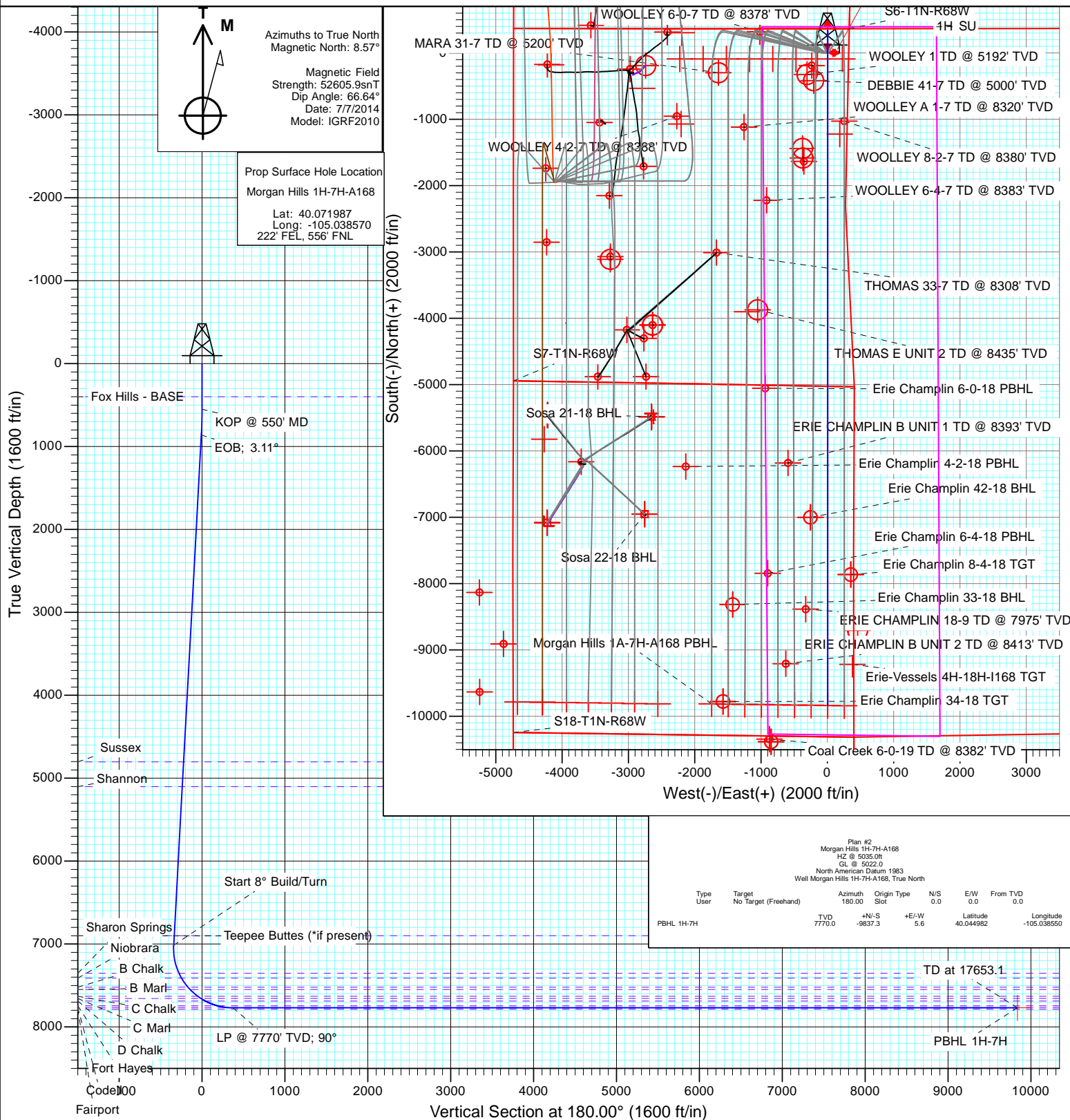




Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)
Well: Morgan Hills 1H-7H-A168
Wellbore: HZ
Design: Plan #2



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		KOP @ 550' MD
2	550.0	0.00	0.00	550.0	0.0	0.0	0.00	0.00	0.0		EOB; 3.11°
3	861.1	3.11	0.84	860.9	8.4	0.1	1.00	0.84	-8.4		Start 8° Build/Turn
4	7024.2	3.11	0.84	7014.9	342.9	5.0	0.00	0.00	-342.9		LP @ 7770' TVD; 90°
5	8188.1	90.00	180.00	7770.0	-372.3	5.6	8.00	179.16	372.3		TD at 17653.1
6	17653.1	90.00	180.00	7770.0	-9837.3	5.6	0.00	0.00	9837.3	PBHL 1H-7H	



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1H-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 1H-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 1H-7H-A168					
Well Position	+N/-S	0.0 ft	Northing:	1,269,408.43 ft	Latitude:	40.071987
	+E/-W	0.0 ft	Easting:	3,129,140.49 ft	Longitude:	-105.038570
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	
550.0	0.00	0.00	550.0	0.0	0.0	0.00	0.00	0.00	0.00	
861.1	3.11	0.84	860.9	8.4	0.1	1.00	1.00	0.00	0.84	
7,024.2	3.11	0.84	7,014.9	342.9	5.0	0.00	0.00	0.00	0.00	
8,188.1	90.00	180.00	7,770.0	-372.3	5.6	8.00	7.47	15.39	179.16	
17,653.1	90.00	180.00	7,770.0	-9,837.3	5.6	0.00	0.00	0.00	0.00	PBHL 1H-7H

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1H-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 1H-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	
550.0	0.00	0.00	550.0	0.0	0.0	0.0	0.00	0.00	KOP @ 550' MD
600.0	0.50	0.84	600.0	0.2	0.0	-0.2	1.00	1.00	
700.0	1.50	0.84	700.0	2.0	0.0	-2.0	1.00	1.00	
800.0	2.50	0.84	799.9	5.5	0.1	-5.5	1.00	1.00	
861.1	3.11	0.84	860.9	8.4	0.1	-8.4	1.00	1.00	EOB; 3.11°
900.0	3.11	0.84	899.8	10.6	0.2	-10.6	0.00	0.00	
1,000.0	3.11	0.84	999.6	16.0	0.2	-16.0	0.00	0.00	
1,100.0	3.11	0.84	1,099.5	21.4	0.3	-21.4	0.00	0.00	
1,200.0	3.11	0.84	1,199.3	26.8	0.4	-26.8	0.00	0.00	
1,300.0	3.11	0.84	1,299.2	32.3	0.5	-32.3	0.00	0.00	
1,400.0	3.11	0.84	1,399.1	37.7	0.5	-37.7	0.00	0.00	
1,500.0	3.11	0.84	1,498.9	43.1	0.6	-43.1	0.00	0.00	
1,600.0	3.11	0.84	1,598.8	48.5	0.7	-48.5	0.00	0.00	
1,700.0	3.11	0.84	1,698.6	54.0	0.8	-54.0	0.00	0.00	
1,800.0	3.11	0.84	1,798.5	59.4	0.9	-59.4	0.00	0.00	
1,900.0	3.11	0.84	1,898.3	64.8	0.9	-64.8	0.00	0.00	
2,000.0	3.11	0.84	1,998.2	70.2	1.0	-70.2	0.00	0.00	
2,100.0	3.11	0.84	2,098.0	75.7	1.1	-75.7	0.00	0.00	
2,200.0	3.11	0.84	2,197.9	81.1	1.2	-81.1	0.00	0.00	
2,300.0	3.11	0.84	2,297.7	86.5	1.3	-86.5	0.00	0.00	
2,400.0	3.11	0.84	2,397.6	91.9	1.3	-91.9	0.00	0.00	
2,500.0	3.11	0.84	2,497.4	97.4	1.4	-97.4	0.00	0.00	
2,600.0	3.11	0.84	2,597.3	102.8	1.5	-102.8	0.00	0.00	
2,700.0	3.11	0.84	2,697.1	108.2	1.6	-108.2	0.00	0.00	
2,800.0	3.11	0.84	2,797.0	113.6	1.7	-113.6	0.00	0.00	
2,900.0	3.11	0.84	2,896.8	119.1	1.7	-119.1	0.00	0.00	
3,000.0	3.11	0.84	2,996.7	124.5	1.8	-124.5	0.00	0.00	
3,100.0	3.11	0.84	3,096.5	129.9	1.9	-129.9	0.00	0.00	
3,200.0	3.11	0.84	3,196.4	135.4	2.0	-135.4	0.00	0.00	
3,300.0	3.11	0.84	3,296.3	140.8	2.1	-140.8	0.00	0.00	
3,400.0	3.11	0.84	3,396.1	146.2	2.1	-146.2	0.00	0.00	
3,500.0	3.11	0.84	3,496.0	151.6	2.2	-151.6	0.00	0.00	
3,600.0	3.11	0.84	3,595.8	157.1	2.3	-157.1	0.00	0.00	
3,700.0	3.11	0.84	3,695.7	162.5	2.4	-162.5	0.00	0.00	
3,800.0	3.11	0.84	3,795.5	167.9	2.4	-167.9	0.00	0.00	
3,900.0	3.11	0.84	3,895.4	173.3	2.5	-173.3	0.00	0.00	
4,000.0	3.11	0.84	3,995.2	178.8	2.6	-178.8	0.00	0.00	
4,100.0	3.11	0.84	4,095.1	184.2	2.7	-184.2	0.00	0.00	
4,200.0	3.11	0.84	4,194.9	189.6	2.8	-189.6	0.00	0.00	
4,300.0	3.11	0.84	4,294.8	195.0	2.8	-195.0	0.00	0.00	
4,400.0	3.11	0.84	4,394.6	200.5	2.9	-200.5	0.00	0.00	
4,500.0	3.11	0.84	4,494.5	205.9	3.0	-205.9	0.00	0.00	
4,600.0	3.11	0.84	4,594.3	211.3	3.1	-211.3	0.00	0.00	
4,700.0	3.11	0.84	4,694.2	216.7	3.2	-216.7	0.00	0.00	
4,800.0	3.11	0.84	4,794.0	222.2	3.2	-222.2	0.00	0.00	
4,809.0	3.11	0.84	4,803.0	222.7	3.2	-222.7	0.00	0.00	Sussex

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1H-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 1H-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
4,900.0	3.11	0.84	4,893.9	227.6	3.3	-227.6	0.00	0.00	
5,000.0	3.11	0.84	4,993.7	233.0	3.4	-233.0	0.00	0.00	
5,100.0	3.11	0.84	5,093.6	238.4	3.5	-238.4	0.00	0.00	
5,109.4	3.11	0.84	5,103.0	239.0	3.5	-239.0	0.00	0.00	Shannon
5,200.0	3.11	0.84	5,193.5	243.9	3.6	-243.9	0.00	0.00	
5,300.0	3.11	0.84	5,293.3	249.3	3.6	-249.3	0.00	0.00	
5,400.0	3.11	0.84	5,393.2	254.7	3.7	-254.7	0.00	0.00	
5,500.0	3.11	0.84	5,493.0	260.2	3.8	-260.2	0.00	0.00	
5,600.0	3.11	0.84	5,592.9	265.6	3.9	-265.6	0.00	0.00	
5,700.0	3.11	0.84	5,692.7	271.0	4.0	-271.0	0.00	0.00	
5,800.0	3.11	0.84	5,792.6	276.4	4.0	-276.4	0.00	0.00	
5,900.0	3.11	0.84	5,892.4	281.9	4.1	-281.9	0.00	0.00	
6,000.0	3.11	0.84	5,992.3	287.3	4.2	-287.3	0.00	0.00	
6,100.0	3.11	0.84	6,092.1	292.7	4.3	-292.7	0.00	0.00	
6,200.0	3.11	0.84	6,192.0	298.1	4.3	-298.1	0.00	0.00	
6,300.0	3.11	0.84	6,291.8	303.6	4.4	-303.6	0.00	0.00	
6,400.0	3.11	0.84	6,391.7	309.0	4.5	-309.0	0.00	0.00	
6,500.0	3.11	0.84	6,491.5	314.4	4.6	-314.4	0.00	0.00	
6,600.0	3.11	0.84	6,591.4	319.8	4.7	-319.8	0.00	0.00	
6,700.0	3.11	0.84	6,691.2	325.3	4.7	-325.3	0.00	0.00	
6,800.0	3.11	0.84	6,791.1	330.7	4.8	-330.7	0.00	0.00	
6,900.0	3.11	0.84	6,890.9	336.1	4.9	-336.1	0.00	0.00	
6,908.1	3.11	0.84	6,899.0	336.6	4.9	-336.6	0.00	0.00	Teepee Buttes (*if present)
7,000.0	3.11	0.84	6,990.8	341.5	5.0	-341.5	0.00	0.00	
7,024.2	3.11	0.84	7,014.9	342.9	5.0	-342.9	0.00	0.00	Start 8° Build/Turn
7,100.0	2.96	179.12	7,090.7	343.0	5.1	-343.0	8.00	-0.20	
7,200.0	10.96	179.77	7,189.9	330.9	5.1	-330.9	8.00	8.00	
7,300.0	18.96	179.87	7,286.4	305.1	5.2	-305.1	8.00	8.00	
7,371.7	24.69	179.90	7,353.0	278.4	5.3	-278.4	8.00	8.00	Sharon Springs
7,400.0	26.96	179.91	7,378.5	266.1	5.3	-266.1	8.00	8.00	
7,437.0	29.92	179.92	7,411.0	248.5	5.3	-248.5	8.00	8.00	Niobrara
7,500.0	34.96	179.94	7,464.1	214.7	5.4	-214.7	8.00	8.00	
7,573.3	40.82	179.95	7,522.0	169.7	5.4	-169.7	8.00	8.00	B Chalk
7,600.0	42.96	179.95	7,541.8	151.9	5.4	-151.9	8.00	8.00	
7,608.5	43.63	179.95	7,548.0	146.1	5.4	-146.1	8.00	8.00	B Marl
7,700.0	50.96	179.96	7,610.0	78.9	5.5	-78.9	8.00	8.00	
7,734.3	53.70	179.97	7,631.0	51.7	5.5	-51.7	8.00	8.00	C Chalk
7,780.3	57.38	179.97	7,657.0	13.8	5.5	-13.8	8.00	8.00	C Marl
7,800.0	58.96	179.97	7,667.4	-2.9	5.5	2.9	8.00	8.00	
7,842.0	62.31	179.98	7,688.0	-39.5	5.5	39.5	8.00	8.00	D Chalk
7,900.0	66.96	179.98	7,712.8	-91.9	5.6	91.9	8.00	8.00	
7,998.3	74.82	179.99	7,745.0	-184.7	5.6	184.7	8.00	8.00	Fort Hayes
8,000.0	74.96	179.99	7,745.5	-186.4	5.6	186.4	8.00	8.00	
8,100.0	82.96	179.99	7,764.6	-284.5	5.6	284.5	8.00	8.00	
8,103.4	83.23	179.99	7,765.0	-287.8	5.6	287.8	8.00	8.00	Codell
8,188.1	90.00	180.00	7,770.0	-372.3	5.6	372.3	8.00	8.00	LP @ 7770' TVD; 90°
8,200.0	90.00	180.00	7,770.0	-384.2	5.6	384.2	0.00	0.00	
8,300.0	90.00	180.00	7,770.0	-484.2	5.6	484.2	0.00	0.00	
8,400.0	90.00	180.00	7,770.0	-584.2	5.6	584.2	0.00	0.00	
8,500.0	90.00	180.00	7,770.0	-684.2	5.6	684.2	0.00	0.00	
8,600.0	90.00	180.00	7,770.0	-784.2	5.6	784.2	0.00	0.00	
8,700.0	90.00	180.00	7,770.0	-884.2	5.6	884.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1H-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 1H-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
8,800.0	90.00	180.00	7,770.0	-984.2	5.6	984.2	0.00	0.00	
8,900.0	90.00	180.00	7,770.0	-1,084.2	5.6	1,084.2	0.00	0.00	
9,000.0	90.00	180.00	7,770.0	-1,184.2	5.6	1,184.2	0.00	0.00	
9,100.0	90.00	180.00	7,770.0	-1,284.2	5.6	1,284.2	0.00	0.00	
9,200.0	90.00	180.00	7,770.0	-1,384.2	5.6	1,384.2	0.00	0.00	
9,300.0	90.00	180.00	7,770.0	-1,484.2	5.6	1,484.2	0.00	0.00	
9,400.0	90.00	180.00	7,770.0	-1,584.2	5.6	1,584.2	0.00	0.00	
9,500.0	90.00	180.00	7,770.0	-1,684.2	5.6	1,684.2	0.00	0.00	
9,600.0	90.00	180.00	7,770.0	-1,784.2	5.6	1,784.2	0.00	0.00	
9,700.0	90.00	180.00	7,770.0	-1,884.2	5.6	1,884.2	0.00	0.00	
9,800.0	90.00	180.00	7,770.0	-1,984.2	5.6	1,984.2	0.00	0.00	
9,900.0	90.00	180.00	7,770.0	-2,084.2	5.6	2,084.2	0.00	0.00	
10,000.0	90.00	180.00	7,770.0	-2,184.2	5.6	2,184.2	0.00	0.00	
10,100.0	90.00	180.00	7,770.0	-2,284.2	5.6	2,284.2	0.00	0.00	
10,200.0	90.00	180.00	7,770.0	-2,384.2	5.6	2,384.2	0.00	0.00	
10,300.0	90.00	180.00	7,770.0	-2,484.2	5.6	2,484.2	0.00	0.00	
10,400.0	90.00	180.00	7,770.0	-2,584.2	5.6	2,584.2	0.00	0.00	
10,500.0	90.00	180.00	7,770.0	-2,684.2	5.6	2,684.2	0.00	0.00	
10,600.0	90.00	180.00	7,770.0	-2,784.2	5.6	2,784.2	0.00	0.00	
10,700.0	90.00	180.00	7,770.0	-2,884.2	5.6	2,884.2	0.00	0.00	
10,800.0	90.00	180.00	7,770.0	-2,984.2	5.6	2,984.2	0.00	0.00	
10,900.0	90.00	180.00	7,770.0	-3,084.2	5.6	3,084.2	0.00	0.00	
11,000.0	90.00	180.00	7,770.0	-3,184.2	5.6	3,184.2	0.00	0.00	
11,100.0	90.00	180.00	7,770.0	-3,284.2	5.6	3,284.2	0.00	0.00	
11,200.0	90.00	180.00	7,770.0	-3,384.2	5.6	3,384.2	0.00	0.00	
11,300.0	90.00	180.00	7,770.0	-3,484.2	5.6	3,484.2	0.00	0.00	
11,400.0	90.00	180.00	7,770.0	-3,584.2	5.6	3,584.2	0.00	0.00	
11,500.0	90.00	180.00	7,770.0	-3,684.2	5.6	3,684.2	0.00	0.00	
11,600.0	90.00	180.00	7,770.0	-3,784.2	5.6	3,784.2	0.00	0.00	
11,700.0	90.00	180.00	7,770.0	-3,884.2	5.6	3,884.2	0.00	0.00	
11,800.0	90.00	180.00	7,770.0	-3,984.2	5.6	3,984.2	0.00	0.00	
11,900.0	90.00	180.00	7,770.0	-4,084.2	5.6	4,084.2	0.00	0.00	
12,000.0	90.00	180.00	7,770.0	-4,184.2	5.6	4,184.2	0.00	0.00	
12,100.0	90.00	180.00	7,770.0	-4,284.2	5.6	4,284.2	0.00	0.00	
12,200.0	90.00	180.00	7,770.0	-4,384.2	5.6	4,384.2	0.00	0.00	
12,300.0	90.00	180.00	7,770.0	-4,484.2	5.6	4,484.2	0.00	0.00	
12,400.0	90.00	180.00	7,770.0	-4,584.2	5.6	4,584.2	0.00	0.00	
12,500.0	90.00	180.00	7,770.0	-4,684.2	5.6	4,684.2	0.00	0.00	
12,600.0	90.00	180.00	7,770.0	-4,784.2	5.6	4,784.2	0.00	0.00	
12,700.0	90.00	180.00	7,770.0	-4,884.2	5.6	4,884.2	0.00	0.00	
12,800.0	90.00	180.00	7,770.0	-4,984.2	5.6	4,984.2	0.00	0.00	
12,900.0	90.00	180.00	7,770.0	-5,084.2	5.6	5,084.2	0.00	0.00	
13,000.0	90.00	180.00	7,770.0	-5,184.2	5.6	5,184.2	0.00	0.00	
13,100.0	90.00	180.00	7,770.0	-5,284.2	5.6	5,284.2	0.00	0.00	
13,200.0	90.00	180.00	7,770.0	-5,384.2	5.6	5,384.2	0.00	0.00	
13,300.0	90.00	180.00	7,770.0	-5,484.2	5.6	5,484.2	0.00	0.00	
13,400.0	90.00	180.00	7,770.0	-5,584.2	5.6	5,584.2	0.00	0.00	
13,500.0	90.00	180.00	7,770.0	-5,684.2	5.6	5,684.2	0.00	0.00	
13,600.0	90.00	180.00	7,770.0	-5,784.2	5.6	5,784.2	0.00	0.00	
13,700.0	90.00	180.00	7,770.0	-5,884.2	5.6	5,884.2	0.00	0.00	
13,800.0	90.00	180.00	7,770.0	-5,984.2	5.6	5,984.2	0.00	0.00	
13,900.0	90.00	180.00	7,770.0	-6,084.2	5.6	6,084.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1H-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 1H-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
14,000.0	90.00	180.00	7,770.0	-6,184.2	5.6	6,184.2	0.00	0.00	
14,100.0	90.00	180.00	7,770.0	-6,284.2	5.6	6,284.2	0.00	0.00	
14,200.0	90.00	180.00	7,770.0	-6,384.2	5.6	6,384.2	0.00	0.00	
14,300.0	90.00	180.00	7,770.0	-6,484.2	5.6	6,484.2	0.00	0.00	
14,400.0	90.00	180.00	7,770.0	-6,584.2	5.6	6,584.2	0.00	0.00	
14,500.0	90.00	180.00	7,770.0	-6,684.2	5.6	6,684.2	0.00	0.00	
14,600.0	90.00	180.00	7,770.0	-6,784.2	5.6	6,784.2	0.00	0.00	
14,700.0	90.00	180.00	7,770.0	-6,884.2	5.6	6,884.2	0.00	0.00	
14,800.0	90.00	180.00	7,770.0	-6,984.2	5.6	6,984.2	0.00	0.00	
14,900.0	90.00	180.00	7,770.0	-7,084.2	5.6	7,084.2	0.00	0.00	
15,000.0	90.00	180.00	7,770.0	-7,184.2	5.6	7,184.2	0.00	0.00	
15,100.0	90.00	180.00	7,770.0	-7,284.2	5.6	7,284.2	0.00	0.00	
15,200.0	90.00	180.00	7,770.0	-7,384.2	5.6	7,384.2	0.00	0.00	
15,300.0	90.00	180.00	7,770.0	-7,484.2	5.6	7,484.2	0.00	0.00	
15,400.0	90.00	180.00	7,770.0	-7,584.2	5.6	7,584.2	0.00	0.00	
15,500.0	90.00	180.00	7,770.0	-7,684.2	5.6	7,684.2	0.00	0.00	
15,600.0	90.00	180.00	7,770.0	-7,784.2	5.6	7,784.2	0.00	0.00	
15,700.0	90.00	180.00	7,770.0	-7,884.2	5.6	7,884.2	0.00	0.00	
15,800.0	90.00	180.00	7,770.0	-7,984.2	5.6	7,984.2	0.00	0.00	
15,900.0	90.00	180.00	7,770.0	-8,084.2	5.6	8,084.2	0.00	0.00	
16,000.0	90.00	180.00	7,770.0	-8,184.2	5.6	8,184.2	0.00	0.00	
16,100.0	90.00	180.00	7,770.0	-8,284.2	5.6	8,284.2	0.00	0.00	
16,200.0	90.00	180.00	7,770.0	-8,384.2	5.6	8,384.2	0.00	0.00	
16,300.0	90.00	180.00	7,770.0	-8,484.2	5.6	8,484.2	0.00	0.00	
16,400.0	90.00	180.00	7,770.0	-8,584.2	5.6	8,584.2	0.00	0.00	
16,500.0	90.00	180.00	7,770.0	-8,684.2	5.6	8,684.2	0.00	0.00	
16,600.0	90.00	180.00	7,770.0	-8,784.2	5.6	8,784.2	0.00	0.00	
16,700.0	90.00	180.00	7,770.0	-8,884.2	5.6	8,884.2	0.00	0.00	
16,800.0	90.00	180.00	7,770.0	-8,984.2	5.6	8,984.2	0.00	0.00	
16,900.0	90.00	180.00	7,770.0	-9,084.2	5.6	9,084.2	0.00	0.00	
17,000.0	90.00	180.00	7,770.0	-9,184.2	5.6	9,184.2	0.00	0.00	
17,100.0	90.00	180.00	7,770.0	-9,284.2	5.6	9,284.2	0.00	0.00	
17,200.0	90.00	180.00	7,770.0	-9,384.2	5.6	9,384.2	0.00	0.00	
17,300.0	90.00	180.00	7,770.0	-9,484.2	5.6	9,484.2	0.00	0.00	
17,400.0	90.00	180.00	7,770.0	-9,584.2	5.6	9,584.2	0.00	0.00	
17,500.0	90.00	180.00	7,770.0	-9,684.2	5.6	9,684.2	0.00	0.00	
17,600.0	90.00	180.00	7,770.0	-9,784.2	5.6	9,784.2	0.00	0.00	
17,653.1	90.00	180.00	7,770.0	-9,837.3	5.6	9,837.3	0.00	0.00	TD at 17653.1

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 1H-7H	0.00	0.00	7,770.0	-9,837.3	5.6	1,259,571.30	3,129,197.28	40.044982	-105.038550
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1H-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 1H-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				
4,809.0	4,803.0	Sussex				
5,109.4	5,103.0	Shannon				
6,908.1	6,899.0	Teepee Buttes (*if present)				
7,371.7	7,353.0	Sharon Springs				
7,437.0	7,411.0	Niobrara				
7,573.3	7,522.0	B Chalk				
7,608.5	7,548.0	B Marl				
7,734.3	7,631.0	C Chalk				
7,780.3	7,657.0	C Marl				
7,842.0	7,688.0	D Chalk				
7,998.3	7,745.0	Fort Hayes				
8,103.4	7,765.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
550.0	550.0	0.0	0.0	KOP @ 550' MD	
861.1	860.9	8.4	0.1	EOB; 3.11°	
7,024.2	7,014.9	342.9	5.0	Start 8° Build/Turn	
8,188.1	7,770.0	-372.3	5.6	LP @ 7770' TVD; 90°	
17,653.1	7,770.0	-9,837.3	5.6	TD at 17653.1	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Morgan Hills 1H-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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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	17,653.1	Plan #2 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE	100.0	46.0	3,621.2	3,621.0	10,000.000	CC, ES
BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE	14,900.0	7,942.0	9,951.6	9,811.1	70.807	SF
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	7,057.1	6,980.9	3,591.7	3,566.0	139.664	CC, ES
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	15,300.0	7,600.0	9,932.3	9,785.2	67.526	SF
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	1,160.6	1,012.0	3,606.0	3,602.3	953.213	CC
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	1,200.0	1,040.4	3,606.1	3,602.2	923.069	ES
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	14,500.0	7,614.8	9,944.2	9,808.0	73.055	SF
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	1,234.0	1,099.9	3,616.9	3,612.8	886.232	CC, ES
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	15,800.0	7,712.1	9,934.7	9,773.8	61.739	SF
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	7,025.4	6,842.0	3,553.8	3,528.7	141.462	CC, ES
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	14,900.0	7,357.9	9,990.5	9,851.8	72.028	SF
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	12,695.1	7,800.0	2,739.7	2,632.9	25.666	CC
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	12,700.0	7,800.0	2,739.7	2,632.9	25.646	ES
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	13,900.0	7,800.0	2,992.9	2,865.2	23.441	SF
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	1,100.0	920.7	3,611.5	3,607.9	989.844	CC, ES
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	13,100.0	7,852.5	8,972.3	8,852.1	74.695	SF
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	3,100.0	3,094.0	3,475.0	3,455.6	179.337	CC, ES
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	16,700.0	7,828.9	9,955.4	9,770.3	53.789	SF
BECKY 1 (EXISTING) - FOUNDATION WELL - NO SUR	5,344.6	5,010.0	5,470.2	5,451.9	298.613	CC, ES
BECKY 1 (EXISTING) - FOUNDATION WELL - NO SUR	12,000.0	5,010.0	9,936.0	9,872.8	157.387	SF
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	7,062.6	6,978.3	5,333.7	5,308.6	212.521	CC, ES
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	12,700.0	7,695.0	9,922.1	9,820.2	97.371	SF
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	7,062.4	6,982.1	5,246.6	5,221.2	206.868	CC, ES
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	13,200.0	7,699.0	9,917.0	9,806.5	89.680	SF
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	7,062.6	6,973.3	6,191.3	6,166.2	246.555	CC, ES
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	11,900.0	7,690.0	9,965.1	9,877.1	113.171	SF
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	7,062.6	6,979.3	4,340.4	4,315.3	173.081	CC, ES
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,700.0	7,696.0	9,976.4	9,857.1	83.646	SF
BILLINGS 21-7 (EXISTING) - KPK WELL - SURVEYS	5,059.9	5,126.0	2,775.5	2,765.8	285.595	CC, ES
BILLINGS 21-7 (EXISTING) - KPK WELL - SURVEYS	17,200.0	5,126.0	9,966.3	9,845.4	82.428	SF
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	2,060.9	1,800.0	4,018.8	4,012.0	592.592	CC
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	2,100.0	1,820.9	4,018.9	4,012.0	583.416	ES
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	13,100.0	7,551.4	9,938.9	9,826.1	88.105	SF
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	1,417.7	1,375.3	2,092.6	2,087.6	424.146	CC, ES
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	15,800.0	7,704.0	9,926.6	9,766.6	62.022	SF
ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO SUR	13,996.4	7,805.0	599.0	474.4	4.807	CC
ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO SUR	14,000.0	7,805.0	599.1	474.4	4.805	ES, SF
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	17,023.6	7,800.0	632.7	455.3	3.566	CC, ES
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	17,100.0	7,800.0	637.3	458.5	3.565	SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	166.3	167.3	70.0	69.4	130.297	CC
Morgan Hills 1A-7H-A168 - HZ - Plan #2	200.0	201.0	70.0	69.3	106.903	ES
Morgan Hills 1A-7H-A168 - HZ - Plan #2	17,653.1	17,589.7	1,766.8	1,420.7	5.105	SF
Morgan Hills 1B-7H-A168 - HZ - Plan #2	200.0	201.0	59.9	59.2	91.506	CC
Morgan Hills 1B-7H-A168 - HZ - Plan #2	249.3	250.3	59.9	59.1	72.463	ES
Morgan Hills 1B-7H-A168 - HZ - Plan #2	17,653.1	17,775.9	1,500.2	1,150.9	4.294	SF
Morgan Hills 1C-7H-A168 - HZ - Plan #2	300.0	300.0	49.8	48.8	49.724	CC, ES
Morgan Hills 1C-7H-A168 - HZ - Plan #2	17,653.1	17,490.0	1,273.0	929.7	3.709	SF
Morgan Hills 1D-7H-A168 - HZ - Plan #2	333.4	333.4	40.0	38.9	35.787	CC
Morgan Hills 1D-7H-A168 - HZ - Plan #2	400.0	399.7	40.2	38.9	29.786	ES
Morgan Hills 1D-7H-A168 - HZ - Plan #2	17,653.1	17,701.3	1,000.1	650.7	2.862	SF
Morgan Hills 1E-7H-A168 - HZ - Plan #2	400.0	400.0	29.9	28.6	22.167	CC, ES
Morgan Hills 1E-7H-A168 - HZ - Plan #2	17,653.1	17,440.2	787.6	454.2	2.363	SF
Morgan Hills 1F-7H-A168 - HZ - Plan #2	433.5	433.5	19.9	18.4	13.537	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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Morgan Hills 1F-7H-A168 - HZ - Plan #2	500.0	499.9	20.0	18.3	11.793	ES
Morgan Hills 1F-7H-A168 - HZ - Plan #2	17,653.1	17,664.2	500.1	150.5	1.431	Level 3, SF
Morgan Hills 1G-7H-A168 - HZ - Plan #2	500.0	500.0	9.8	8.1	5.762	CC
Morgan Hills 1G-7H-A168 - HZ - Plan #2	550.0	550.0	9.9	8.0	5.272	ES
Morgan Hills 1G-7H-A168 - HZ - Plan #2	17,653.1	17,411.2	346.6	91.0	1.356	Level 3, SF
Morgan Hills 1I-7H-A168 - HZ - Plan #2	591.0	591.0	10.1	8.1	4.993	CC
Morgan Hills 1I-7H-A168 - HZ - Plan #2	600.0	600.0	10.1	8.0	4.916	ES
Morgan Hills 1I-7H-A168 - HZ - Plan #2	17,653.1	17,417.7	346.6	91.0	1.356	Level 3, SF
Sosa 11-18 - DD - DD	13,289.0	7,832.9	4,220.4	4,103.7	36.165	CC
Sosa 11-18 - DD - DD	13,400.0	7,833.4	4,221.9	4,103.3	35.589	ES
Sosa 11-18 - DD - DD	16,000.0	7,845.4	5,016.1	4,852.2	30.593	SF
Sosa 11-18 - DD - Plan #1	13,274.8	7,831.3	4,224.0	4,107.5	36.250	CC
Sosa 11-18 - DD - Plan #1	13,300.0	7,831.3	4,224.1	4,107.1	36.115	ES
Sosa 11-18 - DD - Plan #1	16,000.0	7,831.3	5,026.8	4,862.8	30.647	SF
Sosa 12-18 - DD - DD	14,923.3	7,914.2	4,217.6	4,068.5	28.297	CC
Sosa 12-18 - DD - DD	15,000.0	7,914.2	4,218.3	4,067.9	28.050	ES
Sosa 12-18 - DD - DD	17,000.0	7,915.2	4,701.1	4,515.8	25.369	SF
Sosa 12-18 - DD - Plan #3	14,895.9	7,875.1	4,229.9	4,081.7	28.551	CC
Sosa 12-18 - DD - Plan #3	15,000.0	7,875.1	4,231.1	4,081.2	28.214	ES
Sosa 12-18 - DD - Plan #3	17,000.0	7,875.1	4,724.3	4,539.4	25.551	SF
Sosa 21-18 - DD (Gyro) - DD	1,162.9	1,500.0	7,105.9	7,102.5	2,092.085	CC, ES
Sosa 21-18 - DD (Gyro) - DD	17,653.1	1,500.0	8,139.3	8,047.0	88.249	SF
Sosa 21-18 - DD (MWD) - DD	13,293.3	7,851.9	2,667.0	2,550.2	22.850	CC
Sosa 21-18 - DD (MWD) - DD	13,300.0	7,851.8	2,667.0	2,550.1	22.828	ES
Sosa 21-18 - DD (MWD) - DD	14,400.0	7,832.7	2,887.4	2,751.5	21.245	SF
Sosa 21-18 - DD (MWD) - Plan #2	13,300.6	7,894.2	2,656.1	2,539.2	22.736	CC, ES
Sosa 21-18 - DD (MWD) - Plan #2	14,400.0	7,894.2	2,874.6	2,738.7	21.144	SF
Sosa 22-18 - DD - DD	14,785.6	7,932.0	2,742.7	2,597.8	18.933	CC
Sosa 22-18 - DD - DD	14,800.0	7,932.0	2,742.7	2,597.6	18.900	ES
Sosa 22-18 - DD - DD	15,700.0	7,931.6	2,891.1	2,730.3	17.977	SF
Sosa 22-18 - DD - Plan #2	14,768.6	7,888.1	2,760.2	2,615.8	19.124	CC
Sosa 22-18 - DD - Plan #2	14,800.0	7,888.1	2,760.4	2,615.5	19.053	ES
Sosa 22-18 - DD - Plan #2	15,700.0	7,888.1	2,913.1	2,752.5	18.140	SF
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	13,983.4	7,833.9	3,719.6	3,595.2	29.896	CC
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	14,000.0	7,833.9	3,719.7	3,595.0	29.827	ES
SOSA A UNIT 1 (EXISTING) - EXISTING - EXISTING	15,900.0	7,829.6	4,184.4	4,026.5	26.511	SF
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	11,889.5	4,993.0	4,804.5	4,734.7	68.871	CC
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	12,000.0	4,993.0	4,805.7	4,734.4	67.374	ES
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	16,700.0	4,993.0	6,798.8	6,660.1	49.008	SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	12,118.9	7,782.4	2,774.7	2,682.5	30.115	CC
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	12,200.0	7,782.1	2,775.8	2,682.3	29.676	ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	13,600.0	7,777.3	3,145.2	3,027.4	26.696	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	11,989.8	7,737.0	3,029.4	2,939.7	33.778	CC
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	12,000.0	7,737.0	3,029.4	2,939.6	33.712	ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	13,800.0	7,737.0	3,529.0	3,408.0	29.146	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	12,693.7	7,825.9	3,469.8	3,363.5	32.626	CC
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	12,800.0	7,825.7	3,471.4	3,363.2	32.086	ES
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	14,700.0	7,821.1	4,008.1	3,866.8	28.378	SF
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	10,825.7	8,029.9	1,678.4	1,597.1	20.622	CC, ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	11,400.0	8,028.8	1,774.0	1,682.8	19.449	SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	10,668.1	7,730.0	4,239.2	4,172.2	63.257	CC
Thomas 7-12 (Existing) - Existing - NO SURVEYS	10,700.0	7,730.0	4,239.3	4,171.8	62.752	ES
Thomas 7-12 (Existing) - Existing - NO SURVEYS	15,400.0	7,730.0	6,353.1	6,204.2	42.651	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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 7-14 (Existing) - Existing - NO SURVEYS	11,917.4	5,000.0	3,797.3	3,736.5	62.507	CC
Thomas 7-14 (Existing) - Existing - NO SURVEYS	12,000.0	5,000.0	3,798.2	3,736.4	61.515	ES
Thomas 7-14 (Existing) - Existing - NO SURVEYS	14,800.0	5,000.0	4,767.5	4,671.8	49.809	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	10,884.2	7,736.0	3,277.0	3,206.3	46.349	CC
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	10,900.0	7,736.0	3,277.0	3,206.1	46.174	ES
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	13,500.0	7,736.0	4,193.0	4,077.1	36.190	SF
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	10,926.8	5,000.0	4,269.6	4,216.6	80.519	CC
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	11,000.0	5,000.0	4,270.3	4,216.3	79.102	ES
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	15,600.0	5,000.0	6,330.0	6,214.6	54.863	SF
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	0.0	0.0	2,992.2			
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	17,000.0	7,701.0	9,910.9	9,734.4	56.126	SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	9,553.7	7,830.0	4,251.6	4,203.0	87.431	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	9,600.0	7,830.0	4,251.9	4,202.5	86.111	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	16,300.0	7,830.0	7,974.2	7,809.4	48.373	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	420.4	441.5	2,937.1	2,935.6	1,980.328	CC
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	500.0	511.7	2,937.2	2,935.5	1,683.586	ES
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	15,500.0	7,700.0	8,007.2	7,856.6	53.169	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	9,530.7	8,004.9	2,775.2	2,711.9	43.806	CC
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	9,600.0	8,004.5	2,776.1	2,711.6	43.058	ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	11,600.0	7,993.4	3,461.8	3,363.6	35.247	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	0.0	14.3	2,996.0			
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	12,400.0	8,133.7	4,088.0	3,969.1	34.368	SF
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	4,601.4	4,699.0	2,401.7	2,380.3	112.191	CC, ES
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	14,100.0	7,750.1	7,017.0	6,887.7	54.264	SF
WOOLLEY 41-7 (EXISTING) - ENCANA WELL - NO SU	8,002.0	7,743.0	240.7	212.7	8.615	CC, ES, SF
WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WELL - N	550.0	554.0	1,626.0	1,624.1	853.861	CC, ES
WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WELL - N	5,400.0	5,193.0	1,886.8	1,868.3	102.010	SF
WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA - NO S	9,451.0	7,775.0	359.4	312.5	7.666	CC, ES
WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA - NO S	9,500.0	7,775.0	362.7	315.0	7.609	SF
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU	8,932.2	7,791.0	1,263.3	1,224.5	32.508	CC, ES
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU	9,600.0	7,791.0	1,429.0	1,379.6	28.980	SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,862.9	7,852.0	3,443.1	3,405.1	90.732	CC
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,900.0	7,852.3	3,443.3	3,404.8	89.469	ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	14,700.0	7,878.3	6,776.8	6,639.8	49.481	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	200.0	185.0	4,494.1	4,493.5	7,420.545	CC
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	9,800.0	7,441.9	4,522.4	4,470.5	87.238	ES
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	17,000.0	7,258.3	8,521.8	8,346.8	48.688	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	9,412.8	7,686.3	4,151.0	4,103.6	87.615	CC
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	9,500.0	7,628.1	4,151.3	4,103.0	85.945	ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	15,700.0	7,073.4	7,266.7	7,115.6	48.093	SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	9,392.6	7,900.0	3,784.9	3,737.2	79.432	CC
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	9,500.0	7,827.7	3,785.4	3,736.7	77.580	ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	14,900.0	7,300.0	6,437.8	6,299.3	46.495	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	7,550.0	9,507.6	3,508.6	3,453.6	63.840	ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	7,631.6	9,452.8	3,508.0	3,454.1	65.047	CC
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	14,400.0	7,150.0	5,900.8	5,772.2	45.913	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	9,293.8	8,100.0	3,073.0	3,025.8	65.096	CC
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	9,400.0	8,034.1	3,073.6	3,025.4	63.713	ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	13,200.0	7,450.0	4,671.3	4,562.1	42.762	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	7,550.0	9,330.7	2,790.8	2,735.8	50.810	ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	7,594.8	9,301.4	2,790.5	2,736.3	51.411	CC
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	12,600.0	7,300.0	4,276.5	4,178.3	43.516	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	9,053.2	8,275.4	2,488.4	2,442.2	53.820	CC

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 2G-7H-E168 - Hz - Plan #1	9,100.0	8,250.0	2,488.6	2,442.0	53.380	ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	12,000.0	7,600.0	3,546.0	3,457.0	39.815	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	9,280.8	8,050.0	2,049.0	2,002.5	44.121	CC
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	9,300.0	8,050.0	2,049.1	2,002.3	43.840	ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	11,100.0	7,600.0	2,576.4	2,504.4	35.754	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	200.0	184.0	4,554.7	4,554.1	7,542.323	CC
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	17,653.1	15,981.1	4,678.6	4,363.6	14.855	ES, SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	9,403.9	7,747.0	4,300.3	4,253.1	91.163	CC
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	17,653.1	15,969.8	4,303.4	3,988.3	13.657	ES, SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	9,747.2	8,111.6	3,937.9	3,885.6	75.394	CC
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	17,653.1	15,974.5	3,939.4	3,624.3	12.501	ES, SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	14,276.2	12,655.2	3,544.8	3,346.6	17.886	CC
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	17,653.1	15,967.2	3,611.7	3,296.9	11.475	ES, SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	10,451.9	8,870.2	3,210.6	3,140.8	46.028	CC
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	17,653.1	16,036.2	3,261.8	2,946.6	10.346	ES, SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	9,752.7	8,215.6	2,910.4	2,857.9	55.463	CC
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	17,653.1	16,087.8	2,911.8	2,596.3	9.229	ES, SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	9,754.5	8,274.6	2,560.4	2,507.9	48.706	CC
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	17,653.1	16,148.7	2,561.8	2,246.3	8.120	ES, SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	0.0	0.0	0.0	0.0	-60.84	1,764.4	-3,162.2	3,621.4					
100.0	100.0	46.0	46.0	0.2	0.1	-60.84	1,764.5	-3,162.2	3,621.2	3,621.0	0.21	N/A CC, ES		
200.0	200.0	127.9	127.9	0.3	0.2	-60.84	1,764.9	-3,162.5	3,621.7	3,621.2	0.53	6,872.507		
300.0	300.0	210.5	210.5	0.5	0.3	-60.83	1,765.8	-3,163.0	3,622.8	3,621.9	0.85	4,281.663		
400.0	400.0	286.0	286.0	0.7	0.5	-60.81	1,767.1	-3,163.6	3,624.3	3,623.2	1.15	3,142.633		
500.0	500.0	344.0	344.0	0.8	0.6	-60.80	1,768.3	-3,164.5	3,626.8	3,625.4	1.43	2,537.043		
550.0	550.0	374.3	374.3	0.9	0.6	-60.80	1,769.1	-3,165.2	3,628.5	3,626.9	1.57	2,311.021		
600.0	600.0	404.0	403.9	1.0	0.7	-61.62	1,769.9	-3,166.1	3,630.3	3,628.6	1.71	2,124.035		
700.0	700.0	465.0	464.8	1.2	0.8	-61.59	1,771.9	-3,168.6	3,634.5	3,632.5	1.99	1,825.181		
800.0	799.9	497.6	497.3	1.4	0.9	-61.56	1,773.0	-3,170.4	3,639.1	3,636.9	2.23	1,634.619		
861.1	860.9	526.0	525.7	1.5	0.9	-61.55	1,774.1	-3,172.3	3,642.3	3,639.9	2.39	1,526.248		
900.0	899.8	526.0	525.7	1.6	0.9	-61.55	1,774.1	-3,172.3	3,644.7	3,642.2	2.46	1,482.907		
1,000.0	999.6	586.0	585.4	1.8	1.1	-61.61	1,776.2	-3,177.4	3,651.4	3,648.6	2.75	1,329.584		
1,100.0	1,099.5	647.0	646.1	1.9	1.2	-61.68	1,778.0	-3,183.7	3,659.4	3,656.4	3.04	1,204.376		
1,200.0	1,199.3	724.9	723.4	2.1	1.4	-61.79	1,779.3	-3,193.2	3,668.3	3,665.0	3.36	1,090.396		
1,300.0	1,299.2	819.9	817.6	2.3	1.7	-61.93	1,780.6	-3,205.3	3,677.6	3,673.9	3.72	987.414		
1,400.0	1,399.1	894.6	891.6	2.5	1.9	-62.04	1,781.9	-3,214.9	3,687.3	3,683.3	4.05	910.491		
1,500.0	1,498.9	961.9	958.3	2.7	2.1	-62.14	1,783.5	-3,224.0	3,697.8	3,693.4	4.36	847.264		
1,600.0	1,598.8	1,026.4	1,022.1	2.9	2.3	-62.24	1,784.8	-3,233.4	3,709.2	3,704.5	4.68	792.981		
1,700.0	1,698.6	1,093.4	1,088.2	3.1	2.5	-62.36	1,785.5	-3,244.3	3,721.5	3,716.5	5.00	744.189		
1,800.0	1,798.5	1,185.6	1,179.1	3.3	2.8	-62.55	1,785.1	-3,260.4	3,734.3	3,728.9	5.38	693.532		
1,900.0	1,898.3	1,254.0	1,246.2	3.5	3.0	-62.71	1,784.4	-3,272.9	3,747.7	3,741.9	5.72	654.840		
2,000.0	1,998.2	1,324.2	1,315.1	3.7	3.3	-62.86	1,783.6	-3,286.4	3,761.8	3,755.8	6.07	619.785		
2,100.0	2,098.0	1,379.1	1,368.9	3.9	3.5	-62.99	1,783.1	-3,297.5	3,776.9	3,770.6	6.39	591.336		
2,200.0	2,197.9	1,425.0	1,413.7	4.1	3.7	-63.10	1,782.6	-3,307.3	3,793.3	3,786.6	6.69	567.372		
2,300.0	2,297.7	1,479.1	1,466.4	4.3	3.9	-63.24	1,782.0	-3,319.7	3,811.0	3,803.9	7.01	543.631		
2,400.0	2,397.6	1,511.0	1,497.3	4.5	4.1	-63.32	1,781.6	-3,327.4	3,830.0	3,822.7	7.28	526.063		
2,500.0	2,497.4	1,569.6	1,553.9	4.7	4.3	-63.48	1,780.8	-3,342.4	3,850.2	3,842.6	7.63	504.822		
2,600.0	2,597.3	1,596.0	1,579.4	4.9	4.5	-63.55	1,780.4	-3,349.6	3,872.0	3,864.1	7.89	490.815		
2,700.0	2,697.1	1,656.1	1,637.0	5.1	4.8	-63.73	1,779.3	-3,366.8	3,895.0	3,886.8	8.25	472.058		
2,800.0	2,797.0	1,706.8	1,685.2	5.3	5.1	-63.89	1,778.2	-3,382.3	3,919.5	3,910.9	8.59	456.123		
2,900.0	2,896.8	1,769.0	1,744.1	5.5	5.4	-64.09	1,776.3	-3,402.2	3,944.9	3,935.9	8.98	439.529		
3,000.0	2,996.7	1,814.2	1,786.7	5.7	5.7	-64.24	1,774.7	-3,417.1	3,971.4	3,962.1	9.31	426.396		
3,100.0	3,096.5	1,855.0	1,825.0	5.9	6.0	-64.38	1,773.3	-3,431.1	3,999.2	3,989.5	9.64	415.000		
3,200.0	3,196.4	1,925.6	1,891.1	6.1	6.4	-64.62	1,771.1	-3,455.9	4,027.9	4,017.8	10.06	400.539		
3,300.0	3,296.3	2,026.0	1,984.9	6.3	7.1	-64.97	1,768.1	-3,491.6	4,057.1	4,046.5	10.58	383.581		
3,400.0	3,396.1	2,102.5	2,056.3	6.5	7.6	-65.23	1,765.4	-3,518.9	4,086.4	4,075.4	11.02	370.807		
3,500.0	3,496.0	2,201.1	2,148.3	6.7	8.3	-65.56	1,762.2	-3,554.2	4,116.0	4,104.5	11.54	356.798		
3,600.0	3,595.8	2,317.1	2,256.8	6.9	9.0	-65.93	1,758.6	-3,595.2	4,145.3	4,133.2	12.10	342.556		
3,700.0	3,695.7	2,415.3	2,348.8	7.0	9.7	-66.24	1,756.0	-3,629.4	4,174.5	4,161.9	12.60	331.218		
3,800.0	3,795.5	2,515.6	2,442.8	7.2	10.3	-66.55	1,753.0	-3,664.3	4,203.7	4,190.5	13.11	320.579		
3,900.0	3,895.4	2,599.3	2,521.2	7.4	10.9	-66.81	1,750.3	-3,693.5	4,232.9	4,219.3	13.57	311.854		
4,000.0	3,995.2	2,731.2	2,644.7	7.6	11.7	-67.23	1,745.1	-3,739.6	4,262.1	4,247.9	14.19	300.399		
4,100.0	4,095.1	2,823.2	2,731.0	7.8	12.3	-67.51	1,741.7	-3,771.2	4,290.7	4,276.1	14.66	292.698		
4,200.0	4,194.9	2,941.0	2,841.8	8.0	13.1	-67.84	1,739.2	-3,811.0	4,319.7	4,304.5	15.18	284.490		
4,300.0	4,294.8	3,014.7	2,911.4	8.2	13.6	-68.04	1,737.6	-3,835.4	4,348.1	4,332.5	15.60	278.757		
4,400.0	4,394.6	3,067.4	2,960.7	8.4	13.9	-68.19	1,735.8	-3,853.7	4,377.5	4,361.6	15.95	274.395		
4,500.0	4,494.5	3,141.0	3,029.6	8.6	14.4	-68.40	1,733.5	-3,879.7	4,407.7	4,391.4	16.36	269.379		
4,600.0	4,594.3	3,204.3	3,088.7	8.8	14.8	-68.58	1,732.1	-3,902.2	4,438.5	4,421.8	16.74	265.214		
4,700.0	4,694.2	3,338.9	3,214.7	9.0	15.7	-68.93	1,729.8	-3,949.6	4,469.3	4,452.0	17.30	258.345		
4,800.0	4,794.0	3,431.9	3,301.8	9.2	16.4	-69.17	1,728.2	-3,981.9	4,499.7	4,481.9	17.75	253.547		
4,900.0	4,893.9	3,537.1	3,400.5	9.4	17.0	-69.44	1,726.1	-4,018.4	4,530.0	4,511.7	18.23	248.480		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	3,631.8	3,489.2	9.6	17.7	-69.70	1,723.2	-4,051.4	4,560.2	4,541.5	18.70	243.918		
5,100.0	5,093.6	3,725.5	3,576.9	9.8	18.3	-69.95	1,719.7	-4,084.3	4,590.5	4,571.4	19.15	239.652		
5,200.0	5,193.5	3,842.1	3,686.1	10.0	19.1	-70.27	1,715.4	-4,124.8	4,620.6	4,600.9	19.67	234.880		
5,300.0	5,293.3	3,913.0	3,752.6	10.2	19.6	-70.45	1,713.4	-4,149.4	4,650.9	4,630.9	20.05	231.964		
5,400.0	5,393.2	3,987.7	3,822.6	10.4	20.1	-70.63	1,711.7	-4,175.4	4,681.7	4,661.3	20.44	229.028		
5,500.0	5,493.0	4,076.0	3,905.2	10.6	20.6	-70.85	1,709.2	-4,206.6	4,712.8	4,691.9	20.87	225.779		
5,600.0	5,592.9	4,132.7	3,958.1	10.8	21.0	-70.99	1,707.5	-4,226.8	4,744.2	4,723.0	21.22	223.584		
5,700.0	5,692.7	4,170.0	3,992.9	11.0	21.3	-71.09	1,706.5	-4,240.3	4,776.6	4,755.1	21.51	222.032		
5,800.0	5,792.6	4,256.0	4,072.7	11.2	21.9	-71.30	1,704.1	-4,272.3	4,809.8	4,787.8	21.94	219.226		
5,900.0	5,892.4	4,469.3	4,271.2	11.4	23.4	-71.83	1,697.2	-4,350.0	4,842.4	4,819.7	22.69	213.382		
6,000.0	5,992.3	4,549.7	4,346.4	11.6	23.9	-72.03	1,694.0	-4,378.3	4,873.5	4,850.4	23.10	211.013		
6,100.0	6,092.1	6,231.3	5,987.2	11.8	29.9	-74.40	1,675.8	-4,688.6	4,892.9	4,866.8	26.05	187.817		
6,200.0	6,192.0	6,326.9	6,082.8	12.0	30.0	-74.47	1,675.4	-4,690.0	4,892.7	4,866.3	26.35	185.678		
6,300.0	6,291.8	6,426.4	6,182.3	12.2	30.1	-74.52	1,676.2	-4,691.2	4,892.6	4,865.9	26.65	183.562		
6,400.0	6,391.7	6,536.6	6,292.5	12.4	30.2	-74.58	1,677.7	-4,692.2	4,892.4	4,865.4	26.97	181.431		
6,500.0	6,491.5	6,641.0	6,396.9	12.6	30.3	-74.62	1,679.6	-4,692.8	4,892.0	4,864.7	27.28	179.344		
6,600.0	6,591.4	6,743.0	6,498.9	12.8	30.3	-74.67	1,681.2	-4,693.4	4,891.6	4,864.0	27.59	177.307		
6,700.0	6,691.2	6,867.0	6,622.9	13.0	30.4	-74.73	1,682.7	-4,693.9	4,890.9	4,863.0	27.93	175.113		
6,800.0	6,791.1	6,975.7	6,731.6	13.2	30.5	-74.78	1,683.7	-4,694.1	4,889.8	4,861.6	28.26	173.056		
6,900.0	6,890.9	7,075.4	6,831.3	13.4	30.6	-74.84	1,684.4	-4,694.2	4,888.7	4,860.1	28.57	171.100		
7,000.0	6,990.8	7,158.4	6,914.3	13.6	30.6	-74.88	1,685.1	-4,694.4	4,887.8	4,858.9	28.86	169.342		
7,024.2	7,014.9	7,178.1	6,933.9	13.6	30.6	-74.89	1,685.4	-4,694.5	4,887.6	4,858.7	28.93	168.926		
7,039.8	7,030.5	7,190.7	6,946.6	13.7	30.7	-75.45	1,685.6	-4,694.5	4,887.6	4,858.6	28.97	168.697		
7,050.0	7,040.7	7,199.1	6,954.9	13.7	30.7	-76.55	1,685.7	-4,694.6	4,887.6	4,858.6	29.00	168.561		
7,100.0	7,090.7	7,239.7	6,995.5	13.7	30.7	106.78	1,686.3	-4,694.8	4,888.3	4,859.3	29.06	168.203		
7,150.0	7,140.5	7,351.0	7,106.8	13.8	30.8	106.29	1,688.0	-4,694.9	4,889.9	4,860.7	29.19	167.538		
7,200.0	7,189.9	7,455.4	7,211.2	13.8	30.8	106.21	1,689.0	-4,693.7	4,891.6	4,862.3	29.26	167.150		
7,250.0	7,238.6	7,508.0	7,263.8	13.8	30.8	106.10	1,689.5	-4,692.8	4,894.1	4,864.9	29.20	167.592		
7,300.0	7,286.4	7,559.7	7,315.4	13.7	30.8	105.98	1,690.0	-4,691.8	4,897.5	4,868.4	29.09	168.346		
7,350.0	7,333.1	7,599.0	7,354.8	13.7	30.9	105.77	1,690.4	-4,691.1	4,901.9	4,873.0	28.91	169.530		
7,400.0	7,378.5	7,644.0	7,399.8	13.6	30.9	105.55	1,690.9	-4,690.3	4,907.4	4,878.7	28.73	170.831		
7,450.0	7,422.2	7,679.5	7,435.2	13.6	30.9	105.23	1,691.0	-4,689.8	4,914.0	4,885.5	28.49	172.462		
7,500.0	7,464.1	7,713.7	7,469.4	13.5	30.9	104.83	1,691.1	-4,689.4	4,921.6	4,893.4	28.25	174.235		
7,550.0	7,504.1	7,746.4	7,502.1	13.5	31.0	104.36	1,691.0	-4,689.1	4,930.4	4,902.4	28.00	176.066		
7,600.0	7,541.8	7,778.5	7,534.2	13.5	31.0	103.82	1,690.8	-4,688.9	4,940.2	4,912.5	27.78	177.851		
7,650.0	7,577.2	7,812.2	7,567.9	13.4	31.0	103.22	1,690.7	-4,688.7	4,951.1	4,923.5	27.59	179.467		
7,700.0	7,610.0	7,843.2	7,598.9	13.5	31.0	102.53	1,690.6	-4,688.4	4,963.0	4,935.6	27.44	180.847		
7,750.0	7,640.2	7,871.5	7,627.2	13.5	31.0	101.74	1,690.7	-4,688.2	4,976.0	4,948.6	27.36	181.893		
7,800.0	7,667.4	7,896.8	7,652.6	13.6	31.1	100.85	1,690.8	-4,688.0	4,989.9	4,962.6	27.34	182.519		
7,850.0	7,691.7	7,919.2	7,675.0	13.7	31.1	99.86	1,691.0	-4,687.8	5,004.8	4,977.4	27.40	182.663		
7,900.0	7,712.8	7,942.0	7,697.7	13.9	31.1	98.78	1,691.2	-4,687.6	5,020.6	4,993.0	27.55	182.266		
7,950.0	7,730.8	7,954.0	7,709.7	14.1	31.1	97.52	1,691.3	-4,687.5	5,037.3	5,009.5	27.76	181.440		
8,000.0	7,745.5	7,966.4	7,722.1	14.4	31.1	96.17	1,691.4	-4,687.4	5,054.8	5,026.7	28.06	180.125		
8,050.0	7,756.7	7,975.7	7,731.4	14.7	31.1	94.72	1,691.6	-4,687.3	5,073.0	5,044.6	28.43	178.428		
8,100.0	7,764.6	7,982.0	7,737.8	15.1	31.1	93.16	1,691.6	-4,687.3	5,092.0	5,063.1	28.86	176.441		
8,150.0	7,769.0	7,985.3	7,741.1	15.5	31.1	91.51	1,691.7	-4,687.2	5,111.5	5,082.2	29.33	174.261		
8,188.1	7,770.0	7,985.8	7,741.5	15.9	31.1	90.19	1,691.7	-4,687.2	5,126.7	5,097.0	29.72	172.525		
8,200.0	7,770.0	7,985.7	7,741.4	16.0	31.1	90.19	1,691.7	-4,687.2	5,131.5	5,101.7	29.83	172.048		
8,300.0	7,770.0	7,984.6	7,740.3	17.0	31.1	90.18	1,691.7	-4,687.2	5,172.8	5,141.9	30.82	167.818		
8,400.0	7,770.0	7,983.6	7,739.3	18.1	31.1	90.16	1,691.6	-4,687.3	5,215.6	5,183.7	31.94	163.311		
8,500.0	7,770.0	7,982.5	7,738.2	19.3	31.1	90.15	1,691.6	-4,687.3	5,260.0	5,226.9	33.15	158.696		
8,600.0	7,770.0	7,981.5	7,737.2	20.6	31.1	90.14	1,691.6	-4,687.3	5,305.9	5,271.5	34.43	154.098		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,700.0	7,770.0	7,980.4	7,736.2	21.9	31.1	90.12	1,691.6	-4,687.3	5,353.3	5,317.6	35.78	149.601		
8,800.0	7,770.0	7,979.4	7,735.1	23.3	31.1	90.11	1,691.6	-4,687.3	5,402.2	5,365.0	37.19	145.262		
8,900.0	7,770.0	7,978.4	7,734.1	24.8	31.1	90.10	1,691.6	-4,687.3	5,452.4	5,413.7	38.64	141.112		
9,000.0	7,770.0	7,977.4	7,733.1	26.3	31.1	90.09	1,691.6	-4,687.3	5,504.0	5,463.8	40.13	137.170		
9,100.0	7,770.0	7,976.4	7,732.1	27.8	31.1	90.07	1,691.6	-4,687.3	5,556.9	5,515.2	41.64	133.441		
9,200.0	7,770.0	7,975.4	7,731.1	29.3	31.1	90.06	1,691.6	-4,687.3	5,611.1	5,567.9	43.19	129.925		
9,300.0	7,770.0	7,974.4	7,730.1	30.9	31.1	90.05	1,691.5	-4,687.3	5,666.5	5,621.7	44.75	126.617		
9,400.0	7,770.0	7,973.4	7,729.1	32.5	31.1	90.04	1,691.5	-4,687.3	5,723.1	5,676.8	46.34	123.508		
9,500.0	7,770.0	7,972.5	7,728.2	34.1	31.1	90.03	1,691.5	-4,687.4	5,781.0	5,733.0	47.94	120.587		
9,600.0	7,770.0	7,971.5	7,727.2	35.7	31.1	90.01	1,691.5	-4,687.4	5,839.9	5,790.4	49.56	117.845		
9,700.0	7,770.0	7,970.5	7,726.2	37.3	31.1	90.00	1,691.5	-4,687.4	5,900.0	5,848.8	51.18	115.270		
9,800.0	7,770.0	7,969.6	7,725.3	39.0	31.1	89.99	1,691.5	-4,687.4	5,961.1	5,908.3	52.82	112.850		
9,900.0	7,770.0	7,968.6	7,724.4	40.6	31.1	89.98	1,691.5	-4,687.4	6,023.3	5,968.8	54.47	110.576		
10,000.0	7,770.0	7,967.7	7,723.4	42.3	31.1	89.97	1,691.5	-4,687.4	6,086.5	6,030.3	56.13	108.438		
10,100.0	7,770.0	7,966.8	7,722.5	44.0	31.1	89.96	1,691.4	-4,687.4	6,150.6	6,092.8	57.79	106.425		
10,200.0	7,770.0	7,965.8	7,721.6	45.6	31.1	89.95	1,691.4	-4,687.4	6,215.7	6,156.3	59.46	104.529		
10,300.0	7,770.0	7,964.9	7,720.6	47.3	31.1	89.93	1,691.4	-4,687.4	6,281.8	6,220.6	61.14	102.742		
10,400.0	7,770.0	7,964.0	7,719.7	49.0	31.1	89.92	1,691.4	-4,687.4	6,348.7	6,285.9	62.82	101.056		
10,500.0	7,770.0	7,963.1	7,718.8	50.7	31.1	89.91	1,691.4	-4,687.4	6,416.5	6,351.9	64.51	99.463		
10,600.0	7,770.0	7,962.2	7,717.9	52.4	31.1	89.90	1,691.4	-4,687.4	6,485.1	6,418.9	66.20	97.959		
10,700.0	7,770.0	7,961.3	7,717.0	54.1	31.1	89.89	1,691.4	-4,687.5	6,554.5	6,486.6	67.90	96.535		
10,800.0	7,770.0	7,960.4	7,716.1	55.8	31.1	89.88	1,691.4	-4,687.5	6,624.7	6,555.1	69.60	95.187		
10,900.0	7,770.0	7,942.0	7,697.7	57.5	31.1	89.65	1,691.2	-4,687.6	6,695.7	6,624.4	71.27	93.943		
11,000.0	7,770.0	7,942.0	7,697.7	59.2	31.1	89.65	1,691.2	-4,687.6	6,767.3	6,694.4	72.98	92.728		
11,100.0	7,770.0	7,942.0	7,697.7	60.9	31.1	89.65	1,691.2	-4,687.6	6,839.7	6,765.0	74.69	91.576		
11,200.0	7,770.0	7,942.0	7,697.7	62.6	31.1	89.65	1,691.2	-4,687.6	6,912.8	6,836.4	76.40	90.481		
11,300.0	7,770.0	7,942.0	7,697.7	64.3	31.1	89.65	1,691.2	-4,687.6	6,986.6	6,908.4	78.11	89.440		
11,400.0	7,770.0	7,942.0	7,697.7	66.0	31.1	89.65	1,691.2	-4,687.6	7,061.0	6,981.1	79.83	88.450		
11,500.0	7,770.0	7,942.0	7,697.7	67.7	31.1	89.65	1,691.2	-4,687.6	7,136.0	7,054.4	81.55	87.506		
11,600.0	7,770.0	7,942.0	7,697.7	69.5	31.1	89.65	1,691.2	-4,687.6	7,211.6	7,128.3	83.27	86.607		
11,700.0	7,770.0	7,942.0	7,697.7	71.2	31.1	89.65	1,691.2	-4,687.6	7,287.8	7,202.8	84.99	85.750		
11,800.0	7,770.0	7,942.0	7,697.7	72.9	31.1	89.65	1,691.2	-4,687.6	7,364.6	7,277.9	86.71	84.932		
11,900.0	7,770.0	7,942.0	7,697.7	74.6	31.1	89.65	1,691.2	-4,687.6	7,441.9	7,353.5	88.44	84.150		
12,000.0	7,770.0	7,942.0	7,697.7	76.4	31.1	89.65	1,691.2	-4,687.6	7,519.8	7,429.7	90.16	83.403		
12,100.0	7,770.0	7,942.0	7,697.7	78.1	31.1	89.65	1,691.2	-4,687.6	7,598.2	7,506.3	91.89	82.689		
12,200.0	7,770.0	7,942.0	7,697.7	79.8	31.1	89.65	1,691.2	-4,687.6	7,677.1	7,583.5	93.62	82.005		
12,300.0	7,770.0	7,942.0	7,697.7	81.5	31.1	89.65	1,691.2	-4,687.6	7,756.5	7,661.1	95.35	81.351		
12,400.0	7,770.0	7,942.0	7,697.7	83.3	31.1	89.65	1,691.2	-4,687.6	7,836.3	7,739.2	97.08	80.723		
12,500.0	7,770.0	7,942.0	7,697.7	85.0	31.1	89.65	1,691.2	-4,687.6	7,916.6	7,817.8	98.81	80.122		
12,600.0	7,770.0	7,942.0	7,697.7	86.7	31.1	89.65	1,691.2	-4,687.6	7,997.4	7,896.8	100.54	79.544		
12,700.0	7,770.0	7,942.0	7,697.7	88.5	31.1	89.65	1,691.2	-4,687.6	8,078.6	7,976.3	102.27	78.990		
12,800.0	7,770.0	7,942.0	7,697.7	90.2	31.1	89.65	1,691.2	-4,687.6	8,160.2	8,056.2	104.01	78.458		
12,900.0	7,770.0	7,942.0	7,697.7	91.9	31.1	89.65	1,691.2	-4,687.6	8,242.2	8,136.4	105.74	77.946		
13,000.0	7,770.0	7,942.0	7,697.7	93.7	31.1	89.65	1,691.2	-4,687.6	8,324.6	8,217.1	107.48	77.455		
13,100.0	7,770.0	7,942.0	7,697.7	95.4	31.1	89.65	1,691.2	-4,687.6	8,407.4	8,298.1	109.21	76.981		
13,200.0	7,770.0	7,942.0	7,697.7	97.1	31.1	89.65	1,691.2	-4,687.6	8,490.5	8,379.6	110.95	76.526		
13,300.0	7,770.0	7,942.0	7,697.7	98.9	31.1	89.65	1,691.2	-4,687.6	8,574.0	8,461.3	112.69	76.087		
13,400.0	7,770.0	7,942.0	7,697.7	100.6	31.1	89.65	1,691.2	-4,687.6	8,657.9	8,543.5	114.42	75.665		
13,500.0	7,770.0	7,942.0	7,697.7	102.4	31.1	89.65	1,691.2	-4,687.6	8,742.1	8,625.9	116.16	75.257		
13,600.0	7,770.0	7,942.0	7,697.7	104.1	31.1	89.65	1,691.2	-4,687.6	8,826.6	8,708.7	117.90	74.864		
13,700.0	7,770.0	7,942.0	7,697.7	105.8	31.1	89.65	1,691.2	-4,687.6	8,911.5	8,791.8	119.64	74.485		
13,800.0	7,770.0	7,942.0	7,697.7	107.6	31.1	89.65	1,691.2	-4,687.6	8,996.6	8,875.2	121.38	74.119		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,770.0	7,942.0	7,697.7	109.3	31.1	89.65	1,691.2	-4,687.6	9,082.1	8,959.0	123.12	73.765		
14,000.0	7,770.0	7,942.0	7,697.7	111.1	31.1	89.65	1,691.2	-4,687.6	9,167.8	9,043.0	124.86	73.424		
14,100.0	7,770.0	7,942.0	7,697.7	112.8	31.1	89.65	1,691.2	-4,687.6	9,253.9	9,127.3	126.60	73.094		
14,200.0	7,770.0	7,942.0	7,697.7	114.5	31.1	89.65	1,691.2	-4,687.6	9,340.2	9,211.9	128.34	72.774		
14,300.0	7,770.0	7,942.0	7,697.7	116.3	31.1	89.65	1,691.2	-4,687.6	9,426.8	9,296.7	130.09	72.465		
14,400.0	7,770.0	7,942.0	7,697.7	118.0	31.1	89.65	1,691.2	-4,687.6	9,513.7	9,381.8	131.83	72.167		
14,500.0	7,770.0	7,942.0	7,697.7	119.8	31.1	89.65	1,691.2	-4,687.6	9,600.8	9,467.2	133.57	71.877		
14,600.0	7,770.0	7,942.0	7,697.7	121.5	31.1	89.65	1,691.2	-4,687.6	9,688.1	9,552.8	135.31	71.597		
14,700.0	7,770.0	7,942.0	7,697.7	123.3	31.1	89.65	1,691.2	-4,687.6	9,775.7	9,638.7	137.06	71.325		
14,800.0	7,770.0	7,942.0	7,697.7	125.0	31.1	89.65	1,691.2	-4,687.6	9,863.6	9,724.8	138.80	71.062		
14,900.0	7,770.0	7,942.0	7,697.7	126.7	31.1	89.65	1,691.2	-4,687.6	9,951.6	9,811.1	140.55	70.807 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 Tooface (")	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	-60.64	1,778.2	-3,161.1	3,627.4					
100.0	100.0	48.3	48.3	0.2	0.1	-60.64	1,778.2	-3,161.0	3,626.9	3,626.6	0.24	N/A		
200.0	200.0	142.9	142.9	0.3	0.2	-60.64	1,778.1	-3,160.8	3,626.6	3,626.0	0.58	6,297.658		
208.2	208.2	149.2	149.2	0.3	0.3	-60.64	1,778.1	-3,160.8	3,626.6	3,626.0	0.60	6,033.271		
300.0	300.0	219.4	219.4	0.5	0.4	-60.64	1,778.2	-3,160.9	3,626.9	3,626.0	0.88	4,103.171		
400.0	400.0	300.0	300.0	0.7	0.5	-60.64	1,778.5	-3,161.6	3,627.8	3,626.6	1.20	3,025.560		
500.0	500.0	388.3	388.2	0.8	0.7	-60.65	1,778.9	-3,162.8	3,629.1	3,627.6	1.53	2,375.550		
550.0	550.0	430.3	430.3	0.9	0.8	-60.65	1,779.0	-3,163.5	3,629.9	3,628.2	1.69	2,149.893		
600.0	600.0	470.9	470.8	1.0	0.8	-61.48	1,779.2	-3,164.2	3,630.7	3,628.9	1.85	1,966.244		
700.0	700.0	567.9	567.9	1.2	1.0	-61.49	1,780.3	-3,165.9	3,631.9	3,629.7	2.19	1,657.516		
800.0	799.9	647.2	647.1	1.4	1.1	-61.51	1,782.1	-3,166.9	3,632.4	3,629.9	2.51	1,448.205		
861.1	860.9	700.0	699.9	1.5	1.2	-61.53	1,783.8	-3,167.7	3,632.8	3,630.1	2.71	1,339.666		
900.0	899.8	717.2	717.1	1.6	1.3	-61.53	1,784.4	-3,168.0	3,633.0	3,630.2	2.81	1,291.213		
1,000.0	999.6	800.0	799.8	1.8	1.4	-61.56	1,788.0	-3,169.5	3,634.2	3,631.0	3.15	1,155.407		
1,100.0	1,099.5	886.4	886.1	1.9	1.6	-61.58	1,792.1	-3,171.3	3,635.7	3,632.2	3.49	1,042.957		
1,200.0	1,199.3	987.3	986.8	2.1	1.8	-61.61	1,796.7	-3,173.6	3,637.4	3,633.5	3.85	943.768		
1,300.0	1,299.2	1,112.6	1,112.0	2.3	2.0	-61.65	1,802.2	-3,176.1	3,638.7	3,634.4	4.27	852.603		
1,400.0	1,399.1	1,213.4	1,212.7	2.5	2.2	-61.68	1,806.6	-3,177.8	3,639.6	3,635.0	4.64	784.619		
1,500.0	1,498.9	1,321.1	1,320.3	2.7	2.4	-61.71	1,811.0	-3,179.5	3,640.4	3,635.4	5.02	724.878		
1,600.0	1,598.8	1,418.8	1,417.9	2.9	2.6	-61.75	1,814.6	-3,181.1	3,641.1	3,635.7	5.39	675.859		
1,700.0	1,698.6	1,500.0	1,499.0	3.1	2.7	-61.78	1,817.7	-3,182.8	3,642.2	3,636.5	5.72	636.370		
1,800.0	1,798.5	1,642.4	1,641.3	3.3	3.0	-61.83	1,823.2	-3,184.9	3,642.8	3,636.6	6.17	590.259		
1,900.0	1,898.3	1,743.0	1,741.9	3.5	3.2	-61.86	1,826.8	-3,185.9	3,642.8	3,636.3	6.54	556.656		
2,000.0	1,998.2	1,848.5	1,847.3	3.7	3.4	-61.89	1,830.7	-3,187.1	3,643.0	3,636.1	6.93	525.941		
2,100.0	2,098.0	1,988.8	1,987.4	3.9	3.6	-61.94	1,835.6	-3,187.5	3,642.4	3,635.1	7.37	494.083		
2,200.0	2,197.9	2,097.0	2,095.6	4.1	3.8	-61.97	1,838.7	-3,187.4	3,641.2	3,633.4	7.76	469.325		
2,300.0	2,297.7	2,219.1	2,217.7	4.3	4.1	-62.03	1,841.0	-3,187.2	3,639.4	3,631.2	8.17	445.676		
2,400.0	2,397.6	2,315.1	2,313.7	4.5	4.2	-62.08	1,842.8	-3,187.1	3,637.6	3,629.1	8.53	426.517		
2,500.0	2,497.4	2,456.3	2,454.8	4.7	4.5	-62.16	1,844.1	-3,186.2	3,634.9	3,625.9	8.97	405.333		
2,600.0	2,597.3	2,540.2	2,538.8	4.9	4.6	-62.21	1,844.6	-3,185.6	3,632.0	3,622.7	9.31	390.240		
2,700.0	2,697.1	2,613.9	2,612.5	5.1	4.7	-62.26	1,845.4	-3,185.5	3,629.9	3,620.2	9.63	376.972		
2,800.0	2,797.0	2,700.0	2,698.6	5.3	4.9	-62.31	1,846.5	-3,185.6	3,628.1	3,618.1	9.97	363.804		
2,900.0	2,896.8	2,788.3	2,786.9	5.5	5.0	-62.37	1,847.4	-3,186.2	3,626.7	3,616.4	10.32	351.500		
3,000.0	2,896.7	2,890.7	2,889.2	5.7	5.2	-62.45	1,847.8	-3,187.7	3,625.6	3,614.9	10.69	339.302		
3,100.0	3,096.5	2,990.5	2,989.0	5.9	5.4	-62.54	1,847.7	-3,189.2	3,624.4	3,613.3	11.05	328.041		
3,200.0	3,196.4	3,105.1	3,103.6	6.1	5.6	-62.64	1,847.7	-3,190.7	3,623.0	3,611.6	11.44	316.715		
3,300.0	3,296.3	3,200.0	3,198.5	6.3	5.7	-62.72	1,847.9	-3,191.7	3,621.6	3,609.8	11.80	307.013		
3,400.0	3,396.1	3,290.2	3,288.7	6.5	5.9	-62.79	1,848.0	-3,192.9	3,620.3	3,608.2	12.14	298.103		
3,500.0	3,496.0	3,394.0	3,392.5	6.7	6.1	-62.89	1,847.8	-3,194.5	3,619.1	3,606.6	12.52	289.180		
3,600.0	3,595.8	3,515.9	3,514.4	6.9	6.3	-63.00	1,847.0	-3,196.1	3,617.5	3,604.6	12.92	280.039		
3,700.0	3,695.7	3,600.0	3,598.5	7.0	6.4	-63.08	1,846.7	-3,197.1	3,615.9	3,602.6	13.26	272.764		
3,800.0	3,795.5	3,676.3	3,674.8	7.2	6.6	-63.14	1,846.8	-3,198.1	3,614.8	3,601.2	13.58	266.128		
3,900.0	3,895.4	3,759.1	3,757.6	7.4	6.7	-63.21	1,847.4	-3,199.7	3,614.3	3,600.4	13.92	259.660		
4,000.0	3,995.2	3,858.7	3,857.1	7.6	6.9	-63.30	1,847.7	-3,202.1	3,614.1	3,599.8	14.29	252.999		
4,094.5	4,089.6	3,944.3	3,942.7	7.8	7.0	-63.37	1,848.2	-3,204.0	3,613.9	3,599.3	14.62	247.245		
4,100.0	4,095.1	3,948.5	3,946.9	7.8	7.0	-63.38	1,848.2	-3,204.1	3,613.9	3,599.3	14.63	246.940		
4,200.0	4,194.9	4,037.5	4,035.8	8.0	7.2	-63.45	1,848.8	-3,206.5	3,614.2	3,599.2	14.98	241.229		
4,300.0	4,294.8	4,141.3	4,139.6	8.2	7.4	-63.55	1,849.4	-3,209.3	3,614.4	3,599.1	15.36	235.371		
4,400.0	4,394.6	4,259.5	4,257.8	8.4	7.6	-63.65	1,850.3	-3,212.3	3,614.6	3,598.9	15.76	229.411		
4,500.0	4,494.5	4,384.7	4,382.9	8.6	7.8	-63.74	1,851.2	-3,214.2	3,613.9	3,597.7	16.17	223.518		
4,600.0	4,594.3	4,465.0	4,463.2	8.8	8.0	-63.81	1,851.7	-3,215.5	3,613.2	3,596.7	16.50	218.943		
4,700.0	4,694.2	4,573.0	4,571.2	9.0	8.1	-63.89	1,853.0	-3,217.3	3,612.9	3,596.0	16.89	213.959		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
4,800.0	4,794.0	4,674.3	4,672.5	9.2	8.3	-63.96	1,854.0	-3,218.7	3,612.1	3,594.9	17.26	209.310		
4,900.0	4,893.9	4,780.2	4,778.4	9.4	8.5	-64.04	1,855.1	-3,220.1	3,611.5	3,593.8	17.64	204.765		
5,000.0	4,993.7	4,880.9	4,879.1	9.6	8.7	-64.11	1,856.3	-3,221.3	3,610.6	3,592.6	18.01	200.493		
5,100.0	5,093.6	4,982.4	4,980.5	9.8	8.9	-64.16	1,858.1	-3,222.1	3,609.8	3,591.4	18.38	196.378		
5,200.0	5,193.5	5,083.8	5,081.9	10.0	9.1	-64.22	1,859.9	-3,222.9	3,608.9	3,590.1	18.76	192.422		
5,300.0	5,293.3	5,166.0	5,164.1	10.2	9.2	-64.27	1,861.4	-3,223.6	3,608.2	3,589.1	19.09	188.970		
5,400.0	5,393.2	5,261.6	5,259.6	10.4	9.4	-64.33	1,863.1	-3,225.1	3,607.9	3,588.5	19.46	185.438		
5,500.0	5,493.0	5,362.1	5,360.2	10.6	9.6	-64.40	1,864.6	-3,226.5	3,607.6	3,587.8	19.83	181.951		
5,600.0	5,592.9	5,477.6	5,475.6	10.8	9.8	-64.47	1,866.4	-3,228.1	3,607.2	3,587.0	20.23	178.352		
5,700.0	5,692.7	5,560.6	5,558.7	11.0	9.9	-64.52	1,867.9	-3,229.0	3,606.6	3,586.0	20.57	175.368		
5,800.0	5,792.6	5,667.9	5,665.9	11.2	10.1	-64.59	1,869.8	-3,230.7	3,606.5	3,585.5	20.95	172.154		
5,900.0	5,892.4	5,770.2	5,768.2	11.4	10.3	-64.66	1,871.5	-3,231.8	3,605.9	3,584.6	21.32	169.099		
6,000.0	5,992.3	5,853.4	5,851.3	11.6	10.4	-64.71	1,873.0	-3,232.9	3,605.6	3,583.9	21.66	166.424		
6,008.2	6,000.4	5,859.9	5,857.9	11.6	10.4	-64.71	1,873.1	-3,233.0	3,605.6	3,583.9	21.69	166.213		
6,100.0	6,092.1	5,937.3	5,935.2	11.8	10.6	-64.76	1,874.6	-3,234.5	3,605.8	3,583.8	22.01	163.845		
6,200.0	6,192.0	6,050.5	6,048.4	12.0	10.8	-64.83	1,876.9	-3,236.8	3,606.2	3,583.8	22.40	160.979		
6,300.0	6,291.8	6,193.1	6,190.9	12.2	11.0	-64.91	1,879.7	-3,238.1	3,605.6	3,582.7	22.85	157.807		
6,400.0	6,391.7	6,345.4	6,343.2	12.4	11.3	-64.99	1,882.3	-3,237.6	3,603.7	3,580.4	23.31	154.568		
6,500.0	6,491.5	6,450.1	6,447.9	12.6	11.5	-65.02	1,885.0	-3,235.6	3,600.8	3,577.1	23.70	151.954		
6,600.0	6,591.4	6,531.3	6,529.1	12.8	11.6	-65.05	1,886.9	-3,234.6	3,598.4	3,574.3	24.04	149.703		
6,700.0	6,691.2	6,614.9	6,612.6	13.0	11.8	-65.07	1,889.3	-3,233.7	3,596.4	3,572.0	24.38	147.506		
6,800.0	6,791.1	6,706.5	6,704.2	13.2	11.9	-65.10	1,891.9	-3,233.1	3,594.8	3,570.0	24.74	145.305		
6,900.0	6,890.9	6,800.0	6,797.6	13.4	12.1	-65.14	1,894.6	-3,232.8	3,593.5	3,568.3	25.10	143.152		
7,000.0	6,990.8	6,895.0	6,892.5	13.6	12.3	-65.17	1,897.5	-3,232.6	3,592.3	3,566.8	25.47	141.056		
7,024.2	7,014.9	6,929.8	6,927.4	13.6	12.3	-65.18	1,898.4	-3,232.5	3,592.0	3,566.4	25.58	140.443		
7,050.0	7,040.7	6,969.9	6,967.5	13.7	12.4	-66.83	1,899.3	-3,232.4	3,591.7	3,566.0	25.69	139.813		
7,057.1	7,047.9	6,980.9	6,978.5	13.7	12.4	-69.78	1,899.4	-3,232.4	3,591.7	3,566.0	25.72	139.664	CC, ES	
7,100.0	7,090.7	7,043.3	7,040.8	13.7	12.5	116.55	1,900.2	-3,232.0	3,592.2	3,566.3	25.87	138.857		
7,150.0	7,140.5	7,100.0	7,097.5	13.8	12.6	116.00	1,900.7	-3,231.4	3,593.8	3,567.8	25.99	138.300		
7,200.0	7,189.9	7,146.1	7,143.7	13.8	12.7	115.74	1,901.1	-3,231.0	3,597.0	3,570.9	26.05	138.069		
7,250.0	7,238.6	7,184.1	7,181.7	13.8	12.8	115.46	1,901.5	-3,230.7	3,601.8	3,575.7	26.08	138.127		
7,300.0	7,286.4	7,224.1	7,221.6	13.7	12.9	115.12	1,902.0	-3,230.5	3,608.3	3,582.2	26.08	138.358		
7,350.0	7,333.1	7,265.1	7,262.6	13.7	12.9	114.72	1,902.4	-3,230.4	3,616.4	3,590.3	26.07	138.739		
7,400.0	7,378.5	7,300.0	7,297.5	13.6	13.0	114.20	1,902.6	-3,230.5	3,626.1	3,600.1	26.03	139.289		
7,450.0	7,422.2	7,342.3	7,339.9	13.6	13.1	113.65	1,902.8	-3,230.6	3,637.3	3,611.3	26.01	139.861		
7,500.0	7,464.1	7,378.2	7,375.8	13.5	13.1	112.96	1,903.1	-3,230.8	3,650.2	3,624.2	25.98	140.514		
7,550.0	7,504.1	7,414.4	7,412.0	13.5	13.2	112.17	1,903.3	-3,231.0	3,664.6	3,638.6	25.96	141.146		
7,600.0	7,541.8	7,452.1	7,449.6	13.5	13.2	111.30	1,903.7	-3,231.2	3,680.4	3,654.4	25.97	141.694		
7,650.0	7,577.2	7,487.3	7,484.8	13.4	13.3	110.31	1,904.0	-3,231.4	3,697.7	3,671.7	26.02	142.128		
7,700.0	7,610.0	7,539.5	7,537.1	13.5	13.4	109.42	1,904.5	-3,231.5	3,716.3	3,690.2	26.12	142.293		
7,750.0	7,640.2	7,598.8	7,596.3	13.5	13.5	108.54	1,905.2	-3,231.1	3,736.1	3,709.8	26.27	142.215		
7,800.0	7,667.4	7,619.5	7,617.0	13.6	13.5	107.05	1,905.5	-3,230.9	3,757.2	3,730.7	26.45	142.052		
7,850.0	7,691.7	7,637.0	7,634.6	13.7	13.6	105.38	1,905.7	-3,230.7	3,779.5	3,752.8	26.69	141.623		
7,900.0	7,712.8	7,652.2	7,649.7	13.9	13.6	103.53	1,906.0	-3,230.5	3,803.1	3,776.2	26.99	140.932		
7,950.0	7,730.8	7,664.8	7,662.3	14.1	13.6	101.50	1,906.2	-3,230.4	3,827.9	3,800.6	27.34	140.010		
8,000.0	7,745.5	7,674.8	7,672.3	14.4	13.6	99.30	1,906.4	-3,230.3	3,853.7	3,826.0	27.74	138.907		
8,050.0	7,756.7	7,682.3	7,679.8	14.7	13.7	96.92	1,906.6	-3,230.2	3,880.4	3,852.2	28.18	137.689		
8,100.0	7,764.6	7,700.0	7,697.5	15.1	13.7	94.61	1,907.0	-3,230.1	3,908.0	3,879.3	28.66	136.354		
8,150.0	7,769.0	7,700.0	7,697.5	15.5	13.7	91.89	1,907.0	-3,230.1	3,936.1	3,907.0	29.13	135.132		
8,188.1	7,770.0	7,700.0	7,697.5	15.9	13.7	89.76	1,907.0	-3,230.1	3,957.9	3,928.4	29.48	134.256		
8,200.0	7,770.0	7,700.0	7,697.5	16.0	13.7	89.76	1,907.0	-3,230.1	3,964.8	3,935.2	29.59	133.987		
8,300.0	7,770.0	7,700.0	7,697.5	17.0	13.7	89.76	1,907.0	-3,230.1	4,023.4	3,992.8	30.59	131.527		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,400.0	7,770.0	7,700.0	7,697.5	18.1	13.7	89.76	1,907.0	-3,230.1	4,083.6	4,051.9	31.70	128.803		
8,500.0	7,770.0	7,684.8	7,682.3	19.3	13.7	89.49	1,906.7	-3,230.2	4,145.4	4,112.5	32.89	126.049		
8,600.0	7,770.0	7,683.3	7,680.8	20.6	13.7	89.46	1,906.6	-3,230.2	4,208.6	4,174.4	34.17	123.158		
8,700.0	7,770.0	7,681.8	7,679.3	21.9	13.6	89.44	1,906.6	-3,230.2	4,273.2	4,237.7	35.52	120.296		
8,800.0	7,770.0	7,680.3	7,677.8	23.3	13.6	89.41	1,906.6	-3,230.2	4,339.2	4,302.2	36.93	117.509		
8,900.0	7,770.0	7,678.8	7,676.3	24.8	13.6	89.39	1,906.5	-3,230.3	4,406.4	4,368.1	38.37	114.827		
9,000.0	7,770.0	7,677.4	7,674.9	26.3	13.6	89.36	1,906.5	-3,230.3	4,474.9	4,435.0	39.86	112.267		
9,100.0	7,770.0	7,676.0	7,673.5	27.8	13.6	89.34	1,906.5	-3,230.3	4,544.5	4,503.2	41.38	109.836		
9,200.0	7,770.0	7,674.6	7,672.1	29.3	13.6	89.31	1,906.4	-3,230.3	4,615.3	4,572.4	42.92	107.537		
9,300.0	7,770.0	7,673.2	7,670.7	30.9	13.6	89.29	1,906.4	-3,230.3	4,687.1	4,642.6	44.48	105.369		
9,400.0	7,770.0	7,671.8	7,669.3	32.5	13.6	89.26	1,906.4	-3,230.3	4,760.0	4,713.9	46.07	103.327		
9,500.0	7,770.0	7,670.5	7,668.0	34.1	13.6	89.24	1,906.4	-3,230.3	4,833.8	4,786.1	47.67	101.407		
9,600.0	7,770.0	7,669.2	7,666.7	35.7	13.6	89.22	1,906.3	-3,230.3	4,908.5	4,859.2	49.28	99.601		
9,700.0	7,770.0	7,667.9	7,665.4	37.3	13.6	89.19	1,906.3	-3,230.4	4,984.1	4,933.2	50.91	97.904		
9,800.0	7,770.0	7,666.6	7,664.1	39.0	13.6	89.17	1,906.3	-3,230.4	5,060.6	5,008.1	52.55	96.308		
9,900.0	7,770.0	7,665.3	7,662.8	40.6	13.6	89.15	1,906.2	-3,230.4	5,137.9	5,083.7	54.19	94.806		
10,000.0	7,770.0	7,664.1	7,661.6	42.3	13.6	89.13	1,906.2	-3,230.4	5,215.9	5,160.1	55.85	93.393		
10,100.0	7,770.0	7,662.9	7,660.4	44.0	13.6	89.10	1,906.2	-3,230.4	5,294.7	5,237.2	57.51	92.063		
10,200.0	7,770.0	7,661.7	7,659.2	45.6	13.6	89.08	1,906.2	-3,230.4	5,374.2	5,315.0	59.18	90.808		
10,300.0	7,770.0	7,660.5	7,658.0	47.3	13.6	89.06	1,906.2	-3,230.4	5,454.4	5,393.5	60.86	89.625		
10,400.0	7,770.0	7,659.3	7,656.8	49.0	13.6	89.04	1,906.1	-3,230.4	5,535.2	5,472.6	62.54	88.509		
10,500.0	7,770.0	7,658.2	7,655.7	50.7	13.6	89.02	1,906.1	-3,230.4	5,616.6	5,552.4	64.22	87.453		
10,600.0	7,770.0	7,657.0	7,654.5	52.4	13.6	89.00	1,906.1	-3,230.5	5,698.6	5,632.7	65.91	86.455		
10,700.0	7,770.0	7,655.9	7,653.4	54.1	13.6	88.98	1,906.1	-3,230.5	5,781.2	5,713.6	67.61	85.511		
10,800.0	7,770.0	7,654.8	7,652.3	55.8	13.6	88.96	1,906.0	-3,230.5	5,864.3	5,795.0	69.31	84.616		
10,900.0	7,770.0	7,653.7	7,651.2	57.5	13.6	88.94	1,906.0	-3,230.5	5,948.0	5,877.0	71.01	83.767		
11,000.0	7,770.0	7,652.6	7,650.1	59.2	13.6	88.92	1,906.0	-3,230.5	6,032.1	5,959.4	72.71	82.962		
11,100.0	7,770.0	7,651.5	7,649.0	60.9	13.6	88.90	1,906.0	-3,230.5	6,116.8	6,042.3	74.42	82.196		
11,200.0	7,770.0	7,650.5	7,648.0	62.6	13.6	88.88	1,906.0	-3,230.5	6,201.8	6,125.7	76.13	81.469		
11,300.0	7,770.0	7,649.5	7,647.0	64.3	13.6	88.87	1,905.9	-3,230.5	6,287.3	6,209.5	77.84	80.776		
11,400.0	7,770.0	7,648.4	7,645.9	66.0	13.6	88.85	1,905.9	-3,230.5	6,373.3	6,293.7	79.55	80.117		
11,500.0	7,770.0	7,647.4	7,644.9	67.7	13.6	88.83	1,905.9	-3,230.6	6,459.6	6,378.4	81.27	79.488		
11,600.0	7,770.0	7,646.4	7,643.9	69.5	13.6	88.81	1,905.9	-3,230.6	6,546.4	6,463.4	82.98	78.889		
11,700.0	7,770.0	7,645.4	7,642.9	71.2	13.6	88.80	1,905.9	-3,230.6	6,633.5	6,548.8	84.70	78.316		
11,800.0	7,770.0	7,644.5	7,642.0	72.9	13.6	88.78	1,905.9	-3,230.6	6,720.9	6,634.5	86.42	77.769		
11,900.0	7,770.0	7,643.5	7,641.0	74.6	13.6	88.76	1,905.8	-3,230.6	6,808.7	6,720.6	88.14	77.246		
12,000.0	7,770.0	7,642.6	7,640.1	76.4	13.6	88.74	1,905.8	-3,230.6	6,896.9	6,807.0	89.87	76.746		
12,100.0	7,770.0	7,641.6	7,639.1	78.1	13.6	88.73	1,905.8	-3,230.6	6,985.3	6,893.7	91.59	76.267		
12,200.0	7,770.0	7,640.7	7,638.2	79.8	13.6	88.71	1,905.8	-3,230.6	7,074.1	6,980.8	93.32	75.808		
12,300.0	7,770.0	7,639.8	7,637.3	81.5	13.6	88.70	1,905.8	-3,230.6	7,163.2	7,068.1	95.04	75.368		
12,400.0	7,770.0	7,638.9	7,636.4	83.3	13.6	88.68	1,905.8	-3,230.6	7,252.5	7,155.7	96.77	74.945		
12,500.0	7,770.0	7,638.0	7,635.5	85.0	13.6	88.66	1,905.7	-3,230.7	7,342.1	7,243.6	98.50	74.540		
12,600.0	7,770.0	7,637.1	7,634.6	86.7	13.6	88.65	1,905.7	-3,230.7	7,432.0	7,331.8	100.23	74.151		
12,700.0	7,770.0	7,636.2	7,633.7	88.5	13.6	88.63	1,905.7	-3,230.7	7,522.2	7,420.2	101.96	73.776		
12,800.0	7,770.0	7,635.4	7,632.9	90.2	13.6	88.62	1,905.7	-3,230.7	7,612.5	7,508.9	103.69	73.416		
12,900.0	7,770.0	7,634.5	7,632.0	91.9	13.6	88.60	1,905.7	-3,230.7	7,703.2	7,597.7	105.42	73.070		
13,000.0	7,770.0	7,633.7	7,631.2	93.7	13.6	88.59	1,905.7	-3,230.7	7,794.0	7,686.9	107.16	72.736		
13,100.0	7,770.0	7,632.9	7,630.4	95.4	13.6	88.57	1,905.7	-3,230.7	7,885.1	7,776.2	108.89	72.414		
13,200.0	7,770.0	7,632.0	7,629.6	97.1	13.6	88.56	1,905.7	-3,230.7	7,976.4	7,865.8	110.62	72.104		
13,300.0	7,770.0	7,631.2	7,628.7	98.9	13.6	88.54	1,905.6	-3,230.7	8,067.9	7,955.5	112.36	71.806		
13,400.0	7,770.0	7,630.4	7,627.9	100.6	13.6	88.53	1,905.6	-3,230.7	8,159.6	8,045.5	114.09	71.517		
13,500.0	7,770.0	7,629.6	7,627.2	102.4	13.6	88.52	1,905.6	-3,230.7	8,251.5	8,135.6	115.83	71.239		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
13,600.0	7,770.0	7,628.9	7,626.4	104.1	13.6	88.50	1,905.6	-3,230.8	8,343.5	8,226.0	117.56	70.970	
13,700.0	7,770.0	7,628.1	7,625.6	105.8	13.6	88.49	1,905.6	-3,230.8	8,435.8	8,316.5	119.30	70.710	
13,800.0	7,770.0	7,627.3	7,624.8	107.6	13.6	88.47	1,905.6	-3,230.8	8,528.2	8,407.2	121.04	70.459	
13,900.0	7,770.0	7,626.6	7,624.1	109.3	13.6	88.46	1,905.6	-3,230.8	8,620.8	8,498.0	122.78	70.216	
14,000.0	7,770.0	7,625.8	7,623.3	111.1	13.6	88.45	1,905.6	-3,230.8	8,713.6	8,589.1	124.51	69.980	
14,100.0	7,770.0	7,600.0	7,597.5	112.8	13.5	87.99	1,905.2	-3,231.1	8,806.6	8,680.4	126.18	69.793	
14,200.0	7,770.0	7,600.0	7,597.5	114.5	13.5	87.99	1,905.2	-3,231.1	8,899.6	8,771.7	127.92	69.571	
14,300.0	7,770.0	7,600.0	7,597.5	116.3	13.5	87.99	1,905.2	-3,231.1	8,992.9	8,863.2	129.66	69.356	
14,400.0	7,770.0	7,600.0	7,597.5	118.0	13.5	87.99	1,905.2	-3,231.1	9,086.2	8,954.8	131.40	69.148	
14,500.0	7,770.0	7,600.0	7,597.5	119.8	13.5	87.99	1,905.2	-3,231.1	9,179.7	9,046.6	133.14	68.945	
14,600.0	7,770.0	7,600.0	7,597.5	121.5	13.5	87.99	1,905.2	-3,231.1	9,273.4	9,138.5	134.89	68.749	
14,700.0	7,770.0	7,600.0	7,597.5	123.3	13.5	87.99	1,905.2	-3,231.1	9,367.1	9,230.5	136.63	68.559	
14,800.0	7,770.0	7,600.0	7,597.5	125.0	13.5	87.99	1,905.2	-3,231.1	9,461.0	9,322.7	138.37	68.374	
14,900.0	7,770.0	7,600.0	7,597.5	126.7	13.5	87.99	1,905.2	-3,231.1	9,555.0	9,414.9	140.11	68.195	
15,000.0	7,770.0	7,600.0	7,597.5	128.5	13.5	87.99	1,905.2	-3,231.1	9,649.2	9,507.3	141.86	68.020	
15,100.0	7,770.0	7,600.0	7,597.5	130.2	13.5	87.99	1,905.2	-3,231.1	9,743.4	9,599.8	143.60	67.851	
15,200.0	7,770.0	7,600.0	7,597.5	132.0	13.5	87.99	1,905.2	-3,231.1	9,837.8	9,692.5	145.34	67.686	
15,300.0	7,770.0	7,600.0	7,597.5	133.7	13.5	87.99	1,905.2	-3,231.1	9,932.3	9,785.2	147.09	67.526 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (°)	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	-60.12	1,800.8	-3,134.2	3,615.0					
100.0	100.0	57.0	57.0	0.2	0.1	-60.12	1,800.8	-3,134.2	3,614.7	3,614.5	0.25	N/A		
200.0	200.0	157.0	157.0	0.3	0.3	-60.12	1,800.8	-3,134.2	3,614.7	3,614.1	0.59	6,078.404		
300.0	300.0	257.0	257.0	0.5	0.4	-60.12	1,800.8	-3,134.2	3,614.7	3,613.8	0.94	3,845.039		
400.0	400.0	357.0	357.0	0.7	0.6	-60.12	1,800.8	-3,134.2	3,614.7	3,613.4	1.29	2,811.881		
500.0	500.0	457.0	457.0	0.8	0.8	-60.12	1,800.8	-3,134.2	3,614.7	3,613.1	1.63	2,216.350		
550.0	550.0	507.0	507.0	0.9	0.9	-60.12	1,800.8	-3,134.2	3,614.7	3,612.9	1.80	2,004.122		
600.0	600.0	557.0	557.0	1.0	1.0	-60.96	1,800.8	-3,134.2	3,614.6	3,612.6	1.98	1,828.925		
700.0	700.0	657.0	657.0	1.2	1.1	-60.99	1,800.8	-3,134.2	3,613.7	3,611.4	2.32	1,555.961		
800.0	799.9	756.9	756.9	1.4	1.3	-61.05	1,800.8	-3,134.2	3,612.1	3,609.4	2.67	1,352.145		
861.1	860.9	799.2	799.2	1.5	1.4	-61.09	1,800.9	-3,134.3	3,610.8	3,607.9	2.86	1,264.436		
900.0	899.8	838.4	838.4	1.6	1.4	-61.12	1,801.0	-3,134.4	3,609.9	3,606.9	3.00	1,205.225		
1,000.0	999.6	933.5	933.5	1.8	1.6	-61.19	1,801.3	-3,134.9	3,607.9	3,604.5	3.35	1,078.250		
1,100.0	1,099.5	997.6	997.6	1.9	1.7	-61.25	1,801.4	-3,135.5	3,606.3	3,602.7	3.64	989.618		
1,160.6	1,160.0	1,012.0	1,012.0	2.1	1.7	-61.26	1,801.6	-3,135.8	3,606.0	3,602.3	3.78	953.213 CC		
1,200.0	1,199.3	1,040.4	1,040.4	2.1	1.8	-61.28	1,802.0	-3,136.3	3,606.1	3,602.2	3.91	923.069 ES		
1,300.0	1,299.2	1,074.0	1,074.0	2.3	1.8	-61.30	1,802.9	-3,137.4	3,607.6	3,603.4	4.15	868.492		
1,400.0	1,399.1	1,137.0	1,136.8	2.5	2.0	-61.33	1,805.7	-3,140.2	3,610.8	3,606.4	4.45	810.786		
1,500.0	1,498.9	1,158.5	1,158.3	2.7	2.0	-61.34	1,806.9	-3,141.4	3,615.5	3,610.8	4.68	772.332		
1,600.0	1,598.8	1,200.0	1,199.6	2.9	2.1	-61.36	1,809.4	-3,144.3	3,622.0	3,617.1	4.94	732.585		
1,700.0	1,698.6	1,263.0	1,262.2	3.1	2.2	-61.40	1,813.2	-3,149.9	3,630.0	3,624.7	5.25	692.068		
1,800.0	1,798.5	1,305.7	1,304.7	3.3	2.3	-61.43	1,815.8	-3,154.2	3,639.1	3,633.6	5.51	660.313		
1,900.0	1,898.3	1,352.7	1,351.2	3.5	2.4	-61.46	1,819.0	-3,159.5	3,649.6	3,643.8	5.78	630.910		
2,000.0	1,998.2	1,403.1	1,401.0	3.7	2.5	-61.49	1,822.7	-3,165.8	3,661.6	3,655.5	6.06	603.798		
2,100.0	2,098.0	1,466.9	1,464.1	3.9	2.7	-61.54	1,827.3	-3,174.6	3,674.6	3,668.2	6.37	577.083		
2,200.0	2,197.9	1,528.6	1,524.9	4.1	2.9	-61.60	1,832.0	-3,183.8	3,688.8	3,682.1	6.67	553.279		
2,300.0	2,297.7	1,636.0	1,630.8	4.3	3.2	-61.69	1,840.2	-3,200.0	3,703.1	3,696.1	7.05	525.503		
2,400.0	2,397.6	1,699.0	1,692.8	4.5	3.4	-61.73	1,845.6	-3,209.5	3,717.9	3,710.5	7.35	505.895		
2,500.0	2,497.4	1,762.0	1,754.7	4.7	3.6	-61.78	1,851.1	-3,219.9	3,733.9	3,726.2	7.65	487.991		
2,600.0	2,597.3	1,812.0	1,803.8	4.9	3.7	-61.82	1,855.8	-3,228.6	3,751.0	3,743.0	7.93	472.916		
2,700.0	2,697.1	1,887.0	1,877.1	5.1	4.0	-61.87	1,863.3	-3,242.0	3,768.9	3,760.6	8.25	456.559		
2,800.0	2,797.0	1,950.0	1,938.7	5.3	4.2	-61.91	1,870.3	-3,253.4	3,787.6	3,779.0	8.56	442.588		
2,900.0	2,896.8	2,012.0	1,999.3	5.5	4.5	-61.95	1,877.3	-3,264.7	3,806.8	3,797.9	8.86	429.711		
3,000.0	2,996.7	2,074.0	2,059.7	5.7	4.7	-61.98	1,884.5	-3,276.7	3,826.9	3,817.8	9.16	417.780		
3,100.0	3,096.5	2,136.0	2,119.8	5.9	5.0	-62.02	1,892.3	-3,289.5	3,848.5	3,839.0	9.46	406.758		
3,200.0	3,196.4	2,232.7	2,213.6	6.1	5.4	-62.07	1,904.6	-3,309.3	3,870.1	3,860.3	9.82	393.964		
3,300.0	3,296.3	2,300.7	2,279.5	6.3	5.7	-62.12	1,912.6	-3,324.1	3,892.4	3,882.3	10.13	384.066		
3,400.0	3,396.1	2,395.2	2,371.0	6.5	6.1	-62.21	1,922.4	-3,345.8	3,915.1	3,904.6	10.49	373.154		
3,500.0	3,496.0	2,501.3	2,473.7	6.7	6.6	-62.30	1,934.3	-3,369.4	3,937.6	3,926.7	10.87	362.249		
3,600.0	3,595.8	2,594.3	2,563.8	6.9	7.0	-62.36	1,945.5	-3,389.6	3,960.0	3,948.8	11.23	352.778		
3,700.0	3,695.7	2,735.7	2,700.8	7.0	7.6	-62.44	1,963.3	-3,419.6	3,982.3	3,970.7	11.67	341.391		
3,800.0	3,795.5	2,848.8	2,810.8	7.2	8.1	-62.50	1,976.9	-3,442.7	4,003.6	3,991.5	12.06	332.077		
3,900.0	3,895.4	2,953.9	2,912.9	7.4	8.6	-62.54	1,990.5	-3,463.4	4,024.6	4,012.1	12.43	323.684		
4,000.0	3,995.2	3,066.8	3,022.7	7.6	9.1	-62.57	2,005.6	-3,484.8	4,045.2	4,032.4	12.83	315.395		
4,100.0	4,095.1	3,172.2	3,125.2	7.8	9.5	-62.60	2,019.9	-3,504.9	4,066.0	4,052.8	13.20	307.914		
4,200.0	4,194.9	3,299.8	3,249.6	8.0	10.1	-62.67	2,034.4	-3,529.3	4,085.7	4,072.1	13.62	299.954		
4,300.0	4,294.8	3,371.9	3,319.8	8.2	10.4	-62.72	2,041.8	-3,543.6	4,105.6	4,091.7	13.94	294.514		
4,400.0	4,394.6	3,570.8	3,514.2	8.4	11.2	-62.80	2,065.0	-3,579.1	4,124.2	4,109.7	14.49	284.720		
4,500.0	4,494.5	3,819.0	3,758.0	8.6	12.1	-62.89	2,091.0	-3,617.1	4,140.0	4,124.9	15.12	273.868		
4,600.0	4,594.3	3,883.0	3,821.0	8.8	12.3	-62.94	2,096.0	-3,627.2	4,155.0	4,139.6	15.42	269.431		
4,700.0	4,694.2	3,912.7	3,850.2	9.0	12.4	-62.96	2,098.4	-3,632.3	4,171.2	4,155.5	15.67	266.234		
4,800.0	4,794.0	3,974.5	3,910.8	9.2	12.7	-62.99	2,104.6	-3,642.7	4,188.4	4,172.4	15.97	262.254		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,893.9	4,006.0	3,941.6	9.4	12.8	-63.00	2,108.3	-3,648.0	4,206.6	4,190.4	16.22	259.345		
5,000.0	4,993.7	4,069.0	4,003.0	9.6	13.1	-63.03	2,116.1	-3,659.8	4,226.4	4,209.9	16.53	255.758		
5,100.0	5,093.6	4,088.5	4,022.0	9.8	13.2	-63.03	2,118.6	-3,663.8	4,247.5	4,230.8	16.75	253.536		
5,200.0	5,193.5	4,159.5	4,090.8	10.0	13.5	-63.06	2,127.7	-3,678.7	4,269.8	4,252.7	17.07	250.107		
5,300.0	5,293.3	4,317.1	4,243.6	10.2	14.2	-63.18	2,144.8	-3,712.9	4,291.7	4,274.2	17.54	244.708		
5,400.0	5,393.2	4,471.4	4,393.9	10.4	14.9	-63.31	2,158.7	-3,745.3	4,312.2	4,294.2	18.00	239.586		
5,500.0	5,493.0	4,561.2	4,481.3	10.6	15.3	-63.42	2,164.9	-3,764.6	4,332.1	4,313.8	18.35	236.143		
5,600.0	5,592.9	4,728.6	4,644.6	10.8	16.0	-63.61	2,175.8	-3,799.7	4,351.5	4,332.7	18.83	231.121		
5,700.0	5,692.7	4,814.0	4,728.1	11.0	16.3	-63.67	2,183.5	-3,815.8	4,370.1	4,350.9	19.17	227.945		
5,800.0	5,792.6	4,895.4	4,807.7	11.2	16.7	-63.70	2,193.0	-3,830.4	4,388.9	4,369.4	19.51	224.952		
5,900.0	5,892.4	4,969.0	4,879.5	11.4	17.0	-63.71	2,202.7	-3,843.2	4,408.3	4,388.4	19.84	222.237		
6,000.0	5,992.3	5,103.1	5,010.1	11.6	17.5	-63.71	2,221.4	-3,866.7	4,428.0	4,407.7	20.27	218.443		
6,100.0	6,092.1	5,209.1	5,113.6	11.8	18.0	-63.70	2,236.8	-3,883.8	4,446.5	4,425.9	20.66	215.260		
6,200.0	6,192.0	5,312.0	5,214.1	12.0	18.4	-63.70	2,251.5	-3,900.7	4,465.4	4,444.3	21.04	212.266		
6,300.0	6,291.8	5,404.1	5,304.0	12.2	18.8	-63.72	2,262.6	-3,916.9	4,484.1	4,462.7	21.39	209.602		
6,400.0	6,391.7	5,674.6	5,569.7	12.4	19.8	-63.94	2,282.0	-3,963.5	4,499.4	4,477.3	22.06	204.004		
6,500.0	6,491.5	5,757.4	5,651.2	12.6	20.0	-64.02	2,286.4	-3,977.4	4,514.5	4,492.1	22.39	201.609		
6,600.0	6,591.4	5,841.5	5,733.9	12.8	20.4	-64.12	2,290.0	-3,992.4	4,530.1	4,507.3	22.73	199.300		
6,700.0	6,691.2	5,963.2	5,853.5	13.0	20.8	-64.26	2,295.4	-4,014.0	4,545.6	4,522.5	23.13	196.488		
6,800.0	6,791.1	6,072.1	5,960.8	13.2	21.2	-64.35	2,301.9	-4,031.6	4,560.5	4,537.0	23.52	193.907		
6,900.0	6,890.9	6,300.5	6,186.1	13.4	21.9	-64.49	2,318.4	-4,065.1	4,575.2	4,551.1	24.12	189.716		
7,000.0	6,990.8	6,602.9	6,486.0	13.6	22.7	-64.63	2,338.4	-4,098.3	4,586.7	4,561.9	24.85	184.602		
7,024.2	7,014.9	6,657.2	6,540.0	13.6	22.9	-64.66	2,341.2	-4,102.8	4,588.5	4,563.5	24.99	183.613		
7,050.0	7,040.7	7,032.9	6,914.9	13.7	23.5	-66.59	2,347.5	-4,123.5	4,589.9	4,564.2	25.68	178.762		
7,100.0	7,090.7	7,080.2	6,962.2	13.7	23.5	116.70	2,348.1	-4,124.2	4,591.2	4,565.4	25.78	178.099		
7,150.0	7,140.5	7,123.8	7,005.8	13.8	23.6	116.03	2,348.9	-4,124.8	4,594.0	4,568.2	25.85	177.732		
7,200.0	7,189.9	7,177.2	7,059.2	13.8	23.7	115.68	2,349.8	-4,125.5	4,598.5	4,572.6	25.91	177.477		
7,250.0	7,238.6	7,258.0	7,140.0	13.8	23.8	115.41	2,350.5	-4,126.6	4,604.2	4,578.2	26.00	177.115		
7,300.0	7,286.4	7,314.1	7,196.1	13.7	23.8	115.04	2,351.0	-4,127.0	4,611.2	4,585.2	26.03	177.147		
7,350.0	7,333.1	7,358.7	7,240.6	13.7	23.9	114.58	2,351.5	-4,127.3	4,619.7	4,593.7	26.05	177.352		
7,400.0	7,378.5	7,398.1	7,280.0	13.6	23.9	114.02	2,352.1	-4,127.5	4,629.7	4,603.6	26.07	177.582		
7,450.0	7,422.2	7,432.9	7,314.9	13.6	24.0	113.33	2,352.7	-4,127.7	4,641.3	4,615.2	26.11	177.735		
7,500.0	7,464.1	7,466.2	7,348.1	13.5	24.0	112.54	2,353.3	-4,127.9	4,654.3	4,628.2	26.19	177.697		
7,550.0	7,504.1	7,505.0	7,387.0	13.5	24.0	111.69	2,354.2	-4,128.2	4,668.9	4,642.6	26.32	177.358		
7,600.0	7,541.8	7,557.6	7,439.6	13.5	24.1	110.87	2,355.5	-4,128.4	4,684.9	4,658.3	26.52	176.630		
7,650.0	7,577.2	7,622.5	7,504.5	13.4	24.2	110.07	2,357.3	-4,128.2	4,701.9	4,675.2	26.79	175.543		
7,700.0	7,610.0	7,631.0	7,512.9	13.5	24.2	108.66	2,357.5	-4,128.1	4,720.3	4,693.2	27.10	174.155		
7,750.0	7,640.2	7,660.7	7,542.6	13.5	24.2	107.32	2,358.3	-4,127.9	4,740.0	4,712.5	27.50	172.358		
7,800.0	7,667.4	7,674.6	7,556.5	13.6	24.2	105.69	2,358.7	-4,127.9	4,761.0	4,733.0	27.98	170.188		
7,850.0	7,691.7	7,686.9	7,568.8	13.7	24.2	103.91	2,359.0	-4,128.0	4,783.2	4,754.7	28.52	167.731		
7,900.0	7,712.8	7,697.7	7,579.6	13.9	24.3	101.98	2,359.2	-4,128.1	4,806.6	4,777.4	29.11	165.097		
7,950.0	7,730.8	7,725.0	7,606.9	14.1	24.3	100.14	2,359.7	-4,128.4	4,831.0	4,801.2	29.74	162.417		
8,000.0	7,745.5	7,725.0	7,606.9	14.4	24.3	97.84	2,359.7	-4,128.4	4,856.1	4,825.7	30.39	159.775		
8,050.0	7,756.7	7,725.0	7,606.9	14.7	24.3	95.42	2,359.7	-4,128.4	4,882.1	4,851.0	31.03	157.330		
8,100.0	7,764.6	7,725.0	7,606.9	15.1	24.3	92.92	2,359.7	-4,128.4	4,908.7	4,877.0	31.63	155.180		
8,150.0	7,769.0	7,728.9	7,610.8	15.5	24.3	90.39	2,359.8	-4,128.5	4,935.8	4,903.6	32.18	153.381		
8,188.1	7,770.0	7,730.8	7,612.7	15.9	24.3	88.42	2,359.8	-4,128.5	4,956.7	4,924.1	32.55	152.288		
8,200.0	7,770.0	7,729.9	7,611.7	16.0	24.3	88.40	2,359.8	-4,128.5	4,963.3	4,930.6	32.66	151.980		
8,300.0	7,770.0	7,725.0	7,606.9	17.0	24.3	88.34	2,359.7	-4,128.4	5,019.2	4,985.6	33.65	149.162		
8,400.0	7,770.0	7,725.0	7,606.9	18.1	24.3	88.34	2,359.7	-4,128.4	5,076.6	5,041.8	34.76	146.031		
8,500.0	7,770.0	7,725.0	7,606.9	19.3	24.3	88.34	2,359.7	-4,128.4	5,135.2	5,099.2	35.97	142.752		
8,600.0	7,770.0	7,725.0	7,606.9	20.6	24.3	88.34	2,359.7	-4,128.4	5,195.1	5,157.8	37.26	139.425		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	7,725.0	7,606.9	21.9	24.3	88.34	2,359.7	-4,128.4	5,256.2	5,217.6	38.61	136.124		
8,800.0	7,770.0	7,725.0	7,606.9	23.3	24.3	88.34	2,359.7	-4,128.4	5,318.5	5,278.5	40.02	132.899		
8,900.0	7,770.0	7,725.0	7,606.9	24.8	24.3	88.34	2,359.7	-4,128.4	5,382.0	5,340.5	41.47	129.781		
9,000.0	7,770.0	7,725.0	7,606.9	26.3	24.3	88.34	2,359.7	-4,128.4	5,446.5	5,403.5	42.96	126.790		
9,100.0	7,770.0	7,725.0	7,606.9	27.8	24.3	88.34	2,359.7	-4,128.4	5,512.1	5,467.6	44.48	123.936		
9,200.0	7,770.0	7,725.0	7,606.9	29.3	24.3	88.34	2,359.7	-4,128.4	5,578.7	5,532.7	46.02	121.224		
9,300.0	7,770.0	7,725.0	7,606.9	30.9	24.3	88.34	2,359.7	-4,128.4	5,646.3	5,598.7	47.59	118.653		
9,400.0	7,770.0	7,725.0	7,606.9	32.5	24.3	88.34	2,359.7	-4,128.4	5,714.8	5,665.7	49.17	116.220		
9,500.0	7,770.0	7,725.0	7,606.9	34.1	24.3	88.34	2,359.7	-4,128.4	5,784.3	5,733.5	50.77	113.921		
9,600.0	7,770.0	7,725.0	7,606.9	35.7	24.3	88.34	2,359.7	-4,128.4	5,854.7	5,802.3	52.39	111.749		
9,700.0	7,770.0	7,725.0	7,606.9	37.3	24.3	88.34	2,359.7	-4,128.4	5,925.9	5,871.8	54.02	109.697		
9,800.0	7,770.0	7,725.0	7,606.9	39.0	24.3	88.34	2,359.7	-4,128.4	5,997.9	5,942.2	55.66	107.760		
9,900.0	7,770.0	7,725.0	7,606.9	40.6	24.3	88.34	2,359.7	-4,128.4	6,070.7	6,013.4	57.31	105.929		
10,000.0	7,770.0	7,706.3	7,588.2	42.3	24.3	88.08	2,359.4	-4,128.2	6,144.2	6,085.3	58.93	104.256		
10,100.0	7,770.0	7,705.0	7,586.9	44.0	24.3	88.06	2,359.4	-4,128.1	6,218.5	6,158.0	60.60	102.622		
10,200.0	7,770.0	7,703.8	7,585.7	45.6	24.3	88.04	2,359.3	-4,128.1	6,293.6	6,231.3	62.27	101.076		
10,300.0	7,770.0	7,702.5	7,584.4	47.3	24.3	88.02	2,359.3	-4,128.1	6,369.3	6,305.3	63.94	99.613		
10,400.0	7,770.0	7,701.2	7,583.1	49.0	24.3	88.01	2,359.3	-4,128.1	6,445.7	6,380.0	65.62	98.226		
10,500.0	7,770.0	7,699.8	7,581.7	50.7	24.3	87.99	2,359.3	-4,128.1	6,522.7	6,455.4	67.31	96.912		
10,600.0	7,770.0	7,698.5	7,580.4	52.4	24.3	87.97	2,359.2	-4,128.1	6,600.3	6,531.3	68.99	95.664		
10,700.0	7,770.0	7,697.1	7,579.0	54.1	24.3	87.95	2,359.2	-4,128.1	6,678.5	6,607.8	70.69	94.480		
10,800.0	7,770.0	7,695.7	7,577.6	55.8	24.3	87.93	2,359.2	-4,128.0	6,757.3	6,684.9	72.38	93.354		
10,900.0	7,770.0	7,694.2	7,576.1	57.5	24.3	87.91	2,359.1	-4,128.0	6,836.7	6,762.6	74.08	92.284		
11,000.0	7,770.0	7,692.8	7,574.7	59.2	24.3	87.89	2,359.1	-4,128.0	6,916.5	6,840.8	75.79	91.265		
11,100.0	7,770.0	7,691.3	7,573.2	60.9	24.2	87.87	2,359.1	-4,128.0	6,996.9	6,919.5	77.49	90.295		
11,200.0	7,770.0	7,689.8	7,571.7	62.6	24.2	87.85	2,359.0	-4,128.0	7,077.8	6,998.6	79.20	89.370		
11,300.0	7,770.0	7,688.2	7,570.1	64.3	24.2	87.83	2,359.0	-4,128.0	7,159.2	7,078.3	80.91	88.487		
11,400.0	7,770.0	7,686.7	7,568.5	66.0	24.2	87.80	2,359.0	-4,128.0	7,241.1	7,158.5	82.62	87.645		
11,500.0	7,770.0	7,685.0	7,566.9	67.7	24.2	87.78	2,358.9	-4,128.0	7,323.4	7,239.0	84.33	86.840		
11,600.0	7,770.0	7,683.4	7,565.3	69.5	24.2	87.76	2,358.9	-4,128.0	7,406.1	7,320.1	86.05	86.071		
11,700.0	7,770.0	7,681.7	7,563.6	71.2	24.2	87.74	2,358.9	-4,127.9	7,489.3	7,401.5	87.76	85.335		
11,800.0	7,770.0	7,680.0	7,561.9	72.9	24.2	87.71	2,358.8	-4,127.9	7,572.8	7,483.3	89.48	84.630		
11,900.0	7,770.0	7,678.3	7,560.2	74.6	24.2	87.69	2,358.8	-4,127.9	7,656.8	7,565.6	91.20	83.956		
12,000.0	7,770.0	7,676.5	7,558.4	76.4	24.2	87.66	2,358.7	-4,127.9	7,741.1	7,648.2	92.92	83.309		
12,100.0	7,770.0	7,674.7	7,556.6	78.1	24.2	87.64	2,358.7	-4,127.9	7,825.8	7,731.2	94.64	82.688		
12,200.0	7,770.0	7,672.9	7,554.8	79.8	24.2	87.61	2,358.6	-4,127.9	7,910.9	7,814.5	96.36	82.093		
12,300.0	7,770.0	7,671.0	7,552.9	81.5	24.2	87.59	2,358.6	-4,127.9	7,996.3	7,898.2	98.09	81.521		
12,400.0	7,770.0	7,669.0	7,550.9	83.3	24.2	87.56	2,358.6	-4,127.9	8,082.0	7,982.2	99.81	80.972		
12,500.0	7,770.0	7,667.1	7,549.0	85.0	24.2	87.53	2,358.5	-4,127.9	8,168.1	8,066.6	101.54	80.444		
12,600.0	7,770.0	7,665.0	7,547.0	86.7	24.2	87.51	2,358.5	-4,127.9	8,254.5	8,151.2	103.26	79.936		
12,700.0	7,770.0	7,663.0	7,544.9	88.5	24.2	87.48	2,358.4	-4,127.9	8,341.2	8,236.2	104.99	79.447		
12,800.0	7,770.0	7,660.9	7,542.8	90.2	24.2	87.45	2,358.4	-4,127.9	8,428.1	8,321.4	106.72	78.976		
12,900.0	7,770.0	7,658.7	7,540.6	91.9	24.2	87.42	2,358.3	-4,127.9	8,515.4	8,406.9	108.44	78.523		
13,000.0	7,770.0	7,656.5	7,538.4	93.7	24.2	87.39	2,358.2	-4,127.9	8,602.9	8,492.8	110.17	78.086		
13,100.0	7,770.0	7,654.3	7,536.2	95.4	24.2	87.36	2,358.2	-4,127.9	8,690.7	8,578.8	111.90	77.664		
13,200.0	7,770.0	7,652.0	7,533.9	97.1	24.2	87.32	2,358.1	-4,127.9	8,778.8	8,665.2	113.63	77.257		
13,300.0	7,770.0	7,649.6	7,531.5	98.9	24.2	87.29	2,358.1	-4,127.9	8,867.1	8,751.8	115.36	76.865		
13,400.0	7,770.0	7,647.2	7,529.1	100.6	24.2	87.26	2,358.0	-4,128.0	8,955.7	8,838.6	117.09	76.486		
13,500.0	7,770.0	7,644.7	7,526.6	102.4	24.2	87.22	2,357.9	-4,128.0	9,044.5	8,925.7	118.82	76.119		
13,600.0	7,770.0	7,642.2	7,524.1	104.1	24.2	87.19	2,357.8	-4,128.0	9,133.5	9,013.0	120.55	75.766		
13,700.0	7,770.0	7,639.6	7,521.5	105.8	24.2	87.15	2,357.8	-4,128.0	9,222.8	9,100.5	122.28	75.423		
13,800.0	7,770.0	7,636.9	7,518.8	107.6	24.2	87.12	2,357.7	-4,128.0	9,312.2	9,188.2	124.01	75.092		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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					
13,900.0	7,770.0	7,634.2	7,516.1	109.3	24.2	87.08	2,357.6	-4,128.0	9,401.9	9,276.2	125.74	74.772						
14,000.0	7,770.0	7,631.0	7,512.9	111.1	24.2	87.04	2,357.5	-4,128.1	9,491.8	9,364.3	127.47	74.463						
14,100.0	7,770.0	7,628.1	7,510.0	112.8	24.2	86.99	2,357.4	-4,128.1	9,581.9	9,452.7	129.20	74.163						
14,200.0	7,770.0	7,624.7	7,506.6	114.5	24.2	86.95	2,357.3	-4,128.1	9,672.2	9,541.3	130.93	73.873						
14,300.0	7,770.0	7,621.3	7,503.3	116.3	24.2	86.90	2,357.2	-4,128.2	9,762.7	9,630.0	132.66	73.592						
14,400.0	7,770.0	7,618.1	7,500.0	118.0	24.2	86.86	2,357.1	-4,128.2	9,853.3	9,718.9	134.39	73.320						
14,500.0	7,770.0	7,614.8	7,496.7	119.8	24.2	86.81	2,357.0	-4,128.2	9,944.2	9,808.0	136.12	73.055 SF						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-61.06	1,753.5	-3,170.6	3,623.4					
100.0	100.0	55.3	55.3	0.2	0.1	-61.06	1,753.5	-3,170.6	3,623.2	3,622.9	0.25	N/A		
200.0	200.0	152.4	152.4	0.3	0.3	-61.06	1,753.4	-3,170.7	3,623.2	3,622.7	0.59	6,168.614		
300.0	300.0	249.4	249.4	0.5	0.4	-61.06	1,753.4	-3,170.9	3,623.4	3,622.5	0.93	3,904.012		
400.0	400.0	346.5	346.5	0.7	0.6	-61.06	1,753.3	-3,171.2	3,623.7	3,622.4	1.27	2,855.792		
500.0	500.0	443.5	443.5	0.8	0.8	-61.07	1,753.3	-3,171.6	3,624.0	3,622.4	1.61	2,251.436		
550.0	550.0	492.0	492.0	0.9	0.8	-61.07	1,753.2	-3,171.9	3,624.2	3,622.4	1.78	2,036.046		
600.0	600.0	540.5	540.5	1.0	0.9	-61.91	1,753.2	-3,172.1	3,624.3	3,622.4	1.95	1,858.197		
700.0	700.0	637.6	637.6	1.2	1.1	-61.94	1,753.0	-3,172.8	3,624.0	3,621.7	2.29	1,581.177		
800.0	799.9	734.5	734.5	1.4	1.3	-62.01	1,752.9	-3,173.5	3,622.9	3,620.3	2.64	1,374.309		
861.1	860.9	797.0	797.0	1.5	1.4	-62.06	1,752.8	-3,174.0	3,621.9	3,619.1	2.85	1,269.051		
900.0	899.8	830.7	830.7	1.6	1.4	-62.09	1,752.8	-3,174.3	3,621.2	3,618.2	2.98	1,213.427		
1,000.0	999.6	925.5	925.5	1.8	1.6	-62.17	1,752.7	-3,175.2	3,619.4	3,616.1	3.33	1,085.344		
1,100.0	1,099.5	1,012.7	1,012.7	1.9	1.7	-62.25	1,752.6	-3,176.2	3,617.9	3,614.2	3.67	984.681		
1,200.0	1,199.3	1,080.9	1,080.8	2.1	1.9	-62.31	1,752.3	-3,177.5	3,616.9	3,613.0	3.98	908.158		
1,234.0	1,233.3	1,099.9	1,099.9	2.2	1.9	-62.33	1,752.2	-3,178.1	3,616.9	3,612.8	4.08	886.232 CC, ES		
1,300.0	1,299.2	1,144.0	1,143.9	2.3	2.0	-62.39	1,751.4	-3,180.0	3,617.1	3,612.8	4.29	844.124		
1,400.0	1,399.1	1,209.3	1,209.1	2.5	2.1	-62.49	1,749.7	-3,183.7	3,618.3	3,613.7	4.60	787.254		
1,500.0	1,498.9	1,273.8	1,273.3	2.7	2.2	-62.61	1,747.3	-3,188.3	3,620.3	3,615.4	4.91	737.252		
1,600.0	1,598.8	1,333.0	1,332.3	2.9	2.4	-62.73	1,744.5	-3,193.5	3,623.5	3,618.2	5.22	694.249		
1,700.0	1,698.6	1,397.7	1,396.5	3.1	2.5	-62.89	1,740.7	-3,200.4	3,627.7	3,622.1	5.55	653.576		
1,800.0	1,798.5	1,535.0	1,532.2	3.3	2.9	-63.28	1,728.6	-3,217.3	3,632.2	3,626.1	6.07	598.071		
1,900.0	1,898.3	1,635.6	1,631.2	3.5	3.2	-63.62	1,716.5	-3,230.3	3,635.8	3,629.3	6.54	555.676		
2,000.0	1,998.2	1,712.0	1,706.1	3.7	3.4	-63.90	1,706.2	-3,241.2	3,640.1	3,633.1	6.97	522.587		
2,100.0	2,098.0	1,756.2	1,749.4	3.9	3.6	-64.07	1,700.0	-3,248.1	3,645.4	3,638.1	7.30	499.335		
2,200.0	2,197.9	1,807.0	1,798.9	4.1	3.8	-64.27	1,692.9	-3,256.7	3,652.1	3,644.5	7.66	476.900		
2,300.0	2,297.7	1,885.7	1,875.6	4.3	4.1	-64.58	1,681.9	-3,270.6	3,659.8	3,651.7	8.12	450.921		
2,400.0	2,397.6	1,940.2	1,928.6	4.5	4.3	-64.80	1,674.4	-3,280.7	3,668.4	3,659.9	8.50	431.524		
2,500.0	2,497.4	1,997.0	1,983.7	4.7	4.5	-65.03	1,666.6	-3,292.1	3,678.5	3,669.6	8.90	413.399		
2,600.0	2,597.3	2,037.3	2,022.6	4.9	4.7	-65.20	1,660.9	-3,300.8	3,689.9	3,680.7	9.25	398.899		
2,700.0	2,697.1	2,090.0	2,073.3	5.1	4.9	-65.43	1,653.2	-3,313.0	3,702.8	3,693.2	9.65	383.635		
2,800.0	2,797.0	2,142.7	2,123.8	5.3	5.2	-65.67	1,645.2	-3,326.0	3,717.0	3,706.9	10.06	369.344		
2,900.0	2,896.8	2,312.0	2,285.4	5.5	6.1	-66.46	1,617.1	-3,367.9	3,731.1	3,720.1	10.99	339.618		
3,000.0	2,996.7	2,374.0	2,344.6	5.7	6.4	-66.75	1,606.5	-3,382.9	3,744.8	3,733.4	11.45	327.130		
3,100.0	3,096.5	2,456.5	2,423.3	5.9	6.8	-67.13	1,592.9	-3,403.2	3,759.3	3,747.3	12.00	313.382		
3,200.0	3,196.4	2,662.6	2,619.5	6.1	7.9	-68.14	1,553.0	-3,452.6	3,772.1	3,758.9	13.16	286.635		
3,300.0	3,296.3	2,788.4	2,739.5	6.3	8.6	-68.75	1,528.1	-3,480.4	3,783.6	3,769.7	13.93	271.589		
3,400.0	3,396.1	2,902.2	2,848.2	6.5	9.2	-69.29	1,505.5	-3,505.5	3,795.5	3,780.9	14.65	259.150		
3,500.0	3,496.0	2,983.3	2,925.8	6.7	9.6	-69.67	1,489.4	-3,522.8	3,806.9	3,791.7	15.21	250.283		
3,600.0	3,595.8	3,030.0	2,970.4	6.9	9.9	-69.89	1,480.2	-3,533.1	3,819.6	3,804.0	15.62	244.551		
3,700.0	3,695.7	3,089.2	3,026.8	7.0	10.2	-70.17	1,468.9	-3,546.8	3,833.4	3,817.4	16.08	238.440		
3,800.0	3,795.5	3,191.8	3,124.8	7.2	10.8	-70.63	1,450.4	-3,571.3	3,848.4	3,831.7	16.72	230.228		
3,900.0	3,895.4	3,314.0	3,242.1	7.4	11.4	-71.16	1,429.3	-3,598.1	3,861.9	3,844.5	17.41	221.770		
4,000.0	3,995.2	3,372.6	3,298.5	7.6	11.7	-71.41	1,419.5	-3,610.9	3,876.1	3,858.3	17.85	217.141		
4,100.0	4,095.1	3,513.8	3,433.8	7.8	12.4	-72.00	1,396.3	-3,643.5	3,891.8	3,873.2	18.62	208.975		
4,200.0	4,194.9	3,596.8	3,513.4	8.0	12.9	-72.35	1,381.5	-3,662.1	3,906.3	3,887.2	19.18	203.690		
4,300.0	4,294.8	3,690.0	3,602.4	8.2	13.4	-72.77	1,363.6	-3,683.3	3,921.1	3,901.3	19.79	198.185		
4,400.0	4,394.6	3,768.4	3,677.2	8.4	13.8	-73.12	1,348.7	-3,701.3	3,936.3	3,916.0	20.31	193.790		
4,500.0	4,494.5	3,831.5	3,737.5	8.6	14.2	-73.39	1,337.2	-3,716.1	3,952.3	3,931.6	20.77	190.289		
4,600.0	4,594.3	3,903.1	3,805.8	8.8	14.6	-73.70	1,324.6	-3,733.3	3,969.4	3,948.1	21.26	186.706		
4,700.0	4,694.2	4,001.3	3,899.6	9.0	15.1	-74.11	1,307.6	-3,757.0	3,986.7	3,964.8	21.86	182.396		
4,800.0	4,794.0	4,081.3	3,975.8	9.2	15.6	-74.44	1,293.4	-3,776.5	4,004.4	3,982.0	22.38	178.916		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
4,900.0	4,893.9	4,164.0	4,054.7	9.4	16.0	-74.79	1,278.9	-3,796.7	4,022.3	3,999.4	22.91	175.590	
5,000.0	4,993.7	4,236.9	4,124.0	9.6	16.5	-75.10	1,265.6	-3,814.9	4,040.9	4,017.5	23.43	172.493	
5,100.0	5,093.6	4,448.0	4,325.0	9.8	17.7	-75.99	1,225.7	-3,865.8	4,058.7	4,034.2	24.47	165.877	
5,200.0	5,193.5	4,493.4	4,368.4	10.0	17.9	-76.18	1,217.6	-3,876.2	4,075.8	4,051.0	24.84	164.055	
5,300.0	5,293.3	4,540.0	4,412.8	10.2	18.2	-76.36	1,209.4	-3,887.7	4,094.5	4,069.3	25.22	162.325	
5,400.0	5,393.2	4,627.6	4,496.4	10.4	18.7	-76.70	1,194.8	-3,909.5	4,114.2	4,088.4	25.73	159.874	
5,500.0	5,493.0	4,687.5	4,553.6	10.6	19.0	-76.93	1,185.2	-3,924.6	4,134.2	4,108.0	26.16	158.013	
5,600.0	5,592.9	4,752.2	4,615.1	10.8	19.4	-77.19	1,174.1	-3,941.5	4,155.2	4,128.6	26.61	156.151	
5,700.0	5,692.7	5,031.8	4,881.5	11.0	20.9	-78.26	1,125.7	-4,010.8	4,176.0	4,148.2	27.82	150.088	
5,800.0	5,792.6	5,307.5	5,148.7	11.2	22.2	-79.17	1,084.6	-4,064.8	4,191.6	4,162.7	28.85	145.282	
5,900.0	5,892.4	5,811.2	5,646.6	11.4	23.6	-80.31	1,039.0	-4,123.5	4,201.3	4,171.3	30.06	139.788	
6,000.0	5,992.3	6,020.3	5,855.2	11.6	24.0	-80.61	1,029.0	-4,132.2	4,203.5	4,172.9	30.52	137.719	
6,100.0	6,092.1	6,124.4	5,959.3	11.8	24.1	-80.72	1,027.4	-4,134.9	4,204.8	4,174.0	30.82	136.439	
6,200.0	6,192.0	6,226.6	6,061.4	12.0	24.2	-80.81	1,026.9	-4,137.2	4,206.1	4,174.9	31.11	135.193	
6,300.0	6,291.8	6,343.3	6,178.1	12.2	24.3	-80.91	1,026.2	-4,139.5	4,207.1	4,175.7	31.42	133.900	
6,400.0	6,391.7	6,437.9	6,272.7	12.4	24.4	-80.98	1,025.8	-4,141.3	4,208.0	4,176.3	31.70	132.737	
6,500.0	6,491.5	6,529.6	6,364.3	12.6	24.5	-81.06	1,025.7	-4,143.0	4,209.0	4,177.0	31.98	131.603	
6,600.0	6,591.4	6,616.9	6,451.7	12.8	24.6	-81.12	1,025.6	-4,144.9	4,210.3	4,178.1	32.26	130.507	
6,700.0	6,691.2	6,703.9	6,538.6	13.0	24.7	-81.19	1,025.6	-4,147.1	4,211.9	4,179.4	32.54	129.421	
6,800.0	6,791.1	6,790.6	6,625.3	13.2	24.8	-81.27	1,025.3	-4,149.6	4,213.9	4,181.0	32.83	128.355	
6,900.0	6,890.9	6,941.4	6,776.0	13.4	25.0	-81.40	1,024.2	-4,153.5	4,215.5	4,182.3	33.19	127.013	
7,000.0	6,990.8	7,062.5	6,897.1	13.6	25.1	-81.51	1,022.8	-4,155.3	4,216.0	4,182.5	33.51	125.807	
7,024.2	7,014.9	7,086.4	6,921.0	13.6	25.2	-81.53	1,022.6	-4,155.6	4,216.1	4,182.5	33.58	125.542	
7,050.0	7,040.7	7,112.0	6,946.6	13.7	25.2	-83.22	1,022.4	-4,156.0	4,216.3	4,182.6	33.65	125.297	
7,100.0	7,090.7	7,161.5	6,996.1	13.7	25.2	100.10	1,022.0	-4,156.6	4,217.1	4,183.3	33.75	124.968	
7,150.0	7,140.5	7,207.2	7,041.8	13.8	25.3	99.53	1,021.8	-4,157.2	4,218.4	4,184.6	33.79	124.839	
7,200.0	7,189.9	7,248.6	7,083.2	13.8	25.3	99.32	1,021.9	-4,157.8	4,220.4	4,186.6	33.79	124.915	
7,250.0	7,238.6	7,289.3	7,123.9	13.8	25.4	99.18	1,022.2	-4,158.4	4,223.1	4,189.3	33.75	125.141	
7,300.0	7,286.4	7,329.1	7,163.6	13.7	25.4	99.04	1,022.8	-4,159.1	4,226.4	4,192.8	33.68	125.505	
7,350.0	7,333.1	7,376.0	7,210.6	13.7	25.4	98.93	1,023.7	-4,159.9	4,230.5	4,196.9	33.59	125.941	
7,400.0	7,378.5	7,410.4	7,244.9	13.6	25.5	98.75	1,024.6	-4,160.4	4,235.2	4,201.7	33.46	126.557	
7,450.0	7,422.2	7,452.9	7,287.5	13.6	25.5	98.60	1,025.6	-4,161.2	4,240.6	4,207.2	33.34	127.194	
7,500.0	7,464.1	7,493.7	7,328.2	13.5	25.5	98.41	1,026.6	-4,161.9	4,246.6	4,213.4	33.20	127.896	
7,550.0	7,504.1	7,544.8	7,379.3	13.5	25.6	98.29	1,027.8	-4,162.8	4,253.3	4,220.2	33.09	128.521	
7,600.0	7,541.8	7,596.3	7,430.8	13.5	25.6	98.17	1,028.9	-4,163.4	4,260.7	4,227.7	33.00	129.127	
7,650.0	7,577.2	7,644.6	7,479.1	13.4	25.7	97.99	1,029.9	-4,163.9	4,268.6	4,235.7	32.91	129.716	
7,700.0	7,610.0	7,689.4	7,523.9	13.5	25.7	97.75	1,030.7	-4,164.3	4,277.2	4,244.4	32.84	130.255	
7,750.0	7,640.2	7,730.5	7,565.0	13.5	25.7	97.45	1,031.5	-4,164.5	4,286.6	4,253.8	32.79	130.711	
7,800.0	7,667.4	7,767.7	7,602.1	13.6	25.7	97.05	1,032.1	-4,164.6	4,296.7	4,263.9	32.79	131.048	
7,850.0	7,691.7	7,797.7	7,632.1	13.7	25.8	96.52	1,032.6	-4,164.6	4,307.5	4,274.7	32.82	131.248	
7,900.0	7,712.8	7,820.4	7,654.8	13.9	25.8	95.85	1,032.9	-4,164.6	4,319.2	4,286.3	32.90	131.275	
7,950.0	7,730.8	7,839.6	7,674.0	14.1	25.8	95.07	1,033.2	-4,164.6	4,331.7	4,298.6	33.04	131.086	
8,000.0	7,745.5	7,855.1	7,689.5	14.4	25.8	94.17	1,033.4	-4,164.6	4,344.9	4,311.6	33.25	130.669	
8,050.0	7,756.7	7,866.9	7,701.3	14.7	25.8	93.17	1,033.6	-4,164.5	4,358.9	4,325.3	33.52	130.022	
8,100.0	7,764.6	7,874.9	7,709.3	15.1	25.8	92.05	1,033.7	-4,164.5	4,373.5	4,339.7	33.86	129.152	
8,150.0	7,769.0	7,879.0	7,713.4	15.5	25.8	90.83	1,033.8	-4,164.5	4,388.8	4,354.5	34.27	128.078	
8,188.1	7,770.0	7,879.5	7,713.9	15.9	25.8	89.82	1,033.8	-4,164.5	4,400.8	4,366.2	34.61	127.138	
8,200.0	7,770.0	7,879.3	7,713.7	16.0	25.8	89.82	1,033.8	-4,164.5	4,404.6	4,369.9	34.72	126.844	
8,300.0	7,770.0	7,877.7	7,712.2	17.0	25.8	89.80	1,033.7	-4,164.5	4,437.8	4,402.1	35.72	124.232	
8,400.0	7,770.0	7,876.2	7,710.6	18.1	25.8	89.77	1,033.7	-4,164.5	4,473.0	4,436.2	36.84	121.433	
8,500.0	7,770.0	7,874.6	7,709.0	19.3	25.8	89.75	1,033.7	-4,164.5	4,510.2	4,472.1	38.04	118.553	
8,600.0	7,770.0	7,873.0	7,707.4	20.6	25.8	89.73	1,033.7	-4,164.5	4,549.2	4,509.9	39.33	115.666	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,700.0	7,770.0	7,871.3	7,705.8	21.9	25.8	89.71	1,033.7	-4,164.5	4,590.1	4,549.4	40.68	112.828		
8,800.0	7,770.0	7,869.7	7,704.2	23.3	25.8	89.69	1,033.6	-4,164.5	4,632.7	4,590.7	42.09	110.076		
8,900.0	7,770.0	7,868.1	7,702.5	24.8	25.8	89.66	1,033.6	-4,164.5	4,677.2	4,633.6	43.54	107.432		
9,000.0	7,770.0	7,866.5	7,700.9	26.3	25.8	89.64	1,033.6	-4,164.5	4,723.3	4,678.3	45.02	104.910		
9,100.0	7,770.0	7,864.9	7,699.3	27.8	25.8	89.62	1,033.6	-4,164.5	4,771.1	4,724.5	46.54	102.516		
9,200.0	7,770.0	7,863.2	7,697.6	29.3	25.8	89.60	1,033.5	-4,164.5	4,820.4	4,772.4	48.08	100.252		
9,300.0	7,770.0	7,861.6	7,696.0	30.9	25.8	89.57	1,033.5	-4,164.5	4,871.4	4,821.7	49.65	98.116		
9,400.0	7,770.0	7,859.9	7,694.3	32.5	25.8	89.55	1,033.5	-4,164.5	4,923.8	4,872.6	51.23	96.104		
9,500.0	7,770.0	7,858.3	7,692.7	34.1	25.8	89.53	1,033.5	-4,164.6	4,977.7	4,924.8	52.84	94.212		
9,600.0	7,770.0	7,856.6	7,691.0	35.7	25.8	89.51	1,033.4	-4,164.6	5,033.0	4,978.5	54.45	92.432		
9,700.0	7,770.0	7,854.9	7,689.3	37.3	25.8	89.48	1,033.4	-4,164.6	5,089.6	5,033.5	56.08	90.759		
9,800.0	7,770.0	7,853.3	7,687.7	39.0	25.8	89.46	1,033.4	-4,164.6	5,147.6	5,089.9	57.72	89.187		
9,900.0	7,770.0	7,851.6	7,686.0	40.6	25.8	89.44	1,033.4	-4,164.6	5,206.9	5,147.5	59.36	87.710		
10,000.0	7,770.0	7,849.9	7,684.3	42.3	25.8	89.41	1,033.3	-4,164.6	5,267.3	5,206.3	61.02	86.320		
10,100.0	7,770.0	7,848.2	7,682.6	44.0	25.8	89.39	1,033.3	-4,164.6	5,329.0	5,266.3	62.68	85.013		
10,200.0	7,770.0	7,846.5	7,680.9	45.6	25.8	89.37	1,033.3	-4,164.6	5,391.8	5,327.5	64.36	83.783		
10,300.0	7,770.0	7,844.8	7,679.2	47.3	25.8	89.34	1,033.3	-4,164.6	5,455.8	5,389.7	66.03	82.624		
10,400.0	7,770.0	7,843.1	7,677.5	49.0	25.8	89.32	1,033.2	-4,164.6	5,520.8	5,453.1	67.71	81.532		
10,500.0	7,770.0	7,841.3	7,675.8	50.7	25.8	89.30	1,033.2	-4,164.6	5,586.8	5,517.4	69.40	80.503		
10,600.0	7,770.0	7,839.6	7,674.0	52.4	25.8	89.27	1,033.2	-4,164.6	5,653.8	5,582.7	71.09	79.531		
10,700.0	7,770.0	7,837.9	7,672.3	54.1	25.8	89.25	1,033.2	-4,164.6	5,721.8	5,649.0	72.78	78.614		
10,800.0	7,770.0	7,836.1	7,670.5	55.8	25.8	89.22	1,033.1	-4,164.6	5,790.8	5,716.3	74.48	77.747		
10,900.0	7,770.0	7,834.4	7,668.8	57.5	25.8	89.20	1,033.1	-4,164.6	5,860.6	5,784.4	76.18	76.927		
11,000.0	7,770.0	7,832.6	7,667.0	59.2	25.8	89.18	1,033.1	-4,164.6	5,931.3	5,853.4	77.89	76.152		
11,100.0	7,770.0	7,830.9	7,665.3	60.9	25.8	89.15	1,033.1	-4,164.6	6,002.8	5,923.2	79.59	75.417		
11,200.0	7,770.0	7,829.1	7,663.5	62.6	25.8	89.13	1,033.0	-4,164.6	6,075.1	5,993.8	81.30	74.721		
11,300.0	7,770.0	7,827.3	7,661.7	64.3	25.8	89.10	1,033.0	-4,164.6	6,148.2	6,065.2	83.01	74.062		
11,400.0	7,770.0	7,825.5	7,659.9	66.0	25.8	89.08	1,033.0	-4,164.6	6,222.0	6,137.3	84.73	73.435		
11,500.0	7,770.0	7,823.7	7,658.2	67.7	25.8	89.05	1,033.0	-4,164.6	6,296.6	6,210.1	86.44	72.841		
11,600.0	7,770.0	7,821.9	7,656.4	69.5	25.8	89.03	1,032.9	-4,164.6	6,371.8	6,283.7	88.16	72.276		
11,700.0	7,770.0	7,820.1	7,654.5	71.2	25.8	89.00	1,032.9	-4,164.6	6,447.8	6,357.9	89.88	71.738		
11,800.0	7,770.0	7,818.3	7,652.7	72.9	25.8	88.98	1,032.9	-4,164.6	6,524.4	6,432.8	91.60	71.227		
11,900.0	7,770.0	7,816.5	7,650.9	74.6	25.8	88.95	1,032.8	-4,164.6	6,601.6	6,508.2	93.32	70.740		
12,000.0	7,770.0	7,814.7	7,649.1	76.4	25.8	88.93	1,032.8	-4,164.6	6,679.4	6,584.3	95.04	70.277		
12,100.0	7,770.0	7,812.8	7,647.3	78.1	25.8	88.90	1,032.8	-4,164.6	6,757.8	6,661.0	96.77	69.835		
12,200.0	7,770.0	7,811.0	7,645.4	79.8	25.8	88.88	1,032.8	-4,164.6	6,836.7	6,738.2	98.49	69.413		
12,300.0	7,770.0	7,809.1	7,643.6	81.5	25.8	88.85	1,032.7	-4,164.6	6,916.2	6,816.0	100.22	69.010		
12,400.0	7,770.0	7,807.3	7,641.7	83.3	25.8	88.83	1,032.7	-4,164.6	6,996.3	6,894.3	101.95	68.626		
12,500.0	7,770.0	7,805.4	7,639.8	85.0	25.8	88.80	1,032.7	-4,164.6	7,076.8	6,973.1	103.68	68.259		
12,600.0	7,770.0	7,803.5	7,638.0	86.7	25.8	88.78	1,032.6	-4,164.6	7,157.8	7,052.4	105.40	67.908		
12,700.0	7,770.0	7,801.7	7,636.1	88.5	25.8	88.75	1,032.6	-4,164.6	7,239.3	7,132.2	107.13	67.572		
12,800.0	7,770.0	7,799.8	7,634.2	90.2	25.8	88.73	1,032.6	-4,164.6	7,321.3	7,212.4	108.87	67.251		
12,900.0	7,770.0	7,797.9	7,632.3	91.9	25.8	88.70	1,032.6	-4,164.6	7,403.7	7,293.1	110.60	66.943		
13,000.0	7,770.0	7,796.0	7,630.4	93.7	25.8	88.67	1,032.5	-4,164.6	7,486.5	7,374.2	112.33	66.648		
13,100.0	7,770.0	7,794.1	7,628.5	95.4	25.8	88.65	1,032.5	-4,164.6	7,569.8	7,455.7	114.06	66.366		
13,200.0	7,770.0	7,792.2	7,626.6	97.1	25.8	88.62	1,032.5	-4,164.6	7,653.4	7,537.6	115.79	66.095		
13,300.0	7,770.0	7,790.2	7,624.7	98.9	25.8	88.59	1,032.4	-4,164.6	7,737.4	7,619.9	117.53	65.835		
13,400.0	7,770.0	7,788.3	7,622.7	100.6	25.8	88.57	1,032.4	-4,164.6	7,821.9	7,702.6	119.26	65.585		
13,500.0	7,770.0	7,786.3	7,620.8	102.4	25.8	88.54	1,032.4	-4,164.6	7,906.6	7,785.6	121.00	65.346		
13,600.0	7,770.0	7,783.6	7,618.1	104.1	25.8	88.50	1,032.3	-4,164.6	7,991.7	7,869.0	122.73	65.116		
13,700.0	7,770.0	7,780.7	7,615.2	105.8	25.8	88.46	1,032.3	-4,164.6	8,077.2	7,952.7	124.47	64.895		
13,800.0	7,770.0	7,777.8	7,612.3	107.6	25.8	88.42	1,032.2	-4,164.6	8,163.0	8,036.8	126.20	64.683		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
13,900.0	7,770.0	7,774.9	7,609.3	109.3	25.8	88.38	1,032.2	-4,164.6	8,249.1	8,121.2	127.93	64.479		
14,000.0	7,770.0	7,771.9	7,606.3	111.1	25.8	88.34	1,032.2	-4,164.6	8,335.5	8,205.9	129.67	64.283		
14,100.0	7,770.0	7,768.9	7,603.3	112.8	25.7	88.30	1,032.1	-4,164.6	8,422.3	8,290.9	131.41	64.094		
14,200.0	7,770.0	7,765.8	7,600.3	114.5	25.7	88.26	1,032.1	-4,164.6	8,509.3	8,376.1	133.14	63.912		
14,300.0	7,770.0	7,762.7	7,597.2	116.3	25.7	88.22	1,032.0	-4,164.6	8,596.6	8,461.7	134.88	63.737		
14,400.0	7,770.0	7,759.6	7,594.1	118.0	25.7	88.17	1,032.0	-4,164.6	8,684.1	8,547.5	136.61	63.568		
14,500.0	7,770.0	7,756.5	7,590.9	119.8	25.7	88.13	1,031.9	-4,164.6	8,772.0	8,633.6	138.35	63.405		
14,600.0	7,770.0	7,753.3	7,587.7	121.5	25.7	88.09	1,031.8	-4,164.5	8,860.1	8,720.0	140.08	63.248		
14,700.0	7,770.0	7,750.1	7,584.5	123.3	25.7	88.04	1,031.8	-4,164.5	8,948.4	8,806.6	141.82	63.097		
14,800.0	7,770.0	7,746.8	7,581.2	125.0	25.7	88.00	1,031.7	-4,164.5	9,037.0	8,893.4	143.56	62.951		
14,900.0	7,770.0	7,743.5	7,578.0	126.7	25.7	87.95	1,031.7	-4,164.5	9,125.8	8,980.5	145.29	62.810		
15,000.0	7,770.0	7,740.2	7,574.6	128.5	25.7	87.91	1,031.6	-4,164.5	9,214.8	9,067.8	147.03	62.674		
15,100.0	7,770.0	7,736.8	7,571.3	130.2	25.7	87.86	1,031.6	-4,164.5	9,304.1	9,155.4	148.76	62.543		
15,200.0	7,770.0	7,733.4	7,567.9	132.0	25.7	87.81	1,031.5	-4,164.5	9,393.6	9,243.1	150.50	62.416		
15,300.0	7,770.0	7,730.0	7,564.4	133.7	25.7	87.77	1,031.5	-4,164.5	9,483.3	9,331.1	152.24	62.293		
15,400.0	7,770.0	7,726.5	7,560.9	135.5	25.7	87.72	1,031.4	-4,164.5	9,573.2	9,419.2	153.97	62.175		
15,500.0	7,770.0	7,723.0	7,557.4	137.2	25.7	87.67	1,031.3	-4,164.5	9,663.3	9,507.6	155.71	62.060		
15,600.0	7,770.0	7,719.4	7,553.8	139.0	25.7	87.62	1,031.3	-4,164.4	9,753.6	9,596.1	157.44	61.949		
15,700.0	7,770.0	7,715.8	7,550.2	140.7	25.7	87.57	1,031.2	-4,164.4	9,844.1	9,684.9	159.18	61.842		
15,800.0	7,770.0	7,712.1	7,546.6	142.4	25.7	87.52	1,031.1	-4,164.4	9,934.7	9,773.8	160.92	61.739 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 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	-48.45	2,412.8	-2,722.2	3,638.1					
100.0	100.0	37.6	37.6	0.2	0.1	-48.45	2,412.7	-2,722.2	3,637.5	3,637.3	0.22	N/A		
200.0	200.0	135.7	135.7	0.3	0.2	-48.45	2,412.5	-2,722.2	3,637.4	3,636.8	0.56	6,457.226		
209.5	209.5	143.5	143.5	0.3	0.3	-48.45	2,412.5	-2,722.2	3,637.4	3,636.8	0.59	6,129.771		
300.0	300.0	217.9	217.9	0.5	0.4	-48.45	2,412.7	-2,722.3	3,637.6	3,636.7	0.88	4,127.619		
400.0	400.0	300.0	300.0	0.7	0.5	-48.45	2,413.2	-2,722.5	3,638.2	3,637.0	1.20	3,034.239		
500.0	500.0	390.4	390.4	0.8	0.7	-48.44	2,414.0	-2,723.1	3,639.3	3,637.7	1.53	2,376.356		
550.0	550.0	456.7	456.7	0.9	0.8	-48.44	2,414.5	-2,723.5	3,639.8	3,638.1	1.73	2,098.646		
600.0	600.0	517.1	517.1	1.0	0.9	-49.28	2,414.7	-2,723.8	3,639.9	3,638.0	1.93	1,888.762		
700.0	700.0	600.0	600.0	1.2	1.0	-49.31	2,414.8	-2,724.4	3,639.4	3,637.2	2.25	1,619.837		
800.0	799.9	667.1	667.1	1.4	1.2	-49.35	2,415.1	-2,725.4	3,638.5	3,636.0	2.54	1,431.872		
861.1	860.9	711.2	711.1	1.5	1.2	-49.38	2,415.5	-2,726.2	3,637.9	3,635.1	2.73	1,333.765		
900.0	899.8	752.2	752.1	1.6	1.3	-49.41	2,416.0	-2,727.0	3,637.4	3,634.5	2.87	1,267.549		
1,000.0	999.6	862.4	862.3	1.8	1.5	-49.49	2,417.1	-2,729.2	3,636.0	3,632.7	3.24	1,120.679		
1,100.0	1,099.5	946.6	946.5	1.9	1.7	-49.56	2,417.6	-2,731.1	3,634.5	3,630.9	3.58	1,016.520		
1,200.0	1,199.3	1,025.5	1,025.4	2.1	1.8	-49.63	2,418.4	-2,733.3	3,633.7	3,629.9	3.90	932.191		
1,300.0	1,299.2	1,130.6	1,130.4	2.3	2.0	-49.71	2,419.5	-2,736.3	3,633.1	3,628.8	4.27	851.356		
1,400.0	1,399.1	1,225.0	1,224.8	2.5	2.2	-49.79	2,420.5	-2,739.1	3,632.5	3,627.9	4.62	786.461		
1,500.0	1,498.9	1,319.6	1,319.3	2.7	2.3	-49.87	2,421.7	-2,741.9	3,632.1	3,627.1	4.97	730.672		
1,600.0	1,598.8	1,425.4	1,425.0	2.9	2.5	-49.96	2,423.0	-2,745.1	3,631.6	3,626.3	5.34	679.672		
1,700.0	1,698.6	1,534.4	1,534.1	3.1	2.7	-50.05	2,423.6	-2,748.5	3,630.9	3,625.2	5.72	634.496		
1,800.0	1,798.5	1,629.4	1,628.9	3.3	2.9	-50.14	2,424.1	-2,751.6	3,630.2	3,624.2	6.08	597.358		
1,900.0	1,898.3	1,730.6	1,730.1	3.5	3.1	-50.24	2,424.6	-2,754.9	3,629.6	3,623.1	6.44	563.310		
2,000.0	1,998.2	1,834.9	1,834.3	3.7	3.3	-50.33	2,425.3	-2,758.2	3,628.9	3,622.1	6.81	532.495		
2,100.0	2,098.0	1,955.3	1,954.7	3.9	3.5	-50.44	2,425.6	-2,761.7	3,627.9	3,620.7	7.22	502.790		
2,200.0	2,197.9	2,117.6	2,117.0	4.1	3.8	-50.60	2,424.5	-2,765.5	3,625.8	3,618.1	7.69	471.368		
2,300.0	2,297.7	2,219.3	2,218.6	4.3	4.0	-50.71	2,422.9	-2,767.4	3,622.7	3,614.7	8.06	449.421		
2,400.0	2,397.6	2,312.1	2,311.4	4.5	4.1	-50.79	2,422.1	-2,768.6	3,619.7	3,611.3	8.41	430.298		
2,500.0	2,497.4	2,400.0	2,399.3	4.7	4.3	-50.86	2,422.1	-2,769.5	3,617.0	3,608.3	8.75	413.178		
2,600.0	2,597.3	2,480.5	2,479.8	4.9	4.4	-50.92	2,422.2	-2,770.6	3,614.8	3,605.7	9.08	397.915		
2,700.0	2,697.1	2,573.9	2,573.2	5.1	4.6	-51.00	2,422.4	-2,772.3	3,612.9	3,603.5	9.44	382.833		
2,800.0	2,797.0	2,679.5	2,678.8	5.3	4.8	-51.09	2,422.6	-2,774.3	3,611.1	3,601.2	9.81	368.042		
2,900.0	2,896.8	2,768.3	2,767.6	5.5	4.9	-51.16	2,423.1	-2,775.6	3,609.2	3,599.0	10.15	355.413		
3,000.0	2,996.7	2,875.7	2,875.0	5.7	5.1	-51.22	2,424.6	-2,776.9	3,607.6	3,597.0	10.53	342.589		
3,100.0	3,096.5	2,971.1	2,970.3	5.9	5.3	-51.28	2,425.7	-2,777.8	3,605.7	3,594.8	10.89	331.252		
3,200.0	3,196.4	3,065.0	3,064.2	6.1	5.4	-51.34	2,427.0	-2,778.9	3,604.1	3,592.8	11.24	320.724		
3,300.0	3,296.3	3,150.4	3,149.6	6.3	5.6	-51.39	2,428.3	-2,780.0	3,602.7	3,591.1	11.57	311.251		
3,400.0	3,396.1	3,235.8	3,235.0	6.5	5.8	-51.44	2,430.0	-2,781.4	3,601.8	3,589.9	11.91	302.357		
3,500.0	3,496.0	3,326.7	3,325.8	6.7	5.9	-51.50	2,432.0	-2,782.9	3,601.1	3,588.9	12.26	293.744		
3,593.5	3,589.4	3,402.6	3,401.7	6.8	6.1	-51.54	2,434.0	-2,784.4	3,600.9	3,588.3	12.57	286.514		
3,600.0	3,595.8	3,408.7	3,407.8	6.9	6.1	-51.54	2,434.2	-2,784.5	3,600.9	3,588.3	12.59	285.993		
3,700.0	3,695.7	3,504.1	3,503.1	7.0	6.2	-51.59	2,436.8	-2,786.6	3,601.0	3,588.0	12.95	278.149		
3,800.0	3,795.5	3,617.7	3,616.6	7.2	6.4	-51.66	2,439.6	-2,789.2	3,601.0	3,587.6	13.33	270.067		
3,900.0	3,895.4	3,735.2	3,734.2	7.4	6.7	-51.74	2,442.1	-2,791.6	3,600.5	3,586.7	13.73	262.269		
4,000.0	3,995.2	3,846.0	3,844.9	7.6	6.9	-51.80	2,444.2	-2,793.4	3,599.6	3,585.5	14.11	255.095		
4,100.0	4,095.1	3,951.3	3,950.1	7.8	7.0	-51.87	2,446.0	-2,795.0	3,598.5	3,584.0	14.48	248.441		
4,200.0	4,194.9	4,055.1	4,053.9	8.0	7.2	-51.94	2,447.4	-2,796.7	3,597.3	3,582.4	14.86	242.152		
4,300.0	4,294.8	4,151.3	4,150.1	8.2	7.4	-52.01	2,448.6	-2,798.3	3,596.0	3,580.8	15.21	236.371		
4,400.0	4,394.6	4,250.4	4,249.2	8.4	7.6	-52.08	2,449.9	-2,800.2	3,595.0	3,579.4	15.58	230.787		
4,500.0	4,494.5	4,364.0	4,362.7	8.6	7.8	-52.16	2,450.9	-2,802.4	3,593.7	3,577.7	15.97	225.077		
4,600.0	4,594.3	4,472.5	4,471.2	8.8	8.0	-52.26	2,451.1	-2,804.5	3,592.0	3,575.7	16.35	219.731		
4,700.0	4,694.2	4,568.7	4,567.5	9.0	8.1	-52.34	2,451.4	-2,806.3	3,590.3	3,573.6	16.71	214.904		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,800.0	4,794.0	4,673.2	4,671.9	9.2	8.3	-52.42	2,451.8	-2,808.2	3,588.7	3,571.6	17.08	210.107		
4,900.0	4,893.9	4,768.5	4,767.2	9.4	8.5	-52.50	2,452.1	-2,809.8	3,586.9	3,569.5	17.44	205.701		
5,000.0	4,993.7	4,875.4	4,874.1	9.6	8.7	-52.58	2,453.0	-2,811.5	3,585.3	3,567.5	17.81	201.252		
5,100.0	5,093.6	4,973.0	4,971.6	9.8	8.9	-52.65	2,453.8	-2,812.6	3,583.5	3,565.3	18.18	197.153		
5,200.0	5,193.5	5,073.8	5,072.4	10.0	9.0	-52.72	2,454.5	-2,814.1	3,581.8	3,563.2	18.54	193.159		
5,300.0	5,293.3	5,182.4	5,181.0	10.2	9.2	-52.80	2,455.4	-2,815.4	3,579.9	3,561.0	18.92	189.181		
5,400.0	5,393.2	5,281.5	5,280.1	10.4	9.4	-52.86	2,456.5	-2,816.2	3,577.9	3,558.6	19.29	185.511		
5,500.0	5,493.0	5,382.2	5,380.8	10.6	9.6	-52.93	2,457.5	-2,817.0	3,576.0	3,556.3	19.65	181.951		
5,600.0	5,592.9	5,476.6	5,475.2	10.8	9.7	-52.99	2,458.4	-2,817.9	3,574.0	3,554.0	20.01	178.623		
5,700.0	5,692.7	5,593.7	5,592.3	11.0	9.9	-53.06	2,459.7	-2,818.8	3,572.1	3,551.7	20.40	175.068		
5,800.0	5,792.6	5,686.5	5,685.1	11.2	10.1	-53.12	2,460.8	-2,819.2	3,569.8	3,549.1	20.76	171.990		
5,900.0	5,892.4	5,776.9	5,775.5	11.4	10.3	-53.17	2,462.0	-2,819.7	3,567.9	3,546.8	21.10	169.056		
6,000.0	5,992.3	5,873.6	5,872.1	11.6	10.4	-53.23	2,463.1	-2,820.7	3,566.1	3,544.7	21.46	166.140		
6,100.0	6,092.1	5,981.2	5,979.7	11.8	10.6	-53.31	2,463.9	-2,822.0	3,564.3	3,542.5	21.84	163.173		
6,200.0	6,192.0	6,068.2	6,066.7	12.0	10.8	-53.37	2,464.7	-2,823.0	3,562.5	3,540.3	22.19	160.567		
6,300.0	6,291.8	6,160.7	6,159.2	12.2	10.9	-53.44	2,465.7	-2,824.3	3,561.1	3,538.5	22.54	157.992		
6,400.0	6,391.7	6,253.4	6,251.9	12.4	11.1	-53.50	2,467.1	-2,825.6	3,559.8	3,536.9	22.89	155.498		
6,500.0	6,491.5	6,348.1	6,346.6	12.6	11.3	-53.57	2,468.1	-2,827.4	3,558.8	3,535.5	23.25	153.065		
6,600.0	6,591.4	6,453.6	6,452.1	12.8	11.5	-53.65	2,469.1	-2,829.5	3,557.7	3,534.1	23.63	150.581		
6,700.0	6,691.2	6,554.1	6,552.5	13.0	11.6	-53.73	2,469.7	-2,831.6	3,556.5	3,532.5	23.99	148.223		
6,800.0	6,791.1	6,653.0	6,651.4	13.2	11.8	-53.81	2,470.5	-2,833.5	3,555.4	3,531.0	24.36	145.957		
6,900.0	6,890.9	6,740.8	6,739.2	13.4	12.0	-53.88	2,471.4	-2,835.2	3,554.3	3,529.6	24.70	143.873		
7,000.0	6,990.8	6,818.8	6,817.1	13.6	12.1	-53.95	2,472.1	-2,837.4	3,553.9	3,528.8	25.03	141.968		
7,024.2	7,014.9	6,840.9	6,839.2	13.6	12.2	-53.97	2,472.3	-2,838.1	3,553.8	3,528.7	25.12	141.486		
7,025.4	7,016.2	6,842.0	6,840.4	13.6	12.2	-53.99	2,472.3	-2,838.1	3,553.8	3,528.7	25.12	141.462 CC, ES		
7,050.0	7,040.7	6,864.5	6,862.9	13.7	12.2	-55.65	2,472.5	-2,838.9	3,554.1	3,528.9	25.20	141.015		
7,100.0	7,090.7	6,910.0	6,908.3	13.7	12.3	127.58	2,473.0	-2,840.3	3,556.2	3,530.9	25.33	140.387		
7,150.0	7,140.5	6,954.3	6,952.6	13.8	12.4	126.84	2,473.4	-2,841.8	3,560.5	3,535.1	25.42	140.094		
7,200.0	7,189.9	7,000.0	6,998.2	13.8	12.5	126.37	2,473.9	-2,843.5	3,566.9	3,541.5	25.46	140.094		
7,250.0	7,238.6	7,040.8	7,039.1	13.8	12.5	125.86	2,474.5	-2,844.9	3,575.5	3,550.0	25.46	140.419		
7,300.0	7,286.4	7,082.5	7,080.7	13.7	12.6	125.27	2,475.2	-2,846.4	3,586.2	3,560.7	25.44	140.985		
7,350.0	7,333.1	7,140.2	7,138.3	13.7	12.7	124.67	2,476.4	-2,848.2	3,598.8	3,573.4	25.41	141.624		
7,400.0	7,378.5	7,206.1	7,204.2	13.6	12.8	124.04	2,478.0	-2,849.7	3,613.2	3,587.8	25.38	142.361		
7,450.0	7,422.2	7,253.8	7,251.9	13.6	12.9	123.22	2,479.3	-2,850.4	3,629.4	3,604.1	25.32	143.357		
7,500.0	7,464.1	7,299.1	7,297.2	13.5	13.0	122.27	2,480.8	-2,851.0	3,647.4	3,622.2	25.26	144.417		
7,550.0	7,504.1	7,355.1	7,353.1	13.5	13.1	121.30	2,482.7	-2,851.2	3,667.2	3,642.0	25.22	145.381		
7,600.0	7,541.8	7,400.0	7,398.0	13.5	13.2	120.12	2,484.4	-2,851.1	3,688.7	3,663.5	25.21	146.312		
7,650.0	7,577.2	7,430.7	7,428.7	13.4	13.2	118.63	2,485.6	-2,850.9	3,711.9	3,686.6	25.23	147.123		
7,700.0	7,610.0	7,454.9	7,452.9	13.5	13.3	116.88	2,486.7	-2,850.7	3,736.8	3,711.5	25.30	147.677		
7,750.0	7,640.2	7,476.8	7,474.7	13.5	13.3	114.91	2,487.8	-2,850.6	3,763.5	3,738.0	25.45	147.881		
7,800.0	7,667.4	7,500.0	7,497.9	13.6	13.3	112.75	2,489.0	-2,850.4	3,791.6	3,766.0	25.67	147.684		
7,850.0	7,691.7	7,518.2	7,516.0	13.7	13.4	110.30	2,489.9	-2,850.2	3,821.2	3,795.2	25.98	147.094		
7,900.0	7,712.8	7,538.4	7,536.3	13.9	13.4	107.68	2,491.0	-2,850.0	3,852.0	3,825.7	26.36	146.131		
7,950.0	7,730.8	7,555.2	7,553.0	14.1	13.4	104.77	2,491.9	-2,849.9	3,884.0	3,857.2	26.81	144.880		
8,000.0	7,745.5	7,568.3	7,566.1	14.4	13.5	101.60	2,492.6	-2,849.8	3,917.0	3,889.7	27.31	143.451		
8,050.0	7,756.7	7,577.8	7,575.5	14.7	13.5	98.17	2,493.1	-2,849.7	3,950.8	3,922.9	27.83	141.977		
8,100.0	7,764.6	7,583.5	7,581.3	15.1	13.5	94.49	2,493.4	-2,849.6	3,985.3	3,956.9	28.34	140.601		
8,150.0	7,769.0	7,585.5	7,583.2	15.5	13.5	90.61	2,493.5	-2,849.6	4,020.3	3,991.4	28.83	139.458		
8,188.1	7,770.0	7,584.4	7,582.2	15.9	13.5	87.56	2,493.4	-2,849.6	4,047.1	4,018.0	29.16	138.813		
8,200.0	7,770.0	7,583.7	7,581.5	16.0	13.5	87.54	2,493.4	-2,849.6	4,055.6	4,026.3	29.26	138.585		
8,300.0	7,770.0	7,578.1	7,575.9	17.0	13.5	87.43	2,493.1	-2,849.7	4,127.1	4,096.9	30.25	136.431		
8,400.0	7,770.0	7,572.4	7,570.2	18.1	13.5	87.32	2,492.8	-2,849.7	4,199.9	4,168.5	31.35	133.958		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 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)				
8,500.0	7,770.0	7,566.7	7,564.5	19.3	13.5	87.20	2,492.5	-2,849.8	4,273.7	4,241.1	32.55	131.302		
8,600.0	7,770.0	7,561.0	7,558.8	20.6	13.5	87.09	2,492.2	-2,849.8	4,348.5	4,314.7	33.82	128.569		
8,700.0	7,770.0	7,555.3	7,553.1	21.9	13.4	86.97	2,491.9	-2,849.9	4,424.3	4,389.2	35.16	125.831		
8,800.0	7,770.0	7,549.5	7,547.3	23.3	13.4	86.86	2,491.6	-2,849.9	4,501.1	4,464.5	36.55	123.142		
8,900.0	7,770.0	7,543.7	7,541.5	24.8	13.4	86.74	2,491.3	-2,850.0	4,578.8	4,540.8	37.99	120.534		
9,000.0	7,770.0	7,537.9	7,535.7	26.3	13.4	86.63	2,491.0	-2,850.0	4,657.3	4,617.8	39.46	118.028		
9,100.0	7,770.0	7,532.1	7,529.9	27.8	13.4	86.51	2,490.7	-2,850.1	4,736.6	4,695.6	40.96	115.636		
9,200.0	7,770.0	7,526.3	7,524.1	29.3	13.4	86.40	2,490.4	-2,850.1	4,816.6	4,774.2	42.49	113.363		
9,300.0	7,770.0	7,520.4	7,518.2	30.9	13.4	86.28	2,490.0	-2,850.2	4,897.4	4,853.4	44.04	111.210		
9,400.0	7,770.0	7,514.5	7,512.4	32.5	13.4	86.16	2,489.7	-2,850.2	4,978.9	4,933.3	45.61	109.174		
9,500.0	7,770.0	7,508.6	7,506.5	34.1	13.4	86.04	2,489.4	-2,850.3	5,061.1	5,013.9	47.19	107.251		
9,600.0	7,770.0	7,502.7	7,500.5	35.7	13.4	85.93	2,489.1	-2,850.3	5,143.9	5,095.1	48.79	105.437		
9,700.0	7,770.0	7,500.0	7,497.9	37.3	13.3	85.87	2,489.0	-2,850.4	5,227.2	5,176.8	50.40	103.707		
9,800.0	7,770.0	7,500.0	7,497.9	39.0	13.3	85.87	2,489.0	-2,850.4	5,311.2	5,259.1	52.04	102.060		
9,900.0	7,770.0	7,500.0	7,497.9	40.6	13.3	85.87	2,489.0	-2,850.4	5,395.7	5,342.0	53.69	100.505		
10,000.0	7,770.0	7,500.0	7,497.9	42.3	13.3	85.87	2,489.0	-2,850.4	5,480.7	5,425.3	55.34	99.038		
10,100.0	7,770.0	7,500.0	7,497.9	44.0	13.3	85.87	2,489.0	-2,850.4	5,566.2	5,509.2	57.00	97.651		
10,200.0	7,770.0	7,500.0	7,497.9	45.6	13.3	85.87	2,489.0	-2,850.4	5,652.2	5,593.5	58.67	96.341		
10,300.0	7,770.0	7,479.1	7,477.0	47.3	13.3	85.46	2,487.9	-2,850.5	5,738.6	5,678.3	60.28	95.203		
10,400.0	7,770.0	7,476.1	7,474.0	49.0	13.3	85.40	2,487.7	-2,850.6	5,825.4	5,763.5	61.95	94.041		
10,500.0	7,770.0	7,473.2	7,471.1	50.7	13.3	85.34	2,487.6	-2,850.6	5,912.7	5,849.1	63.62	92.940		
10,600.0	7,770.0	7,470.3	7,468.2	52.4	13.3	85.28	2,487.4	-2,850.6	6,000.3	5,935.0	65.30	91.895		
10,700.0	7,770.0	7,467.5	7,465.4	54.1	13.3	85.22	2,487.3	-2,850.6	6,088.4	6,021.4	66.98	90.903		
10,800.0	7,770.0	7,464.7	7,462.6	55.8	13.3	85.17	2,487.2	-2,850.7	6,176.8	6,108.1	68.66	89.961		
10,900.0	7,770.0	7,461.9	7,459.9	57.5	13.3	85.11	2,487.0	-2,850.7	6,265.5	6,195.2	70.35	89.064		
11,000.0	7,770.0	7,459.2	7,457.2	59.2	13.3	85.06	2,486.9	-2,850.7	6,354.6	6,282.6	72.04	88.211		
11,100.0	7,770.0	7,456.6	7,454.5	60.9	13.3	85.01	2,486.8	-2,850.7	6,444.0	6,370.3	73.73	87.398		
11,200.0	7,770.0	7,454.0	7,451.9	62.6	13.3	84.96	2,486.7	-2,850.7	6,533.7	6,458.3	75.43	86.624		
11,300.0	7,770.0	7,451.4	7,449.4	64.3	13.3	84.91	2,486.5	-2,850.8	6,623.7	6,546.6	77.12	85.884		
11,400.0	7,770.0	7,448.9	7,446.9	66.0	13.3	84.86	2,486.4	-2,850.8	6,714.0	6,635.2	78.82	85.178		
11,500.0	7,770.0	7,446.5	7,444.4	67.7	13.3	84.81	2,486.3	-2,850.8	6,804.6	6,724.0	80.52	84.503		
11,600.0	7,770.0	7,444.0	7,442.0	69.5	13.3	84.76	2,486.2	-2,850.8	6,895.4	6,813.1	82.23	83.858		
11,700.0	7,770.0	7,441.6	7,439.6	71.2	13.2	84.71	2,486.1	-2,850.8	6,986.4	6,902.5	83.93	83.240		
11,800.0	7,770.0	7,439.3	7,437.2	72.9	13.2	84.66	2,486.0	-2,850.8	7,077.7	6,992.1	85.64	82.649		
11,900.0	7,770.0	7,436.9	7,434.9	74.6	13.2	84.62	2,485.9	-2,850.9	7,169.3	7,081.9	87.34	82.081		
12,000.0	7,770.0	7,434.7	7,432.6	76.4	13.2	84.57	2,485.8	-2,850.9	7,261.0	7,172.0	89.05	81.537		
12,100.0	7,770.0	7,432.4	7,430.4	78.1	13.2	84.53	2,485.7	-2,850.9	7,353.0	7,262.2	90.76	81.015		
12,200.0	7,770.0	7,430.2	7,428.1	79.8	13.2	84.48	2,485.6	-2,850.9	7,445.2	7,352.7	92.47	80.514		
12,300.0	7,770.0	7,428.0	7,426.0	81.5	13.2	84.44	2,485.5	-2,850.9	7,537.5	7,443.3	94.18	80.032		
12,400.0	7,770.0	7,425.8	7,423.8	83.3	13.2	84.40	2,485.4	-2,850.9	7,630.1	7,534.2	95.89	79.568		
12,500.0	7,770.0	7,400.0	7,398.0	85.0	13.2	83.89	2,484.4	-2,851.1	7,722.9	7,625.4	97.49	79.218		
12,600.0	7,770.0	7,400.0	7,398.0	86.7	13.2	83.89	2,484.4	-2,851.1	7,815.8	7,716.6	99.21	78.779		
12,700.0	7,770.0	7,400.0	7,398.0	88.5	13.2	83.89	2,484.4	-2,851.1	7,908.9	7,808.0	100.94	78.356		
12,800.0	7,770.0	7,400.0	7,398.0	90.2	13.2	83.89	2,484.4	-2,851.1	8,002.2	7,899.5	102.66	77.949		
12,900.0	7,770.0	7,400.0	7,398.0	91.9	13.2	83.89	2,484.4	-2,851.1	8,095.6	7,991.2	104.38	77.556		
13,000.0	7,770.0	7,400.0	7,398.0	93.7	13.2	83.89	2,484.4	-2,851.1	8,189.1	8,083.0	106.11	77.176		
13,100.0	7,770.0	7,400.0	7,398.0	95.4	13.2	83.89	2,484.4	-2,851.1	8,282.9	8,175.0	107.84	76.810		
13,200.0	7,770.0	7,400.0	7,398.0	97.1	13.2	83.89	2,484.4	-2,851.1	8,376.7	8,267.2	109.56	76.456		
13,300.0	7,770.0	7,400.0	7,398.0	98.9	13.2	83.89	2,484.4	-2,851.1	8,470.7	8,359.4	111.29	76.114		
13,400.0	7,770.0	7,400.0	7,398.0	100.6	13.2	83.89	2,484.4	-2,851.1	8,564.9	8,451.8	113.02	75.783		
13,500.0	7,770.0	7,400.0	7,398.0	102.4	13.2	83.89	2,484.4	-2,851.1	8,659.1	8,544.4	114.75	75.463		
13,600.0	7,770.0	7,400.0	7,398.0	104.1	13.2	83.89	2,484.4	-2,851.1	8,753.5	8,637.1	116.48	75.153		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,700.0	7,770.0	7,400.0	7,398.0	105.8	13.2	83.89	2,484.4	-2,851.1	8,848.0	8,729.8	118.21	74.853		
13,800.0	7,770.0	7,397.4	7,395.4	107.6	13.2	83.83	2,484.3	-2,851.1	8,942.7	8,822.8	119.92	74.572		
13,900.0	7,770.0	7,393.6	7,391.6	109.3	13.2	83.76	2,484.1	-2,851.1	9,037.4	8,915.8	121.63	74.304		
14,000.0	7,770.0	7,389.9	7,387.9	111.1	13.2	83.69	2,484.0	-2,851.2	9,132.3	9,009.0	123.34	74.044		
14,100.0	7,770.0	7,386.2	7,384.2	112.8	13.1	83.61	2,483.8	-2,851.2	9,227.3	9,102.2	125.04	73.792		
14,200.0	7,770.0	7,382.5	7,380.5	114.5	13.1	83.54	2,483.7	-2,851.2	9,322.4	9,195.6	126.75	73.548		
14,300.0	7,770.0	7,378.9	7,376.9	116.3	13.1	83.47	2,483.6	-2,851.2	9,417.5	9,289.1	128.46	73.311		
14,400.0	7,770.0	7,375.3	7,373.3	118.0	13.1	83.40	2,483.4	-2,851.2	9,512.8	9,382.6	130.17	73.082		
14,500.0	7,770.0	7,371.8	7,369.8	119.8	13.1	83.33	2,483.3	-2,851.2	9,608.2	9,476.3	131.87	72.859		
14,600.0	7,770.0	7,368.3	7,366.3	121.5	13.1	83.26	2,483.2	-2,851.2	9,703.6	9,570.0	133.58	72.642		
14,700.0	7,770.0	7,364.8	7,362.8	123.3	13.1	83.19	2,483.1	-2,851.2	9,799.2	9,663.9	135.29	72.431		
14,800.0	7,770.0	7,361.3	7,359.3	125.0	13.1	83.12	2,482.9	-2,851.2	9,894.8	9,757.8	137.00	72.227		
14,900.0	7,770.0	7,357.9	7,355.9	126.7	13.1	83.05	2,482.8	-2,851.2	9,990.5	9,851.8	138.70	72.028 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
0.0	0.0	0.0	0.0	0.0	0.0	-144.08	-4,173.3	-3,023.0	5,153.3					
100.0	100.0	57.0	57.0	0.2	0.1	-144.08	-4,173.3	-3,023.0	5,153.2	5,152.9	0.24	N/A		
200.0	200.0	157.0	157.0	0.3	0.2	-144.08	-4,173.3	-3,023.0	5,153.2	5,152.6	0.57	9,001.384		
300.0	300.0	257.0	257.0	0.5	0.4	-144.08	-4,173.3	-3,023.0	5,153.2	5,152.2	0.92	5,591.835		
400.0	400.0	357.0	357.0	0.7	0.6	-144.08	-4,173.3	-3,023.0	5,153.2	5,151.9	1.27	4,055.638		
500.0	500.0	457.0	457.0	0.8	0.8	-144.08	-4,173.3	-3,023.0	5,153.2	5,151.5	1.62	3,181.587		
550.0	550.0	507.0	507.0	0.9	0.9	-144.08	-4,173.3	-3,023.0	5,153.2	5,151.4	1.79	2,872.098		
600.0	600.0	557.0	557.0	1.0	0.9	-144.92	-4,173.3	-3,023.0	5,153.3	5,151.4	1.97	2,617.605		
700.0	700.0	657.0	657.0	1.2	1.1	-144.92	-4,173.3	-3,023.0	5,154.8	5,152.5	2.32	2,223.945		
800.0	799.9	756.9	756.9	1.4	1.3	-144.93	-4,173.3	-3,023.0	5,157.6	5,155.0	2.67	1,933.311		
861.1	860.9	817.9	817.9	1.5	1.4	-144.93	-4,173.3	-3,023.0	5,160.1	5,157.2	2.88	1,790.378		
900.0	899.8	856.8	856.8	1.6	1.5	-144.95	-4,173.3	-3,023.0	5,161.8	5,158.8	3.02	1,709.593		
1,000.0	999.6	956.7	956.7	1.8	1.6	-144.98	-4,173.3	-3,023.0	5,166.3	5,162.9	3.37	1,531.899		
1,100.0	1,099.5	1,056.5	1,056.5	1.9	1.8	-145.01	-4,173.3	-3,023.0	5,170.7	5,167.0	3.73	1,387.626		
1,200.0	1,199.3	1,156.4	1,156.4	2.1	2.0	-145.05	-4,173.3	-3,023.0	5,175.1	5,171.1	4.08	1,268.213		
1,300.0	1,299.2	1,256.2	1,256.2	2.3	2.2	-145.08	-4,173.3	-3,023.0	5,179.6	5,175.2	4.44	1,167.781		
1,400.0	1,399.1	1,356.1	1,356.1	2.5	2.3	-145.12	-4,173.3	-3,023.0	5,184.1	5,179.3	4.79	1,082.157		
1,500.0	1,498.9	1,455.9	1,455.9	2.7	2.5	-145.15	-4,173.3	-3,023.0	5,188.5	5,183.4	5.15	1,008.305		
1,600.0	1,598.8	1,528.4	1,528.4	2.9	2.6	-145.18	-4,173.5	-3,022.9	5,193.1	5,187.7	5.45	952.234		
1,700.0	1,698.6	1,600.0	1,600.0	3.1	2.8	-145.22	-4,174.9	-3,022.3	5,198.6	5,192.9	5.76	902.494		
1,800.0	1,798.5	1,629.7	1,629.7	3.3	2.8	-145.24	-4,176.0	-3,021.9	5,205.0	5,199.0	5.99	868.264		
1,900.0	1,898.3	1,700.0	1,699.8	3.5	2.9	-145.30	-4,179.8	-3,020.3	5,212.4	5,206.1	6.30	827.182		
2,000.0	1,998.2	1,730.4	1,730.2	3.7	3.0	-145.33	-4,181.9	-3,019.5	5,220.6	5,214.1	6.54	798.356		
2,100.0	2,098.0	1,800.0	1,799.5	3.9	3.1	-145.42	-4,187.9	-3,017.0	5,229.9	5,223.1	6.85	763.481		
2,200.0	2,197.9	1,830.2	1,829.4	4.1	3.2	-145.46	-4,190.9	-3,015.8	5,240.0	5,233.0	7.09	738.935		
2,300.0	2,297.7	1,900.0	1,898.7	4.3	3.3	-145.56	-4,199.1	-3,012.4	5,251.3	5,243.9	7.41	708.477		
2,400.0	2,397.6	1,928.8	1,927.2	4.5	3.4	-145.61	-4,203.0	-3,010.9	5,263.3	5,255.6	7.66	687.471		
2,500.0	2,497.4	2,000.0	1,997.5	4.7	3.6	-145.74	-4,213.6	-3,006.5	5,276.5	5,268.5	7.99	660.096		
2,600.0	2,597.3	2,026.0	2,023.1	4.9	3.6	-145.79	-4,217.9	-3,004.7	5,290.4	5,282.1	8.24	642.272		
2,700.0	2,697.1	2,075.0	2,071.2	5.1	3.8	-145.89	-4,226.6	-3,001.2	5,305.4	5,296.8	8.54	621.538		
2,800.0	2,797.0	2,170.0	2,164.2	5.3	4.1	-146.10	-4,244.1	-2,994.0	5,320.9	5,311.9	8.96	594.136		
2,900.0	2,896.8	2,266.9	2,259.2	5.5	4.3	-146.30	-4,262.0	-2,986.7	5,336.5	5,327.1	9.39	568.317		
3,000.0	2,996.7	2,363.7	2,354.1	5.7	4.6	-146.51	-4,279.8	-2,979.4	5,352.1	5,342.3	9.83	544.305		
3,100.0	3,096.5	2,460.6	2,449.0	5.9	5.0	-146.71	-4,297.7	-2,972.1	5,367.9	5,357.6	10.28	522.014		
3,200.0	3,196.4	2,557.4	2,543.9	6.1	5.3	-146.92	-4,315.6	-2,964.8	5,383.7	5,372.9	10.74	501.335		
3,300.0	3,296.3	2,654.3	2,638.8	6.3	5.6	-147.12	-4,333.4	-2,957.5	5,399.5	5,388.3	11.20	482.150		
3,400.0	3,396.1	2,751.1	2,733.7	6.5	5.9	-147.32	-4,351.3	-2,950.2	5,415.5	5,403.8	11.66	464.340		
3,500.0	3,496.0	2,848.0	2,828.6	6.7	6.3	-147.52	-4,369.2	-2,942.8	5,431.5	5,419.3	12.13	447.791		
3,600.0	3,595.8	2,944.8	2,923.5	6.9	6.6	-147.72	-4,387.1	-2,935.5	5,447.5	5,435.0	12.60	432.395		
3,700.0	3,695.7	3,041.7	3,018.4	7.0	7.0	-147.92	-4,404.9	-2,928.2	5,463.7	5,450.6	13.07	418.050		
3,800.0	3,795.5	3,138.5	3,113.3	7.2	7.3	-148.12	-4,422.8	-2,920.9	5,479.9	5,466.3	13.54	404.667		
3,900.0	3,895.4	3,235.4	3,208.2	7.4	7.7	-148.31	-4,440.7	-2,913.6	5,496.2	5,482.1	14.02	392.160		
4,000.0	3,995.2	3,332.2	3,303.2	7.6	8.0	-148.51	-4,458.5	-2,906.3	5,512.5	5,498.0	14.49	380.454		
4,100.0	4,095.1	3,429.1	3,398.1	7.8	8.4	-148.70	-4,476.4	-2,899.0	5,528.9	5,513.9	14.96	369.481		
4,200.0	4,194.9	3,525.9	3,493.0	8.0	8.7	-148.89	-4,494.3	-2,891.7	5,545.3	5,529.9	15.44	359.179		
4,300.0	4,294.8	3,622.8	3,587.9	8.2	9.1	-149.08	-4,512.2	-2,884.3	5,561.9	5,545.9	15.91	349.493		
4,400.0	4,394.6	3,719.7	3,682.8	8.4	9.5	-149.27	-4,530.0	-2,877.0	5,578.4	5,562.1	16.39	340.372		
4,500.0	4,494.5	3,816.5	3,777.7	8.6	9.8	-149.46	-4,547.9	-2,869.7	5,595.1	5,578.2	16.86	331.770		
4,600.0	4,594.3	3,913.4	3,872.6	8.8	10.2	-149.65	-4,565.8	-2,862.4	5,611.8	5,594.5	17.34	323.648		
4,700.0	4,694.2	4,010.2	3,967.5	9.0	10.6	-149.84	-4,583.6	-2,855.1	5,628.6	5,610.8	17.81	315.967		
4,800.0	4,794.0	4,107.1	4,062.4	9.2	10.9	-150.02	-4,601.5	-2,847.8	5,645.4	5,627.1	18.29	308.695		
4,900.0	4,893.9	4,203.9	4,157.3	9.4	11.3	-150.21	-4,619.4	-2,840.5	5,662.3	5,643.5	18.76	301.801		

