189.1	129.6	117.3	12.24	10.586			
3,300.0	3,295.2	3,296.1	3,285.9	6.4	7.1	-69.73	140.1	-196.3	134.4	121.7	12.64	10.633			
3,400.0	3,395.1	3,396.0	3,385.4	6.6	7.3	-69.71	145.5	-203.5	139.2	126.2	13.04	10.677			
3,500.0	3,494.9	3,495.9	3,484.9	6.8	7.5	-69.69	150.9	-210.7	144.0	130.6	13.44	10.718			
3,600.0	3,594.7	3,595.8	3,584.4	7.0	7.8	-69.67	156.3	-217.9	148.9	135.0	13.84	10.757			
3,700.0	3,694.5	3,695.6	3,683.9	7.2	8.0	-69.65	161.7	-225.0	153.7	139.4	14.24	10.793			
3,800.0	3,794.3	3,795.5	3,783.3	7.4	8.2	-69.63	167.1	-232.2	158.5	143.9	14.64	10.828			
3,900.0	3,894.1	3,895.4	3,882.8	7.6	8.5	-69.61	172.5	-239.4	163.3	148.3	15.04	10.860			
4,000.0	3,994.0	3,995.3	3,982.3	7.8	8.7	-69.60	178.0	-246.6	168.2	152.7	15.44	10.891			
4,100.0	4,093.8	4,095.2	4,081.8	8.0	8.9	-69.58	183.4	-253.8	173.0	157.1	15.84	10.921			
4,200.0	4,193.6	4,195.1	4,181.2	8.2	9.2	-69.57	188.8	-261.0	177.8	161.6	16.24	10.948			
4,300.0	4,293.4	4,294.9	4,280.7	8.4	9.4	-69.56	194.2	-268.2	182.6	166.0	16.64	10.975			
4,400.0	4,393.2	4,394.8	4,380.2	8.6	9.6	-69.54	199.6	-275.4	187.5	170.4	17.04	11.000			
4,500.0	4,493.0	4,494.7	4,479.7	8.8	9.9	-69.53	205.0	-282.5	192.3	174.8	17.44	11.024			
4,600.0	4,592.8	4,594.6	4,579.2	9.0	10.1	-69.52	210.4	-289.7	197.1	179.3	17.84	11.047			
4,700.0	4,692.7	4,694.5	4,678.6	9.3	10.3	-69.51	215.8	-296.9	201.9	183.7	18.24	11.069			
4,800.0	4,792.5	4,794.4	4,778.1	9.5	10.6	-69.50	221.2	-304.1	206.8	188.1	18.64	11.090			
4,900.0	4,892.3	4,894.2	4,877.6	9.7	10.8	-69.49	226.6	-311.3	211.6	192.5	19.04	11.110			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1F-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,000.0	4,992.1	4,994.1	4,977.1		9.9	11.1	-69.48	232.0	-318.5	216.4	197.0	19.45	11.129	
5,100.0	5,091.9	5,094.0	5,076.5	10.1	11.3		-69.47	237.4	-325.7	221.2	201.4	19.85	11.148	
5,200.0	5,191.7	5,193.9	5,176.0	10.3	11.5		-69.46	242.8	-332.9	226.1	205.8	20.25	11.165	
5,300.0	5,291.5	5,293.8	5,275.5	10.5	11.8		-69.45	248.3	-340.0	230.9	210.2	20.65	11.182	
5,400.0	5,391.4	5,393.7	5,375.0	10.7	12.0		-69.44	253.7	-347.2	235.7	214.7	21.05	11.199	
5,500.0	5,491.2	5,493.5	5,474.5	10.9	12.2		-69.44	259.1	-354.4	240.5	219.1	21.45	11.214	
5,600.0	5,591.0	5,593.4	5,573.9	11.1	12.5		-69.43	264.5	-361.6	245.4	223.5	21.85	11.230	
5,700.0	5,690.8	5,693.3	5,673.4	11.3	12.7		-69.42	269.9	-368.8	250.2	227.9	22.25	11.244	
5,800.0	5,790.6	5,793.2	5,772.9	11.5	12.9		-69.42	275.3	-376.0	255.0	232.4	22.65	11.258	
5,900.0	5,890.4	5,893.1	5,872.4	11.7	13.2		-69.41	280.7	-383.2	259.8	236.8	23.05	11.272	
6,000.0	5,990.3	5,993.0	5,971.8	11.9	13.4		-69.40	286.1	-390.4	264.7	241.2	23.45	11.285	
6,100.0	6,090.1	6,092.8	6,071.3	12.1	13.6		-69.40	291.5	-397.5	269.5	245.6	23.85	11.297	
6,200.0	6,189.9	6,192.7	6,170.8	12.3	13.9		-69.39	296.9	-404.7	274.3	250.1	24.26	11.310	
6,300.0	6,289.7	6,292.6	6,270.3	12.5	14.1		-69.38	302.3	-411.9	279.1	254.5	24.66	11.322	
6,400.0	6,389.5	6,392.5	6,369.8	12.7	14.3		-69.38	307.7	-419.1	284.0	258.9	25.06	11.333	
6,500.0	6,489.3	6,492.4	6,469.2	12.9	14.6		-69.37	313.1	-426.3	288.8	263.3	25.46	11.344	
6,600.0	6,589.1	6,592.3	6,568.7	13.1	14.8		-69.37	318.5	-433.5	293.6	267.8	25.86	11.355	
6,700.0	6,689.0	6,692.2	6,668.2	13.3	15.0		-69.36	324.0	-440.7	298.4	272.2	26.26	11.365	
6,785.3	6,774.1	6,777.3	6,753.0	13.5	15.2		-69.36	328.6	-446.8	302.6	276.0	26.60	11.374	
6,800.0	6,788.8	6,792.0	6,767.7	13.5	15.3		-58.35	329.4	-447.9	303.3	276.6	26.66	11.375	
6,850.0	6,838.8	6,841.9	6,817.3	13.6	15.4		52.49	332.1	-451.4	305.6	278.8	26.80	11.402	
6,900.0	6,888.6	6,891.4	6,866.7	13.6	15.5	75.40		334.7	-455.0	307.8	280.9	26.86	11.459	
6,950.0	6,938.1	6,940.5	6,915.5	13.7	15.6	82.09		337.4	-458.5	310.1	283.2	26.84	11.552	
7,000.0	6,987.0	6,988.7	6,963.5	13.7	15.7	86.39		340.0	-462.0	312.8	286.1	26.76	11.689	
7,050.0	7,035.0	7,035.9	7,010.5	13.6	15.8	90.12		342.6	-465.4	316.4	289.8	26.63	11.880	
7,100.0	7,082.0	7,085.1	7,059.5	13.6	15.9	93.74		343.9	-468.9	321.0	294.6	26.45	12.138	
7,150.0	7,127.7	7,136.0	7,110.3	13.5	16.0	97.07		341.8	-472.6	326.5	300.3	26.24	12.443	
7,200.0	7,171.8	7,188.4	7,162.3	13.5	16.1	100.16		335.9	-476.3	332.9	306.8	26.03	12.789	
7,250.0	7,214.2	7,242.5	7,215.3	13.4	16.1	103.06		325.8	-480.1	339.9	314.1	25.81	13.171	
7,300.0	7,254.6	7,298.4	7,269.1	13.4	16.1	105.78		311.2	-483.9	347.5	321.9	25.59	13.579	
7,350.0	7,292.9	7,356.2	7,323.3	13.3	16.1	108.33		291.7	-487.8	355.6	330.2	25.39	14.006	
7,400.0	7,328.9	7,416.0	7,377.6	13.3	16.1	110.71		267.0	-491.6	363.9	338.7	25.20	14.440	
7,450.0	7,362.3	7,478.0	7,431.5	13.3	16.1	112.92		236.7	-495.4	372.3	347.3	25.04	14.869	
7,500.0	7,393.1	7,542.1	7,484.3	13.4	16.0	114.96		200.6	-499.1	380.7	355.8	24.92	15.278	
7,550.0	7,421.1	7,608.5	7,535.4	13.5	16.0	116.82		158.3	-502.6	388.8	363.9	24.84	15.650	
7,600.0	7,446.1	7,677.2	7,583.8	13.6	16.0	118.50		109.8	-505.9	396.4	371.6	24.83	15.965	
7,650.0	7,468.0	7,748.1	7,628.8	13.8	16.1	120.00		55.1	-509.0	403.4	378.6	24.88	16.214	
7,700.0	7,486.7	7,821.0	7,669.2	14.0	16.2	121.29		-5.6	-511.7	409.7	384.6	25.02	16.373	
7,750.0	7,502.2	7,896.0	7,704.0	14.2	16.4	122.38		-71.8	-513.9	414.9	389.6	25.27	16.419	
7,800.0	7,514.3	7,972.5	7,732.3	14.6	16.7	123.25		-142.9	-515.7	419.0	393.4	25.63	16.352	
7,850.0	7,523.0	8,050.4	7,753.2	14.9	17.1	123.90		-217.9	-517.0	421.9	395.8	26.09	16.170	
7,900.0	7,528.2	8,129.2	7,765.9	15.3	17.6	124.32		-295.6	-517.6	423.5	396.8	26.69	15.867	
7,950.2	7,530.0	8,207.8	7,770.0	15.8	18.2	124.51		-374.1	-517.6	423.6	396.2	27.40	15.463	
8,000.0	7,530.0	8,257.6	7,770.0	16.2	18.6	124.55		-423.8	-517.5	423.2	395.0	28.20	15.005	
8,100.0	7,530.0	8,357.6	7,770.0	17.3	19.6	124.63		-523.8	-517.1	422.3	392.4	29.94	14.104	
8,200.0	7,530.0	8,457.6	7,770.0	18.4	20.6	124.71		-623.8	-516.8	421.5	389.6	31.85	13.233	
8,300.0	7,530.0	8,557.6	7,770.0	19.7	21.7	124.79		-723.8	-516.4	420.6	386.7	33.89	12.412	
8,400.0	7,530.0	8,657.6	7,770.0	21.0	22.9	124.88		-823.8	-516.1	419.7	383.7	36.03	11.649	
8,500.0	7,530.0	8,757.6	7,770.0	22.4	24.2	124.96		-923.8	-515.7	418.9	380.6	38.27	10.945	
8,600.0	7,530.0	8,857.5	7,770.0	23.8	25.5	125.04		-1,023.8	-515.4	418.0	377.4	40.58	10.300	
8,700.0	7,530.0	8,957.5	7,770.0	25.3	26.9	125.12		-1,123.8	-515.0	417.2	374.2	42.96	9.712	
8,800.0	7,530.0	9,057.5	7,770.0	26.8	28.3	125.21		-1,223.8	-514.7	416.3	370.9	45.38	9.174	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1F-7H-A168 - HZ - Plan #2											Offset Site Error: 0.0 ft		
Survey Program: O-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,530.0	9,157.5	7,770.0	28.3	29.8	125.29	-1,323.8	-514.3	415.5	367.6	47.84	8.684	
9,000.0	7,530.0	9,257.5	7,770.0	29.9	31.2	125.37	-1,423.8	-514.0	414.6	364.3	50.34	8.236	
9,100.0	7,530.0	9,357.5	7,770.0	31.4	32.8	125.46	-1,523.8	-513.6	413.8	360.9	52.87	7.826	
9,200.0	7,530.0	9,457.5	7,770.0	33.0	34.3	125.54	-1,623.8	-513.3	412.9	357.5	55.42	7.451	
9,300.0	7,530.0	9,557.5	7,770.0	34.7	35.8	125.63	-1,723.8	-512.9	412.0	354.1	57.99	7.106	
9,400.0	7,530.0	9,657.5	7,770.0	36.3	37.4	125.71	-1,823.8	-512.6	411.2	350.6	60.57	6.789	
9,500.0	7,530.0	9,757.5	7,770.0	37.9	39.0	125.80	-1,923.8	-512.2	410.3	347.2	63.17	6.496	
9,600.0	7,530.0	9,857.5	7,770.0	39.6	40.6	125.88	-2,023.7	-511.9	409.5	343.7	65.78	6.225	
9,700.0	7,530.0	9,957.5	7,770.0	41.2	42.2	125.97	-2,123.7	-511.5	408.6	340.3	68.40	5.975	
9,800.0	7,530.0	10,057.5	7,770.0	42.9	43.8	126.05	-2,223.7	-511.2	407.8	336.8	71.02	5.742	
9,900.0	7,530.0	10,157.5	7,770.0	44.5	45.5	126.14	-2,323.7	-510.8	407.0	333.3	73.65	5.525	
10,000.0	7,530.0	10,257.5	7,770.0	46.2	47.1	126.23	-2,423.7	-510.5	406.1	329.8	76.29	5.324	
10,100.0	7,530.0	10,357.5	7,770.0	47.9	48.8	126.32	-2,523.7	-510.1	405.3	326.3	78.92	5.135	
10,200.0	7,530.0	10,457.5	7,770.0	49.6	50.4	126.40	-2,623.7	-509.8	404.4	322.9	81.56	4.958	
10,300.0	7,530.0	10,557.5	7,770.0	51.3	52.1	126.49	-2,723.7	-509.4	403.6	319.4	84.20	4.793	
10,400.0	7,530.0	10,657.4	7,770.0	53.0	53.8	126.58	-2,823.7	-509.1	402.7	315.9	86.84	4.638	
10,500.0	7,530.0	10,757.4	7,770.0	54.7	55.4	126.67	-2,923.7	-508.7	401.9	312.4	89.48	4.491	
10,600.0	7,530.0	10,857.4	7,770.0	56.4	57.1	126.76	-3,023.7	-508.4	401.1	308.9	92.12	4.354	
10,700.0	7,530.0	10,957.4	7,770.0	58.1	58.8	126.85	-3,123.7	-508.0	400.2	305.5	94.76	4.224	
10,800.0	7,530.0	11,057.4	7,770.0	59.8	60.5	126.94	-3,223.7	-507.7	399.4	302.0	97.39	4.101	
10,900.0	7,530.0	11,157.4	7,770.0	61.5	62.2	127.03	-3,323.7	-507.3	398.5	298.5	100.02	3.985	
11,000.0	7,530.0	11,257.4	7,770.0	63.2	63.9	127.12	-3,423.7	-507.0	397.7	295.1	102.65	3.874	
11,100.0	7,530.0	11,357.4	7,770.0	64.9	65.6	127.21	-3,523.7	-506.6	396.9	291.6	105.28	3.770	
11,200.0	7,530.0	11,457.4	7,770.0	66.6	67.3	127.30	-3,623.6	-506.3	396.0	288.1	107.90	3.671	
11,300.0	7,530.0	11,557.4	7,770.0	68.4	69.0	127.39	-3,723.6	-505.9	395.2	284.7	110.52	3.576	
11,400.0	7,530.0	11,657.4	7,770.0	70.1	70.7	127.49	-3,823.6	-505.6	394.4	281.3	113.13	3.486	
11,500.0	7,530.0	11,757.4	7,770.0	71.8	72.4	127.58	-3,923.6	-505.2	393.5	277.8	115.74	3.400	
11,600.0	7,530.0	11,857.4	7,770.0	73.5	74.1	127.67	-4,023.6	-504.9	392.7	274.4	118.34	3.319	
11,700.0	7,530.0	11,957.4	7,770.0	75.3	75.8	127.77	-4,123.6	-504.5	391.9	271.0	120.94	3.240	
11,800.0	7,530.0	12,057.4	7,770.0	77.0	77.5	127.86	-4,223.6	-504.2	391.1	267.5	123.53	3.166	
11,900.0	7,530.0	12,157.4	7,770.0	78.7	79.2	127.95	-4,323.6	-503.8	390.2	264.1	126.11	3.094	
12,000.0	7,530.0	12,257.4	7,770.0	80.4	81.0	128.05	-4,423.6	-503.5	389.4	260.7	128.69	3.026	
12,100.0	7,530.0	12,357.4	7,770.0	82.2	82.7	128.14	-4,523.6	-503.1	388.6	257.3	131.27	2.960	
12,200.0	7,530.0	12,457.3	7,770.0	83.9	84.4	128.24	-4,623.6	-502.8	387.8	253.9	133.84	2.897	
12,300.0	7,530.0	12,557.3	7,770.0	85.6	86.1	128.34	-4,723.6	-502.5	386.9	250.5	136.40	2.837	
12,400.0	7,530.0	12,657.3	7,770.0	87.4	87.9	128.43	-4,823.6	-502.1	386.1	247.2	138.95	2.779	
12,500.0	7,530.0	12,757.3	7,770.0	89.1	89.6	128.53	-4,923.6	-501.8	385.3	243.8	141.50	2.723	
12,600.0	7,530.0	12,857.3	7,770.0	90.8	91.3	128.63	-5,023.6	-501.4	384.5	240.4	144.04	2.669	
12,700.0	7,530.0	12,957.3	7,770.0	92.6	93.0	128.72	-5,123.6	-501.1	383.7	237.1	146.57	2.618	
12,800.0	7,530.0	13,057.3	7,770.0	94.3	94.8	128.82	-5,223.5	-500.7	382.9	233.8	149.10	2.568	
12,900.0	7,530.0	13,157.3	7,770.0	96.0	96.5	128.92	-5,323.5	-500.4	382.0	230.4	151.62	2.520	
13,000.0	7,530.0	13,257.3	7,770.0	97.8	98.2	129.02	-5,423.5	-500.0	381.2	227.1	154.13	2.473	
13,100.0	7,530.0	13,357.3	7,770.0	99.5	99.9	129.12	-5,523.5	-499.7	380.4	223.8	156.63	2.429	
13,200.0	7,530.0	13,457.3	7,770.0	101.3	101.7	129.22	-5,623.5	-499.3	379.6	220.5	159.13	2.385	
13,300.0	7,530.0	13,557.3	7,770.0	103.0	103.4	129.32	-5,723.5	-499.0	378.8	217.2	161.62	2.344	
13,400.0	7,530.0	13,657.3	7,770.0	104.7	105.1	129.42	-5,823.5	-498.6	378.0	213.9	164.10	2.303	
13,500.0	7,530.0	13,757.3	7,770.0	106.5	106.9	129.52	-5,923.5	-498.3	377.2	210.6	166.57	2.264	
13,600.0	7,530.0	13,857.3	7,770.0	108.2	108.6	129.62	-6,023.5	-497.9	376.4	207.3	169.03	2.227	
13,700.0	7,530.0	13,957.3	7,770.0	110.0	110.3	129.72	-6,123.5	-497.6	375.6	204.1	171.48	2.190	
13,800.0	7,530.0	14,057.3	7,770.0	111.7	112.1	129.83	-6,223.5	-497.2	374.7	200.8	173.93	2.155	
13,900.0	7,530.0	14,157.3	7,770.0	113.4	113.8	129.93	-6,323.5	-496.9	373.9	197.6	176.37	2.120	
14,000.0	7,530.0	14,257.3	7,770.0	115.2	115.5	130.03	-6,423.5	-496.5	373.1	194.3	178.79	2.087	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1F-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	14,357.2	7,770.0	116.9	117.3	130.13	-6,523.5	-496.2	372.3	191.1	181.21	2.055		
14,200.0	7,530.0	14,457.2	7,770.0	118.7	119.0	130.24	-6,623.5	-495.8	371.5	187.9	183.62	2.023		
14,300.0	7,530.0	14,557.2	7,770.0	120.4	120.8	130.34	-6,723.5	-495.5	370.7	184.7	186.02	1.993		
14,400.0	7,530.0	14,657.2	7,770.0	122.1	122.5	130.45	-6,823.5	-495.1	369.9	181.5	188.41	1.963		
14,500.0	7,530.0	14,757.2	7,770.0	123.9	124.2	130.55	-6,923.4	-494.8	369.1	178.4	190.80	1.935		
14,600.0	7,530.0	14,857.2	7,770.0	125.6	126.0	130.66	-7,023.4	-494.4	368.4	175.2	193.17	1.907		
14,700.0	7,530.0	14,957.2	7,770.0	127.4	127.7	130.77	-7,123.4	-494.1	367.6	172.0	195.53	1.880		
14,800.0	7,530.0	15,057.2	7,770.0	129.1	129.5	130.87	-7,223.4	-493.7	366.8	168.9	197.88	1.853		
14,900.0	7,530.0	15,157.2	7,770.0	130.9	131.2	130.98	-7,323.4	-493.4	366.0	165.7	200.23	1.828		
15,000.0	7,530.0	15,257.2	7,770.0	132.6	132.9	131.09	-7,423.4	-493.0	365.2	162.6	202.56	1.803		
15,100.0	7,530.0	15,357.2	7,770.0	134.4	134.7	131.20	-7,523.4	-492.7	364.4	159.5	204.88	1.779		
15,200.0	7,530.0	15,457.2	7,770.0	136.1	136.4	131.30	-7,623.4	-492.3	363.6	156.4	207.20	1.755		
15,300.0	7,530.0	15,557.2	7,770.0	137.9	138.2	131.41	-7,723.4	-492.0	362.8	153.3	209.50	1.732		
15,400.0	7,530.0	15,657.2	7,770.0	139.6	139.9	131.52	-7,823.4	-491.6	362.0	150.3	211.79	1.709		
15,500.0	7,530.0	15,757.2	7,770.0	141.3	141.6	131.63	-7,923.4	-491.3	361.3	147.2	214.07	1.688		
15,600.0	7,530.0	15,857.2	7,770.0	143.1	143.4	131.74	-8,023.4	-490.9	360.5	144.1	216.34	1.666		
15,700.0	7,530.0	15,957.2	7,770.0	144.8	145.1	131.86	-8,123.4	-490.6	359.7	141.1	218.60	1.645		
15,800.0	7,530.0	16,057.2	7,770.0	146.6	146.9	131.97	-8,223.4	-490.2	358.9	138.1	220.85	1.625		
15,900.0	7,530.0	16,157.1	7,770.0	148.3	148.6	132.08	-8,323.4	-489.9	358.1	135.0	223.09	1.605		
16,000.0	7,530.0	16,257.1	7,770.0	150.1	150.4	132.19	-8,423.4	-489.5	357.4	132.0	225.32	1.586		
16,100.0	7,530.0	16,357.1	7,770.0	151.8	152.1	132.30	-8,523.3	-489.2	356.6	129.1	227.53	1.567		
16,200.0	7,530.0	16,457.1	7,770.0	153.6	153.8	132.42	-8,623.3	-488.8	355.8	126.1	229.74	1.549		
16,300.0	7,530.0	16,557.1	7,770.0	155.3	155.6	132.53	-8,723.3	-488.5	355.0	123.1	231.93	1.531		
16,400.0	7,530.0	16,657.1	7,770.0	157.1	157.3	132.65	-8,823.3	-488.1	354.3	120.2	234.11	1.513		
16,500.0	7,530.0	16,757.1	7,770.0	158.8	159.1	132.76	-8,923.3	-487.8	353.5	117.2	236.28	1.496 Level 3		
16,600.0	7,530.0	16,857.1	7,770.0	160.6	160.8	132.88	-9,023.3	-487.4	352.7	114.3	238.44	1.479 Level 3		
16,700.0	7,530.0	16,957.1	7,770.0	162.3	162.6	132.99	-9,123.3	-487.1	352.0	111.4	240.58	1.463 Level 3		
16,800.0	7,530.0	17,057.1	7,770.0	164.1	164.3	133.11	-9,223.3	-486.7	351.2	108.5	242.71	1.447 Level 3		
16,900.0	7,530.0	17,157.1	7,770.0	165.8	166.1	133.23	-9,323.3	-486.4	350.4	105.6	244.84	1.431 Level 3		
17,000.0	7,530.0	17,257.1	7,770.0	167.6	167.8	133.34	-9,423.3	-486.0	349.7	102.7	246.95	1.416 Level 3		
17,100.0	7,530.0	17,357.1	7,770.0	169.3	169.6	133.46	-9,523.3	-485.7	348.9	99.9	249.04	1.401 Level 3		
17,200.0	7,530.0	17,457.1	7,770.0	171.1	171.3	133.58	-9,623.3	-485.3	348.2	97.0	251.13	1.386 Level 3		
17,300.0	7,530.0	17,557.1	7,770.0	172.8	173.0	133.70	-9,723.3	-485.0	347.4	94.2	253.20	1.372 Level 3		
17,400.0	7,530.0	17,657.1	7,770.0	174.5	174.8	133.82	-9,823.3	-484.7	346.6	91.4	255.26	1.358 Level 3		
17,409.7	7,530.0	17,664.2	7,770.0	174.7	174.9	133.83	-9,830.4	-484.6	346.6	91.1	255.43	1.357 Level 3		
17,411.2	7,530.0	17,664.2	7,770.0	174.7	174.9	133.83	-9,830.4	-484.6	346.6	91.1	255.45	1.357 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1H-7H-A168 - HZ - Plan #2														Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	9.8	9.8						
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	9.8	9.8	9.5	0.30	32.254			
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	9.8	9.8	9.1	0.65	15.006			
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	9.8	9.8	8.8	1.00	9.777			
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	9.8	9.8	8.4	1.35	7.251			
500.0	500.0	500.0	500.0	0.8	0.8	90.00	0.0	9.8	9.8	8.1	1.70	5.762	CC, ES		
600.0	600.0	600.0	600.0	1.0	1.0	116.31	0.2	9.8	10.2	8.1	2.05	4.956			
700.0	700.0	700.0	700.0	1.2	1.2	119.37	2.0	9.8	11.3	8.9	2.40	4.687			
800.0	799.9	800.0	799.9	1.4	1.4	120.79	5.5	9.9	13.1	10.3	2.76	4.731			
848.7	848.4	848.7	848.5	1.5	1.5	121.00	7.8	9.9	14.2	11.3	2.94	4.827			
900.0	899.7	900.0	899.8	1.6	1.6	120.72	10.6	9.9	15.5	12.3	3.13	4.936			
1,000.0	999.5	1,000.0	999.6	1.8	1.8	120.21	16.0	10.0	17.9	14.4	3.51	5.108			
1,100.0	1,099.3	1,099.9	1,099.4	2.0	1.9	119.83	21.4	10.1	20.4	16.5	3.89	5.242			
1,200.0	1,199.1	1,199.9	1,199.3	2.2	2.1	119.52	26.8	10.2	22.8	18.6	4.27	5.348			
1,300.0	1,298.9	1,299.9	1,299.1	2.4	2.3	119.28	32.3	10.3	25.3	20.6	4.65	5.434			
1,400.0	1,398.8	1,399.8	1,398.9	2.6	2.5	119.08	37.7	10.3	27.8	22.7	5.04	5.505			
1,500.0	1,498.6	1,499.8	1,498.7	2.8	2.7	118.91	43.1	10.4	30.2	24.8	5.43	5.564			
1,600.0	1,598.4	1,599.8	1,598.5	3.0	2.9	118.76	48.5	10.5	32.7	26.9	5.82	5.614			
1,700.0	1,698.2	1,699.8	1,698.4	3.2	3.1	118.64	53.9	10.6	35.1	28.9	6.21	5.658			
1,800.0	1,798.0	1,799.7	1,798.2	3.4	3.3	118.53	59.4	10.7	37.6	31.0	6.60	5.695			
1,900.0	1,897.8	1,899.7	1,898.0	3.6	3.5	118.44	64.8	10.7	40.1	33.1	6.99	5.728			
2,000.0	1,997.7	1,999.7	1,997.8	3.8	3.7	118.36	70.2	10.8	42.5	35.1	7.39	5.757			
2,100.0	2,097.5	2,099.6	2,097.7	4.0	3.9	118.28	75.6	10.9	45.0	37.2	7.78	5.783			
2,200.0	2,197.3	2,199.6	2,197.5	4.2	4.1	118.22	81.1	11.0	47.4	39.3	8.17	5.806			
2,300.0	2,297.1	2,299.6	2,297.3	4.4	4.3	118.16	86.5	11.1	49.9	41.3	8.57	5.826			
2,400.0	2,396.9	2,399.5	2,397.1	4.6	4.5	118.10	91.9	11.1	52.4	43.4	8.96	5.845			
2,500.0	2,496.7	2,499.5	2,496.9	4.8	4.7	118.05	97.3	11.2	54.8	45.5	9.35	5.862			
2,600.0	2,596.5	2,599.5	2,596.8	5.0	4.9	118.01	102.8	11.3	57.3	47.5	9.75	5.877			
2,700.0	2,696.4	2,699.5	2,696.6	5.2	5.1	117.97	108.2	11.4	59.8	49.6	10.14	5.891			
2,800.0	2,796.2	2,799.4	2,796.4	5.4	5.3	117.93	113.6	11.5	62.2	51.7	10.54	5.904			
2,900.0	2,896.0	2,899.4	2,896.2	5.6	5.5	117.90	119.0	11.5	64.7	53.7	10.93	5.916			
3,000.0	2,995.8	2,999.4	2,996.1	5.8	5.7	117.86	124.5	11.6	67.1	55.8	11.33	5.927			
3,100.0	3,095.6	3,099.3	3,095.9	6.0	5.9	117.83	129.9	11.7	69.6	57.9	11.72	5.937			
3,200.0	3,195.4	3,199.3	3,195.7	6.2	6.1	117.80	135.3	11.8	72.1	59.9	12.12	5.947			
3,300.0	3,295.2	3,299.3	3,295.5	6.4	6.3	117.78	140.7	11.8	74.5	62.0	12.51	5.956			
3,400.0	3,395.1	3,399.2	3,395.4	6.6	6.5	117.75	146.2	11.9	77.0	64.1	12.91	5.964			
3,500.0	3,494.9	3,499.2	3,495.2	6.8	6.7	117.73	151.6	12.0	79.5	66.1	13.30	5.972			
3,600.0	3,594.7	3,599.2	3,595.0	7.0	6.8	117.71	157.0	12.1	81.9	68.2	13.70	5.979			
3,700.0	3,694.5	3,699.2	3,694.8	7.2	7.0	117.69	162.4	12.2	84.4	70.3	14.10	5.986			
3,800.0	3,794.3	3,799.1	3,794.6	7.4	7.2	117.67	167.9	12.2	86.8	72.3	14.49	5.992			
3,900.0	3,894.1	3,899.1	3,894.5	7.6	7.4	117.65	173.3	12.3	89.3	74.4	14.89	5.998			
4,000.0	3,994.0	3,999.1	3,994.3	7.8	7.6	117.63	178.7	12.4	91.8	76.5	15.28	6.004			
4,100.0	4,093.8	4,099.0	4,094.1	8.0	7.8	117.62	184.1	12.5	94.2	78.5	15.68	6.009			
4,200.0	4,193.6	4,199.0	4,193.9	8.2	8.0	117.60	189.6	12.6	96.7	80.6	16.08	6.015			
4,300.0	4,293.4	4,299.0	4,293.8	8.4	8.2	117.59	195.0	12.6	99.2	82.7	16.47	6.019			
4,400.0	4,393.2	4,398.9	4,393.6	8.6	8.4	117.57	200.4	12.7	101.6	84.7	16.87	6.024			
4,500.0	4,493.0	4,498.9	4,493.4	8.8	8.6	117.56	205.8	12.8	104.1	86.8	17.26	6.029			
4,600.0	4,592.8	4,598.9	4,593.2	9.0	8.8	117.55	211.3	12.9	106.5	88.9	17.66	6.033			
4,700.0	4,692.7	4,698.8	4,693.0	9.3	9.0	117.53	216.7	13.0	109.0	90.9	18.06	6.037			
4,800.0	4,792.5	4,798.8	4,792.9	9.5	9.2	117.52	222.1	13.0	111.5	93.0	18.45	6.041			
4,900.0	4,892.3	4,898.8	4,892.7	9.7	9.4	117.51	227.5	13.1	113.9	95.1	18.85	6.044			
5,000.0	4,992.1	4,998.8	4,992.5	9.9	9.6	117.50	233.0	13.2	116.4	97.1	19.25	6.048			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1H-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,091.9	5,098.7	5,092.3	10.1	9.8	117.49	238.4	13.3	118.9	99.2	19.64	6.051		
5,200.0	5,191.7	5,198.7	5,192.2	10.3	10.0	117.48	243.8	13.4	121.3	101.3	20.04	6.054		
5,300.0	5,291.5	5,298.7	5,292.0	10.5	10.2	117.47	249.2	13.4	123.8	103.3	20.43	6.057		
5,400.0	5,391.4	5,398.6	5,391.8	10.7	10.4	117.46	254.7	13.5	126.2	105.4	20.83	6.060		
5,500.0	5,491.2	5,498.6	5,491.6	10.9	10.6	117.45	260.1	13.6	128.7	107.5	21.23	6.063		
5,600.0	5,591.0	5,598.6	5,591.4	11.1	10.8	117.45	265.5	13.7	131.2	109.5	21.62	6.066		
5,700.0	5,690.8	5,698.5	5,691.3	11.3	11.0	117.44	270.9	13.7	133.6	111.6	22.02	6.068		
5,800.0	5,790.6	5,798.5	5,791.1	11.5	11.2	117.43	276.3	13.8	136.1	113.7	22.42	6.071		
5,900.0	5,890.4	5,898.5	5,890.9	11.7	11.4	117.42	281.8	13.9	138.6	115.7	22.81	6.073		
6,000.0	5,990.3	5,998.5	5,990.7	11.9	11.6	117.41	287.2	14.0	141.0	117.8	23.21	6.076		
6,100.0	6,090.1	6,098.4	6,090.6	12.1	11.8	117.41	292.6	14.1	143.5	119.9	23.61	6.078		
6,200.0	6,189.9	6,198.4	6,190.4	12.3	12.0	117.40	298.0	14.1	145.9	121.9	24.00	6.080		
6,300.0	6,289.7	6,298.4	6,290.2	12.5	12.2	117.39	303.5	14.2	148.4	124.0	24.40	6.082		
6,400.0	6,389.5	6,398.3	6,390.0	12.7	12.4	117.39	308.9	14.3	150.9	126.1	24.80	6.084		
6,500.0	6,489.3	6,498.3	6,489.8	12.9	12.6	117.38	314.3	14.4	153.3	128.1	25.19	6.086		
6,600.0	6,589.1	6,598.3	6,589.7	13.1	12.8	117.38	319.7	14.5	155.8	130.2	25.59	6.088		
6,700.0	6,689.0	6,698.2	6,689.5	13.3	13.0	117.37	325.2	14.5	158.3	132.3	25.99	6.090		
6,785.3	6,774.1	6,783.5	6,774.6	13.5	13.2	117.37	329.8	14.6	160.3	134.0	26.32	6.092		
6,800.0	6,788.8	6,798.2	6,789.3	13.5	13.2	128.37	330.6	14.6	160.7	134.3	26.38	6.092		
6,850.0	6,838.8	6,848.1	6,839.1	13.6	13.3	-122.02	333.3	14.7	161.8	135.2	26.57	6.089		
6,900.0	6,888.6	6,897.7	6,888.7	13.6	13.4	-102.18	336.0	14.7	162.8	136.0	26.75	6.085		
6,950.0	6,938.1	6,946.7	6,937.6	13.7	13.5	-100.24	338.7	14.7	164.2	137.3	26.92	6.099		
7,000.0	6,987.0	6,995.0	6,985.8	13.7	13.6	-102.14	341.3	14.8	166.5	139.4	27.04	6.157		
7,050.0	7,035.0	7,043.2	7,033.9	13.6	13.7	-105.77	343.6	14.8	170.4	143.3	27.08	6.291		
7,100.0	7,082.0	7,093.3	7,084.1	13.6	13.7	-109.89	343.3	14.9	175.8	148.8	27.00	6.513		
7,150.0	7,127.7	7,144.8	7,135.4	13.5	13.8	-113.95	339.2	14.9	182.7	155.9	26.80	6.815		
7,200.0	7,171.8	7,197.7	7,187.6	13.5	13.8	-117.81	331.3	14.9	190.7	164.2	26.50	7.194		
7,250.0	7,214.2	7,252.0	7,240.6	13.4	13.8	-121.40	319.1	15.0	199.6	173.5	26.11	7.643		
7,300.0	7,254.6	7,307.9	7,293.9	13.4	13.7	-124.68	302.5	15.0	209.2	183.5	25.65	8.155		
7,350.0	7,292.9	7,365.5	7,347.4	13.3	13.7	-127.64	281.0	15.1	219.2	194.1	25.14	8.720		
7,400.0	7,328.9	7,424.9	7,400.5	13.3	13.6	-130.29	254.4	15.1	229.5	204.9	24.61	9.327		
7,450.0	7,362.3	7,486.1	7,452.7	13.3	13.5	-132.64	222.6	15.1	239.8	215.7	24.07	9.962		
7,500.0	7,393.1	7,549.1	7,503.4	13.4	13.5	-134.70	185.2	15.2	249.8	226.3	23.55	10.608		
7,550.0	7,421.1	7,614.0	7,552.0	13.5	13.5	-136.50	142.2	15.2	259.5	236.4	23.08	11.241		
7,600.0	7,446.1	7,680.8	7,597.8	13.6	13.5	-138.04	93.6	15.3	268.5	245.9	22.69	11.836		
7,650.0	7,468.0	7,749.4	7,639.8	13.8	13.5	-139.34	39.5	15.3	276.8	254.4	22.39	12.366		
7,700.0	7,486.7	7,819.6	7,677.3	14.0	13.6	-140.41	-19.9	15.3	284.2	261.9	22.21	12.794		
7,750.0	7,502.2	7,891.4	7,709.4	14.2	13.9	-141.26	-84.1	15.3	290.4	268.2	22.18	13.094		
7,800.0	7,514.3	7,964.5	7,735.4	14.6	14.2	-141.89	-152.3	15.4	295.4	273.1	22.31	13.242		
7,850.0	7,523.0	8,038.6	7,754.5	14.9	14.7	-142.31	-223.9	15.4	299.2	276.5	22.62	13.226		
7,900.0	7,528.2	8,113.4	7,766.1	15.3	15.2	-142.52	-297.8	15.4	301.5	278.4	23.11	13.046		
7,950.2	7,530.0	8,188.6	7,770.0	15.8	15.9	-142.53	-372.9	15.4	302.4	278.6	23.79	12.714		
8,000.0	7,530.0	8,238.4	7,770.0	16.2	16.3	-142.48	-422.6	15.4	302.6	278.2	24.40	12.400		
8,100.0	7,530.0	8,338.4	7,770.0	17.3	17.4	-142.37	-522.6	15.4	303.0	277.3	25.73	11.777		
8,200.0	7,530.0	8,438.4	7,770.0	18.4	18.5	-142.27	-622.6	15.4	303.5	276.3	27.17	11.168		
8,300.0	7,530.0	8,538.4	7,770.0	19.7	19.8	-142.17	-722.6	15.4	303.9	275.2	28.72	10.582		
8,400.0	7,530.0	8,638.4	7,770.0	21.0	21.1	-142.06	-822.6	15.4	304.3	274.0	30.35	10.028		
8,500.0	7,530.0	8,738.4	7,770.0	22.4	22.5	-141.96	-922.6	15.4	304.7	272.7	32.06	9.507		
8,600.0	7,530.0	8,838.4	7,770.0	23.8	23.9	-141.85	-1,022.6	15.4	305.2	271.3	33.83	9.021		
8,700.0	7,530.0	8,938.4	7,770.0	25.3	25.4	-141.75	-1,122.6	15.4	305.6	269.9	35.66	8.569		
8,800.0	7,530.0	9,038.4	7,770.0	26.8	26.9	-141.65	-1,222.6	15.4	306.0	268.5	37.55	8.151		
8,900.0	7,530.0	9,138.4	7,770.0	28.3	28.4	-141.55	-1,322.6	15.4	306.5	267.0	39.48	7.763		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1H-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,530.0	9,238.4	7,770.0	29.9	29.9	-141.44	-1,422.6	15.4	306.9	265.5	41.45	7.404		
9,100.0	7,530.0	9,338.4	7,770.0	31.4	31.5	-141.34	-1,522.6	15.4	307.3	263.9	43.46	7.072		
9,200.0	7,530.0	9,438.4	7,770.0	33.0	33.1	-141.24	-1,622.6	15.4	307.8	262.3	45.50	6.765		
9,300.0	7,530.0	9,538.4	7,770.0	34.7	34.7	-141.14	-1,722.6	15.4	308.2	260.6	47.57	6.479		
9,400.0	7,530.0	9,638.4	7,770.0	36.3	36.3	-141.04	-1,822.6	15.4	308.7	259.0	49.67	6.214		
9,500.0	7,530.0	9,738.4	7,770.0	37.9	38.0	-140.94	-1,922.6	15.4	309.1	257.3	51.79	5.968		
9,600.0	7,530.0	9,838.4	7,770.0	39.6	39.6	-140.84	-2,022.6	15.4	309.5	255.6	53.94	5.739		
9,700.0	7,530.0	9,938.4	7,770.0	41.2	41.3	-140.74	-2,122.6	15.4	310.0	253.9	56.11	5.525		
9,800.0	7,530.0	10,038.3	7,770.0	42.9	42.9	-140.64	-2,222.6	15.4	310.4	252.1	58.30	5.325		
9,900.0	7,530.0	10,138.3	7,770.0	44.5	44.6	-140.54	-2,322.6	15.4	310.9	250.4	60.51	5.138		
10,000.0	7,530.0	10,238.3	7,770.0	46.2	46.3	-140.44	-2,422.6	15.4	311.3	248.6	62.74	4.962		
10,100.0	7,530.0	10,338.3	7,770.0	47.9	48.0	-140.34	-2,522.6	15.4	311.8	246.8	64.98	4.798		
10,200.0	7,530.0	10,438.3	7,770.0	49.6	49.6	-140.24	-2,622.6	15.4	312.2	245.0	67.24	4.643		
10,300.0	7,530.0	10,538.3	7,770.0	51.3	51.3	-140.14	-2,722.6	15.4	312.6	243.1	69.52	4.497		
10,400.0	7,530.0	10,638.3	7,770.0	53.0	53.0	-140.05	-2,822.6	15.4	313.1	241.3	71.81	4.360		
10,500.0	7,530.0	10,738.3	7,770.0	54.7	54.7	-139.95	-2,922.6	15.4	313.5	239.4	74.11	4.230		
10,600.0	7,530.0	10,838.3	7,770.0	56.4	56.4	-139.85	-3,022.6	15.4	314.0	237.6	76.43	4.108		
10,700.0	7,530.0	10,938.3	7,770.0	58.1	58.1	-139.75	-3,122.6	15.4	314.4	235.7	78.77	3.992		
10,800.0	7,530.0	11,038.3	7,770.0	59.8	59.8	-139.66	-3,222.6	15.4	314.9	233.8	81.11	3.882		
10,900.0	7,530.0	11,138.3	7,770.0	61.5	61.5	-139.56	-3,322.6	15.4	315.3	231.9	83.47	3.778		
11,000.0	7,530.0	11,238.3	7,770.0	63.2	63.3	-139.46	-3,422.6	15.4	315.8	230.0	85.84	3.679		
11,100.0	7,530.0	11,338.3	7,770.0	64.9	65.0	-139.37	-3,522.6	15.4	316.3	228.0	88.22	3.585		
11,200.0	7,530.0	11,438.3	7,770.0	66.6	66.7	-139.27	-3,622.5	15.4	316.7	226.1	90.61	3.495		
11,300.0	7,530.0	11,538.3	7,770.0	68.4	68.4	-139.18	-3,722.5	15.4	317.2	224.1	93.02	3.410		
11,400.0	7,530.0	11,638.3	7,770.0	70.1	70.1	-139.08	-3,822.5	15.4	317.6	222.2	95.43	3.328		
11,500.0	7,530.0	11,738.3	7,770.0	71.8	71.8	-138.99	-3,922.5	15.4	318.1	220.2	97.86	3.250		
11,600.0	7,530.0	11,838.3	7,770.0	73.5	73.6	-138.89	-4,022.5	15.4	318.5	218.2	100.29	3.176		
11,700.0	7,530.0	11,938.3	7,770.0	75.3	75.3	-138.80	-4,122.5	15.4	319.0	216.3	102.74	3.105		
11,800.0	7,530.0	12,038.3	7,770.0	77.0	77.0	-138.70	-4,222.5	15.4	319.5	214.3	105.20	3.037		
11,900.0	7,530.0	12,138.3	7,770.0	78.7	78.7	-138.61	-4,322.5	15.4	319.9	212.3	107.66	2.971		
12,000.0	7,530.0	12,238.3	7,770.0	80.4	80.5	-138.51	-4,422.5	15.4	320.4	210.2	110.14	2.909		
12,100.0	7,530.0	12,338.3	7,770.0	82.2	82.2	-138.42	-4,522.5	15.4	320.8	208.2	112.62	2.849		
12,200.0	7,530.0	12,438.3	7,770.0	83.9	83.9	-138.33	-4,622.5	15.4	321.3	206.2	115.12	2.791		
12,300.0	7,530.0	12,538.3	7,770.0	85.6	85.7	-138.23	-4,722.5	15.4	321.8	204.2	117.62	2.736		
12,400.0	7,530.0	12,638.3	7,770.0	87.4	87.4	-138.14	-4,822.5	15.4	322.2	202.1	120.13	2.682		
12,500.0	7,530.0	12,738.3	7,770.0	89.1	89.1	-138.05	-4,922.5	15.4	322.7	200.1	122.65	2.631		
12,600.0	7,530.0	12,838.3	7,770.0	90.8	90.9	-137.96	-5,022.5	15.4	323.2	198.0	125.18	2.582		
12,700.0	7,530.0	12,938.3	7,770.0	92.6	92.6	-137.87	-5,122.5	15.4	323.6	195.9	127.72	2.534		
12,800.0	7,530.0	13,038.3	7,770.0	94.3	94.3	-137.77	-5,222.5	15.4	324.1	193.8	130.27	2.488		
12,900.0	7,530.0	13,138.3	7,770.0	96.0	96.1	-137.68	-5,322.5	15.4	324.6	191.8	132.82	2.444		
13,000.0	7,530.0	13,238.3	7,770.0	97.8	97.8	-137.59	-5,422.5	15.4	325.0	189.7	135.38	2.401		
13,100.0	7,530.0	13,338.3	7,770.0	99.5	99.5	-137.50	-5,522.5	15.4	325.5	187.6	137.96	2.360		
13,200.0	7,530.0	13,438.3	7,770.0	101.3	101.3	-137.41	-5,622.5	15.4	326.0	185.5	140.54	2.320		
13,300.0	7,530.0	13,538.3	7,770.0	103.0	103.0	-137.32	-5,722.5	15.4	326.5	183.3	143.12	2.281		
13,400.0	7,530.0	13,638.3	7,770.0	104.7	104.8	-137.23	-5,822.5	15.4	326.9	181.2	145.72	2.244		
13,500.0	7,530.0	13,738.3	7,770.0	106.5	106.5	-137.14	-5,922.5	15.4	327.4	179.1	148.32	2.207		
13,600.0	7,530.0	13,838.3	7,770.0	108.2	108.2	-137.05	-6,022.5	15.4	327.9	177.0	150.93	2.172		
13,700.0	7,530.0	13,938.3	7,770.0	110.0	110.0	-136.96	-6,122.5	15.4	328.4	174.8	153.55	2.138		
13,800.0	7,530.0	14,038.3	7,770.0	111.7	111.7	-136.87	-6,222.5	15.4	328.8	172.7	156.18	2.106		
13,900.0	7,530.0	14,138.2	7,770.0	113.4	113.5	-136.79	-6,322.5	15.4	329.3	170.5	158.81	2.074		
14,000.0	7,530.0	14,238.2	7,770.0	115.2	115.2	-136.70	-6,422.5	15.4	329.8	168.3	161.45	2.043		
14,100.0	7,530.0	14,338.2	7,770.0	116.9	116.9	-136.61	-6,522.5	15.4	330.3	166.2	164.10	2.013		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1H-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,200.0	7,530.0	14,438.2	7,770.0	118.7	118.7	-136.52	-6,622.5	15.4	330.8	164.0	166.75	1.983		
14,300.0	7,530.0	14,538.2	7,770.0	120.4	120.4	-136.43	-6,722.5	15.4	331.2	161.8	169.42	1.955		
14,400.0	7,530.0	14,638.2	7,770.0	122.1	122.2	-136.35	-6,822.5	15.4	331.7	159.6	172.09	1.928		
14,500.0	7,530.0	14,738.2	7,770.0	123.9	123.9	-136.26	-6,922.5	15.4	332.2	157.4	174.76	1.901		
14,600.0	7,530.0	14,838.2	7,770.0	125.6	125.7	-136.17	-7,022.5	15.4	332.7	155.2	177.45	1.875		
14,700.0	7,530.0	14,938.2	7,770.0	127.4	127.4	-136.09	-7,122.5	15.4	333.2	153.0	180.14	1.850		
14,800.0	7,530.0	15,038.2	7,770.0	129.1	129.2	-136.00	-7,222.5	15.4	333.7	150.8	182.83	1.825		
14,900.0	7,530.0	15,138.2	7,770.0	130.9	130.9	-135.91	-7,322.5	15.4	334.1	148.6	185.54	1.801		
15,000.0	7,530.0	15,238.2	7,770.0	132.6	132.6	-135.83	-7,422.5	15.4	334.6	146.4	188.25	1.778		
15,100.0	7,530.0	15,338.2	7,770.0	134.4	134.4	-135.74	-7,522.5	15.4	335.1	144.1	190.97	1.755		
15,200.0	7,530.0	15,438.2	7,770.0	136.1	136.1	-135.66	-7,622.5	15.4	335.6	141.9	193.69	1.733		
15,300.0	7,530.0	15,538.2	7,770.0	137.9	137.9	-135.57	-7,722.4	15.4	336.1	139.7	196.42	1.711		
15,400.0	7,530.0	15,638.2	7,770.0	139.6	139.6	-135.49	-7,822.4	15.4	336.6	137.4	199.16	1.690		
15,500.0	7,530.0	15,738.2	7,770.0	141.3	141.4	-135.40	-7,922.4	15.4	337.1	135.2	201.90	1.669		
15,600.0	7,530.0	15,838.2	7,770.0	143.1	143.1	-135.32	-8,022.4	15.4	337.6	132.9	204.65	1.649		
15,700.0	7,530.0	15,938.2	7,770.0	144.8	144.9	-135.23	-8,122.4	15.4	338.0	130.6	207.41	1.630		
15,800.0	7,530.0	16,038.2	7,770.0	146.6	146.6	-135.15	-8,222.4	15.4	338.5	128.4	210.17	1.611		
15,900.0	7,530.0	16,138.2	7,770.0	148.3	148.4	-135.07	-8,322.4	15.4	339.0	126.1	212.94	1.592		
16,000.0	7,530.0	16,238.2	7,770.0	150.1	150.1	-134.98	-8,422.4	15.4	339.5	123.8	215.71	1.574		
16,100.0	7,530.0	16,338.2	7,770.0	151.8	151.8	-134.90	-8,522.4	15.4	340.0	121.5	218.49	1.556		
16,200.0	7,530.0	16,438.2	7,770.0	153.6	153.6	-134.82	-8,622.4	15.4	340.5	119.2	221.28	1.539		
16,300.0	7,530.0	16,538.2	7,770.0	155.3	155.3	-134.73	-8,722.4	15.4	341.0	116.9	224.07	1.522		
16,400.0	7,530.0	16,638.2	7,770.0	157.1	157.1	-134.65	-8,822.4	15.4	341.5	114.6	226.87	1.505		
16,500.0	7,530.0	16,738.2	7,770.0	158.8	158.8	-134.57	-8,922.4	15.4	342.0	112.3	229.68	1.489	Level 3	
16,600.0	7,530.0	16,838.2	7,770.0	160.6	160.6	-134.49	-9,022.4	15.4	342.5	110.0	232.49	1.473	Level 3	
16,700.0	7,530.0	16,938.2	7,770.0	162.3	162.3	-134.40	-9,122.4	15.4	343.0	107.7	235.30	1.458	Level 3	
16,800.0	7,530.0	17,038.2	7,770.0	164.1	164.1	-134.32	-9,222.4	15.4	343.5	105.4	238.13	1.443	Level 3	
16,900.0	7,530.0	17,138.2	7,770.0	165.8	165.8	-134.24	-9,322.4	15.4	344.0	103.0	240.95	1.428	Level 3	
17,000.0	7,530.0	17,238.2	7,770.0	167.6	167.6	-134.16	-9,422.4	15.4	344.5	100.7	243.79	1.413	Level 3	
17,100.0	7,530.0	17,338.2	7,770.0	169.3	169.3	-134.08	-9,522.4	15.4	345.0	98.4	246.63	1.399	Level 3	
17,200.0	7,530.0	17,438.2	7,770.0	171.1	171.1	-134.00	-9,622.4	15.4	345.5	96.0	249.47	1.385	Level 3	
17,300.0	7,530.0	17,538.2	7,770.0	172.8	172.8	-133.92	-9,722.4	15.4	346.0	93.7	252.32	1.371	Level 3	
17,400.0	7,530.0	17,638.2	7,770.0	174.5	174.6	-133.84	-9,822.4	15.4	346.5	91.3	255.18	1.358	Level 3	
17,411.2	7,530.0	17,649.4	7,770.0	174.7	174.8	-133.83	-9,833.6	15.4	346.6	91.1	255.50	1.356	Level 3, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1I-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	19.9	19.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	19.9	19.9	19.6	0.30	65.429		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	19.9	19.9	19.2	0.65	30.440		
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	19.9	19.9	18.9	1.00	19.834		
400.0	400.0	400.0	400.0	0.7	0.7	90.00	0.0	19.9	19.9	18.5	1.35	14.709		
500.0	500.0	500.0	500.0	0.8	0.8	90.00	0.0	19.9	19.9	18.2	1.70	11.689 CC, ES		
600.0	600.0	600.0	600.0	1.0	1.0	115.28	0.0	19.9	20.2	18.2	2.05	9.870		
700.0	700.0	699.8	699.8	1.2	1.2	119.50	0.7	20.3	21.8	19.4	2.40	9.099		
800.0	799.9	799.6	799.5	1.4	1.4	122.77	2.9	21.7	25.2	22.4	2.76	9.132		
848.7	848.4	848.1	848.0	1.5	1.5	123.92	4.5	22.8	27.4	24.5	2.93	9.342		
900.0	899.7	899.3	899.1	1.6	1.6	124.51	6.6	24.1	30.1	26.9	3.12	9.627		
1,000.0	999.5	998.9	998.6	1.8	1.7	123.44	11.7	27.3	35.7	32.2	3.50	10.205		
1,100.0	1,099.3	1,098.7	1,098.2	2.0	1.9	121.77	17.4	30.9	41.6	37.7	3.88	10.727		
1,200.0	1,199.1	1,198.6	1,197.8	2.2	2.1	120.52	23.1	34.6	47.5	43.3	4.26	11.152		
1,300.0	1,298.9	1,298.4	1,297.4	2.4	2.3	119.55	28.8	38.2	53.5	48.8	4.65	11.503		
1,400.0	1,398.8	1,398.2	1,397.0	2.6	2.5	118.77	34.5	41.8	59.4	54.4	5.04	11.798		
1,500.0	1,498.6	1,498.0	1,496.5	2.8	2.7	118.13	40.2	45.5	65.4	60.0	5.43	12.048		
1,600.0	1,598.4	1,597.8	1,596.1	3.0	2.9	117.60	45.9	49.1	71.4	65.6	5.82	12.263		
1,700.0	1,698.2	1,697.7	1,695.7	3.2	3.1	117.16	51.6	52.7	77.4	71.2	6.21	12.450		
1,800.0	1,798.0	1,797.5	1,795.3	3.4	3.4	116.77	57.3	56.4	83.4	76.8	6.61	12.613		
1,900.0	1,897.8	1,897.3	1,894.9	3.6	3.6	116.44	63.0	60.0	89.4	82.3	7.00	12.757		
2,000.0	1,997.7	1,997.1	1,994.5	3.8	3.8	116.15	68.7	63.6	95.3	87.9	7.40	12.885		
2,100.0	2,097.5	2,096.9	2,094.1	4.0	4.0	115.90	74.4	67.3	101.3	93.5	7.80	13.000		
2,200.0	2,197.3	2,196.8	2,193.7	4.2	4.2	115.67	80.2	70.9	107.3	99.1	8.19	13.103		
2,300.0	2,297.1	2,296.6	2,293.3	4.4	4.4	115.47	85.9	74.5	113.3	104.8	8.59	13.196		
2,400.0	2,396.9	2,396.4	2,392.9	4.6	4.6	115.28	91.6	78.1	119.3	110.4	8.99	13.281		
2,500.0	2,496.7	2,496.2	2,492.4	4.8	4.8	115.12	97.3	81.8	125.3	116.0	9.38	13.358		
2,600.0	2,596.5	2,596.0	2,592.0	5.0	5.0	114.97	103.0	85.4	131.3	121.6	9.78	13.429		
2,700.0	2,696.4	2,695.8	2,691.6	5.2	5.2	114.83	108.7	89.0	137.4	127.2	10.18	13.494		
2,800.0	2,796.2	2,795.7	2,791.2	5.4	5.4	114.70	114.4	92.7	143.4	132.8	10.58	13.553		
2,900.0	2,896.0	2,895.5	2,890.8	5.6	5.6	114.59	120.1	96.3	149.4	138.4	10.98	13.609		
3,000.0	2,995.8	2,995.3	2,990.4	5.8	5.8	114.48	125.8	99.9	155.4	144.0	11.37	13.660		
3,100.0	3,095.6	3,095.1	3,090.0	6.0	6.1	114.38	131.5	103.6	161.4	149.6	11.77	13.708		
3,200.0	3,195.4	3,194.9	3,189.6	6.2	6.3	114.29	137.2	107.2	167.4	155.2	12.17	13.753		
3,300.0	3,295.2	3,294.8	3,289.2	6.4	6.5	114.21	142.9	110.8	173.4	160.8	12.57	13.794		
3,400.0	3,395.1	3,394.6	3,388.8	6.6	6.7	114.13	148.6	114.4	179.4	166.4	12.97	13.833		
3,500.0	3,494.9	3,494.4	3,488.3	6.8	6.9	114.05	154.3	118.1	185.4	172.0	13.37	13.870		
3,600.0	3,594.7	3,594.2	3,587.9	7.0	7.1	113.98	160.0	121.7	191.4	177.6	13.77	13.904		
3,700.0	3,694.5	3,694.0	3,687.5	7.2	7.3	113.92	165.7	125.3	197.4	183.3	14.17	13.937		
3,800.0	3,794.3	3,793.9	3,787.1	7.4	7.5	113.86	171.4	129.0	203.4	188.9	14.56	13.967		
3,900.0	3,894.1	3,893.7	3,886.7	7.6	7.7	113.80	177.1	132.6	209.4	194.5	14.96	13.996		
4,000.0	3,994.0	3,993.5	3,986.3	7.8	7.9	113.74	182.8	136.2	215.4	200.1	15.36	14.024		
4,100.0	4,093.8	4,093.3	4,085.9	8.0	8.1	113.69	188.5	139.9	221.5	205.7	15.76	14.050		
4,200.0	4,193.6	4,193.1	4,185.5	8.2	8.4	113.64	194.2	143.5	227.5	211.3	16.16	14.074		
4,300.0	4,293.4	4,293.0	4,285.1	8.4	8.6	113.60	199.9	147.1	233.5	216.9	16.56	14.098		
4,400.0	4,393.2	4,392.8	4,384.7	8.6	8.8	113.55	205.6	150.7	239.5	222.5	16.96	14.120		
4,500.0	4,493.0	4,492.6	4,484.2	8.8	9.0	113.51	211.3	154.4	245.5	228.1	17.36	14.141		
4,600.0	4,592.8	4,592.4	4,583.8	9.0	9.2	113.47	217.1	158.0	251.5	233.7	17.76	14.162		
4,700.0	4,692.7	4,692.2	4,683.4	9.3	9.4	113.43	222.8	161.6	257.5	239.4	18.16	14.181		
4,800.0	4,792.5	4,792.0	4,783.0	9.5	9.6	113.40	228.5	165.3	263.5	245.0	18.56	14.200		
4,900.0	4,892.3	4,891.9	4,882.6	9.7	9.8	113.36	234.2	168.9	269.5	250.6	18.96	14.217		
5,000.0	4,992.1	4,991.7	4,982.2	9.9	10.0	113.33	239.9	172.5	275.6	256.2	19.36	14.234		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1I-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,091.9	5,091.5	5,081.8	10.1	10.2	113.30	245.6	176.2	281.6	261.8	19.76	14.251		
5,200.0	5,191.7	5,191.3	5,181.4	10.3	10.5	113.27	251.3	179.8	287.6	267.4	20.16	14.266		
5,300.0	5,291.5	5,291.1	5,281.0	10.5	10.7	113.24	257.0	183.4	293.6	273.0	20.56	14.281		
5,400.0	5,391.4	5,391.0	5,380.6	10.7	10.9	113.21	262.7	187.1	299.6	278.6	20.96	14.296		
5,500.0	5,491.2	5,490.8	5,480.1	10.9	11.1	113.18	268.4	190.7	305.6	284.2	21.36	14.310		
5,600.0	5,591.0	5,590.6	5,579.7	11.1	11.3	113.16	274.1	194.3	311.6	289.9	21.76	14.323		
5,700.0	5,690.8	5,690.4	5,679.3	11.3	11.5	113.13	279.8	197.9	317.6	295.5	22.16	14.336		
5,800.0	5,790.6	5,790.2	5,778.9	11.5	11.7	113.11	285.5	201.6	323.6	301.1	22.56	14.348		
5,900.0	5,890.4	5,890.1	5,878.5	11.7	11.9	113.08	291.2	205.2	329.6	306.7	22.96	14.360		
6,000.0	5,990.3	5,989.9	5,978.1	11.9	12.1	113.06	296.9	208.8	335.7	312.3	23.36	14.372		
6,100.0	6,090.1	6,089.7	6,077.7	12.1	12.3	113.04	302.6	212.5	341.7	317.9	23.76	14.383		
6,200.0	6,189.9	6,189.5	6,177.3	12.3	12.6	113.02	308.3	216.1	347.7	323.5	24.16	14.393		
6,300.0	6,289.7	6,289.3	6,276.9	12.5	12.8	113.00	314.0	219.7	353.7	329.1	24.56	14.404		
6,400.0	6,389.5	6,389.2	6,376.5	12.7	13.0	112.98	319.7	223.4	359.7	334.8	24.96	14.414		
6,500.0	6,489.3	6,489.0	6,476.0	12.9	13.2	112.96	325.4	227.0	365.7	340.4	25.36	14.424		
6,600.0	6,589.1	6,588.8	6,575.6	13.1	13.4	112.94	331.1	230.6	371.7	346.0	25.76	14.433		
6,700.0	6,689.0	6,688.6	6,675.2	13.3	13.6	112.92	336.8	234.2	377.7	351.6	26.16	14.442		
6,785.3	6,774.1	6,773.7	6,760.1	13.5	13.8	112.91	341.7	237.3	382.9	356.4	26.50	14.450		
6,800.0	6,788.8	6,788.4	6,774.8	13.5	13.8	123.99	342.5	237.9	383.8	357.2	26.55	14.452		
6,850.0	6,838.8	6,838.3	6,824.7	13.6	13.9	-125.41	343.6	239.7	386.8	360.1	26.69	14.492		
6,900.0	6,888.6	6,888.3	6,874.6	13.6	13.9	-103.38	341.1	241.5	389.8	363.1	26.77	14.560		
6,950.0	6,938.1	6,938.4	6,924.2	13.7	14.0	-98.15	335.1	243.3	392.9	366.1	26.81	14.656		
7,000.0	6,987.0	6,988.5	6,973.4	13.7	14.0	-95.82	325.7	245.1	395.9	369.1	26.79	14.776		
7,050.0	7,035.0	7,038.7	7,021.9	13.6	14.0	-94.48	312.8	246.9	399.0	372.2	26.74	14.918		
7,100.0	7,082.0	7,089.0	7,069.4	13.6	13.9	-93.60	296.6	248.6	401.9	375.3	26.66	15.077		
7,150.0	7,127.7	7,139.3	7,115.8	13.5	13.9	-92.96	277.0	250.3	404.9	378.3	26.55	15.248		
7,200.0	7,171.8	7,189.8	7,160.7	13.5	13.8	-92.47	254.2	251.9	407.7	381.3	26.43	15.425		
7,250.0	7,214.2	7,240.3	7,203.9	13.4	13.8	-92.07	228.2	253.5	410.5	384.2	26.31	15.602		
7,300.0	7,254.6	7,290.8	7,245.3	13.4	13.7	-91.75	199.2	255.0	413.2	387.0	26.20	15.770		
7,350.0	7,292.9	7,341.4	7,284.6	13.3	13.7	-91.48	167.3	256.5	415.7	389.6	26.11	15.919		
7,400.0	7,328.9	7,392.1	7,321.6	13.3	13.7	-91.24	132.7	257.8	418.2	392.1	26.07	16.041		
7,450.0	7,362.3	7,442.9	7,356.1	13.3	13.7	-91.03	95.4	259.1	420.5	394.4	26.08	16.125		
7,500.0	7,393.1	7,493.7	7,387.8	13.4	13.7	-90.85	55.8	260.2	422.6	396.5	26.15	16.163		
7,550.0	7,421.1	7,544.6	7,416.8	13.5	13.8	-90.69	14.0	261.3	424.6	398.3	26.30	16.147		
7,600.0	7,446.1	7,595.5	7,442.7	13.6	13.9	-90.55	-29.8	262.2	426.5	399.9	26.54	16.071		
7,650.0	7,468.0	7,646.5	7,465.5	13.8	14.1	-90.43	-75.4	263.1	428.1	401.3	26.87	15.932		
7,700.0	7,486.7	7,697.5	7,485.0	14.0	14.3	-90.32	-122.5	263.8	429.6	402.3	27.31	15.733		
7,750.0	7,502.2	7,748.6	7,501.1	14.2	14.6	-90.23	-171.0	264.3	430.9	403.0	27.84	15.475		
7,800.0	7,514.3	7,799.7	7,513.7	14.6	14.9	-90.15	-220.4	264.8	432.0	403.5	28.48	15.166		
7,850.0	7,523.0	7,850.8	7,522.7	14.9	15.2	-90.09	-270.7	265.1	432.8	403.6	29.22	14.813		
7,900.0	7,528.2	7,901.9	7,528.2	15.3	15.6	-90.04	-321.5	265.3	433.5	403.5	30.05	14.428		
7,950.2	7,530.0	7,953.3	7,530.0	15.8	16.1	-90.00	-372.9	265.4	434.0	403.0	30.96	14.017		
8,000.0	7,530.0	8,003.0	7,530.0	16.2	16.5	-90.00	-422.6	265.4	434.3	402.4	31.93	13.604		
8,100.0	7,530.0	8,103.0	7,530.0	17.3	17.6	-90.00	-522.6	265.4	435.0	401.0	34.05	12.775		
8,200.0	7,530.0	8,203.0	7,530.0	18.4	18.7	-90.00	-622.6	265.4	435.7	399.3	36.39	11.972		
8,300.0	7,530.0	8,303.0	7,530.0	19.7	19.9	-90.00	-722.6	265.4	436.4	397.5	38.91	11.216		
8,400.0	7,530.0	8,403.0	7,530.0	21.0	21.2	-90.00	-822.6	265.4	437.1	395.5	41.57	10.515		
8,500.0	7,530.0	8,503.0	7,530.0	22.4	22.6	-90.00	-922.6	265.4	437.8	393.5	44.35	9.872		
8,600.0	7,530.0	8,603.0	7,530.0	23.8	24.0	-90.00	-1,022.6	265.4	438.5	391.3	47.23	9.285		
8,700.0	7,530.0	8,703.0	7,530.0	25.3	25.5	-90.00	-1,122.6	265.4	439.2	389.0	50.18	8.752		
8,800.0	7,530.0	8,803.0	7,530.0	26.8	27.0	-90.00	-1,222.6	265.4	439.9	386.7	53.21	8.268		
8,900.0	7,530.0	8,903.0	7,530.0	28.3	28.5	-90.00	-1,322.6	265.4	440.6	384.3	56.29	7.828		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1I-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	9,003.0	7,530.0	29.9	30.0	-90.00	-1,422.6	265.4	441.3	381.9	59.41	7.428		
9,100.0	7,530.0	9,103.0	7,530.0	31.4	31.6	-90.00	-1,522.6	265.4	442.0	379.4	62.58	7.063		
9,200.0	7,530.0	9,203.0	7,530.0	33.0	33.2	-90.00	-1,622.6	265.4	442.7	376.9	65.78	6.730		
9,300.0	7,530.0	9,303.0	7,530.0	34.7	34.8	-90.00	-1,722.6	265.4	443.4	374.4	69.02	6.425		
9,400.0	7,530.0	9,403.0	7,530.0	36.3	36.4	-90.00	-1,822.6	265.4	444.1	371.8	72.27	6.145		
9,500.0	7,530.0	9,503.0	7,530.0	37.9	38.0	-90.00	-1,922.6	265.4	444.8	369.2	75.55	5.887		
9,600.0	7,530.0	9,603.0	7,530.0	39.6	39.7	-90.00	-2,022.6	265.4	445.5	366.6	78.85	5.650		
9,700.0	7,530.0	9,703.0	7,530.0	41.2	41.3	-90.00	-2,122.6	265.4	446.2	364.0	82.17	5.430		
9,800.0	7,530.0	9,803.0	7,530.0	42.9	43.0	-90.00	-2,222.6	265.4	446.9	361.4	85.50	5.227		
9,900.0	7,530.0	9,903.0	7,530.0	44.5	44.6	-90.00	-2,322.6	265.4	447.6	358.7	88.85	5.038		
10,000.0	7,530.0	10,003.0	7,530.0	46.2	46.3	-90.00	-2,422.6	265.4	448.3	356.1	92.21	4.862		
10,100.0	7,530.0	10,103.0	7,530.0	47.9	48.0	-90.00	-2,522.6	265.4	449.0	353.4	95.57	4.698		
10,200.0	7,530.0	10,202.9	7,530.0	49.6	49.7	-90.00	-2,622.6	265.4	449.7	350.7	98.95	4.544		
10,300.0	7,530.0	10,302.9	7,530.0	51.3	51.4	-90.00	-2,722.6	265.4	450.4	348.0	102.34	4.401		
10,400.0	7,530.0	10,402.9	7,530.0	53.0	53.0	-90.00	-2,822.6	265.4	451.1	345.3	105.74	4.266		
10,500.0	7,530.0	10,502.9	7,530.0	54.7	54.7	-90.00	-2,922.6	265.4	451.8	342.6	109.14	4.139		
10,600.0	7,530.0	10,602.9	7,530.0	56.4	56.4	-90.00	-3,022.6	265.4	452.5	339.9	112.55	4.020		
10,700.0	7,530.0	10,702.9	7,530.0	58.1	58.1	-90.00	-3,122.6	265.4	453.2	337.2	115.96	3.908		
10,800.0	7,530.0	10,802.9	7,530.0	59.8	59.8	-90.00	-3,222.6	265.4	453.9	334.5	119.38	3.802		
10,900.0	7,530.0	10,902.9	7,530.0	61.5	61.6	-90.00	-3,322.6	265.4	454.6	331.8	122.81	3.701		
11,000.0	7,530.0	11,002.9	7,530.0	63.2	63.3	-90.00	-3,422.6	265.4	455.3	329.0	126.23	3.606		
11,100.0	7,530.0	11,102.9	7,530.0	64.9	65.0	-90.00	-3,522.5	265.4	456.0	326.3	129.67	3.516		
11,200.0	7,530.0	11,202.9	7,530.0	66.6	66.7	-90.00	-3,622.5	265.4	456.7	323.6	133.11	3.431		
11,300.0	7,530.0	11,302.9	7,530.0	68.4	68.4	-90.00	-3,722.5	265.4	457.4	320.8	136.55	3.349		
11,400.0	7,530.0	11,402.9	7,530.0	70.1	70.1	-90.00	-3,822.5	265.4	458.1	318.1	139.99	3.272		
11,500.0	7,530.0	11,502.9	7,530.0	71.8	71.9	-90.00	-3,922.5	265.4	458.8	315.3	143.44	3.198		
11,600.0	7,530.0	11,602.9	7,530.0	73.5	73.6	-90.00	-4,022.5	265.4	459.5	312.6	146.89	3.128		
11,700.0	7,530.0	11,702.9	7,530.0	75.3	75.3	-90.00	-4,122.5	265.4	460.1	309.8	150.34	3.061		
11,800.0	7,530.0	11,802.9	7,530.0	77.0	77.0	-90.00	-4,222.5	265.4	460.8	307.0	153.80	2.996		
11,900.0	7,530.0	11,902.9	7,530.0	78.7	78.7	-90.00	-4,322.5	265.4	461.5	304.3	157.26	2.935		
12,000.0	7,530.0	12,002.9	7,530.0	80.4	80.5	-90.00	-4,422.5	265.4	462.2	301.5	160.72	2.876		
12,100.0	7,530.0	12,102.9	7,530.0	82.2	82.2	-90.00	-4,522.5	265.4	462.9	298.8	164.18	2.820		
12,200.0	7,530.0	12,202.9	7,530.0	83.9	83.9	-90.00	-4,622.5	265.4	463.6	296.0	167.64	2.766		
12,300.0	7,530.0	12,302.9	7,530.0	85.6	85.7	-90.00	-4,722.5	265.4	464.3	293.2	171.11	2.714		
12,400.0	7,530.0	12,402.9	7,530.0	87.4	87.4	-90.00	-4,822.5	265.4	465.0	290.5	174.58	2.664		
12,500.0	7,530.0	12,502.9	7,530.0	89.1	89.1	-90.00	-4,922.5	265.4	465.7	287.7	178.04	2.616		
12,600.0	7,530.0	12,602.9	7,530.0	90.8	90.9	-90.00	-5,022.5	265.4	466.4	284.9	181.52	2.570		
12,700.0	7,530.0	12,702.9	7,530.0	92.6	92.6	-90.00	-5,122.5	265.4	467.1	282.1	184.99	2.525		
12,800.0	7,530.0	12,802.9	7,530.0	94.3	94.3	-90.00	-5,222.5	265.4	467.8	279.4	188.46	2.482		
12,900.0	7,530.0	12,902.9	7,530.0	96.0	96.1	-90.00	-5,322.5	265.4	468.5	276.6	191.94	2.441		
13,000.0	7,530.0	13,002.9	7,530.0	97.8	97.8	-90.00	-5,422.5	265.4	469.2	273.8	195.41	2.401		
13,100.0	7,530.0	13,102.9	7,530.0	99.5	99.5	-90.00	-5,522.5	265.4	469.9	271.0	198.89	2.363		
13,200.0	7,530.0	13,202.9	7,530.0	101.3	101.3	-90.00	-5,622.5	265.4	470.6	268.3	202.37	2.326		
13,300.0	7,530.0	13,302.9	7,530.0	103.0	103.0	-90.00	-5,722.5	265.4	471.3	265.5	205.85	2.290		
13,400.0	7,530.0	13,402.9	7,530.0	104.7	104.8	-90.00	-5,822.5	265.4	472.0	262.7	209.33	2.255		
13,500.0	7,530.0	13,502.9	7,530.0	106.5	106.5	-90.00	-5,922.5	265.4	472.7	259.9	212.81	2.221		
13,600.0	7,530.0	13,602.9	7,530.0	108.2	108.2	-90.00	-6,022.5	265.4	473.4	257.1	216.29	2.189		
13,700.0	7,530.0	13,702.9	7,530.0	110.0	110.0	-90.00	-6,122.5	265.4	474.1	254.3	219.77	2.157		
13,800.0	7,530.0	13,802.9	7,530.0	111.7	111.7	-90.00	-6,222.5	265.4	474.8	251.6	223.25	2.127		
13,900.0	7,530.0	13,902.9	7,530.0	113.4	113.5	-90.00	-6,322.5	265.4	475.5	248.8	226.74	2.097		
14,000.0	7,530.0	14,002.9	7,530.0	115.2	115.2	-90.00	-6,422.5	265.4	476.2	246.0	230.22	2.068		
14,100.0	7,530.0	14,102.9	7,530.0	116.9	116.9	-90.00	-6,522.5	265.4	476.9	243.2	233.71	2.041		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1I-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
14,200.0	7,530.0	14,202.9	7,530.0	118.7	118.7	-90.00	-6,622.5	265.4	477.6	240.4	237.19	2.014		
14,300.0	7,530.0	14,302.8	7,530.0	120.4	120.4	-90.00	-6,722.5	265.4	478.3	237.6	240.68	1.987		
14,400.0	7,530.0	14,402.8	7,530.0	122.1	122.2	-90.00	-6,822.5	265.4	479.0	234.8	244.17	1.962		
14,500.0	7,530.0	14,502.8	7,530.0	123.9	123.9	-90.00	-6,922.5	265.4	479.7	232.0	247.66	1.937		
14,600.0	7,530.0	14,602.8	7,530.0	125.6	125.6	-90.00	-7,022.5	265.4	480.4	229.3	251.15	1.913		
14,700.0	7,530.0	14,702.8	7,530.0	127.4	127.4	-90.00	-7,122.5	265.4	481.1	226.5	254.63	1.889		
14,800.0	7,530.0	14,802.8	7,530.0	129.1	129.1	-90.00	-7,222.5	265.4	481.8	223.7	258.12	1.867		
14,900.0	7,530.0	14,902.8	7,530.0	130.9	130.9	-90.00	-7,322.5	265.4	482.5	220.9	261.61	1.844		
15,000.0	7,530.0	15,002.8	7,530.0	132.6	132.6	-90.00	-7,422.5	265.4	483.2	218.1	265.11	1.823		
15,100.0	7,530.0	15,102.8	7,530.0	134.4	134.4	-90.00	-7,522.5	265.4	483.9	215.3	268.60	1.802		
15,200.0	7,530.0	15,202.8	7,530.0	136.1	136.1	-90.00	-7,622.4	265.4	484.6	212.5	272.09	1.781		
15,300.0	7,530.0	15,302.8	7,530.0	137.9	137.9	-90.00	-7,722.4	265.4	485.3	209.7	275.58	1.761		
15,400.0	7,530.0	15,402.8	7,530.0	139.6	139.6	-90.00	-7,822.4	265.4	486.0	206.9	279.07	1.741		
15,500.0	7,530.0	15,502.8	7,530.0	141.3	141.4	-90.00	-7,922.4	265.4	486.7	204.1	282.56	1.722		
15,600.0	7,530.0	15,602.8	7,530.0	143.1	143.1	-90.00	-8,022.4	265.4	487.4	201.3	286.06	1.704		
15,700.0	7,530.0	15,702.8	7,530.0	144.8	144.8	-90.00	-8,122.4	265.4	488.1	198.5	289.55	1.686		
15,800.0	7,530.0	15,802.8	7,530.0	146.6	146.6	-90.00	-8,222.4	265.4	488.8	195.7	293.05	1.668		
15,900.0	7,530.0	15,902.8	7,530.0	148.3	148.3	-90.00	-8,322.4	265.4	489.5	192.9	296.54	1.651		
16,000.0	7,530.0	16,002.8	7,530.0	150.1	150.1	-90.00	-8,422.4	265.4	490.2	190.1	300.03	1.634		
16,100.0	7,530.0	16,102.8	7,530.0	151.8	151.8	-90.00	-8,522.4	265.4	490.9	187.3	303.53	1.617		
16,200.0	7,530.0	16,202.8	7,530.0	153.6	153.6	-90.00	-8,622.4	265.4	491.6	184.5	307.02	1.601		
16,300.0	7,530.0	16,302.8	7,530.0	155.3	155.3	-90.00	-8,722.4	265.4	492.3	181.7	310.52	1.585		
16,400.0	7,530.0	16,402.8	7,530.0	157.1	157.1	-90.00	-8,822.4	265.4	493.0	178.9	314.01	1.570		
16,500.0	7,530.0	16,502.8	7,530.0	158.8	158.8	-90.00	-8,922.4	265.4	493.7	176.2	317.51	1.555		
16,600.0	7,530.0	16,602.8	7,530.0	160.6	160.6	-90.00	-9,022.4	265.4	494.4	173.4	321.01	1.540		
16,700.0	7,530.0	16,702.8	7,530.0	162.3	162.3	-90.00	-9,122.4	265.4	495.1	170.6	324.50	1.526		
16,800.0	7,530.0	16,802.8	7,530.0	164.1	164.1	-90.00	-9,222.4	265.4	495.8	167.8	328.00	1.511		
16,900.0	7,530.0	16,902.8	7,530.0	165.8	165.8	-90.00	-9,322.4	265.4	496.5	165.0	331.50	1.498 Level 3		
17,000.0	7,530.0	17,002.8	7,530.0	167.6	167.6	-90.00	-9,422.4	265.4	497.2	162.2	334.99	1.484 Level 3		
17,100.0	7,530.0	17,102.8	7,530.0	169.3	169.3	-90.00	-9,522.4	265.4	497.9	159.4	338.49	1.471 Level 3		
17,200.0	7,530.0	17,202.8	7,530.0	171.1	171.1	-90.00	-9,622.4	265.4	498.6	156.6	341.99	1.458 Level 3		
17,300.0	7,530.0	17,302.8	7,530.0	172.8	172.8	-90.00	-9,722.4	265.4	499.2	153.8	345.49	1.445 Level 3		
17,400.0	7,530.0	17,402.8	7,530.0	174.5	174.5	-90.00	-9,822.4	265.4	499.9	151.0	348.99	1.433 Level 3		
17,411.2	7,530.0	17,414.0	7,530.0	174.7	174.7	-90.00	-9,833.6	265.4	500.0	150.6	349.38	1.431 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 811-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-149.11	-6,136.7	-3,671.3	7,151.0					
100.0	100.0	109.7	109.7	0.2	0.2	-149.11	-6,136.6	-3,671.3	7,151.0	7,150.6	0.34	N/A		
200.0	200.0	224.0	224.0	0.3	0.4	-149.11	-6,136.1	-3,671.5	7,150.7	7,149.9	0.72	9,943.710		
300.0	300.0	338.2	338.2	0.5	0.6	-149.10	-6,135.2	-3,671.8	7,150.2	7,149.1	1.09	6,535.783		
400.0	400.0	452.5	452.5	0.7	0.8	-149.09	-6,134.0	-3,672.3	7,149.5	7,148.0	1.47	4,867.294		
500.0	500.0	566.7	566.7	0.8	1.0	-149.08	-6,132.5	-3,672.8	7,148.6	7,146.8	1.84	3,877.212		
600.0	600.0	681.0	680.9	1.0	1.2	-126.07	-6,130.6	-3,673.5	7,148.0	7,145.8	2.21	3,235.126		
619.4	619.4	703.2	703.1	1.1	1.2	-126.07	-6,130.2	-3,673.7	7,148.0	7,145.7	2.28	3,132.042		
700.0	700.0	795.2	795.2	1.2	1.4	-126.07	-6,128.4	-3,674.3	7,148.3	7,145.7	2.58	2,765.857		
800.0	799.9	973.6	973.4	1.4	1.7	-126.06	-6,122.2	-3,678.6	7,149.1	7,146.0	3.10	2,306.239		
848.7	848.4	1,022.9	1,022.5	1.5	1.8	-126.05	-6,119.3	-3,680.9	7,149.6	7,146.3	3.29	2,174.051		
900.0	899.7	1,095.6	1,094.9	1.6	2.0	-126.03	-6,114.5	-3,685.2	7,150.1	7,146.5	3.54	2,018.887		
1,000.0	999.5	1,326.7	1,323.9	1.8	2.6	-125.89	-6,091.8	-3,705.5	7,149.4	7,145.1	4.31	1,659.283		
1,100.0	1,099.3	1,513.0	1,507.5	2.0	3.2	-125.72	-6,068.0	-3,726.5	7,147.8	7,142.8	5.05	1,414.954		
1,200.0	1,199.1	1,607.0	1,599.8	2.2	3.5	-125.62	-6,054.5	-3,738.5	7,145.6	7,140.1	5.55	1,286.785		
1,300.0	1,298.9	1,639.3	1,631.5	2.4	3.6	-125.58	-6,050.0	-3,742.7	7,144.0	7,138.2	5.84	1,222.338		
1,400.0	1,398.8	1,880.1	1,868.2	2.6	4.4	-125.34	-6,016.6	-3,771.3	7,141.9	7,135.1	6.83	1,044.910		
1,500.0	1,498.6	1,934.7	1,921.8	2.8	4.6	-125.28	-6,008.4	-3,778.1	7,139.2	7,131.9	7.22	989.365		
1,600.0	1,598.4	2,032.5	2,017.8	3.0	5.0	-125.17	-5,994.2	-3,790.2	7,136.8	7,129.0	7.75	921.467		
1,700.0	1,698.2	2,159.9	2,142.9	3.2	5.4	-125.04	-5,975.3	-3,805.4	7,133.8	7,125.4	8.38	851.057		
1,800.0	1,798.0	2,212.0	2,194.0	3.4	5.6	-124.99	-5,967.6	-3,811.9	7,131.3	7,122.5	8.76	813.998		
1,900.0	1,897.8	2,275.0	2,255.9	3.6	5.9	-124.92	-5,958.8	-3,819.8	7,129.5	7,120.3	9.17	777.430		
2,000.0	1,997.7	2,496.0	2,473.2	3.8	6.7	-124.70	-5,927.4	-3,845.0	7,126.9	7,116.7	10.12	703.943		
2,100.0	2,097.5	2,560.0	2,536.1	4.0	6.9	-124.64	-5,918.1	-3,852.1	7,123.8	7,113.3	10.53	676.378		
2,200.0	2,197.3	2,642.7	2,617.4	4.2	7.2	-124.56	-5,906.4	-3,861.6	7,121.4	7,110.4	11.02	646.283		
2,300.0	2,297.1	2,752.7	2,725.3	4.4	7.6	-124.44	-5,889.9	-3,874.9	7,118.6	7,107.0	11.61	613.235		
2,400.0	2,396.9	2,821.5	2,792.9	4.6	7.8	-124.37	-5,880.1	-3,882.8	7,116.2	7,104.2	12.04	591.038		
2,500.0	2,496.7	2,942.9	2,912.3	4.8	8.3	-124.25	-5,862.8	-3,896.9	7,113.8	7,101.1	12.66	561.824		
2,600.0	2,596.5	3,037.0	3,004.7	5.0	8.6	-124.15	-5,849.2	-3,907.9	7,111.4	7,098.2	13.19	539.075		
2,700.0	2,696.4	3,126.9	3,093.1	5.2	8.9	-124.06	-5,836.4	-3,918.5	7,109.1	7,095.4	13.70	518.816		
2,800.0	2,796.2	3,238.0	3,202.3	5.4	9.4	-123.95	-5,820.4	-3,931.4	7,106.7	7,092.5	14.29	497.251		
2,900.0	2,896.0	3,318.0	3,280.9	5.6	9.6	-123.86	-5,808.9	-3,940.8	7,104.5	7,089.7	14.77	481.082		
3,000.0	2,995.8	3,386.0	3,347.8	5.8	9.9	-123.80	-5,799.7	-3,948.5	7,102.6	7,087.4	15.20	467.429		
3,100.0	3,095.6	3,530.6	3,489.9	6.0	10.4	-123.65	-5,779.3	-3,965.5	7,100.5	7,084.6	15.91	446.324		
3,200.0	3,195.4	3,626.9	3,584.6	6.2	10.8	-123.56	-5,765.6	-3,976.6	7,098.3	7,081.9	16.44	431.671		
3,300.0	3,295.2	3,733.1	3,689.0	6.4	11.1	-123.45	-5,750.6	-3,988.7	7,096.1	7,079.1	17.01	417.153		
3,400.0	3,395.1	3,825.4	3,779.9	6.6	11.5	-123.36	-5,737.5	-3,999.1	7,093.9	7,076.4	17.54	404.503		
3,500.0	3,494.9	3,993.3	3,944.8	6.8	12.1	-123.19	-5,712.7	-4,018.5	7,091.3	7,073.0	18.33	386.817		
3,600.0	3,594.7	4,079.7	4,029.7	7.0	12.4	-123.10	-5,700.1	-4,027.8	7,088.3	7,069.5	18.83	376.475		
3,700.0	3,694.5	4,149.0	4,097.9	7.2	12.6	-123.04	-5,690.0	-4,035.1	7,085.5	7,066.3	19.26	367.817		
3,800.0	3,794.3	4,214.1	4,161.9	7.4	12.9	-122.97	-5,680.7	-4,042.3	7,083.2	7,063.5	19.70	359.634		
3,900.0	3,894.1	4,272.1	4,218.9	7.6	13.1	-122.91	-5,672.6	-4,049.3	7,081.6	7,061.5	20.10	352.375		
4,000.0	3,994.0	4,342.9	4,288.6	7.8	13.3	-122.84	-5,663.3	-4,057.6	7,080.5	7,060.0	20.54	344.773		
4,100.0	4,093.8	4,468.9	4,412.7	8.0	13.8	-122.73	-5,646.8	-4,071.5	7,079.1	7,057.9	21.16	334.572		
4,200.0	4,193.6	4,529.0	4,472.1	8.2	14.0	-122.67	-5,639.3	-4,078.0	7,078.1	7,056.6	21.55	328.426		
4,300.0	4,293.4	4,657.9	4,599.1	8.4	14.4	-122.56	-5,622.9	-4,092.2	7,077.0	7,054.8	22.19	318.892		
4,400.0	4,393.2	4,768.0	4,707.7	8.6	14.8	-122.46	-5,609.1	-4,103.9	7,076.0	7,053.2	22.75	311.040		
4,500.0	4,493.0	4,863.7	4,802.2	8.8	15.1	-122.38	-5,597.3	-4,113.4	7,074.7	7,051.4	23.25	304.315		
4,600.0	4,592.8	4,949.4	4,887.0	9.0	15.4	-122.32	-5,587.6	-4,121.1	7,073.7	7,050.0	23.70	298.455		
4,700.0	4,692.7	5,076.9	5,013.2	9.3	15.7	-122.24	-5,572.7	-4,131.7	7,071.9	7,047.7	24.27	291.351		
4,800.0	4,792.5	5,120.9	5,056.8	9.5	15.9	-122.21	-5,568.0	-4,135.2	7,071.0	7,046.4	24.60	287.484		
4,900.0	4,892.3	5,198.4	5,133.6	9.7	16.1	-122.16	-5,560.1	-4,142.1	7,070.8	7,045.8	25.02	282.568		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)				
5,000.0	4,992.1	5,323.0	5,256.9		9.9	16.5	-122.07	-5,546.4	-4,153.3	7,070.1	7,044.5	25.59	276.243	
5,100.0	5,091.9	5,386.0	5,319.3	10.1	16.7	-122.03	-5,539.9	-4,158.9	7,069.8	7,043.9	25.97	272.194		
5,200.0	5,191.7	5,507.5	5,439.8	10.3	17.0	-121.95	-5,527.4	-4,169.3	7,069.5	7,043.0	26.52	266.596		
5,300.0	5,291.5	5,613.3	5,544.7	10.5	17.3	-121.89	-5,517.1	-4,177.7	7,069.3	7,042.3	27.01	261.741		
5,400.0	5,391.4	5,706.0	5,636.7	10.7	17.6	-121.84	-5,507.9	-4,184.8	7,068.8	7,041.4	27.45	257.483		
5,489.1	5,480.3	5,772.7	5,702.9	10.9	17.7	-121.81	-5,501.8	-4,189.5	7,068.6	7,040.8	27.80	254.296		
5,500.0	5,491.2	5,779.8	5,709.9	10.9	17.8	-121.81	-5,501.2	-4,190.0	7,068.6	7,040.8	27.84	253.936		
5,600.0	5,591.0	5,832.7	5,762.5	11.1	17.9	-121.79	-5,496.8	-4,193.5	7,069.0	7,040.8	28.16	251.048		
5,700.0	5,690.8	5,897.0	5,826.6	11.3	18.0	-121.77	-5,492.4	-4,197.6	7,070.1	7,041.6	28.50	248.077		
5,800.0	5,790.6	5,984.0	5,913.3	11.5	18.2	-121.75	-5,487.3	-4,202.2	7,071.6	7,042.7	28.87	244.942		
5,900.0	5,890.4	6,109.7	6,038.8	11.7	18.4	-121.75	-5,481.9	-4,206.0	7,073.0	7,043.8	29.26	241.726		
6,000.0	5,990.3	6,164.2	6,093.3	11.9	18.5	-121.76	-5,480.2	-4,206.5	7,074.3	7,044.8	29.53	239.595		
6,100.0	6,090.1	6,215.0	6,144.1	12.1	18.5	-121.78	-5,479.2	-4,207.0	7,076.4	7,046.6	29.79	237.577		
6,200.0	6,189.9	6,343.2	6,272.3	12.3	18.7	-121.81	-5,477.3	-4,208.3	7,079.1	7,048.9	30.14	234.840		
6,300.0	6,289.7	6,470.0	6,399.1	12.5	18.8	-121.86	-5,475.7	-4,207.5	7,080.9	7,050.4	30.46	232.436		
6,400.0	6,389.5	6,503.1	6,432.1	12.7	18.9	-121.88	-5,475.5	-4,207.0	7,083.0	7,052.3	30.70	230.747		
6,500.0	6,489.3	6,566.0	6,495.1	12.9	18.9	-121.90	-5,475.7	-4,207.1	7,086.2	7,055.2	30.96	228.880		
6,600.0	6,589.1	6,586.9	6,515.9	13.1	18.9	-121.91	-5,475.8	-4,207.3	7,090.0	7,058.8	31.18	227.395		
6,700.0	6,689.0	6,765.8	6,694.8	13.3	19.1	-121.99	-5,476.0	-4,207.7	7,093.3	7,061.7	31.57	224.708		
6,785.3	6,774.1	6,897.7	6,826.7	13.5	19.3	-122.04	-5,475.4	-4,207.6	7,095.6	7,063.7	31.88	222.573		
6,800.0	6,788.8	6,913.0	6,842.0	13.5	19.3	-111.02	-5,475.2	-4,207.5	7,095.8	7,063.9	31.92	222.274		
6,850.0	6,838.8	6,965.1	6,894.1	13.6	19.4	-0.48	-5,474.8	-4,207.4	7,094.8	7,062.7	32.02	221.589		
6,900.0	6,888.6	7,017.0	6,946.1	13.6	19.4	21.65	-5,474.4	-4,207.2	7,090.8	7,058.8	32.04	221.344		
6,950.0	6,938.1	7,058.2	6,987.2	13.7	19.5	27.11	-5,474.1	-4,207.0	7,084.0	7,052.0	31.97	221.608		
7,000.0	6,987.0	7,096.4	7,025.4	13.7	19.5	29.82	-5,473.9	-4,206.8	7,074.4	7,042.6	31.82	222.296		
7,050.0	7,035.0	7,148.5	7,077.6	13.6	19.6	31.71	-5,473.7	-4,206.6	7,062.2	7,030.5	31.64	223.219		
7,100.0	7,082.0	7,215.0	7,144.0	13.6	19.7	33.36	-5,473.3	-4,206.3	7,047.1	7,015.7	31.42	224.301		
7,150.0	7,127.7	7,259.0	7,188.0	13.5	19.7	34.91	-5,472.9	-4,206.1	7,029.3	6,998.2	31.13	225.822		
7,200.0	7,171.8	7,295.8	7,224.8	13.5	19.7	36.50	-5,472.6	-4,205.9	7,009.1	6,978.3	30.80	227.571		
7,250.0	7,214.2	7,331.2	7,260.2	13.4	19.8	38.20	-5,472.3	-4,205.8	6,986.5	6,956.0	30.46	229.384		
7,300.0	7,254.6	7,342.0	7,271.0	13.4	19.8	39.98	-5,472.3	-4,205.8	6,961.7	6,931.6	30.09	231.385		
7,350.0	7,292.9	7,395.6	7,324.7	13.3	19.9	42.13	-5,472.0	-4,205.6	6,934.6	6,904.8	29.81	232.648		
7,400.0	7,328.9	7,425.0	7,354.0	13.3	19.9	44.44	-5,471.9	-4,205.6	6,905.6	6,876.1	29.55	233.702		
7,450.0	7,362.3	7,452.4	7,381.4	13.3	19.9	47.02	-5,471.8	-4,205.5	6,874.8	6,845.5	29.37	234.077		
7,500.0	7,393.1	7,477.7	7,406.7	13.4	19.9	49.91	-5,471.7	-4,205.4	6,842.3	6,813.0	29.30	233.558		
7,550.0	7,421.1	7,500.7	7,429.7	13.5	20.0	53.13	-5,471.7	-4,205.4	6,808.3	6,779.0	29.35	231.978		
7,600.0	7,446.1	7,521.3	7,450.3	13.6	20.0	56.71	-5,471.7	-4,205.3	6,773.0	6,743.4	29.54	229.262		
7,650.0	7,468.0	7,539.4	7,468.4	13.8	20.0	60.64	-5,471.7	-4,205.3	6,736.4	6,706.6	29.88	225.467		
7,700.0	7,486.7	7,555.0	7,484.0	14.0	20.0	64.94	-5,471.8	-4,205.2	6,698.9	6,668.6	30.34	220.792		
7,750.0	7,502.2	7,567.8	7,496.8	14.2	20.0	69.55	-5,471.8	-4,205.2	6,660.7	6,629.8	30.90	215.560		
7,800.0	7,514.3	7,578.0	7,507.0	14.6	20.1	74.45	-5,471.8	-4,205.2	6,621.8	6,590.3	31.51	210.155		
7,850.0	7,523.0	7,585.3	7,514.3	14.9	20.1	79.54	-5,471.8	-4,205.1	6,582.5	6,550.4	32.12	204.950		
7,900.0	7,528.2	7,589.8	7,518.8	15.3	20.1	84.72	-5,471.8	-4,205.1	6,543.0	6,510.3	32.68	200.237		
7,950.2	7,530.0	7,591.4	7,520.4	15.8	20.1	89.92	-5,471.9	-4,205.1	6,503.3	6,470.2	33.15	196.169		
8,000.0	7,530.0	7,591.5	7,520.5	16.2	20.1	89.92	-5,471.9	-4,205.1	6,464.2	6,430.6	33.64	192.185		
8,100.0	7,530.0	7,591.7	7,520.8	17.3	20.1	89.92	-5,471.9	-4,205.1	6,385.9	6,351.2	34.70	184.028		
8,200.0	7,530.0	7,592.0	7,521.0	18.4	20.1	89.93	-5,471.9	-4,205.1	6,308.3	6,272.4	35.87	175.848		
8,300.0	7,530.0	7,592.3	7,521.3	19.7	20.1	89.93	-5,471.9	-4,205.1	6,231.3	6,194.2	37.13	167.806		
8,400.0	7,530.0	7,592.5	7,521.5	21.0	20.1	89.94	-5,471.9	-4,205.1	6,155.0	6,116.5	38.47	160.011		
8,500.0	7,530.0	7,592.8	7,521.8	22.4	20.1	89.94	-5,471.9	-4,205.1	6,079.3	6,039.5	39.86	152.530		
8,600.0	7,530.0	7,593.1	7,522.1	23.8	20.1	89.94	-5,471.9	-4,205.1	6,004.4	5,963.1	41.30	145.399		
8,700.0	7,530.0	7,593.3	7,522.3	25.3	20.1	89.95	-5,471.9	-4,205.1	5,930.2	5,887.4	42.78	138.636		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)	
8,800.0	7,530.0	7,593.6	7,522.6	26.8	20.1	89.95	-5,471.9	-4,205.1	5,856.8	5,812.5	44.29	132.243		
8,900.0	7,530.0	7,593.9	7,522.9	28.3	20.1	89.96	-5,471.9	-4,205.1	5,784.2	5,738.3	45.83	126.212		
9,000.0	7,530.0	7,594.1	7,523.1	29.9	20.1	89.96	-5,471.9	-4,205.1	5,712.4	5,665.0	47.39	120.531		
9,100.0	7,530.0	7,594.4	7,523.4	31.4	20.1	89.96	-5,471.9	-4,205.1	5,641.4	5,592.4	48.98	115.182		
9,200.0	7,530.0	7,594.7	7,523.7	33.0	20.1	89.97	-5,471.9	-4,205.1	5,571.4	5,520.8	50.58	110.150		
9,300.0	7,530.0	7,595.0	7,524.0	34.7	20.1	89.97	-5,471.9	-4,205.1	5,502.3	5,450.1	52.20	105.414		
9,400.0	7,530.0	7,595.2	7,524.3	36.3	20.1	89.97	-5,471.9	-4,205.1	5,434.1	5,380.3	53.83	100.956		
9,500.0	7,530.0	7,595.5	7,524.5	37.9	20.1	89.98	-5,471.9	-4,205.1	5,366.9	5,311.5	55.47	96.759		
9,600.0	7,530.0	7,595.8	7,524.8	39.6	20.1	89.98	-5,471.9	-4,205.1	5,300.8	5,243.7	57.12	92.805		
9,700.0	7,530.0	7,596.1	7,525.1	41.2	20.1	89.99	-5,471.9	-4,205.1	5,235.7	5,177.0	58.78	89.079		
9,800.0	7,530.0	7,596.4	7,525.4	42.9	20.1	89.99	-5,471.9	-4,205.1	5,171.8	5,111.4	60.44	85.565		
9,900.0	7,530.0	7,596.7	7,525.7	44.5	20.1	90.00	-5,471.9	-4,205.1	5,109.0	5,046.9	62.12	82.249		
10,000.0	7,530.0	7,596.9	7,526.0	46.2	20.1	90.00	-5,471.9	-4,205.1	5,047.4	4,983.6	63.80	79.118		
10,100.0	7,530.0	7,597.2	7,526.3	47.9	20.1	90.00	-5,471.9	-4,205.1	4,987.1	4,921.6	65.48	76.161		
10,200.0	7,530.0	7,597.5	7,526.6	49.6	20.1	90.01	-5,471.9	-4,205.1	4,928.0	4,860.9	67.17	73.366		
10,300.0	7,530.0	7,597.8	7,526.8	51.3	20.1	90.01	-5,471.9	-4,205.1	4,870.3	4,801.5	68.86	70.723		
10,400.0	7,530.0	7,598.1	7,527.1	53.0	20.1	90.02	-5,471.9	-4,205.1	4,814.0	4,743.5	70.56	68.223		
10,500.0	7,530.0	7,598.4	7,527.4	54.7	20.1	90.02	-5,471.9	-4,205.1	4,759.1	4,686.9	72.26	65.857		
10,600.0	7,530.0	7,598.7	7,527.7	56.4	20.1	90.02	-5,471.9	-4,205.1	4,705.7	4,631.8	73.97	63.617		
10,700.0	7,530.0	7,599.0	7,528.1	58.1	20.1	90.03	-5,471.9	-4,205.1	4,653.9	4,578.2	75.68	61.496		
10,800.0	7,530.0	7,599.3	7,528.4	59.8	20.1	90.03	-5,471.9	-4,205.1	4,603.6	4,526.2	77.39	59.488		
10,900.0	7,530.0	7,599.6	7,528.7	61.5	20.1	90.04	-5,471.9	-4,205.1	4,554.9	4,475.8	79.10	57.584		
11,000.0	7,530.0	7,600.0	7,529.0	63.2	20.1	90.04	-5,471.9	-4,205.1	4,508.0	4,427.2	80.82	55.781		
11,100.0	7,530.0	7,600.3	7,529.3	64.9	20.1	90.05	-5,471.9	-4,205.1	4,462.8	4,380.3	82.53	54.073		
11,200.0	7,530.0	7,600.6	7,529.6	66.6	20.1	90.05	-5,471.9	-4,205.1	4,419.4	4,335.1	84.25	52.455		
11,300.0	7,530.0	7,600.9	7,529.9	68.4	20.1	90.06	-5,471.9	-4,205.1	4,377.8	4,291.9	85.97	50.921		
11,400.0	7,530.0	7,601.2	7,530.2	70.1	20.1	90.06	-5,471.9	-4,205.1	4,338.2	4,250.5	87.70	49.469		
11,500.0	7,530.0	7,601.5	7,530.6	71.8	20.1	90.07	-5,471.9	-4,205.1	4,300.5	4,211.1	89.42	48.094		
11,600.0	7,530.0	7,601.9	7,530.9	73.5	20.1	90.07	-5,471.9	-4,205.1	4,264.9	4,173.7	91.15	46.792		
11,700.0	7,530.0	7,602.2	7,531.2	75.3	20.1	90.07	-5,471.9	-4,205.1	4,231.3	4,138.4	92.87	45.560		
11,800.0	7,530.0	7,602.5	7,531.5	77.0	20.1	90.08	-5,471.9	-4,205.1	4,199.8	4,105.2	94.60	44.395		
11,900.0	7,530.0	7,602.8	7,531.9	78.7	20.1	90.08	-5,471.9	-4,205.1	4,170.5	4,074.1	96.33	43.293		
12,000.0	7,530.0	7,603.2	7,532.2	80.4	20.1	90.09	-5,471.9	-4,205.1	4,143.3	4,045.3	98.06	42.253		
12,100.0	7,530.0	7,603.5	7,532.5	82.2	20.1	90.09	-5,471.9	-4,205.1	4,118.5	4,018.7	99.79	41.271		
12,200.0	7,530.0	7,603.9	7,532.9	83.9	20.1	90.10	-5,471.9	-4,205.1	4,095.9	3,994.4	101.52	40.344		
12,300.0	7,530.0	7,604.2	7,533.2	85.6	20.1	90.10	-5,471.9	-4,205.1	4,075.7	3,972.4	103.26	39.471		
12,400.0	7,530.0	7,604.5	7,533.6	87.4	20.1	90.11	-5,471.9	-4,205.1	4,057.8	3,952.8	104.99	38.648		
12,500.0	7,530.0	7,604.9	7,533.9	89.1	20.1	90.11	-5,471.9	-4,205.1	4,042.3	3,935.6	106.73	37.875		
12,600.0	7,530.0	7,605.2	7,534.3	90.8	20.1	90.12	-5,471.9	-4,205.1	4,029.2	3,920.7	108.46	37.148		
12,700.0	7,530.0	7,605.6	7,534.6	92.6	20.1	90.12	-5,471.9	-4,205.1	4,018.6	3,908.4	110.20	36.467		
12,800.0	7,530.0	7,605.9	7,535.0	94.3	20.1	90.13	-5,471.9	-4,205.1	4,010.4	3,898.5	111.94	35.828		
12,900.0	7,530.0	7,606.3	7,535.3	96.0	20.1	90.13	-5,471.9	-4,205.1	4,004.8	3,891.1	113.67	35.230		
13,000.0	7,530.0	7,606.7	7,535.7	97.8	20.1	90.14	-5,471.9	-4,205.1	4,001.6	3,886.2	115.41	34.672		
13,077.3	7,530.0	7,606.9	7,536.0	99.1	20.1	90.14	-5,471.9	-4,205.1	4,000.8	3,884.1	116.76	34.266 CC		
13,100.0	7,530.0	7,607.0	7,536.0	99.5	20.1	90.14	-5,471.9	-4,205.1	4,000.9	3,883.8	117.15	34.151 ES		
13,200.0	7,530.0	7,607.4	7,536.4	101.3	20.1	90.15	-5,471.9	-4,205.1	4,002.7	3,883.8	118.89	33.667		
13,300.0	7,530.0	7,607.7	7,536.8	103.0	20.1	90.15	-5,471.9	-4,205.1	4,007.0	3,886.4	120.63	33.217		
13,400.0	7,530.0	7,608.1	7,537.1	104.7	20.1	90.16	-5,471.9	-4,205.1	4,013.8	3,891.5	122.37	32.800		
13,500.0	7,530.0	7,608.5	7,537.5	106.5	20.1	90.16	-5,471.9	-4,205.1	4,023.1	3,899.0	124.11	32.415		
13,600.0	7,530.0	7,608.9	7,537.9	108.2	20.1	90.17	-5,471.9	-4,205.1	4,034.8	3,909.0	125.85	32.060		
13,700.0	7,530.0	7,609.2	7,538.3	110.0	20.1	90.18	-5,471.9	-4,205.1	4,049.0	3,921.4	127.60	31.733		
13,800.0	7,530.0	7,609.6	7,538.6	111.7	20.1	90.18	-5,471.9	-4,205.1	4,065.6	3,936.2	129.34	31.434		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)	
13,900.0	7,530.0	7,610.0	7,539.0	113.4	20.1	90.19	-5,471.9	-4,205.1	4,084.5	3,953.5	131.08	31.161		
14,000.0	7,530.0	7,610.4	7,539.4	115.2	20.1	90.19	-5,471.9	-4,205.1	4,105.9	3,973.0	132.82	30.912		
14,100.0	7,530.0	7,610.8	7,539.8	116.9	20.1	90.20	-5,471.9	-4,205.1	4,129.5	3,994.9	134.57	30.687		
14,200.0	7,530.0	7,611.2	7,540.2	118.7	20.1	90.20	-5,471.9	-4,205.1	4,155.4	4,019.1	136.31	30.485		
14,300.0	7,530.0	7,611.6	7,540.6	120.4	20.1	90.21	-5,471.9	-4,205.1	4,183.5	4,045.4	138.05	30.303		
14,400.0	7,530.0	7,612.0	7,541.0	122.1	20.1	90.21	-5,471.9	-4,205.1	4,213.8	4,074.0	139.80	30.142		
14,500.0	7,530.0	7,612.4	7,541.4	123.9	20.1	90.22	-5,471.9	-4,205.1	4,246.3	4,104.7	141.54	30.000		
14,600.0	7,530.0	7,612.8	7,541.8	125.6	20.1	90.23	-5,471.9	-4,205.1	4,280.8	4,137.5	143.29	29.876		
14,700.0	7,530.0	7,613.2	7,542.2	127.4	20.1	90.23	-5,471.9	-4,205.1	4,317.4	4,172.3	145.03	29.768		
14,800.0	7,530.0	7,613.6	7,542.6	129.1	20.1	90.24	-5,471.9	-4,205.1	4,355.9	4,209.2	146.78	29.677		
14,900.0	7,530.0	7,614.0	7,543.0	130.9	20.1	90.24	-5,471.9	-4,205.1	4,396.5	4,247.9	148.52	29.601		
15,000.0	7,530.0	7,614.4	7,543.5	132.6	20.1	90.25	-5,471.9	-4,205.1	4,438.8	4,288.6	150.27	29.539		
15,100.0	7,530.0	7,614.9	7,543.9	134.4	20.1	90.26	-5,471.9	-4,205.1	4,483.1	4,331.0	152.02	29.491		
15,200.0	7,530.0	7,615.3	7,544.3	136.1	20.1	90.26	-5,471.9	-4,205.1	4,529.1	4,375.3	153.76	29.455		
15,300.0	7,530.0	7,615.7	7,544.7	137.9	20.1	90.27	-5,471.9	-4,205.1	4,576.8	4,421.3	155.51	29.431		
15,400.0	7,530.0	7,616.1	7,545.2	139.6	20.1	90.27	-5,471.9	-4,205.1	4,626.2	4,468.9	157.25	29.418		
15,500.0	7,530.0	7,616.6	7,545.6	141.3	20.1	90.28	-5,471.9	-4,205.1	4,677.2	4,518.2	159.00	29.416 SF		
15,600.0	7,530.0	7,617.0	7,546.0	143.1	20.1	90.29	-5,471.9	-4,205.1	4,729.7	4,569.0	160.75	29.423		
15,700.0	7,530.0	7,617.5	7,546.5	144.8	20.1	90.29	-5,471.9	-4,205.1	4,783.8	4,621.3	162.50	29.440		
15,800.0	7,530.0	7,617.9	7,546.9	146.6	20.1	90.30	-5,471.9	-4,205.1	4,839.4	4,675.1	164.24	29.465		
15,900.0	7,530.0	7,618.4	7,547.4	148.3	20.1	90.31	-5,471.9	-4,205.1	4,896.3	4,730.3	165.99	29.498		
16,000.0	7,530.0	7,618.8	7,547.8	150.1	20.1	90.31	-5,471.9	-4,205.1	4,954.7	4,786.9	167.74	29.538		
16,100.0	7,530.0	7,619.3	7,548.3	151.8	20.1	90.32	-5,472.0	-4,205.1	5,014.3	4,844.8	169.49	29.585		
16,200.0	7,530.0	7,619.7	7,548.8	153.6	20.1	90.33	-5,472.0	-4,205.1	5,075.2	4,904.0	171.23	29.639		
16,300.0	7,530.0	7,620.2	7,549.2	155.3	20.1	90.33	-5,472.0	-4,205.1	5,137.3	4,964.3	172.98	29.699		
16,400.0	7,530.0	7,620.7	7,549.7	157.1	20.1	90.34	-5,472.0	-4,205.1	5,200.6	5,025.9	174.73	29.764		
16,500.0	7,530.0	7,621.2	7,550.2	158.8	20.1	90.35	-5,472.0	-4,205.1	5,265.1	5,088.6	176.48	29.834		
16,600.0	7,530.0	7,621.6	7,550.7	160.6	20.1	90.35	-5,472.0	-4,205.0	5,330.6	5,152.4	178.23	29.909		
16,700.0	7,530.0	7,622.1	7,551.1	162.3	20.1	90.36	-5,472.0	-4,205.0	5,397.2	5,217.3	179.98	29.989		
16,800.0	7,530.0	7,622.6	7,551.6	164.1	20.1	90.37	-5,472.0	-4,205.0	5,464.9	5,283.1	181.72	30.072		
16,900.0	7,530.0	7,623.1	7,552.1	165.8	20.1	90.37	-5,472.0	-4,205.0	5,533.5	5,350.0	183.47	30.159		
17,000.0	7,530.0	7,623.6	7,552.6	167.6	20.1	90.38	-5,472.0	-4,205.0	5,603.0	5,417.8	185.22	30.250		
17,100.0	7,530.0	7,624.1	7,553.1	169.3	20.1	90.39	-5,472.0	-4,205.0	5,673.5	5,486.5	186.97	30.344		
17,200.0	7,530.0	7,624.6	7,553.6	171.1	20.1	90.40	-5,472.0	-4,205.0	5,744.8	5,556.1	188.72	30.441		
17,300.0	7,530.0	7,625.1	7,554.1	172.8	20.1	90.40	-5,472.0	-4,205.0	5,817.0	5,626.5	190.47	30.540		
17,400.0	7,530.0	7,625.6	7,554.6	174.5	20.1	90.41	-5,472.0	-4,205.0	5,890.0	5,697.8	192.22	30.642		
17,411.2	7,530.0	7,625.7	7,554.7	174.7	20.1	90.41	-5,472.0	-4,205.0	5,898.2	5,705.8	192.42	30.653		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-149.11	-6,136.7	-3,671.3	7,151.0					
100.0	100.0	96.0	96.0	0.2	0.1	-149.11	-6,136.7	-3,671.3	7,151.0	7,150.8	0.29	N/A		
200.0	200.0	196.0	196.0	0.3	0.3	-149.11	-6,136.7	-3,671.3	7,151.0	7,150.4	0.64	N/A		
300.0	300.0	296.0	296.0	0.5	0.5	-149.11	-6,136.7	-3,671.3	7,151.0	7,150.1	0.99	7,213.336		
400.0	400.0	396.0	396.0	0.7	0.7	-149.11	-6,136.7	-3,671.3	7,151.0	7,149.7	1.34	5,334.888		
500.0	500.0	496.0	496.0	0.8	0.8	-149.11	-6,136.7	-3,671.3	7,151.0	7,149.4	1.69	4,232.650		
600.0	600.0	596.0	596.0	1.0	1.0	-126.10	-6,136.7	-3,671.3	7,151.6	7,149.5	2.04	3,507.765		
700.0	700.0	696.0	696.0	1.2	1.2	-126.11	-6,136.7	-3,671.3	7,153.1	7,150.7	2.39	2,993.522		
800.0	799.9	795.9	795.9	1.4	1.4	-126.11	-6,136.7	-3,671.3	7,155.7	7,152.9	2.74	2,608.103		
848.7	848.4	844.4	844.4	1.5	1.4	-126.12	-6,136.7	-3,671.3	7,157.3	7,154.4	2.92	2,453.349		
900.0	899.7	895.7	895.7	1.6	1.5	-126.14	-6,136.7	-3,671.3	7,159.1	7,156.0	3.10	2,308.159		
1,000.0	999.5	995.5	995.5	1.8	1.7	-126.18	-6,136.7	-3,671.3	7,162.7	7,159.3	3.46	2,068.853		
1,100.0	1,099.3	1,095.3	1,095.3	2.0	1.9	-126.22	-6,136.7	-3,671.3	7,166.3	7,162.5	3.82	1,873.920		
1,200.0	1,199.1	1,195.1	1,195.1	2.2	2.1	-126.26	-6,136.7	-3,671.3	7,169.9	7,165.7	4.19	1,712.241		
1,300.0	1,298.9	1,294.9	1,294.9	2.4	2.3	-126.30	-6,104.2	-3,697.0	7,169.6	7,164.2	5.35	1,340.177		
1,400.0	1,398.8	1,394.8	1,394.8	2.6	2.5	-126.34	-6,092.2	-3,706.6	7,167.7	7,161.9	5.78	1,239.936		
1,500.0	1,498.6	1,494.6	1,494.6	2.8	2.7	-125.99	-6,080.2	-3,716.1	7,165.8	7,159.6	6.22	1,151.604		
1,600.0	1,498.4	1,494.4	1,494.4	3.0	2.9	-125.91	-6,068.2	-3,725.6	7,163.9	7,157.3	6.67	1,073.561		
1,700.0	1,498.2	1,494.2	1,494.2	3.2	3.1	-125.84	-6,056.1	-3,735.1	7,162.1	7,155.0	7.13	1,004.377		
1,800.0	1,498.0	1,494.0	1,494.0	3.4	3.3	-125.76	-6,044.1	-3,744.7	7,160.2	7,152.6	7.59	942.805		
1,900.0	1,497.8	1,493.8	1,493.8	3.6	3.5	-125.68	-6,032.1	-3,754.2	7,158.4	7,150.3	8.06	887.777		
2,000.0	1,997.7	2,387.3	2,376.6	3.8	5.0	-125.61	-6,020.1	-3,763.7	7,156.6	7,148.0	8.54	838.387		
2,100.0	2,097.5	2,486.8	2,475.0	4.0	5.3	-125.53	-6,008.1	-3,773.3	7,154.8	7,145.8	9.01	793.873		
2,200.0	2,197.3	2,586.3	2,573.3	4.2	5.6	-125.45	-5,996.1	-3,782.8	7,153.0	7,143.5	9.49	753.589		
2,300.0	2,297.1	2,685.9	2,671.6	4.4	5.9	-125.38	-5,984.1	-3,792.3	7,151.2	7,141.2	9.97	716.992		
2,400.0	2,396.9	2,785.4	2,770.0	4.6	6.2	-125.30	-5,972.0	-3,801.8	7,149.4	7,139.0	10.46	683.621		
2,500.0	2,496.7	2,884.9	2,868.3	4.8	6.5	-125.23	-5,960.0	-3,811.4	7,147.7	7,136.7	10.94	653.085		
2,600.0	2,596.5	2,984.4	2,966.7	5.0	6.8	-125.15	-5,948.0	-3,820.9	7,145.9	7,134.5	11.43	625.051		
2,700.0	2,696.4	3,084.0	3,065.0	5.2	7.1	-125.07	-5,936.0	-3,830.4	7,144.2	7,132.3	11.92	599.234		
2,800.0	2,796.2	3,183.5	3,163.3	5.4	7.4	-125.00	-5,924.0	-3,839.9	7,142.5	7,130.1	12.41	575.389		
2,900.0	2,896.0	3,283.0	3,261.7	5.6	7.7	-124.92	-5,912.0	-3,849.5	7,140.8	7,127.9	12.91	553.305		
3,000.0	2,995.8	3,382.5	3,360.0	5.8	8.0	-124.84	-5,900.0	-3,859.0	7,139.1	7,125.7	13.40	532.798		
3,100.0	3,095.6	3,482.1	3,458.4	6.0	8.3	-124.77	-5,888.0	-3,868.5	7,137.4	7,123.5	13.89	513.710		
3,200.0	3,195.4	3,581.6	3,556.7	6.2	8.6	-124.69	-5,875.9	-3,878.0	7,135.7	7,121.3	14.39	495.901		
3,300.0	3,295.2	3,681.1	3,655.0	6.4	8.9	-124.61	-5,863.9	-3,887.6	7,134.1	7,119.2	14.89	479.249		
3,400.0	3,395.1	3,780.6	3,753.4	6.6	9.2	-124.54	-5,851.9	-3,897.1	7,132.4	7,117.1	15.38	463.648		
3,500.0	3,494.9	3,880.2	3,851.7	6.8	9.6	-124.46	-5,839.9	-3,906.6	7,130.8	7,114.9	15.88	449.002		
3,600.0	3,594.7	3,979.7	3,950.0	7.0	9.9	-124.38	-5,827.9	-3,916.1	7,129.2	7,112.8	16.38	435.228		
3,700.0	3,694.5	4,079.2	4,048.4	7.2	10.2	-124.31	-5,815.9	-3,925.7	7,127.6	7,110.7	16.88	422.252		
3,800.0	3,794.3	4,178.8	4,146.7	7.4	10.5	-124.23	-5,803.9	-3,935.2	7,126.0	7,108.6	17.38	410.008		
3,900.0	3,894.1	4,278.3	4,245.1	7.6	10.8	-124.15	-5,791.8	-3,944.7	7,124.4	7,106.5	17.88	398.435		
4,000.0	3,994.0	4,377.8	4,343.4	7.8	11.1	-124.08	-5,779.8	-3,954.3	7,122.9	7,104.5	18.38	387.482		
4,100.0	4,093.8	4,477.3	4,441.7	8.0	11.4	-124.00	-5,767.8	-3,963.8	7,121.3	7,102.4	18.88	377.099		
4,200.0	4,193.6	4,576.9	4,540.1	8.2	11.8	-123.92	-5,755.8	-3,973.3	7,119.8	7,100.4	19.39	367.245		
4,300.0	4,293.4	4,676.4	4,638.4	8.4	12.1	-123.85	-5,743.8	-3,982.8	7,118.2	7,098.4	19.89	357.880		
4,400.0	4,393.2	4,775.9	4,736.8	8.6	12.4	-123.77	-5,731.8	-3,992.4	7,116.7	7,096.3	20.39	348.970		
4,500.0	4,493.0	4,875.4	4,835.1	8.8	12.7	-123.69	-5,719.8	-4,001.9	7,115.2	7,094.3	20.90	340.481		
4,600.0	4,592.8	4,975.0	4,933.4	9.0	13.0	-123.62	-5,707.8	-4,011.4	7,113.7	7,092.3	21.40	332.387		
4,700.0	4,692.7	5,074.5	5,031.8	9.3	13.3	-123.54	-5,695.7	-4,020.9	7,112.3	7,090.4	21.91	324.659		
4,800.0	4,792.5	5,174.0	5,130.1	9.5	13.7	-123.46	-5,683.7	-4,030.5	7,110.8	7,088.4	22.41	317.274		
4,900.0	4,892.3	5,273.5	5,228.4	9.7	14.0	-123.39	-5,671.7	-4,040.0	7,109.4	7,086.4	22.92	310.209		
5,000.0	4,992.1	5,373.1	5,326.8	9.9	14.3	-123.31	-5,659.7	-4,049.5	7,107.9	7,084.5	23.42	303.445		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,472.6	5,425.1	10.1	14.6	-123.23	-5,647.7	-4,059.0	7,106.5	7,082.6	23.93	296.963		
5,200.0	5,191.7	5,572.1	5,523.5	10.3	14.9	-123.15	-5,635.7	-4,068.6	7,105.1	7,080.7	24.44	290.745		
5,300.0	5,291.5	5,671.7	5,621.8	10.5	15.2	-123.08	-5,623.7	-4,078.1	7,103.7	7,078.8	24.94	284.777		
5,400.0	5,391.4	5,771.2	5,720.1	10.7	15.6	-123.00	-5,611.6	-4,087.6	7,102.3	7,076.9	25.45	279.043		
5,500.0	5,491.2	5,870.7	5,818.5	10.9	15.9	-122.92	-5,599.6	-4,097.1	7,100.9	7,075.0	25.96	273.530		
5,600.0	5,591.0	5,970.2	5,916.8	11.1	16.2	-122.84	-5,587.6	-4,106.7	7,099.6	7,073.1	26.47	268.226		
5,700.0	5,690.8	6,069.8	6,015.2	11.3	16.5	-122.77	-5,575.6	-4,116.2	7,098.2	7,071.3	26.98	263.118		
5,800.0	5,790.6	6,169.3	6,113.5	11.5	16.8	-122.69	-5,563.6	-4,125.7	7,096.9	7,069.4	27.49	258.198		
5,900.0	5,890.4	6,268.8	6,211.8	11.7	17.1	-122.61	-5,551.6	-4,135.2	7,095.6	7,067.6	28.00	253.453		
6,000.0	5,990.3	6,368.3	6,310.2	11.9	17.5	-122.54	-5,539.6	-4,144.8	7,094.3	7,065.8	28.51	248.876		
6,100.0	6,090.1	6,467.9	6,408.5	12.1	17.8	-122.46	-5,527.6	-4,154.3	7,093.0	7,064.0	29.02	244.458		
6,200.0	6,189.9	6,567.4	6,506.8	12.3	18.1	-122.38	-5,515.5	-4,163.8	7,091.7	7,062.2	29.53	240.190		
6,300.0	6,289.7	6,666.9	6,605.2	12.5	18.4	-122.30	-5,503.5	-4,173.4	7,090.5	7,060.4	30.04	236.065		
6,400.0	6,389.5	6,766.4	6,703.5	12.7	18.7	-122.23	-5,491.5	-4,182.9	7,089.2	7,058.7	30.55	232.076		
6,500.0	6,489.3	6,843.9	6,780.1	12.9	19.0	-122.17	-5,482.3	-4,190.2	7,088.1	7,057.1	30.98	228.823		
6,600.0	6,589.1	6,900.0	6,835.7	13.1	19.1	-122.13	-5,476.4	-4,194.9	7,087.4	7,056.1	31.33	226.237		
6,655.7	6,644.8	6,934.5	6,869.9	13.2	19.2	-122.11	-5,473.2	-4,197.4	7,087.3	7,055.8	31.52	224.878		
6,700.0	6,689.0	6,960.3	6,895.6	13.3	19.3	-122.10	-5,471.0	-4,199.1	7,087.4	7,055.7	31.66	223.841		
6,785.3	6,774.1	7,000.0	6,935.1	13.5	19.4	-122.09	-5,468.1	-4,201.5	7,087.8	7,055.9	31.92	222.042		
6,800.0	6,788.8	7,000.0	6,935.1	13.5	19.4	-111.06	-5,468.1	-4,201.5	7,087.9	7,055.9	31.95	221.851		
6,850.0	6,838.8	7,047.8	6,982.7	13.6	19.4	-0.45	-5,465.0	-4,203.9	7,086.0	7,054.0	32.08	220.919		
6,900.0	6,888.6	7,076.8	7,011.7	13.6	19.5	21.70	-5,463.5	-4,205.1	7,081.5	7,049.4	32.09	220.679		
6,950.0	6,938.1	7,100.0	7,034.8	13.7	19.5	27.19	-5,462.4	-4,206.0	7,074.3	7,042.3	32.02	220.943		
7,000.0	6,987.0	7,134.0	7,068.8	13.7	19.6	29.93	-5,461.1	-4,207.0	7,064.4	7,032.6	31.88	221.568		
7,050.0	7,035.0	7,162.1	7,096.8	13.6	19.6	31.81	-5,460.3	-4,207.6	7,051.9	7,020.3	31.68	222.621		
7,100.0	7,082.0	7,200.0	7,134.8	13.6	19.7	33.42	-5,459.5	-4,208.3	7,036.9	7,005.5	31.43	223.888		
7,150.0	7,127.7	7,216.4	7,151.1	13.5	19.7	34.91	-5,459.3	-4,208.4	7,019.3	6,988.2	31.10	225.672		
7,200.0	7,171.8	7,242.5	7,177.2	13.5	19.7	36.45	-5,459.1	-4,208.6	6,999.4	6,968.6	30.76	227.544		
7,250.0	7,214.2	7,275.4	7,210.2	13.4	19.8	38.12	-5,459.1	-4,208.6	6,977.1	6,946.7	30.41	229.409		
7,300.0	7,254.6	7,315.9	7,250.6	13.4	19.8	39.99	-5,459.1	-4,208.6	6,952.5	6,922.4	30.08	231.099		
7,350.0	7,292.9	7,354.2	7,288.9	13.3	19.8	42.06	-5,459.1	-4,208.6	6,925.8	6,896.0	29.78	232.531		
7,400.0	7,328.9	7,390.1	7,324.9	13.3	19.9	44.37	-5,459.1	-4,208.6	6,897.0	6,867.5	29.54	233.502		
7,450.0	7,362.3	7,423.6	7,358.3	13.3	19.9	46.97	-5,459.1	-4,208.6	6,866.3	6,837.0	29.37	233.789		
7,500.0	7,393.1	7,454.4	7,389.1	13.4	20.0	49.88	-5,459.1	-4,208.6	6,834.0	6,804.7	29.31	233.181		
7,550.0	7,421.1	7,482.3	7,417.1	13.5	20.0	53.12	-5,459.1	-4,208.6	6,800.1	6,770.7	29.37	231.514		
7,600.0	7,446.1	7,507.3	7,442.1	13.6	20.0	56.72	-5,459.1	-4,208.6	6,764.8	6,735.2	29.58	228.719		
7,650.0	7,468.0	7,529.3	7,464.0	13.8	20.0	60.68	-5,459.1	-4,208.6	6,728.3	6,698.4	29.92	224.857		
7,700.0	7,486.7	7,548.0	7,482.7	14.0	20.1	64.99	-5,459.1	-4,208.6	6,690.9	6,660.5	30.39	220.136		
7,750.0	7,502.2	7,563.4	7,498.2	14.2	20.1	69.63	-5,459.1	-4,208.6	6,652.6	6,621.7	30.96	214.882		
7,800.0	7,514.3	7,575.6	7,510.3	14.6	20.1	74.54	-5,459.1	-4,208.6	6,613.8	6,582.2	31.57	209.479		
7,850.0	7,523.0	7,584.3	7,519.0	14.9	20.1	79.64	-5,459.1	-4,208.6	6,574.6	6,542.4	32.18	204.296		
7,900.0	7,528.2	7,589.5	7,524.2	15.3	20.1	84.82	-5,459.1	-4,208.6	6,535.1	6,502.4	32.74	199.616		
7,950.2	7,530.0	7,591.3	7,526.0	15.8	20.1	90.00	-5,459.1	-4,208.6	6,495.5	6,462.3	33.21	195.583		
8,000.0	7,530.0	7,591.3	7,526.0	16.2	20.1	90.00	-5,459.1	-4,208.6	6,456.4	6,422.7	33.69	191.617		
8,100.0	7,530.0	7,591.3	7,526.0	17.3	20.1	90.00	-5,459.1	-4,208.6	6,378.2	6,343.5	34.76	183.495		
8,200.0	7,530.0	7,591.3	7,526.0	18.4	20.1	90.00	-5,459.1	-4,208.6	6,300.7	6,264.8	35.93	175.351		
8,300.0	7,530.0	7,591.3	7,526.0	19.7	20.1	90.00	-5,459.1	-4,208.6	6,223.8	6,186.6	37.19	167.343		
8,400.0	7,530.0	7,591.3	7,526.0	21.0	20.1	90.00	-5,459.1	-4,208.6	6,147.6	6,109.1	38.52	159.579		
8,500.0	7,530.0	7,591.3	7,526.0	22.4	20.1	90.00	-5,459.1	-4,208.6	6,072.1	6,032.2	39.91	152.128		
8,600.0	7,530.0	7,591.3	7,526.0	23.8	20.1	90.00	-5,459.1	-4,208.6	5,997.3	5,955.9	41.35	145.025		
8,700.0	7,530.0	7,591.3	7,526.0	25.3	20.1	90.00	-5,459.1	-4,208.6	5,923.2	5,880.4	42.83	138.288		
8,800.0	7,530.0	7,591.3	7,526.0	26.8	20.1	90.00	-5,459.1	-4,208.6	5,849.9	5,805.6	44.35	131.918		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,591.3	7,526.0	28.3	20.1	90.00	-5,459.1	-4,208.6	5,777.4	5,731.5	45.89	125.910		
9,000.0	7,530.0	7,591.3	7,526.0	29.9	20.1	90.00	-5,459.1	-4,208.6	5,705.8	5,658.3	47.45	120.249		
9,100.0	7,530.0	7,591.3	7,526.0	31.4	20.1	90.00	-5,459.1	-4,208.6	5,635.0	5,585.9	49.03	114.920		
9,200.0	7,530.0	7,591.3	7,526.0	33.0	20.1	90.00	-5,459.1	-4,208.6	5,565.1	5,514.4	50.64	109.904		
9,300.0	7,530.0	7,591.3	7,526.0	34.7	20.1	90.00	-5,459.1	-4,208.6	5,496.1	5,443.8	52.25	105.185		
9,400.0	7,530.0	7,591.3	7,526.0	36.3	20.1	90.00	-5,459.1	-4,208.6	5,428.1	5,374.2	53.88	100.742		
9,500.0	7,530.0	7,591.3	7,526.0	37.9	20.1	90.00	-5,459.1	-4,208.6	5,361.1	5,305.6	55.52	96.559		
9,600.0	7,530.0	7,591.3	7,526.0	39.6	20.1	90.00	-5,459.1	-4,208.6	5,295.1	5,238.0	57.17	92.618		
9,700.0	7,530.0	7,591.3	7,526.0	41.2	20.1	90.00	-5,459.1	-4,208.6	5,230.2	5,171.4	58.83	88.904		
9,800.0	7,530.0	7,591.3	7,526.0	42.9	20.1	90.00	-5,459.1	-4,208.6	5,166.5	5,106.0	60.50	85.401		
9,900.0	7,530.0	7,591.3	7,526.0	44.5	20.1	90.00	-5,459.1	-4,208.6	5,103.9	5,041.7	62.17	82.096		
10,000.0	7,530.0	7,591.3	7,526.0	46.2	20.1	90.00	-5,459.1	-4,208.6	5,042.5	4,978.6	63.85	78.975		
10,100.0	7,530.0	7,591.3	7,526.0	47.9	20.1	90.00	-5,459.1	-4,208.6	4,982.4	4,916.8	65.53	76.027		
10,200.0	7,530.0	7,591.3	7,526.0	49.6	20.1	90.00	-5,459.1	-4,208.6	4,923.5	4,856.3	67.22	73.241		
10,300.0	7,530.0	7,591.3	7,526.0	51.3	20.1	90.00	-5,459.1	-4,208.6	4,866.0	4,797.1	68.92	70.607		
10,400.0	7,530.0	7,591.3	7,526.0	53.0	20.1	90.00	-5,459.1	-4,208.6	4,809.9	4,739.3	70.61	68.115		
10,500.0	7,530.0	7,591.3	7,526.0	54.7	20.1	90.00	-5,459.1	-4,208.6	4,755.2	4,682.9	72.32	65.757		
10,600.0	7,530.0	7,591.3	7,526.0	56.4	20.1	90.00	-5,459.1	-4,208.6	4,702.1	4,628.0	74.02	63.524		
10,700.0	7,530.0	7,591.3	7,526.0	58.1	20.1	90.00	-5,459.1	-4,208.6	4,650.4	4,574.7	75.73	61.410		
10,800.0	7,530.0	7,591.3	7,526.0	59.8	20.1	90.00	-5,459.1	-4,208.6	4,600.4	4,522.9	77.44	59.408		
10,900.0	7,530.0	7,591.3	7,526.0	61.5	20.1	90.00	-5,459.1	-4,208.6	4,552.0	4,472.8	79.15	57.511		
11,000.0	7,530.0	7,591.3	7,526.0	63.2	20.1	90.00	-5,459.1	-4,208.6	4,505.3	4,424.4	80.87	55.714		
11,100.0	7,530.0	7,591.3	7,526.0	64.9	20.1	90.00	-5,459.1	-4,208.6	4,460.4	4,377.8	82.58	54.011		
11,200.0	7,530.0	7,591.3	7,526.0	66.6	20.1	90.00	-5,459.1	-4,208.6	4,417.2	4,332.9	84.30	52.398		
11,300.0	7,530.0	7,591.3	7,526.0	68.4	20.1	90.00	-5,459.1	-4,208.6	4,376.0	4,289.9	86.02	50.870		
11,400.0	7,530.0	7,591.3	7,526.0	70.1	20.1	90.00	-5,459.1	-4,208.6	4,336.6	4,248.9	87.74	49.423		
11,500.0	7,530.0	7,591.3	7,526.0	71.8	20.1	90.00	-5,459.1	-4,208.6	4,299.2	4,209.7	89.47	48.053		
11,600.0	7,530.0	7,591.3	7,526.0	73.5	20.1	90.00	-5,459.1	-4,208.6	4,263.8	4,172.6	91.19	46.756		
11,700.0	7,530.0	7,591.3	7,526.0	75.3	20.1	90.00	-5,459.1	-4,208.6	4,230.5	4,137.6	92.92	45.529		
11,800.0	7,530.0	7,591.3	7,526.0	77.0	20.1	90.00	-5,459.1	-4,208.6	4,199.3	4,104.7	94.65	44.368		
11,900.0	7,530.0	7,591.3	7,526.0	78.7	20.1	90.00	-5,459.1	-4,208.6	4,170.3	4,073.9	96.38	43.271		
12,000.0	7,530.0	7,591.3	7,526.0	80.4	20.1	90.00	-5,459.1	-4,208.6	4,143.5	4,045.4	98.11	42.235		
12,100.0	7,530.0	7,591.3	7,526.0	82.2	20.1	90.00	-5,459.1	-4,208.6	4,118.9	4,019.1	99.84	41.256		
12,200.0	7,530.0	7,591.3	7,526.0	83.9	20.1	90.00	-5,459.1	-4,208.6	4,096.7	3,995.1	101.57	40.334		
12,300.0	7,530.0	7,591.3	7,526.0	85.6	20.1	90.00	-5,459.1	-4,208.6	4,076.8	3,973.5	103.30	39.464		
12,400.0	7,530.0	7,591.3	7,526.0	87.4	20.1	90.00	-5,459.1	-4,208.6	4,059.2	3,954.2	105.04	38.645		
12,500.0	7,530.0	7,591.3	7,526.0	89.1	20.1	90.00	-5,459.1	-4,208.6	4,044.0	3,937.3	106.77	37.875		
12,600.0	7,530.0	7,591.3	7,526.0	90.8	20.1	90.00	-5,459.1	-4,208.6	4,031.3	3,922.8	108.51	37.152		
12,700.0	7,530.0	7,591.3	7,526.0	92.6	20.1	90.00	-5,459.1	-4,208.6	4,021.0	3,910.7	110.24	36.474		
12,800.0	7,530.0	7,591.3	7,526.0	94.3	20.1	90.00	-5,459.1	-4,208.6	4,013.2	3,901.2	111.98	35.838		
12,900.0	7,530.0	7,591.3	7,526.0	96.0	20.1	90.00	-5,459.1	-4,208.6	4,007.8	3,894.1	113.72	35.244		
13,000.0	7,530.0	7,591.3	7,526.0	97.8	20.1	90.00	-5,459.1	-4,208.6	4,004.9	3,889.5	115.46	34.688		
13,064.5	7,530.0	7,591.3	7,526.0	98.9	20.1	90.00	-5,459.1	-4,208.6	4,004.4	3,887.8	116.58	34.350 CC		
13,100.0	7,530.0	7,591.3	7,526.0	99.5	20.1	90.00	-5,459.1	-4,208.6	4,004.6	3,887.4	117.19	34.171 ES		
13,200.0	7,530.0	7,591.3	7,526.0	101.3	20.1	90.00	-5,459.1	-4,208.6	4,006.7	3,887.8	118.93	33.689		
13,300.0	7,530.0	7,591.3	7,526.0	103.0	20.1	90.00	-5,459.1	-4,208.6	4,011.3	3,890.7	120.67	33.242		
13,400.0	7,530.0	7,591.3	7,526.0	104.7	20.1	90.00	-5,459.1	-4,208.6	4,018.5	3,896.0	122.41	32.827		
13,500.0	7,530.0	7,591.3	7,526.0	106.5	20.1	90.00	-5,459.1	-4,208.6	4,028.0	3,903.9	124.15	32.444		
13,600.0	7,530.0	7,591.3	7,526.0	108.2	20.1	90.00	-5,459.1	-4,208.6	4,040.1	3,914.2	125.89	32.091		
13,700.0	7,530.0	7,591.3	7,526.0	110.0	20.1	90.00	-5,459.1	-4,208.6	4,054.5	3,926.9	127.64	31.767		
13,800.0	7,530.0	7,591.3	7,526.0	111.7	20.1	90.00	-5,459.1	-4,208.6	4,071.4	3,942.0	129.38	31.469		
13,900.0	7,530.0	7,591.3	7,526.0	113.4	20.1	90.00	-5,459.1	-4,208.6	4,090.7	3,959.5	131.12	31.198		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 11-18 - DD - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,000.0	7,530.0	7,591.3	7,526.0	115.2	20.1	90.00	-5,459.1	-4,208.6	4,112.2	3,979.4	132.86	30.951		
14,100.0	7,530.0	7,591.3	7,526.0	116.9	20.1	90.00	-5,459.1	-4,208.6	4,136.1	4,001.5	134.60	30.728		
14,200.0	7,530.0	7,591.3	7,526.0	118.7	20.1	90.00	-5,459.1	-4,208.6	4,162.3	4,025.9	136.35	30.527		
14,300.0	7,530.0	7,591.3	7,526.0	120.4	20.1	90.00	-5,459.1	-4,208.6	4,190.7	4,052.6	138.09	30.347		
14,400.0	7,530.0	7,591.3	7,526.0	122.1	20.1	90.00	-5,459.1	-4,208.6	4,221.2	4,081.4	139.84	30.187		
14,500.0	7,530.0	7,591.3	7,526.0	123.9	20.1	90.00	-5,459.1	-4,208.6	4,253.9	4,112.4	141.58	30.046		
14,600.0	7,530.0	7,591.3	7,526.0	125.6	20.1	90.00	-5,459.1	-4,208.6	4,288.7	4,145.4	143.32	29.923		
14,700.0	7,530.0	7,591.3	7,526.0	127.4	20.1	90.00	-5,459.1	-4,208.6	4,325.5	4,180.5	145.07	29.817		
14,800.0	7,530.0	7,591.3	7,526.0	129.1	20.1	90.00	-5,459.1	-4,208.6	4,364.3	4,217.5	146.81	29.727		
14,900.0	7,530.0	7,591.3	7,526.0	130.9	20.1	90.00	-5,459.1	-4,208.6	4,405.0	4,256.5	148.56	29.652		
15,000.0	7,530.0	7,591.3	7,526.0	132.6	20.1	90.00	-5,459.1	-4,208.6	4,447.6	4,297.3	150.30	29.591		
15,100.0	7,530.0	7,591.3	7,526.0	134.4	20.1	90.00	-5,459.1	-4,208.6	4,492.1	4,340.0	152.05	29.543		
15,200.0	7,530.0	7,591.3	7,526.0	136.1	20.1	90.00	-5,459.1	-4,208.6	4,538.2	4,384.4	153.80	29.508		
15,300.0	7,530.0	7,591.3	7,526.0	137.9	20.1	90.00	-5,459.1	-4,208.6	4,586.1	4,430.6	155.54	29.485		
15,400.0	7,530.0	7,591.3	7,526.0	139.6	20.1	90.00	-5,459.1	-4,208.6	4,635.7	4,478.4	157.29	29.473		
15,500.0	7,530.0	7,591.3	7,526.0	141.3	20.1	90.00	-5,459.1	-4,208.6	4,686.9	4,527.9	159.03	29.471 SF		
15,600.0	7,530.0	7,591.3	7,526.0	143.1	20.1	90.00	-5,459.1	-4,208.6	4,739.6	4,578.8	160.78	29.479		
15,700.0	7,530.0	7,591.3	7,526.0	144.8	20.1	90.00	-5,459.1	-4,208.6	4,793.9	4,631.3	162.53	29.496		
15,800.0	7,530.0	7,591.3	7,526.0	146.6	20.1	90.00	-5,459.1	-4,208.6	4,849.6	4,685.3	164.27	29.521		
15,900.0	7,530.0	7,591.3	7,526.0	148.3	20.1	90.00	-5,459.1	-4,208.6	4,906.7	4,740.6	166.02	29.554		
16,000.0	7,530.0	7,591.3	7,526.0	150.1	20.1	90.00	-5,459.1	-4,208.6	4,965.1	4,797.3	167.77	29.595		
16,100.0	7,530.0	7,591.3	7,526.0	151.8	20.1	90.00	-5,459.1	-4,208.6	5,024.9	4,855.4	169.52	29.642		
16,200.0	7,530.0	7,591.3	7,526.0	153.6	20.1	90.00	-5,459.1	-4,208.6	5,085.9	4,914.7	171.26	29.696		
16,300.0	7,530.0	7,591.3	7,526.0	155.3	20.1	90.00	-5,459.1	-4,208.6	5,148.2	4,975.2	173.01	29.756		
16,400.0	7,530.0	7,591.3	7,526.0	157.1	20.1	90.00	-5,459.1	-4,208.6	5,211.6	5,036.8	174.76	29.822		
16,500.0	7,530.0	7,591.3	7,526.0	158.8	20.1	90.00	-5,459.1	-4,208.6	5,276.2	5,099.7	176.51	29.892		
16,600.0	7,530.0	7,591.3	7,526.0	160.6	20.1	90.00	-5,459.1	-4,208.6	5,341.8	5,163.6	178.26	29.967		
16,700.0	7,530.0	7,591.3	7,526.0	162.3	20.1	90.00	-5,459.1	-4,208.6	5,408.5	5,228.5	180.00	30.047		
16,800.0	7,530.0	7,591.3	7,526.0	164.1	20.1	90.00	-5,459.1	-4,208.6	5,476.2	5,294.5	181.75	30.130		
16,900.0	7,530.0	7,591.3	7,526.0	165.8	20.1	90.00	-5,459.1	-4,208.6	5,544.9	5,361.4	183.50	30.217		
17,000.0	7,530.0	7,591.3	7,526.0	167.6	20.1	90.00	-5,459.1	-4,208.6	5,614.6	5,429.3	185.25	30.308		
17,100.0	7,530.0	7,591.3	7,526.0	169.3	20.1	90.00	-5,459.1	-4,208.6	5,685.1	5,498.1	187.00	30.402		
17,200.0	7,530.0	7,591.3	7,526.0	171.1	20.1	90.00	-5,459.1	-4,208.6	5,756.5	5,567.8	188.75	30.499		
17,300.0	7,530.0	7,591.3	7,526.0	172.8	20.1	90.00	-5,459.1	-4,208.6	5,828.8	5,638.3	190.50	30.598		
17,400.0	7,530.0	7,591.3	7,526.0	174.5	20.1	90.00	-5,459.1	-4,208.6	5,901.8	5,709.6	192.25	30.700		
17,411.2	7,530.0	7,591.3	7,526.0	174.7	20.1	90.00	-5,459.1	-4,208.6	5,910.1	5,717.7	192.44	30.711		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-149.32	-6,136.7	-3,640.5	7,135.3						
100.0	100.0	38.0	38.0	0.2	0.0	-149.32	-6,136.8	-3,640.6	7,135.7	7,135.5	0.20	N/A			
200.0	200.0	96.9	96.9	0.3	0.1	-149.32	-6,137.2	-3,641.3	7,136.8	7,136.4	0.47	N/A			
300.0	300.0	207.0	207.0	0.5	0.3	-149.31	-6,138.0	-3,642.8	7,138.1	7,137.3	0.84	8,537.668			
400.0	400.0	284.6	284.6	0.7	0.5	-149.31	-6,138.9	-3,643.5	7,139.6	7,138.4	1.15	6,230.101			
500.0	500.0	340.5	340.4	0.8	0.6	-149.31	-6,139.9	-3,643.8	7,141.4	7,140.0	1.42	5,035.727			
600.0	600.0	388.0	387.9	1.0	0.7	-126.28	-6,141.1	-3,644.2	7,144.5	7,142.8	1.68	4,263.144			
700.0	700.0	419.0	418.9	1.2	0.7	-126.25	-6,142.1	-3,644.6	7,149.4	7,147.5	1.91	3,750.803			
800.0	799.9	450.0	449.9	1.4	0.8	-126.20	-6,143.3	-3,644.9	7,156.2	7,154.1	2.14	3,344.242			
848.7	848.4	479.7	479.5	1.5	0.8	-126.19	-6,144.7	-3,645.2	7,160.2	7,157.9	2.28	3,139.434			
900.0	899.7	511.0	510.8	1.6	0.9	-126.20	-6,146.5	-3,645.6	7,164.8	7,162.4	2.43	2,948.169			
1,000.0	999.5	542.6	542.4	1.8	1.0	-126.22	-6,148.5	-3,645.9	7,174.3	7,171.7	2.67	2,684.738			
1,100.0	1,099.3	606.0	605.6	2.0	1.1	-126.26	-6,152.9	-3,647.0	7,184.6	7,181.6	2.97	2,418.090			
1,200.0	1,199.1	642.2	641.6	2.2	1.2	-126.28	-6,155.6	-3,647.7	7,195.5	7,192.3	3.22	2,231.829			
1,300.0	1,298.9	692.3	691.6	2.4	1.3	-126.31	-6,159.7	-3,648.7	7,207.2	7,203.7	3.50	2,057.732			
1,400.0	1,398.8	796.0	794.9	2.6	1.5	-126.37	-6,168.6	-3,651.2	7,219.4	7,215.5	3.88	1,862.596			
1,500.0	1,498.6	877.0	875.6	2.8	1.7	-126.41	-6,175.4	-3,653.2	7,231.5	7,227.3	4.21	1,717.568			
1,600.0	1,598.4	909.4	907.9	3.0	1.8	-126.43	-6,178.4	-3,654.0	7,244.2	7,239.7	4.46	1,624.431			
1,700.0	1,698.2	940.0	938.3	3.2	1.8	-126.45	-6,181.3	-3,654.9	7,257.7	7,252.9	4.71	1,542.340			
1,800.0	1,798.0	1,004.0	1,001.9	3.4	2.0	-126.49	-6,188.2	-3,656.8	7,272.0	7,267.0	5.01	1,450.814			
1,900.0	1,897.8	1,004.0	1,001.9	3.6	2.0	-126.49	-6,188.2	-3,656.8	7,287.2	7,282.0	5.20	1,400.095			
2,000.0	1,997.7	1,068.0	1,065.3	3.8	2.2	-126.53	-6,196.2	-3,658.8	7,303.2	7,297.7	5.51	1,324.633			
2,100.0	2,097.5	1,068.0	1,065.3	4.0	2.2	-126.53	-6,196.2	-3,658.8	7,320.2	7,314.5	5.71	1,282.860			
2,200.0	2,197.3	1,133.0	1,129.6	4.2	2.4	-126.58	-6,205.6	-3,660.9	7,338.0	7,332.0	6.02	1,219.178			
2,300.0	2,297.1	1,133.0	1,129.6	4.4	2.4	-126.58	-6,205.6	-3,660.9	7,356.8	7,350.6	6.21	1,184.315			
2,400.0	2,396.9	1,197.0	1,192.7	4.6	2.6	-126.63	-6,216.0	-3,663.4	7,376.4	7,369.9	6.52	1,130.835			
2,500.0	2,496.7	1,197.0	1,192.7	4.8	2.6	-126.63	-6,216.0	-3,663.4	7,396.9	7,390.2	6.72	1,101.360			
2,600.0	2,596.5	1,235.3	1,230.3	5.0	2.7	-126.66	-6,222.7	-3,665.3	7,418.3	7,411.4	6.98	1,062.944			
2,700.0	2,696.4	1,260.0	1,254.6	5.2	2.8	-126.67	-6,227.2	-3,666.8	7,440.8	7,433.5	7.22	1,031.000			
2,800.0	2,796.2	1,291.6	1,285.6	5.4	2.9	-126.69	-6,233.1	-3,669.1	7,464.1	7,456.6	7.47	999.792			
2,900.0	2,896.0	1,324.0	1,317.3	5.6	3.0	-126.71	-6,239.2	-3,671.9	7,488.3	7,480.6	7.71	970.628			
3,000.0	2,995.8	1,371.3	1,363.4	5.8	3.2	-126.73	-6,248.0	-3,676.8	7,513.2	7,505.2	7.99	940.617			
3,100.0	3,095.6	1,420.0	1,411.0	6.0	3.4	-126.75	-6,257.1	-3,682.5	7,538.8	7,530.5	8.26	912.672			
3,200.0	3,195.4	1,463.3	1,453.2	6.2	3.6	-126.76	-6,265.3	-3,687.9	7,564.9	7,556.4	8.53	887.055			
3,300.0	3,295.2	1,516.0	1,504.4	6.4	3.8	-126.77	-6,275.9	-3,694.3	7,591.8	7,583.0	8.81	861.734			
3,400.0	3,395.1	1,640.2	1,625.2	6.6	4.3	-126.82	-6,300.9	-3,709.1	7,618.8	7,609.6	9.21	826.887			
3,500.0	3,494.9	1,642.0	1,626.9	6.8	4.3	-126.82	-6,301.3	-3,709.3	7,646.2	7,636.8	9.41	812.515			
3,600.0	3,594.7	1,701.1	1,684.3	7.0	4.6	-126.84	-6,313.6	-3,716.3	7,674.0	7,664.3	9.71	790.630			
3,700.0	3,694.5	1,738.0	1,720.0	7.2	4.8	-126.86	-6,321.8	-3,720.8	7,702.8	7,692.8	9.96	773.192			
3,800.0	3,794.3	1,800.8	1,780.6	7.4	5.0	-126.88	-6,336.0	-3,728.8	7,732.2	7,721.9	10.26	753.412			
3,900.0	3,894.1	2,047.0	2,019.2	7.6	6.1	-126.98	-6,389.2	-3,758.7	7,760.2	7,749.3	10.87	713.596			
4,000.0	3,994.0	2,122.9	2,092.8	7.8	6.5	-127.00	-6,405.0	-3,768.1	7,787.9	7,776.8	11.20	695.573			
4,100.0	4,093.8	2,309.3	2,273.7	8.0	7.3	-127.07	-6,443.7	-3,790.9	7,815.8	7,804.1	11.71	667.646			
4,200.0	4,193.6	2,404.4	2,366.2	8.2	7.7	-127.10	-6,462.9	-3,801.6	7,842.5	7,830.5	12.06	650.230			
4,300.0	4,293.4	2,470.0	2,429.9	8.4	8.0	-127.12	-6,475.7	-3,810.3	7,869.6	7,857.3	12.36	636.524			
4,400.0	4,393.2	2,680.2	2,634.5	8.6	8.9	-127.15	-6,514.8	-3,838.8	7,896.0	7,883.1	12.91	611.563			
4,500.0	4,493.0	2,724.0	2,677.2	8.8	9.1	-127.17	-6,523.2	-3,843.8	7,922.1	7,908.9	13.18	601.091			
4,600.0	4,592.8	2,765.4	2,717.5	9.0	9.3	-127.18	-6,531.5	-3,848.7	7,948.8	7,935.4	13.44	591.267			
4,700.0	4,692.7	2,819.0	2,769.5	9.3	9.5	-127.20	-6,542.5	-3,855.4	7,976.4	7,962.6	13.73	581.017			
4,800.0	4,792.5	2,850.3	2,799.8	9.5	9.7	-127.21	-6,549.1	-3,859.4	8,004.5	7,990.5	13.98	572.765			
4,900.0	4,892.3	2,951.4	2,897.7	9.7	10.2	-127.24	-6,570.7	-3,872.4	8,033.0	8,018.7	14.34	560.155			
5,000.0	4,992.1	3,093.5	3,035.5	9.9	10.8	-127.28	-6,600.3	-3,890.8	8,061.0	8,046.2	14.78	545.563			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	5,091.9	3,230.8	3,168.8	10.1	11.4	-127.31	-6,628.1	-3,908.5	8,088.5	8,073.3	15.20	532.050		
5,200.0	5,191.7	3,374.5	3,308.5	10.3	12.1	-127.35	-6,656.7	-3,926.2	8,115.6	8,099.9	15.64	518.866		
5,300.0	5,291.5	3,423.0	3,355.6	10.5	12.3	-127.37	-6,666.4	-3,932.0	8,142.5	8,126.6	15.92	511.549		
5,400.0	5,391.4	3,487.0	3,417.8	10.7	12.6	-127.38	-6,679.3	-3,940.0	8,169.9	8,153.7	16.22	503.691		
5,500.0	5,491.2	3,635.9	3,562.5	10.9	13.2	-127.42	-6,709.0	-3,958.8	8,196.9	8,180.3	16.67	491.792		
5,600.0	5,591.0	3,678.0	3,603.4	11.1	13.4	-127.43	-6,717.5	-3,964.1	8,224.3	8,207.4	16.93	485.701		
5,700.0	5,690.8	3,843.6	3,764.2	11.3	14.2	-127.48	-6,750.9	-3,985.3	8,251.8	8,234.4	17.41	473.996		
5,800.0	5,790.6	4,050.2	3,965.2	11.5	15.1	-127.53	-6,791.0	-4,010.5	8,278.6	8,260.7	17.96	461.062		
5,900.0	5,890.4	4,091.0	4,005.1	11.7	15.2	-127.54	-6,798.5	-4,015.4	8,304.4	8,286.2	18.22	455.808		
6,000.0	5,990.3	4,157.6	4,070.0	11.9	15.5	-127.55	-6,811.0	-4,023.7	8,330.6	8,312.1	18.53	449.649		
6,100.0	6,090.1	4,309.2	4,217.6	12.1	16.2	-127.59	-6,840.4	-4,042.0	8,357.1	8,338.1	18.98	440.314		
6,200.0	6,189.9	4,596.9	4,498.6	12.3	17.4	-127.66	-6,892.0	-4,075.5	8,382.3	8,362.6	19.67	426.205		
6,300.0	6,289.7	4,664.0	4,564.3	12.5	17.6	-127.68	-6,903.5	-4,083.1	8,406.3	8,386.3	19.98	420.812		
6,400.0	6,389.5	4,721.1	4,620.1	12.7	17.9	-127.69	-6,913.3	-4,089.9	8,430.7	8,410.4	20.27	415.950		
6,500.0	6,489.3	5,272.2	5,161.6	12.9	19.9	-127.84	-6,999.6	-4,143.5	8,453.3	8,431.9	21.41	394.820		
6,600.0	6,589.1	5,533.2	5,419.7	13.1	20.7	-127.90	-7,031.9	-4,164.8	8,471.9	8,449.8	22.06	384.104		
6,700.0	6,689.0	6,885.0	6,766.2	13.3	23.1	-128.34	-7,111.4	-4,207.6	8,485.8	8,461.2	24.60	344.995		
6,785.3	6,774.1	6,959.4	6,840.6	13.5	23.2	-128.37	-7,111.0	-4,206.9	8,488.3	8,463.4	24.89	341.009		
6,800.0	6,788.8	6,973.9	6,855.1	13.5	23.2	-117.35	-7,111.0	-4,206.8	8,488.6	8,463.6	24.97	339.921		
6,850.0	6,838.8	7,021.5	6,902.7	13.6	23.2	-6.82	-7,110.7	-4,206.5	8,487.6	8,462.4	25.19	336.933		
6,900.0	6,888.6	7,063.1	6,944.3	13.6	23.3	15.27	-7,110.4	-4,206.3	8,483.6	8,458.3	25.32	334.992		
6,950.0	6,938.1	7,102.2	6,983.4	13.7	23.3	20.68	-7,110.3	-4,206.1	8,476.6	8,451.2	25.38	333.957		
7,000.0	6,987.0	7,140.0	7,021.2	13.7	23.3	23.32	-7,110.2	-4,205.8	8,466.6	8,441.3	25.37	333.723		
7,050.0	7,035.0	7,185.5	7,066.7	13.6	23.4	25.11	-7,110.2	-4,205.3	8,453.8	8,428.5	25.31	333.961		
7,100.0	7,082.0	7,269.7	7,150.9	13.6	23.4	26.65	-7,110.0	-4,204.7	8,437.9	8,412.6	25.28	333.790		
7,150.0	7,127.7	7,315.5	7,196.7	13.5	23.5	28.08	-7,109.6	-4,204.5	8,419.1	8,393.9	25.15	334.761		
7,200.0	7,171.8	7,352.8	7,234.0	13.5	23.5	29.54	-7,109.3	-4,204.4	8,397.6	8,372.6	25.00	335.908		
7,250.0	7,214.2	7,385.5	7,266.6	13.4	23.5	31.10	-7,109.1	-4,204.3	8,373.5	8,348.6	24.86	336.778		
7,300.0	7,254.6	7,417.8	7,299.0	13.4	23.6	32.82	-7,108.9	-4,204.3	8,347.0	8,322.2	24.78	336.797		
7,350.0	7,292.9	7,449.1	7,330.2	13.3	23.6	34.75	-7,108.7	-4,204.3	8,318.1	8,293.3	24.80	335.454		
7,400.0	7,328.9	7,489.2	7,370.4	13.3	23.6	36.99	-7,108.5	-4,204.3	8,287.1	8,262.1	24.97	331.899		
7,450.0	7,362.3	7,530.2	7,411.4	13.3	23.7	39.56	-7,108.2	-4,204.2	8,254.0	8,228.7	25.33	325.838		
7,500.0	7,393.1	7,552.0	7,433.2	13.4	23.7	42.43	-7,108.1	-4,204.2	8,219.0	8,193.1	25.88	317.600		
7,550.0	7,421.1	7,587.1	7,468.3	13.5	23.7	45.81	-7,107.9	-4,204.1	8,182.3	8,155.5	26.73	306.162		
7,600.0	7,446.1	7,608.6	7,489.8	13.6	23.7	49.62	-7,107.8	-4,204.0	8,144.1	8,116.3	27.81	292.815		
7,650.0	7,468.0	7,627.5	7,508.7	13.8	23.7	53.96	-7,107.7	-4,203.9	8,104.5	8,075.4	29.16	277.943		
7,700.0	7,486.7	7,643.7	7,524.9	14.0	23.8	58.88	-7,107.6	-4,203.8	8,063.9	8,033.2	30.71	262.549		
7,750.0	7,502.2	7,657.0	7,538.2	14.2	23.8	64.38	-7,107.6	-4,203.8	8,022.4	7,990.0	32.38	247.732		
7,800.0	7,514.3	7,667.4	7,548.6	14.6	23.8	70.42	-7,107.6	-4,203.7	7,980.1	7,946.1	34.03	234.519		
7,850.0	7,523.0	7,674.9	7,556.1	14.9	23.8	76.90	-7,107.5	-4,203.7	7,937.4	7,901.9	35.48	223.726		
7,900.0	7,528.2	7,679.4	7,560.6	15.3	23.8	83.66	-7,107.5	-4,203.7	7,894.3	7,857.8	36.57	215.874		
7,950.2	7,530.0	7,680.8	7,562.0	15.8	23.8	90.52	-7,107.5	-4,203.6	7,851.0	7,813.8	37.18	211.146		
8,000.0	7,530.0	7,680.8	7,561.9	16.2	23.8	90.52	-7,107.5	-4,203.6	7,808.2	7,770.6	37.67	207.300		
8,100.0	7,530.0	7,680.6	7,561.7	17.3	23.8	90.51	-7,107.5	-4,203.7	7,722.4	7,683.7	38.73	199.382		
8,200.0	7,530.0	7,680.4	7,561.5	18.4	23.8	90.51	-7,107.5	-4,203.7	7,637.0	7,597.1	39.90	191.383		
8,300.0	7,530.0	7,680.2	7,561.3	19.7	23.8	90.51	-7,107.5	-4,203.7	7,551.9	7,510.7	41.16	183.458		
8,400.0	7,530.0	7,680.0	7,561.1	21.0	23.8	90.50	-7,107.5	-4,203.7	7,467.1	7,424.6	42.50	175.716		
8,500.0	7,530.0	7,679.8	7,560.9	22.4	23.8	90.50	-7,107.5	-4,203.7	7,382.8	7,338.9	43.89	168.227		
8,600.0	7,530.0	7,679.6	7,560.7	23.8	23.8	90.50	-7,107.5	-4,203.7	7,298.8	7,253.5	45.32	161.034		
8,700.0	7,530.0	7,679.4	7,560.5	25.3	23.8	90.50	-7,107.5	-4,203.7	7,215.3	7,168.5	46.80	154.161		
8,800.0	7,530.0	7,679.2	7,560.3	26.8	23.8	90.49	-7,107.5	-4,203.7	7,132.2	7,083.8	48.32	147.615		
8,900.0	7,530.0	7,679.0	7,560.1	28.3	23.8	90.49	-7,107.5	-4,203.7	7,049.5	6,999.6	49.86	141.396		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,000.0	7,530.0	7,678.8	7,559.9	29.9	23.8	90.49	-7,107.5	-4,203.7	6,967.2	6,915.8	51.42	135.496		
9,100.0	7,530.0	7,678.5	7,559.7	31.4	23.8	90.48	-7,107.5	-4,203.7	6,885.5	6,832.5	53.00	129.904		
9,200.0	7,530.0	7,678.3	7,559.5	33.0	23.8	90.48	-7,107.5	-4,203.7	6,804.2	6,749.6	54.61	124.606		
9,300.0	7,530.0	7,678.1	7,559.3	34.7	23.8	90.48	-7,107.5	-4,203.7	6,723.4	6,667.2	56.22	119.588		
9,400.0	7,530.0	7,677.9	7,559.1	36.3	23.8	90.48	-7,107.5	-4,203.7	6,643.2	6,585.3	57.85	114.833		
9,500.0	7,530.0	7,677.7	7,558.9	37.9	23.8	90.47	-7,107.5	-4,203.7	6,563.5	6,504.0	59.49	110.328		
9,600.0	7,530.0	7,677.5	7,558.7	39.6	23.8	90.47	-7,107.5	-4,203.7	6,484.4	6,423.2	61.14	106.056		
9,700.0	7,530.0	7,677.3	7,558.5	41.2	23.8	90.47	-7,107.5	-4,203.7	6,405.8	6,343.0	62.80	102.004		
9,800.0	7,530.0	7,677.1	7,558.2	42.9	23.8	90.46	-7,107.5	-4,203.7	6,327.9	6,263.4	64.47	98.159		
9,900.0	7,530.0	7,676.8	7,558.0	44.5	23.8	90.46	-7,107.5	-4,203.7	6,250.5	6,184.4	66.14	94.507		
10,000.0	7,530.0	7,676.6	7,557.8	46.2	23.8	90.46	-7,107.5	-4,203.7	6,173.9	6,106.0	67.82	91.037		
10,100.0	7,530.0	7,676.4	7,557.6	47.9	23.8	90.45	-7,107.5	-4,203.7	6,097.9	6,028.4	69.50	87.737		
10,200.0	7,530.0	7,676.2	7,557.4	49.6	23.8	90.45	-7,107.5	-4,203.7	6,022.6	5,951.4	71.19	84.598		
10,300.0	7,530.0	7,676.0	7,557.1	51.3	23.8	90.45	-7,107.5	-4,203.7	5,948.0	5,875.1	72.88	81.609		
10,400.0	7,530.0	7,675.7	7,556.9	53.0	23.8	90.44	-7,107.5	-4,203.7	5,874.2	5,799.6	74.58	78.762		
10,500.0	7,530.0	7,675.5	7,556.7	54.7	23.8	90.44	-7,107.5	-4,203.7	5,801.2	5,724.9	76.28	76.048		
10,600.0	7,530.0	7,675.3	7,556.5	56.4	23.8	90.44	-7,107.5	-4,203.7	5,729.0	5,651.0	77.99	73.461		
10,700.0	7,530.0	7,675.1	7,556.2	58.1	23.8	90.43	-7,107.5	-4,203.7	5,657.6	5,577.9	79.69	70.991		
10,800.0	7,530.0	7,674.8	7,556.0	59.8	23.8	90.43	-7,107.5	-4,203.7	5,587.1	5,505.7	81.40	68.634		
10,900.0	7,530.0	7,674.6	7,555.8	61.5	23.8	90.43	-7,107.5	-4,203.7	5,517.6	5,434.4	83.12	66.383		
11,000.0	7,530.0	7,674.4	7,555.5	63.2	23.8	90.42	-7,107.5	-4,203.7	5,448.9	5,364.1	84.83	64.233		
11,100.0	7,530.0	7,674.1	7,555.3	64.9	23.8	90.42	-7,107.5	-4,203.7	5,381.3	5,294.7	86.55	62.177		
11,200.0	7,530.0	7,673.9	7,555.1	66.6	23.8	90.42	-7,107.5	-4,203.7	5,314.7	5,226.4	88.27	60.212		
11,300.0	7,530.0	7,673.7	7,554.8	68.4	23.8	90.41	-7,107.5	-4,203.7	5,249.1	5,159.1	89.99	58.332		
11,400.0	7,530.0	7,673.4	7,554.6	70.1	23.8	90.41	-7,107.5	-4,203.7	5,184.6	5,092.9	91.71	56.533		
11,500.0	7,530.0	7,673.2	7,554.4	71.8	23.8	90.41	-7,107.5	-4,203.7	5,121.3	5,027.9	93.43	54.813		
11,600.0	7,530.0	7,672.9	7,554.1	73.5	23.8	90.40	-7,107.5	-4,203.7	5,059.2	4,964.0	95.16	53.166		
11,700.0	7,530.0	7,672.7	7,553.9	75.3	23.8	90.40	-7,107.5	-4,203.7	4,998.3	4,901.4	96.88	51.590		
11,800.0	7,530.0	7,672.5	7,553.6	77.0	23.8	90.40	-7,107.5	-4,203.7	4,938.6	4,840.0	98.61	50.082		
11,900.0	7,530.0	7,672.2	7,553.4	78.7	23.8	90.39	-7,107.5	-4,203.7	4,880.3	4,780.0	100.34	48.637		
12,000.0	7,530.0	7,672.0	7,553.1	80.4	23.8	90.39	-7,107.5	-4,203.7	4,823.4	4,721.3	102.07	47.255		
12,100.0	7,530.0	7,671.7	7,552.9	82.2	23.8	90.39	-7,107.5	-4,203.7	4,767.8	4,664.0	103.80	45.932		
12,200.0	7,530.0	7,671.5	7,552.6	83.9	23.8	90.38	-7,107.5	-4,203.7	4,713.8	4,608.3	105.53	44.666		
12,300.0	7,530.0	7,671.2	7,552.4	85.6	23.8	90.38	-7,107.5	-4,203.7	4,661.2	4,554.0	107.27	43.455		
12,400.0	7,530.0	7,670.9	7,552.1	87.4	23.8	90.38	-7,107.5	-4,203.7	4,610.3	4,501.3	109.00	42.296		
12,500.0	7,530.0	7,670.7	7,551.9	89.1	23.8	90.37	-7,107.5	-4,203.7	4,560.9	4,450.2	110.73	41.188		
12,600.0	7,530.0	7,670.4	7,551.6	90.8	23.8	90.37	-7,107.5	-4,203.7	4,513.3	4,400.8	112.47	40.129		
12,700.0	7,530.0	7,670.2	7,551.4	92.6	23.8	90.36	-7,107.5	-4,203.7	4,467.3	4,353.1	114.21	39.117		
12,800.0	7,530.0	7,669.9	7,551.1	94.3	23.8	90.36	-7,107.5	-4,203.7	4,423.2	4,307.2	115.94	38.150		
12,900.0	7,530.0	7,669.6	7,550.8	96.0	23.8	90.36	-7,107.5	-4,203.7	4,380.8	4,263.2	117.68	37.227		
13,000.0	7,530.0	7,669.4	7,550.6	97.8	23.8	90.35	-7,107.5	-4,203.7	4,340.4	4,221.0	119.42	36.347		
13,100.0	7,530.0	7,669.1	7,550.3	99.5	23.8	90.35	-7,107.6	-4,203.7	4,301.9	4,180.8	121.15	35.508		
13,200.0	7,530.0	7,668.8	7,550.0	101.3	23.8	90.35	-7,107.6	-4,203.7	4,265.4	4,142.5	122.89	34.708		
13,300.0	7,530.0	7,668.6	7,549.8	103.0	23.8	90.34	-7,107.6	-4,203.7	4,231.0	4,106.4	124.63	33.948		
13,400.0	7,530.0	7,668.3	7,549.5	104.7	23.8	90.34	-7,107.6	-4,203.7	4,198.7	4,072.3	126.37	33.224		
13,500.0	7,530.0	7,668.0	7,549.2	106.5	23.8	90.33	-7,107.6	-4,203.7	4,168.5	4,040.4	128.11	32.537		
13,600.0	7,530.0	7,667.8	7,548.9	108.2	23.8	90.33	-7,107.6	-4,203.7	4,140.5	4,010.6	129.85	31.886		
13,700.0	7,530.0	7,667.5	7,548.7	110.0	23.8	90.33	-7,107.6	-4,203.7	4,114.7	3,983.1	131.59	31.268		
13,800.0	7,530.0	7,667.2	7,548.4	111.7	23.8	90.32	-7,107.6	-4,203.7	4,091.3	3,957.9	133.34	30.684		
13,900.0	7,530.0	7,666.9	7,548.1	113.4	23.8	90.32	-7,107.6	-4,203.7	4,070.1	3,935.0	135.08	30.131		
14,000.0	7,530.0	7,666.6	7,547.8	115.2	23.8	90.31	-7,107.6	-4,203.7	4,051.3	3,914.5	136.82	29.610		
14,100.0	7,530.0	7,666.3	7,547.5	116.9	23.8	90.31	-7,107.6	-4,203.7	4,034.9	3,896.4	138.56	29.120		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		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			
14,200.0	7,530.0	7,666.1	7,547.2	118.7	23.8	90.30	-7,107.6	-4,203.7	4,021.0	3,880.6	140.31	28.658		
14,300.0	7,530.0	7,665.8	7,546.9	120.4	23.8	90.30	-7,107.6	-4,203.7	4,009.4	3,867.4	142.05	28.226		
14,400.0	7,530.0	7,665.5	7,546.7	122.1	23.8	90.30	-7,107.6	-4,203.7	4,000.4	3,856.6	143.79	27.820		
14,500.0	7,530.0	7,665.2	7,546.4	123.9	23.8	90.29	-7,107.6	-4,203.7	3,993.8	3,848.2	145.54	27.442		
14,600.0	7,530.0	7,664.9	7,546.1	125.6	23.8	90.29	-7,107.6	-4,203.7	3,989.7	3,842.4	147.28	27.089		
14,700.0	7,530.0	7,664.6	7,545.8	127.4	23.8	90.28	-7,107.6	-4,203.7	3,988.1	3,839.1	149.03	26.761		
14,712.9	7,530.0	7,664.5	7,545.7	127.6	23.8	90.28	-7,107.6	-4,203.7	3,988.1	3,838.9	149.25	26.721 CC		
14,800.0	7,530.0	7,664.3	7,545.5	129.1	23.8	90.28	-7,107.6	-4,203.7	3,989.1	3,838.3	150.77	26.458 ES		
14,900.0	7,530.0	7,664.0	7,545.2	130.9	23.8	90.28	-7,107.6	-4,203.7	3,992.5	3,840.0	152.52	26.178		
15,000.0	7,530.0	7,663.7	7,544.9	132.6	23.8	90.27	-7,107.6	-4,203.7	3,998.4	3,844.2	154.26	25.920		
15,100.0	7,530.0	7,663.4	7,544.5	134.4	23.8	90.27	-7,107.6	-4,203.7	4,006.8	3,850.8	156.01	25.684		
15,200.0	7,530.0	7,663.1	7,544.2	136.1	23.8	90.26	-7,107.6	-4,203.7	4,017.7	3,860.0	157.75	25.469		
15,300.0	7,530.0	7,662.7	7,543.9	137.9	23.8	90.26	-7,107.6	-4,203.7	4,031.1	3,871.6	159.50	25.274		
15,400.0	7,530.0	7,662.4	7,543.6	139.6	23.8	90.25	-7,107.6	-4,203.7	4,046.9	3,885.6	161.24	25.098		
15,500.0	7,530.0	7,662.1	7,543.3	141.3	23.8	90.25	-7,107.6	-4,203.7	4,065.0	3,902.0	162.99	24.940		
15,600.0	7,530.0	7,661.8	7,543.0	143.1	23.8	90.24	-7,107.6	-4,203.7	4,085.6	3,920.8	164.74	24.801		
15,700.0	7,530.0	7,661.5	7,542.6	144.8	23.8	90.24	-7,107.6	-4,203.7	4,108.4	3,942.0	166.48	24.678		
15,800.0	7,530.0	7,661.1	7,542.3	146.6	23.8	90.23	-7,107.6	-4,203.7	4,133.6	3,965.4	168.23	24.571		
15,900.0	7,530.0	7,660.8	7,542.0	148.3	23.8	90.23	-7,107.6	-4,203.8	4,161.0	3,991.0	169.98	24.480		
16,000.0	7,530.0	7,660.5	7,541.7	150.1	23.8	90.22	-7,107.6	-4,203.8	4,190.6	4,018.9	171.72	24.404		
16,100.0	7,530.0	7,660.2	7,541.3	151.8	23.8	90.22	-7,107.6	-4,203.8	4,222.4	4,049.0	173.47	24.341		
16,200.0	7,530.0	7,659.8	7,541.0	153.6	23.8	90.22	-7,107.6	-4,203.8	4,256.3	4,081.1	175.22	24.292		
16,300.0	7,530.0	7,659.5	7,540.7	155.3	23.8	90.21	-7,107.6	-4,203.8	4,292.3	4,115.3	176.96	24.255		
16,400.0	7,530.0	7,659.1	7,540.3	157.1	23.8	90.21	-7,107.6	-4,203.8	4,330.3	4,151.5	178.71	24.230		
16,500.0	7,530.0	7,658.8	7,540.0	158.8	23.8	90.20	-7,107.6	-4,203.8	4,370.2	4,189.7	180.46	24.217		
16,600.0	7,530.0	7,658.5	7,539.6	160.6	23.8	90.20	-7,107.6	-4,203.8	4,412.0	4,229.8	182.21	24.214 SF		
16,700.0	7,530.0	7,658.1	7,539.3	162.3	23.8	90.19	-7,107.6	-4,203.8	4,455.7	4,271.8	183.96	24.222		
16,800.0	7,530.0	7,657.8	7,538.9	164.1	23.8	90.19	-7,107.6	-4,203.8	4,501.2	4,315.5	185.70	24.239		
16,900.0	7,530.0	7,657.4	7,538.6	165.8	23.8	90.18	-7,107.6	-4,203.8	4,548.4	4,361.0	187.45	24.264		
17,000.0	7,530.0	7,657.1	7,538.2	167.6	23.8	90.18	-7,107.6	-4,203.8	4,597.3	4,408.1	189.20	24.299		
17,100.0	7,530.0	7,656.7	7,537.9	169.3	23.8	90.17	-7,107.6	-4,203.8	4,647.9	4,456.9	190.95	24.341		
17,200.0	7,530.0	7,656.3	7,537.5	171.1	23.8	90.17	-7,107.6	-4,203.8	4,700.0	4,507.3	192.70	24.391		
17,300.0	7,530.0	7,656.0	7,537.2	172.8	23.8	90.16	-7,107.6	-4,203.8	4,753.7	4,559.3	194.45	24.447		
17,400.0	7,530.0	7,655.6	7,536.8	174.5	23.8	90.15	-7,107.6	-4,203.8	4,808.9	4,612.7	196.19	24.511		
17,411.2	7,530.0	7,655.6	7,536.7	174.7	23.8	90.15	-7,107.6	-4,203.8	4,815.2	4,618.8	196.39	24.518		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - Plan #3														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	-149.32	-6,136.7	-3,640.5	7,135.3						
100.0	100.0	96.0	96.0	0.2	0.1	-149.32	-6,136.7	-3,640.5	7,135.3	7,135.0	0.29	N/A			
200.0	200.0	196.0	196.0	0.3	0.3	-149.32	-6,136.7	-3,640.5	7,135.3	7,134.7	0.64	N/A			
300.0	300.0	245.2	245.2	0.5	0.4	-149.32	-6,136.9	-3,640.5	7,135.6	7,134.7	0.90	7,902.147			
400.0	400.0	300.0	300.0	0.7	0.5	-149.33	-6,137.6	-3,640.5	7,136.7	7,135.6	1.17	6,082.144			
500.0	500.0	339.4	339.4	0.8	0.6	-149.33	-6,138.4	-3,640.6	7,138.5	7,137.1	1.42	5,034.373			
600.0	600.0	400.0	400.0	1.0	0.7	-126.30	-6,140.2	-3,640.8	7,141.6	7,139.9	1.70	4,206.306			
700.0	700.0	433.5	433.4	1.2	0.7	-126.27	-6,141.5	-3,640.9	7,146.5	7,144.5	1.93	3,696.230			
800.0	799.9	500.0	499.9	1.4	0.9	-126.25	-6,144.6	-3,641.1	7,153.2	7,150.9	2.23	3,206.428			
848.7	848.4	500.0	499.9	1.5	0.9	-126.22	-6,144.6	-3,641.1	7,157.0	7,154.6	2.32	3,085.037			
900.0	899.7	527.1	526.9	1.6	0.9	-126.24	-6,146.0	-3,641.3	7,161.4	7,158.9	2.46	2,907.170			
1,000.0	999.5	600.0	599.7	1.8	1.1	-126.28	-6,150.6	-3,641.7	7,170.6	7,167.8	2.78	2,579.212			
1,100.0	1,099.3	643.3	642.8	2.0	1.2	-126.31	-6,153.6	-3,641.9	7,180.3	7,177.2	3.05	2,357.372			
1,200.0	1,199.1	742.5	741.8	2.2	1.4	-126.37	-6,160.5	-3,642.5	7,190.2	7,186.7	3.41	2,106.451			
1,300.0	1,298.9	825.0	824.1	2.4	1.5	-126.42	-6,166.3	-3,643.0	7,200.1	7,196.3	3.75	1,918.972			
1,400.0	1,398.8	858.7	857.7	2.6	1.6	-126.44	-6,168.8	-3,643.4	7,210.7	7,206.7	4.00	1,801.323			
1,500.0	1,498.6	900.0	898.9	2.8	1.7	-126.47	-6,172.2	-3,644.2	7,222.2	7,218.0	4.27	1,692.347			
1,600.0	1,598.4	900.0	898.9	3.0	1.7	-126.47	-6,172.2	-3,644.2	7,234.8	7,230.3	4.46	1,622.463			
1,700.0	1,698.2	945.0	943.6	3.2	1.8	-126.49	-6,176.4	-3,645.5	7,248.2	7,243.5	4.73	1,532.151			
1,800.0	1,798.0	1,000.0	998.3	3.4	1.9	-126.52	-6,182.2	-3,647.9	7,262.8	7,257.8	5.02	1,447.157			
1,900.0	1,897.8	1,000.0	998.3	3.6	1.9	-126.52	-6,182.2	-3,647.9	7,278.0	7,272.8	5.21	1,396.651			
2,000.0	1,997.7	1,000.0	998.3	3.8	1.9	-126.52	-6,182.2	-3,647.9	7,294.6	7,289.2	5.40	1,349.939			
2,100.0	2,097.5	1,059.0	1,056.8	4.0	2.1	-126.55	-6,189.3	-3,651.2	7,311.7	7,306.0	5.70	1,282.906			
2,200.0	2,197.3	1,100.0	1,097.3	4.2	2.2	-126.57	-6,194.7	-3,654.0	7,330.0	7,324.0	5.96	1,229.469			
2,300.0	2,297.1	1,100.0	1,097.3	4.4	2.2	-126.57	-6,194.7	-3,654.0	7,349.2	7,343.0	6.15	1,194.033			
2,400.0	2,396.9	1,143.5	1,140.3	4.6	2.4	-126.59	-6,200.9	-3,657.4	7,369.3	7,362.8	6.42	1,147.218			
2,500.0	2,496.7	1,200.0	1,195.8	4.8	2.5	-126.61	-6,209.6	-3,662.6	7,390.5	7,383.8	6.71	1,101.191			
2,600.0	2,596.5	1,200.0	1,195.8	5.0	2.5	-126.61	-6,209.6	-3,662.6	7,412.3	7,405.4	6.90	1,073.518			
2,700.0	2,696.4	1,227.2	1,222.5	5.2	2.6	-126.62	-6,214.1	-3,665.3	7,435.2	7,428.0	7.14	1,040.705			
2,800.0	2,796.2	1,265.2	1,259.7	5.4	2.8	-126.63	-6,220.6	-3,669.4	7,458.9	7,451.5	7.40	1,007.717			
2,900.0	2,896.0	1,362.1	1,354.6	5.6	3.1	-126.66	-6,237.5	-3,680.1	7,483.0	7,475.3	7.76	964.297			
3,000.0	2,995.8	1,459.1	1,449.5	5.8	3.5	-126.69	-6,254.3	-3,690.8	7,507.2	7,499.0	8.12	924.774			
3,100.0	3,095.6	1,556.1	1,544.4	6.0	3.8	-126.72	-6,271.2	-3,701.5	7,531.3	7,522.8	8.48	888.549			
3,200.0	3,195.4	1,653.0	1,639.3	6.2	4.2	-126.75	-6,288.0	-3,712.1	7,555.4	7,546.6	8.83	855.232			
3,300.0	3,295.2	1,750.0	1,734.2	6.4	4.6	-126.78	-6,304.8	-3,722.8	7,579.5	7,570.3	9.19	824.492			
3,400.0	3,395.1	1,847.0	1,829.1	6.6	5.0	-126.81	-6,321.7	-3,733.5	7,603.6	7,594.1	9.55	796.044			
3,500.0	3,494.9	1,944.0	1,924.0	6.8	5.3	-126.84	-6,338.5	-3,744.2	7,627.8	7,617.9	9.91	769.641			
3,600.0	3,594.7	2,040.9	2,018.9	7.0	5.7	-126.87	-6,355.4	-3,754.9	7,651.9	7,641.6	10.27	745.074			
3,700.0	3,694.5	2,137.9	2,113.8	7.2	6.1	-126.90	-6,372.2	-3,765.6	7,676.0	7,665.4	10.63	722.158			
3,800.0	3,794.3	2,234.9	2,208.7	7.4	6.5	-126.93	-6,389.1	-3,776.2	7,700.2	7,689.2	10.99	700.734			
3,900.0	3,894.1	2,331.8	2,303.6	7.6	6.9	-126.96	-6,405.9	-3,786.9	7,724.3	7,712.9	11.35	680.660			
4,000.0	3,994.0	2,428.8	2,398.5	7.8	7.2	-126.99	-6,422.7	-3,797.6	7,748.4	7,736.7	11.71	661.814			
4,100.0	4,093.8	2,525.8	2,493.4	8.0	7.6	-127.02	-6,439.6	-3,808.3	7,772.6	7,760.5	12.07	644.087			
4,200.0	4,193.6	2,622.7	2,588.2	8.2	8.0	-127.05	-6,456.4	-3,819.0	7,796.7	7,784.3	12.43	627.383			
4,300.0	4,293.4	2,719.7	2,683.1	8.4	8.4	-127.07	-6,473.3	-3,829.6	7,820.8	7,808.0	12.79	611.615			
4,400.0	4,393.2	2,816.7	2,778.0	8.6	8.8	-127.10	-6,490.1	-3,840.3	7,845.0	7,831.8	13.15	596.707			
4,500.0	4,493.0	2,913.7	2,872.9	8.8	9.2	-127.13	-6,507.0	-3,851.0	7,869.1	7,855.6	13.51	582.592			
4,600.0	4,592.8	3,010.6	2,967.8	9.0	9.5	-127.16	-6,523.8	-3,861.7	7,893.3	7,879.4	13.87	569.207			
4,700.0	4,692.7	3,107.6	3,062.7	9.3	9.9	-127.19	-6,540.6	-3,872.4	7,917.4	7,903.2	14.23	556.498			
4,800.0	4,792.5	3,204.6	3,157.6	9.5	10.3	-127.21	-6,557.5	-3,883.0	7,941.6	7,927.0	14.59	544.414			
4,900.0	4,892.3	3,301.5	3,252.5	9.7	10.7	-127.24	-6,574.3	-3,893.7	7,965.7	7,950.8	14.95	532.911			
5,000.0	4,992.1	3,398.5	3,347.4	9.9	11.1	-127.27	-6,591.2	-3,904.4	7,989.9	7,974.6	15.31	521.948			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	5,091.9	3,495.5	3,442.3	10.1	11.5	-127.29	-6,608.0	-3,915.1	8,014.0	7,998.3	15.67	511.488		
5,200.0	5,191.7	3,592.5	3,537.2	10.3	11.9	-127.32	-6,624.9	-3,925.8	8,038.2	8,022.1	16.03	501.497		
5,300.0	5,291.5	3,689.4	3,632.1	10.5	12.2	-127.35	-6,641.7	-3,936.5	8,062.3	8,045.9	16.39	491.944		
5,400.0	5,391.4	3,786.4	3,727.0	10.7	12.6	-127.37	-6,658.5	-3,947.1	8,086.5	8,069.7	16.75	482.802		
5,500.0	5,491.2	3,883.4	3,821.9	10.9	13.0	-127.40	-6,675.4	-3,957.8	8,110.6	8,093.5	17.11	474.043		
5,600.0	5,591.0	3,980.3	3,916.8	11.1	13.4	-127.43	-6,692.2	-3,968.5	8,134.8	8,117.3	17.47	465.646		
5,700.0	5,690.8	4,077.3	4,011.7	11.3	13.8	-127.45	-6,709.1	-3,979.2	8,159.0	8,141.1	17.83	457.587		
5,800.0	5,790.6	4,174.3	4,106.6	11.5	14.2	-127.48	-6,725.9	-3,989.9	8,183.1	8,164.9	18.19	449.846		
5,900.0	5,890.4	4,271.2	4,201.5	11.7	14.6	-127.50	-6,742.8	-4,000.5	8,207.3	8,188.8	18.55	442.406		
6,000.0	5,990.3	4,368.2	4,296.4	11.9	15.0	-127.53	-6,759.6	-4,011.2	8,231.5	8,212.6	18.91	435.250		
6,100.0	6,090.1	4,465.2	4,391.3	12.1	15.3	-127.55	-6,776.4	-4,021.9	8,255.6	8,236.4	19.27	428.360		
6,200.0	6,189.9	4,562.2	4,486.2	12.3	15.7	-127.58	-6,793.3	-4,032.6	8,279.8	8,260.2	19.63	421.723		