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 1H-7H-A168
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Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,000.0	4,993.7	4,300.8	4,252.2	9.6	11.7	-150.39	-4,637.3	-2,833.2	5,679.2	5,660.0	19.23	295.258		
5,100.0	5,093.6	4,397.6	4,347.1	9.8	12.0	-150.57	-4,655.1	-2,825.8	5,696.2	5,676.5	19.71	289.040		
5,200.0	5,193.5	4,494.5	4,442.1	10.0	12.4	-150.76	-4,673.0	-2,818.5	5,713.3	5,693.1	20.18	283.125		
5,300.0	5,293.3	4,591.3	4,537.0	10.2	12.8	-150.94	-4,690.9	-2,811.2	5,730.4	5,709.8	20.65	277.493		
5,400.0	5,393.2	4,688.2	4,631.9	10.4	13.1	-151.12	-4,708.7	-2,803.9	5,747.6	5,726.5	21.12	272.123		
5,500.0	5,493.0	4,785.0	4,726.8	10.6	13.5	-151.29	-4,726.6	-2,796.6	5,764.8	5,743.2	21.59	266.999		
5,600.0	5,592.9	4,881.9	4,821.7	10.8	13.9	-151.47	-4,744.5	-2,789.3	5,782.1	5,760.0	22.06	262.105		
5,700.0	5,692.7	4,978.7	4,916.6	11.0	14.2	-151.65	-4,762.4	-2,782.0	5,799.4	5,776.9	22.53	257.427		
5,800.0	5,792.6	5,075.6	5,011.5	11.2	14.6	-151.82	-4,780.2	-2,774.7	5,816.8	5,793.8	23.00	252.950		
5,900.0	5,892.4	5,172.4	5,106.4	11.4	15.0	-152.00	-4,798.1	-2,767.3	5,834.3	5,810.8	23.46	248.662		
6,000.0	5,992.3	5,272.2	5,206.2	11.6	15.4	-152.18	-4,816.0	-2,759.8	5,851.8	5,827.1	23.93	244.374		
6,100.0	6,092.1	5,372.1	5,306.1	11.8	15.8	-152.36	-4,833.9	-2,752.3	5,869.3	5,844.6	24.40	240.086		
6,200.0	6,192.0	5,472.0	5,406.0	12.0	16.2	-152.54	-4,851.8	-2,744.8	5,886.8	5,862.1	24.87	235.798		
6,300.0	6,291.8	5,571.8	5,505.8	12.2	16.6	-152.72	-4,869.7	-2,737.3	5,904.3	5,879.6	25.34	231.510		
6,400.0	6,391.7	5,671.7	5,605.7	12.4	17.0	-152.90	-4,887.6	-2,729.8	5,921.8	5,897.1	25.81	227.222		
6,500.0	6,491.5	5,771.5	5,705.5	12.6	17.4	-153.08	-4,905.5	-2,722.3	5,939.3	5,914.6	26.28	222.934		
6,600.0	6,591.4	5,871.4	5,805.4	12.8	17.8	-153.26	-4,923.4	-2,714.8	5,956.8	5,932.1	26.75	218.646		
6,700.0	6,691.2	5,971.2	5,905.2	13.0	18.2	-153.44	-4,941.3	-2,707.3	5,974.3	5,949.6	27.22	214.358		
6,800.0	6,791.1	6,071.1	6,005.1	13.2	18.6	-153.62	-4,959.2	-2,699.8	5,991.8	5,967.1	27.69	210.070		
6,900.0	6,890.9	6,171.0	6,105.0	13.4	19.0	-153.80	-4,977.1	-2,692.3	6,009.3	5,984.6	28.16	205.782		
7,000.0	6,990.8	6,270.8	6,204.8	13.6	19.4	-153.98	-4,995.0	-2,684.8	6,026.8	5,999.1	28.63	201.494		
7,024.2	7,014.9	7,044.9	6,972.0	13.6	18.1	-153.12	-4,879.4	-2,734.1	5,897.0	5,868.5	28.46	207.172		
7,050.0	7,040.7	7,070.7	6,997.8	13.7	18.2	-154.81	-4,879.4	-2,734.1	5,897.8	5,869.3	28.56	206.499		
7,100.0	7,090.7	7,120.7	7,047.7	13.7	18.2	28.59	-4,879.4	-2,734.1	5,897.1	5,868.4	28.70	205.456		
7,150.0	7,140.5	7,170.5	7,097.5	13.8	18.3	28.25	-4,879.4	-2,734.1	5,893.3	5,864.5	28.78	204.738		
7,200.0	7,189.9	7,219.9	7,146.9	13.8	18.3	28.41	-4,879.4	-2,734.1	5,886.4	5,857.6	28.81	204.333		
7,250.0	7,238.6	7,268.6	7,195.6	13.8	18.4	28.78	-4,879.4	-2,734.1	5,876.5	5,847.7	28.78	204.220		
7,300.0	7,286.4	7,316.4	7,243.5	13.7	18.5	29.33	-4,879.4	-2,734.1	5,863.6	5,835.0	28.69	204.369		
7,350.0	7,333.1	7,363.1	7,290.1	13.7	18.5	30.05	-4,879.4	-2,734.1	5,847.9	5,819.3	28.56	204.734		
7,400.0	7,378.5	7,408.4	7,335.5	13.6	18.6	30.94	-4,879.4	-2,734.1	5,829.2	5,800.8	28.40	205.253		
7,450.0	7,422.2	7,452.1	7,379.2	13.6	18.6	32.04	-4,879.4	-2,734.1	5,807.9	5,779.7	28.22	205.842		
7,500.0	7,464.1	7,494.1	7,421.2	13.5	18.7	33.34	-4,879.4	-2,734.1	5,784.0	5,755.9	28.02	206.392		
7,550.0	7,504.1	7,534.0	7,461.1	13.5	18.7	34.89	-4,879.4	-2,734.1	5,757.5	5,729.7	27.85	206.758		
7,600.0	7,541.8	7,571.8	7,498.9	13.5	18.8	36.70	-4,879.4	-2,734.1	5,728.7	5,701.0	27.71	206.765		
7,650.0	7,577.2	7,607.2	7,534.2	13.4	18.8	38.83	-4,879.4	-2,734.1	5,697.8	5,670.1	27.63	206.208		
7,700.0	7,610.0	7,640.0	7,567.1	13.5	18.8	41.30	-4,879.4	-2,734.1	5,664.7	5,637.1	27.65	204.862		
7,750.0	7,640.2	7,670.1	7,597.2	13.5	18.9	44.17	-4,879.4	-2,734.1	5,629.9	5,602.1	27.80	202.518		
7,800.0	7,667.4	7,697.4	7,624.4	13.6	18.9	47.48	-4,879.4	-2,734.1	5,593.3	5,565.2	28.10	199.019		
7,850.0	7,691.7	7,721.6	7,648.7	13.7	18.9	51.29	-4,879.4	-2,734.1	5,555.3	5,526.7	28.59	194.318		
7,900.0	7,712.8	7,742.8	7,669.9	13.9	19.0	55.65	-4,879.4	-2,734.1	5,515.9	5,486.7	29.26	188.527		
7,950.0	7,730.8	7,760.7	7,687.8	14.1	19.0	60.56	-4,879.4	-2,734.1	5,475.5	5,445.4	30.10	181.938		
8,000.0	7,745.5	7,775.4	7,702.5	14.4	19.0	66.04	-4,879.4	-2,734.1	5,434.1	5,403.1	31.05	175.002		
8,050.0	7,756.7	7,786.7	7,713.7	14.7	19.0	72.01	-4,879.4	-2,734.1	5,392.2	5,360.1	32.05	168.247		
8,100.0	7,764.6	7,794.5	7,721.6	15.1	19.0	78.38	-4,879.4	-2,734.1	5,349.7	5,316.7	32.99	162.176		
8,150.0	7,769.0	7,798.9	7,726.0	15.5	19.0	84.97	-4,879.4	-2,734.1	5,307.0	5,273.2	33.77	157.163		
8,188.1	7,770.0	7,800.0	7,727.0	15.9	19.0	90.00	-4,879.4	-2,734.1	5,274.4	5,240.2	34.21	154.175		
8,200.0	7,770.0	7,800.0	7,727.0	16.0	19.0	90.00	-4,879.4	-2,734.1	5,264.2	5,229.9	34.32	153.381		
8,300.0	7,770.0	7,800.0	7,727.0	17.0	19.0	90.00	-4,879.4	-2,734.1	5,179.1	5,143.8	35.32	146.631		
8,400.0	7,770.0	7,800.0	7,727.0	18.1	19.0	90.00	-4,879.4	-2,734.1	5,094.5	5,058.1	36.44	139.825		
8,500.0	7,770.0	7,800.0	7,727.0	19.3	19.0	90.00	-4,879.4	-2,734.1	5,010.5	4,972.9	37.64	133.099		
8,600.0	7,770.0	7,800.0	7,727.0	20.6	19.0	90.00	-4,879.4	-2,734.1	4,927.1	4,888.1	38.93	126.551		
8,700.0	7,770.0	7,800.0	7,727.0	21.9	19.0	90.00	-4,879.4	-2,734.1	4,844.3	4,804.0	40.29	120.246		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,770.0	7,800.0	7,727.0	23.3	19.0	90.00	-4,879.4	-2,734.1	4,762.1	4,720.5	41.69	114.219		
8,900.0	7,770.0	7,800.0	7,727.0	24.8	19.0	90.00	-4,879.4	-2,734.1	4,680.7	4,637.6	43.14	108.490		
9,000.0	7,770.0	7,800.0	7,727.0	26.3	19.0	90.00	-4,879.4	-2,734.1	4,600.0	4,555.4	44.63	103.065		
9,100.0	7,770.0	7,800.0	7,727.0	27.8	19.0	90.00	-4,879.4	-2,734.1	4,520.1	4,473.9	46.15	97.941		
9,200.0	7,770.0	7,800.0	7,727.0	29.3	19.0	90.00	-4,879.4	-2,734.1	4,440.9	4,393.2	47.70	93.109		
9,300.0	7,770.0	7,800.0	7,727.0	30.9	19.0	90.00	-4,879.4	-2,734.1	4,362.7	4,313.4	49.26	88.558		
9,400.0	7,770.0	7,800.0	7,727.0	32.5	19.0	90.00	-4,879.4	-2,734.1	4,285.3	4,234.5	50.85	84.273		
9,500.0	7,770.0	7,800.0	7,727.0	34.1	19.0	90.00	-4,879.4	-2,734.1	4,208.9	4,156.4	52.45	80.241		
9,600.0	7,770.0	7,800.0	7,727.0	35.7	19.0	90.00	-4,879.4	-2,734.1	4,133.5	4,079.4	54.07	76.447		
9,700.0	7,770.0	7,800.0	7,727.0	37.3	19.0	90.00	-4,879.4	-2,734.1	4,059.2	4,003.5	55.70	72.875		
9,800.0	7,770.0	7,800.0	7,727.0	39.0	19.0	90.00	-4,879.4	-2,734.1	3,985.9	3,928.6	57.34	69.514		
9,900.0	7,770.0	7,800.0	7,727.0	40.6	19.0	90.00	-4,879.4	-2,734.1	3,913.9	3,854.9	58.99	66.349		
10,000.0	7,770.0	7,800.0	7,727.0	42.3	19.0	90.00	-4,879.4	-2,734.1	3,843.1	3,782.5	60.65	63.367		
10,100.0	7,770.0	7,800.0	7,727.0	44.0	19.0	90.00	-4,879.4	-2,734.1	3,773.7	3,711.4	62.31	60.559		
10,200.0	7,770.0	7,800.0	7,727.0	45.6	19.0	90.00	-4,879.4	-2,734.1	3,705.6	3,641.6	63.99	57.913		
10,300.0	7,770.0	7,800.0	7,727.0	47.3	19.0	90.00	-4,879.4	-2,734.1	3,639.0	3,573.4	65.66	55.418		
10,400.0	7,770.0	7,800.0	7,727.0	49.0	19.0	90.00	-4,879.4	-2,734.1	3,574.0	3,506.7	67.35	53.068		
10,500.0	7,770.0	7,800.0	7,727.0	50.7	19.0	90.00	-4,879.4	-2,734.1	3,510.6	3,441.6	69.04	50.852		
10,600.0	7,770.0	7,800.0	7,727.0	52.4	19.0	90.00	-4,879.4	-2,734.1	3,449.0	3,378.3	70.73	48.763		
10,700.0	7,770.0	7,800.0	7,727.0	54.1	19.0	90.00	-4,879.4	-2,734.1	3,389.2	3,316.7	72.43	46.795		
10,800.0	7,770.0	7,800.0	7,727.0	55.8	19.0	90.00	-4,879.4	-2,734.1	3,331.3	3,257.2	74.13	44.941		
10,900.0	7,770.0	7,800.0	7,727.0	57.5	19.0	90.00	-4,879.4	-2,734.1	3,275.4	3,199.6	75.83	43.195		
11,000.0	7,770.0	7,800.0	7,727.0	59.2	19.0	90.00	-4,879.4	-2,734.1	3,221.7	3,144.2	77.54	41.551		
11,100.0	7,770.0	7,800.0	7,727.0	60.9	19.0	90.00	-4,879.4	-2,734.1	3,170.2	3,091.0	79.24	40.006		
11,200.0	7,770.0	7,800.0	7,727.0	62.6	19.0	90.00	-4,879.4	-2,734.1	3,121.1	3,040.2	80.96	38.553		
11,300.0	7,770.0	7,800.0	7,727.0	64.3	19.0	90.00	-4,879.4	-2,734.1	3,074.5	2,991.8	82.67	37.190		
11,400.0	7,770.0	7,800.0	7,727.0	66.0	19.0	90.00	-4,879.4	-2,734.1	3,030.4	2,946.0	84.39	35.911		
11,500.0	7,770.0	7,800.0	7,727.0	67.7	19.0	90.00	-4,879.4	-2,734.1	2,989.0	2,902.9	86.10	34.714		
11,600.0	7,770.0	7,800.0	7,727.0	69.5	19.0	90.00	-4,879.4	-2,734.1	2,950.5	2,862.6	87.82	33.595		
11,700.0	7,770.0	7,800.0	7,727.0	71.2	19.0	90.00	-4,879.4	-2,734.1	2,914.8	2,825.3	89.54	32.552		
11,800.0	7,770.0	7,800.0	7,727.0	72.9	19.0	90.00	-4,879.4	-2,734.1	2,882.2	2,790.9	91.27	31.580		
11,900.0	7,770.0	7,800.0	7,727.0	74.6	19.0	90.00	-4,879.4	-2,734.1	2,852.7	2,759.7	92.99	30.677		
12,000.0	7,770.0	7,800.0	7,727.0	76.4	19.0	90.00	-4,879.4	-2,734.1	2,826.5	2,731.8	94.72	29.841		
12,100.0	7,770.0	7,800.0	7,727.0	78.1	19.0	90.00	-4,879.4	-2,734.1	2,803.6	2,707.1	96.44	29.069		
12,200.0	7,770.0	7,800.0	7,727.0	79.8	19.0	90.00	-4,879.4	-2,734.1	2,784.1	2,685.9	98.17	28.359		
12,300.0	7,770.0	7,800.0	7,727.0	81.5	19.0	90.00	-4,879.4	-2,734.1	2,768.0	2,668.1	99.90	27.707		
12,400.0	7,770.0	7,800.0	7,727.0	83.3	19.0	90.00	-4,879.4	-2,734.1	2,755.5	2,653.9	101.63	27.113		
12,500.0	7,770.0	7,800.0	7,727.0	85.0	19.0	90.00	-4,879.4	-2,734.1	2,746.6	2,643.3	103.36	26.572		
12,600.0	7,770.0	7,800.0	7,727.0	86.7	19.0	90.00	-4,879.4	-2,734.1	2,741.3	2,636.2	105.10	26.084		
12,695.1	7,770.0	7,800.0	7,727.0	88.4	19.0	90.00	-4,879.4	-2,734.1	2,739.7	2,632.9	106.74	25.666 CC		
12,700.0	7,770.0	7,800.0	7,727.0	88.5	19.0	90.00	-4,879.4	-2,734.1	2,739.7	2,632.9	106.83	25.646 ES		
12,800.0	7,770.0	7,800.0	7,727.0	90.2	19.0	90.00	-4,879.4	-2,734.1	2,741.7	2,633.1	108.56	25.254		
12,900.0	7,770.0	7,800.0	7,727.0	91.9	19.0	90.00	-4,879.4	-2,734.1	2,747.3	2,637.0	110.30	24.908		
13,000.0	7,770.0	7,800.0	7,727.0	93.7	19.0	90.00	-4,879.4	-2,734.1	2,756.6	2,644.6	112.03	24.605		
13,100.0	7,770.0	7,800.0	7,727.0	95.4	19.0	90.00	-4,879.4	-2,734.1	2,769.4	2,655.7	113.77	24.343		
13,200.0	7,770.0	7,800.0	7,727.0	97.1	19.0	90.00	-4,879.4	-2,734.1	2,785.8	2,670.3	115.51	24.118		
13,300.0	7,770.0	7,800.0	7,727.0	98.9	19.0	90.00	-4,879.4	-2,734.1	2,805.7	2,688.4	117.24	23.930		
13,400.0	7,770.0	7,800.0	7,727.0	100.6	19.0	90.00	-4,879.4	-2,734.1	2,828.9	2,709.9	118.98	23.776		
13,500.0	7,770.0	7,800.0	7,727.0	102.4	19.0	90.00	-4,879.4	-2,734.1	2,855.5	2,734.7	120.72	23.654		
13,600.0	7,770.0	7,800.0	7,727.0	104.1	19.0	90.00	-4,879.4	-2,734.1	2,885.2	2,762.8	122.46	23.561		
13,700.0	7,770.0	7,800.0	7,727.0	105.8	19.0	90.00	-4,879.4	-2,734.1	2,918.1	2,793.9	124.20	23.496		
13,800.0	7,770.0	7,800.0	7,727.0	107.6	19.0	90.00	-4,879.4	-2,734.1	2,954.1	2,828.1	125.94	23.457		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	7,800.0	7,727.0	109.3	19.0	90.00	-4,879.4	-2,734.1	2,992.9	2,865.2	127.68	23.441	SF	
14,000.0	7,770.0	7,800.0	7,727.0	111.1	19.0	90.00	-4,879.4	-2,734.1	3,034.6	2,905.1	129.42	23.448		
14,100.0	7,770.0	7,800.0	7,727.0	112.8	19.0	90.00	-4,879.4	-2,734.1	3,078.9	2,947.7	131.16	23.474		
14,200.0	7,770.0	7,800.0	7,727.0	114.5	19.0	90.00	-4,879.4	-2,734.1	3,125.8	2,992.9	132.90	23.519		
14,300.0	7,770.0	7,800.0	7,727.0	116.3	19.0	90.00	-4,879.4	-2,734.1	3,175.1	3,040.5	134.64	23.582		
14,400.0	7,770.0	7,800.0	7,727.0	118.0	19.0	90.00	-4,879.4	-2,734.1	3,226.8	3,090.4	136.39	23.660		
14,500.0	7,770.0	7,800.0	7,727.0	119.8	19.0	90.00	-4,879.4	-2,734.1	3,280.8	3,142.6	138.13	23.751		
14,600.0	7,770.0	7,800.0	7,727.0	121.5	19.0	90.00	-4,879.4	-2,734.1	3,336.8	3,196.9	139.87	23.856		
14,700.0	7,770.0	7,800.0	7,727.0	123.3	19.0	90.00	-4,879.4	-2,734.1	3,394.9	3,253.3	141.61	23.973		
14,800.0	7,770.0	7,800.0	7,727.0	125.0	19.0	90.00	-4,879.4	-2,734.1	3,454.9	3,311.5	143.36	24.100		
14,900.0	7,770.0	7,800.0	7,727.0	126.7	19.0	90.00	-4,879.4	-2,734.1	3,516.7	3,371.6	145.10	24.236		
15,000.0	7,770.0	7,800.0	7,727.0	128.5	19.0	90.00	-4,879.4	-2,734.1	3,580.3	3,433.4	146.85	24.381		
15,100.0	7,770.0	7,800.0	7,727.0	130.2	19.0	90.00	-4,879.4	-2,734.1	3,645.4	3,496.8	148.59	24.533		
15,200.0	7,770.0	7,800.0	7,727.0	132.0	19.0	90.00	-4,879.4	-2,734.1	3,712.2	3,561.8	150.34	24.693		
15,300.0	7,770.0	7,800.0	7,727.0	133.7	19.0	90.00	-4,879.4	-2,734.1	3,780.4	3,628.3	152.08	24.858		
15,400.0	7,770.0	7,800.0	7,727.0	135.5	19.0	90.00	-4,879.4	-2,734.1	3,849.9	3,696.1	153.83	25.028		
15,500.0	7,770.0	7,800.0	7,727.0	137.2	19.0	90.00	-4,879.4	-2,734.1	3,920.8	3,765.3	155.57	25.203		
15,600.0	7,770.0	7,800.0	7,727.0	139.0	19.0	90.00	-4,879.4	-2,734.1	3,993.0	3,835.7	157.32	25.382		
15,700.0	7,770.0	7,800.0	7,727.0	140.7	19.0	90.00	-4,879.4	-2,734.1	4,066.3	3,907.3	159.06	25.564		
15,800.0	7,770.0	7,800.0	7,727.0	142.4	19.0	90.00	-4,879.4	-2,734.1	4,140.8	3,980.0	160.81	25.750		
15,900.0	7,770.0	7,800.0	7,727.0	144.2	19.0	90.00	-4,879.4	-2,734.1	4,216.3	4,053.7	162.55	25.938		
16,000.0	7,770.0	7,800.0	7,727.0	145.9	19.0	90.00	-4,879.4	-2,734.1	4,292.8	4,128.5	164.30	26.127		
16,100.0	7,770.0	7,800.0	7,727.0	147.7	19.0	90.00	-4,879.4	-2,734.1	4,370.2	4,204.2	166.05	26.319		
16,200.0	7,770.0	7,800.0	7,727.0	149.4	19.0	90.00	-4,879.4	-2,734.1	4,448.6	4,280.8	167.79	26.512		
16,300.0	7,770.0	7,800.0	7,727.0	151.2	19.0	90.00	-4,879.4	-2,734.1	4,527.8	4,358.2	169.54	26.706		
16,400.0	7,770.0	7,800.0	7,727.0	152.9	19.0	90.00	-4,879.4	-2,734.1	4,607.8	4,436.5	171.29	26.901		
16,500.0	7,770.0	7,800.0	7,727.0	154.7	19.0	90.00	-4,879.4	-2,734.1	4,688.6	4,515.5	173.04	27.096		
16,600.0	7,770.0	7,800.0	7,727.0	156.4	19.0	90.00	-4,879.4	-2,734.1	4,770.1	4,595.3	174.78	27.291		
16,700.0	7,770.0	7,800.0	7,727.0	158.2	19.0	90.00	-4,879.4	-2,734.1	4,852.3	4,675.8	176.53	27.487		
16,800.0	7,770.0	7,800.0	7,727.0	159.9	19.0	90.00	-4,879.4	-2,734.1	4,935.1	4,756.9	178.28	27.682		
16,900.0	7,770.0	7,800.0	7,727.0	161.7	19.0	90.00	-4,879.4	-2,734.1	5,018.6	4,838.6	180.03	27.877		
17,000.0	7,770.0	7,800.0	7,727.0	163.4	19.0	90.00	-4,879.4	-2,734.1	5,102.7	4,920.9	181.77	28.072		
17,100.0	7,770.0	7,800.0	7,727.0	165.2	19.0	90.00	-4,879.4	-2,734.1	5,187.3	5,003.8	183.52	28.265		
17,200.0	7,770.0	7,800.0	7,727.0	166.9	19.0	90.00	-4,879.4	-2,734.1	5,272.5	5,087.3	185.27	28.459		
17,300.0	7,770.0	7,800.0	7,727.0	168.7	19.0	90.00	-4,879.4	-2,734.1	5,358.2	5,171.2	187.02	28.651		
17,400.0	7,770.0	7,800.0	7,727.0	170.4	19.0	90.00	-4,879.4	-2,734.1	5,444.4	5,255.6	188.77	28.842		
17,500.0	7,770.0	7,800.0	7,727.0	172.2	19.0	90.00	-4,879.4	-2,734.1	5,531.0	5,340.5	190.52	29.032		
17,600.0	7,770.0	7,800.0	7,727.0	173.9	19.0	90.00	-4,879.4	-2,734.1	5,618.1	5,425.9	192.26	29.221		
17,653.1	7,770.0	7,800.0	7,727.0	174.8	19.0	90.00	-4,879.4	-2,734.1	5,664.5	5,471.3	193.19	29.321		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-60.34	1,789.9	-3,142.6	3,616.8					
100.0	100.0	56.0	56.0	0.2	0.1	-60.34	1,789.9	-3,142.6	3,616.6	3,616.3	0.25	N/A		
200.0	200.0	156.0	156.0	0.3	0.3	-60.34	1,789.9	-3,142.6	3,616.6	3,616.0	0.59	6,087.652		
300.0	300.0	256.0	256.0	0.5	0.4	-60.34	1,789.9	-3,142.6	3,616.6	3,615.6	0.94	3,846.505		
400.0	400.0	356.0	356.0	0.7	0.6	-60.34	1,789.9	-3,142.6	3,616.6	3,615.3	1.29	2,811.472		
500.0	500.0	456.0	456.0	0.8	0.8	-60.34	1,789.9	-3,142.6	3,616.6	3,614.9	1.63	2,215.355		
550.0	550.0	506.0	506.0	0.9	0.9	-60.34	1,789.9	-3,142.6	3,616.6	3,614.8	1.81	2,003.007		
600.0	600.0	556.0	556.0	1.0	1.0	-61.18	1,789.9	-3,142.6	3,616.5	3,614.5	1.98	1,827.744		
700.0	700.0	656.0	656.0	1.2	1.1	-61.21	1,789.9	-3,142.6	3,615.6	3,613.3	2.33	1,554.742		
800.0	799.9	755.9	755.9	1.4	1.3	-61.27	1,789.9	-3,142.6	3,613.9	3,611.3	2.68	1,350.944		
861.1	860.9	775.0	775.0	1.5	1.3	-61.29	1,789.9	-3,142.6	3,612.7	3,609.9	2.82	1,281.720		
900.0	899.8	775.0	775.0	1.6	1.3	-61.29	1,789.9	-3,142.6	3,612.4	3,609.5	2.89	1,249.977		
913.4	913.2	775.0	775.0	1.6	1.3	-61.29	1,789.9	-3,142.6	3,612.4	3,609.4	2.91	1,239.365		
1,000.0	999.6	775.0	775.0	1.8	1.3	-61.29	1,789.9	-3,142.6	3,613.4	3,610.3	3.07	1,175.224		
1,094.1	1,093.6	775.0	775.0	1.9	1.3	-61.29	1,789.9	-3,142.6	3,616.9	3,613.6	3.25	1,112.859		
1,100.0	1,099.5	920.7	920.7	1.9	1.8	-61.36	1,793.4	-3,143.7	3,611.5	3,607.9	3.65	989.844 CC, ES		
1,200.0	1,199.3	972.7	972.5	2.1	1.9	-61.37	1,796.4	-3,144.7	3,613.3	3,609.4	3.97	910.680		
1,300.0	1,299.2	1,024.6	1,024.2	2.3	2.1	-61.36	1,800.2	-3,145.9	3,616.4	3,612.2	4.29	843.914		
1,400.0	1,399.1	1,076.4	1,075.8	2.5	2.3	-61.35	1,805.0	-3,147.4	3,620.9	3,616.3	4.60	786.896		
1,500.0	1,498.9	1,128.1	1,127.2	2.7	2.4	-61.33	1,810.6	-3,149.2	3,626.7	3,621.8	4.92	737.688		
1,600.0	1,598.8	1,179.7	1,178.4	2.9	2.6	-61.29	1,817.0	-3,151.3	3,633.8	3,628.6	5.23	694.838		
1,700.0	1,698.6	1,231.1	1,229.2	3.1	2.8	-61.25	1,824.4	-3,153.7	3,642.2	3,636.7	5.54	657.236		
1,800.0	1,798.5	1,380.6	1,376.1	3.3	3.3	-61.06	1,850.6	-3,162.1	3,654.5	3,648.5	6.08	601.208		
1,900.0	1,898.3	1,380.6	1,376.1	3.5	3.3	-61.06	1,850.6	-3,162.1	3,663.7	3,657.4	6.27	584.327		
2,000.0	1,998.2	1,387.4	1,382.7	3.7	3.3	-61.05	1,851.9	-3,162.5	3,675.4	3,669.0	6.48	567.061		
2,100.0	2,098.0	1,486.1	1,479.3	3.9	3.7	-60.91	1,871.7	-3,168.8	3,688.4	3,681.5	6.97	529.392		
2,200.0	2,197.9	1,584.8	1,575.8	4.1	4.1	-60.76	1,891.4	-3,175.2	3,701.4	3,694.0	7.45	496.731		
2,300.0	2,297.7	1,683.5	1,672.3	4.3	4.5	-60.62	1,911.1	-3,181.5	3,714.4	3,706.5	7.93	468.140		
2,400.0	2,397.6	1,782.2	1,768.8	4.5	4.9	-60.47	1,930.8	-3,187.8	3,727.5	3,719.1	8.42	442.900		
2,500.0	2,497.4	1,880.9	1,865.3	4.7	5.3	-60.33	1,950.5	-3,194.1	3,740.6	3,731.7	8.90	420.454		
2,600.0	2,597.3	1,979.7	1,961.8	4.9	5.7	-60.19	1,970.3	-3,200.5	3,753.6	3,744.3	9.38	400.362		
2,700.0	2,697.1	2,078.4	2,058.3	5.1	6.1	-60.05	1,990.0	-3,206.8	3,766.8	3,756.9	9.85	382.273		
2,800.0	2,797.0	2,177.1	2,154.8	5.3	6.5	-59.91	2,009.7	-3,213.1	3,779.9	3,769.6	10.33	365.900		
2,900.0	2,896.8	2,275.8	2,251.4	5.5	6.9	-59.77	2,029.4	-3,219.5	3,793.0	3,782.2	10.81	351.012		
3,000.0	2,996.7	2,374.5	2,347.9	5.7	7.3	-59.63	2,049.1	-3,225.8	3,806.2	3,794.9	11.28	337.415		
3,100.0	3,096.5	2,473.2	2,444.4	5.9	7.6	-59.50	2,068.8	-3,232.1	3,819.4	3,807.7	11.75	324.948		
3,200.0	3,196.4	2,571.9	2,540.9	6.1	8.0	-59.36	2,088.6	-3,238.4	3,832.7	3,820.4	12.23	313.477		
3,300.0	3,296.3	2,670.6	2,637.4	6.3	8.4	-59.22	2,108.3	-3,244.8	3,845.9	3,833.2	12.70	302.886		
3,400.0	3,396.1	2,769.3	2,733.9	6.5	8.8	-59.09	2,128.0	-3,251.1	3,859.2	3,846.0	13.17	293.080		
3,500.0	3,496.0	2,868.0	2,830.4	6.7	9.2	-58.96	2,147.7	-3,257.4	3,872.4	3,858.8	13.64	283.973		
3,600.0	3,595.8	2,966.7	2,927.0	6.9	9.6	-58.83	2,167.4	-3,263.7	3,885.8	3,871.6	14.10	275.494		
3,700.0	3,695.7	3,065.5	3,023.5	7.0	10.0	-58.69	2,187.1	-3,270.1	3,899.1	3,884.5	14.57	267.580		
3,800.0	3,795.5	3,164.2	3,120.0	7.2	10.4	-58.56	2,206.9	-3,276.4	3,912.4	3,897.4	15.04	260.177		
3,900.0	3,895.4	3,262.9	3,216.5	7.4	10.8	-58.43	2,226.6	-3,282.7	3,925.8	3,910.3	15.50	253.237		
4,000.0	3,895.2	3,361.6	3,313.0	7.6	11.2	-58.31	2,246.3	-3,289.1	3,939.2	3,923.2	15.97	246.718		
4,100.0	4,095.1	3,460.3	3,409.5	7.8	11.6	-58.18	2,266.0	-3,295.4	3,952.6	3,936.2	16.43	240.583		
4,200.0	4,194.9	3,559.0	3,506.0	8.0	12.0	-58.05	2,285.7	-3,301.7	3,966.0	3,949.1	16.89	234.800		
4,300.0	4,294.8	3,657.7	3,602.5	8.2	12.4	-57.92	2,305.5	-3,308.0	3,979.5	3,962.1	17.35	229.338		
4,400.0	4,394.6	3,756.4	3,699.1	8.4	12.8	-57.80	2,325.2	-3,314.4	3,992.9	3,975.1	17.81	224.173		
4,500.0	4,494.5	3,855.1	3,795.6	8.6	13.2	-57.67	2,344.9	-3,320.7	4,006.4	3,988.1	18.27	219.280		
4,600.0	4,594.3	3,953.8	3,892.1	8.8	13.6	-57.55	2,364.6	-3,327.0	4,019.9	4,001.2	18.73	214.639		
4,700.0	4,694.2	4,052.6	3,988.6	9.0	14.0	-57.43	2,384.3	-3,333.4	4,033.4	4,014.2	19.19	210.232		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,800.0	4,794.0	4,151.3	4,085.1	9.2	14.4	-57.31	2,404.0	-3,339.7	4,047.0	4,027.3	19.64	206.040		
4,900.0	4,893.9	4,250.0	4,181.6	9.4	14.8	-57.18	2,423.8	-3,346.0	4,060.5	4,040.4	20.10	202.048		
5,000.0	4,993.7	4,348.7	4,278.1	9.6	15.2	-57.06	2,443.5	-3,352.3	4,074.1	4,053.5	20.55	198.244		
5,100.0	5,093.6	4,447.4	4,374.6	9.8	15.6	-56.94	2,463.2	-3,358.7	4,087.7	4,066.7	21.00	194.613		
5,200.0	5,193.5	4,546.1	4,471.2	10.0	16.0	-56.83	2,482.9	-3,365.0	4,101.3	4,079.8	21.46	191.144		
5,300.0	5,293.3	4,644.8	4,567.7	10.2	16.4	-56.71	2,502.6	-3,371.3	4,114.9	4,093.0	21.91	187.828		
5,400.0	5,393.2	4,743.5	4,664.2	10.4	16.8	-56.59	2,522.3	-3,377.7	4,128.6	4,106.2	22.36	184.653		
5,500.0	5,493.0	4,842.2	4,760.7	10.6	17.2	-56.47	2,542.1	-3,384.0	4,142.2	4,119.4	22.81	181.612		
5,600.0	5,592.9	4,940.9	4,857.2	10.8	17.6	-56.36	2,561.8	-3,390.3	4,155.9	4,132.6	23.26	178.695		
5,700.0	5,692.7	5,039.6	4,953.7	11.0	18.0	-56.24	2,581.5	-3,396.6	4,169.6	4,145.9	23.70	175.897		
5,800.0	5,792.6	5,138.4	5,050.2	11.2	18.4	-56.13	2,601.2	-3,403.0	4,183.3	4,159.1	24.15	173.209		
5,900.0	5,892.4	5,237.1	5,146.7	11.4	18.8	-56.02	2,620.9	-3,409.3	4,197.0	4,172.4	24.60	170.625		
6,000.0	5,992.3	5,335.8	5,243.3	11.6	19.2	-55.90	2,640.7	-3,415.6	4,210.8	4,185.7	25.04	168.140		
6,100.0	6,092.1	5,434.5	5,339.8	11.8	19.6	-55.79	2,660.4	-3,421.9	4,224.5	4,199.0	25.49	165.747		
6,200.0	6,192.0	5,533.2	5,436.3	12.0	20.0	-55.68	2,680.1	-3,428.3	4,238.3	4,212.4	25.93	163.443		
6,300.0	6,291.8	5,631.9	5,532.8	12.2	20.4	-55.57	2,699.8	-3,434.6	4,252.1	4,225.7	26.37	161.222		
6,400.0	6,391.7	5,730.6	5,629.3	12.4	20.8	-55.46	2,719.5	-3,440.9	4,265.9	4,239.1	26.82	159.079		
6,500.0	6,491.5	5,829.3	5,725.8	12.6	21.2	-55.35	2,739.2	-3,447.3	4,279.7	4,252.5	27.26	157.011		
6,600.0	6,591.4	5,928.0	5,822.3	12.8	21.6	-55.24	2,759.0	-3,453.6	4,293.5	4,265.8	27.70	155.015		
6,700.0	6,691.2	6,026.7	5,918.8	13.0	22.0	-55.13	2,778.7	-3,459.9	4,307.4	4,279.3	28.14	153.085		
6,800.0	6,791.1	6,125.4	6,015.4	13.2	22.4	-55.03	2,798.4	-3,466.2	4,321.3	4,292.7	28.58	151.220		
6,900.0	6,890.9	6,224.2	6,111.9	13.4	22.8	-54.92	2,818.1	-3,472.6	4,335.1	4,306.1	29.01	149.415		
7,000.0	6,990.8	6,322.9	6,208.4	13.6	23.2	-54.81	2,837.8	-3,478.9	4,349.0	4,319.6	29.45	147.669		
7,024.2	7,014.9	6,346.7	6,231.7	13.6	23.2	-54.79	2,842.6	-3,480.4	4,352.4	4,322.8	29.56	147.255		
7,050.0	7,040.7	6,372.1	6,256.6	13.7	23.4	-56.66	2,847.7	-3,482.1	4,356.3	4,326.6	29.71	146.647		
7,100.0	7,090.7	6,420.8	6,304.2	13.7	23.5	126.20	2,857.4	-3,485.2	4,365.3	4,335.3	29.99	145.562		
7,150.0	7,140.5	6,468.7	6,351.0	13.8	23.7	125.08	2,867.0	-3,488.2	4,376.3	4,346.0	30.28	144.550		
7,200.0	7,189.9	6,515.4	6,396.6	13.8	23.9	124.22	2,876.3	-3,491.2	4,389.2	4,358.7	30.57	143.587		
7,250.0	7,238.6	6,560.8	6,441.0	13.8	24.1	123.31	2,885.4	-3,494.2	4,404.1	4,373.2	30.88	142.642		
7,300.0	7,286.4	6,609.0	6,488.2	13.7	25.1	125.65	2,966.3	-3,520.1	4,417.0	4,385.7	31.31	141.094		
7,350.0	7,333.1	7,415.7	7,289.1	13.7	25.2	125.09	2,966.3	-3,520.1	4,427.8	4,396.4	31.42	140.903		
7,400.0	7,378.5	7,461.0	7,334.5	13.6	25.2	124.41	2,966.3	-3,520.1	4,440.7	4,409.1	31.57	140.666		
7,450.0	7,422.2	7,504.7	7,378.2	13.6	25.3	123.60	2,966.3	-3,520.1	4,455.4	4,423.7	31.75	140.342		
7,500.0	7,464.1	7,546.7	7,420.1	13.5	25.3	122.67	2,966.3	-3,520.1	4,472.1	4,440.2	31.97	139.889		
7,550.0	7,504.1	7,586.6	7,460.1	13.5	25.3	121.58	2,966.3	-3,520.1	4,490.7	4,458.5	32.25	139.266		
7,600.0	7,541.8	7,624.4	7,497.8	13.5	25.4	120.34	2,966.3	-3,520.1	4,511.1	4,478.5	32.59	138.436		
7,650.0	7,577.2	7,659.7	7,533.2	13.4	25.4	118.92	2,966.3	-3,520.1	4,533.3	4,500.3	33.00	137.374		
7,700.0	7,610.0	7,692.6	7,566.0	13.5	25.4	117.32	2,966.3	-3,520.1	4,557.1	4,523.6	33.49	136.066		
7,750.0	7,640.2	7,722.7	7,596.2	13.5	25.5	115.52	2,966.3	-3,520.1	4,582.5	4,548.4	34.07	134.516		
7,800.0	7,667.4	7,749.9	7,623.4	13.6	25.5	113.50	2,966.3	-3,520.1	4,609.4	4,574.7	34.72	132.747		
7,850.0	7,691.7	7,774.2	7,647.7	13.7	25.5	111.25	2,966.3	-3,520.1	4,637.7	4,602.2	35.45	130.808		
7,900.0	7,712.8	7,795.4	7,668.8	13.9	25.5	108.77	2,966.3	-3,520.1	4,667.2	4,631.0	36.25	128.764		
7,950.0	7,730.8	7,813.3	7,686.8	14.1	25.5	106.04	2,966.3	-3,520.1	4,697.9	4,660.9	37.08	126.702		
8,000.0	7,745.5	7,828.0	7,701.5	14.4	25.6	103.07	2,966.3	-3,520.1	4,729.7	4,691.8	37.92	124.719		
8,050.0	7,756.7	7,839.3	7,712.7	14.7	25.6	99.87	2,966.3	-3,520.1	4,762.3	4,723.5	38.74	122.919		
8,100.0	7,764.6	7,847.1	7,720.6	15.1	25.6	96.45	2,966.3	-3,520.1	4,795.6	4,756.1	39.50	121.405		
8,150.0	7,769.0	7,851.5	7,725.0	15.5	25.6	92.85	2,966.3	-3,520.1	4,829.5	4,789.4	40.16	120.271		
8,188.1	7,770.0	7,852.5	7,726.0	15.9	25.6	90.00	2,966.3	-3,520.1	4,855.6	4,815.0	40.56	119.710		
8,200.0	7,770.0	7,852.5	7,726.0	16.0	25.6	90.00	2,966.3	-3,520.1	4,863.8	4,823.1	40.67	119.586		
8,300.0	7,770.0	7,852.5	7,726.0	17.0	25.6	90.00	2,966.3	-3,520.1	4,933.2	4,891.6	41.67	118.385		
8,400.0	7,770.0	7,852.5	7,726.0	18.1	25.6	90.00	2,966.3	-3,520.1	5,003.7	4,960.9	42.79	116.948		
8,500.0	7,770.0	7,852.5	7,726.0	19.3	25.6	90.00	2,966.3	-3,520.1	5,075.1	5,031.1	44.00	115.356		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,600.0	7,770.0	7,852.5	7,726.0	20.6	25.6	90.00	2,966.3	-3,520.1	5,147.5	5,102.2	45.28	113.672	
8,700.0	7,770.0	7,852.5	7,726.0	21.9	25.6	90.00	2,966.3	-3,520.1	5,220.8	5,174.2	46.64	111.946	
8,800.0	7,770.0	7,852.5	7,726.0	23.3	25.6	90.00	2,966.3	-3,520.1	5,295.0	5,247.0	48.04	110.213	
8,900.0	7,770.0	7,852.5	7,726.0	24.8	25.6	90.00	2,966.3	-3,520.1	5,370.0	5,320.5	49.49	108.498	
9,000.0	7,770.0	7,852.5	7,726.0	26.3	25.6	90.00	2,966.3	-3,520.1	5,445.9	5,394.9	50.98	106.818	
9,100.0	7,770.0	7,852.5	7,726.0	27.8	25.6	90.00	2,966.3	-3,520.1	5,522.5	5,470.0	52.50	105.187	
9,200.0	7,770.0	7,852.5	7,726.0	29.3	25.6	90.00	2,966.3	-3,520.1	5,599.8	5,545.7	54.05	103.610	
9,300.0	7,770.0	7,852.5	7,726.0	30.9	25.6	90.00	2,966.3	-3,520.1	5,677.8	5,622.2	55.61	102.093	
9,400.0	7,770.0	7,852.5	7,726.0	32.5	25.6	90.00	2,966.3	-3,520.1	5,756.5	5,699.3	57.20	100.638	
9,500.0	7,770.0	7,852.5	7,726.0	34.1	25.6	90.00	2,966.3	-3,520.1	5,835.9	5,777.1	58.80	99.244	
9,600.0	7,770.0	7,852.5	7,726.0	35.7	25.6	90.00	2,966.3	-3,520.1	5,915.9	5,855.5	60.42	97.912	
9,700.0	7,770.0	7,852.5	7,726.0	37.3	25.6	90.00	2,966.3	-3,520.1	5,996.5	5,934.5	62.05	96.639	
9,800.0	7,770.0	7,852.5	7,726.0	39.0	25.6	90.00	2,966.3	-3,520.1	6,077.7	6,014.0	63.69	95.425	
9,900.0	7,770.0	7,852.5	7,726.0	40.6	25.6	90.00	2,966.3	-3,520.1	6,159.4	6,094.1	65.34	94.266	
10,000.0	7,770.0	7,852.5	7,726.0	42.3	25.6	90.00	2,966.3	-3,520.1	6,241.7	6,174.7	67.00	93.161	
10,100.0	7,770.0	7,852.5	7,726.0	44.0	25.6	90.00	2,966.3	-3,520.1	6,324.4	6,255.8	68.66	92.106	
10,200.0	7,770.0	7,852.5	7,726.0	45.6	25.6	90.00	2,966.3	-3,520.1	6,407.7	6,337.4	70.34	91.100	
10,300.0	7,770.0	7,852.5	7,726.0	47.3	25.6	90.00	2,966.3	-3,520.1	6,491.4	6,419.4	72.02	90.140	
10,400.0	7,770.0	7,852.5	7,726.0	49.0	25.6	90.00	2,966.3	-3,520.1	6,575.6	6,501.9	73.70	89.223	
10,500.0	7,770.0	7,852.5	7,726.0	50.7	25.6	90.00	2,966.3	-3,520.1	6,660.2	6,584.9	75.39	88.347	
10,600.0	7,770.0	7,852.5	7,726.0	52.4	25.6	90.00	2,966.3	-3,520.1	6,745.3	6,668.2	77.08	87.511	
10,700.0	7,770.0	7,852.5	7,726.0	54.1	25.6	90.00	2,966.3	-3,520.1	6,830.7	6,752.0	78.78	86.711	
10,800.0	7,770.0	7,852.5	7,726.0	55.8	25.6	90.00	2,966.3	-3,520.1	6,916.6	6,836.1	80.48	85.946	
10,900.0	7,770.0	7,852.5	7,726.0	57.5	25.6	90.00	2,966.3	-3,520.1	7,002.8	6,920.6	82.18	85.213	
11,000.0	7,770.0	7,852.5	7,726.0	59.2	25.6	90.00	2,966.3	-3,520.1	7,089.4	7,005.5	83.89	84.512	
11,100.0	7,770.0	7,852.5	7,726.0	60.9	25.6	90.00	2,966.3	-3,520.1	7,176.3	7,090.7	85.60	83.840	
11,200.0	7,770.0	7,852.5	7,726.0	62.6	25.6	90.00	2,966.3	-3,520.1	7,263.6	7,176.3	87.31	83.196	
11,300.0	7,770.0	7,852.5	7,726.0	64.3	25.6	90.00	2,966.3	-3,520.1	7,351.2	7,262.2	89.02	82.579	
11,400.0	7,770.0	7,852.5	7,726.0	66.0	25.6	90.00	2,966.3	-3,520.1	7,439.1	7,348.3	90.74	81.986	
11,500.0	7,770.0	7,852.5	7,726.0	67.7	25.6	90.00	2,966.3	-3,520.1	7,527.3	7,434.8	92.45	81.416	
11,600.0	7,770.0	7,852.5	7,726.0	69.5	25.6	90.00	2,966.3	-3,520.1	7,615.8	7,521.6	94.17	80.869	
11,700.0	7,770.0	7,852.5	7,726.0	71.2	25.6	90.00	2,966.3	-3,520.1	7,704.6	7,608.7	95.90	80.343	
11,800.0	7,770.0	7,852.5	7,726.0	72.9	25.6	90.00	2,966.3	-3,520.1	7,793.6	7,696.0	97.62	79.838	
11,900.0	7,770.0	7,852.5	7,726.0	74.6	25.6	90.00	2,966.3	-3,520.1	7,882.9	7,783.6	99.34	79.351	
12,000.0	7,770.0	7,852.5	7,726.0	76.4	25.6	90.00	2,966.3	-3,520.1	7,972.5	7,871.4	101.07	78.882	
12,100.0	7,770.0	7,852.5	7,726.0	78.1	25.6	90.00	2,966.3	-3,520.1	8,062.3	7,959.5	102.80	78.431	
12,200.0	7,770.0	7,852.5	7,726.0	79.8	25.6	90.00	2,966.3	-3,520.1	8,152.3	8,047.8	104.52	77.995	
12,300.0	7,770.0	7,852.5	7,726.0	81.5	25.6	90.00	2,966.3	-3,520.1	8,242.6	8,136.4	106.25	77.576	
12,400.0	7,770.0	7,852.5	7,726.0	83.3	25.6	90.00	2,966.3	-3,520.1	8,333.1	8,225.1	107.98	77.171	
12,500.0	7,770.0	7,852.5	7,726.0	85.0	25.6	90.00	2,966.3	-3,520.1	8,423.8	8,314.1	109.71	76.780	
12,600.0	7,770.0	7,852.5	7,726.0	86.7	25.6	90.00	2,966.3	-3,520.1	8,514.8	8,403.3	111.45	76.402	
12,700.0	7,770.0	7,852.5	7,726.0	88.5	25.6	90.00	2,966.3	-3,520.1	8,605.9	8,492.7	113.18	76.038	
12,800.0	7,770.0	7,852.5	7,726.0	90.2	25.6	90.00	2,966.3	-3,520.1	8,697.2	8,582.3	114.91	75.685	
12,900.0	7,770.0	7,852.5	7,726.0	91.9	25.6	90.00	2,966.3	-3,520.1	8,788.7	8,672.1	116.65	75.344	
13,000.0	7,770.0	7,852.5	7,726.0	93.7	25.6	90.00	2,966.3	-3,520.1	8,880.4	8,762.0	118.38	75.014	
13,100.0	7,770.0	7,852.5	7,726.0	95.4	25.6	90.00	2,966.3	-3,520.1	8,972.3	8,852.1	120.12	74.695 SF	
13,200.0	7,770.0	5,940.9	5,835.0	97.1	21.6	61.34	2,761.5	-3,454.4	9,049.9	8,945.5	104.41	86.675	
13,300.0	7,770.0	5,921.0	5,815.4	98.9	21.5	61.08	2,757.5	-3,453.1	9,140.0	9,034.4	105.63	86.532	
13,400.0	7,770.0	5,901.0	5,795.9	100.6	21.5	60.83	2,753.6	-3,451.9	9,230.3	9,123.4	106.83	86.399	
13,500.0	7,770.0	5,881.0	5,776.4	102.4	21.4	60.57	2,749.6	-3,450.6	9,320.7	9,212.7	108.03	86.277	
13,600.0	7,770.0	5,861.0	5,756.8	104.1	21.3	60.32	2,745.6	-3,449.3	9,411.2	9,302.0	109.22	86.164	
13,700.0	7,770.0	5,841.1	5,737.3	105.8	21.2	60.07	2,741.6	-3,448.0	9,502.0	9,391.5	110.41	86.062	

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor						
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis						
13,800.0	7,770.0	5,821.1	5,717.8	107.6	21.1	59.81	2,737.6	-3,446.7	9,592.8	9,481.2	111.59	85.968					
13,900.0	7,770.0	5,801.1	5,698.2	109.3	21.1	59.56	2,733.6	-3,445.4	9,683.8	9,571.0	112.75	85.884					
14,000.0	7,770.0	5,781.1	5,678.7	111.1	21.0	59.31	2,729.6	-3,444.2	9,774.9	9,661.0	113.92	85.809					
14,100.0	7,770.0	5,761.2	5,659.2	112.8	20.9	59.06	2,725.6	-3,442.9	9,866.2	9,751.1	115.07	85.742					
14,200.0	7,770.0	5,741.2	5,639.6	114.5	20.8	58.82	2,721.6	-3,441.6	9,957.6	9,841.3	116.21	85.683					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-61.27	1,742.5	-3,179.0	3,625.5					
100.0	100.0	370.6	369.8	0.2	0.7	-61.41	1,726.0	-3,166.6	3,620.1	3,619.3	0.80	4,503.501		
200.0	200.0	461.6	460.2	0.3	1.0	-61.52	1,716.3	-3,163.1	3,611.6	3,610.4	1.17	3,076.395		
300.0	300.0	549.3	547.2	0.5	1.2	-61.65	1,705.2	-3,160.8	3,603.3	3,601.7	1.56	2,313.779		
400.0	400.0	617.0	614.2	0.7	1.4	-61.79	1,695.4	-3,160.1	3,595.4	3,593.5	1.91	1,878.662		
500.0	500.0	678.0	674.5	0.8	1.6	-61.92	1,685.9	-3,160.5	3,588.7	3,586.4	2.26	1,586.144		
550.0	550.0	702.7	698.8	0.9	1.7	-61.98	1,682.1	-3,161.0	3,585.8	3,583.4	2.42	1,479.705		
600.0	600.0	735.4	731.1	1.0	1.8	-62.92	1,676.9	-3,161.8	3,583.2	3,580.6	2.61	1,374.793		
700.0	700.0	802.5	797.4	1.2	2.0	-63.15	1,666.4	-3,164.1	3,578.0	3,575.0	2.99	1,195.604		
800.0	799.9	869.0	863.0	1.4	2.2	-63.40	1,656.1	-3,166.9	3,572.9	3,569.5	3.38	1,058.126		
861.1	860.9	925.9	919.1	1.5	2.4	-63.62	1,646.9	-3,169.8	3,569.8	3,566.1	3.69	968.486		
900.0	899.8	978.9	971.2	1.6	2.6	-63.81	1,637.7	-3,172.8	3,567.7	3,563.8	3.96	900.786		
1,000.0	999.6	1,171.5	1,159.0	1.8	3.4	-64.64	1,596.2	-3,183.9	3,560.5	3,555.5	4.94	720.541		
1,100.0	1,099.5	1,255.7	1,240.6	1.9	3.7	-65.02	1,576.2	-3,188.5	3,552.5	3,547.0	5.50	645.967		
1,200.0	1,199.3	1,335.6	1,318.1	2.1	4.1	-65.39	1,557.5	-3,193.5	3,545.5	3,539.4	6.05	586.267		
1,300.0	1,299.2	1,417.9	1,397.8	2.3	4.5	-65.78	1,537.8	-3,198.9	3,538.8	3,532.1	6.62	534.678		
1,400.0	1,399.1	1,468.0	1,446.3	2.5	4.7	-66.02	1,525.7	-3,202.6	3,533.1	3,526.1	7.04	501.583		
1,500.0	1,498.9	1,554.0	1,529.5	2.7	5.1	-66.44	1,505.2	-3,209.9	3,528.5	3,520.9	7.65	461.479		
1,600.0	1,598.8	1,739.3	1,707.1	2.9	6.1	-67.44	1,454.9	-3,225.6	3,522.8	3,513.9	8.84	398.514		
1,700.0	1,698.6	1,843.0	1,805.8	3.1	6.7	-68.03	1,424.2	-3,234.4	3,516.6	3,507.0	9.61	365.848		
1,800.0	1,798.5	1,936.9	1,895.4	3.3	7.1	-68.56	1,396.9	-3,241.3	3,510.1	3,499.8	10.31	340.560		
1,900.0	1,898.3	1,982.0	1,938.7	3.5	7.4	-68.80	1,384.8	-3,244.7	3,504.8	3,494.0	10.73	326.649		
2,000.0	1,998.2	2,033.9	1,988.6	3.7	7.6	-69.07	1,371.5	-3,249.0	3,501.0	3,489.8	11.19	312.902		
2,100.0	2,098.0	2,191.8	2,140.3	3.9	8.5	-69.92	1,329.7	-3,263.4	3,498.1	3,485.9	12.23	286.142		
2,200.0	2,197.9	2,273.5	2,218.4	4.1	8.9	-70.37	1,307.0	-3,269.9	3,493.9	3,481.0	12.87	271.530		
2,300.0	2,297.7	2,331.0	2,273.4	4.3	9.2	-70.70	1,290.7	-3,275.3	3,490.9	3,477.5	13.39	260.756		
2,400.0	2,397.6	2,413.3	2,351.7	4.5	9.7	-71.18	1,266.9	-3,283.8	3,488.9	3,474.8	14.06	248.183		
2,500.0	2,497.4	2,525.6	2,458.5	4.7	10.3	-71.84	1,234.4	-3,295.1	3,487.1	3,472.2	14.89	234.237		
2,600.0	2,597.3	2,705.1	2,629.6	4.9	11.3	-72.88	1,182.1	-3,310.6	3,484.3	3,468.2	16.11	216.248		
2,700.0	2,697.1	2,781.0	2,701.4	5.1	11.8	-73.34	1,158.4	-3,316.7	3,480.9	3,464.1	16.77	207.608		
2,800.0	2,797.0	2,838.0	2,755.2	5.3	12.1	-73.70	1,140.3	-3,322.0	3,478.6	3,461.2	17.31	200.927		
2,900.0	2,896.8	2,923.0	2,835.6	5.5	12.6	-74.22	1,113.9	-3,330.2	3,477.3	3,459.3	18.01	193.121		
3,000.0	2,996.7	3,042.5	2,949.1	5.7	13.3	-74.93	1,078.2	-3,340.2	3,475.5	3,456.6	18.88	184.038		
3,082.1	3,078.7	3,094.0	2,998.1	5.8	13.6	-75.23	1,063.0	-3,345.0	3,475.0	3,455.7	19.34	179.663		
3,100.0	3,096.5	3,094.0	2,998.1	5.9	13.6	-75.23	1,063.0	-3,345.0	3,475.0	3,455.6	19.38	179.337 CC, ES		
3,200.0	3,196.4	3,156.8	3,057.8	6.1	13.9	-75.61	1,044.5	-3,351.6	3,475.9	3,456.0	19.94	174.332		
3,300.0	3,296.3	3,266.0	3,161.5	6.3	14.5	-76.25	1,012.3	-3,362.8	3,477.0	3,456.3	20.76	167.509		
3,400.0	3,396.1	3,329.2	3,221.5	6.5	14.9	-76.63	993.6	-3,369.3	3,478.7	3,457.4	21.33	163.097		
3,500.0	3,496.0	3,437.0	3,323.7	6.7	15.5	-77.28	961.4	-3,381.4	3,481.5	3,459.4	22.14	157.243		
3,600.0	3,595.8	3,522.0	3,404.4	6.9	16.0	-77.79	936.4	-3,390.6	3,484.3	3,461.5	22.83	152.623		
3,700.0	3,695.7	3,604.8	3,483.0	7.0	16.5	-78.28	912.2	-3,399.8	3,487.8	3,464.4	23.49	148.510		
3,800.0	3,795.5	3,690.1	3,564.3	7.2	16.9	-78.77	888.2	-3,409.2	3,491.9	3,467.7	24.14	144.626		
3,900.0	3,895.4	3,903.7	3,767.8	7.4	18.1	-80.00	826.7	-3,430.0	3,495.2	3,469.7	25.51	136.990		
4,000.0	3,995.2	4,036.0	3,894.3	7.6	18.8	-80.74	789.1	-3,439.5	3,496.3	3,469.9	26.40	132.444		
4,100.0	4,095.1	4,100.7	3,956.3	7.8	19.2	-81.10	771.2	-3,444.0	3,497.6	3,470.6	26.94	129.852		
4,200.0	4,194.9	4,170.6	4,023.2	8.0	19.6	-81.49	751.5	-3,449.4	3,500.0	3,472.5	27.50	127.281		
4,300.0	4,294.8	4,239.7	4,089.2	8.2	20.0	-81.88	731.9	-3,455.3	3,503.3	3,475.2	28.07	124.787		
4,400.0	4,394.6	4,320.4	4,165.7	8.4	20.4	-82.36	707.3	-3,463.0	3,507.7	3,478.9	28.73	122.109		
4,500.0	4,494.5	4,442.3	4,281.7	8.6	21.1	-83.07	671.5	-3,473.7	3,511.9	3,482.3	29.56	118.810		
4,600.0	4,594.3	4,563.9	4,398.2	8.8	21.7	-83.73	638.1	-3,483.5	3,515.9	3,485.5	30.37	115.786		
4,700.0	4,694.2	4,787.8	4,612.6	9.0	22.9	-84.96	575.0	-3,496.2	3,517.9	3,486.2	31.68	111.029		
4,800.0	4,794.0	4,860.2	4,682.3	9.2	23.3	-85.35	555.4	-3,499.1	3,518.8	3,486.6	32.22	109.224		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,893.9	4,948.1	4,767.2	9.4	23.7	-85.78	533.4	-3,503.1	3,520.7	3,487.9	32.79	107.375		
5,000.0	4,993.7	5,082.7	4,898.3	9.6	24.2	-86.39	503.3	-3,508.1	3,522.2	3,488.7	33.52	105.092		
5,100.0	5,093.6	5,176.5	4,990.1	9.8	24.6	-86.79	483.8	-3,510.9	3,523.5	3,489.4	34.06	103.463		
5,200.0	5,193.5	5,285.2	5,096.7	10.0	25.0	-87.23	463.1	-3,514.2	3,524.9	3,490.3	34.62	101.830		
5,300.0	5,293.3	5,412.3	5,222.2	10.2	25.4	-87.67	442.6	-3,516.7	3,525.8	3,490.6	35.17	100.238		
5,400.0	5,393.2	5,504.7	5,313.7	10.4	25.6	-87.94	431.0	-3,518.2	3,526.5	3,490.9	35.58	99.119		
5,500.0	5,493.0	5,599.3	5,407.9	10.6	25.8	-88.17	421.9	-3,519.6	3,527.3	3,491.3	35.95	98.116		
5,600.0	5,592.9	5,678.2	5,486.6	10.8	25.9	-88.34	416.2	-3,521.0	3,528.6	3,492.4	36.27	97.293		
5,700.0	5,692.7	5,767.5	5,575.8	11.0	26.1	-88.49	411.5	-3,522.9	3,530.4	3,493.8	36.57	96.527		
5,800.0	5,792.6	5,864.4	5,672.6	11.2	26.2	-88.63	408.1	-3,525.1	3,532.4	3,495.5	36.85	95.846		
5,900.0	5,892.4	5,956.7	5,764.8	11.4	26.3	-88.74	406.4	-3,527.2	3,534.5	3,497.4	37.12	95.207		
6,000.0	5,992.3	6,042.8	5,850.9	11.6	26.3	-88.83	405.6	-3,529.4	3,536.9	3,499.6	37.38	94.627		
6,100.0	6,092.1	6,151.4	5,959.5	11.8	26.4	-88.93	405.4	-3,532.5	3,539.6	3,502.0	37.65	94.009		
6,200.0	6,192.0	6,285.3	6,093.3	12.0	26.5	-89.07	404.5	-3,535.2	3,541.5	3,503.6	37.95	93.315		
6,300.0	6,291.8	6,407.8	6,215.8	12.2	26.6	-89.19	403.8	-3,536.7	3,542.7	3,504.4	38.24	92.645		
6,400.0	6,391.7	6,507.4	6,315.4	12.4	26.7	-89.28	403.5	-3,537.5	3,543.5	3,505.0	38.50	92.038		
6,500.0	6,491.5	6,604.0	6,412.0	12.6	26.8	-89.36	403.8	-3,538.5	3,544.4	3,505.6	38.76	91.454		
6,600.0	6,591.4	6,693.2	6,501.2	12.8	26.8	-89.43	404.3	-3,539.6	3,545.5	3,506.5	39.01	90.886		
6,700.0	6,691.2	6,785.0	6,592.9	13.0	26.9	-89.50	404.8	-3,540.8	3,546.9	3,507.6	39.27	90.330		
6,800.0	6,791.1	6,874.3	6,682.2	13.2	27.0	-89.57	405.5	-3,542.3	3,548.5	3,509.0	39.51	89.811		
6,900.0	6,890.9	6,964.2	6,772.1	13.4	27.0	-89.63	406.6	-3,544.1	3,550.5	3,510.7	39.75	89.310		
7,000.0	6,990.8	7,056.5	6,864.4	13.6	27.1	-89.69	408.1	-3,546.1	3,552.7	3,512.7	39.99	88.837		
7,024.2	7,014.9	7,078.9	6,886.8	13.6	27.1	-89.70	408.6	-3,546.6	3,553.2	3,513.2	40.05	88.724		
7,050.0	7,040.7	7,102.7	6,910.6	13.7	27.1	-91.41	409.1	-3,547.2	3,553.8	3,513.7	40.10	88.628		
7,100.0	7,090.7	7,144.4	6,952.2	13.7	27.1	91.88	410.0	-3,548.2	3,555.1	3,515.0	40.18	88.478		
7,150.0	7,140.5	7,183.6	6,991.5	13.8	27.2	91.31	410.5	-3,549.3	3,556.7	3,516.4	40.25	88.375		
7,200.0	7,189.9	7,222.5	7,030.4	13.8	27.2	91.14	410.8	-3,550.5	3,558.4	3,518.1	40.29	88.326		
7,250.0	7,238.6	7,261.0	7,068.8	13.8	27.3	91.06	410.9	-3,551.8	3,560.4	3,520.1	40.31	88.327		
7,300.0	7,286.4	7,304.4	7,112.2	13.7	27.3	91.05	410.6	-3,553.4	3,562.6	3,522.2	40.32	88.353		
7,350.0	7,333.1	7,361.8	7,169.5	13.7	27.4	91.17	410.1	-3,555.4	3,564.8	3,524.5	40.35	88.354		
7,400.0	7,378.5	7,417.6	7,225.3	13.6	27.4	91.34	409.5	-3,557.2	3,567.1	3,526.7	40.36	88.375		
7,450.0	7,422.2	7,472.9	7,280.6	13.6	27.5	91.56	408.9	-3,558.9	3,569.4	3,529.1	40.37	88.407		
7,500.0	7,464.1	7,530.2	7,337.9	13.5	27.6	91.85	408.3	-3,560.3	3,571.9	3,531.5	40.39	88.440		
7,550.0	7,504.1	7,584.6	7,392.2	13.5	27.6	92.15	408.0	-3,561.5	3,574.5	3,534.1	40.40	88.476		
7,600.0	7,541.8	7,635.3	7,442.9	13.5	27.7	92.44	407.9	-3,562.4	3,577.4	3,537.0	40.42	88.510		
7,650.0	7,577.2	7,680.0	7,487.6	13.4	27.7	92.69	407.9	-3,563.0	3,580.6	3,540.2	40.44	88.544		
7,700.0	7,610.0	7,721.3	7,528.9	13.5	27.7	92.89	408.0	-3,563.5	3,584.3	3,543.8	40.48	88.548		
7,750.0	7,640.2	7,758.9	7,566.6	13.5	27.7	93.03	408.2	-3,563.8	3,588.5	3,547.9	40.54	88.509		
7,800.0	7,667.4	7,792.9	7,600.5	13.6	27.8	93.10	408.4	-3,564.0	3,593.3	3,552.6	40.64	88.416		
7,850.0	7,691.7	7,819.6	7,627.2	13.7	27.8	93.04	408.6	-3,564.2	3,598.7	3,557.9	40.77	88.269		
7,900.0	7,712.8	7,841.5	7,649.1	13.9	27.8	92.86	408.8	-3,564.3	3,604.8	3,563.9	40.94	88.050		
7,950.0	7,730.8	7,860.0	7,667.6	14.1	27.8	92.58	408.9	-3,564.4	3,611.7	3,570.6	41.16	87.749		
8,000.0	7,745.5	7,874.9	7,682.5	14.4	27.8	92.19	409.0	-3,564.4	3,619.4	3,577.9	41.43	87.366		
8,050.0	7,756.7	7,886.3	7,693.9	14.7	27.8	91.68	409.2	-3,564.5	3,627.8	3,586.0	41.75	86.902		
8,100.0	7,764.6	7,894.0	7,701.6	15.1	27.8	91.06	409.2	-3,564.5	3,636.9	3,594.8	42.11	86.364		
8,150.0	7,769.0	7,898.1	7,705.7	15.5	27.8	90.32	409.3	-3,564.5	3,646.7	3,604.2	42.52	85.761		
8,188.1	7,770.0	7,898.8	7,706.4	15.9	27.8	89.68	409.3	-3,564.5	3,654.7	3,611.8	42.86	85.266		
8,200.0	7,770.0	7,898.6	7,706.2	16.0	27.8	89.68	409.3	-3,564.5	3,657.3	3,614.3	42.97	85.106		
8,300.0	7,770.0	7,897.6	7,705.2	17.0	27.8	89.67	409.3	-3,564.5	3,680.3	3,636.3	43.97	83.697		
8,400.0	7,770.0	7,896.6	7,704.2	18.1	27.8	89.65	409.3	-3,564.5	3,705.8	3,660.7	45.09	82.196		
8,500.0	7,770.0	7,895.6	7,703.2	19.3	27.8	89.63	409.2	-3,564.5	3,733.9	3,687.6	46.29	80.655		
8,600.0	7,770.0	7,894.6	7,702.2	20.6	27.8	89.62	409.2	-3,564.5	3,764.4	3,716.8	47.58	79.113		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,700.0	7,770.0	7,893.5	7,701.2	21.9	27.8	89.60	409.2	-3,564.5	3,797.3	3,748.3	48.93	77.599		
8,800.0	7,770.0	7,892.6	7,700.2	23.3	27.8	89.59	409.2	-3,564.5	3,832.5	3,782.1	50.34	76.131		
8,900.0	7,770.0	7,891.6	7,699.2	24.8	27.8	89.57	409.2	-3,564.5	3,869.9	3,818.2	51.79	74.723		
9,000.0	7,770.0	7,890.6	7,698.2	26.3	27.8	89.55	409.2	-3,564.5	3,909.6	3,856.4	53.28	73.382		
9,100.0	7,770.0	7,889.6	7,697.2	27.8	27.8	89.54	409.2	-3,564.5	3,951.4	3,896.6	54.80	72.112		
9,200.0	7,770.0	7,888.6	7,696.2	29.3	27.8	89.52	409.2	-3,564.5	3,995.3	3,939.0	56.34	70.914		
9,300.0	7,770.0	7,887.6	7,695.3	30.9	27.8	89.51	409.2	-3,564.5	4,041.2	3,983.3	57.91	69.788		
9,400.0	7,770.0	7,886.7	7,694.3	32.5	27.8	89.49	409.2	-3,564.5	4,089.0	4,029.5	59.49	68.731		
9,500.0	7,770.0	7,885.7	7,693.3	34.1	27.8	89.48	409.1	-3,564.5	4,138.7	4,077.6	61.09	67.742		
9,600.0	7,770.0	7,884.8	7,692.4	35.7	27.8	89.46	409.1	-3,564.5	4,190.1	4,127.4	62.71	66.816		
9,700.0	7,770.0	7,883.8	7,691.4	37.3	27.8	89.45	409.1	-3,564.4	4,243.3	4,179.0	64.34	65.952		
9,800.0	7,770.0	7,882.9	7,690.5	39.0	27.8	89.43	409.1	-3,564.4	4,298.2	4,232.2	65.98	65.145		
9,900.0	7,770.0	7,882.0	7,689.6	40.6	27.8	89.42	409.1	-3,564.4	4,354.7	4,287.1	67.63	64.391		
10,000.0	7,770.0	7,881.0	7,688.6	42.3	27.8	89.40	409.1	-3,564.4	4,412.7	4,343.4	69.29	63.688		
10,100.0	7,770.0	7,880.1	7,687.7	44.0	27.8	89.39	409.1	-3,564.4	4,472.2	4,401.3	70.95	63.033		
10,200.0	7,770.0	7,879.2	7,686.8	45.6	27.8	89.37	409.1	-3,564.4	4,533.1	4,460.5	72.62	62.421		
10,300.0	7,770.0	7,878.3	7,685.9	47.3	27.8	89.36	409.1	-3,564.4	4,595.4	4,521.1	74.30	61.850		
10,400.0	7,770.0	7,877.4	7,685.0	49.0	27.8	89.34	409.1	-3,564.4	4,659.0	4,583.1	75.98	61.318		
10,500.0	7,770.0	7,876.5	7,684.1	50.7	27.8	89.33	409.1	-3,564.4	4,723.9	4,646.2	77.67	60.821		
10,600.0	7,770.0	7,875.6	7,683.2	52.4	27.8	89.31	409.1	-3,564.4	4,790.0	4,710.6	79.36	60.357		
10,700.0	7,770.0	7,874.7	7,682.3	54.1	27.8	89.30	409.0	-3,564.4	4,857.2	4,776.2	81.06	59.924		
10,800.0	7,770.0	7,873.8	7,681.4	55.8	27.8	89.28	409.0	-3,564.4	4,925.6	4,842.8	82.76	59.519		
10,900.0	7,770.0	7,872.9	7,680.5	57.5	27.8	89.27	409.0	-3,564.4	4,995.0	4,910.5	84.46	59.141		
11,000.0	7,770.0	7,872.0	7,679.6	59.2	27.8	89.26	409.0	-3,564.4	5,065.4	4,979.3	86.16	58.788		
11,100.0	7,770.0	7,871.1	7,678.7	60.9	27.8	89.24	409.0	-3,564.4	5,136.8	5,049.0	87.87	58.458		
11,200.0	7,770.0	7,870.3	7,677.9	62.6	27.8	89.23	409.0	-3,564.4	5,209.2	5,119.6	89.58	58.150		
11,300.0	7,770.0	7,869.4	7,677.0	64.3	27.8	89.21	409.0	-3,564.4	5,282.5	5,191.2	91.30	57.861		
11,400.0	7,770.0	7,868.5	7,676.2	66.0	27.8	89.20	409.0	-3,564.4	5,356.6	5,263.6	93.01	57.592		
11,500.0	7,770.0	7,867.7	7,675.3	67.7	27.8	89.19	409.0	-3,564.4	5,431.6	5,336.8	94.73	57.339		
11,600.0	7,770.0	7,866.8	7,674.4	69.5	27.8	89.17	409.0	-3,564.4	5,507.3	5,410.9	96.45	57.103		
11,700.0	7,770.0	7,866.0	7,673.6	71.2	27.8	89.16	409.0	-3,564.4	5,583.8	5,485.7	98.17	56.881		
11,800.0	7,770.0	7,865.1	7,672.8	72.9	27.8	89.15	409.0	-3,564.4	5,661.1	5,561.2	99.89	56.674		
11,900.0	7,770.0	7,864.3	7,671.9	74.6	27.8	89.13	409.0	-3,564.4	5,739.0	5,637.4	101.61	56.480		
12,000.0	7,770.0	7,863.5	7,671.1	76.4	27.8	89.12	408.9	-3,564.4	5,817.6	5,714.3	103.34	56.298		
12,100.0	7,770.0	7,862.6	7,670.3	78.1	27.8	89.11	408.9	-3,564.4	5,896.9	5,791.9	105.06	56.128		
12,200.0	7,770.0	7,861.8	7,669.4	79.8	27.8	89.09	408.9	-3,564.4	5,976.8	5,870.0	106.79	55.969		
12,300.0	7,770.0	7,861.0	7,668.6	81.5	27.8	89.08	408.9	-3,564.4	6,057.3	5,948.8	108.52	55.819		
12,400.0	7,770.0	7,860.2	7,667.8	83.3	27.8	89.07	408.9	-3,564.4	6,138.4	6,028.1	110.25	55.679		
12,500.0	7,770.0	7,859.4	7,667.0	85.0	27.8	89.05	408.9	-3,564.4	6,220.0	6,108.0	111.98	55.547		
12,600.0	7,770.0	7,858.6	7,666.2	86.7	27.8	89.04	408.9	-3,564.4	6,302.1	6,188.4	113.71	55.424		
12,700.0	7,770.0	7,857.8	7,665.4	88.5	27.8	89.03	408.9	-3,564.3	6,384.8	6,269.3	115.44	55.309		
12,800.0	7,770.0	7,857.0	7,664.6	90.2	27.8	89.01	408.9	-3,564.3	6,467.9	6,350.7	117.17	55.200		
12,900.0	7,770.0	7,856.2	7,663.8	91.9	27.8	89.00	408.9	-3,564.3	6,551.5	6,432.6	118.91	55.099		
13,000.0	7,770.0	7,855.4	7,663.0	93.7	27.8	88.99	408.9	-3,564.3	6,635.6	6,515.0	120.64	55.004		
13,100.0	7,770.0	7,854.6	7,662.2	95.4	27.8	88.98	408.9	-3,564.3	6,720.1	6,597.7	122.37	54.914		
13,200.0	7,770.0	7,853.8	7,661.4	97.1	27.8	88.96	408.9	-3,564.3	6,805.0	6,680.9	124.11	54.831		
13,300.0	7,770.0	7,853.1	7,660.7	98.9	27.8	88.95	408.9	-3,564.3	6,890.4	6,764.5	125.85	54.753		
13,400.0	7,770.0	7,852.3	7,659.9	100.6	27.8	88.94	408.8	-3,564.3	6,976.1	6,848.5	127.58	54.679		
13,500.0	7,770.0	7,851.5	7,659.1	102.4	27.8	88.93	408.8	-3,564.3	7,062.2	6,932.9	129.32	54.610		
13,600.0	7,770.0	7,850.7	7,658.4	104.1	27.8	88.91	408.8	-3,564.3	7,148.6	7,017.6	131.06	54.546		
13,700.0	7,770.0	7,850.0	7,657.6	105.8	27.8	88.90	408.8	-3,564.3	7,235.4	7,102.6	132.80	54.486		
13,800.0	7,770.0	7,849.2	7,656.8	107.6	27.8	88.89	408.8	-3,564.3	7,322.6	7,188.0	134.53	54.429		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	7,848.5	7,656.1	109.3	27.8	88.88	408.8	-3,564.3	7,410.0	7,273.8	136.27	54.377		
14,000.0	7,770.0	7,847.7	7,655.3	111.1	27.8	88.87	408.8	-3,564.3	7,497.8	7,359.8	138.01	54.327		
14,100.0	7,770.0	7,847.0	7,654.6	112.8	27.8	88.85	408.8	-3,564.3	7,585.9	7,446.2	139.75	54.281		
14,200.0	7,770.0	7,846.2	7,653.9	114.5	27.8	88.84	408.8	-3,564.3	7,674.3	7,532.8	141.49	54.238		
14,300.0	7,770.0	7,845.5	7,653.1	116.3	27.8	88.83	408.8	-3,564.3	7,762.9	7,619.7	143.23	54.198		
14,400.0	7,770.0	7,844.8	7,652.4	118.0	27.8	88.82	408.8	-3,564.3	7,851.9	7,706.9	144.97	54.161		
14,500.0	7,770.0	7,844.0	7,651.7	119.8	27.8	88.81	408.8	-3,564.3	7,941.1	7,794.3	146.72	54.126		
14,600.0	7,770.0	7,843.3	7,650.9	121.5	27.8	88.80	408.8	-3,564.3	8,030.5	7,882.0	148.46	54.093		
14,700.0	7,770.0	7,842.6	7,650.2	123.3	27.8	88.78	408.8	-3,564.3	8,120.2	7,970.0	150.20	54.063		
14,800.0	7,770.0	7,841.9	7,649.5	125.0	27.8	88.77	408.8	-3,564.3	8,210.1	8,058.2	151.94	54.035		
14,900.0	7,770.0	7,841.2	7,648.8	126.7	27.8	88.76	408.8	-3,564.3	8,300.3	8,146.6	153.68	54.009		
15,000.0	7,770.0	7,840.4	7,648.1	128.5	27.8	88.75	408.7	-3,564.3	8,390.7	8,235.2	155.43	53.985		
15,100.0	7,770.0	7,839.7	7,647.4	130.2	27.8	88.74	408.7	-3,564.3	8,481.3	8,324.1	157.17	53.963		
15,200.0	7,770.0	7,839.0	7,646.6	132.0	27.8	88.73	408.7	-3,564.3	8,572.1	8,413.2	158.91	53.942		
15,300.0	7,770.0	7,838.3	7,645.9	133.7	27.8	88.72	408.7	-3,564.3	8,663.1	8,502.4	160.66	53.924		
15,400.0	7,770.0	7,837.6	7,645.2	135.5	27.8	88.70	408.7	-3,564.3	8,754.3	8,591.9	162.40	53.906		
15,500.0	7,770.0	7,836.9	7,644.6	137.2	27.8	88.69	408.7	-3,564.3	8,845.7	8,681.6	164.14	53.890		
15,600.0	7,770.0	7,836.3	7,643.9	139.0	27.8	88.68	408.7	-3,564.3	8,937.3	8,771.4	165.89	53.876		
15,700.0	7,770.0	7,835.6	7,643.2	140.7	27.8	88.67	408.7	-3,564.3	9,029.0	8,861.4	167.63	53.863		
15,800.0	7,770.0	7,834.9	7,642.5	142.4	27.8	88.66	408.7	-3,564.2	9,121.0	8,951.6	169.38	53.851		
15,900.0	7,770.0	7,834.2	7,641.8	144.2	27.8	88.65	408.7	-3,564.2	9,213.1	9,042.0	171.12	53.840		
16,000.0	7,770.0	7,833.5	7,641.1	145.9	27.8	88.64	408.7	-3,564.2	9,305.3	9,132.5	172.86	53.830		
16,100.0	7,770.0	7,832.8	7,640.5	147.7	27.8	88.63	408.7	-3,564.2	9,397.8	9,223.2	174.61	53.822		
16,200.0	7,770.0	7,832.2	7,639.8	149.4	27.8	88.62	408.7	-3,564.2	9,490.3	9,314.0	176.35	53.814		
16,300.0	7,770.0	7,831.5	7,639.1	151.2	27.8	88.61	408.7	-3,564.2	9,583.1	9,405.0	178.10	53.807		
16,400.0	7,770.0	7,830.8	7,638.5	152.9	27.8	88.60	408.7	-3,564.2	9,675.9	9,496.1	179.85	53.801		
16,500.0	7,770.0	7,830.2	7,637.8	154.7	27.8	88.58	408.7	-3,564.2	9,768.9	9,587.4	181.59	53.797		
16,600.0	7,770.0	7,829.5	7,637.1	156.4	27.8	88.57	408.7	-3,564.2	9,862.1	9,678.8	183.34	53.792		
16,700.0	7,770.0	7,828.9	7,636.5	158.2	27.8	88.56	408.7	-3,564.2	9,955.4	9,770.3	185.08	53.789 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-28.76	4,980.9	-2,733.7	5,682.2						
100.0	100.0	27.0	27.0	0.2	0.0	-28.76	4,980.9	-2,733.7	5,681.8	5,681.6	0.20	N/A			
200.0	200.0	127.0	127.0	0.3	0.2	-28.76	4,980.9	-2,733.7	5,681.8	5,681.2	0.55	N/A			
300.0	300.0	227.0	227.0	0.5	0.4	-28.76	4,980.9	-2,733.7	5,681.8	5,680.9	0.90	6,332.138			
400.0	400.0	327.0	327.0	0.7	0.6	-28.76	4,980.9	-2,733.7	5,681.8	5,680.5	1.25	4,558.716			
500.0	500.0	427.0	427.0	0.8	0.7	-28.76	4,980.9	-2,733.7	5,681.8	5,680.2	1.60	3,561.311			
550.0	550.0	477.0	477.0	0.9	0.8	-28.76	4,980.9	-2,733.7	5,681.8	5,680.0	1.77	3,210.137			
600.0	600.0	527.0	527.0	1.0	0.9	-29.60	4,980.9	-2,733.7	5,681.6	5,679.6	1.94	2,921.953			
700.0	700.0	627.0	627.0	1.2	1.1	-29.61	4,980.9	-2,733.7	5,680.1	5,677.8	2.29	2,476.662			
800.0	799.9	726.9	726.9	1.4	1.3	-29.65	4,980.9	-2,733.7	5,677.0	5,674.4	2.64	2,148.067			
861.1	860.9	787.9	787.9	1.5	1.4	-29.67	4,980.9	-2,733.7	5,674.4	5,671.6	2.86	1,986.399			
900.0	899.8	826.8	826.8	1.6	1.4	-29.68	4,980.9	-2,733.7	5,672.6	5,669.6	2.99	1,894.983			
1,000.0	999.6	926.6	926.6	1.8	1.6	-29.71	4,980.9	-2,733.7	5,667.9	5,664.5	3.35	1,694.171			
1,100.0	1,099.5	1,026.5	1,026.5	1.9	1.8	-29.74	4,980.9	-2,733.7	5,663.2	5,659.5	3.70	1,531.367			
1,200.0	1,199.3	1,126.3	1,126.3	2.1	2.0	-29.77	4,980.9	-2,733.7	5,658.4	5,654.4	4.05	1,396.762			
1,300.0	1,299.2	1,226.2	1,226.2	2.3	2.1	-29.79	4,980.9	-2,733.7	5,653.7	5,649.3	4.40	1,283.640			
1,400.0	1,399.1	1,326.1	1,326.1	2.5	2.3	-29.82	4,980.9	-2,733.7	5,649.0	5,644.3	4.76	1,187.257			
1,500.0	1,498.9	1,425.9	1,425.9	2.7	2.5	-29.85	4,980.9	-2,733.7	5,644.3	5,639.2	5.11	1,104.163			
1,600.0	1,598.8	1,525.8	1,525.8	2.9	2.7	-29.87	4,980.9	-2,733.7	5,639.6	5,634.1	5.47	1,031.794			
1,700.0	1,698.6	1,625.6	1,625.6	3.1	2.8	-29.90	4,980.9	-2,733.7	5,634.9	5,629.1	5.82	968.205			
1,800.0	1,798.5	1,725.5	1,725.5	3.3	3.0	-29.93	4,980.9	-2,733.7	5,630.2	5,624.0	6.17	911.892			
1,900.0	1,898.3	1,825.3	1,825.3	3.5	3.2	-29.96	4,980.9	-2,733.7	5,625.5	5,619.0	6.53	861.676			
2,000.0	1,998.2	1,925.2	1,925.2	3.7	3.4	-29.99	4,980.9	-2,733.7	5,620.8	5,613.9	6.88	816.620			
2,100.0	2,098.0	2,025.0	2,025.0	3.9	3.5	-30.01	4,980.9	-2,733.7	5,616.1	5,608.9	7.24	775.968			
2,200.0	2,197.9	2,124.9	2,124.9	4.1	3.7	-30.04	4,980.9	-2,733.7	5,611.4	5,603.8	7.59	739.105			
2,300.0	2,297.7	2,224.7	2,224.7	4.3	3.9	-30.07	4,980.9	-2,733.7	5,606.7	5,598.7	7.95	705.527			
2,400.0	2,397.6	2,324.6	2,324.6	4.5	4.1	-30.10	4,980.9	-2,733.7	5,602.0	5,593.7	8.30	674.813			
2,500.0	2,497.4	2,424.4	2,424.4	4.7	4.2	-30.12	4,980.9	-2,733.7	5,597.3	5,588.6	8.66	646.612			
2,600.0	2,597.3	2,524.3	2,524.3	4.9	4.4	-30.15	4,980.9	-2,733.7	5,592.6	5,583.6	9.01	620.628			
2,700.0	2,697.1	2,624.1	2,624.1	5.1	4.6	-30.18	4,980.9	-2,733.7	5,587.9	5,578.5	9.37	596.611			
2,800.0	2,797.0	2,724.0	2,724.0	5.3	4.8	-30.21	4,980.9	-2,733.7	5,583.2	5,573.5	9.72	574.344			
2,900.0	2,896.8	2,823.8	2,823.8	5.5	4.9	-30.24	4,980.9	-2,733.7	5,578.5	5,568.4	10.08	553.644			
3,000.0	2,996.7	2,923.7	2,923.7	5.7	5.1	-30.26	4,980.9	-2,733.7	5,573.8	5,563.4	10.43	534.350			
3,100.0	3,096.5	3,023.5	3,023.5	5.9	5.3	-30.29	4,980.9	-2,733.7	5,569.1	5,558.4	10.79	516.326			
3,200.0	3,196.4	3,123.4	3,123.4	6.1	5.5	-30.32	4,980.9	-2,733.7	5,564.5	5,553.3	11.14	499.448			
3,300.0	3,296.3	3,223.3	3,223.3	6.3	5.6	-30.35	4,980.9	-2,733.7	5,559.8	5,548.3	11.50	483.611			
3,400.0	3,396.1	3,323.1	3,323.1	6.5	5.8	-30.38	4,980.9	-2,733.7	5,555.1	5,543.2	11.85	468.723			
3,500.0	3,496.0	3,423.0	3,423.0	6.7	6.0	-30.40	4,980.9	-2,733.7	5,550.4	5,538.2	12.21	454.699			
3,600.0	3,595.8	3,522.8	3,522.8	6.9	6.1	-30.43	4,980.9	-2,733.7	5,545.7	5,533.2	12.56	441.468			
3,700.0	3,695.7	3,622.7	3,622.7	7.0	6.3	-30.46	4,980.9	-2,733.7	5,541.0	5,528.1	12.92	428.964			
3,800.0	3,795.5	3,722.5	3,722.5	7.2	6.5	-30.49	4,980.9	-2,733.7	5,536.4	5,523.1	13.27	417.128			
3,900.0	3,895.4	3,822.4	3,822.4	7.4	6.7	-30.52	4,980.9	-2,733.7	5,531.7	5,518.1	13.63	405.908			
4,000.0	3,995.2	3,922.2	3,922.2	7.6	6.8	-30.55	4,980.9	-2,733.7	5,527.0	5,513.0	13.98	395.258			
4,100.0	4,095.1	4,022.1	4,022.1	7.8	7.0	-30.58	4,980.9	-2,733.7	5,522.3	5,508.0	14.34	385.135			
4,200.0	4,194.9	4,121.9	4,121.9	8.0	7.2	-30.60	4,980.9	-2,733.7	5,517.7	5,503.0	14.69	375.501			
4,300.0	4,294.8	4,221.8	4,221.8	8.2	7.4	-30.63	4,980.9	-2,733.7	5,513.0	5,497.9	15.05	366.321			
4,400.0	4,394.6	4,321.6	4,321.6	8.4	7.5	-30.66	4,980.9	-2,733.7	5,508.3	5,492.9	15.41	357.565			
4,500.0	4,494.5	4,421.5	4,421.5	8.6	7.7	-30.69	4,980.9	-2,733.7	5,503.7	5,487.9	15.76	349.203			
4,600.0	4,594.3	4,521.3	4,521.3	8.8	7.9	-30.72	4,980.9	-2,733.7	5,499.0	5,482.9	16.12	341.209			
4,700.0	4,694.2	4,621.2	4,621.2	9.0	8.1	-30.75	4,980.9	-2,733.7	5,494.3	5,477.9	16.47	333.560			
4,800.0	4,794.0	4,721.0	4,721.0	9.2	8.2	-30.78	4,980.9	-2,733.7	5,489.7	5,472.8	16.83	326.234			
4,900.0	4,893.9	4,820.9	4,820.9	9.4	8.4	-30.81	4,980.9	-2,733.7	5,485.0	5,467.8	17.18	319.211			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
5,000.0	4,993.7	4,920.7	4,920.7	9.6	8.6	-30.84	4,980.9	-2,733.7	5,480.3	5,462.8	17.54	312.472		
5,100.0	5,093.6	5,010.0	5,010.0	9.8	8.7	-30.86	4,980.9	-2,733.7	5,475.7	5,457.8	17.88	306.318		
5,200.0	5,193.5	5,010.0	5,010.0	10.0	8.7	-30.86	4,980.9	-2,733.7	5,472.1	5,454.1	18.06	303.049		
5,300.0	5,293.3	5,010.0	5,010.0	10.2	8.7	-30.86	4,980.9	-2,733.7	5,470.4	5,452.2	18.24	299.945		
5,344.6	5,337.8	5,010.0	5,010.0	10.3	8.7	-30.86	4,980.9	-2,733.7	5,470.2	5,451.9	18.32	298.613 CC, ES		
5,400.0	5,393.2	5,010.0	5,010.0	10.4	8.7	-30.86	4,980.9	-2,733.7	5,470.5	5,452.1	18.42	297.001		
5,500.0	5,493.0	5,010.0	5,010.0	10.6	8.7	-30.86	4,980.9	-2,733.7	5,472.4	5,453.8	18.60	294.212		
5,600.0	5,592.9	5,010.0	5,010.0	10.8	8.7	-30.86	4,980.9	-2,733.7	5,476.2	5,457.4	18.78	291.574		
5,700.0	5,692.7	5,010.0	5,010.0	11.0	8.7	-30.86	4,980.9	-2,733.7	5,481.8	5,462.8	18.96	289.083		
5,800.0	5,792.6	5,010.0	5,010.0	11.2	8.7	-30.86	4,980.9	-2,733.7	5,489.1	5,470.0	19.14	286.734		
5,900.0	5,892.4	5,010.0	5,010.0	11.4	8.7	-30.86	4,980.9	-2,733.7	5,498.3	5,479.0	19.32	284.522		
6,000.0	5,992.3	5,010.0	5,010.0	11.6	8.7	-30.86	4,980.9	-2,733.7	5,509.3	5,489.8	19.51	282.444		
6,100.0	6,092.1	5,010.0	5,010.0	11.8	8.7	-30.86	4,980.9	-2,733.7	5,522.1	5,502.4	19.69	280.495		
6,200.0	6,192.0	5,010.0	5,010.0	12.0	8.7	-30.86	4,980.9	-2,733.7	5,536.7	5,516.8	19.87	278.671		
6,300.0	6,291.8	5,010.0	5,010.0	12.2	8.7	-30.86	4,980.9	-2,733.7	5,553.0	5,533.0	20.05	276.967		
6,400.0	6,391.7	5,010.0	5,010.0	12.4	8.7	-30.86	4,980.9	-2,733.7	5,571.1	5,550.9	20.23	275.381		
6,500.0	6,491.5	5,010.0	5,010.0	12.6	8.7	-30.86	4,980.9	-2,733.7	5,590.9	5,570.5	20.41	273.907		
6,600.0	6,591.4	5,010.0	5,010.0	12.8	8.7	-30.86	4,980.9	-2,733.7	5,612.4	5,591.8	20.59	272.543		
6,700.0	6,691.2	5,010.0	5,010.0	13.0	8.7	-30.86	4,980.9	-2,733.7	5,635.6	5,614.9	20.77	271.283		
6,800.0	6,791.1	5,010.0	5,010.0	13.2	8.7	-30.86	4,980.9	-2,733.7	5,660.5	5,639.6	20.96	270.125		
6,900.0	6,890.9	5,010.0	5,010.0	13.4	8.7	-30.86	4,980.9	-2,733.7	5,687.1	5,665.9	21.14	269.065		
7,000.0	6,990.8	5,010.0	5,010.0	13.6	8.7	-30.86	4,980.9	-2,733.7	5,715.2	5,693.9	21.32	268.100		
7,024.2	7,014.9	5,010.0	5,010.0	13.6	8.7	-30.86	4,980.9	-2,733.7	5,722.3	5,700.9	21.36	267.880		
7,050.0	7,040.7	5,010.0	5,010.0	13.7	8.7	-32.85	4,980.9	-2,733.7	5,730.3	5,708.9	21.42	267.563		
7,100.0	7,090.7	5,010.0	5,010.0	13.7	8.7	149.73	4,980.9	-2,733.7	5,748.2	5,726.8	21.48	267.597		
7,150.0	7,140.5	5,010.0	5,010.0	13.8	8.7	148.25	4,980.9	-2,733.7	5,769.3	5,747.8	21.49	268.412		
7,200.0	7,189.9	5,010.0	5,010.0	13.8	8.7	146.92	4,980.9	-2,733.7	5,793.4	5,771.9	21.46	269.947		
7,250.0	7,238.6	5,010.0	5,010.0	13.8	8.7	145.43	4,980.9	-2,733.7	5,820.3	5,798.9	21.39	272.119		
7,300.0	7,286.4	5,010.0	5,010.0	13.7	8.7	143.69	4,980.9	-2,733.7	5,849.8	5,828.5	21.29	274.815		
7,350.0	7,333.1	5,010.0	5,010.0	13.7	8.7	141.64	4,980.9	-2,733.7	5,881.8	5,860.7	21.17	277.878		
7,400.0	7,378.5	5,010.0	5,010.0	13.6	8.7	139.21	4,980.9	-2,733.7	5,916.1	5,895.1	21.05	281.092		
7,450.0	7,422.2	5,010.0	5,010.0	13.6	8.7	136.34	4,980.9	-2,733.7	5,952.5	5,931.5	20.95	284.173		
7,500.0	7,464.1	5,010.0	5,010.0	13.5	8.7	132.95	4,980.9	-2,733.7	5,990.7	5,969.8	20.89	286.765		
7,550.0	7,504.1	5,010.0	5,010.0	13.5	8.7	128.94	4,980.9	-2,733.7	6,030.6	6,009.7	20.90	288.477		
7,600.0	7,541.8	5,010.0	5,010.0	13.5	8.7	124.23	4,980.9	-2,733.7	6,071.9	6,050.9	21.01	288.955		
7,650.0	7,577.2	5,010.0	5,010.0	13.4	8.7	118.72	4,980.9	-2,733.7	6,114.4	6,093.2	21.23	288.022		
7,700.0	7,610.0	5,010.0	5,010.0	13.5	8.7	112.38	4,980.9	-2,733.7	6,157.8	6,136.3	21.54	285.851		
7,750.0	7,640.2	5,010.0	5,010.0	13.5	8.7	105.23	4,980.9	-2,733.7	6,202.0	6,180.1	21.91	283.078		
7,800.0	7,667.4	5,010.0	5,010.0	13.6	8.7	97.42	4,980.9	-2,733.7	6,246.7	6,224.4	22.25	280.739		
7,850.0	7,691.7	5,010.0	5,010.0	13.7	8.7	89.23	4,980.9	-2,733.7	6,291.7	6,269.2	22.47	279.982		
7,900.0	7,712.8	5,010.0	5,010.0	13.9	8.7	80.99	4,980.9	-2,733.7	6,336.7	6,314.2	22.50	281.676		
7,950.0	7,730.8	5,010.0	5,010.0	14.1	8.7	73.09	4,980.9	-2,733.7	6,381.5	6,359.2	22.30	286.132		
8,000.0	7,745.5	5,010.0	5,010.0	14.4	8.7	65.81	4,980.9	-2,733.7	6,426.0	6,404.0	21.93	293.072		
8,050.0	7,756.7	5,010.0	5,010.0	14.7	8.7	59.32	4,980.9	-2,733.7	6,469.9	6,448.4	21.44	301.796		
8,100.0	7,764.6	5,010.0	5,010.0	15.1	8.7	53.65	4,980.9	-2,733.7	6,513.0	6,492.0	20.91	311.404		
8,150.0	7,769.0	5,010.0	5,010.0	15.5	8.7	48.78	4,980.9	-2,733.7	6,555.1	6,534.7	20.42	320.975		
8,188.1	7,770.0	5,010.0	5,010.0	15.9	8.7	45.55	4,980.9	-2,733.7	6,586.4	6,566.3	20.10	327.723		
8,200.0	7,770.0	5,010.0	5,010.0	16.0	8.7	45.55	4,980.9	-2,733.7	6,596.1	6,575.9	20.18	326.896		
8,300.0	7,770.0	5,010.0	5,010.0	17.0	8.7	45.55	4,980.9	-2,733.7	6,677.7	6,656.8	20.90	319.531		
8,400.0	7,770.0	5,010.0	5,010.0	18.1	8.7	45.55	4,980.9	-2,733.7	6,759.8	6,738.1	21.69	311.619		
8,500.0	7,770.0	5,010.0	5,010.0	19.3	8.7	45.55	4,980.9	-2,733.7	6,842.3	6,819.8	22.55	303.446		
8,600.0	7,770.0	5,010.0	5,010.0	20.6	8.7	45.55	4,980.9	-2,733.7	6,925.4	6,901.9	23.46	295.230		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
8,700.0	7,770.0	5,010.0	5,010.0	21.9	8.7	45.55	4,980.9	-2,733.7	7,008.8	6,984.4	24.41	287.124			
8,800.0	7,770.0	5,010.0	5,010.0	23.3	8.7	45.55	4,980.9	-2,733.7	7,092.7	7,067.3	25.40	279.234			
8,900.0	7,770.0	5,010.0	5,010.0	24.8	8.7	45.55	4,980.9	-2,733.7	7,177.0	7,150.6	26.42	271.628			
9,000.0	7,770.0	5,010.0	5,010.0	26.3	8.7	45.55	4,980.9	-2,733.7	7,261.7	7,234.3	27.47	264.344			
9,100.0	7,770.0	5,010.0	5,010.0	27.8	8.7	45.55	4,980.9	-2,733.7	7,346.8	7,318.3	28.54	257.404			
9,200.0	7,770.0	5,010.0	5,010.0	29.3	8.7	45.55	4,980.9	-2,733.7	7,432.3	7,402.6	29.63	250.813			
9,300.0	7,770.0	5,010.0	5,010.0	30.9	8.7	45.55	4,980.9	-2,733.7	7,518.1	7,487.4	30.74	244.568			
9,400.0	7,770.0	5,010.0	5,010.0	32.5	8.7	45.55	4,980.9	-2,733.7	7,604.3	7,572.4	31.86	238.659			
9,500.0	7,770.0	5,010.0	5,010.0	34.1	8.7	45.55	4,980.9	-2,733.7	7,690.8	7,657.8	33.00	233.072			
9,600.0	7,770.0	5,010.0	5,010.0	35.7	8.7	45.55	4,980.9	-2,733.7	7,777.6	7,743.4	34.14	227.793			
9,700.0	7,770.0	5,010.0	5,010.0	37.3	8.7	45.55	4,980.9	-2,733.7	7,864.7	7,829.4	35.30	222.804			
9,800.0	7,770.0	5,010.0	5,010.0	39.0	8.7	45.55	4,980.9	-2,733.7	7,952.2	7,915.7	36.46	218.088			
9,900.0	7,770.0	5,010.0	5,010.0	40.6	8.7	45.55	4,980.9	-2,733.7	8,039.9	8,002.3	37.63	213.629			
10,000.0	7,770.0	5,010.0	5,010.0	42.3	8.7	45.55	4,980.9	-2,733.7	8,127.9	8,089.1	38.81	209.410			
10,100.0	7,770.0	5,010.0	5,010.0	44.0	8.7	45.55	4,980.9	-2,733.7	8,216.2	8,176.2	40.00	205.415			
10,200.0	7,770.0	5,010.0	5,010.0	45.6	8.7	45.55	4,980.9	-2,733.7	8,304.8	8,263.6	41.19	201.631			
10,300.0	7,770.0	5,010.0	5,010.0	47.3	8.7	45.55	4,980.9	-2,733.7	8,393.6	8,351.2	42.38	198.042			
10,400.0	7,770.0	5,010.0	5,010.0	49.0	8.7	45.55	4,980.9	-2,733.7	8,482.6	8,439.0	43.58	194.636			
10,500.0	7,770.0	5,010.0	5,010.0	50.7	8.7	45.55	4,980.9	-2,733.7	8,571.9	8,527.1	44.79	191.402			
10,600.0	7,770.0	5,010.0	5,010.0	52.4	8.7	45.55	4,980.9	-2,733.7	8,661.5	8,615.5	45.99	188.327			
10,700.0	7,770.0	5,010.0	5,010.0	54.1	8.7	45.55	4,980.9	-2,733.7	8,751.2	8,704.0	47.20	185.401			
10,800.0	7,770.0	5,010.0	5,010.0	55.8	8.7	45.55	4,980.9	-2,733.7	8,841.2	8,792.8	48.41	182.614			
10,900.0	7,770.0	5,010.0	5,010.0	57.5	8.7	45.55	4,980.9	-2,733.7	8,931.4	8,881.8	49.63	179.959			
11,000.0	7,770.0	5,010.0	5,010.0	59.2	8.7	45.55	4,980.9	-2,733.7	9,021.8	8,971.0	50.85	177.426			
11,100.0	7,770.0	5,010.0	5,010.0	60.9	8.7	45.55	4,980.9	-2,733.7	9,112.4	9,060.4	52.07	175.007			
11,200.0	7,770.0	5,010.0	5,010.0	62.6	8.7	45.55	4,980.9	-2,733.7	9,203.2	9,149.9	53.29	172.696			
11,300.0	7,770.0	5,010.0	5,010.0	64.3	8.7	45.55	4,980.9	-2,733.7	9,294.2	9,239.7	54.52	170.486			
11,400.0	7,770.0	5,010.0	5,010.0	66.0	8.7	45.55	4,980.9	-2,733.7	9,385.4	9,329.6	55.74	168.371			
11,500.0	7,770.0	5,010.0	5,010.0	67.7	8.7	45.55	4,980.9	-2,733.7	9,476.7	9,419.8	56.97	166.346			
11,600.0	7,770.0	5,010.0	5,010.0	69.5	8.7	45.55	4,980.9	-2,733.7	9,568.2	9,510.0	58.20	164.404			
11,700.0	7,770.0	5,010.0	5,010.0	71.2	8.7	45.55	4,980.9	-2,733.7	9,659.9	9,600.5	59.43	162.542			
11,800.0	7,770.0	5,010.0	5,010.0	72.9	8.7	45.55	4,980.9	-2,733.7	9,751.8	9,691.1	60.66	160.754			
11,900.0	7,770.0	5,010.0	5,010.0	74.6	8.7	45.55	4,980.9	-2,733.7	9,843.8	9,781.9	61.90	159.037			
12,000.0	7,770.0	5,010.0	5,010.0	76.4	8.7	45.55	4,980.9	-2,733.7	9,936.0	9,872.8	63.13	157.387 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-37.79	4,424.0	-3,430.2	5,598.5					
100.0	100.0	25.0	25.0	0.2	0.0	-37.79	4,424.0	-3,430.2	5,598.0	5,597.8	0.20	N/A		
200.0	200.0	125.0	125.0	0.3	0.2	-37.79	4,424.0	-3,430.2	5,598.0	5,597.5	0.54	N/A		
300.0	300.0	225.0	225.0	0.5	0.4	-37.79	4,424.0	-3,430.2	5,598.0	5,597.1	0.89	6,263.164		
400.0	400.0	325.0	325.0	0.7	0.6	-37.79	4,424.0	-3,430.2	5,598.0	5,596.8	1.24	4,504.133		
500.0	500.0	425.0	425.0	0.8	0.7	-37.79	4,424.0	-3,430.2	5,598.0	5,596.4	1.59	3,516.509		
550.0	550.0	475.0	475.0	0.9	0.8	-37.79	4,424.0	-3,430.2	5,598.0	5,596.3	1.77	3,169.068		
600.0	600.0	525.0	525.0	1.0	0.9	-38.63	4,424.0	-3,430.2	5,597.9	5,595.9	1.94	2,884.050		
700.0	700.0	625.0	625.0	1.2	1.1	-38.65	4,424.0	-3,430.2	5,596.5	5,594.2	2.29	2,443.679		
800.0	799.9	724.9	724.9	1.4	1.3	-38.69	4,424.0	-3,430.2	5,593.8	5,591.1	2.64	2,118.473		
861.1	860.9	785.9	785.9	1.5	1.4	-38.72	4,424.0	-3,430.2	5,591.4	5,588.6	2.86	1,958.311		
900.0	899.8	824.8	824.8	1.6	1.4	-38.73	4,424.0	-3,430.2	5,589.8	5,586.8	2.99	1,867.800		
1,000.0	999.6	924.6	924.6	1.8	1.6	-38.77	4,424.0	-3,430.2	5,585.6	5,582.2	3.35	1,668.979		
1,100.0	1,099.5	1,024.5	1,024.5	1.9	1.8	-38.80	4,424.0	-3,430.2	5,581.3	5,577.6	3.70	1,507.832		
1,200.0	1,199.3	1,124.3	1,124.3	2.1	2.0	-38.84	4,424.0	-3,430.2	5,577.1	5,573.0	4.06	1,374.656		
1,300.0	1,299.2	1,224.2	1,224.2	2.3	2.1	-38.87	4,424.0	-3,430.2	5,572.9	5,568.5	4.41	1,262.793		
1,400.0	1,399.1	1,324.1	1,324.1	2.5	2.3	-38.91	4,424.0	-3,430.2	5,568.6	5,563.9	4.77	1,167.533		
1,500.0	1,498.9	1,423.9	1,423.9	2.7	2.5	-38.94	4,424.0	-3,430.2	5,564.4	5,559.3	5.13	1,085.453		
1,600.0	1,598.8	1,523.8	1,523.8	2.9	2.7	-38.98	4,424.0	-3,430.2	5,560.2	5,554.7	5.48	1,014.004		
1,700.0	1,698.6	1,623.6	1,623.6	3.1	2.8	-39.01	4,424.0	-3,430.2	5,556.0	5,550.1	5.84	951.255		
1,800.0	1,798.5	1,723.5	1,723.5	3.3	3.0	-39.05	4,424.0	-3,430.2	5,551.8	5,545.6	6.20	895.712		
1,900.0	1,898.3	1,823.3	1,823.3	3.5	3.2	-39.08	4,424.0	-3,430.2	5,547.5	5,541.0	6.56	846.206		
2,000.0	1,998.2	1,923.2	1,923.2	3.7	3.4	-39.12	4,424.0	-3,430.2	5,543.3	5,536.4	6.91	801.805		
2,100.0	2,098.0	2,023.0	2,023.0	3.9	3.5	-39.15	4,424.0	-3,430.2	5,539.1	5,531.8	7.27	761.760		
2,200.0	2,197.9	2,122.9	2,122.9	4.1	3.7	-39.19	4,424.0	-3,430.2	5,534.9	5,527.3	7.63	725.462		
2,300.0	2,297.7	2,222.7	2,222.7	4.3	3.9	-39.22	4,424.0	-3,430.2	5,530.7	5,522.7	7.99	692.409		
2,400.0	2,397.6	2,322.6	2,322.6	4.5	4.1	-39.26	4,424.0	-3,430.2	5,526.5	5,518.1	8.35	662.186		
2,500.0	2,497.4	2,422.4	2,422.4	4.7	4.2	-39.30	4,424.0	-3,430.2	5,522.3	5,513.6	8.70	634.444		
2,600.0	2,597.3	2,522.3	2,522.3	4.9	4.4	-39.33	4,424.0	-3,430.2	5,518.1	5,509.0	9.06	608.891		
2,700.0	2,697.1	2,622.1	2,622.1	5.1	4.6	-39.37	4,424.0	-3,430.2	5,513.9	5,504.5	9.42	585.277		
2,800.0	2,797.0	2,722.0	2,722.0	5.3	4.8	-39.40	4,424.0	-3,430.2	5,509.7	5,499.9	9.78	563.391		
2,900.0	2,896.8	2,821.8	2,821.8	5.5	4.9	-39.44	4,424.0	-3,430.2	5,505.5	5,495.4	10.14	543.050		
3,000.0	2,996.7	2,921.7	2,921.7	5.7	5.1	-39.47	4,424.0	-3,430.2	5,501.3	5,490.8	10.50	524.096		
3,100.0	3,096.5	3,021.5	3,021.5	5.9	5.3	-39.51	4,424.0	-3,430.2	5,497.1	5,486.3	10.86	506.391		
3,200.0	3,196.4	3,121.4	3,121.4	6.1	5.4	-39.55	4,424.0	-3,430.2	5,492.9	5,481.7	11.21	489.817		
3,300.0	3,296.3	3,221.3	3,221.3	6.3	5.6	-39.58	4,424.0	-3,430.2	5,488.7	5,477.2	11.57	474.268		
3,400.0	3,396.1	3,321.1	3,321.1	6.5	5.8	-39.62	4,424.0	-3,430.2	5,484.6	5,472.6	11.93	459.653		
3,500.0	3,496.0	3,421.0	3,421.0	6.7	6.0	-39.66	4,424.0	-3,430.2	5,480.4	5,468.1	12.29	445.890		
3,600.0	3,595.8	3,520.8	3,520.8	6.9	6.1	-39.69	4,424.0	-3,430.2	5,476.2	5,463.5	12.65	432.906		
3,700.0	3,695.7	3,620.7	3,620.7	7.0	6.3	-39.73	4,424.0	-3,430.2	5,472.0	5,459.0	13.01	420.638		
3,800.0	3,795.5	3,720.5	3,720.5	7.2	6.5	-39.76	4,424.0	-3,430.2	5,467.8	5,454.5	13.37	409.027		
3,900.0	3,895.4	3,820.4	3,820.4	7.4	6.7	-39.80	4,424.0	-3,430.2	5,463.7	5,449.9	13.73	398.022		
4,000.0	3,995.2	3,920.2	3,920.2	7.6	6.8	-39.84	4,424.0	-3,430.2	5,459.5	5,445.4	14.09	387.578		
4,100.0	4,095.1	4,020.1	4,020.1	7.8	7.0	-39.87	4,424.0	-3,430.2	5,455.3	5,440.9	14.45	377.652		
4,200.0	4,194.9	4,119.9	4,119.9	8.0	7.2	-39.91	4,424.0	-3,430.2	5,451.2	5,436.4	14.80	368.206		
4,300.0	4,294.8	4,219.8	4,219.8	8.2	7.4	-39.95	4,424.0	-3,430.2	5,447.0	5,431.8	15.16	359.208		
4,400.0	4,394.6	4,319.6	4,319.6	8.4	7.5	-39.98	4,424.0	-3,430.2	5,442.8	5,427.3	15.52	350.625		
4,500.0	4,494.5	4,419.5	4,419.5	8.6	7.7	-40.02	4,424.0	-3,430.2	5,438.7	5,422.8	15.88	342.430		
4,600.0	4,594.3	4,519.3	4,519.3	8.8	7.9	-40.06	4,424.0	-3,430.2	5,434.5	5,418.3	16.24	334.597		
4,700.0	4,694.2	4,619.2	4,619.2	9.0	8.1	-40.09	4,424.0	-3,430.2	5,430.4	5,413.8	16.60	327.102		
4,800.0	4,794.0	4,719.0	4,719.0	9.2	8.2	-40.13	4,424.0	-3,430.2	5,426.2	5,409.3	16.96	319.924		
4,900.0	4,893.9	4,818.9	4,818.9	9.4	8.4	-40.17	4,424.0	-3,430.2	5,422.1	5,404.7	17.32	313.044		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
5,000.0	4,993.7	4,918.7	4,918.7	9.6	8.6	-40.20	4,424.0	-3,430.2	5,417.9	5,400.2	17.68	306.443		
5,100.0	5,093.6	5,018.6	5,018.6	9.8	8.8	-40.24	4,424.0	-3,430.2	5,413.8	5,395.7	18.04	300.104		
5,200.0	5,193.5	5,118.5	5,118.5	10.0	8.9	-40.28	4,424.0	-3,430.2	5,409.6	5,391.2	18.40	294.013		
5,300.0	5,293.3	5,218.3	5,218.3	10.2	9.1	-40.32	4,424.0	-3,430.2	5,405.5	5,386.7	18.76	288.155		
5,400.0	5,393.2	5,318.2	5,318.2	10.4	9.3	-40.35	4,424.0	-3,430.2	5,401.4	5,382.2	19.12	282.517		
5,500.0	5,493.0	5,418.0	5,418.0	10.6	9.5	-40.39	4,424.0	-3,430.2	5,397.2	5,377.7	19.48	277.087		
5,600.0	5,592.9	5,517.9	5,517.9	10.8	9.6	-40.43	4,424.0	-3,430.2	5,393.1	5,373.2	19.84	271.854		
5,700.0	5,692.7	5,617.7	5,617.7	11.0	9.8	-40.46	4,424.0	-3,430.2	5,388.9	5,368.7	20.20	266.806		
5,800.0	5,792.6	5,717.6	5,717.6	11.2	10.0	-40.50	4,424.0	-3,430.2	5,384.8	5,364.3	20.56	261.935		
5,900.0	5,892.4	5,817.4	5,817.4	11.4	10.2	-40.54	4,424.0	-3,430.2	5,380.7	5,359.8	20.92	257.231		
6,000.0	5,992.3	5,917.3	5,917.3	11.6	10.3	-40.58	4,424.0	-3,430.2	5,376.6	5,355.3	21.28	252.686		
6,100.0	6,092.1	6,017.1	6,017.1	11.8	10.5	-40.61	4,424.0	-3,430.2	5,372.4	5,350.8	21.64	248.291		
6,200.0	6,192.0	6,117.0	6,117.0	12.0	10.7	-40.65	4,424.0	-3,430.2	5,368.3	5,346.3	22.00	244.041		
6,300.0	6,291.8	6,216.8	6,216.8	12.2	10.9	-40.69	4,424.0	-3,430.2	5,364.2	5,341.8	22.36	239.927		
6,400.0	6,391.7	6,316.7	6,316.7	12.4	11.0	-40.73	4,424.0	-3,430.2	5,360.1	5,337.4	22.72	235.943		
6,500.0	6,491.5	6,416.5	6,416.5	12.6	11.2	-40.77	4,424.0	-3,430.2	5,356.0	5,332.9	23.08	232.083		
6,600.0	6,591.4	6,516.4	6,516.4	12.8	11.4	-40.80	4,424.0	-3,430.2	5,351.9	5,328.4	23.44	228.341		
6,700.0	6,691.2	6,616.2	6,616.2	13.0	11.5	-40.84	4,424.0	-3,430.2	5,347.8	5,324.0	23.80	224.712		
6,800.0	6,791.1	6,716.1	6,716.1	13.2	11.7	-40.88	4,424.0	-3,430.2	5,343.6	5,319.5	24.16	221.192		
6,900.0	6,890.9	6,815.9	6,815.9	13.4	11.9	-40.92	4,424.0	-3,430.2	5,339.5	5,315.0	24.52	217.774		
7,000.0	6,990.8	6,915.8	6,915.8	13.6	12.1	-40.96	4,424.0	-3,430.2	5,335.4	5,310.6	24.88	214.456		
7,024.2	7,014.9	6,939.9	6,939.9	13.6	12.1	-40.97	4,424.0	-3,430.2	5,334.4	5,309.5	24.97	213.668		
7,050.0	7,040.7	6,965.7	6,965.7	13.7	12.2	-42.59	4,424.0	-3,430.2	5,333.7	5,308.7	25.06	212.848		
7,062.6	7,053.3	6,978.3	6,978.3	13.7	12.2	-90.00	4,424.0	-3,430.2	5,333.7	5,308.6	25.10	212.521	CC, ES	
7,100.0	7,090.7	7,015.7	7,015.7	13.7	12.2	140.75	4,424.0	-3,430.2	5,334.4	5,309.2	25.19	211.730		
7,150.0	7,140.5	7,065.5	7,065.5	13.8	12.3	140.10	4,424.0	-3,430.2	5,337.7	5,312.5	25.28	211.184		
7,200.0	7,189.9	7,114.9	7,114.9	13.8	12.4	139.71	4,424.0	-3,430.2	5,343.7	5,318.4	25.30	211.189		
7,250.0	7,238.6	7,163.6	7,163.6	13.8	12.5	139.27	4,424.0	-3,430.2	5,352.3	5,327.1	25.28	211.711		
7,300.0	7,286.4	7,211.4	7,211.4	13.7	12.6	138.73	4,424.0	-3,430.2	5,363.5	5,338.3	25.22	212.711		
7,350.0	7,333.1	7,258.1	7,258.1	13.7	12.7	138.06	4,424.0	-3,430.2	5,377.3	5,352.2	25.11	214.134		
7,400.0	7,378.5	7,303.5	7,303.5	13.6	12.7	137.26	4,424.0	-3,430.2	5,393.6	5,368.6	24.98	215.909		
7,450.0	7,422.2	7,347.2	7,347.2	13.6	12.8	136.31	4,424.0	-3,430.2	5,412.3	5,387.4	24.83	217.943		
7,500.0	7,464.1	7,389.1	7,389.1	13.5	12.9	135.19	4,424.0	-3,430.2	5,433.3	5,408.7	24.68	220.115		
7,550.0	7,504.1	7,429.1	7,429.1	13.5	13.0	133.88	4,424.0	-3,430.2	5,456.7	5,432.1	24.55	222.278		
7,600.0	7,541.8	7,466.8	7,466.8	13.5	13.0	132.35	4,424.0	-3,430.2	5,482.2	5,457.7	24.45	224.251		
7,650.0	7,577.2	7,502.2	7,502.2	13.4	13.1	130.60	4,424.0	-3,430.2	5,509.8	5,485.4	24.40	225.834		
7,700.0	7,610.0	7,535.0	7,535.0	13.5	13.2	128.58	4,424.0	-3,430.2	5,539.3	5,514.9	24.42	226.814		
7,750.0	7,640.2	7,565.2	7,565.2	13.5	13.2	126.27	4,424.0	-3,430.2	5,570.7	5,546.1	24.54	226.995		
7,800.0	7,667.4	7,592.4	7,592.4	13.6	13.3	123.63	4,424.0	-3,430.2	5,603.7	5,579.0	24.77	226.225		
7,850.0	7,691.7	7,616.7	7,616.7	13.7	13.3	120.63	4,424.0	-3,430.2	5,638.3	5,613.2	25.12	224.438		
7,900.0	7,712.8	7,637.8	7,637.8	13.9	13.3	117.24	4,424.0	-3,430.2	5,674.3	5,648.7	25.60	221.686		
7,950.0	7,730.8	7,655.8	7,655.8	14.1	13.4	113.44	4,424.0	-3,430.2	5,711.5	5,685.4	26.18	218.148		
8,000.0	7,745.5	7,670.5	7,670.5	14.4	13.4	109.21	4,424.0	-3,430.2	5,749.8	5,722.9	26.85	214.127		
8,050.0	7,756.7	7,681.7	7,681.7	14.7	13.4	104.57	4,424.0	-3,430.2	5,788.9	5,761.4	27.56	210.013		
8,100.0	7,764.6	7,689.6	7,689.6	15.1	13.4	99.54	4,424.0	-3,430.2	5,828.7	5,800.5	28.26	206.227		
8,150.0	7,769.0	7,694.0	7,694.0	15.5	13.4	94.21	4,424.0	-3,430.2	5,869.0	5,840.2	28.89	203.158		
8,188.1	7,770.0	7,695.0	7,695.0	15.9	13.4	90.00	4,424.0	-3,430.2	5,899.9	5,870.6	29.28	201.490		
8,200.0	7,770.0	7,695.0	7,695.0	16.0	13.4	90.00	4,424.0	-3,430.2	5,909.6	5,880.2	29.39	201.062		
8,300.0	7,770.0	7,695.0	7,695.0	17.0	13.4	90.00	4,424.0	-3,430.2	5,991.3	5,960.9	30.39	197.138		
8,400.0	7,770.0	7,695.0	7,695.0	18.1	13.4	90.00	4,424.0	-3,430.2	6,073.5	6,042.0	31.51	192.774		
8,500.0	7,770.0	7,695.0	7,695.0	19.3	13.4	90.00	4,424.0	-3,430.2	6,156.2	6,123.5	32.72	188.173		
8,600.0	7,770.0	7,695.0	7,695.0	20.6	13.4	90.00	4,424.0	-3,430.2	6,239.4	6,205.4	34.00	183.491		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,700.0	7,770.0	7,695.0	7,695.0	21.9	13.4	90.00	4,424.0	-3,430.2	6,323.1	6,287.8	35.36	178.836		
8,800.0	7,770.0	7,695.0	7,695.0	23.3	13.4	90.00	4,424.0	-3,430.2	6,407.3	6,370.6	36.76	174.284		
8,900.0	7,770.0	7,695.0	7,695.0	24.8	13.4	90.00	4,424.0	-3,430.2	6,491.9	6,453.7	38.21	169.881		
9,000.0	7,770.0	7,695.0	7,695.0	26.3	13.4	90.00	4,424.0	-3,430.2	6,577.0	6,537.3	39.70	165.657		
9,100.0	7,770.0	7,695.0	7,695.0	27.8	13.4	90.00	4,424.0	-3,430.2	6,662.5	6,621.3	41.22	161.626		
9,200.0	7,770.0	7,695.0	7,695.0	29.3	13.4	90.00	4,424.0	-3,430.2	6,748.4	6,705.6	42.77	157.794		
9,300.0	7,770.0	7,695.0	7,695.0	30.9	13.4	90.00	4,424.0	-3,430.2	6,834.6	6,790.3	44.33	154.161		
9,400.0	7,770.0	7,695.0	7,695.0	32.5	13.4	90.00	4,424.0	-3,430.2	6,921.2	6,875.3	45.92	150.721		
9,500.0	7,770.0	7,695.0	7,695.0	34.1	13.4	90.00	4,424.0	-3,430.2	7,008.2	6,960.7	47.52	147.467		
9,600.0	7,770.0	7,695.0	7,695.0	35.7	13.4	90.00	4,424.0	-3,430.2	7,095.6	7,046.4	49.14	144.392		
9,700.0	7,770.0	7,695.0	7,695.0	37.3	13.4	90.00	4,424.0	-3,430.2	7,183.2	7,132.4	50.77	141.484		
9,800.0	7,770.0	7,695.0	7,695.0	39.0	13.4	90.00	4,424.0	-3,430.2	7,271.2	7,218.8	52.41	138.734		
9,900.0	7,770.0	7,695.0	7,695.0	40.6	13.4	90.00	4,424.0	-3,430.2	7,359.5	7,305.4	54.06	136.133		
10,000.0	7,770.0	7,695.0	7,695.0	42.3	13.4	90.00	4,424.0	-3,430.2	7,448.1	7,392.3	55.72	133.671		
10,100.0	7,770.0	7,695.0	7,695.0	44.0	13.4	90.00	4,424.0	-3,430.2	7,536.9	7,479.5	57.38	131.340		
10,200.0	7,770.0	7,695.0	7,695.0	45.6	13.4	90.00	4,424.0	-3,430.2	7,626.1	7,567.0	59.06	129.130		
10,300.0	7,770.0	7,695.0	7,695.0	47.3	13.4	90.00	4,424.0	-3,430.2	7,715.5	7,654.7	60.74	127.034		
10,400.0	7,770.0	7,695.0	7,695.0	49.0	13.4	90.00	4,424.0	-3,430.2	7,805.1	7,742.7	62.42	125.044		
10,500.0	7,770.0	7,695.0	7,695.0	50.7	13.4	90.00	4,424.0	-3,430.2	7,895.0	7,830.9	64.11	123.154		
10,600.0	7,770.0	7,695.0	7,695.0	52.4	13.4	90.00	4,424.0	-3,430.2	7,985.2	7,919.4	65.80	121.356		
10,700.0	7,770.0	7,695.0	7,695.0	54.1	13.4	90.00	4,424.0	-3,430.2	8,075.6	8,008.1	67.50	119.645		
10,800.0	7,770.0	7,695.0	7,695.0	55.8	13.4	90.00	4,424.0	-3,430.2	8,166.2	8,097.0	69.20	118.015		
10,900.0	7,770.0	7,695.0	7,695.0	57.5	13.4	90.00	4,424.0	-3,430.2	8,257.0	8,186.1	70.90	116.460		
11,000.0	7,770.0	7,695.0	7,695.0	59.2	13.4	90.00	4,424.0	-3,430.2	8,348.1	8,275.4	72.61	114.977		
11,100.0	7,770.0	7,695.0	7,695.0	60.9	13.4	90.00	4,424.0	-3,430.2	8,439.3	8,365.0	74.32	113.561		
11,200.0	7,770.0	7,695.0	7,695.0	62.6	13.4	90.00	4,424.0	-3,430.2	8,530.7	8,454.7	76.03	112.207		
11,300.0	7,770.0	7,695.0	7,695.0	64.3	13.4	90.00	4,424.0	-3,430.2	8,622.4	8,544.6	77.74	110.912		
11,400.0	7,770.0	7,695.0	7,695.0	66.0	13.4	90.00	4,424.0	-3,430.2	8,714.2	8,634.7	79.46	109.672		
11,500.0	7,770.0	7,695.0	7,695.0	67.7	13.4	90.00	4,424.0	-3,430.2	8,806.1	8,725.0	81.17	108.484		
11,600.0	7,770.0	7,695.0	7,695.0	69.5	13.4	90.00	4,424.0	-3,430.2	8,898.3	8,815.4	82.89	107.346		
11,700.0	7,770.0	7,695.0	7,695.0	71.2	13.4	90.00	4,424.0	-3,430.2	8,990.6	8,906.0	84.62	106.253		
11,800.0	7,770.0	7,695.0	7,695.0	72.9	13.4	90.00	4,424.0	-3,430.2	9,083.1	8,996.8	86.34	105.204		
11,900.0	7,770.0	7,695.0	7,695.0	74.6	13.4	90.00	4,424.0	-3,430.2	9,175.8	9,087.7	88.06	104.196		
12,000.0	7,770.0	7,695.0	7,695.0	76.4	13.4	90.00	4,424.0	-3,430.2	9,268.6	9,178.8	89.79	103.227		
12,100.0	7,770.0	7,695.0	7,695.0	78.1	13.4	90.00	4,424.0	-3,430.2	9,361.5	9,270.0	91.52	102.295		
12,200.0	7,770.0	7,695.0	7,695.0	79.8	13.4	90.00	4,424.0	-3,430.2	9,454.6	9,361.4	93.24	101.397		
12,300.0	7,770.0	7,695.0	7,695.0	81.5	13.4	90.00	4,424.0	-3,430.2	9,547.8	9,452.9	94.97	100.533		
12,400.0	7,770.0	7,695.0	7,695.0	83.3	13.4	90.00	4,424.0	-3,430.2	9,641.2	9,544.5	96.70	99.699		
12,500.0	7,770.0	7,695.0	7,695.0	85.0	13.4	90.00	4,424.0	-3,430.2	9,734.7	9,636.3	98.43	98.896		
12,600.0	7,770.0	7,695.0	7,695.0	86.7	13.4	90.00	4,424.0	-3,430.2	9,828.3	9,728.2	100.17	98.120		
12,700.0	7,770.0	7,695.0	7,695.0	88.5	13.4	90.00	4,424.0	-3,430.2	9,922.1	9,820.2	101.90	97.371 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
0.0	0.0	0.0	0.0	0.0	0.0	-47.95	3,661.3	-4,059.6	5,467.2						
100.0	100.0	29.0	29.0	0.2	0.1	-47.95	3,661.3	-4,059.6	5,466.8	5,466.6	0.20	N/A			
200.0	200.0	129.0	129.0	0.3	0.2	-47.95	3,661.3	-4,059.6	5,466.8	5,466.2	0.55	9,908.563			
300.0	300.0	229.0	229.0	0.5	0.4	-47.95	3,661.3	-4,059.6	5,466.8	5,465.9	0.90	6,068.891			
400.0	400.0	329.0	329.0	0.7	0.6	-47.95	3,661.3	-4,059.6	5,466.8	5,465.5	1.25	4,373.943			
500.0	500.0	429.0	429.0	0.8	0.7	-47.95	3,661.3	-4,059.6	5,466.8	5,465.2	1.60	3,419.053			
550.0	550.0	479.0	479.0	0.9	0.8	-47.95	3,661.3	-4,059.6	5,466.8	5,465.0	1.77	3,082.571			
600.0	600.0	529.0	529.0	1.0	0.9	-48.79	3,661.3	-4,059.6	5,466.6	5,464.7	1.95	2,806.318			
700.0	700.0	629.0	629.0	1.2	1.1	-48.81	3,661.3	-4,059.6	5,465.5	5,463.2	2.30	2,378.908			
800.0	799.9	728.9	728.9	1.4	1.3	-48.86	3,661.3	-4,059.6	5,463.2	5,460.5	2.65	2,062.519			
861.1	860.9	789.9	789.9	1.5	1.4	-48.90	3,661.3	-4,059.6	5,461.2	5,458.3	2.86	1,906.369			
900.0	899.8	828.8	828.8	1.6	1.4	-48.91	3,661.3	-4,059.6	5,459.8	5,456.8	3.00	1,818.142			
1,000.0	999.6	928.6	928.6	1.8	1.6	-48.96	3,661.3	-4,059.6	5,456.2	5,452.9	3.36	1,624.236			
1,100.0	1,099.5	1,028.5	1,028.5	1.9	1.8	-49.00	3,661.3	-4,059.6	5,452.7	5,449.0	3.72	1,467.015			
1,200.0	1,199.3	1,128.3	1,128.3	2.1	2.0	-49.04	3,661.3	-4,059.6	5,449.1	5,445.0	4.08	1,337.078			
1,300.0	1,299.2	1,228.2	1,228.2	2.3	2.1	-49.09	3,661.3	-4,059.6	5,445.6	5,441.1	4.43	1,227.953			
1,400.0	1,399.1	1,328.1	1,328.1	2.5	2.3	-49.13	3,661.3	-4,059.6	5,442.0	5,437.2	4.79	1,135.049			
1,500.0	1,498.9	1,427.9	1,427.9	2.7	2.5	-49.17	3,661.3	-4,059.6	5,438.5	5,433.3	5.15	1,055.022			
1,600.0	1,598.8	1,527.8	1,527.8	2.9	2.7	-49.22	3,661.3	-4,059.6	5,434.9	5,429.4	5.52	985.384			
1,700.0	1,698.6	1,627.6	1,627.6	3.1	2.8	-49.26	3,661.3	-4,059.6	5,431.4	5,425.5	5.88	924.246			
1,800.0	1,798.5	1,727.5	1,727.5	3.3	3.0	-49.30	3,661.3	-4,059.6	5,427.8	5,421.6	6.24	870.148			
1,900.0	1,898.3	1,827.3	1,827.3	3.5	3.2	-49.35	3,661.3	-4,059.6	5,424.3	5,417.7	6.60	821.946			
2,000.0	1,998.2	1,927.2	1,927.2	3.7	3.4	-49.39	3,661.3	-4,059.6	5,420.7	5,413.8	6.96	778.728			
2,100.0	2,098.0	2,027.0	2,027.0	3.9	3.5	-49.43	3,661.3	-4,059.6	5,417.2	5,409.9	7.32	739.762			
2,200.0	2,197.9	2,126.9	2,126.9	4.1	3.7	-49.48	3,661.3	-4,059.6	5,413.7	5,406.0	7.68	704.453			
2,300.0	2,297.7	2,226.7	2,226.7	4.3	3.9	-49.52	3,661.3	-4,059.6	5,410.1	5,402.1	8.05	672.309			
2,400.0	2,397.6	2,326.6	2,326.6	4.5	4.1	-49.56	3,661.3	-4,059.6	5,406.6	5,398.2	8.41	642.925			
2,500.0	2,497.4	2,426.4	2,426.4	4.7	4.2	-49.61	3,661.3	-4,059.6	5,403.1	5,394.3	8.77	615.960			
2,600.0	2,597.3	2,526.3	2,526.3	4.9	4.4	-49.65	3,661.3	-4,059.6	5,399.6	5,390.4	9.13	591.129			
2,700.0	2,697.1	2,626.1	2,626.1	5.1	4.6	-49.69	3,661.3	-4,059.6	5,396.1	5,386.6	9.50	568.188			
2,800.0	2,797.0	2,726.0	2,726.0	5.3	4.8	-49.74	3,661.3	-4,059.6	5,392.6	5,382.7	9.86	546.929			
2,900.0	2,896.8	2,825.8	2,825.8	5.5	4.9	-49.78	3,661.3	-4,059.6	5,389.0	5,378.8	10.22	527.175			
3,000.0	2,996.7	2,925.7	2,925.7	5.7	5.1	-49.83	3,661.3	-4,059.6	5,385.5	5,375.0	10.59	508.772			
3,100.0	3,096.5	3,025.5	3,025.5	5.9	5.3	-49.87	3,661.3	-4,059.6	5,382.0	5,371.1	10.95	491.586			
3,200.0	3,196.4	3,125.4	3,125.4	6.1	5.5	-49.92	3,661.3	-4,059.6	5,378.5	5,367.2	11.31	475.499			
3,300.0	3,296.3	3,225.3	3,225.3	6.3	5.6	-49.96	3,661.3	-4,059.6	5,375.0	5,363.4	11.67	460.411			
3,400.0	3,396.1	3,325.1	3,325.1	6.5	5.8	-50.00	3,661.3	-4,059.6	5,371.6	5,359.5	12.04	446.231			
3,500.0	3,496.0	3,425.0	3,425.0	6.7	6.0	-50.05	3,661.3	-4,059.6	5,368.1	5,355.7	12.40	432.879			
3,600.0	3,595.8	3,524.8	3,524.8	6.9	6.2	-50.09	3,661.3	-4,059.6	5,364.6	5,351.8	12.76	420.285			
3,700.0	3,695.7	3,624.7	3,624.7	7.0	6.3	-50.14	3,661.3	-4,059.6	5,361.1	5,348.0	13.13	408.387			
3,800.0	3,795.5	3,724.5	3,724.5	7.2	6.5	-50.18	3,661.3	-4,059.6	5,357.6	5,344.1	13.49	397.129			
3,900.0	3,895.4	3,824.4	3,824.4	7.4	6.7	-50.23	3,661.3	-4,059.6	5,354.1	5,340.3	13.85	386.459			
4,000.0	3,995.2	3,924.2	3,924.2	7.6	6.8	-50.27	3,661.3	-4,059.6	5,350.7	5,336.4	14.22	376.334			
4,100.0	4,095.1	4,024.1	4,024.1	7.8	7.0	-50.32	3,661.3	-4,059.6	5,347.2	5,332.6	14.58	366.713			
4,200.0	4,194.9	4,123.9	4,123.9	8.0	7.2	-50.36	3,661.3	-4,059.6	5,343.7	5,328.8	14.95	357.559			
4,300.0	4,294.8	4,223.8	4,223.8	8.2	7.4	-50.40	3,661.3	-4,059.6	5,340.3	5,325.0	15.31	348.838			
4,400.0	4,394.6	4,323.6	4,323.6	8.4	7.5	-50.45	3,661.3	-4,059.6	5,336.8	5,321.1	15.67	340.522			
4,500.0	4,494.5	4,423.5	4,423.5	8.6	7.7	-50.49	3,661.3	-4,059.6	5,333.3	5,317.3	16.04	332.582			
4,600.0	4,594.3	4,523.3	4,523.3	8.8	7.9	-50.54	3,661.3	-4,059.6	5,329.9	5,313.5	16.40	324.993			
4,700.0	4,694.2	4,623.2	4,623.2	9.0	8.1	-50.58	3,661.3	-4,059.6	5,326.4	5,309.7	16.76	317.733			
4,800.0	4,794.0	4,723.0	4,723.0	9.2	8.2	-50.63	3,661.3	-4,059.6	5,323.0	5,305.9	17.13	310.781			
4,900.0	4,893.9	4,822.9	4,822.9	9.4	8.4	-50.67	3,661.3	-4,059.6	5,319.6	5,302.1	17.49	304.118			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,922.7	4,922.7	9.6	8.6	-50.72	3,661.3	-4,059.6	5,316.1	5,298.3	17.86	297.725		
5,100.0	5,093.6	5,022.6	5,022.6	9.8	8.8	-50.77	3,661.3	-4,059.6	5,312.7	5,294.5	18.22	291.588		
5,200.0	5,193.5	5,122.5	5,122.5	10.0	8.9	-50.81	3,661.3	-4,059.6	5,309.2	5,290.7	18.58	285.690		
5,300.0	5,293.3	5,222.3	5,222.3	10.2	9.1	-50.86	3,661.3	-4,059.6	5,305.8	5,286.9	18.95	280.019		
5,400.0	5,393.2	5,322.2	5,322.2	10.4	9.3	-50.90	3,661.3	-4,059.6	5,302.4	5,283.1	19.31	274.561		
5,500.0	5,493.0	5,422.0	5,422.0	10.6	9.5	-50.95	3,661.3	-4,059.6	5,299.0	5,279.3	19.68	269.304		
5,600.0	5,592.9	5,521.9	5,521.9	10.8	9.6	-50.99	3,661.3	-4,059.6	5,295.5	5,275.5	20.04	264.238		
5,700.0	5,692.7	5,621.7	5,621.7	11.0	9.8	-51.04	3,661.3	-4,059.6	5,292.1	5,271.7	20.41	259.353		
5,800.0	5,792.6	5,721.6	5,721.6	11.2	10.0	-51.08	3,661.3	-4,059.6	5,288.7	5,267.9	20.77	254.639		
5,900.0	5,892.4	5,821.4	5,821.4	11.4	10.2	-51.13	3,661.3	-4,059.6	5,285.3	5,264.2	21.13	250.087		
6,000.0	5,992.3	5,921.3	5,921.3	11.6	10.3	-51.18	3,661.3	-4,059.6	5,281.9	5,260.4	21.50	245.689		
6,100.0	6,092.1	6,021.1	6,021.1	11.8	10.5	-51.22	3,661.3	-4,059.6	5,278.5	5,256.6	21.86	241.437		
6,200.0	6,192.0	6,121.0	6,121.0	12.0	10.7	-51.27	3,661.3	-4,059.6	5,275.1	5,252.9	22.23	237.324		
6,300.0	6,291.8	6,220.8	6,220.8	12.2	10.9	-51.31	3,661.3	-4,059.6	5,271.7	5,249.1	22.59	233.344		
6,400.0	6,391.7	6,320.7	6,320.7	12.4	11.0	-51.36	3,661.3	-4,059.6	5,268.3	5,245.3	22.96	229.490		
6,500.0	6,491.5	6,420.5	6,420.5	12.6	11.2	-51.40	3,661.3	-4,059.6	5,264.9	5,241.6	23.32	225.757		
6,600.0	6,591.4	6,520.4	6,520.4	12.8	11.4	-51.45	3,661.3	-4,059.6	5,261.5	5,237.8	23.69	222.137		
6,700.0	6,691.2	6,620.2	6,620.2	13.0	11.6	-51.50	3,661.3	-4,059.6	5,258.1	5,234.1	24.05	218.628		
6,800.0	6,791.1	6,720.1	6,720.1	13.2	11.7	-51.54	3,661.3	-4,059.6	5,254.8	5,230.3	24.42	215.223		
6,900.0	6,890.9	6,819.9	6,819.9	13.4	11.9	-51.59	3,661.3	-4,059.6	5,251.4	5,226.6	24.78	211.918		
7,000.0	6,990.8	6,919.8	6,919.8	13.6	12.1	-51.64	3,661.3	-4,059.6	5,248.0	5,222.9	25.15	208.709		
7,024.2	7,014.9	6,943.9	6,943.9	13.6	12.1	-51.65	3,661.3	-4,059.6	5,247.2	5,222.0	25.23	207.947		
7,050.0	7,040.7	6,969.7	6,969.7	13.7	12.2	-53.27	3,661.3	-4,059.6	5,246.6	5,221.3	25.32	207.173		
7,062.4	7,053.1	6,982.1	6,982.1	13.7	12.2	-90.00	3,661.3	-4,059.6	5,246.6	5,221.2	25.36	206.868	CC, ES	
7,100.0	7,090.7	7,019.7	7,019.7	13.7	12.3	130.07	3,661.3	-4,059.6	5,247.2	5,221.7	25.46	206.065		
7,150.0	7,140.5	7,069.5	7,069.5	13.8	12.3	129.43	3,661.3	-4,059.6	5,249.9	5,224.4	25.56	205.414		
7,200.0	7,189.9	7,118.9	7,118.9	13.8	12.4	129.05	3,661.3	-4,059.6	5,254.9	5,229.3	25.61	205.198		
7,250.0	7,238.6	7,167.6	7,167.6	13.8	12.5	128.63	3,661.3	-4,059.6	5,262.0	5,236.4	25.62	205.384		
7,300.0	7,286.4	7,215.4	7,215.4	13.7	12.6	128.12	3,661.3	-4,059.6	5,271.3	5,245.7	25.60	205.932		
7,350.0	7,333.1	7,262.1	7,262.1	13.7	12.7	127.50	3,661.3	-4,059.6	5,282.8	5,257.2	25.55	206.788		
7,400.0	7,378.5	7,307.5	7,307.5	13.6	12.8	126.76	3,661.3	-4,059.6	5,296.3	5,270.8	25.48	207.887		
7,450.0	7,422.2	7,351.2	7,351.2	13.6	12.8	125.88	3,661.3	-4,059.6	5,311.9	5,286.5	25.40	209.148		
7,500.0	7,464.1	7,393.1	7,393.1	13.5	12.9	124.86	3,661.3	-4,059.6	5,329.4	5,304.1	25.32	210.474		
7,550.0	7,504.1	7,433.1	7,433.1	13.5	13.0	123.68	3,661.3	-4,059.6	5,348.9	5,323.7	25.26	211.753		
7,600.0	7,541.8	7,470.8	7,470.8	13.5	13.0	122.33	3,661.3	-4,059.6	5,370.3	5,345.1	25.23	212.861		
7,650.0	7,577.2	7,506.2	7,506.2	13.4	13.1	120.80	3,661.3	-4,059.6	5,393.5	5,368.3	25.24	213.671		
7,700.0	7,610.0	7,539.0	7,539.0	13.5	13.2	119.07	3,661.3	-4,059.6	5,418.4	5,393.1	25.31	214.059		
7,750.0	7,640.2	7,569.2	7,569.2	13.5	13.2	117.12	3,661.3	-4,059.6	5,444.8	5,419.4	25.45	213.923		
7,800.0	7,667.4	7,596.4	7,596.4	13.6	13.3	114.95	3,661.3	-4,059.6	5,472.8	5,447.2	25.67	213.197		
7,850.0	7,691.7	7,620.7	7,620.7	13.7	13.3	112.54	3,661.3	-4,059.6	5,502.2	5,476.2	25.97	211.863		
7,900.0	7,712.8	7,641.8	7,641.8	13.9	13.3	109.88	3,661.3	-4,059.6	5,532.8	5,506.5	26.35	209.966		
7,950.0	7,730.8	7,659.8	7,659.8	14.1	13.4	106.97	3,661.3	-4,059.6	5,564.6	5,537.8	26.80	207.611		
8,000.0	7,745.5	7,674.5	7,674.5	14.4	13.4	103.81	3,661.3	-4,059.6	5,597.4	5,570.0	27.31	204.951		
8,050.0	7,756.7	7,685.7	7,685.7	14.7	13.4	100.41	3,661.3	-4,059.6	5,631.0	5,603.1	27.85	202.179		
8,100.0	7,764.6	7,693.6	7,693.6	15.1	13.4	96.79	3,661.3	-4,059.6	5,665.2	5,636.8	28.40	199.494		
8,150.0	7,769.0	7,698.0	7,698.0	15.5	13.4	92.99	3,661.3	-4,059.6	5,700.0	5,671.1	28.92	197.084		
8,188.1	7,770.0	7,699.0	7,699.0	15.9	13.4	90.00	3,661.3	-4,059.6	5,726.8	5,697.5	29.29	195.529		
8,200.0	7,770.0	7,699.0	7,699.0	16.0	13.4	90.00	3,661.3	-4,059.6	5,735.2	5,705.8	29.40	195.080		
8,300.0	7,770.0	7,699.0	7,699.0	17.0	13.4	90.00	3,661.3	-4,059.6	5,806.1	5,775.7	30.40	191.003		
8,400.0	7,770.0	7,699.0	7,699.0	18.1	13.4	90.00	3,661.3	-4,059.6	5,878.0	5,846.4	31.51	186.527		
8,500.0	7,770.0	7,699.0	7,699.0	19.3	13.4	90.00	3,661.3	-4,059.6	5,950.6	5,917.9	32.72	181.850		
8,600.0	7,770.0	7,699.0	7,699.0	20.6	13.4	90.00	3,661.3	-4,059.6	6,024.0	5,990.0	34.01	177.119		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
8,700.0	7,770.0	7,699.0	7,699.0	21.9	13.4	90.00	3,661.3	-4,059.6	6,098.2	6,062.8	35.36	172.440		
8,800.0	7,770.0	7,699.0	7,699.0	23.3	13.4	90.00	3,661.3	-4,059.6	6,173.1	6,136.3	36.77	167.880		
8,900.0	7,770.0	7,699.0	7,699.0	24.8	13.4	90.00	3,661.3	-4,059.6	6,248.7	6,210.5	38.22	163.485		
9,000.0	7,770.0	7,699.0	7,699.0	26.3	13.4	90.00	3,661.3	-4,059.6	6,325.0	6,285.2	39.71	159.281		
9,100.0	7,770.0	7,699.0	7,699.0	27.8	13.4	90.00	3,661.3	-4,059.6	6,401.9	6,360.7	41.23	155.278		
9,200.0	7,770.0	7,699.0	7,699.0	29.3	13.4	90.00	3,661.3	-4,059.6	6,479.5	6,436.7	42.77	151.482		
9,300.0	7,770.0	7,699.0	7,699.0	30.9	13.4	90.00	3,661.3	-4,059.6	6,557.6	6,513.3	44.34	147.890		
9,400.0	7,770.0	7,699.0	7,699.0	32.5	13.4	90.00	3,661.3	-4,059.6	6,636.4	6,590.5	45.93	144.496		
9,500.0	7,770.0	7,699.0	7,699.0	34.1	13.4	90.00	3,661.3	-4,059.6	6,715.7	6,668.2	47.53	141.291		
9,600.0	7,770.0	7,699.0	7,699.0	35.7	13.4	90.00	3,661.3	-4,059.6	6,795.6	6,746.4	49.15	138.267		
9,700.0	7,770.0	7,699.0	7,699.0	37.3	13.4	90.00	3,661.3	-4,059.6	6,876.0	6,825.2	50.78	135.413		
9,800.0	7,770.0	7,699.0	7,699.0	39.0	13.4	90.00	3,661.3	-4,059.6	6,956.9	6,904.4	52.42	132.719		
9,900.0	7,770.0	7,699.0	7,699.0	40.6	13.4	90.00	3,661.3	-4,059.6	7,038.3	6,984.2	54.07	130.175		
10,000.0	7,770.0	7,699.0	7,699.0	42.3	13.4	90.00	3,661.3	-4,059.6	7,120.1	7,064.4	55.73	127.770		
10,100.0	7,770.0	7,699.0	7,699.0	44.0	13.4	90.00	3,661.3	-4,059.6	7,202.5	7,145.1	57.39	125.496		
10,200.0	7,770.0	7,699.0	7,699.0	45.6	13.4	90.00	3,661.3	-4,059.6	7,285.2	7,226.2	59.06	123.344		
10,300.0	7,770.0	7,699.0	7,699.0	47.3	13.4	90.00	3,661.3	-4,059.6	7,368.4	7,307.7	60.74	121.306		
10,400.0	7,770.0	7,699.0	7,699.0	49.0	13.4	90.00	3,661.3	-4,059.6	7,452.0	7,389.6	62.43	119.374		
10,500.0	7,770.0	7,699.0	7,699.0	50.7	13.4	90.00	3,661.3	-4,059.6	7,536.0	7,471.9	64.11	117.541		
10,600.0	7,770.0	7,699.0	7,699.0	52.4	13.4	90.00	3,661.3	-4,059.6	7,620.4	7,554.6	65.81	115.800		
10,700.0	7,770.0	7,699.0	7,699.0	54.1	13.4	90.00	3,661.3	-4,059.6	7,705.2	7,637.7	67.50	114.145		
10,800.0	7,770.0	7,699.0	7,699.0	55.8	13.4	90.00	3,661.3	-4,059.6	7,790.3	7,721.1	69.20	112.571		
10,900.0	7,770.0	7,699.0	7,699.0	57.5	13.4	90.00	3,661.3	-4,059.6	7,875.8	7,804.9	70.91	111.072		
11,000.0	7,770.0	7,699.0	7,699.0	59.2	13.4	90.00	3,661.3	-4,059.6	7,961.6	7,889.0	72.61	109.644		
11,100.0	7,770.0	7,699.0	7,699.0	60.9	13.4	90.00	3,661.3	-4,059.6	8,047.8	7,973.4	74.32	108.282		
11,200.0	7,770.0	7,699.0	7,699.0	62.6	13.4	90.00	3,661.3	-4,059.6	8,134.2	8,058.2	76.03	106.982		
11,300.0	7,770.0	7,699.0	7,699.0	64.3	13.4	90.00	3,661.3	-4,059.6	8,221.0	8,143.2	77.75	105.740		
11,400.0	7,770.0	7,699.0	7,699.0	66.0	13.4	90.00	3,661.3	-4,059.6	8,308.1	8,228.6	79.46	104.552		
11,500.0	7,770.0	7,699.0	7,699.0	67.7	13.4	90.00	3,661.3	-4,059.6	8,395.4	8,314.2	81.18	103.416		
11,600.0	7,770.0	7,699.0	7,699.0	69.5	13.4	90.00	3,661.3	-4,059.6	8,483.0	8,400.1	82.90	102.327		
11,700.0	7,770.0	7,699.0	7,699.0	71.2	13.4	90.00	3,661.3	-4,059.6	8,570.9	8,486.3	84.62	101.285		
11,800.0	7,770.0	7,699.0	7,699.0	72.9	13.4	90.00	3,661.3	-4,059.6	8,659.1	8,572.8	86.35	100.285		
11,900.0	7,770.0	7,699.0	7,699.0	74.6	13.4	90.00	3,661.3	-4,059.6	8,747.5	8,659.5	88.07	99.325		
12,000.0	7,770.0	7,699.0	7,699.0	76.4	13.4	90.00	3,661.3	-4,059.6	8,836.2	8,746.4	89.80	98.404		
12,100.0	7,770.0	7,699.0	7,699.0	78.1	13.4	90.00	3,661.3	-4,059.6	8,925.1	8,833.6	91.52	97.518		
12,200.0	7,770.0	7,699.0	7,699.0	79.8	13.4	90.00	3,661.3	-4,059.6	9,014.2	8,921.0	93.25	96.667		
12,300.0	7,770.0	7,699.0	7,699.0	81.5	13.4	90.00	3,661.3	-4,059.6	9,103.6	9,008.6	94.98	95.848		
12,400.0	7,770.0	7,699.0	7,699.0	83.3	13.4	90.00	3,661.3	-4,059.6	9,193.2	9,096.5	96.71	95.059		
12,500.0	7,770.0	7,699.0	7,699.0	85.0	13.4	90.00	3,661.3	-4,059.6	9,283.0	9,184.6	98.44	94.300		
12,600.0	7,770.0	7,699.0	7,699.0	86.7	13.4	90.00	3,661.3	-4,059.6	9,373.0	9,272.8	100.17	93.568		
12,700.0	7,770.0	7,699.0	7,699.0	88.5	13.4	90.00	3,661.3	-4,059.6	9,463.2	9,361.3	101.91	92.862		
12,800.0	7,770.0	7,699.0	7,699.0	90.2	13.4	90.00	3,661.3	-4,059.6	9,553.6	9,450.0	103.64	92.180		
12,900.0	7,770.0	7,699.0	7,699.0	91.9	13.4	90.00	3,661.3	-4,059.6	9,644.2	9,538.8	105.37	91.523		
13,000.0	7,770.0	7,699.0	7,699.0	93.7	13.4	90.00	3,661.3	-4,059.6	9,735.0	9,627.9	107.11	90.887		
13,100.0	7,770.0	7,699.0	7,699.0	95.4	13.4	90.00	3,661.3	-4,059.6	9,825.9	9,717.1	108.85	90.273		
13,200.0	7,770.0	7,699.0	7,699.0	97.1	13.4	90.00	3,661.3	-4,059.6	9,917.0	9,806.5	110.58	89.680 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-39.00	5,013.9	-4,059.9	6,452.0						
100.0	100.0	20.0	20.0	0.2	0.0	-39.00	5,013.9	-4,059.9	6,451.5	6,451.3	0.19	N/A			
200.0	200.0	120.0	120.0	0.3	0.2	-39.00	5,013.9	-4,059.9	6,451.5	6,451.0	0.54	N/A			
300.0	300.0	220.0	220.0	0.5	0.4	-39.00	5,013.9	-4,059.9	6,451.5	6,450.6	0.89	7,289.215			
400.0	400.0	320.0	320.0	0.7	0.6	-39.00	5,013.9	-4,059.9	6,451.5	6,450.3	1.23	5,227.538			
500.0	500.0	420.0	420.0	0.8	0.7	-39.00	5,013.9	-4,059.9	6,451.5	6,449.9	1.58	4,074.975			
550.0	550.0	470.0	470.0	0.9	0.8	-39.00	5,013.9	-4,059.9	6,451.5	6,449.8	1.76	3,670.356			
600.0	600.0	520.0	520.0	1.0	0.9	-39.84	5,013.9	-4,059.9	6,451.3	6,449.4	1.93	3,338.776			
700.0	700.0	620.0	620.0	1.2	1.1	-39.85	5,013.9	-4,059.9	6,450.0	6,447.7	2.28	2,827.085			
800.0	799.9	719.9	719.9	1.4	1.3	-39.89	5,013.9	-4,059.9	6,447.3	6,444.7	2.63	2,449.677			
861.1	860.9	780.9	780.9	1.5	1.4	-39.92	5,013.9	-4,059.9	6,445.0	6,442.2	2.85	2,263.951			
900.0	899.8	819.8	819.8	1.6	1.4	-39.94	5,013.9	-4,059.9	6,443.4	6,440.4	2.98	2,159.049			
1,000.0	999.6	919.6	919.6	1.8	1.6	-39.97	5,013.9	-4,059.9	6,439.2	6,435.9	3.34	1,928.715			
1,100.0	1,099.5	1,019.5	1,019.5	1.9	1.8	-40.00	5,013.9	-4,059.9	6,435.1	6,431.4	3.69	1,742.133			
1,200.0	1,199.3	1,119.3	1,119.3	2.1	2.0	-40.03	5,013.9	-4,059.9	6,430.9	6,426.9	4.05	1,588.012			
1,300.0	1,299.2	1,219.2	1,219.2	2.3	2.1	-40.06	5,013.9	-4,059.9	6,426.8	6,422.4	4.41	1,458.614			
1,400.0	1,399.1	1,319.1	1,319.1	2.5	2.3	-40.09	5,013.9	-4,059.9	6,422.6	6,417.9	4.76	1,348.463			
1,500.0	1,498.9	1,418.9	1,418.9	2.7	2.5	-40.12	5,013.9	-4,059.9	6,418.5	6,413.3	5.12	1,253.584			
1,600.0	1,598.8	1,518.8	1,518.8	2.9	2.7	-40.15	5,013.9	-4,059.9	6,414.3	6,408.8	5.48	1,171.020			
1,700.0	1,698.6	1,618.6	1,618.6	3.1	2.8	-40.18	5,013.9	-4,059.9	6,410.2	6,404.3	5.84	1,098.528			
1,800.0	1,798.5	1,718.5	1,718.5	3.3	3.0	-40.22	5,013.9	-4,059.9	6,406.0	6,399.8	6.19	1,034.377			
1,900.0	1,898.3	1,818.3	1,818.3	3.5	3.2	-40.25	5,013.9	-4,059.9	6,401.9	6,395.3	6.55	977.210			
2,000.0	1,998.2	1,918.2	1,918.2	3.7	3.3	-40.28	5,013.9	-4,059.9	6,397.7	6,390.8	6.91	925.948			
2,100.0	2,098.0	2,018.0	2,018.0	3.9	3.5	-40.31	5,013.9	-4,059.9	6,393.6	6,386.3	7.27	879.724			
2,200.0	2,197.9	2,117.9	2,117.9	4.1	3.7	-40.34	5,013.9	-4,059.9	6,389.4	6,381.8	7.63	837.832			
2,300.0	2,297.7	2,217.7	2,217.7	4.3	3.9	-40.37	5,013.9	-4,059.9	6,385.3	6,377.3	7.98	799.691			
2,400.0	2,397.6	2,317.6	2,317.6	4.5	4.0	-40.40	5,013.9	-4,059.9	6,381.2	6,372.8	8.34	764.820			
2,500.0	2,497.4	2,417.4	2,417.4	4.7	4.2	-40.44	5,013.9	-4,059.9	6,377.0	6,368.3	8.70	732.816			
2,600.0	2,597.3	2,517.3	2,517.3	4.9	4.4	-40.47	5,013.9	-4,059.9	6,372.9	6,363.8	9.06	703.341			
2,700.0	2,697.1	2,617.1	2,617.1	5.1	4.6	-40.50	5,013.9	-4,059.9	6,368.8	6,359.4	9.42	676.105			
2,800.0	2,797.0	2,717.0	2,717.0	5.3	4.7	-40.53	5,013.9	-4,059.9	6,364.6	6,354.9	9.78	650.865			
2,900.0	2,896.8	2,816.8	2,816.8	5.5	4.9	-40.56	5,013.9	-4,059.9	6,360.5	6,350.4	10.14	627.409			
3,000.0	2,996.7	2,916.7	2,916.7	5.7	5.1	-40.59	5,013.9	-4,059.9	6,356.4	6,345.9	10.50	605.553			
3,100.0	3,096.5	3,016.5	3,016.5	5.9	5.3	-40.63	5,013.9	-4,059.9	6,352.3	6,341.4	10.86	585.141			
3,200.0	3,196.4	3,116.4	3,116.4	6.1	5.4	-40.66	5,013.9	-4,059.9	6,348.2	6,336.9	11.22	566.033			
3,300.0	3,296.3	3,216.3	3,216.3	6.3	5.6	-40.69	5,013.9	-4,059.9	6,344.0	6,332.5	11.57	548.109			
3,400.0	3,396.1	3,316.1	3,316.1	6.5	5.8	-40.72	5,013.9	-4,059.9	6,339.9	6,328.0	11.93	531.262			
3,500.0	3,496.0	3,416.0	3,416.0	6.7	6.0	-40.75	5,013.9	-4,059.9	6,335.8	6,323.5	12.29	515.398			
3,600.0	3,595.8	3,515.8	3,515.8	6.9	6.1	-40.79	5,013.9	-4,059.9	6,331.7	6,319.0	12.65	500.434			
3,700.0	3,695.7	3,615.7	3,615.7	7.0	6.3	-40.82	5,013.9	-4,059.9	6,327.6	6,314.6	13.01	486.295			
3,800.0	3,795.5	3,715.5	3,715.5	7.2	6.5	-40.85	5,013.9	-4,059.9	6,323.5	6,310.1	13.37	472.914			
3,900.0	3,895.4	3,815.4	3,815.4	7.4	6.7	-40.88	5,013.9	-4,059.9	6,319.4	6,305.6	13.73	460.233			
4,000.0	3,995.2	3,915.2	3,915.2	7.6	6.8	-40.91	5,013.9	-4,059.9	6,315.3	6,301.2	14.09	448.197			
4,100.0	4,095.1	4,015.1	4,015.1	7.8	7.0	-40.95	5,013.9	-4,059.9	6,311.2	6,296.7	14.45	436.760			
4,200.0	4,194.9	4,114.9	4,114.9	8.0	7.2	-40.98	5,013.9	-4,059.9	6,307.1	6,292.3	14.81	425.877			
4,300.0	4,294.8	4,214.8	4,214.8	8.2	7.4	-41.01	5,013.9	-4,059.9	6,303.0	6,287.8	15.17	415.509			
4,400.0	4,394.6	4,314.6	4,314.6	8.4	7.5	-41.04	5,013.9	-4,059.9	6,298.9	6,283.3	15.53	405.621			
4,500.0	4,494.5	4,414.5	4,414.5	8.6	7.7	-41.08	5,013.9	-4,059.9	6,294.8	6,278.9	15.89	396.179			
4,600.0	4,594.3	4,514.3	4,514.3	8.8	7.9	-41.11	5,013.9	-4,059.9	6,290.7	6,274.4	16.25	387.155			
4,700.0	4,694.2	4,614.2	4,614.2	9.0	8.1	-41.14	5,013.9	-4,059.9	6,286.6	6,270.0	16.61	378.521			
4,800.0	4,794.0	4,714.0	4,714.0	9.2	8.2	-41.17	5,013.9	-4,059.9	6,282.5	6,265.5	16.97	370.253			
4,900.0	4,893.9	4,813.9	4,813.9	9.4	8.4	-41.21	5,013.9	-4,059.9	6,278.4	6,261.1	17.33	362.327			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,913.7	4,913.7	9.6	8.6	-41.24	5,013.9	-4,059.9	6,274.3	6,256.6	17.69	354.723		
5,100.0	5,093.6	5,013.6	5,013.6	9.8	8.8	-41.27	5,013.9	-4,059.9	6,270.2	6,252.2	18.05	347.422		
5,200.0	5,193.5	5,113.5	5,113.5	10.0	8.9	-41.30	5,013.9	-4,059.9	6,266.2	6,247.8	18.41	340.406		
5,300.0	5,293.3	5,213.3	5,213.3	10.2	9.1	-41.34	5,013.9	-4,059.9	6,262.1	6,243.3	18.77	333.659		
5,400.0	5,393.2	5,313.2	5,313.2	10.4	9.3	-41.37	5,013.9	-4,059.9	6,258.0	6,238.9	19.13	327.165		
5,500.0	5,493.0	5,413.0	5,413.0	10.6	9.4	-41.40	5,013.9	-4,059.9	6,253.9	6,234.5	19.49	320.911		
5,600.0	5,592.9	5,512.9	5,512.9	10.8	9.6	-41.44	5,013.9	-4,059.9	6,249.9	6,230.0	19.85	314.883		
5,700.0	5,692.7	5,612.7	5,612.7	11.0	9.8	-41.47	5,013.9	-4,059.9	6,245.8	6,225.6	20.21	309.070		
5,800.0	5,792.6	5,712.6	5,712.6	11.2	10.0	-41.50	5,013.9	-4,059.9	6,241.7	6,221.2	20.57	303.460		
5,900.0	5,892.4	5,812.4	5,812.4	11.4	10.1	-41.53	5,013.9	-4,059.9	6,237.7	6,216.7	20.93	298.043		
6,000.0	5,992.3	5,912.3	5,912.3	11.6	10.3	-41.57	5,013.9	-4,059.9	6,233.6	6,212.3	21.29	292.808		
6,100.0	6,092.1	6,012.1	6,012.1	11.8	10.5	-41.60	5,013.9	-4,059.9	6,229.5	6,207.9	21.65	287.748		
6,200.0	6,192.0	6,112.0	6,112.0	12.0	10.7	-41.63	5,013.9	-4,059.9	6,225.5	6,203.5	22.01	282.853		
6,300.0	6,291.8	6,211.8	6,211.8	12.2	10.8	-41.67	5,013.9	-4,059.9	6,221.4	6,199.1	22.37	278.115		
6,400.0	6,391.7	6,311.7	6,311.7	12.4	11.0	-41.70	5,013.9	-4,059.9	6,217.4	6,194.6	22.73	273.527		
6,500.0	6,491.5	6,411.5	6,411.5	12.6	11.2	-41.73	5,013.9	-4,059.9	6,213.3	6,190.2	23.09	269.082		
6,600.0	6,591.4	6,511.4	6,511.4	12.8	11.4	-41.77	5,013.9	-4,059.9	6,209.3	6,185.8	23.45	264.773		
6,700.0	6,691.2	6,611.2	6,611.2	13.0	11.5	-41.80	5,013.9	-4,059.9	6,205.2	6,181.4	23.81	260.595		
6,800.0	6,791.1	6,711.1	6,711.1	13.2	11.7	-41.83	5,013.9	-4,059.9	6,201.2	6,177.0	24.17	256.541		
6,900.0	6,890.9	6,810.9	6,810.9	13.4	11.9	-41.87	5,013.9	-4,059.9	6,197.1	6,172.6	24.53	252.606		
7,000.0	6,990.8	6,910.8	6,910.8	13.6	12.1	-41.90	5,013.9	-4,059.9	6,193.1	6,168.2	24.89	248.785		
7,024.2	7,014.9	6,934.9	6,934.9	13.6	12.1	-41.91	5,013.9	-4,059.9	6,192.1	6,167.1	24.98	247.877		
7,050.0	7,040.7	6,960.7	6,960.7	13.7	12.1	-43.53	5,013.9	-4,059.9	6,191.4	6,166.3	25.07	246.933		
7,062.6	7,053.3	6,973.3	6,973.3	13.7	12.2	-89.98	5,013.9	-4,059.9	6,191.3	6,166.2	25.11	246.555 CC, ES		
7,100.0	7,090.7	7,010.7	7,010.7	13.7	12.2	139.81	5,013.9	-4,059.9	6,192.1	6,166.9	25.21	245.629		
7,150.0	7,140.5	7,060.5	7,060.5	13.8	12.3	139.16	5,013.9	-4,059.9	6,195.3	6,170.1	25.29	244.961		
7,200.0	7,189.9	7,109.9	7,109.9	13.8	12.4	138.75	5,013.9	-4,059.9	6,201.2	6,175.9	25.32	244.901		
7,250.0	7,238.6	7,158.6	7,158.6	13.8	12.5	138.30	5,013.9	-4,059.9	6,209.7	6,184.4	25.30	245.413		
7,300.0	7,286.4	7,206.4	7,206.4	13.7	12.6	137.74	5,013.9	-4,059.9	6,220.8	6,195.6	25.24	246.448		
7,350.0	7,333.1	7,253.1	7,253.1	13.7	12.7	137.06	5,013.9	-4,059.9	6,234.4	6,209.2	25.14	247.941		
7,400.0	7,378.5	7,298.5	7,298.5	13.6	12.7	136.24	5,013.9	-4,059.9	6,250.4	6,225.4	25.02	249.808		
7,450.0	7,422.2	7,342.2	7,342.2	13.6	12.8	135.27	5,013.9	-4,059.9	6,268.8	6,243.9	24.88	251.939		
7,500.0	7,464.1	7,384.1	7,384.1	13.5	12.9	134.12	5,013.9	-4,059.9	6,289.6	6,264.8	24.74	254.196		
7,550.0	7,504.1	7,424.1	7,424.1	13.5	13.0	132.79	5,013.9	-4,059.9	6,312.5	6,287.9	24.62	256.408		
7,600.0	7,541.8	7,461.8	7,461.8	13.5	13.0	131.24	5,013.9	-4,059.9	6,337.7	6,313.1	24.53	258.376		
7,650.0	7,577.2	7,497.2	7,497.2	13.4	13.1	129.47	5,013.9	-4,059.9	6,364.8	6,340.3	24.49	259.877		
7,700.0	7,610.0	7,530.0	7,530.0	13.5	13.1	127.44	5,013.9	-4,059.9	6,393.9	6,369.4	24.53	260.681		
7,750.0	7,640.2	7,560.2	7,560.2	13.5	13.2	125.13	5,013.9	-4,059.9	6,424.8	6,400.1	24.66	260.583		
7,800.0	7,667.4	7,587.4	7,587.4	13.6	13.2	122.50	5,013.9	-4,059.9	6,457.3	6,432.4	24.89	259.433		
7,850.0	7,691.7	7,611.7	7,611.7	13.7	13.3	119.53	5,013.9	-4,059.9	6,491.3	6,466.1	25.24	257.179		
7,900.0	7,712.8	7,632.8	7,632.8	13.9	13.3	116.20	5,013.9	-4,059.9	6,526.7	6,501.0	25.71	253.892		
7,950.0	7,730.8	7,650.8	7,650.8	14.1	13.4	112.48	5,013.9	-4,059.9	6,563.2	6,537.0	26.28	249.781		
8,000.0	7,745.5	7,665.5	7,665.5	14.4	13.4	108.37	5,013.9	-4,059.9	6,600.8	6,573.9	26.92	245.177		
8,050.0	7,756.7	7,676.7	7,676.7	14.7	13.4	103.90	5,013.9	-4,059.9	6,639.3	6,611.7	27.61	240.491		
8,100.0	7,764.6	7,684.6	7,684.6	15.1	13.4	99.08	5,013.9	-4,059.9	6,678.4	6,650.1	28.28	236.159		
8,150.0	7,769.0	7,689.0	7,689.0	15.5	13.4	94.00	5,013.9	-4,059.9	6,718.0	6,689.1	28.89	232.573		
8,188.1	7,770.0	7,690.0	7,690.0	15.9	13.4	90.00	5,013.9	-4,059.9	6,748.3	6,719.0	29.27	230.531		
8,200.0	7,770.0	7,690.0	7,690.0	16.0	13.4	90.00	5,013.9	-4,059.9	6,757.8	6,728.4	29.38	229.988		
8,300.0	7,770.0	7,690.0	7,690.0	17.0	13.4	90.00	5,013.9	-4,059.9	6,838.0	6,807.6	30.38	225.063		
8,400.0	7,770.0	7,690.0	7,690.0	18.1	13.4	90.00	5,013.9	-4,059.9	6,918.6	6,887.1	31.50	219.660		
8,500.0	7,770.0	7,690.0	7,690.0	19.3	13.4	90.00	5,013.9	-4,059.9	6,999.8	6,967.1	32.71	214.016		
8,600.0	7,770.0	7,690.0	7,690.0	20.6	13.4	90.00	5,013.9	-4,059.9	7,081.4	7,047.4	34.00	208.306		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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)						
8,700.0	7,770.0	7,690.0	7,690.0	21.9	13.4	90.00	5,013.9	-4,059.9	7,163.5	7,128.2	35.35	202.655		
8,800.0	7,770.0	7,690.0	7,690.0	23.3	13.4	90.00	5,013.9	-4,059.9	7,246.1	7,209.3	36.75	197.146		
8,900.0	7,770.0	7,690.0	7,690.0	24.8	13.4	90.00	5,013.9	-4,059.9	7,329.1	7,290.9	38.21	191.831		
9,000.0	7,770.0	7,690.0	7,690.0	26.3	13.4	90.00	5,013.9	-4,059.9	7,412.5	7,372.8	39.69	186.742		
9,100.0	7,770.0	7,690.0	7,690.0	27.8	13.4	90.00	5,013.9	-4,059.9	7,496.3	7,455.1	41.21	181.893		
9,200.0	7,770.0	7,690.0	7,690.0	29.3	13.4	90.00	5,013.9	-4,059.9	7,580.5	7,537.8	42.76	177.289		
9,300.0	7,770.0	7,690.0	7,690.0	30.9	13.4	90.00	5,013.9	-4,059.9	7,665.1	7,620.8	44.33	172.928		
9,400.0	7,770.0	7,690.0	7,690.0	32.5	13.4	90.00	5,013.9	-4,059.9	7,750.1	7,704.2	45.91	168.802		
9,500.0	7,770.0	7,690.0	7,690.0	34.1	13.4	90.00	5,013.9	-4,059.9	7,835.4	7,787.9	47.52	164.903		
9,600.0	7,770.0	7,690.0	7,690.0	35.7	13.4	90.00	5,013.9	-4,059.9	7,921.0	7,871.9	49.13	161.218		
9,700.0	7,770.0	7,690.0	7,690.0	37.3	13.4	90.00	5,013.9	-4,059.9	8,007.0	7,956.3	50.76	157.737		
9,800.0	7,770.0	7,690.0	7,690.0	39.0	13.4	90.00	5,013.9	-4,059.9	8,093.3	8,040.9	52.40	154.446		
9,900.0	7,770.0	7,690.0	7,690.0	40.6	13.4	90.00	5,013.9	-4,059.9	8,180.0	8,125.9	54.05	151.335		
10,000.0	7,770.0	7,690.0	7,690.0	42.3	13.4	90.00	5,013.9	-4,059.9	8,266.9	8,211.2	55.71	148.390		
10,100.0	7,770.0	7,690.0	7,690.0	44.0	13.4	90.00	5,013.9	-4,059.9	8,354.1	8,296.7	57.38	145.603		
10,200.0	7,770.0	7,690.0	7,690.0	45.6	13.4	90.00	5,013.9	-4,059.9	8,441.6	8,382.6	59.05	142.961		
10,300.0	7,770.0	7,690.0	7,690.0	47.3	13.4	90.00	5,013.9	-4,059.9	8,529.4	8,468.6	60.73	140.455		
10,400.0	7,770.0	7,690.0	7,690.0	49.0	13.4	90.00	5,013.9	-4,059.9	8,617.4	8,555.0	62.41	138.077		
10,500.0	7,770.0	7,690.0	7,690.0	50.7	13.4	90.00	5,013.9	-4,059.9	8,705.7	8,641.6	64.10	135.818		
10,600.0	7,770.0	7,690.0	7,690.0	52.4	13.4	90.00	5,013.9	-4,059.9	8,794.3	8,728.5	65.79	133.670		
10,700.0	7,770.0	7,690.0	7,690.0	54.1	13.4	90.00	5,013.9	-4,059.9	8,883.1	8,815.6	67.49	131.625		
10,800.0	7,770.0	7,690.0	7,690.0	55.8	13.4	90.00	5,013.9	-4,059.9	8,972.1	8,902.9	69.19	129.677		
10,900.0	7,770.0	7,690.0	7,690.0	57.5	13.4	90.00	5,013.9	-4,059.9	9,061.3	8,990.5	70.89	127.821		
11,000.0	7,770.0	7,690.0	7,690.0	59.2	13.4	90.00	5,013.9	-4,059.9	9,150.8	9,078.2	72.60	126.049		
11,100.0	7,770.0	7,690.0	7,690.0	60.9	13.4	90.00	5,013.9	-4,059.9	9,240.5	9,166.2	74.31	124.357		
11,200.0	7,770.0	7,690.0	7,690.0	62.6	13.4	90.00	5,013.9	-4,059.9	9,330.4	9,254.4	76.02	122.740		
11,300.0	7,770.0	7,690.0	7,690.0	64.3	13.4	90.00	5,013.9	-4,059.9	9,420.5	9,342.8	77.73	121.193		
11,400.0	7,770.0	7,690.0	7,690.0	66.0	13.4	90.00	5,013.9	-4,059.9	9,510.8	9,431.4	79.45	119.712		
11,500.0	7,770.0	7,690.0	7,690.0	67.7	13.4	90.00	5,013.9	-4,059.9	9,601.3	9,520.2	81.17	118.293		
11,600.0	7,770.0	7,690.0	7,690.0	69.5	13.4	90.00	5,013.9	-4,059.9	9,692.0	9,609.1	82.89	116.933		
11,700.0	7,770.0	7,690.0	7,690.0	71.2	13.4	90.00	5,013.9	-4,059.9	9,782.9	9,698.3	84.61	115.628		
11,800.0	7,770.0	7,690.0	7,690.0	72.9	13.4	90.00	5,013.9	-4,059.9	9,873.9	9,787.6	86.33	114.375		
11,900.0	7,770.0	7,690.0	7,690.0	74.6	13.4	90.00	5,013.9	-4,059.9	9,965.1	9,877.1	88.05	113.171 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-36.45	3,707.4	-2,738.3	4,609.6					
100.0	100.0	26.0	26.0	0.2	0.0	-36.45	3,707.4	-2,738.3	4,609.0	4,608.8	0.20	N/A		
200.0	200.0	126.0	126.0	0.3	0.2	-36.45	3,707.4	-2,738.3	4,609.0	4,608.5	0.55	8,433.929		
300.0	300.0	226.0	226.0	0.5	0.4	-36.45	3,707.4	-2,738.3	4,609.0	4,608.1	0.90	5,146.586		
400.0	400.0	326.0	326.0	0.7	0.6	-36.45	3,707.4	-2,738.3	4,609.0	4,607.8	1.24	3,703.176		
500.0	500.0	426.0	426.0	0.8	0.7	-36.45	3,707.4	-2,738.3	4,609.0	4,607.4	1.59	2,892.068		
550.0	550.0	476.0	476.0	0.9	0.8	-36.45	3,707.4	-2,738.3	4,609.0	4,607.2	1.77	2,606.605		
600.0	600.0	526.0	526.0	1.0	0.9	-37.29	3,707.4	-2,738.3	4,608.8	4,606.9	1.94	2,372.370		
700.0	700.0	626.0	626.0	1.2	1.1	-37.31	3,707.4	-2,738.3	4,607.5	4,605.2	2.29	2,010.319		
800.0	799.9	725.9	725.9	1.4	1.3	-37.35	3,707.4	-2,738.3	4,604.7	4,602.0	2.64	1,742.843		
861.1	860.9	786.9	786.9	1.5	1.4	-37.39	3,707.4	-2,738.3	4,602.3	4,599.4	2.86	1,611.077		
900.0	899.8	825.8	825.8	1.6	1.4	-37.41	3,707.4	-2,738.3	4,600.6	4,597.6	2.99	1,536.593		
1,000.0	999.6	925.6	925.6	1.8	1.6	-37.45	3,707.4	-2,738.3	4,596.3	4,593.0	3.35	1,372.965		
1,100.0	1,099.5	1,025.5	1,025.5	1.9	1.8	-37.49	3,707.4	-2,738.3	4,592.0	4,588.3	3.70	1,240.328		
1,200.0	1,199.3	1,125.3	1,125.3	2.1	2.0	-37.53	3,707.4	-2,738.3	4,587.7	4,583.6	4.06	1,130.697		
1,300.0	1,299.2	1,225.2	1,225.2	2.3	2.1	-37.57	3,707.4	-2,738.3	4,583.4	4,579.0	4.41	1,038.599		
1,400.0	1,399.1	1,325.1	1,325.1	2.5	2.3	-37.61	3,707.4	-2,738.3	4,579.1	4,574.3	4.77	960.160		
1,500.0	1,498.9	1,424.9	1,424.9	2.7	2.5	-37.65	3,707.4	-2,738.3	4,574.8	4,569.7	5.13	892.565		
1,600.0	1,598.8	1,524.8	1,524.8	2.9	2.7	-37.69	3,707.4	-2,738.3	4,570.5	4,565.0	5.48	833.719		
1,700.0	1,698.6	1,624.6	1,624.6	3.1	2.8	-37.74	3,707.4	-2,738.3	4,566.2	4,560.4	5.84	782.032		
1,800.0	1,798.5	1,724.5	1,724.5	3.3	3.0	-37.78	3,707.4	-2,738.3	4,561.9	4,555.7	6.20	736.277		
1,900.0	1,898.3	1,824.3	1,824.3	3.5	3.2	-37.82	3,707.4	-2,738.3	4,557.6	4,551.1	6.55	695.490		
2,000.0	1,998.2	1,924.2	1,924.2	3.7	3.4	-37.86	3,707.4	-2,738.3	4,553.3	4,546.4	6.91	658.907		
2,100.0	2,098.0	2,024.0	2,024.0	3.9	3.5	-37.90	3,707.4	-2,738.3	4,549.0	4,541.8	7.27	625.910		
2,200.0	2,197.9	2,123.9	2,123.9	4.1	3.7	-37.95	3,707.4	-2,738.3	4,544.8	4,537.1	7.63	595.998		
2,300.0	2,297.7	2,223.7	2,223.7	4.3	3.9	-37.99	3,707.4	-2,738.3	4,540.5	4,532.5	7.98	568.759		
2,400.0	2,397.6	2,323.6	2,323.6	4.5	4.1	-38.03	3,707.4	-2,738.3	4,536.2	4,527.9	8.34	543.850		
2,500.0	2,497.4	2,423.4	2,423.4	4.7	4.2	-38.07	3,707.4	-2,738.3	4,531.9	4,523.2	8.70	520.985		
2,600.0	2,597.3	2,523.3	2,523.3	4.9	4.4	-38.11	3,707.4	-2,738.3	4,527.6	4,518.6	9.06	499.922		
2,700.0	2,697.1	2,623.1	2,623.1	5.1	4.6	-38.16	3,707.4	-2,738.3	4,523.4	4,514.0	9.41	480.458		
2,800.0	2,797.0	2,723.0	2,723.0	5.3	4.8	-38.20	3,707.4	-2,738.3	4,519.1	4,509.3	9.77	462.416		
2,900.0	2,896.8	2,822.8	2,822.8	5.5	4.9	-38.24	3,707.4	-2,738.3	4,514.8	4,504.7	10.13	445.647		
3,000.0	2,996.7	2,922.7	2,922.7	5.7	5.1	-38.28	3,707.4	-2,738.3	4,510.6	4,500.1	10.49	430.021		
3,100.0	3,096.5	3,022.5	3,022.5	5.9	5.3	-38.33	3,707.4	-2,738.3	4,506.3	4,495.5	10.85	415.425		
3,200.0	3,196.4	3,122.4	3,122.4	6.1	5.4	-38.37	3,707.4	-2,738.3	4,502.1	4,490.9	11.21	401.760		
3,300.0	3,296.3	3,222.3	3,222.3	6.3	5.6	-38.41	3,707.4	-2,738.3	4,497.8	4,486.2	11.56	388.940		
3,400.0	3,396.1	3,322.1	3,322.1	6.5	5.8	-38.46	3,707.4	-2,738.3	4,493.6	4,481.6	11.92	376.890		
3,500.0	3,496.0	3,422.0	3,422.0	6.7	6.0	-38.50	3,707.4	-2,738.3	4,489.3	4,477.0	12.28	365.541		
3,600.0	3,595.8	3,521.8	3,521.8	6.9	6.1	-38.54	3,707.4	-2,738.3	4,485.1	4,472.4	12.64	354.835		
3,700.0	3,695.7	3,621.7	3,621.7	7.0	6.3	-38.59	3,707.4	-2,738.3	4,480.8	4,467.8	13.00	344.719		
3,800.0	3,795.5	3,721.5	3,721.5	7.2	6.5	-38.63	3,707.4	-2,738.3	4,476.6	4,463.2	13.36	335.144		
3,900.0	3,895.4	3,821.4	3,821.4	7.4	6.7	-38.67	3,707.4	-2,738.3	4,472.3	4,458.6	13.72	326.070		
4,000.0	3,995.2	3,921.2	3,921.2	7.6	6.8	-38.72	3,707.4	-2,738.3	4,468.1	4,454.0	14.07	317.457		
4,100.0	4,095.1	4,021.1	4,021.1	7.8	7.0	-38.76	3,707.4	-2,738.3	4,463.9	4,449.4	14.43	309.271		
4,200.0	4,194.9	4,120.9	4,120.9	8.0	7.2	-38.80	3,707.4	-2,738.3	4,459.6	4,444.8	14.79	301.482		
4,300.0	4,294.8	4,220.8	4,220.8	8.2	7.4	-38.85	3,707.4	-2,738.3	4,455.4	4,440.2	15.15	294.061		
4,400.0	4,394.6	4,320.6	4,320.6	8.4	7.5	-38.89	3,707.4	-2,738.3	4,451.2	4,435.6	15.51	286.983		
4,500.0	4,494.5	4,420.5	4,420.5	8.6	7.7	-38.93	3,707.4	-2,738.3	4,446.9	4,431.1	15.87	280.224		
4,600.0	4,594.3	4,520.3	4,520.3	8.8	7.9	-38.98	3,707.4	-2,738.3	4,442.7	4,426.5	16.23	273.764		
4,700.0	4,694.2	4,620.2	4,620.2	9.0	8.1	-39.02	3,707.4	-2,738.3	4,438.5	4,421.9	16.59	267.583		
4,800.0	4,794.0	4,720.0	4,720.0	9.2	8.2	-39.07	3,707.4	-2,738.3	4,434.3	4,417.3	16.95	261.663		
4,900.0	4,893.9	4,819.9	4,819.9	9.4	8.4	-39.11	3,707.4	-2,738.3	4,430.1	4,412.8	17.31	255.988		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	4,919.7	4,919.7	9.6	8.6	-39.15	3,707.4	-2,738.3	4,425.8	4,408.2	17.66	250.544		
5,100.0	5,093.6	5,019.6	5,019.6	9.8	8.8	-39.20	3,707.4	-2,738.3	4,421.6	4,403.6	18.02	245.316		
5,200.0	5,193.5	5,119.5	5,119.5	10.0	8.9	-39.24	3,707.4	-2,738.3	4,417.4	4,399.1	18.38	240.293		
5,300.0	5,293.3	5,219.3	5,219.3	10.2	9.1	-39.29	3,707.4	-2,738.3	4,413.2	4,394.5	18.74	235.461		
5,400.0	5,393.2	5,319.2	5,319.2	10.4	9.3	-39.33	3,707.4	-2,738.3	4,409.0	4,389.9	19.10	230.811		
5,500.0	5,493.0	5,419.0	5,419.0	10.6	9.5	-39.38	3,707.4	-2,738.3	4,404.8	4,385.4	19.46	226.332		
5,600.0	5,592.9	5,518.9	5,518.9	10.8	9.6	-39.42	3,707.4	-2,738.3	4,400.6	4,380.8	19.82	222.015		
5,700.0	5,692.7	5,618.7	5,618.7	11.0	9.8	-39.47	3,707.4	-2,738.3	4,396.4	4,376.3	20.18	217.852		
5,800.0	5,792.6	5,718.6	5,718.6	11.2	10.0	-39.51	3,707.4	-2,738.3	4,392.3	4,371.7	20.54	213.835		
5,900.0	5,892.4	5,818.4	5,818.4	11.4	10.2	-39.56	3,707.4	-2,738.3	4,388.1	4,367.2	20.90	209.955		
6,000.0	5,992.3	5,918.3	5,918.3	11.6	10.3	-39.60	3,707.4	-2,738.3	4,383.9	4,362.6	21.26	206.206		
6,100.0	6,092.1	6,018.1	6,018.1	11.8	10.5	-39.65	3,707.4	-2,738.3	4,379.7	4,358.1	21.62	202.581		
6,200.0	6,192.0	6,118.0	6,118.0	12.0	10.7	-39.69	3,707.4	-2,738.3	4,375.5	4,353.5	21.98	199.075		
6,300.0	6,291.8	6,217.8	6,217.8	12.2	10.9	-39.74	3,707.4	-2,738.3	4,371.3	4,349.0	22.34	195.682		
6,400.0	6,391.7	6,317.7	6,317.7	12.4	11.0	-39.78	3,707.4	-2,738.3	4,367.2	4,344.5	22.70	192.396		
6,500.0	6,491.5	6,417.5	6,417.5	12.6	11.2	-39.83	3,707.4	-2,738.3	4,363.0	4,339.9	23.06	189.212		
6,600.0	6,591.4	6,517.4	6,517.4	12.8	11.4	-39.87	3,707.4	-2,738.3	4,358.8	4,335.4	23.42	186.126		
6,700.0	6,691.2	6,617.2	6,617.2	13.0	11.5	-39.92	3,707.4	-2,738.3	4,354.7	4,330.9	23.78	183.133		
6,800.0	6,791.1	6,717.1	6,717.1	13.2	11.7	-39.97	3,707.4	-2,738.3	4,350.5	4,326.4	24.14	180.230		
6,900.0	6,890.9	6,816.9	6,816.9	13.4	11.9	-40.01	3,707.4	-2,738.3	4,346.3	4,321.8	24.50	177.411		
7,000.0	6,990.8	6,916.8	6,916.8	13.6	12.1	-40.06	3,707.4	-2,738.3	4,342.2	4,317.3	24.86	174.674		
7,024.2	7,014.9	6,940.9	6,940.9	13.6	12.1	-40.07	3,707.4	-2,738.3	4,341.2	4,316.2	24.95	174.024		
7,050.0	7,040.7	6,966.7	6,966.7	13.7	12.2	-41.69	3,707.4	-2,738.3	4,340.5	4,315.4	25.04	173.348		
7,062.6	7,053.3	6,979.3	6,979.3	13.7	12.2	-90.00	3,707.4	-2,738.3	4,340.4	4,315.3	25.08	173.081	CC, ES	
7,100.0	7,090.7	7,016.7	7,016.7	13.7	12.2	141.65	3,707.4	-2,738.3	4,341.1	4,316.0	25.17	172.445		
7,150.0	7,140.5	7,066.5	7,066.5	13.8	12.3	141.01	3,707.4	-2,738.3	4,344.5	4,319.3	25.25	172.036		
7,200.0	7,189.9	7,115.9	7,115.9	13.8	12.4	140.63	3,707.4	-2,738.3	4,350.6	4,325.3	25.28	172.102		
7,250.0	7,238.6	7,164.6	7,164.6	13.8	12.5	140.20	3,707.4	-2,738.3	4,359.3	4,334.0	25.25	172.621		
7,300.0	7,286.4	7,212.4	7,212.4	13.7	12.6	139.68	3,707.4	-2,738.3	4,370.7	4,345.5	25.18	173.559		
7,350.0	7,333.1	7,259.1	7,259.1	13.7	12.7	139.05	3,707.4	-2,738.3	4,384.6	4,359.5	25.07	174.874		
7,400.0	7,378.5	7,304.5	7,304.5	13.6	12.7	138.28	3,707.4	-2,738.3	4,401.1	4,376.2	24.93	176.511		
7,450.0	7,422.2	7,348.2	7,348.2	13.6	12.8	137.36	3,707.4	-2,738.3	4,420.1	4,395.3	24.78	178.394		
7,500.0	7,464.1	7,390.1	7,390.1	13.5	12.9	136.28	3,707.4	-2,738.3	4,441.5	4,416.8	24.62	180.427		
7,550.0	7,504.1	7,430.1	7,430.1	13.5	13.0	135.01	3,707.4	-2,738.3	4,465.1	4,440.7	24.47	182.488		
7,600.0	7,541.8	7,467.8	7,467.8	13.5	13.0	133.53	3,707.4	-2,738.3	4,491.1	4,466.7	24.35	184.426		
7,650.0	7,577.2	7,503.2	7,503.2	13.4	13.1	131.82	3,707.4	-2,738.3	4,519.1	4,494.8	24.29	186.068		
7,700.0	7,610.0	7,536.0	7,536.0	13.5	13.2	129.83	3,707.4	-2,738.3	4,549.1	4,524.8	24.30	187.227		
7,750.0	7,640.2	7,566.2	7,566.2	13.5	13.2	127.55	3,707.4	-2,738.3	4,581.0	4,556.6	24.40	187.721		
7,800.0	7,667.4	7,593.4	7,593.4	13.6	13.3	124.92	3,707.4	-2,738.3	4,614.7	4,590.0	24.62	187.404		
7,850.0	7,691.7	7,617.7	7,617.7	13.7	13.3	121.91	3,707.4	-2,738.3	4,649.9	4,624.9	24.97	186.196		
7,900.0	7,712.8	7,638.8	7,638.8	13.9	13.3	118.48	3,707.4	-2,738.3	4,686.5	4,661.1	25.45	184.119		
7,950.0	7,730.8	7,656.8	7,656.8	14.1	13.4	114.59	3,707.4	-2,738.3	4,724.4	4,698.4	26.06	181.316		
8,000.0	7,745.5	7,671.5	7,671.5	14.4	13.4	110.23	3,707.4	-2,738.3	4,763.4	4,736.7	26.75	178.048		
8,050.0	7,756.7	7,682.7	7,682.7	14.7	13.4	105.39	3,707.4	-2,738.3	4,803.3	4,775.8	27.50	174.667		
8,100.0	7,764.6	7,690.6	7,690.6	15.1	13.4	100.12	3,707.4	-2,738.3	4,843.9	4,815.7	28.23	171.568		
8,150.0	7,769.0	7,695.0	7,695.0	15.5	13.4	94.47	3,707.4	-2,738.3	4,885.1	4,856.2	28.88	169.127		
8,188.1	7,770.0	7,696.0	7,696.0	15.9	13.4	90.00	3,707.4	-2,738.3	4,916.6	4,887.3	29.28	167.897		
8,200.0	7,770.0	7,696.0	7,696.0	16.0	13.4	90.00	3,707.4	-2,738.3	4,926.5	4,897.1	29.39	167.603		
8,300.0	7,770.0	7,696.0	7,696.0	17.0	13.4	90.00	3,707.4	-2,738.3	5,009.9	4,979.5	30.39	164.836		
8,400.0	7,770.0	7,696.0	7,696.0	18.1	13.4	90.00	3,707.4	-2,738.3	5,093.8	5,062.3	31.51	161.670		
8,500.0	7,770.0	7,696.0	7,696.0	19.3	13.4	90.00	3,707.4	-2,738.3	5,178.4	5,145.6	32.72	158.275		
8,600.0	7,770.0	7,696.0	7,696.0	20.6	13.4	90.00	3,707.4	-2,738.3	5,263.4	5,229.4	34.01	154.780		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,700.0	7,770.0	7,696.0	7,696.0	21.9	13.4	90.00	3,707.4	-2,738.3	5,349.0	5,313.7	35.36	151.278		
8,800.0	7,770.0	7,696.0	7,696.0	23.3	13.4	90.00	3,707.4	-2,738.3	5,435.1	5,398.3	36.77	147.832		
8,900.0	7,770.0	7,696.0	7,696.0	24.8	13.4	90.00	3,707.4	-2,738.3	5,521.7	5,483.4	38.22	144.484		
9,000.0	7,770.0	7,696.0	7,696.0	26.3	13.4	90.00	3,707.4	-2,738.3	5,608.7	5,568.9	39.70	141.261		
9,100.0	7,770.0	7,696.0	7,696.0	27.8	13.4	90.00	3,707.4	-2,738.3	5,696.1	5,654.9	41.22	138.176		
9,200.0	7,770.0	7,696.0	7,696.0	29.3	13.4	90.00	3,707.4	-2,738.3	5,783.9	5,741.1	42.77	135.238		
9,300.0	7,770.0	7,696.0	7,696.0	30.9	13.4	90.00	3,707.4	-2,738.3	5,872.1	5,827.8	44.34	132.446		
9,400.0	7,770.0	7,696.0	7,696.0	32.5	13.4	90.00	3,707.4	-2,738.3	5,960.7	5,914.8	45.92	129.799		
9,500.0	7,770.0	7,696.0	7,696.0	34.1	13.4	90.00	3,707.4	-2,738.3	6,049.7	6,002.2	47.53	127.293		
9,600.0	7,770.0	7,696.0	7,696.0	35.7	13.4	90.00	3,707.4	-2,738.3	6,139.0	6,089.8	49.14	124.921		
9,700.0	7,770.0	7,696.0	7,696.0	37.3	13.4	90.00	3,707.4	-2,738.3	6,228.6	6,177.8	50.77	122.677		
9,800.0	7,770.0	7,696.0	7,696.0	39.0	13.4	90.00	3,707.4	-2,738.3	6,318.5	6,266.1	52.41	120.553		
9,900.0	7,770.0	7,696.0	7,696.0	40.6	13.4	90.00	3,707.4	-2,738.3	6,408.7	6,354.7	54.06	118.543		
10,000.0	7,770.0	7,696.0	7,696.0	42.3	13.4	90.00	3,707.4	-2,738.3	6,499.2	6,443.5	55.72	116.639		
10,100.0	7,770.0	7,696.0	7,696.0	44.0	13.4	90.00	3,707.4	-2,738.3	6,590.0	6,532.6	57.39	114.836		
10,200.0	7,770.0	7,696.0	7,696.0	45.6	13.4	90.00	3,707.4	-2,738.3	6,681.1	6,622.0	59.06	113.126		
10,300.0	7,770.0	7,696.0	7,696.0	47.3	13.4	90.00	3,707.4	-2,738.3	6,772.4	6,711.6	60.74	111.503		
10,400.0	7,770.0	7,696.0	7,696.0	49.0	13.4	90.00	3,707.4	-2,738.3	6,863.9	6,801.5	62.42	109.963		
10,500.0	7,770.0	7,696.0	7,696.0	50.7	13.4	90.00	3,707.4	-2,738.3	6,955.7	6,891.6	64.11	108.498		
10,600.0	7,770.0	7,696.0	7,696.0	52.4	13.4	90.00	3,707.4	-2,738.3	7,047.7	6,981.9	65.80	107.105		
10,700.0	7,770.0	7,696.0	7,696.0	54.1	13.4	90.00	3,707.4	-2,738.3	7,139.9	7,072.4	67.50	105.780		
10,800.0	7,770.0	7,696.0	7,696.0	55.8	13.4	90.00	3,707.4	-2,738.3	7,232.3	7,163.1	69.20	104.516		
10,900.0	7,770.0	7,696.0	7,696.0	57.5	13.4	90.00	3,707.4	-2,738.3	7,325.0	7,254.1	70.90	103.312		
11,000.0	7,770.0	7,696.0	7,696.0	59.2	13.4	90.00	3,707.4	-2,738.3	7,417.8	7,345.2	72.61	102.162		
11,100.0	7,770.0	7,696.0	7,696.0	60.9	13.4	90.00	3,707.4	-2,738.3	7,510.8	7,436.5	74.32	101.064		
11,200.0	7,770.0	7,696.0	7,696.0	62.6	13.4	90.00	3,707.4	-2,738.3	7,604.0	7,527.9	76.03	100.015		
11,300.0	7,770.0	7,696.0	7,696.0	64.3	13.4	90.00	3,707.4	-2,738.3	7,697.3	7,619.6	77.74	99.011		
11,400.0	7,770.0	7,696.0	7,696.0	66.0	13.4	90.00	3,707.4	-2,738.3	7,790.8	7,711.4	79.46	98.049		
11,500.0	7,770.0	7,696.0	7,696.0	67.7	13.4	90.00	3,707.4	-2,738.3	7,884.5	7,803.3	81.18	97.128		
11,600.0	7,770.0	7,696.0	7,696.0	69.5	13.4	90.00	3,707.4	-2,738.3	7,978.3	7,895.4	82.90	96.245		
11,700.0	7,770.0	7,696.0	7,696.0	71.2	13.4	90.00	3,707.4	-2,738.3	8,072.3	7,987.7	84.62	95.398		
11,800.0	7,770.0	7,696.0	7,696.0	72.9	13.4	90.00	3,707.4	-2,738.3	8,166.4	8,080.1	86.34	94.584		
11,900.0	7,770.0	7,696.0	7,696.0	74.6	13.4	90.00	3,707.4	-2,738.3	8,260.7	8,172.6	88.06	93.803		
12,000.0	7,770.0	7,696.0	7,696.0	76.4	13.4	90.00	3,707.4	-2,738.3	8,355.0	8,265.3	89.79	93.051		
12,100.0	7,770.0	7,696.0	7,696.0	78.1	13.4	90.00	3,707.4	-2,738.3	8,449.6	8,358.0	91.52	92.328		
12,200.0	7,770.0	7,696.0	7,696.0	79.8	13.4	90.00	3,707.4	-2,738.3	8,544.2	8,451.0	93.25	91.632		
12,300.0	7,770.0	7,696.0	7,696.0	81.5	13.4	90.00	3,707.4	-2,738.3	8,639.0	8,544.0	94.97	90.961		
12,400.0	7,770.0	7,696.0	7,696.0	83.3	13.4	90.00	3,707.4	-2,738.3	8,733.8	8,637.1	96.70	90.315		
12,500.0	7,770.0	7,696.0	7,696.0	85.0	13.4	90.00	3,707.4	-2,738.3	8,828.8	8,730.4	98.44	89.691		
12,600.0	7,770.0	7,696.0	7,696.0	86.7	13.4	90.00	3,707.4	-2,738.3	8,923.9	8,823.8	100.17	89.090		
12,700.0	7,770.0	7,696.0	7,696.0	88.5	13.4	90.00	3,707.4	-2,738.3	9,019.1	8,917.2	101.90	88.509		
12,800.0	7,770.0	7,696.0	7,696.0	90.2	13.4	90.00	3,707.4	-2,738.3	9,114.5	9,010.8	103.64	87.948		
12,900.0	7,770.0	7,696.0	7,696.0	91.9	13.4	90.00	3,707.4	-2,738.3	9,209.9	9,104.5	105.37	87.405		
13,000.0	7,770.0	7,696.0	7,696.0	93.7	13.4	90.00	3,707.4	-2,738.3	9,305.4	9,198.3	107.11	86.881		
13,100.0	7,770.0	7,696.0	7,696.0	95.4	13.4	90.00	3,707.4	-2,738.3	9,401.0	9,292.1	108.84	86.373		
13,200.0	7,770.0	7,696.0	7,696.0	97.1	13.4	90.00	3,707.4	-2,738.3	9,496.7	9,386.1	110.58	85.882		
13,300.0	7,770.0	7,696.0	7,696.0	98.9	13.4	90.00	3,707.4	-2,738.3	9,592.4	9,480.1	112.32	85.407		
13,400.0	7,770.0	7,696.0	7,696.0	100.6	13.4	90.00	3,707.4	-2,738.3	9,688.3	9,574.3	114.05	84.946		
13,500.0	7,770.0	7,696.0	7,696.0	102.4	13.4	90.00	3,707.4	-2,738.3	9,784.3	9,668.5	115.79	84.499		
13,600.0	7,770.0	7,696.0	7,696.0	104.1	13.4	90.00	3,707.4	-2,738.3	9,880.3	9,762.8	117.53	84.066		
13,700.0	7,770.0	7,696.0	7,696.0	105.8	13.4	90.00	3,707.4	-2,738.3	9,976.4	9,857.1	119.27	83.646 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	-95.91	-297.5	-2,871.4	2,886.9					
100.0	100.0	114.7	114.7	0.2	0.0	-95.92	-297.6	-2,871.7	2,887.1	2,887.0	0.15	N/A		
200.0	200.0	202.2	202.2	0.3	0.0	-95.92	-297.9	-2,872.3	2,887.9	2,887.6	0.33	8,847.150		
300.0	300.0	289.7	289.7	0.5	0.0	-95.93	-298.4	-2,873.4	2,889.1	2,888.6	0.50	5,766.996		
400.0	400.0	377.2	377.2	0.7	0.0	-95.94	-299.0	-2,874.7	2,890.8	2,890.1	0.68	4,279.272		
500.0	500.0	464.7	464.7	0.8	0.0	-95.95	-299.8	-2,876.5	2,892.8	2,892.0	0.85	3,403.024		
550.0	550.0	508.4	508.4	0.9	0.0	-95.96	-300.3	-2,877.5	2,894.0	2,893.1	0.94	3,087.453		
600.0	600.0	552.2	552.1	1.0	0.0	-96.79	-300.8	-2,878.6	2,895.4	2,894.3	1.02	2,825.696		
700.0	700.0	639.6	639.5	1.2	0.0	-96.81	-301.9	-2,881.1	2,898.5	2,897.3	1.20	2,414.736		
800.0	799.9	726.9	726.7	1.4	0.0	-96.85	-303.3	-2,883.9	2,902.3	2,900.9	1.38	2,103.545		
861.1	860.9	780.2	779.9	1.5	0.0	-96.89	-304.1	-2,885.8	2,904.9	2,903.5	1.49	1,947.067		
900.0	899.8	814.1	813.8	1.6	0.0	-96.93	-304.7	-2,887.1	2,906.7	2,905.2	1.56	1,858.311		
1,000.0	999.6	903.0	902.7	1.8	0.0	-97.05	-306.4	-2,890.7	2,911.6	2,909.9	1.75	1,662.228		
1,100.0	1,099.5	1,009.4	1,008.9	1.9	0.0	-97.20	-308.6	-2,895.1	2,916.6	2,914.7	1.94	1,502.477		
1,200.0	1,199.3	1,118.0	1,117.4	2.1	0.0	-97.35	-310.8	-2,899.2	2,921.4	2,919.2	2.13	1,370.019		
1,300.0	1,299.2	1,226.6	1,226.0	2.3	0.0	-97.50	-313.2	-2,903.0	2,925.8	2,923.5	2.32	1,258.600		
1,400.0	1,399.1	1,335.3	1,334.6	2.5	0.0	-97.65	-315.6	-2,906.4	2,929.9	2,927.4	2.52	1,163.682		
1,500.0	1,498.9	1,444.0	1,443.2	2.7	0.0	-97.81	-318.0	-2,909.5	2,933.8	2,931.0	2.71	1,081.909		
1,600.0	1,598.8	1,552.6	1,551.8	2.9	0.0	-97.96	-320.6	-2,912.3	2,937.3	2,934.4	2.91	1,010.761		
1,700.0	1,698.6	1,657.2	1,656.3	3.1	0.0	-98.12	-323.1	-2,914.6	2,940.6	2,937.5	3.10	948.324		
1,800.0	1,798.5	1,760.1	1,759.1	3.3	0.0	-98.26	-325.2	-2,916.9	2,943.8	2,940.5	3.30	893.143		
1,900.0	1,898.3	1,863.0	1,862.0	3.5	0.0	-98.40	-327.1	-2,919.1	2,947.0	2,943.5	3.49	844.036		
2,000.0	1,998.2	1,965.9	1,964.9	3.7	0.0	-98.53	-328.8	-2,921.2	2,950.0	2,946.3	3.69	800.058		
2,100.0	2,098.0	2,068.9	2,067.8	3.9	0.0	-98.66	-330.2	-2,923.2	2,952.9	2,949.1	3.88	760.450		
2,200.0	2,197.9	2,171.9	2,170.8	4.1	0.0	-98.78	-331.3	-2,925.1	2,955.8	2,951.7	4.08	724.593		
2,300.0	2,297.7	2,275.0	2,273.9	4.3	0.0	-98.90	-332.2	-2,927.0	2,958.5	2,954.3	4.28	691.979		
2,400.0	2,397.6	2,378.1	2,377.0	4.5	0.0	-99.02	-332.8	-2,928.8	2,961.2	2,956.7	4.47	662.186		
2,500.0	2,497.4	2,477.5	2,476.4	4.7	0.0	-99.12	-333.1	-2,930.5	2,963.8	2,959.1	4.67	634.875		
2,600.0	2,597.3	2,576.7	2,575.5	4.9	0.0	-99.21	-332.7	-2,932.3	2,966.4	2,961.6	4.86	609.763		
2,700.0	2,697.1	2,675.8	2,674.6	5.1	0.0	-99.29	-331.9	-2,934.2	2,969.1	2,964.0	5.06	586.597		
2,800.0	2,797.0	2,775.0	2,773.8	5.3	0.0	-99.36	-330.5	-2,936.3	2,971.8	2,966.5	5.26	565.159		
2,900.0	2,896.8	3,268.0	3,265.5	5.5	0.0	-99.68	-316.6	-2,912.3	2,965.7	2,960.2	5.45	543.706		
3,000.0	2,996.7	3,335.4	3,332.4	5.7	0.0	-99.71	-313.6	-2,905.3	2,955.7	2,950.1	5.65	522.994		
3,100.0	3,096.5	3,432.7	3,429.2	5.9	0.0	-99.77	-310.1	-2,896.0	2,946.6	2,940.7	5.85	503.822		
3,200.0	3,196.4	3,569.3	3,565.0	6.1	0.0	-99.88	-306.2	-2,881.6	2,936.6	2,930.6	6.05	485.774		
3,300.0	3,296.3	3,674.7	3,669.6	6.3	0.0	-99.96	-302.7	-2,869.6	2,925.8	2,919.5	6.24	468.715		
3,400.0	3,396.1	3,755.4	3,749.8	6.5	0.0	-100.02	-299.8	-2,860.7	2,915.3	2,908.9	6.44	452.749		
3,500.0	3,496.0	3,826.5	3,820.5	6.7	0.0	-100.06	-297.1	-2,853.5	2,905.6	2,899.0	6.64	437.843		
3,600.0	3,595.8	3,896.0	3,889.7	6.9	0.0	-100.10	-294.4	-2,847.2	2,897.0	2,890.2	6.83	423.947		
3,700.0	3,695.7	3,960.9	3,954.3	7.0	0.0	-100.14	-291.9	-2,842.0	2,889.5	2,882.4	7.03	410.987		
3,800.0	3,795.5	4,033.4	4,026.6	7.2	0.0	-100.18	-289.4	-2,837.1	2,883.1	2,875.8	7.23	398.890		
3,900.0	3,895.4	4,211.3	4,203.9	7.4	0.0	-100.25	-281.3	-2,824.4	2,876.6	2,869.2	7.42	387.435		
4,000.0	3,995.2	4,349.2	4,340.8	7.6	0.0	-100.23	-270.5	-2,811.6	2,867.1	2,859.5	7.62	376.154		
4,100.0	4,095.1	4,448.0	4,438.6	7.8	0.0	-100.16	-260.3	-2,802.2	2,857.0	2,849.2	7.82	365.356		
4,200.0	4,194.9	4,527.7	4,517.4	8.0	0.0	-100.10	-251.9	-2,795.0	2,847.4	2,839.3	8.02	355.140		
4,300.0	4,294.8	4,661.9	4,650.3	8.2	0.0	-100.00	-237.5	-2,782.9	2,837.8	2,829.6	8.22	345.418		
4,400.0	4,394.6	4,767.2	4,754.5	8.4	0.0	-99.92	-226.0	-2,772.4	2,827.1	2,818.6	8.41	336.023		
4,500.0	4,494.5	4,843.0	4,829.5	8.6	0.0	-99.87	-218.2	-2,764.9	2,816.6	2,808.0	8.61	327.095		
4,600.0	4,594.3	4,937.0	4,922.6	8.8	0.0	-99.80	-208.7	-2,756.1	2,806.8	2,798.0	8.81	318.629		
4,700.0	4,694.2	5,033.5	5,018.3	9.0	0.0	-99.74	-198.8	-2,747.4	2,797.2	2,788.2	9.01	310.566		
4,800.0	4,794.0	5,126.0	5,109.8	9.2	0.0	-99.66	-189.0	-2,739.2	2,787.6	2,778.4	9.20	302.850		
4,900.0	4,893.9	5,126.0	5,109.8	9.4	0.0	-99.66	-189.0	-2,739.2	2,780.1	2,770.7	9.40	295.683		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	5,126.0	5,109.8	9.6	0.0	-99.66	-189.0	-2,739.2	2,776.1	2,766.5	9.60	289.184		
5,059.9	5,053.6	5,126.0	5,109.8	9.7	0.0	-99.66	-189.0	-2,739.2	2,775.5	2,765.8	9.72	285.595 CC, ES		
5,100.0	5,093.6	5,126.0	5,109.8	9.8	0.0	-99.66	-189.0	-2,739.2	2,775.8	2,766.0	9.80	283.314		
5,200.0	5,193.5	5,126.0	5,109.8	10.0	0.0	-99.66	-189.0	-2,739.2	2,779.0	2,769.0	10.00	278.037		
5,300.0	5,293.3	5,126.0	5,109.8	10.2	0.0	-99.66	-189.0	-2,739.2	2,785.9	2,775.7	10.19	273.315		
5,400.0	5,393.2	5,126.0	5,109.8	10.4	0.0	-99.66	-189.0	-2,739.2	2,796.3	2,785.9	10.39	269.116		
5,500.0	5,493.0	5,126.0	5,109.8	10.6	0.0	-99.66	-189.0	-2,739.2	2,810.2	2,799.6	10.59	265.406		
5,600.0	5,592.9	5,126.0	5,109.8	10.8	0.0	-99.66	-189.0	-2,739.2	2,827.6	2,816.8	10.79	262.153		
5,700.0	5,692.7	5,126.0	5,109.8	11.0	0.0	-99.66	-189.0	-2,739.2	2,848.4	2,837.4	10.98	259.328		
5,800.0	5,792.6	5,126.0	5,109.8	11.2	0.0	-99.66	-189.0	-2,739.2	2,872.5	2,861.3	11.18	256.900		
5,900.0	5,892.4	5,126.0	5,109.8	11.4	0.0	-99.66	-189.0	-2,739.2	2,899.9	2,888.5	11.38	254.842		
6,000.0	5,992.3	5,126.0	5,109.8	11.6	0.0	-99.66	-189.0	-2,739.2	2,930.4	2,918.8	11.58	253.127		
6,100.0	6,092.1	5,126.0	5,109.8	11.8	0.0	-99.66	-189.0	-2,739.2	2,964.0	2,952.2	11.77	251.730		
6,200.0	6,192.0	5,126.0	5,109.8	12.0	0.0	-99.66	-189.0	-2,739.2	3,000.5	2,988.6	11.97	250.625		
6,300.0	6,291.8	5,126.0	5,109.8	12.2	0.0	-99.66	-189.0	-2,739.2	3,039.9	3,027.8	12.17	249.791		
6,400.0	6,391.7	5,126.0	5,109.8	12.4	0.0	-99.66	-189.0	-2,739.2	3,082.1	3,069.7	12.37	249.204		
6,500.0	6,491.5	5,126.0	5,109.8	12.6	0.0	-99.66	-189.0	-2,739.2	3,126.9	3,114.3	12.57	248.846		
6,600.0	6,591.4	5,126.0	5,109.8	12.8	0.0	-99.66	-189.0	-2,739.2	3,174.2	3,161.4	12.76	248.696		
6,700.0	6,691.2	5,126.0	5,109.8	13.0	0.0	-99.66	-189.0	-2,739.2	3,223.9	3,210.9	12.96	248.736		
6,800.0	6,791.1	5,126.0	5,109.8	13.2	0.0	-99.66	-189.0	-2,739.2	3,275.9	3,262.7	13.16	248.950		
6,900.0	6,890.9	5,126.0	5,109.8	13.4	0.0	-99.66	-189.0	-2,739.2	3,330.1	3,316.7	13.36	249.321		
7,000.0	6,990.8	5,126.0	5,109.8	13.6	0.0	-99.66	-189.0	-2,739.2	3,386.4	3,372.8	13.55	249.835		
7,024.2	7,014.9	5,126.0	5,109.8	13.6	0.0	-99.66	-189.0	-2,739.2	3,400.3	3,386.7	13.60	249.980		
7,050.0	7,040.7	5,126.0	5,109.8	13.7	0.0	-102.76	-189.0	-2,739.2	3,415.2	3,401.6	13.63	250.486		
7,100.0	7,090.7	5,126.0	5,109.8	13.7	0.0	77.84	-189.0	-2,739.2	3,444.0	3,430.4	13.67	252.027		
7,150.0	7,140.5	5,126.0	5,109.8	13.8	0.0	74.62	-189.0	-2,739.2	3,472.7	3,459.1	13.66	254.138		
7,200.0	7,189.9	5,126.0	5,109.8	13.8	0.0	71.85	-189.0	-2,739.2	3,501.2	3,487.5	13.63	256.792		
7,250.0	7,238.6	5,126.0	5,109.8	13.8	0.0	69.24	-189.0	-2,739.2	3,529.1	3,515.6	13.58	259.962		
7,300.0	7,286.4	5,126.0	5,109.8	13.7	0.0	66.77	-189.0	-2,739.2	3,556.6	3,543.1	13.49	263.613		
7,350.0	7,333.1	5,126.0	5,109.8	13.7	0.0	64.44	-189.0	-2,739.2	3,583.4	3,570.0	13.39	267.705		
7,400.0	7,378.5	5,126.0	5,109.8	13.6	0.0	62.25	-189.0	-2,739.2	3,609.3	3,596.1	13.26	272.187		
7,450.0	7,422.2	5,126.0	5,109.8	13.6	0.0	60.20	-189.0	-2,739.2	3,634.4	3,621.3	13.12	276.995		
7,500.0	7,464.1	5,126.0	5,109.8	13.5	0.0	58.31	-189.0	-2,739.2	3,658.6	3,645.6	12.97	282.051		
7,550.0	7,504.1	5,126.0	5,109.8	13.5	0.0	56.55	-189.0	-2,739.2	3,681.6	3,668.8	12.82	287.255		
7,600.0	7,541.8	5,126.0	5,109.8	13.5	0.0	54.94	-189.0	-2,739.2	3,703.4	3,690.8	12.66	292.485		
7,650.0	7,577.2	5,126.0	5,109.8	13.4	0.0	53.47	-189.0	-2,739.2	3,724.0	3,711.5	12.51	297.594		
7,700.0	7,610.0	5,126.0	5,109.8	13.5	0.0	52.14	-189.0	-2,739.2	3,743.2	3,730.9	12.38	302.409		
7,750.0	7,640.2	5,126.0	5,109.8	13.5	0.0	50.95	-189.0	-2,739.2	3,761.0	3,748.8	12.26	306.738		
7,800.0	7,667.4	5,126.0	5,109.8	13.6	0.0	49.88	-189.0	-2,739.2	3,777.4	3,765.2	12.17	310.369		
7,850.0	7,691.7	5,126.0	5,109.8	13.7	0.0	48.94	-189.0	-2,739.2	3,792.2	3,780.1	12.11	313.090		
7,900.0	7,712.8	5,126.0	5,109.8	13.9	0.0	48.11	-189.0	-2,739.2	3,805.4	3,793.3	12.09	314.701		
7,950.0	7,730.8	5,126.0	5,109.8	14.1	0.0	47.41	-189.0	-2,739.2	3,816.9	3,804.8	12.12	315.035		
8,000.0	7,745.5	5,126.0	5,109.8	14.4	0.0	46.82	-189.0	-2,739.2	3,826.8	3,814.6	12.19	313.972		
8,050.0	7,756.7	5,126.0	5,109.8	14.7	0.0	46.34	-189.0	-2,739.2	3,835.0	3,822.6	12.31	311.462		
8,100.0	7,764.6	5,126.0	5,109.8	15.1	0.0	45.97	-189.0	-2,739.2	3,841.4	3,828.9	12.49	307.524		
8,150.0	7,769.0	5,126.0	5,109.8	15.5	0.0	45.70	-189.0	-2,739.2	3,846.0	3,833.3	12.72	302.251		
8,188.1	7,770.0	5,126.0	5,109.8	15.9	0.0	45.56	-189.0	-2,739.2	3,848.3	3,835.4	12.94	297.434		
8,200.0	7,770.0	5,126.0	5,109.8	16.0	0.0	45.56	-189.0	-2,739.2	3,848.9	3,835.9	13.02	295.639		
8,300.0	7,770.0	5,126.0	5,109.8	17.0	0.0	45.56	-189.0	-2,739.2	3,855.3	3,841.5	13.74	280.597		
8,400.0	7,770.0	5,126.0	5,109.8	18.1	0.0	45.56	-189.0	-2,739.2	3,864.2	3,849.7	14.53	265.879		
8,500.0	7,770.0	5,126.0	5,109.8	19.3	0.0	45.56	-189.0	-2,739.2	3,875.7	3,860.3	15.39	251.829		
8,600.0	7,770.0	5,126.0	5,109.8	20.6	0.0	45.56	-189.0	-2,739.2	3,889.8	3,873.5	16.30	238.647		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,700.0	7,770.0	5,126.0	5,109.8	21.9	0.0	45.56	-189.0	-2,739.2	3,906.3	3,889.1	17.25	226.422		
8,800.0	7,770.0	5,126.0	5,109.8	23.3	0.0	45.56	-189.0	-2,739.2	3,925.4	3,907.1	18.24	215.172		
8,900.0	7,770.0	5,126.0	5,109.8	24.8	0.0	45.56	-189.0	-2,739.2	3,946.8	3,927.6	19.26	204.873		
9,000.0	7,770.0	5,126.0	5,109.8	26.3	0.0	45.56	-189.0	-2,739.2	3,970.7	3,950.4	20.31	195.472		
9,100.0	7,770.0	5,126.0	5,109.8	27.8	0.0	45.56	-189.0	-2,739.2	3,996.9	3,975.6	21.38	186.905		
9,200.0	7,770.0	5,126.0	5,109.8	29.3	0.0	45.56	-189.0	-2,739.2	4,025.5	4,003.0	22.48	179.103		
9,300.0	7,770.0	5,126.0	5,109.8	30.9	0.0	45.56	-189.0	-2,739.2	4,056.3	4,032.7	23.58	171.996		
9,400.0	7,770.0	5,126.0	5,109.8	32.5	0.0	45.56	-189.0	-2,739.2	4,089.3	4,064.6	24.71	165.519		
9,500.0	7,770.0	5,126.0	5,109.8	34.1	0.0	45.56	-189.0	-2,739.2	4,124.5	4,098.7	25.84	159.610		
9,600.0	7,770.0	5,126.0	5,109.8	35.7	0.0	45.56	-189.0	-2,739.2	4,161.8	4,134.8	26.99	154.213		
9,700.0	7,770.0	5,126.0	5,109.8	37.3	0.0	45.56	-189.0	-2,739.2	4,201.2	4,173.0	28.14	149.277		
9,800.0	7,770.0	5,126.0	5,109.8	39.0	0.0	45.56	-189.0	-2,739.2	4,242.5	4,213.2	29.31	144.756		
9,900.0	7,770.0	5,126.0	5,109.8	40.6	0.0	45.56	-189.0	-2,739.2	4,285.8	4,255.3	30.48	140.610		
10,000.0	7,770.0	5,126.0	5,109.8	42.3	0.0	45.56	-189.0	-2,739.2	4,330.9	4,299.3	31.66	136.800		
10,100.0	7,770.0	5,126.0	5,109.8	44.0	0.0	45.56	-189.0	-2,739.2	4,377.9	4,345.1	32.84	133.295		
10,200.0	7,770.0	5,126.0	5,109.8	45.6	0.0	45.56	-189.0	-2,739.2	4,426.6	4,392.6	34.03	130.065		
10,300.0	7,770.0	5,126.0	5,109.8	47.3	0.0	45.56	-189.0	-2,739.2	4,477.1	4,441.8	35.23	127.085		
10,400.0	7,770.0	5,126.0	5,109.8	49.0	0.0	45.56	-189.0	-2,739.2	4,529.1	4,492.7	36.43	124.330		
10,500.0	7,770.0	5,126.0	5,109.8	50.7	0.0	45.56	-189.0	-2,739.2	4,582.8	4,545.2	37.63	121.780		
10,600.0	7,770.0	5,126.0	5,109.8	52.4	0.0	45.56	-189.0	-2,739.2	4,638.0	4,599.2	38.84	119.417		
10,700.0	7,770.0	5,126.0	5,109.8	54.1	0.0	45.56	-189.0	-2,739.2	4,694.7	4,654.7	40.05	117.224		
10,800.0	7,770.0	5,126.0	5,109.8	55.8	0.0	45.56	-189.0	-2,739.2	4,752.8	4,711.6	41.26	115.186		
10,900.0	7,770.0	5,126.0	5,109.8	57.5	0.0	45.56	-189.0	-2,739.2	4,812.3	4,769.8	42.48	113.289		
11,000.0	7,770.0	5,126.0	5,109.8	59.2	0.0	45.56	-189.0	-2,739.2	4,873.1	4,829.4	43.70	111.522		
11,100.0	7,770.0	5,126.0	5,109.8	60.9	0.0	45.56	-189.0	-2,739.2	4,935.2	4,890.3	44.92	109.874		
11,200.0	7,770.0	5,126.0	5,109.8	62.6	0.0	45.56	-189.0	-2,739.2	4,998.5	4,952.4	46.14	108.334		
11,300.0	7,770.0	5,126.0	5,109.8	64.3	0.0	45.56	-189.0	-2,739.2	5,063.0	5,015.7	47.36	106.895		
11,400.0	7,770.0	5,126.0	5,109.8	66.0	0.0	45.56	-189.0	-2,739.2	5,128.7	5,080.1	48.59	105.548		
11,500.0	7,770.0	5,126.0	5,109.8	67.7	0.0	45.56	-189.0	-2,739.2	5,195.4	5,145.6	49.82	104.285		
11,600.0	7,770.0	5,126.0	5,109.8	69.5	0.0	45.56	-189.0	-2,739.2	5,263.2	5,212.2	51.05	103.101		
11,700.0	7,770.0	5,126.0	5,109.8	71.2	0.0	45.56	-189.0	-2,739.2	5,332.0	5,279.8	52.28	101.989		
11,800.0	7,770.0	5,126.0	5,109.8	72.9	0.0	45.56	-189.0	-2,739.2	5,401.8	5,348.3	53.51	100.944		
11,900.0	7,770.0	5,126.0	5,109.8	74.6	0.0	45.56	-189.0	-2,739.2	5,472.5	5,417.8	54.75	99.961		
12,000.0	7,770.0	5,126.0	5,109.8	76.4	0.0	45.56	-189.0	-2,739.2	5,544.2	5,488.2	55.98	99.035		
12,100.0	7,770.0	5,126.0	5,109.8	78.1	0.0	45.56	-189.0	-2,739.2	5,616.7	5,559.4	57.22	98.163		
12,200.0	7,770.0	5,126.0	5,109.8	79.8	0.0	45.56	-189.0	-2,739.2	5,690.0	5,631.5	58.45	97.340		
12,300.0	7,770.0	5,126.0	5,109.8	81.5	0.0	45.56	-189.0	-2,739.2	5,764.1	5,704.4	59.69	96.563		
12,400.0	7,770.0	5,126.0	5,109.8	83.3	0.0	45.56	-189.0	-2,739.2	5,839.0	5,778.1	60.93	95.829		
12,500.0	7,770.0	5,126.0	5,109.8	85.0	0.0	45.56	-189.0	-2,739.2	5,914.6	5,852.5	62.17	95.134		
12,600.0	7,770.0	5,126.0	5,109.8	86.7	0.0	45.56	-189.0	-2,739.2	5,991.0	5,927.6	63.41	94.477		
12,700.0	7,770.0	5,126.0	5,109.8	88.5	0.0	45.56	-189.0	-2,739.2	6,068.0	6,003.4	64.65	93.855		
12,800.0	7,770.0	5,126.0	5,109.8	90.2	0.0	45.56	-189.0	-2,739.2	6,145.7	6,079.8	65.90	93.265		
12,900.0	7,770.0	5,126.0	5,109.8	91.9	0.0	45.56	-189.0	-2,739.2	6,224.1	6,156.9	67.14	92.706		
13,000.0	7,770.0	5,126.0	5,109.8	93.7	0.0	45.56	-189.0	-2,739.2	6,303.0	6,234.6	68.38	92.175		
13,100.0	7,770.0	5,126.0	5,109.8	95.4	0.0	45.56	-189.0	-2,739.2	6,382.6	6,312.9	69.63	91.671		
13,200.0	7,770.0	5,126.0	5,109.8	97.1	0.0	45.56	-189.0	-2,739.2	6,462.7	6,391.8	70.87	91.191		
13,300.0	7,770.0	5,126.0	5,109.8	98.9	0.0	45.56	-189.0	-2,739.2	6,543.3	6,471.2	72.11	90.735		
13,400.0	7,770.0	5,126.0	5,109.8	100.6	0.0	45.56	-189.0	-2,739.2	6,624.5	6,551.2	73.36	90.302		
13,500.0	7,770.0	5,126.0	5,109.8	102.4	0.0	45.56	-189.0	-2,739.2	6,706.2	6,631.6	74.61	89.889		
13,600.0	7,770.0	5,126.0	5,109.8	104.1	0.0	45.56	-189.0	-2,739.2	6,788.4	6,712.6	75.85	89.495		
13,700.0	7,770.0	5,126.0	5,109.8	105.8	0.0	45.56	-189.0	-2,739.2	6,871.1	6,794.0	77.10	89.120		
13,800.0	7,770.0	5,126.0	5,109.8	107.6	0.0	45.56	-189.0	-2,739.2	6,954.2	6,875.8	78.35	88.762		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	5,126.0	5,109.8	109.3	0.0	45.56	-189.0	-2,739.2	7,037.7	6,958.1	79.59	88.420		
14,000.0	7,770.0	5,126.0	5,109.8	111.1	0.0	45.56	-189.0	-2,739.2	7,121.7	7,040.9	80.84	88.094		
14,100.0	7,770.0	5,126.0	5,109.8	112.8	0.0	45.56	-189.0	-2,739.2	7,206.1	7,124.0	82.09	87.782		
14,200.0	7,770.0	5,126.0	5,109.8	114.5	0.0	45.56	-189.0	-2,739.2	7,290.9	7,207.5	83.34	87.484		
14,300.0	7,770.0	5,126.0	5,109.8	116.3	0.0	45.56	-189.0	-2,739.2	7,376.0	7,291.4	84.59	87.199		
14,400.0	7,770.0	5,126.0	5,109.8	118.0	0.0	45.56	-189.0	-2,739.2	7,461.6	7,375.7	85.84	86.926		
14,500.0	7,770.0	5,126.0	5,109.8	119.8	0.0	45.56	-189.0	-2,739.2	7,547.4	7,460.3	87.09	86.665		
14,600.0	7,770.0	5,126.0	5,109.8	121.5	0.0	45.56	-189.0	-2,739.2	7,633.7	7,545.3	88.34	86.415		
14,700.0	7,770.0	5,126.0	5,109.8	123.3	0.0	45.56	-189.0	-2,739.2	7,720.2	7,630.6	89.59	86.175		
14,800.0	7,770.0	5,126.0	5,109.8	125.0	0.0	45.56	-189.0	-2,739.2	7,807.1	7,716.3	90.84	85.945		
14,900.0	7,770.0	5,126.0	5,109.8	126.7	0.0	45.56	-189.0	-2,739.2	7,894.3	7,802.2	92.09	85.724		
15,000.0	7,770.0	5,126.0	5,109.8	128.5	0.0	45.56	-189.0	-2,739.2	7,981.8	7,888.5	93.34	85.513		
15,100.0	7,770.0	5,126.0	5,109.8	130.2	0.0	45.56	-189.0	-2,739.2	8,069.6	7,975.0	94.59	85.310		
15,200.0	7,770.0	5,126.0	5,109.8	132.0	0.0	45.56	-189.0	-2,739.2	8,157.6	8,061.8	95.84	85.114		
15,300.0	7,770.0	5,126.0	5,109.8	133.7	0.0	45.56	-189.0	-2,739.2	8,246.0	8,148.9	97.09	84.927		
15,400.0	7,770.0	5,126.0	5,109.8	135.5	0.0	45.56	-189.0	-2,739.2	8,334.6	8,236.2	98.35	84.747		
15,500.0	7,770.0	5,126.0	5,109.8	137.2	0.0	45.56	-189.0	-2,739.2	8,423.4	8,323.8	99.60	84.573		
15,600.0	7,770.0	5,126.0	5,109.8	139.0	0.0	45.56	-189.0	-2,739.2	8,512.5	8,411.7	100.85	84.407		
15,700.0	7,770.0	5,126.0	5,109.8	140.7	0.0	45.56	-189.0	-2,739.2	8,601.9	8,499.8	102.10	84.246		
15,800.0	7,770.0	5,126.0	5,109.8	142.4	0.0	45.56	-189.0	-2,739.2	8,691.5	8,588.1	103.36	84.092		
15,900.0	7,770.0	5,126.0	5,109.8	144.2	0.0	45.56	-189.0	-2,739.2	8,781.3	8,676.6	104.61	83.943		
16,000.0	7,770.0	5,126.0	5,109.8	145.9	0.0	45.56	-189.0	-2,739.2	8,871.3	8,765.4	105.86	83.800		
16,100.0	7,770.0	5,126.0	5,109.8	147.7	0.0	45.56	-189.0	-2,739.2	8,961.5	8,854.4	107.12	83.662		
16,200.0	7,770.0	5,126.0	5,109.8	149.4	0.0	45.56	-189.0	-2,739.2	9,051.9	8,943.6	108.37	83.529		
16,300.0	7,770.0	5,126.0	5,109.8	151.2	0.0	45.56	-189.0	-2,739.2	9,142.6	9,032.9	109.62	83.400		
16,400.0	7,770.0	5,126.0	5,109.8	152.9	0.0	45.56	-189.0	-2,739.2	9,233.4	9,122.5	110.88	83.277		
16,500.0	7,770.0	5,126.0	5,109.8	154.7	0.0	45.56	-189.0	-2,739.2	9,324.4	9,212.3	112.13	83.157		
16,600.0	7,770.0	5,126.0	5,109.8	156.4	0.0	45.56	-189.0	-2,739.2	9,415.6	9,302.2	113.38	83.042		
16,700.0	7,770.0	5,126.0	5,109.8	158.2	0.0	45.56	-189.0	-2,739.2	9,507.0	9,392.3	114.64	82.931		
16,800.0	7,770.0	5,126.0	5,109.8	159.9	0.0	45.56	-189.0	-2,739.2	9,598.5	9,482.6	115.89	82.823		
16,900.0	7,770.0	5,126.0	5,109.8	161.7	0.0	45.56	-189.0	-2,739.2	9,690.2	9,573.1	117.15	82.719		
17,000.0	7,770.0	5,126.0	5,109.8	163.4	0.0	45.56	-189.0	-2,739.2	9,782.1	9,663.7	118.40	82.619		
17,100.0	7,770.0	5,126.0	5,109.8	165.2	0.0	45.56	-189.0	-2,739.2	9,874.2	9,754.5	119.66	82.522		
17,200.0	7,770.0	5,126.0	5,109.8	166.9	0.0	45.56	-189.0	-2,739.2	9,966.3	9,845.4	120.91	82.428 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-24.09	3,719.3	-1,663.2	4,074.8					
100.0	100.0	41.1	41.1	0.2	0.1	-24.09	3,719.3	-1,663.2	4,074.3	4,074.0	0.22	N/A		
200.0	200.0	153.0	153.0	0.3	0.3	-24.10	3,719.0	-1,663.2	4,074.0	4,073.4	0.59	6,865.426		
300.0	300.0	264.6	264.6	0.5	0.5	-24.10	3,718.4	-1,663.2	4,073.5	4,072.5	0.96	4,231.166		
400.0	400.0	376.0	376.0	0.7	0.7	-24.10	3,717.4	-1,663.1	4,072.7	4,071.3	1.33	3,058.026		
500.0	500.0	487.8	487.8	0.8	0.9	-24.11	3,716.1	-1,663.0	4,071.6	4,069.9	1.70	2,392.640		
550.0	550.0	543.4	543.4	0.9	1.0	-24.11	3,715.3	-1,662.9	4,070.9	4,069.0	1.89	2,158.450		
600.0	600.0	599.7	599.7	1.0	1.1	-24.96	3,714.5	-1,662.9	4,070.0	4,067.9	2.07	1,964.715		
700.0	700.0	710.7	710.7	1.2	1.2	-24.99	3,712.5	-1,662.8	4,066.7	4,064.3	2.44	1,666.779		
800.0	799.9	822.4	822.3	1.4	1.4	-25.05	3,710.1	-1,662.6	4,061.6	4,058.8	2.81	1,445.666		
861.1	860.9	887.7	887.6	1.5	1.6	-25.09	3,708.6	-1,662.5	4,057.6	4,054.5	3.03	1,338.953		
900.0	899.8	920.0	919.9	1.6	1.6	-25.11	3,707.9	-1,662.5	4,054.8	4,051.7	3.16	1,284.922		
1,000.0	999.6	991.1	991.0	1.8	1.7	-25.14	3,706.4	-1,662.7	4,048.2	4,044.7	3.46	1,170.882		
1,100.0	1,099.5	1,064.9	1,064.7	1.9	1.9	-25.19	3,705.2	-1,663.7	4,042.3	4,038.5	3.76	1,073.718		
1,200.0	1,199.3	1,133.3	1,133.1	2.1	2.0	-25.23	3,704.2	-1,665.3	4,037.0	4,033.0	4.06	993.417		
1,300.0	1,299.2	1,200.0	1,199.8	2.3	2.1	-25.28	3,703.8	-1,667.0	4,032.6	4,028.3	4.36	924.869		
1,400.0	1,399.1	1,268.7	1,268.5	2.5	2.2	-25.33	3,703.9	-1,668.9	4,029.0	4,024.3	4.66	864.511		
1,500.0	1,498.9	1,333.6	1,333.3	2.7	2.3	-25.37	3,704.6	-1,670.6	4,026.2	4,021.2	4.95	812.792		
1,600.0	1,598.8	1,406.2	1,405.9	2.9	2.5	-25.41	3,706.1	-1,672.5	4,024.2	4,019.0	5.26	765.072		
1,700.0	1,698.6	1,498.5	1,498.2	3.1	2.6	-25.46	3,708.4	-1,675.1	4,022.7	4,017.1	5.60	718.129		
1,800.0	1,798.5	1,592.6	1,592.2	3.3	2.8	-25.52	3,710.5	-1,678.1	4,021.2	4,015.2	5.95	676.140		
1,900.0	1,898.3	1,675.0	1,674.5	3.5	2.9	-25.57	3,712.7	-1,681.0	4,020.1	4,013.9	6.27	640.904		
2,000.0	1,998.2	1,773.0	1,772.4	3.7	3.1	-25.63	3,715.3	-1,684.2	4,019.0	4,012.4	6.62	606.658		
2,060.9	2,059.0	1,800.0	1,799.4	3.8	3.2	-25.64	3,716.2	-1,685.1	4,018.8	4,012.0	6.78	592.592 CC		
2,100.0	2,098.0	1,820.9	1,820.3	3.9	3.2	-25.65	3,717.0	-1,685.8	4,018.9	4,012.0	6.89	583.416 ES		
2,200.0	2,197.9	1,868.6	1,867.9	4.1	3.3	-25.68	3,719.2	-1,687.8	4,020.0	4,012.8	7.15	562.025		
2,300.0	2,297.7	1,920.0	1,919.1	4.3	3.4	-25.71	3,722.3	-1,690.2	4,022.4	4,014.9	7.42	541.919		
2,400.0	2,397.6	1,974.8	1,973.7	4.5	3.5	-25.74	3,726.1	-1,693.1	4,026.0	4,018.3	7.70	522.938		
2,500.0	2,497.4	2,040.0	2,038.6	4.7	3.6	-25.78	3,731.2	-1,696.5	4,030.4	4,022.4	7.99	504.255		
2,600.0	2,597.3	2,096.3	2,094.6	4.9	3.7	-25.81	3,736.1	-1,699.6	4,035.8	4,027.6	8.27	487.914		
2,700.0	2,697.1	2,151.8	2,149.7	5.1	3.8	-25.84	3,741.5	-1,703.2	4,042.4	4,033.9	8.55	472.835		
2,800.0	2,797.0	2,211.4	2,208.9	5.3	4.0	-25.88	3,747.7	-1,707.4	4,050.0	4,041.2	8.83	458.427		
2,900.0	2,896.8	2,257.9	2,254.9	5.5	4.1	-25.91	3,753.0	-1,710.8	4,058.8	4,049.7	9.10	446.190		
3,000.0	2,996.7	2,297.3	2,293.9	5.7	4.2	-25.93	3,758.1	-1,714.0	4,068.9	4,059.6	9.35	435.372		
3,100.0	3,096.5	2,339.8	2,335.8	5.9	4.3	-25.95	3,764.1	-1,717.6	4,080.5	4,070.9	9.60	425.029		
3,200.0	3,196.4	2,386.7	2,382.0	6.1	4.4	-25.98	3,771.2	-1,721.9	4,093.4	4,083.6	9.86	415.001		
3,300.0	3,296.3	2,440.0	2,434.3	6.3	4.6	-26.02	3,780.0	-1,727.3	4,107.7	4,097.5	10.14	405.177		
3,400.0	3,396.1	2,480.0	2,473.4	6.5	4.7	-26.04	3,787.1	-1,731.4	4,123.2	4,112.8	10.39	396.917		
3,500.0	3,496.0	2,520.0	2,512.4	6.7	4.8	-26.06	3,794.8	-1,735.6	4,140.1	4,129.5	10.64	389.184		
3,600.0	3,595.8	2,560.0	2,551.3	6.9	4.9	-26.08	3,803.0	-1,740.0	4,158.3	4,147.4	10.89	381.914		
3,700.0	3,695.7	2,612.5	2,602.3	7.0	5.1	-26.11	3,814.1	-1,746.2	4,177.7	4,166.5	11.16	374.318		
3,800.0	3,795.5	2,680.0	2,667.6	7.2	5.3	-26.14	3,829.0	-1,754.2	4,198.0	4,186.5	11.46	366.349		
3,900.0	3,895.4	2,733.4	2,719.2	7.4	5.5	-26.17	3,841.2	-1,760.7	4,219.2	4,207.4	11.73	359.604		
4,000.0	3,995.2	2,787.3	2,771.1	7.6	5.8	-26.20	3,853.9	-1,767.7	4,241.4	4,229.3	12.01	353.208		
4,100.0	4,095.1	2,951.5	2,929.3	7.8	6.4	-26.30	3,891.8	-1,789.4	4,263.1	4,250.6	12.48	341.599		
4,200.0	4,194.9	3,057.5	3,031.8	8.0	6.9	-26.36	3,915.4	-1,803.3	4,284.2	4,271.3	12.85	333.431		
4,300.0	4,294.8	3,177.5	3,147.8	8.2	7.4	-26.44	3,941.6	-1,819.1	4,304.8	4,291.6	13.24	325.063		
4,400.0	4,394.6	3,259.6	3,227.2	8.4	7.7	-26.51	3,959.2	-1,830.6	4,325.5	4,311.9	13.57	318.720		
4,500.0	4,494.5	3,374.6	3,338.3	8.6	8.2	-26.60	3,983.5	-1,847.2	4,346.1	4,332.2	13.96	311.316		
4,600.0	4,594.3	3,474.9	3,435.4	8.8	8.7	-26.68	4,004.6	-1,861.5	4,366.6	4,352.3	14.32	304.878		
4,700.0	4,694.2	3,655.6	3,610.6	9.0	9.4	-26.82	4,041.1	-1,886.0	4,385.9	4,371.1	14.83	295.776		
4,800.0	4,794.0	3,754.3	3,706.6	9.2	9.9	-26.88	4,060.7	-1,898.0	4,404.4	4,389.2	15.18	290.090		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,893.9	3,850.1	3,799.8		9.4	10.3	-26.93	4,080.0	-1,909.1	4,422.9	4,407.4	15.53	284.774	
5,000.0	4,993.7	3,909.7	3,857.7		9.6	10.5	-26.97	4,092.3	-1,916.3	4,441.9	4,426.1	15.82	280.848	
5,100.0	5,093.6	3,983.4	3,929.1		9.8	10.8	-27.00	4,108.0	-1,925.3	4,461.7	4,445.5	16.13	276.690	
5,200.0	5,193.5	4,077.6	4,020.4		10.0	11.3	-27.04	4,128.6	-1,936.2	4,481.7	4,465.3	16.47	272.146	
5,300.0	5,293.3	4,160.0	4,100.2		10.2	11.6	-27.07	4,146.8	-1,945.6	4,501.9	4,485.1	16.79	268.129	
5,400.0	5,393.2	4,237.9	4,175.5		10.4	12.0	-27.10	4,164.7	-1,954.2	4,522.6	4,505.5	17.10	264.439	
5,500.0	5,493.0	4,399.8	4,332.5		10.6	12.7	-27.16	4,200.0	-1,972.7	4,542.4	4,524.8	17.56	258.616	
5,600.0	5,592.9	4,457.7	4,388.6		10.8	13.0	-27.19	4,212.2	-1,979.9	4,562.2	4,544.4	17.85	255.645	
5,700.0	5,692.7	4,520.0	4,448.8		11.0	13.3	-27.22	4,226.0	-1,988.0	4,583.0	4,564.9	18.14	252.711	
5,800.0	5,792.6	4,583.0	4,509.5		11.2	13.6	-27.26	4,240.2	-1,996.5	4,604.5	4,586.1	18.43	249.884	
5,900.0	5,892.4	4,738.5	4,659.7		11.4	14.3	-27.36	4,274.6	-2,017.9	4,625.9	4,607.0	18.88	244.977	
6,000.0	5,992.3	6,011.5	5,915.3		11.6	17.8	-27.97	4,410.7	-2,106.3	4,632.2	4,610.9	21.29	217.534	
6,100.0	6,092.1	6,129.0	6,032.9		11.8	18.0	-27.99	4,411.3	-2,105.2	4,627.4	4,605.7	21.68	213.488	
6,200.0	6,192.0	6,200.0	6,103.8		12.0	18.0	-28.01	4,411.7	-2,104.8	4,622.8	4,600.9	21.98	210.346	
6,300.0	6,291.8	6,289.4	6,193.2		12.2	18.1	-28.03	4,412.5	-2,104.6	4,618.7	4,596.4	22.31	207.009	
6,400.0	6,391.7	6,382.4	6,286.2		12.4	18.3	-28.05	4,413.4	-2,104.6	4,614.7	4,592.1	22.65	203.724	
6,500.0	6,491.5	6,465.2	6,369.0		12.6	18.4	-28.07	4,414.5	-2,104.4	4,611.0	4,588.1	22.97	200.703	
6,600.0	6,591.4	6,559.2	6,463.0		12.8	18.5	-28.09	4,416.1	-2,104.1	4,607.6	4,584.3	23.32	197.618	
6,700.0	6,691.2	6,706.9	6,610.7		13.0	18.6	-28.12	4,417.9	-2,103.4	4,603.7	4,580.0	23.75	193.840	
6,800.0	6,791.1	6,789.4	6,693.1		13.2	18.7	-28.14	4,418.6	-2,103.0	4,599.5	4,575.4	24.07	191.070	
6,900.0	6,890.9	6,882.9	6,786.7		13.4	18.9	-28.15	4,419.8	-2,102.5	4,595.6	4,571.1	24.41	188.238	
7,000.0	6,990.8	7,011.8	6,915.6		13.6	19.0	-28.18	4,421.1	-2,101.7	4,591.4	4,566.6	24.82	185.022	
7,024.2	7,014.9	7,051.9	6,955.6		13.6	19.1	-28.18	4,421.4	-2,101.2	4,590.3	4,565.4	24.93	184.142	
7,050.0	7,040.7	7,089.7	6,993.4		13.7	19.1	-29.81	4,421.6	-2,100.7	4,589.4	4,564.4	25.01	183.480	
7,066.2	7,057.0	7,110.0	7,013.8		13.7	19.1	162.80	4,421.7	-2,100.4	4,589.3	4,564.2	25.05	183.205	
7,100.0	7,090.7	7,152.1	7,055.8		13.7	19.2	153.57	4,421.9	-2,099.5	4,589.9	4,564.8	25.10	182.843	
7,150.0	7,140.5	7,196.0	7,099.8		13.8	19.2	152.96	4,422.2	-2,098.4	4,593.5	4,568.4	25.09	183.074	
7,200.0	7,189.9	7,235.2	7,139.0		13.8	19.2	152.62	4,422.5	-2,097.5	4,600.3	4,575.3	25.00	183.984	
7,250.0	7,238.6	7,268.6	7,172.4		13.8	19.3	152.23	4,422.7	-2,096.9	4,610.2	4,585.4	24.85	185.558	
7,300.0	7,286.4	7,298.1	7,201.8		13.7	19.3	151.74	4,423.0	-2,096.6	4,623.3	4,598.7	24.63	187.732	
7,350.0	7,333.1	7,320.0	7,223.7		13.7	19.3	151.10	4,423.1	-2,096.6	4,639.6	4,615.2	24.36	190.490	
7,400.0	7,378.5	7,360.0	7,263.7		13.6	19.4	150.37	4,423.3	-2,097.1	4,658.9	4,634.8	24.09	193.418	
7,450.0	7,422.2	7,388.6	7,292.3		13.6	19.4	149.45	4,423.5	-2,097.7	4,681.1	4,657.3	23.79	196.742	
7,500.0	7,464.1	7,425.0	7,328.7		13.5	19.5	148.39	4,423.8	-2,098.3	4,706.1	4,682.5	23.53	200.040	
7,550.0	7,504.1	7,455.4	7,359.1		13.5	19.5	147.10	4,424.1	-2,098.8	4,733.6	4,710.3	23.30	203.200	
7,600.0	7,541.8	7,480.0	7,383.7		13.5	19.6	145.56	4,424.4	-2,099.2	4,763.7	4,740.6	23.14	205.855	
7,650.0	7,577.2	7,502.7	7,406.3		13.4	19.6	143.72	4,424.8	-2,099.6	4,796.2	4,773.1	23.11	207.539	
7,700.0	7,610.0	7,520.0	7,423.7		13.5	19.6	141.50	4,425.1	-2,099.8	4,830.8	4,807.6	23.25	207.801	
7,750.0	7,640.2	7,547.3	7,451.0		13.5	19.7	138.96	4,425.7	-2,100.1	4,867.6	4,844.0	23.60	206.261	
7,800.0	7,667.4	7,584.0	7,487.7		13.6	19.7	136.08	4,426.5	-2,100.5	4,906.1	4,881.9	24.19	202.826	
7,850.0	7,691.7	7,635.4	7,539.1		13.7	19.8	132.89	4,427.5	-2,101.0	4,946.1	4,921.1	25.02	197.703	
7,900.0	7,712.8	7,653.1	7,556.7		13.9	19.8	128.66	4,427.8	-2,101.1	4,987.5	4,961.3	26.18	190.485	
7,950.0	7,730.8	7,665.3	7,569.0		14.1	19.8	123.56	4,428.0	-2,101.2	5,030.1	5,002.5	27.64	181.996	
8,000.0	7,745.5	7,680.0	7,583.6		14.4	19.9	117.63	4,428.3	-2,101.4	5,073.9	5,044.6	29.29	173.216	
8,050.0	7,756.7	7,680.0	7,583.6		14.7	19.9	110.45	4,428.3	-2,101.4	5,118.4	5,087.4	31.04	164.885	
8,100.0	7,764.6	7,687.4	7,591.1		15.1	19.9	102.53	4,428.4	-2,101.4	5,163.6	5,131.0	32.60	158.395	
8,150.0	7,769.0	7,689.9	7,593.5		15.5	19.9	93.82	4,428.5	-2,101.5	5,209.2	5,175.5	33.72	154.464	
8,188.1	7,770.0	7,690.1	7,593.7		15.9	19.9	86.92	4,428.5	-2,101.5	5,244.0	5,209.9	34.15	153.578	
8,200.0	7,770.0	7,689.9	7,593.6		16.0	19.9	86.92	4,428.5	-2,101.5	5,255.0	5,220.7	34.26	153.404	
8,300.0	7,770.0	7,688.7	7,592.3		17.0	19.9	86.88	4,428.4	-2,101.5	5,346.7	5,311.5	35.25	151.675	
8,400.0	7,770.0	7,687.4	7,591.0		18.1	19.9	86.85	4,428.4	-2,101.4	5,438.7	5,402.4	36.36	149.575	
8,500.0	7,770.0	7,680.0	7,583.6		19.3	19.9	86.65	4,428.3	-2,101.4	5,531.0	5,493.5	37.55	147.284	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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			
8,600.0	7,770.0	7,680.0	7,583.6	20.6	19.9	86.65	4,428.3	-2,101.4	5,623.6	5,584.8	38.84	144.790		
8,700.0	7,770.0	7,680.0	7,583.6	21.9	19.9	86.65	4,428.3	-2,101.4	5,716.4	5,676.2	40.19	142.233		
8,800.0	7,770.0	7,680.0	7,583.6	23.3	19.9	86.65	4,428.3	-2,101.4	5,809.5	5,767.9	41.59	139.669		
8,900.0	7,770.0	7,680.0	7,583.6	24.8	19.9	86.65	4,428.3	-2,101.4	5,902.7	5,859.7	43.04	137.137		
9,000.0	7,770.0	7,680.0	7,583.6	26.3	19.9	86.65	4,428.3	-2,101.4	5,996.2	5,951.7	44.53	134.662		
9,100.0	7,770.0	7,680.0	7,583.6	27.8	19.9	86.65	4,428.3	-2,101.4	6,089.9	6,043.9	46.04	132.262		
9,200.0	7,770.0	7,680.0	7,583.6	29.3	19.9	86.65	4,428.3	-2,101.4	6,183.8	6,136.3	47.59	129.948		
9,300.0	7,770.0	7,680.0	7,583.6	30.9	19.9	86.65	4,428.3	-2,101.4	6,277.9	6,228.8	49.15	127.726		
9,400.0	7,770.0	7,680.0	7,583.6	32.5	19.9	86.65	4,428.3	-2,101.4	6,372.2	6,321.5	50.74	125.597		
9,500.0	7,770.0	7,680.0	7,583.6	34.1	19.9	86.65	4,428.3	-2,101.4	6,466.6	6,414.3	52.34	123.561		
9,600.0	7,770.0	7,672.6	7,576.2	35.7	19.8	86.45	4,428.2	-2,101.3	6,561.2	6,507.3	53.93	121.661		
9,700.0	7,770.0	7,671.4	7,575.0	37.3	19.8	86.42	4,428.1	-2,101.3	6,656.0	6,600.4	55.55	119.812		
9,800.0	7,770.0	7,670.2	7,573.8	39.0	19.8	86.38	4,428.1	-2,101.3	6,750.9	6,693.7	57.19	118.049		
9,900.0	7,770.0	7,669.0	7,572.7	40.6	19.8	86.35	4,428.1	-2,101.2	6,846.0	6,787.1	58.83	116.367		
10,000.0	7,770.0	7,667.9	7,571.5	42.3	19.8	86.32	4,428.1	-2,101.2	6,941.2	6,880.7	60.48	114.764		
10,100.0	7,770.0	7,666.7	7,570.3	44.0	19.8	86.29	4,428.1	-2,101.2	7,036.5	6,974.3	62.14	113.234		
10,200.0	7,770.0	7,665.5	7,569.2	45.6	19.8	86.26	4,428.0	-2,101.2	7,131.9	7,068.1	63.81	111.775		
10,300.0	7,770.0	7,664.4	7,568.0	47.3	19.8	86.23	4,428.0	-2,101.2	7,227.5	7,162.0	65.48	110.382		
10,400.0	7,770.0	7,663.3	7,566.9	49.0	19.8	86.20	4,428.0	-2,101.2	7,323.2	7,256.1	67.15	109.052		
10,500.0	7,770.0	7,662.1	7,565.8	50.7	19.8	86.16	4,428.0	-2,101.2	7,419.0	7,350.2	68.83	107.781		
10,600.0	7,770.0	7,661.0	7,564.6	52.4	19.8	86.13	4,428.0	-2,101.2	7,514.9	7,444.4	70.52	106.566		
10,700.0	7,770.0	7,659.9	7,563.5	54.1	19.8	86.10	4,427.9	-2,101.2	7,611.0	7,538.8	72.21	105.403		
10,800.0	7,770.0	7,658.8	7,562.4	55.8	19.8	86.07	4,427.9	-2,101.1	7,707.1	7,633.2	73.90	104.290		
10,900.0	7,770.0	7,657.7	7,561.3	57.5	19.8	86.04	4,427.9	-2,101.1	7,803.3	7,727.7	75.60	103.224		
11,000.0	7,770.0	7,656.6	7,560.2	59.2	19.8	86.01	4,427.9	-2,101.1	7,899.6	7,822.3	77.29	102.202		
11,100.0	7,770.0	7,655.5	7,559.1	60.9	19.8	85.98	4,427.9	-2,101.1	7,996.0	7,917.0	79.00	101.222		
11,200.0	7,770.0	7,654.4	7,558.0	62.6	19.8	85.95	4,427.8	-2,101.1	8,092.5	8,011.8	80.70	100.281		
11,300.0	7,770.0	7,653.3	7,556.9	64.3	19.8	85.93	4,427.8	-2,101.1	8,189.1	8,106.7	82.40	99.377		
11,400.0	7,770.0	7,652.2	7,555.9	66.0	19.8	85.90	4,427.8	-2,101.1	8,285.8	8,201.6	84.11	98.509		
11,500.0	7,770.0	7,651.2	7,554.8	67.7	19.8	85.87	4,427.8	-2,101.1	8,382.5	8,296.7	85.82	97.675		
11,600.0	7,770.0	7,650.1	7,553.7	69.5	19.8	85.84	4,427.8	-2,101.1	8,479.3	8,391.8	87.53	96.871		
11,700.0	7,770.0	7,649.0	7,552.7	71.2	19.8	85.81	4,427.8	-2,101.1	8,576.2	8,486.9	89.24	96.098		
11,800.0	7,770.0	7,648.0	7,551.6	72.9	19.8	85.78	4,427.7	-2,101.1	8,673.1	8,582.2	90.96	95.353		
11,900.0	7,770.0	7,647.0	7,550.6	74.6	19.8	85.75	4,427.6	-2,101.0	8,770.2	8,677.5	92.64	94.666		
12,000.0	7,770.0	7,646.0	7,549.6	76.4	19.8	85.72	4,427.6	-2,101.0	8,867.3	8,772.9	94.36	93.969		
12,100.0	7,770.0	7,645.0	7,548.6	78.1	19.8	85.69	4,427.6	-2,101.0	8,964.4	8,868.3	96.09	93.296		
12,200.0	7,770.0	7,644.0	7,547.6	79.8	19.8	85.66	4,427.6	-2,101.0	9,061.6	8,963.8	97.81	92.647		
12,300.0	7,770.0	7,643.0	7,546.6	81.5	19.8	85.63	4,427.6	-2,101.0	9,158.9	9,059.4	99.53	92.019		
12,400.0	7,770.0	7,642.0	7,545.6	83.3	19.8	85.60	4,427.6	-2,101.0	9,256.2	9,155.0	101.26	91.413		
12,500.0	7,770.0	7,641.0	7,544.6	85.0	19.8	85.57	4,427.6	-2,101.0	9,353.6	9,250.6	102.98	90.826		
12,600.0	7,770.0	7,640.0	7,543.6	86.7	19.7	83.41	4,426.0	-2,100.3	9,451.0	9,346.8	104.25	90.654		
12,700.0	7,770.0	7,640.0	7,543.6	88.5	19.7	83.41	4,426.0	-2,100.3	9,548.5	9,442.5	105.98	90.101		
12,800.0	7,770.0	7,640.0	7,543.6	90.2	19.7	83.41	4,426.0	-2,100.3	9,646.1	9,538.4	107.70	89.565		
12,900.0	7,770.0	7,640.0	7,543.6	91.9	19.7	83.41	4,426.0	-2,100.3	9,743.6	9,634.2	109.42	89.047		
13,000.0	7,770.0	7,640.0	7,543.6	93.7	19.7	83.41	4,426.0	-2,100.3	9,841.3	9,730.1	111.15	88.544		
13,100.0	7,770.0	7,551.4	7,455.1	95.4	19.7	83.18	4,425.8	-2,100.2	9,938.9	9,826.1	112.81	88.105 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	10.0	10.0	0.0	0.0	-60.69	1,029.9	-1,834.4	2,103.7						
100.0	100.0	109.6	109.6	0.2	0.2	-60.69	1,029.9	-1,834.4	2,103.7	2,103.4	0.34	6,123.493			
200.0	200.0	209.2	209.2	0.3	0.4	-60.69	1,029.8	-1,834.5	2,103.8	2,103.1	0.69	3,039.319			
300.0	300.0	308.9	308.9	0.5	0.5	-60.70	1,029.6	-1,834.6	2,103.8	2,102.8	1.04	2,021.312			
400.0	400.0	408.5	408.5	0.7	0.7	-60.70	1,029.5	-1,834.8	2,103.9	2,102.5	1.39	1,514.182			
500.0	500.0	508.2	508.2	0.8	0.9	-60.71	1,029.2	-1,835.0	2,103.9	2,102.2	1.74	1,210.507			
550.0	550.0	558.0	558.0	0.9	1.0	-60.72	1,029.1	-1,835.1	2,104.0	2,102.1	1.91	1,100.193			
600.0	600.0	607.8	607.8	1.0	1.1	-61.56	1,029.0	-1,835.3	2,103.9	2,101.9	2.09	1,008.253			
700.0	700.0	707.4	707.4	1.2	1.2	-61.62	1,028.7	-1,835.6	2,103.2	2,100.8	2.44	863.357			
800.0	799.9	801.1	801.1	1.4	1.4	-61.73	1,028.3	-1,835.9	2,101.8	2,099.0	2.78	756.605			
861.1	860.9	852.0	852.0	1.5	1.5	-61.80	1,028.4	-1,836.3	2,100.7	2,097.8	2.98	705.537			
900.0	899.8	891.6	891.6	1.6	1.6	-61.85	1,028.5	-1,836.7	2,100.1	2,097.0	3.12	673.578			
1,000.0	999.6	994.6	994.6	1.8	1.7	-61.98	1,028.9	-1,837.2	2,098.2	2,094.7	3.48	602.531			
1,100.0	1,099.5	1,090.4	1,090.4	1.9	1.9	-62.12	1,029.1	-1,838.1	2,096.6	2,092.8	3.84	546.525			
1,200.0	1,199.3	1,190.2	1,190.2	2.1	2.1	-62.26	1,029.1	-1,839.0	2,094.8	2,090.6	4.20	498.943			
1,300.0	1,299.2	1,278.0	1,278.0	2.3	2.2	-62.38	1,029.5	-1,840.1	2,093.6	2,089.0	4.54	461.089			
1,400.0	1,399.1	1,364.6	1,364.6	2.5	2.4	-62.49	1,030.4	-1,841.1	2,092.6	2,087.7	4.88	428.707			
1,417.7	1,416.7	1,375.3	1,375.3	2.6	2.4	-62.50	1,030.6	-1,841.2	2,092.6	2,087.6	4.93	424.146 CC, ES			
1,500.0	1,498.9	1,436.0	1,435.9	2.7	2.5	-62.55	1,032.4	-1,842.6	2,093.2	2,088.0	5.20	402.921			
1,600.0	1,598.8	1,486.7	1,486.6	2.9	2.6	-62.59	1,034.6	-1,844.4	2,095.6	2,090.1	5.47	382.790			
1,700.0	1,698.6	1,551.9	1,551.6	3.1	2.7	-62.64	1,037.8	-1,847.6	2,099.8	2,094.1	5.78	363.325			
1,800.0	1,798.5	1,625.0	1,624.4	3.3	2.9	-62.68	1,042.4	-1,852.0	2,105.5	2,099.4	6.10	345.236			
1,900.0	1,898.3	1,687.7	1,686.8	3.5	3.0	-62.70	1,047.4	-1,856.2	2,112.7	2,106.3	6.40	329.986			
2,000.0	1,998.2	1,760.4	1,758.9	3.7	3.2	-62.68	1,054.7	-1,861.5	2,121.4	2,114.7	6.73	315.439			
2,100.0	2,098.0	1,837.6	1,835.3	3.9	3.3	-62.63	1,064.0	-1,867.2	2,131.2	2,124.1	7.06	301.850			
2,200.0	2,197.9	1,910.0	1,906.7	4.1	3.5	-62.55	1,074.6	-1,872.7	2,142.2	2,134.8	7.39	289.839			
2,300.0	2,297.7	1,984.7	1,980.1	4.3	3.7	-62.42	1,087.2	-1,878.4	2,154.5	2,146.8	7.74	278.454			
2,400.0	2,397.6	2,076.9	2,070.5	4.5	4.0	-62.22	1,104.3	-1,885.3	2,167.5	2,159.4	8.13	266.755			
2,500.0	2,497.4	2,170.2	2,161.8	4.7	4.3	-62.01	1,121.9	-1,892.3	2,180.7	2,172.1	8.53	255.777			
2,600.0	2,597.3	2,280.8	2,270.1	4.9	4.7	-61.77	1,143.1	-1,900.4	2,193.9	2,184.9	8.97	244.625			
2,700.0	2,697.1	2,368.2	2,355.7	5.1	5.0	-61.59	1,159.3	-1,906.9	2,206.9	2,197.6	9.36	235.724			
2,800.0	2,797.0	2,473.4	2,458.7	5.3	5.3	-61.37	1,179.1	-1,914.9	2,220.3	2,210.5	9.80	226.472			
2,900.0	2,896.8	2,570.0	2,553.3	5.5	5.7	-61.15	1,197.8	-1,921.7	2,233.5	2,223.2	10.24	218.199			
3,000.0	2,996.7	2,646.8	2,628.3	5.7	6.0	-60.96	1,213.4	-1,927.2	2,247.2	2,236.6	10.62	211.556			
3,100.0	3,096.5	2,744.3	2,723.4	5.9	6.3	-60.73	1,233.3	-1,934.8	2,261.6	2,250.6	11.06	204.569			
3,200.0	3,196.4	2,877.1	2,853.3	6.1	6.8	-60.44	1,259.3	-1,944.4	2,275.2	2,263.6	11.58	196.410			
3,300.0	3,296.3	2,966.5	2,940.8	6.3	7.1	-60.25	1,276.4	-1,950.7	2,288.3	2,276.3	12.00	190.717			
3,400.0	3,396.1	3,063.8	3,036.0	6.5	7.5	-60.05	1,295.1	-1,957.6	2,301.6	2,289.2	12.44	185.048			
3,500.0	3,496.0	3,157.6	3,127.7	6.7	7.9	-59.85	1,313.7	-1,964.2	2,315.2	2,302.4	12.87	179.853			
3,600.0	3,595.8	3,268.1	3,235.8	6.9	8.3	-59.60	1,335.5	-1,971.6	2,328.5	2,315.2	13.35	174.445			
3,700.0	3,695.7	3,353.9	3,319.7	7.0	8.6	-59.43	1,352.0	-1,977.7	2,341.9	2,328.2	13.76	170.238			
3,800.0	3,795.5	3,429.0	3,393.2	7.2	8.9	-59.28	1,366.8	-1,983.6	2,356.2	2,342.1	14.14	166.632			
3,900.0	3,895.4	3,536.5	3,498.1	7.4	9.3	-59.06	1,388.3	-1,992.2	2,370.8	2,356.2	14.61	162.312			
4,000.0	3,995.2	3,638.6	3,598.0	7.6	9.7	-58.86	1,408.4	-2,000.1	2,385.1	2,370.0	15.06	158.397			
4,100.0	4,095.1	3,737.0	3,694.0	7.8	10.1	-58.66	1,428.2	-2,007.9	2,399.8	2,384.3	15.50	154.792			
4,200.0	4,194.9	3,877.7	3,831.6	8.0	10.7	-58.36	1,456.0	-2,016.4	2,412.5	2,396.4	16.06	150.176			
4,300.0	4,294.8	3,972.3	3,924.2	8.2	11.1	-58.15	1,475.1	-2,021.6	2,425.3	2,408.8	16.51	146.900			
4,400.0	4,394.6	4,072.3	4,022.0	8.4	11.4	-57.92	1,495.3	-2,027.2	2,438.2	2,421.2	16.96	143.767			
4,500.0	4,494.5	4,145.0	4,093.2	8.6	11.7	-57.79	1,509.3	-2,032.1	2,451.5	2,434.1	17.33	141.476			
4,600.0	4,594.3	4,217.7	4,164.2	8.8	12.0	-57.67	1,523.1	-2,038.1	2,466.0	2,448.3	17.70	139.357			
4,700.0	4,694.2	4,311.1	4,255.5	9.0	12.4	-57.52	1,541.4	-2,046.4	2,481.3	2,463.1	18.12	136.926			
4,800.0	4,794.0	4,451.2	4,392.3	9.2	13.0	-57.25	1,569.7	-2,056.8	2,495.8	2,477.2	18.67	133.713			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,893.9	4,535.6	4,474.9	9.4	13.3	-57.09	1,586.1	-2,062.7	2,509.5	2,490.5	19.07	131.579		
5,000.0	4,993.7	4,620.9	4,558.1	9.6	13.7	-56.93	1,603.6	-2,068.8	2,524.1	2,504.6	19.48	129.550		
5,100.0	5,093.6	4,709.3	4,644.3	9.8	14.0	-56.75	1,622.1	-2,075.2	2,539.0	2,519.1	19.90	127.564		
5,200.0	5,193.5	4,978.8	4,908.7	10.0	15.0	-56.35	1,670.2	-2,093.2	2,553.0	2,532.3	20.70	123.335		
5,300.0	5,293.3	5,367.8	5,296.7	10.2	15.6	-56.46	1,691.9	-2,102.4	2,552.8	2,531.2	21.55	118.474		
5,400.0	5,393.2	5,457.7	5,386.5	10.4	15.7	-56.55	1,692.0	-2,102.9	2,550.3	2,528.4	21.88	116.581		
5,500.0	5,493.0	5,551.7	5,480.5	10.6	15.8	-56.65	1,692.3	-2,103.5	2,548.0	2,525.8	22.21	114.709		
5,600.0	5,592.9	5,643.4	5,572.2	10.8	15.9	-56.74	1,693.0	-2,104.3	2,546.1	2,523.6	22.55	112.923		
5,700.0	5,692.7	5,737.5	5,666.3	11.0	16.0	-56.83	1,693.8	-2,105.2	2,544.4	2,521.5	22.88	111.184		
5,800.0	5,792.6	5,827.7	5,756.5	11.2	16.2	-56.93	1,694.5	-2,106.6	2,543.2	2,519.9	23.22	109.543		
5,900.0	5,892.4	5,932.6	5,861.4	11.4	16.3	-57.04	1,695.5	-2,108.0	2,541.8	2,518.3	23.57	107.823		
6,000.0	5,992.3	6,034.6	5,963.4	11.6	16.4	-57.13	1,696.7	-2,109.2	2,540.5	2,516.6	23.93	106.167		
6,100.0	6,092.1	6,138.5	6,067.2	11.8	16.6	-57.23	1,697.8	-2,110.2	2,539.0	2,514.7	24.29	104.545		
6,200.0	6,192.0	6,236.3	6,165.1	12.0	16.7	-57.34	1,698.5	-2,111.4	2,537.5	2,512.8	24.63	103.021		
6,300.0	6,291.8	6,331.5	6,260.3	12.2	16.8	-57.44	1,699.1	-2,112.7	2,536.1	2,511.1	24.98	101.536		
6,400.0	6,391.7	6,432.3	6,361.0	12.4	17.0	-57.53	1,700.6	-2,113.8	2,534.8	2,509.5	25.33	100.061		
6,500.0	6,491.5	6,516.6	6,445.3	12.6	17.1	-57.61	1,701.7	-2,114.8	2,533.7	2,508.0	25.66	98.725		
6,600.0	6,591.4	6,668.0	6,596.7	12.8	17.3	-57.75	1,703.5	-2,116.7	2,532.7	2,506.6	26.10	97.053		
6,700.0	6,691.2	6,764.8	6,693.5	13.0	17.4	-57.86	1,703.3	-2,117.1	2,530.0	2,503.6	26.44	95.679		
6,800.0	6,791.1	6,858.7	6,787.4	13.2	17.5	-57.96	1,703.4	-2,117.4	2,527.6	2,500.8	26.79	94.358		
6,900.0	6,890.9	6,952.7	6,881.4	13.4	17.6	-58.06	1,703.8	-2,117.9	2,525.3	2,498.2	27.13	93.078		
7,000.0	6,990.8	7,038.1	6,966.7	13.6	17.7	-58.15	1,704.4	-2,118.6	2,523.5	2,496.1	27.46	91.883		
7,024.2	7,014.9	7,068.8	6,997.4	13.6	17.8	-58.18	1,704.7	-2,118.9	2,523.1	2,495.6	27.56	91.544		
7,050.0	7,040.7	7,101.6	7,030.3	13.7	17.8	-59.83	1,705.0	-2,119.1	2,522.9	2,495.2	27.65	91.260		
7,051.6	7,042.4	7,103.7	7,032.3	13.7	17.8	-60.19	1,705.0	-2,119.1	2,522.9	2,495.2	27.65	91.245		
7,100.0	7,090.7	7,154.8	7,083.5	13.7	17.9	123.50	1,705.3	-2,119.2	2,523.7	2,495.9	27.76	90.900		
7,150.0	7,140.5	7,197.8	7,126.5	13.8	18.0	122.88	1,705.7	-2,119.4	2,526.5	2,498.6	27.84	90.742		
7,200.0	7,189.9	7,245.7	7,174.3	13.8	18.0	122.57	1,706.1	-2,119.8	2,531.2	2,503.3	27.91	90.709		
7,250.0	7,238.6	7,305.6	7,234.2	13.8	18.1	122.33	1,706.6	-2,120.0	2,537.8	2,509.8	27.96	90.765		
7,300.0	7,286.4	7,351.3	7,279.9	13.7	18.2	121.98	1,706.8	-2,120.2	2,546.0	2,518.1	27.99	90.977		
7,350.0	7,333.1	7,390.0	7,318.7	13.7	18.2	121.51	1,707.1	-2,120.3	2,556.3	2,528.3	28.00	91.294		
7,400.0	7,378.5	7,429.2	7,357.9	13.6	18.3	120.96	1,707.4	-2,120.6	2,568.6	2,540.6	28.02	91.671		
7,450.0	7,422.2	7,472.4	7,401.0	13.6	18.3	120.34	1,707.8	-2,121.0	2,582.9	2,554.8	28.05	92.078		
7,500.0	7,464.1	7,513.8	7,442.4	13.5	18.4	119.61	1,708.1	-2,121.4	2,598.9	2,570.8	28.10	92.485		
7,550.0	7,504.1	7,554.3	7,482.9	13.5	18.4	118.77	1,708.5	-2,121.8	2,616.8	2,588.6	28.19	92.843		
7,600.0	7,541.8	7,592.4	7,521.0	13.5	18.5	117.78	1,708.9	-2,122.0	2,636.5	2,608.2	28.31	93.124		
7,650.0	7,577.2	7,630.0	7,558.6	13.4	18.5	116.66	1,709.5	-2,122.1	2,657.9	2,629.4	28.49	93.295		
7,700.0	7,610.0	7,666.9	7,595.5	13.5	18.6	115.39	1,710.0	-2,122.1	2,681.1	2,652.3	28.73	93.323		
7,750.0	7,640.2	7,700.6	7,629.2	13.5	18.6	113.92	1,710.5	-2,122.1	2,705.8	2,676.8	29.04	93.175		
7,800.0	7,667.4	7,726.1	7,654.7	13.6	18.7	112.13	1,710.9	-2,122.1	2,732.1	2,702.7	29.44	92.807		
7,850.0	7,691.7	7,747.9	7,676.5	13.7	18.7	110.07	1,711.2	-2,122.1	2,760.0	2,730.0	29.92	92.250		
7,900.0	7,712.8	7,766.8	7,695.4	13.9	18.7	107.75	1,711.5	-2,122.0	2,789.2	2,758.8	30.47	91.537		
7,950.0	7,730.8	7,782.7	7,711.3	14.1	18.8	105.15	1,711.8	-2,122.0	2,819.8	2,788.7	31.08	90.716		
8,000.0	7,745.5	7,799.0	7,727.6	14.4	18.8	102.36	1,712.1	-2,122.0	2,851.6	2,819.9	31.73	89.867		
8,050.0	7,756.7	7,805.9	7,734.5	14.7	18.8	99.12	1,712.3	-2,121.9	2,884.4	2,852.0	32.39	89.038		
8,100.0	7,764.6	7,813.3	7,741.9	15.1	18.8	95.70	1,712.4	-2,121.9	2,918.0	2,885.0	33.03	88.345		
8,150.0	7,769.0	7,817.1	7,745.7	15.5	18.8	92.03	1,712.5	-2,121.9	2,952.4	2,918.8	33.60	87.862		
8,188.1	7,770.0	7,817.4	7,746.0	15.9	18.8	89.08	1,712.5	-2,121.9	2,978.9	2,944.9	33.97	87.684		
8,200.0	7,770.0	7,817.1	7,745.7	16.0	18.8	89.08	1,712.5	-2,121.9	2,987.3	2,953.2	34.08	87.646		
8,300.0	7,770.0	7,815.1	7,743.7	17.0	18.8	89.02	1,712.4	-2,121.9	3,058.3	3,023.2	35.08	87.183		
8,400.0	7,770.0	7,813.1	7,741.7	18.1	18.8	88.97	1,712.4	-2,121.9	3,130.9	3,094.7	36.19	86.512		
8,500.0	7,770.0	7,811.1	7,739.6	19.3	18.8	88.91	1,712.4	-2,121.9	3,204.9	3,167.5	37.40	85.702		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	7,809.0	7,737.6	20.6	18.8	88.86	1,712.3	-2,121.9	3,280.4	3,241.7	38.68	84.806		
8,700.0	7,770.0	7,806.9	7,735.5	21.9	18.8	88.80	1,712.3	-2,121.9	3,357.1	3,317.1	40.03	83.864		
8,800.0	7,770.0	7,804.9	7,733.5	23.3	18.8	88.75	1,712.2	-2,121.9	3,435.1	3,393.6	41.43	82.906		
8,900.0	7,770.0	7,802.8	7,731.4	24.8	18.8	88.69	1,712.2	-2,122.0	3,514.1	3,471.2	42.88	81.952		
9,000.0	7,770.0	7,800.7	7,729.3	26.3	18.8	88.63	1,712.2	-2,122.0	3,594.2	3,549.8	44.36	81.016		
9,100.0	7,770.0	7,799.0	7,727.6	27.8	18.8	88.59	1,712.1	-2,122.0	3,675.2	3,629.4	45.88	80.107		
9,200.0	7,770.0	7,799.0	7,727.6	29.3	18.8	88.59	1,712.1	-2,122.0	3,757.2	3,709.8	47.42	79.226		
9,300.0	7,770.0	7,799.0	7,727.6	30.9	18.8	88.59	1,712.1	-2,122.0	3,840.1	3,791.1	48.99	78.382		
9,400.0	7,770.0	7,799.0	7,727.6	32.5	18.8	88.59	1,712.1	-2,122.0	3,923.7	3,873.1	50.58	77.578		
9,500.0	7,770.0	7,792.1	7,720.7	34.1	18.8	88.40	1,712.0	-2,122.0	4,008.1	3,955.9	52.17	76.832		
9,600.0	7,770.0	7,790.5	7,719.1	35.7	18.8	88.36	1,712.0	-2,122.0	4,093.1	4,039.4	53.78	76.109		
9,700.0	7,770.0	7,789.0	7,717.6	37.3	18.8	88.32	1,711.9	-2,122.0	4,178.9	4,123.5	55.41	75.423		
9,800.0	7,770.0	7,787.4	7,716.0	39.0	18.8	88.28	1,711.9	-2,122.0	4,265.2	4,208.2	57.04	74.774		
9,900.0	7,770.0	7,785.8	7,714.4	40.6	18.8	88.24	1,711.9	-2,122.0	4,352.2	4,293.5	58.69	74.158		
10,000.0	7,770.0	7,784.3	7,712.9	42.3	18.8	88.19	1,711.9	-2,122.0	4,439.7	4,379.3	60.34	73.575		
10,100.0	7,770.0	7,782.8	7,711.4	44.0	18.8	88.15	1,711.8	-2,122.0	4,527.7	4,465.7	62.00	73.023		
10,200.0	7,770.0	7,781.3	7,709.9	45.6	18.8	88.11	1,711.8	-2,122.0	4,616.2	4,552.5	63.67	72.500		
10,300.0	7,770.0	7,779.8	7,708.4	47.3	18.8	88.07	1,711.8	-2,122.0	4,705.1	4,639.8	65.35	72.004		
10,400.0	7,770.0	7,778.3	7,706.9	49.0	18.8	88.03	1,711.7	-2,122.0	4,794.5	4,727.5	67.02	71.534		
10,500.0	7,770.0	7,776.8	7,705.4	50.7	18.8	87.99	1,711.7	-2,122.0	4,884.3	4,815.6	68.71	71.088		
10,600.0	7,770.0	7,775.4	7,704.0	52.4	18.8	87.95	1,711.7	-2,122.0	4,974.5	4,904.1	70.40	70.665		
10,700.0	7,770.0	7,773.9	7,702.5	54.1	18.8	87.91	1,711.7	-2,122.0	5,065.1	4,993.0	72.09	70.263		
10,800.0	7,770.0	7,772.5	7,701.1	55.8	18.7	87.88	1,711.6	-2,122.0	5,156.0	5,082.2	73.78	69.880		
10,900.0	7,770.0	7,771.1	7,699.7	57.5	18.7	87.84	1,711.6	-2,122.0	5,247.2	5,171.7	75.48	69.517		
11,000.0	7,770.0	7,769.7	7,698.3	59.2	18.7	87.80	1,711.6	-2,122.0	5,338.8	5,261.6	77.18	69.170		
11,100.0	7,770.0	7,768.3	7,696.9	60.9	18.7	87.76	1,711.6	-2,122.0	5,430.6	5,351.7	78.89	68.841		
11,200.0	7,770.0	7,766.9	7,695.5	62.6	18.7	87.73	1,711.5	-2,122.0	5,522.8	5,442.2	80.59	68.526		
11,300.0	7,770.0	7,765.5	7,694.1	64.3	18.7	87.69	1,711.5	-2,122.0	5,615.2	5,532.9	82.30	68.226		
11,400.0	7,770.0	7,764.2	7,692.8	66.0	18.7	87.65	1,711.5	-2,122.0	5,707.8	5,623.8	84.01	67.940		
11,500.0	7,770.0	7,762.8	7,691.4	67.7	18.7	87.62	1,711.5	-2,122.0	5,800.7	5,715.0	85.73	67.666		
11,600.0	7,770.0	7,761.5	7,690.1	69.5	18.7	87.58	1,711.5	-2,122.0	5,893.8	5,806.4	87.44	67.405		
11,700.0	7,770.0	7,760.2	7,688.8	71.2	18.7	87.54	1,711.4	-2,122.0	5,987.2	5,898.0	89.16	67.155		
11,800.0	7,770.0	7,758.9	7,687.5	72.9	18.7	87.51	1,711.4	-2,122.0	6,080.8	5,989.9	90.87	66.915		
11,900.0	7,770.0	7,757.6	7,686.2	74.6	18.7	87.47	1,711.4	-2,122.0	6,174.5	6,081.9	92.59	66.686		
12,000.0	7,770.0	7,756.3	7,684.9	76.4	18.7	87.44	1,711.4	-2,122.0	6,268.5	6,174.2	94.31	66.466		
12,100.0	7,770.0	7,755.0	7,683.6	78.1	18.7	87.41	1,711.3	-2,122.0	6,362.6	6,266.6	96.03	66.255		
12,200.0	7,770.0	7,753.7	7,682.3	79.8	18.7	87.37	1,711.3	-2,122.0	6,456.9	6,359.2	97.75	66.053		
12,300.0	7,770.0	7,752.5	7,681.1	81.5	18.7	87.34	1,711.3	-2,122.0	6,551.4	6,452.0	99.48	65.859		
12,400.0	7,770.0	7,751.2	7,679.8	83.3	18.7	87.30	1,711.3	-2,122.1	6,646.1	6,544.9	101.20	65.672		
12,500.0	7,770.0	7,750.0	7,678.6	85.0	18.7	87.27	1,711.3	-2,122.1	6,740.9	6,638.0	102.93	65.492		
12,600.0	7,770.0	7,748.8	7,677.4	86.7	18.7	87.24	1,711.2	-2,122.1	6,835.8	6,731.2	104.65	65.319		
12,700.0	7,770.0	7,747.5	7,676.1	88.5	18.7	87.21	1,711.2	-2,122.1	6,930.9	6,824.5	106.38	65.153		
12,800.0	7,770.0	7,746.3	7,674.9	90.2	18.7	87.17	1,711.2	-2,122.1	7,026.1	6,918.0	108.11	64.993		
12,900.0	7,770.0	7,745.1	7,673.7	91.9	18.7	87.14	1,711.2	-2,122.1	7,121.5	7,011.7	109.83	64.839		
13,000.0	7,770.0	7,743.9	7,672.5	93.7	18.7	87.11	1,711.2	-2,122.1	7,217.0	7,105.4	111.56	64.690		
13,100.0	7,770.0	7,742.8	7,671.4	95.4	18.7	87.08	1,711.1	-2,122.1	7,312.6	7,199.3	113.29	64.546		
13,200.0	7,770.0	7,741.6	7,670.2	97.1	18.7	87.05	1,711.1	-2,122.1	7,408.3	7,293.3	115.02	64.408		
13,300.0	7,770.0	7,740.4	7,669.0	98.9	18.7	87.01	1,711.1	-2,122.1	7,504.1	7,387.4	116.75	64.274		
13,400.0	7,770.0	7,739.3	7,667.9	100.6	18.7	86.98	1,711.1	-2,122.1	7,600.1	7,481.6	118.48	64.145		
13,500.0	7,770.0	7,738.1	7,666.7	102.4	18.7	86.95	1,711.1	-2,122.1	7,696.1	7,575.9	120.21	64.020		
13,600.0	7,770.0	7,737.0	7,665.6	104.1	18.7	86.92	1,711.1	-2,122.1	7,792.3	7,670.3	121.95	63.899		
13,700.0	7,770.0	7,735.9	7,664.5	105.8	18.7	86.89	1,711.0	-2,122.1	7,888.5	7,764.8	123.68	63.783		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,800.0	7,770.0	7,734.8	7,663.4	107.6	18.7	86.86	1,711.0	-2,122.1	7,984.8	7,859.4	125.41	63.670		
13,900.0	7,770.0	7,733.7	7,662.3	109.3	18.7	86.83	1,711.0	-2,122.1	8,081.2	7,954.1	127.14	63.560		
14,000.0	7,770.0	7,732.6	7,661.2	111.1	18.7	86.80	1,711.0	-2,122.1	8,177.7	8,048.9	128.88	63.454		
14,100.0	7,770.0	7,731.5	7,660.1	112.8	18.7	86.77	1,711.0	-2,122.1	8,274.3	8,143.7	130.61	63.352		
14,200.0	7,770.0	7,730.4	7,659.0	114.5	18.7	86.75	1,710.9	-2,122.1	8,371.0	8,238.7	132.34	63.252		
14,300.0	7,770.0	7,729.3	7,657.9	116.3	18.7	86.72	1,710.9	-2,122.1	8,467.7	8,333.7	134.08	63.156		
14,400.0	7,770.0	7,728.3	7,656.9	118.0	18.7	86.69	1,710.9	-2,122.1	8,564.6	8,428.7	135.81	63.062		
14,500.0	7,770.0	7,727.2	7,655.8	119.8	18.7	86.66	1,710.9	-2,122.1	8,661.5	8,523.9	137.55	62.971		
14,600.0	7,770.0	7,726.1	7,654.8	121.5	18.7	86.63	1,710.9	-2,122.1	8,758.4	8,619.1	139.28	62.883		
14,700.0	7,770.0	7,725.1	7,653.7	123.3	18.7	86.60	1,710.9	-2,122.1	8,855.4	8,714.4	141.02	62.797		
14,800.0	7,770.0	7,724.1	7,652.7	125.0	18.7	86.58	1,710.9	-2,122.1	8,952.5	8,809.8	142.75	62.714		
14,900.0	7,770.0	7,723.0	7,651.7	126.7	18.7	86.55	1,710.8	-2,122.1	9,049.7	8,905.2	144.49	62.633		
15,000.0	7,770.0	7,722.0	7,650.6	128.5	18.7	86.52	1,710.8	-2,122.1	9,146.9	9,000.7	146.22	62.555		
15,100.0	7,770.0	7,721.0	7,649.6	130.2	18.7	86.49	1,710.8	-2,122.1	9,244.2	9,096.2	147.96	62.478		
15,200.0	7,770.0	7,720.0	7,648.6	132.0	18.7	86.47	1,710.8	-2,122.1	9,341.5	9,191.8	149.69	62.404		
15,300.0	7,770.0	7,704.0	7,632.6	133.7	18.6	86.04	1,710.6	-2,122.1	9,438.9	9,287.6	151.34	62.368		
15,400.0	7,770.0	7,704.0	7,632.6	135.5	18.6	86.04	1,710.6	-2,122.1	9,536.4	9,383.3	153.08	62.295		
15,500.0	7,770.0	7,704.0	7,632.6	137.2	18.6	86.04	1,710.6	-2,122.1	9,633.9	9,479.0	154.83	62.224		
15,600.0	7,770.0	7,704.0	7,632.6	139.0	18.6	86.04	1,710.6	-2,122.1	9,731.4	9,574.8	156.57	62.155		
15,700.0	7,770.0	7,704.0	7,632.6	140.7	18.6	86.04	1,710.6	-2,122.1	9,829.0	9,670.7	158.31	62.087		
15,800.0	7,770.0	7,704.0	7,632.6	142.4	18.6	86.04	1,710.6	-2,122.1	9,926.6	9,766.6	160.05	62.022 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-174.52	-6,180.7	-593.4	6,209.1					
100.0	100.0	135.0	135.0	0.2	0.2	-174.52	-6,180.7	-593.4	6,209.1	6,208.7	0.39	N/A		
200.0	200.0	235.0	235.0	0.3	0.4	-174.52	-6,180.7	-593.4	6,209.1	6,208.4	0.74	8,428.002		
300.0	300.0	335.0	335.0	0.5	0.6	-174.52	-6,180.7	-593.4	6,209.1	6,208.0	1.09	5,718.531		
400.0	400.0	435.0	435.0	0.7	0.8	-174.52	-6,180.7	-593.4	6,209.1	6,207.7	1.43	4,327.355		
500.0	500.0	535.0	535.0	0.8	0.9	-174.52	-6,180.7	-593.4	6,209.1	6,207.3	1.78	3,480.609		
550.0	550.0	585.0	585.0	0.9	1.0	-174.52	-6,180.7	-593.4	6,209.1	6,207.1	1.96	3,170.426		
600.0	600.0	635.0	635.0	1.0	1.1	-175.35	-6,180.7	-593.4	6,209.3	6,207.2	2.13	2,911.180		
700.0	700.0	735.0	735.0	1.2	1.3	-175.35	-6,180.7	-593.4	6,211.1	6,208.6	2.48	2,502.951		
800.0	799.9	834.9	834.9	1.4	1.5	-175.35	-6,180.7	-593.4	6,214.5	6,211.7	2.83	2,196.387		
861.1	860.9	895.9	895.9	1.5	1.6	-175.35	-6,180.7	-593.4	6,217.5	6,214.5	3.04	2,044.181		
900.0	899.8	934.8	934.8	1.6	1.6	-175.35	-6,180.7	-593.4	6,219.6	6,216.4	3.18	1,957.481		
1,000.0	999.6	1,034.6	1,034.6	1.8	1.8	-175.36	-6,180.7	-593.4	6,225.0	6,221.5	3.53	1,765.358		
1,100.0	1,099.5	1,134.5	1,134.5	1.9	2.0	-175.36	-6,180.7	-593.4	6,230.4	6,226.6	3.88	1,607.826		
1,200.0	1,199.3	1,234.3	1,234.3	2.1	2.2	-175.36	-6,180.7	-593.4	6,235.9	6,231.6	4.22	1,476.315		
1,300.0	1,299.2	1,334.2	1,334.2	2.3	2.3	-175.37	-6,180.7	-593.4	6,241.3	6,236.7	4.57	1,364.870		
1,400.0	1,399.1	1,434.1	1,434.1	2.5	2.5	-175.37	-6,180.7	-593.4	6,246.7	6,241.8	4.92	1,269.223		
1,500.0	1,498.9	1,533.9	1,533.9	2.7	2.7	-175.38	-6,180.7	-593.4	6,252.1	6,246.8	5.27	1,186.239		
1,600.0	1,598.8	1,633.8	1,633.8	2.9	2.9	-175.38	-6,180.7	-593.4	6,257.5	6,251.9	5.62	1,113.558		
1,700.0	1,698.6	1,733.6	1,733.6	3.1	3.0	-175.38	-6,180.7	-593.4	6,262.9	6,256.9	5.97	1,049.373		
1,800.0	1,798.5	1,833.5	1,833.5	3.3	3.2	-175.39	-6,180.7	-593.4	6,268.3	6,262.0	6.32	992.278		
1,900.0	1,898.3	1,933.3	1,933.3	3.5	3.4	-175.39	-6,180.7	-593.4	6,273.7	6,267.1	6.67	941.159		
2,000.0	1,998.2	2,033.2	2,033.2	3.7	3.5	-175.40	-6,180.7	-593.4	6,279.1	6,272.1	7.01	895.125		
2,100.0	2,098.0	2,133.0	2,133.0	3.9	3.7	-175.40	-6,180.7	-593.4	6,284.5	6,277.2	7.36	853.452		
2,200.0	2,197.9	2,232.9	2,232.9	4.1	3.9	-175.40	-6,180.7	-593.4	6,289.9	6,282.2	7.71	815.550		
2,300.0	2,297.7	2,332.7	2,332.7	4.3	4.1	-175.41	-6,180.7	-593.4	6,295.4	6,287.3	8.06	780.927		
2,400.0	2,397.6	2,432.6	2,432.6	4.5	4.2	-175.41	-6,180.7	-593.4	6,300.8	6,292.4	8.41	749.178		
2,500.0	2,497.4	2,532.4	2,532.4	4.7	4.4	-175.42	-6,180.7	-593.4	6,306.2	6,297.4	8.76	719.957		
2,600.0	2,597.3	2,632.3	2,632.3	4.9	4.6	-175.42	-6,180.7	-593.4	6,311.6	6,302.5	9.11	692.975		
2,700.0	2,697.1	2,732.1	2,732.1	5.1	4.8	-175.42	-6,180.7	-593.4	6,317.0	6,307.5	9.46	667.983		
2,800.0	2,797.0	2,832.0	2,832.0	5.3	4.9	-175.43	-6,180.7	-593.4	6,322.4	6,312.6	9.81	644.770		
2,900.0	2,896.8	2,931.8	2,931.8	5.5	5.1	-175.43	-6,180.7	-593.4	6,327.8	6,317.7	10.15	623.152		
3,000.0	2,996.7	3,031.7	3,031.7	5.7	5.3	-175.44	-6,180.7	-593.4	6,333.2	6,322.7	10.50	602.970		
3,100.0	3,096.5	3,131.5	3,131.5	5.9	5.5	-175.44	-6,180.7	-593.4	6,338.6	6,327.8	10.85	584.085		
3,200.0	3,196.4	3,231.4	3,231.4	6.1	5.6	-175.44	-6,180.7	-593.4	6,344.0	6,332.8	11.20	566.377		
3,300.0	3,296.3	3,331.3	3,331.3	6.3	5.8	-175.45	-6,180.7	-593.4	6,349.4	6,337.9	11.55	549.738		
3,400.0	3,396.1	3,431.1	3,431.1	6.5	6.0	-175.45	-6,180.7	-593.4	6,354.9	6,343.0	11.90	534.076		
3,500.0	3,496.0	3,531.0	3,531.0	6.7	6.2	-175.46	-6,180.7	-593.4	6,360.3	6,348.0	12.25	519.305		
3,600.0	3,595.8	3,630.8	3,630.8	6.9	6.3	-175.46	-6,180.7	-593.4	6,365.7	6,353.1	12.60	505.353		
3,700.0	3,695.7	3,730.7	3,730.7	7.0	6.5	-175.46	-6,180.7	-593.4	6,371.1	6,358.1	12.95	492.152		
3,800.0	3,795.5	3,830.5	3,830.5	7.2	6.7	-175.47	-6,180.7	-593.4	6,376.5	6,363.2	13.29	479.645		
3,900.0	3,895.4	3,930.4	3,930.4	7.4	6.9	-175.47	-6,180.7	-593.4	6,381.9	6,368.3	13.64	467.777		
4,000.0	3,995.2	4,030.2	4,030.2	7.6	7.0	-175.47	-6,180.7	-593.4	6,387.3	6,373.3	13.99	456.501		
4,100.0	4,095.1	4,130.1	4,130.1	7.8	7.2	-175.48	-6,180.7	-593.4	6,392.7	6,378.4	14.34	445.773		
4,200.0	4,194.9	4,229.9	4,229.9	8.0	7.4	-175.48	-6,180.7	-593.4	6,398.1	6,383.4	14.69	435.555		
4,300.0	4,294.8	4,329.8	4,329.8	8.2	7.6	-175.49	-6,180.7	-593.4	6,403.5	6,388.5	15.04	425.811		
4,400.0	4,394.6	4,429.6	4,429.6	8.4	7.7	-175.49	-6,180.7	-593.4	6,409.0	6,393.6	15.39	416.509		
4,500.0	4,494.5	4,529.5	4,529.5	8.6	7.9	-175.49	-6,180.7	-593.4	6,414.4	6,398.6	15.74	407.620		
4,600.0	4,594.3	4,629.3	4,629.3	8.8	8.1	-175.50	-6,180.7	-593.4	6,419.8	6,403.7	16.09	399.116		
4,700.0	4,694.2	4,729.2	4,729.2	9.0	8.3	-175.50	-6,180.7	-593.4	6,425.2	6,408.8	16.43	390.973		
4,800.0	4,794.0	4,829.0	4,829.0	9.2	8.4	-175.50	-6,180.7	-593.4	6,430.6	6,413.8	16.78	383.168		
4,900.0	4,893.9	4,928.9	4,928.9	9.4	8.6	-175.51	-6,180.7	-593.4	6,436.0	6,418.9	17.13	375.682		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	5,028.7	5,028.7	9.6	8.8	-175.51	-6,180.7	-593.4	6,441.4	6,423.9	17.48	368.494		
5,100.0	5,093.6	5,128.6	5,128.6	9.8	9.0	-175.52	-6,180.7	-593.4	6,446.8	6,429.0	17.83	361.587		
5,200.0	5,193.5	5,228.5	5,228.5	10.0	9.1	-175.52	-6,180.7	-593.4	6,452.2	6,434.1	18.18	354.946		
5,300.0	5,293.3	5,328.3	5,328.3	10.2	9.3	-175.52	-6,180.7	-593.4	6,457.6	6,439.1	18.53	348.555		
5,400.0	5,393.2	5,428.2	5,428.2	10.4	9.5	-175.53	-6,180.7	-593.4	6,463.1	6,444.2	18.88	342.400		
5,500.0	5,493.0	5,528.0	5,528.0	10.6	9.6	-175.53	-6,180.7	-593.4	6,468.5	6,449.2	19.22	336.468		
5,600.0	5,592.9	5,627.9	5,627.9	10.8	9.8	-175.54	-6,180.7	-593.4	6,473.9	6,454.3	19.57	330.748		
5,700.0	5,692.7	5,727.7	5,727.7	11.0	10.0	-175.54	-6,180.7	-593.4	6,479.3	6,459.4	19.92	325.228		
5,800.0	5,792.6	5,827.6	5,827.6	11.2	10.2	-175.54	-6,180.7	-593.4	6,484.7	6,464.4	20.27	319.898		
5,900.0	5,892.4	5,927.4	5,927.4	11.4	10.3	-175.55	-6,180.7	-593.4	6,490.1	6,469.5	20.62	314.748		
6,000.0	5,992.3	6,027.3	6,027.3	11.6	10.5	-175.55	-6,180.7	-593.4	6,495.5	6,474.5	20.97	309.770		
6,100.0	6,092.1	6,127.1	6,127.1	11.8	10.7	-175.55	-6,180.7	-593.4	6,500.9	6,479.6	21.32	304.955		
6,200.0	6,192.0	6,227.0	6,227.0	12.0	10.9	-175.56	-6,180.7	-593.4	6,506.3	6,484.7	21.67	300.295		
6,300.0	6,291.8	6,326.8	6,326.8	12.2	11.0	-175.56	-6,180.7	-593.4	6,511.7	6,489.7	22.02	295.782		
6,400.0	6,391.7	6,426.7	6,426.7	12.4	11.2	-175.56	-6,180.7	-593.4	6,517.2	6,494.8	22.36	291.410		
6,500.0	6,491.5	6,526.5	6,526.5	12.6	11.4	-175.57	-6,180.7	-593.4	6,522.6	6,499.9	22.71	287.173		
6,600.0	6,591.4	6,626.4	6,626.4	12.8	11.6	-175.57	-6,180.7	-593.4	6,528.0	6,504.9	23.06	283.064		
6,700.0	6,691.2	6,726.2	6,726.2	13.0	11.7	-175.58	-6,180.7	-593.4	6,533.4	6,510.0	23.41	279.077		
6,800.0	6,791.1	6,826.1	6,826.1	13.2	11.9	-175.58	-6,180.7	-593.4	6,538.8	6,515.0	23.76	275.207		
6,900.0	6,890.9	6,925.9	6,925.9	13.4	12.1	-175.58	-6,180.7	-593.4	6,544.2	6,520.1	24.11	271.450		
7,000.0	6,990.8	7,025.8	7,025.8	13.6	12.3	-175.59	-6,180.7	-593.4	6,549.6	6,525.2	24.46	267.799		
7,024.2	7,014.9	7,049.9	7,049.9	13.6	12.3	-175.59	-6,180.7	-593.4	6,550.9	6,526.4	24.54	266.932		
7,050.0	7,040.7	7,075.7	7,075.7	13.7	12.3	-177.25	-6,180.7	-593.4	6,551.9	6,527.2	24.64	265.918		
7,100.0	7,090.7	7,125.7	7,125.7	13.7	12.4	6.13	-6,180.7	-593.4	6,551.0	6,526.3	24.77	264.518		
7,150.0	7,140.5	7,175.5	7,175.5	13.8	12.5	5.66	-6,180.7	-593.4	6,546.7	6,521.9	24.81	263.846		
7,200.0	7,189.9	7,224.9	7,224.9	13.8	12.6	5.59	-6,180.7	-593.4	6,539.0	6,514.2	24.78	263.892		
7,250.0	7,238.6	7,273.6	7,273.6	13.8	12.7	5.62	-6,180.7	-593.4	6,527.8	6,503.2	24.67	264.650		
7,300.0	7,286.4	7,321.4	7,321.4	13.7	12.8	5.71	-6,180.7	-593.4	6,513.3	6,488.8	24.48	266.119		
7,350.0	7,333.1	7,368.1	7,368.1	13.7	12.9	5.86	-6,180.7	-593.4	6,495.5	6,471.3	24.21	268.299		
7,400.0	7,378.5	7,413.5	7,413.5	13.6	12.9	6.05	-6,180.7	-593.4	6,474.5	6,450.7	23.87	271.189		
7,450.0	7,422.2	7,457.2	7,457.2	13.6	13.0	6.29	-6,180.7	-593.4	6,450.4	6,427.0	23.47	274.787		
7,500.0	7,464.1	7,499.1	7,499.1	13.5	13.1	6.60	-6,180.7	-593.4	6,423.4	6,400.3	23.02	279.080		
7,550.0	7,504.1	7,539.1	7,539.1	13.5	13.2	6.97	-6,180.7	-593.4	6,393.4	6,370.9	22.51	284.041		
7,600.0	7,541.8	7,576.8	7,576.8	13.5	13.2	7.43	-6,180.7	-593.4	6,360.8	6,338.9	21.96	289.616		
7,650.0	7,577.2	7,612.2	7,612.2	13.4	13.3	7.99	-6,180.7	-593.4	6,325.7	6,304.3	21.39	295.709		
7,700.0	7,610.0	7,645.0	7,645.0	13.5	13.3	8.69	-6,180.7	-593.4	6,288.1	6,267.3	20.81	302.162		
7,750.0	7,640.2	7,675.2	7,675.2	13.5	13.4	9.57	-6,180.7	-593.4	6,248.4	6,228.2	20.24	308.713		
7,800.0	7,667.4	7,702.4	7,702.4	13.6	13.4	10.70	-6,180.7	-593.4	6,206.7	6,187.0	19.71	314.950		
7,850.0	7,691.7	7,726.7	7,726.7	13.7	13.5	12.17	-6,180.7	-593.4	6,163.2	6,144.0	19.25	320.223		
7,900.0	7,712.8	7,747.8	7,747.8	13.9	13.5	14.15	-6,180.7	-593.4	6,118.1	6,099.2	18.91	323.500		
7,950.0	7,730.8	7,765.8	7,765.8	14.1	13.6	16.94	-6,180.7	-593.4	6,071.7	6,052.9	18.79	323.110		
8,000.0	7,745.5	7,780.5	7,780.5	14.4	13.6	21.10	-6,180.7	-593.4	6,024.2	6,005.1	19.05	316.276		
8,050.0	7,756.7	7,791.7	7,791.7	14.7	13.6	27.78	-6,180.7	-593.4	5,975.7	5,955.7	20.02	298.477		
8,100.0	7,764.6	7,799.6	7,799.6	15.1	13.6	39.67	-6,180.7	-593.4	5,926.6	5,904.1	22.43	264.170		
8,150.0	7,769.0	7,804.0	7,804.0	15.5	13.6	62.61	-6,180.7	-593.4	5,877.0	5,850.1	26.99	217.774		
8,188.1	7,770.0	7,805.0	7,805.0	15.9	13.6	90.00	-6,180.7	-593.4	5,839.2	5,809.7	29.47	198.117		
8,200.0	7,770.0	7,805.0	7,805.0	16.0	13.6	90.00	-6,180.7	-593.4	5,827.3	5,797.7	29.58	196.975		
8,300.0	7,770.0	7,805.0	7,805.0	17.0	13.6	90.00	-6,180.7	-593.4	5,727.9	5,697.3	30.58	187.288		
8,400.0	7,770.0	7,805.0	7,805.0	18.1	13.6	90.00	-6,180.7	-593.4	5,628.4	5,596.7	31.70	177.565		
8,500.0	7,770.0	7,805.0	7,805.0	19.3	13.6	90.00	-6,180.7	-593.4	5,529.0	5,496.1	32.91	168.016		
8,600.0	7,770.0	7,805.0	7,805.0	20.6	13.6	90.00	-6,180.7	-593.4	5,429.6	5,395.4	34.20	158.779		
8,700.0	7,770.0	7,805.0	7,805.0	21.9	13.6	90.00	-6,180.7	-593.4	5,330.2	5,294.7	35.55	149.939		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,800.0	7,770.0	7,805.0	7,805.0	23.3	13.6	90.00	-6,180.7	-593.4	5,230.9	5,193.9	36.96	141.544		
8,900.0	7,770.0	7,805.0	7,805.0	24.8	13.6	90.00	-6,180.7	-593.4	5,131.5	5,093.1	38.41	133.611		
9,000.0	7,770.0	7,805.0	7,805.0	26.3	13.6	90.00	-6,180.7	-593.4	5,032.2	4,992.3	39.89	126.138		
9,100.0	7,770.0	7,805.0	7,805.0	27.8	13.6	90.00	-6,180.7	-593.4	4,933.0	4,891.5	41.41	119.115		
9,200.0	7,770.0	7,805.0	7,805.0	29.3	13.6	90.00	-6,180.7	-593.4	4,833.7	4,790.8	42.96	112.520		
9,300.0	7,770.0	7,805.0	7,805.0	30.9	13.6	90.00	-6,180.7	-593.4	4,734.5	4,690.0	44.53	106.331		
9,400.0	7,770.0	7,805.0	7,805.0	32.5	13.6	90.00	-6,180.7	-593.4	4,635.3	4,589.2	46.11	100.521		
9,500.0	7,770.0	7,805.0	7,805.0	34.1	13.6	90.00	-6,180.7	-593.4	4,536.2	4,488.5	47.72	95.066		
9,600.0	7,770.0	7,805.0	7,805.0	35.7	13.6	90.00	-6,180.7	-593.4	4,437.1	4,387.7	49.33	89.941		
9,700.0	7,770.0	7,805.0	7,805.0	37.3	13.6	90.00	-6,180.7	-593.4	4,338.0	4,287.0	50.96	85.121		
9,800.0	7,770.0	7,805.0	7,805.0	39.0	13.6	90.00	-6,180.7	-593.4	4,239.0	4,186.4	52.60	80.585		
9,900.0	7,770.0	7,805.0	7,805.0	40.6	13.6	90.00	-6,180.7	-593.4	4,140.0	4,085.8	54.25	76.310		
10,000.0	7,770.0	7,805.0	7,805.0	42.3	13.6	90.00	-6,180.7	-593.4	4,041.1	3,985.2	55.91	72.277		
10,100.0	7,770.0	7,805.0	7,805.0	44.0	13.6	90.00	-6,180.7	-593.4	3,942.2	3,884.7	57.58	68.469		
10,200.0	7,770.0	7,805.0	7,805.0	45.6	13.6	90.00	-6,180.7	-593.4	3,843.4	3,784.2	59.25	64.869		
10,300.0	7,770.0	7,805.0	7,805.0	47.3	13.6	90.00	-6,180.7	-593.4	3,744.7	3,683.7	60.93	61.461		
10,400.0	7,770.0	7,805.0	7,805.0	49.0	13.6	90.00	-6,180.7	-593.4	3,646.0	3,583.4	62.61	58.233		
10,500.0	7,770.0	7,805.0	7,805.0	50.7	13.6	90.00	-6,180.7	-593.4	3,547.4	3,483.1	64.30	55.170		
10,600.0	7,770.0	7,805.0	7,805.0	52.4	13.6	90.00	-6,180.7	-593.4	3,448.9	3,382.9	65.99	52.262		
10,700.0	7,770.0	7,805.0	7,805.0	54.1	13.6	90.00	-6,180.7	-593.4	3,350.4	3,282.8	67.69	49.498		
10,800.0	7,770.0	7,805.0	7,805.0	55.8	13.6	90.00	-6,180.7	-593.4	3,252.1	3,182.7	69.39	46.868		
10,900.0	7,770.0	7,805.0	7,805.0	57.5	13.6	90.00	-6,180.7	-593.4	3,153.9	3,082.8	71.09	44.363		
11,000.0	7,770.0	7,805.0	7,805.0	59.2	13.6	90.00	-6,180.7	-593.4	3,055.7	2,982.9	72.80	41.976		
11,100.0	7,770.0	7,805.0	7,805.0	60.9	13.6	90.00	-6,180.7	-593.4	2,957.7	2,883.2	74.51	39.698		
11,200.0	7,770.0	7,805.0	7,805.0	62.6	13.6	90.00	-6,180.7	-593.4	2,859.9	2,783.7	76.22	37.522		
11,300.0	7,770.0	7,805.0	7,805.0	64.3	13.6	90.00	-6,180.7	-593.4	2,762.2	2,684.3	77.93	35.443		
11,400.0	7,770.0	7,805.0	7,805.0	66.0	13.6	90.00	-6,180.7	-593.4	2,664.7	2,585.0	79.65	33.455		
11,500.0	7,770.0	7,805.0	7,805.0	67.7	13.6	90.00	-6,180.7	-593.4	2,567.3	2,486.0	81.37	31.553		
11,600.0	7,770.0	7,805.0	7,805.0	69.5	13.6	90.00	-6,180.7	-593.4	2,470.2	2,387.1	83.09	29.731		
11,700.0	7,770.0	7,805.0	7,805.0	71.2	13.6	90.00	-6,180.7	-593.4	2,373.3	2,288.5	84.81	27.985		
11,800.0	7,770.0	7,805.0	7,805.0	72.9	13.6	90.00	-6,180.7	-593.4	2,276.7	2,190.1	86.53	26.311		
11,900.0	7,770.0	7,805.0	7,805.0	74.6	13.6	90.00	-6,180.7	-593.4	2,180.4	2,092.1	88.25	24.705		
12,000.0	7,770.0	7,805.0	7,805.0	76.4	13.6	90.00	-6,180.7	-593.4	2,084.4	1,994.4	89.98	23.165		
12,100.0	7,770.0	7,805.0	7,805.0	78.1	13.6	90.00	-6,180.7	-593.4	1,988.8	1,897.1	91.71	21.687		
12,200.0	7,770.0	7,805.0	7,805.0	79.8	13.6	90.00	-6,180.7	-593.4	1,893.7	1,800.3	93.44	20.267		
12,300.0	7,770.0	7,805.0	7,805.0	81.5	13.6	90.00	-6,180.7	-593.4	1,799.1	1,703.9	95.16	18.905		
12,400.0	7,770.0	7,805.0	7,805.0	83.3	13.6	90.00	-6,180.7	-593.4	1,705.1	1,608.2	96.90	17.598		
12,500.0	7,770.0	7,805.0	7,805.0	85.0	13.6	90.00	-6,180.7	-593.4	1,611.9	1,513.3	98.63	16.344		
12,600.0	7,770.0	7,805.0	7,805.0	86.7	13.6	90.00	-6,180.7	-593.4	1,519.5	1,419.2	100.36	15.141		
12,700.0	7,770.0	7,805.0	7,805.0	88.5	13.6	90.00	-6,180.7	-593.4	1,428.2	1,326.1	102.09	13.989		
12,800.0	7,770.0	7,805.0	7,805.0	90.2	13.6	90.00	-6,180.7	-593.4	1,338.0	1,234.2	103.83	12.887		
12,900.0	7,770.0	7,805.0	7,805.0	91.9	13.6	90.00	-6,180.7	-593.4	1,249.4	1,143.9	105.56	11.836		
13,000.0	7,770.0	7,805.0	7,805.0	93.7	13.6	90.00	-6,180.7	-593.4	1,162.7	1,055.4	107.30	10.836		
13,100.0	7,770.0	7,805.0	7,805.0	95.4	13.6	90.00	-6,180.7	-593.4	1,078.2	969.2	109.03	9.889		
13,200.0	7,770.0	7,805.0	7,805.0	97.1	13.6	90.00	-6,180.7	-593.4	996.6	885.8	110.77	8.997		
13,300.0	7,770.0	7,805.0	7,805.0	98.9	13.6	90.00	-6,180.7	-593.4	918.6	806.1	112.51	8.165		
13,400.0	7,770.0	7,805.0	7,805.0	100.6	13.6	90.00	-6,180.7	-593.4	845.3	731.1	114.24	7.400		
13,500.0	7,770.0	7,805.0	7,805.0	102.4	13.6	90.00	-6,180.7	-593.4	778.0	662.0	115.98	6.708		
13,600.0	7,770.0	7,805.0	7,805.0	104.1	13.6	90.00	-6,180.7	-593.4	718.4	600.6	117.72	6.102		
13,700.0	7,770.0	7,805.0	7,805.0	105.8	13.6	90.00	-6,180.7	-593.4	668.4	548.9	119.46	5.595		
13,800.0	7,770.0	7,805.0	7,805.0	107.6	13.6	90.00	-6,180.7	-593.4	630.4	509.2	121.20	5.202		
13,900.0	7,770.0	7,805.0	7,805.0	109.3	13.6	90.00	-6,180.7	-593.4	606.8	483.8	122.94	4.935		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor		
13,996.4	7,770.0	7,805.0	7,805.0	111.0	13.6	90.00	-6,180.7	-593.4	599.0	474.4	124.62	4.807	CC	
14,000.0	7,770.0	7,805.0	7,805.0	111.1	13.6	90.00	-6,180.7	-593.4	599.1	474.4	124.68	4.805	ES, SF	
14,100.0	7,770.0	7,805.0	7,805.0	112.8	13.6	90.00	-6,180.7	-593.4	607.9	481.5	126.42	4.809		
14,200.0	7,770.0	7,805.0	7,805.0	114.5	13.6	90.00	-6,180.7	-593.4	632.7	504.5	128.16	4.937		
14,300.0	7,770.0	7,805.0	7,805.0	116.3	13.6	90.00	-6,180.7	-593.4	671.6	541.7	129.91	5.170		
14,400.0	7,770.0	7,805.0	7,805.0	118.0	13.6	90.00	-6,180.7	-593.4	722.3	590.6	131.65	5.487		
14,500.0	7,770.0	7,805.0	7,805.0	119.8	13.6	90.00	-6,180.7	-593.4	782.6	649.2	133.39	5.867		
14,600.0	7,770.0	7,805.0	7,805.0	121.5	13.6	90.00	-6,180.7	-593.4	850.4	715.2	135.13	6.293		
14,700.0	7,770.0	7,805.0	7,805.0	123.3	13.6	90.00	-6,180.7	-593.4	924.0	787.2	136.88	6.751		
14,800.0	7,770.0	7,805.0	7,805.0	125.0	13.6	90.00	-6,180.7	-593.4	1,002.3	863.7	138.62	7.230		
14,900.0	7,770.0	7,805.0	7,805.0	126.7	13.6	90.00	-6,180.7	-593.4	1,084.1	943.7	140.36	7.723		
15,000.0	7,770.0	7,805.0	7,805.0	128.5	13.6	90.00	-6,180.7	-593.4	1,168.7	1,026.6	142.11	8.224		
15,100.0	7,770.0	7,805.0	7,805.0	130.2	13.6	90.00	-6,180.7	-593.4	1,255.7	1,111.8	143.85	8.729		
15,200.0	7,770.0	7,805.0	7,805.0	132.0	13.6	90.00	-6,180.7	-593.4	1,344.4	1,198.8	145.60	9.234		
15,300.0	7,770.0	7,805.0	7,805.0	133.7	13.6	90.00	-6,180.7	-593.4	1,434.6	1,287.3	147.34	9.737		
15,400.0	7,770.0	7,805.0	7,805.0	135.5	13.6	90.00	-6,180.7	-593.4	1,526.0	1,377.0	149.09	10.236		
15,500.0	7,770.0	7,805.0	7,805.0	137.2	13.6	90.00	-6,180.7	-593.4	1,618.5	1,467.7	150.83	10.730		
15,600.0	7,770.0	7,805.0	7,805.0	139.0	13.6	90.00	-6,180.7	-593.4	1,711.8	1,559.2	152.58	11.219		
15,700.0	7,770.0	7,805.0	7,805.0	140.7	13.6	90.00	-6,180.7	-593.4	1,805.8	1,651.5	154.32	11.701		
15,800.0	7,770.0	7,805.0	7,805.0	142.4	13.6	90.00	-6,180.7	-593.4	1,900.4	1,744.4	156.07	12.177		
15,900.0	7,770.0	7,805.0	7,805.0	144.2	13.6	90.00	-6,180.7	-593.4	1,995.6	1,837.8	157.82	12.645		
16,000.0	7,770.0	7,805.0	7,805.0	145.9	13.6	90.00	-6,180.7	-593.4	2,091.2	1,931.6	159.56	13.106		
16,100.0	7,770.0	7,805.0	7,805.0	147.7	13.6	90.00	-6,180.7	-593.4	2,187.2	2,025.9	161.31	13.559		
16,200.0	7,770.0	7,805.0	7,805.0	149.4	13.6	90.00	-6,180.7	-593.4	2,283.5	2,120.5	163.06	14.004		
16,300.0	7,770.0	7,805.0	7,805.0	151.2	13.6	90.00	-6,180.7	-593.4	2,380.2	2,215.4	164.80	14.442		
16,400.0	7,770.0	7,805.0	7,805.0	152.9	13.6	90.00	-6,180.7	-593.4	2,477.1	2,310.5	166.55	14.873		
16,500.0	7,770.0	7,805.0	7,805.0	154.7	13.6	90.00	-6,180.7	-593.4	2,574.2	2,405.9	168.30	15.296		
16,600.0	7,770.0	7,805.0	7,805.0	156.4	13.6	90.00	-6,180.7	-593.4	2,671.6	2,501.5	170.05	15.711		
16,700.0	7,770.0	7,805.0	7,805.0	158.2	13.6	90.00	-6,180.7	-593.4	2,769.1	2,597.3	171.79	16.119		
16,800.0	7,770.0	7,805.0	7,805.0	159.9	13.6	90.00	-6,180.7	-593.4	2,866.8	2,693.3	173.54	16.520		
16,900.0	7,770.0	7,805.0	7,805.0	161.7	13.6	90.00	-6,180.7	-593.4	2,964.7	2,789.4	175.29	16.913		
17,000.0	7,770.0	7,805.0	7,805.0	163.4	13.6	90.00	-6,180.7	-593.4	3,062.7	2,885.7	177.04	17.300		
17,100.0	7,770.0	7,805.0	7,805.0	165.2	13.6	90.00	-6,180.7	-593.4	3,160.8	2,982.1	178.78	17.680		
17,200.0	7,770.0	7,805.0	7,805.0	166.9	13.6	90.00	-6,180.7	-593.4	3,259.1	3,078.5	180.53	18.053		
17,300.0	7,770.0	7,805.0	7,805.0	168.7	13.6	90.00	-6,180.7	-593.4	3,357.4	3,175.1	182.28	18.419		
17,400.0	7,770.0	7,805.0	7,805.0	170.4	13.6	90.00	-6,180.7	-593.4	3,455.9	3,271.8	184.03	18.779		
17,500.0	7,770.0	7,805.0	7,805.0	172.2	13.6	90.00	-6,180.7	-593.4	3,554.4	3,368.6	185.78	19.132		
17,600.0	7,770.0	7,805.0	7,805.0	173.9	13.6	90.00	-6,180.7	-593.4	3,653.0	3,465.5	187.53	19.480		
17,653.1	7,770.0	7,805.0	7,805.0	174.8	13.6	90.00	-6,180.7	-593.4	3,705.4	3,516.9	188.45	19.662		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-176.10	-9,207.8	-627.1	9,229.1					
100.0	100.0	130.0	130.0	0.2	0.2	-176.10	-9,207.8	-627.1	9,229.1	9,228.8	0.38	N/A		
200.0	200.0	230.0	230.0	0.3	0.4	-176.10	-9,207.8	-627.1	9,229.1	9,228.4	0.73	N/A		
300.0	300.0	330.0	330.0	0.5	0.6	-176.10	-9,207.8	-627.1	9,229.1	9,228.1	1.08	8,568.832		
400.0	400.0	430.0	430.0	0.7	0.8	-176.10	-9,207.8	-627.1	9,229.1	9,227.7	1.43	6,471.492		
500.0	500.0	530.0	530.0	0.8	0.9	-176.10	-9,207.8	-627.1	9,229.1	9,227.4	1.78	5,198.972		
550.0	550.0	580.0	580.0	0.9	1.0	-176.10	-9,207.8	-627.1	9,229.1	9,227.2	1.95	4,733.579		
600.0	600.0	630.0	630.0	1.0	1.1	-176.94	-9,207.8	-627.1	9,229.4	9,227.2	2.12	4,344.874		
700.0	700.0	730.0	730.0	1.2	1.3	-176.94	-9,207.8	-627.1	9,231.1	9,228.6	2.47	3,733.111		
800.0	799.9	829.9	829.9	1.4	1.4	-176.94	-9,207.8	-627.1	9,234.6	9,231.8	2.82	3,273.879		
861.1	860.9	890.9	890.9	1.5	1.6	-176.94	-9,207.8	-627.1	9,237.6	9,234.5	3.03	3,045.891		
900.0	899.8	929.8	929.8	1.6	1.6	-176.94	-9,207.8	-627.1	9,239.7	9,236.5	3.17	2,916.040		
1,000.0	999.6	1,029.6	1,029.6	1.8	1.8	-176.94	-9,207.8	-627.1	9,245.1	9,241.6	3.52	2,628.408		
1,100.0	1,099.5	1,129.5	1,129.5	1.9	2.0	-176.94	-9,207.8	-627.1	9,250.5	9,246.7	3.87	2,392.680		
1,200.0	1,199.3	1,229.3	1,229.3	2.1	2.1	-176.94	-9,207.8	-627.1	9,255.9	9,251.7	4.21	2,195.968		
1,300.0	1,299.2	1,329.2	1,329.2	2.3	2.3	-176.95	-9,207.8	-627.1	9,261.4	9,256.8	4.56	2,029.326		
1,400.0	1,399.1	1,429.1	1,429.1	2.5	2.5	-176.95	-9,207.8	-627.1	9,266.8	9,261.9	4.91	1,886.349		
1,500.0	1,498.9	1,528.9	1,528.9	2.7	2.7	-176.95	-9,207.8	-627.1	9,272.2	9,266.9	5.26	1,762.329		
1,600.0	1,598.8	1,628.8	1,628.8	2.9	2.8	-176.95	-9,207.8	-627.1	9,277.6	9,272.0	5.61	1,653.730		
1,700.0	1,698.6	1,728.6	1,728.6	3.1	3.0	-176.95	-9,207.8	-627.1	9,283.0	9,277.1	5.96	1,557.845		
1,800.0	1,798.5	1,828.5	1,828.5	3.3	3.2	-176.95	-9,207.8	-627.1	9,288.5	9,282.2	6.31	1,472.563		
1,900.0	1,898.3	1,928.3	1,928.3	3.5	3.4	-176.96	-9,207.8	-627.1	9,293.9	9,287.2	6.66	1,396.220		
2,000.0	1,998.2	2,028.2	2,028.2	3.7	3.5	-176.96	-9,207.8	-627.1	9,299.3	9,292.3	7.01	1,327.478		
2,100.0	2,098.0	2,128.0	2,128.0	3.9	3.7	-176.96	-9,207.8	-627.1	9,304.7	9,297.4	7.35	1,265.257		
2,200.0	2,197.9	2,227.9	2,227.9	4.1	3.9	-176.96	-9,207.8	-627.1	9,310.1	9,302.4	7.70	1,208.670		
2,300.0	2,297.7	2,327.7	2,327.7	4.3	4.1	-176.96	-9,207.8	-627.1	9,315.6	9,307.5	8.05	1,156.987		
2,400.0	2,397.6	2,427.6	2,427.6	4.5	4.2	-176.97	-9,207.8	-627.1	9,321.0	9,312.6	8.40	1,109.595		
2,500.0	2,497.4	2,527.4	2,527.4	4.7	4.4	-176.97	-9,207.8	-627.1	9,326.4	9,317.6	8.75	1,065.981		
2,600.0	2,597.3	2,627.3	2,627.3	4.9	4.6	-176.97	-9,207.8	-627.1	9,331.8	9,322.7	9.10	1,025.712		
2,700.0	2,697.1	2,727.1	2,727.1	5.1	4.8	-176.97	-9,207.8	-627.1	9,337.2	9,327.8	9.45	988.416		
2,800.0	2,797.0	2,827.0	2,827.0	5.3	4.9	-176.97	-9,207.8	-627.1	9,342.7	9,332.9	9.80	953.776		
2,900.0	2,896.8	2,926.8	2,926.8	5.5	5.1	-176.97	-9,207.8	-627.1	9,348.1	9,337.9	10.14	921.518		
3,000.0	2,996.7	3,026.7	3,026.7	5.7	5.3	-176.98	-9,207.8	-627.1	9,353.5	9,343.0	10.49	891.404		
3,100.0	3,096.5	3,126.5	3,126.5	5.9	5.5	-176.98	-9,207.8	-627.1	9,358.9	9,348.1	10.84	863.228		
3,200.0	3,196.4	3,226.4	3,226.4	6.1	5.6	-176.98	-9,207.8	-627.1	9,364.3	9,353.1	11.19	836.809		
3,300.0	3,296.3	3,326.3	3,326.3	6.3	5.8	-176.98	-9,207.8	-627.1	9,369.7	9,358.2	11.54	811.986		
3,400.0	3,396.1	3,426.1	3,426.1	6.5	6.0	-176.98	-9,207.8	-627.1	9,375.2	9,363.3	11.89	788.620		
3,500.0	3,496.0	3,526.0	3,526.0	6.7	6.2	-176.98	-9,207.8	-627.1	9,380.6	9,368.3	12.24	766.586		
3,600.0	3,595.8	3,625.8	3,625.8	6.9	6.3	-176.99	-9,207.8	-627.1	9,386.0	9,373.4	12.59	745.773		
3,700.0	3,695.7	3,725.7	3,725.7	7.0	6.5	-176.99	-9,207.8	-627.1	9,391.4	9,378.5	12.93	726.083		
3,800.0	3,795.5	3,825.5	3,825.5	7.2	6.7	-176.99	-9,207.8	-627.1	9,396.8	9,383.6	13.28	707.426		
3,900.0	3,895.4	3,925.4	3,925.4	7.4	6.9	-176.99	-9,207.8	-627.1	9,402.3	9,388.6	13.63	689.724		
4,000.0	3,995.2	4,025.2	4,025.2	7.6	7.0	-176.99	-9,207.8	-627.1	9,407.7	9,393.7	13.98	672.906		
4,100.0	4,095.1	4,125.1	4,125.1	7.8	7.2	-176.99	-9,207.8	-627.1	9,413.1	9,398.8	14.33	656.906		
4,200.0	4,194.9	4,224.9	4,224.9	8.0	7.4	-177.00	-9,207.8	-627.1	9,418.5	9,403.8	14.68	641.666		
4,300.0	4,294.8	4,324.8	4,324.8	8.2	7.5	-177.00	-9,207.8	-627.1	9,423.9	9,408.9	15.03	627.134		
4,400.0	4,394.6	4,424.6	4,424.6	8.4	7.7	-177.00	-9,207.8	-627.1	9,429.4	9,414.0	15.38	613.261		
4,500.0	4,494.5	4,524.5	4,524.5	8.6	7.9	-177.00	-9,207.8	-627.1	9,434.8	9,419.1	15.72	600.004		
4,600.0	4,594.3	4,624.3	4,624.3	8.8	8.1	-177.00	-9,207.8	-627.1	9,440.2	9,424.1	16.07	587.322		
4,700.0	4,694.2	4,724.2	4,724.2	9.0	8.2	-177.01	-9,207.8	-627.1	9,445.6	9,429.2	16.42	575.179		
4,800.0	4,794.0	4,824.0	4,824.0	9.2	8.4	-177.01	-9,207.8	-627.1	9,451.0	9,434.3	16.77	563.540		
4,900.0	4,893.9	4,923.9	4,923.9	9.4	8.6	-177.01	-9,207.8	-627.1	9,456.5	9,439.3	17.12	552.376		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	5,023.7	5,023.7	9.6	8.8	-177.01	-9,207.8	-627.1	9,461.9	9,444.4	17.47	541.658		
5,100.0	5,093.6	5,123.6	5,123.6	9.8	8.9	-177.01	-9,207.8	-627.1	9,467.3	9,449.5	17.82	531.359		
5,200.0	5,193.5	5,223.5	5,223.5	10.0	9.1	-177.01	-9,207.8	-627.1	9,472.7	9,454.5	18.17	521.456		
5,300.0	5,293.3	5,323.3	5,323.3	10.2	9.3	-177.02	-9,207.8	-627.1	9,478.1	9,459.6	18.51	511.926		
5,400.0	5,393.2	5,423.2	5,423.2	10.4	9.5	-177.02	-9,207.8	-627.1	9,483.5	9,464.7	18.86	502.748		
5,500.0	5,493.0	5,523.0	5,523.0	10.6	9.6	-177.02	-9,207.8	-627.1	9,489.0	9,469.8	19.21	493.904		
5,600.0	5,592.9	5,622.9	5,622.9	10.8	9.8	-177.02	-9,207.8	-627.1	9,494.4	9,474.8	19.56	485.375		
5,700.0	5,692.7	5,722.7	5,722.7	11.0	10.0	-177.02	-9,207.8	-627.1	9,499.8	9,479.9	19.91	477.144		
5,800.0	5,792.6	5,822.6	5,822.6	11.2	10.2	-177.02	-9,207.8	-627.1	9,505.2	9,485.0	20.26	469.197		
5,900.0	5,892.4	5,922.4	5,922.4	11.4	10.3	-177.03	-9,207.8	-627.1	9,510.6	9,490.0	20.61	461.519		
6,000.0	5,992.3	6,022.3	6,022.3	11.6	10.5	-177.03	-9,207.8	-627.1	9,516.1	9,495.1	20.96	454.097		
6,100.0	6,092.1	6,122.1	6,122.1	11.8	10.7	-177.03	-9,207.8	-627.1	9,521.5	9,500.2	21.30	446.918		
6,200.0	6,192.0	6,222.0	6,222.0	12.0	10.9	-177.03	-9,207.8	-627.1	9,526.9	9,505.2	21.65	439.970		
6,300.0	6,291.8	6,321.8	6,321.8	12.2	11.0	-177.03	-9,207.8	-627.1	9,532.3	9,510.3	22.00	433.242		
6,400.0	6,391.7	6,421.7	6,421.7	12.4	11.2	-177.03	-9,207.8	-627.1	9,537.7	9,515.4	22.35	426.724		
6,500.0	6,491.5	6,521.5	6,521.5	12.6	11.4	-177.04	-9,207.8	-627.1	9,543.2	9,520.5	22.70	420.407		
6,600.0	6,591.4	6,621.4	6,621.4	12.8	11.6	-177.04	-9,207.8	-627.1	9,548.6	9,525.5	23.05	414.280		
6,700.0	6,691.2	6,721.2	6,721.2	13.0	11.7	-177.04	-9,207.8	-627.1	9,554.0	9,530.6	23.40	408.337		
6,800.0	6,791.1	6,821.1	6,821.1	13.2	11.9	-177.04	-9,207.8	-627.1	9,559.4	9,535.7	23.75	402.568		
6,900.0	6,890.9	6,920.9	6,920.9	13.4	12.1	-177.04	-9,207.8	-627.1	9,564.8	9,540.7	24.09	396.966		
7,000.0	6,990.8	7,020.8	7,020.8	13.6	12.3	-177.04	-9,207.8	-627.1	9,570.3	9,545.8	24.44	391.523		
7,024.2	7,014.9	7,044.9	7,044.9	13.6	12.3	-177.04	-9,207.8	-627.1	9,571.6	9,547.0	24.53	390.231		
7,050.0	7,040.7	7,070.7	7,070.7	13.7	12.3	-178.70	-9,207.8	-627.1	9,572.5	9,547.9	24.63	388.730		
7,100.0	7,090.7	7,120.7	7,120.7	13.7	12.4	4.67	-9,207.8	-627.1	9,571.7	9,546.9	24.75	386.698		
7,150.0	7,140.5	7,170.5	7,170.5	13.8	12.5	4.19	-9,207.8	-627.1	9,567.4	9,542.6	24.80	385.801		
7,200.0	7,189.9	7,219.9	7,219.9	13.8	12.6	4.10	-9,207.8	-627.1	9,559.6	9,534.8	24.76	386.023		
7,250.0	7,238.6	7,268.6	7,268.6	13.8	12.7	4.11	-9,207.8	-627.1	9,548.4	9,523.8	24.65	387.358		
7,300.0	7,286.4	7,316.4	7,316.4	13.7	12.8	4.16	-9,207.8	-627.1	9,533.9	9,509.4	24.46	389.808		
7,350.0	7,333.1	7,363.1	7,363.1	13.7	12.9	4.25	-9,207.8	-627.1	9,516.0	9,491.9	24.19	393.378		
7,400.0	7,378.5	7,408.5	7,408.5	13.6	12.9	4.38	-9,207.8	-627.1	9,495.0	9,471.2	23.85	398.076		
7,450.0	7,422.2	7,452.2	7,452.2	13.6	13.0	4.55	-9,207.8	-627.1	9,470.9	9,447.4	23.45	403.909		
7,500.0	7,464.1	7,494.1	7,494.1	13.5	13.1	4.76	-9,207.8	-627.1	9,443.7	9,420.7	22.98	410.873		
7,550.0	7,504.1	7,534.1	7,534.1	13.5	13.1	5.02	-9,207.8	-627.1	9,413.7	9,391.3	22.47	418.950		
7,600.0	7,541.8	7,571.8	7,571.8	13.5	13.2	5.34	-9,207.8	-627.1	9,381.1	9,359.1	21.91	428.091		
7,650.0	7,577.2	7,607.2	7,607.2	13.4	13.3	5.74	-9,207.8	-627.1	9,345.8	9,324.5	21.33	438.198		
7,700.0	7,610.0	7,640.0	7,640.0	13.5	13.3	6.23	-9,207.8	-627.1	9,308.2	9,287.5	20.73	449.098		
7,750.0	7,640.2	7,670.2	7,670.2	13.5	13.4	6.85	-9,207.8	-627.1	9,268.4	9,248.3	20.13	460.506		
7,800.0	7,667.4	7,697.4	7,697.4	13.6	13.4	7.64	-9,207.8	-627.1	9,226.6	9,207.0	19.55	471.966		
7,850.0	7,691.7	7,721.7	7,721.7	13.7	13.5	8.69	-9,207.8	-627.1	9,183.0	9,164.0	19.02	482.764		
7,900.0	7,712.8	7,742.8	7,742.8	13.9	13.5	10.10	-9,207.8	-627.1	9,137.8	9,119.2	18.58	491.771		
7,950.0	7,730.8	7,760.8	7,760.8	14.1	13.5	12.11	-9,207.8	-627.1	9,091.3	9,073.0	18.29	497.138		
8,000.0	7,745.5	7,775.5	7,775.5	14.4	13.6	15.16	-9,207.8	-627.1	9,043.6	9,025.3	18.25	495.561		
8,050.0	7,756.7	7,786.7	7,786.7	14.7	13.6	20.25	-9,207.8	-627.1	8,995.0	8,976.3	18.72	480.391		
8,100.0	7,764.6	7,794.6	7,794.6	15.1	13.6	30.07	-9,207.8	-627.1	8,945.8	8,925.3	20.45	437.393		
8,150.0	7,769.0	7,799.0	7,799.0	15.5	13.6	53.34	-9,207.8	-627.1	8,896.1	8,870.7	25.41	350.155		
8,188.1	7,770.0	7,800.0	7,800.0	15.9	13.6	90.00	-9,207.8	-627.1	8,858.2	8,828.7	29.46	300.636		
8,200.0	7,770.0	7,800.0	7,800.0	16.0	13.6	90.00	-9,207.8	-627.1	8,846.2	8,816.7	29.58	299.109		
8,300.0	7,770.0	7,800.0	7,800.0	17.0	13.6	90.00	-9,207.8	-627.1	8,746.5	8,715.9	30.57	286.072		
8,400.0	7,770.0	7,800.0	7,800.0	18.1	13.6	90.00	-9,207.8	-627.1	8,646.8	8,615.1	31.69	272.863		
8,500.0	7,770.0	7,800.0	7,800.0	19.3	13.6	90.00	-9,207.8	-627.1	8,547.0	8,514.1	32.90	259.797		
8,600.0	7,770.0	7,800.0	7,800.0	20.6	13.6	90.00	-9,207.8	-627.1	8,447.3	8,413.1	34.19	247.089		
8,700.0	7,770.0	7,800.0	7,800.0	21.9	13.6	90.00	-9,207.8	-627.1	8,347.6	8,312.1	35.54	234.876		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,800.0	7,770.0	7,800.0	7,800.0	23.3	13.6	90.00	-9,207.8	-627.1	8,247.9	8,210.9	36.95	223.236	
8,900.0	7,770.0	7,800.0	7,800.0	24.8	13.6	90.00	-9,207.8	-627.1	8,148.2	8,109.8	38.40	212.204	
9,000.0	7,770.0	7,800.0	7,800.0	26.3	13.6	90.00	-9,207.8	-627.1	8,048.5	8,008.6	39.89	201.788	
9,100.0	7,770.0	7,800.0	7,800.0	27.8	13.6	90.00	-9,207.8	-627.1	7,948.8	7,907.4	41.40	191.978	
9,200.0	7,770.0	7,800.0	7,800.0	29.3	13.6	90.00	-9,207.8	-627.1	7,849.1	7,806.2	42.95	182.750	
9,300.0	7,770.0	7,800.0	7,800.0	30.9	13.6	90.00	-9,207.8	-627.1	7,749.5	7,704.9	44.52	174.077	
9,400.0	7,770.0	7,800.0	7,800.0	32.5	13.6	90.00	-9,207.8	-627.1	7,649.8	7,603.7	46.10	165.924	
9,500.0	7,770.0	7,800.0	7,800.0	34.1	13.6	90.00	-9,207.8	-627.1	7,550.1	7,502.4	47.71	158.260	
9,600.0	7,770.0	7,800.0	7,800.0	35.7	13.6	90.00	-9,207.8	-627.1	7,450.5	7,401.2	49.32	151.051	
9,700.0	7,770.0	7,800.0	7,800.0	37.3	13.6	90.00	-9,207.8	-627.1	7,350.9	7,299.9	50.95	144.265	
9,800.0	7,770.0	7,800.0	7,800.0	39.0	13.6	90.00	-9,207.8	-627.1	7,251.2	7,198.6	52.59	137.871	
9,900.0	7,770.0	7,800.0	7,800.0	40.6	13.6	90.00	-9,207.8	-627.1	7,151.6	7,097.4	54.24	131.842	
10,000.0	7,770.0	7,800.0	7,800.0	42.3	13.6	90.00	-9,207.8	-627.1	7,052.0	6,996.1	55.90	126.149	
10,100.0	7,770.0	7,800.0	7,800.0	44.0	13.6	90.00	-9,207.8	-627.1	6,952.4	6,894.9	57.57	120.769	
10,200.0	7,770.0	7,800.0	7,800.0	45.6	13.6	90.00	-9,207.8	-627.1	6,852.9	6,793.6	59.24	115.679	
10,300.0	7,770.0	7,800.0	7,800.0	47.3	13.6	90.00	-9,207.8	-627.1	6,753.3	6,692.4	60.92	110.858	
10,400.0	7,770.0	7,800.0	7,800.0	49.0	13.6	90.00	-9,207.8	-627.1	6,653.7	6,591.1	62.60	106.286	
10,500.0	7,770.0	7,800.0	7,800.0	50.7	13.6	90.00	-9,207.8	-627.1	6,554.2	6,489.9	64.29	101.947	
10,600.0	7,770.0	7,800.0	7,800.0	52.4	13.6	90.00	-9,207.8	-627.1	6,454.7	6,388.7	65.98	97.823	
10,700.0	7,770.0	7,800.0	7,800.0	54.1	13.6	90.00	-9,207.8	-627.1	6,355.2	6,287.5	67.68	93.901	
10,800.0	7,770.0	7,800.0	7,800.0	55.8	13.6	90.00	-9,207.8	-627.1	6,255.7	6,186.3	69.38	90.166	
10,900.0	7,770.0	7,800.0	7,800.0	57.5	13.6	90.00	-9,207.8	-627.1	6,156.2	6,085.1	71.08	86.605	
11,000.0	7,770.0	7,800.0	7,800.0	59.2	13.6	90.00	-9,207.8	-627.1	6,056.7	5,983.9	72.79	83.209	
11,100.0	7,770.0	7,800.0	7,800.0	60.9	13.6	90.00	-9,207.8	-627.1	5,957.3	5,882.8	74.50	79.965	
11,200.0	7,770.0	7,800.0	7,800.0	62.6	13.6	90.00	-9,207.8	-627.1	5,857.9	5,781.6	76.21	76.865	
11,300.0	7,770.0	7,800.0	7,800.0	64.3	13.6	90.00	-9,207.8	-627.1	5,758.5	5,680.5	77.92	73.899	
11,400.0	7,770.0	7,800.0	7,800.0	66.0	13.6	90.00	-9,207.8	-627.1	5,659.1	5,579.4	79.64	71.058	
11,500.0	7,770.0	7,800.0	7,800.0	67.7	13.6	90.00	-9,207.8	-627.1	5,559.7	5,478.3	81.36	68.337	
11,600.0	7,770.0	7,800.0	7,800.0	69.5	13.6	90.00	-9,207.8	-627.1	5,460.4	5,377.3	83.08	65.726	
11,700.0	7,770.0	7,800.0	7,800.0	71.2	13.6	90.00	-9,207.8	-627.1	5,361.1	5,276.3	84.80	63.221	
11,800.0	7,770.0	7,800.0	7,800.0	72.9	13.6	90.00	-9,207.8	-627.1	5,261.8	5,175.2	86.52	60.815	
11,900.0	7,770.0	7,800.0	7,800.0	74.6	13.6	90.00	-9,207.8	-627.1	5,162.5	5,074.3	88.25	58.501	
12,000.0	7,770.0	7,800.0	7,800.0	76.4	13.6	90.00	-9,207.8	-627.1	5,063.3	4,973.3	89.97	56.276	
12,100.0	7,770.0	7,800.0	7,800.0	78.1	13.6	90.00	-9,207.8	-627.1	4,964.1	4,872.4	91.70	54.135	
12,200.0	7,770.0	7,800.0	7,800.0	79.8	13.6	90.00	-9,207.8	-627.1	4,864.9	4,771.5	93.43	52.072	
12,300.0	7,770.0	7,800.0	7,800.0	81.5	13.6	90.00	-9,207.8	-627.1	4,765.8	4,670.6	95.16	50.084	
12,400.0	7,770.0	7,800.0	7,800.0	83.3	13.6	90.00	-9,207.8	-627.1	4,666.7	4,569.8	96.89	48.167	
12,500.0	7,770.0	7,800.0	7,800.0	85.0	13.6	90.00	-9,207.8	-627.1	4,567.6	4,469.0	98.62	46.317	
12,600.0	7,770.0	7,800.0	7,800.0	86.7	13.6	90.00	-9,207.8	-627.1	4,468.6	4,368.3	100.35	44.530	
12,700.0	7,770.0	7,800.0	7,800.0	88.5	13.6	90.00	-9,207.8	-627.1	4,369.6	4,267.6	102.08	42.805	
12,800.0	7,770.0	7,800.0	7,800.0	90.2	13.6	90.00	-9,207.8	-627.1	4,270.7	4,166.9	103.82	41.137	
12,900.0	7,770.0	7,800.0	7,800.0	91.9	13.6	90.00	-9,207.8	-627.1	4,171.8	4,066.3	105.55	39.524	
13,000.0	7,770.0	7,800.0	7,800.0	93.7	13.6	90.00	-9,207.8	-627.1	4,073.0	3,965.7	107.29	37.964	
13,100.0	7,770.0	7,800.0	7,800.0	95.4	13.6	90.00	-9,207.8	-627.1	3,974.3	3,865.3	109.02	36.454	
13,200.0	7,770.0	7,800.0	7,800.0	97.1	13.6	90.00	-9,207.8	-627.1	3,875.6	3,764.8	110.76	34.991	
13,300.0	7,770.0	7,800.0	7,800.0	98.9	13.6	90.00	-9,207.8	-627.1	3,777.0	3,664.5	112.50	33.574	
13,400.0	7,770.0	7,800.0	7,800.0	100.6	13.6	90.00	-9,207.8	-627.1	3,678.4	3,564.2	114.23	32.201	
13,500.0	7,770.0	7,800.0	7,800.0	102.4	13.6	90.00	-9,207.8	-627.1	3,579.9	3,464.0	115.97	30.869	
13,600.0	7,770.0	7,800.0	7,800.0	104.1	13.6	90.00	-9,207.8	-627.1	3,481.6	3,363.9	117.71	29.577	
13,700.0	7,770.0	7,800.0	7,800.0	105.8	13.6	90.00	-9,207.8	-627.1	3,383.3	3,263.8	119.45	28.323	
13,800.0	7,770.0	7,800.0	7,800.0	107.6	13.6	90.00	-9,207.8	-627.1	3,285.1	3,163.9	121.19	27.107	
13,900.0	7,770.0	7,800.0	7,800.0	109.3	13.6	90.00	-9,207.8	-627.1	3,187.0	3,064.1	122.93	25.925	

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor		
14,000.0	7,770.0	7,800.0	7,800.0	111.1	13.6	90.00	-9,207.8	-627.1	3,089.1	2,964.4	124.67	24.778		
14,100.0	7,770.0	7,800.0	7,800.0	112.8	13.6	90.00	-9,207.8	-627.1	2,991.3	2,864.9	126.41	23.663		
14,200.0	7,770.0	7,800.0	7,800.0	114.5	13.6	90.00	-9,207.8	-627.1	2,893.6	2,765.5	128.16	22.579		
14,300.0	7,770.0	7,800.0	7,800.0	116.3	13.6	90.00	-9,207.8	-627.1	2,796.1	2,666.2	129.90	21.526		
14,400.0	7,770.0	7,800.0	7,800.0	118.0	13.6	90.00	-9,207.8	-627.1	2,698.8	2,567.2	131.64	20.501		
14,500.0	7,770.0	7,800.0	7,800.0	119.8	13.6	90.00	-9,207.8	-627.1	2,601.7	2,468.3	133.38	19.506		
14,600.0	7,770.0	7,800.0	7,800.0	121.5	13.6	90.00	-9,207.8	-627.1	2,504.8	2,369.7	135.13	18.537		
14,700.0	7,770.0	7,800.0	7,800.0	123.3	13.6	90.00	-9,207.8	-627.1	2,408.2	2,271.3	136.87	17.595		
14,800.0	7,770.0	7,800.0	7,800.0	125.0	13.6	90.00	-9,207.8	-627.1	2,311.9	2,173.2	138.61	16.679		
14,900.0	7,770.0	7,800.0	7,800.0	126.7	13.6	90.00	-9,207.8	-627.1	2,215.8	2,075.5	140.36	15.787		
15,000.0	7,770.0	7,800.0	7,800.0	128.5	13.6	90.00	-9,207.8	-627.1	2,120.2	1,978.1	142.10	14.920		
15,100.0	7,770.0	7,800.0	7,800.0	130.2	13.6	90.00	-9,207.8	-627.1	2,025.0	1,881.1	143.84	14.078		
15,200.0	7,770.0	7,800.0	7,800.0	132.0	13.6	90.00	-9,207.8	-627.1	1,930.2	1,784.6	145.59	13.258		
15,300.0	7,770.0	7,800.0	7,800.0	133.7	13.6	90.00	-9,207.8	-627.1	1,836.1	1,688.7	147.33	12.462		
15,400.0	7,770.0	7,800.0	7,800.0	135.5	13.6	90.00	-9,207.8	-627.1	1,742.5	1,593.4	149.08	11.689		
15,500.0	7,770.0	7,800.0	7,800.0	137.2	13.6	90.00	-9,207.8	-627.1	1,649.7	1,498.9	150.82	10.938		
15,600.0	7,770.0	7,800.0	7,800.0	139.0	13.6	90.00	-9,207.8	-627.1	1,557.9	1,405.3	152.57	10.211		
15,700.0	7,770.0	7,800.0	7,800.0	140.7	13.6	90.00	-9,207.8	-627.1	1,467.0	1,312.7	154.32	9.507		
15,800.0	7,770.0	7,800.0	7,800.0	142.4	13.6	90.00	-9,207.8	-627.1	1,377.5	1,221.4	156.06	8.827		
15,900.0	7,770.0	7,800.0	7,800.0	144.2	13.6	90.00	-9,207.8	-627.1	1,289.5	1,131.7	157.81	8.171		
16,000.0	7,770.0	7,800.0	7,800.0	145.9	13.6	90.00	-9,207.8	-627.1	1,203.4	1,043.8	159.55	7.542		
16,100.0	7,770.0	7,800.0	7,800.0	147.7	13.6	90.00	-9,207.8	-627.1	1,119.5	958.2	161.30	6.941		
16,200.0	7,770.0	7,800.0	7,800.0	149.4	13.6	90.00	-9,207.8	-627.1	1,038.6	875.5	163.05	6.370		
16,300.0	7,770.0	7,800.0	7,800.0	151.2	13.6	90.00	-9,207.8	-627.1	961.2	796.4	164.80	5.833		
16,400.0	7,770.0	7,800.0	7,800.0	152.9	13.6	90.00	-9,207.8	-627.1	888.4	721.8	166.54	5.334		
16,500.0	7,770.0	7,800.0	7,800.0	154.7	13.6	90.00	-9,207.8	-627.1	821.3	653.0	168.29	4.880		
16,600.0	7,770.0	7,800.0	7,800.0	156.4	13.6	90.00	-9,207.8	-627.1	761.4	591.4	170.04	4.478		
16,700.0	7,770.0	7,800.0	7,800.0	158.2	13.6	90.00	-9,207.8	-627.1	710.7	538.9	171.78	4.137		
16,800.0	7,770.0	7,800.0	7,800.0	159.9	13.6	90.00	-9,207.8	-627.1	671.1	497.5	173.53	3.867		
16,900.0	7,770.0	7,800.0	7,800.0	161.7	13.6	90.00	-9,207.8	-627.1	644.7	469.4	175.28	3.678		
17,000.0	7,770.0	7,800.0	7,800.0	163.4	13.6	90.00	-9,207.8	-627.1	633.2	456.1	177.03	3.577		
17,023.6	7,770.0	7,800.0	7,800.0	163.8	13.6	90.00	-9,207.8	-627.1	632.7	455.3	177.44	3.566	CC, ES	
17,100.0	7,770.0	7,800.0	7,800.0	165.2	13.6	90.00	-9,207.8	-627.1	637.3	458.5	178.78	3.565	SF	
17,200.0	7,770.0	7,800.0	7,800.0	166.9	13.6	90.00	-9,207.8	-627.1	656.8	476.3	180.52	3.639		
17,300.0	7,770.0	7,800.0	7,800.0	168.7	13.6	90.00	-9,207.8	-627.1	690.5	508.2	182.27	3.788		
17,400.0	7,770.0	7,800.0	7,800.0	170.4	13.6	90.00	-9,207.8	-627.1	736.2	552.2	184.02	4.001		
17,500.0	7,770.0	7,800.0	7,800.0	172.2	13.6	90.00	-9,207.8	-627.1	792.0	606.3	185.77	4.263		
17,600.0	7,770.0	7,800.0	7,800.0	173.9	13.6	90.00	-9,207.8	-627.1	855.9	668.4	187.52	4.564		
17,653.1	7,770.0	7,800.0	7,800.0	174.8	13.6	90.00	-9,207.8	-627.1	892.5	704.1	188.45	4.736		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	1.0	1.0	0.0	0.0	-89.70	0.4	-70.0	70.0					
100.0	100.0	101.0	101.0	0.2	0.2	-89.70	0.4	-70.0	70.0	69.7	0.31	229.070		
166.3	166.3	167.3	167.3	0.3	0.3	-89.70	0.4	-70.0	70.0	69.4	0.54	130.297	CC	
200.0	200.0	201.0	201.0	0.3	0.3	-89.70	0.4	-70.0	70.0	69.3	0.65	106.903	ES	
300.0	300.0	300.0	300.0	0.5	0.5	-89.55	0.6	-70.8	70.8	69.8	1.00	70.692		
400.0	400.0	398.6	398.5	0.7	0.7	-89.11	1.1	-73.3	73.4	72.0	1.35	54.400		
500.0	500.0	497.2	497.1	0.8	0.9	-88.46	2.1	-77.5	77.6	75.9	1.70	45.759		
550.0	550.0	546.4	546.2	0.9	1.0	-88.07	2.7	-80.2	80.4	78.5	1.87	42.981		
600.0	600.0	595.7	595.3	1.0	1.1	-88.60	3.4	-83.3	83.5	81.5	2.04	40.887		
700.0	700.0	693.9	693.3	1.2	1.3	-88.71	5.1	-90.7	91.1	88.7	2.39	38.097		
800.0	799.9	791.8	790.8	1.4	1.5	-89.58	7.2	-99.7	100.3	97.6	2.74	36.557		
861.1	860.9	851.5	850.1	1.5	1.6	-90.38	8.6	-106.0	106.8	103.8	2.96	36.034		
900.0	899.8	889.5	887.8	1.6	1.7	-90.95	9.6	-110.3	111.3	108.2	3.11	35.835		
1,000.0	999.6	986.7	984.2	1.8	2.0	-92.08	12.4	-122.5	123.9	120.4	3.47	35.701		
1,100.0	1,099.5	1,083.5	1,080.0	1.9	2.3	-92.81	15.6	-136.2	138.2	134.4	3.84	35.988		
1,200.0	1,199.3	1,179.9	1,175.1	2.1	2.6	-93.25	19.1	-151.4	154.1	149.9	4.21	36.583		
1,300.0	1,299.2	1,275.7	1,269.4	2.3	2.9	-93.45	22.9	-168.1	171.6	167.0	4.59	37.411		
1,400.0	1,399.1	1,371.0	1,362.8	2.5	3.3	-93.48	27.0	-186.2	190.7	185.7	4.96	38.419		
1,500.0	1,498.9	1,465.6	1,455.3	2.7	3.7	-93.38	31.5	-205.7	211.4	206.0	5.34	39.570		
1,600.0	1,598.8	1,559.6	1,546.9	2.9	4.1	-93.20	36.3	-226.5	233.6	227.8	5.72	40.836		
1,700.0	1,698.6	1,652.9	1,637.4	3.1	4.5	-92.95	41.3	-248.5	257.3	251.2	6.10	42.200		
1,800.0	1,798.5	1,749.5	1,730.9	3.3	4.9	-92.69	46.8	-272.3	281.9	275.4	6.48	43.495		
1,900.0	1,898.3	1,846.4	1,824.6	3.5	5.4	-92.47	52.2	-296.1	306.5	299.7	6.87	44.640		
2,000.0	1,998.2	1,943.3	1,918.4	3.7	5.8	-92.29	57.7	-319.9	331.2	323.9	7.25	45.661		
2,100.0	2,098.0	2,040.2	2,012.2	3.9	6.3	-92.12	63.2	-343.7	355.8	348.1	7.64	46.578		
2,200.0	2,197.9	2,137.2	2,106.0	4.1	6.8	-91.98	68.6	-367.5	380.4	372.4	8.02	47.404		
2,300.0	2,297.7	2,234.1	2,199.8	4.3	7.2	-91.86	74.1	-391.3	405.0	396.6	8.41	48.154		
2,400.0	2,397.6	2,331.0	2,293.6	4.5	7.7	-91.75	79.6	-415.1	429.7	420.9	8.80	48.837		
2,500.0	2,497.4	2,427.9	2,387.4	4.7	8.1	-91.65	85.0	-438.9	454.3	445.1	9.19	49.461		
2,600.0	2,597.3	2,524.8	2,481.1	4.9	8.6	-91.57	90.5	-462.7	479.0	469.4	9.57	50.034		
2,700.0	2,697.1	2,621.7	2,574.9	5.1	9.1	-91.49	96.0	-486.6	503.6	493.6	9.96	50.562		
2,800.0	2,797.0	2,718.6	2,668.7	5.3	9.5	-91.42	101.4	-510.4	528.2	517.9	10.35	51.050		
2,900.0	2,896.8	2,815.6	2,762.5	5.5	10.0	-91.35	106.9	-534.2	552.9	542.1	10.73	51.502		
3,000.0	2,996.7	2,912.5	2,856.3	5.7	10.5	-91.29	112.3	-558.0	577.5	566.4	11.12	51.923		
3,100.0	3,096.5	3,009.4	2,950.1	5.9	10.9	-91.24	117.8	-581.8	602.1	590.6	11.51	52.314		
3,200.0	3,196.4	3,106.3	3,043.9	6.1	11.4	-91.19	123.3	-605.6	626.8	614.9	11.90	52.680		
3,300.0	3,296.3	3,203.2	3,137.7	6.3	11.9	-91.14	128.7	-629.4	651.4	639.1	12.29	53.022		
3,400.0	3,396.1	3,300.1	3,231.4	6.5	12.3	-91.10	134.2	-653.2	676.1	663.4	12.67	53.344		
3,500.0	3,496.0	3,397.1	3,325.2	6.7	12.8	-91.06	139.7	-677.0	700.7	687.7	13.06	53.646		
3,600.0	3,595.8	3,494.0	3,419.0	6.9	13.3	-91.02	145.1	-700.8	725.4	711.9	13.45	53.930		
3,700.0	3,695.7	3,590.9	3,512.8	7.0	13.7	-90.98	150.6	-724.6	750.0	736.2	13.84	54.198		
3,800.0	3,795.5	3,687.8	3,606.6	7.2	14.2	-90.95	156.0	-748.5	774.6	760.4	14.23	54.451		
3,900.0	3,895.4	3,784.7	3,700.4	7.4	14.7	-90.92	161.5	-772.3	799.3	784.7	14.61	54.691		
4,000.0	3,995.2	3,881.6	3,794.2	7.6	15.1	-90.89	167.0	-796.1	823.9	808.9	15.00	54.918		
4,100.0	4,095.1	3,978.5	3,887.9	7.8	15.6	-90.87	172.4	-819.9	848.6	833.2	15.39	55.134		
4,200.0	4,194.9	4,075.5	3,981.7	8.0	16.1	-90.84	177.9	-843.7	873.2	857.4	15.78	55.339		
4,300.0	4,294.8	4,172.4	4,075.5	8.2	16.5	-90.82	183.4	-867.5	897.9	881.7	16.17	55.534		
4,400.0	4,394.6	4,269.3	4,169.3	8.4	17.0	-90.79	188.8	-891.3	922.5	905.9	16.56	55.720		
4,500.0	4,494.5	4,366.2	4,263.1	8.6	17.5	-90.77	194.3	-915.1	947.1	930.2	16.94	55.897		
4,600.0	4,594.3	4,463.1	4,356.9	8.8	18.0	-90.75	199.8	-938.9	971.8	954.5	17.33	56.066		
4,700.0	4,694.2	4,560.0	4,450.7	9.0	18.4	-90.73	205.2	-962.7	996.4	978.7	17.72	56.228		
4,800.0	4,794.0	4,657.0	4,544.4	9.2	18.9	-90.71	210.7	-986.5	1,021.1	1,003.0	18.11	56.383		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
4,900.0	4,893.9	4,753.9	4,638.2		9.4	19.4	-90.69	216.1	-1,010.3	1,045.7	1,027.2	18.50	56.531	
5,000.0	4,993.7	4,850.8	4,732.0		9.6	19.8	-90.68	221.6	-1,034.2	1,070.4	1,051.5	18.89	56.673	
5,100.0	5,093.6	4,947.7	4,825.8		9.8	20.3	-90.66	227.1	-1,058.0	1,095.0	1,075.7	19.28	56.809	
5,200.0	5,193.5	5,044.6	4,919.6		10.0	20.8	-90.64	232.5	-1,081.8	1,119.7	1,100.0	19.66	56.940	
5,300.0	5,293.3	5,141.5	5,013.4		10.2	21.2	-90.63	238.0	-1,105.6	1,144.3	1,124.2	20.05	57.065	
5,400.0	5,393.2	5,238.4	5,107.2		10.4	21.7	-90.62	243.5	-1,129.4	1,168.9	1,148.5	20.44	57.186	
5,500.0	5,493.0	5,335.4	5,200.9		10.6	22.2	-90.60	248.9	-1,153.2	1,193.6	1,172.8	20.83	57.302	
5,600.0	5,592.9	5,432.3	5,294.7		10.8	22.6	-90.59	254.4	-1,177.0	1,218.2	1,197.0	21.22	57.415	
5,700.0	5,692.7	5,529.2	5,388.5		11.0	23.1	-90.58	259.8	-1,200.8	1,242.9	1,221.3	21.61	57.522	
5,800.0	5,792.6	5,626.1	5,482.3		11.2	23.6	-90.56	265.3	-1,224.6	1,267.5	1,245.5	22.00	57.627	
5,900.0	5,892.4	5,723.0	5,576.1		11.4	24.1	-90.55	270.8	-1,248.4	1,292.2	1,269.8	22.38	57.727	
6,000.0	5,992.3	5,819.9	5,669.9		11.6	24.5	-90.54	276.2	-1,272.2	1,316.8	1,294.0	22.77	57.824	
6,100.0	6,092.1	5,916.9	5,763.7		11.8	25.0	-90.53	281.7	-1,296.1	1,341.5	1,318.3	23.16	57.918	
6,200.0	6,192.0	6,013.8	5,857.5		12.0	25.5	-90.52	287.2	-1,319.9	1,366.1	1,342.6	23.55	58.008	
6,300.0	6,291.8	6,110.7	5,951.2		12.2	25.9	-90.51	292.6	-1,343.7	1,390.7	1,366.8	23.94	58.096	
6,400.0	6,391.7	6,207.6	6,045.0		12.4	26.4	-90.50	298.1	-1,367.5	1,415.4	1,391.1	24.33	58.181	
6,500.0	6,491.5	6,304.5	6,138.8		12.6	26.9	-90.49	303.6	-1,391.3	1,440.0	1,415.3	24.72	58.263	
6,600.0	6,591.4	6,401.4	6,232.6		12.8	27.3	-90.48	309.0	-1,415.1	1,464.7	1,439.6	25.10	58.343	
6,700.0	6,691.2	6,498.3	6,326.4		13.0	27.8	-90.47	314.5	-1,438.9	1,489.3	1,463.8	25.49	58.420	
6,800.0	6,791.1	6,595.3	6,420.2		13.2	28.3	-90.47	319.9	-1,462.7	1,514.0	1,488.1	25.88	58.495	
6,900.0	6,890.9	6,692.2	6,514.0		13.4	28.8	-90.46	325.4	-1,486.5	1,538.6	1,512.3	26.27	58.567	
7,000.0	6,990.8	6,789.1	6,607.7		13.6	29.2	-90.45	330.9	-1,510.3	1,563.3	1,536.6	26.66	58.638	
7,024.2	7,014.9	6,812.5	6,630.4		13.6	29.3	-90.45	332.2	-1,516.1	1,569.2	1,542.5	26.75	58.654	
7,050.0	7,040.7	6,837.5	6,654.6		13.7	29.5	-92.61	333.6	-1,522.2	1,575.6	1,548.6	26.95	58.460	
7,100.0	7,090.7	6,885.9	6,701.4		13.7	29.7	89.88	336.3	-1,534.1	1,587.9	1,560.6	27.30	58.168	
7,150.0	7,140.5	6,933.8	6,747.8		13.8	29.9	88.62	339.0	-1,545.9	1,600.2	1,572.6	27.60	57.974	
7,200.0	7,189.9	6,981.1	6,793.6		13.8	30.2	87.85	341.7	-1,557.5	1,612.4	1,584.6	27.86	57.882	
7,250.0	7,238.6	7,029.1	6,840.1		13.8	30.4	87.23	343.0	-1,569.3	1,624.6	1,596.5	28.05	57.927	
7,300.0	7,286.4	7,078.0	6,887.4		13.7	30.6	86.66	341.0	-1,581.3	1,636.6	1,608.4	28.18	58.086	
7,350.0	7,333.1	7,127.9	6,935.5		13.7	30.8	86.13	335.6	-1,593.5	1,648.4	1,620.2	28.25	58.358	
7,400.0	7,378.5	7,178.9	6,984.1		13.6	31.0	85.63	326.5	-1,605.9	1,660.1	1,631.8	28.26	58.741	
7,450.0	7,422.2	7,230.9	7,032.9		13.6	31.2	85.16	313.5	-1,618.3	1,671.4	1,643.2	28.22	59.228	
7,500.0	7,464.1	7,284.2	7,081.8		13.5	31.4	84.73	296.5	-1,630.7	1,682.3	1,654.2	28.13	59.809	
7,550.0	7,504.1	7,338.7	7,130.5		13.5	31.5	84.33	275.3	-1,643.0	1,692.9	1,664.9	28.00	60.466	
7,600.0	7,541.8	7,394.5	7,178.5		13.5	31.7	83.96	249.7	-1,655.2	1,703.0	1,675.1	27.84	61.175	
7,650.0	7,577.2	7,451.8	7,225.6		13.4	31.8	83.63	219.4	-1,667.2	1,712.5	1,684.8	27.67	61.899	
7,700.0	7,610.0	7,510.4	7,271.3		13.5	32.0	83.34	184.5	-1,678.8	1,721.4	1,693.9	27.50	62.594	
7,750.0	7,640.2	7,570.5	7,315.1		13.5	32.1	83.09	144.9	-1,689.9	1,729.7	1,702.3	27.37	63.198	
7,800.0	7,667.4	7,632.1	7,356.4		13.6	32.3	82.87	100.6	-1,700.4	1,737.3	1,710.0	27.30	63.641	
7,850.0	7,691.7	7,695.0	7,394.7		13.7	32.5	82.68	51.6	-1,710.1	1,744.1	1,716.8	27.32	63.850	
7,900.0	7,712.8	7,759.3	7,429.4		13.9	32.6	82.53	-1.8	-1,718.9	1,750.1	1,722.6	27.46	63.725	
7,950.0	7,730.8	7,824.8	7,459.8		14.1	32.8	82.40	-59.3	-1,726.6	1,755.2	1,727.5	27.75	63.249	
8,000.0	7,745.5	7,891.5	7,485.4		14.4	33.0	82.30	-120.5	-1,733.1	1,759.4	1,731.2	28.21	62.378	
8,050.0	7,756.7	7,959.0	7,505.5		14.7	33.3	82.23	-184.7	-1,738.2	1,762.7	1,733.9	28.85	61.101	
8,100.0	7,764.6	8,027.3	7,519.9		15.1	33.5	82.19	-251.3	-1,741.9	1,765.0	1,735.3	29.68	59.465	
8,150.0	7,769.0	8,096.0	7,528.0		15.5	33.8	82.16	-319.5	-1,744.0	1,766.3	1,735.6	30.68	57.565	
8,188.1	7,770.0	8,148.5	7,530.0		15.9	34.0	82.16	-371.9	-1,744.5	1,766.6	1,735.0	31.55	55.986	
8,200.0	7,770.0	8,160.8	7,530.0		16.0	34.0	82.16	-384.2	-1,744.5	1,766.6	1,734.8	31.78	55.590	
8,300.0	7,770.0	8,260.8	7,530.0		17.0	34.5	82.16	-484.2	-1,744.5	1,766.6	1,732.8	33.77	52.318	
8,400.0	7,770.0	8,360.8	7,530.0		18.1	35.0	82.16	-584.2	-1,744.5	1,766.6	1,730.6	35.97	49.115	
8,500.0	7,770.0	8,460.8	7,530.0		19.3	35.6	82.16	-684.2	-1,744.5	1,766.6	1,728.2	38.36	46.053	
8,600.0	7,770.0	8,560.8	7,530.0		20.6	36.3	82.16	-784.2	-1,744.5	1,766.6	1,725.7	40.91	43.185	