6,300.0	6,289.7	4,659.1	4,581.1	12.5	16.1	-127.60	-6,810.1	-4,043.3	8,304.0	8,284.0	19.99	415.325		
6,400.0	6,389.5	4,756.1	4,676.0	12.7	16.5	-127.63	-6,827.0	-4,053.9	8,328.2	8,307.8	20.35	409.153		
6,500.0	6,489.3	4,853.1	4,770.9	12.9	16.9	-127.65	-6,843.8	-4,064.6	8,352.3	8,331.6	20.72	403.195		
6,600.0	6,589.1	4,950.0	4,865.8	13.1	17.3	-127.68	-6,860.7	-4,075.3	8,376.5	8,355.4	21.08	397.441		
6,700.0	6,689.0	5,047.0	4,960.7	13.3	17.7	-127.70	-6,877.5	-4,086.0	8,400.7	8,379.3	21.44	391.881		
6,785.3	6,774.1	5,129.7	5,041.6	13.5	18.0	-127.72	-6,891.9	-4,095.1	8,421.3	8,399.6	21.74	387.285		
6,800.0	6,788.8	5,144.0	5,055.6	13.5	18.1	-116.83	-6,894.4	-4,096.7	8,424.7	8,402.9	21.82	386.168		
6,850.0	6,838.8	5,193.1	5,103.6	13.6	18.3	-6.71	-6,902.9	-4,102.1	8,434.5	8,412.4	22.02	383.094		
6,900.0	6,888.6	5,242.6	5,152.1	13.6	18.5	14.98	-6,911.5	-4,107.5	8,441.1	8,419.0	22.15	381.030		
6,950.0	6,938.1	5,292.4	5,200.8	13.7	18.7	19.99	-6,920.1	-4,113.0	8,444.8	8,422.5	22.22	379.979		
7,000.0	6,987.0	5,342.1	5,248.3	13.7	23.0	23.44	-7,080.1	-4,214.5	8,444.3	8,419.0	25.29	333.834		
7,050.0	7,035.0	7,140.2	7,031.0	13.6	23.0	25.24	-7,080.1	-4,214.5	8,431.7	8,406.4	25.23	334.152		
7,100.0	7,082.0	7,187.1	7,078.0	13.6	23.1	26.73	-7,080.1	-4,214.5	8,416.1	8,391.0	25.12	335.019		
7,150.0	7,127.7	7,232.8	7,123.7	13.5	23.1	28.14	-7,080.1	-4,214.5	8,397.7	8,372.7	24.98	336.222		
7,200.0	7,171.8	7,276.9	7,167.8	13.5	23.1	29.59	-7,080.1	-4,214.5	8,376.6	8,351.8	24.82	337.479		
7,250.0	7,214.2	7,319.3	7,210.2	13.4	23.2	31.14	-7,080.1	-4,214.5	8,352.9	8,328.2	24.68	338.413		
7,300.0	7,254.6	7,359.8	7,250.6	13.4	23.2	32.86	-7,080.1	-4,214.5	8,326.6	8,302.0	24.59	338.557		
7,350.0	7,292.9	7,398.1	7,288.9	13.3	23.3	34.80	-7,080.1	-4,214.5	8,298.0	8,273.4	24.60	337.369		
7,400.0	7,328.9	7,434.0	7,324.9	13.3	23.3	36.99	-7,080.1	-4,214.5	8,267.2	8,242.5	24.73	334.273		
7,450.0	7,362.3	7,467.5	7,358.3	13.3	23.3	39.50	-7,080.1	-4,214.5	8,234.4	8,209.3	25.05	328.767		
7,500.0	7,393.1	7,498.3	7,389.1	13.4	23.4	42.38	-7,080.1	-4,214.5	8,199.6	8,174.0	25.58	320.530		
7,550.0	7,421.1	7,526.2	7,417.1	13.5	23.4	45.67	-7,080.1	-4,214.5	8,163.1	8,136.8	26.37	309.554		
7,600.0	7,446.1	7,551.2	7,442.1	13.6	23.4	49.45	-7,080.1	-4,214.5	8,125.1	8,097.7	27.43	296.216		
7,650.0	7,468.0	7,573.1	7,464.0	13.8	23.4	53.76	-7,080.1	-4,214.5	8,085.8	8,057.1	28.75	281.266		
7,700.0	7,486.7	7,591.9	7,482.7	14.0	23.4	58.63	-7,080.1	-4,214.5	8,045.3	8,015.1	30.28	265.720		
7,750.0	7,502.2	7,607.3	7,498.2	14.2	23.5	64.08	-7,080.1	-4,214.5	8,004.0	7,972.0	31.93	250.698		
7,800.0	7,514.3	7,619.4	7,510.3	14.6	23.5	70.07	-7,080.1	-4,214.5	7,961.8	7,928.3	33.56	237.244		
7,850.0	7,523.0	7,628.1	7,519.0	14.9	23.5	76.49	-7,080.1	-4,214.5	7,919.2	7,884.2	35.01	226.191		
7,900.0	7,528.2	7,633.4	7,524.2	15.3	23.5	83.19	-7,080.1	-4,214.5	7,876.3	7,840.1	36.12	218.071		
7,950.2	7,530.0	7,635.1	7,526.0	15.8	23.5	90.00	-7,080.1	-4,214.5	7,833.0	7,796.3	36.76	213.077		
8,000.0	7,530.0	7,635.1	7,526.0	16.2	23.5	90.00	-7,080.1	-4,214.5	7,790.3	7,753.0	37.24	209.164		
8,100.0	7,530.0	7,635.1	7,526.0	17.3	23.5	90.00	-7,080.1	-4,214.5	7,704.6	7,666.3	38.31	201.111		
8,200.0	7,530.0	7,635.1	7,526.0	18.4	23.5	90.00	-7,080.1	-4,214.5	7,619.3	7,579.9	39.48	192.979		
8,300.0	7,530.0	7,635.1	7,526.0	19.7	23.5	90.00	-7,080.1	-4,214.5	7,534.4	7,493.7	40.74	184.926		
8,400.0	7,530.0	7,635.1	7,526.0	21.0	23.5	90.00	-7,080.1	-4,214.5	7,449.8	7,407.8	42.07	177.063		
8,500.0	7,530.0	7,635.1	7,526.0	22.4	23.5	90.00	-7,080.1	-4,214.5	7,365.7	7,322.2	43.47	169.462		
8,600.0	7,530.0	7,635.1	7,526.0	23.8	23.5	90.00	-7,080.1	-4,214.5	7,281.9	7,237.0	44.90	162.166		
8,700.0	7,530.0	7,635.1	7,526.0	25.3	23.5	90.00	-7,080.1	-4,214.5	7,198.5	7,152.1	46.38	155.197		
8,800.0	7,530.0	7,635.1	7,526.0	26.8	23.5	90.00	-7,080.1	-4,214.5	7,115.6	7,067.7	47.90	148.565		
8,900.0	7,530.0	7,635.1	7,526.0	28.3	23.5	90.00	-7,080.1	-4,214.5	7,033.1	6,983.7	49.44	142.267		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,635.1	7,526.0	29.9	23.5	90.00	-7,080.1	-4,214.5	6,951.1	6,900.1	51.00	136.295		
9,100.0	7,530.0	7,635.1	7,526.0	31.4	23.5	90.00	-7,080.1	-4,214.5	6,869.5	6,816.9	52.58	130.637		
9,200.0	7,530.0	7,635.1	7,526.0	33.0	23.5	90.00	-7,080.1	-4,214.5	6,788.5	6,734.3	54.19	125.280		
9,300.0	7,530.0	7,635.1	7,526.0	34.7	23.5	90.00	-7,080.1	-4,214.5	6,707.9	6,652.1	55.80	120.208		
9,400.0	7,530.0	7,635.1	7,526.0	36.3	23.5	90.00	-7,080.1	-4,214.5	6,627.9	6,570.5	57.43	115.405		
9,500.0	7,530.0	7,635.1	7,526.0	37.9	23.5	90.00	-7,080.1	-4,214.5	6,548.4	6,489.4	59.07	110.855		
9,600.0	7,530.0	7,635.1	7,526.0	39.6	23.5	90.00	-7,080.1	-4,214.5	6,469.5	6,408.8	60.72	106.543		
9,700.0	7,530.0	7,635.1	7,526.0	41.2	23.5	90.00	-7,080.1	-4,214.5	6,391.2	6,328.8	62.38	102.454		
9,800.0	7,530.0	7,635.1	7,526.0	42.9	23.5	90.00	-7,080.1	-4,214.5	6,313.5	6,249.5	64.05	98.576		
9,900.0	7,530.0	7,635.1	7,526.0	44.5	23.5	90.00	-7,080.1	-4,214.5	6,236.5	6,170.7	65.72	94.894		
10,000.0	7,530.0	7,635.1	7,526.0	46.2	23.5	90.00	-7,080.1	-4,214.5	6,160.1	6,092.7	67.40	91.396		
10,100.0	7,530.0	7,635.1	7,526.0	47.9	23.5	90.00	-7,080.1	-4,214.5	6,084.3	6,015.3	69.08	88.071		
10,200.0	7,530.0	7,635.1	7,526.0	49.6	23.5	90.00	-7,080.1	-4,214.5	6,009.3	5,938.6	70.77	84.909		
10,300.0	7,530.0	7,635.1	7,526.0	51.3	23.5	90.00	-7,080.1	-4,214.5	5,935.1	5,862.6	72.47	81.900		
10,400.0	7,530.0	7,635.1	7,526.0	53.0	23.5	90.00	-7,080.1	-4,214.5	5,861.6	5,787.4	74.17	79.034		
10,500.0	7,530.0	7,635.1	7,526.0	54.7	23.5	90.00	-7,080.1	-4,214.5	5,788.9	5,713.0	75.87	76.303		
10,600.0	7,530.0	7,635.1	7,526.0	56.4	23.5	90.00	-7,080.1	-4,214.5	5,717.0	5,639.4	77.57	73.700		
10,700.0	7,530.0	7,635.1	7,526.0	58.1	23.5	90.00	-7,080.1	-4,214.5	5,645.9	5,566.7	79.28	71.217		
10,800.0	7,530.0	7,635.1	7,526.0	59.8	23.5	90.00	-7,080.1	-4,214.5	5,575.8	5,494.8	80.99	68.847		
10,900.0	7,530.0	7,635.1	7,526.0	61.5	23.5	90.00	-7,080.1	-4,214.5	5,506.6	5,423.9	82.70	66.584		
11,000.0	7,530.0	7,635.1	7,526.0	63.2	23.5	90.00	-7,080.1	-4,214.5	5,438.3	5,353.9	84.42	64.423		
11,100.0	7,530.0	7,635.1	7,526.0	64.9	23.5	90.00	-7,080.1	-4,214.5	5,371.0	5,284.9	86.13	62.358		
11,200.0	7,530.0	7,635.1	7,526.0	66.6	23.5	90.00	-7,080.1	-4,214.5	5,304.8	5,217.0	87.85	60.384		
11,300.0	7,530.0	7,635.1	7,526.0	68.4	23.5	90.00	-7,080.1	-4,214.5	5,239.6	5,150.1	89.57	58.496		
11,400.0	7,530.0	7,635.1	7,526.0	70.1	23.5	90.00	-7,080.1	-4,214.5	5,175.6	5,084.3	91.29	56.691		
11,500.0	7,530.0	7,635.1	7,526.0	71.8	23.5	90.00	-7,080.1	-4,214.5	5,112.7	5,019.7	93.02	54.964		
11,600.0	7,530.0	7,635.1	7,526.0	73.5	23.5	90.00	-7,080.1	-4,214.5	5,051.0	4,956.3	94.74	53.312		
11,700.0	7,530.0	7,635.1	7,526.0	75.3	23.5	90.00	-7,080.1	-4,214.5	4,990.5	4,894.1	96.47	51.731		
11,800.0	7,530.0	7,635.1	7,526.0	77.0	23.5	90.00	-7,080.1	-4,214.5	4,931.4	4,833.2	98.20	50.218		
11,900.0	7,530.0	7,635.1	7,526.0	78.7	23.5	90.00	-7,080.1	-4,214.5	4,873.5	4,773.6	99.93	48.771		
12,000.0	7,530.0	7,635.1	7,526.0	80.4	23.5	90.00	-7,080.1	-4,214.5	4,817.1	4,715.4	101.66	47.385		
12,100.0	7,530.0	7,635.1	7,526.0	82.2	23.5	90.00	-7,080.1	-4,214.5	4,762.0	4,658.6	103.39	46.060		
12,200.0	7,530.0	7,635.1	7,526.0	83.9	23.5	90.00	-7,080.1	-4,214.5	4,708.5	4,603.4	105.12	44.791		
12,300.0	7,530.0	7,635.1	7,526.0	85.6	23.5	90.00	-7,080.1	-4,214.5	4,656.5	4,549.6	106.85	43.578		
12,400.0	7,530.0	7,635.1	7,526.0	87.4	23.5	90.00	-7,080.1	-4,214.5	4,606.0	4,497.5	108.59	42.418		
12,500.0	7,530.0	7,635.1	7,526.0	89.1	23.5	90.00	-7,080.1	-4,214.5	4,557.3	4,446.9	110.32	41.309		
12,600.0	7,530.0	7,635.1	7,526.0	90.8	23.5	90.00	-7,080.1	-4,214.5	4,510.1	4,398.1	112.06	40.248		
12,700.0	7,530.0	7,635.1	7,526.0	92.6	23.5	90.00	-7,080.1	-4,214.5	4,464.8	4,351.0	113.79	39.236		
12,800.0	7,530.0	7,635.1	7,526.0	94.3	23.5	90.00	-7,080.1	-4,214.5	4,421.2	4,305.7	115.53	38.269		
12,900.0	7,530.0	7,635.1	7,526.0	96.0	23.5	90.00	-7,080.1	-4,214.5	4,379.5	4,262.2	117.27	37.346		
13,000.0	7,530.0	7,635.1	7,526.0	97.8	23.5	90.00	-7,080.1	-4,214.5	4,339.7	4,220.7	119.01	36.466		
13,100.0	7,530.0	7,635.1	7,526.0	99.5	23.5	90.00	-7,080.1	-4,214.5	4,301.8	4,181.1	120.74	35.628		
13,200.0	7,530.0	7,635.1	7,526.0	101.3	23.5	90.00	-7,080.1	-4,214.5	4,266.0	4,143.5	122.48	34.829		
13,300.0	7,530.0	7,635.1	7,526.0	103.0	23.5	90.00	-7,080.1	-4,214.5	4,232.2	4,108.0	124.22	34.069		
13,400.0	7,530.0	7,635.1	7,526.0	104.7	23.5	90.00	-7,080.1	-4,214.5	4,200.5	4,074.6	125.96	33.347		
13,500.0	7,530.0	7,635.1	7,526.0	106.5	23.5	90.00	-7,080.1	-4,214.5	4,171.0	4,043.3	127.70	32.662		
13,600.0	7,530.0	7,635.1	7,526.0	108.2	23.5	90.00	-7,080.1	-4,214.5	4,143.7	4,014.3	129.44	32.011		
13,700.0	7,530.0	7,635.1	7,526.0	110.0	23.5	90.00	-7,080.1	-4,214.5	4,118.6	3,987.5	131.19	31.395		
13,800.0	7,530.0	7,635.1	7,526.0	111.7	23.5	90.00	-7,080.1	-4,214.5	4,095.9	3,962.9	132.93	30.813		
13,900.0	7,530.0	7,635.1	7,526.0	113.4	23.5	90.00	-7,080.1	-4,214.5	4,075.4	3,940.7	134.67	30.262		
14,000.0	7,530.0	7,635.1	7,526.0	115.2	23.5	90.00	-7,080.1	-4,214.5	4,057.3	3,920.9	136.41	29.743		
14,100.0	7,530.0	7,635.1	7,526.0	116.9	23.5	90.00	-7,080.1	-4,214.5	4,041.6	3,903.5	138.16	29.254		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,200.0	7,530.0	7,635.1	7,526.0	118.7	23.5	90.00	-7,080.1	-4,214.5	4,028.4	3,888.5	139.90	28.795		
14,300.0	7,530.0	7,635.1	7,526.0	120.4	23.5	90.00	-7,080.1	-4,214.5	4,017.5	3,875.9	141.64	28.364		
14,400.0	7,530.0	7,635.1	7,526.0	122.1	23.5	90.00	-7,080.1	-4,214.5	4,009.2	3,865.8	143.39	27.961		
14,500.0	7,530.0	7,635.1	7,526.0	123.9	23.5	90.00	-7,080.1	-4,214.5	4,003.3	3,858.2	145.13	27.584		
14,600.0	7,530.0	7,635.1	7,526.0	125.6	23.5	90.00	-7,080.1	-4,214.5	3,999.9	3,853.0	146.87	27.233		
14,685.6	7,530.0	7,635.1	7,526.0	127.1	23.5	90.00	-7,080.1	-4,214.5	3,999.0	3,850.6	148.37	26.953	CC	
14,700.0	7,530.0	7,635.1	7,526.0	127.4	23.5	90.00	-7,080.1	-4,214.5	3,999.0	3,850.4	148.62	26.908		
14,800.0	7,530.0	7,635.1	7,526.0	129.1	23.5	90.00	-7,080.1	-4,214.5	4,000.6	3,850.3	150.36	26.606	ES	
14,900.0	7,530.0	7,635.1	7,526.0	130.9	23.5	90.00	-7,080.1	-4,214.5	4,004.7	3,852.6	152.11	26.328		
15,000.0	7,530.0	7,635.1	7,526.0	132.6	23.5	90.00	-7,080.1	-4,214.5	4,011.3	3,857.5	153.85	26.072		
15,100.0	7,530.0	7,635.1	7,526.0	134.4	23.5	90.00	-7,080.1	-4,214.5	4,020.4	3,864.8	155.60	25.838		
15,200.0	7,530.0	7,635.1	7,526.0	136.1	23.5	90.00	-7,080.1	-4,214.5	4,031.9	3,874.6	157.35	25.625		
15,300.0	7,530.0	7,635.1	7,526.0	137.9	23.5	90.00	-7,080.1	-4,214.5	4,045.9	3,886.8	159.09	25.431		
15,400.0	7,530.0	7,635.1	7,526.0	139.6	23.5	90.00	-7,080.1	-4,214.5	4,062.3	3,901.5	160.84	25.257		
15,500.0	7,530.0	7,635.1	7,526.0	141.3	23.5	90.00	-7,080.1	-4,214.5	4,081.1	3,918.5	162.58	25.101		
15,600.0	7,530.0	7,635.1	7,526.0	143.1	23.5	90.00	-7,080.1	-4,214.5	4,102.2	3,937.9	164.33	24.963		
15,700.0	7,530.0	7,635.1	7,526.0	144.8	23.5	90.00	-7,080.1	-4,214.5	4,125.6	3,959.6	166.08	24.842		
15,800.0	7,530.0	7,635.1	7,526.0	146.6	23.5	90.00	-7,080.1	-4,214.5	4,151.4	3,983.5	167.83	24.736		
15,900.0	7,530.0	7,635.1	7,526.0	148.3	23.5	90.00	-7,080.1	-4,214.5	4,179.3	4,009.7	169.57	24.646		
16,000.0	7,530.0	7,635.1	7,526.0	150.1	23.5	90.00	-7,080.1	-4,214.5	4,209.5	4,038.1	171.32	24.571		
16,100.0	7,530.0	7,635.1	7,526.0	151.8	23.5	90.00	-7,080.1	-4,214.5	4,241.8	4,068.7	173.07	24.509		
16,200.0	7,530.0	7,635.1	7,526.0	153.6	23.5	90.00	-7,080.1	-4,214.5	4,276.1	4,101.3	174.81	24.461		
16,300.0	7,530.0	7,635.1	7,526.0	155.3	23.5	90.00	-7,080.1	-4,214.5	4,312.6	4,136.0	176.56	24.425		
16,400.0	7,530.0	7,635.1	7,526.0	157.1	23.5	90.00	-7,080.1	-4,214.5	4,351.0	4,172.7	178.31	24.401		
16,500.0	7,530.0	7,635.1	7,526.0	158.8	23.5	90.00	-7,080.1	-4,214.5	4,391.4	4,211.3	180.06	24.389		
16,600.0	7,530.0	7,635.1	7,526.0	160.6	23.5	90.00	-7,080.1	-4,214.5	4,433.6	4,251.8	181.81	24.386	SF	
16,700.0	7,530.0	7,635.1	7,526.0	162.3	23.5	90.00	-7,080.1	-4,214.5	4,477.7	4,294.1	183.55	24.394		
16,800.0	7,530.0	7,635.1	7,526.0	164.1	23.5	90.00	-7,080.1	-4,214.5	4,523.6	4,338.3	185.30	24.412		
16,900.0	7,530.0	7,635.1	7,526.0	165.8	23.5	90.00	-7,080.1	-4,214.5	4,571.2	4,384.1	187.05	24.438		
17,000.0	7,530.0	7,635.1	7,526.0	167.6	23.5	90.00	-7,080.1	-4,214.5	4,620.4	4,431.6	188.80	24.473		
17,100.0	7,530.0	7,635.1	7,526.0	169.3	23.5	90.00	-7,080.1	-4,214.5	4,671.3	4,480.8	190.55	24.515		
17,200.0	7,530.0	7,635.1	7,526.0	171.1	23.5	90.00	-7,080.1	-4,214.5	4,723.8	4,531.5	192.30	24.565		
17,300.0	7,530.0	7,635.1	7,526.0	172.8	23.5	90.00	-7,080.1	-4,214.5	4,777.8	4,583.7	194.05	24.622		
17,400.0	7,530.0	7,635.1	7,526.0	174.5	23.5	90.00	-7,080.1	-4,214.5	4,833.2	4,637.4	195.80	24.685		
17,411.2	7,530.0	7,635.1	7,526.0	174.7	23.5	90.00	-7,080.1	-4,214.5	4,839.5	4,643.6	195.99	24.692		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (Gyro) - DD													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													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	-149.21	-6,136.7	-3,657.3	7,143.9					
100.0	100.0	64.8	64.8	0.2	0.0	-149.21	-6,136.9	-3,657.2	7,144.1	7,143.9	0.20	N/A		
200.0	200.0	167.9	167.9	0.3	0.1	-149.21	-6,137.7	-3,657.0	7,144.6	7,144.2	0.46	N/A		
300.0	300.0	266.0	266.0	0.5	0.2	-149.22	-6,138.4	-3,656.4	7,144.9	7,144.2	0.72	9,909.902		
400.0	400.0	341.3	341.2	0.7	0.3	-149.23	-6,139.2	-3,655.8	7,145.5	7,144.5	0.96	7,430.905		
500.0	500.0	1,500.0	1,492.9	0.8	1.6	-149.58	-6,098.2	-3,580.1	7,141.5	7,139.4	2.16	3,309.871		
600.0	600.0	1,500.0	1,492.9	1.0	1.6	-126.68	-6,098.2	-3,580.1	7,128.8	7,126.4	2.40	2,967.278		
700.0	700.0	1,500.0	1,492.9	1.2	1.6	-126.76	-6,098.2	-3,580.1	7,118.4	7,115.8	2.58	2,760.289		
800.0	799.9	1,500.0	1,492.9	1.4	1.6	-126.82	-6,098.2	-3,580.1	7,110.5	7,107.7	2.76	2,577.480		
848.7	848.4	1,500.0	1,492.9	1.5	1.6	-126.85	-6,098.2	-3,580.1	7,107.5	7,104.7	2.85	2,495.893		
900.0	899.7	1,500.0	1,492.9	1.6	1.6	-126.85	-6,098.2	-3,580.1	7,104.9	7,101.9	2.94	2,414.576		
1,000.0	999.5	1,500.0	1,492.9	1.8	1.6	-126.85	-6,098.2	-3,580.1	7,100.8	7,097.7	3.13	2,269.575		
1,100.0	1,099.3	1,500.0	1,492.9	2.0	1.6	-126.85	-6,098.2	-3,580.1	7,098.1	7,094.8	3.32	2,140.280		
1,200.0	1,199.1	1,500.0	1,492.9	2.2	1.6	-126.85	-6,098.2	-3,580.1	7,096.9	7,093.4	3.51	2,024.580		
1,240.0	1,239.0	1,500.0	1,492.9	2.2	1.6	-126.85	-6,098.2	-3,580.1	7,096.7	7,093.2	3.58	1,981.675		
1,300.0	1,298.9	1,500.0	1,492.9	2.4	1.6	-126.85	-6,098.2	-3,580.1	7,097.0	7,093.3	3.70	1,920.643		
1,400.0	1,398.8	1,500.0	1,492.9	2.6	1.6	-126.85	-6,098.2	-3,580.1	7,098.5	7,094.7	3.89	1,826.909		
1,500.0	1,498.6	1,500.0	1,492.9	2.8	1.6	-126.85	-6,098.2	-3,580.1	7,101.5	7,097.4	4.08	1,742.053		
1,600.0	1,598.4	1,500.0	1,492.9	3.0	1.6	-126.85	-6,098.2	-3,580.1	7,105.9	7,101.6	4.27	1,664.956		
1,700.0	1,698.2	1,500.0	1,492.9	3.2	1.6	-126.85	-6,098.2	-3,580.1	7,111.6	7,107.2	4.46	1,594.668		
1,800.0	1,798.0	1,500.0	1,492.9	3.4	1.6	-126.85	-6,098.2	-3,580.1	7,118.8	7,114.2	4.65	1,530.383		
1,900.0	1,897.8	1,500.0	1,492.9	3.6	1.6	-126.85	-6,098.2	-3,580.1	7,127.4	7,122.5	4.84	1,471.411		
2,000.0	1,997.7	1,500.0	1,492.9	3.8	1.6	-126.85	-6,098.2	-3,580.1	7,137.3	7,132.3	5.04	1,417.161		
2,100.0	2,097.5	1,500.0	1,492.9	4.0	1.6	-126.85	-6,098.2	-3,580.1	7,148.7	7,143.4	5.23	1,367.126		
2,200.0	2,197.3	1,500.0	1,492.9	4.2	1.6	-126.85	-6,098.2	-3,580.1	7,161.4	7,156.0	5.42	1,320.864		
2,300.0	2,297.1	1,500.0	1,492.9	4.4	1.6	-126.85	-6,098.2	-3,580.1	7,175.5	7,169.9	5.61	1,277.995		
2,400.0	2,396.9	1,500.0	1,492.9	4.6	1.6	-126.85	-6,098.2	-3,580.1	7,190.9	7,185.1	5.81	1,238.185		
2,500.0	2,496.7	1,500.0	1,492.9	4.8	1.6	-126.85	-6,098.2	-3,580.1	7,207.7	7,201.7	6.00	1,201.143		
2,600.0	2,596.5	1,500.0	1,492.9	5.0	1.6	-126.85	-6,098.2	-3,580.1	7,225.9	7,219.7	6.19	1,166.611		
2,700.0	2,696.4	1,500.0	1,492.9	5.2	1.6	-126.85	-6,098.2	-3,580.1	7,245.4	7,239.0	6.39	1,134.365		
2,800.0	2,796.2	1,500.0	1,492.9	5.4	1.6	-126.85	-6,098.2	-3,580.1	7,266.2	7,259.6	6.58	1,104.202		
2,900.0	2,896.0	1,500.0	1,492.9	5.6	1.6	-126.85	-6,098.2	-3,580.1	7,288.3	7,281.5	6.77	1,075.946		
3,000.0	2,995.8	1,500.0	1,492.9	5.8	1.6	-126.85	-6,098.2	-3,580.1	7,311.7	7,304.8	6.97	1,049.436		
3,100.0	3,095.6	1,500.0	1,492.9	6.0	1.6	-126.85	-6,098.2	-3,580.1	7,336.4	7,329.3	7.16	1,024.533		
3,200.0	3,195.4	1,500.0	1,492.9	6.2	1.6	-126.85	-6,098.2	-3,580.1	7,362.4	7,355.1	7.35	1,001.107		
3,300.0	3,295.2	1,500.0	1,492.9	6.4	1.6	-126.85	-6,098.2	-3,580.1	7,389.7	7,382.1	7.55	979.044		
3,400.0	3,395.1	1,500.0	1,492.9	6.6	1.6	-126.85	-6,098.2	-3,580.1	7,418.2	7,410.4	7.74	958.242		
3,500.0	3,494.9	1,500.0	1,492.9	6.8	1.6	-126.85	-6,098.2	-3,580.1	7,447.9	7,440.0	7.94	938.606		
3,600.0	3,594.7	1,500.0	1,492.9	7.0	1.6	-126.85	-6,098.2	-3,580.1	7,478.9	7,470.7	8.13	920.053		
3,700.0	3,694.5	1,500.0	1,492.9	7.2	1.6	-126.85	-6,098.2	-3,580.1	7,511.0	7,502.7	8.32	902.504		
3,800.0	3,794.3	1,500.0	1,492.9	7.4	1.6	-126.85	-6,098.2	-3,580.1	7,544.4	7,535.8	8.52	885.891		
3,900.0	3,894.1	1,500.0	1,492.9	7.6	1.6	-126.85	-6,098.2	-3,580.1	7,578.9	7,570.2	8.71	870.149		
4,000.0	3,994.0	1,500.0	1,492.9	7.8	1.6	-126.85	-6,098.2	-3,580.1	7,614.6	7,605.7	8.90	855.220		
4,100.0	4,093.8	1,500.0	1,492.9	8.0	1.6	-126.85	-6,098.2	-3,580.1	7,651.4	7,642.3	9.10	841.051		
4,200.0	4,193.6	1,500.0	1,492.9	8.2	1.6	-126.85	-6,098.2	-3,580.1	7,689.3	7,680.0	9.29	827.592		
4,300.0	4,293.4	1,500.0	1,492.9	8.4	1.6	-126.85	-6,098.2	-3,580.1	7,728.4	7,718.9	9.48	814.799		
4,400.0	4,393.2	1,500.0	1,492.9	8.6	1.6	-126.85	-6,098.2	-3,580.1	7,768.5	7,758.8	9.68	802.629		
4,500.0	4,493.0	1,500.0	1,492.9	8.8	1.6	-126.85	-6,098.2	-3,580.1	7,809.7	7,799.8	9.87	791.045		
4,600.0	4,592.8	1,500.0	1,492.9	9.0	1.6	-126.85	-6,098.2	-3,580.1	7,852.0	7,841.9	10.07	780.010		
4,700.0	4,692.7	1,500.0	1,492.9	9.3	1.6	-126.85	-6,098.2	-3,580.1	7,895.3	7,885.0	10.26	769.494		
4,800.0	4,792.5	1,500.0	1,492.9	9.5	1.6	-126.85	-6,098.2	-3,580.1	7,939.6	7,929.2	10.45	759.464		
4,900.0	4,892.3	1,500.0	1,492.9	9.7	1.6	-126.85	-6,098.2	-3,580.1	7,985.0	7,974.3	10.65	749.893		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (Gyro) - DD													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,992.1	1,500.0	1,492.9		9.9	1.6	-126.85	-6,098.2	-3,580.1	8,031.3	8,020.4	10.84	740.755	
5,100.0	5,091.9	1,500.0	1,492.9	10.1	1.6	-126.85	-6,098.2	-3,580.1	8,078.6	8,067.5	11.04	732.026		
5,200.0	5,191.7	1,500.0	1,492.9	10.3	1.6	-126.85	-6,098.2	-3,580.1	8,126.8	8,115.6	11.23	723.682		
5,300.0	5,291.5	1,500.0	1,492.9	10.5	1.6	-126.85	-6,098.2	-3,580.1	8,176.0	8,164.6	11.42	715.704		
5,400.0	5,391.4	1,500.0	1,492.9	10.7	1.6	-126.85	-6,098.2	-3,580.1	8,226.1	8,214.5	11.62	708.070		
5,500.0	5,491.2	1,500.0	1,492.9	10.9	1.6	-126.85	-6,098.2	-3,580.1	8,277.2	8,265.4	11.81	700.764		
5,600.0	5,591.0	1,500.0	1,492.9	11.1	1.6	-126.85	-6,098.2	-3,580.1	8,329.1	8,317.1	12.01	693.767		
5,700.0	5,690.8	1,500.0	1,492.9	11.3	1.6	-126.85	-6,098.2	-3,580.1	8,381.9	8,369.7	12.20	687.063		
5,800.0	5,790.6	1,500.0	1,492.9	11.5	1.6	-126.85	-6,098.2	-3,580.1	8,435.5	8,423.1	12.39	680.638		
5,900.0	5,890.4	1,500.0	1,492.9	11.7	1.6	-126.85	-6,098.2	-3,580.1	8,490.0	8,477.4	12.59	674.478		
6,000.0	5,990.3	1,500.0	1,492.9	11.9	1.6	-126.85	-6,098.2	-3,580.1	8,545.3	8,532.5	12.78	668.568		
6,100.0	6,090.1	1,500.0	1,492.9	12.1	1.6	-126.85	-6,098.2	-3,580.1	8,601.4	8,588.4	12.98	662.897		
6,200.0	6,189.9	1,500.0	1,492.9	12.3	1.6	-126.85	-6,098.2	-3,580.1	8,658.3	8,645.1	13.17	657.453		
6,300.0	6,289.7	1,500.0	1,492.9	12.5	1.6	-126.85	-6,098.2	-3,580.1	8,715.9	8,702.6	13.36	652.225		
6,400.0	6,389.5	1,500.0	1,492.9	12.7	1.6	-126.85	-6,098.2	-3,580.1	8,774.4	8,760.8	13.56	647.202		
6,500.0	6,489.3	1,500.0	1,492.9	12.9	1.6	-126.85	-6,098.2	-3,580.1	8,833.5	8,819.8	13.75	642.375		
6,600.0	6,589.1	1,500.0	1,492.9	13.1	1.6	-126.85	-6,098.2	-3,580.1	8,893.5	8,879.5	13.95	637.734		
6,700.0	6,689.0	1,500.0	1,492.9	13.3	1.6	-126.85	-6,098.2	-3,580.1	8,954.1	8,939.9	14.14	633.272		
6,785.3	6,774.1	1,500.0	1,492.9	13.5	1.6	-126.85	-6,098.2	-3,580.1	9,006.3	8,992.0	14.30	629.601		
6,800.0	6,788.8	1,500.0	1,492.9	13.5	1.6	-116.26	-6,098.2	-3,580.1	9,015.3	9,001.0	14.32	629.493		
6,850.0	6,838.8	1,500.0	1,492.9	13.6	1.6	-7.12	-6,098.2	-3,580.1	9,044.3	9,029.9	14.35	630.299		
6,900.0	6,888.6	1,500.0	1,492.9	13.6	1.6	13.66	-6,098.2	-3,580.1	9,070.9	9,056.5	14.34	632.626		
6,950.0	6,938.1	1,500.0	1,492.9	13.7	1.6	17.81	-6,098.2	-3,580.1	9,095.0	9,080.7	14.29	636.480		
7,000.0	6,987.0	1,500.0	1,492.9	13.7	1.6	19.23	-6,098.2	-3,580.1	9,116.6	9,102.4	14.20	641.860		
7,050.0	7,035.0	1,500.0	1,492.9	13.6	1.6	19.78	-6,098.2	-3,580.1	9,135.4	9,121.4	14.08	648.761		
7,100.0	7,082.0	1,500.0	1,492.9	13.6	1.6	20.01	-6,098.2	-3,580.1	9,151.6	9,137.7	13.93	657.169		
7,150.0	7,127.7	1,500.0	1,492.9	13.5	1.6	20.11	-6,098.2	-3,580.1	9,164.9	9,151.2	13.74	667.055		
7,200.0	7,171.8	1,500.0	1,492.9	13.5	1.6	20.16	-6,098.2	-3,580.1	9,175.4	9,161.9	13.53	678.367		
7,250.0	7,214.2	1,500.0	1,492.9	13.4	1.6	20.22	-6,098.2	-3,580.1	9,183.0	9,169.7	13.29	691.017		
7,300.0	7,254.6	1,500.0	1,492.9	13.4	1.6	20.30	-6,098.2	-3,580.1	9,187.7	9,174.6	13.03	704.862		
7,350.0	7,292.9	1,500.0	1,492.9	13.3	1.6	20.43	-6,098.2	-3,580.1	9,189.4	9,176.6	12.77	719.687		
7,400.0	7,328.9	1,500.0	1,492.9	13.3	1.6	20.61	-6,098.2	-3,580.1	9,188.2	9,175.7	12.50	735.172		
7,450.0	7,362.3	1,500.0	1,492.9	13.3	1.6	20.86	-6,098.2	-3,580.1	9,184.0	9,171.7	12.23	750.866		
7,500.0	7,393.1	1,500.0	1,492.9	13.4	1.6	21.17	-6,098.2	-3,580.1	9,176.9	9,164.9	11.98	766.157		
7,550.0	7,421.1	1,500.0	1,492.9	13.5	1.6	21.57	-6,098.2	-3,580.1	9,166.8	9,155.1	11.75	780.247		
7,600.0	7,446.1	1,500.0	1,492.9	13.6	1.6	22.06	-6,098.2	-3,580.1	9,154.0	9,142.4	11.56	792.155		
7,650.0	7,468.0	1,500.0	1,492.9	13.8	1.6	22.65	-6,098.2	-3,580.1	9,138.3	9,126.9	11.41	800.749		
7,700.0	7,486.7	1,500.0	1,492.9	14.0	1.6	23.35	-6,098.2	-3,580.1	9,119.8	9,108.5	11.33	804.835		
7,750.0	7,502.2	1,500.0	1,492.9	14.2	1.6	24.18	-6,098.2	-3,580.1	9,098.7	9,087.4	11.33	803.297		
7,800.0	7,514.3	1,500.0	1,492.9	14.6	1.6	25.15	-6,098.2	-3,580.1	9,075.0	9,063.6	11.41	795.283		
7,850.0	7,523.0	1,500.0	1,492.9	14.9	1.6	26.29	-6,098.2	-3,580.1	9,048.8	9,037.2	11.60	780.378		
7,900.0	7,528.2	1,500.0	1,492.9	15.3	1.6	27.63	-6,098.2	-3,580.1	9,020.2	9,008.3	11.89	758.710		
7,950.2	7,530.0	1,500.0	1,492.9	15.8	1.6	29.20	-6,098.2	-3,580.1	8,989.2	8,976.9	12.30	730.795		
8,000.0	7,530.0	1,500.0	1,492.9	16.2	1.6	29.20	-6,098.2	-3,580.1	8,957.4	8,944.9	12.55	713.656		
8,100.0	7,530.0	1,500.0	1,492.9	17.3	1.6	29.20	-6,098.2	-3,580.1	8,894.1	8,881.1	13.09	679.537		
8,200.0	7,530.0	1,500.0	1,492.9	18.4	1.6	29.20	-6,098.2	-3,580.1	8,831.5	8,817.9	13.66	646.316		
8,300.0	7,530.0	1,500.0	1,492.9	19.7	1.6	29.20	-6,098.2	-3,580.1	8,769.6	8,755.3	14.27	614.381		
8,400.0	7,530.0	1,500.0	1,492.9	21.0	1.6	29.20	-6,098.2	-3,580.1	8,708.4	8,693.5	14.91	583.970		
8,500.0	7,530.0	1,500.0	1,492.9	22.4	1.6	29.20	-6,098.2	-3,580.1	8,647.9	8,632.3	15.58	555.207		
8,600.0	7,530.0	1,500.0	1,492.9	23.8	1.6	29.20	-6,098.2	-3,580.1	8,588.2	8,571.9	16.26	528.134		
8,700.0	7,530.0	1,500.0	1,492.9	25.3	1.6	29.20	-6,098.2	-3,580.1	8,529.2	8,512.2	16.97	502.737		
8,800.0	7,530.0	1,500.0	1,492.9	26.8	1.6	29.20	-6,098.2	-3,580.1	8,470.9	8,453.2	17.69	478.963		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (Gyro) - DD													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,530.0	1,500.0	1,492.9	28.3	1.6	29.20	-6,098.2	-3,580.1	8,413.5	8,395.1	18.42	456.739		
9,000.0	7,530.0	1,500.0	1,492.9	29.9	1.6	29.20	-6,098.2	-3,580.1	8,356.9	8,337.7	19.17	435.977		
9,100.0	7,530.0	1,500.0	1,492.9	31.4	1.6	29.20	-6,098.2	-3,580.1	8,301.0	8,281.1	19.93	416.584		
9,200.0	7,530.0	1,500.0	1,492.9	33.0	1.6	29.20	-6,098.2	-3,580.1	8,246.0	8,225.4	20.69	398.466		
9,300.0	7,530.0	1,500.0	1,492.9	34.7	1.6	29.20	-6,098.2	-3,580.1	8,191.9	8,170.4	21.47	381.533		
9,400.0	7,530.0	1,500.0	1,492.9	36.3	1.6	29.20	-6,098.2	-3,580.1	8,138.6	8,116.4	22.26	365.695		
9,500.0	7,530.0	1,500.0	1,492.9	37.9	1.6	29.20	-6,098.2	-3,580.1	8,086.3	8,063.2	23.05	350.871		
9,600.0	7,530.0	1,500.0	1,492.9	39.6	1.6	29.20	-6,098.2	-3,580.1	8,034.8	8,010.9	23.84	336.983		
9,700.0	7,530.0	1,500.0	1,492.9	41.2	1.6	29.20	-6,098.2	-3,580.1	7,984.2	7,959.6	24.65	323.959		
9,800.0	7,530.0	1,500.0	1,492.9	42.9	1.6	29.20	-6,098.2	-3,580.1	7,934.6	7,909.2	25.45	311.734		
9,900.0	7,530.0	1,500.0	1,492.9	44.5	1.6	29.20	-6,098.2	-3,580.1	7,886.0	7,859.7	26.26	300.246		
10,000.0	7,530.0	1,500.0	1,492.9	46.2	1.6	29.20	-6,098.2	-3,580.1	7,838.3	7,811.2	27.08	289.440		
10,100.0	7,530.0	1,500.0	1,492.9	47.9	1.6	29.20	-6,098.2	-3,580.1	7,791.6	7,763.7	27.90	279.265		
10,200.0	7,530.0	1,500.0	1,492.9	49.6	1.6	29.20	-6,098.2	-3,580.1	7,745.9	7,717.2	28.72	269.676		
10,300.0	7,530.0	1,500.0	1,492.9	51.3	1.6	29.20	-6,098.2	-3,580.1	7,701.2	7,671.7	29.55	260.628		
10,400.0	7,530.0	1,500.0	1,492.9	53.0	1.6	29.20	-6,098.2	-3,580.1	7,657.6	7,627.2	30.38	252.084		
10,500.0	7,530.0	1,500.0	1,492.9	54.7	1.6	29.20	-6,098.2	-3,580.1	7,615.1	7,583.9	31.21	244.008		
10,600.0	7,530.0	1,500.0	1,492.9	56.4	1.6	29.20	-6,098.2	-3,580.1	7,573.6	7,541.5	32.04	236.368		
10,700.0	7,530.0	1,500.0	1,492.9	58.1	1.6	29.20	-6,098.2	-3,580.1	7,533.2	7,500.3	32.88	229.134		
10,800.0	7,530.0	1,500.0	1,492.9	59.8	1.6	29.20	-6,098.2	-3,580.1	7,494.0	7,460.3	33.71	222.278		
10,900.0	7,530.0	1,500.0	1,492.9	61.5	1.6	29.20	-6,098.2	-3,580.1	7,455.8	7,421.3	34.55	215.776		
11,000.0	7,530.0	1,500.0	1,492.9	63.2	1.6	29.20	-6,098.2	-3,580.1	7,418.9	7,383.5	35.39	209.605		
11,100.0	7,530.0	1,500.0	1,492.9	64.9	1.6	29.20	-6,098.2	-3,580.1	7,383.1	7,346.8	36.24	203.744		
11,200.0	7,530.0	1,500.0	1,492.9	66.6	1.6	29.20	-6,098.2	-3,580.1	7,348.5	7,311.4	37.08	198.174		
11,300.0	7,530.0	1,500.0	1,492.9	68.4	1.6	29.20	-6,098.2	-3,580.1	7,315.1	7,277.1	37.93	192.876		
11,400.0	7,530.0	1,500.0	1,492.9	70.1	1.6	29.20	-6,098.2	-3,580.1	7,282.9	7,244.1	38.77	187.835		
11,500.0	7,530.0	1,500.0	1,492.9	71.8	1.6	29.20	-6,098.2	-3,580.1	7,251.9	7,212.3	39.62	183.035		
11,600.0	7,530.0	1,500.0	1,492.9	73.5	1.6	29.20	-6,098.2	-3,580.1	7,222.2	7,181.8	40.47	178.462		
11,700.0	7,530.0	1,500.0	1,492.9	75.3	1.6	29.20	-6,098.2	-3,580.1	7,193.8	7,152.5	41.32	174.103		
11,800.0	7,530.0	1,500.0	1,492.9	77.0	1.6	29.20	-6,098.2	-3,580.1	7,166.7	7,124.5	42.17	169.947		
11,900.0	7,530.0	1,500.0	1,492.9	78.7	1.6	29.20	-6,098.2	-3,580.1	7,140.8	7,097.8	43.02	165.982		
12,000.0	7,530.0	1,500.0	1,492.9	80.4	1.6	29.20	-6,098.2	-3,580.1	7,116.3	7,072.4	43.87	162.197		
12,100.0	7,530.0	1,500.0	1,492.9	82.2	1.6	29.20	-6,098.2	-3,580.1	7,093.1	7,048.3	44.73	158.584		
12,200.0	7,530.0	1,500.0	1,492.9	83.9	1.6	29.20	-6,098.2	-3,580.1	7,071.2	7,025.6	45.58	155.132		
12,300.0	7,530.0	1,500.0	1,492.9	85.6	1.6	29.20	-6,098.2	-3,580.1	7,050.6	7,004.2	46.44	151.834		
12,400.0	7,530.0	1,500.0	1,492.9	87.4	1.6	29.20	-6,098.2	-3,580.1	7,031.5	6,984.2	47.29	148.683		
12,500.0	7,530.0	1,500.0	1,492.9	89.1	1.6	29.20	-6,098.2	-3,580.1	7,013.7	6,965.5	48.15	145.669		
12,600.0	7,530.0	1,500.0	1,492.9	90.8	1.6	29.20	-6,098.2	-3,580.1	6,997.3	6,948.3	49.00	142.788		
12,700.0	7,530.0	1,500.0	1,492.9	92.6	1.6	29.20	-6,098.2	-3,580.1	6,982.3	6,932.4	49.86	140.032		
12,800.0	7,530.0	1,500.0	1,492.9	94.3	1.6	29.20	-6,098.2	-3,580.1	6,968.7	6,917.9	50.72	137.395		
12,900.0	7,530.0	1,500.0	1,492.9	96.0	1.6	29.20	-6,098.2	-3,580.1	6,956.5	6,904.9	51.58	134.872		
13,000.0	7,530.0	1,500.0	1,492.9	97.8	1.6	29.20	-6,098.2	-3,580.1	6,945.7	6,893.3	52.44	132.458		
13,100.0	7,530.0	1,500.0	1,492.9	99.5	1.6	29.20	-6,098.2	-3,580.1	6,936.3	6,883.0	53.30	130.147		
13,200.0	7,530.0	1,500.0	1,492.9	101.3	1.6	29.20	-6,098.2	-3,580.1	6,928.4	6,874.3	54.16	127.935		
13,300.0	7,530.0	1,500.0	1,492.9	103.0	1.6	29.20	-6,098.2	-3,580.1	6,921.9	6,866.9	55.02	125.816		
13,400.0	7,530.0	1,500.0	1,492.9	104.7	1.6	29.20	-6,098.2	-3,580.1	6,916.9	6,861.0	55.88	123.789		
13,500.0	7,530.0	1,500.0	1,492.9	106.5	1.6	29.20	-6,098.2	-3,580.1	6,913.3	6,856.5	56.74	121.847		
13,600.0	7,530.0	1,500.0	1,492.9	108.2	1.6	29.20	-6,098.2	-3,580.1	6,911.1	6,853.5	57.60	119.987		
13,699.3	7,530.0	1,500.0	1,492.9	109.9	1.6	29.20	-6,098.2	-3,580.1	6,910.4	6,851.9	58.45	118.219 CC		
13,700.0	7,530.0	1,500.0	1,492.9	110.0	1.6	29.20	-6,098.2	-3,580.1	6,910.4	6,851.9	58.46	118.207		
13,800.0	7,530.0	1,500.0	1,492.9	111.7	1.6	29.20	-6,098.2	-3,580.1	6,911.1	6,851.8	59.32	116.502 ES		
13,900.0	7,530.0	1,500.0	1,492.9	113.4	1.6	29.20	-6,098.2	-3,580.1	6,913.3	6,853.1	60.18	114.869		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (Gyro) - DD													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,530.0	1,500.0	1,492.9	115.2	1.6	29.20	-6,098.2	-3,580.1	6,916.9	6,855.9	61.05	113.305		
14,100.0	7,530.0	1,500.0	1,492.9	116.9	1.6	29.20	-6,098.2	-3,580.1	6,922.0	6,860.1	61.91	111.808		
14,200.0	7,530.0	1,500.0	1,492.9	118.7	1.6	29.20	-6,098.2	-3,580.1	6,928.5	6,865.7	62.77	110.374		
14,300.0	7,530.0	1,500.0	1,492.9	120.4	1.6	29.20	-6,098.2	-3,580.1	6,936.5	6,872.8	63.64	109.002		
14,400.0	7,530.0	1,500.0	1,492.9	122.1	1.6	29.20	-6,098.2	-3,580.1	6,945.8	6,881.3	64.50	107.687		
14,500.0	7,530.0	1,500.0	1,492.9	123.9	1.6	29.20	-6,098.2	-3,580.1	6,956.6	6,891.3	65.36	106.429		
14,600.0	7,530.0	1,500.0	1,492.9	125.6	1.6	29.20	-6,098.2	-3,580.1	6,968.9	6,902.6	66.23	105.225		
14,700.0	7,530.0	1,500.0	1,492.9	127.4	1.6	29.20	-6,098.2	-3,580.1	6,982.5	6,915.4	67.09	104.073		
14,800.0	7,530.0	1,500.0	1,492.9	129.1	1.6	29.20	-6,098.2	-3,580.1	6,997.5	6,929.6	67.96	102.970		
14,900.0	7,530.0	1,500.0	1,492.9	130.9	1.6	29.20	-6,098.2	-3,580.1	7,013.9	6,945.1	68.82	101.915		
15,000.0	7,530.0	1,500.0	1,492.9	132.6	1.6	29.20	-6,098.2	-3,580.1	7,031.7	6,962.1	69.69	100.905		
15,100.0	7,530.0	1,500.0	1,492.9	134.4	1.6	29.20	-6,098.2	-3,580.1	7,050.9	6,980.4	70.55	99.940		
15,200.0	7,530.0	1,500.0	1,492.9	136.1	1.6	29.20	-6,098.2	-3,580.1	7,071.5	7,000.1	71.42	99.017		
15,300.0	7,530.0	1,500.0	1,492.9	137.9	1.6	29.20	-6,098.2	-3,580.1	7,093.4	7,021.1	72.28	98.134		
15,400.0	7,530.0	1,500.0	1,492.9	139.6	1.6	29.20	-6,098.2	-3,580.1	7,116.6	7,043.5	73.15	97.290		
15,500.0	7,530.0	1,500.0	1,492.9	141.3	1.6	29.20	-6,098.2	-3,580.1	7,141.2	7,067.1	74.01	96.484		
15,600.0	7,530.0	1,500.0	1,492.9	143.1	1.6	29.20	-6,098.2	-3,580.1	7,167.0	7,092.1	74.88	95.714		
15,700.0	7,530.0	1,500.0	1,492.9	144.8	1.6	29.20	-6,098.2	-3,580.1	7,194.2	7,118.4	75.75	94.978		
15,800.0	7,530.0	1,500.0	1,492.9	146.6	1.6	29.20	-6,098.2	-3,580.1	7,222.6	7,146.0	76.61	94.275		
15,900.0	7,530.0	1,500.0	1,492.9	148.3	1.6	29.20	-6,098.2	-3,580.1	7,252.4	7,174.9	77.48	93.604		
16,000.0	7,530.0	1,500.0	1,492.9	150.1	1.6	29.20	-6,098.2	-3,580.1	7,283.3	7,205.0	78.35	92.964		
16,100.0	7,530.0	1,500.0	1,492.9	151.8	1.6	29.20	-6,098.2	-3,580.1	7,315.5	7,236.3	79.21	92.354		
16,200.0	7,530.0	1,500.0	1,492.9	153.6	1.6	29.20	-6,098.2	-3,580.1	7,349.0	7,268.9	80.08	91.771		
16,300.0	7,530.0	1,500.0	1,492.9	155.3	1.6	29.20	-6,098.2	-3,580.1	7,383.6	7,302.6	80.95	91.216		
16,400.0	7,530.0	1,500.0	1,492.9	157.1	1.6	29.20	-6,098.2	-3,580.1	7,419.4	7,337.6	81.81	90.687		
16,500.0	7,530.0	1,500.0	1,492.9	158.8	1.6	29.20	-6,098.2	-3,580.1	7,456.4	7,373.7	82.68	90.183		
16,600.0	7,530.0	1,500.0	1,492.9	160.6	1.6	29.20	-6,098.2	-3,580.1	7,494.5	7,411.0	83.55	89.703		
16,700.0	7,530.0	1,500.0	1,492.9	162.3	1.6	29.20	-6,098.2	-3,580.1	7,533.8	7,449.4	84.42	89.247		
16,800.0	7,530.0	1,500.0	1,492.9	164.1	1.6	29.20	-6,098.2	-3,580.1	7,574.2	7,488.9	85.28	88.813		
16,900.0	7,530.0	1,500.0	1,492.9	165.8	1.6	29.20	-6,098.2	-3,580.1	7,615.7	7,529.5	86.15	88.400		
17,000.0	7,530.0	1,500.0	1,492.9	167.6	1.6	29.20	-6,098.2	-3,580.1	7,658.2	7,571.2	87.02	88.007		
17,100.0	7,530.0	1,500.0	1,492.9	169.3	1.6	29.20	-6,098.2	-3,580.1	7,701.8	7,614.0	87.89	87.635		
17,200.0	7,530.0	1,500.0	1,492.9	171.1	1.6	29.20	-6,098.2	-3,580.1	7,746.5	7,657.8	88.75	87.281		
17,300.0	7,530.0	1,500.0	1,492.9	172.8	1.6	29.20	-6,098.2	-3,580.1	7,792.2	7,702.6	89.62	86.946		
17,400.0	7,530.0	1,500.0	1,492.9	174.5	1.6	29.20	-6,098.2	-3,580.1	7,838.9	7,748.4	90.49	86.628		
17,411.2	7,530.0	1,500.0	1,492.9	174.7	1.6	29.20	-6,098.2	-3,580.1	7,844.2	7,753.7	90.59	86.593 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program:		814-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-149.21	-6,136.7	-3,657.3	7,143.9					
100.0	100.0	96.5	96.5	0.2	0.2	-149.21	-6,136.7	-3,657.2	7,143.9	7,143.6	0.32	N/A		
200.0	200.0	198.0	198.0	0.3	0.3	-149.21	-6,136.7	-3,657.2	7,143.8	7,143.2	0.67	N/A		
300.0	300.0	299.6	299.6	0.5	0.5	-149.21	-6,136.7	-3,657.2	7,143.8	7,142.8	1.01	7,043.912		
400.0	400.0	2,148.6	2,120.1	0.7	5.9	-150.14	-6,004.7	-3,446.9	7,135.4	7,131.0	4.41	1,617.321		
500.0	500.0	2,244.1	2,212.0	0.8	6.4	-150.24	-5,990.8	-3,425.0	7,111.1	7,106.4	4.76	1,495.354		
600.0	600.0	2,311.0	2,276.5	1.0	6.7	-127.50	-5,981.0	-3,410.0	7,087.7	7,081.9	5.77	1,227.826		
700.0	700.0	2,377.5	2,340.7	1.2	7.0	-127.75	-5,971.4	-3,395.4	7,065.7	7,059.6	6.14	1,150.723		
800.0	799.9	2,449.5	2,410.2	1.4	7.4	-128.01	-5,961.5	-3,379.5	7,045.2	7,038.7	6.53	1,079.481		
848.7	848.4	2,487.7	2,447.0	1.5	7.6	-128.14	-5,956.3	-3,371.2	7,035.8	7,029.0	6.72	1,046.298		
900.0	899.7	2,533.0	2,490.9	1.6	7.8	-128.20	-5,950.1	-3,361.4	7,026.0	7,019.0	6.94	1,011.776		
1,000.0	999.5	2,594.5	2,550.3	1.8	8.1	-128.29	-5,941.9	-3,348.0	7,007.2	6,999.9	7.31	959.039		
1,100.0	1,099.3	2,773.0	2,722.7	2.0	8.9	-128.55	-5,917.8	-3,308.5	6,988.1	6,980.1	8.00	873.082		
1,200.0	1,199.1	2,850.0	2,797.1	2.2	9.3	-128.67	-5,907.0	-3,291.6	6,968.7	6,960.3	8.41	828.231		
1,300.0	1,298.9	2,962.8	2,905.9	2.4	9.9	-128.83	-5,891.3	-3,266.4	6,949.3	6,940.4	8.93	777.906		
1,400.0	1,398.8	3,137.0	3,073.8	2.6	10.8	-129.09	-5,865.8	-3,227.6	6,929.2	6,919.6	9.63	719.416		
1,500.0	1,498.6	3,200.2	3,134.5	2.8	11.1	-129.18	-5,856.3	-3,213.1	6,908.7	6,898.7	10.01	690.156		
1,600.0	1,598.4	3,286.7	3,217.9	3.0	11.5	-129.32	-5,844.0	-3,193.5	6,889.0	6,878.5	10.47	658.208		
1,700.0	1,698.2	3,343.0	3,272.1	3.2	11.8	-129.40	-5,836.2	-3,180.5	6,869.4	6,858.6	10.83	634.316		
1,800.0	1,798.0	3,394.6	3,321.9	3.4	12.0	-129.48	-5,829.3	-3,169.0	6,850.5	6,839.4	11.18	612.837		
1,900.0	1,897.8	3,538.2	3,460.7	3.6	12.7	-129.70	-5,809.6	-3,137.7	6,831.8	6,820.0	11.80	578.917		
2,000.0	1,997.7	3,677.4	3,594.8	3.8	13.4	-129.92	-5,790.2	-3,105.7	6,812.4	6,800.0	12.44	547.677		
2,100.0	2,097.5	3,743.6	3,658.4	4.0	13.8	-130.03	-5,781.0	-3,090.2	6,792.8	6,780.0	12.84	529.057		
2,200.0	2,197.3	3,804.0	3,716.8	4.2	14.1	-130.12	-5,772.8	-3,076.7	6,774.0	6,760.8	13.22	512.537		
2,300.0	2,297.1	3,843.5	3,755.0	4.4	14.3	-130.18	-5,767.6	-3,068.2	6,755.9	6,742.3	13.53	499.294		
2,400.0	2,396.9	3,907.7	3,817.2	4.6	14.6	-130.28	-5,759.4	-3,054.4	6,738.3	6,724.4	13.92	483.987		
2,500.0	2,496.7	4,026.5	3,932.3	4.8	15.1	-130.47	-5,744.5	-3,028.8	6,721.0	6,706.5	14.49	463.813		
2,600.0	2,596.5	4,261.3	4,158.9	5.0	16.3	-130.83	-5,711.5	-2,977.3	6,701.8	6,686.4	15.41	434.788		
2,700.0	2,696.4	4,341.2	4,236.0	5.2	16.7	-130.96	-5,699.7	-2,959.8	6,682.5	6,666.6	15.85	421.487		
2,800.0	2,796.2	4,399.4	4,292.1	5.4	17.0	-131.05	-5,691.2	-2,947.2	6,663.5	6,647.2	16.23	410.621		
2,900.0	2,896.0	4,439.0	4,330.4	5.6	17.2	-131.11	-5,685.7	-2,938.7	6,645.2	6,628.7	16.54	401.676		
3,000.0	2,995.8	4,483.5	4,373.5	5.8	17.4	-131.18	-5,679.9	-2,929.3	6,627.9	6,611.0	16.88	392.703		
3,100.0	3,095.6	4,581.3	4,468.3	6.0	17.8	-131.33	-5,667.8	-2,908.6	6,611.2	6,593.8	17.38	380.342		
3,200.0	3,195.4	4,698.8	4,582.2	6.2	18.4	-131.52	-5,652.4	-2,883.9	6,593.8	6,575.9	17.94	367.487		
3,300.0	3,295.2	4,757.0	4,638.7	6.4	18.7	-131.60	-5,644.8	-2,872.0	6,577.0	6,558.7	18.31	359.123		
3,400.0	3,395.1	4,802.1	4,682.5	6.6	18.8	-131.67	-5,639.1	-2,863.1	6,560.8	6,542.2	18.64	352.064		
3,500.0	3,494.9	4,848.3	4,727.6	6.8	19.0	-131.74	-5,633.5	-2,854.3	6,545.5	6,526.5	18.96	345.227		
3,600.0	3,594.7	4,901.7	4,779.7	7.0	19.3	-131.81	-5,627.3	-2,844.7	6,531.0	6,511.7	19.30	338.318		
3,700.0	3,694.5	4,980.0	4,856.2	7.2	19.6	-131.92	-5,618.3	-2,830.9	6,516.9	6,497.2	19.72	330.509		
3,800.0	3,794.3	5,052.5	4,927.1	7.4	19.9	-132.02	-5,610.1	-2,818.4	6,503.2	6,483.1	20.11	323.337		
3,900.0	3,894.1	5,117.9	4,991.2	7.6	20.1	-132.11	-5,602.9	-2,807.4	6,490.0	6,469.5	20.48	316.818		
4,000.0	3,994.0	5,228.4	5,099.5	7.8	20.5	-132.25	-5,591.1	-2,789.1	6,477.3	6,456.3	20.99	308.620		
4,100.0	4,093.8	5,298.0	5,167.7	8.0	20.8	-132.35	-5,583.6	-2,777.2	6,464.2	6,442.9	21.38	302.398		
4,200.0	4,193.6	5,366.9	5,235.3	8.2	21.1	-132.44	-5,576.3	-2,766.0	6,451.7	6,430.0	21.75	296.596		
4,300.0	4,293.4	5,424.5	5,291.9	8.4	21.3	-132.52	-5,570.4	-2,757.1	6,439.9	6,417.8	22.10	291.420		
4,400.0	4,393.2	5,488.0	5,354.4	8.6	21.5	-132.60	-5,564.3	-2,747.4	6,428.7	6,406.3	22.46	286.223		
4,500.0	4,493.0	5,551.0	5,416.4	8.8	21.7	-132.68	-5,558.6	-2,737.9	6,418.1	6,395.3	22.83	281.166		
4,600.0	4,592.8	5,710.0	5,572.7	9.0	22.3	-132.89	-5,543.1	-2,713.3	6,406.6	6,383.1	23.45	273.202		
4,700.0	4,692.7	5,743.5	5,605.6	9.3	22.4	-132.93	-5,539.9	-2,708.3	6,395.8	6,372.1	23.73	269.549		
4,800.0	4,792.5	5,774.0	5,635.8	9.5	22.5	-132.97	-5,537.2	-2,704.0	6,386.1	6,362.1	24.00	266.107		
4,900.0	4,892.3	5,854.4	5,715.1	9.7	22.8	-133.06	-5,530.5	-2,693.1	6,377.0	6,352.6	24.40	261.365		
5,000.0	4,992.1	5,928.8	5,788.5	9.9	23.0	-133.16	-5,524.7	-2,682.8	6,368.3	6,343.5	24.79	256.930		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,091.9	5,963.0	5,822.4	10.1	23.2	-133.20	-5,522.1	-2,678.2	6,360.2	6,335.2	25.07	253.749		
5,200.0	5,191.7	6,027.0	5,885.7	10.3	23.3	-133.27	-5,517.7	-2,670.3	6,353.0	6,327.6	25.41	249.998		
5,300.0	5,291.5	6,067.9	5,926.2	10.5	23.4	-133.32	-5,515.0	-2,665.9	6,346.7	6,321.0	25.69	247.053		
5,400.0	5,391.4	6,124.9	5,983.0	10.7	23.6	-133.37	-5,511.3	-2,660.7	6,341.1	6,315.1	26.00	243.924		
5,500.0	5,491.2	6,175.9	6,033.6	10.9	23.7	-133.41	-5,508.0	-2,656.5	6,336.2	6,309.9	26.29	241.049		
5,600.0	5,591.0	6,219.0	6,076.6	11.1	23.8	-133.45	-5,505.6	-2,653.3	6,332.2	6,305.6	26.56	238.424		
5,700.0	5,690.8	6,283.0	6,140.3	11.3	23.9	-133.50	-5,502.4	-2,648.9	6,329.0	6,302.1	26.87	235.556		
5,800.0	5,790.6	6,283.0	6,140.3	11.5	23.9	-133.50	-5,502.4	-2,648.9	6,326.8	6,299.7	27.06	233.814		
5,900.0	5,890.4	6,340.9	6,198.1	11.7	24.0	-133.54	-5,500.1	-2,645.7	6,325.3	6,298.0	27.34	231.323		
5,974.3	5,964.6	6,379.0	6,236.2	11.9	24.1	-133.56	-5,499.0	-2,644.1	6,325.1	6,297.5	27.55	229.609		
6,000.0	5,990.3	6,379.0	6,236.2	11.9	24.1	-133.56	-5,499.0	-2,644.1	6,325.1	6,297.5	27.60	229.202		
6,100.0	6,090.1	6,425.1	6,282.2	12.1	24.1	-133.59	-5,497.8	-2,642.8	6,325.8	6,298.0	27.84	227.260		
6,200.0	6,189.9	6,506.0	6,363.1	12.3	24.2	-133.62	-5,495.7	-2,642.4	6,327.3	6,299.2	28.11	225.110		
6,300.0	6,289.7	6,506.0	6,363.1	12.5	24.2	-133.62	-5,495.7	-2,642.4	6,329.5	6,301.2	28.30	223.671		
6,400.0	6,389.5	6,545.0	6,402.1	12.7	24.2	-133.63	-5,495.0	-2,642.8	6,332.7	6,304.2	28.53	221.954		
6,500.0	6,489.3	6,571.0	6,428.1	12.9	24.2	-133.63	-5,494.9	-2,643.2	6,337.3	6,308.5	28.75	220.417		
6,600.0	6,589.1	6,771.5	6,628.6	13.1	24.4	-133.71	-5,494.9	-2,643.3	6,341.4	6,312.2	29.21	217.101		
6,700.0	6,689.0	6,872.9	6,730.0	13.3	24.5	-133.75	-5,494.4	-2,642.9	6,344.9	6,315.4	29.53	214.843		
6,785.3	6,774.1	6,971.2	6,828.3	13.5	24.6	-133.79	-5,493.6	-2,642.5	6,347.8	6,318.0	29.82	212.845		
6,800.0	6,788.8	6,989.8	6,846.9	13.5	24.6	-122.78	-5,493.4	-2,642.5	6,348.2	6,318.3	29.88	212.467		
6,850.0	6,838.8	7,052.3	6,909.4	13.6	24.7	-12.25	-5,492.8	-2,642.3	6,347.2	6,317.2	29.96	211.820		
6,900.0	6,888.6	7,106.3	6,963.4	13.6	24.7	9.82	-5,492.1	-2,642.3	6,342.9	6,313.0	29.89	212.195		
6,950.0	6,938.1	7,164.3	7,021.3	13.7	24.8	15.21	-5,491.2	-2,642.5	6,335.4	6,305.7	29.68	213.470		
7,000.0	6,987.0	7,232.0	7,089.0	13.7	24.8	17.83	-5,489.9	-2,642.7	6,324.6	6,295.3	29.33	215.627		
7,050.0	7,035.0	7,279.3	7,136.3	13.6	24.9	19.58	-5,489.0	-2,642.9	6,310.7	6,281.8	28.83	218.889		
7,100.0	7,082.0	7,330.7	7,187.7	13.6	24.9	21.03	-5,488.0	-2,643.0	6,293.7	6,265.5	28.21	223.133		
7,150.0	7,127.7	7,389.3	7,246.3	13.5	25.0	22.40	-5,486.7	-2,643.2	6,273.7	6,246.2	27.47	228.370		
7,200.0	7,171.8	7,425.1	7,282.1	13.5	25.0	23.77	-5,485.8	-2,643.5	6,250.9	6,224.2	26.62	234.825		
7,250.0	7,214.2	7,455.9	7,312.8	13.4	25.1	25.22	-5,485.1	-2,643.7	6,225.4	6,199.7	25.69	242.331		
7,300.0	7,254.6	7,493.0	7,350.0	13.4	25.1	26.85	-5,484.3	-2,644.2	6,197.3	6,172.6	24.73	250.650		
7,350.0	7,292.9	7,513.5	7,370.5	13.3	25.1	28.64	-5,483.9	-2,644.5	6,166.9	6,143.2	23.76	259.604		
7,400.0	7,328.9	7,540.4	7,397.3	13.3	25.1	30.71	-5,483.3	-2,644.9	6,134.3	6,111.4	22.86	268.292		
7,450.0	7,362.3	7,565.3	7,422.2	13.3	25.2	33.12	-5,482.8	-2,645.3	6,099.5	6,077.4	22.14	275.547		
7,500.0	7,393.1	7,592.0	7,449.0	13.4	25.2	35.94	-5,482.3	-2,645.8	6,062.9	6,041.2	21.69	279.470		
7,550.0	7,421.1	7,619.3	7,476.2	13.5	25.2	39.28	-5,481.8	-2,646.3	6,024.4	6,002.8	21.67	277.988		
7,600.0	7,446.1	7,643.5	7,500.4	13.6	25.2	43.21	-5,481.3	-2,646.8	5,984.4	5,962.2	22.17	269.876		
7,650.0	7,468.0	7,664.5	7,521.4	13.8	25.2	47.82	-5,480.9	-2,647.2	5,943.0	5,919.7	23.25	255.591		
7,700.0	7,486.7	7,682.4	7,539.3	14.0	25.3	53.23	-5,480.5	-2,647.5	5,900.4	5,875.6	24.86	237.346		
7,750.0	7,502.2	7,696.9	7,553.8	14.2	25.3	59.49	-5,480.2	-2,647.8	5,856.9	5,830.0	26.86	218.084		
7,800.0	7,514.3	7,704.0	7,560.9	14.6	25.3	66.52	-5,480.1	-2,647.9	5,812.6	5,783.6	28.98	200.557		
7,850.0	7,523.0	7,704.0	7,560.9	14.9	25.3	74.18	-5,480.1	-2,647.9	5,767.8	5,736.9	30.95	186.388		
7,900.0	7,528.2	7,716.7	7,573.6	15.3	25.3	82.68	-5,479.9	-2,648.2	5,722.7	5,690.2	32.52	175.965		
7,950.2	7,530.0	7,717.3	7,574.2	15.8	25.3	91.15	-5,479.8	-2,648.2	5,677.3	5,644.0	33.37	170.145		
8,000.0	7,530.0	7,716.6	7,573.5	16.2	25.3	91.14	-5,479.9	-2,648.2	5,632.5	5,598.6	33.85	166.396		
8,100.0	7,530.0	7,715.1	7,571.9	17.3	25.3	91.10	-5,479.9	-2,648.1	5,542.5	5,507.6	34.91	158.754		
8,200.0	7,530.0	7,713.5	7,570.4	18.4	25.3	91.06	-5,479.9	-2,648.1	5,453.0	5,416.9	36.08	151.124		
8,300.0	7,530.0	7,704.0	7,560.9	19.7	25.3	90.84	-5,480.1	-2,647.9	5,363.8	5,326.5	37.33	143.695		
8,400.0	7,530.0	7,704.0	7,560.9	21.0	25.3	90.84	-5,480.1	-2,647.9	5,275.0	5,236.3	38.66	136.448		
8,500.0	7,530.0	7,704.0	7,560.9	22.4	25.3	90.84	-5,480.1	-2,647.9	5,186.5	5,146.5	40.05	129.503		
8,600.0	7,530.0	7,704.0	7,560.9	23.8	25.3	90.84	-5,480.1	-2,647.9	5,098.6	5,057.1	41.49	122.891		
8,700.0	7,530.0	7,704.0	7,560.9	25.3	25.3	90.84	-5,480.1	-2,647.9	5,011.0	4,968.1	42.97	116.623		
8,800.0	7,530.0	7,704.0	7,560.9	26.8	25.3	90.84	-5,480.1	-2,647.9	4,924.0	4,879.5	44.48	110.701		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
8,900.0	7,530.0	7,702.1	7,559.0	28.3	25.3	90.80	-5,480.1	-2,647.9	4,837.4	4,791.4	46.02	105.121		
9,000.0	7,530.0	7,700.2	7,557.1	29.9	25.3	90.75	-5,480.2	-2,647.9	4,751.4	4,703.8	47.58	99.864		
9,100.0	7,530.0	7,698.2	7,555.1	31.4	25.3	90.71	-5,480.2	-2,647.8	4,665.9	4,616.7	49.16	94.914		
9,200.0	7,530.0	7,696.3	7,553.1	33.0	25.3	90.66	-5,480.3	-2,647.8	4,581.0	4,530.3	50.76	90.253		
9,300.0	7,530.0	7,694.3	7,551.2	34.7	25.3	90.61	-5,480.3	-2,647.7	4,496.7	4,444.4	52.37	85.864		
9,400.0	7,530.0	7,692.4	7,549.3	36.3	25.3	90.57	-5,480.3	-2,647.7	4,413.1	4,359.1	54.00	81.730		
9,500.0	7,530.0	7,690.4	7,547.3	37.9	25.3	90.52	-5,480.4	-2,647.7	4,330.2	4,274.6	55.63	77.834		
9,600.0	7,530.0	7,688.5	7,545.4	39.6	25.3	90.48	-5,480.4	-2,647.6	4,248.0	4,190.7	57.28	74.162		
9,700.0	7,530.0	7,686.5	7,543.4	41.2	25.3	90.43	-5,480.4	-2,647.6	4,166.6	4,107.7	58.94	70.698		
9,800.0	7,530.0	7,684.6	7,541.5	42.9	25.3	90.39	-5,480.5	-2,647.6	4,086.0	4,025.4	60.60	67.428		
9,900.0	7,530.0	7,682.7	7,539.6	44.5	25.3	90.34	-5,480.5	-2,647.5	4,006.3	3,944.1	62.27	64.339		
10,000.0	7,530.0	7,680.7	7,537.6	46.2	25.3	90.30	-5,480.6	-2,647.5	3,927.6	3,863.6	63.94	61.421		
10,100.0	7,530.0	7,678.8	7,535.7	47.9	25.3	90.25	-5,480.6	-2,647.4	3,849.8	3,784.1	65.63	58.663		
10,200.0	7,530.0	7,676.9	7,533.8	49.6	25.2	90.21	-5,480.6	-2,647.4	3,773.0	3,705.7	67.31	56.053		
10,300.0	7,530.0	7,675.0	7,531.9	51.3	25.2	90.16	-5,480.7	-2,647.4	3,697.4	3,628.4	69.00	53.584		
10,400.0	7,530.0	7,673.0	7,529.9	53.0	25.2	90.12	-5,480.7	-2,647.3	3,622.9	3,552.2	70.70	51.247		
10,500.0	7,530.0	7,671.1	7,528.0	54.7	25.2	90.07	-5,480.8	-2,647.3	3,549.7	3,477.3	72.39	49.034		
10,600.0	7,530.0	7,669.2	7,526.1	56.4	25.2	90.03	-5,480.8	-2,647.3	3,477.8	3,403.8	74.09	46.938		
10,700.0	7,530.0	7,667.3	7,524.2	58.1	25.2	89.98	-5,480.8	-2,647.2	3,407.4	3,331.6	75.80	44.953		
10,800.0	7,530.0	7,665.4	7,522.3	59.8	25.2	89.94	-5,480.9	-2,647.2	3,338.5	3,260.9	77.50	43.074		
10,900.0	7,530.0	7,663.5	7,520.4	61.5	25.2	89.89	-5,480.9	-2,647.1	3,271.1	3,191.9	79.21	41.295		
11,000.0	7,530.0	7,661.5	7,518.4	63.2	25.2	89.85	-5,480.9	-2,647.1	3,205.5	3,124.6	80.92	39.611		
11,100.0	7,530.0	7,659.6	7,516.5	64.9	25.2	89.80	-5,481.0	-2,647.1	3,141.7	3,059.0	82.64	38.017		
11,200.0	7,530.0	7,657.7	7,514.6	66.6	25.2	89.76	-5,481.0	-2,647.0	3,079.8	2,995.4	84.35	36.510		
11,300.0	7,530.0	7,655.8	7,512.7	68.4	25.2	89.71	-5,481.1	-2,647.0	3,019.9	2,933.8	86.07	35.086		
11,400.0	7,530.0	7,653.9	7,510.8	70.1	25.2	89.67	-5,481.1	-2,647.0	2,962.2	2,874.4	87.79	33.742		
11,500.0	7,530.0	7,652.0	7,508.9	71.8	25.2	89.62	-5,481.1	-2,646.9	2,906.8	2,817.3	89.51	32.475		
11,600.0	7,530.0	7,650.1	7,507.0	73.5	25.2	89.58	-5,481.2	-2,646.9	2,853.8	2,762.6	91.23	31.282		
11,700.0	7,530.0	7,648.2	7,505.2	75.3	25.2	89.53	-5,481.2	-2,646.9	2,803.4	2,710.5	92.95	30.160		
11,800.0	7,530.0	7,646.4	7,503.3	77.0	25.2	89.49	-5,481.2	-2,646.8	2,755.7	2,661.1	94.68	29.107		
11,900.0	7,530.0	7,644.5	7,501.4	78.7	25.2	89.45	-5,481.3	-2,646.8	2,710.9	2,614.5	96.40	28.121		
12,000.0	7,530.0	7,642.6	7,499.5	80.4	25.2	89.40	-5,481.3	-2,646.7	2,669.0	2,570.9	98.13	27.200		
12,100.0	7,530.0	7,640.7	7,497.6	82.2	25.2	89.36	-5,481.3	-2,646.7	2,630.3	2,530.5	99.85	26.342		
12,200.0	7,530.0	7,638.8	7,495.7	83.9	25.2	89.31	-5,481.4	-2,646.7	2,594.9	2,493.3	101.58	25.545		
12,300.0	7,530.0	7,636.9	7,493.8	85.6	25.2	89.27	-5,481.4	-2,646.6	2,562.8	2,459.5	103.31	24.808		
12,400.0	7,530.0	7,635.1	7,492.0	87.4	25.2	89.22	-5,481.5	-2,646.6	2,534.4	2,429.3	105.04	24.128		
12,500.0	7,530.0	7,633.2	7,490.1	89.1	25.2	89.18	-5,481.5	-2,646.6	2,509.5	2,402.8	106.77	23.505		
12,600.0	7,530.0	7,631.3	7,488.2	90.8	25.2	89.14	-5,481.5	-2,646.5	2,488.5	2,380.0	108.50	22.936		
12,700.0	7,530.0	7,629.4	7,486.4	92.6	25.2	89.09	-5,481.6	-2,646.5	2,471.3	2,361.1	110.23	22.420		
12,800.0	7,530.0	7,627.6	7,484.5	94.3	25.2	89.05	-5,481.6	-2,646.5	2,458.1	2,346.1	111.96	21.955		
12,900.0	7,530.0	7,625.7	7,482.6	96.0	25.2	89.01	-5,481.6	-2,646.4	2,448.9	2,335.2	113.69	21.539		
13,000.0	7,530.0	7,623.8	7,480.8	97.8	25.2	88.96	-5,481.7	-2,646.4	2,443.7	2,328.3	115.43	21.171		
13,076.2	7,530.0	7,622.4	7,479.3	99.1	25.2	88.93	-5,481.7	-2,646.4	2,442.5	2,325.8	116.75	20.921 CC		
13,100.0	7,530.0	7,622.0	7,478.9	99.5	25.2	88.92	-5,481.7	-2,646.4	2,442.6	2,325.5	117.16	20.849 ES		
13,200.0	7,530.0	7,620.1	7,477.0	101.3	25.2	88.87	-5,481.7	-2,646.3	2,445.6	2,326.7	118.89	20.570		
13,300.0	7,530.0	7,618.3	7,475.2	103.0	25.2	88.83	-5,481.8	-2,646.3	2,452.7	2,332.1	120.63	20.333		
13,400.0	7,530.0	7,616.4	7,473.3	104.7	25.2	88.79	-5,481.8	-2,646.3	2,463.9	2,341.5	122.36	20.136		
13,500.0	7,530.0	7,614.6	7,471.5	106.5	25.2	88.74	-5,481.9	-2,646.2	2,479.0	2,354.9	124.10	19.976		
13,600.0	7,530.0	7,612.7	7,469.6	108.2	25.2	88.70	-5,481.9	-2,646.2	2,498.0	2,372.2	125.83	19.852		
13,700.0	7,530.0	7,610.9	7,467.8	110.0	25.2	88.66	-5,481.9	-2,646.2	2,520.9	2,393.3	127.57	19.761		
13,800.0	7,530.0	7,609.0	7,465.9	111.7	25.2	88.61	-5,482.0	-2,646.1	2,547.4	2,418.1	129.30	19.701		
13,900.0	7,530.0	7,607.2	7,464.1	113.4	25.2	88.57	-5,482.0	-2,646.1	2,577.6	2,446.6	131.04	19.671		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
14,000.0	7,530.0	7,605.3	7,462.2	115.2	25.2	88.53	-5,482.0	-2,646.1	2,611.3	2,478.5	132.77	19.667 SF		
14,100.0	7,530.0	7,603.5	7,460.4	116.9	25.2	88.48	-5,482.1	-2,646.0	2,648.3	2,513.8	134.51	19.688		
14,200.0	7,530.0	7,601.6	7,458.6	118.7	25.2	88.44	-5,482.1	-2,646.0	2,688.5	2,552.3	136.25	19.733		
14,300.0	7,530.0	7,599.8	7,456.7	120.4	25.2	88.40	-5,482.1	-2,646.0	2,731.8	2,593.8	137.98	19.798		
14,400.0	7,530.0	7,598.0	7,454.9	122.1	25.2	88.36	-5,482.2	-2,645.9	2,778.0	2,638.3	139.72	19.883		
14,500.0	7,530.0	7,596.1	7,453.1	123.9	25.2	88.31	-5,482.2	-2,645.9	2,827.0	2,685.6	141.46	19.985		
14,600.0	7,530.0	7,594.3	7,451.2	125.6	25.2	88.27	-5,482.2	-2,645.9	2,878.7	2,735.5	143.20	20.103		
14,700.0	7,530.0	7,592.5	7,449.4	127.4	25.2	88.23	-5,482.3	-2,645.8	2,932.8	2,787.9	144.93	20.236		
14,800.0	7,530.0	7,590.7	7,447.6	129.1	25.2	88.18	-5,482.3	-2,645.8	2,989.3	2,842.7	146.67	20.381		
14,900.0	7,530.0	7,588.8	7,445.8	130.9	25.2	88.14	-5,482.3	-2,645.8	3,048.1	2,899.7	148.41	20.538		
15,000.0	7,530.0	7,587.0	7,444.0	132.6	25.2	88.10	-5,482.4	-2,645.7	3,108.9	2,958.8	150.15	20.706		
15,100.0	7,530.0	7,585.2	7,442.1	134.4	25.2	88.06	-5,482.4	-2,645.7	3,171.7	3,019.9	151.88	20.883		
15,200.0	7,530.0	7,583.4	7,440.3	136.1	25.2	88.01	-5,482.5	-2,645.7	3,236.4	3,082.8	153.62	21.068		
15,300.0	7,530.0	7,581.6	7,438.5	137.9	25.2	87.97	-5,482.5	-2,645.6	3,302.9	3,147.5	155.36	21.260		
15,400.0	7,530.0	7,579.8	7,436.7	139.6	25.2	87.93	-5,482.5	-2,645.6	3,371.0	3,213.9	157.10	21.458		
15,500.0	7,530.0	7,576.0	7,432.9	141.3	25.2	87.84	-5,482.6	-2,645.5	3,440.7	3,281.9	158.83	21.663		
15,600.0	7,530.0	7,576.0	7,432.9	143.1	25.2	87.84	-5,482.6	-2,645.5	3,511.8	3,351.3	160.57	21.871		
15,700.0	7,530.0	7,574.3	7,431.2	144.8	25.2	87.80	-5,482.6	-2,645.5	3,584.3	3,422.0	162.31	22.083		
15,800.0	7,530.0	7,572.4	7,429.3	146.6	25.2	87.76	-5,482.7	-2,645.5	3,658.1	3,494.1	164.05	22.299		
15,900.0	7,530.0	7,570.5	7,427.5	148.3	25.2	87.71	-5,482.7	-2,645.4	3,733.2	3,567.4	165.78	22.518		
16,000.0	7,530.0	7,568.6	7,425.6	150.1	25.2	87.67	-5,482.7	-2,645.4	3,809.4	3,641.8	167.52	22.739		
16,100.0	7,530.0	7,566.7	7,423.6	151.8	25.2	87.62	-5,482.8	-2,645.4	3,886.6	3,717.3	169.26	22.962		
16,200.0	7,530.0	7,564.8	7,421.7	153.6	25.2	87.58	-5,482.8	-2,645.3	3,964.9	3,793.9	171.00	23.187		
16,300.0	7,530.0	7,562.8	7,419.8	155.3	25.2	87.53	-5,482.8	-2,645.3	4,044.1	3,871.4	172.73	23.412		
16,400.0	7,530.0	7,560.9	7,417.8	157.1	25.2	87.49	-5,482.9	-2,645.3	4,124.2	3,949.8	174.47	23.639		
16,500.0	7,530.0	7,558.9	7,415.8	158.8	25.1	87.44	-5,482.9	-2,645.2	4,205.2	4,029.0	176.21	23.865		
16,600.0	7,530.0	7,556.9	7,413.9	160.6	25.1	87.39	-5,483.0	-2,645.2	4,287.0	4,109.0	177.94	24.092		
16,700.0	7,530.0	7,554.9	7,411.9	162.3	25.1	87.35	-5,483.0	-2,645.2	4,369.5	4,189.8	179.68	24.318		
16,800.0	7,530.0	7,552.9	7,409.8	164.1	25.1	87.30	-5,483.0	-2,645.1	4,452.8	4,271.4	181.42	24.545		
16,900.0	7,530.0	7,550.9	7,407.8	165.8	25.1	87.25	-5,483.1	-2,645.1	4,536.7	4,353.6	183.15	24.770		
17,000.0	7,530.0	7,548.8	7,405.8	167.6	25.1	87.20	-5,483.1	-2,645.1	4,621.3	4,436.4	184.89	24.995		
17,100.0	7,530.0	7,546.8	7,403.7	169.3	25.1	87.15	-5,483.2	-2,645.0	4,706.5	4,519.8	186.62	25.219		
17,200.0	7,530.0	7,544.7	7,401.6	171.1	25.1	87.11	-5,483.2	-2,645.0	4,792.2	4,603.8	188.36	25.442		
17,300.0	7,530.0	7,542.6	7,399.5	172.8	25.1	87.06	-5,483.3	-2,645.0	4,878.5	4,688.4	190.09	25.664		
17,400.0	7,530.0	7,540.5	7,397.4	174.5	25.1	87.01	-5,483.3	-2,644.9	4,965.3	4,773.5	191.83	25.884		
17,411.2	7,530.0	7,540.3	7,397.2	174.7	25.1	87.00	-5,483.3	-2,644.9	4,975.1	4,783.1	192.02	25.909		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - Plan #2														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	-149.21	-6,136.7	-3,657.3	7,143.9						
100.0	100.0	95.0	95.0	0.2	0.1	-149.21	-6,136.7	-3,657.3	7,143.9	7,143.6	0.29	N/A			
200.0	200.0	195.0	195.0	0.3	0.3	-149.21	-6,136.7	-3,657.3	7,143.9	7,143.2	0.64	N/A			
300.0	300.0	295.0	295.0	0.5	0.5	-149.21	-6,136.7	-3,657.3	7,143.9	7,142.9	0.99	7,218.816			
400.0	400.0	395.0	395.0	0.7	0.7	-149.21	-6,136.7	-3,657.3	7,143.9	7,142.5	1.34	5,336.490			
500.0	500.0	495.0	495.0	0.8	0.8	-149.21	-6,136.7	-3,657.3	7,143.9	7,142.2	1.69	4,232.781			
600.0	600.0	595.0	595.0	1.0	1.0	-126.20	-6,136.7	-3,657.3	7,144.4	7,142.4	2.04	3,507.254			
700.0	700.0	695.0	695.0	1.2	1.2	-126.20	-6,136.7	-3,657.3	7,145.9	7,143.6	2.39	2,992.719			
800.0	799.9	794.9	794.9	1.4	1.4	-126.21	-6,136.7	-3,657.3	7,148.5	7,145.8	2.74	2,607.174			
848.7	848.4	2,263.3	2,247.6	1.5	5.0	-127.37	-6,048.1	-3,519.0	7,143.0	7,137.4	5.65	1,264.314			
900.0	899.7	2,313.4	2,296.5	1.6	5.2	-127.43	-6,042.1	-3,509.7	7,134.8	7,128.9	5.86	1,217.807			
1,000.0	999.5	2,411.0	2,391.7	1.8	5.6	-127.55	-6,030.5	-3,491.6	7,118.8	7,112.5	6.27	1,135.290			
1,100.0	1,099.3	2,508.6	2,486.9	2.0	5.9	-127.67	-6,018.9	-3,473.6	7,102.8	7,096.1	6.69	1,062.234			
1,200.0	1,199.1	2,606.2	2,582.1	2.2	6.3	-127.79	-6,007.3	-3,455.5	7,086.8	7,079.7	7.11	997.211			
1,300.0	1,298.9	2,703.8	2,677.4	2.4	6.7	-127.91	-5,995.8	-3,437.4	7,070.9	7,063.4	7.53	939.035			
1,400.0	1,398.8	2,801.4	2,772.6	2.6	7.1	-128.03	-5,984.2	-3,419.4	7,055.0	7,047.1	7.96	886.730			
1,500.0	1,498.6	2,899.0	2,867.8	2.8	7.5	-128.15	-5,972.6	-3,401.3	7,039.2	7,030.8	8.39	839.481			
1,600.0	1,598.4	2,996.6	2,963.0	3.0	7.9	-128.28	-5,961.0	-3,383.2	7,023.4	7,014.5	8.82	796.615			
1,700.0	1,698.2	3,094.2	3,058.2	3.2	8.3	-128.40	-5,949.4	-3,365.2	7,007.6	6,998.3	9.25	757.571			
1,800.0	1,798.0	3,191.8	3,153.4	3.4	8.7	-128.52	-5,937.8	-3,347.1	6,991.8	6,982.1	9.69	721.872			
1,900.0	1,897.8	3,289.4	3,248.6	3.6	9.1	-128.65	-5,926.2	-3,329.0	6,976.1	6,965.9	10.12	689.118			
2,000.0	1,997.7	3,387.0	3,343.8	3.8	9.5	-128.77	-5,914.7	-3,311.0	6,960.4	6,949.8	10.56	658.967			
2,100.0	2,097.5	3,484.6	3,439.0	4.0	9.9	-128.90	-5,903.1	-3,292.9	6,944.7	6,933.7	11.00	631.126			
2,200.0	2,197.3	3,582.2	3,534.2	4.2	10.3	-129.02	-5,891.5	-3,274.8	6,929.1	6,917.6	11.45	605.346			
2,300.0	2,297.1	3,679.8	3,629.4	4.4	10.7	-129.15	-5,879.9	-3,256.8	6,913.5	6,901.6	11.89	581.411			
2,400.0	2,396.9	3,777.4	3,724.6	4.6	11.1	-129.27	-5,868.3	-3,238.7	6,897.9	6,885.6	12.34	559.132			
2,500.0	2,496.7	3,875.0	3,819.8	4.8	11.6	-129.40	-5,856.7	-3,220.6	6,882.4	6,869.6	12.78	538.346			
2,600.0	2,596.5	3,972.6	3,915.0	5.0	12.0	-129.53	-5,845.1	-3,202.6	6,866.9	6,853.7	13.23	518.911			
2,700.0	2,696.4	4,070.1	4,010.2	5.2	12.4	-129.66	-5,833.6	-3,184.5	6,851.4	6,837.8	13.68	500.701			
2,800.0	2,796.2	4,167.7	4,105.4	5.4	12.8	-129.79	-5,822.0	-3,166.4	6,836.0	6,821.9	14.14	483.605			
2,900.0	2,896.0	4,265.3	4,200.7	5.6	13.2	-129.92	-5,810.4	-3,148.4	6,820.6	6,806.0	14.59	467.526			
3,000.0	2,995.8	4,362.9	4,295.9	5.8	13.6	-130.05	-5,798.8	-3,130.3	6,805.3	6,790.2	15.04	452.377			
3,100.0	3,095.6	4,460.5	4,391.1	6.0	14.0	-130.18	-5,787.2	-3,112.2	6,789.9	6,774.4	15.50	438.081			
3,200.0	3,195.4	4,558.1	4,486.3	6.2	14.4	-130.31	-5,775.6	-3,094.2	6,774.7	6,758.7	15.96	424.569			
3,300.0	3,295.2	4,655.7	4,581.5	6.4	14.8	-130.44	-5,764.0	-3,076.1	6,759.4	6,743.0	16.42	411.778			
3,400.0	3,395.1	4,753.3	4,676.7	6.6	15.2	-130.57	-5,752.4	-3,058.0	6,744.2	6,727.3	16.88	399.654			
3,500.0	3,494.9	4,850.9	4,771.9	6.8	15.7	-130.70	-5,740.9	-3,040.0	6,729.0	6,711.7	17.34	388.146			
3,600.0	3,594.7	4,948.5	4,867.1	7.0	16.1	-130.84	-5,729.3	-3,021.9	6,713.9	6,696.1	17.80	377.209			
3,700.0	3,694.5	5,046.1	4,962.3	7.2	16.5	-130.97	-5,717.7	-3,003.8	6,698.8	6,680.5	18.26	366.802			
3,800.0	3,794.3	5,143.7	5,057.5	7.4	16.9	-131.11	-5,706.1	-2,985.8	6,683.7	6,665.0	18.73	356.888			
3,900.0	3,894.1	5,241.3	5,152.7	7.6	17.3	-131.24	-5,694.5	-2,967.7	6,668.7	6,649.5	19.19	347.433			
4,000.0	3,994.0	5,338.9	5,247.9	7.8	17.7	-131.38	-5,682.9	-2,949.6	6,653.7	6,634.0	19.66	338.407			
4,100.0	4,093.8	5,436.5	5,343.1	8.0	18.1	-131.51	-5,671.3	-2,931.6	6,638.7	6,618.6	20.13	329.781			
4,200.0	4,193.6	5,534.1	5,438.3	8.2	18.6	-131.65	-5,659.8	-2,913.5	6,623.8	6,603.2	20.60	321.530			
4,300.0	4,293.4	5,631.7	5,533.5	8.4	19.0	-131.79	-5,648.2	-2,895.4	6,608.9	6,587.8	21.07	313.630			
4,400.0	4,393.2	5,729.3	5,628.8	8.6	19.4	-131.93	-5,636.6	-2,877.4	6,594.1	6,572.5	21.55	306.059			
4,500.0	4,493.0	5,826.9	5,724.0	8.8	19.8	-132.07	-5,625.0	-2,859.3	6,579.3	6,557.3	22.02	298.798			
4,600.0	4,592.8	5,924.5	5,819.2	9.0	20.2	-132.21	-5,613.4	-2,841.2	6,564.5	6,542.0	22.49	291.829			
4,700.0	4,692.7	6,022.1	5,914.4	9.3	20.6	-132.35	-5,601.8	-2,823.2	6,549.8	6,526.8	22.97	285.133			
4,800.0	4,792.5	6,119.7	6,009.6	9.5	21.0	-132.49	-5,590.2	-2,805.1	6,535.1	6,511.7	23.45	278.697			
4,900.0	4,892.3	6,217.3	6,104.8	9.7	21.5	-132.63	-5,578.7	-2,787.0	6,520.5	6,496.5	23.93	272.504			
5,000.0	4,992.1	6,314.9	6,200.0	9.9	21.9	-132.77	-5,567.1	-2,769.0	6,505.9	6,481.4	24.41	266.543			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - Plan #2												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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
5,100.0	5,091.9	6,412.4	6,295.2	10.1	22.3	-132.91	-5,555.5	-2,750.9	6,491.3	6,466.4	24.89	260.800			
5,200.0	5,191.7	6,510.0	6,390.4	10.3	22.7	-133.06	-5,543.9	-2,732.8	6,476.8	6,451.4	25.37	255.263			
5,300.0	5,291.5	6,607.6	6,485.6	10.5	23.1	-133.20	-5,532.3	-2,714.8	6,462.3	6,436.4	25.86	249.923			
5,400.0	5,391.4	6,694.6	6,570.5	10.7	23.5	-133.33	-5,522.0	-2,698.7	6,447.9	6,421.5	26.31	245.069			
5,500.0	5,491.2	6,700.0	6,575.7	10.9	23.5	-133.34	-5,521.4	-2,697.7	6,434.3	6,407.8	26.52	242.645			
5,600.0	5,591.0	6,762.4	6,636.8	11.1	23.7	-133.42	-5,514.4	-2,686.9	6,421.4	6,394.5	26.88	238.895			
5,700.0	5,690.8	6,800.0	6,673.7	11.3	23.9	-133.47	-5,510.6	-2,680.9	6,409.6	6,382.5	27.17	235.881			
5,800.0	5,790.6	6,800.0	6,673.7	11.5	23.9	-133.47	-5,510.6	-2,680.9	6,399.1	6,371.8	27.36	233.854			
5,900.0	5,890.4	6,865.1	6,737.9	11.7	24.1	-133.56	-5,504.6	-2,671.6	6,389.2	6,361.5	27.72	230.522			
6,000.0	5,990.3	6,900.0	6,772.4	11.9	24.2	-133.60	-5,501.7	-2,667.0	6,380.5	6,352.5	27.99	227.932			
6,100.0	6,090.1	6,934.3	6,806.3	12.1	24.3	-133.63	-5,499.1	-2,663.0	6,372.9	6,344.6	28.26	225.509			
6,200.0	6,189.9	7,000.0	6,871.5	12.3	24.4	-133.70	-5,494.7	-2,656.1	6,366.5	6,337.9	28.60	222.637			
6,300.0	6,289.7	7,000.0	6,871.5	12.5	24.4	-133.70	-5,494.7	-2,656.1	6,360.6	6,331.9	28.79	220.960			
6,400.0	6,389.5	7,038.8	6,910.0	12.7	24.5	-133.74	-5,492.5	-2,652.6	6,356.1	6,327.0	29.05	218.776			
6,500.0	6,489.3	7,100.0	6,971.0	12.9	24.6	-133.79	-5,489.5	-2,648.0	6,352.6	6,323.3	29.36	216.355			
6,600.0	6,589.1	7,100.0	6,971.0	13.1	24.6	-133.79	-5,489.5	-2,648.0	6,350.0	6,320.4	29.55	214.870			
6,700.0	6,689.0	7,143.9	7,014.8	13.3	24.7	-133.82	-5,487.9	-2,645.4	6,348.4	6,318.6	29.82	212.910			
6,785.3	6,774.1	7,200.0	7,070.8	13.5	24.8	-133.86	-5,486.2	-2,642.9	6,348.1	6,318.0	30.07	211.085			
6,800.0	6,788.8	7,200.0	7,070.8	13.5	24.8	-122.82	-5,486.2	-2,642.9	6,347.9	6,317.8	30.10	210.886			
6,850.0	6,838.8	7,200.0	7,070.8	13.6	24.8	-12.24	-5,486.2	-2,642.9	6,345.4	6,315.3	30.10	210.809			
6,900.0	6,888.6	7,200.0	7,070.8	13.6	24.8	9.86	-5,486.2	-2,642.9	6,340.1	6,310.1	29.96	211.621			
6,950.0	6,938.1	7,200.0	7,070.8	13.7	24.8	15.25	-5,486.2	-2,642.9	6,331.9	6,302.2	29.68	213.339			
7,000.0	6,987.0	7,248.9	7,119.7	13.7	24.9	17.86	-5,485.3	-2,641.5	6,320.5	6,291.2	29.32	215.535			
7,050.0	7,035.0	7,265.8	7,136.6	13.6	24.9	19.58	-5,485.1	-2,641.2	6,306.4	6,277.6	28.80	218.996			
7,100.0	7,082.0	7,300.0	7,170.8	13.6	24.9	21.00	-5,484.8	-2,640.7	6,289.6	6,261.5	28.16	223.321			
7,150.0	7,127.7	7,300.0	7,170.8	13.5	24.9	22.26	-5,484.8	-2,640.7	6,270.0	6,242.6	27.38	228.985			
7,200.0	7,171.8	7,314.2	7,185.0	13.5	24.9	23.54	-5,484.8	-2,640.7	6,247.8	6,221.2	26.52	235.612			
7,250.0	7,214.2	7,338.4	7,209.2	13.4	24.9	24.92	-5,484.8	-2,640.7	6,223.0	6,197.4	25.59	243.209			
7,300.0	7,254.6	7,378.8	7,249.6	13.4	25.0	26.50	-5,484.8	-2,640.7	6,195.6	6,170.9	24.63	251.569			
7,350.0	7,292.9	7,417.1	7,287.9	13.3	25.0	28.28	-5,484.8	-2,640.7	6,165.7	6,142.0	23.67	260.514			
7,400.0	7,328.9	7,453.1	7,323.9	13.3	25.0	30.32	-5,484.8	-2,640.7	6,133.5	6,110.7	22.77	269.363			
7,450.0	7,362.3	7,486.5	7,357.3	13.3	25.1	32.69	-5,484.8	-2,640.7	6,099.1	6,077.1	22.03	276.913			
7,500.0	7,393.1	7,517.3	7,388.1	13.4	25.1	35.46	-5,484.8	-2,640.7	6,062.7	6,041.2	21.55	281.360			
7,550.0	7,421.1	7,545.3	7,416.1	13.5	25.1	38.71	-5,484.8	-2,640.7	6,024.6	6,003.1	21.47	280.613			
7,600.0	7,446.1	7,570.3	7,441.1	13.6	25.1	42.53	-5,484.8	-2,640.7	5,984.8	5,962.9	21.91	273.208			
7,650.0	7,468.0	7,592.2	7,463.0	13.8	25.2	47.03	-5,484.8	-2,640.7	5,943.5	5,920.6	22.92	259.371			
7,700.0	7,486.7	7,611.0	7,481.7	14.0	25.2	52.31	-5,484.8	-2,640.7	5,901.1	5,876.7	24.47	241.184			
7,750.0	7,502.2	7,626.4	7,497.2	14.2	25.2	58.44	-5,484.8	-2,640.7	5,857.7	5,831.3	26.43	221.618			
7,800.0	7,514.3	7,638.5	7,509.3	14.6	25.2	65.43	-5,484.8	-2,640.7	5,813.5	5,784.9	28.58	203.384			
7,850.0	7,523.0	7,647.2	7,518.0	14.9	25.2	73.20	-5,484.8	-2,640.7	5,768.8	5,738.1	30.63	188.358			
7,900.0	7,528.2	7,652.5	7,523.2	15.3	25.2	81.49	-5,484.8	-2,640.7	5,723.7	5,691.5	32.24	177.531			
7,950.2	7,530.0	7,654.2	7,525.0	15.8	25.2	90.00	-5,484.8	-2,640.7	5,678.3	5,645.1	33.18	171.128			
8,000.0	7,530.0	7,654.2	7,525.0	16.2	25.2	90.00	-5,484.8	-2,640.7	5,633.4	5,599.7	33.66	167.337			
8,100.0	7,530.0	7,654.2	7,525.0	17.3	25.2	90.00	-5,484.8	-2,640.7	5,543.4	5,508.7	34.73	159.612			
8,200.0	7,530.0	7,654.2	7,525.0	18.4	25.2	90.00	-5,484.8	-2,640.7	5,453.7	5,417.8	35.90	151.903			
8,300.0	7,530.0	7,654.2	7,525.0	19.7	25.2	90.00	-5,484.8	-2,640.7	5,364.5	5,327.3	37.16	144.350			
8,400.0	7,530.0	7,654.2	7,525.0	21.0	25.2	90.00	-5,484.8	-2,640.7	5,275.6	5,237.1	38.49	137.047			
8,500.0	7,530.0	7,654.2	7,525.0	22.4	25.2	90.00	-5,484.8	-2,640.7	5,187.1	5,147.2	39.89	130.050			
8,600.0	7,530.0	7,654.2	7,525.0	23.8	25.2	90.00	-5,484.8	-2,640.7	5,099.0	5,057.7	41.32	123.390			
8,700.0	7,530.0	7,654.2	7,525.0	25.3	25.2	90.00	-5,484.8	-2,640.7	5,011.4	4,968.6	42.80	117.080			
8,800.0	7,530.0	7,654.2	7,525.0	26.8	25.2	90.00	-5,484.8	-2,640.7	4,924.2	4,879.9	44.32	111.117			
8,900.0	7,530.0	7,654.2	7,525.0	28.3	25.2	90.00	-5,484.8	-2,640.7	4,837.6	4,791.7	45.86	105.495			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,654.2	7,525.0	29.9	25.2	90.00	-5,484.8	-2,640.7	4,751.5	4,704.0	47.42	100.199		
9,100.0	7,530.0	7,654.2	7,525.0	31.4	25.2	90.00	-5,484.8	-2,640.7	4,665.9	4,616.9	49.00	95.213		
9,200.0	7,530.0	7,654.2	7,525.0	33.0	25.2	90.00	-5,484.8	-2,640.7	4,580.9	4,530.3	50.61	90.520		
9,300.0	7,530.0	7,654.2	7,525.0	34.7	25.2	90.00	-5,484.8	-2,640.7	4,496.5	4,444.3	52.22	86.103		
9,400.0	7,530.0	7,654.2	7,525.0	36.3	25.2	90.00	-5,484.8	-2,640.7	4,412.8	4,359.0	53.85	81.944		
9,500.0	7,530.0	7,654.2	7,525.0	37.9	25.2	90.00	-5,484.8	-2,640.7	4,329.8	4,274.3	55.49	78.025		
9,600.0	7,530.0	7,654.2	7,525.0	39.6	25.2	90.00	-5,484.8	-2,640.7	4,247.5	4,190.4	57.14	74.332		
9,700.0	7,530.0	7,654.2	7,525.0	41.2	25.2	90.00	-5,484.8	-2,640.7	4,166.0	4,107.2	58.80	70.849		
9,800.0	7,530.0	7,654.2	7,525.0	42.9	25.2	90.00	-5,484.8	-2,640.7	4,085.3	4,024.8	60.47	67.562		
9,900.0	7,530.0	7,654.2	7,525.0	44.5	25.2	90.00	-5,484.8	-2,640.7	4,005.5	3,943.3	62.14	64.458		
10,000.0	7,530.0	7,654.2	7,525.0	46.2	25.2	90.00	-5,484.8	-2,640.7	3,926.6	3,862.7	63.82	61.526		
10,100.0	7,530.0	7,654.2	7,525.0	47.9	25.2	90.00	-5,484.8	-2,640.7	3,848.6	3,783.1	65.50	58.754		
10,200.0	7,530.0	7,654.2	7,525.0	49.6	25.2	90.00	-5,484.8	-2,640.7	3,771.8	3,704.6	67.19	56.133		
10,300.0	7,530.0	7,654.2	7,525.0	51.3	25.2	90.00	-5,484.8	-2,640.7	3,696.0	3,627.1	68.89	53.652		
10,400.0	7,530.0	7,654.2	7,525.0	53.0	25.2	90.00	-5,484.8	-2,640.7	3,621.4	3,550.8	70.59	51.305		
10,500.0	7,530.0	7,654.2	7,525.0	54.7	25.2	90.00	-5,484.8	-2,640.7	3,548.0	3,475.7	72.29	49.083		
10,600.0	7,530.0	7,654.2	7,525.0	56.4	25.2	90.00	-5,484.8	-2,640.7	3,476.0	3,402.0	73.99	46.979		
10,700.0	7,530.0	7,654.2	7,525.0	58.1	25.2	90.00	-5,484.8	-2,640.7	3,405.4	3,329.7	75.70	44.987		
10,800.0	7,530.0	7,654.2	7,525.0	59.8	25.2	90.00	-5,484.8	-2,640.7	3,336.3	3,258.9	77.41	43.100		
10,900.0	7,530.0	7,654.2	7,525.0	61.5	25.2	90.00	-5,484.8	-2,640.7	3,268.8	3,189.7	79.12	41.314		
11,000.0	7,530.0	7,654.2	7,525.0	63.2	25.2	90.00	-5,484.8	-2,640.7	3,203.0	3,122.2	80.84	39.624		
11,100.0	7,530.0	7,654.2	7,525.0	64.9	25.2	90.00	-5,484.8	-2,640.7	3,139.0	3,056.5	82.55	38.024		
11,200.0	7,530.0	7,654.2	7,525.0	66.6	25.2	90.00	-5,484.8	-2,640.7	3,076.9	2,992.7	84.27	36.512		
11,300.0	7,530.0	7,654.2	7,525.0	68.4	25.2	90.00	-5,484.8	-2,640.7	3,016.9	2,930.9	85.99	35.083		
11,400.0	7,530.0	7,654.2	7,525.0	70.1	25.2	90.00	-5,484.8	-2,640.7	2,959.0	2,871.3	87.71	33.735		
11,500.0	7,530.0	7,654.2	7,525.0	71.8	25.2	90.00	-5,484.8	-2,640.7	2,903.4	2,814.0	89.44	32.463		
11,600.0	7,530.0	7,654.2	7,525.0	73.5	25.2	90.00	-5,484.8	-2,640.7	2,850.3	2,759.1	91.16	31.265		
11,700.0	7,530.0	7,654.2	7,525.0	75.3	25.2	90.00	-5,484.8	-2,640.7	2,799.7	2,706.8	92.89	30.140		
11,800.0	7,530.0	7,654.2	7,525.0	77.0	25.2	90.00	-5,484.8	-2,640.7	2,751.8	2,657.2	94.62	29.083		
11,900.0	7,530.0	7,654.2	7,525.0	78.7	25.2	90.00	-5,484.8	-2,640.7	2,706.8	2,610.4	96.35	28.094		
12,000.0	7,530.0	7,654.2	7,525.0	80.4	25.2	90.00	-5,484.8	-2,640.7	2,664.7	2,566.6	98.08	27.169		
12,100.0	7,530.0	7,654.2	7,525.0	82.2	25.2	90.00	-5,484.8	-2,640.7	2,625.8	2,526.0	99.81	26.308		
12,200.0	7,530.0	7,654.2	7,525.0	83.9	25.2	90.00	-5,484.8	-2,640.7	2,590.2	2,488.6	101.54	25.509		
12,300.0	7,530.0	7,654.2	7,525.0	85.6	25.2	90.00	-5,484.8	-2,640.7	2,557.9	2,454.7	103.27	24.769		
12,400.0	7,530.0	7,654.2	7,525.0	87.4	25.2	90.00	-5,484.8	-2,640.7	2,529.3	2,424.3	105.01	24.087		
12,500.0	7,530.0	7,654.2	7,525.0	89.1	25.2	90.00	-5,484.8	-2,640.7	2,504.3	2,397.5	106.74	23.461		
12,600.0	7,530.0	7,654.2	7,525.0	90.8	25.2	90.00	-5,484.8	-2,640.7	2,483.0	2,374.6	108.48	22.890		
12,700.0	7,530.0	7,654.2	7,525.0	92.6	25.2	90.00	-5,484.8	-2,640.7	2,465.7	2,355.5	110.21	22.372		
12,800.0	7,530.0	7,654.2	7,525.0	94.3	25.2	90.00	-5,484.8	-2,640.7	2,452.3	2,340.4	111.95	21.905		
12,900.0	7,530.0	7,654.2	7,525.0	96.0	25.2	90.00	-5,484.8	-2,640.7	2,442.9	2,329.2	113.69	21.488		
13,000.0	7,530.0	7,654.2	7,525.0	97.8	25.2	90.00	-5,484.8	-2,640.7	2,437.6	2,322.2	115.43	21.119		
13,079.3	7,530.0	7,654.2	7,525.0	99.2	25.2	90.00	-5,484.8	-2,640.7	2,436.3	2,319.5	116.80	20.858 CC		
13,100.0	7,530.0	7,654.2	7,525.0	99.5	25.2	90.00	-5,484.8	-2,640.7	2,436.4	2,319.3	117.16	20.795 ES		
13,200.0	7,530.0	7,654.2	7,525.0	101.3	25.2	90.00	-5,484.8	-2,640.7	2,439.3	2,320.4	118.90	20.515		
13,300.0	7,530.0	7,654.2	7,525.0	103.0	25.2	90.00	-5,484.8	-2,640.7	2,446.3	2,325.7	120.64	20.277		
13,400.0	7,530.0	7,654.2	7,525.0	104.7	25.2	90.00	-5,484.8	-2,640.7	2,457.4	2,335.0	122.38	20.079		
13,500.0	7,530.0	7,654.2	7,525.0	106.5	25.2	90.00	-5,484.8	-2,640.7	2,472.4	2,348.3	124.12	19.919		
13,600.0	7,530.0	7,654.2	7,525.0	108.2	25.2	90.00	-5,484.8	-2,640.7	2,491.4	2,365.5	125.86	19.794		
13,700.0	7,530.0	7,654.2	7,525.0	110.0	25.2	90.00	-5,484.8	-2,640.7	2,514.2	2,386.6	127.61	19.703		
13,800.0	7,530.0	7,654.2	7,525.0	111.7	25.2	90.00	-5,484.8	-2,640.7	2,540.7	2,411.4	129.35	19.642		
13,900.0	7,530.0	7,654.2	7,525.0	113.4	25.2	90.00	-5,484.8	-2,640.7	2,570.9	2,439.8	131.09	19.611		
14,000.0	7,530.0	7,654.2	7,525.0	115.2	25.2	90.00	-5,484.8	-2,640.7	2,604.5	2,471.7	132.83	19.607 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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	7,654.2	7,525.0	116.9	25.2	90.00	-5,484.8	-2,640.7	2,641.5	2,506.9	134.58	19.629		
14,200.0	7,530.0	7,654.2	7,525.0	118.7	25.2	90.00	-5,484.8	-2,640.7	2,681.7	2,545.4	136.32	19.673		
14,300.0	7,530.0	7,654.2	7,525.0	120.4	25.2	90.00	-5,484.8	-2,640.7	2,725.0	2,587.0	138.06	19.738		
14,400.0	7,530.0	7,654.2	7,525.0	122.1	25.2	90.00	-5,484.8	-2,640.7	2,771.3	2,631.5	139.81	19.822		
14,500.0	7,530.0	7,654.2	7,525.0	123.9	25.2	90.00	-5,484.8	-2,640.7	2,820.3	2,678.8	141.55	19.924		
14,600.0	7,530.0	7,654.2	7,525.0	125.6	25.2	90.00	-5,484.8	-2,640.7	2,872.0	2,728.7	143.29	20.043		
14,700.0	7,530.0	7,654.2	7,525.0	127.4	25.2	90.00	-5,484.8	-2,640.7	2,926.2	2,781.1	145.04	20.175		
14,800.0	7,530.0	7,654.2	7,525.0	129.1	25.2	90.00	-5,484.8	-2,640.7	2,982.7	2,835.9	146.78	20.320		
14,900.0	7,530.0	7,654.2	7,525.0	130.9	25.2	90.00	-5,484.8	-2,640.7	3,041.5	2,893.0	148.53	20.477		
15,000.0	7,530.0	7,654.2	7,525.0	132.6	25.2	90.00	-5,484.8	-2,640.7	3,102.4	2,952.1	150.27	20.645		
15,100.0	7,530.0	7,654.2	7,525.0	134.4	25.2	90.00	-5,484.8	-2,640.7	3,165.3	3,013.3	152.02	20.821		
15,200.0	7,530.0	7,654.2	7,525.0	136.1	25.2	90.00	-5,484.8	-2,640.7	3,230.0	3,076.3	153.77	21.006		
15,300.0	7,530.0	7,654.2	7,525.0	137.9	25.2	90.00	-5,484.8	-2,640.7	3,296.6	3,141.0	155.51	21.198		
15,400.0	7,530.0	7,654.2	7,525.0	139.6	25.2	90.00	-5,484.8	-2,640.7	3,364.7	3,207.5	157.26	21.396		
15,500.0	7,530.0	7,654.2	7,525.0	141.3	25.2	90.00	-5,484.8	-2,640.7	3,434.5	3,275.5	159.00	21.600		
15,600.0	7,530.0	7,654.2	7,525.0	143.1	25.2	90.00	-5,484.8	-2,640.7	3,505.7	3,344.9	160.75	21.808		
15,700.0	7,530.0	7,654.2	7,525.0	144.8	25.2	90.00	-5,484.8	-2,640.7	3,578.2	3,415.7	162.50	22.020		
15,800.0	7,530.0	7,654.2	7,525.0	146.6	25.2	90.00	-5,484.8	-2,640.7	3,652.1	3,487.9	164.25	22.236		
15,900.0	7,530.0	7,654.2	7,525.0	148.3	25.2	90.00	-5,484.8	-2,640.7	3,727.2	3,561.2	165.99	22.454		
16,000.0	7,530.0	7,654.2	7,525.0	150.1	25.2	90.00	-5,484.8	-2,640.7	3,803.5	3,635.7	167.74	22.675		
16,100.0	7,530.0	7,654.2	7,525.0	151.8	25.2	90.00	-5,484.8	-2,640.7	3,880.8	3,711.3	169.49	22.897		
16,200.0	7,530.0	7,654.2	7,525.0	153.6	25.2	90.00	-5,484.8	-2,640.7	3,959.1	3,787.9	171.23	23.121		
16,300.0	7,530.0	7,654.2	7,525.0	155.3	25.2	90.00	-5,484.8	-2,640.7	4,038.4	3,865.4	172.98	23.346		
16,400.0	7,530.0	7,654.2	7,525.0	157.1	25.2	90.00	-5,484.8	-2,640.7	4,118.6	3,943.9	174.73	23.571		
16,500.0	7,530.0	7,654.2	7,525.0	158.8	25.2	90.00	-5,484.8	-2,640.7	4,199.6	4,023.2	176.48	23.797		
16,600.0	7,530.0	7,654.2	7,525.0	160.6	25.2	90.00	-5,484.8	-2,640.7	4,281.5	4,103.3	178.23	24.023		
16,700.0	7,530.0	7,654.2	7,525.0	162.3	25.2	90.00	-5,484.8	-2,640.7	4,364.1	4,184.1	179.97	24.248		
16,800.0	7,530.0	7,654.2	7,525.0	164.1	25.2	90.00	-5,484.8	-2,640.7	4,447.4	4,265.7	181.72	24.473		
16,900.0	7,530.0	7,654.2	7,525.0	165.8	25.2	90.00	-5,484.8	-2,640.7	4,531.4	4,347.9	183.47	24.698		
17,000.0	7,530.0	7,654.2	7,525.0	167.6	25.2	90.00	-5,484.8	-2,640.7	4,616.0	4,430.8	185.22	24.922		
17,100.0	7,530.0	7,654.2	7,525.0	169.3	25.2	90.00	-5,484.8	-2,640.7	4,701.3	4,514.3	186.97	25.145		
17,200.0	7,530.0	7,654.2	7,525.0	171.1	25.2	90.00	-5,484.8	-2,640.7	4,787.1	4,598.3	188.72	25.366		
17,300.0	7,530.0	7,654.2	7,525.0	172.8	25.2	90.00	-5,484.8	-2,640.7	4,873.4	4,682.9	190.47	25.587		
17,400.0	7,530.0	7,654.2	7,525.0	174.5	25.2	90.00	-5,484.8	-2,640.7	4,960.3	4,768.0	192.22	25.806		
17,411.2	7,530.0	7,654.2	7,525.0	174.7	25.2	90.00	-5,484.8	-2,640.7	4,970.1	4,777.7	192.41	25.830		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	-149.42	-6,136.7	-3,626.5	7,128.2					
100.0	100.0	106.4	106.4	0.2	0.2	-149.42	-6,136.6	-3,626.3	7,127.9	7,127.6	0.31	N/A		
123.0	123.0	118.0	118.0	0.2	0.2	-149.42	-6,136.6	-3,626.3	7,127.9	7,127.6	0.37	N/A		
200.0	200.0	178.0	178.0	0.3	0.3	-149.43	-6,137.1	-3,625.6	7,128.0	7,127.4	0.61	N/A		
300.0	300.0	232.6	232.5	0.5	0.4	-149.44	-6,138.3	-3,624.2	7,128.7	7,127.8	0.89	8,011.058		
400.0	400.0	298.1	298.0	0.7	0.5	-149.47	-6,140.8	-3,621.5	7,129.8	7,128.6	1.20	5,958.850		
500.0	500.0	362.0	361.6	0.8	0.7	-149.51	-6,144.2	-3,617.7	7,131.4	7,129.9	1.51	4,720.843		
600.0	600.0	412.0	411.4	1.0	0.8	-126.52	-6,147.7	-3,614.0	7,134.1	7,132.3	1.81	3,935.678		
700.0	700.0	454.0	453.1	1.2	0.9	-126.53	-6,151.2	-3,610.4	7,138.6	7,136.5	2.10	3,404.794		
800.0	799.9	517.2	515.7	1.4	1.1	-126.57	-6,157.4	-3,604.2	7,144.8	7,142.4	2.46	2,901.359		
848.7	848.4	546.0	544.1	1.5	1.2	-126.58	-6,160.5	-3,601.1	7,148.4	7,145.8	2.64	2,710.766		
900.0	899.7	584.3	581.9	1.6	1.3	-126.64	-6,165.0	-3,596.6	7,152.5	7,149.6	2.87	2,495.175		
1,000.0	999.5	667.3	663.4	1.8	1.6	-126.80	-6,175.9	-3,585.2	7,160.7	7,157.3	3.36	2,134.211		
1,100.0	1,099.3	764.3	758.2	2.0	2.0	-127.00	-6,189.8	-3,570.0	7,169.0	7,165.1	3.91	1,831.743		
1,200.0	1,199.1	848.0	840.2	2.2	2.3	-127.16	-6,201.3	-3,557.6	7,177.4	7,173.0	4.41	1,626.233		
1,300.0	1,298.9	931.2	921.6	2.4	2.7	-127.33	-6,213.1	-3,545.4	7,186.2	7,181.3	4.93	1,458.904		
1,400.0	1,398.8	988.8	977.7	2.6	2.9	-127.45	-6,221.8	-3,536.1	7,195.3	7,190.0	5.36	1,342.902		
1,500.0	1,498.6	1,048.1	1,035.4	2.8	3.2	-127.58	-6,231.5	-3,525.9	7,205.1	7,199.3	5.81	1,239.894		
1,600.0	1,598.4	1,144.4	1,128.5	3.0	3.6	-127.80	-6,248.3	-3,508.3	7,215.3	7,208.9	6.44	1,119.753		
1,700.0	1,698.2	1,224.3	1,205.8	3.2	4.0	-127.99	-6,262.3	-3,493.3	7,225.6	7,218.6	7.00	1,031.665		
1,800.0	1,798.0	1,424.7	1,399.9	3.4	4.9	-128.45	-6,295.9	-3,456.6	7,235.6	7,227.5	8.09	894.095		
1,900.0	1,897.8	1,495.6	1,468.7	3.6	5.3	-128.61	-6,307.2	-3,443.7	7,245.0	7,236.4	8.60	842.586		
2,000.0	1,997.7	1,568.7	1,539.6	3.8	5.6	-128.77	-6,319.0	-3,430.7	7,254.9	7,245.7	9.11	796.233		
2,100.0	2,097.5	1,641.0	1,609.8	4.0	5.9	-128.93	-6,331.0	-3,417.8	7,265.1	7,255.5	9.62	754.845		
2,200.0	2,197.3	1,751.2	1,716.5	4.2	6.5	-129.18	-6,349.6	-3,397.6	7,275.6	7,265.2	10.32	704.923		
2,300.0	2,297.1	1,832.0	1,794.7	4.4	6.9	-129.37	-6,363.4	-3,382.5	7,286.1	7,275.3	10.89	669.354		
2,400.0	2,396.9	1,977.5	1,935.4	4.6	7.6	-129.70	-6,387.5	-3,354.8	7,296.1	7,284.4	11.74	621.457		
2,500.0	2,496.7	2,046.5	2,002.3	4.8	7.9	-129.85	-6,399.0	-3,341.9	7,306.5	7,294.3	12.24	596.765		
2,600.0	2,596.5	2,117.0	2,070.6	5.0	8.2	-130.01	-6,410.7	-3,328.9	7,317.2	7,304.4	12.75	573.874		
2,700.0	2,696.4	2,186.5	2,137.9	5.2	8.5	-130.17	-6,422.5	-3,316.2	7,328.3	7,315.0	13.26	552.703		
2,800.0	2,796.2	2,290.3	2,238.3	5.4	9.0	-130.40	-6,440.5	-3,297.5	7,339.9	7,326.0	13.90	527.958		
2,900.0	2,896.0	2,454.8	2,397.9	5.6	9.8	-130.76	-6,467.1	-3,267.9	7,350.5	7,335.6	14.83	495.763		
3,000.0	2,995.8	2,512.1	2,453.4	5.8	10.1	-130.89	-6,476.7	-3,256.9	7,361.4	7,346.1	15.28	481.796		
3,100.0	3,095.6	2,582.8	2,521.9	6.0	10.4	-131.05	-6,488.8	-3,244.1	7,373.0	7,357.2	15.78	467.262		
3,200.0	3,195.4	2,677.3	2,613.6	6.2	10.8	-131.25	-6,504.4	-3,227.6	7,384.7	7,368.3	16.37	451.011		
3,300.0	3,295.2	2,768.2	2,701.9	6.4	11.3	-131.44	-6,519.6	-3,212.0	7,396.6	7,379.6	16.95	436.312		
3,400.0	3,395.1	2,920.3	2,849.4	6.6	12.0	-131.77	-6,544.2	-3,184.7	7,407.6	7,389.8	17.81	415.935		
3,500.0	3,494.9	2,975.0	2,902.4	6.8	12.2	-131.89	-6,553.5	-3,174.6	7,419.4	7,401.2	18.24	406.665		
3,600.0	3,594.7	3,004.2	2,930.6	7.0	12.4	-131.95	-6,558.6	-3,169.3	7,431.9	7,413.4	18.57	400.280		
3,700.0	3,694.5	3,071.0	2,995.1	7.2	12.7	-132.10	-6,570.9	-3,157.1	7,445.2	7,426.2	19.06	390.670		
3,800.0	3,794.3	3,168.0	3,088.9	7.4	13.2	-132.31	-6,588.5	-3,139.7	7,458.7	7,439.0	19.68	379.056		
3,900.0	3,894.1	3,370.6	3,284.8	7.6	14.2	-132.76	-6,624.6	-3,102.5	7,472.0	7,451.3	20.77	359.752		
4,000.0	3,994.0	3,530.9	3,439.9	7.8	14.9	-133.11	-6,650.7	-3,071.9	7,483.4	7,461.7	21.67	345.332		
4,100.0	4,093.8	3,606.4	3,513.0	8.0	15.3	-133.27	-6,663.1	-3,057.3	7,495.1	7,472.9	22.20	337.666		
4,200.0	4,193.6	3,679.3	3,583.5	8.2	15.6	-133.43	-6,675.1	-3,043.4	7,507.1	7,484.4	22.71	330.621		
4,300.0	4,293.4	3,753.0	3,655.0	8.4	16.0	-133.59	-6,687.4	-3,030.0	7,519.5	7,496.3	23.21	323.974		
4,400.0	4,393.2	3,834.0	3,733.5	8.6	16.4	-133.76	-6,700.8	-3,015.5	7,532.3	7,508.5	23.74	317.229		
4,500.0	4,493.0	3,987.6	3,882.6	8.8	17.1	-134.07	-6,725.9	-2,988.7	7,545.1	7,520.5	24.57	307.108		
4,600.0	4,592.8	4,076.3	3,968.7	9.0	17.5	-134.26	-6,740.1	-2,972.6	7,557.3	7,532.1	25.13	300.736		
4,700.0	4,692.7	4,182.7	4,072.2	9.3	17.9	-134.47	-6,756.7	-2,954.2	7,569.6	7,543.9	25.75	294.005		
4,800.0	4,792.5	4,241.7	4,129.6	9.5	18.2	-134.58	-6,766.0	-2,944.2	7,582.2	7,556.1	26.17	289.752		
4,900.0	4,892.3	4,310.0	4,196.1	9.7	18.5	-134.72	-6,777.1	-2,933.2	7,595.6	7,569.0	26.62	285.340		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)	
5,000.0	4,992.1	4,581.7	4,462.2		9.9	19.5	-135.19	-6,815.6	-2,894.1	7,607.7	7,580.0	27.73	274.348	
5,100.0	5,091.9	4,709.1	4,587.4	10.1	20.0		-135.39	-6,831.3	-2,877.1	7,618.8	7,590.5	28.35	268.761	
5,200.0	5,191.7	4,765.2	4,642.5	10.3	20.2		-135.48	-6,838.4	-2,869.2	7,629.9	7,601.2	28.73	265.605	
5,300.0	5,291.5	4,826.5	4,702.6	10.5	20.4		-135.59	-6,846.6	-2,860.7	7,641.7	7,612.6	29.12	262.428	
5,400.0	5,391.4	4,916.9	4,791.4	10.7	20.8		-135.73	-6,858.6	-2,848.8	7,653.8	7,624.2	29.59	258.652	
5,500.0	5,491.2	5,206.3	5,077.2	10.9	21.7		-136.14	-6,889.9	-2,815.5	7,663.4	7,632.8	30.61	250.344	
5,600.0	5,591.0	5,295.0	5,164.8		11.1	22.0	-136.27	-6,899.1	-2,804.7	7,673.2	7,642.1	31.07	246.996	
5,700.0	5,690.8	5,474.3	5,342.1		11.3	22.5	-136.51	-6,916.3	-2,784.4	7,682.8	7,651.1	31.73	242.120	
5,800.0	5,790.6	5,584.5	5,451.4		11.5	22.8	-136.64	-6,925.3	-2,774.1	7,691.7	7,659.5	32.18	239.054	
5,900.0	5,890.4	5,680.8	5,547.1		11.7	23.1	-136.75	-6,932.6	-2,766.0	7,700.4	7,667.8	32.58	236.332	
6,000.0	5,990.3	5,741.0	5,606.9		11.9	23.2	-136.81	-6,937.4	-2,760.9	7,709.5	7,676.5	32.91	234.253	
6,100.0	6,090.1	5,939.7	5,804.5		12.1	23.7	-137.02	-6,952.1	-2,745.8	7,718.4	7,684.9	33.50	230.395	
6,200.0	6,189.9	6,198.6	6,062.8		12.3	24.1	-137.20	-6,963.1	-2,734.6	7,725.2	7,691.2	34.06	226.832	
6,300.0	6,289.7	6,288.8	6,153.0		12.5	24.2	-137.24	-6,965.0	-2,733.8	7,731.4	7,697.0	34.32	225.272	
6,400.0	6,389.5	6,526.0	6,390.2		12.7	24.3	-137.30	-6,965.6	-2,735.5	7,735.9	7,701.2	34.67	223.099	
6,500.0	6,489.3	6,624.5	6,488.7		12.9	24.4	-137.33	-6,965.2	-2,736.0	7,740.2	7,705.3	34.94	221.529	
6,600.0	6,589.1	6,694.0	6,558.2		13.1	24.5	-137.35	-6,965.3	-2,736.2	7,744.8	7,709.6	35.19	220.111	
6,700.0	6,689.0	6,837.6	6,701.8		13.3	24.6	-137.39	-6,965.3	-2,736.0	7,749.2	7,713.7	35.50	218.272	
6,785.3	6,774.1	6,924.1	6,788.3		13.5	24.7	-137.42	-6,965.2	-2,735.5	7,752.8	7,717.1	35.74	216.899	
6,800.0	6,788.8	6,939.4	6,803.6		13.5	24.7	-126.41	-6,965.2	-2,735.4	7,753.3	7,717.5	35.80	216.589	
6,850.0	6,838.8	6,980.0	6,844.2		13.6	24.7	-15.90	-6,965.2	-2,735.2	7,752.8	7,716.9	35.89	215.986	
6,900.0	6,888.6	7,021.8	6,886.0		13.6	24.8	6.13	-6,965.3	-2,734.8	7,749.1	7,713.2	35.89	215.921	
6,950.0	6,938.1	7,055.9	6,920.1		13.7	24.8	11.44	-6,965.4	-2,734.5	7,742.1	7,706.4	35.77	216.472	
7,000.0	6,987.0	7,100.5	6,964.7		13.7	24.9	13.96	-6,965.7	-2,734.1	7,732.1	7,696.5	35.55	217.517	
7,050.0	7,035.0	7,158.8	7,023.0		13.6	24.9	15.60	-6,965.9	-2,733.6	7,718.8	7,683.5	35.24	219.021	
7,100.0	7,082.0	7,199.9	7,064.1		13.6	24.9	16.90	-6,966.1	-2,733.3	7,702.3	7,667.5	34.82	221.191	
7,150.0	7,127.7	7,235.6	7,099.8		13.5	25.0	18.07	-6,966.3	-2,733.0	7,682.9	7,648.6	34.31	223.935	
7,200.0	7,171.8	7,266.0	7,130.2		13.5	25.0	19.24	-6,966.4	-2,732.9	7,660.5	7,626.8	33.71	227.235	
7,250.0	7,214.2	7,304.9	7,169.1		13.4	25.1	20.48	-6,966.7	-2,732.7	7,635.4	7,602.3	33.06	230.923	
7,300.0	7,254.6	7,337.9	7,202.1		13.4	25.1	21.83	-6,967.0	-2,732.5	7,607.6	7,575.2	32.36	235.061	
7,350.0	7,292.9	7,373.0	7,237.2		13.3	25.1	23.37	-6,967.3	-2,732.3	7,577.2	7,545.6	31.64	239.461	
7,400.0	7,328.9	7,415.6	7,279.8		13.3	25.2	25.18	-6,967.7	-2,732.0	7,544.5	7,513.5	30.94	243.865	
7,450.0	7,362.3	7,455.3	7,319.4		13.3	25.2	27.28	-6,968.0	-2,731.7	7,509.4	7,479.1	30.27	248.085	
7,500.0	7,393.1	7,491.7	7,355.9		13.4	25.2	29.78	-6,968.3	-2,731.4	7,472.2	7,442.5	29.69	251.702	
7,550.0	7,421.1	7,524.8	7,389.0		13.5	25.3	32.76	-6,968.6	-2,731.1	7,433.1	7,403.8	29.25	254.145	
7,600.0	7,446.1	7,554.4	7,418.6		13.6	25.3	36.36	-6,968.8	-2,730.9	7,392.2	7,363.2	29.02	254.709	
7,650.0	7,468.0	7,580.4	7,444.6		13.8	25.3	40.72	-6,968.9	-2,730.6	7,349.9	7,320.8	29.09	252.658	
7,700.0	7,486.7	7,602.6	7,466.7		14.0	25.4	46.03	-6,969.0	-2,730.4	7,306.3	7,276.7	29.53	247.452	
7,750.0	7,502.2	7,620.9	7,485.1		14.2	25.4	52.48	-6,969.1	-2,730.3	7,261.6	7,231.2	30.37	239.097	
7,800.0	7,514.3	7,635.3	7,499.5		14.6	25.4	60.21	-6,969.2	-2,730.1	7,216.0	7,184.4	31.59	228.458	
7,850.0	7,523.0	7,645.7	7,509.9		14.9	25.4	69.22	-6,969.3	-2,730.1	7,169.8	7,136.8	33.00	217.255	
7,900.0	7,528.2	7,652.1	7,516.2		15.3	25.4	79.27	-6,969.3	-2,730.0	7,123.2	7,088.9	34.32	207.567	
7,950.2	7,530.0	7,654.4	7,518.6		15.8	25.4	89.85	-6,969.3	-2,730.0	7,076.3	7,041.1	35.21	200.971	
8,000.0	7,530.0	7,654.6	7,518.8		16.2	25.4	89.86	-6,969.3	-2,730.0	7,029.8	6,994.1	35.69	196.945	
8,100.0	7,530.0	7,655.2	7,519.3		17.3	25.4	89.87	-6,969.3	-2,730.0	6,936.5	6,899.8	36.76	188.696	
8,200.0	7,530.0	7,655.7	7,519.9		18.4	25.4	89.88	-6,969.3	-2,730.0	6,843.4	6,805.5	37.93	180.406	
8,300.0	7,530.0	7,656.2	7,520.4		19.7	25.4	89.89	-6,969.3	-2,730.0	6,750.5	6,711.3	39.19	172.232	
8,400.0	7,530.0	7,656.7	7,520.9		21.0	25.4	89.91	-6,969.3	-2,730.0	6,657.8	6,617.3	40.53	164.283	
8,500.0	7,530.0	7,657.2	7,521.4		22.4	25.4	89.92	-6,969.3	-2,729.9	6,565.3	6,523.4	41.92	156.624	
8,600.0	7,530.0	7,657.7	7,521.9		23.8	25.4	89.93	-6,969.3	-2,729.9	6,473.1	6,429.7	43.36	149.295	
8,700.0	7,530.0	7,658.3	7,522.4		25.3	25.4	89.94	-6,969.3	-2,729.9	6,381.1	6,336.2	44.84	142.316	
8,800.0	7,530.0	7,658.8	7,522.9		26.8	25.4	89.95	-6,969.3	-2,729.9	6,289.3	6,242.9	46.35	135.690	

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error: 0.0 ft			
Survey Program: 41-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning			
8,900.0	7,530.0	7,659.3	7,523.4	28.3	25.4	89.96	-6,969.3	-2,729.9	6,197.8	6,149.9	47.89	129.412				
9,000.0	7,530.0	7,659.8	7,523.9	29.9	25.4	89.98	-6,969.3	-2,729.9	6,106.5	6,057.0	49.46	123.472				
9,100.0	7,530.0	7,660.3	7,524.4	31.4	25.4	89.99	-6,969.3	-2,729.9	6,015.5	5,964.5	51.04	117.855				
9,200.0	7,530.0	7,660.8	7,524.9	33.0	25.4	90.00	-6,969.3	-2,729.9	5,924.8	5,872.2	52.64	112.545				
9,300.0	7,530.0	7,661.3	7,525.4	34.7	25.4	90.01	-6,969.3	-2,729.9	5,834.4	5,780.2	54.26	107.526				
9,400.0	7,530.0	7,661.8	7,525.9	36.3	25.4	90.02	-6,969.3	-2,729.9	5,744.4	5,688.5	55.89	102.778				
9,500.0	7,530.0	7,662.3	7,526.4	37.9	25.4	90.03	-6,969.3	-2,729.9	5,654.6	5,597.1	57.53	98.287				
9,600.0	7,530.0	7,662.8	7,526.9	39.6	25.4	90.04	-6,969.3	-2,729.9	5,565.2	5,506.1	59.18	94.035				
9,700.0	7,530.0	7,663.2	7,527.4	41.2	25.4	90.05	-6,969.3	-2,729.9	5,476.2	5,415.4	60.84	90.007				
9,800.0	7,530.0	7,663.7	7,527.9	42.9	25.4	90.07	-6,969.3	-2,729.9	5,387.6	5,325.1	62.51	86.189				
9,900.0	7,530.0	7,664.2	7,528.4	44.5	25.4	90.08	-6,969.4	-2,729.9	5,299.4	5,235.2	64.18	82.567				
10,000.0	7,530.0	7,664.7	7,528.9	46.2	25.4	90.09	-6,969.4	-2,729.9	5,211.6	5,145.7	65.86	79.128				
10,100.0	7,530.0	7,665.2	7,529.4	47.9	25.4	90.10	-6,969.4	-2,729.9	5,124.2	5,056.7	67.55	75.860				
10,200.0	7,530.0	7,665.7	7,529.8	49.6	25.4	90.11	-6,969.4	-2,729.9	5,037.3	4,968.1	69.24	72.754				
10,300.0	7,530.0	7,666.1	7,530.3	51.3	25.4	90.12	-6,969.4	-2,729.9	4,950.9	4,880.0	70.93	69.798				
10,400.0	7,530.0	7,666.6	7,530.8	53.0	25.4	90.13	-6,969.4	-2,729.9	4,865.1	4,792.4	72.63	66.984				
10,500.0	7,530.0	7,667.1	7,531.3	54.7	25.4	90.14	-6,969.4	-2,729.9	4,779.7	4,705.4	74.33	64.302				
10,600.0	7,530.0	7,667.6	7,531.7	56.4	25.4	90.15	-6,969.4	-2,729.8	4,695.0	4,619.0	76.04	61.746				
10,700.0	7,530.0	7,668.0	7,532.2	58.1	25.4	90.16	-6,969.4	-2,729.8	4,610.9	4,533.1	77.75	59.307				
10,800.0	7,530.0	7,668.5	7,532.7	59.8	25.4	90.17	-6,969.4	-2,729.8	4,527.4	4,447.9	79.46	56.980				
10,900.0	7,530.0	7,669.0	7,533.1	61.5	25.4	90.19	-6,969.4	-2,729.8	4,444.6	4,363.4	81.17	54.757				
11,000.0	7,530.0	7,669.4	7,533.6	63.2	25.4	90.20	-6,969.4	-2,729.8	4,362.5	4,279.6	82.88	52.633				
11,100.0	7,530.0	7,669.9	7,534.1	64.9	25.4	90.21	-6,969.4	-2,729.8	4,281.2	4,196.6	84.60	50.604				
11,200.0	7,530.0	7,670.3	7,534.5	66.6	25.4	90.22	-6,969.4	-2,729.8	4,200.7	4,114.4	86.32	48.663				
11,300.0	7,530.0	7,670.8	7,535.0	68.4	25.4	90.23	-6,969.4	-2,729.8	4,121.0	4,033.0	88.04	46.807				
11,400.0	7,530.0	7,671.3	7,535.4	70.1	25.4	90.24	-6,969.4	-2,729.8	4,042.3	3,952.5	89.77	45.031				
11,500.0	7,530.0	7,671.7	7,535.9	71.8	25.4	90.25	-6,969.4	-2,729.8	3,964.5	3,873.0	91.49	43.332				
11,600.0	7,530.0	7,672.2	7,536.3	73.5	25.4	90.26	-6,969.4	-2,729.8	3,887.7	3,794.5	93.22	41.706				
11,700.0	7,530.0	7,672.6	7,536.8	75.3	25.4	90.27	-6,969.4	-2,729.8	3,812.0	3,717.0	94.94	40.150				
11,800.0	7,530.0	7,673.1	7,537.2	77.0	25.4	90.28	-6,969.4	-2,729.8	3,737.4	3,640.8	96.67	38.661				
11,900.0	7,530.0	7,673.5	7,537.7	78.7	25.4	90.29	-6,969.4	-2,729.8	3,664.1	3,565.7	98.40	37.236				
12,000.0	7,530.0	7,674.0	7,538.1	80.4	25.4	90.30	-6,969.4	-2,729.8	3,592.0	3,491.9	100.13	35.873				
12,100.0	7,530.0	7,674.4	7,538.6	82.2	25.4	90.31	-6,969.4	-2,729.8	3,521.3	3,419.4	101.86	34.569				
12,200.0	7,530.0	7,674.9	7,539.0	83.9	25.4	90.32	-6,969.4	-2,729.8	3,452.1	3,348.5	103.60	33.322				
12,300.0	7,530.0	7,675.3	7,539.5	85.6	25.4	90.33	-6,969.4	-2,729.8	3,384.4	3,279.0	105.33	32.131				
12,400.0	7,530.0	7,675.7	7,539.9	87.4	25.4	90.34	-6,969.4	-2,729.8	3,318.3	3,211.2	107.06	30.993				
12,500.0	7,530.0	7,676.2	7,540.3	89.1	25.4	90.35	-6,969.4	-2,729.8	3,253.9	3,145.1	108.80	29.908				
12,600.0	7,530.0	7,676.6	7,540.8	90.8	25.4	90.36	-6,969.4	-2,729.8	3,191.4	3,080.9	110.54	28.872				
12,700.0	7,530.0	7,677.0	7,541.2	92.6	25.4	90.37	-6,969.4	-2,729.8	3,130.9	3,018.6	112.27	27.886				
12,800.0	7,530.0	7,677.5	7,541.6	94.3	25.4	90.38	-6,969.4	-2,729.8	3,072.4	2,958.3	114.01	26.948				
12,900.0	7,530.0	7,677.9	7,542.1	96.0	25.4	90.39	-6,969.4	-2,729.8	3,016.0	2,900.3	115.75	26.057				
13,000.0	7,530.0	7,678.3	7,542.5	97.8	25.4	90.40	-6,969.4	-2,729.7	2,962.0	2,844.5	117.49	25.212				
13,100.0	7,530.0	7,678.8	7,542.9	99.5	25.4	90.41	-6,969.4	-2,729.7	2,910.4	2,791.2	119.22	24.411				
13,200.0	7,530.0	7,679.2	7,543.4	101.3	25.4	90.42	-6,969.4	-2,729.7	2,861.4	2,740.5	120.96	23.655				
13,300.0	7,530.0	7,679.6	7,543.8	103.0	25.4	90.43	-6,969.4	-2,729.7	2,815.1	2,692.4	122.70	22.942				
13,400.0	7,530.0	7,680.0	7,544.2	104.7	25.4	90.44	-6,969.4	-2,729.7	2,771.6	2,647.2	124.44	22.272				
13,500.0	7,530.0	7,680.5	7,544.6	106.5	25.4	90.45	-6,969.4	-2,729.7	2,731.1	2,604.9	126.19	21.644				
13,600.0	7,530.0	7,680.9	7,545.0	108.2	25.4	90.46	-6,969.4	-2,729.7	2,693.7	2,565.8	127.93	21.057				
13,700.0	7,530.0	7,681.3	7,545.5	110.0	25.4	90.47	-6,969.4	-2,729.7	2,659.6	2,529.9	129.67	20.510				
13,800.0	7,530.0	7,681.7	7,545.9	111.7	25.4	90.48	-6,969.4	-2,729.7	2,628.8	2,497.3	131.41	20.004				
13,900.0	7,530.0	7,682.1	7,546.3	113.4	25.4	90.48	-6,969.4	-2,729.7	2,601.4	2,468.3	133.15	19.537				
14,000.0	7,530.0	7,682.5	7,546.7	115.2	25.4	90.49	-6,969.4	-2,729.7	2,577.7	2,442.8	134.90	19.109				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)				
14,100.0	7,530.0	7,683.0	7,547.1	116.9	25.4	90.50	-6,969.4	-2,729.7	2,557.7	2,421.0	136.64	18.718		
14,200.0	7,530.0	7,683.4	7,547.5	118.7	25.4	90.51	-6,969.4	-2,729.7	2,541.4	2,403.0	138.38	18.365		
14,300.0	7,530.0	7,683.8	7,547.9	120.4	25.4	90.52	-6,969.4	-2,729.7	2,529.0	2,388.9	140.13	18.048		
14,400.0	7,530.0	7,684.2	7,548.3	122.1	25.4	90.53	-6,969.4	-2,729.7	2,520.5	2,378.6	141.87	17.766		
14,500.0	7,530.0	7,684.6	7,548.8	123.9	25.4	90.54	-6,969.4	-2,729.7	2,515.9	2,372.3	143.61	17.519		
14,564.5	7,530.0	7,684.8	7,549.0	125.0	25.4	90.55	-6,969.4	-2,729.7	2,515.1	2,370.4	144.74	17.377	CC	
14,600.0	7,530.0	7,685.0	7,549.2	125.6	25.4	90.55	-6,969.4	-2,729.7	2,515.4	2,370.0	145.36	17.304	ES	
14,700.0	7,530.0	7,685.4	7,549.6	127.4	25.4	90.56	-6,969.4	-2,729.7	2,518.8	2,371.7	147.10	17.122		
14,800.0	7,530.0	7,685.8	7,550.0	129.1	25.4	90.57	-6,969.4	-2,729.7	2,526.1	2,377.3	148.85	16.971		
14,900.0	7,530.0	7,686.2	7,550.4	130.9	25.4	90.58	-6,969.4	-2,729.7	2,537.4	2,386.8	150.60	16.849		
15,000.0	7,530.0	7,686.6	7,550.8	132.6	25.4	90.59	-6,969.4	-2,729.7	2,552.5	2,400.2	152.34	16.755		
15,100.0	7,530.0	7,687.0	7,551.2	134.4	25.4	90.60	-6,969.4	-2,729.7	2,571.5	2,417.4	154.09	16.689		
15,200.0	7,530.0	7,687.4	7,551.6	136.1	25.4	90.60	-6,969.4	-2,729.7	2,594.2	2,438.3	155.83	16.647		
15,300.0	7,530.0	7,687.8	7,551.9	137.9	25.4	90.61	-6,969.4	-2,729.7	2,620.4	2,462.9	157.58	16.629	SF	
15,400.0	7,530.0	7,688.2	7,552.3	139.6	25.4	90.62	-6,969.5	-2,729.7	2,650.3	2,490.9	159.33	16.634		
15,500.0	7,530.0	7,688.6	7,552.7	141.3	25.4	90.63	-6,969.5	-2,729.7	2,683.5	2,522.4	161.07	16.660		
15,600.0	7,530.0	7,688.9	7,553.1	143.1	25.4	90.64	-6,969.5	-2,729.6	2,719.9	2,557.1	162.82	16.705		
15,700.0	7,530.0	7,689.3	7,553.5	144.8	25.4	90.65	-6,969.5	-2,729.6	2,759.5	2,595.0	164.57	16.769		
15,800.0	7,530.0	7,689.7	7,553.9	146.6	25.4	90.66	-6,969.5	-2,729.6	2,802.2	2,635.9	166.31	16.849		
15,900.0	7,530.0	7,690.1	7,554.3	148.3	25.4	90.67	-6,969.5	-2,729.6	2,847.7	2,679.6	168.06	16.944		
16,000.0	7,530.0	7,690.5	7,554.7	150.1	25.4	90.68	-6,969.5	-2,729.6	2,895.9	2,726.1	169.81	17.054		
16,100.0	7,530.0	7,690.9	7,555.0	151.8	25.5	90.68	-6,969.5	-2,729.6	2,946.8	2,775.2	171.56	17.177		
16,200.0	7,530.0	7,691.3	7,555.4	153.6	25.5	90.69	-6,969.5	-2,729.6	3,000.1	2,826.8	173.30	17.311		
16,300.0	7,530.0	7,691.6	7,555.8	155.3	25.5	90.70	-6,969.5	-2,729.6	3,055.8	2,880.7	175.05	17.456		
16,400.0	7,530.0	7,692.0	7,556.2	157.1	25.5	90.71	-6,969.5	-2,729.6	3,113.6	2,936.8	176.80	17.611		
16,500.0	7,530.0	7,692.4	7,556.6	158.8	25.5	90.72	-6,969.5	-2,729.6	3,173.6	2,995.1	178.55	17.775		
16,600.0	7,530.0	7,692.8	7,556.9	160.6	25.5	90.73	-6,969.5	-2,729.6	3,235.6	3,055.3	180.30	17.946		
16,700.0	7,530.0	7,693.1	7,557.3	162.3	25.5	90.74	-6,969.5	-2,729.6	3,299.4	3,117.4	182.04	18.124		
16,800.0	7,530.0	7,693.5	7,557.7	164.1	25.5	90.74	-6,969.5	-2,729.6	3,365.0	3,181.2	183.79	18.309		
16,900.0	7,530.0	7,693.9	7,558.1	165.8	25.5	90.75	-6,969.5	-2,729.6	3,432.2	3,246.7	185.54	18.499		
17,000.0	7,530.0	7,694.3	7,558.4	167.6	25.5	90.76	-6,969.5	-2,729.6	3,501.0	3,313.7	187.29	18.693		
17,100.0	7,530.0	7,694.6	7,558.8	169.3	25.5	90.77	-6,969.5	-2,729.6	3,571.3	3,382.3	189.04	18.892		
17,200.0	7,530.0	7,695.0	7,559.2	171.1	25.5	90.78	-6,969.5	-2,729.6	3,643.0	3,452.2	190.79	19.095		
17,300.0	7,530.0	7,695.4	7,559.5	172.8	25.5	90.79	-6,969.5	-2,729.6	3,716.0	3,523.4	192.54	19.300		
17,400.0	7,530.0	7,695.7	7,559.9	174.5	25.5	90.79	-6,969.5	-2,729.6	3,790.2	3,595.9	194.28	19.508		
17,411.2	7,530.0	7,695.8	7,559.9	174.7	25.5	90.80	-6,969.5	-2,729.6	3,798.6	3,604.1	194.48	19.532		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-149.42	-6,136.7	-3,626.5	7,128.2						
100.0	100.0	95.0	95.0	0.2	0.1	-149.42	-6,136.7	-3,626.5	7,128.2	7,127.9	0.29	N/A			
200.0	200.0	195.0	195.0	0.3	0.3	-149.42	-6,136.7	-3,626.5	7,128.2	7,127.5	0.64	N/A			
300.0	300.0	262.2	262.2	0.5	0.4	-149.42	-6,137.2	-3,626.0	7,128.4	7,127.5	0.93	7,629.145			
400.0	400.0	327.7	327.7	0.7	0.6	-149.44	-6,138.7	-3,624.4	7,129.1	7,127.9	1.23	5,797.305			
500.0	500.0	400.0	399.8	0.8	0.7	-149.47	-6,141.5	-3,621.3	7,130.3	7,128.7	1.55	4,613.518			
600.0	600.0	458.1	457.7	1.0	0.8	-126.49	-6,144.6	-3,617.9	7,132.5	7,130.6	1.85	3,857.337			
700.0	700.0	522.7	522.0	1.2	1.0	-126.52	-6,149.1	-3,613.1	7,136.2	7,134.0	2.18	3,275.061			
800.0	799.9	600.0	598.7	1.4	1.2	-126.57	-6,155.7	-3,606.0	7,141.5	7,138.9	2.56	2,786.830			
848.7	848.4	617.7	616.2	1.5	1.2	-126.58	-6,157.4	-3,604.2	7,144.6	7,141.9	2.71	2,640.283			
900.0	899.7	650.2	648.3	1.6	1.3	-126.63	-6,160.7	-3,600.6	7,148.2	7,145.3	2.90	2,463.861			
1,000.0	999.5	700.0	697.5	1.8	1.5	-126.71	-6,166.3	-3,594.5	7,155.5	7,152.3	3.24	2,206.675			
1,100.0	1,099.3	775.0	771.2	2.0	1.8	-126.85	-6,175.8	-3,584.3	7,163.4	7,159.7	3.70	1,934.103			
1,200.0	1,199.1	853.7	848.2	2.2	2.1	-127.01	-6,186.9	-3,572.2	7,171.8	7,167.6	4.19	1,713.389			
1,300.0	1,298.9	950.2	942.4	2.4	2.5	-127.20	-6,200.7	-3,557.4	7,180.3	7,175.6	4.74	1,514.263			
1,400.0	1,398.8	1,046.6	1,036.7	2.6	2.8	-127.40	-6,214.5	-3,542.5	7,188.9	7,183.6	5.30	1,355.632			
1,500.0	1,498.6	1,143.0	1,131.0	2.8	3.2	-127.59	-6,228.2	-3,527.6	7,197.6	7,191.8	5.87	1,226.702			
1,600.0	1,598.4	1,239.4	1,225.3	3.0	3.6	-127.78	-6,242.0	-3,512.8	7,206.4	7,200.0	6.43	1,120.062			
1,700.0	1,698.2	1,335.9	1,319.5	3.2	4.0	-127.98	-6,255.7	-3,497.9	7,215.3	7,208.3	7.00	1,030.507			
1,800.0	1,798.0	1,432.3	1,413.8	3.4	4.4	-128.17	-6,269.5	-3,483.0	7,224.3	7,216.7	7.57	954.302			
1,900.0	1,897.8	1,528.7	1,508.1	3.6	4.8	-128.36	-6,283.2	-3,468.2	7,233.3	7,225.2	8.14	888.708			
2,000.0	1,997.7	1,625.1	1,602.3	3.8	5.2	-128.55	-6,297.0	-3,453.3	7,242.5	7,233.8	8.71	831.681			
2,100.0	2,097.5	1,721.6	1,696.6	4.0	5.6	-128.74	-6,310.8	-3,438.5	7,251.7	7,242.4	9.28	781.662			
2,200.0	2,197.3	1,818.0	1,790.9	4.2	6.0	-128.93	-6,324.5	-3,423.6	7,261.0	7,251.2	9.85	737.446			
2,300.0	2,297.1	1,914.4	1,885.2	4.4	6.4	-129.12	-6,338.3	-3,408.7	7,270.4	7,260.0	10.41	698.087			
2,400.0	2,396.9	2,010.8	1,979.4	4.6	6.7	-129.31	-6,352.0	-3,393.9	7,279.9	7,268.9	10.98	662.833			
2,500.0	2,496.7	2,107.2	2,073.7	4.8	7.1	-129.50	-6,365.8	-3,379.0	7,289.4	7,277.9	11.55	631.079			
2,600.0	2,596.5	2,203.7	2,168.0	5.0	7.5	-129.69	-6,379.6	-3,364.1	7,299.1	7,287.0	12.12	602.333			
2,700.0	2,696.4	2,300.1	2,262.2	5.2	7.9	-129.88	-6,393.3	-3,349.3	7,308.8	7,296.1	12.68	576.189			
2,800.0	2,796.2	2,396.5	2,356.5	5.4	8.3	-130.07	-6,407.1	-3,334.4	7,318.6	7,305.4	13.25	552.312			
2,900.0	2,896.0	2,492.9	2,450.8	5.6	8.7	-130.25	-6,420.8	-3,319.5	7,328.5	7,314.7	13.82	530.421			
3,000.0	2,995.8	2,589.4	2,545.1	5.8	9.1	-130.44	-6,434.6	-3,304.7	7,338.5	7,324.1	14.38	510.281			
3,100.0	3,095.6	2,685.8	2,639.3	6.0	9.5	-130.63	-6,448.4	-3,289.8	7,348.6	7,333.6	14.95	491.691			
3,200.0	3,195.4	2,782.2	2,733.6	6.2	9.9	-130.81	-6,462.1	-3,274.9	7,358.7	7,343.2	15.51	474.481			
3,300.0	3,295.2	2,878.6	2,827.9	6.4	10.3	-131.00	-6,475.9	-3,260.1	7,368.9	7,352.8	16.07	458.503			
3,400.0	3,395.1	2,975.0	2,922.1	6.6	10.7	-131.18	-6,489.6	-3,245.2	7,379.2	7,362.6	16.63	443.631			
3,500.0	3,494.9	3,071.5	3,016.4	6.8	11.1	-131.37	-6,503.4	-3,230.3	7,389.6	7,372.4	17.19	429.755			
3,600.0	3,594.7	3,167.9	3,110.7	7.0	11.5	-131.55	-6,517.2	-3,215.5	7,400.1	7,382.3	17.76	416.778			
3,700.0	3,694.5	3,264.3	3,204.9	7.2	11.9	-131.74	-6,530.9	-3,200.6	7,410.6	7,392.3	18.32	404.618			
3,800.0	3,794.3	3,360.7	3,299.2	7.4	12.3	-131.92	-6,544.7	-3,185.7	7,421.2	7,402.4	18.87	393.199			
3,900.0	3,894.1	3,457.2	3,393.5	7.6	12.7	-132.10	-6,558.4	-3,170.9	7,431.9	7,412.5	19.43	382.458			
4,000.0	3,994.0	3,553.6	3,487.8	7.8	13.1	-132.28	-6,572.2	-3,156.0	7,442.7	7,422.7	19.99	372.335			
4,100.0	4,093.8	3,650.0	3,582.0	8.0	13.4	-132.46	-6,585.9	-3,141.2	7,453.6	7,433.0	20.55	362.780			
4,200.0	4,193.6	3,746.4	3,676.3	8.2	13.8	-132.65	-6,599.7	-3,126.3	7,464.5	7,443.4	21.10	353.747			
4,300.0	4,293.4	3,842.8	3,770.6	8.4	14.2	-132.83	-6,613.5	-3,111.4	7,475.5	7,453.9	21.66	345.194			
4,400.0	4,393.2	3,939.3	3,864.8	8.6	14.6	-133.01	-6,627.2	-3,096.6	7,486.6	7,464.4	22.21	337.085			
4,500.0	4,493.0	4,035.7	3,959.1	8.8	15.0	-133.19	-6,641.0	-3,081.7	7,497.8	7,475.0	22.76	329.387			
4,600.0	4,592.8	4,132.1	4,053.4	9.0	15.4	-133.36	-6,654.7	-3,066.8	7,509.1	7,485.7	23.32	322.069			
4,700.0	4,692.7	4,228.5	4,147.7	9.3	15.8	-133.54	-6,668.5	-3,052.0	7,520.4	7,496.5	23.87	315.105			
4,800.0	4,792.5	4,325.0	4,241.9	9.5	16.2	-133.72	-6,682.3	-3,037.1	7,531.8	7,507.4	24.42	308.469			
4,900.0	4,892.3	4,421.4	4,336.2	9.7	16.6	-133.90	-6,696.0	-3,022.2	7,543.3	7,518.3	24.97	302.140			
5,000.0	4,992.1	4,517.8	4,430.5	9.9	17.0	-134.08	-6,709.8	-3,007.4	7,554.8	7,529.3	25.51	296.096			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - Plan #2													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				
5,100.0	5,091.9	4,614.2	4,524.7	10.1	17.4	-134.25	-6,723.5	-2,992.5	7,566.4	7,540.4	26.06	290.320				
5,200.0	5,191.7	4,710.6	4,619.0	10.3	17.8	-134.43	-6,737.3	-2,977.6	7,578.1	7,551.5	26.61	284.795				
5,300.0	5,291.5	4,807.1	4,713.3	10.5	18.2	-134.60	-6,751.1	-2,962.8	7,589.9	7,562.8	27.16	279.504				
5,400.0	5,391.4	4,903.5	4,807.6	10.7	18.6	-134.78	-6,764.8	-2,947.9	7,601.8	7,574.1	27.70	274.433				
5,500.0	5,491.2	4,999.9	4,901.8	10.9	19.0	-134.95	-6,778.6	-2,933.0	7,613.7	7,585.5	28.24	269.569				
5,600.0	5,591.0	5,096.3	4,996.1	11.1	19.4	-135.13	-6,792.3	-2,918.2	7,625.7	7,596.9	28.79	264.900				
5,700.0	5,690.8	5,192.8	5,090.4	11.3	19.8	-135.30	-6,806.1	-2,903.3	7,637.8	7,608.4	29.33	260.415				
5,800.0	5,790.6	5,289.2	5,184.6	11.5	20.2	-135.47	-6,819.8	-2,888.4	7,649.9	7,620.0	29.87	256.103				
5,900.0	5,890.4	5,385.6	5,278.9	11.7	20.6	-135.65	-6,833.6	-2,873.6	7,662.1	7,631.7	30.41	251.954				
6,000.0	5,990.3	5,482.0	5,373.2	11.9	21.0	-135.82	-6,847.4	-2,858.7	7,674.4	7,643.5	30.95	247.961				
6,100.0	6,090.1	5,578.4	5,467.5	12.1	21.3	-135.99	-6,861.1	-2,843.8	7,686.8	7,655.3	31.49	244.113				
6,200.0	6,189.9	5,674.9	5,561.7	12.3	21.7	-136.16	-6,874.9	-2,829.0	7,699.2	7,667.2	32.03	240.405				
6,300.0	6,289.7	5,771.3	5,656.0	12.5	22.1	-136.33	-6,888.6	-2,814.1	7,711.7	7,679.2	32.56	236.828				
6,400.0	6,389.5	5,867.7	5,750.3	12.7	22.5	-136.50	-6,902.4	-2,799.3	7,724.3	7,691.2	33.10	233.375				
6,500.0	6,489.3	6,607.4	6,484.3	12.9	24.1	-137.24	-6,952.8	-2,744.8	7,731.5	7,696.7	34.72	222.703				
6,600.0	6,589.1	6,707.2	6,584.1	13.1	24.2	-137.27	-6,952.8	-2,744.8	7,735.9	7,700.9	34.99	221.094				
6,700.0	6,689.0	6,807.0	6,684.0	13.3	24.3	-137.30	-6,952.8	-2,744.8	7,740.4	7,705.1	35.26	219.504				
6,785.3	6,774.1	6,892.1	6,769.1	13.5	24.4	-137.32	-6,952.8	-2,744.8	7,744.2	7,708.7	35.50	218.164				
6,800.0	6,788.8	6,906.9	6,783.8	13.5	24.4	-126.31	-6,952.8	-2,744.8	7,744.7	7,709.2	35.55	217.863				
6,850.0	6,838.8	6,956.8	6,833.8	13.6	24.4	-15.80	-6,952.8	-2,744.8	7,744.3	7,708.7	35.65	217.226				
6,900.0	6,888.6	7,006.7	6,883.6	13.6	24.5	6.23	-6,952.8	-2,744.8	7,740.7	7,705.0	35.65	217.155				
6,950.0	6,938.1	7,056.2	6,933.1	13.7	24.5	11.55	-6,952.8	-2,744.8	7,733.7	7,698.2	35.53	217.644				
7,000.0	6,987.0	7,105.1	6,982.0	13.7	24.6	14.08	-6,952.8	-2,744.8	7,723.5	7,688.2	35.32	218.693				
7,050.0	7,035.0	7,153.1	7,030.0	13.6	24.6	15.72	-6,952.8	-2,744.8	7,710.2	7,675.2	35.00	220.295				
7,100.0	7,082.0	7,200.1	7,077.0	13.6	24.6	17.03	-6,952.8	-2,744.8	7,693.7	7,659.1	34.59	222.449				
7,150.0	7,127.7	7,245.7	7,122.7	13.5	24.7	18.23	-6,952.8	-2,744.8	7,674.1	7,640.0	34.09	225.140				
7,200.0	7,171.8	7,289.9	7,166.8	13.5	24.7	19.42	-6,952.8	-2,744.8	7,651.6	7,618.1	33.51	228.347				
7,250.0	7,214.2	7,332.3	7,209.2	13.4	24.8	20.69	-6,952.8	-2,744.8	7,626.3	7,593.5	32.87	232.026				
7,300.0	7,254.6	7,372.7	7,249.6	13.4	24.8	22.08	-6,952.8	-2,744.8	7,598.3	7,566.1	32.18	236.106				
7,350.0	7,292.9	7,411.0	7,287.9	13.3	24.8	23.66	-6,952.8	-2,744.8	7,567.7	7,536.3	31.47	240.464				
7,400.0	7,328.9	7,447.0	7,323.9	13.3	24.9	25.48	-6,952.8	-2,744.8	7,534.7	7,504.0	30.77	244.907				
7,450.0	7,362.3	7,480.4	7,357.3	13.3	24.9	27.61	-6,952.8	-2,744.8	7,499.5	7,469.4	30.10	249.143				
7,500.0	7,393.1	7,511.2	7,388.1	13.4	24.9	30.13	-6,952.8	-2,744.8	7,462.2	7,432.7	29.52	252.747				
7,550.0	7,421.1	7,539.1	7,416.1	13.5	24.9	33.13	-6,952.8	-2,744.8	7,423.0	7,393.9	29.09	255.145				
7,600.0	7,446.1	7,564.2	7,441.1	13.6	25.0	36.75	-6,952.8	-2,744.8	7,382.1	7,353.2	28.88	255.634				
7,650.0	7,468.0	7,586.1	7,463.0	13.8	25.0	41.12	-6,952.8	-2,744.8	7,339.8	7,310.8	28.95	253.489				
7,700.0	7,486.7	7,604.8	7,481.7	14.0	25.0	46.44	-6,952.8	-2,744.8	7,296.1	7,266.7	29.40	248.195				
7,750.0	7,502.2	7,620.3	7,497.2	14.2	25.0	52.88	-6,952.8	-2,744.8	7,251.4	7,221.2	30.24	239.790				
7,800.0	7,514.3	7,632.4	7,509.3	14.6	25.0	60.58	-6,952.8	-2,744.8	7,205.9	7,174.4	31.45	229.158				
7,850.0	7,523.0	7,641.1	7,518.0	14.9	25.0	69.54	-6,952.8	-2,744.8	7,159.7	7,126.9	32.84	218.015				
7,900.0	7,528.2	7,646.3	7,523.2	15.3	25.0	79.51	-6,952.8	-2,744.8	7,113.2	7,079.1	34.13	208.405				
7,950.2	7,530.0	7,648.1	7,525.0	15.8	25.0	90.00	-6,952.8	-2,744.8	7,066.3	7,031.3	35.01	201.864				
8,000.0	7,530.0	7,648.1	7,525.0	16.2	25.0	90.00	-6,952.8	-2,744.8	7,019.9	6,984.4	35.49	197.807				
8,100.0	7,530.0	7,648.1	7,525.0	17.3	25.0	90.00	-6,952.8	-2,744.8	6,926.7	6,890.1	36.55	189.492				
8,200.0	7,530.0	7,648.1	7,525.0	18.4	25.0	90.00	-6,952.8	-2,744.8	6,833.7	6,796.0	37.73	181.138				
8,300.0	7,530.0	7,648.1	7,525.0	19.7	25.0	90.00	-6,952.8	-2,744.8	6,740.9	6,701.9	38.99	172.903				
8,400.0	7,530.0	7,648.1	7,525.0	21.0	25.0	90.00	-6,952.8	-2,744.8	6,648.3	6,608.0	40.32	164.896				
8,500.0	7,530.0	7,648.1	7,525.0	22.4	25.0	90.00	-6,952.8	-2,744.8	6,556.0	6,514.2	41.71	157.184				
8,600.0	7,530.0	7,648.1	7,525.0	23.8	25.0	90.00	-6,952.8	-2,744.8	6,463.8	6,420.7	43.15	149.807				
8,700.0	7,530.0	7,648.1	7,525.0	25.3	25.0	90.00	-6,952.8	-2,744.8	6,371.9	6,327.3	44.63	142.782				
8,800.0	7,530.0	7,648.1	7,525.0	26.8	25.0	90.00	-6,952.8	-2,744.8	6,280.3	6,234.1	46.14	136.115				
8,900.0	7,530.0	7,648.1	7,525.0	28.3	25.0	90.00	-6,952.8	-2,744.8	6,188.9	6,141.2	47.68	129.801				

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,000.0	7,530.0	7,648.1	7,525.0	29.9	25.0	90.00	-6,952.8	-2,744.8	6,097.7	6,048.5	49.24	123.827		
9,100.0	7,530.0	7,648.1	7,525.0	31.4	25.0	90.00	-6,952.8	-2,744.8	6,006.9	5,956.1	50.83	118.180		
9,200.0	7,530.0	7,648.1	7,525.0	33.0	25.0	90.00	-6,952.8	-2,744.8	5,916.4	5,863.9	52.43	112.843		
9,300.0	7,530.0	7,648.1	7,525.0	34.7	25.0	90.00	-6,952.8	-2,744.8	5,826.1	5,772.1	54.05	107.799		
9,400.0	7,530.0	7,648.1	7,525.0	36.3	25.0	90.00	-6,952.8	-2,744.8	5,736.2	5,680.5	55.68	103.029		
9,500.0	7,530.0	7,648.1	7,525.0	37.9	25.0	90.00	-6,952.8	-2,744.8	5,646.6	5,589.3	57.32	98.518		
9,600.0	7,530.0	7,648.1	7,525.0	39.6	25.0	90.00	-6,952.8	-2,744.8	5,557.4	5,498.5	58.97	94.248		
9,700.0	7,530.0	7,648.1	7,525.0	41.2	25.0	90.00	-6,952.8	-2,744.8	5,468.6	5,407.9	60.62	90.204		
9,800.0	7,530.0	7,648.1	7,525.0	42.9	25.0	90.00	-6,952.8	-2,744.8	5,380.1	5,317.8	62.29	86.370		
9,900.0	7,530.0	7,648.1	7,525.0	44.5	25.0	90.00	-6,952.8	-2,744.8	5,292.1	5,228.1	63.96	82.735		
10,000.0	7,530.0	7,648.1	7,525.0	46.2	25.0	90.00	-6,952.8	-2,744.8	5,204.5	5,138.8	65.64	79.284		
10,100.0	7,530.0	7,648.1	7,525.0	47.9	25.0	90.00	-6,952.8	-2,744.8	5,117.3	5,050.0	67.33	76.006		
10,200.0	7,530.0	7,648.1	7,525.0	49.6	25.0	90.00	-6,952.8	-2,744.8	5,030.6	4,961.6	69.02	72.889		
10,300.0	7,530.0	7,648.1	7,525.0	51.3	25.0	90.00	-6,952.8	-2,744.8	4,944.5	4,873.7	70.71	69.925		
10,400.0	7,530.0	7,648.1	7,525.0	53.0	25.0	90.00	-6,952.8	-2,744.8	4,858.8	4,786.4	72.41	67.103		
10,500.0	7,530.0	7,648.1	7,525.0	54.7	25.0	90.00	-6,952.8	-2,744.8	4,773.7	4,699.6	74.11	64.414		
10,600.0	7,530.0	7,648.1	7,525.0	56.4	25.0	90.00	-6,952.8	-2,744.8	4,689.2	4,613.4	75.81	61.851		
10,700.0	7,530.0	7,648.1	7,525.0	58.1	25.0	90.00	-6,952.8	-2,744.8	4,605.4	4,527.8	77.52	59.407		
10,800.0	7,530.0	7,648.1	7,525.0	59.8	25.0	90.00	-6,952.8	-2,744.8	4,522.1	4,442.9	79.23	57.075		
10,900.0	7,530.0	7,648.1	7,525.0	61.5	25.0	90.00	-6,952.8	-2,744.8	4,439.6	4,358.7	80.94	54.847		
11,000.0	7,530.0	7,648.1	7,525.0	63.2	25.0	90.00	-6,952.8	-2,744.8	4,357.8	4,275.1	82.66	52.720		
11,100.0	7,530.0	7,648.1	7,525.0	64.9	25.0	90.00	-6,952.8	-2,744.8	4,276.8	4,192.4	84.38	50.687		
11,200.0	7,530.0	7,648.1	7,525.0	66.6	25.0	90.00	-6,952.8	-2,744.8	4,196.6	4,110.5	86.10	48.743		
11,300.0	7,530.0	7,648.1	7,525.0	68.4	25.0	90.00	-6,952.8	-2,744.8	4,117.2	4,029.4	87.82	46.885		
11,400.0	7,530.0	7,648.1	7,525.0	70.1	25.0	90.00	-6,952.8	-2,744.8	4,038.8	3,949.3	89.54	45.107		
11,500.0	7,530.0	7,648.1	7,525.0	71.8	25.0	90.00	-6,952.8	-2,744.8	3,961.4	3,870.1	91.26	43.406		
11,600.0	7,530.0	7,648.1	7,525.0	73.5	25.0	90.00	-6,952.8	-2,744.8	3,884.9	3,792.0	92.99	41.779		
11,700.0	7,530.0	7,648.1	7,525.0	75.3	25.0	90.00	-6,952.8	-2,744.8	3,809.6	3,714.9	94.71	40.222		
11,800.0	7,530.0	7,648.1	7,525.0	77.0	25.0	90.00	-6,952.8	-2,744.8	3,735.5	3,639.0	96.44	38.733		
11,900.0	7,530.0	7,648.1	7,525.0	78.7	25.0	90.00	-6,952.8	-2,744.8	3,662.5	3,564.3	98.17	37.307		
12,000.0	7,530.0	7,648.1	7,525.0	80.4	25.0	90.00	-6,952.8	-2,744.8	3,590.9	3,491.0	99.90	35.944		
12,100.0	7,530.0	7,648.1	7,525.0	82.2	25.0	90.00	-6,952.8	-2,744.8	3,520.6	3,419.0	101.63	34.641		
12,200.0	7,530.0	7,648.1	7,525.0	83.9	25.0	90.00	-6,952.8	-2,744.8	3,451.8	3,348.5	103.36	33.395		
12,300.0	7,530.0	7,648.1	7,525.0	85.6	25.0	90.00	-6,952.8	-2,744.8	3,384.6	3,279.5	105.10	32.204		
12,400.0	7,530.0	7,648.1	7,525.0	87.4	25.0	90.00	-6,952.8	-2,744.8	3,319.0	3,212.2	106.83	31.068		
12,500.0	7,530.0	7,648.1	7,525.0	89.1	25.0	90.00	-6,952.8	-2,744.8	3,255.2	3,146.6	108.57	29.984		
12,600.0	7,530.0	7,648.1	7,525.0	90.8	25.0	90.00	-6,952.8	-2,744.8	3,193.2	3,082.9	110.30	28.950		
12,700.0	7,530.0	7,648.1	7,525.0	92.6	25.0	90.00	-6,952.8	-2,744.8	3,133.2	3,021.2	112.04	27.966		
12,800.0	7,530.0	7,648.1	7,525.0	94.3	25.0	90.00	-6,952.8	-2,744.8	3,075.3	2,961.5	113.77	27.030		
12,900.0	7,530.0	7,648.1	7,525.0	96.0	25.0	90.00	-6,952.8	-2,744.8	3,019.6	2,904.1	115.51	26.141		
13,000.0	7,530.0	7,648.1	7,525.0	97.8	25.0	90.00	-6,952.8	-2,744.8	2,966.2	2,849.0	117.25	25.298		
13,100.0	7,530.0	7,648.1	7,525.0	99.5	25.0	90.00	-6,952.8	-2,744.8	2,915.3	2,796.3	118.99	24.500		
13,200.0	7,530.0	7,648.1	7,525.0	101.3	25.0	90.00	-6,952.8	-2,744.8	2,866.9	2,746.2	120.73	23.747		
13,300.0	7,530.0	7,648.1	7,525.0	103.0	25.0	90.00	-6,952.8	-2,744.8	2,821.3	2,698.8	122.47	23.037		
13,400.0	7,530.0	7,648.1	7,525.0	104.7	25.0	90.00	-6,952.8	-2,744.8	2,778.5	2,654.3	124.21	22.370		
13,500.0	7,530.0	7,648.1	7,525.0	106.5	25.0	90.00	-6,952.8	-2,744.8	2,738.7	2,612.7	125.95	21.745		
13,600.0	7,530.0	7,648.1	7,525.0	108.2	25.0	90.00	-6,952.8	-2,744.8	2,702.0	2,574.3	127.69	21.161		
13,700.0	7,530.0	7,648.1	7,525.0	110.0	25.0	90.00	-6,952.8	-2,744.8	2,668.5	2,539.1	129.43	20.618		
13,800.0	7,530.0	7,648.1	7,525.0	111.7	25.0	90.00	-6,952.8	-2,744.8	2,638.5	2,507.3	131.17	20.115		
13,900.0	7,530.0	7,648.1	7,525.0	113.4	25.0	90.00	-6,952.8	-2,744.8	2,611.9	2,479.0	132.91	19.651		
14,000.0	7,530.0	7,648.1	7,525.0	115.2	25.0	90.00	-6,952.8	-2,744.8	2,588.9	2,454.2	134.66	19.226		
14,100.0	7,530.0	7,648.1	7,525.0	116.9	25.0	90.00	-6,952.8	-2,744.8	2,569.6	2,433.2	136.40	18.839		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,200.0	7,530.0	7,648.1	7,525.0	118.7	25.0	90.00	-6,952.8	-2,744.8	2,554.0	2,415.9	138.14	18.488		
14,300.0	7,530.0	7,648.1	7,525.0	120.4	25.0	90.00	-6,952.8	-2,744.8	2,542.3	2,402.5	139.89	18.174		
14,400.0	7,530.0	7,648.1	7,525.0	122.1	25.0	90.00	-6,952.8	-2,744.8	2,534.5	2,392.9	141.63	17.896		
14,500.0	7,530.0	7,648.1	7,525.0	123.9	25.0	90.00	-6,952.8	-2,744.8	2,530.7	2,387.3	143.37	17.651		
14,548.0	7,530.0	7,648.1	7,525.0	124.7	25.0	90.00	-6,952.8	-2,744.8	2,530.2	2,386.0	144.21	17.545 CC		
14,600.0	7,530.0	7,648.1	7,525.0	125.6	25.0	90.00	-6,952.8	-2,744.8	2,530.8	2,385.6	145.12	17.439 ES		
14,700.0	7,530.0	7,648.1	7,525.0	127.4	25.0	90.00	-6,952.8	-2,744.8	2,534.8	2,387.9	146.86	17.260		
14,800.0	7,530.0	7,648.1	7,525.0	129.1	25.0	90.00	-6,952.8	-2,744.8	2,542.7	2,394.1	148.61	17.110		
14,900.0	7,530.0	7,648.1	7,525.0	130.9	25.0	90.00	-6,952.8	-2,744.8	2,554.6	2,404.2	150.35	16.991		
15,000.0	7,530.0	7,648.1	7,525.0	132.6	25.0	90.00	-6,952.8	-2,744.8	2,570.3	2,418.2	152.10	16.899		
15,100.0	7,530.0	7,648.1	7,525.0	134.4	25.0	90.00	-6,952.8	-2,744.8	2,589.7	2,435.9	153.84	16.833		
15,200.0	7,530.0	7,648.1	7,525.0	136.1	25.0	90.00	-6,952.8	-2,744.8	2,612.9	2,457.3	155.59	16.793		
15,300.0	7,530.0	7,648.1	7,525.0	137.9	25.0	90.00	-6,952.8	-2,744.8	2,639.6	2,482.3	157.34	16.777 SF		
15,400.0	7,530.0	7,648.1	7,525.0	139.6	25.0	90.00	-6,952.8	-2,744.8	2,669.8	2,510.7	159.08	16.783		
15,500.0	7,530.0	7,648.1	7,525.0	141.3	25.0	90.00	-6,952.8	-2,744.8	2,703.4	2,542.6	160.83	16.809		
15,600.0	7,530.0	7,648.1	7,525.0	143.1	25.0	90.00	-6,952.8	-2,744.8	2,740.2	2,577.6	162.57	16.855		
15,700.0	7,530.0	7,648.1	7,525.0	144.8	25.0	90.00	-6,952.8	-2,744.8	2,780.1	2,615.8	164.32	16.919		
15,800.0	7,530.0	7,648.1	7,525.0	146.6	25.0	90.00	-6,952.8	-2,744.8	2,823.0	2,657.0	166.07	16.999		
15,900.0	7,530.0	7,648.1	7,525.0	148.3	25.0	90.00	-6,952.8	-2,744.8	2,868.8	2,701.0	167.82	17.095		
16,000.0	7,530.0	7,648.1	7,525.0	150.1	25.0	90.00	-6,952.8	-2,744.8	2,917.2	2,747.7	169.56	17.204		
16,100.0	7,530.0	7,648.1	7,525.0	151.8	25.0	90.00	-6,952.8	-2,744.8	2,968.3	2,797.0	171.31	17.327		
16,200.0	7,530.0	7,648.1	7,525.0	153.6	25.0	90.00	-6,952.8	-2,744.8	3,021.8	2,848.7	173.06	17.461		
16,300.0	7,530.0	7,648.1	7,525.0	155.3	25.0	90.00	-6,952.8	-2,744.8	3,077.6	2,902.8	174.81	17.606		
16,400.0	7,530.0	7,648.1	7,525.0	157.1	25.0	90.00	-6,952.8	-2,744.8	3,135.6	2,959.0	176.55	17.760		
16,500.0	7,530.0	7,648.1	7,525.0	158.8	25.0	90.00	-6,952.8	-2,744.8	3,195.7	3,017.4	178.30	17.923		
16,600.0	7,530.0	7,648.1	7,525.0	160.6	25.0	90.00	-6,952.8	-2,744.8	3,257.7	3,077.7	180.05	18.093		
16,700.0	7,530.0	7,648.1	7,525.0	162.3	25.0	90.00	-6,952.8	-2,744.8	3,321.6	3,139.8	181.80	18.271		
16,800.0	7,530.0	7,648.1	7,525.0	164.1	25.0	90.00	-6,952.8	-2,744.8	3,387.2	3,203.7	183.55	18.454		
16,900.0	7,530.0	7,648.1	7,525.0	165.8	25.0	90.00	-6,952.8	-2,744.8	3,454.5	3,269.2	185.30	18.643		
17,000.0	7,530.0	7,648.1	7,525.0	167.6	25.0	90.00	-6,952.8	-2,744.8	3,523.4	3,336.3	187.04	18.837		
17,100.0	7,530.0	7,648.1	7,525.0	169.3	25.0	90.00	-6,952.8	-2,744.8	3,593.7	3,404.9	188.79	19.035		
17,200.0	7,530.0	7,648.1	7,525.0	171.1	25.0	90.00	-6,952.8	-2,744.8	3,665.4	3,474.8	190.54	19.237		
17,300.0	7,530.0	7,648.1	7,525.0	172.8	25.0	90.00	-6,952.8	-2,744.8	3,738.4	3,546.1	192.29	19.441		
17,400.0	7,530.0	7,648.1	7,525.0	174.5	25.0	90.00	-6,952.8	-2,744.8	3,812.6	3,618.5	194.04	19.648		
17,411.2	7,530.0	7,648.1	7,525.0	174.7	25.0	90.00	-6,952.8	-2,744.8	3,821.0	3,626.8	194.24	19.672		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-149.60	-6,195.0	-3,634.9	7,182.7					
100.0	100.0	68.3	68.3	0.2	0.1	-149.60	-6,195.1	-3,634.7	7,182.7	7,182.4	0.27	N/A		
200.0	200.0	141.2	141.2	0.3	0.2	-149.60	-6,195.5	-3,634.4	7,183.0	7,182.4	0.57	N/A		
300.0	300.0	208.5	208.5	0.5	0.4	-149.61	-6,196.2	-3,634.3	7,183.7	7,182.8	0.87	8,294.980		
400.0	400.0	312.8	312.8	0.7	0.5	-149.61	-6,197.1	-3,634.6	7,184.6	7,183.4	1.22	5,876.912		
500.0	500.0	424.7	424.6	0.8	0.7	-149.61	-6,198.1	-3,634.8	7,185.4	7,183.8	1.59	4,511.296		
600.0	600.0	525.6	525.6	1.0	0.9	-126.60	-6,198.8	-3,635.0	7,186.7	7,184.7	1.94	3,699.713		
700.0	700.0	641.6	641.6	1.2	1.1	-126.60	-6,199.2	-3,635.7	7,188.8	7,186.5	2.32	3,097.329		
800.0	799.9	733.8	733.8	1.4	1.3	-126.60	-6,199.5	-3,636.1	7,191.9	7,189.3	2.66	2,702.266		
848.7	848.4	769.0	768.9	1.5	1.3	-126.59	-6,199.6	-3,636.3	7,193.9	7,191.1	2.81	2,558.690		
900.0	899.7	811.3	811.2	1.6	1.4	-126.60	-6,199.7	-3,636.9	7,196.2	7,193.2	2.98	2,414.775		
1,000.0	999.5	923.0	923.0	1.8	1.6	-126.64	-6,200.0	-3,638.0	7,200.6	7,197.2	3.36	2,142.231		
1,100.0	1,099.3	1,000.0	1,000.0	2.0	1.8	-126.67	-6,200.3	-3,639.0	7,205.2	7,201.5	3.68	1,956.083		
1,200.0	1,199.1	1,105.1	1,105.0	2.2	1.9	-126.70	-6,200.7	-3,640.6	7,209.9	7,205.9	4.06	1,777.570		
1,300.0	1,298.9	1,200.0	1,199.9	2.4	2.1	-126.72	-6,200.9	-3,642.2	7,214.5	7,210.1	4.41	1,635.217		
1,400.0	1,398.8	1,279.2	1,279.1	2.6	2.2	-126.74	-6,201.0	-3,643.7	7,219.3	7,214.6	4.74	1,522.615		
1,500.0	1,498.6	1,383.6	1,383.5	2.8	2.4	-126.77	-6,201.2	-3,646.2	7,224.3	7,219.2	5.12	1,412.030		
1,600.0	1,598.4	1,514.0	1,513.9	3.0	2.7	-126.80	-6,201.3	-3,648.9	7,229.0	7,223.5	5.54	1,305.703		
1,700.0	1,698.2	1,619.0	1,618.9	3.2	2.8	-126.83	-6,201.0	-3,650.9	7,233.5	7,227.5	5.91	1,223.214		
1,800.0	1,798.0	1,703.9	1,703.7	3.4	3.0	-126.85	-6,200.9	-3,652.6	7,238.0	7,231.7	6.25	1,157.168		
1,900.0	1,897.8	1,812.6	1,812.4	3.6	3.2	-126.87	-6,200.5	-3,655.3	7,242.6	7,235.9	6.64	1,090.678		
2,000.0	1,997.7	1,900.0	1,899.8	3.8	3.3	-126.88	-6,200.0	-3,657.7	7,247.1	7,240.1	6.99	1,037.061		
2,100.0	2,097.5	1,982.6	1,982.3	4.0	3.5	-126.90	-6,199.8	-3,659.9	7,251.9	7,244.5	7.33	989.709		
2,200.0	2,197.3	2,100.0	2,099.7	4.2	3.7	-126.92	-6,199.5	-3,663.0	7,256.7	7,248.9	7.73	938.889		
2,300.0	2,297.1	2,176.3	2,176.0	4.4	3.8	-126.94	-6,199.4	-3,665.0	7,261.4	7,253.4	8.06	901.264		
2,400.0	2,396.9	2,267.1	2,266.8	4.6	4.0	-126.96	-6,199.5	-3,667.4	7,266.6	7,258.2	8.41	863.798		
2,500.0	2,496.7	2,366.2	2,365.7	4.8	4.2	-126.97	-6,199.3	-3,670.7	7,271.7	7,262.9	8.78	827.927		
2,600.0	2,596.5	2,514.2	2,513.6	5.0	4.5	-126.99	-6,198.4	-3,675.7	7,276.6	7,267.4	9.24	787.204		
2,700.0	2,696.4	2,619.6	2,619.0	5.2	4.6	-127.00	-6,197.4	-3,679.3	7,281.1	7,271.4	9.63	756.335		
2,800.0	2,796.2	2,727.0	2,726.4	5.4	4.8	-127.02	-6,196.7	-3,681.9	7,285.4	7,275.4	10.01	727.739		
2,900.0	2,896.0	2,833.3	2,832.6	5.6	5.0	-127.05	-6,196.2	-3,684.2	7,289.7	7,279.3	10.39	701.419		
3,000.0	2,995.8	2,966.4	2,965.7	5.8	5.3	-127.08	-6,195.3	-3,686.3	7,293.6	7,282.8	10.82	674.020		
3,100.0	3,095.6	3,050.2	3,049.5	6.0	5.4	-127.10	-6,194.7	-3,687.6	7,297.4	7,286.3	11.16	653.726		
3,200.0	3,195.4	3,137.8	3,137.1	6.2	5.6	-127.12	-6,194.3	-3,689.3	7,301.6	7,290.1	11.51	634.292		
3,300.0	3,295.2	3,236.9	3,236.1	6.4	5.7	-127.14	-6,193.8	-3,690.9	7,305.7	7,293.8	11.88	615.002		
3,400.0	3,395.1	3,331.8	3,331.1	6.6	5.9	-127.17	-6,193.8	-3,692.1	7,310.0	7,297.7	12.24	597.315		
3,500.0	3,494.9	3,440.4	3,439.7	6.8	6.1	-127.21	-6,193.8	-3,693.0	7,314.0	7,301.4	12.62	579.551		
3,600.0	3,594.7	3,523.5	3,522.8	7.0	6.2	-127.23	-6,194.0	-3,693.7	7,318.3	7,305.3	12.96	564.762		
3,700.0	3,694.5	3,633.2	3,632.5	7.2	6.4	-127.27	-6,194.2	-3,694.7	7,322.6	7,309.3	13.34	548.822		
3,800.0	3,794.3	3,750.2	3,749.5	7.4	6.6	-127.31	-6,194.2	-3,695.5	7,326.7	7,312.9	13.74	533.278		
3,900.0	3,894.1	3,837.5	3,836.7	7.6	6.8	-127.34	-6,194.3	-3,696.0	7,330.7	7,316.6	14.08	520.488		
4,000.0	3,994.0	3,915.5	3,914.8	7.8	6.9	-127.36	-6,194.4	-3,696.8	7,335.0	7,320.6	14.41	508.864		
4,100.0	4,093.8	4,000.0	3,999.3	8.0	7.1	-127.39	-6,194.5	-3,698.1	7,339.6	7,324.8	14.76	497.388		
4,200.0	4,193.6	4,091.6	4,090.8	8.2	7.2	-127.41	-6,194.6	-3,699.8	7,344.3	7,329.2	15.11	486.001		
4,300.0	4,293.4	4,219.7	4,219.0	8.4	7.5	-127.44	-6,194.4	-3,702.4	7,348.9	7,333.3	15.53	473.138		
4,400.0	4,393.2	4,300.0	4,299.2	8.6	7.6	-127.46	-6,194.1	-3,704.4	7,353.4	7,337.6	15.87	463.373		