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	8,660.8	7,530.0	21.9	37.1	82.16	-884.2	-1,744.5	1,766.6	1,723.0	43.58	40.533		
8,800.0	7,770.0	8,760.8	7,530.0	23.3	37.9	82.16	-984.2	-1,744.5	1,766.6	1,720.2	46.37	38.101		
8,900.0	7,770.0	8,860.8	7,530.0	24.8	38.8	82.16	-1,084.2	-1,744.5	1,766.6	1,717.3	49.24	35.880		
9,000.0	7,770.0	8,960.8	7,530.0	26.3	39.8	82.16	-1,184.2	-1,744.5	1,766.6	1,714.4	52.18	33.855		
9,100.0	7,770.0	9,060.8	7,530.0	27.8	40.8	82.16	-1,284.2	-1,744.5	1,766.6	1,711.4	55.19	32.011		
9,200.0	7,770.0	9,160.8	7,530.0	29.3	41.8	82.16	-1,384.2	-1,744.5	1,766.6	1,708.3	58.25	30.330		
9,300.0	7,770.0	9,260.8	7,530.0	30.9	42.9	82.16	-1,484.2	-1,744.5	1,766.6	1,705.2	61.35	28.796		
9,400.0	7,770.0	9,360.8	7,530.0	32.5	44.0	82.16	-1,584.2	-1,744.5	1,766.6	1,702.1	64.49	27.393		
9,500.0	7,770.0	9,460.8	7,530.0	34.1	45.2	82.16	-1,684.2	-1,744.5	1,766.6	1,698.9	67.66	26.108		
9,600.0	7,770.0	9,560.8	7,530.0	35.7	46.4	82.16	-1,784.2	-1,744.5	1,766.6	1,695.7	70.87	24.929		
9,700.0	7,770.0	9,660.8	7,530.0	37.3	47.7	82.16	-1,884.2	-1,744.5	1,766.6	1,692.5	74.09	23.843		
9,800.0	7,770.0	9,760.8	7,530.0	39.0	49.0	82.16	-1,984.2	-1,744.5	1,766.6	1,689.2	77.34	22.841		
9,900.0	7,770.0	9,860.8	7,530.0	40.6	50.3	82.16	-2,084.2	-1,744.5	1,766.6	1,686.0	80.61	21.916		
10,000.0	7,770.0	9,960.8	7,530.0	42.3	51.6	82.16	-2,184.2	-1,744.5	1,766.6	1,682.7	83.89	21.058		
10,100.0	7,770.0	10,060.8	7,530.0	44.0	53.0	82.16	-2,284.2	-1,744.5	1,766.6	1,679.4	87.19	20.261		
10,200.0	7,770.0	10,160.8	7,530.0	45.6	54.4	82.16	-2,384.2	-1,744.5	1,766.6	1,676.1	90.50	19.519		
10,300.0	7,770.0	10,260.8	7,530.0	47.3	55.8	82.16	-2,484.2	-1,744.5	1,766.6	1,672.8	93.83	18.828		
10,400.0	7,770.0	10,360.8	7,530.0	49.0	57.2	82.16	-2,584.2	-1,744.5	1,766.6	1,669.4	97.16	18.182		
10,500.0	7,770.0	10,460.8	7,530.0	50.7	58.7	82.16	-2,684.2	-1,744.5	1,766.6	1,666.1	100.51	17.577		
10,600.0	7,770.0	10,560.8	7,530.0	52.4	60.1	82.16	-2,784.2	-1,744.5	1,766.6	1,662.7	103.86	17.009		
10,700.0	7,770.0	10,660.8	7,530.0	54.1	61.6	82.16	-2,884.2	-1,744.5	1,766.6	1,659.4	107.22	16.476		
10,800.0	7,770.0	10,760.8	7,530.0	55.8	63.1	82.16	-2,984.2	-1,744.5	1,766.6	1,656.0	110.59	15.974		
10,900.0	7,770.0	10,860.8	7,530.0	57.5	64.6	82.16	-3,084.2	-1,744.5	1,766.6	1,652.6	113.96	15.501		
11,000.0	7,770.0	10,960.8	7,530.0	59.2	66.1	82.16	-3,184.2	-1,744.5	1,766.6	1,649.2	117.34	15.055		
11,100.0	7,770.0	11,060.8	7,530.0	60.9	67.6	82.16	-3,284.2	-1,744.5	1,766.6	1,645.9	120.73	14.633		
11,200.0	7,770.0	11,160.8	7,530.0	62.6	69.2	82.16	-3,384.2	-1,744.5	1,766.6	1,642.5	124.12	14.233		
11,300.0	7,770.0	11,260.8	7,530.0	64.3	70.7	82.16	-3,484.2	-1,744.5	1,766.6	1,639.1	127.51	13.854		
11,400.0	7,770.0	11,360.8	7,530.0	66.0	72.3	82.16	-3,584.2	-1,744.5	1,766.6	1,635.7	130.91	13.494		
11,500.0	7,770.0	11,460.8	7,530.0	67.7	73.9	82.16	-3,684.2	-1,744.5	1,766.6	1,632.3	134.32	13.152		
11,600.0	7,770.0	11,560.8	7,530.0	69.5	75.4	82.16	-3,784.2	-1,744.5	1,766.6	1,628.9	137.72	12.827		
11,700.0	7,770.0	11,660.8	7,530.0	71.2	77.0	82.16	-3,884.2	-1,744.5	1,766.6	1,625.5	141.13	12.517		
11,800.0	7,770.0	11,760.8	7,530.0	72.9	78.6	82.16	-3,984.2	-1,744.5	1,766.6	1,622.0	144.55	12.221		
11,900.0	7,770.0	11,860.8	7,530.0	74.6	80.2	82.16	-4,084.2	-1,744.5	1,766.6	1,618.6	147.96	11.939		
12,000.0	7,770.0	11,960.8	7,530.0	76.4	81.8	82.16	-4,184.2	-1,744.5	1,766.6	1,615.2	151.38	11.670		
12,100.0	7,770.0	12,060.8	7,530.0	78.1	83.4	82.16	-4,284.2	-1,744.5	1,766.6	1,611.8	154.80	11.412		
12,200.0	7,770.0	12,160.8	7,530.0	79.8	85.1	82.16	-4,384.2	-1,744.5	1,766.6	1,608.4	158.23	11.165		
12,300.0	7,770.0	12,260.8	7,530.0	81.5	86.7	82.16	-4,484.2	-1,744.5	1,766.6	1,604.9	161.65	10.928		
12,400.0	7,770.0	12,360.8	7,530.0	83.3	88.3	82.16	-4,584.2	-1,744.5	1,766.6	1,601.5	165.08	10.701		
12,500.0	7,770.0	12,460.8	7,530.0	85.0	89.9	82.16	-4,684.2	-1,744.5	1,766.6	1,598.1	168.51	10.483		
12,600.0	7,770.0	12,560.8	7,530.0	86.7	91.6	82.16	-4,784.2	-1,744.5	1,766.6	1,594.6	171.95	10.274		
12,700.0	7,770.0	12,660.8	7,530.0	88.5	93.2	82.16	-4,884.2	-1,744.5	1,766.6	1,591.2	175.38	10.073		
12,800.0	7,770.0	12,760.8	7,530.0	90.2	94.9	82.16	-4,984.2	-1,744.5	1,766.6	1,587.8	178.81	9.879		
12,900.0	7,770.0	12,860.8	7,530.0	91.9	96.5	82.16	-5,084.2	-1,744.5	1,766.6	1,584.3	182.25	9.693		
13,000.0	7,770.0	12,960.8	7,530.0	93.7	98.2	82.16	-5,184.2	-1,744.5	1,766.6	1,580.9	185.69	9.514		
13,100.0	7,770.0	13,060.8	7,530.0	95.4	99.8	82.16	-5,284.2	-1,744.5	1,766.6	1,577.5	189.13	9.341		
13,200.0	7,770.0	13,160.8	7,530.0	97.1	101.5	82.16	-5,384.2	-1,744.5	1,766.6	1,574.0	192.57	9.174		
13,300.0	7,770.0	13,260.8	7,530.0	98.9	103.2	82.16	-5,484.2	-1,744.5	1,766.6	1,570.6	196.01	9.013		
13,400.0	7,770.0	13,360.8	7,530.0	100.6	104.8	82.16	-5,584.2	-1,744.5	1,766.6	1,567.1	199.46	8.857		
13,500.0	7,770.0	13,460.8	7,530.0	102.4	106.5	82.16	-5,684.2	-1,744.5	1,766.6	1,563.7	202.90	8.707		
13,600.0	7,770.0	13,560.8	7,530.0	104.1	108.2	82.16	-5,784.2	-1,744.5	1,766.6	1,560.2	206.35	8.561		
13,700.0	7,770.0	13,660.8	7,530.0	105.8	109.8	82.16	-5,884.2	-1,744.5	1,766.6	1,556.8	209.79	8.421		
13,800.0	7,770.0	13,760.8	7,530.0	107.6	111.5	82.16	-5,984.2	-1,744.5	1,766.6	1,553.4	213.24	8.285		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	13,860.8	7,530.0	109.3	113.2	82.16	-6,084.2	-1,744.5	1,766.6	1,549.9	216.69	8.153		
14,000.0	7,770.0	13,960.8	7,530.0	111.1	114.9	82.16	-6,184.2	-1,744.5	1,766.6	1,546.5	220.14	8.025		
14,100.0	7,770.0	14,060.8	7,530.0	112.8	116.6	82.16	-6,284.2	-1,744.5	1,766.6	1,543.0	223.59	7.901		
14,200.0	7,770.0	14,160.8	7,530.0	114.5	118.2	82.16	-6,384.2	-1,744.5	1,766.6	1,539.6	227.04	7.781		
14,300.0	7,770.0	14,260.8	7,530.0	116.3	119.9	82.16	-6,484.2	-1,744.5	1,766.6	1,536.1	230.49	7.665		
14,400.0	7,770.0	14,360.8	7,530.0	118.0	121.6	82.16	-6,584.2	-1,744.5	1,766.6	1,532.7	233.94	7.551		
14,500.0	7,770.0	14,460.8	7,530.0	119.8	123.3	82.16	-6,684.2	-1,744.5	1,766.6	1,529.2	237.39	7.442		
14,600.0	7,770.0	14,560.8	7,530.0	121.5	125.0	82.16	-6,784.2	-1,744.5	1,766.6	1,525.7	240.85	7.335		
14,700.0	7,770.0	14,660.8	7,530.0	123.3	126.7	82.16	-6,884.2	-1,744.5	1,766.6	1,522.3	244.30	7.231		
14,800.0	7,770.0	14,760.8	7,530.0	125.0	128.4	82.16	-6,984.2	-1,744.5	1,766.6	1,518.8	247.76	7.130		
14,900.0	7,770.0	14,860.8	7,530.0	126.7	130.1	82.16	-7,084.2	-1,744.5	1,766.6	1,515.4	251.21	7.032		
15,000.0	7,770.0	14,960.8	7,530.0	128.5	131.8	82.16	-7,184.2	-1,744.5	1,766.6	1,511.9	254.67	6.937		
15,100.0	7,770.0	15,060.8	7,530.0	130.2	133.5	82.16	-7,284.2	-1,744.5	1,766.6	1,508.5	258.12	6.844		
15,200.0	7,770.0	15,160.8	7,530.0	132.0	135.2	82.16	-7,384.2	-1,744.5	1,766.6	1,505.0	261.58	6.754		
15,300.0	7,770.0	15,260.8	7,530.0	133.7	136.9	82.16	-7,484.2	-1,744.5	1,766.6	1,501.6	265.04	6.665		
15,400.0	7,770.0	15,360.8	7,530.0	135.5	138.6	82.16	-7,584.2	-1,744.5	1,766.6	1,498.1	268.50	6.580		
15,500.0	7,770.0	15,460.8	7,530.0	137.2	140.3	82.16	-7,684.2	-1,744.5	1,766.6	1,494.6	271.96	6.496		
15,600.0	7,770.0	15,560.8	7,530.0	139.0	142.0	82.16	-7,784.2	-1,744.5	1,766.6	1,491.2	275.41	6.414		
15,700.0	7,770.0	15,660.8	7,530.0	140.7	143.7	82.16	-7,884.2	-1,744.5	1,766.6	1,487.7	278.87	6.335		
15,800.0	7,770.0	15,760.8	7,530.0	142.4	145.4	82.16	-7,984.2	-1,744.5	1,766.6	1,484.3	282.33	6.257		
15,900.0	7,770.0	15,860.8	7,530.0	144.2	147.1	82.16	-8,084.2	-1,744.5	1,766.6	1,480.8	285.79	6.181		
16,000.0	7,770.0	15,960.8	7,530.0	145.9	148.9	82.16	-8,184.2	-1,744.5	1,766.6	1,477.3	289.25	6.107		
16,100.0	7,770.0	16,060.8	7,530.0	147.7	150.6	82.16	-8,284.2	-1,744.5	1,766.6	1,473.9	292.71	6.035		
16,200.0	7,770.0	16,160.8	7,530.0	149.4	152.3	82.16	-8,384.2	-1,744.5	1,766.6	1,470.4	296.18	5.965		
16,300.0	7,770.0	16,260.8	7,530.0	151.2	154.0	82.16	-8,484.2	-1,744.5	1,766.6	1,467.0	299.64	5.896		
16,400.0	7,770.0	16,360.8	7,530.0	152.9	155.7	82.16	-8,584.2	-1,744.5	1,766.6	1,463.5	303.10	5.828		
16,500.0	7,770.0	16,460.8	7,530.0	154.7	157.4	82.16	-8,684.2	-1,744.5	1,766.6	1,460.0	306.56	5.763		
16,600.0	7,770.0	16,560.8	7,530.0	156.4	159.1	82.16	-8,784.2	-1,744.5	1,766.6	1,456.6	310.02	5.698		
16,700.0	7,770.0	16,660.8	7,530.0	158.2	160.9	82.16	-8,884.2	-1,744.5	1,766.6	1,453.1	313.49	5.635		
16,800.0	7,770.0	16,760.8	7,530.0	159.9	162.6	82.16	-8,984.2	-1,744.5	1,766.6	1,449.7	316.95	5.574		
16,900.0	7,770.0	16,860.8	7,530.0	161.7	164.3	82.16	-9,084.2	-1,744.5	1,766.6	1,446.2	320.41	5.514		
17,000.0	7,770.0	16,960.8	7,530.0	163.4	166.0	82.16	-9,184.2	-1,744.5	1,766.6	1,442.7	323.88	5.455		
17,100.0	7,770.0	17,060.8	7,530.0	165.2	167.7	82.16	-9,284.2	-1,744.5	1,766.6	1,439.3	327.34	5.397		
17,200.0	7,770.0	17,160.8	7,530.0	166.9	169.5	82.16	-9,384.2	-1,744.5	1,766.6	1,435.8	330.80	5.340		
17,300.0	7,770.0	17,260.8	7,530.0	168.7	171.2	82.16	-9,484.2	-1,744.5	1,766.6	1,432.3	334.27	5.285		
17,400.0	7,770.0	17,360.8	7,530.0	170.4	172.9	82.16	-9,584.2	-1,744.5	1,766.6	1,428.9	337.73	5.231		
17,500.0	7,770.0	17,460.8	7,530.0	172.2	174.6	82.16	-9,684.2	-1,744.5	1,766.6	1,425.4	341.20	5.178		
17,600.0	7,770.0	17,560.8	7,530.0	173.9	176.4	82.16	-9,784.2	-1,744.5	1,766.6	1,421.9	344.66	5.126		
17,615.1	7,770.0	17,575.9	7,530.0	174.2	176.6	82.16	-9,799.3	-1,744.5	1,766.6	1,421.4	345.18	5.118		
17,653.1	7,770.0	17,589.7	7,530.0	174.8	176.9	82.16	-9,813.2	-1,744.5	1,766.8	1,420.7	346.08	5.105 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	1.0	1.0	0.0	0.0	-89.65	0.4	-59.9	59.9					
100.0	100.0	101.0	101.0	0.2	0.2	-89.65	0.4	-59.9	59.9	59.6	0.31	196.085		
200.0	200.0	201.0	201.0	0.3	0.3	-89.65	0.4	-59.9	59.9	59.2	0.65	91.506 CC		
249.3	249.3	250.3	250.3	0.4	0.4	-89.65	0.4	-59.9	59.9	59.1	0.83	72.463 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-89.60	0.4	-60.1	60.1	59.1	1.00	60.001		
400.0	400.0	399.5	399.4	0.7	0.7	-89.19	0.9	-61.8	61.8	60.4	1.35	45.774		
500.0	500.0	498.3	498.3	0.8	0.9	-88.45	1.8	-65.1	65.2	63.5	1.70	38.388		
550.0	550.0	547.7	547.6	0.9	1.0	-87.99	2.4	-67.4	67.5	65.6	1.87	36.060		
600.0	600.0	597.1	596.9	1.0	1.0	-88.47	3.1	-70.0	70.2	68.2	2.05	34.337		
700.0	700.0	695.6	695.2	1.2	1.2	-88.57	4.8	-76.6	76.9	74.5	2.39	32.128		
800.0	799.9	793.9	793.1	1.4	1.5	-89.54	7.0	-84.8	85.3	82.5	2.75	31.025		
861.1	860.9	853.8	852.6	1.5	1.6	-90.43	8.6	-90.6	91.2	88.2	2.97	30.721		
900.0	899.8	891.9	890.5	1.6	1.7	-91.04	9.7	-94.6	95.3	92.2	3.11	30.647		
1,000.0	999.6	989.5	987.4	1.8	1.9	-92.22	12.7	-105.9	107.0	103.5	3.48	30.787		
1,100.0	1,099.5	1,086.7	1,083.8	1.9	2.2	-92.93	16.1	-118.8	120.4	116.6	3.85	31.295		
1,200.0	1,199.3	1,183.6	1,179.4	2.1	2.5	-93.28	20.0	-133.2	135.4	131.2	4.22	32.070		
1,300.0	1,299.2	1,279.9	1,274.3	2.3	2.8	-93.37	24.2	-149.1	152.0	147.4	4.60	33.046		
1,400.0	1,399.1	1,375.6	1,368.4	2.5	3.2	-93.27	28.9	-166.4	170.1	165.1	4.98	34.177		
1,500.0	1,498.9	1,471.1	1,461.9	2.7	3.5	-93.04	33.9	-185.1	189.8	184.5	5.36	35.434		
1,600.0	1,598.8	1,569.0	1,557.6	2.9	3.9	-92.79	39.2	-205.0	210.2	204.4	5.74	36.602		
1,700.0	1,698.6	1,666.9	1,653.3	3.1	4.3	-92.59	44.5	-224.8	230.5	224.4	6.13	37.619		
1,800.0	1,798.5	1,764.8	1,749.0	3.3	4.7	-92.42	49.8	-244.7	250.9	244.4	6.51	38.511		
1,900.0	1,898.3	1,862.7	1,844.7	3.5	5.1	-92.28	55.2	-264.6	271.2	264.3	6.90	39.301		
2,000.0	1,998.2	1,960.6	1,940.5	3.7	5.5	-92.15	60.5	-284.4	291.6	284.3	7.29	40.004		
2,100.0	2,098.0	2,058.5	2,036.2	3.9	5.9	-92.04	65.8	-304.3	312.0	304.3	7.68	40.634		
2,200.0	2,197.9	2,156.4	2,131.9	4.1	6.3	-91.95	71.1	-324.2	332.3	324.3	8.07	41.202		
2,300.0	2,297.7	2,254.3	2,227.6	4.3	6.7	-91.87	76.4	-344.0	352.7	344.2	8.45	41.716		
2,400.0	2,397.6	2,352.2	2,323.3	4.5	7.1	-91.79	81.7	-363.9	373.1	364.2	8.84	42.184		
2,500.0	2,497.4	2,450.1	2,419.1	4.7	7.5	-91.72	87.1	-383.8	393.4	384.2	9.23	42.611		
2,600.0	2,597.3	2,548.0	2,514.8	4.9	7.9	-91.66	92.4	-403.6	413.8	404.2	9.62	43.004		
2,700.0	2,697.1	2,645.9	2,610.5	5.1	8.3	-91.61	97.7	-423.5	434.2	424.2	10.01	43.364		
2,800.0	2,797.0	2,743.8	2,706.2	5.3	8.7	-91.56	103.0	-443.4	454.5	444.1	10.40	43.698		
2,900.0	2,896.8	2,841.7	2,801.9	5.5	9.1	-91.51	108.3	-463.3	474.9	464.1	10.79	44.006		
3,000.0	2,996.7	2,939.6	2,897.6	5.7	9.5	-91.47	113.7	-483.1	495.3	484.1	11.18	44.293		
3,100.0	3,096.5	3,037.5	2,993.4	5.9	9.9	-91.43	119.0	-503.0	515.6	504.1	11.57	44.560		
3,200.0	3,196.4	3,135.4	3,089.1	6.1	10.3	-91.40	124.3	-522.9	536.0	524.0	11.96	44.809		
3,300.0	3,296.3	3,233.3	3,184.8	6.3	10.7	-91.37	129.6	-542.7	556.4	544.0	12.35	45.042		
3,400.0	3,396.1	3,331.2	3,280.5	6.5	11.1	-91.33	134.9	-562.6	576.7	564.0	12.74	45.261		
3,500.0	3,496.0	3,429.2	3,376.2	6.7	11.5	-91.31	140.2	-582.5	597.1	584.0	13.13	45.466		
3,600.0	3,595.8	3,527.1	3,472.0	6.9	11.9	-91.28	145.6	-602.3	617.5	604.0	13.52	45.660		
3,700.0	3,695.7	3,625.0	3,567.7	7.0	12.3	-91.25	150.9	-622.2	637.9	623.9	13.91	45.842		
3,800.0	3,795.5	3,722.9	3,663.4	7.2	12.7	-91.23	156.2	-642.1	658.2	643.9	14.30	46.014		
3,900.0	3,895.4	3,820.8	3,759.1	7.4	13.1	-91.21	161.5	-661.9	678.6	663.9	14.70	46.177		
4,000.0	3,995.2	3,918.7	3,854.8	7.6	13.5	-91.19	166.8	-681.8	699.0	683.9	15.09	46.331		
4,100.0	4,095.1	4,016.6	3,950.5	7.8	13.9	-91.17	172.2	-701.7	719.3	703.9	15.48	46.478		
4,200.0	4,194.9	4,114.5	4,046.3	8.0	14.3	-91.15	177.5	-721.5	739.7	723.8	15.87	46.617		
4,300.0	4,294.8	4,212.4	4,142.0	8.2	14.7	-91.13	182.8	-741.4	760.1	743.8	16.26	46.749		
4,400.0	4,394.6	4,310.3	4,237.7	8.4	15.1	-91.12	188.1	-761.3	780.4	763.8	16.65	46.875		
4,500.0	4,494.5	4,408.2	4,333.4	8.6	15.5	-91.10	193.4	-781.1	800.8	783.8	17.04	46.995		
4,600.0	4,594.3	4,506.1	4,429.1	8.8	15.9	-91.09	198.7	-801.0	821.2	803.7	17.43	47.109		
4,700.0	4,694.2	4,604.0	4,524.9	9.0	16.3	-91.07	204.1	-820.9	841.5	823.7	17.82	47.219		
4,800.0	4,794.0	4,701.9	4,620.6	9.2	16.7	-91.06	209.4	-840.7	861.9	843.7	18.21	47.324		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
4,900.0	4,893.9	4,799.8	4,716.3	9.4	17.1	-91.05	214.7	-860.6	882.3	863.7	18.60	47.424		
5,000.0	4,993.7	4,897.7	4,812.0	9.6	17.5	-91.03	220.0	-880.5	902.7	883.7	19.00	47.520		
5,100.0	5,093.6	4,995.6	4,907.7	9.8	17.9	-91.02	225.3	-900.3	923.0	903.6	19.39	47.612		
5,200.0	5,193.5	5,093.5	5,003.4	10.0	18.3	-91.01	230.7	-920.2	943.4	923.6	19.78	47.701		
5,300.0	5,293.3	5,191.4	5,099.2	10.2	18.7	-91.00	236.0	-940.1	963.8	943.6	20.17	47.786		
5,400.0	5,393.2	5,289.3	5,194.9	10.4	19.1	-90.99	241.3	-959.9	984.1	963.6	20.56	47.867		
5,500.0	5,493.0	5,387.2	5,290.6	10.6	19.5	-90.98	246.6	-979.8	1,004.5	983.6	20.95	47.946		
5,600.0	5,592.9	5,485.1	5,386.3	10.8	19.9	-90.97	251.9	-999.7	1,024.9	1,003.5	21.34	48.022		
5,700.0	5,692.7	5,583.0	5,482.0	11.0	20.3	-90.96	257.3	-1,019.5	1,045.3	1,023.5	21.73	48.095		
5,800.0	5,792.6	5,680.9	5,577.8	11.2	20.7	-90.95	262.6	-1,039.4	1,065.6	1,043.5	22.12	48.165		
5,900.0	5,892.4	5,778.8	5,673.5	11.4	21.1	-90.94	267.9	-1,059.3	1,086.0	1,063.5	22.52	48.233		
6,000.0	5,992.3	5,876.7	5,769.2	11.6	21.5	-90.93	273.2	-1,079.2	1,106.4	1,083.5	22.91	48.298		
6,100.0	6,092.1	5,974.6	5,864.9	11.8	21.9	-90.93	278.5	-1,099.0	1,126.7	1,103.4	23.30	48.362		
6,200.0	6,192.0	6,072.5	5,960.6	12.0	22.3	-90.92	283.8	-1,118.9	1,147.1	1,123.4	23.69	48.423		
6,300.0	6,291.8	6,170.4	6,056.3	12.2	22.7	-90.91	289.2	-1,138.8	1,167.5	1,143.4	24.08	48.482		
6,400.0	6,391.7	6,268.3	6,152.1	12.4	23.1	-90.90	294.5	-1,158.6	1,187.8	1,163.4	24.47	48.539		
6,500.0	6,491.5	6,366.2	6,247.8	12.6	23.5	-90.90	299.8	-1,178.5	1,208.2	1,183.4	24.86	48.595		
6,600.0	6,591.4	6,464.1	6,343.5	12.8	24.0	-90.89	305.1	-1,198.4	1,228.6	1,203.3	25.25	48.649		
6,700.0	6,691.2	6,562.0	6,439.2	13.0	24.4	-90.88	310.4	-1,218.2	1,249.0	1,223.3	25.65	48.701		
6,800.0	6,791.1	6,660.0	6,534.9	13.2	24.8	-90.88	315.8	-1,238.1	1,269.3	1,243.3	26.04	48.751		
6,900.0	6,890.9	6,757.9	6,630.7	13.4	25.2	-90.87	321.1	-1,258.0	1,289.7	1,263.3	26.43	48.800		
7,000.0	6,990.8	6,855.8	6,726.4	13.6	25.6	-90.87	326.4	-1,277.8	1,310.1	1,283.3	26.82	48.848		
7,024.2	7,014.9	6,879.4	6,749.5	13.6	25.7	-90.87	327.7	-1,282.6	1,315.0	1,288.1	26.91	48.859		
7,050.0	7,040.7	6,904.7	6,774.2	13.7	25.8	-92.93	329.0	-1,287.8	1,320.3	1,293.2	27.08	48.757		
7,100.0	7,090.7	6,953.5	6,822.0	13.7	26.0	89.77	331.7	-1,297.7	1,330.4	1,303.1	27.35	48.636		
7,150.0	7,140.5	7,002.0	6,869.3	13.8	26.2	88.74	334.3	-1,307.5	1,340.5	1,313.0	27.58	48.603		
7,200.0	7,189.9	7,049.8	6,916.1	13.8	26.4	88.23	336.9	-1,317.2	1,350.6	1,322.9	27.76	48.655		
7,250.0	7,238.6	7,096.8	6,962.1	13.8	26.6	87.91	339.5	-1,326.8	1,360.7	1,332.8	27.89	48.791		
7,300.0	7,286.4	7,142.8	7,007.0	13.7	26.7	87.73	342.0	-1,336.1	1,370.8	1,342.8	27.97	49.002		
7,350.0	7,333.1	7,189.2	7,052.4	13.7	26.9	87.66	344.2	-1,345.5	1,381.0	1,353.0	28.02	49.294		
7,400.0	7,378.5	7,238.4	7,100.6	13.6	27.1	87.67	343.6	-1,355.5	1,391.2	1,363.2	28.01	49.677		
7,450.0	7,422.2	7,289.3	7,150.3	13.6	27.3	87.70	339.5	-1,365.8	1,401.4	1,373.5	27.96	50.125		
7,500.0	7,464.1	7,342.1	7,201.3	13.5	27.5	87.75	331.4	-1,376.4	1,411.6	1,383.7	27.88	50.629		
7,550.0	7,504.1	7,396.9	7,253.5	13.5	27.6	87.84	319.0	-1,387.2	1,421.5	1,393.8	27.78	51.175		
7,600.0	7,541.8	7,453.9	7,306.7	13.5	27.8	87.95	301.8	-1,398.3	1,431.3	1,403.6	27.66	51.747		
7,650.0	7,577.2	7,513.4	7,360.6	13.4	27.9	88.09	279.4	-1,409.5	1,440.8	1,413.2	27.54	52.318		
7,700.0	7,610.0	7,575.5	7,414.8	13.5	28.0	88.26	251.1	-1,420.7	1,449.9	1,422.5	27.43	52.855		
7,750.0	7,640.2	7,640.5	7,468.7	13.5	28.2	88.45	216.5	-1,431.9	1,458.6	1,431.2	27.36	53.317		
7,800.0	7,667.4	7,708.6	7,521.5	13.6	28.3	88.67	175.1	-1,442.9	1,466.7	1,439.3	27.34	53.653		
7,850.0	7,691.7	7,779.7	7,572.4	13.7	28.4	88.89	126.5	-1,453.4	1,474.1	1,446.7	27.40	53.805		
7,900.0	7,712.8	7,854.1	7,620.2	13.9	28.6	89.13	70.5	-1,463.4	1,480.8	1,453.3	27.57	53.718		
7,950.0	7,730.8	7,931.5	7,663.7	14.1	28.8	89.36	7.2	-1,472.4	1,486.7	1,458.8	27.88	53.318		
8,000.0	7,745.5	8,011.8	7,701.5	14.4	29.0	89.56	-63.2	-1,480.2	1,491.6	1,463.2	28.36	52.591		
8,050.0	7,756.7	8,094.6	7,732.2	14.7	29.2	89.74	-139.8	-1,486.6	1,495.4	1,466.4	29.03	51.517		
8,100.0	7,764.6	8,179.4	7,754.4	15.1	29.5	89.87	-221.5	-1,491.2	1,498.2	1,468.3	29.89	50.117		
8,150.0	7,769.0	8,265.6	7,767.1	15.5	29.9	89.95	-306.7	-1,493.8	1,499.7	1,468.8	30.94	48.469		
8,188.1	7,770.0	8,331.3	7,770.0	15.9	30.2	89.96	-372.3	-1,494.5	1,500.1	1,468.2	31.84	47.106		
8,200.0	7,770.0	8,343.3	7,770.0	16.0	30.2	89.96	-384.2	-1,494.5	1,500.1	1,468.0	32.07	46.776		
8,300.0	7,770.0	8,443.3	7,770.0	17.0	30.8	89.96	-484.2	-1,494.5	1,500.1	1,466.0	34.07	44.027		
8,400.0	7,770.0	8,543.3	7,770.0	18.1	31.4	89.96	-584.2	-1,494.5	1,500.1	1,463.8	36.29	41.333		
8,500.0	7,770.0	8,643.3	7,770.0	19.3	32.1	89.96	-684.2	-1,494.5	1,500.1	1,461.3	38.70	38.757		
8,600.0	7,770.0	8,743.3	7,770.0	20.6	32.9	89.96	-784.2	-1,494.5	1,500.1	1,458.8	41.27	36.344		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
8,700.0	7,770.0	8,843.3	7,770.0	21.9	33.7	89.96	-884.2	-1,494.5	1,500.1	1,456.1	43.97	34.113	
8,800.0	7,770.0	8,943.3	7,770.0	23.3	34.6	89.96	-984.2	-1,494.5	1,500.1	1,453.3	46.78	32.066	
8,900.0	7,770.0	9,043.3	7,770.0	24.8	35.6	89.96	-1,084.2	-1,494.5	1,500.1	1,450.4	49.68	30.196	
9,000.0	7,770.0	9,143.3	7,770.0	26.3	36.7	89.96	-1,184.2	-1,494.5	1,500.1	1,447.4	52.65	28.492	
9,100.0	7,770.0	9,243.3	7,770.0	27.8	37.8	89.96	-1,284.2	-1,494.5	1,500.1	1,444.4	55.68	26.940	
9,200.0	7,770.0	9,343.3	7,770.0	29.3	38.9	89.96	-1,384.2	-1,494.5	1,500.1	1,441.3	58.77	25.525	
9,300.0	7,770.0	9,443.3	7,770.0	30.9	40.1	89.96	-1,484.2	-1,494.5	1,500.1	1,438.2	61.90	24.234	
9,400.0	7,770.0	9,543.3	7,770.0	32.5	41.3	89.96	-1,584.2	-1,494.5	1,500.1	1,435.0	65.07	23.053	
9,500.0	7,770.0	9,643.3	7,770.0	34.1	42.6	89.96	-1,684.2	-1,494.5	1,500.1	1,431.8	68.27	21.972	
9,600.0	7,770.0	9,743.3	7,770.0	35.7	43.9	89.96	-1,784.2	-1,494.5	1,500.1	1,428.6	71.50	20.978	
9,700.0	7,770.0	9,843.3	7,770.0	37.3	45.2	89.96	-1,884.2	-1,494.5	1,500.1	1,425.3	74.76	20.065	
9,800.0	7,770.0	9,943.3	7,770.0	39.0	46.6	89.96	-1,984.2	-1,494.5	1,500.1	1,422.0	78.04	19.222	
9,900.0	7,770.0	10,043.3	7,770.0	40.6	48.0	89.96	-2,084.2	-1,494.5	1,500.1	1,418.7	81.34	18.442	
10,000.0	7,770.0	10,143.3	7,770.0	42.3	49.4	89.96	-2,184.2	-1,494.5	1,500.1	1,415.4	84.65	17.720	
10,100.0	7,770.0	10,243.3	7,770.0	44.0	50.8	89.96	-2,284.2	-1,494.5	1,500.1	1,412.1	87.98	17.050	
10,200.0	7,770.0	10,343.3	7,770.0	45.6	52.2	89.96	-2,384.2	-1,494.5	1,500.1	1,408.7	91.32	16.426	
10,300.0	7,770.0	10,443.3	7,770.0	47.3	53.7	89.96	-2,484.2	-1,494.5	1,500.1	1,405.4	94.68	15.844	
10,400.0	7,770.0	10,543.3	7,770.0	49.0	55.2	89.96	-2,584.2	-1,494.5	1,500.1	1,402.0	98.04	15.300	
10,500.0	7,770.0	10,643.3	7,770.0	50.7	56.7	89.96	-2,684.2	-1,494.5	1,500.1	1,398.6	101.42	14.791	
10,600.0	7,770.0	10,743.3	7,770.0	52.4	58.2	89.96	-2,784.2	-1,494.5	1,500.1	1,395.3	104.80	14.313	
10,700.0	7,770.0	10,843.3	7,770.0	54.1	59.7	89.96	-2,884.2	-1,494.5	1,500.1	1,391.9	108.20	13.864	
10,800.0	7,770.0	10,943.3	7,770.0	55.8	61.3	89.96	-2,984.2	-1,494.5	1,500.1	1,388.5	111.59	13.442	
10,900.0	7,770.0	11,043.3	7,770.0	57.5	62.8	89.96	-3,084.2	-1,494.5	1,500.1	1,385.1	115.00	13.044	
11,000.0	7,770.0	11,143.3	7,770.0	59.2	64.4	89.96	-3,184.2	-1,494.5	1,500.1	1,381.6	118.41	12.668	
11,100.0	7,770.0	11,243.3	7,770.0	60.9	66.0	89.96	-3,284.2	-1,494.5	1,500.1	1,378.2	121.83	12.313	
11,200.0	7,770.0	11,343.3	7,770.0	62.6	67.6	89.96	-3,384.2	-1,494.5	1,500.1	1,374.8	125.25	11.976	
11,300.0	7,770.0	11,443.3	7,770.0	64.3	69.2	89.96	-3,484.2	-1,494.5	1,500.1	1,371.4	128.68	11.657	
11,400.0	7,770.0	11,543.3	7,770.0	66.0	70.7	89.96	-3,584.2	-1,494.5	1,500.1	1,368.0	132.11	11.355	
11,500.0	7,770.0	11,643.3	7,770.0	67.7	72.4	89.96	-3,684.2	-1,494.5	1,500.1	1,364.5	135.54	11.067	
11,600.0	7,770.0	11,743.3	7,770.0	69.5	74.0	89.96	-3,784.2	-1,494.5	1,500.1	1,361.1	138.98	10.793	
11,700.0	7,770.0	11,843.3	7,770.0	71.2	75.6	89.96	-3,884.2	-1,494.5	1,500.1	1,357.6	142.42	10.532	
11,800.0	7,770.0	11,943.3	7,770.0	72.9	77.2	89.96	-3,984.2	-1,494.5	1,500.1	1,354.2	145.87	10.284	
11,900.0	7,770.0	12,043.3	7,770.0	74.6	78.8	89.96	-4,084.2	-1,494.5	1,500.1	1,350.7	149.32	10.046	
12,000.0	7,770.0	12,143.3	7,770.0	76.4	80.5	89.96	-4,184.2	-1,494.5	1,500.1	1,347.3	152.77	9.819	
12,100.0	7,770.0	12,243.3	7,770.0	78.1	82.1	89.96	-4,284.2	-1,494.5	1,500.1	1,343.8	156.22	9.602	
12,200.0	7,770.0	12,343.3	7,770.0	79.8	83.8	89.96	-4,384.2	-1,494.5	1,500.1	1,340.4	159.68	9.394	
12,300.0	7,770.0	12,443.3	7,770.0	81.5	85.4	89.96	-4,484.2	-1,494.5	1,500.1	1,336.9	163.14	9.195	
12,400.0	7,770.0	12,543.3	7,770.0	83.3	87.1	89.96	-4,584.2	-1,494.5	1,500.1	1,333.5	166.60	9.004	
12,500.0	7,770.0	12,643.3	7,770.0	85.0	88.7	89.96	-4,684.2	-1,494.5	1,500.1	1,330.0	170.06	8.821	
12,600.0	7,770.0	12,743.3	7,770.0	86.7	90.4	89.96	-4,784.2	-1,494.5	1,500.1	1,326.5	173.52	8.645	
12,700.0	7,770.0	12,843.3	7,770.0	88.5	92.0	89.96	-4,884.2	-1,494.5	1,500.1	1,323.1	176.99	8.476	
12,800.0	7,770.0	12,943.3	7,770.0	90.2	93.7	89.96	-4,984.2	-1,494.5	1,500.1	1,319.6	180.45	8.313	
12,900.0	7,770.0	13,043.3	7,770.0	91.9	95.4	89.96	-5,084.2	-1,494.5	1,500.1	1,316.1	183.92	8.156	
13,000.0	7,770.0	13,143.3	7,770.0	93.7	97.1	89.96	-5,184.2	-1,494.5	1,500.1	1,312.7	187.39	8.005	
13,100.0	7,770.0	13,243.3	7,770.0	95.4	98.7	89.96	-5,284.2	-1,494.5	1,500.1	1,309.2	190.87	7.859	
13,200.0	7,770.0	13,343.3	7,770.0	97.1	100.4	89.96	-5,384.2	-1,494.5	1,500.1	1,305.7	194.34	7.719	
13,300.0	7,770.0	13,443.3	7,770.0	98.9	102.1	89.96	-5,484.2	-1,494.5	1,500.1	1,302.3	197.81	7.583	
13,400.0	7,770.0	13,543.3	7,770.0	100.6	103.8	89.96	-5,584.2	-1,494.5	1,500.1	1,298.8	201.29	7.452	
13,500.0	7,770.0	13,643.3	7,770.0	102.4	105.5	89.96	-5,684.2	-1,494.5	1,500.1	1,295.3	204.76	7.326	
13,600.0	7,770.0	13,743.3	7,770.0	104.1	107.2	89.96	-5,784.2	-1,494.5	1,500.1	1,291.8	208.24	7.203	
13,700.0	7,770.0	13,843.3	7,770.0	105.8	108.8	89.96	-5,884.2	-1,494.5	1,500.1	1,288.3	211.72	7.085	
13,800.0	7,770.0	13,943.3	7,770.0	107.6	110.5	89.96	-5,984.2	-1,494.5	1,500.1	1,284.9	215.20	6.971	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
13,900.0	7,770.0	14,043.3	7,770.0	109.3	112.2	89.96	-6,084.2	-1,494.5	1,500.1	1,281.4	218.68	6.860		
14,000.0	7,770.0	14,143.3	7,770.0	111.1	113.9	89.96	-6,184.2	-1,494.5	1,500.1	1,277.9	222.16	6.752		
14,100.0	7,770.0	14,243.3	7,770.0	112.8	115.6	89.96	-6,284.2	-1,494.5	1,500.1	1,274.4	225.64	6.648		
14,200.0	7,770.0	14,343.3	7,770.0	114.5	117.3	89.96	-6,384.2	-1,494.5	1,500.1	1,270.9	229.13	6.547		
14,300.0	7,770.0	14,443.3	7,770.0	116.3	119.0	89.96	-6,484.2	-1,494.5	1,500.1	1,267.5	232.61	6.449		
14,400.0	7,770.0	14,543.3	7,770.0	118.0	120.7	89.96	-6,584.2	-1,494.5	1,500.1	1,264.0	236.10	6.354		
14,500.0	7,770.0	14,643.3	7,770.0	119.8	122.4	89.96	-6,684.2	-1,494.5	1,500.1	1,260.5	239.58	6.261		
14,600.0	7,770.0	14,743.3	7,770.0	121.5	124.1	89.96	-6,784.2	-1,494.5	1,500.1	1,257.0	243.07	6.171		
14,700.0	7,770.0	14,843.3	7,770.0	123.3	125.9	89.96	-6,884.2	-1,494.5	1,500.1	1,253.5	246.55	6.084		
14,800.0	7,770.0	14,943.3	7,770.0	125.0	127.6	89.96	-6,984.2	-1,494.5	1,500.1	1,250.0	250.04	5.999		
14,900.0	7,770.0	15,043.3	7,770.0	126.7	129.3	89.96	-7,084.2	-1,494.5	1,500.1	1,246.5	253.53	5.917		
15,000.0	7,770.0	15,143.3	7,770.0	128.5	131.0	89.96	-7,184.2	-1,494.5	1,500.1	1,243.1	257.02	5.836		
15,100.0	7,770.0	15,243.3	7,770.0	130.2	132.7	89.96	-7,284.2	-1,494.5	1,500.1	1,239.6	260.50	5.758		
15,200.0	7,770.0	15,343.3	7,770.0	132.0	134.4	89.96	-7,384.2	-1,494.5	1,500.1	1,236.1	263.99	5.682		
15,300.0	7,770.0	15,443.3	7,770.0	133.7	136.1	89.96	-7,484.2	-1,494.5	1,500.1	1,232.6	267.48	5.608		
15,400.0	7,770.0	15,543.3	7,770.0	135.5	137.8	89.96	-7,584.2	-1,494.5	1,500.1	1,229.1	270.97	5.536		
15,500.0	7,770.0	15,643.3	7,770.0	137.2	139.6	89.96	-7,684.2	-1,494.5	1,500.1	1,225.6	274.46	5.465		
15,600.0	7,770.0	15,743.3	7,770.0	139.0	141.3	89.96	-7,784.2	-1,494.5	1,500.1	1,222.1	277.95	5.397		
15,700.0	7,770.0	15,843.3	7,770.0	140.7	143.0	89.96	-7,884.2	-1,494.5	1,500.1	1,218.6	281.45	5.330		
15,800.0	7,770.0	15,943.3	7,770.0	142.4	144.7	89.96	-7,984.2	-1,494.5	1,500.1	1,215.1	284.94	5.265		
15,900.0	7,770.0	16,043.3	7,770.0	144.2	146.4	89.96	-8,084.2	-1,494.5	1,500.1	1,211.6	288.43	5.201		
16,000.0	7,770.0	16,143.3	7,770.0	145.9	148.1	89.96	-8,184.2	-1,494.5	1,500.1	1,208.1	291.92	5.139		
16,100.0	7,770.0	16,243.3	7,770.0	147.7	149.9	89.96	-8,284.2	-1,494.5	1,500.1	1,204.7	295.42	5.078		
16,200.0	7,770.0	16,343.3	7,770.0	149.4	151.6	89.96	-8,384.2	-1,494.5	1,500.1	1,201.2	298.91	5.018		
16,300.0	7,770.0	16,443.3	7,770.0	151.2	153.3	89.96	-8,484.2	-1,494.5	1,500.1	1,197.7	302.40	4.961		
16,400.0	7,770.0	16,543.3	7,770.0	152.9	155.0	89.96	-8,584.2	-1,494.5	1,500.1	1,194.2	305.90	4.904		
16,500.0	7,770.0	16,643.3	7,770.0	154.7	156.8	89.96	-8,684.2	-1,494.5	1,500.1	1,190.7	309.39	4.848		
16,600.0	7,770.0	16,743.3	7,770.0	156.4	158.5	89.96	-8,784.2	-1,494.5	1,500.1	1,187.2	312.89	4.794		
16,700.0	7,770.0	16,843.3	7,770.0	158.2	160.2	89.96	-8,884.2	-1,494.5	1,500.1	1,183.7	316.38	4.741		
16,800.0	7,770.0	16,943.3	7,770.0	159.9	161.9	89.96	-8,984.2	-1,494.5	1,500.1	1,180.2	319.88	4.690		
16,900.0	7,770.0	17,043.3	7,770.0	161.7	163.7	89.96	-9,084.2	-1,494.5	1,500.1	1,176.7	323.37	4.639		
17,000.0	7,770.0	17,143.3	7,770.0	163.4	165.4	89.96	-9,184.2	-1,494.5	1,500.1	1,173.2	326.87	4.589		
17,100.0	7,770.0	17,243.3	7,770.0	165.2	167.1	89.96	-9,284.2	-1,494.5	1,500.1	1,169.7	330.36	4.541		
17,200.0	7,770.0	17,343.3	7,770.0	166.9	168.8	89.96	-9,384.2	-1,494.5	1,500.1	1,166.2	333.86	4.493		
17,300.0	7,770.0	17,443.3	7,770.0	168.7	170.6	89.96	-9,484.2	-1,494.5	1,500.1	1,162.7	337.36	4.447		
17,400.0	7,770.0	17,543.3	7,770.0	170.4	172.3	89.96	-9,584.2	-1,494.5	1,500.1	1,159.2	340.85	4.401		
17,500.0	7,770.0	17,643.3	7,770.0	172.2	174.0	89.96	-9,684.2	-1,494.5	1,500.1	1,155.7	344.35	4.356		
17,600.0	7,770.0	17,743.3	7,770.0	173.9	175.8	89.96	-9,784.2	-1,494.5	1,500.1	1,152.2	347.85	4.312		
17,618.7	7,770.0	17,762.0	7,770.0	174.2	176.1	89.96	-9,802.9	-1,494.5	1,500.1	1,151.6	348.50	4.304		
17,653.1	7,770.0	17,775.9	7,770.0	174.8	176.3	89.96	-9,816.8	-1,494.5	1,500.2	1,150.9	349.35	4.294 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-49.8	49.8					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-49.8	49.8	49.5	0.30	164.033		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-49.8	49.8	49.2	0.65	76.315		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-49.8	49.8	48.8	1.00	49.724	CC, ES	
400.0	400.0	399.2	399.2	0.7	0.7	-89.69	0.3	-50.6	50.6	49.3	1.35	37.521		
500.0	500.0	498.3	498.2	0.8	0.9	-88.82	1.1	-53.1	53.1	51.4	1.70	31.286		
550.0	550.0	547.8	547.7	0.9	0.9	-88.21	1.7	-54.9	55.0	53.1	1.87	29.368		
600.0	600.0	597.3	597.2	1.0	1.0	-88.56	2.5	-57.1	57.2	55.2	2.05	27.982		
700.0	700.0	696.1	695.8	1.2	1.2	-88.54	4.4	-62.8	63.0	60.6	2.40	26.299		
800.0	799.9	794.7	794.1	1.4	1.4	-89.51	6.8	-70.0	70.4	67.6	2.75	25.586		
861.1	860.9	854.8	854.0	1.5	1.6	-90.44	8.6	-75.3	75.7	72.7	2.97	25.473		
900.0	899.8	893.1	892.0	1.6	1.7	-91.07	9.8	-78.9	79.4	76.3	3.11	25.506		
1,000.0	999.6	991.1	989.5	1.8	1.9	-92.19	13.3	-89.3	90.1	86.6	3.48	25.878		
1,100.0	1,099.5	1,088.8	1,086.3	1.9	2.2	-92.73	17.3	-101.2	102.4	98.6	3.86	26.565		
1,200.0	1,199.3	1,186.1	1,182.6	2.1	2.4	-92.86	21.9	-114.6	116.3	112.1	4.23	27.480		
1,300.0	1,299.2	1,283.0	1,278.2	2.3	2.8	-92.70	26.9	-129.5	131.8	127.2	4.61	28.570		
1,400.0	1,399.1	1,380.8	1,374.5	2.5	3.1	-92.39	32.4	-145.8	148.5	143.5	5.00	29.719		
1,500.0	1,498.9	1,479.4	1,471.5	2.7	3.4	-92.14	37.9	-162.3	165.3	159.9	5.38	30.706		
1,600.0	1,598.8	1,578.0	1,568.6	2.9	3.7	-91.92	43.5	-178.7	182.0	176.3	5.77	31.557		
1,700.0	1,698.6	1,676.6	1,665.6	3.1	4.1	-91.75	49.0	-195.2	198.8	192.7	6.16	32.296		
1,800.0	1,798.5	1,775.2	1,762.6	3.3	4.4	-91.60	54.6	-211.7	215.6	209.1	6.54	32.944		
1,900.0	1,898.3	1,873.7	1,859.7	3.5	4.8	-91.48	60.1	-228.2	232.4	225.5	6.93	33.517		
2,000.0	1,998.2	1,972.3	1,956.7	3.7	5.1	-91.37	65.7	-244.6	249.2	241.9	7.32	34.027		
2,100.0	2,098.0	2,070.9	2,053.7	3.9	5.4	-91.27	71.3	-261.1	266.0	258.3	7.71	34.484		
2,200.0	2,197.9	2,169.5	2,150.8	4.1	5.8	-91.19	76.8	-277.6	282.8	274.7	8.10	34.895		
2,300.0	2,297.7	2,268.1	2,247.8	4.3	6.1	-91.11	82.4	-294.1	299.6	291.1	8.49	35.268		
2,400.0	2,397.6	2,366.6	2,344.8	4.5	6.5	-91.05	87.9	-310.6	316.3	307.5	8.88	35.606		
2,500.0	2,497.4	2,465.2	2,441.9	4.7	6.8	-90.99	93.5	-327.0	333.1	323.9	9.28	35.916		
2,600.0	2,597.3	2,563.8	2,538.9	4.9	7.2	-90.93	99.0	-343.5	349.9	340.3	9.67	36.199		
2,700.0	2,697.1	2,662.4	2,636.0	5.1	7.5	-90.88	104.6	-360.0	366.7	356.7	10.06	36.460		
2,800.0	2,797.0	2,761.0	2,733.0	5.3	7.9	-90.84	110.1	-376.5	383.5	373.1	10.45	36.701		
2,900.0	2,896.8	2,859.5	2,830.0	5.5	8.2	-90.80	115.7	-392.9	400.3	389.5	10.84	36.924		
3,000.0	2,996.7	2,958.1	2,927.1	5.7	8.6	-90.76	121.3	-409.4	417.1	405.9	11.23	37.131		
3,100.0	3,096.5	3,056.7	3,024.1	5.9	8.9	-90.72	126.8	-425.9	433.9	422.3	11.62	37.324		
3,200.0	3,196.4	3,155.3	3,121.1	6.1	9.3	-90.69	132.4	-442.4	450.7	438.7	12.02	37.504		
3,300.0	3,296.3	3,253.9	3,218.2	6.3	9.6	-90.66	137.9	-458.8	467.5	455.1	12.41	37.672		
3,400.0	3,396.1	3,352.4	3,315.2	6.5	10.0	-90.63	143.5	-475.3	484.3	471.5	12.80	37.830		
3,500.0	3,496.0	3,451.0	3,412.2	6.7	10.3	-90.61	149.0	-491.8	501.1	487.9	13.19	37.978		
3,600.0	3,595.8	3,549.6	3,509.3	6.9	10.7	-90.58	154.6	-508.3	517.9	504.3	13.59	38.118		
3,700.0	3,695.7	3,648.2	3,606.3	7.0	11.0	-90.56	160.2	-524.8	534.6	520.7	13.98	38.249		
3,800.0	3,795.5	3,746.8	3,703.3	7.2	11.4	-90.54	165.7	-541.2	551.4	537.1	14.37	38.373		
3,900.0	3,895.4	3,845.3	3,800.4	7.4	11.7	-90.52	171.3	-557.7	568.2	553.5	14.76	38.491		
4,000.0	3,995.2	3,943.9	3,897.4	7.6	12.1	-90.50	176.8	-574.2	585.0	569.9	15.16	38.602		
4,100.0	4,095.1	4,042.5	3,994.4	7.8	12.4	-90.48	182.4	-590.7	601.8	586.3	15.55	38.707		
4,200.0	4,194.9	4,141.1	4,091.5	8.0	12.8	-90.46	187.9	-607.1	618.6	602.7	15.94	38.807		
4,300.0	4,294.8	4,239.7	4,188.5	8.2	13.1	-90.45	193.5	-623.6	635.4	619.1	16.33	38.903		
4,400.0	4,394.6	4,338.2	4,285.5	8.4	13.5	-90.43	199.0	-640.1	652.2	635.5	16.73	38.993		
4,500.0	4,494.5	4,436.8	4,382.6	8.6	13.8	-90.42	204.6	-656.6	669.0	651.9	17.12	39.080		
4,600.0	4,594.3	4,535.4	4,479.6	8.8	14.2	-90.40	210.2	-673.0	685.8	668.3	17.51	39.163		
4,700.0	4,694.2	4,634.0	4,576.6	9.0	14.5	-90.39	215.7	-689.5	702.6	684.7	17.90	39.241		
4,800.0	4,794.0	4,732.5	4,673.7	9.2	14.9	-90.38	221.3	-706.0	719.4	701.1	18.30	39.317		
4,900.0	4,893.9	4,831.1	4,770.7	9.4	15.2	-90.37	226.8	-722.5	736.2	717.5	18.69	39.389		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	4,929.7	4,867.7	9.6	15.6	-90.36	232.4	-738.9	753.0	733.9	19.08	39.458		
5,100.0	5,093.6	5,028.3	4,964.8	9.8	15.9	-90.34	237.9	-755.4	769.8	750.3	19.48	39.525		
5,200.0	5,193.5	5,126.9	5,061.8	10.0	16.3	-90.33	243.5	-771.9	786.6	766.7	19.87	39.588		
5,300.0	5,293.3	5,225.4	5,158.8	10.2	16.6	-90.32	249.1	-788.4	803.3	783.1	20.26	39.649		
5,400.0	5,393.2	5,324.0	5,255.9	10.4	17.0	-90.31	254.6	-804.9	820.1	799.5	20.65	39.708		
5,500.0	5,493.0	5,422.6	5,352.9	10.6	17.3	-90.31	260.2	-821.3	836.9	815.9	21.05	39.765		
5,600.0	5,592.9	5,521.2	5,449.9	10.8	17.7	-90.30	265.7	-837.8	853.7	832.3	21.44	39.819		
5,700.0	5,692.7	5,619.8	5,547.0	11.0	18.0	-90.29	271.3	-854.3	870.5	848.7	21.83	39.872		
5,800.0	5,792.6	5,718.3	5,644.0	11.2	18.4	-90.28	276.8	-870.8	887.3	865.1	22.23	39.922		
5,900.0	5,892.4	5,816.9	5,741.0	11.4	18.8	-90.27	282.4	-887.2	904.1	881.5	22.62	39.971		
6,000.0	5,992.3	5,915.5	5,838.1	11.6	19.1	-90.26	287.9	-903.7	920.9	897.9	23.01	40.018		
6,100.0	6,092.1	6,014.1	5,935.1	11.8	19.5	-90.26	293.5	-920.2	937.7	914.3	23.41	40.064		
6,200.0	6,192.0	6,112.7	6,032.1	12.0	19.8	-90.25	299.1	-936.7	954.5	930.7	23.80	40.108		
6,300.0	6,291.8	6,211.2	6,129.2	12.2	20.2	-90.24	304.6	-953.1	971.3	947.1	24.19	40.150		
6,400.0	6,391.7	6,309.8	6,226.2	12.4	20.5	-90.24	310.2	-969.6	988.1	963.5	24.58	40.192		
6,500.0	6,491.5	6,408.4	6,323.2	12.6	20.9	-90.23	315.7	-986.1	1,004.9	979.9	24.98	40.232		
6,600.0	6,591.4	6,507.0	6,420.3	12.8	21.2	-90.22	321.3	-1,002.6	1,021.7	996.3	25.37	40.270		
6,700.0	6,691.2	6,605.6	6,517.3	13.0	21.6	-90.22	326.8	-1,019.1	1,038.5	1,012.7	25.76	40.308		
6,800.0	6,791.1	6,704.1	6,614.3	13.2	21.9	-90.21	332.4	-1,035.5	1,055.3	1,029.1	26.16	40.344		
6,900.0	6,890.9	6,802.7	6,711.4	13.4	22.3	-90.21	338.0	-1,052.0	1,072.1	1,045.5	26.55	40.379		
7,000.0	6,990.8	6,901.2	6,808.3	13.6	22.6	-90.22	343.1	-1,068.5	1,088.9	1,061.9	26.94	40.419		
7,024.2	7,014.9	6,924.8	6,831.6	13.6	22.7	-90.28	343.3	-1,072.4	1,092.9	1,065.9	27.02	40.443		
7,050.0	7,040.7	6,950.0	6,856.4	13.7	22.8	-92.38	342.6	-1,076.7	1,097.3	1,070.1	27.16	40.401		
7,100.0	7,090.7	6,998.6	6,904.2	13.7	22.9	90.15	338.7	-1,084.8	1,105.7	1,078.3	27.37	40.396		
7,150.0	7,140.5	7,047.0	6,951.4	13.8	23.0	88.81	331.6	-1,092.9	1,114.2	1,086.6	27.53	40.467		
7,200.0	7,189.9	7,095.3	6,997.9	13.8	23.1	87.86	321.4	-1,100.8	1,122.6	1,094.9	27.64	40.612		
7,250.0	7,238.6	7,143.4	7,043.4	13.8	23.2	87.00	308.0	-1,108.6	1,130.9	1,103.2	27.70	40.828		
7,300.0	7,286.4	7,191.3	7,087.8	13.7	23.3	86.19	291.6	-1,116.3	1,139.0	1,111.3	27.71	41.112		
7,350.0	7,333.1	7,239.2	7,130.9	13.7	23.4	85.41	272.3	-1,123.7	1,147.0	1,119.4	27.67	41.456		
7,400.0	7,378.5	7,286.9	7,172.6	13.6	23.4	84.67	250.2	-1,130.9	1,154.8	1,127.2	27.59	41.853		
7,450.0	7,422.2	7,334.6	7,212.7	13.6	23.5	83.97	225.3	-1,137.9	1,162.3	1,134.9	27.49	42.290		
7,500.0	7,464.1	7,382.2	7,250.9	13.5	23.6	83.31	197.9	-1,144.5	1,169.6	1,142.2	27.36	42.752		
7,550.0	7,504.1	7,429.7	7,287.3	13.5	23.6	82.68	167.9	-1,150.9	1,176.5	1,149.3	27.22	43.221		
7,600.0	7,541.8	7,477.2	7,321.6	13.5	23.7	82.10	135.6	-1,156.9	1,183.1	1,156.0	27.09	43.672		
7,650.0	7,577.2	7,524.7	7,353.7	13.4	23.8	81.56	101.1	-1,162.5	1,189.2	1,162.3	26.98	44.078		
7,700.0	7,610.0	7,572.2	7,383.4	13.5	23.9	81.06	64.5	-1,167.8	1,195.0	1,168.1	26.91	44.412		
7,750.0	7,640.2	7,619.6	7,410.7	13.5	24.0	80.60	26.0	-1,172.6	1,200.3	1,173.4	26.88	44.649		
7,800.0	7,667.4	7,667.1	7,435.4	13.6	24.1	80.20	-14.3	-1,177.0	1,205.1	1,178.2	26.97	44.691		
7,850.0	7,691.7	7,714.6	7,457.5	13.7	24.2	79.84	-56.1	-1,181.0	1,209.5	1,182.3	27.11	44.610		
7,900.0	7,712.8	7,762.0	7,476.7	13.9	24.4	79.52	-99.4	-1,184.5	1,213.3	1,185.9	27.37	44.335		
7,950.0	7,730.8	7,809.5	7,493.1	14.1	24.5	79.26	-143.9	-1,187.5	1,216.5	1,188.8	27.74	43.861		
8,000.0	7,745.5	7,857.1	7,506.6	14.4	24.7	79.05	-189.4	-1,190.0	1,219.2	1,191.0	28.23	43.190		
8,050.0	7,756.7	7,904.6	7,517.0	14.7	24.9	78.88	-235.7	-1,192.1	1,221.4	1,192.5	28.85	42.337		
8,100.0	7,764.6	7,952.2	7,524.5	15.1	25.1	78.77	-282.7	-1,193.6	1,223.0	1,193.4	29.59	41.328		
8,150.0	7,769.0	8,000.0	7,528.8	15.5	25.4	78.71	-330.3	-1,194.5	1,224.0	1,193.5	30.45	40.192		
8,188.1	7,770.0	8,036.1	7,530.0	15.9	25.6	78.69	-366.3	-1,194.9	1,224.3	1,193.1	31.18	39.267		
8,200.0	7,770.0	8,047.7	7,530.0	16.0	25.6	78.70	-377.9	-1,195.0	1,224.4	1,193.0	31.39	39.001		
8,300.0	7,770.0	8,147.7	7,530.0	17.0	26.3	78.70	-477.9	-1,195.5	1,224.9	1,191.5	33.36	36.719		
8,400.0	7,770.0	8,247.7	7,530.0	18.1	27.0	78.71	-577.9	-1,196.1	1,225.4	1,189.9	35.54	34.484		
8,500.0	7,770.0	8,347.7	7,530.0	19.3	27.8	78.71	-677.9	-1,196.6	1,225.9	1,188.0	37.90	32.345		
8,600.0	7,770.0	8,447.7	7,530.0	20.6	28.7	78.71	-777.9	-1,197.1	1,226.4	1,186.0	40.42	30.341		
8,700.0	7,770.0	8,547.7	7,530.0	21.9	29.7	78.72	-877.9	-1,197.6	1,226.9	1,183.9	43.07	28.487		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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: 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		
8,800.0	7,770.0	8,647.7	7,530.0	23.3	30.7	78.72	-977.9	-1,198.1	1,227.5	1,181.6	45.82	26.787		
8,900.0	7,770.0	8,747.7	7,530.0	24.8	31.8	78.73	-1,077.9	-1,198.7	1,228.0	1,179.3	48.67	25.233		
9,000.0	7,770.0	8,847.7	7,530.0	26.3	33.0	78.73	-1,177.9	-1,199.2	1,228.5	1,176.9	51.58	23.817		
9,100.0	7,770.0	8,947.7	7,530.0	27.8	34.2	78.74	-1,277.9	-1,199.7	1,229.0	1,174.4	54.56	22.527		
9,200.0	7,770.0	9,047.7	7,530.0	29.3	35.5	78.74	-1,377.9	-1,200.2	1,229.5	1,171.9	57.59	21.351		
9,300.0	7,770.0	9,147.7	7,530.0	30.9	36.8	78.75	-1,477.9	-1,200.8	1,230.0	1,169.4	60.66	20.278		
9,400.0	7,770.0	9,247.7	7,530.0	32.5	38.1	78.75	-1,577.9	-1,201.3	1,230.5	1,166.8	63.77	19.296		
9,500.0	7,770.0	9,347.7	7,530.0	34.1	39.5	78.76	-1,677.9	-1,201.8	1,231.1	1,164.1	66.91	18.398		
9,600.0	7,770.0	9,447.7	7,530.0	35.7	40.9	78.76	-1,777.9	-1,202.3	1,231.6	1,161.5	70.09	17.572		
9,700.0	7,770.0	9,547.7	7,530.0	37.3	42.3	78.77	-1,877.9	-1,202.9	1,232.1	1,158.8	73.28	16.813		
9,800.0	7,770.0	9,647.7	7,530.0	39.0	43.8	78.77	-1,977.9	-1,203.4	1,232.6	1,156.1	76.50	16.112		
9,900.0	7,770.0	9,747.7	7,530.0	40.6	45.2	78.78	-2,077.9	-1,203.9	1,233.1	1,153.4	79.74	15.465		
10,000.0	7,770.0	9,847.7	7,530.0	42.3	46.7	78.78	-2,177.9	-1,204.4	1,233.6	1,150.6	82.99	14.865		
10,100.0	7,770.0	9,947.7	7,530.0	44.0	48.2	78.79	-2,277.9	-1,205.0	1,234.1	1,147.9	86.26	14.307		
10,200.0	7,770.0	10,047.7	7,530.0	45.6	49.8	78.79	-2,377.9	-1,205.5	1,234.6	1,145.1	89.54	13.789		
10,300.0	7,770.0	10,147.7	7,530.0	47.3	51.3	78.80	-2,477.9	-1,206.0	1,235.2	1,142.3	92.83	13.305		
10,400.0	7,770.0	10,247.7	7,530.0	49.0	52.9	78.80	-2,577.9	-1,206.5	1,235.7	1,139.5	96.14	12.853		
10,500.0	7,770.0	10,347.7	7,530.0	50.7	54.4	78.81	-2,677.9	-1,207.1	1,236.2	1,136.7	99.45	12.430		
10,600.0	7,770.0	10,447.7	7,530.0	52.4	56.0	78.81	-2,777.9	-1,207.6	1,236.7	1,133.9	102.77	12.033		
10,700.0	7,770.0	10,547.7	7,530.0	54.1	57.6	78.81	-2,877.9	-1,208.1	1,237.2	1,131.1	106.10	11.661		
10,800.0	7,770.0	10,647.7	7,530.0	55.8	59.2	78.82	-2,977.9	-1,208.6	1,237.7	1,128.3	109.44	11.310		
10,900.0	7,770.0	10,747.7	7,530.0	57.5	60.8	78.82	-3,077.9	-1,209.1	1,238.2	1,125.5	112.78	10.979		
11,000.0	7,770.0	10,847.7	7,530.0	59.2	62.4	78.83	-3,177.9	-1,209.7	1,238.8	1,122.6	116.13	10.667		
11,100.0	7,770.0	10,947.7	7,530.0	60.9	64.0	78.83	-3,277.9	-1,210.2	1,239.3	1,119.8	119.49	10.372		
11,200.0	7,770.0	11,047.7	7,530.0	62.6	65.7	78.84	-3,377.9	-1,210.7	1,239.8	1,116.9	122.85	10.092		
11,300.0	7,770.0	11,147.7	7,530.0	64.3	67.3	78.84	-3,477.9	-1,211.2	1,240.3	1,114.1	126.21	9.827		
11,400.0	7,770.0	11,247.7	7,530.0	66.0	68.9	78.85	-3,577.9	-1,211.8	1,240.8	1,111.2	129.58	9.576		
11,500.0	7,770.0	11,347.7	7,530.0	67.7	70.6	78.85	-3,677.9	-1,212.3	1,241.3	1,108.4	132.95	9.336		
11,600.0	7,770.0	11,447.7	7,530.0	69.5	72.2	78.86	-3,777.9	-1,212.8	1,241.8	1,105.5	136.33	9.109		
11,700.0	7,770.0	11,547.7	7,530.0	71.2	73.9	78.86	-3,877.8	-1,213.3	1,242.4	1,102.6	139.71	8.892		
11,800.0	7,770.0	11,647.7	7,530.0	72.9	75.5	78.87	-3,977.8	-1,213.9	1,242.9	1,099.8	143.09	8.686		
11,900.0	7,770.0	11,747.7	7,530.0	74.6	77.2	78.87	-4,077.8	-1,214.4	1,243.4	1,096.9	146.48	8.488		
12,000.0	7,770.0	11,847.7	7,530.0	76.4	78.9	78.88	-4,177.8	-1,214.9	1,243.9	1,094.0	149.87	8.300		
12,100.0	7,770.0	11,947.7	7,530.0	78.1	80.5	78.88	-4,277.8	-1,215.4	1,244.4	1,091.1	153.26	8.119		
12,200.0	7,770.0	12,047.7	7,530.0	79.8	82.2	78.88	-4,377.8	-1,216.0	1,244.9	1,088.3	156.66	7.947		
12,300.0	7,770.0	12,147.7	7,530.0	81.5	83.9	78.89	-4,477.8	-1,216.5	1,245.4	1,085.4	160.05	7.781		
12,400.0	7,770.0	12,247.7	7,530.0	83.3	85.6	78.89	-4,577.8	-1,217.0	1,246.0	1,082.5	163.45	7.623		
12,500.0	7,770.0	12,347.7	7,530.0	85.0	87.3	78.90	-4,677.8	-1,217.5	1,246.5	1,079.6	166.85	7.470		
12,600.0	7,770.0	12,447.7	7,530.0	86.7	89.0	78.90	-4,777.8	-1,218.1	1,247.0	1,076.7	170.25	7.324		
12,700.0	7,770.0	12,547.7	7,530.0	88.5	90.6	78.91	-4,877.8	-1,218.6	1,247.5	1,073.8	173.66	7.184		
12,800.0	7,770.0	12,647.7	7,530.0	90.2	92.3	78.91	-4,977.8	-1,219.1	1,248.0	1,070.9	177.06	7.048		
12,900.0	7,770.0	12,747.7	7,530.0	91.9	94.0	78.92	-5,077.8	-1,219.6	1,248.5	1,068.1	180.47	6.918		
13,000.0	7,770.0	12,847.7	7,530.0	93.7	95.7	78.92	-5,177.8	-1,220.1	1,249.0	1,065.2	183.88	6.793		
13,100.0	7,770.0	12,947.7	7,530.0	95.4	97.4	78.93	-5,277.8	-1,220.7	1,249.6	1,062.3	187.29	6.672		
13,200.0	7,770.0	13,047.6	7,530.0	97.1	99.1	78.93	-5,377.8	-1,221.2	1,250.1	1,059.4	190.70	6.555		
13,300.0	7,770.0	13,147.6	7,530.0	98.9	100.8	78.94	-5,477.8	-1,221.7	1,250.6	1,056.5	194.12	6.442		
13,400.0	7,770.0	13,247.6	7,530.0	100.6	102.5	78.94	-5,577.8	-1,222.2	1,251.1	1,053.6	197.53	6.334		
13,500.0	7,770.0	13,347.6	7,530.0	102.4	104.2	78.94	-5,677.8	-1,222.8	1,251.6	1,050.7	200.95	6.229		
13,600.0	7,770.0	13,447.6	7,530.0	104.1	105.9	78.95	-5,777.8	-1,223.3	1,252.1	1,047.8	204.37	6.127		
13,700.0	7,770.0	13,547.6	7,530.0	105.8	107.7	78.95	-5,877.8	-1,223.8	1,252.6	1,044.9	207.78	6.029		
13,800.0	7,770.0	13,647.6	7,530.0	107.6	109.4	78.96	-5,977.8	-1,224.3	1,253.1	1,041.9	211.20	5.933		
13,900.0	7,770.0	13,747.6	7,530.0	109.3	111.1	78.96	-6,077.8	-1,224.9	1,253.7	1,039.0	214.62	5.841		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,000.0	7,770.0	13,847.6	7,530.0	111.1	112.8	78.97	-6,177.8	-1,225.4	1,254.2	1,036.1	218.04	5.752		
14,100.0	7,770.0	13,947.6	7,530.0	112.8	114.5	78.97	-6,277.8	-1,225.9	1,254.7	1,033.2	221.47	5.665		
14,200.0	7,770.0	14,047.6	7,530.0	114.5	116.2	78.98	-6,377.8	-1,226.4	1,255.2	1,030.3	224.89	5.581		
14,300.0	7,770.0	14,147.6	7,530.0	116.3	117.9	78.98	-6,477.8	-1,227.0	1,255.7	1,027.4	228.31	5.500		
14,400.0	7,770.0	14,247.6	7,530.0	118.0	119.7	78.99	-6,577.8	-1,227.5	1,256.2	1,024.5	231.74	5.421		
14,500.0	7,770.0	14,347.6	7,530.0	119.8	121.4	78.99	-6,677.8	-1,228.0	1,256.7	1,021.6	235.16	5.344		
14,600.0	7,770.0	14,447.6	7,530.0	121.5	123.1	79.00	-6,777.8	-1,228.5	1,257.3	1,018.7	238.59	5.270		
14,700.0	7,770.0	14,547.6	7,530.0	123.3	124.8	79.00	-6,877.8	-1,229.1	1,257.8	1,015.8	242.01	5.197		
14,800.0	7,770.0	14,647.6	7,530.0	125.0	126.5	79.00	-6,977.8	-1,229.6	1,258.3	1,012.8	245.44	5.127		
14,900.0	7,770.0	14,747.6	7,530.0	126.7	128.3	79.01	-7,077.8	-1,230.1	1,258.8	1,009.9	248.87	5.058		
15,000.0	7,770.0	14,847.6	7,530.0	128.5	130.0	79.01	-7,177.8	-1,230.6	1,259.3	1,007.0	252.30	4.991		
15,100.0	7,770.0	14,947.6	7,530.0	130.2	131.7	79.02	-7,277.8	-1,231.1	1,259.8	1,004.1	255.73	4.926		
15,200.0	7,770.0	15,047.6	7,530.0	132.0	133.4	79.02	-7,377.8	-1,231.7	1,260.3	1,001.2	259.16	4.863		
15,300.0	7,770.0	15,147.6	7,530.0	133.7	135.2	79.03	-7,477.7	-1,232.2	1,260.9	998.3	262.59	4.802		
15,400.0	7,770.0	15,247.6	7,530.0	135.5	136.9	79.03	-7,577.7	-1,232.7	1,261.4	995.4	266.02	4.742		
15,500.0	7,770.0	15,347.6	7,530.0	137.2	138.6	79.04	-7,677.7	-1,233.2	1,261.9	992.4	269.45	4.683		
15,600.0	7,770.0	15,447.6	7,530.0	139.0	140.3	79.04	-7,777.7	-1,233.8	1,262.4	989.5	272.88	4.626		
15,700.0	7,770.0	15,547.6	7,530.0	140.7	142.1	79.04	-7,877.7	-1,234.3	1,262.9	986.6	276.32	4.571		
15,800.0	7,770.0	15,647.6	7,530.0	142.4	143.8	79.05	-7,977.7	-1,234.8	1,263.4	983.7	279.75	4.516		
15,900.0	7,770.0	15,747.6	7,530.0	144.2	145.5	79.05	-8,077.7	-1,235.3	1,263.9	980.8	283.18	4.463		
16,000.0	7,770.0	15,847.6	7,530.0	145.9	147.3	79.06	-8,177.7	-1,235.9	1,264.5	977.8	286.62	4.412		
16,100.0	7,770.0	15,947.6	7,530.0	147.7	149.0	79.06	-8,277.7	-1,236.4	1,265.0	974.9	290.05	4.361		
16,200.0	7,770.0	16,047.6	7,530.0	149.4	150.7	79.07	-8,377.7	-1,236.9	1,265.5	972.0	293.49	4.312		
16,300.0	7,770.0	16,147.6	7,530.0	151.2	152.4	79.07	-8,477.7	-1,237.4	1,266.0	969.1	296.92	4.264		
16,400.0	7,770.0	16,247.6	7,530.0	152.9	154.2	79.08	-8,577.7	-1,238.0	1,266.5	966.2	300.36	4.217		
16,500.0	7,770.0	16,347.6	7,530.0	154.7	155.9	79.08	-8,677.7	-1,238.5	1,267.0	963.2	303.79	4.171		
16,600.0	7,770.0	16,447.6	7,530.0	156.4	157.6	79.09	-8,777.7	-1,239.0	1,267.5	960.3	307.23	4.126		
16,700.0	7,770.0	16,547.6	7,530.0	158.2	159.4	79.09	-8,877.7	-1,239.5	1,268.1	957.4	310.67	4.082		
16,800.0	7,770.0	16,647.6	7,530.0	159.9	161.1	79.09	-8,977.7	-1,240.1	1,268.6	954.5	314.11	4.039		
16,900.0	7,770.0	16,747.6	7,530.0	161.7	162.8	79.10	-9,077.7	-1,240.6	1,269.1	951.5	317.54	3.997		
17,000.0	7,770.0	16,847.6	7,530.0	163.4	164.6	79.10	-9,177.7	-1,241.1	1,269.6	948.6	320.98	3.955		
17,100.0	7,770.0	16,947.6	7,530.0	165.2	166.3	79.11	-9,277.7	-1,241.6	1,270.1	945.7	324.42	3.915		
17,200.0	7,770.0	17,047.6	7,530.0	166.9	168.1	79.11	-9,377.7	-1,242.1	1,270.6	942.8	327.86	3.876		
17,300.0	7,770.0	17,147.6	7,530.0	168.7	169.8	79.12	-9,477.7	-1,242.7	1,271.1	939.9	331.30	3.837		
17,400.0	7,770.0	17,247.6	7,530.0	170.4	171.5	79.12	-9,577.7	-1,243.2	1,271.7	936.9	334.74	3.799		
17,500.0	7,770.0	17,347.6	7,530.0	172.2	173.3	79.13	-9,677.7	-1,243.7	1,272.2	934.0	338.18	3.762		
17,600.0	7,770.0	17,447.6	7,530.0	173.9	175.0	79.13	-9,777.7	-1,244.2	1,272.7	931.1	341.62	3.725		
17,653.1	7,770.0	17,490.0	7,530.0	174.8	175.7	79.13	-9,820.1	-1,244.5	1,273.0	929.7	343.26	3.709 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
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		
333.4	333.4	333.4	333.4	0.6	0.6	-90.00	0.0	-40.0	40.0	38.9	1.12	35.787 CC		
400.0	400.0	399.7	399.7	0.7	0.7	-89.89	0.1	-40.2	40.2	38.9	1.35	29.786 ES		
500.0	500.0	499.0	499.0	0.8	0.8	-89.01	0.7	-41.8	41.8	40.1	1.70	24.632		
550.0	550.0	548.6	548.6	0.9	0.9	-88.30	1.3	-43.2	43.3	41.4	1.87	23.099		
600.0	600.0	598.2	598.2	1.0	1.0	-88.55	2.0	-45.0	45.1	43.0	2.05	22.027		
700.0	700.0	697.3	697.1	1.2	1.2	-88.51	3.9	-49.8	49.9	47.5	2.40	20.832		
800.0	799.9	796.3	795.8	1.4	1.4	-89.62	6.5	-56.1	56.4	53.6	2.75	20.481		
861.1	860.9	856.6	855.9	1.5	1.5	-90.69	8.3	-60.8	61.1	58.1	2.97	20.549		
900.0	899.8	895.0	894.1	1.6	1.6	-91.38	9.6	-64.1	64.5	61.3	3.12	20.684		
1,000.0	999.6	993.4	992.0	1.8	1.9	-92.49	13.4	-73.5	74.2	70.7	3.49	21.274		
1,100.0	1,099.5	1,091.5	1,089.4	1.9	2.1	-92.88	17.8	-84.5	85.5	81.6	3.86	22.131		
1,200.0	1,199.3	1,189.3	1,186.3	2.1	2.4	-92.77	22.8	-97.0	98.3	94.1	4.24	23.182		
1,300.0	1,299.2	1,288.4	1,284.3	2.3	2.7	-92.52	28.2	-110.3	111.9	107.3	4.62	24.192		
1,400.0	1,399.1	1,387.4	1,382.3	2.5	2.9	-92.32	33.5	-123.7	125.4	120.4	5.01	25.039		
1,500.0	1,498.9	1,486.5	1,480.4	2.7	3.2	-92.16	38.9	-137.1	139.0	133.6	5.40	25.759		
1,600.0	1,598.8	1,585.6	1,578.4	2.9	3.5	-92.03	44.3	-150.4	152.6	146.8	5.78	26.377		
1,700.0	1,698.6	1,684.7	1,676.4	3.1	3.8	-91.93	49.6	-163.8	166.1	159.9	6.17	26.914		
1,800.0	1,798.5	1,783.7	1,774.4	3.3	4.1	-91.83	55.0	-177.1	179.7	173.1	6.56	27.384		
1,900.0	1,898.3	1,882.8	1,872.5	3.5	4.4	-91.76	60.3	-190.5	193.2	186.3	6.95	27.799		
2,000.0	1,998.2	1,981.9	1,970.5	3.7	4.7	-91.69	65.7	-203.9	206.8	199.5	7.34	28.168		
2,100.0	2,098.0	2,081.0	2,068.5	3.9	5.0	-91.63	71.0	-217.2	220.4	212.6	7.73	28.499		
2,200.0	2,197.9	2,180.0	2,166.5	4.1	5.3	-91.57	76.4	-230.6	233.9	225.8	8.12	28.796		
2,300.0	2,297.7	2,279.1	2,264.6	4.3	5.6	-91.53	81.8	-244.0	247.5	239.0	8.52	29.065		
2,400.0	2,397.6	2,378.2	2,362.6	4.5	5.9	-91.48	87.1	-257.3	261.1	252.2	8.91	29.309		
2,500.0	2,497.4	2,477.3	2,460.6	4.7	6.2	-91.44	92.5	-270.7	274.6	265.3	9.30	29.532		
2,600.0	2,597.3	2,576.4	2,558.6	4.9	6.5	-91.41	97.8	-284.0	288.2	278.5	9.69	29.736		
2,700.0	2,697.1	2,675.4	2,656.7	5.1	6.8	-91.38	103.2	-297.4	301.8	291.7	10.08	29.924		
2,800.0	2,797.0	2,774.5	2,754.7	5.3	7.1	-91.35	108.5	-310.8	315.3	304.8	10.48	30.097		
2,900.0	2,896.8	2,873.6	2,852.7	5.5	7.4	-91.32	113.9	-324.1	328.9	318.0	10.87	30.257		
3,000.0	2,996.7	2,972.7	2,950.7	5.7	7.7	-91.30	119.2	-337.5	324.4	331.2	11.26	30.406		
3,100.0	3,096.5	3,071.7	3,048.8	5.9	8.0	-91.28	124.6	-350.9	356.0	344.4	11.66	30.544		
3,200.0	3,196.4	3,170.8	3,146.8	6.1	8.3	-91.26	130.0	-364.2	369.6	357.5	12.05	30.673		
3,300.0	3,296.3	3,269.9	3,244.8	6.3	8.7	-91.24	135.3	-377.6	383.1	370.7	12.44	30.794		
3,400.0	3,396.1	3,369.0	3,342.8	6.5	9.0	-91.22	140.7	-390.9	396.7	383.9	12.84	30.907		
3,500.0	3,496.0	3,468.0	3,440.9	6.7	9.3	-91.20	146.0	-404.3	410.3	397.0	13.23	31.014		
3,600.0	3,595.8	3,567.1	3,538.9	6.9	9.6	-91.19	151.4	-417.7	423.8	410.2	13.62	31.113		
3,700.0	3,695.7	3,666.2	3,636.9	7.0	9.9	-91.17	156.7	-431.0	437.4	423.4	14.02	31.208		
3,800.0	3,795.5	3,765.3	3,734.9	7.2	10.2	-91.16	162.1	-444.4	451.0	436.6	14.41	31.296		
3,900.0	3,895.4	3,864.3	3,832.9	7.4	10.5	-91.14	167.5	-457.8	464.5	449.7	14.80	31.381		
4,000.0	3,995.2	3,963.4	3,931.0	7.6	10.8	-91.13	172.8	-471.1	478.1	462.9	15.20	31.460		
4,100.0	4,095.1	4,062.5	4,029.0	7.8	11.1	-91.12	178.2	-484.5	491.7	476.1	15.59	31.536		
4,200.0	4,194.9	4,161.6	4,127.0	8.0	11.4	-91.11	183.5	-497.8	505.2	489.2	15.98	31.607		
4,300.0	4,294.8	4,260.6	4,225.0	8.2	11.7	-91.10	188.9	-511.2	518.8	502.4	16.38	31.675		
4,400.0	4,394.6	4,359.7	4,323.1	8.4	12.0	-91.09	194.2	-524.6	532.4	515.6	16.77	31.740		
4,500.0	4,494.5	4,458.8	4,421.1	8.6	12.3	-91.08	199.6	-537.9	545.9	528.8	17.17	31.802		
4,600.0	4,594.3	4,557.9	4,519.1	8.8	12.6	-91.07	205.0	-551.3	559.5	541.9	17.56	31.861		
4,700.0	4,694.2	4,656.9	4,617.1	9.0	12.9	-91.06	210.3	-564.7	573.1	555.1	17.95	31.917		
4,800.0	4,794.0	4,756.0	4,715.2	9.2	13.2	-91.05	215.7	-578.0	586.6	568.3	18.35	31.971		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,893.9	4,855.1	4,813.2	9.4	13.5	-91.04	221.0	-591.4	600.2	581.4	18.74	32.023		
5,000.0	4,993.7	4,954.2	4,911.2	9.6	13.8	-91.04	226.4	-604.7	613.7	594.6	19.14	32.072		
5,100.0	5,093.6	5,053.2	5,009.2	9.8	14.2	-91.03	231.7	-618.1	627.3	607.8	19.53	32.119		
5,200.0	5,193.5	5,152.3	5,107.3	10.0	14.5	-91.02	237.1	-631.5	640.9	621.0	19.92	32.165		
5,300.0	5,293.3	5,251.4	5,205.3	10.2	14.8	-91.02	242.4	-644.8	654.4	634.1	20.32	32.208		
5,400.0	5,393.2	5,350.5	5,303.3	10.4	15.1	-91.01	247.8	-658.2	668.0	647.3	20.71	32.250		
5,500.0	5,493.0	5,449.5	5,401.3	10.6	15.4	-91.00	253.2	-671.5	681.6	660.5	21.11	32.291		
5,600.0	5,592.9	5,548.6	5,499.4	10.8	15.7	-91.00	258.5	-684.9	695.1	673.6	21.50	32.330		
5,700.0	5,692.7	5,647.7	5,597.4	11.0	16.0	-90.99	263.9	-698.3	708.7	686.8	21.90	32.367		
5,800.0	5,792.6	5,746.8	5,695.4	11.2	16.3	-90.99	269.2	-711.6	722.3	700.0	22.29	32.403		
5,900.0	5,892.4	5,845.8	5,793.4	11.4	16.6	-90.98	274.6	-725.0	735.8	713.1	22.68	32.438		
6,000.0	5,992.3	5,944.9	5,891.5	11.6	16.9	-90.98	279.9	-738.4	749.4	726.3	23.08	32.472		
6,100.0	6,092.1	6,044.0	5,989.5	11.8	17.2	-90.97	285.3	-751.7	763.0	739.5	23.47	32.504		
6,200.0	6,192.0	6,143.1	6,087.5	12.0	17.5	-90.97	290.7	-765.1	776.5	752.7	23.87	32.535		
6,300.0	6,291.8	6,242.1	6,185.5	12.2	17.8	-90.96	296.0	-778.4	790.1	765.8	24.26	32.566		
6,400.0	6,391.7	6,341.2	6,283.6	12.4	18.1	-90.96	301.4	-791.8	803.7	779.0	24.66	32.595		
6,500.0	6,491.5	6,440.3	6,381.6	12.6	18.4	-90.96	306.7	-805.2	817.2	792.2	25.05	32.623		
6,600.0	6,591.4	6,539.4	6,479.6	12.8	18.7	-90.95	312.1	-818.5	830.8	805.3	25.44	32.651		
6,700.0	6,691.2	6,638.5	6,577.6	13.0	19.1	-90.95	317.4	-831.9	844.4	818.5	25.84	32.678		
6,800.0	6,791.1	6,737.5	6,675.6	13.2	19.4	-90.94	322.8	-845.3	857.9	831.7	26.23	32.703		
6,900.0	6,890.9	6,836.6	6,773.7	13.4	19.7	-90.94	328.2	-858.6	871.5	844.9	26.63	32.728		
7,000.0	6,990.8	6,935.7	6,871.7	13.6	20.0	-90.94	333.5	-872.0	885.1	858.0	27.02	32.753		
7,024.2	7,014.9	6,959.6	6,895.4	13.6	20.0	-90.94	334.8	-875.2	888.3	861.2	27.12	32.759		
7,050.0	7,040.7	6,985.2	6,920.7	13.7	20.1	-92.84	336.2	-878.7	891.8	864.6	27.24	32.738		
7,100.0	7,090.7	7,034.6	6,969.6	13.7	20.3	90.21	338.9	-885.3	898.6	871.2	27.44	32.753		
7,150.0	7,140.5	7,083.6	7,018.1	13.8	20.4	89.60	341.5	-891.9	905.4	877.8	27.58	32.828		
7,200.0	7,189.9	7,132.9	7,066.8	13.8	20.6	89.49	342.7	-898.6	912.1	884.5	27.66	32.977		
7,250.0	7,238.6	7,182.7	7,116.2	13.8	20.7	89.45	340.6	-905.3	918.9	891.2	27.69	33.184		
7,300.0	7,286.4	7,233.3	7,165.9	13.7	20.8	89.44	334.8	-912.1	925.7	898.0	27.68	33.441		
7,350.0	7,333.1	7,284.5	7,215.8	13.7	20.9	89.44	325.4	-918.9	932.3	904.7	27.63	33.744		
7,400.0	7,378.5	7,336.5	7,265.6	13.6	21.0	89.46	312.2	-925.7	938.9	911.4	27.55	34.083		
7,450.0	7,422.2	7,389.2	7,315.0	13.6	21.0	89.48	295.1	-932.4	945.3	917.9	27.44	34.448		
7,500.0	7,464.1	7,442.7	7,363.7	13.5	21.1	89.51	274.0	-939.1	951.6	924.3	27.33	34.825		
7,550.0	7,504.1	7,497.0	7,411.4	13.5	21.1	89.55	249.0	-945.6	957.6	930.4	27.21	35.197		
7,600.0	7,541.8	7,552.0	7,457.8	13.5	21.2	89.59	219.9	-951.9	963.4	936.3	27.10	35.545		
7,650.0	7,577.2	7,607.9	7,502.4	13.4	21.2	89.63	186.9	-958.0	968.9	941.8	27.03	35.845		
7,700.0	7,610.0	7,664.6	7,544.9	13.5	21.2	89.68	149.9	-963.7	974.0	947.0	27.00	36.073		
7,750.0	7,640.2	7,722.0	7,584.9	13.5	21.3	89.72	109.0	-969.2	978.8	951.7	27.04	36.203		
7,800.0	7,667.4	7,780.2	7,621.9	13.6	21.4	89.77	64.5	-974.2	983.1	956.0	27.15	36.214		
7,850.0	7,691.7	7,839.1	7,655.6	13.7	21.5	89.81	16.5	-978.8	987.1	959.7	27.35	36.086		
7,900.0	7,712.8	7,898.6	7,685.6	13.9	21.6	89.85	-34.7	-982.9	990.5	962.9	27.66	35.806		
7,950.0	7,730.8	7,958.6	7,711.6	14.1	21.8	89.89	-88.8	-986.5	993.5	965.4	28.10	35.361		
8,000.0	7,745.5	8,019.2	7,733.1	14.4	22.0	89.93	-145.4	-989.4	995.9	967.3	28.65	34.763		
8,050.0	7,756.7	8,080.2	7,749.8	14.7	22.3	89.96	-203.9	-991.7	997.8	968.5	29.32	34.030		
8,100.0	7,764.6	8,141.5	7,761.7	15.1	22.6	89.98	-264.1	-993.3	999.1	969.0	30.11	33.183		
8,150.0	7,769.0	8,203.0	7,768.4	15.5	22.9	89.99	-325.2	-994.2	999.9	968.8	31.01	32.245		
8,188.1	7,770.0	8,249.9	7,770.0	15.9	23.2	90.00	-372.0	-994.4	1,000.0	968.3	31.76	31.488		
8,200.0	7,770.0	8,262.1	7,770.0	16.0	23.3	90.00	-384.2	-994.4	1,000.0	968.1	31.98	31.266		
8,300.0	7,770.0	8,362.1	7,770.0	17.0	24.0	90.00	-484.2	-994.4	1,000.0	966.0	33.99	29.420		
8,400.0	7,770.0	8,462.1	7,770.0	18.1	24.7	90.00	-584.2	-994.4	1,000.0	963.8	36.22	27.614		
8,500.0	7,770.0	8,562.1	7,770.0	19.3	25.6	90.00	-684.2	-994.4	1,000.0	961.4	38.63	25.887		
8,600.0	7,770.0	8,662.1	7,770.0	20.6	26.6	90.00	-784.2	-994.4	1,000.0	958.8	41.20	24.271		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,700.0	7,770.0	8,762.1	7,770.0	21.9	27.7	90.00	-884.2	-994.4	1,000.0	956.1	43.91	22.777		
8,800.0	7,770.0	8,862.1	7,770.0	23.3	28.8	90.00	-984.2	-994.4	1,000.0	953.3	46.72	21.407		
8,900.0	7,770.0	8,962.1	7,770.0	24.8	30.0	90.00	-1,084.2	-994.4	1,000.0	950.4	49.61	20.156		
9,000.0	7,770.0	9,062.1	7,770.0	26.3	31.2	90.00	-1,184.2	-994.4	1,000.0	947.4	52.59	19.017		
9,100.0	7,770.0	9,162.1	7,770.0	27.8	32.5	90.00	-1,284.2	-994.4	1,000.0	944.4	55.62	17.979		
9,200.0	7,770.0	9,262.1	7,770.0	29.3	33.8	90.00	-1,384.2	-994.4	1,000.0	941.3	58.71	17.033		
9,300.0	7,770.0	9,362.1	7,770.0	30.9	35.2	90.00	-1,484.2	-994.4	1,000.0	938.2	61.85	16.170		
9,400.0	7,770.0	9,462.1	7,770.0	32.5	36.6	90.00	-1,584.2	-994.4	1,000.0	935.0	65.02	15.381		
9,500.0	7,770.0	9,562.1	7,770.0	34.1	38.0	90.00	-1,684.2	-994.4	1,000.0	931.8	68.22	14.659		
9,600.0	7,770.0	9,662.1	7,770.0	35.7	39.5	90.00	-1,784.2	-994.4	1,000.0	928.6	71.45	13.995		
9,700.0	7,770.0	9,762.1	7,770.0	37.3	41.0	90.00	-1,884.2	-994.4	1,000.0	925.3	74.71	13.385		
9,800.0	7,770.0	9,862.1	7,770.0	39.0	42.5	90.00	-1,984.2	-994.4	1,000.0	922.0	77.99	12.822		
9,900.0	7,770.0	9,962.1	7,770.0	40.6	44.0	90.00	-2,084.2	-994.4	1,000.0	918.7	81.29	12.302		
10,000.0	7,770.0	10,062.1	7,770.0	42.3	45.5	90.00	-2,184.2	-994.4	1,000.0	915.4	84.61	11.820		
10,100.0	7,770.0	10,162.1	7,770.0	44.0	47.1	90.00	-2,284.2	-994.4	1,000.0	912.1	87.94	11.372		
10,200.0	7,770.0	10,262.1	7,770.0	45.6	48.6	90.00	-2,384.2	-994.4	1,000.0	908.8	91.28	10.956		
10,300.0	7,770.0	10,362.1	7,770.0	47.3	50.2	90.00	-2,484.2	-994.4	1,000.0	905.4	94.64	10.567		
10,400.0	7,770.0	10,462.1	7,770.0	49.0	51.8	90.00	-2,584.2	-994.4	1,000.0	902.0	98.00	10.204		
10,500.0	7,770.0	10,562.1	7,770.0	50.7	53.4	90.00	-2,684.2	-994.4	1,000.0	898.7	101.38	9.864		
10,600.0	7,770.0	10,662.1	7,770.0	52.4	55.0	90.00	-2,784.2	-994.4	1,000.0	895.3	104.76	9.546		
10,700.0	7,770.0	10,762.1	7,770.0	54.1	56.6	90.00	-2,884.2	-994.4	1,000.0	891.9	108.16	9.246		
10,800.0	7,770.0	10,862.1	7,770.0	55.8	58.3	90.00	-2,984.2	-994.4	1,000.0	888.5	111.56	8.964		
10,900.0	7,770.0	10,962.1	7,770.0	57.5	59.9	90.00	-3,084.2	-994.4	1,000.0	885.1	114.96	8.699		
11,000.0	7,770.0	11,062.1	7,770.0	59.2	61.5	90.00	-3,184.2	-994.4	1,000.0	881.7	118.37	8.448		
11,100.0	7,770.0	11,162.1	7,770.0	60.9	63.2	90.00	-3,284.2	-994.4	1,000.0	878.2	121.79	8.211		
11,200.0	7,770.0	11,262.1	7,770.0	62.6	64.8	90.00	-3,384.2	-994.4	1,000.0	874.8	125.21	7.987		
11,300.0	7,770.0	11,362.1	7,770.0	64.3	66.5	90.00	-3,484.2	-994.4	1,000.0	871.4	128.64	7.774		
11,400.0	7,770.0	11,462.1	7,770.0	66.0	68.1	90.00	-3,584.2	-994.4	1,000.0	868.0	132.07	7.572		
11,500.0	7,770.0	11,562.1	7,770.0	67.7	69.8	90.00	-3,684.2	-994.4	1,000.0	864.5	135.51	7.380		
11,600.0	7,770.0	11,662.1	7,770.0	69.5	71.5	90.00	-3,784.2	-994.4	1,000.0	861.1	138.95	7.197		
11,700.0	7,770.0	11,762.1	7,770.0	71.2	73.2	90.00	-3,884.2	-994.4	1,000.0	857.7	142.39	7.023		
11,800.0	7,770.0	11,862.1	7,770.0	72.9	74.8	90.00	-3,984.2	-994.4	1,000.0	854.2	145.84	6.857		
11,900.0	7,770.0	11,962.1	7,770.0	74.6	76.5	90.00	-4,084.2	-994.4	1,000.0	850.8	149.28	6.699		
12,000.0	7,770.0	12,062.1	7,770.0	76.4	78.2	90.00	-4,184.2	-994.4	1,000.0	847.3	152.73	6.548		
12,100.0	7,770.0	12,162.1	7,770.0	78.1	79.9	90.00	-4,284.2	-994.4	1,000.0	843.9	156.19	6.403		
12,200.0	7,770.0	12,262.1	7,770.0	79.8	81.6	90.00	-4,384.2	-994.4	1,000.0	840.4	159.64	6.264		
12,300.0	7,770.0	12,362.1	7,770.0	81.5	83.3	90.00	-4,484.2	-994.4	1,000.0	836.9	163.10	6.131		
12,400.0	7,770.0	12,462.1	7,770.0	83.3	85.0	90.00	-4,584.2	-994.4	1,000.0	833.5	166.56	6.004		
12,500.0	7,770.0	12,562.1	7,770.0	85.0	86.7	90.00	-4,684.2	-994.4	1,000.0	830.0	170.03	5.882		
12,600.0	7,770.0	12,662.1	7,770.0	86.7	88.4	90.00	-4,784.2	-994.4	1,000.0	826.6	173.49	5.764		
12,700.0	7,770.0	12,762.1	7,770.0	88.5	90.1	90.00	-4,884.2	-994.4	1,000.0	823.1	176.96	5.651		
12,800.0	7,770.0	12,862.1	7,770.0	90.2	91.8	90.00	-4,984.2	-994.4	1,000.0	819.6	180.42	5.543		
12,900.0	7,770.0	12,962.1	7,770.0	91.9	93.5	90.00	-5,084.2	-994.4	1,000.0	816.1	183.89	5.438		
13,000.0	7,770.0	13,062.1	7,770.0	93.7	95.2	90.00	-5,184.2	-994.4	1,000.0	812.7	187.36	5.337		
13,100.0	7,770.0	13,162.1	7,770.0	95.4	96.9	90.00	-5,284.2	-994.4	1,000.0	809.2	190.83	5.240		
13,200.0	7,770.0	13,262.1	7,770.0	97.1	98.6	90.00	-5,384.2	-994.4	1,000.0	805.7	194.31	5.147		
13,300.0	7,770.0	13,362.1	7,770.0	98.9	100.3	90.00	-5,484.2	-994.4	1,000.0	802.3	197.78	5.056		
13,400.0	7,770.0	13,462.1	7,770.0	100.6	102.0	90.00	-5,584.2	-994.4	1,000.0	798.8	201.26	4.969		
13,500.0	7,770.0	13,562.1	7,770.0	102.4	103.7	90.00	-5,684.2	-994.4	1,000.0	795.3	204.73	4.885		
13,600.0	7,770.0	13,662.1	7,770.0	104.1	105.5	90.00	-5,784.2	-994.4	1,000.0	791.8	208.21	4.803		
13,700.0	7,770.0	13,762.1	7,770.0	105.8	107.2	90.00	-5,884.2	-994.4	1,000.0	788.4	211.69	4.724		
13,800.0	7,770.0	13,862.1	7,770.0	107.6	108.9	90.00	-5,984.2	-994.4	1,000.0	784.9	215.17	4.648		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	13,962.1	7,770.0	109.3	110.6	90.00	-6,084.2	-994.4	1,000.0	781.4	218.65	4.574		
14,000.0	7,770.0	14,062.1	7,770.0	111.1	112.3	90.00	-6,184.2	-994.4	1,000.0	777.9	222.13	4.502		
14,100.0	7,770.0	14,162.1	7,770.0	112.8	114.1	90.00	-6,284.2	-994.4	1,000.0	774.4	225.62	4.433		
14,200.0	7,770.0	14,262.1	7,770.0	114.5	115.8	90.00	-6,384.2	-994.4	1,000.0	770.9	229.10	4.365		
14,300.0	7,770.0	14,362.1	7,770.0	116.3	117.5	90.00	-6,484.2	-994.4	1,000.0	767.5	232.58	4.300		
14,400.0	7,770.0	14,462.1	7,770.0	118.0	119.2	90.00	-6,584.2	-994.4	1,000.0	764.0	236.07	4.236		
14,500.0	7,770.0	14,562.1	7,770.0	119.8	121.0	90.00	-6,684.2	-994.4	1,000.0	760.5	239.55	4.175		
14,600.0	7,770.0	14,662.1	7,770.0	121.5	122.7	90.00	-6,784.2	-994.4	1,000.0	757.0	243.04	4.115		
14,700.0	7,770.0	14,762.1	7,770.0	123.3	124.4	90.00	-6,884.2	-994.4	1,000.0	753.5	246.52	4.057		
14,800.0	7,770.0	14,862.1	7,770.0	125.0	126.1	90.00	-6,984.2	-994.4	1,000.0	750.0	250.01	4.000		
14,900.0	7,770.0	14,962.1	7,770.0	126.7	127.9	90.00	-7,084.2	-994.4	1,000.0	746.5	253.50	3.945		
15,000.0	7,770.0	15,062.1	7,770.0	128.5	129.6	90.00	-7,184.2	-994.4	1,000.0	743.1	256.99	3.891		
15,100.0	7,770.0	15,162.1	7,770.0	130.2	131.3	90.00	-7,284.2	-994.4	1,000.0	739.6	260.48	3.839		
15,200.0	7,770.0	15,262.1	7,770.0	132.0	133.1	90.00	-7,384.2	-994.4	1,000.0	736.1	263.97	3.789		
15,300.0	7,770.0	15,362.1	7,770.0	133.7	134.8	90.00	-7,484.2	-994.4	1,000.0	732.6	267.46	3.739		
15,400.0	7,770.0	15,462.1	7,770.0	135.5	136.5	90.00	-7,584.2	-994.4	1,000.0	729.1	270.95	3.691		
15,500.0	7,770.0	15,562.1	7,770.0	137.2	138.2	90.00	-7,684.2	-994.4	1,000.0	725.6	274.44	3.644		
15,600.0	7,770.0	15,662.1	7,770.0	139.0	140.0	90.00	-7,784.2	-994.4	1,000.0	722.1	277.93	3.598		
15,700.0	7,770.0	15,762.1	7,770.0	140.7	141.7	90.00	-7,884.2	-994.4	1,000.0	718.6	281.42	3.554		
15,800.0	7,770.0	15,862.1	7,770.0	142.4	143.4	90.00	-7,984.2	-994.4	1,000.0	715.1	284.91	3.510		
15,900.0	7,770.0	15,962.1	7,770.0	144.2	145.2	90.00	-8,084.2	-994.4	1,000.0	711.6	288.40	3.468		
16,000.0	7,770.0	16,062.1	7,770.0	145.9	146.9	90.00	-8,184.2	-994.4	1,000.0	708.2	291.90	3.426		
16,100.0	7,770.0	16,162.1	7,770.0	147.7	148.7	90.00	-8,284.2	-994.4	1,000.0	704.7	295.39	3.386		
16,200.0	7,770.0	16,262.1	7,770.0	149.4	150.4	90.00	-8,384.2	-994.4	1,000.0	701.2	298.88	3.346		
16,300.0	7,770.0	16,362.1	7,770.0	151.2	152.1	90.00	-8,484.2	-994.4	1,000.0	697.7	302.38	3.307		
16,400.0	7,770.0	16,462.1	7,770.0	152.9	153.9	90.00	-8,584.2	-994.4	1,000.0	694.2	305.87	3.270		
16,500.0	7,770.0	16,562.1	7,770.0	154.7	155.6	90.00	-8,684.2	-994.4	1,000.0	690.7	309.37	3.233		
16,600.0	7,770.0	16,662.1	7,770.0	156.4	157.3	90.00	-8,784.2	-994.4	1,000.0	687.2	312.86	3.196		
16,700.0	7,770.0	16,762.1	7,770.0	158.2	159.1	90.00	-8,884.2	-994.4	1,000.0	683.7	316.35	3.161		
16,800.0	7,770.0	16,862.1	7,770.0	159.9	160.8	90.00	-8,984.2	-994.4	1,000.0	680.2	319.85	3.127		
16,900.0	7,770.0	16,962.1	7,770.0	161.7	162.5	90.00	-9,084.2	-994.4	1,000.0	676.7	323.35	3.093		
17,000.0	7,770.0	17,062.1	7,770.0	163.4	164.3	90.00	-9,184.2	-994.4	1,000.0	673.2	326.84	3.060		
17,100.0	7,770.0	17,162.1	7,770.0	165.2	166.0	90.00	-9,284.2	-994.4	1,000.0	669.7	330.34	3.027		
17,200.0	7,770.0	17,262.1	7,770.0	166.9	167.8	90.00	-9,384.2	-994.4	1,000.0	666.2	333.83	2.996		
17,300.0	7,770.0	17,362.1	7,770.0	168.7	169.5	90.00	-9,484.2	-994.5	1,000.0	662.7	337.33	2.965		
17,400.0	7,770.0	17,462.1	7,770.0	170.4	171.2	90.00	-9,584.2	-994.5	1,000.0	659.2	340.83	2.934		
17,500.0	7,770.0	17,562.1	7,770.0	172.2	173.0	90.00	-9,684.2	-994.5	1,000.0	655.7	344.32	2.904		
17,600.0	7,770.0	17,662.1	7,770.0	173.9	174.7	90.00	-9,784.2	-994.5	1,000.0	652.2	347.82	2.875		
17,623.6	7,770.0	17,685.7	7,770.0	174.3	175.1	90.00	-9,807.8	-994.5	1,000.0	651.4	348.65	2.868		
17,653.1	7,770.0	17,701.3	7,770.0	174.8	175.4	90.00	-9,823.4	-994.5	1,000.1	650.7	349.44	2.862 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	-29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-29.9	29.9	29.6	0.30	98.604		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-29.9	29.9	29.3	0.65	45.875		
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-29.9	29.9	28.9	1.00	29.890		
400.0	400.0	400.0	400.0	0.7	0.7	-90.00	0.0	-29.9	29.9	28.6	1.35	22.167 CC, ES		
500.0	500.0	499.5	499.5	0.8	0.8	-89.23	0.4	-30.7	30.7	29.0	1.70	18.074		
550.0	550.0	549.3	549.3	0.9	0.9	-88.33	0.9	-31.7	31.7	29.8	1.87	16.906		
600.0	600.0	599.0	599.0	1.0	1.0	-88.35	1.6	-33.0	33.0	31.0	2.05	16.130		
700.0	700.0	698.4	698.3	1.2	1.2	-88.08	3.7	-36.8	36.9	34.5	2.40	15.377		
800.0	799.9	797.6	797.3	1.4	1.4	-89.19	6.6	-42.1	42.3	39.5	2.76	15.333		
861.1	860.9	858.1	857.7	1.5	1.5	-90.30	8.7	-46.1	46.3	43.3	2.98	15.542		
900.0	899.8	896.7	896.1	1.6	1.6	-90.99	10.2	-48.9	49.2	46.1	3.12	15.753		
1,000.0	999.6	995.5	994.4	1.8	1.8	-91.84	14.7	-57.2	57.6	54.1	3.49	16.494		
1,100.0	1,099.5	1,094.2	1,092.5	1.9	2.1	-91.75	19.9	-66.9	67.6	63.7	3.87	17.454		
1,200.0	1,199.3	1,193.6	1,191.2	2.1	2.3	-91.45	25.6	-77.3	78.1	73.9	4.25	18.360		
1,300.0	1,299.2	1,293.1	1,290.0	2.3	2.6	-91.22	31.2	-87.7	88.6	84.0	4.64	19.108		
1,400.0	1,399.1	1,392.5	1,388.7	2.5	2.8	-91.03	36.8	-98.1	99.2	94.1	5.02	19.734		
1,500.0	1,498.9	1,492.0	1,487.5	2.7	3.1	-90.89	42.4	-108.5	109.7	104.3	5.41	20.267		
1,600.0	1,598.8	1,591.4	1,586.2	2.9	3.3	-90.76	48.0	-118.9	120.2	114.4	5.80	20.724		
1,700.0	1,698.6	1,690.9	1,684.9	3.1	3.6	-90.66	53.6	-129.2	130.8	124.6	6.19	21.120		
1,800.0	1,798.5	1,790.3	1,783.7	3.3	3.9	-90.58	59.2	-139.6	141.3	134.7	6.58	21.468		
1,900.0	1,898.3	1,889.8	1,882.4	3.5	4.1	-90.50	64.8	-150.0	151.8	144.8	6.97	21.774		
2,000.0	1,998.2	1,989.2	1,981.2	3.7	4.4	-90.44	70.4	-160.4	162.3	155.0	7.36	22.047		
2,100.0	2,098.0	2,088.6	2,079.9	3.9	4.6	-90.38	76.1	-170.8	172.9	165.1	7.76	22.291		
2,200.0	2,197.9	2,188.1	2,178.6	4.1	4.9	-90.33	81.7	-181.2	183.4	175.3	8.15	22.510		
2,300.0	2,297.7	2,287.5	2,277.4	4.3	5.2	-90.28	87.3	-191.6	193.9	185.4	8.54	22.709		
2,400.0	2,397.6	2,387.0	2,376.1	4.5	5.4	-90.24	92.9	-202.0	204.5	195.5	8.93	22.889		
2,500.0	2,497.4	2,486.4	2,474.9	4.7	5.7	-90.21	98.5	-212.4	215.0	205.7	9.33	23.053		
2,600.0	2,597.3	2,585.9	2,573.6	4.9	6.0	-90.17	104.1	-222.8	225.5	215.8	9.72	23.204		
2,700.0	2,697.1	2,685.3	2,672.3	5.1	6.2	-90.14	109.7	-233.2	236.1	225.9	10.11	23.342		
2,800.0	2,797.0	2,784.7	2,771.1	5.3	6.5	-90.11	115.3	-243.6	246.6	236.1	10.51	23.470		
2,900.0	2,896.8	2,884.2	2,869.8	5.5	6.8	-90.09	120.9	-254.0	257.1	246.2	10.90	23.589		
3,000.0	2,996.7	2,983.6	2,968.6	5.7	7.0	-90.07	126.5	-264.3	267.7	256.4	11.29	23.698		
3,100.0	3,096.5	3,083.1	3,067.3	5.9	7.3	-90.04	132.2	-274.7	278.2	266.5	11.69	23.800		
3,200.0	3,196.4	3,182.5	3,166.0	6.1	7.6	-90.02	137.8	-285.1	288.7	276.6	12.08	23.896		
3,300.0	3,296.3	3,282.0	3,264.8	6.3	7.9	-90.01	143.4	-295.5	299.2	286.8	12.48	23.985		
3,400.0	3,396.1	3,381.4	3,363.5	6.5	8.1	-89.99	149.0	-305.9	309.8	296.9	12.87	24.068		
3,500.0	3,496.0	3,480.9	3,462.3	6.7	8.4	-89.97	154.6	-316.3	320.3	307.0	13.27	24.146		
3,600.0	3,595.8	3,580.3	3,561.0	6.9	8.7	-89.96	160.2	-326.7	330.8	317.2	13.66	24.220		
3,700.0	3,695.7	3,679.7	3,659.7	7.0	8.9	-89.94	165.8	-337.1	341.4	327.3	14.05	24.289		
3,800.0	3,795.5	3,779.2	3,758.5	7.2	9.2	-89.93	171.4	-347.5	351.9	337.5	14.45	24.355		
3,900.0	3,895.4	3,878.6	3,857.2	7.4	9.5	-89.92	177.0	-357.9	362.4	347.6	14.84	24.417		
4,000.0	3,995.2	3,978.1	3,956.0	7.6	9.7	-89.90	182.7	-368.3	373.0	357.7	15.24	24.475		
4,100.0	4,095.1	4,077.5	4,054.7	7.8	10.0	-89.89	188.3	-378.7	383.5	367.9	15.63	24.531		
4,200.0	4,194.9	4,177.0	4,153.4	8.0	10.3	-89.88	193.9	-389.1	394.0	378.0	16.03	24.584		
4,300.0	4,294.8	4,276.4	4,252.2	8.2	10.5	-89.87	199.5	-399.4	404.6	388.1	16.42	24.634		
4,400.0	4,394.6	4,375.8	4,350.9	8.4	10.8	-89.86	205.1	-409.8	415.1	398.3	16.82	24.682		
4,500.0	4,494.5	4,475.3	4,449.7	8.6	11.1	-89.85	210.7	-420.2	425.6	408.4	17.21	24.727		
4,600.0	4,594.3	4,574.7	4,548.4	8.8	11.4	-89.85	216.3	-430.6	436.2	418.5	17.61	24.771		
4,700.0	4,694.2	4,674.2	4,647.1	9.0	11.6	-89.84	221.9	-441.0	446.7	428.7	18.00	24.812		
4,800.0	4,794.0	4,773.6	4,745.9	9.2	11.9	-89.83	227.5	-451.4	457.2	438.8	18.40	24.852		
4,900.0	4,893.9	4,873.1	4,844.6	9.4	12.2	-89.82	233.1	-461.8	467.8	449.0	18.79	24.890		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,993.7	4,972.5	4,943.4	9.6	12.4	-89.81	238.8	-472.2	478.3	459.1	19.19	24.926		
5,100.0	5,093.6	5,072.0	5,042.1	9.8	12.7	-89.81	244.4	-482.6	488.8	469.2	19.58	24.961		
5,200.0	5,193.5	5,171.4	5,140.8	10.0	13.0	-89.80	250.0	-493.0	499.3	479.4	19.98	24.995		
5,300.0	5,293.3	5,270.8	5,239.6	10.2	13.2	-89.80	255.6	-503.4	509.9	489.5	20.37	25.027		
5,400.0	5,393.2	5,370.3	5,338.3	10.4	13.5	-89.79	261.2	-513.8	520.4	499.6	20.77	25.058		
5,500.0	5,493.0	5,469.7	5,437.1	10.6	13.8	-89.78	266.8	-524.1	530.9	509.8	21.16	25.087		
5,600.0	5,592.9	5,569.2	5,535.8	10.8	14.0	-89.78	272.4	-534.5	541.5	519.9	21.56	25.116		
5,700.0	5,692.7	5,668.6	5,634.5	11.0	14.3	-89.77	278.0	-544.9	552.0	530.1	21.95	25.144		
5,800.0	5,792.6	5,768.1	5,733.3	11.2	14.6	-89.77	283.6	-555.3	562.5	540.2	22.35	25.170		
5,900.0	5,892.4	5,867.5	5,832.0	11.4	14.9	-89.76	289.3	-565.7	573.1	550.3	22.74	25.196		
6,000.0	5,992.3	5,966.9	5,930.8	11.6	15.1	-89.76	294.9	-576.1	583.6	560.5	23.14	25.221		
6,100.0	6,092.1	6,066.4	6,029.5	11.8	15.4	-89.75	300.5	-586.5	594.1	570.6	23.54	25.245		
6,200.0	6,192.0	6,165.8	6,128.2	12.0	15.7	-89.75	306.1	-596.9	604.7	580.7	23.93	25.268		
6,300.0	6,291.8	6,265.3	6,227.0	12.2	15.9	-89.74	311.7	-607.3	615.2	590.9	24.33	25.290		
6,400.0	6,391.7	6,364.7	6,325.7	12.4	16.2	-89.74	317.3	-617.7	625.7	601.0	24.72	25.312		
6,500.0	6,491.5	6,464.2	6,424.5	12.6	16.5	-89.74	322.9	-628.1	636.3	611.1	25.12	25.332		
6,600.0	6,591.4	6,563.6	6,523.2	12.8	16.7	-89.73	328.5	-638.5	646.8	621.3	25.51	25.353		
6,700.0	6,691.2	6,663.1	6,621.9	13.0	17.0	-89.73	334.1	-648.9	657.3	631.4	25.91	25.372		
6,800.0	6,791.1	6,762.5	6,720.7	13.2	17.3	-89.72	339.7	-659.2	667.9	641.6	26.30	25.391		
6,900.0	6,890.9	6,862.4	6,820.0	13.4	17.5	-89.83	344.1	-669.7	678.4	651.7	26.69	25.419		
7,000.0	6,990.8	6,961.4	6,918.1	13.6	17.7	-90.89	337.0	-680.0	688.9	661.8	27.05	25.465		
7,024.2	7,014.9	6,984.7	6,940.9	13.6	17.7	-91.29	333.3	-682.4	691.5	664.3	27.14	25.481		
7,050.0	7,040.7	7,009.3	6,964.9	13.7	17.8	-93.63	328.7	-685.0	694.3	667.1	27.24	25.491		
7,100.0	7,090.7	7,056.4	7,010.4	13.7	17.8	88.44	317.4	-689.7	699.9	672.5	27.39	25.557		
7,150.0	7,140.5	7,102.8	7,054.4	13.8	17.8	86.66	303.4	-694.4	705.6	678.1	27.48	25.674		
7,200.0	7,189.9	7,150.0	7,098.1	13.8	17.9	85.26	286.3	-699.0	711.5	683.9	27.53	25.841		
7,250.0	7,238.6	7,194.0	7,137.8	13.8	17.9	84.03	267.7	-703.1	717.3	689.8	27.53	26.055		
7,300.0	7,286.4	7,238.8	7,177.0	13.7	17.9	82.84	246.4	-707.3	723.2	695.7	27.49	26.309		
7,350.0	7,333.1	7,283.1	7,214.3	13.7	17.9	81.71	222.8	-711.2	729.1	701.7	27.41	26.599		
7,400.0	7,378.5	7,327.0	7,249.8	13.6	17.9	80.65	197.3	-714.9	734.9	707.6	27.30	26.917		
7,450.0	7,422.2	7,370.6	7,283.4	13.6	17.9	79.64	169.8	-718.5	740.5	713.3	27.17	27.255		
7,500.0	7,464.1	7,413.7	7,315.0	13.5	17.9	78.69	140.7	-721.8	746.0	718.9	27.03	27.602		
7,550.0	7,504.1	7,456.5	7,344.6	13.5	17.9	77.80	109.9	-724.9	751.2	724.4	26.88	27.946		
7,600.0	7,541.8	7,500.0	7,372.7	13.5	18.0	76.97	76.8	-727.9	756.3	729.5	26.75	28.271		
7,650.0	7,577.2	7,541.3	7,397.5	13.4	18.0	76.22	44.0	-730.5	761.0	734.4	26.65	28.559		
7,700.0	7,610.0	7,583.2	7,420.7	13.5	18.1	75.52	9.1	-732.9	765.5	738.9	26.61	28.767		
7,750.0	7,640.2	7,625.0	7,441.8	13.5	18.2	74.89	-26.9	-735.1	769.6	743.0	26.60	28.934		
7,800.0	7,667.4	7,666.6	7,460.7	13.6	18.3	74.33	-63.9	-737.1	773.3	746.6	26.66	29.004		
7,850.0	7,691.7	7,708.0	7,477.3	13.7	18.5	73.83	-101.8	-738.9	776.6	749.8	26.81	28.968		
7,900.0	7,712.8	7,750.0	7,491.9	13.9	18.6	73.40	-141.1	-740.4	779.5	752.5	27.06	28.812		
7,950.0	7,730.8	7,790.4	7,503.8	14.1	18.8	73.04	-179.7	-741.7	782.0	754.6	27.41	28.530		
8,000.0	7,745.5	7,831.5	7,513.7	14.4	19.0	72.75	-219.6	-742.7	784.1	756.2	27.87	28.129		
8,050.0	7,756.7	7,872.5	7,521.2	14.7	19.2	72.52	-259.8	-743.5	785.6	757.2	28.45	27.618		
8,100.0	7,764.6	7,913.4	7,526.4	15.1	19.5	72.36	-300.4	-744.1	786.7	757.6	29.13	27.011		
8,150.0	7,769.0	7,954.3	7,529.3	15.5	19.8	72.28	-341.2	-744.4	787.3	757.4	29.91	26.324		
8,188.1	7,770.0	7,985.4	7,530.0	15.9	20.0	72.26	-372.3	-744.4	787.5	756.9	30.57	25.758		
8,200.0	7,770.0	7,997.3	7,530.0	16.0	20.1	72.26	-384.2	-744.4	787.5	756.7	30.78	25.581		
8,300.0	7,770.0	8,097.3	7,530.0	17.0	20.9	72.26	-484.2	-744.4	787.5	754.8	32.69	24.088		
8,400.0	7,770.0	8,197.3	7,530.0	18.1	21.8	72.26	-584.2	-744.4	787.5	752.7	34.82	22.619		
8,500.0	7,770.0	8,297.3	7,530.0	19.3	22.8	72.26	-684.2	-744.4	787.5	750.4	37.12	21.215		
8,600.0	7,770.0	8,397.3	7,530.0	20.6	23.9	72.26	-784.2	-744.4	787.5	747.9	39.57	19.900		
8,700.0	7,770.0	8,497.3	7,530.0	21.9	25.0	72.26	-884.2	-744.4	787.5	745.3	42.15	18.684		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	8,597.3	7,530.0	23.3	26.3	72.26	-984.2	-744.4	787.5	742.7	44.82	17.568		
8,900.0	7,770.0	8,697.3	7,530.0	24.8	27.6	72.26	-1,084.2	-744.4	787.5	739.9	47.59	16.549		
9,000.0	7,770.0	8,797.3	7,530.0	26.3	28.9	72.26	-1,184.2	-744.4	787.5	737.1	50.42	15.619		
9,100.0	7,770.0	8,897.3	7,530.0	27.8	30.3	72.26	-1,284.2	-744.4	787.5	734.2	53.31	14.772		
9,200.0	7,770.0	8,997.3	7,530.0	29.3	31.7	72.26	-1,384.2	-744.4	787.5	731.2	56.25	14.000		
9,300.0	7,770.0	9,097.3	7,530.0	30.9	33.2	72.26	-1,484.2	-744.4	787.5	728.3	59.23	13.295		
9,400.0	7,770.0	9,197.3	7,530.0	32.5	34.7	72.26	-1,584.2	-744.4	787.5	725.2	62.25	12.650		
9,500.0	7,770.0	9,297.3	7,530.0	34.1	36.2	72.26	-1,684.2	-744.4	787.5	722.2	65.31	12.059		
9,600.0	7,770.0	9,397.3	7,530.0	35.7	37.7	72.26	-1,784.2	-744.4	787.5	719.1	68.38	11.516		
9,700.0	7,770.0	9,497.3	7,530.0	37.3	39.2	72.26	-1,884.2	-744.4	787.5	716.0	71.49	11.016		
9,800.0	7,770.0	9,597.3	7,530.0	39.0	40.8	72.26	-1,984.2	-744.4	787.5	712.9	74.61	10.555		
9,900.0	7,770.0	9,697.3	7,530.0	40.6	42.4	72.26	-2,084.2	-744.4	787.5	709.7	77.75	10.128		
10,000.0	7,770.0	9,797.3	7,530.0	42.3	44.0	72.26	-2,184.2	-744.4	787.5	706.6	80.91	9.733		
10,100.0	7,770.0	9,897.3	7,530.0	44.0	45.6	72.26	-2,284.2	-744.4	787.5	703.4	84.08	9.366		
10,200.0	7,770.0	9,997.3	7,530.0	45.6	47.2	72.26	-2,384.2	-744.4	787.5	700.2	87.27	9.024		
10,300.0	7,770.0	10,097.3	7,530.0	47.3	48.8	72.26	-2,484.2	-744.4	787.5	697.0	90.47	8.705		
10,400.0	7,770.0	10,197.3	7,530.0	49.0	50.4	72.26	-2,584.2	-744.4	787.5	693.8	93.67	8.407		
10,500.0	7,770.0	10,297.3	7,530.0	50.7	52.1	72.26	-2,684.2	-744.4	787.5	690.6	96.89	8.128		
10,600.0	7,770.0	10,397.3	7,530.0	52.4	53.7	72.26	-2,784.2	-744.4	787.5	687.4	100.11	7.866		
10,700.0	7,770.0	10,497.3	7,530.0	54.1	55.4	72.26	-2,884.2	-744.4	787.5	684.1	103.34	7.620		
10,800.0	7,770.0	10,597.3	7,530.0	55.8	57.0	72.26	-2,984.2	-744.4	787.5	680.9	106.58	7.389		
10,900.0	7,770.0	10,697.3	7,530.0	57.5	58.7	72.26	-3,084.2	-744.4	787.5	677.7	109.83	7.170		
11,000.0	7,770.0	10,797.3	7,530.0	59.2	60.4	72.26	-3,184.2	-744.4	787.5	674.4	113.08	6.964		
11,100.0	7,770.0	10,897.3	7,530.0	60.9	62.0	72.26	-3,284.2	-744.4	787.5	671.2	116.34	6.769		
11,200.0	7,770.0	10,997.3	7,530.0	62.6	63.7	72.26	-3,384.2	-744.4	787.5	667.9	119.60	6.585		
11,300.0	7,770.0	11,097.3	7,530.0	64.3	65.4	72.26	-3,484.2	-744.4	787.5	664.6	122.86	6.410		
11,400.0	7,770.0	11,197.3	7,530.0	66.0	67.1	72.26	-3,584.2	-744.4	787.5	661.4	126.13	6.243		
11,500.0	7,770.0	11,297.3	7,530.0	67.7	68.8	72.26	-3,684.2	-744.4	787.5	658.1	129.40	6.086		
11,600.0	7,770.0	11,397.3	7,530.0	69.5	70.5	72.26	-3,784.2	-744.4	787.5	654.8	132.68	5.935		
11,700.0	7,770.0	11,497.3	7,530.0	71.2	72.2	72.26	-3,884.2	-744.4	787.5	651.5	135.96	5.792		
11,800.0	7,770.0	11,597.3	7,530.0	72.9	73.9	72.26	-3,984.2	-744.4	787.5	648.3	139.24	5.656		
11,900.0	7,770.0	11,697.3	7,530.0	74.6	75.6	72.26	-4,084.2	-744.4	787.5	645.0	142.53	5.525		
12,000.0	7,770.0	11,797.3	7,530.0	76.4	77.3	72.26	-4,184.2	-744.4	787.5	641.7	145.82	5.401		
12,100.0	7,770.0	11,897.3	7,530.0	78.1	79.0	72.26	-4,284.2	-744.4	787.5	638.4	149.11	5.281		
12,200.0	7,770.0	11,997.3	7,530.0	79.8	80.7	72.26	-4,384.2	-744.4	787.5	635.1	152.40	5.167		
12,300.0	7,770.0	12,097.3	7,530.0	81.5	82.4	72.26	-4,484.2	-744.4	787.5	631.8	155.70	5.058		
12,400.0	7,770.0	12,197.3	7,530.0	83.3	84.1	72.26	-4,584.2	-744.4	787.5	628.5	158.99	4.953		
12,500.0	7,770.0	12,297.3	7,530.0	85.0	85.8	72.26	-4,684.2	-744.4	787.5	625.2	162.29	4.852		
12,600.0	7,770.0	12,397.3	7,530.0	86.7	87.5	72.26	-4,784.2	-744.4	787.5	621.9	165.59	4.756		
12,700.0	7,770.0	12,497.3	7,530.0	88.5	89.3	72.26	-4,884.2	-744.4	787.5	618.6	168.90	4.663		
12,800.0	7,770.0	12,597.3	7,530.0	90.2	91.0	72.26	-4,984.2	-744.4	787.5	615.3	172.20	4.573		
12,900.0	7,770.0	12,697.3	7,530.0	91.9	92.7	72.26	-5,084.2	-744.4	787.5	612.0	175.51	4.487		
13,000.0	7,770.0	12,797.3	7,530.0	93.7	94.4	72.26	-5,184.2	-744.4	787.5	608.7	178.81	4.404		
13,100.0	7,770.0	12,897.3	7,530.0	95.4	96.1	72.26	-5,284.2	-744.4	787.5	605.4	182.12	4.324		
13,200.0	7,770.0	12,997.3	7,530.0	97.1	97.9	72.26	-5,384.2	-744.4	787.5	602.1	185.43	4.247		
13,300.0	7,770.0	13,097.3	7,530.0	98.9	99.6	72.26	-5,484.2	-744.4	787.5	598.8	188.74	4.172		
13,400.0	7,770.0	13,197.3	7,530.0	100.6	101.3	72.26	-5,584.2	-744.4	787.5	595.4	192.05	4.100		
13,500.0	7,770.0	13,297.3	7,530.0	102.4	103.0	72.26	-5,684.2	-744.4	787.5	592.1	195.37	4.031		
13,600.0	7,770.0	13,397.3	7,530.0	104.1	104.8	72.26	-5,784.2	-744.4	787.5	588.8	198.68	3.964		
13,700.0	7,770.0	13,497.3	7,530.0	105.8	106.5	72.26	-5,884.2	-744.4	787.5	585.5	202.00	3.899		
13,800.0	7,770.0	13,597.3	7,530.0	107.6	108.2	72.26	-5,984.2	-744.4	787.5	582.2	205.31	3.836		
13,900.0	7,770.0	13,697.3	7,530.0	109.3	109.9	72.26	-6,084.2	-744.4	787.5	578.9	208.63	3.775		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
14,000.0	7,770.0	13,797.3	7,530.0	111.1	111.7	72.26	-6,184.2	-744.4	787.5	575.6	211.95	3.716		
14,100.0	7,770.0	13,897.3	7,530.0	112.8	113.4	72.26	-6,284.2	-744.4	787.5	572.2	215.26	3.658		
14,200.0	7,770.0	13,997.3	7,530.0	114.5	115.1	72.26	-6,384.2	-744.4	787.5	568.9	218.58	3.603		
14,300.0	7,770.0	14,097.3	7,530.0	116.3	116.9	72.26	-6,484.2	-744.4	787.5	565.6	221.90	3.549		
14,400.0	7,770.0	14,197.3	7,530.0	118.0	118.6	72.26	-6,584.2	-744.4	787.5	562.3	225.22	3.497		
14,500.0	7,770.0	14,297.3	7,530.0	119.8	120.3	72.26	-6,684.2	-744.4	787.5	559.0	228.54	3.446		
14,600.0	7,770.0	14,397.3	7,530.0	121.5	122.1	72.26	-6,784.2	-744.4	787.5	555.6	231.87	3.396		
14,700.0	7,770.0	14,497.3	7,530.0	123.3	123.8	72.26	-6,884.2	-744.4	787.5	552.3	235.19	3.348		
14,800.0	7,770.0	14,597.3	7,530.0	125.0	125.5	72.26	-6,984.2	-744.4	787.5	549.0	238.51	3.302		
14,900.0	7,770.0	14,697.3	7,530.0	126.7	127.3	72.26	-7,084.2	-744.4	787.5	545.7	241.84	3.256		
15,000.0	7,770.0	14,797.3	7,530.0	128.5	129.0	72.26	-7,184.2	-744.4	787.5	542.3	245.16	3.212		
15,100.0	7,770.0	14,897.3	7,530.0	130.2	130.8	72.26	-7,284.2	-744.4	787.5	539.0	248.48	3.169		
15,200.0	7,770.0	14,997.3	7,530.0	132.0	132.5	72.26	-7,384.2	-744.4	787.5	535.7	251.81	3.127		
15,300.0	7,770.0	15,097.3	7,530.0	133.7	134.2	72.26	-7,484.2	-744.4	787.5	532.4	255.14	3.087		
15,400.0	7,770.0	15,197.3	7,530.0	135.5	136.0	72.26	-7,584.2	-744.4	787.5	529.0	258.46	3.047		
15,500.0	7,770.0	15,297.3	7,530.0	137.2	137.7	72.26	-7,684.2	-744.4	787.5	525.7	261.79	3.008		
15,600.0	7,770.0	15,397.3	7,530.0	139.0	139.4	72.26	-7,784.2	-744.4	787.5	522.4	265.11	2.970		
15,700.0	7,770.0	15,497.3	7,530.0	140.7	141.2	72.26	-7,884.2	-744.4	787.5	519.1	268.44	2.934		
15,800.0	7,770.0	15,597.3	7,530.0	142.4	142.9	72.26	-7,984.2	-744.4	787.5	515.7	271.77	2.898		
15,900.0	7,770.0	15,697.3	7,530.0	144.2	144.7	72.26	-8,084.2	-744.4	787.5	512.4	275.10	2.863		
16,000.0	7,770.0	15,797.3	7,530.0	145.9	146.4	72.26	-8,184.2	-744.4	787.5	509.1	278.43	2.828		
16,100.0	7,770.0	15,897.3	7,530.0	147.7	148.1	72.26	-8,284.2	-744.4	787.5	505.7	281.76	2.795		
16,200.0	7,770.0	15,997.3	7,530.0	149.4	149.9	72.26	-8,384.2	-744.4	787.5	502.4	285.08	2.762		
16,300.0	7,770.0	16,097.3	7,530.0	151.2	151.6	72.26	-8,484.2	-744.4	787.5	499.1	288.41	2.730		
16,400.0	7,770.0	16,197.3	7,530.0	152.9	153.4	72.26	-8,584.2	-744.4	787.5	495.8	291.74	2.699		
16,500.0	7,770.0	16,297.3	7,530.0	154.7	155.1	72.26	-8,684.2	-744.4	787.5	492.4	295.07	2.669		
16,600.0	7,770.0	16,397.3	7,530.0	156.4	156.9	72.26	-8,784.2	-744.4	787.5	489.1	298.40	2.639		
16,700.0	7,770.0	16,497.3	7,530.0	158.2	158.6	72.26	-8,884.2	-744.4	787.5	485.8	301.73	2.610		
16,800.0	7,770.0	16,597.3	7,530.0	159.9	160.3	72.26	-8,984.2	-744.4	787.5	482.4	305.07	2.581		
16,900.0	7,770.0	16,697.3	7,530.0	161.7	162.1	72.26	-9,084.2	-744.4	787.5	479.1	308.40	2.554		
17,000.0	7,770.0	16,797.3	7,530.0	163.4	163.8	72.26	-9,184.2	-744.4	787.5	475.8	311.73	2.526		
17,100.0	7,770.0	16,897.3	7,530.0	165.2	165.6	72.26	-9,284.2	-744.4	787.5	472.4	315.06	2.500		
17,200.0	7,770.0	16,997.3	7,530.0	166.9	167.3	72.26	-9,384.2	-744.4	787.5	469.1	318.39	2.473		
17,300.0	7,770.0	17,097.3	7,530.0	168.7	169.1	72.26	-9,484.2	-744.4	787.5	465.8	321.72	2.448		
17,400.0	7,770.0	17,197.3	7,530.0	170.4	170.8	72.26	-9,584.2	-744.4	787.5	462.4	325.06	2.423		
17,500.0	7,770.0	17,297.3	7,530.0	172.2	172.5	72.26	-9,684.2	-744.4	787.5	459.1	328.39	2.398		
17,600.0	7,770.0	17,397.3	7,530.0	173.9	174.3	72.26	-9,784.2	-744.4	787.5	455.8	331.72	2.374		
17,625.6	7,770.0	17,422.9	7,530.0	174.4	174.7	72.26	-9,809.8	-744.4	787.5	454.9	332.58	2.368		
17,653.1	7,770.0	17,440.2	7,530.0	174.8	175.0	72.26	-9,827.1	-744.4	787.6	454.2	333.32	2.363 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-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			
433.5	433.5	433.5	433.5	0.7	0.7	-90.00	0.0	-19.9	19.9	18.4	1.47	13.537 CC			
500.0	500.0	499.9	499.9	0.8	0.8	-89.63	0.1	-20.0	20.0	18.3	1.70	11.793 ES			
550.0	550.0	549.7	549.7	0.9	0.9	-88.55	0.5	-20.6	20.6	18.7	1.87	10.976			
600.0	600.0	599.6	599.5	1.0	1.0	-88.27	1.2	-21.4	21.5	19.4	2.05	10.474			
700.0	700.0	699.2	699.1	1.2	1.2	-87.73	3.3	-24.2	24.3	21.9	2.40	10.116			
800.0	799.9	798.7	798.5	1.4	1.4	-88.85	6.4	-28.3	28.5	25.7	2.76	10.327			
861.1	860.9	859.4	859.1	1.5	1.5	-90.02	8.8	-31.6	31.7	28.8	2.98	10.644			
900.0	899.8	898.1	897.7	1.6	1.6	-90.68	10.5	-33.9	34.1	31.0	3.12	10.908			
1,000.0	999.6	997.5	996.7	1.8	1.8	-91.05	15.7	-40.7	41.0	37.5	3.50	11.726			
1,100.0	1,099.5	1,097.3	1,096.0	1.9	2.0	-91.01	21.1	-47.9	48.3	44.4	3.88	12.455			
1,200.0	1,199.3	1,197.0	1,195.4	2.1	2.2	-90.99	26.5	-55.0	55.6	51.3	4.26	13.045			
1,300.0	1,299.2	1,296.7	1,294.7	2.3	2.5	-90.97	31.9	-62.2	62.9	58.2	4.65	13.531			
1,400.0	1,399.1	1,396.5	1,394.0	2.5	2.7	-90.95	37.3	-69.4	70.1	65.1	5.03	13.938			
1,500.0	1,498.9	1,496.2	1,493.4	2.7	2.9	-90.94	42.7	-76.6	77.4	72.0	5.42	14.282			
1,600.0	1,598.8	1,595.9	1,592.7	2.9	3.1	-90.93	48.1	-83.8	84.7	78.9	5.81	14.578			
1,700.0	1,698.6	1,695.7	1,692.0	3.1	3.4	-90.92	53.5	-90.9	92.0	85.8	6.20	14.834			
1,800.0	1,798.5	1,795.4	1,791.3	3.3	3.6	-90.92	58.9	-98.1	99.2	92.6	6.59	15.059			
1,900.0	1,898.3	1,895.1	1,890.7	3.5	3.8	-90.91	64.3	-105.3	106.5	99.5	6.98	15.257			
2,000.0	1,998.2	1,994.9	1,990.0	3.7	4.0	-90.90	69.7	-112.5	113.8	106.4	7.37	15.432			
2,100.0	2,098.0	2,094.6	2,089.3	3.9	4.3	-90.90	75.1	-119.6	121.1	113.3	7.77	15.589			
2,200.0	2,197.9	2,194.3	2,188.7	4.1	4.5	-90.89	80.5	-126.8	128.3	120.2	8.16	15.730			
2,300.0	2,297.7	2,294.1	2,288.0	4.3	4.7	-90.89	85.9	-134.0	135.6	127.1	8.55	15.858			
2,400.0	2,397.6	2,393.8	2,387.3	4.5	5.0	-90.89	91.3	-141.2	142.9	133.9	8.94	15.974			
2,500.0	2,497.4	2,493.6	2,486.7	4.7	5.2	-90.88	96.7	-148.3	150.2	140.8	9.34	16.079			
2,600.0	2,597.3	2,593.3	2,586.0	4.9	5.4	-90.88	102.1	-155.5	157.4	147.7	9.73	16.176			
2,700.0	2,697.1	2,693.0	2,685.3	5.1	5.7	-90.88	107.5	-162.7	164.7	154.6	10.13	16.265			
2,800.0	2,797.0	2,792.8	2,784.6	5.3	5.9	-90.88	112.9	-169.9	172.0	161.5	10.52	16.347			
2,900.0	2,896.8	2,892.5	2,884.0	5.5	6.1	-90.87	118.3	-177.1	179.3	168.3	10.92	16.423			
3,000.0	2,996.7	2,992.2	2,983.3	5.7	6.4	-90.87	123.7	-184.2	186.5	175.2	11.31	16.493			
3,100.0	3,096.5	3,092.0	3,082.6	5.9	6.6	-90.87	129.1	-191.4	193.8	182.1	11.70	16.558			
3,200.0	3,196.4	3,191.7	3,182.0	6.1	6.8	-90.87	134.5	-198.6	201.1	189.0	12.10	16.619			
3,300.0	3,296.3	3,291.4	3,281.3	6.3	7.1	-90.87	139.9	-205.8	208.4	195.9	12.49	16.676			
3,400.0	3,396.1	3,391.2	3,380.6	6.5	7.3	-90.86	145.2	-212.9	215.6	202.7	12.89	16.729			
3,500.0	3,496.0	3,490.9	3,479.9	6.7	7.5	-90.86	150.6	-220.1	222.9	209.6	13.28	16.779			
3,600.0	3,595.8	3,590.6	3,579.3	6.9	7.8	-90.86	156.0	-227.3	230.2	216.5	13.68	16.827			
3,700.0	3,695.7	3,690.4	3,678.6	7.0	8.0	-90.86	161.4	-234.5	237.4	223.4	14.07	16.871			
3,800.0	3,795.5	3,790.1	3,777.9	7.2	8.2	-90.86	166.8	-241.6	244.7	230.3	14.47	16.913			
3,900.0	3,895.4	3,889.8	3,877.3	7.4	8.5	-90.86	172.2	-248.8	252.0	237.1	14.87	16.952			
4,000.0	3,995.2	3,989.6	3,976.6	7.6	8.7	-90.86	177.6	-256.0	259.3	244.0	15.26	16.990			
4,100.0	4,095.1	4,089.3	4,075.9	7.8	8.9	-90.86	183.0	-263.2	266.5	250.9	15.66	17.025			
4,200.0	4,194.9	4,189.0	4,175.3	8.0	9.2	-90.86	188.4	-270.3	273.8	257.8	16.05	17.059			
4,300.0	4,294.8	4,288.8	4,274.6	8.2	9.4	-90.85	193.8	-277.5	281.1	264.7	16.45	17.091			
4,400.0	4,394.6	4,388.5	4,373.9	8.4	9.6	-90.85	199.2	-284.7	288.4	271.5	16.84	17.121			
4,500.0	4,494.5	4,488.3	4,473.2	8.6	9.9	-90.85	204.6	-291.9	295.6	278.4	17.24	17.150			
4,600.0	4,594.3	4,588.0	4,572.6	8.8	10.1	-90.85	210.0	-299.1	302.9	285.3	17.63	17.178			
4,700.0	4,694.2	4,687.7	4,671.9	9.0	10.3	-90.85	215.4	-306.2	310.2	292.2	18.03	17.205			
4,800.0	4,794.0	4,787.5	4,771.2	9.2	10.6	-90.85	220.8	-313.4	317.5	299.0	18.43	17.230			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,893.9	4,887.2	4,870.6	9.4	10.8	-90.85	226.2	-320.6	324.7	305.9	18.82	17.254		
5,000.0	4,993.7	4,986.9	4,969.9	9.6	11.0	-90.85	231.6	-327.8	332.0	312.8	19.22	17.277		
5,100.0	5,093.6	5,086.7	5,069.2	9.8	11.3	-90.85	237.0	-334.9	339.3	319.7	19.61	17.300		
5,200.0	5,193.5	5,186.4	5,168.6	10.0	11.5	-90.85	242.4	-342.1	346.6	326.6	20.01	17.321		
5,300.0	5,293.3	5,286.1	5,267.9	10.2	11.7	-90.85	247.8	-349.3	353.8	333.4	20.40	17.341		
5,400.0	5,393.2	5,385.9	5,367.2	10.4	12.0	-90.85	253.2	-356.5	361.1	340.3	20.80	17.361		
5,500.0	5,493.0	5,485.6	5,466.5	10.6	12.2	-90.85	258.6	-363.6	368.4	347.2	21.20	17.380		
5,600.0	5,592.9	5,585.3	5,565.9	10.8	12.4	-90.85	264.0	-370.8	375.7	354.1	21.59	17.398		
5,700.0	5,692.7	5,685.1	5,665.2	11.0	12.7	-90.85	269.4	-378.0	382.9	361.0	21.99	17.416		
5,800.0	5,792.6	5,784.8	5,764.5	11.2	12.9	-90.85	274.8	-385.2	390.2	367.8	22.38	17.433		
5,900.0	5,892.4	5,884.5	5,863.9	11.4	13.1	-90.84	280.2	-392.4	397.5	374.7	22.78	17.449		
6,000.0	5,992.3	5,984.3	5,963.2	11.6	13.4	-90.84	285.6	-399.5	404.8	381.6	23.18	17.465		
6,100.0	6,092.1	6,084.0	6,062.5	11.8	13.6	-90.84	291.0	-406.7	412.0	388.5	23.57	17.480		
6,200.0	6,192.0	6,183.8	6,161.9	12.0	13.8	-90.84	296.4	-413.9	419.3	395.3	23.97	17.495		
6,300.0	6,291.8	6,283.5	6,261.2	12.2	14.1	-90.84	301.8	-421.1	426.6	402.2	24.36	17.509		
6,400.0	6,391.7	6,383.2	6,360.5	12.4	14.3	-90.84	307.2	-428.2	433.9	409.1	24.76	17.523		
6,500.0	6,491.5	6,483.0	6,459.8	12.6	14.5	-90.84	312.6	-435.4	441.1	416.0	25.16	17.536		
6,600.0	6,591.4	6,582.7	6,559.2	12.8	14.8	-90.84	318.0	-442.6	448.4	422.9	25.55	17.549		
6,700.0	6,691.2	6,682.4	6,658.5	13.0	15.0	-90.84	323.4	-449.8	455.7	429.7	25.95	17.561		
6,800.0	6,791.1	6,782.2	6,757.8	13.2	15.2	-90.84	328.8	-456.9	463.0	436.6	26.34	17.573		
6,900.0	6,890.9	6,881.9	6,857.2	13.4	15.5	-90.84	334.2	-464.1	470.2	443.5	26.74	17.585		
7,000.0	6,990.8	6,981.6	6,956.5	13.6	15.7	-90.84	339.6	-471.3	477.5	450.4	27.14	17.596		
7,024.2	7,014.9	7,005.7	6,980.5	13.6	15.8	-90.84	340.9	-473.0	479.3	452.0	27.23	17.599		
7,050.0	7,040.7	7,031.5	7,006.2	13.7	15.8	-92.59	342.3	-474.9	481.2	453.8	27.33	17.603		
7,100.0	7,090.7	7,081.4	7,055.9	13.7	15.9	90.78	344.0	-478.5	484.8	457.3	27.47	17.647		
7,150.0	7,140.5	7,131.5	7,105.8	13.8	16.0	90.29	342.2	-482.1	488.4	460.9	27.56	17.725		
7,200.0	7,189.9	7,181.7	7,155.6	13.8	16.1	90.16	336.9	-485.6	492.0	464.4	27.59	17.832		
7,250.0	7,238.6	7,232.2	7,205.2	13.8	16.1	90.10	328.0	-489.2	495.6	468.0	27.58	17.967		
7,300.0	7,286.4	7,282.8	7,254.2	13.7	16.1	90.07	315.7	-492.7	499.0	471.5	27.53	18.125		
7,350.0	7,333.1	7,333.7	7,302.3	13.7	16.1	90.06	299.8	-496.1	502.4	475.0	27.45	18.301		
7,400.0	7,378.5	7,384.7	7,349.4	13.6	16.1	90.04	280.5	-499.4	505.7	478.4	27.35	18.489		
7,450.0	7,422.2	7,435.9	7,395.2	13.6	16.1	90.04	257.8	-502.6	508.9	481.7	27.24	18.683		
7,500.0	7,464.1	7,487.3	7,439.4	13.5	16.1	90.03	231.8	-505.7	512.0	484.8	27.12	18.874		
7,550.0	7,504.1	7,538.8	7,481.7	13.5	16.0	90.02	202.5	-508.7	514.9	487.8	27.02	19.053		
7,600.0	7,541.8	7,590.6	7,522.0	13.5	16.0	90.02	170.2	-511.5	517.6	490.6	26.95	19.208		
7,650.0	7,577.2	7,642.5	7,559.9	13.4	16.0	90.02	134.9	-514.1	520.1	493.2	26.91	19.328		
7,700.0	7,610.0	7,694.5	7,595.3	13.5	16.1	90.01	96.8	-516.5	522.5	495.5	26.93	19.403		
7,750.0	7,640.2	7,746.7	7,628.0	13.5	16.1	90.01	56.2	-518.7	524.6	497.6	27.01	19.422		
7,800.0	7,667.4	7,799.0	7,657.7	13.6	16.2	90.01	13.2	-520.7	526.5	499.4	27.18	19.376		
7,850.0	7,691.7	7,851.5	7,684.2	13.7	16.3	90.01	-32.0	-522.4	528.2	500.8	27.43	19.258		
7,900.0	7,712.8	7,904.0	7,707.4	13.9	16.5	90.00	-79.2	-523.9	529.7	501.9	27.78	19.067		
7,950.0	7,730.8	7,956.7	7,727.1	14.1	16.7	90.00	-127.9	-525.2	530.9	502.6	28.23	18.803		
8,000.0	7,745.5	8,009.4	7,743.2	14.4	16.9	90.00	-178.1	-526.2	531.8	503.0	28.79	18.473		
8,050.0	7,756.7	8,062.1	7,755.6	14.7	17.2	90.00	-229.4	-526.9	532.5	503.1	29.45	18.084		
8,100.0	7,764.6	8,114.9	7,764.2	15.1	17.5	90.00	-281.5	-527.3	532.9	502.7	30.20	17.646		
8,150.0	7,769.0	8,167.8	7,769.0	15.5	17.9	90.00	-334.1	-527.5	533.1	502.0	31.05	17.171		
8,188.1	7,770.0	8,207.9	7,770.0	15.9	18.2	90.00	-374.1	-527.4	533.0	501.3	31.74	16.794		
8,200.0	7,770.0	8,219.8	7,770.0	16.0	18.3	90.00	-386.1	-527.4	533.0	501.0	31.97	16.674		
8,300.0	7,770.0	8,319.8	7,770.0	17.0	19.2	90.00	-486.1	-527.0	532.6	498.7	33.97	15.681		
8,400.0	7,770.0	8,419.8	7,770.0	18.1	20.2	90.00	-586.1	-526.7	532.3	496.1	36.20	14.706		
8,500.0	7,770.0	8,519.8	7,770.0	19.3	21.3	90.00	-686.1	-526.3	531.9	493.3	38.62	13.775		
8,600.0	7,770.0	8,619.8	7,770.0	20.6	22.5	90.00	-786.1	-526.0	531.6	490.4	41.19	12.905		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,700.0	7,770.0	8,719.8	7,770.0	21.9	23.7	90.00	-886.1	-525.6	531.2	487.3	43.90	12.102		
8,800.0	7,770.0	8,819.8	7,770.0	23.3	25.0	90.00	-986.1	-525.3	530.9	484.2	46.71	11.366		
8,900.0	7,770.0	8,919.8	7,770.0	24.8	26.4	90.00	-1,086.1	-524.9	530.5	480.9	49.61	10.694		
9,000.0	7,770.0	9,019.8	7,770.0	26.3	27.8	90.00	-1,186.1	-524.6	530.2	477.6	52.59	10.082		
9,100.0	7,770.0	9,119.8	7,770.0	27.8	29.2	90.00	-1,286.1	-524.2	529.8	474.2	55.63	9.525		
9,200.0	7,770.0	9,219.8	7,770.0	29.3	30.7	90.00	-1,386.1	-523.9	529.5	470.8	58.72	9.018		
9,300.0	7,770.0	9,319.8	7,770.0	30.9	32.2	90.00	-1,486.1	-523.5	529.1	467.3	61.85	8.555		
9,400.0	7,770.0	9,419.8	7,770.0	32.5	33.7	90.00	-1,586.1	-523.2	528.8	463.8	65.02	8.132		
9,500.0	7,770.0	9,519.8	7,770.0	34.1	35.3	90.00	-1,686.1	-522.8	528.5	460.2	68.23	7.745		
9,600.0	7,770.0	9,619.8	7,770.0	35.7	36.8	90.00	-1,786.1	-522.5	528.1	456.6	71.46	7.390		
9,700.0	7,770.0	9,719.8	7,770.0	37.3	38.4	90.00	-1,886.1	-522.2	527.8	453.0	74.72	7.063		
9,800.0	7,770.0	9,819.8	7,770.0	39.0	40.0	90.00	-1,986.1	-521.8	527.4	449.4	78.00	6.761		
9,900.0	7,770.0	9,919.8	7,770.0	40.6	41.6	90.00	-2,086.1	-521.5	527.1	445.8	81.30	6.483		
10,000.0	7,770.0	10,019.8	7,770.0	42.3	43.2	90.00	-2,186.1	-521.1	526.7	442.1	84.62	6.224		
10,100.0	7,770.0	10,119.8	7,770.0	44.0	44.9	90.00	-2,286.1	-520.8	526.4	438.4	87.95	5.985		
10,200.0	7,770.0	10,219.8	7,770.0	45.6	46.5	90.00	-2,386.1	-520.4	526.0	434.7	91.29	5.762		
10,300.0	7,770.0	10,319.8	7,770.0	47.3	48.2	90.00	-2,486.1	-520.1	525.7	431.0	94.65	5.554		
10,400.0	7,770.0	10,419.8	7,770.0	49.0	49.8	90.00	-2,586.1	-519.7	525.3	427.3	98.02	5.359		
10,500.0	7,770.0	10,519.8	7,770.0	50.7	51.5	90.00	-2,686.1	-519.4	525.0	423.6	101.39	5.177		
10,600.0	7,770.0	10,619.8	7,770.0	52.4	53.1	90.00	-2,786.1	-519.0	524.6	419.8	104.78	5.007		
10,700.0	7,770.0	10,719.8	7,770.0	54.1	54.8	90.00	-2,886.1	-518.7	524.3	416.1	108.17	4.847		
10,800.0	7,770.0	10,819.8	7,770.0	55.8	56.5	90.00	-2,986.1	-518.3	523.9	412.3	111.57	4.696		
10,900.0	7,770.0	10,919.8	7,770.0	57.5	58.2	90.00	-3,086.1	-518.0	523.6	408.6	114.98	4.554		
11,000.0	7,770.0	11,019.8	7,770.0	59.2	59.9	90.00	-3,186.1	-517.6	523.2	404.8	118.39	4.419		
11,100.0	7,770.0	11,119.8	7,770.0	60.9	61.5	90.00	-3,286.1	-517.3	522.9	401.1	121.81	4.293		
11,200.0	7,770.0	11,219.8	7,770.0	62.6	63.2	90.00	-3,386.1	-516.9	522.5	397.3	125.23	4.172		
11,300.0	7,770.0	11,319.8	7,770.0	64.3	64.9	90.00	-3,486.1	-516.6	522.2	393.5	128.66	4.059		
11,400.0	7,770.0	11,419.8	7,770.0	66.0	66.6	90.00	-3,586.1	-516.2	521.8	389.7	132.09	3.950		
11,500.0	7,770.0	11,519.8	7,770.0	67.7	68.3	90.00	-3,686.1	-515.9	521.5	385.9	135.53	3.848		
11,600.0	7,770.0	11,619.8	7,770.0	69.5	70.0	90.00	-3,786.1	-515.5	521.1	382.2	138.97	3.750		
11,700.0	7,770.0	11,719.8	7,770.0	71.2	71.8	90.00	-3,886.0	-515.2	520.8	378.4	142.41	3.657		
11,800.0	7,770.0	11,819.8	7,770.0	72.9	73.5	90.00	-3,986.0	-514.8	520.4	374.6	145.85	3.568		
11,900.0	7,770.0	11,919.8	7,770.0	74.6	75.2	90.00	-4,086.0	-514.5	520.1	370.8	149.30	3.483		
12,000.0	7,770.0	12,019.8	7,770.0	76.4	76.9	90.00	-4,186.0	-514.1	519.7	367.0	152.75	3.402		
12,100.0	7,770.0	12,119.8	7,770.0	78.1	78.6	90.00	-4,286.0	-513.8	519.4	363.2	156.21	3.325		
12,200.0	7,770.0	12,219.8	7,770.0	79.8	80.3	90.00	-4,386.0	-513.4	519.0	359.4	159.67	3.251		
12,300.0	7,770.0	12,319.8	7,770.0	81.5	82.0	90.00	-4,486.0	-513.1	518.7	355.6	163.12	3.180		
12,400.0	7,770.0	12,419.8	7,770.0	83.3	83.8	90.00	-4,586.0	-512.7	518.3	351.7	166.58	3.112		
12,500.0	7,770.0	12,519.8	7,770.0	85.0	85.5	90.00	-4,686.0	-512.4	518.0	347.9	170.05	3.046		
12,600.0	7,770.0	12,619.8	7,770.0	86.7	87.2	90.00	-4,786.0	-512.0	517.6	344.1	173.51	2.983		
12,700.0	7,770.0	12,719.8	7,770.0	88.5	88.9	90.00	-4,886.0	-511.7	517.3	340.3	176.98	2.923		
12,800.0	7,770.0	12,819.8	7,770.0	90.2	90.7	90.00	-4,986.0	-511.3	516.9	336.5	180.44	2.865		
12,900.0	7,770.0	12,919.8	7,770.0	91.9	92.4	90.00	-5,086.0	-511.0	516.6	332.7	183.91	2.809		
13,000.0	7,770.0	13,019.8	7,770.0	93.7	94.1	90.00	-5,186.0	-510.6	516.2	328.9	187.38	2.755		
13,100.0	7,770.0	13,119.8	7,770.0	95.4	95.8	90.00	-5,286.0	-510.3	515.9	325.0	190.86	2.703		
13,200.0	7,770.0	13,219.8	7,770.0	97.1	97.6	90.00	-5,386.0	-509.9	515.5	321.2	194.33	2.653		
13,300.0	7,770.0	13,319.8	7,770.0	98.9	99.3	90.00	-5,486.0	-509.6	515.2	317.4	197.80	2.605		
13,400.0	7,770.0	13,419.8	7,770.0	100.6	101.0	90.00	-5,586.0	-509.2	514.8	313.6	201.28	2.558		
13,500.0	7,770.0	13,519.8	7,770.0	102.4	102.8	90.00	-5,686.0	-508.9	514.5	309.7	204.76	2.513		
13,600.0	7,770.0	13,619.8	7,770.0	104.1	104.5	90.00	-5,786.0	-508.5	514.1	305.9	208.23	2.469		
13,700.0	7,770.0	13,719.8	7,770.0	105.8	106.2	90.00	-5,886.0	-508.2	513.8	302.1	211.71	2.427		
13,800.0	7,770.0	13,819.8	7,770.0	107.6	108.0	90.00	-5,986.0	-507.8	513.4	298.3	215.19	2.386		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
13,900.0	7,770.0	13,919.8	7,770.0	109.3	109.7	90.00	-6,086.0	-507.5	513.1	294.4	218.67	2.346		
14,000.0	7,770.0	14,019.8	7,770.0	111.1	111.4	90.00	-6,186.0	-507.1	512.7	290.6	222.16	2.308		
14,100.0	7,770.0	14,119.8	7,770.0	112.8	113.2	90.00	-6,286.0	-506.8	512.4	286.8	225.64	2.271		
14,200.0	7,770.0	14,219.8	7,770.0	114.5	114.9	90.00	-6,386.0	-506.4	512.0	282.9	229.12	2.235		
14,300.0	7,770.0	14,319.8	7,770.0	116.3	116.6	90.00	-6,486.0	-506.1	511.7	279.1	232.60	2.200		
14,400.0	7,770.0	14,419.8	7,770.0	118.0	118.4	90.00	-6,586.0	-505.7	511.4	275.3	236.09	2.166		
14,500.0	7,770.0	14,519.8	7,770.0	119.8	120.1	90.00	-6,686.0	-505.4	511.0	271.4	239.57	2.133		
14,600.0	7,770.0	14,619.8	7,770.0	121.5	121.8	90.00	-6,786.0	-505.1	510.7	267.6	243.06	2.101		
14,700.0	7,770.0	14,719.8	7,770.0	123.3	123.6	90.00	-6,886.0	-504.7	510.3	263.8	246.55	2.070		
14,800.0	7,770.0	14,819.8	7,770.0	125.0	125.3	90.00	-6,986.0	-504.4	510.0	259.9	250.03	2.040		
14,900.0	7,770.0	14,919.8	7,770.0	126.7	127.1	90.00	-7,086.0	-504.0	509.6	256.1	253.52	2.010		
15,000.0	7,770.0	15,019.8	7,770.0	128.5	128.8	90.00	-7,186.0	-503.7	509.3	252.2	257.01	1.981		
15,100.0	7,770.0	15,119.8	7,770.0	130.2	130.5	90.00	-7,286.0	-503.3	508.9	248.4	260.50	1.954		
15,200.0	7,770.0	15,219.8	7,770.0	132.0	132.3	90.00	-7,386.0	-503.0	508.6	244.6	263.99	1.926		
15,300.0	7,770.0	15,319.8	7,770.0	133.7	134.0	90.00	-7,486.0	-502.6	508.2	240.7	267.48	1.900		
15,400.0	7,770.0	15,419.8	7,770.0	135.5	135.8	90.00	-7,586.0	-502.3	507.9	236.9	270.97	1.874		
15,500.0	7,770.0	15,519.8	7,770.0	137.2	137.5	90.00	-7,686.0	-501.9	507.5	233.1	274.46	1.849		
15,600.0	7,770.0	15,619.8	7,770.0	139.0	139.3	90.00	-7,786.0	-501.6	507.2	229.2	277.95	1.825		
15,700.0	7,770.0	15,719.8	7,770.0	140.7	141.0	90.00	-7,886.0	-501.2	506.8	225.4	281.44	1.801		
15,800.0	7,770.0	15,819.8	7,770.0	142.4	142.7	90.00	-7,986.0	-500.9	506.5	221.5	284.93	1.777		
15,900.0	7,770.0	15,919.8	7,770.0	144.2	144.5	90.00	-8,086.0	-500.5	506.1	217.7	288.43	1.755		
16,000.0	7,770.0	16,019.8	7,770.0	145.9	146.2	90.00	-8,186.0	-500.2	505.8	213.8	291.92	1.733		
16,100.0	7,770.0	16,119.8	7,770.0	147.7	148.0	90.00	-8,286.0	-499.8	505.4	210.0	295.41	1.711		
16,200.0	7,770.0	16,219.8	7,770.0	149.4	149.7	90.00	-8,386.0	-499.5	505.1	206.2	298.91	1.690		
16,300.0	7,770.0	16,319.8	7,770.0	151.2	151.5	90.00	-8,486.0	-499.1	504.7	202.3	302.40	1.669		
16,400.0	7,770.0	16,419.8	7,770.0	152.9	153.2	90.00	-8,586.0	-498.8	504.4	198.5	305.89	1.649		
16,500.0	7,770.0	16,519.8	7,770.0	154.7	154.9	90.00	-8,686.0	-498.4	504.0	194.6	309.39	1.629		
16,600.0	7,770.0	16,619.8	7,770.0	156.4	156.7	90.00	-8,786.0	-498.1	503.7	190.8	312.88	1.610		
16,700.0	7,770.0	16,719.8	7,770.0	158.2	158.4	90.00	-8,886.0	-497.7	503.3	186.9	316.38	1.591		
16,800.0	7,770.0	16,819.8	7,770.0	159.9	160.2	90.00	-8,986.0	-497.4	503.0	183.1	319.87	1.572		
16,900.0	7,770.0	16,919.8	7,770.0	161.7	161.9	90.00	-9,086.0	-497.0	502.6	179.3	323.37	1.554		
17,000.0	7,770.0	17,019.8	7,770.0	163.4	163.7	90.00	-9,186.0	-496.7	502.3	175.4	326.87	1.537		
17,100.0	7,770.0	17,119.8	7,770.0	165.2	165.4	90.00	-9,286.0	-496.3	501.9	171.6	330.36	1.519		
17,200.0	7,770.0	17,219.8	7,770.0	166.9	167.2	90.00	-9,386.0	-496.0	501.6	167.7	333.86	1.502		
17,300.0	7,770.0	17,319.8	7,770.0	168.7	168.9	90.00	-9,486.0	-495.6	501.2	163.9	337.36	1.486 Level 3		
17,400.0	7,770.0	17,419.8	7,770.0	170.4	170.6	90.00	-9,586.0	-495.3	500.9	160.0	340.85	1.469 Level 3		
17,500.0	7,770.0	17,519.8	7,770.0	172.2	172.4	90.00	-9,686.0	-494.9	500.5	156.2	344.35	1.454 Level 3		
17,600.0	7,770.0	17,619.8	7,770.0	173.9	174.1	90.00	-9,786.0	-494.6	500.2	152.3	347.85	1.438 Level 3		
17,642.9	7,770.0	17,662.7	7,770.0	174.7	174.9	90.00	-9,828.9	-494.4	500.0	150.7	349.35	1.431 Level 3		
17,653.1	7,770.0	17,664.2	7,770.0	174.8	174.9	90.00	-9,830.4	-494.4	500.1	150.5	349.55	1.431 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1G-7H-A168 - HZ - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	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			
550.0	550.0	550.0	550.0	0.9	0.9	-88.84	0.2	-9.9	9.9	8.0	1.87	5.272 ES			
600.0	600.0	599.9	599.9	1.0	1.0	-87.54	0.8	-10.1	10.2	8.1	2.05	4.956			
700.0	700.0	699.8	699.8	1.2	1.2	-84.47	3.2	-11.2	11.3	8.9	2.40	4.687			
800.0	799.9	799.7	799.6	1.4	1.4	-83.03	7.2	-12.9	13.1	10.3	2.76	4.730			
861.1	860.9	860.7	860.5	1.5	1.5	-82.84	10.4	-14.2	14.5	11.5	2.99	4.854			
900.0	899.8	899.6	899.3	1.6	1.6	-83.08	12.6	-15.2	15.5	12.3	3.13	4.935			
1,000.0	999.6	999.6	999.1	1.8	1.8	-83.59	18.2	-17.5	17.9	14.4	3.51	5.107			
1,100.0	1,099.5	1,099.6	1,098.9	1.9	2.0	-83.98	23.8	-19.9	20.4	16.5	3.89	5.241			
1,200.0	1,199.3	1,199.5	1,198.7	2.1	2.2	-84.29	29.4	-22.3	22.8	18.6	4.27	5.347			
1,300.0	1,299.2	1,299.5	1,298.4	2.3	2.4	-84.53	35.0	-24.7	25.3	20.6	4.65	5.433			
1,400.0	1,399.1	1,399.5	1,398.2	2.5	2.6	-84.73	40.6	-27.0	27.7	22.7	5.04	5.504			
1,500.0	1,498.9	1,499.4	1,498.0	2.7	2.8	-84.90	46.2	-29.4	30.2	24.8	5.43	5.563			
1,600.0	1,598.8	1,599.4	1,597.8	2.9	3.0	-85.04	51.8	-31.8	32.7	26.9	5.82	5.614			
1,700.0	1,698.6	1,699.4	1,697.6	3.1	3.2	-85.17	57.4	-34.2	35.1	28.9	6.21	5.657			
1,800.0	1,798.5	1,799.3	1,797.4	3.3	3.4	-85.27	63.0	-36.5	37.6	31.0	6.60	5.695			
1,900.0	1,898.3	1,899.3	1,897.2	3.5	3.6	-85.37	68.6	-38.9	40.1	33.1	6.99	5.727			
2,000.0	1,998.2	1,999.3	1,996.9	3.7	3.8	-85.45	74.2	-41.3	42.5	35.1	7.39	5.756			
2,100.0	2,098.0	2,099.3	2,096.7	3.9	4.0	-85.52	79.8	-43.7	45.0	37.2	7.78	5.782			
2,200.0	2,197.9	2,199.2	2,196.5	4.1	4.2	-85.59	85.4	-46.0	47.4	39.3	8.17	5.805			
2,300.0	2,297.7	2,299.2	2,296.3	4.3	4.4	-85.65	91.0	-48.4	49.9	41.3	8.57	5.826			
2,400.0	2,397.6	2,399.2	2,396.1	4.5	4.6	-85.70	96.6	-50.8	52.4	43.4	8.96	5.844			
2,500.0	2,497.4	2,499.1	2,495.9	4.7	4.8	-85.75	102.1	-53.2	54.8	45.5	9.35	5.861			
2,600.0	2,597.3	2,599.1	2,595.6	4.9	5.0	-85.80	107.7	-55.6	57.3	47.5	9.75	5.877			
2,700.0	2,697.1	2,699.1	2,695.4	5.1	5.2	-85.84	113.3	-57.9	59.8	49.6	10.14	5.891			
2,800.0	2,797.0	2,799.0	2,795.2	5.3	5.4	-85.88	118.9	-60.3	62.2	51.7	10.54	5.904			
2,900.0	2,896.8	2,899.0	2,895.0	5.5	5.6	-85.91	124.5	-62.7	64.7	53.7	10.93	5.916			
3,000.0	2,996.7	2,999.0	2,994.8	5.7	5.8	-85.95	130.1	-65.1	67.1	55.8	11.33	5.927			
3,100.0	3,096.5	3,099.0	3,094.6	5.9	6.0	-85.98	135.7	-67.4	69.6	57.9	11.72	5.937			
3,200.0	3,196.4	3,198.9	3,194.4	6.1	6.2	-86.00	141.3	-69.8	72.1	59.9	12.12	5.947			
3,300.0	3,296.3	3,298.9	3,294.1	6.3	6.4	-86.03	146.9	-72.2	74.5	62.0	12.51	5.955			
3,400.0	3,396.1	3,398.9	3,393.9	6.5	6.6	-86.06	152.5	-74.6	77.0	64.1	12.91	5.964			
3,500.0	3,496.0	3,498.8	3,493.7	6.7	6.8	-86.08	158.1	-76.9	79.4	66.1	13.30	5.972			
3,600.0	3,595.8	3,598.8	3,593.5	6.9	7.0	-86.10	163.7	-79.3	81.9	68.2	13.70	5.979			
3,700.0	3,695.7	3,698.8	3,693.3	7.0	7.2	-86.12	169.3	-81.7	84.4	70.3	14.10	5.986			
3,800.0	3,795.5	3,798.7	3,793.1	7.2	7.4	-86.14	174.9	-84.1	86.8	72.3	14.49	5.992			
3,900.0	3,895.4	3,898.7	3,892.8	7.4	7.6	-86.16	180.5	-86.4	89.3	74.4	14.89	5.998			
4,000.0	3,995.2	3,998.7	3,992.6	7.6	7.8	-86.18	186.1	-88.8	91.8	76.5	15.28	6.004			
4,100.0	4,095.1	4,098.6	4,092.4	7.8	8.0	-86.19	191.7	-91.2	94.2	78.5	15.68	6.009			
4,200.0	4,194.9	4,198.6	4,192.2	8.0	8.2	-86.21	197.3	-93.6	96.7	80.6	16.08	6.014			
4,300.0	4,294.8	4,298.6	4,292.0	8.2	8.4	-86.22	202.9	-96.0	99.1	82.7	16.47	6.019			
4,400.0	4,394.6	4,398.6	4,391.8	8.4	8.6	-86.24	208.5	-98.3	101.6	84.7	16.87	6.024			
4,500.0	4,494.5	4,498.5	4,491.6	8.6	8.8	-86.25	214.1	-100.7	104.1	86.8	17.26	6.028			
4,600.0	4,594.3	4,598.5	4,591.3	8.8	9.0	-86.26	219.7	-103.1	106.5	88.9	17.66	6.033			
4,700.0	4,694.2	4,698.5	4,691.1	9.0	9.2	-86.27	225.3	-105.5	109.0	90.9	18.06	6.037			
4,800.0	4,794.0	4,798.4	4,790.9	9.2	9.5	-86.29	230.8	-107.8	111.5	93.0	18.45	6.040			
4,900.0	4,893.9	4,898.4	4,890.7	9.4	9.7	-86.30	236.4	-110.2	113.9	95.1	18.85	6.044			

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1G-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	4,993.7	4,998.4	4,990.5	9.6	9.9	-86.31	242.0	-112.6	116.4	97.1	19.25	6.047		
5,100.0	5,093.6	5,098.3	5,090.3	9.8	10.1	-86.32	247.6	-115.0	118.8	99.2	19.64	6.051		
5,200.0	5,193.5	5,198.3	5,190.0	10.0	10.3	-86.33	253.2	-117.3	121.3	101.3	20.04	6.054		
5,300.0	5,293.3	5,298.3	5,289.8	10.2	10.5	-86.34	258.8	-119.7	123.8	103.3	20.43	6.057		
5,400.0	5,393.2	5,398.3	5,389.6	10.4	10.7	-86.35	264.4	-122.1	126.2	105.4	20.83	6.060		
5,500.0	5,493.0	5,498.2	5,489.4	10.6	10.9	-86.35	270.0	-124.5	128.7	107.5	21.23	6.063		
5,600.0	5,592.9	5,598.2	5,589.2	10.8	11.1	-86.36	275.6	-126.8	131.2	109.5	21.62	6.066		
5,700.0	5,692.7	5,698.2	5,689.0	11.0	11.3	-86.37	281.2	-129.2	133.6	111.6	22.02	6.068		
5,800.0	5,792.6	5,798.1	5,788.8	11.2	11.5	-86.38	286.8	-131.6	136.1	113.7	22.42	6.071		
5,900.0	5,892.4	5,898.1	5,888.5	11.4	11.7	-86.39	292.4	-134.0	138.5	115.7	22.81	6.073		
6,000.0	5,992.3	5,998.1	5,988.3	11.6	11.9	-86.39	298.0	-136.4	141.0	117.8	23.21	6.076		
6,100.0	6,092.1	6,098.0	6,088.1	11.8	12.1	-86.40	303.6	-138.7	143.5	119.9	23.61	6.078		
6,200.0	6,192.0	6,198.0	6,187.9	12.0	12.3	-86.41	309.2	-141.1	145.9	121.9	24.00	6.080		
6,300.0	6,291.8	6,298.0	6,287.7	12.2	12.5	-86.41	314.8	-143.5	148.4	124.0	24.40	6.082		
6,400.0	6,391.7	6,398.0	6,387.5	12.4	12.7	-86.42	320.4	-145.9	150.9	126.1	24.80	6.084		
6,500.0	6,491.5	6,497.9	6,487.2	12.6	12.9	-86.43	326.0	-148.2	153.3	128.1	25.19	6.086		
6,600.0	6,591.4	6,597.9	6,587.0	12.8	13.1	-86.43	331.6	-150.6	155.8	130.2	25.59	6.088		
6,700.0	6,691.2	6,697.9	6,686.8	13.0	13.3	-86.44	337.2	-153.0	158.2	132.3	25.99	6.090		
6,800.0	6,791.1	6,798.0	6,786.8	13.2	13.5	-86.48	342.7	-155.4	160.7	134.3	26.38	6.091		
6,900.0	6,890.9	6,898.6	6,887.2	13.4	13.6	-89.59	339.4	-157.8	162.8	136.0	26.76	6.084		
7,000.0	6,990.8	6,995.0	6,982.1	13.6	13.7	-97.00	323.2	-160.2	166.5	139.4	27.07	6.149		
7,024.2	7,014.9	7,017.3	7,003.7	13.6	13.6	-99.27	317.6	-160.8	168.1	141.0	27.13	6.196		
7,050.0	7,040.7	7,040.7	7,026.2	13.7	13.6	-103.53	311.0	-161.4	170.2	143.1	27.17	6.266		
7,100.0	7,090.7	7,085.5	7,068.5	13.7	13.6	75.02	296.4	-162.5	175.3	148.1	27.18	6.450		
7,150.0	7,140.5	7,129.6	7,109.2	13.8	13.6	70.05	279.5	-163.6	181.5	154.4	27.12	6.692		
7,200.0	7,189.9	7,172.9	7,148.1	13.8	13.5	65.83	260.5	-164.7	188.5	161.5	27.00	6.982		
7,250.0	7,238.6	7,215.6	7,185.2	13.8	13.5	62.07	239.5	-165.7	196.2	169.4	26.82	7.315		
7,300.0	7,286.4	7,257.6	7,220.5	13.7	13.4	58.70	216.7	-166.8	204.3	177.7	26.59	7.683		
7,350.0	7,333.1	7,300.0	7,254.6	13.7	13.4	55.65	191.6	-167.8	212.7	186.4	26.31	8.084		
7,400.0	7,378.5	7,340.2	7,285.6	13.6	13.4	53.03	166.0	-168.7	221.2	195.2	25.99	8.508		
7,450.0	7,422.2	7,380.7	7,315.3	13.6	13.3	50.66	138.4	-169.6	229.6	204.0	25.64	8.954		
7,500.0	7,464.1	7,420.9	7,343.2	13.5	13.3	48.56	109.6	-170.5	237.9	212.7	25.27	9.417		
7,550.0	7,504.1	7,460.7	7,369.1	13.5	13.3	46.71	79.4	-171.3	246.0	221.1	24.87	9.891		
7,600.0	7,541.8	7,500.0	7,393.1	13.5	13.4	45.09	48.3	-172.1	253.7	229.2	24.47	10.368		
7,650.0	7,577.2	7,539.2	7,415.3	13.4	13.4	43.66	15.9	-172.9	261.0	237.0	24.08	10.841		
7,700.0	7,610.0	7,578.1	7,435.5	13.5	13.5	42.42	-17.3	-173.6	267.9	244.2	23.70	11.302		
7,750.0	7,640.2	7,616.7	7,453.7	13.5	13.6	41.34	-51.3	-174.3	274.2	250.9	23.36	11.741		
7,800.0	7,667.4	7,650.0	7,468.0	13.6	13.8	40.49	-81.4	-174.8	280.1	257.0	23.05	12.149		
7,850.0	7,691.7	7,693.3	7,484.4	13.7	13.9	39.64	-121.4	-175.5	285.2	262.4	22.82	12.498		
7,900.0	7,712.8	7,731.4	7,496.8	13.9	14.1	38.99	-157.4	-176.1	289.7	267.1	22.66	12.785		
7,950.0	7,730.8	7,769.3	7,507.3	14.1	14.4	38.46	-193.9	-176.6	293.6	271.0	22.59	12.997		
8,000.0	7,745.5	7,807.1	7,515.8	14.4	14.6	38.05	-230.7	-177.0	296.8	274.1	22.62	13.121		
8,050.0	7,756.7	7,850.0	7,523.0	14.7	14.9	37.73	-273.0	-177.5	299.3	276.5	22.78	13.141		
8,100.0	7,764.6	7,882.6	7,526.8	15.1	15.2	37.56	-305.3	-177.8	301.0	278.0	23.02	13.076		
8,150.0	7,769.0	7,920.2	7,529.4	15.5	15.5	37.47	-342.8	-178.1	302.1	278.7	23.40	12.908		
8,188.1	7,770.0	7,950.2	7,530.0	15.9	15.8	37.47	-372.9	-178.4	302.4	278.6	23.78	12.716		
8,188.6	7,770.0	7,950.2	7,530.0	15.9	15.8	37.47	-372.9	-178.4	302.4	278.6	23.78	12.714		
8,200.0	7,770.0	7,960.3	7,530.0	16.0	15.9	37.48	-382.9	-178.4	302.4	278.5	23.91	12.647		
8,300.0	7,770.0	8,060.3	7,530.0	17.0	16.9	37.59	-482.9	-179.1	302.9	277.7	25.20	12.020		
8,400.0	7,770.0	8,160.3	7,530.0	18.1	18.0	37.69	-582.9	-179.8	303.3	276.7	26.60	11.404		
8,500.0	7,770.0	8,260.3	7,530.0	19.3	19.2	37.79	-682.9	-180.5	303.7	275.6	28.10	10.808		
8,600.0	7,770.0	8,360.3	7,530.0	20.6	20.5	37.90	-782.9	-181.2	304.1	274.4	29.70	10.241		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1G-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,700.0	7,770.0	8,460.3	7,530.0	21.9	21.8	38.00	-882.9	-181.9	304.6	273.2	31.38	9.706		
8,800.0	7,770.0	8,560.3	7,530.0	23.3	23.2	38.11	-982.9	-182.6	305.0	271.9	33.13	9.207		
8,900.0	7,770.0	8,660.3	7,530.0	24.8	24.7	38.21	-1,082.9	-183.3	305.4	270.5	34.94	8.742		
9,000.0	7,770.0	8,760.3	7,530.0	26.3	26.2	38.31	-1,182.9	-184.0	305.9	269.1	36.80	8.311		
9,100.0	7,770.0	8,860.3	7,530.0	27.8	27.7	38.41	-1,282.9	-184.7	306.3	267.6	38.72	7.911		
9,200.0	7,770.0	8,960.3	7,530.0	29.3	29.3	38.52	-1,382.9	-185.4	306.7	266.1	40.67	7.542		
9,300.0	7,770.0	9,060.3	7,530.0	30.9	30.8	38.62	-1,482.9	-186.1	307.2	264.5	42.67	7.199		
9,400.0	7,770.0	9,160.3	7,530.0	32.5	32.4	38.72	-1,582.9	-186.8	307.6	262.9	44.69	6.882		
9,500.0	7,770.0	9,260.3	7,530.0	34.1	34.0	38.82	-1,682.9	-187.5	308.0	261.3	46.75	6.589		
9,600.0	7,770.0	9,360.3	7,530.0	35.7	35.6	38.92	-1,782.9	-188.2	308.5	259.6	48.84	6.316		
9,700.0	7,770.0	9,460.3	7,530.0	37.3	37.3	39.02	-1,882.9	-188.9	308.9	258.0	50.96	6.062		
9,800.0	7,770.0	9,560.3	7,530.0	39.0	38.9	39.12	-1,982.9	-189.6	309.4	256.3	53.10	5.827		
9,900.0	7,770.0	9,660.3	7,530.0	40.6	40.6	39.22	-2,082.9	-190.3	309.8	254.5	55.26	5.607		
10,000.0	7,770.0	9,760.3	7,530.0	42.3	42.2	39.32	-2,182.9	-191.0	310.2	252.8	57.44	5.401		
10,100.0	7,770.0	9,860.3	7,530.0	44.0	43.9	39.42	-2,282.9	-191.7	310.7	251.0	59.64	5.209		
10,200.0	7,770.0	9,960.3	7,530.0	45.6	45.6	39.52	-2,382.8	-192.4	311.1	249.3	61.86	5.030		
10,300.0	7,770.0	10,060.3	7,530.0	47.3	47.2	39.62	-2,482.8	-193.1	311.6	247.5	64.10	4.861		
10,400.0	7,770.0	10,160.3	7,530.0	49.0	48.9	39.72	-2,582.8	-193.8	312.0	245.7	66.35	4.702		
10,500.0	7,770.0	10,260.3	7,530.0	50.7	50.6	39.82	-2,682.8	-194.5	312.5	243.8	68.62	4.553		
10,600.0	7,770.0	10,360.3	7,530.0	52.4	52.3	39.92	-2,782.8	-195.2	312.9	242.0	70.91	4.413		
10,700.0	7,770.0	10,460.3	7,530.0	54.1	54.0	40.01	-2,882.8	-195.9	313.4	240.2	73.21	4.280		
10,800.0	7,770.0	10,560.3	7,530.0	55.8	55.7	40.11	-2,982.8	-196.6	313.8	238.3	75.52	4.155		
10,900.0	7,770.0	10,660.3	7,530.0	57.5	57.4	40.21	-3,082.8	-197.3	314.3	236.4	77.85	4.037		
11,000.0	7,770.0	10,760.3	7,530.0	59.2	59.1	40.31	-3,182.8	-198.0	314.7	234.5	80.19	3.925		
11,100.0	7,770.0	10,860.2	7,530.0	60.9	60.8	40.40	-3,282.8	-198.7	315.2	232.6	82.54	3.818		
11,200.0	7,770.0	10,960.2	7,530.0	62.6	62.5	40.50	-3,382.8	-199.4	315.6	230.7	84.91	3.717		
11,300.0	7,770.0	11,060.2	7,530.0	64.3	64.2	40.60	-3,482.8	-200.1	316.1	228.8	87.29	3.621		
11,400.0	7,770.0	11,160.2	7,530.0	66.0	66.0	40.69	-3,582.8	-200.8	316.5	226.9	89.68	3.530		
11,500.0	7,770.0	11,260.2	7,530.0	67.7	67.7	40.79	-3,682.8	-201.5	317.0	224.9	92.08	3.443		
11,600.0	7,770.0	11,360.2	7,530.0	69.5	69.4	40.88	-3,782.8	-202.2	317.4	223.0	94.49	3.360		
11,700.0	7,770.0	11,460.2	7,530.0	71.2	71.1	40.98	-3,882.8	-202.9	317.9	221.0	96.91	3.280		
11,800.0	7,770.0	11,560.2	7,530.0	72.9	72.8	41.07	-3,982.8	-203.6	318.4	219.0	99.34	3.205		
11,900.0	7,770.0	11,660.2	7,530.0	74.6	74.6	41.17	-4,082.8	-204.3	318.8	217.0	101.78	3.132		
12,000.0	7,770.0	11,760.2	7,530.0	76.4	76.3	41.26	-4,182.8	-205.0	319.3	215.0	104.23	3.063		
12,100.0	7,770.0	11,860.2	7,530.0	78.1	78.0	41.36	-4,282.8	-205.7	319.7	213.0	106.69	2.997		
12,200.0	7,770.0	11,960.2	7,530.0	79.8	79.8	41.45	-4,382.8	-206.4	320.2	211.0	109.17	2.933		
12,300.0	7,770.0	12,060.2	7,530.0	81.5	81.5	41.54	-4,482.7	-207.1	320.7	209.0	111.65	2.872		
12,400.0	7,770.0	12,160.2	7,530.0	83.3	83.2	41.64	-4,582.7	-207.8	321.1	207.0	114.14	2.813		
12,500.0	7,770.0	12,260.2	7,530.0	85.0	84.9	41.73	-4,682.7	-208.5	321.6	205.0	116.64	2.757		
12,600.0	7,770.0	12,360.2	7,530.0	86.7	86.7	41.82	-4,782.7	-209.1	322.1	202.9	119.15	2.703		
12,700.0	7,770.0	12,460.2	7,530.0	88.5	88.4	41.91	-4,882.7	-209.8	322.5	200.9	121.66	2.651		
12,800.0	7,770.0	12,560.2	7,530.0	90.2	90.1	42.01	-4,982.7	-210.5	323.0	198.8	124.19	2.601		
12,900.0	7,770.0	12,660.2	7,530.0	91.9	91.9	42.10	-5,082.7	-211.2	323.5	196.7	126.72	2.552		
13,000.0	7,770.0	12,760.2	7,530.0	93.7	93.6	42.19	-5,182.7	-211.9	323.9	194.7	129.27	2.506		
13,100.0	7,770.0	12,860.2	7,530.0	95.4	95.3	42.28	-5,282.7	-212.6	324.4	192.6	131.82	2.461		
13,200.0	7,770.0	12,960.2	7,530.0	97.1	97.1	42.37	-5,382.7	-213.3	324.9	190.5	134.38	2.418		
13,300.0	7,770.0	13,060.2	7,530.0	98.9	98.8	42.46	-5,482.7	-214.0	325.3	188.4	136.95	2.376		
13,400.0	7,770.0	13,160.2	7,530.0	100.6	100.6	42.55	-5,582.7	-214.7	325.8	186.3	139.52	2.335		
13,500.0	7,770.0	13,260.2	7,530.0	102.4	102.3	42.64	-5,682.7	-215.4	326.3	184.2	142.11	2.296		
13,600.0	7,770.0	13,360.2	7,530.0	104.1	104.0	42.73	-5,782.7	-216.1	326.8	182.1	144.70	2.258		
13,700.0	7,770.0	13,460.2	7,530.0	105.8	105.8	42.82	-5,882.7	-216.8	327.2	179.9	147.30	2.221		
13,800.0	7,770.0	13,560.2	7,530.0	107.6	107.5	42.91	-5,982.7	-217.5	327.7	177.8	149.91	2.186		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 1G-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)	
13,900.0	7,770.0	13,660.2	7,530.0	109.3	109.3	43.00	-6,082.7	-218.2	328.2	175.7	152.52	2.152		
14,000.0	7,770.0	13,760.2	7,530.0	111.1	111.0	43.09	-6,182.7	-218.9	328.7	173.5	155.15	2.118		
14,100.0	7,770.0	13,860.2	7,530.0	112.8	112.7	43.18	-6,282.7	-219.6	329.1	171.4	157.78	2.086		
14,200.0	7,770.0	13,960.2	7,530.0	114.5	114.5	43.27	-6,382.7	-220.3	329.6	169.2	160.41	2.055		
14,300.0	7,770.0	14,060.2	7,530.0	116.3	116.2	43.36	-6,482.6	-221.0	330.1	167.0	163.06	2.024		
14,400.0	7,770.0	14,160.2	7,530.0	118.0	118.0	43.45	-6,582.6	-221.7	330.6	164.9	165.71	1.995		
14,500.0	7,770.0	14,260.2	7,530.0	119.8	119.7	43.53	-6,682.6	-222.4	331.0	162.7	168.37	1.966		
14,600.0	7,770.0	14,360.2	7,530.0	121.5	121.5	43.62	-6,782.6	-223.1	331.5	160.5	171.04	1.938		
14,700.0	7,770.0	14,460.2	7,530.0	123.3	123.2	43.71	-6,882.6	-223.8	332.0	158.3	173.71	1.911		
14,800.0	7,770.0	14,560.2	7,530.0	125.0	124.9	43.79	-6,982.6	-224.5	332.5	156.1	176.39	1.885		
14,900.0	7,770.0	14,660.2	7,530.0	126.7	126.7	43.88	-7,082.6	-225.2	333.0	153.9	179.08	1.859		
15,000.0	7,770.0	14,760.2	7,530.0	128.5	128.4	43.97	-7,182.6	-225.9	333.5	151.7	181.78	1.834		
15,100.0	7,770.0	14,860.2	7,530.0	130.2	130.2	44.05	-7,282.6	-226.6	333.9	149.5	184.48	1.810		
15,200.0	7,770.0	14,960.1	7,530.0	132.0	131.9	44.14	-7,382.6	-227.3	334.4	147.2	187.19	1.787		
15,300.0	7,770.0	15,060.1	7,530.0	133.7	133.7	44.23	-7,482.6	-228.0	334.9	145.0	189.90	1.764		
15,400.0	7,770.0	15,160.1	7,530.0	135.5	135.4	44.31	-7,582.6	-228.7	335.4	142.8	192.62	1.741		
15,500.0	7,770.0	15,260.1	7,530.0	137.2	137.2	44.40	-7,682.6	-229.4	335.9	140.5	195.35	1.719		
15,600.0	7,770.0	15,360.1	7,530.0	139.0	138.9	44.48	-7,782.6	-230.1	336.4	138.3	198.08	1.698		
15,700.0	7,770.0	15,460.1	7,530.0	140.7	140.6	44.57	-7,882.6	-230.8	336.9	136.0	200.82	1.677		
15,800.0	7,770.0	15,560.1	7,530.0	142.4	142.4	44.65	-7,982.6	-231.5	337.4	133.8	203.57	1.657		
15,900.0	7,770.0	15,660.1	7,530.0	144.2	144.1	44.73	-8,082.6	-232.2	337.9	131.5	206.33	1.637		
16,000.0	7,770.0	15,760.1	7,530.0	145.9	145.9	44.82	-8,182.6	-232.9	338.3	129.3	209.09	1.618		
16,100.0	7,770.0	15,860.1	7,530.0	147.7	147.6	44.90	-8,282.6	-233.6	338.8	127.0	211.85	1.599		
16,200.0	7,770.0	15,960.1	7,530.0	149.4	149.4	44.99	-8,382.6	-234.3	339.3	124.7	214.62	1.581		
16,300.0	7,770.0	16,060.1	7,530.0	151.2	151.1	45.07	-8,482.6	-235.0	339.8	122.4	217.40	1.563		
16,400.0	7,770.0	16,160.1	7,530.0	152.9	152.9	45.15	-8,582.5	-235.7	340.3	120.1	220.19	1.546		
16,500.0	7,770.0	16,260.1	7,530.0	154.7	154.6	45.23	-8,682.5	-236.4	340.8	117.8	222.98	1.528		
16,600.0	7,770.0	16,360.1	7,530.0	156.4	156.4	45.32	-8,782.5	-237.1	341.3	115.5	225.77	1.512		
16,700.0	7,770.0	16,460.1	7,530.0	158.2	158.1	45.40	-8,882.5	-237.8	341.8	113.2	228.58	1.495 Level 3		
16,800.0	7,770.0	16,560.1	7,530.0	159.9	159.9	45.48	-8,982.5	-238.5	342.3	110.9	231.38	1.479 Level 3		
16,900.0	7,770.0	16,660.1	7,530.0	161.7	161.6	45.56	-9,082.5	-239.2	342.8	108.6	234.20	1.464 Level 3		
17,000.0	7,770.0	16,760.1	7,530.0	163.4	163.4	45.65	-9,182.5	-239.9	343.3	106.3	237.02	1.448 Level 3		
17,100.0	7,770.0	16,860.1	7,530.0	165.2	165.1	45.73	-9,282.5	-240.6	343.8	104.0	239.84	1.433 Level 3		
17,200.0	7,770.0	16,960.1	7,530.0	166.9	166.9	45.81	-9,382.5	-241.3	344.3	101.6	242.68	1.419 Level 3		
17,300.0	7,770.0	17,060.1	7,530.0	168.7	168.6	45.89	-9,482.5	-242.0	344.8	99.3	245.51	1.404 Level 3		
17,400.0	7,770.0	17,160.1	7,530.0	170.4	170.4	45.97	-9,582.5	-242.7	345.3	96.9	248.36	1.390 Level 3		
17,500.0	7,770.0	17,260.1	7,530.0	172.2	172.1	46.05	-9,682.5	-243.4	345.8	94.6	251.20	1.377 Level 3		
17,600.0	7,770.0	17,360.1	7,530.0	173.9	173.9	46.13	-9,782.5	-244.1	346.3	92.3	254.06	1.363 Level 3		
17,653.1	7,770.0	17,411.2	7,530.0	174.8	174.7	46.17	-9,833.6	-244.4	346.6	91.0	255.54	1.356 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	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			
500.0	500.0	500.0	500.0	0.8	0.8	90.00	0.0	10.1	10.1	8.4	1.70	5.927			
550.0	550.0	550.0	550.0	0.9	0.9	90.00	0.0	10.1	10.1	8.2	1.87	5.375			
591.0	591.0	591.0	591.0	1.0	1.0	90.00	0.0	10.1	10.1	8.1	2.02	4.993 CC			
600.0	600.0	600.0	600.0	1.0	1.0	90.41	0.0	10.1	10.1	8.0	2.05	4.916 ES			
700.0	700.0	699.9	699.9	1.2	1.2	95.81	0.7	10.5	10.6	8.2	2.40	4.412			
800.0	799.9	799.8	799.8	1.4	1.4	101.08	2.9	11.9	12.1	9.4	2.76	4.402			
861.1	860.9	860.8	860.7	1.5	1.5	103.75	5.0	13.3	13.6	10.6	2.98	4.561			
900.0	899.8	899.7	899.6	1.6	1.6	104.69	6.6	14.3	14.7	11.5	3.12	4.701			
1,000.0	999.6	999.6	999.3	1.8	1.7	102.84	11.7	17.5	17.8	14.3	3.50	5.101			
1,100.0	1,099.5	1,099.5	1,099.0	1.9	1.9	99.80	17.5	21.2	21.2	17.4	3.88	5.482			
1,200.0	1,199.3	1,199.4	1,198.7	2.1	2.1	97.61	23.2	24.8	24.7	20.4	4.26	5.800			
1,300.0	1,299.2	1,299.4	1,298.4	2.3	2.3	95.96	28.9	28.5	28.2	23.5	4.65	6.069			
1,400.0	1,399.1	1,399.3	1,398.1	2.5	2.5	94.68	34.6	32.1	31.7	26.7	5.03	6.297			
1,500.0	1,498.9	1,499.3	1,497.8	2.7	2.7	93.65	40.3	35.7	35.2	29.8	5.42	6.494			
1,600.0	1,598.8	1,599.2	1,597.5	2.9	2.9	92.80	46.0	39.4	38.7	32.9	5.81	6.665			
1,700.0	1,698.6	1,699.1	1,697.2	3.1	3.2	92.10	51.7	43.0	42.3	36.1	6.21	6.814			
1,800.0	1,798.5	1,799.1	1,796.9	3.3	3.4	91.51	57.4	46.6	45.8	39.2	6.60	6.946			
1,900.0	1,898.3	1,899.0	1,896.6	3.5	3.6	91.00	63.1	50.3	49.4	42.4	6.99	7.063			
2,000.0	1,998.2	1,998.9	1,996.3	3.7	3.8	90.56	68.8	53.9	52.9	45.5	7.38	7.168			
2,100.0	2,098.0	2,098.9	2,096.0	3.9	4.0	90.18	74.6	57.5	56.5	48.7	7.78	7.262			
2,200.0	2,197.9	2,198.8	2,195.7	4.1	4.2	89.84	80.3	61.2	60.0	51.9	8.17	7.347			
2,300.0	2,297.7	2,298.7	2,295.4	4.3	4.4	89.54	86.0	64.8	63.6	55.0	8.56	7.424			
2,400.0	2,397.6	2,398.7	2,395.1	4.5	4.6	89.27	91.7	68.4	67.1	58.2	8.96	7.494			
2,500.0	2,497.4	2,498.6	2,494.9	4.7	4.8	89.03	97.4	72.1	70.7	61.3	9.35	7.559			
2,600.0	2,597.3	2,598.6	2,594.6	4.9	5.0	88.81	103.1	75.7	74.3	64.5	9.75	7.618			
2,700.0	2,697.1	2,698.5	2,694.3	5.1	5.2	88.61	108.8	79.3	77.8	67.7	10.14	7.672			
2,800.0	2,797.0	2,798.4	2,794.0	5.3	5.4	88.43	114.5	83.0	81.4	70.8	10.54	7.723			
2,900.0	2,896.8	2,898.4	2,893.7	5.5	5.6	88.26	120.2	86.6	84.9	74.0	10.93	7.770			
3,000.0	2,996.7	2,998.3	2,993.4	5.7	5.9	88.11	126.0	90.2	88.5	77.2	11.33	7.813			
3,100.0	3,096.5	3,098.2	3,093.1	5.9	6.1	87.97	131.7	93.9	92.1	80.3	11.72	7.854			
3,200.0	3,196.4	3,198.2	3,192.8	6.1	6.3	87.84	137.4	97.5	95.6	83.5	12.12	7.891			
3,300.0	3,296.3	3,298.1	3,292.5	6.3	6.5	87.71	143.1	101.1	99.2	86.7	12.51	7.927			
3,400.0	3,396.1	3,398.0	3,392.2	6.5	6.7	87.60	148.8	104.8	102.7	89.8	12.91	7.960			
3,500.0	3,496.0	3,498.0	3,491.9	6.7	6.9	87.50	154.5	108.4	106.3	93.0	13.30	7.991			
3,600.0	3,595.8	3,597.9	3,591.6	6.9	7.1	87.40	160.2	112.0	109.9	96.2	13.70	8.021			
3,700.0	3,695.7	3,697.9	3,691.3	7.0	7.3	87.31	165.9	115.7	113.4	99.3	14.09	8.049			
3,800.0	3,795.5	3,797.8	3,791.0	7.2	7.5	87.22	171.6	119.3	117.0	102.5	14.49	8.075			
3,900.0	3,895.4	3,897.7	3,890.7	7.4	7.7	87.14	177.4	122.9	120.6	105.7	14.89	8.100			
4,000.0	3,995.2	3,997.7	3,990.5	7.6	7.9	87.06	183.1	126.6	124.1	108.9	15.28	8.123			
4,100.0	4,095.1	4,097.6	4,090.2	7.8	8.2	86.99	188.8	130.2	127.7	112.0	15.68	8.146			
4,200.0	4,194.9	4,197.5	4,189.9	8.0	8.4	86.92	194.5	133.9	131.3	115.2	16.07	8.167			
4,300.0	4,294.8	4,297.5	4,289.6	8.2	8.6	86.85	200.2	137.5	134.8	118.4	16.47	8.187			
4,400.0	4,394.6	4,397.4	4,389.3	8.4	8.8	86.79	205.9	141.1	138.4	121.5	16.87	8.207			
4,500.0	4,494.5	4,497.3	4,489.0	8.6	9.0	86.73	211.6	144.8	142.0	124.7	17.26	8.225			
4,600.0	4,594.3	4,597.3	4,588.7	8.8	9.2	86.68	217.3	148.4	145.5	127.9	17.66	8.242			
4,700.0	4,694.2	4,697.2	4,688.4	9.0	9.4	86.63	223.0	152.0	149.1	131.1	18.05	8.259			
4,800.0	4,794.0	4,797.2	4,788.1	9.2	9.6	86.58	228.8	155.7	152.7	134.2	18.45	8.275			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 11-7H-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)	
4,900.0	4,893.9	4,897.1	4,887.8		9.4	9.8	86.53	234.5	159.3	156.2	137.4	18.85	8.291	
5,000.0	4,993.7	4,997.0	4,987.5		9.6	10.0	86.48	240.2	162.9	159.8	140.6	19.24	8.305	
5,100.0	5,093.6	5,097.0	5,087.2		9.8	10.3	86.44	245.9	166.6	163.4	143.7	19.64	8.320	
5,200.0	5,193.5	5,196.9	5,186.9		10.0	10.5	86.39	251.6	170.2	166.9	146.9	20.03	8.333	
5,300.0	5,293.3	5,296.8	5,286.6		10.2	10.7	86.35	257.3	173.8	170.5	150.1	20.43	8.346	
5,400.0	5,393.2	5,396.8	5,386.4		10.4	10.9	86.32	263.0	177.5	174.1	153.3	20.83	8.359	
5,500.0	5,493.0	5,496.7	5,486.1		10.6	11.1	86.28	268.7	181.1	177.7	156.4	21.22	8.371	
5,600.0	5,592.9	5,596.6	5,585.8		10.8	11.3	86.24	274.4	184.7	181.2	159.6	21.62	8.383	
5,700.0	5,692.7	5,696.6	5,685.5		11.0	11.5	86.21	280.2	188.4	184.8	162.8	22.01	8.394	
5,800.0	5,792.6	5,796.5	5,785.2		11.2	11.7	86.18	285.9	192.0	188.4	165.9	22.41	8.405	
5,900.0	5,892.4	5,896.5	5,884.9		11.4	11.9	86.14	291.6	195.6	191.9	169.1	22.81	8.415	
6,000.0	5,992.3	5,996.4	5,984.6		11.6	12.2	86.11	297.3	199.3	195.5	172.3	23.20	8.425	
6,100.0	6,092.1	6,096.3	6,084.3		11.8	12.4	86.08	303.0	202.9	199.1	175.5	23.60	8.435	
6,200.0	6,192.0	6,196.3	6,184.0		12.0	12.6	86.06	308.7	206.5	202.6	178.6	24.00	8.444	
6,300.0	6,291.8	6,296.2	6,283.7		12.2	12.8	86.03	314.4	210.2	206.2	181.8	24.39	8.453	
6,400.0	6,391.7	6,396.1	6,383.4		12.4	13.0	86.00	320.1	213.8	209.8	185.0	24.79	8.462	
6,500.0	6,491.5	6,496.1	6,483.1		12.6	13.2	85.98	325.8	217.4	213.3	188.1	25.18	8.471	
6,600.0	6,591.4	6,596.0	6,582.8		12.8	13.4	85.95	331.5	221.1	216.9	191.3	25.58	8.479	
6,700.0	6,691.2	6,695.9	6,682.5		13.0	13.6	85.93	337.3	224.7	220.5	194.5	25.98	8.487	
6,800.0	6,791.1	6,796.0	6,782.4		13.2	13.8	85.92	342.9	228.4	224.0	197.7	26.37	8.495	
6,900.0	6,890.9	6,896.9	6,883.1		13.4	14.0	88.00	340.3	232.0	227.3	200.5	26.75	8.496	
7,000.0	6,990.8	6,993.6	6,978.4		13.6	14.0	93.21	324.5	235.5	231.5	204.4	27.10	8.540	
7,024.2	7,014.9	7,016.1	7,000.1		13.6	14.0	94.83	319.1	236.3	233.0	205.8	27.18	8.573	
7,050.0	7,040.7	7,039.6	7,022.8		13.7	14.0	95.09	312.6	237.1	234.9	207.6	27.25	8.621	
7,100.0	7,090.7	7,084.7	7,065.4		13.7	13.9	-77.96	298.1	238.7	239.2	211.9	27.32	8.756	
7,150.0	7,140.5	7,129.0	7,106.3		13.8	13.9	-75.07	281.3	240.2	244.4	217.0	27.33	8.941	
7,200.0	7,189.9	7,172.5	7,145.5		13.8	13.9	-72.01	262.3	241.6	250.2	222.9	27.28	9.171	
7,250.0	7,238.6	7,215.4	7,182.9		13.8	13.8	-69.10	241.3	243.0	256.5	229.3	27.17	9.440	
7,300.0	7,286.4	7,257.7	7,218.5		13.7	13.8	-66.37	218.5	244.3	263.2	236.2	27.01	9.744	
7,350.0	7,333.1	7,300.0	7,252.6		13.7	13.7	-63.83	193.6	245.5	270.1	243.3	26.80	10.080	
7,400.0	7,378.5	7,340.7	7,284.1		13.6	13.7	-61.53	167.8	246.6	277.2	250.6	26.55	10.441	
7,450.0	7,422.2	7,381.5	7,314.0		13.6	13.7	-59.42	140.1	247.7	284.3	258.0	26.26	10.825	
7,500.0	7,464.1	7,421.9	7,342.1		13.5	13.7	-57.49	111.1	248.8	291.3	265.4	25.95	11.225	
7,550.0	7,504.1	7,461.9	7,368.3		13.5	13.7	-55.75	80.9	249.7	298.2	272.5	25.63	11.634	
7,600.0	7,541.8	7,500.0	7,391.6		13.5	13.7	-54.23	50.8	250.6	304.8	279.5	25.31	12.044	
7,650.0	7,577.2	7,540.9	7,414.8		13.4	13.8	-52.79	17.1	251.4	311.1	286.1	24.99	12.448	
7,700.0	7,610.0	7,580.0	7,435.1		13.5	13.9	-51.54	-16.2	252.1	317.0	292.3	24.71	12.830	
7,750.0	7,640.2	7,618.8	7,453.5		13.5	14.0	-50.45	-50.4	252.8	322.5	298.0	24.45	13.189	
7,800.0	7,667.4	7,657.4	7,469.9		13.6	14.1	-49.49	-85.4	253.4	327.5	303.2	24.25	13.506	
7,850.0	7,691.7	7,700.0	7,485.8		13.7	14.3	-48.61	-124.8	254.0	332.0	307.9	24.12	13.766	
7,900.0	7,712.8	7,734.1	7,496.9		13.9	14.5	-47.97	-157.2	254.4	335.9	311.8	24.07	13.956	
7,950.0	7,730.8	7,772.3	7,507.3		14.1	14.7	-47.39	-193.8	254.8	339.2	315.1	24.12	14.068	
8,000.0	7,745.5	7,810.3	7,515.9		14.4	14.9	-46.92	-230.9	255.1	342.0	317.7	24.26	14.094	
8,050.0	7,756.7	7,850.0	7,522.6		14.7	15.2	-46.56	-270.0	255.3	344.1	319.6	24.53	14.026	
8,100.0	7,764.6	7,886.1	7,526.9		15.1	15.5	-46.33	-305.8	255.5	345.6	320.6	24.91	13.872	
8,150.0	7,769.0	7,923.9	7,529.4		15.5	15.8	-46.20	-343.6	255.6	346.4	321.0	25.41	13.631	
8,188.1	7,770.0	7,952.9	7,530.0		15.9	16.1	-46.17	-372.6	255.6	346.6	320.7	25.87	13.397	
8,188.6	7,770.0	7,953.2	7,530.0		15.9	16.1	-46.17	-372.8	255.6	346.6	320.7	25.87	13.395	
8,200.0	7,770.0	7,964.6	7,530.0		16.0	16.2	-46.17	-384.2	255.6	346.6	320.5	26.03	13.314	
8,300.0	7,770.0	8,064.6	7,530.0		17.0	17.2	-46.17	-484.2	255.6	346.6	319.1	27.50	12.604	
8,400.0	7,770.0	8,164.6	7,530.0		18.1	18.3	-46.17	-584.2	255.6	346.6	317.5	29.10	11.909	
8,500.0	7,770.0	8,264.6	7,530.0		19.3	19.5	-46.17	-684.2	255.6	346.6	315.7	30.84	11.239	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,600.0	7,770.0	8,364.6	7,530.0	20.6	20.7	-46.17	-784.2	255.6	346.6	313.9	32.68	10.606	
8,700.0	7,770.0	8,464.6	7,530.0	21.9	22.1	-46.17	-884.2	255.6	346.6	312.0	34.60	10.015	
8,800.0	7,770.0	8,564.6	7,530.0	23.3	23.5	-46.17	-984.2	255.6	346.6	310.0	36.61	9.466	
8,900.0	7,770.0	8,664.6	7,530.0	24.8	24.9	-46.17	-1,084.2	255.6	346.6	307.9	38.68	8.960	
9,000.0	7,770.0	8,764.6	7,530.0	26.3	26.4	-46.17	-1,184.2	255.6	346.6	305.8	40.80	8.494	
9,100.0	7,770.0	8,864.6	7,530.0	27.8	27.9	-46.17	-1,284.2	255.6	346.6	303.6	42.97	8.065	
9,200.0	7,770.0	8,964.6	7,530.0	29.3	29.4	-46.17	-1,384.2	255.6	346.6	301.4	45.18	7.671	
9,300.0	7,770.0	9,064.6	7,530.0	30.9	31.0	-46.17	-1,484.2	255.6	346.6	299.1	47.42	7.309	
9,400.0	7,770.0	9,164.6	7,530.0	32.5	32.6	-46.17	-1,584.2	255.6	346.6	296.9	49.69	6.975	
9,500.0	7,770.0	9,264.6	7,530.0	34.1	34.2	-46.17	-1,684.2	255.6	346.6	294.6	51.99	6.666	
9,600.0	7,770.0	9,364.6	7,530.0	35.7	35.8	-46.17	-1,784.2	255.6	346.6	292.3	54.30	6.382	
9,700.0	7,770.0	9,464.6	7,530.0	37.3	37.4	-46.17	-1,884.2	255.6	346.6	289.9	56.64	6.118	
9,800.0	7,770.0	9,564.6	7,530.0	39.0	39.0	-46.17	-1,984.2	255.6	346.6	287.6	59.00	5.874	
9,900.0	7,770.0	9,664.6	7,530.0	40.6	40.7	-46.17	-2,084.2	255.6	346.6	285.2	61.37	5.647	
10,000.0	7,770.0	9,764.6	7,530.0	42.3	42.3	-46.17	-2,184.2	255.6	346.6	282.8	63.75	5.436	
10,100.0	7,770.0	9,864.6	7,530.0	44.0	44.0	-46.17	-2,284.2	255.6	346.6	280.4	66.15	5.239	
10,200.0	7,770.0	9,964.6	7,530.0	45.6	45.7	-46.17	-2,384.2	255.6	346.6	278.0	68.55	5.055	
10,300.0	7,770.0	10,064.6	7,530.0	47.3	47.3	-46.17	-2,484.2	255.6	346.6	275.6	70.97	4.883	
10,400.0	7,770.0	10,164.6	7,530.0	49.0	49.0	-46.17	-2,584.2	255.6	346.6	273.2	73.40	4.722	
10,500.0	7,770.0	10,264.6	7,530.0	50.7	50.7	-46.17	-2,684.2	255.6	346.6	270.7	75.83	4.570	
10,600.0	7,770.0	10,364.6	7,530.0	52.4	52.4	-46.17	-2,784.2	255.6	346.6	268.3	78.27	4.428	
10,700.0	7,770.0	10,464.6	7,530.0	54.1	54.1	-46.17	-2,884.2	255.6	346.6	265.8	80.71	4.294	
10,800.0	7,770.0	10,564.6	7,530.0	55.8	55.8	-46.17	-2,984.2	255.6	346.6	263.4	83.17	4.167	
10,900.0	7,770.0	10,664.6	7,530.0	57.5	57.5	-46.17	-3,084.2	255.6	346.6	260.9	85.63	4.047	
11,000.0	7,770.0	10,764.6	7,530.0	59.2	59.2	-46.17	-3,184.2	255.6	346.6	258.5	88.09	3.934	
11,100.0	7,770.0	10,864.6	7,530.0	60.9	60.9	-46.17	-3,284.2	255.6	346.6	256.0	90.56	3.827	
11,200.0	7,770.0	10,964.6	7,530.0	62.6	62.6	-46.17	-3,384.2	255.6	346.6	253.5	93.03	3.725	
11,300.0	7,770.0	11,064.6	7,530.0	64.3	64.3	-46.17	-3,484.2	255.6	346.6	251.1	95.50	3.629	
11,400.0	7,770.0	11,164.6	7,530.0	66.0	66.0	-46.17	-3,584.2	255.6	346.6	248.6	97.98	3.537	
11,500.0	7,770.0	11,264.6	7,530.0	67.7	67.8	-46.17	-3,684.2	255.6	346.6	246.1	100.46	3.450	
11,600.0	7,770.0	11,364.6	7,530.0	69.5	69.5	-46.17	-3,784.2	255.6	346.6	243.6	102.95	3.366	
11,700.0	7,770.0	11,464.6	7,530.0	71.2	71.2	-46.17	-3,884.2	255.6	346.6	241.1	105.44	3.287	
11,800.0	7,770.0	11,564.6	7,530.0	72.9	72.9	-46.17	-3,984.2	255.6	346.6	238.6	107.93	3.211	
11,900.0	7,770.0	11,664.6	7,530.0	74.6	74.6	-46.17	-4,084.2	255.6	346.6	236.1	110.42	3.139	
12,000.0	7,770.0	11,764.6	7,530.0	76.4	76.4	-46.17	-4,184.2	255.6	346.6	233.6	112.92	3.069	
12,100.0	7,770.0	11,864.6	7,530.0	78.1	78.1	-46.17	-4,284.2	255.6	346.6	231.1	115.41	3.003	
12,200.0	7,770.0	11,964.6	7,530.0	79.8	79.8	-46.17	-4,384.2	255.6	346.6	228.6	117.91	2.939	
12,300.0	7,770.0	12,064.6	7,530.0	81.5	81.5	-46.17	-4,484.2	255.6	346.6	226.1	120.42	2.878	
12,400.0	7,770.0	12,164.6	7,530.0	83.3	83.3	-46.17	-4,584.2	255.6	346.6	223.6	122.92	2.819	
12,500.0	7,770.0	12,264.6	7,530.0	85.0	85.0	-46.17	-4,684.2	255.6	346.6	221.1	125.43	2.763	
12,600.0	7,770.0	12,364.6	7,530.0	86.7	86.7	-46.17	-4,784.2	255.6	346.6	218.6	127.93	2.709	
12,700.0	7,770.0	12,464.6	7,530.0	88.5	88.5	-46.17	-4,884.2	255.6	346.6	216.1	130.44	2.657	
12,800.0	7,770.0	12,564.6	7,530.0	90.2	90.2	-46.17	-4,984.2	255.6	346.6	213.6	132.95	2.607	
12,900.0	7,770.0	12,664.6	7,530.0	91.9	91.9	-46.17	-5,084.2	255.6	346.6	211.1	135.46	2.558	
13,000.0	7,770.0	12,764.6	7,530.0	93.7	93.7	-46.17	-5,184.2	255.6	346.6	208.6	137.97	2.512	
13,100.0	7,770.0	12,864.6	7,530.0	95.4	95.4	-46.17	-5,284.2	255.6	346.6	206.1	140.49	2.467	
13,200.0	7,770.0	12,964.6	7,530.0	97.1	97.1	-46.17	-5,384.2	255.6	346.6	203.6	143.00	2.423	
13,300.0	7,770.0	13,064.6	7,530.0	98.9	98.9	-46.17	-5,484.2	255.6	346.6	201.0	145.52	2.382	
13,400.0	7,770.0	13,164.6	7,530.0	100.6	100.6	-46.17	-5,584.2	255.6	346.6	198.5	148.03	2.341	
13,500.0	7,770.0	13,264.6	7,530.0	102.4	102.4	-46.17	-5,684.2	255.6	346.6	196.0	150.55	2.302	
13,600.0	7,770.0	13,364.6	7,530.0	104.1	104.1	-46.17	-5,784.2	255.6	346.6	193.5	153.07	2.264	
13,700.0	7,770.0	13,464.6	7,530.0	105.8	105.8	-46.17	-5,884.2	255.6	346.6	191.0	155.59	2.227	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
13,800.0	7,770.0	13,564.6	7,530.0	107.6	107.6	-46.17	-5,984.2	255.6	346.6	188.5	2.192		
13,900.0	7,770.0	13,664.6	7,530.0	109.3	109.3	-46.17	-6,084.2	255.6	346.6	185.9	2.158		
14,000.0	7,770.0	13,764.6	7,530.0	111.1	111.0	-46.17	-6,184.2	255.6	346.6	183.4	2.124		
14,100.0	7,770.0	13,864.6	7,530.0	112.8	112.8	-46.17	-6,284.2	255.6	346.6	180.9	2.092		
14,200.0	7,770.0	13,964.6	7,530.0	114.5	114.5	-46.17	-6,384.2	255.6	346.6	178.4	2.060		
14,300.0	7,770.0	14,064.6	7,530.0	116.3	116.3	-46.17	-6,484.2	255.6	346.6	175.8	2.030		
14,400.0	7,770.0	14,164.6	7,530.0	118.0	118.0	-46.17	-6,584.2	255.6	346.6	173.3	2.000		
14,500.0	7,770.0	14,264.6	7,530.0	119.8	119.8	-46.17	-6,684.2	255.6	346.6	170.8	1.972		
14,600.0	7,770.0	14,364.6	7,530.0	121.5	121.5	-46.17	-6,784.2	255.6	346.6	168.3	1.944		
14,700.0	7,770.0	14,464.6	7,530.0	123.3	123.2	-46.17	-6,884.2	255.6	346.6	165.7	1.917		
14,800.0	7,770.0	14,564.6	7,530.0	125.0	125.0	-46.17	-6,984.2	255.6	346.6	163.2	1.890		
14,900.0	7,770.0	14,664.6	7,530.0	126.7	126.7	-46.17	-7,084.2	255.6	346.6	160.7	1.864		
15,000.0	7,770.0	14,764.6	7,530.0	128.5	128.5	-46.17	-7,184.2	255.6	346.6	158.2	1.839		
15,100.0	7,770.0	14,864.6	7,530.0	130.2	130.2	-46.17	-7,284.2	255.6	346.6	155.6	1.815		
15,200.0	7,770.0	14,964.6	7,530.0	132.0	132.0	-46.17	-7,384.2	255.6	346.6	153.1	1.791		
15,300.0	7,770.0	15,064.6	7,530.0	133.7	133.7	-46.17	-7,484.2	255.6	346.6	150.6	1.768		
15,400.0	7,770.0	15,164.6	7,530.0	135.5	135.4	-46.17	-7,584.2	255.6	346.6	148.0	1.746		
15,500.0	7,770.0	15,264.6	7,530.0	137.2	137.2	-46.17	-7,684.2	255.6	346.6	145.5	1.724		
15,600.0	7,770.0	15,364.6	7,530.0	139.0	138.9	-46.17	-7,784.2	255.6	346.6	143.0	1.702		
15,700.0	7,770.0	15,464.6	7,530.0	140.7	140.7	-46.17	-7,884.2	255.6	346.6	140.5	1.681		
15,800.0	7,770.0	15,564.6	7,530.0	142.4	142.4	-46.17	-7,984.2	255.6	346.6	137.9	1.661		
15,900.0	7,770.0	15,664.6	7,530.0	144.2	144.2	-46.17	-8,084.2	255.6	346.6	135.4	1.641		
16,000.0	7,770.0	15,764.6	7,530.0	145.9	145.9	-46.17	-8,184.2	255.6	346.6	132.9	1.622		
16,100.0	7,770.0	15,864.6	7,530.0	147.7	147.7	-46.17	-8,284.2	255.6	346.6	130.3	1.603		
16,200.0	7,770.0	15,964.6	7,530.0	149.4	149.4	-46.17	-8,384.2	255.6	346.6	127.8	1.584		
16,300.0	7,770.0	16,064.6	7,530.0	151.2	151.2	-46.17	-8,484.2	255.6	346.6	125.3	1.566		
16,400.0	7,770.0	16,164.6	7,530.0	152.9	152.9	-46.17	-8,584.2	255.6	346.6	122.7	1.548		
16,500.0	7,770.0	16,264.6	7,530.0	154.7	154.7	-46.17	-8,684.2	255.6	346.6	120.2	1.531		
16,600.0	7,770.0	16,364.6	7,530.0	156.4	156.4	-46.17	-8,784.2	255.6	346.6	117.7	1.514		
16,700.0	7,770.0	16,464.6	7,530.0	158.2	158.1	-46.17	-8,884.2	255.6	346.6	115.1	1.497 Level 3		
16,800.0	7,770.0	16,564.6	7,530.0	159.9	159.9	-46.17	-8,984.2	255.6	346.6	112.6	1.481 Level 3		
16,900.0	7,770.0	16,664.6	7,530.0	161.7	161.6	-46.17	-9,084.2	255.6	346.6	110.1	1.465 Level 3		
17,000.0	7,770.0	16,764.6	7,530.0	163.4	163.4	-46.17	-9,184.2	255.6	346.6	107.5	1.450 Level 3		
17,100.0	7,770.0	16,864.6	7,530.0	165.2	165.1	-46.17	-9,284.2	255.6	346.6	105.0	1.435 Level 3		
17,200.0	7,770.0	16,964.6	7,530.0	166.9	166.9	-46.17	-9,384.2	255.6	346.6	102.5	1.420 Level 3		
17,300.0	7,770.0	17,064.6	7,530.0	168.7	168.6	-46.17	-9,484.2	255.6	346.6	99.9	1.405 Level 3		
17,400.0	7,770.0	17,164.6	7,530.0	170.4	170.4	-46.17	-9,584.2	255.6	346.6	97.4	1.391 Level 3		
17,500.0	7,770.0	17,264.6	7,530.0	172.2	172.1	-46.17	-9,684.2	255.6	346.6	94.9	1.377 Level 3		
17,600.0	7,770.0	17,364.6	7,530.0	173.9	173.9	-46.17	-9,784.2	255.6	346.6	92.3	1.363 Level 3		
17,653.1	7,770.0	17,417.7	7,530.0	174.8	174.8	-46.17	-9,837.3	255.6	346.6	91.0	1.356 Level 3, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-149.04	-6,136.7	-3,681.0	7,156.1					
100.0	100.0	109.7	109.7	0.2	0.2	-149.04	-6,136.6	-3,681.1	7,156.0	7,155.6	0.34	N/A		
200.0	200.0	224.0	223.9	0.3	0.4	-149.04	-6,136.1	-3,681.3	7,155.7	7,155.0	0.72	9,995.500		
300.0	300.0	338.2	338.2	0.5	0.6	-149.03	-6,135.2	-3,681.6	7,155.2	7,154.1	1.09	6,569.604		
400.0	400.0	452.4	452.4	0.7	0.8	-149.03	-6,134.0	-3,682.1	7,154.5	7,153.1	1.46	4,892.398		
500.0	500.0	566.7	566.6	0.8	1.0	-149.01	-6,132.5	-3,682.6	7,153.6	7,151.8	1.84	3,897.168		
550.0	550.0	623.8	623.8	0.9	1.1	-149.01	-6,131.6	-3,683.0	7,153.1	7,151.1	2.02	3,537.289		
600.0	600.0	680.9	680.9	1.0	1.2	-149.84	-6,130.6	-3,683.3	7,152.7	7,150.5	2.21	3,237.773		
633.0	632.9	718.5	718.5	1.1	1.3	-149.84	-6,130.0	-3,683.6	7,152.7	7,150.3	2.33	3,066.986		
700.0	700.0	795.1	795.1	1.2	1.4	-149.83	-6,128.4	-3,684.1	7,153.0	7,150.4	2.58	2,770.030		
800.0	799.9	973.0	972.8	1.4	1.7	-149.80	-6,122.2	-3,688.3	7,154.3	7,151.2	3.09	2,313.839		
861.1	860.9	1,034.9	1,034.5	1.5	1.9	-149.77	-6,118.6	-3,691.3	7,155.4	7,152.0	3.32	2,152.122		
900.0	899.8	1,093.9	1,093.2	1.6	2.0	-149.74	-6,114.6	-3,694.9	7,156.2	7,152.6	3.52	2,030.857		
1,000.0	999.6	1,325.1	1,322.4	1.8	2.6	-149.56	-6,092.0	-3,715.1	7,156.7	7,152.4	4.28	1,671.279		
1,100.0	1,099.5	1,513.0	1,507.5	1.9	3.2	-149.36	-6,068.0	-3,736.2	7,156.3	7,151.3	5.02	1,425.506		
1,200.0	1,199.3	1,591.1	1,584.2	2.1	3.4	-149.26	-6,056.7	-3,746.2	7,155.3	7,149.8	5.46	1,310.812		
1,300.0	1,299.2	1,637.9	1,630.1	2.3	3.6	-149.20	-6,050.2	-3,752.3	7,154.8	7,149.0	5.79	1,236.118		
1,400.0	1,399.1	1,878.3	1,866.4	2.5	4.4	-148.92	-6,016.9	-3,780.9	7,154.0	7,147.2	6.77	1,057.286		
1,500.0	1,498.9	1,931.2	1,918.3	2.7	4.6	-148.85	-6,009.0	-3,787.5	7,152.4	7,145.2	7.13	1,003.136		
1,600.0	1,598.8	2,020.0	2,005.5	2.9	4.9	-148.74	-5,996.0	-3,798.5	7,151.2	7,143.6	7.62	938.899		
1,700.0	1,698.6	2,157.4	2,140.4	3.1	5.4	-148.57	-5,975.6	-3,814.9	7,149.4	7,141.2	8.28	863.813		
1,800.0	1,798.5	2,212.0	2,194.0	3.3	5.6	-148.50	-5,967.6	-3,821.7	7,148.1	7,139.5	8.65	826.162		
1,900.0	1,898.3	2,275.0	2,255.9	3.5	5.9	-148.43	-5,958.8	-3,829.6	7,147.6	7,138.5	9.05	789.795		
2,000.0	1,998.2	2,496.0	2,473.2	3.7	6.7	-148.17	-5,927.4	-3,854.8	7,146.2	7,136.2	9.99	715.163		
2,100.0	2,098.0	2,560.0	2,536.1	3.9	6.9	-148.10	-5,918.1	-3,861.9	7,144.4	7,134.1	10.39	687.732		
2,200.0	2,197.9	2,631.4	2,606.3	4.1	7.1	-148.02	-5,908.0	-3,870.0	7,143.2	7,132.4	10.82	660.100		
2,300.0	2,297.7	2,749.4	2,722.1	4.3	7.6	-147.87	-5,890.3	-3,884.3	7,141.7	7,130.3	11.43	624.882		
2,400.0	2,397.6	2,816.4	2,787.9	4.5	7.8	-147.79	-5,880.8	-3,892.0	7,140.6	7,128.7	11.84	602.982		
2,500.0	2,497.4	2,938.1	2,907.6	4.7	8.3	-147.65	-5,863.5	-3,906.1	7,139.5	7,127.0	12.45	573.323		
2,600.0	2,597.3	3,037.0	3,004.7	4.9	8.6	-147.53	-5,849.2	-3,917.7	7,138.3	7,125.4	12.99	549.645		
2,700.0	2,697.1	3,118.1	3,084.5	5.1	8.9	-147.43	-5,837.6	-3,927.2	7,137.3	7,123.9	13.45	530.473		
2,800.0	2,797.0	3,231.3	3,195.7	5.3	9.3	-147.30	-5,821.4	-3,940.4	7,136.3	7,122.3	14.04	508.310		
2,900.0	2,896.8	3,313.2	3,276.2	5.5	9.6	-147.20	-5,809.6	-3,950.0	7,135.3	7,120.8	14.51	491.746		
3,000.0	2,996.7	3,386.0	3,347.8	5.7	9.9	-147.12	-5,799.7	-3,958.3	7,134.8	7,119.8	14.94	477.515		
3,100.0	3,096.5	3,523.1	3,482.6	5.9	10.4	-146.96	-5,780.4	-3,974.4	7,134.0	7,118.4	15.62	456.805		
3,200.0	3,196.4	3,618.5	3,576.4	6.1	10.7	-146.85	-5,766.8	-3,985.4	7,133.2	7,117.0	16.14	442.045		
3,300.0	3,296.3	3,723.9	3,680.0	6.3	11.1	-146.72	-5,751.9	-3,997.5	7,132.3	7,115.6	16.69	427.358		
3,400.0	3,396.1	3,817.9	3,772.5	6.5	11.4	-146.62	-5,738.6	-4,008.0	7,131.4	7,114.2	17.21	414.425		
3,500.0	3,496.0	3,986.2	3,937.8	6.7	12.1	-146.41	-5,713.8	-4,027.5	7,130.3	7,112.3	17.99	396.247		
3,600.0	3,595.8	4,071.3	4,021.5	6.9	12.4	-146.32	-5,701.3	-4,036.7	7,128.7	7,110.2	18.47	385.876		
3,700.0	3,695.7	4,149.0	4,097.9	7.0	12.6	-146.23	-5,690.0	-4,044.9	7,127.2	7,108.3	18.93	376.577		
3,800.0	3,795.5	4,209.1	4,157.0	7.2	12.9	-146.16	-5,681.4	-4,051.6	7,126.2	7,106.9	19.33	368.713		
3,898.6	3,894.0	4,264.0	4,210.9	7.4	13.1	-146.10	-5,673.7	-4,058.1	7,125.9	7,106.2	19.70	361.660		
3,900.0	3,895.4	4,264.9	4,211.9	7.4	13.1	-146.09	-5,673.6	-4,058.2	7,125.9	7,106.2	19.71	361.554		
4,000.0	3,995.2	4,339.0	4,284.8	7.6	13.3	-146.01	-5,663.8	-4,066.9	7,126.2	7,106.0	20.15	353.689		
4,100.0	4,095.1	4,463.2	4,407.2	7.8	13.8	-145.87	-5,647.5	-4,080.7	7,126.2	7,105.5	20.75	343.385		
4,200.0	4,194.9	4,529.0	4,472.1	8.0	14.0	-145.81	-5,639.3	-4,087.8	7,126.6	7,105.4	21.15	336.926		
4,300.0	4,294.8	4,651.2	4,592.5	8.2	14.4	-145.67	-5,623.7	-4,101.2	7,126.9	7,105.1	21.76	327.549		
4,400.0	4,394.6	4,752.6	4,692.5	8.4	14.7	-145.57	-5,611.0	-4,112.1	7,127.3	7,105.0	22.28	319.964		
4,500.0	4,494.5	4,857.0	4,795.6	8.6	15.1	-145.47	-5,598.1	-4,122.5	7,127.4	7,104.6	22.79	312.721		
4,600.0	4,594.3	4,934.4	4,872.1	8.8	15.3	-145.40	-5,589.2	-4,129.6	7,127.7	7,104.5	23.21	307.129		
4,700.0	4,694.2	5,073.4	5,009.8	9.0	15.7	-145.28	-5,573.1	-4,141.2	7,127.4	7,103.6	23.80	299.427		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
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			
4,702.8	4,697.0	5,074.6	5,010.9	9.0	15.7	-145.28	-5,573.0	-4,141.3	7,127.4	7,103.6	23.81	299.320				
4,800.0	4,794.0	5,100.0	5,036.1	9.2	15.8	-145.26	-5,570.2	-4,143.3	7,127.9	7,103.8	24.06	296.227				
4,900.0	4,893.9	5,164.0	5,099.5	9.4	16.0	-145.21	-5,563.6	-4,148.8	7,129.0	7,104.5	24.43	291.767				
5,000.0	4,993.7	5,312.0	5,246.0	9.6	16.4	-145.08	-5,547.6	-4,162.1	7,129.7	7,104.7	25.06	284.457				
5,100.0	5,093.6	5,386.0	5,319.3	9.8	16.7	-145.02	-5,539.9	-4,168.7	7,130.9	7,105.4	25.46	280.031				
5,200.0	5,193.5	5,502.1	5,434.4	10.0	17.0	-144.93	-5,527.9	-4,178.6	7,131.9	7,105.9	25.98	274.497				
5,300.0	5,293.3	5,598.4	5,529.9	10.2	17.3	-144.86	-5,518.6	-4,186.3	7,133.2	7,106.7	26.43	269.843				
5,400.0	5,393.2	5,706.0	5,636.7	10.4	17.6	-144.78	-5,507.9	-4,194.6	7,134.1	7,107.2	26.91	265.121				
5,500.0	5,493.0	5,774.6	5,704.8	10.6	17.7	-144.74	-5,501.6	-4,199.4	7,135.3	7,108.0	27.27	261.691				
5,600.0	5,592.9	5,829.1	5,759.0	10.8	17.9	-144.71	-5,497.1	-4,203.1	7,137.0	7,109.4	27.58	258.774				
5,700.0	5,692.7	5,897.0	5,826.6	11.0	18.0	-144.67	-5,492.4	-4,207.4	7,139.4	7,111.5	27.92	255.737				
5,800.0	5,792.6	5,980.8	5,910.1	11.2	18.2	-144.64	-5,487.5	-4,211.9	7,142.2	7,114.0	28.27	252.650				
5,900.0	5,892.4	6,109.5	6,038.7	11.4	18.4	-144.62	-5,481.9	-4,215.8	7,145.0	7,116.3	28.65	249.358				
6,000.0	5,992.3	6,164.4	6,093.5	11.6	18.5	-144.63	-5,480.2	-4,216.3	7,147.6	7,118.7	28.91	247.260				
6,100.0	6,092.1	6,215.0	6,144.1	11.8	18.5	-144.63	-5,479.2	-4,216.8	7,150.9	7,121.8	29.15	245.284				
6,200.0	6,192.0	6,344.4	6,273.5	12.0	18.7	-144.65	-5,477.3	-4,218.1	7,154.8	7,125.3	29.50	242.524				
6,300.0	6,291.8	6,470.0	6,399.1	12.2	18.8	-144.68	-5,475.7	-4,217.3	7,157.8	7,128.0	29.81	240.129				
6,400.0	6,391.7	6,504.2	6,433.2	12.4	18.9	-144.69	-5,475.5	-4,216.8	7,161.2	7,131.1	30.03	238.480				
6,500.0	6,491.5	6,566.0	6,495.1	12.6	18.9	-144.70	-5,475.7	-4,216.9	7,165.6	7,135.3	30.28	236.654				
6,600.0	6,591.4	6,590.4	6,519.5	12.8	19.0	-144.71	-5,475.9	-4,217.1	7,170.6	7,140.1	30.49	235.192				
6,700.0	6,691.2	6,768.4	6,697.5	13.0	19.1	-144.75	-5,476.0	-4,217.5	7,175.1	7,144.3	30.86	232.479				
6,800.0	6,791.1	6,915.7	6,844.7	13.2	19.3	-144.78	-5,475.2	-4,217.3	7,179.0	7,147.8	31.21	230.014				
6,900.0	6,890.9	7,020.3	6,949.3	13.4	19.4	-144.81	-5,474.4	-4,217.0	7,182.6	7,151.1	31.51	227.952				
7,000.0	6,990.8	7,100.0	7,029.0	13.6	19.5	-144.83	-5,473.9	-4,216.6	7,186.3	7,154.5	31.78	226.133				
7,024.2	7,014.9	7,121.0	7,050.0	13.6	19.5	-144.84	-5,473.8	-4,216.5	7,187.2	7,155.4	31.85	225.686				
7,050.0	7,040.7	7,159.7	7,088.7	13.7	19.6	-146.52	-5,473.7	-4,216.3	7,187.9	7,155.9	31.94	225.055				
7,100.0	7,090.7	7,229.3	7,158.3	13.7	19.7	36.90	-5,473.1	-4,216.0	7,186.7	7,154.7	32.06	224.187				
7,150.0	7,140.5	7,270.8	7,199.8	13.8	19.7	36.60	-5,472.8	-4,215.8	7,182.8	7,150.7	32.08	223.935				
7,200.0	7,189.9	7,311.9	7,241.0	13.8	19.8	36.82	-5,472.5	-4,215.7	7,176.1	7,144.1	32.03	224.053				
7,250.0	7,238.6	7,342.0	7,271.0	13.8	19.8	37.24	-5,472.3	-4,215.6	7,166.8	7,134.8	31.91	224.603				
7,300.0	7,286.4	7,391.3	7,320.3	13.7	19.9	37.88	-5,472.0	-4,215.5	7,154.7	7,123.0	31.76	225.300				
7,350.0	7,333.1	7,429.3	7,358.3	13.7	19.9	38.69	-5,471.8	-4,215.3	7,140.1	7,108.5	31.55	226.328				
7,400.0	7,378.5	7,466.3	7,395.3	13.6	19.9	39.67	-5,471.8	-4,215.2	7,122.9	7,091.6	31.31	227.531				
7,450.0	7,422.2	7,502.0	7,431.1	13.6	20.0	40.86	-5,471.7	-4,215.2	7,103.4	7,072.3	31.04	228.820				
7,500.0	7,464.1	7,536.4	7,465.4	13.5	20.0	42.25	-5,471.7	-4,215.1	7,081.5	7,050.7	30.78	230.082				
7,550.0	7,504.1	7,569.1	7,498.1	13.5	20.0	43.87	-5,471.8	-4,215.0	7,057.4	7,026.9	30.53	231.182				
7,600.0	7,541.8	7,600.1	7,529.1	13.5	20.1	45.73	-5,471.9	-4,214.9	7,031.2	7,000.9	30.31	231.962				
7,650.0	7,577.2	7,633.0	7,562.0	13.4	20.1	47.87	-5,472.0	-4,214.8	7,003.1	6,972.9	30.16	232.204				
7,700.0	7,610.0	7,655.3	7,584.3	13.5	20.1	50.26	-5,472.1	-4,214.8	6,973.1	6,943.0	30.07	231.899				
7,750.0	7,640.2	7,679.1	7,608.1	13.5	20.2	52.97	-5,472.2	-4,214.7	6,941.5	6,911.4	30.08	230.747				
7,800.0	7,667.4	7,700.7	7,629.7	13.6	20.2	56.00	-5,472.4	-4,214.7	6,908.4	6,878.2	30.21	228.704				
7,850.0	7,691.7	7,726.0	7,655.0	13.7	20.2	59.42	-5,472.5	-4,214.7	6,874.0	6,843.6	30.46	225.656				
7,900.0	7,712.8	7,741.1	7,670.2	13.9	20.2	63.11	-5,472.7	-4,214.7	6,838.5	6,807.6	30.82	221.910				
7,950.0	7,730.8	7,761.2	7,690.2	14.1	20.3	67.20	-5,472.8	-4,214.8	6,801.9	6,770.6	31.29	217.407				
8,000.0	7,745.5	7,777.6	7,706.6	14.4	20.3	71.58	-5,472.9	-4,214.8	6,764.6	6,732.8	31.83	212.552				
8,050.0	7,756.7	7,790.2	7,719.3	14.7	20.3	76.21	-5,473.0	-4,214.8	6,726.7	6,694.3	32.40	207.639				
8,100.0	7,764.6	7,799.1	7,728.2	15.1	20.3	81.00	-5,473.0	-4,214.8	6,688.3	6,655.4	32.96	202.935				
8,150.0	7,769.0	7,804.2	7,733.3	15.5	20.3	85.87	-5,473.0	-4,214.8	6,649.8	6,616.3	33.48	198.639				
8,188.1	7,770.0	7,805.6	7,734.6	15.9	20.3	89.57	-5,473.0	-4,214.8	6,620.5	6,586.6	33.83	195.713				
8,200.0	7,770.0	7,805.6	7,734.7	16.0	20.3	89.57	-5,473.0	-4,214.8	6,611.3	6,577.3	33.94	194.804				
8,300.0	7,770.0	7,806.2	7,735.2	17.0	20.3	89.58	-5,473.0	-4,214.8	6,534.6	6,499.7	34.94	187.035				
8,400.0	7,770.0	7,806.8	7,735.8	18.1	20.3	89.59	-5,473.0	-4,214.8	6,458.6	6,422.5	36.05	179.141				

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,500.0	7,770.0	7,807.4	7,736.4	19.3	20.3	89.60	-5,473.1	-4,214.8	6,383.2	6,345.9	37.26	171.299		
8,600.0	7,770.0	7,808.0	7,737.0	20.6	20.3	89.61	-5,473.1	-4,214.8	6,308.5	6,270.0	38.55	163.634		
8,700.0	7,770.0	7,808.6	7,737.6	21.9	20.3	89.61	-5,473.1	-4,214.8	6,234.6	6,194.7	39.91	156.229		
8,800.0	7,770.0	7,809.1	7,738.2	23.3	20.3	89.62	-5,473.1	-4,214.8	6,161.3	6,120.0	41.31	149.135		
8,900.0	7,770.0	7,809.7	7,738.7	24.8	20.3	89.63	-5,473.1	-4,214.8	6,088.9	6,046.1	42.77	142.379		
9,000.0	7,770.0	7,810.3	7,739.3	26.3	20.3	89.64	-5,473.1	-4,214.8	6,017.2	5,972.9	44.25	135.970		
9,100.0	7,770.0	7,810.9	7,739.9	27.8	20.3	89.65	-5,473.1	-4,214.8	5,946.3	5,900.6	45.77	129.907		
9,200.0	7,770.0	7,811.4	7,740.5	29.3	20.3	89.65	-5,473.1	-4,214.8	5,876.3	5,829.0	47.32	124.184		
9,300.0	7,770.0	7,812.0	7,741.0	30.9	20.3	89.66	-5,473.1	-4,214.8	5,807.2	5,758.3	48.89	118.786		
9,400.0	7,770.0	7,812.6	7,741.6	32.5	20.3	89.67	-5,473.1	-4,214.8	5,738.9	5,688.5	50.47	113.699		
9,500.0	7,770.0	7,813.1	7,742.2	34.1	20.3	89.68	-5,473.1	-4,214.8	5,671.7	5,619.6	52.08	108.906		
9,600.0	7,770.0	7,813.7	7,742.7	35.7	20.3	89.68	-5,473.1	-4,214.8	5,605.4	5,551.7	53.70	104.390		
9,700.0	7,770.0	7,814.3	7,743.3	37.3	20.3	89.69	-5,473.1	-4,214.8	5,540.1	5,484.7	55.33	100.133		
9,800.0	7,770.0	7,814.8	7,743.8	39.0	20.3	89.70	-5,473.1	-4,214.8	5,475.8	5,418.8	56.97	96.121		
9,900.0	7,770.0	7,815.4	7,744.4	40.6	20.3	89.71	-5,473.1	-4,214.8	5,412.6	5,354.0	58.62	92.337		
10,000.0	7,770.0	7,815.9	7,744.9	42.3	20.3	89.71	-5,473.1	-4,214.8	5,350.6	5,290.3	60.28	88.767		
10,100.0	7,770.0	7,816.5	7,745.5	44.0	20.3	89.72	-5,473.1	-4,214.8	5,289.7	5,227.8	61.94	85.396		
10,200.0	7,770.0	7,817.0	7,746.0	45.6	20.3	89.73	-5,473.1	-4,214.8	5,230.0	5,166.4	63.62	82.212		
10,300.0	7,770.0	7,817.6	7,746.6	47.3	20.3	89.74	-5,473.1	-4,214.8	5,171.6	5,106.3	65.30	79.203		
10,400.0	7,770.0	7,818.1	7,747.1	49.0	20.3	89.74	-5,473.1	-4,214.8	5,114.5	5,047.5	66.98	76.359		
10,500.0	7,770.0	7,818.6	7,747.7	50.7	20.3	89.75	-5,473.1	-4,214.8	5,058.7	4,990.0	68.67	73.668		
10,600.0	7,770.0	7,819.2	7,748.2	52.4	20.3	89.76	-5,473.1	-4,214.8	5,004.2	4,933.9	70.36	71.121		
10,700.0	7,770.0	7,819.7	7,748.7	54.1	20.3	89.77	-5,473.1	-4,214.8	4,951.2	4,879.1	72.06	68.710		
10,800.0	7,770.0	7,820.2	7,749.3	55.8	20.3	89.77	-5,473.1	-4,214.8	4,899.7	4,825.9	73.76	66.427		
10,900.0	7,770.0	7,820.8	7,749.8	57.5	20.3	89.78	-5,473.1	-4,214.8	4,849.6	4,774.2	75.46	64.264		
11,000.0	7,770.0	7,821.3	7,750.3	59.2	20.3	89.79	-5,473.1	-4,214.8	4,801.2	4,724.0	77.17	62.215		
11,100.0	7,770.0	7,821.8	7,750.9	60.9	20.3	89.79	-5,473.1	-4,214.8	4,754.3	4,675.4	78.88	60.272		
11,200.0	7,770.0	7,822.4	7,751.4	62.6	20.3	89.80	-5,473.1	-4,214.8	4,709.1	4,628.5	80.59	58.431		
11,300.0	7,770.0	7,822.9	7,751.9	64.3	20.3	89.81	-5,473.1	-4,214.8	4,665.6	4,583.3	82.31	56.685		
11,400.0	7,770.0	7,823.4	7,752.4	66.0	20.3	89.82	-5,473.1	-4,214.8	4,623.9	4,539.8	84.02	55.030		
11,500.0	7,770.0	7,823.9	7,752.9	67.7	20.3	89.82	-5,473.1	-4,214.8	4,583.9	4,498.2	85.74	53.462		
11,600.0	7,770.0	7,824.4	7,753.5	69.5	20.3	89.83	-5,473.1	-4,214.8	4,545.8	4,458.4	87.46	51.975		
11,700.0	7,770.0	7,825.0	7,754.0	71.2	20.3	89.84	-5,473.1	-4,214.8	4,509.6	4,420.4	89.18	50.565		
11,800.0	7,770.0	7,825.5	7,754.5	72.9	20.3	89.84	-5,473.1	-4,214.8	4,475.4	4,384.5	90.91	49.230		
11,900.0	7,770.0	7,826.0	7,755.0	74.6	20.3	89.85	-5,473.1	-4,214.8	4,443.1	4,350.5	92.63	47.965		
12,000.0	7,770.0	7,826.5	7,755.5	76.4	20.3	89.86	-5,473.2	-4,214.8	4,412.9	4,318.5	94.36	46.767		
12,100.0	7,770.0	7,827.0	7,756.0	78.1	20.3	89.86	-5,473.2	-4,214.8	4,384.7	4,288.6	96.09	45.633		
12,200.0	7,770.0	7,827.5	7,756.5	79.8	20.3	89.87	-5,473.2	-4,214.8	4,358.6	4,260.8	97.82	44.560		
12,300.0	7,770.0	7,828.0	7,757.0	81.5	20.3	89.88	-5,473.2	-4,214.8	4,334.7	4,235.2	99.55	43.545		
12,400.0	7,770.0	7,828.5	7,757.5	83.3	20.3	89.88	-5,473.2	-4,214.8	4,313.0	4,211.7	101.28	42.587		
12,500.0	7,770.0	7,829.0	7,758.0	85.0	20.3	89.89	-5,473.2	-4,214.8	4,293.5	4,190.5	103.01	41.681		
12,600.0	7,770.0	7,829.5	7,758.5	86.7	20.3	89.90	-5,473.2	-4,214.8	4,276.3	4,171.5	104.74	40.827		
12,700.0	7,770.0	7,830.0	7,759.0	88.5	20.3	89.91	-5,473.2	-4,214.8	4,261.3	4,154.8	106.47	40.022		
12,800.0	7,770.0	7,830.5	7,759.5	90.2	20.3	89.91	-5,473.2	-4,214.8	4,248.7	4,140.4	108.21	39.263		
12,900.0	7,770.0	7,831.0	7,760.0	91.9	20.3	89.92	-5,473.2	-4,214.8	4,238.3	4,128.4	109.94	38.550		
13,000.0	7,770.0	7,831.5	7,760.5	93.7	20.3	89.93	-5,473.2	-4,214.8	4,230.3	4,118.6	111.68	37.879		
13,100.0	7,770.0	7,832.0	7,761.0	95.4	20.3	89.93	-5,473.2	-4,214.8	4,224.7	4,111.2	113.42	37.249		
13,200.0	7,770.0	7,832.5	7,761.5	97.1	20.3	89.94	-5,473.2	-4,214.8	4,221.4	4,106.2	115.15	36.658		
13,289.0	7,770.0	7,832.9	7,761.9	98.7	20.3	89.94	-5,473.2	-4,214.8	4,220.4	4,103.7	116.70	36.165 CC		
13,300.0	7,770.0	7,832.9	7,762.0	98.9	20.3	89.94	-5,473.2	-4,214.8	4,220.4	4,103.5	116.89	36.105		
13,400.0	7,770.0	7,833.4	7,762.4	100.6	20.3	89.95	-5,473.2	-4,214.8	4,221.9	4,103.3	118.63	35.589 ES		
13,500.0	7,770.0	7,833.9	7,762.9	102.4	20.3	89.96	-5,473.2	-4,214.8	4,225.7	4,105.3	120.37	35.106		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
13,600.0	7,770.0	7,834.4	7,763.4	104.1	20.3	89.96	-5,473.2	-4,214.8	4,231.9	4,109.8	122.11	34.656		
13,700.0	7,770.0	7,834.9	7,763.9	105.8	20.3	89.97	-5,473.2	-4,214.8	4,240.4	4,116.5	123.85	34.238		
13,800.0	7,770.0	7,835.3	7,764.4	107.6	20.3	89.98	-5,473.2	-4,214.8	4,251.3	4,125.7	125.59	33.850		
13,900.0	7,770.0	7,835.8	7,764.8	109.3	20.3	89.98	-5,473.2	-4,214.8	4,264.4	4,137.1	127.33	33.491		
14,000.0	7,770.0	7,836.3	7,765.3	111.1	20.3	89.99	-5,473.2	-4,214.8	4,279.9	4,150.8	129.07	33.159		
14,100.0	7,770.0	7,836.7	7,765.8	112.8	20.3	90.00	-5,473.2	-4,214.8	4,297.6	4,166.8	130.81	32.853		
14,200.0	7,770.0	7,837.2	7,766.2	114.5	20.3	90.00	-5,473.2	-4,214.8	4,317.6	4,185.1	132.56	32.572		
14,300.0	7,770.0	7,837.7	7,766.7	116.3	20.3	90.01	-5,473.2	-4,214.8	4,339.8	4,205.5	134.30	32.315		
14,400.0	7,770.0	7,838.1	7,767.2	118.0	20.3	90.02	-5,473.2	-4,214.8	4,364.2	4,228.2	136.04	32.080		
14,500.0	7,770.0	7,838.6	7,767.6	119.8	20.3	90.02	-5,473.2	-4,214.8	4,390.7	4,253.0	137.78	31.867		
14,600.0	7,770.0	7,839.1	7,768.1	121.5	20.3	90.03	-5,473.2	-4,214.8	4,419.4	4,279.8	139.53	31.674		
14,700.0	7,770.0	7,839.5	7,768.6	123.3	20.3	90.03	-5,473.2	-4,214.8	4,450.1	4,308.8	141.27	31.500		
14,800.0	7,770.0	7,840.0	7,769.0	125.0	20.3	90.04	-5,473.2	-4,214.8	4,482.8	4,339.7	143.02	31.345		
14,900.0	7,770.0	7,840.4	7,769.5	126.7	20.3	90.05	-5,473.2	-4,214.8	4,517.5	4,372.7	144.76	31.206		
15,000.0	7,770.0	7,840.9	7,769.9	128.5	20.3	90.05	-5,473.2	-4,214.8	4,554.1	4,407.6	146.50	31.085		
15,100.0	7,770.0	7,841.4	7,770.4	130.2	20.3	90.06	-5,473.2	-4,214.8	4,592.6	4,444.3	148.25	30.979		
15,200.0	7,770.0	7,841.8	7,770.8	132.0	20.3	90.07	-5,473.2	-4,214.8	4,632.9	4,482.9	150.00	30.887		
15,300.0	7,770.0	7,842.3	7,771.3	133.7	20.3	90.07	-5,473.2	-4,214.8	4,675.1	4,523.3	151.74	30.810		
15,400.0	7,770.0	7,842.7	7,771.7	135.5	20.3	90.08	-5,473.2	-4,214.8	4,718.9	4,565.5	153.49	30.745		
15,500.0	7,770.0	7,843.2	7,772.2	137.2	20.3	90.08	-5,473.2	-4,214.8	4,764.5	4,609.3	155.23	30.693		
15,600.0	7,770.0	7,843.6	7,772.6	139.0	20.3	90.09	-5,473.2	-4,214.8	4,811.7	4,654.8	156.98	30.652		
15,700.0	7,770.0	7,844.0	7,773.1	140.7	20.3	90.10	-5,473.2	-4,214.8	4,860.6	4,701.8	158.72	30.623		
15,800.0	7,770.0	7,844.5	7,773.5	142.4	20.3	90.10	-5,473.2	-4,214.8	4,910.9	4,750.5	160.47	30.603		
15,900.0	7,770.0	7,844.9	7,773.9	144.2	20.3	90.11	-5,473.2	-4,214.8	4,962.8	4,800.6	162.22	30.593		
16,000.0	7,770.0	7,845.4	7,774.4	145.9	20.3	90.11	-5,473.2	-4,214.8	5,016.1	4,852.2	163.96	30.593 SF		
16,100.0	7,770.0	7,845.8	7,774.8	147.7	20.4	90.12	-5,473.2	-4,214.8	5,070.9	4,905.2	165.71	30.601		
16,200.0	7,770.0	7,846.2	7,775.3	149.4	20.4	90.13	-5,473.2	-4,214.8	5,127.0	4,959.5	167.46	30.616		
16,300.0	7,770.0	7,846.7	7,775.7	151.2	20.4	90.13	-5,473.2	-4,214.8	5,184.4	5,015.2	169.21	30.640		
16,400.0	7,770.0	7,847.1	7,776.1	152.9	20.4	90.14	-5,473.3	-4,214.8	5,243.1	5,072.2	170.95	30.670		
16,500.0	7,770.0	7,847.5	7,776.6	154.7	20.4	90.14	-5,473.3	-4,214.8	5,303.1	5,130.4	172.70	30.707		
16,600.0	7,770.0	7,848.0	7,777.0	156.4	20.4	90.15	-5,473.3	-4,214.8	5,364.2	5,189.8	174.45	30.749		
16,700.0	7,770.0	7,848.4	7,777.4	158.2	20.4	90.15	-5,473.3	-4,214.8	5,426.5	5,250.3	176.20	30.798		
16,800.0	7,770.0	7,848.8	7,777.8	159.9	20.4	90.16	-5,473.3	-4,214.8	5,489.9	5,312.0	177.95	30.852		
16,900.0	7,770.0	7,849.2	7,778.3	161.7	20.4	90.17	-5,473.3	-4,214.8	5,554.4	5,374.7	179.69	30.910		
17,000.0	7,770.0	7,849.7	7,778.7	163.4	20.4	90.17	-5,473.3	-4,214.8	5,619.9	5,438.5	181.44	30.974		
17,100.0	7,770.0	7,850.1	7,779.1	165.2	20.4	90.18	-5,473.3	-4,214.8	5,686.5	5,503.3	183.19	31.041		
17,200.0	7,770.0	7,850.5	7,779.5	166.9	20.4	90.18	-5,473.3	-4,214.8	5,753.9	5,569.0	184.94	31.113		
17,300.0	7,770.0	7,850.9	7,779.9	168.7	20.4	90.19	-5,473.3	-4,214.8	5,822.4	5,635.7	186.69	31.188		
17,400.0	7,770.0	7,851.3	7,780.4	170.4	20.4	90.19	-5,473.3	-4,214.8	5,891.7	5,703.3	188.44	31.266		
17,500.0	7,770.0	7,851.8	7,780.8	172.2	20.4	90.20	-5,473.3	-4,214.8	5,961.9	5,771.7	190.19	31.348		
17,600.0	7,770.0	7,852.2	7,781.2	173.9	20.4	90.21	-5,473.3	-4,214.8	6,033.0	5,841.0	191.94	31.432		
17,653.1	7,770.0	7,852.4	7,781.4	174.8	20.4	90.21	-5,473.3	-4,214.8	6,071.0	5,878.1	192.86	31.478		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	-149.04	-6,136.7	-3,681.0	7,156.1						
100.0	100.0	96.0	96.0	0.2	0.1	-149.04	-6,136.7	-3,681.0	7,156.1	7,155.8	0.29	N/A			
200.0	200.0	196.0	196.0	0.3	0.3	-149.04	-6,136.7	-3,681.0	7,156.1	7,155.4	0.64	N/A			
300.0	300.0	296.0	296.0	0.5	0.5	-149.04	-6,136.7	-3,681.0	7,156.1	7,155.1	0.99	7,218.414			
400.0	400.0	396.0	396.0	0.7	0.7	-149.04	-6,136.7	-3,681.0	7,156.1	7,154.7	1.34	5,338.643			
500.0	500.0	496.0	496.0	0.8	0.8	-149.04	-6,136.7	-3,681.0	7,156.1	7,154.4	1.69	4,235.630			
550.0	550.0	546.0	546.0	0.9	0.9	-149.04	-6,136.7	-3,681.0	7,156.1	7,154.2	1.86	3,839.039			
600.0	600.0	596.0	596.0	1.0	1.0	-149.88	-6,136.7	-3,681.0	7,156.3	7,154.2	2.04	3,510.505			
700.0	700.0	696.0	696.0	1.2	1.2	-149.88	-6,136.7	-3,681.0	7,157.8	7,155.4	2.39	2,997.998			
800.0	799.9	795.9	795.9	1.4	1.4	-149.88	-6,136.7	-3,681.0	7,160.8	7,158.1	2.74	2,616.337			
861.1	860.9	856.9	856.9	1.5	1.5	-149.88	-6,136.7	-3,681.0	7,163.4	7,160.4	2.95	2,427.638			
900.0	899.8	895.8	895.8	1.6	1.5	-149.88	-6,136.7	-3,681.0	7,165.2	7,162.1	3.09	2,320.621			
1,000.0	999.6	995.7	995.7	1.8	1.7	-149.91	-6,136.7	-3,681.0	7,169.9	7,166.5	3.44	2,084.439			
1,100.0	1,099.5	1,095.5	1,095.5	1.9	1.9	-149.93	-6,136.7	-3,681.0	7,174.6	7,170.8	3.79	1,891.847			
1,200.0	1,199.3	1,195.4	1,195.4	2.1	2.1	-149.95	-6,136.7	-3,681.0	7,179.3	7,175.2	4.15	1,731.858			
1,300.0	1,299.2	1,295.3	1,295.3	2.3	2.3	-149.97	-6,104.5	-3,706.6	7,180.2	7,174.9	5.29	1,357.067			
1,400.0	1,399.1	1,395.2	1,395.2	2.5	2.5	-149.99	-6,092.5	-3,716.1	7,179.4	7,173.7	5.71	1,257.321			
1,500.0	1,498.9	1,495.0	1,495.0	2.7	2.7	-149.99	-6,080.5	-3,725.6	7,178.7	7,172.6	6.14	1,169.222			
1,600.0	1,498.8	1,494.9	1,494.9	2.9	2.9	-149.97	-6,068.5	-3,735.1	7,178.0	7,171.4	6.58	1,091.216			
1,700.0	1,498.6	1,494.7	1,494.7	3.1	3.1	-149.95	-6,056.5	-3,744.6	7,177.3	7,170.3	7.02	1,021.932			
1,800.0	1,498.5	1,494.6	1,494.6	3.3	3.3	-149.93	-6,044.6	-3,754.1	7,176.6	7,169.2	7.47	960.165			
1,900.0	1,498.3	1,494.4	1,494.4	3.5	3.5	-149.91	-6,032.6	-3,763.6	7,176.0	7,168.1	7.93	904.880			
2,000.0	1,498.2	1,494.3	1,494.3	3.7	3.7	-149.90	-6,020.6	-3,773.1	7,175.4	7,167.0	8.39	855.192			
2,100.0	1,498.0	1,494.2	1,494.2	3.9	3.9	-149.89	-6,008.6	-3,782.6	7,174.7	7,165.9	8.85	810.355			
2,200.0	1,497.9	1,494.1	1,494.1	4.1	4.1	-149.88	-5,996.6	-3,792.2	7,174.2	7,164.8	9.32	769.734			
2,300.0	1,497.7	1,494.0	1,494.0	4.3	4.3	-149.87	-5,984.6	-3,801.7	7,173.6	7,163.8	9.79	732.794			
2,400.0	1,497.6	1,493.9	1,493.9	4.5	4.5	-149.86	-5,972.6	-3,811.2	7,173.0	7,162.8	10.26	699.081			
2,500.0	1,497.4	1,493.8	1,493.8	4.7	4.7	-149.85	-5,960.7	-3,820.7	7,172.5	7,161.8	10.73	668.206			
2,600.0	1,497.3	1,493.7	1,493.7	4.9	4.9	-149.84	-5,948.7	-3,830.2	7,172.0	7,160.8	11.21	639.840			
2,700.0	1,497.1	1,493.6	1,493.6	5.1	5.1	-149.83	-5,936.7	-3,839.7	7,171.5	7,159.8	11.69	613.700			
2,800.0	1,497.0	1,493.5	1,493.5	5.3	5.3	-149.82	-5,924.7	-3,849.2	7,171.0	7,158.9	12.16	589.541			
2,900.0	1,496.8	1,493.4	1,493.4	5.5	5.5	-149.81	-5,912.7	-3,858.7	7,170.6	7,157.9	12.64	567.152			
3,000.0	1,496.7	1,493.3	1,493.3	5.7	5.7	-149.80	-5,900.7	-3,868.2	7,170.1	7,157.0	13.12	546.352			
3,100.0	1,496.5	1,493.2	1,493.2	5.9	5.9	-149.79	-5,888.7	-3,877.7	7,169.7	7,156.1	13.61	526.981			
3,200.0	1,496.4	1,493.1	1,493.1	6.1	6.1	-149.78	-5,876.7	-3,887.2	7,169.3	7,155.2	14.09	508.900			
3,300.0	1,496.3	1,493.0	1,493.0	6.3	6.3	-149.77	-5,864.8	-3,896.7	7,168.9	7,154.4	14.57	491.987			
3,400.0	1,496.1	1,492.9	1,492.9	6.5	6.5	-149.76	-5,852.8	-3,906.2	7,168.6	7,153.5	15.06	476.135			
3,500.0	1,496.0	1,492.8	1,492.8	6.7	6.7	-149.75	-5,840.8	-3,915.7	7,168.2	7,152.7	15.54	461.248			
3,600.0	1,495.8	1,492.7	1,492.7	6.9	6.9	-149.74	-5,828.8	-3,925.2	7,167.9	7,151.9	16.03	447.243			
3,700.0	1,495.7	1,492.6	1,492.6	7.0	7.0	-149.73	-5,816.8	-3,934.7	7,167.6	7,151.1	16.51	434.044			
3,800.0	1,495.5	1,492.5	1,492.5	7.2	7.2	-149.72	-5,804.8	-3,944.2	7,167.3	7,150.3	17.00	421.586			
3,900.0	1,495.4	1,492.4	1,492.4	7.4	7.4	-149.71	-5,792.8	-3,953.7	7,167.1	7,149.6	17.49	409.808			
4,000.0	1,495.2	1,492.3	1,492.3	7.6	7.6	-149.70	-5,780.8	-3,963.2	7,166.8	7,148.8	17.98	398.657			
4,100.0	1,495.1	1,492.2	1,492.2	7.8	7.8	-149.69	-5,768.9	-3,972.7	7,166.6	7,148.1	18.47	388.085			
4,200.0	1,494.9	1,492.1	1,492.1	8.0	8.0	-149.68	-5,756.9	-3,982.3	7,166.4	7,147.4	18.96	378.049			
4,300.0	1,494.8	1,492.0	1,492.0	8.2	8.2	-149.67	-5,744.9	-3,991.8	7,166.2	7,146.7	19.45	368.509			
4,400.0	1,494.6	1,491.9	1,491.9	8.4	8.4	-149.66	-5,732.9	-4,001.3	7,166.0	7,146.1	19.94	359.430			
4,500.0	1,494.5	1,491.8	1,491.8	8.6	8.6	-149.65	-5,720.9	-4,010.8	7,165.9	7,145.4	20.43	350.780			
4,600.0	1,494.3	1,491.7	1,491.7	8.8	8.8	-149.64	-5,708.9	-4,020.3	7,165.7	7,144.8	20.92	342.529			
4,700.0	1,494.2	1,491.6	1,491.6	9.0	9.0	-149.63	-5,696.9	-4,029.8	7,165.6	7,144.2	21.41	334.651			
4,800.0	1,494.0	1,491.5	1,491.5	9.2	9.2	-149.62	-5,684.9	-4,039.3	7,165.5	7,143.6	21.90	327.121			
4,900.0	1,493.9	1,491.4	1,491.4	9.4	9.4	-149.61	-5,673.0	-4,048.8	7,165.5	7,143.1	22.40	319.917			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	5,362.5	5,316.3	9.6	14.3	-146.30	-5,661.0	-4,058.3	7,165.4	7,142.5	22.89	313.018		
5,100.0	5,093.6	5,461.8	5,414.5	9.8	14.6	-146.21	-5,649.0	-4,067.8	7,165.4	7,142.0	23.39	306.406		
5,200.0	5,193.5	5,561.1	5,512.6	10.0	14.9	-146.12	-5,637.0	-4,077.3	7,165.4	7,141.5	23.88	300.063		
5,222.5	5,215.9	5,583.5	5,534.7	10.1	15.0	-146.10	-5,634.3	-4,079.4	7,165.4	7,141.4	23.99	298.672		
5,300.0	5,293.3	5,660.4	5,610.7	10.2	15.2	-146.02	-5,625.0	-4,086.8	7,165.4	7,141.0	24.37	293.974		
5,400.0	5,393.2	5,759.7	5,708.8	10.4	15.5	-145.93	-5,613.0	-4,096.3	7,165.4	7,140.5	24.87	288.123		
5,500.0	5,493.0	5,859.0	5,806.9	10.6	15.8	-145.84	-5,601.0	-4,105.8	7,165.4	7,140.1	25.36	282.498		
5,600.0	5,592.9	5,958.3	5,905.1	10.8	16.2	-145.74	-5,589.1	-4,115.3	7,165.5	7,139.6	25.86	277.084		
5,700.0	5,692.7	6,057.7	6,003.2	11.0	16.5	-145.65	-5,577.1	-4,124.8	7,165.6	7,139.2	26.36	271.872		
5,800.0	5,792.6	6,157.0	6,101.3	11.2	16.8	-145.56	-5,565.1	-4,134.3	7,165.7	7,138.8	26.85	266.849		
5,900.0	5,892.4	6,256.3	6,199.4	11.4	17.1	-145.46	-5,553.1	-4,143.8	7,165.8	7,138.5	27.35	262.006		
6,000.0	5,992.3	6,355.6	6,297.6	11.6	17.4	-145.37	-5,541.1	-4,153.3	7,166.0	7,138.1	27.85	257.333		
6,100.0	6,092.1	6,454.9	6,395.7	11.8	17.7	-145.28	-5,529.1	-4,162.9	7,166.1	7,137.8	28.34	252.822		
6,200.0	6,192.0	6,554.2	6,493.8	12.0	18.1	-145.18	-5,517.1	-4,172.4	7,166.3	7,137.4	28.84	248.465		
6,300.0	6,291.8	6,653.5	6,591.9	12.2	18.4	-145.09	-5,505.1	-4,181.9	7,166.5	7,137.1	29.34	244.254		
6,400.0	6,391.7	6,752.8	6,690.1	12.4	18.7	-145.00	-5,493.2	-4,191.4	7,166.7	7,136.9	29.84	240.181		
6,500.0	6,491.5	6,836.3	6,772.6	12.6	18.9	-144.92	-5,483.1	-4,199.3	7,167.0	7,136.7	30.28	236.704		
6,600.0	6,591.4	6,900.0	6,835.7	12.8	19.1	-144.87	-5,476.4	-4,204.6	7,167.7	7,137.1	30.64	233.948		
6,700.0	6,691.2	6,955.0	6,890.3	13.0	19.3	-144.84	-5,471.5	-4,208.6	7,169.1	7,138.1	30.95	231.644		
6,800.0	6,791.1	7,000.0	6,935.1	13.2	19.4	-144.81	-5,468.0	-4,211.3	7,171.0	7,139.7	31.24	229.578		
6,900.0	6,890.9	7,074.3	7,009.2	13.4	19.5	-144.79	-5,463.6	-4,214.8	7,173.4	7,141.8	31.56	227.324		
7,000.0	6,990.8	7,134.1	7,068.9	13.6	19.6	-144.78	-5,461.1	-4,216.8	7,176.4	7,144.6	31.83	225.437		
7,024.2	7,014.9	7,148.5	7,083.3	13.6	19.6	-144.78	-5,460.7	-4,217.1	7,177.2	7,145.3	31.90	225.008		
7,050.0	7,040.7	7,164.0	7,098.8	13.7	19.6	-146.45	-5,460.2	-4,217.5	7,177.7	7,145.8	31.97	224.538		
7,100.0	7,090.7	7,200.0	7,134.8	13.7	19.7	36.98	-5,459.5	-4,218.1	7,176.7	7,144.7	32.05	223.894		
7,150.0	7,140.5	7,223.6	7,158.4	13.8	19.7	36.66	-5,459.2	-4,218.3	7,173.0	7,141.0	32.05	223.810		
7,200.0	7,189.9	7,256.3	7,191.0	13.8	19.7	36.85	-5,459.1	-4,218.4	7,166.7	7,134.7	31.99	224.024		
7,250.0	7,238.6	7,299.9	7,234.6	13.8	19.8	37.28	-5,459.1	-4,218.4	7,157.7	7,125.8	31.89	224.480		
7,300.0	7,286.4	7,347.7	7,282.5	13.7	19.8	37.90	-5,459.1	-4,218.4	7,145.9	7,114.2	31.73	225.185		
7,350.0	7,333.1	7,394.4	7,329.1	13.7	19.9	38.71	-5,459.1	-4,218.4	7,131.5	7,100.0	31.54	226.130		
7,400.0	7,378.5	7,439.7	7,374.5	13.6	19.9	39.70	-5,459.1	-4,218.4	7,114.6	7,083.3	31.31	227.241		
7,450.0	7,422.2	7,483.4	7,418.2	13.6	20.0	40.90	-5,459.1	-4,218.4	7,095.1	7,064.1	31.06	228.430		
7,500.0	7,464.1	7,525.4	7,460.2	13.5	20.0	42.32	-5,459.1	-4,218.4	7,073.3	7,042.5	30.81	229.584		
7,550.0	7,504.1	7,565.3	7,500.1	13.5	20.1	43.96	-5,459.1	-4,218.4	7,049.3	7,018.7	30.57	230.566		
7,600.0	7,541.8	7,603.1	7,537.9	13.5	20.1	45.86	-5,459.1	-4,218.4	7,023.1	6,992.7	30.37	231.221		
7,650.0	7,577.2	7,638.5	7,573.2	13.4	20.2	48.02	-5,459.1	-4,218.4	6,994.9	6,964.7	30.23	231.379		
7,700.0	7,610.0	7,671.3	7,606.1	13.5	20.2	50.48	-5,459.1	-4,218.4	6,964.9	6,934.7	30.17	230.876		
7,750.0	7,640.2	7,701.4	7,636.2	13.5	20.2	53.26	-5,459.1	-4,218.4	6,933.2	6,903.0	30.20	229.576		
7,800.0	7,667.4	7,728.7	7,663.4	13.6	20.3	56.36	-5,459.1	-4,218.4	6,900.1	6,869.7	30.34	227.393		
7,850.0	7,691.7	7,752.9	7,687.7	13.7	20.3	59.79	-5,459.1	-4,218.4	6,865.6	6,835.0	30.60	224.330		
7,900.0	7,712.8	7,774.1	7,708.9	13.9	20.3	63.57	-5,459.1	-4,218.4	6,829.9	6,799.0	30.98	220.485		
7,950.0	7,730.8	7,792.1	7,726.8	14.1	20.4	67.67	-5,459.1	-4,218.4	6,793.3	6,761.9	31.44	216.052		
8,000.0	7,745.5	7,806.7	7,741.5	14.4	20.4	72.05	-5,459.1	-4,218.4	6,756.0	6,724.0	31.97	211.289		
8,050.0	7,756.7	7,818.0	7,752.7	14.7	20.4	76.68	-5,459.1	-4,218.4	6,718.0	6,685.5	32.54	206.484		
8,100.0	7,764.6	7,825.8	7,760.6	15.1	20.4	81.46	-5,459.1	-4,218.4	6,679.7	6,646.6	33.09	201.895		
8,150.0	7,769.0	7,830.2	7,765.0	15.5	20.4	86.31	-5,459.1	-4,218.4	6,641.2	6,607.6	33.59	197.713		
8,188.1	7,770.0	7,831.3	7,766.0	15.9	20.4	90.00	-5,459.1	-4,218.4	6,611.9	6,578.0	33.93	194.867		
8,200.0	7,770.0	7,831.3	7,766.0	16.0	20.4	90.00	-5,459.1	-4,218.4	6,602.7	6,568.7	34.04	193.964		
8,300.0	7,770.0	7,831.3	7,766.0	17.0	20.4	90.00	-5,459.1	-4,218.4	6,526.2	6,491.2	35.04	186.249		
8,400.0	7,770.0	7,831.3	7,766.0	18.1	20.4	90.00	-5,459.1	-4,218.4	6,450.3	6,414.1	36.15	178.408		
8,500.0	7,770.0	7,831.3	7,766.0	19.3	20.4	90.00	-5,459.1	-4,218.4	6,375.0	6,337.7	37.36	170.617		
8,600.0	7,770.0	7,831.3	7,766.0	20.6	20.4	90.00	-5,459.1	-4,218.4	6,300.5	6,261.8	38.65	163.002		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,700.0	7,770.0	7,831.3	7,766.0	21.9	20.4	90.00	-5,459.1	-4,218.4	6,226.7	6,186.7	40.01	155.643		
8,800.0	7,770.0	7,831.3	7,766.0	23.3	20.4	90.00	-5,459.1	-4,218.4	6,153.6	6,112.2	41.41	148.591		
8,900.0	7,770.0	7,831.3	7,766.0	24.8	20.4	90.00	-5,459.1	-4,218.4	6,081.2	6,038.4	42.86	141.874		
9,000.0	7,770.0	7,831.3	7,766.0	26.3	20.4	90.00	-5,459.1	-4,218.4	6,009.7	5,965.3	44.35	135.501		
9,100.0	7,770.0	7,831.3	7,766.0	27.8	20.4	90.00	-5,459.1	-4,218.4	5,939.0	5,893.1	45.87	129.473		
9,200.0	7,770.0	7,831.3	7,766.0	29.3	20.4	90.00	-5,459.1	-4,218.4	5,869.1	5,821.7	47.42	123.780		
9,300.0	7,770.0	7,831.3	7,766.0	30.9	20.4	90.00	-5,459.1	-4,218.4	5,800.1	5,751.1	48.98	118.411		
9,400.0	7,770.0	7,831.3	7,766.0	32.5	20.4	90.00	-5,459.1	-4,218.4	5,732.1	5,681.5	50.57	113.349		
9,500.0	7,770.0	7,831.3	7,766.0	34.1	20.4	90.00	-5,459.1	-4,218.4	5,664.9	5,612.8	52.17	108.580		
9,600.0	7,770.0	7,831.3	7,766.0	35.7	20.4	90.00	-5,459.1	-4,218.4	5,598.8	5,545.0	53.79	104.086		
9,700.0	7,770.0	7,831.3	7,766.0	37.3	20.4	90.00	-5,459.1	-4,218.4	5,533.7	5,478.3	55.42	99.851		
9,800.0	7,770.0	7,831.3	7,766.0	39.0	20.4	90.00	-5,459.1	-4,218.4	5,469.6	5,412.6	57.06	95.857		
9,900.0	7,770.0	7,831.3	7,766.0	40.6	20.4	90.00	-5,459.1	-4,218.4	5,406.6	5,347.9	58.71	92.091		
10,000.0	7,770.0	7,831.3	7,766.0	42.3	20.4	90.00	-5,459.1	-4,218.4	5,344.8	5,284.4	60.37	88.537		
10,100.0	7,770.0	7,831.3	7,766.0	44.0	20.4	90.00	-5,459.1	-4,218.4	5,284.1	5,222.1	62.03	85.181		
10,200.0	7,770.0	7,831.3	7,766.0	45.6	20.4	90.00	-5,459.1	-4,218.4	5,224.6	5,160.9	63.71	82.012		
10,300.0	7,770.0	7,831.3	7,766.0	47.3	20.4	90.00	-5,459.1	-4,218.4	5,166.4	5,101.0	65.38	79.016		
10,400.0	7,770.0	7,831.3	7,766.0	49.0	20.4	90.00	-5,459.1	-4,218.4	5,109.5	5,042.4	67.07	76.184		
10,500.0	7,770.0	7,831.3	7,766.0	50.7	20.4	90.00	-5,459.1	-4,218.4	5,053.9	4,985.1	68.76	73.505		
10,600.0	7,770.0	7,831.3	7,766.0	52.4	20.4	90.00	-5,459.1	-4,218.4	4,999.7	4,929.2	70.45	70.969		
10,700.0	7,770.0	7,831.3	7,766.0	54.1	20.4	90.00	-5,459.1	-4,218.4	4,946.9	4,874.8	72.15	68.569		
10,800.0	7,770.0	7,831.3	7,766.0	55.8	20.4	90.00	-5,459.1	-4,218.4	4,895.6	4,821.8	73.85	66.295		
10,900.0	7,770.0	7,831.3	7,766.0	57.5	20.4	90.00	-5,459.1	-4,218.4	4,845.8	4,770.3	75.55	64.142		
11,000.0	7,770.0	7,831.3	7,766.0	59.2	20.4	90.00	-5,459.1	-4,218.4	4,797.6	4,720.4	77.26	62.101		
11,100.0	7,770.0	7,831.3	7,766.0	60.9	20.4	90.00	-5,459.1	-4,218.4	4,751.0	4,672.0	78.96	60.167		
11,200.0	7,770.0	7,831.3	7,766.0	62.6	20.4	90.00	-5,459.1	-4,218.4	4,706.1	4,625.4	80.68	58.333		
11,300.0	7,770.0	7,831.3	7,766.0	64.3	20.4	90.00	-5,459.1	-4,218.4	4,662.8	4,580.5	82.39	56.595		
11,400.0	7,770.0	7,831.3	7,766.0	66.0	20.4	90.00	-5,459.1	-4,218.4	4,621.4	4,537.3	84.11	54.948		
11,500.0	7,770.0	7,831.3	7,766.0	67.7	20.4	90.00	-5,459.1	-4,218.4	4,581.7	4,495.9	85.82	53.386		
11,600.0	7,770.0	7,831.3	7,766.0	69.5	20.4	90.00	-5,459.1	-4,218.4	4,543.9	4,456.4	87.54	51.905		
11,700.0	7,770.0	7,831.3	7,766.0	71.2	20.4	90.00	-5,459.1	-4,218.4	4,508.0	4,418.8	89.26	50.502		
11,800.0	7,770.0	7,831.3	7,766.0	72.9	20.4	90.00	-5,459.1	-4,218.4	4,474.1	4,383.1	90.99	49.173		
11,900.0	7,770.0	7,831.3	7,766.0	74.6	20.4	90.00	-5,459.1	-4,218.4	4,442.1	4,349.4	92.71	47.913		
12,000.0	7,770.0	7,831.3	7,766.0	76.4	20.4	90.00	-5,459.1	-4,218.4	4,412.2	4,317.7	94.44	46.721		
12,100.0	7,770.0	7,831.3	7,766.0	78.1	20.4	90.00	-5,459.1	-4,218.4	4,384.3	4,288.2	96.16	45.592		
12,200.0	7,770.0	7,831.3	7,766.0	79.8	20.4	90.00	-5,459.1	-4,218.4	4,358.6	4,260.7	97.89	44.524		
12,300.0	7,770.0	7,831.3	7,766.0	81.5	20.4	90.00	-5,459.1	-4,218.4	4,335.0	4,235.4	99.62	43.515		
12,400.0	7,770.0	7,831.3	7,766.0	83.3	20.4	90.00	-5,459.1	-4,218.4	4,313.6	4,212.3	101.35	42.561		
12,500.0	7,770.0	7,831.3	7,766.0	85.0	20.4	90.00	-5,459.1	-4,218.4	4,294.5	4,191.4	103.08	41.660		
12,600.0	7,770.0	7,831.3	7,766.0	86.7	20.4	90.00	-5,459.1	-4,218.4	4,277.6	4,172.7	104.82	40.810		
12,700.0	7,770.0	7,831.3	7,766.0	88.5	20.4	90.00	-5,459.1	-4,218.4	4,262.9	4,156.4	106.55	40.009		
12,800.0	7,770.0	7,831.3	7,766.0	90.2	20.4	90.00	-5,459.1	-4,218.4	4,250.6	4,142.3	108.28	39.255		
12,900.0	7,770.0	7,831.3	7,766.0	91.9	20.4	90.00	-5,459.1	-4,218.4	4,240.6	4,130.6	110.02	38.545		
13,000.0	7,770.0	7,831.3	7,766.0	93.7	20.4	90.00	-5,459.1	-4,218.4	4,232.9	4,121.2	111.75	37.878		
13,100.0	7,770.0	7,831.3	7,766.0	95.4	20.4	90.00	-5,459.1	-4,218.4	4,227.6	4,114.1	113.49	37.251		
13,200.0	7,770.0	7,831.3	7,766.0	97.1	20.4	90.00	-5,459.1	-4,218.4	4,224.7	4,109.4	115.23	36.664		
13,274.8	7,770.0	7,831.3	7,766.0	98.4	20.4	90.00	-5,459.1	-4,218.4	4,224.0	4,107.5	116.53	36.250 CC		
13,300.0	7,770.0	7,831.3	7,766.0	98.9	20.4	90.00	-5,459.1	-4,218.4	4,224.1	4,107.1	116.96	36.115 ES		
13,400.0	7,770.0	7,831.3	7,766.0	100.6	20.4	90.00	-5,459.1	-4,218.4	4,225.8	4,107.1	118.70	35.601		
13,500.0	7,770.0	7,831.3	7,766.0	102.4	20.4	90.00	-5,459.1	-4,218.4	4,230.0	4,109.6	120.44	35.122		
13,600.0	7,770.0	7,831.3	7,766.0	104.1	20.4	90.00	-5,459.1	-4,218.4	4,236.5	4,114.3	122.18	34.675		
13,700.0	7,770.0	7,831.3	7,766.0	105.8	20.4	90.00	-5,459.1	-4,218.4	4,245.3	4,121.4	123.92	34.260		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 (°)	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)	
13,800.0	7,770.0	7,831.3	7,766.0	107.6	20.4	90.00	-5,459.1	-4,218.4	4,256.5	4,130.9	125.66	33.874		
13,900.0	7,770.0	7,831.3	7,766.0	109.3	20.4	90.00	-5,459.1	-4,218.4	4,270.0	4,142.6	127.40	33.517		
14,000.0	7,770.0	7,831.3	7,766.0	111.1	20.4	90.00	-5,459.1	-4,218.4	4,285.8	4,156.6	129.14	33.188		
14,100.0	7,770.0	7,831.3	7,766.0	112.8	20.4	90.00	-5,459.1	-4,218.4	4,303.8	4,173.0	130.88	32.884		
14,200.0	7,770.0	7,831.3	7,766.0	114.5	20.4	90.00	-5,459.1	-4,218.4	4,324.1	4,191.5	132.62	32.605		
14,300.0	7,770.0	7,831.3	7,766.0	116.3	20.4	90.00	-5,459.1	-4,218.4	4,346.6	4,212.3	134.36	32.350		
14,400.0	7,770.0	7,831.3	7,766.0	118.0	20.4	90.00	-5,459.1	-4,218.4	4,371.3	4,235.2	136.11	32.117		
14,500.0	7,770.0	7,831.3	7,766.0	119.8	20.4	90.00	-5,459.1	-4,218.4	4,398.1	4,260.2	137.85	31.905		
14,600.0	7,770.0	7,831.3	7,766.0	121.5	20.4	90.00	-5,459.1	-4,218.4	4,427.0	4,287.4	139.59	31.714		
14,700.0	7,770.0	7,831.3	7,766.0	123.3	20.4	90.00	-5,459.1	-4,218.4	4,457.9	4,316.6	141.33	31.542		
14,800.0	7,770.0	7,831.3	7,766.0	125.0	20.4	90.00	-5,459.1	-4,218.4	4,490.9	4,347.8	143.08	31.388		
14,900.0	7,770.0	7,831.3	7,766.0	126.7	20.4	90.00	-5,459.1	-4,218.4	4,525.8	4,381.0	144.82	31.251		
15,000.0	7,770.0	7,831.3	7,766.0	128.5	20.4	90.00	-5,459.1	-4,218.4	4,562.7	4,416.1	146.57	31.131		
15,100.0	7,770.0	7,831.3	7,766.0	130.2	20.4	90.00	-5,459.1	-4,218.4	4,601.4	4,453.1	148.31	31.026		
15,200.0	7,770.0	7,831.3	7,766.0	132.0	20.4	90.00	-5,459.1	-4,218.4	4,642.0	4,492.0	150.05	30.935		
15,300.0	7,770.0	7,831.3	7,766.0	133.7	20.4	90.00	-5,459.1	-4,218.4	4,684.4	4,532.6	151.80	30.859		
15,400.0	7,770.0	7,831.3	7,766.0	135.5	20.4	90.00	-5,459.1	-4,218.4	4,728.5	4,574.9	153.55	30.795		
15,500.0	7,770.0	7,831.3	7,766.0	137.2	20.4	90.00	-5,459.1	-4,218.4	4,774.2	4,619.0	155.29	30.744		
15,600.0	7,770.0	7,831.3	7,766.0	139.0	20.4	90.00	-5,459.1	-4,218.4	4,821.7	4,664.6	157.04	30.704		
15,700.0	7,770.0	7,831.3	7,766.0	140.7	20.4	90.00	-5,459.1	-4,218.4	4,870.7	4,711.9	158.78	30.675		
15,800.0	7,770.0	7,831.3	7,766.0	142.4	20.4	90.00	-5,459.1	-4,218.4	4,921.2	4,760.7	160.53	30.657		
15,900.0	7,770.0	7,831.3	7,766.0	144.2	20.4	90.00	-5,459.1	-4,218.4	4,973.3	4,811.0	162.27	30.647		
16,000.0	7,770.0	7,831.3	7,766.0	145.9	20.4	90.00	-5,459.1	-4,218.4	5,026.8	4,862.8	164.02	30.647 SF		
16,100.0	7,770.0	7,831.3	7,766.0	147.7	20.4	90.00	-5,459.1	-4,218.4	5,081.7	4,915.9	165.77	30.656		
16,200.0	7,770.0	7,831.3	7,766.0	149.4	20.4	90.00	-5,459.1	-4,218.4	5,138.0	4,970.4	167.51	30.672		
16,300.0	7,770.0	7,831.3	7,766.0	151.2	20.4	90.00	-5,459.1	-4,218.4	5,195.5	5,026.3	169.26	30.695		
16,400.0	7,770.0	7,831.3	7,766.0	152.9	20.4	90.00	-5,459.1	-4,218.4	5,254.4	5,083.4	171.01	30.726		
16,500.0	7,770.0	7,831.3	7,766.0	154.7	20.4	90.00	-5,459.1	-4,218.4	5,314.5	5,141.7	172.76	30.763		
16,600.0	7,770.0	7,831.3	7,766.0	156.4	20.4	90.00	-5,459.1	-4,218.4	5,375.8	5,201.3	174.50	30.806		
16,700.0	7,770.0	7,831.3	7,766.0	158.2	20.4	90.00	-5,459.1	-4,218.4	5,438.2	5,261.9	176.25	30.855		
16,800.0	7,770.0	7,831.3	7,766.0	159.9	20.4	90.00	-5,459.1	-4,218.4	5,501.7	5,323.7	178.00	30.909		
16,900.0	7,770.0	7,831.3	7,766.0	161.7	20.4	90.00	-5,459.1	-4,218.4	5,566.3	5,386.6	179.75	30.968		
17,000.0	7,770.0	7,831.3	7,766.0	163.4	20.4	90.00	-5,459.1	-4,218.4	5,632.0	5,450.5	181.49	31.031		
17,100.0	7,770.0	7,831.3	7,766.0	165.2	20.4	90.00	-5,459.1	-4,218.4	5,698.6	5,515.3	183.24	31.099		
17,200.0	7,770.0	7,831.3	7,766.0	166.9	20.4	90.00	-5,459.1	-4,218.4	5,766.2	5,581.2	184.99	31.170		
17,300.0	7,770.0	7,831.3	7,766.0	168.7	20.4	90.00	-5,459.1	-4,218.4	5,834.7	5,648.0	186.74	31.245		
17,400.0	7,770.0	7,831.3	7,766.0	170.4	20.4	90.00	-5,459.1	-4,218.4	5,904.2	5,715.7	188.49	31.324		
17,500.0	7,770.0	7,831.3	7,766.0	172.2	20.4	90.00	-5,459.1	-4,218.4	5,974.5	5,784.2	190.24	31.406		
17,600.0	7,770.0	7,831.3	7,766.0	173.9	20.4	90.00	-5,459.1	-4,218.4	6,045.6	5,853.6	191.98	31.490		
17,653.1	7,770.0	7,831.3	7,766.0	174.8	20.4	90.00	-5,459.1	-4,218.4	6,083.7	5,890.7	192.91	31.536		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-149.25	-6,136.7	-3,650.3	7,140.3						
100.0	100.0	37.9	37.9	0.2	0.0	-149.25	-6,136.8	-3,650.4	7,140.7	7,140.5	0.20	N/A			
200.0	200.0	96.8	96.8	0.3	0.1	-149.25	-6,137.2	-3,651.1	7,141.8	7,141.4	0.47	N/A			
300.0	300.0	207.0	207.0	0.5	0.3	-149.24	-6,138.0	-3,652.6	7,143.1	7,142.3	0.84	8,534.206			
400.0	400.0	284.5	284.5	0.7	0.5	-149.24	-6,138.9	-3,653.3	7,144.6	7,143.4	1.15	6,231.312			
500.0	500.0	340.4	340.4	0.8	0.6	-149.24	-6,139.9	-3,653.6	7,146.4	7,145.0	1.42	5,038.403			
550.0	550.0	358.0	358.0	0.9	0.6	-149.25	-6,140.3	-3,653.8	7,147.6	7,146.1	1.54	4,652.665			
600.0	600.0	388.0	387.9	1.0	0.7	-150.08	-6,141.1	-3,654.0	7,149.2	7,147.5	1.68	4,266.566			
700.0	700.0	419.0	418.9	1.2	0.7	-150.05	-6,142.1	-3,654.4	7,154.1	7,152.2	1.90	3,757.265			
800.0	799.9	450.0	449.9	1.4	0.8	-150.02	-6,143.3	-3,654.7	7,161.3	7,159.2	2.13	3,357.180			
861.1	860.9	484.2	484.0	1.5	0.8	-150.01	-6,145.0	-3,655.1	7,166.9	7,164.6	2.30	3,115.687			
900.0	899.8	511.0	510.8	1.6	0.9	-150.02	-6,146.5	-3,655.4	7,170.8	7,168.4	2.42	2,967.913			
1,000.0	999.6	542.7	542.4	1.8	1.0	-150.03	-6,148.5	-3,655.7	7,181.4	7,178.8	2.65	2,710.294			
1,100.0	1,099.5	606.0	605.6	1.9	1.1	-150.05	-6,152.9	-3,656.8	7,192.8	7,189.9	2.94	2,447.327			
1,200.0	1,199.3	642.1	641.6	2.1	1.2	-150.07	-6,155.6	-3,657.5	7,204.8	7,201.6	3.18	2,264.508			
1,300.0	1,299.2	692.3	691.6	2.3	1.3	-150.09	-6,159.7	-3,658.5	7,217.5	7,214.1	3.45	2,092.517			
1,400.0	1,399.1	795.5	794.4	2.5	1.5	-150.13	-6,168.6	-3,661.0	7,230.8	7,227.0	3.81	1,897.527			
1,500.0	1,498.9	877.0	875.6	2.7	1.7	-150.16	-6,175.4	-3,663.0	7,244.0	7,239.9	4.13	1,752.185			
1,600.0	1,598.8	909.4	907.8	2.9	1.8	-150.18	-6,178.3	-3,663.8	7,257.7	7,253.4	4.37	1,660.241			
1,700.0	1,698.6	940.0	938.3	3.1	1.8	-150.19	-6,181.3	-3,664.7	7,272.3	7,267.7	4.61	1,578.958			
1,800.0	1,798.5	1,004.0	1,001.9	3.3	2.0	-150.22	-6,188.2	-3,666.6	7,287.7	7,282.8	4.90	1,487.183			
1,900.0	1,898.3	1,004.0	1,001.9	3.5	2.0	-150.22	-6,188.2	-3,666.6	7,303.9	7,298.8	5.08	1,437.662			
2,000.0	1,998.2	1,068.0	1,065.3	3.7	2.2	-150.25	-6,196.2	-3,668.6	7,321.0	7,315.7	5.38	1,361.633			
2,100.0	2,098.0	1,068.0	1,065.3	3.9	2.2	-150.25	-6,196.2	-3,668.6	7,339.0	7,333.5	5.56	1,320.718			
2,200.0	2,197.9	1,133.0	1,129.6	4.1	2.4	-150.29	-6,205.6	-3,670.7	7,357.9	7,352.0	5.86	1,256.257			
2,300.0	2,297.7	1,133.0	1,129.6	4.3	2.4	-150.29	-6,205.6	-3,670.7	7,377.7	7,371.6	6.04	1,222.016			
2,400.0	2,397.6	1,197.0	1,192.7	4.5	2.6	-150.32	-6,216.0	-3,673.2	7,398.3	7,392.0	6.34	1,167.702			
2,500.0	2,497.4	1,197.0	1,192.7	4.7	2.6	-150.32	-6,216.0	-3,673.2	7,419.8	7,413.3	6.52	1,138.683			
2,600.0	2,597.3	1,234.8	1,229.9	4.9	2.7	-150.35	-6,222.6	-3,675.1	7,442.2	7,435.5	6.77	1,100.033			
2,700.0	2,697.1	1,260.0	1,254.6	5.1	2.8	-150.36	-6,227.2	-3,676.6	7,465.7	7,458.7	6.99	1,067.841			
2,800.0	2,797.0	1,290.6	1,284.6	5.3	2.9	-150.37	-6,232.9	-3,678.8	7,490.0	7,482.7	7.23	1,036.623			
2,900.0	2,896.8	1,324.0	1,317.3	5.5	3.0	-150.39	-6,239.2	-3,681.7	7,515.2	7,507.7	7.46	1,006.938			
3,000.0	2,996.7	1,368.5	1,360.7	5.7	3.2	-150.40	-6,247.5	-3,686.3	7,541.1	7,533.4	7.72	977.019			
3,100.0	3,096.5	1,420.0	1,411.0	5.9	3.4	-150.40	-6,257.1	-3,692.3	7,567.6	7,559.6	7.98	948.019			
3,200.0	3,196.4	1,460.4	1,450.3	6.1	3.6	-150.41	-6,264.8	-3,697.3	7,594.8	7,586.6	8.23	922.527			
3,300.0	3,296.3	1,516.0	1,504.4	6.3	3.8	-150.42	-6,275.9	-3,704.1	7,622.7	7,614.2	8.51	896.114			
3,400.0	3,396.1	1,631.9	1,617.0	6.5	4.3	-150.44	-6,299.2	-3,717.9	7,650.7	7,641.8	8.88	861.254			
3,500.0	3,496.0	1,642.0	1,626.9	6.7	4.3	-150.44	-6,301.3	-3,719.1	7,679.0	7,669.9	9.08	845.623			
3,600.0	3,595.8	1,698.9	1,682.1	6.9	4.6	-150.46	-6,313.1	-3,725.8	7,707.7	7,698.4	9.36	823.511			
3,700.0	3,695.7	1,738.0	1,720.0	7.0	4.8	-150.47	-6,321.8	-3,730.6	7,737.5	7,727.9	9.61	805.434			
3,800.0	3,795.5	1,793.5	1,773.6	7.2	5.0	-150.48	-6,334.4	-3,737.6	7,767.9	7,758.0	9.88	786.074			
3,900.0	3,895.4	2,040.0	2,012.3	7.4	6.1	-150.54	-6,387.8	-3,767.7	7,797.0	7,786.5	10.48	743.881			
4,000.0	3,995.2	2,116.8	2,086.8	7.6	6.5	-150.55	-6,403.7	-3,777.2	7,825.8	7,815.0	10.79	725.167			
4,100.0	4,095.1	2,298.3	2,262.9	7.8	7.3	-150.58	-6,441.4	-3,799.5	7,854.8	7,843.5	11.28	696.321			
4,200.0	4,194.9	2,399.3	2,361.2	8.0	7.7	-150.61	-6,461.9	-3,810.8	7,882.5	7,870.8	11.63	677.617			
4,300.0	4,294.8	2,470.0	2,429.9	8.2	8.0	-150.61	-6,475.7	-3,820.1	7,910.5	7,898.6	11.93	663.084			
4,400.0	4,394.6	2,675.2	2,629.6	8.4	8.9	-150.62	-6,513.8	-3,848.0	7,938.0	7,925.6	12.46	637.321			
4,500.0	4,494.5	2,724.0	2,677.2	8.6	9.1	-150.62	-6,523.2	-3,853.6	7,965.1	7,952.4	12.72	626.226			
4,600.0	4,594.3	2,762.0	2,714.1	8.8	9.3	-150.63	-6,530.8	-3,858.1	7,992.8	7,979.8	12.96	616.520			
4,700.0	4,694.2	2,819.0	2,769.5	9.0	9.5	-150.64	-6,542.5	-3,865.2	8,021.3	8,008.0	13.24	605.758			
4,800.0	4,794.0	2,842.7	2,792.4	9.2	9.7	-150.64	-6,547.5	-3,868.2	8,050.3	8,036.9	13.46	597.980			
4,900.0	4,893.9	2,935.8	2,882.6	9.4	10.1	-150.66	-6,567.4	-3,880.3	8,079.8	8,066.0	13.80	585.431			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	3,079.8	3,022.2	9.6	10.8	-150.68	-6,597.5	-3,898.8	8,108.9	8,094.7	14.23	569.998		
5,100.0	5,093.6	3,221.5	3,159.7	9.8	11.4	-150.70	-6,626.2	-3,917.1	8,137.5	8,122.8	14.65	555.565		
5,200.0	5,193.5	3,363.5	3,297.8	10.0	12.0	-150.72	-6,654.6	-3,934.7	8,165.6	8,150.5	15.07	541.858		
5,300.0	5,293.3	3,423.0	3,355.6	10.2	12.3	-150.72	-6,666.4	-3,941.8	8,193.4	8,178.1	15.35	533.723		
5,400.0	5,393.2	3,487.0	3,417.8	10.4	12.6	-150.73	-6,679.3	-3,949.8	8,221.8	8,206.1	15.64	525.656		
5,500.0	5,493.0	3,614.0	3,541.2	10.6	13.1	-150.75	-6,704.7	-3,965.8	8,249.9	8,233.9	16.04	514.413		
5,600.0	5,592.9	3,678.0	3,603.4	10.8	13.4	-150.76	-6,717.5	-3,973.9	8,278.2	8,261.9	16.33	507.021		
5,700.0	5,692.7	3,836.4	3,757.2	11.0	14.1	-150.78	-6,749.5	-3,994.1	8,306.8	8,290.0	16.78	495.121		
5,800.0	5,792.6	4,034.9	3,950.4	11.2	15.0	-150.80	-6,788.1	-4,018.5	8,334.7	8,317.4	17.30	481.876		
5,900.0	5,892.4	4,091.0	4,005.1	11.4	15.2	-150.81	-6,798.5	-4,025.2	8,361.5	8,343.9	17.57	475.820		
6,000.0	5,992.3	4,152.1	4,064.6	11.6	15.5	-150.81	-6,810.0	-4,032.8	8,388.6	8,370.7	17.86	469.747		
6,100.0	6,092.1	4,282.0	4,191.1	11.8	16.1	-150.83	-6,835.2	-4,048.6	8,416.2	8,397.9	18.26	460.905		
6,200.0	6,192.0	4,589.9	4,491.7	12.0	17.3	-150.86	-6,890.9	-4,084.5	8,442.6	8,423.6	18.97	445.109		
6,300.0	6,291.8	4,664.0	4,564.3	12.2	17.6	-150.87	-6,903.5	-4,092.9	8,467.6	8,448.3	19.28	439.300		
6,400.0	6,391.7	4,710.6	4,609.8	12.4	17.8	-150.87	-6,911.5	-4,098.4	8,492.9	8,473.4	19.54	434.740		
6,500.0	6,491.5	5,241.6	5,131.4	12.6	19.8	-150.94	-6,995.5	-4,150.7	8,517.1	8,496.5	20.63	412.882		
6,600.0	6,591.4	5,523.5	5,410.1	12.8	20.6	-150.97	-7,030.8	-4,173.9	8,536.8	8,515.5	21.30	400.865		
6,700.0	6,691.2	6,885.0	6,766.2	13.0	23.1	-151.23	-7,111.4	-4,217.4	8,552.0	8,528.1	23.84	358.670		
6,800.0	6,791.1	6,977.1	6,858.3	13.2	23.2	-151.25	-7,110.9	-4,216.6	8,555.9	8,531.7	24.19	353.763		
6,900.0	6,890.9	7,065.7	6,946.9	13.4	23.3	-151.26	-7,110.4	-4,216.1	8,559.9	8,535.3	24.52	349.084		
7,000.0	6,990.8	7,144.0	7,025.2	13.6	23.3	-151.28	-7,110.2	-4,215.5	8,564.0	8,539.2	24.84	344.791		
7,024.2	7,014.9	7,171.0	7,052.2	13.6	23.4	-151.29	-7,110.2	-4,215.3	8,565.1	8,540.2	24.93	343.580		
7,050.0	7,040.7	7,198.9	7,080.1	13.7	23.4	-152.97	-7,110.2	-4,215.0	8,565.8	8,540.7	25.07	341.687		
7,100.0	7,090.7	7,279.7	7,160.9	13.7	23.4	30.44	-7,109.9	-4,214.5	8,564.7	8,539.4	25.34	338.039		
7,150.0	7,140.5	7,329.6	7,210.8	13.8	23.5	30.12	-7,109.5	-4,214.3	8,560.6	8,535.1	25.48	335.909		
7,200.0	7,189.9	7,367.6	7,248.8	13.8	23.5	30.29	-7,109.2	-4,214.2	8,553.4	8,527.9	25.55	334.768		
7,250.0	7,238.6	7,405.5	7,286.7	13.8	23.6	30.67	-7,108.9	-4,214.1	8,543.4	8,517.8	25.56	334.237		
7,300.0	7,286.4	7,444.5	7,325.7	13.7	23.6	31.22	-7,108.7	-4,214.1	8,530.4	8,504.9	25.53	334.156		
7,350.0	7,333.1	7,495.9	7,377.1	13.7	23.6	31.96	-7,108.4	-4,214.1	8,514.7	8,489.2	25.49	334.068		
7,400.0	7,378.5	7,552.0	7,433.2	13.6	23.7	32.90	-7,108.1	-4,214.0	8,496.1	8,470.7	25.45	333.901		
7,450.0	7,422.2	7,589.7	7,470.9	13.6	23.7	33.99	-7,107.9	-4,213.8	8,474.8	8,449.5	25.38	333.874		
7,500.0	7,464.1	7,625.9	7,507.0	13.5	23.7	35.30	-7,107.7	-4,213.7	8,451.0	8,425.7	25.36	333.239		
7,550.0	7,504.1	7,660.3	7,541.5	13.5	23.8	36.84	-7,107.6	-4,213.6	8,424.8	8,399.4	25.41	331.571		
7,600.0	7,541.8	7,692.9	7,574.1	13.5	23.8	38.64	-7,107.5	-4,213.4	8,396.3	8,370.8	25.56	328.430		
7,650.0	7,577.2	7,723.6	7,604.7	13.4	23.8	40.73	-7,107.5	-4,213.2	8,365.7	8,339.8	25.87	323.416		
7,700.0	7,610.0	7,761.0	7,642.2	13.5	23.9	43.20	-7,107.5	-4,213.0	8,333.0	8,306.7	26.37	315.978		
7,750.0	7,640.2	7,780.8	7,662.0	13.5	23.9	45.97	-7,107.5	-4,212.8	8,298.6	8,271.5	27.05	306.764		
7,800.0	7,667.4	7,808.1	7,689.2	13.6	23.9	49.23	-7,107.5	-4,212.6	8,262.4	8,234.4	27.99	295.209		
7,850.0	7,691.7	7,832.4	7,713.5	13.7	23.9	52.95	-7,107.5	-4,212.5	8,224.8	8,195.7	29.15	282.107		
7,900.0	7,712.8	7,853.5	7,734.7	13.9	24.0	57.18	-7,107.5	-4,212.3	8,185.9	8,155.4	30.53	268.165		
7,950.0	7,730.8	7,871.5	7,752.7	14.1	24.0	61.94	-7,107.5	-4,212.2	8,145.9	8,113.9	32.04	254.227		
8,000.0	7,745.5	7,886.2	7,767.4	14.4	24.0	67.23	-7,107.5	-4,212.1	8,105.0	8,071.4	33.61	241.151		
8,050.0	7,756.7	7,897.5	7,778.7	14.7	24.0	72.98	-7,107.5	-4,212.0	8,063.4	8,028.3	35.10	229.703		
8,100.0	7,764.6	7,905.4	7,786.6	15.1	24.0	79.12	-7,107.5	-4,212.0	8,021.4	7,985.0	36.38	220.467		
8,150.0	7,769.0	7,909.8	7,791.0	15.5	24.0	85.48	-7,107.5	-4,211.9	7,979.1	7,941.7	37.32	213.799		
8,188.1	7,770.0	7,910.8	7,792.0	15.9	24.0	90.35	-7,107.5	-4,211.9	7,946.8	7,909.0	37.75	210.520		
8,200.0	7,770.0	7,910.8	7,792.0	16.0	24.0	90.35	-7,107.5	-4,211.9	7,936.7	7,898.8	37.86	209.638		
8,300.0	7,770.0	7,910.9	7,792.1	17.0	24.0	90.35	-7,107.5	-4,211.9	7,852.1	7,813.3	38.86	202.072		
8,400.0	7,770.0	7,910.9	7,792.1	18.1	24.0	90.35	-7,107.5	-4,211.9	7,768.0	7,728.0	39.97	194.332		
8,500.0	7,770.0	7,911.0	7,792.2	19.3	24.0	90.36	-7,107.5	-4,211.9	7,684.2	7,643.0	41.18	186.588		
8,600.0	7,770.0	7,911.0	7,792.2	20.6	24.0	90.36	-7,107.5	-4,211.9	7,600.8	7,558.3	42.47	178.964		
8,700.0	7,770.0	7,911.1	7,792.3	21.9	24.0	90.36	-7,107.5	-4,211.9	7,517.8	7,474.0	43.82	171.545		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,770.0	7,911.1	7,792.3	23.3	24.0	90.36	-7,107.5	-4,211.9	7,435.2	7,390.0	45.23	164.385		
8,900.0	7,770.0	7,911.2	7,792.4	24.8	24.0	90.36	-7,107.5	-4,211.9	7,353.1	7,306.4	46.68	157.516		
9,000.0	7,770.0	7,911.2	7,792.4	26.3	24.0	90.36	-7,107.5	-4,211.9	7,271.4	7,223.2	48.17	150.954		
9,100.0	7,770.0	7,911.3	7,792.5	27.8	24.0	90.36	-7,107.5	-4,211.9	7,190.2	7,140.5	49.69	144.705		
9,200.0	7,770.0	7,911.3	7,792.5	29.3	24.0	90.36	-7,107.5	-4,211.9	7,109.4	7,058.2	51.23	138.765		
9,300.0	7,770.0	7,911.4	7,792.6	30.9	24.0	90.36	-7,107.5	-4,211.9	7,029.2	6,976.4	52.80	133.125		
9,400.0	7,770.0	7,911.4	7,792.6	32.5	24.0	90.36	-7,107.5	-4,211.9	6,949.5	6,895.1	54.39	127.775		
9,500.0	7,770.0	7,911.5	7,792.7	34.1	24.0	90.36	-7,107.5	-4,211.9	6,870.2	6,814.3	55.99	122.703		
9,600.0	7,770.0	7,911.5	7,792.7	35.7	24.0	90.36	-7,107.5	-4,211.9	6,791.6	6,734.0	57.61	117.892		
9,700.0	7,770.0	7,911.6	7,792.8	37.3	24.0	90.36	-7,107.5	-4,211.9	6,713.5	6,654.2	59.24	113.331		
9,800.0	7,770.0	7,911.6	7,792.8	39.0	24.0	90.36	-7,107.5	-4,211.9	6,636.0	6,575.1	60.88	109.004		
9,900.0	7,770.0	7,911.7	7,792.9	40.6	24.0	90.36	-7,107.5	-4,211.9	6,559.1	6,496.6	62.53	104.898		
10,000.0	7,770.0	7,911.7	7,792.9	42.3	24.0	90.37	-7,107.5	-4,211.9	6,482.8	6,418.6	64.19	101.000		
10,100.0	7,770.0	7,911.8	7,793.0	44.0	24.0	90.37	-7,107.5	-4,211.9	6,407.2	6,341.4	65.85	97.297		
10,200.0	7,770.0	7,911.8	7,793.0	45.6	24.0	90.37	-7,107.5	-4,211.9	6,332.3	6,264.7	67.52	93.778		
10,300.0	7,770.0	7,911.9	7,793.1	47.3	24.0	90.37	-7,107.5	-4,211.9	6,258.0	6,188.8	69.20	90.431		
10,400.0	7,770.0	7,911.9	7,793.1	49.0	24.0	90.37	-7,107.5	-4,211.9	6,184.5	6,113.6	70.89	87.246		
10,500.0	7,770.0	7,912.0	7,793.2	50.7	24.0	90.37	-7,107.5	-4,211.9	6,111.8	6,039.2	72.57	84.214		
10,600.0	7,770.0	7,912.0	7,793.2	52.4	24.0	90.37	-7,107.5	-4,211.9	6,039.8	5,965.5	74.27	81.325		
10,700.0	7,770.0	7,912.1	7,793.3	54.1	24.0	90.37	-7,107.5	-4,211.9	5,968.6	5,892.6	75.96	78.572		
10,800.0	7,770.0	7,912.1	7,793.3	55.8	24.0	90.37	-7,107.5	-4,211.9	5,898.3	5,820.6	77.66	75.946		
10,900.0	7,770.0	7,912.2	7,793.4	57.5	24.0	90.37	-7,107.5	-4,211.9	5,828.8	5,749.4	79.37	73.441		
11,000.0	7,770.0	7,912.2	7,793.4	59.2	24.0	90.37	-7,107.5	-4,211.9	5,760.2	5,679.2	81.07	71.050		
11,100.0	7,770.0	7,912.3	7,793.5	60.9	24.0	90.37	-7,107.5	-4,211.9	5,692.6	5,609.8	82.78	68.766		
11,200.0	7,770.0	7,912.3	7,793.5	62.6	24.0	90.37	-7,107.5	-4,211.9	5,625.9	5,541.4	84.49	66.584		
11,300.0	7,770.0	7,912.4	7,793.6	64.3	24.0	90.37	-7,107.5	-4,211.9	5,560.2	5,474.0	86.21	64.498		
11,400.0	7,770.0	7,912.4	7,793.6	66.0	24.0	90.38	-7,107.5	-4,211.9	5,495.6	5,407.7	87.92	62.504		
11,500.0	7,770.0	7,912.5	7,793.7	67.7	24.0	90.38	-7,107.5	-4,211.9	5,432.0	5,342.4	89.64	60.597		
11,600.0	7,770.0	7,912.5	7,793.7	69.5	24.0	90.38	-7,107.5	-4,211.9	5,369.6	5,278.2	91.36	58.773		
11,700.0	7,770.0	7,912.6	7,793.8	71.2	24.0	90.38	-7,107.5	-4,211.9	5,308.3	5,215.2	93.08	57.027		
11,800.0	7,770.0	7,912.6	7,793.8	72.9	24.0	90.38	-7,107.5	-4,211.9	5,248.1	5,153.3	94.81	55.357		
11,900.0	7,770.0	7,912.7	7,793.9	74.6	24.0	90.38	-7,107.5	-4,211.9	5,189.3	5,092.7	96.53	53.758		
12,000.0	7,770.0	7,912.7	7,793.9	76.4	24.0	90.38	-7,107.5	-4,211.9	5,131.6	5,033.4	98.26	52.227		
12,100.0	7,770.0	7,912.8	7,794.0	78.1	24.0	90.38	-7,107.5	-4,211.9	5,075.3	4,975.4	99.98	50.762		
12,200.0	7,770.0	7,912.8	7,794.0	79.8	24.0	90.38	-7,107.5	-4,211.9	5,020.4	4,918.7	101.71	49.360		
12,300.0	7,770.0	7,912.9	7,794.1	81.5	24.0	90.38	-7,107.5	-4,211.9	4,966.9	4,863.4	103.44	48.017		
12,400.0	7,770.0	7,912.9	7,794.1	83.3	24.0	90.38	-7,107.5	-4,211.9	4,914.8	4,809.6	105.17	46.732		
12,500.0	7,770.0	7,913.0	7,794.2	85.0	24.0	90.38	-7,107.5	-4,211.9	4,864.2	4,757.3	106.90	45.502		
12,600.0	7,770.0	7,913.0	7,794.2	86.7	24.0	90.38	-7,107.5	-4,211.9	4,815.2	4,706.5	108.63	44.325		
12,700.0	7,770.0	7,913.1	7,794.3	88.5	24.0	90.38	-7,107.5	-4,211.9	4,767.7	4,657.3	110.37	43.199		
12,800.0	7,770.0	7,913.1	7,794.3	90.2	24.0	90.38	-7,107.5	-4,211.9	4,721.9	4,609.8	112.10	42.122		
12,900.0	7,770.0	7,913.2	7,794.4	91.9	24.0	90.39	-7,107.5	-4,211.9	4,677.8	4,564.0	113.84	41.093		
13,000.0	7,770.0	7,913.2	7,794.4	93.7	24.0	90.39	-7,107.5	-4,211.9	4,635.4	4,519.9	115.57	40.109		
13,100.0	7,770.0	7,913.3	7,794.5	95.4	24.0	90.39	-7,107.5	-4,211.9	4,594.8	4,477.5	117.31	39.169		
13,200.0	7,770.0	7,913.3	7,794.5	97.1	24.0	90.39	-7,107.5	-4,211.9	4,556.1	4,437.0	119.04	38.272		
13,300.0	7,770.0	7,913.4	7,794.6	98.9	24.0	90.39	-7,107.5	-4,211.9	4,519.2	4,398.4	120.78	37.417		
13,400.0	7,770.0	7,913.4	7,794.6	100.6	24.0	90.39	-7,107.5	-4,211.9	4,484.3	4,361.7	122.52	36.601		
13,500.0	7,770.0	7,913.5	7,794.7	102.4	24.0	90.39	-7,107.5	-4,211.9	4,451.3	4,327.0	124.26	35.823		
13,600.0	7,770.0	7,913.5	7,794.7	104.1	24.0	90.39	-7,107.5	-4,211.9	4,420.3	4,294.3	126.00	35.083		
13,700.0	7,770.0	7,913.6	7,794.8	105.8	24.0	90.39	-7,107.5	-4,211.9	4,391.4	4,263.7	127.74	34.379		
13,800.0	7,770.0	7,913.6	7,794.8	107.6	24.0	90.39	-7,107.5	-4,211.9	4,364.6	4,235.1	129.48	33.710		
13,900.0	7,770.0	7,913.7	7,794.9	109.3	24.0	90.39	-7,107.5	-4,211.9	4,340.0	4,208.7	131.22	33.075		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
14,000.0	7,770.0	7,913.7	7,794.9	111.1	24.0	90.39	-7,107.5	-4,211.9	4,317.5	4,184.5	132.96	32.473		
14,100.0	7,770.0	7,913.8	7,795.0	112.8	24.0	90.39	-7,107.5	-4,211.9	4,297.2	4,162.5	134.70	31.902		
14,200.0	7,770.0	7,913.8	7,795.0	114.5	24.0	90.39	-7,107.5	-4,211.9	4,279.2	4,142.7	136.44	31.363		
14,300.0	7,770.0	7,913.9	7,795.1	116.3	24.0	90.39	-7,107.5	-4,211.9	4,263.4	4,125.2	138.18	30.854		
14,400.0	7,770.0	7,913.9	7,795.1	118.0	24.0	90.40	-7,107.5	-4,211.9	4,249.9	4,110.0	139.92	30.373		
14,500.0	7,770.0	7,914.0	7,795.2	119.8	24.0	90.40	-7,107.5	-4,211.9	4,238.8	4,097.1	141.67	29.921		
14,600.0	7,770.0	7,914.0	7,795.2	121.5	24.0	90.40	-7,107.5	-4,211.9	4,230.0	4,086.6	143.41	29.496		
14,700.0	7,770.0	7,914.1	7,795.3	123.3	24.0	90.40	-7,107.5	-4,211.9	4,223.5	4,078.3	145.15	29.097		
14,800.0	7,770.0	7,914.1	7,795.3	125.0	24.0	90.40	-7,107.5	-4,211.9	4,219.4	4,072.5	146.90	28.724		
14,900.0	7,770.0	7,914.2	7,795.4	126.7	24.0	90.40	-7,107.5	-4,211.9	4,217.7	4,069.0	148.64	28.375		
14,923.3	7,770.0	7,914.2	7,795.4	127.1	24.0	90.40	-7,107.5	-4,211.9	4,217.6	4,068.5	149.05	28.297	CC	
15,000.0	7,770.0	7,914.2	7,795.4	128.5	24.0	90.40	-7,107.5	-4,211.9	4,218.3	4,067.9	150.38	28.050	ES	
15,100.0	7,770.0	7,914.3	7,795.5	130.2	24.0	90.40	-7,107.5	-4,211.9	4,221.3	4,069.2	152.13	27.748		
15,200.0	7,770.0	7,914.3	7,795.5	132.0	24.0	90.40	-7,107.5	-4,211.9	4,226.7	4,072.8	153.87	27.468		
15,300.0	7,770.0	7,914.4	7,795.6	133.7	24.0	90.40	-7,107.5	-4,211.9	4,234.4	4,078.8	155.62	27.210		
15,400.0	7,770.0	7,914.4	7,795.6	135.5	24.0	90.40	-7,107.5	-4,211.9	4,244.4	4,087.1	157.36	26.972		
15,500.0	7,770.0	7,914.5	7,795.7	137.2	24.0	90.40	-7,107.5	-4,211.9	4,256.8	4,097.7	159.11	26.754		
15,600.0	7,770.0	7,914.5	7,795.7	139.0	24.0	90.40	-7,107.5	-4,211.9	4,271.5	4,110.7	160.85	26.555		
15,700.0	7,770.0	7,914.6	7,795.8	140.7	24.0	90.40	-7,107.5	-4,211.9	4,288.5	4,125.9	162.60	26.375		
15,800.0	7,770.0	7,914.6	7,795.8	142.4	24.0	90.40	-7,107.5	-4,211.9	4,307.7	4,143.4	164.35	26.211		
15,900.0	7,770.0	7,914.7	7,795.9	144.2	24.0	90.41	-7,107.5	-4,211.9	4,329.2	4,163.1	166.09	26.065		
16,000.0	7,770.0	7,914.7	7,795.9	145.9	24.0	90.41	-7,107.5	-4,211.9	4,352.9	4,185.0	167.84	25.935		
16,100.0	7,770.0	7,914.8	7,796.0	147.7	24.0	90.41	-7,107.5	-4,211.9	4,378.7	4,209.1	169.59	25.820		
16,200.0	7,770.0	7,914.8	7,796.0	149.4	24.0	90.41	-7,107.5	-4,211.9	4,406.6	4,235.3	171.33	25.720		
16,300.0	7,770.0	7,914.9	7,796.1	151.2	24.0	90.41	-7,107.5	-4,211.9	4,436.6	4,263.5	173.08	25.633		
16,400.0	7,770.0	7,914.9	7,796.1	152.9	24.0	90.41	-7,107.5	-4,211.9	4,468.6	4,293.8	174.83	25.560		
16,500.0	7,770.0	7,915.0	7,796.2	154.7	24.0	90.41	-7,107.5	-4,211.9	4,502.7	4,326.1	176.57	25.500		
16,600.0	7,770.0	7,915.0	7,796.2	156.4	24.0	90.41	-7,107.5	-4,211.9	4,538.7	4,360.3	178.32	25.452		
16,700.0	7,770.0	7,915.1	7,796.3	158.2	24.0	90.41	-7,107.5	-4,211.9	4,576.5	4,396.5	180.07	25.416		
16,800.0	7,770.0	7,915.1	7,796.3	159.9	24.0	90.41	-7,107.5	-4,211.9	4,616.3	4,434.5	181.82	25.390		
16,900.0	7,770.0	7,915.2	7,796.4	161.7	24.0	90.41	-7,107.5	-4,211.9	4,657.8	4,474.3	183.56	25.374		
17,000.0	7,770.0	7,915.2	7,796.4	163.4	24.0	90.41	-7,107.5	-4,211.9	4,701.1	4,515.8	185.31	25.369	SF	
17,100.0	7,770.0	7,915.3	7,796.5	165.2	24.0	90.41	-7,107.5	-4,211.9	4,746.2	4,559.1	187.06	25.372		
17,200.0	7,770.0	7,915.3	7,796.5	166.9	24.0	90.41	-7,107.5	-4,211.9	4,792.9	4,604.0	188.81	25.385		
17,300.0	7,770.0	7,915.4	7,796.6	168.7	24.0	90.42	-7,107.5	-4,211.9	4,841.2	4,650.6	190.56	25.405		
17,400.0	7,770.0	7,915.4	7,796.6	170.4	24.0	90.42	-7,107.5	-4,211.9	4,891.0	4,698.7	192.31	25.434		
17,500.0	7,770.0	7,915.5	7,796.7	172.2	24.0	90.42	-7,107.5	-4,211.9	4,942.4	4,748.4	194.05	25.469		
17,600.0	7,770.0	7,915.5	7,796.7	173.9	24.0	90.42	-7,107.5	-4,211.9	4,995.3	4,799.5	195.80	25.512		
17,653.1	7,770.0	7,915.6	7,796.7	174.8	24.0	90.42	-7,107.5	-4,211.9	5,023.9	4,827.2	196.73	25.537		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-149.25	-6,136.7	-3,650.3	7,140.3						
100.0	100.0	96.0	96.0	0.2	0.1	-149.25	-6,136.7	-3,650.3	7,140.3	7,140.0	0.29	N/A			
200.0	200.0	196.0	196.0	0.3	0.3	-149.25	-6,136.7	-3,650.3	7,140.3	7,139.7	0.64	N/A			
300.0	300.0	245.2	245.2	0.5	0.4	-149.26	-6,136.9	-3,650.3	7,140.6	7,139.7	0.90	7,909.172			
400.0	400.0	300.0	300.0	0.7	0.5	-149.26	-6,137.6	-3,650.3	7,141.7	7,140.6	1.17	6,088.270			
500.0	500.0	339.4	339.4	0.8	0.6	-149.26	-6,138.4	-3,650.4	7,143.5	7,142.1	1.42	5,042.097			
550.0	550.0	363.0	362.9	0.9	0.6	-149.26	-6,139.0	-3,650.5	7,144.7	7,143.2	1.55	4,623.376			
600.0	600.0	400.0	400.0	1.0	0.7	-150.10	-6,140.2	-3,650.6	7,146.3	7,144.6	1.70	4,209.676			
700.0	700.0	433.5	433.4	1.2	0.7	-150.08	-6,141.5	-3,650.7	7,151.1	7,149.2	1.93	3,702.461			
800.0	799.9	500.0	499.9	1.4	0.9	-150.06	-6,144.6	-3,650.9	7,158.2	7,156.0	2.22	3,218.406			
861.1	860.9	500.0	499.9	1.5	0.9	-150.04	-6,144.6	-3,650.9	7,163.6	7,161.3	2.33	3,072.345			
900.0	899.8	527.2	527.0	1.6	0.9	-150.05	-6,146.0	-3,651.1	7,167.4	7,164.9	2.45	2,926.219			
1,000.0	999.6	600.0	599.7	1.8	1.1	-150.08	-6,150.6	-3,651.5	7,177.7	7,174.9	2.76	2,602.925			
1,100.0	1,099.5	643.5	643.1	1.9	1.2	-150.10	-6,153.7	-3,651.7	7,188.4	7,185.4	3.01	2,384.879			
1,200.0	1,199.3	742.7	742.0	2.1	1.4	-150.15	-6,160.6	-3,652.3	7,199.4	7,196.0	3.37	2,135.373			
1,300.0	1,299.2	825.0	824.1	2.3	1.5	-150.18	-6,166.3	-3,652.8	7,210.4	7,206.7	3.70	1,949.334			
1,400.0	1,399.1	858.7	857.8	2.5	1.6	-150.20	-6,168.8	-3,653.2	7,222.1	7,218.1	3.94	1,833.611			
1,500.0	1,498.9	900.0	898.9	2.7	1.7	-150.22	-6,172.2	-3,654.0	7,234.7	7,230.5	4.19	1,725.947			
1,600.0	1,598.8	900.0	898.9	2.9	1.7	-150.22	-6,172.2	-3,654.0	7,248.3	7,244.0	4.37	1,658.089			
1,700.0	1,698.6	944.8	943.5	3.1	1.8	-150.23	-6,176.4	-3,655.3	7,262.8	7,258.2	4.63	1,568.356			
1,800.0	1,798.5	1,000.0	998.3	3.3	1.9	-150.25	-6,182.2	-3,657.7	7,278.5	7,273.6	4.91	1,483.326			
1,900.0	1,898.3	1,000.0	998.3	3.5	1.9	-150.25	-6,182.2	-3,657.7	7,294.8	7,289.7	5.09	1,434.021			
2,000.0	1,998.2	1,000.0	998.3	3.7	1.9	-150.25	-6,182.2	-3,657.7	7,312.4	7,307.1	5.27	1,388.320			
2,100.0	2,098.0	1,058.5	1,056.2	3.9	2.1	-150.27	-6,189.2	-3,661.0	7,330.5	7,325.0	5.55	1,320.974			
2,200.0	2,197.9	1,100.0	1,097.3	4.1	2.2	-150.28	-6,194.7	-3,663.8	7,349.8	7,344.0	5.80	1,267.179			
2,300.0	2,297.7	1,100.0	1,097.3	4.3	2.2	-150.28	-6,194.7	-3,663.8	7,370.1	7,364.1	5.98	1,232.358			
2,400.0	2,397.6	1,142.7	1,139.4	4.5	2.4	-150.29	-6,200.8	-3,667.1	7,391.1	7,384.9	6.23	1,185.458			
2,500.0	2,497.4	1,200.0	1,195.8	4.7	2.5	-150.30	-6,209.6	-3,672.4	7,413.4	7,406.9	6.51	1,138.550			
2,600.0	2,597.3	1,200.0	1,195.8	4.9	2.5	-150.30	-6,209.6	-3,672.4	7,436.2	7,429.5	6.69	1,111.259			
2,700.0	2,697.1	1,225.9	1,221.2	5.1	2.6	-150.31	-6,213.9	-3,675.0	7,460.1	7,453.2	6.92	1,078.632			
2,800.0	2,797.0	1,260.1	1,254.7	5.3	2.8	-150.32	-6,219.7	-3,678.7	7,484.9	7,477.7	7.15	1,046.212			
2,900.0	2,896.8	1,356.8	1,349.4	5.5	3.1	-150.33	-6,236.6	-3,689.3	7,510.0	7,502.5	7.50	1,001.432			
3,000.0	2,996.7	1,453.6	1,444.1	5.7	3.5	-150.34	-6,253.4	-3,700.0	7,535.2	7,527.3	7.84	960.678			
3,100.0	3,096.5	1,550.4	1,538.8	5.9	3.8	-150.36	-6,270.2	-3,710.6	7,560.3	7,552.1	8.19	923.313			
3,200.0	3,196.4	1,647.1	1,633.5	6.1	4.2	-150.37	-6,287.0	-3,721.3	7,585.5	7,576.9	8.53	888.937			
3,300.0	3,296.3	1,743.9	1,728.2	6.3	4.6	-150.39	-6,303.8	-3,732.0	7,610.6	7,601.7	8.88	857.210			
3,400.0	3,396.1	1,840.7	1,822.9	6.5	4.9	-150.40	-6,320.6	-3,742.6	7,635.8	7,626.6	9.22	827.841			
3,500.0	3,496.0	1,937.4	1,917.6	6.7	5.3	-150.42	-6,337.4	-3,753.3	7,660.9	7,651.4	9.57	800.579			
3,600.0	3,595.8	2,034.2	2,012.3	6.9	5.7	-150.43	-6,354.2	-3,763.9	7,686.1	7,676.2	9.91	775.206			
3,700.0	3,695.7	2,131.0	2,107.0	7.0	6.1	-150.45	-6,371.0	-3,774.6	7,711.2	7,701.0	10.26	751.533			
3,800.0	3,795.5	2,227.7	2,201.7	7.2	6.4	-150.46	-6,387.8	-3,785.2	7,736.4	7,725.8	10.61	729.397			
3,900.0	3,895.4	2,324.5	2,296.4	7.4	6.8	-150.47	-6,404.6	-3,795.9	7,761.6	7,750.6	10.95	708.653			
4,000.0	3,995.2	2,421.3	2,391.1	7.6	7.2	-150.49	-6,421.4	-3,806.6	7,786.7	7,775.4	11.30	689.175			
4,100.0	4,095.1	2,518.0	2,485.8	7.8	7.6	-150.50	-6,438.2	-3,817.2	7,811.9	7,800.2	11.64	670.850			
4,200.0	4,194.9	2,614.8	2,580.5	8.0	8.0	-150.51	-6,455.1	-3,827.9	7,837.0	7,825.0	11.99	653.580			
4,300.0	4,294.8	2,711.6	2,675.2	8.2	8.4	-150.53	-6,471.9	-3,838.5	7,862.2	7,849.9	12.34	637.276			
4,400.0	4,394.6	2,808.3	2,769.9	8.4	8.7	-150.54	-6,488.7	-3,849.2	7,887.3	7,874.7	12.68	621.860			
4,500.0	4,494.5	2,905.1	2,864.6	8.6	9.1	-150.56	-6,505.5	-3,859.9	7,912.5	7,899.5	13.03	607.260			
4,600.0	4,594.3	3,001.9	2,959.3	8.8	9.5	-150.57	-6,522.3	-3,870.5	7,937.7	7,924.3	13.38	593.415			
4,700.0	4,694.2	3,098.6	3,054.0	9.0	9.9	-150.58	-6,539.1	-3,881.2	7,962.8	7,949.1	13.72	580.267			
4,800.0	4,794.0	3,195.4	3,148.7	9.2	10.3	-150.59	-6,555.9	-3,891.8	7,988.0	7,973.9	14.07	567.765			
4,900.0	4,893.9	3,292.2	3,243.4	9.4	10.7	-150.61	-6,572.7	-3,902.5	8,013.1	7,998.7	14.42	555.863			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,993.7	3,388.9	3,338.0	9.6	11.1	-150.62	-6,589.5	-3,913.1	8,038.3	8,023.5	14.76	544.518				
5,100.0	5,093.6	3,485.7	3,432.7	9.8	11.4	-150.63	-6,606.3	-3,923.8	8,063.5	8,048.4	15.11	533.692				
5,200.0	5,193.5	3,582.5	3,527.4	10.0	11.8	-150.65	-6,623.1	-3,934.5	8,088.6	8,073.2	15.46	523.352				
5,300.0	5,293.3	3,679.2	3,622.1	10.2	12.2	-150.66	-6,639.9	-3,945.1	8,113.8	8,098.0	15.80	513.464				
5,400.0	5,393.2	3,776.0	3,716.8	10.4	12.6	-150.67	-6,656.7	-3,955.8	8,139.0	8,122.8	16.15	504.000				
5,500.0	5,493.0	3,872.8	3,811.5	10.6	13.0	-150.68	-6,673.5	-3,966.4	8,164.1	8,147.6	16.50	494.933				
5,600.0	5,592.9	3,969.5	3,906.2	10.8	13.4	-150.70	-6,690.4	-3,977.1	8,189.3	8,172.4	16.84	486.238				
5,700.0	5,692.7	4,066.3	4,000.9	11.0	13.8	-150.71	-6,707.2	-3,987.8	8,214.5	8,197.3	17.19	477.894				
5,800.0	5,792.6	4,163.1	4,095.6	11.2	14.1	-150.72	-6,724.0	-3,998.4	8,239.6	8,222.1	17.54	469.880				
5,900.0	5,892.4	4,259.8	4,190.3	11.4	14.5	-150.73	-6,740.8	-4,009.1	8,264.8	8,246.9	17.88	462.175				
6,000.0	5,992.3	4,356.6	4,285.0	11.6	14.9	-150.75	-6,757.6	-4,019.7	8,289.9	8,271.7	18.23	454.764				
6,100.0	6,092.1	4,453.4	4,379.7	11.8	15.3	-150.76	-6,774.4	-4,030.4	8,315.1	8,296.5	18.58	447.628				
6,200.0	6,192.0	4,550.1	4,474.4	12.0	15.7	-150.77	-6,791.2	-4,041.1	8,340.3	8,321.4	18.92	440.754				
6,300.0	6,291.8	4,646.9	4,569.1	12.2	16.1	-150.78	-6,808.0	-4,051.7	8,365.4	8,346.2	19.27	434.127				
6,400.0	6,391.7	4,743.7	4,663.8	12.4	16.5	-150.79	-6,824.8	-4,062.4	8,390.6	8,371.0	19.62	427.734				
6,500.0	6,491.5	4,840.4	4,758.5	12.6	16.8	-150.81	-6,841.6	-4,073.0	8,415.8	8,395.8	19.96	421.563				
6,600.0	6,591.4	4,937.2	4,853.2	12.8	17.2	-150.82	-6,858.4	-4,083.7	8,440.9	8,420.6	20.31	415.602				
6,700.0	6,691.2	5,034.0	4,947.9	13.0	17.6	-150.83	-6,875.2	-4,094.3	8,466.1	8,445.5	20.66	409.841				
6,800.0	6,791.1	5,130.7	5,042.6	13.2	18.0	-150.84	-6,892.0	-4,105.0	8,491.3	8,470.3	21.00	404.271				
6,900.0	6,890.9	5,227.5	5,137.3	13.4	18.4	-150.85	-6,908.8	-4,115.7	8,516.4	8,495.1	21.35	398.881				
7,000.0	6,990.8	5,324.3	5,232.0	13.6	18.8	-150.86	-6,925.7	-4,126.3	8,541.6	8,519.9	21.70	393.663				
7,024.2	7,014.9	7,120.1	7,011.0	13.6	23.0	-151.13	-7,080.1	-4,224.3	8,543.2	8,518.4	24.86	343.694				
7,050.0	7,040.7	7,145.9	7,036.8	13.7	23.0	-152.82	-7,080.1	-4,224.3	8,544.1	8,519.1	24.99	341.855				
7,100.0	7,090.7	7,195.9	7,086.7	13.7	23.1	30.59	-7,080.1	-4,224.3	8,543.4	8,518.2	25.20	338.968				
7,150.0	7,140.5	7,245.7	7,136.5	13.8	23.1	30.24	-7,080.1	-4,224.3	8,539.6	8,514.3	25.35	336.899				
7,200.0	7,189.9	7,295.1	7,185.9	13.8	23.2	30.41	-7,080.1	-4,224.3	8,532.9	8,507.5	25.43	335.588				
7,250.0	7,238.6	7,343.8	7,234.6	13.8	23.2	30.78	-7,080.1	-4,224.3	8,523.2	8,497.7	25.45	334.931				
7,300.0	7,286.4	7,391.6	7,282.5	13.7	23.3	31.33	-7,080.1	-4,224.3	8,510.5	8,485.1	25.42	334.797				
7,350.0	7,333.1	7,438.3	7,329.1	13.7	23.3	32.05	-7,080.1	-4,224.3	8,495.1	8,469.7	25.36	335.001				
7,400.0	7,378.5	7,483.6	7,374.5	13.6	23.3	32.95	-7,080.1	-4,224.3	8,476.8	8,451.5	25.28	335.306				
7,450.0	7,422.2	7,527.3	7,418.2	13.6	23.4	34.05	-7,080.1	-4,224.3	8,455.8	8,430.6	25.21	335.404				
7,500.0	7,464.1	7,569.3	7,460.2	13.5	23.4	35.35	-7,080.1	-4,224.3	8,432.3	8,407.1	25.18	334.922				
7,550.0	7,504.1	7,609.2	7,500.1	13.5	23.5	36.88	-7,080.1	-4,224.3	8,406.3	8,381.1	25.21	333.427				
7,600.0	7,541.8	7,647.0	7,537.9	13.5	23.5	38.68	-7,080.1	-4,224.3	8,378.1	8,352.7	25.35	330.461				
7,650.0	7,577.2	7,682.4	7,573.2	13.4	23.5	40.78	-7,080.1	-4,224.3	8,347.6	8,322.0	25.64	325.605				
7,700.0	7,610.0	7,715.2	7,606.1	13.5	23.6	43.21	-7,080.1	-4,224.3	8,315.1	8,289.0	26.10	318.559				
7,750.0	7,640.2	7,745.3	7,636.2	13.5	23.6	46.01	-7,080.1	-4,224.3	8,280.8	8,254.0	26.78	309.232				
7,800.0	7,667.4	7,772.6	7,663.4	13.6	23.6	49.24	-7,080.1	-4,224.3	8,244.8	8,217.2	27.68	297.811				
7,850.0	7,691.7	7,796.8	7,687.7	13.7	23.7	52.93	-7,080.1	-4,224.3	8,207.4	8,178.5	28.82	284.773				
7,900.0	7,712.8	7,818.0	7,708.9	13.9	23.7	57.13	-7,080.1	-4,224.3	8,168.6	8,138.4	30.16	270.828				
7,950.0	7,730.8	7,835.9	7,726.8	14.1	23.7	61.85	-7,080.1	-4,224.3	8,128.7	8,097.1	31.65	256.831				
8,000.0	7,745.5	7,850.6	7,741.5	14.4	23.7	67.08	-7,080.1	-4,224.3	8,088.0	8,054.8	33.19	243.654				
8,050.0	7,756.7	7,861.9	7,752.7	14.7	23.7	72.78	-7,080.1	-4,224.3	8,046.5	8,011.8	34.67	232.070				
8,100.0	7,764.6	7,869.7	7,760.6	15.1	23.7	78.86	-7,080.1	-4,224.3	8,004.5	7,968.6	35.95	222.675				
8,150.0	7,769.0	7,874.1	7,765.0	15.5	23.7	85.16	-7,080.1	-4,224.3	7,962.3	7,925.4	36.89	215.832				
8,188.1	7,770.0	7,875.1	7,766.0	15.9	23.7	90.00	-7,080.1	-4,224.3	7,930.1	7,892.8	37.33	212.415				
8,200.0	7,770.0	7,875.1	7,766.0	16.0	23.7	90.00	-7,080.1	-4,224.3	7,920.0	7,882.6	37.44	211.518				
8,300.0	7,770.0	7,875.1	7,766.0	17.0	23.7	90.00	-7,080.1	-4,224.3	7,835.6	7,797.2	38.44	203.826				
8,400.0	7,770.0	7,875.1	7,766.0	18.1	23.7	90.00	-7,080.1	-4,224.3	7,751.7	7,712.1	39.56	195.960				
8,500.0	7,770.0	7,875.1	7,766.0	19.3	23.7	90.00	-7,080.1	-4,224.3	7,668.0	7,627.3	40.77	188.094				
8,600.0	7,770.0	7,875.1	7,766.0	20.6	23.7	90.00	-7,080.1	-4,224.3	7,584.8	7,542.8	42.06	180.353				
8,700.0	7,770.0	7,875.1	7,766.0	21.9	23.7	90.00	-7,080.1	-4,224.3	7,502.0	7,458.6	43.41	172.823				

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,770.0	7,875.1	7,766.0	23.3	23.7	90.00	-7,080.1	-4,224.3	7,419.7	7,374.9	44.82	165.561		
8,900.0	7,770.0	7,875.1	7,766.0	24.8	23.7	90.00	-7,080.1	-4,224.3	7,337.7	7,291.5	46.27	158.598		
9,000.0	7,770.0	7,875.1	7,766.0	26.3	23.7	90.00	-7,080.1	-4,224.3	7,256.2	7,208.5	47.75	151.950		
9,100.0	7,770.0	7,875.1	7,766.0	27.8	23.7	90.00	-7,080.1	-4,224.3	7,175.2	7,126.0	49.27	145.622		
9,200.0	7,770.0	7,875.1	7,766.0	29.3	23.7	90.00	-7,080.1	-4,224.3	7,094.7	7,043.9	50.82	139.609		
9,300.0	7,770.0	7,875.1	7,766.0	30.9	23.7	90.00	-7,080.1	-4,224.3	7,014.7	6,962.3	52.39	133.904		
9,400.0	7,770.0	7,875.1	7,766.0	32.5	23.7	90.00	-7,080.1	-4,224.3	6,935.2	6,881.2	53.97	128.494		
9,500.0	7,770.0	7,875.1	7,766.0	34.1	23.7	90.00	-7,080.1	-4,224.3	6,856.2	6,800.6	55.58	123.367		
9,600.0	7,770.0	7,875.1	7,766.0	35.7	23.7	90.00	-7,080.1	-4,224.3	6,777.8	6,720.6	57.19	118.508		
9,700.0	7,770.0	7,875.1	7,766.0	37.3	23.7	90.00	-7,080.1	-4,224.3	6,699.9	6,641.1	58.82	113.901		
9,800.0	7,770.0	7,875.1	7,766.0	39.0	23.7	90.00	-7,080.1	-4,224.3	6,622.7	6,562.2	60.46	109.533		
9,900.0	7,770.0	7,875.1	7,766.0	40.6	23.7	90.00	-7,080.1	-4,224.3	6,546.0	6,483.9	62.11	105.390		
10,000.0	7,770.0	7,875.1	7,766.0	42.3	23.7	90.00	-7,080.1	-4,224.3	6,470.0	6,406.3	63.77	101.458		
10,100.0	7,770.0	7,875.1	7,766.0	44.0	23.7	90.00	-7,080.1	-4,224.3	6,394.7	6,329.3	65.44	97.724		
10,200.0	7,770.0	7,875.1	7,766.0	45.6	23.7	90.00	-7,080.1	-4,224.3	6,320.0	6,252.9	67.11	94.176		
10,300.0	7,770.0	7,875.1	7,766.0	47.3	23.7	90.00	-7,080.1	-4,224.3	6,246.1	6,177.3	68.79	90.804		
10,400.0	7,770.0	7,875.1	7,766.0	49.0	23.7	90.00	-7,080.1	-4,224.3	6,172.9	6,102.4	70.47	87.596		
10,500.0	7,770.0	7,875.1	7,766.0	50.7	23.7	90.00	-7,080.1	-4,224.3	6,100.5	6,028.3	72.16	84.542		
10,600.0	7,770.0	7,875.1	7,766.0	52.4	23.7	90.00	-7,080.1	-4,224.3	6,028.8	5,954.9	73.85	81.634		
10,700.0	7,770.0	7,875.1	7,766.0	54.1	23.7	90.00	-7,080.1	-4,224.3	5,957.9	5,882.4	75.55	78.863		
10,800.0	7,770.0	7,875.1	7,766.0	55.8	23.7	90.00	-7,080.1	-4,224.3	5,888.0	5,810.7	77.25	76.221		
10,900.0	7,770.0	7,875.1	7,766.0	57.5	23.7	90.00	-7,080.1	-4,224.3	5,818.8	5,739.9	78.95	73.701		
11,000.0	7,770.0	7,875.1	7,766.0	59.2	23.7	90.00	-7,080.1	-4,224.3	5,750.6	5,670.0	80.66	71.297		
11,100.0	7,770.0	7,875.1	7,766.0	60.9	23.7	90.00	-7,080.1	-4,224.3	5,683.3	5,601.0	82.37	69.001		
11,200.0	7,770.0	7,875.1	7,766.0	62.6	23.7	90.00	-7,080.1	-4,224.3	5,617.1	5,533.0	84.08	66.807		
11,300.0	7,770.0	7,875.1	7,766.0	64.3	23.7	90.00	-7,080.1	-4,224.3	5,551.8	5,466.0	85.79	64.712		
11,400.0	7,770.0	7,875.1	7,766.0	66.0	23.7	90.00	-7,080.1	-4,224.3	5,487.5	5,400.0	87.51	62.709		
11,500.0	7,770.0	7,875.1	7,766.0	67.7	23.7	90.00	-7,080.1	-4,224.3	5,424.4	5,335.1	89.23	60.794		
11,600.0	7,770.0	7,875.1	7,766.0	69.5	23.7	90.00	-7,080.1	-4,224.3	5,362.3	5,271.4	90.95	58.962		
11,700.0	7,770.0	7,875.1	7,766.0	71.2	23.7	90.00	-7,080.1	-4,224.3	5,301.5	5,208.8	92.67	57.210		
11,800.0	7,770.0	7,875.1	7,766.0	72.9	23.7	90.00	-7,080.1	-4,224.3	5,241.8	5,147.4	94.39	55.533		
11,900.0	7,770.0	7,875.1	7,766.0	74.6	23.7	90.00	-7,080.1	-4,224.3	5,183.3	5,087.2	96.11	53.929		
12,000.0	7,770.0	7,875.1	7,766.0	76.4	23.7	90.00	-7,080.1	-4,224.3	5,126.2	5,028.4	97.84	52.394		
12,100.0	7,770.0	7,875.1	7,766.0	78.1	23.7	90.00	-7,080.1	-4,224.3	5,070.4	4,970.8	99.57	50.924		
12,200.0	7,770.0	7,875.1	7,766.0	79.8	23.7	90.00	-7,080.1	-4,224.3	5,015.9	4,914.6	101.30	49.518		
12,300.0	7,770.0	7,875.1	7,766.0	81.5	23.7	90.00	-7,080.1	-4,224.3	4,962.9	4,859.9	103.02	48.172		
12,400.0	7,770.0	7,875.1	7,766.0	83.3	23.7	90.00	-7,080.1	-4,224.3	4,911.3	4,806.6	104.75	46.884		
12,500.0	7,770.0	7,875.1	7,766.0	85.0	23.7	90.00	-7,080.1	-4,224.3	4,861.3	4,754.8	106.49	45.652		
12,600.0	7,770.0	7,875.1	7,766.0	86.7	23.7	90.00	-7,080.1	-4,224.3	4,812.8	4,704.6	108.22	44.473		
12,700.0	7,770.0	7,875.1	7,766.0	88.5	23.7	90.00	-7,080.1	-4,224.3	4,765.9	4,655.9	109.95	43.345		
12,800.0	7,770.0	7,875.1	7,766.0	90.2	23.7	90.00	-7,080.1	-4,224.3	4,720.6	4,609.0	111.68	42.268		
12,900.0	7,770.0	7,875.1	7,766.0	91.9	23.7	90.00	-7,080.1	-4,224.3	4,677.1	4,563.7	113.42	41.237		
13,000.0	7,770.0	7,875.1	7,766.0	93.7	23.7	90.00	-7,080.1	-4,224.3	4,635.3	4,520.2	115.15	40.253		
13,100.0	7,770.0	7,875.1	7,766.0	95.4	23.7	90.00	-7,080.1	-4,224.3	4,595.3	4,478.4	116.89	39.313		
13,200.0	7,770.0	7,875.1	7,766.0	97.1	23.7	90.00	-7,080.1	-4,224.3	4,557.2	4,438.5	118.63	38.416		
13,300.0	7,770.0	7,875.1	7,766.0	98.9	23.7	90.00	-7,080.1	-4,224.3	4,520.9	4,400.5	120.36	37.560		
13,400.0	7,770.0	7,875.1	7,766.0	100.6	23.7	90.00	-7,080.1	-4,224.3	4,486.6	4,364.5	122.10	36.744		
13,500.0	7,770.0	7,875.1	7,766.0	102.4	23.7	90.00	-7,080.1	-4,224.3	4,454.2	4,330.4	123.84	35.967		
13,600.0	7,770.0	7,875.1	7,766.0	104.1	23.7	90.00	-7,080.1	-4,224.3	4,423.9	4,298.3	125.58	35.228		
13,700.0	7,770.0	7,875.1	7,766.0	105.8	23.7	90.00	-7,080.1	-4,224.3	4,395.7	4,268.3	127.32	34.525		
13,800.0	7,770.0	7,875.1	7,766.0	107.6	23.7	90.00	-7,080.1	-4,224.3	4,369.5	4,240.5	129.06	33.857		
13,900.0	7,770.0	7,875.1	7,766.0	109.3	23.7	90.00	-7,080.1	-4,224.3	4,345.5	4,214.7	130.80	33.223		

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

Anticollision Report

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Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
14,000.0	7,770.0	7,875.1	7,766.0	111.1	23.7	90.00	-7,080.1	-4,224.3	4,323.7	4,191.2	132.54	32.622		
14,100.0	7,770.0	7,875.1	7,766.0	112.8	23.7	90.00	-7,080.1	-4,224.3	4,304.1	4,169.8	134.28	32.053		
14,200.0	7,770.0	7,875.1	7,766.0	114.5	23.7	90.00	-7,080.1	-4,224.3	4,286.7	4,150.7	136.02	31.515		
14,300.0	7,770.0	7,875.1	7,766.0	116.3	23.7	90.00	-7,080.1	-4,224.3	4,271.6	4,133.9	137.77	31.007		
14,400.0	7,770.0	7,875.1	7,766.0	118.0	23.7	90.00	-7,080.1	-4,224.3	4,258.8	4,119.3	139.51	30.528		
14,500.0	7,770.0	7,875.1	7,766.0	119.8	23.7	90.00	-7,080.1	-4,224.3	4,248.4	4,107.1	141.25	30.077		
14,600.0	7,770.0	7,875.1	7,766.0	121.5	23.7	90.00	-7,080.1	-4,224.3	4,240.2	4,097.2	142.99	29.653		
14,700.0	7,770.0	7,875.1	7,766.0	123.3	23.7	90.00	-7,080.1	-4,224.3	4,234.4	4,089.7	144.74	29.256		
14,800.0	7,770.0	7,875.1	7,766.0	125.0	23.7	90.00	-7,080.1	-4,224.3	4,231.0	4,084.5	146.48	28.884		
14,895.9	7,770.0	7,875.1	7,766.0	126.7	23.7	90.00	-7,080.1	-4,224.3	4,229.9	4,081.7	148.15	28.551	CC	
14,900.0	7,770.0	7,875.1	7,766.0	126.7	23.7	90.00	-7,080.1	-4,224.3	4,229.9	4,081.6	148.22	28.537		
15,000.0	7,770.0	7,875.1	7,766.0	128.5	23.7	90.00	-7,080.1	-4,224.3	4,231.1	4,081.2	149.97	28.214	ES	
15,100.0	7,770.0	7,875.1	7,766.0	130.2	23.7	90.00	-7,080.1	-4,224.3	4,234.8	4,083.1	151.71	27.913		
15,200.0	7,770.0	7,875.1	7,766.0	132.0	23.7	90.00	-7,080.1	-4,224.3	4,240.8	4,087.3	153.46	27.635		
15,300.0	7,770.0	7,875.1	7,766.0	133.7	23.7	90.00	-7,080.1	-4,224.3	4,249.1	4,093.9	155.20	27.378		
15,400.0	7,770.0	7,875.1	7,766.0	135.5	23.7	90.00	-7,080.1	-4,224.3	4,259.8	4,102.9	156.95	27.142		
15,500.0	7,770.0	7,875.1	7,766.0	137.2	23.7	90.00	-7,080.1	-4,224.3	4,272.8	4,114.1	158.69	26.925		
15,600.0	7,770.0	7,875.1	7,766.0	139.0	23.7	90.00	-7,080.1	-4,224.3	4,288.1	4,127.6	160.44	26.727		
15,700.0	7,770.0	7,875.1	7,766.0	140.7	23.7	90.00	-7,080.1	-4,224.3	4,305.6	4,143.4	162.18	26.548		
15,800.0	7,770.0	7,875.1	7,766.0	142.4	23.7	90.00	-7,080.1	-4,224.3	4,325.4	4,161.5	163.93	26.386		
15,900.0	7,770.0	7,875.1	7,766.0	144.2	23.7	90.00	-7,080.1	-4,224.3	4,347.4	4,181.7	165.68	26.240		
16,000.0	7,770.0	7,875.1	7,766.0	145.9	23.7	90.00	-7,080.1	-4,224.3	4,371.6	4,204.2	167.42	26.111		
16,100.0	7,770.0	7,875.1	7,766.0	147.7	23.7	90.00	-7,080.1	-4,224.3	4,397.9	4,228.8	169.17	25.997		
16,200.0	7,770.0	7,875.1	7,766.0	149.4	23.7	90.00	-7,080.1	-4,224.3	4,426.3	4,255.4	170.92	25.898		
16,300.0	7,770.0	7,875.1	7,766.0	151.2	23.7	90.00	-7,080.1	-4,224.3	4,456.8	4,284.2	172.66	25.812		
16,400.0	7,770.0	7,875.1	7,766.0	152.9	23.7	90.00	-7,080.1	-4,224.3	4,489.3	4,314.9	174.41	25.740		
16,500.0	7,770.0	7,875.1	7,766.0	154.7	23.7	90.00	-7,080.1	-4,224.3	4,523.8	4,347.7	176.16	25.681		
16,600.0	7,770.0	7,875.1	7,766.0	156.4	23.7	90.00	-7,080.1	-4,224.3	4,560.2	4,382.3	177.91	25.633		
16,700.0	7,770.0	7,875.1	7,766.0	158.2	23.7	90.00	-7,080.1	-4,224.3	4,598.5	4,418.9	179.65	25.597		
16,800.0	7,770.0	7,875.1	7,766.0	159.9	23.7	90.00	-7,080.1	-4,224.3	4,638.7	4,457.3	181.40	25.572		
16,900.0	7,770.0	7,875.1	7,766.0	161.7	23.7	90.00	-7,080.1	-4,224.3	4,680.6	4,497.5	183.15	25.557		
17,000.0	7,770.0	7,875.1	7,766.0	163.4	23.7	90.00	-7,080.1	-4,224.3	4,724.3	4,539.4	184.90	25.551	SF	
17,100.0	7,770.0	7,875.1	7,766.0	165.2	23.7	90.00	-7,080.1	-4,224.3	4,769.7	4,583.0	186.64	25.555		
17,200.0	7,770.0	7,875.1	7,766.0	166.9	23.7	90.00	-7,080.1	-4,224.3	4,816.7	4,628.3	188.39	25.567		
17,300.0	7,770.0	7,875.1	7,766.0	168.7	23.7	90.00	-7,080.1	-4,224.3	4,865.3	4,675.2	190.14	25.588		
17,400.0	7,770.0	7,875.1	7,766.0	170.4	23.7	90.00	-7,080.1	-4,224.3	4,915.5	4,723.6	191.89	25.616		
17,500.0	7,770.0	7,875.1	7,766.0	172.2	23.7	90.00	-7,080.1	-4,224.3	4,967.2	4,773.6	193.64	25.652		
17,600.0	7,770.0	7,875.1	7,766.0	173.9	23.7	90.00	-7,080.1	-4,224.3	5,020.4	4,825.0	195.39	25.695		
17,653.1	7,770.0	7,875.1	7,766.0	174.8	23.7	90.00	-7,080.1	-4,224.3	5,049.1	4,852.8	196.31	25.720		

Anticollision Report

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Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-149.14	-6,136.7	-3,667.1	7,148.9					
100.0	100.0	64.8	64.8	0.2	0.0	-149.14	-6,136.9	-3,667.0	7,149.1	7,148.9	0.20	N/A		
200.0	200.0	168.0	168.0	0.3	0.1	-149.15	-6,137.7	-3,666.8	7,149.6	7,149.2	0.46	N/A		
300.0	300.0	266.1	266.1	0.5	0.2	-149.15	-6,138.4	-3,666.2	7,150.0	7,149.2	0.72	9,919.131		
400.0	400.0	341.3	341.3	0.7	0.3	-149.16	-6,139.2	-3,665.6	7,150.5	7,149.5	0.96	7,438.891		
500.0	500.0	1,500.0	1,492.9	0.8	1.6	-149.52	-6,098.2	-3,589.9	7,146.4	7,144.2	2.23	3,203.659		
550.0	550.0	1,500.0	1,492.9	0.9	1.6	-149.52	-6,098.2	-3,589.9	7,139.6	7,137.3	2.32	3,080.111		
600.0	600.0	1,500.0	1,492.9	1.0	1.6	-150.38	-6,098.2	-3,589.9	7,133.4	7,131.0	2.40	2,970.131		
700.0	700.0	1,500.0	1,492.9	1.2	1.6	-150.43	-6,098.2	-3,589.9	7,123.0	7,120.4	2.58	2,764.956		
800.0	799.9	1,500.0	1,492.9	1.4	1.6	-150.47	-6,098.2	-3,589.9	7,115.5	7,112.7	2.75	2,586.195		
861.1	860.9	1,500.0	1,492.9	1.5	1.6	-150.49	-6,098.2	-3,589.9	7,112.4	7,109.5	2.86	2,487.803		
900.0	899.8	1,500.0	1,492.9	1.6	1.6	-150.49	-6,098.2	-3,589.9	7,110.8	7,107.9	2.93	2,428.613		
1,000.0	999.6	1,500.0	1,492.9	1.8	1.6	-150.49	-6,098.2	-3,589.9	7,107.8	7,104.7	3.11	2,288.578		
1,100.0	1,099.5	1,500.0	1,492.9	1.9	1.6	-150.49	-6,098.2	-3,589.9	7,106.2	7,102.9	3.28	2,163.785		
1,162.9	1,162.3	1,500.0	1,492.9	2.1	1.6	-150.49	-6,098.2	-3,589.9	7,105.9	7,102.5	3.40	2,092.085	CC, ES	
1,200.0	1,199.3	1,500.0	1,492.9	2.1	1.6	-150.49	-6,098.2	-3,589.9	7,106.0	7,102.6	3.46	2,052.020		
1,300.0	1,299.2	1,500.0	1,492.9	2.3	1.6	-150.49	-6,098.2	-3,589.9	7,107.3	7,103.6	3.64	1,951.452		
1,400.0	1,399.1	1,500.0	1,492.9	2.5	1.6	-150.49	-6,098.2	-3,589.9	7,109.9	7,106.1	3.82	1,860.563		
1,500.0	1,498.9	1,500.0	1,492.9	2.7	1.6	-150.49	-6,098.2	-3,589.9	7,113.9	7,109.9	4.00	1,778.090		
1,600.0	1,598.8	1,500.0	1,492.9	2.9	1.6	-150.49	-6,098.2	-3,589.9	7,119.4	7,115.2	4.18	1,702.972		
1,700.0	1,698.6	1,500.0	1,492.9	3.1	1.6	-150.49	-6,098.2	-3,589.9	7,126.2	7,121.9	4.36	1,634.320		
1,800.0	1,798.5	1,500.0	1,492.9	3.3	1.6	-150.49	-6,098.2	-3,589.9	7,134.4	7,129.9	4.54	1,571.376		
1,900.0	1,898.3	1,500.0	1,492.9	3.5	1.6	-150.49	-6,098.2	-3,589.9	7,144.1	7,139.4	4.72	1,513.497		
2,000.0	1,998.2	1,500.0	1,492.9	3.7	1.6	-150.49	-6,098.2	-3,589.9	7,155.1	7,150.2	4.90	1,460.130		
2,100.0	2,098.0	1,500.0	1,492.9	3.9	1.6	-150.49	-6,098.2	-3,589.9	7,167.5	7,162.4	5.08	1,410.800		
2,200.0	2,197.9	1,500.0	1,492.9	4.1	1.6	-150.49	-6,098.2	-3,589.9	7,181.2	7,176.0	5.26	1,365.095		
2,300.0	2,297.7	1,500.0	1,492.9	4.3	1.6	-150.49	-6,098.2	-3,589.9	7,196.4	7,190.9	5.44	1,322.656		
2,400.0	2,397.6	1,500.0	1,492.9	4.5	1.6	-150.49	-6,098.2	-3,589.9	7,212.8	7,207.2	5.62	1,283.170		
2,500.0	2,497.4	1,500.0	1,492.9	4.7	1.6	-150.49	-6,098.2	-3,589.9	7,230.7	7,224.9	5.80	1,246.362		
2,600.0	2,597.3	1,500.0	1,492.9	4.9	1.6	-150.49	-6,098.2	-3,589.9	7,249.8	7,243.8	5.98	1,211.990		
2,700.0	2,697.1	1,500.0	1,492.9	5.1	1.6	-150.49	-6,098.2	-3,589.9	7,270.3	7,264.1	6.16	1,179.840		
2,800.0	2,797.0	1,500.0	1,492.9	5.3	1.6	-150.49	-6,098.2	-3,589.9	7,292.1	7,285.8	6.34	1,149.720		
2,900.0	2,896.8	1,500.0	1,492.9	5.5	1.6	-150.49	-6,098.2	-3,589.9	7,315.2	7,308.7	6.52	1,121.463		
3,000.0	2,996.7	1,500.0	1,492.9	5.7	1.6	-150.49	-6,098.2	-3,589.9	7,339.6	7,332.9	6.70	1,094.915		
3,100.0	3,096.5	1,500.0	1,492.9	5.9	1.6	-150.49	-6,098.2	-3,589.9	7,365.2	7,358.4	6.88	1,069.942		
3,200.0	3,196.4	1,500.0	1,492.9	6.1	1.6	-150.49	-6,098.2	-3,589.9	7,392.2	7,385.1	7.06	1,046.421		
3,300.0	3,296.3	1,500.0	1,492.9	6.3	1.6	-150.49	-6,098.2	-3,589.9	7,420.4	7,413.1	7.24	1,024.242		
3,400.0	3,396.1	1,500.0	1,492.9	6.5	1.6	-150.49	-6,098.2	-3,589.9	7,449.8	7,442.4	7.43	1,003.307		
3,500.0	3,496.0	1,500.0	1,492.9	6.7	1.6	-150.49	-6,098.2	-3,589.9	7,480.4	7,472.8	7.61	983.523		
3,600.0	3,595.8	1,500.0	1,492.9	6.9	1.6	-150.49	-6,098.2	-3,589.9	7,512.3	7,504.5	7.79	964.811		
3,700.0	3,695.7	1,500.0	1,492.9	7.0	1.6	-150.49	-6,098.2	-3,589.9	7,545.3	7,537.3	7.97	947.095		
3,800.0	3,795.5	1,500.0	1,492.9	7.2	1.6	-150.49	-6,098.2	-3,589.9	7,579.5	7,571.4	8.15	930.307		
3,900.0	3,895.4	1,500.0	1,492.9	7.4	1.6	-150.49	-6,098.2	-3,589.9	7,614.9	7,606.5	8.33	914.385		
4,000.0	3,995.2	1,500.0	1,492.9	7.6	1.6	-150.49	-6,098.2	-3,589.9	7,651.4	7,642.9	8.51	899.272		
4,100.0	4,095.1	1,500.0	1,492.9	7.8	1.6	-150.49	-6,098.2	-3,589.9	7,689.0	7,680.3	8.69	884.917		
4,200.0	4,194.9	1,500.0	1,492.9	8.0	1.6	-150.49	-6,098.2	-3,589.9	7,727.8	7,718.9	8.87	871.271		
4,300.0	4,294.8	1,500.0	1,492.9	8.2	1.6	-150.49	-6,098.2	-3,589.9	7,767.6	7,758.6	9.05	858.289		
4,400.0	4,394.6	1,500.0	1,492.9	8.4	1.6	-150.49	-6,098.2	-3,589.9	7,808.5	7,799.3	9.23	845.931		
4,500.0	4,494.5	1,500.0	1,492.9	8.6	1.6	-150.49	-6,098.2	-3,589.9	7,850.5	7,841.1	9.41	834.160		
4,600.0	4,594.3	1,500.0	1,492.9	8.8	1.6	-150.49	-6,098.2	-3,589.9	7,893.6	7,884.0	9.59	822.941		
4,700.0	4,694.2	1,500.0	1,492.9	9.0	1.6	-150.49	-6,098.2	-3,589.9	7,937.6	7,927.8	9.77	812.240		
4,800.0	4,794.0	1,500.0	1,492.9	9.2	1.6	-150.49	-6,098.2	-3,589.9	7,982.7	7,972.7	9.95	802.030		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,893.9	1,500.0	1,492.9	9.4	1.6	-150.49	-6,098.2	-3,589.9	8,028.7	8,018.6	10.13	792.280		
5,000.0	4,993.7	1,500.0	1,492.9	9.6	1.6	-150.49	-6,098.2	-3,589.9	8,075.8	8,065.4	10.31	782.967		
5,100.0	5,093.6	1,500.0	1,492.9	9.8	1.6	-150.49	-6,098.2	-3,589.9	8,123.8	8,113.3	10.49	774.065		
5,200.0	5,193.5	1,500.0	1,492.9	10.0	1.6	-150.49	-6,098.2	-3,589.9	8,172.7	8,162.0	10.68	765.552		
5,300.0	5,293.3	1,500.0	1,492.9	10.2	1.6	-150.49	-6,098.2	-3,589.9	8,222.5	8,211.7	10.86	757.407		
5,400.0	5,393.2	1,500.0	1,492.9	10.4	1.6	-150.49	-6,098.2	-3,589.9	8,273.3	8,262.3	11.04	749.612		
5,500.0	5,493.0	1,500.0	1,492.9	10.6	1.6	-150.49	-6,098.2	-3,589.9	8,325.0	8,313.7	11.22	742.146		
5,600.0	5,592.9	1,500.0	1,492.9	10.8	1.6	-150.49	-6,098.2	-3,589.9	8,377.5	8,366.1	11.40	734.994		
5,700.0	5,692.7	1,500.0	1,492.9	11.0	1.6	-150.49	-6,098.2	-3,589.9	8,430.9	8,419.3	11.58	728.139		
5,800.0	5,792.6	1,500.0	1,492.9	11.2	1.6	-150.49	-6,098.2	-3,589.9	8,485.1	8,473.4	11.76	721.566		
5,900.0	5,892.4	1,500.0	1,492.9	11.4	1.6	-150.49	-6,098.2	-3,589.9	8,540.2	8,528.2	11.94	715.260		
6,000.0	5,992.3	1,500.0	1,492.9	11.6	1.6	-150.49	-6,098.2	-3,589.9	8,596.1	8,583.9	12.12	709.210		
6,100.0	6,092.1	1,500.0	1,492.9	11.8	1.6	-150.49	-6,098.2	-3,589.9	8,652.7	8,640.4	12.30	703.402		
6,200.0	6,192.0	1,500.0	1,492.9	12.0	1.6	-150.49	-6,098.2	-3,589.9	8,710.2	8,697.7	12.48	697.824		
6,300.0	6,291.8	1,500.0	1,492.9	12.2	1.6	-150.49	-6,098.2	-3,589.9	8,768.4	8,755.7	12.66	692.466		
6,400.0	6,391.7	1,500.0	1,492.9	12.4	1.6	-150.49	-6,098.2	-3,589.9	8,827.3	8,814.5	12.84	687.316		
6,500.0	6,491.5	1,500.0	1,492.9	12.6	1.6	-150.49	-6,098.2	-3,589.9	8,887.0	8,874.0	13.02	682.366		
6,600.0	6,591.4	1,500.0	1,492.9	12.8	1.6	-150.49	-6,098.2	-3,589.9	8,947.4	8,934.2	13.20	677.606		
6,700.0	6,691.2	1,500.0	1,492.9	13.0	1.6	-150.49	-6,098.2	-3,589.9	9,008.6	8,995.2	13.39	673.026		
6,800.0	6,791.1	1,500.0	1,492.9	13.2	1.6	-150.49	-6,098.2	-3,589.9	9,070.4	9,056.8	13.57	668.620		
6,900.0	6,890.9	1,500.0	1,492.9	13.4	1.6	-150.49	-6,098.2	-3,589.9	9,132.9	9,119.1	13.75	664.378		
7,000.0	6,990.8	1,500.0	1,492.9	13.6	1.6	-150.49	-6,098.2	-3,589.9	9,196.0	9,182.1	13.93	660.294		
7,024.2	7,014.9	1,500.0	1,492.9	13.6	1.6	-150.49	-6,098.2	-3,589.9	9,211.4	9,197.4	13.97	659.329		
7,050.0	7,040.7	1,500.0	1,492.9	13.7	1.6	-152.97	-6,098.2	-3,589.9	9,227.5	9,213.5	14.00	659.136		
7,100.0	7,090.7	1,500.0	1,492.9	13.7	1.6	28.99	-6,098.2	-3,589.9	9,257.1	9,243.0	14.03	659.831		
7,150.0	7,140.5	1,500.0	1,492.9	13.8	1.6	27.29	-6,098.2	-3,589.9	9,284.2	9,270.2	14.03	661.872		
7,200.0	7,189.9	1,500.0	1,492.9	13.8	1.6	26.14	-6,098.2	-3,589.9	9,309.0	9,295.0	13.99	665.288		
7,250.0	7,238.6	1,500.0	1,492.9	13.8	1.6	25.22	-6,098.2	-3,589.9	9,331.2	9,317.2	13.93	670.087		
7,300.0	7,286.4	1,500.0	1,492.9	13.7	1.6	24.48	-6,098.2	-3,589.9	9,350.7	9,336.8	13.83	676.258		
7,350.0	7,333.1	1,500.0	1,492.9	13.7	1.6	23.88	-6,098.2	-3,589.9	9,367.5	9,353.8	13.70	683.771		
7,400.0	7,378.5	1,500.0	1,492.9	13.6	1.6	23.39	-6,098.2	-3,589.9	9,381.5	9,367.9	13.55	692.574		
7,450.0	7,422.2	1,500.0	1,492.9	13.6	1.6	23.02	-6,098.2	-3,589.9	9,392.6	9,379.2	13.37	702.580		
7,500.0	7,464.1	1,500.0	1,492.9	13.5	1.6	22.75	-6,098.2	-3,589.9	9,400.8	9,387.7	13.17	713.662		
7,550.0	7,504.1	1,500.0	1,492.9	13.5	1.6	22.58	-6,098.2	-3,589.9	9,406.1	9,393.2	12.96	725.637		
7,600.0	7,541.8	1,500.0	1,492.9	13.5	1.6	22.50	-6,098.2	-3,589.9	9,408.5	9,395.8	12.74	738.250		
7,650.0	7,577.2	1,500.0	1,492.9	13.4	1.6	22.52	-6,098.2	-3,589.9	9,407.9	9,395.4	12.52	751.156		
7,700.0	7,610.0	1,500.0	1,492.9	13.5	1.6	22.62	-6,098.2	-3,589.9	9,404.4	9,392.1	12.31	763.901		
7,750.0	7,640.2	1,500.0	1,492.9	13.5	1.6	22.82	-6,098.2	-3,589.9	9,397.9	9,385.8	12.11	775.909		
7,800.0	7,667.4	1,500.0	1,492.9	13.6	1.6	23.12	-6,098.2	-3,589.9	9,388.5	9,376.5	11.94	786.483		
7,850.0	7,691.7	1,500.0	1,492.9	13.7	1.6	23.52	-6,098.2	-3,589.9	9,376.2	9,364.4	11.80	794.811		
7,900.0	7,712.8	1,500.0	1,492.9	13.9	1.6	24.03	-6,098.2	-3,589.9	9,361.0	9,349.3	11.70	800.018		
7,950.0	7,730.8	1,500.0	1,492.9	14.1	1.6	24.66	-6,098.2	-3,589.9	9,343.1	9,331.5	11.66	801.229		
8,000.0	7,745.5	1,500.0	1,492.9	14.4	1.6	25.42	-6,098.2	-3,589.9	9,322.6	9,310.9	11.69	797.674		
8,050.0	7,756.7	1,500.0	1,492.9	14.7	1.6	26.33	-6,098.2	-3,589.9	9,299.3	9,287.5	11.79	788.793		
8,100.0	7,764.6	1,500.0	1,492.9	15.1	1.6	27.42	-6,098.2	-3,589.9	9,273.6	9,261.6	11.98	774.332		
8,150.0	7,769.0	1,500.0	1,492.9	15.5	1.6	28.70	-6,098.2	-3,589.9	9,245.4	9,233.2	12.26	754.396		
8,188.1	7,770.0	1,500.0	1,492.9	15.9	1.6	29.82	-6,098.2	-3,589.9	9,222.5	9,209.9	12.53	735.808		
8,200.0	7,770.0	1,500.0	1,492.9	16.0	1.6	29.82	-6,098.2	-3,589.9	9,215.1	9,202.5	12.59	731.728		
8,300.0	7,770.0	1,500.0	1,492.9	17.0	1.6	29.82	-6,098.2	-3,589.9	9,153.4	9,140.3	13.12	697.681		
8,400.0	7,770.0	1,500.0	1,492.9	18.1	1.6	29.82	-6,098.2	-3,589.9	9,092.4	9,078.7	13.69	664.263		
8,500.0	7,770.0	1,500.0	1,492.9	19.3	1.6	29.82	-6,098.2	-3,589.9	9,032.1	9,017.8	14.29	631.944		
8,600.0	7,770.0	1,500.0	1,492.9	20.6	1.6	29.82	-6,098.2	-3,589.9	8,972.5	8,957.6	14.93	601.023		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
8,700.0	7,770.0	1,500.0	1,492.9	21.9	1.6	29.82	-6,098.2	-3,589.9	8,913.7	8,898.1	15.59	571.675			
8,800.0	7,770.0	1,500.0	1,492.9	23.3	1.6	29.82	-6,098.2	-3,589.9	8,855.5	8,839.3	16.28	543.977			
8,900.0	7,770.0	1,500.0	1,492.9	24.8	1.6	29.82	-6,098.2	-3,589.9	8,798.2	8,781.2	16.99	517.943			
9,000.0	7,770.0	1,500.0	1,492.9	26.3	1.6	29.82	-6,098.2	-3,589.9	8,741.6	8,723.8	17.71	493.537			
9,100.0	7,770.0	1,500.0	1,492.9	27.8	1.6	29.82	-6,098.2	-3,589.9	8,685.7	8,667.3	18.45	470.698			
9,200.0	7,770.0	1,500.0	1,492.9	29.3	1.6	29.82	-6,098.2	-3,589.9	8,630.7	8,611.5	19.21	449.345			
9,300.0	7,770.0	1,500.0	1,492.9	30.9	1.6	29.82	-6,098.2	-3,589.9	8,576.5	8,556.5	19.97	429.391			
9,400.0	7,770.0	1,500.0	1,492.9	32.5	1.6	29.82	-6,098.2	-3,589.9	8,523.1	8,502.4	20.75	410.744			
9,500.0	7,770.0	1,500.0	1,492.9	34.1	1.6	29.82	-6,098.2	-3,589.9	8,470.6	8,449.1	21.54	393.312			
9,600.0	7,770.0	1,500.0	1,492.9	35.7	1.6	29.82	-6,098.2	-3,589.9	8,418.9	8,396.6	22.33	377.007			
9,700.0	7,770.0	1,500.0	1,492.9	37.3	1.6	29.82	-6,098.2	-3,589.9	8,368.1	8,345.0	23.13	361.746			
9,800.0	7,770.0	1,500.0	1,492.9	39.0	1.6	29.82	-6,098.2	-3,589.9	8,318.2	8,294.3	23.94	347.450			
9,900.0	7,770.0	1,500.0	1,492.9	40.6	1.6	29.82	-6,098.2	-3,589.9	8,269.2	8,244.4	24.75	334.045			
10,000.0	7,770.0	1,500.0	1,492.9	42.3	1.6	29.82	-6,098.2	-3,589.9	8,221.1	8,195.5	25.57	321.463			
10,100.0	7,770.0	1,500.0	1,492.9	44.0	1.6	29.82	-6,098.2	-3,589.9	8,174.0	8,147.6	26.40	309.642			
10,200.0	7,770.0	1,500.0	1,492.9	45.6	1.6	29.82	-6,098.2	-3,589.9	8,127.8	8,100.6	27.23	298.525			
10,300.0	7,770.0	1,500.0	1,492.9	47.3	1.6	29.82	-6,098.2	-3,589.9	8,082.6	8,054.5	28.06	288.060			
10,400.0	7,770.0	1,500.0	1,492.9	49.0	1.6	29.82	-6,098.2	-3,589.9	8,038.4	8,009.5	28.89	278.197			
10,500.0	7,770.0	1,500.0	1,492.9	50.7	1.6	29.82	-6,098.2	-3,589.9	7,995.2	7,965.4	29.73	268.894			
10,600.0	7,770.0	1,500.0	1,492.9	52.4	1.6	29.82	-6,098.2	-3,589.9	7,953.0	7,922.4	30.58	260.110			
10,700.0	7,770.0	1,500.0	1,492.9	54.1	1.6	29.82	-6,098.2	-3,589.9	7,911.8	7,880.4	31.42	251.808			
10,800.0	7,770.0	1,500.0	1,492.9	55.8	1.6	29.82	-6,098.2	-3,589.9	7,871.7	7,839.5	32.27	243.955			
10,900.0	7,770.0	1,500.0	1,492.9	57.5	1.6	29.82	-6,098.2	-3,589.9	7,832.7	7,799.6	33.12	236.519			
11,000.0	7,770.0	1,500.0	1,492.9	59.2	1.6	29.82	-6,098.2	-3,589.9	7,794.8	7,760.8	33.97	229.474			
11,100.0	7,770.0	1,500.0	1,492.9	60.9	1.6	29.82	-6,098.2	-3,589.9	7,758.0	7,723.1	34.82	222.792			
11,200.0	7,770.0	1,500.0	1,492.9	62.6	1.6	29.82	-6,098.2	-3,589.9	7,722.3	7,686.6	35.68	216.451			
11,300.0	7,770.0	1,500.0	1,492.9	64.3	1.6	29.82	-6,098.2	-3,589.9	7,687.7	7,651.1	36.53	210.427			
11,400.0	7,770.0	1,500.0	1,492.9	66.0	1.6	29.82	-6,098.2	-3,589.9	7,654.3	7,616.9	37.39	204.703			
11,500.0	7,770.0	1,500.0	1,492.9	67.7	1.6	29.82	-6,098.2	-3,589.9	7,622.0	7,583.7	38.25	199.258			
11,600.0	7,770.0	1,500.0	1,492.9	69.5	1.6	29.82	-6,098.2	-3,589.9	7,590.9	7,551.8	39.11	194.076			
11,700.0	7,770.0	1,500.0	1,492.9	71.2	1.6	29.82	-6,098.2	-3,589.9	7,561.0	7,521.1	39.98	189.141			
11,800.0	7,770.0	1,500.0	1,492.9	72.9	1.6	29.82	-6,098.2	-3,589.9	7,532.4	7,491.5	40.84	184.440			
11,900.0	7,770.0	1,500.0	1,492.9	74.6	1.6	29.82	-6,098.2	-3,589.9	7,504.9	7,463.2	41.70	179.957			
12,000.0	7,770.0	1,500.0	1,492.9	76.4	1.6	29.82	-6,098.2	-3,589.9	7,478.7	7,436.1	42.57	175.682			
12,100.0	7,770.0	1,500.0	1,492.9	78.1	1.6	29.82	-6,098.2	-3,589.9	7,453.7	7,410.3	43.44	171.602			
12,200.0	7,770.0	1,500.0	1,492.9	79.8	1.6	29.82	-6,098.2	-3,589.9	7,430.0	7,385.7	44.30	167.706			
12,300.0	7,770.0	1,500.0	1,492.9	81.5	1.6	29.82	-6,098.2	-3,589.9	7,407.6	7,362.4	45.17	163.986			
12,400.0	7,770.0	1,500.0	1,492.9	83.3	1.6	29.82	-6,098.2	-3,589.9	7,386.4	7,340.4	46.04	160.431			
12,500.0	7,770.0	1,500.0	1,492.9	85.0	1.6	29.82	-6,098.2	-3,589.9	7,366.6	7,319.7	46.91	157.032			
12,600.0	7,770.0	1,500.0	1,492.9	86.7	1.6	29.82	-6,098.2	-3,589.9	7,348.1	7,300.3	47.78	153.783			
12,700.0	7,770.0	1,500.0	1,492.9	88.5	1.6	29.82	-6,098.2	-3,589.9	7,330.8	7,282.2	48.65	150.675			
12,800.0	7,770.0	1,500.0	1,492.9	90.2	1.6	29.82	-6,098.2	-3,589.9	7,314.9	7,265.4	49.53	147.701			
12,900.0	7,770.0	1,500.0	1,492.9	91.9	1.6	29.82	-6,098.2	-3,589.9	7,300.4	7,250.0	50.40	144.855			
13,000.0	7,770.0	1,500.0	1,492.9	93.7	1.6	29.82	-6,098.2	-3,589.9	7,287.2	7,235.9	51.27	142.130			
13,100.0	7,770.0	1,500.0	1,492.9	95.4	1.6	29.82	-6,098.2	-3,589.9	7,275.3	7,223.2	52.14	139.522			
13,200.0	7,770.0	1,500.0	1,492.9	97.1	1.6	29.82	-6,098.2	-3,589.9	7,264.8	7,211.8	53.02	137.023			
13,300.0	7,770.0	1,500.0	1,492.9	98.9	1.6	29.82	-6,098.2	-3,589.9	7,255.6	7,201.8	53.89	134.629			
13,400.0	7,770.0	1,500.0	1,492.9	100.6	1.6	29.82	-6,098.2	-3,589.9	7,247.9	7,193.1	54.77	132.336			
13,500.0	7,770.0	1,500.0	1,492.9	102.4	1.6	29.82	-6,098.2	-3,589.9	7,241.5	7,185.8	55.64	130.139			
13,600.0	7,770.0	1,500.0	1,492.9	104.1	1.6	29.82	-6,098.2	-3,589.9	7,236.4	7,179.9	56.52	128.033			
13,700.0	7,770.0	1,500.0	1,492.9	105.8	1.6	29.82	-6,098.2	-3,589.9	7,232.8	7,175.4	57.40	126.014			
13,800.0	7,770.0	1,500.0	1,492.9	107.6	1.6	29.82	-6,098.2	-3,589.9	7,230.5	7,172.2	58.27	124.079			