4,500.0	4,493.0	4,390.8	4,390.0	8.8	7.8	-127.47	-6,193.8	-3,706.9	7,358.2	7,342.0	16.23	453.506		
4,600.0	4,592.8	4,510.9	4,510.0	9.0	8.0	-127.50	-6,193.6	-3,709.6	7,362.8	7,346.2	16.63	442.731		
4,700.0	4,692.7	4,600.0	4,599.1	9.3	8.1	-127.52	-6,193.6	-3,711.2	7,367.5	7,350.5	16.98	433.863		
4,800.0	4,792.5	4,736.7	4,735.8	9.5	8.4	-127.55	-6,193.0	-3,713.7	7,371.6	7,354.2	17.42	423.252		
4,900.0	4,892.3	4,801.8	4,800.9	9.7	8.5	-127.57	-6,192.8	-3,715.1	7,376.1	7,358.3	17.73	416.124		
5,000.0	4,992.1	5,000.0	4,999.0	9.9	8.9	-127.61	-6,191.6	-3,718.8	7,380.3	7,362.0	18.27	403.967		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI											Offset Site Error:		0.0 ft
Survey Program: 100-Geolink MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,091.9	5,087.4	5,086.4	10.1	9.0	-127.63	-6,190.7	-3,719.8	7,383.7	7,365.1	18.62	396.612	
5,200.0	5,191.7	5,232.5	5,231.5	10.3	9.3	-127.67	-6,188.9	-3,721.5	7,386.9	7,367.9	19.07	387.432	
5,300.0	5,291.5	5,347.6	5,346.5	10.5	9.5	-127.70	-6,187.0	-3,722.5	7,389.6	7,370.1	19.46	379.686	
5,400.0	5,391.4	5,428.4	5,427.4	10.7	9.6	-127.72	-6,185.8	-3,723.1	7,392.4	7,372.6	19.80	373.390	
5,500.0	5,491.2	5,507.2	5,506.2	10.9	9.7	-127.74	-6,184.7	-3,723.9	7,395.5	7,375.3	20.13	367.381	
5,600.0	5,591.0	5,638.4	5,637.4	11.1	10.0	-127.78	-6,182.9	-3,724.9	7,398.3	7,377.7	20.55	359.950	
5,700.0	5,690.8	5,719.2	5,718.1	11.3	10.1	-127.80	-6,181.9	-3,725.4	7,401.2	7,380.3	20.89	354.327	
5,800.0	5,790.6	5,861.1	5,860.0	11.5	10.4	-127.84	-6,180.0	-3,726.1	7,404.1	7,382.8	21.33	347.125	
5,900.0	5,890.4	5,951.4	5,950.3	11.7	10.5	-127.87	-6,178.5	-3,726.3	7,406.5	7,384.8	21.68	341.623	
6,000.0	5,990.3	6,000.0	5,998.9	11.9	10.6	-127.88	-6,178.0	-3,726.4	7,409.4	7,387.4	21.96	337.433	
6,100.0	6,090.1	6,080.6	6,079.5	12.1	10.7	-127.91	-6,177.4	-3,726.7	7,412.7	7,390.4	22.29	332.535	
6,200.0	6,189.9	6,138.3	6,137.2	12.3	10.8	-127.93	-6,177.2	-3,727.1	7,416.5	7,393.9	22.59	328.378	
6,300.0	6,289.7	6,200.0	6,198.9	12.5	10.9	-127.94	-6,177.4	-3,727.7	7,421.0	7,398.1	22.89	324.257	
6,400.0	6,389.5	6,395.8	6,394.7	12.7	11.3	-128.01	-6,177.7	-3,729.1	7,425.4	7,401.9	23.42	317.074	
6,500.0	6,489.3	6,487.3	6,486.2	12.9	11.4	-128.04	-6,177.0	-3,729.6	7,428.8	7,405.0	23.77	312.506	
6,600.0	6,589.1	6,579.9	6,578.7	13.1	11.6	-128.06	-6,176.4	-3,730.3	7,432.3	7,408.2	24.13	308.057	
6,700.0	6,689.0	6,702.2	6,701.0	13.3	11.8	-128.10	-6,175.5	-3,731.2	7,435.8	7,411.3	24.53	303.093	
6,785.3	6,774.1	6,817.8	6,816.7	13.5	12.0	-128.13	-6,174.1	-3,732.1	7,438.4	7,413.5	24.90	298.721	
6,800.0	6,788.8	6,835.3	6,834.2	13.5	12.1	-117.11	-6,173.9	-3,732.2	7,438.7	7,413.7	24.96	297.992	
6,850.0	6,838.8	6,894.6	6,893.4	13.6	12.2	-6.57	-6,173.0	-3,732.6	7,437.6	7,412.5	25.12	296.055	
6,900.0	6,888.6	6,952.7	6,951.5	13.6	12.3	15.53	-6,172.1	-3,732.9	7,433.5	7,408.3	25.21	294.882	
6,950.0	6,938.1	7,008.3	7,007.1	13.7	12.4	20.97	-6,171.3	-3,732.9	7,426.2	7,401.0	25.22	294.459	
7,000.0	6,987.0	7,054.2	7,053.0	13.7	12.4	23.63	-6,170.7	-3,732.8	7,415.9	7,390.8	25.15	294.898	
7,050.0	7,035.0	7,100.0	7,098.8	13.6	12.5	25.46	-6,170.2	-3,732.6	7,402.7	7,377.7	25.01	295.952	
7,100.0	7,082.0	7,356.0	7,354.6	13.6	12.9	27.24	-6,166.8	-3,723.9	7,385.4	7,360.2	25.17	293.472	
7,150.0	7,127.7	7,400.0	7,398.5	13.5	13.0	28.75	-6,166.4	-3,721.1	7,365.3	7,340.3	24.92	295.513	
7,200.0	7,171.8	7,400.0	7,398.5	13.5	13.0	30.23	-6,166.4	-3,721.1	7,342.5	7,318.0	24.58	298.713	
7,250.0	7,214.2	7,436.4	7,434.9	13.4	13.1	31.89	-6,166.3	-3,718.7	7,317.3	7,293.1	24.28	301.357	
7,300.0	7,254.6	7,455.9	7,454.3	13.4	13.1	33.68	-6,166.2	-3,717.5	7,289.8	7,265.9	23.96	304.256	
7,350.0	7,292.9	7,500.0	7,498.3	13.3	13.2	35.77	-6,166.3	-3,715.0	7,260.3	7,236.6	23.71	306.211	
7,400.0	7,328.9	7,500.0	7,498.3	13.3	13.2	37.99	-6,166.3	-3,715.0	7,228.4	7,205.0	23.44	308.344	
7,450.0	7,362.3	7,500.0	7,498.3	13.3	13.2	40.50	-6,166.3	-3,715.0	7,194.8	7,171.5	23.26	309.276	
7,500.0	7,393.1	7,527.7	7,526.0	13.4	13.2	43.52	-6,166.3	-3,713.5	7,159.4	7,136.1	23.26	307.740	
7,550.0	7,421.1	7,544.0	7,542.3	13.5	13.2	46.92	-6,166.4	-3,712.8	7,122.4	7,099.0	23.40	304.316	
7,600.0	7,446.1	7,558.7	7,557.0	13.6	13.3	50.81	-6,166.5	-3,712.1	7,084.0	7,060.2	23.73	298.528	
7,650.0	7,468.0	7,571.6	7,569.9	13.8	13.3	55.22	-6,166.5	-3,711.5	7,044.3	7,020.1	24.25	290.474	
7,700.0	7,486.7	7,600.0	7,598.2	14.0	13.3	60.40	-6,166.7	-3,710.3	7,003.6	6,978.6	25.01	280.063	
7,750.0	7,502.2	7,600.0	7,598.2	14.2	13.3	65.84	-6,166.7	-3,710.3	6,962.1	6,936.2	25.82	269.621	
7,800.0	7,514.3	7,600.0	7,598.2	14.6	13.3	71.79	-6,166.7	-3,710.3	6,919.8	6,893.1	26.70	259.179	
7,850.0	7,523.0	7,600.0	7,598.2	14.9	13.3	78.16	-6,166.7	-3,710.3	6,877.2	6,849.7	27.54	249.697	
7,900.0	7,528.2	7,600.0	7,598.2	15.3	13.3	84.78	-6,166.7	-3,710.3	6,834.3	6,806.1	28.25	241.919	
7,950.2	7,530.0	7,600.0	7,598.2	15.8	13.3	91.49	-6,166.7	-3,710.3	6,791.2	6,762.5	28.75	236.221	
8,000.0	7,530.0	7,600.0	7,598.2	16.2	13.3	91.49	-6,166.7	-3,710.3	6,748.6	6,719.4	29.23	230.859	
8,100.0	7,530.0	7,600.0	7,598.2	17.3	13.3	91.49	-6,166.7	-3,710.3	6,663.4	6,633.1	30.30	219.926	
8,200.0	7,530.0	7,600.0	7,598.2	18.4	13.3	91.49	-6,166.7	-3,710.3	6,578.5	6,547.0	31.47	209.038	
8,300.0	7,530.0	7,600.0	7,598.2	19.7	13.3	91.49	-6,166.7	-3,710.3	6,494.1	6,461.3	32.73	198.412	
8,400.0	7,530.0	7,600.0	7,598.2	21.0	13.3	91.49	-6,166.7	-3,710.3	6,410.1	6,376.0	34.06	188.190	
8,500.0	7,530.0	7,600.0	7,598.2	22.4	13.3	91.49	-6,166.7	-3,710.3	6,326.6	6,291.1	35.45	178.455	
8,600.0	7,530.0	7,600.0	7,598.2	23.8	13.3	91.49	-6,166.7	-3,710.3	6,243.5	6,206.6	36.89	169.245	
8,700.0	7,530.0	7,600.0	7,598.2	25.3	13.3	91.49	-6,166.7	-3,710.3	6,161.0	6,122.6	38.37	160.571	
8,800.0	7,530.0	7,600.0	7,598.2	26.8	13.3	91.49	-6,166.7	-3,710.3	6,079.0	6,039.1	39.88	152.427	
8,900.0	7,530.0	7,600.0	7,598.2	28.3	13.3	91.49	-6,166.7	-3,710.3	5,997.5	5,956.1	41.42	144.793	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,530.0	7,600.0	7,598.2	29.9	13.3	91.49	-6,166.7	-3,710.3	5,916.7	5,873.7	42.99	137.644		
9,100.0	7,530.0	7,614.8	7,613.0	31.4	13.4	91.73	-6,166.8	-3,709.8	5,836.3	5,791.7	44.59	130.889		
9,200.0	7,530.0	7,615.2	7,613.4	33.0	13.4	91.74	-6,166.8	-3,709.8	5,756.7	5,710.5	46.19	124.626		
9,300.0	7,530.0	7,615.6	7,613.8	34.7	13.4	91.75	-6,166.8	-3,709.7	5,677.6	5,629.8	47.81	118.759		
9,400.0	7,530.0	7,616.0	7,614.2	36.3	13.4	91.75	-6,166.8	-3,709.7	5,599.2	5,549.8	49.44	113.261		
9,500.0	7,530.0	7,616.4	7,614.6	37.9	13.4	91.76	-6,166.8	-3,709.7	5,521.6	5,470.5	51.08	108.103		
9,600.0	7,530.0	7,616.8	7,615.0	39.6	13.4	91.77	-6,166.8	-3,709.7	5,444.6	5,391.9	52.73	103.261		
9,700.0	7,530.0	7,617.2	7,615.4	41.2	13.4	91.77	-6,166.8	-3,709.7	5,368.5	5,314.1	54.39	98.711		
9,800.0	7,530.0	7,617.6	7,615.8	42.9	13.4	91.78	-6,166.8	-3,709.7	5,293.1	5,237.0	56.05	94.432		
9,900.0	7,530.0	7,618.0	7,616.2	44.5	13.4	91.79	-6,166.8	-3,709.7	5,218.5	5,160.8	57.72	90.404		
10,000.0	7,530.0	7,618.4	7,616.6	46.2	13.4	91.79	-6,166.8	-3,709.6	5,144.8	5,085.4	59.40	86.608		
10,100.0	7,530.0	7,618.8	7,617.0	47.9	13.4	91.80	-6,166.8	-3,709.6	5,072.0	5,010.9	61.09	83.028		
10,200.0	7,530.0	7,619.2	7,617.4	49.6	13.4	91.81	-6,166.8	-3,709.6	5,000.2	4,937.4	62.78	79.650		
10,300.0	7,530.0	7,619.6	7,617.8	51.3	13.4	91.81	-6,166.8	-3,709.6	4,929.3	4,864.8	64.47	76.458		
10,400.0	7,530.0	7,620.0	7,618.2	53.0	13.4	91.82	-6,166.8	-3,709.6	4,859.4	4,793.3	66.17	73.441		
10,500.0	7,530.0	7,620.4	7,618.6	54.7	13.4	91.83	-6,166.8	-3,709.6	4,790.7	4,722.8	67.87	70.587		
10,600.0	7,530.0	7,620.8	7,619.0	56.4	13.4	91.83	-6,166.8	-3,709.6	4,723.0	4,653.4	69.57	67.886		
10,700.0	7,530.0	7,621.2	7,619.4	58.1	13.4	91.84	-6,166.8	-3,709.5	4,656.5	4,585.2	71.28	65.327		
10,800.0	7,530.0	7,621.6	7,619.8	59.8	13.4	91.85	-6,166.8	-3,709.5	4,591.2	4,518.2	72.99	62.902		
10,900.0	7,530.0	7,622.0	7,620.2	61.5	13.4	91.85	-6,166.8	-3,709.5	4,527.2	4,452.5	74.70	60.604		
11,000.0	7,530.0	7,622.5	7,620.7	63.2	13.4	91.86	-6,166.8	-3,709.5	4,464.5	4,388.1	76.42	58.424		
11,100.0	7,530.0	7,622.9	7,621.1	64.9	13.4	91.87	-6,166.8	-3,709.5	4,403.2	4,325.0	78.13	56.355		
11,200.0	7,530.0	7,623.3	7,621.5	66.6	13.4	91.87	-6,166.8	-3,709.5	4,343.3	4,263.4	79.85	54.392		
11,300.0	7,530.0	7,623.7	7,621.9	68.4	13.4	91.88	-6,166.8	-3,709.4	4,284.9	4,203.3	81.57	52.530		
11,400.0	7,530.0	7,624.1	7,622.3	70.1	13.4	91.89	-6,166.8	-3,709.4	4,228.1	4,144.8	83.29	50.761		
11,500.0	7,530.0	7,624.5	7,622.7	71.8	13.4	91.89	-6,166.8	-3,709.4	4,172.9	4,087.9	85.02	49.083		
11,600.0	7,530.0	7,624.9	7,623.1	73.5	13.4	91.90	-6,166.8	-3,709.4	4,119.4	4,032.6	86.74	47.490		
11,700.0	7,530.0	7,625.4	7,623.6	75.3	13.4	91.91	-6,166.8	-3,709.4	4,067.6	3,979.1	88.47	45.979		
11,800.0	7,530.0	7,625.8	7,624.0	77.0	13.4	91.91	-6,166.8	-3,709.4	4,017.7	3,927.5	90.19	44.544		
11,900.0	7,530.0	7,626.2	7,624.4	78.7	13.4	91.92	-6,166.8	-3,709.4	3,969.6	3,877.7	91.92	43.184		
12,000.0	7,530.0	7,626.6	7,624.8	80.4	13.4	91.93	-6,166.8	-3,709.3	3,923.5	3,829.9	93.65	41.894		
12,100.0	7,530.0	7,627.1	7,625.3	82.2	13.4	91.94	-6,166.8	-3,709.3	3,879.5	3,784.1	95.38	40.672		
12,200.0	7,530.0	7,627.5	7,625.7	83.9	13.4	91.94	-6,166.8	-3,709.3	3,837.5	3,740.4	97.11	39.515		
12,300.0	7,530.0	7,627.9	7,626.1	85.6	13.4	91.95	-6,166.8	-3,709.3	3,797.7	3,698.9	98.85	38.420		
12,400.0	7,530.0	7,628.3	7,626.5	87.4	13.4	91.96	-6,166.8	-3,709.3	3,760.2	3,659.6	100.58	37.385		
12,500.0	7,530.0	7,628.8	7,627.0	89.1	13.4	91.96	-6,166.8	-3,709.3	3,725.0	3,622.6	102.31	36.407		
12,600.0	7,530.0	7,629.2	7,627.4	90.8	13.4	91.97	-6,166.8	-3,709.2	3,692.1	3,588.0	104.05	35.484		
12,700.0	7,530.0	7,629.6	7,627.8	92.6	13.4	91.98	-6,166.8	-3,709.2	3,661.7	3,555.9	105.78	34.614		
12,800.0	7,530.0	7,630.1	7,628.3	94.3	13.4	91.98	-6,166.8	-3,709.2	3,633.7	3,526.2	107.52	33.796		
12,900.0	7,530.0	7,630.5	7,628.7	96.0	13.4	91.99	-6,166.8	-3,709.2	3,608.4	3,499.1	109.26	33.026		
13,000.0	7,530.0	7,630.9	7,629.1	97.8	13.4	92.00	-6,166.8	-3,709.2	3,585.6	3,474.6	110.99	32.304		
13,100.0	7,530.0	7,631.4	7,629.6	99.5	13.4	92.01	-6,166.9	-3,709.2	3,565.5	3,452.8	112.73	31.628		
13,200.0	7,530.0	7,631.8	7,630.0	101.3	13.4	92.01	-6,166.9	-3,709.1	3,548.1	3,433.6	114.47	30.996		
13,300.0	7,530.0	7,632.3	7,630.5	103.0	13.4	92.02	-6,166.9	-3,709.1	3,533.4	3,417.2	116.21	30.406		
13,400.0	7,530.0	7,632.7	7,630.9	104.7	13.4	92.03	-6,166.9	-3,709.1	3,521.6	3,403.6	117.95	29.857		
13,500.0	7,530.0	7,633.1	7,631.3	106.5	13.4	92.03	-6,166.9	-3,709.1	3,512.5	3,392.8	119.69	29.347		
13,600.0	7,530.0	7,633.6	7,631.8	108.2	13.4	92.04	-6,166.9	-3,709.1	3,506.3	3,384.8	121.43	28.875		
13,700.0	7,530.0	7,634.0	7,632.2	110.0	13.4	92.05	-6,166.9	-3,709.1	3,502.9	3,379.7	123.17	28.440		
13,768.8	7,530.0	7,634.3	7,632.5	111.2	13.4	92.05	-6,166.9	-3,709.1	3,502.2	3,377.8	124.37	28.160 CC		
13,800.0	7,530.0	7,634.5	7,632.7	111.7	13.4	92.06	-6,166.9	-3,709.1	3,502.3	3,377.4	124.91	28.039 ES		
13,900.0	7,530.0	7,634.9	7,633.1	113.4	13.4	92.06	-6,166.9	-3,709.0	3,504.7	3,378.0	126.65	27.672		
14,000.0	7,530.0	7,635.4	7,633.6	115.2	13.4	92.07	-6,166.9	-3,709.0	3,509.8	3,381.4	128.39	27.337		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	7,635.8	7,634.0	116.9	13.4	92.08	-6,166.9	-3,709.0	3,517.8	3,387.7	130.13	27.032		
14,200.0	7,530.0	7,636.3	7,634.5	118.7	13.4	92.09	-6,166.9	-3,709.0	3,528.7	3,396.8	131.88	26.757		
14,300.0	7,530.0	7,636.7	7,634.9	120.4	13.4	92.09	-6,166.9	-3,709.0	3,542.3	3,408.6	133.62	26.510		
14,400.0	7,530.0	7,637.2	7,635.4	122.1	13.4	92.10	-6,166.9	-3,709.0	3,558.6	3,423.3	135.36	26.290		
14,500.0	7,530.0	7,637.7	7,635.8	123.9	13.4	92.11	-6,166.9	-3,708.9	3,577.7	3,440.6	137.11	26.095		
14,600.0	7,530.0	7,638.1	7,636.3	125.6	13.4	92.12	-6,166.9	-3,708.9	3,599.5	3,460.6	138.85	25.924		
14,700.0	7,530.0	7,638.6	7,636.8	127.4	13.4	92.12	-6,166.9	-3,708.9	3,623.9	3,483.3	140.59	25.776		
14,800.0	7,530.0	7,639.0	7,637.2	129.1	13.4	92.13	-6,166.9	-3,708.9	3,650.9	3,508.5	142.34	25.649		
14,900.0	7,530.0	7,639.5	7,637.7	130.9	13.4	92.14	-6,166.9	-3,708.9	3,680.4	3,536.3	144.08	25.544		
15,000.0	7,530.0	7,640.0	7,638.1	132.6	13.4	92.15	-6,166.9	-3,708.9	3,712.3	3,566.5	145.83	25.457		
15,100.0	7,530.0	7,640.4	7,638.6	134.4	13.4	92.15	-6,166.9	-3,708.8	3,746.7	3,599.1	147.57	25.389		
15,200.0	7,530.0	7,640.9	7,639.1	136.1	13.4	92.16	-6,166.9	-3,708.8	3,783.3	3,634.0	149.31	25.338		
15,300.0	7,530.0	7,641.4	7,639.5	137.9	13.4	92.17	-6,166.9	-3,708.8	3,822.3	3,671.2	151.06	25.303		
15,400.0	7,530.0	7,641.8	7,640.0	139.6	13.4	92.18	-6,166.9	-3,708.8	3,863.4	3,710.6	152.80	25.284		
15,500.0	7,530.0	7,642.3	7,640.5	141.3	13.4	92.18	-6,166.9	-3,708.8	3,906.7	3,752.2	154.55	25.278 SF		
15,600.0	7,530.0	7,642.8	7,641.0	143.1	13.4	92.19	-6,166.9	-3,708.8	3,952.0	3,795.7	156.29	25.286		
15,700.0	7,530.0	7,643.2	7,641.4	144.8	13.4	92.20	-6,166.9	-3,708.7	3,999.4	3,841.3	158.04	25.306		
15,800.0	7,530.0	7,643.7	7,641.9	146.6	13.4	92.21	-6,166.9	-3,708.7	4,048.6	3,888.8	159.79	25.338		
15,900.0	7,530.0	7,644.2	7,642.4	148.3	13.4	92.22	-6,166.9	-3,708.7	4,099.7	3,938.1	161.53	25.380		
16,000.0	7,530.0	7,644.7	7,642.9	150.1	13.4	92.22	-6,166.9	-3,708.7	4,152.5	3,989.3	163.28	25.432		
16,100.0	7,530.0	7,645.2	7,643.3	151.8	13.4	92.23	-6,166.9	-3,708.7	4,207.1	4,042.1	165.02	25.494		
16,200.0	7,530.0	7,645.6	7,643.8	153.6	13.4	92.24	-6,166.9	-3,708.7	4,263.3	4,096.6	166.77	25.564		
16,300.0	7,530.0	7,646.1	7,644.3	155.3	13.4	92.25	-6,166.9	-3,708.6	4,321.1	4,152.6	168.52	25.642		
16,400.0	7,530.0	7,646.6	7,644.8	157.1	13.4	92.25	-6,166.9	-3,708.6	4,380.5	4,210.2	170.26	25.728		
16,500.0	7,530.0	7,647.1	7,645.3	158.8	13.4	92.26	-6,166.9	-3,708.6	4,441.2	4,269.2	172.01	25.820		
16,600.0	7,530.0	7,647.6	7,645.8	160.6	13.4	92.27	-6,167.0	-3,708.6	4,503.4	4,329.7	173.76	25.918		
16,700.0	7,530.0	7,648.1	7,646.2	162.3	13.4	92.28	-6,167.0	-3,708.6	4,567.0	4,391.4	175.50	26.022		
16,800.0	7,530.0	7,648.6	7,646.7	164.1	13.4	92.29	-6,167.0	-3,708.6	4,631.8	4,454.5	177.25	26.131		
16,900.0	7,530.0	7,649.0	7,647.2	165.8	13.4	92.29	-6,167.0	-3,708.5	4,697.8	4,518.8	179.00	26.245		
17,000.0	7,530.0	7,649.5	7,647.7	167.6	13.4	92.30	-6,167.0	-3,708.5	4,765.1	4,584.3	180.74	26.363		
17,100.0	7,530.0	7,650.0	7,648.2	169.3	13.4	92.31	-6,167.0	-3,708.5	4,833.4	4,650.9	182.49	26.486		
17,200.0	7,530.0	7,650.5	7,648.7	171.1	13.4	92.32	-6,167.0	-3,708.5	4,902.9	4,718.6	184.24	26.611		
17,300.0	7,530.0	7,651.0	7,649.2	172.8	13.4	92.33	-6,167.0	-3,708.5	4,973.4	4,787.4	185.99	26.740		
17,400.0	7,530.0	7,651.5	7,649.7	174.5	13.4	92.34	-6,167.0	-3,708.5	5,044.9	4,857.1	187.73	26.872		
17,411.2	7,530.0	7,651.6	7,649.8	174.7	13.4	92.34	-6,167.0	-3,708.5	5,053.0	4,865.0	187.93	26.887		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 14-7(EXISTING) - EXISTING - NO SURV													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-136.00	-4,073.8	-3,934.6	5,663.8					
100.0	100.0	58.0	58.0	0.2	0.1	-136.00	-4,073.8	-3,934.6	5,663.6	5,663.4	0.25	N/A		
200.0	200.0	158.0	158.0	0.3	0.3	-136.00	-4,073.8	-3,934.6	5,663.6	5,663.0	0.60	9,402.838		
300.0	300.0	258.0	258.0	0.5	0.5	-136.00	-4,073.8	-3,934.6	5,663.6	5,662.7	0.95	5,952.984		
400.0	400.0	358.0	358.0	0.7	0.6	-136.00	-4,073.8	-3,934.6	5,663.6	5,662.3	1.30	4,355.114		
500.0	500.0	458.0	458.0	0.8	0.8	-136.00	-4,073.8	-3,934.6	5,663.6	5,662.0	1.65	3,433.509		
600.0	600.0	558.0	558.0	1.0	1.0	-112.99	-4,073.8	-3,934.6	5,664.0	5,662.0	2.00	2,833.511		
700.0	700.0	658.0	658.0	1.2	1.1	-113.00	-4,073.8	-3,934.6	5,665.0	5,662.6	2.35	2,410.240		
800.0	799.9	757.9	757.9	1.4	1.3	-113.03	-4,073.8	-3,934.6	5,666.7	5,664.0	2.71	2,093.813		
848.7	848.4	806.4	806.4	1.5	1.4	-113.04	-4,073.8	-3,934.6	5,667.8	5,664.9	2.88	1,966.908		
900.0	899.7	857.7	857.7	1.6	1.5	-113.07	-4,073.8	-3,934.6	5,669.0	5,665.9	3.07	1,848.132		
1,000.0	999.5	957.5	957.5	1.8	1.7	-113.13	-4,073.8	-3,934.6	5,671.4	5,668.0	3.43	1,652.794		
1,100.0	1,099.3	1,057.3	1,057.3	2.0	1.8	-113.19	-4,073.8	-3,934.6	5,673.8	5,670.0	3.80	1,494.134		
1,200.0	1,199.1	1,157.1	1,157.1	2.2	2.0	-113.24	-4,073.8	-3,934.6	5,676.2	5,672.0	4.16	1,362.892		
1,300.0	1,298.9	1,256.9	1,256.9	2.4	2.2	-113.30	-4,073.8	-3,934.6	5,678.6	5,674.1	4.53	1,252.632		
1,400.0	1,398.8	1,356.8	1,356.8	2.6	2.4	-113.36	-4,073.8	-3,934.6	5,681.0	5,676.1	4.90	1,158.756		
1,500.0	1,498.6	1,456.6	1,456.6	2.8	2.5	-113.41	-4,073.8	-3,934.6	5,683.4	5,678.2	5.27	1,077.903		
1,600.0	1,598.4	1,556.4	1,556.4	3.0	2.7	-113.47	-4,073.8	-3,934.6	5,685.9	5,680.2	5.64	1,007.565		
1,700.0	1,698.2	1,656.2	1,656.2	3.2	2.9	-113.52	-4,073.8	-3,934.6	5,688.3	5,682.3	6.01	945.832		
1,800.0	1,798.0	1,756.0	1,756.0	3.4	3.1	-113.58	-4,073.8	-3,934.6	5,690.7	5,684.3	6.39	891.226		
1,900.0	1,897.8	1,855.8	1,855.8	3.6	3.2	-113.64	-4,073.8	-3,934.6	5,693.2	5,686.4	6.76	842.589		
2,000.0	1,997.7	1,955.7	1,955.7	3.8	3.4	-113.69	-4,073.8	-3,934.6	5,695.6	5,688.5	7.13	798.998		
2,100.0	2,097.5	2,055.5	2,055.5	4.0	3.6	-113.75	-4,073.8	-3,934.6	5,698.0	5,690.5	7.50	759.711		
2,200.0	2,197.3	2,155.3	2,155.3	4.2	3.8	-113.80	-4,073.8	-3,934.6	5,700.5	5,692.6	7.87	724.123		
2,300.0	2,297.1	2,255.1	2,255.1	4.4	3.9	-113.86	-4,073.8	-3,934.6	5,703.0	5,694.7	8.24	691.737		
2,400.0	2,396.9	2,354.9	2,354.9	4.6	4.1	-113.92	-4,073.8	-3,934.6	5,705.4	5,696.8	8.62	662.142		
2,500.0	2,496.7	2,454.7	2,454.7	4.8	4.3	-113.97	-4,073.8	-3,934.6	5,707.9	5,698.9	8.99	634.993		
2,600.0	2,596.5	2,554.5	2,554.5	5.0	4.5	-114.03	-4,073.8	-3,934.6	5,710.4	5,701.0	9.36	610.000		
2,700.0	2,696.4	2,654.4	2,654.4	5.2	4.6	-114.08	-4,073.8	-3,934.6	5,712.9	5,703.1	9.73	586.916		
2,800.0	2,796.2	2,754.2	2,754.2	5.4	4.8	-114.14	-4,073.8	-3,934.6	5,715.4	5,705.2	10.11	565.532		
2,900.0	2,896.0	2,854.0	2,854.0	5.6	5.0	-114.19	-4,073.8	-3,934.6	5,717.8	5,707.4	10.48	545.667		
3,000.0	2,995.8	2,953.8	2,953.8	5.8	5.2	-114.25	-4,073.8	-3,934.6	5,720.3	5,709.5	10.85	527.165		
3,100.0	3,095.6	3,053.6	3,053.6	6.0	5.3	-114.30	-4,073.8	-3,934.6	5,722.8	5,711.6	11.22	509.891		
3,200.0	3,195.4	3,153.4	3,153.4	6.2	5.5	-114.36	-4,073.8	-3,934.6	5,725.4	5,713.8	11.60	493.726		
3,300.0	3,295.2	3,253.2	3,253.2	6.4	5.7	-114.42	-4,073.8	-3,934.6	5,727.9	5,715.9	11.97	478.568		
3,400.0	3,395.1	3,353.1	3,353.1	6.6	5.9	-114.47	-4,073.8	-3,934.6	5,730.4	5,718.1	12.34	464.326		
3,500.0	3,494.9	3,452.9	3,452.9	6.8	6.0	-114.53	-4,073.8	-3,934.6	5,732.9	5,720.2	12.71	450.919		
3,600.0	3,594.7	3,552.7	3,552.7	7.0	6.2	-114.58	-4,073.8	-3,934.6	5,735.5	5,722.4	13.09	438.275		
3,700.0	3,694.5	3,652.5	3,652.5	7.2	6.4	-114.64	-4,073.8	-3,934.6	5,738.0	5,724.5	13.46	426.333		
3,800.0	3,794.3	3,752.3	3,752.3	7.4	6.5	-114.69	-4,073.8	-3,934.6	5,740.5	5,726.7	13.83	415.034		
3,900.0	3,894.1	3,852.1	3,852.1	7.6	6.7	-114.75	-4,073.8	-3,934.6	5,743.1	5,728.9	14.20	404.329		
4,000.0	3,994.0	3,952.0	3,952.0	7.8	6.9	-114.80	-4,073.8	-3,934.6	5,745.6	5,731.1	14.58	394.171		
4,100.0	4,093.8	4,051.8	4,051.8	8.0	7.1	-114.86	-4,073.8	-3,934.6	5,748.2	5,733.2	14.95	384.521		
4,200.0	4,193.6	4,151.6	4,151.6	8.2	7.2	-114.91	-4,073.8	-3,934.6	5,750.7	5,735.4	15.32	375.341		
4,300.0	4,293.4	4,251.4	4,251.4	8.4	7.4	-114.97	-4,073.8	-3,934.6	5,753.3	5,737.6	15.69	366.597		
4,400.0	4,393.2	4,351.2	4,351.2	8.6	7.6	-115.02	-4,073.8	-3,934.6	5,755.9	5,739.8	16.07	358.259		
4,500.0	4,493.0	4,451.0	4,451.0	8.8	7.8	-115.08	-4,073.8	-3,934.6	5,758.5	5,742.0	16.44	350.301		
4,600.0	4,592.8	4,550.8	4,550.8	9.0	7.9	-115.13	-4,073.8	-3,934.6	5,761.1	5,744.2	16.81	342.695		
4,700.0	4,692.7	4,650.7	4,650.7	9.3	8.1	-115.18	-4,073.8	-3,934.6	5,763.6	5,746.5	17.18	335.420		
4,800.0	4,792.5	4,750.5	4,750.5	9.5	8.3	-115.24	-4,073.8	-3,934.6	5,766.2	5,748.7	17.56	328.455		
4,900.0	4,892.3	4,850.3	4,850.3	9.7	8.5	-115.29	-4,073.8	-3,934.6	5,768.8	5,750.9	17.93	321.779		
5,000.0	4,992.1	4,950.1	4,950.1	9.9	8.6	-115.35	-4,073.8	-3,934.6	5,771.4	5,753.1	18.30	315.376		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 14-7(EXISTING) - EXISTING - NO SURV													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	5,091.9	4,993.0	4,993.0	10.1	8.7	-115.37	-4,073.8	-3,934.6	5,774.3	5,755.8	18.57	310.889		
5,200.0	5,191.7	4,993.0	4,993.0	10.3	8.7	-115.37	-4,073.8	-3,934.6	5,778.8	5,760.0	18.77	307.833		
5,300.0	5,291.5	4,993.0	4,993.0	10.5	8.7	-115.37	-4,073.8	-3,934.6	5,785.0	5,766.0	18.97	304.932		
5,400.0	5,391.4	4,993.0	4,993.0	10.7	8.7	-115.37	-4,073.8	-3,934.6	5,792.9	5,773.7	19.17	302.180		
5,500.0	5,491.2	4,993.0	4,993.0	10.9	8.7	-115.37	-4,073.8	-3,934.6	5,802.5	5,783.1	19.37	299.573		
5,600.0	5,591.0	4,993.0	4,993.0	11.1	8.7	-115.37	-4,073.8	-3,934.6	5,813.8	5,794.3	19.57	297.106		
5,700.0	5,690.8	4,993.0	4,993.0	11.3	8.7	-115.37	-4,073.8	-3,934.6	5,826.8	5,807.1	19.77	294.774		
5,800.0	5,790.6	4,993.0	4,993.0	11.5	8.7	-115.37	-4,073.8	-3,934.6	5,841.5	5,821.6	19.97	292.573		
5,900.0	5,890.4	4,993.0	4,993.0	11.7	8.7	-115.37	-4,073.8	-3,934.6	5,857.9	5,837.7	20.17	290.498		
6,000.0	5,990.3	4,993.0	4,993.0	11.9	8.7	-115.37	-4,073.8	-3,934.6	5,875.9	5,855.6	20.36	288.545		
6,100.0	6,090.1	4,993.0	4,993.0	12.1	8.7	-115.37	-4,073.8	-3,934.6	5,895.6	5,875.0	20.56	286.709		
6,200.0	6,189.9	4,993.0	4,993.0	12.3	8.7	-115.37	-4,073.8	-3,934.6	5,916.9	5,896.1	20.76	284.987		
6,300.0	6,289.7	4,993.0	4,993.0	12.5	8.7	-115.37	-4,073.8	-3,934.6	5,939.8	5,918.8	20.96	283.374		
6,400.0	6,389.5	4,993.0	4,993.0	12.7	8.7	-115.37	-4,073.8	-3,934.6	5,964.3	5,943.1	21.16	281.867		
6,500.0	6,489.3	4,993.0	4,993.0	12.9	8.7	-115.37	-4,073.8	-3,934.6	5,990.4	5,969.0	21.36	280.461		
6,600.0	6,589.1	4,993.0	4,993.0	13.1	8.7	-115.37	-4,073.8	-3,934.6	6,018.0	5,996.4	21.56	279.152		
6,700.0	6,689.0	4,993.0	4,993.0	13.3	8.7	-115.37	-4,073.8	-3,934.6	6,047.1	6,025.3	21.76	277.938		
6,785.3	6,774.1	4,993.0	4,993.0	13.5	8.7	-115.37	-4,073.8	-3,934.6	6,073.1	6,051.2	21.93	276.974		
6,800.0	6,788.8	4,993.0	4,993.0	13.5	8.7	-104.59	-4,073.8	-3,934.6	6,077.6	6,055.7	21.95	276.886		
6,850.0	6,838.8	4,993.0	4,993.0	13.6	8.7	5.16	-4,073.8	-3,934.6	6,091.5	6,069.5	21.99	277.055		
6,900.0	6,888.6	4,993.0	4,993.0	13.6	8.7	26.48	-4,073.8	-3,934.6	6,103.2	6,081.2	21.97	277.827		
6,950.0	6,938.1	4,993.0	4,993.0	13.7	8.7	31.12	-4,073.8	-3,934.6	6,112.6	6,090.7	21.89	279.202		
7,000.0	6,987.0	4,993.0	4,993.0	13.7	8.7	32.99	-4,073.8	-3,934.6	6,119.8	6,098.0	21.77	281.172		
7,050.0	7,035.0	4,993.0	4,993.0	13.6	8.7	33.98	-4,073.8	-3,934.6	6,124.7	6,103.1	21.59	283.720		
7,100.0	7,082.0	4,993.0	4,993.0	13.6	8.7	34.64	-4,073.8	-3,934.6	6,127.2	6,105.9	21.36	286.816		
7,150.0	7,127.7	4,993.0	4,993.0	13.5	8.7	35.17	-4,073.8	-3,934.6	6,127.4	6,106.3	21.10	290.416		
7,200.0	7,171.8	4,993.0	4,993.0	13.5	8.7	35.66	-4,073.8	-3,934.6	6,125.3	6,104.5	20.80	294.452		
7,250.0	7,214.2	4,993.0	4,993.0	13.4	8.7	36.18	-4,073.8	-3,934.6	6,120.9	6,100.4	20.48	298.828		
7,300.0	7,254.6	4,993.0	4,993.0	13.4	8.7	36.74	-4,073.8	-3,934.6	6,114.2	6,094.0	20.15	303.411		
7,350.0	7,292.9	4,993.0	4,993.0	13.3	8.7	37.39	-4,073.8	-3,934.6	6,105.2	6,085.3	19.82	308.024		
7,400.0	7,328.9	4,993.0	4,993.0	13.3	8.7	38.12	-4,073.8	-3,934.6	6,093.9	6,074.4	19.50	312.434		
7,450.0	7,362.3	4,993.0	4,993.0	13.3	8.7	38.97	-4,073.8	-3,934.6	6,080.4	6,061.2	19.22	316.352		
7,500.0	7,393.1	4,993.0	4,993.0	13.4	8.7	39.93	-4,073.8	-3,934.6	6,064.8	6,045.8	18.99	319.441		
7,550.0	7,421.1	4,993.0	4,993.0	13.5	8.7	41.02	-4,073.8	-3,934.6	6,047.1	6,028.3	18.82	321.326		
7,600.0	7,446.1	4,993.0	4,993.0	13.6	8.7	42.27	-4,073.8	-3,934.6	6,027.4	6,008.6	18.74	321.635		
7,650.0	7,468.0	4,993.0	4,993.0	13.8	8.7	43.67	-4,073.8	-3,934.6	6,005.7	5,986.9	18.77	320.046		
7,700.0	7,486.7	4,993.0	4,993.0	14.0	8.7	45.25	-4,073.8	-3,934.6	5,982.2	5,963.3	18.91	316.345		
7,750.0	7,502.2	4,993.0	4,993.0	14.2	8.7	47.01	-4,073.8	-3,934.6	5,956.9	5,937.7	19.19	310.474		
7,800.0	7,514.3	4,993.0	4,993.0	14.6	8.7	48.98	-4,073.8	-3,934.6	5,929.9	5,910.3	19.60	302.563		
7,850.0	7,523.0	4,993.0	4,993.0	14.9	8.7	51.18	-4,073.8	-3,934.6	5,901.4	5,881.2	20.15	292.917		
7,900.0	7,528.2	4,993.0	4,993.0	15.3	8.7	53.60	-4,073.8	-3,934.6	5,871.4	5,850.6	20.82	281.973		
7,950.2	7,530.0	4,993.0	4,993.0	15.8	8.7	56.29	-4,073.8	-3,934.6	5,839.9	5,818.3	21.62	270.179		
8,000.0	7,530.0	4,993.0	4,993.0	16.2	8.7	56.29	-4,073.8	-3,934.6	5,808.3	5,786.3	22.02	263.815		
8,100.0	7,530.0	4,993.0	4,993.0	17.3	8.7	56.29	-4,073.8	-3,934.6	5,745.5	5,722.6	22.90	250.922		
8,200.0	7,530.0	4,993.0	4,993.0	18.4	8.7	56.29	-4,073.8	-3,934.6	5,683.8	5,659.9	23.86	238.178		
8,300.0	7,530.0	4,993.0	4,993.0	19.7	8.7	56.29	-4,073.8	-3,934.6	5,623.2	5,598.3	24.90	225.828		
8,400.0	7,530.0	4,993.0	4,993.0	21.0	8.7	56.29	-4,073.8	-3,934.6	5,563.7	5,537.7	26.00	214.026		
8,500.0	7,530.0	4,993.0	4,993.0	22.4	8.7	56.29	-4,073.8	-3,934.6	5,505.4	5,478.2	27.14	202.857		
8,600.0	7,530.0	4,993.0	4,993.0	23.8	8.7	56.29	-4,073.8	-3,934.6	5,448.3	5,419.9	28.32	192.358		
8,700.0	7,530.0	4,993.0	4,993.0	25.3	8.7	56.29	-4,073.8	-3,934.6	5,392.4	5,362.9	29.54	182.535		
8,800.0	7,530.0	4,993.0	4,993.0	26.8	8.7	56.29	-4,073.8	-3,934.6	5,337.8	5,307.1	30.79	173.371		
8,900.0	7,530.0	4,993.0	4,993.0	28.3	8.7	56.29	-4,073.8	-3,934.6	5,284.6	5,252.6	32.06	164.837		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 14-7(EXISTING) - EXISTING - NO SURV													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,530.0	4,993.0	4,993.0	29.9	8.7	56.29	-4,073.8	-3,934.6	5,232.8	5,199.4	33.35	156.899		
9,100.0	7,530.0	4,993.0	4,993.0	31.4	8.7	56.29	-4,073.8	-3,934.6	5,182.3	5,147.6	34.66	149.517		
9,200.0	7,530.0	4,993.0	4,993.0	33.0	8.7	56.29	-4,073.8	-3,934.6	5,133.3	5,097.3	35.98	142.653		
9,300.0	7,530.0	4,993.0	4,993.0	34.7	8.7	56.29	-4,073.8	-3,934.6	5,085.8	5,048.5	37.32	136.269		
9,400.0	7,530.0	4,993.0	4,993.0	36.3	8.7	56.29	-4,073.8	-3,934.6	5,039.8	5,001.2	38.67	130.327		
9,500.0	7,530.0	4,993.0	4,993.0	37.9	8.7	56.29	-4,073.8	-3,934.6	4,995.4	4,955.4	40.03	124.794		
9,600.0	7,530.0	4,993.0	4,993.0	39.6	8.7	56.29	-4,073.8	-3,934.6	4,952.7	4,911.3	41.40	119.639		
9,700.0	7,530.0	4,993.0	4,993.0	41.2	8.7	56.29	-4,073.8	-3,934.6	4,911.6	4,868.8	42.77	114.831		
9,800.0	7,530.0	4,993.0	4,993.0	42.9	8.7	56.29	-4,073.8	-3,934.6	4,872.2	4,828.0	44.15	110.344		
9,900.0	7,530.0	4,993.0	4,993.0	44.5	8.7	56.29	-4,073.8	-3,934.6	4,834.5	4,789.0	45.54	106.154		
10,000.0	7,530.0	4,993.0	4,993.0	46.2	8.7	56.29	-4,073.8	-3,934.6	4,798.6	4,751.7	46.94	102.238		
10,100.0	7,530.0	4,993.0	4,993.0	47.9	8.7	56.29	-4,073.8	-3,934.6	4,764.6	4,716.3	48.33	98.576		
10,200.0	7,530.0	4,993.0	4,993.0	49.6	8.7	56.29	-4,073.8	-3,934.6	4,732.4	4,682.7	49.74	95.148		
10,300.0	7,530.0	4,993.0	4,993.0	51.3	8.7	56.29	-4,073.8	-3,934.6	4,702.2	4,651.0	51.14	91.939		
10,400.0	7,530.0	4,993.0	4,993.0	53.0	8.7	56.29	-4,073.8	-3,934.6	4,673.9	4,621.3	52.56	88.933		
10,500.0	7,530.0	4,993.0	4,993.0	54.7	8.7	56.29	-4,073.8	-3,934.6	4,647.5	4,593.6	53.97	86.115		
10,600.0	7,530.0	4,993.0	4,993.0	56.4	8.7	56.29	-4,073.8	-3,934.6	4,623.2	4,567.8	55.39	83.473		
10,700.0	7,530.0	4,993.0	4,993.0	58.1	8.7	56.29	-4,073.8	-3,934.6	4,600.9	4,544.1	56.81	80.995		
10,800.0	7,530.0	4,993.0	4,993.0	59.8	8.7	56.29	-4,073.8	-3,934.6	4,580.7	4,522.5	58.23	78.670		
10,900.0	7,530.0	4,993.0	4,993.0	61.5	8.7	56.29	-4,073.8	-3,934.6	4,562.7	4,503.0	59.65	76.488		
11,000.0	7,530.0	4,993.0	4,993.0	63.2	8.7	56.29	-4,073.8	-3,934.6	4,546.7	4,485.6	61.08	74.441		
11,100.0	7,530.0	4,993.0	4,993.0	64.9	8.7	56.29	-4,073.8	-3,934.6	4,532.9	4,470.4	62.51	72.518		
11,200.0	7,530.0	4,993.0	4,993.0	66.6	8.7	56.29	-4,073.8	-3,934.6	4,521.2	4,457.3	63.94	70.714		
11,300.0	7,530.0	4,993.0	4,993.0	68.4	8.7	56.29	-4,073.8	-3,934.6	4,511.8	4,446.4	65.37	69.020		
11,400.0	7,530.0	4,993.0	4,993.0	70.1	8.7	56.29	-4,073.8	-3,934.6	4,504.5	4,437.7	66.80	67.431		
11,500.0	7,530.0	4,993.0	4,993.0	71.8	8.7	56.29	-4,073.8	-3,934.6	4,499.4	4,431.2	68.24	65.939		
11,600.0	7,530.0	4,993.0	4,993.0	73.5	8.7	56.29	-4,073.8	-3,934.6	4,496.6	4,426.9	69.67	64.539		
11,677.3	7,530.0	4,993.0	4,993.0	74.9	8.7	56.29	-4,073.8	-3,934.6	4,495.9	4,425.2	70.78	63.516 CC		
11,700.0	7,530.0	4,993.0	4,993.0	75.3	8.7	56.29	-4,073.8	-3,934.6	4,496.0	4,424.9	71.11	63.226 ES		
11,800.0	7,530.0	4,993.0	4,993.0	77.0	8.7	56.29	-4,073.8	-3,934.6	4,497.6	4,425.1	72.55	61.995		
11,900.0	7,530.0	4,993.0	4,993.0	78.7	8.7	56.29	-4,073.8	-3,934.6	4,501.5	4,427.5	73.99	60.840		
12,000.0	7,530.0	4,993.0	4,993.0	80.4	8.7	56.29	-4,073.8	-3,934.6	4,507.5	4,432.1	75.43	59.759		
12,100.0	7,530.0	4,993.0	4,993.0	82.2	8.7	56.29	-4,073.8	-3,934.6	4,515.8	4,438.9	76.87	58.745		
12,200.0	7,530.0	4,993.0	4,993.0	83.9	8.7	56.29	-4,073.8	-3,934.6	4,526.2	4,447.9	78.31	57.797		
12,300.0	7,530.0	4,993.0	4,993.0	85.6	8.7	56.29	-4,073.8	-3,934.6	4,538.9	4,459.1	79.76	56.909		
12,400.0	7,530.0	4,993.0	4,993.0	87.4	8.7	56.29	-4,073.8	-3,934.6	4,553.7	4,472.5	81.20	56.079		
12,500.0	7,530.0	4,993.0	4,993.0	89.1	8.7	56.29	-4,073.8	-3,934.6	4,570.6	4,487.9	82.64	55.304		
12,600.0	7,530.0	4,993.0	4,993.0	90.8	8.7	56.29	-4,073.8	-3,934.6	4,589.6	4,505.6	84.09	54.580		
12,700.0	7,530.0	4,993.0	4,993.0	92.6	8.7	56.29	-4,073.8	-3,934.6	4,610.8	4,525.3	85.54	53.904		
12,800.0	7,530.0	4,993.0	4,993.0	94.3	8.7	56.29	-4,073.8	-3,934.6	4,634.0	4,547.0	86.98	53.274		
12,900.0	7,530.0	4,993.0	4,993.0	96.0	8.7	56.29	-4,073.8	-3,934.6	4,659.2	4,570.8	88.43	52.688		
13,000.0	7,530.0	4,993.0	4,993.0	97.8	8.7	56.29	-4,073.8	-3,934.6	4,686.5	4,596.6	89.88	52.142		
13,100.0	7,530.0	4,993.0	4,993.0	99.5	8.7	56.29	-4,073.8	-3,934.6	4,715.7	4,624.3	91.33	51.635		
13,200.0	7,530.0	4,993.0	4,993.0	101.3	8.7	56.29	-4,073.8	-3,934.6	4,746.8	4,654.0	92.78	51.164		
13,300.0	7,530.0	4,993.0	4,993.0	103.0	8.7	56.29	-4,073.8	-3,934.6	4,779.8	4,685.6	94.23	50.727		
13,400.0	7,530.0	4,993.0	4,993.0	104.7	8.7	56.29	-4,073.8	-3,934.6	4,814.7	4,719.0	95.68	50.323		
13,500.0	7,530.0	4,993.0	4,993.0	106.5	8.7	56.29	-4,073.8	-3,934.6	4,851.4	4,754.2	97.13	49.949		
13,600.0	7,530.0	4,993.0	4,993.0	108.2	8.7	56.29	-4,073.8	-3,934.6	4,889.8	4,791.2	98.58	49.604		
13,700.0	7,530.0	4,993.0	4,993.0	110.0	8.7	56.29	-4,073.8	-3,934.6	4,930.0	4,830.0	100.03	49.286		
13,800.0	7,530.0	4,993.0	4,993.0	111.7	8.7	56.29	-4,073.8	-3,934.6	4,971.8	4,870.4	101.48	48.994		
13,900.0	7,530.0	4,993.0	4,993.0	113.4	8.7	56.29	-4,073.8	-3,934.6	5,015.4	4,912.4	102.93	48.725		
14,000.0	7,530.0	4,993.0	4,993.0	115.2	8.7	56.29	-4,073.8	-3,934.6	5,060.5	4,956.1	104.38	48.479		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 14-7(EXISTING) - EXISTING - NO SURV													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	7,530.0	4,993.0	4,993.0	116.9	8.7	56.29	-4,073.8	-3,934.6	5,107.1	5,001.3	105.84	48.255		
14,200.0	7,530.0	4,993.0	4,993.0	118.7	8.7	56.29	-4,073.8	-3,934.6	5,155.3	5,048.0	107.29	48.051		
14,300.0	7,530.0	4,993.0	4,993.0	120.4	8.7	56.29	-4,073.8	-3,934.6	5,205.0	5,096.2	108.74	47.865		
14,400.0	7,530.0	4,993.0	4,993.0	122.1	8.7	56.29	-4,073.8	-3,934.6	5,256.1	5,145.9	110.20	47.698		
14,500.0	7,530.0	4,993.0	4,993.0	123.9	8.7	56.29	-4,073.8	-3,934.6	5,308.6	5,196.9	111.65	47.547		
14,600.0	7,530.0	4,993.0	4,993.0	125.6	8.7	56.29	-4,073.8	-3,934.6	5,362.4	5,249.3	113.10	47.412		
14,700.0	7,530.0	4,993.0	4,993.0	127.4	8.7	56.29	-4,073.8	-3,934.6	5,417.6	5,303.0	114.56	47.291		
14,800.0	7,530.0	4,993.0	4,993.0	129.1	8.7	56.29	-4,073.8	-3,934.6	5,474.0	5,358.0	116.01	47.185		
14,900.0	7,530.0	4,993.0	4,993.0	130.9	8.7	56.29	-4,073.8	-3,934.6	5,531.6	5,414.2	117.47	47.091		
15,000.0	7,530.0	4,993.0	4,993.0	132.6	8.7	56.29	-4,073.8	-3,934.6	5,590.5	5,471.6	118.92	47.010		
15,100.0	7,530.0	4,993.0	4,993.0	134.4	8.7	56.29	-4,073.8	-3,934.6	5,650.5	5,530.1	120.38	46.940		
15,200.0	7,530.0	4,993.0	4,993.0	136.1	8.7	56.29	-4,073.8	-3,934.6	5,711.6	5,589.8	121.83	46.881		
15,300.0	7,530.0	4,993.0	4,993.0	137.9	8.7	56.29	-4,073.8	-3,934.6	5,773.8	5,650.6	123.29	46.832		
15,400.0	7,530.0	4,993.0	4,993.0	139.6	8.7	56.29	-4,073.8	-3,934.6	5,837.1	5,712.4	124.74	46.793		
15,500.0	7,530.0	4,993.0	4,993.0	141.3	8.7	56.29	-4,073.8	-3,934.6	5,901.4	5,775.2	126.20	46.762		
15,600.0	7,530.0	4,993.0	4,993.0	143.1	8.7	56.29	-4,073.8	-3,934.6	5,966.6	5,839.0	127.66	46.740		
15,700.0	7,530.0	4,993.0	4,993.0	144.8	8.7	56.29	-4,073.8	-3,934.6	6,032.9	5,903.7	129.11	46.726		
15,800.0	7,530.0	4,993.0	4,993.0	146.6	8.7	56.29	-4,073.8	-3,934.6	6,100.0	5,969.4	130.57	46.719		
15,900.0	7,530.0	4,993.0	4,993.0	148.3	8.7	56.29	-4,073.8	-3,934.6	6,168.0	6,036.0	132.03	46.719 SF		
16,000.0	7,530.0	4,993.0	4,993.0	150.1	8.7	56.29	-4,073.8	-3,934.6	6,236.9	6,103.4	133.48	46.725		
16,100.0	7,530.0	4,993.0	4,993.0	151.8	8.7	56.29	-4,073.8	-3,934.6	6,306.6	6,171.7	134.94	46.737		
16,200.0	7,530.0	4,993.0	4,993.0	153.6	8.7	56.29	-4,073.8	-3,934.6	6,377.1	6,240.8	136.40	46.755		
16,300.0	7,530.0	4,993.0	4,993.0	155.3	8.7	56.29	-4,073.8	-3,934.6	6,448.5	6,310.6	137.85	46.778		
16,400.0	7,530.0	4,993.0	4,993.0	157.1	8.7	56.29	-4,073.8	-3,934.6	6,520.5	6,381.2	139.31	46.806		
16,500.0	7,530.0	4,993.0	4,993.0	158.8	8.7	56.29	-4,073.8	-3,934.6	6,593.3	6,452.5	140.77	46.838		
16,600.0	7,530.0	4,993.0	4,993.0	160.6	8.7	56.29	-4,073.8	-3,934.6	6,666.8	6,524.6	142.23	46.875		
16,700.0	7,530.0	4,993.0	4,993.0	162.3	8.7	56.29	-4,073.8	-3,934.6	6,741.0	6,597.3	143.68	46.916		
16,800.0	7,530.0	4,993.0	4,993.0	164.1	8.7	56.29	-4,073.8	-3,934.6	6,815.8	6,670.7	145.14	46.960		
16,900.0	7,530.0	4,993.0	4,993.0	165.8	8.7	56.29	-4,073.8	-3,934.6	6,891.3	6,744.7	146.60	47.008		
17,000.0	7,530.0	4,993.0	4,993.0	167.6	8.7	56.29	-4,073.8	-3,934.6	6,967.4	6,819.3	148.06	47.059		
17,100.0	7,530.0	4,993.0	4,993.0	169.3	8.7	56.29	-4,073.8	-3,934.6	7,044.1	6,894.5	149.51	47.113		
17,200.0	7,530.0	4,993.0	4,993.0	171.1	8.7	56.29	-4,073.8	-3,934.6	7,121.3	6,970.4	150.97	47.169		
17,300.0	7,530.0	4,993.0	4,993.0	172.8	8.7	56.29	-4,073.8	-3,934.6	7,199.2	7,046.7	152.43	47.229		
17,400.0	7,530.0	4,993.0	4,993.0	174.5	8.7	56.29	-4,073.8	-3,934.6	7,277.5	7,123.6	153.89	47.290		
17,411.2	7,530.0	4,993.0	4,993.0	174.7	8.7	56.29	-4,073.8	-3,934.6	7,286.4	7,132.3	154.05	47.298		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program:		1024-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-144.17	-4,173.3	-3,013.2	5,147.5					
100.0	100.0	87.4	87.4	0.2	0.2	-144.17	-4,173.3	-3,013.2	5,147.4	5,147.1	0.30	N/A		
200.0	200.0	192.7	192.7	0.3	0.3	-144.17	-4,173.1	-3,013.2	5,147.3	5,146.6	0.66	7,807.826		
300.0	300.0	298.0	298.0	0.5	0.5	-144.17	-4,172.8	-3,013.2	5,147.0	5,146.0	1.02	5,067.660		
400.0	400.0	403.3	403.3	0.7	0.7	-144.16	-4,172.4	-3,013.2	5,146.7	5,145.3	1.37	3,751.018		
500.0	500.0	508.6	508.6	0.8	0.9	-144.16	-4,171.8	-3,013.2	5,146.2	5,144.5	1.73	2,977.303		
562.2	562.2	574.1	574.1	1.0	1.0	-121.15	-4,171.4	-3,013.2	5,146.1	5,144.1	1.95	2,642.454		
600.0	600.0	613.9	613.9	1.0	1.1	-121.15	-4,171.1	-3,013.1	5,146.1	5,144.1	2.08	2,471.605		
700.0	700.0	719.2	719.2	1.2	1.2	-121.17	-4,170.3	-3,013.1	5,146.8	5,144.4	2.44	2,109.402		
800.0	799.9	824.4	824.4	1.4	1.4	-121.19	-4,169.3	-3,013.1	5,148.3	5,145.5	2.80	1,837.606		
848.7	848.4	875.6	875.6	1.5	1.5	-121.21	-4,168.8	-3,013.1	5,149.4	5,146.4	2.98	1,728.383		
900.0	899.7	929.6	929.6	1.6	1.6	-121.24	-4,168.2	-3,013.1	5,150.5	5,147.4	3.17	1,625.914		
1,000.0	999.5	1,032.0	1,032.0	1.8	1.8	-121.29	-4,167.0	-3,013.1	5,152.7	5,149.2	3.53	1,458.866		
1,100.0	1,099.3	1,111.7	1,111.7	2.0	1.9	-121.34	-4,166.5	-3,012.7	5,155.1	5,151.3	3.86	1,335.608		
1,200.0	1,199.1	1,183.0	1,183.0	2.2	2.0	-121.39	-4,166.8	-3,011.8	5,157.9	5,153.7	4.17	1,235.906		
1,300.0	1,298.9	1,258.4	1,258.4	2.4	2.2	-121.45	-4,167.9	-3,010.4	5,161.2	5,156.7	4.50	1,148.104		
1,400.0	1,398.8	1,338.9	1,338.8	2.6	2.3	-121.52	-4,169.8	-3,008.7	5,165.1	5,160.3	4.83	1,069.887		
1,500.0	1,498.6	1,449.6	1,449.4	2.8	2.5	-121.63	-4,173.0	-3,005.8	5,169.1	5,163.9	5.21	991.216		
1,600.0	1,598.4	1,609.2	1,608.8	3.0	2.8	-121.82	-4,178.2	-2,998.8	5,172.5	5,166.8	5.70	907.988		
1,700.0	1,698.2	1,737.3	1,736.5	3.2	3.0	-122.01	-4,183.0	-2,989.7	5,174.7	5,168.6	6.13	843.482		
1,800.0	1,798.0	1,830.8	1,829.7	3.4	3.2	-122.15	-4,186.8	-2,982.6	5,176.9	5,170.4	6.51	794.909		
1,900.0	1,897.8	1,942.1	1,940.5	3.6	3.5	-122.32	-4,191.4	-2,974.1	5,179.2	5,172.2	6.93	747.276		
2,000.0	1,997.7	2,027.6	2,025.7	3.8	3.6	-122.45	-4,194.8	-2,967.6	5,181.4	5,174.1	7.30	709.959		
2,100.0	2,097.5	2,115.5	2,113.3	4.0	3.8	-122.58	-4,198.5	-2,961.0	5,183.9	5,176.2	7.68	675.259		
2,200.0	2,197.3	2,201.5	2,198.8	4.2	4.0	-122.72	-4,202.7	-2,954.1	5,186.7	5,178.7	8.06	643.886		
2,300.0	2,297.1	2,305.5	2,302.4	4.4	4.2	-122.89	-4,208.2	-2,945.3	5,189.7	5,181.2	8.48	611.993		
2,400.0	2,396.9	2,384.8	2,381.2	4.6	4.4	-123.02	-4,212.5	-2,938.5	5,192.7	5,183.9	8.84	587.099		
2,500.0	2,496.7	2,472.6	2,468.8	4.8	4.6	-123.16	-4,216.9	-2,932.4	5,196.3	5,187.0	9.23	563.272		
2,600.0	2,596.5	2,642.0	2,637.6	5.0	4.9	-123.40	-4,223.5	-2,920.6	5,198.9	5,189.1	9.78	531.597		
2,700.0	2,696.4	2,707.6	2,703.0	5.2	5.1	-123.50	-4,226.1	-2,915.7	5,201.4	5,191.3	10.12	514.086		
2,800.0	2,796.2	2,801.0	2,796.0	5.4	5.3	-123.64	-4,230.4	-2,908.9	5,204.5	5,194.0	10.52	494.902		
2,900.0	2,896.0	2,901.9	2,896.6	5.6	5.5	-123.78	-4,234.6	-2,901.8	5,207.6	5,196.7	10.93	476.592		
3,000.0	2,995.8	3,023.0	3,017.3	5.8	5.8	-123.95	-4,239.2	-2,893.6	5,210.5	5,199.1	11.38	457.800		
3,100.0	3,095.6	3,100.9	3,095.0	6.0	5.9	-124.07	-4,242.2	-2,888.1	5,213.3	5,201.6	11.74	443.889		
3,200.0	3,195.4	3,217.8	3,211.4	6.2	6.2	-124.24	-4,247.1	-2,879.7	5,216.3	5,204.2	12.20	427.673		
3,300.0	3,295.2	3,329.7	3,323.0	6.4	6.4	-124.40	-4,251.3	-2,871.7	5,219.1	5,206.5	12.63	413.114		
3,400.0	3,395.1	3,438.9	3,431.7	6.6	6.7	-124.56	-4,255.3	-2,863.1	5,221.4	5,208.3	13.07	399.439		
3,500.0	3,494.9	3,505.6	3,498.2	6.8	6.8	-124.66	-4,258.0	-2,858.0	5,224.1	5,210.7	13.41	389.468		
3,600.0	3,594.7	3,594.0	3,586.3	7.0	7.0	-124.79	-4,261.7	-2,851.7	5,227.3	5,213.5	13.80	378.709		
3,700.0	3,694.5	3,760.4	3,752.1	7.2	7.4	-125.04	-4,267.9	-2,838.4	5,229.6	5,215.2	14.37	363.889		
3,800.0	3,794.3	3,831.0	3,822.4	7.4	7.6	-125.14	-4,270.4	-2,832.8	5,231.9	5,217.2	14.72	355.346		
3,900.0	3,894.1	3,910.0	3,901.1	7.6	7.8	-125.26	-4,273.6	-2,826.8	5,234.9	5,219.8	15.10	346.768		
4,000.0	3,994.0	4,029.5	4,020.1	7.8	8.0	-125.44	-4,278.6	-2,817.0	5,237.6	5,222.1	15.57	336.500		
4,100.0	4,093.8	4,121.7	4,111.9	8.0	8.2	-125.59	-4,282.5	-2,809.4	5,240.4	5,224.4	15.97	328.108		
4,200.0	4,193.6	4,212.9	4,202.6	8.2	8.5	-125.73	-4,286.5	-2,801.7	5,243.4	5,227.0	16.38	320.119		
4,300.0	4,293.4	4,303.4	4,292.7	8.4	8.7	-125.88	-4,290.8	-2,793.9	5,246.5	5,229.7	16.79	312.550		
4,400.0	4,393.2	4,377.6	4,366.6	8.6	8.8	-125.99	-4,294.3	-2,788.0	5,250.0	5,232.8	17.15	306.153		
4,500.0	4,493.0	4,539.7	4,528.1	8.8	9.2	-126.23	-4,300.6	-2,775.3	5,252.8	5,235.1	17.71	296.643		
4,600.0	4,592.8	4,637.8	4,625.8	9.0	9.4	-126.37	-4,303.7	-2,768.2	5,255.4	5,237.3	18.11	290.139		
4,700.0	4,692.7	4,724.0	4,711.9	9.3	9.6	-126.48	-4,306.2	-2,762.6	5,258.2	5,239.7	18.49	284.412		
4,800.0	4,792.5	4,796.3	4,784.0	9.5	9.8	-126.57	-4,308.3	-2,758.4	5,261.3	5,242.5	18.83	279.476		
4,900.0	4,892.3	4,864.0	4,851.6	9.7	9.9	-126.64	-4,310.2	-2,755.4	5,265.1	5,246.0	19.15	274.985		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	4,992.1	4,926.6	4,914.1	9.9	10.0	-126.70	-4,311.8	-2,753.7	5,269.6	5,250.2	19.44	271.022	
5,100.0	5,091.9	5,063.0	5,050.5	10.1	10.2	-126.79	-4,313.8	-2,752.9	5,274.3	5,254.5	19.85	265.730	
5,200.0	5,191.7	5,154.1	5,141.7	10.3	10.3	-126.84	-4,314.4	-2,753.0	5,278.5	5,258.4	20.18	261.556	
5,300.0	5,291.5	5,265.5	5,253.0	10.5	10.5	-126.90	-4,314.9	-2,753.2	5,282.7	5,262.2	20.54	257.178	
5,400.0	5,391.4	5,379.5	5,367.1	10.7	10.7	-126.96	-4,314.8	-2,753.9	5,286.6	5,265.7	20.90	252.924	
5,500.0	5,491.2	5,471.7	5,459.2	10.9	10.8	-127.00	-4,314.7	-2,754.5	5,290.5	5,269.2	21.23	249.189	
5,600.0	5,591.0	5,577.0	5,564.6	11.1	11.0	-127.04	-4,314.5	-2,755.4	5,294.4	5,272.8	21.58	245.352	
5,700.0	5,690.8	5,678.3	5,665.8	11.3	11.1	-127.09	-4,314.2	-2,756.2	5,298.2	5,276.3	21.92	241.682	
5,800.0	5,790.6	5,781.0	5,768.5	11.5	11.3	-127.13	-4,313.9	-2,756.9	5,302.0	5,279.7	22.27	238.096	
5,900.0	5,890.4	5,880.6	5,878.1	11.7	11.4	-127.18	-4,313.4	-2,757.8	5,305.7	5,283.1	22.62	234.527	
6,000.0	5,990.3	5,988.2	5,975.8	11.9	11.6	-127.22	-4,312.7	-2,758.8	5,309.3	5,286.3	22.96	231.251	
6,100.0	6,090.1	6,090.1	6,077.7	12.1	11.7	-127.26	-4,312.0	-2,760.1	5,313.0	5,289.7	23.30	227.997	
6,200.0	6,189.9	6,218.2	6,205.7	12.3	11.9	-127.32	-4,311.2	-2,760.3	5,316.1	5,292.4	23.70	224.352	
6,300.0	6,289.7	6,320.8	6,308.3	12.5	12.1	-127.36	-4,310.4	-2,760.4	5,319.2	5,295.2	24.05	221.196	
6,400.0	6,389.5	6,420.0	6,407.5	12.7	12.2	-127.41	-4,309.6	-2,760.4	5,322.2	5,297.8	24.40	218.166	
6,500.0	6,489.3	6,512.0	6,499.5	12.9	12.4	-127.46	-4,309.0	-2,760.5	5,325.3	5,300.6	24.73	215.324	
6,600.0	6,589.1	6,602.9	6,590.4	13.1	12.5	-127.50	-4,308.4	-2,760.7	5,328.6	5,303.5	25.07	212.577	
6,700.0	6,689.0	6,692.8	6,680.3	13.3	12.7	-127.54	-4,308.0	-2,760.9	5,332.1	5,306.7	25.40	209.909	
6,785.3	6,774.1	6,769.5	6,757.0	13.5	12.8	-127.58	-4,307.9	-2,761.0	5,335.2	5,309.5	25.69	207.693	
6,800.0	6,788.8	6,782.9	6,770.4	13.5	12.8	-116.57	-4,307.9	-2,761.0	5,335.6	5,309.8	25.74	207.289	
6,850.0	6,838.8	6,832.0	6,819.5	13.6	12.9	-6.05	-4,307.8	-2,761.2	5,335.0	5,309.2	25.87	206.225	
6,900.0	6,888.6	6,881.1	6,868.5	13.6	13.0	16.03	-4,307.8	-2,761.3	5,331.5	5,305.5	25.93	205.634	
6,950.0	6,938.1	6,933.2	6,920.7	13.7	13.1	21.45	-4,307.8	-2,761.3	5,324.8	5,298.9	25.92	205.467	
7,000.0	6,987.0	6,978.7	6,966.2	13.7	13.1	24.10	-4,307.8	-2,761.3	5,315.2	5,289.4	25.82	205.830	
7,050.0	7,035.0	7,023.9	7,011.4	13.6	13.2	25.92	-4,307.8	-2,761.4	5,302.6	5,277.0	25.66	206.614	
7,100.0	7,082.0	7,080.3	7,067.8	13.6	13.3	27.47	-4,307.8	-2,761.4	5,287.2	5,261.7	25.47	207.620	
7,150.0	7,127.7	7,140.8	7,128.3	13.5	13.4	28.97	-4,307.7	-2,761.4	5,268.8	5,243.6	25.22	208.884	
7,200.0	7,171.8	7,210.3	7,197.8	13.5	13.5	30.57	-4,307.4	-2,761.3	5,247.6	5,222.7	24.96	210.246	
7,250.0	7,214.2	7,267.7	7,255.2	13.4	13.6	32.29	-4,306.8	-2,761.1	5,223.6	5,199.0	24.65	211.874	
7,300.0	7,254.6	7,308.0	7,295.5	13.4	13.7	34.14	-4,306.3	-2,761.0	5,197.1	5,172.8	24.32	213.683	
7,350.0	7,292.9	7,342.3	7,329.8	13.3	13.7	36.20	-4,305.9	-2,761.0	5,168.3	5,144.3	24.00	215.308	
7,400.0	7,328.9	7,367.7	7,355.2	13.3	13.8	38.49	-4,305.6	-2,760.9	5,137.5	5,113.8	23.72	216.546	
7,450.0	7,362.3	7,391.9	7,379.4	13.3	13.8	41.09	-4,305.4	-2,760.9	5,104.7	5,081.2	23.53	216.948	
7,500.0	7,393.1	7,421.2	7,408.7	13.4	13.8	44.11	-4,305.2	-2,760.8	5,070.1	5,046.7	23.47	216.020	
7,550.0	7,421.1	7,447.9	7,435.4	13.5	13.9	47.54	-4,305.0	-2,760.8	5,033.9	5,010.4	23.57	213.590	
7,600.0	7,446.1	7,471.7	7,459.1	13.6	13.9	51.44	-4,304.9	-2,760.8	4,996.3	4,972.4	23.85	209.488	
7,650.0	7,468.0	7,493.2	7,480.7	13.8	14.0	55.84	-4,304.7	-2,760.8	4,957.4	4,933.1	24.33	203.751	
7,700.0	7,486.7	7,513.4	7,500.9	14.0	14.0	60.78	-4,304.6	-2,760.8	4,917.4	4,892.4	25.00	196.684	
7,750.0	7,502.2	7,530.1	7,517.6	14.2	14.0	66.21	-4,304.5	-2,760.7	4,876.7	4,850.8	25.81	188.927	
7,800.0	7,514.3	7,543.1	7,530.6	14.6	14.0	72.06	-4,304.4	-2,760.7	4,835.2	4,808.6	26.69	181.172	
7,850.0	7,523.0	7,551.9	7,539.3	14.9	14.0	78.20	-4,304.4	-2,760.7	4,793.4	4,765.9	27.54	174.073	
7,900.0	7,528.2	7,556.8	7,544.3	15.3	14.1	84.47	-4,304.3	-2,760.6	4,751.4	4,723.1	28.27	168.072	
7,950.2	7,530.0	7,558.3	7,545.8	15.8	14.1	90.73	-4,304.3	-2,760.6	4,709.2	4,680.3	28.83	163.358	
8,000.0	7,530.0	7,558.0	7,545.5	16.2	14.1	90.73	-4,304.3	-2,760.6	4,667.5	4,638.2	29.31	159.246	
8,100.0	7,530.0	7,557.5	7,544.9	17.3	14.1	90.71	-4,304.3	-2,760.6	4,584.3	4,553.9	30.37	150.925	
8,200.0	7,530.0	7,556.9	7,544.4	18.4	14.1	90.70	-4,304.3	-2,760.6	4,501.8	4,470.2	31.55	142.703	
8,300.0	7,530.0	7,556.4	7,543.8	19.7	14.1	90.69	-4,304.3	-2,760.6	4,419.9	4,387.1	32.81	134.732	
8,400.0	7,530.0	7,555.8	7,543.3	21.0	14.1	90.68	-4,304.3	-2,760.6	4,338.9	4,304.7	34.14	127.105	
8,500.0	7,530.0	7,555.3	7,542.7	22.4	14.1	90.66	-4,304.3	-2,760.6	4,258.6	4,223.1	35.53	119.874	
8,600.0	7,530.0	7,554.7	7,542.2	23.8	14.1	90.65	-4,304.3	-2,760.6	4,179.2	4,142.3	36.96	113.063	
8,700.0	7,530.0	7,554.2	7,541.6	25.3	14.1	90.64	-4,304.4	-2,760.6	4,100.7	4,062.3	38.44	106.673	
8,800.0	7,530.0	7,553.6	7,541.1	26.8	14.1	90.63	-4,304.4	-2,760.7	4,023.2	3,983.2	39.95	100.697	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	7,530.0	7,553.0	7,540.5	28.3	14.1	90.61	-4,304.4	-2,760.7	3,946.7	3,905.2	41.49	95.116	
9,000.0	7,530.0	7,552.5	7,540.0	29.9	14.1	90.60	-4,304.4	-2,760.7	3,871.2	3,828.2	43.06	89.910	
9,100.0	7,530.0	7,551.9	7,539.4	31.4	14.1	90.59	-4,304.4	-2,760.7	3,796.9	3,752.2	44.64	85.056	
9,200.0	7,530.0	7,551.4	7,538.9	33.0	14.0	90.58	-4,304.4	-2,760.7	3,723.8	3,677.5	46.24	80.530	
9,300.0	7,530.0	7,550.8	7,538.3	34.7	14.0	90.57	-4,304.4	-2,760.7	3,651.9	3,604.1	47.86	76.311	
9,400.0	7,530.0	7,550.3	7,537.8	36.3	14.0	90.55	-4,304.4	-2,760.7	3,581.4	3,531.9	49.48	72.375	
9,500.0	7,530.0	7,549.7	7,537.2	37.9	14.0	90.54	-4,304.4	-2,760.7	3,512.3	3,461.2	51.12	68.703	
9,600.0	7,530.0	7,549.2	7,536.6	39.6	14.0	90.53	-4,304.4	-2,760.7	3,444.8	3,392.0	52.77	65.276	
9,700.0	7,530.0	7,548.6	7,536.1	41.2	14.0	90.52	-4,304.4	-2,760.7	3,378.8	3,324.4	54.43	62.076	
9,800.0	7,530.0	7,548.1	7,535.5	42.9	14.0	90.50	-4,304.4	-2,760.7	3,314.6	3,258.5	56.10	59.088	
9,900.0	7,530.0	7,547.5	7,535.0	44.5	14.0	90.49	-4,304.4	-2,760.7	3,252.2	3,194.4	57.77	56.297	
10,000.0	7,530.0	7,546.9	7,534.4	46.2	14.0	90.48	-4,304.4	-2,760.7	3,191.7	3,132.2	59.45	53.690	
10,100.0	7,530.0	7,546.3	7,533.8	47.9	14.0	90.46	-4,304.4	-2,760.7	3,133.2	3,072.0	61.13	51.255	
10,200.0	7,530.0	7,545.6	7,533.1	49.6	14.0	90.45	-4,304.4	-2,760.7	3,076.8	3,014.0	62.82	48.980	
10,300.0	7,530.0	7,545.0	7,532.5	51.3	14.0	90.43	-4,304.4	-2,760.7	3,022.7	2,958.2	64.51	46.856	
10,400.0	7,530.0	7,544.3	7,531.8	53.0	14.0	90.42	-4,304.4	-2,760.7	2,971.0	2,904.8	66.21	44.875	
10,500.0	7,530.0	7,543.6	7,531.1	54.7	14.0	90.40	-4,304.4	-2,760.7	2,921.8	2,853.9	67.91	43.027	
10,600.0	7,530.0	7,543.0	7,530.5	56.4	14.0	90.39	-4,304.4	-2,760.7	2,875.2	2,805.6	69.61	41.305	
10,700.0	7,530.0	7,542.3	7,529.8	58.1	14.0	90.37	-4,304.4	-2,760.7	2,831.4	2,760.1	71.32	39.702	
10,800.0	7,530.0	7,541.6	7,529.1	59.8	14.0	90.36	-4,304.4	-2,760.7	2,790.5	2,717.5	73.03	38.213	
10,900.0	7,530.0	7,541.0	7,528.4	61.5	14.0	90.34	-4,304.4	-2,760.7	2,752.7	2,677.9	74.74	36.831	
11,000.0	7,530.0	7,540.3	7,527.7	63.2	14.0	90.33	-4,304.4	-2,760.7	2,717.9	2,641.5	76.45	35.551	
11,100.0	7,530.0	7,539.6	7,527.1	64.9	14.0	90.31	-4,304.4	-2,760.7	2,686.5	2,608.3	78.17	34.369	
11,200.0	7,530.0	7,538.9	7,526.4	66.6	14.0	90.30	-4,304.4	-2,760.7	2,658.4	2,578.6	79.88	33.278	
11,300.0	7,530.0	7,538.2	7,525.7	68.4	14.0	90.28	-4,304.4	-2,760.7	2,633.9	2,552.3	81.60	32.276	
11,400.0	7,530.0	7,537.5	7,525.0	70.1	14.0	90.27	-4,304.4	-2,760.7	2,612.9	2,529.6	83.33	31.358	
11,500.0	7,530.0	7,536.8	7,524.3	71.8	14.0	90.25	-4,304.4	-2,760.7	2,595.6	2,510.6	85.05	30.520	
11,600.0	7,530.0	7,536.1	7,523.6	73.5	14.0	90.24	-4,304.5	-2,760.7	2,582.1	2,495.4	86.77	29.758	
11,700.0	7,530.0	7,535.4	7,522.9	75.3	14.0	90.22	-4,304.5	-2,760.7	2,572.4	2,483.9	88.50	29.068	
11,800.0	7,530.0	7,534.7	7,522.1	77.0	14.0	90.20	-4,304.5	-2,760.7	2,566.6	2,476.4	90.22	28.447	
11,899.8	7,530.0	7,533.9	7,521.4	78.7	14.0	90.19	-4,304.5	-2,760.7	2,564.7	2,472.7	91.95	27.892 CC	
11,900.0	7,530.0	7,533.9	7,521.4	78.7	14.0	90.19	-4,304.5	-2,760.7	2,564.7	2,472.7	91.95	27.891 ES	
12,000.0	7,530.0	7,533.2	7,520.7	80.4	14.0	90.17	-4,304.5	-2,760.7	2,566.6	2,472.9	93.68	27.398	
12,100.0	7,530.0	7,532.5	7,520.0	82.2	14.0	90.16	-4,304.5	-2,760.7	2,572.5	2,477.1	95.41	26.962	
12,200.0	7,530.0	7,531.7	7,519.2	83.9	14.0	90.14	-4,304.5	-2,760.7	2,582.2	2,485.0	97.14	26.582	
12,300.0	7,530.0	7,531.0	7,518.5	85.6	14.0	90.12	-4,304.5	-2,760.7	2,595.7	2,496.8	98.87	26.253	
12,400.0	7,530.0	7,530.3	7,517.8	87.4	14.0	90.11	-4,304.5	-2,760.7	2,613.0	2,512.4	100.61	25.972	
12,500.0	7,530.0	7,529.5	7,517.0	89.1	14.0	90.09	-4,304.5	-2,760.7	2,634.0	2,531.6	102.34	25.737	
12,600.0	7,530.0	7,528.8	7,516.3	90.8	14.0	90.07	-4,304.5	-2,760.7	2,658.5	2,554.4	104.07	25.545	
12,700.0	7,530.0	7,528.0	7,515.5	92.6	14.0	90.06	-4,304.5	-2,760.7	2,686.6	2,580.8	105.81	25.391	
12,800.0	7,530.0	7,527.3	7,514.7	94.3	14.0	90.04	-4,304.5	-2,760.8	2,718.0	2,610.5	107.54	25.274	
12,900.0	7,530.0	7,526.5	7,514.0	96.0	14.0	90.02	-4,304.5	-2,760.8	2,752.8	2,643.5	109.28	25.190	
13,000.0	7,530.0	7,525.7	7,513.2	97.8	14.0	90.00	-4,304.5	-2,760.8	2,790.7	2,679.7	111.02	25.138	
13,100.0	7,530.0	7,525.0	7,512.4	99.5	14.0	89.99	-4,304.5	-2,760.8	2,831.6	2,718.8	112.75	25.113 SF	
13,200.0	7,530.0	7,524.2	7,511.7	101.3	14.0	89.97	-4,304.5	-2,760.8	2,875.4	2,760.9	114.49	25.115	
13,300.0	7,530.0	7,523.4	7,510.9	103.0	14.0	89.95	-4,304.5	-2,760.8	2,922.0	2,805.7	116.23	25.140	
13,400.0	7,530.0	7,522.6	7,510.1	104.7	14.0	89.93	-4,304.5	-2,760.8	2,971.2	2,853.2	117.97	25.186	
13,500.0	7,530.0	7,521.8	7,509.3	106.5	14.0	89.92	-4,304.5	-2,760.8	3,022.9	2,903.2	119.71	25.253	
13,600.0	7,530.0	7,521.0	7,508.5	108.2	14.0	89.90	-4,304.5	-2,760.8	3,077.0	2,955.6	121.45	25.336	
13,700.0	7,530.0	7,520.2	7,507.7	110.0	14.0	89.88	-4,304.5	-2,760.8	3,133.4	3,010.2	123.19	25.436	
13,800.0	7,530.0	7,519.4	7,506.9	111.7	14.0	89.86	-4,304.6	-2,760.8	3,191.9	3,066.9	124.93	25.550	
13,900.0	7,530.0	7,518.6	7,506.1	113.4	14.0	89.84	-4,304.6	-2,760.8	3,252.4	3,125.7	126.67	25.677	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error: 0.0 ft	
Survey Program: 1024-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	7,517.8	7,505.2	115.2	14.0	89.83	-4,304.6	-2,760.8	3,314.8	3,186.4	128.41	25.815		
14,100.0	7,530.0	7,516.9	7,504.4	116.9	14.0	89.81	-4,304.6	-2,760.8	3,379.1	3,248.9	130.15	25.963		
14,200.0	7,530.0	7,516.1	7,503.6	118.7	14.0	89.79	-4,304.6	-2,760.8	3,445.0	3,313.1	131.89	26.120		
14,300.0	7,530.0	7,515.3	7,502.8	120.4	14.0	89.77	-4,304.6	-2,760.8	3,512.6	3,378.9	133.63	26.285		
14,400.0	7,530.0	7,514.4	7,501.9	122.1	14.0	89.75	-4,304.6	-2,760.8	3,581.6	3,446.3	135.37	26.457		
14,500.0	7,530.0	7,513.6	7,501.1	123.9	14.0	89.73	-4,304.6	-2,760.8	3,652.1	3,515.0	137.12	26.635		
14,600.0	7,530.0	7,512.7	7,500.2	125.6	14.0	89.71	-4,304.6	-2,760.8	3,724.0	3,585.1	138.86	26.818		
14,700.0	7,530.0	7,511.9	7,499.4	127.4	14.0	89.70	-4,304.6	-2,760.8	3,797.1	3,656.5	140.60	27.006		
14,800.0	7,530.0	7,511.0	7,498.5	129.1	14.0	89.68	-4,304.6	-2,760.8	3,871.4	3,729.1	142.35	27.198		
14,900.0	7,530.0	7,510.2	7,497.6	130.9	14.0	89.66	-4,304.6	-2,760.8	3,946.9	3,802.8	144.09	27.392		
15,000.0	7,530.0	7,509.3	7,496.8	132.6	14.0	89.64	-4,304.6	-2,760.8	4,023.4	3,877.6	145.83	27.590		
15,100.0	7,530.0	7,508.4	7,495.9	134.4	14.0	89.62	-4,304.6	-2,760.8	4,101.0	3,953.4	147.58	27.789		
15,200.0	7,530.0	7,507.5	7,495.0	136.1	14.0	89.60	-4,304.6	-2,760.8	4,179.5	4,030.2	149.32	27.990		
15,300.0	7,530.0	7,506.6	7,494.1	137.9	14.0	89.58	-4,304.6	-2,760.8	4,258.9	4,107.8	151.06	28.193		
15,400.0	7,530.0	7,505.7	7,493.2	139.6	14.0	89.56	-4,304.6	-2,760.8	4,339.1	4,186.3	152.81	28.396		
15,500.0	7,530.0	7,504.8	7,492.3	141.3	14.0	89.54	-4,304.6	-2,760.8	4,420.2	4,265.6	154.55	28.600		
15,600.0	7,530.0	7,503.9	7,491.4	143.1	14.0	89.52	-4,304.7	-2,760.8	4,502.0	4,345.7	156.30	28.804		
15,700.0	7,530.0	7,503.0	7,490.5	144.8	14.0	89.50	-4,304.7	-2,760.8	4,584.5	4,426.5	158.04	29.009		
15,800.0	7,530.0	7,502.1	7,489.6	146.6	14.0	89.48	-4,304.7	-2,760.8	4,667.8	4,508.0	159.79	29.213		
15,900.0	7,530.0	7,501.2	7,488.7	148.3	14.0	89.46	-4,304.7	-2,760.8	4,751.6	4,590.1	161.53	29.416		
16,000.0	7,530.0	7,500.3	7,487.7	150.1	14.0	89.44	-4,304.7	-2,760.8	4,836.1	4,672.8	163.28	29.619		
16,100.0	7,530.0	7,499.3	7,486.8	151.8	14.0	89.41	-4,304.7	-2,760.8	4,921.2	4,756.2	165.02	29.822		
16,200.0	7,530.0	7,498.4	7,485.9	153.6	14.0	89.39	-4,304.7	-2,760.8	5,006.8	4,840.0	166.77	30.023		
16,300.0	7,530.0	7,497.4	7,484.9	155.3	14.0	89.37	-4,304.7	-2,760.8	5,092.9	4,924.4	168.51	30.223		
16,400.0	7,530.0	7,496.5	7,483.9	157.1	14.0	89.35	-4,304.7	-2,760.8	5,179.6	5,009.3	170.26	30.422		
16,500.0	7,530.0	7,495.5	7,483.0	158.8	14.0	89.33	-4,304.7	-2,760.8	5,266.7	5,094.7	172.00	30.620		
16,600.0	7,530.0	7,494.5	7,482.0	160.6	14.0	89.31	-4,304.7	-2,760.8	5,354.2	5,180.5	173.75	30.816		
16,700.0	7,530.0	7,493.6	7,481.0	162.3	14.0	89.29	-4,304.7	-2,760.8	5,442.2	5,266.7	175.49	31.011		
16,800.0	7,530.0	7,492.6	7,480.1	164.1	14.0	89.26	-4,304.7	-2,760.8	5,530.6	5,353.4	177.24	31.204		
16,900.0	7,530.0	7,491.6	7,479.1	165.8	14.0	89.24	-4,304.7	-2,760.8	5,619.4	5,440.4	178.99	31.396		
17,000.0	7,530.0	7,490.6	7,478.1	167.6	13.9	89.22	-4,304.7	-2,760.8	5,708.6	5,527.8	180.73	31.586		
17,100.0	7,530.0	7,489.6	7,477.1	169.3	13.9	89.20	-4,304.7	-2,760.8	5,798.1	5,615.6	182.48	31.774		
17,200.0	7,530.0	7,488.6	7,476.1	171.1	13.9	89.17	-4,304.8	-2,760.8	5,887.9	5,703.7	184.22	31.961		
17,300.0	7,530.0	7,487.6	7,475.0	172.8	13.9	89.15	-4,304.8	-2,760.8	5,978.1	5,792.1	185.97	32.146		
17,400.0	7,530.0	7,487.0	7,474.5	174.5	13.9	89.14	-4,304.8	-2,760.8	6,068.6	5,880.9	187.72	32.329		
17,411.2	7,530.0	7,487.0	7,474.5	174.7	13.9	89.14	-4,304.8	-2,760.8	6,078.8	5,890.9	187.91	32.349		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	-144.17	-4,174.1	-3,014.0	5,148.6					
100.0	100.0	67.0	67.0	0.2	0.1	-144.17	-4,174.1	-3,014.0	5,148.5	5,148.2	0.27	N/A		
200.0	200.0	167.0	167.0	0.3	0.3	-144.17	-4,174.1	-3,014.0	5,148.5	5,147.9	0.62	8,330.351		
300.0	300.0	267.0	267.0	0.5	0.5	-144.17	-4,174.1	-3,014.0	5,148.5	5,147.5	0.97	5,323.627		
400.0	400.0	367.0	367.0	0.7	0.6	-144.17	-4,174.1	-3,014.0	5,148.5	5,147.2	1.32	3,911.740		
500.0	500.0	467.0	467.0	0.8	0.8	-144.17	-4,174.1	-3,014.0	5,148.5	5,146.8	1.67	3,091.767		
600.0	600.0	567.0	567.0	1.0	1.0	-121.16	-4,174.1	-3,014.0	5,149.0	5,146.9	2.01	2,555.867		
700.0	700.0	667.0	667.0	1.2	1.2	-121.17	-4,174.1	-3,014.0	5,150.3	5,148.0	2.37	2,177.167		
800.0	799.9	766.9	766.9	1.4	1.3	-121.20	-4,174.1	-3,014.0	5,152.6	5,149.9	2.72	1,893.989		
848.7	848.4	815.4	815.4	1.5	1.4	-121.21	-4,174.1	-3,014.0	5,154.0	5,151.1	2.89	1,780.435		
900.0	899.7	866.7	866.7	1.6	1.5	-121.24	-4,174.1	-3,014.0	5,155.6	5,152.5	3.08	1,674.048		
1,000.0	999.5	966.5	966.5	1.8	1.7	-121.30	-4,174.1	-3,014.0	5,158.8	5,155.3	3.44	1,498.931		
1,100.0	1,099.3	1,066.3	1,066.3	2.0	1.9	-121.36	-4,174.1	-3,014.0	5,162.0	5,158.2	3.81	1,356.522		
1,200.0	1,199.1	1,166.1	1,166.1	2.2	2.0	-121.41	-4,174.1	-3,014.0	5,165.1	5,161.0	4.17	1,238.584		
1,300.0	1,298.9	1,265.9	1,265.9	2.4	2.2	-121.47	-4,174.1	-3,014.0	5,168.3	5,163.8	4.54	1,139.392		
1,400.0	1,398.8	1,365.8	1,365.8	2.6	2.4	-121.53	-4,174.1	-3,014.0	5,171.5	5,166.6	4.90	1,054.853		
1,500.0	1,498.6	1,465.6	1,465.6	2.8	2.6	-121.59	-4,174.1	-3,014.0	5,174.7	5,169.4	5.27	981.975		
1,600.0	1,598.4	1,565.4	1,565.4	3.0	2.7	-121.64	-4,174.1	-3,014.0	5,177.9	5,172.2	5.64	918.520		
1,700.0	1,698.2	1,665.2	1,665.2	3.2	2.9	-121.70	-4,174.1	-3,014.0	5,181.1	5,175.1	6.01	862.786		
1,800.0	1,798.0	1,765.0	1,765.0	3.4	3.1	-121.76	-4,174.1	-3,014.0	5,184.3	5,177.9	6.37	813.452		
1,900.0	1,897.8	1,864.8	1,864.8	3.6	3.3	-121.81	-4,174.1	-3,014.0	5,187.5	5,180.7	6.74	769.482		
2,000.0	1,997.7	1,964.7	1,964.7	3.8	3.4	-121.87	-4,174.1	-3,014.0	5,190.7	5,183.6	7.11	730.051		
2,100.0	2,097.5	2,064.5	2,064.5	4.0	3.6	-121.93	-4,174.1	-3,014.0	5,193.9	5,186.4	7.48	694.494		
2,200.0	2,197.3	2,164.3	2,164.3	4.2	3.8	-121.98	-4,174.1	-3,014.0	5,197.1	5,189.3	7.85	662.268		
2,300.0	2,297.1	2,264.1	2,264.1	4.4	4.0	-122.04	-4,174.1	-3,014.0	5,200.4	5,192.1	8.22	632.930		
2,400.0	2,396.9	2,363.9	2,363.9	4.6	4.1	-122.10	-4,174.1	-3,014.0	5,203.6	5,195.0	8.59	606.108		
2,500.0	2,496.7	2,463.7	2,463.7	4.8	4.3	-122.15	-4,174.1	-3,014.0	5,206.8	5,197.9	8.95	581.493		
2,600.0	2,596.5	2,563.5	2,563.5	5.0	4.5	-122.21	-4,174.1	-3,014.0	5,210.1	5,200.7	9.32	558.824		
2,700.0	2,696.4	2,663.4	2,663.4	5.2	4.6	-122.27	-4,174.1	-3,014.0	5,213.3	5,203.6	9.69	537.880		
2,800.0	2,796.2	2,763.2	2,763.2	5.4	4.8	-122.32	-4,174.1	-3,014.0	5,216.6	5,206.5	10.06	518.473		
2,900.0	2,896.0	2,863.0	2,863.0	5.6	5.0	-122.38	-4,174.1	-3,014.0	5,219.8	5,209.4	10.43	500.438		
3,000.0	2,995.8	2,962.8	2,962.8	5.8	5.2	-122.44	-4,174.1	-3,014.0	5,223.1	5,212.3	10.80	483.636		
3,100.0	3,095.6	3,062.6	3,062.6	6.0	5.3	-122.49	-4,174.1	-3,014.0	5,226.4	5,215.2	11.17	467.946		
3,200.0	3,195.4	3,162.4	3,162.4	6.2	5.5	-122.55	-4,174.1	-3,014.0	5,229.6	5,218.1	11.54	453.259		
3,300.0	3,295.2	3,262.2	3,262.2	6.4	5.7	-122.60	-4,174.1	-3,014.0	5,232.9	5,221.0	11.91	439.484		
3,400.0	3,395.1	3,362.1	3,362.1	6.6	5.9	-122.66	-4,174.1	-3,014.0	5,236.2	5,223.9	12.28	426.538		
3,500.0	3,494.9	3,461.9	3,461.9	6.8	6.0	-122.72	-4,174.1	-3,014.0	5,239.5	5,226.8	12.65	414.349		
3,600.0	3,594.7	3,561.7	3,561.7	7.0	6.2	-122.77	-4,174.1	-3,014.0	5,242.8	5,229.8	13.01	402.852		
3,700.0	3,694.5	3,661.5	3,661.5	7.2	6.4	-122.83	-4,174.1	-3,014.0	5,246.1	5,232.7	13.38	391.990		
3,800.0	3,794.3	3,761.3	3,761.3	7.4	6.6	-122.88	-4,174.1	-3,014.0	5,249.4	5,235.6	13.75	381.712		
3,900.0	3,894.1	3,861.1	3,861.1	7.6	6.7	-122.94	-4,174.1	-3,014.0	5,252.7	5,238.6	14.12	371.973		
4,000.0	3,994.0	3,961.0	3,961.0	7.8	6.9	-123.00	-4,174.1	-3,014.0	5,256.0	5,241.5	14.49	362.730		
4,100.0	4,093.8	4,060.8	4,060.8	8.0	7.1	-123.05	-4,174.1	-3,014.0	5,259.3	5,244.5	14.86	353.947		
4,200.0	4,193.6	4,160.6	4,160.6	8.2	7.3	-123.11	-4,174.1	-3,014.0	5,262.6	5,247.4	15.23	345.591		
4,300.0	4,293.4	4,260.4	4,260.4	8.4	7.4	-123.16	-4,174.1	-3,014.0	5,266.0	5,250.4	15.60	337.631		
4,400.0	4,393.2	4,360.2	4,360.2	8.6	7.6	-123.22	-4,174.1	-3,014.0	5,269.3	5,253.3	15.97	330.040		
4,500.0	4,493.0	4,460.0	4,460.0	8.8	7.8	-123.27	-4,174.1	-3,014.0	5,272.6	5,256.3	16.33	322.793		
4,600.0	4,592.8	4,559.8	4,559.8	9.0	8.0	-123.33	-4,174.1	-3,014.0	5,276.0	5,259.3	16.70	315.867		
4,700.0	4,692.7	4,659.7	4,659.7	9.3	8.1	-123.38	-4,174.1	-3,014.0	5,279.3	5,262.3	17.07	309.241		
4,800.0	4,792.5	4,759.5	4,759.5	9.5	8.3	-123.44	-4,174.1	-3,014.0	5,282.7	5,265.2	17.44	302.896		
4,900.0	4,892.3	4,859.3	4,859.3	9.7	8.5	-123.49	-4,174.1	-3,014.0	5,286.0	5,268.2	17.81	296.815		
5,000.0	4,992.1	4,959.1	4,959.1	9.9	8.7	-123.55	-4,174.1	-3,014.0	5,289.4	5,271.2	18.18	290.981		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)				
5,100.0	5,091.9	5,058.9	5,058.9	10.1	8.8	-123.60	-4,174.1	-3,014.0	5,292.8	5,274.2	18.55	285.380		
5,200.0	5,191.7	5,158.7	5,158.7	10.3	9.0	-123.66	-4,174.1	-3,014.0	5,296.1	5,277.2	18.91	279.998		
5,300.0	5,291.5	5,258.5	5,258.5	10.5	9.2	-123.71	-4,174.1	-3,014.0	5,299.5	5,280.2	19.28	274.823		
5,400.0	5,391.4	5,358.4	5,358.4	10.7	9.4	-123.77	-4,174.1	-3,014.0	5,302.9	5,283.3	19.65	269.842		
5,500.0	5,491.2	5,458.2	5,458.2	10.9	9.5	-123.82	-4,174.1	-3,014.0	5,306.3	5,286.3	20.02	265.046		
5,600.0	5,591.0	5,558.0	5,558.0	11.1	9.7	-123.87	-4,174.1	-3,014.0	5,309.7	5,289.3	20.39	260.424		
5,700.0	5,690.8	5,657.8	5,657.8	11.3	9.9	-123.93	-4,174.1	-3,014.0	5,313.1	5,292.3	20.76	255.966		
5,800.0	5,790.6	5,757.6	5,757.6	11.5	10.0	-123.98	-4,174.1	-3,014.0	5,316.5	5,295.4	21.13	251.665		
5,900.0	5,890.4	5,857.4	5,857.4	11.7	10.2	-124.04	-4,174.1	-3,014.0	5,319.9	5,298.4	21.49	247.512		
6,000.0	5,990.3	5,957.3	5,957.3	11.9	10.4	-124.09	-4,174.1	-3,014.0	5,323.3	5,301.4	21.86	243.499		
6,100.0	6,090.1	6,057.1	6,057.1	12.1	10.6	-124.15	-4,174.1	-3,014.0	5,326.7	5,304.5	22.23	239.620		
6,200.0	6,189.9	6,156.9	6,156.9	12.3	10.7	-124.20	-4,174.1	-3,014.0	5,330.1	5,307.5	22.60	235.869		
6,300.0	6,289.7	6,256.7	6,256.7	12.5	10.9	-124.25	-4,174.1	-3,014.0	5,333.6	5,310.6	22.97	232.238		
6,400.0	6,389.5	6,356.5	6,356.5	12.7	11.1	-124.31	-4,174.1	-3,014.0	5,337.0	5,313.7	23.33	228.722		
6,500.0	6,489.3	6,456.3	6,456.3	12.9	11.3	-124.36	-4,174.1	-3,014.0	5,340.4	5,316.7	23.70	225.316		
6,600.0	6,589.1	6,556.1	6,556.1	13.1	11.4	-124.42	-4,174.1	-3,014.0	5,343.9	5,319.8	24.07	222.015		
6,700.0	6,689.0	6,656.0	6,656.0	13.3	11.6	-124.47	-4,174.1	-3,014.0	5,347.3	5,322.9	24.44	218.814		
6,785.3	6,774.1	6,741.1	6,741.1	13.5	11.8	-124.51	-4,174.1	-3,014.0	5,350.2	5,325.5	24.75	216.160		
6,800.0	6,788.8	6,755.8	6,755.8	13.5	11.8	-113.51	-4,174.1	-3,014.0	5,350.6	5,325.8	24.81	215.693		
6,850.0	6,838.8	6,805.8	6,805.8	13.6	11.9	-2.99	-4,174.1	-3,014.0	5,350.0	5,325.1	24.95	214.460		
6,900.0	6,888.6	6,855.6	6,855.6	13.6	12.0	19.11	-4,174.1	-3,014.0	5,346.4	5,321.4	25.02	213.695		
6,950.0	6,938.1	6,905.1	6,905.1	13.7	12.1	24.55	-4,174.1	-3,014.0	5,339.9	5,314.9	25.03	213.379		
7,000.0	6,987.0	6,954.0	6,954.0	13.7	12.1	27.24	-4,174.1	-3,014.0	5,330.5	5,305.5	24.97	213.486		
7,050.0	7,035.0	7,002.0	7,002.0	13.6	12.2	29.11	-4,174.1	-3,014.0	5,318.2	5,293.4	24.85	213.982		
7,100.0	7,082.0	7,049.0	7,049.0	13.6	12.3	30.69	-4,174.1	-3,014.0	5,303.1	5,278.5	24.69	214.815		
7,150.0	7,127.7	7,094.7	7,094.7	13.5	12.4	32.21	-4,174.1	-3,014.0	5,285.4	5,260.9	24.48	215.917		
7,200.0	7,171.8	7,138.8	7,138.8	13.5	12.5	33.78	-4,174.1	-3,014.0	5,265.0	5,240.8	24.24	217.189		
7,250.0	7,214.2	7,181.2	7,181.2	13.4	12.5	35.47	-4,174.1	-3,014.0	5,242.1	5,218.2	23.99	218.500		
7,300.0	7,254.6	7,221.6	7,221.6	13.4	12.6	37.35	-4,174.1	-3,014.0	5,216.9	5,193.2	23.75	219.675		
7,350.0	7,292.9	7,259.9	7,259.9	13.3	12.7	39.44	-4,174.1	-3,014.0	5,189.4	5,165.9	23.54	220.493		
7,400.0	7,328.9	7,295.9	7,295.9	13.3	12.7	41.79	-4,174.1	-3,014.0	5,159.9	5,136.5	23.38	220.690		
7,450.0	7,362.3	7,329.3	7,329.3	13.3	12.8	44.45	-4,174.1	-3,014.0	5,128.4	5,105.1	23.31	219.979		
7,500.0	7,393.1	7,360.1	7,360.1	13.4	12.8	47.44	-4,174.1	-3,014.0	5,095.1	5,071.8	23.36	218.092		
7,550.0	7,421.1	7,388.1	7,388.1	13.5	12.9	50.80	-4,174.1	-3,014.0	5,060.3	5,036.8	23.55	214.837		
7,600.0	7,446.1	7,413.1	7,413.1	13.6	12.9	54.56	-4,174.1	-3,014.0	5,024.1	5,000.2	23.91	210.169		
7,650.0	7,468.0	7,435.0	7,435.0	13.8	13.0	58.73	-4,174.1	-3,014.0	4,986.7	4,962.3	24.42	204.237		
7,700.0	7,486.7	7,453.7	7,453.7	14.0	13.0	63.30	-4,174.1	-3,014.0	4,948.3	4,923.2	25.07	197.391		
7,750.0	7,502.2	7,469.2	7,469.2	14.2	13.0	68.24	-4,174.1	-3,014.0	4,909.1	4,883.3	25.82	190.125		
7,800.0	7,514.3	7,481.3	7,481.3	14.6	13.1	73.49	-4,174.1	-3,014.0	4,869.3	4,842.7	26.61	182.975		
7,850.0	7,523.0	7,490.0	7,490.0	14.9	13.1	78.94	-4,174.1	-3,014.0	4,829.1	4,801.7	27.37	176.413		
7,900.0	7,528.2	7,495.2	7,495.2	15.3	13.1	84.48	-4,174.1	-3,014.0	4,788.8	4,760.7	28.04	170.766		
7,950.2	7,530.0	7,497.0	7,497.0	15.8	13.1	90.00	-4,174.1	-3,014.0	4,748.2	4,719.7	28.57	166.169		
8,000.0	7,530.0	7,497.0	7,497.0	16.2	13.1	90.00	-4,174.1	-3,014.0	4,708.3	4,679.2	29.06	162.031		
8,100.0	7,530.0	7,497.0	7,497.0	17.3	13.1	90.00	-4,174.1	-3,014.0	4,628.6	4,598.5	30.12	153.653		
8,200.0	7,530.0	7,497.0	7,497.0	18.4	13.1	90.00	-4,174.1	-3,014.0	4,549.7	4,518.4	31.30	145.376		
8,300.0	7,530.0	7,497.0	7,497.0	19.7	13.1	90.00	-4,174.1	-3,014.0	4,471.6	4,439.0	32.56	137.351		
8,400.0	7,530.0	7,497.0	7,497.0	21.0	13.1	90.00	-4,174.1	-3,014.0	4,394.4	4,360.5	33.89	129.676		
8,500.0	7,530.0	7,497.0	7,497.0	22.4	13.1	90.00	-4,174.1	-3,014.0	4,318.2	4,282.9	35.28	122.404		
8,600.0	7,530.0	7,497.0	7,497.0	23.8	13.1	90.00	-4,174.1	-3,014.0	4,242.9	4,206.2	36.72	115.557		
8,700.0	7,530.0	7,497.0	7,497.0	25.3	13.1	90.00	-4,174.1	-3,014.0	4,168.7	4,130.5	38.20	109.140		
8,800.0	7,530.0	7,497.0	7,497.0	26.8	13.1	90.00	-4,174.1	-3,014.0	4,095.6	4,055.9	39.71	103.141		
8,900.0	7,530.0	7,497.0	7,497.0	28.3	13.1	90.00	-4,174.1	-3,014.0	4,023.7	3,982.4	41.25	97.545		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)	
9,000.0	7,530.0	7,497.0	7,497.0	29.9	13.1	90.00	-4,174.1	-3,014.0	3,952.9	3,910.1	42.81	92.329		
9,100.0	7,530.0	7,497.0	7,497.0	31.4	13.1	90.00	-4,174.1	-3,014.0	3,883.5	3,839.1	44.40	87.470		
9,200.0	7,530.0	7,497.0	7,497.0	33.0	13.1	90.00	-4,174.1	-3,014.0	3,815.4	3,769.4	46.00	82.944		
9,300.0	7,530.0	7,497.0	7,497.0	34.7	13.1	90.00	-4,174.1	-3,014.0	3,748.7	3,701.1	47.62	78.728		
9,400.0	7,530.0	7,497.0	7,497.0	36.3	13.1	90.00	-4,174.1	-3,014.0	3,683.6	3,634.3	49.24	74.801		
9,500.0	7,530.0	7,497.0	7,497.0	37.9	13.1	90.00	-4,174.1	-3,014.0	3,620.0	3,569.1	50.89	71.140		
9,600.0	7,530.0	7,497.0	7,497.0	39.6	13.1	90.00	-4,174.1	-3,014.0	3,558.1	3,505.6	52.54	67.728		
9,700.0	7,530.0	7,497.0	7,497.0	41.2	13.1	90.00	-4,174.1	-3,014.0	3,498.0	3,443.8	54.19	64.545		
9,800.0	7,530.0	7,497.0	7,497.0	42.9	13.1	90.00	-4,174.1	-3,014.0	3,439.7	3,383.9	55.86	61.577		
9,900.0	7,530.0	7,497.0	7,497.0	44.5	13.1	90.00	-4,174.1	-3,014.0	3,383.4	3,325.9	57.53	58.807		
10,000.0	7,530.0	7,497.0	7,497.0	46.2	13.1	90.00	-4,174.1	-3,014.0	3,329.1	3,269.9	59.21	56.223		
10,100.0	7,530.0	7,497.0	7,497.0	47.9	13.1	90.00	-4,174.1	-3,014.0	3,277.0	3,216.1	60.90	53.812		
10,200.0	7,530.0	7,497.0	7,497.0	49.6	13.1	90.00	-4,174.1	-3,014.0	3,227.2	3,164.6	62.59	51.563		
10,300.0	7,530.0	7,497.0	7,497.0	51.3	13.1	90.00	-4,174.1	-3,014.0	3,179.7	3,115.4	64.28	49.466		
10,400.0	7,530.0	7,497.0	7,497.0	53.0	13.1	90.00	-4,174.1	-3,014.0	3,134.7	3,068.7	65.98	47.511		
10,500.0	7,530.0	7,497.0	7,497.0	54.7	13.1	90.00	-4,174.1	-3,014.0	3,092.2	3,024.6	67.68	45.689		
10,600.0	7,530.0	7,497.0	7,497.0	56.4	13.1	90.00	-4,174.1	-3,014.0	3,052.5	2,983.1	69.38	43.994		
10,700.0	7,530.0	7,497.0	7,497.0	58.1	13.1	90.00	-4,174.1	-3,014.0	3,015.5	2,944.4	71.09	42.418		
10,800.0	7,530.0	7,497.0	7,497.0	59.8	13.1	90.00	-4,174.1	-3,014.0	2,981.5	2,908.7	72.80	40.954		
10,900.0	7,530.0	7,497.0	7,497.0	61.5	13.1	90.00	-4,174.1	-3,014.0	2,950.4	2,875.9	74.51	39.595		
11,000.0	7,530.0	7,497.0	7,497.0	63.2	13.1	90.00	-4,174.1	-3,014.0	2,922.4	2,846.2	76.23	38.338		
11,100.0	7,530.0	7,497.0	7,497.0	64.9	13.1	90.00	-4,174.1	-3,014.0	2,897.7	2,819.7	77.95	37.175		
11,200.0	7,530.0	7,497.0	7,497.0	66.6	13.1	90.00	-4,174.1	-3,014.0	2,876.1	2,796.5	79.66	36.103		
11,300.0	7,530.0	7,497.0	7,497.0	68.4	13.1	90.00	-4,174.1	-3,014.0	2,858.0	2,776.6	81.39	35.116		
11,400.0	7,530.0	7,497.0	7,497.0	70.1	13.1	90.00	-4,174.1	-3,014.0	2,843.2	2,760.1	83.11	34.211		
11,500.0	7,530.0	7,497.0	7,497.0	71.8	13.1	90.00	-4,174.1	-3,014.0	2,831.9	2,747.0	84.83	33.382		
11,600.0	7,530.0	7,497.0	7,497.0	73.5	13.1	90.00	-4,174.1	-3,014.0	2,824.0	2,737.5	86.56	32.626		
11,700.0	7,530.0	7,497.0	7,497.0	75.3	13.1	90.00	-4,174.1	-3,014.0	2,819.8	2,731.5	88.28	31.940		
11,771.2	7,530.0	7,497.0	7,497.0	76.5	13.1	90.00	-4,174.1	-3,014.0	2,818.9	2,729.3	89.51	31.491 CC		
11,800.0	7,530.0	7,497.0	7,497.0	77.0	13.1	90.00	-4,174.1	-3,014.0	2,819.0	2,729.0	90.01	31.318 ES		
11,900.0	7,530.0	7,497.0	7,497.0	78.7	13.1	90.00	-4,174.1	-3,014.0	2,821.8	2,730.1	91.74	30.758		
12,000.0	7,530.0	7,497.0	7,497.0	80.4	13.1	90.00	-4,174.1	-3,014.0	2,828.1	2,734.6	93.47	30.257		
12,100.0	7,530.0	7,497.0	7,497.0	82.2	13.1	90.00	-4,174.1	-3,014.0	2,838.0	2,742.8	95.20	29.810		
12,200.0	7,530.0	7,497.0	7,497.0	83.9	13.1	90.00	-4,174.1	-3,014.0	2,851.3	2,754.3	96.93	29.415		
12,300.0	7,530.0	7,497.0	7,497.0	85.6	13.1	90.00	-4,174.1	-3,014.0	2,868.0	2,769.4	98.67	29.068		
12,400.0	7,530.0	7,497.0	7,497.0	87.4	13.1	90.00	-4,174.1	-3,014.0	2,888.1	2,787.7	100.40	28.766		
12,500.0	7,530.0	7,497.0	7,497.0	89.1	13.1	90.00	-4,174.1	-3,014.0	2,911.5	2,809.4	102.14	28.507		
12,600.0	7,530.0	7,497.0	7,497.0	90.8	13.1	90.00	-4,174.1	-3,014.0	2,938.2	2,834.3	103.87	28.287		
12,700.0	7,530.0	7,497.0	7,497.0	92.6	13.1	90.00	-4,174.1	-3,014.0	2,967.9	2,862.3	105.61	28.103		
12,800.0	7,530.0	7,497.0	7,497.0	94.3	13.1	90.00	-4,174.1	-3,014.0	3,000.7	2,893.4	107.34	27.954		
12,900.0	7,530.0	7,497.0	7,497.0	96.0	13.1	90.00	-4,174.1	-3,014.0	3,036.5	2,927.4	109.08	27.837		
13,000.0	7,530.0	7,497.0	7,497.0	97.8	13.1	90.00	-4,174.1	-3,014.0	3,075.0	2,964.2	110.82	27.748		
13,100.0	7,530.0	7,497.0	7,497.0	99.5	13.1	90.00	-4,174.1	-3,014.0	3,116.3	3,003.8	112.56	27.687		
13,200.0	7,530.0	7,497.0	7,497.0	101.3	13.1	90.00	-4,174.1	-3,014.0	3,160.3	3,046.0	114.30	27.650		
13,300.0	7,530.0	7,497.0	7,497.0	103.0	13.1	90.00	-4,174.1	-3,014.0	3,206.7	3,090.7	116.04	27.636 SF		
13,400.0	7,530.0	7,497.0	7,497.0	104.7	13.1	90.00	-4,174.1	-3,014.0	3,255.6	3,137.8	117.78	27.642		
13,500.0	7,530.0	7,497.0	7,497.0	106.5	13.1	90.00	-4,174.1	-3,014.0	3,306.8	3,187.2	119.52	27.668		
13,600.0	7,530.0	7,497.0	7,497.0	108.2	13.1	90.00	-4,174.1	-3,014.0	3,360.1	3,238.9	121.26	27.711		
13,700.0	7,530.0	7,497.0	7,497.0	110.0	13.1	90.00	-4,174.1	-3,014.0	3,415.6	3,292.6	123.00	27.769		
13,800.0	7,530.0	7,497.0	7,497.0	111.7	13.1	90.00	-4,174.1	-3,014.0	3,473.0	3,348.3	124.74	27.842		
13,900.0	7,530.0	7,497.0	7,497.0	113.4	13.1	90.00	-4,174.1	-3,014.0	3,532.4	3,405.9	126.48	27.928		
14,000.0	7,530.0	7,497.0	7,497.0	115.2	13.1	90.00	-4,174.1	-3,014.0	3,593.5	3,465.3	128.23	28.025		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)	
14,100.0	7,530.0	7,497.0	7,497.0	116.9	13.1	90.00	-4,174.1	-3,014.0	3,656.4	3,526.4	129.97	28.133		
14,200.0	7,530.0	7,497.0	7,497.0	118.7	13.1	90.00	-4,174.1	-3,014.0	3,720.9	3,589.2	131.71	28.250		
14,300.0	7,530.0	7,497.0	7,497.0	120.4	13.1	90.00	-4,174.1	-3,014.0	3,786.9	3,653.5	133.46	28.376		
14,400.0	7,530.0	7,497.0	7,497.0	122.1	13.1	90.00	-4,174.1	-3,014.0	3,854.4	3,719.2	135.20	28.509		
14,500.0	7,530.0	7,497.0	7,497.0	123.9	13.1	90.00	-4,174.1	-3,014.0	3,923.3	3,786.3	136.94	28.649		
14,600.0	7,530.0	7,497.0	7,497.0	125.6	13.1	90.00	-4,174.1	-3,014.0	3,993.5	3,854.8	138.69	28.795		
14,700.0	7,530.0	7,497.0	7,497.0	127.4	13.1	90.00	-4,174.1	-3,014.0	4,064.9	3,924.5	140.43	28.946		
14,800.0	7,530.0	7,497.0	7,497.0	129.1	13.1	90.00	-4,174.1	-3,014.0	4,137.6	3,995.4	142.18	29.102		
14,900.0	7,530.0	7,497.0	7,497.0	130.9	13.1	90.00	-4,174.1	-3,014.0	4,211.3	4,067.4	143.92	29.261		
15,000.0	7,530.0	7,497.0	7,497.0	132.6	13.1	90.00	-4,174.1	-3,014.0	4,286.1	4,140.5	145.67	29.424		
15,100.0	7,530.0	7,497.0	7,497.0	134.4	13.1	90.00	-4,174.1	-3,014.0	4,362.0	4,214.6	147.41	29.590		
15,200.0	7,530.0	7,497.0	7,497.0	136.1	13.1	90.00	-4,174.1	-3,014.0	4,438.7	4,289.6	149.16	29.758		
15,300.0	7,530.0	7,497.0	7,497.0	137.9	13.1	90.00	-4,174.1	-3,014.0	4,516.4	4,365.5	150.91	29.929		
15,400.0	7,530.0	7,497.0	7,497.0	139.6	13.1	90.00	-4,174.1	-3,014.0	4,595.0	4,442.3	152.65	30.101		
15,500.0	7,530.0	7,497.0	7,497.0	141.3	13.1	90.00	-4,174.1	-3,014.0	4,674.4	4,520.0	154.40	30.275		
15,600.0	7,530.0	7,497.0	7,497.0	143.1	13.1	90.00	-4,174.1	-3,014.0	4,754.5	4,598.4	156.14	30.450		
15,700.0	7,530.0	7,497.0	7,497.0	144.8	13.1	90.00	-4,174.1	-3,014.0	4,835.4	4,677.5	157.89	30.625		
15,800.0	7,530.0	7,497.0	7,497.0	146.6	13.1	90.00	-4,174.1	-3,014.0	4,917.0	4,757.4	159.64	30.801		
15,900.0	7,530.0	7,497.0	7,497.0	148.3	13.1	90.00	-4,174.1	-3,014.0	4,999.3	4,837.9	161.39	30.977		
16,000.0	7,530.0	7,497.0	7,497.0	150.1	13.1	90.00	-4,174.1	-3,014.0	5,082.2	4,919.0	163.13	31.154		
16,100.0	7,530.0	7,497.0	7,497.0	151.8	13.1	90.00	-4,174.1	-3,014.0	5,165.7	5,000.8	164.88	31.330		
16,200.0	7,530.0	7,497.0	7,497.0	153.6	13.1	90.00	-4,174.1	-3,014.0	5,249.8	5,083.1	166.63	31.506		
16,300.0	7,530.0	7,497.0	7,497.0	155.3	13.1	90.00	-4,174.1	-3,014.0	5,334.4	5,166.0	168.38	31.682		
16,400.0	7,530.0	7,497.0	7,497.0	157.1	13.1	90.00	-4,174.1	-3,014.0	5,419.6	5,249.4	170.12	31.857		
16,500.0	7,530.0	7,497.0	7,497.0	158.8	13.1	90.00	-4,174.1	-3,014.0	5,505.2	5,333.3	171.87	32.031		
16,600.0	7,530.0	7,497.0	7,497.0	160.6	13.1	90.00	-4,174.1	-3,014.0	5,591.3	5,417.7	173.62	32.205		
16,700.0	7,530.0	7,497.0	7,497.0	162.3	13.1	90.00	-4,174.1	-3,014.0	5,677.9	5,502.6	175.37	32.377		
16,800.0	7,530.0	7,497.0	7,497.0	164.1	13.1	90.00	-4,174.1	-3,014.0	5,764.9	5,587.8	177.12	32.549		
16,900.0	7,530.0	7,497.0	7,497.0	165.8	13.1	90.00	-4,174.1	-3,014.0	5,852.4	5,673.5	178.86	32.720		
17,000.0	7,530.0	7,497.0	7,497.0	167.6	13.1	90.00	-4,174.1	-3,014.0	5,940.2	5,759.6	180.61	32.889		
17,100.0	7,530.0	7,497.0	7,497.0	169.3	13.1	90.00	-4,174.1	-3,014.0	6,028.4	5,846.1	182.36	33.057		
17,200.0	7,530.0	7,497.0	7,497.0	171.1	13.1	90.00	-4,174.1	-3,014.0	6,117.0	5,932.9	184.11	33.224		
17,300.0	7,530.0	7,497.0	7,497.0	172.8	13.1	90.00	-4,174.1	-3,014.0	6,205.9	6,020.1	185.86	33.390		
17,400.0	7,530.0	7,497.0	7,497.0	174.5	13.1	90.00	-4,174.1	-3,014.0	6,295.2	6,107.6	187.61	33.555		
17,411.2	7,530.0	7,497.0	7,497.0	174.7	13.1	90.00	-4,174.1	-3,014.0	6,305.2	6,117.4	187.81	33.573		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
0.0	0.0	0.0	0.0	0.0	0.0	-144.36	-4,202.5	-3,013.2	5,171.1					
100.0	100.0	81.1	81.1	0.2	0.1	-144.36	-4,202.4	-3,013.3	5,171.1	5,170.8	0.29	N/A		
200.0	200.0	178.8	178.8	0.3	0.3	-144.35	-4,202.3	-3,013.6	5,171.2	5,170.5	0.64	8,088.379		
300.0	300.0	276.5	276.5	0.5	0.5	-144.35	-4,202.0	-3,014.2	5,171.3	5,170.3	0.98	5,250.751		
400.0	400.0	374.1	374.1	0.7	0.7	-144.34	-4,201.6	-3,015.0	5,171.4	5,170.1	1.33	3,887.165		
500.0	500.0	471.8	471.8	0.8	0.8	-144.32	-4,201.0	-3,016.1	5,171.6	5,169.9	1.68	3,085.890		
600.0	600.0	569.5	569.5	1.0	1.0	-121.30	-4,200.4	-3,017.4	5,172.3	5,170.3	2.03	2,549.244		
700.0	700.0	667.1	667.1	1.2	1.2	-121.29	-4,199.6	-3,019.0	5,174.0	5,171.6	2.38	2,176.001		
800.0	799.9	764.8	764.7	1.4	1.3	-121.29	-4,198.7	-3,020.8	5,176.5	5,173.8	2.73	1,895.893		
848.7	848.4	812.3	812.2	1.5	1.4	-121.29	-4,198.2	-3,021.8	5,178.2	5,175.3	2.90	1,783.321		
900.0	899.7	859.5	859.4	1.6	1.5	-121.30	-4,197.7	-3,022.8	5,180.0	5,176.9	3.08	1,680.346		
1,000.0	999.5	932.0	931.9	1.8	1.6	-121.34	-4,197.6	-3,023.3	5,183.6	5,180.2	3.39	1,527.085		
1,100.0	1,099.3	996.0	995.9	2.0	1.8	-121.37	-4,198.4	-3,023.9	5,188.2	5,184.5	3.69	1,404.763		
1,200.0	1,199.1	1,019.4	1,019.3	2.2	1.8	-121.39	-4,198.9	-3,024.3	5,193.8	5,189.9	3.92	1,323.742		
1,300.0	1,298.9	1,060.0	1,059.9	2.4	1.9	-121.41	-4,200.2	-3,025.1	5,200.7	5,196.6	4.18	1,242.922		
1,400.0	1,398.8	1,096.0	1,095.8	2.6	1.9	-121.43	-4,201.8	-3,025.9	5,208.8	5,204.4	4.43	1,174.730		
1,500.0	1,498.6	1,156.0	1,155.7	2.8	2.0	-121.47	-4,205.2	-3,027.7	5,218.2	5,213.5	4.73	1,103.000		
1,600.0	1,598.4	1,156.0	1,155.7	3.0	2.0	-121.47	-4,205.2	-3,027.7	5,228.6	5,223.6	4.92	1,061.747		
1,700.0	1,698.2	1,226.1	1,225.5	3.2	2.2	-121.52	-4,210.3	-3,030.3	5,239.9	5,234.7	5.24	1,000.406		
1,800.0	1,798.0	1,336.6	1,335.6	3.4	2.4	-121.60	-4,218.8	-3,034.9	5,251.8	5,246.1	5.62	934.626		
1,900.0	1,897.8	1,411.0	1,409.7	3.6	2.5	-121.65	-4,224.6	-3,038.3	5,263.9	5,257.9	5.94	886.135		
2,000.0	1,997.7	1,500.8	1,499.2	3.8	2.7	-121.71	-4,231.7	-3,042.5	5,276.3	5,270.0	6.29	838.997		
2,100.0	2,097.5	1,570.0	1,568.0	4.0	2.9	-121.75	-4,237.3	-3,045.7	5,288.8	5,282.2	6.60	801.119		
2,200.0	2,197.3	1,629.0	1,626.8	4.2	3.0	-121.79	-4,242.5	-3,048.6	5,301.9	5,295.0	6.90	768.621		
2,300.0	2,297.1	1,665.0	1,662.5	4.4	3.1	-121.82	-4,245.8	-3,050.5	5,316.1	5,308.9	7.15	743.045		
2,400.0	2,396.9	1,742.1	1,739.1	4.6	3.3	-121.87	-4,253.7	-3,054.7	5,330.9	5,323.4	7.48	712.563		
2,500.0	2,496.7	1,797.9	1,794.4	4.8	3.4	-121.91	-4,259.9	-3,058.0	5,346.5	5,338.7	7.77	687.879		
2,600.0	2,596.5	1,857.0	1,853.1	5.0	3.6	-121.95	-4,266.7	-3,062.0	5,362.9	5,354.9	8.07	664.616		
2,700.0	2,696.4	1,902.5	1,898.1	5.2	3.7	-121.98	-4,272.2	-3,065.3	5,380.2	5,371.9	8.34	644.888		
2,800.0	2,796.2	1,952.0	1,947.0	5.4	3.8	-122.02	-4,278.7	-3,068.9	5,398.4	5,389.8	8.62	626.069		
2,900.0	2,896.0	2,007.0	2,001.3	5.6	4.0	-122.06	-4,286.3	-3,073.1	5,417.4	5,408.5	8.91	607.807		
3,000.0	2,995.8	2,048.0	2,041.8	5.8	4.1	-122.08	-4,292.2	-3,076.5	5,437.2	5,428.0	9.18	592.382		
3,100.0	3,095.6	2,106.2	2,099.1	6.0	4.3	-122.13	-4,301.0	-3,081.6	5,457.9	5,448.4	9.47	576.065		
3,200.0	3,195.4	2,233.8	2,224.6	6.2	4.7	-122.22	-4,321.2	-3,092.7	5,479.2	5,469.3	9.89	554.100		
3,300.0	3,295.2	2,341.0	2,330.1	6.4	5.0	-122.30	-4,337.5	-3,101.7	5,499.7	5,489.5	10.27	535.604		
3,400.0	3,395.1	2,435.1	2,422.8	6.6	5.3	-122.36	-4,351.5	-3,110.0	5,520.2	5,509.5	10.63	519.498		
3,500.0	3,494.9	2,511.4	2,498.0	6.8	5.6	-122.41	-4,362.8	-3,117.0	5,540.9	5,529.9	10.95	505.871		
3,600.0	3,594.7	2,590.0	2,575.3	7.0	5.9	-122.45	-4,374.6	-3,124.9	5,562.1	5,550.8	11.28	492.914		
3,700.0	3,694.5	2,707.0	2,690.3	7.2	6.3	-122.52	-4,392.3	-3,136.3	5,583.3	5,571.6	11.68	477.977		
3,800.0	3,794.3	2,824.4	2,805.9	7.4	6.6	-122.60	-4,410.3	-3,146.5	5,604.2	5,592.1	12.08	463.968		
3,900.0	3,894.1	2,936.5	2,916.4	7.6	7.0	-122.68	-4,427.0	-3,155.9	5,624.5	5,612.0	12.47	451.137		
4,000.0	3,994.0	3,036.0	3,014.4	7.8	7.3	-122.74	-4,441.9	-3,164.4	5,644.8	5,632.0	12.83	439.825		
4,100.0	4,093.8	3,125.4	3,102.4	8.0	7.6	-122.80	-4,455.0	-3,172.2	5,665.2	5,652.0	13.18	429.710		
4,200.0	4,193.6	3,266.8	3,241.8	8.2	8.1	-122.89	-4,475.7	-3,184.5	5,685.5	5,671.9	13.62	417.352		
4,300.0	4,293.4	3,374.5	3,348.1	8.4	8.5	-122.95	-4,490.8	-3,193.2	5,704.9	5,690.9	14.00	407.380		
4,400.0	4,393.2	3,448.0	3,420.5	8.6	8.7	-123.00	-4,501.4	-3,199.5	5,724.9	5,710.6	14.33	399.619		
4,500.0	4,493.0	3,482.3	3,454.3	8.8	8.8	-123.02	-4,506.6	-3,202.6	5,745.6	5,731.0	14.58	394.052		
4,600.0	4,592.8	3,544.0	3,515.0	9.0	9.1	-123.06	-4,516.2	-3,208.4	5,767.0	5,752.1	14.88	387.506		
4,700.0	4,692.7	3,732.1	3,700.2	9.3	9.7	-123.17	-4,544.3	-3,225.7	5,787.7	5,772.3	15.40	375.797		
4,800.0	4,792.5	3,873.7	3,839.9	9.5	10.2	-123.25	-4,564.1	-3,237.2	5,807.1	5,791.3	15.84	366.603		
4,900.0	4,892.3	3,946.1	3,911.3	9.7	10.4	-123.29	-4,574.1	-3,243.7	5,826.8	5,810.6	16.16	360.558		
5,000.0	4,992.1	4,019.0	3,983.2	9.9	10.6	-123.33	-4,584.3	-3,250.2	5,846.7	5,830.3	16.48	354.751		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	5,091.9	4,077.9	4,041.2	10.1	10.8	-123.36	-4,592.7	-3,255.7	5,867.2	5,850.5	16.78	349.699			
5,200.0	5,191.7	4,139.9	4,102.2	10.3	11.1	-123.39	-4,601.9	-3,262.1	5,888.5	5,871.5	17.08	344.764			
5,300.0	5,291.5	4,254.0	4,214.4	10.5	11.5	-123.45	-4,619.5	-3,273.1	5,910.0	5,892.5	17.47	338.266			
5,400.0	5,391.4	4,465.0	4,422.4	10.7	12.2	-123.56	-4,648.9	-3,292.3	5,929.6	5,911.6	18.03	328.892			
5,500.0	5,491.2	4,525.0	4,481.7	10.9	12.4	-123.58	-4,657.0	-3,297.8	5,949.3	5,930.9	18.33	324.602			
5,600.0	5,591.0	4,655.0	4,609.9	11.1	12.8	-123.65	-4,674.9	-3,309.5	5,969.0	5,950.3	18.75	318.406			
5,700.0	5,690.8	4,687.0	4,641.4	11.3	12.9	-123.66	-4,679.3	-3,312.4	5,989.0	5,970.0	19.00	315.259			
5,800.0	5,790.6	4,744.1	4,697.7	11.5	13.1	-123.69	-4,687.6	-3,317.6	6,009.7	5,990.4	19.29	311.537			
5,900.0	5,890.4	4,957.4	4,907.9	11.7	13.8	-123.80	-4,718.1	-3,337.7	6,030.3	6,010.5	19.85	303.765			
6,000.0	5,990.3	5,042.6	4,991.9	11.9	14.1	-123.83	-4,729.4	-3,345.5	6,049.8	6,029.6	20.19	299.588			
6,100.0	6,090.1	5,178.3	5,125.9	12.1	14.6	-123.90	-4,747.4	-3,357.6	6,069.2	6,048.5	20.62	294.302			
6,200.0	6,189.9	5,321.1	5,267.0	12.3	15.0	-123.98	-4,766.5	-3,368.3	6,087.9	6,066.9	21.06	289.039			
6,300.0	6,289.7	5,421.9	5,366.7	12.5	15.3	-124.03	-4,779.1	-3,376.3	6,106.0	6,084.6	21.43	284.914			
6,400.0	6,389.5	5,493.4	5,437.4	12.7	15.6	-124.06	-4,787.9	-3,382.5	6,124.4	6,102.7	21.75	281.590			
6,500.0	6,489.3	5,560.5	5,503.7	12.9	15.8	-124.09	-4,796.6	-3,388.2	6,143.3	6,121.3	22.06	278.482			
6,600.0	6,589.1	5,639.0	5,581.1	13.1	16.0	-124.12	-4,807.1	-3,395.2	6,162.7	6,140.4	22.39	275.243			
6,700.0	6,689.0	5,762.2	5,698.4	13.3	18.4	-124.64	-4,884.7	-3,446.2	6,179.0	6,154.4	24.53	251.944			
6,785.3	6,774.1	6,858.7	6,795.0	13.5	18.5	-124.68	-4,884.0	-3,446.4	6,181.5	6,156.6	24.86	248.657			
6,800.0	6,788.8	6,878.7	6,815.0	13.5	18.5	-113.66	-4,883.8	-3,446.5	6,181.8	6,156.9	24.94	247.855			
6,850.0	6,838.8	6,935.9	6,872.2	13.6	18.6	-3.12	-4,883.2	-3,446.7	6,180.8	6,155.6	25.15	245.750			
6,900.0	6,888.6	6,982.1	6,918.4	13.6	18.6	18.99	-4,882.7	-3,446.8	6,176.8	6,151.5	25.27	244.410			
6,950.0	6,938.1	7,027.0	6,963.3	13.7	18.7	24.44	-4,882.1	-3,447.0	6,169.9	6,144.6	25.32	243.635			
7,000.0	6,987.0	7,069.9	7,006.2	13.7	18.7	27.14	-4,881.7	-3,447.2	6,160.2	6,134.9	25.31	243.383			
7,050.0	7,035.0	7,112.1	7,048.3	13.6	18.8	29.00	-4,881.2	-3,447.5	6,147.6	6,122.4	25.24	243.565			
7,100.0	7,082.0	7,136.0	7,072.3	13.6	18.8	30.54	-4,881.0	-3,447.7	6,132.4	6,107.3	25.09	244.384			
7,150.0	7,127.7	7,181.6	7,117.8	13.5	18.9	32.05	-4,880.6	-3,448.1	6,114.4	6,089.5	24.95	245.021			
7,200.0	7,171.8	7,212.4	7,148.7	13.5	18.9	33.57	-4,880.4	-3,448.4	6,094.0	6,069.3	24.78	245.940			
7,250.0	7,214.2	7,247.0	7,183.3	13.4	18.9	35.22	-4,880.2	-3,448.8	6,071.2	6,046.6	24.62	246.593			
7,300.0	7,254.6	7,287.9	7,224.1	13.4	19.0	37.06	-4,880.0	-3,449.3	6,046.0	6,021.5	24.51	246.643			
7,350.0	7,292.9	7,326.0	7,262.2	13.3	19.0	39.12	-4,879.6	-3,450.0	6,018.5	5,994.1	24.47	245.929			
7,400.0	7,328.9	7,357.0	7,293.2	13.3	19.1	41.40	-4,879.4	-3,450.6	5,989.0	5,964.5	24.52	244.203			
7,450.0	7,362.3	7,385.5	7,321.7	13.3	19.1	43.98	-4,879.2	-3,451.0	5,957.5	5,932.8	24.71	241.078			
7,500.0	7,393.1	7,411.8	7,348.1	13.4	19.1	46.88	-4,879.0	-3,451.5	5,924.3	5,899.3	25.07	236.345			
7,550.0	7,421.1	7,437.8	7,374.0	13.5	19.2	50.16	-4,878.9	-3,451.9	5,889.5	5,863.9	25.62	229.909			
7,600.0	7,446.1	7,462.6	7,398.8	13.6	19.2	53.85	-4,878.8	-3,452.2	5,853.3	5,826.9	26.37	221.966			
7,650.0	7,468.0	7,484.3	7,420.5	13.8	19.2	57.96	-4,878.8	-3,452.5	5,815.8	5,788.5	27.31	212.972			
7,700.0	7,486.7	7,502.9	7,439.1	14.0	19.3	62.49	-4,878.7	-3,452.8	5,777.3	5,748.9	28.39	203.496			
7,750.0	7,502.2	7,518.2	7,454.4	14.2	19.3	67.41	-4,878.7	-3,453.0	5,738.0	5,708.4	29.55	194.175			
7,800.0	7,514.3	7,531.5	7,467.7	14.6	19.3	72.69	-4,878.6	-3,453.2	5,698.0	5,667.3	30.70	185.576			
7,850.0	7,523.0	7,541.1	7,477.3	14.9	19.3	78.21	-4,878.6	-3,453.3	5,657.5	5,625.8	31.75	178.210			
7,900.0	7,528.2	7,546.8	7,483.0	15.3	19.3	83.85	-4,878.6	-3,453.4	5,616.9	5,584.3	32.59	172.367			
7,950.2	7,530.0	7,548.7	7,484.9	15.8	19.3	89.50	-4,878.6	-3,453.4	5,576.0	5,542.9	33.16	168.132			
8,000.0	7,530.0	7,548.5	7,484.7	16.2	19.3	89.50	-4,878.6	-3,453.4	5,535.7	5,502.1	33.65	164.520			
8,100.0	7,530.0	7,548.2	7,484.4	17.3	19.3	89.50	-4,878.6	-3,453.4	5,455.1	5,420.4	34.71	157.150			
8,200.0	7,530.0	7,548.0	7,484.2	18.4	19.3	89.49	-4,878.6	-3,453.4	5,375.2	5,339.3	35.88	149.790			
8,300.0	7,530.0	7,547.7	7,483.9	19.7	19.3	89.49	-4,878.6	-3,453.4	5,295.9	5,258.8	37.14	142.577			
8,400.0	7,530.0	7,547.4	7,483.6	21.0	19.3	89.48	-4,878.6	-3,453.4	5,217.4	5,178.9	38.48	135.602			
8,500.0	7,530.0	7,547.1	7,483.3	22.4	19.3	89.48	-4,878.6	-3,453.4	5,139.6	5,099.7	39.87	128.923			
8,600.0	7,530.0	7,546.8	7,483.0	23.8	19.3	89.47	-4,878.6	-3,453.4	5,062.6	5,021.3	41.30	122.568			
8,700.0	7,530.0	7,546.6	7,482.8	25.3	19.3	89.47	-4,878.6	-3,453.4	4,986.4	4,943.6	42.78	116.551			
8,800.0	7,530.0	7,546.3	7,482.5	26.8	19.3	89.46	-4,878.6	-3,453.4	4,911.0	4,866.7	44.29	110.871			
8,900.0	7,530.0	7,546.0	7,482.2	28.3	19.3	89.46	-4,878.6	-3,453.4	4,836.6	4,790.7	45.83	105.522			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 838-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,530.0	7,545.7	7,481.9	29.9	19.3	89.45	-4,878.6	-3,453.4	4,763.0	4,715.6	47.40	100.489		
9,100.0	7,530.0	7,545.4	7,481.6	31.4	19.3	89.45	-4,878.6	-3,453.4	4,690.5	4,641.5	48.98	95.759		
9,200.0	7,530.0	7,545.1	7,481.3	33.0	19.3	89.44	-4,878.6	-3,453.4	4,619.0	4,568.4	50.58	91.314		
9,300.0	7,530.0	7,544.8	7,481.0	34.7	19.3	89.44	-4,878.6	-3,453.3	4,548.5	4,496.3	52.20	87.138		
9,400.0	7,530.0	7,544.5	7,480.8	36.3	19.3	89.43	-4,878.6	-3,453.3	4,479.2	4,425.4	53.83	83.214		
9,500.0	7,530.0	7,544.3	7,480.5	37.9	19.3	89.43	-4,878.6	-3,453.3	4,411.1	4,355.6	55.47	79.525		
9,600.0	7,530.0	7,544.0	7,480.2	39.6	19.3	89.42	-4,878.6	-3,453.3	4,344.2	4,287.1	57.12	76.057		
9,700.0	7,530.0	7,543.7	7,479.9	41.2	19.3	89.42	-4,878.6	-3,453.3	4,278.6	4,219.8	58.78	72.795		
9,800.0	7,530.0	7,543.4	7,479.6	42.9	19.3	89.41	-4,878.6	-3,453.3	4,214.3	4,153.9	60.44	69.725		
9,900.0	7,530.0	7,543.1	7,479.3	44.5	19.3	89.41	-4,878.6	-3,453.3	4,151.5	4,089.4	62.11	66.836		
10,000.0	7,530.0	7,542.8	7,479.0	46.2	19.3	89.40	-4,878.6	-3,453.3	4,090.1	4,026.3	63.79	64.115		
10,100.0	7,530.0	7,542.5	7,478.7	47.9	19.3	89.40	-4,878.6	-3,453.3	4,030.3	3,964.8	65.48	61.553		
10,200.0	7,530.0	7,542.2	7,478.4	49.6	19.3	89.39	-4,878.6	-3,453.3	3,972.1	3,904.9	67.17	59.138		
10,300.0	7,530.0	7,541.9	7,478.1	51.3	19.3	89.39	-4,878.6	-3,453.3	3,915.6	3,846.7	68.86	56.864		
10,400.0	7,530.0	7,541.6	7,477.8	53.0	19.3	89.38	-4,878.6	-3,453.3	3,860.8	3,790.3	70.56	54.720		
10,500.0	7,530.0	7,541.3	7,477.5	54.7	19.3	89.37	-4,878.6	-3,453.3	3,807.9	3,735.7	72.26	52.700		
10,600.0	7,530.0	7,541.0	7,477.2	56.4	19.3	89.37	-4,878.6	-3,453.3	3,756.9	3,683.0	73.96	50.796		
10,700.0	7,530.0	7,540.7	7,476.9	58.1	19.3	89.36	-4,878.6	-3,453.3	3,707.9	3,632.3	75.67	49.003		
10,800.0	7,530.0	7,540.4	7,476.6	59.8	19.3	89.36	-4,878.6	-3,453.3	3,661.0	3,583.6	77.38	47.314		
10,900.0	7,530.0	7,540.1	7,476.3	61.5	19.3	89.35	-4,878.6	-3,453.3	3,616.2	3,537.1	79.09	45.723		
11,000.0	7,530.0	7,539.8	7,476.0	63.2	19.3	89.35	-4,878.6	-3,453.3	3,573.7	3,492.9	80.80	44.227		
11,100.0	7,530.0	7,539.5	7,475.7	64.9	19.3	89.34	-4,878.6	-3,453.3	3,533.5	3,451.0	82.52	42.820		
11,200.0	7,530.0	7,539.2	7,475.4	66.6	19.3	89.34	-4,878.6	-3,453.3	3,495.7	3,411.5	84.24	41.498		
11,300.0	7,530.0	7,538.9	7,475.1	68.4	19.3	89.33	-4,878.6	-3,453.3	3,460.4	3,374.4	85.96	40.256		
11,400.0	7,530.0	7,538.6	7,474.8	70.1	19.3	89.33	-4,878.6	-3,453.3	3,427.6	3,339.9	87.68	39.092		
11,500.0	7,530.0	7,538.2	7,474.5	71.8	19.3	89.32	-4,878.6	-3,453.3	3,397.4	3,308.0	89.40	38.001		
11,600.0	7,530.0	7,537.9	7,474.1	73.5	19.3	89.32	-4,878.6	-3,453.3	3,370.0	3,278.9	91.13	36.981		
11,700.0	7,530.0	7,537.6	7,473.8	75.3	19.3	89.31	-4,878.6	-3,453.3	3,345.3	3,252.5	92.85	36.027		
11,800.0	7,530.0	7,537.3	7,473.5	77.0	19.3	89.30	-4,878.6	-3,453.3	3,323.5	3,228.9	94.58	35.138		
11,900.0	7,530.0	7,537.0	7,473.2	78.7	19.3	89.30	-4,878.6	-3,453.2	3,304.5	3,208.2	96.31	34.311		
12,000.0	7,530.0	7,536.7	7,472.9	80.4	19.3	89.29	-4,878.6	-3,453.2	3,288.4	3,190.4	98.04	33.542		
12,100.0	7,530.0	7,536.4	7,472.6	82.2	19.3	89.29	-4,878.6	-3,453.2	3,275.4	3,175.6	99.77	32.829		
12,200.0	7,530.0	7,536.0	7,472.3	83.9	19.3	89.28	-4,878.6	-3,453.2	3,265.3	3,163.8	101.50	32.170		
12,300.0	7,530.0	7,535.7	7,471.9	85.6	19.3	89.28	-4,878.6	-3,453.2	3,258.3	3,155.1	103.23	31.562		
12,400.0	7,530.0	7,535.4	7,471.6	87.4	19.3	89.27	-4,878.6	-3,453.2	3,254.3	3,149.4	104.97	31.003		
12,478.8	7,530.0	7,535.2	7,471.4	88.7	19.3	89.27	-4,878.6	-3,453.2	3,253.4	3,147.1	106.33	30.596 CC		
12,500.0	7,530.0	7,535.1	7,471.3	89.1	19.3	89.27	-4,878.6	-3,453.2	3,253.5	3,146.8	106.70	30.491 ES		
12,600.0	7,530.0	7,534.8	7,471.0	90.8	19.3	89.26	-4,878.6	-3,453.2	3,255.6	3,147.2	108.44	30.024		
12,700.0	7,530.0	7,534.4	7,470.7	92.6	19.3	89.25	-4,878.6	-3,453.2	3,260.9	3,150.7	110.17	29.598		
12,800.0	7,530.0	7,534.1	7,470.3	94.3	19.3	89.25	-4,878.6	-3,453.2	3,269.2	3,157.3	111.91	29.214		
12,900.0	7,530.0	7,533.8	7,470.0	96.0	19.3	89.24	-4,878.6	-3,453.2	3,280.5	3,166.9	113.64	28.867		
13,000.0	7,530.0	7,533.5	7,469.7	97.8	19.3	89.24	-4,878.6	-3,453.2	3,294.9	3,179.5	115.38	28.556		
13,100.0	7,530.0	7,533.1	7,469.3	99.5	19.3	89.23	-4,878.6	-3,453.2	3,312.2	3,195.0	117.12	28.280		
13,200.0	7,530.0	7,532.8	7,469.0	101.3	19.3	89.23	-4,878.6	-3,453.2	3,332.4	3,213.5	118.86	28.037		
13,300.0	7,530.0	7,532.5	7,468.7	103.0	19.3	89.22	-4,878.6	-3,453.2	3,355.4	3,234.8	120.60	27.824		
13,400.0	7,530.0	7,532.2	7,468.4	104.7	19.3	89.21	-4,878.6	-3,453.2	3,381.3	3,259.0	122.34	27.639		
13,500.0	7,530.0	7,531.8	7,468.0	106.5	19.3	89.21	-4,878.6	-3,453.2	3,409.9	3,285.8	124.08	27.482		
13,600.0	7,530.0	7,531.5	7,467.7	108.2	19.3	89.20	-4,878.6	-3,453.2	3,441.2	3,315.4	125.82	27.351		
13,700.0	7,530.0	7,531.2	7,467.4	110.0	19.3	89.20	-4,878.6	-3,453.2	3,475.0	3,347.5	127.56	27.243		
13,800.0	7,530.0	7,530.8	7,467.0	111.7	19.3	89.19	-4,878.6	-3,453.2	3,511.4	3,382.1	129.30	27.158		
13,900.0	7,530.0	7,530.5	7,466.7	113.4	19.3	89.18	-4,878.6	-3,453.2	3,550.3	3,419.2	131.04	27.093		
14,000.0	7,530.0	7,530.1	7,466.4	115.2	19.3	89.18	-4,878.6	-3,453.2	3,591.5	3,458.7	132.78	27.048		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 838-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,529.8	7,466.0	116.9	19.3	89.17	-4,878.6	-3,453.2	3,634.9	3,500.4	134.52	27.021		
14,200.0	7,530.0	7,529.5	7,465.7	118.7	19.3	89.17	-4,878.6	-3,453.2	3,680.6	3,544.4	136.27	27.011 SF		
14,300.0	7,530.0	7,529.1	7,465.3	120.4	19.3	89.16	-4,878.6	-3,453.1	3,728.4	3,590.4	138.01	27.016		
14,400.0	7,530.0	7,528.8	7,465.0	122.1	19.3	89.15	-4,878.6	-3,453.1	3,778.3	3,638.5	139.75	27.036		
14,500.0	7,530.0	7,528.4	7,464.6	123.9	19.3	89.15	-4,878.6	-3,453.1	3,830.1	3,688.6	141.49	27.069		
14,600.0	7,530.0	7,528.1	7,464.3	125.6	19.3	89.14	-4,878.6	-3,453.1	3,883.8	3,740.6	143.24	27.114		
14,700.0	7,530.0	7,527.7	7,464.0	127.4	19.3	89.14	-4,878.6	-3,453.1	3,939.3	3,794.3	144.98	27.171		
14,800.0	7,530.0	7,527.4	7,463.6	129.1	19.3	89.13	-4,878.6	-3,453.1	3,996.6	3,849.8	146.73	27.238		
14,900.0	7,530.0	7,527.1	7,463.3	130.9	19.3	89.12	-4,878.6	-3,453.1	4,055.5	3,907.0	148.47	27.315		
15,000.0	7,530.0	7,526.7	7,462.9	132.6	19.3	89.12	-4,878.6	-3,453.1	4,115.9	3,965.7	150.21	27.400		
15,100.0	7,530.0	7,526.3	7,462.6	134.4	19.3	89.11	-4,878.6	-3,453.1	4,177.9	4,026.0	151.96	27.494		
15,200.0	7,530.0	7,526.0	7,462.2	136.1	19.3	89.11	-4,878.6	-3,453.1	4,241.4	4,087.7	153.70	27.594		
15,300.0	7,530.0	7,525.6	7,461.9	137.9	19.3	89.10	-4,878.6	-3,453.1	4,306.2	4,150.8	155.45	27.702		
15,400.0	7,530.0	7,525.3	7,461.5	139.6	19.3	89.09	-4,878.6	-3,453.1	4,372.4	4,215.2	157.19	27.815		
15,500.0	7,530.0	7,524.9	7,461.1	141.3	19.3	89.09	-4,878.6	-3,453.1	4,439.8	4,280.9	158.94	27.934		
15,600.0	7,530.0	7,524.6	7,460.8	143.1	19.3	89.08	-4,878.6	-3,453.1	4,508.5	4,347.8	160.69	28.058		
15,700.0	7,530.0	7,524.2	7,460.4	144.8	19.3	89.07	-4,878.6	-3,453.1	4,578.3	4,415.8	162.43	28.186		
15,800.0	7,530.0	7,523.9	7,460.1	146.6	19.3	89.07	-4,878.6	-3,453.1	4,649.2	4,485.0	164.18	28.318		
15,900.0	7,530.0	7,523.5	7,459.7	148.3	19.3	89.06	-4,878.6	-3,453.1	4,721.1	4,555.2	165.92	28.454		
16,000.0	7,530.0	7,523.1	7,459.3	150.1	19.3	89.05	-4,878.6	-3,453.1	4,794.1	4,626.4	167.67	28.592		
16,100.0	7,530.0	7,522.8	7,459.0	151.8	19.3	89.05	-4,878.6	-3,453.1	4,868.0	4,698.6	169.42	28.734		
16,200.0	7,530.0	7,522.4	7,458.6	153.6	19.3	89.04	-4,878.6	-3,453.1	4,942.9	4,771.7	171.16	28.878		
16,300.0	7,530.0	7,522.0	7,458.2	155.3	19.3	89.04	-4,878.6	-3,453.1	5,018.6	4,845.7	172.91	29.024		
16,400.0	7,530.0	7,521.7	7,457.9	157.1	19.3	89.03	-4,878.6	-3,453.0	5,095.1	4,920.5	174.66	29.172		
16,500.0	7,530.0	7,521.3	7,457.5	158.8	19.3	89.02	-4,878.6	-3,453.0	5,172.5	4,996.1	176.40	29.322		
16,600.0	7,530.0	7,520.9	7,457.1	160.6	19.3	89.02	-4,878.6	-3,453.0	5,250.6	5,072.4	178.15	29.473		
16,700.0	7,530.0	7,520.6	7,456.8	162.3	19.3	89.01	-4,878.6	-3,453.0	5,329.4	5,149.5	179.90	29.625		
16,800.0	7,530.0	7,520.2	7,456.4	164.1	19.3	89.00	-4,878.6	-3,453.0	5,409.0	5,227.3	181.65	29.778		
16,900.0	7,530.0	7,519.8	7,456.0	165.8	19.3	89.00	-4,878.6	-3,453.0	5,489.2	5,305.8	183.39	29.931		
17,000.0	7,530.0	7,519.4	7,455.6	167.6	19.3	88.99	-4,878.6	-3,453.0	5,570.1	5,384.9	185.14	30.085		
17,100.0	7,530.0	7,519.1	7,455.3	169.3	19.3	88.98	-4,878.6	-3,453.0	5,651.5	5,464.6	186.89	30.240		
17,200.0	7,530.0	7,518.7	7,454.9	171.1	19.3	88.98	-4,878.7	-3,453.0	5,733.6	5,545.0	188.64	30.395		
17,300.0	7,530.0	7,518.4	7,454.6	172.8	19.3	88.97	-4,878.7	-3,453.0	5,816.2	5,625.8	190.38	30.550		
17,400.0	7,530.0	7,518.1	7,454.3	174.5	19.3	88.97	-4,878.7	-3,453.0	5,899.4	5,707.2	192.13	30.705		
17,411.2	7,530.0	7,518.0	7,454.3	174.7	19.3	88.97	-4,878.7	-3,453.0	5,908.8	5,716.4	192.33	30.722		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 59-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	1,677.4	1,627.0	0.0	7.1	-145.38	-3,960.3	-2,734.3	5,085.9					
100.0	100.0	1,754.0	1,699.3	0.2	7.6	-145.45	-3,943.5	-2,715.5	5,053.8	5,050.5	3.28	1,542.706		
200.0	200.0	1,830.8	1,771.8	0.3	8.1	-145.52	-3,926.9	-2,696.7	5,021.9	5,018.4	3.59	1,397.089		
300.0	300.0	1,944.0	1,878.9	0.5	8.8	-145.63	-3,902.1	-2,669.3	4,990.2	4,986.2	3.98	1,253.095		
400.0	400.0	1,995.6	1,927.6	0.7	9.1	-145.67	-3,890.9	-2,656.9	4,958.6	4,954.3	4.25	1,166.023		
500.0	500.0	2,047.7	1,977.2	0.8	9.4	-145.72	-3,880.0	-2,644.6	4,927.8	4,923.3	4.52	1,089.388		
600.0	600.0	2,164.2	2,087.8	1.0	10.1	-123.10	-3,856.1	-2,617.2	4,898.1	4,892.5	5.55	882.876		
700.0	700.0	2,289.6	2,206.5	1.2	10.8	-123.52	-3,829.6	-2,586.6	4,868.1	4,862.0	6.06	803.825		
800.0	799.9	2,377.0	2,289.2	1.4	11.3	-123.91	-3,811.3	-2,565.2	4,839.2	4,832.7	6.48	746.474		
848.7	848.4	2,420.0	2,329.9	1.5	11.6	-124.10	-3,802.3	-2,554.6	4,825.5	4,818.8	6.69	720.772		
900.0	899.7	2,452.3	2,360.5	1.6	11.8	-124.15	-3,795.6	-2,546.8	4,811.2	4,804.4	6.87	700.425		
1,000.0	999.5	2,515.0	2,420.1	1.8	12.2	-124.26	-3,782.6	-2,532.0	4,784.1	4,776.9	7.21	663.559		
1,100.0	1,099.3	2,625.8	2,525.3	2.0	12.8	-124.45	-3,760.0	-2,505.7	4,757.2	4,749.5	7.68	619.035		
1,200.0	1,199.1	2,734.9	2,628.9	2.2	13.5	-124.63	-3,737.3	-2,480.1	4,730.0	4,721.9	8.15	580.502		
1,300.0	1,298.9	2,896.0	2,781.3	2.4	14.4	-124.92	-3,703.0	-2,440.6	4,701.9	4,693.2	8.76	536.627		
1,400.0	1,398.8	2,958.3	2,840.1	2.6	14.8	-125.03	-3,689.4	-2,425.4	4,673.5	4,664.4	9.12	512.479		
1,500.0	1,498.6	3,053.6	2,930.3	2.8	15.4	-125.20	-3,669.3	-2,402.3	4,645.9	4,636.3	9.56	485.728		
1,600.0	1,598.4	3,208.0	3,076.1	3.0	16.4	-125.48	-3,635.2	-2,364.4	4,617.2	4,607.0	10.17	453.951		
1,700.0	1,698.2	3,276.0	3,140.2	3.2	16.8	-125.61	-3,620.2	-2,347.4	4,588.3	4,577.8	10.55	434.746		
1,800.0	1,798.0	3,336.7	3,197.6	3.4	17.1	-125.73	-3,607.1	-2,332.3	4,560.1	4,549.2	10.91	417.856		
1,900.0	1,897.8	3,393.1	3,251.0	3.6	17.5	-125.83	-3,595.3	-2,318.8	4,532.9	4,521.6	11.26	402.507		
2,000.0	1,997.7	3,467.0	3,321.2	3.8	17.9	-125.97	-3,580.3	-2,301.3	4,506.4	4,494.7	11.66	386.439		
2,100.0	2,097.5	3,589.7	3,437.8	4.0	18.6	-126.21	-3,554.9	-2,272.5	4,479.7	4,467.5	12.19	367.488		
2,200.0	2,197.3	3,656.0	3,500.8	4.2	19.0	-126.33	-3,541.1	-2,257.1	4,453.1	4,440.5	12.57	354.363		
2,300.0	2,297.1	3,801.6	3,639.0	4.4	19.9	-126.61	-3,510.7	-2,222.7	4,426.2	4,413.1	13.18	335.862		
2,400.0	2,396.9	3,952.5	3,781.4	4.6	20.8	-126.93	-3,478.7	-2,185.0	4,398.4	4,384.6	13.83	318.063		
2,500.0	2,496.7	4,039.5	3,863.5	4.8	21.4	-127.11	-3,459.5	-2,163.3	4,370.1	4,355.8	14.28	306.002		
2,600.0	2,596.5	4,132.0	3,950.8	5.0	21.9	-127.30	-3,439.3	-2,140.3	4,341.9	4,327.1	14.76	294.204		
2,700.0	2,696.4	4,196.8	4,012.0	5.2	22.3	-127.44	-3,425.3	-2,124.3	4,314.1	4,298.9	15.15	284.773		
2,800.0	2,796.2	4,273.0	4,084.2	5.4	22.8	-127.60	-3,409.2	-2,105.8	4,287.0	4,271.4	15.58	275.237		
2,900.0	2,896.0	4,343.7	4,151.2	5.6	23.2	-127.75	-3,394.4	-2,088.9	4,260.2	4,244.2	15.98	266.520		
3,000.0	2,995.8	4,421.2	4,224.9	5.8	23.6	-127.91	-3,378.5	-2,070.9	4,234.2	4,217.8	16.41	257.970		
3,100.0	3,095.6	4,494.8	4,294.9	6.0	24.1	-128.06	-3,363.5	-2,053.9	4,208.5	4,191.7	16.83	250.050		
3,200.0	3,195.4	4,588.0	4,383.7	6.2	24.6	-128.26	-3,344.8	-2,032.8	4,183.3	4,166.0	17.30	241.770		
3,300.0	3,295.2	4,726.3	4,515.1	6.4	25.4	-128.55	-3,316.0	-2,000.5	4,157.0	4,139.1	17.94	231.774		
3,400.0	3,395.1	4,862.0	4,644.1	6.6	26.2	-128.85	-3,288.1	-1,968.9	4,131.5	4,112.9	18.56	222.553		
3,500.0	3,494.9	4,926.0	4,704.7	6.8	26.6	-129.00	-3,274.5	-1,953.6	4,104.8	4,085.8	18.97	216.414		
3,600.0	3,594.7	5,006.6	4,781.3	7.0	27.1	-129.18	-3,258.0	-1,934.7	4,079.0	4,059.6	19.42	210.019		
3,700.0	3,694.5	5,079.0	4,850.1	7.2	27.5	-129.34	-3,243.1	-1,918.0	4,053.4	4,033.5	19.84	204.258		
3,800.0	3,794.3	5,201.1	4,966.4	7.4	28.2	-129.60	-3,217.7	-1,890.8	4,028.2	4,007.8	20.42	197.259		
3,900.0	3,894.1	5,283.8	5,045.1	7.6	28.7	-129.78	-3,200.2	-1,872.1	4,002.5	3,981.6	20.88	191.670		
4,000.0	3,994.0	5,352.8	5,110.8	7.8	29.1	-129.94	-3,186.0	-1,856.6	3,977.3	3,956.0	21.29	186.775		
4,100.0	4,093.8	5,397.9	5,153.9	8.0	29.3	-130.03	-3,176.8	-1,847.0	3,953.1	3,931.4	21.63	182.790		
4,200.0	4,193.6	5,439.7	5,194.0	8.2	29.5	-130.12	-3,168.8	-1,838.5	3,930.3	3,908.3	21.95	179.083		
4,300.0	4,293.4	5,524.8	5,275.9	8.4	30.0	-130.30	-3,153.1	-1,821.3	3,908.3	3,885.9	22.42	174.358		
4,400.0	4,393.2	5,592.0	5,340.5	8.6	30.3	-130.46	-3,141.5	-1,806.8	3,886.7	3,863.9	22.85	170.087		
4,500.0	4,493.0	5,659.8	5,405.7	8.8	30.7	-130.64	-3,130.4	-1,792.0	3,866.0	3,842.7	23.29	166.025		
4,600.0	4,592.8	5,779.9	5,521.3	9.0	31.3	-130.92	-3,109.6	-1,767.0	3,844.7	3,820.8	23.88	161.022		
4,700.0	4,692.7	5,814.0	5,554.2	9.3	31.4	-130.99	-3,103.9	-1,760.3	3,824.7	3,800.5	24.18	158.179		
4,800.0	4,792.5	5,879.6	5,617.8	9.5	31.7	-131.14	-3,093.4	-1,748.1	3,805.9	3,781.3	24.57	154.898		
4,900.0	4,892.3	5,941.0	5,677.5	9.7	32.0	-131.26	-3,084.0	-1,737.3	3,788.2	3,763.2	24.95	151.848		
5,000.0	4,992.1	5,986.1	5,721.6	9.9	32.2	-131.35	-3,077.4	-1,729.9	3,771.6	3,746.4	25.27	149.257		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 59-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,091.9	6,062.0	5,795.8	10.1	32.5	-131.50	-3,066.7	-1,718.3	3,756.2	3,730.5	25.67	146.310		
5,200.0	5,191.7	6,131.0	5,863.4	10.3	32.7	-131.62	-3,057.1	-1,708.6	3,741.4	3,715.3	26.04	143.673		
5,300.0	5,291.5	6,163.1	5,895.0	10.5	32.8	-131.67	-3,052.9	-1,704.5	3,727.9	3,701.5	26.31	141.680		
5,400.0	5,391.4	6,195.0	5,926.4	10.7	32.9	-131.72	-3,049.1	-1,700.7	3,716.0	3,689.4	26.58	139.797		
5,500.0	5,491.2	6,258.0	5,988.7	10.9	33.1	-131.81	-3,042.5	-1,693.8	3,705.7	3,678.8	26.92	137.661		
5,600.0	5,591.0	6,301.1	6,031.4	11.1	33.2	-131.88	-3,038.3	-1,689.7	3,696.8	3,669.6	27.21	135.878		
5,700.0	5,690.8	6,353.0	6,082.9	11.3	33.4	-131.95	-3,033.7	-1,685.1	3,689.0	3,661.5	27.51	134.105		
5,800.0	5,790.6	6,410.2	6,139.7	11.5	33.5	-132.02	-3,029.2	-1,680.7	3,682.6	3,654.8	27.82	132.387		
5,900.0	5,890.4	6,449.0	6,178.3	11.7	33.6	-132.07	-3,026.3	-1,677.9	3,677.3	3,649.2	28.09	130.927		
6,000.0	5,990.3	6,515.5	6,244.5	11.9	33.7	-132.14	-3,022.0	-1,673.8	3,673.0	3,644.6	28.40	129.345		
6,100.0	6,090.1	6,575.0	6,303.9	12.1	33.8	-132.20	-3,019.1	-1,671.0	3,670.5	3,641.8	28.69	127.923		
6,200.0	6,189.9	6,624.4	6,353.2	12.3	33.8	-132.25	-3,017.1	-1,669.2	3,669.2	3,640.2	28.97	126.657		
6,300.0	6,289.7	6,702.0	6,430.8	12.5	33.9	-132.33	-3,014.4	-1,666.6	3,668.7	3,639.4	29.29	125.249		
6,308.8	6,298.5	6,702.0	6,430.8	12.5	33.9	-132.33	-3,014.4	-1,666.6	3,668.7	3,639.4	29.31	125.176		
6,400.0	6,389.5	6,745.9	6,474.6	12.7	34.0	-132.37	-3,013.3	-1,665.5	3,669.3	3,639.7	29.55	124.157		
6,500.0	6,489.3	6,798.0	6,526.7	12.9	34.0	-132.41	-3,012.5	-1,664.5	3,671.3	3,641.5	29.83	123.080		
6,600.0	6,589.1	6,884.5	6,613.2	13.1	34.1	-132.48	-3,011.8	-1,663.4	3,674.0	3,643.9	30.15	121.851		
6,700.0	6,689.0	6,954.1	6,682.8	13.3	34.1	-132.53	-3,011.2	-1,663.4	3,677.5	3,647.0	30.44	120.826		
6,785.3	6,774.1	7,024.4	6,753.1	13.5	34.2	-132.57	-3,011.0	-1,663.7	3,680.9	3,650.2	30.70	119.916		
6,800.0	6,788.8	7,040.5	6,769.2	13.5	34.2	-121.56	-3,011.0	-1,663.7	3,681.4	3,650.6	30.75	119.714		
6,850.0	6,838.8	7,095.2	6,823.9	13.6	34.2	-11.06	-3,011.0	-1,663.8	3,680.9	3,650.1	30.82	119.450		
6,900.0	6,888.6	7,145.2	6,873.9	13.6	34.3	11.00	-3,011.0	-1,663.7	3,677.2	3,646.5	30.69	119.832		
6,950.0	6,938.1	7,192.4	6,921.1	13.7	34.3	16.38	-3,010.9	-1,663.7	3,670.3	3,639.9	30.37	120.859		
7,000.0	6,987.0	7,246.9	6,975.6	13.7	34.3	19.00	-3,010.9	-1,663.7	3,660.3	3,630.4	29.87	122.526		
7,050.0	7,035.0	7,305.8	7,034.5	13.6	34.4	20.80	-3,010.6	-1,663.8	3,647.1	3,617.9	29.20	124.884		
7,100.0	7,082.0	7,356.8	7,085.5	13.6	34.4	22.29	-3,010.3	-1,663.9	3,630.8	3,602.4	28.37	127.988		
7,150.0	7,127.7	7,401.0	7,129.7	13.5	34.4	23.69	-3,010.0	-1,663.8	3,611.5	3,584.2	27.39	131.877		
7,200.0	7,171.8	7,444.8	7,173.5	13.5	34.5	25.14	-3,009.8	-1,663.7	3,589.5	3,563.2	26.29	136.538		
7,250.0	7,214.2	7,482.7	7,211.4	13.4	34.5	26.68	-3,009.6	-1,663.7	3,564.7	3,539.6	25.12	141.923		
7,300.0	7,254.6	7,518.9	7,247.6	13.4	34.5	28.39	-3,009.5	-1,663.5	3,537.5	3,513.6	23.94	147.779		
7,350.0	7,292.9	7,553.4	7,282.1	13.3	34.5	30.33	-3,009.5	-1,663.5	3,507.9	3,485.0	22.85	153.510		
7,400.0	7,328.9	7,586.0	7,314.7	13.3	34.6	32.54	-3,009.4	-1,663.4	3,476.0	3,454.0	22.01	157.963		
7,450.0	7,362.3	7,616.3	7,345.0	13.3	34.6	35.10	-3,009.4	-1,663.4	3,442.1	3,420.5	21.59	159.414		
7,500.0	7,393.1	7,644.0	7,372.7	13.4	34.6	38.06	-3,009.4	-1,663.4	3,406.3	3,384.5	21.80	156.221		
7,550.0	7,421.1	7,669.1	7,397.8	13.5	34.6	41.49	-3,009.5	-1,663.4	3,368.7	3,346.0	22.76	148.042		
7,600.0	7,446.1	7,691.6	7,420.3	13.6	34.6	45.46	-3,009.5	-1,663.4	3,329.7	3,305.2	24.43	136.279		
7,650.0	7,468.0	7,711.5	7,440.1	13.8	34.6	50.05	-3,009.6	-1,663.4	3,289.3	3,262.6	26.72	123.098		
7,700.0	7,486.7	7,730.3	7,459.0	14.0	34.7	55.35	-3,009.6	-1,663.4	3,247.8	3,218.4	29.46	110.241		
7,750.0	7,502.2	7,746.8	7,475.5	14.2	34.7	61.35	-3,009.7	-1,663.4	3,205.4	3,173.0	32.41	98.891		
7,800.0	7,514.3	7,759.7	7,488.4	14.6	34.7	67.98	-3,009.7	-1,663.4	3,162.4	3,127.1	35.29	89.623		
7,850.0	7,523.0	7,769.0	7,497.7	14.9	34.7	75.07	-3,009.7	-1,663.4	3,118.8	3,081.1	37.77	82.580		
7,900.0	7,528.2	7,774.6	7,503.3	15.3	34.7	82.41	-3,009.7	-1,663.4	3,075.1	3,035.5	39.58	77.683		
7,950.2	7,530.0	7,776.5	7,505.2	15.8	34.7	89.74	-3,009.7	-1,663.4	3,031.1	2,990.6	40.57	74.713		
8,000.0	7,530.0	7,776.7	7,505.3	16.2	34.7	89.74	-3,009.7	-1,663.4	2,987.8	2,946.7	41.05	72.777		
8,100.0	7,530.0	7,776.9	7,505.6	17.3	34.7	89.75	-3,009.7	-1,663.4	2,901.3	2,859.1	42.12	68.881		
8,200.0	7,530.0	7,777.1	7,505.8	18.4	34.7	89.76	-3,009.7	-1,663.4	2,815.6	2,772.3	43.29	65.038		
8,300.0	7,530.0	7,777.3	7,506.0	19.7	34.7	89.77	-3,009.7	-1,663.4	2,731.0	2,686.4	44.55	61.298		
8,400.0	7,530.0	7,777.5	7,506.2	21.0	34.7	89.77	-3,009.7	-1,663.4	2,647.4	2,601.5	45.88	57.697		
8,500.0	7,530.0	7,777.7	7,506.4	22.4	34.7	89.78	-3,009.7	-1,663.4	2,565.0	2,517.7	47.28	54.257		
8,600.0	7,530.0	7,777.9	7,506.6	23.8	34.7	89.79	-3,009.7	-1,663.4	2,483.9	2,435.2	48.71	50.989		
8,700.0	7,530.0	7,778.1	7,506.8	25.3	34.7	89.80	-3,009.7	-1,663.4	2,404.2	2,354.0	50.19	47.899		
8,800.0	7,530.0	7,778.3	7,507.0	26.8	34.7	89.81	-3,009.7	-1,663.4	2,326.1	2,274.4	51.71	44.987		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 59-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,778.6	7,507.3	28.3	34.7	89.82	-3,009.7	-1,663.4	2,249.7	2,196.5	53.25	42.250		
9,000.0	7,530.0	7,778.8	7,507.5	29.9	34.7	89.82	-3,009.7	-1,663.4	2,175.3	2,120.5	54.81	39.686		
9,100.0	7,530.0	7,779.0	7,507.7	31.4	34.7	89.83	-3,009.7	-1,663.4	2,102.9	2,046.5	56.40	37.288		
9,200.0	7,530.0	7,779.2	7,507.9	33.0	34.7	89.84	-3,009.7	-1,663.4	2,032.9	1,974.9	58.00	35.051		
9,300.0	7,530.0	7,779.4	7,508.1	34.7	34.7	89.85	-3,009.7	-1,663.4	1,965.5	1,905.9	59.62	32.970		
9,400.0	7,530.0	7,779.6	7,508.3	36.3	34.7	89.85	-3,009.7	-1,663.4	1,901.0	1,839.8	61.24	31.039		
9,500.0	7,530.0	7,779.8	7,508.5	37.9	34.7	89.86	-3,009.7	-1,663.4	1,839.6	1,776.8	62.89	29.254		
9,600.0	7,530.0	7,780.0	7,508.7	39.6	34.7	89.87	-3,009.7	-1,663.4	1,781.8	1,717.3	64.54	27.609		
9,700.0	7,530.0	7,780.2	7,508.9	41.2	34.7	89.88	-3,009.7	-1,663.4	1,727.8	1,661.6	66.19	26.102		
9,800.0	7,530.0	7,780.4	7,509.1	42.9	34.7	89.89	-3,009.7	-1,663.4	1,678.0	1,610.2	67.86	24.727		
9,900.0	7,530.0	7,780.6	7,509.3	44.5	34.7	89.89	-3,009.7	-1,663.4	1,632.9	1,563.3	69.54	23.483		
10,000.0	7,530.0	7,780.8	7,509.5	46.2	34.7	89.90	-3,009.7	-1,663.4	1,592.7	1,521.5	71.21	22.365		
10,100.0	7,530.0	7,781.0	7,509.7	47.9	34.7	89.91	-3,009.7	-1,663.4	1,558.0	1,485.1	72.90	21.372		
10,200.0	7,530.0	7,781.2	7,509.8	49.6	34.7	89.92	-3,009.7	-1,663.4	1,529.0	1,454.4	74.59	20.499		
10,300.0	7,530.0	7,781.3	7,510.0	51.3	34.7	89.92	-3,009.7	-1,663.4	1,506.1	1,429.8	76.28	19.743		
10,400.0	7,530.0	7,781.5	7,510.2	53.0	34.7	89.93	-3,009.7	-1,663.4	1,489.6	1,411.6	77.98	19.102		
10,500.0	7,530.0	7,781.7	7,510.4	54.7	34.7	89.94	-3,009.7	-1,663.4	1,479.6	1,400.0	79.68	18.569		
10,597.5	7,530.0	7,781.9	7,510.6	56.3	34.7	89.95	-3,009.7	-1,663.4	1,476.4	1,395.1	81.34	18.150 CC		
10,600.0	7,530.0	7,781.9	7,510.6	56.4	34.7	89.95	-3,009.7	-1,663.4	1,476.4	1,395.0	81.39	18.141 ES		
10,700.0	7,530.0	7,782.1	7,510.8	58.1	34.7	89.95	-3,009.7	-1,663.4	1,480.0	1,396.9	83.09	17.811		
10,800.0	7,530.0	7,782.3	7,511.0	59.8	34.7	89.96	-3,009.8	-1,663.4	1,490.2	1,405.4	84.81	17.573		
10,900.0	7,530.0	7,782.5	7,511.2	61.5	34.7	89.97	-3,009.8	-1,663.4	1,507.1	1,420.6	86.52	17.419		
11,000.0	7,530.0	7,782.7	7,511.4	63.2	34.7	89.98	-3,009.8	-1,663.4	1,530.3	1,442.1	88.23	17.344		
11,100.0	7,530.0	7,782.9	7,511.6	64.9	34.7	89.98	-3,009.8	-1,663.4	1,559.6	1,469.6	89.95	17.338 SF		
11,200.0	7,530.0	7,783.0	7,511.7	66.6	34.7	89.99	-3,009.8	-1,663.4	1,594.6	1,503.0	91.67	17.395		
11,300.0	7,530.0	7,783.2	7,511.9	68.4	34.7	90.00	-3,009.8	-1,663.4	1,635.0	1,541.6	93.39	17.507		
11,400.0	7,530.0	7,783.4	7,512.1	70.1	34.7	90.00	-3,009.8	-1,663.4	1,680.4	1,585.3	95.11	17.668		
11,500.0	7,530.0	7,783.6	7,512.3	71.8	34.7	90.01	-3,009.8	-1,663.4	1,730.4	1,633.6	96.84	17.869		
11,600.0	7,530.0	7,783.8	7,512.5	73.5	34.7	90.02	-3,009.8	-1,663.4	1,784.6	1,686.0	98.56	18.106		
11,700.0	7,530.0	7,784.0	7,512.7	75.3	34.7	90.02	-3,009.8	-1,663.4	1,842.6	1,742.4	100.29	18.373		
11,800.0	7,530.0	7,784.1	7,512.8	77.0	34.7	90.03	-3,009.8	-1,663.4	1,904.2	1,802.1	102.02	18.665		
11,900.0	7,530.0	7,784.3	7,513.0	78.7	34.7	90.04	-3,009.8	-1,663.4	1,968.8	1,865.1	103.75	18.977		
12,000.0	7,530.0	7,784.5	7,513.2	80.4	34.7	90.05	-3,009.8	-1,663.4	2,036.4	1,930.9	105.48	19.306		
12,100.0	7,530.0	7,784.7	7,513.4	82.2	34.7	90.05	-3,009.8	-1,663.4	2,106.5	1,999.3	107.21	19.648		
12,200.0	7,530.0	7,784.9	7,513.5	83.9	34.7	90.06	-3,009.8	-1,663.4	2,179.0	2,070.0	108.94	20.001		
12,300.0	7,530.0	7,785.0	7,513.7	85.6	34.7	90.07	-3,009.8	-1,663.4	2,253.5	2,142.8	110.67	20.362		
12,400.0	7,530.0	7,785.2	7,513.9	87.4	34.7	90.07	-3,009.8	-1,663.4	2,330.0	2,217.6	112.41	20.728		
12,500.0	7,530.0	7,785.4	7,514.1	89.1	34.7	90.08	-3,009.8	-1,663.4	2,408.2	2,294.0	114.14	21.098		
12,600.0	7,530.0	7,785.5	7,514.2	90.8	34.7	90.09	-3,009.8	-1,663.4	2,487.9	2,372.1	115.88	21.470		
12,700.0	7,530.0	7,785.7	7,514.4	92.6	34.7	90.09	-3,009.8	-1,663.4	2,569.1	2,451.5	117.62	21.843		
12,800.0	7,530.0	7,785.9	7,514.6	94.3	34.7	90.10	-3,009.8	-1,663.4	2,651.6	2,532.2	119.35	22.216		
12,900.0	7,530.0	7,786.1	7,514.8	96.0	34.7	90.11	-3,009.8	-1,663.4	2,735.2	2,614.1	121.09	22.588		
13,000.0	7,530.0	7,786.2	7,514.9	97.8	34.7	90.11	-3,009.8	-1,663.4	2,819.9	2,697.1	122.83	22.958		
13,100.0	7,530.0	7,786.4	7,515.1	99.5	34.7	90.12	-3,009.8	-1,663.4	2,905.6	2,781.0	124.57	23.325		
13,200.0	7,530.0	7,786.6	7,515.3	101.3	34.7	90.13	-3,009.8	-1,663.4	2,992.1	2,865.8	126.31	23.689		
13,300.0	7,530.0	7,786.7	7,515.4	103.0	34.7	90.13	-3,009.8	-1,663.4	3,079.5	2,951.5	128.05	24.050		
13,400.0	7,530.0	7,786.9	7,515.6	104.7	34.7	90.14	-3,009.8	-1,663.4	3,167.6	3,037.8	129.79	24.406		
13,500.0	7,530.0	7,787.1	7,515.8	106.5	34.7	90.15	-3,009.8	-1,663.4	3,256.4	3,124.9	131.53	24.759		
13,600.0	7,530.0	7,787.2	7,515.9	108.2	34.7	90.15	-3,009.8	-1,663.4	3,345.9	3,212.6	133.27	25.106		
13,700.0	7,530.0	7,787.4	7,516.1	110.0	34.7	90.16	-3,009.8	-1,663.4	3,435.9	3,300.9	135.01	25.449		
13,800.0	7,530.0	7,787.6	7,516.3	111.7	34.7	90.17	-3,009.8	-1,663.4	3,526.4	3,389.7	136.75	25.787		
13,900.0	7,530.0	7,787.7	7,516.4	113.4	34.7	90.17	-3,009.8	-1,663.4	3,617.5	3,479.0	138.49	26.120		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 59-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	7,787.9	7,516.6	115.2	34.7	90.18	-3,009.8	-1,663.4	3,709.0	3,568.8	140.24	26.448		
14,100.0	7,530.0	7,788.1	7,516.8	116.9	34.7	90.18	-3,009.8	-1,663.4	3,801.0	3,659.0	141.98	26.771		
14,200.0	7,530.0	7,788.2	7,516.9	118.7	34.7	90.19	-3,009.8	-1,663.4	3,893.3	3,749.6	143.72	27.089		
14,300.0	7,530.0	7,788.4	7,517.1	120.4	34.7	90.20	-3,009.8	-1,663.4	3,986.0	3,840.5	145.47	27.401		
14,400.0	7,530.0	7,788.5	7,517.2	122.1	34.7	90.20	-3,009.8	-1,663.4	4,079.1	3,931.9	147.21	27.709		
14,500.0	7,530.0	7,788.7	7,517.4	123.9	34.7	90.21	-3,009.8	-1,663.4	4,172.4	4,023.5	148.96	28.011		
14,600.0	7,530.0	7,788.9	7,517.6	125.6	34.7	90.22	-3,009.8	-1,663.4	4,266.1	4,115.4	150.70	28.309		
14,700.0	7,530.0	7,789.0	7,517.7	127.4	34.7	90.22	-3,009.8	-1,663.4	4,360.1	4,207.6	152.44	28.601		
14,800.0	7,530.0	7,789.2	7,517.9	129.1	34.7	90.23	-3,009.8	-1,663.4	4,454.3	4,300.1	154.19	28.888		
14,900.0	7,530.0	7,789.3	7,518.0	130.9	34.7	90.23	-3,009.8	-1,663.4	4,548.8	4,392.8	155.94	29.171		
15,000.0	7,530.0	7,789.5	7,518.2	132.6	34.7	90.24	-3,009.8	-1,663.4	4,643.5	4,485.8	157.68	29.449		
15,100.0	7,530.0	7,789.6	7,518.3	134.4	34.7	90.25	-3,009.8	-1,663.4	4,738.4	4,579.0	159.43	29.721		
15,200.0	7,530.0	7,789.8	7,518.5	136.1	34.7	90.25	-3,009.8	-1,663.4	4,833.5	4,672.3	161.17	29.990		
15,300.0	7,530.0	7,790.0	7,518.6	137.9	34.7	90.26	-3,009.8	-1,663.4	4,928.8	4,765.9	162.92	30.253		
15,400.0	7,530.0	7,790.1	7,518.8	139.6	34.7	90.26	-3,009.8	-1,663.4	5,024.3	4,859.7	164.67	30.512		
15,500.0	7,530.0	7,790.3	7,519.0	141.3	34.7	90.27	-3,009.8	-1,663.4	5,120.0	4,953.6	166.41	30.767		
15,600.0	7,530.0	7,790.4	7,519.1	143.1	34.7	90.28	-3,009.8	-1,663.4	5,215.8	5,047.7	168.16	31.017		
15,700.0	7,530.0	7,790.6	7,519.3	144.8	34.7	90.28	-3,009.8	-1,663.4	5,311.8	5,141.9	169.91	31.263		
15,800.0	7,530.0	7,790.7	7,519.4	146.6	34.7	90.29	-3,009.8	-1,663.4	5,407.9	5,236.3	171.65	31.505		
15,900.0	7,530.0	7,790.9	7,519.6	148.3	34.7	90.29	-3,009.8	-1,663.4	5,504.2	5,330.8	173.40	31.743		
16,000.0	7,530.0	7,791.0	7,519.7	150.1	34.7	90.30	-3,009.8	-1,663.4	5,600.6	5,425.5	175.15	31.977		
16,100.0	7,530.0	7,791.2	7,519.9	151.8	34.7	90.30	-3,009.8	-1,663.4	5,697.1	5,520.2	176.89	32.206		
16,200.0	7,530.0	7,791.3	7,520.0	153.6	34.7	90.31	-3,009.8	-1,663.4	5,793.8	5,615.1	178.64	32.432		
16,300.0	7,530.0	7,791.5	7,520.1	155.3	34.7	90.32	-3,009.8	-1,663.4	5,890.5	5,710.1	180.39	32.654		
16,400.0	7,530.0	7,791.6	7,520.3	157.1	34.7	90.32	-3,009.8	-1,663.4	5,987.4	5,805.2	182.14	32.873		
16,500.0	7,530.0	7,791.7	7,520.4	158.8	34.7	90.33	-3,009.8	-1,663.4	6,084.3	5,900.5	183.89	33.088		
16,600.0	7,530.0	7,791.9	7,520.6	160.6	34.7	90.33	-3,009.8	-1,663.4	6,181.4	5,995.8	185.63	33.299		
16,700.0	7,530.0	7,792.0	7,520.7	162.3	34.7	90.34	-3,009.8	-1,663.4	6,278.6	6,091.2	187.38	33.507		
16,800.0	7,530.0	7,792.2	7,520.9	164.1	34.7	90.34	-3,009.8	-1,663.4	6,375.8	6,186.7	189.13	33.711		
16,900.0	7,530.0	7,792.3	7,521.0	165.8	34.7	90.35	-3,009.8	-1,663.4	6,473.1	6,282.2	190.88	33.912		
17,000.0	7,530.0	7,792.5	7,521.2	167.6	34.7	90.36	-3,009.8	-1,663.4	6,570.5	6,377.9	192.63	34.110		
17,100.0	7,530.0	7,792.6	7,521.3	169.3	34.7	90.36	-3,009.8	-1,663.4	6,668.0	6,473.6	194.38	34.304		
17,200.0	7,530.0	7,792.8	7,521.4	171.1	34.7	90.37	-3,009.8	-1,663.4	6,765.6	6,569.4	196.13	34.496		
17,300.0	7,530.0	7,792.9	7,521.6	172.8	34.7	90.37	-3,009.8	-1,663.4	6,863.2	6,665.3	197.88	34.684		
17,400.0	7,530.0	7,793.0	7,521.7	174.5	34.7	90.38	-3,009.8	-1,663.4	6,960.9	6,761.2	199.62	34.870		
17,411.2	7,530.0	7,793.1	7,521.7	174.7	34.7	90.38	-3,009.8	-1,663.4	6,971.9	6,772.0	199.82	34.890		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-124.03	-2,852.3	-4,223.8	5,096.9					
100.0	100.0	60.0	60.0	0.2	0.1	-124.03	-2,852.3	-4,223.8	5,096.7	5,096.4	0.26	N/A		
200.0	200.0	160.0	160.0	0.3	0.3	-124.03	-2,852.3	-4,223.8	5,096.7	5,096.1	0.61	8,412.816		
300.0	300.0	260.0	260.0	0.5	0.5	-124.03	-2,852.3	-4,223.8	5,096.7	5,095.7	0.95	5,337.478		
400.0	400.0	360.0	360.0	0.7	0.6	-124.03	-2,852.3	-4,223.8	5,096.7	5,095.4	1.30	3,908.654		
500.0	500.0	460.0	460.0	0.8	0.8	-124.03	-2,852.3	-4,223.8	5,096.7	5,095.0	1.65	3,083.273		
600.0	600.0	560.0	560.0	1.0	1.0	-101.03	-2,852.3	-4,223.8	5,096.9	5,094.9	2.00	2,545.252		
700.0	700.0	660.0	660.0	1.2	1.2	-101.05	-2,852.3	-4,223.8	5,097.4	5,095.0	2.35	2,165.048		
800.0	799.9	759.9	759.9	1.4	1.3	-101.09	-2,852.3	-4,223.8	5,098.2	5,095.5	2.71	1,880.184		
848.7	848.4	808.4	808.4	1.5	1.4	-101.12	-2,852.3	-4,223.8	5,098.7	5,095.8	2.89	1,765.753		
900.0	899.7	859.7	859.7	1.6	1.5	-101.15	-2,852.3	-4,223.8	5,099.3	5,096.3	3.07	1,658.670		
1,000.0	999.5	959.5	959.5	1.8	1.7	-101.22	-2,852.3	-4,223.8	5,100.5	5,097.1	3.44	1,482.534		
1,100.0	1,099.3	1,059.3	1,059.3	2.0	1.8	-101.28	-2,852.3	-4,223.8	5,101.7	5,097.9	3.81	1,339.475		
1,200.0	1,199.1	1,159.1	1,159.1	2.2	2.0	-101.35	-2,852.3	-4,223.8	5,102.9	5,098.7	4.18	1,221.163		
1,300.0	1,298.9	1,258.9	1,258.9	2.4	2.2	-101.42	-2,852.3	-4,223.8	5,104.1	5,099.6	4.55	1,121.795		
1,400.0	1,398.8	1,358.8	1,358.8	2.6	2.4	-101.49	-2,852.3	-4,223.8	5,105.3	5,100.4	4.92	1,037.221		
1,500.0	1,498.6	1,458.6	1,458.6	2.8	2.5	-101.55	-2,852.3	-4,223.8	5,106.5	5,101.2	5.30	964.405		
1,600.0	1,598.4	1,558.4	1,558.4	3.0	2.7	-101.62	-2,852.3	-4,223.8	5,107.8	5,102.1	5.67	901.079		
1,700.0	1,698.2	1,658.2	1,658.2	3.2	2.9	-101.69	-2,852.3	-4,223.8	5,109.0	5,102.9	6.04	845.518		
1,800.0	1,798.0	1,758.0	1,758.0	3.4	3.1	-101.75	-2,852.3	-4,223.8	5,110.2	5,103.8	6.42	796.388		
1,900.0	1,897.8	1,857.8	1,857.8	3.6	3.2	-101.82	-2,852.3	-4,223.8	5,111.5	5,104.7	6.79	752.641		
2,000.0	1,997.7	1,957.7	1,957.7	3.8	3.4	-101.89	-2,852.3	-4,223.8	5,112.7	5,105.6	7.17	713.443		
2,100.0	2,097.5	2,057.5	2,057.5	4.0	3.6	-101.95	-2,852.3	-4,223.8	5,114.0	5,106.4	7.54	678.125		
2,200.0	2,197.3	2,157.3	2,157.3	4.2	3.8	-102.02	-2,852.3	-4,223.8	5,115.2	5,107.3	7.92	646.139		
2,300.0	2,297.1	2,257.1	2,257.1	4.4	3.9	-102.08	-2,852.3	-4,223.8	5,116.5	5,108.2	8.29	617.039		
2,400.0	2,396.9	2,356.9	2,356.9	4.6	4.1	-102.15	-2,852.3	-4,223.8	5,117.8	5,109.1	8.67	590.452		
2,500.0	2,496.7	2,456.7	2,456.7	4.8	4.3	-102.22	-2,852.3	-4,223.8	5,119.1	5,110.0	9.04	566.068		
2,600.0	2,596.5	2,556.5	2,556.5	5.0	4.5	-102.28	-2,852.3	-4,223.8	5,120.4	5,111.0	9.42	543.624		
2,700.0	2,696.4	2,656.4	2,656.4	5.2	4.6	-102.35	-2,852.3	-4,223.8	5,121.7	5,111.9	9.79	522.898		
2,800.0	2,796.2	2,756.2	2,756.2	5.4	4.8	-102.42	-2,852.3	-4,223.8	5,123.0	5,112.8	10.17	503.702		
2,900.0	2,896.0	2,856.0	2,856.0	5.6	5.0	-102.48	-2,852.3	-4,223.8	5,124.3	5,113.7	10.55	485.872		
3,000.0	2,995.8	2,955.8	2,955.8	5.8	5.2	-102.55	-2,852.3	-4,223.8	5,125.6	5,114.7	10.92	469.269		
3,100.0	3,095.6	3,055.6	3,055.6	6.0	5.3	-102.62	-2,852.3	-4,223.8	5,126.9	5,115.6	11.30	453.769		
3,200.0	3,195.4	3,155.4	3,155.4	6.2	5.5	-102.68	-2,852.3	-4,223.8	5,128.3	5,116.6	11.67	439.268		
3,300.0	3,295.2	3,255.2	3,255.2	6.4	5.7	-102.75	-2,852.3	-4,223.8	5,129.6	5,117.6	12.05	425.671		
3,400.0	3,395.1	3,355.1	3,355.1	6.6	5.9	-102.81	-2,852.3	-4,223.8	5,131.0	5,118.5	12.43	412.897		
3,500.0	3,494.9	3,454.9	3,454.9	6.8	6.0	-102.88	-2,852.3	-4,223.8	5,132.3	5,119.5	12.80	400.873		
3,600.0	3,594.7	3,554.7	3,554.7	7.0	6.2	-102.95	-2,852.3	-4,223.8	5,133.7	5,120.5	13.18	389.536		
3,700.0	3,694.5	3,654.5	3,654.5	7.2	6.4	-103.01	-2,852.3	-4,223.8	5,135.0	5,121.5	13.56	378.829		
3,800.0	3,794.3	3,754.3	3,754.3	7.4	6.6	-103.08	-2,852.3	-4,223.8	5,136.4	5,122.5	13.93	368.700		
3,900.0	3,894.1	3,854.1	3,854.1	7.6	6.7	-103.14	-2,852.3	-4,223.8	5,137.8	5,123.5	14.31	359.104		
4,000.0	3,994.0	3,954.0	3,954.0	7.8	6.9	-103.21	-2,852.3	-4,223.8	5,139.2	5,124.5	14.68	350.000		
4,100.0	4,093.8	4,053.8	4,053.8	8.0	7.1	-103.28	-2,852.3	-4,223.8	5,140.6	5,125.5	15.06	341.351		
4,200.0	4,193.6	4,153.6	4,153.6	8.2	7.2	-103.34	-2,852.3	-4,223.8	5,142.0	5,126.6	15.44	333.125		
4,300.0	4,293.4	4,253.4	4,253.4	8.4	7.4	-103.41	-2,852.3	-4,223.8	5,143.4	5,127.6	15.81	325.290		
4,400.0	4,393.2	4,353.2	4,353.2	8.6	7.6	-103.47	-2,852.3	-4,223.8	5,144.8	5,128.6	16.19	317.820		
4,500.0	4,493.0	4,453.0	4,453.0	8.8	7.8	-103.54	-2,852.3	-4,223.8	5,146.2	5,129.7	16.56	310.690		
4,600.0	4,592.8	4,552.8	4,552.8	9.0	7.9	-103.60	-2,852.3	-4,223.8	5,147.7	5,130.7	16.94	303.877		
4,700.0	4,692.7	4,652.7	4,652.7	9.3	8.1	-103.67	-2,852.3	-4,223.8	5,149.1	5,131.8	17.32	297.361		
4,800.0	4,792.5	4,752.5	4,752.5	9.5	8.3	-103.74	-2,852.3	-4,223.8	5,150.5	5,132.9	17.69	291.122		
4,900.0	4,892.3	4,852.3	4,852.3	9.7	8.5	-103.80	-2,852.3	-4,223.8	5,152.0	5,133.9	18.07	285.144		
5,000.0	4,992.1	4,952.1	4,952.1	9.9	8.6	-103.87	-2,852.3	-4,223.8	5,153.5	5,135.0	18.44	279.410		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	5,091.9	5,051.9	5,051.9	10.1	8.8	-103.93	-2,852.3	-4,223.8	5,154.9	5,136.1	18.82	273.905		
5,200.0	5,191.7	5,151.7	5,151.7	10.3	9.0	-104.00	-2,852.3	-4,223.8	5,156.4	5,137.2	19.20	268.617		
5,300.0	5,291.5	5,251.5	5,251.5	10.5	9.2	-104.06	-2,852.3	-4,223.8	5,157.9	5,138.3	19.57	263.533		
5,400.0	5,391.4	5,351.4	5,351.4	10.7	9.3	-104.13	-2,852.3	-4,223.8	5,159.3	5,139.4	19.95	258.641		
5,500.0	5,491.2	5,451.2	5,451.2	10.9	9.5	-104.19	-2,852.3	-4,223.8	5,160.8	5,140.5	20.32	253.931		
5,600.0	5,591.0	5,551.0	5,551.0	11.1	9.7	-104.26	-2,852.3	-4,223.8	5,162.3	5,141.6	20.70	249.392		
5,700.0	5,690.8	5,650.8	5,650.8	11.3	9.9	-104.32	-2,852.3	-4,223.8	5,163.8	5,142.8	21.08	245.016		
5,800.0	5,790.6	5,750.6	5,750.6	11.5	10.0	-104.39	-2,852.3	-4,223.8	5,165.4	5,143.9	21.45	240.794		
5,900.0	5,890.4	5,850.4	5,850.4	11.7	10.2	-104.46	-2,852.3	-4,223.8	5,166.9	5,145.0	21.83	236.717		
6,000.0	5,990.3	5,950.3	5,950.3	11.9	10.4	-104.52	-2,852.3	-4,223.8	5,168.4	5,146.2	22.20	232.780		
6,100.0	6,090.1	6,050.1	6,050.1	12.1	10.6	-104.59	-2,852.3	-4,223.8	5,169.9	5,147.3	22.58	228.974		
6,200.0	6,189.9	6,149.9	6,149.9	12.3	10.7	-104.65	-2,852.3	-4,223.8	5,171.5	5,148.5	22.95	225.293		
6,300.0	6,289.7	6,249.7	6,249.7	12.5	10.9	-104.72	-2,852.3	-4,223.8	5,173.0	5,149.7	23.33	221.731		
6,400.0	6,389.5	6,349.5	6,349.5	12.7	11.1	-104.78	-2,852.3	-4,223.8	5,174.6	5,150.8	23.71	218.282		
6,500.0	6,489.3	6,449.3	6,449.3	12.9	11.3	-104.85	-2,852.3	-4,223.8	5,176.1	5,152.0	24.08	214.942		
6,600.0	6,589.1	6,549.1	6,549.1	13.1	11.4	-104.91	-2,852.3	-4,223.8	5,177.7	5,153.2	24.46	211.705		
6,700.0	6,689.0	6,649.0	6,649.0	13.3	11.6	-104.98	-2,852.3	-4,223.8	5,179.2	5,154.4	24.83	208.566		
6,785.3	6,774.1	6,734.1	6,734.1	13.5	11.8	-105.03	-2,852.3	-4,223.8	5,180.6	5,155.4	25.15	205.965		
6,800.0	6,788.8	6,748.8	6,748.8	13.5	11.8	-94.02	-2,852.3	-4,223.8	5,180.7	5,155.5	25.21	205.532		
6,850.0	6,838.8	6,798.8	6,798.8	13.6	11.9	16.54	-2,852.3	-4,223.8	5,179.8	5,154.4	25.35	204.355		
6,900.0	6,888.6	6,848.6	6,848.6	13.6	12.0	38.69	-2,852.3	-4,223.8	5,176.7	5,151.3	25.44	203.517		
6,950.0	6,938.1	6,898.1	6,898.1	13.7	12.0	44.20	-2,852.3	-4,223.8	5,171.4	5,146.0	25.48	202.994		
7,000.0	6,987.0	6,947.0	6,947.0	13.7	12.1	46.99	-2,852.3	-4,223.8	5,164.1	5,138.6	25.47	202.751		
7,050.0	7,035.0	6,995.0	6,995.0	13.6	12.2	48.95	-2,852.3	-4,223.8	5,154.6	5,129.2	25.42	202.743		
7,100.0	7,082.0	7,042.0	7,042.0	13.6	12.3	50.64	-2,852.3	-4,223.8	5,143.2	5,117.8	25.35	202.908		
7,150.0	7,127.7	7,087.7	7,087.7	13.5	12.4	52.25	-2,852.3	-4,223.8	5,129.8	5,104.6	25.25	203.170		
7,200.0	7,171.8	7,131.8	7,131.8	13.5	12.4	53.89	-2,852.3	-4,223.8	5,114.6	5,089.4	25.14	203.440		
7,250.0	7,214.2	7,174.2	7,174.2	13.4	12.5	55.62	-2,852.3	-4,223.8	5,097.6	5,072.6	25.04	203.612		
7,300.0	7,254.6	7,214.6	7,214.6	13.4	12.6	57.46	-2,852.3	-4,223.8	5,079.0	5,054.1	24.95	203.570		
7,350.0	7,292.9	7,252.9	7,252.9	13.3	12.7	59.43	-2,852.3	-4,223.8	5,058.9	5,034.0	24.90	203.197		
7,400.0	7,328.9	7,288.9	7,288.9	13.3	12.7	61.54	-2,852.3	-4,223.8	5,037.4	5,012.6	24.89	202.382		
7,450.0	7,362.3	7,322.3	7,322.3	13.3	12.8	63.78	-2,852.3	-4,223.8	5,014.7	4,989.8	24.94	201.037		
7,500.0	7,393.1	7,353.1	7,353.1	13.4	12.8	66.15	-2,852.3	-4,223.8	4,990.9	4,965.8	25.07	199.109		
7,550.0	7,421.1	7,381.1	7,381.1	13.5	12.9	68.64	-2,852.3	-4,223.8	4,966.2	4,940.9	25.26	196.594		
7,600.0	7,446.1	7,406.1	7,406.1	13.6	12.9	71.23	-2,852.3	-4,223.8	4,940.6	4,915.1	25.53	193.537		
7,650.0	7,468.0	7,428.0	7,428.0	13.8	13.0	73.90	-2,852.3	-4,223.8	4,914.5	4,888.6	25.86	190.028		
7,700.0	7,486.7	7,446.7	7,446.7	14.0	13.0	76.63	-2,852.3	-4,223.8	4,887.8	4,861.6	26.25	186.190		
7,750.0	7,502.2	7,462.2	7,462.2	14.2	13.0	79.37	-2,852.3	-4,223.8	4,860.9	4,834.2	26.68	182.161		
7,800.0	7,514.3	7,474.3	7,474.3	14.6	13.0	82.11	-2,852.3	-4,223.8	4,833.8	4,806.7	27.15	178.072		
7,850.0	7,523.0	7,483.0	7,483.0	14.9	13.1	84.82	-2,852.3	-4,223.8	4,806.8	4,779.2	27.62	174.036		
7,900.0	7,528.2	7,488.2	7,488.2	15.3	13.1	87.45	-2,852.3	-4,223.8	4,779.9	4,751.8	28.09	170.138		
7,950.2	7,530.0	7,490.0	7,490.0	15.8	13.1	90.00	-2,852.3	-4,223.8	4,753.2	4,724.6	28.56	166.414		
8,000.0	7,530.0	7,490.0	7,490.0	16.2	13.1	90.00	-2,852.3	-4,223.8	4,727.1	4,698.1	29.05	162.747		
8,100.0	7,530.0	7,490.0	7,490.0	17.3	13.1	90.00	-2,852.3	-4,223.8	4,675.9	4,645.8	30.11	155.287		
8,200.0	7,530.0	7,490.0	7,490.0	18.4	13.1	90.00	-2,852.3	-4,223.8	4,626.3	4,595.0	31.28	147.882		
8,300.0	7,530.0	7,490.0	7,490.0	19.7	13.1	90.00	-2,852.3	-4,223.8	4,578.3	4,545.8	32.54	140.682		
8,400.0	7,530.0	7,490.0	7,490.0	21.0	13.1	90.00	-2,852.3	-4,223.8	4,532.0	4,498.2	33.88	133.785		
8,500.0	7,530.0	7,490.0	7,490.0	22.4	13.1	90.00	-2,852.3	-4,223.8	4,487.5	4,452.2	35.27	127.247		
8,600.0	7,530.0	7,490.0	7,490.0	23.8	13.1	90.00	-2,852.3	-4,223.8	4,444.8	4,408.1	36.71	121.095		
8,700.0	7,530.0	7,490.0	7,490.0	25.3	13.1	90.00	-2,852.3	-4,223.8	4,403.9	4,365.7	38.18	115.334		
8,800.0	7,530.0	7,490.0	7,490.0	26.8	13.1	90.00	-2,852.3	-4,223.8	4,365.0	4,325.3	39.70	109.958		
8,900.0	7,530.0	7,490.0	7,490.0	28.3	13.1	90.00	-2,852.3	-4,223.8	4,328.0	4,286.7	41.24	104.954		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	
9,000.0	7,530.0	7,490.0	7,490.0	29.9	13.1	90.00	-2,852.3	-4,223.8	4,293.0	4,250.2	42.80	100.301	
9,100.0	7,530.0	7,490.0	7,490.0	31.4	13.1	90.00	-2,852.3	-4,223.8	4,260.1	4,215.7	44.39	95.979	
9,200.0	7,530.0	7,490.0	7,490.0	33.0	13.1	90.00	-2,852.3	-4,223.8	4,229.3	4,183.3	45.99	91.966	
9,300.0	7,530.0	7,490.0	7,490.0	34.7	13.1	90.00	-2,852.3	-4,223.8	4,200.6	4,153.0	47.60	88.241	
9,400.0	7,530.0	7,490.0	7,490.0	36.3	13.1	90.00	-2,852.3	-4,223.8	4,174.1	4,124.9	49.23	84.784	
9,500.0	7,530.0	7,490.0	7,490.0	37.9	13.1	90.00	-2,852.3	-4,223.8	4,149.9	4,099.1	50.87	81.574	
9,600.0	7,530.0	7,490.0	7,490.0	39.6	13.1	90.00	-2,852.3	-4,223.8	4,128.0	4,075.5	52.52	78.594	
9,700.0	7,530.0	7,490.0	7,490.0	41.2	13.1	90.00	-2,852.3	-4,223.8	4,108.4	4,054.2	54.18	75.825	
9,800.0	7,530.0	7,490.0	7,490.0	42.9	13.1	90.00	-2,852.3	-4,223.8	4,091.1	4,035.3	55.85	73.254	
9,900.0	7,530.0	7,490.0	7,490.0	44.5	13.1	90.00	-2,852.3	-4,223.8	4,076.2	4,018.7	57.52	70.864	
10,000.0	7,530.0	7,490.0	7,490.0	46.2	13.1	90.00	-2,852.3	-4,223.8	4,063.7	4,004.5	59.20	68.643	
10,100.0	7,530.0	7,490.0	7,490.0	47.9	13.1	90.00	-2,852.3	-4,223.8	4,053.7	3,992.8	60.89	66.579	
10,200.0	7,530.0	7,490.0	7,490.0	49.6	13.1	90.00	-2,852.3	-4,223.8	4,046.1	3,983.5	62.57	64.660	
10,300.0	7,530.0	7,490.0	7,490.0	51.3	13.1	90.00	-2,852.3	-4,223.8	4,040.9	3,976.7	64.27	62.876	
10,400.0	7,530.0	7,490.0	7,490.0	53.0	13.1	90.00	-2,852.3	-4,223.8	4,038.3	3,972.3	65.97	61.218	
10,457.9	7,530.0	7,490.0	7,490.0	54.0	13.1	90.00	-2,852.3	-4,223.8	4,037.9	3,970.9	66.95	60.310 CC	
10,500.0	7,530.0	7,490.0	7,490.0	54.7	13.1	90.00	-2,852.3	-4,223.8	4,038.1	3,970.4	67.67	59.676 ES	
10,600.0	7,530.0	7,490.0	7,490.0	56.4	13.1	90.00	-2,852.3	-4,223.8	4,040.4	3,971.0	69.37	58.242	
10,700.0	7,530.0	7,490.0	7,490.0	58.1	13.1	90.00	-2,852.3	-4,223.8	4,045.1	3,974.0	71.08	56.910	
10,800.0	7,530.0	7,490.0	7,490.0	59.8	13.1	90.00	-2,852.3	-4,223.8	4,052.3	3,979.5	72.79	55.672	
10,900.0	7,530.0	7,490.0	7,490.0	61.5	13.1	90.00	-2,852.3	-4,223.8	4,062.0	3,987.5	74.50	54.522	
11,000.0	7,530.0	7,490.0	7,490.0	63.2	13.1	90.00	-2,852.3	-4,223.8	4,074.1	3,997.9	76.22	53.454	
11,100.0	7,530.0	7,490.0	7,490.0	64.9	13.1	90.00	-2,852.3	-4,223.8	4,088.6	4,010.7	77.93	52.462	
11,200.0	7,530.0	7,490.0	7,490.0	66.6	13.1	90.00	-2,852.3	-4,223.8	4,105.5	4,025.8	79.65	51.542	
11,300.0	7,530.0	7,490.0	7,490.0	68.4	13.1	90.00	-2,852.3	-4,223.8	4,124.7	4,043.4	81.37	50.689	
11,400.0	7,530.0	7,490.0	7,490.0	70.1	13.1	90.00	-2,852.3	-4,223.8	4,146.3	4,063.2	83.10	49.898	
11,500.0	7,530.0	7,490.0	7,490.0	71.8	13.1	90.00	-2,852.3	-4,223.8	4,170.2	4,085.3	84.82	49.165	
11,600.0	7,530.0	7,490.0	7,490.0	73.5	13.1	90.00	-2,852.3	-4,223.8	4,196.3	4,109.7	86.54	48.487	
11,700.0	7,530.0	7,490.0	7,490.0	75.3	13.1	90.00	-2,852.3	-4,223.8	4,224.6	4,136.3	88.27	47.859	
11,800.0	7,530.0	7,490.0	7,490.0	77.0	13.1	90.00	-2,852.3	-4,223.8	4,255.1	4,165.1	90.00	47.279	
11,900.0	7,530.0	7,490.0	7,490.0	78.7	13.1	90.00	-2,852.3	-4,223.8	4,287.6	4,195.9	91.73	46.743	
12,000.0	7,530.0	7,490.0	7,490.0	80.4	13.1	90.00	-2,852.3	-4,223.8	4,322.3	4,228.8	93.46	46.248	
12,100.0	7,530.0	7,490.0	7,490.0	82.2	13.1	90.00	-2,852.3	-4,223.8	4,359.0	4,263.8	95.19	45.793	
12,200.0	7,530.0	7,490.0	7,490.0	83.9	13.1	90.00	-2,852.3	-4,223.8	4,397.6	4,300.7	96.92	45.373	
12,300.0	7,530.0	7,490.0	7,490.0	85.6	13.1	90.00	-2,852.3	-4,223.8	4,438.2	4,339.5	98.65	44.987	
12,400.0	7,530.0	7,490.0	7,490.0	87.4	13.1	90.00	-2,852.3	-4,223.8	4,480.6	4,380.2	100.39	44.633	
12,500.0	7,530.0	7,490.0	7,490.0	89.1	13.1	90.00	-2,852.3	-4,223.8	4,524.9	4,422.7	102.12	44.308	
12,600.0	7,530.0	7,490.0	7,490.0	90.8	13.1	90.00	-2,852.3	-4,223.8	4,570.9	4,467.0	103.86	44.010	
12,700.0	7,530.0	7,490.0	7,490.0	92.6	13.1	90.00	-2,852.3	-4,223.8	4,618.6	4,513.0	105.59	43.739	
12,800.0	7,530.0	7,490.0	7,490.0	94.3	13.1	90.00	-2,852.3	-4,223.8	4,667.9	4,560.6	107.33	43.491	
12,900.0	7,530.0	7,490.0	7,490.0	96.0	13.1	90.00	-2,852.3	-4,223.8	4,718.9	4,609.8	109.07	43.265	
13,000.0	7,530.0	7,490.0	7,490.0	97.8	13.1	90.00	-2,852.3	-4,223.8	4,771.4	4,660.6	110.81	43.061	
13,100.0	7,530.0	7,490.0	7,490.0	99.5	13.1	90.00	-2,852.3	-4,223.8	4,825.4	4,712.9	112.55	42.876	
13,200.0	7,530.0	7,490.0	7,490.0	101.3	13.1	90.00	-2,852.3	-4,223.8	4,880.9	4,766.6	114.28	42.708	
13,300.0	7,530.0	7,490.0	7,490.0	103.0	13.1	90.00	-2,852.3	-4,223.8	4,937.8	4,821.8	116.02	42.558	
13,400.0	7,530.0	7,490.0	7,490.0	104.7	13.1	90.00	-2,852.3	-4,223.8	4,996.0	4,878.2	117.76	42.424	
13,500.0	7,530.0	7,490.0	7,490.0	106.5	13.1	90.00	-2,852.3	-4,223.8	5,055.5	4,936.0	119.50	42.304	
13,600.0	7,530.0	7,490.0	7,490.0	108.2	13.1	90.00	-2,852.3	-4,223.8	5,116.3	4,995.1	121.25	42.198	
13,700.0	7,530.0	7,490.0	7,490.0	110.0	13.1	90.00	-2,852.3	-4,223.8	5,178.4	5,055.4	122.99	42.105	
13,800.0	7,530.0	7,490.0	7,490.0	111.7	13.1	90.00	-2,852.3	-4,223.8	5,241.5	5,116.8	124.73	42.024	
13,900.0	7,530.0	7,490.0	7,490.0	113.4	13.1	90.00	-2,852.3	-4,223.8	5,305.9	5,179.4	126.47	41.953	
14,000.0	7,530.0	7,490.0	7,490.0	115.2	13.1	90.00	-2,852.3	-4,223.8	5,371.3	5,243.1	128.21	41.893	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
14,100.0	7,530.0	7,490.0	7,490.0	116.9	13.1	90.00	-2,852.3	-4,223.8	5,437.7	5,307.8	129.96	41.843		
14,200.0	7,530.0	7,490.0	7,490.0	118.7	13.1	90.00	-2,852.3	-4,223.8	5,505.2	5,373.5	131.70	41.801		
14,300.0	7,530.0	7,490.0	7,490.0	120.4	13.1	90.00	-2,852.3	-4,223.8	5,573.7	5,440.2	133.44	41.768		
14,400.0	7,530.0	7,490.0	7,490.0	122.1	13.1	90.00	-2,852.3	-4,223.8	5,643.1	5,507.9	135.19	41.743		
14,500.0	7,530.0	7,490.0	7,490.0	123.9	13.1	90.00	-2,852.3	-4,223.8	5,713.4	5,576.4	136.93	41.725		
14,600.0	7,530.0	7,490.0	7,490.0	125.6	13.1	90.00	-2,852.3	-4,223.8	5,784.6	5,645.9	138.68	41.713		
14,700.0	7,530.0	7,490.0	7,490.0	127.4	13.1	90.00	-2,852.3	-4,223.8	5,856.6	5,716.2	140.42	41.708 SF		
14,800.0	7,530.0	7,490.0	7,490.0	129.1	13.1	90.00	-2,852.3	-4,223.8	5,929.4	5,787.2	142.16	41.708		
14,900.0	7,530.0	7,490.0	7,490.0	130.9	13.1	90.00	-2,852.3	-4,223.8	6,003.0	5,859.1	143.91	41.714		
15,000.0	7,530.0	7,490.0	7,490.0	132.6	13.1	90.00	-2,852.3	-4,223.8	6,077.4	5,931.7	145.66	41.724		
15,100.0	7,530.0	7,490.0	7,490.0	134.4	13.1	90.00	-2,852.3	-4,223.8	6,152.5	6,005.1	147.40	41.740		
15,200.0	7,530.0	7,490.0	7,490.0	136.1	13.1	90.00	-2,852.3	-4,223.8	6,228.3	6,079.1	149.15	41.759		
15,300.0	7,530.0	7,490.0	7,490.0	137.9	13.1	90.00	-2,852.3	-4,223.8	6,304.8	6,153.9	150.89	41.783		
15,400.0	7,530.0	7,490.0	7,490.0	139.6	13.1	90.00	-2,852.3	-4,223.8	6,381.9	6,229.2	152.64	41.810		
15,500.0	7,530.0	7,490.0	7,490.0	141.3	13.1	90.00	-2,852.3	-4,223.8	6,459.6	6,305.2	154.39	41.841		
15,600.0	7,530.0	7,490.0	7,490.0	143.1	13.1	90.00	-2,852.3	-4,223.8	6,538.0	6,381.9	156.13	41.875		
15,700.0	7,530.0	7,490.0	7,490.0	144.8	13.1	90.00	-2,852.3	-4,223.8	6,616.9	6,459.0	157.88	41.911		
15,800.0	7,530.0	7,490.0	7,490.0	146.6	13.1	90.00	-2,852.3	-4,223.8	6,696.4	6,536.8	159.63	41.951		
15,900.0	7,530.0	7,490.0	7,490.0	148.3	13.1	90.00	-2,852.3	-4,223.8	6,776.5	6,615.1	161.37	41.993		
16,000.0	7,530.0	7,490.0	7,490.0	150.1	13.1	90.00	-2,852.3	-4,223.8	6,857.0	6,693.9	163.12	42.037		
16,100.0	7,530.0	7,490.0	7,490.0	151.8	13.1	90.00	-2,852.3	-4,223.8	6,938.1	6,773.2	164.87	42.083		
16,200.0	7,530.0	7,490.0	7,490.0	153.6	13.1	90.00	-2,852.3	-4,223.8	7,019.7	6,853.1	166.62	42.131		
16,300.0	7,530.0	7,490.0	7,490.0	155.3	13.1	90.00	-2,852.3	-4,223.8	7,101.7	6,933.3	168.36	42.181		
16,400.0	7,530.0	7,490.0	7,490.0	157.1	13.1	90.00	-2,852.3	-4,223.8	7,184.2	7,014.1	170.11	42.232		
16,500.0	7,530.0	7,490.0	7,490.0	158.8	13.1	90.00	-2,852.3	-4,223.8	7,267.1	7,095.3	171.86	42.285		
16,600.0	7,530.0	7,490.0	7,490.0	160.6	13.1	90.00	-2,852.3	-4,223.8	7,350.5	7,176.9	173.61	42.340		
16,700.0	7,530.0	7,490.0	7,490.0	162.3	13.1	90.00	-2,852.3	-4,223.8	7,434.2	7,258.9	175.36	42.395		
16,800.0	7,530.0	7,490.0	7,490.0	164.1	13.1	90.00	-2,852.3	-4,223.8	7,518.4	7,341.3	177.10	42.452		
16,900.0	7,530.0	7,490.0	7,490.0	165.8	13.1	90.00	-2,852.3	-4,223.8	7,602.9	7,424.1	178.85	42.510		
17,000.0	7,530.0	7,490.0	7,490.0	167.6	13.1	90.00	-2,852.3	-4,223.8	7,687.9	7,507.3	180.60	42.568		
17,100.0	7,530.0	7,490.0	7,490.0	169.3	13.1	90.00	-2,852.3	-4,223.8	7,773.1	7,590.8	182.35	42.628		
17,200.0	7,530.0	7,490.0	7,490.0	171.1	13.1	90.00	-2,852.3	-4,223.8	7,858.7	7,674.6	184.10	42.688		
17,300.0	7,530.0	7,490.0	7,490.0	172.8	13.1	90.00	-2,852.3	-4,223.8	7,944.7	7,758.9	185.85	42.748		
17,400.0	7,530.0	7,490.0	7,490.0	174.5	13.1	90.00	-2,852.3	-4,223.8	8,031.0	7,843.4	187.60	42.810		
17,411.2	7,530.0	7,490.0	7,490.0	174.7	13.1	90.00	-2,852.3	-4,223.8	8,040.7	7,852.9	187.79	42.817		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-14 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program:		5000-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	-147.37	-4,101.6	-2,626.1	4,870.5					
100.0	100.0	58.0	58.0	0.2	0.1	-147.37	-4,101.6	-2,626.1	4,870.3	4,870.0	0.25	N/A		
200.0	200.0	158.0	158.0	0.3	0.3	-147.37	-4,101.6	-2,626.1	4,870.3	4,869.7	0.60	8,085.684		
300.0	300.0	258.0	258.0	0.5	0.5	-147.37	-4,101.6	-2,626.1	4,870.3	4,869.3	0.95	5,119.086		
400.0	400.0	358.0	358.0	0.7	0.6	-147.37	-4,101.6	-2,626.1	4,870.3	4,869.0	1.30	3,745.047		
500.0	500.0	458.0	458.0	0.8	0.8	-147.37	-4,101.6	-2,626.1	4,870.3	4,868.6	1.65	2,952.541		
600.0	600.0	558.0	558.0	1.0	1.0	-124.36	-4,101.6	-2,626.1	4,870.8	4,868.8	2.00	2,436.822		
700.0	700.0	658.0	658.0	1.2	1.1	-124.38	-4,101.6	-2,626.1	4,872.2	4,869.9	2.35	2,073.585		
800.0	799.9	757.9	757.9	1.4	1.3	-124.40	-4,101.6	-2,626.1	4,874.7	4,872.0	2.70	1,802.739		
848.7	848.4	806.4	806.4	1.5	1.4	-124.41	-4,101.6	-2,626.1	4,876.3	4,873.4	2.88	1,694.330		
900.0	899.7	857.7	857.7	1.6	1.5	-124.44	-4,101.6	-2,626.1	4,878.0	4,875.0	3.06	1,592.818		
1,000.0	999.5	957.5	957.5	1.8	1.7	-124.50	-4,101.6	-2,626.1	4,881.5	4,878.1	3.42	1,425.870		
1,100.0	1,099.3	1,057.3	1,057.3	2.0	1.8	-124.56	-4,101.6	-2,626.1	4,884.9	4,881.1	3.79	1,290.223		
1,200.0	1,199.1	1,157.1	1,157.1	2.2	2.0	-124.62	-4,101.6	-2,626.1	4,888.4	4,884.2	4.15	1,177.957		
1,300.0	1,298.9	1,256.9	1,256.9	2.4	2.2	-124.68	-4,101.6	-2,626.1	4,891.8	4,887.3	4.51	1,083.579		
1,400.0	1,398.8	1,356.8	1,356.8	2.6	2.4	-124.74	-4,101.6	-2,626.1	4,895.3	4,890.4	4.88	1,003.173		
1,500.0	1,498.6	1,456.6	1,456.6	2.8	2.5	-124.79	-4,101.6	-2,626.1	4,898.8	4,893.5	5.25	933.878		
1,600.0	1,598.4	1,556.4	1,556.4	3.0	2.7	-124.85	-4,101.6	-2,626.1	4,902.3	4,896.7	5.61	873.557		
1,700.0	1,698.2	1,656.2	1,656.2	3.2	2.9	-124.91	-4,101.6	-2,626.1	4,905.7	4,899.8	5.98	820.584		
1,800.0	1,798.0	1,756.0	1,756.0	3.4	3.1	-124.97	-4,101.6	-2,626.1	4,909.2	4,902.9	6.35	773.702		
1,900.0	1,897.8	1,855.8	1,855.8	3.6	3.2	-125.03	-4,101.6	-2,626.1	4,912.7	4,906.0	6.71	731.923		
2,000.0	1,997.7	1,955.7	1,955.7	3.8	3.4	-125.09	-4,101.6	-2,626.1	4,916.2	4,909.1	7.08	694.461		
2,100.0	2,097.5	2,055.5	2,055.5	4.0	3.6	-125.14	-4,101.6	-2,626.1	4,919.7	4,912.3	7.45	660.682		
2,200.0	2,197.3	2,155.3	2,155.3	4.2	3.8	-125.20	-4,101.6	-2,626.1	4,923.2	4,915.4	7.81	630.071		
2,300.0	2,297.1	2,255.1	2,255.1	4.4	3.9	-125.26	-4,101.6	-2,626.1	4,926.7	4,918.6	8.18	602.204		
2,400.0	2,396.9	2,354.9	2,354.9	4.6	4.1	-125.32	-4,101.6	-2,626.1	4,930.3	4,921.7	8.55	576.729		
2,500.0	2,496.7	2,454.7	2,454.7	4.8	4.3	-125.37	-4,101.6	-2,626.1	4,933.8	4,924.9	8.92	553.351		
2,600.0	2,596.5	2,554.5	2,554.5	5.0	4.5	-125.43	-4,101.6	-2,626.1	4,937.3	4,928.0	9.28	531.823		
2,700.0	2,696.4	2,654.4	2,654.4	5.2	4.6	-125.49	-4,101.6	-2,626.1	4,940.8	4,931.2	9.65	511.934		
2,800.0	2,796.2	2,754.2	2,754.2	5.4	4.8	-125.55	-4,101.6	-2,626.1	4,944.4	4,934.4	10.02	493.504		
2,900.0	2,896.0	2,854.0	2,854.0	5.6	5.0	-125.60	-4,101.6	-2,626.1	4,947.9	4,937.5	10.39	476.379		
3,000.0	2,995.8	2,953.8	2,953.8	5.8	5.2	-125.66	-4,101.6	-2,626.1	4,951.5	4,940.7	10.75	460.425		
3,100.0	3,095.6	3,053.6	3,053.6	6.0	5.3	-125.72	-4,101.6	-2,626.1	4,955.0	4,943.9	11.12	445.526		
3,200.0	3,195.4	3,153.4	3,153.4	6.2	5.5	-125.77	-4,101.6	-2,626.1	4,958.6	4,947.1	11.49	431.582		
3,300.0	3,295.2	3,253.2	3,253.2	6.4	5.7	-125.83	-4,101.6	-2,626.1	4,962.1	4,950.3	11.86	418.503		
3,400.0	3,395.1	3,353.1	3,353.1	6.6	5.9	-125.89	-4,101.6	-2,626.1	4,965.7	4,953.5	12.22	406.211		
3,500.0	3,494.9	3,452.9	3,452.9	6.8	6.0	-125.95	-4,101.6	-2,626.1	4,969.3	4,956.7	12.59	394.638		
3,600.0	3,594.7	3,552.7	3,552.7	7.0	6.2	-126.00	-4,101.6	-2,626.1	4,972.9	4,959.9	12.96	383.722		
3,700.0	3,694.5	3,652.5	3,652.5	7.2	6.4	-126.06	-4,101.6	-2,626.1	4,976.4	4,963.1	13.33	373.410		
3,800.0	3,794.3	3,752.3	3,752.3	7.4	6.5	-126.11	-4,101.6	-2,626.1	4,980.0	4,966.3	13.69	363.652		
3,900.0	3,894.1	3,852.1	3,852.1	7.6	6.7	-126.17	-4,101.6	-2,626.1	4,983.6	4,969.6	14.06	354.405		
4,000.0	3,994.0	3,952.0	3,952.0	7.8	6.9	-126.23	-4,101.6	-2,626.1	4,987.2	4,972.8	14.43	345.631		
4,100.0	4,093.8	4,051.8	4,051.8	8.0	7.1	-126.28	-4,101.6	-2,626.1	4,990.8	4,976.0	14.80	337.293		
4,200.0	4,193.6	4,151.6	4,151.6	8.2	7.2	-126.34	-4,101.6	-2,626.1	4,994.4	4,979.3	15.16	329.360		
4,300.0	4,293.4	4,251.4	4,251.4	8.4	7.4	-126.40	-4,101.6	-2,626.1	4,998.0	4,982.5	15.53	321.804		
4,400.0	4,393.2	4,351.2	4,351.2	8.6	7.6	-126.45	-4,101.6	-2,626.1	5,001.6	4,985.7	15.90	314.597		
4,500.0	4,493.0	4,451.0	4,451.0	8.8	7.8	-126.51	-4,101.6	-2,626.1	5,005.3	4,989.0	16.27	307.717		
4,600.0	4,592.8	4,550.8	4,550.8	9.0	7.9	-126.56	-4,101.6	-2,626.1	5,008.9	4,992.3	16.63	301.142		
4,700.0	4,692.7	4,650.7	4,650.7	9.3	8.1	-126.62	-4,101.6	-2,626.1	5,012.5	4,995.5	17.00	294.852		
4,800.0	4,792.5	4,750.5	4,750.5	9.5	8.3	-126.68	-4,101.6	-2,626.1	5,016.2	4,998.8	17.37	288.829		
4,900.0	4,892.3	4,850.3	4,850.3	9.7	8.5	-126.73	-4,101.6	-2,626.1	5,019.8	5,002.1	17.73	283.056		
5,000.0	4,992.1	4,950.1	4,950.1	9.9	8.6	-126.79	-4,101.6	-2,626.1	5,023.4	5,005.3	18.10	277.518		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-14 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5000-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	5,091.9	5,000.0	5,000.0	10.1	8.7	-126.81	-4,101.6	-2,626.1	5,027.3	5,008.9	18.38	273.496		
5,200.0	5,191.7	5,000.0	5,000.0	10.3	8.7	-126.81	-4,101.6	-2,626.1	5,033.0	5,014.4	18.58	270.944		
5,300.0	5,291.5	5,000.0	5,000.0	10.5	8.7	-126.81	-4,101.6	-2,626.1	5,040.6	5,021.8	18.77	268.550		
5,400.0	5,391.4	5,000.0	5,000.0	10.7	8.7	-126.81	-4,101.6	-2,626.1	5,050.2	5,031.2	18.96	266.309		
5,500.0	5,491.2	5,000.0	5,000.0	10.9	8.7	-126.81	-4,101.6	-2,626.1	5,061.7	5,042.5	19.16	264.215		
5,600.0	5,591.0	5,000.0	5,000.0	11.1	8.7	-126.81	-4,101.6	-2,626.1	5,075.2	5,055.8	19.35	262.263		
5,700.0	5,690.8	5,000.0	5,000.0	11.3	8.7	-126.81	-4,101.6	-2,626.1	5,090.6	5,071.0	19.55	260.449		
5,800.0	5,790.6	5,000.0	5,000.0	11.5	8.7	-126.81	-4,101.6	-2,626.1	5,107.9	5,088.2	19.74	258.767		
5,900.0	5,890.4	5,000.0	5,000.0	11.7	8.7	-126.81	-4,101.6	-2,626.1	5,127.1	5,107.2	19.93	257.213		
6,000.0	5,990.3	5,000.0	5,000.0	11.9	8.7	-126.81	-4,101.6	-2,626.1	5,148.2	5,128.1	20.13	255.782		
6,100.0	6,090.1	5,000.0	5,000.0	12.1	8.7	-126.81	-4,101.6	-2,626.1	5,171.1	5,150.8	20.32	254.468		
6,200.0	6,189.9	5,000.0	5,000.0	12.3	8.7	-126.81	-4,101.6	-2,626.1	5,195.9	5,175.4	20.52	253.269		
6,300.0	6,289.7	5,000.0	5,000.0	12.5	8.7	-126.81	-4,101.6	-2,626.1	5,222.5	5,201.8	20.71	252.179		
6,400.0	6,389.5	5,000.0	5,000.0	12.7	8.7	-126.81	-4,101.6	-2,626.1	5,250.8	5,229.9	20.90	251.193		
6,500.0	6,489.3	5,000.0	5,000.0	12.9	8.7	-126.81	-4,101.6	-2,626.1	5,280.9	5,259.8	21.10	250.308		
6,600.0	6,589.1	5,000.0	5,000.0	13.1	8.7	-126.81	-4,101.6	-2,626.1	5,312.6	5,291.3	21.29	249.520		
6,700.0	6,689.0	5,000.0	5,000.0	13.3	8.7	-126.81	-4,101.6	-2,626.1	5,346.1	5,324.6	21.49	248.824		
6,785.3	6,774.1	5,000.0	5,000.0	13.5	8.7	-126.81	-4,101.6	-2,626.1	5,375.9	5,354.3	21.65	248.301		
6,800.0	6,788.8	5,000.0	5,000.0	13.5	8.7	-116.00	-4,101.6	-2,626.1	5,381.1	5,359.4	21.67	248.270		
6,850.0	6,838.8	5,000.0	5,000.0	13.6	8.7	-6.15	-4,101.6	-2,626.1	5,397.0	5,375.3	21.71	248.594		
6,900.0	6,888.6	5,000.0	5,000.0	13.6	8.7	15.25	-4,101.6	-2,626.1	5,410.4	5,388.7	21.68	249.512		
6,950.0	6,938.1	5,000.0	5,000.0	13.7	8.7	19.96	-4,101.6	-2,626.1	5,421.2	5,399.6	21.60	251.025		
7,000.0	6,987.0	5,000.0	5,000.0	13.7	8.7	21.88	-4,101.6	-2,626.1	5,429.5	5,408.1	21.45	253.136		
7,050.0	7,035.0	5,000.0	5,000.0	13.6	8.7	22.91	-4,101.6	-2,626.1	5,435.2	5,413.9	21.24	255.838		
7,100.0	7,082.0	5,000.0	5,000.0	13.6	8.7	23.58	-4,101.6	-2,626.1	5,438.2	5,417.2	20.99	259.123		
7,150.0	7,127.7	5,000.0	5,000.0	13.5	8.7	24.10	-4,101.6	-2,626.1	5,438.6	5,417.9	20.68	262.972		
7,200.0	7,171.8	5,000.0	5,000.0	13.5	8.7	24.57	-4,101.6	-2,626.1	5,436.3	5,416.0	20.33	267.350		
7,250.0	7,214.2	5,000.0	5,000.0	13.4	8.7	25.05	-4,101.6	-2,626.1	5,431.4	5,411.5	19.95	272.203		
7,300.0	7,254.6	5,000.0	5,000.0	13.4	8.7	25.56	-4,101.6	-2,626.1	5,423.9	5,404.4	19.55	277.448		
7,350.0	7,292.9	5,000.0	5,000.0	13.3	8.7	26.12	-4,101.6	-2,626.1	5,413.8	5,394.7	19.13	282.960		
7,400.0	7,328.9	5,000.0	5,000.0	13.3	8.7	26.77	-4,101.6	-2,626.1	5,401.2	5,382.4	18.72	288.559		
7,450.0	7,362.3	5,000.0	5,000.0	13.3	8.7	27.50	-4,101.6	-2,626.1	5,386.0	5,367.7	18.32	294.001		
7,500.0	7,393.1	5,000.0	5,000.0	13.4	8.7	28.35	-4,101.6	-2,626.1	5,368.4	5,350.4	17.96	298.962		
7,550.0	7,421.1	5,000.0	5,000.0	13.5	8.7	29.31	-4,101.6	-2,626.1	5,348.3	5,330.7	17.65	303.040		
7,600.0	7,446.1	5,000.0	5,000.0	13.6	8.7	30.42	-4,101.6	-2,626.1	5,326.0	5,308.6	17.42	305.770		
7,650.0	7,468.0	5,000.0	5,000.0	13.8	8.7	31.69	-4,101.6	-2,626.1	5,301.4	5,284.1	17.29	306.656		
7,700.0	7,486.7	5,000.0	5,000.0	14.0	8.7	33.15	-4,101.6	-2,626.1	5,274.6	5,257.3	17.28	305.243		
7,750.0	7,502.2	5,000.0	5,000.0	14.2	8.7	34.82	-4,101.6	-2,626.1	5,245.8	5,228.4	17.42	301.198		
7,800.0	7,514.3	5,000.0	5,000.0	14.6	8.7	36.73	-4,101.6	-2,626.1	5,215.0	5,197.3	17.71	294.391		
7,850.0	7,523.0	5,000.0	5,000.0	14.9	8.7	38.93	-4,101.6	-2,626.1	5,182.4	5,164.2	18.19	284.954		
7,900.0	7,528.2	5,000.0	5,000.0	15.3	8.7	41.44	-4,101.6	-2,626.1	5,148.1	5,129.3	18.84	273.271		
7,950.2	7,530.0	5,000.0	5,000.0	15.8	8.7	44.34	-4,101.6	-2,626.1	5,112.0	5,092.4	19.67	259.861		
8,000.0	7,530.0	5,000.0	5,000.0	16.2	8.7	44.34	-4,101.6	-2,626.1	5,075.7	5,055.7	20.01	253.626		
8,100.0	7,530.0	5,000.0	5,000.0	17.3	8.7	44.34	-4,101.6	-2,626.1	5,003.4	4,982.6	20.75	241.073		
8,200.0	7,530.0	5,000.0	5,000.0	18.4	8.7	44.34	-4,101.6	-2,626.1	4,932.0	4,910.4	21.56	228.717		
8,300.0	7,530.0	5,000.0	5,000.0	19.7	8.7	44.34	-4,101.6	-2,626.1	4,861.6	4,839.2	22.43	216.751		
8,400.0	7,530.0	5,000.0	5,000.0	21.0	8.7	44.34	-4,101.6	-2,626.1	4,792.3	4,768.9	23.34	205.301		
8,500.0	7,530.0	5,000.0	5,000.0	22.4	8.7	44.34	-4,101.6	-2,626.1	4,724.1	4,699.8	24.30	194.437		
8,600.0	7,530.0	5,000.0	5,000.0	23.8	8.7	44.34	-4,101.6	-2,626.1	4,657.0	4,631.7	25.28	184.194		
8,700.0	7,530.0	5,000.0	5,000.0	25.3	8.7	44.34	-4,101.6	-2,626.1	4,591.1	4,564.8	26.30	174.576		
8,800.0	7,530.0	5,000.0	5,000.0	26.8	8.7	44.34	-4,101.6	-2,626.1	4,526.5	4,499.1	27.34	165.572		
8,900.0	7,530.0	5,000.0	5,000.0	28.3	8.7	44.34	-4,101.6	-2,626.1	4,463.2	4,434.8	28.40	157.159		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-14 (Existing) - Existing - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5000-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	7,530.0	5,000.0	5,000.0	29.9	8.7	44.34	-4,101.6	-2,626.1	4,401.2	4,371.7	29.48	149.308		
9,100.0	7,530.0	5,000.0	5,000.0	31.4	8.7	44.34	-4,101.6	-2,626.1	4,340.7	4,310.1	30.57	141.987		
9,200.0	7,530.0	5,000.0	5,000.0	33.0	8.7	44.34	-4,101.6	-2,626.1	4,281.6	4,249.9	31.68	135.161		
9,300.0	7,530.0	5,000.0	5,000.0	34.7	8.7	44.34	-4,101.6	-2,626.1	4,224.1	4,191.3	32.80	128.798		
9,400.0	7,530.0	5,000.0	5,000.0	36.3	8.7	44.34	-4,101.6	-2,626.1	4,168.2	4,134.3	33.92	122.866		
9,500.0	7,530.0	5,000.0	5,000.0	37.9	8.7	44.34	-4,101.6	-2,626.1	4,113.9	4,078.9	35.06	117.333		
9,600.0	7,530.0	5,000.0	5,000.0	39.6	8.7	44.34	-4,101.6	-2,626.1	4,061.4	4,025.2	36.21	112.172		
9,700.0	7,530.0	5,000.0	5,000.0	41.2	8.7	44.34	-4,101.6	-2,626.1	4,010.8	3,973.4	37.36	107.355		
9,800.0	7,530.0	5,000.0	5,000.0	42.9	8.7	44.34	-4,101.6	-2,626.1	3,961.9	3,923.4	38.52	102.859		
9,900.0	7,530.0	5,000.0	5,000.0	44.5	8.7	44.34	-4,101.6	-2,626.1	3,915.1	3,875.4	39.68	98.661		
10,000.0	7,530.0	5,000.0	5,000.0	46.2	8.7	44.34	-4,101.6	-2,626.1	3,870.2	3,829.4	40.85	94.739		
10,100.0	7,530.0	5,000.0	5,000.0	47.9	8.7	44.34	-4,101.6	-2,626.1	3,827.4	3,785.4	42.02	91.076		
10,200.0	7,530.0	5,000.0	5,000.0	49.6	8.7	44.34	-4,101.6	-2,626.1	3,786.8	3,743.6	43.20	87.654		
10,300.0	7,530.0	5,000.0	5,000.0	51.3	8.7	44.34	-4,101.6	-2,626.1	3,748.5	3,704.1	44.38	84.457		
10,400.0	7,530.0	5,000.0	5,000.0	53.0	8.7	44.34	-4,101.6	-2,626.1	3,712.4	3,666.8	45.57	81.470		
10,500.0	7,530.0	5,000.0	5,000.0	54.7	8.7	44.34	-4,101.6	-2,626.1	3,678.6	3,631.9	46.75	78.680		
10,600.0	7,530.0	5,000.0	5,000.0	56.4	8.7	44.34	-4,101.6	-2,626.1	3,647.4	3,599.4	47.94	76.074		
10,700.0	7,530.0	5,000.0	5,000.0	58.1	8.7	44.34	-4,101.6	-2,626.1	3,618.6	3,569.4	49.14	73.641		
10,800.0	7,530.0	5,000.0	5,000.0	59.8	8.7	44.34	-4,101.6	-2,626.1	3,592.3	3,542.0	50.33	71.372		
10,900.0	7,530.0	5,000.0	5,000.0	61.5	8.7	44.34	-4,101.6	-2,626.1	3,568.7	3,517.2	51.53	69.255		
11,000.0	7,530.0	5,000.0	5,000.0	63.2	8.7	44.34	-4,101.6	-2,626.1	3,547.7	3,495.0	52.73	67.283		
11,100.0	7,530.0	5,000.0	5,000.0	64.9	8.7	44.34	-4,101.6	-2,626.1	3,529.5	3,475.5	53.93	65.446		
11,200.0	7,530.0	5,000.0	5,000.0	66.6	8.7	44.34	-4,101.6	-2,626.1	3,514.0	3,458.8	55.13	63.737		
11,300.0	7,530.0	5,000.0	5,000.0	68.4	8.7	44.34	-4,101.6	-2,626.1	3,501.3	3,444.9	56.34	62.149		
11,400.0	7,530.0	5,000.0	5,000.0	70.1	8.7	44.34	-4,101.6	-2,626.1	3,491.4	3,433.8	57.54	60.675		
11,500.0	7,530.0	5,000.0	5,000.0	71.8	8.7	44.34	-4,101.6	-2,626.1	3,484.3	3,425.5	58.75	59.308		
11,600.0	7,530.0	5,000.0	5,000.0	73.5	8.7	44.34	-4,101.6	-2,626.1	3,480.1	3,420.1	59.96	58.043		
11,696.1	7,530.0	5,000.0	5,000.0	75.2	8.7	44.34	-4,101.6	-2,626.1	3,478.8	3,417.7	61.12	56.918 CC		
11,700.0	7,530.0	5,000.0	5,000.0	75.3	8.7	44.34	-4,101.6	-2,626.1	3,478.8	3,417.6	61.17	56.874 ES		
11,800.0	7,530.0	5,000.0	5,000.0	77.0	8.7	44.34	-4,101.6	-2,626.1	3,480.3	3,418.0	62.38	55.795		
11,900.0	7,530.0	5,000.0	5,000.0	78.7	8.7	44.34	-4,101.6	-2,626.1	3,484.8	3,421.2	63.59	54.802		
12,000.0	7,530.0	5,000.0	5,000.0	80.4	8.7	44.34	-4,101.6	-2,626.1	3,492.0	3,427.2	64.80	53.889		
12,100.0	7,530.0	5,000.0	5,000.0	82.2	8.7	44.34	-4,101.6	-2,626.1	3,502.2	3,436.1	66.01	53.052		
12,200.0	7,530.0	5,000.0	5,000.0	83.9	8.7	44.34	-4,101.6	-2,626.1	3,515.1	3,447.9	67.23	52.286		
12,300.0	7,530.0	5,000.0	5,000.0	85.6	8.7	44.34	-4,101.6	-2,626.1	3,530.8	3,462.4	68.44	51.588		
12,400.0	7,530.0	5,000.0	5,000.0	87.4	8.7	44.34	-4,101.6	-2,626.1	3,549.3	3,479.6	69.66	50.953		
12,500.0	7,530.0	5,000.0	5,000.0	89.1	8.7	44.34	-4,101.6	-2,626.1	3,570.5	3,499.6	70.87	50.377		
12,600.0	7,530.0	5,000.0	5,000.0	90.8	8.7	44.34	-4,101.6	-2,626.1	3,594.3	3,522.2	72.09	49.857		
12,700.0	7,530.0	5,000.0	5,000.0	92.6	8.7	44.34	-4,101.6	-2,626.1	3,620.7	3,547.4	73.31	49.390		
12,800.0	7,530.0	5,000.0	5,000.0	94.3	8.7	44.34	-4,101.6	-2,626.1	3,649.7	3,575.2	74.53	48.972		
12,900.0	7,530.0	5,000.0	5,000.0	96.0	8.7	44.34	-4,101.6	-2,626.1	3,681.2	3,605.5	75.75	48.599		
13,000.0	7,530.0	5,000.0	5,000.0	97.8	8.7	44.34	-4,101.6	-2,626.1	3,715.1	3,638.2	76.97	48.270		
13,100.0	7,530.0	5,000.0	5,000.0	99.5	8.7	44.34	-4,101.6	-2,626.1	3,751.4	3,673.2	78.19	47.981		
13,200.0	7,530.0	5,000.0	5,000.0	101.3	8.7	44.34	-4,101.6	-2,626.1	3,790.0	3,710.5	79.41	47.729		
13,300.0	7,530.0	5,000.0	5,000.0	103.0	8.7	44.34	-4,101.6	-2,626.1	3,830.7	3,750.1	80.63	47.512		
13,400.0	7,530.0	5,000.0	5,000.0	104.7	8.7	44.34	-4,101.6	-2,626.1	3,873.7	3,791.8	81.85	47.328		
13,500.0	7,530.0	5,000.0	5,000.0	106.5	8.7	44.34	-4,101.6	-2,626.1	3,918.7	3,835.6	83.07	47.174		
13,600.0	7,530.0	5,000.0	5,000.0	108.2	8.7	44.34	-4,101.6	-2,626.1	3,965.7	3,881.4	84.29	47.048		
13,700.0	7,530.0	5,000.0	5,000.0	110.0	8.7	44.34	-4,101.6	-2,626.1	4,014.7	3,929.2	85.51	46.948		
13,800.0	7,530.0	5,000.0	5,000.0	111.7	8.7	44.34	-4,101.6	-2,626.1	4,065.5	3,978.8	86.74	46.872		
13,900.0	7,530.0	5,000.0	5,000.0	113.4	8.7	44.34	-4,101.6	-2,626.1	4,118.2	4,030.2	87.96	46.819		
14,000.0	7,530.0	5,000.0	5,000.0	115.2	8.7	44.34	-4,101.6	-2,626.1	4,172.5	4,083.4	89.18	46.787		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-14 (Existing) - Existing - NO SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 5000-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
14,100.0	7,530.0	5,000.0	5,000.0	116.9	8.7	44.34	-4,101.6	-2,626.1	4,228.6	4,138.2	90.41	46.773 SF			
14,200.0	7,530.0	5,000.0	5,000.0	118.7	8.7	44.34	-4,101.6	-2,626.1	4,286.2	4,194.6	91.63	46.777			
14,300.0	7,530.0	5,000.0	5,000.0	120.4	8.7	44.34	-4,101.6	-2,626.1	4,345.4	4,252.5	92.85	46.798			
14,400.0	7,530.0	5,000.0	5,000.0	122.1	8.7	44.34	-4,101.6	-2,626.1	4,406.0	4,312.0	94.08	46.834			
14,500.0	7,530.0	5,000.0	5,000.0	123.9	8.7	44.34	-4,101.6	-2,626.1	4,468.1	4,372.8	95.30	46.883			
14,600.0	7,530.0	5,000.0	5,000.0	125.6	8.7	44.34	-4,101.6	-2,626.1	4,531.5	4,435.0	96.53	46.945			
14,700.0	7,530.0	5,000.0	5,000.0	127.4	8.7	44.34	-4,101.6	-2,626.1	4,596.3	4,498.5	97.75	47.019			
14,800.0	7,530.0	5,000.0	5,000.0	129.1	8.7	44.34	-4,101.6	-2,626.1	4,662.2	4,563.2	98.98	47.103			
14,900.0	7,530.0	5,000.0	5,000.0	130.9	8.7	44.34	-4,101.6	-2,626.1	4,729.4	4,629.2	100.20	47.197			
15,000.0	7,530.0	5,000.0	5,000.0	132.6	8.7	44.34	-4,101.6	-2,626.1	4,797.7	4,696.3	101.43	47.300			
15,100.0	7,530.0	5,000.0	5,000.0	134.4	8.7	44.34	-4,101.6	-2,626.1	4,867.1	4,764.4	102.66	47.411			
15,200.0	7,530.0	5,000.0	5,000.0	136.1	8.7	44.34	-4,101.6	-2,626.1	4,937.6	4,833.7	103.88	47.530			
15,300.0	7,530.0	5,000.0	5,000.0	137.9	8.7	44.34	-4,101.6	-2,626.1	5,009.0	4,903.9	105.11	47.655			
15,400.0	7,530.0	5,000.0	5,000.0	139.6	8.7	44.34	-4,101.6	-2,626.1	5,081.4	4,975.1	106.34	47.786			
15,500.0	7,530.0	5,000.0	5,000.0	141.3	8.7	44.34	-4,101.6	-2,626.1	5,154.8	5,047.2	107.56	47.923			
15,600.0	7,530.0	5,000.0	5,000.0	143.1	8.7	44.34	-4,101.6	-2,626.1	5,229.0	5,120.2	108.79	48.065			
15,700.0	7,530.0	5,000.0	5,000.0	144.8	8.7	44.34	-4,101.6	-2,626.1	5,304.1	5,194.1	110.02	48.211			
15,800.0	7,530.0	5,000.0	5,000.0	146.6	8.7	44.34	-4,101.6	-2,626.1	5,380.0	5,268.7	111.25	48.362			
15,900.0	7,530.0	5,000.0	5,000.0	148.3	8.7	44.34	-4,101.6	-2,626.1	5,456.6	5,344.2	112.47	48.515			
16,000.0	7,530.0	5,000.0	5,000.0	150.1	8.7	44.34	-4,101.6	-2,626.1	5,534.1	5,420.4	113.70	48.672			
16,100.0	7,530.0	5,000.0	5,000.0	151.8	8.7	44.34	-4,101.6	-2,626.1	5,612.2	5,497.3	114.93	48.832			
16,200.0	7,530.0	5,000.0	5,000.0	153.6	8.7	44.34	-4,101.6	-2,626.1	5,691.0	5,574.8	116.16	48.994			
16,300.0	7,530.0	5,000.0	5,000.0	155.3	8.7	44.34	-4,101.6	-2,626.1	5,770.5	5,653.1	117.38	49.159			
16,400.0	7,530.0	5,000.0	5,000.0	157.1	8.7	44.34	-4,101.6	-2,626.1	5,850.6	5,731.9	118.61	49.325			
16,500.0	7,530.0	5,000.0	5,000.0	158.8	8.7	44.34	-4,101.6	-2,626.1	5,931.3	5,811.4	119.84	49.493			
16,600.0	7,530.0	5,000.0	5,000.0	160.6	8.7	44.34	-4,101.6	-2,626.1	6,012.5	5,891.5	121.07	49.662			
16,700.0	7,530.0	5,000.0	5,000.0	162.3	8.7	44.34	-4,101.6	-2,626.1	6,094.4	5,972.1	122.30	49.832			
16,800.0	7,530.0	5,000.0	5,000.0	164.1	8.7	44.34	-4,101.6	-2,626.1	6,176.7	6,053.2	123.53	50.003			
16,900.0	7,530.0	5,000.0	5,000.0	165.8	8.7	44.34	-4,101.6	-2,626.1	6,259.6	6,134.9	124.76	50.175			
17,000.0	7,530.0	5,000.0	5,000.0	167.6	8.7	44.34	-4,101.6	-2,626.1	6,343.0	6,217.0	125.98	50.348			
17,100.0	7,530.0	5,000.0	5,000.0	169.3	8.7	44.34	-4,101.6	-2,626.1	6,426.9	6,299.6	127.21	50.520			
17,200.0	7,530.0	5,000.0	5,000.0	171.1	8.7	44.34	-4,101.6	-2,626.1	6,511.2	6,382.7	128.44	50.693			
17,300.0	7,530.0	5,000.0	5,000.0	172.8	8.7	44.34	-4,101.6	-2,626.1	6,595.9	6,466.2	129.67	50.866			
17,400.0	7,530.0	5,000.0	5,000.0	174.5	8.7	44.34	-4,101.6	-2,626.1	6,681.1	6,550.2	130.90	51.039			
17,411.2	7,530.0	5,000.0	5,000.0	174.7	8.7	44.34	-4,101.6	-2,626.1	6,690.7	6,559.6	131.04	51.059			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU														Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-133.25	-3,068.5	-3,261.6	4,478.2						
100.0	100.0	66.0	66.0	0.2	0.1	-133.25	-3,068.5	-3,261.6	4,478.1	4,477.8	0.27	N/A			
200.0	200.0	166.0	166.0	0.3	0.3	-133.25	-3,068.5	-3,261.6	4,478.1	4,477.5	0.62	7,266.147			
300.0	300.0	266.0	266.0	0.5	0.5	-133.25	-3,068.5	-3,261.6	4,478.1	4,477.1	0.97	4,638.791			
400.0	400.0	366.0	366.0	0.7	0.6	-133.25	-3,068.5	-3,261.6	4,478.1	4,476.8	1.31	3,406.897			
500.0	500.0	466.0	466.0	0.8	0.8	-133.25	-3,068.5	-3,261.6	4,478.1	4,476.4	1.66	2,691.999			
600.0	600.0	566.0	566.0	1.0	1.0	-110.25	-3,068.5	-3,261.6	4,478.4	4,476.4	2.01	2,224.835			
700.0	700.0	666.0	666.0	1.2	1.2	-110.27	-3,068.5	-3,261.6	4,479.3	4,477.0	2.36	1,894.402			
800.0	799.9	765.9	765.9	1.4	1.3	-110.31	-3,068.5	-3,261.6	4,480.8	4,478.1	2.72	1,646.857			
848.7	848.4	814.4	814.4	1.5	1.4	-110.33	-3,068.5	-3,261.6	4,481.8	4,478.9	2.90	1,547.449			
900.0	899.7	865.7	865.7	1.6	1.5	-110.37	-3,068.5	-3,261.6	4,482.9	4,479.8	3.08	1,454.366			
1,000.0	999.5	965.5	965.5	1.8	1.7	-110.44	-3,068.5	-3,261.6	4,485.0	4,481.6	3.45	1,301.168			
1,100.0	1,099.3	1,065.3	1,065.3	2.0	1.9	-110.52	-3,068.5	-3,261.6	4,487.1	4,483.3	3.81	1,176.636			
1,200.0	1,199.1	1,165.1	1,165.1	2.2	2.0	-110.59	-3,068.5	-3,261.6	4,489.3	4,485.1	4.18	1,073.564			
1,300.0	1,298.9	1,264.9	1,264.9	2.4	2.2	-110.66	-3,068.5	-3,261.6	4,491.4	4,486.9	4.55	986.930			
1,400.0	1,398.8	1,364.8	1,364.8	2.6	2.4	-110.73	-3,068.5	-3,261.6	4,493.6	4,488.6	4.92	913.144			
1,500.0	1,498.6	1,464.6	1,464.6	2.8	2.6	-110.81	-3,068.5	-3,261.6	4,495.7	4,490.4	5.29	849.575			
1,600.0	1,598.4	1,564.4	1,564.4	3.0	2.7	-110.88	-3,068.5	-3,261.6	4,497.9	4,492.2	5.66	794.260			
1,700.0	1,698.2	1,664.2	1,664.2	3.2	2.9	-110.95	-3,068.5	-3,261.6	4,500.1	4,494.0	6.03	745.703			
1,800.0	1,798.0	1,764.0	1,764.0	3.4	3.1	-111.02	-3,068.5	-3,261.6	4,502.3	4,495.8	6.41	702.745			
1,900.0	1,897.8	1,863.8	1,863.8	3.6	3.3	-111.10	-3,068.5	-3,261.6	4,504.4	4,497.7	6.78	664.477			
2,000.0	1,997.7	1,963.7	1,963.7	3.8	3.4	-111.17	-3,068.5	-3,261.6	4,506.6	4,499.5	7.15	630.175			
2,100.0	2,097.5	2,063.5	2,063.5	4.0	3.6	-111.24	-3,068.5	-3,261.6	4,508.8	4,501.3	7.52	599.257			
2,200.0	2,197.3	2,163.3	2,163.3	4.2	3.8	-111.31	-3,068.5	-3,261.6	4,511.0	4,503.2	7.90	571.247			
2,300.0	2,297.1	2,263.1	2,263.1	4.4	3.9	-111.38	-3,068.5	-3,261.6	4,513.3	4,505.0	8.27	545.756			
2,400.0	2,396.9	2,362.9	2,362.9	4.6	4.1	-111.45	-3,068.5	-3,261.6	4,515.5	4,506.8	8.64	522.460			
2,500.0	2,496.7	2,462.7	2,462.7	4.8	4.3	-111.53	-3,068.5	-3,261.6	4,517.7	4,508.7	9.02	501.089			
2,600.0	2,596.5	2,562.5	2,562.5	5.0	4.5	-111.60	-3,068.5	-3,261.6	4,520.0	4,510.6	9.39	481.413			
2,700.0	2,696.4	2,662.4	2,662.4	5.2	4.6	-111.67	-3,068.5	-3,261.6	4,522.2	4,512.4	9.76	463.240			
2,800.0	2,796.2	2,762.2	2,762.2	5.4	4.8	-111.74	-3,068.5	-3,261.6	4,524.5	4,514.3	10.14	446.404			
2,900.0	2,896.0	2,862.0	2,862.0	5.6	5.0	-111.81	-3,068.5	-3,261.6	4,526.7	4,516.2	10.51	430.764			
3,000.0	2,995.8	2,961.8	2,961.8	5.8	5.2	-111.88	-3,068.5	-3,261.6	4,529.0	4,518.1	10.88	416.196			
3,100.0	3,095.6	3,061.6	3,061.6	6.0	5.3	-111.96	-3,068.5	-3,261.6	4,531.3	4,520.0	11.26	402.595			
3,200.0	3,195.4	3,161.4	3,161.4	6.2	5.5	-112.03	-3,068.5	-3,261.6	4,533.5	4,521.9	11.63	389.868			
3,300.0	3,295.2	3,261.2	3,261.2	6.4	5.7	-112.10	-3,068.5	-3,261.6	4,535.8	4,523.8	12.00	377.933			
3,400.0	3,395.1	3,361.1	3,361.1	6.6	5.9	-112.17	-3,068.5	-3,261.6	4,538.1	4,525.7	12.37	366.718			
3,500.0	3,494.9	3,460.9	3,460.9	6.8	6.0	-112.24	-3,068.5	-3,261.6	4,540.4	4,527.7	12.75	356.161			
3,600.0	3,594.7	3,560.7	3,560.7	7.0	6.2	-112.31	-3,068.5	-3,261.6	4,542.7	4,529.6	13.12	346.206			
3,700.0	3,694.5	3,660.5	3,660.5	7.2	6.4	-112.38	-3,068.5	-3,261.6	4,545.0	4,531.6	13.49	336.802			
3,800.0	3,794.3	3,760.3	3,760.3	7.4	6.6	-112.45	-3,068.5	-3,261.6	4,547.4	4,533.5	13.87	327.905			
3,900.0	3,894.1	3,860.1	3,860.1	7.6	6.7	-112.52	-3,068.5	-3,261.6	4,549.7	4,535.5	14.24	319.476			
4,000.0	3,994.0	3,960.0	3,960.0	7.8	6.9	-112.59	-3,068.5	-3,261.6	4,552.0	4,537.4	14.61	311.478			
4,100.0	4,093.8	4,059.8	4,059.8	8.0	7.1	-112.66	-3,068.5	-3,261.6	4,554.4	4,539.4	14.99	303.879			
4,200.0	4,193.6	4,159.6	4,159.6	8.2	7.3	-112.73	-3,068.5	-3,261.6	4,556.7	4,541.4	15.36	296.651			
4,300.0	4,293.4	4,259.4	4,259.4	8.4	7.4	-112.80	-3,068.5	-3,261.6	4,559.1	4,543.4	15.73	289.766			
4,400.0	4,393.2	4,359.2	4,359.2	8.6	7.6	-112.87	-3,068.5	-3,261.6	4,561.5	4,545.3	16.11	283.202			
4,500.0	4,493.0	4,459.0	4,459.0	8.8	7.8	-112.94	-3,068.5	-3,261.6	4,563.8	4,547.3	16.48	276.935			
4,600.0	4,592.8	4,558.8	4,558.8	9.0	8.0	-113.02	-3,068.5	-3,261.6	4,566.2	4,549.4	16.85	270.947			
4,700.0	4,692.7	4,658.7	4,658.7	9.3	8.1	-113.09	-3,068.5	-3,261.6	4,568.6	4,551.4	17.23	265.219			
4,800.0	4,792.5	4,758.5	4,758.5	9.5	8.3	-113.16	-3,068.5	-3,261.6	4,571.0	4,553.4	17.60	259.735			
4,900.0	4,892.3	4,858.3	4,858.3	9.7	8.5	-113.23	-3,068.5	-3,261.6	4,573.4	4,555.4	17.97	254.479			
5,000.0	4,992.1	4,958.1	4,958.1	9.9	8.7	-113.29	-3,068.5	-3,261.6	4,575.8	4,557.4	18.34	249.438			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	5,091.9	5,057.9	5,057.9	10.1	8.8	-113.36	-3,068.5	-3,261.6	4,578.2	4,559.5	18.72	244.598		
5,200.0	5,191.7	5,157.7	5,157.7	10.3	9.0	-113.43	-3,068.5	-3,261.6	4,580.6	4,561.5	19.09	239.949		
5,300.0	5,291.5	5,257.5	5,257.5	10.5	9.2	-113.50	-3,068.5	-3,261.6	4,583.0	4,563.6	19.46	235.478		
5,400.0	5,391.4	5,357.4	5,357.4	10.7	9.4	-113.57	-3,068.5	-3,261.6	4,585.5	4,565.6	19.84	231.176		
5,500.0	5,491.2	5,457.2	5,457.2	10.9	9.5	-113.64	-3,068.5	-3,261.6	4,587.9	4,567.7	20.21	227.034		
5,600.0	5,591.0	5,557.0	5,557.0	11.1	9.7	-113.71	-3,068.5	-3,261.6	4,590.4	4,569.8	20.58	223.043		
5,700.0	5,690.8	5,656.8	5,656.8	11.3	9.9	-113.78	-3,068.5	-3,261.6	4,592.8	4,571.9	20.95	219.194		
5,800.0	5,790.6	5,756.6	5,756.6	11.5	10.0	-113.85	-3,068.5	-3,261.6	4,595.3	4,573.9	21.33	215.480		
5,900.0	5,890.4	5,856.4	5,856.4	11.7	10.2	-113.92	-3,068.5	-3,261.6	4,597.7	4,576.0	21.70	211.895		
6,000.0	5,990.3	5,956.3	5,956.3	11.9	10.4	-113.99	-3,068.5	-3,261.6	4,600.2	4,578.1	22.07	208.432		
6,100.0	6,090.1	6,056.1	6,056.1	12.1	10.6	-114.06	-3,068.5	-3,261.6	4,602.7	4,580.2	22.44	205.084		
6,200.0	6,189.9	6,155.9	6,155.9	12.3	10.7	-114.13	-3,068.5	-3,261.6	4,605.2	4,582.4	22.82	201.846		
6,300.0	6,289.7	6,255.7	6,255.7	12.5	10.9	-114.20	-3,068.5	-3,261.6	4,607.7	4,584.5	23.19	198.713		
6,400.0	6,389.5	6,355.5	6,355.5	12.7	11.1	-114.27	-3,068.5	-3,261.6	4,610.2	4,586.6	23.56	195.679		
6,500.0	6,489.3	6,455.3	6,455.3	12.9	11.3	-114.33	-3,068.5	-3,261.6	4,612.7	4,588.7	23.93	192.740		
6,600.0	6,589.1	6,555.1	6,555.1	13.1	11.4	-114.40	-3,068.5	-3,261.6	4,615.2	4,590.9	24.30	189.893		
6,700.0	6,689.0	6,655.0	6,655.0	13.3	11.6	-114.47	-3,068.5	-3,261.6	4,617.7	4,593.0	24.68	187.131		
6,785.3	6,774.1	6,740.1	6,740.1	13.5	11.8	-114.53	-3,068.5	-3,261.6	4,619.9	4,594.9	24.99	184.842		
6,800.0	6,788.8	6,754.8	6,754.8	13.5	11.8	-103.52	-3,068.5	-3,261.6	4,620.1	4,595.1	25.05	184.451		
6,850.0	6,838.8	6,804.8	6,804.8	13.6	11.9	7.01	-3,068.5	-3,261.6	4,619.3	4,594.1	25.19	183.397		
6,900.0	6,888.6	6,854.6	6,854.6	13.6	12.0	29.15	-3,068.5	-3,261.6	4,615.9	4,590.7	25.27	182.679		
6,950.0	6,938.1	6,904.1	6,904.1	13.7	12.0	34.65	-3,068.5	-3,261.6	4,610.0	4,584.7	25.29	182.277		
7,000.0	6,987.0	6,953.0	6,953.0	13.7	12.1	37.42	-3,068.5	-3,261.6	4,601.5	4,576.2	25.26	182.163		
7,050.0	7,035.0	7,001.0	7,001.0	13.6	12.2	39.39	-3,068.5	-3,261.6	4,590.5	4,565.3	25.18	182.298		
7,100.0	7,082.0	7,048.0	7,048.0	13.6	12.3	41.08	-3,068.5	-3,261.6	4,577.1	4,552.1	25.06	182.627		
7,150.0	7,127.7	7,093.7	7,093.7	13.5	12.4	42.73	-3,068.5	-3,261.6	4,561.4	4,536.5	24.91	183.080		
7,200.0	7,171.8	7,137.8	7,137.8	13.5	12.5	44.43	-3,068.5	-3,261.6	4,543.4	4,518.6	24.75	183.566		
7,250.0	7,214.2	7,180.2	7,180.2	13.4	12.5	46.25	-3,068.5	-3,261.6	4,523.3	4,498.7	24.59	183.973		
7,300.0	7,254.6	7,220.6	7,220.6	13.4	12.6	48.23	-3,068.5	-3,261.6	4,501.2	4,476.7	24.44	184.168		
7,350.0	7,292.9	7,258.9	7,258.9	13.3	12.7	50.39	-3,068.5	-3,261.6	4,477.2	4,452.8	24.33	184.002		
7,400.0	7,328.9	7,294.9	7,294.9	13.3	12.7	52.76	-3,068.5	-3,261.6	4,451.4	4,427.1	24.28	183.325		
7,450.0	7,362.3	7,328.3	7,328.3	13.3	12.8	55.35	-3,068.5	-3,261.6	4,424.1	4,399.8	24.31	182.002		
7,500.0	7,393.1	7,359.1	7,359.1	13.4	12.8	58.16	-3,068.5	-3,261.6	4,395.4	4,371.0	24.43	179.941		
7,550.0	7,421.1	7,387.1	7,387.1	13.5	12.9	61.19	-3,068.5	-3,261.6	4,365.4	4,340.8	24.65	177.115		
7,600.0	7,446.1	7,412.1	7,412.1	13.6	12.9	64.44	-3,068.5	-3,261.6	4,334.4	4,309.4	24.97	173.577		
7,650.0	7,468.0	7,434.0	7,434.0	13.8	13.0	67.87	-3,068.5	-3,261.6	4,302.5	4,277.1	25.39	169.463		
7,700.0	7,486.7	7,452.7	7,452.7	14.0	13.0	71.45	-3,068.5	-3,261.6	4,269.9	4,244.0	25.88	164.966		
7,750.0	7,502.2	7,468.2	7,468.2	14.2	13.0	75.15	-3,068.5	-3,261.6	4,236.8	4,210.3	26.43	160.308		
7,800.0	7,514.3	7,480.3	7,480.3	14.6	13.1	78.90	-3,068.5	-3,261.6	4,203.3	4,176.3	27.00	155.700		
7,850.0	7,523.0	7,489.0	7,489.0	14.9	13.1	82.67	-3,068.5	-3,261.6	4,169.8	4,142.2	27.56	151.313		
7,900.0	7,528.2	7,494.2	7,494.2	15.3	13.1	86.38	-3,068.5	-3,261.6	4,136.3	4,108.2	28.09	147.263		
7,950.2	7,530.0	7,496.0	7,496.0	15.8	13.1	90.00	-3,068.5	-3,261.6	4,102.8	4,074.2	28.57	143.591		
8,000.0	7,530.0	7,496.0	7,496.0	16.2	13.1	90.00	-3,068.5	-3,261.6	4,070.0	4,041.0	29.06	140.074		
8,100.0	7,530.0	7,496.0	7,496.0	17.3	13.1	90.00	-3,068.5	-3,261.6	4,005.2	3,975.1	30.12	132.967		
8,200.0	7,530.0	7,496.0	7,496.0	18.4	13.1	90.00	-3,068.5	-3,261.6	3,941.8	3,910.6	31.29	125.961		
8,300.0	7,530.0	7,496.0	7,496.0	19.7	13.1	90.00	-3,068.5	-3,261.6	3,880.0	3,847.5	32.55	119.187		
8,400.0	7,530.0	7,496.0	7,496.0	21.0	13.1	90.00	-3,068.5	-3,261.6	3,819.8	3,786.0	33.89	112.727		
8,500.0	7,530.0	7,496.0	7,496.0	22.4	13.1	90.00	-3,068.5	-3,261.6	3,761.4	3,726.1	35.28	106.625		
8,600.0	7,530.0	7,496.0	7,496.0	23.8	13.1	90.00	-3,068.5	-3,261.6	3,704.6	3,667.9	36.72	100.901		
8,700.0	7,530.0	7,496.0	7,496.0	25.3	13.1	90.00	-3,068.5	-3,261.6	3,649.8	3,611.6	38.19	95.557		
8,800.0	7,530.0	7,496.0	7,496.0	26.8	13.1	90.00	-3,068.5	-3,261.6	3,596.9	3,557.1	39.71	90.585		
8,900.0	7,530.0	7,496.0	7,496.0	28.3	13.1	90.00	-3,068.5	-3,261.6	3,546.0	3,504.7	41.25	85.968		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,496.0	7,496.0	29.9	13.1	90.00	-3,068.5	-3,261.6	3,497.2	3,454.4	42.81	81.688		
9,100.0	7,530.0	7,496.0	7,496.0	31.4	13.1	90.00	-3,068.5	-3,261.6	3,450.6	3,406.2	44.40	77.724		
9,200.0	7,530.0	7,496.0	7,496.0	33.0	13.1	90.00	-3,068.5	-3,261.6	3,406.4	3,360.4	46.00	74.056		
9,300.0	7,530.0	7,496.0	7,496.0	34.7	13.1	90.00	-3,068.5	-3,261.6	3,364.5	3,316.9	47.61	70.662		
9,400.0	7,530.0	7,496.0	7,496.0	36.3	13.1	90.00	-3,068.5	-3,261.6	3,325.1	3,275.9	49.24	67.525		
9,500.0	7,530.0	7,496.0	7,496.0	37.9	13.1	90.00	-3,068.5	-3,261.6	3,288.3	3,237.4	50.88	64.624		
9,600.0	7,530.0	7,496.0	7,496.0	39.6	13.1	90.00	-3,068.5	-3,261.6	3,254.2	3,201.6	52.53	61.944		
9,700.0	7,530.0	7,496.0	7,496.0	41.2	13.1	90.00	-3,068.5	-3,261.6	3,222.7	3,168.6	54.19	59.468		
9,800.0	7,530.0	7,496.0	7,496.0	42.9	13.1	90.00	-3,068.5	-3,261.6	3,194.2	3,138.3	55.86	57.183		
9,900.0	7,530.0	7,496.0	7,496.0	44.5	13.1	90.00	-3,068.5	-3,261.6	3,168.5	3,110.9	57.53	55.073		
10,000.0	7,530.0	7,496.0	7,496.0	46.2	13.1	90.00	-3,068.5	-3,261.6	3,145.7	3,086.5	59.21	53.127		
10,100.0	7,530.0	7,496.0	7,496.0	47.9	13.1	90.00	-3,068.5	-3,261.6	3,126.1	3,065.2	60.90	51.335		
10,200.0	7,530.0	7,496.0	7,496.0	49.6	13.1	90.00	-3,068.5	-3,261.6	3,109.5	3,046.9	62.59	49.684		
10,300.0	7,530.0	7,496.0	7,496.0	51.3	13.1	90.00	-3,068.5	-3,261.6	3,096.0	3,031.7	64.28	48.165		
10,400.0	7,530.0	7,496.0	7,496.0	53.0	13.1	90.00	-3,068.5	-3,261.6	3,085.7	3,019.8	65.98	46.770		
10,500.0	7,530.0	7,496.0	7,496.0	54.7	13.1	90.00	-3,068.5	-3,261.6	3,078.7	3,011.0	67.68	45.490		
10,600.0	7,530.0	7,496.0	7,496.0	56.4	13.1	90.00	-3,068.5	-3,261.6	3,074.9	3,005.5	69.38	44.318		
10,667.4	7,530.0	7,496.0	7,496.0	57.5	13.1	90.00	-3,068.5	-3,261.6	3,074.1	3,003.6	70.53	43.585 CC		
10,700.0	7,530.0	7,496.0	7,496.0	58.1	13.1	90.00	-3,068.5	-3,261.6	3,074.3	3,003.2	71.09	43.246 ES		
10,800.0	7,530.0	7,496.0	7,496.0	59.8	13.1	90.00	-3,068.5	-3,261.6	3,077.0	3,004.2	72.80	42.267		
10,900.0	7,530.0	7,496.0	7,496.0	61.5	13.1	90.00	-3,068.5	-3,261.6	3,082.9	3,008.4	74.51	41.375		
11,000.0	7,530.0	7,496.0	7,496.0	63.2	13.1	90.00	-3,068.5	-3,261.6	3,092.1	3,015.9	76.23	40.564		
11,100.0	7,530.0	7,496.0	7,496.0	64.9	13.1	90.00	-3,068.5	-3,261.6	3,104.4	3,026.5	77.94	39.829		
11,200.0	7,530.0	7,496.0	7,496.0	66.6	13.1	90.00	-3,068.5	-3,261.6	3,119.9	3,040.3	79.66	39.164		
11,300.0	7,530.0	7,496.0	7,496.0	68.4	13.1	90.00	-3,068.5	-3,261.6	3,138.6	3,057.2	81.38	38.565		
11,400.0	7,530.0	7,496.0	7,496.0	70.1	13.1	90.00	-3,068.5	-3,261.6	3,160.2	3,077.1	83.11	38.026		
11,500.0	7,530.0	7,496.0	7,496.0	71.8	13.1	90.00	-3,068.5	-3,261.6	3,184.9	3,100.1	84.83	37.545		
11,600.0	7,530.0	7,496.0	7,496.0	73.5	13.1	90.00	-3,068.5	-3,261.6	3,212.5	3,125.9	86.56	37.115		
11,700.0	7,530.0	7,496.0	7,496.0	75.3	13.1	90.00	-3,068.5	-3,261.6	3,242.9	3,154.7	88.28	36.734		
11,800.0	7,530.0	7,496.0	7,496.0	77.0	13.1	90.00	-3,068.5	-3,261.6	3,276.2	3,186.1	90.01	36.398		
11,900.0	7,530.0	7,496.0	7,496.0	78.7	13.1	90.00	-3,068.5	-3,261.6	3,312.1	3,220.3	91.74	36.103		
12,000.0	7,530.0	7,496.0	7,496.0	80.4	13.1	90.00	-3,068.5	-3,261.6	3,350.6	3,257.1	93.47	35.847		
12,100.0	7,530.0	7,496.0	7,496.0	82.2	13.1	90.00	-3,068.5	-3,261.6	3,391.6	3,296.4	95.20	35.626		
12,200.0	7,530.0	7,496.0	7,496.0	83.9	13.1	90.00	-3,068.5	-3,261.6	3,435.0	3,338.1	96.93	35.437		
12,300.0	7,530.0	7,496.0	7,496.0	85.6	13.1	90.00	-3,068.5	-3,261.6	3,480.8	3,382.1	98.67	35.279		
12,400.0	7,530.0	7,496.0	7,496.0	87.4	13.1	90.00	-3,068.5	-3,261.6	3,528.8	3,428.4	100.40	35.148		
12,500.0	7,530.0	7,496.0	7,496.0	89.1	13.1	90.00	-3,068.5	-3,261.6	3,578.9	3,476.8	102.13	35.042		
12,600.0	7,530.0	7,496.0	7,496.0	90.8	13.1	90.00	-3,068.5	-3,261.6	3,631.2	3,527.3	103.87	34.959		
12,700.0	7,530.0	7,496.0	7,496.0	92.6	13.1	90.00	-3,068.5	-3,261.6	3,685.4	3,579.8	105.61	34.898		
12,800.0	7,530.0	7,496.0	7,496.0	94.3	13.1	90.00	-3,068.5	-3,261.6	3,741.5	3,634.1	107.34	34.855		
12,900.0	7,530.0	7,496.0	7,496.0	96.0	13.1	90.00	-3,068.5	-3,261.6	3,799.3	3,690.3	109.08	34.831		
13,000.0	7,530.0	7,496.0	7,496.0	97.8	13.1	90.00	-3,068.5	-3,261.6	3,859.0	3,748.1	110.82	34.823 SF		
13,100.0	7,530.0	7,496.0	7,496.0	99.5	13.1	90.00	-3,068.5	-3,261.6	3,920.2	3,807.7	112.56	34.829		
13,200.0	7,530.0	7,496.0	7,496.0	101.3	13.1	90.00	-3,068.5	-3,261.6	3,983.0	3,868.7	114.29	34.849		
13,300.0	7,530.0	7,496.0	7,496.0	103.0	13.1	90.00	-3,068.5	-3,261.6	4,047.4	3,931.3	116.03	34.881		
13,400.0	7,530.0	7,496.0	7,496.0	104.7	13.1	90.00	-3,068.5	-3,261.6	4,113.1	3,995.3	117.77	34.924		
13,500.0	7,530.0	7,496.0	7,496.0	106.5	13.1	90.00	-3,068.5	-3,261.6	4,180.2	4,060.7	119.52	34.976		
13,600.0	7,530.0	7,496.0	7,496.0	108.2	13.1	90.00	-3,068.5	-3,261.6	4,248.6	4,127.4	121.26	35.038		
13,700.0	7,530.0	7,496.0	7,496.0	110.0	13.1	90.00	-3,068.5	-3,261.6	4,318.2	4,195.2	123.00	35.108		
13,800.0	7,530.0	7,496.0	7,496.0	111.7	13.1	90.00	-3,068.5	-3,261.6	4,389.0	4,264.3	124.74	35.186		
13,900.0	7,530.0	7,496.0	7,496.0	113.4	13.1	90.00	-3,068.5	-3,261.6	4,461.0	4,334.5	126.48	35.270		
14,000.0	7,530.0	7,496.0	7,496.0	115.2	13.1	90.00	-3,068.5	-3,261.6	4,534.0	4,405.7	128.22	35.360		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU														Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
14,100.0	7,530.0	7,496.0	7,496.0	116.9	13.1	90.00	-3,068.5	-3,261.6	4,608.0	4,478.0	129.97	35.455			
14,200.0	7,530.0	7,496.0	7,496.0	118.7	13.1	90.00	-3,068.5	-3,261.6	4,682.9	4,551.2	131.71	35.555			
14,300.0	7,530.0	7,496.0	7,496.0	120.4	13.1	90.00	-3,068.5	-3,261.6	4,758.8	4,625.4	133.45	35.659			
14,400.0	7,530.0	7,496.0	7,496.0	122.1	13.1	90.00	-3,068.5	-3,261.6	4,835.6	4,700.4	135.20	35.767			
14,500.0	7,530.0	7,496.0	7,496.0	123.9	13.1	90.00	-3,068.5	-3,261.6	4,913.2	4,776.2	136.94	35.878			
14,600.0	7,530.0	7,496.0	7,496.0	125.6	13.1	90.00	-3,068.5	-3,261.6	4,991.6	4,852.9	138.69	35.992			
14,700.0	7,530.0	7,496.0	7,496.0	127.4	13.1	90.00	-3,068.5	-3,261.6	5,070.7	4,930.3	140.43	36.109			
14,800.0	7,530.0	7,496.0	7,496.0	129.1	13.1	90.00	-3,068.5	-3,261.6	5,150.6	5,008.5	142.18	36.227			
14,900.0	7,530.0	7,496.0	7,496.0	130.9	13.1	90.00	-3,068.5	-3,261.6	5,231.2	5,087.3	143.92	36.348			
15,000.0	7,530.0	7,496.0	7,496.0	132.6	13.1	90.00	-3,068.5	-3,261.6	5,312.4	5,166.8	145.67	36.470			
15,100.0	7,530.0	7,496.0	7,496.0	134.4	13.1	90.00	-3,068.5	-3,261.6	5,394.3	5,246.9	147.41	36.594			
15,200.0	7,530.0	7,496.0	7,496.0	136.1	13.1	90.00	-3,068.5	-3,261.6	5,476.8	5,327.6	149.16	36.718			
15,300.0	7,530.0	7,496.0	7,496.0	137.9	13.1	90.00	-3,068.5	-3,261.6	5,559.8	5,408.9	150.90	36.844			
15,400.0	7,530.0	7,496.0	7,496.0	139.6	13.1	90.00	-3,068.5	-3,261.6	5,643.4	5,490.8	152.65	36.970			
15,500.0	7,530.0	7,496.0	7,496.0	141.3	13.1	90.00	-3,068.5	-3,261.6	5,727.5	5,573.1	154.40	37.096			
15,600.0	7,530.0	7,496.0	7,496.0	143.1	13.1	90.00	-3,068.5	-3,261.6	5,812.2	5,656.0	156.14	37.223			
15,700.0	7,530.0	7,496.0	7,496.0	144.8	13.1	90.00	-3,068.5	-3,261.6	5,897.3	5,739.4	157.89	37.351			
15,800.0	7,530.0	7,496.0	7,496.0	146.6	13.1	90.00	-3,068.5	-3,261.6	5,982.8	5,823.2	159.64	37.478			
15,900.0	7,530.0	7,496.0	7,496.0	148.3	13.1	90.00	-3,068.5	-3,261.6	6,068.8	5,907.5	161.38	37.605			
16,000.0	7,530.0	7,496.0	7,496.0	150.1	13.1	90.00	-3,068.5	-3,261.6	6,155.3	5,992.1	163.13	37.732			
16,100.0	7,530.0	7,496.0	7,496.0	151.8	13.1	90.00	-3,068.5	-3,261.6	6,242.1	6,077.2	164.88	37.859			
16,200.0	7,530.0	7,496.0	7,496.0	153.6	13.1	90.00	-3,068.5	-3,261.6	6,329.3	6,162.7	166.63	37.985			
16,300.0	7,530.0	7,496.0	7,496.0	155.3	13.1	90.00	-3,068.5	-3,261.6	6,416.9	6,248.6	168.37	38.111			
16,400.0	7,530.0	7,496.0	7,496.0	157.1	13.1	90.00	-3,068.5	-3,261.6	6,504.9	6,334.8	170.12	38.237			
16,500.0	7,530.0	7,496.0	7,496.0	158.8	13.1	90.00	-3,068.5	-3,261.6	6,593.2	6,421.3	171.87	38.361			
16,600.0	7,530.0	7,496.0	7,496.0	160.6	13.1	90.00	-3,068.5	-3,261.6	6,681.8	6,508.2	173.62	38.486			
16,700.0	7,530.0	7,496.0	7,496.0	162.3	13.1	90.00	-3,068.5	-3,261.6	6,770.7	6,595.4	175.37	38.609			
16,800.0	7,530.0	7,496.0	7,496.0	164.1	13.1	90.00	-3,068.5	-3,261.6	6,860.0	6,682.9	177.11	38.732			
16,900.0	7,530.0	7,496.0	7,496.0	165.8	13.1	90.00	-3,068.5	-3,261.6	6,949.5	6,770.7	178.86	38.854			
17,000.0	7,530.0	7,496.0	7,496.0	167.6	13.1	90.00	-3,068.5	-3,261.6	7,039.4	6,858.7	180.61	38.975			
17,100.0	7,530.0	7,496.0	7,496.0	169.3	13.1	90.00	-3,068.5	-3,261.6	7,129.5	6,947.1	182.36	39.095			
17,200.0	7,530.0	7,496.0	7,496.0	171.1	13.1	90.00	-3,068.5	-3,261.6	7,219.8	7,035.7	184.11	39.215			
17,300.0	7,530.0	7,496.0	7,496.0	172.8	13.1	90.00	-3,068.5	-3,261.6	7,310.4	7,124.6	185.86	39.333			
17,400.0	7,530.0	7,496.0	7,496.0	174.5	13.1	90.00	-3,068.5	-3,261.6	7,401.3	7,213.7	187.61	39.451			
17,411.2	7,530.0	7,496.0	7,496.0	174.7	13.1	90.00	-3,068.5	-3,261.6	7,411.5	7,223.7	187.80	39.464			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS K UNIT 1 (EXISTING) - EXISTING - NO													Offset Site Error:	0.0 ft
Survey Program: 5000-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	-133.64	-3,111.1	-3,262.4	4,508.2					
100.0	100.0	66.0	66.0	0.2	0.1	-133.64	-3,111.1	-3,262.4	4,508.0	4,507.8	0.27	N/A		
200.0	200.0	166.0	166.0	0.3	0.3	-133.64	-3,111.1	-3,262.4	4,508.0	4,507.4	0.62	7,314.726		
300.0	300.0	266.0	266.0	0.5	0.5	-133.64	-3,111.1	-3,262.4	4,508.0	4,507.1	0.97	4,669.805		
400.0	400.0	366.0	366.0	0.7	0.6	-133.64	-3,111.1	-3,262.4	4,508.0	4,506.7	1.31	3,429.674		
500.0	500.0	466.0	466.0	0.8	0.8	-133.64	-3,111.1	-3,262.4	4,508.0	4,506.4	1.66	2,709.997		
600.0	600.0	566.0	566.0	1.0	1.0	-110.64	-3,111.1	-3,262.4	4,508.3	4,506.3	2.01	2,239.715		
700.0	700.0	666.0	666.0	1.2	1.2	-110.66	-3,111.1	-3,262.4	4,509.3	4,506.9	2.36	1,907.089		
800.0	799.9	765.9	765.9	1.4	1.3	-110.70	-3,111.1	-3,262.4	4,510.8	4,508.1	2.72	1,657.917		
848.7	848.4	814.4	814.4	1.5	1.4	-110.72	-3,111.1	-3,262.4	4,511.8	4,508.9	2.90	1,557.860		
900.0	899.7	865.7	865.7	1.6	1.5	-110.76	-3,111.1	-3,262.4	4,512.9	4,509.8	3.08	1,464.169		
1,000.0	999.5	965.5	965.5	1.8	1.7	-110.83	-3,111.1	-3,262.4	4,515.0	4,511.6	3.45	1,309.969		
1,100.0	1,099.3	1,065.3	1,065.3	2.0	1.9	-110.90	-3,111.1	-3,262.4	4,517.2	4,513.4	3.81	1,184.622		
1,200.0	1,199.1	1,165.1	1,165.1	2.2	2.0	-110.97	-3,111.1	-3,262.4	4,519.4	4,515.2	4.18	1,080.874		
1,300.0	1,298.9	1,264.9	1,264.9	2.4	2.2	-111.04	-3,111.1	-3,262.4	4,521.6	4,517.0	4.55	993.670		
1,400.0	1,398.8	1,364.8	1,364.8	2.6	2.4	-111.12	-3,111.1	-3,262.4	4,523.8	4,518.8	4.92	919.397		
1,500.0	1,498.6	1,464.6	1,464.6	2.8	2.6	-111.19	-3,111.1	-3,262.4	4,526.0	4,520.7	5.29	855.408		
1,600.0	1,598.4	1,564.4	1,564.4	3.0	2.7	-111.26	-3,111.1	-3,262.4	4,528.2	4,522.5	5.66	799.726		
1,700.0	1,698.2	1,664.2	1,664.2	3.2	2.9	-111.33	-3,111.1	-3,262.4	4,530.4	4,524.3	6.03	750.846		
1,800.0	1,798.0	1,764.0	1,764.0	3.4	3.1	-111.40	-3,111.1	-3,262.4	4,532.6	4,526.2	6.41	707.601		
1,900.0	1,897.8	1,863.8	1,863.8	3.6	3.3	-111.47	-3,111.1	-3,262.4	4,534.8	4,528.0	6.78	669.078		
2,000.0	1,997.7	1,963.7	1,963.7	3.8	3.4	-111.55	-3,111.1	-3,262.4	4,537.1	4,529.9	7.15	634.547		
2,100.0	2,097.5	2,063.5	2,063.5	4.0	3.6	-111.62	-3,111.1	-3,262.4	4,539.3	4,531.8	7.52	603.421		
2,200.0	2,197.3	2,163.3	2,163.3	4.2	3.8	-111.69	-3,111.1	-3,262.4	4,541.5	4,533.7	7.90	575.224		
2,300.0	2,297.1	2,263.1	2,263.1	4.4	3.9	-111.76	-3,111.1	-3,262.4	4,543.8	4,535.5	8.27	549.561		
2,400.0	2,396.9	2,362.9	2,362.9	4.6	4.1	-111.83	-3,111.1	-3,262.4	4,546.1	4,537.4	8.64	526.108		
2,500.0	2,496.7	2,462.7	2,462.7	4.8	4.3	-111.90	-3,111.1	-3,262.4	4,548.3	4,539.3	9.01	504.592		
2,600.0	2,596.5	2,562.5	2,562.5	5.0	4.5	-111.97	-3,111.1	-3,262.4	4,550.6	4,541.2	9.39	484.784		
2,700.0	2,696.4	2,662.4	2,662.4	5.2	4.6	-112.04	-3,111.1	-3,262.4	4,552.9	4,543.1	9.76	466.488		
2,800.0	2,796.2	2,762.2	2,762.2	5.4	4.8	-112.11	-3,111.1	-3,262.4	4,555.2	4,545.0	10.13	449.538		
2,900.0	2,896.0	2,862.0	2,862.0	5.6	5.0	-112.18	-3,111.1	-3,262.4	4,557.5	4,547.0	10.51	433.791		
3,000.0	2,995.8	2,961.8	2,961.8	5.8	5.2	-112.25	-3,111.1	-3,262.4	4,559.8	4,548.9	10.88	419.125		
3,100.0	3,095.6	3,061.6	3,061.6	6.0	5.3	-112.33	-3,111.1	-3,262.4	4,562.1	4,550.8	11.25	405.432		
3,200.0	3,195.4	3,161.4	3,161.4	6.2	5.5	-112.40	-3,111.1	-3,262.4	4,564.4	4,552.8	11.63	392.618		
3,300.0	3,295.2	3,261.2	3,261.2	6.4	5.7	-112.47	-3,111.1	-3,262.4	4,566.7	4,554.7	12.00	380.601		
3,400.0	3,395.1	3,361.1	3,361.1	6.6	5.9	-112.54	-3,111.1	-3,262.4	4,569.1	4,556.7	12.37	369.310		
3,500.0	3,494.9	3,460.9	3,460.9	6.8	6.0	-112.61	-3,111.1	-3,262.4	4,571.4	4,558.7	12.75	358.682		
3,600.0	3,594.7	3,560.7	3,560.7	7.0	6.2	-112.68	-3,111.1	-3,262.4	4,573.7	4,560.6	13.12	348.658		
3,700.0	3,694.5	3,660.5	3,660.5	7.2	6.4	-112.75	-3,111.1	-3,262.4	4,576.1	4,562.6	13.49	339.190		
3,800.0	3,794.3	3,760.3	3,760.3	7.4	6.6	-112.82	-3,111.1	-3,262.4	4,578.5	4,564.6	13.86	330.233		
3,900.0	3,894.1	3,860.1	3,860.1	7.6	6.7	-112.89	-3,111.1	-3,262.4	4,580.8	4,566.6	14.24	321.746		
4,000.0	3,994.0	3,960.0	3,960.0	7.8	6.9	-112.96	-3,111.1	-3,262.4	4,583.2	4,568.6	14.61	313.693		
4,100.0	4,093.8	4,059.8	4,059.8	8.0	7.1	-113.03	-3,111.1	-3,262.4	4,585.6	4,570.6	14.98	306.042		
4,200.0	4,193.6	4,159.6	4,159.6	8.2	7.3	-113.10	-3,111.1	-3,262.4	4,588.0	4,572.6	15.36	298.764		
4,300.0	4,293.4	4,259.4	4,259.4	8.4	7.4	-113.17	-3,111.1	-3,262.4	4,590.4	4,574.6	15.73	291.832		
4,400.0	4,393.2	4,359.2	4,359.2	8.6	7.6	-113.24	-3,111.1	-3,262.4	4,592.7	4,576.6	16.10	285.222		
4,500.0	4,493.0	4,459.0	4,459.0	8.8	7.8	-113.31	-3,111.1	-3,262.4	4,595.2	4,578.7	16.48	278.913		
4,600.0	4,592.8	4,558.8	4,558.8	9.0	8.0	-113.38	-3,111.1	-3,262.4	4,597.6	4,580.7	16.85	272.883		
4,700.0	4,692.7	4,658.7	4,658.7	9.3	8.1	-113.44	-3,111.1	-3,262.4	4,600.0	4,582.8	17.22	267.116		
4,800.0	4,792.5	4,758.5	4,758.5	9.5	8.3	-113.51	-3,111.1	-3,262.4	4,602.4	4,584.8	17.59	261.594		
4,900.0	4,892.3	4,858.3	4,858.3	9.7	8.5	-113.58	-3,111.1	-3,262.4	4,604.8	4,586.9	17.97	256.302		
5,000.0	4,992.1	4,958.1	4,958.1	9.9	8.7	-113.65	-3,111.1	-3,262.4	4,607.3	4,589.0	18.34	251.226		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS K UNIT 1 (EXISTING) - EXISTING - NO														Offset Site Error:	0.0 ft
Survey Program: 5000-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	5,091.9	5,000.0	5,000.0	10.1	8.7	-113.68	-3,111.1	-3,262.4	4,610.1	4,591.5	18.61	247.703			
5,200.0	5,191.7	5,000.0	5,000.0	10.3	8.7	-113.68	-3,111.1	-3,262.4	4,614.9	4,596.1	18.81	245.330			
5,300.0	5,291.5	5,000.0	5,000.0	10.5	8.7	-113.68	-3,111.1	-3,262.4	4,621.8	4,602.8	19.01	243.120			
5,400.0	5,391.4	5,000.0	5,000.0	10.7	8.7	-113.68	-3,111.1	-3,262.4	4,630.9	4,611.7	19.21	241.068			
5,500.0	5,491.2	5,000.0	5,000.0	10.9	8.7	-113.68	-3,111.1	-3,262.4	4,642.2	4,622.7	19.41	239.169			
5,600.0	5,591.0	5,000.0	5,000.0	11.1	8.7	-113.68	-3,111.1	-3,262.4	4,655.5	4,635.9	19.61	237.415			
5,700.0	5,690.8	5,000.0	5,000.0	11.3	8.7	-113.68	-3,111.1	-3,262.4	4,671.0	4,651.2	19.81	235.804			
5,800.0	5,790.6	5,000.0	5,000.0	11.5	8.7	-113.68	-3,111.1	-3,262.4	4,688.5	4,668.5	20.01	234.328			
5,900.0	5,890.4	5,000.0	5,000.0	11.7	8.7	-113.68	-3,111.1	-3,262.4	4,708.1	4,687.9	20.21	232.984			
6,000.0	5,990.3	5,000.0	5,000.0	11.9	8.7	-113.68	-3,111.1	-3,262.4	4,729.7	4,709.3	20.41	231.765			
6,100.0	6,090.1	5,000.0	5,000.0	12.1	8.7	-113.68	-3,111.1	-3,262.4	4,753.4	4,732.8	20.61	230.667			
6,200.0	6,189.9	5,000.0	5,000.0	12.3	8.7	-113.68	-3,111.1	-3,262.4	4,779.0	4,758.2	20.81	229.685			
6,300.0	6,289.7	5,000.0	5,000.0	12.5	8.7	-113.68	-3,111.1	-3,262.4	4,806.5	4,785.5	21.01	228.814			
6,400.0	6,389.5	5,000.0	5,000.0	12.7	8.7	-113.68	-3,111.1	-3,262.4	4,836.0	4,814.8	21.21	228.050			
6,500.0	6,489.3	5,000.0	5,000.0	12.9	8.7	-113.68	-3,111.1	-3,262.4	4,867.4	4,846.0	21.41	227.388			
6,600.0	6,589.1	5,000.0	5,000.0	13.1	8.7	-113.68	-3,111.1	-3,262.4	4,900.5	4,878.9	21.61	226.822			
6,700.0	6,689.0	5,000.0	5,000.0	13.3	8.7	-113.68	-3,111.1	-3,262.4	4,935.5	4,913.7	21.80	226.350			
6,785.3	6,774.1	5,000.0	5,000.0	13.5	8.7	-113.68	-3,111.1	-3,262.4	4,966.8	4,944.8	21.98	226.018			
6,800.0	6,788.8	5,000.0	5,000.0	13.5	8.7	-102.97	-3,111.1	-3,262.4	4,972.2	4,950.2	22.00	226.039			
6,850.0	6,838.8	5,000.0	5,000.0	13.6	8.7	6.56	-3,111.1	-3,262.4	4,989.3	4,967.3	22.03	226.480			
6,900.0	6,888.6	5,000.0	5,000.0	13.6	8.7	27.66	-3,111.1	-3,262.4	5,004.4	4,982.4	22.01	227.398			
6,950.0	6,938.1	5,000.0	5,000.0	13.7	8.7	32.09	-3,111.1	-3,262.4	5,017.4	4,995.5	21.93	228.797			
7,000.0	6,987.0	5,000.0	5,000.0	13.7	8.7	33.75	-3,111.1	-3,262.4	5,028.3	5,006.5	21.80	230.675			
7,050.0	7,035.0	5,000.0	5,000.0	13.6	8.7	34.54	-3,111.1	-3,262.4	5,037.0	5,015.4	21.62	233.026			
7,100.0	7,082.0	5,000.0	5,000.0	13.6	8.7	34.99	-3,111.1	-3,262.4	5,043.6	5,022.2	21.39	235.829			
7,150.0	7,127.7	5,000.0	5,000.0	13.5	8.7	35.31	-3,111.1	-3,262.4	5,047.9	5,026.8	21.12	239.054			
7,200.0	7,171.8	5,000.0	5,000.0	13.5	8.7	35.60	-3,111.1	-3,262.4	5,050.0	5,029.2	20.81	242.656			
7,250.0	7,214.2	5,000.0	5,000.0	13.4	8.7	35.90	-3,111.1	-3,262.4	5,049.8	5,029.3	20.48	246.565			
7,300.0	7,254.6	5,000.0	5,000.0	13.4	8.7	36.25	-3,111.1	-3,262.4	5,047.4	5,027.3	20.13	250.685			
7,350.0	7,292.9	5,000.0	5,000.0	13.3	8.7	36.66	-3,111.1	-3,262.4	5,042.8	5,023.0	19.78	254.884			
7,400.0	7,328.9	5,000.0	5,000.0	13.3	8.7	37.15	-3,111.1	-3,262.4	5,036.0	5,016.5	19.44	258.988			
7,450.0	7,362.3	5,000.0	5,000.0	13.3	8.7	37.73	-3,111.1	-3,262.4	5,026.9	5,007.8	19.13	262.778			
7,500.0	7,393.1	5,000.0	5,000.0	13.4	8.7	38.42	-3,111.1	-3,262.4	5,015.7	4,996.9	18.86	265.990			
7,550.0	7,421.1	5,000.0	5,000.0	13.5	8.7	39.21	-3,111.1	-3,262.4	5,002.4	4,983.8	18.64	268.324			
7,600.0	7,446.1	5,000.0	5,000.0	13.6	8.7	40.13	-3,111.1	-3,262.4	4,987.0	4,968.5	18.51	269.469			
7,650.0	7,468.0	5,000.0	5,000.0	13.8	8.7	41.18	-3,111.1	-3,262.4	4,969.7	4,951.2	18.47	269.135			
7,700.0	7,486.7	5,000.0	5,000.0	14.0	8.7	42.37	-3,111.1	-3,262.4	4,950.3	4,931.8	18.53	267.097			
7,750.0	7,502.2	5,000.0	5,000.0	14.2	8.7	43.72	-3,111.1	-3,262.4	4,929.1	4,910.4	18.72	263.242			
7,800.0	7,514.3	5,000.0	5,000.0	14.6	8.7	45.24	-3,111.1	-3,262.4	4,906.1	4,887.0	19.05	257.595			
7,850.0	7,523.0	5,000.0	5,000.0	14.9	8.7	46.93	-3,111.1	-3,262.4	4,881.3	4,861.8	19.50	250.328			
7,900.0	7,528.2	5,000.0	5,000.0	15.3	8.7	48.82	-3,111.1	-3,262.4	4,855.0	4,834.9	20.08	241.733			
7,950.2	7,530.0	5,000.0	5,000.0	15.8	8.7	50.93	-3,111.1	-3,262.4	4,827.0	4,806.2	20.79	232.136			
8,000.0	7,530.0	5,000.0	5,000.0	16.2	8.7	50.93	-3,111.1	-3,262.4	4,798.7	4,777.5	21.17	226.681			
8,100.0	7,530.0	5,000.0	5,000.0	17.3	8.7	50.93	-3,111.1	-3,262.4	4,743.0	4,721.0	21.99	215.670			
8,200.0	7,530.0	5,000.0	5,000.0	18.4	8.7	50.93	-3,111.1	-3,262.4	4,688.7	4,665.8	22.89	204.820			
8,300.0	7,530.0	5,000.0	5,000.0	19.7	8.7	50.93	-3,111.1	-3,262.4	4,635.9	4,612.1	23.86	194.326			
8,400.0	7,530.0	5,000.0	5,000.0	21.0	8.7	50.93	-3,111.1	-3,262.4	4,584.7	4,559.9	24.88	184.310			
8,500.0	7,530.0	5,000.0	5,000.0	22.4	8.7	50.93	-3,111.1	-3,262.4	4,535.2	4,509.2	25.94	174.840			
8,600.0	7,530.0	5,000.0	5,000.0	23.8	8.7	50.93	-3,111.1	-3,262.4	4,487.3	4,460.2	27.04	165.946			
8,700.0	7,530.0	5,000.0	5,000.0	25.3	8.7	50.93	-3,111.1	-3,262.4	4,441.1	4,413.0	28.17	157.633			
8,800.0	7,530.0	5,000.0	5,000.0	26.8	8.7	50.93	-3,111.1	-3,262.4	4,396.8	4,367.5	29.33	149.887			
8,900.0	7,530.0	5,000.0	5,000.0	28.3	8.7	50.93	-3,111.1	-3,262.4	4,354.3	4,323.8	30.52	142.684			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS K UNIT 1 (EXISTING) - EXISTING - NO													Offset Site Error:	0.0 ft
Survey Program: 5000-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	7,530.0	5,000.0	5,000.0	29.9	8.7	50.93	-3,111.1	-3,262.4	4,313.7	4,281.9	31.72	135.996		
9,100.0	7,530.0	5,000.0	5,000.0	31.4	8.7	50.93	-3,111.1	-3,262.4	4,275.0	4,242.1	32.94	129.789		
9,200.0	7,530.0	5,000.0	5,000.0	33.0	8.7	50.93	-3,111.1	-3,262.4	4,238.4	4,204.2	34.17	124.033		
9,300.0	7,530.0	5,000.0	5,000.0	34.7	8.7	50.93	-3,111.1	-3,262.4	4,203.8	4,168.4	35.42	118.693		
9,400.0	7,530.0	5,000.0	5,000.0	36.3	8.7	50.93	-3,111.1	-3,262.4	4,171.3	4,134.6	36.67	113.740		
9,500.0	7,530.0	5,000.0	5,000.0	37.9	8.7	50.93	-3,111.1	-3,262.4	4,141.0	4,103.0	37.94	109.145		
9,600.0	7,530.0	5,000.0	5,000.0	39.6	8.7	50.93	-3,111.1	-3,262.4	4,112.9	4,073.7	39.21	104.881		
9,700.0	7,530.0	5,000.0	5,000.0	41.2	8.7	50.93	-3,111.1	-3,262.4	4,087.0	4,046.5	40.50	100.922		
9,800.0	7,530.0	5,000.0	5,000.0	42.9	8.7	50.93	-3,111.1	-3,262.4	4,063.5	4,021.7	41.79	97.246		
9,900.0	7,530.0	5,000.0	5,000.0	44.5	8.7	50.93	-3,111.1	-3,262.4	4,042.2	3,999.2	43.08	93.832		
10,000.0	7,530.0	5,000.0	5,000.0	46.2	8.7	50.93	-3,111.1	-3,262.4	4,023.4	3,979.0	44.38	90.659		
10,100.0	7,530.0	5,000.0	5,000.0	47.9	8.7	50.93	-3,111.1	-3,262.4	4,007.0	3,961.3	45.68	87.710		
10,200.0	7,530.0	5,000.0	5,000.0	49.6	8.7	50.93	-3,111.1	-3,262.4	3,993.0	3,946.0	46.99	84.970		
10,300.0	7,530.0	5,000.0	5,000.0	51.3	8.7	50.93	-3,111.1	-3,262.4	3,981.4	3,933.1	48.31	82.422		
10,400.0	7,530.0	5,000.0	5,000.0	53.0	8.7	50.93	-3,111.1	-3,262.4	3,972.4	3,922.8	49.62	80.054		
10,500.0	7,530.0	5,000.0	5,000.0	54.7	8.7	50.93	-3,111.1	-3,262.4	3,965.8	3,914.9	50.94	77.852		
10,600.0	7,530.0	5,000.0	5,000.0	56.4	8.7	50.93	-3,111.1	-3,262.4	3,961.8	3,909.5	52.26	75.805		
10,700.0	7,530.0	5,000.0	5,000.0	58.1	8.7	50.93	-3,111.1	-3,262.4	3,960.3	3,906.7	53.59	73.903		
10,710.0	7,530.0	5,000.0	5,000.0	58.3	8.7	50.93	-3,111.1	-3,262.4	3,960.3	3,906.5	53.72	73.720 CC		
10,800.0	7,530.0	5,000.0	5,000.0	59.8	8.7	50.93	-3,111.1	-3,262.4	3,961.3	3,906.4	54.91	72.135 ES		
10,900.0	7,530.0	5,000.0	5,000.0	61.5	8.7	50.93	-3,111.1	-3,262.4	3,964.8	3,908.6	56.24	70.493		
11,000.0	7,530.0	5,000.0	5,000.0	63.2	8.7	50.93	-3,111.1	-3,262.4	3,970.9	3,913.3	57.58	68.968		
11,100.0	7,530.0	5,000.0	5,000.0	64.9	8.7	50.93	-3,111.1	-3,262.4	3,979.4	3,920.5	58.91	67.552		
11,200.0	7,530.0	5,000.0	5,000.0	66.6	8.7	50.93	-3,111.1	-3,262.4	3,990.5	3,930.2	60.24	66.238		
11,300.0	7,530.0	5,000.0	5,000.0	68.4	8.7	50.93	-3,111.1	-3,262.4	4,004.0	3,942.4	61.58	65.020		
11,400.0	7,530.0	5,000.0	5,000.0	70.1	8.7	50.93	-3,111.1	-3,262.4	4,019.9	3,957.0	62.92	63.891		
11,500.0	7,530.0	5,000.0	5,000.0	71.8	8.7	50.93	-3,111.1	-3,262.4	4,038.3	3,974.0	64.26	62.845		
11,600.0	7,530.0	5,000.0	5,000.0	73.5	8.7	50.93	-3,111.1	-3,262.4	4,059.0	3,993.4	65.60	61.876		
11,700.0	7,530.0	5,000.0	5,000.0	75.3	8.7	50.93	-3,111.1	-3,262.4	4,082.1	4,015.2	66.94	60.981		
11,800.0	7,530.0	5,000.0	5,000.0	77.0	8.7	50.93	-3,111.1	-3,262.4	4,107.5	4,039.2	68.28	60.153		
11,900.0	7,530.0	5,000.0	5,000.0	78.7	8.7	50.93	-3,111.1	-3,262.4	4,135.2	4,065.6	69.63	59.389		
12,000.0	7,530.0	5,000.0	5,000.0	80.4	8.7	50.93	-3,111.1	-3,262.4	4,165.1	4,094.1	70.97	58.685		
12,100.0	7,530.0	5,000.0	5,000.0	82.2	8.7	50.93	-3,111.1	-3,262.4	4,197.1	4,124.8	72.32	58.035		
12,200.0	7,530.0	5,000.0	5,000.0	83.9	8.7	50.93	-3,111.1	-3,262.4	4,231.3	4,157.6	73.67	57.438		
12,300.0	7,530.0	5,000.0	5,000.0	85.6	8.7	50.93	-3,111.1	-3,262.4	4,267.5	4,192.5	75.02	56.889		
12,400.0	7,530.0	5,000.0	5,000.0	87.4	8.7	50.93	-3,111.1	-3,262.4	4,305.8	4,229.4	76.36	56.385		
12,500.0	7,530.0	5,000.0	5,000.0	89.1	8.7	50.93	-3,111.1	-3,262.4	4,346.0	4,268.3	77.71	55.924		
12,600.0	7,530.0	5,000.0	5,000.0	90.8	8.7	50.93	-3,111.1	-3,262.4	4,388.1	4,309.1	79.06	55.502		
12,700.0	7,530.0	5,000.0	5,000.0	92.6	8.7	50.93	-3,111.1	-3,262.4	4,432.1	4,351.7	80.41	55.117		
12,800.0	7,530.0	5,000.0	5,000.0	94.3	8.7	50.93	-3,111.1	-3,262.4	4,477.9	4,396.2	81.76	54.766		
12,900.0	7,530.0	5,000.0	5,000.0	96.0	8.7	50.93	-3,111.1	-3,262.4	4,525.5	4,442.4	83.12	54.447		
13,000.0	7,530.0	5,000.0	5,000.0	97.8	8.7	50.93	-3,111.1	-3,262.4	4,574.7	4,490.2	84.47	54.158		
13,100.0	7,530.0	5,000.0	5,000.0	99.5	8.7	50.93	-3,111.1	-3,262.4	4,625.6	4,539.7	85.82	53.897		
13,200.0	7,530.0	5,000.0	5,000.0	101.3	8.7	50.93	-3,111.1	-3,262.4	4,678.0	4,590.8	87.18	53.662		
13,300.0	7,530.0	5,000.0	5,000.0	103.0	8.7	50.93	-3,111.1	-3,262.4	4,732.0	4,643.5	88.53	53.451		
13,400.0	7,530.0	5,000.0	5,000.0	104.7	8.7	50.93	-3,111.1	-3,262.4	4,787.5	4,697.6	89.88	53.263		
13,500.0	7,530.0	5,000.0	5,000.0	106.5	8.7	50.93	-3,111.1	-3,262.4	4,844.4	4,753.1	91.24	53.096		
13,600.0	7,530.0	5,000.0	5,000.0	108.2	8.7	50.93	-3,111.1	-3,262.4	4,902.6	4,810.0	92.59	52.948		
13,700.0	7,530.0	5,000.0	5,000.0	110.0	8.7	50.93	-3,111.1	-3,262.4	4,962.2	4,868.3	93.95	52.818		
13,800.0	7,530.0	5,000.0	5,000.0	111.7	8.7	50.93	-3,111.1	-3,262.4	5,023.1	4,927.8	95.31	52.706		
13,900.0	7,530.0	5,000.0	5,000.0	113.4	8.7	50.93	-3,111.1	-3,262.4	5,085.3	4,988.6	96.66	52.609		
14,000.0	7,530.0	5,000.0	5,000.0	115.2	8.7	50.93	-3,111.1	-3,262.4	5,148.6	5,050.6	98.02	52.527		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS K UNIT 1 (EXISTING) - EXISTING - NO													Offset Site Error:	0.0 ft
Survey Program: 5000-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	7,530.0	5,000.0	5,000.0	116.9	8.7	50.93	-3,111.1	-3,262.4	5,213.1	5,113.7	99.38	52.458		
14,200.0	7,530.0	5,000.0	5,000.0	118.7	8.7	50.93	-3,111.1	-3,262.4	5,278.6	5,177.9	100.73	52.403		
14,300.0	7,530.0	5,000.0	5,000.0	120.4	8.7	50.93	-3,111.1	-3,262.4	5,345.3	5,243.2	102.09	52.359		
14,400.0	7,530.0	5,000.0	5,000.0	122.1	8.7	50.93	-3,111.1	-3,262.4	5,412.9	5,309.5	103.45	52.325		
14,500.0	7,530.0	5,000.0	5,000.0	123.9	8.7	50.93	-3,111.1	-3,262.4	5,481.6	5,376.8	104.81	52.302		
14,600.0	7,530.0	5,000.0	5,000.0	125.6	8.7	50.93	-3,111.1	-3,262.4	5,551.2	5,445.0	106.16	52.289		
14,700.0	7,530.0	5,000.0	5,000.0	127.4	8.7	50.93	-3,111.1	-3,262.4	5,621.7	5,514.2	107.52	52.284 SF		
14,800.0	7,530.0	5,000.0	5,000.0	129.1	8.7	50.93	-3,111.1	-3,262.4	5,693.1	5,584.3	108.88	52.288		
14,900.0	7,530.0	5,000.0	5,000.0	130.9	8.7	50.93	-3,111.1	-3,262.4	5,765.4	5,655.2	110.24	52.298		
15,000.0	7,530.0	5,000.0	5,000.0	132.6	8.7	50.93	-3,111.1	-3,262.4	5,838.5	5,726.9	111.60	52.316		
15,100.0	7,530.0	5,000.0	5,000.0	134.4	8.7	50.93	-3,111.1	-3,262.4	5,912.4	5,799.4	112.96	52.341		
15,200.0	7,530.0	5,000.0	5,000.0	136.1	8.7	50.93	-3,111.1	-3,262.4	5,987.0	5,872.7	114.32	52.371		
15,300.0	7,530.0	5,000.0	5,000.0	137.9	8.7	50.93	-3,111.1	-3,262.4	6,062.3	5,946.7	115.68	52.407		
15,400.0	7,530.0	5,000.0	5,000.0	139.6	8.7	50.93	-3,111.1	-3,262.4	6,138.4	6,021.4	117.04	52.448		
15,500.0	7,530.0	5,000.0	5,000.0	141.3	8.7	50.93	-3,111.1	-3,262.4	6,215.1	6,096.7	118.40	52.493		
15,600.0	7,530.0	5,000.0	5,000.0	143.1	8.7	50.93	-3,111.1	-3,262.4	6,292.5	6,172.8	119.76	52.543		
15,700.0	7,530.0	5,000.0	5,000.0	144.8	8.7	50.93	-3,111.1	-3,262.4	6,370.6	6,249.4	121.12	52.597		
15,800.0	7,530.0	5,000.0	5,000.0	146.6	8.7	50.93	-3,111.1	-3,262.4	6,449.2	6,326.7	122.48	52.655		
15,900.0	7,530.0	5,000.0	5,000.0	148.3	8.7	50.93	-3,111.1	-3,262.4	6,528.4	6,404.6	123.84	52.716		
16,000.0	7,530.0	5,000.0	5,000.0	150.1	8.7	50.93	-3,111.1	-3,262.4	6,608.2	6,483.0	125.20	52.780		
16,100.0	7,530.0	5,000.0	5,000.0	151.8	8.7	50.93	-3,111.1	-3,262.4	6,688.5	6,561.9	126.56	52.847		
16,200.0	7,530.0	5,000.0	5,000.0	153.6	8.7	50.93	-3,111.1	-3,262.4	6,769.3	6,641.4	127.93	52.916		
16,300.0	7,530.0	5,000.0	5,000.0	155.3	8.7	50.93	-3,111.1	-3,262.4	6,850.7	6,721.4	129.29	52.988		
16,400.0	7,530.0	5,000.0	5,000.0	157.1	8.7	50.93	-3,111.1	-3,262.4	6,932.5	6,801.9	130.65	53.063		
16,500.0	7,530.0	5,000.0	5,000.0	158.8	8.7	50.93	-3,111.1	-3,262.4	7,014.8	6,882.8	132.01	53.139		
16,600.0	7,530.0	5,000.0	5,000.0	160.6	8.7	50.93	-3,111.1	-3,262.4	7,097.6	6,964.2	133.37	53.217		
16,700.0	7,530.0	5,000.0	5,000.0	162.3	8.7	50.93	-3,111.1	-3,262.4	7,180.8	7,046.1	134.73	53.296		
16,800.0	7,530.0	5,000.0	5,000.0	164.1	8.7	50.93	-3,111.1	-3,262.4	7,264.4	7,128.3	136.10	53.377		
16,900.0	7,530.0	5,000.0	5,000.0	165.8	8.7	50.93	-3,111.1	-3,262.4	7,348.5	7,211.0	137.46	53.460		
17,000.0	7,530.0	5,000.0	5,000.0	167.6	8.7	50.93	-3,111.1	-3,262.4	7,432.9	7,294.1	138.82	53.543		
17,100.0	7,530.0	5,000.0	5,000.0	169.3	8.7	50.93	-3,111.1	-3,262.4	7,517.7	7,377.5	140.18	53.628		
17,200.0	7,530.0	5,000.0	5,000.0	171.1	8.7	50.93	-3,111.1	-3,262.4	7,602.9	7,461.3	141.55	53.714		
17,300.0	7,530.0	5,000.0	5,000.0	172.8	8.7	50.93	-3,111.1	-3,262.4	7,688.4	7,545.5	142.91	53.800		
17,400.0	7,530.0	5,000.0	5,000.0	174.5	8.7	50.93	-3,111.1	-3,262.4	7,774.3	7,630.0	144.27	53.887		
17,411.2	7,530.0	5,000.0	5,000.0	174.7	8.7	50.93	-3,111.1	-3,262.4	7,784.0	7,639.6	144.42	53.897		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S														Offset Site Error:	0.0 ft
Survey Program: 132-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-95.05	-262.5	-2,970.7	2,982.4						
100.0	100.0	86.5	86.5	0.2	0.2	-95.05	-262.5	-2,971.3	2,983.1	2,982.8	0.30	9,833.616			
200.0	200.0	158.1	158.1	0.3	0.3	-95.05	-262.7	-2,972.5	2,984.8	2,984.2	0.60	4,945.586			
300.0	300.0	223.0	223.0	0.5	0.4	-95.05	-263.1	-2,974.2	2,987.5	2,986.6	0.89	3,347.049			
400.0	400.0	315.0	314.9	0.7	0.6	-95.07	-264.1	-2,977.4	2,991.0	2,989.8	1.23	2,427.715			
500.0	500.0	361.6	361.4	0.8	0.7	-95.08	-264.7	-2,979.6	2,995.7	2,994.2	1.49	2,009.409			
600.0	600.0	420.7	420.4	1.0	0.8	-72.03	-265.4	-2,983.2	3,001.6	2,999.8	1.76	1,705.516			
700.0	700.0	498.0	497.5	1.2	1.0	-71.98	-264.9	-2,988.9	3,008.0	3,006.0	2.07	1,452.145			
800.0	799.9	534.7	534.0	1.4	1.0	-71.92	-264.1	-2,992.1	3,015.3	3,013.0	2.32	1,300.279			
848.7	848.4	553.8	553.0	1.5	1.1	-71.89	-263.6	-2,994.1	3,019.4	3,016.9	2.44	1,235.734			
900.0	899.7	590.0	589.0	1.6	1.2	-71.91	-262.6	-2,998.4	3,024.2	3,021.6	2.60	1,161.080			
1,000.0	999.5	590.0	589.0	1.8	1.2	-71.91	-262.6	-2,998.4	3,035.1	3,032.3	2.80	1,085.694			
1,100.0	1,099.3	646.2	644.5	2.0	1.4	-71.92	-261.1	-3,006.4	3,047.7	3,044.6	3.09	986.405			
1,200.0	1,199.1	681.0	678.9	2.2	1.5	-71.93	-260.2	-3,012.4	3,062.6	3,059.2	3.35	914.925			
1,300.0	1,298.9	727.3	724.3	2.4	1.7	-71.95	-259.2	-3,021.1	3,079.4	3,075.7	3.63	849.216			
1,400.0	1,398.8	773.0	769.0	2.6	1.8	-71.97	-258.6	-3,030.5	3,097.8	3,093.9	3.90	793.343			
1,500.0	1,498.6	850.0	844.2	2.8	2.1	-72.02	-258.3	-3,047.1	3,117.4	3,113.2	4.24	735.420			
1,600.0	1,598.4	964.2	955.7	3.0	2.6	-72.13	-259.4	-3,071.6	3,137.1	3,132.4	4.64	676.598			
1,700.0	1,698.2	1,033.0	1,022.9	3.2	2.9	-72.19	-260.5	-3,086.6	3,157.1	3,152.2	4.95	637.249			
1,800.0	1,798.0	1,083.9	1,072.5	3.4	3.1	-72.24	-261.5	-3,098.3	3,178.3	3,173.1	5.24	606.485			
1,900.0	1,897.8	1,120.0	1,107.5	3.6	3.3	-72.28	-262.2	-3,106.9	3,200.8	3,195.3	5.50	581.615			
2,000.0	1,997.7	1,207.0	1,191.6	3.8	3.7	-72.37	-264.3	-3,129.1	3,224.6	3,218.8	5.85	550.919			
2,100.0	2,097.5	1,253.7	1,236.6	4.0	3.9	-72.42	-265.3	-3,141.6	3,249.6	3,243.5	6.14	529.680			
2,200.0	2,197.3	1,340.0	1,319.5	4.2	4.4	-72.49	-266.8	-3,165.4	3,275.4	3,268.9	6.48	505.078			
2,300.0	2,297.1	1,426.4	1,402.6	4.4	4.8	-72.58	-269.3	-3,189.0	3,301.3	3,294.4	6.83	483.053			
2,400.0	2,396.9	1,509.5	1,482.3	4.6	5.3	-72.66	-271.4	-3,212.3	3,327.7	3,320.5	7.18	463.518			
2,500.0	2,496.7	1,652.6	1,619.8	4.8	6.0	-72.77	-273.5	-3,251.9	3,353.7	3,346.1	7.63	439.503			
2,600.0	2,596.5	1,731.0	1,695.3	5.0	6.4	-72.83	-274.9	-3,273.1	3,379.1	3,371.1	7.97	424.093			
2,700.0	2,696.4	1,789.1	1,751.0	5.2	6.7	-72.88	-275.8	-3,289.3	3,405.3	3,397.0	8.27	411.675			
2,800.0	2,796.2	1,852.4	1,811.6	5.4	7.1	-72.91	-276.3	-3,307.7	3,432.6	3,424.0	8.58	399.854			
2,900.0	2,896.0	1,934.8	1,890.2	5.6	7.5	-72.96	-277.3	-3,332.2	3,460.6	3,451.7	8.93	387.482			
3,000.0	2,995.8	2,097.3	2,045.7	5.8	8.4	-73.09	-280.5	-3,379.5	3,488.2	3,478.8	9.41	370.520			
3,100.0	3,095.6	2,196.3	2,140.9	6.0	8.9	-73.17	-282.5	-3,406.5	3,513.9	3,504.1	9.79	358.912			
3,200.0	3,195.4	2,255.0	2,197.1	6.2	9.3	-73.21	-283.3	-3,423.6	3,541.0	3,530.9	10.10	350.752			
3,300.0	3,295.2	2,286.9	2,227.5	6.4	9.5	-73.23	-283.9	-3,433.3	3,569.4	3,559.0	10.35	344.804			
3,400.0	3,395.1	2,371.1	2,307.5	6.6	10.0	-73.30	-286.1	-3,459.2	3,598.6	3,587.9	10.70	336.290			
3,500.0	3,494.9	2,539.7	2,468.3	6.8	10.9	-73.36	-286.1	-3,510.3	3,627.1	3,615.9	11.21	323.590			
3,600.0	3,594.7	2,656.4	2,579.9	7.0	11.6	-73.38	-284.9	-3,544.0	3,654.0	3,642.4	11.62	314.331			
3,700.0	3,694.5	2,742.3	2,662.1	7.2	12.0	-73.40	-283.6	-3,568.8	3,680.9	3,668.9	11.98	307.137			
3,800.0	3,794.3	2,846.9	2,762.2	7.4	12.6	-73.42	-282.8	-3,599.2	3,708.0	3,695.7	12.38	299.605			
3,900.0	3,894.1	3,002.1	2,911.4	7.6	13.4	-73.51	-284.4	-3,642.2	3,734.0	3,721.1	12.85	290.497			
4,000.0	3,994.0	3,084.0	2,990.2	7.8	13.8	-73.56	-285.6	-3,664.3	3,759.4	3,746.2	13.20	284.840			
4,100.0	4,093.8	3,152.2	3,055.7	8.0	14.2	-73.62	-287.8	-3,683.1	3,785.5	3,772.0	13.52	280.014			
4,200.0	4,193.6	3,230.8	3,131.1	8.2	14.6	-73.68	-289.4	-3,705.3	3,812.2	3,798.3	13.86	275.017			
4,300.0	4,293.4	3,327.6	3,223.9	8.4	15.2	-73.73	-290.9	-3,733.1	3,839.2	3,824.9	14.24	269.670			
4,400.0	4,393.2	3,512.0	3,401.0	8.6	16.1	-73.83	-292.5	-3,784.0	3,865.3	3,850.5	14.77	261.679			
4,500.0	4,493.0	3,604.0	3,489.8	8.8	16.6	-73.86	-292.5	-3,808.1	3,889.6	3,874.5	15.15	256.821			
4,600.0	4,592.8	3,652.0	3,536.0	9.0	16.9	-73.86	-291.6	-3,821.3	3,915.0	3,899.6	15.44	253.577			
4,700.0	4,692.7	3,739.0	3,619.4	9.3	17.3	-73.86	-289.1	-3,845.9	3,941.2	3,925.4	15.81	249.314			
4,800.0	4,792.5	3,852.3	3,728.1	9.5	17.9	-73.88	-288.3	-3,877.5	3,967.1	3,950.9	16.21	244.671			
4,900.0	4,892.3	3,927.6	3,800.5	9.7	18.3	-73.92	-288.9	-3,898.5	3,993.3	3,976.7	16.55	241.232			
5,000.0	4,992.1	4,001.0	3,870.9	9.9	18.7	-73.94	-289.0	-3,919.2	4,019.8	4,002.9	16.89	237.977			

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 132-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,091.9	4,061.4	3,928.7	10.1	19.1	-73.96	-289.1	-3,936.7	4,047.0	4,029.8	17.20	235.236		
5,200.0	5,191.7	4,151.0	4,014.2	10.3	19.6	-74.00	-289.8	-3,963.4	4,075.1	4,057.5	17.57	231.980		
5,300.0	5,291.5	5,071.6	4,913.6	10.5	23.1	-74.33	-283.2	-4,148.3	4,094.3	4,074.9	19.48	210.208		
5,400.0	5,391.4	5,348.4	5,189.4	10.7	23.6	-74.45	-278.7	-4,171.1	4,101.2	4,081.0	20.19	203.082		
5,500.0	5,491.2	5,533.9	5,374.7	10.9	23.9	-74.54	-275.1	-4,179.7	4,103.8	4,083.0	20.74	197.868		
5,600.0	5,591.0	5,647.3	5,488.0	11.1	24.0	-74.60	-273.2	-4,183.7	4,105.4	4,084.3	21.15	194.099		
5,700.0	5,690.8	5,772.2	5,612.8	11.3	24.1	-74.66	-270.8	-4,187.5	4,106.6	4,085.0	21.59	190.209		
5,800.0	5,790.6	5,888.2	5,728.7	11.5	24.3	-74.71	-267.6	-4,190.6	4,107.2	4,085.2	22.01	186.609		
5,900.0	5,890.4	5,994.0	5,834.5	11.7	24.4	-74.75	-264.9	-4,193.1	4,107.7	4,085.2	22.41	183.307		
6,000.0	5,990.3	6,146.9	5,987.3	11.9	24.5	-74.82	-261.5	-4,195.6	4,107.4	4,084.5	22.89	179.444		
6,100.0	6,090.1	6,247.7	6,088.1	12.1	24.6	-74.88	-259.7	-4,196.4	4,106.3	4,083.0	23.28	176.399		
6,200.0	6,189.9	6,330.6	6,170.9	12.3	24.7	-74.93	-258.2	-4,197.3	4,105.6	4,081.9	23.63	173.713		
6,300.0	6,289.7	6,417.7	6,258.0	12.5	24.8	-74.97	-256.6	-4,198.6	4,105.2	4,081.2	24.00	171.061		
6,383.8	6,373.3	6,492.4	6,332.7	12.7	24.9	-75.01	-255.1	-4,199.9	4,105.1	4,080.8	24.31	168.883		
6,400.0	6,389.5	6,506.9	6,347.2	12.7	24.9	-75.02	-254.8	-4,200.2	4,105.1	4,080.8	24.37	168.468		
6,500.0	6,489.3	6,595.3	6,435.6	12.9	25.0	-75.06	-253.0	-4,202.0	4,105.3	4,080.6	24.73	165.982		
6,600.0	6,589.1	6,683.3	6,523.5	13.1	25.1	-75.11	-251.2	-4,204.1	4,105.8	4,080.7	25.10	163.586		
6,700.0	6,689.0	6,792.5	6,632.7	13.3	25.2	-75.16	-249.1	-4,206.7	4,106.4	4,080.9	25.50	161.003		
6,785.3	6,774.1	6,891.8	6,731.9	13.5	25.3	-75.21	-246.8	-4,208.8	4,106.6	4,080.7	25.86	158.780		
6,800.0	6,788.8	6,908.2	6,748.3	13.5	25.3	-64.18	-246.4	-4,209.2	4,106.5	4,080.6	25.93	158.397		
6,850.0	6,838.8	6,963.9	6,804.0	13.6	25.4	46.38	-245.0	-4,210.2	4,106.1	4,080.0	26.10	157.344		
6,900.0	6,888.6	7,019.3	6,859.3	13.6	25.5	68.47	-243.6	-4,211.2	4,105.1	4,078.8	26.22	156.561		
6,950.0	6,938.1	7,075.3	6,915.4	13.7	25.5	73.85	-242.1	-4,212.1	4,103.5	4,077.2	26.30	156.014		
7,000.0	6,987.0	7,133.1	6,973.1	13.7	25.6	76.44	-240.5	-4,212.9	4,101.3	4,074.9	26.35	155.662		
7,050.0	7,035.0	7,189.7	7,029.7	13.6	25.6	78.13	-238.9	-4,213.6	4,098.6	4,072.2	26.36	155.488		
7,100.0	7,082.0	7,243.0	7,083.0	13.6	25.7	79.44	-237.4	-4,214.1	4,095.4	4,069.0	26.34	155.462		
7,150.0	7,127.7	7,289.4	7,129.3	13.5	25.7	80.53	-236.2	-4,214.6	4,091.8	4,065.5	26.30	155.565		
7,200.0	7,171.8	7,334.1	7,174.0	13.5	25.8	81.53	-235.0	-4,214.9	4,088.0	4,061.7	26.26	155.698		
7,250.0	7,214.2	7,377.0	7,216.9	13.4	25.8	82.48	-234.0	-4,215.3	4,084.0	4,057.8	26.21	155.814		
7,300.0	7,254.6	7,421.6	7,261.4	13.4	25.9	83.42	-232.9	-4,215.6	4,079.8	4,053.7	26.18	155.837		
7,350.0	7,292.9	7,471.7	7,311.6	13.3	25.9	84.40	-231.7	-4,215.9	4,075.6	4,049.4	26.18	155.684		
7,400.0	7,328.9	7,518.6	7,358.4	13.3	26.0	85.36	-230.5	-4,216.0	4,071.3	4,045.1	26.20	155.388		
7,450.0	7,362.3	7,561.8	7,401.7	13.3	26.0	86.28	-229.3	-4,216.0	4,067.1	4,040.8	26.25	154.921		
7,500.0	7,393.1	7,596.8	7,436.6	13.4	26.0	87.09	-228.4	-4,215.9	4,063.1	4,036.7	26.33	154.303		
7,550.0	7,421.1	7,624.7	7,464.6	13.5	26.0	87.80	-227.6	-4,215.8	4,059.3	4,032.9	26.44	153.509		
7,600.0	7,446.1	7,649.5	7,489.3	13.6	26.1	88.44	-226.9	-4,215.7	4,056.1	4,029.5	26.60	152.500		
7,650.0	7,468.0	7,671.0	7,510.8	13.8	26.1	88.99	-226.2	-4,215.6	4,053.3	4,026.5	26.79	151.272		
7,700.0	7,486.7	7,689.1	7,528.9	14.0	26.1	89.46	-225.7	-4,215.6	4,051.0	4,024.0	27.04	149.832		
7,750.0	7,502.2	7,703.7	7,543.5	14.2	26.1	89.82	-225.3	-4,215.5	4,049.4	4,022.0	27.33	148.192		
7,800.0	7,514.3	7,714.7	7,554.5	14.6	26.1	90.08	-224.9	-4,215.5	4,048.4	4,020.7	27.66	146.372		
7,846.5	7,522.5	7,721.8	7,561.6	14.9	26.1	90.22	-224.7	-4,215.5	4,048.1	4,020.1	28.01	144.535		
7,850.0	7,523.0	7,722.2	7,562.0	14.9	26.1	90.22	-224.7	-4,215.5	4,048.1	4,020.0	28.03	144.399		
7,900.0	7,528.2	7,726.1	7,565.9	15.3	26.1	90.25	-224.6	-4,215.4	4,048.5	4,020.0	28.45	142.301		
7,950.2	7,530.0	7,726.3	7,566.1	15.8	26.1	90.17	-224.6	-4,215.4	4,049.6	4,020.7	28.90	140.101		
8,000.0	7,530.0	7,724.7	7,564.5	16.2	26.1	90.15	-224.6	-4,215.4	4,051.4	4,022.0	29.39	137.868		
8,100.0	7,530.0	7,721.6	7,561.4	17.3	26.1	90.10	-224.7	-4,215.5	4,056.8	4,026.4	30.45	133.241		
8,200.0	7,530.0	7,718.4	7,558.2	18.4	26.1	90.06	-224.8	-4,215.5	4,064.7	4,033.1	31.62	128.566		
8,300.0	7,530.0	7,715.3	7,555.1	19.7	26.1	90.02	-224.9	-4,215.5	4,075.0	4,042.1	32.87	123.969		
8,400.0	7,530.0	7,712.2	7,552.0	21.0	26.1	89.97	-225.0	-4,215.5	4,087.7	4,053.5	34.20	119.529		
8,500.0	7,530.0	7,709.1	7,548.9	22.4	26.1	89.93	-225.1	-4,215.5	4,102.8	4,067.2	35.58	115.298		
8,600.0	7,530.0	7,706.0	7,545.8	23.8	26.1	89.88	-225.2	-4,215.5	4,120.3	4,083.3	37.02	111.302		
8,700.0	7,530.0	7,702.9	7,542.7	25.3	26.1	89.84	-225.3	-4,215.5	4,140.2	4,101.7	38.49	107.553		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 132-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
8,800.0	7,530.0	7,699.8	7,539.6	26.8	26.1	89.80	-225.4	-4,215.5	4,162.3	4,122.3	40.00	104.052		
8,900.0	7,530.0	7,696.8	7,536.5	28.3	26.1	89.75	-225.5	-4,215.6	4,186.7	4,145.2	41.54	100.791		
9,000.0	7,530.0	7,693.7	7,533.5	29.9	26.1	89.71	-225.6	-4,215.6	4,213.3	4,170.2	43.10	97.762		
9,100.0	7,530.0	7,690.7	7,530.5	31.4	26.1	89.67	-225.7	-4,215.6	4,242.2	4,197.5	44.68	94.950		
9,200.0	7,530.0	7,687.6	7,527.4	33.0	26.1	89.62	-225.7	-4,215.6	4,273.1	4,226.9	46.28	92.342		
9,300.0	7,530.0	7,684.6	7,524.4	34.7	26.1	89.58	-225.8	-4,215.6	4,306.2	4,258.3	47.89	89.924		
9,400.0	7,530.0	7,681.6	7,521.4	36.3	26.1	89.54	-225.9	-4,215.6	4,341.3	4,291.8	49.51	87.683		
9,500.0	7,530.0	7,678.6	7,518.4	37.9	26.1	89.50	-226.0	-4,215.6	4,378.5	4,327.3	51.15	85.604		
9,600.0	7,530.0	7,675.7	7,515.4	39.6	26.1	89.45	-226.1	-4,215.6	4,417.5	4,364.7	52.79	83.676		
9,700.0	7,530.0	7,672.7	7,512.5	41.2	26.1	89.41	-226.2	-4,215.6	4,458.5	4,404.0	54.45	81.886		
9,800.0	7,530.0	7,669.7	7,509.5	42.9	26.1	89.37	-226.3	-4,215.7	4,501.3	4,445.2	56.11	80.224		
9,900.0	7,530.0	7,666.8	7,506.6	44.5	26.1	89.33	-226.4	-4,215.7	4,545.9	4,488.1	57.78	78.680		
10,000.0	7,530.0	7,663.8	7,503.6	46.2	26.1	89.29	-226.4	-4,215.7	4,592.3	4,532.8	59.45	77.243		
10,100.0	7,530.0	7,660.9	7,500.7	47.9	26.1	89.25	-226.5	-4,215.7	4,640.3	4,579.2	61.13	75.907		
10,200.0	7,530.0	7,658.0	7,497.8	49.6	26.1	89.20	-226.6	-4,215.7	4,690.0	4,627.2	62.82	74.662		
10,300.0	7,530.0	7,655.1	7,494.9	51.3	26.1	89.16	-226.7	-4,215.7	4,741.3	4,676.8	64.51	73.502		
10,400.0	7,530.0	7,652.2	7,492.0	53.0	26.1	89.12	-226.8	-4,215.7	4,794.1	4,727.9	66.20	72.420		
10,500.0	7,530.0	7,649.3	7,489.1	54.7	26.1	89.08	-226.9	-4,215.7	4,848.4	4,780.5	67.89	71.410		
10,600.0	7,530.0	7,646.5	7,486.3	56.4	26.1	89.04	-227.0	-4,215.7	4,904.1	4,834.5	69.59	70.467		
10,700.0	7,530.0	7,643.6	7,483.4	58.1	26.1	89.00	-227.0	-4,215.7	4,961.2	4,889.9	71.30	69.586		
10,800.0	7,530.0	7,640.8	7,480.6	59.8	26.1	88.96	-227.1	-4,215.8	5,019.7	4,946.7	73.00	68.761		
10,900.0	7,530.0	7,637.9	7,477.7	61.5	26.1	88.92	-227.2	-4,215.8	5,079.4	5,004.7	74.71	67.990		
11,000.0	7,530.0	7,635.1	7,474.9	63.2	26.1	88.88	-227.3	-4,215.8	5,140.4	5,064.0	76.42	67.267		
11,100.0	7,530.0	7,632.3	7,472.1	64.9	26.0	88.84	-227.4	-4,215.8	5,202.6	5,124.5	78.13	66.589		
11,200.0	7,530.0	7,629.5	7,469.3	66.6	26.0	88.80	-227.4	-4,215.8	5,266.0	5,186.2	79.84	65.954		
11,300.0	7,530.0	7,626.7	7,466.5	68.4	26.0	88.76	-227.5	-4,215.8	5,330.5	5,248.9	81.56	65.357		
11,400.0	7,530.0	7,623.9	7,463.7	70.1	26.0	88.72	-227.6	-4,215.8	5,396.1	5,312.8	83.28	64.797		
11,500.0	7,530.0	7,621.1	7,460.9	71.8	26.0	88.68	-227.7	-4,215.8	5,462.7	5,377.7	84.99	64.271		
11,600.0	7,530.0	7,618.4	7,458.2	73.5	26.0	88.64	-227.8	-4,215.8	5,530.3	5,443.6	86.71	63.776		
11,700.0	7,530.0	7,615.6	7,455.4	75.3	26.0	88.61	-227.8	-4,215.8	5,598.9	5,510.5	88.44	63.311		
11,800.0	7,530.0	7,612.9	7,452.7	77.0	26.0	88.57	-227.9	-4,215.8	5,668.4	5,578.2	90.16	62.872		
11,900.0	7,530.0	7,610.1	7,449.9	78.7	26.0	88.53	-228.0	-4,215.9	5,738.8	5,646.9	91.88	62.460		
12,000.0	7,530.0	7,607.4	7,447.2	80.4	26.0	88.49	-228.1	-4,215.9	5,810.1	5,716.5	93.60	62.071		
12,100.0	7,530.0	7,604.7	7,444.5	82.2	26.0	88.45	-228.2	-4,215.9	5,882.2	5,786.9	95.33	61.704		
12,200.0	7,530.0	7,602.0	7,441.8	83.9	26.0	88.41	-228.2	-4,215.9	5,955.2	5,858.1	97.06	61.358		
12,300.0	7,530.0	7,599.3	7,439.1	85.6	26.0	88.37	-228.3	-4,215.9	6,028.9	5,930.1	98.78	61.031		
12,400.0	7,530.0	7,596.6	7,436.4	87.4	26.0	88.34	-228.4	-4,215.9	6,103.3	6,002.8	100.51	60.723		
12,500.0	7,530.0	7,593.9	7,433.8	89.1	26.0	88.30	-228.5	-4,215.9	6,178.5	6,076.2	102.24	60.432		
12,600.0	7,530.0	7,591.3	7,431.1	90.8	26.0	88.26	-228.5	-4,215.9	6,254.3	6,150.4	103.97	60.157		
12,700.0	7,530.0	7,588.6	7,428.4	92.6	26.0	88.22	-228.6	-4,215.9	6,330.9	6,225.2	105.70	59.896		
12,800.0	7,530.0	7,586.0	7,425.8	94.3	26.0	88.19	-228.7	-4,215.9	6,408.0	6,300.6	107.43	59.650		
12,900.0	7,530.0	7,580.0	7,419.8	96.0	26.0	88.10	-228.8	-4,215.9	6,485.8	6,376.7	109.15	59.421		
13,000.0	7,530.0	7,580.0	7,419.8	97.8	26.0	88.10	-228.8	-4,215.9	6,564.2	6,453.4	110.89	59.197		
13,100.0	7,530.0	7,577.7	7,417.6	99.5	26.0	88.07	-228.9	-4,215.9	6,643.2	6,530.6	112.62	58.988		
13,200.0	7,530.0	7,574.7	7,414.5	101.3	26.0	88.03	-229.0	-4,216.0	6,722.8	6,608.4	114.35	58.790		
13,300.0	7,530.0	7,571.6	7,411.4	103.0	26.0	87.98	-229.1	-4,216.0	6,802.8	6,686.7	116.08	58.603		
13,400.0	7,530.0	7,568.6	7,408.4	104.7	26.0	87.94	-229.2	-4,216.0	6,883.4	6,765.6	117.81	58.426		
13,500.0	7,530.0	7,565.5	7,405.4	106.5	26.0	87.90	-229.2	-4,216.0	6,964.5	6,845.0	119.55	58.258		
13,600.0	7,530.0	7,562.5	7,402.4	108.2	26.0	87.86	-229.3	-4,216.0	7,046.1	6,924.8	121.28	58.098		
13,700.0	7,530.0	7,559.6	7,399.4	110.0	26.0	87.81	-229.4	-4,216.0	7,128.2	7,005.1	123.01	57.947		
13,800.0	7,530.0	7,556.6	7,396.4	111.7	26.0	87.77	-229.5	-4,216.0	7,210.7	7,085.9	124.75	57.803		
13,900.0	7,530.0	7,553.7	7,393.5	113.4	26.0	87.73	-229.6	-4,216.0	7,293.6	7,167.1	126.48	57.667		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 132-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
14,000.0	7,530.0	7,550.7	7,390.6	115.2	26.0	87.69	-229.6	-4,216.0	7,377.0	7,248.7	128.21	57.537		
14,100.0	7,530.0	7,547.8	7,387.7	116.9	26.0	87.65	-229.7	-4,216.0	7,460.7	7,330.8	129.95	57.414		
14,200.0	7,530.0	7,544.9	7,384.8	118.7	26.0	87.61	-229.8	-4,216.0	7,544.9	7,413.2	131.68	57.297		
14,300.0	7,530.0	7,542.0	7,381.9	120.4	26.0	87.57	-229.9	-4,216.0	7,629.4	7,496.0	133.41	57.186		
14,400.0	7,530.0	7,539.2	7,379.0	122.1	26.0	87.52	-230.0	-4,216.0	7,714.3	7,579.2	135.15	57.080		
14,500.0	7,530.0	7,536.3	7,376.2	123.9	26.0	87.48	-230.0	-4,216.0	7,799.6	7,662.7	136.88	56.980		
14,600.0	7,530.0	7,533.5	7,373.3	125.6	26.0	87.44	-230.1	-4,216.0	7,885.2	7,746.6	138.62	56.885		
14,700.0	7,530.0	7,530.7	7,370.5	127.4	26.0	87.41	-230.2	-4,216.0	7,971.2	7,830.8	140.35	56.794		
14,800.0	7,530.0	7,527.9	7,367.7	129.1	26.0	87.37	-230.3	-4,216.0	8,057.5	7,915.4	142.09	56.708		
14,900.0	7,530.0	7,525.1	7,364.9	130.9	26.0	87.33	-230.3	-4,216.0	8,144.0	8,000.2	143.82	56.625		
15,000.0	7,530.0	7,522.3	7,362.2	132.6	26.0	87.29	-230.4	-4,216.0	8,230.9	8,085.4	145.56	56.547		
15,100.0	7,530.0	7,519.6	7,359.4	134.4	26.0	87.25	-230.5	-4,216.0	8,318.1	8,170.8	147.29	56.473		
15,200.0	7,530.0	7,516.8	7,356.7	136.1	26.0	87.21	-230.5	-4,216.0	8,405.6	8,256.5	149.03	56.402		
15,300.0	7,530.0	7,514.1	7,354.0	137.9	25.9	87.17	-230.6	-4,216.0	8,493.3	8,342.6	150.76	56.335		
15,400.0	7,530.0	7,511.4	7,351.3	139.6	25.9	87.13	-230.7	-4,216.0	8,581.3	8,428.8	152.50	56.271		
15,500.0	7,530.0	7,508.7	7,348.6	141.3	25.9	87.09	-230.8	-4,216.0	8,669.6	8,515.4	154.24	56.210		
15,600.0	7,530.0	7,506.0	7,345.9	143.1	25.9	87.06	-230.8	-4,216.0	8,758.1	8,602.1	155.97	56.152		
15,700.0	7,530.0	7,503.4	7,343.2	144.8	25.9	87.02	-230.9	-4,216.0	8,846.9	8,689.2	157.71	56.097		
15,800.0	7,530.0	7,500.7	7,340.6	146.6	25.9	86.98	-231.0	-4,216.0	8,935.9	8,776.4	159.44	56.044		
15,900.0	7,530.0	7,498.1	7,337.9	148.3	25.9	86.95	-231.0	-4,216.0	9,025.1	8,863.9	161.18	55.994		
16,000.0	7,530.0	7,495.5	7,335.3	150.1	25.9	86.91	-231.1	-4,216.0	9,114.6	8,951.7	162.91	55.947		
16,100.0	7,530.0	7,492.9	7,332.7	151.8	25.9	86.87	-231.2	-4,215.9	9,204.2	9,039.6	164.65	55.902		
16,200.0	7,530.0	7,490.3	7,330.1	153.6	25.9	86.83	-231.2	-4,215.9	9,294.1	9,127.7	166.39	55.859		
16,300.0	7,530.0	7,487.7	7,327.6	155.3	25.9	86.80	-231.3	-4,215.9	9,384.2	9,216.1	168.12	55.818		
16,400.0	7,530.0	7,485.1	7,325.0	157.1	25.9	86.76	-231.4	-4,215.9	9,474.5	9,304.6	169.86	55.779		
16,500.0	7,530.0	7,482.6	7,322.4	158.8	25.9	86.73	-231.4	-4,215.9	9,565.0	9,393.4	171.59	55.742		
16,600.0	7,530.0	7,480.0	7,319.9	160.6	25.9	86.69	-231.5	-4,215.9	9,655.6	9,482.3	173.33	55.707		
16,700.0	7,530.0	7,477.5	7,317.4	162.3	25.9	86.65	-231.6	-4,215.9	9,746.5	9,571.4	175.07	55.673		
16,800.0	7,530.0	7,475.0	7,314.9	164.1	25.9	86.62	-231.6	-4,215.9	9,837.5	9,660.7	176.80	55.641		
16,900.0	7,530.0	7,472.5	7,312.4	165.8	25.9	86.58	-231.7	-4,215.9	9,928.7	9,750.1	178.54	55.611 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N														Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	60.0	60.0	0.0	0.1	-112.31	-1,738.0	-4,236.2	4,578.9						
100.0	100.0	160.0	160.0	0.2	0.3	-112.31	-1,738.0	-4,236.2	4,578.9	4,578.5	0.43	N/A			
200.0	200.0	260.0	260.0	0.3	0.5	-112.31	-1,738.0	-4,236.2	4,578.9	4,578.1	0.78	5,867.693			
300.0	300.0	360.0	360.0	0.5	0.6	-112.31	-1,738.0	-4,236.2	4,578.9	4,577.8	1.13	4,054.197			
400.0	400.0	460.0	460.0	0.7	0.8	-112.31	-1,738.0	-4,236.2	4,578.9	4,577.4	1.48	3,097.019			
500.0	500.0	560.0	560.0	0.8	1.0	-112.31	-1,738.0	-4,236.2	4,578.9	4,577.1	1.83	2,505.485			
600.0	600.0	660.0	660.0	1.0	1.2	-89.31	-1,738.0	-4,236.2	4,578.9	4,576.7	2.18	2,103.246			
700.0	700.0	760.0	760.0	1.2	1.3	-89.34	-1,738.0	-4,236.2	4,578.8	4,576.3	2.53	1,810.481			
800.0	799.9	859.9	859.9	1.4	1.5	-89.39	-1,738.0	-4,236.2	4,578.8	4,575.9	2.89	1,586.227			
848.7	848.4	908.4	908.4	1.5	1.6	-89.43	-1,738.0	-4,236.2	4,578.8	4,575.7	3.06	1,494.914			
900.0	899.7	959.7	959.7	1.6	1.7	-89.47	-1,738.0	-4,236.2	4,578.7	4,575.5	3.25	1,408.851			
1,000.0	999.5	1,059.5	1,059.5	1.8	1.8	-89.54	-1,738.0	-4,236.2	4,578.7	4,575.1	3.62	1,265.978			
1,100.0	1,099.3	1,159.3	1,159.3	2.0	2.0	-89.62	-1,738.0	-4,236.2	4,578.6	4,574.7	3.99	1,148.729			
1,200.0	1,199.1	1,259.1	1,259.1	2.2	2.2	-89.70	-1,738.0	-4,236.2	4,578.6	4,574.3	4.36	1,050.938			
1,300.0	1,298.9	1,358.9	1,358.9	2.4	2.4	-89.77	-1,738.0	-4,236.2	4,578.6	4,573.9	4.73	968.225			
1,400.0	1,398.8	1,458.8	1,458.8	2.6	2.5	-89.85	-1,738.0	-4,236.2	4,578.6	4,573.5	5.10	897.406			
1,500.0	1,498.6	1,558.6	1,558.6	2.8	2.7	-89.92	-1,738.0	-4,236.2	4,578.5	4,573.1	5.48	836.123			
1,599.9	1,598.3	1,658.3	1,658.3	3.0	2.9	-90.00	-1,738.0	-4,236.2	4,578.5	4,572.7	5.85	782.657			
1,600.0	1,598.4	1,658.4	1,658.4	3.0	2.9	-90.00	-1,738.0	-4,236.2	4,578.5	4,572.7	5.85	782.593			
1,700.0	1,698.2	1,758.2	1,758.2	3.2	3.1	-90.08	-1,738.0	-4,236.2	4,578.5	4,572.3	6.23	735.445			
1,800.0	1,798.0	1,858.0	1,858.0	3.4	3.2	-90.15	-1,738.0	-4,236.2	4,578.6	4,572.0	6.60	693.614			
1,900.0	1,897.8	1,957.8	1,957.8	3.6	3.4	-90.23	-1,738.0	-4,236.2	4,578.6	4,571.6	6.98	656.255			
2,000.0	1,997.7	2,057.7	2,057.7	3.8	3.6	-90.30	-1,738.0	-4,236.2	4,578.6	4,571.3	7.35	622.691			
2,100.0	2,097.5	2,157.5	2,157.5	4.0	3.8	-90.38	-1,738.0	-4,236.2	4,578.6	4,570.9	7.73	592.376			
2,200.0	2,197.3	2,257.3	2,257.3	4.2	3.9	-90.46	-1,738.0	-4,236.2	4,578.7	4,570.6	8.11	564.863			
2,300.0	2,297.1	2,357.1	2,357.1	4.4	4.1	-90.53	-1,738.0	-4,236.2	4,578.7	4,570.3	8.48	539.782			
2,400.0	2,396.9	2,456.9	2,456.9	4.6	4.3	-90.61	-1,738.0	-4,236.2	4,578.8	4,569.9	8.86	516.826			
2,500.0	2,496.7	2,556.7	2,556.7	4.8	4.5	-90.68	-1,738.0	-4,236.2	4,578.9	4,569.6	9.24	495.738			
2,600.0	2,596.5	2,656.5	2,656.5	5.0	4.6	-90.76	-1,738.0	-4,236.2	4,578.9	4,569.3	9.61	476.298			
2,700.0	2,696.4	2,756.4	2,756.4	5.2	4.8	-90.84	-1,738.0	-4,236.2	4,579.0	4,569.0	9.99	458.322			
2,800.0	2,796.2	2,856.2	2,856.2	5.4	5.0	-90.91	-1,738.0	-4,236.2	4,579.1	4,568.8	10.37	441.652			
2,900.0	2,896.0	2,956.0	2,956.0	5.6	5.2	-90.99	-1,738.0	-4,236.2	4,579.2	4,568.5	10.75	426.149			
3,000.0	2,995.8	3,055.8	3,055.8	5.8	5.3	-91.06	-1,738.0	-4,236.2	4,579.3	4,568.2	11.12	411.697			
3,100.0	3,095.6	3,155.6	3,155.6	6.0	5.5	-91.14	-1,738.0	-4,236.2	4,579.5	4,568.0	11.50	398.192			
3,200.0	3,195.4	3,255.4	3,255.4	6.2	5.7	-91.22	-1,738.0	-4,236.2	4,579.6	4,567.7	11.88	385.545			
3,300.0	3,295.2	3,355.2	3,355.2	6.4	5.9	-91.29	-1,738.0	-4,236.2	4,579.7	4,567.5	12.26	373.676			
3,400.0	3,395.1	3,455.1	3,455.1	6.6	6.0	-91.37	-1,738.0	-4,236.2	4,579.9	4,567.2	12.63	362.516			
3,500.0	3,494.9	3,554.9	3,554.9	6.8	6.2	-91.44	-1,738.0	-4,236.2	4,580.0	4,567.0	13.01	352.003			
3,600.0	3,594.7	3,654.7	3,654.7	7.0	6.4	-91.52	-1,738.0	-4,236.2	4,580.2	4,566.8	13.39	342.083			
3,700.0	3,694.5	3,754.5	3,754.5	7.2	6.6	-91.59	-1,738.0	-4,236.2	4,580.3	4,566.6	13.77	332.708			
3,800.0	3,794.3	3,854.3	3,854.3	7.4	6.7	-91.67	-1,738.0	-4,236.2	4,580.5	4,566.4	14.14	323.833			
3,900.0	3,894.1	3,954.1	3,954.1	7.6	6.9	-91.75	-1,738.0	-4,236.2	4,580.7	4,566.2	14.52	315.420			
4,000.0	3,994.0	4,054.0	4,054.0	7.8	7.1	-91.82	-1,738.0	-4,236.2	4,580.9	4,566.0	14.90	307.434			
4,100.0	4,093.8	4,153.8	4,153.8	8.0	7.2	-91.90	-1,738.0	-4,236.2	4,581.1	4,565.8	15.28	299.843			
4,200.0	4,193.6	4,253.6	4,253.6	8.2	7.4	-91.97	-1,738.0	-4,236.2	4,581.3	4,565.6	15.66	292.618			
4,300.0	4,293.4	4,353.4	4,353.4	8.4	7.6	-92.05	-1,738.0	-4,236.2	4,581.5	4,565.5	16.03	285.735			
4,400.0	4,393.2	4,453.2	4,453.2	8.6	7.8	-92.13	-1,738.0	-4,236.2	4,581.7	4,565.3	16.41	279.168			
4,500.0	4,493.0	4,553.0	4,553.0	8.8	7.9	-92.20	-1,738.0	-4,236.2	4,581.9	4,565.1	16.79	272.898			
4,600.0	4,592.8	4,652.8	4,652.8	9.0	8.1	-92.28	-1,738.0	-4,236.2	4,582.2	4,565.0	17.17	266.904			
4,700.0	4,692.7	4,752.7	4,752.7	9.3	8.3	-92.35	-1,738.0	-4,236.2	4,582.4	4,564.9	17.55	261.168			
4,800.0	4,792.5	4,852.5	4,852.5	9.5	8.5	-92.43	-1,738.0	-4,236.2	4,582.7	4,564.8	17.92	255.675			
4,900.0	4,892.3	4,952.3	4,952.3	9.7	8.6	-92.51	-1,738.0	-4,236.2	4,582.9	4,564.6	18.30	250.409			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)				
5,000.0	4,992.1	5,052.1	5,052.1	9.9	8.8	-92.58	-1,738.0	-4,236.2	4,583.2	4,564.5	18.68	245.357		
5,100.0	5,091.9	5,151.9	5,151.9	10.1	9.0	-92.66	-1,738.0	-4,236.2	4,583.5	4,564.4	19.06	240.505		
5,200.0	5,191.7	5,251.7	5,251.7	10.3	9.2	-92.73	-1,738.0	-4,236.2	4,583.8	4,564.3	19.44	235.842		
5,300.0	5,291.5	5,351.5	5,351.5	10.5	9.3	-92.81	-1,738.0	-4,236.2	4,584.1	4,564.3	19.81	231.358		
5,400.0	5,391.4	5,451.4	5,451.4	10.7	9.5	-92.88	-1,738.0	-4,236.2	4,584.4	4,564.2	20.19	227.042		
5,500.0	5,491.2	5,551.2	5,551.2	10.9	9.7	-92.96	-1,738.0	-4,236.2	4,584.7	4,564.1	20.57	222.885		
5,600.0	5,591.0	5,651.0	5,651.0	11.1	9.9	-93.04	-1,738.0	-4,236.2	4,585.0	4,564.1	20.95	218.878		
5,700.0	5,690.8	5,750.8	5,750.8	11.3	10.0	-93.11	-1,738.0	-4,236.2	4,585.3	4,564.0	21.33	215.014		
5,800.0	5,790.6	5,850.6	5,850.6	11.5	10.2	-93.19	-1,738.0	-4,236.2	4,585.7	4,564.0	21.70	211.285		
5,900.0	5,890.4	5,950.4	5,950.4	11.7	10.4	-93.26	-1,738.0	-4,236.2	4,586.0	4,563.9	22.08	207.684		
6,000.0	5,990.3	6,050.3	6,050.3	11.9	10.6	-93.34	-1,738.0	-4,236.2	4,586.4	4,563.9	22.46	204.205		
6,100.0	6,090.1	6,150.1	6,150.1	12.1	10.7	-93.41	-1,738.0	-4,236.2	4,586.7	4,563.9	22.84	200.841		
6,200.0	6,189.9	6,249.9	6,249.9	12.3	10.9	-93.49	-1,738.0	-4,236.2	4,587.1	4,563.9	23.22	197.587		
6,300.0	6,289.7	6,349.7	6,349.7	12.5	11.1	-93.57	-1,738.0	-4,236.2	4,587.5	4,563.9	23.59	194.437		
6,400.0	6,389.5	6,449.5	6,449.5	12.7	11.3	-93.64	-1,738.0	-4,236.2	4,587.8	4,563.9	23.97	191.388		
6,500.0	6,489.3	6,549.3	6,549.3	12.9	11.4	-93.72	-1,738.0	-4,236.2	4,588.2	4,563.9	24.35	188.433		
6,600.0	6,589.1	6,649.1	6,649.1	13.1	11.6	-93.79	-1,738.0	-4,236.2	4,588.6	4,563.9	24.73	185.569		
6,700.0	6,689.0	6,749.0	6,749.0	13.3	11.8	-93.87	-1,738.0	-4,236.2	4,589.0	4,563.9	25.11	182.792		
6,785.3	6,774.1	6,834.1	6,834.1	13.5	11.9	-93.93	-1,738.0	-4,236.2	4,589.4	4,564.0	25.43	180.490		
6,800.0	6,788.8	6,848.8	6,848.8	13.5	12.0	-82.91	-1,738.0	-4,236.2	4,589.4	4,563.9	25.48	180.114		
6,850.0	6,838.8	6,898.8	6,898.8	13.6	12.0	27.66	-1,738.0	-4,236.2	4,588.3	4,562.7	25.62	179.071		
6,900.0	6,888.6	6,948.6	6,948.6	13.6	12.1	49.82	-1,738.0	-4,236.2	4,585.6	4,559.9	25.72	178.276		
6,950.0	6,938.1	6,998.1	6,998.1	13.7	12.2	55.32	-1,738.0	-4,236.2	4,581.4	4,555.6	25.78	177.705		
7,000.0	6,987.0	7,047.0	7,047.0	13.7	12.3	58.08	-1,738.0	-4,236.2	4,575.6	4,549.8	25.80	177.332		
7,050.0	7,035.0	7,095.0	7,095.0	13.6	12.4	59.99	-1,738.0	-4,236.2	4,568.3	4,542.5	25.79	177.117		
7,100.0	7,082.0	7,142.0	7,142.0	13.6	12.5	61.60	-1,738.0	-4,236.2	4,559.6	4,533.8	25.76	177.013		
7,150.0	7,127.7	7,187.7	7,187.7	13.5	12.5	63.10	-1,738.0	-4,236.2	4,549.4	4,523.7	25.71	176.966		
7,200.0	7,171.8	7,231.8	7,231.8	13.5	12.6	64.59	-1,738.0	-4,236.2	4,538.0	4,512.4	25.65	176.913		
7,250.0	7,214.2	7,274.2	7,274.2	13.4	12.7	66.12	-1,738.0	-4,236.2	4,525.4	4,499.8	25.60	176.786		
7,300.0	7,254.6	7,314.6	7,314.6	13.4	12.8	67.70	-1,738.0	-4,236.2	4,511.7	4,486.2	25.56	176.515		
7,350.0	7,292.9	7,352.9	7,352.9	13.3	12.8	69.34	-1,738.0	-4,236.2	4,497.0	4,471.5	25.55	176.033		
7,400.0	7,328.9	7,388.9	7,388.9	13.3	12.9	71.05	-1,738.0	-4,236.2	4,481.5	4,455.9	25.57	175.282		
7,450.0	7,362.3	7,422.3	7,422.3	13.3	13.0	72.81	-1,738.0	-4,236.2	4,465.2	4,439.6	25.63	174.216		
7,500.0	7,393.1	7,453.1	7,453.1	13.4	13.0	74.61	-1,738.0	-4,236.2	4,448.3	4,422.6	25.74	172.810		
7,550.0	7,421.1	7,481.1	7,481.1	13.5	13.1	76.45	-1,738.0	-4,236.2	4,431.0	4,405.0	25.90	171.059		
7,600.0	7,446.1	7,506.1	7,506.1	13.6	13.1	78.29	-1,738.0	-4,236.2	4,413.3	4,387.1	26.12	168.981		
7,650.0	7,468.0	7,528.0	7,528.0	13.8	13.1	80.13	-1,738.0	-4,236.2	4,395.3	4,369.0	26.38	166.612		
7,700.0	7,486.7	7,546.7	7,546.7	14.0	13.2	81.94	-1,738.0	-4,236.2	4,377.4	4,350.7	26.69	164.003		
7,750.0	7,502.2	7,562.2	7,562.2	14.2	13.2	83.70	-1,738.0	-4,236.2	4,359.4	4,332.4	27.04	161.211		
7,800.0	7,514.3	7,574.3	7,574.3	14.6	13.2	85.41	-1,738.0	-4,236.2	4,341.7	4,314.3	27.43	158.296		
7,850.0	7,523.0	7,583.0	7,583.0	14.9	13.2	87.03	-1,738.0	-4,236.2	4,324.3	4,296.4	27.84	155.312		
7,900.0	7,528.2	7,588.2	7,588.2	15.3	13.2	88.56	-1,738.0	-4,236.2	4,307.2	4,278.9	28.28	152.308		
7,950.2	7,530.0	7,590.0	7,590.0	15.8	13.2	90.00	-1,738.0	-4,236.2	4,290.6	4,261.9	28.74	149.307		
8,000.0	7,530.0	7,590.0	7,590.0	16.2	13.2	90.00	-1,738.0	-4,236.2	4,274.7	4,245.5	29.22	146.293		
8,100.0	7,530.0	7,590.0	7,590.0	17.3	13.2	90.00	-1,738.0	-4,236.2	4,244.3	4,214.1	30.29	140.143		
8,200.0	7,530.0	7,590.0	7,590.0	18.4	13.2	90.00	-1,738.0	-4,236.2	4,216.1	4,184.7	31.46	134.023		
8,300.0	7,530.0	7,590.0	7,590.0	19.7	13.2	90.00	-1,738.0	-4,236.2	4,190.1	4,157.4	32.72	128.066		
8,400.0	7,530.0	7,590.0	7,590.0	21.0	13.2	90.00	-1,738.0	-4,236.2	4,166.3	4,132.3	34.05	122.359		
8,500.0	7,530.0	7,590.0	7,590.0	22.4	13.2	90.00	-1,738.0	-4,236.2	4,144.8	4,109.4	35.44	116.951		
8,600.0	7,530.0	7,590.0	7,590.0	23.8	13.2	90.00	-1,738.0	-4,236.2	4,125.6	4,088.7	36.88	111.868		
8,700.0	7,530.0	7,590.0	7,590.0	25.3	13.2	90.00	-1,738.0	-4,236.2	4,108.8	4,070.4	38.36	107.115		
8,800.0	7,530.0	7,590.0	7,590.0	26.8	13.2	90.00	-1,738.0	-4,236.2	4,094.3	4,054.4	39.87	102.688		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)	
8,900.0	7,530.0	7,590.0	7,590.0	28.3	13.2	90.00	-1,738.0	-4,236.2	4,082.2	4,040.8	41.41	98.577		
9,000.0	7,530.0	7,590.0	7,590.0	29.9	13.2	90.00	-1,738.0	-4,236.2	4,072.6	4,029.6	42.98	94.764		
9,100.0	7,530.0	7,590.0	7,590.0	31.4	13.2	90.00	-1,738.0	-4,236.2	4,065.4	4,020.8	44.56	91.233		
9,200.0	7,530.0	7,590.0	7,590.0	33.0	13.2	90.00	-1,738.0	-4,236.2	4,060.6	4,014.4	46.16	87.964		
9,300.0	7,530.0	7,590.0	7,590.0	34.7	13.2	90.00	-1,738.0	-4,236.2	4,058.3	4,010.5	47.78	84.940		
9,343.7	7,530.0	7,590.0	7,590.0	35.4	13.2	90.00	-1,738.0	-4,236.2	4,058.0	4,009.5	48.49	83.688	CC	
9,400.0	7,530.0	7,590.0	7,590.0	36.3	13.2	90.00	-1,738.0	-4,236.2	4,058.4	4,009.0	49.41	82.142	ES	
9,500.0	7,530.0	7,590.0	7,590.0	37.9	13.2	90.00	-1,738.0	-4,236.2	4,061.0	4,010.0	51.05	79.554		
9,600.0	7,530.0	7,590.0	7,590.0	39.6	13.2	90.00	-1,738.0	-4,236.2	4,066.1	4,013.4	52.70	77.159		
9,700.0	7,530.0	7,590.0	7,590.0	41.2	13.2	90.00	-1,738.0	-4,236.2	4,073.7	4,019.3	54.36	74.943		
9,800.0	7,530.0	7,590.0	7,590.0	42.9	13.2	90.00	-1,738.0	-4,236.2	4,083.6	4,027.6	56.02	72.892		
9,900.0	7,530.0	7,590.0	7,590.0	44.5	13.2	90.00	-1,738.0	-4,236.2	4,096.0	4,038.3	57.70	70.992		
10,000.0	7,530.0	7,590.0	7,590.0	46.2	13.2	90.00	-1,738.0	-4,236.2	4,110.8	4,051.4	59.38	69.234		
10,100.0	7,530.0	7,590.0	7,590.0	47.9	13.2	90.00	-1,738.0	-4,236.2	4,127.9	4,066.9	61.06	67.604		
10,200.0	7,530.0	7,590.0	7,590.0	49.6	13.2	90.00	-1,738.0	-4,236.2	4,147.4	4,084.6	62.75	66.095		
10,300.0	7,530.0	7,590.0	7,590.0	51.3	13.2	90.00	-1,738.0	-4,236.2	4,169.2	4,104.8	64.44	64.696		
10,400.0	7,530.0	7,590.0	7,590.0	53.0	13.2	90.00	-1,738.0	-4,236.2	4,193.3	4,127.1	66.14	63.399		
10,500.0	7,530.0	7,590.0	7,590.0	54.7	13.2	90.00	-1,738.0	-4,236.2	4,219.6	4,151.7	67.84	62.197		
10,600.0	7,530.0	7,590.0	7,590.0	56.4	13.2	90.00	-1,738.0	-4,236.2	4,248.1	4,178.5	69.55	61.082		
10,700.0	7,530.0	7,590.0	7,590.0	58.1	13.2	90.00	-1,738.0	-4,236.2	4,278.7	4,207.4	71.25	60.049		
10,800.0	7,530.0	7,590.0	7,590.0	59.8	13.2	90.00	-1,738.0	-4,236.2	4,311.4	4,238.5	72.96	59.090		
10,900.0	7,530.0	7,590.0	7,590.0	61.5	13.2	90.00	-1,738.0	-4,236.2	4,346.2	4,271.6	74.68	58.201		
11,000.0	7,530.0	7,590.0	7,590.0	63.2	13.2	90.00	-1,738.0	-4,236.2	4,383.0	4,306.6	76.39	57.376		
11,100.0	7,530.0	7,590.0	7,590.0	64.9	13.2	90.00	-1,738.0	-4,236.2	4,421.8	4,343.7	78.11	56.611		
11,200.0	7,530.0	7,590.0	7,590.0	66.6	13.2	90.00	-1,738.0	-4,236.2	4,462.5	4,382.6	79.83	55.902		
11,300.0	7,530.0	7,590.0	7,590.0	68.4	13.2	90.00	-1,738.0	-4,236.2	4,505.0	4,423.4	81.55	55.243		
11,400.0	7,530.0	7,590.0	7,590.0	70.1	13.2	90.00	-1,738.0	-4,236.2	4,549.3	4,466.0	83.27	54.633		
11,500.0	7,530.0	7,590.0	7,590.0	71.8	13.2	90.00	-1,738.0	-4,236.2	4,595.4	4,510.4	84.99	54.067		
11,600.0	7,530.0	7,590.0	7,590.0	73.5	13.2	90.00	-1,738.0	-4,236.2	4,643.1	4,556.4	86.72	53.542		
11,700.0	7,530.0	7,590.0	7,590.0	75.3	13.2	90.00	-1,738.0	-4,236.2	4,692.5	4,604.1	88.45	53.055		
11,800.0	7,530.0	7,590.0	7,590.0	77.0	13.2	90.00	-1,738.0	-4,236.2	4,743.5	4,653.4	90.17	52.604		
11,900.0	7,530.0	7,590.0	7,590.0	78.7	13.2	90.00	-1,738.0	-4,236.2	4,796.1	4,704.2	91.90	52.186		
12,000.0	7,530.0	7,590.0	7,590.0	80.4	13.2	90.00	-1,738.0	-4,236.2	4,850.1	4,756.5	93.63	51.799		
12,100.0	7,530.0	7,590.0	7,590.0	82.2	13.2	90.00	-1,738.0	-4,236.2	4,905.6	4,810.2	95.36	51.441		
12,200.0	7,530.0	7,590.0	7,590.0	83.9	13.2	90.00	-1,738.0	-4,236.2	4,962.5	4,865.4	97.10	51.109		
12,300.0	7,530.0	7,590.0	7,590.0	85.6	13.2	90.00	-1,738.0	-4,236.2	5,020.7	4,921.9	98.83	50.802		
12,400.0	7,530.0	7,590.0	7,590.0	87.4	13.2	90.00	-1,738.0	-4,236.2	5,080.2	4,979.7	100.56	50.518		
12,500.0	7,530.0	7,590.0	7,590.0	89.1	13.2	90.00	-1,738.0	-4,236.2	5,141.0	5,038.7	102.30	50.255		
12,600.0	7,530.0	7,590.0	7,590.0	90.8	13.2	90.00	-1,738.0	-4,236.2	5,203.0	5,099.0	104.03	50.013		
12,700.0	7,530.0	7,590.0	7,590.0	92.6	13.2	90.00	-1,738.0	-4,236.2	5,266.2	5,160.4	105.77	49.789		
12,800.0	7,530.0	7,590.0	7,590.0	94.3	13.2	90.00	-1,738.0	-4,236.2	5,330.4	5,222.9	107.51	49.583		
12,900.0	7,530.0	7,590.0	7,590.0	96.0	13.2	90.00	-1,738.0	-4,236.2	5,395.8	5,286.6	109.24	49.393		
13,000.0	7,530.0	7,590.0	7,590.0	97.8	13.2	90.00	-1,738.0	-4,236.2	5,462.2	5,351.3	110.98	49.218		
13,100.0	7,530.0	7,590.0	7,590.0	99.5	13.2	90.00	-1,738.0	-4,236.2	5,529.7	5,417.0	112.72	49.057		
13,200.0	7,530.0	7,590.0	7,590.0	101.3	13.2	90.00	-1,738.0	-4,236.2	5,598.1	5,483.6	114.46	48.909		
13,300.0	7,530.0	7,590.0	7,590.0	103.0	13.2	90.00	-1,738.0	-4,236.2	5,667.4	5,551.2	116.20	48.774		
13,400.0	7,530.0	7,590.0	7,590.0	104.7	13.2	90.00	-1,738.0	-4,236.2	5,737.7	5,619.8	117.94	48.650		
13,500.0	7,530.0	7,590.0	7,590.0	106.5	13.2	90.00	-1,738.0	-4,236.2	5,808.8	5,689.1	119.68	48.537		
13,600.0	7,530.0	7,590.0	7,590.0	108.2	13.2	90.00	-1,738.0	-4,236.2	5,880.8	5,759.4	121.42	48.433		
13,700.0	7,530.0	7,590.0	7,590.0	110.0	13.2	90.00	-1,738.0	-4,236.2	5,953.6	5,830.4	123.16	48.340		
13,800.0	7,530.0	7,590.0	7,590.0	111.7	13.2	90.00	-1,738.0	-4,236.2	6,027.1	5,902.2	124.90	48.254		
13,900.0	7,530.0	7,590.0	7,590.0	113.4	13.2	90.00	-1,738.0	-4,236.2	6,101.4	5,974.8	126.65	48.177		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N														Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
14,000.0	7,530.0	7,590.0	7,590.0	115.2	13.2	90.00	-1,738.0	-4,236.2	6,176.5	6,048.1	128.39	48.108			
14,100.0	7,530.0	7,590.0	7,590.0	116.9	13.2	90.00	-1,738.0	-4,236.2	6,252.2	6,122.1	130.13	48.045			
14,200.0	7,530.0	7,590.0	7,590.0	118.7	13.2	90.00	-1,738.0	-4,236.2	6,328.6	6,196.7	131.87	47.990			
14,300.0	7,530.0	7,590.0	7,590.0	120.4	13.2	90.00	-1,738.0	-4,236.2	6,405.7	6,272.0	133.62	47.940			
14,400.0	7,530.0	7,590.0	7,590.0	122.1	13.2	90.00	-1,738.0	-4,236.2	6,483.3	6,348.0	135.36	47.897			
14,500.0	7,530.0	7,590.0	7,590.0	123.9	13.2	90.00	-1,738.0	-4,236.2	6,561.6	6,424.5	137.11	47.858			
14,600.0	7,530.0	7,590.0	7,590.0	125.6	13.2	90.00	-1,738.0	-4,236.2	6,640.5	6,501.7	138.85	47.825			
14,700.0	7,530.0	7,590.0	7,590.0	127.4	13.2	90.00	-1,738.0	-4,236.2	6,719.9	6,579.3	140.59	47.797			
14,800.0	7,530.0	7,590.0	7,590.0	129.1	13.2	90.00	-1,738.0	-4,236.2	6,799.9	6,657.6	142.34	47.773			
14,900.0	7,530.0	7,590.0	7,590.0	130.9	13.2	90.00	-1,738.0	-4,236.2	6,880.4	6,736.3	144.08	47.753			
15,000.0	7,530.0	7,590.0	7,590.0	132.6	13.2	90.00	-1,738.0	-4,236.2	6,961.4	6,815.6	145.83	47.737			
15,100.0	7,530.0	7,590.0	7,590.0	134.4	13.2	90.00	-1,738.0	-4,236.2	7,042.9	6,895.3	147.58	47.724			
15,200.0	7,530.0	7,590.0	7,590.0	136.1	13.2	90.00	-1,738.0	-4,236.2	7,124.9	6,975.6	149.32	47.715			
15,300.0	7,530.0	7,590.0	7,590.0	137.9	13.2	90.00	-1,738.0	-4,236.2	7,207.3	7,056.2	151.07	47.709			
15,400.0	7,530.0	7,590.0	7,590.0	139.6	13.2	90.00	-1,738.0	-4,236.2	7,290.2	7,137.3	152.81	47.706			
15,500.0	7,530.0	7,590.0	7,590.0	141.3	13.2	90.00	-1,738.0	-4,236.2	7,373.4	7,218.9	154.56	47.706 SF			
15,600.0	7,530.0	7,590.0	7,590.0	143.1	13.2	90.00	-1,738.0	-4,236.2	7,457.1	7,300.8	156.31	47.708			
15,700.0	7,530.0	7,590.0	7,590.0	144.8	13.2	90.00	-1,738.0	-4,236.2	7,541.2	7,383.2	158.05	47.713			
15,800.0	7,530.0	7,590.0	7,590.0	146.6	13.2	90.00	-1,738.0	-4,236.2	7,625.7	7,465.9	159.80	47.720			
15,900.0	7,530.0	7,590.0	7,590.0	148.3	13.2	90.00	-1,738.0	-4,236.2	7,710.6	7,549.0	161.55	47.729			
16,000.0	7,530.0	7,590.0	7,590.0	150.1	13.2	90.00	-1,738.0	-4,236.2	7,795.8	7,632.5	163.29	47.740			
16,100.0	7,530.0	7,590.0	7,590.0	151.8	13.2	90.00	-1,738.0	-4,236.2	7,881.3	7,716.3	165.04	47.753			
16,200.0	7,530.0	7,590.0	7,590.0	153.6	13.2	90.00	-1,738.0	-4,236.2	7,967.2	7,800.4	166.79	47.768			
16,300.0	7,530.0	7,590.0	7,590.0	155.3	13.2	90.00	-1,738.0	-4,236.2	8,053.4	7,884.9	168.54	47.784			
16,400.0	7,530.0	7,590.0	7,590.0	157.1	13.2	90.00	-1,738.0	-4,236.2	8,140.0	7,969.7	170.29	47.802			
16,500.0	7,530.0	7,590.0	7,590.0	158.8	13.2	90.00	-1,738.0	-4,236.2	8,226.8	8,054.8	172.03	47.821			
16,600.0	7,530.0	7,590.0	7,590.0	160.6	13.2	90.00	-1,738.0	-4,236.2	8,313.9	8,140.1	173.78	47.841			
16,700.0	7,530.0	7,590.0	7,590.0	162.3	13.2	90.00	-1,738.0	-4,236.2	8,401.3	8,225.8	175.53	47.863			
16,800.0	7,530.0	7,590.0	7,590.0	164.1	13.2	90.00	-1,738.0	-4,236.2	8,489.0	8,311.8	177.28	47.885			
16,900.0	7,530.0	7,590.0	7,590.0	165.8	13.2	90.00	-1,738.0	-4,236.2	8,577.0	8,398.0	179.03	47.909			
17,000.0	7,530.0	7,590.0	7,590.0	167.6	13.2	90.00	-1,738.0	-4,236.2	8,665.2	8,484.5	180.78	47.934			
17,100.0	7,530.0	7,590.0	7,590.0	169.3	13.2	90.00	-1,738.0	-4,236.2	8,753.7	8,571.2	182.52	47.959			
17,200.0	7,530.0	7,590.0	7,590.0	171.1	13.2	90.00	-1,738.0	-4,236.2	8,842.5	8,658.2	184.27	47.985			
17,300.0	7,530.0	7,590.0	7,590.0	172.8	13.2	90.00	-1,738.0	-4,236.2	8,931.4	8,745.4	186.02	48.013			
17,400.0	7,530.0	7,590.0	7,590.0	174.5	13.2	90.00	-1,738.0	-4,236.2	9,020.6	8,832.8	187.77	48.040			
17,411.2	7,530.0	7,590.0	7,590.0	174.7	13.2	90.00	-1,738.0	-4,236.2	9,030.7	8,842.7	187.97	48.044			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	32.1	32.1	0.0	0.1	-95.74	-293.1	-2,916.1	2,930.8					
100.0	100.0	159.9	159.9	0.2	0.3	-95.75	-293.5	-2,914.8	2,929.8	2,929.3	0.43	6,796.659		
200.0	200.0	252.5	252.5	0.3	0.4	-95.77	-294.4	-2,913.5	2,928.5	2,927.7	0.77	3,817.183		
300.0	300.0	337.1	337.1	0.5	0.6	-95.78	-294.9	-2,912.7	2,927.7	2,926.6	1.09	2,687.097		
400.0	400.0	423.6	423.6	0.7	0.7	-95.79	-295.2	-2,912.4	2,927.4	2,925.9	1.41	2,068.827		
420.4	420.4	441.4	441.4	0.7	0.8	-95.79	-295.3	-2,912.4	2,927.3	2,925.9	1.48	1,975.541		
500.0	500.0	511.8	511.7	0.8	0.9	-95.79	-295.5	-2,912.5	2,927.5	2,925.7	1.74	1,679.067		
600.0	600.0	600.0	600.0	1.0	1.0	-72.80	-295.7	-2,912.9	2,927.7	2,925.6	2.07	1,412.083		
700.0	700.0	694.4	694.3	1.2	1.2	-72.85	-296.0	-2,913.5	2,927.6	2,925.2	2.42	1,211.973		
800.0	799.9	791.6	791.6	1.4	1.4	-72.95	-297.0	-2,914.4	2,927.3	2,924.5	2.77	1,057.355		
848.7	848.4	846.0	845.9	1.5	1.5	-73.02	-297.8	-2,914.8	2,926.9	2,924.0	2.96	990.470		
900.0	899.7	900.0	899.9	1.6	1.6	-73.10	-298.7	-2,915.1	2,926.4	2,923.2	3.15	929.801		
1,000.0	999.5	989.7	989.6	1.8	1.7	-73.23	-300.2	-2,915.6	2,925.4	2,921.9	3.50	836.729		
1,100.0	1,099.3	1,082.2	1,082.2	2.0	1.9	-73.37	-301.7	-2,916.6	2,924.9	2,921.0	3.85	759.209		
1,171.4	1,170.6	1,141.0	1,140.9	2.1	2.0	-73.45	-302.6	-2,917.3	2,924.7	2,920.6	4.10	714.211		
1,200.0	1,199.1	1,163.4	1,163.3	2.2	2.0	-73.48	-302.9	-2,917.7	2,924.7	2,920.5	4.19	698.021		
1,300.0	1,298.9	1,252.1	1,252.0	2.4	2.2	-73.60	-304.0	-2,919.6	2,925.2	2,920.7	4.54	644.074		
1,400.0	1,398.8	1,344.9	1,344.7	2.6	2.4	-73.72	-305.1	-2,921.7	2,925.9	2,921.0	4.90	596.964		
1,500.0	1,498.6	1,434.0	1,433.8	2.8	2.5	-73.83	-305.9	-2,924.1	2,927.0	2,921.7	5.25	557.023		
1,600.0	1,598.4	1,534.6	1,534.3	3.0	2.7	-73.95	-306.3	-2,927.1	2,928.3	2,922.7	5.63	520.288		
1,700.0	1,698.2	1,641.9	1,641.6	3.2	2.9	-74.07	-306.8	-2,929.9	2,929.3	2,923.3	6.01	487.040		
1,800.0	1,798.0	1,732.8	1,732.5	3.4	3.1	-74.18	-307.2	-2,932.4	2,930.4	2,924.1	6.37	459.887		
1,900.0	1,897.8	1,837.8	1,837.4	3.6	3.2	-74.29	-307.1	-2,935.6	2,931.7	2,925.0	6.75	434.048		
2,000.0	1,997.7	1,958.6	1,958.2	3.8	3.5	-74.42	-307.2	-2,938.5	2,932.5	2,925.4	7.16	409.289		