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,900.0	7,770.0	1,500.0	1,492.9	109.3	1.6	29.82	-6,098.2	-3,589.9	7,229.6	7,170.5	59.15	122.224		
13,914.0	7,770.0	1,500.0	1,492.9	109.6	1.6	29.82	-6,098.2	-3,589.9	7,229.6	7,170.3	59.27	121.971		
14,000.0	7,770.0	1,500.0	1,492.9	111.1	1.6	29.82	-6,098.2	-3,589.9	7,230.1	7,170.1	60.03	120.446		
14,100.0	7,770.0	1,500.0	1,492.9	112.8	1.6	29.82	-6,098.2	-3,589.9	7,232.0	7,171.1	60.91	118.741		
14,200.0	7,770.0	1,500.0	1,492.9	114.5	1.6	29.82	-6,098.2	-3,589.9	7,235.3	7,173.5	61.78	117.106		
14,300.0	7,770.0	1,500.0	1,492.9	116.3	1.6	29.82	-6,098.2	-3,589.9	7,239.9	7,177.3	62.66	115.539		
14,400.0	7,770.0	1,500.0	1,492.9	118.0	1.6	29.82	-6,098.2	-3,589.9	7,245.9	7,182.4	63.54	114.036		
14,500.0	7,770.0	1,500.0	1,492.9	119.8	1.6	29.82	-6,098.2	-3,589.9	7,253.3	7,188.9	64.42	112.594		
14,600.0	7,770.0	1,500.0	1,492.9	121.5	1.6	29.82	-6,098.2	-3,589.9	7,262.1	7,196.8	65.30	111.213		
14,700.0	7,770.0	1,500.0	1,492.9	123.3	1.6	29.82	-6,098.2	-3,589.9	7,272.2	7,206.0	66.18	109.888		
14,800.0	7,770.0	1,500.0	1,492.9	125.0	1.6	29.82	-6,098.2	-3,589.9	7,283.7	7,216.6	67.06	108.617		
14,900.0	7,770.0	1,500.0	1,492.9	126.7	1.6	29.82	-6,098.2	-3,589.9	7,296.5	7,228.6	67.94	107.399		
15,000.0	7,770.0	1,500.0	1,492.9	128.5	1.6	29.82	-6,098.2	-3,589.9	7,310.7	7,241.9	68.82	106.232		
15,100.0	7,770.0	1,500.0	1,492.9	130.2	1.6	29.82	-6,098.2	-3,589.9	7,326.2	7,256.6	69.70	105.113		
15,200.0	7,770.0	1,500.0	1,492.9	132.0	1.6	29.82	-6,098.2	-3,589.9	7,343.1	7,272.5	70.58	104.040		
15,300.0	7,770.0	1,500.0	1,492.9	133.7	1.6	29.82	-6,098.2	-3,589.9	7,361.3	7,289.8	71.46	103.012		
15,400.0	7,770.0	1,500.0	1,492.9	135.5	1.6	29.82	-6,098.2	-3,589.9	7,380.8	7,308.4	72.34	102.026		
15,500.0	7,770.0	1,500.0	1,492.9	137.2	1.6	29.82	-6,098.2	-3,589.9	7,401.5	7,328.3	73.22	101.082		
15,600.0	7,770.0	1,500.0	1,492.9	139.0	1.6	29.82	-6,098.2	-3,589.9	7,423.6	7,349.5	74.10	100.178		
15,700.0	7,770.0	1,500.0	1,492.9	140.7	1.6	29.82	-6,098.2	-3,589.9	7,447.0	7,372.0	74.99	99.311		
15,800.0	7,770.0	1,500.0	1,492.9	142.4	1.6	29.82	-6,098.2	-3,589.9	7,471.6	7,395.7	75.87	98.482		
15,900.0	7,770.0	1,500.0	1,492.9	144.2	1.6	29.82	-6,098.2	-3,589.9	7,497.4	7,420.7	76.75	97.687		
16,000.0	7,770.0	1,500.0	1,492.9	145.9	1.6	29.82	-6,098.2	-3,589.9	7,524.5	7,446.9	77.63	96.926		
16,100.0	7,770.0	1,500.0	1,492.9	147.7	1.6	29.82	-6,098.2	-3,589.9	7,552.9	7,474.4	78.51	96.198		
16,200.0	7,770.0	1,500.0	1,492.9	149.4	1.6	29.82	-6,098.2	-3,589.9	7,582.4	7,503.0	79.40	95.501		
16,300.0	7,770.0	1,500.0	1,492.9	151.2	1.6	29.82	-6,098.2	-3,589.9	7,613.2	7,532.9	80.28	94.834		
16,400.0	7,770.0	1,500.0	1,492.9	152.9	1.6	29.82	-6,098.2	-3,589.9	7,645.1	7,563.9	81.16	94.196		
16,500.0	7,770.0	1,500.0	1,492.9	154.7	1.6	29.82	-6,098.2	-3,589.9	7,678.2	7,596.2	82.04	93.586		
16,600.0	7,770.0	1,500.0	1,492.9	156.4	1.6	29.82	-6,098.2	-3,589.9	7,712.5	7,629.5	82.93	93.003		
16,700.0	7,770.0	1,500.0	1,492.9	158.2	1.6	29.82	-6,098.2	-3,589.9	7,747.8	7,664.0	83.81	92.445		
16,800.0	7,770.0	1,500.0	1,492.9	159.9	1.6	29.82	-6,098.2	-3,589.9	7,784.4	7,699.7	84.69	91.913		
16,900.0	7,770.0	1,500.0	1,492.9	161.7	1.6	29.82	-6,098.2	-3,589.9	7,822.0	7,736.4	85.58	91.404		
17,000.0	7,770.0	1,500.0	1,492.9	163.4	1.6	29.82	-6,098.2	-3,589.9	7,860.7	7,774.2	86.46	90.918		
17,100.0	7,770.0	1,500.0	1,492.9	165.2	1.6	29.82	-6,098.2	-3,589.9	7,900.5	7,813.2	87.34	90.454		
17,200.0	7,770.0	1,500.0	1,492.9	166.9	1.6	29.82	-6,098.2	-3,589.9	7,941.4	7,853.1	88.23	90.011		
17,300.0	7,770.0	1,500.0	1,492.9	168.7	1.6	29.82	-6,098.2	-3,589.9	7,983.3	7,894.1	89.11	89.588		
17,400.0	7,770.0	1,500.0	1,492.9	170.4	1.6	29.82	-6,098.2	-3,589.9	8,026.2	7,936.2	89.99	89.186		
17,500.0	7,770.0	1,500.0	1,492.9	172.2	1.6	29.82	-6,098.2	-3,589.9	8,070.1	7,979.2	90.88	88.802		
17,600.0	7,770.0	1,500.0	1,492.9	173.9	1.6	29.82	-6,098.2	-3,589.9	8,115.0	8,023.3	91.76	88.436		
17,653.1	7,770.0	1,500.0	1,492.9	174.8	1.6	29.82	-6,098.2	-3,589.9	8,139.3	8,047.0	92.23	88.249 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-149.14	-6,136.7	-3,667.1	7,148.9						
100.0	100.0	96.5	96.5	0.2	0.2	-149.14	-6,136.7	-3,667.0	7,148.9	7,148.6	0.32	N/A			
200.0	200.0	198.0	198.0	0.3	0.3	-149.14	-6,136.7	-3,667.0	7,148.9	7,148.2	0.67	N/A			
300.0	300.0	299.6	299.6	0.5	0.5	-149.14	-6,136.7	-3,667.0	7,148.8	7,147.8	1.01	7,048.928			
400.0	400.0	2,151.2	2,122.6	0.7	6.0	-150.08	-6,004.3	-3,456.1	7,140.1	7,135.1	5.02	1,423.728			
500.0	500.0	2,245.7	2,213.6	0.8	6.4	-150.17	-5,990.5	-3,434.4	7,115.9	7,110.4	5.45	1,306.255			
550.0	550.0	2,280.4	2,247.0	0.9	6.6	-150.21	-5,985.5	-3,426.6	7,103.8	7,098.2	5.63	1,262.405			
600.0	600.0	2,311.0	2,276.5	1.0	6.7	-151.13	-5,981.0	-3,419.8	7,092.1	7,086.3	5.76	1,230.730			
700.0	700.0	2,379.1	2,342.2	1.2	7.1	-151.32	-5,971.2	-3,404.9	7,070.0	7,063.9	6.13	1,153.458			
800.0	799.9	2,451.7	2,412.3	1.4	7.4	-151.50	-5,961.2	-3,388.9	7,049.9	7,043.4	6.51	1,083.148			
861.1	860.9	2,499.8	2,458.7	1.5	7.6	-151.61	-5,954.6	-3,378.4	7,038.5	7,031.8	6.75	1,042.631			
900.0	899.8	2,533.0	2,490.9	1.6	7.8	-151.65	-5,950.1	-3,371.2	7,031.5	7,024.6	6.91	1,017.520			
1,000.0	999.6	2,597.0	2,552.8	1.8	8.1	-151.73	-5,941.6	-3,357.2	7,013.8	7,006.5	7.27	964.770			
1,100.0	1,099.5	2,776.3	2,725.9	1.9	9.0	-151.96	-5,917.3	-3,317.6	6,995.6	6,987.6	7.95	879.467			
1,200.0	1,199.3	2,853.1	2,800.0	2.1	9.3	-152.06	-5,906.5	-3,300.7	6,977.1	6,968.8	8.35	835.478			
1,300.0	1,299.2	2,969.5	2,912.4	2.3	9.9	-152.21	-5,890.4	-3,274.7	6,958.7	6,949.8	8.87	784.903			
1,400.0	1,399.1	3,137.0	3,073.8	2.5	10.8	-152.42	-5,865.8	-3,237.4	6,939.5	6,929.9	9.53	728.412			
1,500.0	1,498.9	3,203.1	3,137.3	2.7	11.1	-152.50	-5,855.8	-3,222.3	6,919.9	6,910.0	9.90	698.976			
1,600.0	1,598.8	3,296.0	3,226.9	2.9	11.6	-152.63	-5,842.7	-3,201.1	6,901.1	6,890.8	10.36	666.096			
1,700.0	1,698.6	3,359.0	3,287.6	3.1	11.9	-152.71	-5,834.0	-3,186.7	6,882.5	6,871.8	10.73	641.462			
1,800.0	1,798.5	3,399.1	3,326.3	3.3	12.1	-152.77	-5,828.7	-3,177.8	6,864.6	6,853.5	11.03	622.399			
1,900.0	1,898.3	3,549.2	3,471.3	3.5	12.8	-152.96	-5,808.0	-3,145.0	6,846.7	6,835.0	11.65	587.565			
2,000.0	1,998.2	3,693.4	3,610.2	3.7	13.5	-153.16	-5,788.0	-3,111.7	6,828.1	6,815.8	12.29	555.654			
2,100.0	2,098.0	3,748.2	3,662.9	3.9	13.8	-153.24	-5,780.4	-3,098.9	6,809.4	6,796.8	12.64	538.894			
2,200.0	2,197.9	3,804.0	3,716.8	4.1	14.1	-153.31	-5,772.8	-3,086.5	6,791.5	6,778.5	12.98	523.081			
2,300.0	2,297.7	3,850.6	3,761.9	4.3	14.3	-153.38	-5,766.7	-3,076.4	6,774.3	6,761.0	13.31	509.144			
2,400.0	2,397.6	3,931.0	3,839.7	4.5	14.7	-153.48	-5,756.5	-3,059.2	6,757.6	6,743.9	13.73	492.149			
2,500.0	2,497.4	4,138.4	4,040.4	4.7	15.7	-153.76	-5,729.5	-3,014.0	6,741.1	6,726.5	14.55	463.233			
2,600.0	2,597.3	4,271.6	4,168.8	4.9	16.3	-153.94	-5,710.0	-2,984.9	6,722.5	6,707.4	15.14	444.169			
2,700.0	2,697.1	4,352.0	4,246.4	5.1	16.7	-154.05	-5,698.1	-2,967.3	6,703.9	6,688.4	15.56	430.872			
2,800.0	2,797.0	4,405.2	4,297.7	5.3	17.0	-154.12	-5,690.4	-2,955.7	6,685.8	6,669.9	15.90	420.462			
2,900.0	2,896.8	4,439.0	4,330.4	5.5	17.2	-154.16	-5,685.7	-2,948.5	6,668.5	6,652.3	16.18	412.037			
3,000.0	2,996.7	4,503.0	4,392.4	5.7	17.5	-154.25	-5,677.5	-2,935.0	6,652.0	6,635.5	16.56	401.596			
3,100.0	3,096.5	4,617.7	4,503.7	5.9	18.0	-154.40	-5,663.1	-2,910.7	6,636.0	6,618.9	17.10	388.053			
3,200.0	3,196.4	4,707.6	4,590.7	6.1	18.4	-154.52	-5,651.2	-2,891.8	6,619.4	6,601.9	17.55	377.080			
3,300.0	3,296.3	4,757.0	4,638.7	6.3	18.7	-154.59	-5,644.8	-2,881.8	6,603.4	6,585.5	17.88	369.268			
3,400.0	3,396.1	4,809.2	4,689.4	6.5	18.9	-154.65	-5,638.2	-2,871.5	6,588.1	6,569.9	18.21	361.817			
3,500.0	3,496.0	4,884.0	4,762.4	6.7	19.2	-154.74	-5,629.3	-2,857.7	6,573.8	6,555.2	18.60	353.468			
3,600.0	3,595.8	4,913.3	4,790.9	6.9	19.3	-154.78	-5,625.9	-2,852.5	6,559.9	6,541.1	18.86	347.860			
3,700.0	3,695.7	4,980.0	4,856.2	7.0	19.6	-154.85	-5,618.3	-2,840.7	6,546.7	6,527.4	19.22	340.583			
3,800.0	3,795.5	5,064.0	4,938.4	7.2	19.9	-154.95	-5,608.8	-2,826.3	6,533.8	6,514.1	19.63	332.824			
3,900.0	3,895.4	5,127.3	5,000.4	7.4	20.2	-155.02	-5,601.9	-2,815.6	6,521.3	6,501.3	19.98	326.386			
4,000.0	3,995.2	5,246.7	5,117.5	7.6	20.6	-155.15	-5,589.2	-2,795.8	6,509.3	6,488.8	20.49	317.694			
4,100.0	4,095.1	5,317.7	5,187.0	7.8	20.9	-155.23	-5,581.5	-2,783.7	6,497.0	6,476.1	20.86	311.440			
4,200.0	4,194.9	5,393.0	5,260.9	8.0	21.2	-155.31	-5,573.6	-2,771.7	6,485.3	6,464.1	21.24	305.383			
4,300.0	4,294.8	5,433.5	5,300.8	8.2	21.3	-155.36	-5,569.5	-2,765.5	6,474.2	6,452.7	21.52	300.821			
4,400.0	4,394.6	5,488.0	5,354.4	8.4	21.5	-155.41	-5,564.3	-2,757.2	6,463.8	6,442.0	21.84	295.909			
4,500.0	4,494.5	5,647.0	5,510.8	8.6	22.1	-155.59	-5,549.4	-2,732.7	6,453.8	6,431.3	22.45	287.476			
4,600.0	4,594.3	5,710.0	5,572.7	8.8	22.3	-155.65	-5,543.1	-2,723.1	6,443.0	6,420.2	22.79	282.670			
4,700.0	4,694.2	5,749.1	5,611.1	9.0	22.5	-155.69	-5,539.4	-2,717.3	6,433.0	6,409.9	23.07	278.836			
4,800.0	4,794.0	5,792.7	5,654.2	9.2	22.6	-155.74	-5,535.6	-2,711.3	6,424.1	6,400.7	23.36	275.001			
4,900.0	4,893.9	5,868.0	5,728.6	9.4	22.8	-155.81	-5,529.4	-2,701.0	6,415.7	6,392.0	23.73	270.344			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
5,000.0	4,993.7	5,939.8	5,799.4	9.6	23.1	-155.88	-5,523.9	-2,691.1	6,407.8	6,383.7	24.09	265.946		
5,100.0	5,093.6	5,986.4	5,845.5	9.8	23.2	-155.93	-5,520.4	-2,685.0	6,400.4	6,376.0	24.39	262.450		
5,200.0	5,193.5	6,027.0	5,885.7	10.0	23.3	-155.97	-5,517.7	-2,680.1	6,394.0	6,369.4	24.66	259.261		
5,300.0	5,293.3	6,075.3	5,933.6	10.2	23.5	-156.01	-5,514.5	-2,675.0	6,388.5	6,363.6	24.94	256.145		
5,400.0	5,393.2	6,131.8	5,989.8	10.4	23.6	-156.05	-5,510.8	-2,669.9	6,383.7	6,358.5	25.23	253.013		
5,500.0	5,493.0	6,180.7	6,038.5	10.6	23.7	-156.08	-5,507.8	-2,665.9	6,379.6	6,354.1	25.50	250.164		
5,600.0	5,592.9	6,219.0	6,076.6	10.8	23.8	-156.10	-5,505.6	-2,663.1	6,376.4	6,350.6	25.75	247.614		
5,700.0	5,692.7	6,283.0	6,140.3	11.0	23.9	-156.13	-5,502.4	-2,658.7	6,373.9	6,347.9	26.05	244.716		
5,800.0	5,792.6	6,283.0	6,140.3	11.2	23.9	-156.13	-5,502.4	-2,658.7	6,372.6	6,346.3	26.22	242.997		
5,895.5	5,888.0	6,342.1	6,199.3	11.4	24.0	-156.16	-5,500.0	-2,655.4	6,371.9	6,345.4	26.49	240.538		
5,900.0	5,892.4	6,343.5	6,200.7	11.4	24.0	-156.17	-5,500.0	-2,655.3	6,371.9	6,345.4	26.50	240.446		
6,000.0	5,992.3	6,379.0	6,236.2	11.6	24.1	-156.18	-5,499.0	-2,653.9	6,372.4	6,345.7	26.74	238.356		
6,100.0	6,092.1	6,427.7	6,284.8	11.8	24.1	-156.20	-5,497.8	-2,652.5	6,374.0	6,347.0	26.96	236.389		
6,200.0	6,192.0	6,506.0	6,363.1	12.0	24.2	-156.21	-5,495.7	-2,652.2	6,376.2	6,349.0	27.22	234.248		
6,300.0	6,291.8	6,506.0	6,363.1	12.2	24.2	-156.21	-5,495.7	-2,652.2	6,379.2	6,351.8	27.40	232.830		
6,400.0	6,391.7	6,545.1	6,402.1	12.4	24.2	-156.21	-5,495.0	-2,652.6	6,383.3	6,355.7	27.62	231.113		
6,500.0	6,491.5	6,571.0	6,428.1	12.6	24.2	-156.21	-5,494.9	-2,653.0	6,388.6	6,360.8	27.83	229.584		
6,600.0	6,591.4	6,774.8	6,631.8	12.8	24.4	-156.25	-5,494.9	-2,653.1	6,393.5	6,365.3	28.27	226.127		
6,700.0	6,691.2	6,876.0	6,733.0	13.0	24.5	-156.27	-5,494.3	-2,652.6	6,397.8	6,369.2	28.58	223.828		
6,800.0	6,791.1	6,993.2	6,850.2	13.2	24.6	-156.29	-5,493.4	-2,652.3	6,401.9	6,373.0	28.91	221.422		
6,900.0	6,890.9	7,108.6	6,965.6	13.4	24.7	-156.31	-5,492.0	-2,652.1	6,405.7	6,376.5	29.23	219.125		
7,000.0	6,990.8	7,237.0	7,094.0	13.6	24.8	-156.33	-5,489.8	-2,652.5	6,409.3	6,379.7	29.56	216.808		
7,024.2	7,014.9	7,260.6	7,117.6	13.6	24.9	-156.33	-5,489.3	-2,652.6	6,410.1	6,380.4	29.63	216.313		
7,050.0	7,040.7	7,284.9	7,141.9	13.7	24.9	-158.00	-5,488.9	-2,652.7	6,410.5	6,380.8	29.70	215.850		
7,100.0	7,090.7	7,342.7	7,199.7	13.7	25.0	25.44	-5,487.7	-2,652.9	6,408.9	6,379.2	29.73	215.573		
7,150.0	7,140.5	7,398.0	7,255.0	13.8	25.0	25.12	-5,486.5	-2,653.1	6,404.1	6,374.5	29.62	216.225		
7,200.0	7,189.9	7,438.8	7,295.7	13.8	25.0	25.28	-5,485.5	-2,653.4	6,396.1	6,366.8	29.35	217.910		
7,250.0	7,238.6	7,473.9	7,330.9	13.8	25.1	25.64	-5,484.7	-2,653.7	6,385.1	6,356.2	28.95	220.541		
7,300.0	7,286.4	7,509.0	7,366.0	13.7	25.1	26.16	-5,483.9	-2,654.2	6,371.2	6,342.8	28.43	224.096		
7,350.0	7,333.1	7,543.9	7,400.8	13.7	25.1	26.83	-5,483.2	-2,654.8	6,354.4	6,326.6	27.80	228.586		
7,400.0	7,378.5	7,578.3	7,435.3	13.6	25.2	27.67	-5,482.5	-2,655.4	6,334.8	6,307.7	27.07	233.998		
7,450.0	7,422.2	7,621.6	7,478.5	13.6	25.2	28.71	-5,481.7	-2,656.2	6,312.4	6,286.2	26.28	240.213		
7,500.0	7,464.1	7,663.0	7,519.9	13.5	25.2	29.95	-5,480.9	-2,656.9	6,287.4	6,262.0	25.44	247.141		
7,550.0	7,504.1	7,702.4	7,559.3	13.5	25.3	31.44	-5,480.1	-2,657.7	6,259.8	6,235.2	24.60	254.471		
7,600.0	7,541.8	7,731.6	7,588.4	13.5	25.3	33.16	-5,479.6	-2,658.3	6,229.9	6,206.1	23.80	261.728		
7,650.0	7,577.2	7,758.6	7,615.4	13.4	25.3	35.17	-5,479.1	-2,658.8	6,197.7	6,174.6	23.13	267.957		
7,700.0	7,610.0	7,783.6	7,640.5	13.5	25.3	37.54	-5,478.7	-2,659.3	6,163.5	6,140.8	22.67	271.871		
7,750.0	7,640.2	7,812.9	7,669.7	13.5	25.4	40.37	-5,478.2	-2,659.9	6,127.4	6,104.8	22.54	271.784		
7,800.0	7,667.4	7,850.8	7,707.6	13.6	25.4	43.79	-5,477.5	-2,660.7	6,089.5	6,066.6	22.88	266.191		
7,850.0	7,691.7	7,884.1	7,740.9	13.7	25.4	47.80	-5,476.9	-2,661.4	6,050.1	6,026.4	23.70	255.272		
7,900.0	7,712.8	7,907.4	7,764.2	13.9	25.4	52.40	-5,476.4	-2,661.9	6,009.3	5,984.3	24.98	240.529		
7,950.0	7,730.8	7,925.4	7,782.2	14.1	25.5	57.69	-5,476.0	-2,662.3	5,967.3	5,940.7	26.65	223.891		
8,000.0	7,745.5	7,939.8	7,796.6	14.4	25.5	63.71	-5,475.7	-2,662.6	5,924.5	5,895.9	28.56	207.424		
8,050.0	7,756.7	7,950.7	7,807.5	14.7	25.5	70.43	-5,475.5	-2,662.8	5,880.9	5,850.4	30.50	192.841		
8,100.0	7,764.6	7,958.0	7,814.8	15.1	25.5	77.70	-5,475.4	-2,662.9	5,836.9	5,804.7	32.21	181.229		
8,150.0	7,769.0	7,961.6	7,818.4	15.5	25.5	85.31	-5,475.3	-2,663.0	5,792.6	5,759.2	33.47	173.090		
8,188.1	7,770.0	7,961.8	7,818.6	15.9	25.5	91.15	-5,475.3	-2,663.0	5,758.9	5,724.9	34.03	169.252		
8,200.0	7,770.0	7,961.6	7,818.4	16.0	25.5	91.15	-5,475.3	-2,663.0	5,748.3	5,714.2	34.14	168.396		
8,300.0	7,770.0	7,959.5	7,816.2	17.0	25.5	91.10	-5,475.3	-2,662.9	5,659.9	5,624.8	35.13	161.109		
8,400.0	7,770.0	7,957.3	7,814.1	18.1	25.5	91.05	-5,475.4	-2,662.9	5,572.0	5,535.7	36.24	153.744		
8,500.0	7,770.0	7,955.2	7,812.0	19.3	25.5	91.01	-5,475.4	-2,662.9	5,484.4	5,446.9	37.45	146.454		
8,600.0	7,770.0	7,953.1	7,809.8	20.6	25.5	90.96	-5,475.5	-2,662.8	5,397.2	5,358.5	38.73	139.347		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,700.0	7,770.0	7,950.9	7,807.7	21.9	25.5	90.92	-5,475.5	-2,662.8	5,310.6	5,270.5	40.08	132.494		
8,800.0	7,770.0	7,948.8	7,805.5	23.3	25.5	90.87	-5,475.6	-2,662.7	5,224.3	5,182.9	41.48	125.935		
8,900.0	7,770.0	7,946.6	7,803.4	24.8	25.5	90.82	-5,475.6	-2,662.7	5,138.6	5,095.7	42.93	119.694		
9,000.0	7,770.0	7,944.4	7,801.2	26.3	25.5	90.78	-5,475.6	-2,662.7	5,053.4	5,009.0	44.42	113.776		
9,100.0	7,770.0	7,942.3	7,799.1	27.8	25.5	90.73	-5,475.7	-2,662.6	4,968.8	4,922.9	45.93	108.180		
9,200.0	7,770.0	7,940.1	7,796.9	29.3	25.5	90.68	-5,475.7	-2,662.6	4,884.7	4,837.3	47.47	102.897		
9,300.0	7,770.0	7,937.9	7,794.7	30.9	25.5	90.64	-5,475.8	-2,662.5	4,801.3	4,752.2	49.04	97.914		
9,400.0	7,770.0	7,935.7	7,792.5	32.5	25.5	90.59	-5,475.8	-2,662.5	4,718.5	4,667.9	50.62	93.216		
9,500.0	7,770.0	7,933.6	7,790.4	34.1	25.5	90.54	-5,475.9	-2,662.5	4,636.3	4,584.1	52.22	88.789		
9,600.0	7,770.0	7,931.4	7,788.2	35.7	25.5	90.50	-5,475.9	-2,662.4	4,554.9	4,501.1	53.83	84.615		
9,700.0	7,770.0	7,929.2	7,786.0	37.3	25.5	90.45	-5,476.0	-2,662.4	4,474.3	4,418.8	55.46	80.680		
9,800.0	7,770.0	7,927.0	7,783.8	39.0	25.5	90.40	-5,476.0	-2,662.3	4,394.4	4,337.3	57.09	76.969		
9,900.0	7,770.0	7,924.8	7,781.6	40.6	25.5	90.36	-5,476.0	-2,662.3	4,315.4	4,256.6	58.74	73.467		
10,000.0	7,770.0	7,922.6	7,779.4	42.3	25.5	90.31	-5,476.1	-2,662.2	4,237.2	4,176.8	60.39	70.160		
10,100.0	7,770.0	7,920.3	7,777.1	44.0	25.5	90.26	-5,476.1	-2,662.2	4,160.0	4,097.9	62.05	67.037		
10,200.0	7,770.0	7,918.1	7,774.9	45.6	25.4	90.21	-5,476.2	-2,662.2	4,083.8	4,020.0	63.72	64.086		
10,300.0	7,770.0	7,915.9	7,772.7	47.3	25.4	90.16	-5,476.2	-2,662.1	4,008.6	3,943.2	65.40	61.296		
10,400.0	7,770.0	7,913.7	7,770.5	49.0	25.4	90.12	-5,476.3	-2,662.1	3,934.5	3,867.4	67.08	58.657		
10,500.0	7,770.0	7,911.4	7,768.2	50.7	25.4	90.07	-5,476.3	-2,662.0	3,861.6	3,792.8	68.76	56.160		
10,600.0	7,770.0	7,909.2	7,766.0	52.4	25.4	90.02	-5,476.4	-2,662.0	3,789.9	3,719.5	70.45	53.796		
10,700.0	7,770.0	7,906.9	7,763.7	54.1	25.4	89.97	-5,476.4	-2,661.9	3,719.6	3,647.4	72.14	51.559		
10,800.0	7,770.0	7,904.7	7,761.5	55.8	25.4	89.92	-5,476.5	-2,661.9	3,650.6	3,576.7	73.84	49.441		
10,900.0	7,770.0	7,902.4	7,759.2	57.5	25.4	89.88	-5,476.5	-2,661.8	3,583.0	3,507.5	75.54	47.435		
11,000.0	7,770.0	7,900.1	7,757.0	59.2	25.4	89.83	-5,476.6	-2,661.8	3,517.1	3,439.8	77.24	45.535		
11,100.0	7,770.0	7,897.9	7,754.7	60.9	25.4	89.78	-5,476.6	-2,661.7	3,452.7	3,373.8	78.94	43.737		
11,200.0	7,770.0	7,895.6	7,752.4	62.6	25.4	89.73	-5,476.6	-2,661.7	3,390.1	3,309.5	80.65	42.035		
11,300.0	7,770.0	7,893.3	7,750.1	64.3	25.4	89.68	-5,476.7	-2,661.6	3,329.3	3,247.0	82.36	40.424		
11,400.0	7,770.0	7,891.0	7,747.8	66.0	25.4	89.63	-5,476.7	-2,661.6	3,270.4	3,186.4	84.07	38.901		
11,500.0	7,770.0	7,888.7	7,745.5	67.7	25.4	89.58	-5,476.8	-2,661.5	3,213.6	3,127.8	85.78	37.462		
11,600.0	7,770.0	7,886.5	7,743.3	69.5	25.4	89.53	-5,476.8	-2,661.5	3,158.9	3,071.4	87.50	36.103		
11,700.0	7,770.0	7,884.2	7,741.0	71.2	25.4	89.49	-5,476.9	-2,661.5	3,106.5	3,017.3	89.21	34.820		
11,800.0	7,770.0	7,882.0	7,738.8	72.9	25.4	89.44	-5,476.9	-2,661.4	3,056.4	2,965.5	90.93	33.612		
11,900.0	7,770.0	7,879.8	7,736.7	74.6	25.4	89.39	-5,477.0	-2,661.4	3,008.9	2,916.2	92.65	32.475		
12,000.0	7,770.0	7,877.7	7,734.5	76.4	25.4	89.34	-5,477.0	-2,661.3	2,963.9	2,869.5	94.37	31.406		
12,100.0	7,770.0	7,875.6	7,732.4	78.1	25.4	89.30	-5,477.1	-2,661.3	2,921.7	2,825.6	96.09	30.404		
12,200.0	7,770.0	7,873.5	7,730.3	79.8	25.4	89.25	-5,477.1	-2,661.2	2,882.3	2,784.5	97.82	29.466		
12,300.0	7,770.0	7,871.4	7,728.2	81.5	25.4	89.21	-5,477.1	-2,661.2	2,845.9	2,746.3	99.54	28.590		
12,400.0	7,770.0	7,869.3	7,726.1	83.3	25.4	89.16	-5,477.2	-2,661.1	2,812.5	2,711.3	101.27	27.773		
12,500.0	7,770.0	7,867.3	7,724.1	85.0	25.4	89.12	-5,477.2	-2,661.1	2,782.4	2,679.4	102.99	27.015		
12,600.0	7,770.0	7,865.3	7,722.1	86.7	25.4	89.08	-5,477.3	-2,661.1	2,755.6	2,650.8	104.72	26.314		
12,700.0	7,770.0	7,863.3	7,720.1	88.5	25.4	89.04	-5,477.3	-2,661.0	2,732.1	2,625.7	106.45	25.666		
12,800.0	7,770.0	7,861.3	7,718.1	90.2	25.4	88.99	-5,477.3	-2,661.0	2,712.2	2,604.0	108.18	25.072		
12,900.0	7,770.0	7,859.4	7,716.2	91.9	25.4	88.95	-5,477.4	-2,660.9	2,695.8	2,585.9	109.91	24.528		
13,000.0	7,770.0	7,857.5	7,714.3	93.7	25.4	88.91	-5,477.4	-2,660.9	2,683.0	2,571.4	111.64	24.034		
13,100.0	7,770.0	7,855.6	7,712.4	95.4	25.4	88.87	-5,477.4	-2,660.8	2,674.0	2,560.6	113.37	23.587		
13,200.0	7,770.0	7,853.7	7,710.5	97.1	25.4	88.83	-5,477.5	-2,660.8	2,668.6	2,553.5	115.10	23.185		
13,293.3	7,770.0	7,851.9	7,708.8	98.8	25.4	88.79	-5,477.5	-2,660.8	2,667.0	2,550.2	116.71	22.850 CC		
13,300.0	7,770.0	7,851.8	7,708.6	98.9	25.4	88.79	-5,477.5	-2,660.8	2,667.0	2,550.1	116.83	22.828 ES		
13,400.0	7,770.0	7,850.0	7,706.8	100.6	25.4	88.75	-5,477.5	-2,660.7	2,669.1	2,550.5	118.56	22.512		
13,500.0	7,770.0	7,848.2	7,705.0	102.4	25.4	88.71	-5,477.6	-2,660.7	2,675.0	2,554.7	120.30	22.237		
13,600.0	7,770.0	7,846.4	7,703.2	104.1	25.4	88.67	-5,477.6	-2,660.7	2,684.5	2,562.5	122.03	21.999		
13,700.0	7,770.0	7,844.6	7,701.4	105.8	25.4	88.63	-5,477.6	-2,660.6	2,697.8	2,574.0	123.76	21.798		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	7,770.0	7,842.8	7,699.7	107.6	25.4	88.60	-5,477.7	-2,660.6	2,714.7	2,589.2	125.50	21.631		
13,900.0	7,770.0	7,841.1	7,697.9	109.3	25.4	88.56	-5,477.7	-2,660.5	2,735.1	2,607.9	127.23	21.497		
14,000.0	7,770.0	7,839.4	7,696.2	111.1	25.4	88.52	-5,477.7	-2,660.5	2,759.0	2,630.0	128.97	21.393		
14,100.0	7,770.0	7,837.7	7,694.5	112.8	25.4	88.49	-5,477.8	-2,660.5	2,786.3	2,655.6	130.70	21.318		
14,200.0	7,770.0	7,836.0	7,692.8	114.5	25.4	88.45	-5,477.8	-2,660.4	2,816.8	2,684.4	132.44	21.269		
14,300.0	7,770.0	7,834.3	7,691.1	116.3	25.4	88.41	-5,477.8	-2,660.4	2,850.6	2,716.4	134.17	21.246		
14,400.0	7,770.0	7,832.7	7,689.5	118.0	25.4	88.38	-5,477.9	-2,660.4	2,887.4	2,751.5	135.91	21.245 SF		
14,500.0	7,770.0	7,831.0	7,687.9	119.8	25.4	88.34	-5,477.9	-2,660.3	2,927.2	2,789.5	137.65	21.266		
14,600.0	7,770.0	7,829.4	7,686.2	121.5	25.4	88.31	-5,477.9	-2,660.3	2,969.8	2,830.4	139.38	21.307		
14,700.0	7,770.0	7,827.8	7,684.6	123.3	25.4	88.27	-5,477.9	-2,660.3	3,015.1	2,874.0	141.12	21.366		
14,800.0	7,770.0	7,826.2	7,683.1	125.0	25.4	88.24	-5,478.0	-2,660.2	3,063.0	2,920.2	142.86	21.441		
14,900.0	7,770.0	7,824.7	7,681.5	126.7	25.4	88.21	-5,478.0	-2,660.2	3,113.4	2,968.8	144.60	21.532		
15,000.0	7,770.0	7,823.1	7,679.9	128.5	25.4	88.17	-5,478.0	-2,660.2	3,166.2	3,019.8	146.33	21.637		
15,100.0	7,770.0	7,821.6	7,678.4	130.2	25.4	88.14	-5,478.0	-2,660.1	3,221.2	3,073.1	148.07	21.754		
15,200.0	7,770.0	7,820.0	7,676.9	132.0	25.4	88.11	-5,478.1	-2,660.1	3,278.3	3,128.5	149.81	21.883		
15,300.0	7,770.0	7,818.5	7,675.4	133.7	25.4	88.07	-5,478.1	-2,660.1	3,337.4	3,185.9	151.55	22.022		
15,400.0	7,770.0	7,817.0	7,673.9	135.5	25.4	88.04	-5,478.1	-2,660.0	3,398.5	3,245.2	153.29	22.171		
15,500.0	7,770.0	7,815.6	7,672.4	137.2	25.4	88.01	-5,478.2	-2,660.0	3,461.3	3,306.3	155.03	22.327		
15,600.0	7,770.0	7,814.1	7,671.0	139.0	25.4	87.98	-5,478.2	-2,660.0	3,525.9	3,369.1	156.76	22.492		
15,700.0	7,770.0	7,812.7	7,669.5	140.7	25.4	87.95	-5,478.2	-2,659.9	3,592.1	3,433.6	158.50	22.663		
15,800.0	7,770.0	7,811.2	7,668.1	142.4	25.4	87.92	-5,478.2	-2,659.9	3,659.8	3,499.6	160.24	22.839		
15,900.0	7,770.0	7,809.8	7,666.7	144.2	25.4	87.89	-5,478.2	-2,659.9	3,729.0	3,567.0	161.98	23.021		
16,000.0	7,770.0	7,808.4	7,665.2	145.9	25.4	87.86	-5,478.3	-2,659.9	3,799.6	3,635.9	163.72	23.208		
16,100.0	7,770.0	7,807.0	7,663.9	147.7	25.4	87.83	-5,478.3	-2,659.8	3,871.4	3,706.0	165.46	23.398		
16,200.0	7,770.0	7,799.0	7,655.9	149.4	25.3	87.65	-5,478.4	-2,659.7	3,944.5	3,777.4	167.17	23.595		
16,300.0	7,770.0	7,799.0	7,655.9	151.2	25.3	87.65	-5,478.4	-2,659.7	4,018.8	3,849.8	168.92	23.791		
16,400.0	7,770.0	7,799.0	7,655.9	152.9	25.3	87.65	-5,478.4	-2,659.7	4,094.1	3,923.4	170.66	23.989		
16,500.0	7,770.0	7,799.0	7,655.9	154.7	25.3	87.65	-5,478.4	-2,659.7	4,170.5	3,998.1	172.41	24.189		
16,600.0	7,770.0	7,799.0	7,655.9	156.4	25.3	87.65	-5,478.4	-2,659.7	4,247.8	4,073.7	174.16	24.391		
16,700.0	7,770.0	7,798.9	7,655.7	158.2	25.3	87.65	-5,478.4	-2,659.7	4,326.1	4,150.2	175.90	24.594		
16,800.0	7,770.0	7,797.1	7,654.0	159.9	25.3	87.61	-5,478.4	-2,659.6	4,405.3	4,227.6	177.64	24.799		
16,900.0	7,770.0	7,795.3	7,652.2	161.7	25.3	87.58	-5,478.5	-2,659.6	4,485.2	4,305.9	179.38	25.004		
17,000.0	7,770.0	7,793.5	7,650.4	163.4	25.3	87.54	-5,478.5	-2,659.5	4,566.0	4,384.9	181.12	25.210		
17,100.0	7,770.0	7,791.7	7,648.5	165.2	25.3	87.50	-5,478.5	-2,659.5	4,647.5	4,464.7	182.85	25.417		
17,200.0	7,770.0	7,789.8	7,646.7	166.9	25.3	87.46	-5,478.6	-2,659.5	4,729.8	4,545.2	184.59	25.623		
17,300.0	7,770.0	7,788.0	7,644.8	168.7	25.3	87.42	-5,478.6	-2,659.4	4,812.7	4,626.4	186.33	25.829		
17,400.0	7,770.0	7,786.1	7,642.9	170.4	25.3	87.38	-5,478.6	-2,659.4	4,896.2	4,708.2	188.07	26.034		
17,500.0	7,770.0	7,784.2	7,641.0	172.2	25.3	87.34	-5,478.7	-2,659.3	4,980.4	4,790.6	189.80	26.240		
17,600.0	7,770.0	7,782.3	7,639.1	173.9	25.3	87.30	-5,478.7	-2,659.3	5,065.1	4,873.6	191.54	26.444		
17,653.1	7,770.0	7,781.2	7,638.1	174.8	25.3	87.27	-5,478.7	-2,659.3	5,110.3	4,917.8	192.46	26.552		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-149.14	-6,136.7	-3,667.1	7,148.9						
100.0	100.0	95.0	95.0	0.2	0.1	-149.14	-6,136.7	-3,667.1	7,148.9	7,148.6	0.29	N/A			
200.0	200.0	195.0	195.0	0.3	0.3	-149.14	-6,136.7	-3,667.1	7,148.9	7,148.3	0.64	N/A			
300.0	300.0	295.0	295.0	0.5	0.5	-149.14	-6,136.7	-3,667.1	7,148.9	7,147.9	0.99	7,223.888			
400.0	400.0	395.0	395.0	0.7	0.7	-149.14	-6,136.7	-3,667.1	7,148.9	7,147.6	1.34	5,340.240			
500.0	500.0	495.0	495.0	0.8	0.8	-149.14	-6,136.7	-3,667.1	7,148.9	7,147.2	1.69	4,235.755			
550.0	550.0	545.0	545.0	0.9	0.9	-149.14	-6,136.7	-3,667.1	7,148.9	7,147.0	1.86	3,838.781			
600.0	600.0	595.0	595.0	1.0	1.0	-149.97	-6,136.7	-3,667.1	7,149.1	7,147.1	2.04	3,509.988			
700.0	700.0	695.0	695.0	1.2	1.2	-149.97	-6,136.7	-3,667.1	7,150.6	7,148.2	2.39	2,997.185			
800.0	799.9	794.9	794.9	1.4	1.4	-149.97	-6,136.7	-3,667.1	7,153.6	7,150.9	2.74	2,615.392			
861.1	860.9	2,277.9	2,261.9	1.5	5.1	-150.89	-6,046.3	-3,526.1	7,146.4	7,140.7	5.69	1,255.960			
900.0	899.8	2,316.1	2,299.1	1.6	5.2	-150.93	-6,041.8	-3,519.0	7,140.5	7,134.7	5.85	1,221.482			
1,000.0	999.6	2,414.2	2,394.8	1.8	5.6	-151.03	-6,030.1	-3,500.8	7,125.6	7,119.3	6.25	1,140.256			
1,100.0	1,099.5	2,512.2	2,490.5	1.9	6.0	-151.13	-6,018.5	-3,482.7	7,110.6	7,103.9	6.66	1,068.345			
1,200.0	1,199.3	2,610.3	2,586.1	2.1	6.3	-151.23	-6,006.9	-3,464.5	7,095.6	7,088.6	7.07	1,004.300			
1,300.0	1,299.2	2,708.4	2,681.8	2.3	6.7	-151.33	-5,995.2	-3,446.4	7,080.7	7,073.2	7.48	946.943			
1,400.0	1,399.1	2,806.4	2,777.5	2.5	7.1	-151.44	-5,983.6	-3,428.2	7,065.8	7,057.9	7.89	895.313			
1,500.0	1,498.9	2,904.5	2,873.1	2.7	7.5	-151.54	-5,971.9	-3,410.1	7,050.9	7,042.6	8.31	848.616			
1,600.0	1,598.8	3,002.6	2,968.8	2.9	7.9	-151.65	-5,960.3	-3,391.9	7,036.1	7,027.4	8.73	806.196			
1,700.0	1,698.6	3,100.6	3,064.5	3.1	8.3	-151.75	-5,948.6	-3,373.8	7,021.3	7,012.1	9.15	767.506			
1,800.0	1,798.5	3,198.7	3,160.1	3.3	8.7	-151.85	-5,937.0	-3,355.6	7,006.5	6,996.9	9.57	732.084			
1,900.0	1,898.3	3,296.8	3,255.8	3.5	9.1	-151.96	-5,925.4	-3,337.5	6,991.7	6,981.7	9.99	699.541			
2,000.0	1,998.2	3,394.8	3,351.5	3.7	9.5	-152.07	-5,913.7	-3,319.3	6,976.9	6,966.5	10.42	669.548			
2,100.0	2,098.0	3,492.9	3,447.1	3.9	10.0	-152.17	-5,902.1	-3,301.1	6,962.2	6,951.3	10.85	641.822			
2,200.0	2,197.9	3,591.0	3,542.8	4.1	10.4	-152.28	-5,890.4	-3,283.0	6,947.5	6,936.2	11.28	616.120			
2,300.0	2,297.7	3,689.0	3,638.5	4.3	10.8	-152.38	-5,878.8	-3,264.8	6,932.8	6,921.1	11.71	592.230			
2,400.0	2,397.6	3,787.1	3,734.1	4.5	11.2	-152.49	-5,867.2	-3,246.7	6,918.1	6,906.0	12.14	569.972			
2,500.0	2,497.4	3,885.2	3,829.8	4.7	11.6	-152.60	-5,855.5	-3,228.5	6,903.5	6,890.9	12.57	549.186			
2,600.0	2,597.3	3,983.2	3,925.5	4.9	12.0	-152.71	-5,843.9	-3,210.4	6,888.9	6,875.9	13.00	529.732			
2,700.0	2,697.1	4,081.3	4,021.1	5.1	12.4	-152.82	-5,832.2	-3,192.2	6,874.3	6,860.8	13.44	511.488			
2,800.0	2,797.0	4,179.4	4,116.8	5.3	12.8	-152.93	-5,820.6	-3,174.1	6,859.7	6,845.8	13.88	494.346			
2,900.0	2,896.8	4,277.4	4,212.5	5.5	13.2	-153.04	-5,808.9	-3,155.9	6,845.2	6,830.8	14.31	478.211			
3,000.0	2,996.7	4,375.5	4,308.1	5.7	13.7	-153.15	-5,797.3	-3,137.8	6,830.6	6,815.9	14.75	462.997			
3,100.0	3,096.5	4,473.6	4,403.8	5.9	14.1	-153.26	-5,785.7	-3,119.6	6,816.1	6,801.0	15.19	448.629			
3,200.0	3,196.4	4,571.6	4,499.5	6.1	14.5	-153.37	-5,774.0	-3,101.5	6,801.7	6,786.0	15.63	435.038			
3,300.0	3,296.3	4,669.7	4,595.1	6.3	14.9	-153.48	-5,762.4	-3,083.3	6,787.2	6,771.2	16.08	422.165			
3,400.0	3,396.1	4,767.8	4,690.8	6.5	15.3	-153.59	-5,750.7	-3,065.1	6,772.8	6,756.3	16.52	409.954			
3,500.0	3,496.0	4,865.9	4,786.5	6.7	15.7	-153.70	-5,739.1	-3,047.0	6,758.4	6,741.5	16.97	398.356			
3,600.0	3,595.8	4,963.9	4,882.1	6.9	16.1	-153.82	-5,727.4	-3,028.8	6,744.1	6,726.7	17.41	387.327			
3,700.0	3,695.7	5,062.0	4,977.8	7.0	16.6	-153.93	-5,715.8	-3,010.7	6,729.7	6,711.9	17.86	376.826			
3,800.0	3,795.5	5,160.1	5,073.5	7.2	17.0	-154.04	-5,704.2	-2,992.5	6,715.4	6,697.1	18.31	366.817			
3,900.0	3,895.4	5,258.1	5,169.1	7.4	17.4	-154.16	-5,692.5	-2,974.4	6,701.2	6,682.4	18.76	357.266			
4,000.0	3,995.2	5,356.2	5,264.8	7.6	17.8	-154.27	-5,680.9	-2,956.2	6,686.9	6,667.7	19.21	348.143			
4,100.0	4,095.1	5,454.3	5,360.5	7.8	18.2	-154.39	-5,669.2	-2,938.1	6,672.7	6,653.0	19.66	339.420			
4,200.0	4,194.9	5,552.3	5,456.1	8.0	18.6	-154.50	-5,657.6	-2,919.9	6,658.5	6,638.4	20.11	331.072			
4,300.0	4,294.8	5,650.4	5,551.8	8.2	19.0	-154.62	-5,646.0	-2,901.8	6,644.3	6,623.7	20.57	323.074			
4,400.0	4,394.6	5,748.5	5,647.5	8.4	19.5	-154.74	-5,634.3	-2,883.6	6,630.1	6,609.1	21.02	315.407			
4,500.0	4,494.5	5,846.5	5,743.1	8.6	19.9	-154.85	-5,622.7	-2,865.5	6,616.0	6,594.5	21.48	308.049			
4,600.0	4,594.3	5,944.6	5,838.8	8.8	20.3	-154.97	-5,611.0	-2,847.3	6,601.9	6,580.0	21.93	300.984			
4,700.0	4,694.2	6,042.7	5,934.5	9.0	20.7	-155.09	-5,599.4	-2,829.1	6,587.9	6,565.5	22.39	294.193			
4,800.0	4,794.0	6,140.7	6,030.1	9.2	21.1	-155.21	-5,587.7	-2,811.0	6,573.8	6,551.0	22.85	287.662			
4,900.0	4,893.9	6,238.8	6,125.8	9.4	21.5	-155.33	-5,576.1	-2,792.8	6,559.8	6,536.5	23.31	281.376			

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,993.7	6,336.9	6,221.5	9.6	22.0	-155.45	-5,564.5	-2,774.7	6,545.8	6,522.1	23.78	275.321		
5,100.0	5,093.6	6,434.9	6,317.1	9.8	22.4	-155.57	-5,552.8	-2,756.5	6,531.9	6,507.7	24.24	269.486		
5,200.0	5,193.5	6,533.0	6,412.8	10.0	22.8	-155.69	-5,541.2	-2,738.4	6,518.0	6,493.3	24.70	263.858		
5,300.0	5,293.3	6,631.1	6,508.5	10.2	23.2	-155.81	-5,529.5	-2,720.2	6,504.1	6,478.9	25.17	258.428		
5,400.0	5,393.2	6,700.0	6,575.7	10.4	23.5	-155.90	-5,521.4	-2,707.5	6,490.3	6,464.7	25.55	254.038		
5,500.0	5,493.0	6,736.3	6,611.2	10.6	23.6	-155.94	-5,517.2	-2,701.1	6,477.3	6,451.5	25.82	250.823		
5,600.0	5,592.9	6,800.0	6,673.7	10.8	23.9	-156.01	-5,510.6	-2,690.7	6,465.6	6,439.4	26.17	247.035		
5,700.0	5,692.7	6,800.0	6,673.7	11.0	23.9	-156.01	-5,510.6	-2,690.7	6,454.5	6,428.1	26.35	244.937		
5,800.0	5,792.6	6,837.8	6,710.9	11.2	24.0	-156.05	-5,507.0	-2,685.1	6,444.6	6,418.0	26.62	242.078		
5,900.0	5,892.4	6,900.0	6,772.4	11.4	24.2	-156.11	-5,501.7	-2,676.8	6,435.9	6,408.9	26.95	238.802		
6,000.0	5,992.3	6,900.0	6,772.4	11.6	24.2	-156.11	-5,501.7	-2,676.8	6,427.8	6,400.7	27.13	236.932		
6,100.0	6,092.1	6,940.3	6,812.3	11.8	24.3	-156.14	-5,498.7	-2,672.1	6,420.9	6,393.5	27.40	234.379		
6,200.0	6,192.0	7,000.0	6,871.5	12.0	24.4	-156.19	-5,494.7	-2,665.9	6,415.2	6,387.5	27.70	231.574		
6,300.0	6,291.8	7,000.0	6,871.5	12.2	24.4	-156.19	-5,494.7	-2,665.9	6,410.3	6,382.4	27.88	229.913		
6,400.0	6,391.7	7,043.7	6,914.9	12.4	24.5	-156.22	-5,492.2	-2,662.0	6,406.5	6,378.3	28.14	227.635		
6,500.0	6,491.5	7,100.0	6,971.0	12.6	24.6	-156.26	-5,489.5	-2,657.8	6,403.8	6,375.4	28.43	225.254		
6,600.0	6,591.4	7,100.0	6,971.0	12.8	24.6	-156.26	-5,489.5	-2,657.8	6,402.0	6,373.4	28.61	223.783		
6,700.0	6,691.2	7,147.5	7,018.4	13.0	24.7	-156.28	-5,487.7	-2,655.0	6,401.2	6,372.4	28.87	221.760		
6,716.9	6,708.1	7,153.4	7,024.2	13.0	24.7	-156.29	-5,487.5	-2,654.7	6,401.2	6,372.3	28.91	221.453		
6,800.0	6,791.1	7,200.0	7,070.8	13.2	24.8	-156.31	-5,486.2	-2,652.7	6,401.6	6,372.5	29.13	219.755		
6,900.0	6,890.9	7,200.0	7,070.8	13.4	24.8	-156.31	-5,486.2	-2,652.7	6,402.9	6,373.6	29.31	218.460		
7,000.0	6,990.8	7,251.6	7,122.4	13.6	24.9	-156.32	-5,485.3	-2,651.2	6,405.2	6,375.6	29.56	216.678		
7,024.2	7,014.9	7,259.9	7,130.7	13.6	24.9	-156.33	-5,485.2	-2,651.1	6,405.9	6,376.3	29.62	216.300		
7,050.0	7,040.7	7,300.0	7,170.8	13.7	24.9	-158.00	-5,484.8	-2,650.5	6,406.5	6,376.8	29.71	215.655		
7,100.0	7,090.7	7,300.0	7,170.8	13.7	24.9	25.42	-5,484.8	-2,650.5	6,404.9	6,375.2	29.67	215.845		
7,150.0	7,140.5	7,300.0	7,170.8	13.8	24.9	25.06	-5,484.8	-2,650.5	6,400.5	6,371.0	29.51	216.918		
7,200.0	7,189.9	7,324.2	7,195.0	13.8	24.9	25.19	-5,484.8	-2,650.5	6,393.3	6,364.0	29.24	218.671		
7,250.0	7,238.6	7,362.8	7,233.6	13.8	25.0	25.51	-5,484.8	-2,650.5	6,383.1	6,354.2	28.85	221.215		
7,300.0	7,286.4	7,410.7	7,281.5	13.7	25.0	26.01	-5,484.8	-2,650.5	6,369.9	6,341.5	28.36	224.610		
7,350.0	7,333.1	7,457.3	7,328.1	13.7	25.0	26.66	-5,484.8	-2,650.5	6,353.6	6,325.9	27.75	228.953		
7,400.0	7,378.5	7,502.7	7,373.5	13.6	25.1	27.48	-5,484.8	-2,650.5	6,334.5	6,307.4	27.04	234.239		
7,450.0	7,422.2	7,546.4	7,417.2	13.6	25.1	28.49	-5,484.8	-2,650.5	6,312.5	6,286.3	26.26	240.417		
7,500.0	7,464.1	7,588.4	7,459.2	13.5	25.2	29.69	-5,484.8	-2,650.5	6,287.9	6,262.5	25.42	247.358		
7,550.0	7,504.1	7,628.3	7,499.1	13.5	25.2	31.13	-5,484.8	-2,650.5	6,260.7	6,236.1	24.57	254.781		
7,600.0	7,541.8	7,666.1	7,536.9	13.5	25.2	32.83	-5,484.8	-2,650.5	6,231.0	6,207.3	23.77	262.162		
7,650.0	7,577.2	7,701.4	7,572.2	13.4	25.3	34.84	-5,484.8	-2,650.5	6,199.1	6,176.0	23.08	268.625		
7,700.0	7,610.0	7,734.3	7,605.1	13.5	25.3	37.20	-5,484.8	-2,650.5	6,165.1	6,142.5	22.59	272.878		
7,750.0	7,640.2	7,764.4	7,635.2	13.5	25.3	39.98	-5,484.8	-2,650.5	6,129.1	6,106.7	22.42	273.376		
7,800.0	7,667.4	7,791.6	7,662.4	13.6	25.4	43.25	-5,484.8	-2,650.5	6,091.4	6,068.7	22.66	268.808		
7,850.0	7,691.7	7,815.9	7,686.7	13.7	25.4	47.08	-5,484.8	-2,650.5	6,052.1	6,028.7	23.38	258.834		
7,900.0	7,712.8	7,837.1	7,707.9	13.9	25.4	51.55	-5,484.8	-2,650.5	6,011.4	5,986.8	24.59	244.478		
7,950.0	7,730.8	7,855.0	7,725.8	14.1	25.4	56.72	-5,484.8	-2,650.5	5,969.6	5,943.4	26.21	227.764		
8,000.0	7,745.5	7,869.7	7,740.5	14.4	25.4	62.64	-5,484.8	-2,650.5	5,926.9	5,898.8	28.10	210.925		
8,050.0	7,756.7	7,881.0	7,751.7	14.7	25.4	69.27	-5,484.8	-2,650.5	5,883.4	5,853.3	30.05	195.787		
8,100.0	7,764.6	7,888.8	7,759.6	15.1	25.4	76.50	-5,484.8	-2,650.5	5,839.4	5,807.5	31.81	183.550		
8,150.0	7,769.0	7,893.2	7,764.0	15.5	25.4	84.12	-5,484.8	-2,650.5	5,795.1	5,761.9	33.15	174.805		
8,188.1	7,770.0	7,894.2	7,765.0	15.9	25.4	90.00	-5,484.8	-2,650.5	5,761.3	5,727.5	33.78	170.558		
8,200.0	7,770.0	7,894.2	7,765.0	16.0	25.4	90.00	-5,484.8	-2,650.5	5,750.7	5,716.8	33.89	169.689		
8,300.0	7,770.0	7,894.2	7,765.0	17.0	25.4	90.00	-5,484.8	-2,650.5	5,662.2	5,627.3	34.89	162.292		
8,400.0	7,770.0	7,894.2	7,765.0	18.1	25.4	90.00	-5,484.8	-2,650.5	5,574.1	5,538.1	36.00	154.821		
8,500.0	7,770.0	7,894.2	7,765.0	19.3	25.4	90.00	-5,484.8	-2,650.5	5,486.3	5,449.1	37.21	147.430		
8,600.0	7,770.0	7,894.2	7,765.0	20.6	25.4	90.00	-5,484.8	-2,650.5	5,399.1	5,360.6	38.50	140.230		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,700.0	7,770.0	7,894.2	7,765.0	21.9	25.4	90.00	-5,484.8	-2,650.5	5,312.2	5,272.4	39.85	133.290		
8,800.0	7,770.0	7,894.2	7,765.0	23.3	25.4	90.00	-5,484.8	-2,650.5	5,225.9	5,184.6	41.26	126.653		
8,900.0	7,770.0	7,894.2	7,765.0	24.8	25.4	90.00	-5,484.8	-2,650.5	5,140.0	5,097.3	42.71	120.340		
9,000.0	7,770.0	7,894.2	7,765.0	26.3	25.4	90.00	-5,484.8	-2,650.5	5,054.6	5,010.4	44.20	114.358		
9,100.0	7,770.0	7,894.2	7,765.0	27.8	25.4	90.00	-5,484.8	-2,650.5	4,969.8	4,924.1	45.72	108.704		
9,200.0	7,770.0	7,894.2	7,765.0	29.3	25.4	90.00	-5,484.8	-2,650.5	4,885.6	4,838.3	47.26	103.368		
9,300.0	7,770.0	7,894.2	7,765.0	30.9	25.4	90.00	-5,484.8	-2,650.5	4,802.0	4,753.2	48.83	98.337		
9,400.0	7,770.0	7,894.2	7,765.0	32.5	25.4	90.00	-5,484.8	-2,650.5	4,719.0	4,668.6	50.42	93.597		
9,500.0	7,770.0	7,894.2	7,765.0	34.1	25.4	90.00	-5,484.8	-2,650.5	4,636.7	4,584.7	52.02	89.130		
9,600.0	7,770.0	7,894.2	7,765.0	35.7	25.4	90.00	-5,484.8	-2,650.5	4,555.1	4,501.4	53.64	84.922		
9,700.0	7,770.0	7,894.2	7,765.0	37.3	25.4	90.00	-5,484.8	-2,650.5	4,474.2	4,419.0	55.27	80.955		
9,800.0	7,770.0	7,894.2	7,765.0	39.0	25.4	90.00	-5,484.8	-2,650.5	4,394.1	4,337.2	56.91	77.214		
9,900.0	7,770.0	7,894.2	7,765.0	40.6	25.4	90.00	-5,484.8	-2,650.5	4,314.9	4,256.3	58.56	73.686		
10,000.0	7,770.0	7,894.2	7,765.0	42.3	25.4	90.00	-5,484.8	-2,650.5	4,236.5	4,176.3	60.22	70.355		
10,100.0	7,770.0	7,894.2	7,765.0	44.0	25.4	90.00	-5,484.8	-2,650.5	4,159.1	4,097.2	61.88	67.210		
10,200.0	7,770.0	7,894.2	7,765.0	45.6	25.4	90.00	-5,484.8	-2,650.5	4,082.7	4,019.1	63.55	64.239		
10,300.0	7,770.0	7,894.2	7,765.0	47.3	25.4	90.00	-5,484.8	-2,650.5	4,007.2	3,942.0	65.23	61.430		
10,400.0	7,770.0	7,894.2	7,765.0	49.0	25.4	90.00	-5,484.8	-2,650.5	3,932.9	3,866.0	66.92	58.774		
10,500.0	7,770.0	7,894.2	7,765.0	50.7	25.4	90.00	-5,484.8	-2,650.5	3,859.8	3,791.2	68.60	56.261		
10,600.0	7,770.0	7,894.2	7,765.0	52.4	25.4	90.00	-5,484.8	-2,650.5	3,787.8	3,717.5	70.30	53.883		
10,700.0	7,770.0	7,894.2	7,765.0	54.1	25.4	90.00	-5,484.8	-2,650.5	3,717.2	3,645.2	71.99	51.632		
10,800.0	7,770.0	7,894.2	7,765.0	55.8	25.4	90.00	-5,484.8	-2,650.5	3,647.9	3,574.2	73.69	49.501		
10,900.0	7,770.0	7,894.2	7,765.0	57.5	25.4	90.00	-5,484.8	-2,650.5	3,580.1	3,504.7	75.40	47.483		
11,000.0	7,770.0	7,894.2	7,765.0	59.2	25.4	90.00	-5,484.8	-2,650.5	3,513.9	3,436.8	77.10	45.573		
11,100.0	7,770.0	7,894.2	7,765.0	60.9	25.4	90.00	-5,484.8	-2,650.5	3,449.2	3,370.4	78.81	43.765		
11,200.0	7,770.0	7,894.2	7,765.0	62.6	25.4	90.00	-5,484.8	-2,650.5	3,386.3	3,305.8	80.52	42.053		
11,300.0	7,770.0	7,894.2	7,765.0	64.3	25.4	90.00	-5,484.8	-2,650.5	3,325.2	3,242.9	82.24	40.434		
11,400.0	7,770.0	7,894.2	7,765.0	66.0	25.4	90.00	-5,484.8	-2,650.5	3,266.0	3,182.0	83.95	38.902		
11,500.0	7,770.0	7,894.2	7,765.0	67.7	25.4	90.00	-5,484.8	-2,650.5	3,208.8	3,123.2	85.67	37.455		
11,600.0	7,770.0	7,894.2	7,765.0	69.5	25.4	90.00	-5,484.8	-2,650.5	3,153.8	3,066.4	87.39	36.088		
11,700.0	7,770.0	7,894.2	7,765.0	71.2	25.4	90.00	-5,484.8	-2,650.5	3,101.0	3,011.9	89.11	34.799		
11,800.0	7,770.0	7,894.2	7,765.0	72.9	25.4	90.00	-5,484.8	-2,650.5	3,050.6	2,959.8	90.84	33.584		
11,900.0	7,770.0	7,894.2	7,765.0	74.6	25.4	90.00	-5,484.8	-2,650.5	3,002.7	2,910.1	92.56	32.440		
12,000.0	7,770.0	7,894.2	7,765.0	76.4	25.4	90.00	-5,484.8	-2,650.5	2,957.4	2,863.1	94.29	31.366		
12,100.0	7,770.0	7,894.2	7,765.0	78.1	25.4	90.00	-5,484.8	-2,650.5	2,914.8	2,818.8	96.01	30.358		
12,200.0	7,770.0	7,894.2	7,765.0	79.8	25.4	90.00	-5,484.8	-2,650.5	2,875.0	2,777.3	97.74	29.415		
12,300.0	7,770.0	7,894.2	7,765.0	81.5	25.4	90.00	-5,484.8	-2,650.5	2,838.3	2,738.8	99.47	28.534		
12,400.0	7,770.0	7,894.2	7,765.0	83.3	25.4	90.00	-5,484.8	-2,650.5	2,804.6	2,703.4	101.20	27.713		
12,500.0	7,770.0	7,894.2	7,765.0	85.0	25.4	90.00	-5,484.8	-2,650.5	2,774.1	2,671.1	102.93	26.951		
12,600.0	7,770.0	7,894.2	7,765.0	86.7	25.4	90.00	-5,484.8	-2,650.5	2,746.9	2,642.2	104.66	26.245		
12,700.0	7,770.0	7,894.2	7,765.0	88.5	25.4	90.00	-5,484.8	-2,650.5	2,723.1	2,616.7	106.40	25.594		
12,800.0	7,770.0	7,894.2	7,765.0	90.2	25.4	90.00	-5,484.8	-2,650.5	2,702.8	2,594.7	108.13	24.996		
12,900.0	7,770.0	7,894.2	7,765.0	91.9	25.4	90.00	-5,484.8	-2,650.5	2,686.1	2,576.2	109.87	24.449		
13,000.0	7,770.0	7,894.2	7,765.0	93.7	25.4	90.00	-5,484.8	-2,650.5	2,673.0	2,561.4	111.60	23.951		
13,100.0	7,770.0	7,894.2	7,765.0	95.4	25.4	90.00	-5,484.8	-2,650.5	2,663.6	2,550.3	113.34	23.502		
13,200.0	7,770.0	7,894.2	7,765.0	97.1	25.4	90.00	-5,484.8	-2,650.5	2,658.0	2,542.9	115.07	23.098		
13,300.0	7,770.0	7,894.2	7,765.0	98.9	25.4	90.00	-5,484.8	-2,650.5	2,656.1	2,539.2	116.81	22.738		
13,300.6	7,770.0	7,894.2	7,765.0	98.9	25.4	90.00	-5,484.8	-2,650.5	2,656.1	2,539.2	116.82	22.736 CC, ES		
13,400.0	7,770.0	7,894.2	7,765.0	100.6	25.4	90.00	-5,484.8	-2,650.5	2,657.9	2,539.4	118.55	22.420		
13,500.0	7,770.0	7,894.2	7,765.0	102.4	25.4	90.00	-5,484.8	-2,650.5	2,663.5	2,543.2	120.29	22.143		
13,600.0	7,770.0	7,894.2	7,765.0	104.1	25.4	90.00	-5,484.8	-2,650.5	2,672.9	2,550.9	122.03	21.904		
13,700.0	7,770.0	7,894.2	7,765.0	105.8	25.4	90.00	-5,484.8	-2,650.5	2,685.9	2,562.2	123.77	21.702		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,800.0	7,770.0	7,894.2	7,765.0	107.6	25.4	90.00	-5,484.8	-2,650.5	2,702.6	2,577.1	125.51	21.534		
13,900.0	7,770.0	7,894.2	7,765.0	109.3	25.4	90.00	-5,484.8	-2,650.5	2,722.9	2,595.6	127.25	21.398		
14,000.0	7,770.0	7,894.2	7,765.0	111.1	25.4	90.00	-5,484.8	-2,650.5	2,746.6	2,617.6	128.99	21.294		
14,100.0	7,770.0	7,894.2	7,765.0	112.8	25.4	90.00	-5,484.8	-2,650.5	2,773.8	2,643.0	130.73	21.218		
14,200.0	7,770.0	7,894.2	7,765.0	114.5	25.4	90.00	-5,484.8	-2,650.5	2,804.2	2,671.7	132.47	21.169		
14,300.0	7,770.0	7,894.2	7,765.0	116.3	25.4	90.00	-5,484.8	-2,650.5	2,837.9	2,703.7	134.21	21.145		
14,400.0	7,770.0	7,894.2	7,765.0	118.0	25.4	90.00	-5,484.8	-2,650.5	2,874.6	2,738.7	135.95	21.144 SF		
14,500.0	7,770.0	7,894.2	7,765.0	119.8	25.4	90.00	-5,484.8	-2,650.5	2,914.3	2,776.6	137.70	21.165		
14,600.0	7,770.0	7,894.2	7,765.0	121.5	25.4	90.00	-5,484.8	-2,650.5	2,956.9	2,817.4	139.44	21.206		
14,700.0	7,770.0	7,894.2	7,765.0	123.3	25.4	90.00	-5,484.8	-2,650.5	3,002.2	2,861.0	141.18	21.264		
14,800.0	7,770.0	7,894.2	7,765.0	125.0	25.4	90.00	-5,484.8	-2,650.5	3,050.1	2,907.1	142.93	21.340		
14,900.0	7,770.0	7,894.2	7,765.0	126.7	25.4	90.00	-5,484.8	-2,650.5	3,100.5	2,955.8	144.67	21.431		
15,000.0	7,770.0	7,894.2	7,765.0	128.5	25.4	90.00	-5,484.8	-2,650.5	3,153.2	3,006.8	146.41	21.536		
15,100.0	7,770.0	7,894.2	7,765.0	130.2	25.4	90.00	-5,484.8	-2,650.5	3,208.2	3,060.1	148.16	21.654		
15,200.0	7,770.0	7,894.2	7,765.0	132.0	25.4	90.00	-5,484.8	-2,650.5	3,265.3	3,115.4	149.90	21.783		
15,300.0	7,770.0	7,894.2	7,765.0	133.7	25.4	90.00	-5,484.8	-2,650.5	3,324.5	3,172.9	151.65	21.922		
15,400.0	7,770.0	7,894.2	7,765.0	135.5	25.4	90.00	-5,484.8	-2,650.5	3,385.6	3,232.2	153.39	22.071		
15,500.0	7,770.0	7,894.2	7,765.0	137.2	25.4	90.00	-5,484.8	-2,650.5	3,448.5	3,293.4	155.14	22.228		
15,600.0	7,770.0	7,894.2	7,765.0	139.0	25.4	90.00	-5,484.8	-2,650.5	3,513.1	3,356.2	156.88	22.393		
15,700.0	7,770.0	7,894.2	7,765.0	140.7	25.4	90.00	-5,484.8	-2,650.5	3,579.4	3,420.7	158.63	22.564		
15,800.0	7,770.0	7,894.2	7,765.0	142.4	25.4	90.00	-5,484.8	-2,650.5	3,647.2	3,486.8	160.38	22.741		
15,900.0	7,770.0	7,894.2	7,765.0	144.2	25.4	90.00	-5,484.8	-2,650.5	3,716.4	3,554.3	162.12	22.923		
16,000.0	7,770.0	7,894.2	7,765.0	145.9	25.4	90.00	-5,484.8	-2,650.5	3,787.0	3,623.2	163.87	23.110		
16,100.0	7,770.0	7,894.2	7,765.0	147.7	25.4	90.00	-5,484.8	-2,650.5	3,858.9	3,693.3	165.62	23.301		
16,200.0	7,770.0	7,894.2	7,765.0	149.4	25.4	90.00	-5,484.8	-2,650.5	3,932.1	3,764.7	167.36	23.494		
16,300.0	7,770.0	7,894.2	7,765.0	151.2	25.4	90.00	-5,484.8	-2,650.5	4,006.4	3,837.3	169.11	23.691		
16,400.0	7,770.0	7,894.2	7,765.0	152.9	25.4	90.00	-5,484.8	-2,650.5	4,081.8	3,911.0	170.86	23.890		
16,500.0	7,770.0	7,894.2	7,765.0	154.7	25.4	90.00	-5,484.8	-2,650.5	4,158.3	3,985.6	172.60	24.091		
16,600.0	7,770.0	7,894.2	7,765.0	156.4	25.4	90.00	-5,484.8	-2,650.5	4,235.7	4,061.3	174.35	24.294		
16,700.0	7,770.0	7,894.2	7,765.0	158.2	25.4	90.00	-5,484.8	-2,650.5	4,314.0	4,137.9	176.10	24.498		
16,800.0	7,770.0	7,894.2	7,765.0	159.9	25.4	90.00	-5,484.8	-2,650.5	4,393.3	4,215.4	177.85	24.703		
16,900.0	7,770.0	7,894.2	7,765.0	161.7	25.4	90.00	-5,484.8	-2,650.5	4,473.3	4,293.7	179.59	24.908		
17,000.0	7,770.0	7,894.2	7,765.0	163.4	25.4	90.00	-5,484.8	-2,650.5	4,554.2	4,372.8	181.34	25.114		
17,100.0	7,770.0	7,894.2	7,765.0	165.2	25.4	90.00	-5,484.8	-2,650.5	4,635.8	4,452.7	183.09	25.320		
17,200.0	7,770.0	7,894.2	7,765.0	166.9	25.4	90.00	-5,484.8	-2,650.5	4,718.1	4,533.2	184.84	25.525		
17,300.0	7,770.0	7,894.2	7,765.0	168.7	25.4	90.00	-5,484.8	-2,650.5	4,801.1	4,614.5	186.59	25.731		
17,400.0	7,770.0	7,894.2	7,765.0	170.4	25.4	90.00	-5,484.8	-2,650.5	4,884.7	4,696.3	188.34	25.936		
17,500.0	7,770.0	7,894.2	7,765.0	172.2	25.4	90.00	-5,484.8	-2,650.5	4,968.9	4,778.8	190.08	26.141		
17,600.0	7,770.0	7,894.2	7,765.0	173.9	25.4	90.00	-5,484.8	-2,650.5	5,053.7	4,861.9	191.83	26.344		
17,653.1	7,770.0	7,894.2	7,765.0	174.8	25.4	90.00	-5,484.8	-2,650.5	5,098.9	4,906.1	192.76	26.452		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-149.35	-6,136.7	-3,636.3	7,133.2						
100.0	100.0	106.4	106.4	0.2	0.2	-149.35	-6,136.6	-3,636.1	7,132.9	7,132.6	0.31	N/A			
123.0	123.0	118.0	118.0	0.2	0.2	-149.35	-6,136.6	-3,636.0	7,132.9	7,132.5	0.37	N/A			
200.0	200.0	178.0	178.0	0.3	0.3	-149.36	-6,137.1	-3,635.4	7,133.0	7,132.4	0.61	N/A			
300.0	300.0	232.8	232.8	0.5	0.4	-149.37	-6,138.3	-3,634.0	7,133.7	7,132.8	0.89	8,010.047			
400.0	400.0	298.5	298.3	0.7	0.5	-149.40	-6,140.8	-3,631.3	7,134.8	7,133.6	1.20	5,957.379			
500.0	500.0	362.0	361.6	0.8	0.7	-149.44	-6,144.2	-3,627.5	7,136.4	7,134.9	1.51	4,723.005			
550.0	550.0	387.7	387.2	0.9	0.7	-149.46	-6,145.9	-3,625.6	7,137.4	7,135.7	1.66	4,291.709			
600.0	600.0	412.4	411.8	1.0	0.8	-150.31	-6,147.7	-3,623.7	7,138.8	7,137.0	1.81	3,936.324			
700.0	700.0	454.0	453.1	1.2	0.9	-150.33	-6,151.2	-3,620.2	7,143.2	7,141.1	2.09	3,410.233			
800.0	799.9	518.1	516.6	1.4	1.1	-150.38	-6,157.5	-3,613.9	7,149.8	7,147.4	2.46	2,908.190			
861.1	860.9	554.5	552.5	1.5	1.2	-150.40	-6,161.5	-3,610.0	7,154.9	7,152.2	2.68	2,671.203			
900.0	899.8	586.2	583.8	1.6	1.3	-150.45	-6,165.2	-3,606.2	7,158.4	7,155.6	2.86	2,503.832			
1,000.0	999.6	670.2	666.3	1.8	1.6	-150.59	-6,176.3	-3,594.5	7,167.6	7,164.3	3.34	2,143.442			
1,100.0	1,099.5	768.4	762.2	1.9	2.0	-150.78	-6,190.4	-3,579.1	7,177.0	7,173.1	3.90	1,841.607			
1,200.0	1,199.3	850.5	842.6	2.1	2.3	-150.92	-6,201.7	-3,567.0	7,186.4	7,182.0	4.38	1,640.423			
1,300.0	1,299.2	935.9	926.2	2.3	2.7	-151.08	-6,213.7	-3,554.4	7,196.2	7,191.3	4.89	1,471.046			
1,400.0	1,399.1	1,004.0	992.6	2.5	3.0	-151.21	-6,224.2	-3,543.3	7,206.4	7,201.0	5.36	1,344.612			
1,500.0	1,498.9	1,052.1	1,039.2	2.7	3.2	-151.31	-6,232.2	-3,534.9	7,217.1	7,211.4	5.75	1,254.184			
1,600.0	1,598.8	1,152.7	1,136.6	2.9	3.7	-151.53	-6,249.7	-3,516.5	7,228.3	7,221.9	6.40	1,130.068			
1,700.0	1,698.6	1,230.1	1,211.4	3.1	4.0	-151.69	-6,263.3	-3,502.0	7,239.5	7,232.5	6.93	1,044.135			
1,800.0	1,798.5	1,432.9	1,407.9	3.3	5.0	-152.12	-6,297.2	-3,464.9	7,250.3	7,242.2	8.02	903.863			
1,900.0	1,898.3	1,500.9	1,473.8	3.5	5.3	-152.26	-6,308.0	-3,452.6	7,260.6	7,252.1	8.50	853.928			
2,000.0	1,998.2	1,577.0	1,547.7	3.7	5.6	-152.42	-6,320.4	-3,439.0	7,271.3	7,262.3	9.02	806.379			
2,100.0	2,098.0	1,644.5	1,613.2	3.9	6.0	-152.56	-6,331.6	-3,427.0	7,282.5	7,273.0	9.50	766.708			
2,200.0	2,197.9	1,759.0	1,724.1	4.1	6.5	-152.80	-6,350.9	-3,406.0	7,293.7	7,283.5	10.20	714.801			
2,300.0	2,297.7	1,925.0	1,884.6	4.3	7.3	-153.15	-6,378.9	-3,374.6	7,305.2	7,294.0	11.15	655.337			
2,400.0	2,397.6	1,984.3	1,942.0	4.5	7.6	-153.28	-6,388.6	-3,363.4	7,315.9	7,304.3	11.60	630.880			
2,500.0	2,497.4	2,059.0	2,014.4	4.7	7.9	-153.43	-6,401.1	-3,349.4	7,327.1	7,315.0	12.11	604.888			
2,600.0	2,597.3	2,140.3	2,093.1	4.9	8.3	-153.60	-6,414.6	-3,334.5	7,338.5	7,325.9	12.66	579.683			
2,700.0	2,697.1	2,213.0	2,163.5	5.1	8.7	-153.75	-6,427.1	-3,321.1	7,350.5	7,337.4	13.17	558.073			
2,800.0	2,797.0	2,403.0	2,347.8	5.3	9.5	-154.14	-6,458.8	-3,287.3	7,362.8	7,348.6	14.18	519.270			
2,900.0	2,896.8	2,463.2	2,406.1	5.5	9.8	-154.26	-6,468.5	-3,276.1	7,374.0	7,359.4	14.64	503.786			
3,000.0	2,996.7	2,520.8	2,461.8	5.7	10.1	-154.38	-6,478.2	-3,265.1	7,385.7	7,370.7	15.08	489.838			
3,100.0	3,096.5	2,604.3	2,542.7	5.9	10.5	-154.55	-6,492.4	-3,250.1	7,398.0	7,382.4	15.62	473.569			
3,200.0	3,196.4	2,689.0	2,624.9	6.1	10.9	-154.72	-6,506.4	-3,235.4	7,410.4	7,394.2	16.16	458.472			
3,300.0	3,296.3	2,880.0	2,810.3	6.3	11.8	-155.09	-6,537.7	-3,201.9	7,422.9	7,405.7	17.17	432.288			
3,400.0	3,396.1	2,926.9	2,855.8	6.5	12.0	-155.18	-6,545.3	-3,193.2	7,434.6	7,417.0	17.56	423.361			
3,500.0	3,496.0	2,975.0	2,902.4	6.7	12.2	-155.28	-6,553.5	-3,184.4	7,447.1	7,429.1	17.96	414.755			
3,600.0	3,595.8	3,013.1	2,939.2	6.9	12.4	-155.36	-6,560.2	-3,177.4	7,460.4	7,442.1	18.31	407.527			
3,700.0	3,695.7	3,071.0	2,995.1	7.0	12.7	-155.48	-6,570.9	-3,166.9	7,474.4	7,455.6	18.75	398.693			
3,800.0	3,795.5	3,180.3	3,100.8	7.2	13.2	-155.70	-6,590.8	-3,147.3	7,488.4	7,469.0	19.41	385.729			
3,900.0	3,895.4	3,483.0	3,393.6	7.4	14.7	-156.31	-6,643.1	-3,090.9	7,501.9	7,481.0	20.95	358.140			
4,000.0	3,995.2	3,547.0	3,455.5	7.6	15.0	-156.44	-6,653.3	-3,078.6	7,513.8	7,492.4	21.41	350.912			
4,100.0	4,095.1	3,624.4	3,530.5	7.8	15.4	-156.60	-6,666.0	-3,063.7	7,526.1	7,504.1	21.94	343.054			
4,200.0	4,194.9	3,693.1	3,596.9	8.0	15.7	-156.74	-6,677.4	-3,050.7	7,538.6	7,516.2	22.42	336.279			
4,300.0	4,294.8	3,770.0	3,671.4	8.2	16.1	-156.89	-6,690.2	-3,036.7	7,551.7	7,528.7	22.93	329.401			
4,400.0	4,394.6	3,855.6	3,754.4	8.4	16.5	-157.05	-6,704.4	-3,021.4	7,564.9	7,541.4	23.47	322.349			
4,500.0	4,494.5	4,024.0	3,918.0	8.6	17.2	-157.37	-6,731.7	-2,991.9	7,578.0	7,553.7	24.35	311.160			
4,600.0	4,594.3	4,096.1	3,988.0	8.8	17.6	-157.50	-6,743.2	-2,978.9	7,590.8	7,565.9	24.83	305.678			
4,700.0	4,694.2	4,199.1	4,088.2	9.0	18.0	-157.69	-6,759.3	-2,961.2	7,603.5	7,578.1	25.43	299.019			
4,800.0	4,794.0	4,252.5	4,140.1	9.2	18.2	-157.79	-6,767.7	-2,952.2	7,616.7	7,590.9	25.82	295.037			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
4,900.0	4,893.9	4,310.0	4,196.1	9.4	18.5	-157.89	-6,777.1	-2,943.0	7,630.6	7,604.4	26.22	291.051		
5,000.0	4,993.7	4,600.2	4,480.3	9.6	19.6	-158.34	-6,817.8	-2,901.5	7,642.8	7,615.4	27.39	279.032		
5,100.0	5,093.6	4,720.0	4,598.1	9.8	20.0	-158.51	-6,832.7	-2,885.4	7,654.2	7,626.2	27.98	273.567		
5,200.0	5,193.5	4,786.0	4,662.9	10.0	20.3	-158.61	-6,841.2	-2,876.1	7,665.9	7,637.5	28.38	270.084		
5,300.0	5,293.3	4,840.8	4,716.7	10.2	20.5	-158.69	-6,848.5	-2,868.5	7,678.2	7,649.4	28.74	267.123		
5,400.0	5,393.2	5,136.2	5,007.9	10.4	21.5	-159.07	-6,882.8	-2,833.7	7,690.2	7,660.4	29.80	258.085		
5,500.0	5,493.0	5,222.0	5,092.8	10.6	21.8	-159.18	-6,891.5	-2,823.4	7,700.3	7,670.1	30.23	254.702		
5,600.0	5,592.9	5,309.5	5,179.1	10.8	22.1	-159.29	-6,900.6	-2,812.7	7,710.6	7,680.0	30.67	251.368		
5,700.0	5,692.7	5,490.3	5,358.0	11.0	22.6	-159.50	-6,917.7	-2,792.6	7,720.5	7,689.2	31.33	246.394		
5,800.0	5,792.6	5,605.6	5,472.4	11.2	22.9	-159.62	-6,927.0	-2,782.1	7,729.8	7,698.1	31.78	243.215		
5,900.0	5,892.4	5,689.8	5,566.0	11.4	23.1	-159.70	-6,933.3	-2,775.0	7,739.0	7,706.8	32.16	240.676		
6,000.0	5,992.3	5,755.4	5,621.2	11.6	23.3	-159.76	-6,938.6	-2,769.5	7,748.6	7,716.1	32.49	238.521		
6,100.0	6,092.1	5,966.7	5,821.4	11.8	23.7	-159.93	-6,953.1	-2,754.6	7,757.9	7,724.8	33.07	234.574		
6,200.0	6,192.0	6,203.2	6,067.5	12.0	24.1	-160.06	-6,963.2	-2,744.3	7,765.1	7,731.5	33.60	231.092		
6,300.0	6,291.8	6,290.6	6,154.8	12.2	24.2	-160.08	-6,965.0	-2,743.6	7,771.8	7,737.9	33.85	229.580		
6,400.0	6,391.7	6,527.0	6,391.2	12.4	24.3	-160.10	-6,965.6	-2,745.3	7,776.9	7,742.7	34.20	227.392		
6,500.0	6,491.5	6,625.7	6,489.9	12.6	24.4	-160.11	-6,965.2	-2,745.8	7,781.9	7,747.4	34.46	225.844		
6,600.0	6,591.4	6,696.6	6,560.8	12.8	24.5	-160.12	-6,965.3	-2,746.0	7,787.2	7,752.5	34.69	224.447		
6,700.0	6,691.2	6,840.5	6,704.8	13.0	24.6	-160.14	-6,965.3	-2,745.8	7,792.2	7,757.2	35.00	222.607		
6,800.0	6,791.1	6,942.9	6,807.1	13.2	24.7	-160.16	-6,965.2	-2,745.2	7,797.0	7,761.7	35.28	221.006		
6,900.0	6,890.9	7,024.4	6,888.6	13.4	24.8	-160.17	-6,965.3	-2,744.6	7,801.9	7,766.4	35.54	219.523		
7,000.0	6,990.8	7,106.9	6,971.1	13.6	24.9	-160.19	-6,965.7	-2,743.8	7,807.2	7,771.4	35.80	218.054		
7,024.2	7,014.9	7,136.1	7,000.3	13.6	24.9	-160.20	-6,965.8	-2,743.6	7,808.4	7,772.6	35.88	217.649		
7,050.0	7,040.7	7,167.2	7,031.4	13.7	24.9	-161.88	-6,966.0	-2,743.3	7,809.4	7,773.4	35.98	217.061		
7,100.0	7,090.7	7,207.4	7,071.6	13.7	25.0	21.51	-6,966.1	-2,743.0	7,808.6	7,772.6	36.07	216.471		
7,150.0	7,140.5	7,246.0	7,110.2	13.8	25.0	21.12	-6,966.3	-2,742.8	7,804.7	7,768.7	36.06	216.426		
7,200.0	7,189.9	7,285.2	7,149.4	13.8	25.0	21.20	-6,966.5	-2,742.6	7,797.7	7,761.7	35.95	216.899		
7,250.0	7,238.6	7,324.9	7,189.1	13.8	25.1	21.46	-6,966.8	-2,742.4	7,787.4	7,751.7	35.74	217.880		
7,300.0	7,286.4	7,365.2	7,229.4	13.7	25.1	21.86	-6,967.2	-2,742.1	7,774.1	7,738.7	35.44	219.365		
7,350.0	7,333.1	7,420.5	7,284.7	13.7	25.2	22.42	-6,967.7	-2,741.7	7,757.7	7,722.6	35.07	221.220		
7,400.0	7,378.5	7,474.2	7,338.4	13.6	25.2	23.12	-6,968.2	-2,741.3	7,738.2	7,703.6	34.62	223.544		
7,450.0	7,422.2	7,526.0	7,390.1	13.6	25.3	23.98	-6,968.6	-2,740.9	7,715.8	7,681.7	34.10	226.298		
7,500.0	7,464.1	7,575.6	7,439.8	13.5	25.3	25.04	-6,968.9	-2,740.5	7,690.5	7,657.0	33.52	229.418		
7,550.0	7,504.1	7,622.9	7,487.0	13.5	25.4	26.30	-6,969.2	-2,740.1	7,662.5	7,629.6	32.91	232.808		
7,600.0	7,541.8	7,667.5	7,531.7	13.5	25.4	27.82	-6,969.4	-2,739.6	7,632.0	7,599.7	32.30	236.321		
7,650.0	7,577.2	7,709.3	7,573.4	13.4	25.5	29.63	-6,969.5	-2,739.2	7,599.1	7,567.4	31.70	239.740		
7,700.0	7,610.0	7,748.0	7,612.2	13.5	25.5	31.80	-6,969.7	-2,738.9	7,563.9	7,532.8	31.16	242.764		
7,750.0	7,640.2	7,783.5	7,647.6	13.5	25.5	34.40	-6,969.7	-2,738.5	7,526.7	7,496.0	30.72	244.988		
7,800.0	7,667.4	7,815.6	7,679.7	13.6	25.6	37.52	-6,969.8	-2,738.2	7,487.7	7,457.2	30.45	245.918		
7,850.0	7,691.7	7,844.1	7,708.2	13.7	25.6	41.28	-6,969.8	-2,737.9	7,447.0	7,416.6	30.39	245.014		
7,900.0	7,712.8	7,868.9	7,733.1	13.9	25.6	45.81	-6,969.9	-2,737.6	7,404.8	7,374.2	30.62	241.812		
7,950.0	7,730.8	7,889.9	7,754.1	14.1	25.7	51.26	-6,969.9	-2,737.4	7,361.5	7,330.3	31.18	236.120		
8,000.0	7,745.5	7,907.1	7,771.2	14.4	25.7	57.76	-6,969.9	-2,737.2	7,317.1	7,285.0	32.06	228.240		
8,050.0	7,756.7	7,920.2	7,784.4	14.7	25.7	65.37	-6,969.9	-2,737.0	7,271.9	7,238.7	33.19	219.085		
8,100.0	7,764.6	7,929.4	7,793.5	15.1	25.7	74.01	-6,969.9	-2,736.9	7,226.2	7,191.8	34.40	210.054		
8,150.0	7,769.0	7,934.5	7,798.6	15.5	25.7	83.39	-6,969.9	-2,736.9	7,180.1	7,144.7	35.44	202.595		
8,188.1	7,770.0	7,935.6	7,799.8	15.9	25.7	90.73	-6,969.9	-2,736.9	7,145.0	7,109.0	35.98	198.588		
8,200.0	7,770.0	7,935.6	7,799.8	16.0	25.7	90.73	-6,969.9	-2,736.9	7,133.9	7,097.8	36.09	197.674		
8,300.0	7,770.0	7,935.6	7,799.7	17.0	25.7	90.73	-6,969.9	-2,736.9	7,041.7	7,004.6	37.09	189.863		
8,400.0	7,770.0	7,935.5	7,799.7	18.1	25.7	90.72	-6,969.9	-2,736.9	6,949.7	6,911.5	38.20	181.917		
8,500.0	7,770.0	7,935.4	7,799.6	19.3	25.7	90.72	-6,969.9	-2,736.9	6,858.0	6,818.5	39.41	174.005		
8,600.0	7,770.0	7,935.4	7,799.5	20.6	25.7	90.72	-6,969.9	-2,736.9	6,766.4	6,725.7	40.70	166.249		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,700.0	7,770.0	7,935.3	7,799.5	21.9	25.7	90.72	-6,969.9	-2,736.9	6,675.1	6,633.1	42.05	158.729		
8,800.0	7,770.0	7,935.3	7,799.4	23.3	25.7	90.72	-6,969.9	-2,736.9	6,584.1	6,540.6	43.46	151.498		
8,900.0	7,770.0	7,935.2	7,799.3	24.8	25.7	90.72	-6,969.9	-2,736.9	6,493.3	6,448.4	44.91	144.583		
9,000.0	7,770.0	7,935.1	7,799.3	26.3	25.7	90.72	-6,969.9	-2,736.9	6,402.8	6,356.4	46.40	137.996		
9,100.0	7,770.0	7,935.1	7,799.2	27.8	25.7	90.71	-6,969.9	-2,736.9	6,312.6	6,264.7	47.92	131.740		
9,200.0	7,770.0	7,935.0	7,799.2	29.3	25.7	90.71	-6,969.9	-2,736.9	6,222.7	6,173.2	49.46	125.807		
9,300.0	7,770.0	7,935.0	7,799.1	30.9	25.7	90.71	-6,969.9	-2,736.9	6,133.1	6,082.0	51.03	120.187		
9,400.0	7,770.0	7,934.9	7,799.0	32.5	25.7	90.71	-6,969.9	-2,736.9	6,043.8	5,991.2	52.62	114.866		
9,500.0	7,770.0	7,934.8	7,799.0	34.1	25.7	90.71	-6,969.9	-2,736.9	5,954.9	5,900.6	54.22	109.830		
9,600.0	7,770.0	7,934.8	7,798.9	35.7	25.7	90.71	-6,969.9	-2,736.9	5,866.3	5,810.4	55.84	105.063		
9,700.0	7,770.0	7,934.7	7,798.9	37.3	25.7	90.71	-6,969.9	-2,736.9	5,778.1	5,720.6	57.47	100.549		
9,800.0	7,770.0	7,934.7	7,798.8	39.0	25.7	90.71	-6,969.9	-2,736.9	5,690.2	5,631.1	59.11	96.273		
9,900.0	7,770.0	7,934.6	7,798.8	40.6	25.7	90.70	-6,969.9	-2,736.9	5,602.8	5,542.1	60.75	92.220		
10,000.0	7,770.0	7,934.5	7,798.7	42.3	25.7	90.70	-6,969.9	-2,736.9	5,515.9	5,453.4	62.41	88.377		
10,100.0	7,770.0	7,934.5	7,798.6	44.0	25.7	90.70	-6,969.9	-2,736.9	5,429.3	5,365.2	64.08	84.729		
10,200.0	7,770.0	7,934.4	7,798.6	45.6	25.7	90.70	-6,969.9	-2,736.9	5,343.3	5,277.5	65.75	81.266		
10,300.0	7,770.0	7,934.4	7,798.5	47.3	25.7	90.70	-6,969.9	-2,736.9	5,257.7	5,190.3	67.43	77.974		
10,400.0	7,770.0	7,934.3	7,798.5	49.0	25.7	90.70	-6,969.9	-2,736.9	5,172.6	5,103.5	69.11	74.844		
10,500.0	7,770.0	7,934.2	7,798.4	50.7	25.7	90.70	-6,969.9	-2,736.9	5,088.1	5,017.3	70.80	71.866		
10,600.0	7,770.0	7,934.2	7,798.3	52.4	25.7	90.70	-6,969.9	-2,736.9	5,004.2	4,931.7	72.49	69.030		
10,700.0	7,770.0	7,934.1	7,798.3	54.1	25.7	90.70	-6,969.9	-2,736.9	4,920.9	4,846.7	74.19	66.329		
10,800.0	7,770.0	7,934.1	7,798.2	55.8	25.7	90.69	-6,969.9	-2,736.9	4,838.1	4,762.3	75.89	63.753		
10,900.0	7,770.0	7,934.0	7,798.2	57.5	25.7	90.69	-6,969.9	-2,736.9	4,756.1	4,678.5	77.59	61.296		
11,000.0	7,770.0	7,934.0	7,798.1	59.2	25.7	90.69	-6,969.9	-2,736.9	4,674.8	4,595.5	79.30	58.952		
11,100.0	7,770.0	7,933.9	7,798.1	60.9	25.7	90.69	-6,969.9	-2,736.9	4,594.2	4,513.1	81.01	56.713		
11,200.0	7,770.0	7,933.9	7,798.0	62.6	25.7	90.69	-6,969.9	-2,736.9	4,514.3	4,431.6	82.72	54.575		
11,300.0	7,770.0	7,933.8	7,798.0	64.3	25.7	90.69	-6,969.9	-2,736.9	4,435.3	4,350.9	84.43	52.531		
11,400.0	7,770.0	7,933.7	7,797.9	66.0	25.7	90.69	-6,969.9	-2,736.9	4,357.2	4,271.0	86.15	50.578		
11,500.0	7,770.0	7,933.7	7,797.8	67.7	25.7	90.69	-6,969.9	-2,736.9	4,279.9	4,192.1	87.87	48.710		
11,600.0	7,770.0	7,933.6	7,797.8	69.5	25.7	90.68	-6,969.9	-2,736.9	4,203.6	4,114.1	89.58	46.924		
11,700.0	7,770.0	7,933.6	7,797.7	71.2	25.7	90.68	-6,969.9	-2,736.9	4,128.4	4,037.1	91.31	45.215		
11,800.0	7,770.0	7,933.5	7,797.7	72.9	25.7	90.68	-6,969.9	-2,736.9	4,054.2	3,961.1	93.03	43.580		
11,900.0	7,770.0	7,933.5	7,797.6	74.6	25.7	90.68	-6,969.9	-2,736.9	3,981.1	3,886.4	94.75	42.016		
12,000.0	7,770.0	7,933.4	7,797.6	76.4	25.7	90.68	-6,969.9	-2,736.9	3,909.2	3,812.8	96.48	40.519		
12,100.0	7,770.0	7,933.4	7,797.5	78.1	25.7	90.68	-6,969.9	-2,736.9	3,838.6	3,740.4	98.21	39.088		
12,200.0	7,770.0	7,933.3	7,797.5	79.8	25.7	90.68	-6,969.9	-2,736.9	3,769.3	3,669.4	99.93	37.718		
12,300.0	7,770.0	7,933.3	7,797.4	81.5	25.7	90.68	-6,969.9	-2,736.9	3,701.4	3,599.8	101.66	36.409		
12,400.0	7,770.0	7,933.2	7,797.4	83.3	25.7	90.68	-6,969.9	-2,736.9	3,635.1	3,531.7	103.39	35.158		
12,500.0	7,770.0	7,933.1	7,797.3	85.0	25.7	90.67	-6,969.9	-2,736.9	3,570.2	3,465.1	105.12	33.962		
12,600.0	7,770.0	7,933.1	7,797.2	86.7	25.7	90.67	-6,969.9	-2,736.9	3,507.0	3,400.2	106.86	32.820		
12,700.0	7,770.0	7,933.0	7,797.2	88.5	25.7	90.67	-6,969.9	-2,736.9	3,445.6	3,337.0	108.59	31.731		
12,800.0	7,770.0	7,933.0	7,797.1	90.2	25.7	90.67	-6,969.9	-2,736.9	3,386.0	3,275.7	110.32	30.692		
12,900.0	7,770.0	7,932.9	7,797.1	91.9	25.7	90.67	-6,969.9	-2,736.9	3,328.4	3,216.3	112.06	29.702		
13,000.0	7,770.0	7,932.9	7,797.0	93.7	25.7	90.67	-6,969.9	-2,736.9	3,272.7	3,158.9	113.79	28.761		
13,100.0	7,770.0	7,932.8	7,797.0	95.4	25.7	90.67	-6,969.9	-2,736.9	3,219.3	3,103.7	115.53	27.866		
13,200.0	7,770.0	7,932.8	7,796.9	97.1	25.7	90.67	-6,969.9	-2,736.9	3,168.1	3,050.8	117.26	27.016		
13,300.0	7,770.0	7,932.7	7,796.9	98.9	25.7	90.67	-6,969.9	-2,736.9	3,119.2	3,000.2	119.00	26.212		
13,400.0	7,770.0	7,932.7	7,796.8	100.6	25.7	90.66	-6,969.9	-2,736.9	3,072.8	2,952.1	120.74	25.450		
13,500.0	7,770.0	7,932.6	7,796.8	102.4	25.7	90.66	-6,969.9	-2,736.9	3,029.1	2,906.6	122.48	24.732		
13,600.0	7,770.0	7,932.6	7,796.7	104.1	25.7	90.66	-6,969.9	-2,736.9	2,988.0	2,863.8	124.22	24.055		
13,700.0	7,770.0	7,932.5	7,796.7	105.8	25.7	90.66	-6,969.9	-2,736.9	2,949.7	2,823.8	125.96	23.419		
13,800.0	7,770.0	7,932.5	7,796.6	107.6	25.7	90.66	-6,969.9	-2,736.9	2,914.4	2,786.7	127.70	22.823		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,900.0	7,770.0	7,932.4	7,796.6	109.3	25.7	90.66	-6,969.9	-2,736.9	2,882.1	2,752.7	129.44	22.267		
14,000.0	7,770.0	7,932.4	7,796.5	111.1	25.7	90.66	-6,969.9	-2,736.9	2,853.0	2,721.8	131.18	21.749		
14,100.0	7,770.0	7,932.3	7,796.5	112.8	25.7	90.66	-6,969.9	-2,736.9	2,827.1	2,694.2	132.92	21.270		
14,200.0	7,770.0	7,932.3	7,796.4	114.5	25.7	90.66	-6,969.9	-2,736.9	2,804.5	2,669.9	134.66	20.827		
14,300.0	7,770.0	7,932.2	7,796.4	116.3	25.7	90.66	-6,969.9	-2,736.9	2,785.3	2,648.9	136.40	20.420		
14,400.0	7,770.0	7,932.2	7,796.3	118.0	25.7	90.65	-6,969.9	-2,736.9	2,769.7	2,631.5	138.14	20.049		
14,500.0	7,770.0	7,932.1	7,796.3	119.8	25.7	90.65	-6,969.9	-2,736.9	2,757.5	2,617.6	139.88	19.713		
14,600.0	7,770.0	7,932.1	7,796.2	121.5	25.7	90.65	-6,969.9	-2,736.9	2,749.0	2,607.3	141.63	19.410		
14,700.0	7,770.0	7,932.0	7,796.2	123.3	25.7	90.65	-6,969.9	-2,736.9	2,744.0	2,600.6	143.37	19.139		
14,785.6	7,770.0	7,932.0	7,796.1	124.7	25.7	90.65	-6,969.9	-2,736.9	2,742.7	2,597.8	144.86	18.933 CC		
14,800.0	7,770.0	7,932.0	7,796.1	125.0	25.7	90.65	-6,969.9	-2,736.9	2,742.7	2,597.6	145.11	18.900 ES		
14,900.0	7,770.0	7,931.9	7,796.1	126.7	25.7	90.65	-6,969.9	-2,736.9	2,745.1	2,598.2	146.86	18.692		
15,000.0	7,770.0	7,931.9	7,796.0	128.5	25.7	90.65	-6,969.9	-2,736.9	2,751.0	2,602.4	148.60	18.513		
15,100.0	7,770.0	7,931.8	7,796.0	130.2	25.7	90.65	-6,969.9	-2,736.9	2,760.6	2,610.3	150.35	18.362		
15,200.0	7,770.0	7,931.8	7,795.9	132.0	25.7	90.65	-6,969.9	-2,736.9	2,773.8	2,621.7	152.09	18.238		
15,300.0	7,770.0	7,931.7	7,795.9	133.7	25.7	90.65	-6,969.9	-2,736.9	2,790.5	2,636.7	153.84	18.139		
15,400.0	7,770.0	7,931.7	7,795.9	135.5	25.7	90.64	-6,969.9	-2,736.9	2,810.6	2,655.1	155.58	18.066		
15,500.0	7,770.0	7,931.6	7,795.8	137.2	25.7	90.64	-6,969.9	-2,736.9	2,834.2	2,676.9	157.33	18.015		
15,600.0	7,770.0	7,931.6	7,795.8	139.0	25.7	90.64	-6,969.9	-2,736.9	2,861.0	2,702.0	159.07	17.986		
15,700.0	7,770.0	7,931.6	7,795.7	140.7	25.7	90.64	-6,969.9	-2,736.9	2,891.1	2,730.3	160.82	17.977 SF		
15,800.0	7,770.0	7,931.5	7,795.7	142.4	25.7	90.64	-6,969.9	-2,736.9	2,924.2	2,761.7	162.56	17.988		
15,900.0	7,770.0	7,931.5	7,795.6	144.2	25.7	90.64	-6,969.9	-2,736.9	2,960.4	2,796.1	164.31	18.017		
16,000.0	7,770.0	7,931.4	7,795.6	145.9	25.7	90.64	-6,969.9	-2,736.9	2,999.5	2,833.4	166.06	18.063		
16,100.0	7,770.0	7,931.4	7,795.5	147.7	25.7	90.64	-6,969.9	-2,736.9	3,041.4	2,873.6	167.80	18.125		
16,200.0	7,770.0	7,931.3	7,795.5	149.4	25.7	90.64	-6,969.9	-2,736.9	3,085.9	2,916.3	169.55	18.201		
16,300.0	7,770.0	7,931.3	7,795.4	151.2	25.7	90.64	-6,969.9	-2,736.9	3,133.0	2,961.7	171.30	18.290		
16,400.0	7,770.0	7,931.2	7,795.4	152.9	25.7	90.63	-6,969.9	-2,736.9	3,182.5	3,009.5	173.04	18.392		
16,500.0	7,770.0	7,931.2	7,795.3	154.7	25.7	90.63	-6,969.9	-2,736.9	3,234.4	3,059.6	174.79	18.505		
16,600.0	7,770.0	7,931.1	7,795.3	156.4	25.7	90.63	-6,969.9	-2,736.9	3,288.5	3,112.0	176.54	18.628		
16,700.0	7,770.0	7,931.1	7,795.2	158.2	25.7	90.63	-6,969.9	-2,736.9	3,344.7	3,166.4	178.28	18.761		
16,800.0	7,770.0	7,931.0	7,795.2	159.9	25.7	90.63	-6,969.9	-2,736.9	3,402.9	3,222.9	180.03	18.902		
16,900.0	7,770.0	7,931.0	7,795.2	161.7	25.7	90.63	-6,969.9	-2,736.9	3,463.1	3,281.3	181.78	19.051		
17,000.0	7,770.0	7,931.0	7,795.1	163.4	25.7	90.63	-6,969.9	-2,736.9	3,525.0	3,341.5	183.53	19.207		
17,100.0	7,770.0	7,930.9	7,795.1	165.2	25.7	90.63	-6,969.9	-2,736.9	3,588.7	3,403.4	185.28	19.369		
17,200.0	7,770.0	7,930.9	7,795.0	166.9	25.7	90.63	-6,969.9	-2,736.9	3,654.0	3,466.9	187.02	19.537		
17,300.0	7,770.0	7,930.8	7,795.0	168.7	25.7	90.63	-6,969.9	-2,736.9	3,720.8	3,532.0	188.77	19.711		
17,400.0	7,770.0	7,930.8	7,794.9	170.4	25.7	90.63	-6,969.9	-2,736.9	3,789.1	3,598.6	190.52	19.888		
17,500.0	7,770.0	7,930.7	7,794.9	172.2	25.7	90.62	-6,969.9	-2,736.9	3,858.8	3,666.5	192.27	20.070		
17,600.0	7,770.0	7,930.7	7,794.8	173.9	25.7	90.62	-6,969.9	-2,736.9	3,929.7	3,735.7	194.02	20.255		
17,653.1	7,770.0	7,930.7	7,794.8	174.8	25.7	90.62	-6,969.9	-2,736.9	3,967.9	3,773.0	194.94	20.354		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-149.35	-6,136.7	-3,636.3	7,133.2						
100.0	100.0	95.0	95.0	0.2	0.1	-149.35	-6,136.7	-3,636.3	7,133.2	7,132.9	0.29	N/A			
200.0	200.0	195.0	195.0	0.3	0.3	-149.35	-6,136.7	-3,636.3	7,133.2	7,132.5	0.64	N/A			
300.0	300.0	262.4	262.3	0.5	0.4	-149.36	-6,137.2	-3,635.8	7,133.4	7,132.4	0.93	7,633.029			
400.0	400.0	327.9	327.9	0.7	0.6	-149.37	-6,138.7	-3,634.2	7,134.1	7,132.8	1.23	5,799.844			
500.0	500.0	400.0	399.8	0.8	0.7	-149.41	-6,141.5	-3,631.1	7,135.3	7,133.7	1.55	4,617.882			
550.0	550.0	426.0	425.7	0.9	0.8	-149.42	-6,142.8	-3,629.7	7,136.0	7,134.3	1.69	4,223.196			
600.0	600.0	458.6	458.2	1.0	0.8	-150.27	-6,144.7	-3,627.7	7,137.1	7,135.3	1.85	3,858.158			
700.0	700.0	523.4	522.7	1.2	1.0	-150.31	-6,149.1	-3,622.9	7,140.8	7,138.6	2.18	3,277.513			
800.0	799.9	600.0	598.7	1.4	1.2	-150.37	-6,155.7	-3,615.8	7,146.5	7,144.0	2.56	2,796.110			
861.1	860.9	626.8	625.2	1.5	1.3	-150.38	-6,158.3	-3,613.0	7,151.0	7,148.2	2.75	2,604.483			
900.0	899.8	651.5	649.7	1.6	1.4	-150.42	-6,160.9	-3,610.2	7,154.1	7,151.2	2.89	2,474.392			
1,000.0	999.6	700.0	697.5	1.8	1.5	-150.49	-6,166.3	-3,604.3	7,162.5	7,159.3	3.22	2,224.290			
1,100.0	1,099.5	777.2	773.3	1.9	1.8	-150.62	-6,176.1	-3,593.7	7,171.4	7,167.8	3.68	1,948.804			
1,200.0	1,199.3	857.8	852.2	2.1	2.1	-150.77	-6,187.5	-3,581.4	7,180.8	7,176.7	4.16	1,726.548			
1,300.0	1,299.2	954.7	946.9	2.3	2.5	-150.95	-6,201.3	-3,566.5	7,190.4	7,185.7	4.71	1,527.741			
1,400.0	1,399.1	1,051.5	1,041.6	2.5	2.9	-151.13	-6,215.2	-3,551.5	7,200.0	7,194.7	5.26	1,369.137			
1,500.0	1,498.9	1,148.4	1,136.3	2.7	3.2	-151.30	-6,229.0	-3,536.6	7,209.7	7,203.8	5.81	1,240.058			
1,600.0	1,598.8	1,245.3	1,231.0	2.9	3.6	-151.48	-6,242.8	-3,521.7	7,219.4	7,213.0	6.37	1,133.168			
1,700.0	1,698.6	1,342.1	1,325.7	3.1	4.0	-151.66	-6,256.6	-3,506.7	7,229.2	7,222.3	6.93	1,043.304			
1,800.0	1,798.5	1,439.0	1,420.4	3.3	4.4	-151.84	-6,270.4	-3,491.8	7,239.1	7,231.6	7.49	966.760			
1,900.0	1,898.3	1,535.9	1,515.1	3.5	4.8	-152.01	-6,284.3	-3,476.9	7,249.1	7,241.0	8.05	900.817			
2,000.0	1,998.2	1,632.7	1,609.8	3.7	5.2	-152.19	-6,298.1	-3,461.9	7,259.1	7,250.5	8.61	843.437			
2,100.0	2,098.0	1,729.6	1,704.5	3.9	5.6	-152.36	-6,311.9	-3,447.0	7,269.2	7,260.1	9.17	793.070			
2,200.0	2,197.9	1,826.5	1,799.2	4.1	6.0	-152.54	-6,325.7	-3,432.1	7,279.4	7,269.7	9.73	748.515			
2,300.0	2,297.7	1,923.3	1,893.9	4.3	6.4	-152.71	-6,339.6	-3,417.1	7,289.7	7,279.4	10.28	708.828			
2,400.0	2,397.6	2,020.2	1,988.6	4.5	6.8	-152.89	-6,353.4	-3,402.2	7,300.0	7,289.1	10.84	673.259			
2,500.0	2,497.4	2,117.0	2,083.3	4.7	7.2	-153.06	-6,367.2	-3,387.3	7,310.4	7,299.0	11.40	641.203			
2,600.0	2,597.3	2,213.9	2,178.0	4.9	7.6	-153.23	-6,381.0	-3,372.3	7,320.8	7,308.9	11.96	612.167			
2,700.0	2,697.1	2,310.8	2,272.7	5.1	8.0	-153.40	-6,394.8	-3,357.4	7,331.3	7,318.8	12.52	585.746			
2,800.0	2,797.0	2,407.6	2,367.4	5.3	8.4	-153.58	-6,408.7	-3,342.5	7,341.9	7,328.9	13.07	561.604			
2,900.0	2,896.8	2,504.5	2,462.1	5.5	8.8	-153.75	-6,422.5	-3,327.5	7,352.6	7,339.0	13.63	539.461			
3,000.0	2,996.7	2,601.4	2,556.8	5.7	9.2	-153.92	-6,436.3	-3,312.6	7,363.3	7,349.2	14.19	519.079			
3,100.0	3,096.5	2,698.2	2,651.5	5.9	9.6	-154.09	-6,450.1	-3,297.7	7,374.1	7,359.4	14.74	500.255			
3,200.0	3,196.4	2,795.1	2,746.2	6.1	9.9	-154.26	-6,464.0	-3,282.7	7,385.0	7,369.7	15.30	482.827			
3,300.0	3,296.3	2,891.9	2,840.9	6.3	10.3	-154.43	-6,477.8	-3,267.8	7,396.0	7,380.1	15.85	466.638			
3,400.0	3,396.1	2,988.8	2,935.6	6.5	10.7	-154.60	-6,491.6	-3,252.9	7,407.0	7,390.6	16.40	451.563			
3,500.0	3,496.0	3,085.7	3,030.3	6.7	11.1	-154.77	-6,505.4	-3,238.0	7,418.0	7,401.1	16.96	437.492			
3,600.0	3,595.8	3,182.5	3,125.0	6.9	11.5	-154.94	-6,519.2	-3,223.0	7,429.2	7,411.7	17.51	424.330			
3,700.0	3,695.7	3,279.4	3,219.7	7.0	11.9	-155.10	-6,533.1	-3,208.1	7,440.4	7,422.3	18.06	411.990			
3,800.0	3,795.5	3,376.3	3,314.4	7.2	12.3	-155.27	-6,546.9	-3,193.2	7,451.6	7,433.0	18.61	400.400			
3,900.0	3,895.4	3,473.1	3,409.1	7.4	12.7	-155.44	-6,560.7	-3,178.2	7,463.0	7,443.8	19.16	389.493			
4,000.0	3,995.2	3,570.0	3,503.8	7.6	13.1	-155.60	-6,574.5	-3,163.3	7,474.4	7,454.7	19.71	379.211			
4,100.0	4,095.1	3,666.8	3,598.5	7.8	13.5	-155.77	-6,588.3	-3,148.4	7,485.8	7,465.6	20.26	369.503			
4,200.0	4,194.9	3,763.7	3,693.2	8.0	13.9	-155.93	-6,602.2	-3,133.4	7,497.4	7,476.6	20.81	360.322			
4,300.0	4,294.8	3,860.6	3,787.9	8.2	14.3	-156.10	-6,616.0	-3,118.5	7,509.0	7,487.6	21.35	351.626			
4,400.0	4,394.6	3,957.4	3,882.6	8.4	14.7	-156.26	-6,629.8	-3,103.6	7,520.6	7,498.7	21.90	343.379			
4,500.0	4,494.5	4,054.3	3,977.3	8.6	15.1	-156.43	-6,643.6	-3,088.6	7,532.4	7,509.9	22.45	335.548			
4,600.0	4,594.3	4,151.2	4,072.0	8.8	15.5	-156.59	-6,657.5	-3,073.7	7,544.2	7,521.2	22.99	328.101			
4,700.0	4,694.2	4,248.0	4,166.7	9.0	15.9	-156.75	-6,671.3	-3,058.8	7,556.0	7,532.5	23.54	321.012			
4,800.0	4,794.0	4,344.9	4,261.4	9.2	16.3	-156.92	-6,685.1	-3,043.8	7,567.9	7,543.8	24.08	314.255			
4,900.0	4,893.9	4,441.7	4,356.1	9.4	16.7	-157.08	-6,698.9	-3,028.9	7,579.9	7,555.3	24.63	307.808			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	4,538.6	4,450.8		9.6	17.1	-157.24	-6,712.7	-3,014.0	7,591.9	7,566.8	25.17	301.651	
5,100.0	5,093.6	4,635.5	4,545.5		9.8	17.5	-157.40	-6,726.6	-2,999.0	7,604.0	7,578.3	25.71	295.765	
5,200.0	5,193.5	4,732.3	4,640.2		10.0	17.9	-157.56	-6,740.4	-2,984.1	7,616.2	7,589.9	26.25	290.131	
5,300.0	5,293.3	4,829.2	4,734.9		10.2	18.3	-157.72	-6,754.2	-2,969.2	7,628.4	7,601.6	26.79	284.736	
5,400.0	5,393.2	4,926.1	4,829.6		10.4	18.7	-157.88	-6,768.0	-2,954.2	7,640.7	7,613.4	27.33	279.563	
5,500.0	5,493.0	5,022.9	4,924.3		10.6	19.1	-158.04	-6,781.9	-2,939.3	7,653.1	7,625.2	27.87	274.601	
5,600.0	5,592.9	5,119.8	5,019.0		10.8	19.5	-158.20	-6,795.7	-2,924.4	7,665.5	7,637.1	28.41	269.836	
5,700.0	5,692.7	5,216.6	5,113.7		11.0	19.9	-158.36	-6,809.5	-2,909.4	7,677.9	7,649.0	28.95	265.257	
5,800.0	5,792.6	5,313.5	5,208.4		11.2	20.3	-158.51	-6,823.3	-2,894.5	7,690.5	7,661.0	29.48	260.853	
5,900.0	5,892.4	5,410.4	5,303.1		11.4	20.7	-158.67	-6,837.1	-2,879.6	7,703.1	7,673.0	30.02	256.615	
6,000.0	5,992.3	5,507.2	5,397.8		11.6	21.1	-158.83	-6,851.0	-2,864.6	7,715.7	7,685.2	30.55	252.534	
6,100.0	6,092.1	5,604.1	5,492.5		11.8	21.5	-158.98	-6,864.8	-2,849.7	7,728.4	7,697.3	31.09	248.602	
6,200.0	6,192.0	5,701.0	5,587.2		12.0	21.8	-159.14	-6,878.6	-2,834.8	7,741.2	7,709.6	31.62	244.810	
6,300.0	6,291.8	5,797.8	5,681.9		12.2	22.2	-159.29	-6,892.4	-2,819.8	7,754.0	7,721.8	32.15	241.151	
6,400.0	6,391.7	5,894.7	5,776.6		12.4	22.6	-159.45	-6,906.2	-2,804.9	7,766.9	7,734.2	32.69	237.620	
6,500.0	6,491.5	6,609.6	6,486.5		12.6	24.1	-160.02	-6,952.8	-2,754.6	7,773.4	7,739.2	34.23	227.094	
6,600.0	6,591.4	6,709.5	6,586.4		12.8	24.2	-160.03	-6,952.8	-2,754.6	7,778.5	7,744.0	34.49	225.504	
6,700.0	6,691.2	6,809.3	6,686.3		13.0	24.3	-160.05	-6,952.8	-2,754.6	7,783.6	7,748.8	34.76	223.932	
6,800.0	6,791.1	6,909.2	6,786.1		13.2	24.4	-160.06	-6,952.8	-2,754.6	7,788.7	7,753.7	35.02	222.377	
6,900.0	6,890.9	7,009.0	6,886.0		13.4	24.5	-160.07	-6,952.8	-2,754.6	7,793.8	7,758.5	35.29	220.840	
7,000.0	6,990.8	7,108.9	6,985.8		13.6	24.6	-160.09	-6,952.8	-2,754.6	7,798.9	7,763.3	35.56	219.319	
7,024.2	7,014.9	7,133.0	7,010.0		13.6	24.6	-160.09	-6,952.8	-2,754.6	7,800.1	7,764.5	35.62	218.954	
7,050.0	7,040.7	7,158.8	7,035.8		13.7	24.6	-161.77	-6,952.8	-2,754.6	7,801.0	7,765.3	35.72	218.409	
7,100.0	7,090.7	7,208.8	7,085.7		13.7	24.6	21.62	-6,952.8	-2,754.6	7,800.3	7,764.4	35.82	217.770	
7,150.0	7,140.5	7,258.6	7,135.5		13.8	24.7	21.25	-6,952.8	-2,754.6	7,796.2	7,760.4	35.82	217.664	
7,200.0	7,189.9	7,308.0	7,184.9		13.8	24.7	21.34	-6,952.8	-2,754.6	7,789.0	7,753.3	35.71	218.087	
7,250.0	7,238.6	7,356.7	7,233.6		13.8	24.8	21.62	-6,952.8	-2,754.6	7,778.5	7,743.0	35.51	219.029	
7,300.0	7,286.4	7,404.5	7,281.5		13.7	24.8	22.04	-6,952.8	-2,754.6	7,764.9	7,729.7	35.22	220.481	
7,350.0	7,333.1	7,451.2	7,328.1		13.7	24.9	22.60	-6,952.8	-2,754.6	7,748.2	7,713.4	34.84	222.425	
7,400.0	7,378.5	7,496.5	7,373.5		13.6	24.9	23.31	-6,952.8	-2,754.6	7,728.5	7,694.1	34.37	224.838	
7,450.0	7,422.2	7,540.3	7,417.2		13.6	24.9	24.18	-6,952.8	-2,754.6	7,705.9	7,672.1	33.85	227.677	
7,500.0	7,464.1	7,582.2	7,459.2		13.5	25.0	25.24	-6,952.8	-2,754.6	7,680.5	7,647.3	33.27	230.879	
7,550.0	7,504.1	7,622.2	7,499.1		13.5	25.0	26.51	-6,952.8	-2,754.6	7,652.5	7,619.9	32.66	234.343	
7,600.0	7,541.8	7,659.9	7,536.9		13.5	25.1	28.02	-6,952.8	-2,754.6	7,622.0	7,589.9	32.04	237.921	
7,650.0	7,577.2	7,695.3	7,572.2		13.4	25.1	29.82	-6,952.8	-2,754.6	7,589.1	7,557.6	31.44	241.395	
7,700.0	7,610.0	7,728.1	7,605.1		13.5	25.1	31.98	-6,952.8	-2,754.6	7,554.0	7,523.1	30.90	244.460	
7,750.0	7,640.2	7,758.2	7,635.2		13.5	25.2	34.55	-6,952.8	-2,754.6	7,516.8	7,486.4	30.47	246.713	
7,800.0	7,667.4	7,785.5	7,662.4		13.6	25.2	37.64	-6,952.8	-2,754.6	7,477.9	7,447.7	30.19	247.660	
7,850.0	7,691.7	7,809.8	7,686.7		13.7	25.2	41.35	-6,952.8	-2,754.6	7,437.3	7,407.2	30.14	246.766	
7,900.0	7,712.8	7,830.9	7,707.9		13.9	25.2	45.81	-6,952.8	-2,754.6	7,395.3	7,364.9	30.36	243.572	
7,950.0	7,730.8	7,848.9	7,725.8		14.1	25.2	51.17	-6,952.8	-2,754.6	7,352.0	7,321.1	30.91	237.885	
8,000.0	7,745.5	7,863.5	7,740.5		14.4	25.2	57.55	-6,952.8	-2,754.6	7,307.7	7,276.0	31.77	229.993	
8,050.0	7,756.7	7,874.8	7,751.7		14.7	25.3	65.01	-6,952.8	-2,754.6	7,262.7	7,229.8	32.90	220.781	
8,100.0	7,764.6	7,882.7	7,759.6		15.1	25.3	73.50	-6,952.8	-2,754.6	7,217.0	7,182.9	34.11	211.612	
8,150.0	7,769.0	7,887.1	7,764.0		15.5	25.3	82.74	-6,952.8	-2,754.6	7,171.1	7,135.9	35.17	203.923	
8,188.1	7,770.0	7,888.1	7,765.0		15.9	25.3	90.00	-6,952.8	-2,754.6	7,136.0	7,100.2	35.73	199.697	
8,200.0	7,770.0	7,888.1	7,765.0		16.0	25.3	90.00	-6,952.8	-2,754.6	7,125.0	7,089.1	35.84	198.774	
8,300.0	7,770.0	7,888.1	7,765.0		17.0	25.3	90.00	-6,952.8	-2,754.6	7,032.9	6,996.0	36.84	190.884	
8,400.0	7,770.0	7,888.1	7,765.0		18.1	25.3	90.00	-6,952.8	-2,754.6	6,941.0	6,903.0	37.96	182.859	
8,500.0	7,770.0	7,888.1	7,765.0		19.3	25.3	90.00	-6,952.8	-2,754.6	6,849.4	6,810.2	39.17	174.871	
8,600.0	7,770.0	7,888.1	7,765.0		20.6	25.3	90.00	-6,952.8	-2,754.6	6,758.0	6,717.5	40.46	167.043	
8,700.0	7,770.0	7,888.1	7,765.0		21.9	25.3	90.00	-6,952.8	-2,754.6	6,666.8	6,625.0	41.81	159.457	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	7,888.1	7,765.0	23.3	25.3	90.00	-6,952.8	-2,754.6	6,575.9	6,532.7	43.22	152.163		
8,900.0	7,770.0	7,888.1	7,765.0	24.8	25.3	90.00	-6,952.8	-2,754.6	6,485.3	6,440.6	44.67	145.192		
9,000.0	7,770.0	7,888.1	7,765.0	26.3	25.3	90.00	-6,952.8	-2,754.6	6,394.9	6,348.8	46.15	138.554		
9,100.0	7,770.0	7,888.1	7,765.0	27.8	25.3	90.00	-6,952.8	-2,754.6	6,304.9	6,257.2	47.67	132.250		
9,200.0	7,770.0	7,888.1	7,765.0	29.3	25.3	90.00	-6,952.8	-2,754.6	6,215.1	6,165.9	49.22	126.274		
9,300.0	7,770.0	7,888.1	7,765.0	30.9	25.3	90.00	-6,952.8	-2,754.6	6,125.7	6,074.9	50.79	120.616		
9,400.0	7,770.0	7,888.1	7,765.0	32.5	25.3	90.00	-6,952.8	-2,754.6	6,036.6	5,984.2	52.37	115.261		
9,500.0	7,770.0	7,888.1	7,765.0	34.1	25.3	90.00	-6,952.8	-2,754.6	5,947.8	5,893.8	53.98	110.193		
9,600.0	7,770.0	7,888.1	7,765.0	35.7	25.3	90.00	-6,952.8	-2,754.6	5,859.4	5,803.8	55.59	105.398		
9,700.0	7,770.0	7,888.1	7,765.0	37.3	25.3	90.00	-6,952.8	-2,754.6	5,771.4	5,714.2	57.22	100.858		
9,800.0	7,770.0	7,888.1	7,765.0	39.0	25.3	90.00	-6,952.8	-2,754.6	5,683.8	5,624.9	58.86	96.559		
9,900.0	7,770.0	7,888.1	7,765.0	40.6	25.3	90.00	-6,952.8	-2,754.6	5,596.6	5,536.1	60.51	92.485		
10,000.0	7,770.0	7,888.1	7,765.0	42.3	25.3	90.00	-6,952.8	-2,754.6	5,509.8	5,447.6	62.17	88.623		
10,100.0	7,770.0	7,888.1	7,765.0	44.0	25.3	90.00	-6,952.8	-2,754.6	5,423.5	5,359.7	63.84	84.958		
10,200.0	7,770.0	7,888.1	7,765.0	45.6	25.3	90.00	-6,952.8	-2,754.6	5,337.7	5,272.1	65.51	81.479		
10,300.0	7,770.0	7,888.1	7,765.0	47.3	25.3	90.00	-6,952.8	-2,754.6	5,252.3	5,185.1	67.19	78.174		
10,400.0	7,770.0	7,888.1	7,765.0	49.0	25.3	90.00	-6,952.8	-2,754.6	5,167.5	5,098.6	68.87	75.031		
10,500.0	7,770.0	7,888.1	7,765.0	50.7	25.3	90.00	-6,952.8	-2,754.6	5,083.2	5,012.7	70.56	72.042		
10,600.0	7,770.0	7,888.1	7,765.0	52.4	25.3	90.00	-6,952.8	-2,754.6	4,999.6	4,927.3	72.25	69.196		
10,700.0	7,770.0	7,888.1	7,765.0	54.1	25.3	90.00	-6,952.8	-2,754.6	4,916.5	4,842.6	73.95	66.485		
10,800.0	7,770.0	7,888.1	7,765.0	55.8	25.3	90.00	-6,952.8	-2,754.6	4,834.1	4,758.4	75.65	63.901		
10,900.0	7,770.0	7,888.1	7,765.0	57.5	25.3	90.00	-6,952.8	-2,754.6	4,752.3	4,675.0	77.35	61.437		
11,000.0	7,770.0	7,888.1	7,765.0	59.2	25.3	90.00	-6,952.8	-2,754.6	4,671.3	4,592.2	79.06	59.086		
11,100.0	7,770.0	7,888.1	7,765.0	60.9	25.3	90.00	-6,952.8	-2,754.6	4,591.0	4,510.2	80.77	56.842		
11,200.0	7,770.0	7,888.1	7,765.0	62.6	25.3	90.00	-6,952.8	-2,754.6	4,511.5	4,429.0	82.48	54.698		
11,300.0	7,770.0	7,888.1	7,765.0	64.3	25.3	90.00	-6,952.8	-2,754.6	4,432.8	4,348.6	84.19	52.650		
11,400.0	7,770.0	7,888.1	7,765.0	66.0	25.3	90.00	-6,952.8	-2,754.6	4,355.0	4,269.1	85.91	50.693		
11,500.0	7,770.0	7,888.1	7,765.0	67.7	25.3	90.00	-6,952.8	-2,754.6	4,278.1	4,190.5	87.63	48.822		
11,600.0	7,770.0	7,888.1	7,765.0	69.5	25.3	90.00	-6,952.8	-2,754.6	4,202.2	4,112.9	89.35	47.033		
11,700.0	7,770.0	7,888.1	7,765.0	71.2	25.3	90.00	-6,952.8	-2,754.6	4,127.3	4,036.3	91.07	45.321		
11,800.0	7,770.0	7,888.1	7,765.0	72.9	25.3	90.00	-6,952.8	-2,754.6	4,053.5	3,960.7	92.79	43.685		
11,900.0	7,770.0	7,888.1	7,765.0	74.6	25.3	90.00	-6,952.8	-2,754.6	3,980.9	3,886.4	94.52	42.119		
12,000.0	7,770.0	7,888.1	7,765.0	76.4	25.3	90.00	-6,952.8	-2,754.6	3,909.4	3,813.2	96.24	40.621		
12,100.0	7,770.0	7,888.1	7,765.0	78.1	25.3	90.00	-6,952.8	-2,754.6	3,839.3	3,741.3	97.97	39.189		
12,200.0	7,770.0	7,888.1	7,765.0	79.8	25.3	90.00	-6,952.8	-2,754.6	3,770.4	3,670.7	99.70	37.819		
12,300.0	7,770.0	7,888.1	7,765.0	81.5	25.3	90.00	-6,952.8	-2,754.6	3,703.0	3,601.6	101.43	36.510		
12,400.0	7,770.0	7,888.1	7,765.0	83.3	25.3	90.00	-6,952.8	-2,754.6	3,637.1	3,534.0	103.16	35.259		
12,500.0	7,770.0	7,888.1	7,765.0	85.0	25.3	90.00	-6,952.8	-2,754.6	3,572.8	3,467.9	104.89	34.064		
12,600.0	7,770.0	7,888.1	7,765.0	86.7	25.3	90.00	-6,952.8	-2,754.6	3,510.2	3,403.6	106.62	32.923		
12,700.0	7,770.0	7,888.1	7,765.0	88.5	25.3	90.00	-6,952.8	-2,754.6	3,449.3	3,340.9	108.35	31.834		
12,800.0	7,770.0	7,888.1	7,765.0	90.2	25.3	90.00	-6,952.8	-2,754.6	3,390.3	3,280.2	110.09	30.797		
12,900.0	7,770.0	7,888.1	7,765.0	91.9	25.3	90.00	-6,952.8	-2,754.6	3,333.2	3,221.4	111.82	29.808		
13,000.0	7,770.0	7,888.1	7,765.0	93.7	25.3	90.00	-6,952.8	-2,754.6	3,278.2	3,164.6	113.56	28.868		
13,100.0	7,770.0	7,888.1	7,765.0	95.4	25.3	90.00	-6,952.8	-2,754.6	3,225.3	3,110.0	115.29	27.975		
13,200.0	7,770.0	7,888.1	7,765.0	97.1	25.3	90.00	-6,952.8	-2,754.6	3,174.8	3,057.7	117.03	27.128		
13,300.0	7,770.0	7,888.1	7,765.0	98.9	25.3	90.00	-6,952.8	-2,754.6	3,126.6	3,007.8	118.77	26.325		
13,400.0	7,770.0	7,888.1	7,765.0	100.6	25.3	90.00	-6,952.8	-2,754.6	3,080.8	2,960.3	120.50	25.566		
13,500.0	7,770.0	7,888.1	7,765.0	102.4	25.3	90.00	-6,952.8	-2,754.6	3,037.7	2,915.5	122.24	24.850		
13,600.0	7,770.0	7,888.1	7,765.0	104.1	25.3	90.00	-6,952.8	-2,754.6	2,997.4	2,873.4	123.98	24.176		
13,700.0	7,770.0	7,888.1	7,765.0	105.8	25.3	90.00	-6,952.8	-2,754.6	2,959.8	2,834.1	125.72	23.543		
13,800.0	7,770.0	7,888.1	7,765.0	107.6	25.3	90.00	-6,952.8	-2,754.6	2,925.2	2,797.7	127.46	22.950		
13,900.0	7,770.0	7,888.1	7,765.0	109.3	25.3	90.00	-6,952.8	-2,754.6	2,893.6	2,764.4	129.20	22.396		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
14,000.0	7,770.0	7,888.1	7,765.0	111.1	25.3	90.00	-6,952.8	-2,754.6	2,865.2	2,734.2	130.94	21.881		
14,100.0	7,770.0	7,888.1	7,765.0	112.8	25.3	90.00	-6,952.8	-2,754.6	2,840.0	2,707.3	132.68	21.404		
14,200.0	7,770.0	7,888.1	7,765.0	114.5	25.3	90.00	-6,952.8	-2,754.6	2,818.1	2,683.7	134.42	20.964		
14,300.0	7,770.0	7,888.1	7,765.0	116.3	25.3	90.00	-6,952.8	-2,754.6	2,799.7	2,663.5	136.17	20.561		
14,400.0	7,770.0	7,888.1	7,765.0	118.0	25.3	90.00	-6,952.8	-2,754.6	2,784.7	2,646.8	137.91	20.192		
14,500.0	7,770.0	7,888.1	7,765.0	119.8	25.3	90.00	-6,952.8	-2,754.6	2,773.2	2,633.6	139.65	19.858		
14,600.0	7,770.0	7,888.1	7,765.0	121.5	25.3	90.00	-6,952.8	-2,754.6	2,765.3	2,623.9	141.39	19.558		
14,700.0	7,770.0	7,888.1	7,765.0	123.3	25.3	90.00	-6,952.8	-2,754.6	2,761.0	2,617.9	143.14	19.289		
14,768.6	7,770.0	7,888.1	7,765.0	124.5	25.3	90.00	-6,952.8	-2,754.6	2,760.2	2,615.8	144.33	19.124 CC		
14,800.0	7,770.0	7,888.1	7,765.0	125.0	25.3	90.00	-6,952.8	-2,754.6	2,760.4	2,615.5	144.88	19.053 ES		
14,900.0	7,770.0	7,888.1	7,765.0	126.7	25.3	90.00	-6,952.8	-2,754.6	2,763.3	2,616.7	146.63	18.846		
15,000.0	7,770.0	7,888.1	7,765.0	128.5	25.3	90.00	-6,952.8	-2,754.6	2,769.9	2,621.5	148.37	18.669		
15,100.0	7,770.0	7,888.1	7,765.0	130.2	25.3	90.00	-6,952.8	-2,754.6	2,780.0	2,629.9	150.11	18.519		
15,200.0	7,770.0	7,888.1	7,765.0	132.0	25.3	90.00	-6,952.8	-2,754.6	2,793.7	2,641.8	151.86	18.397		
15,300.0	7,770.0	7,888.1	7,765.0	133.7	25.3	90.00	-6,952.8	-2,754.6	2,810.9	2,657.3	153.60	18.300		
15,400.0	7,770.0	7,888.1	7,765.0	135.5	25.3	90.00	-6,952.8	-2,754.6	2,831.5	2,676.1	155.35	18.227		
15,500.0	7,770.0	7,888.1	7,765.0	137.2	25.3	90.00	-6,952.8	-2,754.6	2,855.4	2,698.3	157.09	18.177		
15,600.0	7,770.0	7,888.1	7,765.0	139.0	25.3	90.00	-6,952.8	-2,754.6	2,882.7	2,723.8	158.84	18.148		
15,700.0	7,770.0	7,888.1	7,765.0	140.7	25.3	90.00	-6,952.8	-2,754.6	2,913.1	2,752.5	160.59	18.140 SF		
15,800.0	7,770.0	7,888.1	7,765.0	142.4	25.3	90.00	-6,952.8	-2,754.6	2,946.6	2,784.3	162.33	18.152		
15,900.0	7,770.0	7,888.1	7,765.0	144.2	25.3	90.00	-6,952.8	-2,754.6	2,983.1	2,819.0	164.08	18.181		
16,000.0	7,770.0	7,888.1	7,765.0	145.9	25.3	90.00	-6,952.8	-2,754.6	3,022.4	2,856.6	165.82	18.227		
16,100.0	7,770.0	7,888.1	7,765.0	147.7	25.3	90.00	-6,952.8	-2,754.6	3,064.5	2,896.9	167.57	18.288		
16,200.0	7,770.0	7,888.1	7,765.0	149.4	25.3	90.00	-6,952.8	-2,754.6	3,109.3	2,939.9	169.32	18.364		
16,300.0	7,770.0	7,888.1	7,765.0	151.2	25.3	90.00	-6,952.8	-2,754.6	3,156.5	2,985.5	171.06	18.452		
16,400.0	7,770.0	7,888.1	7,765.0	152.9	25.3	90.00	-6,952.8	-2,754.6	3,206.3	3,033.4	172.81	18.553		
16,500.0	7,770.0	7,888.1	7,765.0	154.7	25.3	90.00	-6,952.8	-2,754.6	3,258.3	3,083.7	174.56	18.666		
16,600.0	7,770.0	7,888.1	7,765.0	156.4	25.3	90.00	-6,952.8	-2,754.6	3,312.5	3,136.2	176.31	18.788		
16,700.0	7,770.0	7,888.1	7,765.0	158.2	25.3	90.00	-6,952.8	-2,754.6	3,368.8	3,190.8	178.05	18.920		
16,800.0	7,770.0	7,888.1	7,765.0	159.9	25.3	90.00	-6,952.8	-2,754.6	3,427.1	3,247.3	179.80	19.061		
16,900.0	7,770.0	7,888.1	7,765.0	161.7	25.3	90.00	-6,952.8	-2,754.6	3,487.3	3,305.8	181.55	19.209		
17,000.0	7,770.0	7,888.1	7,765.0	163.4	25.3	90.00	-6,952.8	-2,754.6	3,549.3	3,366.0	183.30	19.364		
17,100.0	7,770.0	7,888.1	7,765.0	165.2	25.3	90.00	-6,952.8	-2,754.6	3,613.0	3,428.0	185.05	19.525		
17,200.0	7,770.0	7,888.1	7,765.0	166.9	25.3	90.00	-6,952.8	-2,754.6	3,678.4	3,491.6	186.79	19.692		
17,300.0	7,770.0	7,888.1	7,765.0	168.7	25.3	90.00	-6,952.8	-2,754.6	3,745.2	3,556.7	188.54	19.864		
17,400.0	7,770.0	7,888.1	7,765.0	170.4	25.3	90.00	-6,952.8	-2,754.6	3,813.5	3,623.2	190.29	20.041		
17,500.0	7,770.0	7,888.1	7,765.0	172.2	25.3	90.00	-6,952.8	-2,754.6	3,883.2	3,691.2	192.04	20.221		
17,600.0	7,770.0	7,888.1	7,765.0	173.9	25.3	90.00	-6,952.8	-2,754.6	3,954.2	3,760.4	193.79	20.405		
17,653.1	7,770.0	7,888.1	7,765.0	174.8	25.3	90.00	-6,952.8	-2,754.6	3,992.3	3,797.6	194.72	20.503		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-149.53	-6,195.0	-3,644.7	7,187.6						
100.0	100.0	68.3	68.3	0.2	0.1	-149.53	-6,195.1	-3,644.5	7,187.6	7,187.4	0.27	N/A			
200.0	200.0	141.2	141.2	0.3	0.2	-149.54	-6,195.5	-3,644.2	7,187.9	7,187.3	0.57	N/A			
300.0	300.0	208.5	208.5	0.5	0.4	-149.54	-6,196.2	-3,644.1	7,188.7	7,187.8	0.87	8,305.326			
400.0	400.0	312.7	312.7	0.7	0.5	-149.54	-6,197.1	-3,644.4	7,189.6	7,188.4	1.22	5,884.877			
500.0	500.0	424.7	424.6	0.8	0.7	-149.54	-6,198.1	-3,644.6	7,190.4	7,188.8	1.59	4,517.219			
550.0	550.0	472.5	472.5	0.9	0.8	-149.54	-6,198.4	-3,644.6	7,190.7	7,189.0	1.76	4,079.692			
600.0	600.0	525.5	525.5	1.0	0.9	-150.38	-6,198.8	-3,644.8	7,191.3	7,189.4	1.94	3,702.723			
700.0	700.0	641.6	641.6	1.2	1.1	-150.37	-6,199.2	-3,645.5	7,193.4	7,191.1	2.32	3,102.094			
800.0	799.9	733.8	733.8	1.4	1.3	-150.37	-6,199.5	-3,645.9	7,196.9	7,194.3	2.65	2,711.036			
861.1	860.9	777.9	777.9	1.5	1.4	-150.36	-6,199.6	-3,646.2	7,200.0	7,197.1	2.84	2,536.317			
900.0	899.8	811.1	811.1	1.6	1.4	-150.36	-6,199.7	-3,646.7	7,202.2	7,199.2	2.97	2,428.488			
1,000.0	999.6	923.0	922.9	1.8	1.6	-150.38	-6,200.0	-3,647.8	7,207.6	7,204.3	3.34	2,158.849			
1,100.0	1,099.5	1,000.0	1,000.0	1.9	1.8	-150.39	-6,200.3	-3,648.8	7,213.3	7,209.6	3.65	1,975.468			
1,200.0	1,199.3	1,104.9	1,104.8	2.1	1.9	-150.40	-6,200.7	-3,650.4	7,219.1	7,215.1	4.01	1,798.696			
1,300.0	1,299.2	1,200.0	1,199.9	2.3	2.1	-150.41	-6,200.9	-3,652.0	7,224.8	7,220.5	4.36	1,657.451			
1,400.0	1,399.1	1,278.9	1,278.8	2.5	2.2	-150.42	-6,201.0	-3,653.5	7,230.7	7,226.0	4.68	1,546.056			
1,500.0	1,498.9	1,383.1	1,383.0	2.7	2.4	-150.43	-6,201.2	-3,656.0	7,236.8	7,231.7	5.04	1,435.945			
1,600.0	1,598.8	1,513.8	1,513.7	2.9	2.7	-150.44	-6,201.3	-3,658.6	7,242.6	7,237.1	5.45	1,329.201			
1,700.0	1,698.6	1,618.7	1,618.6	3.1	2.8	-150.44	-6,201.0	-3,660.7	7,248.1	7,242.3	5.81	1,246.745			
1,800.0	1,798.5	1,703.5	1,703.4	3.3	3.0	-150.45	-6,200.9	-3,662.4	7,253.7	7,247.6	6.14	1,180.830			
1,900.0	1,898.3	1,812.0	1,811.8	3.5	3.2	-150.45	-6,200.5	-3,665.1	7,259.3	7,252.8	6.52	1,114.149			
2,000.0	1,998.2	1,900.0	1,899.8	3.7	3.3	-150.45	-6,200.0	-3,667.5	7,265.0	7,258.1	6.85	1,060.265			
2,100.0	2,098.0	1,982.1	1,981.8	3.9	3.5	-150.45	-6,199.8	-3,669.7	7,270.8	7,263.6	7.18	1,012.952			
2,200.0	2,197.9	2,100.0	2,099.7	4.1	3.7	-150.46	-6,199.5	-3,672.8	7,276.7	7,269.1	7.57	961.521			
2,300.0	2,297.7	2,175.9	2,175.5	4.3	3.8	-150.46	-6,199.4	-3,674.8	7,282.5	7,274.6	7.88	923.886			
2,400.0	2,397.6	2,266.2	2,265.8	4.5	4.0	-150.46	-6,199.5	-3,677.2	7,288.7	7,280.5	8.22	886.255			
2,500.0	2,497.4	2,365.1	2,364.7	4.7	4.2	-150.46	-6,199.3	-3,680.5	7,294.9	7,286.4	8.58	850.035			
2,600.0	2,597.3	2,512.8	2,512.3	4.9	4.4	-150.45	-6,198.5	-3,685.5	7,300.9	7,291.9	9.03	808.590			
2,700.0	2,697.1	2,618.3	2,617.8	5.1	4.6	-150.45	-6,197.4	-3,689.0	7,306.5	7,297.1	9.40	777.299			
2,800.0	2,797.0	2,726.5	2,725.9	5.3	4.8	-150.45	-6,196.7	-3,691.7	7,311.9	7,302.1	9.77	748.200			
2,900.0	2,896.8	2,832.5	2,831.8	5.5	5.0	-150.45	-6,196.2	-3,694.0	7,317.3	7,307.2	10.14	721.551			
3,000.0	2,996.7	2,966.2	2,965.5	5.7	5.3	-150.46	-6,195.3	-3,696.1	7,322.2	7,311.7	10.56	693.543			
3,100.0	3,096.5	3,049.9	3,049.2	5.9	5.4	-150.47	-6,194.7	-3,697.4	7,327.1	7,316.2	10.89	673.047			
3,200.0	3,196.4	3,137.3	3,136.6	6.1	5.6	-150.48	-6,194.3	-3,699.1	7,332.3	7,321.1	11.22	653.397			
3,300.0	3,296.3	3,236.8	3,236.1	6.3	5.7	-150.48	-6,193.8	-3,700.7	7,337.5	7,325.9	11.58	633.778			
3,400.0	3,396.1	3,332.2	3,331.5	6.5	5.9	-150.50	-6,193.8	-3,701.9	7,342.8	7,330.9	11.92	615.785			
3,500.0	3,496.0	3,440.8	3,440.0	6.7	6.1	-150.51	-6,193.8	-3,702.8	7,348.0	7,335.7	12.29	597.703			
3,600.0	3,595.8	3,523.9	3,523.2	6.9	6.2	-150.53	-6,194.0	-3,703.5	7,353.3	7,340.7	12.62	582.720			
3,700.0	3,695.7	3,633.8	3,633.1	7.0	6.4	-150.54	-6,194.2	-3,704.5	7,358.7	7,345.7	12.99	566.451			
3,800.0	3,795.5	3,750.9	3,750.2	7.2	6.6	-150.56	-6,194.2	-3,705.3	7,363.7	7,350.4	13.37	550.574			
3,900.0	3,895.4	3,837.9	3,837.2	7.4	6.8	-150.58	-6,194.3	-3,705.8	7,368.8	7,355.1	13.71	537.606			
4,000.0	3,995.2	3,915.6	3,914.8	7.6	6.9	-150.59	-6,194.4	-3,706.6	7,374.2	7,360.2	14.02	525.847			
4,100.0	4,095.1	4,000.0	3,999.3	7.8	7.1	-150.60	-6,194.5	-3,707.9	7,379.8	7,365.5	14.35	514.188			
4,200.0	4,194.9	4,091.0	4,090.2	8.0	7.2	-150.61	-6,194.6	-3,709.6	7,385.6	7,370.9	14.69	502.630			
4,300.0	4,294.8	4,219.2	4,218.5	8.2	7.5	-150.61	-6,194.4	-3,712.2	7,391.2	7,376.1	15.10	489.426			
4,400.0	4,394.6	4,300.0	4,299.2	8.4	7.6	-150.62	-6,194.1	-3,714.2	7,396.8	7,381.4	15.43	479.473			
4,500.0	4,494.5	4,389.5	4,388.6	8.6	7.8	-150.62	-6,193.8	-3,716.7	7,402.6	7,386.9	15.77	469.489			
4,600.0	4,594.3	4,510.5	4,509.7	8.8	8.0	-150.62	-6,193.6	-3,719.4	7,408.3	7,392.1	16.16	458.384			
4,700.0	4,694.2	4,600.0	4,599.1	9.0	8.1	-150.63	-6,193.6	-3,721.0	7,414.0	7,397.5	16.50	449.326			
4,800.0	4,794.0	4,736.3	4,735.4	9.2	8.4	-150.64	-6,193.0	-3,723.5	7,419.2	7,402.3	16.92	438.424			
4,900.0	4,893.9	4,800.6	4,799.7	9.4	8.5	-150.64	-6,192.8	-3,724.8	7,424.7	7,407.4	17.22	431.238			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	5,000.0	4,999.0	9.6	8.9	-150.65	-6,191.6	-3,728.6	7,430.0	7,412.2	17.75	418.574		
5,100.0	5,093.6	5,087.5	5,086.5	9.8	9.0	-150.66	-6,190.7	-3,729.6	7,434.4	7,416.3	18.09	411.068		
5,200.0	5,193.5	5,233.0	5,232.0	10.0	9.3	-150.67	-6,188.9	-3,731.3	7,438.7	7,420.1	18.52	401.587		
5,300.0	5,293.3	5,348.1	5,347.1	10.2	9.5	-150.68	-6,187.0	-3,732.3	7,442.3	7,423.4	18.91	393.636		
5,400.0	5,393.2	5,428.8	5,427.8	10.4	9.6	-150.69	-6,185.7	-3,732.9	7,446.2	7,426.9	19.23	387.228		
5,500.0	5,493.0	5,507.8	5,506.8	10.6	9.7	-150.70	-6,184.7	-3,733.7	7,450.3	7,430.7	19.55	381.103		
5,600.0	5,592.9	5,639.2	5,638.1	10.8	10.0	-150.71	-6,182.8	-3,734.7	7,454.1	7,434.2	19.96	373.445		
5,700.0	5,692.7	5,720.5	5,719.4	11.0	10.1	-150.72	-6,181.9	-3,735.2	7,458.1	7,437.8	20.28	367.696		
5,800.0	5,792.6	5,863.5	5,862.4	11.2	10.4	-150.74	-6,180.0	-3,735.9	7,462.0	7,441.3	20.71	360.228		
5,900.0	5,892.4	5,952.5	5,951.4	11.4	10.5	-150.75	-6,178.5	-3,736.1	7,465.4	7,444.4	21.05	354.646		
6,000.0	5,992.3	6,000.0	5,998.9	11.6	10.6	-150.75	-6,178.0	-3,736.2	7,469.3	7,448.0	21.31	350.449		
6,100.0	6,092.1	6,081.4	6,080.3	11.8	10.7	-150.77	-6,177.4	-3,736.5	7,473.6	7,452.0	21.64	345.429		
6,200.0	6,192.0	6,138.8	6,137.7	12.0	10.8	-150.78	-6,177.2	-3,736.9	7,478.5	7,456.6	21.92	341.228		
6,300.0	6,291.8	6,200.0	6,198.9	12.2	10.9	-150.78	-6,177.4	-3,737.5	7,484.0	7,461.8	22.20	337.059		
6,400.0	6,391.7	6,400.0	6,398.9	12.4	11.3	-150.82	-6,177.6	-3,738.9	7,489.3	7,466.6	22.73	329.472		
6,500.0	6,491.5	6,488.2	6,487.0	12.6	11.4	-150.83	-6,177.0	-3,739.4	7,493.7	7,470.7	23.07	324.880		
6,600.0	6,591.4	6,580.8	6,579.6	12.8	11.6	-150.84	-6,176.4	-3,740.1	7,498.3	7,474.9	23.41	320.321		
6,700.0	6,691.2	6,703.8	6,702.7	13.0	11.8	-150.86	-6,175.5	-3,741.0	7,502.8	7,479.0	23.80	315.184		
6,800.0	6,791.1	6,836.4	6,835.2	13.2	12.1	-150.87	-6,173.8	-3,742.0	7,506.8	7,482.6	24.22	309.966		
6,900.0	6,890.9	6,954.9	6,953.8	13.4	12.3	-150.88	-6,172.0	-3,742.7	7,510.5	7,485.9	24.61	305.230		
7,000.0	6,990.8	7,058.6	7,057.4	13.6	12.4	-150.90	-6,170.7	-3,742.6	7,514.1	7,489.1	24.97	300.971		
7,024.2	7,014.9	7,081.5	7,080.3	13.6	12.5	-150.90	-6,170.4	-3,742.5	7,514.9	7,489.9	25.05	300.006		
7,050.0	7,040.7	7,332.0	7,330.7	13.7	12.9	-152.63	-6,167.1	-3,735.2	7,515.3	7,489.8	25.52	294.520		
7,100.0	7,090.7	7,371.8	7,370.4	13.7	13.0	30.84	-6,166.7	-3,732.7	7,512.5	7,486.9	25.63	293.120		
7,150.0	7,140.5	7,400.0	7,398.5	13.8	13.0	30.56	-6,166.4	-3,730.9	7,506.8	7,481.2	25.66	292.570		
7,200.0	7,189.9	7,430.2	7,428.7	13.8	13.1	30.78	-6,166.3	-3,728.9	7,498.3	7,472.7	25.63	292.577		
7,250.0	7,238.6	7,453.3	7,451.7	13.8	13.1	31.20	-6,166.2	-3,727.4	7,487.0	7,461.5	25.53	293.274		
7,300.0	7,286.4	7,500.0	7,498.3	13.7	13.2	31.82	-6,166.3	-3,724.8	7,473.0	7,447.6	25.42	294.031		
7,350.0	7,333.1	7,500.0	7,498.3	13.7	13.2	32.55	-6,166.3	-3,724.8	7,456.2	7,431.1	25.18	296.082		
7,400.0	7,378.5	7,523.9	7,522.2	13.6	13.2	33.48	-6,166.3	-3,723.5	7,436.9	7,412.0	24.96	297.990		
7,450.0	7,422.2	7,549.0	7,547.3	13.6	13.3	34.60	-6,166.4	-3,722.3	7,415.1	7,390.4	24.71	300.039		
7,500.0	7,464.1	7,573.1	7,571.3	13.5	13.3	35.93	-6,166.5	-3,721.2	7,390.8	7,366.4	24.47	302.082		
7,550.0	7,504.1	7,600.0	7,598.2	13.5	13.3	37.50	-6,166.7	-3,720.1	7,364.3	7,340.0	24.24	303.789		
7,600.0	7,541.8	7,621.2	7,619.4	13.5	13.4	39.32	-6,166.8	-3,719.3	7,335.5	7,311.4	24.05	305.037		
7,650.0	7,577.2	7,645.4	7,643.6	13.4	13.4	41.45	-6,166.9	-3,718.5	7,304.6	7,280.7	23.93	305.277		
7,700.0	7,610.0	7,667.9	7,666.1	13.5	13.4	43.91	-6,167.1	-3,717.7	7,271.9	7,248.0	23.90	304.241		
7,750.0	7,640.2	7,700.0	7,698.2	13.5	13.5	46.82	-6,167.3	-3,716.7	7,237.3	7,213.3	24.02	301.262		
7,800.0	7,667.4	7,715.8	7,713.9	13.6	13.5	50.06	-6,167.4	-3,716.2	7,201.2	7,176.9	24.26	296.820		
7,850.0	7,691.7	7,751.4	7,749.5	13.7	13.6	53.95	-6,167.6	-3,715.2	7,163.6	7,138.9	24.72	289.799		
7,900.0	7,712.8	7,782.2	7,780.3	13.9	13.6	58.35	-6,167.7	-3,714.4	7,124.7	7,099.3	25.34	281.162		
7,950.0	7,730.8	7,808.6	7,806.7	14.1	13.7	63.27	-6,167.7	-3,713.7	7,084.7	7,058.6	26.10	271.442		
8,000.0	7,745.5	7,830.4	7,828.5	14.4	13.7	68.71	-6,167.7	-3,713.1	7,043.9	7,016.9	26.95	261.384		
8,050.0	7,756.7	7,846.9	7,845.0	14.7	13.8	74.56	-6,167.6	-3,712.8	7,002.4	6,974.6	27.81	251.824		
8,100.0	7,764.6	7,858.0	7,856.1	15.1	13.8	80.72	-6,167.5	-3,712.5	6,960.5	6,931.9	28.59	243.456		
8,150.0	7,769.0	7,864.0	7,862.0	15.5	13.8	87.01	-6,167.5	-3,712.4	6,918.4	6,889.1	29.22	236.739		
8,188.1	7,770.0	7,865.0	7,863.1	15.9	13.8	91.79	-6,167.5	-3,712.4	6,886.3	6,856.7	29.57	232.845		
8,200.0	7,770.0	7,864.9	7,863.0	16.0	13.8	91.79	-6,167.5	-3,712.4	6,876.3	6,846.6	29.68	231.641		
8,300.0	7,770.0	7,863.8	7,861.9	17.0	13.8	91.77	-6,167.5	-3,712.4	6,792.4	6,761.7	30.68	221.380		
8,400.0	7,770.0	7,862.8	7,860.9	18.1	13.8	91.75	-6,167.5	-3,712.4	6,708.9	6,677.1	31.79	211.010		
8,500.0	7,770.0	7,861.8	7,859.9	19.3	13.8	91.74	-6,167.5	-3,712.5	6,625.9	6,592.9	33.00	200.774		
8,600.0	7,770.0	7,860.8	7,858.9	20.6	13.8	91.72	-6,167.5	-3,712.5	6,543.4	6,509.1	34.29	190.835		
8,700.0	7,770.0	7,859.9	7,858.0	21.9	13.8	91.71	-6,167.5	-3,712.5	6,461.4	6,425.8	35.64	181.299		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	7,859.0	7,857.1	23.3	13.8	91.70	-6,167.5	-3,712.5	6,379.9	6,342.8	37.04	172.225		
8,900.0	7,770.0	7,858.1	7,856.2	24.8	13.8	91.68	-6,167.5	-3,712.5	6,298.9	6,260.4	38.49	163.639		
9,000.0	7,770.0	7,857.2	7,855.3	26.3	13.8	91.67	-6,167.5	-3,712.5	6,218.5	6,178.5	39.98	155.545		
9,100.0	7,770.0	7,856.4	7,854.5	27.8	13.8	91.66	-6,167.5	-3,712.6	6,138.7	6,097.2	41.50	147.934		
9,200.0	7,770.0	7,855.6	7,853.7	29.3	13.8	91.64	-6,167.6	-3,712.6	6,059.4	6,016.4	43.04	140.788		
9,300.0	7,770.0	7,854.8	7,852.9	30.9	13.8	91.63	-6,167.6	-3,712.6	5,980.8	5,936.2	44.61	134.083		
9,400.0	7,770.0	7,854.1	7,852.2	32.5	13.8	91.62	-6,167.6	-3,712.6	5,902.8	5,856.6	46.19	127.794		
9,500.0	7,770.0	7,853.4	7,851.5	34.1	13.8	91.61	-6,167.6	-3,712.6	5,825.5	5,777.7	47.79	121.895		
9,600.0	7,770.0	7,852.7	7,850.8	35.7	13.8	91.60	-6,167.6	-3,712.6	5,748.9	5,699.5	49.41	116.358		
9,700.0	7,770.0	7,852.0	7,850.1	37.3	13.8	91.59	-6,167.6	-3,712.7	5,673.0	5,622.0	51.03	111.160		
9,800.0	7,770.0	7,851.3	7,849.4	39.0	13.8	91.58	-6,167.6	-3,712.7	5,597.9	5,545.2	52.67	106.275		
9,900.0	7,770.0	7,850.7	7,848.8	40.6	13.8	91.57	-6,167.6	-3,712.7	5,523.6	5,469.2	54.32	101.682		
10,000.0	7,770.0	7,850.0	7,848.1	42.3	13.8	91.56	-6,167.6	-3,712.7	5,450.1	5,394.1	55.98	97.360		
10,100.0	7,770.0	7,849.4	7,847.5	44.0	13.8	91.55	-6,167.6	-3,712.7	5,377.4	5,319.8	57.64	93.288		
10,200.0	7,770.0	7,848.8	7,846.9	45.6	13.8	91.54	-6,167.6	-3,712.7	5,305.6	5,246.3	59.31	89.450		
10,300.0	7,770.0	7,848.2	7,846.3	47.3	13.8	91.53	-6,167.6	-3,712.7	5,234.8	5,173.8	60.99	85.830		
10,400.0	7,770.0	7,847.7	7,845.8	49.0	13.8	91.52	-6,167.6	-3,712.7	5,164.9	5,102.2	62.67	82.411		
10,500.0	7,770.0	7,847.1	7,845.2	50.7	13.8	91.51	-6,167.6	-3,712.8	5,096.0	5,031.7	64.36	79.181		
10,600.0	7,770.0	7,846.6	7,844.7	52.4	13.8	91.50	-6,167.6	-3,712.8	5,028.2	4,962.2	66.05	76.126		
10,700.0	7,770.0	7,846.0	7,844.1	54.1	13.8	91.50	-6,167.6	-3,712.8	4,961.5	4,893.7	67.75	73.236		
10,800.0	7,770.0	7,845.5	7,843.6	55.8	13.8	91.49	-6,167.6	-3,712.8	4,895.9	4,826.4	69.45	70.500		
10,900.0	7,770.0	7,845.0	7,843.1	57.5	13.8	91.48	-6,167.6	-3,712.8	4,831.5	4,760.3	71.15	67.908		
11,000.0	7,770.0	7,844.5	7,842.6	59.2	13.8	91.47	-6,167.6	-3,712.8	4,768.3	4,695.4	72.85	65.451		
11,100.0	7,770.0	7,844.1	7,842.2	60.9	13.7	91.47	-6,167.6	-3,712.8	4,706.3	4,631.8	74.56	63.121		
11,200.0	7,770.0	7,843.6	7,841.7	62.6	13.7	91.46	-6,167.6	-3,712.8	4,645.7	4,569.5	76.27	60.911		
11,300.0	7,770.0	7,843.1	7,841.2	64.3	13.7	91.45	-6,167.6	-3,712.8	4,586.5	4,508.5	77.98	58.814		
11,400.0	7,770.0	7,842.7	7,840.8	66.0	13.7	91.44	-6,167.6	-3,712.9	4,528.8	4,449.1	79.70	56.824		
11,500.0	7,770.0	7,842.3	7,840.4	67.7	13.7	91.44	-6,167.6	-3,712.9	4,472.5	4,391.0	81.41	54.934		
11,600.0	7,770.0	7,841.8	7,839.9	69.5	13.7	91.43	-6,167.6	-3,712.9	4,417.7	4,334.6	83.13	53.140		
11,700.0	7,770.0	7,841.4	7,839.5	71.2	13.7	91.43	-6,167.6	-3,712.9	4,364.6	4,279.7	84.85	51.437		
11,800.0	7,770.0	7,841.0	7,839.1	72.9	13.7	91.42	-6,167.6	-3,712.9	4,313.1	4,226.5	86.58	49.819		
11,900.0	7,770.0	7,840.6	7,838.7	74.6	13.7	91.41	-6,167.6	-3,712.9	4,263.4	4,175.1	88.30	48.283		
12,000.0	7,770.0	7,840.2	7,838.3	76.4	13.7	91.41	-6,167.6	-3,712.9	4,215.4	4,125.4	90.02	46.825		
12,100.0	7,770.0	7,839.8	7,837.9	78.1	13.7	91.40	-6,167.6	-3,712.9	4,169.3	4,077.5	91.75	45.442		
12,200.0	7,770.0	7,839.5	7,837.6	79.8	13.7	91.40	-6,167.6	-3,712.9	4,125.1	4,031.6	93.48	44.129		
12,300.0	7,770.0	7,839.1	7,837.2	81.5	13.7	91.39	-6,167.6	-3,712.9	4,082.8	3,987.6	95.21	42.885		
12,400.0	7,770.0	7,838.8	7,836.9	83.3	13.7	91.38	-6,167.6	-3,712.9	4,042.6	3,945.7	96.93	41.705		
12,500.0	7,770.0	7,838.4	7,836.5	85.0	13.7	91.38	-6,167.6	-3,712.9	4,004.5	3,905.8	98.66	40.587		
12,600.0	7,770.0	7,838.1	7,836.2	86.7	13.7	91.37	-6,167.6	-3,713.0	3,968.6	3,868.2	100.40	39.529		
12,700.0	7,770.0	7,837.7	7,835.8	88.5	13.7	91.37	-6,167.6	-3,713.0	3,934.8	3,832.7	102.13	38.528		
12,800.0	7,770.0	7,837.4	7,835.5	90.2	13.7	91.36	-6,167.6	-3,713.0	3,903.3	3,799.5	103.86	37.582		
12,900.0	7,770.0	7,837.1	7,835.2	91.9	13.7	91.36	-6,167.6	-3,713.0	3,874.2	3,768.6	105.60	36.689		
13,000.0	7,770.0	7,836.7	7,834.9	93.7	13.7	91.35	-6,167.6	-3,713.0	3,847.4	3,740.1	107.33	35.847		
13,100.0	7,770.0	7,836.4	7,834.5	95.4	13.7	91.35	-6,167.7	-3,713.0	3,823.1	3,714.0	109.06	35.053		
13,200.0	7,770.0	7,836.1	7,834.2	97.1	13.7	91.34	-6,167.7	-3,713.0	3,801.2	3,690.4	110.80	34.307		
13,300.0	7,770.0	7,835.8	7,833.9	98.9	13.7	91.34	-6,167.7	-3,713.0	3,781.9	3,669.3	112.54	33.606		
13,400.0	7,770.0	7,835.5	7,833.6	100.6	13.7	91.33	-6,167.7	-3,713.0	3,765.1	3,650.8	114.27	32.948		
13,500.0	7,770.0	7,835.2	7,833.4	102.4	13.7	91.33	-6,167.7	-3,713.0	3,750.9	3,634.9	116.01	32.332		
13,600.0	7,770.0	7,835.0	7,833.1	104.1	13.7	91.33	-6,167.7	-3,713.0	3,739.3	3,621.6	117.75	31.756		
13,700.0	7,770.0	7,834.7	7,832.8	105.8	13.7	91.32	-6,167.7	-3,713.0	3,730.4	3,610.9	119.49	31.220		
13,800.0	7,770.0	7,834.4	7,832.5	107.6	13.7	91.32	-6,167.7	-3,713.0	3,724.1	3,602.9	121.23	30.720		
13,900.0	7,770.0	7,834.1	7,832.2	109.3	13.7	91.31	-6,167.7	-3,713.0	3,720.6	3,597.6	122.97	30.256		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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			
13,983.4	7,770.0	7,833.9	7,832.0	110.8	13.7	91.31	-6,167.7	-3,713.1	3,719.6	3,595.2	124.42	29.896	CC		
14,000.0	7,770.0	7,833.9	7,832.0	111.1	13.7	91.31	-6,167.7	-3,713.1	3,719.7	3,595.0	124.71	29.827	ES		
14,100.0	7,770.0	7,833.6	7,831.7	112.8	13.7	91.31	-6,167.7	-3,713.1	3,721.4	3,595.0	126.45	29.431			
14,200.0	7,770.0	7,833.4	7,831.5	114.5	13.7	91.30	-6,167.7	-3,713.1	3,725.9	3,597.7	128.19	29.066			
14,300.0	7,770.0	7,833.1	7,831.2	116.3	13.7	91.30	-6,167.7	-3,713.1	3,733.1	3,603.1	129.93	28.731			
14,400.0	7,770.0	7,832.9	7,831.0	118.0	13.7	91.29	-6,167.7	-3,713.1	3,742.9	3,611.2	131.67	28.426			
14,500.0	7,770.0	7,832.6	7,830.7	119.8	13.7	91.29	-6,167.7	-3,713.1	3,755.3	3,621.9	133.41	28.148			
14,600.0	7,770.0	7,832.4	7,830.5	121.5	13.7	91.29	-6,167.7	-3,713.1	3,770.4	3,635.2	135.16	27.896			
14,700.0	7,770.0	7,832.2	7,830.3	123.3	13.7	91.28	-6,167.7	-3,713.1	3,788.0	3,651.1	136.90	27.670			
14,800.0	7,770.0	7,831.9	7,830.0	125.0	13.7	91.28	-6,167.7	-3,713.1	3,808.2	3,669.6	138.64	27.468			
14,900.0	7,770.0	7,831.7	7,829.8	126.7	13.7	91.28	-6,167.7	-3,713.1	3,830.9	3,690.5	140.39	27.288			
15,000.0	7,770.0	7,831.5	7,829.6	128.5	13.7	91.27	-6,167.7	-3,713.1	3,856.0	3,713.9	142.13	27.131			
15,100.0	7,770.0	7,831.3	7,829.4	130.2	13.7	91.27	-6,167.7	-3,713.1	3,883.6	3,739.7	143.87	26.993			
15,200.0	7,770.0	7,831.0	7,829.1	132.0	13.7	91.27	-6,167.7	-3,713.1	3,913.5	3,767.9	145.62	26.875			
15,300.0	7,770.0	7,830.8	7,828.9	133.7	13.7	91.26	-6,167.7	-3,713.1	3,945.7	3,798.4	147.36	26.776			
15,400.0	7,770.0	7,830.6	7,828.7	135.5	13.7	91.26	-6,167.7	-3,713.1	3,980.2	3,831.1	149.11	26.694			
15,500.0	7,770.0	7,830.4	7,828.5	137.2	13.7	91.26	-6,167.7	-3,713.1	4,016.9	3,866.1	150.85	26.628			
15,600.0	7,770.0	7,830.2	7,828.3	139.0	13.7	91.25	-6,167.7	-3,713.1	4,055.7	3,903.1	152.60	26.578			
15,700.0	7,770.0	7,830.0	7,828.1	140.7	13.7	91.25	-6,167.7	-3,713.1	4,096.6	3,942.3	154.34	26.543			
15,800.0	7,770.0	7,829.8	7,827.9	142.4	13.7	91.25	-6,167.7	-3,713.1	4,139.5	3,983.4	156.09	26.521			
15,900.0	7,770.0	7,829.6	7,827.7	144.2	13.7	91.24	-6,167.7	-3,713.1	4,184.4	4,026.5	157.83	26.511	SF		
16,000.0	7,770.0	7,829.4	7,827.5	145.9	13.7	91.24	-6,167.7	-3,713.2	4,231.1	4,071.5	159.58	26.514			
16,100.0	7,770.0	7,829.2	7,827.4	147.7	13.7	91.24	-6,167.7	-3,713.2	4,279.7	4,118.3	161.32	26.528			
16,200.0	7,770.0	7,829.1	7,827.2	149.4	13.7	91.23	-6,167.7	-3,713.2	4,330.0	4,166.9	163.07	26.553			
16,300.0	7,770.0	7,828.9	7,827.0	151.2	13.7	91.23	-6,167.7	-3,713.2	4,382.0	4,217.2	164.82	26.587			
16,400.0	7,770.0	7,828.7	7,826.8	152.9	13.7	91.23	-6,167.7	-3,713.2	4,435.7	4,269.1	166.56	26.631			
16,500.0	7,770.0	7,828.5	7,826.6	154.7	13.7	91.23	-6,167.7	-3,713.2	4,491.0	4,322.6	168.31	26.683			
16,600.0	7,770.0	7,828.3	7,826.5	156.4	13.7	91.22	-6,167.7	-3,713.2	4,547.7	4,377.7	170.06	26.743			
16,700.0	7,770.0	7,828.2	7,826.3	158.2	13.7	91.22	-6,167.7	-3,713.2	4,606.0	4,434.2	171.80	26.810			
16,800.0	7,770.0	7,828.0	7,826.1	159.9	13.7	91.22	-6,167.7	-3,713.2	4,665.7	4,492.1	173.55	26.884			
16,900.0	7,770.0	7,827.8	7,825.9	161.7	13.7	91.22	-6,167.7	-3,713.2	4,726.7	4,551.4	175.30	26.964			
17,000.0	7,770.0	7,827.7	7,825.8	163.4	13.7	91.21	-6,167.7	-3,713.2	4,789.1	4,612.0	177.05	27.050			
17,100.0	7,770.0	7,827.5	7,825.6	165.2	13.7	91.21	-6,167.7	-3,713.2	4,852.7	4,673.9	178.79	27.141			
17,200.0	7,770.0	7,827.4	7,825.5	166.9	13.7	91.21	-6,167.7	-3,713.2	4,917.5	4,737.0	180.54	27.238			
17,300.0	7,770.0	7,827.2	7,825.3	168.7	13.7	91.21	-6,167.7	-3,713.2	4,983.5	4,801.2	182.29	27.338			
17,400.0	7,770.0	7,827.0	7,825.1	170.4	13.7	91.20	-6,167.7	-3,713.2	5,050.6	4,866.6	184.04	27.443			
17,500.0	7,770.0	7,826.9	7,825.0	172.2	13.7	91.20	-6,167.7	-3,713.2	5,118.8	4,933.0	185.78	27.552			
17,600.0	7,770.0	7,826.7	7,824.8	173.9	13.7	91.20	-6,167.7	-3,713.2	5,188.0	5,000.4	187.53	27.664			
17,653.1	7,770.0	7,826.7	7,824.8	174.8	13.7	91.20	-6,167.7	-3,713.2	5,225.1	5,036.6	188.46	27.725			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-135.92	-4,073.8	-3,944.4	5,670.6					
100.0	100.0	58.0	58.0	0.2	0.1	-135.92	-4,073.8	-3,944.4	5,670.4	5,670.2	0.25	N/A		
200.0	200.0	158.0	158.0	0.3	0.3	-135.92	-4,073.8	-3,944.4	5,670.4	5,669.8	0.60	9,414.143		
300.0	300.0	258.0	258.0	0.5	0.5	-135.92	-4,073.8	-3,944.4	5,670.4	5,669.5	0.95	5,960.141		
400.0	400.0	358.0	358.0	0.7	0.6	-135.92	-4,073.8	-3,944.4	5,670.4	5,669.1	1.30	4,360.350		
500.0	500.0	458.0	458.0	0.8	0.8	-135.92	-4,073.8	-3,944.4	5,670.4	5,668.8	1.65	3,437.637		
550.0	550.0	508.0	508.0	0.9	0.9	-135.92	-4,073.8	-3,944.4	5,670.4	5,668.6	1.82	3,108.713		
600.0	600.0	558.0	558.0	1.0	1.0	-136.76	-4,073.8	-3,944.4	5,670.6	5,668.6	2.00	2,837.336		
700.0	700.0	658.0	658.0	1.2	1.1	-136.76	-4,073.8	-3,944.4	5,671.9	5,669.5	2.35	2,415.717		
800.0	799.9	757.9	757.9	1.4	1.3	-136.77	-4,073.8	-3,944.4	5,674.4	5,671.7	2.70	2,102.702		
861.1	860.9	818.9	818.9	1.5	1.4	-136.78	-4,073.8	-3,944.4	5,676.6	5,673.7	2.91	1,948.116		
900.0	899.8	857.8	857.8	1.6	1.5	-136.79	-4,073.8	-3,944.4	5,678.1	5,675.1	3.05	1,860.648		
1,000.0	999.6	957.6	957.6	1.8	1.7	-136.83	-4,073.8	-3,944.4	5,682.1	5,678.7	3.41	1,667.941		
1,100.0	1,099.5	1,057.5	1,057.5	1.9	1.8	-136.87	-4,073.8	-3,944.4	5,686.1	5,682.3	3.76	1,511.194		
1,200.0	1,199.3	1,157.3	1,157.3	2.1	2.0	-136.90	-4,073.8	-3,944.4	5,690.0	5,685.9	4.12	1,381.293		
1,300.0	1,299.2	1,257.2	1,257.2	2.3	2.2	-136.94	-4,073.8	-3,944.4	5,694.0	5,689.5	4.48	1,271.938		
1,400.0	1,399.1	1,357.1	1,357.1	2.5	2.4	-136.98	-4,073.8	-3,944.4	5,698.0	5,693.1	4.83	1,178.644		
1,500.0	1,498.9	1,456.9	1,456.9	2.7	2.5	-137.01	-4,073.8	-3,944.4	5,701.9	5,696.7	5.19	1,098.136		
1,600.0	1,598.8	1,556.8	1,556.8	2.9	2.7	-137.05	-4,073.8	-3,944.4	5,705.9	5,700.4	5.55	1,027.966		
1,700.0	1,698.6	1,656.6	1,656.6	3.1	2.9	-137.09	-4,073.8	-3,944.4	5,709.9	5,704.0	5.91	966.272		
1,800.0	1,798.5	1,756.5	1,756.5	3.3	3.1	-137.13	-4,073.8	-3,944.4	5,713.9	5,707.6	6.27	911.613		
1,900.0	1,898.3	1,856.3	1,856.3	3.5	3.2	-137.16	-4,073.8	-3,944.4	5,717.8	5,711.2	6.63	862.853		
2,000.0	1,998.2	1,956.2	1,956.2	3.7	3.4	-137.20	-4,073.8	-3,944.4	5,721.8	5,714.8	6.99	819.090		
2,100.0	2,098.0	2,056.0	2,056.0	3.9	3.6	-137.24	-4,073.8	-3,944.4	5,725.8	5,718.5	7.34	779.595		
2,200.0	2,197.9	2,155.9	2,155.9	4.1	3.8	-137.27	-4,073.8	-3,944.4	5,729.8	5,722.1	7.70	743.775		
2,300.0	2,297.7	2,255.7	2,255.7	4.3	3.9	-137.31	-4,073.8	-3,944.4	5,733.8	5,725.7	8.06	711.140		
2,400.0	2,397.6	2,355.6	2,355.6	4.5	4.1	-137.35	-4,073.8	-3,944.4	5,737.8	5,729.4	8.42	681.285		
2,500.0	2,497.4	2,455.4	2,455.4	4.7	4.3	-137.38	-4,073.8	-3,944.4	5,741.8	5,733.0	8.78	653.870		
2,600.0	2,597.3	2,555.3	2,555.3	4.9	4.5	-137.42	-4,073.8	-3,944.4	5,745.8	5,736.6	9.14	628.608		
2,700.0	2,697.1	2,655.1	2,655.1	5.1	4.6	-137.46	-4,073.8	-3,944.4	5,749.8	5,740.3	9.50	605.256		
2,800.0	2,797.0	2,755.0	2,755.0	5.3	4.8	-137.49	-4,073.8	-3,944.4	5,753.8	5,743.9	9.86	583.605		
2,900.0	2,896.8	2,854.8	2,854.8	5.5	5.0	-137.53	-4,073.8	-3,944.4	5,757.8	5,747.6	10.22	563.476		
3,000.0	2,996.7	2,954.7	2,954.7	5.7	5.2	-137.57	-4,073.8	-3,944.4	5,761.8	5,751.2	10.58	544.714		
3,100.0	3,096.5	3,054.5	3,054.5	5.9	5.3	-137.60	-4,073.8	-3,944.4	5,765.8	5,754.9	10.94	527.185		
3,200.0	3,196.4	3,154.4	3,154.4	6.1	5.5	-137.64	-4,073.8	-3,944.4	5,769.8	5,758.5	11.30	510.772		
3,300.0	3,296.3	3,254.3	3,254.3	6.3	5.7	-137.68	-4,073.8	-3,944.4	5,773.8	5,762.2	11.66	495.370		
3,400.0	3,396.1	3,354.1	3,354.1	6.5	5.9	-137.71	-4,073.8	-3,944.4	5,777.8	5,765.8	12.01	480.890		
3,500.0	3,496.0	3,454.0	3,454.0	6.7	6.0	-137.75	-4,073.8	-3,944.4	5,781.9	5,769.5	12.37	467.252		
3,600.0	3,595.8	3,553.8	3,553.8	6.9	6.2	-137.78	-4,073.8	-3,944.4	5,785.9	5,773.1	12.73	454.384		
3,700.0	3,695.7	3,653.7	3,653.7	7.0	6.4	-137.82	-4,073.8	-3,944.4	5,789.9	5,776.8	13.09	442.222		
3,800.0	3,795.5	3,753.5	3,753.5	7.2	6.6	-137.86	-4,073.8	-3,944.4	5,793.9	5,780.5	13.45	430.711		
3,900.0	3,895.4	3,853.4	3,853.4	7.4	6.7	-137.89	-4,073.8	-3,944.4	5,797.9	5,784.1	13.81	419.799		
4,000.0	3,995.2	3,953.2	3,953.2	7.6	6.9	-137.93	-4,073.8	-3,944.4	5,802.0	5,787.8	14.17	409.441		
4,100.0	4,095.1	4,053.1	4,053.1	7.8	7.1	-137.96	-4,073.8	-3,944.4	5,806.0	5,791.5	14.53	399.596		
4,200.0	4,194.9	4,152.9	4,152.9	8.0	7.2	-138.00	-4,073.8	-3,944.4	5,810.0	5,795.2	14.89	390.226		
4,300.0	4,294.8	4,252.8	4,252.8	8.2	7.4	-138.03	-4,073.8	-3,944.4	5,814.1	5,798.8	15.25	381.299		
4,400.0	4,394.6	4,352.6	4,352.6	8.4	7.6	-138.07	-4,073.8	-3,944.4	5,818.1	5,802.5	15.61	372.783		
4,500.0	4,494.5	4,452.5	4,452.5	8.6	7.8	-138.11	-4,073.8	-3,944.4	5,822.2	5,806.2	15.97	364.650		
4,600.0	4,594.3	4,552.3	4,552.3	8.8	7.9	-138.14	-4,073.8	-3,944.4	5,826.2	5,809.9	16.33	356.876		
4,700.0	4,694.2	4,652.2	4,652.2	9.0	8.1	-138.18	-4,073.8	-3,944.4	5,830.2	5,813.6	16.68	349.438		
4,800.0	4,794.0	4,752.0	4,752.0	9.2	8.3	-138.21	-4,073.8	-3,944.4	5,834.3	5,817.3	17.04	342.313		
4,900.0	4,893.9	4,851.9	4,851.9	9.4	8.5	-138.25	-4,073.8	-3,944.4	5,838.3	5,820.9	17.40	335.483		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	4,951.7	4,951.7	9.6	8.6	-138.28	-4,073.8	-3,944.4	5,842.4	5,824.6	17.76	328.929		
5,100.0	5,093.6	4,993.0	4,993.0	9.8	8.7	-138.30	-4,073.8	-3,944.4	5,846.7	5,828.7	18.02	324.476		
5,200.0	5,193.5	4,993.0	4,993.0	10.0	8.7	-138.30	-4,073.8	-3,944.4	5,852.7	5,834.4	18.20	321.496		
5,300.0	5,293.3	4,993.0	4,993.0	10.2	8.7	-138.30	-4,073.8	-3,944.4	5,860.3	5,841.9	18.39	318.667		
5,400.0	5,393.2	4,993.0	4,993.0	10.4	8.7	-138.30	-4,073.8	-3,944.4	5,869.6	5,851.0	18.58	315.987		
5,500.0	5,493.0	4,993.0	4,993.0	10.6	8.7	-138.30	-4,073.8	-3,944.4	5,880.6	5,861.8	18.76	313.449		
5,600.0	5,592.9	4,993.0	4,993.0	10.8	8.7	-138.30	-4,073.8	-3,944.4	5,893.2	5,874.3	18.95	311.049		
5,700.0	5,692.7	4,993.0	4,993.0	11.0	8.7	-138.30	-4,073.8	-3,944.4	5,907.6	5,888.4	19.13	308.783		
5,800.0	5,792.6	4,993.0	4,993.0	11.2	8.7	-138.30	-4,073.8	-3,944.4	5,923.5	5,904.2	19.32	306.646		
5,900.0	5,892.4	4,993.0	4,993.0	11.4	8.7	-138.30	-4,073.8	-3,944.4	5,941.2	5,921.7	19.50	304.633		
6,000.0	5,992.3	4,993.0	4,993.0	11.6	8.7	-138.30	-4,073.8	-3,944.4	5,960.4	5,940.7	19.69	302.741		
6,100.0	6,092.1	4,993.0	4,993.0	11.8	8.7	-138.30	-4,073.8	-3,944.4	5,981.3	5,961.4	19.87	300.966		
6,200.0	6,192.0	4,993.0	4,993.0	12.0	8.7	-138.30	-4,073.8	-3,944.4	6,003.7	5,983.7	20.06	299.302		
6,300.0	6,291.8	4,993.0	4,993.0	12.2	8.7	-138.30	-4,073.8	-3,944.4	6,027.8	6,007.5	20.24	297.747		
6,400.0	6,391.7	4,993.0	4,993.0	12.4	8.7	-138.30	-4,073.8	-3,944.4	6,053.3	6,032.9	20.43	296.296		
6,500.0	6,491.5	4,993.0	4,993.0	12.6	8.7	-138.30	-4,073.8	-3,944.4	6,080.5	6,059.9	20.62	294.946		
6,600.0	6,591.4	4,993.0	4,993.0	12.8	8.7	-138.30	-4,073.8	-3,944.4	6,109.1	6,088.3	20.80	293.692		
6,700.0	6,691.2	4,993.0	4,993.0	13.0	8.7	-138.30	-4,073.8	-3,944.4	6,139.3	6,118.3	20.99	292.532		
6,800.0	6,791.1	4,993.0	4,993.0	13.2	8.7	-138.30	-4,073.8	-3,944.4	6,170.9	6,149.7	21.17	291.462		
6,900.0	6,890.9	4,993.0	4,993.0	13.4	8.7	-138.30	-4,073.8	-3,944.4	6,203.9	6,182.6	21.36	290.479		
7,000.0	6,990.8	4,993.0	4,993.0	13.6	8.7	-138.30	-4,073.8	-3,944.4	6,238.4	6,216.9	21.54	289.578		
7,024.2	7,014.9	4,993.0	4,993.0	13.6	8.7	-138.30	-4,073.8	-3,944.4	6,247.0	6,225.4	21.59	289.373		
7,050.0	7,040.7	4,993.0	4,993.0	13.7	8.7	-140.46	-4,073.8	-3,944.4	6,255.9	6,234.2	21.62	289.325		
7,100.0	7,090.7	4,993.0	4,993.0	13.7	8.7	42.03	-4,073.8	-3,944.4	6,271.5	6,249.9	21.65	289.661		
7,150.0	7,140.5	4,993.0	4,993.0	13.8	8.7	40.80	-4,073.8	-3,944.4	6,285.0	6,263.4	21.63	290.522		
7,200.0	7,189.9	4,993.0	4,993.0	13.8	8.7	40.06	-4,073.8	-3,944.4	6,296.3	6,274.7	21.57	291.908		
7,250.0	7,238.6	4,993.0	4,993.0	13.8	8.7	39.53	-4,073.8	-3,944.4	6,305.3	6,283.9	21.46	293.813		
7,300.0	7,286.4	4,993.0	4,993.0	13.7	8.7	39.15	-4,073.8	-3,944.4	6,312.1	6,290.8	21.31	296.214		
7,350.0	7,333.1	4,993.0	4,993.0	13.7	8.7	38.90	-4,073.8	-3,944.4	6,316.6	6,295.5	21.12	299.075		
7,400.0	7,378.5	4,993.0	4,993.0	13.6	8.7	38.78	-4,073.8	-3,944.4	6,318.7	6,297.8	20.90	302.342		
7,450.0	7,422.2	4,993.0	4,993.0	13.6	8.7	38.77	-4,073.8	-3,944.4	6,318.5	6,297.9	20.65	305.939		
7,500.0	7,464.1	4,993.0	4,993.0	13.5	8.7	38.89	-4,073.8	-3,944.4	6,316.0	6,295.6	20.39	309.760		
7,550.0	7,504.1	4,993.0	4,993.0	13.5	8.7	39.13	-4,073.8	-3,944.4	6,311.2	6,291.1	20.12	313.669		
7,600.0	7,541.8	4,993.0	4,993.0	13.5	8.7	39.48	-4,073.8	-3,944.4	6,304.1	6,284.2	19.86	317.489		
7,650.0	7,577.2	4,993.0	4,993.0	13.4	8.7	39.97	-4,073.8	-3,944.4	6,294.7	6,275.1	19.61	321.004		
7,700.0	7,610.0	4,993.0	4,993.0	13.5	8.7	40.58	-4,073.8	-3,944.4	6,283.1	6,263.7	19.39	323.959		
7,750.0	7,640.2	4,993.0	4,993.0	13.5	8.7	41.33	-4,073.8	-3,944.4	6,269.2	6,250.0	19.23	326.066		
7,800.0	7,667.4	4,993.0	4,993.0	13.6	8.7	42.23	-4,073.8	-3,944.4	6,253.3	6,234.1	19.12	327.027		
7,850.0	7,691.7	4,993.0	4,993.0	13.7	8.7	43.28	-4,073.8	-3,944.4	6,235.2	6,216.1	19.09	326.556		
7,900.0	7,712.8	4,993.0	4,993.0	13.9	8.7	44.49	-4,073.8	-3,944.4	6,215.1	6,196.0	19.16	324.417		
7,950.0	7,730.8	4,993.0	4,993.0	14.1	8.7	45.88	-4,073.8	-3,944.4	6,193.2	6,173.8	19.33	320.462		
8,000.0	7,745.5	4,993.0	4,993.0	14.4	8.7	47.45	-4,073.8	-3,944.4	6,169.3	6,149.7	19.61	314.661		
8,050.0	7,756.7	4,993.0	4,993.0	14.7	8.7	49.23	-4,073.8	-3,944.4	6,143.8	6,123.8	20.00	307.119		
8,100.0	7,764.6	4,993.0	4,993.0	15.1	8.7	51.22	-4,073.8	-3,944.4	6,116.5	6,096.0	20.52	298.064		
8,150.0	7,769.0	4,993.0	4,993.0	15.5	8.7	53.45	-4,073.8	-3,944.4	6,087.8	6,066.6	21.15	287.829		
8,188.1	7,770.0	4,993.0	4,993.0	15.9	8.7	55.30	-4,073.8	-3,944.4	6,065.0	6,043.3	21.70	279.487		
8,200.0	7,770.0	4,993.0	4,993.0	16.0	8.7	55.30	-4,073.8	-3,944.4	6,057.7	6,035.9	21.79	277.977		
8,300.0	7,770.0	4,993.0	4,993.0	17.0	8.7	55.30	-4,073.8	-3,944.4	5,997.3	5,974.7	22.62	265.178		
8,400.0	7,770.0	4,993.0	4,993.0	18.1	8.7	55.30	-4,073.8	-3,944.4	5,938.0	5,914.5	23.53	252.360		
8,500.0	7,770.0	4,993.0	4,993.0	19.3	8.7	55.30	-4,073.8	-3,944.4	5,879.8	5,855.3	24.52	239.810		
8,600.0	7,770.0	4,993.0	4,993.0	20.6	8.7	55.30	-4,073.8	-3,944.4	5,822.7	5,797.1	25.57	227.720		
8,700.0	7,770.0	4,993.0	4,993.0	21.9	8.7	55.30	-4,073.8	-3,944.4	5,766.8	5,740.1	26.67	216.204		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,800.0	7,770.0	4,993.0	4,993.0	23.3	8.7	55.30	-4,073.8	-3,944.4	5,712.1	5,684.3	27.82	205.326		
8,900.0	7,770.0	4,993.0	4,993.0	24.8	8.7	55.30	-4,073.8	-3,944.4	5,658.6	5,629.6	29.00	195.105		
9,000.0	7,770.0	4,993.0	4,993.0	26.3	8.7	55.30	-4,073.8	-3,944.4	5,606.4	5,576.2	30.22	185.539		
9,100.0	7,770.0	4,993.0	4,993.0	27.8	8.7	55.30	-4,073.8	-3,944.4	5,555.6	5,524.1	31.46	176.607		
9,200.0	7,770.0	4,993.0	4,993.0	29.3	8.7	55.30	-4,073.8	-3,944.4	5,506.0	5,473.3	32.72	168.280		
9,300.0	7,770.0	4,993.0	4,993.0	30.9	8.7	55.30	-4,073.8	-3,944.4	5,457.9	5,423.9	34.00	160.523		
9,400.0	7,770.0	4,993.0	4,993.0	32.5	8.7	55.30	-4,073.8	-3,944.4	5,411.2	5,375.9	35.30	153.298		
9,500.0	7,770.0	4,993.0	4,993.0	34.1	8.7	55.30	-4,073.8	-3,944.4	5,365.9	5,329.3	36.61	146.569		
9,600.0	7,770.0	4,993.0	4,993.0	35.7	8.7	55.30	-4,073.8	-3,944.4	5,322.1	5,284.2	37.93	140.299		
9,700.0	7,770.0	4,993.0	4,993.0	37.3	8.7	55.30	-4,073.8	-3,944.4	5,279.9	5,240.6	39.27	134.455		
9,800.0	7,770.0	4,993.0	4,993.0	39.0	8.7	55.30	-4,073.8	-3,944.4	5,239.2	5,198.6	40.61	129.003		
9,900.0	7,770.0	4,993.0	4,993.0	40.6	8.7	55.30	-4,073.8	-3,944.4	5,200.1	5,158.1	41.97	123.914		
10,000.0	7,770.0	4,993.0	4,993.0	42.3	8.7	55.30	-4,073.8	-3,944.4	5,162.7	5,119.3	43.33	119.161		
10,100.0	7,770.0	4,993.0	4,993.0	44.0	8.7	55.30	-4,073.8	-3,944.4	5,126.9	5,082.2	44.69	114.718		
10,200.0	7,770.0	4,993.0	4,993.0	45.6	8.7	55.30	-4,073.8	-3,944.4	5,092.9	5,046.8	46.06	110.561		
10,300.0	7,770.0	4,993.0	4,993.0	47.3	8.7	55.30	-4,073.8	-3,944.4	5,060.6	5,013.1	47.44	106.670		
10,400.0	7,770.0	4,993.0	4,993.0	49.0	8.7	55.30	-4,073.8	-3,944.4	5,030.1	4,981.2	48.82	103.025		
10,500.0	7,770.0	4,993.0	4,993.0	50.7	8.7	55.30	-4,073.8	-3,944.4	5,001.4	4,951.2	50.21	99.608		
10,600.0	7,770.0	4,993.0	4,993.0	52.4	8.7	55.30	-4,073.8	-3,944.4	4,974.5	4,922.9	51.60	96.404		
10,700.0	7,770.0	4,993.0	4,993.0	54.1	8.7	55.30	-4,073.8	-3,944.4	4,949.5	4,896.5	52.99	93.397		
10,800.0	7,770.0	4,993.0	4,993.0	55.8	8.7	55.30	-4,073.8	-3,944.4	4,926.4	4,872.1	54.39	90.574		
10,900.0	7,770.0	4,993.0	4,993.0	57.5	8.7	55.30	-4,073.8	-3,944.4	4,905.3	4,849.5	55.79	87.922		
11,000.0	7,770.0	4,993.0	4,993.0	59.2	8.7	55.30	-4,073.8	-3,944.4	4,886.1	4,828.9	57.19	85.430		
11,100.0	7,770.0	4,993.0	4,993.0	60.9	8.7	55.30	-4,073.8	-3,944.4	4,868.9	4,810.3	58.60	83.088		
11,200.0	7,770.0	4,993.0	4,993.0	62.6	8.7	55.30	-4,073.8	-3,944.4	4,853.7	4,793.7	60.01	80.886		
11,300.0	7,770.0	4,993.0	4,993.0	64.3	8.7	55.30	-4,073.8	-3,944.4	4,840.5	4,779.1	61.42	78.814		
11,400.0	7,770.0	4,993.0	4,993.0	66.0	8.7	55.30	-4,073.8	-3,944.4	4,829.3	4,766.5	62.83	76.866		
11,500.0	7,770.0	4,993.0	4,993.0	67.7	8.7	55.30	-4,073.8	-3,944.4	4,820.2	4,756.0	64.24	75.034		
11,600.0	7,770.0	4,993.0	4,993.0	69.5	8.7	55.30	-4,073.8	-3,944.4	4,813.2	4,747.5	65.66	73.309		
11,700.0	7,770.0	4,993.0	4,993.0	71.2	8.7	55.30	-4,073.8	-3,944.4	4,808.2	4,741.1	67.07	71.687		
11,800.0	7,770.0	4,993.0	4,993.0	72.9	8.7	55.30	-4,073.8	-3,944.4	4,805.3	4,736.8	68.49	70.161		
11,889.5	7,770.0	4,993.0	4,993.0	74.5	8.7	55.30	-4,073.8	-3,944.4	4,804.5	4,734.7	69.76	68.871 CC		
11,900.0	7,770.0	4,993.0	4,993.0	74.6	8.7	55.30	-4,073.8	-3,944.4	4,804.5	4,734.6	69.91	68.725		
12,000.0	7,770.0	4,993.0	4,993.0	76.4	8.7	55.30	-4,073.8	-3,944.4	4,805.7	4,734.4	71.33	67.374 ES		
12,100.0	7,770.0	4,993.0	4,993.0	78.1	8.7	55.30	-4,073.8	-3,944.4	4,809.1	4,736.3	72.75	66.104		
12,200.0	7,770.0	4,993.0	4,993.0	79.8	8.7	55.30	-4,073.8	-3,944.4	4,814.5	4,740.3	74.17	64.909		
12,300.0	7,770.0	4,993.0	4,993.0	81.5	8.7	55.30	-4,073.8	-3,944.4	4,822.0	4,746.4	75.60	63.786		
12,400.0	7,770.0	4,993.0	4,993.0	83.3	8.7	55.30	-4,073.8	-3,944.4	4,831.5	4,754.5	77.02	62.730		
12,500.0	7,770.0	4,993.0	4,993.0	85.0	8.7	55.30	-4,073.8	-3,944.4	4,843.1	4,764.6	78.45	61.738		
12,600.0	7,770.0	4,993.0	4,993.0	86.7	8.7	55.30	-4,073.8	-3,944.4	4,856.7	4,776.8	79.87	60.806		
12,700.0	7,770.0	4,993.0	4,993.0	88.5	8.7	55.30	-4,073.8	-3,944.4	4,872.3	4,791.0	81.30	59.931		
12,800.0	7,770.0	4,993.0	4,993.0	90.2	8.7	55.30	-4,073.8	-3,944.4	4,890.0	4,807.2	82.73	59.110		
12,900.0	7,770.0	4,993.0	4,993.0	91.9	8.7	55.30	-4,073.8	-3,944.4	4,909.6	4,825.4	84.16	58.339		
13,000.0	7,770.0	4,993.0	4,993.0	93.7	8.7	55.30	-4,073.8	-3,944.4	4,931.1	4,845.5	85.58	57.617		
13,100.0	7,770.0	4,993.0	4,993.0	95.4	8.7	55.30	-4,073.8	-3,944.4	4,954.6	4,867.6	87.01	56.940		
13,200.0	7,770.0	4,993.0	4,993.0	97.1	8.7	55.30	-4,073.8	-3,944.4	4,980.0	4,891.5	88.44	56.306		
13,300.0	7,770.0	4,993.0	4,993.0	98.9	8.7	55.30	-4,073.8	-3,944.4	5,007.2	4,917.3	89.88	55.713		
13,400.0	7,770.0	4,993.0	4,993.0	100.6	8.7	55.30	-4,073.8	-3,944.4	5,036.3	4,945.0	91.31	55.158		
13,500.0	7,770.0	4,993.0	4,993.0	102.4	8.7	55.30	-4,073.8	-3,944.4	5,067.2	4,974.5	92.74	54.640		
13,600.0	7,770.0	4,993.0	4,993.0	104.1	8.7	55.30	-4,073.8	-3,944.4	5,099.9	5,005.7	94.17	54.155		
13,700.0	7,770.0	4,993.0	4,993.0	105.8	8.7	55.30	-4,073.8	-3,944.4	5,134.3	5,038.7	95.60	53.704		
13,800.0	7,770.0	4,993.0	4,993.0	107.6	8.7	55.30	-4,073.8	-3,944.4	5,170.4	5,073.3	97.04	53.283		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	4,993.0	4,993.0	109.3	8.7	55.30	-4,073.8	-3,944.4	5,208.1	5,109.7	98.47	52.890		
14,000.0	7,770.0	4,993.0	4,993.0	111.1	8.7	55.30	-4,073.8	-3,944.4	5,247.6	5,147.7	99.90	52.526		
14,100.0	7,770.0	4,993.0	4,993.0	112.8	8.7	55.30	-4,073.8	-3,944.4	5,288.6	5,187.2	101.34	52.187		
14,200.0	7,770.0	4,993.0	4,993.0	114.5	8.7	55.30	-4,073.8	-3,944.4	5,331.1	5,228.4	102.77	51.873		
14,300.0	7,770.0	4,993.0	4,993.0	116.3	8.7	55.30	-4,073.8	-3,944.4	5,375.2	5,271.0	104.21	51.581		
14,400.0	7,770.0	4,993.0	4,993.0	118.0	8.7	55.30	-4,073.8	-3,944.4	5,420.8	5,315.2	105.64	51.312		
14,500.0	7,770.0	4,993.0	4,993.0	119.8	8.7	55.30	-4,073.8	-3,944.4	5,467.8	5,360.8	107.08	51.063		
14,600.0	7,770.0	4,993.0	4,993.0	121.5	8.7	55.30	-4,073.8	-3,944.4	5,516.3	5,407.8	108.52	50.834		
14,700.0	7,770.0	4,993.0	4,993.0	123.3	8.7	55.30	-4,073.8	-3,944.4	5,566.1	5,456.2	109.95	50.623		
14,800.0	7,770.0	4,993.0	4,993.0	125.0	8.7	55.30	-4,073.8	-3,944.4	5,617.3	5,505.9	111.39	50.429		
14,900.0	7,770.0	4,993.0	4,993.0	126.7	8.7	55.30	-4,073.8	-3,944.4	5,669.7	5,556.9	112.83	50.252		
15,000.0	7,770.0	4,993.0	4,993.0	128.5	8.7	55.30	-4,073.8	-3,944.4	5,723.4	5,609.2	114.26	50.090		
15,100.0	7,770.0	4,993.0	4,993.0	130.2	8.7	55.30	-4,073.8	-3,944.4	5,778.4	5,662.7	115.70	49.943		
15,200.0	7,770.0	4,993.0	4,993.0	132.0	8.7	55.30	-4,073.8	-3,944.4	5,834.6	5,717.4	117.14	49.809		
15,300.0	7,770.0	4,993.0	4,993.0	133.7	8.7	55.30	-4,073.8	-3,944.4	5,891.9	5,773.3	118.58	49.688		
15,400.0	7,770.0	4,993.0	4,993.0	135.5	8.7	55.30	-4,073.8	-3,944.4	5,950.3	5,830.3	120.01	49.580		
15,500.0	7,770.0	4,993.0	4,993.0	137.2	8.7	55.30	-4,073.8	-3,944.4	6,009.9	5,888.4	121.45	49.483		
15,600.0	7,770.0	4,993.0	4,993.0	139.0	8.7	55.30	-4,073.8	-3,944.4	6,070.5	5,947.6	122.89	49.397		
15,700.0	7,770.0	4,993.0	4,993.0	140.7	8.7	55.30	-4,073.8	-3,944.4	6,132.1	6,007.8	124.33	49.321		
15,800.0	7,770.0	4,993.0	4,993.0	142.4	8.7	55.30	-4,073.8	-3,944.4	6,194.7	6,069.0	125.77	49.255		
15,900.0	7,770.0	4,993.0	4,993.0	144.2	8.7	55.30	-4,073.8	-3,944.4	6,258.3	6,131.1	127.21	49.198		
16,000.0	7,770.0	4,993.0	4,993.0	145.9	8.7	55.30	-4,073.8	-3,944.4	6,322.9	6,194.2	128.65	49.149		
16,100.0	7,770.0	4,993.0	4,993.0	147.7	8.7	55.30	-4,073.8	-3,944.4	6,388.3	6,258.3	130.09	49.108		
16,200.0	7,770.0	4,993.0	4,993.0	149.4	8.7	55.30	-4,073.8	-3,944.4	6,454.7	6,323.2	131.53	49.075		
16,300.0	7,770.0	4,993.0	4,993.0	151.2	8.7	55.30	-4,073.8	-3,944.4	6,521.9	6,388.9	132.97	49.049		
16,400.0	7,770.0	4,993.0	4,993.0	152.9	8.7	55.30	-4,073.8	-3,944.4	6,589.9	6,455.5	134.41	49.030		
16,500.0	7,770.0	4,993.0	4,993.0	154.7	8.7	55.30	-4,073.8	-3,944.4	6,658.8	6,522.9	135.85	49.017		
16,600.0	7,770.0	4,993.0	4,993.0	156.4	8.7	55.30	-4,073.8	-3,944.4	6,728.4	6,591.1	137.29	49.010		
16,700.0	7,770.0	4,993.0	4,993.0	158.2	8.7	55.30	-4,073.8	-3,944.4	6,798.8	6,660.1	138.73	49.008 SF		
16,800.0	7,770.0	4,993.0	4,993.0	159.9	8.7	55.30	-4,073.8	-3,944.4	6,869.9	6,729.7	140.17	49.012		
16,900.0	7,770.0	4,993.0	4,993.0	161.7	8.7	55.30	-4,073.8	-3,944.4	6,941.7	6,800.1	141.61	49.021		
17,000.0	7,770.0	4,993.0	4,993.0	163.4	8.7	55.30	-4,073.8	-3,944.4	7,014.3	6,871.2	143.05	49.034		
17,100.0	7,770.0	4,993.0	4,993.0	165.2	8.7	55.30	-4,073.8	-3,944.4	7,087.4	6,943.0	144.49	49.052		
17,200.0	7,770.0	4,993.0	4,993.0	166.9	8.7	55.30	-4,073.8	-3,944.4	7,161.3	7,015.3	145.93	49.073		
17,300.0	7,770.0	4,993.0	4,993.0	168.7	8.7	55.30	-4,073.8	-3,944.4	7,235.7	7,088.4	147.37	49.099		
17,400.0	7,770.0	4,993.0	4,993.0	170.4	8.7	55.30	-4,073.8	-3,944.4	7,310.8	7,162.0	148.81	49.128		
17,500.0	7,770.0	4,993.0	4,993.0	172.2	8.7	55.30	-4,073.8	-3,944.4	7,386.5	7,236.2	150.25	49.160		
17,600.0	7,770.0	4,993.0	4,993.0	173.9	8.7	55.30	-4,073.8	-3,944.4	7,462.7	7,311.0	151.70	49.196		
17,653.1	7,770.0	4,993.0	4,993.0	174.8	8.7	55.30	-4,073.8	-3,944.4	7,503.4	7,350.9	152.46	49.216		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-144.08	-4,173.3	-3,023.0	5,153.2					
100.0	100.0	87.4	87.4	0.2	0.2	-144.08	-4,173.3	-3,023.0	5,153.1	5,152.8	0.30	N/A		
200.0	200.0	192.7	192.7	0.3	0.3	-144.08	-4,173.1	-3,023.0	5,153.0	5,152.3	0.66	7,828.224		
300.0	300.0	298.0	298.0	0.5	0.5	-144.08	-4,172.8	-3,023.0	5,152.8	5,151.8	1.01	5,080.929		
400.0	400.0	403.3	403.3	0.7	0.7	-144.08	-4,172.4	-3,023.0	5,152.4	5,151.1	1.37	3,760.849		
500.0	500.0	508.6	508.6	0.8	0.9	-144.07	-4,171.8	-3,023.0	5,152.0	5,150.3	1.73	2,985.112		
550.0	550.0	561.3	561.3	0.9	1.0	-144.07	-4,171.5	-3,022.9	5,151.7	5,149.8	1.90	2,705.978		
591.4	591.4	604.8	604.8	1.0	1.0	-144.91	-4,171.2	-3,022.9	5,151.6	5,149.6	2.05	2,511.546		
600.0	600.0	613.9	613.9	1.0	1.1	-144.91	-4,171.1	-3,022.9	5,151.6	5,149.5	2.08	2,474.567		
700.0	700.0	719.2	719.2	1.2	1.2	-144.91	-4,170.3	-3,022.9	5,152.4	5,149.9	2.44	2,113.610		
800.0	799.9	824.5	824.5	1.4	1.4	-144.91	-4,169.3	-3,022.9	5,154.5	5,151.7	2.79	1,844.574		
861.1	860.9	888.7	888.7	1.5	1.5	-144.92	-4,168.6	-3,022.9	5,156.4	5,153.4	3.01	1,711.457		
900.0	899.8	929.7	929.7	1.6	1.6	-144.93	-4,168.2	-3,022.9	5,157.8	5,154.7	3.15	1,635.958		
1,000.0	999.6	1,032.1	1,032.1	1.8	1.8	-144.96	-4,167.0	-3,022.9	5,161.3	5,157.8	3.51	1,471.209		
1,100.0	1,099.5	1,112.0	1,112.0	1.9	1.9	-144.98	-4,166.5	-3,022.5	5,165.0	5,161.2	3.83	1,349.818		
1,200.0	1,199.3	1,183.0	1,183.0	2.1	2.0	-145.02	-4,166.8	-3,021.6	5,169.0	5,164.9	4.13	1,251.897		
1,300.0	1,299.2	1,259.0	1,258.9	2.3	2.2	-145.07	-4,167.9	-3,020.2	5,173.6	5,169.2	4.44	1,165.019		
1,400.0	1,399.1	1,339.8	1,339.7	2.5	2.3	-145.12	-4,169.8	-3,018.4	5,178.7	5,174.0	4.76	1,087.500		
1,500.0	1,498.9	1,451.3	1,451.1	2.7	2.5	-145.21	-4,173.0	-3,015.5	5,184.0	5,178.8	5.14	1,008.763		
1,600.0	1,598.8	1,614.8	1,614.3	2.9	2.8	-145.36	-4,178.4	-3,008.2	5,188.6	5,183.0	5.62	923.936		
1,700.0	1,698.6	1,740.6	1,739.7	3.1	3.0	-145.52	-4,183.1	-2,999.3	5,192.0	5,186.0	6.04	859.903		
1,800.0	1,798.5	1,834.0	1,832.8	3.3	3.2	-145.64	-4,187.0	-2,992.2	5,195.4	5,189.0	6.40	811.403		
1,900.0	1,898.3	1,944.0	1,942.4	3.5	3.5	-145.78	-4,191.4	-2,983.7	5,198.8	5,192.0	6.81	763.843		
2,000.0	1,998.2	2,030.8	2,028.9	3.7	3.6	-145.89	-4,194.9	-2,977.1	5,202.2	5,195.1	7.16	726.205		
2,100.0	2,098.0	2,119.4	2,117.1	3.9	3.8	-146.00	-4,198.7	-2,970.5	5,205.9	5,198.4	7.53	691.248		
2,200.0	2,197.9	2,205.5	2,202.8	4.1	4.0	-146.12	-4,202.9	-2,963.5	5,209.9	5,202.0	7.90	659.706		
2,300.0	2,297.7	2,311.6	2,308.4	4.3	4.2	-146.27	-4,208.6	-2,954.6	5,214.0	5,205.7	8.31	627.125		
2,400.0	2,397.6	2,388.4	2,384.9	4.5	4.4	-146.38	-4,212.7	-2,948.1	5,218.1	5,209.5	8.66	602.549		
2,500.0	2,497.4	2,484.0	2,480.1	4.7	4.6	-146.50	-4,217.5	-2,941.4	5,222.8	5,213.8	9.04	577.499		
2,600.0	2,597.3	2,642.0	2,637.6	4.9	4.9	-146.69	-4,223.5	-2,930.4	5,226.5	5,216.9	9.56	546.603		
2,700.0	2,697.1	2,711.1	2,706.4	5.1	5.1	-146.78	-4,226.3	-2,925.3	5,230.2	5,220.3	9.89	528.598		
2,800.0	2,797.0	2,806.4	2,801.4	5.3	5.3	-146.90	-4,230.6	-2,918.3	5,234.4	5,224.1	10.28	508.972		
2,900.0	2,896.8	2,907.7	2,902.3	5.5	5.5	-147.02	-4,234.8	-2,911.3	5,238.6	5,227.9	10.68	490.391		
3,000.0	2,996.7	3,023.0	3,017.3	5.7	5.8	-147.16	-4,239.2	-2,903.4	5,242.5	5,231.4	11.11	471.781		
3,100.0	3,096.5	3,105.4	3,099.4	5.9	6.0	-147.25	-4,242.4	-2,897.6	5,246.4	5,234.9	11.47	457.322		
3,200.0	3,196.4	3,224.8	3,218.4	6.1	6.2	-147.40	-4,247.4	-2,889.0	5,250.5	5,238.6	11.92	440.589		
3,300.0	3,296.3	3,340.5	3,333.7	6.3	6.5	-147.54	-4,251.7	-2,880.7	5,254.2	5,241.9	12.35	425.452		
3,400.0	3,396.1	3,443.7	3,436.5	6.5	6.7	-147.67	-4,255.5	-2,872.5	5,257.5	5,244.8	12.76	411.979		
3,500.0	3,496.0	3,511.8	3,504.4	6.7	6.9	-147.75	-4,258.2	-2,867.4	5,261.4	5,248.3	13.09	401.827		
3,600.0	3,595.8	3,614.1	3,606.4	6.9	7.1	-147.88	-4,262.6	-2,860.0	5,265.6	5,252.1	13.50	389.979		
3,700.0	3,695.7	3,768.5	3,760.1	7.0	7.4	-148.07	-4,268.2	-2,847.6	5,268.7	5,254.7	14.03	375.518		
3,800.0	3,795.5	3,836.0	3,827.4	7.2	7.6	-148.16	-4,270.6	-2,842.2	5,272.1	5,257.7	14.36	367.061		
3,900.0	3,895.4	3,922.8	3,913.8	7.4	7.8	-148.27	-4,274.2	-2,835.6	5,276.1	5,261.3	14.74	357.912		
4,000.0	3,995.2	4,038.6	4,029.1	7.6	8.0	-148.42	-4,279.0	-2,826.1	5,279.7	5,264.6	15.19	347.607		
4,100.0	4,095.1	4,130.2	4,120.3	7.8	8.3	-148.54	-4,282.9	-2,818.5	5,283.5	5,267.9	15.58	339.083		
4,200.0	4,194.9	4,222.4	4,212.1	8.0	8.5	-148.66	-4,287.0	-2,810.7	5,287.4	5,271.4	15.98	330.873		
4,300.0	4,294.8	4,312.2	4,301.5	8.2	8.7	-148.78	-4,291.2	-2,802.9	5,291.5	5,275.1	16.37	323.199		
4,400.0	4,394.6	4,388.0	4,377.0	8.4	8.9	-148.88	-4,294.8	-2,797.0	5,295.9	5,279.2	16.72	316.652		
4,500.0	4,494.5	4,550.4	4,538.8	8.6	9.2	-149.08	-4,301.0	-2,784.3	5,299.5	5,282.2	17.27	306.822		
4,600.0	4,594.3	4,645.8	4,633.8	8.8	9.4	-149.19	-4,304.0	-2,777.4	5,303.0	5,285.4	17.66	300.299		
4,700.0	4,694.2	4,730.8	4,718.6	9.0	9.6	-149.28	-4,306.4	-2,771.9	5,306.7	5,288.7	18.02	294.521		
4,800.0	4,794.0	4,800.9	4,788.6	9.2	9.8	-149.35	-4,308.4	-2,767.9	5,310.9	5,292.5	18.34	289.604		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
4,900.0	4,893.9	4,864.0	4,851.6		9.4	9.9	-149.40	-4,310.2	-2,765.2	5,315.7	5,297.0	18.64	285.197	
5,000.0	4,993.7	4,929.2	4,916.7		9.6	10.0	-149.45	-4,311.8	-2,763.5	5,321.2	5,302.3	18.93	281.141	
5,100.0	5,093.6	5,064.6	5,052.1		9.8	10.2	-149.51	-4,313.8	-2,762.7	5,326.9	5,307.6	19.32	275.744	
5,200.0	5,193.5	5,155.9	5,143.5		10.0	10.3	-149.54	-4,314.4	-2,762.8	5,332.1	5,312.5	19.64	271.506	
5,300.0	5,293.3	5,267.2	5,254.8		10.2	10.5	-149.57	-4,314.9	-2,763.0	5,337.3	5,317.3	19.99	267.045	
5,400.0	5,393.2	5,380.4	5,367.9		10.4	10.7	-149.60	-4,314.8	-2,763.7	5,342.2	5,321.8	20.33	262.727	
5,500.0	5,493.0	5,472.6	5,460.1		10.6	10.8	-149.62	-4,314.7	-2,764.3	5,347.1	5,326.5	20.65	258.937	
5,600.0	5,592.9	5,577.8	5,565.4		10.8	11.0	-149.64	-4,314.5	-2,765.2	5,352.1	5,331.1	20.99	255.031	
5,700.0	5,692.7	5,679.1	5,666.7		11.0	11.1	-149.66	-4,314.2	-2,766.0	5,356.9	5,335.6	21.32	251.295	
5,800.0	5,792.6	5,782.0	5,769.5		11.2	11.3	-149.68	-4,313.9	-2,766.7	5,361.8	5,340.1	21.65	247.641	
5,900.0	5,892.4	5,891.3	5,878.8		11.4	11.4	-149.70	-4,313.4	-2,767.6	5,366.5	5,344.5	21.99	244.005	
6,000.0	5,992.3	5,988.5	5,976.1		11.6	11.6	-149.72	-4,312.7	-2,768.6	5,371.1	5,348.8	22.32	240.679	
6,100.0	6,092.1	6,091.0	6,078.5		11.8	11.7	-149.73	-4,312.0	-2,769.9	5,375.8	5,353.2	22.65	237.353	
6,200.0	6,192.0	6,220.2	6,207.7		12.0	11.9	-149.76	-4,311.1	-2,770.1	5,380.0	5,356.9	23.03	233.595	
6,300.0	6,291.8	6,323.0	6,310.5		12.2	12.1	-149.79	-4,310.4	-2,770.2	5,384.1	5,360.7	23.37	230.370	
6,400.0	6,391.7	6,422.0	6,409.5		12.4	12.2	-149.81	-4,309.6	-2,770.2	5,388.1	5,364.4	23.71	227.280	
6,500.0	6,491.5	6,513.7	6,501.2		12.6	12.4	-149.84	-4,308.9	-2,770.3	5,392.2	5,368.2	24.03	224.389	
6,600.0	6,591.4	6,604.5	6,592.0		12.8	12.5	-149.86	-4,308.4	-2,770.5	5,396.5	5,372.1	24.35	221.592	
6,700.0	6,691.2	6,694.6	6,682.1		13.0	12.7	-149.88	-4,308.0	-2,770.7	5,400.9	5,376.3	24.68	218.870	
6,800.0	6,791.1	6,784.6	6,772.1		13.2	12.8	-149.90	-4,307.9	-2,770.8	5,405.6	5,380.6	25.00	216.223	
6,900.0	6,890.9	6,883.3	6,870.8		13.4	13.0	-149.93	-4,307.8	-2,771.1	5,410.4	5,385.0	25.34	213.526	
7,000.0	6,990.8	6,982.1	6,969.6		13.6	13.1	-149.96	-4,307.8	-2,771.1	5,415.1	5,389.4	25.68	210.888	
7,024.2	7,014.9	7,004.5	6,992.0		13.6	13.2	-149.96	-4,307.8	-2,771.2	5,416.3	5,390.5	25.76	210.281	
7,050.0	7,040.7	7,030.5	7,018.0		13.7	13.2	-151.65	-4,307.8	-2,771.2	5,417.1	5,391.3	25.85	209.563	
7,100.0	7,090.7	7,090.9	7,078.4		13.7	13.3	31.75	-4,307.8	-2,771.2	5,416.4	5,390.4	25.99	208.385	
7,150.0	7,140.5	7,162.1	7,149.6		13.8	13.4	31.44	-4,307.7	-2,771.1	5,412.6	5,386.5	26.08	207.501	
7,200.0	7,189.9	7,236.9	7,224.3		13.8	13.5	31.66	-4,307.1	-2,771.0	5,405.6	5,379.5	26.12	206.976	
7,250.0	7,238.6	7,303.2	7,290.7		13.8	13.6	32.12	-4,306.3	-2,770.9	5,395.4	5,369.4	26.07	206.934	
7,300.0	7,286.4	7,339.1	7,326.6		13.7	13.7	32.73	-4,305.9	-2,770.8	5,382.4	5,356.5	25.93	207.610	
7,350.0	7,333.1	7,371.9	7,359.4		13.7	13.8	33.50	-4,305.6	-2,770.7	5,366.7	5,341.0	25.73	208.617	
7,400.0	7,378.5	7,408.8	7,396.3		13.6	13.8	34.46	-4,305.3	-2,770.6	5,348.3	5,322.8	25.49	209.788	
7,450.0	7,422.2	7,450.6	7,438.1		13.6	13.9	35.65	-4,305.0	-2,770.6	5,327.4	5,302.2	25.25	211.004	
7,500.0	7,464.1	7,491.2	7,478.7		13.5	14.0	37.05	-4,304.7	-2,770.6	5,304.0	5,279.0	24.99	212.210	
7,550.0	7,504.1	7,535.1	7,522.6		13.5	14.0	38.73	-4,304.5	-2,770.5	5,278.2	5,253.4	24.76	213.154	
7,600.0	7,541.8	7,573.8	7,561.3		13.5	14.1	40.67	-4,304.2	-2,770.4	5,250.1	5,225.5	24.56	213.758	
7,650.0	7,577.2	7,608.9	7,596.4		13.4	14.1	42.91	-4,304.1	-2,770.2	5,219.9	5,195.5	24.42	213.749	
7,700.0	7,610.0	7,658.8	7,646.3		13.5	14.2	45.63	-4,303.7	-2,769.9	5,187.8	5,163.3	24.41	212.500	
7,750.0	7,640.2	7,689.8	7,677.3		13.5	14.3	48.61	-4,303.5	-2,769.6	5,153.8	5,129.3	24.49	210.415	
7,800.0	7,667.4	7,708.5	7,695.9		13.6	14.3	51.89	-4,303.4	-2,769.5	5,118.3	5,093.6	24.69	207.272	
7,850.0	7,691.7	7,725.1	7,712.6		13.7	14.3	55.60	-4,303.3	-2,769.4	5,081.4	5,056.4	25.05	202.839	
7,900.0	7,712.8	7,740.0	7,727.5		13.9	14.4	59.75	-4,303.3	-2,769.3	5,043.4	5,017.8	25.57	197.254	
7,950.0	7,730.8	7,757.4	7,744.9		14.1	14.4	64.41	-4,303.2	-2,769.2	5,004.4	4,978.2	26.24	190.730	
8,000.0	7,745.5	7,772.0	7,759.4		14.4	14.4	69.49	-4,303.1	-2,769.1	4,964.6	4,937.6	27.00	183.861	
8,050.0	7,756.7	7,783.1	7,770.6		14.7	14.4	74.90	-4,303.1	-2,769.0	4,924.2	4,896.4	27.80	177.157	
8,100.0	7,764.6	7,790.9	7,778.3		15.1	14.4	80.54	-4,303.1	-2,769.0	4,883.5	4,854.9	28.55	171.051	
8,150.0	7,769.0	7,795.1	7,782.6		15.5	14.5	86.28	-4,303.1	-2,768.9	4,842.6	4,813.4	29.20	165.833	
8,188.1	7,770.0	7,796.0	7,783.5		15.9	14.5	90.63	-4,303.1	-2,768.9	4,811.4	4,781.8	29.60	162.539	
8,200.0	7,770.0	7,796.0	7,783.4		16.0	14.5	90.63	-4,303.1	-2,768.9	4,801.7	4,772.0	29.71	161.606	
8,300.0	7,770.0	7,795.6	7,783.1		17.0	14.5	90.62	-4,303.1	-2,768.9	4,720.4	4,689.7	30.71	153.706	
8,400.0	7,770.0	7,795.3	7,782.7		18.1	14.5	90.61	-4,303.1	-2,768.9	4,639.9	4,608.1	31.82	145.796	
8,500.0	7,770.0	7,794.9	7,782.4		19.3	14.5	90.61	-4,303.1	-2,768.9	4,560.1	4,527.1	33.03	138.045	
8,600.0	7,770.0	7,794.6	7,782.0		20.6	14.5	90.60	-4,303.1	-2,768.9	4,481.2	4,446.9	34.32	130.565	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
8,700.0	7,770.0	7,794.2	7,781.7	21.9	14.5	90.59	-4,303.1	-2,768.9	4,403.1	4,367.4	35.67	123.426	
8,800.0	7,770.0	7,793.9	7,781.3	23.3	14.5	90.58	-4,303.1	-2,768.9	4,325.9	4,288.8	37.08	116.665	
8,900.0	7,770.0	7,793.5	7,781.0	24.8	14.5	90.58	-4,303.1	-2,768.9	4,249.7	4,211.1	38.53	110.295	
9,000.0	7,770.0	7,793.2	7,780.6	26.3	14.5	90.57	-4,303.1	-2,768.9	4,174.4	4,134.4	40.02	104.316	
9,100.0	7,770.0	7,792.8	7,780.3	27.8	14.4	90.56	-4,303.1	-2,768.9	4,100.3	4,058.7	41.54	98.717	
9,200.0	7,770.0	7,792.5	7,779.9	29.3	14.4	90.56	-4,303.1	-2,768.9	4,027.2	3,984.1	43.08	93.482	
9,300.0	7,770.0	7,792.1	7,779.6	30.9	14.4	90.55	-4,303.1	-2,768.9	3,955.3	3,910.7	44.65	88.591	
9,400.0	7,770.0	7,791.8	7,779.2	32.5	14.4	90.54	-4,303.1	-2,768.9	3,884.7	3,838.5	46.23	84.025	
9,500.0	7,770.0	7,791.4	7,778.9	34.1	14.4	90.53	-4,303.1	-2,768.9	3,815.4	3,767.5	47.84	79.761	
9,600.0	7,770.0	7,791.1	7,778.5	35.7	14.4	90.53	-4,303.1	-2,768.9	3,747.5	3,698.0	49.45	75.780	
9,700.0	7,770.0	7,790.7	7,778.2	37.3	14.4	90.52	-4,303.1	-2,769.0	3,681.0	3,629.9	51.08	72.062	
9,800.0	7,770.0	7,790.4	7,777.9	39.0	14.4	90.51	-4,303.1	-2,769.0	3,616.1	3,563.3	52.72	68.589	
9,900.0	7,770.0	7,790.0	7,777.5	40.6	14.4	90.51	-4,303.1	-2,769.0	3,552.8	3,498.4	54.37	65.344	
10,000.0	7,770.0	7,789.7	7,777.2	42.3	14.4	90.50	-4,303.1	-2,769.0	3,491.2	3,435.1	56.03	62.312	
10,100.0	7,770.0	7,789.3	7,776.8	44.0	14.4	90.49	-4,303.1	-2,769.0	3,431.4	3,373.7	57.69	59.478	
10,200.0	7,770.0	7,789.0	7,776.5	45.6	14.4	90.48	-4,303.1	-2,769.0	3,373.5	3,314.2	59.36	56.828	
10,300.0	7,770.0	7,788.7	7,776.1	47.3	14.4	90.48	-4,303.1	-2,769.0	3,317.7	3,256.6	61.04	54.351	
10,400.0	7,770.0	7,788.3	7,775.8	49.0	14.4	90.47	-4,303.1	-2,769.0	3,263.9	3,201.2	62.72	52.036	
10,500.0	7,770.0	7,788.0	7,775.4	50.7	14.4	90.46	-4,303.1	-2,769.0	3,212.4	3,148.0	64.41	49.872	
10,600.0	7,770.0	7,787.6	7,775.1	52.4	14.4	90.46	-4,303.1	-2,769.0	3,163.2	3,097.1	66.10	47.851	
10,700.0	7,770.0	7,787.3	7,774.7	54.1	14.4	90.45	-4,303.1	-2,769.0	3,116.4	3,048.6	67.80	45.964	
10,800.0	7,770.0	7,786.9	7,774.4	55.8	14.4	90.44	-4,303.1	-2,769.0	3,072.2	3,002.7	69.50	44.204	
10,900.0	7,770.0	7,786.6	7,774.0	57.5	14.4	90.43	-4,303.1	-2,769.0	3,030.6	2,959.4	71.20	42.563	
11,000.0	7,770.0	7,786.2	7,773.7	59.2	14.4	90.43	-4,303.1	-2,769.0	2,991.8	2,918.8	72.91	41.035	
11,100.0	7,770.0	7,785.9	7,773.4	60.9	14.4	90.42	-4,303.1	-2,769.0	2,955.8	2,881.2	74.62	39.613	
11,200.0	7,770.0	7,785.5	7,773.0	62.6	14.4	90.41	-4,303.1	-2,769.0	2,922.8	2,846.5	76.33	38.294	
11,300.0	7,770.0	7,785.2	7,772.7	64.3	14.4	90.41	-4,303.1	-2,769.0	2,893.0	2,814.9	78.04	37.070	
11,400.0	7,770.0	7,784.9	7,772.3	66.0	14.4	90.40	-4,303.1	-2,769.0	2,866.3	2,786.5	79.76	35.938	
11,500.0	7,770.0	7,784.5	7,772.0	67.7	14.4	90.39	-4,303.1	-2,769.0	2,842.8	2,761.4	81.47	34.893	
11,600.0	7,770.0	7,784.2	7,771.6	69.5	14.4	90.38	-4,303.1	-2,769.0	2,822.8	2,739.6	83.19	33.930	
11,700.0	7,770.0	7,783.8	7,771.3	71.2	14.4	90.38	-4,303.1	-2,769.0	2,806.1	2,721.2	84.91	33.047	
11,800.0	7,770.0	7,783.5	7,770.9	72.9	14.4	90.37	-4,303.1	-2,769.0	2,792.9	2,706.3	86.64	32.238	
11,900.0	7,770.0	7,783.1	7,770.6	74.6	14.4	90.36	-4,303.1	-2,769.0	2,783.3	2,694.9	88.36	31.500	
12,000.0	7,770.0	7,782.8	7,770.3	76.4	14.4	90.36	-4,303.1	-2,769.0	2,777.2	2,687.1	90.08	30.829	
12,100.0	7,770.0	7,782.4	7,769.9	78.1	14.4	90.35	-4,303.1	-2,769.0	2,774.7	2,682.9	91.81	30.222	
12,118.9	7,770.0	7,782.4	7,769.9	78.4	14.4	90.35	-4,303.1	-2,769.0	2,774.7	2,682.5	92.14	30.115 CC	
12,200.0	7,770.0	7,782.1	7,769.6	79.8	14.4	90.34	-4,303.1	-2,769.0	2,775.8	2,682.3	93.54	29.676 ES	
12,300.0	7,770.0	7,781.8	7,769.2	81.5	14.4	90.33	-4,303.1	-2,769.0	2,780.6	2,685.3	95.27	29.187	
12,400.0	7,770.0	7,781.4	7,768.9	83.3	14.4	90.33	-4,303.1	-2,769.0	2,788.9	2,691.9	97.00	28.752	
12,500.0	7,770.0	7,781.1	7,768.5	85.0	14.4	90.32	-4,303.1	-2,769.0	2,800.7	2,702.0	98.73	28.368	
12,600.0	7,770.0	7,780.7	7,768.2	86.7	14.4	90.31	-4,303.1	-2,769.0	2,816.1	2,715.6	100.46	28.032	
12,700.0	7,770.0	7,780.4	7,767.9	88.5	14.4	90.31	-4,303.1	-2,769.0	2,834.9	2,732.7	102.19	27.741	
12,800.0	7,770.0	7,780.0	7,767.5	90.2	14.4	90.30	-4,303.1	-2,769.0	2,857.0	2,753.1	103.92	27.491	
12,900.0	7,770.0	7,779.7	7,767.2	91.9	14.4	90.29	-4,303.1	-2,769.0	2,882.5	2,776.8	105.66	27.281	
13,000.0	7,770.0	7,779.4	7,766.8	93.7	14.4	90.29	-4,303.1	-2,769.0	2,911.2	2,803.8	107.39	27.108	
13,100.0	7,770.0	7,779.0	7,766.5	95.4	14.4	90.28	-4,303.1	-2,769.0	2,943.0	2,833.9	109.13	26.968	
13,200.0	7,770.0	7,778.7	7,766.2	97.1	14.4	90.27	-4,303.1	-2,769.0	2,977.8	2,867.0	110.86	26.860	
13,300.0	7,770.0	7,778.3	7,765.8	98.9	14.4	90.26	-4,303.1	-2,769.0	3,015.6	2,903.0	112.60	26.781	
13,400.0	7,770.0	7,778.0	7,765.5	100.6	14.4	90.26	-4,303.1	-2,769.0	3,056.1	2,941.8	114.34	26.729	
13,500.0	7,770.0	7,777.7	7,765.1	102.4	14.4	90.25	-4,303.1	-2,769.0	3,099.4	2,983.3	116.08	26.701	
13,600.0	7,770.0	7,777.3	7,764.8	104.1	14.4	90.24	-4,303.1	-2,769.0	3,145.2	3,027.4	117.82	26.696 SF	
13,700.0	7,770.0	7,777.0	7,764.4	105.8	14.4	90.24	-4,303.1	-2,769.0	3,193.5	3,074.0	119.55	26.712	