2,100.0	2,097.5	2,072.1	2,071.7	4.0	3.7	-74.54	-306.9	-2,940.6	2,932.7	2,925.1	7.56	387.785		
2,200.0	2,197.3	2,182.8	2,182.4	4.2	3.8	-74.66	-306.5	-2,942.2	2,932.5	2,924.5	7.96	368.582		
2,300.0	2,297.1	2,296.6	2,296.2	4.4	4.0	-74.78	-306.5	-2,943.4	2,931.9	2,923.5	8.36	350.888		
2,400.0	2,396.9	2,388.7	2,388.2	4.6	4.2	-74.89	-306.6	-2,944.2	2,931.2	2,922.4	8.72	336.246		
2,500.0	2,496.7	2,485.4	2,484.9	4.8	4.4	-74.99	-306.3	-2,945.3	2,930.6	2,921.6	9.09	322.521		
2,600.0	2,596.5	2,582.1	2,581.7	5.0	4.5	-75.07	-305.0	-2,946.6	2,930.2	2,920.8	9.46	309.883		
2,700.0	2,696.4	2,673.1	2,672.6	5.2	4.7	-75.14	-303.3	-2,948.1	2,930.0	2,920.2	9.82	298.512		
2,708.7	2,705.0	2,680.9	2,680.4	5.2	4.7	-75.15	-303.2	-2,948.2	2,930.0	2,920.2	9.85	297.570		
2,800.0	2,796.2	2,761.4	2,760.9	5.4	4.9	-75.21	-301.8	-2,949.8	2,930.2	2,920.0	10.17	288.096		
2,900.0	2,896.0	2,870.6	2,870.0	5.6	5.1	-75.30	-300.3	-2,952.2	2,930.6	2,920.0	10.56	277.433		
3,000.0	2,995.8	2,991.7	2,991.1	5.8	5.3	-75.41	-298.9	-2,953.9	2,930.3	2,919.3	10.98	266.956		
3,100.0	3,095.6	3,103.1	3,102.5	6.0	5.5	-75.50	-297.4	-2,954.8	2,929.4	2,918.0	11.37	257.571		
3,200.0	3,195.4	3,200.0	3,199.4	6.2	5.6	-75.59	-296.3	-2,955.5	2,928.4	2,916.6	11.74	249.337		
3,300.0	3,295.2	3,290.6	3,290.0	6.4	5.8	-75.68	-295.9	-2,956.2	2,927.6	2,915.5	12.11	241.847		
3,400.0	3,395.1	3,381.9	3,381.3	6.6	5.9	-75.79	-296.1	-2,957.1	2,927.1	2,914.7	12.47	234.793		
3,500.0	3,494.9	3,473.7	3,473.1	6.8	6.1	-75.90	-296.6	-2,958.3	2,927.0	2,914.2	12.83	228.142		
3,506.5	3,501.4	3,479.7	3,479.1	6.8	6.1	-75.91	-296.7	-2,958.4	2,927.0	2,914.1	12.85	227.722		
3,600.0	3,594.7	3,570.2	3,569.6	7.0	6.3	-76.03	-297.8	-2,959.6	2,927.0	2,913.8	13.20	221.734		
3,700.0	3,694.5	3,667.6	3,666.9	7.2	6.5	-76.18	-299.5	-2,960.9	2,927.2	2,913.6	13.57	215.653		
3,800.0	3,794.3	3,797.9	3,797.2	7.4	6.7	-76.39	-302.7	-2,962.1	2,927.1	2,913.1	14.00	209.007		
3,900.0	3,894.1	3,885.7	3,884.9	7.6	6.8	-76.52	-304.7	-2,962.5	2,926.5	2,912.1	14.36	203.775		
3,950.4	3,944.5	3,924.9	3,924.2	7.7	6.9	-76.59	-305.7	-2,962.8	2,926.4	2,911.8	14.53	201.368		
4,000.0	3,994.0	3,961.4	3,960.6	7.8	7.0	-76.64	-306.6	-2,963.2	2,926.5	2,911.8	14.70	199.123		
4,100.0	4,093.8	4,073.4	4,072.6	8.0	7.2	-76.83	-309.6	-2,965.0	2,927.1	2,912.0	15.10	193.886		
4,164.2	4,157.8	4,137.7	4,136.9	8.2	7.3	-76.94	-311.6	-2,965.4	2,927.0	2,911.7	15.34	190.803		
4,200.0	4,193.6	4,166.5	4,165.7	8.2	7.3	-76.99	-312.4	-2,965.7	2,927.1	2,911.6	15.46	189.284		
4,300.0	4,293.4	4,258.7	4,257.7	8.4	7.5	-77.14	-315.1	-2,967.0	2,927.6	2,911.8	15.83	184.949		
4,400.0	4,393.2	4,366.6	4,365.7	8.6	7.7	-77.31	-317.7	-2,968.6	2,928.1	2,911.9	16.22	180.500		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G														Offset Site Error:	0.0 ft
Survey Program: 100-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
4,500.0	4,493.0	4,478.9	4,477.9	8.8	7.9	-77.46	-319.1	-2,970.0	2,928.2	2,911.6	16.62	176.165			
4,600.0	4,592.8	4,586.3	4,585.4	9.0	8.1	-77.60	-319.8	-2,971.0	2,928.0	2,911.0	17.01	172.101			
4,700.0	4,692.7	4,677.1	4,676.2	9.3	8.2	-77.71	-320.3	-2,971.9	2,927.8	2,910.4	17.38	168.503			
4,800.0	4,792.5	4,783.8	4,782.8	9.5	8.4	-77.84	-321.1	-2,973.1	2,927.7	2,910.0	17.77	164.802			
4,893.2	4,885.5	4,870.3	4,869.3	9.6	8.6	-77.95	-321.6	-2,974.0	2,927.6	2,909.5	18.11	161.691			
4,900.0	4,892.3	4,876.4	4,875.4	9.7	8.6	-77.96	-321.7	-2,974.1	2,927.6	2,909.5	18.13	161.473			
5,000.0	4,992.1	4,969.7	4,968.7	9.9	8.8	-78.07	-322.1	-2,975.3	2,927.7	2,909.3	18.50	158.283			
5,100.0	5,091.9	5,077.8	5,076.7	10.1	8.9	-78.20	-322.3	-2,976.9	2,927.9	2,909.1	18.89	155.010			
5,200.0	5,191.7	5,190.1	5,189.1	10.3	9.1	-78.32	-322.0	-2,978.1	2,927.7	2,908.4	19.29	151.788			
5,300.0	5,291.5	5,281.1	5,280.0	10.5	9.3	-78.41	-321.8	-2,979.0	2,927.4	2,907.8	19.65	148.977			
5,400.0	5,391.4	5,386.9	5,385.8	10.7	9.5	-78.52	-320.9	-2,980.4	2,927.3	2,907.2	20.04	146.088			
5,500.0	5,491.2	5,484.7	5,483.7	10.9	9.7	-78.60	-319.8	-2,981.5	2,927.0	2,906.6	20.41	143.398			
5,600.0	5,591.0	5,579.0	5,577.9	11.1	9.8	-78.69	-318.7	-2,982.7	2,926.9	2,906.1	20.78	140.855			
5,617.2	5,608.2	5,595.2	5,594.1	11.1	9.8	-78.70	-318.5	-2,983.0	2,926.8	2,906.0	20.84	140.428			
5,700.0	5,690.8	5,677.8	5,676.8	11.3	10.0	-78.77	-317.5	-2,984.2	2,926.9	2,905.7	21.16	138.353			
5,800.0	5,790.6	5,782.2	5,781.1	11.5	10.2	-78.87	-316.3	-2,985.7	2,926.8	2,905.3	21.54	135.875			
5,900.0	5,890.4	5,881.4	5,880.3	11.7	10.3	-78.95	-314.9	-2,987.0	2,926.7	2,904.8	21.92	133.535			
6,000.0	5,990.3	5,987.3	5,986.1	11.9	10.5	-79.04	-313.1	-2,988.5	2,926.5	2,904.2	22.31	131.203			
6,100.0	6,090.1	6,108.4	6,107.2	12.1	10.7	-79.13	-310.8	-2,989.6	2,925.8	2,903.1	22.72	128.776			
6,200.0	6,189.9	6,200.0	6,198.8	12.3	10.9	-79.20	-309.2	-2,990.1	2,924.9	2,901.8	23.08	126.707			
6,300.0	6,289.7	6,292.7	6,291.4	12.5	11.1	-79.28	-307.5	-2,990.9	2,924.3	2,900.8	23.45	124.704			
6,400.0	6,389.5	6,400.0	6,398.8	12.7	11.3	-79.36	-305.7	-2,991.9	2,923.6	2,899.8	23.84	122.628			
6,500.0	6,489.3	6,483.4	6,482.2	12.9	11.4	-79.43	-304.1	-2,992.7	2,923.1	2,898.9	24.19	120.834			
6,600.0	6,589.1	6,588.8	6,587.5	13.1	11.6	-79.51	-302.3	-2,994.1	2,922.9	2,898.4	24.58	118.920			
6,700.0	6,689.0	6,696.6	6,695.3	13.3	11.8	-79.58	-299.9	-2,995.4	2,922.5	2,897.5	24.97	117.029			
6,785.3	6,774.1	6,806.6	6,805.2	13.5	12.0	-79.64	-296.5	-2,996.2	2,921.6	2,896.3	25.34	115.300			
6,800.0	6,788.8	6,827.4	6,826.0	13.5	12.0	-68.60	-295.8	-2,996.3	2,921.4	2,896.0	25.40	114.999			
6,850.0	6,838.8	6,898.0	6,896.6	13.6	12.1	42.07	-293.3	-2,996.2	2,919.7	2,894.1	25.59	114.112			
6,900.0	6,888.6	6,966.4	6,964.9	13.6	12.2	64.35	-290.8	-2,995.7	2,917.0	2,891.3	25.73	113.360			
6,950.0	6,938.1	7,031.0	7,029.4	13.7	12.3	69.99	-288.2	-2,994.8	2,913.2	2,887.4	25.84	112.740			
7,000.0	6,987.0	7,091.6	7,090.0	13.7	12.5	72.87	-285.5	-2,993.8	2,908.5	2,882.6	25.91	112.238			
7,050.0	7,035.0	7,156.0	7,154.3	13.6	12.6	74.94	-282.1	-2,992.4	2,903.0	2,877.0	25.97	111.773			
7,100.0	7,082.0	7,225.6	7,223.8	13.6	12.7	76.77	-277.8	-2,990.7	2,896.6	2,870.6	26.02	111.305			
7,150.0	7,127.7	7,300.0	7,297.9	13.5	12.8	78.56	-272.7	-2,988.1	2,889.3	2,863.2	26.07	110.806			
7,200.0	7,171.8	7,342.6	7,340.3	13.5	12.9	80.02	-269.7	-2,986.4	2,881.5	2,855.4	26.07	110.537			
7,250.0	7,214.2	7,380.1	7,377.7	13.4	12.9	81.38	-267.4	-2,984.9	2,873.5	2,847.4	26.06	110.281			
7,300.0	7,254.6	7,417.4	7,415.0	13.4	13.0	82.72	-265.4	-2,983.4	2,865.5	2,839.5	26.06	109.977			
7,350.0	7,292.9	7,454.8	7,452.3	13.3	13.1	84.05	-263.5	-2,981.8	2,857.6	2,831.5	26.07	109.598			
7,400.0	7,328.9	7,490.0	7,487.4	13.3	13.1	85.33	-262.0	-2,980.3	2,849.8	2,823.7	26.11	109.139			
7,450.0	7,362.3	7,517.7	7,515.1	13.3	13.2	86.48	-261.0	-2,979.1	2,842.4	2,816.2	26.17	108.624			
7,500.0	7,393.1	7,541.1	7,538.5	13.4	13.2	87.52	-260.2	-2,978.2	2,835.4	2,809.2	26.25	108.015			
7,550.0	7,421.1	7,562.4	7,559.8	13.5	13.3	88.48	-259.5	-2,977.3	2,829.1	2,802.7	26.37	107.286			
7,600.0	7,446.1	7,581.5	7,578.8	13.6	13.3	89.35	-258.9	-2,976.6	2,823.4	2,796.9	26.53	106.430			
7,650.0	7,468.0	7,600.0	7,597.3	13.8	13.3	90.13	-258.5	-2,975.9	2,818.5	2,791.8	26.73	105.436			
7,700.0	7,486.7	7,613.3	7,610.6	14.0	13.3	90.75	-258.1	-2,975.4	2,814.5	2,787.6	26.97	104.339			
7,750.0	7,502.2	7,625.7	7,622.9	14.2	13.4	91.27	-257.8	-2,975.0	2,811.5	2,784.2	27.26	103.121			
7,800.0	7,514.3	7,635.0	7,632.3	14.6	13.4	91.65	-257.6	-2,974.7	2,809.4	2,781.8	27.60	101.806			
7,850.0	7,523.0	7,641.5	7,638.7	14.9	13.4	91.88	-257.4	-2,974.5	2,808.4	2,780.4	27.97	100.412			
7,872.0	7,525.7	7,643.4	7,640.6	15.1	13.4	91.93	-257.4	-2,974.4	2,808.3	2,780.1	28.15	99.761 CC			
7,900.0	7,528.2	7,644.9	7,642.2	15.3	13.4	91.95	-257.4	-2,974.3	2,808.5	2,780.1	28.38	98.957 ES			
7,950.2	7,530.0	7,645.3	7,642.6	15.8	13.4	91.87	-257.4	-2,974.3	2,809.6	2,780.8	28.83	97.453			
8,000.0	7,530.0	7,644.3	7,641.5	16.2	13.4	91.85	-257.4	-2,974.4	2,811.8	2,782.5	29.31	95.925			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
8,100.0	7,530.0	7,642.1	7,639.4	17.3	13.4	91.80	-257.4	-2,974.4	2,818.7	2,788.3	30.37	92.799		
8,200.0	7,530.0	7,640.0	7,637.2	18.4	13.4	91.76	-257.5	-2,974.5	2,829.2	2,797.6	31.54	89.692		
8,300.0	7,530.0	7,637.8	7,635.1	19.7	13.4	91.72	-257.5	-2,974.6	2,843.1	2,810.3	32.80	86.681		
8,400.0	7,530.0	7,635.6	7,632.9	21.0	13.4	91.67	-257.6	-2,974.6	2,860.5	2,826.4	34.13	83.816		
8,500.0	7,530.0	7,633.5	7,630.8	22.4	13.4	91.63	-257.6	-2,974.7	2,881.2	2,845.7	35.52	81.127		
8,600.0	7,530.0	7,631.4	7,628.6	23.8	13.4	91.58	-257.7	-2,974.8	2,905.3	2,868.3	36.95	78.626		
8,700.0	7,530.0	7,629.2	7,626.5	25.3	13.4	91.54	-257.8	-2,974.9	2,932.5	2,894.1	38.43	76.315		
8,800.0	7,530.0	7,627.1	7,624.4	26.8	13.4	91.50	-257.8	-2,974.9	2,962.9	2,923.0	39.94	74.192		
8,900.0	7,530.0	7,624.9	7,622.2	28.3	13.4	91.45	-257.9	-2,975.0	2,996.3	2,954.8	41.47	72.248		
9,000.0	7,530.0	7,622.8	7,620.1	29.9	13.4	91.41	-257.9	-2,975.1	3,032.6	2,989.6	43.03	70.471		
9,100.0	7,530.0	7,620.7	7,618.0	31.4	13.4	91.37	-258.0	-2,975.2	3,071.8	3,027.2	44.61	68.852		
9,200.0	7,530.0	7,618.6	7,615.8	33.0	13.3	91.32	-258.0	-2,975.2	3,113.7	3,067.4	46.21	67.377		
9,300.0	7,530.0	7,616.4	7,613.7	34.7	13.3	91.28	-258.1	-2,975.3	3,158.1	3,110.3	47.83	66.034		
9,400.0	7,530.0	7,614.3	7,611.6	36.3	13.3	91.24	-258.1	-2,975.4	3,205.1	3,155.7	49.45	64.813		
9,500.0	7,530.0	7,612.2	7,609.5	37.9	13.3	91.19	-258.2	-2,975.5	3,254.5	3,203.4	51.09	63.703		
9,600.0	7,530.0	7,610.1	7,607.4	39.6	13.3	91.15	-258.2	-2,975.5	3,306.2	3,253.4	52.74	62.693		
9,700.0	7,530.0	7,608.0	7,605.3	41.2	13.3	91.11	-258.3	-2,975.6	3,360.0	3,305.6	54.39	61.775		
9,800.0	7,530.0	7,600.0	7,597.3	42.9	13.3	90.94	-258.5	-2,975.9	3,415.9	3,359.9	56.05	60.949		
9,900.0	7,530.0	7,600.0	7,597.3	44.5	13.3	90.94	-258.5	-2,975.9	3,473.8	3,416.1	57.72	60.186		
10,000.0	7,530.0	7,600.0	7,597.3	46.2	13.3	90.94	-258.5	-2,975.9	3,533.6	3,474.2	59.40	59.491		
10,100.0	7,530.0	7,599.4	7,596.7	47.9	13.3	90.93	-258.5	-2,975.9	3,595.2	3,534.1	61.08	58.859		
10,200.0	7,530.0	7,596.6	7,593.9	49.6	13.3	90.87	-258.6	-2,976.0	3,658.5	3,595.7	62.77	58.287		
10,300.0	7,530.0	7,593.6	7,590.9	51.3	13.3	90.81	-258.6	-2,976.1	3,723.3	3,658.9	64.46	57.766		
10,400.0	7,530.0	7,590.6	7,587.9	53.0	13.3	90.75	-258.7	-2,976.2	3,789.7	3,723.6	66.15	57.291		
10,500.0	7,530.0	7,587.5	7,584.8	54.7	13.3	90.69	-258.8	-2,976.4	3,857.6	3,789.7	67.85	56.858		
10,600.0	7,530.0	7,584.3	7,581.6	56.4	13.3	90.62	-258.9	-2,976.5	3,926.8	3,857.3	69.55	56.464		
10,700.0	7,530.0	7,580.9	7,578.2	58.1	13.3	90.56	-259.0	-2,976.6	3,997.3	3,926.1	71.25	56.105		
10,800.0	7,530.0	7,577.4	7,574.8	59.8	13.3	90.48	-259.1	-2,976.7	4,069.1	3,996.1	72.95	55.777		
10,900.0	7,530.0	7,573.9	7,571.2	61.5	13.3	90.41	-259.2	-2,976.9	4,142.0	4,067.3	74.66	55.479		
11,000.0	7,530.0	7,570.1	7,567.5	63.2	13.3	90.34	-259.3	-2,977.0	4,216.0	4,139.7	76.37	55.207		
11,100.0	7,530.0	7,566.3	7,563.6	64.9	13.3	90.26	-259.4	-2,977.2	4,291.1	4,213.0	78.08	54.959		
11,200.0	7,530.0	7,562.3	7,559.6	66.6	13.3	90.18	-259.5	-2,977.3	4,367.2	4,287.4	79.79	54.733		
11,300.0	7,530.0	7,558.1	7,555.5	68.4	13.2	90.09	-259.6	-2,977.5	4,444.2	4,362.7	81.51	54.527		
11,400.0	7,530.0	7,553.8	7,551.1	70.1	13.2	90.00	-259.7	-2,977.7	4,522.1	4,438.9	83.22	54.339		
11,500.0	7,530.0	7,549.3	7,546.7	71.8	13.2	89.91	-259.9	-2,977.8	4,600.9	4,516.0	84.94	54.169		
11,600.0	7,530.0	7,544.6	7,542.0	73.5	13.2	89.82	-260.0	-2,978.0	4,680.5	4,593.8	86.65	54.014		
11,700.0	7,530.0	7,539.7	7,537.1	75.3	13.2	89.72	-260.2	-2,978.2	4,760.8	4,672.5	88.37	53.873		
11,800.0	7,530.0	7,534.6	7,532.0	77.0	13.2	89.61	-260.4	-2,978.4	4,841.9	4,751.8	90.09	53.746		
11,900.0	7,530.0	7,529.3	7,526.7	78.7	13.2	89.50	-260.5	-2,978.6	4,923.7	4,831.9	91.81	53.630		
12,000.0	7,530.0	7,523.8	7,521.2	80.4	13.2	89.39	-260.7	-2,978.9	5,006.1	4,912.6	93.53	53.526		
12,100.0	7,530.0	7,518.0	7,515.4	82.2	13.2	89.27	-260.9	-2,979.1	5,089.2	4,993.9	95.25	53.432		
12,200.0	7,530.0	7,511.9	7,509.3	83.9	13.2	89.15	-261.2	-2,979.4	5,172.8	5,075.8	96.96	53.347		
12,300.0	7,530.0	7,505.5	7,502.9	85.6	13.2	89.02	-261.4	-2,979.7	5,257.0	5,158.3	98.68	53.272		
12,400.0	7,530.0	7,495.5	7,492.9	87.4	13.1	88.82	-261.8	-2,980.1	5,341.8	5,241.4	100.39	53.209		
12,500.0	7,530.0	7,465.4	7,462.9	89.1	13.1	88.21	-263.0	-2,981.4	5,427.0	5,325.0	102.05	53.180		
12,600.0	7,530.0	7,426.6	7,424.1	90.8	13.0	87.42	-264.9	-2,983.0	5,512.8	5,409.1	103.67	53.178		
12,700.0	7,530.0	7,383.5	7,381.2	92.6	12.9	86.55	-267.2	-2,984.7	5,598.9	5,493.7	105.25	53.197		
12,800.0	7,530.0	7,339.9	7,337.7	94.3	12.9	85.67	-269.9	-2,986.5	5,685.5	5,578.7	106.81	53.232		
12,900.0	7,530.0	7,300.0	7,297.9	96.0	12.8	84.87	-272.7	-2,988.1	5,772.4	5,664.1	108.35	53.274		
13,000.0	7,530.0	7,291.2	7,289.2	97.8	12.8	84.70	-273.3	-2,988.4	5,859.8	5,749.7	110.04	53.251		
13,100.0	7,530.0	7,284.4	7,282.4	99.5	12.8	84.56	-273.8	-2,988.7	5,947.5	5,835.8	111.74	53.228		
13,200.0	7,530.0	7,277.8	7,275.7	101.3	12.8	84.43	-274.2	-2,988.9	6,035.6	5,922.2	113.43	53.209		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,300.0	7,530.0	7,271.2	7,269.2	103.0	12.8	84.30	-274.7	-2,989.2	6,124.1	6,009.0	115.13	53.193		
13,400.0	7,530.0	7,264.7	7,262.7	104.7	12.7	84.17	-275.2	-2,989.4	6,212.9	6,096.1	116.82	53.181		
13,500.0	7,530.0	7,258.4	7,256.4	106.5	12.7	84.04	-275.6	-2,989.6	6,302.0	6,183.5	118.52	53.173		
13,600.0	7,530.0	7,252.1	7,250.2	108.2	12.7	83.91	-276.0	-2,989.8	6,391.5	6,271.3	120.21	53.167		
13,700.0	7,530.0	7,245.9	7,244.0	110.0	12.7	83.79	-276.4	-2,990.0	6,481.2	6,359.3	121.91	53.164		
13,800.0	7,530.0	7,239.9	7,238.0	111.7	12.7	83.67	-276.9	-2,990.2	6,571.3	6,447.7	123.60	53.164 SF		
13,900.0	7,530.0	7,233.9	7,232.0	113.4	12.7	83.55	-277.3	-2,990.4	6,661.6	6,536.3	125.30	53.166		
14,000.0	7,530.0	7,228.0	7,226.2	115.2	12.7	83.43	-277.6	-2,990.6	6,752.2	6,625.2	126.99	53.170		
14,100.0	7,530.0	7,222.2	7,220.4	116.9	12.7	83.32	-278.0	-2,990.8	6,843.0	6,714.3	128.69	53.176		
14,200.0	7,530.0	7,216.5	7,214.7	118.7	12.7	83.21	-278.4	-2,990.9	6,934.1	6,803.7	130.38	53.184		
14,300.0	7,530.0	7,210.9	7,209.1	120.4	12.7	83.09	-278.8	-2,991.1	7,025.4	6,893.4	132.07	53.194		
14,400.0	7,530.0	7,200.0	7,198.2	122.1	12.6	82.88	-279.5	-2,991.4	7,117.0	6,983.3	133.73	53.221		
14,500.0	7,530.0	7,200.0	7,198.2	123.9	12.6	82.88	-279.5	-2,991.4	7,208.8	7,073.3	135.46	53.218		
14,600.0	7,530.0	7,200.0	7,198.2	125.6	12.6	82.88	-279.5	-2,991.4	7,300.7	7,163.6	137.19	53.217		
14,700.0	7,530.0	7,200.0	7,198.2	127.4	12.6	82.88	-279.5	-2,991.4	7,392.9	7,254.0	138.92	53.218		
14,800.0	7,530.0	7,200.0	7,198.2	129.1	12.6	82.88	-279.5	-2,991.4	7,485.3	7,344.7	140.65	53.219		
14,900.0	7,530.0	7,200.0	7,198.2	130.9	12.6	82.88	-279.5	-2,991.4	7,577.9	7,435.5	142.38	53.222		
15,000.0	7,530.0	7,200.0	7,198.2	132.6	12.6	82.88	-279.5	-2,991.4	7,670.7	7,526.6	144.11	53.227		
15,100.0	7,530.0	7,200.0	7,198.2	134.4	12.6	82.88	-279.5	-2,991.4	7,763.7	7,617.8	145.85	53.232		
15,200.0	7,530.0	7,200.0	7,198.2	136.1	12.6	82.88	-279.5	-2,991.4	7,856.8	7,709.2	147.58	53.238		
15,300.0	7,530.0	7,173.8	7,172.1	137.9	12.6	82.36	-281.1	-2,992.0	7,950.0	7,800.9	149.10	53.319		
15,400.0	7,530.0	7,170.8	7,169.1	139.6	12.6	82.30	-281.3	-2,992.1	8,043.4	7,892.6	150.81	53.336		
15,500.0	7,530.0	7,167.8	7,166.1	141.3	12.6	82.24	-281.4	-2,992.2	8,137.0	7,984.5	152.51	53.353		
15,600.0	7,530.0	7,164.9	7,163.1	143.1	12.6	82.18	-281.6	-2,992.2	8,230.8	8,076.5	154.22	53.371		
15,700.0	7,530.0	7,162.0	7,160.2	144.8	12.6	82.12	-281.8	-2,992.3	8,324.6	8,168.7	155.92	53.389		
15,800.0	7,530.0	7,159.1	7,157.4	146.6	12.6	82.07	-281.9	-2,992.4	8,418.7	8,261.0	157.63	53.408		
15,900.0	7,530.0	7,156.3	7,154.6	148.3	12.6	82.01	-282.1	-2,992.4	8,512.8	8,353.5	159.33	53.427		
16,000.0	7,530.0	7,153.5	7,151.8	150.1	12.6	81.96	-282.3	-2,992.5	8,607.1	8,446.1	161.04	53.447		
16,100.0	7,530.0	7,150.8	7,149.1	151.8	12.6	81.90	-282.4	-2,992.5	8,701.5	8,538.8	162.74	53.467		
16,200.0	7,530.0	7,148.1	7,146.4	153.6	12.5	81.85	-282.6	-2,992.6	8,796.0	8,631.6	164.45	53.488		
16,300.0	7,530.0	7,145.4	7,143.7	155.3	12.5	81.80	-282.7	-2,992.7	8,890.7	8,724.5	166.15	53.508		
16,400.0	7,530.0	7,142.8	7,141.1	157.1	12.5	81.74	-282.9	-2,992.7	8,985.5	8,817.6	167.86	53.530		
16,500.0	7,530.0	7,140.2	7,138.5	158.8	12.5	81.69	-283.0	-2,992.8	9,080.3	8,910.8	169.56	53.551		
16,600.0	7,530.0	7,137.7	7,136.0	160.6	12.5	81.64	-283.1	-2,992.8	9,175.3	9,004.0	171.27	53.572		
16,700.0	7,530.0	7,135.2	7,133.5	162.3	12.5	81.59	-283.3	-2,992.9	9,270.4	9,097.4	172.97	53.594		
16,800.0	7,530.0	7,132.7	7,131.0	164.1	12.5	81.54	-283.4	-2,992.9	9,365.6	9,190.9	174.68	53.616		
16,900.0	7,530.0	7,130.2	7,128.6	165.8	12.5	81.50	-283.5	-2,993.0	9,460.9	9,284.5	176.38	53.638		
17,000.0	7,530.0	7,127.8	7,126.2	167.6	12.5	81.45	-283.7	-2,993.0	9,556.2	9,378.2	178.09	53.660		
17,100.0	7,530.0	7,100.0	7,098.4	169.3	12.5	80.90	-285.1	-2,993.6	9,651.8	9,472.3	179.52	53.766		
17,200.0	7,530.0	7,100.0	7,098.4	171.1	12.5	80.90	-285.1	-2,993.6	9,747.3	9,566.1	181.24	53.781		
17,300.0	7,530.0	7,100.0	7,098.4	172.8	12.5	80.90	-285.1	-2,993.6	9,843.0	9,660.0	182.97	53.796		
17,400.0	7,530.0	7,100.0	7,098.4	174.5	12.5	80.90	-285.1	-2,993.6	9,938.7	9,754.0	184.70	53.811		
17,411.2	7,530.0	7,100.0	7,098.4	174.7	12.5	80.90	-285.1	-2,993.6	9,949.5	9,764.6	184.89	53.812		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	25.3	25.3	0.0	0.0	-95.29	-275.2	-2,972.4	2,985.1					
100.0	100.0	124.0	124.0	0.2	0.2	-95.29	-275.3	-2,972.3	2,985.0	2,984.7	0.37	8,106.762		
200.0	200.0	215.9	215.9	0.3	0.4	-95.29	-275.1	-2,972.5	2,985.2	2,984.5	0.70	4,244.449		
300.0	300.0	300.2	300.2	0.5	0.5	-95.28	-274.6	-2,972.9	2,985.7	2,984.6	1.02	2,913.178		
400.0	400.0	394.1	394.1	0.7	0.7	-95.28	-274.8	-2,973.9	2,986.7	2,985.3	1.36	2,189.792		
500.0	500.0	587.2	586.8	0.8	1.1	-95.49	-285.7	-2,971.2	2,985.6	2,983.7	1.91	1,565.234		
600.0	600.0	724.5	722.6	1.0	1.4	-72.91	-304.8	-2,965.8	2,982.8	2,980.3	2.46	1,214.661		
700.0	700.0	804.0	800.7	1.2	1.7	-73.26	-319.1	-2,962.1	2,979.2	2,976.3	2.89	1,030.572		
800.0	799.9	923.1	917.3	1.4	2.1	-73.86	-342.8	-2,956.0	2,975.1	2,971.6	3.50	849.681		
848.7	848.4	956.2	949.6	1.5	2.3	-74.05	-349.6	-2,954.3	2,972.9	2,969.2	3.72	799.416		
900.0	899.7	989.0	981.7	1.6	2.4	-74.22	-356.5	-2,952.7	2,970.9	2,966.9	3.94	753.722		
1,000.0	999.5	1,051.1	1,042.2	1.8	2.6	-74.56	-370.3	-2,950.1	2,967.9	2,963.5	4.39	675.362		
1,100.0	1,099.3	1,119.9	1,108.9	2.0	3.0	-74.96	-387.0	-2,947.8	2,966.3	2,961.4	4.91	604.575		
1,200.0	1,199.1	1,205.0	1,190.5	2.2	3.4	-75.51	-410.7	-2,945.1	2,965.6	2,960.1	5.53	535.960		
1,287.5	1,286.4	1,285.3	1,267.0	2.3	3.8	-76.07	-435.0	-2,942.3	2,965.4	2,959.3	6.14	483.012		
1,300.0	1,298.9	1,295.6	1,276.8	2.4	3.9	-76.14	-438.2	-2,941.9	2,965.4	2,959.2	6.22	476.664		
1,400.0	1,398.8	1,401.0	1,376.7	2.6	4.5	-76.91	-471.6	-2,938.1	2,965.7	2,958.7	7.01	422.852		
1,500.0	1,498.6	1,505.6	1,475.4	2.8	5.1	-77.68	-505.7	-2,933.3	2,965.9	2,958.1	7.82	379.079		
1,600.0	1,598.4	1,608.9	1,573.0	3.0	5.7	-78.45	-539.3	-2,928.4	2,966.3	2,957.7	8.62	344.159		
1,695.6	1,693.9	1,726.8	1,684.4	3.1	6.4	-79.32	-577.2	-2,921.8	2,966.3	2,956.8	9.50	312.203		
1,700.0	1,698.2	1,730.6	1,688.0	3.2	6.4	-79.35	-578.4	-2,921.5	2,966.3	2,956.8	9.53	311.169		
1,800.0	1,798.0	1,841.7	1,792.8	3.4	7.1	-80.18	-614.9	-2,914.6	2,966.5	2,956.1	10.40	285.354		
1,813.9	1,811.9	1,860.6	1,810.6	3.4	7.2	-80.33	-621.1	-2,913.3	2,966.4	2,955.9	10.54	281.557		
1,900.0	1,897.8	1,899.7	1,847.5	3.6	7.4	-80.62	-633.8	-2,910.8	2,967.0	2,956.1	10.94	271.300		
2,000.0	1,997.7	1,949.0	1,894.0	3.8	7.7	-80.98	-649.9	-2,908.6	2,969.5	2,958.1	11.42	259.948		
2,100.0	2,097.5	2,124.0	2,059.9	4.0	8.7	-82.24	-705.0	-2,900.2	2,972.5	2,959.9	12.61	235.792		
2,200.0	2,197.3	2,200.3	2,132.4	4.2	9.1	-82.78	-728.3	-2,895.5	2,974.1	2,960.9	13.24	224.593		
2,300.0	2,297.1	2,293.1	2,220.1	4.4	9.7	-83.46	-757.9	-2,889.9	2,976.6	2,962.6	13.99	212.768		
2,400.0	2,396.9	2,375.1	2,297.5	4.6	10.2	-84.07	-784.6	-2,884.8	2,979.7	2,965.1	14.67	203.132		
2,500.0	2,496.7	2,448.5	2,366.9	4.8	10.6	-84.61	-808.1	-2,880.8	2,983.8	2,968.5	15.28	195.233		
2,600.0	2,596.5	2,536.1	2,450.0	5.0	11.1	-85.23	-835.7	-2,876.6	2,988.8	2,972.8	15.97	187.095		
2,700.0	2,696.4	2,619.2	2,528.8	5.2	11.6	-85.82	-861.8	-2,872.7	2,994.3	2,977.7	16.63	180.034		
2,800.0	2,796.2	2,722.9	2,627.3	5.4	12.2	-86.55	-894.1	-2,868.2	3,000.5	2,983.1	17.40	172.396		
2,900.0	2,896.0	2,776.9	2,678.3	5.6	12.5	-86.93	-911.3	-2,865.8	3,007.3	2,989.3	17.91	167.893		
3,000.0	2,995.8	2,822.0	2,720.9	5.8	12.8	-87.26	-926.2	-2,864.3	3,015.9	2,997.6	18.37	164.175		
3,100.0	3,095.6	2,885.6	2,780.6	6.0	13.2	-87.73	-948.0	-2,862.7	3,026.2	3,007.3	18.95	159.730		
3,200.0	3,195.4	2,997.0	2,884.7	6.2	13.9	-88.56	-987.6	-2,859.9	3,037.4	3,017.6	19.80	153.370		
3,300.0	3,295.2	3,088.4	2,970.2	6.4	14.5	-89.25	-1,019.8	-2,857.2	3,048.6	3,028.1	20.53	148.499		
3,400.0	3,395.1	3,203.9	3,078.3	6.6	15.2	-90.10	-1,060.2	-2,852.9	3,059.5	3,038.1	21.39	143.006		
3,500.0	3,494.9	3,259.0	3,129.9	6.8	15.6	-90.51	-1,079.5	-2,851.1	3,071.3	3,049.4	21.91	140.187		
3,600.0	3,594.7	3,325.8	3,192.5	7.0	16.0	-91.00	-1,103.0	-2,849.5	3,084.5	3,062.1	22.47	137.245		
3,700.0	3,694.5	3,584.9	3,436.9	7.2	17.5	-92.78	-1,188.1	-2,841.0	3,096.8	3,072.8	24.01	128.989		
3,800.0	3,794.3	3,758.6	3,602.5	7.4	18.4	-93.91	-1,239.3	-2,829.8	3,104.8	3,079.8	25.03	124.034		
3,900.0	3,894.1	3,827.5	3,668.9	7.6	18.8	-94.31	-1,257.3	-2,826.0	3,112.6	3,087.1	25.51	122.025		
4,000.0	3,994.0	3,870.0	3,710.1	7.8	19.0	-94.54	-1,267.6	-2,824.5	3,121.8	3,096.0	25.87	120.673		
4,100.0	4,093.8	3,925.4	3,763.7	8.0	19.2	-94.83	-1,281.3	-2,823.5	3,132.7	3,106.4	26.29	119.150		
4,200.0	4,193.6	3,973.8	3,810.5	8.2	19.5	-95.09	-1,293.9	-2,823.2	3,145.4	3,118.7	26.69	117.838		
4,300.0	4,293.4	4,146.4	3,975.5	8.4	20.4	-96.11	-1,344.3	-2,819.7	3,159.5	3,131.9	27.67	114.168		
4,400.0	4,393.2	4,219.0	4,044.4	8.6	20.9	-96.58	-1,366.9	-2,815.8	3,171.5	3,143.3	28.23	112.332		
4,500.0	4,493.0	4,268.2	4,090.8	8.8	21.2	-96.91	-1,383.1	-2,813.1	3,184.8	3,156.2	28.69	111.014		
4,600.0	4,592.8	4,322.3	4,141.4	9.0	21.5	-97.28	-1,401.8	-2,810.5	3,199.8	3,170.6	29.17	109.712		
4,700.0	4,692.7	4,394.0	4,208.5	9.3	22.0	-97.77	-1,427.0	-2,807.6	3,216.0	3,186.3	29.73	108.185		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
4,800.0	4,792.5	4,632.3	4,432.8	9.5	23.4	-99.34	-1,506.5	-2,796.0	3,231.8	3,200.8	31.03	104.167		
4,900.0	4,892.3	4,746.7	4,542.2	9.7	24.0	-100.01	-1,539.4	-2,789.7	3,244.3	3,212.6	31.70	102.348		
5,000.0	4,992.1	4,830.0	4,622.2	9.9	24.4	-100.48	-1,562.4	-2,785.6	3,257.1	3,224.9	32.21	101.106		
5,100.0	5,091.9	4,897.0	4,686.6	10.1	24.8	-100.83	-1,580.4	-2,783.3	3,270.8	3,238.2	32.66	100.160		
5,200.0	5,191.7	5,141.2	4,923.7	10.3	25.8	-102.00	-1,638.3	-2,775.6	3,283.6	3,250.0	33.61	97.690		
5,300.0	5,291.5	5,305.1	5,085.1	10.5	26.4	-102.61	-1,666.3	-2,771.3	3,292.8	3,258.6	34.19	96.308		
5,400.0	5,391.4	5,428.9	5,207.7	10.7	26.7	-103.00	-1,683.4	-2,768.9	3,300.7	3,266.1	34.63	95.315		
5,500.0	5,491.2	5,574.9	5,352.8	10.9	27.0	-103.38	-1,698.9	-2,767.6	3,307.8	3,272.7	35.04	94.396		
5,600.0	5,591.0	5,824.4	5,601.9	11.1	27.3	-103.83	-1,711.8	-2,765.9	3,311.5	3,276.1	35.47	93.373		
5,700.0	5,690.8	5,892.1	5,669.6	11.3	27.4	-103.90	-1,712.0	-2,766.6	3,314.0	3,278.3	35.70	92.840		
5,800.0	5,790.6	6,046.4	5,823.9	11.5	27.5	-104.05	-1,712.4	-2,767.4	3,316.0	3,280.0	36.00	92.110		
5,900.0	5,890.4	6,158.6	5,936.1	11.7	27.5	-104.18	-1,712.5	-2,766.6	3,317.0	3,280.7	36.26	91.478		
6,000.0	5,990.3	6,268.5	6,046.1	11.9	27.6	-104.29	-1,711.9	-2,765.9	3,317.7	3,281.2	36.53	90.833		
6,100.0	6,090.1	6,377.2	6,154.7	12.1	27.7	-104.40	-1,711.4	-2,764.8	3,318.1	3,281.3	36.80	90.171		
6,200.0	6,189.9	6,471.2	6,248.7	12.3	27.8	-104.51	-1,711.1	-2,763.6	3,318.4	3,281.4	37.06	89.551		
6,300.0	6,289.7	6,560.9	6,338.4	12.5	27.8	-104.60	-1,710.8	-2,762.9	3,319.1	3,281.7	37.31	88.955		
6,400.0	6,389.5	6,657.8	6,435.3	12.7	27.9	-104.70	-1,710.5	-2,762.2	3,319.9	3,282.3	37.58	88.352		
6,500.0	6,489.3	6,756.3	6,533.8	12.9	28.0	-104.81	-1,710.3	-2,761.6	3,320.8	3,283.0	37.84	87.755		
6,600.0	6,589.1	6,855.5	6,633.0	13.1	28.0	-104.91	-1,710.3	-2,760.9	3,321.8	3,283.7	38.11	87.153		
6,700.0	6,689.0	6,955.1	6,732.6	13.3	28.1	-105.03	-1,710.4	-2,760.0	3,322.8	3,284.4	38.39	86.558		
6,785.3	6,774.1	7,040.8	6,818.3	13.5	28.2	-105.12	-1,710.6	-2,759.2	3,323.6	3,285.0	38.62	86.051		
6,800.0	6,788.8	7,055.7	6,833.2	13.5	28.2	-94.11	-1,710.6	-2,759.1	3,323.7	3,285.0	38.66	85.966		
6,850.0	6,838.8	7,105.7	6,883.2	13.6	28.2	16.45	-1,710.7	-2,758.6	3,322.4	3,283.6	38.78	85.684		
6,900.0	6,888.6	7,152.8	6,930.3	13.6	28.3	38.62	-1,710.9	-2,758.1	3,319.0	3,280.1	38.87	85.377		
6,950.0	6,938.1	7,199.6	6,977.1	13.7	28.3	44.16	-1,711.3	-2,757.5	3,313.5	3,274.6	38.95	85.061		
7,000.0	6,987.0	7,245.9	7,023.4	13.7	28.4	46.99	-1,711.9	-2,756.8	3,305.9	3,266.9	39.02	84.730		
7,050.0	7,035.0	7,291.0	7,068.4	13.6	28.4	49.00	-1,712.6	-2,756.1	3,296.3	3,257.3	39.06	84.387		
7,100.0	7,082.0	7,334.0	7,111.5	13.6	28.5	50.74	-1,713.2	-2,755.5	3,284.8	3,245.7	39.09	84.028		
7,150.0	7,127.7	7,375.9	7,153.4	13.5	28.5	52.42	-1,713.6	-2,755.1	3,271.4	3,232.3	39.12	83.622		
7,200.0	7,171.8	7,416.3	7,193.8	13.5	28.5	54.14	-1,714.0	-2,754.8	3,256.2	3,217.1	39.16	83.156		
7,250.0	7,214.2	7,449.0	7,226.4	13.4	28.6	55.89	-1,714.2	-2,754.7	3,239.5	3,200.3	39.20	82.647		
7,300.0	7,254.6	7,485.9	7,263.4	13.4	28.6	57.81	-1,714.5	-2,754.6	3,221.2	3,181.9	39.27	82.030		
7,350.0	7,292.9	7,515.9	7,293.4	13.3	28.6	59.80	-1,714.6	-2,754.7	3,201.6	3,162.2	39.36	81.334		
7,400.0	7,328.9	7,544.1	7,321.6	13.3	28.6	61.91	-1,714.7	-2,755.0	3,180.8	3,141.3	39.50	80.521		
7,450.0	7,362.3	7,570.3	7,347.8	13.3	28.7	64.13	-1,714.8	-2,755.2	3,159.0	3,119.3	39.69	79.584		
7,500.0	7,393.1	7,594.4	7,371.8	13.4	28.7	66.46	-1,714.9	-2,755.6	3,136.2	3,096.3	39.94	78.523		
7,550.0	7,421.1	7,624.0	7,401.4	13.5	28.7	69.01	-1,715.0	-2,756.1	3,112.8	3,072.5	40.27	77.297		
7,600.0	7,446.1	7,642.2	7,419.6	13.6	28.7	71.48	-1,715.1	-2,756.4	3,088.7	3,048.1	40.63	76.028		
7,650.0	7,468.0	7,668.5	7,445.9	13.8	28.7	74.19	-1,715.1	-2,756.9	3,064.1	3,023.1	41.06	74.618		
7,700.0	7,486.7	7,691.0	7,468.5	14.0	28.8	76.90	-1,715.2	-2,757.2	3,039.3	2,997.7	41.54	73.173		
7,750.0	7,502.2	7,709.6	7,487.1	14.2	28.8	79.58	-1,715.2	-2,757.5	3,014.3	2,972.3	42.03	71.723		
7,800.0	7,514.3	7,724.2	7,501.6	14.6	28.8	82.19	-1,715.2	-2,757.7	2,989.4	2,946.9	42.53	70.291		
7,850.0	7,523.0	7,734.7	7,512.2	14.9	28.8	84.69	-1,715.3	-2,757.8	2,964.8	2,921.8	43.03	68.897		
7,900.0	7,528.2	7,741.1	7,518.5	15.3	28.8	87.05	-1,715.3	-2,757.9	2,940.6	2,897.1	43.53	67.552		
7,950.2	7,530.0	7,743.3	7,520.7	15.8	28.8	89.26	-1,715.3	-2,757.9	2,916.8	2,872.8	44.02	66.256		
8,000.0	7,530.0	7,743.4	7,520.9	16.2	28.8	89.26	-1,715.3	-2,757.9	2,894.0	2,849.5	44.51	65.022		
8,100.0	7,530.0	7,743.7	7,521.1	17.3	28.8	89.27	-1,715.3	-2,757.9	2,850.1	2,804.5	45.57	62.539		
8,200.0	7,530.0	7,743.9	7,521.3	18.4	28.8	89.27	-1,715.3	-2,757.9	2,809.0	2,762.3	46.75	60.093		
8,300.0	7,530.0	7,744.1	7,521.6	19.7	28.8	89.28	-1,715.3	-2,757.9	2,771.0	2,723.0	48.01	57.723		
8,400.0	7,530.0	7,744.4	7,521.8	21.0	28.8	89.29	-1,715.3	-2,757.9	2,736.1	2,686.8	49.34	55.458		
8,500.0	7,530.0	7,744.6	7,522.0	22.4	28.8	89.29	-1,715.3	-2,757.9	2,704.5	2,653.8	50.73	53.314		
8,600.0	7,530.0	7,744.8	7,522.3	23.8	28.8	89.30	-1,715.3	-2,757.9	2,676.2	2,624.1	52.17	51.301		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
8,700.0	7,530.0	7,745.1	7,522.5	25.3	28.8	89.30	-1,715.3	-2,757.9	2,651.4	2,597.8	53.65	49.425		
8,800.0	7,530.0	7,745.3	7,522.7	26.8	28.8	89.31	-1,715.3	-2,757.9	2,630.2	2,575.0	55.16	47.684		
8,900.0	7,530.0	7,745.5	7,523.0	28.3	28.8	89.31	-1,715.3	-2,757.9	2,612.6	2,555.9	56.70	46.079		
9,000.0	7,530.0	7,745.8	7,523.2	29.9	28.8	89.32	-1,715.3	-2,758.0	2,598.8	2,540.5	58.26	44.604		
9,100.0	7,530.0	7,746.0	7,523.4	31.4	28.8	89.32	-1,715.3	-2,758.0	2,588.7	2,528.9	59.85	43.255		
9,200.0	7,530.0	7,746.2	7,523.7	33.0	28.8	89.33	-1,715.3	-2,758.0	2,582.5	2,521.1	61.45	42.027		
9,300.0	7,530.0	7,746.5	7,523.9	34.7	28.8	89.33	-1,715.3	-2,758.0	2,580.2	2,517.1	63.07	40.912		
9,310.7	7,530.0	7,746.5	7,523.9	34.8	28.8	89.33	-1,715.3	-2,758.0	2,580.1	2,516.9	63.24	40.799	CC, ES	
9,400.0	7,530.0	7,746.7	7,524.1	36.3	28.8	89.34	-1,715.3	-2,758.0	2,581.7	2,517.0	64.70	39.905		
9,500.0	7,530.0	7,746.9	7,524.4	37.9	28.8	89.34	-1,715.3	-2,758.0	2,587.1	2,520.7	66.34	39.000		
9,600.0	7,530.0	7,747.2	7,524.6	39.6	28.8	89.35	-1,715.3	-2,758.0	2,596.3	2,528.3	67.99	38.189		
9,700.0	7,530.0	7,747.4	7,524.8	41.2	28.8	89.35	-1,715.3	-2,758.0	2,609.3	2,539.7	69.64	37.466		
9,800.0	7,530.0	7,747.6	7,525.0	42.9	28.8	89.36	-1,715.3	-2,758.0	2,626.1	2,554.8	71.31	36.826		
9,900.0	7,530.0	7,747.9	7,525.3	44.5	28.8	89.36	-1,715.3	-2,758.0	2,646.6	2,573.6	72.98	36.262		
10,000.0	7,530.0	7,748.1	7,525.5	46.2	28.8	89.37	-1,715.3	-2,758.0	2,670.6	2,596.0	74.66	35.769		
10,100.0	7,530.0	7,748.3	7,525.7	47.9	28.8	89.37	-1,715.3	-2,758.0	2,698.2	2,621.8	76.35	35.340		
10,200.0	7,530.0	7,748.5	7,526.0	49.6	28.8	89.38	-1,715.3	-2,758.0	2,729.1	2,651.1	78.04	34.971		
10,300.0	7,530.0	7,748.8	7,526.2	51.3	28.8	89.38	-1,715.3	-2,758.0	2,763.3	2,683.6	79.73	34.657		
10,400.0	7,530.0	7,749.0	7,526.4	53.0	28.8	89.39	-1,715.3	-2,758.0	2,800.7	2,719.2	81.43	34.394		
10,500.0	7,530.0	7,749.2	7,526.7	54.7	28.8	89.39	-1,715.3	-2,758.0	2,841.0	2,757.9	83.13	34.175		
10,600.0	7,530.0	7,749.5	7,526.9	56.4	28.8	89.40	-1,715.3	-2,758.0	2,884.3	2,799.5	84.84	33.999		
10,700.0	7,530.0	7,749.7	7,527.1	58.1	28.8	89.40	-1,715.3	-2,758.0	2,930.4	2,843.9	86.54	33.861		
10,800.0	7,530.0	7,749.9	7,527.3	59.8	28.8	89.41	-1,715.3	-2,758.0	2,979.1	2,890.9	88.25	33.756		
10,900.0	7,530.0	7,750.1	7,527.6	61.5	28.8	89.41	-1,715.3	-2,758.0	3,030.3	2,940.4	89.97	33.683		
11,000.0	7,530.0	7,750.4	7,527.8	63.2	28.8	89.42	-1,715.3	-2,758.0	3,084.0	2,992.3	91.68	33.638		
11,100.0	7,530.0	7,750.6	7,528.0	64.9	28.8	89.42	-1,715.3	-2,758.0	3,139.9	3,046.5	93.40	33.618	SF	
11,200.0	7,530.0	7,750.8	7,528.2	66.6	28.8	89.43	-1,715.3	-2,758.0	3,197.9	3,102.8	95.12	33.620		
11,300.0	7,530.0	7,751.0	7,528.5	68.4	28.8	89.43	-1,715.3	-2,758.0	3,258.0	3,161.1	96.84	33.643		
11,400.0	7,530.0	7,751.3	7,528.7	70.1	28.8	89.44	-1,715.3	-2,758.0	3,320.0	3,221.4	98.56	33.685		
11,500.0	7,530.0	7,751.5	7,528.9	71.8	28.8	89.44	-1,715.3	-2,758.0	3,383.8	3,283.5	100.29	33.742		
11,600.0	7,530.0	7,751.7	7,529.1	73.5	28.8	89.45	-1,715.3	-2,758.0	3,449.3	3,347.3	102.01	33.814		
11,700.0	7,530.0	7,751.9	7,529.4	75.3	28.8	89.45	-1,715.3	-2,758.0	3,516.5	3,412.8	103.74	33.898		
11,800.0	7,530.0	7,752.2	7,529.6	77.0	28.8	89.46	-1,715.3	-2,758.0	3,585.2	3,479.7	105.47	33.994		
11,900.0	7,530.0	7,752.4	7,529.8	78.7	28.8	89.46	-1,715.3	-2,758.0	3,655.3	3,548.2	107.19	34.100		
12,000.0	7,530.0	7,752.6	7,530.0	80.4	28.8	89.47	-1,715.3	-2,758.0	3,726.9	3,617.9	108.93	34.215		
12,100.0	7,530.0	7,752.8	7,530.3	82.2	28.8	89.47	-1,715.3	-2,758.0	3,799.6	3,689.0	110.66	34.337		
12,200.0	7,530.0	7,753.1	7,530.5	83.9	28.8	89.48	-1,715.3	-2,758.0	3,873.6	3,761.3	112.39	34.466		
12,300.0	7,530.0	7,753.3	7,530.7	85.6	28.8	89.48	-1,715.3	-2,758.0	3,948.8	3,834.7	114.12	34.602		
12,400.0	7,530.0	7,753.5	7,530.9	87.4	28.8	89.49	-1,715.3	-2,758.0	4,025.0	3,909.2	115.86	34.742		
12,500.0	7,530.0	7,753.7	7,531.2	89.1	28.8	89.49	-1,715.3	-2,758.0	4,102.3	3,984.7	117.59	34.886		
12,600.0	7,530.0	7,754.0	7,531.4	90.8	28.8	89.50	-1,715.3	-2,758.0	4,180.5	4,061.2	119.33	35.034		
12,700.0	7,530.0	7,754.2	7,531.6	92.6	28.8	89.50	-1,715.3	-2,758.0	4,259.6	4,138.6	121.06	35.185		
12,800.0	7,530.0	7,754.4	7,531.8	94.3	28.8	89.51	-1,715.3	-2,758.0	4,339.6	4,216.8	122.80	35.339		
12,900.0	7,530.0	7,754.6	7,532.0	96.0	28.8	89.51	-1,715.3	-2,758.1	4,420.4	4,295.9	124.54	35.495		
13,000.0	7,530.0	7,754.8	7,532.3	97.8	28.8	89.52	-1,715.3	-2,758.1	4,502.0	4,375.7	126.28	35.652		
13,100.0	7,530.0	7,755.1	7,532.5	99.5	28.8	89.52	-1,715.3	-2,758.1	4,584.3	4,456.3	128.01	35.811		
13,200.0	7,530.0	7,755.3	7,532.7	101.3	28.8	89.53	-1,715.3	-2,758.1	4,667.3	4,537.6	129.75	35.971		
13,300.0	7,530.0	7,755.5	7,532.9	103.0	28.8	89.53	-1,715.3	-2,758.1	4,751.0	4,619.5	131.49	36.131		
13,400.0	7,530.0	7,755.7	7,533.2	104.7	28.8	89.54	-1,715.3	-2,758.1	4,835.2	4,702.0	133.23	36.291		
13,500.0	7,530.0	7,755.9	7,533.4	106.5	28.8	89.54	-1,715.3	-2,758.1	4,920.1	4,785.1	134.97	36.452		
13,600.0	7,530.0	7,756.2	7,533.6	108.2	28.8	89.55	-1,715.3	-2,758.1	5,005.5	4,868.8	136.72	36.613		
13,700.0	7,530.0	7,756.4	7,533.8	110.0	28.8	89.55	-1,715.3	-2,758.1	5,091.5	4,953.0	138.46	36.773		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error: 0.0 ft	
Survey Program: 71-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
13,800.0	7,530.0	7,756.6	7,534.0	111.7	28.8	89.56	-1,715.3	-2,758.1	5,177.9	5,037.7	140.20	36.933		
13,900.0	7,530.0	7,756.8	7,534.2	113.4	28.8	89.56	-1,715.3	-2,758.1	5,264.9	5,122.9	141.94	37.092		
14,000.0	7,530.0	7,757.0	7,534.5	115.2	28.8	89.57	-1,715.3	-2,758.1	5,352.3	5,208.6	143.68	37.250		
14,100.0	7,530.0	7,757.3	7,534.7	116.9	28.8	89.57	-1,715.3	-2,758.1	5,440.1	5,294.7	145.43	37.407		
14,200.0	7,530.0	7,757.5	7,534.9	118.7	28.8	89.58	-1,715.3	-2,758.1	5,528.3	5,381.1	147.17	37.564		
14,300.0	7,530.0	7,757.7	7,535.1	120.4	28.8	89.58	-1,715.3	-2,758.1	5,617.0	5,468.0	148.91	37.719		
14,400.0	7,530.0	7,757.9	7,535.3	122.1	28.8	89.59	-1,715.3	-2,758.1	5,706.0	5,555.3	150.66	37.873		
14,500.0	7,530.0	7,758.1	7,535.6	123.9	28.8	89.59	-1,715.3	-2,758.1	5,795.3	5,642.9	152.40	38.026		
14,600.0	7,530.0	7,758.4	7,535.8	125.6	28.8	89.60	-1,715.3	-2,758.1	5,885.0	5,730.9	154.15	38.178		
14,700.0	7,530.0	7,758.6	7,536.0	127.4	28.8	89.60	-1,715.3	-2,758.1	5,975.1	5,819.2	155.89	38.328		
14,800.0	7,530.0	7,758.8	7,536.2	129.1	28.8	89.60	-1,715.3	-2,758.1	6,065.4	5,907.8	157.64	38.477		
14,900.0	7,530.0	7,759.0	7,536.4	130.9	28.8	89.61	-1,715.3	-2,758.1	6,156.1	5,996.7	159.38	38.624		
15,000.0	7,530.0	7,759.2	7,536.6	132.6	28.8	89.61	-1,715.3	-2,758.1	6,247.0	6,085.9	161.13	38.770		
15,100.0	7,530.0	7,759.4	7,536.9	134.4	28.8	89.62	-1,715.3	-2,758.1	6,338.2	6,175.3	162.87	38.915		
15,200.0	7,530.0	7,759.7	7,537.1	136.1	28.8	89.62	-1,715.3	-2,758.1	6,429.7	6,265.1	164.62	39.058		
15,300.0	7,530.0	7,759.9	7,537.3	137.9	28.8	89.63	-1,715.3	-2,758.1	6,521.4	6,355.0	166.37	39.199		
15,400.0	7,530.0	7,760.1	7,537.5	139.6	28.8	89.63	-1,715.3	-2,758.1	6,613.4	6,445.3	168.11	39.339		
15,500.0	7,530.0	7,760.3	7,537.7	141.3	28.8	89.64	-1,715.3	-2,758.1	6,705.6	6,535.7	169.86	39.477		
15,600.0	7,530.0	7,760.5	7,537.9	143.1	28.8	89.64	-1,715.3	-2,758.1	6,798.0	6,626.4	171.61	39.614		
15,700.0	7,530.0	7,760.7	7,538.2	144.8	28.8	89.65	-1,715.3	-2,758.1	6,890.6	6,717.2	173.35	39.749		
15,800.0	7,530.0	7,760.9	7,538.4	146.6	28.8	89.65	-1,715.3	-2,758.1	6,983.4	6,808.3	175.10	39.882		
15,900.0	7,530.0	7,761.2	7,538.6	148.3	28.8	89.66	-1,715.3	-2,758.1	7,076.4	6,899.6	176.85	40.014		
16,000.0	7,530.0	7,761.4	7,538.8	150.1	28.8	89.66	-1,715.3	-2,758.1	7,169.6	6,991.0	178.60	40.144		
16,100.0	7,530.0	7,761.6	7,539.0	151.8	28.8	89.67	-1,715.3	-2,758.1	7,263.0	7,082.7	180.34	40.273		
16,200.0	7,530.0	7,761.8	7,539.2	153.6	28.8	89.67	-1,715.3	-2,758.1	7,356.6	7,174.5	182.09	40.400		
16,300.0	7,530.0	7,762.0	7,539.4	155.3	28.8	89.68	-1,715.3	-2,758.1	7,450.3	7,266.5	183.84	40.526		
16,400.0	7,530.0	7,762.2	7,539.6	157.1	28.8	89.68	-1,715.3	-2,758.1	7,544.2	7,358.6	185.59	40.650		
16,500.0	7,530.0	7,762.4	7,539.9	158.8	28.8	89.69	-1,715.3	-2,758.1	7,638.3	7,450.9	187.34	40.773		
16,600.0	7,530.0	7,762.6	7,540.1	160.6	28.8	89.69	-1,715.3	-2,758.1	7,732.5	7,543.4	189.08	40.894		
16,700.0	7,530.0	7,762.9	7,540.3	162.3	28.8	89.70	-1,715.3	-2,758.1	7,826.8	7,636.0	190.83	41.014		
16,800.0	7,530.0	7,763.1	7,540.5	164.1	28.8	89.70	-1,715.3	-2,758.1	7,921.3	7,728.7	192.58	41.132		
16,900.0	7,530.0	7,763.3	7,540.7	165.8	28.8	89.70	-1,715.3	-2,758.1	8,015.9	7,821.6	194.33	41.249		
17,000.0	7,530.0	7,763.5	7,540.9	167.6	28.8	89.71	-1,715.3	-2,758.1	8,110.6	7,914.5	196.08	41.364		
17,100.0	7,530.0	7,763.7	7,541.1	169.3	28.8	89.71	-1,715.3	-2,758.2	8,205.5	8,007.7	197.83	41.478		
17,200.0	7,530.0	7,763.9	7,541.3	171.1	28.8	89.72	-1,715.3	-2,758.2	8,300.5	8,100.9	199.58	41.590		
17,300.0	7,530.0	7,764.1	7,541.6	172.8	28.8	89.72	-1,715.3	-2,758.2	8,395.6	8,194.3	201.33	41.701		
17,400.0	7,530.0	7,764.3	7,541.8	174.5	28.8	89.73	-1,715.3	-2,758.2	8,490.8	8,287.7	203.08	41.811		
17,411.2	7,530.0	7,764.4	7,541.8	174.7	28.8	89.73	-1,715.3	-2,758.2	8,501.5	8,298.2	203.27	41.823		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	14.3	14.3	0.0	0.0	-95.46	-284.3	-2,972.7	2,986.3					
100.0	100.0	81.3	81.3	0.2	0.1	-95.48	-285.0	-2,973.3	2,987.2	2,986.9	0.30	N/A		
200.0	200.0	155.0	154.9	0.3	0.3	-95.51	-286.9	-2,974.5	2,989.1	2,988.5	0.61	4,906.484		
300.0	300.0	231.0	230.8	0.5	0.4	-95.57	-290.2	-2,976.3	2,991.8	2,990.9	0.94	3,199.721		
400.0	400.0	315.0	314.6	0.7	0.6	-95.67	-295.8	-2,978.5	2,995.2	2,993.9	1.29	2,314.970		
500.0	500.0	407.0	406.2	0.8	0.8	-95.83	-304.2	-2,981.3	2,999.1	2,997.4	1.70	1,768.461		
600.0	600.0	491.3	489.9	1.0	1.1	-72.98	-314.3	-2,983.9	3,003.1	3,001.0	2.07	1,448.804		
700.0	700.0	618.0	615.3	1.2	1.5	-73.34	-332.3	-2,986.8	3,006.2	3,003.6	2.63	1,144.815		
800.0	799.9	709.7	705.6	1.4	1.8	-73.68	-347.8	-2,988.6	3,008.9	3,005.7	3.11	965.970		
848.7	848.4	767.3	762.2	1.5	2.0	-73.92	-358.2	-2,989.5	3,009.9	3,006.5	3.41	883.966		
900.0	899.7	815.7	809.8	1.6	2.2	-74.14	-367.3	-2,990.1	3,011.0	3,007.3	3.68	818.871		
1,000.0	999.5	940.9	932.7	1.8	2.6	-74.73	-391.2	-2,991.2	3,012.8	3,008.5	4.31	698.475		
1,100.0	1,099.3	1,026.1	1,016.4	2.0	2.9	-75.12	-407.0	-2,991.6	3,014.4	3,009.6	4.82	625.746		
1,200.0	1,199.1	1,096.7	1,085.5	2.2	3.2	-75.46	-421.3	-2,992.3	3,016.9	3,011.6	5.29	570.696		
1,300.0	1,298.9	1,164.0	1,151.2	2.4	3.5	-75.81	-436.0	-2,993.5	3,020.6	3,014.8	5.76	524.779		
1,400.0	1,398.8	1,227.5	1,212.8	2.6	3.8	-76.15	-451.0	-2,995.1	3,025.5	3,019.2	6.24	484.842		
1,500.0	1,498.6	1,293.1	1,276.2	2.8	4.1	-76.54	-468.2	-2,997.1	3,031.6	3,024.8	6.75	449.194		
1,600.0	1,598.4	1,362.1	1,342.4	3.0	4.5	-76.96	-487.5	-2,999.5	3,038.9	3,031.6	7.29	417.115		
1,700.0	1,698.2	1,443.1	1,419.7	3.2	4.9	-77.48	-511.1	-3,002.7	3,047.2	3,039.3	7.89	386.032		
1,800.0	1,798.0	1,529.7	1,502.2	3.4	5.4	-78.05	-537.7	-3,006.1	3,056.1	3,047.5	8.55	357.425		
1,900.0	1,897.8	1,610.3	1,578.4	3.6	5.9	-78.60	-563.4	-3,009.3	3,065.7	3,056.5	9.19	333.711		
2,000.0	1,997.7	1,687.0	1,650.7	3.8	6.4	-79.13	-588.8	-3,012.4	3,076.2	3,066.4	9.82	313.407		
2,100.0	2,097.5	1,756.2	1,715.5	4.0	6.8	-79.63	-613.0	-3,015.4	3,087.7	3,077.3	10.43	295.964		
2,200.0	2,197.3	1,809.0	1,764.5	4.2	7.2	-80.03	-632.6	-3,017.8	3,100.6	3,089.6	10.96	282.901		
2,300.0	2,297.1	1,862.0	1,813.3	4.4	7.5	-80.45	-653.0	-3,020.8	3,115.2	3,103.7	11.49	271.077		
2,400.0	2,396.9	1,971.8	1,913.6	4.6	8.3	-81.33	-697.3	-3,026.3	3,130.4	3,118.0	12.41	252.186		
2,500.0	2,496.7	2,037.0	1,972.8	4.8	8.8	-81.86	-724.3	-3,029.6	3,146.5	3,133.5	13.04	241.310		
2,600.0	2,596.5	2,119.9	2,047.9	5.0	9.4	-82.54	-759.2	-3,034.0	3,163.7	3,149.9	13.79	229.391		
2,700.0	2,696.4	2,202.3	2,121.9	5.2	10.1	-83.24	-795.1	-3,037.8	3,181.4	3,166.8	14.56	218.436		
2,800.0	2,796.2	2,256.3	2,170.1	5.4	10.5	-83.71	-819.6	-3,040.2	3,200.3	3,185.1	15.15	211.233		
2,900.0	2,896.0	2,309.6	2,217.1	5.6	11.0	-84.18	-844.4	-3,043.0	3,220.8	3,205.1	15.73	204.781		
3,000.0	2,995.8	2,386.0	2,284.7	5.8	11.6	-84.84	-879.8	-3,047.6	3,242.6	3,226.1	16.45	197.104		
3,100.0	3,095.6	2,501.8	2,387.6	6.0	12.5	-85.81	-932.4	-3,054.8	3,264.9	3,247.5	17.42	187.429		
3,200.0	3,195.4	2,603.4	2,478.6	6.2	13.3	-86.64	-977.2	-3,060.4	3,286.6	3,268.4	18.26	179.978		
3,300.0	3,295.2	2,676.0	2,544.0	6.4	13.9	-87.20	-1,008.5	-3,065.1	3,309.5	3,290.6	18.91	174.999		
3,400.0	3,395.1	2,822.0	2,675.3	6.6	15.0	-88.34	-1,071.8	-3,073.0	3,331.9	3,311.9	20.00	166.556		
3,500.0	3,494.9	2,873.4	2,721.6	6.8	15.4	-88.73	-1,093.8	-3,075.5	3,354.5	3,334.0	20.52	163.489		
3,600.0	3,594.7	2,910.0	2,754.5	7.0	15.7	-89.01	-1,109.9	-3,077.8	3,379.2	3,358.2	20.94	161.365		
3,700.0	3,694.5	2,997.0	2,832.3	7.2	16.4	-89.68	-1,148.2	-3,083.9	3,404.9	3,383.3	21.66	157.220		
3,800.0	3,794.3	3,061.2	2,889.9	7.4	16.9	-90.15	-1,176.3	-3,088.8	3,431.4	3,409.2	22.22	154.417		
3,900.0	3,894.1	3,161.7	2,980.2	7.6	17.7	-90.87	-1,219.6	-3,097.2	3,458.8	3,435.9	22.98	150.534		
4,000.0	3,994.0	3,221.4	3,033.8	7.8	18.2	-91.30	-1,245.2	-3,102.2	3,486.6	3,463.1	23.51	148.293		
4,100.0	4,093.8	3,346.0	3,145.3	8.0	19.2	-92.19	-1,300.1	-3,112.2	3,515.2	3,490.8	24.40	144.043		
4,200.0	4,193.6	3,400.4	3,193.9	8.2	19.6	-92.58	-1,324.1	-3,116.1	3,543.7	3,518.8	24.90	142.317		
4,300.0	4,293.4	3,517.0	3,298.0	8.4	20.5	-93.40	-1,375.8	-3,125.5	3,573.3	3,547.6	25.73	138.881		
4,400.0	4,393.2	3,608.0	3,379.3	8.6	21.3	-94.04	-1,416.3	-3,131.3	3,602.2	3,575.7	26.42	136.346		
4,500.0	4,493.0	3,677.4	3,441.3	8.8	21.8	-94.52	-1,447.0	-3,136.0	3,631.7	3,604.7	26.97	134.634		
4,600.0	4,592.8	3,750.4	3,506.7	9.0	22.4	-95.00	-1,479.0	-3,141.9	3,662.2	3,634.7	27.53	133.020		
4,700.0	4,692.7	3,865.8	3,610.8	9.3	23.3	-95.72	-1,527.6	-3,152.4	3,693.1	3,664.9	28.25	130.746		
4,800.0	4,792.5	4,015.2	3,746.8	9.5	24.4	-96.60	-1,587.8	-3,165.8	3,723.3	3,694.2	29.10	127.942		
4,900.0	4,892.3	4,099.9	3,823.9	9.7	25.0	-97.10	-1,622.4	-3,172.0	3,752.8	3,723.1	29.68	126.441		
5,000.0	4,992.1	4,263.0	3,971.5	9.9	26.3	-98.12	-1,691.3	-3,180.7	3,781.9	3,751.3	30.64	123.446		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S										Offset Site Error:		0.0 ft	
Survey Program: 41-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,091.9	4,381.5	4,078.7	10.1	27.2	-98.85	-1,741.6	-3,185.3	3,810.5	3,779.2	31.37	121.489	
5,200.0	5,191.7	4,423.8	4,117.0	10.3	27.5	-99.11	-1,759.5	-3,186.8	3,839.3	3,807.5	31.77	120.855	
5,300.0	5,291.5	4,481.0	4,168.1	10.5	28.0	-99.48	-1,785.1	-3,189.2	3,869.9	3,837.7	32.24	120.025	
5,400.0	5,391.4	4,481.0	4,168.1	10.7	28.0	-99.48	-1,785.1	-3,189.2	3,901.8	3,869.3	32.45	120.254	
5,500.0	5,491.2	4,533.0	4,214.0	10.9	28.4	-99.82	-1,809.3	-3,191.9	3,935.2	3,902.3	32.89	119.638	
5,600.0	5,591.0	5,664.6	5,285.1	11.1	34.4	-104.47	-2,143.6	-3,237.5	3,962.1	3,926.1	36.01	110.021	
5,700.0	5,690.8	6,022.2	5,642.0	11.3	34.8	-104.90	-2,161.0	-3,245.2	3,967.5	3,931.1	36.39	109.012	
5,800.0	5,790.6	6,143.9	5,763.7	11.5	34.8	-104.99	-2,161.0	-3,247.5	3,970.4	3,933.8	36.63	108.393	
5,900.0	5,890.4	6,239.8	5,859.6	11.7	34.9	-105.05	-2,160.9	-3,249.1	3,973.3	3,936.5	36.86	107.785	
6,000.0	5,990.3	6,337.3	5,957.1	11.9	35.0	-105.12	-2,161.0	-3,250.8	3,976.3	3,939.2	37.10	107.185	
6,100.0	6,090.1	6,440.5	6,060.3	12.1	35.0	-105.19	-2,161.1	-3,252.6	3,979.3	3,942.0	37.34	106.581	
6,200.0	6,189.9	6,565.1	6,184.8	12.3	35.1	-105.28	-2,161.2	-3,254.3	3,982.1	3,944.5	37.58	105.954	
6,300.0	6,289.7	6,692.1	6,311.8	12.5	35.2	-105.38	-2,160.5	-3,255.3	3,984.0	3,946.1	37.83	105.300	
6,400.0	6,389.5	6,782.1	6,401.9	12.7	35.2	-105.44	-2,160.1	-3,255.8	3,985.7	3,947.7	38.08	104.680	
6,500.0	6,489.3	6,873.6	6,493.3	12.9	35.3	-105.51	-2,159.9	-3,256.4	3,987.8	3,949.5	38.32	104.072	
6,600.0	6,589.1	6,967.3	6,587.0	13.1	35.3	-105.58	-2,159.9	-3,257.2	3,990.0	3,951.4	38.56	103.470	
6,700.0	6,689.0	7,058.6	6,678.4	13.3	35.4	-105.65	-2,160.0	-3,258.0	3,992.4	3,953.6	38.80	102.884	
6,785.3	6,774.1	7,134.7	6,754.4	13.5	35.4	-105.71	-2,160.1	-3,258.8	3,994.6	3,955.6	39.01	102.397	
6,800.0	6,788.8	7,147.8	6,767.6	13.5	35.4	-94.71	-2,160.2	-3,259.0	3,994.9	3,955.9	39.04	102.338	
6,850.0	6,838.8	7,193.0	6,812.7	13.6	35.5	15.81	-2,160.3	-3,259.6	3,994.6	3,955.5	39.14	102.070	
6,900.0	6,888.6	7,241.2	6,861.0	13.6	35.5	37.93	-2,160.4	-3,260.3	3,992.1	3,952.8	39.27	101.653	
6,950.0	6,938.1	7,289.2	6,908.9	13.7	35.5	43.42	-2,160.6	-3,260.9	3,987.5	3,948.0	39.44	101.097	
7,000.0	6,987.0	7,336.5	6,956.3	13.7	35.6	46.19	-2,160.7	-3,261.6	3,980.7	3,941.0	39.65	100.400	
7,050.0	7,035.0	7,383.2	7,002.9	13.6	35.6	48.14	-2,160.8	-3,262.4	3,971.8	3,931.9	39.89	99.565	
7,100.0	7,082.0	7,428.9	7,048.6	13.6	35.6	49.82	-2,161.0	-3,263.1	3,960.9	3,920.7	40.18	98.588	
7,150.0	7,127.7	7,473.3	7,093.0	13.5	35.7	51.43	-2,161.0	-3,263.9	3,948.0	3,907.5	40.51	97.466	
7,200.0	7,171.8	7,516.2	7,135.8	13.5	35.7	53.08	-2,161.1	-3,264.7	3,933.3	3,892.4	40.89	96.195	
7,250.0	7,214.2	7,558.5	7,178.2	13.4	35.7	54.83	-2,161.1	-3,265.5	3,916.9	3,875.5	41.33	94.768	
7,300.0	7,254.6	7,600.0	7,219.7	13.4	35.8	56.70	-2,161.1	-3,266.3	3,898.7	3,856.9	41.84	93.187	
7,350.0	7,292.9	7,639.3	7,259.0	13.3	35.8	58.70	-2,161.1	-3,267.0	3,879.1	3,836.7	42.41	91.470	
7,400.0	7,328.9	7,676.2	7,295.8	13.3	35.8	60.85	-2,161.0	-3,267.7	3,858.1	3,815.0	43.04	89.632	
7,450.0	7,362.3	7,710.4	7,330.1	13.3	35.8	63.13	-2,161.0	-3,268.4	3,835.8	3,792.1	43.74	87.696	
7,500.0	7,393.1	7,743.2	7,362.9	13.4	35.9	65.55	-2,160.9	-3,269.0	3,812.5	3,768.0	44.49	85.684	
7,550.0	7,421.1	7,772.9	7,392.6	13.5	35.9	68.09	-2,160.8	-3,269.6	3,788.2	3,742.9	45.29	83.640	
7,600.0	7,446.1	7,799.4	7,419.0	13.6	35.9	70.72	-2,160.7	-3,270.1	3,763.2	3,717.1	46.12	81.602	
7,650.0	7,468.0	7,822.5	7,442.1	13.8	35.9	73.41	-2,160.6	-3,270.6	3,737.7	3,690.7	46.95	79.610	
7,700.0	7,486.7	7,842.1	7,461.8	14.0	35.9	76.13	-2,160.5	-3,270.9	3,711.7	3,663.9	47.77	77.700	
7,750.0	7,502.2	7,858.2	7,477.9	14.2	35.9	78.86	-2,160.4	-3,271.3	3,685.5	3,636.9	48.56	75.902	
7,800.0	7,514.3	7,870.7	7,490.4	14.6	35.9	81.55	-2,160.3	-3,271.5	3,659.2	3,609.9	49.29	74.238	
7,850.0	7,523.0	7,879.6	7,499.2	14.9	35.9	84.17	-2,160.3	-3,271.7	3,633.0	3,583.1	49.96	72.720	
7,900.0	7,528.2	7,884.7	7,504.4	15.3	35.9	86.69	-2,160.2	-3,271.8	3,607.1	3,556.6	50.55	71.351	
7,950.2	7,530.0	7,886.3	7,505.9	15.8	35.9	89.11	-2,160.2	-3,271.8	3,581.5	3,530.4	51.08	70.121	
8,000.0	7,530.0	7,885.8	7,505.5	16.2	35.9	89.10	-2,160.2	-3,271.8	3,556.6	3,505.1	51.56	68.982	
8,100.0	7,530.0	7,885.1	7,504.7	17.3	35.9	89.09	-2,160.2	-3,271.8	3,508.2	3,455.6	52.62	66.667	
8,200.0	7,530.0	7,884.4	7,504.0	18.4	35.9	89.07	-2,160.2	-3,271.8	3,462.1	3,408.3	53.80	64.356	
8,300.0	7,530.0	7,883.6	7,503.3	19.7	35.9	89.06	-2,160.3	-3,271.7	3,418.2	3,363.1	55.05	62.087	
8,400.0	7,530.0	7,882.9	7,502.5	21.0	35.9	89.05	-2,160.3	-3,271.7	3,376.7	3,320.3	56.39	59.886	
8,500.0	7,530.0	7,882.2	7,501.8	22.4	35.9	89.03	-2,160.3	-3,271.7	3,337.7	3,279.9	57.77	57.771	
8,600.0	7,530.0	7,881.5	7,501.1	23.8	35.9	89.02	-2,160.3	-3,271.7	3,301.3	3,242.1	59.21	55.753	
8,700.0	7,530.0	7,880.8	7,500.4	25.3	35.9	89.01	-2,160.3	-3,271.7	3,267.5	3,206.8	60.69	53.838	
8,800.0	7,530.0	7,880.1	7,499.7	26.8	35.9	88.99	-2,160.3	-3,271.7	3,236.5	3,174.3	62.20	52.031	
8,900.0	7,530.0	7,879.4	7,499.0	28.3	35.9	88.98	-2,160.3	-3,271.7	3,208.2	3,144.5	63.74	50.331	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,878.7	7,498.3	29.9	35.9	88.97	-2,160.3	-3,271.7	3,182.9	3,117.6	65.31	48.739		
9,100.0	7,530.0	7,878.0	7,497.6	31.4	35.9	88.95	-2,160.3	-3,271.6	3,160.6	3,093.7	66.89	47.251		
9,200.0	7,530.0	7,877.3	7,496.9	33.0	35.9	88.94	-2,160.3	-3,271.6	3,141.2	3,072.7	68.49	45.864		
9,300.0	7,530.0	7,876.6	7,496.3	34.7	35.9	88.93	-2,160.3	-3,271.6	3,125.0	3,054.9	70.11	44.575		
9,400.0	7,530.0	7,875.9	7,495.6	36.3	35.9	88.92	-2,160.3	-3,271.6	3,111.8	3,040.1	71.73	43.381		
9,500.0	7,530.0	7,875.3	7,494.9	37.9	35.9	88.90	-2,160.3	-3,271.6	3,101.9	3,028.5	73.37	42.276		
9,600.0	7,530.0	7,874.6	7,494.2	39.6	35.9	88.89	-2,160.3	-3,271.6	3,095.1	3,020.1	75.02	41.256		
9,700.0	7,530.0	7,873.9	7,493.6	41.2	35.9	88.88	-2,160.3	-3,271.6	3,091.6	3,014.9	76.68	40.318		
9,759.3	7,530.0	7,873.6	7,493.2	42.2	35.9	88.87	-2,160.3	-3,271.6	3,091.0	3,013.4	77.67	39.798		
9,800.0	7,530.0	7,873.3	7,492.9	42.9	35.9	88.87	-2,160.3	-3,271.5	3,091.3	3,013.0	78.35	39.457		
9,900.0	7,530.0	7,872.6	7,492.3	44.5	35.9	88.86	-2,160.3	-3,271.5	3,094.2	3,014.2	80.02	38.670		
10,000.0	7,530.0	7,872.0	7,491.6	46.2	35.9	88.84	-2,160.3	-3,271.5	3,100.4	3,018.7	81.70	37.951		
10,100.0	7,530.0	7,871.3	7,491.0	47.9	35.9	88.83	-2,160.3	-3,271.5	3,109.7	3,026.4	83.38	37.297		
10,200.0	7,530.0	7,870.7	7,490.3	49.6	35.9	88.82	-2,160.3	-3,271.5	3,122.3	3,037.2	85.07	36.704		
10,300.0	7,530.0	7,870.1	7,489.7	51.3	35.9	88.81	-2,160.3	-3,271.5	3,138.0	3,051.2	86.76	36.168		
10,400.0	7,530.0	7,869.4	7,489.0	53.0	35.9	88.80	-2,160.4	-3,271.5	3,156.7	3,068.3	88.46	35.687		
10,500.0	7,530.0	7,868.8	7,488.4	54.7	35.9	88.78	-2,160.4	-3,271.5	3,178.5	3,088.4	90.16	35.256		
10,600.0	7,530.0	7,868.2	7,487.8	56.4	35.9	88.77	-2,160.4	-3,271.4	3,203.3	3,111.4	91.86	34.872		
10,700.0	7,530.0	7,867.5	7,487.2	58.1	35.9	88.76	-2,160.4	-3,271.4	3,231.0	3,137.4	93.57	34.532		
10,800.0	7,530.0	7,866.9	7,486.6	59.8	35.9	88.75	-2,160.4	-3,271.4	3,261.5	3,166.2	95.28	34.232		
10,900.0	7,530.0	7,866.3	7,485.9	61.5	35.9	88.74	-2,160.4	-3,271.4	3,294.8	3,197.8	96.99	33.971		
11,000.0	7,530.0	7,865.7	7,485.3	63.2	35.9	88.73	-2,160.4	-3,271.4	3,330.7	3,232.0	98.70	33.746		
11,100.0	7,530.0	7,865.1	7,484.7	64.9	35.9	88.72	-2,160.4	-3,271.4	3,369.2	3,268.8	100.42	33.553		
11,200.0	7,530.0	7,864.5	7,484.1	66.6	35.9	88.70	-2,160.4	-3,271.4	3,410.3	3,308.1	102.13	33.390		
11,300.0	7,530.0	7,863.9	7,483.5	68.4	35.9	88.69	-2,160.4	-3,271.4	3,453.7	3,349.9	103.85	33.256		
11,400.0	7,530.0	7,863.3	7,482.9	70.1	35.9	88.68	-2,160.4	-3,271.4	3,499.5	3,393.9	105.57	33.147		
11,500.0	7,530.0	7,862.7	7,482.3	71.8	35.9	88.67	-2,160.4	-3,271.3	3,547.4	3,440.1	107.30	33.062		
11,600.0	7,530.0	7,862.1	7,481.7	73.5	35.9	88.66	-2,160.4	-3,271.3	3,597.6	3,488.5	109.02	32.999		
11,700.0	7,530.0	7,861.5	7,481.2	75.3	35.9	88.65	-2,160.4	-3,271.3	3,649.7	3,539.0	110.75	32.956		
11,800.0	7,530.0	7,860.9	7,480.6	77.0	35.9	88.64	-2,160.4	-3,271.3	3,703.9	3,591.4	112.47	32.931		
11,900.0	7,530.0	7,860.4	7,480.0	78.7	35.9	88.63	-2,160.4	-3,271.3	3,759.9	3,645.7	114.20	32.923 SF		
12,000.0	7,530.0	7,859.8	7,479.4	80.4	35.9	88.62	-2,160.4	-3,271.3	3,817.7	3,701.8	115.93	32.931		
12,100.0	7,530.0	7,859.2	7,478.9	82.2	35.9	88.61	-2,160.4	-3,271.3	3,877.2	3,759.6	117.66	32.953		
12,200.0	7,530.0	7,858.7	7,478.3	83.9	35.9	88.60	-2,160.4	-3,271.3	3,938.4	3,819.0	119.39	32.988		
12,300.0	7,530.0	7,858.1	7,477.7	85.6	35.9	88.59	-2,160.4	-3,271.2	4,001.2	3,880.0	121.12	33.034		
12,400.0	7,530.0	7,857.5	7,477.2	87.4	35.9	88.58	-2,160.4	-3,271.2	4,065.4	3,942.5	122.85	33.091		
12,500.0	7,530.0	7,857.0	7,476.6	89.1	35.9	88.57	-2,160.4	-3,271.2	4,131.0	4,006.5	124.59	33.158		
12,600.0	7,530.0	7,856.4	7,476.1	90.8	35.9	88.56	-2,160.4	-3,271.2	4,198.1	4,071.7	126.32	33.233		
12,700.0	7,530.0	7,855.9	7,475.5	92.6	35.9	88.54	-2,160.4	-3,271.2	4,266.4	4,138.3	128.06	33.316		
12,800.0	7,530.0	7,855.3	7,475.0	94.3	35.9	88.53	-2,160.4	-3,271.2	4,335.9	4,206.1	129.79	33.406		
12,900.0	7,530.0	7,854.8	7,474.4	96.0	35.9	88.52	-2,160.4	-3,271.2	4,406.6	4,275.1	131.53	33.503		
13,000.0	7,530.0	7,854.2	7,473.9	97.8	35.9	88.51	-2,160.4	-3,271.2	4,478.4	4,345.1	133.26	33.605		
13,100.0	7,530.0	7,853.7	7,473.3	99.5	35.9	88.50	-2,160.5	-3,271.2	4,551.3	4,416.3	135.00	33.713		
13,200.0	7,530.0	7,853.2	7,472.8	101.3	35.9	88.49	-2,160.5	-3,271.2	4,625.2	4,488.4	136.74	33.825		
13,300.0	7,530.0	7,852.6	7,472.3	103.0	35.9	88.48	-2,160.5	-3,271.1	4,700.0	4,561.6	138.48	33.941		
13,400.0	7,530.0	7,852.1	7,471.7	104.7	35.9	88.48	-2,160.5	-3,271.1	4,775.8	4,635.6	140.22	34.060		
13,500.0	7,530.0	7,851.6	7,471.2	106.5	35.9	88.47	-2,160.5	-3,271.1	4,852.5	4,710.5	141.96	34.183		
13,600.0	7,530.0	7,851.1	7,470.7	108.2	35.9	88.46	-2,160.5	-3,271.1	4,930.0	4,786.3	143.69	34.309		
13,700.0	7,530.0	7,850.5	7,470.2	110.0	35.9	88.45	-2,160.5	-3,271.1	5,008.3	4,862.8	145.43	34.437		
13,800.0	7,530.0	7,850.0	7,469.7	111.7	35.9	88.44	-2,160.5	-3,271.1	5,087.3	4,940.2	147.17	34.567		
13,900.0	7,530.0	7,849.5	7,469.2	113.4	35.9	88.43	-2,160.5	-3,271.1	5,167.1	5,018.2	148.92	34.698		
14,000.0	7,530.0	7,849.0	7,468.6	115.2	35.9	88.42	-2,160.5	-3,271.1	5,247.6	5,096.9	150.66	34.832		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S														Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
14,100.0	7,530.0	7,848.5	7,468.1	116.9	35.9	88.41	-2,160.5	-3,271.1	5,328.7	5,176.3	152.40	34.966			
14,200.0	7,530.0	7,848.0	7,467.6	118.7	35.9	88.40	-2,160.5	-3,271.1	5,410.5	5,256.3	154.14	35.101			
14,300.0	7,530.0	7,847.5	7,467.1	120.4	35.9	88.39	-2,160.5	-3,271.0	5,492.9	5,337.0	155.88	35.237			
14,400.0	7,530.0	7,847.0	7,466.6	122.1	35.9	88.38	-2,160.5	-3,271.0	5,575.8	5,418.2	157.62	35.374			
14,500.0	7,530.0	7,846.5	7,466.1	123.9	35.9	88.37	-2,160.5	-3,271.0	5,659.3	5,499.9	159.37	35.511			
14,600.0	7,530.0	7,846.0	7,465.6	125.6	35.9	88.36	-2,160.5	-3,271.0	5,743.3	5,582.2	161.11	35.649			
14,700.0	7,530.0	7,845.5	7,465.2	127.4	35.9	88.35	-2,160.5	-3,271.0	5,827.9	5,665.0	162.85	35.786			
14,800.0	7,530.0	7,845.0	7,464.7	129.1	35.9	88.34	-2,160.5	-3,271.0	5,912.9	5,748.3	164.59	35.924			
14,900.0	7,530.0	7,844.5	7,464.2	130.9	35.9	88.33	-2,160.5	-3,271.0	5,998.3	5,832.0	166.34	36.061			
15,000.0	7,530.0	7,844.1	7,463.7	132.6	35.9	88.33	-2,160.5	-3,271.0	6,084.3	5,916.2	168.08	36.198			
15,100.0	7,530.0	7,843.6	7,463.2	134.4	35.9	88.32	-2,160.5	-3,271.0	6,170.6	6,000.8	169.83	36.335			
15,200.0	7,530.0	7,843.1	7,462.7	136.1	35.9	88.31	-2,160.5	-3,271.0	6,257.3	6,085.8	171.57	36.471			
15,300.0	7,530.0	7,842.6	7,462.3	137.9	35.9	88.30	-2,160.5	-3,270.9	6,344.5	6,171.2	173.31	36.607			
15,400.0	7,530.0	7,842.2	7,461.8	139.6	35.9	88.29	-2,160.5	-3,270.9	6,432.0	6,256.9	175.06	36.742			
15,500.0	7,530.0	7,841.7	7,461.3	141.3	35.9	88.28	-2,160.5	-3,270.9	6,519.9	6,343.1	176.80	36.876			
15,600.0	7,530.0	7,841.2	7,460.9	143.1	35.9	88.27	-2,160.5	-3,270.9	6,608.1	6,429.5	178.55	37.010			
15,700.0	7,530.0	7,840.8	7,460.4	144.8	35.9	88.26	-2,160.5	-3,270.9	6,696.6	6,516.3	180.29	37.143			
15,800.0	7,530.0	7,840.3	7,459.9	146.6	35.9	88.26	-2,160.5	-3,270.9	6,785.5	6,603.5	182.04	37.275			
15,900.0	7,530.0	7,839.8	7,459.5	148.3	35.9	88.25	-2,160.5	-3,270.9	6,874.7	6,690.9	183.78	37.406			
16,000.0	7,530.0	7,839.4	7,459.0	150.1	35.9	88.24	-2,160.5	-3,270.9	6,964.1	6,778.6	185.53	37.537			
16,100.0	7,530.0	7,838.9	7,458.6	151.8	35.9	88.23	-2,160.5	-3,270.9	7,053.9	6,866.6	187.27	37.666			
16,200.0	7,530.0	7,838.5	7,458.1	153.6	35.9	88.22	-2,160.5	-3,270.9	7,143.9	6,954.9	189.02	37.794			
16,300.0	7,530.0	7,838.0	7,457.7	155.3	35.9	88.21	-2,160.5	-3,270.9	7,234.2	7,043.4	190.77	37.922			
16,400.0	7,530.0	7,837.6	7,457.2	157.1	35.9	88.21	-2,160.5	-3,270.8	7,324.7	7,132.2	192.51	38.048			
16,500.0	7,530.0	7,837.1	7,456.8	158.8	35.9	88.20	-2,160.5	-3,270.8	7,415.5	7,221.2	194.26	38.173			
16,600.0	7,530.0	7,836.7	7,456.3	160.6	35.9	88.19	-2,160.6	-3,270.8	7,506.5	7,310.5	196.00	38.298			
16,700.0	7,530.0	7,836.3	7,455.9	162.3	35.9	88.18	-2,160.6	-3,270.8	7,597.8	7,400.0	197.75	38.421			
16,800.0	7,530.0	7,835.8	7,455.5	164.1	35.9	88.17	-2,160.6	-3,270.8	7,689.2	7,489.7	199.50	38.543			
16,900.0	7,530.0	7,835.4	7,455.0	165.8	35.9	88.17	-2,160.6	-3,270.8	7,780.9	7,579.6	201.24	38.664			
17,000.0	7,530.0	7,835.0	7,454.6	167.6	35.9	88.16	-2,160.6	-3,270.8	7,872.7	7,669.8	202.99	38.784			
17,100.0	7,530.0	7,834.5	7,454.2	169.3	35.9	88.15	-2,160.6	-3,270.8	7,964.8	7,760.1	204.74	38.903			
17,200.0	7,530.0	7,834.1	7,453.7	171.1	35.9	88.14	-2,160.6	-3,270.8	8,057.1	7,850.6	206.48	39.020			
17,300.0	7,530.0	7,833.7	7,453.3	172.8	35.9	88.13	-2,160.6	-3,270.8	8,149.5	7,941.3	208.23	39.137			
17,400.0	7,530.0	7,833.2	7,452.9	174.5	35.9	88.13	-2,160.6	-3,270.8	8,242.1	8,032.1	209.98	39.252			
17,411.2	7,530.0	7,833.2	7,452.8	174.7	35.9	88.12	-2,160.6	-3,270.8	8,252.5	8,042.4	210.17	39.265			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 4-0-7 (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	25.7	25.7	0.0	0.0	-94.89	-254.5	-2,971.8	2,982.7					
100.0	100.0	451.9	450.8	0.2	1.0	-94.67	-241.0	-2,951.9	2,979.7	2,978.6	1.05	2,830.618		
200.0	200.0	712.0	706.4	0.3	1.9	-94.07	-207.6	-2,917.1	2,964.0	2,961.9	2.09	1,420.061		
300.0	300.0	786.0	778.7	0.5	2.2	-93.87	-196.5	-2,906.1	2,948.0	2,945.4	2.53	1,165.494		
400.0	400.0	839.9	831.6	0.7	2.4	-93.73	-188.8	-2,898.7	2,933.3	2,930.4	2.88	1,017.000		
500.0	500.0	917.2	907.6	0.8	2.7	-93.54	-179.0	-2,889.1	2,919.9	2,916.6	3.31	882.600		
600.0	600.0	1,132.1	1,118.6	1.0	3.5	-70.20	-151.3	-2,859.7	2,905.8	2,902.1	3.71	783.723		
700.0	700.0	1,234.1	1,218.0	1.2	3.9	-70.12	-135.3	-2,843.4	2,888.0	2,883.8	4.21	686.738		
800.0	799.9	1,331.5	1,312.7	1.4	4.3	-70.06	-119.1	-2,827.5	2,869.2	2,864.5	4.70	610.481		
848.7	848.4	1,365.3	1,345.6	1.5	4.5	-70.08	-113.5	-2,822.1	2,860.1	2,855.2	4.90	583.835		
900.0	899.7	1,382.0	1,361.9	1.6	4.6	-70.04	-110.6	-2,819.5	2,850.7	2,845.7	5.05	564.407		
1,000.0	999.5	1,469.0	1,446.8	1.8	4.9	-69.86	-96.3	-2,807.0	2,833.4	2,827.8	5.52	513.051		
1,100.0	1,099.3	1,551.0	1,527.0	2.0	5.2	-69.71	-83.8	-2,795.9	2,816.9	2,810.9	5.96	472.469		
1,200.0	1,199.1	1,686.9	1,660.3	2.2	5.8	-69.51	-65.8	-2,775.7	2,799.2	2,792.6	6.55	427.472		
1,300.0	1,298.9	1,760.2	1,731.9	2.4	6.1	-69.38	-54.9	-2,765.1	2,781.9	2,774.9	6.98	398.728		
1,400.0	1,398.8	1,993.0	1,959.1	2.6	7.1	-68.94	-19.8	-2,728.6	2,764.5	2,756.6	7.90	349.824		
1,500.0	1,498.6	2,082.7	2,046.3	2.8	7.5	-68.79	-7.2	-2,711.6	2,743.0	2,734.6	8.37	327.757		
1,600.0	1,598.4	2,214.2	2,173.9	3.0	8.1	-68.57	11.4	-2,686.0	2,720.8	2,711.8	8.97	303.213		
1,700.0	1,698.2	2,299.6	2,256.7	3.2	8.5	-68.41	23.8	-2,669.2	2,698.5	2,689.0	9.44	285.854		
1,800.0	1,798.0	2,374.3	2,329.2	3.4	8.8	-68.27	34.6	-2,654.9	2,676.8	2,666.9	9.87	271.135		
1,900.0	1,897.8	2,429.0	2,382.5	3.6	9.0	-68.17	42.4	-2,645.0	2,656.2	2,646.0	10.24	259.351		
2,000.0	1,997.7	2,517.0	2,468.3	3.8	9.4	-68.01	55.0	-2,630.2	2,636.8	2,626.1	10.72	246.007		
2,100.0	2,097.5	2,571.3	2,521.4	4.0	9.6	-67.92	61.9	-2,621.7	2,618.6	2,607.6	11.05	237.005		
2,200.0	2,197.3	2,645.7	2,594.7	4.2	9.9	-67.85	69.2	-2,610.9	2,601.6	2,590.1	11.44	227.430		
2,300.0	2,297.1	2,794.9	2,741.2	4.4	10.4	-67.64	87.5	-2,588.9	2,584.6	2,572.6	12.08	213.981		
2,400.0	2,396.9	2,910.2	2,853.9	4.6	10.9	-67.47	101.4	-2,569.5	2,565.3	2,552.7	12.59	203.685		
2,500.0	2,496.7	2,979.2	2,921.6	4.8	11.2	-67.39	108.9	-2,558.2	2,546.6	2,533.6	12.97	196.303		
2,600.0	2,596.5	3,041.0	2,982.4	5.0	11.4	-67.33	115.0	-2,549.0	2,529.3	2,516.0	13.32	189.832		
2,700.0	2,696.4	3,194.4	3,132.7	5.2	12.0	-67.08	134.2	-2,524.9	2,510.9	2,496.9	14.01	179.203		
2,800.0	2,796.2	3,302.0	3,237.6	5.4	12.5	-66.86	149.5	-2,506.8	2,491.7	2,477.2	14.55	171.305		
2,900.0	2,896.0	3,390.0	3,323.6	5.6	12.8	-66.71	160.8	-2,492.1	2,472.7	2,457.7	15.02	164.646		
3,000.0	2,995.8	3,564.0	3,493.0	5.8	13.6	-66.30	187.0	-2,462.3	2,453.7	2,437.9	15.84	154.934		
3,100.0	3,095.6	3,652.0	3,578.2	6.0	14.0	-66.07	201.2	-2,445.4	2,432.2	2,415.9	16.36	148.704		
3,200.0	3,195.4	3,687.5	3,612.7	6.2	14.2	-65.98	206.7	-2,439.2	2,412.4	2,395.7	16.67	144.686		
3,300.0	3,295.2	3,739.0	3,663.1	6.4	14.4	-65.87	214.2	-2,431.3	2,394.6	2,377.6	17.04	140.511		
3,400.0	3,395.1	3,807.1	3,729.9	6.6	14.6	-65.73	223.3	-2,421.9	2,378.5	2,361.1	17.45	136.280		
3,500.0	3,494.9	3,861.1	3,783.0	6.8	14.8	-65.63	230.1	-2,415.0	2,363.8	2,346.0	17.82	132.678		
3,600.0	3,594.7	3,914.0	3,835.2	7.0	15.0	-65.54	236.6	-2,409.6	2,351.2	2,333.0	18.17	129.381		
3,700.0	3,694.5	3,964.2	3,885.0	7.2	15.1	-65.46	242.4	-2,405.5	2,340.6	2,322.1	18.51	126.482		
3,800.0	3,794.3	4,024.9	3,945.2	7.4	15.2	-65.39	248.6	-2,401.5	2,331.9	2,313.0	18.86	123.657		
3,900.0	3,894.1	4,088.0	4,007.9	7.6	15.4	-65.33	254.3	-2,398.3	2,324.6	2,305.4	19.20	121.048		
4,000.0	3,994.0	4,175.0	4,094.7	7.8	15.5	-65.30	260.4	-2,395.1	2,318.5	2,298.9	19.57	118.482		
4,100.0	4,093.8	4,258.5	4,178.0	8.0	15.7	-65.31	264.4	-2,392.6	2,313.1	2,293.2	19.90	116.240		
4,200.0	4,193.6	4,339.5	4,259.0	8.2	15.8	-65.35	267.4	-2,390.8	2,308.4	2,288.2	20.22	114.151		
4,300.0	4,293.4	4,416.3	4,335.7	8.4	15.9	-65.38	270.1	-2,389.7	2,304.5	2,284.0	20.54	112.218		
4,400.0	4,393.2	4,521.4	4,440.8	8.6	16.0	-65.47	272.3	-2,388.8	2,301.3	2,280.4	20.85	110.376		
4,500.0	4,493.0	4,607.6	4,527.0	8.8	16.0	-65.59	272.2	-2,388.2	2,298.0	2,276.9	21.13	108.767		
4,600.0	4,592.8	4,699.0	4,618.4	9.0	16.1	-65.72	272.1	-2,388.1	2,295.4	2,274.0	21.41	107.206		
4,700.0	4,692.7	4,776.9	4,696.2	9.3	16.2	-65.84	271.8	-2,388.5	2,293.4	2,271.7	21.68	105.799		
4,800.0	4,792.5	4,874.0	4,793.3	9.5	16.2	-65.99	271.1	-2,389.8	2,292.2	2,270.2	21.96	104.385		
4,900.0	4,892.3	4,963.9	4,883.2	9.7	16.3	-66.14	270.2	-2,391.2	2,291.3	2,269.0	22.23	103.069		
5,000.0	4,992.1	5,068.6	4,987.9	9.9	16.4	-66.32	268.7	-2,392.6	2,290.1	2,267.6	22.51	101.716		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,091.9	5,166.2	5,085.5	10.1	16.4	-66.49	267.5	-2,393.9	2,289.0	2,266.2	22.80	100.390		
5,200.0	5,191.7	5,264.4	5,183.7	10.3	16.5	-66.65	266.4	-2,395.2	2,287.9	2,264.8	23.09	99.080		
5,300.0	5,291.5	5,363.7	5,282.9	10.5	16.6	-66.81	265.6	-2,396.7	2,286.9	2,263.5	23.39	97.778		
5,400.0	5,391.4	5,466.8	5,386.0	10.7	16.7	-66.97	265.0	-2,398.1	2,285.9	2,262.2	23.70	96.459		
5,500.0	5,491.2	5,572.0	5,491.2	10.9	16.8	-67.13	264.8	-2,399.3	2,284.7	2,260.7	24.01	95.137		
5,600.0	5,591.0	5,666.5	5,585.7	11.1	16.8	-67.26	265.0	-2,400.4	2,283.5	2,259.2	24.33	93.863		
5,700.0	5,690.8	5,762.2	5,681.4	11.3	16.9	-67.38	265.4	-2,401.7	2,282.6	2,257.9	24.64	92.618		
5,800.0	5,790.6	5,864.3	5,783.5	11.5	17.0	-67.51	266.0	-2,403.2	2,281.6	2,256.7	24.98	91.356		
5,900.0	5,890.4	5,966.9	5,886.1	11.7	17.1	-67.63	266.9	-2,404.5	2,280.6	2,255.3	25.31	90.111		
6,000.0	5,990.3	6,070.1	5,989.3	11.9	17.2	-67.75	268.0	-2,405.8	2,279.5	2,253.8	25.65	88.879		
6,100.0	6,090.1	6,175.2	6,094.4	12.1	17.4	-67.86	269.3	-2,406.8	2,278.2	2,252.2	26.00	87.632		
6,200.0	6,189.9	6,280.4	6,199.5	12.3	17.5	-67.97	271.2	-2,407.6	2,276.6	2,250.3	26.35	86.396		
6,300.0	6,289.7	6,379.6	6,298.7	12.5	17.6	-68.06	273.0	-2,408.3	2,275.0	2,248.3	26.69	85.226		
6,400.0	6,389.5	6,477.3	6,396.4	12.7	17.7	-68.16	274.6	-2,409.0	2,273.4	2,246.4	27.03	84.097		
6,500.0	6,489.3	6,572.2	6,491.3	12.9	17.8	-68.26	276.0	-2,409.8	2,272.0	2,244.6	27.37	83.018		
6,600.0	6,589.1	6,672.1	6,591.2	13.1	18.0	-68.36	277.4	-2,410.9	2,270.8	2,243.1	27.71	81.942		
6,700.0	6,689.0	6,777.0	6,696.1	13.3	18.1	-68.47	279.1	-2,411.8	2,269.4	2,241.3	28.07	80.857		
6,785.3	6,774.1	6,862.8	6,781.9	13.5	18.2	-68.56	280.5	-2,412.5	2,268.1	2,239.7	28.36	79.978		
6,800.0	6,788.8	6,877.5	6,796.5	13.5	18.2	-57.52	280.7	-2,412.6	2,267.9	2,239.5	28.41	79.832		
6,850.0	6,838.8	6,927.3	6,846.4	13.6	18.3	53.07	281.3	-2,413.0	2,267.0	2,238.5	28.55	79.401		
6,900.0	6,888.6	6,978.8	6,897.9	13.6	18.3	75.18	281.9	-2,413.3	2,266.1	2,237.4	28.68	79.005		
6,950.0	6,938.1	7,039.6	6,958.7	13.7	18.4	80.64	282.7	-2,413.6	2,264.8	2,236.0	28.83	78.570		
7,000.0	6,987.0	7,099.5	7,018.5	13.7	18.5	83.33	283.9	-2,413.6	2,263.3	2,234.4	28.96	78.161		
7,050.0	7,035.0	7,155.8	7,074.8	13.6	18.6	85.13	285.3	-2,413.3	2,261.6	2,232.6	29.07	77.793		
7,100.0	7,082.0	7,203.7	7,122.7	13.6	18.7	86.50	286.6	-2,413.0	2,259.9	2,230.8	29.16	77.504		
7,150.0	7,127.7	7,250.3	7,169.2	13.5	18.7	87.67	287.9	-2,412.6	2,258.4	2,229.2	29.24	77.249		
7,200.0	7,171.8	7,295.1	7,214.1	13.5	18.8	88.72	289.0	-2,412.2	2,257.1	2,227.8	29.30	77.025		
7,250.0	7,214.2	7,336.8	7,255.7	13.4	18.8	89.67	290.1	-2,411.9	2,256.2	2,226.9	29.36	76.841		
7,300.0	7,254.6	7,375.1	7,294.0	13.4	18.9	90.52	291.1	-2,411.5	2,255.8	2,226.4	29.41	76.695		
7,306.1	7,259.4	7,379.6	7,298.5	13.4	18.9	90.62	291.2	-2,411.5	2,255.8	2,226.4	29.42	76.676	CC, ES	
7,350.0	7,292.9	7,411.2	7,330.2	13.3	19.0	91.29	292.0	-2,411.3	2,256.1	2,226.6	29.47	76.565		
7,400.0	7,328.9	7,445.2	7,364.1	13.3	19.0	91.96	292.8	-2,411.0	2,257.1	2,227.6	29.53	76.445		
7,450.0	7,362.3	7,476.7	7,395.6	13.3	19.1	92.54	293.5	-2,410.8	2,259.0	2,229.4	29.60	76.323		
7,500.0	7,393.1	7,507.6	7,426.5	13.4	19.1	93.04	294.2	-2,410.6	2,261.8	2,232.1	29.69	76.176		
7,550.0	7,421.1	7,537.9	7,456.8	13.5	19.1	93.46	294.9	-2,410.4	2,265.6	2,235.7	29.81	75.991		
7,600.0	7,446.1	7,564.8	7,483.7	13.6	19.2	93.73	295.5	-2,410.2	2,270.4	2,240.5	29.96	75.778		
7,650.0	7,468.0	7,588.2	7,507.1	13.8	19.2	93.84	296.0	-2,410.0	2,276.5	2,246.3	30.14	75.528		
7,700.0	7,486.7	7,608.0	7,526.8	14.0	19.3	93.77	296.5	-2,409.7	2,283.7	2,253.4	30.36	75.230		
7,750.0	7,502.2	7,624.0	7,542.8	14.2	19.3	93.50	296.9	-2,409.5	2,292.2	2,261.6	30.61	74.880		
7,800.0	7,514.3	7,636.2	7,555.1	14.6	19.3	93.03	297.1	-2,409.4	2,302.0	2,271.1	30.91	74.474		
7,850.0	7,523.0	7,644.6	7,563.5	14.9	19.3	92.36	297.3	-2,409.3	2,313.0	2,281.8	31.25	74.011		
7,900.0	7,528.2	7,649.2	7,568.0	15.3	19.3	91.47	297.4	-2,409.2	2,325.3	2,293.7	31.64	73.497		
7,950.2	7,530.0	7,649.8	7,568.6	15.8	19.3	90.37	297.5	-2,409.2	2,338.8	2,306.7	32.07	72.934		
8,000.0	7,530.0	7,648.5	7,567.3	16.2	19.3	90.34	297.4	-2,409.2	2,353.2	2,320.7	32.55	72.299		
8,100.0	7,530.0	7,645.8	7,564.7	17.3	19.3	90.27	297.4	-2,409.3	2,385.1	2,351.5	33.61	70.964		
8,200.0	7,530.0	7,643.2	7,562.0	18.4	19.3	90.21	297.3	-2,409.3	2,420.6	2,385.8	34.78	69.603		
8,300.0	7,530.0	7,640.6	7,559.4	19.7	19.3	90.14	297.2	-2,409.3	2,459.7	2,423.7	36.03	68.264		
8,400.0	7,530.0	7,637.9	7,556.8	21.0	19.3	90.07	297.2	-2,409.4	2,502.2	2,464.9	37.36	66.976		
8,500.0	7,530.0	7,635.3	7,554.2	22.4	19.3	90.00	297.1	-2,409.4	2,547.9	2,509.2	38.75	65.760		
8,600.0	7,530.0	7,632.7	7,551.6	23.8	19.3	89.94	297.1	-2,409.4	2,596.7	2,556.5	40.18	64.627		
8,700.0	7,530.0	7,630.1	7,549.0	25.3	19.3	89.87	297.0	-2,409.5	2,648.3	2,606.6	41.65	63.579		
8,800.0	7,530.0	7,627.5	7,546.4	26.8	19.3	89.81	296.9	-2,409.5	2,702.6	2,659.5	43.16	62.617		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,624.9	7,543.8	28.3	19.3	89.74	296.9	-2,409.5	2,759.5	2,714.8	44.70	61.739		
9,000.0	7,530.0	7,622.3	7,541.2	29.9	19.3	89.67	296.8	-2,409.6	2,818.8	2,772.6	46.26	60.940		
9,100.0	7,530.0	7,619.8	7,538.6	31.4	19.3	89.61	296.8	-2,409.6	2,880.4	2,832.5	47.84	60.214		
9,200.0	7,530.0	7,617.2	7,536.0	33.0	19.3	89.54	296.7	-2,409.6	2,944.0	2,894.6	49.43	59.557		
9,300.0	7,530.0	7,614.6	7,533.5	34.7	19.3	89.48	296.6	-2,409.7	3,009.7	2,958.6	51.04	58.963		
9,400.0	7,530.0	7,612.1	7,530.9	36.3	19.3	89.41	296.6	-2,409.7	3,077.1	3,024.5	52.67	58.426		
9,500.0	7,530.0	7,609.5	7,528.4	37.9	19.3	89.35	296.5	-2,409.7	3,146.3	3,092.0	54.30	57.942		
9,600.0	7,530.0	7,607.0	7,525.8	39.6	19.2	89.28	296.5	-2,409.7	3,217.2	3,161.2	55.95	57.504		
9,700.0	7,530.0	7,604.4	7,523.3	41.2	19.2	89.22	296.4	-2,409.8	3,289.5	3,231.9	57.60	57.110		
9,800.0	7,530.0	7,601.9	7,520.8	42.9	19.2	89.15	296.3	-2,409.8	3,363.3	3,304.0	59.26	56.754		
9,900.0	7,530.0	7,599.4	7,518.2	44.5	19.2	89.09	296.3	-2,409.8	3,438.3	3,377.4	60.93	56.433		
10,000.0	7,530.0	7,596.9	7,515.7	46.2	19.2	89.02	296.2	-2,409.9	3,514.7	3,452.1	62.60	56.144		
10,100.0	7,530.0	7,594.3	7,513.2	47.9	19.2	88.96	296.2	-2,409.9	3,592.1	3,527.9	64.28	55.883		
10,200.0	7,530.0	7,591.8	7,510.7	49.6	19.2	88.90	296.1	-2,409.9	3,670.7	3,604.7	65.96	55.648		
10,300.0	7,530.0	7,589.3	7,508.2	51.3	19.2	88.83	296.0	-2,409.9	3,750.3	3,682.6	67.65	55.437		
10,400.0	7,530.0	7,586.8	7,505.7	53.0	19.2	88.77	296.0	-2,410.0	3,830.8	3,761.5	69.34	55.246		
10,500.0	7,530.0	7,584.4	7,503.2	54.7	19.2	88.70	295.9	-2,410.0	3,912.3	3,841.2	71.04	55.075		
10,600.0	7,530.0	7,581.9	7,500.7	56.4	19.2	88.64	295.9	-2,410.0	3,994.5	3,921.8	72.73	54.920		
10,700.0	7,530.0	7,579.4	7,498.3	58.1	19.2	88.58	295.8	-2,410.0	4,077.6	4,003.2	74.43	54.782		
10,800.0	7,530.0	7,576.9	7,495.8	59.8	19.2	88.52	295.8	-2,410.1	4,161.4	4,085.3	76.14	54.657		
10,900.0	7,530.0	7,574.5	7,493.3	61.5	19.2	88.45	295.7	-2,410.1	4,245.9	4,168.1	77.84	54.545		
11,000.0	7,530.0	7,572.0	7,490.9	63.2	19.2	88.39	295.7	-2,410.1	4,331.1	4,251.6	79.55	54.445		
11,100.0	7,530.0	7,569.6	7,488.4	64.9	19.2	88.33	295.6	-2,410.1	4,416.9	4,335.7	81.26	54.356		
11,200.0	7,530.0	7,567.1	7,486.0	66.6	19.2	88.27	295.5	-2,410.2	4,503.3	4,420.3	82.97	54.276		
11,300.0	7,530.0	7,564.7	7,483.6	68.4	19.2	88.20	295.5	-2,410.2	4,590.2	4,505.5	84.68	54.205		
11,400.0	7,530.0	7,562.2	7,481.1	70.1	19.2	88.14	295.4	-2,410.2	4,677.7	4,591.3	86.40	54.141		
11,500.0	7,530.0	7,559.8	7,478.7	71.8	19.2	88.08	295.4	-2,410.2	4,765.6	4,677.5	88.11	54.085		
11,600.0	7,530.0	7,557.4	7,476.3	73.5	19.2	88.02	295.3	-2,410.3	4,854.0	4,764.2	89.83	54.036		
11,700.0	7,530.0	7,555.0	7,473.9	75.3	19.2	87.96	295.3	-2,410.3	4,942.9	4,851.3	91.55	53.992		
11,800.0	7,530.0	7,552.6	7,471.5	77.0	19.2	87.90	295.2	-2,410.3	5,032.1	4,938.9	93.27	53.954		
11,900.0	7,530.0	7,550.2	7,469.1	78.7	19.2	87.83	295.2	-2,410.3	5,121.8	5,026.8	94.99	53.921		
12,000.0	7,530.0	7,547.8	7,466.7	80.4	19.2	87.77	295.1	-2,410.3	5,211.8	5,115.1	96.71	53.893		
12,100.0	7,530.0	7,545.4	7,464.3	82.2	19.2	87.71	295.0	-2,410.4	5,302.2	5,203.8	98.43	53.869		
12,200.0	7,530.0	7,543.0	7,461.9	83.9	19.2	87.65	295.0	-2,410.4	5,393.0	5,292.8	100.15	53.848		
12,300.0	7,530.0	7,540.6	7,459.5	85.6	19.1	87.59	294.9	-2,410.4	5,484.0	5,382.1	101.87	53.831		
12,400.0	7,530.0	7,538.3	7,457.1	87.4	19.1	87.53	294.9	-2,410.4	5,575.4	5,471.8	103.60	53.817		
12,500.0	7,530.0	7,535.9	7,454.8	89.1	19.1	87.47	294.8	-2,410.4	5,667.0	5,561.7	105.32	53.807		
12,600.0	7,530.0	7,533.5	7,452.4	90.8	19.1	87.41	294.8	-2,410.5	5,759.0	5,651.9	107.05	53.799		
12,700.0	7,530.0	7,531.2	7,450.1	92.6	19.1	87.35	294.7	-2,410.5	5,851.1	5,742.4	108.77	53.793		
12,800.0	7,530.0	7,528.8	7,447.7	94.3	19.1	87.29	294.7	-2,410.5	5,943.6	5,833.1	110.50	53.789		
12,900.0	7,530.0	7,526.5	7,445.4	96.0	19.1	87.23	294.6	-2,410.5	6,036.3	5,924.0	112.22	53.788 SF		
13,000.0	7,530.0	7,524.1	7,443.0	97.8	19.1	87.17	294.6	-2,410.5	6,129.2	6,015.2	113.95	53.789		
13,100.0	7,530.0	7,521.8	7,440.7	99.5	19.1	87.11	294.5	-2,410.5	6,222.3	6,106.6	115.68	53.791		
13,200.0	7,530.0	7,519.5	7,438.4	101.3	19.1	87.05	294.5	-2,410.6	6,315.7	6,198.2	117.40	53.795		
13,300.0	7,530.0	7,517.2	7,436.1	103.0	19.1	86.99	294.4	-2,410.6	6,409.2	6,290.1	119.13	53.800		
13,400.0	7,530.0	7,514.9	7,433.7	104.7	19.1	86.94	294.4	-2,410.6	6,502.9	6,382.1	120.86	53.807		
13,500.0	7,530.0	7,512.5	7,431.4	106.5	19.1	86.88	294.3	-2,410.6	6,596.8	6,474.3	122.58	53.815		
13,600.0	7,530.0	7,510.2	7,429.1	108.2	19.1	86.82	294.3	-2,410.6	6,690.9	6,566.6	124.31	53.824		
13,700.0	7,530.0	7,507.9	7,426.8	110.0	19.1	86.76	294.2	-2,410.6	6,785.2	6,659.1	126.04	53.834		
13,800.0	7,530.0	7,505.6	7,424.5	111.7	19.1	86.70	294.2	-2,410.7	6,879.6	6,751.8	127.77	53.845		
13,900.0	7,530.0	7,503.4	7,422.2	113.4	19.1	86.64	294.1	-2,410.7	6,974.2	6,844.7	129.50	53.857		
14,000.0	7,530.0	7,501.1	7,420.0	115.2	19.1	86.59	294.1	-2,410.7	7,068.9	6,937.7	131.22	53.869		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 4-0-7 (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		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
14,100.0	7,530.0	7,498.8	7,417.7	116.9	19.1	86.53	294.0	-2,410.7	7,163.8	7,030.8	132.95	53.883		
14,200.0	7,530.0	7,496.5	7,415.4	118.7	19.1	86.47	294.0	-2,410.7	7,258.8	7,124.1	134.68	53.897		
14,300.0	7,530.0	7,494.3	7,413.2	120.4	19.1	86.41	293.9	-2,410.7	7,353.9	7,217.5	136.41	53.912		
14,400.0	7,530.0	7,491.9	7,410.8	122.1	19.1	86.35	293.9	-2,410.7	7,449.2	7,311.0	138.13	53.927		
14,500.0	7,530.0	7,489.3	7,408.2	123.9	19.1	86.29	293.8	-2,410.8	7,544.6	7,404.7	139.86	53.944		
14,600.0	7,530.0	7,486.7	7,405.6	125.6	19.1	86.22	293.7	-2,410.8	7,640.1	7,498.5	141.59	53.960		
14,700.0	7,530.0	7,484.1	7,403.0	127.4	19.1	86.15	293.7	-2,410.8	7,735.7	7,592.4	143.31	53.978		
14,800.0	7,530.0	7,481.4	7,400.3	129.1	19.1	86.09	293.6	-2,410.8	7,831.4	7,686.4	145.04	53.996		
14,900.0	7,530.0	7,478.8	7,397.7	130.9	19.1	86.02	293.6	-2,410.8	7,927.2	7,780.5	146.76	54.014		
15,000.0	7,530.0	7,476.1	7,395.0	132.6	19.0	85.95	293.5	-2,410.8	8,023.1	7,874.7	148.49	54.033		
15,100.0	7,530.0	7,473.4	7,392.3	134.4	19.0	85.88	293.5	-2,410.9	8,119.2	7,969.0	150.21	54.052		
15,200.0	7,530.0	7,470.7	7,389.6	136.1	19.0	85.82	293.4	-2,410.9	8,215.3	8,063.4	151.94	54.071		
15,300.0	7,530.0	7,468.0	7,386.9	137.9	19.0	85.75	293.3	-2,410.9	8,311.5	8,157.8	153.66	54.091		
15,400.0	7,530.0	7,465.3	7,384.2	139.6	19.0	85.68	293.3	-2,410.9	8,407.8	8,252.4	155.38	54.111		
15,500.0	7,530.0	7,462.5	7,381.4	141.3	19.0	85.61	293.2	-2,410.9	8,504.2	8,347.1	157.10	54.131		
15,600.0	7,530.0	7,459.8	7,378.7	143.1	19.0	85.54	293.1	-2,410.9	8,600.7	8,441.8	158.83	54.151		
15,700.0	7,530.0	7,457.0	7,375.9	144.8	19.0	85.47	293.1	-2,411.0	8,697.2	8,536.7	160.55	54.172		
15,800.0	7,530.0	7,454.2	7,373.1	146.6	19.0	85.40	293.0	-2,411.0	8,793.8	8,631.6	162.27	54.193		
15,900.0	7,530.0	7,451.3	7,370.3	148.3	19.0	85.33	293.0	-2,411.0	8,890.5	8,726.5	163.99	54.214		
16,000.0	7,530.0	7,448.5	7,367.4	150.1	19.0	85.25	292.9	-2,411.0	8,987.3	8,821.6	165.71	54.235		
16,100.0	7,530.0	7,445.6	7,364.6	151.8	19.0	85.18	292.8	-2,411.0	9,084.1	8,916.7	167.43	54.256		
16,200.0	7,530.0	7,442.8	7,361.7	153.6	19.0	85.11	292.8	-2,411.1	9,181.0	9,011.9	169.15	54.278		
16,300.0	7,530.0	7,439.9	7,358.8	155.3	19.0	85.03	292.7	-2,411.1	9,278.0	9,107.1	170.87	54.300		
16,400.0	7,530.0	7,437.0	7,355.9	157.1	19.0	84.96	292.6	-2,411.1	9,375.0	9,202.4	172.58	54.321		
16,500.0	7,530.0	7,434.0	7,352.9	158.8	19.0	84.89	292.5	-2,411.1	9,472.1	9,297.8	174.30	54.343		
16,600.0	7,530.0	7,431.1	7,350.0	160.6	19.0	84.81	292.5	-2,411.1	9,569.3	9,393.2	176.02	54.365		
16,700.0	7,530.0	7,428.1	7,347.0	162.3	19.0	84.74	292.4	-2,411.2	9,666.5	9,488.7	177.73	54.388		
16,800.0	7,530.0	7,425.1	7,344.0	164.1	19.0	84.66	292.3	-2,411.2	9,763.7	9,584.3	179.45	54.410		
16,900.0	7,530.0	7,422.1	7,341.0	165.8	19.0	84.59	292.3	-2,411.2	9,861.1	9,679.9	181.16	54.432		
17,000.0	7,530.0	7,419.1	7,338.0	167.6	19.0	84.51	292.2	-2,411.2	9,958.4	9,775.6	182.87	54.455		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 41-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8370-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-129.89	-188.3	-225.3	293.7					
100.0	100.0	97.0	97.0	0.2	0.2	-129.89	-188.3	-225.3	293.6	293.3	0.32	913.795		
200.0	200.0	197.0	197.0	0.3	0.3	-129.89	-188.3	-225.3	293.6	293.0	0.67	438.002		
300.0	300.0	297.0	297.0	0.5	0.5	-129.89	-188.3	-225.3	293.6	292.6	1.02	288.031		
400.0	400.0	397.0	397.0	0.7	0.7	-129.89	-188.3	-225.3	293.6	292.3	1.37	214.564		
500.0	500.0	497.0	497.0	0.8	0.9	-129.89	-188.3	-225.3	293.6	291.9	1.72	170.959		
600.0	600.0	597.0	597.0	1.0	1.0	-107.04	-188.3	-225.3	293.9	291.8	2.07	142.180		
700.0	700.0	697.0	697.0	1.2	1.2	-107.52	-188.3	-225.3	294.7	292.3	2.42	121.828		
800.0	799.9	796.9	796.9	1.4	1.4	-108.31	-188.3	-225.3	296.0	293.2	2.78	106.662		
848.7	848.4	845.4	845.4	1.5	1.5	-108.81	-188.3	-225.3	296.9	293.9	2.95	100.617		
900.0	899.7	896.7	896.7	1.6	1.6	-109.38	-188.3	-225.3	297.9	294.8	3.14	94.974		
1,000.0	999.5	996.5	996.5	1.8	1.7	-110.47	-188.3	-225.3	300.0	296.5	3.50	85.687		
1,100.0	1,099.3	1,096.3	1,096.3	2.0	1.9	-111.55	-188.3	-225.3	302.2	298.3	3.87	78.146		
1,200.0	1,199.1	1,196.1	1,196.1	2.2	2.1	-112.61	-188.3	-225.3	304.5	300.2	4.23	71.916		
1,300.0	1,298.9	1,295.9	1,295.9	2.4	2.3	-113.66	-188.3	-225.3	306.9	302.3	4.60	66.695		
1,400.0	1,398.8	1,395.8	1,395.8	2.6	2.4	-114.69	-188.3	-225.3	309.4	304.4	4.97	62.264		
1,500.0	1,498.6	1,495.6	1,495.6	2.8	2.6	-115.70	-188.3	-225.3	311.9	306.6	5.34	58.461		
1,600.0	1,598.4	1,595.4	1,595.4	3.0	2.8	-116.70	-188.3	-225.3	314.6	308.9	5.70	55.168		
1,700.0	1,698.2	1,695.2	1,695.2	3.2	3.0	-117.68	-188.3	-225.3	317.4	311.3	6.07	52.291		
1,800.0	1,798.0	1,795.0	1,795.0	3.4	3.1	-118.64	-188.3	-225.3	320.3	313.9	6.44	49.759		
1,900.0	1,897.8	1,894.8	1,894.8	3.6	3.3	-119.59	-188.3	-225.3	323.3	316.5	6.80	47.517		
2,000.0	1,997.7	1,994.7	1,994.7	3.8	3.5	-120.51	-188.3	-225.3	326.3	319.1	7.17	45.519		
2,100.0	2,097.5	2,094.5	2,094.5	4.0	3.7	-121.42	-188.3	-225.3	329.4	321.9	7.53	43.729		
2,200.0	2,197.3	2,194.3	2,194.3	4.2	3.8	-122.32	-188.3	-225.3	332.7	324.8	7.90	42.118		
2,300.0	2,297.1	2,294.1	2,294.1	4.4	4.0	-123.19	-188.3	-225.3	335.9	327.7	8.26	40.662		
2,400.0	2,396.9	2,393.9	2,393.9	4.6	4.2	-124.05	-188.3	-225.3	339.3	330.7	8.63	39.341		
2,500.0	2,496.7	2,493.7	2,493.7	4.8	4.4	-124.89	-188.3	-225.3	342.8	333.8	8.99	38.137		
2,600.0	2,596.5	2,593.5	2,593.5	5.0	4.5	-125.71	-188.3	-225.3	346.3	336.9	9.35	37.037		
2,700.0	2,696.4	2,693.4	2,693.4	5.2	4.7	-126.52	-188.3	-225.3	349.9	340.2	9.71	36.028		
2,800.0	2,796.2	2,793.2	2,793.2	5.4	4.9	-127.31	-188.3	-225.3	353.5	343.5	10.07	35.101		
2,900.0	2,896.0	2,893.0	2,893.0	5.6	5.0	-128.09	-188.3	-225.3	357.3	346.8	10.43	34.246		
3,000.0	2,995.8	2,992.8	2,992.8	5.8	5.2	-128.85	-188.3	-225.3	361.0	350.2	10.79	33.456		
3,100.0	3,095.6	3,092.6	3,092.6	6.0	5.4	-129.59	-188.3	-225.3	364.9	353.7	11.15	32.724		
3,200.0	3,195.4	3,192.4	3,192.4	6.2	5.6	-130.32	-188.3	-225.3	368.8	357.3	11.51	32.045		
3,300.0	3,295.2	3,292.2	3,292.2	6.4	5.7	-131.03	-188.3	-225.3	372.8	360.9	11.87	31.413		
3,400.0	3,395.1	3,392.1	3,392.1	6.6	5.9	-131.73	-188.3	-225.3	376.8	364.6	12.22	30.824		
3,500.0	3,494.9	3,491.9	3,491.9	6.8	6.1	-132.41	-188.3	-225.3	380.9	368.3	12.58	30.274		
3,600.0	3,594.7	3,591.7	3,591.7	7.0	6.3	-133.08	-188.3	-225.3	385.0	372.1	12.94	29.759		
3,700.0	3,694.5	3,691.5	3,691.5	7.2	6.4	-133.73	-188.3	-225.3	389.2	375.9	13.29	29.277		
3,800.0	3,794.3	3,791.3	3,791.3	7.4	6.6	-134.37	-188.3	-225.3	393.4	379.8	13.65	28.825		
3,900.0	3,894.1	3,891.1	3,891.1	7.6	6.8	-134.99	-188.3	-225.3	397.7	383.7	14.00	28.400		
4,000.0	3,994.0	3,991.0	3,991.0	7.8	7.0	-135.61	-188.3	-225.3	402.0	387.7	14.36	28.000		
4,100.0	4,093.8	4,090.8	4,090.8	8.0	7.1	-136.21	-188.3	-225.3	406.4	391.7	14.71	27.624		
4,200.0	4,193.6	4,190.6	4,190.6	8.2	7.3	-136.79	-188.3	-225.3	410.8	395.7	15.07	27.268		
4,300.0	4,293.4	4,290.4	4,290.4	8.4	7.5	-137.37	-188.3	-225.3	415.3	399.8	15.42	26.932		
4,400.0	4,393.2	4,390.2	4,390.2	8.6	7.7	-137.93	-188.3	-225.3	419.8	404.0	15.77	26.615		
4,500.0	4,493.0	4,490.0	4,490.0	8.8	7.8	-138.48	-188.3	-225.3	424.3	408.2	16.12	26.314		
4,600.0	4,592.8	4,589.8	4,589.8	9.0	8.0	-139.02	-188.3	-225.3	428.9	412.4	16.48	26.029		
4,700.0	4,692.7	4,689.7	4,689.7	9.3	8.2	-139.54	-188.3	-225.3	433.5	416.7	16.83	25.759		
4,800.0	4,792.5	4,789.5	4,789.5	9.5	8.4	-140.06	-188.3	-225.3	438.1	421.0	17.18	25.502		
4,900.0	4,892.3	4,889.3	4,889.3	9.7	8.5	-140.56	-188.3	-225.3	442.8	425.3	17.53	25.259		
5,000.0	4,992.1	4,989.1	4,989.1	9.9	8.7	-141.06	-188.3	-225.3	447.5	429.7	17.88	25.026		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 41-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8370-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,088.9	5,088.9	10.1	8.9	-141.54	-188.3	-225.3	452.3	434.1	18.23	24.805		
5,200.0	5,191.7	5,188.7	5,188.7	10.3	9.1	-142.02	-188.3	-225.3	457.1	438.5	18.58	24.595		
5,300.0	5,291.5	5,288.5	5,288.5	10.5	9.2	-142.48	-188.3	-225.3	461.9	442.9	18.93	24.394		
5,400.0	5,391.4	5,388.4	5,388.4	10.7	9.4	-142.93	-188.3	-225.3	466.7	447.4	19.28	24.202		
5,500.0	5,491.2	5,488.2	5,488.2	10.9	9.6	-143.38	-188.3	-225.3	471.6	452.0	19.63	24.019		
5,600.0	5,591.0	5,588.0	5,588.0	11.1	9.8	-143.81	-188.3	-225.3	476.5	456.5	19.98	23.843		
5,700.0	5,690.8	5,687.8	5,687.8	11.3	9.9	-144.24	-188.3	-225.3	481.4	461.1	20.33	23.676		
5,800.0	5,790.6	5,787.6	5,787.6	11.5	10.1	-144.66	-188.3	-225.3	486.4	465.7	20.68	23.515		
5,900.0	5,890.4	5,887.4	5,887.4	11.7	10.3	-145.07	-188.3	-225.3	491.3	470.3	21.03	23.361		
6,000.0	5,990.3	5,987.3	5,987.3	11.9	10.4	-145.47	-188.3	-225.3	496.3	475.0	21.38	23.214		
6,100.0	6,090.1	6,087.1	6,087.1	12.1	10.6	-145.87	-188.3	-225.3	501.4	479.6	21.73	23.073		
6,200.0	6,189.9	6,186.9	6,186.9	12.3	10.8	-146.25	-188.3	-225.3	506.4	484.3	22.08	22.937		
6,300.0	6,289.7	6,286.7	6,286.7	12.5	11.0	-146.63	-188.3	-225.3	511.5	489.1	22.43	22.806		
6,400.0	6,389.5	6,386.5	6,386.5	12.7	11.1	-147.00	-188.3	-225.3	516.6	493.8	22.78	22.681		
6,500.0	6,489.3	6,486.3	6,486.3	12.9	11.3	-147.36	-188.3	-225.3	521.7	498.6	23.12	22.560		
6,600.0	6,589.1	6,586.1	6,586.1	13.1	11.5	-147.72	-188.3	-225.3	526.8	503.4	23.47	22.445		
6,700.0	6,689.0	6,686.0	6,686.0	13.3	11.7	-148.07	-188.3	-225.3	532.0	508.2	23.82	22.333		
6,785.3	6,774.1	6,771.1	6,771.1	13.5	11.8	-148.36	-188.3	-225.3	536.4	512.3	24.12	22.241		
6,800.0	6,788.8	6,785.8	6,785.8	13.5	11.8	-137.39	-188.3	-225.3	537.0	512.8	24.17	22.214		
6,850.0	6,838.8	6,835.8	6,835.8	13.6	11.9	-27.01	-188.3	-225.3	536.9	512.5	24.32	22.079		
6,900.0	6,888.6	6,885.6	6,885.6	13.6	12.0	-5.11	-188.3	-225.3	533.3	508.9	24.38	21.874		
6,950.0	6,938.1	6,935.1	6,935.1	13.7	12.1	0.07	-188.3	-225.3	526.2	501.8	24.36	21.599		
7,000.0	6,987.0	6,984.0	6,984.0	13.7	12.2	2.45	-188.3	-225.3	515.8	491.5	24.27	21.252		
7,050.0	7,035.0	7,032.0	7,032.0	13.6	12.3	3.94	-188.3	-225.3	502.0	477.9	24.10	20.830		
7,100.0	7,082.0	7,079.0	7,079.0	13.6	12.4	5.10	-188.3	-225.3	484.9	461.1	23.86	20.326		
7,150.0	7,127.7	7,124.7	7,124.7	13.5	12.4	6.16	-188.3	-225.3	464.6	441.1	23.55	19.734		
7,200.0	7,171.8	7,168.8	7,168.8	13.5	12.5	7.25	-188.3	-225.3	441.3	418.1	23.17	19.044		
7,250.0	7,214.2	7,211.2	7,211.2	13.4	12.6	8.48	-188.3	-225.3	415.0	392.2	22.75	18.243		
7,300.0	7,254.6	7,251.6	7,251.6	13.4	12.7	9.95	-188.3	-225.3	385.8	363.6	22.28	17.315		
7,350.0	7,292.9	7,289.9	7,289.9	13.3	12.7	11.81	-188.3	-225.3	354.0	332.2	21.80	16.239		
7,400.0	7,328.9	7,325.9	7,325.9	13.3	12.8	14.24	-188.3	-225.3	319.8	298.5	21.34	14.986		
7,450.0	7,362.3	7,359.3	7,359.3	13.3	12.8	17.55	-188.3	-225.3	283.3	262.3	20.95	13.520		
7,500.0	7,393.1	7,390.1	7,390.1	13.4	12.9	22.21	-188.3	-225.3	244.8	224.1	20.76	11.793		
7,550.0	7,421.1	7,418.1	7,418.1	13.5	12.9	28.98	-188.3	-225.3	204.8	183.8	20.97	9.766		
7,600.0	7,446.1	7,443.1	7,443.1	13.6	13.0	38.93	-188.3	-225.3	163.7	141.8	21.89	7.477		
7,650.0	7,468.0	7,465.0	7,465.0	13.8	13.0	53.01	-188.3	-225.3	122.8	99.0	23.73	5.174		
7,700.0	7,486.7	7,483.7	7,483.7	14.0	13.1	70.20	-188.3	-225.3	84.9	59.1	25.83	3.289		
7,750.0	7,502.2	7,499.2	7,499.2	14.2	13.1	86.25	-188.3	-225.3	60.2	33.2	27.00	2.230		
7,764.4	7,506.0	7,503.0	7,503.0	14.3	13.1	90.00	-188.3	-225.3	58.6	31.5	27.13	2.159 CC, ES, SF		
7,800.0	7,514.3	7,511.3	7,511.3	14.6	13.1	97.03	-188.3	-225.3	68.1	40.8	27.24	2.499		
7,850.0	7,523.0	7,520.0	7,520.0	14.9	13.1	101.33	-188.3	-225.3	102.4	75.0	27.40	3.736		
7,900.0	7,528.2	7,525.2	7,525.2	15.3	13.1	99.14	-188.3	-225.3	146.0	118.1	27.92	5.228		
7,950.2	7,530.0	7,527.0	7,527.0	15.8	13.1	90.00	-188.3	-225.3	193.1	164.4	28.63	6.744		
8,000.0	7,530.0	7,527.0	7,527.0	16.2	13.1	90.00	-188.3	-225.3	241.0	211.9	29.11	8.278		
8,100.0	7,530.0	7,527.0	7,527.0	17.3	13.1	90.00	-188.3	-225.3	338.9	308.7	30.18	11.231		
8,200.0	7,530.0	7,527.0	7,527.0	18.4	13.1	90.00	-188.3	-225.3	437.8	406.4	31.35	13.964		
8,300.0	7,530.0	7,527.0	7,527.0	19.7	13.1	90.00	-188.3	-225.3	537.0	504.4	32.61	16.469		
8,400.0	7,530.0	7,527.0	7,527.0	21.0	13.1	90.00	-188.3	-225.3	636.5	602.6	33.94	18.755		
8,500.0	7,530.0	7,527.0	7,527.0	22.4	13.1	90.00	-188.3	-225.3	736.2	700.9	35.33	20.837		
8,600.0	7,530.0	7,527.0	7,527.0	23.8	13.1	90.00	-188.3	-225.3	835.9	799.1	36.77	22.734		
8,700.0	7,530.0	7,527.0	7,527.0	25.3	13.1	90.00	-188.3	-225.3	935.7	897.4	38.25	24.463		
8,800.0	7,530.0	7,527.0	7,527.0	26.8	13.1	90.00	-188.3	-225.3	1,035.5	995.8	39.76	26.044		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 41-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8370-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	7,530.0	7,527.0	7,527.0	28.3	13.1	90.00	-188.3	-225.3	1,135.4	1,094.1	41.30	27.490		
9,000.0	7,530.0	7,527.0	7,527.0	29.9	13.1	90.00	-188.3	-225.3	1,235.3	1,192.4	42.87	28.817		
9,100.0	7,530.0	7,527.0	7,527.0	31.4	13.1	90.00	-188.3	-225.3	1,335.2	1,290.7	44.45	30.037		
9,200.0	7,530.0	7,527.0	7,527.0	33.0	13.1	90.00	-188.3	-225.3	1,435.1	1,389.0	46.05	31.162		
9,300.0	7,530.0	7,527.0	7,527.0	34.7	13.1	90.00	-188.3	-225.3	1,535.0	1,487.3	47.67	32.202		
9,400.0	7,530.0	7,527.0	7,527.0	36.3	13.1	90.00	-188.3	-225.3	1,634.9	1,585.6	49.30	33.165		
9,500.0	7,530.0	7,527.0	7,527.0	37.9	13.1	90.00	-188.3	-225.3	1,734.9	1,683.9	50.94	34.059		
9,600.0	7,530.0	7,527.0	7,527.0	39.6	13.1	90.00	-188.3	-225.3	1,834.8	1,782.2	52.59	34.890		
9,700.0	7,530.0	7,527.0	7,527.0	41.2	13.1	90.00	-188.3	-225.3	1,934.8	1,880.5	54.25	35.666		
9,800.0	7,530.0	7,527.0	7,527.0	42.9	13.1	90.00	-188.3	-225.3	2,034.7	1,978.8	55.91	36.391		
9,900.0	7,530.0	7,527.0	7,527.0	44.5	13.1	90.00	-188.3	-225.3	2,134.7	2,077.1	57.59	37.069		
10,000.0	7,530.0	7,527.0	7,527.0	46.2	13.1	90.00	-188.3	-225.3	2,234.6	2,175.4	59.27	37.706		
10,100.0	7,530.0	7,527.0	7,527.0	47.9	13.1	90.00	-188.3	-225.3	2,334.6	2,273.7	60.95	38.304		
10,200.0	7,530.0	7,527.0	7,527.0	49.6	13.1	90.00	-188.3	-225.3	2,434.6	2,371.9	62.64	38.867		
10,300.0	7,530.0	7,527.0	7,527.0	51.3	13.1	90.00	-188.3	-225.3	2,534.6	2,470.2	64.33	39.398		
10,400.0	7,530.0	7,527.0	7,527.0	53.0	13.1	90.00	-188.3	-225.3	2,634.5	2,568.5	66.03	39.899		
10,500.0	7,530.0	7,527.0	7,527.0	54.7	13.1	90.00	-188.3	-225.3	2,734.5	2,666.8	67.73	40.373		
10,600.0	7,530.0	7,527.0	7,527.0	56.4	13.1	90.00	-188.3	-225.3	2,834.5	2,765.1	69.44	40.821		
10,700.0	7,530.0	7,527.0	7,527.0	58.1	13.1	90.00	-188.3	-225.3	2,934.5	2,863.3	71.14	41.247		
10,800.0	7,530.0	7,527.0	7,527.0	59.8	13.1	90.00	-188.3	-225.3	3,034.5	2,961.6	72.85	41.651		
10,900.0	7,530.0	7,527.0	7,527.0	61.5	13.1	90.00	-188.3	-225.3	3,134.4	3,059.9	74.57	42.035		
11,000.0	7,530.0	7,527.0	7,527.0	63.2	13.1	90.00	-188.3	-225.3	3,234.4	3,158.1	76.28	42.401		
11,100.0	7,530.0	7,527.0	7,527.0	64.9	13.1	90.00	-188.3	-225.3	3,334.4	3,256.4	78.00	42.750		
11,200.0	7,530.0	7,527.0	7,527.0	66.6	13.1	90.00	-188.3	-225.3	3,434.4	3,354.7	79.72	43.082		
11,300.0	7,530.0	7,527.0	7,527.0	68.4	13.1	90.00	-188.3	-225.3	3,534.4	3,452.9	81.44	43.400		
11,400.0	7,530.0	7,527.0	7,527.0	70.1	13.1	90.00	-188.3	-225.3	3,634.4	3,551.2	83.16	43.703		
11,500.0	7,530.0	7,527.0	7,527.0	71.8	13.1	90.00	-188.3	-225.3	3,734.3	3,649.5	84.88	43.994		
11,600.0	7,530.0	7,527.0	7,527.0	73.5	13.1	90.00	-188.3	-225.3	3,834.3	3,747.7	86.61	44.272		
11,700.0	7,530.0	7,527.0	7,527.0	75.3	13.1	90.00	-188.3	-225.3	3,934.3	3,846.0	88.34	44.538		
11,800.0	7,530.0	7,527.0	7,527.0	77.0	13.1	90.00	-188.3	-225.3	4,034.3	3,944.2	90.06	44.794		
11,900.0	7,530.0	7,527.0	7,527.0	78.7	13.1	90.00	-188.3	-225.3	4,134.3	4,042.5	91.79	45.039		
12,000.0	7,530.0	7,527.0	7,527.0	80.4	13.1	90.00	-188.3	-225.3	4,234.3	4,140.8	93.52	45.275		
12,100.0	7,530.0	7,527.0	7,527.0	82.2	13.1	90.00	-188.3	-225.3	4,334.3	4,239.0	95.25	45.502		
12,200.0	7,530.0	7,527.0	7,527.0	83.9	13.1	90.00	-188.3	-225.3	4,434.3	4,337.3	96.99	45.721		
12,300.0	7,530.0	7,527.0	7,527.0	85.6	13.1	90.00	-188.3	-225.3	4,534.3	4,435.5	98.72	45.931		
12,400.0	7,530.0	7,527.0	7,527.0	87.4	13.1	90.00	-188.3	-225.3	4,634.3	4,533.8	100.45	46.134		
12,500.0	7,530.0	7,527.0	7,527.0	89.1	13.1	90.00	-188.3	-225.3	4,734.3	4,632.1	102.19	46.329		
12,600.0	7,530.0	7,527.0	7,527.0	90.8	13.1	90.00	-188.3	-225.3	4,834.2	4,730.3	103.92	46.517		
12,700.0	7,530.0	7,527.0	7,527.0	92.6	13.1	90.00	-188.3	-225.3	4,934.2	4,828.6	105.66	46.700		
12,800.0	7,530.0	7,527.0	7,527.0	94.3	13.1	90.00	-188.3	-225.3	5,034.2	4,926.8	107.40	46.875		
12,900.0	7,530.0	7,527.0	7,527.0	96.0	13.1	90.00	-188.3	-225.3	5,134.2	5,025.1	109.13	47.045		
13,000.0	7,530.0	7,527.0	7,527.0	97.8	13.1	90.00	-188.3	-225.3	5,234.2	5,123.3	110.87	47.210		
13,100.0	7,530.0	7,527.0	7,527.0	99.5	13.1	90.00	-188.3	-225.3	5,334.2	5,221.6	112.61	47.369		
13,200.0	7,530.0	7,527.0	7,527.0	101.3	13.1	90.00	-188.3	-225.3	5,434.2	5,319.9	114.35	47.523		
13,300.0	7,530.0	7,527.0	7,527.0	103.0	13.1	90.00	-188.3	-225.3	5,534.2	5,418.1	116.09	47.672		
13,400.0	7,530.0	7,527.0	7,527.0	104.7	13.1	90.00	-188.3	-225.3	5,634.2	5,516.4	117.83	47.817		
13,500.0	7,530.0	7,527.0	7,527.0	106.5	13.1	90.00	-188.3	-225.3	5,734.2	5,614.6	119.57	47.957		
13,600.0	7,530.0	7,527.0	7,527.0	108.2	13.1	90.00	-188.3	-225.3	5,834.2	5,712.9	121.31	48.093		
13,700.0	7,530.0	7,527.0	7,527.0	110.0	13.1	90.00	-188.3	-225.3	5,934.2	5,811.1	123.05	48.225		
13,800.0	7,530.0	7,527.0	7,527.0	111.7	13.1	90.00	-188.3	-225.3	6,034.2	5,909.4	124.79	48.353		
13,900.0	7,530.0	7,527.0	7,527.0	113.4	13.1	90.00	-188.3	-225.3	6,134.2	6,007.6	126.54	48.478		
14,000.0	7,530.0	7,527.0	7,527.0	115.2	13.1	90.00	-188.3	-225.3	6,234.2	6,105.9	128.28	48.599		

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 41-7 (EXISTING) - ENCANA WELL - N														Offset Site Error:	0.0 ft
Survey Program: 8370-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
14,100.0	7,530.0	7,527.0	7,527.0	116.9	13.1	90.00	-188.3	-225.3	6,334.2	6,204.1	130.02	48.716			
14,200.0	7,530.0	7,527.0	7,527.0	118.7	13.1	90.00	-188.3	-225.3	6,434.2	6,302.4	131.76	48.831			
14,300.0	7,530.0	7,527.0	7,527.0	120.4	13.1	90.00	-188.3	-225.3	6,534.2	6,400.6	133.51	48.942			
14,400.0	7,530.0	7,527.0	7,527.0	122.1	13.1	90.00	-188.3	-225.3	6,634.1	6,498.9	135.25	49.051			
14,500.0	7,530.0	7,527.0	7,527.0	123.9	13.1	90.00	-188.3	-225.3	6,734.1	6,597.2	137.00	49.156			
14,600.0	7,530.0	7,527.0	7,527.0	125.6	13.1	90.00	-188.3	-225.3	6,834.1	6,695.4	138.74	49.259			
14,700.0	7,530.0	7,527.0	7,527.0	127.4	13.1	90.00	-188.3	-225.3	6,934.1	6,793.7	140.48	49.359			
14,800.0	7,530.0	7,527.0	7,527.0	129.1	13.1	90.00	-188.3	-225.3	7,034.1	6,891.9	142.23	49.456			
14,900.0	7,530.0	7,527.0	7,527.0	130.9	13.1	90.00	-188.3	-225.3	7,134.1	6,990.2	143.97	49.551			
15,000.0	7,530.0	7,527.0	7,527.0	132.6	13.1	90.00	-188.3	-225.3	7,234.1	7,088.4	145.72	49.644			
15,100.0	7,530.0	7,527.0	7,527.0	134.4	13.1	90.00	-188.3	-225.3	7,334.1	7,186.7	147.47	49.734			
15,200.0	7,530.0	7,527.0	7,527.0	136.1	13.1	90.00	-188.3	-225.3	7,434.1	7,284.9	149.21	49.823			
15,300.0	7,530.0	7,527.0	7,527.0	137.9	13.1	90.00	-188.3	-225.3	7,534.1	7,383.2	150.96	49.909			
15,400.0	7,530.0	7,527.0	7,527.0	139.6	13.1	90.00	-188.3	-225.3	7,634.1	7,481.4	152.70	49.993			
15,500.0	7,530.0	7,527.0	7,527.0	141.3	13.1	90.00	-188.3	-225.3	7,734.1	7,579.7	154.45	50.075			
15,600.0	7,530.0	7,527.0	7,527.0	143.1	13.1	90.00	-188.3	-225.3	7,834.1	7,677.9	156.20	50.155			
15,700.0	7,530.0	7,527.0	7,527.0	144.8	13.1	90.00	-188.3	-225.3	7,934.1	7,776.2	157.94	50.234			
15,800.0	7,530.0	7,527.0	7,527.0	146.6	13.1	90.00	-188.3	-225.3	8,034.1	7,874.4	159.69	50.310			
15,900.0	7,530.0	7,527.0	7,527.0	148.3	13.1	90.00	-188.3	-225.3	8,134.1	7,972.7	161.44	50.385			
16,000.0	7,530.0	7,527.0	7,527.0	150.1	13.1	90.00	-188.3	-225.3	8,234.1	8,070.9	163.19	50.459			
16,100.0	7,530.0	7,527.0	7,527.0	151.8	13.1	90.00	-188.3	-225.3	8,334.1	8,169.2	164.93	50.530			
16,200.0	7,530.0	7,527.0	7,527.0	153.6	13.1	90.00	-188.3	-225.3	8,434.1	8,267.4	166.68	50.600			
16,300.0	7,530.0	7,527.0	7,527.0	155.3	13.1	90.00	-188.3	-225.3	8,534.1	8,365.7	168.43	50.669			
16,400.0	7,530.0	7,527.0	7,527.0	157.1	13.1	90.00	-188.3	-225.3	8,634.1	8,463.9	170.18	50.736			
16,500.0	7,530.0	7,527.0	7,527.0	158.8	13.1	90.00	-188.3	-225.3	8,734.1	8,562.2	171.92	50.802			
16,600.0	7,530.0	7,527.0	7,527.0	160.6	13.1	90.00	-188.3	-225.3	8,834.1	8,660.4	173.67	50.867			
16,700.0	7,530.0	7,527.0	7,527.0	162.3	13.1	90.00	-188.3	-225.3	8,934.1	8,758.7	175.42	50.930			
16,800.0	7,530.0	7,527.0	7,527.0	164.1	13.1	90.00	-188.3	-225.3	9,034.1	8,856.9	177.17	50.991			
16,900.0	7,530.0	7,527.0	7,527.0	165.8	13.1	90.00	-188.3	-225.3	9,134.1	8,955.2	178.92	51.052			
17,000.0	7,530.0	7,527.0	7,527.0	167.6	13.1	90.00	-188.3	-225.3	9,234.1	9,053.4	180.67	51.111			
17,100.0	7,530.0	7,527.0	7,527.0	169.3	13.1	90.00	-188.3	-225.3	9,334.1	9,151.7	182.41	51.170			
17,200.0	7,530.0	7,527.0	7,527.0	171.1	13.1	90.00	-188.3	-225.3	9,434.1	9,249.9	184.16	51.227			
17,300.0	7,530.0	7,527.0	7,527.0	172.8	13.1	90.00	-188.3	-225.3	9,534.1	9,348.2	185.91	51.283			
17,400.0	7,530.0	7,527.0	7,527.0	174.5	13.1	90.00	-188.3	-225.3	9,634.1	9,446.4	187.66	51.337			
17,411.2	7,530.0	7,527.0	7,527.0	174.7	13.1	90.00	-188.3	-225.3	9,645.3	9,457.5	187.86	51.344			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE														Offset Site Error:	0.0 ft
Survey Program: 5193-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	4.0	4.0	0.0	0.0	-167.20	-1,583.5	-359.6	1,623.8						
100.0	100.0	104.0	104.0	0.2	0.2	-167.20	-1,583.5	-359.6	1,623.8	1,623.5	0.33	4,868.289			
200.0	200.0	204.0	204.0	0.3	0.4	-167.20	-1,583.5	-359.6	1,623.8	1,623.2	0.68	2,378.845			
300.0	300.0	304.0	304.0	0.5	0.5	-167.20	-1,583.5	-359.6	1,623.8	1,622.8	1.03	1,573.977			
400.0	400.0	404.0	404.0	0.7	0.7	-167.20	-1,583.5	-359.6	1,623.8	1,622.5	1.38	1,176.063			
500.0	500.0	504.0	504.0	0.8	0.9	-167.20	-1,583.5	-359.6	1,623.8	1,622.1	1.73	938.742	CC, ES		
600.0	600.0	604.0	604.0	1.0	1.1	-144.21	-1,583.5	-359.6	1,624.5	1,622.5	2.08	781.453			
700.0	700.0	704.0	704.0	1.2	1.2	-144.25	-1,583.5	-359.6	1,626.7	1,624.2	2.43	669.835			
800.0	799.9	803.9	803.9	1.4	1.4	-144.32	-1,583.5	-359.6	1,630.2	1,627.4	2.78	586.521			
848.7	848.4	852.4	852.4	1.5	1.5	-144.36	-1,583.5	-359.6	1,632.4	1,629.5	2.95	553.217			
900.0	899.7	903.7	903.7	1.6	1.6	-144.42	-1,583.5	-359.6	1,635.0	1,631.9	3.13	521.927			
1,000.0	999.5	1,003.5	1,003.5	1.8	1.8	-144.55	-1,583.5	-359.6	1,639.9	1,636.5	3.49	470.251			
1,100.0	1,099.3	1,103.3	1,103.3	2.0	1.9	-144.67	-1,583.5	-359.6	1,644.9	1,641.1	3.84	428.037			
1,200.0	1,199.1	1,203.1	1,203.1	2.2	2.1	-144.79	-1,583.5	-359.6	1,649.9	1,645.7	4.20	392.924			
1,300.0	1,298.9	1,302.9	1,302.9	2.4	2.3	-144.91	-1,583.5	-359.6	1,654.8	1,650.3	4.56	363.273			
1,400.0	1,398.8	1,402.8	1,402.8	2.6	2.4	-145.03	-1,583.5	-359.6	1,659.8	1,654.9	4.91	337.909			
1,500.0	1,498.6	1,502.6	1,502.6	2.8	2.6	-145.15	-1,583.5	-359.6	1,664.8	1,659.6	5.27	315.969			
1,600.0	1,598.4	1,602.4	1,602.4	3.0	2.8	-145.27	-1,583.5	-359.6	1,669.8	1,664.2	5.63	296.807			
1,700.0	1,698.2	1,702.2	1,702.2	3.2	3.0	-145.39	-1,583.5	-359.6	1,674.8	1,668.8	5.98	279.929			
1,800.0	1,798.0	1,802.0	1,802.0	3.4	3.1	-145.51	-1,583.5	-359.6	1,679.8	1,673.5	6.34	264.952			
1,900.0	1,897.8	1,901.8	1,901.8	3.6	3.3	-145.63	-1,583.5	-359.6	1,684.9	1,678.2	6.70	251.572			
2,000.0	1,997.7	2,001.7	2,001.7	3.8	3.5	-145.74	-1,583.5	-359.6	1,689.9	1,682.8	7.05	239.547			
2,100.0	2,097.5	2,101.5	2,101.5	4.0	3.7	-145.86	-1,583.5	-359.6	1,694.9	1,687.5	7.41	228.683			
2,200.0	2,197.3	2,201.3	2,201.3	4.2	3.8	-145.97	-1,583.5	-359.6	1,700.0	1,692.2	7.77	218.820			
2,300.0	2,297.1	2,301.1	2,301.1	4.4	4.0	-146.09	-1,583.5	-359.6	1,705.0	1,696.9	8.13	209.825			
2,400.0	2,396.9	2,400.9	2,400.9	4.6	4.2	-146.20	-1,583.5	-359.6	1,710.1	1,701.6	8.48	201.589			
2,500.0	2,496.7	2,500.7	2,500.7	4.8	4.4	-146.31	-1,583.5	-359.6	1,715.1	1,706.3	8.84	194.020			
2,600.0	2,596.5	2,600.5	2,600.5	5.0	4.5	-146.43	-1,583.5	-359.6	1,720.2	1,711.0	9.20	187.041			
2,700.0	2,696.4	2,700.4	2,700.4	5.2	4.7	-146.54	-1,583.5	-359.6	1,725.3	1,715.7	9.55	180.585			
2,800.0	2,796.2	2,800.2	2,800.2	5.4	4.9	-146.65	-1,583.5	-359.6	1,730.3	1,720.4	9.91	174.596			
2,900.0	2,896.0	2,900.0	2,900.0	5.6	5.1	-146.76	-1,583.5	-359.6	1,735.4	1,725.2	10.27	169.025			
3,000.0	2,995.8	2,999.8	2,999.8	5.8	5.2	-146.87	-1,583.5	-359.6	1,740.5	1,729.9	10.62	163.829			
3,100.0	3,095.6	3,099.6	3,099.6	6.0	5.4	-146.98	-1,583.5	-359.6	1,745.6	1,734.6	10.98	158.973			
3,200.0	3,195.4	3,199.4	3,199.4	6.2	5.6	-147.09	-1,583.5	-359.6	1,750.7	1,739.4	11.34	154.424			
3,300.0	3,295.2	3,299.2	3,299.2	6.4	5.8	-147.19	-1,583.5	-359.6	1,755.8	1,744.1	11.69	150.154			
3,400.0	3,395.1	3,399.1	3,399.1	6.6	5.9	-147.30	-1,583.5	-359.6	1,760.9	1,748.9	12.05	146.138			
3,500.0	3,494.9	3,498.9	3,498.9	6.8	6.1	-147.41	-1,583.5	-359.6	1,766.1	1,753.7	12.41	142.354			
3,600.0	3,594.7	3,598.7	3,598.7	7.0	6.3	-147.51	-1,583.5	-359.6	1,771.2	1,758.4	12.76	138.782			
3,700.0	3,694.5	3,698.5	3,698.5	7.2	6.5	-147.62	-1,583.5	-359.6	1,776.3	1,763.2	13.12	135.406			
3,800.0	3,794.3	3,798.3	3,798.3	7.4	6.6	-147.72	-1,583.5	-359.6	1,781.5	1,768.0	13.47	132.209			
3,900.0	3,894.1	3,898.1	3,898.1	7.6	6.8	-147.83	-1,583.5	-359.6	1,786.6	1,772.8	13.83	129.178			
4,000.0	3,994.0	3,998.0	3,998.0	7.8	7.0	-147.93	-1,583.5	-359.6	1,791.8	1,777.6	14.19	126.301			
4,100.0	4,093.8	4,097.8	4,097.8	8.0	7.2	-148.03	-1,583.5	-359.6	1,796.9	1,782.4	14.54	123.565			
4,200.0	4,193.6	4,197.6	4,197.6	8.2	7.3	-148.14	-1,583.5	-359.6	1,802.1	1,787.2	14.90	120.961			
4,300.0	4,293.4	4,297.4	4,297.4	8.4	7.5	-148.24	-1,583.5	-359.6	1,807.3	1,792.0	15.25	118.480			
4,400.0	4,393.2	4,397.2	4,397.2	8.6	7.7	-148.34	-1,583.5	-359.6	1,812.4	1,796.8	15.61	116.112			
4,500.0	4,493.0	4,497.0	4,497.0	8.8	7.8	-148.44	-1,583.5	-359.6	1,817.6	1,801.7	15.96	113.851			
4,600.0	4,592.8	4,596.8	4,596.8	9.0	8.0	-148.54	-1,583.5	-359.6	1,822.8	1,806.5	16.32	111.689			
4,700.0	4,692.7	4,696.7	4,696.7	9.3	8.2	-148.64	-1,583.5	-359.6	1,828.0	1,811.3	16.68	109.620			
4,800.0	4,792.5	4,796.5	4,796.5	9.5	8.4	-148.74	-1,583.5	-359.6	1,833.2	1,816.2	17.03	107.639			
4,900.0	4,892.3	4,896.3	4,896.3	9.7	8.5	-148.84	-1,583.5	-359.6	1,838.4	1,821.0	17.39	105.739			
5,000.0	4,992.1	4,996.1	4,996.1	9.9	8.7	-148.94	-1,583.5	-359.6	1,843.6	1,825.9	17.74	103.916			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE													Offset Site Error:	0.0 ft
Survey Program: 5193-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,091.9	5,095.9	5,095.9	10.1	8.9	-149.03	-1,583.5	-359.6	1,848.8	1,830.7	18.10	102.165		
5,200.0	5,191.7	5,193.0	5,193.0	10.3	9.1	-149.13	-1,583.5	-359.6	1,854.1	1,835.6	18.45	100.508		
5,300.0	5,291.5	5,193.0	5,193.0	10.5	9.1	-149.13	-1,583.5	-359.6	1,862.1	1,843.5	18.63	99.954		
5,400.0	5,391.4	5,193.0	5,193.0	10.7	9.1	-149.13	-1,583.5	-359.6	1,875.5	1,856.6	18.81	99.692 SF		
5,500.0	5,491.2	5,193.0	5,193.0	10.9	9.1	-149.13	-1,583.5	-359.6	1,894.0	1,875.0	19.00	99.709		
5,600.0	5,591.0	5,193.0	5,193.0	11.1	9.1	-149.13	-1,583.5	-359.6	1,917.6	1,898.4	19.18	99.989		
5,700.0	5,690.8	5,193.0	5,193.0	11.3	9.1	-149.13	-1,583.5	-359.6	1,946.0	1,926.7	19.36	100.514		
5,800.0	5,790.6	5,193.0	5,193.0	11.5	9.1	-149.13	-1,583.5	-359.6	1,979.1	1,959.6	19.54	101.267		
5,900.0	5,890.4	5,193.0	5,193.0	11.7	9.1	-149.13	-1,583.5	-359.6	2,016.7	1,996.9	19.73	102.231		
6,000.0	5,990.3	5,193.0	5,193.0	11.9	9.1	-149.13	-1,583.5	-359.6	2,058.3	2,038.4	19.91	103.386		
6,100.0	6,090.1	5,193.0	5,193.0	12.1	9.1	-149.13	-1,583.5	-359.6	2,104.0	2,083.9	20.09	104.716		
6,200.0	6,189.9	5,193.0	5,193.0	12.3	9.1	-149.13	-1,583.5	-359.6	2,153.3	2,133.0	20.27	106.204		
6,300.0	6,289.7	5,193.0	5,193.0	12.5	9.1	-149.13	-1,583.5	-359.6	2,206.0	2,185.6	20.46	107.833		
6,400.0	6,389.5	5,193.0	5,193.0	12.7	9.1	-149.13	-1,583.5	-359.6	2,262.0	2,241.3	20.64	109.588		
6,500.0	6,489.3	5,193.0	5,193.0	12.9	9.1	-149.13	-1,583.5	-359.6	2,320.8	2,300.0	20.82	111.454		
6,600.0	6,589.1	5,193.0	5,193.0	13.1	9.1	-149.13	-1,583.5	-359.6	2,382.5	2,361.5	21.01	113.418		
6,700.0	6,689.0	5,193.0	5,193.0	13.3	9.1	-149.13	-1,583.5	-359.6	2,446.7	2,425.5	21.19	115.468		
6,785.3	6,774.1	5,193.0	5,193.0	13.5	9.1	-149.13	-1,583.5	-359.6	2,503.2	2,481.9	21.34	117.275		
6,800.0	6,788.8	5,193.0	5,193.0	13.5	9.1	-138.23	-1,583.5	-359.6	2,513.1	2,491.7	21.37	117.585		
6,850.0	6,838.8	5,193.0	5,193.0	13.6	9.1	-28.14	-1,583.5	-359.6	2,545.1	2,523.7	21.42	118.819		
6,900.0	6,888.6	5,193.0	5,193.0	13.6	9.1	-6.55	-1,583.5	-359.6	2,575.0	2,553.6	21.40	120.338		
6,950.0	6,938.1	5,193.0	5,193.0	13.7	9.1	-1.72	-1,583.5	-359.6	2,602.7	2,581.4	21.31	122.149		
7,000.0	6,987.0	5,193.0	5,193.0	13.7	9.1	0.26	-1,583.5	-359.6	2,628.2	2,607.0	21.15	124.262		
7,050.0	7,035.0	5,193.0	5,193.0	13.6	9.1	1.28	-1,583.5	-359.6	2,651.4	2,630.4	20.93	126.688		
7,100.0	7,082.0	5,193.0	5,193.0	13.6	9.1	1.88	-1,583.5	-359.6	2,672.2	2,651.5	20.64	129.438		
7,150.0	7,127.7	5,193.0	5,193.0	13.5	9.1	2.27	-1,583.5	-359.6	2,690.6	2,670.3	20.30	132.524		
7,200.0	7,171.8	5,193.0	5,193.0	13.5	9.1	2.53	-1,583.5	-359.6	2,706.5	2,686.6	19.91	135.956		
7,250.0	7,214.2	5,193.0	5,193.0	13.4	9.1	2.72	-1,583.5	-359.6	2,720.0	2,700.6	19.46	139.740		
7,300.0	7,254.6	5,193.0	5,193.0	13.4	9.1	2.87	-1,583.5	-359.6	2,731.0	2,712.0	18.98	143.878		
7,350.0	7,292.9	5,193.0	5,193.0	13.3	9.1	2.99	-1,583.5	-359.6	2,739.5	2,721.0	18.46	148.361		
7,400.0	7,328.9	5,193.0	5,193.0	13.3	9.1	3.09	-1,583.5	-359.6	2,745.4	2,727.4	17.92	153.168		
7,450.0	7,362.3	5,193.0	5,193.0	13.3	9.1	3.19	-1,583.5	-359.6	2,748.7	2,731.3	17.37	158.255		
7,500.0	7,393.1	5,193.0	5,193.0	13.4	9.1	3.28	-1,583.5	-359.6	2,749.5	2,732.7	16.81	163.552		
7,550.0	7,421.1	5,193.0	5,193.0	13.5	9.1	3.37	-1,583.5	-359.6	2,747.7	2,731.4	16.26	168.950		
7,600.0	7,446.1	5,193.0	5,193.0	13.6	9.1	3.46	-1,583.5	-359.6	2,743.4	2,727.6	15.74	174.293		
7,650.0	7,468.0	5,193.0	5,193.0	13.8	9.1	3.57	-1,583.5	-359.6	2,736.5	2,721.2	15.26	179.370		
7,700.0	7,486.7	5,193.0	5,193.0	14.0	9.1	3.68	-1,583.5	-359.6	2,727.0	2,712.2	14.83	183.919		
7,750.0	7,502.2	5,193.0	5,193.0	14.2	9.1	3.80	-1,583.5	-359.6	2,715.0	2,700.6	14.47	187.630		
7,800.0	7,514.3	5,193.0	5,193.0	14.6	9.1	3.94	-1,583.5	-359.6	2,700.6	2,686.4	14.20	190.178		
7,850.0	7,523.0	5,193.0	5,193.0	14.9	9.1	4.09	-1,583.5	-359.6	2,683.6	2,669.6	14.03	191.266		
7,900.0	7,528.2	5,193.0	5,193.0	15.3	9.1	4.26	-1,583.5	-359.6	2,664.3	2,650.3	13.97	190.673		
7,950.2	7,530.0	5,193.0	5,193.0	15.8	9.1	4.46	-1,583.5	-359.6	2,642.4	2,628.4	14.03	188.294		
8,000.0	7,530.0	5,193.0	5,193.0	16.2	9.1	4.46	-1,583.5	-359.6	2,620.0	2,605.8	14.18	184.811		
8,100.0	7,530.0	5,193.0	5,193.0	17.3	9.1	4.46	-1,583.5	-359.6	2,577.2	2,562.7	14.46	178.206		
8,200.0	7,530.0	5,193.0	5,193.0	18.4	9.1	4.46	-1,583.5	-359.6	2,537.6	2,522.9	14.74	172.105		
8,300.0	7,530.0	5,193.0	5,193.0	19.7	9.1	4.46	-1,583.5	-359.6	2,501.4	2,486.4	15.02	166.485		
8,400.0	7,530.0	5,193.0	5,193.0	21.0	9.1	4.46	-1,583.5	-359.6	2,468.7	2,453.4	15.30	161.324		
8,500.0	7,530.0	5,193.0	5,193.0	22.4	9.1	4.46	-1,583.5	-359.6	2,439.7	2,424.1	15.58	156.602		
8,600.0	7,530.0	5,193.0	5,193.0	23.8	9.1	4.46	-1,583.5	-359.6	2,414.5	2,398.6	15.85	152.302		
8,700.0	7,530.0	5,193.0	5,193.0	25.3	9.1	4.46	-1,583.5	-359.6	2,393.2	2,377.0	16.13	148.407		
8,800.0	7,530.0	5,193.0	5,193.0	26.8	9.1	4.46	-1,583.5	-359.6	2,375.9	2,359.5	16.40	144.901		
8,900.0	7,530.0	5,193.0	5,193.0	28.3	9.1	4.46	-1,583.5	-359.6	2,362.7	2,346.0	16.67	141.768		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE													Offset Site Error:	0.0 ft
Survey Program: 5193-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	7,530.0	5,193.0	5,193.0	29.9	9.1	4.46	-1,583.5	-359.6	2,353.7	2,336.8	16.93	138.993		
9,100.0	7,530.0	5,193.0	5,193.0	31.4	9.1	4.46	-1,583.5	-359.6	2,348.9	2,331.7	17.20	136.560		
9,162.2	7,530.0	5,193.0	5,193.0	32.4	9.1	4.46	-1,583.5	-359.6	2,348.1	2,330.7	17.37	135.214		
9,200.0	7,530.0	5,193.0	5,193.0	33.0	9.1	4.46	-1,583.5	-359.6	2,348.4	2,331.0	17.47	134.454		
9,300.0	7,530.0	5,193.0	5,193.0	34.7	9.1	4.46	-1,583.5	-359.6	2,352.2	2,334.4	17.73	132.659		
9,400.0	7,530.0	5,193.0	5,193.0	36.3	9.1	4.46	-1,583.5	-359.6	2,360.1	2,342.1	17.99	131.160		
9,500.0	7,530.0	5,193.0	5,193.0	37.9	9.1	4.46	-1,583.5	-359.6	2,372.3	2,354.0	18.26	129.942		
9,600.0	7,530.0	5,193.0	5,193.0	39.6	9.1	4.46	-1,583.5	-359.6	2,388.6	2,370.1	18.52	128.987		
9,700.0	7,530.0	5,193.0	5,193.0	41.2	9.1	4.46	-1,583.5	-359.6	2,408.9	2,390.1	18.78	128.280		
9,800.0	7,530.0	5,193.0	5,193.0	42.9	9.1	4.46	-1,583.5	-359.6	2,433.2	2,414.2	19.04	127.805		
9,900.0	7,530.0	5,193.0	5,193.0	44.5	9.1	4.46	-1,583.5	-359.6	2,461.3	2,442.0	19.30	127.546		
10,000.0	7,530.0	5,193.0	5,193.0	46.2	9.1	4.46	-1,583.5	-359.6	2,493.1	2,473.5	19.56	127.488		
10,100.0	7,530.0	5,193.0	5,193.0	47.9	9.1	4.46	-1,583.5	-359.6	2,528.5	2,508.6	19.81	127.616		
10,200.0	7,530.0	5,193.0	5,193.0	49.6	9.1	4.46	-1,583.5	-359.6	2,567.2	2,547.2	20.07	127.914		
10,300.0	7,530.0	5,193.0	5,193.0	51.3	9.1	4.46	-1,583.5	-359.6	2,609.3	2,588.9	20.33	128.370		
10,400.0	7,530.0	5,193.0	5,193.0	53.0	9.1	4.46	-1,583.5	-359.6	2,654.4	2,633.8	20.58	128.968		
10,500.0	7,530.0	5,193.0	5,193.0	54.7	9.1	4.46	-1,583.5	-359.6	2,702.5	2,681.6	20.84	129.697		
10,600.0	7,530.0	5,193.0	5,193.0	56.4	9.1	4.46	-1,583.5	-359.6	2,753.3	2,732.3	21.09	130.544		
10,700.0	7,530.0	5,193.0	5,193.0	58.1	9.1	4.46	-1,583.5	-359.6	2,806.9	2,785.5	21.35	131.498		
10,800.0	7,530.0	5,193.0	5,193.0	59.8	9.1	4.46	-1,583.5	-359.6	2,862.9	2,841.3	21.60	132.547		
10,900.0	7,530.0	5,193.0	5,193.0	61.5	9.1	4.46	-1,583.5	-359.6	2,921.2	2,899.4	21.85	133.683		
11,000.0	7,530.0	5,193.0	5,193.0	63.2	9.1	4.46	-1,583.5	-359.6	2,981.8	2,959.7	22.10	134.896		
11,100.0	7,530.0	5,193.0	5,193.0	64.9	9.1	4.46	-1,583.5	-359.6	3,044.5	3,022.1	22.36	136.177		
11,200.0	7,530.0	5,193.0	5,193.0	66.6	9.1	4.46	-1,583.5	-359.6	3,109.1	3,086.5	22.61	137.518		
11,300.0	7,530.0	5,193.0	5,193.0	68.4	9.1	4.46	-1,583.5	-359.6	3,175.5	3,152.7	22.86	138.912		
11,400.0	7,530.0	5,193.0	5,193.0	70.1	9.1	4.46	-1,583.5	-359.6	3,243.7	3,220.6	23.11	140.353		
11,500.0	7,530.0	5,193.0	5,193.0	71.8	9.1	4.46	-1,583.5	-359.6	3,313.5	3,290.1	23.36	141.835		
11,600.0	7,530.0	5,193.0	5,193.0	73.5	9.1	4.46	-1,583.5	-359.6	3,384.8	3,361.1	23.61	143.351		
11,700.0	7,530.0	5,193.0	5,193.0	75.3	9.1	4.46	-1,583.5	-359.6	3,457.5	3,433.6	23.86	144.897		
11,800.0	7,530.0	5,193.0	5,193.0	77.0	9.1	4.46	-1,583.5	-359.6	3,531.5	3,507.4	24.11	146.468		
11,900.0	7,530.0	5,193.0	5,193.0	78.7	9.1	4.46	-1,583.5	-359.6	3,606.8	3,582.5	24.36	148.060		
12,000.0	7,530.0	5,193.0	5,193.0	80.4	9.1	4.46	-1,583.5	-359.6	3,683.3	3,658.7	24.61	149.670		
12,100.0	7,530.0	5,193.0	5,193.0	82.2	9.1	4.46	-1,583.5	-359.6	3,760.9	3,736.0	24.86	151.293		
12,200.0	7,530.0	5,193.0	5,193.0	83.9	9.1	4.46	-1,583.5	-359.6	3,839.5	3,814.4	25.11	152.927		
12,300.0	7,530.0	5,193.0	5,193.0	85.6	9.1	4.46	-1,583.5	-359.6	3,919.1	3,893.8	25.36	154.569		
12,400.0	7,530.0	5,193.0	5,193.0	87.4	9.1	4.46	-1,583.5	-359.6	3,999.6	3,974.0	25.60	156.217		
12,500.0	7,530.0	5,193.0	5,193.0	89.1	9.1	4.46	-1,583.5	-359.6	4,081.0	4,055.2	25.85	157.868		
12,600.0	7,530.0	5,193.0	5,193.0	90.8	9.1	4.46	-1,583.5	-359.6	4,163.2	4,137.1	26.10	159.520		
12,700.0	7,530.0	5,193.0	5,193.0	92.6	9.1	4.46	-1,583.5	-359.6	4,246.1	4,219.8	26.35	161.172		
12,800.0	7,530.0	5,193.0	5,193.0	94.3	9.1	4.46	-1,583.5	-359.6	4,329.8	4,303.2	26.59	162.821		
12,900.0	7,530.0	5,193.0	5,193.0	96.0	9.1	4.46	-1,583.5	-359.6	4,414.2	4,387.3	26.84	164.466		
13,000.0	7,530.0	5,193.0	5,193.0	97.8	9.1	4.46	-1,583.5	-359.6	4,499.2	4,472.1	27.09	166.107		
13,100.0	7,530.0	5,193.0	5,193.0	99.5	9.1	4.46	-1,583.5	-359.6	4,584.8	4,557.4	27.33	167.741		
13,200.0	7,530.0	5,193.0	5,193.0	101.3	9.1	4.46	-1,583.5	-359.6	4,670.9	4,643.3	27.58	169.368		
13,300.0	7,530.0	5,193.0	5,193.0	103.0	9.1	4.46	-1,583.5	-359.6	4,757.6	4,729.8	27.82	170.986		
13,400.0	7,530.0	5,193.0	5,193.0	104.7	9.1	4.46	-1,583.5	-359.6	4,844.9	4,816.8	28.07	172.596		
13,500.0	7,530.0	5,193.0	5,193.0	106.5	9.1	4.46	-1,583.5	-359.6	4,932.6	4,904.3	28.32	174.196		
13,600.0	7,530.0	5,193.0	5,193.0	108.2	9.1	4.46	-1,583.5	-359.6	5,020.7	4,992.2	28.56	175.785		
13,700.0	7,530.0	5,193.0	5,193.0	110.0	9.1	4.46	-1,583.5	-359.6	5,109.3	5,080.5	28.81	177.364		
13,800.0	7,530.0	5,193.0	5,193.0	111.7	9.1	4.46	-1,583.5	-359.6	5,198.4	5,169.3	29.05	178.931		
13,900.0	7,530.0	5,193.0	5,193.0	113.4	9.1	4.46	-1,583.5	-359.6	5,287.8	5,258.5	29.30	180.486		
14,000.0	7,530.0	5,193.0	5,193.0	115.2	9.1	4.46	-1,583.5	-359.6	5,377.6	5,348.0	29.54	182.029		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE													Offset Site Error:	0.0 ft
Survey Program: 5193-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
14,100.0	7,530.0	5,193.0	5,193.0	116.9	9.1	4.46	-1,583.5	-359.6	5,467.7	5,437.9	29.79	183.559		
14,200.0	7,530.0	5,193.0	5,193.0	118.7	9.1	4.46	-1,583.5	-359.6	5,558.2	5,528.1	30.03	185.077		
14,300.0	7,530.0	5,193.0	5,193.0	120.4	9.1	4.46	-1,583.5	-359.6	5,649.0	5,618.7	30.28	186.581		
14,400.0	7,530.0	5,193.0	5,193.0	122.1	9.1	4.46	-1,583.5	-359.6	5,740.1	5,709.5	30.52	188.072		
14,500.0	7,530.0	5,193.0	5,193.0	123.9	9.1	4.46	-1,583.5	-359.6	5,831.5	5,800.7	30.76	189.550		
14,600.0	7,530.0	5,193.0	5,193.0	125.6	9.1	4.46	-1,583.5	-359.6	5,923.1	5,892.1	31.01	191.014		
14,700.0	7,530.0	5,193.0	5,193.0	127.4	9.1	4.46	-1,583.5	-359.6	6,015.1	5,983.8	31.25	192.465		
14,800.0	7,530.0	5,193.0	5,193.0	129.1	9.1	4.46	-1,583.5	-359.6	6,107.3	6,075.8	31.50	193.901		
14,900.0	7,530.0	5,193.0	5,193.0	130.9	9.1	4.46	-1,583.5	-359.6	6,199.7	6,167.9	31.74	195.324		
15,000.0	7,530.0	5,193.0	5,193.0	132.6	9.1	4.46	-1,583.5	-359.6	6,292.4	6,260.4	31.98	196.734		
15,100.0	7,530.0	5,193.0	5,193.0	134.4	9.1	4.46	-1,583.5	-359.6	6,385.2	6,353.0	32.23	198.129		
15,200.0	7,530.0	5,193.0	5,193.0	136.1	9.1	4.46	-1,583.5	-359.6	6,478.3	6,445.9	32.47	199.511		
15,300.0	7,530.0	5,193.0	5,193.0	137.9	9.1	4.46	-1,583.5	-359.6	6,571.6	6,538.9	32.71	200.879		
15,400.0	7,530.0	5,193.0	5,193.0	139.6	9.1	4.46	-1,583.5	-359.6	6,665.1	6,632.2	32.96	202.233		
15,500.0	7,530.0	5,193.0	5,193.0	141.3	9.1	4.46	-1,583.5	-359.6	6,758.8	6,725.6	33.20	203.574		
15,600.0	7,530.0	5,193.0	5,193.0	143.1	9.1	4.46	-1,583.5	-359.6	6,852.7	6,819.2	33.44	204.901		
15,700.0	7,530.0	5,193.0	5,193.0	144.8	9.1	4.46	-1,583.5	-359.6	6,946.7	6,913.0	33.69	206.214		
15,800.0	7,530.0	5,193.0	5,193.0	146.6	9.1	4.46	-1,583.5	-359.6	7,040.9	7,007.0	33.93	207.515		
15,900.0	7,530.0	5,193.0	5,193.0	148.3	9.1	4.46	-1,583.5	-359.6	7,135.2	7,101.1	34.17	208.801		
16,000.0	7,530.0	5,193.0	5,193.0	150.1	9.1	4.46	-1,583.5	-359.6	7,229.8	7,195.3	34.42	210.075		
16,100.0	7,530.0	5,193.0	5,193.0	151.8	9.1	4.46	-1,583.5	-359.6	7,324.4	7,289.7	34.66	211.336		
16,200.0	7,530.0	5,193.0	5,193.0	153.6	9.1	4.46	-1,583.5	-359.6	7,419.2	7,384.3	34.90	212.583		
16,300.0	7,530.0	5,193.0	5,193.0	155.3	9.1	4.46	-1,583.5	-359.6	7,514.1	7,479.0	35.14	213.818		
16,400.0	7,530.0	5,193.0	5,193.0	157.1	9.1	4.46	-1,583.5	-359.6	7,609.2	7,573.8	35.39	215.039		
16,500.0	7,530.0	5,193.0	5,193.0	158.8	9.1	4.46	-1,583.5	-359.6	7,704.4	7,668.7	35.63	216.249		
16,600.0	7,530.0	5,193.0	5,193.0	160.6	9.1	4.46	-1,583.5	-359.6	7,799.7	7,763.8	35.87	217.445		
16,700.0	7,530.0	5,193.0	5,193.0	162.3	9.1	4.46	-1,583.5	-359.6	7,895.1	7,859.0	36.11	218.629		
16,800.0	7,530.0	5,193.0	5,193.0	164.1	9.1	4.46	-1,583.5	-359.6	7,990.6	7,954.3	36.35	219.801		
16,900.0	7,530.0	5,193.0	5,193.0	165.8	9.1	4.46	-1,583.5	-359.6	8,086.2	8,049.6	36.60	220.961		
17,000.0	7,530.0	5,193.0	5,193.0	167.6	9.1	4.46	-1,583.5	-359.6	8,182.0	8,145.1	36.84	222.109		
17,100.0	7,530.0	5,193.0	5,193.0	169.3	9.1	4.46	-1,583.5	-359.6	8,277.8	8,240.8	37.08	223.245		
17,200.0	7,530.0	5,193.0	5,193.0	171.1	9.1	4.46	-1,583.5	-359.6	8,373.8	8,336.4	37.32	224.369		
17,300.0	7,530.0	5,193.0	5,193.0	172.8	9.1	4.46	-1,583.5	-359.6	8,469.8	8,432.2	37.56	225.482		
17,400.0	7,530.0	5,193.0	5,193.0	174.5	9.1	4.46	-1,583.5	-359.6	8,565.9	8,528.1	37.80	226.583		
17,411.2	7,530.0	5,193.0	5,193.0	174.7	9.1	4.46	-1,583.5	-359.6	8,576.7	8,538.9	37.83	226.706		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA													Offset Site Error:	0.0 ft
Survey Program: 8381-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
0.0	0.0	5.0	5.0	0.0	0.0	-168.12	-1,635.2	-344.0	1,671.0					
100.0	100.0	105.0	105.0	0.2	0.2	-168.12	-1,635.2	-344.0	1,671.0	1,670.7	0.34	4,983.654		
200.0	200.0	205.0	205.0	0.3	0.4	-168.12	-1,635.2	-344.0	1,671.0	1,670.3	0.68	2,441.716		
300.0	300.0	305.0	305.0	0.5	0.5	-168.12	-1,635.2	-344.0	1,671.0	1,670.0	1.03	1,616.972		
400.0	400.0	405.0	405.0	0.7	0.7	-168.12	-1,635.2	-344.0	1,671.0	1,669.6	1.38	1,208.705		
500.0	500.0	505.0	505.0	0.8	0.9	-168.12	-1,635.2	-344.0	1,671.0	1,669.3	1.73	965.042		
600.0	600.0	605.0	605.0	1.0	1.1	-145.12	-1,635.2	-344.0	1,671.7	1,669.7	2.08	803.481		
700.0	700.0	705.0	705.0	1.2	1.2	-145.16	-1,635.2	-344.0	1,673.9	1,671.5	2.43	688.799		
800.0	799.9	804.9	804.9	1.4	1.4	-145.23	-1,635.2	-344.0	1,677.5	1,674.7	2.78	603.189		
848.7	848.4	853.4	853.4	1.5	1.5	-145.27	-1,635.2	-344.0	1,679.7	1,676.8	2.95	568.964		
900.0	899.7	904.7	904.7	1.6	1.6	-145.33	-1,635.2	-344.0	1,682.3	1,679.2	3.13	536.805		
1,000.0	999.5	1,004.5	1,004.5	1.8	1.8	-145.45	-1,635.2	-344.0	1,687.3	1,683.8	3.49	483.687		
1,100.0	1,099.3	1,104.3	1,104.3	2.0	1.9	-145.56	-1,635.2	-344.0	1,692.3	1,688.5	3.84	440.290		
1,200.0	1,199.1	1,204.1	1,204.1	2.2	2.1	-145.68	-1,635.2	-344.0	1,697.3	1,693.1	4.20	404.188		
1,300.0	1,298.9	1,303.9	1,303.9	2.4	2.3	-145.79	-1,635.2	-344.0	1,702.4	1,697.8	4.56	373.697		
1,400.0	1,398.8	1,403.8	1,403.8	2.6	2.5	-145.91	-1,635.2	-344.0	1,707.4	1,702.5	4.91	347.611		
1,500.0	1,498.6	1,503.6	1,503.6	2.8	2.6	-146.02	-1,635.2	-344.0	1,712.5	1,707.2	5.27	325.044		
1,600.0	1,598.4	1,603.4	1,603.4	3.0	2.8	-146.14	-1,635.2	-344.0	1,717.5	1,711.9	5.63	305.333		
1,700.0	1,698.2	1,703.2	1,703.2	3.2	3.0	-146.25	-1,635.2	-344.0	1,722.6	1,716.6	5.98	287.969		
1,800.0	1,798.0	1,803.0	1,803.0	3.4	3.1	-146.36	-1,635.2	-344.0	1,727.6	1,721.3	6.34	272.558		
1,900.0	1,897.8	1,902.8	1,902.8	3.6	3.3	-146.47	-1,635.2	-344.0	1,732.7	1,726.0	6.70	258.790		
2,000.0	1,997.7	2,002.7	2,002.7	3.8	3.5	-146.58	-1,635.2	-344.0	1,737.8	1,730.7	7.05	246.416		
2,100.0	2,097.5	2,102.5	2,102.5	4.0	3.7	-146.69	-1,635.2	-344.0	1,742.8	1,735.4	7.41	235.235		
2,200.0	2,197.3	2,202.3	2,202.3	4.2	3.8	-146.80	-1,635.2	-344.0	1,747.9	1,740.2	7.77	225.083		
2,300.0	2,297.1	2,302.1	2,302.1	4.4	4.0	-146.91	-1,635.2	-344.0	1,753.0	1,744.9	8.12	215.825		
2,400.0	2,396.9	2,401.9	2,401.9	4.6	4.2	-147.02	-1,635.2	-344.0	1,758.1	1,749.7	8.48	207.347		
2,500.0	2,496.7	2,501.7	2,501.7	4.8	4.4	-147.13	-1,635.2	-344.0	1,763.2	1,754.4	8.84	199.555		
2,600.0	2,596.5	2,601.5	2,601.5	5.0	4.5	-147.23	-1,635.2	-344.0	1,768.4	1,759.2	9.19	192.370		
2,700.0	2,696.4	2,701.4	2,701.4	5.2	4.7	-147.34	-1,635.2	-344.0	1,773.5	1,763.9	9.55	185.723		
2,800.0	2,796.2	2,801.2	2,801.2	5.4	4.9	-147.44	-1,635.2	-344.0	1,778.6	1,768.7	9.91	179.556		
2,900.0	2,896.0	2,901.0	2,901.0	5.6	5.1	-147.55	-1,635.2	-344.0	1,783.7	1,773.5	10.26	173.820		