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,800.0	7,770.0	7,776.6	7,764.1	107.6	14.4	90.23	-4,303.1	-2,769.0	3,244.2	3,122.9	121.29	26.747		
13,900.0	7,770.0	7,776.3	7,763.8	109.3	14.4	90.22	-4,303.1	-2,769.0	3,297.1	3,174.1	123.03	26.799		
14,000.0	7,770.0	7,776.0	7,763.4	111.1	14.4	90.22	-4,303.1	-2,769.0	3,352.2	3,227.4	124.77	26.866		
14,100.0	7,770.0	7,775.6	7,763.1	112.8	14.4	90.21	-4,303.1	-2,769.0	3,409.3	3,282.8	126.51	26.948		
14,200.0	7,770.0	7,775.3	7,762.7	114.5	14.4	90.20	-4,303.1	-2,769.0	3,468.4	3,340.1	128.25	27.043		
14,300.0	7,770.0	7,774.9	7,762.4	116.3	14.4	90.19	-4,303.1	-2,769.0	3,529.3	3,399.3	130.00	27.149		
14,400.0	7,770.0	7,774.6	7,762.1	118.0	14.4	90.19	-4,303.1	-2,769.0	3,592.0	3,460.2	131.74	27.266		
14,500.0	7,770.0	7,774.3	7,761.7	119.8	14.4	90.18	-4,303.1	-2,769.1	3,656.3	3,522.8	133.48	27.392		
14,600.0	7,770.0	7,773.9	7,761.4	121.5	14.4	90.17	-4,303.1	-2,769.1	3,722.2	3,587.0	135.22	27.526		
14,700.0	7,770.0	7,773.6	7,761.0	123.3	14.4	90.17	-4,303.1	-2,769.1	3,789.6	3,652.6	136.97	27.668		
14,800.0	7,770.0	7,773.2	7,760.7	125.0	14.4	90.16	-4,303.1	-2,769.1	3,858.4	3,719.7	138.71	27.816		
14,900.0	7,770.0	7,772.9	7,760.4	126.7	14.4	90.15	-4,303.1	-2,769.1	3,928.5	3,788.1	140.45	27.971		
15,000.0	7,770.0	7,772.6	7,760.0	128.5	14.4	90.14	-4,303.1	-2,769.1	3,999.9	3,857.7	142.20	28.130		
15,100.0	7,770.0	7,772.2	7,759.7	130.2	14.4	90.14	-4,303.1	-2,769.1	4,072.6	3,928.6	143.94	28.294		
15,200.0	7,770.0	7,771.9	7,759.3	132.0	14.4	90.13	-4,303.1	-2,769.1	4,146.3	4,000.6	145.68	28.461		
15,300.0	7,770.0	7,771.5	7,759.0	133.7	14.4	90.12	-4,303.2	-2,769.1	4,221.1	4,073.7	147.43	28.632		
15,400.0	7,770.0	7,771.2	7,758.7	135.5	14.4	90.12	-4,303.2	-2,769.1	4,297.0	4,147.8	149.17	28.806		
15,500.0	7,770.0	7,770.9	7,758.3	137.2	14.4	90.11	-4,303.2	-2,769.1	4,373.8	4,222.9	150.92	28.982		
15,600.0	7,770.0	7,770.5	7,758.0	139.0	14.4	90.10	-4,303.2	-2,769.1	4,451.6	4,298.9	152.66	29.160		
15,700.0	7,770.0	7,770.2	7,757.7	140.7	14.4	90.10	-4,303.2	-2,769.1	4,530.2	4,375.8	154.41	29.339		
15,800.0	7,770.0	7,769.8	7,757.3	142.4	14.4	90.09	-4,303.2	-2,769.1	4,609.7	4,453.5	156.15	29.520		
15,900.0	7,770.0	7,769.5	7,757.0	144.2	14.4	90.08	-4,303.2	-2,769.1	4,689.9	4,532.0	157.90	29.702		
16,000.0	7,770.0	7,769.2	7,756.6	145.9	14.4	90.08	-4,303.2	-2,769.1	4,770.9	4,611.3	159.64	29.885		
16,100.0	7,770.0	7,768.8	7,756.3	147.7	14.4	90.07	-4,303.2	-2,769.1	4,852.6	4,691.2	161.39	30.068		
16,200.0	7,770.0	7,768.5	7,756.0	149.4	14.4	90.06	-4,303.2	-2,769.1	4,935.0	4,771.8	163.14	30.251		
16,300.0	7,770.0	7,768.2	7,755.6	151.2	14.4	90.05	-4,303.2	-2,769.1	5,018.0	4,853.1	164.88	30.434		
16,400.0	7,770.0	7,767.8	7,755.3	152.9	14.4	90.05	-4,303.2	-2,769.1	5,101.6	4,935.0	166.63	30.617		
16,500.0	7,770.0	7,767.5	7,755.0	154.7	14.4	90.04	-4,303.2	-2,769.1	5,185.8	5,017.4	168.38	30.799		
16,600.0	7,770.0	7,767.1	7,754.6	156.4	14.4	90.03	-4,303.2	-2,769.1	5,270.6	5,100.4	170.12	30.981		
16,700.0	7,770.0	7,766.8	7,754.3	158.2	14.4	90.03	-4,303.2	-2,769.1	5,355.8	5,184.0	171.87	31.162		
16,800.0	7,770.0	7,766.5	7,753.9	159.9	14.4	90.02	-4,303.2	-2,769.1	5,441.6	5,268.0	173.62	31.343		
16,900.0	7,770.0	7,766.1	7,753.6	161.7	14.4	90.01	-4,303.2	-2,769.1	5,527.9	5,352.5	175.36	31.522		
17,000.0	7,770.0	7,765.8	7,753.3	163.4	14.4	90.01	-4,303.2	-2,769.1	5,614.6	5,437.5	177.11	31.701		
17,100.0	7,770.0	7,765.5	7,752.9	165.2	14.4	90.00	-4,303.2	-2,769.1	5,701.8	5,522.9	178.86	31.879		
17,200.0	7,770.0	7,765.1	7,752.6	166.9	14.4	89.99	-4,303.2	-2,769.1	5,789.3	5,608.7	180.61	32.055		
17,300.0	7,770.0	7,764.8	7,752.3	168.7	14.4	89.98	-4,303.2	-2,769.1	5,877.3	5,694.9	182.35	32.230		
17,400.0	7,770.0	7,764.5	7,751.9	170.4	14.4	89.98	-4,303.2	-2,769.1	5,965.6	5,781.5	184.10	32.404		
17,500.0	7,770.0	7,764.1	7,751.6	172.2	14.4	89.97	-4,303.2	-2,769.1	6,054.3	5,868.5	185.85	32.576		
17,600.0	7,770.0	7,763.8	7,751.3	173.9	14.4	89.96	-4,303.2	-2,769.1	6,143.4	5,955.8	187.60	32.748		
17,653.1	7,770.0	7,763.6	7,751.1	174.8	14.4	89.96	-4,303.2	-2,769.1	6,190.8	6,002.2	188.53	32.838		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-144.08	-4,174.1	-3,023.8	5,154.4						
100.0	100.0	67.0	67.0	0.2	0.1	-144.08	-4,174.1	-3,023.8	5,154.3	5,154.0	0.27	N/A			
200.0	200.0	167.0	167.0	0.3	0.3	-144.08	-4,174.1	-3,023.8	5,154.3	5,153.6	0.62	8,339.639			
300.0	300.0	267.0	267.0	0.5	0.5	-144.08	-4,174.1	-3,023.8	5,154.3	5,153.3	0.97	5,329.563			
400.0	400.0	367.0	367.0	0.7	0.6	-144.08	-4,174.1	-3,023.8	5,154.3	5,152.9	1.32	3,916.101			
500.0	500.0	467.0	467.0	0.8	0.8	-144.08	-4,174.1	-3,023.8	5,154.3	5,152.6	1.67	3,095.214			
550.0	550.0	517.0	517.0	0.9	0.9	-144.08	-4,174.1	-3,023.8	5,154.3	5,152.4	1.84	2,801.583			
600.0	600.0	567.0	567.0	1.0	1.0	-144.92	-4,174.1	-3,023.8	5,154.4	5,152.4	2.01	2,558.956			
700.0	700.0	667.0	667.0	1.2	1.2	-144.92	-4,174.1	-3,023.8	5,155.9	5,153.5	2.36	2,181.555			
800.0	799.9	766.9	766.9	1.4	1.3	-144.92	-4,174.1	-3,023.8	5,158.7	5,156.0	2.71	1,901.276			
861.1	860.9	827.9	827.9	1.5	1.4	-144.93	-4,174.1	-3,023.8	5,161.2	5,158.2	2.93	1,762.918			
900.0	899.8	866.8	866.8	1.6	1.5	-144.94	-4,174.1	-3,023.8	5,162.9	5,159.8	3.06	1,684.562			
1,000.0	999.6	966.6	966.6	1.8	1.7	-144.98	-4,174.1	-3,023.8	5,167.3	5,163.9	3.42	1,511.821			
1,100.0	1,099.5	1,066.5	1,066.5	1.9	1.9	-145.01	-4,174.1	-3,023.8	5,171.8	5,168.0	3.77	1,371.172			
1,200.0	1,199.3	1,166.3	1,166.3	2.1	2.0	-145.05	-4,174.1	-3,023.8	5,176.2	5,172.1	4.13	1,254.491			
1,300.0	1,299.2	1,266.2	1,266.2	2.3	2.2	-145.08	-4,174.1	-3,023.8	5,180.7	5,176.2	4.48	1,156.165			
1,400.0	1,399.1	1,366.1	1,366.1	2.5	2.4	-145.11	-4,174.1	-3,023.8	5,185.1	5,180.3	4.84	1,072.200			
1,500.0	1,498.9	1,465.9	1,465.9	2.7	2.6	-145.15	-4,174.1	-3,023.8	5,189.6	5,184.4	5.19	999.677			
1,600.0	1,598.8	1,565.8	1,565.8	2.9	2.7	-145.18	-4,174.1	-3,023.8	5,194.0	5,188.5	5.55	936.414			
1,700.0	1,698.6	1,665.6	1,665.6	3.1	2.9	-145.22	-4,174.1	-3,023.8	5,198.5	5,192.6	5.90	880.751			
1,800.0	1,798.5	1,765.5	1,765.5	3.3	3.1	-145.25	-4,174.1	-3,023.8	5,203.0	5,196.7	6.26	831.399			
1,900.0	1,898.3	1,865.3	1,865.3	3.5	3.3	-145.29	-4,174.1	-3,023.8	5,207.4	5,200.8	6.61	787.345			
2,000.0	1,998.2	1,965.2	1,965.2	3.7	3.4	-145.32	-4,174.1	-3,023.8	5,211.9	5,204.9	6.97	747.781			
2,100.0	2,098.0	2,065.0	2,065.0	3.9	3.6	-145.35	-4,174.1	-3,023.8	5,216.4	5,209.0	7.33	712.057			
2,200.0	2,197.9	2,164.9	2,164.9	4.1	3.8	-145.39	-4,174.1	-3,023.8	5,220.8	5,213.1	7.68	679.639			
2,300.0	2,297.7	2,264.7	2,264.7	4.3	4.0	-145.42	-4,174.1	-3,023.8	5,225.3	5,217.3	8.04	650.090			
2,400.0	2,397.6	2,364.6	2,364.6	4.5	4.1	-145.45	-4,174.1	-3,023.8	5,229.8	5,221.4	8.39	623.046			
2,500.0	2,497.4	2,464.4	2,464.4	4.7	4.3	-145.49	-4,174.1	-3,023.8	5,234.2	5,225.5	8.75	598.201			
2,600.0	2,597.3	2,564.3	2,564.3	4.9	4.5	-145.52	-4,174.1	-3,023.8	5,238.7	5,229.6	9.11	575.299			
2,700.0	2,697.1	2,664.1	2,664.1	5.1	4.6	-145.56	-4,174.1	-3,023.8	5,243.2	5,233.7	9.46	554.120			
2,800.0	2,797.0	2,764.0	2,764.0	5.3	4.8	-145.59	-4,174.1	-3,023.8	5,247.7	5,237.9	9.82	534.478			
2,900.0	2,896.8	2,863.8	2,863.8	5.5	5.0	-145.62	-4,174.1	-3,023.8	5,252.1	5,242.0	10.17	516.210			
3,000.0	2,996.7	2,963.7	2,963.7	5.7	5.2	-145.66	-4,174.1	-3,023.8	5,256.6	5,246.1	10.53	499.178			
3,100.0	3,096.5	3,063.5	3,063.5	5.9	5.3	-145.69	-4,174.1	-3,023.8	5,261.1	5,250.2	10.89	483.261			
3,200.0	3,196.4	3,163.4	3,163.4	6.1	5.5	-145.72	-4,174.1	-3,023.8	5,265.6	5,254.4	11.24	468.352			
3,300.0	3,296.3	3,263.3	3,263.3	6.3	5.7	-145.76	-4,174.1	-3,023.8	5,270.1	5,258.5	11.60	454.359			
3,400.0	3,396.1	3,363.1	3,363.1	6.5	5.9	-145.79	-4,174.1	-3,023.8	5,274.6	5,262.6	11.96	441.200			
3,500.0	3,496.0	3,463.0	3,463.0	6.7	6.0	-145.82	-4,174.1	-3,023.8	5,279.1	5,266.8	12.31	428.803			
3,600.0	3,595.8	3,562.8	3,562.8	6.9	6.2	-145.85	-4,174.1	-3,023.8	5,283.6	5,270.9	12.67	417.104			
3,700.0	3,695.7	3,662.7	3,662.7	7.0	6.4	-145.89	-4,174.1	-3,023.8	5,288.1	5,275.0	13.02	406.044			
3,800.0	3,795.5	3,762.5	3,762.5	7.2	6.6	-145.92	-4,174.1	-3,023.8	5,292.5	5,279.2	13.38	395.574			
3,900.0	3,895.4	3,862.4	3,862.4	7.4	6.7	-145.95	-4,174.1	-3,023.8	5,297.0	5,283.3	13.74	385.647			
4,000.0	3,995.2	3,962.2	3,962.2	7.6	6.9	-145.99	-4,174.1	-3,023.8	5,301.5	5,287.5	14.09	376.223			
4,100.0	4,095.1	4,062.1	4,062.1	7.8	7.1	-146.02	-4,174.1	-3,023.8	5,306.0	5,291.6	14.45	367.263			
4,200.0	4,194.9	4,161.9	4,161.9	8.0	7.3	-146.05	-4,174.1	-3,023.8	5,310.5	5,295.7	14.80	358.735			
4,300.0	4,294.8	4,261.8	4,261.8	8.2	7.4	-146.08	-4,174.1	-3,023.8	5,315.1	5,299.9	15.16	350.608			
4,400.0	4,394.6	4,361.6	4,361.6	8.4	7.6	-146.12	-4,174.1	-3,023.8	5,319.6	5,304.0	15.52	342.854			
4,500.0	4,494.5	4,461.5	4,461.5	8.6	7.8	-146.15	-4,174.1	-3,023.8	5,324.1	5,308.2	15.87	335.449			
4,600.0	4,594.3	4,561.3	4,561.3	8.8	8.0	-146.18	-4,174.1	-3,023.8	5,328.6	5,312.3	16.23	328.369			
4,700.0	4,694.2	4,661.2	4,661.2	9.0	8.1	-146.21	-4,174.1	-3,023.8	5,333.1	5,316.5	16.58	321.593			
4,800.0	4,794.0	4,761.0	4,761.0	9.2	8.3	-146.25	-4,174.1	-3,023.8	5,337.6	5,320.7	16.94	315.103			
4,900.0	4,893.9	4,860.9	4,860.9	9.4	8.5	-146.28	-4,174.1	-3,023.8	5,342.1	5,324.8	17.30	308.880			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,993.7	4,960.7	4,960.7	9.6	8.7	-146.31	-4,174.1	-3,023.8	5,346.6	5,329.0	17.65	302.909		
5,100.0	5,093.6	5,060.6	5,060.6	9.8	8.8	-146.34	-4,174.1	-3,023.8	5,351.2	5,333.1	18.01	297.174		
5,200.0	5,193.5	5,160.5	5,160.5	10.0	9.0	-146.38	-4,174.1	-3,023.8	5,355.7	5,337.3	18.36	291.661		
5,300.0	5,293.3	5,260.3	5,260.3	10.2	9.2	-146.41	-4,174.1	-3,023.8	5,360.2	5,341.5	18.72	286.359		
5,400.0	5,393.2	5,360.2	5,360.2	10.4	9.4	-146.44	-4,174.1	-3,023.8	5,364.7	5,345.6	19.07	281.254		
5,500.0	5,493.0	5,460.0	5,460.0	10.6	9.5	-146.47	-4,174.1	-3,023.8	5,369.2	5,349.8	19.43	276.338		
5,600.0	5,592.9	5,559.9	5,559.9	10.8	9.7	-146.50	-4,174.1	-3,023.8	5,373.8	5,354.0	19.79	271.598		
5,700.0	5,692.7	5,659.7	5,659.7	11.0	9.9	-146.54	-4,174.1	-3,023.8	5,378.3	5,358.2	20.14	267.026		
5,800.0	5,792.6	5,759.6	5,759.6	11.2	10.1	-146.57	-4,174.1	-3,023.8	5,382.8	5,362.3	20.50	262.613		
5,900.0	5,892.4	5,859.4	5,859.4	11.4	10.2	-146.60	-4,174.1	-3,023.8	5,387.4	5,366.5	20.85	258.351		
6,000.0	5,992.3	5,959.3	5,959.3	11.6	10.4	-146.63	-4,174.1	-3,023.8	5,391.9	5,370.7	21.21	254.232		
6,100.0	6,092.1	6,059.1	6,059.1	11.8	10.6	-146.66	-4,174.1	-3,023.8	5,396.4	5,374.9	21.56	250.250		
6,200.0	6,192.0	6,159.0	6,159.0	12.0	10.7	-146.69	-4,174.1	-3,023.8	5,401.0	5,379.0	21.92	246.397		
6,300.0	6,291.8	6,258.8	6,258.8	12.2	10.9	-146.73	-4,174.1	-3,023.8	5,405.5	5,383.2	22.28	242.667		
6,400.0	6,391.7	6,358.7	6,358.7	12.4	11.1	-146.76	-4,174.1	-3,023.8	5,410.0	5,387.4	22.63	239.055		
6,500.0	6,491.5	6,458.5	6,458.5	12.6	11.3	-146.79	-4,174.1	-3,023.8	5,414.6	5,391.6	22.99	235.555		
6,600.0	6,591.4	6,558.4	6,558.4	12.8	11.4	-146.82	-4,174.1	-3,023.8	5,419.1	5,395.8	23.34	232.161		
6,700.0	6,691.2	6,658.2	6,658.2	13.0	11.6	-146.85	-4,174.1	-3,023.8	5,423.7	5,400.0	23.70	228.870		
6,800.0	6,791.1	6,758.1	6,758.1	13.2	11.8	-146.88	-4,174.1	-3,023.8	5,428.2	5,404.2	24.05	225.677		
6,900.0	6,890.9	6,857.9	6,857.9	13.4	12.0	-146.91	-4,174.1	-3,023.8	5,432.8	5,408.4	24.41	222.576		
7,000.0	6,990.8	6,957.8	6,957.8	13.6	12.1	-146.95	-4,174.1	-3,023.8	5,437.3	5,412.5	24.76	219.565		
7,024.2	7,014.9	6,981.9	6,981.9	13.6	12.2	-146.95	-4,174.1	-3,023.8	5,438.4	5,413.6	24.85	218.850		
7,050.0	7,040.7	7,007.7	7,007.7	13.7	12.2	-148.65	-4,174.1	-3,023.8	5,439.2	5,414.3	24.94	218.059		
7,100.0	7,090.7	7,057.7	7,057.7	13.7	12.3	34.76	-4,174.1	-3,023.8	5,438.5	5,413.5	25.08	216.864		
7,150.0	7,140.5	7,107.5	7,107.5	13.8	12.4	34.44	-4,174.1	-3,023.8	5,435.0	5,409.8	25.15	216.076		
7,200.0	7,189.9	7,156.9	7,156.9	13.8	12.5	34.64	-4,174.1	-3,023.8	5,428.5	5,403.4	25.17	215.671		
7,250.0	7,238.6	7,205.6	7,205.6	13.8	12.6	35.08	-4,174.1	-3,023.8	5,419.3	5,394.1	25.13	215.616		
7,300.0	7,286.4	7,253.4	7,253.4	13.7	12.7	35.70	-4,174.1	-3,023.8	5,407.2	5,382.1	25.05	215.864		
7,350.0	7,333.1	7,300.1	7,300.1	13.7	12.7	36.51	-4,174.1	-3,023.8	5,392.4	5,367.5	24.92	216.351		
7,400.0	7,378.5	7,345.5	7,345.5	13.6	12.8	37.52	-4,174.1	-3,023.8	5,375.0	5,350.2	24.77	216.992		
7,450.0	7,422.2	7,389.2	7,389.2	13.6	12.9	38.73	-4,174.1	-3,023.8	5,355.0	5,330.4	24.60	217.678		
7,500.0	7,464.1	7,431.1	7,431.1	13.5	13.0	40.17	-4,174.1	-3,023.8	5,332.7	5,308.2	24.43	218.267		
7,550.0	7,504.1	7,471.1	7,471.1	13.5	13.0	41.85	-4,174.1	-3,023.8	5,308.0	5,283.7	24.28	218.587		
7,600.0	7,541.8	7,508.8	7,508.8	13.5	13.1	43.79	-4,174.1	-3,023.8	5,281.1	5,256.9	24.18	218.438		
7,650.0	7,577.2	7,544.2	7,544.2	13.4	13.2	46.01	-4,174.1	-3,023.8	5,252.2	5,228.1	24.14	217.607		
7,700.0	7,610.0	7,577.0	7,577.0	13.5	13.2	48.55	-4,174.1	-3,023.8	5,221.5	5,197.3	24.19	215.890		
7,750.0	7,640.2	7,607.2	7,607.2	13.5	13.3	51.42	-4,174.1	-3,023.8	5,189.1	5,164.7	24.35	213.130		
7,800.0	7,667.4	7,634.4	7,634.4	13.6	13.3	54.65	-4,174.1	-3,023.8	5,155.1	5,130.5	24.63	209.261		
7,850.0	7,691.7	7,658.7	7,658.7	13.7	13.4	58.24	-4,174.1	-3,023.8	5,119.8	5,094.8	25.06	204.341		
7,900.0	7,712.8	7,679.8	7,679.8	13.9	13.4	62.21	-4,174.1	-3,023.8	5,083.4	5,057.8	25.60	198.564		
7,950.0	7,730.8	7,697.8	7,697.8	14.1	13.4	66.52	-4,174.1	-3,023.8	5,046.0	5,019.8	26.25	192.247		
8,000.0	7,745.5	7,712.5	7,712.5	14.4	13.5	71.14	-4,174.1	-3,023.8	5,007.9	4,980.9	26.96	185.771		
8,050.0	7,756.7	7,723.7	7,723.7	14.7	13.5	76.02	-4,174.1	-3,023.8	4,969.2	4,941.5	27.68	179.516		
8,100.0	7,764.6	7,731.6	7,731.6	15.1	13.5	81.05	-4,174.1	-3,023.8	4,930.2	4,901.8	28.37	173.799		
8,150.0	7,769.0	7,736.0	7,736.0	15.5	13.5	86.15	-4,174.1	-3,023.8	4,891.0	4,862.0	28.97	168.827		
8,188.1	7,770.0	7,737.0	7,737.0	15.9	13.5	90.00	-4,174.1	-3,023.8	4,861.2	4,831.8	29.35	165.600		
8,200.0	7,770.0	7,737.0	7,737.0	16.0	13.5	90.00	-4,174.1	-3,023.8	4,851.8	4,822.4	29.47	164.662		
8,300.0	7,770.0	7,737.0	7,737.0	17.0	13.5	90.00	-4,174.1	-3,023.8	4,774.1	4,743.7	30.46	156.711		
8,400.0	7,770.0	7,737.0	7,737.0	18.1	13.5	90.00	-4,174.1	-3,023.8	4,697.3	4,665.7	31.58	148.746		
8,500.0	7,770.0	7,737.0	7,737.0	19.3	13.5	90.00	-4,174.1	-3,023.8	4,621.3	4,588.5	32.79	140.941		
8,600.0	7,770.0	7,737.0	7,737.0	20.6	13.5	90.00	-4,174.1	-3,023.8	4,546.2	4,512.2	34.08	133.410		
8,700.0	7,770.0	7,737.0	7,737.0	21.9	13.5	90.00	-4,174.1	-3,023.8	4,472.2	4,436.7	35.43	126.224		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,800.0	7,770.0	7,737.0	7,737.0	23.3	13.5	90.00	-4,174.1	-3,023.8	4,399.1	4,362.3	36.84	119.422		
8,900.0	7,770.0	7,737.0	7,737.0	24.8	13.5	90.00	-4,174.1	-3,023.8	4,327.2	4,288.9	38.29	113.017		
9,000.0	7,770.0	7,737.0	7,737.0	26.3	13.5	90.00	-4,174.1	-3,023.8	4,256.3	4,216.6	39.78	107.008		
9,100.0	7,770.0	7,737.0	7,737.0	27.8	13.5	90.00	-4,174.1	-3,023.8	4,186.7	4,145.4	41.29	101.386		
9,200.0	7,770.0	7,737.0	7,737.0	29.3	13.5	90.00	-4,174.1	-3,023.8	4,118.3	4,075.5	42.84	96.132		
9,300.0	7,770.0	7,737.0	7,737.0	30.9	13.5	90.00	-4,174.1	-3,023.8	4,051.2	4,006.8	44.41	91.229		
9,400.0	7,770.0	7,737.0	7,737.0	32.5	13.5	90.00	-4,174.1	-3,023.8	3,985.6	3,939.6	45.99	86.653		
9,500.0	7,770.0	7,737.0	7,737.0	34.1	13.5	90.00	-4,174.1	-3,023.8	3,921.3	3,873.7	47.60	82.385		
9,600.0	7,770.0	7,737.0	7,737.0	35.7	13.5	90.00	-4,174.1	-3,023.8	3,858.6	3,809.4	49.21	78.404		
9,700.0	7,770.0	7,737.0	7,737.0	37.3	13.5	90.00	-4,174.1	-3,023.8	3,797.5	3,746.6	50.84	74.689		
9,800.0	7,770.0	7,737.0	7,737.0	39.0	13.5	90.00	-4,174.1	-3,023.8	3,738.0	3,685.5	52.48	71.222		
9,900.0	7,770.0	7,737.0	7,737.0	40.6	13.5	90.00	-4,174.1	-3,023.8	3,680.3	3,626.2	54.13	67.985		
10,000.0	7,770.0	7,737.0	7,737.0	42.3	13.5	90.00	-4,174.1	-3,023.8	3,624.5	3,568.7	55.79	64.964		
10,100.0	7,770.0	7,737.0	7,737.0	44.0	13.5	90.00	-4,174.1	-3,023.8	3,570.6	3,513.1	57.46	62.142		
10,200.0	7,770.0	7,737.0	7,737.0	45.6	13.5	90.00	-4,174.1	-3,023.8	3,518.6	3,459.5	59.13	59.507		
10,300.0	7,770.0	7,737.0	7,737.0	47.3	13.5	90.00	-4,174.1	-3,023.8	3,468.9	3,408.0	60.81	57.045		
10,400.0	7,770.0	7,737.0	7,737.0	49.0	13.5	90.00	-4,174.1	-3,023.8	3,421.3	3,358.8	62.49	54.747		
10,500.0	7,770.0	7,737.0	7,737.0	50.7	13.5	90.00	-4,174.1	-3,023.8	3,375.9	3,311.8	64.18	52.601		
10,600.0	7,770.0	7,737.0	7,737.0	52.4	13.5	90.00	-4,174.1	-3,023.8	3,333.0	3,267.1	65.87	50.598		
10,700.0	7,770.0	7,737.0	7,737.0	54.1	13.5	90.00	-4,174.1	-3,023.8	3,292.6	3,225.0	67.57	48.729		
10,800.0	7,770.0	7,737.0	7,737.0	55.8	13.5	90.00	-4,174.1	-3,023.8	3,254.7	3,185.4	69.27	46.986		
10,900.0	7,770.0	7,737.0	7,737.0	57.5	13.5	90.00	-4,174.1	-3,023.8	3,219.5	3,148.5	70.97	45.362		
11,000.0	7,770.0	7,737.0	7,737.0	59.2	13.5	90.00	-4,174.1	-3,023.8	3,187.0	3,114.3	72.68	43.850		
11,100.0	7,770.0	7,737.0	7,737.0	60.9	13.5	90.00	-4,174.1	-3,023.8	3,157.4	3,083.0	74.39	42.445		
11,200.0	7,770.0	7,737.0	7,737.0	62.6	13.5	90.00	-4,174.1	-3,023.8	3,130.7	3,054.6	76.10	41.139		
11,300.0	7,770.0	7,737.0	7,737.0	64.3	13.5	90.00	-4,174.1	-3,023.8	3,107.0	3,029.2	77.81	39.928		
11,400.0	7,770.0	7,737.0	7,737.0	66.0	13.5	90.00	-4,174.1	-3,023.8	3,086.3	3,006.8	79.53	38.807		
11,500.0	7,770.0	7,737.0	7,737.0	67.7	13.5	90.00	-4,174.1	-3,023.8	3,068.8	2,987.5	81.25	37.771		
11,600.0	7,770.0	7,737.0	7,737.0	69.5	13.5	90.00	-4,174.1	-3,023.8	3,054.4	2,971.4	82.97	36.814		
11,700.0	7,770.0	7,737.0	7,737.0	71.2	13.5	90.00	-4,174.1	-3,023.8	3,043.3	2,958.6	84.69	35.935		
11,800.0	7,770.0	7,737.0	7,737.0	72.9	13.5	90.00	-4,174.1	-3,023.8	3,035.4	2,948.9	86.41	35.127		
11,900.0	7,770.0	7,737.0	7,737.0	74.6	13.5	90.00	-4,174.1	-3,023.8	3,030.8	2,942.6	88.14	34.387		
11,989.8	7,770.0	7,737.0	7,737.0	76.2	13.5	90.00	-4,174.1	-3,023.8	3,029.4	2,939.7	89.69	33.778 CC		
12,000.0	7,770.0	7,737.0	7,737.0	76.4	13.5	90.00	-4,174.1	-3,023.8	3,029.4	2,939.6	89.86	33.712 ES		
12,100.0	7,770.0	7,737.0	7,737.0	78.1	13.5	90.00	-4,174.1	-3,023.8	3,031.4	2,939.8	91.59	33.098		
12,200.0	7,770.0	7,737.0	7,737.0	79.8	13.5	90.00	-4,174.1	-3,023.8	3,036.7	2,943.4	93.32	32.542		
12,300.0	7,770.0	7,737.0	7,737.0	81.5	13.5	90.00	-4,174.1	-3,023.8	3,045.3	2,950.2	95.05	32.040		
12,400.0	7,770.0	7,737.0	7,737.0	83.3	13.5	90.00	-4,174.1	-3,023.8	3,057.1	2,960.3	96.78	31.589		
12,500.0	7,770.0	7,737.0	7,737.0	85.0	13.5	90.00	-4,174.1	-3,023.8	3,072.1	2,973.6	98.51	31.186		
12,600.0	7,770.0	7,737.0	7,737.0	86.7	13.5	90.00	-4,174.1	-3,023.8	3,090.3	2,990.0	100.24	30.829		
12,700.0	7,770.0	7,737.0	7,737.0	88.5	13.5	90.00	-4,174.1	-3,023.8	3,111.5	3,009.6	101.97	30.513		
12,800.0	7,770.0	7,737.0	7,737.0	90.2	13.5	90.00	-4,174.1	-3,023.8	3,135.9	3,032.2	103.71	30.238		
12,900.0	7,770.0	7,737.0	7,737.0	91.9	13.5	90.00	-4,174.1	-3,023.8	3,163.2	3,057.7	105.44	30.000		
13,000.0	7,770.0	7,737.0	7,737.0	93.7	13.5	90.00	-4,174.1	-3,023.8	3,193.4	3,086.2	107.18	29.796		
13,100.0	7,770.0	7,737.0	7,737.0	95.4	13.5	90.00	-4,174.1	-3,023.8	3,226.4	3,117.5	108.91	29.624		
13,200.0	7,770.0	7,737.0	7,737.0	97.1	13.5	90.00	-4,174.1	-3,023.8	3,262.2	3,151.5	110.65	29.482		
13,300.0	7,770.0	7,737.0	7,737.0	98.9	13.5	90.00	-4,174.1	-3,023.8	3,300.6	3,188.2	112.39	29.368		
13,400.0	7,770.0	7,737.0	7,737.0	100.6	13.5	90.00	-4,174.1	-3,023.8	3,341.5	3,227.4	114.12	29.280		
13,500.0	7,770.0	7,737.0	7,737.0	102.4	13.5	90.00	-4,174.1	-3,023.8	3,385.0	3,269.1	115.86	29.215		
13,600.0	7,770.0	7,737.0	7,737.0	104.1	13.5	90.00	-4,174.1	-3,023.8	3,430.7	3,313.1	117.60	29.173		
13,700.0	7,770.0	7,737.0	7,737.0	105.8	13.5	90.00	-4,174.1	-3,023.8	3,478.8	3,359.5	119.34	29.150		
13,800.0	7,770.0	7,737.0	7,737.0	107.6	13.5	90.00	-4,174.1	-3,023.8	3,529.0	3,408.0	121.08	29.146 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
13,900.0	7,770.0	7,737.0	7,737.0	109.3	13.5	90.00	-4,174.1	-3,023.8	3,581.4	3,458.5	122.82	29.159		
14,000.0	7,770.0	7,737.0	7,737.0	111.1	13.5	90.00	-4,174.1	-3,023.8	3,635.7	3,511.1	124.56	29.188		
14,100.0	7,770.0	7,737.0	7,737.0	112.8	13.5	90.00	-4,174.1	-3,023.8	3,691.9	3,565.6	126.30	29.230		
14,200.0	7,770.0	7,737.0	7,737.0	114.5	13.5	90.00	-4,174.1	-3,023.8	3,750.0	3,621.9	128.05	29.286		
14,300.0	7,770.0	7,737.0	7,737.0	116.3	13.5	90.00	-4,174.1	-3,023.8	3,809.8	3,680.0	129.79	29.354		
14,400.0	7,770.0	7,737.0	7,737.0	118.0	13.5	90.00	-4,174.1	-3,023.8	3,871.2	3,739.7	131.53	29.432		
14,500.0	7,770.0	7,737.0	7,737.0	119.8	13.5	90.00	-4,174.1	-3,023.8	3,934.2	3,801.0	133.27	29.520		
14,600.0	7,770.0	7,737.0	7,737.0	121.5	13.5	90.00	-4,174.1	-3,023.8	3,998.8	3,863.8	135.02	29.617		
14,700.0	7,770.0	7,737.0	7,737.0	123.3	13.5	90.00	-4,174.1	-3,023.8	4,064.8	3,928.0	136.76	29.722		
14,800.0	7,770.0	7,737.0	7,737.0	125.0	13.5	90.00	-4,174.1	-3,023.8	4,132.1	3,993.6	138.50	29.834		
14,900.0	7,770.0	7,737.0	7,737.0	126.7	13.5	90.00	-4,174.1	-3,023.8	4,200.8	4,060.5	140.25	29.953		
15,000.0	7,770.0	7,737.0	7,737.0	128.5	13.5	90.00	-4,174.1	-3,023.8	4,270.7	4,128.7	141.99	30.077		
15,100.0	7,770.0	7,737.0	7,737.0	130.2	13.5	90.00	-4,174.1	-3,023.8	4,341.7	4,198.0	143.73	30.206		
15,200.0	7,770.0	7,737.0	7,737.0	132.0	13.5	90.00	-4,174.1	-3,023.8	4,413.9	4,268.4	145.48	30.340		
15,300.0	7,770.0	7,737.0	7,737.0	133.7	13.5	90.00	-4,174.1	-3,023.8	4,487.2	4,339.9	147.22	30.478		
15,400.0	7,770.0	7,737.0	7,737.0	135.5	13.5	90.00	-4,174.1	-3,023.8	4,561.4	4,412.5	148.97	30.620		
15,500.0	7,770.0	7,737.0	7,737.0	137.2	13.5	90.00	-4,174.1	-3,023.8	4,636.7	4,485.9	150.71	30.764		
15,600.0	7,770.0	7,737.0	7,737.0	139.0	13.5	90.00	-4,174.1	-3,023.8	4,712.8	4,560.4	152.46	30.912		
15,700.0	7,770.0	7,737.0	7,737.0	140.7	13.5	90.00	-4,174.1	-3,023.8	4,789.9	4,635.6	154.21	31.061		
15,800.0	7,770.0	7,737.0	7,737.0	142.4	13.5	90.00	-4,174.1	-3,023.8	4,867.7	4,711.8	155.95	31.213		
15,900.0	7,770.0	7,737.0	7,737.0	144.2	13.5	90.00	-4,174.1	-3,023.8	4,946.4	4,788.7	157.70	31.366		
16,000.0	7,770.0	7,737.0	7,737.0	145.9	13.5	90.00	-4,174.1	-3,023.8	5,025.8	4,866.4	159.44	31.521		
16,100.0	7,770.0	7,737.0	7,737.0	147.7	13.5	90.00	-4,174.1	-3,023.8	5,106.0	4,944.8	161.19	31.676		
16,200.0	7,770.0	7,737.0	7,737.0	149.4	13.5	90.00	-4,174.1	-3,023.8	5,186.8	5,023.9	162.94	31.833		
16,300.0	7,770.0	7,737.0	7,737.0	151.2	13.5	90.00	-4,174.1	-3,023.8	5,268.3	5,103.6	164.69	31.990		
16,400.0	7,770.0	7,737.0	7,737.0	152.9	13.5	90.00	-4,174.1	-3,023.8	5,350.4	5,184.0	166.43	32.148		
16,500.0	7,770.0	7,737.0	7,737.0	154.7	13.5	90.00	-4,174.1	-3,023.8	5,433.1	5,265.0	168.18	32.306		
16,600.0	7,770.0	7,737.0	7,737.0	156.4	13.5	90.00	-4,174.1	-3,023.8	5,516.4	5,346.5	169.93	32.464		
16,700.0	7,770.0	7,737.0	7,737.0	158.2	13.5	90.00	-4,174.1	-3,023.8	5,600.3	5,428.6	171.67	32.621		
16,800.0	7,770.0	7,737.0	7,737.0	159.9	13.5	90.00	-4,174.1	-3,023.8	5,684.6	5,511.2	173.42	32.779		
16,900.0	7,770.0	7,737.0	7,737.0	161.7	13.5	90.00	-4,174.1	-3,023.8	5,769.5	5,594.3	175.17	32.937		
17,000.0	7,770.0	7,737.0	7,737.0	163.4	13.5	90.00	-4,174.1	-3,023.8	5,854.8	5,677.9	176.92	33.093		
17,100.0	7,770.0	7,737.0	7,737.0	165.2	13.5	90.00	-4,174.1	-3,023.8	5,940.6	5,762.0	178.67	33.250		
17,200.0	7,770.0	7,737.0	7,737.0	166.9	13.5	90.00	-4,174.1	-3,023.8	6,026.9	5,846.5	180.41	33.406		
17,300.0	7,770.0	7,737.0	7,737.0	168.7	13.5	90.00	-4,174.1	-3,023.8	6,113.5	5,931.4	182.16	33.561		
17,400.0	7,770.0	7,737.0	7,737.0	170.4	13.5	90.00	-4,174.1	-3,023.8	6,200.6	6,016.7	183.91	33.715		
17,500.0	7,770.0	7,737.0	7,737.0	172.2	13.5	90.00	-4,174.1	-3,023.8	6,288.0	6,102.4	185.66	33.869		
17,600.0	7,770.0	7,737.0	7,737.0	173.9	13.5	90.00	-4,174.1	-3,023.8	6,375.8	6,188.4	187.41	34.021		
17,653.1	7,770.0	7,737.0	7,737.0	174.8	13.5	90.00	-4,174.1	-3,023.8	6,422.6	6,234.2	188.34	34.102		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-144.27	-4,202.5	-3,023.0	5,176.8						
100.0	100.0	81.1	81.1	0.2	0.1	-144.27	-4,202.4	-3,023.1	5,176.8	5,176.5	0.29	N/A			
200.0	200.0	178.7	178.7	0.3	0.3	-144.27	-4,202.3	-3,023.4	5,176.9	5,176.2	0.64	8,069.088			
300.0	300.0	276.4	276.4	0.5	0.5	-144.26	-4,202.0	-3,024.0	5,177.0	5,176.0	0.99	5,238.153			
400.0	400.0	374.0	374.0	0.7	0.7	-144.25	-4,201.6	-3,024.8	5,177.1	5,175.8	1.34	3,877.808			
500.0	500.0	471.7	471.7	0.8	0.8	-144.24	-4,201.0	-3,025.9	5,177.3	5,175.7	1.68	3,078.446			
550.0	550.0	520.5	520.5	0.9	0.9	-144.23	-4,200.7	-3,026.5	5,177.4	5,175.6	1.86	2,790.833			
600.0	600.0	569.3	569.3	1.0	1.0	-145.05	-4,200.4	-3,027.2	5,177.8	5,175.7	2.03	2,552.653			
700.0	700.0	667.0	666.9	1.2	1.2	-145.04	-4,199.6	-3,028.8	5,179.5	5,177.1	2.38	2,180.691			
800.0	799.9	764.6	764.5	1.4	1.3	-145.02	-4,198.7	-3,030.6	5,182.7	5,179.9	2.72	1,903.488			
861.1	860.9	824.1	824.1	1.5	1.5	-145.01	-4,198.1	-3,031.8	5,185.3	5,182.4	2.94	1,766.344			
900.0	899.8	859.3	859.2	1.6	1.5	-145.01	-4,197.7	-3,032.6	5,187.2	5,184.2	3.07	1,691.158			
1,000.0	999.6	932.0	931.9	1.8	1.6	-145.03	-4,197.6	-3,033.1	5,192.1	5,188.8	3.37	1,540.462			
1,100.0	1,099.5	996.0	995.9	1.9	1.8	-145.05	-4,198.4	-3,033.7	5,198.0	5,194.3	3.66	1,420.427			
1,200.0	1,199.3	1,019.3	1,019.2	2.1	1.8	-145.06	-4,198.9	-3,034.1	5,204.9	5,201.1	3.88	1,341.789			
1,300.0	1,299.2	1,060.0	1,059.9	2.3	1.9	-145.07	-4,200.2	-3,034.9	5,213.1	5,209.0	4.13	1,262.660			
1,400.0	1,399.1	1,095.9	1,095.7	2.5	1.9	-145.09	-4,201.8	-3,035.7	5,222.4	5,218.1	4.37	1,195.990			
1,500.0	1,498.9	1,156.0	1,155.7	2.7	2.0	-145.12	-4,205.2	-3,037.5	5,233.1	5,228.4	4.65	1,124.987			
1,600.0	1,598.8	1,156.0	1,155.7	2.9	2.0	-145.12	-4,205.2	-3,037.5	5,244.7	5,239.9	4.83	1,085.165			
1,700.0	1,698.6	1,225.7	1,225.2	3.1	2.2	-145.15	-4,210.3	-3,040.1	5,257.3	5,252.1	5.13	1,024.159			
1,800.0	1,798.5	1,336.1	1,335.1	3.3	2.4	-145.20	-4,218.7	-3,044.7	5,270.4	5,264.9	5.50	957.975			
1,900.0	1,898.3	1,411.0	1,409.7	3.5	2.5	-145.23	-4,224.6	-3,048.1	5,283.7	5,277.9	5.81	909.290			
2,000.0	1,998.2	1,499.9	1,498.2	3.7	2.7	-145.27	-4,231.7	-3,052.3	5,297.4	5,291.2	6.14	862.087			
2,100.0	2,098.0	1,570.0	1,568.0	3.9	2.9	-145.30	-4,237.3	-3,055.5	5,311.1	5,304.7	6.45	823.886			
2,200.0	2,197.9	1,628.3	1,626.0	4.1	3.0	-145.33	-4,242.4	-3,058.3	5,325.5	5,318.8	6.73	791.497			
2,300.0	2,297.7	1,665.0	1,662.5	4.3	3.1	-145.34	-4,245.8	-3,060.3	5,340.8	5,333.9	6.97	765.932			
2,400.0	2,397.6	1,741.0	1,738.0	4.5	3.3	-145.38	-4,253.6	-3,064.5	5,356.9	5,349.6	7.28	735.342			
2,500.0	2,497.4	1,796.7	1,793.3	4.7	3.4	-145.41	-4,259.8	-3,067.7	5,373.7	5,366.1	7.56	710.560			
2,600.0	2,597.3	1,857.0	1,853.1	4.9	3.6	-145.44	-4,266.7	-3,071.7	5,391.3	5,383.5	7.85	686.954			
2,700.0	2,697.1	1,901.0	1,896.6	5.1	3.7	-145.46	-4,272.0	-3,075.0	5,409.8	5,401.7	8.11	667.383			
2,800.0	2,797.0	1,952.0	1,947.0	5.3	3.8	-145.48	-4,278.7	-3,078.7	5,429.1	5,420.7	8.37	648.251			
2,900.0	2,896.8	2,005.0	1,999.4	5.5	4.0	-145.51	-4,286.1	-3,082.7	5,449.3	5,440.6	8.65	630.070			
3,000.0	2,996.7	2,048.0	2,041.8	5.7	4.1	-145.53	-4,292.2	-3,086.3	5,470.2	5,461.3	8.90	614.345			
3,100.0	3,096.5	2,104.2	2,097.1	5.9	4.3	-145.56	-4,300.7	-3,091.2	5,492.1	5,482.9	9.18	598.058			
3,200.0	3,196.4	2,229.2	2,220.0	6.1	4.7	-145.62	-4,320.5	-3,102.1	5,514.6	5,505.0	9.58	575.663			
3,300.0	3,296.3	2,336.2	2,325.4	6.3	5.0	-145.68	-4,336.8	-3,111.1	5,536.3	5,526.3	9.95	556.648			
3,400.0	3,396.1	2,431.1	2,418.8	6.5	5.3	-145.72	-4,350.9	-3,119.4	5,557.9	5,547.6	10.29	540.055			
3,500.0	3,496.0	2,494.0	2,480.8	6.7	5.5	-145.75	-4,360.2	-3,125.1	5,579.7	5,569.2	10.58	527.296			
3,600.0	3,595.8	2,572.0	2,557.5	6.9	5.8	-145.78	-4,371.9	-3,132.8	5,602.1	5,591.2	10.90	514.015			
3,700.0	3,695.7	2,701.3	2,684.7	7.0	6.2	-145.83	-4,391.4	-3,145.6	5,624.5	5,613.2	11.30	497.592			
3,800.0	3,795.5	2,816.1	2,797.7	7.2	6.6	-145.88	-4,409.1	-3,155.5	5,646.6	5,634.9	11.68	483.291			
3,900.0	3,895.4	2,931.8	2,911.7	7.4	7.0	-145.94	-4,426.3	-3,165.3	5,668.0	5,656.0	12.07	469.785			
4,000.0	3,995.2	3,029.9	3,008.4	7.6	7.3	-145.99	-4,441.0	-3,173.7	5,689.6	5,677.1	12.42	458.220			
4,100.0	4,095.1	3,120.5	3,097.7	7.8	7.6	-146.02	-4,454.2	-3,181.6	5,711.0	5,698.3	12.76	447.745			
4,200.0	4,194.9	3,257.7	3,232.9	8.0	8.1	-146.08	-4,474.4	-3,193.5	5,732.5	5,719.4	13.17	435.150			
4,300.0	4,294.8	3,352.0	3,325.9	8.2	8.4	-146.12	-4,487.6	-3,201.2	5,753.2	5,739.7	13.52	425.573			
4,400.0	4,394.6	3,424.1	3,397.0	8.4	8.6	-146.16	-4,497.9	-3,207.1	5,774.2	5,760.3	13.83	417.652			
4,500.0	4,494.5	3,478.4	3,450.4	8.6	8.8	-146.18	-4,506.0	-3,212.0	5,796.0	5,781.8	14.10	411.027			
4,600.0	4,594.3	3,544.0	3,515.0	8.8	9.1	-146.20	-4,516.2	-3,218.2	5,818.5	5,804.1	14.40	404.163			
4,700.0	4,694.2	3,722.0	3,690.2	9.0	9.7	-146.28	-4,542.9	-3,234.5	5,840.4	5,825.6	14.88	392.371			
4,800.0	4,794.0	3,869.3	3,835.5	9.2	10.1	-146.34	-4,563.5	-3,246.7	5,861.0	5,845.7	15.32	382.544			
4,900.0	4,893.9	3,939.3	3,904.6	9.4	10.4	-146.36	-4,573.2	-3,252.9	5,881.8	5,866.2	15.62	376.461			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,019.0	3,983.2	9.6	10.6	-146.39	-4,584.3	-3,260.0	5,902.8	5,886.9	15.94	370.240		
5,100.0	5,093.6	4,073.5	4,036.9	9.8	10.8	-146.41	-4,592.1	-3,265.1	5,924.4	5,908.2	16.22	365.274		
5,200.0	5,193.5	4,130.6	4,093.1	10.0	11.0	-146.42	-4,600.5	-3,270.9	5,946.8	5,930.3	16.50	360.426		
5,300.0	5,293.3	4,243.4	4,204.0	10.2	11.4	-146.46	-4,617.9	-3,281.9	5,969.4	5,952.5	16.88	353.728		
5,400.0	5,393.2	4,465.0	4,422.4	10.4	12.2	-146.53	-4,648.9	-3,302.1	5,990.3	5,972.9	17.44	343.509		
5,500.0	5,493.0	4,520.4	4,477.1	10.6	12.4	-146.55	-4,656.4	-3,307.2	6,011.0	5,993.3	17.72	339.295		
5,600.0	5,592.9	4,650.9	4,605.8	10.8	12.8	-146.59	-4,674.3	-3,319.0	6,032.0	6,013.8	18.12	332.840		
5,700.0	5,692.7	4,687.0	4,641.4	11.0	12.9	-146.60	-4,679.3	-3,322.2	6,052.9	6,034.6	18.37	329.555		
5,800.0	5,792.6	4,740.1	4,693.7	11.2	13.1	-146.62	-4,687.0	-3,327.0	6,074.7	6,056.1	18.64	325.890		
5,900.0	5,892.4	4,947.2	4,897.8	11.4	13.8	-146.68	-4,716.8	-3,346.6	6,096.6	6,077.4	19.18	317.892		
6,000.0	5,992.3	5,034.6	4,984.1	11.6	14.1	-146.71	-4,728.3	-3,354.5	6,117.2	6,097.7	19.51	313.531		
6,100.0	6,092.1	5,168.6	5,116.3	11.8	14.5	-146.75	-4,746.1	-3,366.6	6,137.7	6,117.8	19.92	308.071		
6,200.0	6,192.0	5,305.6	5,251.7	12.0	15.0	-146.80	-4,764.5	-3,377.0	6,157.6	6,137.3	20.34	302.718		
6,300.0	6,291.8	5,414.5	5,359.4	12.2	15.3	-146.84	-4,778.2	-3,385.5	6,176.9	6,156.1	20.71	298.248		
6,400.0	6,391.7	5,487.1	5,431.1	12.4	15.5	-146.85	-4,787.0	-3,391.8	6,196.3	6,175.3	21.02	294.820		
6,500.0	6,491.5	5,543.0	5,486.4	12.6	15.7	-146.87	-4,794.3	-3,396.5	6,216.3	6,195.0	21.30	291.905		
6,600.0	6,591.4	5,621.4	5,563.8	12.8	16.0	-146.89	-4,804.7	-3,403.3	6,236.7	6,215.1	21.61	288.572		
6,700.0	6,691.2	5,764.0	5,700.3	13.0	16.4	-147.21	-4,884.7	-3,456.0	6,254.7	6,230.9	23.77	263.131		
6,800.0	6,791.1	6,881.1	6,817.4	13.2	18.5	-147.23	-4,883.8	-3,456.3	6,258.8	6,234.6	24.16	259.096		
6,900.0	6,890.9	6,983.7	6,919.9	13.4	18.6	-147.25	-4,882.6	-3,456.6	6,262.6	6,238.0	24.52	255.438		
7,000.0	6,990.8	7,072.6	7,008.9	13.6	18.7	-147.27	-4,881.6	-3,457.1	6,266.5	6,241.6	24.85	252.131		
7,024.2	7,014.9	7,093.8	7,030.0	13.6	18.8	-147.27	-4,881.4	-3,457.2	6,267.4	6,242.5	24.93	251.352		
7,050.0	7,040.7	7,116.4	7,052.7	13.7	18.8	-148.96	-4,881.2	-3,457.3	6,268.1	6,243.1	25.05	250.207		
7,100.0	7,090.7	7,155.2	7,091.5	13.7	18.8	34.46	-4,880.8	-3,457.6	6,267.2	6,242.0	25.22	248.487		
7,150.0	7,140.5	7,189.8	7,126.0	13.8	18.9	34.14	-4,880.5	-3,457.9	6,263.6	6,238.3	25.32	247.329		
7,200.0	7,189.9	7,231.0	7,167.2	13.8	18.9	34.33	-4,880.3	-3,458.4	6,257.2	6,231.8	25.38	246.511		
7,250.0	7,238.6	7,270.0	7,206.2	13.8	19.0	34.74	-4,880.1	-3,458.9	6,248.0	6,222.6	25.39	246.120		
7,300.0	7,286.4	7,318.0	7,254.3	13.7	19.0	35.35	-4,879.7	-3,459.6	6,236.0	6,210.6	25.36	245.879		
7,350.0	7,333.1	7,359.1	7,295.3	13.7	19.1	36.14	-4,879.4	-3,460.4	6,221.3	6,196.0	25.30	245.946		
7,400.0	7,378.5	7,397.8	7,334.0	13.6	19.1	37.10	-4,879.1	-3,461.0	6,204.0	6,178.8	25.21	246.098		
7,450.0	7,422.2	7,437.2	7,373.4	13.6	19.2	38.27	-4,878.9	-3,461.6	6,184.2	6,159.0	25.13	246.098		
7,500.0	7,464.1	7,478.9	7,415.1	13.5	19.2	39.66	-4,878.8	-3,462.3	6,161.9	6,136.8	25.08	245.686		
7,550.0	7,504.1	7,518.6	7,454.9	13.5	19.3	41.29	-4,878.6	-3,462.8	6,137.3	6,112.2	25.08	244.685		
7,600.0	7,541.8	7,561.0	7,497.2	13.5	19.3	43.20	-4,878.5	-3,463.3	6,110.5	6,085.3	25.18	242.718		
7,650.0	7,577.2	7,600.7	7,536.9	13.4	19.4	45.40	-4,878.5	-3,463.7	6,081.6	6,056.2	25.38	239.648		
7,700.0	7,610.0	7,637.7	7,573.9	13.5	19.4	47.92	-4,878.4	-3,464.1	6,050.8	6,025.1	25.72	235.302		
7,750.0	7,640.2	7,684.2	7,620.4	13.5	19.5	50.87	-4,878.3	-3,464.3	6,018.2	5,992.0	26.25	229.296		
7,800.0	7,667.4	7,730.0	7,666.2	13.6	19.5	54.25	-4,878.2	-3,464.4	5,984.0	5,957.1	26.96	221.976		
7,850.0	7,691.7	7,758.9	7,695.1	13.7	19.6	57.90	-4,878.1	-3,464.3	5,948.4	5,920.6	27.79	214.037		
7,900.0	7,712.8	7,779.8	7,716.0	13.9	19.6	61.89	-4,878.1	-3,464.3	5,911.6	5,882.9	28.74	205.660		
7,950.0	7,730.8	7,797.5	7,733.7	14.1	19.6	66.25	-4,878.0	-3,464.3	5,873.9	5,844.1	29.79	197.192		
8,000.0	7,745.5	7,812.0	7,748.2	14.4	19.6	70.95	-4,878.0	-3,464.2	5,835.3	5,804.5	30.86	189.113		
8,050.0	7,756.7	7,823.1	7,759.3	14.7	19.6	75.92	-4,878.0	-3,464.2	5,796.2	5,764.3	31.88	181.841		
8,100.0	7,764.6	7,830.8	7,767.0	15.1	19.6	81.09	-4,877.9	-3,464.2	5,756.7	5,724.0	32.77	175.681		
8,150.0	7,769.0	7,835.1	7,771.3	15.5	19.7	86.34	-4,877.9	-3,464.2	5,717.1	5,683.6	33.47	170.806		
8,188.1	7,770.0	7,836.0	7,772.2	15.9	19.7	90.32	-4,877.9	-3,464.2	5,686.9	5,653.0	33.85	167.987		
8,200.0	7,770.0	7,836.0	7,772.2	16.0	19.7	90.32	-4,877.9	-3,464.2	5,677.4	5,643.4	33.96	167.162		
8,300.0	7,770.0	7,835.8	7,772.0	17.0	19.7	90.31	-4,877.9	-3,464.2	5,598.6	5,563.6	34.96	160.131		
8,400.0	7,770.0	7,835.5	7,771.7	18.1	19.7	90.31	-4,877.9	-3,464.2	5,520.5	5,484.4	36.08	153.020		
8,500.0	7,770.0	7,835.3	7,771.5	19.3	19.7	90.31	-4,877.9	-3,464.2	5,443.0	5,405.8	37.29	145.980		
8,600.0	7,770.0	7,835.1	7,771.3	20.6	19.7	90.30	-4,877.9	-3,464.2	5,366.4	5,327.8	38.57	139.117		
8,700.0	7,770.0	7,834.9	7,771.1	21.9	19.7	90.30	-4,877.9	-3,464.2	5,290.5	5,250.6	39.93	132.503		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
8,800.0	7,770.0	7,834.7	7,770.9	23.3	19.7	90.30	-4,877.9	-3,464.2	5,215.4	5,174.1	41.33	126.178			
8,900.0	7,770.0	7,834.5	7,770.7	24.8	19.7	90.29	-4,877.9	-3,464.2	5,141.2	5,098.4	42.78	120.165			
9,000.0	7,770.0	7,834.3	7,770.5	26.3	19.7	90.29	-4,877.9	-3,464.2	5,067.8	5,023.6	44.27	114.471			
9,100.0	7,770.0	7,834.0	7,770.2	27.8	19.7	90.28	-4,877.9	-3,464.2	4,995.4	4,949.6	45.79	109.093			
9,200.0	7,770.0	7,833.8	7,770.0	29.3	19.7	90.28	-4,877.9	-3,464.2	4,924.0	4,876.6	47.34	104.023			
9,300.0	7,770.0	7,833.6	7,769.8	30.9	19.7	90.28	-4,877.9	-3,464.2	4,853.5	4,804.6	48.90	99.249			
9,400.0	7,770.0	7,833.4	7,769.6	32.5	19.6	90.27	-4,877.9	-3,464.2	4,784.2	4,733.7	50.49	94.756			
9,500.0	7,770.0	7,833.2	7,769.4	34.1	19.6	90.27	-4,877.9	-3,464.2	4,715.9	4,663.8	52.09	90.530			
9,600.0	7,770.0	7,832.9	7,769.1	35.7	19.6	90.27	-4,877.9	-3,464.2	4,648.7	4,595.0	53.71	86.554			
9,700.0	7,770.0	7,832.7	7,768.9	37.3	19.6	90.26	-4,877.9	-3,464.2	4,582.8	4,527.4	55.34	82.814			
9,800.0	7,770.0	7,832.5	7,768.7	39.0	19.6	90.26	-4,877.9	-3,464.2	4,518.1	4,461.1	56.98	79.295			
9,900.0	7,770.0	7,832.3	7,768.5	40.6	19.6	90.26	-4,877.9	-3,464.2	4,454.7	4,396.1	58.63	75.983			
10,000.0	7,770.0	7,832.1	7,768.3	42.3	19.6	90.25	-4,877.9	-3,464.2	4,392.7	4,332.4	60.29	72.864			
10,100.0	7,770.0	7,831.8	7,768.0	44.0	19.6	90.25	-4,877.9	-3,464.2	4,332.1	4,270.1	61.95	69.927			
10,200.0	7,770.0	7,831.6	7,767.8	45.6	19.6	90.24	-4,877.9	-3,464.2	4,273.0	4,209.3	63.62	67.160			
10,300.0	7,770.0	7,831.4	7,767.6	47.3	19.6	90.24	-4,877.9	-3,464.2	4,215.4	4,150.1	65.30	64.553			
10,400.0	7,770.0	7,831.2	7,767.4	49.0	19.6	90.24	-4,877.9	-3,464.2	4,159.4	4,092.4	66.98	62.095			
10,500.0	7,770.0	7,831.0	7,767.2	50.7	19.6	90.23	-4,877.9	-3,464.2	4,105.1	4,036.4	68.67	59.778			
10,600.0	7,770.0	7,830.7	7,766.9	52.4	19.6	90.23	-4,877.9	-3,464.2	4,052.6	3,982.2	70.36	57.593			
10,700.0	7,770.0	7,830.5	7,766.7	54.1	19.6	90.23	-4,877.9	-3,464.2	4,001.8	3,929.7	72.06	55.533			
10,800.0	7,770.0	7,830.3	7,766.5	55.8	19.6	90.22	-4,877.9	-3,464.2	3,952.9	3,879.2	73.76	53.591			
10,900.0	7,770.0	7,830.1	7,766.3	57.5	19.6	90.22	-4,877.9	-3,464.2	3,906.0	3,830.6	75.46	51.760			
11,000.0	7,770.0	7,829.8	7,766.0	59.2	19.6	90.21	-4,877.9	-3,464.2	3,861.1	3,783.9	77.17	50.034			
11,100.0	7,770.0	7,829.6	7,765.8	60.9	19.6	90.21	-4,877.9	-3,464.2	3,818.3	3,739.4	78.88	48.407			
11,200.0	7,770.0	7,829.4	7,765.6	62.6	19.6	90.21	-4,877.9	-3,464.2	3,777.7	3,697.1	80.59	46.875			
11,300.0	7,770.0	7,829.1	7,765.3	64.3	19.6	90.20	-4,877.9	-3,464.2	3,739.3	3,656.9	82.30	45.432			
11,400.0	7,770.0	7,828.9	7,765.1	66.0	19.6	90.20	-4,877.9	-3,464.2	3,703.1	3,619.1	84.02	44.075			
11,500.0	7,770.0	7,828.7	7,764.9	67.7	19.6	90.20	-4,877.9	-3,464.2	3,669.4	3,583.7	85.74	42.798			
11,600.0	7,770.0	7,828.5	7,764.7	69.5	19.6	90.19	-4,878.0	-3,464.2	3,638.1	3,550.6	87.46	41.599			
11,700.0	7,770.0	7,828.2	7,764.4	71.2	19.6	90.19	-4,878.0	-3,464.2	3,609.3	3,520.1	89.18	40.473			
11,800.0	7,770.0	7,828.0	7,764.2	72.9	19.6	90.18	-4,878.0	-3,464.2	3,583.1	3,492.2	90.90	39.417			
11,900.0	7,770.0	7,827.8	7,764.0	74.6	19.6	90.18	-4,878.0	-3,464.2	3,559.4	3,466.8	92.62	38.429			
12,000.0	7,770.0	7,827.5	7,763.7	76.4	19.6	90.18	-4,878.0	-3,464.2	3,538.5	3,444.1	94.35	37.504			
12,100.0	7,770.0	7,827.3	7,763.5	78.1	19.6	90.17	-4,878.0	-3,464.2	3,520.2	3,424.2	96.08	36.640			
12,200.0	7,770.0	7,827.1	7,763.3	79.8	19.6	90.17	-4,878.0	-3,464.2	3,504.8	3,407.0	97.80	35.834			
12,300.0	7,770.0	7,826.8	7,763.0	81.5	19.6	90.17	-4,878.0	-3,464.2	3,492.1	3,392.5	99.53	35.084			
12,400.0	7,770.0	7,826.6	7,762.8	83.3	19.6	90.16	-4,878.0	-3,464.2	3,482.2	3,381.0	101.26	34.388			
12,500.0	7,770.0	7,826.4	7,762.6	85.0	19.6	90.16	-4,878.0	-3,464.2	3,475.2	3,372.2	102.99	33.742			
12,600.0	7,770.0	7,826.1	7,762.3	86.7	19.6	90.15	-4,878.0	-3,464.2	3,471.1	3,366.3	104.73	33.144			
12,693.7	7,770.0	7,825.9	7,762.1	88.4	19.6	90.15	-4,878.0	-3,464.2	3,469.8	3,363.5	106.35	32.626 CC			
12,700.0	7,770.0	7,825.9	7,762.1	88.5	19.6	90.15	-4,878.0	-3,464.2	3,469.8	3,363.4	106.46	32.593			
12,800.0	7,770.0	7,825.7	7,761.9	90.2	19.6	90.15	-4,878.0	-3,464.2	3,471.4	3,363.2	108.19	32.086 ES			
12,900.0	7,770.0	7,825.4	7,761.6	91.9	19.6	90.14	-4,878.0	-3,464.2	3,475.9	3,366.0	109.93	31.620			
13,000.0	7,770.0	7,825.2	7,761.4	93.7	19.6	90.14	-4,878.0	-3,464.2	3,483.3	3,371.6	111.66	31.195			
13,100.0	7,770.0	7,825.0	7,761.2	95.4	19.6	90.13	-4,878.0	-3,464.2	3,493.5	3,380.1	113.40	30.808			
13,200.0	7,770.0	7,824.7	7,760.9	97.1	19.6	90.13	-4,878.0	-3,464.2	3,506.5	3,391.4	115.13	30.456			
13,300.0	7,770.0	7,824.5	7,760.7	98.9	19.6	90.13	-4,878.0	-3,464.2	3,522.4	3,405.5	116.87	30.139			
13,400.0	7,770.0	7,824.3	7,760.5	100.6	19.6	90.12	-4,878.0	-3,464.2	3,541.0	3,422.3	118.61	29.854			
13,500.0	7,770.0	7,824.0	7,760.2	102.4	19.6	90.12	-4,878.0	-3,464.2	3,562.3	3,441.9	120.35	29.600			
13,600.0	7,770.0	7,823.8	7,760.0	104.1	19.6	90.12	-4,878.0	-3,464.2	3,586.2	3,464.1	122.09	29.374			
13,700.0	7,770.0	7,823.5	7,759.7	105.8	19.6	90.11	-4,878.0	-3,464.2	3,612.8	3,488.9	123.82	29.176			
13,800.0	7,770.0	7,823.3	7,759.5	107.6	19.6	90.11	-4,878.0	-3,464.2	3,641.9	3,516.3	125.56	29.004			