3,000.0	2,995.8	3,000.8	3,000.8	5.8	5.2	-147.65	-1,635.2	-344.0	1,788.9	1,778.2	10.62	168.470		
3,100.0	3,095.6	3,100.6	3,100.6	6.0	5.4	-147.76	-1,635.2	-344.0	1,794.0	1,783.0	10.97	163.469		
3,200.0	3,195.4	3,200.4	3,200.4	6.2	5.6	-147.86	-1,635.2	-344.0	1,799.2	1,787.8	11.33	158.784		
3,300.0	3,295.2	3,300.2	3,300.2	6.4	5.8	-147.96	-1,635.2	-344.0	1,804.3	1,792.6	11.69	154.387		
3,400.0	3,395.1	3,400.1	3,400.1	6.6	5.9	-148.07	-1,635.2	-344.0	1,809.5	1,797.4	12.04	150.250		
3,500.0	3,494.9	3,499.9	3,499.9	6.8	6.1	-148.17	-1,635.2	-344.0	1,814.6	1,802.2	12.40	146.353		
3,600.0	3,594.7	3,599.7	3,599.7	7.0	6.3	-148.27	-1,635.2	-344.0	1,819.8	1,807.1	12.76	142.674		
3,700.0	3,694.5	3,699.5	3,699.5	7.2	6.5	-148.37	-1,635.2	-344.0	1,825.0	1,811.9	13.11	139.196		
3,800.0	3,794.3	3,799.3	3,799.3	7.4	6.6	-148.47	-1,635.2	-344.0	1,830.2	1,816.7	13.47	135.904		
3,900.0	3,894.1	3,899.1	3,899.1	7.6	6.8	-148.57	-1,635.2	-344.0	1,835.4	1,821.5	13.82	132.782		
4,000.0	3,994.0	3,999.0	3,999.0	7.8	7.0	-148.67	-1,635.2	-344.0	1,840.6	1,826.4	14.18	129.817		
4,100.0	4,093.8	4,098.8	4,098.8	8.0	7.2	-148.76	-1,635.2	-344.0	1,845.8	1,831.2	14.53	126.999		
4,200.0	4,193.6	4,198.6	4,198.6	8.2	7.3	-148.86	-1,635.2	-344.0	1,851.0	1,836.1	14.89	124.316		
4,300.0	4,293.4	4,298.4	4,298.4	8.4	7.5	-148.96	-1,635.2	-344.0	1,856.2	1,840.9	15.24	121.760		
4,400.0	4,393.2	4,398.2	4,398.2	8.6	7.7	-149.06	-1,635.2	-344.0	1,861.4	1,845.8	15.60	119.320		
4,500.0	4,493.0	4,498.0	4,498.0	8.8	7.9	-149.15	-1,635.2	-344.0	1,866.6	1,850.7	15.96	116.990		
4,600.0	4,592.8	4,597.8	4,597.8	9.0	8.0	-149.25	-1,635.2	-344.0	1,871.8	1,855.5	16.31	114.763		
4,700.0	4,692.7	4,697.7	4,697.7	9.3	8.2	-149.34	-1,635.2	-344.0	1,877.1	1,860.4	16.67	112.631		
4,800.0	4,792.5	4,797.5	4,797.5	9.5	8.4	-149.44	-1,635.2	-344.0	1,882.3	1,865.3	17.02	110.589		
4,900.0	4,892.3	4,897.3	4,897.3	9.7	8.5	-149.53	-1,635.2	-344.0	1,887.5	1,870.2	17.38	108.632		
5,000.0	4,992.1	4,997.1	4,997.1	9.9	8.7	-149.62	-1,635.2	-344.0	1,892.8	1,875.1	17.73	106.753		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA														Offset Site Error:	0.0 ft
Survey Program: 8381-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	5,091.9	5,096.9	5,096.9	10.1	8.9	-149.72	-1,635.2	-344.0	1,898.0	1,880.0	18.09	104.949			
5,200.0	5,191.7	5,196.7	5,196.7	10.3	9.1	-149.81	-1,635.2	-344.0	1,903.3	1,884.9	18.44	103.215			
5,300.0	5,291.5	5,296.5	5,296.5	10.5	9.2	-149.90	-1,635.2	-344.0	1,908.6	1,889.8	18.79	101.546			
5,400.0	5,391.4	5,396.4	5,396.4	10.7	9.4	-149.99	-1,635.2	-344.0	1,913.8	1,894.7	19.15	99.941			
5,500.0	5,491.2	5,496.2	5,496.2	10.9	9.6	-150.08	-1,635.2	-344.0	1,919.1	1,899.6	19.50	98.394			
5,600.0	5,591.0	5,596.0	5,596.0	11.1	9.8	-150.17	-1,635.2	-344.0	1,924.4	1,904.5	19.86	96.903			
5,700.0	5,690.8	5,695.8	5,695.8	11.3	9.9	-150.26	-1,635.2	-344.0	1,929.7	1,909.4	20.21	95.465			
5,800.0	5,790.6	5,795.6	5,795.6	11.5	10.1	-150.35	-1,635.2	-344.0	1,934.9	1,914.4	20.57	94.077			
5,900.0	5,890.4	5,895.4	5,895.4	11.7	10.3	-150.44	-1,635.2	-344.0	1,940.2	1,919.3	20.92	92.737			
6,000.0	5,990.3	5,995.3	5,995.3	11.9	10.5	-150.53	-1,635.2	-344.0	1,945.5	1,924.2	21.28	91.442			
6,100.0	6,090.1	6,095.1	6,095.1	12.1	10.6	-150.62	-1,635.2	-344.0	1,950.8	1,929.2	21.63	90.189			
6,200.0	6,189.9	6,194.9	6,194.9	12.3	10.8	-150.70	-1,635.2	-344.0	1,956.1	1,934.1	21.98	88.978			
6,300.0	6,289.7	6,294.7	6,294.7	12.5	11.0	-150.79	-1,635.2	-344.0	1,961.4	1,939.1	22.34	87.805			
6,400.0	6,389.5	6,394.5	6,394.5	12.7	11.2	-150.88	-1,635.2	-344.0	1,966.7	1,944.1	22.69	86.670			
6,500.0	6,489.3	6,494.3	6,494.3	12.9	11.3	-150.96	-1,635.2	-344.0	1,972.1	1,949.0	23.05	85.569			
6,600.0	6,589.1	6,594.1	6,594.1	13.1	11.5	-151.05	-1,635.2	-344.0	1,977.4	1,954.0	23.40	84.503			
6,700.0	6,689.0	6,694.0	6,694.0	13.3	11.7	-151.13	-1,635.2	-344.0	1,982.7	1,959.0	23.75	83.468			
6,785.3	6,774.1	6,779.1	6,779.1	13.5	11.8	-151.21	-1,635.2	-344.0	1,987.3	1,963.2	24.06	82.611			
6,800.0	6,788.8	6,793.8	6,793.8	13.5	11.9	-140.19	-1,635.2	-344.0	1,987.9	1,963.8	24.11	82.438			
6,850.0	6,838.8	6,843.8	6,843.8	13.6	11.9	-29.72	-1,635.2	-344.0	1,987.8	1,963.5	24.26	81.942			
6,900.0	6,888.6	6,893.6	6,893.6	13.6	12.0	-7.79	-1,635.2	-344.0	1,984.2	1,959.9	24.32	81.576			
6,950.0	6,938.1	6,943.1	6,943.1	13.7	12.1	-2.62	-1,635.2	-344.0	1,977.2	1,952.9	24.31	81.338			
7,000.0	6,987.0	6,992.0	6,992.0	13.7	12.2	-0.32	-1,635.2	-344.0	1,966.8	1,942.6	24.21	81.226			
7,050.0	7,035.0	7,040.0	7,040.0	13.6	12.3	1.03	-1,635.2	-344.0	1,953.0	1,928.9	24.04	81.235			
7,100.0	7,082.0	7,087.0	7,087.0	13.6	12.4	1.97	-1,635.2	-344.0	1,935.8	1,912.1	23.79	81.364			
7,150.0	7,127.7	7,132.7	7,132.7	13.5	12.4	2.71	-1,635.2	-344.0	1,915.5	1,892.0	23.47	81.608			
7,200.0	7,171.8	7,176.8	7,176.8	13.5	12.5	3.36	-1,635.2	-344.0	1,892.1	1,869.0	23.08	81.962			
7,250.0	7,214.2	7,219.2	7,219.2	13.4	12.6	3.98	-1,635.2	-344.0	1,865.6	1,843.0	22.64	82.416			
7,300.0	7,254.6	7,259.6	7,259.6	13.4	12.7	4.61	-1,635.2	-344.0	1,836.3	1,814.1	22.14	82.957			
7,350.0	7,292.9	7,297.9	7,297.9	13.3	12.7	5.30	-1,635.2	-344.0	1,804.2	1,782.6	21.59	83.563			
7,400.0	7,328.9	7,333.9	7,333.9	13.3	12.8	6.06	-1,635.2	-344.0	1,769.6	1,748.6	21.02	84.203			
7,450.0	7,362.3	7,367.3	7,367.3	13.3	12.9	6.96	-1,635.2	-344.0	1,732.5	1,712.1	20.42	84.825			
7,500.0	7,393.1	7,398.1	7,398.1	13.4	12.9	8.05	-1,635.2	-344.0	1,693.3	1,673.4	19.84	85.356			
7,550.0	7,421.1	7,426.1	7,426.1	13.5	13.0	9.40	-1,635.2	-344.0	1,652.0	1,632.7	19.28	85.677			
7,600.0	7,446.1	7,451.1	7,451.1	13.6	13.0	11.13	-1,635.2	-344.0	1,608.9	1,590.1	18.79	85.607			
7,650.0	7,468.0	7,473.0	7,473.0	13.8	13.0	13.43	-1,635.2	-344.0	1,564.1	1,545.7	18.43	84.861			
7,700.0	7,486.7	7,491.7	7,491.7	14.0	13.1	16.63	-1,635.2	-344.0	1,518.0	1,499.7	18.29	82.985			
7,750.0	7,502.2	7,507.2	7,507.2	14.2	13.1	21.28	-1,635.2	-344.0	1,470.7	1,452.2	18.55	79.265			
7,800.0	7,514.3	7,519.3	7,519.3	14.6	13.1	28.49	-1,635.2	-344.0	1,422.5	1,403.0	19.56	72.724			
7,850.0	7,523.0	7,528.0	7,528.0	14.9	13.1	40.43	-1,635.2	-344.0	1,373.6	1,351.7	21.91	62.700			
7,900.0	7,528.2	7,533.2	7,533.2	15.3	13.1	60.74	-1,635.2	-344.0	1,324.3	1,298.4	25.88	51.165			
7,950.2	7,530.0	7,535.0	7,535.0	15.8	13.2	90.00	-1,635.2	-344.0	1,274.5	1,245.9	28.64	44.499			
8,000.0	7,530.0	7,535.0	7,535.0	16.2	13.2	90.00	-1,635.2	-344.0	1,225.2	1,196.1	29.12	42.067			
8,100.0	7,530.0	7,535.0	7,535.0	17.3	13.2	90.00	-1,635.2	-344.0	1,126.2	1,096.0	30.19	37.304			
8,200.0	7,530.0	7,535.0	7,535.0	18.4	13.2	90.00	-1,635.2	-344.0	1,027.4	996.0	31.36	32.759			
8,300.0	7,530.0	7,535.0	7,535.0	19.7	13.2	90.00	-1,635.2	-344.0	928.9	896.2	32.62	28.473			
8,400.0	7,530.0	7,535.0	7,535.0	21.0	13.2	90.00	-1,635.2	-344.0	830.7	796.7	33.95	24.465			
8,500.0	7,530.0	7,535.0	7,535.0	22.4	13.2	90.00	-1,635.2	-344.0	733.0	697.6	35.34	20.738			
8,600.0	7,530.0	7,535.0	7,535.0	23.8	13.2	90.00	-1,635.2	-344.0	636.0	599.2	36.78	17.291			
8,700.0	7,530.0	7,535.0	7,535.0	25.3	13.2	90.00	-1,635.2	-344.0	540.1	501.9	38.26	14.117			
8,800.0	7,530.0	7,535.0	7,535.0	26.8	13.2	90.00	-1,635.2	-344.0	446.1	406.3	39.78	11.215			
8,900.0	7,530.0	7,535.0	7,535.0	28.3	13.2	90.00	-1,635.2	-344.0	355.3	314.0	41.32	8.599			

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA													Offset Site Error:	0.0 ft
Survey Program: 8381-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	7,530.0	7,535.0	7,535.0	29.9	13.2	90.00	-1,635.2	-344.0	271.0	228.2	42.88	6.321		
9,100.0	7,530.0	7,535.0	7,535.0	31.4	13.2	90.00	-1,635.2	-344.0	201.7	157.3	44.46	4.537		
9,200.0	7,530.0	7,535.0	7,535.0	33.0	13.2	90.00	-1,635.2	-344.0	167.2	121.1	46.07	3.629		
9,213.8	7,530.0	7,535.0	7,535.0	33.3	13.2	90.00	-1,635.2	-344.0	166.6	120.3	46.29	3.599	CC, ES, SF	
9,300.0	7,530.0	7,535.0	7,535.0	34.7	13.2	90.00	-1,635.2	-344.0	187.6	139.9	47.68	3.934		
9,400.0	7,530.0	7,535.0	7,535.0	36.3	13.2	90.00	-1,635.2	-344.0	249.8	200.5	49.31	5.067		
9,500.0	7,530.0	7,535.0	7,535.0	37.9	13.2	90.00	-1,635.2	-344.0	331.1	280.2	50.95	6.499		
9,600.0	7,530.0	7,535.0	7,535.0	39.6	13.2	90.00	-1,635.2	-344.0	420.6	368.0	52.60	7.996		
9,700.0	7,530.0	7,535.0	7,535.0	41.2	13.2	90.00	-1,635.2	-344.0	513.9	459.7	54.26	9.472		
9,800.0	7,530.0	7,535.0	7,535.0	42.9	13.2	90.00	-1,635.2	-344.0	609.4	553.5	55.93	10.896		
9,900.0	7,530.0	7,535.0	7,535.0	44.5	13.2	90.00	-1,635.2	-344.0	706.1	648.5	57.60	12.259		
10,000.0	7,530.0	7,535.0	7,535.0	46.2	13.2	90.00	-1,635.2	-344.0	803.6	744.4	59.28	13.557		
10,100.0	7,530.0	7,535.0	7,535.0	47.9	13.2	90.00	-1,635.2	-344.0	901.7	840.8	60.96	14.791		
10,200.0	7,530.0	7,535.0	7,535.0	49.6	13.2	90.00	-1,635.2	-344.0	1,000.2	937.5	62.65	15.964		
10,300.0	7,530.0	7,535.0	7,535.0	51.3	13.2	90.00	-1,635.2	-344.0	1,098.9	1,034.5	64.35	17.078		
10,400.0	7,530.0	7,535.0	7,535.0	53.0	13.2	90.00	-1,635.2	-344.0	1,197.8	1,131.8	66.04	18.137		
10,500.0	7,530.0	7,535.0	7,535.0	54.7	13.2	90.00	-1,635.2	-344.0	1,296.9	1,229.2	67.75	19.144		
10,600.0	7,530.0	7,535.0	7,535.0	56.4	13.2	90.00	-1,635.2	-344.0	1,396.2	1,326.7	69.45	20.103		
10,700.0	7,530.0	7,535.0	7,535.0	58.1	13.2	90.00	-1,635.2	-344.0	1,495.5	1,424.3	71.16	21.017		
10,800.0	7,530.0	7,535.0	7,535.0	59.8	13.2	90.00	-1,635.2	-344.0	1,594.9	1,522.1	72.87	21.888		
10,900.0	7,530.0	7,535.0	7,535.0	61.5	13.2	90.00	-1,635.2	-344.0	1,694.4	1,619.8	74.58	22.719		
11,000.0	7,530.0	7,535.0	7,535.0	63.2	13.2	90.00	-1,635.2	-344.0	1,793.9	1,717.7	76.30	23.513		
11,100.0	7,530.0	7,535.0	7,535.0	64.9	13.2	90.00	-1,635.2	-344.0	1,893.5	1,815.5	78.01	24.272		
11,200.0	7,530.0	7,535.0	7,535.0	66.6	13.2	90.00	-1,635.2	-344.0	1,993.2	1,913.4	79.73	24.999		
11,300.0	7,530.0	7,535.0	7,535.0	68.4	13.2	90.00	-1,635.2	-344.0	2,092.8	2,011.4	81.45	25.694		
11,400.0	7,530.0	7,535.0	7,535.0	70.1	13.2	90.00	-1,635.2	-344.0	2,192.5	2,109.4	83.17	26.361		
11,500.0	7,530.0	7,535.0	7,535.0	71.8	13.2	90.00	-1,635.2	-344.0	2,292.3	2,207.4	84.90	27.000		
11,600.0	7,530.0	7,535.0	7,535.0	73.5	13.2	90.00	-1,635.2	-344.0	2,392.0	2,305.4	86.62	27.614		
11,700.0	7,530.0	7,535.0	7,535.0	75.3	13.2	90.00	-1,635.2	-344.0	2,491.8	2,403.4	88.35	28.203		
11,800.0	7,530.0	7,535.0	7,535.0	77.0	13.2	90.00	-1,635.2	-344.0	2,591.6	2,501.5	90.08	28.770		
11,900.0	7,530.0	7,535.0	7,535.0	78.7	13.2	90.00	-1,635.2	-344.0	2,691.4	2,599.5	91.81	29.315		
12,000.0	7,530.0	7,535.0	7,535.0	80.4	13.2	90.00	-1,635.2	-344.0	2,791.2	2,697.6	93.54	29.840		
12,100.0	7,530.0	7,535.0	7,535.0	82.2	13.2	90.00	-1,635.2	-344.0	2,891.0	2,795.7	95.27	30.346		
12,200.0	7,530.0	7,535.0	7,535.0	83.9	13.2	90.00	-1,635.2	-344.0	2,990.8	2,893.8	97.00	30.833		
12,300.0	7,530.0	7,535.0	7,535.0	85.6	13.2	90.00	-1,635.2	-344.0	3,090.7	2,992.0	98.73	31.303		
12,400.0	7,530.0	7,535.0	7,535.0	87.4	13.2	90.00	-1,635.2	-344.0	3,190.5	3,090.1	100.47	31.757		
12,500.0	7,530.0	7,535.0	7,535.0	89.1	13.2	90.00	-1,635.2	-344.0	3,290.4	3,188.2	102.20	32.195		
12,600.0	7,530.0	7,535.0	7,535.0	90.8	13.2	90.00	-1,635.2	-344.0	3,390.3	3,286.4	103.94	32.619		
12,700.0	7,530.0	7,535.0	7,535.0	92.6	13.2	90.00	-1,635.2	-344.0	3,490.2	3,384.5	105.67	33.028		
12,800.0	7,530.0	7,535.0	7,535.0	94.3	13.2	90.00	-1,635.2	-344.0	3,590.1	3,482.7	107.41	33.424		
12,900.0	7,530.0	7,535.0	7,535.0	96.0	13.2	90.00	-1,635.2	-344.0	3,690.0	3,580.8	109.15	33.807		
13,000.0	7,530.0	7,535.0	7,535.0	97.8	13.2	90.00	-1,635.2	-344.0	3,789.9	3,679.0	110.89	34.178		
13,100.0	7,530.0	7,535.0	7,535.0	99.5	13.2	90.00	-1,635.2	-344.0	3,889.8	3,777.1	112.62	34.538		
13,200.0	7,530.0	7,535.0	7,535.0	101.3	13.2	90.00	-1,635.2	-344.0	3,989.7	3,875.3	114.36	34.886		
13,300.0	7,530.0	7,535.0	7,535.0	103.0	13.2	90.00	-1,635.2	-344.0	4,089.6	3,973.5	116.10	35.224		
13,400.0	7,530.0	7,535.0	7,535.0	104.7	13.2	90.00	-1,635.2	-344.0	4,189.5	4,071.7	117.84	35.552		
13,500.0	7,530.0	7,535.0	7,535.0	106.5	13.2	90.00	-1,635.2	-344.0	4,289.4	4,169.8	119.58	35.870		
13,600.0	7,530.0	7,535.0	7,535.0	108.2	13.2	90.00	-1,635.2	-344.0	4,389.4	4,268.0	121.32	36.179		
13,700.0	7,530.0	7,535.0	7,535.0	110.0	13.2	90.00	-1,635.2	-344.0	4,489.3	4,366.2	123.07	36.479		
13,800.0	7,530.0	7,535.0	7,535.0	111.7	13.2	90.00	-1,635.2	-344.0	4,589.2	4,464.4	124.81	36.770		
13,900.0	7,530.0	7,535.0	7,535.0	113.4	13.2	90.00	-1,635.2	-344.0	4,689.2	4,562.6	126.55	37.054		
14,000.0	7,530.0	7,535.0	7,535.0	115.2	13.2	90.00	-1,635.2	-344.0	4,789.1	4,660.8	128.29	37.330		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA													Offset Site Error: 0.0 ft	
Survey Program: 8381-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	7,530.0	7,535.0	7,535.0	116.9	13.2	90.00	-1,635.2	-344.0	4,889.0	4,759.0	130.03	37.598		
14,200.0	7,530.0	7,535.0	7,535.0	118.7	13.2	90.00	-1,635.2	-344.0	4,989.0	4,857.2	131.78	37.859		
14,300.0	7,530.0	7,535.0	7,535.0	120.4	13.2	90.00	-1,635.2	-344.0	5,088.9	4,955.4	133.52	38.113		
14,400.0	7,530.0	7,535.0	7,535.0	122.1	13.2	90.00	-1,635.2	-344.0	5,188.9	5,053.6	135.27	38.361		
14,500.0	7,530.0	7,535.0	7,535.0	123.9	13.2	90.00	-1,635.2	-344.0	5,288.8	5,151.8	137.01	38.602		
14,600.0	7,530.0	7,535.0	7,535.0	125.6	13.2	90.00	-1,635.2	-344.0	5,388.8	5,250.0	138.75	38.837		
14,700.0	7,530.0	7,535.0	7,535.0	127.4	13.2	90.00	-1,635.2	-344.0	5,488.7	5,348.2	140.50	39.066		
14,800.0	7,530.0	7,535.0	7,535.0	129.1	13.2	90.00	-1,635.2	-344.0	5,588.7	5,446.4	142.24	39.290		
14,900.0	7,530.0	7,535.0	7,535.0	130.9	13.2	90.00	-1,635.2	-344.0	5,688.6	5,544.6	143.99	39.508		
15,000.0	7,530.0	7,535.0	7,535.0	132.6	13.2	90.00	-1,635.2	-344.0	5,788.6	5,642.9	145.73	39.720		
15,100.0	7,530.0	7,535.0	7,535.0	134.4	13.2	90.00	-1,635.2	-344.0	5,888.6	5,741.1	147.48	39.928		
15,200.0	7,530.0	7,535.0	7,535.0	136.1	13.2	90.00	-1,635.2	-344.0	5,988.5	5,839.3	149.23	40.131		
15,300.0	7,530.0	7,535.0	7,535.0	137.9	13.2	90.00	-1,635.2	-344.0	6,088.5	5,937.5	150.97	40.329		
15,400.0	7,530.0	7,535.0	7,535.0	139.6	13.2	90.00	-1,635.2	-344.0	6,188.4	6,035.7	152.72	40.522		
15,500.0	7,530.0	7,535.0	7,535.0	141.3	13.2	90.00	-1,635.2	-344.0	6,288.4	6,133.9	154.46	40.711		
15,600.0	7,530.0	7,535.0	7,535.0	143.1	13.2	90.00	-1,635.2	-344.0	6,388.4	6,232.2	156.21	40.896		
15,700.0	7,530.0	7,535.0	7,535.0	144.8	13.2	90.00	-1,635.2	-344.0	6,488.3	6,330.4	157.96	41.076		
15,800.0	7,530.0	7,535.0	7,535.0	146.6	13.2	90.00	-1,635.2	-344.0	6,588.3	6,428.6	159.70	41.253		
15,900.0	7,530.0	7,535.0	7,535.0	148.3	13.2	90.00	-1,635.2	-344.0	6,688.3	6,526.8	161.45	41.426		
16,000.0	7,530.0	7,535.0	7,535.0	150.1	13.2	90.00	-1,635.2	-344.0	6,788.2	6,625.0	163.20	41.595		
16,100.0	7,530.0	7,535.0	7,535.0	151.8	13.2	90.00	-1,635.2	-344.0	6,888.2	6,723.3	164.95	41.760		
16,200.0	7,530.0	7,535.0	7,535.0	153.6	13.2	90.00	-1,635.2	-344.0	6,988.2	6,821.5	166.69	41.922		
16,300.0	7,530.0	7,535.0	7,535.0	155.3	13.2	90.00	-1,635.2	-344.0	7,088.2	6,919.7	168.44	42.081		
16,400.0	7,530.0	7,535.0	7,535.0	157.1	13.2	90.00	-1,635.2	-344.0	7,188.1	7,017.9	170.19	42.236		
16,500.0	7,530.0	7,535.0	7,535.0	158.8	13.2	90.00	-1,635.2	-344.0	7,288.1	7,116.2	171.94	42.388		
16,600.0	7,530.0	7,535.0	7,535.0	160.6	13.2	90.00	-1,635.2	-344.0	7,388.1	7,214.4	173.69	42.537		
16,700.0	7,530.0	7,535.0	7,535.0	162.3	13.2	90.00	-1,635.2	-344.0	7,488.0	7,312.6	175.43	42.683		
16,800.0	7,530.0	7,535.0	7,535.0	164.1	13.2	90.00	-1,635.2	-344.0	7,588.0	7,410.8	177.18	42.826		
16,900.0	7,530.0	7,535.0	7,535.0	165.8	13.2	90.00	-1,635.2	-344.0	7,688.0	7,509.1	178.93	42.966		
17,000.0	7,530.0	7,535.0	7,535.0	167.6	13.2	90.00	-1,635.2	-344.0	7,788.0	7,607.3	180.68	43.104		
17,100.0	7,530.0	7,535.0	7,535.0	169.3	13.2	90.00	-1,635.2	-344.0	7,888.0	7,705.5	182.43	43.239		
17,200.0	7,530.0	7,535.0	7,535.0	171.1	13.2	90.00	-1,635.2	-344.0	7,987.9	7,803.8	184.18	43.371		
17,300.0	7,530.0	7,535.0	7,535.0	172.8	13.2	90.00	-1,635.2	-344.0	8,087.9	7,902.0	185.93	43.501		
17,400.0	7,530.0	7,535.0	7,535.0	174.5	13.2	90.00	-1,635.2	-344.0	8,187.9	8,000.2	187.68	43.628		
17,411.2	7,530.0	7,535.0	7,535.0	174.7	13.2	90.00	-1,635.2	-344.0	8,199.1	8,011.3	187.87	43.642		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - N														Offset Site Error:	0.0 ft
Survey Program: 8320-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	21.0	21.0	0.0	0.0	-131.82	-1,116.5	-1,247.9	1,674.5						
100.0	100.0	121.0	121.0	0.2	0.2	-131.82	-1,116.5	-1,247.9	1,674.5	1,674.1	0.36	4,610.032			
200.0	200.0	221.0	221.0	0.3	0.4	-131.82	-1,116.5	-1,247.9	1,674.5	1,673.8	0.71	2,350.846			
300.0	300.0	321.0	321.0	0.5	0.6	-131.82	-1,116.5	-1,247.9	1,674.5	1,673.4	1.06	1,577.687			
400.0	400.0	421.0	421.0	0.7	0.7	-131.82	-1,116.5	-1,247.9	1,674.5	1,673.1	1.41	1,187.226			
500.0	500.0	521.0	521.0	0.8	0.9	-131.82	-1,116.5	-1,247.9	1,674.5	1,672.7	1.76	951.692			
600.0	600.0	621.0	621.0	1.0	1.1	-108.83	-1,116.5	-1,247.9	1,674.8	1,672.7	2.11	794.134			
700.0	700.0	721.0	721.0	1.2	1.3	-108.91	-1,116.5	-1,247.9	1,675.6	1,673.2	2.46	680.989			
800.0	799.9	820.9	820.9	1.4	1.4	-109.04	-1,116.5	-1,247.9	1,677.0	1,674.2	2.82	595.321			
848.7	848.4	869.4	869.4	1.5	1.5	-109.12	-1,116.5	-1,247.9	1,677.9	1,674.9	2.99	560.710			
900.0	899.7	920.7	920.7	1.6	1.6	-109.22	-1,116.5	-1,247.9	1,679.0	1,675.8	3.18	528.188			
1,000.0	999.5	1,020.5	1,020.5	1.8	1.8	-109.41	-1,116.5	-1,247.9	1,681.0	1,677.4	3.54	474.392			
1,100.0	1,099.3	1,120.3	1,120.3	2.0	2.0	-109.61	-1,116.5	-1,247.9	1,683.0	1,679.1	3.91	430.415			
1,200.0	1,199.1	1,220.1	1,220.1	2.2	2.1	-109.80	-1,116.5	-1,247.9	1,685.1	1,680.8	4.28	393.851			
1,300.0	1,298.9	1,319.9	1,319.9	2.4	2.3	-110.00	-1,116.5	-1,247.9	1,687.1	1,682.5	4.65	363.003			
1,400.0	1,398.8	1,419.8	1,419.8	2.6	2.5	-110.19	-1,116.5	-1,247.9	1,689.2	1,684.2	5.02	336.646			
1,500.0	1,498.6	1,519.6	1,519.6	2.8	2.7	-110.38	-1,116.5	-1,247.9	1,691.3	1,686.0	5.39	313.880			
1,600.0	1,598.4	1,619.4	1,619.4	3.0	2.8	-110.57	-1,116.5	-1,247.9	1,693.5	1,687.7	5.76	294.024			
1,700.0	1,698.2	1,719.2	1,719.2	3.2	3.0	-110.77	-1,116.5	-1,247.9	1,695.6	1,689.5	6.13	276.561			
1,800.0	1,798.0	1,819.0	1,819.0	3.4	3.2	-110.96	-1,116.5	-1,247.9	1,697.8	1,691.3	6.50	261.085			
1,900.0	1,897.8	1,918.8	1,918.8	3.6	3.3	-111.15	-1,116.5	-1,247.9	1,700.0	1,693.1	6.87	247.279			
2,000.0	1,997.7	2,018.7	2,018.7	3.8	3.5	-111.34	-1,116.5	-1,247.9	1,702.2	1,694.9	7.25	234.888			
2,100.0	2,097.5	2,118.5	2,118.5	4.0	3.7	-111.53	-1,116.5	-1,247.9	1,704.4	1,696.8	7.62	223.707			
2,200.0	2,197.3	2,218.3	2,218.3	4.2	3.9	-111.72	-1,116.5	-1,247.9	1,706.7	1,698.7	7.99	213.568			
2,300.0	2,297.1	2,318.1	2,318.1	4.4	4.0	-111.91	-1,116.5	-1,247.9	1,708.9	1,700.6	8.36	204.333			
2,400.0	2,396.9	2,417.9	2,417.9	4.6	4.2	-112.10	-1,116.5	-1,247.9	1,711.2	1,702.5	8.74	195.887			
2,500.0	2,496.7	2,517.7	2,517.7	4.8	4.4	-112.29	-1,116.5	-1,247.9	1,713.5	1,704.4	9.11	188.133			
2,600.0	2,596.5	2,617.5	2,617.5	5.0	4.6	-112.47	-1,116.5	-1,247.9	1,715.8	1,706.3	9.48	180.991			
2,700.0	2,696.4	2,717.4	2,717.4	5.2	4.7	-112.66	-1,116.5	-1,247.9	1,718.2	1,708.3	9.85	174.391			
2,800.0	2,796.2	2,817.2	2,817.2	5.4	4.9	-112.85	-1,116.5	-1,247.9	1,720.5	1,710.3	10.22	168.274			
2,900.0	2,896.0	2,917.0	2,917.0	5.6	5.1	-113.03	-1,116.5	-1,247.9	1,722.9	1,712.3	10.60	162.590			
3,000.0	2,995.8	3,016.8	3,016.8	5.8	5.3	-113.22	-1,116.5	-1,247.9	1,725.3	1,714.3	10.97	157.293			
3,100.0	3,095.6	3,116.6	3,116.6	6.0	5.4	-113.40	-1,116.5	-1,247.9	1,727.7	1,716.4	11.34	152.347			
3,200.0	3,195.4	3,216.4	3,216.4	6.2	5.6	-113.59	-1,116.5	-1,247.9	1,730.1	1,718.4	11.71	147.717			
3,300.0	3,295.2	3,316.2	3,316.2	6.4	5.8	-113.77	-1,116.5	-1,247.9	1,732.6	1,720.5	12.08	143.375			
3,400.0	3,395.1	3,416.1	3,416.1	6.6	6.0	-113.96	-1,116.5	-1,247.9	1,735.0	1,722.6	12.46	139.295			
3,500.0	3,494.9	3,515.9	3,515.9	6.8	6.1	-114.14	-1,116.5	-1,247.9	1,737.5	1,724.7	12.83	135.453			
3,600.0	3,594.7	3,615.7	3,615.7	7.0	6.3	-114.32	-1,116.5	-1,247.9	1,740.0	1,726.8	13.20	131.830			
3,700.0	3,694.5	3,715.5	3,715.5	7.2	6.5	-114.50	-1,116.5	-1,247.9	1,742.5	1,729.0	13.57	128.408			
3,800.0	3,794.3	3,815.3	3,815.3	7.4	6.7	-114.68	-1,116.5	-1,247.9	1,745.1	1,731.1	13.94	125.170			
3,900.0	3,894.1	3,915.1	3,915.1	7.6	6.8	-114.87	-1,116.5	-1,247.9	1,747.6	1,733.3	14.31	122.103			
4,000.0	3,994.0	4,015.0	4,015.0	7.8	7.0	-115.05	-1,116.5	-1,247.9	1,750.2	1,735.5	14.68	119.192			
4,100.0	4,093.8	4,114.8	4,114.8	8.0	7.2	-115.23	-1,116.5	-1,247.9	1,752.8	1,737.7	15.05	116.427			
4,200.0	4,193.6	4,214.6	4,214.6	8.2	7.4	-115.41	-1,116.5	-1,247.9	1,755.4	1,740.0	15.43	113.797			
4,300.0	4,293.4	4,314.4	4,314.4	8.4	7.5	-115.58	-1,116.5	-1,247.9	1,758.0	1,742.2	15.80	111.293			
4,400.0	4,393.2	4,414.2	4,414.2	8.6	7.7	-115.76	-1,116.5	-1,247.9	1,760.6	1,744.5	16.17	108.905			
4,500.0	4,493.0	4,514.0	4,514.0	8.8	7.9	-115.94	-1,116.5	-1,247.9	1,763.3	1,746.8	16.54	106.626			
4,600.0	4,592.8	4,613.8	4,613.8	9.0	8.1	-116.12	-1,116.5	-1,247.9	1,766.0	1,749.1	16.91	104.449			
4,700.0	4,692.7	4,713.7	4,713.7	9.3	8.2	-116.29	-1,116.5	-1,247.9	1,768.7	1,751.4	17.28	102.367			
4,800.0	4,792.5	4,813.5	4,813.5	9.5	8.4	-116.47	-1,116.5	-1,247.9	1,771.4	1,753.7	17.65	100.374			
4,900.0	4,892.3	4,913.3	4,913.3	9.7	8.6	-116.65	-1,116.5	-1,247.9	1,774.1	1,756.1	18.02	98.464			
5,000.0	4,992.1	5,013.1	5,013.1	9.9	8.7	-116.82	-1,116.5	-1,247.9	1,776.8	1,758.4	18.39	96.633			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8320-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		
5,100.0	5,091.9	5,112.9	5,112.9	10.1	8.9	-116.99	-1,116.5	-1,247.9	1,779.6	1,760.8	18.76	94.875		
5,200.0	5,191.7	5,212.7	5,212.7	10.3	9.1	-117.17	-1,116.5	-1,247.9	1,782.4	1,763.2	19.13	93.187		
5,300.0	5,291.5	5,312.5	5,312.5	10.5	9.3	-117.34	-1,116.5	-1,247.9	1,785.1	1,765.6	19.50	91.565		
5,400.0	5,391.4	5,412.4	5,412.4	10.7	9.4	-117.51	-1,116.5	-1,247.9	1,787.9	1,768.1	19.87	90.004		
5,500.0	5,491.2	5,512.2	5,512.2	10.9	9.6	-117.69	-1,116.5	-1,247.9	1,790.8	1,770.5	20.23	88.501		
5,600.0	5,591.0	5,612.0	5,612.0	11.1	9.8	-117.86	-1,116.5	-1,247.9	1,793.6	1,773.0	20.60	87.054		
5,700.0	5,690.8	5,711.8	5,711.8	11.3	10.0	-118.03	-1,116.5	-1,247.9	1,796.5	1,775.5	20.97	85.659		
5,800.0	5,790.6	5,811.6	5,811.6	11.5	10.1	-118.20	-1,116.5	-1,247.9	1,799.3	1,778.0	21.34	84.314		
5,900.0	5,890.4	5,911.4	5,911.4	11.7	10.3	-118.37	-1,116.5	-1,247.9	1,802.2	1,780.5	21.71	83.015		
6,000.0	5,990.3	6,011.3	6,011.3	11.9	10.5	-118.54	-1,116.5	-1,247.9	1,805.1	1,783.0	22.08	81.761		
6,100.0	6,090.1	6,111.1	6,111.1	12.1	10.7	-118.71	-1,116.5	-1,247.9	1,808.0	1,785.6	22.45	80.550		
6,200.0	6,189.9	6,210.9	6,210.9	12.3	10.8	-118.88	-1,116.5	-1,247.9	1,811.0	1,788.2	22.81	79.378		
6,300.0	6,289.7	6,310.7	6,310.7	12.5	11.0	-119.05	-1,116.5	-1,247.9	1,813.9	1,790.7	23.18	78.245		
6,400.0	6,389.5	6,410.5	6,410.5	12.7	11.2	-119.21	-1,116.5	-1,247.9	1,816.9	1,793.3	23.55	77.149		
6,500.0	6,489.3	6,510.3	6,510.3	12.9	11.4	-119.38	-1,116.5	-1,247.9	1,819.9	1,795.9	23.92	76.087		
6,600.0	6,589.1	6,610.1	6,610.1	13.1	11.5	-119.55	-1,116.5	-1,247.9	1,822.9	1,798.6	24.29	75.059		
6,700.0	6,689.0	6,710.0	6,710.0	13.3	11.7	-119.71	-1,116.5	-1,247.9	1,825.9	1,801.2	24.65	74.062		
6,785.3	6,774.1	6,795.1	6,795.1	13.5	11.9	-119.85	-1,116.5	-1,247.9	1,828.4	1,803.5	24.97	73.237		
6,800.0	6,788.8	6,809.8	6,809.8	13.5	11.9	-108.86	-1,116.5	-1,247.9	1,828.8	1,803.8	25.02	73.090		
6,850.0	6,838.8	6,859.8	6,859.8	13.6	12.0	1.65	-1,116.5	-1,247.9	1,828.1	1,802.9	25.16	72.658		
6,900.0	6,888.6	6,909.6	6,909.6	13.6	12.1	23.79	-1,116.5	-1,247.9	1,824.6	1,799.3	25.24	72.299		
6,950.0	6,938.1	6,959.1	6,959.1	13.7	12.1	29.32	-1,116.5	-1,247.9	1,818.3	1,793.0	25.25	72.007		
7,000.0	6,987.0	7,008.0	7,008.0	13.7	12.2	32.17	-1,116.5	-1,247.9	1,809.3	1,784.1	25.21	71.770		
7,050.0	7,035.0	7,056.0	7,056.0	13.6	12.3	34.24	-1,116.5	-1,247.9	1,797.6	1,772.5	25.12	71.573		
7,100.0	7,082.0	7,103.0	7,103.0	13.6	12.4	36.08	-1,116.5	-1,247.9	1,783.3	1,758.3	24.98	71.392		
7,150.0	7,127.7	7,148.7	7,148.7	13.5	12.5	37.93	-1,116.5	-1,247.9	1,766.6	1,741.7	24.81	71.199		
7,200.0	7,171.8	7,192.8	7,192.8	13.5	12.6	39.88	-1,116.5	-1,247.9	1,747.4	1,722.8	24.63	70.952		
7,250.0	7,214.2	7,235.2	7,235.2	13.4	12.6	42.02	-1,116.5	-1,247.9	1,726.1	1,701.6	24.45	70.604		
7,300.0	7,254.6	7,275.6	7,275.6	13.4	12.7	44.37	-1,116.5	-1,247.9	1,702.7	1,678.4	24.29	70.097		
7,350.0	7,292.9	7,313.9	7,313.9	13.3	12.8	46.98	-1,116.5	-1,247.9	1,677.4	1,653.2	24.18	69.369		
7,400.0	7,328.9	7,349.9	7,349.9	13.3	12.8	49.87	-1,116.5	-1,247.9	1,650.4	1,626.3	24.14	68.361		
7,450.0	7,362.3	7,383.3	7,383.3	13.3	12.9	53.03	-1,116.5	-1,247.9	1,621.9	1,597.8	24.20	67.030		
7,500.0	7,393.1	7,414.1	7,414.1	13.4	12.9	56.47	-1,116.5	-1,247.9	1,592.2	1,567.9	24.36	65.361		
7,550.0	7,421.1	7,442.1	7,442.1	13.5	13.0	60.15	-1,116.5	-1,247.9	1,561.5	1,536.9	24.64	63.377		
7,600.0	7,446.1	7,467.1	7,467.1	13.6	13.0	64.03	-1,116.5	-1,247.9	1,530.0	1,505.0	25.02	61.143		
7,650.0	7,468.0	7,489.0	7,489.0	13.8	13.1	68.05	-1,116.5	-1,247.9	1,498.1	1,472.6	25.50	58.752		
7,700.0	7,486.7	7,507.7	7,507.7	14.0	13.1	72.11	-1,116.5	-1,247.9	1,465.8	1,439.8	26.03	56.311		
7,750.0	7,502.2	7,523.2	7,523.2	14.2	13.1	76.13	-1,116.5	-1,247.9	1,433.7	1,407.1	26.59	53.913		
7,800.0	7,514.3	7,535.3	7,535.3	14.6	13.2	80.00	-1,116.5	-1,247.9	1,401.8	1,374.7	27.15	51.629		
7,850.0	7,523.0	7,544.0	7,544.0	14.9	13.2	83.65	-1,116.5	-1,247.9	1,370.6	1,342.9	27.69	49.498		
7,900.0	7,528.2	7,549.2	7,549.2	15.3	13.2	87.00	-1,116.5	-1,247.9	1,340.2	1,312.0	28.19	47.533		
7,950.2	7,530.0	7,551.0	7,551.0	15.8	13.2	90.00	-1,116.5	-1,247.9	1,310.7	1,282.1	28.67	45.720		
8,000.0	7,530.0	7,551.0	7,551.0	16.2	13.2	90.00	-1,116.5	-1,247.9	1,282.9	1,253.7	29.15	44.006		
8,100.0	7,530.0	7,551.0	7,551.0	17.3	13.2	90.00	-1,116.5	-1,247.9	1,231.0	1,200.8	30.22	40.739		
8,200.0	7,530.0	7,551.0	7,551.0	18.4	13.2	90.00	-1,116.5	-1,247.9	1,185.4	1,154.0	31.39	37.764		
8,300.0	7,530.0	7,551.0	7,551.0	19.7	13.2	90.00	-1,116.5	-1,247.9	1,146.7	1,114.1	32.65	35.121		
8,400.0	7,530.0	7,551.0	7,551.0	21.0	13.2	90.00	-1,116.5	-1,247.9	1,115.6	1,081.7	33.98	32.830		
8,500.0	7,530.0	7,551.0	7,551.0	22.4	13.2	90.00	-1,116.5	-1,247.9	1,092.9	1,057.5	35.37	30.896		
8,600.0	7,530.0	7,551.0	7,551.0	23.8	13.2	90.00	-1,116.5	-1,247.9	1,078.9	1,042.1	36.81	29.310		
8,700.0	7,530.0	7,551.0	7,551.0	25.3	13.2	90.00	-1,116.5	-1,247.9	1,074.2	1,035.9	38.29	28.053		
8,701.4	7,530.0	7,551.0	7,551.0	25.3	13.2	90.00	-1,116.5	-1,247.9	1,074.2	1,035.9	38.31	28.038	CC, ES	
8,800.0	7,530.0	7,551.0	7,551.0	26.8	13.2	90.00	-1,116.5	-1,247.9	1,078.7	1,038.9	39.80	27.100		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8320-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	7,530.0	7,551.0	7,551.0	28.3	13.2	90.00	-1,116.5	-1,247.9	1,092.4	1,051.0	41.34	26.422		
9,000.0	7,530.0	7,551.0	7,551.0	29.9	13.2	90.00	-1,116.5	-1,247.9	1,114.9	1,072.0	42.91	25.984		
9,100.0	7,530.0	7,551.0	7,551.0	31.4	13.2	90.00	-1,116.5	-1,247.9	1,145.7	1,101.3	44.49	25.752		
9,200.0	7,530.0	7,551.0	7,551.0	33.0	13.2	90.00	-1,116.5	-1,247.9	1,184.3	1,138.2	46.09	25.692 SF		
9,300.0	7,530.0	7,551.0	7,551.0	34.7	13.2	90.00	-1,116.5	-1,247.9	1,229.7	1,182.0	47.71	25.775		
9,400.0	7,530.0	7,551.0	7,551.0	36.3	13.2	90.00	-1,116.5	-1,247.9	1,281.4	1,232.0	49.34	25.971		
9,500.0	7,530.0	7,551.0	7,551.0	37.9	13.2	90.00	-1,116.5	-1,247.9	1,338.5	1,287.5	50.98	26.256		
9,600.0	7,530.0	7,551.0	7,551.0	39.6	13.2	90.00	-1,116.5	-1,247.9	1,400.5	1,347.9	52.63	26.610		
9,700.0	7,530.0	7,551.0	7,551.0	41.2	13.2	90.00	-1,116.5	-1,247.9	1,466.7	1,412.4	54.29	27.016		
9,800.0	7,530.0	7,551.0	7,551.0	42.9	13.2	90.00	-1,116.5	-1,247.9	1,536.5	1,480.5	55.95	27.460		
9,900.0	7,530.0	7,551.0	7,551.0	44.5	13.2	90.00	-1,116.5	-1,247.9	1,609.5	1,551.9	57.63	27.929		
10,000.0	7,530.0	7,551.0	7,551.0	46.2	13.2	90.00	-1,116.5	-1,247.9	1,685.3	1,626.0	59.31	28.417		
10,100.0	7,530.0	7,551.0	7,551.0	47.9	13.2	90.00	-1,116.5	-1,247.9	1,763.5	1,702.5	60.99	28.914		
10,200.0	7,530.0	7,551.0	7,551.0	49.6	13.2	90.00	-1,116.5	-1,247.9	1,843.8	1,781.2	62.68	29.416		
10,300.0	7,530.0	7,551.0	7,551.0	51.3	13.2	90.00	-1,116.5	-1,247.9	1,926.0	1,861.6	64.37	29.918		
10,400.0	7,530.0	7,551.0	7,551.0	53.0	13.2	90.00	-1,116.5	-1,247.9	2,009.8	1,943.7	66.07	30.418		
10,500.0	7,530.0	7,551.0	7,551.0	54.7	13.2	90.00	-1,116.5	-1,247.9	2,095.0	2,027.2	67.77	30.911		
10,600.0	7,530.0	7,551.0	7,551.0	56.4	13.2	90.00	-1,116.5	-1,247.9	2,181.4	2,111.9	69.48	31.397		
10,700.0	7,530.0	7,551.0	7,551.0	58.1	13.2	90.00	-1,116.5	-1,247.9	2,269.0	2,197.8	71.19	31.874		
10,800.0	7,530.0	7,551.0	7,551.0	59.8	13.2	90.00	-1,116.5	-1,247.9	2,357.6	2,284.7	72.90	32.342		
10,900.0	7,530.0	7,551.0	7,551.0	61.5	13.2	90.00	-1,116.5	-1,247.9	2,447.0	2,372.4	74.61	32.798		
11,000.0	7,530.0	7,551.0	7,551.0	63.2	13.2	90.00	-1,116.5	-1,247.9	2,537.2	2,460.9	76.32	33.243		
11,100.0	7,530.0	7,551.0	7,551.0	64.9	13.2	90.00	-1,116.5	-1,247.9	2,628.2	2,550.1	78.04	33.677		
11,200.0	7,530.0	7,551.0	7,551.0	66.6	13.2	90.00	-1,116.5	-1,247.9	2,719.7	2,640.0	79.76	34.099		
11,300.0	7,530.0	7,551.0	7,551.0	68.4	13.2	90.00	-1,116.5	-1,247.9	2,811.9	2,730.4	81.48	34.510		
11,400.0	7,530.0	7,551.0	7,551.0	70.1	13.2	90.00	-1,116.5	-1,247.9	2,904.6	2,821.4	83.20	34.910		
11,500.0	7,530.0	7,551.0	7,551.0	71.8	13.2	90.00	-1,116.5	-1,247.9	2,997.7	2,912.8	84.93	35.298		
11,600.0	7,530.0	7,551.0	7,551.0	73.5	13.2	90.00	-1,116.5	-1,247.9	3,091.3	3,004.6	86.65	35.675		
11,700.0	7,530.0	7,551.0	7,551.0	75.3	13.2	90.00	-1,116.5	-1,247.9	3,185.2	3,096.8	88.38	36.041		
11,800.0	7,530.0	7,551.0	7,551.0	77.0	13.2	90.00	-1,116.5	-1,247.9	3,279.5	3,189.4	90.11	36.396		
11,900.0	7,530.0	7,551.0	7,551.0	78.7	13.2	90.00	-1,116.5	-1,247.9	3,374.2	3,282.3	91.83	36.742		
12,000.0	7,530.0	7,551.0	7,551.0	80.4	13.2	90.00	-1,116.5	-1,247.9	3,469.1	3,375.6	93.56	37.077		
12,100.0	7,530.0	7,551.0	7,551.0	82.2	13.2	90.00	-1,116.5	-1,247.9	3,564.3	3,469.0	95.30	37.403		
12,200.0	7,530.0	7,551.0	7,551.0	83.9	13.2	90.00	-1,116.5	-1,247.9	3,659.8	3,562.8	97.03	37.719		
12,300.0	7,530.0	7,551.0	7,551.0	85.6	13.2	90.00	-1,116.5	-1,247.9	3,755.5	3,656.8	98.76	38.026		
12,400.0	7,530.0	7,551.0	7,551.0	87.4	13.2	90.00	-1,116.5	-1,247.9	3,851.5	3,751.0	100.50	38.325		
12,500.0	7,530.0	7,551.0	7,551.0	89.1	13.2	90.00	-1,116.5	-1,247.9	3,947.6	3,845.4	102.23	38.615		
12,600.0	7,530.0	7,551.0	7,551.0	90.8	13.2	90.00	-1,116.5	-1,247.9	4,043.9	3,939.9	103.97	38.897		
12,700.0	7,530.0	7,551.0	7,551.0	92.6	13.2	90.00	-1,116.5	-1,247.9	4,140.4	4,034.7	105.70	39.171		
12,800.0	7,530.0	7,551.0	7,551.0	94.3	13.2	90.00	-1,116.5	-1,247.9	4,237.1	4,129.6	107.44	39.437		
12,900.0	7,530.0	7,551.0	7,551.0	96.0	13.2	90.00	-1,116.5	-1,247.9	4,333.9	4,224.7	109.18	39.696		
13,000.0	7,530.0	7,551.0	7,551.0	97.8	13.2	90.00	-1,116.5	-1,247.9	4,430.8	4,319.9	110.91	39.948		
13,100.0	7,530.0	7,551.0	7,551.0	99.5	13.2	90.00	-1,116.5	-1,247.9	4,527.9	4,415.2	112.65	40.194		
13,200.0	7,530.0	7,551.0	7,551.0	101.3	13.2	90.00	-1,116.5	-1,247.9	4,625.1	4,510.7	114.39	40.432		
13,300.0	7,530.0	7,551.0	7,551.0	103.0	13.2	90.00	-1,116.5	-1,247.9	4,722.4	4,606.3	116.13	40.665		
13,400.0	7,530.0	7,551.0	7,551.0	104.7	13.2	90.00	-1,116.5	-1,247.9	4,819.9	4,702.0	117.87	40.891		
13,500.0	7,530.0	7,551.0	7,551.0	106.5	13.2	90.00	-1,116.5	-1,247.9	4,917.4	4,797.8	119.61	41.111		
13,600.0	7,530.0	7,551.0	7,551.0	108.2	13.2	90.00	-1,116.5	-1,247.9	5,015.0	4,893.7	121.35	41.326		
13,700.0	7,530.0	7,551.0	7,551.0	110.0	13.2	90.00	-1,116.5	-1,247.9	5,112.7	4,989.6	123.09	41.535		
13,800.0	7,530.0	7,551.0	7,551.0	111.7	13.2	90.00	-1,116.5	-1,247.9	5,210.6	5,085.7	124.84	41.739		
13,900.0	7,530.0	7,551.0	7,551.0	113.4	13.2	90.00	-1,116.5	-1,247.9	5,308.4	5,181.9	126.58	41.938		
14,000.0	7,530.0	7,551.0	7,551.0	115.2	13.2	90.00	-1,116.5	-1,247.9	5,406.4	5,278.1	128.32	42.132		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - N													Offset Site Error: 0.0 ft	
Survey Program: 8320-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	7,530.0	7,551.0	7,551.0	116.9	13.2	90.00	-1,116.5	-1,247.9	5,504.5	5,374.4	130.06	42.322		
14,200.0	7,530.0	7,551.0	7,551.0	118.7	13.2	90.00	-1,116.5	-1,247.9	5,602.6	5,470.8	131.81	42.506		
14,300.0	7,530.0	7,551.0	7,551.0	120.4	13.2	90.00	-1,116.5	-1,247.9	5,700.7	5,567.2	133.55	42.686		
14,400.0	7,530.0	7,551.0	7,551.0	122.1	13.2	90.00	-1,116.5	-1,247.9	5,799.0	5,663.7	135.29	42.862		
14,500.0	7,530.0	7,551.0	7,551.0	123.9	13.2	90.00	-1,116.5	-1,247.9	5,897.3	5,760.2	137.04	43.034		
14,600.0	7,530.0	7,551.0	7,551.0	125.6	13.2	90.00	-1,116.5	-1,247.9	5,995.6	5,856.9	138.78	43.202		
14,700.0	7,530.0	7,551.0	7,551.0	127.4	13.2	90.00	-1,116.5	-1,247.9	6,094.0	5,953.5	140.53	43.366		
14,800.0	7,530.0	7,551.0	7,551.0	129.1	13.2	90.00	-1,116.5	-1,247.9	6,192.5	6,050.2	142.27	43.526		
14,900.0	7,530.0	7,551.0	7,551.0	130.9	13.2	90.00	-1,116.5	-1,247.9	6,291.0	6,147.0	144.02	43.683		
15,000.0	7,530.0	7,551.0	7,551.0	132.6	13.2	90.00	-1,116.5	-1,247.9	6,389.6	6,243.8	145.76	43.836		
15,100.0	7,530.0	7,551.0	7,551.0	134.4	13.2	90.00	-1,116.5	-1,247.9	6,488.2	6,340.7	147.51	43.985		
15,200.0	7,530.0	7,551.0	7,551.0	136.1	13.2	90.00	-1,116.5	-1,247.9	6,586.8	6,437.6	149.25	44.132		
15,300.0	7,530.0	7,551.0	7,551.0	137.9	13.2	90.00	-1,116.5	-1,247.9	6,685.5	6,534.5	151.00	44.275		
15,400.0	7,530.0	7,551.0	7,551.0	139.6	13.2	90.00	-1,116.5	-1,247.9	6,784.2	6,631.5	152.75	44.415		
15,500.0	7,530.0	7,551.0	7,551.0	141.3	13.2	90.00	-1,116.5	-1,247.9	6,883.0	6,728.5	154.49	44.552		
15,600.0	7,530.0	7,551.0	7,551.0	143.1	13.2	90.00	-1,116.5	-1,247.9	6,981.8	6,825.5	156.24	44.686		
15,700.0	7,530.0	7,551.0	7,551.0	144.8	13.2	90.00	-1,116.5	-1,247.9	7,080.6	6,922.6	157.99	44.818		
15,800.0	7,530.0	7,551.0	7,551.0	146.6	13.2	90.00	-1,116.5	-1,247.9	7,179.4	7,019.7	159.73	44.947		
15,900.0	7,530.0	7,551.0	7,551.0	148.3	13.2	90.00	-1,116.5	-1,247.9	7,278.3	7,116.9	161.48	45.073		
16,000.0	7,530.0	7,551.0	7,551.0	150.1	13.2	90.00	-1,116.5	-1,247.9	7,377.3	7,214.0	163.23	45.196		
16,100.0	7,530.0	7,551.0	7,551.0	151.8	13.2	90.00	-1,116.5	-1,247.9	7,476.2	7,311.2	164.97	45.317		
16,200.0	7,530.0	7,551.0	7,551.0	153.6	13.2	90.00	-1,116.5	-1,247.9	7,575.2	7,408.5	166.72	45.436		
16,300.0	7,530.0	7,551.0	7,551.0	155.3	13.2	90.00	-1,116.5	-1,247.9	7,674.2	7,505.7	168.47	45.552		
16,400.0	7,530.0	7,551.0	7,551.0	157.1	13.2	90.00	-1,116.5	-1,247.9	7,773.2	7,603.0	170.22	45.666		
16,500.0	7,530.0	7,551.0	7,551.0	158.8	13.2	90.00	-1,116.5	-1,247.9	7,872.3	7,700.3	171.97	45.778		
16,600.0	7,530.0	7,551.0	7,551.0	160.6	13.2	90.00	-1,116.5	-1,247.9	7,971.3	7,797.6	173.71	45.888		
16,700.0	7,530.0	7,551.0	7,551.0	162.3	13.2	90.00	-1,116.5	-1,247.9	8,070.4	7,895.0	175.46	45.995		
16,800.0	7,530.0	7,551.0	7,551.0	164.1	13.2	90.00	-1,116.5	-1,247.9	8,169.6	7,992.3	177.21	46.101		
16,900.0	7,530.0	7,551.0	7,551.0	165.8	13.2	90.00	-1,116.5	-1,247.9	8,268.7	8,089.7	178.96	46.204		
17,000.0	7,530.0	7,551.0	7,551.0	167.6	13.2	90.00	-1,116.5	-1,247.9	8,367.9	8,187.2	180.71	46.306		
17,100.0	7,530.0	7,551.0	7,551.0	169.3	13.2	90.00	-1,116.5	-1,247.9	8,467.0	8,284.6	182.46	46.406		
17,200.0	7,530.0	7,551.0	7,551.0	171.1	13.2	90.00	-1,116.5	-1,247.9	8,566.2	8,382.0	184.21	46.504		
17,300.0	7,530.0	7,551.0	7,551.0	172.8	13.2	90.00	-1,116.5	-1,247.9	8,665.5	8,479.5	185.95	46.600		
17,400.0	7,530.0	7,551.0	7,551.0	174.5	13.2	90.00	-1,116.5	-1,247.9	8,764.7	8,577.0	187.70	46.694		
17,411.2	7,530.0	7,551.0	7,551.0	174.7	13.2	90.00	-1,116.5	-1,247.9	8,775.9	8,588.0	187.90	46.705		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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	21.4	21.4	0.0	0.0	-107.73	-1,068.2	-3,340.8	3,507.4						
100.0	100.0	183.0	183.0	0.2	0.3	-107.74	-1,067.8	-3,338.6	3,505.9	3,505.5	0.47	7,434.444			
200.0	200.0	258.7	258.7	0.3	0.5	-107.74	-1,067.6	-3,337.1	3,504.1	3,503.3	0.78	4,502.738			
300.0	300.0	330.1	330.1	0.5	0.6	-107.74	-1,067.5	-3,336.5	3,503.2	3,502.1	1.08	3,251.478			
400.0	400.0	410.6	410.5	0.7	0.7	-107.74	-1,067.5	-3,336.3	3,502.9	3,501.5	1.39	2,515.922			
500.0	500.0	512.7	512.7	0.8	0.9	-107.74	-1,067.1	-3,336.3	3,502.8	3,501.1	1.75	2,006.936			
600.0	600.0	605.0	605.0	1.0	1.1	-84.74	-1,066.9	-3,336.4	3,502.8	3,500.7	2.08	1,683.306			
700.0	700.0	700.0	700.0	1.2	1.2	-84.78	-1,066.9	-3,336.6	3,502.7	3,500.3	2.42	1,444.902			
702.9	702.8	700.0	700.0	1.2	1.2	-84.78	-1,066.9	-3,336.6	3,502.7	3,500.3	2.43	1,441.777			
800.0	799.9	773.4	773.3	1.4	1.4	-84.82	-1,067.0	-3,337.0	3,502.9	3,500.2	2.74	1,280.632			
848.7	848.4	811.6	811.6	1.5	1.4	-84.85	-1,067.1	-3,337.5	3,503.3	3,500.4	2.89	1,210.713			
900.0	899.7	866.2	866.1	1.6	1.5	-84.91	-1,067.1	-3,338.2	3,503.7	3,500.6	3.09	1,135.205			
1,000.0	999.5	965.6	965.5	1.8	1.7	-85.00	-1,067.0	-3,339.6	3,504.4	3,500.9	3.45	1,015.086			
1,100.0	1,099.3	1,066.0	1,065.9	2.0	1.9	-85.09	-1,067.3	-3,340.8	3,505.1	3,501.3	3.82	917.006			
1,200.0	1,199.1	1,156.9	1,156.9	2.2	2.0	-85.18	-1,067.6	-3,341.9	3,505.9	3,501.7	4.18	839.216			
1,300.0	1,298.9	1,246.8	1,246.7	2.4	2.2	-85.27	-1,067.9	-3,343.4	3,507.1	3,502.5	4.53	773.790			
1,400.0	1,398.8	1,354.3	1,354.2	2.6	2.4	-85.37	-1,068.0	-3,345.4	3,508.3	3,503.4	4.92	713.240			
1,500.0	1,498.6	1,464.2	1,464.1	2.8	2.6	-85.46	-1,067.6	-3,347.1	3,509.2	3,503.9	5.31	660.781			
1,600.0	1,598.4	1,558.6	1,558.5	3.0	2.7	-85.54	-1,067.1	-3,348.5	3,510.0	3,504.3	5.68	618.403			
1,700.0	1,698.2	1,668.5	1,668.4	3.2	2.9	-85.63	-1,066.6	-3,350.3	3,511.0	3,504.9	6.07	578.508			
1,800.0	1,798.0	1,775.9	1,775.8	3.4	3.1	-85.72	-1,065.7	-3,351.7	3,511.5	3,505.0	6.46	543.705			
1,900.0	1,897.8	1,871.3	1,871.1	3.6	3.3	-85.79	-1,064.8	-3,353.0	3,512.0	3,505.2	6.83	514.410			
2,000.0	1,997.7	1,976.6	1,976.4	3.8	3.5	-85.87	-1,063.5	-3,354.6	3,512.6	3,505.3	7.21	486.902			
2,100.0	2,097.5	2,107.9	2,107.6	4.0	3.7	-85.95	-1,061.3	-3,356.0	3,512.6	3,505.0	7.65	459.308			
2,200.0	2,197.3	2,221.0	2,220.7	4.2	3.9	-86.02	-1,058.7	-3,356.6	3,512.0	3,503.9	8.05	436.275			
2,300.0	2,297.1	2,326.2	2,325.9	4.4	4.1	-86.09	-1,056.3	-3,356.9	3,511.0	3,502.6	8.44	416.080			
2,400.0	2,396.9	2,417.8	2,417.5	4.6	4.2	-86.15	-1,054.5	-3,357.1	3,510.2	3,501.4	8.80	398.777			
2,500.0	2,496.7	2,514.1	2,513.8	4.8	4.4	-86.22	-1,053.2	-3,357.3	3,509.6	3,500.4	9.17	382.542			
2,600.0	2,596.5	2,608.3	2,608.0	5.0	4.6	-86.30	-1,052.2	-3,357.5	3,509.0	3,499.5	9.54	367.731			
2,700.0	2,696.4	2,700.0	2,699.7	5.2	4.7	-86.38	-1,051.4	-3,357.9	3,508.7	3,498.8	9.91	354.196			
2,800.0	2,796.2	2,806.9	2,806.5	5.4	4.9	-86.47	-1,050.5	-3,358.3	3,508.4	3,498.1	10.30	340.739			
2,900.0	2,896.0	2,900.0	2,899.7	5.6	5.1	-86.55	-1,049.8	-3,358.8	3,508.3	3,497.6	10.66	329.012			
2,916.7	2,912.6	2,907.8	2,907.5	5.6	5.1	-86.55	-1,049.8	-3,358.8	3,508.3	3,497.5	10.71	327.548			
3,000.0	2,995.8	2,978.3	2,978.0	5.8	5.2	-86.61	-1,049.1	-3,359.5	3,508.5	3,497.5	11.00	318.831			
3,100.0	3,095.6	3,077.8	3,077.5	6.0	5.4	-86.69	-1,048.2	-3,360.7	3,509.0	3,497.6	11.38	308.279			
3,200.0	3,195.4	3,168.5	3,168.2	6.2	5.6	-86.76	-1,047.5	-3,361.8	3,509.5	3,497.8	11.75	298.806			
3,300.0	3,295.2	3,262.4	3,262.1	6.4	5.7	-86.83	-1,046.8	-3,363.3	3,510.3	3,498.2	12.11	289.779			
3,400.0	3,395.1	3,371.2	3,370.8	6.6	5.9	-86.92	-1,045.6	-3,365.0	3,511.2	3,498.7	12.51	280.684			
3,500.0	3,494.9	3,499.8	3,499.4	6.8	6.1	-87.01	-1,043.9	-3,366.5	3,511.5	3,498.5	12.94	271.372			
3,600.0	3,594.7	3,631.4	3,630.9	7.0	6.4	-87.10	-1,041.5	-3,366.9	3,510.9	3,497.5	13.38	262.462			
3,700.0	3,694.5	3,735.6	3,735.1	7.2	6.6	-87.16	-1,038.7	-3,366.8	3,509.5	3,495.8	13.77	254.944			
3,800.0	3,794.3	3,811.5	3,811.0	7.4	6.7	-87.20	-1,036.8	-3,367.1	3,508.7	3,494.6	14.10	248.767			
3,900.0	3,894.1	3,900.0	3,899.5	7.6	6.8	-87.27	-1,035.3	-3,367.6	3,508.3	3,493.9	14.46	242.557			
3,957.3	3,951.3	3,951.3	3,950.8	7.7	6.9	-87.31	-1,034.7	-3,367.9	3,508.3	3,493.6	14.67	239.132			
4,000.0	3,994.0	3,986.5	3,985.9	7.8	7.0	-87.33	-1,034.3	-3,368.2	3,508.3	3,493.5	14.82	236.732			
4,100.0	4,093.8	4,058.1	4,057.6	8.0	7.1	-87.39	-1,033.8	-3,369.0	3,508.9	3,493.8	15.15	231.629			
4,200.0	4,193.6	4,138.5	4,138.0	8.2	7.3	-87.46	-1,033.8	-3,370.5	3,510.3	3,494.9	15.49	226.564			
4,300.0	4,293.4	4,243.8	4,243.2	8.4	7.5	-87.55	-1,033.3	-3,372.8	3,512.0	3,496.1	15.88	221.123			
4,400.0	4,393.2	4,358.1	4,357.5	8.6	7.7	-87.65	-1,033.3	-3,374.6	3,513.2	3,496.9	16.29	215.721			
4,500.0	4,493.0	4,444.8	4,444.2	8.8	7.8	-87.73	-1,033.2	-3,375.9	3,514.3	3,497.7	16.64	211.172			
4,600.0	4,592.8	4,530.6	4,530.0	9.0	8.0	-87.79	-1,032.7	-3,378.0	3,516.1	3,499.1	17.00	206.853			
4,700.0	4,692.7	4,650.1	4,649.4	9.3	8.2	-87.86	-1,030.8	-3,380.9	3,517.6	3,500.2	17.41	201.995			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
4,800.0	4,792.5	4,747.5	4,746.9	9.5	8.3	-87.94	-1,029.8	-3,382.8	3,518.8	3,501.0	17.79	197.798		
4,900.0	4,892.3	4,857.3	4,856.6	9.7	8.5	-88.02	-1,029.1	-3,385.0	3,520.2	3,502.1	18.19	193.568		
5,000.0	4,992.1	4,959.0	4,958.2	9.9	8.7	-88.12	-1,029.4	-3,386.1	3,521.1	3,502.6	18.57	189.648		
5,100.0	5,091.9	5,054.9	5,054.2	10.1	8.9	-88.21	-1,029.7	-3,387.4	3,522.3	3,503.4	18.94	185.989		
5,200.0	5,191.7	5,151.1	5,150.3	10.3	9.1	-88.29	-1,029.4	-3,388.9	3,523.5	3,504.2	19.31	182.458		
5,300.0	5,291.5	5,239.9	5,239.2	10.5	9.2	-88.36	-1,028.9	-3,390.6	3,524.9	3,505.3	19.67	179.190		
5,400.0	5,391.4	5,366.0	5,365.3	10.7	9.4	-88.47	-1,028.4	-3,393.1	3,526.5	3,506.4	20.10	175.473		
5,500.0	5,491.2	5,472.4	5,471.6	10.9	9.6	-88.55	-1,027.7	-3,394.2	3,527.1	3,506.6	20.49	172.157		
5,600.0	5,591.0	5,569.3	5,568.5	11.1	9.8	-88.64	-1,027.4	-3,395.3	3,527.8	3,507.0	20.86	169.108		
5,700.0	5,690.8	5,656.6	5,655.8	11.3	9.9	-88.71	-1,026.9	-3,396.4	3,528.7	3,507.5	21.22	166.300		
5,800.0	5,790.6	5,741.1	5,740.2	11.5	10.1	-88.78	-1,026.4	-3,398.0	3,530.1	3,508.5	21.57	163.646		
5,900.0	5,890.4	5,835.3	5,834.4	11.7	10.3	-88.85	-1,026.0	-3,400.1	3,531.8	3,509.9	21.94	160.966		
6,000.0	5,990.3	5,943.3	5,942.4	11.9	10.5	-88.93	-1,025.4	-3,402.3	3,533.5	3,511.2	22.34	158.200		
6,100.0	6,090.1	6,036.7	6,035.8	12.1	10.6	-89.01	-1,025.0	-3,404.1	3,535.0	3,512.3	22.70	155.701		
6,200.0	6,189.9	6,116.0	6,115.0	12.3	10.8	-89.08	-1,025.0	-3,406.0	3,537.0	3,514.0	23.05	153.473		
6,300.0	6,289.7	6,217.5	6,216.6	12.5	10.9	-89.16	-1,025.1	-3,408.5	3,539.3	3,515.9	23.43	151.069		
6,400.0	6,389.5	6,330.8	6,329.8	12.7	11.1	-89.26	-1,025.2	-3,411.2	3,541.5	3,517.6	23.83	148.605		
6,500.0	6,489.3	6,445.1	6,444.1	12.9	11.3	-89.36	-1,025.1	-3,413.4	3,543.1	3,518.8	24.24	146.188		
6,600.0	6,589.1	6,563.9	6,562.9	13.1	11.6	-89.44	-1,023.9	-3,415.6	3,544.4	3,519.8	24.65	143.789		
6,700.0	6,689.0	6,665.5	6,664.4	13.3	11.7	-89.52	-1,023.2	-3,416.9	3,545.2	3,520.2	25.03	141.624		
6,785.3	6,774.1	6,748.8	6,747.8	13.5	11.9	-89.59	-1,022.6	-3,418.0	3,546.1	3,520.7	25.35	139.869		
6,800.0	6,788.8	6,764.3	6,763.3	13.5	11.9	-78.57	-1,022.6	-3,418.2	3,546.2	3,520.8	25.41	139.571		
6,850.0	6,838.8	6,812.3	6,811.2	13.6	12.0	31.97	-1,022.5	-3,418.8	3,545.6	3,520.0	25.55	138.773		
6,900.0	6,888.6	6,850.5	6,849.4	13.6	12.1	54.08	-1,022.4	-3,419.3	3,543.7	3,518.1	25.63	138.242		
6,950.0	6,938.1	6,900.0	6,898.9	13.7	12.2	59.54	-1,022.3	-3,420.2	3,540.7	3,515.0	25.70	137.765		
7,000.0	6,987.0	6,931.2	6,930.1	13.7	12.2	62.19	-1,022.3	-3,420.9	3,536.4	3,510.7	25.70	137.592		
7,050.0	7,035.0	6,975.5	6,974.4	13.6	12.3	64.02	-1,022.1	-3,421.9	3,531.0	3,505.3	25.70	137.401		
7,100.0	7,082.0	7,027.0	7,025.9	13.6	12.4	65.58	-1,021.9	-3,423.1	3,524.4	3,498.7	25.69	137.211		
7,150.0	7,127.7	7,087.7	7,086.6	13.5	12.5	67.09	-1,021.8	-3,424.2	3,516.5	3,490.8	25.68	136.953		
7,200.0	7,171.8	7,124.2	7,123.1	13.5	12.5	68.44	-1,022.0	-3,424.7	3,507.4	3,481.8	25.62	136.904		
7,250.0	7,214.2	7,153.5	7,152.4	13.4	12.6	69.74	-1,022.1	-3,425.3	3,497.6	3,472.0	25.55	136.868		
7,300.0	7,254.6	7,181.6	7,180.5	13.4	12.6	71.05	-1,022.2	-3,425.9	3,487.1	3,461.6	25.50	136.742		
7,350.0	7,292.9	7,200.0	7,198.9	13.3	12.7	72.30	-1,022.2	-3,426.4	3,475.9	3,450.5	25.45	136.571		
7,400.0	7,328.9	7,235.5	7,234.4	13.3	12.7	73.77	-1,022.4	-3,427.4	3,464.3	3,438.8	25.47	136.015		
7,450.0	7,362.3	7,260.5	7,259.4	13.3	12.8	75.16	-1,022.6	-3,428.1	3,452.2	3,426.7	25.51	135.343		
7,500.0	7,393.1	7,283.7	7,282.5	13.4	12.8	76.56	-1,022.8	-3,428.9	3,439.8	3,414.2	25.59	134.433		
7,550.0	7,421.1	7,300.0	7,298.8	13.5	12.9	77.88	-1,023.0	-3,429.4	3,427.2	3,401.5	25.70	133.332		
7,600.0	7,446.1	7,300.0	7,298.8	13.6	12.9	78.97	-1,023.0	-3,429.4	3,414.7	3,388.8	25.84	132.157		
7,650.0	7,468.0	7,331.8	7,330.6	13.8	12.9	80.53	-1,023.5	-3,430.6	3,402.0	3,375.9	26.10	130.346		
7,700.0	7,486.7	7,343.5	7,342.3	14.0	12.9	81.78	-1,023.8	-3,431.1	3,389.5	3,363.2	26.37	128.536		
7,750.0	7,502.2	7,353.6	7,352.3	14.2	13.0	82.98	-1,024.1	-3,431.5	3,377.3	3,350.6	26.69	126.540		
7,800.0	7,514.3	7,361.8	7,360.6	14.6	13.0	84.12	-1,024.4	-3,431.8	3,365.4	3,338.4	27.05	124.396		
7,850.0	7,523.0	7,368.2	7,366.9	14.9	13.0	85.19	-1,024.6	-3,432.1	3,353.9	3,326.5	27.46	122.146		
7,900.0	7,528.2	7,372.6	7,371.3	15.3	13.0	86.18	-1,024.8	-3,432.3	3,342.9	3,315.0	27.90	119.828		
7,950.2	7,530.0	7,621.6	7,619.6	15.8	13.4	91.40	-1,042.6	-3,431.9	3,332.3	3,303.5	28.79	115.765		
8,000.0	7,530.0	7,623.1	7,621.0	16.2	13.4	91.42	-1,042.6	-3,431.9	3,322.3	3,293.1	29.27	113.503		
8,100.0	7,530.0	7,626.0	7,623.9	17.3	13.4	91.48	-1,042.8	-3,431.8	3,304.4	3,274.1	30.34	108.912		
8,200.0	7,530.0	7,628.7	7,626.7	18.4	13.4	91.52	-1,042.9	-3,431.7	3,289.5	3,258.0	31.52	104.372		
8,300.0	7,530.0	7,631.4	7,629.4	19.7	13.4	91.57	-1,043.0	-3,431.6	3,277.5	3,244.7	32.78	99.984		
8,400.0	7,530.0	7,634.0	7,631.9	21.0	13.4	91.62	-1,043.1	-3,431.5	3,268.6	3,234.4	34.12	95.808		
8,500.0	7,530.0	7,636.4	7,634.4	22.4	13.4	91.66	-1,043.2	-3,431.4	3,262.6	3,227.1	35.51	91.881		
8,600.0	7,530.0	7,638.8	7,636.7	23.8	13.4	91.70	-1,043.3	-3,431.4	3,259.8	3,222.8	36.95	88.218		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	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		
8,643.5	7,530.0	7,639.8	7,637.7	24.4	13.4	91.72	-1,043.3	-3,431.3	3,259.5	3,221.9	37.60	86.698	CC	
8,700.0	7,530.0	7,641.1	7,639.0	25.3	13.4	91.74	-1,043.4	-3,431.3	3,260.0	3,221.5	38.43	84.822	ES	
8,800.0	7,530.0	7,643.3	7,641.2	26.8	13.4	91.78	-1,043.5	-3,431.2	3,263.2	3,223.3	39.95	81.687		
8,900.0	7,530.0	7,645.4	7,643.3	28.3	13.4	91.82	-1,043.6	-3,431.2	3,269.5	3,228.1	41.49	78.802		
9,000.0	7,530.0	7,647.4	7,645.4	29.9	13.4	91.85	-1,043.6	-3,431.1	3,278.9	3,235.8	43.06	76.152		
9,100.0	7,530.0	7,649.4	7,647.3	31.4	13.4	91.89	-1,043.7	-3,431.1	3,291.3	3,246.6	44.64	73.724		
9,200.0	7,530.0	7,651.3	7,649.3	33.0	13.5	91.92	-1,043.8	-3,431.0	3,306.6	3,260.4	46.25	71.500		
9,300.0	7,530.0	7,653.2	7,651.1	34.7	13.5	91.95	-1,043.9	-3,431.0	3,324.9	3,277.0	47.86	69.465		
9,400.0	7,530.0	7,655.0	7,652.9	36.3	13.5	91.98	-1,043.9	-3,430.9	3,346.1	3,296.6	49.50	67.604		
9,500.0	7,530.0	7,656.7	7,654.6	37.9	13.5	92.01	-1,044.0	-3,430.9	3,370.1	3,318.9	51.14	65.903		
9,600.0	7,530.0	7,658.4	7,656.3	39.6	13.5	92.04	-1,044.0	-3,430.8	3,396.8	3,344.0	52.79	64.349		
9,700.0	7,530.0	7,660.0	7,657.9	41.2	13.5	92.07	-1,044.1	-3,430.8	3,426.3	3,371.9	54.45	62.929		
9,800.0	7,530.0	7,661.6	7,659.5	42.9	13.5	92.10	-1,044.1	-3,430.7	3,458.4	3,402.3	56.11	61.631		
9,900.0	7,530.0	7,663.1	7,661.0	44.5	13.5	92.13	-1,044.2	-3,430.7	3,493.1	3,435.3	57.79	60.447		
10,000.0	7,530.0	7,664.6	7,662.5	46.2	13.5	92.15	-1,044.2	-3,430.7	3,530.3	3,470.8	59.47	59.364		
10,100.0	7,530.0	7,666.0	7,663.9	47.9	13.5	92.18	-1,044.3	-3,430.6	3,569.9	3,508.7	61.15	58.376		
10,200.0	7,530.0	7,667.4	7,665.3	49.6	13.5	92.20	-1,044.3	-3,430.6	3,611.8	3,549.0	62.84	57.474		
10,300.0	7,530.0	7,668.7	7,666.6	51.3	13.5	92.23	-1,044.4	-3,430.6	3,656.0	3,591.5	64.54	56.650		
10,400.0	7,530.0	7,670.1	7,668.0	53.0	13.5	92.25	-1,044.4	-3,430.5	3,702.4	3,636.1	66.23	55.898		
10,500.0	7,530.0	7,671.3	7,669.2	54.7	13.5	92.27	-1,044.4	-3,430.5	3,750.8	3,682.9	67.94	55.211		
10,600.0	7,530.0	7,700.0	7,697.9	56.4	13.5	92.78	-1,045.2	-3,430.0	3,801.5	3,731.8	69.66	54.569		
10,700.0	7,530.0	7,700.0	7,697.9	58.1	13.5	92.78	-1,045.2	-3,430.0	3,853.9	3,782.5	71.37	53.999		
10,800.0	7,530.0	7,700.0	7,697.9	59.8	13.5	92.78	-1,045.2	-3,430.0	3,908.1	3,835.0	73.08	53.479		
10,900.0	7,530.0	7,700.0	7,697.9	61.5	13.5	92.78	-1,045.2	-3,430.0	3,964.1	3,889.3	74.79	53.005		
11,000.0	7,530.0	7,700.0	7,697.9	63.2	13.5	92.78	-1,045.2	-3,430.0	4,021.8	3,945.3	76.50	52.573		
11,100.0	7,530.0	7,700.0	7,697.9	64.9	13.5	92.78	-1,045.2	-3,430.0	4,081.2	4,003.0	78.22	52.179		
11,200.0	7,530.0	7,700.0	7,697.9	66.6	13.5	92.78	-1,045.2	-3,430.0	4,142.1	4,062.2	79.93	51.820		
11,300.0	7,530.0	7,700.0	7,697.9	68.4	13.5	92.78	-1,045.2	-3,430.0	4,204.5	4,122.9	81.65	51.494		
11,400.0	7,530.0	7,700.0	7,697.9	70.1	13.5	92.78	-1,045.2	-3,430.0	4,268.4	4,185.0	83.37	51.197		
11,500.0	7,530.0	7,700.0	7,697.9	71.8	13.5	92.78	-1,045.2	-3,430.0	4,333.6	4,248.5	85.09	50.927		
11,600.0	7,530.0	7,700.0	7,697.9	73.5	13.5	92.78	-1,045.2	-3,430.0	4,400.1	4,313.3	86.82	50.682		
11,700.0	7,530.0	7,700.0	7,697.9	75.3	13.5	92.78	-1,045.2	-3,430.0	4,467.9	4,379.3	88.54	50.460		
11,800.0	7,530.0	7,700.0	7,697.9	77.0	13.5	92.78	-1,045.2	-3,430.0	4,536.8	4,446.6	90.27	50.260		
11,900.0	7,530.0	7,700.0	7,697.9	78.7	13.5	92.78	-1,045.2	-3,430.0	4,606.9	4,514.9	91.99	50.078		
12,000.0	7,530.0	7,700.0	7,697.9	80.4	13.5	92.78	-1,045.2	-3,430.0	4,678.1	4,584.4	93.72	49.914		
12,100.0	7,530.0	7,700.0	7,697.9	82.2	13.5	92.78	-1,045.2	-3,430.0	4,750.3	4,654.9	95.45	49.767		
12,200.0	7,530.0	7,700.0	7,697.9	83.9	13.5	92.78	-1,045.2	-3,430.0	4,823.5	4,726.4	97.18	49.634		
12,300.0	7,530.0	7,700.0	7,697.9	85.6	13.5	92.78	-1,045.2	-3,430.0	4,897.7	4,798.8	98.91	49.515		
12,400.0	7,530.0	7,700.0	7,697.9	87.4	13.5	92.78	-1,045.2	-3,430.0	4,972.8	4,872.1	100.64	49.409		
12,500.0	7,530.0	7,700.0	7,697.9	89.1	13.5	92.78	-1,045.2	-3,430.0	5,048.7	4,946.3	102.38	49.314		
12,600.0	7,530.0	7,700.0	7,697.9	90.8	13.5	92.78	-1,045.2	-3,430.0	5,125.5	5,021.3	104.11	49.231		
12,700.0	7,530.0	7,700.0	7,697.9	92.6	13.5	92.78	-1,045.2	-3,430.0	5,203.0	5,097.2	105.85	49.157		
12,800.0	7,530.0	7,700.0	7,697.9	94.3	13.5	92.78	-1,045.2	-3,430.0	5,281.3	5,173.7	107.58	49.092		
12,900.0	7,530.0	7,700.0	7,697.9	96.0	13.5	92.78	-1,045.2	-3,430.0	5,360.3	5,251.0	109.32	49.035		
13,000.0	7,530.0	7,700.0	7,697.9	97.8	13.5	92.78	-1,045.2	-3,430.0	5,440.0	5,329.0	111.05	48.987		
13,100.0	7,530.0	7,700.0	7,697.9	99.5	13.5	92.78	-1,045.2	-3,430.0	5,520.4	5,407.6	112.79	48.945		
13,200.0	7,530.0	7,700.0	7,697.9	101.3	13.5	92.78	-1,045.2	-3,430.0	5,601.4	5,486.9	114.52	48.910		
13,300.0	7,530.0	7,700.0	7,697.9	103.0	13.5	92.78	-1,045.2	-3,430.0	5,683.0	5,566.8	116.26	48.881		
13,400.0	7,530.0	7,700.0	7,697.9	104.7	13.5	92.78	-1,045.2	-3,430.0	5,765.2	5,647.2	118.00	48.858		
13,500.0	7,530.0	7,700.0	7,697.9	106.5	13.5	92.78	-1,045.2	-3,430.0	5,848.0	5,728.2	119.74	48.839		
13,600.0	7,530.0	7,700.0	7,697.9	108.2	13.5	92.78	-1,045.2	-3,430.0	5,931.2	5,809.8	121.48	48.826		
13,700.0	7,530.0	7,700.0	7,697.9	110.0	13.5	92.78	-1,045.2	-3,430.0	6,015.0	5,891.8	123.22	48.816		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL														Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
13,800.0	7,530.0	7,700.0	7,697.9	111.7	13.5	92.78	-1,045.2	-3,430.0	6,099.3	5,974.4	124.96	48.811			
13,900.0	7,530.0	7,700.0	7,697.9	113.4	13.5	92.78	-1,045.2	-3,430.0	6,184.1	6,057.4	126.70	48.810 SF			
14,000.0	7,530.0	7,700.0	7,697.9	115.2	13.5	92.78	-1,045.2	-3,430.0	6,269.2	6,140.8	128.44	48.812			
14,100.0	7,530.0	7,700.0	7,697.9	116.9	13.5	92.78	-1,045.2	-3,430.0	6,354.9	6,224.7	130.18	48.817			
14,200.0	7,530.0	7,700.0	7,697.9	118.7	13.5	92.78	-1,045.2	-3,430.0	6,440.9	6,309.0	131.92	48.824			
14,300.0	7,530.0	7,700.0	7,697.9	120.4	13.5	92.78	-1,045.2	-3,430.0	6,527.3	6,393.7	133.66	48.835			
14,400.0	7,530.0	7,700.0	7,697.9	122.1	13.5	92.78	-1,045.2	-3,430.0	6,614.2	6,478.8	135.40	48.848			
14,500.0	7,530.0	7,700.0	7,697.9	123.9	13.5	92.78	-1,045.2	-3,430.0	6,701.4	6,564.2	137.15	48.863			
14,600.0	7,530.0	7,700.0	7,697.9	125.6	13.5	92.78	-1,045.2	-3,430.0	6,788.9	6,650.0	138.89	48.881			
14,700.0	7,530.0	7,700.0	7,697.9	127.4	13.5	92.78	-1,045.2	-3,430.0	6,876.8	6,736.1	140.63	48.900			
14,800.0	7,530.0	7,700.0	7,697.9	129.1	13.5	92.78	-1,045.2	-3,430.0	6,965.0	6,822.6	142.37	48.921			
14,900.0	7,530.0	7,715.4	7,713.3	130.9	13.6	93.05	-1,045.5	-3,429.7	7,053.5	6,909.4	144.11	48.945			
15,000.0	7,530.0	7,716.7	7,714.6	132.6	13.6	93.07	-1,045.5	-3,429.7	7,142.3	6,996.5	145.85	48.969			
15,100.0	7,530.0	7,718.0	7,715.9	134.4	13.6	93.09	-1,045.5	-3,429.7	7,231.4	7,083.8	147.59	48.995			
15,200.0	7,530.0	7,719.3	7,717.1	136.1	13.6	93.11	-1,045.5	-3,429.6	7,320.8	7,171.5	149.34	49.022			
15,300.0	7,530.0	7,720.5	7,718.4	137.9	13.6	93.14	-1,045.6	-3,429.6	7,410.5	7,259.4	151.08	49.050			
15,400.0	7,530.0	7,721.8	7,719.6	139.6	13.6	93.16	-1,045.6	-3,429.6	7,500.4	7,347.6	152.82	49.079			
15,500.0	7,530.0	7,723.0	7,720.9	141.3	13.6	93.18	-1,045.6	-3,429.6	7,590.6	7,436.0	154.57	49.109			
15,600.0	7,530.0	7,724.2	7,722.1	143.1	13.6	93.20	-1,045.6	-3,429.5	7,681.0	7,524.7	156.31	49.140			
15,700.0	7,530.0	7,725.4	7,723.3	144.8	13.6	93.22	-1,045.6	-3,429.5	7,771.6	7,613.6	158.05	49.172			
15,800.0	7,530.0	7,726.6	7,724.5	146.6	13.6	93.24	-1,045.7	-3,429.5	7,862.5	7,702.7	159.79	49.204			
15,900.0	7,530.0	7,727.7	7,725.6	148.3	13.6	93.26	-1,045.7	-3,429.5	7,953.6	7,792.1	161.54	49.237			
16,000.0	7,530.0	7,728.9	7,726.8	150.1	13.6	93.28	-1,045.7	-3,429.5	8,044.9	7,881.7	163.28	49.270			
16,100.0	7,530.0	7,730.0	7,727.9	151.8	13.6	93.30	-1,045.7	-3,429.4	8,136.5	7,971.4	165.02	49.304			
16,200.0	7,530.0	7,731.1	7,729.0	153.6	13.6	93.32	-1,045.7	-3,429.4	8,228.2	8,061.4	166.77	49.339			
16,300.0	7,530.0	7,732.2	7,730.1	155.3	13.6	93.34	-1,045.8	-3,429.4	8,320.1	8,151.6	168.51	49.374			
16,400.0	7,530.0	7,733.3	7,731.2	157.1	13.6	93.36	-1,045.8	-3,429.4	8,412.2	8,241.9	170.26	49.409			
16,500.0	7,530.0	7,734.4	7,732.3	158.8	13.6	93.38	-1,045.8	-3,429.4	8,504.4	8,332.4	172.00	49.444			
16,600.0	7,530.0	7,735.5	7,733.4	160.6	13.6	93.40	-1,045.8	-3,429.3	8,596.9	8,423.1	173.74	49.480			
16,700.0	7,530.0	7,736.5	7,734.4	162.3	13.6	93.42	-1,045.8	-3,429.3	8,689.5	8,514.0	175.49	49.516			
16,800.0	7,530.0	7,737.6	7,735.5	164.1	13.6	93.44	-1,045.9	-3,429.3	8,782.2	8,605.0	177.23	49.552			
16,900.0	7,530.0	7,738.6	7,736.5	165.8	13.6	93.45	-1,045.9	-3,429.3	8,875.2	8,696.2	178.97	49.589			
17,000.0	7,530.0	7,739.6	7,737.5	167.6	13.6	93.47	-1,045.9	-3,429.3	8,968.2	8,787.5	180.72	49.625			
17,100.0	7,530.0	7,740.6	7,738.5	169.3	13.6	93.49	-1,045.9	-3,429.3	9,061.5	8,879.0	182.46	49.662			
17,200.0	7,530.0	7,741.6	7,739.5	171.1	13.6	93.51	-1,045.9	-3,429.2	9,154.8	8,970.6	184.21	49.699			
17,300.0	7,530.0	7,742.6	7,740.5	172.8	13.6	93.52	-1,045.9	-3,429.2	9,248.3	9,062.4	185.95	49.735			
17,400.0	7,530.0	7,743.6	7,741.5	174.5	13.6	93.54	-1,046.0	-3,429.2	9,342.0	9,154.3	187.70	49.772			
17,411.2	7,530.0	7,743.7	7,741.6	174.7	13.6	93.54	-1,046.0	-3,429.2	9,352.5	9,164.6	187.89	49.776			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.58	-1,936.5	-4,045.7	4,485.3					
100.0	100.0	85.0	85.0	0.2	0.1	-115.58	-1,936.5	-4,045.7	4,485.3	4,485.0	0.26	N/A		
200.0	200.0	185.0	185.0	0.3	0.3	-115.58	-1,936.5	-4,045.7	4,485.3	4,484.7	0.61	7,405.954		
300.0	300.0	247.7	247.7	0.5	0.4	-115.58	-1,936.6	-4,045.8	4,485.6	4,484.7	0.89	5,041.336		
400.0	400.0	300.0	300.0	0.7	0.5	-115.58	-1,937.0	-4,046.4	4,486.9	4,485.8	1.16	3,882.726		
500.0	500.0	360.0	360.0	0.8	0.6	-115.58	-1,937.6	-4,047.6	4,489.2	4,487.8	1.44	3,127.038		
600.0	600.0	400.0	400.0	1.0	0.7	-92.54	-1,938.3	-4,048.7	4,492.6	4,490.9	1.68	2,674.955		
700.0	700.0	472.2	472.1	1.2	0.8	-92.52	-1,939.8	-4,051.3	4,496.9	4,494.9	1.98	2,267.514		
800.0	799.9	528.1	527.9	1.4	0.9	-92.50	-1,941.2	-4,053.8	4,502.3	4,500.1	2.26	1,988.600		
848.7	848.4	555.3	555.0	1.5	1.0	-92.49	-1,942.0	-4,055.2	4,505.3	4,502.9	2.40	1,874.833		
900.0	899.7	600.0	599.7	1.6	1.0	-92.53	-1,943.5	-4,057.8	4,508.8	4,506.3	2.58	1,748.590		
1,000.0	999.5	696.5	696.0	1.8	1.2	-92.60	-1,946.1	-4,063.7	4,515.8	4,512.8	2.94	1,536.444		
1,100.0	1,099.3	820.0	819.2	2.0	1.5	-92.67	-1,947.1	-4,071.5	4,522.1	4,518.8	3.35	1,349.768		
1,200.0	1,199.1	919.7	918.7	2.2	1.7	-92.71	-1,947.3	-4,077.9	4,528.3	4,524.5	3.72	1,216.369		
1,300.0	1,298.9	1,019.5	1,018.3	2.4	1.9	-92.76	-1,947.6	-4,084.2	4,534.4	4,530.3	4.10	1,106.681		
1,400.0	1,398.8	1,119.2	1,117.8	2.6	2.1	-92.80	-1,947.9	-4,090.6	4,540.6	4,536.1	4.47	1,015.014		
1,500.0	1,498.6	1,219.0	1,217.4	2.8	2.3	-92.84	-1,948.1	-4,097.0	4,546.8	4,541.9	4.85	937.333		
1,600.0	1,598.4	1,318.7	1,316.9	3.0	2.5	-92.89	-1,948.4	-4,103.3	4,552.9	4,547.7	5.23	870.706		
1,700.0	1,698.2	1,418.5	1,416.5	3.2	2.7	-92.93	-1,948.7	-4,109.7	4,559.1	4,553.5	5.61	812.957		
1,800.0	1,798.0	1,518.2	1,516.0	3.4	2.9	-92.98	-1,948.9	-4,116.1	4,565.3	4,559.3	5.99	762.440		
1,900.0	1,897.8	1,618.0	1,615.6	3.6	3.1	-93.02	-1,949.2	-4,122.4	4,571.4	4,565.1	6.37	717.888		
2,000.0	1,997.7	1,717.7	1,715.1	3.8	3.3	-93.06	-1,949.5	-4,128.8	4,577.6	4,570.9	6.75	678.312		
2,100.0	2,097.5	1,817.5	1,814.6	4.0	3.5	-93.11	-1,949.7	-4,135.2	4,583.8	4,576.7	7.13	642.928		
2,200.0	2,197.3	1,917.2	1,914.2	4.2	3.7	-93.15	-1,950.0	-4,141.6	4,590.0	4,582.5	7.51	611.108		
2,300.0	2,297.1	2,017.0	2,013.7	4.4	3.9	-93.19	-1,950.3	-4,147.9	4,596.2	4,588.3	7.89	582.343		
2,400.0	2,396.9	2,116.7	2,113.3	4.6	4.1	-93.24	-1,950.5	-4,154.3	4,602.4	4,594.1	8.27	556.214		
2,500.0	2,496.7	2,216.5	2,212.8	4.8	4.4	-93.28	-1,950.8	-4,160.7	4,608.6	4,599.9	8.66	532.377		
2,600.0	2,596.5	2,316.2	2,312.4	5.0	4.6	-93.32	-1,951.1	-4,167.0	4,614.8	4,605.7	9.04	510.545		
2,700.0	2,696.4	2,416.0	2,411.9	5.2	4.8	-93.37	-1,951.3	-4,173.4	4,621.0	4,611.5	9.42	490.476		
2,800.0	2,796.2	2,515.7	2,511.5	5.4	5.0	-93.41	-1,951.6	-4,179.8	4,627.2	4,617.4	9.80	471.965		
2,900.0	2,896.0	2,615.5	2,611.0	5.6	5.2	-93.45	-1,951.9	-4,186.1	4,633.4	4,623.2	10.19	454.838		
3,000.0	2,995.8	2,715.2	2,710.5	5.8	5.4	-93.50	-1,952.1	-4,192.5	4,639.6	4,629.0	10.57	438.947		
3,100.0	3,095.6	2,815.0	2,810.1	6.0	5.6	-93.54	-1,952.4	-4,198.9	4,645.8	4,634.8	10.95	424.162		
3,200.0	3,195.4	2,914.7	2,909.6	6.2	5.8	-93.58	-1,952.6	-4,205.2	4,652.0	4,640.6	11.34	410.373		
3,300.0	3,295.2	3,014.5	3,009.2	6.4	6.0	-93.62	-1,952.9	-4,211.6	4,658.2	4,646.5	11.72	397.482		
3,400.0	3,395.1	3,114.2	3,108.7	6.6	6.2	-93.67	-1,953.2	-4,218.0	4,664.4	4,652.3	12.10	385.404		
3,500.0	3,494.9	3,213.9	3,208.3	6.8	6.4	-93.71	-1,953.4	-4,224.4	4,670.6	4,658.1	12.49	374.066		
3,600.0	3,594.7	3,313.7	3,307.8	7.0	6.6	-93.75	-1,953.7	-4,230.7	4,676.9	4,664.0	12.87	363.401		
3,700.0	3,694.5	3,413.4	3,407.3	7.2	6.8	-93.79	-1,954.0	-4,237.1	4,683.1	4,669.8	13.25	353.351		
3,800.0	3,794.3	3,513.2	3,506.9	7.4	7.0	-93.83	-1,954.2	-4,243.5	4,689.3	4,675.7	13.64	343.865		
3,900.0	3,894.1	3,612.9	3,606.4	7.6	7.2	-93.87	-1,954.5	-4,249.8	4,695.5	4,681.5	14.02	334.896		
4,000.0	3,994.0	3,712.7	3,706.0	7.8	7.4	-93.92	-1,954.8	-4,256.2	4,701.8	4,687.4	14.40	326.405		
4,100.0	4,093.8	3,812.4	3,805.5	8.0	7.7	-93.96	-1,955.0	-4,262.6	4,708.0	4,693.2	14.79	318.352		
4,200.0	4,193.6	3,912.2	3,905.1	8.2	7.9	-94.00	-1,955.3	-4,268.9	4,714.2	4,699.1	15.17	310.706		
4,300.0	4,293.4	4,011.9	4,004.6	8.4	8.1	-94.04	-1,955.6	-4,275.3	4,720.5	4,704.9	15.56	303.437		
4,400.0	4,393.2	4,111.7	4,104.2	8.6	8.3	-94.08	-1,955.8	-4,281.7	4,726.7	4,710.8	15.94	296.516		
4,500.0	4,493.0	4,211.4	4,203.7	8.8	8.5	-94.12	-1,956.1	-4,288.0	4,733.0	4,716.6	16.32	289.921		
4,600.0	4,592.8	4,311.2	4,303.2	9.0	8.7	-94.16	-1,956.4	-4,294.4	4,739.2	4,722.5	16.71	283.628		
4,700.0	4,692.7	4,410.9	4,402.8	9.3	8.9	-94.20	-1,956.6	-4,300.8	4,745.4	4,728.3	17.09	277.617		
4,800.0	4,792.5	4,510.7	4,502.3	9.5	9.1	-94.24	-1,956.9	-4,307.2	4,751.7	4,734.2	17.48	271.870		
4,900.0	4,892.3	4,610.4	4,601.9	9.7	9.3	-94.28	-1,957.2	-4,313.5	4,757.9	4,740.1	17.86	266.369		
5,000.0	4,992.1	4,710.2	4,701.4	9.9	9.5	-94.33	-1,957.4	-4,319.9	4,764.2	4,746.0	18.25	261.100		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1													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	5,091.9	4,809.9	4,801.0	10.1	9.7	-94.37	-1,957.7	-4,326.3	4,770.5	4,751.8	18.63	256.048		
5,200.0	5,191.7	4,909.7	4,900.5	10.3	9.9	-94.41	-1,957.9	-4,332.6	4,776.7	4,757.7	19.02	251.199		
5,300.0	5,291.5	5,009.4	5,000.0	10.5	10.1	-94.45	-1,958.2	-4,339.0	4,783.0	4,763.6	19.40	246.543		
5,400.0	5,391.4	5,109.2	5,099.6	10.7	10.3	-94.49	-1,958.5	-4,345.4	4,789.2	4,769.5	19.78	242.066		
5,500.0	5,491.2	5,208.9	5,199.1	10.9	10.5	-94.53	-1,958.7	-4,351.7	4,795.5	4,775.3	20.17	237.761		
5,600.0	5,591.0	5,308.7	5,298.7	11.1	10.8	-94.57	-1,959.0	-4,358.1	4,801.8	4,781.2	20.55	233.616		
5,700.0	5,690.8	5,408.4	5,398.2	11.3	11.0	-94.61	-1,959.3	-4,364.5	4,808.0	4,787.1	20.94	229.623		
5,800.0	5,790.6	5,508.1	5,497.8	11.5	11.2	-94.64	-1,959.5	-4,370.8	4,814.3	4,793.0	21.32	225.773		
5,900.0	5,890.4	5,607.9	5,597.3	11.7	11.4	-94.68	-1,959.8	-4,377.2	4,820.6	4,798.9	21.71	222.060		
6,000.0	5,990.3	9,772.9	7,817.0	11.9	42.7	-69.37	221.5	-4,557.1	4,798.6	4,744.9	53.77	89.252		
6,100.0	6,090.1	9,778.5	7,817.0	12.1	42.8	-69.30	227.1	-4,557.2	4,759.1	4,705.0	54.05	88.050		
6,200.0	6,189.9	9,784.1	7,817.0	12.3	42.9	-69.23	232.8	-4,557.3	4,721.3	4,667.0	54.33	86.894		
6,300.0	6,289.7	9,789.8	7,817.0	12.5	43.0	-69.15	238.4	-4,557.4	4,685.4	4,630.8	54.62	85.784		
6,400.0	6,389.5	9,795.4	7,817.0	12.7	43.0	-69.08	244.0	-4,557.5	4,651.3	4,596.4	54.90	84.719		
6,500.0	6,489.3	9,801.0	7,817.0	12.9	43.1	-69.01	249.7	-4,557.6	4,619.2	4,564.0	55.19	83.700		
6,600.0	6,589.1	9,806.7	7,817.0	13.1	43.2	-68.93	255.3	-4,557.7	4,589.0	4,533.5	55.47	82.726		
6,700.0	6,689.0	9,812.3	7,817.0	13.3	43.3	-68.86	261.0	-4,557.7	4,560.7	4,505.0	55.76	81.798		
6,785.3	6,774.1	9,817.1	7,817.0	13.5	43.4	-68.80	265.8	-4,557.8	4,538.3	4,482.3	56.00	81.043		
6,800.0	6,788.8	9,817.8	7,817.0	13.5	43.4	-57.45	266.4	-4,557.8	4,534.5	4,478.5	55.99	80.988		
6,850.0	6,838.8	9,817.9	7,817.0	13.6	43.4	54.08	266.5	-4,557.8	4,522.1	4,466.2	55.90	80.900		
6,900.0	6,888.6	9,814.4	7,817.0	13.6	43.4	76.96	263.0	-4,557.8	4,510.1	4,454.4	55.72	80.937		
6,950.0	6,938.1	9,807.5	7,817.0	13.7	43.2	82.94	256.1	-4,557.7	4,498.7	4,443.2	55.48	81.089		
7,000.0	6,987.0	9,797.2	7,817.0	13.7	43.1	85.92	245.8	-4,557.5	4,487.8	4,432.7	55.17	81.348		
7,050.0	7,035.0	9,783.4	7,817.0	13.6	42.9	87.83	232.1	-4,557.2	4,477.6	4,422.8	54.80	81.705		
7,100.0	7,082.0	9,766.4	7,817.0	13.6	42.6	89.19	215.0	-4,557.0	4,467.9	4,413.5	54.38	82.154		
7,150.0	7,127.7	9,746.1	7,817.0	13.5	42.2	90.22	194.7	-4,556.6	4,458.9	4,405.0	53.93	82.687		
7,200.0	7,171.8	9,722.7	7,817.0	13.5	41.9	91.02	171.3	-4,556.2	4,450.5	4,397.1	53.43	83.298		
7,250.0	7,214.2	9,696.2	7,817.0	13.4	41.4	91.65	144.9	-4,555.7	4,442.8	4,389.9	52.90	83.978		
7,300.0	7,254.6	9,666.9	7,817.0	13.4	41.0	92.14	115.6	-4,555.2	4,435.7	4,383.3	52.36	84.718		
7,350.0	7,292.9	9,634.8	7,817.0	13.3	40.4	92.53	83.5	-4,554.7	4,429.2	4,377.4	51.80	85.511		
7,400.0	7,328.9	9,600.1	7,817.0	13.3	39.9	92.82	48.8	-4,554.1	4,423.2	4,372.0	51.23	86.349		
7,450.0	7,362.3	9,563.0	7,817.0	13.3	39.3	93.05	11.7	-4,553.4	4,417.8	4,367.2	50.65	87.215		
7,500.0	7,393.1	9,523.7	7,817.0	13.4	38.6	93.22	-27.7	-4,552.8	4,413.0	4,362.9	50.09	88.104		
7,550.0	7,421.1	9,482.3	7,817.0	13.5	38.0	93.35	-69.1	-4,552.0	4,408.6	4,359.1	49.53	89.001		
7,600.0	7,446.1	9,439.0	7,817.0	13.6	37.3	93.45	-112.3	-4,551.3	4,404.7	4,355.7	49.00	89.894		
7,650.0	7,468.0	9,394.1	7,817.0	13.8	36.6	93.52	-157.2	-4,550.5	4,401.2	4,352.7	48.49	90.774		
7,700.0	7,486.7	9,347.8	7,817.0	14.0	35.8	93.59	-203.5	-4,549.7	4,398.1	4,350.1	48.00	91.623		
7,750.0	7,502.2	9,300.3	7,817.0	14.2	35.1	93.65	-251.0	-4,548.9	4,395.4	4,347.9	47.55	92.440		
7,800.0	7,514.3	9,251.8	7,817.0	14.6	34.3	93.71	-299.5	-4,548.1	4,393.1	4,345.9	47.13	93.205		
7,850.0	7,523.0	9,202.6	7,817.0	14.9	33.6	93.78	-348.7	-4,547.2	4,391.0	4,344.3	46.75	93.923		
7,900.0	7,528.2	9,152.9	7,817.0	15.3	32.8	93.86	-398.4	-4,546.3	4,389.4	4,342.9	46.41	94.577		
7,950.2	7,530.0	9,102.7	7,817.0	15.8	32.0	93.95	-448.6	-4,545.5	4,388.0	4,341.9	46.10	95.181		
8,000.0	7,530.0	9,053.0	7,817.0	16.2	31.3	93.95	-498.3	-4,544.6	4,386.8	4,341.0	45.80	95.778		
8,100.0	7,530.0	8,953.0	7,817.0	17.3	29.7	93.95	-598.2	-4,542.9	4,384.3	4,339.0	45.30	96.778		
8,200.0	7,530.0	8,853.0	7,817.0	18.4	28.3	93.95	-698.2	-4,541.2	4,381.9	4,337.0	44.93	97.518		
8,300.0	7,530.0	8,753.1	7,817.0	19.7	26.8	93.96	-798.2	-4,539.4	4,379.5	4,334.8	44.68	98.018		
8,400.0	7,530.0	8,653.1	7,817.0	21.0	25.4	93.96	-898.1	-4,537.7	4,377.1	4,332.6	44.53	98.292		
8,500.0	7,530.0	8,553.1	7,817.0	22.4	24.0	93.96	-998.1	-4,536.0	4,374.7	4,330.2	44.48	98.352		
8,600.0	7,530.0	8,453.1	7,817.0	23.8	22.7	93.96	-1,098.0	-4,534.2	4,372.2	4,327.7	44.52	98.200		
8,700.0	7,530.0	8,353.2	7,817.0	25.3	21.5	93.96	-1,198.0	-4,532.5	4,369.8	4,325.2	44.67	97.835		
8,800.0	7,530.0	8,253.2	7,817.0	26.8	20.3	93.97	-1,297.9	-4,530.8	4,367.4	4,322.5	44.91	97.247		
8,900.0	7,530.0	7,251.7	7,237.7	28.3	14.8	86.31	-1,964.2	-4,482.2	4,363.3	4,322.6	40.75	107.070		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1													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	7,530.0	7,252.0	7,238.0	29.9	14.8	86.32	-1,964.2	-4,482.2	4,349.1	4,306.7	42.31	102.782		
9,100.0	7,530.0	7,252.3	7,238.3	31.4	14.8	86.32	-1,964.2	-4,482.2	4,337.0	4,293.1	43.89	98.806		
9,200.0	7,530.0	7,252.6	7,238.6	33.0	14.8	86.32	-1,964.2	-4,482.2	4,327.3	4,281.8	45.49	95.120		
9,300.0	7,530.0	7,252.9	7,238.9	34.7	14.8	86.33	-1,964.2	-4,482.3	4,319.9	4,272.8	47.11	91.704		
9,400.0	7,530.0	7,253.2	7,239.3	36.3	14.8	86.33	-1,964.2	-4,482.3	4,314.7	4,266.0	48.73	88.539		
9,500.0	7,530.0	7,253.5	7,239.6	37.9	14.8	86.34	-1,964.2	-4,482.3	4,311.9	4,261.5	50.37	85.604		
9,571.6	7,530.0	7,253.7	7,239.8	39.1	14.8	86.34	-1,964.2	-4,482.3	4,311.3	4,259.8	51.55	83.633 CC		
9,600.0	7,530.0	7,253.8	7,239.9	39.6	14.8	86.34	-1,964.2	-4,482.3	4,311.4	4,259.4	52.02	82.884 ES		
9,700.0	7,530.0	7,254.1	7,240.2	41.2	14.8	86.35	-1,964.2	-4,482.3	4,313.2	4,259.6	53.67	80.361		
9,800.0	7,530.0	7,254.4	7,240.5	42.9	14.8	86.35	-1,964.2	-4,482.4	4,317.4	4,262.0	55.34	78.019		
9,900.0	7,530.0	7,254.8	7,240.8	44.5	14.8	86.35	-1,964.2	-4,482.4	4,323.8	4,266.8	57.01	75.847		
10,000.0	7,530.0	7,255.1	7,241.1	46.2	14.8	86.36	-1,964.2	-4,482.4	4,332.6	4,273.9	58.68	73.829		
10,100.0	7,530.0	7,255.4	7,241.4	47.9	14.8	86.36	-1,964.2	-4,482.4	4,343.6	4,283.2	60.37	71.955		
10,200.0	7,530.0	7,255.7	7,241.7	49.6	14.8	86.37	-1,964.2	-4,482.4	4,356.9	4,294.8	62.05	70.213		
10,300.0	7,530.0	7,256.0	7,242.0	51.3	14.8	86.37	-1,964.2	-4,482.5	4,372.4	4,308.7	63.74	68.595		
10,400.0	7,530.0	7,256.3	7,242.4	53.0	14.8	86.37	-1,964.2	-4,482.5	4,390.2	4,324.7	65.44	67.089		
10,500.0	7,530.0	7,256.6	7,242.7	54.7	14.8	86.38	-1,964.2	-4,482.5	4,410.1	4,343.0	67.14	65.689		
10,600.0	7,530.0	7,256.9	7,243.0	56.4	14.8	86.38	-1,964.2	-4,482.5	4,432.3	4,363.4	68.84	64.387		
10,700.0	7,530.0	7,257.2	7,243.3	58.1	14.8	86.39	-1,964.2	-4,482.5	4,456.5	4,386.0	70.54	63.175		
10,800.0	7,530.0	7,257.5	7,243.6	59.8	14.8	86.39	-1,964.2	-4,482.6	4,482.9	4,410.7	72.25	62.047		
10,900.0	7,530.0	7,257.9	7,243.9	61.5	14.8	86.39	-1,964.2	-4,482.6	4,511.3	4,437.4	73.96	60.997		
11,000.0	7,530.0	7,258.2	7,244.2	63.2	14.8	86.40	-1,964.2	-4,482.6	4,541.8	4,466.1	75.67	60.019		
11,100.0	7,530.0	7,258.3	7,244.3	64.9	14.8	86.40	-1,964.2	-4,482.6	4,574.2	4,496.8	77.39	59.109		
11,200.0	7,530.0	7,258.3	7,244.3	66.6	14.8	86.40	-1,964.2	-4,482.6	4,608.6	4,529.5	79.10	58.262		
11,300.0	7,530.0	7,258.3	7,244.3	68.4	14.8	86.40	-1,964.2	-4,482.6	4,644.9	4,564.0	80.82	57.473		
11,400.0	7,530.0	7,258.3	7,244.3	70.1	14.8	86.40	-1,964.2	-4,482.6	4,683.0	4,600.5	82.54	56.738		
11,500.0	7,530.0	7,258.3	7,244.3	71.8	14.8	86.40	-1,964.2	-4,482.6	4,722.9	4,638.7	84.26	56.053		
11,600.0	7,530.0	7,258.3	7,244.3	73.5	14.8	86.40	-1,964.2	-4,482.6	4,764.6	4,678.7	85.98	55.416		
11,700.0	7,530.0	7,258.3	7,244.3	75.3	14.8	86.40	-1,964.2	-4,482.6	4,808.1	4,720.4	87.70	54.822		
11,800.0	7,530.0	7,258.3	7,244.3	77.0	14.8	86.40	-1,964.2	-4,482.6	4,853.2	4,763.7	89.43	54.269		
11,900.0	7,530.0	7,258.3	7,244.3	78.7	14.8	86.40	-1,964.2	-4,482.6	4,899.9	4,808.7	91.15	53.754		
12,000.0	7,530.0	7,258.3	7,244.3	80.4	14.8	86.40	-1,964.2	-4,482.6	4,948.2	4,855.3	92.88	53.275		
12,100.0	7,530.0	7,258.3	7,244.3	82.2	14.8	86.40	-1,964.2	-4,482.6	4,998.0	4,903.4	94.61	52.829		
12,200.0	7,530.0	7,258.3	7,244.3	83.9	14.8	86.40	-1,964.2	-4,482.6	5,049.3	4,953.0	96.34	52.414		
12,300.0	7,530.0	7,258.3	7,244.3	85.6	14.8	86.40	-1,964.2	-4,482.6	5,102.1	5,004.0	98.07	52.027		
12,400.0	7,530.0	7,258.3	7,244.3	87.4	14.8	86.40	-1,964.2	-4,482.6	5,156.3	5,056.5	99.80	51.668		
12,500.0	7,530.0	7,258.3	7,244.3	89.1	14.8	86.40	-1,964.2	-4,482.6	5,211.8	5,110.3	101.53	51.334		
12,600.0	7,530.0	7,258.3	7,244.3	90.8	14.8	86.40	-1,964.2	-4,482.6	5,268.6	5,165.4	103.26	51.023		
12,700.0	7,530.0	7,258.3	7,244.3	92.6	14.8	86.40	-1,964.2	-4,482.6	5,326.7	5,221.8	104.99	50.735		
12,800.0	7,530.0	7,258.3	7,244.3	94.3	14.8	86.40	-1,964.2	-4,482.6	5,386.1	5,279.4	106.73	50.467		
12,900.0	7,530.0	7,258.3	7,244.3	96.0	14.8	86.40	-1,964.2	-4,482.6	5,446.6	5,338.1	108.46	50.218		
13,000.0	7,530.0	7,258.3	7,244.3	97.8	14.8	86.40	-1,964.2	-4,482.6	5,508.3	5,398.1	110.19	49.987		
13,100.0	7,530.0	7,258.3	7,244.3	99.5	14.8	86.40	-1,964.2	-4,482.6	5,571.1	5,459.1	111.93	49.773		
13,200.0	7,530.0	7,258.3	7,244.3	101.3	14.8	86.40	-1,964.2	-4,482.6	5,634.9	5,521.3	113.66	49.575		
13,300.0	7,530.0	7,258.3	7,244.3	103.0	14.8	86.40	-1,964.2	-4,482.6	5,699.8	5,584.4	115.40	49.392		
13,400.0	7,530.0	7,258.3	7,244.3	104.7	14.8	86.40	-1,964.2	-4,482.6	5,765.8	5,648.6	117.14	49.222		
13,500.0	7,530.0	7,258.3	7,244.3	106.5	14.8	86.40	-1,964.2	-4,482.6	5,832.6	5,713.8	118.87	49.065		
13,600.0	7,530.0	7,258.3	7,244.3	108.2	14.8	86.40	-1,964.2	-4,482.6	5,900.4	5,779.8	120.61	48.921		
13,700.0	7,530.0	7,258.3	7,244.3	110.0	14.8	86.40	-1,964.2	-4,482.6	5,969.2	5,846.8	122.35	48.788		
13,800.0	7,530.0	7,258.3	7,244.3	111.7	14.8	86.40	-1,964.2	-4,482.6	6,038.8	5,914.7	124.09	48.665		
13,900.0	7,530.0	7,258.3	7,244.3	113.4	14.8	86.40	-1,964.2	-4,482.6	6,109.2	5,983.4	125.83	48.552		
14,000.0	7,530.0	7,258.3	7,244.3	115.2	14.8	86.40	-1,964.2	-4,482.6	6,180.4	6,052.9	127.57	48.449		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1													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	7,530.0	7,258.3	7,244.3	116.9	14.8	86.40	-1,964.2	-4,482.6	6,252.5	6,123.2	129.31	48.354		
14,200.0	7,530.0	7,258.3	7,244.3	118.7	14.8	86.40	-1,964.2	-4,482.6	6,325.3	6,194.2	131.05	48.268		
14,300.0	7,530.0	7,258.3	7,244.3	120.4	14.8	86.40	-1,964.2	-4,482.6	6,398.8	6,266.0	132.79	48.189		
14,400.0	7,530.0	7,258.3	7,244.3	122.1	14.8	86.40	-1,964.2	-4,482.6	6,473.1	6,338.5	134.53	48.118		
14,500.0	7,530.0	7,258.3	7,244.3	123.9	14.8	86.40	-1,964.2	-4,482.6	6,548.0	6,411.7	136.27	48.053		
14,600.0	7,530.0	7,258.3	7,244.3	125.6	14.8	86.40	-1,964.2	-4,482.6	6,623.6	6,485.6	138.01	47.994		
14,700.0	7,530.0	7,258.3	7,244.3	127.4	14.8	86.40	-1,964.2	-4,482.6	6,699.8	6,560.1	139.75	47.942		
14,800.0	7,530.0	7,258.3	7,244.3	129.1	14.8	86.40	-1,964.2	-4,482.6	6,776.7	6,635.2	141.49	47.895		
14,900.0	7,530.0	7,258.3	7,244.3	130.9	14.8	86.40	-1,964.2	-4,482.6	6,854.1	6,710.9	143.23	47.853		
15,000.0	7,530.0	7,258.3	7,244.3	132.6	14.8	86.40	-1,964.2	-4,482.6	6,932.1	6,787.2	144.97	47.816		
15,100.0	7,530.0	7,258.3	7,244.3	134.4	14.8	86.40	-1,964.2	-4,482.6	7,010.7	6,864.0	146.72	47.784		
15,200.0	7,530.0	7,258.3	7,244.3	136.1	14.8	86.40	-1,964.2	-4,482.6	7,089.9	6,941.4	148.46	47.756		
15,300.0	7,530.0	7,258.3	7,244.3	137.9	14.8	86.40	-1,964.2	-4,482.6	7,169.5	7,019.3	150.20	47.733		
15,400.0	7,530.0	7,258.3	7,244.3	139.6	14.8	86.40	-1,964.2	-4,482.6	7,249.6	7,097.7	151.94	47.713		
15,500.0	7,530.0	7,258.3	7,244.3	141.3	14.8	86.40	-1,964.2	-4,482.6	7,330.3	7,176.6	153.69	47.696		
15,600.0	7,530.0	7,258.3	7,244.3	143.1	14.8	86.40	-1,964.2	-4,482.6	7,411.4	7,256.0	155.43	47.683		
15,700.0	7,530.0	7,258.3	7,244.3	144.8	14.8	86.40	-1,964.2	-4,482.6	7,493.0	7,335.8	157.17	47.673		
15,800.0	7,530.0	7,258.3	7,244.3	146.6	14.8	86.40	-1,964.2	-4,482.6	7,575.0	7,416.0	158.92	47.666		
15,900.0	7,530.0	7,258.3	7,244.3	148.3	14.8	86.40	-1,964.2	-4,482.6	7,657.4	7,496.7	160.66	47.662		
16,000.0	7,530.0	7,258.3	7,244.3	150.1	14.8	86.40	-1,964.2	-4,482.6	7,740.2	7,577.8	162.40	47.660 SF		
16,100.0	7,530.0	7,258.3	7,244.3	151.8	14.8	86.40	-1,964.2	-4,482.6	7,823.5	7,659.3	164.15	47.661		
16,200.0	7,530.0	7,258.3	7,244.3	153.6	14.8	86.40	-1,964.2	-4,482.6	7,907.1	7,741.2	165.89	47.664		
16,300.0	7,530.0	7,258.3	7,244.3	155.3	14.8	86.40	-1,964.2	-4,482.6	7,991.1	7,823.5	167.64	47.669		
16,400.0	7,530.0	7,258.3	7,244.3	157.1	14.8	86.40	-1,964.2	-4,482.6	8,075.5	7,906.1	169.38	47.676		
16,500.0	7,530.0	7,258.3	7,244.3	158.8	14.8	86.40	-1,964.2	-4,482.6	8,160.3	7,989.1	171.13	47.686		
16,600.0	7,530.0	7,258.3	7,244.3	160.6	14.8	86.40	-1,964.2	-4,482.6	8,245.3	8,072.5	172.87	47.696		
16,700.0	7,530.0	7,258.3	7,244.3	162.3	14.8	86.40	-1,964.2	-4,482.6	8,330.7	8,156.1	174.62	47.709		
16,800.0	7,530.0	7,258.3	7,244.3	164.1	14.8	86.40	-1,964.2	-4,482.6	8,416.5	8,240.1	176.36	47.723		
16,900.0	7,530.0	7,258.3	7,244.3	165.8	14.8	86.40	-1,964.2	-4,482.6	8,502.5	8,324.4	178.11	47.738		
17,000.0	7,530.0	7,258.3	7,244.3	167.6	14.8	86.40	-1,964.2	-4,482.6	8,588.8	8,409.0	179.85	47.755		
17,100.0	7,530.0	7,258.3	7,244.3	169.3	14.8	86.40	-1,964.2	-4,482.6	8,675.5	8,493.9	181.60	47.773		
17,200.0	7,530.0	7,258.3	7,244.3	171.1	14.8	86.40	-1,964.2	-4,482.6	8,762.4	8,579.0	183.34	47.793		
17,300.0	7,530.0	7,258.3	7,244.3	172.8	14.8	86.40	-1,964.2	-4,482.6	8,849.6	8,664.5	185.09	47.813		
17,400.0	7,530.0	7,258.3	7,244.3	174.5	14.8	86.40	-1,964.2	-4,482.6	8,937.0	8,750.2	186.83	47.834		
17,411.2	7,530.0	7,258.3	7,244.3	174.7	14.8	86.40	-1,964.2	-4,482.6	8,946.9	8,759.9	187.03	47.837		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-115.53	-1,929.2	-4,040.1	4,477.1						
100.0	100.0	85.0	85.0	0.2	0.1	-115.53	-1,929.2	-4,040.1	4,477.1	4,476.8	0.26	N/A			
200.0	200.0	185.0	185.0	0.3	0.3	-115.53	-1,929.2	-4,040.1	4,477.1	4,476.5	0.61	7,392.425			
300.0	300.0	285.0	285.0	0.5	0.5	-115.53	-1,929.2	-4,040.1	4,477.1	4,476.1	0.95	4,689.528			
400.0	400.0	349.7	349.7	0.7	0.6	-115.53	-1,929.4	-4,040.2	4,477.4	4,476.2	1.24	3,604.133			
500.0	500.0	400.0	400.0	0.8	0.7	-115.53	-1,929.9	-4,040.6	4,478.7	4,477.2	1.50	2,976.139			
600.0	600.0	466.5	466.5	1.0	0.8	-92.51	-1,931.1	-4,041.6	4,480.9	4,479.1	1.80	2,494.583			
700.0	700.0	524.8	524.8	1.2	0.9	-92.51	-1,932.6	-4,042.9	4,484.1	4,482.0	2.08	2,159.589			
800.0	799.9	600.0	599.9	1.4	1.0	-92.53	-1,935.3	-4,045.1	4,488.4	4,486.0	2.39	1,876.378			
848.7	848.4	655.5	655.3	1.5	1.1	-92.56	-1,937.3	-4,046.8	4,490.7	4,488.1	2.58	1,739.868			
900.0	899.7	802.7	802.5	1.6	1.4	-92.69	-1,940.3	-4,050.1	4,492.3	4,489.4	2.94	1,530.226			
1,000.0	999.5	937.4	937.1	1.8	1.6	-92.79	-1,940.7	-4,051.7	4,493.7	4,490.4	3.36	1,336.533			
1,100.0	1,099.3	1,037.2	1,037.0	2.0	1.8	-92.87	-1,940.9	-4,052.8	4,495.1	4,491.3	3.73	1,204.880			
1,200.0	1,199.1	1,137.1	1,136.8	2.2	2.0	-92.94	-1,941.1	-4,053.9	4,496.4	4,492.3	4.10	1,096.406			
1,300.0	1,298.9	1,236.9	1,236.6	2.4	2.1	-93.01	-1,941.2	-4,055.0	4,497.8	4,493.3	4.47	1,005.591			
1,400.0	1,398.8	1,336.7	1,336.4	2.6	2.3	-93.09	-1,941.4	-4,056.1	4,499.2	4,494.3	4.85	928.511			
1,500.0	1,498.6	1,436.5	1,436.2	2.8	2.5	-93.16	-1,941.5	-4,057.2	4,500.6	4,495.4	5.22	862.309			
1,600.0	1,598.4	1,536.4	1,536.1	3.0	2.7	-93.23	-1,941.7	-4,058.3	4,502.0	4,496.4	5.59	804.858			
1,700.0	1,698.2	1,636.2	1,635.9	3.2	2.8	-93.30	-1,941.9	-4,059.4	4,503.4	4,497.4	5.97	754.547			
1,800.0	1,798.0	1,736.0	1,735.7	3.4	3.0	-93.38	-1,942.0	-4,060.5	4,504.8	4,498.4	6.34	710.134			
1,900.0	1,897.8	1,835.8	1,835.5	3.6	3.2	-93.45	-1,942.2	-4,061.5	4,506.2	4,499.5	6.72	670.648			
2,000.0	1,997.7	1,935.7	1,935.3	3.8	3.4	-93.52	-1,942.3	-4,062.6	4,507.6	4,500.5	7.10	635.316			
2,100.0	2,097.5	2,035.5	2,035.2	4.0	3.5	-93.59	-1,942.5	-4,063.7	4,509.0	4,501.6	7.47	603.520			
2,200.0	2,197.3	2,135.3	2,135.0	4.2	3.7	-93.67	-1,942.7	-4,064.8	4,510.5	4,502.6	7.85	574.758			
2,300.0	2,297.1	2,235.2	2,234.8	4.4	3.9	-93.74	-1,942.8	-4,065.9	4,511.9	4,503.7	8.22	548.617			
2,400.0	2,396.9	2,335.0	2,334.6	4.6	4.1	-93.81	-1,943.0	-4,067.0	4,513.4	4,504.8	8.60	524.756			
2,500.0	2,496.7	2,434.8	2,434.4	4.8	4.2	-93.88	-1,943.1	-4,068.1	4,514.8	4,505.9	8.98	502.891			
2,600.0	2,596.5	2,534.6	2,534.2	5.0	4.4	-93.96	-1,943.3	-4,069.2	4,516.3	4,506.9	9.35	482.782			
2,700.0	2,696.4	2,634.5	2,634.1	5.2	4.6	-94.03	-1,943.5	-4,070.3	4,517.8	4,508.0	9.73	464.227			
2,800.0	2,796.2	2,734.3	2,733.9	5.4	4.8	-94.10	-1,943.6	-4,071.4	4,519.3	4,509.1	10.11	447.053			
2,900.0	2,896.0	2,834.1	2,833.7	5.6	4.9	-94.17	-1,943.8	-4,072.5	4,520.7	4,510.3	10.49	431.112			
3,000.0	2,995.8	2,933.9	2,933.5	5.8	5.1	-94.25	-1,943.9	-4,073.6	4,522.2	4,511.4	10.86	416.275			
3,100.0	3,095.6	3,033.8	3,033.3	6.0	5.3	-94.32	-1,944.1	-4,074.6	4,523.7	4,512.5	11.24	402.434			
3,200.0	3,195.4	3,133.6	3,133.2	6.2	5.5	-94.39	-1,944.3	-4,075.7	4,525.3	4,513.6	11.62	389.490			
3,300.0	3,295.2	3,233.4	3,233.0	6.4	5.6	-94.46	-1,944.4	-4,076.8	4,526.8	4,514.8	12.00	377.360			
3,400.0	3,395.1	3,333.2	3,332.8	6.6	5.8	-94.53	-1,944.6	-4,077.9	4,528.3	4,515.9	12.37	365.970			
3,500.0	3,494.9	3,433.1	3,432.6	6.8	6.0	-94.61	-1,944.7	-4,079.0	4,529.8	4,517.1	12.75	355.253			
3,600.0	3,594.7	3,532.9	3,532.4	7.0	6.2	-94.68	-1,944.9	-4,080.1	4,531.4	4,518.2	13.13	345.153			
3,700.0	3,694.5	3,632.7	3,632.3	7.2	6.3	-94.75	-1,945.1	-4,081.2	4,532.9	4,519.4	13.51	335.617			
3,800.0	3,794.3	3,732.5	3,732.1	7.4	6.5	-94.82	-1,945.2	-4,082.3	4,534.5	4,520.6	13.88	326.599			
3,900.0	3,894.1	3,832.4	3,831.9	7.6	6.7	-94.89	-1,945.4	-4,083.4	4,536.0	4,521.8	14.26	318.060			
4,000.0	3,994.0	3,932.2	3,931.7	7.8	6.9	-94.97	-1,945.5	-4,084.5	4,537.6	4,522.9	14.64	309.961			
4,100.0	4,093.8	4,032.0	4,031.5	8.0	7.0	-95.04	-1,945.7	-4,085.6	4,539.2	4,524.1	15.02	302.269			
4,200.0	4,193.6	4,131.8	4,131.4	8.2	7.2	-95.11	-1,945.9	-4,086.6	4,540.7	4,525.3	15.39	294.956			
4,300.0	4,293.4	4,231.7	4,231.2	8.4	7.4	-95.18	-1,946.0	-4,087.7	4,542.3	4,526.6	15.77	287.992			
4,400.0	4,393.2	4,331.5	4,331.0	8.6	7.6	-95.25	-1,946.2	-4,088.8	4,543.9	4,527.8	16.15	281.355			
4,500.0	4,493.0	4,431.3	4,430.8	8.8	7.7	-95.32	-1,946.3	-4,089.9	4,545.5	4,529.0	16.53	275.022			
4,600.0	4,592.8	4,531.1	4,530.6	9.0	7.9	-95.40	-1,946.5	-4,091.0	4,547.1	4,530.2	16.91	268.971			
4,700.0	4,692.7	4,631.0	4,630.5	9.3	8.1	-95.47	-1,946.7	-4,092.1	4,548.7	4,531.5	17.28	263.186			
4,800.0	4,792.5	4,730.8	4,730.3	9.5	8.3	-95.54	-1,946.8	-4,093.2	4,550.4	4,532.7	17.66	257.648			
4,900.0	4,892.3	4,830.6	4,830.1	9.7	8.4	-95.61	-1,947.0	-4,094.3	4,552.0	4,534.0	18.04	252.343			
5,000.0	4,992.1	4,930.4	4,929.9	9.9	8.6	-95.68	-1,947.1	-4,095.4	4,553.6	4,535.2	18.42	247.256			

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1													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	5,091.9	5,030.3	5,029.7	10.1	8.8	-95.75	-1,947.3	-4,096.5	4,555.3	4,536.5	18.79	242.374		
5,200.0	5,191.7	5,130.1	5,129.6	10.3	9.0	-95.82	-1,947.5	-4,097.6	4,556.9	4,537.8	19.17	237.684		
5,300.0	5,291.5	5,229.9	5,229.4	10.5	9.1	-95.89	-1,947.6	-4,098.7	4,558.6	4,539.0	19.55	233.176		
5,400.0	5,391.4	5,329.8	5,329.2	10.7	9.3	-95.96	-1,947.8	-4,099.7	4,560.3	4,540.3	19.93	228.840		
5,500.0	5,491.2	5,429.6	5,429.0	10.9	9.5	-96.04	-1,947.9	-4,100.8	4,561.9	4,541.6	20.31	224.665		
5,600.0	5,591.0	9,379.0	7,585.0	11.1	39.3	-71.32	88.3	-4,162.1	4,520.3	4,470.1	50.21	90.032		
5,700.0	5,690.8	9,400.0	7,585.0	11.3	39.6	-71.02	109.2	-4,163.1	4,475.0	4,424.2	50.76	88.168		
5,800.0	5,790.6	9,400.0	7,585.0	11.5	39.6	-71.02	109.2	-4,163.1	4,431.4	4,380.4	50.96	86.964		
5,900.0	5,890.4	9,400.0	7,585.0	11.7	39.6	-71.02	109.2	-4,163.1	4,389.6	4,338.5	51.16	85.806		
6,000.0	5,990.3	9,400.0	7,585.0	11.9	39.6	-71.02	109.2	-4,163.1	4,349.8	4,298.4	51.36	84.694		
6,100.0	6,090.1	9,400.0	7,585.0	12.1	39.6	-71.02	109.2	-4,163.1	4,311.8	4,260.3	51.56	83.628		
6,200.0	6,189.9	9,400.0	7,585.0	12.3	39.6	-71.02	109.2	-4,163.1	4,275.9	4,224.2	51.76	82.609		
6,300.0	6,289.7	9,400.0	7,585.0	12.5	39.6	-71.02	109.2	-4,163.1	4,242.1	4,190.1	51.96	81.638		
6,400.0	6,389.5	9,400.0	7,585.0	12.7	39.6	-71.02	109.2	-4,163.1	4,210.3	4,158.1	52.16	80.714		
6,500.0	6,489.3	9,400.0	7,585.0	12.9	39.6	-71.02	109.2	-4,163.1	4,180.7	4,128.3	52.36	79.838		
6,600.0	6,589.1	9,400.0	7,585.0	13.1	39.6	-71.02	109.2	-4,163.1	4,153.3	4,100.7	52.57	79.011		
6,700.0	6,689.0	9,400.0	7,585.0	13.3	39.6	-71.02	109.2	-4,163.1	4,128.1	4,075.3	52.77	78.233		
6,785.3	6,774.1	9,400.0	7,585.0	13.5	39.6	-71.02	109.2	-4,163.1	4,108.5	4,055.5	52.94	77.608		
6,800.0	6,788.8	9,400.0	7,585.0	13.5	39.6	-59.72	109.2	-4,163.1	4,105.2	4,052.3	52.96	77.514		
6,850.0	6,838.8	9,400.0	7,585.0	13.6	39.6	51.67	109.2	-4,163.1	4,094.4	4,041.4	53.00	77.247		
6,900.0	6,888.6	9,400.0	7,585.0	13.6	39.6	74.45	109.2	-4,163.1	4,084.1	4,031.1	53.02	77.036		
6,950.0	6,938.1	9,400.0	7,585.0	13.7	39.6	80.39	109.2	-4,163.1	4,074.1	4,021.1	53.00	76.875		
7,000.0	6,987.0	9,400.0	7,585.0	13.7	39.6	83.39	109.2	-4,163.1	4,064.7	4,011.7	52.95	76.760		
7,050.0	7,035.0	9,400.0	7,585.0	13.6	39.6	85.35	109.2	-4,163.1	4,055.8	4,002.9	52.89	76.683		
7,100.0	7,082.0	9,400.0	7,585.0	13.6	39.6	86.81	109.2	-4,163.1	4,047.4	3,994.6	52.81	76.637		
7,150.0	7,127.7	9,377.2	7,585.0	13.5	39.2	87.67	86.4	-4,162.0	4,039.6	3,987.3	52.37	77.143		
7,200.0	7,171.8	9,363.4	7,585.0	13.5	39.0	88.47	72.7	-4,161.4	4,032.4	3,980.4	52.06	77.456		
7,250.0	7,214.2	9,347.9	7,585.0	13.4	38.7	89.11	57.2	-4,160.7	4,025.8	3,974.1	51.73	77.821		
7,300.0	7,254.6	9,330.6	7,585.0	13.4	38.5	89.62	40.0	-4,160.1	4,019.8	3,968.5	51.39	78.227		
7,350.0	7,292.9	9,300.0	7,585.0	13.3	37.9	89.90	9.3	-4,159.0	4,014.5	3,963.6	50.84	78.956		
7,400.0	7,328.9	9,300.0	7,585.0	13.3	37.9	90.44	9.3	-4,159.0	4,009.6	3,958.8	50.82	78.905		
7,450.0	7,362.3	9,269.5	7,585.0	13.3	37.4	90.60	-21.1	-4,158.1	4,005.3	3,955.0	50.33	79.581		
7,500.0	7,393.1	9,246.4	7,585.0	13.4	37.1	90.79	-44.3	-4,157.5	4,001.6	3,951.6	50.00	80.038		
7,550.0	7,421.1	9,212.7	7,585.0	13.5	36.5	90.86	-77.9	-4,156.8	3,998.4	3,948.9	49.53	80.723		
7,600.0	7,446.1	9,185.2	7,585.0	13.6	36.1	90.95	-105.5	-4,156.3	3,995.7	3,946.5	49.21	81.192		
7,650.0	7,468.0	9,140.3	7,585.0	13.8	35.3	90.91	-150.4	-4,155.6	3,993.3	3,944.7	48.66	82.065		
7,700.0	7,486.7	9,094.0	7,585.0	14.0	34.6	90.88	-196.7	-4,154.8	3,991.2	3,943.0	48.13	82.919		
7,750.0	7,502.2	9,046.4	7,585.0	14.2	33.8	90.86	-244.2	-4,153.9	3,989.2	3,941.6	47.64	83.738		
7,800.0	7,514.3	8,998.0	7,585.0	14.6	33.0	90.85	-292.7	-4,153.1	3,987.5	3,940.3	47.18	84.522		
7,850.0	7,523.0	8,948.8	7,585.0	14.9	32.2	90.88	-341.9	-4,152.3	3,985.9	3,939.1	46.75	85.251		
7,900.0	7,528.2	8,899.1	7,585.0	15.3	31.4	90.93	-391.5	-4,151.4	3,984.5	3,938.1	46.37	85.932		
7,950.2	7,530.0	8,848.9	7,585.0	15.8	30.6	91.01	-441.7	-4,150.5	3,983.2	3,937.1	46.02	86.552		
8,000.0	7,530.0	8,799.1	7,585.0	16.2	29.8	91.01	-491.5	-4,149.7	3,982.0	3,936.3	45.71	87.112		
8,100.0	7,530.0	8,699.2	7,585.0	17.3	28.2	91.01	-591.4	-4,147.9	3,979.5	3,934.3	45.20	88.041		
8,200.0	7,530.0	8,599.2	7,585.0	18.4	26.7	91.01	-691.4	-4,146.2	3,977.1	3,932.3	44.82	88.735		
8,300.0	7,530.0	8,499.2	7,585.0	19.7	25.2	91.01	-791.3	-4,144.5	3,974.7	3,930.1	44.55	89.211		
8,400.0	7,530.0	8,399.2	7,585.0	21.0	23.7	91.01	-891.3	-4,142.7	3,972.3	3,927.9	44.39	89.485		
8,500.0	7,530.0	8,299.3	7,585.0	22.4	22.2	91.01	-991.2	-4,141.0	3,969.8	3,925.5	44.32	89.566		
8,600.0	7,530.0	8,199.3	7,585.0	23.8	20.8	91.01	-1,091.2	-4,139.3	3,967.4	3,923.1	44.35	89.456		
8,700.0	7,530.0	8,099.3	7,585.0	25.3	19.5	91.01	-1,191.2	-4,137.6	3,965.0	3,920.5	44.47	89.153		
8,800.0	7,530.0	7,999.4	7,585.0	26.8	18.2	91.01	-1,291.1	-4,135.8	3,962.5	3,917.9	44.70	88.650		
8,900.0	7,530.0	7,896.1	7,584.8	28.3	16.9	91.01	-1,394.3	-4,134.0	3,960.1	3,915.1	45.00	88.004		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1											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	7,530.0	7,774.2	7,568.3	29.9	15.6	90.77	-1,514.9	-4,131.8	3,957.3	3,912.1	45.26	87.443	
9,100.0	7,530.0	7,663.8	7,531.8	31.4	14.6	90.24	-1,618.9	-4,129.6	3,954.2	3,908.4	45.85	86.241	
9,200.0	7,530.0	7,570.0	7,485.5	33.0	14.0	89.57	-1,700.3	-4,127.7	3,951.3	3,904.5	46.78	84.460	
9,300.0	7,530.0	7,493.2	7,438.1	34.7	13.5	88.88	-1,760.7	-4,126.1	3,949.0	3,901.1	47.96	82.339	
9,400.0	7,530.0	7,431.3	7,394.3	36.3	13.2	88.25	-1,804.4	-4,124.9	3,948.1	3,898.8	49.31	80.072	
9,414.7	7,530.0	7,423.3	7,388.3	36.5	13.2	88.16	-1,809.7	-4,124.7	3,948.1	3,898.5	49.51	79.737 CC	
9,500.0	7,530.0	7,381.3	7,355.8	37.9	13.1	87.69	-1,836.0	-4,123.9	3,948.7	3,897.9	50.75	77.806 ES	
9,600.0	7,530.0	7,340.8	7,322.5	39.6	12.9	87.21	-1,859.2	-4,123.1	3,951.1	3,898.9	52.26	75.609	
9,700.0	7,530.0	7,300.0	7,287.4	41.2	12.8	86.70	-1,880.0	-4,122.4	3,955.6	3,901.8	53.78	73.547	
9,800.0	7,530.0	7,280.0	7,269.8	42.9	12.8	86.44	-1,889.3	-4,122.0	3,962.2	3,906.8	55.39	71.534	
9,900.0	7,530.0	7,250.0	7,242.6	44.5	12.7	86.05	-1,902.1	-4,121.5	3,971.1	3,914.1	56.97	69.705	
10,000.0	7,530.0	7,250.0	7,242.6	46.2	12.7	86.05	-1,902.1	-4,121.5	3,982.2	3,923.6	58.64	67.904	
10,100.0	7,530.0	7,220.4	7,215.2	47.9	12.6	85.65	-1,913.3	-4,121.0	3,995.6	3,935.3	60.24	66.327	
10,200.0	7,530.0	7,200.0	7,196.0	49.6	12.6	85.37	-1,920.2	-4,120.7	4,011.3	3,949.4	61.86	64.840	
10,300.0	7,530.0	7,200.0	7,196.0	51.3	12.6	85.37	-1,920.2	-4,120.7	4,029.3	3,965.8	63.55	63.401	
10,400.0	7,530.0	7,181.8	7,178.7	53.0	12.6	85.12	-1,925.8	-4,120.4	4,049.6	3,984.4	65.19	62.119	
10,500.0	7,530.0	7,171.9	7,169.2	54.7	12.6	84.99	-1,928.6	-4,120.3	4,072.2	4,005.4	66.86	60.909	
10,600.0	7,530.0	7,150.0	7,148.0	56.4	12.5	84.68	-1,934.2	-4,119.9	4,097.2	4,028.7	68.49	59.824	
10,700.0	7,530.0	7,150.0	7,148.0	58.1	12.5	84.68	-1,934.2	-4,119.9	4,124.2	4,054.0	70.19	58.760	
10,800.0	7,530.0	7,150.0	7,148.0	59.8	12.5	84.68	-1,934.2	-4,119.9	4,153.4	4,081.6	71.89	57.775	
10,900.0	7,530.0	7,150.0	7,148.0	61.5	12.5	84.68	-1,934.2	-4,119.9	4,184.9	4,111.3	73.59	56.864	
11,000.0	7,530.0	7,150.0	7,148.0	63.2	12.5	84.68	-1,934.2	-4,119.9	4,218.5	4,143.2	75.30	56.020	
11,100.0	7,530.0	7,130.2	7,128.7	64.9	12.5	84.40	-1,938.5	-4,119.6	4,253.9	4,177.0	76.95	55.284	
11,200.0	7,530.0	7,125.3	7,123.9	66.6	12.5	84.33	-1,939.5	-4,119.6	4,291.5	4,212.9	78.64	54.572	
11,300.0	7,530.0	7,120.7	7,119.4	68.4	12.5	84.27	-1,940.4	-4,119.5	4,331.1	4,250.8	80.34	53.911	
11,400.0	7,530.0	7,100.0	7,099.0	70.1	12.4	83.97	-1,943.9	-4,119.2	4,372.7	4,290.7	81.98	53.340	
11,500.0	7,530.0	7,100.0	7,099.0	71.8	12.4	83.97	-1,943.9	-4,119.2	4,416.0	4,332.3	83.69	52.765	
11,600.0	7,530.0	7,100.0	7,099.0	73.5	12.4	83.97	-1,943.9	-4,119.2	4,461.0	4,375.6	85.41	52.233	
11,700.0	7,530.0	7,100.0	7,099.0	75.3	12.4	83.97	-1,943.9	-4,119.2	4,507.9	4,420.8	87.12	51.741	
11,800.0	7,530.0	7,100.0	7,099.0	77.0	12.4	83.97	-1,943.9	-4,119.2	4,556.5	4,467.6	88.84	51.287	
11,900.0	7,530.0	7,100.0	7,099.0	78.7	12.4	83.97	-1,943.9	-4,119.2	4,606.7	4,516.1	90.56	50.868	
12,000.0	7,530.0	7,100.0	7,099.0	80.4	12.4	83.97	-1,943.9	-4,119.2	4,658.5	4,566.2	92.28	50.481	
12,100.0	7,530.0	7,100.0	7,099.0	82.2	12.4	83.97	-1,943.9	-4,119.2	4,711.9	4,617.9	94.00	50.125	
12,200.0	7,530.0	7,100.0	7,099.0	83.9	12.4	83.97	-1,943.9	-4,119.2	4,766.8	4,671.1	95.73	49.796	
12,300.0	7,530.0	7,100.0	7,099.0	85.6	12.4	83.97	-1,943.9	-4,119.2	4,823.1	4,725.7	97.45	49.493	
12,400.0	7,530.0	7,100.0	7,099.0	87.4	12.4	83.97	-1,943.9	-4,119.2	4,880.9	4,781.7	99.17	49.215	
12,500.0	7,530.0	7,100.0	7,099.0	89.1	12.4	83.97	-1,943.9	-4,119.2	4,939.9	4,839.0	100.90	48.959	
12,600.0	7,530.0	7,100.0	7,099.0	90.8	12.4	83.97	-1,943.9	-4,119.2	5,000.3	4,897.7	102.63	48.724	
12,700.0	7,530.0	7,100.0	7,099.0	92.6	12.4	83.97	-1,943.9	-4,119.2	5,062.0	4,957.6	104.35	48.509	
12,800.0	7,530.0	7,100.0	7,099.0	94.3	12.4	83.97	-1,943.9	-4,119.2	5,124.8	5,018.7	106.08	48.312	
12,900.0	7,530.0	7,078.2	7,077.4	96.0	12.4	83.66	-1,946.8	-4,118.9	5,188.5	5,080.8	107.71	48.170	
13,000.0	7,530.0	7,076.6	7,075.9	97.8	12.4	83.64	-1,946.9	-4,118.9	5,253.6	5,144.2	109.43	48.008	
13,100.0	7,530.0	7,075.1	7,074.4	99.5	12.4	83.62	-1,947.1	-4,118.9	5,319.8	5,208.6	111.15	47.860	
13,200.0	7,530.0	7,073.7	7,072.9	101.3	12.4	83.60	-1,947.3	-4,118.9	5,387.0	5,274.1	112.88	47.725	
13,300.0	7,530.0	7,072.3	7,071.6	103.0	12.4	83.58	-1,947.4	-4,118.9	5,455.2	5,340.6	114.60	47.603	
13,400.0	7,530.0	7,050.0	7,049.3	104.7	12.3	83.26	-1,949.3	-4,118.6	5,524.7	5,408.5	116.22	47.536	
13,500.0	7,530.0	7,050.0	7,049.3	106.5	12.3	83.26	-1,949.3	-4,118.6	5,594.8	5,476.8	117.95	47.434	
13,600.0	7,530.0	7,050.0	7,049.3	108.2	12.3	83.26	-1,949.3	-4,118.6	5,665.7	5,546.0	119.68	47.341	
13,700.0	7,530.0	7,050.0	7,049.3	110.0	12.3	83.26	-1,949.3	-4,118.6	5,737.6	5,616.2	121.41	47.259	
13,800.0	7,530.0	7,050.0	7,049.3	111.7	12.3	83.26	-1,949.3	-4,118.6	5,810.2	5,687.1	123.14	47.185	
13,900.0	7,530.0	7,050.0	7,049.3	113.4	12.3	83.26	-1,949.3	-4,118.6	5,883.7	5,758.8	124.87	47.120	
14,000.0	7,530.0	7,050.0	7,049.3	115.2	12.3	83.26	-1,949.3	-4,118.6	5,957.9	5,831.3	126.60	47.062	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1													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	7,530.0	7,050.0	7,049.3	116.9	12.3	83.26	-1,949.3	-4,118.6	6,032.9	5,904.6	128.33	47.011		
14,200.0	7,530.0	7,050.0	7,049.3	118.7	12.3	83.26	-1,949.3	-4,118.6	6,108.6	5,978.6	130.06	46.968		
14,300.0	7,530.0	7,050.0	7,049.3	120.4	12.3	83.26	-1,949.3	-4,118.6	6,185.0	6,053.2	131.79	46.930		
14,400.0	7,530.0	7,050.0	7,049.3	122.1	12.3	83.26	-1,949.3	-4,118.6	6,262.1	6,128.6	133.52	46.899		
14,500.0	7,530.0	7,050.0	7,049.3	123.9	12.3	83.26	-1,949.3	-4,118.6	6,339.8	6,204.5	135.26	46.873		
14,600.0	7,530.0	7,050.0	7,049.3	125.6	12.3	83.26	-1,949.3	-4,118.6	6,418.1	6,281.1	136.99	46.852		
14,700.0	7,530.0	7,050.0	7,049.3	127.4	12.3	83.26	-1,949.3	-4,118.6	6,497.0	6,358.3	138.72	46.835		
14,800.0	7,530.0	7,050.0	7,049.3	129.1	12.3	83.26	-1,949.3	-4,118.6	6,576.5	6,436.0	140.45	46.823		
14,900.0	7,530.0	7,050.0	7,049.3	130.9	12.3	83.26	-1,949.3	-4,118.6	6,656.5	6,514.4	142.19	46.815		
15,000.0	7,530.0	7,050.0	7,049.3	132.6	12.3	83.26	-1,949.3	-4,118.6	6,737.1	6,593.2	143.92	46.811		
15,100.0	7,530.0	7,050.0	7,049.3	134.4	12.3	83.26	-1,949.3	-4,118.6	6,818.2	6,672.5	145.65	46.811 SF		
15,200.0	7,530.0	7,050.0	7,049.3	136.1	12.3	83.26	-1,949.3	-4,118.6	6,899.8	6,752.4	147.39	46.814		
15,300.0	7,530.0	7,050.0	7,049.3	137.9	12.3	83.26	-1,949.3	-4,118.6	6,981.8	6,832.7	149.12	46.820		
15,400.0	7,530.0	7,050.0	7,049.3	139.6	12.3	83.26	-1,949.3	-4,118.6	7,064.4	6,913.5	150.86	46.829		
15,500.0	7,530.0	7,050.0	7,049.3	141.3	12.3	83.26	-1,949.3	-4,118.6	7,147.3	6,994.8	152.59	46.840		
15,600.0	7,530.0	7,050.0	7,049.3	143.1	12.3	83.26	-1,949.3	-4,118.6	7,230.7	7,076.4	154.33	46.854		
15,700.0	7,530.0	7,050.0	7,049.3	144.8	12.3	83.26	-1,949.3	-4,118.6	7,314.6	7,158.5	156.06	46.870		
15,800.0	7,530.0	7,050.0	7,049.3	146.6	12.3	83.26	-1,949.3	-4,118.6	7,398.8	7,241.0	157.79	46.889		
15,900.0	7,530.0	7,050.0	7,049.3	148.3	12.3	83.26	-1,949.3	-4,118.6	7,483.4	7,323.9	159.53	46.909		
16,000.0	7,530.0	7,050.0	7,049.3	150.1	12.3	83.26	-1,949.3	-4,118.6	7,568.4	7,407.1	161.27	46.931		
16,100.0	7,530.0	7,050.0	7,049.3	151.8	12.3	83.26	-1,949.3	-4,118.6	7,653.7	7,490.7	163.00	46.955		
16,200.0	7,530.0	7,050.0	7,049.3	153.6	12.3	83.26	-1,949.3	-4,118.6	7,739.4	7,574.7	164.74	46.981		
16,300.0	7,530.0	7,050.0	7,049.3	155.3	12.3	83.26	-1,949.3	-4,118.6	7,825.5	7,659.0	166.47	47.008		
16,400.0	7,530.0	7,050.0	7,049.3	157.1	12.3	83.26	-1,949.3	-4,118.6	7,911.8	7,743.6	168.21	47.036		
16,500.0	7,530.0	7,050.0	7,049.3	158.8	12.3	83.26	-1,949.3	-4,118.6	7,998.5	7,828.6	169.94	47.065		
16,600.0	7,530.0	7,050.0	7,049.3	160.6	12.3	83.26	-1,949.3	-4,118.6	8,085.5	7,913.8	171.68	47.096		
16,700.0	7,530.0	7,050.0	7,049.3	162.3	12.3	83.26	-1,949.3	-4,118.6	8,172.8	7,999.4	173.42	47.128		
16,800.0	7,530.0	7,050.0	7,049.3	164.1	12.3	83.26	-1,949.3	-4,118.6	8,260.4	8,085.2	175.15	47.161		
16,900.0	7,530.0	7,050.0	7,049.3	165.8	12.3	83.26	-1,949.3	-4,118.6	8,348.2	8,171.3	176.89	47.194		
17,000.0	7,530.0	7,050.0	7,049.3	167.6	12.3	83.26	-1,949.3	-4,118.6	8,436.3	8,257.7	178.63	47.229		
17,100.0	7,530.0	7,050.0	7,049.3	169.3	12.3	83.26	-1,949.3	-4,118.6	8,524.7	8,344.4	180.36	47.264		
17,200.0	7,530.0	7,050.0	7,049.3	171.1	12.3	83.26	-1,949.3	-4,118.6	8,613.4	8,431.3	182.10	47.300		
17,300.0	7,530.0	7,050.0	7,049.3	172.8	12.3	83.26	-1,949.3	-4,118.6	8,702.3	8,518.4	183.84	47.337		
17,400.0	7,530.0	7,050.0	7,049.3	174.5	12.3	83.26	-1,949.3	-4,118.6	8,791.4	8,605.8	185.57	47.374		
17,411.2	7,530.0	7,050.0	7,049.3	174.7	12.3	83.26	-1,949.3	-4,118.6	8,801.4	8,615.7	185.77	47.378		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #3														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-115.63	-1,936.5	-4,037.3	4,477.7						
100.0	100.0	86.0	86.0	0.2	0.1	-115.63	-1,936.5	-4,037.3	4,477.7	4,477.4	0.26	N/A			
200.0	200.0	186.0	186.0	0.3	0.3	-115.63	-1,936.5	-4,037.3	4,477.7	4,477.1	0.61	7,372.206			
300.0	300.0	286.0	286.0	0.5	0.5	-115.63	-1,936.5	-4,037.3	4,477.7	4,476.7	0.96	4,681.621			
400.0	400.0	386.0	386.0	0.7	0.6	-115.63	-1,936.5	-4,037.3	4,477.7	4,476.4	1.31	3,429.851			
500.0	500.0	486.0	486.0	0.8	0.8	-115.63	-1,936.5	-4,037.3	4,477.7	4,476.0	1.65	2,706.254			
600.0	600.0	586.0	586.0	1.0	1.0	-92.63	-1,936.5	-4,037.3	4,477.7	4,475.7	2.00	2,234.308			
700.0	700.0	686.0	686.0	1.2	1.4	-92.75	-1,935.9	-4,031.9	4,475.8	4,473.1	2.64	1,692.636			
800.0	799.9	950.5	950.3	1.4	1.6	-92.86	-1,935.5	-4,028.0	4,472.3	4,469.3	3.00	1,489.654			
848.7	848.4	999.0	998.8	1.5	1.7	-92.92	-1,935.3	-4,026.1	4,470.7	4,467.5	3.18	1,406.405			
900.0	899.7	1,050.2	1,049.9	1.6	1.8	-92.97	-1,935.1	-4,024.2	4,468.9	4,465.6	3.37	1,327.589			
1,000.0	999.5	1,149.8	1,149.5	1.8	2.0	-93.06	-1,934.7	-4,020.3	4,465.6	4,461.8	3.73	1,196.047			
1,100.0	1,099.3	1,249.5	1,249.1	2.0	2.2	-93.16	-1,934.2	-4,016.4	4,462.2	4,458.1	4.10	1,087.422			
1,200.0	1,199.1	1,349.2	1,348.7	2.2	2.4	-93.25	-1,933.8	-4,012.6	4,458.9	4,454.4	4.48	996.360			
1,300.0	1,298.9	1,448.8	1,448.3	2.4	2.5	-93.35	-1,933.4	-4,008.7	4,455.6	4,450.7	4.85	919.008			
1,400.0	1,398.8	1,548.5	1,547.9	2.6	2.7	-93.44	-1,932.9	-4,004.8	4,452.2	4,447.0	5.22	852.541			
1,500.0	1,498.6	1,648.2	1,647.5	2.8	2.9	-93.54	-1,932.5	-4,001.0	4,448.9	4,443.3	5.60	794.844			
1,600.0	1,598.4	1,747.9	1,747.1	3.0	3.1	-93.63	-1,932.1	-3,997.1	4,445.7	4,439.7	5.97	744.310			
1,700.0	1,698.2	1,847.5	1,846.7	3.2	3.3	-93.73	-1,931.7	-3,993.3	4,442.4	4,436.0	6.35	699.698			
1,800.0	1,798.0	1,947.2	1,946.3	3.4	3.5	-93.82	-1,931.2	-3,989.4	4,439.1	4,432.4	6.73	660.035			
1,900.0	1,897.8	2,046.9	2,045.9	3.6	3.7	-93.92	-1,930.8	-3,985.5	4,435.9	4,428.8	7.10	624.546			
2,000.0	1,997.7	2,146.5	2,145.5	3.8	3.8	-94.02	-1,930.4	-3,981.7	4,432.6	4,425.2	7.48	592.612			
2,100.0	2,097.5	2,246.2	2,245.1	4.0	4.0	-94.11	-1,929.9	-3,977.8	4,429.4	4,421.5	7.86	563.726			
2,200.0	2,197.3	2,345.9	2,344.7	4.2	4.2	-94.21	-1,929.5	-3,973.9	4,426.2	4,418.0	8.24	537.475			
2,300.0	2,297.1	2,445.6	2,444.3	4.4	4.4	-94.30	-1,929.1	-3,970.1	4,423.0	4,414.4	8.61	513.516			
2,400.0	2,396.9	2,545.2	2,543.9	4.6	4.6	-94.40	-1,928.7	-3,966.2	4,419.8	4,410.8	8.99	491.564			
2,500.0	2,496.7	2,644.9	2,643.5	4.8	4.8	-94.50	-1,928.2	-3,962.4	4,416.6	4,407.3	9.37	471.376			
2,600.0	2,596.5	2,744.6	2,743.0	5.0	5.0	-94.59	-1,927.8	-3,958.5	4,413.5	4,403.7	9.75	452.751			
2,700.0	2,696.4	2,844.2	2,842.6	5.2	5.1	-94.69	-1,927.4	-3,954.6	4,410.3	4,400.2	10.13	435.514			
2,800.0	2,796.2	2,943.9	2,942.2	5.4	5.3	-94.79	-1,927.0	-3,950.8	4,407.2	4,396.7	10.51	419.516			
2,900.0	2,896.0	3,043.6	3,041.8	5.6	5.5	-94.88	-1,926.5	-3,946.9	4,404.1	4,393.2	10.88	404.628			
3,000.0	2,995.8	3,143.2	3,141.4	5.8	5.7	-94.98	-1,926.1	-3,943.0	4,400.9	4,389.7	11.26	390.740			
3,100.0	3,095.6	3,242.9	3,241.0	6.0	5.9	-95.08	-1,925.7	-3,939.2	4,397.8	4,386.2	11.64	377.754			
3,200.0	3,195.4	3,342.6	3,340.6	6.2	6.1	-95.18	-1,925.2	-3,935.3	4,394.8	4,382.7	12.02	365.586			
3,300.0	3,295.2	3,442.3	3,440.2	6.4	6.3	-95.27	-1,924.8	-3,931.4	4,391.7	4,379.3	12.40	354.161			
3,400.0	3,395.1	3,541.9	3,539.8	6.6	6.4	-95.37	-1,924.4	-3,927.6	4,388.6	4,375.8	12.78	343.413			
3,500.0	3,494.9	3,641.6	3,639.4	6.8	6.6	-95.47	-1,924.0	-3,923.7	4,385.6	4,372.4	13.16	333.283			
3,600.0	3,594.7	3,741.3	3,739.0	7.0	6.8	-95.57	-1,923.5	-3,919.9	4,382.5	4,369.0	13.54	323.721			
3,700.0	3,694.5	3,840.9	3,838.6	7.2	7.0	-95.67	-1,923.1	-3,916.0	4,379.5	4,365.6	13.92	314.680			
3,800.0	3,794.3	3,940.6	3,938.2	7.4	7.2	-95.76	-1,922.7	-3,912.1	4,376.5	4,362.2	14.30	306.119			
3,900.0	3,894.1	4,040.3	4,037.8	7.6	7.4	-95.86	-1,922.2	-3,908.3	4,373.5	4,358.8	14.68	298.000			
4,000.0	3,994.0	4,140.0	4,137.4	7.8	7.6	-95.96	-1,921.8	-3,904.4	4,370.5	4,355.5	15.06	290.291			
4,100.0	4,093.8	4,239.6	4,237.0	8.0	7.7	-96.06	-1,921.4	-3,900.5	4,367.6	4,352.1	15.44	282.961			
4,200.0	4,193.6	4,339.3	4,336.6	8.2	7.9	-96.16	-1,921.0	-3,896.7	4,364.6	4,348.8	15.81	275.982			
4,300.0	4,293.4	4,439.0	4,436.2	8.4	8.1	-96.26	-1,920.5	-3,892.8	4,361.7	4,345.5	16.19	269.332			
4,400.0	4,393.2	4,538.6	4,535.8	8.6	8.3	-96.36	-1,920.1	-3,889.0	4,358.7	4,342.2	16.57	262.986			
4,500.0	4,493.0	4,638.3	4,635.4	8.8	8.5	-96.46	-1,919.7	-3,885.1	4,355.8	4,338.9	16.95	256.924			
4,600.0	4,592.8	4,738.0	4,734.9	9.0	8.7	-96.55	-1,919.2	-3,881.2	4,352.9	4,335.6	17.33	251.129			
4,700.0	4,692.7	4,837.7	4,834.5	9.3	8.9	-96.65	-1,918.8	-3,877.4	4,350.0	4,332.3	17.71	245.582			
4,800.0	4,792.5	4,937.3	4,934.1	9.5	9.1	-96.75	-1,918.4	-3,873.5	4,347.1	4,329.1	18.09	240.269			
4,900.0	4,892.3	5,037.0	5,033.7	9.7	9.2	-96.85	-1,918.0	-3,869.6	4,344.3	4,325.8	18.47	235.174			
5,000.0	4,992.1	5,136.7	5,133.3	9.9	9.4	-96.95	-1,917.5	-3,865.8	4,341.4	4,322.6	18.85	230.285			

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,236.3	5,232.9	10.1	9.6	-97.05	-1,917.1	-3,861.9	4,338.6	4,319.4	19.23	225.590		
5,200.0	5,191.7	5,336.0	5,332.5	10.3	9.8	-97.15	-1,916.7	-3,858.1	4,335.8	4,316.2	19.61	221.077		
5,300.0	5,291.5	5,435.7	5,432.1	10.5	10.0	-97.25	-1,916.3	-3,854.2	4,333.0	4,313.0	19.99	216.736		
5,400.0	5,391.4	5,535.3	5,531.7	10.7	10.2	-97.35	-1,915.8	-3,850.3	4,330.2	4,309.8	20.37	212.557		
5,500.0	5,491.2	5,635.0	5,631.3	10.9	10.4	-97.45	-1,915.4	-3,846.5	4,327.4	4,306.6	20.75	208.531		
5,600.0	5,591.0	5,696.9	7,817.0	11.1	41.7	-70.01	212.1	-3,798.3	4,309.6	4,257.5	52.20	82.564		
5,700.0	5,690.8	9,702.6	7,817.0	11.3	41.8	-69.92	217.7	-3,798.4	4,256.7	4,204.2	52.50	81.079		
5,800.0	5,790.6	9,708.2	7,817.0	11.5	41.9	-69.83	223.3	-3,798.5	4,205.4	4,152.6	52.80	79.644		
5,900.0	5,890.4	9,713.8	7,817.0	11.7	42.0	-69.74	229.0	-3,798.6	4,155.8	4,102.7	53.10	78.259		
6,000.0	5,990.3	9,719.5	7,817.0	11.9	42.1	-69.65	234.6	-3,798.7	4,108.1	4,054.7	53.41	76.923		
6,100.0	6,090.1	9,725.1	7,817.0	12.1	42.2	-69.57	240.2	-3,798.8	4,062.3	4,008.6	53.71	75.638		
6,200.0	6,189.9	9,730.7	7,817.0	12.3	42.3	-69.48	245.9	-3,798.9	4,018.5	3,964.5	54.01	74.404		
6,300.0	6,289.7	9,736.4	7,817.0	12.5	42.4	-69.39	251.5	-3,799.0	3,976.7	3,922.3	54.31	73.221		
6,400.0	6,389.5	9,742.0	7,817.0	12.7	42.5	-69.30	257.2	-3,799.1	3,936.9	3,882.3	54.61	72.089		
6,500.0	6,489.3	9,747.7	7,817.0	12.9	42.6	-69.21	262.8	-3,799.2	3,899.3	3,844.4	54.91	71.010		
6,600.0	6,589.1	9,753.3	7,817.0	13.1	42.7	-69.12	268.4	-3,799.3	3,864.0	3,808.8	55.21	69.982		
6,700.0	6,689.0	9,758.9	7,817.0	13.3	42.8	-69.03	274.1	-3,799.4	3,830.9	3,775.4	55.51	69.006		
6,785.3	6,774.1	9,763.7	7,817.0	13.5	42.8	-68.96	278.9	-3,799.5	3,804.5	3,748.7	55.77	68.216		
6,800.0	6,788.8	9,764.4	7,817.0	13.5	42.9	-57.55	279.6	-3,799.5	3,800.1	3,744.3	55.83	68.061		
6,850.0	6,838.8	9,764.5	7,817.0	13.6	42.9	54.18	279.6	-3,799.5	3,785.6	3,729.6	55.97	67.636		
6,900.0	6,888.6	9,761.0	7,817.0	13.6	42.8	77.22	276.2	-3,799.4	3,771.5	3,715.5	56.00	67.347		
6,950.0	6,938.1	9,754.1	7,817.0	13.7	42.7	83.36	269.3	-3,799.3	3,758.2	3,702.2	55.94	67.187		
7,000.0	6,987.0	9,743.8	7,817.0	13.7	42.5	86.48	258.9	-3,799.1	3,745.4	3,689.7	55.78	67.148		
7,050.0	7,035.0	9,730.0	7,817.0	13.6	42.3	88.49	245.2	-3,798.9	3,733.4	3,677.9	55.54	67.224		
7,100.0	7,082.0	9,713.0	7,817.0	13.6	42.0	89.95	228.1	-3,798.6	3,722.2	3,667.0	55.22	67.409		
7,150.0	7,127.7	9,692.7	7,817.0	13.5	41.7	91.05	207.9	-3,798.2	3,711.7	3,656.9	54.83	67.694		
7,200.0	7,171.8	9,669.3	7,817.0	13.5	41.3	91.91	184.4	-3,797.8	3,702.0	3,647.6	54.38	68.072		
7,250.0	7,214.2	9,642.8	7,817.0	13.4	40.8	92.58	158.0	-3,797.4	3,693.0	3,639.1	53.88	68.536		
7,300.0	7,254.6	9,613.5	7,817.0	13.4	40.4	93.09	128.7	-3,796.9	3,684.8	3,631.5	53.34	69.078		
7,350.0	7,292.9	9,581.4	7,817.0	13.3	39.8	93.49	96.6	-3,796.3	3,677.3	3,624.6	52.77	69.687		
7,400.0	7,328.9	9,546.7	7,817.0	13.3	39.3	93.79	61.9	-3,795.7	3,670.5	3,618.4	52.17	70.355		
7,450.0	7,362.3	9,509.6	7,817.0	13.3	38.7	94.02	24.8	-3,795.1	3,664.4	3,612.9	51.56	71.071		
7,500.0	7,393.1	9,470.3	7,817.0	13.4	38.0	94.17	-14.5	-3,794.4	3,658.9	3,608.0	50.95	71.820		
7,550.0	7,421.1	9,428.9	7,817.0	13.5	37.3	94.28	-55.9	-3,793.7	3,654.0	3,603.7	50.33	72.595		
7,600.0	7,446.1	9,385.6	7,817.0	13.6	36.6	94.36	-99.2	-3,792.9	3,649.6	3,599.9	49.74	73.381		
7,650.0	7,468.0	9,340.7	7,817.0	13.8	35.9	94.41	-144.1	-3,792.2	3,645.8	3,596.6	49.16	74.166		
7,700.0	7,486.7	9,294.4	7,817.0	14.0	35.2	94.46	-190.4	-3,791.4	3,642.4	3,593.8	48.60	74.943		
7,750.0	7,502.2	9,246.9	7,817.0	14.2	34.4	94.50	-237.9	-3,790.5	3,639.4	3,591.4	48.08	75.696		
7,800.0	7,514.3	9,198.4	7,817.0	14.6	33.6	94.54	-286.4	-3,789.7	3,636.9	3,589.3	47.59	76.426		
7,850.0	7,523.0	9,149.2	7,817.0	14.9	32.8	94.60	-335.6	-3,788.8	3,634.8	3,587.6	47.13	77.117		
7,900.0	7,528.2	9,099.5	7,817.0	15.3	32.0	94.67	-385.3	-3,788.0	3,633.0	3,586.3	46.71	77.776		
7,950.2	7,530.0	9,049.3	7,817.0	15.8	31.3	94.76	-435.4	-3,787.1	3,631.6	3,585.3	46.33	78.391		
8,000.0	7,530.0	8,999.6	7,817.0	16.2	30.5	94.76	-485.2	-3,786.3	3,630.4	3,584.4	46.02	78.887		
8,100.0	7,530.0	8,999.6	7,817.0	17.3	28.9	94.76	-585.1	-3,784.5	3,628.0	3,582.5	45.52	79.706		
8,200.0	7,530.0	8,799.6	7,817.0	18.4	27.4	94.76	-685.1	-3,782.8	3,625.6	3,580.4	45.14	80.313		
8,300.0	7,530.0	8,699.7	7,817.0	19.7	25.9	94.77	-785.0	-3,781.1	3,623.1	3,578.3	44.88	80.726		
8,400.0	7,530.0	8,599.7	7,817.0	21.0	24.4	94.77	-885.0	-3,779.3	3,620.7	3,576.0	44.72	80.957		
8,500.0	7,530.0	8,499.7	7,817.0	22.4	23.0	94.77	-985.0	-3,777.6	3,618.3	3,573.6	44.66	81.016		
8,600.0	7,530.0	8,399.7	7,817.0	23.8	21.6	94.78	-1,084.9	-3,775.9	3,615.9	3,571.2	44.69	80.905		
8,700.0	7,530.0	8,299.8	7,817.0	25.3	20.3	94.78	-1,184.9	-3,774.2	3,613.5	3,568.6	44.82	80.623		
8,800.0	7,530.0	8,199.8	7,817.0	26.8	19.1	94.78	-1,284.8	-3,772.4	3,611.0	3,566.0	45.05	80.164		
8,900.0	7,530.0	8,080.8	7,812.9	28.3	17.7	94.72	-1,403.7	-3,770.5	3,608.5	3,563.3	45.17	79.885		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total 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	7,530.0	7,949.8	7,782.6	29.9	16.4	94.24	-1,530.8	-3,769.5	3,605.1	3,559.7	45.38	79.438		
9,100.0	7,530.0	7,837.2	7,734.1	31.4	15.5	93.47	-1,632.2	-3,769.6	3,601.3	3,555.3	46.04	78.218		
9,200.0	7,530.0	7,746.0	7,680.9	33.0	14.9	92.63	-1,706.1	-3,770.4	3,597.9	3,550.8	47.05	76.463		
9,300.0	7,530.0	7,674.1	7,631.0	34.7	14.5	91.83	-1,757.9	-3,771.5	3,595.5	3,547.2	48.31	74.430		
9,394.9	7,530.0	7,620.2	7,589.6	36.2	14.3	91.17	-1,792.4	-3,772.5	3,594.7	3,545.1	49.63	72.437 CC		
9,400.0	7,530.0	7,617.6	7,587.6	36.3	14.3	91.14	-1,794.0	-3,772.5	3,594.7	3,545.0	49.70	72.331		
9,500.0	7,530.0	7,572.9	7,550.8	37.9	14.1	90.55	-1,819.4	-3,773.5	3,595.8	3,544.6	51.18	70.264 ES		
9,600.0	7,530.0	7,536.9	7,519.9	39.6	14.0	90.06	-1,837.7	-3,774.4	3,599.1	3,546.4	52.71	68.284		
9,700.0	7,530.0	7,500.0	7,487.0	41.2	13.9	89.54	-1,854.4	-3,775.4	3,604.7	3,550.5	54.25	66.443		
9,800.0	7,530.0	7,483.5	7,471.9	42.9	13.9	89.30	-1,861.2	-3,775.9	3,612.8	3,556.9	55.87	64.659		
9,900.0	7,530.0	7,463.3	7,453.2	44.5	13.8	89.00	-1,868.9	-3,776.5	3,623.4	3,565.9	57.49	63.025		
10,000.0	7,530.0	7,450.0	7,440.8	46.2	13.8	88.80	-1,873.6	-3,776.9	3,636.5	3,577.3	59.13	61.498		
10,100.0	7,530.0	7,431.4	7,423.3	47.9	13.8	88.52	-1,879.7	-3,777.4	3,652.1	3,591.3	60.77	60.101		
10,200.0	7,530.0	7,418.7	7,411.2	49.6	13.7	88.33	-1,883.5	-3,777.8	3,670.3	3,607.9	62.42	58.800		
10,300.0	7,530.0	7,400.0	7,393.2	51.3	13.7	88.05	-1,888.7	-3,778.5	3,691.0	3,627.0	64.06	57.617		
10,400.0	7,530.0	7,400.0	7,393.2	53.0	13.7	88.05	-1,888.7	-3,778.5	3,714.2	3,648.5	65.76	56.483		
10,500.0	7,530.0	7,400.0	7,393.2	54.7	13.7	88.05	-1,888.7	-3,778.5	3,739.9	3,672.5	67.46	55.441		
10,600.0	7,530.0	7,381.4	7,375.2	56.4	13.6	87.76	-1,893.2	-3,779.1	3,768.0	3,698.9	69.11	54.521		
10,700.0	7,530.0	7,374.5	7,368.4	58.1	13.6	87.65	-1,894.8	-3,779.3	3,798.5	3,727.7	70.80	53.653		
10,800.0	7,530.0	7,368.2	7,362.3	59.8	13.6	87.56	-1,896.1	-3,779.5	3,831.3	3,758.8	72.49	52.854		
10,900.0	7,530.0	7,350.0	7,344.5	61.5	13.6	87.27	-1,899.6	-3,780.2	3,866.5	3,792.3	74.15	52.147		
11,000.0	7,530.0	7,350.0	7,344.5	63.2	13.6	87.27	-1,899.6	-3,780.2	3,903.7	3,827.9	75.86	51.460		
11,100.0	7,530.0	7,350.0	7,344.5	64.9	13.6	87.27	-1,899.6	-3,780.2	3,943.2	3,865.6	77.57	50.831		
11,200.0	7,530.0	7,350.0	7,344.5	66.6	13.6	87.27	-1,899.6	-3,780.2	3,984.8	3,905.5	79.29	50.255		
11,300.0	7,530.0	7,350.0	7,344.5	68.4	13.6	87.27	-1,899.6	-3,780.2	4,028.4	3,947.4	81.01	49.727		
11,400.0	7,530.0	7,350.0	7,344.5	70.1	13.6	87.27	-1,899.6	-3,780.2	4,074.0	3,991.3	82.73	49.244		
11,500.0	7,530.0	7,350.0	7,344.5	71.8	13.6	87.27	-1,899.6	-3,780.2	4,121.5	4,037.1	84.45	48.803		
11,600.0	7,530.0	7,350.0	7,344.5	73.5	13.6	87.27	-1,899.6	-3,780.2	4,170.9	4,084.7	86.18	48.400		
11,700.0	7,530.0	7,350.0	7,344.5	75.3	13.6	87.27	-1,899.6	-3,780.2	4,222.1	4,134.2	87.90	48.033		
11,800.0	7,530.0	7,328.4	7,323.1	77.0	13.5	86.93	-1,903.0	-3,780.9	4,274.7	4,185.2	89.56	47.731		
11,900.0	7,530.0	7,325.8	7,320.6	78.7	13.5	86.89	-1,903.3	-3,781.0	4,329.2	4,237.9	91.28	47.429		
12,000.0	7,530.0	7,323.4	7,318.2	80.4	13.5	86.86	-1,903.6	-3,781.1	4,385.3	4,292.3	93.00	47.155		
12,100.0	7,530.0	7,321.1	7,316.0	82.2	13.5	86.82	-1,903.9	-3,781.2	4,442.9	4,348.2	94.72	46.907		
12,200.0	7,530.0	7,300.0	7,295.0	83.9	13.5	86.49	-1,906.2	-3,782.0	4,502.3	4,405.9	96.38	46.716		
12,300.0	7,530.0	7,300.0	7,295.0	85.6	13.5	86.49	-1,906.2	-3,782.0	4,562.8	4,464.6	98.11	46.509		
12,400.0	7,530.0	7,300.0	7,295.0	87.4	13.5	86.49	-1,906.2	-3,782.0	4,624.6	4,524.8	99.84	46.322		
12,500.0	7,530.0	7,300.0	7,295.0	89.1	13.5	86.49	-1,906.2	-3,782.0	4,687.8	4,586.2	101.57	46.154		
12,600.0	7,530.0	7,300.0	7,295.0	90.8	13.5	86.49	-1,906.2	-3,782.0	4,752.2	4,648.9	103.30	46.004		
12,700.0	7,530.0	7,300.0	7,295.0	92.6	13.5	86.49	-1,906.2	-3,782.0	4,817.9	4,712.8	105.03	45.870		
12,800.0	7,530.0	7,300.0	7,295.0	94.3	13.5	86.49	-1,906.2	-3,782.0	4,884.7	4,777.9	106.77	45.751		
12,900.0	7,530.0	7,300.0	7,295.0	96.0	13.5	86.49	-1,906.2	-3,782.0	4,952.6	4,844.1	108.50	45.646		
13,000.0	7,530.0	7,300.0	7,295.0	97.8	13.5	86.49	-1,906.2	-3,782.0	5,021.6	4,911.4	110.23	45.554		
13,100.0	7,530.0	7,300.0	7,295.0	99.5	13.5	86.49	-1,906.2	-3,782.0	5,091.6	4,979.7	111.97	45.473		
13,200.0	7,530.0	7,300.0	7,295.0	101.3	13.5	86.49	-1,906.2	-3,782.0	5,162.7	5,048.9	113.71	45.403		
13,300.0	7,530.0	7,300.0	7,295.0	103.0	13.5	86.49	-1,906.2	-3,782.0	5,234.6	5,119.2	115.44	45.344		
13,400.0	7,530.0	7,300.0	7,295.0	104.7	13.5	86.49	-1,906.2	-3,782.0	5,307.5	5,190.3	117.18	45.294		
13,500.0	7,530.0	7,300.0	7,295.0	106.5	13.5	86.49	-1,906.2	-3,782.0	5,381.2	5,262.3	118.92	45.252		
13,600.0	7,530.0	7,300.0	7,295.0	108.2	13.5	86.49	-1,906.2	-3,782.0	5,455.8	5,335.2	120.65	45.219		
13,700.0	7,530.0	7,300.0	7,295.0	110.0	13.5	86.49	-1,906.2	-3,782.0	5,531.2	5,408.8	122.39	45.192		
13,800.0	7,530.0	7,300.0	7,295.0	111.7	13.5	86.49	-1,906.2	-3,782.0	5,607.4	5,483.2	124.13	45.173		
13,900.0	7,530.0	7,300.0	7,295.0	113.4	13.5	86.49	-1,906.2	-3,782.0	5,684.3	5,558.4	125.87	45.160		
14,000.0	7,530.0	7,300.0	7,295.0	115.2	13.5	86.49	-1,906.2	-3,782.0	5,761.9	5,634.2	127.61	45.152		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 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		
14,100.0	7,530.0	7,300.0	7,295.0	116.9	13.5	86.49	-1,906.2	-3,782.0	5,840.1	5,710.8	129.35	45.150 SF		
14,200.0	7,530.0	7,300.0	7,295.0	118.7	13.5	86.49	-1,906.2	-3,782.0	5,919.1	5,788.0	131.09	45.153		
14,300.0	7,530.0	7,300.0	7,295.0	120.4	13.5	86.49	-1,906.2	-3,782.0	5,998.6	5,865.8	132.83	45.161		
14,400.0	7,530.0	7,300.0	7,295.0	122.1	13.5	86.49	-1,906.2	-3,782.0	6,078.8	5,944.2	134.57	45.172		
14,500.0	7,530.0	7,300.0	7,295.0	123.9	13.5	86.49	-1,906.2	-3,782.0	6,159.6	6,023.3	136.31	45.188		
14,600.0	7,530.0	7,300.0	7,295.0	125.6	13.5	86.49	-1,906.2	-3,782.0	6,240.9	6,102.8	138.05	45.207		
14,700.0	7,530.0	7,300.0	7,295.0	127.4	13.5	86.49	-1,906.2	-3,782.0	6,322.7	6,182.9	139.79	45.229		
14,800.0	7,530.0	7,300.0	7,295.0	129.1	13.5	86.49	-1,906.2	-3,782.0	6,405.1	6,263.5	141.53	45.255		
14,900.0	7,530.0	7,300.0	7,295.0	130.9	13.5	86.49	-1,906.2	-3,782.0	6,487.9	6,344.7	143.28	45.283		
15,000.0	7,530.0	7,300.0	7,295.0	132.6	13.5	86.49	-1,906.2	-3,782.0	6,571.3	6,426.2	145.02	45.313		
15,100.0	7,530.0	7,300.0	7,295.0	134.4	13.5	86.49	-1,906.2	-3,782.0	6,655.0	6,508.3	146.76	45.346		
15,200.0	7,530.0	7,300.0	7,295.0	136.1	13.5	86.49	-1,906.2	-3,782.0	6,739.3	6,590.8	148.50	45.381		
15,300.0	7,530.0	7,300.0	7,295.0	137.9	13.5	86.49	-1,906.2	-3,782.0	6,823.9	6,673.7	150.25	45.418		
15,400.0	7,530.0	7,300.0	7,295.0	139.6	13.5	86.49	-1,906.2	-3,782.0	6,909.0	6,757.0	151.99	45.457		
15,500.0	7,530.0	7,300.0	7,295.0	141.3	13.5	86.49	-1,906.2	-3,782.0	6,994.5	6,840.7	153.73	45.498		
15,600.0	7,530.0	7,300.0	7,295.0	143.1	13.5	86.49	-1,906.2	-3,782.0	7,080.3	6,924.8	155.48	45.540		
15,700.0	7,530.0	7,300.0	7,295.0	144.8	13.5	86.49	-1,906.2	-3,782.0	7,166.5	7,009.3	157.22	45.583		
15,800.0	7,530.0	7,300.0	7,295.0	146.6	13.5	86.49	-1,906.2	-3,782.0	7,253.1	7,094.1	158.96	45.628		
15,900.0	7,530.0	7,300.0	7,295.0	148.3	13.5	86.49	-1,906.2	-3,782.0	7,340.0	7,179.3	160.71	45.673		
16,000.0	7,530.0	7,300.0	7,295.0	150.1	13.5	86.49	-1,906.2	-3,782.0	7,427.2	7,264.8	162.45	45.720		
16,100.0	7,530.0	7,300.0	7,295.0	151.8	13.5	86.49	-1,906.2	-3,782.0	7,514.8	7,350.6	164.19	45.768		
16,200.0	7,530.0	7,300.0	7,295.0	153.6	13.5	86.49	-1,906.2	-3,782.0	7,602.7	7,436.7	165.94	45.816		
16,300.0	7,530.0	7,300.0	7,295.0	155.3	13.5	86.49	-1,906.2	-3,782.0	7,690.8	7,523.1	167.68	45.865		
16,400.0	7,530.0	7,300.0	7,295.0	157.1	13.5	86.49	-1,906.2	-3,782.0	7,779.3	7,609.8	169.43	45.915		
16,500.0	7,530.0	7,300.0	7,295.0	158.8	13.5	86.49	-1,906.2	-3,782.0	7,868.0	7,696.8	171.17	45.965		
16,600.0	7,530.0	7,300.0	7,295.0	160.6	13.5	86.49	-1,906.2	-3,782.0	7,957.0	7,784.1	172.92	46.016		
16,700.0	7,530.0	7,300.0	7,295.0	162.3	13.5	86.49	-1,906.2	-3,782.0	8,046.2	7,871.6	174.66	46.067		
16,800.0	7,530.0	7,300.0	7,295.0	164.1	13.5	86.49	-1,906.2	-3,782.0	8,135.7	7,959.3	176.41	46.119		
16,900.0	7,530.0	7,300.0	7,295.0	165.8	13.5	86.49	-1,906.2	-3,782.0	8,225.5	8,047.3	178.15	46.171		
17,000.0	7,530.0	7,300.0	7,295.0	167.6	13.5	86.49	-1,906.2	-3,782.0	8,315.4	8,135.5	179.90	46.223		
17,100.0	7,530.0	7,300.0	7,295.0	169.3	13.5	86.49	-1,906.2	-3,782.0	8,405.6	8,224.0	181.64	46.275		
17,200.0	7,530.0	7,277.1	7,272.2	171.1	13.4	86.13	-1,907.8	-3,782.8	8,495.6	8,312.3	183.28	46.354		
17,300.0	7,530.0	7,276.8	7,271.8	172.8	13.4	86.12	-1,907.8	-3,782.8	8,586.2	8,401.2	185.02	46.407		
17,400.0	7,530.0	7,276.5	7,271.5	174.5	13.4	86.12	-1,907.8	-3,782.9	8,677.0	8,490.3	186.76	46.460		
17,411.2	7,530.0	7,276.4	7,271.5	174.7	13.4	86.12	-1,907.8	-3,782.9	8,687.3	8,500.3	186.96	46.466		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-115.57	-1,929.2	-4,031.7	4,469.5					
100.0	100.0	86.0	86.0	0.2	0.1	-115.57	-1,929.2	-4,031.7	4,469.5	4,469.2	0.26	N/A		
200.0	200.0	186.0	186.0	0.3	0.3	-115.57	-1,929.2	-4,031.7	4,469.5	4,468.9	0.61	7,358.711		
300.0	300.0	286.0	286.0	0.5	0.5	-115.57	-1,929.2	-4,031.7	4,469.5	4,468.5	0.96	4,673.051		
400.0	400.0	386.0	386.0	0.7	0.6	-115.57	-1,929.2	-4,031.7	4,469.5	4,468.2	1.31	3,423.572		
500.0	500.0	486.0	486.0	0.8	0.8	-115.57	-1,929.2	-4,031.7	4,469.5	4,467.8	1.65	2,701.300		
600.0	600.0	787.5	787.3	1.0	1.3	-92.66	-1,929.3	-4,024.5	4,467.6	4,465.2	2.36	1,894.738		
700.0	700.0	989.4	988.8	1.2	1.7	-92.86	-1,929.4	-4,011.1	4,461.4	4,458.5	2.90	1,540.522		
800.0	799.9	1,088.9	1,088.0	1.4	1.9	-93.02	-1,929.5	-4,003.5	4,454.9	4,451.6	3.26	1,367.045		
848.7	848.4	1,137.2	1,136.2	1.5	2.0	-93.11	-1,929.5	-3,999.9	4,451.7	4,448.3	3.44	1,294.904		
900.0	899.7	1,188.2	1,187.1	1.6	2.1	-93.17	-1,929.5	-3,996.0	4,448.4	4,444.8	3.63	1,226.138		
1,000.0	999.5	1,287.6	1,286.1	1.8	2.4	-93.29	-1,929.6	-3,988.5	4,441.9	4,437.9	4.00	1,110.186		
1,100.0	1,099.3	1,386.9	1,385.2	2.0	2.6	-93.41	-1,929.6	-3,981.0	4,435.5	4,431.1	4.38	1,013.353		
1,200.0	1,199.1	1,486.3	1,484.3	2.2	2.8	-93.54	-1,929.7	-3,973.5	4,429.1	4,424.4	4.76	931.421		
1,300.0	1,298.9	1,585.6	1,583.3	2.4	3.0	-93.66	-1,929.7	-3,966.0	4,422.7	4,417.6	5.14	861.283		
1,400.0	1,398.8	1,685.0	1,682.4	2.6	3.2	-93.78	-1,929.8	-3,958.5	4,416.4	4,410.9	5.52	800.616		
1,500.0	1,498.6	1,784.3	1,781.5	2.8	3.4	-93.90	-1,929.8	-3,951.0	4,410.0	4,404.1	5.90	747.657		
1,600.0	1,598.4	1,883.7	1,880.5	3.0	3.6	-94.03	-1,929.9	-3,943.5	4,403.7	4,397.4	6.28	701.047		
1,700.0	1,698.2	1,983.0	1,979.6	3.2	3.8	-94.15	-1,930.0	-3,936.0	4,397.4	4,390.8	6.67	659.724		
1,800.0	1,798.0	2,082.3	2,078.6	3.4	4.0	-94.27	-1,930.0	-3,928.5	4,391.1	4,384.1	7.05	622.846		
1,900.0	1,897.8	2,181.7	2,177.7	3.6	4.3	-94.40	-1,930.1	-3,920.9	4,384.9	4,377.4	7.44	589.741		
2,000.0	1,997.7	2,281.0	2,276.8	3.8	4.5	-94.52	-1,930.1	-3,913.4	4,378.6	4,370.8	7.82	559.862		
2,100.0	2,097.5	2,380.4	2,375.8	4.0	4.7	-94.65	-1,930.2	-3,905.9	4,372.4	4,364.2	8.21	532.764		
2,200.0	2,197.3	2,479.7	2,474.9	4.2	4.9	-94.77	-1,930.2	-3,898.4	4,366.2	4,357.6	8.59	508.080		
2,300.0	2,297.1	2,579.1	2,574.0	4.4	5.1	-94.90	-1,930.3	-3,890.9	4,360.1	4,351.1	8.98	485.502		
2,400.0	2,396.9	2,678.4	2,673.0	4.6	5.3	-95.02	-1,930.3	-3,883.4	4,353.9	4,344.5	9.37	464.774		
2,500.0	2,496.7	2,777.8	2,772.1	4.8	5.6	-95.15	-1,930.4	-3,875.9	4,347.8	4,338.0	9.76	445.679		
2,600.0	2,596.5	2,877.1	2,871.1	5.0	5.8	-95.28	-1,930.4	-3,868.4	4,341.7	4,331.5	10.14	428.033		
2,700.0	2,696.4	2,976.5	2,970.2	5.2	6.0	-95.40	-1,930.5	-3,860.9	4,335.6	4,325.0	10.53	411.677		
2,800.0	2,796.2	3,075.8	3,069.3	5.4	6.2	-95.53	-1,930.6	-3,853.4	4,329.5	4,318.6	10.92	396.476		
2,900.0	2,896.0	3,175.2	3,168.3	5.6	6.4	-95.66	-1,930.6	-3,845.9	4,323.5	4,312.1	11.31	382.312		
3,000.0	2,995.8	3,274.5	3,267.4	5.8	6.6	-95.79	-1,930.7	-3,838.3	4,317.4	4,305.7	11.70	369.083		
3,100.0	3,095.6	3,373.9	3,366.5	6.0	6.9	-95.92	-1,930.7	-3,830.8	4,311.4	4,299.3	12.09	356.701		
3,200.0	3,195.4	3,473.2	3,465.5	6.2	7.1	-96.05	-1,930.8	-3,823.3	4,305.4	4,293.0	12.48	345.086		
3,300.0	3,295.2	3,572.5	3,564.6	6.4	7.3	-96.17	-1,930.8	-3,815.8	4,299.5	4,286.6	12.87	334.170		
3,400.0	3,395.1	3,671.9	3,663.6	6.6	7.5	-96.30	-1,930.9	-3,808.3	4,293.6	4,280.3	13.26	323.893		
3,500.0	3,494.9	3,771.2	3,762.7	6.8	7.7	-96.43	-1,930.9	-3,800.8	4,287.6	4,274.0	13.65	314.199		
3,600.0	3,594.7	3,870.6	3,861.8	7.0	7.9	-96.56	-1,931.0	-3,793.3	4,281.7	4,267.7	14.04	305.041		
3,700.0	3,694.5	3,969.9	3,960.8	7.2	8.2	-96.70	-1,931.1	-3,785.8	4,275.9	4,261.4	14.43	296.376		
3,800.0	3,794.3	4,069.3	4,059.9	7.4	8.4	-96.83	-1,931.1	-3,778.3	4,270.0	4,255.2	14.82	288.165		
3,900.0	3,894.1	4,168.6	4,159.0	7.6	8.6	-96.96	-1,931.2	-3,770.8	4,264.2	4,249.0	15.21	280.374		
4,000.0	3,994.0	4,268.0	4,258.0	7.8	8.8	-97.09	-1,931.2	-3,763.3	4,258.4	4,242.8	15.60	272.971		
4,100.0	4,093.8	4,367.3	4,357.1	8.0	9.0	-97.22	-1,931.3	-3,755.8	4,252.6	4,236.6	15.99	265.929		
4,200.0	4,193.6	4,466.7	4,456.1	8.2	9.2	-97.35	-1,931.3	-3,748.2	4,246.9	4,230.5	16.38	259.221		
4,300.0	4,293.4	4,566.0	4,555.2	8.4	9.5	-97.49	-1,931.4	-3,740.7	4,241.1	4,224.4	16.77	252.825		
4,400.0	4,393.2	4,665.4	4,654.3	8.6	9.7	-97.62	-1,931.4	-3,733.2	4,235.4	4,218.3	17.17	246.720		
4,500.0	4,493.0	4,764.7	4,753.3	8.8	9.9	-97.75	-1,931.5	-3,725.7	4,229.7	4,212.2	17.56	240.885		
4,600.0	4,592.8	4,864.1	4,852.4	9.0	10.1	-97.89	-1,931.6	-3,718.2	4,224.1	4,206.1	17.95	235.305		
4,700.0	4,692.7	4,963.4	4,951.5	9.3	10.3	-98.02	-1,931.6	-3,710.7	4,218.4	4,200.1	18.34	229.962		
4,800.0	4,792.5	5,062.7	5,050.5	9.5	10.5	-98.16	-1,931.7	-3,703.2	4,212.8	4,194.1	18.74	224.842		
4,900.0	4,892.3	5,162.1	5,149.6	9.7	10.8	-98.29	-1,931.7	-3,695.7	4,207.2	4,188.1	19.13	219.932		
5,000.0	4,992.1	5,261.4	5,248.6	9.9	11.0	-98.43	-1,931.8	-3,688.2	4,201.6	4,182.1	19.52	215.218		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,360.8	5,347.7	10.1	11.2	-98.56	-1,931.8	-3,680.7	4,196.1	4,176.2	19.92	210.689		
5,200.0	5,191.7	5,575.2	7,585.0	10.3	43.5	-68.83	283.4	-3,491.4	4,152.8	4,100.6	52.25	79.476		
5,300.0	5,291.5	5,580.8	7,585.0	10.5	43.6	-68.74	289.0	-3,491.3	4,093.8	4,041.2	52.56	77.886		
5,400.0	5,391.4	5,586.4	7,585.0	10.7	43.7	-68.64	294.6	-3,491.3	4,036.3	3,983.4	52.87	76.345		
5,500.0	5,491.2	5,591.9	7,585.0	10.9	43.8	-68.54	300.1	-3,491.2	3,980.5	3,927.4	53.18	74.853		
5,600.0	5,591.0	5,597.5	7,585.0	11.1	43.9	-68.45	305.7	-3,491.2	3,926.5	3,873.0	53.49	73.412		
5,700.0	5,690.8	9,603.1	7,585.0	11.3	44.0	-68.35	311.3	-3,491.1	3,874.3	3,820.5	53.79	72.021		
5,800.0	5,790.6	9,608.7	7,585.0	11.5	44.0	-68.26	316.9	-3,491.1	3,824.0	3,769.9	54.10	70.680		
5,900.0	5,890.4	9,614.2	7,585.0	11.7	44.1	-68.16	322.4	-3,491.0	3,775.6	3,721.2	54.41	69.392		
6,000.0	5,990.3	9,619.8	7,585.0	11.9	44.2	-68.06	328.0	-3,491.0	3,729.4	3,674.6	54.72	68.155		
6,100.0	6,090.1	9,625.4	7,585.0	12.1	44.3	-67.97	333.6	-3,490.9	3,685.2	3,630.2	55.03	66.971		
6,200.0	6,189.9	9,631.0	7,585.0	12.3	44.4	-67.87	339.2	-3,490.9	3,643.2	3,587.9	55.33	65.840		
6,300.0	6,289.7	9,636.6	7,585.0	12.5	44.5	-67.78	344.7	-3,490.8	3,603.5	3,547.9	55.64	64.763		
6,400.0	6,389.5	9,642.1	7,585.0	12.7	44.6	-67.68	350.3	-3,490.8	3,566.2	3,510.2	55.95	63.740		
6,500.0	6,489.3	9,647.7	7,585.0	12.9	44.7	-67.59	355.9	-3,490.7	3,531.3	3,475.0	56.26	62.771		
6,600.0	6,589.1	9,653.3	7,585.0	13.1	44.8	-67.49	361.5	-3,490.7	3,498.9	3,442.3	56.56	61.857		
6,700.0	6,689.0	9,658.9	7,585.0	13.3	44.9	-67.39	367.0	-3,490.6	3,469.0	3,412.2	56.87	60.999		
6,785.3	6,774.1	9,663.6	7,585.0	13.5	45.0	-67.31	371.8	-3,490.6	3,445.7	3,388.5	57.13	60.311		
6,800.0	6,788.8	9,664.3	7,585.0	13.5	45.0	-55.95	372.5	-3,490.6	3,441.8	3,384.6	57.21	60.157		
6,850.0	6,838.8	9,664.3	7,585.0	13.6	45.0	55.60	372.5	-3,490.6	3,429.2	3,371.8	57.41	59.730		
6,900.0	6,888.6	9,660.8	7,585.0	13.6	44.9	78.45	369.0	-3,490.6	3,417.3	3,359.8	57.50	59.431		
6,950.0	6,938.1	9,653.9	7,585.0	13.7	44.8	84.37	362.1	-3,490.7	3,406.2	3,348.8	57.48	59.256		
7,000.0	6,987.0	9,643.5	7,585.0	13.7	44.6	87.27	351.7	-3,490.8	3,395.9	3,338.6	57.37	59.198		
7,050.0	7,035.0	9,629.7	7,585.0	13.6	44.4	89.05	337.9	-3,490.9	3,386.5	3,329.3	57.15	59.252		
7,100.0	7,082.0	9,612.7	7,585.0	13.6	44.1	90.25	320.8	-3,491.1	3,377.9	3,321.0	56.86	59.412		
7,150.0	7,127.7	9,592.3	7,585.0	13.5	43.8	91.09	300.5	-3,491.2	3,370.2	3,313.7	56.48	59.673		
7,200.0	7,171.8	9,568.9	7,585.0	13.5	43.4	91.69	277.1	-3,491.4	3,363.3	3,307.2	56.03	60.025		
7,250.0	7,214.2	9,542.4	7,585.0	13.4	43.0	92.08	250.6	-3,491.7	3,357.2	3,301.6	55.52	60.464		
7,300.0	7,254.6	9,513.0	7,585.0	13.4	42.5	92.33	221.2	-3,491.9	3,351.9	3,296.9	54.97	60.981		
7,350.0	7,292.9	9,480.9	7,585.0	13.3	42.0	92.46	189.1	-3,492.2	3,347.3	3,292.9	54.37	61.566		
7,400.0	7,328.9	9,446.2	7,585.0	13.3	41.4	92.48	154.4	-3,492.5	3,343.4	3,289.6	53.74	62.209		
7,450.0	7,362.3	9,409.1	7,585.0	13.3	40.8	92.44	117.3	-3,492.9	3,340.1	3,287.0	53.10	62.900		
7,500.0	7,393.1	9,369.7	7,585.0	13.4	40.2	92.34	77.9	-3,493.2	3,337.4	3,284.9	52.45	63.624		
7,550.0	7,421.1	9,328.2	7,585.0	13.5	39.5	92.19	36.4	-3,493.6	3,335.2	3,283.4	51.81	64.372		
7,600.0	7,446.1	9,285.0	7,585.0	13.6	38.8	92.03	-6.8	-3,494.0	3,333.4	3,282.2	51.18	65.129		
7,650.0	7,468.0	9,240.0	7,585.0	13.8	38.1	91.85	-51.8	-3,494.4	3,332.0	3,281.5	50.58	65.883		
7,700.0	7,486.7	9,193.7	7,585.0	14.0	37.3	91.68	-98.1	-3,494.8	3,331.0	3,281.0	50.00	66.625		
7,750.0	7,502.2	9,146.1	7,585.0	14.2	36.6	91.52	-145.6	-3,495.2	3,330.2	3,280.8	49.45	67.339		
7,800.0	7,514.3	9,097.6	7,585.0	14.6	35.8	91.39	-194.1	-3,495.6	3,329.7	3,280.7	48.95	68.025 ES		
7,850.0	7,523.0	9,048.4	7,585.0	14.9	35.0	91.28	-243.4	-3,496.1	3,329.4	3,280.9	48.48	68.669		
7,900.0	7,528.2	8,998.7	7,585.0	15.3	34.3	91.22	-293.1	-3,496.5	3,329.2	3,281.2	48.06	69.275		
7,920.0	7,529.4	8,978.8	7,585.0	15.5	33.9	91.20	-313.0	-3,496.7	3,329.2	3,281.3	47.90	69.497 CC		
7,950.2	7,530.0	8,948.5	7,585.0	15.8	33.5	91.19	-343.3	-3,497.0	3,329.2	3,281.6	47.67	69.837		
8,000.0	7,530.0	8,898.7	7,585.0	16.2	32.7	91.19	-393.0	-3,497.4	3,329.3	3,282.0	47.35	70.308		
8,100.0	7,530.0	8,798.7	7,585.0	17.3	31.2	91.19	-493.0	-3,498.3	3,329.5	3,282.7	46.82	71.108		
8,200.0	7,530.0	8,698.7	7,585.0	18.4	29.7	91.19	-593.0	-3,499.2	3,329.7	3,283.3	46.42	71.731		
8,300.0	7,530.0	8,598.7	7,585.0	19.7	28.2	91.19	-693.0	-3,500.1	3,329.9	3,283.8	46.13	72.193		
8,400.0	7,530.0	8,498.7	7,585.0	21.0	26.8	91.19	-793.0	-3,501.0	3,330.1	3,284.2	45.93	72.506		
8,500.0	7,530.0	8,398.7	7,585.0	22.4	25.4	91.19	-893.0	-3,501.8	3,330.3	3,284.5	45.82	72.679		
8,600.0	7,530.0	8,298.7	7,585.0	23.8	24.0	91.19	-993.0	-3,502.7	3,330.5	3,284.7	45.80	72.715		
8,700.0	7,530.0	8,198.7	7,585.0	25.3	22.7	91.19	-1,093.0	-3,503.6	3,330.7	3,284.8	45.87	72.616		
8,800.0	7,530.0	8,098.7	7,585.0	26.8	21.5	91.19	-1,193.0	-3,504.5	3,330.9	3,284.8	46.02	72.376		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,998.7	7,585.0	28.3	20.3	91.19	-1,293.0	-3,505.4	3,331.1	3,284.8	46.27	71.989		
9,000.0	7,530.0	7,906.7	7,584.5	29.9	19.3	91.18	-1,385.0	-3,506.3	3,331.3	3,284.6	46.72	71.299		
9,100.0	7,530.0	7,831.9	7,576.4	31.4	18.6	91.04	-1,459.3	-3,507.5	3,332.1	3,284.6	47.47	70.194		
9,200.0	7,530.0	7,760.4	7,559.7	33.0	17.9	90.75	-1,528.8	-3,509.4	3,333.7	3,285.4	48.34	68.968		
9,300.0	7,530.0	7,700.0	7,539.0	34.7	17.4	90.39	-1,585.5	-3,511.5	3,336.4	3,287.0	49.40	67.545		
9,400.0	7,530.0	7,633.6	7,509.5	36.3	17.0	89.89	-1,644.8	-3,514.3	3,340.3	3,289.8	50.49	66.158		
9,500.0	7,530.0	7,579.8	7,480.7	37.9	16.6	89.39	-1,690.2	-3,516.8	3,345.7	3,294.0	51.75	64.654		
9,600.0	7,530.0	7,532.2	7,451.8	39.6	16.4	88.90	-1,727.9	-3,519.4	3,352.9	3,299.8	53.10	63.144		
9,700.0	7,530.0	7,500.0	7,430.5	41.2	16.2	88.53	-1,752.0	-3,521.2	3,362.0	3,307.4	54.57	61.609		
9,800.0	7,530.0	7,450.0	7,394.8	42.9	16.0	87.93	-1,786.9	-3,524.2	3,373.2	3,317.2	55.98	60.257		
9,900.0	7,530.0	7,421.8	7,373.4	44.5	15.9	87.56	-1,805.2	-3,526.0	3,386.6	3,329.1	57.52	58.873		
10,000.0	7,530.0	7,400.0	7,356.3	46.2	15.8	87.27	-1,818.5	-3,527.4	3,402.4	3,343.3	59.10	57.569		
10,100.0	7,530.0	7,368.7	7,330.8	47.9	15.7	86.84	-1,836.6	-3,529.5	3,420.5	3,359.9	60.66	56.393		
10,200.0	7,530.0	7,350.0	7,315.1	49.6	15.6	86.57	-1,846.7	-3,530.8	3,441.1	3,378.9	62.26	55.268		
10,300.0	7,530.0	7,327.2	7,295.6	51.3	15.6	86.24	-1,858.3	-3,532.4	3,464.2	3,400.3	63.87	54.241		
10,400.0	7,530.0	7,300.0	7,271.7	53.0	15.5	85.84	-1,871.2	-3,534.3	3,489.7	3,424.3	65.45	53.317		
10,500.0	7,530.0	7,300.0	7,271.7	54.7	15.5	85.84	-1,871.2	-3,534.3	3,517.6	3,450.5	67.15	52.386		
10,600.0	7,530.0	7,280.0	7,253.8	56.4	15.4	85.53	-1,879.9	-3,535.7	3,548.0	3,479.2	68.77	51.589		
10,700.0	7,530.0	7,250.0	7,226.3	58.1	15.3	85.07	-1,891.8	-3,537.9	3,580.8	3,510.5	70.36	50.894		
10,800.0	7,530.0	7,250.0	7,226.3	59.8	15.3	85.07	-1,891.8	-3,537.9	3,615.8	3,543.7	72.06	50.176		
10,900.0	7,530.0	7,250.0	7,226.3	61.5	15.3	85.07	-1,891.8	-3,537.9	3,653.1	3,579.4	73.77	49.521		
11,000.0	7,530.0	7,250.0	7,226.3	63.2	15.3	85.07	-1,891.8	-3,537.9	3,692.8	3,617.3	75.48	48.926		
11,100.0	7,530.0	7,226.8	7,204.6	64.9	15.3	84.71	-1,900.0	-3,539.6	3,734.4	3,657.4	77.10	48.439		
11,200.0	7,530.0	7,200.0	7,179.3	66.6	15.2	84.28	-1,908.3	-3,541.6	3,778.5	3,699.8	78.70	48.013		
11,300.0	7,530.0	7,200.0	7,179.3	68.4	15.2	84.28	-1,908.3	-3,541.6	3,824.3	3,743.9	80.41	47.560		
11,400.0	7,530.0	7,200.0	7,179.3	70.1	15.2	84.28	-1,908.3	-3,541.6	3,872.1	3,790.0	82.12	47.150		
11,500.0	7,530.0	7,200.0	7,179.3	71.8	15.2	84.28	-1,908.3	-3,541.6	3,921.9	3,838.1	83.84	46.780		
11,600.0	7,530.0	7,200.0	7,179.3	73.5	15.2	84.28	-1,908.3	-3,541.6	3,973.6	3,888.1	85.56	46.445		
11,700.0	7,530.0	7,200.0	7,179.3	75.3	15.2	84.28	-1,908.3	-3,541.6	4,027.2	3,939.9	87.27	46.144		
11,800.0	7,530.0	7,200.0	7,179.3	77.0	15.2	84.28	-1,908.3	-3,541.6	4,082.4	3,993.4	88.99	45.874		
11,900.0	7,530.0	7,176.1	7,156.3	78.7	15.2	83.90	-1,914.7	-3,543.4	4,139.0	4,048.4	90.61	45.681		
12,000.0	7,530.0	7,171.6	7,151.9	80.4	15.2	83.82	-1,915.8	-3,543.8	4,197.4	4,105.1	92.31	45.472		
12,100.0	7,530.0	7,150.0	7,131.0	82.2	15.1	83.47	-1,920.6	-3,545.4	4,257.5	4,163.6	93.93	45.328		
12,200.0	7,530.0	7,150.0	7,131.0	83.9	15.1	83.47	-1,920.6	-3,545.4	4,318.8	4,223.1	95.65	45.154		
12,300.0	7,530.0	7,150.0	7,131.0	85.6	15.1	83.47	-1,920.6	-3,545.4	4,381.5	4,284.1	97.37	44.999		
12,400.0	7,530.0	7,150.0	7,131.0	87.4	15.1	83.47	-1,920.6	-3,545.4	4,445.6	4,346.5	99.09	44.864		
12,500.0	7,530.0	7,150.0	7,131.0	89.1	15.1	83.47	-1,920.6	-3,545.4	4,511.0	4,410.2	100.81	44.746		
12,600.0	7,530.0	7,150.0	7,131.0	90.8	15.1	83.47	-1,920.6	-3,545.4	4,577.6	4,475.1	102.54	44.643		
12,700.0	7,530.0	7,150.0	7,131.0	92.6	15.1	83.47	-1,920.6	-3,545.4	4,645.5	4,541.2	104.26	44.555		
12,800.0	7,530.0	7,150.0	7,131.0	94.3	15.1	83.47	-1,920.6	-3,545.4	4,714.5	4,608.5	105.99	44.481		
12,900.0	7,530.0	7,150.0	7,131.0	96.0	15.1	83.47	-1,920.6	-3,545.4	4,784.5	4,676.8	107.71	44.419		
13,000.0	7,530.0	7,150.0	7,131.0	97.8	15.1	83.47	-1,920.6	-3,545.4	4,855.7	4,746.2	109.44	44.368		
13,100.0	7,530.0	7,150.0	7,131.0	99.5	15.1	83.47	-1,920.6	-3,545.4	4,927.8	4,816.6	111.17	44.327		
13,200.0	7,530.0	7,150.0	7,131.0	101.3	15.1	83.47	-1,920.6	-3,545.4	5,000.9	4,888.0	112.90	44.296		
13,300.0	7,530.0	7,150.0	7,131.0	103.0	15.1	83.47	-1,920.6	-3,545.4	5,074.9	4,960.3	114.62	44.274		
13,400.0	7,530.0	7,150.0	7,131.0	104.7	15.1	83.47	-1,920.6	-3,545.4	5,149.8	5,033.4	116.35	44.260 SF		
13,500.0	7,530.0	7,126.3	7,107.7	106.5	15.1	83.09	-1,925.0	-3,547.2	5,225.1	5,107.1	117.95	44.299		
13,600.0	7,530.0	7,124.3	7,105.8	108.2	15.0	83.05	-1,925.3	-3,547.3	5,301.5	5,181.9	119.67	44.302		
13,700.0	7,530.0	7,122.4	7,103.9	110.0	15.0	83.02	-1,925.6	-3,547.5	5,378.7	5,257.4	121.38	44.312		
13,800.0	7,530.0	7,100.0	7,081.8	111.7	15.0	82.66	-1,928.7	-3,549.2	5,457.0	5,334.1	122.98	44.374		
13,900.0	7,530.0	7,100.0	7,081.8	113.4	15.0	82.66	-1,928.7	-3,549.2	5,535.6	5,410.9	124.71	44.389		
14,000.0	7,530.0	7,100.0	7,081.8	115.2	15.0	82.66	-1,928.7	-3,549.2	5,614.9	5,488.5	126.43	44.410		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,100.0	7,081.8	116.9	15.0	82.66	-1,928.7	-3,549.2	5,694.9	5,566.7	128.16	44.434		
14,200.0	7,530.0	7,100.0	7,081.8	118.7	15.0	82.66	-1,928.7	-3,549.2	5,775.4	5,645.5	129.89	44.463		
14,300.0	7,530.0	7,100.0	7,081.8	120.4	15.0	82.66	-1,928.7	-3,549.2	5,856.6	5,725.0	131.62	44.496		
14,400.0	7,530.0	7,100.0	7,081.8	122.1	15.0	82.66	-1,928.7	-3,549.2	5,938.3	5,805.0	133.35	44.531		
14,500.0	7,530.0	7,100.0	7,081.8	123.9	15.0	82.66	-1,928.7	-3,549.2	6,020.6	5,885.5	135.08	44.570		
14,600.0	7,530.0	7,100.0	7,081.8	125.6	15.0	82.66	-1,928.7	-3,549.2	6,103.4	5,966.6	136.81	44.612		
14,700.0	7,530.0	7,100.0	7,081.8	127.4	15.0	82.66	-1,928.7	-3,549.2	6,186.7	6,048.2	138.54	44.656		
14,800.0	7,530.0	7,100.0	7,081.8	129.1	15.0	82.66	-1,928.7	-3,549.2	6,270.6	6,130.3	140.27	44.703		
14,900.0	7,530.0	7,100.0	7,081.8	130.9	15.0	82.66	-1,928.7	-3,549.2	6,354.8	6,212.8	142.00	44.751		
15,000.0	7,530.0	7,100.0	7,081.8	132.6	15.0	82.66	-1,928.7	-3,549.2	6,439.6	6,295.8	143.73	44.802		
15,100.0	7,530.0	7,100.0	7,081.8	134.4	15.0	82.66	-1,928.7	-3,549.2	6,524.7	6,379.3	145.47	44.854		
15,200.0	7,530.0	7,100.0	7,081.8	136.1	15.0	82.66	-1,928.7	-3,549.2	6,610.3	6,463.1	147.20	44.908		
15,300.0	7,530.0	7,100.0	7,081.8	137.9	15.0	82.66	-1,928.7	-3,549.2	6,696.3	6,547.4	148.93	44.963		
15,400.0	7,530.0	7,100.0	7,081.8	139.6	15.0	82.66	-1,928.7	-3,549.2	6,782.6	6,632.0	150.66	45.019		
15,500.0	7,530.0	7,100.0	7,081.8	141.3	15.0	82.66	-1,928.7	-3,549.2	6,869.4	6,717.0	152.39	45.077		
15,600.0	7,530.0	7,100.0	7,081.8	143.1	15.0	82.66	-1,928.7	-3,549.2	6,956.5	6,802.3	154.13	45.135		
15,700.0	7,530.0	7,100.0	7,081.8	144.8	15.0	82.66	-1,928.7	-3,549.2	7,043.9	6,888.0	155.86	45.194		
15,800.0	7,530.0	7,100.0	7,081.8	146.6	15.0	82.66	-1,928.7	-3,549.2	7,131.7	6,974.1	157.59	45.254		
15,900.0	7,530.0	7,100.0	7,081.8	148.3	15.0	82.66	-1,928.7	-3,549.2	7,219.7	7,060.4	159.32	45.315		
16,000.0	7,530.0	7,100.0	7,081.8	150.1	15.0	82.66	-1,928.7	-3,549.2	7,308.1	7,147.1	161.06	45.376		
16,100.0	7,530.0	7,100.0	7,081.8	151.8	15.0	82.66	-1,928.7	-3,549.2	7,396.8	7,234.0	162.79	45.438		
16,200.0	7,530.0	7,100.0	7,081.8	153.6	15.0	82.66	-1,928.7	-3,549.2	7,485.8	7,321.3	164.52	45.500		
16,300.0	7,530.0	7,100.0	7,081.8	155.3	15.0	82.66	-1,928.7	-3,549.2	7,575.0	7,408.8	166.26	45.562		
16,400.0	7,530.0	7,100.0	7,081.8	157.1	15.0	82.66	-1,928.7	-3,549.2	7,664.5	7,496.5	167.99	45.625		
16,500.0	7,530.0	7,100.0	7,081.8	158.8	15.0	82.66	-1,928.7	-3,549.2	7,754.3	7,584.6	169.73	45.687		
16,600.0	7,530.0	7,100.0	7,081.8	160.6	15.0	82.66	-1,928.7	-3,549.2	7,844.3	7,672.8	171.46	45.750		
16,700.0	7,530.0	7,100.0	7,081.8	162.3	15.0	82.66	-1,928.7	-3,549.2	7,934.6	7,761.4	173.19	45.813		
16,800.0	7,530.0	7,100.0	7,081.8	164.1	15.0	82.66	-1,928.7	-3,549.2	8,025.0	7,850.1	174.93	45.876		
16,900.0	7,530.0	7,100.0	7,081.8	165.8	15.0	82.66	-1,928.7	-3,549.2	8,115.7	7,939.1	176.66	45.939		
17,000.0	7,530.0	7,100.0	7,081.8	167.6	15.0	82.66	-1,928.7	-3,549.2	8,206.7	8,028.3	178.40	46.003		
17,100.0	7,530.0	7,100.0	7,081.8	169.3	15.0	82.66	-1,928.7	-3,549.2	8,297.8	8,117.7	180.13	46.065		
17,200.0	7,530.0	7,100.0	7,081.8	171.1	15.0	82.66	-1,928.7	-3,549.2	8,389.1	8,207.3	181.87	46.128		
17,300.0	7,530.0	7,100.0	7,081.8	172.8	15.0	82.66	-1,928.7	-3,549.2	8,480.7	8,297.1	183.60	46.191		
17,400.0	7,530.0	7,100.0	7,081.8	174.5	15.0	82.66	-1,928.7	-3,549.2	8,572.4	8,387.0	185.33	46.253		
17,411.2	7,530.0	7,100.0	7,081.8	174.7	15.0	82.66	-1,928.7	-3,549.2	8,582.7	8,397.2	185.53	46.260		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-115.75	-1,936.5	-4,014.9	4,457.5						
100.0	100.0	86.0	86.0	0.2	0.1	-115.75	-1,936.5	-4,014.9	4,457.5	4,457.3	0.26	N/A			
200.0	200.0	186.0	186.0	0.3	0.3	-115.75	-1,936.5	-4,014.9	4,457.5	4,456.9	0.61	7,338.988			
300.0	300.0	286.0	286.0	0.5	0.5	-115.75	-1,936.5	-4,014.9	4,457.5	4,456.6	0.96	4,660.526			
400.0	400.0	386.0	386.0	0.7	0.6	-115.75	-1,936.5	-4,014.9	4,457.5	4,456.2	1.31	3,414.396			
500.0	500.0	684.5	684.3	0.8	1.2	-115.79	-1,936.6	-4,007.8	4,455.6	4,453.6	2.00	2,226.686			
600.0	600.0	1,013.2	1,012.1	1.0	1.9	-93.03	-1,936.8	-3,982.1	4,448.6	4,445.8	2.78	1,602.868			
700.0	700.0	1,233.4	1,230.5	1.2	2.4	-93.38	-1,937.0	-3,954.6	4,437.2	4,433.8	3.38	1,313.882			
800.0	799.9	1,332.1	1,328.3	1.4	2.7	-93.63	-1,937.1	-3,941.0	4,425.2	4,421.4	3.76	1,178.243			
848.7	848.4	1,380.1	1,375.8	1.5	2.8	-93.76	-1,937.2	-3,934.5	4,419.4	4,415.5	3.94	1,120.803			
900.0	899.7	1,430.7	1,425.9	1.6	3.0	-93.85	-1,937.3	-3,927.5	4,413.3	4,409.2	4.14	1,065.542			
1,000.0	999.5	1,529.2	1,523.5	1.8	3.2	-94.00	-1,937.4	-3,914.0	4,401.5	4,396.9	4.53	971.092			
1,100.0	1,099.3	1,627.8	1,621.2	2.0	3.5	-94.16	-1,937.5	-3,900.5	4,389.7	4,384.7	4.93	890.951			
1,200.0	1,199.1	1,726.3	1,718.8	2.2	3.8	-94.32	-1,937.6	-3,887.0	4,377.9	4,372.6	5.32	822.232			
1,300.0	1,298.9	1,824.9	1,816.4	2.4	4.1	-94.49	-1,937.7	-3,873.5	4,366.2	4,360.4	5.72	762.737			
1,400.0	1,398.8	1,923.4	1,914.0	2.6	4.4	-94.65	-1,937.8	-3,860.0	4,354.4	4,348.3	6.13	710.776			
1,500.0	1,498.6	2,022.0	2,011.6	2.8	4.7	-94.81	-1,937.9	-3,846.5	4,342.8	4,336.2	6.53	665.036			
1,600.0	1,598.4	2,120.5	2,109.2	3.0	4.9	-94.97	-1,938.0	-3,833.0	4,331.1	4,324.2	6.94	624.485			
1,700.0	1,698.2	2,219.0	2,206.8	3.2	5.2	-95.14	-1,938.1	-3,819.5	4,319.5	4,312.2	7.34	588.302			
1,800.0	1,798.0	2,317.6	2,304.4	3.4	5.5	-95.31	-1,938.3	-3,806.0	4,308.0	4,300.2	7.75	555.829			
1,900.0	1,897.8	2,416.1	2,402.1	3.6	5.8	-95.47	-1,938.4	-3,792.5	4,296.5	4,288.3	8.16	526.531			
2,000.0	1,997.7	2,514.7	2,499.7	3.8	6.1	-95.64	-1,938.5	-3,779.0	4,285.0	4,276.4	8.57	499.969			
2,100.0	2,097.5	2,613.2	2,597.3	4.0	6.4	-95.81	-1,938.6	-3,765.5	4,273.5	4,264.5	8.98	475.783			
2,200.0	2,197.3	2,711.7	2,694.9	4.2	6.7	-95.98	-1,938.7	-3,752.0	4,262.1	4,252.7	9.39	453.669			
2,300.0	2,297.1	2,810.3	2,792.5	4.4	7.0	-96.15	-1,938.8	-3,738.5	4,250.7	4,240.9	9.81	433.377			
2,400.0	2,396.9	2,908.8	2,890.1	4.6	7.3	-96.32	-1,938.9	-3,725.0	4,239.4	4,229.2	10.22	414.691			
2,500.0	2,496.7	3,007.4	2,987.7	4.8	7.5	-96.49	-1,939.0	-3,711.5	4,228.1	4,217.5	10.64	397.430			
2,600.0	2,596.5	3,105.9	3,085.3	5.0	7.8	-96.66	-1,939.1	-3,698.0	4,216.8	4,205.8	11.06	381.438			
2,700.0	2,696.4	3,204.5	3,183.0	5.2	8.1	-96.84	-1,939.3	-3,684.5	4,205.6	4,194.1	11.47	366.582			
2,800.0	2,796.2	3,303.0	3,280.6	5.4	8.4	-97.01	-1,939.4	-3,671.0	4,194.4	4,182.5	11.89	352.746			
2,900.0	2,896.0	3,401.5	3,378.2	5.6	8.7	-97.19	-1,939.5	-3,657.5	4,183.3	4,171.0	12.31	339.829			
3,000.0	2,995.8	3,500.1	3,475.8	5.8	9.0	-97.36	-1,939.6	-3,644.0	4,172.2	4,159.4	12.73	327.744			
3,100.0	3,095.6	3,598.6	3,573.4	6.0	9.3	-97.54	-1,939.7	-3,630.5	4,161.1	4,148.0	13.15	316.412			
3,200.0	3,195.4	3,697.2	3,671.0	6.2	9.6	-97.72	-1,939.8	-3,617.0	4,150.1	4,136.5	13.57	305.768			
3,300.0	3,295.2	3,795.7	3,768.6	6.4	9.9	-97.90	-1,939.9	-3,603.5	4,139.1	4,125.1	14.00	295.750			
3,400.0	3,395.1	3,894.2	3,866.2	6.6	10.2	-98.08	-1,940.0	-3,590.0	4,128.1	4,113.7	14.42	286.305			
3,500.0	3,494.9	3,992.8	3,963.9	6.8	10.5	-98.26	-1,940.1	-3,576.5	4,117.2	4,102.4	14.84	277.385			
3,600.0	3,594.7	4,091.3	4,061.5	7.0	10.7	-98.44	-1,940.3	-3,563.0	4,106.4	4,091.1	15.27	268.950			
3,700.0	3,694.5	4,189.9	4,159.1	7.2	11.0	-98.62	-1,940.4	-3,549.5	4,095.6	4,079.9	15.69	260.960			
3,800.0	3,794.3	4,288.4	4,256.7	7.4	11.3	-98.81	-1,940.5	-3,536.0	4,084.8	4,068.7	16.12	253.382			
3,900.0	3,894.1	4,387.0	4,354.3	7.6	11.6	-98.99	-1,940.6	-3,522.5	4,074.1	4,057.5	16.55	246.184			
4,000.0	3,994.0	4,485.5	4,451.9	7.8	11.9	-99.18	-1,940.7	-3,509.0	4,063.4	4,046.4	16.98	239.340			
4,100.0	4,093.8	4,584.0	4,549.5	8.0	12.2	-99.36	-1,940.8	-3,495.5	4,052.7	4,035.3	17.41	232.824			
4,200.0	4,193.6	4,682.6	4,647.1	8.2	12.5	-99.55	-1,940.9	-3,482.0	4,042.1	4,024.3	17.84	226.614			
4,300.0	4,293.4	4,781.1	4,744.8	8.4	12.8	-99.74	-1,941.0	-3,468.5	4,031.5	4,013.3	18.27	220.688			
4,400.0	4,393.2	4,879.7	4,842.4	8.6	13.1	-99.93	-1,941.1	-3,455.0	4,021.0	4,002.3	18.70	215.028			
4,500.0	4,493.0	4,978.2	4,940.0	8.8	13.4	-100.12	-1,941.3	-3,441.5	4,010.6	3,991.4	19.13	209.617			
4,600.0	4,592.8	5,076.7	5,037.6	9.0	13.7	-100.31	-1,941.4	-3,428.0	4,000.1	3,980.6	19.57	204.438			
4,700.0	4,692.7	5,175.3	5,135.2	9.3	14.0	-100.51	-1,941.5	-3,414.5	3,989.7	3,969.7	20.00	199.477			
4,800.0	4,792.5	5,273.8	5,232.8	9.5	14.3	-100.70	-1,941.6	-3,401.0	3,979.4	3,959.0	20.44	194.722			
4,900.0	4,892.3	5,372.4	5,330.4	9.7	14.6	-100.89	-1,941.7	-3,387.5	3,969.1	3,948.2	20.87	190.159			
5,000.0	4,992.1	5,470.9	5,428.0	9.9	14.8	-101.09	-1,941.8	-3,374.0	3,958.9	3,937.6	21.31	185.778			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - 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	5,091.9	5,569.5	5,525.7	10.1	15.1	-101.29	-1,941.9	-3,360.5	3,948.7	3,926.9	21.75	181.568		
5,200.0	5,191.7	5,668.0	5,623.3	10.3	15.4	-101.48	-1,942.0	-3,347.0	3,938.5	3,916.3	22.19	177.519		
5,300.0	5,291.5	9,760.4	7,817.0	10.5	44.1	-71.32	181.1	-3,098.9	3,922.9	3,872.7	50.20	78.150		
5,400.0	5,391.4	9,766.0	7,817.0	10.7	44.2	-71.21	186.8	-3,099.1	3,857.3	3,806.7	50.52	76.347		
5,500.0	5,491.2	9,771.7	7,817.0	10.9	44.3	-71.10	192.5	-3,099.2	3,793.2	3,742.3	50.85	74.597		
5,600.0	5,591.0	9,777.4	7,817.0	11.1	44.4	-70.99	198.1	-3,099.4	3,730.6	3,679.5	51.17	72.900		
5,700.0	5,690.8	9,783.0	7,817.0	11.3	44.5	-70.88	203.8	-3,099.5	3,669.8	3,618.3	51.50	71.257		
5,800.0	5,790.6	9,788.7	7,817.0	11.5	44.6	-70.77	209.4	-3,099.7	3,610.6	3,558.8	51.83	69.669		
5,900.0	5,890.4	9,794.3	7,817.0	11.7	44.7	-70.66	215.1	-3,099.8	3,553.3	3,501.1	52.15	68.135		
6,000.0	5,990.3	9,800.0	7,817.0	11.9	44.7	-70.55	220.7	-3,100.0	3,497.9	3,445.4	52.48	66.657		
6,100.0	6,090.1	9,805.6	7,817.0	12.1	44.8	-70.44	226.4	-3,100.1	3,444.5	3,391.7	52.80	65.234		
6,200.0	6,189.9	9,811.3	7,817.0	12.3	44.9	-70.33	232.0	-3,100.3	3,393.2	3,340.0	53.13	63.869		
6,300.0	6,289.7	9,817.0	7,817.0	12.5	45.0	-70.22	237.7	-3,100.4	3,344.0	3,290.6	53.45	62.561		
6,400.0	6,389.5	9,822.6	7,817.0	12.7	45.1	-70.11	243.3	-3,100.5	3,297.2	3,243.4	53.78	61.312		
6,500.0	6,489.3	9,828.3	7,817.0	12.9	45.2	-70.00	249.0	-3,100.7	3,252.8	3,198.7	54.10	60.123		
6,600.0	6,589.1	9,833.9	7,817.0	13.1	45.3	-69.89	254.7	-3,100.8	3,210.9	3,156.4	54.43	58.994		
6,700.0	6,689.0	9,839.6	7,817.0	13.3	45.4	-69.78	260.3	-3,101.0	3,171.5	3,116.8	54.75	57.925		
6,785.3	6,774.1	9,844.4	7,817.0	13.5	45.4	-69.68	265.1	-3,101.1	3,140.1	3,085.0	55.03	57.063		
6,800.0	6,788.8	9,845.1	7,817.0	13.5	45.4	-58.19	265.8	-3,101.1	3,134.8	3,079.6	55.19	56.804		
6,850.0	6,838.8	9,845.1	7,817.0	13.6	45.4	53.80	265.9	-3,101.1	3,117.4	3,061.8	55.63	56.041		
6,900.0	6,888.6	9,841.7	7,817.0	13.6	45.4	77.09	262.5	-3,101.0	3,100.7	3,044.7	55.93	55.434		
6,950.0	6,938.1	9,834.8	7,817.0	13.7	45.3	83.44	255.6	-3,100.9	3,084.6	3,028.5	56.11	54.976		
7,000.0	6,987.0	9,824.5	7,817.0	13.7	45.1	86.75	245.2	-3,100.6	3,069.4	3,013.2	56.15	54.660		
7,050.0	7,035.0	9,810.8	7,817.0	13.6	44.9	88.94	231.5	-3,100.2	3,054.9	2,998.9	56.08	54.477		
7,100.0	7,082.0	9,793.7	7,817.0	13.6	44.6	90.53	214.5	-3,099.8	3,041.4	2,985.5	55.89	54.420		
7,150.0	7,127.7	9,773.5	7,817.0	13.5	44.3	91.76	194.2	-3,099.3	3,028.7	2,973.1	55.59	54.480		
7,200.0	7,171.8	9,750.1	7,817.0	13.5	44.0	92.71	170.8	-3,098.7	3,017.0	2,961.8	55.21	54.650		
7,250.0	7,214.2	9,723.6	7,817.0	13.4	43.6	93.45	144.4	-3,098.0	3,006.2	2,951.4	54.74	54.920		
7,300.0	7,254.6	9,694.3	7,817.0	13.4	43.1	94.03	115.1	-3,097.2	2,996.2	2,942.0	54.20	55.281		
7,350.0	7,292.9	9,662.2	7,817.0	13.3	42.6	94.47	83.0	-3,096.4	2,987.1	2,933.5	53.61	55.721		
7,400.0	7,328.9	9,627.6	7,817.0	13.3	42.1	94.80	48.4	-3,095.5	2,978.9	2,925.9	52.97	56.233		
7,450.0	7,362.3	9,590.5	7,817.0	13.3	41.6	95.04	11.3	-3,094.5	2,971.4	2,919.1	52.31	56.803		
7,500.0	7,393.1	9,551.2	7,817.0	13.4	41.0	95.21	-28.0	-3,093.5	2,964.7	2,913.1	51.63	57.420		
7,550.0	7,421.1	9,509.8	7,817.0	13.5	40.4	95.33	-69.4	-3,092.4	2,958.7	2,907.7	50.95	58.073		
7,600.0	7,446.1	9,466.5	7,817.0	13.6	39.7	95.41	-112.6	-3,091.3	2,953.3	2,903.0	50.27	58.748		
7,650.0	7,468.0	9,421.6	7,817.0	13.8	39.1	95.46	-157.5	-3,090.1	2,948.5	2,898.9	49.61	59.437		
7,700.0	7,486.7	9,375.3	7,817.0	14.0	38.4	95.51	-203.8	-3,088.9	2,944.3	2,895.3	48.97	60.127		
7,750.0	7,502.2	9,327.8	7,817.0	14.2	37.7	95.55	-251.3	-3,087.7	2,940.6	2,892.2	48.36	60.811		
7,800.0	7,514.3	9,279.4	7,817.0	14.6	37.0	95.61	-299.7	-3,086.4	2,937.4	2,889.6	47.78	61.482		
7,850.0	7,523.0	9,230.2	7,817.0	14.9	36.3	95.68	-348.9	-3,085.1	2,934.6	2,887.4	47.23	62.136		
7,900.0	7,528.2	9,180.5	7,817.0	15.3	35.6	95.78	-398.5	-3,083.8	2,932.3	2,885.6	46.72	62.769		
7,950.2	7,530.0	9,130.3	7,817.0	15.8	34.9	95.90	-448.7	-3,082.5	2,930.5	2,884.2	46.23	63.383		
8,000.0	7,530.0	9,080.6	7,817.0	16.2	34.2	95.90	-498.4	-3,081.2	2,928.8	2,882.9	45.93	63.763		
8,100.0	7,530.0	8,980.6	7,817.0	17.3	32.9	95.91	-598.3	-3,078.6	2,925.5	2,880.1	45.44	64.385		
8,200.0	7,530.0	8,880.7	7,817.0	18.4	31.6	95.92	-698.2	-3,076.0	2,922.3	2,877.2	45.07	64.835		
8,300.0	7,530.0	8,780.8	7,817.0	19.7	30.3	95.92	-798.2	-3,073.4	2,919.0	2,874.2	44.82	65.126		
8,400.0	7,530.0	8,680.8	7,817.0	21.0	29.1	95.93	-898.1	-3,070.8	2,915.7	2,871.0	44.67	65.269		
8,500.0	7,530.0	8,580.9	7,817.0	22.4	28.0	95.94	-998.0	-3,068.2	2,912.4	2,867.8	44.62	65.270		
8,600.0	7,530.0	8,480.9	7,817.0	23.8	26.9	95.94	-1,097.9	-3,065.6	2,909.1	2,864.5	44.67	65.132		
8,700.0	7,530.0	8,381.0	7,817.0	25.3	25.9	95.95	-1,197.8	-3,063.0	2,905.9	2,861.0	44.81	64.855		
8,800.0	7,530.0	8,281.0	7,817.0	26.8	25.0	95.96	-1,297.7	-3,060.4	2,902.6	2,857.5	45.05	64.436		
8,900.0	7,530.0	8,185.2	7,816.5	28.3	24.2	95.95	-1,393.5	-3,058.0	2,899.3	2,853.9	45.44	63.802		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,000.0	7,530.0	8,100.0	7,806.6	29.9	23.6	95.76	-1,478.0	-3,057.2	2,896.4	2,850.4	46.08	62.861	
9,100.0	7,530.0	8,021.0	7,786.5	31.4	23.0	95.36	-1,554.3	-3,058.0	2,894.2	2,847.3	46.91	61.703	
9,200.0	7,530.0	7,950.0	7,759.7	33.0	22.6	94.83	-1,620.0	-3,060.0	2,893.0	2,845.1	47.91	60.383	
9,248.0	7,530.0	7,915.7	7,743.9	33.8	22.4	94.52	-1,650.5	-3,061.4	2,892.8	2,844.4	48.44	59.722 CC	
9,300.0	7,530.0	7,882.9	7,727.2	34.7	22.3	94.19	-1,678.6	-3,062.9	2,893.0	2,844.0	49.06	58.974 ES	
9,400.0	7,530.0	7,826.0	7,694.5	36.3	22.0	93.54	-1,725.0	-3,066.3	2,894.7	2,844.4	50.34	57.499	
9,500.0	7,530.0	7,776.8	7,662.6	37.9	21.8	92.90	-1,762.4	-3,069.7	2,898.5	2,846.7	51.73	56.029	
9,600.0	7,530.0	7,734.3	7,632.6	39.6	21.6	92.31	-1,792.2	-3,073.1	2,904.5	2,851.3	53.19	54.605	
9,700.0	7,530.0	7,700.0	7,606.9	41.2	21.5	91.80	-1,814.7	-3,076.0	2,913.0	2,858.3	54.71	53.245	
9,800.0	7,530.0	7,666.1	7,580.2	42.9	21.4	91.27	-1,835.4	-3,079.2	2,924.2	2,867.9	56.26	51.980	
9,900.0	7,530.0	7,650.0	7,567.1	44.5	21.3	91.01	-1,844.6	-3,080.8	2,938.2	2,880.3	57.87	50.771	
10,000.0	7,530.0	7,614.7	7,537.6	46.2	21.2	90.43	-1,863.5	-3,084.4	2,954.9	2,895.5	59.44	49.712	
10,100.0	7,530.0	7,600.0	7,524.9	47.9	21.2	90.18	-1,870.9	-3,085.9	2,974.6	2,913.5	61.08	48.702	
10,200.0	7,530.0	7,575.2	7,503.2	49.6	21.1	89.75	-1,882.5	-3,088.6	2,997.2	2,934.5	62.70	47.805	
10,300.0	7,530.0	7,550.0	7,480.6	51.3	21.0	89.30	-1,893.4	-3,091.5	3,022.7	2,958.3	64.31	46.999	
10,400.0	7,530.0	7,550.0	7,480.6	53.0	21.0	89.30	-1,893.4	-3,091.5	3,050.9	2,984.9	66.01	46.219	
10,500.0	7,530.0	7,531.1	7,463.4	54.7	21.0	88.97	-1,900.9	-3,093.6	3,082.0	3,014.4	67.66	45.553	
10,600.0	7,530.0	7,519.3	7,452.5	56.4	20.9	88.75	-1,905.2	-3,095.0	3,115.9	3,046.6	69.33	44.944	
10,700.0	7,530.0	7,500.0	7,434.5	58.1	20.9	88.40	-1,911.9	-3,097.3	3,152.5	3,081.5	70.98	44.415	
10,800.0	7,530.0	7,500.0	7,434.5	59.8	20.9	88.40	-1,911.9	-3,097.3	3,191.6	3,118.9	72.69	43.909	
10,900.0	7,530.0	7,500.0	7,434.5	61.5	20.9	88.40	-1,911.9	-3,097.3	3,233.3	3,158.9	74.40	43.459	
11,000.0	7,530.0	7,500.0	7,434.5	63.2	20.9	88.40	-1,911.9	-3,097.3	3,277.5	3,201.4	76.11	43.062	
11,100.0	7,530.0	7,474.6	7,410.6	64.9	20.8	87.93	-1,919.7	-3,100.4	3,323.8	3,246.1	77.75	42.749	
11,200.0	7,530.0	7,450.0	7,387.1	66.6	20.7	87.48	-1,926.3	-3,103.5	3,372.7	3,293.3	79.39	42.483	
11,300.0	7,530.0	7,450.0	7,387.1	68.4	20.7	87.48	-1,926.3	-3,103.5	3,423.5	3,342.4	81.11	42.209	
11,400.0	7,530.0	7,450.0	7,387.1	70.1	20.7	87.48	-1,926.3	-3,103.5	3,476.4	3,393.6	82.83	41.971	
11,500.0	7,530.0	7,450.0	7,387.1	71.8	20.7	87.48	-1,926.3	-3,103.5	3,531.4	3,446.9	84.55	41.766	
11,600.0	7,530.0	7,450.0	7,387.1	73.5	20.7	87.48	-1,926.3	-3,103.5	3,588.3	3,502.0	86.28	41.591	
11,700.0	7,530.0	7,450.0	7,387.1	75.3	20.7	87.48	-1,926.3	-3,103.5	3,647.1	3,559.1	88.00	41.444	
11,800.0	7,530.0	7,450.0	7,387.1	77.0	20.7	87.48	-1,926.3	-3,103.5	3,707.6	3,617.9	89.73	41.321	
11,900.0	7,530.0	7,450.0	7,387.1	78.7	20.7	87.48	-1,926.3	-3,103.5	3,769.8	3,678.4	91.45	41.221	
12,000.0	7,530.0	7,428.1	7,365.9	80.4	20.7	87.06	-1,931.3	-3,106.3	3,833.3	3,740.2	93.11	41.171	
12,100.0	7,530.0	7,424.4	7,362.4	82.2	20.6	87.00	-1,932.0	-3,106.8	3,898.5	3,803.7	94.82	41.114	
12,200.0	7,530.0	7,421.0	7,359.0	83.9	20.6	86.93	-1,932.7	-3,107.2	3,965.1	3,868.6	96.54	41.073	
12,300.0	7,530.0	7,400.0	7,338.6	85.6	20.6	86.54	-1,936.4	-3,110.0	4,033.3	3,935.2	98.19	41.077	
12,400.0	7,530.0	7,400.0	7,338.6	87.4	20.6	86.54	-1,936.4	-3,110.0	4,102.6	4,002.6	99.92	41.059	
12,500.0	7,530.0	7,400.0	7,338.6	89.1	20.6	86.54	-1,936.4	-3,110.0	4,173.0	4,071.4	101.65	41.053 SF	
12,600.0	7,530.0	7,400.0	7,338.6	90.8	20.6	86.54	-1,936.4	-3,110.0	4,244.7	4,141.3	103.38	41.058	
12,700.0	7,530.0	7,400.0	7,338.6	92.6	20.6	86.54	-1,936.4	-3,110.0	4,317.5	4,212.3	105.12	41.073	
12,800.0	7,530.0	7,400.0	7,338.6	94.3	20.6	86.54	-1,936.4	-3,110.0	4,391.3	4,284.5	106.85	41.098	
12,900.0	7,530.0	7,400.0	7,338.6	96.0	20.6	86.54	-1,936.4	-3,110.0	4,466.2	4,357.6	108.58	41.131	
13,000.0	7,530.0	7,400.0	7,338.6	97.8	20.6	86.54	-1,936.4	-3,110.0	4,542.0	4,431.7	110.32	41.172	
13,100.0	7,530.0	7,400.0	7,338.6	99.5	20.6	86.54	-1,936.4	-3,110.0	4,618.8	4,506.7	112.05	41.219	
13,200.0	7,530.0	7,400.0	7,338.6	101.3	20.6	86.54	-1,936.4	-3,110.0	4,696.4	4,582.6	113.79	41.273	
13,300.0	7,530.0	7,400.0	7,338.6	103.0	20.6	86.54	-1,936.4	-3,110.0	4,774.9	4,659.3	115.53	41.331	
13,400.0	7,530.0	7,400.0	7,338.6	104.7	20.6	86.54	-1,936.4	-3,110.0	4,854.1	4,736.8	117.26	41.395	
13,500.0	7,530.0	7,400.0	7,338.6	106.5	20.6	86.54	-1,936.4	-3,110.0	4,934.1	4,815.1	119.00	41.463	
13,600.0	7,530.0	7,400.0	7,338.6	108.2	20.6	86.54	-1,936.4	-3,110.0	5,014.8	4,894.1	120.74	41.535	
13,700.0	7,530.0	7,400.0	7,338.6	110.0	20.6	86.54	-1,936.4	-3,110.0	5,096.3	4,973.8	122.48	41.610	
13,800.0	7,530.0	7,400.0	7,338.6	111.7	20.6	86.54	-1,936.4	-3,110.0	5,178.3	5,054.1	124.22	41.688	
13,900.0	7,530.0	7,400.0	7,338.6	113.4	20.6	86.54	-1,936.4	-3,110.0	5,261.0	5,135.0	125.95	41.769	
14,000.0	7,530.0	7,400.0	7,338.6	115.2	20.6	86.54	-1,936.4	-3,110.0	5,344.3	5,216.6	127.69	41.852	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - 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	7,530.0	7,400.0	7,338.6	116.9	20.6	86.54	-1,936.4	-3,110.0	5,428.1	5,298.7	129.43	41.938		
14,200.0	7,530.0	7,400.0	7,338.6	118.7	20.6	86.54	-1,936.4	-3,110.0	5,512.5	5,381.3	131.17	42.024		
14,300.0	7,530.0	7,377.5	7,316.5	120.4	20.5	86.11	-1,939.6	-3,112.9	5,596.9	5,464.1	132.81	42.143		
14,400.0	7,530.0	7,376.2	7,315.2	122.1	20.5	86.08	-1,939.8	-3,113.1	5,682.3	5,547.7	134.54	42.235		
14,500.0	7,530.0	7,375.0	7,314.0	123.9	20.5	86.06	-1,939.9	-3,113.3	5,768.1	5,631.8	136.27	42.327		
14,600.0	7,530.0	7,373.8	7,312.9	125.6	20.5	86.04	-1,940.1	-3,113.4	5,854.3	5,716.3	138.01	42.420		
14,700.0	7,530.0	7,372.7	7,311.7	127.4	20.5	86.02	-1,940.2	-3,113.6	5,941.0	5,801.3	139.74	42.514		
14,800.0	7,530.0	7,350.0	7,289.4	129.1	20.4	85.59	-1,942.3	-3,116.6	6,028.5	5,887.1	141.36	42.645		
14,900.0	7,530.0	7,350.0	7,289.4	130.9	20.4	85.59	-1,942.3	-3,116.6	6,115.9	5,972.8	143.10	42.738		
15,000.0	7,530.0	7,350.0	7,289.4	132.6	20.4	85.59	-1,942.3	-3,116.6	6,203.8	6,058.9	144.84	42.831		
15,100.0	7,530.0	7,350.0	7,289.4	134.4	20.4	85.59	-1,942.3	-3,116.6	6,291.9	6,145.4	146.58	42.924		
15,200.0	7,530.0	7,350.0	7,289.4	136.1	20.4	85.59	-1,942.3	-3,116.6	6,380.5	6,232.2	148.33	43.017		
15,300.0	7,530.0	7,350.0	7,289.4	137.9	20.4	85.59	-1,942.3	-3,116.6	6,469.4	6,319.3	150.07	43.110		
15,400.0	7,530.0	7,350.0	7,289.4	139.6	20.4	85.59	-1,942.3	-3,116.6	6,558.5	6,406.7	151.81	43.203		
15,500.0	7,530.0	7,350.0	7,289.4	141.3	20.4	85.59	-1,942.3	-3,116.6	6,648.0	6,494.5	153.55	43.296		
15,600.0	7,530.0	7,350.0	7,289.4	143.1	20.4	85.59	-1,942.3	-3,116.6	6,737.8	6,582.5	155.29	43.389		
15,700.0	7,530.0	7,350.0	7,289.4	144.8	20.4	85.59	-1,942.3	-3,116.6	6,827.9	6,670.9	157.03	43.481		
15,800.0	7,530.0	7,350.0	7,289.4	146.6	20.4	85.59	-1,942.3	-3,116.6	6,918.3	6,759.5	158.77	43.573		
15,900.0	7,530.0	7,350.0	7,289.4	148.3	20.4	85.59	-1,942.3	-3,116.6	7,008.9	6,848.4	160.52	43.665		
16,000.0	7,530.0	7,350.0	7,289.4	150.1	20.4	85.59	-1,942.3	-3,116.6	7,099.7	6,937.5	162.26	43.756		
16,100.0	7,530.0	7,350.0	7,289.4	151.8	20.4	85.59	-1,942.3	-3,116.6	7,190.8	7,026.8	164.00	43.847		
16,200.0	7,530.0	7,350.0	7,289.4	153.6	20.4	85.59	-1,942.3	-3,116.6	7,282.2	7,116.4	165.74	43.937		
16,300.0	7,530.0	7,350.0	7,289.4	155.3	20.4	85.59	-1,942.3	-3,116.6	7,373.7	7,206.3	167.49	44.026		
16,400.0	7,530.0	7,350.0	7,289.4	157.1	20.4	85.59	-1,942.3	-3,116.6	7,465.5	7,296.3	169.23	44.115		
16,500.0	7,530.0	7,350.0	7,289.4	158.8	20.4	85.59	-1,942.3	-3,116.6	7,557.5	7,386.5	170.97	44.203		
16,600.0	7,530.0	7,350.0	7,289.4	160.6	20.4	85.59	-1,942.3	-3,116.6	7,649.7	7,477.0	172.71	44.291		
16,700.0	7,530.0	7,350.0	7,289.4	162.3	20.4	85.59	-1,942.3	-3,116.6	7,742.1	7,567.6	174.46	44.378		
16,800.0	7,530.0	7,350.0	7,289.4	164.1	20.4	85.59	-1,942.3	-3,116.6	7,834.7	7,658.5	176.20	44.464		
16,900.0	7,530.0	7,350.0	7,289.4	165.8	20.4	85.59	-1,942.3	-3,116.6	7,927.4	7,749.5	177.94	44.550		
17,000.0	7,530.0	7,350.0	7,289.4	167.6	20.4	85.59	-1,942.3	-3,116.6	8,020.3	7,840.6	179.69	44.635		
17,100.0	7,530.0	7,350.0	7,289.4	169.3	20.4	85.59	-1,942.3	-3,116.6	8,113.4	7,932.0	181.43	44.719		
17,200.0	7,530.0	7,350.0	7,289.4	171.1	20.4	85.59	-1,942.3	-3,116.6	8,206.7	8,023.5	183.17	44.802		
17,300.0	7,530.0	7,350.0	7,289.4	172.8	20.4	85.59	-1,942.3	-3,116.6	8,300.1	8,115.2	184.92	44.885		
17,400.0	7,530.0	7,350.0	7,289.4	174.5	20.4	85.59	-1,942.3	-3,116.6	8,393.7	8,207.0	186.66	44.967		
17,411.2	7,530.0	7,350.0	7,289.4	174.7	20.4	85.59	-1,942.3	-3,116.6	8,404.2	8,217.3	186.86	44.976		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-115.68	-1,929.3	-4,012.1	4,451.9					
100.0	100.0	87.0	87.0	0.2	0.1	-115.68	-1,929.3	-4,012.1	4,451.8	4,451.6	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.68	-1,929.3	-4,012.1	4,451.8	4,451.2	0.61	7,308.628		
300.0	300.0	287.0	287.0	0.5	0.5	-115.68	-1,929.3	-4,012.1	4,451.8	4,450.9	0.96	4,646.105		
400.0	400.0	651.3	651.1	0.7	1.1	-115.72	-1,927.1	-4,001.5	4,449.2	4,447.5	1.77	2,514.822		
500.0	500.0	1,051.7	1,049.6	0.8	2.0	-115.84	-1,919.6	-3,963.8	4,439.9	4,437.3	2.65	1,677.133		
600.0	600.0	1,372.9	1,366.6	1.0	3.0	-93.19	-1,909.6	-3,913.9	4,424.2	4,420.8	3.43	1,291.120		
700.0	700.0	1,471.1	1,463.2	1.2	3.4	-93.46	-1,906.1	-3,896.4	4,406.7	4,402.9	3.79	1,162.474		
800.0	799.9	1,569.1	1,559.6	1.4	3.7	-93.75	-1,902.6	-3,878.9	4,389.4	4,385.2	4.16	1,054.595		
848.7	848.4	1,616.8	1,606.5	1.5	3.9	-93.90	-1,900.9	-3,870.4	4,381.0	4,376.6	4.35	1,008.100		
900.0	899.7	1,667.1	1,655.9	1.6	4.1	-93.98	-1,899.1	-3,861.4	4,372.1	4,367.6	4.54	963.033		
1,000.0	999.5	1,765.0	1,752.2	1.8	4.4	-94.12	-1,895.6	-3,843.9	4,354.9	4,350.0	4.92	884.931		
1,100.0	1,099.3	1,862.9	1,848.5	2.0	4.7	-94.26	-1,892.1	-3,826.5	4,337.8	4,332.5	5.31	817.547		
1,200.0	1,199.1	1,960.8	1,944.8	2.2	5.1	-94.41	-1,888.6	-3,809.0	4,320.6	4,314.9	5.69	758.919		
1,300.0	1,298.9	2,058.8	2,041.1	2.4	5.4	-94.55	-1,885.1	-3,791.5	4,303.5	4,297.4	6.08	707.503		
1,400.0	1,398.8	2,156.7	2,137.3	2.6	5.8	-94.70	-1,881.7	-3,774.0	4,286.4	4,280.0	6.47	662.085		
1,500.0	1,498.6	2,254.6	2,233.6	2.8	6.1	-94.85	-1,878.2	-3,756.6	4,269.4	4,262.5	6.87	621.698		
1,600.0	1,598.4	2,352.5	2,329.9	3.0	6.5	-94.99	-1,874.7	-3,739.1	4,252.3	4,245.1	7.26	585.565		
1,700.0	1,698.2	2,450.5	2,426.2	3.2	6.9	-95.15	-1,871.2	-3,721.6	4,235.3	4,227.7	7.66	553.059		
1,800.0	1,798.0	2,548.4	2,522.5	3.4	7.2	-95.30	-1,867.7	-3,704.1	4,218.4	4,210.3	8.06	523.668		
1,900.0	1,897.8	2,646.3	2,618.8	3.6	7.6	-95.45	-1,864.2	-3,686.7	4,201.4	4,193.0	8.45	496.971		
2,000.0	1,997.7	2,744.2	2,715.1	3.8	7.9	-95.60	-1,860.7	-3,669.2	4,184.5	4,175.6	8.85	472.618		
2,100.0	2,097.5	2,842.2	2,811.4	4.0	8.3	-95.76	-1,857.2	-3,651.7	4,167.6	4,158.4	9.25	450.315		
2,200.0	2,197.3	2,940.1	2,907.7	4.2	8.6	-95.91	-1,853.7	-3,634.2	4,150.8	4,141.1	9.66	429.818		
2,300.0	2,297.1	3,038.0	3,003.9	4.4	9.0	-96.07	-1,850.2	-3,616.8	4,133.9	4,123.9	10.06	410.917		
2,400.0	2,396.9	3,135.9	3,100.2	4.6	9.3	-96.23	-1,846.7	-3,599.3	4,117.1	4,106.7	10.46	393.434		
2,500.0	2,496.7	3,233.8	3,196.5	4.8	9.7	-96.39	-1,843.2	-3,581.8	4,100.4	4,089.5	10.87	377.217		
2,600.0	2,596.5	3,331.8	3,292.8	5.0	10.1	-96.55	-1,839.7	-3,564.3	4,083.6	4,072.4	11.28	362.134		
2,700.0	2,696.4	3,429.7	3,389.1	5.2	10.4	-96.72	-1,836.2	-3,546.9	4,066.9	4,055.3	11.68	348.072		
2,800.0	2,796.2	3,527.6	3,485.4	5.4	10.8	-96.88	-1,832.7	-3,529.4	4,050.3	4,038.2	12.09	334.929		
2,900.0	2,896.0	3,625.5	3,581.7	5.6	11.1	-97.05	-1,829.2	-3,511.9	4,033.6	4,021.1	12.50	322.621		
3,000.0	2,995.8	3,723.5	3,678.0	5.8	11.5	-97.21	-1,825.7	-3,494.4	4,017.0	4,004.1	12.91	311.069		
3,100.0	3,095.6	3,821.4	3,774.2	6.0	11.8	-97.38	-1,822.2	-3,477.0	4,000.5	3,987.1	13.33	300.208		
3,200.0	3,195.4	3,919.3	3,870.5	6.2	12.2	-97.55	-1,818.8	-3,459.5	3,983.9	3,970.2	13.74	289.977		
3,300.0	3,295.2	4,017.2	3,966.8	6.4	12.6	-97.72	-1,815.3	-3,442.0	3,967.4	3,953.3	14.15	280.324		
3,400.0	3,395.1	4,115.2	4,063.1	6.6	12.9	-97.89	-1,811.8	-3,424.5	3,951.0	3,936.4	14.57	271.201		
3,500.0	3,494.9	4,213.1	4,159.4	6.8	13.3	-98.07	-1,808.3	-3,407.1	3,934.6	3,919.6	14.99	262.565		
3,600.0	3,594.7	4,311.0	4,255.7	7.0	13.6	-98.24	-1,804.8	-3,389.6	3,918.2	3,902.8	15.40	254.380		
3,700.0	3,694.5	4,408.9	4,352.0	7.2	14.0	-98.42	-1,801.3	-3,372.1	3,901.8	3,886.0	15.82	246.611		
3,800.0	3,794.3	4,506.9	4,448.3	7.4	14.3	-98.60	-1,797.8	-3,354.6	3,885.5	3,869.3	16.24	239.228		
3,900.0	3,894.1	4,604.8	4,544.6	7.6	14.7	-98.78	-1,794.3	-3,337.2	3,869.2	3,852.6	16.66	232.202		
4,000.0	3,994.0	4,702.7	4,640.8	7.8	15.1	-98.96	-1,790.8	-3,319.7	3,853.0	3,835.9	17.09	225.509		
4,100.0	4,093.8	4,800.6	4,737.1	8.0	15.4	-99.14	-1,787.3	-3,302.2	3,836.8	3,819.3	17.51	219.125		
4,200.0	4,193.6	4,898.5	4,833.4	8.2	15.8	-99.32	-1,783.8	-3,284.7	3,820.6	3,802.7	17.93	213.031		
4,300.0	4,293.4	4,996.5	4,929.7	8.4	16.1	-99.51	-1,780.3	-3,267.3	3,804.5	3,786.1	18.36	207.206		
4,400.0	4,393.2	5,094.4	5,026.0	8.6	16.5	-99.70	-1,776.8	-3,249.8	3,788.4	3,769.6	18.79	201.634		
4,500.0	4,493.0	5,192.3	5,122.3	8.8	16.9	-99.89	-1,773.3	-3,232.3	3,772.4	3,753.1	19.22	196.298		
4,600.0	4,592.8	5,290.2	5,218.6	9.0	17.2	-100.08	-1,769.8	-3,214.8	3,756.4	3,736.7	19.65	191.185		
4,700.0	4,692.7	5,388.2	5,314.9	9.3	17.6	-100.27	-1,766.3	-3,197.4	3,740.4	3,720.3	20.08	186.280		
4,800.0	4,792.5	5,486.1	5,411.1	9.5	17.9	-100.46	-1,762.8	-3,179.9	3,724.5	3,704.0	20.51	181.571		
4,900.0	4,892.3	5,584.0	5,507.4	9.7	18.3	-100.66	-1,759.4	-3,162.4	3,708.6	3,687.6	20.95	177.048		
5,000.0	4,992.1	5,681.9	5,603.7	9.9	18.6	-100.85	-1,755.9	-3,144.9	3,692.8	3,671.4	21.38	172.698		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	9,392.7	7,550.0	10.1	47.5	-69.54	271.5	-2,774.3	3,637.4	3,586.3	51.13	71.141		
5,200.0	5,191.7	9,398.3	7,550.0	10.3	47.6	-69.42	277.0	-2,774.3	3,568.6	3,517.1	51.47	69.335		
5,300.0	5,291.5	9,403.8	7,550.0	10.5	47.7	-69.30	282.6	-2,774.2	3,501.2	3,449.4	51.81	67.582		
5,400.0	5,391.4	9,409.4	7,550.0	10.7	47.8	-69.18	288.2	-2,774.2	3,435.4	3,383.2	52.14	65.882		
5,500.0	5,491.2	9,415.0	7,550.0	10.9	47.9	-69.06	293.8	-2,774.1	3,371.3	3,318.8	52.48	64.236		
5,600.0	5,591.0	9,420.6	7,550.0	11.1	47.9	-68.93	299.3	-2,774.1	3,308.9	3,256.1	52.82	62.645		
5,700.0	5,690.8	9,426.1	7,550.0	11.3	48.0	-68.81	304.9	-2,774.0	3,248.4	3,195.3	53.16	61.110		
5,800.0	5,790.6	9,431.7	7,550.0	11.5	48.1	-68.69	310.5	-2,774.0	3,189.9	3,136.4	53.49	59.631		
5,900.0	5,890.4	9,437.3	7,550.0	11.7	48.2	-68.57	316.1	-2,773.9	3,133.5	3,079.7	53.83	58.209		
6,000.0	5,990.3	9,442.9	7,550.0	11.9	48.3	-68.44	321.6	-2,773.9	3,079.3	3,025.1	54.17	56.846		
6,100.0	6,090.1	9,448.4	7,550.0	12.1	48.4	-68.32	327.2	-2,773.8	3,027.4	2,972.9	54.51	55.543		
6,200.0	6,189.9	9,454.0	7,550.0	12.3	48.4	-68.20	332.8	-2,773.8	2,978.0	2,923.1	54.84	54.301		
6,300.0	6,289.7	9,459.6	7,550.0	12.5	48.5	-68.08	338.4	-2,773.7	2,931.1	2,875.9	55.18	53.121		
6,400.0	6,389.5	9,465.2	7,550.0	12.7	48.6	-67.96	343.9	-2,773.7	2,886.9	2,831.4	55.51	52.003		
6,500.0	6,489.3	9,470.8	7,550.0	12.9	48.7	-67.83	349.5	-2,773.6	2,845.6	2,789.7	55.85	50.950		
6,600.0	6,589.1	9,476.3	7,550.0	13.1	48.8	-67.71	355.1	-2,773.6	2,807.1	2,751.0	56.19	49.962		
6,700.0	6,689.0	9,481.9	7,550.0	13.3	48.9	-67.59	360.7	-2,773.5	2,771.8	2,715.3	56.52	49.040		
6,785.3	6,774.1	9,486.7	7,550.0	13.5	48.9	-67.49	365.4	-2,773.5	2,744.2	2,687.3	56.81	48.306		
6,800.0	6,788.8	9,487.3	7,550.0	13.5	48.9	-56.06	366.1	-2,773.5	2,739.6	2,682.6	56.98	48.081		
6,850.0	6,838.8	9,487.3	7,550.0	13.6	48.9	55.69	366.1	-2,773.5	2,724.7	2,667.3	57.45	47.425		
6,900.0	6,888.6	9,483.9	7,550.0	13.6	48.9	78.72	362.6	-2,773.5	2,710.8	2,653.0	57.78	46.916		
6,950.0	6,938.1	9,476.9	7,550.0	13.7	48.8	84.77	355.7	-2,773.6	2,697.7	2,639.8	57.96	46.548		
7,000.0	6,987.0	9,466.6	7,550.0	13.7	48.6	87.77	345.3	-2,773.6	2,685.7	2,627.7	57.99	46.315		
7,050.0	7,035.0	9,452.8	7,550.0	13.6	48.4	89.62	331.6	-2,773.8	2,674.7	2,616.8	57.88	46.208		
7,100.0	7,082.0	9,435.7	7,550.0	13.6	48.2	90.87	314.5	-2,773.9	2,664.7	2,607.1	57.65	46.222		
7,150.0	7,127.7	9,415.4	7,550.0	13.5	47.9	91.72	294.1	-2,774.1	2,655.8	2,598.5	57.30	46.347		
7,200.0	7,171.8	9,391.9	7,550.0	13.5	47.5	92.30	270.7	-2,774.3	2,647.9	2,591.1	56.85	46.576		
7,250.0	7,214.2	9,365.5	7,550.0	13.4	47.1	92.66	244.2	-2,774.5	2,641.0	2,584.7	56.31	46.899		
7,300.0	7,254.6	9,336.1	7,550.0	13.4	46.7	92.84	214.8	-2,774.8	2,635.1	2,579.4	55.70	47.308		
7,350.0	7,292.9	9,304.0	7,550.0	13.3	46.2	92.89	182.7	-2,775.1	2,630.0	2,575.0	55.03	47.792		
7,400.0	7,328.9	9,269.2	7,550.0	13.3	45.7	92.83	148.0	-2,775.4	2,625.7	2,571.4	54.32	48.337		
7,450.0	7,362.3	9,232.1	7,550.0	13.3	45.2	92.69	110.9	-2,775.7	2,622.2	2,568.6	53.59	48.933		
7,500.0	7,393.1	9,192.7	7,550.0	13.4	44.6	92.48	71.5	-2,776.1	2,619.4	2,566.5	52.85	49.565		
7,550.0	7,421.1	9,151.3	7,550.0	13.5	44.0	92.24	30.1	-2,776.4	2,617.1	2,565.0	52.11	50.220		
7,600.0	7,446.1	9,108.0	7,550.0	13.6	43.4	91.97	-13.2	-2,776.8	2,615.4	2,564.0	51.40	50.885		
7,650.0	7,468.0	9,063.1	7,550.0	13.8	42.7	91.70	-58.1	-2,777.2	2,614.0	2,563.3	50.71	51.544		
7,700.0	7,486.7	9,016.7	7,550.0	14.0	42.1	91.44	-104.5	-2,777.6	2,613.1	2,563.0	50.07	52.189		
7,750.0	7,502.2	8,969.2	7,550.0	14.2	41.4	91.20	-152.0	-2,778.1	2,612.4	2,562.9	49.47	52.807 ES		
7,800.0	7,514.3	8,920.7	7,550.0	14.6	40.7	91.01	-200.5	-2,778.5	2,611.9	2,563.0	48.92	53.393		
7,850.0	7,523.0	8,871.5	7,550.0	14.9	40.0	90.86	-249.7	-2,778.9	2,611.6	2,563.2	48.42	53.942		
7,900.0	7,528.2	8,821.8	7,550.0	15.3	39.4	90.76	-299.5	-2,779.4	2,611.5	2,563.6	47.96	54.452		
7,913.6	7,529.1	8,808.2	7,550.0	15.4	39.2	90.75	-313.0	-2,779.5	2,611.5	2,563.7	47.85	54.581 CC		
7,950.2	7,530.0	8,771.5	7,550.0	15.8	38.7	90.72	-349.7	-2,779.8	2,611.6	2,564.0	47.55	54.927		
8,000.0	7,530.0	8,721.8	7,550.0	16.2	38.0	90.72	-399.4	-2,780.3	2,611.7	2,564.4	47.23	55.301		
8,100.0	7,530.0	8,621.8	7,550.0	17.3	36.7	90.72	-499.4	-2,781.2	2,611.9	2,565.2	46.69	55.939		
8,200.0	7,530.0	8,521.8	7,550.0	18.4	35.5	90.72	-599.4	-2,782.0	2,612.0	2,565.8	46.28	56.440		
8,300.0	7,530.0	8,421.8	7,550.0	19.7	34.2	90.72	-699.4	-2,782.9	2,612.2	2,566.3	45.98	56.813		
8,400.0	7,530.0	8,321.8	7,550.0	21.0	33.1	90.72	-799.4	-2,783.8	2,612.4	2,566.7	45.78	57.070		
8,500.0	7,530.0	8,221.8	7,550.0	22.4	32.0	90.72	-899.4	-2,784.7	2,612.6	2,567.0	45.66	57.217		
8,600.0	7,530.0	8,121.8	7,550.0	23.8	30.9	90.72	-999.4	-2,785.6	2,612.8	2,567.2	45.63	57.258		
8,700.0	7,530.0	8,021.8	7,550.0	25.3	29.9	90.72	-1,099.4	-2,786.5	2,613.0	2,567.3	45.69	57.192		
8,800.0	7,530.0	7,950.0	7,548.8	26.8	29.2	90.70	-1,171.1	-2,787.4	2,613.6	2,567.3	46.21	56.562		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,530.0	7,900.0	7,543.4	28.3	28.8	90.58	-1,220.8	-2,788.8	2,615.7	2,568.6	47.08	55.562		
9,000.0	7,530.0	7,850.0	7,533.7	29.9	28.3	90.37	-1,269.8	-2,790.9	2,619.6	2,571.6	47.99	54.584		
9,100.0	7,530.0	7,788.0	7,516.0	31.4	27.8	89.98	-1,329.1	-2,794.7	2,625.2	2,576.4	48.81	53.787		
9,200.0	7,530.0	7,750.0	7,502.1	33.0	27.5	89.67	-1,364.3	-2,797.5	2,633.0	2,583.0	49.96	52.705		
9,300.0	7,530.0	7,700.0	7,480.3	34.7	27.1	89.20	-1,409.1	-2,801.9	2,642.8	2,591.8	51.01	51.811		
9,400.0	7,530.0	7,650.0	7,454.8	36.3	26.7	88.64	-1,451.8	-2,806.9	2,655.0	2,602.8	52.11	50.952		
9,500.0	7,530.0	7,615.1	7,434.8	37.9	26.5	88.21	-1,480.1	-2,810.7	2,669.6	2,616.2	53.40	49.991		
9,600.0	7,530.0	7,580.8	7,413.6	39.6	26.3	87.75	-1,506.7	-2,814.8	2,686.8	2,632.0	54.72	49.099		
9,700.0	7,530.0	7,550.0	7,393.2	41.2	26.1	87.32	-1,529.5	-2,818.7	2,706.6	2,650.5	56.09	48.254		
9,800.0	7,530.0	7,521.5	7,373.3	42.9	25.9	86.89	-1,549.6	-2,822.5	2,729.2	2,671.7	57.51	47.457		
9,900.0	7,530.0	7,500.0	7,357.6	44.5	25.8	86.56	-1,564.0	-2,825.5	2,754.6	2,695.6	58.99	46.696		
10,000.0	7,530.0	7,472.8	7,337.1	46.2	25.6	86.12	-1,581.4	-2,829.3	2,782.8	2,722.3	60.45	46.037		
10,100.0	7,530.0	7,450.0	7,319.3	47.9	25.5	85.74	-1,595.2	-2,832.7	2,813.7	2,751.8	61.94	45.428		
10,200.0	7,530.0	7,432.7	7,305.4	49.6	25.4	85.45	-1,605.2	-2,835.3	2,847.4	2,783.9	63.49	44.848		
10,300.0	7,530.0	7,400.0	7,278.3	51.3	25.2	84.88	-1,622.8	-2,840.4	2,884.0	2,819.1	64.92	44.422		
10,400.0	7,530.0	7,400.0	7,278.3	53.0	25.2	84.88	-1,622.8	-2,840.4	2,923.0	2,856.3	66.61	43.879		
10,500.0	7,530.0	7,400.0	7,278.3	54.7	25.2	84.88	-1,622.8	-2,840.4	2,964.8	2,896.5	68.31	43.403		
10,600.0	7,530.0	7,371.4	7,253.9	56.4	25.0	84.37	-1,637.0	-2,844.9	3,008.8	2,939.0	69.79	43.111		
10,700.0	7,530.0	7,350.0	7,235.2	58.1	24.9	83.98	-1,646.8	-2,848.4	3,055.5	2,984.2	71.33	42.838		
10,800.0	7,530.0	7,350.0	7,235.2	59.8	24.9	83.98	-1,646.8	-2,848.4	3,104.5	3,031.4	73.03	42.511		
10,900.0	7,530.0	7,350.0	7,235.2	61.5	24.9	83.98	-1,646.8	-2,848.4	3,155.8	3,081.1	74.73	42.229		
11,000.0	7,530.0	7,327.5	7,215.2	63.2	24.8	83.56	-1,656.3	-2,852.1	3,209.1	3,132.8	76.27	42.075		
11,100.0	7,530.0	7,300.0	7,190.2	64.9	24.7	83.04	-1,666.8	-2,856.7	3,264.8	3,187.0	77.77	41.981		
11,200.0	7,530.0	7,300.0	7,190.2	66.6	24.7	83.04	-1,666.8	-2,856.7	3,322.1	3,242.6	79.47	41.801		
11,300.0	7,530.0	7,300.0	7,190.2	68.4	24.7	83.04	-1,666.8	-2,856.7	3,381.4	3,300.2	81.18	41.652		
11,400.0	7,530.0	7,300.0	7,190.2	70.1	24.7	83.04	-1,666.8	-2,856.7	3,442.6	3,359.7	82.89	41.531		
11,500.0	7,530.0	7,300.0	7,190.2	71.8	24.7	83.04	-1,666.8	-2,856.7	3,505.5	3,420.9	84.60	41.435		
11,600.0	7,530.0	7,300.0	7,190.2	73.5	24.7	83.04	-1,666.8	-2,856.7	3,570.2	3,483.9	86.32	41.362 SF		
11,700.0	7,530.0	7,275.5	7,167.5	75.3	24.6	82.58	-1,675.2	-2,860.9	3,636.0	3,548.1	87.84	41.391		
11,800.0	7,530.0	7,250.0	7,143.6	77.0	24.5	82.09	-1,682.8	-2,865.3	3,703.8	3,614.4	89.35	41.450		
11,900.0	7,530.0	7,250.0	7,143.6	78.7	24.5	82.09	-1,682.8	-2,865.3	3,772.6	3,681.5	91.07	41.426		
12,000.0	7,530.0	7,250.0	7,143.6	80.4	24.5	82.09	-1,682.8	-2,865.3	3,842.7	3,749.9	92.78	41.417		
12,100.0	7,530.0	7,250.0	7,143.6	82.2	24.5	82.09	-1,682.8	-2,865.3	3,914.2	3,819.7	94.50	41.422		
12,200.0	7,530.0	7,250.0	7,143.6	83.9	24.5	82.09	-1,682.8	-2,865.3	3,986.8	3,890.6	96.21	41.438		
12,300.0	7,530.0	7,250.0	7,143.6	85.6	24.5	82.09	-1,682.8	-2,865.3	4,060.7	3,962.7	97.93	41.466		
12,400.0	7,530.0	7,250.0	7,143.6	87.4	24.5	82.09	-1,682.8	-2,865.3	4,135.6	4,036.0	99.64	41.504		
12,500.0	7,530.0	7,250.0	7,143.6	89.1	24.5	82.09	-1,682.8	-2,865.3	4,211.6	4,110.2	101.36	41.550		
12,600.0	7,530.0	7,250.0	7,143.6	90.8	24.5	82.09	-1,682.8	-2,865.3	4,288.6	4,185.5	103.08	41.603		
12,700.0	7,530.0	7,250.0	7,143.6	92.6	24.5	82.09	-1,682.8	-2,865.3	4,366.5	4,261.7	104.80	41.664		
12,800.0	7,530.0	7,227.1	7,121.8	94.3	24.4	81.65	-1,688.7	-2,869.3	4,444.8	4,338.5	106.33	41.802		
12,900.0	7,530.0	7,223.9	7,118.8	96.0	24.3	81.59	-1,689.4	-2,869.9	4,524.3	4,416.3	108.02	41.884		
13,000.0	7,530.0	7,200.0	7,095.8	97.8	24.2	81.12	-1,694.5	-2,874.1	4,604.9	4,495.4	109.53	42.044		
13,100.0	7,530.0	7,200.0	7,095.8	99.5	24.2	81.12	-1,694.5	-2,874.1	4,685.9	4,574.6	111.25	42.122		
13,200.0	7,530.0	7,200.0	7,095.8	101.3	24.2	81.12	-1,694.5	-2,874.1	4,767.5	4,654.5	112.96	42.204		
13,300.0	7,530.0	7,200.0	7,095.8	103.0	24.2	81.12	-1,694.5	-2,874.1	4,849.8	4,735.2	114.68	42.289		
13,400.0	7,530.0	7,200.0	7,095.8	104.7	24.2	81.12	-1,694.5	-2,874.1	4,932.8	4,816.4	116.40	42.378		
13,500.0	7,530.0	7,200.0	7,095.8	106.5	24.2	81.12	-1,694.5	-2,874.1	5,016.4	4,898.3	118.12	42.468		
13,600.0	7,530.0	7,200.0	7,095.8	108.2	24.2	81.12	-1,694.5	-2,874.1	5,100.6	4,980.8	119.84	42.561		
13,700.0	7,530.0	7,200.0	7,095.8	110.0	24.2	81.12	-1,694.5	-2,874.1	5,185.4	5,063.8	121.56	42.656		
13,800.0	7,530.0	7,200.0	7,095.8	111.7	24.2	81.12	-1,694.5	-2,874.1	5,270.7	5,147.4	123.28	42.753		
13,900.0	7,530.0	7,200.0	7,095.8	113.4	24.2	81.12	-1,694.5	-2,874.1	5,356.5	5,231.5	125.00	42.850		
14,000.0	7,530.0	7,200.0	7,095.8	115.2	24.2	81.12	-1,694.5	-2,874.1	5,442.8	5,316.1	126.73	42.949		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - 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	7,530.0	7,200.0	7,095.8	116.9	24.2	81.12	-1,694.5	-2,874.1	5,529.5	5,401.1	128.45	43.049		
14,200.0	7,530.0	7,200.0	7,095.8	118.7	24.2	81.12	-1,694.5	-2,874.1	5,616.7	5,486.5	130.17	43.149		
14,300.0	7,530.0	7,200.0	7,095.8	120.4	24.2	81.12	-1,694.5	-2,874.1	5,704.3	5,572.4	131.89	43.249		
14,400.0	7,530.0	7,200.0	7,095.8	122.1	24.2	81.12	-1,694.5	-2,874.1	5,792.3	5,658.7	133.62	43.350		
14,500.0	7,530.0	7,200.0	7,095.8	123.9	24.2	81.12	-1,694.5	-2,874.1	5,880.7	5,745.4	135.34	43.452		
14,600.0	7,530.0	7,200.0	7,095.8	125.6	24.2	81.12	-1,694.5	-2,874.1	5,969.5	5,832.4	137.06	43.553		
14,700.0	7,530.0	7,200.0	7,095.8	127.4	24.2	81.12	-1,694.5	-2,874.1	6,058.6	5,919.8	138.79	43.654		
14,800.0	7,530.0	7,200.0	7,095.8	129.1	24.2	81.12	-1,694.5	-2,874.1	6,148.1	6,007.5	140.51	43.755		
14,900.0	7,530.0	7,200.0	7,095.8	130.9	24.2	81.12	-1,694.5	-2,874.1	6,237.8	6,095.6	142.24	43.855		
15,000.0	7,530.0	7,200.0	7,095.8	132.6	24.2	81.12	-1,694.5	-2,874.1	6,327.9	6,183.9	143.96	43.956		
15,100.0	7,530.0	7,200.0	7,095.8	134.4	24.2	81.12	-1,694.5	-2,874.1	6,418.3	6,272.6	145.69	44.056		
15,200.0	7,530.0	7,176.6	7,073.1	136.1	24.1	80.66	-1,698.6	-2,878.2	6,508.4	6,361.3	147.16	44.227		
15,300.0	7,530.0	7,175.2	7,071.8	137.9	24.1	80.64	-1,698.8	-2,878.4	6,599.3	6,450.4	148.87	44.330		
15,400.0	7,530.0	7,174.0	7,070.6	139.6	24.1	80.61	-1,699.0	-2,878.7	6,690.4	6,539.8	150.58	44.432		
15,500.0	7,530.0	7,150.0	7,047.2	141.3	24.0	80.15	-1,702.0	-2,882.9	6,782.2	6,630.2	152.03	44.612		
15,600.0	7,530.0	7,150.0	7,047.2	143.1	24.0	80.15	-1,702.0	-2,882.9	6,873.8	6,720.1	153.75	44.708		
15,700.0	7,530.0	7,150.0	7,047.2	144.8	24.0	80.15	-1,702.0	-2,882.9	6,965.6	6,810.1	155.47	44.803		
15,800.0	7,530.0	7,150.0	7,047.2	146.6	24.0	80.15	-1,702.0	-2,882.9	7,057.6	6,900.4	157.19	44.898		
15,900.0	7,530.0	7,150.0	7,047.2	148.3	24.0	80.15	-1,702.0	-2,882.9	7,149.8	6,990.9	158.91	44.992		
16,000.0	7,530.0	7,150.0	7,047.2	150.1	24.0	80.15	-1,702.0	-2,882.9	7,242.3	7,081.6	160.64	45.085		
16,100.0	7,530.0	7,150.0	7,047.2	151.8	24.0	80.15	-1,702.0	-2,882.9	7,334.9	7,172.5	162.36	45.178		
16,200.0	7,530.0	7,150.0	7,047.2	153.6	24.0	80.15	-1,702.0	-2,882.9	7,427.7	7,263.6	164.08	45.269		
16,300.0	7,530.0	7,150.0	7,047.2	155.3	24.0	80.15	-1,702.0	-2,882.9	7,520.7	7,354.9	165.80	45.360		
16,400.0	7,530.0	7,150.0	7,047.2	157.1	24.0	80.15	-1,702.0	-2,882.9	7,613.9	7,446.4	167.52	45.450		
16,500.0	7,530.0	7,150.0	7,047.2	158.8	24.0	80.15	-1,702.0	-2,882.9	7,707.3	7,538.0	169.25	45.539		
16,600.0	7,530.0	7,150.0	7,047.2	160.6	24.0	80.15	-1,702.0	-2,882.9	7,800.8	7,629.8	170.97	45.627		
16,700.0	7,530.0	7,150.0	7,047.2	162.3	24.0	80.15	-1,702.0	-2,882.9	7,894.5	7,721.8	172.69	45.714		
16,800.0	7,530.0	7,150.0	7,047.2	164.1	24.0	80.15	-1,702.0	-2,882.9	7,988.3	7,813.9	174.41	45.801		
16,900.0	7,530.0	7,150.0	7,047.2	165.8	24.0	80.15	-1,702.0	-2,882.9	8,082.3	7,906.2	176.14	45.886		
17,000.0	7,530.0	7,150.0	7,047.2	167.6	24.0	80.15	-1,702.0	-2,882.9	8,176.4	7,998.6	177.86	45.971		
17,100.0	7,530.0	7,150.0	7,047.2	169.3	24.0	80.15	-1,702.0	-2,882.9	8,270.7	8,091.1	179.58	46.055		
17,200.0	7,530.0	7,150.0	7,047.2	171.1	24.0	80.15	-1,702.0	-2,882.9	8,365.1	8,183.8	181.31	46.138		
17,300.0	7,530.0	7,150.0	7,047.2	172.8	24.0	80.15	-1,702.0	-2,882.9	8,459.6	8,276.6	183.03	46.220		
17,400.0	7,530.0	7,150.0	7,047.2	174.5	24.0	80.15	-1,702.0	-2,882.9	8,554.3	8,369.5	184.75	46.301		
17,411.2	7,530.0	7,150.0	7,047.2	174.7	24.0	80.15	-1,702.0	-2,882.9	8,564.9	8,380.0	184.95	46.310		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-115.80	-1,936.5	-4,006.5	4,450.0					
100.0	100.0	87.0	87.0	0.2	0.1	-115.80	-1,936.5	-4,006.5	4,450.0	4,449.7	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.80	-1,936.5	-4,006.5	4,450.0	4,449.3	0.61	7,305.547		
300.0	300.0	350.0	350.0	0.5	0.6	-115.80	-1,936.7	-4,005.6	4,449.7	4,448.6	1.07	4,165.924		
400.0	400.0	619.6	619.4	0.7	1.1	-115.89	-1,938.6	-3,994.7	4,446.4	4,444.7	1.71	2,592.750		
500.0	500.0	887.7	886.4	0.8	1.7	-116.07	-1,942.7	-3,971.6	4,439.3	4,436.9	2.36	1,877.844		
600.0	600.0	1,152.7	1,149.0	1.0	2.4	-93.47	-1,948.9	-3,936.6	4,428.5	4,425.3	3.16	1,402.360		
700.0	700.0	1,413.3	1,405.3	1.2	3.3	-94.06	-1,957.0	-3,890.6	4,414.1	4,410.1	3.98	1,109.694		
800.0	799.9	1,667.9	1,653.5	1.4	4.4	-94.84	-1,966.9	-3,834.6	4,396.4	4,391.5	4.90	898.069		
848.7	848.4	1,789.3	1,770.8	1.5	5.0	-95.28	-1,972.3	-3,804.1	4,386.7	4,381.3	5.38	815.349		
900.0	899.7	1,891.9	1,869.5	1.6	5.5	-95.59	-1,977.0	-3,776.5	4,375.6	4,369.8	5.82	751.526		
1,000.0	999.5	2,048.7	2,020.3	1.8	6.3	-96.05	-1,981.2	-3,733.7	4,353.1	4,346.6	6.51	668.430		
1,100.0	1,099.3	2,195.8	2,161.8	2.0	7.0	-96.43	-1,981.3	-3,693.3	4,329.3	4,322.2	7.15	605.582		
1,200.0	1,199.1	2,291.2	2,253.4	2.2	7.5	-96.67	-1,980.4	-3,667.0	4,305.1	4,297.5	7.63	564.200		
1,300.0	1,298.9	2,386.5	2,345.1	2.4	8.0	-96.92	-1,979.5	-3,640.8	4,281.0	4,272.9	8.12	527.445		
1,400.0	1,398.8	2,481.9	2,436.7	2.6	8.5	-97.16	-1,978.6	-3,614.5	4,257.0	4,248.4	8.61	494.609		
1,500.0	1,498.6	2,577.2	2,528.4	2.8	8.9	-97.41	-1,977.6	-3,588.2	4,233.0	4,223.9	9.10	465.116		
1,600.0	1,598.4	2,672.5	2,620.1	3.0	9.4	-97.67	-1,976.7	-3,562.0	4,209.1	4,199.5	9.60	438.491		
1,700.0	1,698.2	2,767.9	2,711.7	3.2	9.9	-97.92	-1,975.8	-3,535.7	4,185.3	4,175.2	10.10	414.345		
1,800.0	1,798.0	2,863.2	2,803.4	3.4	10.4	-98.18	-1,974.9	-3,509.4	4,161.6	4,151.0	10.61	392.354		
1,900.0	1,897.8	2,958.6	2,895.0	3.6	10.9	-98.44	-1,974.0	-3,483.2	4,138.0	4,126.9	11.12	372.247		
2,000.0	1,997.7	3,053.9	2,986.7	3.8	11.4	-98.71	-1,973.1	-3,456.9	4,114.4	4,102.8	11.63	353.798		
2,100.0	2,097.5	3,149.3	3,078.3	4.0	11.9	-98.97	-1,972.2	-3,430.6	4,091.0	4,078.8	12.15	336.811		
2,200.0	2,197.3	3,225.8	3,152.0	4.2	12.3	-99.19	-1,971.4	-3,409.7	4,067.8	4,055.2	12.60	322.932		
2,300.0	2,297.1	3,300.0	3,223.5	4.4	12.7	-99.39	-1,970.2	-3,390.2	4,045.3	4,032.2	13.03	310.484		
2,400.0	2,396.9	3,362.1	3,283.6	4.6	13.0	-99.55	-1,968.9	-3,374.5	4,023.5	4,010.1	13.41	299.997		
2,500.0	2,496.7	3,431.0	3,350.4	4.8	13.3	-99.71	-1,967.2	-3,357.9	4,002.4	3,988.6	13.81	289.858		
2,600.0	2,596.5	3,500.0	3,417.5	5.0	13.6	-99.87	-1,965.2	-3,341.9	3,982.1	3,967.9	14.20	280.464		
2,700.0	2,696.4	3,569.9	3,485.6	5.2	13.9	-100.03	-1,962.7	-3,326.5	3,962.5	3,947.9	14.58	271.854		
2,800.0	2,796.2	3,639.9	3,554.1	5.4	14.1	-100.17	-1,959.9	-3,311.8	3,943.6	3,928.7	14.95	263.864		
2,900.0	2,896.0	3,713.7	3,626.3	5.6	14.4	-100.31	-1,956.6	-3,297.2	3,925.4	3,910.1	15.32	256.259		
3,000.0	2,995.8	3,811.3	3,721.9	5.8	14.8	-100.50	-1,952.1	-3,278.2	3,907.6	3,891.8	15.75	248.158		
3,100.0	3,095.6	3,908.9	3,817.5	6.0	15.2	-100.68	-1,947.5	-3,259.2	3,889.7	3,873.5	16.18	240.462		
3,200.0	3,195.4	4,006.5	3,913.1	6.2	15.5	-100.87	-1,942.9	-3,240.2	3,871.9	3,855.3	16.60	233.189		
3,300.0	3,295.2	4,104.1	4,008.8	6.4	15.9	-101.06	-1,938.4	-3,221.2	3,854.2	3,837.1	17.04	226.139		
3,400.0	3,395.1	4,201.7	4,104.4	6.6	16.3	-101.25	-1,933.8	-3,202.2	3,836.4	3,819.0	17.48	219.505		
3,500.0	3,494.9	4,299.3	4,200.0	6.8	16.7	-101.44	-1,929.3	-3,183.3	3,818.8	3,800.9	17.91	213.163		
3,600.0	3,594.7	4,396.9	4,295.6	7.0	17.1	-101.64	-1,924.7	-3,164.3	3,801.1	3,782.8	18.35	207.102		
3,700.0	3,694.5	4,494.5	4,391.3	7.2	17.4	-101.83	-1,920.1	-3,145.3	3,783.6	3,764.8	18.79	201.308		
3,800.0	3,794.3	4,592.1	4,486.9	7.4	17.8	-102.03	-1,915.6	-3,126.3	3,766.0	3,746.8	19.24	195.764		
3,900.0	3,894.1	4,689.7	4,582.5	7.6	18.2	-102.23	-1,911.0	-3,107.3	3,748.5	3,728.8	19.68	190.454		
4,000.0	3,994.0	4,787.3	4,678.1	7.8	18.6	-102.43	-1,906.5	-3,088.3	3,731.1	3,710.9	20.13	185.363		
4,100.0	4,093.8	4,884.9	4,773.8	8.0	19.0	-102.63	-1,901.9	-3,069.4	3,713.7	3,693.1	20.58	180.479		
4,200.0	4,193.6	4,982.4	4,869.4	8.2	19.3	-102.84	-1,897.3	-3,050.4	3,696.3	3,675.3	21.03	175.790		
4,300.0	4,293.4	5,080.0	4,965.0	8.4	19.7	-103.04	-1,892.8	-3,031.4	3,679.0	3,657.5	21.48	171.285		
4,400.0	4,393.2	5,177.6	5,060.6	8.6	20.1	-103.25	-1,888.2	-3,012.4	3,661.7	3,639.8	21.93	166.953		
4,500.0	4,493.0	5,275.2	5,156.3	8.8	20.5	-103.46	-1,883.6	-2,993.4	3,644.5	3,622.1	22.39	162.785		
4,600.0	4,592.8	5,372.8	5,251.9	9.0	20.9	-103.68	-1,879.1	-2,974.5	3,627.3	3,604.5	22.85	158.772		
4,700.0	4,692.7	5,470.4	5,347.5	9.3	21.2	-103.89	-1,874.5	-2,955.5	3,610.2	3,586.9	23.31	154.906		
4,800.0	4,792.5	5,568.0	5,443.1	9.5	21.6	-104.11	-1,870.0	-2,936.5	3,593.2	3,569.4	23.77	151.179		
4,900.0	4,892.3	5,665.6	5,538.8	9.7	22.0	-104.33	-1,865.4	-2,917.5	3,576.1	3,551.9	24.23	147.584		
5,000.0	4,992.1	5,763.2	5,634.4	9.9	22.4	-104.55	-1,860.8	-2,898.5	3,559.2	3,534.5	24.70	144.115		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,860.8	5,730.0	10.1	22.8	-104.77	-1,856.3	-2,879.5	3,542.3	3,517.1	25.16	140.764		
5,200.0	5,191.7	5,958.4	5,825.6	10.3	23.2	-105.00	-1,851.7	-2,860.6	3,525.4	3,499.8	25.63	137.527		
5,300.0	5,291.5	9,751.4	7,803.0	10.5	49.9	-71.02	238.6	-2,485.1	3,466.2	3,415.7	50.48	68.661		
5,400.0	5,391.4	9,757.0	7,803.0	10.7	50.0	-70.88	244.2	-2,485.2	3,392.6	3,341.7	50.84	66.731		
5,500.0	5,491.2	9,762.7	7,803.0	10.9	50.1	-70.75	249.8	-2,485.2	3,320.3	3,269.1	51.20	64.855		
5,600.0	5,591.0	9,768.3	7,803.0	11.1	50.2	-70.61	255.4	-2,485.3	3,249.5	3,198.0	51.55	63.033		
5,700.0	5,690.8	9,773.9	7,803.0	11.3	50.3	-70.47	261.0	-2,485.3	3,180.3	3,128.4	51.91	61.266		
5,800.0	5,790.6	9,779.5	7,803.0	11.5	50.3	-70.33	266.7	-2,485.4	3,112.7	3,060.4	52.27	59.556		
5,900.0	5,890.4	9,785.1	7,803.0	11.7	50.4	-70.19	272.3	-2,485.4	3,046.9	2,994.2	52.62	57.902		
6,000.0	5,990.3	9,790.8	7,803.0	11.9	50.5	-70.05	277.9	-2,485.5	2,982.9	2,930.0	52.98	56.307		
6,100.0	6,090.1	9,796.4	7,803.0	12.1	50.6	-69.92	283.5	-2,485.5	2,921.0	2,867.7	53.33	54.771		
6,200.0	6,189.9	9,802.0	7,803.0	12.3	50.6	-69.78	289.1	-2,485.6	2,861.3	2,807.6	53.69	53.295		
6,300.0	6,289.7	9,807.6	7,803.0	12.5	50.7	-69.64	294.8	-2,485.6	2,803.8	2,749.8	54.04	51.881		
6,400.0	6,389.5	9,813.2	7,803.0	12.7	50.8	-69.50	300.4	-2,485.6	2,748.7	2,694.3	54.40	50.530		
6,500.0	6,489.3	9,818.8	7,803.0	12.9	50.9	-69.36	306.0	-2,485.7	2,696.3	2,641.5	54.75	49.243		
6,600.0	6,589.1	9,824.5	7,803.0	13.1	51.0	-69.22	311.6	-2,485.7	2,646.5	2,591.4	55.11	48.023		
6,700.0	6,689.0	9,830.1	7,803.0	13.3	51.0	-69.08	317.2	-2,485.8	2,599.6	2,544.2	55.46	46.871		
6,785.3	6,774.1	9,834.9	7,803.0	13.5	51.1	-68.97	322.0	-2,485.8	2,562.1	2,506.3	55.77	45.944		
6,800.0	6,788.8	9,835.5	7,803.0	13.5	51.1	-67.36	322.7	-2,485.8	2,555.8	2,499.8	56.05	45.601		
6,850.0	6,838.8	9,835.6	7,803.0	13.6	51.1	54.97	322.7	-2,485.8	2,535.0	2,478.2	56.88	44.570		
6,900.0	6,888.6	9,832.1	7,803.0	13.6	51.1	78.56	319.3	-2,485.8	2,515.1	2,457.5	57.52	43.724		
6,950.0	6,938.1	9,825.2	7,803.0	13.7	51.0	85.17	312.4	-2,485.8	2,496.0	2,438.0	57.98	43.051		
7,000.0	6,987.0	9,814.8	7,803.0	13.7	50.8	88.69	302.0	-2,485.7	2,478.0	2,419.7	58.25	42.539		
7,050.0	7,035.0	9,801.1	7,803.0	13.6	50.6	91.04	288.3	-2,485.5	2,461.0	2,402.7	58.35	42.179		
7,100.0	7,082.0	9,784.0	7,803.0	13.6	50.4	92.76	271.2	-2,485.4	2,445.2	2,386.9	58.28	41.958		
7,150.0	7,127.7	9,763.7	7,803.0	13.5	50.1	94.07	250.9	-2,485.2	2,430.5	2,372.4	58.05	41.866		
7,200.0	7,171.8	9,740.3	7,803.0	13.5	49.8	95.07	227.5	-2,485.0	2,417.0	2,359.3	57.69	41.894		
7,250.0	7,214.2	9,713.9	7,803.0	13.4	49.4	95.83	201.0	-2,484.8	2,404.6	2,347.4	57.21	42.030		
7,300.0	7,254.6	9,684.5	7,803.0	13.4	49.0	96.39	171.7	-2,484.5	2,393.4	2,336.8	56.63	42.265		
7,350.0	7,292.9	9,652.4	7,803.0	13.3	48.6	96.79	139.6	-2,484.3	2,383.4	2,327.4	55.96	42.587		
7,400.0	7,328.9	9,617.7	7,803.0	13.3	48.1	97.06	104.9	-2,484.0	2,374.3	2,319.1	55.23	42.987		
7,450.0	7,362.3	9,580.6	7,803.0	13.3	47.6	97.22	67.7	-2,483.7	2,366.3	2,311.9	54.46	43.453		
7,500.0	7,393.1	9,541.2	7,803.0	13.4	47.1	97.29	28.4	-2,483.3	2,359.3	2,305.6	53.65	43.973		
7,550.0	7,421.1	9,499.8	7,803.0	13.5	46.5	97.30	-13.0	-2,483.0	2,353.2	2,300.3	52.84	44.536		
7,600.0	7,446.1	9,456.5	7,803.0	13.6	46.0	97.27	-56.3	-2,482.6	2,347.8	2,295.8	52.02	45.130		
7,650.0	7,468.0	9,411.6	7,803.0	13.8	45.4	97.21	-101.2	-2,482.2	2,343.3	2,292.0	51.22	45.745		
7,700.0	7,486.7	9,365.3	7,803.0	14.0	44.8	97.14	-147.5	-2,481.8	2,339.4	2,288.9	50.45	46.371		
7,750.0	7,502.2	9,317.8	7,803.0	14.2	44.2	97.08	-195.1	-2,481.4	2,336.2	2,286.4	49.71	47.000		
7,800.0	7,514.3	9,269.3	7,803.0	14.6	43.6	97.03	-243.6	-2,481.0	2,333.5	2,284.5	49.00	47.626		
7,850.0	7,523.0	9,220.1	7,803.0	14.9	43.0	97.00	-292.8	-2,480.6	2,331.4	2,283.1	48.33	48.245		
7,900.0	7,528.2	9,170.4	7,803.0	15.3	42.3	97.01	-342.5	-2,480.1	2,329.9	2,282.2	47.69	48.854		
7,950.2	7,530.0	9,120.2	7,803.0	15.8	41.7	97.05	-392.7	-2,479.7	2,328.9	2,281.8	47.09	49.457		
8,000.0	7,530.0	9,070.4	7,803.0	16.2	41.2	97.06	-442.4	-2,479.3	2,328.1	2,281.3	46.78	49.763		
8,100.0	7,530.0	8,970.4	7,803.0	17.3	40.0	97.06	-542.4	-2,478.4	2,326.6	2,280.3	46.28	50.275		
8,200.0	7,530.0	8,870.4	7,803.0	18.4	38.9	97.07	-642.4	-2,477.6	2,325.0	2,279.1	45.90	50.658		
8,300.0	7,530.0	8,770.4	7,803.0	19.7	37.8	97.07	-742.4	-2,476.7	2,323.5	2,277.8	45.63	50.923		
8,400.0	7,530.0	8,670.5	7,803.0	21.0	36.8	97.08	-842.4	-2,475.9	2,321.9	2,276.5	45.46	51.078		
8,500.0	7,530.0	8,570.5	7,803.0	22.4	35.9	97.08	-942.3	-2,475.0	2,320.4	2,275.0	45.38	51.129		
8,600.0	7,530.0	8,470.5	7,803.0	23.8	35.0	97.09	-1,042.3	-2,474.1	2,318.8	2,273.4	45.40	51.080		
8,700.0	7,530.0	8,370.5	7,803.0	25.3	34.2	97.09	-1,142.3	-2,473.3	2,317.3	2,271.8	45.50	50.930		
8,800.0	7,530.0	8,277.9	7,802.5	26.8	33.5	97.08	-1,234.9	-2,472.6	2,315.8	2,270.0	45.79	50.578		
8,900.0	7,530.0	8,200.0	7,793.9	28.3	33.0	96.87	-1,312.3	-2,473.6	2,315.1	2,268.7	46.36	49.940		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1													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)	
8,915.6	7,530.0	8,189.9	7,792.1	28.6	32.9	96.82	-1,322.2	-2,473.9	2,315.1	2,268.6	46.48	49.804 CC		
9,000.0	7,530.0	8,128.7	7,777.2	29.9	32.5	96.45	-1,381.5	-2,476.4	2,315.5	2,268.4	47.10	49.157 ES		
9,100.0	7,530.0	8,061.1	7,753.6	31.4	32.0	95.86	-1,444.7	-2,480.5	2,317.4	2,269.4	47.98	48.300		
9,200.0	7,530.0	8,000.0	7,726.2	33.0	31.7	95.18	-1,499.0	-2,485.5	2,321.0	2,272.0	49.00	47.370		
9,300.0	7,530.0	7,950.0	7,699.6	34.7	31.4	94.51	-1,541.0	-2,490.4	2,326.7	2,276.6	50.18	46.366		
9,400.0	7,530.0	7,900.0	7,669.6	36.3	31.1	93.76	-1,580.6	-2,496.1	2,335.0	2,283.6	51.42	45.409		
9,500.0	7,530.0	7,850.0	7,636.3	37.9	30.8	92.94	-1,617.3	-2,502.4	2,346.0	2,293.3	52.71	44.510		
9,600.0	7,530.0	7,818.8	7,613.9	39.6	30.7	92.38	-1,638.7	-2,506.6	2,360.0	2,305.9	54.16	43.576		
9,700.0	7,530.0	7,786.7	7,589.8	41.2	30.5	91.79	-1,659.3	-2,511.3	2,377.2	2,321.6	55.62	42.741		
9,800.0	7,530.0	7,750.0	7,560.9	42.9	30.3	91.08	-1,681.2	-2,516.8	2,397.7	2,340.6	57.07	42.013		
9,900.0	7,530.0	7,733.8	7,547.7	44.5	30.3	90.75	-1,690.3	-2,519.4	2,421.4	2,362.8	58.66	41.281		
10,000.0	7,530.0	7,700.0	7,519.4	46.2	30.1	90.06	-1,707.9	-2,524.9	2,448.6	2,388.4	60.15	40.706		
10,100.0	7,530.0	7,700.0	7,519.4	47.9	30.1	90.06	-1,707.9	-2,524.9	2,479.0	2,417.1	61.84	40.089		
10,200.0	7,530.0	7,675.2	7,498.0	49.6	30.0	89.54	-1,719.8	-2,529.0	2,512.6	2,449.2	63.40	39.630		
10,300.0	7,530.0	7,650.0	7,475.8	51.3	29.9	89.00	-1,730.8	-2,533.3	2,549.5	2,484.6	64.96	39.245		
10,400.0	7,530.0	7,650.0	7,475.8	53.0	29.9	89.00	-1,730.8	-2,533.3	2,589.4	2,522.8	66.66	38.844		
10,500.0	7,530.0	7,650.0	7,475.8	54.7	29.9	89.00	-1,730.8	-2,533.3	2,632.5	2,564.2	68.36	38.508		
10,600.0	7,530.0	7,621.7	7,450.3	56.4	29.7	88.38	-1,742.1	-2,538.3	2,678.1	2,608.2	69.93	38.298		
10,700.0	7,530.0	7,600.0	7,430.4	58.1	29.6	87.90	-1,749.8	-2,542.2	2,726.8	2,655.3	71.52	38.124		
10,800.0	7,530.0	7,600.0	7,430.4	59.8	29.6	87.90	-1,749.8	-2,542.2	2,777.9	2,704.6	73.23	37.932		
10,900.0	7,530.0	7,600.0	7,430.4	61.5	29.6	87.90	-1,749.8	-2,542.2	2,831.6	2,756.6	74.94	37.783		
11,000.0	7,530.0	7,600.0	7,430.4	63.2	29.6	87.90	-1,749.8	-2,542.2	2,887.8	2,811.1	76.66	37.671		
11,100.0	7,530.0	7,577.7	7,409.7	64.9	29.6	87.41	-1,756.9	-2,546.3	2,945.9	2,867.6	78.26	37.641		
11,200.0	7,530.0	7,570.9	7,403.3	66.6	29.5	87.25	-1,759.0	-2,547.5	3,006.3	2,926.4	79.94	37.605 SF		
11,300.0	7,530.0	7,550.0	7,383.6	68.4	29.4	86.78	-1,764.7	-2,551.4	3,068.9	2,987.3	81.55	37.631		
11,400.0	7,530.0	7,550.0	7,383.6	70.1	29.4	86.78	-1,764.7	-2,551.4	3,133.1	3,049.8	83.27	37.625		
11,500.0	7,530.0	7,550.0	7,383.6	71.8	29.4	86.78	-1,764.7	-2,551.4	3,199.2	3,114.2	84.99	37.641		
11,600.0	7,530.0	7,550.0	7,383.6	73.5	29.4	86.78	-1,764.7	-2,551.4	3,266.9	3,180.2	86.71	37.675		
11,700.0	7,530.0	7,550.0	7,383.6	75.3	29.4	86.78	-1,764.7	-2,551.4	3,336.3	3,247.9	88.44	37.725		
11,800.0	7,530.0	7,550.0	7,383.6	77.0	29.4	86.78	-1,764.7	-2,551.4	3,407.3	3,317.1	90.16	37.790		
11,900.0	7,530.0	7,550.0	7,383.6	78.7	29.4	86.78	-1,764.7	-2,551.4	3,479.6	3,387.7	91.89	37.867		
12,000.0	7,530.0	7,550.0	7,383.6	80.4	29.4	86.78	-1,764.7	-2,551.4	3,553.3	3,459.7	93.62	37.956		
12,100.0	7,530.0	7,526.8	7,361.4	82.2	29.3	86.26	-1,770.1	-2,555.8	3,627.8	3,532.6	95.22	38.100		
12,200.0	7,530.0	7,523.2	7,358.0	83.9	29.3	86.18	-1,770.9	-2,556.4	3,703.8	3,606.9	96.93	38.213		
12,300.0	7,530.0	7,500.0	7,335.7	85.6	29.2	85.65	-1,775.3	-2,560.8	3,781.2	3,682.7	98.52	38.381		
12,400.0	7,530.0	7,500.0	7,335.7	87.4	29.2	85.65	-1,775.3	-2,560.8	3,859.2	3,759.0	100.25	38.498		
12,500.0	7,530.0	7,500.0	7,335.7	89.1	29.2	85.65	-1,775.3	-2,560.8	3,938.3	3,836.3	101.98	38.620		
12,600.0	7,530.0	7,500.0	7,335.7	90.8	29.2	85.65	-1,775.3	-2,560.8	4,018.2	3,914.5	103.71	38.746		
12,700.0	7,530.0	7,500.0	7,335.7	92.6	29.2	85.65	-1,775.3	-2,560.8	4,099.0	3,993.6	105.44	38.877		
12,800.0	7,530.0	7,500.0	7,335.7	94.3	29.2	85.65	-1,775.3	-2,560.8	4,180.7	4,073.5	107.17	39.011		
12,900.0	7,530.0	7,500.0	7,335.7	96.0	29.2	85.65	-1,775.3	-2,560.8	4,263.1	4,154.2	108.90	39.147		
13,000.0	7,530.0	7,500.0	7,335.7	97.8	29.2	85.65	-1,775.3	-2,560.8	4,346.3	4,235.7	110.63	39.286		
13,100.0	7,530.0	7,500.0	7,335.7	99.5	29.2	85.65	-1,775.3	-2,560.8	4,430.2	4,317.8	112.37	39.426		
13,200.0	7,530.0	7,500.0	7,335.7	101.3	29.2	85.65	-1,775.3	-2,560.8	4,514.7	4,400.6	114.10	39.568		
13,300.0	7,530.0	7,500.0	7,335.7	103.0	29.2	85.65	-1,775.3	-2,560.8	4,599.9	4,484.0	115.84	39.710		
13,400.0	7,530.0	7,500.0	7,335.7	104.7	29.2	85.65	-1,775.3	-2,560.8	4,685.6	4,568.1	117.57	39.854		
13,500.0	7,530.0	7,500.0	7,335.7	106.5	29.2	85.65	-1,775.3	-2,560.8	4,771.9	4,652.6	119.31	39.997		
13,600.0	7,530.0	7,500.0	7,335.7	108.2	29.2	85.65	-1,775.3	-2,560.8	4,858.7	4,737.7	121.04	40.141		
13,700.0	7,530.0	7,500.0	7,335.7	110.0	29.2	85.65	-1,775.3	-2,560.8	4,946.1	4,823.3	122.78	40.284		
13,800.0	7,530.0	7,500.0	7,335.7	111.7	29.2	85.65	-1,775.3	-2,560.8	5,033.8	4,909.3	124.52	40.427		
13,900.0	7,530.0	7,500.0	7,335.7	113.4	29.2	85.65	-1,775.3	-2,560.8	5,122.1	4,995.8	126.25	40.570		
14,000.0	7,530.0	7,500.0	7,335.7	115.2	29.2	85.65	-1,775.3	-2,560.8	5,210.7	5,082.8	127.99	40.712		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1													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	7,530.0	7,500.0	7,335.7	116.9	29.2	85.65	-1,775.3	-2,560.8	5,299.8	5,170.1	129.73	40.853		
14,200.0	7,530.0	7,500.0	7,335.7	118.7	29.2	85.65	-1,775.3	-2,560.8	5,389.3	5,257.8	131.47	40.993		
14,300.0	7,530.0	7,500.0	7,335.7	120.4	29.2	85.65	-1,775.3	-2,560.8	5,479.1	5,345.9	133.20	41.133		
14,400.0	7,530.0	7,476.3	7,312.7	122.1	29.1	85.11	-1,778.8	-2,565.4	5,568.7	5,434.0	134.78	41.318		
14,500.0	7,530.0	7,475.0	7,311.4	123.9	29.1	85.08	-1,779.0	-2,565.6	5,659.2	5,522.7	136.50	41.458		
14,600.0	7,530.0	7,473.7	7,310.2	125.6	29.1	85.05	-1,779.2	-2,565.9	5,749.9	5,611.7	138.23	41.596		
14,700.0	7,530.0	7,450.0	7,287.0	127.4	29.0	84.51	-1,781.6	-2,570.5	5,841.4	5,701.6	139.79	41.788		
14,800.0	7,530.0	7,450.0	7,287.0	129.1	29.0	84.51	-1,781.6	-2,570.5	5,932.7	5,791.2	141.52	41.920		
14,900.0	7,530.0	7,450.0	7,287.0	130.9	29.0	84.51	-1,781.6	-2,570.5	6,024.3	5,881.0	143.26	42.051		
15,000.0	7,530.0	7,450.0	7,287.0	132.6	29.0	84.51	-1,781.6	-2,570.5	6,116.1	5,971.1	145.00	42.180		
15,100.0	7,530.0	7,450.0	7,287.0	134.4	29.0	84.51	-1,781.6	-2,570.5	6,208.2	6,061.5	146.74	42.309		
15,200.0	7,530.0	7,450.0	7,287.0	136.1	29.0	84.51	-1,781.6	-2,570.5	6,300.5	6,152.0	148.47	42.435		
15,300.0	7,530.0	7,450.0	7,287.0	137.9	29.0	84.51	-1,781.6	-2,570.5	6,393.1	6,242.9	150.21	42.560		
15,400.0	7,530.0	7,450.0	7,287.0	139.6	29.0	84.51	-1,781.6	-2,570.5	6,485.8	6,333.9	151.95	42.684		
15,500.0	7,530.0	7,450.0	7,287.0	141.3	29.0	84.51	-1,781.6	-2,570.5	6,578.8	6,425.1	153.69	42.806		
15,600.0	7,530.0	7,450.0	7,287.0	143.1	29.0	84.51	-1,781.6	-2,570.5	6,672.0	6,516.6	155.43	42.927		
15,700.0	7,530.0	7,450.0	7,287.0	144.8	29.0	84.51	-1,781.6	-2,570.5	6,765.4	6,608.2	157.17	43.046		
15,800.0	7,530.0	7,450.0	7,287.0	146.6	29.0	84.51	-1,781.6	-2,570.5	6,859.0	6,700.1	158.91	43.164		
15,900.0	7,530.0	7,450.0	7,287.0	148.3	29.0	84.51	-1,781.6	-2,570.5	6,952.7	6,792.1	160.64	43.280		
16,000.0	7,530.0	7,450.0	7,287.0	150.1	29.0	84.51	-1,781.6	-2,570.5	7,046.7	6,884.3	162.38	43.395		
16,100.0	7,530.0	7,450.0	7,287.0	151.8	29.0	84.51	-1,781.6	-2,570.5	7,140.7	6,976.6	164.12	43.508		
16,200.0	7,530.0	7,450.0	7,287.0	153.6	29.0	84.51	-1,781.6	-2,570.5	7,235.0	7,069.1	165.86	43.620		
16,300.0	7,530.0	7,450.0	7,287.0	155.3	29.0	84.51	-1,781.6	-2,570.5	7,329.4	7,161.8	167.60	43.731		
16,400.0	7,530.0	7,450.0	7,287.0	157.1	29.0	84.51	-1,781.6	-2,570.5	7,423.9	7,254.6	169.34	43.840		
16,500.0	7,530.0	7,450.0	7,287.0	158.8	29.0	84.51	-1,781.6	-2,570.5	7,518.6	7,347.5	171.08	43.947		
16,600.0	7,530.0	7,450.0	7,287.0	160.6	29.0	84.51	-1,781.6	-2,570.5	7,613.4	7,440.6	172.82	44.053		
16,700.0	7,530.0	7,450.0	7,287.0	162.3	29.0	84.51	-1,781.6	-2,570.5	7,708.4	7,533.8	174.56	44.158		
16,800.0	7,530.0	7,450.0	7,287.0	164.1	29.0	84.51	-1,781.6	-2,570.5	7,803.5	7,627.2	176.30	44.261		
16,900.0	7,530.0	7,450.0	7,287.0	165.8	29.0	84.51	-1,781.6	-2,570.5	7,898.7	7,720.6	178.04	44.363		
17,000.0	7,530.0	7,450.0	7,287.0	167.6	29.0	84.51	-1,781.6	-2,570.5	7,994.0	7,814.2	179.79	44.464		
17,100.0	7,530.0	7,450.0	7,287.0	169.3	29.0	84.51	-1,781.6	-2,570.5	8,089.4	7,907.9	181.53	44.563		
17,200.0	7,530.0	7,450.0	7,287.0	171.1	29.0	84.51	-1,781.6	-2,570.5	8,185.0	8,001.7	183.27	44.661		
17,300.0	7,530.0	7,450.0	7,287.0	172.8	29.0	84.51	-1,781.6	-2,570.5	8,280.6	8,095.6	185.01	44.758		
17,400.0	7,530.0	7,450.0	7,287.0	174.5	29.0	84.51	-1,781.6	-2,570.5	8,376.3	8,189.6	186.75	44.853		
17,411.2	7,530.0	7,450.0	7,287.0	174.7	29.0	84.51	-1,781.6	-2,570.5	8,387.1	8,200.2	186.95	44.864		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.74	-1,929.3	-4,000.9	4,441.8					
100.0	100.0	87.0	87.0	0.2	0.1	-115.74	-1,929.3	-4,000.9	4,441.7	4,441.5	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.74	-1,929.3	-4,000.9	4,441.7	4,441.1	0.61	7,292.070		
300.0	300.0	488.1	487.9	0.5	0.8	-115.78	-1,929.3	-3,993.6	4,439.8	4,438.5	1.31	3,391.364		
400.0	400.0	817.3	816.1	0.7	1.5	-115.93	-1,929.3	-3,967.7	4,432.7	4,430.6	2.06	2,153.468		
500.0	500.0	1,142.5	1,138.2	0.8	2.5	-116.18	-1,929.3	-3,923.5	4,420.5	4,417.7	2.80	1,578.338		
600.0	600.0	1,461.4	1,451.2	1.0	3.6	-93.74	-1,929.3	-3,862.6	4,403.3	4,399.5	3.80	1,159.874		
700.0	700.0	1,771.8	1,752.1	1.2	5.1	-94.53	-1,929.3	-3,786.7	4,381.5	4,376.7	4.77	917.610		
800.0	799.9	1,981.5	1,953.0	1.4	6.2	-95.29	-1,929.3	-3,726.3	4,355.7	4,350.2	5.58	780.728		
848.7	848.4	2,027.5	1,996.9	1.5	6.4	-95.55	-1,929.3	-3,712.5	4,342.9	4,337.1	5.82	746.563		
900.0	899.7	2,076.1	2,043.2	1.6	6.7	-95.68	-1,929.3	-3,698.0	4,329.5	4,323.4	6.06	713.902		
1,000.0	999.5	2,170.6	2,133.5	1.8	7.2	-95.94	-1,929.3	-3,669.8	4,303.4	4,296.8	6.55	656.729		
1,100.0	1,099.3	2,265.2	2,223.7	2.0	7.8	-96.21	-1,929.3	-3,641.5	4,277.3	4,270.3	7.05	606.836		
1,200.0	1,199.1	2,359.7	2,313.9	2.2	8.3	-96.48	-1,929.3	-3,613.3	4,251.3	4,243.8	7.55	563.002		
1,300.0	1,298.9	2,454.2	2,404.1	2.4	8.8	-96.75	-1,929.3	-3,585.0	4,225.5	4,217.4	8.06	524.245		
1,400.0	1,398.8	2,548.8	2,494.3	2.6	9.3	-97.02	-1,929.3	-3,556.7	4,199.7	4,191.1	8.57	489.767		
1,500.0	1,498.6	2,643.3	2,584.5	2.8	9.9	-97.30	-1,929.3	-3,528.5	4,174.0	4,164.9	9.10	458.923		
1,600.0	1,598.4	2,737.9	2,674.8	3.0	10.4	-97.58	-1,929.3	-3,500.2	4,148.5	4,138.8	9.62	431.188		
1,700.0	1,698.2	2,832.4	2,765.0	3.2	10.9	-97.87	-1,929.3	-3,472.0	4,123.0	4,112.8	10.15	406.128		
1,800.0	1,798.0	2,926.9	2,855.2	3.4	11.5	-98.15	-1,929.3	-3,443.7	4,097.6	4,086.9	10.69	383.386		
1,900.0	1,897.8	3,021.5	2,945.4	3.6	12.0	-98.45	-1,929.4	-3,415.4	4,072.3	4,061.1	11.23	362.663		
2,000.0	1,997.7	3,116.0	3,035.6	3.8	12.5	-98.74	-1,929.4	-3,387.2	4,047.1	4,035.4	11.77	343.709		
2,100.0	2,097.5	3,210.6	3,125.9	4.0	13.1	-99.04	-1,929.4	-3,358.9	4,022.1	4,009.7	12.33	326.314		
2,200.0	2,197.3	3,305.1	3,216.1	4.2	13.6	-99.34	-1,929.4	-3,330.7	3,997.1	3,984.2	12.88	310.297		
2,300.0	2,297.1	3,399.6	3,306.3	4.4	14.2	-99.65	-1,929.4	-3,302.4	3,972.3	3,958.8	13.44	295.505		
2,400.0	2,396.9	3,494.2	3,396.5	4.6	14.7	-99.96	-1,929.4	-3,274.1	3,947.5	3,933.5	14.01	281.807		
2,500.0	2,496.7	3,588.7	3,486.7	4.8	15.2	-100.27	-1,929.4	-3,245.9	3,922.9	3,908.3	14.58	269.090		
2,600.0	2,596.5	3,683.3	3,576.9	5.0	15.8	-100.59	-1,929.4	-3,217.6	3,898.4	3,883.3	15.15	257.255		
2,700.0	2,696.4	3,777.8	3,667.2	5.2	16.3	-100.91	-1,929.4	-3,189.4	3,874.0	3,858.3	15.73	246.216		
2,800.0	2,796.2	3,872.4	3,757.4	5.4	16.8	-101.23	-1,929.4	-3,161.1	3,849.8	3,833.4	16.32	235.897		
2,900.0	2,896.0	3,966.9	3,847.6	5.6	17.4	-101.56	-1,929.4	-3,132.8	3,825.6	3,808.7	16.91	226.234		
3,000.0	2,995.8	4,061.4	3,937.8	5.8	17.9	-101.89	-1,929.4	-3,104.6	3,801.6	3,784.1	17.51	217.168		
3,100.0	3,095.6	4,156.0	4,028.0	6.0	18.5	-102.23	-1,929.4	-3,076.3	3,777.7	3,759.6	18.11	208.646		
3,200.0	3,195.4	4,250.5	4,118.3	6.2	19.0	-102.57	-1,929.4	-3,048.1	3,754.0	3,735.3	18.71	200.624		
3,300.0	3,295.2	4,345.1	4,208.5	6.4	19.5	-102.91	-1,929.4	-3,019.8	3,730.3	3,711.0	19.32	193.061		
3,400.0	3,395.1	4,439.6	4,298.7	6.6	20.1	-103.26	-1,929.4	-2,991.6	3,706.9	3,686.9	19.94	185.920		
3,500.0	3,494.9	4,534.1	4,388.9	6.8	20.6	-103.61	-1,929.4	-2,963.3	3,683.5	3,663.0	20.56	179.168		
3,600.0	3,594.7	4,628.7	4,479.1	7.0	21.1	-103.97	-1,929.4	-2,935.0	3,660.3	3,639.1	21.19	172.776		
3,700.0	3,694.5	4,723.2	4,569.4	7.2	21.7	-104.33	-1,929.4	-2,906.8	3,637.3	3,615.4	21.82	166.717		
3,800.0	3,794.3	4,817.8	4,659.6	7.4	22.2	-104.69	-1,929.4	-2,878.5	3,614.3	3,591.9	22.45	160.968		
3,900.0	3,894.1	4,912.3	4,749.8	7.6	22.8	-105.06	-1,929.4	-2,850.3	3,591.6	3,568.5	23.10	155.506		
4,000.0	3,994.0	5,006.8	4,840.0	7.8	23.3	-105.44	-1,929.5	-2,822.0	3,569.0	3,545.2	23.74	150.312		
4,100.0	4,093.8	5,101.4	4,930.2	8.0	23.8	-105.82	-1,929.5	-2,793.7	3,546.5	3,522.1	24.40	145.368		
4,200.0	4,193.6	5,195.9	5,020.4	8.2	24.4	-106.20	-1,929.5	-2,765.5	3,524.2	3,499.2	25.06	140.658		
4,300.0	4,293.4	5,290.5	5,110.7	8.4	24.9	-106.59	-1,929.5	-2,737.2	3,502.1	3,476.4	25.72	136.166		
4,400.0	4,393.2	5,385.0	5,200.9	8.6	25.5	-106.98	-1,929.5	-2,709.0	3,480.1	3,453.7	26.39	131.879		
4,500.0	4,493.0	5,479.5	5,291.1	8.8	26.0	-107.38	-1,929.5	-2,680.7	3,458.3	3,431.2	27.06	127.785		
4,600.0	4,592.8	5,574.1	5,381.3	9.0	26.5	-107.78	-1,929.5	-2,652.4	3,436.7	3,408.9	27.74	123.871		
4,700.0	4,692.7	5,668.6	5,471.5	9.3	27.1	-108.19	-1,929.5	-2,624.2	3,415.2	3,386.8	28.43	120.127		
4,800.0	4,792.5	5,763.2	5,561.8	9.5	27.6	-108.60	-1,929.5	-2,595.9	3,393.9	3,364.8	29.12	116.543		
4,900.0	4,892.3	5,857.7	5,652.0	9.7	28.2	-109.01	-1,929.5	-2,567.7	3,372.8	3,343.0	29.82	113.110		
5,000.0	4,992.1	5,956.7	5,750.0	9.9	51.1	-76.73	44.1	-2,162.9	3,300.4	3,257.3	43.10	76.568		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	9,572.5	7,550.0	10.1	51.2	-76.56	49.9	-2,163.4	3,222.1	3,178.6	43.49	74.082		
5,200.0	5,191.7	9,578.3	7,550.0	10.3	51.2	-76.40	55.7	-2,164.0	3,145.0	3,101.1	43.88	71.669		
5,300.0	5,291.5	9,584.1	7,550.0	10.5	51.3	-76.24	61.4	-2,164.5	3,069.2	3,024.9	44.27	69.328		
5,400.0	5,391.4	9,589.8	7,550.0	10.7	51.3	-76.07	67.2	-2,165.1	2,994.8	2,950.1	44.66	67.058		
5,500.0	5,491.2	9,595.6	7,550.0	10.9	51.4	-75.91	73.0	-2,165.6	2,921.9	2,876.9	45.05	64.862		
5,600.0	5,591.0	9,601.4	7,550.0	11.1	51.5	-75.75	78.7	-2,166.2	2,850.7	2,805.3	45.44	62.739		
5,700.0	5,690.8	9,607.2	7,550.0	11.3	51.5	-75.58	84.5	-2,166.8	2,781.2	2,735.4	45.83	60.690		
5,800.0	5,790.6	9,613.0	7,550.0	11.5	51.6	-75.42	90.3	-2,167.3	2,713.7	2,667.4	46.22	58.716		
5,900.0	5,890.4	9,618.8	7,550.0	11.7	51.7	-75.26	96.1	-2,167.9	2,648.1	2,601.5	46.61	56.819		
6,000.0	5,990.3	9,624.6	7,550.0	11.9	51.7	-75.09	101.8	-2,168.4	2,584.8	2,537.8	47.00	55.000		
6,100.0	6,090.1	9,630.4	7,550.0	12.1	51.8	-74.93	107.6	-2,169.0	2,523.8	2,476.4	47.39	53.262		
6,200.0	6,189.9	9,636.2	7,550.0	12.3	51.9	-74.77	113.4	-2,169.5	2,465.4	2,417.6	47.77	51.604		
6,300.0	6,289.7	9,642.0	7,550.0	12.5	52.0	-74.60	119.2	-2,170.1	2,409.6	2,361.5	48.16	50.030		
6,400.0	6,389.5	9,647.8	7,550.0	12.7	52.0	-74.44	124.9	-2,170.6	2,356.8	2,308.3	48.55	48.542		
6,500.0	6,489.3	9,653.6	7,550.0	12.9	52.1	-74.27	130.7	-2,171.2	2,307.1	2,258.2	48.94	47.140		
6,600.0	6,589.1	9,659.4	7,550.0	13.1	52.2	-74.11	136.5	-2,171.8	2,260.8	2,211.4	49.33	45.829		
6,700.0	6,689.0	9,665.2	7,550.0	13.3	52.2	-73.95	142.2	-2,172.3	2,217.9	2,168.2	49.72	44.608		
6,785.3	6,774.1	9,670.2	7,550.0	13.5	52.3	-73.81	147.2	-2,172.8	2,184.3	2,134.3	50.05	43.642		
6,800.0	6,788.8	9,670.9	7,550.0	13.5	52.3	-62.28	147.9	-2,172.8	2,178.8	2,128.4	50.36	43.266		
6,850.0	6,838.8	9,671.0	7,550.0	13.6	52.3	49.80	148.0	-2,172.9	2,160.4	2,109.1	51.28	42.130		
6,900.0	6,888.6	9,667.7	7,550.0	13.6	52.3	73.15	144.7	-2,172.5	2,142.7	2,090.7	52.03	41.185		
6,950.0	6,938.1	9,660.9	7,550.0	13.7	52.2	79.52	137.9	-2,171.9	2,125.8	2,073.2	52.59	40.423		
7,000.0	6,987.0	9,650.7	7,550.0	13.7	52.1	82.81	127.8	-2,170.9	2,109.8	2,056.8	52.97	39.831		
7,050.0	7,035.0	9,637.2	7,550.0	13.6	51.9	84.95	114.3	-2,169.6	2,094.7	2,041.6	53.17	39.397		
7,100.0	7,082.0	9,620.3	7,550.0	13.6	51.7	86.46	97.5	-2,168.0	2,080.6	2,027.4	53.20	39.108		
7,150.0	7,127.7	9,600.2	7,550.0	13.5	51.5	87.57	77.5	-2,166.1	2,067.4	2,014.3	53.07	38.953		
7,200.0	7,171.8	9,577.0	7,550.0	13.5	51.2	88.38	54.4	-2,163.9	2,055.1	2,002.3	52.81	38.917		
7,250.0	7,214.2	9,550.7	7,550.0	13.4	50.9	88.97	28.3	-2,161.4	2,043.8	1,991.4	52.42	38.987		
7,300.0	7,254.6	9,521.6	7,550.0	13.4	50.6	89.38	-0.7	-2,158.6	2,033.4	1,981.4	51.94	39.151		
7,350.0	7,292.9	9,489.8	7,550.0	13.3	50.2	89.65	-32.4	-2,155.5	2,023.7	1,972.3	51.37	39.394		
7,400.0	7,328.9	9,455.3	7,550.0	13.3	49.8	89.81	-66.7	-2,152.2	2,014.8	1,964.1	50.75	39.699		
7,450.0	7,362.3	9,418.5	7,550.0	13.3	49.4	89.89	-103.4	-2,148.7	2,006.6	1,956.5	50.10	40.054		
7,500.0	7,393.1	9,379.4	7,550.0	13.4	49.0	89.91	-142.3	-2,145.0	1,999.0	1,949.6	49.43	40.441		
7,550.0	7,421.1	9,338.2	7,550.0	13.5	48.6	89.90	-183.3	-2,141.0	1,991.9	1,943.2	48.77	40.844		
7,600.0	7,446.1	9,295.2	7,550.0	13.6	48.1	89.88	-226.1	-2,136.9	1,985.3	1,937.1	48.12	41.253		
7,650.0	7,468.0	9,250.6	7,550.0	13.8	47.7	89.87	-270.5	-2,132.6	1,979.0	1,931.4	47.51	41.651		
7,700.0	7,486.7	9,204.5	7,550.0	14.0	47.2	89.90	-316.3	-2,128.2	1,972.9	1,926.0	46.94	42.032		
7,750.0	7,502.2	9,157.3	7,550.0	14.2	46.8	89.97	-363.4	-2,123.7	1,967.2	1,920.7	46.41	42.388		
7,800.0	7,514.3	9,109.1	7,550.0	14.6	46.3	90.11	-411.4	-2,119.1	1,961.6	1,915.6	45.92	42.719		
7,850.0	7,523.0	9,060.1	7,550.0	14.9	45.9	90.32	-460.1	-2,114.4	1,956.1	1,910.6	45.47	43.023		
7,900.0	7,528.2	9,010.7	7,550.0	15.3	45.4	90.60	-509.3	-2,109.7	1,950.8	1,905.7	45.04	43.310		
7,950.2	7,530.0	8,960.8	7,550.0	15.8	45.0	90.98	-559.0	-2,104.9	1,945.5	1,900.9	44.64	43.585		
8,000.0	7,530.0	8,911.3	7,550.0	16.2	44.5	90.98	-608.3	-2,100.2	1,940.4	1,896.1	44.34	43.759		
8,100.0	7,530.0	8,811.8	7,550.0	17.3	43.7	90.98	-707.3	-2,090.6	1,930.2	1,886.3	43.87	44.000		
8,200.0	7,530.0	8,712.3	7,550.0	18.4	43.0	90.99	-806.3	-2,081.1	1,919.9	1,876.4	43.53	44.110		
8,300.0	7,530.0	8,612.9	7,550.0	19.7	42.3	91.00	-905.3	-2,071.6	1,909.7	1,866.3	43.30	44.101		
8,400.0	7,530.0	8,513.4	7,550.0	21.0	41.6	91.00	-1,004.3	-2,062.1	1,899.4	1,856.2	43.19	43.981		
8,500.0	7,530.0	8,413.9	7,550.0	22.4	41.1	91.01	-1,103.3	-2,052.6	1,889.1	1,846.0	43.18	43.754		
8,600.0	7,530.0	8,314.4	7,550.0	23.8	40.6	91.01	-1,202.4	-2,043.1	1,878.9	1,835.6	43.27	43.423		
8,700.0	7,530.0	8,215.0	7,550.0	25.3	40.1	91.02	-1,301.4	-2,033.5	1,868.6	1,825.1	43.47	42.988		
8,800.0	7,530.0	8,150.0	7,549.5	26.8	39.9	91.01	-1,366.1	-2,027.5	1,858.8	1,814.6	44.18	42.071		
8,900.0	7,530.0	8,100.0	7,545.5	28.3	39.7	90.88	-1,415.7	-2,024.0	1,851.3	1,806.2	45.14	41.015		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - 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
9,000.0	7,530.0	8,050.0	7,537.3	29.9	39.5	90.63	-1,465.0	-2,021.8	1,846.5	1,800.3	46.14	40.017	
9,100.0	7,530.0	8,000.0	7,525.1	31.4	39.4	90.25	-1,513.5	-2,020.9	1,844.4	1,797.2	47.20	39.078	
9,121.4	7,530.0	7,981.5	7,519.6	31.8	39.3	90.08	-1,531.1	-2,021.0	1,844.3	1,796.9	47.36	38.943	CC, ES
9,200.0	7,530.0	7,950.0	7,508.9	33.0	39.2	89.75	-1,560.8	-2,021.5	1,845.2	1,796.9	48.30	38.200	
9,300.0	7,530.0	7,900.0	7,488.9	34.7	39.0	89.13	-1,606.5	-2,023.4	1,849.2	1,799.8	49.46	37.390	
9,400.0	7,530.0	7,850.0	7,465.1	36.3	38.8	88.39	-1,650.4	-2,026.6	1,856.6	1,806.0	50.65	36.653	
9,500.0	7,530.0	7,822.4	7,450.5	37.9	38.7	87.94	-1,673.6	-2,028.9	1,867.4	1,815.3	52.07	35.862	
9,600.0	7,530.0	7,800.0	7,437.9	39.6	38.6	87.55	-1,692.0	-2,031.1	1,882.0	1,828.4	53.54	35.153	
9,700.0	7,530.0	7,750.0	7,407.3	41.2	38.5	86.62	-1,731.1	-2,036.9	1,900.2	1,845.3	54.81	34.665	
9,800.0	7,530.0	7,726.5	7,391.8	42.9	38.4	86.15	-1,748.5	-2,040.1	1,922.2	1,865.9	56.31	34.136	
9,900.0	7,530.0	7,700.0	7,373.6	44.5	38.3	85.61	-1,767.4	-2,044.0	1,948.1	1,890.3	57.78	33.713	
10,000.0	7,530.0	7,675.5	7,356.1	46.2	38.2	85.08	-1,784.1	-2,047.9	1,977.8	1,918.5	59.29	33.359	
10,100.0	7,530.0	7,650.0	7,337.2	47.9	38.1	84.52	-1,800.6	-2,052.2	2,011.3	1,950.6	60.78	33.090	
10,200.0	7,530.0	7,632.9	7,324.1	49.6	38.0	84.13	-1,811.2	-2,055.3	2,048.5	1,986.1	62.35	32.855	
10,300.0	7,530.0	7,600.0	7,298.1	51.3	37.8	83.37	-1,830.4	-2,061.6	2,089.4	2,025.6	63.80	32.749	
10,400.0	7,530.0	7,600.0	7,298.1	53.0	37.8	83.37	-1,830.4	-2,061.6	2,133.4	2,067.9	65.49	32.578	
10,500.0	7,530.0	7,581.5	7,283.1	54.7	37.8	82.93	-1,840.5	-2,065.3	2,180.8	2,113.8	67.05	32.528	SF
10,600.0	7,530.0	7,550.0	7,256.9	56.4	37.6	82.18	-1,856.6	-2,072.0	2,231.6	2,163.1	68.50	32.576	
10,700.0	7,530.0	7,550.0	7,256.9	58.1	37.6	82.18	-1,856.6	-2,072.0	2,284.9	2,214.7	70.19	32.550	
10,800.0	7,530.0	7,550.0	7,256.9	59.8	37.6	82.18	-1,856.6	-2,072.0	2,341.2	2,269.3	71.89	32.567	
10,900.0	7,530.0	7,529.8	7,239.7	61.5	37.5	81.68	-1,866.1	-2,076.5	2,400.0	2,326.6	73.43	32.683	
11,000.0	7,530.0	7,519.2	7,230.5	63.2	37.5	81.42	-1,870.9	-2,078.9	2,461.3	2,386.3	75.05	32.798	
11,100.0	7,530.0	7,500.0	7,213.7	64.9	37.4	80.95	-1,879.0	-2,083.4	2,525.0	2,448.4	76.59	32.970	
11,200.0	7,530.0	7,500.0	7,213.7	66.6	37.4	80.95	-1,879.0	-2,083.4	2,590.7	2,512.4	78.28	33.094	
11,300.0	7,530.0	7,500.0	7,213.7	68.4	37.4	80.95	-1,879.0	-2,083.4	2,658.5	2,578.6	79.98	33.239	
11,400.0	7,530.0	7,500.0	7,213.7	70.1	37.4	80.95	-1,879.0	-2,083.4	2,728.4	2,646.7	81.68	33.401	
11,500.0	7,530.0	7,475.9	7,192.3	71.8	37.3	80.35	-1,888.4	-2,089.1	2,799.5	2,716.3	83.18	33.656	
11,600.0	7,530.0	7,450.0	7,168.9	73.5	37.2	79.70	-1,897.5	-2,095.6	2,872.8	2,788.1	84.65	33.939	
11,700.0	7,530.0	7,450.0	7,168.9	75.3	37.2	79.70	-1,897.5	-2,095.6	2,947.1	2,860.7	86.34	34.131	
11,800.0	7,530.0	7,450.0	7,168.9	77.0	37.2	79.70	-1,897.5	-2,095.6	3,022.8	2,934.8	88.04	34.333	
11,900.0	7,530.0	7,450.0	7,168.9	78.7	37.2	79.70	-1,897.5	-2,095.6	3,100.0	3,010.2	89.75	34.542	
12,000.0	7,530.0	7,450.0	7,168.9	80.4	37.2	79.70	-1,897.5	-2,095.6	3,178.4	3,086.9	91.45	34.756	
12,100.0	7,530.0	7,450.0	7,168.9	82.2	37.2	79.70	-1,897.5	-2,095.6	3,258.0	3,164.8	93.15	34.975	
12,200.0	7,530.0	7,450.0	7,168.9	83.9	37.2	79.70	-1,897.5	-2,095.6	3,338.7	3,243.8	94.86	35.198	
12,300.0	7,530.0	7,450.0	7,168.9	85.6	37.2	79.70	-1,897.5	-2,095.6	3,420.4	3,323.8	96.56	35.422	
12,400.0	7,530.0	7,424.9	7,145.9	87.4	37.0	79.08	-1,905.3	-2,102.1	3,502.5	3,404.5	98.01	35.737	
12,500.0	7,530.0	7,400.0	7,122.8	89.1	36.9	78.45	-1,911.9	-2,108.7	3,586.2	3,486.8	99.44	36.063	
12,600.0	7,530.0	7,400.0	7,122.8	90.8	36.9	78.45	-1,911.9	-2,108.7	3,670.2	3,569.0	101.14	36.287	
12,700.0	7,530.0	7,400.0	7,122.8	92.6	36.9	78.45	-1,911.9	-2,108.7	3,755.0	3,652.1	102.84	36.511	
12,800.0	7,530.0	7,400.0	7,122.8	94.3	36.9	78.45	-1,911.9	-2,108.7	3,840.5	3,735.9	104.55	36.735	
12,900.0	7,530.0	7,400.0	7,122.8	96.0	36.9	78.45	-1,911.9	-2,108.7	3,926.7	3,820.4	106.25	36.958	
13,000.0	7,530.0	7,400.0	7,122.8	97.8	36.9	78.45	-1,911.9	-2,108.7	4,013.5	3,905.5	107.95	37.179	
13,100.0	7,530.0	7,400.0	7,122.8	99.5	36.9	78.45	-1,911.9	-2,108.7	4,100.9	3,991.3	109.65	37.399	
13,200.0	7,530.0	7,400.0	7,122.8	101.3	36.9	78.45	-1,911.9	-2,108.7	4,188.9	4,077.5	111.36	37.616	
13,300.0	7,530.0	7,400.0	7,122.8	103.0	36.9	78.45	-1,911.9	-2,108.7	4,277.4	4,164.4	113.06	37.832	
13,400.0	7,530.0	7,400.0	7,122.8	104.7	36.9	78.45	-1,911.9	-2,108.7	4,366.4	4,251.7	114.77	38.046	
13,500.0	7,530.0	7,400.0	7,122.8	106.5	36.9	78.45	-1,911.9	-2,108.7	4,455.9	4,339.5	116.47	38.257	
13,600.0	7,530.0	7,400.0	7,122.8	108.2	36.9	78.45	-1,911.9	-2,108.7	4,545.8	4,427.7	118.18	38.466	
13,700.0	7,530.0	7,400.0	7,122.8	110.0	36.9	78.45	-1,911.9	-2,108.7	4,636.2	4,516.3	119.89	38.672	
13,800.0	7,530.0	7,400.0	7,122.8	111.7	36.9	78.45	-1,911.9	-2,108.7	4,726.9	4,605.3	121.59	38.875	
13,900.0	7,530.0	7,377.1	7,101.4	113.4	36.8	77.88	-1,917.1	-2,114.9	4,817.5	4,694.5	123.00	39.167	
14,000.0	7,530.0	7,374.9	7,099.3	115.2	36.8	77.83	-1,917.5	-2,115.5	4,908.8	4,784.2	124.67	39.374	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - 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	7,530.0	7,372.7	7,097.3	116.9	36.8	77.77	-1,918.0	-2,116.1	5,000.5	4,874.1	126.35	39.578		
14,200.0	7,530.0	7,350.0	7,075.9	118.7	36.7	77.21	-1,922.1	-2,122.4	5,092.9	4,965.1	127.73	39.873		
14,300.0	7,530.0	7,350.0	7,075.9	120.4	36.7	77.21	-1,922.1	-2,122.4	5,185.0	5,055.6	129.43	40.061		
14,400.0	7,530.0	7,350.0	7,075.9	122.1	36.7	77.21	-1,922.1	-2,122.4	5,277.5	5,146.4	131.13	40.246		
14,500.0	7,530.0	7,350.0	7,075.9	123.9	36.7	77.21	-1,922.1	-2,122.4	5,370.2	5,237.4	132.83	40.429		
14,600.0	7,530.0	7,350.0	7,075.9	125.6	36.7	77.21	-1,922.1	-2,122.4	5,463.2	5,328.7	134.53	40.609		
14,700.0	7,530.0	7,350.0	7,075.9	127.4	36.7	77.21	-1,922.1	-2,122.4	5,556.4	5,420.2	136.23	40.786		
14,800.0	7,530.0	7,350.0	7,075.9	129.1	36.7	77.21	-1,922.1	-2,122.4	5,649.9	5,512.0	137.94	40.960		
14,900.0	7,530.0	7,350.0	7,075.9	130.9	36.7	77.21	-1,922.1	-2,122.4	5,743.6	5,604.0	139.64	41.132		
15,000.0	7,530.0	7,350.0	7,075.9	132.6	36.7	77.21	-1,922.1	-2,122.4	5,837.5	5,696.1	141.34	41.301		
15,100.0	7,530.0	7,350.0	7,075.9	134.4	36.7	77.21	-1,922.1	-2,122.4	5,931.6	5,788.5	143.04	41.467		
15,200.0	7,530.0	7,350.0	7,075.9	136.1	36.7	77.21	-1,922.1	-2,122.4	6,025.9	5,881.1	144.75	41.631		
15,300.0	7,530.0	7,350.0	7,075.9	137.9	36.7	77.21	-1,922.1	-2,122.4	6,120.3	5,973.9	146.45	41.792		
15,400.0	7,530.0	7,350.0	7,075.9	139.6	36.7	77.21	-1,922.1	-2,122.4	6,215.0	6,066.8	148.15	41.950		
15,500.0	7,530.0	7,350.0	7,075.9	141.3	36.7	77.21	-1,922.1	-2,122.4	6,309.8	6,159.9	149.86	42.106		
15,600.0	7,530.0	7,350.0	7,075.9	143.1	36.7	77.21	-1,922.1	-2,122.4	6,404.7	6,253.2	151.56	42.259		
15,700.0	7,530.0	7,350.0	7,075.9	144.8	36.7	77.21	-1,922.1	-2,122.4	6,499.8	6,346.6	153.26	42.410		
15,800.0	7,530.0	7,350.0	7,075.9	146.6	36.7	77.21	-1,922.1	-2,122.4	6,595.1	6,440.1	154.97	42.558		
15,900.0	7,530.0	7,350.0	7,075.9	148.3	36.7	77.21	-1,922.1	-2,122.4	6,690.5	6,533.8	156.67	42.704		
16,000.0	7,530.0	7,350.0	7,075.9	150.1	36.7	77.21	-1,922.1	-2,122.4	6,786.0	6,627.7	158.38	42.848		
16,100.0	7,530.0	7,350.0	7,075.9	151.8	36.7	77.21	-1,922.1	-2,122.4	6,881.7	6,721.6	160.08	42.989		
16,200.0	7,530.0	7,350.0	7,075.9	153.6	36.7	77.21	-1,922.1	-2,122.4	6,977.5	6,815.7	161.78	43.128		
16,300.0	7,530.0	7,350.0	7,075.9	155.3	36.7	77.21	-1,922.1	-2,122.4	7,073.4	6,909.9	163.49	43.265		
16,400.0	7,530.0	7,350.0	7,075.9	157.1	36.7	77.21	-1,922.1	-2,122.4	7,169.4	7,004.2	165.19	43.399		
16,500.0	7,530.0	7,350.0	7,075.9	158.8	36.7	77.21	-1,922.1	-2,122.4	7,265.5	7,098.6	166.90	43.532		
16,600.0	7,530.0	7,350.0	7,075.9	160.6	36.7	77.21	-1,922.1	-2,122.4	7,361.7	7,193.1	168.60	43.662		
16,700.0	7,530.0	7,350.0	7,075.9	162.3	36.7	77.21	-1,922.1	-2,122.4	7,458.0	7,287.7	170.31	43.791		
16,800.0	7,530.0	7,350.0	7,075.9	164.1	36.7	77.21	-1,922.1	-2,122.4	7,554.4	7,382.4	172.02	43.917		
16,900.0	7,530.0	7,350.0	7,075.9	165.8	36.7	77.21	-1,922.1	-2,122.4	7,650.9	7,477.2	173.72	44.041		
17,000.0	7,530.0	7,350.0	7,075.9	167.6	36.7	77.21	-1,922.1	-2,122.4	7,747.5	7,572.1	175.43	44.164		
17,100.0	7,530.0	7,350.0	7,075.9	169.3	36.7	77.21	-1,922.1	-2,122.4	7,844.2	7,667.1	177.13	44.284		
17,200.0	7,530.0	7,350.0	7,075.9	171.1	36.7	77.21	-1,922.1	-2,122.4	7,941.0	7,762.1	178.84	44.403		
17,300.0	7,530.0	7,350.0	7,075.9	172.8	36.7	77.21	-1,922.1	-2,122.4	8,037.8	7,857.3	180.54	44.520		
17,400.0	7,530.0	7,350.0	7,075.9	174.5	36.7	77.21	-1,922.1	-2,122.4	8,134.7	7,952.5	182.25	44.635		
17,411.2	7,530.0	7,350.0	7,075.9	174.7	36.7	77.21	-1,922.1	-2,122.4	8,145.6	7,963.2	182.44	44.648		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.22	-1,937.1	-4,112.4	4,545.9					
100.0	100.0	84.0	84.0	0.2	0.1	-115.22	-1,937.1	-4,112.4	4,545.8	4,545.6	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.22	-1,937.1	-4,112.4	4,545.8	4,545.2	0.60	7,527.646		
300.0	300.0	269.0	269.0	0.5	0.4	-115.22	-1,936.8	-4,112.7	4,546.0	4,545.0	0.93	4,903.045		
400.0	400.0	351.1	351.1	0.7	0.6	-115.20	-1,935.6	-4,113.8	4,546.5	4,545.2	1.25	3,646.330		
500.0	500.0	433.2	433.1	0.8	0.7	-115.16	-1,933.5	-4,115.6	4,547.4	4,545.8	1.57	2,898.405		
600.0	600.0	515.2	515.0	1.0	0.9	-92.10	-1,930.6	-4,118.1	4,548.8	4,546.9	1.90	2,391.216		
700.0	700.0	600.0	599.7	1.2	1.0	-92.05	-1,926.6	-4,121.6	4,550.6	4,548.3	2.25	2,024.372		
800.0	799.9	679.0	678.5	1.4	1.2	-92.00	-1,922.0	-4,125.6	4,552.8	4,550.2	2.60	1,752.263		
848.7	848.4	718.9	718.2	1.5	1.3	-91.97	-1,919.4	-4,127.9	4,554.1	4,551.3	2.78	1,639.778		
900.0	899.7	760.9	760.0	1.6	1.4	-91.95	-1,916.4	-4,130.5	4,555.6	4,552.6	2.97	1,533.441		
1,000.0	999.5	842.7	841.3	1.8	1.6	-91.91	-1,910.0	-4,136.1	4,558.7	4,555.3	3.36	1,358.589		
1,100.0	1,099.3	938.9	936.9	2.0	1.8	-91.85	-1,901.7	-4,143.4	4,562.1	4,558.3	3.79	1,205.279		
1,200.0	1,199.1	1,038.7	1,036.1	2.2	2.1	-91.79	-1,893.0	-4,150.9	4,565.5	4,561.3	4.23	1,079.651		
1,300.0	1,298.9	1,138.6	1,135.3	2.4	2.3	-91.73	-1,884.4	-4,158.4	4,568.9	4,564.3	4.68	977.054		
1,400.0	1,398.8	1,238.4	1,234.4	2.6	2.6	-91.67	-1,875.8	-4,166.0	4,572.4	4,567.2	5.13	891.888		
1,500.0	1,498.6	1,338.2	1,333.6	2.8	2.9	-91.60	-1,867.2	-4,173.5	4,575.8	4,570.2	5.58	820.168		
1,600.0	1,598.4	1,438.0	1,432.7	3.0	3.1	-91.54	-1,858.5	-4,181.0	4,579.2	4,573.2	6.03	759.010		
1,700.0	1,698.2	1,537.8	1,531.9	3.2	3.4	-91.48	-1,849.9	-4,188.6	4,582.7	4,576.2	6.49	706.279		
1,800.0	1,798.0	1,637.7	1,631.1	3.4	3.6	-91.42	-1,841.3	-4,196.1	4,586.1	4,579.2	6.94	660.373		
1,900.0	1,897.8	1,737.5	1,730.2	3.6	3.9	-91.36	-1,832.7	-4,203.6	4,589.6	4,582.2	7.40	620.063		
2,000.0	1,997.7	1,837.3	1,829.4	3.8	4.2	-91.30	-1,824.0	-4,211.1	4,593.0	4,585.2	7.86	584.397		
2,100.0	2,097.5	1,937.1	1,928.5	4.0	4.4	-91.24	-1,815.4	-4,218.7	4,596.5	4,588.2	8.32	552.623		
2,200.0	2,197.3	2,036.9	2,027.7	4.2	4.7	-91.17	-1,806.8	-4,226.2	4,599.9	4,591.2	8.78	524.143		
2,300.0	2,297.1	2,136.7	2,126.9	4.4	5.0	-91.11	-1,798.1	-4,233.7	4,603.4	4,594.2	9.23	498.475		
2,400.0	2,396.9	2,236.6	2,226.0	4.6	5.2	-91.05	-1,789.5	-4,241.3	4,606.9	4,597.2	9.69	475.224		
2,500.0	2,496.7	2,336.4	2,325.2	4.8	5.5	-90.99	-1,780.9	-4,248.8	4,610.4	4,600.2	10.15	454.067		
2,600.0	2,596.5	2,436.2	2,424.3	5.0	5.8	-90.93	-1,772.3	-4,256.3	4,613.9	4,603.3	10.61	434.735		
2,700.0	2,696.4	2,536.0	2,523.5	5.2	6.0	-90.87	-1,763.6	-4,263.9	4,617.4	4,606.3	11.07	417.002		
2,800.0	2,796.2	2,635.8	2,622.7	5.4	6.3	-90.81	-1,755.0	-4,271.4	4,620.9	4,609.3	11.53	400.679		
2,900.0	2,896.0	2,735.7	2,721.8	5.6	6.5	-90.75	-1,746.4	-4,278.9	4,624.4	4,612.4	11.99	385.606		
3,000.0	2,995.8	2,835.5	2,821.0	5.8	6.8	-90.69	-1,737.8	-4,286.5	4,627.9	4,615.4	12.45	371.645		
3,100.0	3,095.6	2,935.3	2,920.1	6.0	7.1	-90.63	-1,729.1	-4,294.0	4,631.4	4,618.5	12.91	358.677		
3,200.0	3,195.4	3,035.1	3,019.3	6.2	7.3	-90.57	-1,720.5	-4,301.5	4,634.9	4,621.5	13.37	346.600		
3,300.0	3,295.2	3,134.9	3,118.5	6.4	7.6	-90.51	-1,711.9	-4,309.0	4,638.4	4,624.6	13.83	335.327		
3,400.0	3,395.1	3,234.8	3,217.6	6.6	7.9	-90.45	-1,703.2	-4,316.6	4,642.0	4,627.7	14.29	324.780		
3,500.0	3,494.9	3,334.6	3,316.8	6.8	8.1	-90.39	-1,694.6	-4,324.1	4,645.5	4,630.7	14.75	314.891		
3,600.0	3,594.7	3,434.4	3,415.9	7.0	8.4	-90.33	-1,686.0	-4,331.6	4,649.0	4,633.8	15.21	305.600		
3,700.0	3,694.5	3,534.2	3,515.1	7.2	8.7	-90.27	-1,677.4	-4,339.2	4,652.6	4,636.9	15.67	296.856		
3,800.0	3,794.3	3,634.0	3,614.3	7.4	8.9	-90.21	-1,668.7	-4,346.7	4,656.1	4,640.0	16.13	288.611		
3,900.0	3,894.1	3,733.9	3,713.4	7.6	9.2	-90.15	-1,660.1	-4,354.2	4,659.7	4,643.1	16.59	280.825		
4,000.0	3,994.0	3,833.7	3,812.6	7.8	9.5	-90.09	-1,651.5	-4,361.8	4,663.2	4,646.2	17.05	273.459		
4,100.0	4,093.8	3,933.5	3,911.7	8.0	9.7	-90.03	-1,642.9	-4,369.3	4,666.8	4,649.3	17.51	266.481		
4,200.0	4,193.6	4,033.3	4,010.9	8.2	10.0	-89.97	-1,634.2	-4,376.8	4,670.4	4,652.4	17.97	259.861		
4,300.0	4,293.4	4,133.1	4,110.1	8.4	10.3	-89.91	-1,625.6	-4,384.4	4,673.9	4,655.5	18.43	253.572		
4,400.0	4,393.2	4,232.9	4,209.2	8.6	10.5	-89.85	-1,617.0	-4,391.9	4,677.5	4,658.6	18.89	247.591		
4,500.0	4,493.0	4,332.8	4,308.4	8.8	10.8	-89.79	-1,608.3	-4,399.4	4,681.1	4,661.8	19.35	241.894		
4,600.0	4,592.8	4,432.6	4,407.5	9.0	11.1	-89.73	-1,599.7	-4,406.9	4,684.7	4,664.9	19.81	236.463		
4,700.0	4,692.7	4,532.4	4,506.7	9.3	11.3	-89.67	-1,591.1	-4,414.5	4,688.3	4,668.0	20.27	231.280		
4,800.0	4,792.5	4,632.2	4,605.9	9.5	11.6	-89.62	-1,582.5	-4,422.0	4,691.9	4,671.2	20.73	226.327		
4,900.0	4,892.3	4,732.0	4,705.0	9.7	11.8	-89.56	-1,573.8	-4,429.5	4,695.5	4,674.3	21.19	221.590		
5,000.0	4,992.1	4,831.9	4,804.2	9.9	12.1	-89.50	-1,565.2	-4,437.1	4,699.1	4,677.5	21.65	217.055		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	4,931.7	4,903.3	10.1	12.4	-89.44	-1,556.6	-4,444.6	4,702.7	4,680.6	22.11	212.709		
5,200.0	5,191.7	5,031.5	5,002.5	10.3	12.6	-89.38	-1,548.0	-4,452.1	4,706.3	4,683.8	22.57	208.541		
5,300.0	5,291.5	5,131.3	5,101.7	10.5	12.9	-89.32	-1,539.3	-4,459.7	4,710.0	4,686.9	23.03	204.540		
5,400.0	5,391.4	5,231.1	5,200.8	10.7	13.2	-89.26	-1,530.7	-4,467.2	4,713.6	4,690.1	23.49	200.697		
5,500.0	5,491.2	5,331.0	5,300.0	10.9	13.4	-89.21	-1,522.1	-4,474.7	4,717.2	4,693.3	23.95	197.002		
5,600.0	5,591.0	5,430.8	5,399.1	11.1	13.7	-89.15	-1,513.4	-4,482.3	4,720.9	4,696.5	24.40	193.446		
5,700.0	5,690.8	5,530.6	5,498.3	11.3	14.0	-89.09	-1,504.8	-4,489.8	4,724.5	4,699.7	24.86	190.023		
5,800.0	5,790.6	5,630.4	5,597.5	11.5	14.2	-89.03	-1,496.2	-4,497.3	4,728.2	4,702.8	25.32	186.725		
5,900.0	5,890.4	5,730.2	5,696.6	11.7	14.5	-88.97	-1,487.6	-4,504.8	4,731.8	4,706.0	25.78	183.545		
6,000.0	5,990.3	5,830.1	5,795.8	11.9	14.8	-88.92	-1,478.9	-4,512.4	4,735.5	4,709.2	26.24	180.476		
6,100.0	6,090.1	5,929.9	5,894.9	12.1	15.0	-88.86	-1,470.3	-4,519.9	4,739.1	4,712.4	26.70	177.514		
6,200.0	6,189.9	6,029.7	5,994.1	12.3	15.3	-88.80	-1,461.7	-4,527.4	4,742.8	4,715.6	27.16	174.653		
6,300.0	6,289.7	6,129.5	6,093.3	12.5	15.6	-88.74	-1,453.1	-4,535.0	4,746.5	4,718.9	27.61	171.888		
6,400.0	6,389.5	6,229.3	6,192.4	12.7	15.8	-88.69	-1,444.4	-4,542.5	4,750.2	4,722.1	28.07	169.213		
6,500.0	6,489.3	6,329.1	6,291.6	12.9	16.1	-88.63	-1,435.8	-4,550.0	4,753.8	4,725.3	28.53	166.625		
6,600.0	6,589.1	6,429.0	6,390.7	13.1	16.4	-88.57	-1,427.2	-4,557.6	4,757.5	4,728.5	28.99	164.120		
6,700.0	6,689.0	6,528.8	6,489.9	13.3	16.6	-88.51	-1,418.5	-4,565.1	4,761.2	4,731.8	29.45	161.693		
6,785.3	6,774.1	6,613.9	6,574.4	13.5	16.8	-88.47	-1,411.2	-4,571.5	4,764.4	4,734.5	29.84	159.683		
6,800.0	6,788.8	6,628.6	6,589.1	13.5	16.9	-77.46	-1,409.9	-4,572.6	4,764.9	4,735.0	29.91	159.333		
6,850.0	6,838.8	6,678.3	6,638.5	13.6	17.0	33.04	-1,405.6	-4,576.4	4,765.7	4,735.6	30.09	158.370		
6,900.0	6,888.6	6,727.7	6,687.5	13.6	17.2	55.11	-1,401.4	-4,580.1	4,765.2	4,735.0	30.22	157.667		
6,950.0	6,938.1	6,776.3	6,735.8	13.7	17.3	60.50	-1,397.2	-4,583.8	4,763.4	4,733.1	30.30	157.208		
7,000.0	6,987.0	6,824.1	6,783.2	13.7	17.4	63.12	-1,393.0	-4,587.4	4,760.4	4,730.1	30.33	156.973		
7,050.0	7,035.0	6,870.7	6,829.6	13.6	17.5	64.87	-1,389.0	-4,590.9	4,756.2	4,725.9	30.31	156.933		
7,100.0	7,082.0	6,916.0	6,874.5	13.6	17.7	66.29	-1,385.1	-4,594.3	4,750.9	4,720.6	30.25	157.057		
7,150.0	7,127.7	6,959.7	6,918.0	13.5	17.8	67.56	-1,381.3	-4,597.6	4,744.5	4,714.3	30.16	157.304		
7,200.0	7,171.8	7,001.6	6,959.6	13.5	17.9	68.79	-1,377.7	-4,600.8	4,737.0	4,707.0	30.05	157.631		
7,250.0	7,214.2	7,041.5	6,999.2	13.4	18.0	70.02	-1,374.2	-4,603.8	4,728.6	4,698.7	29.93	157.985		
7,300.0	7,254.6	7,079.2	7,036.7	13.4	18.1	71.26	-1,371.0	-4,606.6	4,719.4	4,689.6	29.81	158.312		
7,350.0	7,292.9	7,114.6	7,071.8	13.3	18.2	72.53	-1,367.9	-4,609.3	4,709.5	4,679.8	29.70	158.556		
7,400.0	7,328.9	7,147.4	7,104.4	13.3	18.3	73.81	-1,365.1	-4,611.8	4,698.9	4,669.2	29.62	158.659		
7,450.0	7,362.3	7,177.5	7,134.3	13.3	18.3	75.12	-1,362.5	-4,614.0	4,687.7	4,658.2	29.56	158.569		
7,500.0	7,393.1	7,188.2	7,145.0	13.4	18.4	76.25	-1,361.6	-4,614.8	4,676.2	4,646.7	29.51	158.465		
7,550.0	7,421.1	7,200.0	7,156.7	13.5	18.4	77.41	-1,360.8	-4,615.7	4,664.4	4,634.9	29.51	158.056		
7,600.0	7,446.1	7,200.0	7,156.7	13.6	18.4	78.44	-1,360.8	-4,615.7	4,652.4	4,622.9	29.55	157.451		
7,650.0	7,468.0	7,200.0	7,156.7	13.8	18.4	79.48	-1,360.8	-4,615.7	4,640.4	4,610.7	29.65	156.510		
7,700.0	7,486.7	7,200.0	7,156.7	14.0	18.4	80.50	-1,360.8	-4,615.7	4,628.3	4,598.5	29.81	155.238		
7,750.0	7,502.2	7,218.2	7,174.9	14.2	18.4	81.75	-1,360.1	-4,617.1	4,616.1	4,586.1	30.07	153.533		
7,800.0	7,514.3	7,221.9	7,178.5	14.6	18.4	82.80	-1,360.1	-4,617.4	4,604.2	4,573.8	30.36	151.640		
7,850.0	7,523.0	7,224.6	7,181.3	14.9	18.4	83.82	-1,360.0	-4,617.6	4,592.3	4,561.6	30.72	149.513		
7,900.0	7,528.2	7,226.3	7,182.9	15.3	18.4	84.80	-1,360.0	-4,617.7	4,580.7	4,549.6	31.12	147.199		
7,950.2	7,530.0	7,226.8	7,183.4	15.8	18.4	85.74	-1,360.0	-4,617.8	4,569.4	4,537.8	31.57	144.735		
8,000.0	7,530.0	7,226.7	7,183.3	16.2	18.4	85.74	-1,360.0	-4,617.8	4,558.5	4,526.5	32.05	142.223		
8,100.0	7,530.0	7,226.4	7,183.0	17.3	18.4	85.74	-1,360.0	-4,617.7	4,538.3	4,505.2	33.11	137.055		
8,200.0	7,530.0	7,226.1	7,182.7	18.4	18.4	85.73	-1,360.0	-4,617.7	4,520.3	4,486.0	34.28	131.858		
8,300.0	7,530.0	7,225.7	7,182.3	19.7	18.4	85.73	-1,360.0	-4,617.7	4,504.4	4,468.8	35.54	126.752		
8,400.0	7,530.0	7,225.2	7,181.8	21.0	18.4	85.72	-1,360.0	-4,617.6	4,490.6	4,453.7	36.86	121.818		
8,500.0	7,530.0	7,224.7	7,181.3	22.4	18.4	85.72	-1,360.0	-4,617.6	4,479.0	4,440.8	38.25	117.104		
8,600.0	7,530.0	7,224.0	7,180.6	23.8	18.4	85.71	-1,360.0	-4,617.5	4,469.7	4,430.0	39.68	112.638		
8,700.0	7,530.0	7,223.1	7,179.8	25.3	18.4	85.70	-1,360.0	-4,617.5	4,462.6	4,421.4	41.15	108.433		
8,800.0	7,530.0	7,222.1	7,178.7	26.8	18.4	85.68	-1,360.1	-4,617.4	4,457.7	4,415.0	42.66	104.490		
8,900.0	7,530.0	7,220.6	7,177.3	28.3	18.4	85.66	-1,360.1	-4,617.3	4,455.0	4,410.8	44.19	100.805		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #1													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)	
8,968.5	7,530.0	7,219.4	7,176.0	29.4	18.4	85.65	-1,360.1	-4,617.2	4,454.5	4,409.2	45.26	98.418		
9,000.0	7,530.0	7,218.7	7,175.3	29.9	18.4	85.64	-1,360.1	-4,617.1	4,454.6	4,408.8	45.75	97.367		
9,100.0	7,530.0	7,215.7	7,172.4	31.4	18.4	85.60	-1,360.2	-4,616.9	4,456.4	4,409.1	47.33	94.165		
9,200.0	7,530.0	7,210.9	7,167.5	33.0	18.4	85.54	-1,360.3	-4,616.6	4,460.5	4,411.6	48.91	91.190		
9,300.0	7,530.0	7,201.4	7,158.1	34.7	18.4	85.42	-1,360.8	-4,615.8	4,466.8	4,416.3	50.51	88.434		
9,400.0	7,530.0	7,180.3	7,137.1	36.3	18.4	85.15	-1,362.2	-4,614.2	4,475.3	4,423.2	52.08	85.934		
9,500.0	7,530.0	7,171.7	7,128.6	37.9	18.3	85.04	-1,363.0	-4,613.6	4,486.0	4,432.3	53.69	83.559		
9,600.0	7,530.0	8,220.0	7,759.0	39.6	17.3	93.13	-2,021.8	-4,661.6	4,488.2	4,434.4	53.79	83.444		
9,700.0	7,530.0	8,320.0	7,759.0	41.2	17.8	93.13	-2,121.8	-4,661.6	4,487.5	4,431.6	55.95	80.209		
9,800.0	7,530.0	8,420.0	7,759.0	42.9	18.3	93.13	-2,221.8	-4,661.6	4,486.8	4,428.5	58.30	76.965		
9,900.0	7,530.0	8,520.0	7,759.0	44.5	19.1	93.13	-2,321.8	-4,661.6	4,486.2	4,425.4	60.81	73.771		
10,000.0	7,530.0	8,620.0	7,759.0	46.2	19.9	93.13	-2,421.8	-4,661.7	4,485.5	4,422.0	63.47	70.673		
10,100.0	7,530.0	8,720.0	7,759.0	47.9	20.9	93.13	-2,521.8	-4,661.7	4,484.8	4,418.6	66.24	67.701		
10,200.0	7,530.0	8,820.0	7,759.0	49.6	21.9	93.13	-2,621.8	-4,661.7	4,484.1	4,415.0	69.12	64.873		
10,300.0	7,530.0	8,920.0	7,759.0	51.3	23.1	93.13	-2,721.8	-4,661.7	4,483.4	4,411.4	72.08	62.200		
10,400.0	7,530.0	9,020.0	7,759.0	53.0	24.3	93.13	-2,821.8	-4,661.7	4,482.8	4,407.6	75.11	59.682		
10,500.0	7,530.0	9,120.0	7,759.0	54.7	25.6	93.13	-2,921.8	-4,661.7	4,482.1	4,403.9	78.20	57.317		
10,600.0	7,530.0	9,220.0	7,759.0	56.4	26.9	93.13	-3,021.8	-4,661.8	4,481.4	4,400.1	81.33	55.099		
10,700.0	7,530.0	9,320.0	7,759.0	58.1	28.3	93.13	-3,121.8	-4,661.8	4,480.7	4,396.2	84.51	53.019		
10,800.0	7,530.0	9,420.0	7,759.0	59.8	29.7	93.13	-3,221.8	-4,661.8	4,480.0	4,392.3	87.72	51.070		
10,900.0	7,530.0	9,520.0	7,759.0	61.5	31.2	93.14	-3,321.8	-4,661.8	4,479.4	4,388.4	90.96	49.243		
11,000.0	7,530.0	9,620.0	7,759.0	63.2	32.6	93.14	-3,421.8	-4,661.8	4,478.7	4,384.4	94.23	47.529		
11,100.0	7,530.0	9,720.0	7,759.0	64.9	34.1	93.14	-3,521.8	-4,661.8	4,478.0	4,380.5	97.52	45.919		
11,200.0	7,530.0	9,820.0	7,759.0	66.6	35.7	93.14	-3,621.8	-4,661.9	4,477.3	4,376.5	100.83	44.405		
11,300.0	7,530.0	9,920.0	7,759.0	68.4	37.2	93.14	-3,721.8	-4,661.9	4,476.6	4,372.5	104.15	42.981		
11,400.0	7,530.0	10,020.0	7,759.0	70.1	38.8	93.14	-3,821.8	-4,661.9	4,476.0	4,368.5	107.49	41.640		
11,500.0	7,530.0	10,120.0	7,759.0	71.8	40.4	93.14	-3,921.8	-4,661.9	4,475.3	4,364.4	110.84	40.374		
11,600.0	7,530.0	10,220.0	7,759.0	73.5	42.0	93.14	-4,021.8	-4,661.9	4,474.6	4,360.4	114.21	39.179		
11,700.0	7,530.0	10,319.9	7,759.0	75.3	43.6	93.14	-4,121.8	-4,661.9	4,473.9	4,356.3	117.58	38.049		
11,800.0	7,530.0	10,419.9	7,759.0	77.0	45.2	93.14	-4,221.8	-4,662.0	4,473.2	4,352.3	120.96	36.980		
11,900.0	7,530.0	10,519.9	7,759.0	78.7	46.8	93.14	-4,321.8	-4,662.0	4,472.6	4,348.2	124.36	35.966		
12,000.0	7,530.0	10,619.9	7,759.0	80.4	48.5	93.14	-4,421.8	-4,662.0	4,471.9	4,344.1	127.75	35.004		
12,100.0	7,530.0	10,719.9	7,759.0	82.2	50.1	93.14	-4,521.8	-4,662.0	4,471.2	4,340.0	131.16	34.090		
12,200.0	7,530.0	10,819.9	7,759.0	83.9	51.8	93.14	-4,621.8	-4,662.0	4,470.5	4,335.9	134.57	33.221		
12,300.0	7,530.0	10,919.9	7,759.0	85.6	53.4	93.14	-4,721.8	-4,662.0	4,469.8	4,331.8	137.99	32.393		
12,400.0	7,530.0	11,019.9	7,759.0	87.4	55.1	93.14	-4,821.8	-4,662.1	4,469.1	4,327.7	141.41	31.605		
12,500.0	7,530.0	11,119.9	7,759.0	89.1	56.8	93.14	-4,921.8	-4,662.1	4,468.5	4,323.6	144.83	30.852		
12,600.0	7,530.0	11,219.9	7,759.0	90.8	58.4	93.14	-5,021.8	-4,662.1	4,467.8	4,319.5	148.26	30.134		
12,700.0	7,530.0	11,319.9	7,759.0	92.6	60.1	93.14	-5,121.8	-4,662.1	4,467.1	4,315.4	151.70	29.448		
12,800.0	7,530.0	11,419.9	7,759.0	94.3	61.8	93.14	-5,221.8	-4,662.1	4,466.4	4,311.3	155.13	28.791		
12,900.0	7,530.0	11,519.9	7,759.0	96.0	63.5	93.15	-5,321.8	-4,662.1	4,465.7	4,307.2	158.58	28.162		
13,000.0	7,530.0	11,619.9	7,759.0	97.8	65.2	93.15	-5,421.8	-4,662.2	4,465.1	4,303.0	162.02	27.559		
13,100.0	7,530.0	11,719.9	7,759.0	99.5	66.9	93.15	-5,521.8	-4,662.2	4,464.4	4,298.9	165.47	26.981		
13,200.0	7,530.0	11,819.9	7,759.0	101.3	68.6	93.15	-5,621.8	-4,662.2	4,463.7	4,294.8	168.92	26.426		
13,300.0	7,530.0	11,919.9	7,759.0	103.0	70.3	93.15	-5,721.8	-4,662.2	4,463.0	4,290.7	172.37	25.893		
13,400.0	7,530.0	12,019.9	7,759.0	104.7	72.0	93.15	-5,821.8	-4,662.2	4,462.3	4,286.5	175.82	25.380		
13,500.0	7,530.0	12,119.9	7,759.0	106.5	73.7	93.15	-5,921.8	-4,662.2	4,461.7	4,282.4	179.28	24.887		
13,600.0	7,530.0	12,219.9	7,759.0	108.2	75.4	93.15	-6,021.8	-4,662.3	4,461.0	4,278.2	182.73	24.412		
13,700.0	7,530.0	12,319.9	7,759.0	110.0	77.1	93.15	-6,121.7	-4,662.3	4,460.3	4,274.1	186.19	23.955		
13,800.0	7,530.0	12,419.9	7,759.0	111.7	78.8	93.15	-6,221.7	-4,662.3	4,459.6	4,270.0	189.66	23.514		
13,900.0	7,530.0	12,519.9	7,759.0	113.4	80.5	93.15	-6,321.7	-4,662.3	4,458.9	4,265.8	193.12	23.089		
14,000.0	7,530.0	12,619.9	7,759.0	115.2	82.2	93.15	-6,421.7	-4,662.3	4,458.3	4,261.7	196.58	22.679		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #1													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)				Between Centres (ft)	Between Ellipses (ft)	
14,100.0	7,530.0	12,719.9	7,759.0	116.9	84.0	93.15	-6,521.7	-4,662.3	4,457.6	4,257.5	200.05	22.282		
14,200.0	7,530.0	12,819.9	7,759.0	118.7	85.7	93.15	-6,621.7	-4,662.4	4,456.9	4,253.4	203.52	21.899		
14,300.0	7,530.0	12,919.9	7,759.0	120.4	87.4	93.15	-6,721.7	-4,662.4	4,456.2	4,249.2	206.99	21.529		
14,400.0	7,530.0	13,019.9	7,759.0	122.1	89.1	93.15	-6,821.7	-4,662.4	4,455.5	4,245.1	210.46	21.171		
14,500.0	7,530.0	13,119.9	7,759.0	123.9	90.8	93.15	-6,921.7	-4,662.4	4,454.9	4,240.9	213.93	20.824		
14,600.0	7,530.0	13,219.9	7,759.0	125.6	92.6	93.15	-7,021.7	-4,662.4	4,454.2	4,236.8	217.40	20.488		
14,700.0	7,530.0	13,319.9	7,759.0	127.4	94.3	93.15	-7,121.7	-4,662.4	4,453.5	4,232.6	220.87	20.163		
14,800.0	7,530.0	13,419.9	7,759.0	129.1	96.0	93.15	-7,221.7	-4,662.5	4,452.8	4,228.5	224.35	19.848		
14,900.0	7,530.0	13,519.9	7,759.0	130.9	97.7	93.15	-7,321.7	-4,662.5	4,452.1	4,224.3	227.82	19.542		
15,000.0	7,530.0	13,619.9	7,759.0	132.6	99.5	93.16	-7,421.7	-4,662.5	4,451.5	4,220.2	231.30	19.245		
15,100.0	7,530.0	13,719.9	7,759.0	134.4	101.2	93.16	-7,521.7	-4,662.5	4,450.8	4,216.0	234.78	18.958		
15,200.0	7,530.0	13,819.9	7,759.0	136.1	102.9	93.16	-7,621.7	-4,662.5	4,450.1	4,211.8	238.25	18.678		
15,300.0	7,530.0	13,919.9	7,759.0	137.9	104.7	93.16	-7,721.7	-4,662.5	4,449.4	4,207.7	241.73	18.406		
15,400.0	7,530.0	14,019.9	7,759.0	139.6	106.4	93.16	-7,821.7	-4,662.6	4,448.7	4,203.5	245.21	18.142		
15,500.0	7,530.0	14,119.9	7,759.0	141.3	108.1	93.16	-7,921.7	-4,662.6	4,448.1	4,199.4	248.69	17.886		
15,600.0	7,530.0	14,219.9	7,759.0	143.1	109.8	93.16	-8,021.7	-4,662.6	4,447.4	4,195.2	252.17	17.636		
15,700.0	7,530.0	14,319.9	7,759.0	144.8	111.6	93.16	-8,121.7	-4,662.6	4,446.7	4,191.0	255.65	17.393		
15,800.0	7,530.0	14,419.9	7,759.0	146.6	113.3	93.16	-8,221.7	-4,662.6	4,446.0	4,186.9	259.13	17.157		
15,900.0	7,530.0	14,519.9	7,759.0	148.3	115.1	93.16	-8,321.7	-4,662.6	4,445.3	4,182.7	262.62	16.927		
16,000.0	7,530.0	14,619.8	7,759.0	150.1	116.8	93.16	-8,421.7	-4,662.7	4,444.6	4,178.5	266.10	16.703		
16,100.0	7,530.0	14,719.8	7,759.0	151.8	118.5	93.16	-8,521.7	-4,662.7	4,444.0	4,174.4	269.58	16.485		
16,200.0	7,530.0	14,819.8	7,759.0	153.6	120.3	93.16	-8,621.7	-4,662.7	4,443.3	4,170.2	273.07	16.272		
16,300.0	7,530.0	14,919.8	7,759.0	155.3	122.0	93.16	-8,721.7	-4,662.7	4,442.6	4,166.1	276.55	16.064		
16,400.0	7,530.0	15,019.8	7,759.0	157.1	123.7	93.16	-8,821.7	-4,662.7	4,441.9	4,161.9	280.04	15.862		
16,500.0	7,530.0	15,119.8	7,759.0	158.8	125.5	93.16	-8,921.7	-4,662.7	4,441.2	4,157.7	283.52	15.665		
16,600.0	7,530.0	15,219.8	7,759.0	160.6	127.2	93.16	-9,021.7	-4,662.8	4,440.6	4,153.6	287.01	15.472		
16,700.0	7,530.0	15,319.8	7,759.0	162.3	128.9	93.16	-9,121.7	-4,662.8	4,439.9	4,149.4	290.49	15.284		
16,800.0	7,530.0	15,419.8	7,759.0	164.1	130.7	93.16	-9,221.7	-4,662.8	4,439.2	4,145.2	293.98	15.100		
16,900.0	7,530.0	15,519.8	7,759.0	165.8	132.4	93.16	-9,321.7	-4,662.8	4,438.5	4,141.1	297.47	14.921		
17,000.0	7,530.0	15,619.8	7,759.0	167.6	134.2	93.16	-9,421.7	-4,662.8	4,437.8	4,136.9	300.96	14.746		
17,100.0	7,530.0	15,719.8	7,759.0	169.3	135.9	93.17	-9,521.7	-4,662.8	4,437.2	4,132.7	304.44	14.575		
17,200.0	7,530.0	15,819.8	7,759.0	171.1	137.6	93.17	-9,621.7	-4,662.9	4,436.5	4,128.6	307.93	14.407		
17,300.0	7,530.0	15,919.8	7,759.0	172.8	139.4	93.17	-9,721.7	-4,662.9	4,435.8	4,124.4	311.42	14.244		
17,391.5	7,530.0	15,981.1	7,759.0	174.4	140.4	93.17	-9,782.9	-4,662.9	4,435.3	4,121.2	314.09	14.121 CC		
17,400.0	7,530.0	15,981.1	7,759.0	174.5	140.4	93.17	-9,782.9	-4,662.9	4,435.3	4,121.1	314.23	14.115		
17,411.2	7,530.0	15,981.1	7,759.0	174.7	140.4	93.17	-9,782.9	-4,662.9	4,435.3	4,120.9	314.43	14.106 ES, SF		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.18	-1,931.1	-4,107.4	4,538.8					
100.0	100.0	84.0	84.0	0.2	0.1	-115.18	-1,931.1	-4,107.4	4,538.7	4,538.5	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.18	-1,931.1	-4,107.4	4,538.7	4,538.1	0.60	7,515.896		
300.0	300.0	284.0	284.0	0.5	0.5	-115.18	-1,931.1	-4,107.4	4,538.7	4,537.8	0.95	4,762.821		
400.0	400.0	396.2	396.2	0.7	0.6	-115.17	-1,930.4	-4,107.6	4,538.6	4,537.3	1.32	3,427.925		
500.0	500.0	510.7	510.7	0.8	0.9	-115.13	-1,927.4	-4,108.5	4,538.2	4,536.5	1.70	2,663.853		
600.0	600.0	625.1	624.9	1.0	1.1	-92.07	-1,922.3	-4,109.9	4,537.5	4,535.4	2.09	2,167.165		
700.0	700.0	739.4	738.9	1.2	1.3	-92.03	-1,914.9	-4,112.0	4,536.5	4,534.0	2.50	1,813.980		
800.0	799.9	849.0	848.1	1.4	1.5	-91.98	-1,905.9	-4,114.6	4,535.3	4,532.4	2.92	1,554.451		
848.7	848.4	897.6	896.6	1.5	1.6	-91.97	-1,901.7	-4,115.8	4,534.7	4,531.6	3.12	1,455.725		
900.0	899.7	948.9	947.7	1.6	1.8	-91.95	-1,897.3	-4,117.1	4,534.1	4,530.8	3.33	1,363.174		
1,000.0	999.5	1,048.9	1,047.2	1.8	2.0	-91.91	-1,888.6	-4,119.6	4,532.9	4,529.2	3.74	1,211.617		
1,100.0	1,099.3	1,148.8	1,146.8	2.0	2.2	-91.88	-1,880.0	-4,122.0	4,531.7	4,527.5	4.16	1,089.098		
1,200.0	1,199.1	1,248.8	1,246.3	2.2	2.4	-91.84	-1,871.3	-4,124.5	4,530.5	4,525.9	4.58	988.297		
1,300.0	1,298.9	1,348.7	1,345.9	2.4	2.7	-91.81	-1,862.6	-4,127.0	4,529.3	4,524.3	5.01	904.073		
1,400.0	1,398.8	1,448.7	1,445.4	2.6	2.9	-91.77	-1,854.0	-4,129.4	4,528.1	4,522.6	5.44	832.742		
1,500.0	1,498.6	1,548.6	1,545.0	2.8	3.1	-91.74	-1,845.3	-4,131.9	4,526.9	4,521.0	5.87	771.613		
1,600.0	1,598.4	1,648.6	1,644.5	3.0	3.4	-91.70	-1,836.7	-4,134.4	4,525.7	4,519.4	6.30	718.679		
1,700.0	1,698.2	1,748.5	1,744.1	3.2	3.6	-91.66	-1,828.0	-4,136.9	4,524.5	4,517.8	6.73	672.420		
1,800.0	1,798.0	1,848.5	1,843.6	3.4	3.8	-91.63	-1,819.3	-4,139.3	4,523.3	4,516.1	7.16	631.664		
1,900.0	1,897.8	1,948.5	1,943.1	3.6	4.0	-91.59	-1,810.7	-4,141.8	4,522.1	4,514.5	7.59	595.495		
2,000.0	1,997.7	2,048.4	2,042.7	3.8	4.3	-91.56	-1,802.0	-4,144.3	4,520.9	4,512.9	8.03	563.187		
2,100.0	2,097.5	2,148.4	2,142.2	4.0	4.5	-91.52	-1,793.4	-4,146.8	4,519.7	4,511.3	8.46	534.160		
2,200.0	2,197.3	2,248.3	2,241.8	4.2	4.7	-91.48	-1,784.7	-4,149.2	4,518.6	4,509.7	8.90	507.941		
2,300.0	2,297.1	2,348.3	2,341.3	4.4	5.0	-91.45	-1,776.0	-4,151.7	4,517.4	4,508.0	9.33	484.145		
2,400.0	2,396.9	2,448.2	2,440.9	4.6	5.2	-91.41	-1,767.4	-4,154.2	4,516.2	4,506.4	9.77	462.453		
2,500.0	2,496.7	2,548.2	2,540.4	4.8	5.4	-91.38	-1,758.7	-4,156.7	4,515.0	4,504.8	10.20	442.600		
2,600.0	2,596.5	2,648.1	2,640.0	5.0	5.7	-91.34	-1,750.1	-4,159.1	4,513.8	4,503.2	10.64	424.362		
2,700.0	2,696.4	2,748.1	2,739.5	5.2	5.9	-91.30	-1,741.4	-4,161.6	4,512.7	4,501.6	11.07	407.551		
2,800.0	2,796.2	2,848.0	2,839.1	5.4	6.1	-91.27	-1,732.7	-4,164.1	4,511.5	4,500.0	11.51	392.008		
2,900.0	2,896.0	2,948.0	2,938.6	5.6	6.4	-91.23	-1,724.1	-4,166.5	4,510.3	4,498.4	11.94	377.593		
3,000.0	2,995.8	3,047.9	3,038.2	5.8	6.6	-91.20	-1,715.4	-4,169.0	4,509.1	4,496.8	12.38	364.190		
3,100.0	3,095.6	3,147.9	3,137.7	6.0	6.9	-91.16	-1,706.8	-4,171.5	4,508.0	4,495.2	12.82	351.695		
3,200.0	3,195.4	3,247.8	3,237.2	6.2	7.1	-91.12	-1,698.1	-4,174.0	4,506.8	4,493.6	13.25	340.021		
3,300.0	3,295.2	3,347.8	3,336.8	6.4	7.3	-91.09	-1,689.4	-4,176.4	4,505.6	4,492.0	13.69	329.088		
3,400.0	3,395.1	3,447.7	3,436.3	6.6	7.6	-91.05	-1,680.8	-4,178.9	4,504.5	4,490.4	14.13	318.828		
3,500.0	3,494.9	3,547.7	3,535.9	6.8	7.8	-91.01	-1,672.1	-4,181.4	4,503.3	4,488.8	14.57	309.183		
3,600.0	3,594.7	3,647.6	3,635.4	7.0	8.0	-90.98	-1,663.4	-4,183.9	4,502.2	4,487.2	15.00	300.097		
3,700.0	3,694.5	3,747.6	3,735.0	7.2	8.3	-90.94	-1,654.8	-4,186.3	4,501.0	4,485.6	15.44	291.524		
3,800.0	3,794.3	3,847.6	3,834.5	7.4	8.5	-90.91	-1,646.1	-4,188.8	4,499.8	4,484.0	15.88	283.422		
3,900.0	3,894.1	3,947.5	3,934.1	7.6	8.7	-90.87	-1,637.5	-4,191.3	4,498.7	4,482.4	16.31	275.753		
4,000.0	3,994.0	4,047.5	4,033.6	7.8	9.0	-90.83	-1,628.8	-4,193.8	4,497.5	4,480.8	16.75	268.483		
4,100.0	4,093.8	4,147.4	4,133.2	8.0	9.2	-90.80	-1,620.1	-4,196.2	4,496.4	4,479.2	17.19	261.583		
4,200.0	4,193.6	4,247.4	4,232.7	8.2	9.4	-90.76	-1,611.5	-4,198.7	4,495.2	4,477.6	17.63	255.024		
4,300.0	4,293.4	4,347.3	4,332.3	8.4	9.7	-90.72	-1,602.8	-4,201.2	4,494.1	4,476.0	18.06	248.782		
4,400.0	4,393.2	4,447.3	4,431.8	8.6	9.9	-90.69	-1,594.2	-4,203.6	4,493.0	4,474.4	18.50	242.835		
4,500.0	4,493.0	4,547.2	4,531.3	8.8	10.1	-90.65	-1,585.5	-4,206.1	4,491.8	4,472.9	18.94	237.162		
4,600.0	4,592.8	4,647.2	4,630.9	9.0	10.4	-90.61	-1,576.8	-4,208.6	4,490.7	4,471.3	19.38	231.745		
4,700.0	4,692.7	4,747.1	4,730.4	9.3	10.6	-90.58	-1,568.2	-4,211.1	4,489.5	4,469.7	19.82	226.567		
4,800.0	4,792.5	4,847.1	4,830.0	9.5	10.8	-90.54	-1,559.5	-4,213.5	4,488.4	4,468.1	20.25	221.612		
4,900.0	4,892.3	4,947.0	4,929.5	9.7	11.1	-90.50	-1,550.9	-4,216.0	4,487.3	4,466.6	20.69	216.867		
5,000.0	4,992.1	5,047.0	5,029.1	9.9	11.3	-90.47	-1,542.2	-4,218.5	4,486.1	4,465.0	21.13	212.318		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,146.9	5,128.6	10.1	11.5	-90.43	-1,533.5	-4,221.0	4,485.0	4,463.4	21.57	207.953		
5,200.0	5,191.7	5,246.9	5,228.2	10.3	11.8	-90.40	-1,524.9	-4,223.4	4,483.9	4,461.9	22.01	203.762		
5,300.0	5,291.5	5,346.8	5,327.7	10.5	12.0	-90.36	-1,516.2	-4,225.9	4,482.7	4,460.3	22.44	199.734		
5,400.0	5,391.4	5,446.8	5,427.3	10.7	12.2	-90.32	-1,507.6	-4,228.4	4,481.6	4,458.7	22.88	195.861		
5,500.0	5,491.2	5,546.7	5,526.8	10.9	12.5	-90.29	-1,498.9	-4,230.9	4,480.5	4,457.2	23.32	192.132		
5,600.0	5,591.0	5,646.7	5,626.4	11.1	12.7	-90.25	-1,490.2	-4,233.3	4,479.4	4,455.6	23.76	188.541		
5,700.0	5,690.8	5,746.7	5,725.9	11.3	12.9	-90.21	-1,481.6	-4,235.8	4,478.2	4,454.0	24.20	185.080		
5,800.0	5,790.6	5,846.6	5,825.4	11.5	13.2	-90.18	-1,472.9	-4,238.3	4,477.1	4,452.5	24.63	181.742		
5,900.0	5,890.4	5,946.6	5,925.0	11.7	13.4	-90.14	-1,464.3	-4,240.7	4,476.0	4,450.9	25.07	178.520		
6,000.0	5,990.3	6,046.5	6,024.5	11.9	13.7	-90.10	-1,455.6	-4,243.2	4,474.9	4,449.4	25.51	175.409		
6,100.0	6,090.1	6,146.5	6,124.1	12.1	13.9	-90.07	-1,446.9	-4,245.7	4,473.8	4,447.8	25.95	172.403		
6,200.0	6,189.9	6,246.4	6,223.6	12.3	14.1	-90.03	-1,438.3	-4,248.2	4,472.7	4,446.3	26.39	169.497		
6,300.0	6,289.7	6,346.4	6,323.2	12.5	14.4	-89.99	-1,429.6	-4,250.6	4,471.5	4,444.7	26.83	166.685		
6,400.0	6,389.5	6,446.3	6,422.7	12.7	14.6	-89.96	-1,421.0	-4,253.1	4,470.4	4,443.2	27.26	163.964		
6,500.0	6,489.3	6,546.3	6,522.3	12.9	14.8	-89.92	-1,412.3	-4,255.6	4,469.3	4,441.6	27.70	161.329		
6,600.0	6,589.1	6,646.2	6,621.8	13.1	15.1	-89.88	-1,403.6	-4,258.1	4,468.2	4,440.1	28.14	158.776		
6,700.0	6,689.0	6,746.2	6,721.4	13.3	15.3	-89.85	-1,395.0	-4,260.5	4,467.1	4,438.5	28.58	156.301		
6,785.3	6,774.1	6,831.4	6,806.2	13.5	15.5	-89.81	-1,387.6	-4,262.6	4,466.2	4,437.2	28.95	154.251		
6,800.0	6,788.8	6,846.1	6,820.9	13.5	15.5	-78.76	-1,386.3	-4,263.0	4,466.0	4,436.9	29.01	153.919		
6,850.0	6,838.8	6,895.9	6,870.5	13.6	15.6	31.92	-1,382.0	-4,264.2	4,464.3	4,435.1	29.19	152.964		
6,900.0	6,888.6	6,945.3	6,919.7	13.6	15.8	54.16	-1,377.7	-4,265.5	4,461.3	4,432.0	29.32	152.184		
6,950.0	6,938.1	6,994.0	6,968.2	13.7	15.9	59.74	-1,373.5	-4,266.7	4,457.0	4,427.6	29.41	151.564		
7,000.0	6,987.0	7,041.9	7,015.8	13.7	16.0	62.56	-1,369.4	-4,267.9	4,451.4	4,421.9	29.46	151.082		
7,050.0	7,035.0	7,088.5	7,062.3	13.6	16.1	64.52	-1,365.3	-4,269.0	4,444.5	4,415.0	29.49	150.713		
7,100.0	7,082.0	7,133.9	7,107.5	13.6	16.2	66.14	-1,361.4	-4,270.1	4,436.5	4,407.0	29.49	150.427		
7,150.0	7,127.7	7,163.1	7,136.6	13.5	16.3	67.54	-1,358.8	-4,270.9	4,427.5	4,398.0	29.44	150.374		
7,200.0	7,171.8	7,177.9	7,151.4	13.5	16.3	68.79	-1,357.8	-4,271.2	4,417.6	4,388.3	29.34	150.559		
7,250.0	7,214.2	7,200.0	7,173.4	13.4	16.3	70.06	-1,356.8	-4,271.8	4,407.2	4,377.9	29.26	150.645		
7,300.0	7,254.6	7,200.0	7,173.4	13.4	16.3	71.16	-1,356.8	-4,271.8	4,396.1	4,366.9	29.14	150.862		
7,350.0	7,292.9	7,200.0	7,173.4	13.3	16.3	72.25	-1,356.8	-4,271.8	4,384.5	4,355.5	29.04	150.965		
7,400.0	7,328.9	7,219.6	7,193.0	13.3	16.3	73.53	-1,356.7	-4,272.3	4,372.4	4,343.4	29.00	150.793		
7,450.0	7,362.3	7,229.3	7,202.6	13.3	16.4	74.74	-1,356.9	-4,272.5	4,360.0	4,331.0	28.98	150.466		
7,500.0	7,393.1	7,250.0	7,223.4	13.4	16.4	76.08	-1,357.9	-4,273.0	4,347.3	4,318.3	29.01	149.832		
7,550.0	7,421.1	7,250.0	7,223.4	13.5	16.4	77.22	-1,357.9	-4,273.0	4,334.2	4,305.1	29.08	149.044		
7,600.0	7,446.1	7,250.0	7,223.4	13.6	16.4	78.35	-1,357.9	-4,273.0	4,321.0	4,291.8	29.20	147.980		
7,650.0	7,468.0	7,250.0	7,223.4	13.8	16.4	79.49	-1,357.9	-4,273.0	4,307.8	4,278.4	29.38	146.637		
7,700.0	7,486.7	7,270.6	7,243.9	14.0	16.4	80.87	-1,359.6	-4,273.5	4,294.5	4,264.8	29.62	144.995		
7,750.0	7,502.2	7,277.1	7,250.4	14.2	16.4	82.08	-1,360.3	-4,273.7	4,281.2	4,251.3	29.91	143.136		
7,800.0	7,514.3	7,283.0	7,256.2	14.6	16.4	83.26	-1,361.0	-4,273.8	4,268.1	4,237.9	30.25	141.075		
7,850.0	7,523.0	7,300.0	7,273.0	14.9	16.4	84.56	-1,363.3	-4,274.2	4,255.3	4,224.6	30.65	138.848		
7,900.0	7,528.2	7,300.0	7,273.0	15.3	16.4	85.62	-1,363.3	-4,274.2	4,242.6	4,211.6	31.08	136.512		
7,950.2	7,530.0	7,300.0	7,273.0	15.8	16.4	86.64	-1,363.3	-4,274.2	4,230.3	4,198.8	31.55	134.086		
8,000.0	7,530.0	7,300.0	7,273.0	16.2	16.4	86.64	-1,363.3	-4,274.2	4,218.6	4,186.6	32.03	131.702		
8,100.0	7,530.0	7,300.0	7,273.0	17.3	16.4	86.64	-1,363.3	-4,274.2	4,196.8	4,163.7	33.09	126.811		
8,200.0	7,530.0	7,300.0	7,273.0	18.4	16.4	86.64	-1,363.3	-4,274.2	4,177.2	4,142.9	34.26	121.911		
8,300.0	7,530.0	7,318.7	7,291.5	19.7	16.3	86.89	-1,366.4	-4,274.7	4,159.9	4,124.3	35.51	117.158		
8,400.0	7,530.0	7,328.0	7,300.6	21.0	16.3	87.02	-1,368.2	-4,274.9	4,144.8	4,108.0	36.83	112.547		
8,500.0	7,530.0	7,350.0	7,322.1	22.4	16.3	87.32	-1,373.0	-4,275.5	4,132.2	4,094.0	38.20	108.179		
8,600.0	7,530.0	7,350.0	7,322.1	23.8	16.3	87.32	-1,373.0	-4,275.5	4,121.8	4,082.1	39.63	103.995		
8,700.0	7,530.0	7,369.0	7,340.4	25.3	16.3	87.58	-1,377.9	-4,275.9	4,113.7	4,072.6	41.08	100.139		
8,800.0	7,530.0	7,389.8	7,360.3	26.8	16.2	87.85	-1,383.8	-4,276.4	4,108.0	4,065.4	42.56	96.530		
8,900.0	7,530.0	7,416.7	7,385.8	28.3	16.2	88.21	-1,392.6	-4,277.1	4,104.5	4,060.4	44.04	93.204		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #1													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	7,530.0	7,452.6	7,419.0	29.9	16.1	88.67	-1,406.2	-4,277.9	4,103.1	4,057.6	45.51	90.159		
9,014.8	7,530.0	7,459.0	7,424.8	30.1	16.1	88.75	-1,408.8	-4,278.0	4,103.1	4,057.4	45.72	89.735		
9,100.0	7,530.0	7,502.7	7,463.8	31.4	15.9	89.30	-1,428.5	-4,279.0	4,103.8	4,056.9	46.93	87.438		
9,200.0	7,530.0	7,575.6	7,525.2	33.0	15.6	90.16	-1,467.8	-4,280.5	4,106.2	4,057.9	48.25	85.099		
9,300.0	7,530.0	7,686.8	7,607.9	34.7	15.2	91.31	-1,541.8	-4,282.6	4,109.7	4,060.3	49.38	83.223		
9,400.0	7,530.0	7,857.9	7,703.2	36.3	14.6	92.64	-1,683.0	-4,285.0	4,113.0	4,062.7	50.34	81.708		
9,500.0	7,530.0	8,093.2	7,758.7	37.9	14.4	93.41	-1,910.0	-4,286.4	4,114.3	4,062.5	51.79	79.438		
9,600.0	7,530.0	8,205.1	7,759.0	39.6	14.8	93.41	-2,021.9	-4,286.4	4,113.7	4,059.9	53.78	76.497		
9,700.0	7,530.0	8,305.1	7,759.0	41.2	15.3	93.42	-2,121.9	-4,286.5	4,113.0	4,057.0	55.94	73.521		
9,800.0	7,530.0	8,405.1	7,759.0	42.9	15.9	93.42	-2,221.9	-4,286.5	4,112.3	4,054.0	58.30	70.539		
9,900.0	7,530.0	8,505.1	7,759.0	44.5	16.8	93.42	-2,321.9	-4,286.5	4,111.6	4,050.8	60.82	67.605		
10,000.0	7,530.0	8,605.1	7,759.0	46.2	17.7	93.42	-2,421.9	-4,286.5	4,110.9	4,047.5	63.48	64.760		
10,100.0	7,530.0	8,705.1	7,759.0	47.9	18.8	93.42	-2,521.9	-4,286.5	4,110.3	4,044.0	66.26	62.032		
10,200.0	7,530.0	8,805.1	7,759.0	49.6	20.0	93.42	-2,621.9	-4,286.5	4,109.6	4,040.4	69.14	59.439		
10,300.0	7,530.0	8,905.1	7,759.0	51.3	21.2	93.42	-2,721.9	-4,286.6	4,108.9	4,036.8	72.10	56.988		
10,400.0	7,530.0	9,005.1	7,759.0	53.0	22.6	93.42	-2,821.9	-4,286.6	4,108.2	4,033.1	75.13	54.680		
10,500.0	7,530.0	9,105.1	7,759.0	54.7	24.0	93.42	-2,921.9	-4,286.6	4,107.5	4,029.3	78.22	52.512		
10,600.0	7,530.0	9,205.1	7,759.0	56.4	25.4	93.42	-3,021.9	-4,286.6	4,106.9	4,025.5	81.36	50.479		
10,700.0	7,530.0	9,305.0	7,759.0	58.1	26.8	93.42	-3,121.9	-4,286.6	4,106.2	4,021.6	84.54	48.573		
10,800.0	7,530.0	9,405.0	7,759.0	59.8	28.3	93.42	-3,221.9	-4,286.6	4,105.5	4,017.7	87.75	46.787		
10,900.0	7,530.0	9,505.0	7,759.0	61.5	29.9	93.42	-3,321.9	-4,286.7	4,104.8	4,013.8	90.99	45.113		
11,000.0	7,530.0	9,605.0	7,759.0	63.2	31.4	93.42	-3,421.9	-4,286.7	4,104.1	4,009.9	94.26	43.542		
11,100.0	7,530.0	9,705.0	7,759.0	64.9	33.0	93.42	-3,521.9	-4,286.7	4,103.5	4,005.9	97.55	42.067		
11,200.0	7,530.0	9,805.0	7,759.0	66.6	34.6	93.42	-3,621.9	-4,286.7	4,102.8	4,001.9	100.85	40.681		
11,300.0	7,530.0	9,905.0	7,759.0	68.4	36.2	93.42	-3,721.9	-4,286.7	4,102.1	3,997.9	104.18	39.376		
11,400.0	7,530.0	10,005.0	7,759.0	70.1	37.8	93.42	-3,821.9	-4,286.7	4,101.4	3,993.9	107.52	38.147		
11,500.0	7,530.0	10,105.0	7,759.0	71.8	39.4	93.43	-3,921.9	-4,286.8	4,100.7	3,989.9	110.87	36.988		
11,600.0	7,530.0	10,205.0	7,759.0	73.5	41.1	93.43	-4,021.9	-4,286.8	4,100.1	3,985.8	114.23	35.893		
11,700.0	7,530.0	10,305.0	7,759.0	75.3	42.7	93.43	-4,121.9	-4,286.8	4,099.4	3,981.8	117.60	34.857		
11,800.0	7,530.0	10,405.0	7,759.0	77.0	44.4	93.43	-4,221.9	-4,286.8	4,098.7	3,977.7	120.99	33.877		
11,900.0	7,530.0	10,505.0	7,759.0	78.7	46.0	93.43	-4,321.9	-4,286.8	4,098.0	3,973.6	124.38	32.949		
12,000.0	7,530.0	10,605.0	7,759.0	80.4	47.7	93.43	-4,421.9	-4,286.8	4,097.3	3,969.6	127.77	32.067		
12,100.0	7,530.0	10,705.0	7,759.0	82.2	49.4	93.43	-4,521.8	-4,286.9	4,096.6	3,965.5	131.18	31.230		
12,200.0	7,530.0	10,805.0	7,759.0	83.9	51.0	93.43	-4,621.8	-4,286.9	4,096.0	3,961.4	134.59	30.433		
12,300.0	7,530.0	10,905.0	7,759.0	85.6	52.7	93.43	-4,721.8	-4,286.9	4,095.3	3,957.3	138.00	29.675		
12,400.0	7,530.0	11,005.0	7,759.0	87.4	54.4	93.43	-4,821.8	-4,286.9	4,094.6	3,953.2	141.42	28.953		
12,500.0	7,530.0	11,105.0	7,759.0	89.1	56.1	93.43	-4,921.8	-4,286.9	4,093.9	3,949.1	144.85	28.263		
12,600.0	7,530.0	11,205.0	7,759.0	90.8	57.8	93.43	-5,021.8	-4,286.9	4,093.2	3,945.0	148.28	27.605		
12,700.0	7,530.0	11,305.0	7,759.0	92.6	59.5	93.43	-5,121.8	-4,287.0	4,092.6	3,940.9	151.71	26.976		
12,800.0	7,530.0	11,405.0	7,759.0	94.3	61.2	93.43	-5,221.8	-4,287.0	4,091.9	3,936.7	155.15	26.374		
12,900.0	7,530.0	11,505.0	7,759.0	96.0	62.9	93.43	-5,321.8	-4,287.0	4,091.2	3,932.6	158.59	25.798		
13,000.0	7,530.0	11,605.0	7,759.0	97.8	64.6	93.43	-5,421.8	-4,287.0	4,090.5	3,928.5	162.03	25.245		
13,100.0	7,530.0	11,705.0	7,759.0	99.5	66.3	93.43	-5,521.8	-4,287.0	4,089.8	3,924.4	165.48	24.716		
13,200.0	7,530.0	11,805.0	7,759.0	101.3	68.1	93.43	-5,621.8	-4,287.0	4,089.2	3,920.2	168.92	24.207		
13,300.0	7,530.0	11,905.0	7,759.0	103.0	69.8	93.44	-5,721.8	-4,287.0	4,088.5	3,916.1	172.38	23.719		
13,400.0	7,530.0	12,005.0	7,759.0	104.7	71.5	93.44	-5,821.8	-4,287.1	4,087.8	3,912.0	175.83	23.249		
13,500.0	7,530.0	12,105.0	7,759.0	106.5	73.2	93.44	-5,921.8	-4,287.1	4,087.1	3,907.8	179.28	22.797		
13,600.0	7,530.0	12,205.0	7,759.0	108.2	74.9	93.44	-6,021.8	-4,287.1	4,086.4	3,903.7	182.74	22.362		
13,700.0	7,530.0	12,305.0	7,759.0	110.0	76.7	93.44	-6,121.8	-4,287.1	4,085.8	3,899.6	186.20	21.943		
13,800.0	7,530.0	12,405.0	7,759.0	111.7	78.4	93.44	-6,221.8	-4,287.1	4,085.1	3,895.4	189.66	21.539		
13,900.0	7,530.0	12,505.0	7,759.0	113.4	80.1	93.44	-6,321.8	-4,287.1	4,084.4	3,891.3	193.12	21.149		
14,000.0	7,530.0	12,605.0	7,759.0	115.2	81.8	93.44	-6,421.8	-4,287.2	4,083.7	3,887.1	196.59	20.773		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #1													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	7,530.0	12,705.0	7,759.0	116.9	83.6	93.44	-6,521.8	-4,287.2	4,083.0	3,883.0	200.05	20.410		
14,200.0	7,530.0	12,805.0	7,759.0	118.7	85.3	93.44	-6,621.8	-4,287.2	4,082.4	3,878.8	203.52	20.059		
14,300.0	7,530.0	12,905.0	7,759.0	120.4	87.0	93.44	-6,721.8	-4,287.2	4,081.7	3,874.7	206.98	19.720		
14,400.0	7,530.0	13,005.0	7,759.0	122.1	88.7	93.44	-6,821.8	-4,287.2	4,081.0	3,870.5	210.45	19.391		
14,500.0	7,530.0	13,105.0	7,759.0	123.9	90.5	93.44	-6,921.8	-4,287.2	4,080.3	3,866.4	213.92	19.074		
14,600.0	7,530.0	13,205.0	7,759.0	125.6	92.2	93.44	-7,021.8	-4,287.3	4,079.6	3,862.2	217.40	18.766		
14,700.0	7,530.0	13,305.0	7,759.0	127.4	93.9	93.44	-7,121.8	-4,287.3	4,079.0	3,858.1	220.87	18.468		
14,800.0	7,530.0	13,405.0	7,759.0	129.1	95.7	93.44	-7,221.8	-4,287.3	4,078.3	3,853.9	224.34	18.179		
14,900.0	7,530.0	13,505.0	7,759.0	130.9	97.4	93.44	-7,321.8	-4,287.3	4,077.6	3,849.8	227.82	17.899		
15,000.0	7,530.0	13,604.9	7,759.0	132.6	99.1	93.45	-7,421.8	-4,287.3	4,076.9	3,845.6	231.29	17.627		
15,100.0	7,530.0	13,704.9	7,759.0	134.4	100.9	93.45	-7,521.8	-4,287.3	4,076.2	3,841.5	234.77	17.363		
15,200.0	7,530.0	13,804.9	7,759.0	136.1	102.6	93.45	-7,621.8	-4,287.4	4,075.6	3,837.3	238.24	17.107		
15,300.0	7,530.0	13,904.9	7,759.0	137.9	104.4	93.45	-7,721.8	-4,287.4	4,074.9	3,833.2	241.72	16.858		
15,400.0	7,530.0	14,004.9	7,759.0	139.6	106.1	93.45	-7,821.8	-4,287.4	4,074.2	3,829.0	245.20	16.616		
15,500.0	7,530.0	14,104.9	7,759.0	141.3	107.8	93.45	-7,921.8	-4,287.4	4,073.5	3,824.8	248.68	16.381		
15,600.0	7,530.0	14,204.9	7,759.0	143.1	109.6	93.45	-8,021.8	-4,287.4	4,072.8	3,820.7	252.16	16.152		
15,700.0	7,530.0	14,304.9	7,759.0	144.8	111.3	93.45	-8,121.8	-4,287.4	4,072.2	3,816.5	255.64	15.929		
15,800.0	7,530.0	14,404.9	7,759.0	146.6	113.0	93.45	-8,221.8	-4,287.5	4,071.5	3,812.4	259.12	15.713		
15,900.0	7,530.0	14,504.9	7,759.0	148.3	114.8	93.45	-8,321.8	-4,287.5	4,070.8	3,808.2	262.60	15.502		
16,000.0	7,530.0	14,604.9	7,759.0	150.1	116.5	93.45	-8,421.8	-4,287.5	4,070.1	3,804.0	266.08	15.296		
16,100.0	7,530.0	14,704.9	7,759.0	151.8	118.3	93.45	-8,521.8	-4,287.5	4,069.4	3,799.9	269.56	15.096		
16,200.0	7,530.0	14,804.9	7,759.0	153.6	120.0	93.45	-8,621.8	-4,287.5	4,068.8	3,795.7	273.05	14.901		
16,300.0	7,530.0	14,904.9	7,759.0	155.3	121.7	93.45	-8,721.8	-4,287.5	4,068.1	3,791.5	276.53	14.711		
16,400.0	7,530.0	15,004.9	7,759.0	157.1	123.5	93.45	-8,821.7	-4,287.6	4,067.4	3,787.4	280.01	14.526		
16,500.0	7,530.0	15,104.9	7,759.0	158.8	125.2	93.45	-8,921.7	-4,287.6	4,066.7	3,783.2	283.50	14.345		
16,600.0	7,530.0	15,204.9	7,759.0	160.6	127.0	93.45	-9,021.7	-4,287.6	4,066.0	3,779.0	286.98	14.168		
16,700.0	7,530.0	15,304.9	7,759.0	162.3	128.7	93.46	-9,121.7	-4,287.6	4,065.4	3,774.9	290.47	13.996		
16,800.0	7,530.0	15,404.9	7,759.0	164.1	130.5	93.46	-9,221.7	-4,287.6	4,064.7	3,770.7	293.95	13.828		
16,900.0	7,530.0	15,504.9	7,759.0	165.8	132.2	93.46	-9,321.7	-4,287.6	4,064.0	3,766.6	297.44	13.663		
17,000.0	7,530.0	15,604.9	7,759.0	167.6	133.9	93.46	-9,421.7	-4,287.7	4,063.3	3,762.4	300.93	13.503		
17,100.0	7,530.0	15,704.9	7,759.0	169.3	135.7	93.46	-9,521.7	-4,287.7	4,062.6	3,758.2	304.41	13.346		
17,200.0	7,530.0	15,804.9	7,759.0	171.1	137.4	93.46	-9,621.7	-4,287.7	4,062.0	3,754.0	307.90	13.192		
17,300.0	7,530.0	15,904.9	7,759.0	172.8	139.2	93.46	-9,721.7	-4,287.7	4,061.3	3,749.9	311.39	13.042		
17,392.5	7,530.0	15,969.8	7,759.0	174.4	140.3	93.46	-9,786.6	-4,287.7	4,060.7	3,746.6	314.13	12.927 CC		
17,400.0	7,530.0	15,969.8	7,759.0	174.5	140.3	93.46	-9,786.6	-4,287.7	4,060.7	3,746.5	314.27	12.921		
17,411.2	7,530.0	15,969.8	7,759.0	174.7	140.3	93.46	-9,786.6	-4,287.7	4,060.8	3,746.3	314.46	12.913 ES, SF		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-115.28	-1,937.2	-4,102.4	4,536.8						
100.0	100.0	84.0	84.0	0.2	0.1	-115.28	-1,937.2	-4,102.4	4,536.8	4,536.5	0.26	N/A			
200.0	200.0	184.0	184.0	0.3	0.3	-115.28	-1,937.2	-4,102.4	4,536.8	4,536.2	0.60	7,512.706			
300.0	300.0	284.0	284.0	0.5	0.5	-115.28	-1,937.2	-4,102.4	4,536.8	4,535.9	0.95	4,760.800			
400.0	400.0	384.0	384.0	0.7	0.6	-115.28	-1,937.2	-4,102.4	4,536.8	4,535.5	1.30	3,484.446			
500.0	500.0	575.6	575.6	0.8	1.0	-115.25	-1,934.6	-4,101.7	4,536.0	4,534.1	1.81	2,500.635			
600.0	600.0	784.3	784.0	1.0	1.4	-92.20	-1,924.8	-4,098.9	4,532.8	4,530.4	2.37	1,914.376			
700.0	700.0	958.8	957.9	1.2	1.7	-92.17	-1,911.1	-4,095.0	4,527.4	4,524.5	2.88	1,569.523			
800.0	799.9	1,058.6	1,057.3	1.4	1.9	-92.20	-1,902.2	-4,092.5	4,521.5	4,518.2	3.27	1,383.670			
848.7	848.4	1,107.1	1,105.6	1.5	2.0	-92.22	-1,897.9	-4,091.2	4,518.7	4,515.2	3.46	1,307.050			
900.0	899.7	1,158.4	1,156.7	1.6	2.2	-92.21	-1,893.4	-4,089.9	4,515.7	4,512.0	3.66	1,234.081			
1,000.0	999.5	1,258.2	1,256.1	1.8	2.4	-92.20	-1,884.6	-4,087.4	4,509.8	4,505.8	4.06	1,111.975			
1,100.0	1,099.3	1,358.1	1,355.5	2.0	2.6	-92.19	-1,875.7	-4,084.9	4,504.0	4,499.6	4.46	1,010.778			
1,200.0	1,199.1	1,457.9	1,454.9	2.2	2.8	-92.18	-1,866.9	-4,082.4	4,498.2	4,493.3	4.86	925.737			
1,300.0	1,298.9	1,557.7	1,554.3	2.4	3.1	-92.17	-1,858.1	-4,079.8	4,492.4	4,487.1	5.26	853.379			
1,400.0	1,398.8	1,657.5	1,653.7	2.6	3.3	-92.16	-1,849.2	-4,077.3	4,486.6	4,480.9	5.67	791.133			
1,500.0	1,498.6	1,757.4	1,753.1	2.8	3.5	-92.15	-1,840.4	-4,074.8	4,480.7	4,474.7	6.08	737.059			
1,600.0	1,598.4	1,857.2	1,852.5	3.0	3.8	-92.13	-1,831.6	-4,072.3	4,474.9	4,468.4	6.49	689.676			
1,700.0	1,698.2	1,957.0	1,951.9	3.2	4.0	-92.12	-1,822.8	-4,069.8	4,469.1	4,462.2	6.90	647.832			
1,800.0	1,798.0	2,056.8	2,051.3	3.4	4.2	-92.11	-1,813.9	-4,067.2	4,463.3	4,456.0	7.31	610.623			
1,900.0	1,897.8	2,156.7	2,150.7	3.6	4.5	-92.10	-1,805.1	-4,064.7	4,457.5	4,449.7	7.72	577.328			
2,000.0	1,997.7	2,256.5	2,250.1	3.8	4.7	-92.09	-1,796.3	-4,062.2	4,451.6	4,443.5	8.13	547.366			
2,100.0	2,097.5	2,356.3	2,349.5	4.0	4.9	-92.08	-1,787.4	-4,059.7	4,445.8	4,437.3	8.55	520.266			
2,200.0	2,197.3	2,456.2	2,448.9	4.2	5.2	-92.07	-1,778.6	-4,057.1	4,440.0	4,431.0	8.96	495.640			
2,300.0	2,297.1	2,556.0	2,548.3	4.4	5.4	-92.06	-1,769.8	-4,054.6	4,434.2	4,424.8	9.37	473.166			
2,400.0	2,396.9	2,655.8	2,647.7	4.6	5.6	-92.04	-1,760.9	-4,052.1	4,428.4	4,418.6	9.78	452.576			
2,500.0	2,496.7	2,755.6	2,747.1	4.8	5.9	-92.03	-1,752.1	-4,049.6	4,422.5	4,412.3	10.20	433.644			
2,600.0	2,596.5	2,855.5	2,846.5	5.0	6.1	-92.02	-1,743.3	-4,047.0	4,416.7	4,406.1	10.61	416.179			
2,700.0	2,696.4	2,955.3	2,945.9	5.2	6.3	-92.01	-1,734.5	-4,044.5	4,410.9	4,399.9	11.03	400.018			
2,800.0	2,796.2	3,055.1	3,045.3	5.4	6.6	-92.00	-1,725.6	-4,042.0	4,405.1	4,393.6	11.44	385.020			
2,900.0	2,896.0	3,154.9	3,144.7	5.6	6.8	-91.99	-1,716.8	-4,039.5	4,399.3	4,387.4	11.86	371.066			
3,000.0	2,995.8	3,254.8	3,244.2	5.8	7.1	-91.98	-1,708.0	-4,037.0	4,393.4	4,381.2	12.27	358.049			
3,100.0	3,095.6	3,354.6	3,343.6	6.0	7.3	-91.96	-1,699.1	-4,034.4	4,387.6	4,374.9	12.69	345.880			
3,200.0	3,195.4	3,454.4	3,443.0	6.2	7.5	-91.95	-1,690.3	-4,031.9	4,381.8	4,368.7	13.10	334.478			
3,300.0	3,295.2	3,554.2	3,542.4	6.4	7.8	-91.94	-1,681.5	-4,029.4	4,376.0	4,362.5	13.52	323.773			
3,400.0	3,395.1	3,654.1	3,641.8	6.6	8.0	-91.93	-1,672.6	-4,026.9	4,370.2	4,356.2	13.93	313.703			
3,500.0	3,494.9	3,753.9	3,741.2	6.8	8.2	-91.92	-1,663.8	-4,024.3	4,364.4	4,350.0	14.35	304.215			
3,600.0	3,594.7	3,853.7	3,840.6	7.0	8.5	-91.91	-1,655.0	-4,021.8	4,358.5	4,343.8	14.76	295.258			
3,700.0	3,694.5	3,953.6	3,940.0	7.2	8.7	-91.89	-1,646.2	-4,019.3	4,352.7	4,337.5	15.18	286.790			
3,800.0	3,794.3	4,053.4	4,039.4	7.4	8.9	-91.88	-1,637.3	-4,016.8	4,346.9	4,331.3	15.59	278.771			
3,900.0	3,894.1	4,153.2	4,138.8	7.6	9.2	-91.87	-1,628.5	-4,014.2	4,341.1	4,325.1	16.01	271.168			
4,000.0	3,994.0	4,253.0	4,238.2	7.8	9.4	-91.86	-1,619.7	-4,011.7	4,335.3	4,318.8	16.42	263.948			
4,100.0	4,093.8	4,352.9	4,337.6	8.0	9.6	-91.85	-1,610.8	-4,009.2	4,329.5	4,312.6	16.84	257.084			
4,200.0	4,193.6	4,452.7	4,437.0	8.2	9.9	-91.84	-1,602.0	-4,006.7	4,323.6	4,306.4	17.26	250.549			
4,300.0	4,293.4	4,552.5	4,536.4	8.4	10.1	-91.82	-1,593.2	-4,004.2	4,317.8	4,300.1	17.67	244.321			
4,400.0	4,393.2	4,652.3	4,635.8	8.6	10.4	-91.81	-1,584.3	-4,001.6	4,312.0	4,293.9	18.09	238.379			
4,500.0	4,493.0	4,752.2	4,735.2	8.8	10.6	-91.80	-1,575.5	-3,999.1	4,306.2	4,287.7	18.51	232.703			
4,600.0	4,592.8	4,852.0	4,834.6	9.0	10.8	-91.79	-1,566.7	-3,996.6	4,300.4	4,281.5	18.92	227.276			
4,700.0	4,692.7	4,951.8	4,934.0	9.3	11.1	-91.78	-1,557.8	-3,994.1	4,294.6	4,275.2	19.34	222.082			
4,800.0	4,792.5	5,051.6	5,033.4	9.5	11.3	-91.76	-1,549.0	-3,991.5	4,288.7	4,269.0	19.75	217.107			
4,900.0	4,892.3	5,151.5	5,132.8	9.7	11.5	-91.75	-1,540.2	-3,989.0	4,282.9	4,262.8	20.17	212.336			
5,000.0	4,992.1	5,251.3	5,232.2	9.9	11.8	-91.74	-1,531.4	-3,986.5	4,277.1	4,256.5	20.59	207.758			

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,091.9	5,351.1	5,331.6	10.1	12.0	-91.73	-1,522.5	-3,984.0	4,271.3	4,250.3	21.00	203.360		
5,200.0	5,191.7	5,451.0	5,431.0	10.3	12.2	-91.71	-1,513.7	-3,981.4	4,265.5	4,244.1	21.42	199.134		
5,300.0	5,291.5	5,550.8	5,530.4	10.5	12.5	-91.70	-1,504.9	-3,978.9	4,259.7	4,237.8	21.84	195.068		
5,400.0	5,391.4	5,650.6	5,629.8	10.7	12.7	-91.69	-1,496.0	-3,976.4	4,253.9	4,231.6	22.25	191.154		
5,500.0	5,491.2	5,750.4	5,729.2	10.9	13.0	-91.68	-1,487.2	-3,973.9	4,248.0	4,225.4	22.67	187.383		
5,600.0	5,591.0	5,850.3	5,828.6	11.1	13.2	-91.67	-1,478.4	-3,971.4	4,242.2	4,219.1	23.09	183.749		
5,700.0	5,690.8	5,950.1	5,928.0	11.3	13.4	-91.65	-1,469.5	-3,968.8	4,236.4	4,212.9	23.50	180.242		
5,800.0	5,790.6	6,049.9	6,027.4	11.5	13.7	-91.64	-1,460.7	-3,966.3	4,230.6	4,206.7	23.92	176.858		
5,900.0	5,890.4	6,149.7	6,126.8	11.7	13.9	-91.63	-1,451.9	-3,963.8	4,224.8	4,200.5	24.34	173.589		
6,000.0	5,990.3	6,249.6	6,226.3	11.9	14.1	-91.62	-1,443.1	-3,961.3	4,219.0	4,194.2	24.75	170.430		
6,100.0	6,090.1	6,349.4	6,325.7	12.1	14.4	-91.60	-1,434.2	-3,958.7	4,213.2	4,188.0	25.17	167.376		
6,200.0	6,189.9	6,449.2	6,425.1	12.3	14.6	-91.59	-1,425.4	-3,956.2	4,207.4	4,181.8	25.59	164.421		
6,300.0	6,289.7	6,549.0	6,524.5	12.5	14.8	-91.58	-1,416.6	-3,953.7	4,201.5	4,175.5	26.01	161.560		
6,400.0	6,389.5	6,648.9	6,623.9	12.7	15.1	-91.57	-1,407.7	-3,951.2	4,195.7	4,169.3	26.42	158.789		
6,500.0	6,489.3	6,748.7	6,723.3	12.9	15.3	-91.55	-1,398.9	-3,948.6	4,189.9	4,163.1	26.84	156.105		
6,600.0	6,589.1	6,848.5	6,822.7	13.1	15.6	-91.54	-1,390.1	-3,946.1	4,184.1	4,156.8	27.26	153.502		
6,700.0	6,689.0	6,948.4	6,922.1	13.3	15.8	-91.53	-1,381.2	-3,943.6	4,178.3	4,150.6	27.67	150.978		
6,785.3	6,774.1	7,033.5	7,006.8	13.5	16.0	-91.52	-1,373.7	-3,941.5	4,173.3	4,145.3	28.03	148.884		
6,800.0	6,788.8	7,048.2	7,021.5	13.5	16.0	-80.41	-1,372.4	-3,941.1	4,172.4	4,144.3	28.09	148.544		
6,850.0	6,838.8	7,097.9	7,071.0	13.6	16.1	30.43	-1,368.0	-3,939.8	4,168.4	4,140.1	28.26	147.509		
6,900.0	6,888.6	7,147.2	7,120.1	13.6	16.3	52.85	-1,363.7	-3,938.6	4,162.8	4,134.4	28.40	146.575		
6,950.0	6,938.1	7,162.7	7,135.6	13.7	16.3	58.51	-1,362.3	-3,938.2	4,156.1	4,127.6	28.44	146.125		
7,000.0	6,987.0	7,183.3	7,156.0	13.7	16.3	61.38	-1,360.8	-3,937.7	4,148.3	4,119.8	28.46	145.758		
7,050.0	7,035.0	7,200.0	7,172.7	13.6	16.4	63.34	-1,360.2	-3,937.2	4,139.6	4,111.2	28.45	145.488		
7,100.0	7,082.0	7,200.0	7,172.7	13.6	16.4	64.84	-1,360.2	-3,937.2	4,130.2	4,101.8	28.40	145.412		
7,150.0	7,127.7	7,219.0	7,191.8	13.5	16.4	66.26	-1,360.1	-3,936.8	4,119.8	4,091.5	28.37	145.228		
7,200.0	7,171.8	7,230.7	7,203.4	13.5	16.4	67.56	-1,360.3	-3,936.5	4,108.8	4,080.5	28.33	145.054		
7,250.0	7,214.2	7,250.0	7,222.7	13.4	16.4	68.90	-1,361.2	-3,936.0	4,097.1	4,068.8	28.30	144.758		
7,300.0	7,254.6	7,250.0	7,222.7	13.4	16.4	70.10	-1,361.2	-3,936.0	4,084.7	4,056.4	28.27	144.477		
7,350.0	7,292.9	7,250.0	7,222.7	13.3	16.4	71.29	-1,361.2	-3,936.0	4,071.9	4,043.6	28.27	144.058		
7,400.0	7,328.9	7,275.2	7,247.7	13.3	16.4	72.72	-1,363.3	-3,935.3	4,058.4	4,030.0	28.31	143.374		
7,450.0	7,362.3	7,300.0	7,272.4	13.3	16.4	74.18	-1,366.6	-3,934.7	4,044.6	4,016.2	28.39	142.486		
7,500.0	7,393.1	7,300.0	7,272.4	13.4	16.4	75.44	-1,366.6	-3,934.7	4,030.3	4,001.9	28.50	141.440		
7,550.0	7,421.1	7,300.0	7,272.4	13.5	16.4	76.69	-1,366.6	-3,934.7	4,015.9	3,987.3	28.65	140.162		
7,600.0	7,446.1	7,300.0	7,272.4	13.6	16.4	77.95	-1,366.6	-3,934.7	4,001.4	3,972.5	28.86	138.652		
7,650.0	7,468.0	7,323.9	7,295.9	13.8	16.4	79.50	-1,370.6	-3,934.1	3,986.6	3,957.4	29.11	136.932		
7,700.0	7,486.7	7,332.3	7,304.2	14.0	16.4	80.86	-1,372.3	-3,933.9	3,971.8	3,942.4	29.42	135.009		
7,750.0	7,502.2	7,350.0	7,321.4	14.2	16.3	82.34	-1,376.2	-3,933.5	3,957.2	3,927.4	29.77	132.942		
7,800.0	7,514.3	7,350.0	7,321.4	14.6	16.3	83.58	-1,376.2	-3,933.5	3,942.7	3,912.5	30.16	130.723		
7,850.0	7,523.0	7,350.0	7,321.4	14.9	16.3	84.78	-1,376.2	-3,933.5	3,928.4	3,897.9	30.59	128.419		
7,900.0	7,528.2	7,350.0	7,321.4	15.3	16.3	85.94	-1,376.2	-3,933.5	3,914.6	3,883.5	31.05	126.065		
7,950.2	7,530.0	7,350.0	7,321.4	15.8	16.3	87.07	-1,376.2	-3,933.5	3,901.1	3,869.5	31.54	123.687		
8,000.0	7,530.0	7,370.0	7,340.7	16.2	16.3	87.36	-1,381.3	-3,933.0	3,888.1	3,856.1	31.99	121.544		
8,100.0	7,530.0	7,380.5	7,350.8	17.3	16.3	87.51	-1,384.2	-3,932.7	3,863.9	3,830.9	33.04	116.962		
8,200.0	7,530.0	7,400.0	7,369.4	18.4	16.2	87.80	-1,390.1	-3,932.3	3,842.2	3,808.0	34.17	112.430		
8,300.0	7,530.0	7,400.0	7,369.4	19.7	16.2	87.80	-1,390.1	-3,932.3	3,822.8	3,787.3	35.43	107.888		
8,400.0	7,530.0	7,422.0	7,390.1	21.0	16.2	88.11	-1,397.6	-3,931.7	3,805.7	3,769.0	36.71	103.671		
8,500.0	7,530.0	7,450.0	7,416.0	22.4	16.1	88.51	-1,408.2	-3,931.1	3,791.2	3,753.1	38.03	99.687		
8,600.0	7,530.0	7,462.6	7,427.5	23.8	16.1	88.68	-1,413.3	-3,930.8	3,778.9	3,739.5	39.43	95.839		
8,700.0	7,530.0	7,489.0	7,451.2	25.3	16.0	89.04	-1,425.0	-3,930.2	3,769.1	3,728.2	40.83	92.320		
8,800.0	7,530.0	7,521.0	7,479.1	26.8	15.9	89.47	-1,440.6	-3,929.5	3,761.5	3,719.2	42.23	89.079		
8,900.0	7,530.0	7,560.5	7,512.3	28.3	15.7	89.97	-1,461.9	-3,928.6	3,756.0	3,712.4	43.62	86.117		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1													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	7,530.0	7,609.7	7,551.5	29.9	15.5	90.57	-1,491.6	-3,927.7	3,752.6	3,707.6	44.97	83.440		
9,100.0	7,530.0	7,671.7	7,597.0	31.4	15.3	91.27	-1,533.7	-3,926.5	3,750.9	3,704.6	46.28	81.043		
9,190.6	7,530.0	7,742.1	7,642.8	32.9	15.0	91.97	-1,587.1	-3,925.4	3,750.4	3,703.0	47.42	79.086		
9,200.0	7,530.0	7,750.2	7,647.7	33.0	15.0	92.04	-1,593.6	-3,925.2	3,750.4	3,702.9	47.54	78.896		
9,300.0	7,530.0	7,848.4	7,698.8	34.7	14.6	92.82	-1,677.2	-3,924.0	3,750.8	3,702.0	48.78	76.895		
9,400.0	7,530.0	7,966.4	7,740.2	36.3	14.4	93.46	-1,787.5	-3,922.9	3,751.2	3,701.1	50.14	74.813		
9,500.0	7,530.0	8,098.6	7,758.8	37.9	14.4	93.74	-1,918.1	-3,922.5	3,751.1	3,699.3	51.81	72.401		
9,600.0	7,530.0	8,202.5	7,759.0	39.6	14.7	93.75	-2,022.0	-3,922.5	3,750.4	3,696.7	53.76	69.765		
9,700.0	7,530.0	8,302.5	7,759.0	41.2	15.2	93.75	-2,122.0	-3,922.5	3,749.7	3,693.8	55.91	67.070		
9,800.0	7,530.0	8,402.5	7,759.0	42.9	15.9	93.75	-2,222.0	-3,922.5	3,749.0	3,690.8	58.25	64.365		
9,900.0	7,530.0	8,502.5	7,759.0	44.5	16.7	93.75	-2,322.0	-3,922.5	3,748.4	3,687.6	60.75	61.700		
10,000.0	7,530.0	8,602.5	7,759.0	46.2	17.7	93.75	-2,422.0	-3,922.5	3,747.7	3,684.3	63.40	59.112		
10,100.0	7,530.0	8,702.5	7,759.0	47.9	18.8	93.75	-2,522.0	-3,922.6	3,747.0	3,680.8	66.17	56.628		
10,200.0	7,530.0	8,802.5	7,759.0	49.6	19.9	93.75	-2,622.0	-3,922.6	3,746.3	3,677.3	69.04	54.264		
10,300.0	7,530.0	8,902.5	7,759.0	51.3	21.2	93.75	-2,722.0	-3,922.6	3,745.6	3,673.7	71.99	52.029		
10,400.0	7,530.0	9,002.5	7,759.0	53.0	22.5	93.75	-2,821.9	-3,922.6	3,745.0	3,670.0	75.02	49.923		
10,500.0	7,530.0	9,102.4	7,759.0	54.7	23.9	93.75	-2,921.9	-3,922.6	3,744.3	3,666.2	78.10	47.944		
10,600.0	7,530.0	9,202.4	7,759.0	56.4	25.3	93.75	-3,021.9	-3,922.6	3,743.6	3,662.4	81.23	46.087		
10,700.0	7,530.0	9,302.4	7,759.0	58.1	26.8	93.75	-3,121.9	-3,922.7	3,742.9	3,658.5	84.40	44.347		
10,800.0	7,530.0	9,402.4	7,759.0	59.8	28.3	93.75	-3,221.9	-3,922.7	3,742.2	3,654.6	87.61	42.715		
10,900.0	7,530.0	9,502.4	7,759.0	61.5	29.8	93.75	-3,321.9	-3,922.7	3,741.6	3,650.7	90.85	41.186		
11,000.0	7,530.0	9,602.4	7,759.0	63.2	31.3	93.76	-3,421.9	-3,922.7	3,740.9	3,646.8	94.11	39.750		
11,100.0	7,530.0	9,702.4	7,759.0	64.9	32.9	93.76	-3,521.9	-3,922.7	3,740.2	3,642.8	97.39	38.403		
11,200.0	7,530.0	9,802.4	7,759.0	66.6	34.5	93.76	-3,621.9	-3,922.7	3,739.5	3,638.8	100.70	37.136		
11,300.0	7,530.0	9,902.4	7,759.0	68.4	36.1	93.76	-3,721.9	-3,922.8	3,738.8	3,634.8	104.02	35.943		
11,400.0	7,530.0	10,002.4	7,759.0	70.1	37.7	93.76	-3,821.9	-3,922.8	3,738.2	3,630.8	107.36	34.820		
11,500.0	7,530.0	10,102.4	7,759.0	71.8	39.3	93.76	-3,921.9	-3,922.8	3,737.5	3,626.8	110.71	33.761		
11,600.0	7,530.0	10,202.4	7,759.0	73.5	41.0	93.76	-4,021.9	-3,922.8	3,736.8	3,622.7	114.07	32.760		
11,700.0	7,530.0	10,302.4	7,759.0	75.3	42.6	93.76	-4,121.9	-3,922.8	3,736.1	3,618.7	117.44	31.814		
11,800.0	7,530.0	10,402.4	7,759.0	77.0	44.3	93.76	-4,221.9	-3,922.8	3,735.4	3,614.6	120.82	30.918		
11,900.0	7,530.0	10,502.4	7,759.0	78.7	45.9	93.76	-4,321.9	-3,922.9	3,734.8	3,610.6	124.20	30.070		
12,000.0	7,530.0	10,602.4	7,759.0	80.4	47.6	93.76	-4,421.9	-3,922.9	3,734.1	3,606.5	127.60	29.264		
12,100.0	7,530.0	10,702.4	7,759.0	82.2	49.3	93.76	-4,521.9	-3,922.9	3,733.4	3,602.4	131.00	28.499		
12,200.0	7,530.0	10,802.4	7,759.0	83.9	50.9	93.76	-4,621.9	-3,922.9	3,732.7	3,598.3	134.41	27.771		
12,300.0	7,530.0	10,902.4	7,759.0	85.6	52.6	93.76	-4,721.9	-3,922.9	3,732.0	3,594.2	137.82	27.078		
12,400.0	7,530.0	11,002.4	7,759.0	87.4	54.3	93.76	-4,821.9	-3,922.9	3,731.4	3,590.1	141.24	26.418		
12,500.0	7,530.0	11,102.4	7,759.0	89.1	56.0	93.77	-4,921.9	-3,923.0	3,730.7	3,586.0	144.67	25.788		
12,600.0	7,530.0	11,202.4	7,759.0	90.8	57.7	93.77	-5,021.9	-3,923.0	3,730.0	3,581.9	148.09	25.187		
12,700.0	7,530.0	11,302.4	7,759.0	92.6	59.4	93.77	-5,121.9	-3,923.0	3,729.3	3,577.8	151.52	24.612		
12,800.0	7,530.0	11,402.4	7,759.0	94.3	61.1	93.77	-5,221.9	-3,923.0	3,728.6	3,573.7	154.96	24.062		
12,900.0	7,530.0	11,502.4	7,759.0	96.0	62.8	93.77	-5,321.9	-3,923.0	3,728.0	3,569.6	158.40	23.536		
13,000.0	7,530.0	11,602.4	7,759.0	97.8	64.5	93.77	-5,421.9	-3,923.0	3,727.3	3,565.4	161.84	23.031		
13,100.0	7,530.0	11,702.4	7,759.0	99.5	66.2	93.77	-5,521.9	-3,923.1	3,726.6	3,561.3	165.28	22.547		
13,200.0	7,530.0	11,802.4	7,759.0	101.3	68.0	93.77	-5,621.9	-3,923.1	3,725.9	3,557.2	168.73	22.082		
13,300.0	7,530.0	11,902.4	7,759.0	103.0	69.7	93.77	-5,721.9	-3,923.1	3,725.2	3,553.1	172.18	21.636		
13,400.0	7,530.0	12,002.4	7,759.0	104.7	71.4	93.77	-5,821.9	-3,923.1	3,724.6	3,548.9	175.63	21.207		
13,500.0	7,530.0	12,102.4	7,759.0	106.5	73.1	93.77	-5,921.9	-3,923.1	3,723.9	3,544.8	179.08	20.794		
13,600.0	7,530.0	12,202.4	7,759.0	108.2	74.8	93.77	-6,021.9	-3,923.1	3,723.2	3,540.7	182.54	20.397		
13,700.0	7,530.0	12,302.4	7,759.0	110.0	76.6	93.77	-6,121.9	-3,923.2	3,722.5	3,536.5	185.99	20.014		
13,800.0	7,530.0	12,402.4	7,759.0	111.7	78.3	93.77	-6,221.9	-3,923.2	3,721.8	3,532.4	189.45	19.645		
13,900.0	7,530.0	12,502.4	7,759.0	113.4	80.0	93.78	-6,321.9	-3,923.2	3,721.2	3,528.2	192.91	19.289		
14,000.0	7,530.0	12,602.4	7,759.0	115.2	81.7	93.78	-6,421.9	-3,923.2	3,720.5	3,524.1	196.38	18.946		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1													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	7,530.0	12,702.4	7,759.0	116.9	83.5	93.78	-6,521.9	-3,923.2	3,719.8	3,520.0	199.84	18.614		
14,200.0	7,530.0	12,802.4	7,759.0	118.7	85.2	93.78	-6,621.9	-3,923.2	3,719.1	3,515.8	203.31	18.293		
14,300.0	7,530.0	12,902.4	7,759.0	120.4	86.9	93.78	-6,721.9	-3,923.3	3,718.4	3,511.7	206.77	17.983		
14,400.0	7,530.0	13,002.4	7,759.0	122.1	88.6	93.78	-6,821.9	-3,923.3	3,717.8	3,507.5	210.24	17.683		
14,500.0	7,530.0	13,102.4	7,759.0	123.9	90.4	93.78	-6,921.9	-3,923.3	3,717.1	3,503.4	213.71	17.393		
14,600.0	7,530.0	13,202.4	7,759.0	125.6	92.1	93.78	-7,021.9	-3,923.3	3,716.4	3,499.2	217.18	17.112		
14,700.0	7,530.0	13,302.4	7,759.0	127.4	93.8	93.78	-7,121.8	-3,923.3	3,715.7	3,495.1	220.65	16.840		
14,800.0	7,530.0	13,402.3	7,759.0	129.1	95.6	93.78	-7,221.8	-3,923.3	3,715.0	3,490.9	224.12	16.576		
14,900.0	7,530.0	13,502.3	7,759.0	130.9	97.3	93.78	-7,321.8	-3,923.4	3,714.4	3,486.8	227.59	16.320		
15,000.0	7,530.0	13,602.3	7,759.0	132.6	99.0	93.78	-7,421.8	-3,923.4	3,713.7	3,482.6	231.07	16.072		
15,100.0	7,530.0	13,702.3	7,759.0	134.4	100.8	93.78	-7,521.8	-3,923.4	3,713.0	3,478.5	234.54	15.831		
15,200.0	7,530.0	13,802.3	7,759.0	136.1	102.5	93.78	-7,621.8	-3,923.4	3,712.3	3,474.3	238.02	15.597		
15,300.0	7,530.0	13,902.3	7,759.0	137.9	104.3	93.78	-7,721.8	-3,923.4	3,711.6	3,470.1	241.49	15.370		
15,400.0	7,530.0	14,002.3	7,759.0	139.6	106.0	93.79	-7,821.8	-3,923.4	3,711.0	3,466.0	244.97	15.149		
15,500.0	7,530.0	14,102.3	7,759.0	141.3	107.7	93.79	-7,921.8	-3,923.5	3,710.3	3,461.8	248.45	14.934		
15,600.0	7,530.0	14,202.3	7,759.0	143.1	109.5	93.79	-8,021.8	-3,923.5	3,709.6	3,457.7	251.92	14.725		
15,700.0	7,530.0	14,302.3	7,759.0	144.8	111.2	93.79	-8,121.8	-3,923.5	3,708.9	3,453.5	255.40	14.522		
15,800.0	7,530.0	14,402.3	7,759.0	146.6	112.9	93.79	-8,221.8	-3,923.5	3,708.2	3,449.4	258.88	14.324		
15,900.0	7,530.0	14,502.3	7,759.0	148.3	114.7	93.79	-8,321.8	-3,923.5	3,707.6	3,445.2	262.36	14.131		
16,000.0	7,530.0	14,602.3	7,759.0	150.1	116.4	93.79	-8,421.8	-3,923.5	3,706.9	3,441.0	265.84	13.944		
16,100.0	7,530.0	14,702.3	7,759.0	151.8	118.2	93.79	-8,521.8	-3,923.6	3,706.2	3,436.9	269.32	13.761		
16,200.0	7,530.0	14,802.3	7,759.0	153.6	119.9	93.79	-8,621.8	-3,923.6	3,705.5	3,432.7	272.81	13.583		
16,300.0	7,530.0	14,902.3	7,759.0	155.3	121.6	93.79	-8,721.8	-3,923.6	3,704.8	3,428.6	276.29	13.409		
16,400.0	7,530.0	15,002.3	7,759.0	157.1	123.4	93.79	-8,821.8	-3,923.6	3,704.2	3,424.4	279.77	13.240		
16,500.0	7,530.0	15,102.3	7,759.0	158.8	125.1	93.79	-8,921.8	-3,923.6	3,703.5	3,420.2	283.25	13.075		
16,600.0	7,530.0	15,202.3	7,759.0	160.6	126.9	93.79	-9,021.8	-3,923.6	3,702.8	3,416.1	286.74	12.914		
16,700.0	7,530.0	15,302.3	7,759.0	162.3	128.6	93.79	-9,121.8	-3,923.7	3,702.1	3,411.9	290.22	12.756		
16,800.0	7,530.0	15,402.3	7,759.0	164.1	130.4	93.80	-9,221.8	-3,923.7	3,701.4	3,407.7	293.71	12.603		
16,900.0	7,530.0	15,502.3	7,759.0	165.8	132.1	93.80	-9,321.8	-3,923.7	3,700.8	3,403.6	297.19	12.453		
17,000.0	7,530.0	15,602.3	7,759.0	167.6	133.8	93.80	-9,421.8	-3,923.7	3,700.1	3,399.4	300.67	12.306		
17,100.0	7,530.0	15,702.3	7,759.0	169.3	135.6	93.80	-9,521.8	-3,923.7	3,699.4	3,395.2	304.16	12.163		
17,200.0	7,530.0	15,802.3	7,759.0	171.1	137.3	93.80	-9,621.8	-3,923.7	3,698.7	3,391.1	307.65	12.023		
17,300.0	7,530.0	15,902.3	7,759.0	172.8	139.1	93.80	-9,721.8	-3,923.8	3,698.0	3,386.9	311.13	11.886		
17,397.4	7,530.0	15,974.5	7,759.0	174.5	140.3	93.80	-9,794.0	-3,923.8	3,697.5	3,383.4	314.09	11.772 CC		
17,400.0	7,530.0	15,974.5	7,759.0	174.5	140.3	93.80	-9,794.0	-3,923.8	3,697.5	3,383.3	314.13	11.770		
17,411.2	7,530.0	15,974.5	7,759.0	174.7	140.3	93.80	-9,794.0	-3,923.8	3,697.5	3,383.2	314.33	11.763 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.24	-1,931.2	-4,097.4	4,529.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.24	-1,931.2	-4,097.4	4,529.7	4,529.4	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.24	-1,931.2	-4,097.4	4,529.7	4,529.1	0.60	7,500.950		
300.0	300.0	284.0	284.0	0.5	0.5	-115.24	-1,931.2	-4,097.4	4,529.7	4,528.8	0.95	4,753.350		
400.0	400.0	384.0	384.0	0.7	0.6	-115.24	-1,931.2	-4,097.4	4,529.7	4,528.4	1.30	3,478.994		
500.0	500.0	484.0	484.0	0.8	0.8	-115.24	-1,931.2	-4,097.4	4,529.7	4,528.1	1.65	2,743.477		
600.0	600.0	789.3	789.2	1.0	1.3	-92.24	-1,925.5	-4,092.9	4,527.8	4,525.5	2.36	1,917.609		
700.0	700.0	1,132.0	1,130.7	1.2	2.1	-92.27	-1,904.0	-4,075.7	4,520.7	4,517.6	3.16	1,430.867		
800.0	799.9	1,253.3	1,251.2	1.4	2.3	-92.36	-1,893.1	-4,067.0	4,510.5	4,507.0	3.57	1,263.614		
848.7	848.4	1,301.7	1,299.3	1.5	2.5	-92.41	-1,888.8	-4,063.5	4,505.6	4,501.9	3.75	1,200.970		
900.0	899.7	1,352.7	1,350.0	1.6	2.6	-92.42	-1,884.1	-4,059.8	4,500.4	4,496.5	3.95	1,140.492		
1,000.0	999.5	1,452.2	1,448.8	1.8	2.8	-92.43	-1,875.2	-4,052.6	4,490.3	4,486.0	4.33	1,037.743		
1,100.0	1,099.3	1,551.7	1,547.6	2.0	3.1	-92.44	-1,866.2	-4,045.5	4,480.2	4,475.5	4.71	950.984		
1,200.0	1,199.1	1,651.2	1,646.4	2.2	3.3	-92.46	-1,857.2	-4,038.3	4,470.0	4,464.9	5.10	876.901		
1,300.0	1,298.9	1,750.7	1,745.3	2.4	3.6	-92.47	-1,848.3	-4,031.1	4,459.9	4,454.4	5.49	812.992		
1,400.0	1,398.8	1,850.2	1,844.1	2.6	3.8	-92.48	-1,839.3	-4,024.0	4,449.8	4,443.9	5.88	757.351		
1,500.0	1,498.6	1,949.6	1,942.9	2.8	4.1	-92.50	-1,830.3	-4,016.8	4,439.7	4,433.4	6.27	708.506		
1,600.0	1,598.4	2,049.1	2,041.7	3.0	4.4	-92.51	-1,821.4	-4,009.6	4,429.5	4,422.9	6.66	665.305		
1,700.0	1,698.2	2,148.6	2,140.5	3.2	4.6	-92.52	-1,812.4	-4,002.5	4,419.4	4,412.4	7.05	626.840		
1,800.0	1,798.0	2,248.1	2,239.3	3.4	4.9	-92.54	-1,803.4	-3,995.3	4,409.3	4,401.9	7.44	592.383		
1,900.0	1,897.8	2,347.6	2,338.2	3.6	5.1	-92.55	-1,794.5	-3,988.1	4,399.2	4,391.3	7.84	561.346		
2,000.0	1,997.7	2,447.0	2,437.0	3.8	5.4	-92.56	-1,785.5	-3,980.9	4,389.1	4,380.8	8.23	533.250		
2,100.0	2,097.5	2,546.5	2,535.8	4.0	5.7	-92.58	-1,776.5	-3,973.8	4,378.9	4,370.3	8.63	507.699		
2,200.0	2,197.3	2,646.0	2,634.6	4.2	5.9	-92.59	-1,767.6	-3,966.6	4,368.8	4,359.8	9.02	484.367		
2,300.0	2,297.1	2,745.5	2,733.4	4.4	6.2	-92.60	-1,758.6	-3,959.4	4,358.7	4,349.3	9.41	462.977		
2,400.0	2,396.9	2,845.0	2,832.2	4.6	6.4	-92.62	-1,749.6	-3,952.3	4,348.6	4,338.8	9.81	443.300		
2,500.0	2,496.7	2,944.4	2,931.1	4.8	6.7	-92.63	-1,740.7	-3,945.1	4,338.4	4,328.2	10.20	425.138		
2,600.0	2,596.5	3,043.9	3,029.9	5.0	7.0	-92.64	-1,731.7	-3,937.9	4,328.3	4,317.7	10.60	408.325		
2,700.0	2,696.4	3,143.4	3,128.7	5.2	7.2	-92.66	-1,722.7	-3,930.8	4,318.2	4,307.2	11.00	392.716		
2,800.0	2,796.2	3,242.9	3,227.5	5.4	7.5	-92.67	-1,713.8	-3,923.6	4,308.1	4,296.7	11.39	378.187		
2,900.0	2,896.0	3,342.4	3,326.3	5.6	7.8	-92.69	-1,704.8	-3,916.4	4,298.0	4,286.2	11.79	364.630		
3,000.0	2,995.8	3,441.9	3,425.1	5.8	8.0	-92.70	-1,695.8	-3,909.2	4,287.8	4,275.7	12.18	351.951		
3,100.0	3,095.6	3,541.3	3,524.0	6.0	8.3	-92.71	-1,686.9	-3,902.1	4,277.7	4,265.1	12.58	340.069		
3,200.0	3,195.4	3,640.8	3,622.8	6.2	8.6	-92.73	-1,677.9	-3,894.9	4,267.6	4,254.6	12.97	328.910		
3,300.0	3,295.2	3,740.3	3,721.6	6.4	8.8	-92.74	-1,668.9	-3,887.7	4,257.5	4,244.1	13.37	318.411		
3,400.0	3,395.1	3,839.8	3,820.4	6.6	9.1	-92.76	-1,660.0	-3,880.6	4,247.4	4,233.6	13.77	308.515		
3,500.0	3,494.9	3,939.3	3,919.2	6.8	9.3	-92.77	-1,651.0	-3,873.4	4,237.2	4,223.1	14.16	299.171		
3,600.0	3,594.7	4,038.7	4,018.0	7.0	9.6	-92.79	-1,642.0	-3,866.2	4,227.1	4,212.6	14.56	290.336		
3,700.0	3,694.5	4,138.2	4,116.9	7.2	9.9	-92.80	-1,633.0	-3,859.1	4,217.0	4,202.1	14.96	281.968		
3,800.0	3,794.3	4,237.7	4,215.7	7.4	10.1	-92.81	-1,624.1	-3,851.9	4,206.9	4,191.5	15.35	274.032		
3,900.0	3,894.1	4,337.2	4,314.5	7.6	10.4	-92.83	-1,615.1	-3,844.7	4,196.8	4,181.0	15.75	266.495		
4,000.0	3,994.0	4,436.7	4,413.3	7.8	10.7	-92.84	-1,606.1	-3,837.5	4,186.7	4,170.5	16.14	259.327		
4,100.0	4,093.8	4,536.1	4,512.1	8.0	10.9	-92.86	-1,597.2	-3,830.4	4,176.5	4,160.0	16.54	252.504		
4,200.0	4,193.6	4,635.6	4,610.9	8.2	11.2	-92.87	-1,588.2	-3,823.2	4,166.4	4,149.5	16.94	245.999		
4,300.0	4,293.4	4,735.1	4,709.8	8.4	11.5	-92.89	-1,579.2	-3,816.0	4,156.3	4,139.0	17.33	239.792		
4,400.0	4,393.2	4,834.6	4,808.6	8.6	11.7	-92.90	-1,570.3	-3,808.9	4,146.2	4,128.5	17.73	233.862		
4,500.0	4,493.0	4,934.1	4,907.4	8.8	12.0	-92.92	-1,561.3	-3,801.7	4,136.1	4,118.0	18.13	228.192		
4,600.0	4,592.8	5,033.5	5,006.2	9.0	12.3	-92.93	-1,552.3	-3,794.5	4,126.0	4,107.4	18.52	222.764		
4,700.0	4,692.7	5,133.0	5,105.0	9.3	12.5	-92.95	-1,543.4	-3,787.4	4,115.8	4,096.9	18.92	217.564		
4,800.0	4,792.5	5,232.5	5,203.8	9.5	12.8	-92.96	-1,534.4	-3,780.2	4,105.7	4,086.4	19.31	212.578		
4,900.0	4,892.3	5,332.0	5,302.7	9.7	13.0	-92.98	-1,525.4	-3,773.0	4,095.6	4,075.9	19.71	207.792		
5,000.0	4,992.1	5,431.5	5,401.5	9.9	13.3	-92.99	-1,516.5	-3,765.9	4,085.5	4,065.4	20.11	203.195		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1													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	5,091.9	5,531.0	5,500.3	10.1	13.6	-93.01	-1,507.5	-3,758.7	4,075.4	4,054.9	20.50	198.776		
5,200.0	5,191.7	5,630.4	5,599.1	10.3	13.8	-93.02	-1,498.5	-3,751.5	4,065.3	4,044.4	20.90	194.525		
5,300.0	5,291.5	5,729.9	5,697.9	10.5	14.1	-93.04	-1,489.6	-3,744.3	4,055.2	4,033.9	21.29	190.432		
5,400.0	5,391.4	5,829.4	5,796.7	10.7	14.4	-93.06	-1,480.6	-3,737.2	4,045.0	4,023.4	21.69	186.489		
5,500.0	5,491.2	5,928.9	5,895.6	10.9	14.6	-93.07	-1,471.6	-3,730.0	4,034.9	4,012.8	22.09	182.687		
5,600.0	5,591.0	6,028.4	5,994.4	11.1	14.9	-93.09	-1,462.7	-3,722.8	4,024.8	4,002.3	22.48	179.020		
5,700.0	5,690.8	6,127.8	6,093.2	11.3	15.2	-93.10	-1,453.7	-3,715.7	4,014.7	3,991.8	22.88	175.480		
5,800.0	5,790.6	6,227.3	6,192.0	11.5	15.4	-93.12	-1,444.7	-3,708.5	4,004.6	3,981.3	23.27	172.060		
5,900.0	5,890.4	6,326.8	6,290.8	11.7	15.7	-93.14	-1,435.8	-3,701.3	3,994.5	3,970.8	23.67	168.756		
6,000.0	5,990.3	6,426.3	6,389.6	11.9	16.0	-93.15	-1,426.8	-3,694.2	3,984.4	3,960.3	24.07	165.560		
6,100.0	6,090.1	6,525.8	6,488.5	12.1	16.2	-93.17	-1,417.8	-3,687.0	3,974.3	3,949.8	24.46	162.468		
6,200.0	6,189.9	6,625.2	6,587.3	12.3	16.5	-93.18	-1,408.9	-3,679.8	3,964.1	3,939.3	24.86	159.474		
6,300.0	6,289.7	6,724.7	6,686.1	12.5	16.8	-93.20	-1,399.9	-3,672.6	3,954.0	3,928.8	25.25	156.575		
6,400.0	6,389.5	6,824.2	6,784.9	12.7	17.0	-93.22	-1,390.9	-3,665.5	3,943.9	3,918.3	25.65	153.766		
6,500.0	6,489.3	6,923.7	6,883.7	12.9	17.3	-93.23	-1,382.0	-3,658.3	3,933.8	3,907.8	26.04	151.042		
6,600.0	6,589.1	7,023.2	6,982.5	13.1	17.5	-93.25	-1,373.0	-3,651.1	3,923.7	3,897.3	26.44	148.400		
6,700.0	6,689.0	7,122.7	7,081.3	13.3	17.8	-93.27	-1,364.0	-3,644.0	3,913.6	3,886.8	26.84	145.836		
6,785.3	6,774.1	7,177.7	7,136.0	13.5	18.0	-93.28	-1,359.1	-3,640.0	3,905.1	3,878.0	27.12	144.017		
6,800.0	6,788.8	7,188.9	7,147.1	13.5	18.0	-82.14	-1,358.2	-3,639.2	3,903.6	3,876.5	27.16	143.718		
6,850.0	6,838.8	7,200.0	7,158.2	13.6	18.0	28.77	-1,357.5	-3,638.4	3,898.0	3,870.7	27.25	143.067		
6,900.0	6,888.6	7,200.0	7,158.2	13.6	18.0	51.18	-1,357.5	-3,638.4	3,891.4	3,864.1	27.28	142.624		
6,950.0	6,938.1	7,226.3	7,184.4	13.7	18.1	56.91	-1,356.7	-3,636.5	3,883.6	3,856.3	27.33	142.082		
7,000.0	6,987.0	7,250.0	7,208.1	13.7	18.1	59.83	-1,357.1	-3,634.8	3,874.9	3,847.6	27.36	141.612		
7,050.0	7,035.0	7,250.0	7,208.1	13.6	18.1	61.79	-1,357.1	-3,634.8	3,865.2	3,837.9	27.35	141.321		
7,100.0	7,082.0	7,250.0	7,208.1	13.6	18.1	63.37	-1,357.1	-3,634.8	3,854.8	3,827.4	27.33	141.036		
7,150.0	7,127.7	7,275.2	7,233.1	13.5	18.1	64.87	-1,358.5	-3,633.0	3,843.2	3,815.9	27.34	140.588		
7,200.0	7,171.8	7,300.0	7,257.8	13.5	18.1	66.33	-1,361.1	-3,631.2	3,831.1	3,803.8	27.35	140.062		
7,250.0	7,214.2	7,300.0	7,257.8	13.4	18.1	67.63	-1,361.1	-3,631.2	3,818.1	3,790.7	27.36	139.528		
7,300.0	7,254.6	7,300.0	7,257.8	13.4	18.1	68.93	-1,361.1	-3,631.2	3,804.5	3,777.1	27.40	138.854		
7,350.0	7,292.9	7,322.0	7,279.5	13.3	18.1	70.39	-1,364.2	-3,629.6	3,790.2	3,762.8	27.48	137.948		
7,400.0	7,328.9	7,350.0	7,306.9	13.3	18.1	71.95	-1,369.4	-3,627.6	3,775.6	3,748.0	27.59	136.829		
7,450.0	7,362.3	7,350.0	7,306.9	13.3	18.1	73.30	-1,369.4	-3,627.6	3,760.3	3,732.5	27.74	135.541		
7,500.0	7,393.1	7,350.0	7,306.9	13.4	18.1	74.67	-1,369.4	-3,627.6	3,744.7	3,716.8	27.94	134.038		
7,550.0	7,421.1	7,350.0	7,306.9	13.5	18.1	76.04	-1,369.4	-3,627.6	3,729.0	3,700.8	28.18	132.324		
7,600.0	7,446.1	7,375.4	7,331.5	13.6	18.1	77.71	-1,375.2	-3,625.8	3,712.8	3,684.3	28.47	130.431		
7,650.0	7,468.0	7,400.0	7,355.2	13.8	18.1	79.40	-1,381.9	-3,624.1	3,696.8	3,668.0	28.79	128.388		
7,700.0	7,486.7	7,400.0	7,355.2	14.0	18.1	80.81	-1,381.9	-3,624.1	3,680.5	3,651.4	29.17	126.170		
7,750.0	7,502.2	7,400.0	7,355.2	14.2	18.1	82.19	-1,381.9	-3,624.1	3,664.5	3,634.9	29.59	123.859		
7,800.0	7,514.3	7,400.0	7,355.2	14.6	18.1	83.54	-1,381.9	-3,624.1	3,648.6	3,618.6	30.03	121.494		
7,850.0	7,523.0	7,419.1	7,373.3	14.9	18.0	85.14	-1,387.8	-3,622.8	3,633.0	3,602.5	30.47	119.231		
7,900.0	7,528.2	7,426.2	7,379.9	15.3	18.0	86.53	-1,390.2	-3,622.3	3,617.8	3,586.8	30.94	116.923		
7,950.2	7,530.0	7,432.5	7,385.9	15.8	18.0	87.87	-1,392.4	-3,621.9	3,602.9	3,571.5	31.43	114.652		
8,000.0	7,530.0	7,450.0	7,402.1	16.2	18.0	88.14	-1,398.7	-3,620.7	3,588.9	3,557.0	31.87	112.610		
8,100.0	7,530.0	7,450.0	7,402.1	17.3	18.0	88.14	-1,398.7	-3,620.7	3,562.3	3,529.4	32.93	108.163		
8,200.0	7,530.0	7,467.3	7,418.0	18.4	17.9	88.40	-1,405.4	-3,619.5	3,538.2	3,504.2	34.06	103.892		
8,300.0	7,530.0	7,484.5	7,433.7	19.7	17.9	88.66	-1,412.6	-3,618.4	3,516.7	3,481.4	35.27	99.716		
8,400.0	7,530.0	7,500.0	7,447.5	21.0	17.9	88.89	-1,419.4	-3,617.4	3,497.6	3,461.1	36.55	95.685		
8,500.0	7,530.0	7,527.0	7,471.2	22.4	17.8	89.29	-1,432.3	-3,615.7	3,481.1	3,443.2	37.85	91.969		
8,600.0	7,530.0	7,550.0	7,490.9	23.8	17.7	89.61	-1,444.1	-3,614.3	3,467.0	3,427.8	39.21	88.422		
8,700.0	7,530.0	7,584.4	7,519.4	25.3	17.6	90.09	-1,463.2	-3,612.2	3,455.2	3,414.7	40.55	85.204		
8,800.0	7,530.0	7,620.9	7,548.3	26.8	17.5	90.57	-1,485.3	-3,610.1	3,445.8	3,403.9	41.91	82.212		
8,900.0	7,530.0	7,664.1	7,580.7	28.3	17.4	91.11	-1,513.9	-3,607.8	3,438.5	3,395.3	43.27	79.473		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1													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	7,530.0	7,715.5	7,616.2	29.9	17.2	91.71	-1,550.8	-3,605.2	3,433.2	3,388.6	44.60	76.972		
9,100.0	7,530.0	7,776.5	7,654.0	31.4	17.0	92.34	-1,598.7	-3,602.5	3,429.6	3,383.7	45.93	74.678		
9,200.0	7,530.0	7,850.0	7,692.4	33.0	16.8	92.98	-1,661.2	-3,599.7	3,427.3	3,380.0	47.24	72.547		
9,300.0	7,530.0	7,931.1	7,725.1	34.7	16.6	93.53	-1,735.3	-3,597.3	3,425.9	3,377.2	48.63	70.445		
9,400.0	7,530.0	8,023.5	7,749.3	36.3	16.6	93.94	-1,824.4	-3,595.6	3,425.0	3,374.9	50.14	68.304		
9,500.0	7,530.0	8,121.8	7,758.9	37.9	16.7	94.10	-1,922.1	-3,594.9	3,424.3	3,372.4	51.86	66.035		
9,600.0	7,530.0	8,221.8	7,759.0	39.6	16.9	94.10	-2,022.0	-3,594.9	3,423.6	3,369.8	53.82	63.617		
9,700.0	7,530.0	8,321.8	7,759.0	41.2	17.4	94.10	-2,122.0	-3,594.9	3,422.9	3,367.0	55.97	61.158		
9,800.0	7,530.0	8,421.8	7,759.0	42.9	18.0	94.11	-2,222.0	-3,595.0	3,422.3	3,363.9	58.31	58.692		
9,900.0	7,530.0	8,521.8	7,759.0	44.5	18.7	94.11	-2,322.0	-3,595.0	3,421.6	3,360.8	60.82	56.262		
10,000.0	7,530.0	8,621.7	7,759.0	46.2	19.6	94.11	-2,422.0	-3,595.0	3,420.9	3,357.4	63.46	53.904		
10,100.0	7,530.0	8,721.7	7,759.0	47.9	20.6	94.11	-2,522.0	-3,595.0	3,420.2	3,354.0	66.23	51.641		
10,200.0	7,530.0	8,821.7	7,759.0	49.6	21.6	94.11	-2,622.0	-3,595.0	3,419.5	3,350.4	69.10	49.487		
10,300.0	7,530.0	8,921.7	7,759.0	51.3	22.8	94.11	-2,722.0	-3,595.0	3,418.9	3,346.8	72.05	47.451		
10,400.0	7,530.0	9,021.7	7,759.0	53.0	24.0	94.11	-2,822.0	-3,595.0	3,418.2	3,343.1	75.07	45.532		
10,500.0	7,530.0	9,121.7	7,759.0	54.7	25.3	94.11	-2,922.0	-3,595.1	3,417.5	3,339.3	78.15	43.728		
10,600.0	7,530.0	9,221.7	7,759.0	56.4	26.7	94.11	-3,022.0	-3,595.1	3,416.8	3,335.5	81.28	42.037		
10,700.0	7,530.0	9,321.7	7,759.0	58.1	28.1	94.11	-3,122.0	-3,595.1	3,416.1	3,331.7	84.45	40.450		
10,800.0	7,530.0	9,421.7	7,759.0	59.8	29.5	94.11	-3,222.0	-3,595.1	3,415.5	3,327.8	87.66	38.963		
10,900.0	7,530.0	9,521.7	7,759.0	61.5	31.0	94.11	-3,322.0	-3,595.1	3,414.8	3,323.9	90.89	37.569		
11,000.0	7,530.0	9,621.7	7,759.0	63.2	32.5	94.12	-3,422.0	-3,595.1	3,414.1	3,319.9	94.15	36.261		
11,100.0	7,530.0	9,721.7	7,759.0	64.9	34.0	94.12	-3,522.0	-3,595.2	3,413.4	3,316.0	97.44	35.032		
11,200.0	7,530.0	9,821.7	7,759.0	66.6	35.5	94.12	-3,622.0	-3,595.2	3,412.7	3,312.0	100.74	33.877		
11,300.0	7,530.0	9,921.7	7,759.0	68.4	37.1	94.12	-3,722.0	-3,595.2	3,412.1	3,308.0	104.06	32.790		
11,400.0	7,530.0	10,021.7	7,759.0	70.1	38.7	94.12	-3,822.0	-3,595.2	3,411.4	3,304.0	107.39	31.765		
11,500.0	7,530.0	10,121.7	7,759.0	71.8	40.3	94.12	-3,922.0	-3,595.2	3,410.7	3,300.0	110.74	30.799		
11,600.0	7,530.0	10,221.7	7,759.0	73.5	41.9	94.12	-4,022.0	-3,595.2	3,410.0	3,295.9	114.10	29.887		
11,700.0	7,530.0	10,321.7	7,759.0	75.3	43.5	94.12	-4,122.0	-3,595.3	3,409.3	3,291.9	117.47	29.024		
11,800.0	7,530.0	10,421.7	7,759.0	77.0	45.1	94.12	-4,222.0	-3,595.3	3,408.7	3,287.8	120.85	28.207		
11,900.0	7,530.0	10,521.7	7,759.0	78.7	46.8	94.12	-4,322.0	-3,595.3	3,408.0	3,283.7	124.23	27.432		
12,000.0	7,530.0	10,621.7	7,759.0	80.4	48.4	94.12	-4,422.0	-3,595.3	3,407.3	3,279.7	127.63	26.698		
12,100.0	7,530.0	10,721.7	7,759.0	82.2	50.1	94.12	-4,522.0	-3,595.3	3,406.6	3,275.6	131.03	26.000		
12,200.0	7,530.0	10,821.7	7,759.0	83.9	51.7	94.13	-4,622.0	-3,595.3	3,405.9	3,271.5	134.43	25.336		
12,300.0	7,530.0	10,921.7	7,759.0	85.6	53.4	94.13	-4,722.0	-3,595.4	3,405.3	3,267.4	137.84	24.704		
12,400.0	7,530.0	11,021.7	7,759.0	87.4	55.0	94.13	-4,822.0	-3,595.4	3,404.6	3,263.3	141.26	24.101		
12,500.0	7,530.0	11,121.7	7,759.0	89.1	56.7	94.13	-4,922.0	-3,595.4	3,403.9	3,259.2	144.68	23.527		
12,600.0	7,530.0	11,221.7	7,759.0	90.8	58.4	94.13	-5,022.0	-3,595.4	3,403.2	3,255.1	148.11	22.978		
12,700.0	7,530.0	11,321.7	7,759.0	92.6	60.1	94.13	-5,122.0	-3,595.4	3,402.5	3,251.0	151.54	22.454		
12,800.0	7,530.0	11,421.7	7,759.0	94.3	61.8	94.13	-5,221.9	-3,595.4	3,401.9	3,246.9	154.97	21.952		
12,900.0	7,530.0	11,528.4	7,759.0	96.0	67.5	94.15	-5,558.4	-3,584.4	3,398.4	3,236.0	162.44	20.921		
13,000.0	7,530.0	11,858.1	7,759.0	97.8	69.2	94.16	-5,657.9	-3,577.5	3,390.8	3,224.9	165.87	20.442		
13,100.0	7,530.0	11,957.8	7,759.0	99.5	70.9	94.17	-5,757.3	-3,570.6	3,383.1	3,213.8	169.30	19.982		
13,200.0	7,530.0	12,057.5	7,759.0	101.3	72.6	94.17	-5,856.8	-3,563.6	3,375.5	3,202.7	172.74	19.541		
13,300.0	7,530.0	12,157.3	7,759.0	103.0	74.4	94.18	-5,956.3	-3,556.7	3,367.8	3,191.7	176.18	19.116		
13,400.0	7,530.0	12,257.0	7,759.0	104.7	76.1	94.19	-6,055.7	-3,549.8	3,360.2	3,180.6	179.62	18.707		
13,500.0	7,530.0	12,356.7	7,759.0	106.5	77.8	94.20	-6,155.2	-3,542.8	3,352.6	3,169.5	183.07	18.313		
13,600.0	7,530.0	12,450.0	7,759.0	108.2	79.4	94.21	-6,248.3	-3,536.3	3,344.9	3,158.5	186.40	17.945		
13,700.0	7,530.0	12,500.0	7,759.0	110.0	80.3	94.22	-6,298.2	-3,533.3	3,338.2	3,149.2	189.00	17.663		
13,800.0	7,530.0	12,545.3	7,759.0	111.7	81.0	94.22	-6,343.4	-3,531.3	3,333.1	3,141.6	191.52	17.404		
13,900.0	7,530.0	12,600.0	7,759.0	113.4	82.0	94.22	-6,398.1	-3,529.8	3,329.6	3,135.4	194.20	17.146		
14,000.0	7,530.0	12,637.9	7,759.0	115.2	82.6	94.22	-6,436.0	-3,529.4	3,327.7	3,131.1	196.59	16.927		
14,044.4	7,530.0	12,658.4	7,759.0	116.0	83.0	94.22	-6,456.6	-3,529.4	3,327.3	3,129.6	197.71	16.829 CC		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	12,707.2	7,759.0	116.9	83.8	94.22	-6,505.3	-3,530.0	3,327.5	3,128.0	199.52	16.678		
14,106.0	7,530.0	12,707.2	7,759.0	117.0	83.8	94.22	-6,505.3	-3,530.0	3,327.5	3,127.9	199.62	16.669		
14,200.0	7,530.0	12,757.6	7,759.0	118.7	84.7	94.22	-6,555.7	-3,531.0	3,328.5	3,126.3	202.13	16.467		
14,300.0	7,530.0	12,857.6	7,759.0	120.4	86.4	94.22	-6,655.7	-3,533.0	3,329.8	3,124.2	205.59	16.196		
14,400.0	7,530.0	12,957.6	7,759.0	122.1	88.1	94.22	-6,755.6	-3,535.0	3,331.1	3,122.0	209.06	15.934		
14,500.0	7,530.0	13,057.6	7,759.0	123.9	89.8	94.22	-6,855.6	-3,537.0	3,332.4	3,119.9	212.52	15.680		
14,600.0	7,530.0	13,157.6	7,759.0	125.6	91.5	94.21	-6,955.6	-3,539.0	3,333.7	3,117.7	215.99	15.435		
14,700.0	7,530.0	13,257.5	7,759.0	127.4	93.3	94.21	-7,055.6	-3,541.0	3,335.0	3,115.6	219.46	15.196		
14,800.0	7,530.0	13,357.5	7,759.0	129.1	95.0	94.21	-7,155.5	-3,543.0	3,336.3	3,113.4	222.93	14.966		
14,900.0	7,530.0	13,457.5	7,759.0	130.9	96.7	94.21	-7,255.5	-3,545.0	3,337.6	3,111.2	226.40	14.742		
15,000.0	7,530.0	13,557.5	7,759.0	132.6	98.4	94.21	-7,355.5	-3,547.1	3,339.0	3,109.1	229.87	14.525		
15,100.0	7,530.0	13,657.5	7,759.0	134.4	100.1	94.21	-7,455.4	-3,549.1	3,340.3	3,106.9	233.35	14.315		
15,200.0	7,530.0	13,757.5	7,759.0	136.1	101.9	94.20	-7,555.4	-3,551.1	3,341.6	3,104.8	236.82	14.110		
15,300.0	7,530.0	13,857.5	7,759.0	137.9	103.6	94.20	-7,655.4	-3,553.1	3,342.9	3,102.6	240.29	13.912		
15,400.0	7,530.0	13,957.5	7,759.0	139.6	105.3	94.20	-7,755.4	-3,555.1	3,344.2	3,100.4	243.77	13.719		
15,500.0	7,530.0	14,057.5	7,759.0	141.3	107.1	94.20	-7,855.3	-3,557.1	3,345.5	3,098.3	247.25	13.531		
15,600.0	7,530.0	14,157.5	7,759.0	143.1	108.8	94.20	-7,955.3	-3,559.1	3,346.8	3,096.1	250.72	13.349		
15,700.0	7,530.0	14,257.5	7,759.0	144.8	110.5	94.20	-8,055.3	-3,561.1	3,348.1	3,093.9	254.20	13.171		
15,800.0	7,530.0	14,357.4	7,759.0	146.6	112.2	94.20	-8,155.2	-3,563.2	3,349.4	3,091.8	257.68	12.999		
15,900.0	7,530.0	14,457.4	7,759.0	148.3	114.0	94.19	-8,255.2	-3,565.2	3,350.7	3,089.6	261.16	12.830		
16,000.0	7,530.0	14,557.4	7,759.0	150.1	115.7	94.19	-8,355.2	-3,567.2	3,352.1	3,087.4	264.64	12.667		
16,100.0	7,530.0	14,657.4	7,759.0	151.8	117.4	94.19	-8,455.1	-3,569.2	3,353.4	3,085.2	268.12	12.507		
16,200.0	7,530.0	14,757.4	7,759.0	153.6	119.2	94.19	-8,555.1	-3,571.2	3,354.7	3,083.1	271.60	12.352		
16,300.0	7,530.0	14,857.4	7,759.0	155.3	120.9	94.19	-8,655.1	-3,573.2	3,356.0	3,080.9	275.08	12.200		
16,400.0	7,530.0	14,957.4	7,759.0	157.1	122.6	94.19	-8,755.1	-3,575.2	3,357.3	3,078.7	278.56	12.052		
16,500.0	7,530.0	15,057.4	7,759.0	158.8	124.4	94.18	-8,855.0	-3,577.2	3,358.6	3,076.6	282.04	11.908		
16,600.0	7,530.0	15,157.4	7,759.0	160.6	126.1	94.18	-8,955.0	-3,579.2	3,359.9	3,074.4	285.52	11.768		
16,700.0	7,530.0	15,257.4	7,759.0	162.3	127.9	94.18	-9,055.0	-3,581.3	3,361.2	3,072.2	289.01	11.630		
16,800.0	7,530.0	15,357.4	7,759.0	164.1	129.6	94.18	-9,154.9	-3,583.3	3,362.5	3,070.0	292.49	11.496		
16,900.0	7,530.0	15,457.4	7,759.0	165.8	131.3	94.18	-9,254.9	-3,585.3	3,363.8	3,067.9	295.97	11.365		
17,000.0	7,530.0	15,557.3	7,759.0	167.6	133.1	94.18	-9,354.9	-3,587.3	3,365.2	3,065.7	299.46	11.238		
17,100.0	7,530.0	15,657.3	7,759.0	169.3	134.8	94.17	-9,454.9	-3,589.3	3,366.5	3,063.5	302.94	11.113		
17,200.0	7,530.0	15,757.3	7,759.0	171.1	136.5	94.17	-9,554.8	-3,591.3	3,367.8	3,061.4	306.43	10.990		
17,300.0	7,530.0	15,857.3	7,759.0	172.8	138.3	94.17	-9,654.8	-3,593.3	3,369.1	3,059.2	309.91	10.871		
17,400.0	7,530.0	15,957.3	7,759.0	174.5	140.0	94.17	-9,754.8	-3,595.3	3,370.4	3,057.0	313.40	10.754		
17,411.2	7,530.0	15,968.6	7,759.0	174.7	140.2	94.17	-9,766.0	-3,595.6	3,370.5	3,056.8	313.79	10.741 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.39	-1,937.3	-4,082.4	4,518.8					
100.0	100.0	84.0	84.0	0.2	0.1	-115.39	-1,937.3	-4,082.4	4,518.8	4,518.5	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.39	-1,937.3	-4,082.4	4,518.8	4,518.2	0.60	7,482.845		
300.0	300.0	284.0	284.0	0.5	0.5	-115.39	-1,937.3	-4,082.4	4,518.8	4,517.8	0.95	4,741.877		
400.0	400.0	384.0	384.0	0.7	0.6	-115.39	-1,937.3	-4,082.4	4,518.8	4,517.5	1.30	3,470.597		
500.0	500.0	484.0	484.0	0.8	0.8	-115.39	-1,937.3	-4,082.4	4,518.8	4,517.1	1.65	2,736.856		
600.0	600.0	584.0	584.0	1.0	1.0	-92.39	-1,937.3	-4,082.4	4,518.8	4,516.8	2.00	2,258.738		
700.0	700.0	684.0	684.0	1.2	1.2	-92.42	-1,937.3	-4,082.4	4,518.9	4,516.6	2.35	1,920.809		
800.0	799.9	783.9	783.9	1.4	1.3	-92.47	-1,937.3	-4,082.4	4,519.1	4,516.4	2.71	1,667.495		
848.7	848.4	832.4	832.4	1.5	1.4	-92.50	-1,937.3	-4,082.4	4,519.2	4,516.3	2.89	1,565.694		
900.0	899.7	883.7	883.7	1.6	1.5	-92.54	-1,937.3	-4,082.4	4,519.4	4,516.3	3.07	1,470.442		
1,000.0	999.5	983.5	983.5	1.8	1.7	-92.62	-1,937.3	-4,082.4	4,519.6	4,516.2	3.44	1,313.782		
1,100.0	1,099.3	1,363.1	1,362.8	2.0	2.4	-92.88	-1,930.2	-4,073.4	4,517.3	4,513.0	4.30	1,050.934		
1,200.0	1,199.1	1,795.0	1,792.4	2.2	3.3	-93.10	-1,903.4	-4,039.0	4,507.8	4,502.5	5.26	857.673		
1,300.0	1,298.9	1,994.5	1,989.6	2.4	3.8	-93.17	-1,884.5	-4,014.9	4,492.7	4,486.9	5.81	773.306		
1,400.0	1,398.8	2,093.3	2,087.0	2.6	4.1	-93.21	-1,874.7	-4,002.4	4,477.3	4,471.1	6.19	723.831		
1,500.0	1,498.6	2,192.0	2,184.5	2.8	4.4	-93.24	-1,864.9	-3,989.9	4,461.8	4,455.3	6.56	679.917		
1,600.0	1,598.4	2,290.8	2,282.0	3.0	4.7	-93.28	-1,855.2	-3,977.3	4,446.4	4,439.5	6.94	640.693		
1,700.0	1,698.2	2,389.6	2,379.5	3.2	5.0	-93.31	-1,845.4	-3,964.8	4,431.0	4,423.7	7.32	605.460		
1,800.0	1,798.0	2,488.3	2,477.0	3.4	5.3	-93.35	-1,835.6	-3,952.3	4,415.6	4,407.9	7.70	573.649		
1,900.0	1,897.8	2,587.1	2,574.4	3.6	5.6	-93.39	-1,825.8	-3,939.8	4,400.2	4,392.1	8.08	544.792		
2,000.0	1,997.7	2,685.9	2,671.9	3.8	5.9	-93.42	-1,816.0	-3,927.2	4,384.8	4,376.3	8.46	518.502		
2,100.0	2,097.5	2,784.6	2,769.4	4.0	6.2	-93.46	-1,806.3	-3,914.7	4,369.3	4,360.5	8.84	494.454		
2,200.0	2,197.3	2,883.4	2,866.9	4.2	6.5	-93.49	-1,796.5	-3,902.2	4,353.9	4,344.7	9.22	472.376		
2,300.0	2,297.1	2,982.2	2,964.4	4.4	6.8	-93.53	-1,786.7	-3,889.7	4,338.5	4,328.9	9.60	452.038		
2,400.0	2,396.9	3,080.9	3,061.8	4.6	7.1	-93.57	-1,776.9	-3,877.1	4,323.1	4,313.1	9.98	433.245		
2,500.0	2,496.7	3,179.7	3,159.3	4.8	7.4	-93.61	-1,767.1	-3,864.6	4,307.7	4,297.4	10.36	415.827		
2,600.0	2,596.5	3,278.5	3,256.8	5.0	7.8	-93.64	-1,757.3	-3,852.1	4,292.3	4,281.6	10.74	399.641		
2,700.0	2,696.4	3,377.2	3,354.3	5.2	8.1	-93.68	-1,747.6	-3,839.6	4,276.9	4,265.8	11.12	384.561		
2,800.0	2,796.2	3,476.0	3,451.8	5.4	8.4	-93.72	-1,737.8	-3,827.0	4,261.5	4,250.0	11.50	370.478		
2,900.0	2,896.0	3,574.8	3,549.2	5.6	8.7	-93.76	-1,728.0	-3,814.5	4,246.1	4,234.2	11.88	357.298		
3,000.0	2,995.8	3,673.5	3,646.7	5.8	9.0	-93.80	-1,718.2	-3,802.0	4,230.7	4,218.5	12.27	344.936		
3,100.0	3,095.6	3,772.3	3,744.2	6.0	9.3	-93.84	-1,708.4	-3,789.5	4,215.3	4,202.7	12.65	333.319		
3,200.0	3,195.4	3,871.1	3,841.7	6.2	9.7	-93.88	-1,698.6	-3,776.9	4,199.9	4,186.9	13.03	322.382		
3,300.0	3,295.2	3,969.8	3,939.2	6.4	10.0	-93.92	-1,688.9	-3,764.4	4,184.5	4,171.1	13.41	312.068		
3,400.0	3,395.1	4,068.6	4,036.6	6.6	10.3	-93.96	-1,679.1	-3,751.9	4,169.2	4,155.4	13.79	302.324		
3,500.0	3,494.9	4,167.4	4,134.1	6.8	10.6	-94.00	-1,669.3	-3,739.4	4,153.8	4,139.6	14.17	293.105		
3,600.0	3,594.7	4,266.1	4,231.6	7.0	11.0	-94.04	-1,659.5	-3,726.8	4,138.4	4,123.8	14.55	284.371		
3,700.0	3,694.5	4,364.9	4,329.1	7.2	11.3	-94.08	-1,649.7	-3,714.3	4,123.0	4,108.1	14.93	276.083		
3,800.0	3,794.3	4,463.7	4,426.6	7.4	11.6	-94.12	-1,639.9	-3,701.8	4,107.6	4,092.3	15.32	268.208		
3,900.0	3,894.1	4,562.4	4,524.0	7.6	11.9	-94.16	-1,630.2	-3,689.2	4,092.3	4,076.6	15.70	260.717		
4,000.0	3,994.0	4,661.2	4,621.5	7.8	12.2	-94.20	-1,620.4	-3,676.7	4,076.9	4,060.8	16.08	253.582		
4,100.0	4,093.8	4,760.0	4,719.0	8.0	12.6	-94.24	-1,610.6	-3,664.2	4,061.5	4,045.0	16.46	246.779		
4,200.0	4,193.6	4,858.7	4,816.5	8.2	12.9	-94.29	-1,600.8	-3,651.7	4,046.1	4,029.3	16.84	240.285		
4,300.0	4,293.4	4,957.5	4,914.0	8.4	13.2	-94.33	-1,591.0	-3,639.1	4,030.8	4,013.5	17.22	234.079		
4,400.0	4,393.2	5,056.3	5,011.4	8.6	13.5	-94.37	-1,581.3	-3,626.6	4,015.4	3,997.8	17.60	228.143		
4,500.0	4,493.0	5,155.0	5,108.9	8.8	13.9	-94.41	-1,571.5	-3,614.1	4,000.0	3,982.1	17.98	222.459		
4,600.0	4,592.8	5,253.8	5,206.4	9.0	14.2	-94.46	-1,561.7	-3,601.6	3,984.7	3,966.3	18.36	217.012		
4,700.0	4,692.7	5,352.6	5,303.9	9.3	14.5	-94.50	-1,551.9	-3,589.0	3,969.3	3,950.6	18.74	211.788		
4,800.0	4,792.5	5,451.3	5,401.4	9.5	14.8	-94.55	-1,542.1	-3,576.5	3,954.0	3,934.8	19.12	206.772		
4,900.0	4,892.3	5,550.1	5,498.8	9.7	15.2	-94.59	-1,532.3	-3,564.0	3,938.6	3,919.1	19.50	201.953		
5,000.0	4,992.1	5,648.9	5,596.3	9.9	15.5	-94.64	-1,522.6	-3,551.5	3,923.2	3,903.4	19.88	197.320		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,091.9	5,747.6	5,693.8	10.1	15.8	-94.68	-1,512.8	-3,538.9	3,907.9	3,887.6	20.26	192.862		
5,200.0	5,191.7	5,846.4	5,791.3	10.3	16.1	-94.73	-1,503.0	-3,526.4	3,892.5	3,871.9	20.64	188.569		
5,300.0	5,291.5	5,945.2	5,888.8	10.5	16.5	-94.77	-1,493.2	-3,513.9	3,877.2	3,856.2	21.02	184.432		
5,400.0	5,391.4	6,043.9	5,986.2	10.7	16.8	-94.82	-1,483.4	-3,501.4	3,861.9	3,840.5	21.40	180.443		
5,500.0	5,491.2	6,142.7	6,083.7	10.9	17.1	-94.87	-1,473.6	-3,488.8	3,846.5	3,824.7	21.78	176.594		
5,600.0	5,591.0	6,241.5	6,181.2	11.1	17.4	-94.91	-1,463.9	-3,476.3	3,831.2	3,809.0	22.16	172.878		
5,700.0	5,690.8	6,340.2	6,278.7	11.3	17.8	-94.96	-1,454.1	-3,463.8	3,815.8	3,793.3	22.54	169.289		
5,800.0	5,790.6	6,439.0	6,376.2	11.5	18.1	-95.01	-1,444.3	-3,451.3	3,800.5	3,777.6	22.92	165.819		
5,900.0	5,890.4	6,537.8	6,473.6	11.7	18.4	-95.06	-1,434.5	-3,438.7	3,785.2	3,761.9	23.30	162.463		
6,000.0	5,990.3	6,636.5	6,571.1	11.9	18.8	-95.11	-1,424.7	-3,426.2	3,769.9	3,746.2	23.68	159.215		
6,100.0	6,090.1	6,735.3	6,668.6	12.1	19.1	-95.16	-1,414.9	-3,413.7	3,754.5	3,730.5	24.06	156.071		
6,200.0	6,189.9	6,834.1	6,766.1	12.3	19.4	-95.21	-1,405.2	-3,401.2	3,739.2	3,714.8	24.44	153.025		
6,300.0	6,289.7	6,932.8	6,863.6	12.5	19.7	-95.26	-1,395.4	-3,388.6	3,723.9	3,699.1	24.81	150.073		
6,400.0	6,389.5	7,031.6	6,961.0	12.7	20.1	-95.31	-1,385.6	-3,376.1	3,708.6	3,683.4	25.19	147.210		
6,500.0	6,489.3	7,130.4	7,058.5	12.9	20.4	-95.36	-1,375.8	-3,363.6	3,693.3	3,667.7	25.57	144.433		
6,600.0	6,589.1	7,213.0	7,140.1	13.1	20.7	-95.40	-1,367.6	-3,353.1	3,678.0	3,652.1	25.92	141.895		
6,700.0	6,689.0	7,250.0	7,176.7	13.3	20.8	-95.44	-1,365.2	-3,348.3	3,664.0	3,637.8	26.18	139.951		
6,785.3	6,774.1	7,268.7	7,195.2	13.5	20.8	-95.47	-1,364.8	-3,345.8	3,653.5	3,627.1	26.38	138.515		
6,800.0	6,788.8	7,272.7	7,199.2	13.5	20.8	-84.32	-1,364.8	-3,345.3	3,651.8	3,625.4	26.40	138.303		
6,850.0	6,838.8	7,300.0	7,226.2	13.6	20.9	26.62	-1,365.6	-3,341.6	3,645.2	3,618.7	26.48	137.634		
6,900.0	6,888.6	7,300.0	7,226.2	13.6	20.9	49.11	-1,365.6	-3,341.6	3,637.3	3,610.8	26.50	137.235		
6,950.0	6,938.1	7,300.0	7,226.2	13.7	20.9	54.88	-1,365.6	-3,341.6	3,628.5	3,602.0	26.50	136.922		
7,000.0	6,987.0	7,327.6	7,253.5	13.7	20.9	57.85	-1,367.7	-3,337.7	3,618.4	3,591.9	26.51	136.517		
7,050.0	7,035.0	7,350.0	7,275.5	13.6	20.9	59.93	-1,370.4	-3,334.6	3,607.4	3,580.9	26.50	136.148		
7,100.0	7,082.0	7,350.0	7,275.5	13.6	20.9	61.61	-1,370.4	-3,334.6	3,595.3	3,568.9	26.47	135.830		
7,150.0	7,127.7	7,368.4	7,293.4	13.5	21.0	63.18	-1,373.2	-3,331.9	3,582.3	3,555.9	26.46	135.374		
7,200.0	7,171.8	7,381.8	7,306.5	13.5	21.0	64.68	-1,375.7	-3,330.0	3,568.5	3,542.0	26.47	134.793		
7,250.0	7,214.2	7,400.0	7,324.1	13.4	21.0	66.19	-1,379.5	-3,327.3	3,553.8	3,527.3	26.52	134.019		
7,300.0	7,254.6	7,400.0	7,324.1	13.4	21.0	67.62	-1,379.5	-3,327.3	3,538.4	3,511.8	26.59	133.066		
7,350.0	7,292.9	7,421.3	7,344.5	13.3	21.0	69.21	-1,384.6	-3,324.2	3,522.3	3,495.6	26.71	131.868		
7,400.0	7,328.9	7,450.0	7,371.7	13.3	21.0	70.89	-1,392.8	-3,320.0	3,505.8	3,478.9	26.88	130.430		
7,450.0	7,362.3	7,450.0	7,371.7	13.3	21.0	72.42	-1,392.8	-3,320.0	3,488.5	3,461.4	27.10	128.711		
7,500.0	7,393.1	7,450.0	7,371.7	13.4	21.0	73.97	-1,392.8	-3,320.0	3,470.9	3,443.6	27.38	126.761		
7,550.0	7,421.1	7,471.7	7,391.9	13.5	21.0	75.74	-1,399.9	-3,316.7	3,453.0	3,425.3	27.70	124.671		
7,600.0	7,446.1	7,500.0	7,417.9	13.6	21.0	77.62	-1,410.3	-3,312.5	3,435.0	3,407.0	28.05	122.456		
7,650.0	7,468.0	7,500.0	7,417.9	13.8	21.0	79.22	-1,410.3	-3,312.5	3,416.7	3,388.2	28.47	120.009		
7,700.0	7,486.7	7,500.0	7,417.9	14.0	21.0	80.81	-1,410.3	-3,312.5	3,398.4	3,369.5	28.92	117.497		
7,750.0	7,502.2	7,518.0	7,434.1	14.2	21.0	82.62	-1,417.5	-3,309.8	3,380.3	3,350.9	29.37	115.094		
7,800.0	7,514.3	7,528.7	7,443.7	14.6	21.0	84.32	-1,422.1	-3,308.2	3,362.3	3,332.5	29.84	112.676		
7,850.0	7,523.0	7,550.0	7,462.4	14.9	21.0	86.15	-1,431.7	-3,305.0	3,344.7	3,314.4	30.29	110.426		
7,900.0	7,528.2	7,550.0	7,462.4	15.3	21.0	87.63	-1,431.7	-3,305.0	3,327.4	3,296.7	30.79	108.087		
7,950.2	7,530.0	7,550.0	7,462.4	15.8	21.0	89.06	-1,431.7	-3,305.0	3,310.7	3,279.4	31.28	105.848		
8,000.0	7,530.0	7,567.1	7,477.2	16.2	20.9	89.33	-1,440.0	-3,302.4	3,294.7	3,263.0	31.70	103.931		
8,100.0	7,530.0	7,600.0	7,504.9	17.3	20.9	89.83	-1,457.0	-3,297.4	3,264.4	3,231.8	32.65	99.986		
8,200.0	7,530.0	7,600.0	7,504.9	18.4	20.9	89.83	-1,457.0	-3,297.4	3,236.6	3,202.7	33.82	95.696		
8,300.0	7,530.0	7,635.4	7,533.5	19.7	20.9	90.36	-1,477.2	-3,292.2	3,211.1	3,176.2	34.94	91.905		
8,400.0	7,530.0	7,664.6	7,556.1	21.0	20.8	90.78	-1,495.1	-3,287.8	3,188.2	3,152.0	36.15	88.192		
8,500.0	7,530.0	7,700.0	7,582.3	22.4	20.8	91.26	-1,518.4	-3,282.7	3,167.6	3,130.2	37.39	84.721		
8,600.0	7,530.0	7,735.9	7,607.3	23.8	20.7	91.72	-1,543.6	-3,277.5	3,149.2	3,110.6	38.67	81.443		
8,700.0	7,530.0	7,779.5	7,635.4	25.3	20.6	92.25	-1,576.3	-3,271.4	3,133.0	3,093.1	39.96	78.412		
8,800.0	7,530.0	7,829.1	7,664.4	26.8	20.6	92.79	-1,616.1	-3,264.7	3,118.8	3,077.6	41.26	75.590		
8,900.0	7,530.0	7,885.4	7,692.8	28.3	20.5	93.32	-1,664.0	-3,257.5	3,106.3	3,063.8	42.59	72.942		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - 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	
9,000.0	7,530.0	7,950.0	7,719.6	29.9	20.5	93.83	-1,722.3	-3,249.8	3,095.4	3,051.4	43.95	70.431		
9,100.0	7,530.0	8,017.4	7,740.3	31.4	20.5	94.22	-1,786.0	-3,242.6	3,085.6	3,040.2	45.40	67.958		
9,200.0	7,530.0	8,091.4	7,754.3	33.0	20.6	94.50	-1,858.2	-3,235.7	3,076.8	3,029.9	46.96	65.518		
9,300.0	7,530.0	8,169.1	7,759.0	34.7	20.7	94.59	-1,935.5	-3,229.6	3,068.9	3,020.2	48.66	63.066		
9,400.0	7,530.0	8,268.8	7,759.0	36.3	21.0	94.60	-2,034.9	-3,222.7	3,061.2	3,010.6	50.61	60.484		
9,500.0	7,530.0	8,368.5	7,759.0	37.9	21.5	94.61	-2,134.4	-3,215.8	3,053.6	3,000.8	52.75	57.891		
9,600.0	7,530.0	8,464.6	7,759.0	39.6	22.0	94.63	-2,230.3	-3,209.1	3,046.0	2,990.9	55.03	55.355		
9,700.0	7,530.0	8,532.2	7,759.0	41.2	22.5	94.63	-2,297.7	-3,204.8	3,038.9	2,981.7	57.24	53.088		
9,800.0	7,530.0	8,600.0	7,759.0	42.9	23.0	94.64	-2,365.5	-3,201.2	3,033.1	2,973.5	59.50	50.972		
9,900.0	7,530.0	8,662.9	7,759.0	44.5	23.5	94.64	-2,428.3	-3,198.7	3,028.3	2,966.5	61.81	48.995		
10,000.0	7,530.0	8,728.4	7,759.0	46.2	24.0	94.65	-2,493.8	-3,196.8	3,024.7	2,960.5	64.18	47.131		
10,100.0	7,530.0	8,800.0	7,759.0	47.9	24.7	94.65	-2,565.4	-3,195.5	3,022.2	2,955.5	66.66	45.340		
10,200.0	7,530.0	8,864.6	7,759.0	49.6	25.3	94.65	-2,630.0	-3,195.2	3,020.9	2,951.8	69.11	43.710		
10,300.0	7,530.0	8,956.7	7,759.0	51.3	26.2	94.65	-2,722.1	-3,195.2	3,020.2	2,948.2	71.96	41.968		
10,400.0	7,530.0	9,056.7	7,759.0	53.0	27.3	94.65	-2,822.1	-3,195.2	3,019.5	2,944.5	74.97	40.274		
10,500.0	7,530.0	9,156.7	7,759.0	54.7	28.4	94.65	-2,922.1	-3,195.2	3,018.8	2,940.8	78.04	38.681		
10,600.0	7,530.0	9,256.7	7,759.0	56.4	29.6	94.66	-3,022.1	-3,195.2	3,018.1	2,937.0	81.16	37.186		
10,700.0	7,530.0	9,356.7	7,759.0	58.1	30.9	94.66	-3,122.1	-3,195.3	3,017.5	2,933.1	84.32	35.785		
10,777.5	7,530.0	9,411.6	7,759.0	59.4	31.6	94.66	-3,177.0	-3,195.5	3,017.2	2,930.7	86.46	34.898	CC	
10,800.0	7,530.0	9,434.1	7,759.0	59.8	31.9	94.66	-3,199.5	-3,195.6	3,017.2	2,930.0	87.18	34.608		
10,900.0	7,530.0	9,534.1	7,759.0	61.5	33.2	94.66	-3,299.5	-3,196.4	3,017.3	2,926.9	90.41	33.375		
11,000.0	7,530.0	9,634.1	7,759.0	63.2	34.6	94.66	-3,399.5	-3,197.2	3,017.4	2,923.7	93.66	32.217		
11,100.0	7,530.0	9,734.1	7,759.0	64.9	36.0	94.66	-3,499.5	-3,197.9	3,017.4	2,920.5	96.93	31.130		
11,200.0	7,530.0	9,834.1	7,759.0	66.6	37.4	94.66	-3,599.5	-3,198.7	3,017.5	2,917.3	100.22	30.108		
11,300.0	7,530.0	9,934.1	7,759.0	68.4	38.9	94.66	-3,699.5	-3,199.5	3,017.6	2,914.0	103.53	29.146		
11,400.0	7,530.0	10,034.1	7,759.0	70.1	40.3	94.66	-3,799.5	-3,200.2	3,017.6	2,910.8	106.86	28.239		
11,500.0	7,530.0	10,134.1	7,759.0	71.8	41.8	94.66	-3,899.5	-3,201.0	3,017.7	2,907.5	110.20	27.384		
11,600.0	7,530.0	10,234.1	7,759.0	73.5	43.4	94.66	-3,999.5	-3,201.8	3,017.8	2,904.2	113.55	26.576		
11,700.0	7,530.0	10,334.1	7,759.0	75.3	44.9	94.66	-4,099.5	-3,202.5	3,017.8	2,900.9	116.91	25.812		
11,800.0	7,530.0	10,434.1	7,759.0	77.0	46.5	94.66	-4,199.5	-3,203.3	3,017.9	2,897.6	120.29	25.089		
11,900.0	7,530.0	10,534.1	7,759.0	78.7	48.0	94.66	-4,299.5	-3,204.1	3,018.0	2,894.3	123.67	24.404		
12,000.0	7,530.0	10,634.1	7,759.0	80.4	49.6	94.66	-4,399.5	-3,204.8	3,018.0	2,891.0	127.06	23.754		
12,100.0	7,530.0	10,734.1	7,759.0	82.2	51.2	94.66	-4,499.5	-3,205.6	3,018.1	2,887.7	130.45	23.136		
12,200.0	7,530.0	10,834.1	7,759.0	83.9	52.8	94.66	-4,599.5	-3,206.4	3,018.2	2,884.3	133.85	22.548		
12,300.0	7,530.0	10,934.1	7,759.0	85.6	54.4	94.66	-4,699.5	-3,207.1	3,018.2	2,881.0	137.26	21.989		
12,400.0	7,530.0	11,034.1	7,759.0	87.4	56.0	94.66	-4,799.5	-3,207.9	3,018.3	2,877.6	140.67	21.456		
12,500.0	7,530.0	11,134.1	7,759.0	89.1	57.7	94.66	-4,899.5	-3,208.7	3,018.4	2,874.3	144.09	20.948		
12,600.0	7,530.0	11,234.1	7,759.0	90.8	59.3	94.66	-4,999.4	-3,209.4	3,018.4	2,870.9	147.51	20.462		
12,700.0	7,530.0	11,334.1	7,759.0	92.6	60.9	94.66	-5,099.4	-3,210.2	3,018.5	2,867.6	150.94	19.998		
12,800.0	7,530.0	11,434.1	7,759.0	94.3	62.6	94.65	-5,199.4	-3,211.0	3,018.6	2,864.2	154.37	19.555		
12,900.0	7,530.0	11,534.1	7,759.0	96.0	64.2	94.65	-5,299.4	-3,211.7	3,018.7	2,860.9	157.80	19.130		
13,000.0	7,530.0	11,634.1	7,759.0	97.8	65.9	94.65	-5,399.4	-3,212.5	3,018.7	2,857.5	161.24	18.722		
13,100.0	7,530.0	11,734.1	7,759.0	99.5	67.6	94.65	-5,499.4	-3,213.3	3,018.8	2,854.1	164.68	18.332		
13,200.0	7,530.0	11,834.1	7,759.0	101.3	69.2	94.65	-5,599.4	-3,214.0	3,018.9	2,850.7	168.12	17.957		
13,300.0	7,530.0	11,934.1	7,759.0	103.0	70.9	94.65	-5,699.4	-3,214.8	3,018.9	2,847.4	171.56	17.597		
13,400.0	7,530.0	12,034.1	7,759.0	104.7	72.6	94.65	-5,799.4	-3,215.6	3,019.0	2,844.0	175.01	17.251		
13,500.0	7,530.0	12,134.1	7,759.0	106.5	74.3	94.65	-5,899.4	-3,216.3	3,019.1	2,840.6	178.46	16.918		
13,600.0	7,530.0	12,234.1	7,759.0	108.2	75.9	94.65	-5,999.4	-3,217.1	3,019.1	2,837.2	181.91	16.597		
13,700.0	7,530.0	12,334.1	7,759.0	110.0	77.6	94.65	-6,099.4	-3,217.9	3,019.2	2,833.8	185.36	16.288		
13,800.0	7,530.0	12,434.1	7,759.0	111.7	79.3	94.65	-6,199.4	-3,218.6	3,019.3	2,830.5	188.81	15.991		
13,900.0	7,530.0	12,534.1	7,759.0	113.4	81.0	94.65	-6,299.4	-3,219.4	3,019.3	2,827.1	192.27	15.704		
14,000.0	7,530.0	12,634.1	7,759.0	115.2	82.7	94.65	-6,399.4	-3,220.2	3,019.4	2,823.7	195.73	15.426		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	12,734.1	7,759.0	116.9	84.4	94.65	-6,499.4	-3,220.9	3,019.5	2,820.3	199.19	15.159		
14,200.0	7,530.0	12,834.1	7,759.0	118.7	86.1	94.65	-6,599.4	-3,221.7	3,019.5	2,816.9	202.65	14.900		
14,300.0	7,530.0	12,934.1	7,759.0	120.4	87.8	94.65	-6,699.4	-3,222.5	3,019.6	2,813.5	206.11	14.650		
14,400.0	7,530.0	13,034.1	7,759.0	122.1	89.5	94.65	-6,799.4	-3,223.2	3,019.7	2,810.1	209.57	14.409		
14,500.0	7,530.0	13,134.1	7,759.0	123.9	91.2	94.65	-6,899.4	-3,224.0	3,019.7	2,806.7	213.04	14.175		
14,600.0	7,530.0	13,234.1	7,759.0	125.6	92.9	94.65	-6,999.4	-3,224.8	3,019.8	2,803.3	216.50	13.948		
14,700.0	7,530.0	13,334.1	7,759.0	127.4	94.6	94.65	-7,099.4	-3,225.5	3,019.9	2,799.9	219.97	13.729		
14,800.0	7,530.0	13,434.1	7,759.0	129.1	96.3	94.65	-7,199.4	-3,226.3	3,020.0	2,796.5	223.44	13.516		
14,900.0	7,530.0	13,534.1	7,759.0	130.9	98.0	94.65	-7,299.4	-3,227.1	3,020.0	2,793.1	226.91	13.310		
15,000.0	7,530.0	13,634.1	7,759.0	132.6	99.8	94.65	-7,399.4	-3,227.8	3,020.1	2,789.7	230.38	13.109		
15,100.0	7,530.0	13,734.1	7,759.0	134.4	101.5	94.65	-7,499.4	-3,228.6	3,020.2	2,786.3	233.85	12.915		
15,200.0	7,530.0	13,834.1	7,759.0	136.1	103.2	94.65	-7,599.4	-3,229.4	3,020.2	2,782.9	237.32	12.726		
15,300.0	7,530.0	13,934.1	7,759.0	137.9	104.9	94.65	-7,699.4	-3,230.1	3,020.3	2,779.5	240.79	12.543		
15,400.0	7,530.0	14,034.1	7,759.0	139.6	106.6	94.65	-7,799.4	-3,230.9	3,020.4	2,776.1	244.26	12.365		
15,500.0	7,530.0	14,134.1	7,759.0	141.3	108.3	94.65	-7,899.4	-3,231.7	3,020.4	2,772.7	247.74	12.192		
15,600.0	7,530.0	14,234.1	7,759.0	143.1	110.1	94.65	-7,999.4	-3,232.4	3,020.5	2,769.3	251.21	12.024		
15,700.0	7,530.0	14,334.1	7,759.0	144.8	111.8	94.65	-8,099.4	-3,233.2	3,020.6	2,765.9	254.69	11.860		
15,800.0	7,530.0	14,434.1	7,759.0	146.6	113.5	94.65	-8,199.4	-3,234.0	3,020.6	2,762.5	258.16	11.701		
15,900.0	7,530.0	14,534.1	7,759.0	148.3	115.2	94.65	-8,299.4	-3,234.7	3,020.7	2,759.1	261.64	11.545		
16,000.0	7,530.0	14,634.1	7,759.0	150.1	117.0	94.65	-8,399.3	-3,235.5	3,020.8	2,755.7	265.11	11.394		
16,100.0	7,530.0	14,734.1	7,759.0	151.8	118.7	94.65	-8,499.3	-3,236.3	3,020.8	2,752.2	268.59	11.247		
16,200.0	7,530.0	14,834.1	7,759.0	153.6	120.4	94.65	-8,599.3	-3,237.0	3,020.9	2,748.8	272.07	11.103		
16,300.0	7,530.0	14,934.1	7,759.0	155.3	122.1	94.65	-8,699.3	-3,237.8	3,021.0	2,745.4	275.55	10.964		
16,400.0	7,530.0	15,034.1	7,759.0	157.1	123.9	94.65	-8,799.3	-3,238.6	3,021.0	2,742.0	279.03	10.827		
16,500.0	7,530.0	15,134.1	7,759.0	158.8	125.6	94.65	-8,899.3	-3,239.3	3,021.1	2,738.6	282.51	10.694		
16,600.0	7,530.0	15,234.1	7,759.0	160.6	127.3	94.65	-8,999.3	-3,240.1	3,021.2	2,735.2	285.98	10.564		
16,700.0	7,530.0	15,334.1	7,759.0	162.3	129.1	94.65	-9,099.3	-3,240.9	3,021.2	2,731.8	289.47	10.437		
16,800.0	7,530.0	15,434.1	7,759.0	164.1	130.8	94.65	-9,199.3	-3,241.6	3,021.3	2,728.4	292.95	10.314		
16,900.0	7,530.0	15,534.1	7,759.0	165.8	132.5	94.65	-9,299.3	-3,242.4	3,021.4	2,725.0	296.43	10.193		
17,000.0	7,530.0	15,634.1	7,759.0	167.6	134.2	94.65	-9,399.3	-3,243.2	3,021.5	2,721.5	299.91	10.075		
17,100.0	7,530.0	15,734.1	7,759.0	169.3	136.0	94.65	-9,499.3	-3,243.9	3,021.5	2,718.1	303.39	9.959		
17,200.0	7,530.0	15,834.1	7,759.0	171.1	137.7	94.65	-9,599.3	-3,244.7	3,021.6	2,714.7	306.87	9.846		
17,300.0	7,530.0	15,934.1	7,759.0	172.8	139.4	94.65	-9,699.3	-3,245.5	3,021.7	2,711.3	310.35	9.736		
17,400.0	7,530.0	16,034.1	7,759.0	174.5	141.2	94.65	-9,799.3	-3,246.2	3,021.7	2,707.9	313.84	9.628		
17,411.2	7,530.0	16,036.2	7,759.0	174.7	141.2	94.65	-9,801.4	-3,246.2	3,021.7	2,707.7	314.07	9.621 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-115.34	-1,931.3	-4,077.4	4,511.7						
100.0	100.0	84.0	84.0	0.2	0.1	-115.34	-1,931.3	-4,077.4	4,511.7	4,511.4	0.26	N/A			
200.0	200.0	184.0	184.0	0.3	0.3	-115.34	-1,931.3	-4,077.4	4,511.7	4,511.1	0.60	7,471.079			
300.0	300.0	284.0	284.0	0.5	0.5	-115.34	-1,931.3	-4,077.4	4,511.7	4,510.7	0.95	4,734.421			
400.0	400.0	693.0	692.7	0.7	1.2	-115.34	-1,925.0	-4,065.5	4,508.8	4,506.9	1.85	2,439.280			
500.0	500.0	1,155.8	1,152.6	0.8	2.3	-115.31	-1,901.4	-4,021.1	4,497.9	4,495.0	2.90	1,552.833			
600.0	600.0	1,443.0	1,435.5	1.0	3.3	-92.47	-1,878.1	-3,977.2	4,480.0	4,476.5	3.50	1,280.143			
700.0	700.0	1,541.2	1,531.9	1.2	3.6	-92.69	-1,869.3	-3,960.7	4,461.1	4,457.3	3.85	1,159.391			
800.0	799.9	1,639.4	1,628.3	1.4	4.0	-92.92	-1,860.5	-3,944.2	4,442.3	4,438.1	4.20	1,057.332			
848.7	848.4	1,687.1	1,675.1	1.5	4.2	-93.05	-1,856.3	-3,936.2	4,433.2	4,428.8	4.38	1,013.137			
900.0	899.7	1,737.5	1,724.6	1.6	4.3	-93.08	-1,851.8	-3,927.7	4,423.6	4,419.0	4.56	969.884			
1,000.0	999.5	1,835.6	1,820.9	1.8	4.7	-93.15	-1,843.0	-3,911.3	4,404.9	4,399.9	4.92	894.607			
1,100.0	1,099.3	1,933.7	1,917.2	2.0	5.1	-93.22	-1,834.3	-3,894.8	4,386.2	4,380.9	5.29	829.301			
1,200.0	1,199.1	2,031.8	2,013.5	2.2	5.4	-93.29	-1,825.5	-3,878.3	4,367.4	4,361.8	5.66	772.204			
1,300.0	1,298.9	2,129.8	2,109.8	2.4	5.8	-93.36	-1,816.7	-3,861.8	4,348.7	4,342.7	6.02	721.914			
1,400.0	1,398.8	2,227.9	2,206.1	2.6	6.2	-93.43	-1,808.0	-3,845.3	4,330.1	4,323.7	6.39	677.318			
1,500.0	1,498.6	2,326.0	2,302.4	2.8	6.5	-93.51	-1,799.2	-3,828.8	4,311.4	4,304.6	6.76	637.521			
1,600.0	1,598.4	2,424.1	2,398.7	3.0	6.9	-93.58	-1,790.5	-3,812.4	4,292.7	4,285.6	7.13	601.802			
1,700.0	1,698.2	2,522.2	2,495.0	3.2	7.3	-93.65	-1,781.7	-3,795.9	4,274.0	4,266.5	7.50	569.576			
1,800.0	1,798.0	2,620.3	2,591.3	3.4	7.6	-93.73	-1,773.0	-3,779.4	4,255.3	4,247.5	7.88	540.360			
1,900.0	1,897.8	2,718.4	2,687.6	3.6	8.0	-93.80	-1,764.2	-3,762.9	4,236.7	4,228.4	8.25	513.755			
2,000.0	1,997.7	2,816.5	2,783.9	3.8	8.4	-93.88	-1,755.5	-3,746.4	4,218.0	4,209.4	8.62	489.431			
2,100.0	2,097.5	2,914.6	2,880.2	4.0	8.7	-93.95	-1,746.7	-3,729.9	4,199.4	4,190.4	8.99	467.108			
2,200.0	2,197.3	3,012.7	2,976.5	4.2	9.1	-94.03	-1,737.9	-3,713.5	4,180.7	4,171.4	9.36	446.551			
2,300.0	2,297.1	3,110.8	3,072.8	4.4	9.5	-94.11	-1,729.2	-3,697.0	4,162.1	4,152.4	9.73	427.559			
2,400.0	2,396.9	3,208.9	3,169.1	4.6	9.8	-94.19	-1,720.4	-3,680.5	4,143.5	4,133.4	10.11	409.962			
2,500.0	2,496.7	3,306.9	3,265.4	4.8	10.2	-94.27	-1,711.7	-3,664.0	4,124.9	4,114.4	10.48	393.612			
2,600.0	2,596.5	3,405.0	3,361.7	5.0	10.6	-94.35	-1,702.9	-3,647.5	4,106.3	4,095.4	10.85	378.382			
2,700.0	2,696.4	3,503.1	3,458.0	5.2	10.9	-94.43	-1,694.2	-3,631.1	4,087.7	4,076.4	11.22	364.160			
2,800.0	2,796.2	3,601.2	3,554.3	5.4	11.3	-94.51	-1,685.4	-3,614.6	4,069.1	4,057.5	11.60	350.851			
2,900.0	2,896.0	3,699.3	3,650.6	5.6	11.7	-94.59	-1,676.6	-3,598.1	4,050.5	4,038.5	11.97	338.369			
3,000.0	2,995.8	3,797.4	3,746.9	5.8	12.0	-94.67	-1,667.9	-3,581.6	4,031.9	4,019.6	12.34	326.640			
3,100.0	3,095.6	3,895.5	3,843.2	6.0	12.4	-94.76	-1,659.1	-3,565.1	4,013.3	4,000.6	12.72	315.597			
3,200.0	3,195.4	3,993.6	3,939.5	6.2	12.8	-94.84	-1,650.4	-3,548.6	3,994.8	3,981.7	13.09	305.183			
3,300.0	3,295.2	4,091.7	4,035.8	6.4	13.2	-94.92	-1,641.6	-3,532.2	3,976.2	3,962.8	13.46	295.346			
3,400.0	3,395.1	4,189.8	4,132.1	6.6	13.5	-95.01	-1,632.9	-3,515.7	3,957.7	3,943.9	13.84	286.038			
3,500.0	3,494.9	4,287.9	4,228.4	6.8	13.9	-95.10	-1,624.1	-3,499.2	3,939.2	3,924.9	14.21	277.218			
3,600.0	3,594.7	4,386.0	4,324.7	7.0	14.3	-95.18	-1,615.4	-3,482.7	3,920.6	3,906.1	14.58	268.850			
3,700.0	3,694.5	4,484.0	4,421.0	7.2	14.6	-95.27	-1,606.6	-3,466.2	3,902.1	3,887.2	14.96	260.898			
3,800.0	3,794.3	4,582.1	4,517.3	7.4	15.0	-95.36	-1,597.8	-3,449.7	3,883.6	3,868.3	15.33	253.334			
3,900.0	3,894.1	4,680.2	4,613.6	7.6	15.4	-95.45	-1,589.1	-3,433.3	3,865.1	3,849.4	15.70	246.128			
4,000.0	3,994.0	4,778.3	4,709.9	7.8	15.8	-95.54	-1,580.3	-3,416.8	3,846.6	3,830.5	16.08	239.257			
4,100.0	4,093.8	4,876.4	4,806.2	8.0	16.1	-95.63	-1,571.6	-3,400.3	3,828.1	3,811.7	16.45	232.698			
4,200.0	4,193.6	4,974.5	4,902.5	8.2	16.5	-95.73	-1,562.8	-3,383.8	3,809.7	3,792.8	16.83	226.429			
4,300.0	4,293.4	5,072.6	4,998.8	8.4	16.9	-95.82	-1,554.1	-3,367.3	3,791.2	3,774.0	17.20	220.432			
4,400.0	4,393.2	5,170.7	5,095.1	8.6	17.2	-95.91	-1,545.3	-3,350.8	3,772.8	3,755.2	17.57	214.690			
4,500.0	4,493.0	5,268.8	5,191.4	8.8	17.6	-96.01	-1,536.6	-3,334.4	3,754.3	3,736.4	17.95	209.187			
4,600.0	4,592.8	5,366.9	5,287.7	9.0	18.0	-96.11	-1,527.8	-3,317.9	3,735.9	3,717.6	18.32	203.908			
4,700.0	4,692.7	5,465.0	5,384.0	9.3	18.4	-96.20	-1,519.0	-3,301.4	3,717.5	3,698.8	18.70	198.839			
4,800.0	4,792.5	5,563.1	5,480.3	9.5	18.7	-96.30	-1,510.3	-3,284.9	3,699.1	3,680.0	19.07	193.969			
4,900.0	4,892.3	5,661.1	5,576.6	9.7	19.1	-96.40	-1,501.5	-3,268.4	3,680.7	3,661.2	19.45	189.285			
5,000.0	4,992.1	5,759.2	5,672.9	9.9	19.5	-96.50	-1,492.8	-3,251.9	3,662.3	3,642.5	19.82	184.778			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1												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	5,091.9	5,857.3	5,769.2	10.1	19.8	-96.60	-1,484.0	-3,235.5	3,643.9	3,623.7	20.19	180.438	
5,200.0	5,191.7	5,955.4	5,865.5	10.3	20.2	-96.70	-1,475.3	-3,219.0	3,625.5	3,605.0	20.57	176.255	
5,300.0	5,291.5	6,053.5	5,961.8	10.5	20.6	-96.81	-1,466.5	-3,202.5	3,607.2	3,586.2	20.95	172.221	
5,400.0	5,391.4	6,151.6	6,058.1	10.7	20.9	-96.91	-1,457.7	-3,186.0	3,588.8	3,567.5	21.32	168.328	
5,500.0	5,491.2	6,249.7	6,154.4	10.9	21.3	-97.02	-1,449.0	-3,169.5	3,570.5	3,548.8	21.70	164.569	
5,600.0	5,591.0	6,347.8	6,250.7	11.1	21.7	-97.12	-1,440.2	-3,153.1	3,552.2	3,530.1	22.07	160.938	
5,700.0	5,690.8	6,445.9	6,347.0	11.3	22.1	-97.23	-1,431.5	-3,136.6	3,533.9	3,511.4	22.45	157.427	
5,800.0	5,790.6	6,544.0	6,443.3	11.5	22.4	-97.34	-1,422.7	-3,120.1	3,515.6	3,492.8	22.82	154.031	
5,900.0	5,890.4	6,642.1	6,539.6	11.7	22.8	-97.45	-1,414.0	-3,103.6	3,497.3	3,474.1	23.20	150.744	
6,000.0	5,990.3	6,740.2	6,635.9	11.9	23.2	-97.56	-1,405.2	-3,087.1	3,479.0	3,455.5	23.58	147.561	
6,100.0	6,090.1	6,838.2	6,732.1	12.1	23.6	-97.67	-1,396.5	-3,070.6	3,460.8	3,436.8	23.95	144.477	
6,200.0	6,189.9	6,936.3	6,828.4	12.3	23.9	-97.78	-1,387.7	-3,054.2	3,442.5	3,418.2	24.33	141.488	
6,300.0	6,289.7	7,034.4	6,924.7	12.5	24.3	-97.90	-1,378.9	-3,037.7	3,424.3	3,399.6	24.71	138.590	
6,400.0	6,389.5	7,132.5	7,021.0	12.7	24.7	-98.01	-1,370.2	-3,021.2	3,406.1	3,381.0	25.09	135.777	
6,500.0	6,489.3	7,230.6	7,117.3	12.9	25.0	-98.13	-1,361.4	-3,004.7	3,387.9	3,362.4	25.46	133.047	
6,600.0	6,589.1	7,275.6	7,161.5	13.1	25.2	-98.19	-1,357.7	-2,997.1	3,370.2	3,344.5	25.75	130.886	
6,700.0	6,689.0	7,300.0	7,185.6	13.3	25.3	-98.24	-1,356.8	-2,993.0	3,354.7	3,328.7	26.00	129.028	
6,785.3	6,774.1	7,321.5	7,206.7	13.5	25.3	-98.29	-1,356.9	-2,989.4	3,343.2	3,317.0	26.22	127.513	
6,800.0	6,788.8	7,325.1	7,210.3	13.5	25.3	-87.14	-1,357.0	-2,988.8	3,341.3	3,315.0	26.23	127.359	
6,850.0	6,838.8	7,350.0	7,234.8	13.6	25.4	23.81	-1,358.2	-2,984.6	3,334.1	3,307.8	26.27	126.902	
6,900.0	6,888.6	7,350.0	7,234.8	13.6	25.4	46.35	-1,358.2	-2,984.6	3,325.5	3,299.3	26.21	126.877	
6,950.0	6,938.1	7,350.0	7,234.8	13.7	25.4	52.15	-1,358.2	-2,984.6	3,315.8	3,289.7	26.11	127.001	
7,000.0	6,987.0	7,374.4	7,258.8	13.7	25.5	55.15	-1,360.5	-2,980.5	3,304.9	3,278.8	26.03	126.988	
7,050.0	7,035.0	7,400.0	7,283.8	13.6	25.5	57.28	-1,364.0	-2,976.2	3,293.0	3,267.0	25.92	127.023	
7,100.0	7,082.0	7,400.0	7,283.8	13.6	25.5	59.03	-1,364.0	-2,976.2	3,279.8	3,254.0	25.78	127.213	
7,150.0	7,127.7	7,400.0	7,283.8	13.5	25.5	60.61	-1,364.0	-2,976.2	3,265.8	3,240.1	25.66	127.265	
7,200.0	7,171.8	7,423.2	7,306.2	13.5	25.5	62.21	-1,368.1	-2,972.4	3,250.7	3,225.1	25.61	126.933	
7,250.0	7,214.2	7,450.0	7,332.0	13.4	25.6	63.84	-1,374.0	-2,968.0	3,234.9	3,209.3	25.61	126.311	
7,300.0	7,254.6	7,450.0	7,332.0	13.4	25.6	65.38	-1,374.0	-2,968.0	3,218.1	3,192.4	25.65	125.472	
7,350.0	7,292.9	7,450.0	7,332.0	13.3	25.6	66.94	-1,374.0	-2,968.0	3,200.7	3,174.9	25.76	124.238	
7,400.0	7,328.9	7,470.2	7,351.2	13.3	25.6	68.68	-1,379.3	-2,964.7	3,182.6	3,156.6	25.97	122.525	
7,450.0	7,362.3	7,481.5	7,361.9	13.3	25.6	70.42	-1,382.6	-2,962.9	3,163.9	3,137.7	26.26	120.475	
7,500.0	7,393.1	7,500.0	7,379.2	13.4	25.6	72.27	-1,388.3	-2,959.9	3,144.9	3,118.3	26.63	118.086	
7,550.0	7,421.1	7,500.0	7,379.2	13.5	25.6	73.98	-1,388.3	-2,959.9	3,125.4	3,098.4	27.06	115.486	
7,600.0	7,446.1	7,500.0	7,379.2	13.6	25.6	75.70	-1,388.3	-2,959.9	3,105.8	3,078.3	27.56	112.714	
7,650.0	7,468.0	7,524.5	7,401.9	13.8	25.6	77.74	-1,396.9	-2,956.0	3,085.9	3,057.8	28.09	109.862	
7,700.0	7,486.7	7,550.0	7,425.0	14.0	25.6	79.84	-1,406.8	-2,952.1	3,066.1	3,037.5	28.64	107.044	
7,750.0	7,502.2	7,550.0	7,425.0	14.2	25.6	81.59	-1,406.8	-2,952.1	3,046.3	3,017.0	29.23	104.231	
7,800.0	7,514.3	7,550.0	7,425.0	14.6	25.6	83.31	-1,406.8	-2,952.1	3,026.7	2,996.8	29.81	101.527	
7,850.0	7,523.0	7,550.0	7,425.0	14.9	25.6	84.98	-1,406.8	-2,952.1	3,007.5	2,977.1	30.39	98.968	
7,900.0	7,528.2	7,570.4	7,443.3	15.3	25.6	86.96	-1,415.4	-2,948.9	2,988.6	2,957.7	30.90	96.732	
7,950.2	7,530.0	7,578.2	7,450.1	15.8	25.6	88.68	-1,418.9	-2,947.8	2,970.2	2,938.8	31.40	94.597	
8,000.0	7,530.0	7,600.0	7,469.1	16.2	25.6	89.07	-1,429.2	-2,944.5	2,952.8	2,921.0	31.82	92.810	
8,100.0	7,530.0	7,600.0	7,469.1	17.3	25.6	89.07	-1,429.2	-2,944.5	2,919.6	2,886.7	32.88	88.792	
8,200.0	7,530.0	7,620.6	7,486.6	18.4	25.6	89.43	-1,439.5	-2,941.5	2,889.2	2,855.3	33.98	85.027	
8,300.0	7,530.0	7,650.0	7,511.0	19.7	25.6	89.94	-1,455.4	-2,937.3	2,861.7	2,826.6	35.13	81.452	
8,400.0	7,530.0	7,650.0	7,511.0	21.0	25.6	89.94	-1,455.4	-2,937.3	2,837.1	2,800.6	36.47	77.802	
8,500.0	7,530.0	7,700.0	7,550.6	22.4	25.6	90.76	-1,485.2	-2,930.6	2,815.2	2,777.6	37.65	74.763	
8,600.0	7,530.0	7,719.4	7,565.2	23.8	25.6	91.07	-1,497.7	-2,928.1	2,796.1	2,757.1	39.01	71.676	
8,700.0	7,530.0	7,750.0	7,587.4	25.3	25.5	91.53	-1,518.4	-2,924.3	2,779.8	2,739.4	40.36	68.881	
8,800.0	7,530.0	7,800.0	7,621.2	26.8	25.5	92.24	-1,554.7	-2,918.5	2,766.1	2,724.5	41.65	66.419	
8,900.0	7,530.0	7,833.3	7,642.0	28.3	25.5	92.68	-1,580.5	-2,915.0	2,754.8	2,711.8	43.04	64.004	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1												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	7,530.0	7,881.7	7,669.4	29.9	25.4	93.25	-1,620.0	-2,910.3	2,745.9	2,701.5	44.40	61.840	
9,100.0	7,530.0	7,935.9	7,696.2	31.4	25.4	93.82	-1,667.0	-2,905.7	2,739.0	2,693.2	45.78	59.826	
9,200.0	7,530.0	8,000.0	7,721.9	33.0	25.3	94.37	-1,725.5	-2,901.3	2,733.9	2,686.7	47.19	57.936	
9,300.0	7,530.0	8,061.6	7,740.5	34.7	25.3	94.76	-1,784.1	-2,898.1	2,730.3	2,681.6	48.69	56.077	
9,400.0	7,530.0	8,131.2	7,753.8	36.3	25.3	95.04	-1,852.4	-2,895.9	2,727.9	2,677.6	50.27	54.260	
9,500.0	7,530.0	8,203.3	7,759.0	37.9	25.4	95.15	-1,924.2	-2,895.0	2,726.6	2,674.7	51.98	52.457	
9,600.0	7,530.0	8,301.2	7,759.0	39.6	25.5	95.16	-2,022.1	-2,895.0	2,726.0	2,672.0	53.91	50.568	
9,700.0	7,530.0	8,401.2	7,759.0	41.2	25.8	95.16	-2,122.1	-2,895.0	2,725.3	2,669.2	56.04	48.627	
9,800.0	7,530.0	8,501.2	7,759.0	42.9	26.2	95.16	-2,222.1	-2,895.0	2,724.6	2,666.2	58.37	46.678	
9,900.0	7,530.0	8,601.2	7,759.0	44.5	26.7	95.16	-2,322.1	-2,895.0	2,723.9	2,663.1	60.86	44.757	
10,000.0	7,530.0	8,701.2	7,759.0	46.2	27.3	95.16	-2,422.1	-2,895.1	2,723.2	2,659.7	63.49	42.891	
10,100.0	7,530.0	8,801.2	7,759.0	47.9	28.0	95.16	-2,522.1	-2,895.1	2,722.6	2,656.3	66.24	41.099	
10,200.0	7,530.0	8,901.2	7,759.0	49.6	28.8	95.16	-2,622.1	-2,895.1	2,721.9	2,652.8	69.10	39.392	
10,300.0	7,530.0	9,001.2	7,759.0	51.3	29.7	95.17	-2,722.1	-2,895.1	2,721.2	2,649.2	72.03	37.777	
10,400.0	7,530.0	9,101.2	7,759.0	53.0	30.6	95.17	-2,822.1	-2,895.1	2,720.5	2,645.5	75.04	36.253	
10,500.0	7,530.0	9,201.2	7,759.0	54.7	31.7	95.17	-2,922.1	-2,895.1	2,719.8	2,641.7	78.11	34.821	
10,600.0	7,530.0	9,301.2	7,759.0	56.4	32.7	95.17	-3,022.1	-2,895.2	2,719.2	2,637.9	81.23	33.477	
10,700.0	7,530.0	9,401.2	7,759.0	58.1	33.9	95.17	-3,122.1	-2,895.2	2,718.5	2,634.1	84.38	32.215	
10,800.0	7,530.0	9,501.2	7,759.0	59.8	35.1	95.17	-3,222.1	-2,895.2	2,717.8	2,630.2	87.58	31.033	
10,900.0	7,530.0	9,601.2	7,759.0	61.5	36.3	95.17	-3,322.1	-2,895.2	2,717.1	2,626.3	90.80	29.923	
11,000.0	7,530.0	9,701.2	7,759.0	63.2	37.6	95.17	-3,422.1	-2,895.2	2,716.4	2,622.4	94.05	28.882	
11,100.0	7,530.0	9,801.2	7,759.0	64.9	38.9	95.18	-3,522.1	-2,895.2	2,715.8	2,618.4	97.33	27.903	
11,200.0	7,530.0	9,901.2	7,759.0	66.6	40.3	95.18	-3,622.1	-2,895.3	2,715.1	2,614.5	100.62	26.983	
11,300.0	7,530.0	10,001.2	7,759.0	68.4	41.7	95.18	-3,722.1	-2,895.3	2,714.4	2,610.5	103.93	26.117	
11,400.0	7,530.0	10,101.2	7,759.0	70.1	43.1	95.18	-3,822.1	-2,895.3	2,713.7	2,606.5	107.26	25.301	
11,500.0	7,530.0	10,201.2	7,759.0	71.8	44.5	95.18	-3,922.1	-2,895.3	2,713.1	2,602.5	110.59	24.531	
11,600.0	7,530.0	10,301.2	7,759.0	73.5	46.0	95.18	-4,022.1	-2,895.3	2,712.4	2,598.4	113.95	23.804	
11,700.0	7,530.0	10,401.2	7,759.0	75.3	47.4	95.18	-4,122.1	-2,895.3	2,711.7	2,594.4	117.31	23.116	
11,800.0	7,530.0	10,501.2	7,759.0	77.0	48.9	95.19	-4,222.1	-2,895.4	2,711.0	2,590.3	120.68	22.465	
11,900.0	7,530.0	10,601.2	7,759.0	78.7	50.4	95.19	-4,322.1	-2,895.4	2,710.3	2,586.3	124.05	21.848	
12,000.0	7,530.0	10,701.2	7,759.0	80.4	52.0	95.19	-4,422.1	-2,895.4	2,709.7	2,582.2	127.44	21.262	
12,100.0	7,530.0	10,801.2	7,759.0	82.2	53.5	95.19	-4,522.1	-2,895.4	2,709.0	2,578.1	130.83	20.706	
12,200.0	7,530.0	10,901.2	7,759.0	83.9	55.1	95.19	-4,622.1	-2,895.4	2,708.3	2,574.1	134.23	20.176	
12,300.0	7,530.0	11,001.2	7,759.0	85.6	56.6	95.19	-4,722.1	-2,895.4	2,707.6	2,570.0	137.64	19.672	
12,400.0	7,530.0	11,101.2	7,759.0	87.4	58.2	95.19	-4,822.1	-2,895.5	2,706.9	2,565.9	141.05	19.192	
12,500.0	7,530.0	11,201.2	7,759.0	89.1	59.8	95.19	-4,922.1	-2,895.5	2,706.3	2,561.8	144.46	18.734	
12,600.0	7,530.0	11,301.2	7,759.0	90.8	61.4	95.20	-5,022.1	-2,895.5	2,705.6	2,557.7	147.88	18.296	
12,700.0	7,530.0	11,401.2	7,759.0	92.6	63.0	95.20	-5,122.1	-2,895.5	2,704.9	2,553.6	151.30	17.877	
12,800.0	7,530.0	11,501.2	7,759.0	94.3	64.6	95.20	-5,222.1	-2,895.5	2,704.2	2,549.5	154.73	17.477	
12,900.0	7,530.0	11,601.2	7,759.0	96.0	66.2	95.20	-5,322.1	-2,895.5	2,703.5	2,545.4	158.16	17.094	
13,000.0	7,530.0	11,701.2	7,759.0	97.8	67.9	95.20	-5,422.1	-2,895.6	2,702.9	2,541.3	161.59	16.727	
13,100.0	7,530.0	11,801.2	7,759.0	99.5	69.5	95.20	-5,522.1	-2,895.6	2,702.2	2,537.2	165.03	16.374	
13,200.0	7,530.0	11,901.2	7,759.0	101.3	71.1	95.20	-5,622.1	-2,895.6	2,701.5	2,533.0	168.47	16.036	
13,300.0	7,530.0	12,001.2	7,759.0	103.0	72.8	95.20	-5,722.1	-2,895.6	2,700.8	2,528.9	171.91	15.711	
13,400.0	7,530.0	12,101.2	7,759.0	104.7	74.4	95.21	-5,822.1	-2,895.6	2,700.2	2,524.8	175.35	15.399	
13,500.0	7,530.0	12,201.2	7,759.0	106.5	76.1	95.21	-5,922.1	-2,895.6	2,699.5	2,520.7	178.79	15.098	
13,600.0	7,530.0	12,301.2	7,759.0	108.2	77.7	95.21	-6,022.0	-2,895.7	2,698.8	2,516.6	182.24	14.809	
13,700.0	7,530.0	12,401.1	7,759.0	110.0	79.4	95.21	-6,122.0	-2,895.7	2,698.1	2,512.4	185.69	14.530	
13,800.0	7,530.0	12,501.1	7,759.0	111.7	81.1	95.21	-6,222.0	-2,895.7	2,697.4	2,508.3	189.14	14.261	
13,900.0	7,530.0	12,601.1	7,759.0	113.4	82.7	95.21	-6,322.0	-2,895.7	2,696.8	2,504.2	192.59	14.002	
14,000.0	7,530.0	12,701.1	7,759.0	115.2	84.4	95.21	-6,422.0	-2,895.7	2,696.1	2,500.0	196.05	13.752	
14,100.0	7,530.0	12,801.1	7,759.0	116.9	86.1	95.22	-6,522.0	-2,895.7	2,695.4	2,495.9	199.50	13.510	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1													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)				
14,200.0	7,530.0	12,901.1	7,759.0	118.7	87.8	95.22	-6,622.0	-2,895.8	2,694.7	2,491.8	202.96	13.277		
14,300.0	7,530.0	13,001.1	7,759.0	120.4	89.4	95.22	-6,722.0	-2,895.8	2,694.0	2,487.6	206.42	13.051		
14,400.0	7,530.0	13,101.1	7,759.0	122.1	91.1	95.22	-6,822.0	-2,895.8	2,693.4	2,483.5	209.88	12.833		
14,500.0	7,530.0	13,201.1	7,759.0	123.9	92.8	95.22	-6,922.0	-2,895.8	2,692.7	2,479.3	213.34	12.621		
14,600.0	7,530.0	13,301.1	7,759.0	125.6	94.5	95.22	-7,022.0	-2,895.8	2,692.0	2,475.2	216.80	12.417		
14,700.0	7,530.0	13,401.1	7,759.0	127.4	96.2	95.22	-7,122.0	-2,895.8	2,691.3	2,471.1	220.27	12.219		
14,800.0	7,530.0	13,501.1	7,759.0	129.1	97.9	95.22	-7,222.0	-2,895.9	2,690.6	2,466.9	223.73	12.026		
14,900.0	7,530.0	13,601.1	7,759.0	130.9	99.6	95.23	-7,322.0	-2,895.9	2,690.0	2,462.8	227.20	11.840		
15,000.0	7,530.0	13,701.1	7,759.0	132.6	101.3	95.23	-7,422.0	-2,895.9	2,689.3	2,458.6	230.66	11.659		
15,100.0	7,530.0	13,801.1	7,759.0	134.4	103.0	95.23	-7,522.0	-2,895.9	2,688.6	2,454.5	234.13	11.484		
15,200.0	7,530.0	13,901.1	7,759.0	136.1	104.7	95.23	-7,622.0	-2,895.9	2,687.9	2,450.3	237.60	11.313		
15,300.0	7,530.0	14,001.1	7,759.0	137.9	106.4	95.23	-7,722.0	-2,895.9	2,687.3	2,446.2	241.06	11.147		
15,400.0	7,530.0	14,101.1	7,759.0	139.6	108.1	95.23	-7,822.0	-2,896.0	2,686.6	2,442.0	244.53	10.987		
15,500.0	7,530.0	14,201.1	7,759.0	141.3	109.8	95.23	-7,922.0	-2,896.0	2,685.9	2,437.9	248.00	10.830		
15,600.0	7,530.0	14,301.1	7,759.0	143.1	111.5	95.24	-8,022.0	-2,896.0	2,685.2	2,433.7	251.47	10.678		
15,700.0	7,530.0	14,401.1	7,759.0	144.8	113.2	95.24	-8,122.0	-2,896.0	2,684.5	2,429.6	254.94	10.530		
15,800.0	7,530.0	14,501.1	7,759.0	146.6	114.9	95.24	-8,222.0	-2,896.0	2,683.9	2,425.4	258.42	10.386		
15,900.0	7,530.0	14,601.1	7,759.0	148.3	116.6	95.24	-8,322.0	-2,896.0	2,683.2	2,421.3	261.89	10.246		
16,000.0	7,530.0	14,701.1	7,759.0	150.1	118.3	95.24	-8,422.0	-2,896.1	2,682.5	2,417.1	265.36	10.109		
16,100.0	7,530.0	14,801.1	7,759.0	151.8	120.1	95.24	-8,522.0	-2,896.1	2,681.8	2,413.0	268.83	9.976		
16,200.0	7,530.0	14,901.1	7,759.0	153.6	121.8	95.24	-8,622.0	-2,896.1	2,681.1	2,408.8	272.31	9.846		
16,300.0	7,530.0	15,001.1	7,759.0	155.3	123.5	95.24	-8,722.0	-2,896.1	2,680.5	2,404.7	275.78	9.719		
16,400.0	7,530.0	15,101.1	7,759.0	157.1	125.2	95.25	-8,822.0	-2,896.1	2,679.8	2,400.5	279.26	9.596		
16,500.0	7,530.0	15,201.1	7,759.0	158.8	126.9	95.25	-8,922.0	-2,896.1	2,679.1	2,396.4	282.73	9.476		
16,600.0	7,530.0	15,301.1	7,759.0	160.6	128.7	95.25	-9,022.0	-2,896.2	2,678.4	2,392.2	286.21	9.358		
16,700.0	7,530.0	15,401.1	7,759.0	162.3	130.4	95.25	-9,122.0	-2,896.2	2,677.7	2,388.1	289.68	9.244		
16,800.0	7,530.0	15,501.1	7,759.0	164.1	132.1	95.25	-9,222.0	-2,896.2	2,677.1	2,383.9	293.16	9.132		
16,900.0	7,530.0	15,601.1	7,759.0	165.8	133.8	95.25	-9,322.0	-2,896.2	2,676.4	2,379.8	296.64	9.022		
17,000.0	7,530.0	15,701.1	7,759.0	167.6	135.5	95.25	-9,422.0	-2,896.2	2,675.7	2,375.6	300.12	8.916		
17,100.0	7,530.0	15,801.1	7,759.0	169.3	137.3	95.26	-9,522.0	-2,896.2	2,675.0	2,371.4	303.59	8.811		
17,200.0	7,530.0	15,901.1	7,759.0	171.1	139.0	95.26	-9,622.0	-2,896.2	2,674.4	2,367.3	307.07	8.709		
17,300.0	7,530.0	16,001.1	7,759.0	172.8	140.7	95.26	-9,722.0	-2,896.3	2,673.7	2,363.1	310.55	8.609		
17,400.0	7,530.0	16,087.8	7,759.0	174.5	142.2	95.26	-9,808.7	-2,896.3	2,673.0	2,359.2	313.80	8.518		
17,404.9	7,530.0	16,087.8	7,759.0	174.6	142.2	95.26	-9,808.7	-2,896.3	2,673.0	2,359.1	313.88	8.516 CC		
17,411.2	7,530.0	16,087.8	7,759.0	174.7	142.2	95.26	-9,808.7	-2,896.3	2,673.0	2,359.0	313.99	8.513 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-115.44	-1,937.3	-4,072.4	4,509.8						
100.0	100.0	84.0	84.0	0.2	0.1	-115.44	-1,937.3	-4,072.4	4,509.8	4,509.5	0.26	N/A			
200.0	200.0	184.0	184.0	0.3	0.3	-115.44	-1,937.3	-4,072.4	4,509.8	4,509.2	0.60	7,467.925			
300.0	300.0	591.8	591.5	0.5	1.0	-115.45	-1,932.2	-4,060.1	4,506.9	4,505.4	1.50	3,014.178			
400.0	400.0	1,053.2	1,050.0	0.7	2.2	-115.49	-1,913.2	-4,013.8	4,496.1	4,493.5	2.52	1,785.167			
500.0	500.0	1,503.7	1,492.5	0.8	3.8	-115.55	-1,881.2	-3,935.8	4,477.4	4,473.8	3.60	1,244.985			
600.0	600.0	1,636.6	1,621.7	1.0	4.4	-92.81	-1,869.5	-3,907.3	4,454.1	4,450.3	3.84	1,160.083			
700.0	700.0	1,733.8	1,716.3	1.2	4.8	-93.10	-1,860.9	-3,886.3	4,431.0	4,426.8	4.19	1,057.924			
800.0	799.9	1,830.9	1,810.7	1.4	5.2	-93.41	-1,852.3	-3,865.4	4,407.9	4,403.3	4.54	970.143			
848.7	848.4	1,878.1	1,856.6	1.5	5.4	-93.57	-1,848.1	-3,855.2	4,396.7	4,392.0	4.72	931.693			
900.0	899.7	1,928.0	1,905.1	1.6	5.6	-93.62	-1,843.7	-3,844.4	4,384.9	4,380.0	4.90	894.073			
1,000.0	999.5	2,025.0	1,999.4	1.8	6.1	-93.72	-1,835.1	-3,823.5	4,362.0	4,356.7	5.27	828.017			
1,100.0	1,099.3	2,122.1	2,093.8	2.0	6.5	-93.82	-1,826.5	-3,802.5	4,339.0	4,333.4	5.63	770.131			
1,200.0	1,199.1	2,219.1	2,188.2	2.2	6.9	-93.93	-1,817.9	-3,781.6	4,316.1	4,310.1	6.00	719.074			
1,300.0	1,298.9	2,316.1	2,282.5	2.4	7.4	-94.03	-1,809.3	-3,760.6	4,293.2	4,286.8	6.37	673.753			
1,400.0	1,398.8	2,413.2	2,376.9	2.6	7.8	-94.13	-1,800.7	-3,739.7	4,270.3	4,263.5	6.74	633.283			
1,500.0	1,498.6	2,510.2	2,471.3	2.8	8.2	-94.24	-1,792.1	-3,718.7	4,247.4	4,240.3	7.12	596.945			
1,600.0	1,598.4	2,607.3	2,565.6	3.0	8.7	-94.35	-1,783.5	-3,697.8	4,224.5	4,217.0	7.49	564.150			
1,700.0	1,698.2	2,704.3	2,660.0	3.2	9.1	-94.45	-1,774.9	-3,676.8	4,201.6	4,193.8	7.86	534.411			
1,800.0	1,798.0	2,801.4	2,754.4	3.4	9.5	-94.56	-1,766.3	-3,655.9	4,178.8	4,170.6	8.24	507.327			
1,900.0	1,897.8	2,898.4	2,848.7	3.6	10.0	-94.67	-1,757.7	-3,634.9	4,156.0	4,147.3	8.61	482.561			
2,000.0	1,997.7	2,995.4	2,943.1	3.8	10.4	-94.79	-1,749.1	-3,614.0	4,133.1	4,124.2	8.99	459.830			
2,100.0	2,097.5	3,092.5	3,037.4	4.0	10.8	-94.90	-1,740.5	-3,593.0	4,110.3	4,101.0	9.37	438.896			
2,200.0	2,197.3	3,189.5	3,131.8	4.2	11.3	-95.01	-1,731.9	-3,572.1	4,087.6	4,077.8	9.74	419.556			
2,300.0	2,297.1	3,286.6	3,226.2	4.4	11.7	-95.13	-1,723.3	-3,551.1	4,064.8	4,054.7	10.12	401.634			
2,400.0	2,396.9	3,383.6	3,320.5	4.6	12.1	-95.24	-1,714.7	-3,530.2	4,042.0	4,031.5	10.50	384.982			
2,500.0	2,496.7	3,480.7	3,414.9	4.8	12.6	-95.36	-1,706.1	-3,509.3	4,019.3	4,008.4	10.88	369.470			
2,600.0	2,596.5	3,577.7	3,509.3	5.0	13.0	-95.48	-1,697.5	-3,488.3	3,996.6	3,985.3	11.26	354.984			
2,700.0	2,696.4	3,674.7	3,603.6	5.2	13.4	-95.60	-1,688.9	-3,467.4	3,973.9	3,962.2	11.64	341.427			
2,800.0	2,796.2	3,771.8	3,698.0	5.4	13.9	-95.72	-1,680.3	-3,446.4	3,951.2	3,939.1	12.02	328.713			
2,900.0	2,896.0	3,868.8	3,792.4	5.6	14.3	-95.85	-1,671.7	-3,425.5	3,928.5	3,916.1	12.40	316.764			
3,000.0	2,995.8	3,965.9	3,886.7	5.8	14.8	-95.97	-1,663.1	-3,404.5	3,905.8	3,893.1	12.78	305.515			
3,100.0	3,095.6	4,062.9	3,981.1	6.0	15.2	-96.10	-1,654.5	-3,383.6	3,883.2	3,870.0	13.17	294.906			
3,200.0	3,195.4	4,160.0	4,075.4	6.2	15.6	-96.23	-1,645.9	-3,362.6	3,860.6	3,847.0	13.55	284.883			
3,300.0	3,295.2	4,257.0	4,169.8	6.4	16.1	-96.36	-1,637.3	-3,341.7	3,838.0	3,824.1	13.94	275.399			
3,400.0	3,395.1	4,354.0	4,264.2	6.6	16.5	-96.49	-1,628.7	-3,320.7	3,815.4	3,801.1	14.32	266.412			
3,500.0	3,494.9	4,451.1	4,358.5	6.8	16.9	-96.62	-1,620.1	-3,299.8	3,792.8	3,778.1	14.71	257.884			
3,600.0	3,594.7	4,548.1	4,452.9	7.0	17.4	-96.75	-1,611.5	-3,278.8	3,770.3	3,755.2	15.09	249.781			
3,700.0	3,694.5	4,645.2	4,547.3	7.2	17.8	-96.89	-1,602.9	-3,257.9	3,747.8	3,732.3	15.48	242.071			
3,800.0	3,794.3	4,742.2	4,641.6	7.4	18.3	-97.03	-1,594.3	-3,236.9	3,725.3	3,709.4	15.87	234.727			
3,900.0	3,894.1	4,839.2	4,736.0	7.6	18.7	-97.16	-1,585.7	-3,216.0	3,702.8	3,686.5	16.26	227.724			
4,000.0	3,994.0	4,936.3	4,830.4	7.8	19.1	-97.30	-1,577.1	-3,195.0	3,680.3	3,663.7	16.65	221.037			
4,100.0	4,093.8	5,033.3	4,924.7	8.0	19.6	-97.45	-1,568.5	-3,174.1	3,657.9	3,640.9	17.04	214.646			
4,200.0	4,193.6	5,130.4	5,019.1	8.2	20.0	-97.59	-1,559.9	-3,153.1	3,635.5	3,618.1	17.43	208.532			
4,300.0	4,293.4	5,227.4	5,113.4	8.4	20.4	-97.74	-1,551.3	-3,132.2	3,613.1	3,595.3	17.83	202.677			
4,400.0	4,393.2	5,324.5	5,207.8	8.6	20.9	-97.88	-1,542.7	-3,111.3	3,590.7	3,572.5	18.22	197.065			
4,500.0	4,493.0	5,421.5	5,302.2	8.8	21.3	-98.03	-1,534.1	-3,090.3	3,568.4	3,549.8	18.62	191.681			
4,600.0	4,592.8	5,518.5	5,396.5	9.0	21.8	-98.18	-1,525.5	-3,069.4	3,546.0	3,527.0	19.01	186.511			
4,700.0	4,692.7	5,615.6	5,490.9	9.3	22.2	-98.34	-1,516.9	-3,048.4	3,523.7	3,504.3	19.41	181.543			
4,800.0	4,792.5	5,712.6	5,585.3	9.5	22.6	-98.49	-1,508.3	-3,027.5	3,501.5	3,481.7	19.81	176.766			
4,900.0	4,892.3	5,809.7	5,679.6	9.7	23.1	-98.65	-1,499.7	-3,006.5	3,479.2	3,459.0	20.21	172.168			
5,000.0	4,992.1	5,906.7	5,774.0	9.9	23.5	-98.81	-1,491.1	-2,985.6	3,457.0	3,436.4	20.61	167.740			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1											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	5,091.9	6,003.8	5,868.4	10.1	23.9	-98.97	-1,482.5	-2,964.6	3,434.8	3,413.8	21.01	163.472	
5,200.0	5,191.7	6,100.8	5,962.7	10.3	24.4	-99.13	-1,473.9	-2,943.7	3,412.6	3,391.2	21.42	159.355	
5,300.0	5,291.5	6,197.8	6,057.1	10.5	24.8	-99.30	-1,465.3	-2,922.7	3,390.5	3,368.6	21.82	155.383	
5,400.0	5,391.4	6,294.9	6,151.4	10.7	25.3	-99.46	-1,456.7	-2,901.8	3,368.3	3,346.1	22.23	151.547	
5,500.0	5,491.2	6,391.9	6,245.8	10.9	25.7	-99.63	-1,448.1	-2,880.8	3,346.3	3,323.6	22.63	147.840	
5,600.0	5,591.0	6,489.0	6,340.2	11.1	26.1	-99.80	-1,439.5	-2,859.9	3,324.2	3,301.2	23.04	144.257	
5,700.0	5,690.8	6,586.0	6,434.5	11.3	26.6	-99.98	-1,430.9	-2,838.9	3,302.2	3,278.7	23.45	140.790	
5,800.0	5,790.6	6,683.1	6,528.9	11.5	27.0	-100.15	-1,422.3	-2,818.0	3,280.2	3,256.3	23.87	137.435	
5,900.0	5,890.4	6,780.1	6,623.3	11.7	27.4	-100.33	-1,413.7	-2,797.0	3,258.2	3,233.9	24.28	134.186	
6,000.0	5,990.3	6,877.1	6,717.6	11.9	27.9	-100.51	-1,405.1	-2,776.1	3,236.2	3,211.5	24.70	131.038	
6,100.0	6,090.1	6,974.2	6,812.0	12.1	28.3	-100.70	-1,396.5	-2,755.1	3,214.3	3,189.2	25.11	127.986	
6,200.0	6,189.9	7,071.2	6,906.4	12.3	28.8	-100.88	-1,387.9	-2,734.2	3,192.4	3,166.9	25.53	125.027	
6,300.0	6,289.7	7,168.3	7,000.7	12.5	29.2	-101.07	-1,379.3	-2,713.3	3,170.6	3,144.6	25.96	122.156	
6,400.0	6,389.5	7,265.3	7,095.1	12.7	29.6	-101.26	-1,370.7	-2,692.3	3,148.8	3,122.4	26.38	119.369	
6,500.0	6,489.3	7,321.9	7,150.1	12.9	29.9	-101.38	-1,365.7	-2,680.1	3,127.3	3,100.6	26.71	117.078	
6,600.0	6,589.1	7,350.0	7,177.5	13.1	30.0	-101.44	-1,363.9	-2,674.0	3,107.6	3,080.6	26.99	115.142	
6,700.0	6,689.0	7,381.1	7,207.8	13.3	30.1	-101.54	-1,363.5	-2,667.3	3,090.2	3,062.9	27.30	113.210	
6,785.3	6,774.1	7,400.0	7,226.3	13.5	30.2	-101.62	-1,364.1	-2,663.2	3,077.3	3,049.8	27.54	111.758	
6,800.0	6,788.8	7,400.0	7,226.3	13.5	30.2	-90.44	-1,364.1	-2,663.2	3,075.2	3,047.7	27.53	111.721	
6,850.0	6,838.8	7,400.0	7,226.3	13.6	30.2	20.59	-1,364.1	-2,663.2	3,067.3	3,039.8	27.42	111.847	
6,900.0	6,888.6	7,429.7	7,255.2	13.6	30.3	43.08	-1,366.2	-2,656.8	3,057.6	3,030.2	27.34	111.831	
6,950.0	6,938.1	7,450.0	7,274.9	13.7	30.3	48.90	-1,368.6	-2,652.4	3,046.8	3,019.7	27.14	112.277	
7,000.0	6,987.0	7,450.0	7,274.9	13.7	30.3	51.97	-1,368.6	-2,652.4	3,034.7	3,007.9	26.80	113.240	
7,050.0	7,035.0	7,450.0	7,274.9	13.6	30.3	54.13	-1,368.6	-2,652.4	3,021.6	2,995.2	26.42	114.352	
7,100.0	7,082.0	7,478.2	7,302.0	13.6	30.4	55.96	-1,373.1	-2,646.4	3,007.0	2,980.9	26.12	115.141	
7,150.0	7,127.7	7,500.0	7,322.9	13.5	30.5	57.67	-1,377.5	-2,641.7	2,991.5	2,965.7	25.79	115.999	
7,200.0	7,171.8	7,500.0	7,322.9	13.5	30.5	59.30	-1,377.5	-2,641.7	2,974.8	2,949.3	25.45	116.895	
7,250.0	7,214.2	7,500.0	7,322.9	13.4	30.5	60.92	-1,377.5	-2,641.7	2,957.3	2,932.1	25.19	117.412	
7,300.0	7,254.6	7,525.7	7,347.2	13.4	30.5	62.69	-1,383.7	-2,636.3	2,938.7	2,913.6	25.08	117.165	
7,350.0	7,292.9	7,550.0	7,370.0	13.3	30.6	64.54	-1,390.6	-2,631.3	2,919.4	2,894.4	25.09	116.367	
7,400.0	7,328.9	7,550.0	7,370.0	13.3	30.6	66.31	-1,390.6	-2,631.3	2,899.3	2,874.1	25.20	115.073	
7,450.0	7,362.3	7,550.0	7,370.0	13.3	30.6	68.12	-1,390.6	-2,631.3	2,878.7	2,853.2	25.45	113.129	
7,500.0	7,393.1	7,571.2	7,389.5	13.4	30.6	70.18	-1,397.4	-2,626.9	2,857.4	2,831.5	25.85	110.525	
7,550.0	7,421.1	7,600.0	7,415.8	13.5	30.7	72.40	-1,407.9	-2,621.1	2,836.0	2,809.6	26.38	107.522	
7,600.0	7,446.1	7,600.0	7,415.8	13.6	30.7	74.37	-1,407.9	-2,621.1	2,813.8	2,786.9	26.97	104.342	
7,650.0	7,468.0	7,600.0	7,415.8	13.8	30.7	76.35	-1,407.9	-2,621.1	2,791.7	2,764.1	27.63	101.053	
7,700.0	7,486.7	7,600.0	7,415.8	14.0	30.7	78.33	-1,407.9	-2,621.1	2,769.6	2,741.3	28.32	97.785	
7,750.0	7,502.2	7,622.9	7,436.2	14.2	30.7	80.66	-1,417.2	-2,616.6	2,747.3	2,718.3	29.02	94.668	
7,800.0	7,514.3	7,632.2	7,444.4	14.6	30.7	82.78	-1,421.2	-2,614.8	2,725.4	2,695.7	29.70	91.755	
7,850.0	7,523.0	7,650.0	7,459.9	14.9	30.7	85.03	-1,429.2	-2,611.3	2,703.8	2,673.5	30.33	89.141	
7,900.0	7,528.2	7,650.0	7,459.9	15.3	30.7	86.91	-1,429.2	-2,611.3	2,682.6	2,651.6	30.93	86.717	
7,950.2	7,530.0	7,650.0	7,459.9	15.8	30.7	88.73	-1,429.2	-2,611.3	2,661.9	2,630.4	31.49	84.543	
8,000.0	7,530.0	7,650.0	7,459.9	16.2	30.7	88.73	-1,429.2	-2,611.3	2,642.3	2,610.3	31.97	82.650	
8,100.0	7,530.0	7,682.4	7,487.4	17.3	30.8	89.37	-1,445.1	-2,605.2	2,604.6	2,571.7	32.93	79.101	
8,200.0	7,530.0	7,700.0	7,502.1	18.4	30.8	89.72	-1,454.4	-2,602.0	2,570.0	2,536.0	34.04	75.500	
8,300.0	7,530.0	7,722.1	7,520.0	19.7	30.8	90.14	-1,466.7	-2,598.0	2,538.5	2,503.3	35.22	72.084	
8,400.0	7,530.0	7,750.0	7,541.9	21.0	30.8	90.66	-1,483.2	-2,593.1	2,510.1	2,473.6	36.44	68.884	
8,500.0	7,530.0	7,771.7	7,558.4	22.4	30.8	91.05	-1,496.8	-2,589.5	2,484.7	2,447.0	37.74	65.841	
8,600.0	7,530.0	7,800.0	7,579.2	23.8	30.8	91.55	-1,515.5	-2,584.9	2,462.5	2,423.4	39.06	63.048	
8,700.0	7,530.0	7,834.2	7,603.0	25.3	30.8	92.12	-1,539.5	-2,579.6	2,443.3	2,402.9	40.39	60.499	
8,800.0	7,530.0	7,871.5	7,627.4	26.8	30.8	92.71	-1,567.2	-2,574.2	2,426.9	2,385.2	41.73	58.155	
8,900.0	7,530.0	7,913.3	7,652.5	28.3	30.8	93.32	-1,600.1	-2,568.6	2,413.4	2,370.3	43.09	56.010	

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 Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1													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	7,530.0	7,950.0	7,672.6	29.9	30.8	93.80	-1,630.5	-2,564.2	2,402.5	2,358.0	44.50	53.994		
9,100.0	7,530.0	8,012.1	7,702.1	31.4	30.8	94.52	-1,684.7	-2,557.6	2,393.9	2,348.1	45.85	52.211		
9,200.0	7,530.0	8,069.2	7,724.1	33.0	30.8	95.06	-1,737.1	-2,552.7	2,387.5	2,340.2	47.28	50.492		
9,300.0	7,530.0	8,130.8	7,741.9	34.7	30.8	95.49	-1,795.9	-2,548.8	2,382.9	2,334.1	48.78	48.849		
9,400.0	7,530.0	8,200.0	7,754.5	36.3	30.8	95.80	-1,863.9	-2,546.0	2,379.9	2,329.5	50.36	47.256		
9,500.0	7,530.0	8,263.1	7,758.9	37.9	30.9	95.91	-1,926.8	-2,545.0	2,378.3	2,326.2	52.06	45.685		
9,600.0	7,530.0	8,358.5	7,759.0	39.6	31.0	95.91	-2,022.2	-2,545.0	2,377.6	2,323.6	53.99	44.042		
9,700.0	7,530.0	8,458.5	7,759.0	41.2	31.2	95.92	-2,122.2	-2,545.1	2,376.9	2,320.8	56.10	42.371		
9,800.0	7,530.0	8,558.5	7,759.0	42.9	31.5	95.92	-2,222.2	-2,545.1	2,376.3	2,317.9	58.40	40.690		
9,900.0	7,530.0	8,658.5	7,759.0	44.5	31.9	95.92	-2,322.2	-2,545.1	2,375.6	2,314.7	60.86	39.030		
10,000.0	7,530.0	8,758.5	7,759.0	46.2	32.4	95.92	-2,422.2	-2,545.1	2,374.9	2,311.4	63.47	37.415		
10,100.0	7,530.0	8,858.5	7,759.0	47.9	33.0	95.92	-2,522.2	-2,545.1	2,374.2	2,308.0	66.21	35.862		
10,200.0	7,530.0	8,958.5	7,759.0	49.6	33.6	95.92	-2,622.2	-2,545.1	2,373.5	2,304.5	69.04	34.380		
10,300.0	7,530.0	9,058.5	7,759.0	51.3	34.4	95.93	-2,722.2	-2,545.2	2,372.9	2,300.9	71.96	32.975		
10,400.0	7,530.0	9,158.5	7,759.0	53.0	35.2	95.93	-2,822.2	-2,545.2	2,372.2	2,297.2	74.95	31.650		
10,500.0	7,530.0	9,258.5	7,759.0	54.7	36.1	95.93	-2,922.2	-2,545.2	2,371.5	2,293.5	78.00	30.403		
10,600.0	7,530.0	9,358.5	7,759.0	56.4	37.0	95.93	-3,022.2	-2,545.2	2,370.8	2,289.7	81.11	29.231		
10,700.0	7,530.0	9,458.5	7,759.0	58.1	38.0	95.93	-3,122.2	-2,545.2	2,370.2	2,285.9	84.25	28.131		
10,800.0	7,530.0	9,558.5	7,759.0	59.8	39.1	95.94	-3,222.2	-2,545.2	2,369.5	2,282.0	87.44	27.099		
10,900.0	7,530.0	9,658.5	7,759.0	61.5	40.2	95.94	-3,322.2	-2,545.3	2,368.8	2,278.1	90.65	26.131		
11,000.0	7,530.0	9,758.5	7,759.0	63.2	41.3	95.94	-3,422.2	-2,545.3	2,368.1	2,274.2	93.89	25.222		
11,100.0	7,530.0	9,858.5	7,759.0	64.9	42.5	95.94	-3,522.2	-2,545.3	2,367.4	2,270.3	97.16	24.368		
11,200.0	7,530.0	9,958.5	7,759.0	66.6	43.7	95.94	-3,622.2	-2,545.3	2,366.8	2,266.3	100.44	23.564		
11,300.0	7,530.0	10,058.5	7,759.0	68.4	45.0	95.94	-3,722.2	-2,545.3	2,366.1	2,262.3	103.74	22.808		
11,400.0	7,530.0	10,158.5	7,759.0	70.1	46.3	95.95	-3,822.2	-2,545.3	2,365.4	2,258.4	107.06	22.095		
11,500.0	7,530.0	10,258.5	7,759.0	71.8	47.6	95.95	-3,922.2	-2,545.4	2,364.7	2,254.3	110.39	21.422		
11,600.0	7,530.0	10,358.5	7,759.0	73.5	49.0	95.95	-4,022.2	-2,545.4	2,364.1	2,250.3	113.73	20.786		
11,700.0	7,530.0	10,458.5	7,759.0	75.3	50.4	95.95	-4,122.1	-2,545.4	2,363.4	2,246.3	117.09	20.185		
11,800.0	7,530.0	10,558.5	7,759.0	77.0	51.8	95.95	-4,222.1	-2,545.4	2,362.7	2,242.2	120.45	19.616		
11,900.0	7,530.0	10,658.5	7,759.0	78.7	53.2	95.95	-4,322.1	-2,545.4	2,362.0	2,238.2	123.82	19.076		
12,000.0	7,530.0	10,758.5	7,759.0	80.4	54.6	95.96	-4,422.1	-2,545.4	2,361.3	2,234.1	127.20	18.564		
12,100.0	7,530.0	10,858.5	7,759.0	82.2	56.1	95.96	-4,522.1	-2,545.5	2,360.7	2,230.1	130.59	18.078		
12,200.0	7,530.0	10,958.5	7,759.0	83.9	57.6	95.96	-4,622.1	-2,545.5	2,360.0	2,226.0	133.98	17.615		
12,300.0	7,530.0	11,058.5	7,759.0	85.6	59.1	95.96	-4,722.1	-2,545.5	2,359.3	2,221.9	137.38	17.174		
12,400.0	7,530.0	11,158.5	7,759.0	87.4	60.6	95.96	-4,822.1	-2,545.5	2,358.6	2,217.8	140.78	16.754		
12,500.0	7,530.0	11,258.5	7,759.0	89.1	62.1	95.96	-4,922.1	-2,545.5	2,358.0	2,213.8	144.19	16.353		
12,600.0	7,530.0	11,358.5	7,759.0	90.8	63.6	95.97	-5,022.1	-2,545.5	2,357.3	2,209.7	147.60	15.971		
12,700.0	7,530.0	11,458.5	7,759.0	92.6	65.2	95.97	-5,122.1	-2,545.5	2,356.6	2,205.6	151.02	15.605		
12,800.0	7,530.0	11,558.5	7,759.0	94.3	66.7	95.97	-5,222.1	-2,545.6	2,355.9	2,201.5	154.44	15.255		
12,900.0	7,530.0	11,658.5	7,759.0	96.0	68.3	95.97	-5,322.1	-2,545.6	2,355.2	2,197.4	157.86	14.920		
13,000.0	7,530.0	11,758.5	7,759.0	97.8	69.9	95.97	-5,422.1	-2,545.6	2,354.6	2,193.3	161.29	14.598		
13,100.0	7,530.0	11,858.5	7,759.0	99.5	71.5	95.97	-5,522.1	-2,545.6	2,353.9	2,189.2	164.72	14.290		
13,200.0	7,530.0	11,958.4	7,759.0	101.3	73.1	95.98	-5,622.1	-2,545.6	2,353.2	2,185.1	168.15	13.995		
13,300.0	7,530.0	12,058.4	7,759.0	103.0	74.7	95.98	-5,722.1	-2,545.6	2,352.5	2,180.9	171.59	13.710		
13,400.0	7,530.0	12,158.4	7,759.0	104.7	76.3	95.98	-5,822.1	-2,545.7	2,351.8	2,176.8	175.02	13.437		
13,500.0	7,530.0	12,258.4	7,759.0	106.5	77.9	95.98	-5,922.1	-2,545.7	2,351.2	2,172.7	178.46	13.174		
13,600.0	7,530.0	12,358.4	7,759.0	108.2	79.5	95.98	-6,022.1	-2,545.7	2,350.5	2,168.6	181.91	12.921		
13,700.0	7,530.0	12,458.4	7,759.0	110.0	81.1	95.98	-6,122.1	-2,545.7	2,349.8	2,164.5	185.35	12.678		
13,800.0	7,530.0	12,558.4	7,759.0	111.7	82.7	95.99	-6,222.1	-2,545.7	2,349.1	2,160.3	188.80	12.443		
13,900.0	7,530.0	12,658.4	7,759.0	113.4	84.4	95.99	-6,322.1	-2,545.7	2,348.5	2,156.2	192.24	12.216		
14,000.0	7,530.0	12,758.4	7,759.0	115.2	86.0	95.99	-6,422.1	-2,545.8	2,347.8	2,152.1	195.69	11.997		
14,100.0	7,530.0	12,858.4	7,759.0	116.9	87.7	95.99	-6,522.1	-2,545.8	2,347.1	2,148.0	199.14	11.786		

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

Anticollision Report

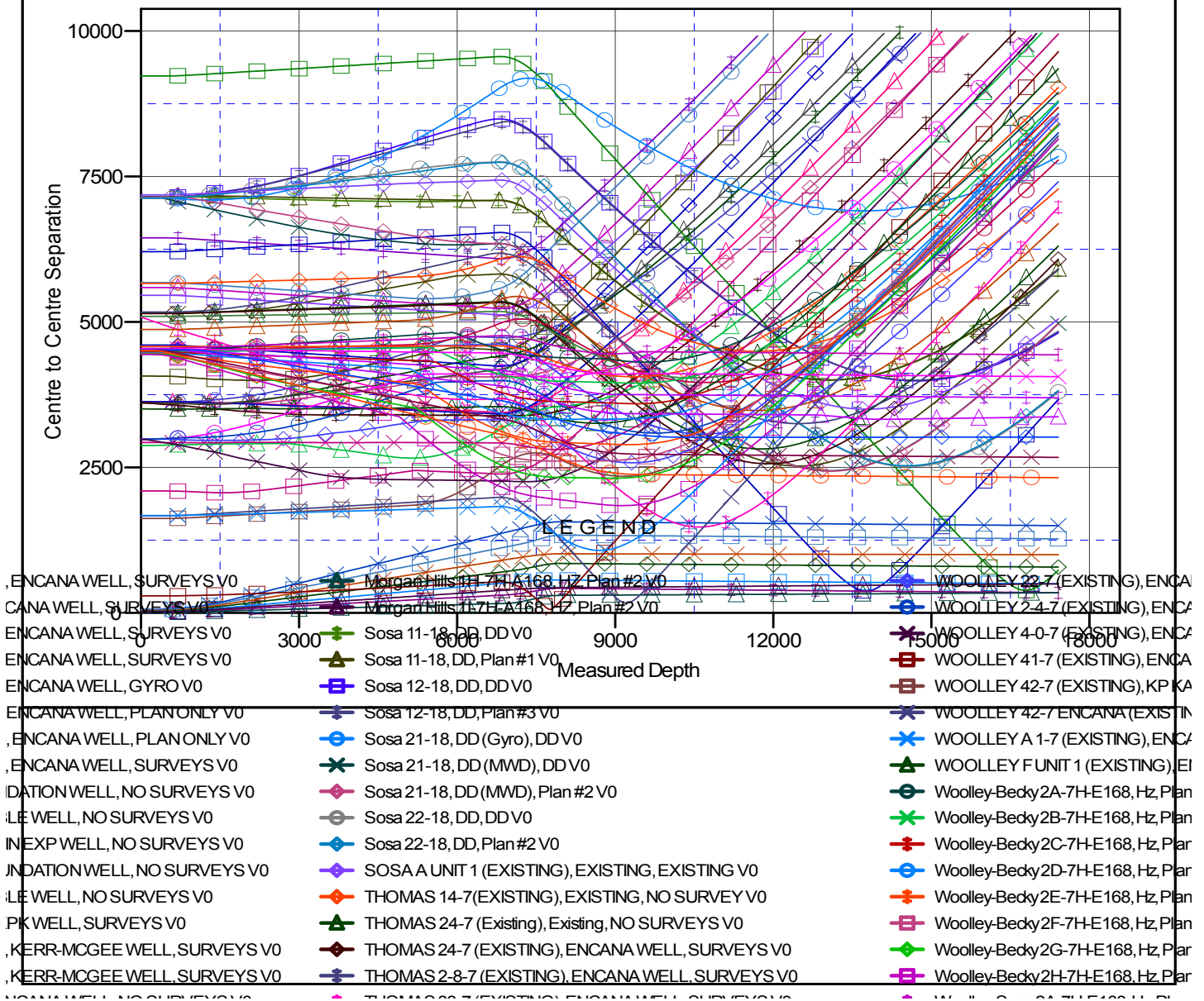
Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1													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)				
14,200.0	7,530.0	12,958.4	7,759.0	118.7	89.3	95.99	-6,622.1	-2,545.8	2,346.4	2,143.8	202.59	11.582		
14,300.0	7,530.0	13,058.4	7,759.0	120.4	91.0	96.00	-6,722.1	-2,545.8	2,345.7	2,139.7	206.05	11.385		
14,400.0	7,530.0	13,158.4	7,759.0	122.1	92.6	96.00	-6,822.1	-2,545.8	2,345.1	2,135.6	209.50	11.194		
14,500.0	7,530.0	13,258.4	7,759.0	123.9	94.3	96.00	-6,922.1	-2,545.8	2,344.4	2,131.4	212.96	11.009		
14,600.0	7,530.0	13,358.4	7,759.0	125.6	95.9	96.00	-7,022.1	-2,545.9	2,343.7	2,127.3	216.41	10.830		
14,700.0	7,530.0	13,458.4	7,759.0	127.4	97.6	96.00	-7,122.1	-2,545.9	2,343.0	2,123.2	219.87	10.656		
14,800.0	7,530.0	13,558.4	7,759.0	129.1	99.3	96.00	-7,222.1	-2,545.9	2,342.4	2,119.0	223.33	10.488		
14,900.0	7,530.0	13,658.4	7,759.0	130.9	100.9	96.01	-7,322.1	-2,545.9	2,341.7	2,114.9	226.79	10.325		
15,000.0	7,530.0	13,758.4	7,759.0	132.6	102.6	96.01	-7,422.1	-2,545.9	2,341.0	2,110.8	230.25	10.167		
15,100.0	7,530.0	13,858.4	7,759.0	134.4	104.3	96.01	-7,522.1	-2,545.9	2,340.3	2,106.6	233.71	10.014		
15,200.0	7,530.0	13,958.4	7,759.0	136.1	106.0	96.01	-7,622.1	-2,546.0	2,339.6	2,102.5	237.17	9.865		
15,300.0	7,530.0	14,058.4	7,759.0	137.9	107.6	96.01	-7,722.1	-2,546.0	2,339.0	2,098.3	240.64	9.720		
15,400.0	7,530.0	14,158.4	7,759.0	139.6	109.3	96.01	-7,822.1	-2,546.0	2,338.3	2,094.2	244.10	9.579		
15,500.0	7,530.0	14,258.4	7,759.0	141.3	111.0	96.02	-7,922.1	-2,546.0	2,337.6	2,090.0	247.57	9.442		
15,600.0	7,530.0	14,358.4	7,759.0	143.1	112.7	96.02	-8,022.1	-2,546.0	2,336.9	2,085.9	251.03	9.309		
15,700.0	7,530.0	14,458.4	7,759.0	144.8	114.4	96.02	-8,122.1	-2,546.0	2,336.3	2,081.8	254.50	9.180		
15,800.0	7,530.0	14,558.4	7,759.0	146.6	116.1	96.02	-8,222.1	-2,546.1	2,335.6	2,077.6	257.96	9.054		
15,900.0	7,530.0	14,658.4	7,759.0	148.3	117.8	96.02	-8,322.1	-2,546.1	2,334.9	2,073.5	261.43	8.931		
16,000.0	7,530.0	14,758.4	7,759.0	150.1	119.5	96.03	-8,422.0	-2,546.1	2,334.2	2,069.3	264.90	8.812		
16,100.0	7,530.0	14,858.4	7,759.0	151.8	121.2	96.03	-8,522.0	-2,546.1	2,333.5	2,065.2	268.37	8.695		
16,200.0	7,530.0	14,958.4	7,759.0	153.6	122.9	96.03	-8,622.0	-2,546.1	2,332.9	2,061.0	271.83	8.582		
16,300.0	7,530.0	15,058.4	7,759.0	155.3	124.6	96.03	-8,722.0	-2,546.1	2,332.2	2,056.9	275.30	8.471		
16,400.0	7,530.0	15,158.4	7,759.0	157.1	126.3	96.03	-8,822.0	-2,546.2	2,331.5	2,052.7	278.77	8.363		
16,500.0	7,530.0	15,258.4	7,759.0	158.8	128.0	96.03	-8,922.0	-2,546.2	2,330.8	2,048.6	282.24	8.258		
16,600.0	7,530.0	15,358.4	7,759.0	160.6	129.7	96.04	-9,022.0	-2,546.2	2,330.2	2,044.4	285.71	8.156		
16,700.0	7,530.0	15,458.4	7,759.0	162.3	131.4	96.04	-9,122.0	-2,546.2	2,329.5	2,040.3	289.19	8.055		
16,800.0	7,530.0	15,558.4	7,759.0	164.1	133.1	96.04	-9,222.0	-2,546.2	2,328.8	2,036.1	292.66	7.957		
16,900.0	7,530.0	15,658.4	7,759.0	165.8	134.8	96.04	-9,322.0	-2,546.2	2,328.1	2,032.0	296.13	7.862		
17,000.0	7,530.0	15,758.4	7,759.0	167.6	136.5	96.04	-9,422.0	-2,546.3	2,327.4	2,027.8	299.60	7.768		
17,100.0	7,530.0	15,858.4	7,759.0	169.3	138.2	96.04	-9,522.0	-2,546.3	2,326.8	2,023.7	303.07	7.677		
17,200.0	7,530.0	15,958.4	7,759.0	171.1	139.9	96.05	-9,622.0	-2,546.3	2,326.1	2,019.5	306.55	7.588		
17,300.0	7,530.0	16,058.4	7,759.0	172.8	141.6	96.05	-9,722.0	-2,546.3	2,325.4	2,015.4	310.02	7.501		
17,400.0	7,530.0	16,148.7	7,759.0	174.5	143.2	96.05	-9,812.4	-2,546.3	2,324.8	2,011.4	313.33	7.420		
17,406.1	7,530.0	16,148.7	7,759.0	174.7	143.2	96.05	-9,812.4	-2,546.3	2,324.7	2,011.3	313.43	7.417 CC		
17,411.2	7,530.0	16,148.7	7,759.0	174.7	143.2	96.05	-9,812.4	-2,546.3	2,324.7	2,011.2	313.52	7.415 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1G-7H-A168
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Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1G-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Coordinates are relative to: Morgan Hills 1G-7H-A168
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.30°



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