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	7,823.1	7,759.3	109.3	19.6	90.10	-4,878.0	-3,464.2	3,673.5	3,546.2	127.30	28.856		
14,000.0	7,770.0	7,822.8	7,759.0	111.1	19.6	90.10	-4,878.0	-3,464.2	3,707.5	3,578.5	129.05	28.731		
14,100.0	7,770.0	7,822.6	7,758.8	112.8	19.6	90.10	-4,878.0	-3,464.2	3,743.9	3,613.2	130.79	28.626		
14,200.0	7,770.0	7,822.3	7,758.5	114.5	19.6	90.09	-4,878.0	-3,464.2	3,782.6	3,650.1	132.53	28.542		
14,300.0	7,770.0	7,822.1	7,758.3	116.3	19.6	90.09	-4,878.0	-3,464.2	3,823.6	3,689.3	134.27	28.477		
14,400.0	7,770.0	7,821.8	7,758.0	118.0	19.6	90.08	-4,878.0	-3,464.2	3,866.6	3,730.6	136.01	28.429		
14,500.0	7,770.0	7,821.6	7,757.8	119.8	19.6	90.08	-4,878.0	-3,464.2	3,911.8	3,774.0	137.75	28.397		
14,600.0	7,770.0	7,821.4	7,757.6	121.5	19.6	90.08	-4,878.0	-3,464.2	3,959.0	3,819.5	139.50	28.380		
14,700.0	7,770.0	7,821.1	7,757.3	123.3	19.6	90.07	-4,878.0	-3,464.2	4,008.1	3,866.8	141.24	28.378 SF		
14,800.0	7,770.0	7,820.9	7,757.1	125.0	19.6	90.07	-4,878.0	-3,464.2	4,059.1	3,916.1	142.98	28.388		
14,900.0	7,770.0	7,820.6	7,756.8	126.7	19.6	90.06	-4,878.0	-3,464.2	4,111.8	3,967.1	144.73	28.411		
15,000.0	7,770.0	7,820.4	7,756.6	128.5	19.6	90.06	-4,878.0	-3,464.2	4,166.3	4,019.9	146.47	28.445		
15,100.0	7,770.0	7,820.1	7,756.3	130.2	19.6	90.05	-4,878.0	-3,464.2	4,222.5	4,074.3	148.21	28.489		
15,200.0	7,770.0	7,819.9	7,756.1	132.0	19.6	90.05	-4,878.0	-3,464.2	4,280.3	4,130.3	149.96	28.543		
15,300.0	7,770.0	7,819.6	7,755.8	133.7	19.6	90.05	-4,878.0	-3,464.2	4,339.6	4,187.9	151.70	28.606		
15,400.0	7,770.0	7,819.4	7,755.6	135.5	19.6	90.04	-4,878.0	-3,464.2	4,400.4	4,246.9	153.45	28.677		
15,500.0	7,770.0	7,819.1	7,755.3	137.2	19.6	90.04	-4,878.0	-3,464.2	4,462.6	4,307.4	155.19	28.755		
15,600.0	7,770.0	7,818.9	7,755.1	139.0	19.6	90.03	-4,878.0	-3,464.2	4,526.1	4,369.2	156.94	28.840		
15,700.0	7,770.0	7,818.6	7,754.8	140.7	19.6	90.03	-4,878.0	-3,464.2	4,591.0	4,432.3	158.68	28.932		
15,800.0	7,770.0	7,818.4	7,754.6	142.4	19.6	90.03	-4,878.0	-3,464.2	4,657.1	4,496.7	160.43	29.029		
15,900.0	7,770.0	7,818.1	7,754.3	144.2	19.6	90.02	-4,878.0	-3,464.2	4,724.4	4,562.2	162.18	29.131		
16,000.0	7,770.0	7,817.9	7,754.1	145.9	19.6	90.02	-4,878.0	-3,464.2	4,792.8	4,628.9	163.92	29.238		
16,100.0	7,770.0	7,817.6	7,753.8	147.7	19.6	90.01	-4,878.0	-3,464.2	4,862.3	4,696.7	165.67	29.350		
16,200.0	7,770.0	7,817.4	7,753.6	149.4	19.6	90.01	-4,878.0	-3,464.2	4,932.9	4,765.5	167.41	29.465		
16,300.0	7,770.0	7,817.1	7,753.3	151.2	19.6	90.00	-4,878.0	-3,464.2	5,004.5	4,835.3	169.16	29.584		
16,400.0	7,770.0	7,816.9	7,753.1	152.9	19.6	90.00	-4,878.0	-3,464.2	5,077.0	4,906.1	170.91	29.706		
16,500.0	7,770.0	7,816.6	7,752.8	154.7	19.6	90.00	-4,878.0	-3,464.2	5,150.5	4,977.8	172.66	29.831		
16,600.0	7,770.0	7,816.3	7,752.5	156.4	19.6	89.99	-4,878.0	-3,464.2	5,224.8	5,050.4	174.40	29.958		
16,700.0	7,770.0	7,816.1	7,752.3	158.2	19.6	89.99	-4,878.0	-3,464.2	5,300.0	5,123.8	176.15	30.088		
16,800.0	7,770.0	7,815.8	7,752.0	159.9	19.6	89.98	-4,878.0	-3,464.2	5,376.0	5,198.1	177.90	30.220		
16,900.0	7,770.0	7,815.6	7,751.8	161.7	19.6	89.98	-4,878.0	-3,464.2	5,452.7	5,273.1	179.64	30.353		
17,000.0	7,770.0	7,815.3	7,751.5	163.4	19.6	89.98	-4,878.0	-3,464.2	5,530.2	5,348.8	181.39	30.488		
17,100.0	7,770.0	7,815.1	7,751.3	165.2	19.6	89.97	-4,878.0	-3,464.2	5,608.5	5,425.3	183.14	30.624		
17,200.0	7,770.0	7,814.8	7,751.0	166.9	19.6	89.97	-4,878.0	-3,464.2	5,687.4	5,502.5	184.89	30.761		
17,300.0	7,770.0	7,814.5	7,750.7	168.7	19.6	89.96	-4,878.0	-3,464.2	5,766.9	5,580.3	186.64	30.899		
17,400.0	7,770.0	7,814.3	7,750.5	170.4	19.6	89.96	-4,878.0	-3,464.2	5,847.1	5,658.7	188.38	31.038		
17,500.0	7,770.0	7,814.0	7,750.2	172.2	19.6	89.95	-4,878.0	-3,464.2	5,927.9	5,737.7	190.13	31.178		
17,600.0	7,770.0	7,813.8	7,750.0	173.9	19.6	89.95	-4,878.0	-3,464.2	6,009.2	5,817.4	191.88	31.318		
17,653.1	7,770.0	7,813.6	7,749.8	174.8	19.6	89.95	-4,878.0	-3,464.2	6,052.6	5,859.8	192.81	31.392		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	1,679.3	1,628.7	0.0	7.2	-145.28	-3,959.9	-2,743.6	5,091.2					
100.0	100.0	1,754.0	1,699.3	0.2	7.6	-145.35	-3,943.5	-2,725.3	5,059.0	5,055.3	3.76	1,343.708		
200.0	200.0	1,832.7	1,773.7	0.3	8.1	-145.43	-3,926.5	-2,706.0	5,027.2	5,023.1	4.12	1,220.479		
300.0	300.0	1,944.0	1,878.9	0.5	8.8	-145.53	-3,902.1	-2,679.1	4,995.4	4,990.9	4.55	1,098.270		
400.0	400.0	1,996.8	1,928.8	0.7	9.1	-145.58	-3,890.7	-2,666.4	4,963.8	4,959.0	4.84	1,024.877		
500.0	500.0	2,049.4	1,978.8	0.8	9.4	-145.62	-3,879.6	-2,654.0	4,933.1	4,927.9	5.14	960.012		
550.0	550.0	2,084.5	2,012.1	0.9	9.6	-145.66	-3,872.4	-2,645.8	4,918.0	4,912.7	5.31	926.570		
600.0	600.0	2,170.9	2,094.2	1.0	10.1	-146.67	-3,854.7	-2,625.4	4,903.0	4,897.5	5.54	885.498		
700.0	700.0	2,291.7	2,208.5	1.2	10.8	-146.98	-3,829.2	-2,595.9	4,873.0	4,867.0	6.02	809.221		
800.0	799.9	2,379.8	2,291.9	1.4	11.4	-147.25	-3,810.7	-2,574.3	4,844.6	4,838.2	6.43	752.998		
861.1	860.9	2,420.0	2,329.9	1.5	11.6	-147.40	-3,802.3	-2,564.4	4,828.0	4,821.4	6.65	725.659		
900.0	899.8	2,454.4	2,362.5	1.6	11.8	-147.45	-3,795.1	-2,556.1	4,817.7	4,810.9	6.80	708.019		
1,000.0	999.6	2,515.0	2,420.1	1.8	12.2	-147.53	-3,782.6	-2,541.8	4,791.7	4,784.6	7.13	672.281		
1,100.0	1,099.5	2,630.5	2,529.8	1.9	12.8	-147.70	-3,759.1	-2,514.4	4,765.8	4,758.2	7.60	627.414		
1,200.0	1,199.3	2,742.9	2,636.5	2.1	13.5	-147.85	-3,735.6	-2,488.0	4,739.8	4,731.7	8.05	588.752		
1,300.0	1,299.2	2,896.0	2,781.3	2.3	14.4	-148.08	-3,703.0	-2,450.4	4,712.7	4,704.1	8.62	546.795		
1,400.0	1,399.1	2,961.8	2,843.4	2.5	14.8	-148.17	-3,688.6	-2,434.4	4,685.4	4,676.4	8.97	522.431		
1,500.0	1,498.9	3,065.6	2,941.7	2.7	15.5	-148.33	-3,666.8	-2,409.2	4,658.8	4,649.4	9.41	494.838		
1,600.0	1,598.8	3,214.4	3,082.2	2.9	16.4	-148.55	-3,633.8	-2,372.6	4,631.0	4,621.1	9.98	464.040		
1,700.0	1,698.6	3,276.0	3,140.2	3.1	16.8	-148.65	-3,620.2	-2,357.2	4,603.2	4,592.9	10.33	445.799		
1,800.0	1,798.5	3,341.6	3,202.2	3.3	17.2	-148.75	-3,606.1	-2,340.9	4,576.1	4,565.4	10.68	428.516		
1,900.0	1,898.3	3,399.0	3,256.6	3.5	17.5	-148.84	-3,594.1	-2,327.2	4,549.9	4,538.9	11.01	413.193		
2,000.0	1,998.2	3,467.0	3,321.2	3.7	17.9	-148.95	-3,580.3	-2,311.1	4,524.5	4,513.1	11.37	397.772		
2,100.0	2,098.0	3,596.7	3,444.4	3.9	18.7	-149.15	-3,553.4	-2,280.7	4,498.7	4,486.8	11.89	378.223		
2,200.0	2,197.9	3,673.6	3,517.5	4.1	19.1	-149.26	-3,537.5	-2,262.8	4,473.2	4,460.9	12.28	364.311		
2,300.0	2,297.7	3,817.0	3,653.5	4.3	20.0	-149.49	-3,507.5	-2,228.7	4,447.1	4,434.3	12.86	345.927		
2,400.0	2,397.6	3,964.1	3,792.4	4.5	20.9	-149.75	-3,476.1	-2,191.9	4,420.1	4,406.6	13.46	328.428		
2,500.0	2,497.4	4,052.9	3,876.2	4.7	21.4	-149.90	-3,456.6	-2,169.8	4,392.7	4,378.8	13.89	316.239		
2,600.0	2,597.3	4,132.0	3,950.8	4.9	21.9	-150.04	-3,439.3	-2,150.1	4,365.4	4,351.1	14.30	305.261		
2,700.0	2,697.1	4,206.0	4,020.7	5.1	22.4	-150.17	-3,423.3	-2,131.8	4,338.6	4,323.9	14.70	295.242		
2,800.0	2,797.0	4,286.8	4,097.3	5.3	22.9	-150.31	-3,406.3	-2,112.3	4,312.4	4,297.3	15.11	285.423		
2,900.0	2,896.8	4,355.0	4,161.9	5.5	23.3	-150.42	-3,392.0	-2,096.1	4,286.6	4,271.1	15.49	276.821		
3,000.0	2,996.7	4,435.2	4,238.2	5.7	23.7	-150.56	-3,375.6	-2,077.4	4,261.5	4,245.6	15.90	268.092		
3,100.0	3,096.5	4,513.0	4,312.2	5.9	24.2	-150.69	-3,359.9	-2,059.5	4,236.8	4,220.5	16.30	259.946		
3,200.0	3,196.4	4,604.9	4,399.9	6.1	24.7	-150.85	-3,341.3	-2,038.8	4,212.4	4,195.6	16.74	251.688		
3,300.0	3,296.3	4,732.5	4,521.0	6.3	25.5	-151.07	-3,314.7	-2,008.8	4,186.7	4,169.4	17.30	242.011		
3,400.0	3,396.1	4,881.2	4,662.2	6.5	26.3	-151.34	-3,283.9	-1,974.0	4,161.7	4,143.8	17.93	232.147		
3,500.0	3,496.0	4,926.0	4,704.7	6.7	26.6	-151.42	-3,274.5	-1,963.3	4,136.1	4,117.8	18.25	226.694		
3,600.0	3,595.8	5,021.0	4,795.0	6.9	27.2	-151.59	-3,255.0	-1,941.1	4,111.0	4,092.3	18.71	219.687		
3,700.0	3,695.7	5,091.9	4,862.4	7.0	27.6	-151.72	-3,240.4	-1,924.9	4,086.3	4,067.2	19.10	213.930		
3,800.0	3,795.5	5,222.4	4,986.7	7.2	28.3	-151.95	-3,213.2	-1,895.8	4,061.7	4,042.0	19.66	206.576		
3,900.0	3,895.4	5,307.0	5,067.2	7.4	28.8	-152.10	-3,195.4	-1,876.6	4,036.7	4,016.6	20.10	200.849		
4,000.0	3,995.2	5,370.0	5,127.2	7.6	29.2	-152.21	-3,182.4	-1,862.7	4,012.4	3,991.9	20.46	196.102		
4,100.0	4,095.1	5,405.5	5,161.2	7.8	29.3	-152.27	-3,175.3	-1,855.2	3,989.1	3,968.4	20.74	192.328		
4,200.0	4,194.9	5,456.4	5,210.1	8.0	29.6	-152.35	-3,165.7	-1,844.9	3,967.3	3,946.2	21.07	188.326		
4,300.0	4,294.8	5,543.8	5,294.2	8.2	30.1	-152.50	-3,149.8	-1,827.1	3,946.1	3,924.6	21.52	183.389		
4,400.0	4,394.6	5,616.2	5,363.7	8.4	30.4	-152.65	-3,137.5	-1,811.2	3,925.2	3,903.2	21.94	178.895		
4,500.0	4,494.5	5,739.7	5,482.6	8.6	31.1	-152.89	-3,116.8	-1,785.0	3,905.1	3,882.6	22.51	173.462		
4,600.0	4,594.3	5,788.4	5,529.5	8.8	31.3	-152.98	-3,108.2	-1,775.1	3,884.5	3,861.7	22.84	170.079		
4,700.0	4,694.2	5,814.0	5,554.2	9.0	31.4	-153.03	-3,103.9	-1,770.1	3,865.5	3,842.4	23.10	167.365		
4,800.0	4,794.0	5,891.5	5,629.4	9.2	31.8	-153.16	-3,091.5	-1,755.7	3,847.5	3,824.0	23.49	163.770		
4,900.0	4,893.9	5,941.0	5,677.5	9.4	32.0	-153.24	-3,084.0	-1,747.1	3,830.6	3,806.7	23.81	160.881		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	6,004.0	5,739.0		9.6	32.2	-153.34	-3,074.8	-1,736.9	3,814.9	3,790.7	24.16	157.918	
5,100.0	5,093.6	6,068.0	5,801.7		9.8	32.5	-153.43	-3,065.9	-1,727.2	3,800.2	3,775.7	24.50	155.111	
5,200.0	5,193.5	6,131.0	5,863.4		10.0	32.7	-153.51	-3,057.1	-1,718.4	3,786.2	3,761.3	24.83	152.507	
5,300.0	5,293.3	6,168.8	5,900.6		10.2	32.9	-153.55	-3,052.2	-1,713.6	3,773.6	3,748.5	25.09	150.392	
5,400.0	5,393.2	6,195.0	5,926.4		10.4	32.9	-153.58	-3,049.1	-1,710.4	3,762.7	3,737.3	25.33	148.545	
5,500.0	5,493.0	6,258.0	5,988.7		10.6	33.1	-153.65	-3,042.5	-1,703.6	3,753.2	3,727.5	25.64	146.353	
5,600.0	5,592.9	6,322.0	6,052.1		10.8	33.3	-153.72	-3,036.4	-1,697.5	3,745.1	3,719.1	25.96	144.292	
5,700.0	5,692.7	6,358.8	6,088.7		11.0	33.4	-153.75	-3,033.2	-1,694.4	3,738.2	3,711.9	26.21	142.647	
5,800.0	5,792.6	6,418.2	6,147.7		11.2	33.5	-153.80	-3,028.6	-1,689.9	3,732.6	3,706.1	26.50	140.865	
5,900.0	5,892.4	6,449.0	6,178.3		11.4	33.6	-153.83	-3,026.3	-1,687.7	3,728.1	3,701.4	26.73	139.451	
6,000.0	5,992.3	6,519.5	6,248.5		11.6	33.7	-153.88	-3,021.8	-1,683.4	3,724.7	3,697.6	27.03	137.787	
6,100.0	6,092.1	6,575.0	6,303.9		11.8	33.8	-153.92	-3,019.1	-1,680.8	3,722.9	3,695.6	27.30	136.359	
6,200.0	6,192.0	6,629.3	6,358.2		12.0	33.8	-153.95	-3,016.9	-1,678.8	3,722.4	3,694.9	27.57	135.019	
6,212.4	6,204.3	6,639.0	6,367.8		12.0	33.9	-153.96	-3,016.6	-1,678.4	3,722.4	3,694.8	27.61	134.834	
6,300.0	6,291.8	6,702.0	6,430.8		12.2	33.9	-153.99	-3,014.4	-1,676.4	3,722.7	3,694.9	27.86	133.603	
6,400.0	6,391.7	6,748.4	6,477.1		12.4	34.0	-154.02	-3,013.2	-1,675.2	3,724.1	3,696.0	28.11	132.461	
6,500.0	6,491.5	6,798.0	6,526.7		12.6	34.0	-154.04	-3,012.5	-1,674.3	3,726.9	3,698.6	28.37	131.369	
6,600.0	6,591.4	6,886.5	6,615.2		12.8	34.1	-154.09	-3,011.8	-1,673.2	3,730.5	3,701.8	28.68	130.080	
6,700.0	6,691.2	6,955.4	6,684.1		13.0	34.1	-154.11	-3,011.2	-1,673.2	3,734.7	3,705.7	28.95	129.024	
6,800.0	6,791.1	7,042.7	6,771.4		13.2	34.2	-154.13	-3,011.0	-1,673.5	3,739.5	3,710.3	29.24	127.884	
6,900.0	6,890.9	7,147.6	6,876.3		13.4	34.3	-154.17	-3,011.0	-1,673.5	3,744.3	3,714.8	29.57	126.638	
7,000.0	6,990.8	7,251.5	6,980.2		13.6	34.3	-154.21	-3,010.9	-1,673.5	3,749.2	3,719.3	29.89	125.439	
7,024.2	7,014.9	7,281.0	7,009.7		13.6	34.3	-154.22	-3,010.8	-1,673.6	3,750.3	3,720.3	29.97	125.132	
7,050.0	7,040.7	7,311.8	7,040.5		13.7	34.4	-155.90	-3,010.6	-1,673.6	3,751.0	3,721.0	30.04	124.864	
7,100.0	7,090.7	7,366.8	7,095.5		13.7	34.4	27.51	-3,010.2	-1,673.7	3,750.0	3,720.0	30.04	124.853	
7,150.0	7,140.5	7,417.7	7,146.4		13.8	34.4	27.19	-3,009.9	-1,673.6	3,745.9	3,716.0	29.85	125.495	
7,200.0	7,189.9	7,461.8	7,190.5		13.8	34.5	27.37	-3,009.7	-1,673.5	3,738.6	3,709.2	29.48	126.801	
7,250.0	7,238.6	7,505.3	7,234.0		13.8	34.5	27.76	-3,009.5	-1,673.4	3,728.4	3,699.5	28.96	128.763	
7,300.0	7,286.4	7,548.1	7,276.8		13.7	34.5	28.32	-3,009.5	-1,673.3	3,715.3	3,687.0	28.28	131.398	
7,350.0	7,333.1	7,590.1	7,318.8		13.7	34.6	29.06	-3,009.4	-1,673.2	3,699.3	3,671.8	27.46	134.712	
7,400.0	7,378.5	7,630.8	7,359.5		13.6	34.6	29.99	-3,009.4	-1,673.2	3,680.5	3,654.0	26.54	138.676	
7,450.0	7,422.2	7,669.7	7,398.4		13.6	34.6	31.10	-3,009.5	-1,673.2	3,659.1	3,633.5	25.56	143.180	
7,500.0	7,464.1	7,707.1	7,435.8		13.5	34.6	32.44	-3,009.5	-1,673.2	3,635.0	3,610.5	24.57	147.971	
7,550.0	7,504.1	7,747.6	7,476.3		13.5	34.7	34.05	-3,009.7	-1,673.2	3,608.5	3,584.9	23.66	152.502	
7,600.0	7,541.8	7,787.8	7,516.5		13.5	34.7	35.96	-3,009.8	-1,673.2	3,579.7	3,556.7	22.97	155.847	
7,650.0	7,577.2	7,826.0	7,554.7		13.4	34.7	38.20	-3,009.8	-1,673.3	3,548.6	3,525.9	22.64	156.727	
7,700.0	7,610.0	7,862.6	7,591.3		13.5	34.7	40.82	-3,009.8	-1,673.3	3,515.4	3,492.6	22.84	153.924	
7,750.0	7,640.2	7,896.2	7,624.9		13.5	34.8	43.87	-3,009.9	-1,673.2	3,480.4	3,456.8	23.66	147.115	
7,800.0	7,667.4	7,924.4	7,653.1		13.6	34.8	47.36	-3,009.9	-1,673.1	3,443.8	3,418.7	25.09	137.256	
7,850.0	7,691.7	7,948.1	7,676.8		13.7	34.8	51.33	-3,009.9	-1,673.0	3,405.7	3,378.6	27.05	125.895	
7,900.0	7,712.8	7,968.8	7,697.5		13.9	34.8	55.84	-3,009.9	-1,673.0	3,366.3	3,336.9	29.41	114.449	
7,950.0	7,730.8	7,986.3	7,715.0		14.1	34.8	60.90	-3,009.9	-1,673.0	3,325.9	3,293.9	32.00	103.933	
8,000.0	7,745.5	8,003.9	7,732.6		14.4	34.8	66.56	-3,009.9	-1,672.9	3,284.8	3,250.1	34.64	94.822	
8,050.0	7,756.7	8,018.9	7,747.6		14.7	34.9	72.70	-3,009.9	-1,672.9	3,243.0	3,205.9	37.08	87.458	
8,100.0	7,764.6	8,029.3	7,758.0		15.1	34.9	79.11	-3,009.9	-1,672.8	3,200.8	3,161.7	39.07	81.917	
8,150.0	7,769.0	8,035.1	7,763.7		15.5	34.9	85.59	-3,009.9	-1,672.8	3,158.5	3,118.1	40.46	78.072	
8,188.1	7,770.0	8,036.3	7,765.0		15.9	34.9	90.44	-3,009.9	-1,672.8	3,126.4	3,085.3	41.05	76.160	
8,200.0	7,770.0	8,036.3	7,764.9		16.0	34.9	90.44	-3,009.9	-1,672.8	3,116.3	3,075.1	41.16	75.711	
8,300.0	7,770.0	8,036.0	7,764.7		17.0	34.9	90.43	-3,009.9	-1,672.8	3,032.5	2,990.3	42.16	71.930	
8,400.0	7,770.0	8,035.7	7,764.4		18.1	34.9	90.42	-3,009.9	-1,672.8	2,949.7	2,906.5	43.27	68.166	
8,500.0	7,770.0	8,035.4	7,764.1		19.3	34.9	90.41	-3,009.9	-1,672.8	2,868.1	2,823.6	44.48	64.477	
8,600.0	7,770.0	8,035.1	7,763.8		20.6	34.9	90.40	-3,009.9	-1,672.8	2,787.6	2,741.8	45.77	60.904	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,700.0	7,770.0	8,034.9	7,763.6	21.9	34.9	90.39	-3,009.9	-1,672.8	2,708.4	2,661.3	47.12	57.476		
8,800.0	7,770.0	8,034.6	7,763.3	23.3	34.9	90.38	-3,009.9	-1,672.8	2,630.7	2,582.1	48.53	54.208		
8,900.0	7,770.0	8,034.3	7,763.0	24.8	34.9	90.38	-3,009.9	-1,672.8	2,554.5	2,504.5	49.98	51.110		
9,000.0	7,770.0	8,034.1	7,762.8	26.3	34.9	90.37	-3,009.9	-1,672.8	2,480.0	2,428.5	51.47	48.185		
9,100.0	7,770.0	8,033.8	7,762.5	27.8	34.9	90.36	-3,009.9	-1,672.8	2,407.3	2,354.3	52.99	45.433		
9,200.0	7,770.0	8,033.6	7,762.3	29.3	34.9	90.35	-3,009.9	-1,672.8	2,336.6	2,282.1	54.53	42.850		
9,300.0	7,770.0	8,033.3	7,762.0	30.9	34.9	90.34	-3,009.9	-1,672.8	2,268.2	2,212.1	56.10	40.433		
9,400.0	7,770.0	8,033.1	7,761.8	32.5	34.9	90.33	-3,009.9	-1,672.8	2,202.2	2,144.5	57.68	38.177		
9,500.0	7,770.0	8,032.8	7,761.5	34.1	34.9	90.32	-3,009.9	-1,672.8	2,138.8	2,079.5	59.29	36.076		
9,600.0	7,770.0	8,032.6	7,761.3	35.7	34.9	90.32	-3,009.9	-1,672.8	2,078.3	2,017.4	60.90	34.125		
9,700.0	7,770.0	8,032.4	7,761.0	37.3	34.9	90.31	-3,009.9	-1,672.8	2,021.0	1,958.4	62.53	32.318		
9,800.0	7,770.0	8,032.1	7,760.8	39.0	34.9	90.30	-3,009.9	-1,672.8	1,967.0	1,902.8	64.17	30.652		
9,900.0	7,770.0	8,031.9	7,760.6	40.6	34.9	90.29	-3,009.9	-1,672.8	1,916.8	1,850.9	65.82	29.120		
10,000.0	7,770.0	8,031.7	7,760.4	42.3	34.9	90.28	-3,009.9	-1,672.8	1,870.5	1,803.0	67.48	27.720		
10,100.0	7,770.0	8,031.4	7,760.1	44.0	34.9	90.28	-3,009.9	-1,672.8	1,828.6	1,759.4	69.15	26.446		
10,200.0	7,770.0	8,031.2	7,759.9	45.6	34.9	90.27	-3,009.9	-1,672.8	1,791.3	1,720.4	70.82	25.294		
10,300.0	7,770.0	8,031.0	7,759.7	47.3	34.9	90.26	-3,009.9	-1,672.8	1,758.8	1,686.3	72.50	24.261		
10,400.0	7,770.0	8,030.8	7,759.5	49.0	34.9	90.26	-3,009.9	-1,672.8	1,731.6	1,657.4	74.18	23.343		
10,500.0	7,770.0	8,030.6	7,759.3	50.7	34.9	90.25	-3,009.9	-1,672.8	1,709.7	1,633.9	75.87	22.536		
10,600.0	7,770.0	8,030.4	7,759.1	52.4	34.9	90.24	-3,009.9	-1,672.8	1,693.5	1,616.0	77.56	21.836		
10,700.0	7,770.0	8,030.2	7,758.9	54.1	34.9	90.23	-3,009.9	-1,672.8	1,683.1	1,603.9	79.26	21.237		
10,800.0	7,770.0	8,030.0	7,758.6	55.8	34.9	90.23	-3,009.9	-1,672.8	1,678.6	1,597.7	80.96	20.735		
10,825.7	7,770.0	8,029.9	7,758.6	56.2	34.9	90.22	-3,009.9	-1,672.8	1,678.4	1,597.1	81.39	20.622 CC, ES		
10,900.0	7,770.0	8,029.8	7,758.4	57.5	34.9	90.22	-3,009.9	-1,672.8	1,680.1	1,597.4	82.66	20.326		
11,000.0	7,770.0	8,029.6	7,758.2	59.2	34.9	90.21	-3,009.9	-1,672.8	1,687.5	1,603.1	84.36	20.002		
11,100.0	7,770.0	8,029.4	7,758.1	60.9	34.9	90.21	-3,009.9	-1,672.8	1,700.7	1,614.6	86.07	19.759		
11,200.0	7,770.0	8,029.2	7,757.9	62.6	34.9	90.20	-3,009.9	-1,672.8	1,719.7	1,631.9	87.78	19.590		
11,300.0	7,770.0	8,029.0	7,757.7	64.3	34.9	90.19	-3,009.9	-1,672.8	1,744.2	1,654.7	89.50	19.489		
11,400.0	7,770.0	8,028.8	7,757.5	66.0	34.9	90.19	-3,009.9	-1,672.8	1,774.0	1,682.8	91.21	19.449 SF		
11,500.0	7,770.0	8,028.6	7,757.3	67.7	34.9	90.18	-3,009.9	-1,672.8	1,808.8	1,715.9	92.93	19.464		
11,600.0	7,770.0	8,028.4	7,757.1	69.5	34.9	90.17	-3,009.9	-1,672.8	1,848.5	1,753.8	94.65	19.529		
11,700.0	7,770.0	8,028.2	7,756.9	71.2	34.9	90.17	-3,009.9	-1,672.8	1,892.5	1,796.2	96.37	19.638		
11,800.0	7,770.0	8,028.0	7,756.7	72.9	34.9	90.16	-3,009.9	-1,672.8	1,940.8	1,842.7	98.09	19.785		
11,900.0	7,770.0	8,027.9	7,756.6	74.6	34.9	90.16	-3,009.9	-1,672.8	1,992.8	1,893.0	99.82	19.965		
12,000.0	7,770.0	8,027.7	7,756.4	76.4	34.9	90.15	-3,009.9	-1,672.8	2,048.5	1,946.9	101.54	20.173		
12,100.0	7,770.0	8,027.5	7,756.2	78.1	34.9	90.14	-3,009.9	-1,672.8	2,107.4	2,004.1	103.27	20.407		
12,200.0	7,770.0	8,027.3	7,756.0	79.8	34.9	90.14	-3,009.9	-1,672.8	2,169.3	2,064.3	105.00	20.661		
12,300.0	7,770.0	8,027.2	7,755.9	81.5	34.9	90.13	-3,009.9	-1,672.8	2,234.0	2,127.3	106.73	20.932		
12,400.0	7,770.0	8,027.0	7,755.7	83.3	34.9	90.13	-3,009.9	-1,672.8	2,301.2	2,192.8	108.46	21.218		
12,500.0	7,770.0	8,026.8	7,755.5	85.0	34.9	90.12	-3,009.9	-1,672.8	2,370.8	2,260.6	110.19	21.516		
12,600.0	7,770.0	8,026.7	7,755.4	86.7	34.9	90.11	-3,009.9	-1,672.8	2,442.4	2,330.5	111.92	21.823		
12,700.0	7,770.0	8,026.5	7,755.2	88.5	34.9	90.11	-3,009.9	-1,672.8	2,516.0	2,402.4	113.65	22.138		
12,800.0	7,770.0	8,026.3	7,755.0	90.2	34.9	90.10	-3,009.9	-1,672.8	2,591.4	2,476.0	115.39	22.458		
12,900.0	7,770.0	8,026.2	7,754.9	91.9	34.9	90.10	-3,009.9	-1,672.8	2,668.3	2,551.2	117.12	22.783		
13,000.0	7,770.0	8,026.0	7,754.7	93.7	34.9	90.09	-3,009.9	-1,672.8	2,746.8	2,627.9	118.86	23.110		
13,100.0	7,770.0	8,025.9	7,754.6	95.4	34.9	90.09	-3,009.9	-1,672.8	2,826.6	2,706.0	120.59	23.440		
13,200.0	7,770.0	8,025.7	7,754.4	97.1	34.9	90.08	-3,009.9	-1,672.8	2,907.7	2,785.4	122.33	23.770		
13,300.0	7,770.0	8,025.6	7,754.3	98.9	34.9	90.08	-3,009.9	-1,672.8	2,989.9	2,865.8	124.07	24.099		
13,400.0	7,770.0	8,025.4	7,754.1	100.6	34.9	90.07	-3,009.9	-1,672.9	3,073.2	2,947.4	125.80	24.428		
13,500.0	7,770.0	8,025.3	7,753.9	102.4	34.9	90.07	-3,009.9	-1,672.9	3,157.4	3,029.9	127.54	24.756		
13,600.0	7,770.0	8,025.1	7,753.8	104.1	34.9	90.06	-3,009.9	-1,672.9	3,242.6	3,113.3	129.28	25.082		
13,700.0	7,770.0	8,025.0	7,753.7	105.8	34.9	90.06	-3,009.9	-1,672.9	3,328.5	3,197.5	131.02	25.405		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,800.0	7,770.0	8,024.8	7,753.5	107.6	34.9	90.05	-3,009.9	-1,672.9	3,415.2	3,282.5	132.76	25.725		
13,900.0	7,770.0	8,024.7	7,753.4	109.3	34.9	90.05	-3,009.9	-1,672.9	3,502.7	3,368.2	134.50	26.042		
14,000.0	7,770.0	8,024.5	7,753.2	111.1	34.9	90.04	-3,009.9	-1,672.9	3,590.8	3,454.5	136.24	26.356		
14,100.0	7,770.0	8,024.4	7,753.1	112.8	34.9	90.04	-3,009.9	-1,672.9	3,679.5	3,541.5	137.98	26.667		
14,200.0	7,770.0	8,024.2	7,752.9	114.5	34.9	90.03	-3,009.9	-1,672.9	3,768.7	3,629.0	139.72	26.973		
14,300.0	7,770.0	8,024.1	7,752.8	116.3	34.9	90.03	-3,009.9	-1,672.9	3,858.5	3,717.1	141.46	27.276		
14,400.0	7,770.0	8,024.0	7,752.7	118.0	34.9	90.02	-3,009.9	-1,672.9	3,948.8	3,805.6	143.21	27.574		
14,500.0	7,770.0	8,023.8	7,752.5	119.8	34.9	90.02	-3,009.9	-1,672.9	4,039.5	3,894.6	144.95	27.869		
14,600.0	7,770.0	8,023.7	7,752.4	121.5	34.9	90.01	-3,009.9	-1,672.9	4,130.7	3,984.0	146.69	28.159		
14,700.0	7,770.0	8,023.6	7,752.3	123.3	34.9	90.01	-3,009.9	-1,672.9	4,222.3	4,073.9	148.43	28.445		
14,800.0	7,770.0	8,023.4	7,752.1	125.0	34.9	90.00	-3,009.9	-1,672.9	4,314.2	4,164.0	150.18	28.727		
14,900.0	7,770.0	8,023.3	7,752.0	126.7	34.9	90.00	-3,009.9	-1,672.9	4,406.5	4,254.6	151.92	29.005		
15,000.0	7,770.0	8,023.2	7,751.9	128.5	34.9	90.00	-3,009.9	-1,672.9	4,499.1	4,345.5	153.67	29.279		
15,100.0	7,770.0	8,023.1	7,751.7	130.2	34.9	89.99	-3,009.9	-1,672.9	4,592.1	4,436.7	155.41	29.548		
15,200.0	7,770.0	8,022.9	7,751.6	132.0	34.9	89.99	-3,009.9	-1,672.9	4,685.3	4,528.1	157.15	29.813		
15,300.0	7,770.0	8,022.8	7,751.5	133.7	34.9	89.98	-3,009.9	-1,672.9	4,778.8	4,619.9	158.90	30.074		
15,400.0	7,770.0	8,022.7	7,751.4	135.5	34.9	89.98	-3,009.9	-1,672.9	4,872.6	4,711.9	160.64	30.331		
15,500.0	7,770.0	8,022.6	7,751.3	137.2	34.9	89.97	-3,009.9	-1,672.9	4,966.6	4,804.2	162.39	30.584		
15,600.0	7,770.0	8,022.4	7,751.1	139.0	34.9	89.97	-3,009.9	-1,672.9	5,060.8	4,896.6	164.13	30.833		
15,700.0	7,770.0	8,022.3	7,751.0	140.7	34.9	89.97	-3,009.9	-1,672.9	5,155.2	4,989.3	165.88	31.078		
15,800.0	7,770.0	8,022.2	7,750.9	142.4	34.9	89.96	-3,009.9	-1,672.9	5,249.9	5,082.3	167.63	31.319		
15,900.0	7,770.0	8,022.1	7,750.8	144.2	34.9	89.96	-3,009.9	-1,672.9	5,344.7	5,175.4	169.37	31.556		
16,000.0	7,770.0	8,022.0	7,750.7	145.9	34.9	89.95	-3,009.9	-1,672.9	5,439.8	5,268.6	171.12	31.789		
16,100.0	7,770.0	8,021.8	7,750.5	147.7	34.9	89.95	-3,009.9	-1,672.9	5,535.0	5,362.1	172.86	32.019		
16,200.0	7,770.0	8,021.7	7,750.4	149.4	34.9	89.95	-3,009.9	-1,672.9	5,630.3	5,455.7	174.61	32.245		
16,300.0	7,770.0	8,021.6	7,750.3	151.2	34.9	89.94	-3,009.9	-1,672.9	5,725.9	5,549.5	176.36	32.467		
16,400.0	7,770.0	8,021.5	7,750.2	152.9	34.9	89.94	-3,009.9	-1,672.9	5,821.5	5,643.4	178.10	32.686		
16,500.0	7,770.0	8,021.4	7,750.1	154.7	34.9	89.93	-3,009.9	-1,672.9	5,917.4	5,737.5	179.85	32.901		
16,600.0	7,770.0	8,021.3	7,750.0	156.4	34.9	89.93	-3,009.9	-1,672.9	6,013.3	5,831.7	181.60	33.113		
16,700.0	7,770.0	8,021.2	7,749.9	158.2	34.9	89.93	-3,009.9	-1,672.9	6,109.4	5,926.1	183.35	33.322		
16,800.0	7,770.0	8,021.1	7,749.8	159.9	34.9	89.92	-3,009.9	-1,672.9	6,205.6	6,020.5	185.09	33.527		
16,900.0	7,770.0	8,021.0	7,749.7	161.7	34.9	89.92	-3,009.9	-1,672.9	6,302.0	6,115.1	186.84	33.729		
17,000.0	7,770.0	8,020.9	7,749.5	163.4	34.9	89.92	-3,009.9	-1,672.9	6,398.4	6,209.8	188.59	33.928		
17,100.0	7,770.0	8,020.7	7,749.4	165.2	34.9	89.91	-3,009.9	-1,672.9	6,495.0	6,304.6	190.34	34.123		
17,200.0	7,770.0	8,020.6	7,749.3	166.9	34.9	89.91	-3,009.9	-1,672.9	6,591.6	6,399.5	192.09	34.316		
17,300.0	7,770.0	8,020.5	7,749.2	168.7	34.9	89.91	-3,009.9	-1,672.9	6,688.4	6,494.5	193.83	34.506		
17,400.0	7,770.0	8,020.4	7,749.1	170.4	34.9	89.90	-3,009.9	-1,672.9	6,785.2	6,589.6	195.58	34.692		
17,500.0	7,770.0	8,020.3	7,749.0	172.2	34.9	89.90	-3,009.9	-1,672.9	6,882.1	6,684.8	197.33	34.876		
17,600.0	7,770.0	8,020.2	7,748.9	173.9	34.9	89.89	-3,009.9	-1,672.9	6,979.2	6,780.1	199.08	35.057		
17,653.1	7,770.0	8,020.2	7,748.9	174.8	34.9	89.89	-3,009.9	-1,672.9	7,030.7	6,830.7	200.01	35.152		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	-123.97	-2,852.3	-4,233.6	5,105.0					
100.0	100.0	60.0	60.0	0.2	0.1	-123.97	-2,852.3	-4,233.6	5,104.8	5,104.6	0.26	N/A		
200.0	200.0	160.0	160.0	0.3	0.3	-123.97	-2,852.3	-4,233.6	5,104.8	5,104.2	0.61	8,426.220		
300.0	300.0	260.0	260.0	0.5	0.5	-123.97	-2,852.3	-4,233.6	5,104.8	5,103.9	0.95	5,345.982		
400.0	400.0	360.0	360.0	0.7	0.6	-123.97	-2,852.3	-4,233.6	5,104.8	5,103.5	1.30	3,914.882		
500.0	500.0	460.0	460.0	0.8	0.8	-123.97	-2,852.3	-4,233.6	5,104.8	5,103.2	1.65	3,088.185		
550.0	550.0	510.0	510.0	0.9	0.9	-123.97	-2,852.3	-4,233.6	5,104.8	5,103.0	1.83	2,793.262		
600.0	600.0	560.0	560.0	1.0	1.0	-124.81	-2,852.3	-4,233.6	5,104.9	5,102.9	2.00	2,549.819		
700.0	700.0	660.0	660.0	1.2	1.2	-124.81	-2,852.3	-4,233.6	5,105.9	5,103.6	2.35	2,171.124		
800.0	799.9	759.9	759.9	1.4	1.3	-124.83	-2,852.3	-4,233.6	5,107.9	5,105.2	2.70	1,889.250		
861.1	860.9	820.9	820.9	1.5	1.4	-124.84	-2,852.3	-4,233.6	5,109.6	5,106.7	2.92	1,749.698		
900.0	899.8	859.8	859.8	1.6	1.5	-124.86	-2,852.3	-4,233.6	5,110.8	5,107.8	3.06	1,670.760		
1,000.0	999.6	959.6	959.6	1.8	1.7	-124.91	-2,852.3	-4,233.6	5,114.0	5,110.5	3.42	1,496.783		
1,100.0	1,099.5	1,059.5	1,059.5	1.9	1.8	-124.96	-2,852.3	-4,233.6	5,117.1	5,113.3	3.78	1,355.253		
1,200.0	1,199.3	1,159.3	1,159.3	2.1	2.0	-125.01	-2,852.3	-4,233.6	5,120.2	5,116.0	4.14	1,237.989		
1,300.0	1,299.2	1,259.2	1,259.2	2.3	2.2	-125.06	-2,852.3	-4,233.6	5,123.3	5,118.8	4.50	1,139.311		
1,400.0	1,399.1	1,359.1	1,359.1	2.5	2.4	-125.11	-2,852.3	-4,233.6	5,126.4	5,121.6	4.86	1,055.165		
1,500.0	1,498.9	1,458.9	1,458.9	2.7	2.5	-125.16	-2,852.3	-4,233.6	5,129.5	5,124.3	5.22	982.588		
1,600.0	1,598.8	1,558.8	1,558.8	2.9	2.7	-125.21	-2,852.3	-4,233.6	5,132.7	5,127.1	5.58	919.365		
1,700.0	1,698.6	1,658.6	1,658.6	3.1	2.9	-125.26	-2,852.3	-4,233.6	5,135.8	5,129.9	5.95	863.806		
1,800.0	1,798.5	1,758.5	1,758.5	3.3	3.1	-125.31	-2,852.3	-4,233.6	5,139.0	5,132.6	6.31	814.607		
1,900.0	1,898.3	1,858.3	1,858.3	3.5	3.2	-125.36	-2,852.3	-4,233.6	5,142.1	5,135.4	6.67	770.739		
2,000.0	1,998.2	1,958.2	1,958.2	3.7	3.4	-125.41	-2,852.3	-4,233.6	5,145.2	5,138.2	7.03	731.384		
2,100.0	2,098.0	2,058.0	2,058.0	3.9	3.6	-125.46	-2,852.3	-4,233.6	5,148.4	5,141.0	7.40	695.883		
2,200.0	2,197.9	2,157.9	2,157.9	4.1	3.8	-125.51	-2,852.3	-4,233.6	5,151.5	5,143.8	7.76	663.698		
2,300.0	2,297.7	2,257.7	2,257.7	4.3	3.9	-125.55	-2,852.3	-4,233.6	5,154.7	5,146.6	8.13	634.387		
2,400.0	2,397.6	2,357.6	2,357.6	4.5	4.1	-125.60	-2,852.3	-4,233.6	5,157.9	5,149.4	8.49	607.582		
2,500.0	2,497.4	2,457.4	2,457.4	4.7	4.3	-125.65	-2,852.3	-4,233.6	5,161.0	5,152.2	8.85	582.977		
2,600.0	2,597.3	2,557.3	2,557.3	4.9	4.5	-125.70	-2,852.3	-4,233.6	5,164.2	5,155.0	9.22	560.311		
2,700.0	2,697.1	2,657.1	2,657.1	5.1	4.6	-125.75	-2,852.3	-4,233.6	5,167.4	5,157.8	9.58	539.365		
2,800.0	2,797.0	2,757.0	2,757.0	5.3	4.8	-125.80	-2,852.3	-4,233.6	5,170.5	5,160.6	9.94	519.950		
2,900.0	2,896.8	2,856.8	2,856.8	5.5	5.0	-125.85	-2,852.3	-4,233.6	5,173.7	5,163.4	10.31	501.906		
3,000.0	2,996.7	2,956.7	2,956.7	5.7	5.2	-125.90	-2,852.3	-4,233.6	5,176.9	5,166.2	10.67	485.091		
3,100.0	3,096.5	3,056.5	3,056.5	5.9	5.3	-125.94	-2,852.3	-4,233.6	5,180.1	5,169.0	11.04	469.385		
3,200.0	3,196.4	3,156.4	3,156.4	6.1	5.5	-125.99	-2,852.3	-4,233.6	5,183.3	5,171.9	11.40	454.683		
3,300.0	3,296.3	3,256.3	3,256.3	6.3	5.7	-126.04	-2,852.3	-4,233.6	5,186.5	5,174.7	11.76	440.890		
3,400.0	3,396.1	3,356.1	3,356.1	6.5	5.9	-126.09	-2,852.3	-4,233.6	5,189.7	5,177.5	12.13	427.925		
3,500.0	3,496.0	3,456.0	3,456.0	6.7	6.0	-126.14	-2,852.3	-4,233.6	5,192.9	5,180.4	12.49	415.716		
3,600.0	3,595.8	3,555.8	3,555.8	6.9	6.2	-126.19	-2,852.3	-4,233.6	5,196.1	5,183.2	12.86	404.198		
3,700.0	3,695.7	3,655.7	3,655.7	7.0	6.4	-126.24	-2,852.3	-4,233.6	5,199.3	5,186.1	13.22	393.316		
3,800.0	3,795.5	3,755.5	3,755.5	7.2	6.6	-126.28	-2,852.3	-4,233.6	5,202.5	5,188.9	13.58	383.017		
3,900.0	3,895.4	3,855.4	3,855.4	7.4	6.7	-126.33	-2,852.3	-4,233.6	5,205.7	5,191.8	13.95	373.256		
4,000.0	3,995.2	3,955.2	3,955.2	7.6	6.9	-126.38	-2,852.3	-4,233.6	5,208.9	5,194.6	14.31	363.992		
4,100.0	4,095.1	4,055.1	4,055.1	7.8	7.1	-126.43	-2,852.3	-4,233.6	5,212.2	5,197.5	14.67	355.188		
4,200.0	4,194.9	4,154.9	4,154.9	8.0	7.3	-126.48	-2,852.3	-4,233.6	5,215.4	5,200.3	15.04	346.811		
4,300.0	4,294.8	4,254.8	4,254.8	8.2	7.4	-126.52	-2,852.3	-4,233.6	5,218.6	5,203.2	15.40	338.830		
4,400.0	4,394.6	4,354.6	4,354.6	8.4	7.6	-126.57	-2,852.3	-4,233.6	5,221.8	5,206.1	15.77	331.218		
4,500.0	4,494.5	4,454.5	4,454.5	8.6	7.8	-126.62	-2,852.3	-4,233.6	5,225.1	5,209.0	16.13	323.950		
4,600.0	4,594.3	4,554.3	4,554.3	8.8	7.9	-126.67	-2,852.3	-4,233.6	5,228.3	5,211.8	16.49	317.003		
4,700.0	4,694.2	4,654.2	4,654.2	9.0	8.1	-126.71	-2,852.3	-4,233.6	5,231.6	5,214.7	16.86	310.357		
4,800.0	4,794.0	4,754.0	4,754.0	9.2	8.3	-126.76	-2,852.3	-4,233.6	5,234.8	5,217.6	17.22	303.992		
4,900.0	4,893.9	4,853.9	4,853.9	9.4	8.5	-126.81	-2,852.3	-4,233.6	5,238.1	5,220.5	17.58	297.891		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,953.7	4,953.7	9.6	8.6	-126.86	-2,852.3	-4,233.6	5,241.3	5,223.4	17.95	292.038		
5,100.0	5,093.6	5,053.6	5,053.6	9.8	8.8	-126.90	-2,852.3	-4,233.6	5,244.6	5,226.3	18.31	286.418		
5,200.0	5,193.5	5,153.5	5,153.5	10.0	9.0	-126.95	-2,852.3	-4,233.6	5,247.9	5,229.2	18.67	281.017		
5,300.0	5,293.3	5,253.3	5,253.3	10.2	9.2	-127.00	-2,852.3	-4,233.6	5,251.1	5,232.1	19.04	275.824		
5,400.0	5,393.2	5,353.2	5,353.2	10.4	9.3	-127.05	-2,852.3	-4,233.6	5,254.4	5,235.0	19.40	270.825		
5,500.0	5,493.0	5,453.0	5,453.0	10.6	9.5	-127.09	-2,852.3	-4,233.6	5,257.7	5,237.9	19.76	266.011		
5,600.0	5,592.9	5,552.9	5,552.9	10.8	9.7	-127.14	-2,852.3	-4,233.6	5,260.9	5,240.8	20.13	261.371		
5,700.0	5,692.7	5,652.7	5,652.7	11.0	9.9	-127.19	-2,852.3	-4,233.6	5,264.2	5,243.7	20.49	256.896		
5,800.0	5,792.6	5,752.6	5,752.6	11.2	10.0	-127.23	-2,852.3	-4,233.6	5,267.5	5,246.7	20.85	252.578		
5,900.0	5,892.4	5,852.4	5,852.4	11.4	10.2	-127.28	-2,852.3	-4,233.6	5,270.8	5,249.6	21.22	248.408		
6,000.0	5,992.3	5,952.3	5,952.3	11.6	10.4	-127.33	-2,852.3	-4,233.6	5,274.1	5,252.5	21.58	244.379		
6,100.0	6,092.1	6,052.1	6,052.1	11.8	10.6	-127.37	-2,852.3	-4,233.6	5,277.4	5,255.4	21.94	240.484		
6,200.0	6,192.0	6,152.0	6,152.0	12.0	10.7	-127.42	-2,852.3	-4,233.6	5,280.7	5,258.4	22.31	236.717		
6,300.0	6,291.8	6,251.8	6,251.8	12.2	10.9	-127.47	-2,852.3	-4,233.6	5,284.0	5,261.3	22.67	233.070		
6,400.0	6,391.7	6,351.7	6,351.7	12.4	11.1	-127.51	-2,852.3	-4,233.6	5,287.3	5,264.3	23.03	229.539		
6,500.0	6,491.5	6,451.5	6,451.5	12.6	11.3	-127.56	-2,852.3	-4,233.6	5,290.6	5,267.2	23.40	226.118		
6,600.0	6,591.4	6,551.4	6,551.4	12.8	11.4	-127.61	-2,852.3	-4,233.6	5,293.9	5,270.2	23.76	222.803		
6,700.0	6,691.2	6,651.2	6,651.2	13.0	11.6	-127.65	-2,852.3	-4,233.6	5,297.2	5,273.1	24.12	219.587		
6,800.0	6,791.1	6,751.1	6,751.1	13.2	11.8	-127.70	-2,852.3	-4,233.6	5,300.6	5,276.1	24.49	216.467		
6,900.0	6,890.9	6,850.9	6,850.9	13.4	12.0	-127.75	-2,852.3	-4,233.6	5,303.9	5,279.0	24.85	213.439		
7,000.0	6,990.8	6,950.8	6,950.8	13.6	12.1	-127.79	-2,852.3	-4,233.6	5,307.2	5,282.0	25.21	210.498		
7,024.2	7,014.9	6,974.9	6,974.9	13.6	12.2	-127.80	-2,852.3	-4,233.6	5,308.0	5,282.7	25.30	209.800		
7,050.0	7,040.7	7,000.7	7,000.7	13.7	12.2	-129.50	-2,852.3	-4,233.6	5,308.6	5,283.2	25.39	209.070		
7,100.0	7,090.7	7,050.7	7,050.7	13.7	12.3	53.91	-2,852.3	-4,233.6	5,308.1	5,282.6	25.53	207.901		
7,150.0	7,140.5	7,100.5	7,100.5	13.8	12.4	53.60	-2,852.3	-4,233.6	5,305.5	5,279.9	25.63	206.992		
7,200.0	7,189.9	7,149.9	7,149.9	13.8	12.5	53.83	-2,852.3	-4,233.6	5,300.9	5,275.2	25.69	206.320		
7,250.0	7,238.6	7,198.6	7,198.6	13.8	12.6	54.30	-2,852.3	-4,233.6	5,294.2	5,268.5	25.72	205.850		
7,300.0	7,286.4	7,246.4	7,246.4	13.7	12.6	54.97	-2,852.3	-4,233.6	5,285.5	5,259.8	25.72	205.535		
7,350.0	7,333.1	7,293.1	7,293.1	13.7	12.7	55.81	-2,852.3	-4,233.6	5,274.9	5,249.2	25.69	205.315		
7,400.0	7,378.5	7,338.5	7,338.5	13.6	12.8	56.83	-2,852.3	-4,233.6	5,262.4	5,236.7	25.65	205.122		
7,450.0	7,422.2	7,382.2	7,382.2	13.6	12.9	58.03	-2,852.3	-4,233.6	5,248.1	5,222.5	25.62	204.873		
7,500.0	7,464.1	7,424.1	7,424.1	13.5	13.0	59.39	-2,852.3	-4,233.6	5,232.2	5,206.6	25.59	204.482		
7,550.0	7,504.1	7,464.1	7,464.1	13.5	13.0	60.93	-2,852.3	-4,233.6	5,214.6	5,189.0	25.58	203.860		
7,600.0	7,541.8	7,501.8	7,501.8	13.5	13.1	62.63	-2,852.3	-4,233.6	5,195.6	5,170.0	25.60	202.921		
7,650.0	7,577.2	7,537.2	7,537.2	13.4	13.2	64.49	-2,852.3	-4,233.6	5,175.3	5,149.6	25.67	201.595		
7,700.0	7,610.0	7,570.0	7,570.0	13.5	13.2	66.49	-2,852.3	-4,233.6	5,153.8	5,128.0	25.79	199.833		
7,750.0	7,640.2	7,600.2	7,600.2	13.5	13.3	68.64	-2,852.3	-4,233.6	5,131.2	5,105.3	25.97	197.616		
7,800.0	7,667.4	7,627.4	7,627.4	13.6	13.3	70.90	-2,852.3	-4,233.6	5,107.8	5,081.6	26.20	194.959		
7,850.0	7,691.7	7,651.7	7,651.7	13.7	13.4	73.27	-2,852.3	-4,233.6	5,083.5	5,057.0	26.49	191.909		
7,900.0	7,712.8	7,672.8	7,672.8	13.9	13.4	75.71	-2,852.3	-4,233.6	5,058.7	5,031.8	26.83	188.541		
7,950.0	7,730.8	7,690.8	7,690.8	14.1	13.4	78.21	-2,852.3	-4,233.6	5,033.4	5,006.2	27.22	184.946		
8,000.0	7,745.5	7,705.5	7,705.5	14.4	13.4	80.73	-2,852.3	-4,233.6	5,007.8	4,980.2	27.63	181.218		
8,050.0	7,756.7	7,716.7	7,716.7	14.7	13.5	83.26	-2,852.3	-4,233.6	4,982.0	4,954.0	28.08	177.448		
8,100.0	7,764.6	7,724.6	7,724.6	15.1	13.5	85.75	-2,852.3	-4,233.6	4,956.3	4,927.8	28.53	173.713		
8,150.0	7,769.0	7,729.0	7,729.0	15.5	13.5	88.19	-2,852.3	-4,233.6	4,930.7	4,901.7	28.99	170.068		
8,188.1	7,770.0	7,730.0	7,730.0	15.9	13.5	90.00	-2,852.3	-4,233.6	4,911.4	4,882.0	29.34	167.380		
8,200.0	7,770.0	7,730.0	7,730.0	16.0	13.5	90.00	-2,852.3	-4,233.6	4,905.3	4,875.9	29.45	166.547		
8,300.0	7,770.0	7,730.0	7,730.0	17.0	13.5	90.00	-2,852.3	-4,233.6	4,855.8	4,825.3	30.45	159.456		
8,400.0	7,770.0	7,730.0	7,730.0	18.1	13.5	90.00	-2,852.3	-4,233.6	4,807.8	4,776.3	31.57	152.306		
8,500.0	7,770.0	7,730.0	7,730.0	19.3	13.5	90.00	-2,852.3	-4,233.6	4,761.5	4,728.7	32.78	145.270		
8,600.0	7,770.0	7,730.0	7,730.0	20.6	13.5	90.00	-2,852.3	-4,233.6	4,716.8	4,682.7	34.07	138.463		
8,700.0	7,770.0	7,730.0	7,730.0	21.9	13.5	90.00	-2,852.3	-4,233.6	4,673.8	4,638.4	35.42	131.960		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	7,730.0	7,730.0	23.3	13.5	90.00	-2,852.3	-4,233.6	4,632.6	4,595.7	36.82	125.800		
8,900.0	7,770.0	7,730.0	7,730.0	24.8	13.5	90.00	-2,852.3	-4,233.6	4,593.2	4,554.9	38.28	120.002		
9,000.0	7,770.0	7,730.0	7,730.0	26.3	13.5	90.00	-2,852.3	-4,233.6	4,555.6	4,515.8	39.76	114.567		
9,100.0	7,770.0	7,730.0	7,730.0	27.8	13.5	90.00	-2,852.3	-4,233.6	4,519.9	4,478.7	41.28	109.488		
9,200.0	7,770.0	7,730.0	7,730.0	29.3	13.5	90.00	-2,852.3	-4,233.6	4,486.2	4,443.4	42.83	104.750		
9,300.0	7,770.0	7,730.0	7,730.0	30.9	13.5	90.00	-2,852.3	-4,233.6	4,454.5	4,410.1	44.40	100.337		
9,400.0	7,770.0	7,730.0	7,730.0	32.5	13.5	90.00	-2,852.3	-4,233.6	4,424.8	4,378.8	45.98	96.229		
9,500.0	7,770.0	7,730.0	7,730.0	34.1	13.5	90.00	-2,852.3	-4,233.6	4,397.2	4,349.6	47.58	92.407		
9,600.0	7,770.0	7,730.0	7,730.0	35.7	13.5	90.00	-2,852.3	-4,233.6	4,371.7	4,322.5	49.20	88.852		
9,700.0	7,770.0	7,730.0	7,730.0	37.3	13.5	90.00	-2,852.3	-4,233.6	4,348.4	4,297.5	50.83	85.544		
9,800.0	7,770.0	7,730.0	7,730.0	39.0	13.5	90.00	-2,852.3	-4,233.6	4,327.2	4,274.7	52.47	82.466		
9,900.0	7,770.0	7,730.0	7,730.0	40.6	13.5	90.00	-2,852.3	-4,233.6	4,308.2	4,254.1	54.12	79.602		
10,000.0	7,770.0	7,730.0	7,730.0	42.3	13.5	90.00	-2,852.3	-4,233.6	4,291.5	4,235.8	55.78	76.937		
10,100.0	7,770.0	7,730.0	7,730.0	44.0	13.5	90.00	-2,852.3	-4,233.6	4,277.1	4,219.7	57.45	74.455		
10,200.0	7,770.0	7,730.0	7,730.0	45.6	13.5	90.00	-2,852.3	-4,233.6	4,265.0	4,205.9	59.12	72.143		
10,300.0	7,770.0	7,730.0	7,730.0	47.3	13.5	90.00	-2,852.3	-4,233.6	4,255.2	4,194.4	60.80	69.991		
10,400.0	7,770.0	7,730.0	7,730.0	49.0	13.5	90.00	-2,852.3	-4,233.6	4,247.7	4,185.2	62.48	67.985		
10,500.0	7,770.0	7,730.0	7,730.0	50.7	13.5	90.00	-2,852.3	-4,233.6	4,242.6	4,178.4	64.17	66.116		
10,600.0	7,770.0	7,730.0	7,730.0	52.4	13.5	90.00	-2,852.3	-4,233.6	4,239.8	4,173.9	65.86	64.375		
10,668.1	7,770.0	7,730.0	7,730.0	53.5	13.5	90.00	-2,852.3	-4,233.6	4,239.2	4,172.2	67.02	63.257 CC		
10,700.0	7,770.0	7,730.0	7,730.0	54.1	13.5	90.00	-2,852.3	-4,233.6	4,239.3	4,171.8	67.56	62.752 ES		
10,800.0	7,770.0	7,730.0	7,730.0	55.8	13.5	90.00	-2,852.3	-4,233.6	4,241.3	4,172.0	69.26	61.239		
10,900.0	7,770.0	7,730.0	7,730.0	57.5	13.5	90.00	-2,852.3	-4,233.6	4,245.6	4,174.6	70.96	59.830		
11,000.0	7,770.0	7,730.0	7,730.0	59.2	13.5	90.00	-2,852.3	-4,233.6	4,252.2	4,179.5	72.67	58.516		
11,100.0	7,770.0	7,730.0	7,730.0	60.9	13.5	90.00	-2,852.3	-4,233.6	4,261.2	4,186.8	74.38	57.292		
11,200.0	7,770.0	7,730.0	7,730.0	62.6	13.5	90.00	-2,852.3	-4,233.6	4,272.5	4,196.4	76.09	56.152		
11,300.0	7,770.0	7,730.0	7,730.0	64.3	13.5	90.00	-2,852.3	-4,233.6	4,286.1	4,208.3	77.80	55.090		
11,400.0	7,770.0	7,730.0	7,730.0	66.0	13.5	90.00	-2,852.3	-4,233.6	4,301.9	4,222.4	79.52	54.101		
11,500.0	7,770.0	7,730.0	7,730.0	67.7	13.5	90.00	-2,852.3	-4,233.6	4,320.1	4,238.9	81.24	53.180		
11,600.0	7,770.0	7,730.0	7,730.0	69.5	13.5	90.00	-2,852.3	-4,233.6	4,340.5	4,257.5	82.96	52.323		
11,700.0	7,770.0	7,730.0	7,730.0	71.2	13.5	90.00	-2,852.3	-4,233.6	4,363.0	4,278.3	84.68	51.526		
11,800.0	7,770.0	7,730.0	7,730.0	72.9	13.5	90.00	-2,852.3	-4,233.6	4,387.7	4,301.3	86.40	50.784		
11,900.0	7,770.0	7,730.0	7,730.0	74.6	13.5	90.00	-2,852.3	-4,233.6	4,414.6	4,326.5	88.12	50.095		
12,000.0	7,770.0	7,730.0	7,730.0	76.4	13.5	90.00	-2,852.3	-4,233.6	4,443.5	4,353.7	89.85	49.455		
12,100.0	7,770.0	7,730.0	7,730.0	78.1	13.5	90.00	-2,852.3	-4,233.6	4,474.5	4,383.0	91.58	48.861		
12,200.0	7,770.0	7,730.0	7,730.0	79.8	13.5	90.00	-2,852.3	-4,233.6	4,507.5	4,414.2	93.30	48.310		
12,300.0	7,770.0	7,730.0	7,730.0	81.5	13.5	90.00	-2,852.3	-4,233.6	4,542.5	4,447.5	95.03	47.799		
12,400.0	7,770.0	7,730.0	7,730.0	83.3	13.5	90.00	-2,852.3	-4,233.6	4,579.4	4,482.6	96.76	47.325		
12,500.0	7,770.0	7,730.0	7,730.0	85.0	13.5	90.00	-2,852.3	-4,233.6	4,618.1	4,519.6	98.50	46.887		
12,600.0	7,770.0	7,730.0	7,730.0	86.7	13.5	90.00	-2,852.3	-4,233.6	4,658.7	4,558.5	100.23	46.481		
12,700.0	7,770.0	7,730.0	7,730.0	88.5	13.5	90.00	-2,852.3	-4,233.6	4,701.0	4,599.1	101.96	46.106		
12,800.0	7,770.0	7,730.0	7,730.0	90.2	13.5	90.00	-2,852.3	-4,233.6	4,745.1	4,641.4	103.69	45.761		
12,900.0	7,770.0	7,730.0	7,730.0	91.9	13.5	90.00	-2,852.3	-4,233.6	4,790.9	4,685.5	105.43	45.442		
13,000.0	7,770.0	7,730.0	7,730.0	93.7	13.5	90.00	-2,852.3	-4,233.6	4,838.3	4,731.1	107.16	45.148		
13,100.0	7,770.0	7,730.0	7,730.0	95.4	13.5	90.00	-2,852.3	-4,233.6	4,887.3	4,778.4	108.90	44.878		
13,200.0	7,770.0	7,730.0	7,730.0	97.1	13.5	90.00	-2,852.3	-4,233.6	4,937.8	4,827.1	110.64	44.630		
13,300.0	7,770.0	7,730.0	7,730.0	98.9	13.5	90.00	-2,852.3	-4,233.6	4,989.8	4,877.4	112.37	44.403		
13,400.0	7,770.0	7,730.0	7,730.0	100.6	13.5	90.00	-2,852.3	-4,233.6	5,043.3	4,929.2	114.11	44.196		
13,500.0	7,770.0	7,730.0	7,730.0	102.4	13.5	90.00	-2,852.3	-4,233.6	5,098.1	4,982.3	115.85	44.006		
13,600.0	7,770.0	7,730.0	7,730.0	104.1	13.5	90.00	-2,852.3	-4,233.6	5,154.3	5,036.8	117.59	43.833		
13,700.0	7,770.0	7,730.0	7,730.0	105.8	13.5	90.00	-2,852.3	-4,233.6	5,211.9	5,092.5	119.33	43.676		
13,800.0	7,770.0	7,730.0	7,730.0	107.6	13.5	90.00	-2,852.3	-4,233.6	5,270.7	5,149.6	121.07	43.534		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	7,730.0	7,730.0	109.3	13.5	90.00	-2,852.3	-4,233.6	5,330.7	5,207.9	122.81	43.406		
14,000.0	7,770.0	7,730.0	7,730.0	111.1	13.5	90.00	-2,852.3	-4,233.6	5,391.9	5,267.4	124.55	43.291		
14,100.0	7,770.0	7,730.0	7,730.0	112.8	13.5	90.00	-2,852.3	-4,233.6	5,454.3	5,328.0	126.29	43.188		
14,200.0	7,770.0	7,730.0	7,730.0	114.5	13.5	90.00	-2,852.3	-4,233.6	5,517.8	5,389.7	128.03	43.096		
14,300.0	7,770.0	7,730.0	7,730.0	116.3	13.5	90.00	-2,852.3	-4,233.6	5,582.3	5,452.5	129.77	43.015		
14,400.0	7,770.0	7,730.0	7,730.0	118.0	13.5	90.00	-2,852.3	-4,233.6	5,647.9	5,516.3	131.52	42.944		
14,500.0	7,770.0	7,730.0	7,730.0	119.8	13.5	90.00	-2,852.3	-4,233.6	5,714.4	5,581.2	133.26	42.882		
14,600.0	7,770.0	7,730.0	7,730.0	121.5	13.5	90.00	-2,852.3	-4,233.6	5,782.0	5,647.0	135.00	42.828		
14,700.0	7,770.0	7,730.0	7,730.0	123.3	13.5	90.00	-2,852.3	-4,233.6	5,850.4	5,713.7	136.75	42.783		
14,800.0	7,770.0	7,730.0	7,730.0	125.0	13.5	90.00	-2,852.3	-4,233.6	5,919.8	5,781.3	138.49	42.745		
14,900.0	7,770.0	7,730.0	7,730.0	126.7	13.5	90.00	-2,852.3	-4,233.6	5,990.0	5,849.8	140.23	42.715		
15,000.0	7,770.0	7,730.0	7,730.0	128.5	13.5	90.00	-2,852.3	-4,233.6	6,061.1	5,919.1	141.98	42.690		
15,100.0	7,770.0	7,730.0	7,730.0	130.2	13.5	90.00	-2,852.3	-4,233.6	6,133.0	5,989.2	143.72	42.672		
15,200.0	7,770.0	7,730.0	7,730.0	132.0	13.5	90.00	-2,852.3	-4,233.6	6,205.6	6,060.1	145.47	42.660		
15,300.0	7,770.0	7,730.0	7,730.0	133.7	13.5	90.00	-2,852.3	-4,233.6	6,279.0	6,131.8	147.21	42.653		
15,400.0	7,770.0	7,730.0	7,730.0	135.5	13.5	90.00	-2,852.3	-4,233.6	6,353.1	6,204.2	148.96	42.651 SF		
15,500.0	7,770.0	7,730.0	7,730.0	137.2	13.5	90.00	-2,852.3	-4,233.6	6,428.0	6,277.3	150.70	42.653		
15,600.0	7,770.0	7,730.0	7,730.0	139.0	13.5	90.00	-2,852.3	-4,233.6	6,503.5	6,351.0	152.45	42.660		
15,700.0	7,770.0	7,730.0	7,730.0	140.7	13.5	90.00	-2,852.3	-4,233.6	6,579.6	6,425.4	154.19	42.671		
15,800.0	7,770.0	7,730.0	7,730.0	142.4	13.5	90.00	-2,852.3	-4,233.6	6,656.4	6,500.5	155.94	42.686		
15,900.0	7,770.0	7,730.0	7,730.0	144.2	13.5	90.00	-2,852.3	-4,233.6	6,733.8	6,576.1	157.69	42.704		
16,000.0	7,770.0	7,730.0	7,730.0	145.9	13.5	90.00	-2,852.3	-4,233.6	6,811.8	6,652.4	159.43	42.725		
16,100.0	7,770.0	7,730.0	7,730.0	147.7	13.5	90.00	-2,852.3	-4,233.6	6,890.4	6,729.2	161.18	42.750		
16,200.0	7,770.0	7,730.0	7,730.0	149.4	13.5	90.00	-2,852.3	-4,233.6	6,969.5	6,806.5	162.93	42.777		
16,300.0	7,770.0	7,730.0	7,730.0	151.2	13.5	90.00	-2,852.3	-4,233.6	7,049.1	6,884.4	164.67	42.807		
16,400.0	7,770.0	7,730.0	7,730.0	152.9	13.5	90.00	-2,852.3	-4,233.6	7,129.2	6,962.8	166.42	42.839		
16,500.0	7,770.0	7,730.0	7,730.0	154.7	13.5	90.00	-2,852.3	-4,233.6	7,209.9	7,041.7	168.17	42.873		
16,600.0	7,770.0	7,730.0	7,730.0	156.4	13.5	90.00	-2,852.3	-4,233.6	7,291.0	7,121.1	169.91	42.910		
16,700.0	7,770.0	7,730.0	7,730.0	158.2	13.5	90.00	-2,852.3	-4,233.6	7,372.6	7,200.9	171.66	42.948		
16,800.0	7,770.0	7,730.0	7,730.0	159.9	13.5	90.00	-2,852.3	-4,233.6	7,454.6	7,281.2	173.41	42.989		
16,900.0	7,770.0	7,730.0	7,730.0	161.7	13.5	90.00	-2,852.3	-4,233.6	7,537.1	7,362.0	175.16	43.030		
17,000.0	7,770.0	7,730.0	7,730.0	163.4	13.5	90.00	-2,852.3	-4,233.6	7,620.0	7,443.1	176.91	43.074		
17,100.0	7,770.0	7,730.0	7,730.0	165.2	13.5	90.00	-2,852.3	-4,233.6	7,703.3	7,524.6	178.65	43.119		
17,200.0	7,770.0	7,730.0	7,730.0	166.9	13.5	90.00	-2,852.3	-4,233.6	7,787.0	7,606.6	180.40	43.165		
17,300.0	7,770.0	7,730.0	7,730.0	168.7	13.5	90.00	-2,852.3	-4,233.6	7,871.1	7,688.9	182.15	43.212		
17,400.0	7,770.0	7,730.0	7,730.0	170.4	13.5	90.00	-2,852.3	-4,233.6	7,955.5	7,771.6	183.90	43.260		
17,500.0	7,770.0	7,730.0	7,730.0	172.2	13.5	90.00	-2,852.3	-4,233.6	8,040.3	7,854.7	185.65	43.309		
17,600.0	7,770.0	7,730.0	7,730.0	173.9	13.5	90.00	-2,852.3	-4,233.6	8,125.4	7,938.0	187.40	43.360		
17,653.1	7,770.0	7,730.0	7,730.0	174.8	13.5	90.00	-2,852.3	-4,233.6	8,170.8	7,982.4	188.32	43.387		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-147.27	-4,101.6	-2,635.9	4,875.7					
100.0	100.0	58.0	58.0	0.2	0.1	-147.27	-4,101.6	-2,635.9	4,875.6	4,875.3	0.25	N/A		
200.0	200.0	158.0	158.0	0.3	0.3	-147.27	-4,101.6	-2,635.9	4,875.6	4,875.0	0.60	8,094.464		
300.0	300.0	258.0	258.0	0.5	0.5	-147.27	-4,101.6	-2,635.9	4,875.6	4,874.6	0.95	5,124.645		
400.0	400.0	358.0	358.0	0.7	0.6	-147.27	-4,101.6	-2,635.9	4,875.6	4,874.3	1.30	3,749.114		
500.0	500.0	458.0	458.0	0.8	0.8	-147.27	-4,101.6	-2,635.9	4,875.6	4,873.9	1.65	2,955.747		
550.0	550.0	508.0	508.0	0.9	0.9	-147.27	-4,101.6	-2,635.9	4,875.6	4,873.7	1.82	2,672.932		
600.0	600.0	558.0	558.0	1.0	1.0	-148.11	-4,101.6	-2,635.9	4,875.7	4,873.7	2.00	2,439.640		
700.0	700.0	658.0	658.0	1.2	1.1	-148.11	-4,101.6	-2,635.9	4,877.2	4,874.9	2.35	2,077.549		
800.0	799.9	757.9	757.9	1.4	1.3	-148.12	-4,101.6	-2,635.9	4,880.2	4,877.5	2.70	1,809.360		
861.1	860.9	818.9	818.9	1.5	1.4	-148.12	-4,101.6	-2,635.9	4,882.7	4,879.8	2.91	1,677.231		
900.0	899.8	857.8	857.8	1.6	1.5	-148.14	-4,101.6	-2,635.9	4,884.5	4,881.5	3.05	1,602.448		
1,000.0	999.6	957.6	957.6	1.8	1.7	-148.17	-4,101.6	-2,635.9	4,889.1	4,885.7	3.40	1,437.721		
1,100.0	1,099.5	1,057.5	1,057.5	1.9	1.8	-148.20	-4,101.6	-2,635.9	4,893.7	4,890.0	3.75	1,303.725		
1,200.0	1,199.3	1,157.3	1,157.3	2.1	2.0	-148.24	-4,101.6	-2,635.9	4,898.4	4,894.3	4.11	1,192.641		
1,300.0	1,299.2	1,257.2	1,257.2	2.3	2.2	-148.27	-4,101.6	-2,635.9	4,903.0	4,898.5	4.46	1,099.082		
1,400.0	1,399.1	1,357.1	1,357.1	2.5	2.4	-148.30	-4,101.6	-2,635.9	4,907.6	4,902.8	4.82	1,019.220		
1,500.0	1,498.9	1,456.9	1,456.9	2.7	2.5	-148.34	-4,101.6	-2,635.9	4,912.2	4,907.0	5.17	950.264		
1,600.0	1,598.8	1,556.8	1,556.8	2.9	2.7	-148.37	-4,101.6	-2,635.9	4,916.8	4,911.3	5.52	890.128		
1,700.0	1,698.6	1,656.6	1,656.6	3.1	2.9	-148.40	-4,101.6	-2,635.9	4,921.5	4,915.6	5.88	837.228		
1,800.0	1,798.5	1,756.5	1,756.5	3.3	3.1	-148.44	-4,101.6	-2,635.9	4,926.1	4,919.9	6.23	790.334		
1,900.0	1,898.3	1,856.3	1,856.3	3.5	3.2	-148.47	-4,101.6	-2,635.9	4,930.7	4,924.1	6.59	748.481		
2,000.0	1,998.2	1,956.2	1,956.2	3.7	3.4	-148.50	-4,101.6	-2,635.9	4,935.3	4,928.4	6.94	710.898		
2,100.0	2,098.0	2,056.0	2,056.0	3.9	3.6	-148.54	-4,101.6	-2,635.9	4,940.0	4,932.7	7.30	676.966		
2,200.0	2,197.9	2,155.9	2,155.9	4.1	3.8	-148.57	-4,101.6	-2,635.9	4,944.6	4,937.0	7.65	646.177		
2,300.0	2,297.7	2,255.7	2,255.7	4.3	3.9	-148.60	-4,101.6	-2,635.9	4,949.2	4,941.2	8.01	618.116		
2,400.0	2,397.6	2,355.6	2,355.6	4.5	4.1	-148.63	-4,101.6	-2,635.9	4,953.9	4,945.5	8.36	592.435		
2,500.0	2,497.4	2,455.4	2,455.4	4.7	4.3	-148.67	-4,101.6	-2,635.9	4,958.5	4,949.8	8.72	568.844		
2,600.0	2,597.3	2,555.3	2,555.3	4.9	4.5	-148.70	-4,101.6	-2,635.9	4,963.1	4,954.1	9.07	547.099		
2,700.0	2,697.1	2,655.1	2,655.1	5.1	4.6	-148.73	-4,101.6	-2,635.9	4,967.8	4,958.4	9.43	526.991		
2,800.0	2,797.0	2,755.0	2,755.0	5.3	4.8	-148.76	-4,101.6	-2,635.9	4,972.4	4,962.6	9.78	508.342		
2,900.0	2,896.8	2,854.8	2,854.8	5.5	5.0	-148.80	-4,101.6	-2,635.9	4,977.1	4,966.9	10.14	490.999		
3,000.0	2,996.7	2,954.7	2,954.7	5.7	5.2	-148.83	-4,101.6	-2,635.9	4,981.7	4,971.2	10.49	474.830		
3,100.0	3,096.5	3,054.5	3,054.5	5.9	5.3	-148.86	-4,101.6	-2,635.9	4,986.4	4,975.5	10.85	459.720		
3,200.0	3,196.4	3,154.4	3,154.4	6.1	5.5	-148.89	-4,101.6	-2,635.9	4,991.0	4,979.8	11.20	445.568		
3,300.0	3,296.3	3,254.3	3,254.3	6.3	5.7	-148.93	-4,101.6	-2,635.9	4,995.7	4,984.1	11.56	432.285		
3,400.0	3,396.1	3,354.1	3,354.1	6.5	5.9	-148.96	-4,101.6	-2,635.9	5,000.3	4,988.4	11.91	419.794		
3,500.0	3,496.0	3,454.0	3,454.0	6.7	6.0	-148.99	-4,101.6	-2,635.9	5,005.0	4,992.7	12.27	408.027		
3,600.0	3,595.8	3,553.8	3,553.8	6.9	6.2	-149.02	-4,101.6	-2,635.9	5,009.6	4,997.0	12.62	396.922		
3,700.0	3,695.7	3,653.7	3,653.7	7.0	6.4	-149.05	-4,101.6	-2,635.9	5,014.3	5,001.3	12.98	386.425		
3,800.0	3,795.5	3,753.5	3,753.5	7.2	6.6	-149.08	-4,101.6	-2,635.9	5,018.9	5,005.6	13.33	376.487		
3,900.0	3,895.4	3,853.4	3,853.4	7.4	6.7	-149.12	-4,101.6	-2,635.9	5,023.6	5,009.9	13.69	367.065		
4,000.0	3,995.2	3,953.2	3,953.2	7.6	6.9	-149.15	-4,101.6	-2,635.9	5,028.2	5,014.2	14.04	358.120		
4,100.0	4,095.1	4,053.1	4,053.1	7.8	7.1	-149.18	-4,101.6	-2,635.9	5,032.9	5,018.5	14.40	349.616		
4,200.0	4,194.9	4,152.9	4,152.9	8.0	7.2	-149.21	-4,101.6	-2,635.9	5,037.6	5,022.8	14.75	341.522		
4,300.0	4,294.8	4,252.8	4,252.8	8.2	7.4	-149.24	-4,101.6	-2,635.9	5,042.2	5,027.1	15.11	333.809		
4,400.0	4,394.6	4,352.6	4,352.6	8.4	7.6	-149.27	-4,101.6	-2,635.9	5,046.9	5,031.4	15.46	326.450		
4,500.0	4,494.5	4,452.5	4,452.5	8.6	7.8	-149.31	-4,101.6	-2,635.9	5,051.6	5,035.7	15.81	319.421		
4,600.0	4,594.3	4,552.3	4,552.3	8.8	7.9	-149.34	-4,101.6	-2,635.9	5,056.2	5,040.1	16.17	312.702		
4,700.0	4,694.2	4,652.2	4,652.2	9.0	8.1	-149.37	-4,101.6	-2,635.9	5,060.9	5,044.4	16.52	306.271		
4,800.0	4,794.0	4,752.0	4,752.0	9.2	8.3	-149.40	-4,101.6	-2,635.9	5,065.6	5,048.7	16.88	300.112		
4,900.0	4,893.9	4,851.9	4,851.9	9.4	8.5	-149.43	-4,101.6	-2,635.9	5,070.2	5,053.0	17.23	294.206		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,951.7	4,951.7	9.6	8.6	-149.46	-4,101.6	-2,635.9	5,074.9	5,057.3	17.59	288.538		
5,100.0	5,093.6	5,000.0	5,000.0	9.8	8.7	-149.48	-4,101.6	-2,635.9	5,079.9	5,062.0	17.85	284.534		
5,200.0	5,193.5	5,000.0	5,000.0	10.0	8.7	-149.48	-4,101.6	-2,635.9	5,086.5	5,068.5	18.03	282.048		
5,300.0	5,293.3	5,000.0	5,000.0	10.2	8.7	-149.48	-4,101.6	-2,635.9	5,095.2	5,076.9	18.22	279.719		
5,400.0	5,393.2	5,000.0	5,000.0	10.4	8.7	-149.48	-4,101.6	-2,635.9	5,105.7	5,087.3	18.40	277.541		
5,500.0	5,493.0	5,000.0	5,000.0	10.6	8.7	-149.48	-4,101.6	-2,635.9	5,118.2	5,099.7	18.58	275.510		
5,600.0	5,592.9	5,000.0	5,000.0	10.8	8.7	-149.48	-4,101.6	-2,635.9	5,132.6	5,113.9	18.76	273.620		
5,700.0	5,692.7	5,000.0	5,000.0	11.0	8.7	-149.48	-4,101.6	-2,635.9	5,149.0	5,130.0	18.94	271.867		
5,800.0	5,792.6	5,000.0	5,000.0	11.2	8.7	-149.48	-4,101.6	-2,635.9	5,167.2	5,148.1	19.12	270.246		
5,900.0	5,892.4	5,000.0	5,000.0	11.4	8.7	-149.48	-4,101.6	-2,635.9	5,187.2	5,167.9	19.30	268.751		
6,000.0	5,992.3	5,000.0	5,000.0	11.6	8.7	-149.48	-4,101.6	-2,635.9	5,209.2	5,189.7	19.48	267.379		
6,100.0	6,092.1	5,000.0	5,000.0	11.8	8.7	-149.48	-4,101.6	-2,635.9	5,232.9	5,213.2	19.66	266.124		
6,200.0	6,192.0	5,000.0	5,000.0	12.0	8.7	-149.48	-4,101.6	-2,635.9	5,258.4	5,238.6	19.84	264.983		
6,300.0	6,291.8	5,000.0	5,000.0	12.2	8.7	-149.48	-4,101.6	-2,635.9	5,285.7	5,265.7	20.03	263.951		
6,400.0	6,391.7	5,000.0	5,000.0	12.4	8.7	-149.48	-4,101.6	-2,635.9	5,314.8	5,294.6	20.21	263.023		
6,500.0	6,491.5	5,000.0	5,000.0	12.6	8.7	-149.48	-4,101.6	-2,635.9	5,345.5	5,325.1	20.39	262.196		
6,600.0	6,591.4	5,000.0	5,000.0	12.8	8.7	-149.48	-4,101.6	-2,635.9	5,377.9	5,357.4	20.57	261.466		
6,700.0	6,691.2	5,000.0	5,000.0	13.0	8.7	-149.48	-4,101.6	-2,635.9	5,412.0	5,391.3	20.75	260.827		
6,800.0	6,791.1	5,000.0	5,000.0	13.2	8.7	-149.48	-4,101.6	-2,635.9	5,447.7	5,426.8	20.93	260.278		
6,900.0	6,890.9	5,000.0	5,000.0	13.4	8.7	-149.48	-4,101.6	-2,635.9	5,485.0	5,463.9	21.11	259.813		
7,000.0	6,990.8	5,000.0	5,000.0	13.6	8.7	-149.48	-4,101.6	-2,635.9	5,523.9	5,502.6	21.29	259.429		
7,024.2	7,014.9	5,000.0	5,000.0	13.6	8.7	-149.48	-4,101.6	-2,635.9	5,533.5	5,512.2	21.34	259.348		
7,050.0	7,040.7	5,000.0	5,000.0	13.7	8.7	-151.58	-4,101.6	-2,635.9	5,543.5	5,522.2	21.37	259.356		
7,100.0	7,090.7	5,000.0	5,000.0	13.7	8.7	31.03	-4,101.6	-2,635.9	5,561.1	5,539.7	21.40	259.805		
7,150.0	7,140.5	5,000.0	5,000.0	13.8	8.7	29.89	-4,101.6	-2,635.9	5,576.2	5,554.9	21.38	260.804		
7,200.0	7,189.9	5,000.0	5,000.0	13.8	8.7	29.24	-4,101.6	-2,635.9	5,588.9	5,567.6	21.30	262.357		
7,250.0	7,238.6	5,000.0	5,000.0	13.8	8.7	28.79	-4,101.6	-2,635.9	5,598.9	5,577.7	21.17	264.464		
7,300.0	7,286.4	5,000.0	5,000.0	13.7	8.7	28.46	-4,101.6	-2,635.9	5,606.4	5,585.4	20.99	267.114		
7,350.0	7,333.1	5,000.0	5,000.0	13.7	8.7	28.25	-4,101.6	-2,635.9	5,611.3	5,590.5	20.76	270.290		
7,400.0	7,378.5	5,000.0	5,000.0	13.6	8.7	28.15	-4,101.6	-2,635.9	5,613.5	5,593.0	20.49	273.961		
7,450.0	7,422.2	5,000.0	5,000.0	13.6	8.7	28.15	-4,101.6	-2,635.9	5,613.1	5,593.0	20.19	278.078		
7,500.0	7,464.1	5,000.0	5,000.0	13.5	8.7	28.26	-4,101.6	-2,635.9	5,610.1	5,590.3	19.85	282.572		
7,550.0	7,504.1	5,000.0	5,000.0	13.5	8.7	28.47	-4,101.6	-2,635.9	5,604.5	5,585.0	19.50	287.342		
7,600.0	7,541.8	5,000.0	5,000.0	13.5	8.7	28.78	-4,101.6	-2,635.9	5,596.2	5,577.1	19.15	292.248		
7,650.0	7,577.2	5,000.0	5,000.0	13.4	8.7	29.21	-4,101.6	-2,635.9	5,585.4	5,566.6	18.80	297.104		
7,700.0	7,610.0	5,000.0	5,000.0	13.5	8.7	29.75	-4,101.6	-2,635.9	5,572.1	5,553.6	18.47	301.669		
7,750.0	7,640.2	5,000.0	5,000.0	13.5	8.7	30.41	-4,101.6	-2,635.9	5,556.2	5,538.0	18.18	305.645		
7,800.0	7,667.4	5,000.0	5,000.0	13.6	8.7	31.21	-4,101.6	-2,635.9	5,537.9	5,520.0	17.94	308.681		
7,850.0	7,691.7	5,000.0	5,000.0	13.7	8.7	32.16	-4,101.6	-2,635.9	5,517.3	5,499.5	17.78	310.395		
7,900.0	7,712.8	5,000.0	5,000.0	13.9	8.7	33.28	-4,101.6	-2,635.9	5,494.4	5,476.7	17.70	310.402		
7,950.0	7,730.8	5,000.0	5,000.0	14.1	8.7	34.57	-4,101.6	-2,635.9	5,469.2	5,451.5	17.74	308.369		
8,000.0	7,745.5	5,000.0	5,000.0	14.4	8.7	36.07	-4,101.6	-2,635.9	5,442.0	5,424.1	17.90	304.069		
8,050.0	7,756.7	5,000.0	5,000.0	14.7	8.7	37.81	-4,101.6	-2,635.9	5,412.7	5,394.5	18.20	297.431		
8,100.0	7,764.6	5,000.0	5,000.0	15.1	8.7	39.81	-4,101.6	-2,635.9	5,381.5	5,362.9	18.65	288.570		
8,150.0	7,769.0	5,000.0	5,000.0	15.5	8.7	42.10	-4,101.6	-2,635.9	5,348.5	5,329.3	19.25	277.782		
8,188.1	7,770.0	5,000.0	5,000.0	15.9	8.7	44.08	-4,101.6	-2,635.9	5,322.3	5,302.5	19.82	268.544		
8,200.0	7,770.0	5,000.0	5,000.0	16.0	8.7	44.08	-4,101.6	-2,635.9	5,314.0	5,294.1	19.90	267.062		
8,300.0	7,770.0	5,000.0	5,000.0	17.0	8.7	44.08	-4,101.6	-2,635.9	5,244.5	5,223.9	20.60	254.574		
8,400.0	7,770.0	5,000.0	5,000.0	18.1	8.7	44.08	-4,101.6	-2,635.9	5,176.0	5,154.7	21.38	242.150		
8,500.0	7,770.0	5,000.0	5,000.0	19.3	8.7	44.08	-4,101.6	-2,635.9	5,108.6	5,086.4	22.21	230.018		
8,600.0	7,770.0	5,000.0	5,000.0	20.6	8.7	44.08	-4,101.6	-2,635.9	5,042.3	5,019.2	23.09	218.330		
8,700.0	7,770.0	5,000.0	5,000.0	21.9	8.7	44.08	-4,101.6	-2,635.9	4,977.0	4,953.0	24.02	207.183		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,770.0	5,000.0	5,000.0	23.3	8.7	44.08	-4,101.6	-2,635.9	4,913.0	4,888.0	24.99	196.626		
8,900.0	7,770.0	5,000.0	5,000.0	24.8	8.7	44.08	-4,101.6	-2,635.9	4,850.1	4,824.2	25.98	186.681		
9,000.0	7,770.0	5,000.0	5,000.0	26.3	8.7	44.08	-4,101.6	-2,635.9	4,788.6	4,761.6	27.00	177.344		
9,100.0	7,770.0	5,000.0	5,000.0	27.8	8.7	44.08	-4,101.6	-2,635.9	4,728.3	4,700.3	28.04	168.601		
9,200.0	7,770.0	5,000.0	5,000.0	29.3	8.7	44.08	-4,101.6	-2,635.9	4,669.4	4,640.3	29.11	160.426		
9,300.0	7,770.0	5,000.0	5,000.0	30.9	8.7	44.08	-4,101.6	-2,635.9	4,611.9	4,581.8	30.18	152.790		
9,400.0	7,770.0	5,000.0	5,000.0	32.5	8.7	44.08	-4,101.6	-2,635.9	4,555.9	4,524.7	31.28	145.662		
9,500.0	7,770.0	5,000.0	5,000.0	34.1	8.7	44.08	-4,101.6	-2,635.9	4,501.5	4,469.1	32.38	139.008		
9,600.0	7,770.0	5,000.0	5,000.0	35.7	8.7	44.08	-4,101.6	-2,635.9	4,448.5	4,415.1	33.50	132.798		
9,700.0	7,770.0	5,000.0	5,000.0	37.3	8.7	44.08	-4,101.6	-2,635.9	4,397.3	4,362.7	34.62	127.001		
9,800.0	7,770.0	5,000.0	5,000.0	39.0	8.7	44.08	-4,101.6	-2,635.9	4,347.7	4,312.0	35.76	121.587		
9,900.0	7,770.0	5,000.0	5,000.0	40.6	8.7	44.08	-4,101.6	-2,635.9	4,299.9	4,263.0	36.90	116.530		
10,000.0	7,770.0	5,000.0	5,000.0	42.3	8.7	44.08	-4,101.6	-2,635.9	4,253.9	4,215.9	38.05	111.805		
10,100.0	7,770.0	5,000.0	5,000.0	44.0	8.7	44.08	-4,101.6	-2,635.9	4,209.8	4,170.6	39.20	107.388		
10,200.0	7,770.0	5,000.0	5,000.0	45.6	8.7	44.08	-4,101.6	-2,635.9	4,167.6	4,127.2	40.36	103.259		
10,300.0	7,770.0	5,000.0	5,000.0	47.3	8.7	44.08	-4,101.6	-2,635.9	4,127.4	4,085.9	41.52	99.396		
10,400.0	7,770.0	5,000.0	5,000.0	49.0	8.7	44.08	-4,101.6	-2,635.9	4,089.2	4,046.5	42.69	95.782		
10,500.0	7,770.0	5,000.0	5,000.0	50.7	8.7	44.08	-4,101.6	-2,635.9	4,053.2	4,009.3	43.87	92.401		
10,600.0	7,770.0	5,000.0	5,000.0	52.4	8.7	44.08	-4,101.6	-2,635.9	4,019.3	3,974.3	45.04	89.237		
10,700.0	7,770.0	5,000.0	5,000.0	54.1	8.7	44.08	-4,101.6	-2,635.9	3,987.6	3,941.4	46.22	86.275		
10,800.0	7,770.0	5,000.0	5,000.0	55.8	8.7	44.08	-4,101.6	-2,635.9	3,958.3	3,910.9	47.40	83.504		
10,900.0	7,770.0	5,000.0	5,000.0	57.5	8.7	44.08	-4,101.6	-2,635.9	3,931.2	3,882.6	48.59	80.912		
11,000.0	7,770.0	5,000.0	5,000.0	59.2	8.7	44.08	-4,101.6	-2,635.9	3,906.5	3,856.7	49.77	78.486		
11,100.0	7,770.0	5,000.0	5,000.0	60.9	8.7	44.08	-4,101.6	-2,635.9	3,884.3	3,833.3	50.96	76.217		
11,200.0	7,770.0	5,000.0	5,000.0	62.6	8.7	44.08	-4,101.6	-2,635.9	3,864.4	3,812.3	52.15	74.096		
11,300.0	7,770.0	5,000.0	5,000.0	64.3	8.7	44.08	-4,101.6	-2,635.9	3,847.1	3,793.8	53.35	72.115		
11,400.0	7,770.0	5,000.0	5,000.0	66.0	8.7	44.08	-4,101.6	-2,635.9	3,832.4	3,777.8	54.54	70.264		
11,500.0	7,770.0	5,000.0	5,000.0	67.7	8.7	44.08	-4,101.6	-2,635.9	3,820.1	3,764.4	55.74	68.536		
11,600.0	7,770.0	5,000.0	5,000.0	69.5	8.7	44.08	-4,101.6	-2,635.9	3,810.5	3,753.6	56.94	66.924		
11,700.0	7,770.0	5,000.0	5,000.0	71.2	8.7	44.08	-4,101.6	-2,635.9	3,803.5	3,745.4	58.14	65.422		
11,800.0	7,770.0	5,000.0	5,000.0	72.9	8.7	44.08	-4,101.6	-2,635.9	3,799.1	3,739.8	59.34	64.024		
11,900.0	7,770.0	5,000.0	5,000.0	74.6	8.7	44.08	-4,101.6	-2,635.9	3,797.3	3,736.8	60.54	62.723		
11,917.4	7,770.0	5,000.0	5,000.0	74.9	8.7	44.08	-4,101.6	-2,635.9	3,797.3	3,736.5	60.75	62.507 CC		
12,000.0	7,770.0	5,000.0	5,000.0	76.4	8.7	44.08	-4,101.6	-2,635.9	3,798.2	3,736.4	61.74	61.515 ES		
12,100.0	7,770.0	5,000.0	5,000.0	78.1	8.7	44.08	-4,101.6	-2,635.9	3,801.7	3,738.7	62.95	60.393		
12,200.0	7,770.0	5,000.0	5,000.0	79.8	8.7	44.08	-4,101.6	-2,635.9	3,807.8	3,743.6	64.15	59.354		
12,300.0	7,770.0	5,000.0	5,000.0	81.5	8.7	44.08	-4,101.6	-2,635.9	3,816.5	3,751.1	65.36	58.392		
12,400.0	7,770.0	5,000.0	5,000.0	83.3	8.7	44.08	-4,101.6	-2,635.9	3,827.8	3,761.3	66.57	57.503		
12,500.0	7,770.0	5,000.0	5,000.0	85.0	8.7	44.08	-4,101.6	-2,635.9	3,841.7	3,773.9	67.78	56.682		
12,600.0	7,770.0	5,000.0	5,000.0	86.7	8.7	44.08	-4,101.6	-2,635.9	3,858.1	3,789.2	68.98	55.927		
12,700.0	7,770.0	5,000.0	5,000.0	88.5	8.7	44.08	-4,101.6	-2,635.9	3,877.1	3,806.9	70.19	55.233		
12,800.0	7,770.0	5,000.0	5,000.0	90.2	8.7	44.08	-4,101.6	-2,635.9	3,898.5	3,827.1	71.40	54.597		
12,900.0	7,770.0	5,000.0	5,000.0	91.9	8.7	44.08	-4,101.6	-2,635.9	3,922.3	3,849.7	72.62	54.015		
13,000.0	7,770.0	5,000.0	5,000.0	93.7	8.7	44.08	-4,101.6	-2,635.9	3,948.6	3,874.8	73.83	53.484		
13,100.0	7,770.0	5,000.0	5,000.0	95.4	8.7	44.08	-4,101.6	-2,635.9	3,977.2	3,902.1	75.04	53.001		
13,200.0	7,770.0	5,000.0	5,000.0	97.1	8.7	44.08	-4,101.6	-2,635.9	4,008.0	3,931.8	76.25	52.563		
13,300.0	7,770.0	5,000.0	5,000.0	98.9	8.7	44.08	-4,101.6	-2,635.9	4,041.2	3,963.7	77.47	52.167		
13,400.0	7,770.0	5,000.0	5,000.0	100.6	8.7	44.08	-4,101.6	-2,635.9	4,076.4	3,997.8	78.68	51.810		
13,500.0	7,770.0	5,000.0	5,000.0	102.4	8.7	44.08	-4,101.6	-2,635.9	4,113.9	4,034.0	79.89	51.491		
13,600.0	7,770.0	5,000.0	5,000.0	104.1	8.7	44.08	-4,101.6	-2,635.9	4,153.4	4,072.3	81.11	51.207		
13,700.0	7,770.0	5,000.0	5,000.0	105.8	8.7	44.08	-4,101.6	-2,635.9	4,194.9	4,112.6	82.32	50.955		
13,800.0	7,770.0	5,000.0	5,000.0	107.6	8.7	44.08	-4,101.6	-2,635.9	4,238.3	4,154.8	83.54	50.734		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,900.0	7,770.0	5,000.0	5,000.0	109.3	8.7	44.08	-4,101.6	-2,635.9	4,283.7	4,198.9	84.76	50.541		
14,000.0	7,770.0	5,000.0	5,000.0	111.1	8.7	44.08	-4,101.6	-2,635.9	4,330.9	4,244.9	85.97	50.375		
14,100.0	7,770.0	5,000.0	5,000.0	112.8	8.7	44.08	-4,101.6	-2,635.9	4,379.9	4,292.7	87.19	50.234		
14,200.0	7,770.0	5,000.0	5,000.0	114.5	8.7	44.08	-4,101.6	-2,635.9	4,430.5	4,342.1	88.41	50.116		
14,300.0	7,770.0	5,000.0	5,000.0	116.3	8.7	44.08	-4,101.6	-2,635.9	4,482.9	4,393.2	89.62	50.019		
14,400.0	7,770.0	5,000.0	5,000.0	118.0	8.7	44.08	-4,101.6	-2,635.9	4,536.8	4,446.0	90.84	49.942		
14,500.0	7,770.0	5,000.0	5,000.0	119.8	8.7	44.08	-4,101.6	-2,635.9	4,592.3	4,500.2	92.06	49.884		
14,600.0	7,770.0	5,000.0	5,000.0	121.5	8.7	44.08	-4,101.6	-2,635.9	4,649.3	4,556.0	93.28	49.843		
14,700.0	7,770.0	5,000.0	5,000.0	123.3	8.7	44.08	-4,101.6	-2,635.9	4,707.7	4,613.2	94.50	49.818		
14,800.0	7,770.0	5,000.0	5,000.0	125.0	8.7	44.08	-4,101.6	-2,635.9	4,767.5	4,671.8	95.72	49.809 SF		
14,900.0	7,770.0	5,000.0	5,000.0	126.7	8.7	44.08	-4,101.6	-2,635.9	4,828.6	4,731.7	96.93	49.813		
15,000.0	7,770.0	5,000.0	5,000.0	128.5	8.7	44.08	-4,101.6	-2,635.9	4,891.0	4,792.8	98.15	49.830		
15,100.0	7,770.0	5,000.0	5,000.0	130.2	8.7	44.08	-4,101.6	-2,635.9	4,954.6	4,855.3	99.37	49.859		
15,200.0	7,770.0	5,000.0	5,000.0	132.0	8.7	44.08	-4,101.6	-2,635.9	5,019.4	4,918.9	100.59	49.898		
15,300.0	7,770.0	5,000.0	5,000.0	133.7	8.7	44.08	-4,101.6	-2,635.9	5,085.4	4,983.6	101.81	49.948		
15,400.0	7,770.0	5,000.0	5,000.0	135.5	8.7	44.08	-4,101.6	-2,635.9	5,152.5	5,049.4	103.03	50.008		
15,500.0	7,770.0	5,000.0	5,000.0	137.2	8.7	44.08	-4,101.6	-2,635.9	5,220.6	5,116.3	104.25	50.075		
15,600.0	7,770.0	5,000.0	5,000.0	139.0	8.7	44.08	-4,101.6	-2,635.9	5,289.7	5,184.2	105.47	50.151		
15,700.0	7,770.0	5,000.0	5,000.0	140.7	8.7	44.08	-4,101.6	-2,635.9	5,359.8	5,253.1	106.70	50.234		
15,800.0	7,770.0	5,000.0	5,000.0	142.4	8.7	44.08	-4,101.6	-2,635.9	5,430.8	5,322.9	107.92	50.324		
15,900.0	7,770.0	5,000.0	5,000.0	144.2	8.7	44.08	-4,101.6	-2,635.9	5,502.8	5,393.6	109.14	50.420		
16,000.0	7,770.0	5,000.0	5,000.0	145.9	8.7	44.08	-4,101.6	-2,635.9	5,575.6	5,465.2	110.36	50.522		
16,100.0	7,770.0	5,000.0	5,000.0	147.7	8.7	44.08	-4,101.6	-2,635.9	5,649.2	5,537.6	111.58	50.629		
16,200.0	7,770.0	5,000.0	5,000.0	149.4	8.7	44.08	-4,101.6	-2,635.9	5,723.6	5,610.8	112.80	50.740		
16,300.0	7,770.0	5,000.0	5,000.0	151.2	8.7	44.08	-4,101.6	-2,635.9	5,798.8	5,684.8	114.02	50.856		
16,400.0	7,770.0	5,000.0	5,000.0	152.9	8.7	44.08	-4,101.6	-2,635.9	5,874.8	5,759.5	115.25	50.976		
16,500.0	7,770.0	5,000.0	5,000.0	154.7	8.7	44.08	-4,101.6	-2,635.9	5,951.4	5,835.0	116.47	51.099		
16,600.0	7,770.0	5,000.0	5,000.0	156.4	8.7	44.08	-4,101.6	-2,635.9	6,028.8	5,911.1	117.69	51.226		
16,700.0	7,770.0	5,000.0	5,000.0	158.2	8.7	44.08	-4,101.6	-2,635.9	6,106.8	5,987.9	118.91	51.355		
16,800.0	7,770.0	5,000.0	5,000.0	159.9	8.7	44.08	-4,101.6	-2,635.9	6,185.4	6,065.3	120.14	51.487		
16,900.0	7,770.0	5,000.0	5,000.0	161.7	8.7	44.08	-4,101.6	-2,635.9	6,264.6	6,143.3	121.36	51.621		
17,000.0	7,770.0	5,000.0	5,000.0	163.4	8.7	44.08	-4,101.6	-2,635.9	6,344.5	6,221.9	122.58	51.757		
17,100.0	7,770.0	5,000.0	5,000.0	165.2	8.7	44.08	-4,101.6	-2,635.9	6,424.9	6,301.1	123.80	51.896		
17,200.0	7,770.0	5,000.0	5,000.0	166.9	8.7	44.08	-4,101.6	-2,635.9	6,505.8	6,380.8	125.03	52.035		
17,300.0	7,770.0	5,000.0	5,000.0	168.7	8.7	44.08	-4,101.6	-2,635.9	6,587.2	6,461.0	126.25	52.176		
17,400.0	7,770.0	5,000.0	5,000.0	170.4	8.7	44.08	-4,101.6	-2,635.9	6,669.2	6,541.7	127.47	52.319		
17,500.0	7,770.0	5,000.0	5,000.0	172.2	8.7	44.08	-4,101.6	-2,635.9	6,751.7	6,623.0	128.70	52.462		
17,600.0	7,770.0	5,000.0	5,000.0	173.9	8.7	44.08	-4,101.6	-2,635.9	6,834.6	6,704.7	129.92	52.606		
17,653.1	7,770.0	5,000.0	5,000.0	174.8	8.7	44.08	-4,101.6	-2,635.9	6,878.7	6,748.2	130.57	52.683		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-133.17	-3,068.5	-3,271.4	4,485.4					
100.0	100.0	66.0	66.0	0.2	0.1	-133.17	-3,068.5	-3,271.4	4,485.2	4,485.0	0.27	N/A		
200.0	200.0	166.0	166.0	0.3	0.3	-133.17	-3,068.5	-3,271.4	4,485.2	4,484.6	0.62	7,277.731		
300.0	300.0	266.0	266.0	0.5	0.5	-133.17	-3,068.5	-3,271.4	4,485.2	4,484.3	0.97	4,646.187		
400.0	400.0	366.0	366.0	0.7	0.6	-133.17	-3,068.5	-3,271.4	4,485.2	4,483.9	1.31	3,412.328		
500.0	500.0	466.0	466.0	0.8	0.8	-133.17	-3,068.5	-3,271.4	4,485.2	4,483.6	1.66	2,696.291		
550.0	550.0	516.0	516.0	0.9	0.9	-133.17	-3,068.5	-3,271.4	4,485.2	4,483.4	1.84	2,440.261		
600.0	600.0	566.0	566.0	1.0	1.0	-134.00	-3,068.5	-3,271.4	4,485.4	4,483.4	2.01	2,228.725		
700.0	700.0	666.0	666.0	1.2	1.2	-134.01	-3,068.5	-3,271.4	4,486.6	4,484.2	2.36	1,899.531		
800.0	799.9	765.9	765.9	1.4	1.3	-134.03	-3,068.5	-3,271.4	4,489.0	4,486.3	2.71	1,654.661		
861.1	860.9	826.9	826.9	1.5	1.4	-134.04	-3,068.5	-3,271.4	4,491.1	4,488.2	2.93	1,533.569		
900.0	899.8	865.8	865.8	1.6	1.5	-134.06	-3,068.5	-3,271.4	4,492.6	4,489.5	3.07	1,465.027		
1,000.0	999.6	965.6	965.6	1.8	1.7	-134.11	-3,068.5	-3,271.4	4,496.4	4,492.9	3.42	1,313.908		
1,100.0	1,099.5	1,065.5	1,065.5	1.9	1.9	-134.16	-3,068.5	-3,271.4	4,500.1	4,496.4	3.78	1,190.885		
1,200.0	1,199.3	1,165.3	1,165.3	2.1	2.0	-134.21	-3,068.5	-3,271.4	4,503.9	4,499.8	4.14	1,088.870		
1,300.0	1,299.2	1,265.2	1,265.2	2.3	2.2	-134.26	-3,068.5	-3,271.4	4,507.7	4,503.2	4.49	1,002.952		
1,400.0	1,399.1	1,365.1	1,365.1	2.5	2.4	-134.30	-3,068.5	-3,271.4	4,511.5	4,506.7	4.85	929.627		
1,500.0	1,498.9	1,464.9	1,464.9	2.7	2.6	-134.35	-3,068.5	-3,271.4	4,515.3	4,510.1	5.21	866.333		
1,600.0	1,598.8	1,564.8	1,564.8	2.9	2.7	-134.40	-3,068.5	-3,271.4	4,519.1	4,513.5	5.57	811.156		
1,700.0	1,698.6	1,664.6	1,664.6	3.1	2.9	-134.45	-3,068.5	-3,271.4	4,522.9	4,517.0	5.93	762.634		
1,800.0	1,798.5	1,764.5	1,764.5	3.3	3.1	-134.50	-3,068.5	-3,271.4	4,526.7	4,520.4	6.29	719.639		
1,900.0	1,898.3	1,864.3	1,864.3	3.5	3.3	-134.55	-3,068.5	-3,271.4	4,530.5	4,523.9	6.65	681.280		
2,000.0	1,998.2	1,964.2	1,964.2	3.7	3.4	-134.60	-3,068.5	-3,271.4	4,534.3	4,527.3	7.01	646.848		
2,100.0	2,098.0	2,064.0	2,064.0	3.9	3.6	-134.65	-3,068.5	-3,271.4	4,538.1	4,530.8	7.37	615.772		
2,200.0	2,197.9	2,163.9	2,163.9	4.1	3.8	-134.70	-3,068.5	-3,271.4	4,542.0	4,534.2	7.73	587.586		
2,300.0	2,297.7	2,263.7	2,263.7	4.3	4.0	-134.74	-3,068.5	-3,271.4	4,545.8	4,537.7	8.09	561.904		
2,400.0	2,397.6	2,363.6	2,363.6	4.5	4.1	-134.79	-3,068.5	-3,271.4	4,549.6	4,541.2	8.45	538.409		
2,500.0	2,497.4	2,463.4	2,463.4	4.7	4.3	-134.84	-3,068.5	-3,271.4	4,553.4	4,544.6	8.81	516.834		
2,600.0	2,597.3	2,563.3	2,563.3	4.9	4.5	-134.89	-3,068.5	-3,271.4	4,557.3	4,548.1	9.17	496.951		
2,700.0	2,697.1	2,663.1	2,663.1	5.1	4.6	-134.94	-3,068.5	-3,271.4	4,561.1	4,551.6	9.53	478.572		
2,800.0	2,797.0	2,763.0	2,763.0	5.3	4.8	-134.99	-3,068.5	-3,271.4	4,564.9	4,555.0	9.89	461.530		
2,900.0	2,896.8	2,862.8	2,862.8	5.5	5.0	-135.03	-3,068.5	-3,271.4	4,568.8	4,558.5	10.25	445.687		
3,000.0	2,996.7	2,962.7	2,962.7	5.7	5.2	-135.08	-3,068.5	-3,271.4	4,572.6	4,562.0	10.61	430.919		
3,100.0	3,096.5	3,062.5	3,062.5	5.9	5.3	-135.13	-3,068.5	-3,271.4	4,576.5	4,565.5	10.97	417.122		
3,200.0	3,196.4	3,162.4	3,162.4	6.1	5.5	-135.18	-3,068.5	-3,271.4	4,580.3	4,569.0	11.33	404.202		
3,300.0	3,296.3	3,262.3	3,262.3	6.3	5.7	-135.23	-3,068.5	-3,271.4	4,584.2	4,572.5	11.69	392.079		
3,400.0	3,396.1	3,362.1	3,362.1	6.5	5.9	-135.27	-3,068.5	-3,271.4	4,588.0	4,576.0	12.05	380.681		
3,500.0	3,496.0	3,462.0	3,462.0	6.7	6.0	-135.32	-3,068.5	-3,271.4	4,591.9	4,579.5	12.41	369.945		
3,600.0	3,595.8	3,561.8	3,561.8	6.9	6.2	-135.37	-3,068.5	-3,271.4	4,595.8	4,583.0	12.77	359.816		
3,700.0	3,695.7	3,661.7	3,661.7	7.0	6.4	-135.42	-3,068.5	-3,271.4	4,599.6	4,586.5	13.13	350.243		
3,800.0	3,795.5	3,761.5	3,761.5	7.2	6.6	-135.46	-3,068.5	-3,271.4	4,603.5	4,590.0	13.49	341.181		
3,900.0	3,895.4	3,861.4	3,861.4	7.4	6.7	-135.51	-3,068.5	-3,271.4	4,607.4	4,593.5	13.85	332.592		
4,000.0	3,995.2	3,961.2	3,961.2	7.6	6.9	-135.56	-3,068.5	-3,271.4	4,611.2	4,597.0	14.21	324.438		
4,100.0	4,095.1	4,061.1	4,061.1	7.8	7.1	-135.61	-3,068.5	-3,271.4	4,615.1	4,600.5	14.57	316.688		
4,200.0	4,194.9	4,160.9	4,160.9	8.0	7.3	-135.65	-3,068.5	-3,271.4	4,619.0	4,604.1	14.93	309.313		
4,300.0	4,294.8	4,260.8	4,260.8	8.2	7.4	-135.70	-3,068.5	-3,271.4	4,622.9	4,607.6	15.29	302.286		
4,400.0	4,394.6	4,360.6	4,360.6	8.4	7.6	-135.75	-3,068.5	-3,271.4	4,626.8	4,611.1	15.65	295.582		
4,500.0	4,494.5	4,460.5	4,460.5	8.6	7.8	-135.79	-3,068.5	-3,271.4	4,630.7	4,614.6	16.01	289.181		
4,600.0	4,594.3	4,560.3	4,560.3	8.8	8.0	-135.84	-3,068.5	-3,271.4	4,634.6	4,618.2	16.37	283.061		
4,700.0	4,694.2	4,660.2	4,660.2	9.0	8.1	-135.89	-3,068.5	-3,271.4	4,638.5	4,621.7	16.73	277.206		
4,800.0	4,794.0	4,760.0	4,760.0	9.2	8.3	-135.93	-3,068.5	-3,271.4	4,642.4	4,625.3	17.09	271.598		
4,900.0	4,893.9	4,859.9	4,859.9	9.4	8.5	-135.98	-3,068.5	-3,271.4	4,646.3	4,628.8	17.45	266.222		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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		
5,000.0	4,993.7	4,959.7	4,959.7	9.6	8.7	-136.03	-3,068.5	-3,271.4	4,650.2	4,632.4	17.81	261.063		
5,100.0	5,093.6	5,059.6	5,059.6	9.8	8.8	-136.07	-3,068.5	-3,271.4	4,654.1	4,635.9	18.17	256.110		
5,200.0	5,193.5	5,159.5	5,159.5	10.0	9.0	-136.12	-3,068.5	-3,271.4	4,658.0	4,639.5	18.53	251.349		
5,300.0	5,293.3	5,259.3	5,259.3	10.2	9.2	-136.16	-3,068.5	-3,271.4	4,661.9	4,643.0	18.89	246.770		
5,400.0	5,393.2	5,359.2	5,359.2	10.4	9.4	-136.21	-3,068.5	-3,271.4	4,665.8	4,646.6	19.25	242.363		
5,500.0	5,493.0	5,459.0	5,459.0	10.6	9.5	-136.26	-3,068.5	-3,271.4	4,669.7	4,650.1	19.61	238.118		
5,600.0	5,592.9	5,558.9	5,558.9	10.8	9.7	-136.30	-3,068.5	-3,271.4	4,673.7	4,653.7	19.97	234.027		
5,700.0	5,692.7	5,658.7	5,658.7	11.0	9.9	-136.35	-3,068.5	-3,271.4	4,677.6	4,657.3	20.33	230.081		
5,800.0	5,792.6	5,758.6	5,758.6	11.2	10.1	-136.39	-3,068.5	-3,271.4	4,681.5	4,660.8	20.69	226.272		
5,900.0	5,892.4	5,858.4	5,858.4	11.4	10.2	-136.44	-3,068.5	-3,271.4	4,685.5	4,664.4	21.05	222.594		
6,000.0	5,992.3	5,958.3	5,958.3	11.6	10.4	-136.49	-3,068.5	-3,271.4	4,689.4	4,668.0	21.41	219.040		
6,100.0	6,092.1	6,058.1	6,058.1	11.8	10.6	-136.53	-3,068.5	-3,271.4	4,693.3	4,671.6	21.77	215.604		
6,200.0	6,192.0	6,158.0	6,158.0	12.0	10.7	-136.58	-3,068.5	-3,271.4	4,697.3	4,675.1	22.13	212.280		
6,300.0	6,291.8	6,257.8	6,257.8	12.2	10.9	-136.62	-3,068.5	-3,271.4	4,701.2	4,678.7	22.49	209.063		
6,400.0	6,391.7	6,357.7	6,357.7	12.4	11.1	-136.67	-3,068.5	-3,271.4	4,705.2	4,682.3	22.85	205.947		
6,500.0	6,491.5	6,457.5	6,457.5	12.6	11.3	-136.71	-3,068.5	-3,271.4	4,709.1	4,685.9	23.21	202.928		
6,600.0	6,591.4	6,557.4	6,557.4	12.8	11.4	-136.76	-3,068.5	-3,271.4	4,713.1	4,689.5	23.57	200.002		
6,700.0	6,691.2	6,657.2	6,657.2	13.0	11.6	-136.80	-3,068.5	-3,271.4	4,717.0	4,693.1	23.92	197.164		
6,800.0	6,791.1	6,757.1	6,757.1	13.2	11.8	-136.85	-3,068.5	-3,271.4	4,721.0	4,696.7	24.28	194.410		
6,900.0	6,890.9	6,856.9	6,856.9	13.4	12.0	-136.89	-3,068.5	-3,271.4	4,725.0	4,700.3	24.64	191.737		
7,000.0	6,990.8	6,956.8	6,956.8	13.6	12.1	-136.94	-3,068.5	-3,271.4	4,728.9	4,703.9	25.00	189.142		
7,024.2	7,014.9	6,980.9	6,980.9	13.6	12.2	-136.95	-3,068.5	-3,271.4	4,729.9	4,704.8	25.09	188.525		
7,050.0	7,040.7	7,006.7	7,006.7	13.7	12.2	-138.65	-3,068.5	-3,271.4	4,730.6	4,705.4	25.18	187.862		
7,100.0	7,090.7	7,056.7	7,056.7	13.7	12.3	44.76	-3,068.5	-3,271.4	4,730.0	4,704.7	25.32	186.817		
7,150.0	7,140.5	7,106.5	7,106.5	13.8	12.4	44.46	-3,068.5	-3,271.4	4,726.9	4,701.5	25.41	186.045		
7,200.0	7,189.9	7,155.9	7,155.9	13.8	12.5	44.71	-3,068.5	-3,271.4	4,721.3	4,695.9	25.45	185.522		
7,250.0	7,238.6	7,204.6	7,204.6	13.8	12.6	45.20	-3,068.5	-3,271.4	4,713.3	4,687.9	25.45	185.217		
7,300.0	7,286.4	7,252.4	7,252.4	13.7	12.7	45.89	-3,068.5	-3,271.4	4,702.9	4,677.4	25.41	185.083		
7,350.0	7,333.1	7,299.1	7,299.1	13.7	12.7	46.79	-3,068.5	-3,271.4	4,690.1	4,664.7	25.34	185.063		
7,400.0	7,378.5	7,344.5	7,344.5	13.6	12.8	47.88	-3,068.5	-3,271.4	4,675.0	4,649.8	25.26	185.081		
7,450.0	7,422.2	7,388.2	7,388.2	13.6	12.9	49.17	-3,068.5	-3,271.4	4,657.8	4,632.7	25.17	185.050		
7,500.0	7,464.1	7,430.1	7,430.1	13.5	13.0	50.67	-3,068.5	-3,271.4	4,638.6	4,613.5	25.09	184.866		
7,550.0	7,504.1	7,470.1	7,470.1	13.5	13.0	52.39	-3,068.5	-3,271.4	4,617.4	4,592.3	25.04	184.416		
7,600.0	7,541.8	7,507.8	7,507.8	13.5	13.1	54.32	-3,068.5	-3,271.4	4,594.4	4,569.3	25.03	183.587		
7,650.0	7,577.2	7,543.2	7,543.2	13.4	13.2	56.48	-3,068.5	-3,271.4	4,569.7	4,544.6	25.07	182.275		
7,700.0	7,610.0	7,576.0	7,576.0	13.5	13.2	58.86	-3,068.5	-3,271.4	4,543.5	4,518.3	25.19	180.404		
7,750.0	7,640.2	7,606.2	7,606.2	13.5	13.3	61.46	-3,068.5	-3,271.4	4,516.0	4,490.6	25.38	177.939		
7,800.0	7,667.4	7,633.4	7,633.4	13.6	13.3	64.27	-3,068.5	-3,271.4	4,487.3	4,461.6	25.66	174.897		
7,850.0	7,691.7	7,657.7	7,657.7	13.7	13.4	67.27	-3,068.5	-3,271.4	4,457.5	4,431.5	26.01	171.352		
7,900.0	7,712.8	7,678.8	7,678.8	13.9	13.4	70.44	-3,068.5	-3,271.4	4,427.0	4,400.5	26.44	167.426		
7,950.0	7,730.8	7,696.8	7,696.8	14.1	13.4	73.74	-3,068.5	-3,271.4	4,395.7	4,368.8	26.92	163.270		
8,000.0	7,745.5	7,711.5	7,711.5	14.4	13.5	77.15	-3,068.5	-3,271.4	4,364.0	4,336.6	27.44	159.042		
8,050.0	7,756.7	7,722.7	7,722.7	14.7	13.5	80.60	-3,068.5	-3,271.4	4,332.0	4,304.1	27.97	154.886		
8,100.0	7,764.6	7,730.6	7,730.6	15.1	13.5	84.05	-3,068.5	-3,271.4	4,299.9	4,271.4	28.49	150.914		
8,150.0	7,769.0	7,735.0	7,735.0	15.5	13.5	87.46	-3,068.5	-3,271.4	4,267.9	4,238.9	28.99	147.201		
8,188.1	7,770.0	7,736.0	7,736.0	15.9	13.5	90.00	-3,068.5	-3,271.4	4,243.6	4,214.2	29.35	144.570		
8,200.0	7,770.0	7,736.0	7,736.0	16.0	13.5	90.00	-3,068.5	-3,271.4	4,236.0	4,206.5	29.46	143.771		
8,300.0	7,770.0	7,736.0	7,736.0	17.0	13.5	90.00	-3,068.5	-3,271.4	4,173.4	4,142.9	30.46	136.998		
8,400.0	7,770.0	7,736.0	7,736.0	18.1	13.5	90.00	-3,068.5	-3,271.4	4,112.2	4,080.6	31.58	130.226		
8,500.0	7,770.0	7,736.0	7,736.0	19.3	13.5	90.00	-3,068.5	-3,271.4	4,052.6	4,019.8	32.79	123.602		
8,600.0	7,770.0	7,736.0	7,736.0	20.6	13.5	90.00	-3,068.5	-3,271.4	3,994.5	3,960.5	34.08	117.226		
8,700.0	7,770.0	7,736.0	7,736.0	21.9	13.5	90.00	-3,068.5	-3,271.4	3,938.2	3,902.8	35.43	111.159		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,800.0	7,770.0	7,736.0	7,736.0	23.3	13.5	90.00	-3,068.5	-3,271.4	3,883.6	3,846.8	36.84	105.433		
8,900.0	7,770.0	7,736.0	7,736.0	24.8	13.5	90.00	-3,068.5	-3,271.4	3,830.9	3,792.6	38.29	100.060		
9,000.0	7,770.0	7,736.0	7,736.0	26.3	13.5	90.00	-3,068.5	-3,271.4	3,780.1	3,740.3	39.77	95.039		
9,100.0	7,770.0	7,736.0	7,736.0	27.8	13.5	90.00	-3,068.5	-3,271.4	3,731.2	3,689.9	41.29	90.360		
9,200.0	7,770.0	7,736.0	7,736.0	29.3	13.5	90.00	-3,068.5	-3,271.4	3,684.5	3,641.6	42.84	86.009		
9,300.0	7,770.0	7,736.0	7,736.0	30.9	13.5	90.00	-3,068.5	-3,271.4	3,639.8	3,595.4	44.41	81.968		
9,400.0	7,770.0	7,736.0	7,736.0	32.5	13.5	90.00	-3,068.5	-3,271.4	3,597.4	3,551.4	45.99	78.218		
9,500.0	7,770.0	7,736.0	7,736.0	34.1	13.5	90.00	-3,068.5	-3,271.4	3,557.4	3,509.8	47.60	74.741		
9,600.0	7,770.0	7,736.0	7,736.0	35.7	13.5	90.00	-3,068.5	-3,271.4	3,519.6	3,470.4	49.21	71.519		
9,700.0	7,770.0	7,736.0	7,736.0	37.3	13.5	90.00	-3,068.5	-3,271.4	3,484.4	3,433.6	50.84	68.534		
9,800.0	7,770.0	7,736.0	7,736.0	39.0	13.5	90.00	-3,068.5	-3,271.4	3,451.7	3,399.2	52.48	65.768		
9,900.0	7,770.0	7,736.0	7,736.0	40.6	13.5	90.00	-3,068.5	-3,271.4	3,421.6	3,367.5	54.13	63.208		
10,000.0	7,770.0	7,736.0	7,736.0	42.3	13.5	90.00	-3,068.5	-3,271.4	3,394.2	3,338.4	55.79	60.838		
10,100.0	7,770.0	7,736.0	7,736.0	44.0	13.5	90.00	-3,068.5	-3,271.4	3,369.5	3,312.1	57.46	58.645		
10,200.0	7,770.0	7,736.0	7,736.0	45.6	13.5	90.00	-3,068.5	-3,271.4	3,347.7	3,288.5	59.13	56.617		
10,300.0	7,770.0	7,736.0	7,736.0	47.3	13.5	90.00	-3,068.5	-3,271.4	3,328.7	3,267.9	60.81	54.742		
10,400.0	7,770.0	7,736.0	7,736.0	49.0	13.5	90.00	-3,068.5	-3,271.4	3,312.6	3,250.1	62.49	53.009		
10,500.0	7,770.0	7,736.0	7,736.0	50.7	13.5	90.00	-3,068.5	-3,271.4	3,299.4	3,235.3	64.18	51.410		
10,600.0	7,770.0	7,736.0	7,736.0	52.4	13.5	90.00	-3,068.5	-3,271.4	3,289.3	3,223.4	65.87	49.935		
10,700.0	7,770.0	7,736.0	7,736.0	54.1	13.5	90.00	-3,068.5	-3,271.4	3,282.2	3,214.6	67.57	48.576		
10,800.0	7,770.0	7,736.0	7,736.0	55.8	13.5	90.00	-3,068.5	-3,271.4	3,278.1	3,208.8	69.27	47.324		
10,884.2	7,770.0	7,736.0	7,736.0	57.2	13.5	90.00	-3,068.5	-3,271.4	3,277.0	3,206.3	70.70	46.349 CC		
10,900.0	7,770.0	7,736.0	7,736.0	57.5	13.5	90.00	-3,068.5	-3,271.4	3,277.0	3,206.1	70.97	46.174 ES		
11,000.0	7,770.0	7,736.0	7,736.0	59.2	13.5	90.00	-3,068.5	-3,271.4	3,279.0	3,206.4	72.68	45.117		
11,100.0	7,770.0	7,736.0	7,736.0	60.9	13.5	90.00	-3,068.5	-3,271.4	3,284.1	3,209.7	74.39	44.149		
11,200.0	7,770.0	7,736.0	7,736.0	62.6	13.5	90.00	-3,068.5	-3,271.4	3,292.2	3,216.1	76.10	43.262		
11,300.0	7,770.0	7,736.0	7,736.0	64.3	13.5	90.00	-3,068.5	-3,271.4	3,303.3	3,225.4	77.81	42.452		
11,400.0	7,770.0	7,736.0	7,736.0	66.0	13.5	90.00	-3,068.5	-3,271.4	3,317.3	3,237.8	79.53	41.713		
11,500.0	7,770.0	7,736.0	7,736.0	67.7	13.5	90.00	-3,068.5	-3,271.4	3,334.3	3,253.1	81.25	41.040		
11,600.0	7,770.0	7,736.0	7,736.0	69.5	13.5	90.00	-3,068.5	-3,271.4	3,354.2	3,271.3	82.97	40.429		
11,700.0	7,770.0	7,736.0	7,736.0	71.2	13.5	90.00	-3,068.5	-3,271.4	3,377.0	3,292.3	84.69	39.876		
11,800.0	7,770.0	7,736.0	7,736.0	72.9	13.5	90.00	-3,068.5	-3,271.4	3,402.5	3,316.1	86.41	39.377		
11,900.0	7,770.0	7,736.0	7,736.0	74.6	13.5	90.00	-3,068.5	-3,271.4	3,430.8	3,342.7	88.13	38.927		
12,000.0	7,770.0	7,736.0	7,736.0	76.4	13.5	90.00	-3,068.5	-3,271.4	3,461.7	3,371.9	89.86	38.524		
12,100.0	7,770.0	7,736.0	7,736.0	78.1	13.5	90.00	-3,068.5	-3,271.4	3,495.2	3,403.7	91.59	38.163		
12,200.0	7,770.0	7,736.0	7,736.0	79.8	13.5	90.00	-3,068.5	-3,271.4	3,531.3	3,438.0	93.32	37.843		
12,300.0	7,770.0	7,736.0	7,736.0	81.5	13.5	90.00	-3,068.5	-3,271.4	3,569.7	3,474.7	95.04	37.559		
12,400.0	7,770.0	7,736.0	7,736.0	83.3	13.5	90.00	-3,068.5	-3,271.4	3,610.6	3,513.8	96.77	37.309		
12,500.0	7,770.0	7,736.0	7,736.0	85.0	13.5	90.00	-3,068.5	-3,271.4	3,653.7	3,555.2	98.51	37.091		
12,600.0	7,770.0	7,736.0	7,736.0	86.7	13.5	90.00	-3,068.5	-3,271.4	3,699.0	3,598.8	100.24	36.902		
12,700.0	7,770.0	7,736.0	7,736.0	88.5	13.5	90.00	-3,068.5	-3,271.4	3,746.4	3,644.5	101.97	36.740		
12,800.0	7,770.0	7,736.0	7,736.0	90.2	13.5	90.00	-3,068.5	-3,271.4	3,795.9	3,692.2	103.70	36.603		
12,900.0	7,770.0	7,736.0	7,736.0	91.9	13.5	90.00	-3,068.5	-3,271.4	3,847.3	3,741.9	105.44	36.489		
13,000.0	7,770.0	7,736.0	7,736.0	93.7	13.5	90.00	-3,068.5	-3,271.4	3,900.7	3,793.5	107.17	36.395		
13,100.0	7,770.0	7,736.0	7,736.0	95.4	13.5	90.00	-3,068.5	-3,271.4	3,955.8	3,846.9	108.91	36.321		
13,200.0	7,770.0	7,736.0	7,736.0	97.1	13.5	90.00	-3,068.5	-3,271.4	4,012.7	3,902.0	110.65	36.265		
13,300.0	7,770.0	7,736.0	7,736.0	98.9	13.5	90.00	-3,068.5	-3,271.4	4,071.2	3,958.8	112.38	36.225		
13,400.0	7,770.0	7,736.0	7,736.0	100.6	13.5	90.00	-3,068.5	-3,271.4	4,131.3	4,017.2	114.12	36.201		
13,500.0	7,770.0	7,736.0	7,736.0	102.4	13.5	90.00	-3,068.5	-3,271.4	4,193.0	4,077.1	115.86	36.190 SF		
13,600.0	7,770.0	7,736.0	7,736.0	104.1	13.5	90.00	-3,068.5	-3,271.4	4,256.1	4,138.5	117.60	36.191		
13,700.0	7,770.0	7,736.0	7,736.0	105.8	13.5	90.00	-3,068.5	-3,271.4	4,320.6	4,201.2	119.34	36.204		
13,800.0	7,770.0	7,736.0	7,736.0	107.6	13.5	90.00	-3,068.5	-3,271.4	4,386.4	4,265.3	121.08	36.227		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
13,900.0	7,770.0	7,736.0	7,736.0	109.3	13.5	90.00	-3,068.5	-3,271.4	4,453.5	4,330.7	122.82	36.260		
14,000.0	7,770.0	7,736.0	7,736.0	111.1	13.5	90.00	-3,068.5	-3,271.4	4,521.8	4,397.2	124.56	36.302		
14,100.0	7,770.0	7,736.0	7,736.0	112.8	13.5	90.00	-3,068.5	-3,271.4	4,591.3	4,465.0	126.30	36.352		
14,200.0	7,770.0	7,736.0	7,736.0	114.5	13.5	90.00	-3,068.5	-3,271.4	4,661.9	4,533.8	128.04	36.408		
14,300.0	7,770.0	7,736.0	7,736.0	116.3	13.5	90.00	-3,068.5	-3,271.4	4,733.5	4,603.7	129.79	36.472		
14,400.0	7,770.0	7,736.0	7,736.0	118.0	13.5	90.00	-3,068.5	-3,271.4	4,806.2	4,674.6	131.53	36.541		
14,500.0	7,770.0	7,736.0	7,736.0	119.8	13.5	90.00	-3,068.5	-3,271.4	4,879.8	4,746.5	133.27	36.616		
14,600.0	7,770.0	7,736.0	7,736.0	121.5	13.5	90.00	-3,068.5	-3,271.4	4,954.4	4,819.3	135.01	36.695		
14,700.0	7,770.0	7,736.0	7,736.0	123.3	13.5	90.00	-3,068.5	-3,271.4	5,029.8	4,893.0	136.76	36.779		
14,800.0	7,770.0	7,736.0	7,736.0	125.0	13.5	90.00	-3,068.5	-3,271.4	5,106.1	4,967.6	138.50	36.867		
14,900.0	7,770.0	7,736.0	7,736.0	126.7	13.5	90.00	-3,068.5	-3,271.4	5,183.2	5,042.9	140.24	36.958		
15,000.0	7,770.0	7,736.0	7,736.0	128.5	13.5	90.00	-3,068.5	-3,271.4	5,261.0	5,119.0	141.99	37.052		
15,100.0	7,770.0	7,736.0	7,736.0	130.2	13.5	90.00	-3,068.5	-3,271.4	5,339.6	5,195.9	143.73	37.149		
15,200.0	7,770.0	7,736.0	7,736.0	132.0	13.5	90.00	-3,068.5	-3,271.4	5,418.9	5,273.4	145.48	37.249		
15,300.0	7,770.0	7,736.0	7,736.0	133.7	13.5	90.00	-3,068.5	-3,271.4	5,498.9	5,351.7	147.22	37.351		
15,400.0	7,770.0	7,736.0	7,736.0	135.5	13.5	90.00	-3,068.5	-3,271.4	5,579.5	5,430.5	148.97	37.454		
15,500.0	7,770.0	7,736.0	7,736.0	137.2	13.5	90.00	-3,068.5	-3,271.4	5,660.7	5,510.0	150.71	37.560		
15,600.0	7,770.0	7,736.0	7,736.0	139.0	13.5	90.00	-3,068.5	-3,271.4	5,742.6	5,590.1	152.46	37.666		
15,700.0	7,770.0	7,736.0	7,736.0	140.7	13.5	90.00	-3,068.5	-3,271.4	5,825.0	5,670.8	154.20	37.774		
15,800.0	7,770.0	7,736.0	7,736.0	142.4	13.5	90.00	-3,068.5	-3,271.4	5,907.9	5,752.0	155.95	37.883		
15,900.0	7,770.0	7,736.0	7,736.0	144.2	13.5	90.00	-3,068.5	-3,271.4	5,991.4	5,833.7	157.70	37.993		
16,000.0	7,770.0	7,736.0	7,736.0	145.9	13.5	90.00	-3,068.5	-3,271.4	6,075.3	5,915.9	159.44	38.103		
16,100.0	7,770.0	7,736.0	7,736.0	147.7	13.5	90.00	-3,068.5	-3,271.4	6,159.8	5,998.6	161.19	38.214		
16,200.0	7,770.0	7,736.0	7,736.0	149.4	13.5	90.00	-3,068.5	-3,271.4	6,244.7	6,081.7	162.94	38.326		
16,300.0	7,770.0	7,736.0	7,736.0	151.2	13.5	90.00	-3,068.5	-3,271.4	6,330.0	6,165.3	164.68	38.438		
16,400.0	7,770.0	7,736.0	7,736.0	152.9	13.5	90.00	-3,068.5	-3,271.4	6,415.8	6,249.4	166.43	38.549		
16,500.0	7,770.0	7,736.0	7,736.0	154.7	13.5	90.00	-3,068.5	-3,271.4	6,502.0	6,333.8	168.18	38.661		
16,600.0	7,770.0	7,736.0	7,736.0	156.4	13.5	90.00	-3,068.5	-3,271.4	6,588.5	6,418.6	169.93	38.773		
16,700.0	7,770.0	7,736.0	7,736.0	158.2	13.5	90.00	-3,068.5	-3,271.4	6,675.5	6,503.8	171.67	38.885		
16,800.0	7,770.0	7,736.0	7,736.0	159.9	13.5	90.00	-3,068.5	-3,271.4	6,762.8	6,589.3	173.42	38.996		
16,900.0	7,770.0	7,736.0	7,736.0	161.7	13.5	90.00	-3,068.5	-3,271.4	6,850.4	6,675.2	175.17	39.108		
17,000.0	7,770.0	7,736.0	7,736.0	163.4	13.5	90.00	-3,068.5	-3,271.4	6,938.4	6,761.5	176.92	39.219		
17,100.0	7,770.0	7,736.0	7,736.0	165.2	13.5	90.00	-3,068.5	-3,271.4	7,026.7	6,848.0	178.66	39.329		
17,200.0	7,770.0	7,736.0	7,736.0	166.9	13.5	90.00	-3,068.5	-3,271.4	7,115.3	6,934.9	180.41	39.439		
17,300.0	7,770.0	7,736.0	7,736.0	168.7	13.5	90.00	-3,068.5	-3,271.4	7,204.2	7,022.1	182.16	39.549		
17,400.0	7,770.0	7,736.0	7,736.0	170.4	13.5	90.00	-3,068.5	-3,271.4	7,293.4	7,109.5	183.91	39.658		
17,500.0	7,770.0	7,736.0	7,736.0	172.2	13.5	90.00	-3,068.5	-3,271.4	7,382.9	7,197.2	185.66	39.766		
17,600.0	7,770.0	7,736.0	7,736.0	173.9	13.5	90.00	-3,068.5	-3,271.4	7,472.6	7,285.2	187.41	39.874		
17,653.1	7,770.0	7,736.0	7,736.0	174.8	13.5	90.00	-3,068.5	-3,271.4	7,520.4	7,332.0	188.33	39.931		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-133.55	-3,111.1	-3,272.2	4,515.2					
100.0	100.0	66.0	66.0	0.2	0.1	-133.55	-3,111.1	-3,272.2	4,515.1	4,514.9	0.27	N/A		
200.0	200.0	166.0	166.0	0.3	0.3	-133.55	-3,111.1	-3,272.2	4,515.1	4,514.5	0.62	7,326.236		
300.0	300.0	266.0	266.0	0.5	0.5	-133.55	-3,111.1	-3,272.2	4,515.1	4,514.2	0.97	4,677.153		
400.0	400.0	366.0	366.0	0.7	0.6	-133.55	-3,111.1	-3,272.2	4,515.1	4,513.8	1.31	3,435.071		
500.0	500.0	466.0	466.0	0.8	0.8	-133.55	-3,111.1	-3,272.2	4,515.1	4,513.5	1.66	2,714.262		
550.0	550.0	516.0	516.0	0.9	0.9	-133.55	-3,111.1	-3,272.2	4,515.1	4,513.3	1.84	2,456.525		
600.0	600.0	566.0	566.0	1.0	1.0	-134.39	-3,111.1	-3,272.2	4,515.3	4,513.3	2.01	2,243.580		
700.0	700.0	666.0	666.0	1.2	1.2	-134.40	-3,111.1	-3,272.2	4,516.5	4,514.1	2.36	1,912.201		
800.0	799.9	765.9	765.9	1.4	1.3	-134.41	-3,111.1	-3,272.2	4,518.9	4,516.2	2.71	1,665.721		
861.1	860.9	826.9	826.9	1.5	1.4	-134.42	-3,111.1	-3,272.2	4,521.0	4,518.1	2.93	1,543.841		
900.0	899.8	865.8	865.8	1.6	1.5	-134.44	-3,111.1	-3,272.2	4,522.5	4,519.4	3.07	1,474.853		
1,000.0	999.6	965.6	965.6	1.8	1.7	-134.49	-3,111.1	-3,272.2	4,526.3	4,522.9	3.42	1,322.748		
1,100.0	1,099.5	1,065.5	1,065.5	1.9	1.9	-134.54	-3,111.1	-3,272.2	4,530.1	4,526.3	3.78	1,198.923		
1,200.0	1,199.3	1,165.3	1,165.3	2.1	2.0	-134.59	-3,111.1	-3,272.2	4,533.9	4,529.8	4.14	1,096.242		
1,300.0	1,299.2	1,265.2	1,265.2	2.3	2.2	-134.64	-3,111.1	-3,272.2	4,537.7	4,533.3	4.49	1,009.761		
1,400.0	1,399.1	1,365.1	1,365.1	2.5	2.4	-134.69	-3,111.1	-3,272.2	4,541.6	4,536.7	4.85	935.955		
1,500.0	1,498.9	1,464.9	1,464.9	2.7	2.6	-134.74	-3,111.1	-3,272.2	4,545.4	4,540.2	5.21	872.244		
1,600.0	1,598.8	1,564.8	1,564.8	2.9	2.7	-134.78	-3,111.1	-3,272.2	4,549.2	4,543.6	5.57	816.701		
1,700.0	1,698.6	1,664.6	1,664.6	3.1	2.9	-134.83	-3,111.1	-3,272.2	4,553.0	4,547.1	5.93	767.858		
1,800.0	1,798.5	1,764.5	1,764.5	3.3	3.1	-134.88	-3,111.1	-3,272.2	4,556.9	4,550.6	6.29	724.577		
1,900.0	1,898.3	1,864.3	1,864.3	3.5	3.3	-134.93	-3,111.1	-3,272.2	4,560.7	4,554.1	6.65	685.962		
2,000.0	1,998.2	1,964.2	1,964.2	3.7	3.4	-134.98	-3,111.1	-3,272.2	4,564.5	4,557.5	7.01	651.300		
2,100.0	2,098.0	2,064.0	2,064.0	3.9	3.6	-135.03	-3,111.1	-3,272.2	4,568.4	4,561.0	7.37	620.016		
2,200.0	2,197.9	2,163.9	2,163.9	4.1	3.8	-135.07	-3,111.1	-3,272.2	4,572.2	4,564.5	7.73	591.640		
2,300.0	2,297.7	2,263.7	2,263.7	4.3	4.0	-135.12	-3,111.1	-3,272.2	4,576.1	4,568.0	8.09	565.786		
2,400.0	2,397.6	2,363.6	2,363.6	4.5	4.1	-135.17	-3,111.1	-3,272.2	4,579.9	4,571.5	8.45	542.132		
2,500.0	2,497.4	2,463.4	2,463.4	4.7	4.3	-135.22	-3,111.1	-3,272.2	4,583.8	4,575.0	8.81	520.410		
2,600.0	2,597.3	2,563.3	2,563.3	4.9	4.5	-135.26	-3,111.1	-3,272.2	4,587.6	4,578.5	9.17	500.394		
2,700.0	2,697.1	2,663.1	2,663.1	5.1	4.6	-135.31	-3,111.1	-3,272.2	4,591.5	4,582.0	9.53	481.889		
2,800.0	2,797.0	2,763.0	2,763.0	5.3	4.8	-135.36	-3,111.1	-3,272.2	4,595.3	4,585.5	9.89	464.732		
2,900.0	2,896.8	2,862.8	2,862.8	5.5	5.0	-135.41	-3,111.1	-3,272.2	4,599.2	4,589.0	10.25	448.781		
3,000.0	2,996.7	2,962.7	2,962.7	5.7	5.2	-135.45	-3,111.1	-3,272.2	4,603.1	4,592.5	10.61	433.912		
3,100.0	3,096.5	3,062.5	3,062.5	5.9	5.3	-135.50	-3,111.1	-3,272.2	4,607.0	4,596.0	10.97	420.021		
3,200.0	3,196.4	3,162.4	3,162.4	6.1	5.5	-135.55	-3,111.1	-3,272.2	4,610.8	4,599.5	11.33	407.013		
3,300.0	3,296.3	3,262.3	3,262.3	6.3	5.7	-135.60	-3,111.1	-3,272.2	4,614.7	4,603.0	11.69	394.806		
3,400.0	3,396.1	3,362.1	3,362.1	6.5	5.9	-135.64	-3,111.1	-3,272.2	4,618.6	4,606.5	12.05	383.331		
3,500.0	3,496.0	3,462.0	3,462.0	6.7	6.0	-135.69	-3,111.1	-3,272.2	4,622.5	4,610.1	12.41	372.521		
3,600.0	3,595.8	3,561.8	3,561.8	6.9	6.2	-135.74	-3,111.1	-3,272.2	4,626.4	4,613.6	12.77	362.322		
3,700.0	3,695.7	3,661.7	3,661.7	7.0	6.4	-135.78	-3,111.1	-3,272.2	4,630.3	4,617.1	13.13	352.683		
3,800.0	3,795.5	3,761.5	3,761.5	7.2	6.6	-135.83	-3,111.1	-3,272.2	4,634.1	4,620.7	13.49	343.560		
3,900.0	3,895.4	3,861.4	3,861.4	7.4	6.7	-135.88	-3,111.1	-3,272.2	4,638.0	4,624.2	13.85	334.911		
4,000.0	3,995.2	3,961.2	3,961.2	7.6	6.9	-135.92	-3,111.1	-3,272.2	4,641.9	4,627.7	14.21	326.701		
4,100.0	4,095.1	4,061.1	4,061.1	7.8	7.1	-135.97	-3,111.1	-3,272.2	4,645.8	4,631.3	14.57	318.898		
4,200.0	4,194.9	4,160.9	4,160.9	8.0	7.3	-136.02	-3,111.1	-3,272.2	4,649.8	4,634.8	14.93	311.472		
4,300.0	4,294.8	4,260.8	4,260.8	8.2	7.4	-136.06	-3,111.1	-3,272.2	4,653.7	4,638.4	15.29	304.396		
4,400.0	4,394.6	4,360.6	4,360.6	8.4	7.6	-136.11	-3,111.1	-3,272.2	4,657.6	4,641.9	15.65	297.646		
4,500.0	4,494.5	4,460.5	4,460.5	8.6	7.8	-136.16	-3,111.1	-3,272.2	4,661.5	4,645.5	16.01	291.200		
4,600.0	4,594.3	4,560.3	4,560.3	8.8	8.0	-136.20	-3,111.1	-3,272.2	4,665.4	4,649.0	16.37	285.038		
4,700.0	4,694.2	4,660.2	4,660.2	9.0	8.1	-136.25	-3,111.1	-3,272.2	4,669.3	4,652.6	16.73	279.142		
4,800.0	4,794.0	4,760.0	4,760.0	9.2	8.3	-136.29	-3,111.1	-3,272.2	4,673.3	4,656.2	17.09	273.495		
4,900.0	4,893.9	4,859.9	4,859.9	9.4	8.5	-136.34	-3,111.1	-3,272.2	4,677.2	4,659.7	17.45	268.082		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,959.7	4,959.7	9.6	8.7	-136.39	-3,111.1	-3,272.2	4,681.1	4,663.3	17.81	262.888		
5,100.0	5,093.6	5,000.0	5,000.0	9.8	8.7	-136.40	-3,111.1	-3,272.2	4,685.4	4,667.4	18.06	259.399		
5,200.0	5,193.5	5,000.0	5,000.0	10.0	8.7	-136.40	-3,111.1	-3,272.2	4,691.7	4,673.4	18.25	257.095		
5,300.0	5,293.3	5,000.0	5,000.0	10.2	8.7	-136.40	-3,111.1	-3,272.2	4,700.1	4,681.6	18.44	254.953		
5,400.0	5,393.2	5,000.0	5,000.0	10.4	8.7	-136.40	-3,111.1	-3,272.2	4,710.6	4,691.9	18.62	252.967		
5,500.0	5,493.0	5,000.0	5,000.0	10.6	8.7	-136.40	-3,111.1	-3,272.2	4,723.2	4,704.4	18.81	251.131		
5,600.0	5,592.9	5,000.0	5,000.0	10.8	8.7	-136.40	-3,111.1	-3,272.2	4,737.8	4,718.8	18.99	249.441		
5,700.0	5,692.7	5,000.0	5,000.0	11.0	8.7	-136.40	-3,111.1	-3,272.2	4,754.6	4,735.4	19.18	247.891		
5,800.0	5,792.6	5,000.0	5,000.0	11.2	8.7	-136.40	-3,111.1	-3,272.2	4,773.3	4,754.0	19.37	246.476		
5,900.0	5,892.4	5,000.0	5,000.0	11.4	8.7	-136.40	-3,111.1	-3,272.2	4,794.1	4,774.5	19.55	245.190		
6,000.0	5,992.3	5,000.0	5,000.0	11.6	8.7	-136.40	-3,111.1	-3,272.2	4,816.9	4,797.1	19.74	244.030		
6,100.0	6,092.1	5,000.0	5,000.0	11.8	8.7	-136.40	-3,111.1	-3,272.2	4,841.6	4,821.7	19.93	242.989		
6,200.0	6,192.0	5,000.0	5,000.0	12.0	8.7	-136.40	-3,111.1	-3,272.2	4,868.2	4,848.1	20.11	242.064		
6,300.0	6,291.8	5,000.0	5,000.0	12.2	8.7	-136.40	-3,111.1	-3,272.2	4,896.8	4,876.5	20.30	241.249		
6,400.0	6,391.7	5,000.0	5,000.0	12.4	8.7	-136.40	-3,111.1	-3,272.2	4,927.2	4,906.7	20.48	240.540		
6,500.0	6,491.5	5,000.0	5,000.0	12.6	8.7	-136.40	-3,111.1	-3,272.2	4,959.4	4,938.8	20.67	239.932		
6,600.0	6,591.4	5,000.0	5,000.0	12.8	8.7	-136.40	-3,111.1	-3,272.2	4,993.5	4,972.6	20.86	239.421		
6,700.0	6,691.2	5,000.0	5,000.0	13.0	8.7	-136.40	-3,111.1	-3,272.2	5,029.3	5,008.2	21.04	239.002		
6,800.0	6,791.1	5,000.0	5,000.0	13.2	8.7	-136.40	-3,111.1	-3,272.2	5,066.8	5,045.6	21.23	238.672		
6,900.0	6,890.9	5,000.0	5,000.0	13.4	8.7	-136.40	-3,111.1	-3,272.2	5,106.0	5,084.6	21.42	238.427		
7,000.0	6,990.8	5,000.0	5,000.0	13.6	8.7	-136.40	-3,111.1	-3,272.2	5,146.8	5,125.2	21.60	238.261		
7,024.2	7,014.9	5,000.0	5,000.0	13.6	8.7	-136.40	-3,111.1	-3,272.2	5,156.9	5,135.3	21.65	238.233		
7,050.0	7,040.7	5,000.0	5,000.0	13.7	8.7	-138.71	-3,111.1	-3,272.2	5,167.5	5,145.9	21.68	238.384		
7,100.0	7,090.7	5,000.0	5,000.0	13.7	8.7	43.53	-3,111.1	-3,272.2	5,186.6	5,164.9	21.70	239.011		
7,150.0	7,140.5	5,000.0	5,000.0	13.8	8.7	42.05	-3,111.1	-3,272.2	5,203.7	5,182.1	21.68	240.049		
7,200.0	7,189.9	5,000.0	5,000.0	13.8	8.7	41.08	-3,111.1	-3,272.2	5,218.8	5,197.2	21.61	241.507		
7,250.0	7,238.6	5,000.0	5,000.0	13.8	8.7	40.32	-3,111.1	-3,272.2	5,231.8	5,210.3	21.50	243.385		
7,300.0	7,286.4	5,000.0	5,000.0	13.7	8.7	39.71	-3,111.1	-3,272.2	5,242.6	5,221.3	21.34	245.673		
7,350.0	7,333.1	5,000.0	5,000.0	13.7	8.7	39.24	-3,111.1	-3,272.2	5,251.3	5,230.2	21.14	248.347		
7,400.0	7,378.5	5,000.0	5,000.0	13.6	8.7	38.90	-3,111.1	-3,272.2	5,257.8	5,236.8	20.92	251.373		
7,450.0	7,422.2	5,000.0	5,000.0	13.6	8.7	38.68	-3,111.1	-3,272.2	5,262.0	5,241.3	20.66	254.694		
7,500.0	7,464.1	5,000.0	5,000.0	13.5	8.7	38.57	-3,111.1	-3,272.2	5,263.9	5,243.6	20.38	258.237		
7,550.0	7,504.1	5,000.0	5,000.0	13.5	8.7	38.58	-3,111.1	-3,272.2	5,263.6	5,243.5	20.10	261.900		
7,600.0	7,541.8	5,000.0	5,000.0	13.5	8.7	38.70	-3,111.1	-3,272.2	5,261.1	5,241.3	19.81	265.551		
7,650.0	7,577.2	5,000.0	5,000.0	13.4	8.7	38.93	-3,111.1	-3,272.2	5,256.3	5,236.8	19.54	269.024		
7,700.0	7,610.0	5,000.0	5,000.0	13.5	8.7	39.29	-3,111.1	-3,272.2	5,249.3	5,230.0	19.29	272.122		
7,750.0	7,640.2	5,000.0	5,000.0	13.5	8.7	39.76	-3,111.1	-3,272.2	5,240.1	5,221.0	19.08	274.614		
7,800.0	7,667.4	5,000.0	5,000.0	13.6	8.7	40.36	-3,111.1	-3,272.2	5,228.7	5,209.7	18.93	276.253		
7,850.0	7,691.7	5,000.0	5,000.0	13.7	8.7	41.09	-3,111.1	-3,272.2	5,215.2	5,196.3	18.84	276.792		
7,900.0	7,712.8	5,000.0	5,000.0	13.9	8.7	41.96	-3,111.1	-3,272.2	5,199.6	5,180.7	18.84	276.009		
7,950.0	7,730.8	5,000.0	5,000.0	14.1	8.7	42.98	-3,111.1	-3,272.2	5,181.9	5,163.0	18.93	273.737		
8,000.0	7,745.5	5,000.0	5,000.0	14.4	8.7	44.15	-3,111.1	-3,272.2	5,162.4	5,143.2	19.13	269.896		
8,050.0	7,756.7	5,000.0	5,000.0	14.7	8.7	45.49	-3,111.1	-3,272.2	5,140.9	5,121.5	19.44	264.505		
8,100.0	7,764.6	5,000.0	5,000.0	15.1	8.7	47.00	-3,111.1	-3,272.2	5,117.6	5,097.8	19.86	257.693		
8,150.0	7,769.0	5,000.0	5,000.0	15.5	8.7	48.71	-3,111.1	-3,272.2	5,092.7	5,072.3	20.40	249.677		
8,188.1	7,770.0	5,000.0	5,000.0	15.9	8.7	50.15	-3,111.1	-3,272.2	5,072.6	5,051.7	20.88	242.944		
8,200.0	7,770.0	5,000.0	5,000.0	16.0	8.7	50.15	-3,111.1	-3,272.2	5,066.1	5,045.2	20.97	241.640		
8,300.0	7,770.0	5,000.0	5,000.0	17.0	8.7	50.15	-3,111.1	-3,272.2	5,013.0	4,991.3	21.74	230.619		
8,400.0	7,770.0	5,000.0	5,000.0	18.1	8.7	50.15	-3,111.1	-3,272.2	4,961.3	4,938.7	22.59	219.622		
8,500.0	7,770.0	5,000.0	5,000.0	19.3	8.7	50.15	-3,111.1	-3,272.2	4,911.2	4,887.6	23.51	208.878		
8,600.0	7,770.0	5,000.0	5,000.0	20.6	8.7	50.15	-3,111.1	-3,272.2	4,862.5	4,838.0	24.49	198.540		
8,700.0	7,770.0	5,000.0	5,000.0	21.9	8.7	50.15	-3,111.1	-3,272.2	4,815.5	4,789.9	25.52	188.703		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	5,000.0	5,000.0	23.3	8.7	50.15	-3,111.1	-3,272.2	4,770.0	4,743.5	26.59	179.416			
8,900.0	7,770.0	5,000.0	5,000.0	24.8	8.7	50.15	-3,111.1	-3,272.2	4,726.3	4,698.6	27.69	170.697			
9,000.0	7,770.0	5,000.0	5,000.0	26.3	8.7	50.15	-3,111.1	-3,272.2	4,684.3	4,655.5	28.82	162.542			
9,100.0	7,770.0	5,000.0	5,000.0	27.8	8.7	50.15	-3,111.1	-3,272.2	4,644.1	4,614.1	29.97	154.936			
9,200.0	7,770.0	5,000.0	5,000.0	29.3	8.7	50.15	-3,111.1	-3,272.2	4,605.6	4,574.5	31.15	147.854			
9,300.0	7,770.0	5,000.0	5,000.0	30.9	8.7	50.15	-3,111.1	-3,272.2	4,569.1	4,536.7	32.34	141.267			
9,400.0	7,770.0	5,000.0	5,000.0	32.5	8.7	50.15	-3,111.1	-3,272.2	4,534.4	4,500.9	33.55	135.143			
9,500.0	7,770.0	5,000.0	5,000.0	34.1	8.7	50.15	-3,111.1	-3,272.2	4,501.8	4,467.0	34.78	129.451			
9,600.0	7,770.0	5,000.0	5,000.0	35.7	8.7	50.15	-3,111.1	-3,272.2	4,471.1	4,435.1	36.01	124.162			
9,700.0	7,770.0	5,000.0	5,000.0	37.3	8.7	50.15	-3,111.1	-3,272.2	4,442.4	4,405.2	37.25	119.245			
9,800.0	7,770.0	5,000.0	5,000.0	39.0	8.7	50.15	-3,111.1	-3,272.2	4,415.8	4,377.3	38.51	114.673			
9,900.0	7,770.0	5,000.0	5,000.0	40.6	8.7	50.15	-3,111.1	-3,272.2	4,391.4	4,351.6	39.77	110.420			
10,000.0	7,770.0	5,000.0	5,000.0	42.3	8.7	50.15	-3,111.1	-3,272.2	4,369.1	4,328.1	41.04	106.464			
10,100.0	7,770.0	5,000.0	5,000.0	44.0	8.7	50.15	-3,111.1	-3,272.2	4,349.0	4,306.7	42.31	102.780			
10,200.0	7,770.0	5,000.0	5,000.0	45.6	8.7	50.15	-3,111.1	-3,272.2	4,331.1	4,287.5	43.59	99.351			
10,300.0	7,770.0	5,000.0	5,000.0	47.3	8.7	50.15	-3,111.1	-3,272.2	4,315.4	4,270.5	44.88	96.156			
10,400.0	7,770.0	5,000.0	5,000.0	49.0	8.7	50.15	-3,111.1	-3,272.2	4,302.0	4,255.9	46.17	93.179			
10,500.0	7,770.0	5,000.0	5,000.0	50.7	8.7	50.15	-3,111.1	-3,272.2	4,290.9	4,243.5	47.46	90.404			
10,600.0	7,770.0	5,000.0	5,000.0	52.4	8.7	50.15	-3,111.1	-3,272.2	4,282.1	4,233.4	48.76	87.818			
10,700.0	7,770.0	5,000.0	5,000.0	54.1	8.7	50.15	-3,111.1	-3,272.2	4,275.7	4,225.6	50.06	85.406			
10,800.0	7,770.0	5,000.0	5,000.0	55.8	8.7	50.15	-3,111.1	-3,272.2	4,271.5	4,220.2	51.37	83.156			
10,900.0	7,770.0	5,000.0	5,000.0	57.5	8.7	50.15	-3,111.1	-3,272.2	4,269.7	4,217.1	52.67	81.058			
10,926.8	7,770.0	5,000.0	5,000.0	57.9	8.7	50.15	-3,111.1	-3,272.2	4,269.6	4,216.6	53.03	80.519 CC			
11,000.0	7,770.0	5,000.0	5,000.0	59.2	8.7	50.15	-3,111.1	-3,272.2	4,270.3	4,216.3	53.98	79.102 ES			
11,100.0	7,770.0	5,000.0	5,000.0	60.9	8.7	50.15	-3,111.1	-3,272.2	4,273.2	4,217.9	55.30	77.277			
11,200.0	7,770.0	5,000.0	5,000.0	62.6	8.7	50.15	-3,111.1	-3,272.2	4,278.4	4,221.8	56.61	75.575			
11,300.0	7,770.0	5,000.0	5,000.0	64.3	8.7	50.15	-3,111.1	-3,272.2	4,285.9	4,228.0	57.93	73.988			
11,400.0	7,770.0	5,000.0	5,000.0	66.0	8.7	50.15	-3,111.1	-3,272.2	4,295.8	4,236.5	59.25	72.508			
11,500.0	7,770.0	5,000.0	5,000.0	67.7	8.7	50.15	-3,111.1	-3,272.2	4,307.9	4,247.4	60.57	71.128			
11,600.0	7,770.0	5,000.0	5,000.0	69.5	8.7	50.15	-3,111.1	-3,272.2	4,322.4	4,260.5	61.89	69.843			
11,700.0	7,770.0	5,000.0	5,000.0	71.2	8.7	50.15	-3,111.1	-3,272.2	4,339.1	4,275.9	63.21	68.645			
11,800.0	7,770.0	5,000.0	5,000.0	72.9	8.7	50.15	-3,111.1	-3,272.2	4,358.0	4,293.5	64.53	67.530			
11,900.0	7,770.0	5,000.0	5,000.0	74.6	8.7	50.15	-3,111.1	-3,272.2	4,379.1	4,313.3	65.86	66.491			
12,000.0	7,770.0	5,000.0	5,000.0	76.4	8.7	50.15	-3,111.1	-3,272.2	4,402.4	4,335.3	67.19	65.525			
12,100.0	7,770.0	5,000.0	5,000.0	78.1	8.7	50.15	-3,111.1	-3,272.2	4,427.9	4,359.4	68.52	64.626			
12,200.0	7,770.0	5,000.0	5,000.0	79.8	8.7	50.15	-3,111.1	-3,272.2	4,455.4	4,385.6	69.84	63.791			
12,300.0	7,770.0	5,000.0	5,000.0	81.5	8.7	50.15	-3,111.1	-3,272.2	4,485.0	4,413.9	71.17	63.015			
12,400.0	7,770.0	5,000.0	5,000.0	83.3	8.7	50.15	-3,111.1	-3,272.2	4,516.6	4,444.1	72.51	62.294			
12,500.0	7,770.0	5,000.0	5,000.0	85.0	8.7	50.15	-3,111.1	-3,272.2	4,550.2	4,476.4	73.84	61.625			
12,600.0	7,770.0	5,000.0	5,000.0	86.7	8.7	50.15	-3,111.1	-3,272.2	4,585.8	4,510.6	75.17	61.006			
12,700.0	7,770.0	5,000.0	5,000.0	88.5	8.7	50.15	-3,111.1	-3,272.2	4,623.2	4,546.7	76.50	60.432			
12,800.0	7,770.0	5,000.0	5,000.0	90.2	8.7	50.15	-3,111.1	-3,272.2	4,662.5	4,584.6	77.84	59.900			
12,900.0	7,770.0	5,000.0	5,000.0	91.9	8.7	50.15	-3,111.1	-3,272.2	4,703.5	4,624.4	79.17	59.409			
13,000.0	7,770.0	5,000.0	5,000.0	93.7	8.7	50.15	-3,111.1	-3,272.2	4,746.4	4,665.8	80.51	58.956			
13,100.0	7,770.0	5,000.0	5,000.0	95.4	8.7	50.15	-3,111.1	-3,272.2	4,790.9	4,709.0	81.84	58.537			
13,200.0	7,770.0	5,000.0	5,000.0	97.1	8.7	50.15	-3,111.1	-3,272.2	4,837.1	4,753.9	83.18	58.152			
13,300.0	7,770.0	5,000.0	5,000.0	98.9	8.7	50.15	-3,111.1	-3,272.2	4,884.9	4,800.3	84.52	57.797			
13,400.0	7,770.0	5,000.0	5,000.0	100.6	8.7	50.15	-3,111.1	-3,272.2	4,934.2	4,848.4	85.85	57.471			
13,500.0	7,770.0	5,000.0	5,000.0	102.4	8.7	50.15	-3,111.1	-3,272.2	4,985.1	4,897.9	87.19	57.173			
13,600.0	7,770.0	5,000.0	5,000.0	104.1	8.7	50.15	-3,111.1	-3,272.2	5,037.4	4,948.9	88.53	56.900			
13,700.0	7,770.0	5,000.0	5,000.0	105.8	8.7	50.15	-3,111.1	-3,272.2	5,091.2	5,001.3	89.87	56.650			
13,800.0	7,770.0	5,000.0	5,000.0	107.6	8.7	50.15	-3,111.1	-3,272.2	5,146.4	5,055.1	91.21	56.423			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	5,000.0	5,000.0	109.3	8.7	50.15	-3,111.1	-3,272.2	5,202.8	5,110.3	92.55	56.216			
14,000.0	7,770.0	5,000.0	5,000.0	111.1	8.7	50.15	-3,111.1	-3,272.2	5,260.6	5,166.7	93.89	56.029			
14,100.0	7,770.0	5,000.0	5,000.0	112.8	8.7	50.15	-3,111.1	-3,272.2	5,319.7	5,224.4	95.23	55.860			
14,200.0	7,770.0	5,000.0	5,000.0	114.5	8.7	50.15	-3,111.1	-3,272.2	5,379.9	5,283.3	96.57	55.709			
14,300.0	7,770.0	5,000.0	5,000.0	116.3	8.7	50.15	-3,111.1	-3,272.2	5,441.3	5,343.4	97.91	55.573			
14,400.0	7,770.0	5,000.0	5,000.0	118.0	8.7	50.15	-3,111.1	-3,272.2	5,503.9	5,404.6	99.26	55.452			
14,500.0	7,770.0	5,000.0	5,000.0	119.8	8.7	50.15	-3,111.1	-3,272.2	5,567.5	5,466.9	100.60	55.344			
14,600.0	7,770.0	5,000.0	5,000.0	121.5	8.7	50.15	-3,111.1	-3,272.2	5,632.2	5,530.3	101.94	55.250			
14,700.0	7,770.0	5,000.0	5,000.0	123.3	8.7	50.15	-3,111.1	-3,272.2	5,697.9	5,594.7	103.28	55.169			
14,800.0	7,770.0	5,000.0	5,000.0	125.0	8.7	50.15	-3,111.1	-3,272.2	5,764.7	5,660.0	104.63	55.098			
14,900.0	7,770.0	5,000.0	5,000.0	126.7	8.7	50.15	-3,111.1	-3,272.2	5,832.3	5,726.3	105.97	55.038			
15,000.0	7,770.0	5,000.0	5,000.0	128.5	8.7	50.15	-3,111.1	-3,272.2	5,900.9	5,793.6	107.31	54.988			
15,100.0	7,770.0	5,000.0	5,000.0	130.2	8.7	50.15	-3,111.1	-3,272.2	5,970.4	5,861.7	108.66	54.948			
15,200.0	7,770.0	5,000.0	5,000.0	132.0	8.7	50.15	-3,111.1	-3,272.2	6,040.7	5,930.7	110.00	54.916			
15,300.0	7,770.0	5,000.0	5,000.0	133.7	8.7	50.15	-3,111.1	-3,272.2	6,111.8	6,000.5	111.34	54.892			
15,400.0	7,770.0	5,000.0	5,000.0	135.5	8.7	50.15	-3,111.1	-3,272.2	6,183.8	6,071.1	112.69	54.875			
15,500.0	7,770.0	5,000.0	5,000.0	137.2	8.7	50.15	-3,111.1	-3,272.2	6,256.5	6,142.5	114.03	54.866			
15,600.0	7,770.0	5,000.0	5,000.0	139.0	8.7	50.15	-3,111.1	-3,272.2	6,330.0	6,214.6	115.38	54.863 SF			
15,700.0	7,770.0	5,000.0	5,000.0	140.7	8.7	50.15	-3,111.1	-3,272.2	6,404.1	6,287.4	116.72	54.867			
15,800.0	7,770.0	5,000.0	5,000.0	142.4	8.7	50.15	-3,111.1	-3,272.2	6,479.0	6,360.9	118.07	54.876			
15,900.0	7,770.0	5,000.0	5,000.0	144.2	8.7	50.15	-3,111.1	-3,272.2	6,554.6	6,435.1	119.41	54.890			
16,000.0	7,770.0	5,000.0	5,000.0	145.9	8.7	50.15	-3,111.1	-3,272.2	6,630.7	6,510.0	120.76	54.910			
16,100.0	7,770.0	5,000.0	5,000.0	147.7	8.7	50.15	-3,111.1	-3,272.2	6,707.6	6,585.5	122.10	54.934			
16,200.0	7,770.0	5,000.0	5,000.0	149.4	8.7	50.15	-3,111.1	-3,272.2	6,785.0	6,661.5	123.45	54.962			
16,300.0	7,770.0	5,000.0	5,000.0	151.2	8.7	50.15	-3,111.1	-3,272.2	6,863.0	6,738.2	124.79	54.994			
16,400.0	7,770.0	5,000.0	5,000.0	152.9	8.7	50.15	-3,111.1	-3,272.2	6,941.6	6,815.4	126.14	55.030			
16,500.0	7,770.0	5,000.0	5,000.0	154.7	8.7	50.15	-3,111.1	-3,272.2	7,020.7	6,893.2	127.49	55.070			
16,600.0	7,770.0	5,000.0	5,000.0	156.4	8.7	50.15	-3,111.1	-3,272.2	7,100.3	6,971.5	128.83	55.113			
16,700.0	7,770.0	5,000.0	5,000.0	158.2	8.7	50.15	-3,111.1	-3,272.2	7,180.5	7,050.3	130.18	55.158			
16,800.0	7,770.0	5,000.0	5,000.0	159.9	8.7	50.15	-3,111.1	-3,272.2	7,261.1	7,129.6	131.53	55.207			
16,900.0	7,770.0	5,000.0	5,000.0	161.7	8.7	50.15	-3,111.1	-3,272.2	7,342.2	7,209.4	132.87	55.258			
17,000.0	7,770.0	5,000.0	5,000.0	163.4	8.7	50.15	-3,111.1	-3,272.2	7,423.8	7,289.6	134.22	55.311			
17,100.0	7,770.0	5,000.0	5,000.0	165.2	8.7	50.15	-3,111.1	-3,272.2	7,505.8	7,370.3	135.57	55.366			
17,200.0	7,770.0	5,000.0	5,000.0	166.9	8.7	50.15	-3,111.1	-3,272.2	7,588.3	7,451.4	136.91	55.424			
17,300.0	7,770.0	5,000.0	5,000.0	168.7	8.7	50.15	-3,111.1	-3,272.2	7,671.2	7,532.9	138.26	55.483			
17,400.0	7,770.0	5,000.0	5,000.0	170.4	8.7	50.15	-3,111.1	-3,272.2	7,754.5	7,614.9	139.61	55.544			
17,500.0	7,770.0	5,000.0	5,000.0	172.2	8.7	50.15	-3,111.1	-3,272.2	7,838.1	7,697.2	140.96	55.607			
17,600.0	7,770.0	5,000.0	5,000.0	173.9	8.7	50.15	-3,111.1	-3,272.2	7,922.2	7,779.9	142.30	55.671			
17,653.1	7,770.0	5,000.0	5,000.0	174.8	8.7	50.15	-3,111.1	-3,272.2	7,966.9	7,823.9	143.02	55.706			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	0.0	0.0	0.0	0.0	-95.03	-262.5	-2,980.5	2,992.2					
100.0	100.0	86.4	86.4	0.2	0.2	-95.03	-262.5	-2,981.1	2,992.8	2,992.5	0.30	9,886.198		
200.0	200.0	157.9	157.9	0.3	0.3	-95.03	-262.7	-2,982.3	2,994.6	2,994.0	0.60	4,973.675		
300.0	300.0	223.0	223.0	0.5	0.4	-95.04	-263.1	-2,984.0	2,997.2	2,996.3	0.89	3,366.895		
400.0	400.0	315.0	314.9	0.7	0.6	-95.05	-264.1	-2,987.2	3,000.8	2,999.6	1.23	2,448.058		
500.0	500.0	361.3	361.1	0.8	0.7	-95.06	-264.7	-2,989.3	3,005.5	3,004.0	1.48	2,029.135		
550.0	550.0	407.0	406.8	0.9	0.8	-95.07	-265.3	-2,992.1	3,008.4	3,006.8	1.65	1,825.233		
600.0	600.0	420.2	419.9	1.0	0.8	-95.87	-265.4	-2,992.9	3,011.6	3,009.9	1.76	1,712.475		
700.0	700.0	498.0	497.5	1.2	1.0	-95.81	-264.9	-2,998.7	3,019.0	3,017.0	2.07	1,458.983		
800.0	799.9	534.2	533.5	1.4	1.0	-95.72	-264.1	-3,001.9	3,028.0	3,025.7	2.31	1,309.209		
861.1	860.9	558.0	557.2	1.5	1.1	-95.66	-263.5	-3,004.4	3,034.5	3,032.0	2.47	1,230.096		
900.0	899.8	590.0	589.0	1.6	1.2	-95.67	-262.6	-3,008.2	3,039.2	3,036.6	2.60	1,170.769		
1,000.0	999.6	590.0	589.0	1.8	1.2	-95.67	-262.6	-3,008.2	3,052.4	3,049.6	2.78	1,096.627		
1,100.0	1,099.5	645.0	643.4	1.9	1.4	-95.69	-261.1	-3,016.1	3,067.4	3,064.3	3.07	998.494		
1,200.0	1,199.3	681.0	678.9	2.1	1.5	-95.70	-260.2	-3,022.2	3,084.6	3,081.3	3.33	926.824		
1,300.0	1,299.2	725.1	722.2	2.3	1.6	-95.71	-259.2	-3,030.5	3,103.7	3,100.1	3.60	862.303		
1,400.0	1,399.1	773.0	769.0	2.5	1.8	-95.73	-258.6	-3,040.3	3,124.4	3,120.6	3.88	805.644		
1,500.0	1,498.9	850.0	844.2	2.7	2.1	-95.77	-258.3	-3,056.8	3,146.4	3,142.2	4.21	747.647		
1,600.0	1,598.8	946.0	938.0	2.9	2.5	-95.85	-259.3	-3,077.5	3,168.5	3,163.9	4.57	693.271		
1,700.0	1,698.6	1,033.0	1,022.9	3.1	2.9	-95.93	-260.5	-3,096.4	3,190.8	3,185.9	4.92	649.161		
1,800.0	1,798.5	1,079.1	1,067.7	3.3	3.1	-95.97	-261.4	-3,107.0	3,214.2	3,209.0	5.19	619.408		
1,900.0	1,898.3	1,120.0	1,107.5	3.5	3.3	-96.01	-262.2	-3,116.7	3,238.9	3,233.5	5.46	593.584		
2,000.0	1,998.2	1,184.4	1,169.7	3.7	3.6	-96.07	-263.7	-3,132.9	3,264.9	3,259.1	5.76	566.433		
2,100.0	2,098.0	1,245.3	1,228.5	3.9	3.9	-96.13	-265.2	-3,149.1	3,292.2	3,286.1	6.07	542.811		
2,200.0	2,197.9	1,326.1	1,306.2	4.1	4.3	-96.19	-266.5	-3,171.3	3,320.3	3,313.9	6.40	518.680		
2,300.0	2,297.7	1,416.7	1,393.2	4.3	4.8	-96.28	-269.0	-3,196.1	3,348.4	3,341.6	6.75	495.853		
2,400.0	2,397.6	1,495.3	1,468.7	4.5	5.2	-96.35	-271.1	-3,218.1	3,377.1	3,370.0	7.09	476.644		
2,500.0	2,497.4	1,635.1	1,602.9	4.7	5.9	-96.45	-273.3	-3,257.0	3,405.7	3,398.1	7.53	452.558		
2,600.0	2,597.3	1,723.6	1,688.1	4.9	6.4	-96.51	-274.7	-3,280.9	3,433.3	3,425.4	7.88	435.954		
2,700.0	2,697.1	1,780.0	1,742.3	5.1	6.7	-96.55	-275.7	-3,296.5	3,461.6	3,453.4	8.17	423.620		
2,800.0	2,797.0	1,839.0	1,798.8	5.3	7.0	-96.59	-276.2	-3,313.6	3,491.1	3,482.6	8.47	412.063		
2,900.0	2,896.8	1,914.9	1,871.3	5.5	7.4	-96.63	-277.0	-3,336.1	3,521.3	3,512.5	8.80	400.047		
3,000.0	2,996.7	2,051.0	2,001.3	5.7	8.2	-96.71	-279.0	-3,376.3	3,551.5	3,542.3	9.23	384.586		
3,100.0	3,096.5	2,168.0	2,113.7	5.9	8.8	-96.81	-282.1	-3,408.5	3,579.7	3,570.1	9.63	371.541		
3,200.0	3,196.4	2,226.2	2,169.6	6.1	9.1	-96.84	-282.9	-3,424.8	3,608.6	3,598.6	9.93	363.240		
3,300.0	3,296.3	2,270.6	2,211.9	6.3	9.4	-96.87	-283.5	-3,438.1	3,639.1	3,628.9	10.21	356.460		
3,400.0	3,396.1	2,342.2	2,280.0	6.5	9.8	-96.92	-285.3	-3,460.1	3,670.5	3,660.0	10.53	348.609		
3,500.0	3,496.0	2,498.5	2,428.9	6.7	10.7	-96.99	-286.6	-3,507.9	3,701.8	3,690.8	11.01	336.317		
3,600.0	3,595.8	2,634.2	2,558.7	6.9	11.4	-97.01	-285.1	-3,547.4	3,731.2	3,719.7	11.45	325.856		
3,700.0	3,695.7	2,722.7	2,643.4	7.0	11.9	-97.02	-283.9	-3,572.9	3,760.3	3,748.5	11.81	318.408		
3,800.0	3,795.5	2,815.8	2,732.5	7.2	12.4	-97.03	-282.9	-3,600.0	3,789.8	3,777.6	12.18	311.260		
3,900.0	3,895.4	2,974.8	2,885.1	7.4	13.3	-97.10	-284.0	-3,644.6	3,818.4	3,805.8	12.65	301.775		
4,000.0	3,995.2	3,068.3	2,975.1	7.6	13.8	-97.16	-285.3	-3,669.8	3,846.1	3,833.1	13.01	295.533		
4,100.0	4,095.1	3,128.0	3,032.5	7.8	14.1	-97.20	-287.0	-3,686.2	3,874.3	3,861.0	13.31	291.023		
4,200.0	4,194.9	3,215.0	3,115.9	8.0	14.6	-97.26	-289.2	-3,710.6	3,903.2	3,889.5	13.67	285.635		
4,300.0	4,294.8	3,294.2	3,191.8	8.2	15.0	-97.30	-290.4	-3,733.3	3,932.5	3,918.5	14.00	280.858		
4,400.0	4,394.6	3,449.9	3,341.2	8.4	15.8	-97.37	-291.7	-3,777.2	3,961.4	3,946.9	14.48	273.637		
4,500.0	4,494.5	3,590.6	3,476.9	8.6	16.5	-97.43	-292.6	-3,814.3	3,988.2	3,973.2	14.93	267.127		
4,600.0	4,594.3	3,652.0	3,536.0	8.8	16.9	-97.43	-291.5	-3,831.1	4,015.6	4,000.4	15.24	263.417		
4,700.0	4,694.2	3,709.2	3,590.8	9.0	17.2	-97.43	-290.0	-3,847.2	4,043.9	4,028.4	15.55	260.046		
4,800.0	4,794.0	3,826.0	3,702.9	9.2	17.8	-97.43	-288.2	-3,880.1	4,072.4	4,056.4	15.96	255.165		
4,900.0	4,893.9	3,902.6	3,776.5	9.4	18.2	-97.46	-288.7	-3,901.3	4,100.6	4,084.4	16.30	251.650		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	3,986.3	3,856.8	9.6	18.6	-97.49	-289.0	-3,924.9	4,129.4	4,112.7	16.65	248.077		
5,100.0	5,093.6	4,043.5	3,911.6	9.8	19.0	-97.51	-289.0	-3,941.3	4,158.6	4,141.6	16.95	245.388		
5,200.0	5,193.5	4,104.5	3,969.9	10.0	19.3	-97.52	-289.3	-3,959.4	4,188.8	4,171.5	17.25	242.769		
5,300.0	5,293.3	5,056.6	4,898.7	10.2	23.1	-97.81	-283.5	-4,156.6	4,215.0	4,195.8	19.19	219.613		
5,400.0	5,393.2	5,338.3	5,179.4	10.4	23.6	-97.92	-278.9	-4,180.3	4,224.6	4,204.7	19.91	212.194		
5,500.0	5,493.0	5,530.4	5,371.2	10.6	23.9	-97.99	-275.1	-4,189.4	4,229.7	4,209.2	20.46	206.738		
5,600.0	5,592.9	5,644.3	5,485.0	10.8	24.0	-98.04	-273.3	-4,193.4	4,233.7	4,212.9	20.87	202.911		
5,700.0	5,692.7	5,769.6	5,610.2	11.0	24.1	-98.10	-270.8	-4,197.2	4,237.3	4,216.0	21.30	198.958		
5,800.0	5,792.6	5,886.4	5,726.9	11.2	24.3	-98.13	-267.7	-4,200.3	4,240.4	4,218.6	21.71	195.292		
5,900.0	5,892.4	5,992.5	5,833.0	11.4	24.4	-98.17	-264.9	-4,202.9	4,243.2	4,221.1	22.11	191.945		
6,000.0	5,992.3	6,147.7	5,988.1	11.6	24.5	-98.23	-261.5	-4,205.5	4,245.4	4,222.8	22.58	187.973		
6,100.0	6,092.1	6,248.2	6,088.6	11.8	24.6	-98.28	-259.7	-4,206.2	4,246.6	4,223.7	22.97	184.902		
6,200.0	6,192.0	6,330.6	6,170.9	12.0	24.7	-98.32	-258.2	-4,207.1	4,248.3	4,225.0	23.32	182.206		
6,300.0	6,291.8	6,417.2	6,257.6	12.2	24.8	-98.36	-256.6	-4,208.4	4,250.3	4,226.6	23.67	179.540		
6,400.0	6,391.7	6,506.1	6,346.4	12.4	24.9	-98.39	-254.8	-4,210.0	4,252.6	4,228.6	24.04	176.932		
6,500.0	6,491.5	6,594.1	6,434.3	12.6	25.0	-98.43	-253.0	-4,211.8	4,255.1	4,230.8	24.39	174.431		
6,600.0	6,591.4	6,681.7	6,521.9	12.8	25.1	-98.47	-251.2	-4,213.8	4,258.0	4,233.2	24.75	172.020		
6,700.0	6,691.2	6,790.7	6,630.8	13.0	25.2	-98.51	-249.1	-4,216.5	4,261.0	4,235.8	25.15	169.409		
6,800.0	6,791.1	6,907.0	6,747.1	13.2	25.3	-98.55	-246.4	-4,218.9	4,263.6	4,238.0	25.57	166.771		
6,900.0	6,890.9	7,018.7	6,858.8	13.4	25.5	-98.59	-243.6	-4,221.0	4,265.8	4,239.8	25.97	164.256		
7,000.0	6,990.8	7,135.7	6,975.7	13.6	25.6	-98.63	-240.4	-4,222.7	4,267.8	4,241.4	26.39	161.747		
7,024.2	7,014.9	7,164.6	7,004.6	13.6	25.6	-98.64	-239.6	-4,223.1	4,268.2	4,241.7	26.49	161.142		
7,050.0	7,040.7	7,195.5	7,035.5	13.7	25.6	-100.32	-238.8	-4,223.5	4,268.5	4,241.9	26.60	160.480		
7,100.0	7,090.7	7,251.9	7,091.8	13.7	25.7	83.06	-237.2	-4,224.0	4,268.7	4,242.0	26.77	159.459		
7,150.0	7,140.5	7,302.9	7,142.8	13.8	25.8	82.66	-235.8	-4,224.5	4,268.5	4,241.6	26.89	158.722		
7,200.0	7,189.9	7,353.4	7,193.3	13.8	25.8	82.70	-234.5	-4,224.9	4,267.7	4,240.7	26.98	158.190		
7,250.0	7,238.6	7,403.2	7,243.1	13.8	25.9	82.90	-233.3	-4,225.3	4,266.5	4,239.5	27.03	157.837		
7,300.0	7,286.4	7,467.0	7,306.8	13.7	25.9	83.27	-231.8	-4,225.7	4,264.8	4,237.7	27.08	157.505		
7,350.0	7,333.1	7,529.9	7,369.8	13.7	26.0	83.74	-230.2	-4,225.8	4,262.6	4,235.5	27.10	157.285		
7,400.0	7,378.5	7,588.3	7,428.2	13.6	26.0	84.29	-228.6	-4,225.7	4,259.9	4,232.8	27.11	157.160		
7,450.0	7,422.2	7,633.6	7,473.4	13.6	26.0	84.82	-227.3	-4,225.6	4,256.9	4,229.8	27.09	157.157		
7,500.0	7,464.1	7,676.8	7,516.6	13.5	26.1	85.39	-226.1	-4,225.4	4,253.8	4,226.7	27.07	157.145		
7,550.0	7,504.1	7,717.8	7,557.6	13.5	26.1	85.99	-224.8	-4,225.3	4,250.5	4,223.5	27.06	157.087		
7,600.0	7,541.8	7,756.4	7,596.1	13.5	26.2	86.60	-223.6	-4,225.1	4,247.3	4,220.2	27.06	156.945		
7,650.0	7,577.2	7,792.2	7,631.9	13.4	26.2	87.20	-222.4	-4,225.0	4,244.1	4,217.0	27.09	156.673		
7,700.0	7,610.0	7,824.7	7,664.4	13.5	26.2	87.79	-221.1	-4,224.8	4,241.0	4,213.9	27.14	156.263		
7,750.0	7,640.2	7,853.8	7,693.5	13.5	26.2	88.33	-219.7	-4,224.7	4,238.2	4,211.0	27.22	155.687		
7,800.0	7,667.4	7,879.5	7,719.1	13.6	26.3	88.83	-218.3	-4,224.6	4,235.7	4,208.4	27.34	154.924		
7,850.0	7,691.7	7,901.6	7,741.2	13.7	26.3	89.27	-217.1	-4,224.5	4,233.6	4,206.1	27.50	153.961		
7,900.0	7,712.8	7,920.1	7,759.7	13.9	26.3	89.63	-216.0	-4,224.5	4,231.9	4,204.2	27.70	152.790		
7,950.0	7,730.8	7,935.7	7,775.2	14.1	26.3	89.93	-215.0	-4,224.4	4,230.7	4,202.8	27.94	151.404		
8,000.0	7,745.5	7,948.6	7,788.1	14.4	26.3	90.15	-214.1	-4,224.4	4,230.1	4,201.8	28.24	149.812		
8,031.3	7,752.9	7,954.7	7,794.2	14.6	26.3	90.24	-213.7	-4,224.3	4,229.9	4,201.5	28.45	148.697		
8,050.0	7,756.7	7,957.5	7,797.0	14.7	26.3	90.27	-213.5	-4,224.3	4,230.0	4,201.4	28.57	148.046		
8,100.0	7,764.6	7,962.4	7,801.9	15.1	26.3	90.30	-213.1	-4,224.3	4,230.5	4,201.6	28.95	146.133		
8,150.0	7,769.0	7,963.3	7,802.8	15.5	26.3	90.22	-213.1	-4,224.3	4,231.6	4,202.3	29.37	144.103		
8,188.1	7,770.0	7,961.5	7,801.0	15.9	26.3	90.09	-213.2	-4,224.3	4,232.9	4,203.2	29.70	142.502		
8,200.0	7,770.0	7,960.6	7,800.1	16.0	26.3	90.08	-213.3	-4,224.3	4,233.4	4,203.5	29.81	141.995		
8,300.0	7,770.0	7,953.2	7,792.7	17.0	26.3	89.98	-213.8	-4,224.3	4,238.6	4,207.8	30.80	137.611		
8,400.0	7,770.0	7,946.1	7,785.6	18.1	26.3	89.89	-214.3	-4,224.4	4,246.1	4,214.2	31.90	133.088		
8,500.0	7,770.0	7,939.2	7,778.7	19.3	26.3	89.79	-214.7	-4,224.4	4,256.0	4,222.9	33.10	128.565		
8,600.0	7,770.0	7,932.5	7,772.1	20.6	26.3	89.70	-215.2	-4,224.4	4,268.2	4,233.8	34.38	124.140		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,700.0	7,770.0	7,930.0	7,769.5	21.9	26.3	89.67	-215.3	-4,224.4	4,282.7	4,246.9	35.73	119.858		
8,800.0	7,770.0	7,930.0	7,769.5	23.3	26.3	89.67	-215.3	-4,224.4	4,299.4	4,262.3	37.14	115.770		
8,900.0	7,770.0	7,915.8	7,755.4	24.8	26.3	89.48	-216.2	-4,224.5	4,318.4	4,279.8	38.57	111.971		
9,000.0	7,770.0	7,910.7	7,750.3	26.3	26.3	89.41	-216.5	-4,224.5	4,339.6	4,299.5	40.05	108.363		
9,100.0	7,770.0	7,905.8	7,745.4	27.8	26.3	89.34	-216.8	-4,224.5	4,363.0	4,321.4	41.56	104.985		
9,200.0	7,770.0	7,901.0	7,740.6	29.3	26.3	89.28	-217.1	-4,224.5	4,388.5	4,345.4	43.10	101.832		
9,300.0	7,770.0	7,896.3	7,735.9	30.9	26.3	89.21	-217.4	-4,224.5	4,416.1	4,371.5	44.66	98.894		
9,400.0	7,770.0	7,891.8	7,731.4	32.5	26.3	89.15	-217.7	-4,224.6	4,445.9	4,399.6	46.23	96.159		
9,500.0	7,770.0	7,887.4	7,727.0	34.1	26.3	89.09	-217.9	-4,224.6	4,477.6	4,429.8	47.83	93.614		
9,600.0	7,770.0	7,883.1	7,722.7	35.7	26.3	89.03	-218.1	-4,224.6	4,511.3	4,461.9	49.44	91.248		
9,700.0	7,770.0	7,879.0	7,718.6	37.3	26.3	88.98	-218.4	-4,224.6	4,547.0	4,496.0	51.06	89.048		
9,800.0	7,770.0	7,874.9	7,714.6	39.0	26.3	88.92	-218.6	-4,224.6	4,584.6	4,531.9	52.70	87.000		
9,900.0	7,770.0	7,871.0	7,710.7	40.6	26.3	88.87	-218.8	-4,224.6	4,624.0	4,569.7	54.34	85.096		
10,000.0	7,770.0	7,867.2	7,706.9	42.3	26.3	88.82	-219.0	-4,224.7	4,665.3	4,609.3	55.99	83.322		
10,100.0	7,770.0	7,863.5	7,703.2	44.0	26.2	88.77	-219.2	-4,224.7	4,708.3	4,650.6	57.65	81.670		
10,200.0	7,770.0	7,859.9	7,699.6	45.6	26.2	88.72	-219.4	-4,224.7	4,753.0	4,693.7	59.32	80.131		
10,300.0	7,770.0	7,856.4	7,696.0	47.3	26.2	88.67	-219.6	-4,224.7	4,799.3	4,738.4	60.99	78.695		
10,400.0	7,770.0	7,853.0	7,692.6	49.0	26.2	88.63	-219.7	-4,224.7	4,847.3	4,784.7	62.66	77.354		
10,500.0	7,770.0	7,849.6	7,689.3	50.7	26.2	88.58	-219.9	-4,224.7	4,896.9	4,832.5	64.35	76.103		
10,600.0	7,770.0	7,846.4	7,686.0	52.4	26.2	88.54	-220.0	-4,224.7	4,948.0	4,881.9	66.03	74.933		
10,700.0	7,770.0	7,843.2	7,682.9	54.1	26.2	88.50	-220.2	-4,224.7	5,000.5	4,932.8	67.72	73.839		
10,800.0	7,770.0	7,840.1	7,679.8	55.8	26.2	88.45	-220.4	-4,224.8	5,054.5	4,985.1	69.42	72.815		
10,900.0	7,770.0	7,837.1	7,676.8	57.5	26.2	88.41	-220.5	-4,224.8	5,109.9	5,038.8	71.11	71.856		
11,000.0	7,770.0	7,834.1	7,673.8	59.2	26.2	88.37	-220.6	-4,224.8	5,166.6	5,093.8	72.81	70.957		
11,100.0	7,770.0	7,831.3	7,671.0	60.9	26.2	88.33	-220.8	-4,224.8	5,224.6	5,150.1	74.52	70.114		
11,200.0	7,770.0	7,828.4	7,668.2	62.6	26.2	88.30	-220.9	-4,224.8	5,283.8	5,207.6	76.22	69.322		
11,300.0	7,770.0	7,825.7	7,665.4	64.3	26.2	88.26	-221.0	-4,224.8	5,344.3	5,266.4	77.93	68.579		
11,400.0	7,770.0	7,823.0	7,662.7	66.0	26.2	88.22	-221.1	-4,224.8	5,405.9	5,326.3	79.64	67.881		
11,500.0	7,770.0	7,820.4	7,660.1	67.7	26.2	88.19	-221.2	-4,224.8	5,468.7	5,387.4	81.35	67.224		
11,600.0	7,770.0	7,817.8	7,657.6	69.5	26.2	88.15	-221.4	-4,224.8	5,532.6	5,449.5	83.06	66.606		
11,700.0	7,770.0	7,815.3	7,655.1	71.2	26.2	88.12	-221.5	-4,224.9	5,597.5	5,512.7	84.78	66.024		
11,800.0	7,770.0	7,812.9	7,652.6	72.9	26.2	88.09	-221.6	-4,224.9	5,663.4	5,576.9	86.50	65.476		
11,900.0	7,770.0	7,810.5	7,650.2	74.6	26.2	88.05	-221.7	-4,224.9	5,730.4	5,642.1	88.21	64.959		
12,000.0	7,770.0	7,808.1	7,647.9	76.4	26.2	88.02	-221.8	-4,224.9	5,798.2	5,708.3	89.93	64.472		
12,100.0	7,770.0	7,805.9	7,645.6	78.1	26.2	87.99	-221.9	-4,224.9	5,867.0	5,775.4	91.66	64.012		
12,200.0	7,770.0	7,803.6	7,643.3	79.8	26.2	87.96	-221.9	-4,224.9	5,936.7	5,843.3	93.38	63.577		
12,300.0	7,770.0	7,801.4	7,641.1	81.5	26.2	87.93	-222.0	-4,224.9	6,007.2	5,912.1	95.10	63.167		
12,400.0	7,770.0	7,799.3	7,639.0	83.3	26.2	87.90	-222.1	-4,224.9	6,078.6	5,981.8	96.83	62.779		
12,500.0	7,770.0	7,797.1	7,636.9	85.0	26.2	87.87	-222.2	-4,224.9	6,150.8	6,052.2	98.55	62.412		
12,600.0	7,770.0	7,795.0	7,634.8	86.7	26.2	87.83	-223.7	-4,225.1	6,223.9	6,123.7	100.18	62.126		
12,700.0	7,770.0	7,793.0	7,632.7	88.5	26.2	87.80	-223.7	-4,225.1	6,297.6	6,195.6	101.91	61.794		
12,800.0	7,770.0	7,791.0	7,630.6	90.2	26.2	87.77	-223.7	-4,225.1	6,371.9	6,268.3	103.64	61.479		
12,900.0	7,770.0	7,789.0	7,628.5	91.9	26.2	87.73	-223.7	-4,225.1	6,447.0	6,341.6	105.38	61.180		
13,000.0	7,770.0	7,787.0	7,626.4	93.7	26.2	87.70	-223.7	-4,225.1	6,522.7	6,415.6	107.11	60.897		
13,100.0	7,770.0	7,785.0	7,624.3	95.4	26.2	87.70	-223.7	-4,225.1	6,599.1	6,490.2	108.84	60.628		
13,200.0	7,770.0	7,783.0	7,622.2	97.1	26.2	87.70	-223.7	-4,225.1	6,676.1	6,565.5	110.58	60.373		
13,300.0	7,770.0	7,781.0	7,620.1	98.9	26.2	87.70	-223.7	-4,225.1	6,753.7	6,641.3	112.31	60.131		
13,400.0	7,770.0	7,779.0	7,618.0	100.6	26.2	87.70	-223.7	-4,225.1	6,831.8	6,717.8	114.05	59.902		
13,500.0	7,770.0	7,775.0	7,616.0	102.4	26.2	87.70	-223.7	-4,225.1	6,910.6	6,794.8	115.79	59.683		
13,600.0	7,770.0	7,775.0	7,616.0	104.1	26.2	87.70	-223.7	-4,225.1	6,989.9	6,872.3	117.52	59.476		
13,700.0	7,770.0	7,775.0	7,616.0	105.8	26.2	87.70	-223.7	-4,225.1	7,069.7	6,950.4	119.26	59.279		
13,800.0	7,770.0	7,775.0	7,616.0	107.6	26.2	87.70	-223.7	-4,225.1	7,150.0	7,029.0	121.00	59.091		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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		
13,900.0	7,770.0	7,755.0	7,594.8	109.3	26.2	87.30	-223.7	-4,225.1	7,230.8	7,108.1	122.74	58.912			
14,000.0	7,770.0	7,755.0	7,594.8	111.1	26.2	87.30	-223.7	-4,225.1	7,312.1	7,187.6	124.48	58.742			
14,100.0	7,770.0	7,755.0	7,594.8	112.8	26.2	87.30	-223.7	-4,225.1	7,393.8	7,267.6	126.22	58.581			
14,200.0	7,770.0	7,755.0	7,594.8	114.5	26.2	87.30	-223.7	-4,225.1	7,476.0	7,348.1	127.96	58.426			
14,300.0	7,770.0	7,755.0	7,594.8	116.3	26.2	87.30	-223.7	-4,225.1	7,558.6	7,428.9	129.70	58.279			
14,400.0	7,770.0	7,755.0	7,594.8	118.0	26.2	87.30	-223.7	-4,225.1	7,641.7	7,510.2	131.44	58.139			
14,500.0	7,770.0	7,755.0	7,594.8	119.8	26.2	87.30	-223.7	-4,225.1	7,725.1	7,591.9	133.18	58.006			
14,600.0	7,770.0	7,755.0	7,594.8	121.5	26.2	87.30	-223.7	-4,225.1	7,808.9	7,674.0	134.92	57.879			
14,700.0	7,770.0	7,755.0	7,594.8	123.3	26.2	87.30	-223.7	-4,225.1	7,893.1	7,756.5	136.66	57.757			
14,800.0	7,770.0	7,755.0	7,594.8	125.0	26.2	87.30	-223.7	-4,225.1	7,977.7	7,839.3	138.40	57.642			
14,900.0	7,770.0	7,755.0	7,594.8	126.7	26.2	87.30	-223.7	-4,225.1	8,062.6	7,922.5	140.14	57.531			
15,000.0	7,770.0	7,755.0	7,594.8	128.5	26.2	87.30	-223.7	-4,225.1	8,147.9	8,006.0	141.89	57.425			
15,100.0	7,770.0	7,755.0	7,594.8	130.2	26.2	87.30	-223.7	-4,225.1	8,233.5	8,089.8	143.63	57.325			
15,200.0	7,770.0	7,755.0	7,594.8	132.0	26.2	87.30	-223.7	-4,225.1	8,319.4	8,174.0	145.37	57.228			
15,300.0	7,770.0	7,755.0	7,594.8	133.7	26.2	87.30	-223.7	-4,225.1	8,405.6	8,258.5	147.11	57.137			
15,400.0	7,770.0	7,744.7	7,584.5	135.5	26.1	87.17	-224.0	-4,225.2	8,492.1	8,343.3	148.83	57.061			
15,500.0	7,770.0	7,741.9	7,581.7	137.2	26.1	87.13	-224.1	-4,225.2	8,578.9	8,428.4	150.56	56.980			
15,600.0	7,770.0	7,739.1	7,578.9	139.0	26.1	87.09	-224.2	-4,225.2	8,666.0	8,513.7	152.30	56.903			
15,700.0	7,770.0	7,736.3	7,576.1	140.7	26.1	87.05	-224.3	-4,225.2	8,753.4	8,599.4	154.03	56.829			
15,800.0	7,770.0	7,733.6	7,573.3	142.4	26.1	87.01	-224.3	-4,225.2	8,841.0	8,685.3	155.77	56.759			
15,900.0	7,770.0	7,730.8	7,570.6	144.2	26.1	86.98	-224.4	-4,225.2	8,928.9	8,771.4	157.50	56.692			
16,000.0	7,770.0	7,728.0	7,567.8	145.9	26.1	86.94	-224.5	-4,225.2	9,017.1	8,857.9	159.24	56.628			
16,100.0	7,770.0	7,725.3	7,565.1	147.7	26.1	86.90	-224.6	-4,225.2	9,105.5	8,944.5	160.97	56.566			
16,200.0	7,770.0	7,722.6	7,562.3	149.4	26.1	86.87	-224.7	-4,225.2	9,194.1	9,031.4	162.70	56.508			
16,300.0	7,770.0	7,719.8	7,559.6	151.2	26.1	86.83	-224.8	-4,225.3	9,283.0	9,118.5	164.44	56.452			
16,400.0	7,770.0	7,717.1	7,556.9	152.9	26.1	86.79	-224.9	-4,225.3	9,372.1	9,205.9	166.17	56.399			
16,500.0	7,770.0	7,714.4	7,554.2	154.7	26.1	86.76	-224.9	-4,225.3	9,461.4	9,293.5	167.91	56.348			
16,600.0	7,770.0	7,711.7	7,551.5	156.4	26.1	86.72	-225.0	-4,225.3	9,550.9	9,381.2	169.64	56.299			
16,700.0	7,770.0	7,709.0	7,548.8	158.2	26.1	86.68	-225.1	-4,225.3	9,640.6	9,469.2	171.38	56.253			
16,800.0	7,770.0	7,706.3	7,546.1	159.9	26.1	86.65	-225.2	-4,225.3	9,730.5	9,557.4	173.11	56.209			
16,900.0	7,770.0	7,703.6	7,543.4	161.7	26.1	86.61	-225.3	-4,225.3	9,820.6	9,645.8	174.85	56.166			
17,000.0	7,770.0	7,701.0	7,540.8	163.4	26.1	86.57	-225.3	-4,225.3	9,910.9	9,734.4	176.58	56.126 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	60.0	60.0	0.0	0.1	-112.26	-1,738.0	-4,246.0	4,588.0						
100.0	100.0	160.0	160.0	0.2	0.3	-112.26	-1,738.0	-4,246.0	4,588.0	4,587.5	0.43	N/A			
200.0	200.0	260.0	260.0	0.3	0.5	-112.26	-1,738.0	-4,246.0	4,588.0	4,587.2	0.78	5,879.307			
300.0	300.0	360.0	360.0	0.5	0.6	-112.26	-1,738.0	-4,246.0	4,588.0	4,586.8	1.13	4,062.222			
400.0	400.0	460.0	460.0	0.7	0.8	-112.26	-1,738.0	-4,246.0	4,588.0	4,586.5	1.48	3,103.149			
500.0	500.0	560.0	560.0	0.8	1.0	-112.26	-1,738.0	-4,246.0	4,588.0	4,586.1	1.83	2,510.444			
550.0	550.0	610.0	610.0	0.9	1.1	-112.26	-1,738.0	-4,246.0	4,588.0	4,586.0	2.00	2,291.595			
600.0	600.0	660.0	660.0	1.0	1.2	-113.10	-1,738.0	-4,246.0	4,588.0	4,585.9	2.18	2,107.869			
700.0	700.0	760.0	760.0	1.2	1.3	-113.11	-1,738.0	-4,246.0	4,588.7	4,586.2	2.53	1,816.192			
800.0	799.9	859.9	859.9	1.4	1.5	-113.14	-1,738.0	-4,246.0	4,590.1	4,587.2	2.88	1,594.061			
861.1	860.9	920.9	920.9	1.5	1.6	-113.16	-1,738.0	-4,246.0	4,591.3	4,588.2	3.10	1,482.374			
900.0	899.8	959.8	959.8	1.6	1.7	-113.19	-1,738.0	-4,246.0	4,592.1	4,588.9	3.24	1,418.769			
1,000.0	999.6	1,059.6	1,059.6	1.8	1.8	-113.25	-1,738.0	-4,246.0	4,594.2	4,590.6	3.60	1,277.398			
1,100.0	1,099.5	1,159.5	1,159.5	1.9	2.0	-113.31	-1,738.0	-4,246.0	4,596.4	4,592.4	3.96	1,161.212			
1,200.0	1,199.3	1,259.3	1,259.3	2.1	2.2	-113.37	-1,738.0	-4,246.0	4,598.5	4,594.2	4.32	1,064.155			
1,300.0	1,299.2	1,359.2	1,359.2	2.3	2.4	-113.43	-1,738.0	-4,246.0	4,600.7	4,596.0	4.69	981.935			
1,400.0	1,399.1	1,459.1	1,459.1	2.5	2.5	-113.50	-1,738.0	-4,246.0	4,602.9	4,597.8	5.05	911.433			
1,500.0	1,498.9	1,558.9	1,558.9	2.7	2.7	-113.56	-1,738.0	-4,246.0	4,605.0	4,599.6	5.42	850.339			
1,600.0	1,598.8	1,658.8	1,658.8	2.9	2.9	-113.62	-1,738.0	-4,246.0	4,607.2	4,601.4	5.78	796.904			
1,700.0	1,698.6	1,758.6	1,758.6	3.1	3.1	-113.68	-1,738.0	-4,246.0	4,609.4	4,603.2	6.15	749.786			
1,800.0	1,798.5	1,858.5	1,858.5	3.3	3.2	-113.74	-1,738.0	-4,246.0	4,611.6	4,605.1	6.51	707.933			
1,900.0	1,898.3	1,958.3	1,958.3	3.5	3.4	-113.81	-1,738.0	-4,246.0	4,613.8	4,606.9	6.88	670.517			
2,000.0	1,998.2	2,058.2	2,058.2	3.7	3.6	-113.87	-1,738.0	-4,246.0	4,616.0	4,608.7	7.25	636.870			
2,100.0	2,098.0	2,158.0	2,158.0	3.9	3.8	-113.93	-1,738.0	-4,246.0	4,618.2	4,610.5	7.62	606.455			
2,200.0	2,197.9	2,257.9	2,257.9	4.1	3.9	-113.99	-1,738.0	-4,246.0	4,620.4	4,612.4	7.98	578.828			
2,300.0	2,297.7	2,357.7	2,357.7	4.3	4.1	-114.05	-1,738.0	-4,246.0	4,622.6	4,614.2	8.35	553.624			
2,400.0	2,397.6	2,457.6	2,457.6	4.5	4.3	-114.11	-1,738.0	-4,246.0	4,624.8	4,616.1	8.72	530.540			
2,500.0	2,497.4	2,557.4	2,557.4	4.7	4.5	-114.17	-1,738.0	-4,246.0	4,627.0	4,617.9	9.08	509.320			
2,600.0	2,597.3	2,657.3	2,657.3	4.9	4.6	-114.23	-1,738.0	-4,246.0	4,629.2	4,619.8	9.45	489.748			
2,700.0	2,697.1	2,757.1	2,757.1	5.1	4.8	-114.30	-1,738.0	-4,246.0	4,631.5	4,621.7	9.82	471.639			
2,800.0	2,797.0	2,857.0	2,857.0	5.3	5.0	-114.36	-1,738.0	-4,246.0	4,633.7	4,623.5	10.19	454.836			
2,900.0	2,896.8	2,956.8	2,956.8	5.5	5.2	-114.42	-1,738.0	-4,246.0	4,636.0	4,625.4	10.56	439.203			
3,000.0	2,996.7	3,056.7	3,056.7	5.7	5.3	-114.48	-1,738.0	-4,246.0	4,638.2	4,627.3	10.92	424.621			
3,100.0	3,096.5	3,156.5	3,156.5	5.9	5.5	-114.54	-1,738.0	-4,246.0	4,640.5	4,629.2	11.29	410.990			
3,200.0	3,196.4	3,256.4	3,256.4	6.1	5.7	-114.60	-1,738.0	-4,246.0	4,642.7	4,631.1	11.66	398.219			
3,300.0	3,296.3	3,356.3	3,356.3	6.3	5.9	-114.66	-1,738.0	-4,246.0	4,645.0	4,633.0	12.03	386.228			
3,400.0	3,396.1	3,456.1	3,456.1	6.5	6.0	-114.72	-1,738.0	-4,246.0	4,647.3	4,634.9	12.39	374.950			
3,500.0	3,496.0	3,556.0	3,556.0	6.7	6.2	-114.78	-1,738.0	-4,246.0	4,649.5	4,636.8	12.76	364.322			
3,600.0	3,595.8	3,655.8	3,655.8	6.9	6.4	-114.84	-1,738.0	-4,246.0	4,651.8	4,638.7	13.13	354.290			
3,700.0	3,695.7	3,755.7	3,755.7	7.0	6.6	-114.90	-1,738.0	-4,246.0	4,654.1	4,640.6	13.50	344.806			
3,800.0	3,795.5	3,855.5	3,855.5	7.2	6.7	-114.96	-1,738.0	-4,246.0	4,656.4	4,642.5	13.87	335.825			
3,900.0	3,895.4	3,955.4	3,955.4	7.4	6.9	-115.02	-1,738.0	-4,246.0	4,658.7	4,644.5	14.23	327.309			
4,000.0	3,995.2	4,055.2	4,055.2	7.6	7.1	-115.09	-1,738.0	-4,246.0	4,661.0	4,646.4	14.60	319.222			
4,100.0	4,095.1	4,155.1	4,155.1	7.8	7.3	-115.15	-1,738.0	-4,246.0	4,663.3	4,648.3	14.97	311.534			
4,200.0	4,194.9	4,254.9	4,254.9	8.0	7.4	-115.21	-1,738.0	-4,246.0	4,665.6	4,650.3	15.34	304.215			
4,300.0	4,294.8	4,354.8	4,354.8	8.2	7.6	-115.27	-1,738.0	-4,246.0	4,667.9	4,652.2	15.70	297.239			
4,400.0	4,394.6	4,454.6	4,454.6	8.4	7.8	-115.33	-1,738.0	-4,246.0	4,670.2	4,654.2	16.07	290.584			
4,500.0	4,494.5	4,554.5	4,554.5	8.6	7.9	-115.39	-1,738.0	-4,246.0	4,672.6	4,656.1	16.44	284.226			
4,600.0	4,594.3	4,654.3	4,654.3	8.8	8.1	-115.45	-1,738.0	-4,246.0	4,674.9	4,658.1	16.81	278.148			
4,700.0	4,694.2	4,754.2	4,754.2	9.0	8.3	-115.51	-1,738.0	-4,246.0	4,677.2	4,660.1	17.17	272.330			
4,800.0	4,794.0	4,854.0	4,854.0	9.2	8.5	-115.57	-1,738.0	-4,246.0	4,679.6	4,662.0	17.54	266.757			
4,900.0	4,893.9	4,953.9	4,953.9	9.4	8.6	-115.63	-1,738.0	-4,246.0	4,681.9	4,664.0	17.91	261.413			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	4,993.7	5,053.7	5,053.7	9.6	8.8	-115.69	-1,738.0	-4,246.0	4,684.3	4,666.0	18.28	256.285		
5,100.0	5,093.6	5,153.6	5,153.6	9.8	9.0	-115.75	-1,738.0	-4,246.0	4,686.6	4,668.0	18.65	251.360		
5,200.0	5,193.5	5,253.5	5,253.5	10.0	9.2	-115.81	-1,738.0	-4,246.0	4,689.0	4,670.0	19.01	246.626		
5,300.0	5,293.3	5,353.3	5,353.3	10.2	9.3	-115.86	-1,738.0	-4,246.0	4,691.4	4,672.0	19.38	242.071		
5,400.0	5,393.2	5,453.2	5,453.2	10.4	9.5	-115.92	-1,738.0	-4,246.0	4,693.7	4,674.0	19.75	237.687		
5,500.0	5,493.0	5,553.0	5,553.0	10.6	9.7	-115.98	-1,738.0	-4,246.0	4,696.1	4,676.0	20.11	233.464		
5,600.0	5,592.9	5,652.9	5,652.9	10.8	9.9	-116.04	-1,738.0	-4,246.0	4,698.5	4,678.0	20.48	229.393		
5,700.0	5,692.7	5,752.7	5,752.7	11.0	10.0	-116.10	-1,738.0	-4,246.0	4,700.9	4,680.0	20.85	225.466		
5,800.0	5,792.6	5,852.6	5,852.6	11.2	10.2	-116.16	-1,738.0	-4,246.0	4,703.3	4,682.1	21.22	221.675		
5,900.0	5,892.4	5,952.4	5,952.4	11.4	10.4	-116.22	-1,738.0	-4,246.0	4,705.7	4,684.1	21.58	218.014		
6,000.0	5,992.3	6,052.3	6,052.3	11.6	10.6	-116.28	-1,738.0	-4,246.0	4,708.1	4,686.1	21.95	214.476		
6,100.0	6,092.1	6,152.1	6,152.1	11.8	10.7	-116.34	-1,738.0	-4,246.0	4,710.5	4,688.2	22.32	211.055		
6,200.0	6,192.0	6,252.0	6,252.0	12.0	10.9	-116.40	-1,738.0	-4,246.0	4,712.9	4,690.2	22.69	207.746		
6,300.0	6,291.8	6,351.8	6,351.8	12.2	11.1	-116.46	-1,738.0	-4,246.0	4,715.3	4,692.3	23.05	204.542		
6,400.0	6,391.7	6,451.7	6,451.7	12.4	11.3	-116.52	-1,738.0	-4,246.0	4,717.7	4,694.3	23.42	201.439		
6,500.0	6,491.5	6,551.5	6,551.5	12.6	11.4	-116.58	-1,738.0	-4,246.0	4,720.2	4,696.4	23.79	198.432		
6,600.0	6,591.4	6,651.4	6,651.4	12.8	11.6	-116.63	-1,738.0	-4,246.0	4,722.6	4,698.4	24.15	195.518		
6,700.0	6,691.2	6,751.2	6,751.2	13.0	11.8	-116.69	-1,738.0	-4,246.0	4,725.0	4,700.5	24.52	192.691		
6,800.0	6,791.1	6,851.1	6,851.1	13.2	12.0	-116.75	-1,738.0	-4,246.0	4,727.5	4,702.6	24.89	189.948		
6,900.0	6,890.9	6,950.9	6,950.9	13.4	12.1	-116.81	-1,738.0	-4,246.0	4,729.9	4,704.7	25.26	187.285		
7,000.0	6,990.8	7,050.8	7,050.8	13.6	12.3	-116.87	-1,738.0	-4,246.0	4,732.4	4,706.8	25.62	184.698		
7,024.2	7,014.9	7,074.9	7,074.9	13.6	12.3	-116.88	-1,738.0	-4,246.0	4,733.0	4,707.3	25.71	184.084		
7,050.0	7,040.7	7,100.7	7,100.7	13.7	12.4	-118.58	-1,738.0	-4,246.0	4,733.4	4,707.6	25.80	183.459		
7,100.0	7,090.7	7,150.7	7,150.7	13.7	12.5	64.83	-1,738.0	-4,246.0	4,733.1	4,707.1	25.94	182.432		
7,150.0	7,140.5	7,200.5	7,200.5	13.8	12.6	64.50	-1,738.0	-4,246.0	4,731.2	4,705.2	26.05	181.588		
7,200.0	7,189.9	7,249.9	7,249.9	13.8	12.7	64.69	-1,738.0	-4,246.0	4,727.8	4,701.7	26.13	180.909		
7,250.0	7,238.6	7,298.6	7,298.6	13.8	12.7	65.10	-1,738.0	-4,246.0	4,723.0	4,696.8	26.19	180.367		
7,300.0	7,286.4	7,346.4	7,346.4	13.7	12.8	65.69	-1,738.0	-4,246.0	4,716.7	4,690.5	26.21	179.929		
7,350.0	7,333.1	7,393.1	7,393.1	13.7	12.9	66.42	-1,738.0	-4,246.0	4,709.0	4,682.8	26.23	179.554		
7,400.0	7,378.5	7,438.5	7,438.5	13.6	13.0	67.29	-1,738.0	-4,246.0	4,700.0	4,673.8	26.23	179.198		
7,450.0	7,422.2	7,482.2	7,482.2	13.6	13.1	68.30	-1,738.0	-4,246.0	4,689.8	4,663.5	26.23	178.808		
7,500.0	7,464.1	7,524.1	7,524.1	13.5	13.1	69.43	-1,738.0	-4,246.0	4,678.4	4,652.1	26.23	178.334		
7,550.0	7,504.1	7,564.1	7,564.1	13.5	13.2	70.67	-1,738.0	-4,246.0	4,665.9	4,639.7	26.25	177.723		
7,600.0	7,541.8	7,601.8	7,601.8	13.5	13.3	72.02	-1,738.0	-4,246.0	4,652.6	4,626.3	26.30	176.930		
7,650.0	7,577.2	7,637.2	7,637.2	13.4	13.3	73.45	-1,738.0	-4,246.0	4,638.4	4,612.0	26.37	175.914		
7,700.0	7,610.0	7,670.0	7,670.0	13.5	13.4	74.96	-1,738.0	-4,246.0	4,623.4	4,597.0	26.47	174.648		
7,750.0	7,640.2	7,700.2	7,700.2	13.5	13.4	76.52	-1,738.0	-4,246.0	4,607.9	4,581.3	26.62	173.117		
7,800.0	7,667.4	7,727.4	7,727.4	13.6	13.5	78.13	-1,738.0	-4,246.0	4,591.9	4,565.1	26.80	171.321		
7,850.0	7,691.7	7,751.7	7,751.7	13.7	13.5	79.76	-1,738.0	-4,246.0	4,575.6	4,548.6	27.03	169.272		
7,900.0	7,712.8	7,772.8	7,772.8	13.9	13.6	81.39	-1,738.0	-4,246.0	4,559.1	4,531.8	27.30	166.995		
7,950.0	7,730.8	7,790.8	7,790.8	14.1	13.6	83.01	-1,738.0	-4,246.0	4,542.5	4,514.9	27.61	164.524		
8,000.0	7,745.5	7,805.5	7,805.5	14.4	13.6	84.59	-1,738.0	-4,246.0	4,525.9	4,497.9	27.96	161.897		
8,050.0	7,756.7	7,816.7	7,816.7	14.7	13.6	86.13	-1,738.0	-4,246.0	4,509.4	4,481.1	28.33	159.154		
8,100.0	7,764.6	7,824.6	7,824.6	15.1	13.7	87.60	-1,738.0	-4,246.0	4,493.2	4,464.5	28.74	156.334		
8,150.0	7,769.0	7,829.0	7,829.0	15.5	13.7	89.00	-1,738.0	-4,246.0	4,477.4	4,448.2	29.17	153.473		
8,188.1	7,770.0	7,830.0	7,830.0	15.9	13.7	90.00	-1,738.0	-4,246.0	4,465.6	4,436.1	29.52	151.288		
8,200.0	7,770.0	7,830.0	7,830.0	16.0	13.7	90.00	-1,738.0	-4,246.0	4,461.9	4,432.3	29.63	150.601		
8,300.0	7,770.0	7,830.0	7,830.0	17.0	13.7	90.00	-1,738.0	-4,246.0	4,432.6	4,402.0	30.63	144.730		
8,400.0	7,770.0	7,830.0	7,830.0	18.1	13.7	90.00	-1,738.0	-4,246.0	4,405.4	4,373.6	31.74	138.790		
8,500.0	7,770.0	7,830.0	7,830.0	19.3	13.7	90.00	-1,738.0	-4,246.0	4,380.3	4,347.3	32.95	132.932		
8,600.0	7,770.0	7,830.0	7,830.0	20.6	13.7	90.00	-1,738.0	-4,246.0	4,357.3	4,323.0	34.24	127.259		
8,700.0	7,770.0	7,830.0	7,830.0	21.9	13.7	90.00	-1,738.0	-4,246.0	4,336.5	4,300.9	35.59	121.836		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,770.0	7,830.0	7,830.0	23.3	13.7	90.00	-1,738.0	-4,246.0	4,317.9	4,280.9	37.00	116.703		
8,900.0	7,770.0	7,830.0	7,830.0	24.8	13.7	90.00	-1,738.0	-4,246.0	4,301.6	4,263.1	38.45	111.874		
9,000.0	7,770.0	7,830.0	7,830.0	26.3	13.7	90.00	-1,738.0	-4,246.0	4,287.5	4,247.6	39.94	107.354		
9,100.0	7,770.0	7,830.0	7,830.0	27.8	13.7	90.00	-1,738.0	-4,246.0	4,275.8	4,234.3	41.46	103.137		
9,200.0	7,770.0	7,830.0	7,830.0	29.3	13.7	90.00	-1,738.0	-4,246.0	4,266.3	4,223.3	43.00	99.211		
9,300.0	7,770.0	7,830.0	7,830.0	30.9	13.7	90.00	-1,738.0	-4,246.0	4,259.2	4,214.6	44.57	95.562		
9,400.0	7,770.0	7,830.0	7,830.0	32.5	13.7	90.00	-1,738.0	-4,246.0	4,254.4	4,208.3	46.16	92.174		
9,500.0	7,770.0	7,830.0	7,830.0	34.1	13.7	90.00	-1,738.0	-4,246.0	4,252.0	4,204.2	47.76	89.029		
9,553.7	7,770.0	7,830.0	7,830.0	35.0	13.7	90.00	-1,738.0	-4,246.0	4,251.6	4,203.0	48.63	87.431 CC		
9,600.0	7,770.0	7,830.0	7,830.0	35.7	13.7	90.00	-1,738.0	-4,246.0	4,251.9	4,202.5	49.38	86.111 ES		
9,700.0	7,770.0	7,830.0	7,830.0	37.3	13.7	90.00	-1,738.0	-4,246.0	4,254.1	4,203.1	51.01	83.404		
9,800.0	7,770.0	7,830.0	7,830.0	39.0	13.7	90.00	-1,738.0	-4,246.0	4,258.8	4,206.1	52.65	80.893		
9,900.0	7,770.0	7,830.0	7,830.0	40.6	13.7	90.00	-1,738.0	-4,246.0	4,265.7	4,211.4	54.30	78.563		
10,000.0	7,770.0	7,830.0	7,830.0	42.3	13.7	90.00	-1,738.0	-4,246.0	4,275.0	4,219.0	55.95	76.401		
10,100.0	7,770.0	7,830.0	7,830.0	44.0	13.7	90.00	-1,738.0	-4,246.0	4,286.6	4,229.0	57.62	74.393		
10,200.0	7,770.0	7,830.0	7,830.0	45.6	13.7	90.00	-1,738.0	-4,246.0	4,300.5	4,241.2	59.29	72.529		
10,300.0	7,770.0	7,830.0	7,830.0	47.3	13.7	90.00	-1,738.0	-4,246.0	4,316.6	4,255.7	60.97	70.798		
10,400.0	7,770.0	7,830.0	7,830.0	49.0	13.7	90.00	-1,738.0	-4,246.0	4,335.0	4,272.4	62.65	69.189		
10,500.0	7,770.0	7,830.0	7,830.0	50.7	13.7	90.00	-1,738.0	-4,246.0	4,355.7	4,291.3	64.34	67.695		
10,600.0	7,770.0	7,830.0	7,830.0	52.4	13.7	90.00	-1,738.0	-4,246.0	4,378.5	4,312.4	66.04	66.305		
10,700.0	7,770.0	7,830.0	7,830.0	54.1	13.7	90.00	-1,738.0	-4,246.0	4,403.4	4,335.7	67.73	65.013		
10,800.0	7,770.0	7,830.0	7,830.0	55.8	13.7	90.00	-1,738.0	-4,246.0	4,430.5	4,361.1	69.43	63.811		
10,900.0	7,770.0	7,830.0	7,830.0	57.5	13.7	90.00	-1,738.0	-4,246.0	4,459.7	4,388.5	71.14	62.693		
11,000.0	7,770.0	7,830.0	7,830.0	59.2	13.7	90.00	-1,738.0	-4,246.0	4,490.9	4,418.0	72.84	61.653		
11,100.0	7,770.0	7,830.0	7,830.0	60.9	13.7	90.00	-1,738.0	-4,246.0	4,524.1	4,449.5	74.55	60.684		
11,200.0	7,770.0	7,830.0	7,830.0	62.6	13.7	90.00	-1,738.0	-4,246.0	4,559.2	4,483.0	76.26	59.783		
11,300.0	7,770.0	7,830.0	7,830.0	64.3	13.7	90.00	-1,738.0	-4,246.0	4,596.3	4,518.3	77.98	58.945		
11,400.0	7,770.0	7,830.0	7,830.0	66.0	13.7	90.00	-1,738.0	-4,246.0	4,635.2	4,555.5	79.69	58.164		
11,500.0	7,770.0	7,830.0	7,830.0	67.7	13.7	90.00	-1,738.0	-4,246.0	4,675.9	4,594.5	81.41	57.437		
11,600.0	7,770.0	7,830.0	7,830.0	69.5	13.7	90.00	-1,738.0	-4,246.0	4,718.4	4,635.3	83.13	56.760		
11,700.0	7,770.0	7,830.0	7,830.0	71.2	13.7	90.00	-1,738.0	-4,246.0	4,762.6	4,677.8	84.85	56.130		
11,800.0	7,770.0	7,830.0	7,830.0	72.9	13.7	90.00	-1,738.0	-4,246.0	4,808.5	4,722.0	86.57	55.543		
11,900.0	7,770.0	7,830.0	7,830.0	74.6	13.7	90.00	-1,738.0	-4,246.0	4,856.1	4,767.8	88.30	54.996		
12,000.0	7,770.0	7,830.0	7,830.0	76.4	13.7	90.00	-1,738.0	-4,246.0	4,905.2	4,815.1	90.02	54.487		
12,100.0	7,770.0	7,830.0	7,830.0	78.1	13.7	90.00	-1,738.0	-4,246.0	4,955.8	4,864.0	91.75	54.013		
12,200.0	7,770.0	7,830.0	7,830.0	79.8	13.7	90.00	-1,738.0	-4,246.0	5,007.9	4,914.4	93.48	53.572		
12,300.0	7,770.0	7,830.0	7,830.0	81.5	13.7	90.00	-1,738.0	-4,246.0	5,061.5	4,966.2	95.21	53.162		
12,400.0	7,770.0	7,830.0	7,830.0	83.3	13.7	90.00	-1,738.0	-4,246.0	5,116.4	5,019.5	96.94	52.780		
12,500.0	7,770.0	7,830.0	7,830.0	85.0	13.7	90.00	-1,738.0	-4,246.0	5,172.7	5,074.0	98.67	52.424		
12,600.0	7,770.0	7,830.0	7,830.0	86.7	13.7	90.00	-1,738.0	-4,246.0	5,230.3	5,129.9	100.40	52.094		
12,700.0	7,770.0	7,830.0	7,830.0	88.5	13.7	90.00	-1,738.0	-4,246.0	5,289.2	5,187.0	102.14	51.786		
12,800.0	7,770.0	7,830.0	7,830.0	90.2	13.7	90.00	-1,738.0	-4,246.0	5,349.3	5,245.4	103.87	51.500		
12,900.0	7,770.0	7,830.0	7,830.0	91.9	13.7	90.00	-1,738.0	-4,246.0	5,410.5	5,304.9	105.60	51.234		
13,000.0	7,770.0	7,830.0	7,830.0	93.7	13.7	90.00	-1,738.0	-4,246.0	5,472.9	5,365.6	107.34	50.987		
13,100.0	7,770.0	7,830.0	7,830.0	95.4	13.7	90.00	-1,738.0	-4,246.0	5,536.5	5,427.4	109.08	50.758		
13,200.0	7,770.0	7,830.0	7,830.0	97.1	13.7	90.00	-1,738.0	-4,246.0	5,601.0	5,490.2	110.81	50.545		
13,300.0	7,770.0	7,830.0	7,830.0	98.9	13.7	90.00	-1,738.0	-4,246.0	5,666.6	5,554.1	112.55	50.348		
13,400.0	7,770.0	7,830.0	7,830.0	100.6	13.7	90.00	-1,738.0	-4,246.0	5,733.2	5,619.0	114.29	50.165		
13,500.0	7,770.0	7,830.0	7,830.0	102.4	13.7	90.00	-1,738.0	-4,246.0	5,800.8	5,684.8	116.03	49.996		
13,600.0	7,770.0	7,830.0	7,830.0	104.1	13.7	90.00	-1,738.0	-4,246.0	5,869.3	5,751.5	117.76	49.839		
13,700.0	7,770.0	7,830.0	7,830.0	105.8	13.7	90.00	-1,738.0	-4,246.0	5,938.7	5,819.2	119.50	49.694		
13,800.0	7,770.0	7,830.0	7,830.0	107.6	13.7	90.00	-1,738.0	-4,246.0	6,008.9	5,887.7	121.24	49.561		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
13,900.0	7,770.0	7,830.0	7,830.0	109.3	13.7	90.00	-1,738.0	-4,246.0	6,080.0	5,957.0	122.98	49.437		
14,000.0	7,770.0	7,830.0	7,830.0	111.1	13.7	90.00	-1,738.0	-4,246.0	6,151.9	6,027.2	124.72	49.324		
14,100.0	7,770.0	7,830.0	7,830.0	112.8	13.7	90.00	-1,738.0	-4,246.0	6,224.5	6,098.1	126.47	49.219		
14,200.0	7,770.0	7,830.0	7,830.0	114.5	13.7	90.00	-1,738.0	-4,246.0	6,297.9	6,169.7	128.21	49.123		
14,300.0	7,770.0	7,830.0	7,830.0	116.3	13.7	90.00	-1,738.0	-4,246.0	6,372.1	6,242.1	129.95	49.035		
14,400.0	7,770.0	7,830.0	7,830.0	118.0	13.7	90.00	-1,738.0	-4,246.0	6,446.9	6,315.2	131.69	48.954		
14,500.0	7,770.0	7,830.0	7,830.0	119.8	13.7	90.00	-1,738.0	-4,246.0	6,522.4	6,389.0	133.43	48.881		
14,600.0	7,770.0	7,830.0	7,830.0	121.5	13.7	90.00	-1,738.0	-4,246.0	6,598.6	6,463.4	135.18	48.814		
14,700.0	7,770.0	7,830.0	7,830.0	123.3	13.7	90.00	-1,738.0	-4,246.0	6,675.4	6,538.4	136.92	48.753		
14,800.0	7,770.0	7,830.0	7,830.0	125.0	13.7	90.00	-1,738.0	-4,246.0	6,752.7	6,614.1	138.66	48.698		
14,900.0	7,770.0	7,830.0	7,830.0	126.7	13.7	90.00	-1,738.0	-4,246.0	6,830.7	6,690.3	140.41	48.649		
15,000.0	7,770.0	7,830.0	7,830.0	128.5	13.7	90.00	-1,738.0	-4,246.0	6,909.3	6,767.1	142.15	48.605		
15,100.0	7,770.0	7,830.0	7,830.0	130.2	13.7	90.00	-1,738.0	-4,246.0	6,988.4	6,844.5	143.90	48.565		
15,200.0	7,770.0	7,830.0	7,830.0	132.0	13.7	90.00	-1,738.0	-4,246.0	7,068.0	6,922.4	145.64	48.530		
15,300.0	7,770.0	7,830.0	7,830.0	133.7	13.7	90.00	-1,738.0	-4,246.0	7,148.1	7,000.7	147.39	48.499		
15,400.0	7,770.0	7,830.0	7,830.0	135.5	13.7	90.00	-1,738.0	-4,246.0	7,228.8	7,079.6	149.13	48.472		
15,500.0	7,770.0	7,830.0	7,830.0	137.2	13.7	90.00	-1,738.0	-4,246.0	7,309.9	7,159.0	150.88	48.449		
15,600.0	7,770.0	7,830.0	7,830.0	139.0	13.7	90.00	-1,738.0	-4,246.0	7,391.5	7,238.8	152.62	48.430		
15,700.0	7,770.0	7,830.0	7,830.0	140.7	13.7	90.00	-1,738.0	-4,246.0	7,473.5	7,319.1	154.37	48.413		
15,800.0	7,770.0	7,830.0	7,830.0	142.4	13.7	90.00	-1,738.0	-4,246.0	7,555.9	7,399.8	156.11	48.400		
15,900.0	7,770.0	7,830.0	7,830.0	144.2	13.7	90.00	-1,738.0	-4,246.0	7,638.8	7,480.9	157.86	48.389		
16,000.0	7,770.0	7,830.0	7,830.0	145.9	13.7	90.00	-1,738.0	-4,246.0	7,722.1	7,562.5	159.61	48.382		
16,100.0	7,770.0	7,830.0	7,830.0	147.7	13.7	90.00	-1,738.0	-4,246.0	7,805.8	7,644.4	161.35	48.377		
16,200.0	7,770.0	7,830.0	7,830.0	149.4	13.7	90.00	-1,738.0	-4,246.0	7,889.8	7,726.7	163.10	48.374		
16,300.0	7,770.0	7,830.0	7,830.0	151.2	13.7	90.00	-1,738.0	-4,246.0	7,974.2	7,809.4	164.85	48.373 SF		
16,400.0	7,770.0	7,830.0	7,830.0	152.9	13.7	90.00	-1,738.0	-4,246.0	8,059.0	7,892.4	166.59	48.375		
16,500.0	7,770.0	7,830.0	7,830.0	154.7	13.7	90.00	-1,738.0	-4,246.0	8,144.1	7,975.8	168.34	48.379		
16,600.0	7,770.0	7,830.0	7,830.0	156.4	13.7	90.00	-1,738.0	-4,246.0	8,229.6	8,059.5	170.09	48.384		
16,700.0	7,770.0	7,830.0	7,830.0	158.2	13.7	90.00	-1,738.0	-4,246.0	8,315.4	8,143.5	171.84	48.391		
16,800.0	7,770.0	7,830.0	7,830.0	159.9	13.7	90.00	-1,738.0	-4,246.0	8,401.5	8,227.9	173.58	48.400		
16,900.0	7,770.0	7,830.0	7,830.0	161.7	13.7	90.00	-1,738.0	-4,246.0	8,487.9	8,312.5	175.33	48.410		
17,000.0	7,770.0	7,830.0	7,830.0	163.4	13.7	90.00	-1,738.0	-4,246.0	8,574.6	8,397.5	177.08	48.422		
17,100.0	7,770.0	7,830.0	7,830.0	165.2	13.7	90.00	-1,738.0	-4,246.0	8,661.5	8,482.7	178.83	48.435		
17,200.0	7,770.0	7,830.0	7,830.0	166.9	13.7	90.00	-1,738.0	-4,246.0	8,748.8	8,568.2	180.58	48.449		
17,300.0	7,770.0	7,830.0	7,830.0	168.7	13.7	90.00	-1,738.0	-4,246.0	8,836.3	8,654.0	182.33	48.465		
17,400.0	7,770.0	7,830.0	7,830.0	170.4	13.7	90.00	-1,738.0	-4,246.0	8,924.1	8,740.1	184.07	48.481		
17,500.0	7,770.0	7,830.0	7,830.0	172.2	13.7	90.00	-1,738.0	-4,246.0	9,012.2	8,826.4	185.82	48.499		
17,600.0	7,770.0	7,830.0	7,830.0	173.9	13.7	90.00	-1,738.0	-4,246.0	9,100.5	8,912.9	187.57	48.518		
17,653.1	7,770.0	7,830.0	7,830.0	174.8	13.7	90.00	-1,738.0	-4,246.0	9,147.4	8,958.9	188.50	48.528		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	32.2	32.2	0.0	0.1	-95.72	-293.1	-2,925.9	2,940.6						
100.0	100.0	160.1	160.1	0.2	0.3	-95.73	-293.5	-2,924.6	2,939.5	2,939.1	0.43	6,804.044			
200.0	200.0	252.6	252.6	0.3	0.4	-95.75	-294.4	-2,923.3	2,938.2	2,937.4	0.77	3,822.728			
300.0	300.0	337.2	337.2	0.5	0.6	-95.76	-294.9	-2,922.5	2,937.4	2,936.3	1.09	2,692.430			
400.0	400.0	423.6	423.6	0.7	0.7	-95.77	-295.2	-2,922.2	2,937.1	2,935.7	1.42	2,073.799			
420.4	420.4	441.5	441.4	0.7	0.8	-95.77	-295.3	-2,922.2	2,937.1	2,935.6	1.48	1,980.328	CC		
500.0	500.0	511.7	511.7	0.8	0.9	-95.77	-295.5	-2,922.3	2,937.2	2,935.5	1.74	1,683.586	ES		
550.0	550.0	558.2	558.2	0.9	1.0	-95.78	-295.6	-2,922.5	2,937.4	2,935.5	1.91	1,535.587			
600.0	600.0	600.0	600.0	1.0	1.0	-96.61	-295.7	-2,922.7	2,937.7	2,935.6	2.07	1,417.157			
700.0	700.0	694.3	694.3	1.2	1.2	-96.64	-296.0	-2,923.3	2,938.6	2,936.2	2.41	1,217.534			
800.0	799.9	791.6	791.6	1.4	1.4	-96.71	-297.0	-2,924.2	2,940.0	2,937.2	2.76	1,063.831			
861.1	860.9	860.2	860.2	1.5	1.5	-96.78	-298.0	-2,924.7	2,940.9	2,937.9	3.00	981.372			
900.0	899.8	900.0	899.9	1.6	1.6	-96.84	-298.7	-2,924.9	2,941.4	2,938.2	3.14	937.051			
1,000.0	999.6	989.7	989.6	1.8	1.7	-96.96	-300.2	-2,925.4	2,942.9	2,939.4	3.48	844.603			
1,100.0	1,099.5	1,082.2	1,082.1	1.9	1.9	-97.09	-301.7	-2,926.4	2,944.7	2,940.9	3.84	767.505			
1,200.0	1,199.3	1,163.3	1,163.2	2.1	2.0	-97.19	-302.9	-2,927.5	2,947.0	2,942.8	4.17	706.677			
1,300.0	1,299.2	1,251.8	1,251.7	2.3	2.2	-97.30	-304.0	-2,929.4	2,949.9	2,945.4	4.52	652.962			
1,400.0	1,399.1	1,344.6	1,344.4	2.5	2.4	-97.41	-305.1	-2,931.5	2,953.0	2,948.1	4.87	605.975			
1,500.0	1,498.9	1,433.5	1,433.3	2.7	2.5	-97.52	-305.9	-2,933.9	2,956.4	2,951.2	5.22	566.146			
1,600.0	1,598.8	1,533.9	1,533.6	2.9	2.7	-97.62	-306.3	-2,936.9	2,960.2	2,954.6	5.59	529.459			
1,700.0	1,698.6	1,641.4	1,641.2	3.1	2.9	-97.74	-306.8	-2,939.7	2,963.5	2,957.6	5.97	496.134			
1,800.0	1,798.5	1,732.1	1,731.8	3.3	3.0	-97.83	-307.2	-2,942.2	2,967.1	2,960.8	6.33	469.020			
1,900.0	1,898.3	1,837.0	1,836.6	3.5	3.2	-97.93	-307.1	-2,945.3	2,970.8	2,964.1	6.70	443.153			
2,000.0	1,998.2	1,958.2	1,957.8	3.7	3.5	-98.05	-307.2	-2,948.3	2,974.0	2,966.9	7.11	418.269			
2,100.0	2,098.0	2,071.9	2,071.5	3.9	3.7	-98.16	-306.9	-2,950.4	2,976.6	2,969.1	7.50	396.679			
2,200.0	2,197.9	2,182.8	2,182.4	4.1	3.8	-98.26	-306.5	-2,952.0	2,978.8	2,970.9	7.89	377.398			
2,300.0	2,297.7	2,296.9	2,296.5	4.3	4.0	-98.38	-306.5	-2,953.2	2,980.5	2,972.3	8.29	359.617			
2,400.0	2,397.6	2,388.8	2,388.4	4.5	4.2	-98.47	-306.6	-2,954.0	2,982.2	2,973.6	8.64	344.976			
2,500.0	2,497.4	2,485.4	2,484.9	4.7	4.4	-98.56	-306.3	-2,955.1	2,984.1	2,975.1	9.01	331.235			
2,600.0	2,597.3	2,581.9	2,581.5	4.9	4.5	-98.64	-305.1	-2,956.4	2,986.1	2,976.7	9.37	318.580			
2,700.0	2,697.1	2,672.7	2,672.2	5.1	4.7	-98.69	-303.3	-2,957.9	2,988.3	2,978.5	9.73	307.197			
2,800.0	2,797.0	2,760.9	2,760.3	5.3	4.9	-98.75	-301.8	-2,959.6	2,990.8	2,980.7	10.08	296.773			
2,900.0	2,896.8	2,870.1	2,869.6	5.5	5.1	-98.83	-300.3	-2,961.9	2,993.6	2,983.1	10.47	286.054			
3,000.0	2,996.7	2,991.8	2,991.3	5.7	5.3	-98.92	-298.9	-2,963.6	2,995.7	2,984.8	10.87	275.480			
3,100.0	3,096.5	3,103.4	3,102.8	5.9	5.5	-99.00	-297.4	-2,964.6	2,997.2	2,985.9	11.27	266.035			
3,200.0	3,196.4	3,200.0	3,199.4	6.1	5.6	-99.08	-296.3	-2,965.3	2,998.5	2,986.9	11.63	257.789			
3,300.0	3,296.3	3,290.9	3,290.3	6.3	5.8	-99.16	-295.9	-2,966.0	3,000.1	2,988.1	11.99	250.271			
3,400.0	3,396.1	3,382.1	3,381.5	6.5	5.9	-99.26	-296.1	-2,966.9	3,002.0	2,989.7	12.34	243.208			
3,500.0	3,496.0	3,473.8	3,473.2	6.7	6.1	-99.36	-296.6	-2,968.1	3,004.3	2,991.5	12.70	236.545			
3,600.0	3,595.8	3,570.3	3,569.6	6.9	6.3	-99.48	-297.8	-2,969.4	3,006.7	2,993.6	13.07	230.118			
3,700.0	3,695.7	3,667.8	3,667.1	7.0	6.5	-99.60	-299.5	-2,970.7	3,009.2	2,995.7	13.43	224.015			
3,800.0	3,795.5	3,799.6	3,798.9	7.2	6.7	-99.80	-302.8	-2,971.9	3,011.4	2,997.5	13.86	217.276			
3,900.0	3,895.4	3,886.4	3,885.6	7.4	6.8	-99.92	-304.7	-2,972.3	3,013.1	2,998.9	14.21	212.065			
4,000.0	3,995.2	3,961.5	3,960.7	7.6	7.0	-100.03	-306.6	-2,973.0	3,015.5	3,000.9	14.54	207.435			
4,100.0	4,095.1	4,074.4	4,073.6	7.8	7.2	-100.19	-309.6	-2,974.8	3,018.4	3,003.5	14.93	202.146			
4,200.0	4,194.9	4,166.9	4,166.0	8.0	7.3	-100.34	-312.5	-2,975.5	3,020.7	3,005.4	15.29	197.548			
4,300.0	4,294.8	4,258.8	4,257.9	8.2	7.5	-100.48	-315.1	-2,976.8	3,023.6	3,007.9	15.65	193.209			
4,400.0	4,394.6	4,366.9	4,365.9	8.4	7.7	-100.63	-317.7	-2,978.4	3,026.4	3,010.4	16.04	188.733			
4,500.0	4,494.5	4,479.3	4,478.3	8.6	7.9	-100.76	-319.1	-2,979.8	3,028.9	3,012.4	16.43	184.364			
4,600.0	4,594.3	4,587.0	4,586.0	8.8	8.1	-100.88	-319.8	-2,980.8	3,031.0	3,014.1	16.81	180.270			
4,700.0	4,694.2	4,677.4	4,676.5	9.0	8.2	-100.98	-320.3	-2,981.7	3,033.1	3,015.9	17.17	176.668			
4,800.0	4,794.0	4,784.5	4,783.5	9.2	8.4	-101.10	-321.1	-2,982.9	3,035.4	3,017.8	17.55	172.936			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,893.9	4,876.7	4,875.7	9.4	8.6	-101.20	-321.7	-2,983.9	3,037.5	3,019.6	17.91	169.603		
5,000.0	4,993.7	4,969.7	4,968.7	9.6	8.8	-101.30	-322.1	-2,985.1	3,040.0	3,021.7	18.27	166.405		
5,100.0	5,093.6	5,077.9	5,076.9	9.8	8.9	-101.40	-322.3	-2,986.7	3,042.5	3,023.9	18.65	163.105		
5,200.0	5,193.5	5,190.9	5,189.8	10.0	9.1	-101.51	-322.0	-2,987.9	3,044.6	3,025.6	19.05	159.845		
5,300.0	5,293.3	5,281.3	5,280.2	10.2	9.3	-101.59	-321.8	-2,988.8	3,046.7	3,027.3	19.40	157.032		
5,400.0	5,393.2	5,387.1	5,386.0	10.4	9.5	-101.67	-320.9	-2,990.1	3,048.8	3,029.1	19.78	154.121		
5,500.0	5,493.0	5,484.9	5,483.9	10.6	9.7	-101.75	-319.8	-2,991.3	3,050.9	3,030.7	20.15	151.415		
5,600.0	5,592.9	5,578.8	5,577.8	10.8	9.8	-101.82	-318.7	-2,992.5	3,053.1	3,032.6	20.51	148.863		
5,700.0	5,692.7	5,677.7	5,676.6	11.0	10.0	-101.89	-317.5	-2,994.0	3,055.4	3,034.5	20.88	146.344		
5,800.0	5,792.6	5,782.2	5,781.0	11.2	10.2	-101.96	-316.3	-2,995.5	3,057.7	3,036.4	21.26	143.845		
5,900.0	5,892.4	5,881.3	5,880.2	11.4	10.3	-102.03	-314.9	-2,996.8	3,059.9	3,038.2	21.63	141.489		
6,000.0	5,992.3	5,987.2	5,986.1	11.6	10.5	-102.10	-313.1	-2,998.3	3,062.0	3,040.0	22.01	139.135		
6,100.0	6,092.1	6,109.5	6,108.3	11.8	10.7	-102.17	-310.8	-2,999.4	3,063.7	3,041.2	22.42	136.665		
6,200.0	6,192.0	6,200.0	6,198.8	12.0	10.9	-102.23	-309.2	-2,999.9	3,065.1	3,042.3	22.77	134.598		
6,300.0	6,291.8	6,293.0	6,291.8	12.2	11.1	-102.29	-307.5	-3,000.7	3,066.7	3,043.6	23.13	132.579		
6,400.0	6,391.7	6,400.0	6,398.8	12.4	11.3	-102.36	-305.7	-3,001.7	3,068.4	3,044.9	23.51	130.487		
6,500.0	6,491.5	6,483.4	6,482.1	12.6	11.4	-102.41	-304.1	-3,002.5	3,070.2	3,046.3	23.86	128.688		
6,600.0	6,591.4	6,589.0	6,587.7	12.8	11.6	-102.48	-302.3	-3,003.9	3,072.4	3,048.1	24.24	126.752		
6,700.0	6,691.2	6,696.7	6,695.4	13.0	11.8	-102.53	-299.9	-3,005.2	3,074.2	3,049.6	24.62	124.843		
6,800.0	6,791.1	6,829.7	6,828.3	13.2	12.0	-102.59	-295.7	-3,006.1	3,075.4	3,050.4	25.06	122.746		
6,900.0	6,890.9	6,972.0	6,970.5	13.4	12.2	-102.64	-290.6	-3,005.4	3,075.4	3,049.9	25.50	120.593		
7,000.0	6,990.8	7,101.7	7,100.1	13.6	12.5	-102.67	-285.0	-3,003.4	3,074.2	3,048.2	25.93	118.561		
7,024.2	7,014.9	7,135.8	7,134.1	13.6	12.5	-102.67	-283.2	-3,002.7	3,073.7	3,047.7	26.04	118.050		
7,050.0	7,040.7	7,172.2	7,170.5	13.7	12.6	-104.26	-281.2	-3,001.8	3,073.1	3,046.9	26.15	117.525		
7,100.0	7,090.7	7,259.1	7,257.1	13.7	12.7	79.40	-275.5	-2,999.4	3,070.9	3,044.5	26.37	116.474		
7,150.0	7,140.5	7,325.9	7,323.7	13.8	12.9	79.34	-270.8	-2,996.8	3,067.5	3,041.0	26.52	115.663		
7,200.0	7,189.9	7,370.2	7,367.9	13.8	12.9	79.69	-268.0	-2,995.1	3,063.4	3,036.8	26.61	115.121		
7,250.0	7,238.6	7,415.2	7,412.8	13.8	13.0	80.22	-265.5	-2,993.3	3,058.8	3,032.1	26.68	114.651		
7,300.0	7,286.4	7,462.3	7,459.8	13.7	13.1	80.88	-263.2	-2,991.3	3,053.7	3,027.0	26.73	114.224		
7,350.0	7,333.1	7,500.0	7,497.4	13.7	13.1	81.56	-261.6	-2,989.7	3,048.2	3,021.4	26.76	113.913		
7,400.0	7,378.5	7,540.8	7,538.2	13.6	13.2	82.35	-260.2	-2,988.0	3,042.3	3,015.6	26.78	113.602		
7,450.0	7,422.2	7,574.1	7,571.4	13.6	13.3	83.13	-259.1	-2,986.7	3,036.4	3,009.6	26.79	113.359		
7,500.0	7,464.1	7,600.0	7,597.3	13.5	13.3	83.88	-258.5	-2,985.7	3,030.3	3,003.5	26.78	113.158		
7,550.0	7,504.1	7,640.3	7,637.6	13.5	13.4	84.82	-257.5	-2,984.3	3,024.3	2,997.5	26.81	112.803		
7,600.0	7,541.8	7,672.0	7,669.2	13.5	13.4	85.70	-256.7	-2,983.2	3,018.3	2,991.5	26.84	112.457		
7,650.0	7,577.2	7,700.0	7,697.2	13.4	13.5	86.54	-256.0	-2,982.4	3,012.6	2,985.7	26.88	112.058		
7,700.0	7,610.0	7,728.1	7,725.3	13.5	13.5	87.39	-255.3	-2,981.5	3,007.1	2,980.2	26.96	111.559		
7,750.0	7,640.2	7,752.3	7,749.5	13.5	13.6	88.17	-254.7	-2,980.9	3,002.0	2,975.0	27.05	110.972		
7,800.0	7,667.4	7,774.2	7,771.4	13.6	13.6	88.89	-254.1	-2,980.3	2,997.5	2,970.3	27.18	110.273		
7,850.0	7,691.7	7,800.0	7,797.1	13.7	13.7	89.65	-253.5	-2,979.6	2,993.5	2,966.2	27.36	109.408		
7,900.0	7,712.8	7,810.6	7,807.8	13.9	13.7	90.10	-253.2	-2,979.4	2,990.2	2,962.6	27.56	108.507		
7,950.0	7,730.8	7,825.1	7,822.2	14.1	13.7	90.57	-252.8	-2,979.1	2,987.6	2,959.8	27.81	107.435		
8,000.0	7,745.5	7,836.7	7,833.8	14.4	13.7	90.92	-252.5	-2,978.8	2,985.9	2,957.8	28.10	106.248		
8,050.0	7,756.7	7,845.2	7,842.4	14.7	13.7	91.16	-252.3	-2,978.6	2,984.9	2,956.5	28.44	104.958		
8,077.0	7,761.4	7,848.6	7,845.7	14.9	13.7	91.23	-252.2	-2,978.5	2,984.8	2,956.2	28.64	104.203		
8,100.0	7,764.6	7,850.8	7,847.9	15.1	13.8	91.26	-252.1	-2,978.5	2,984.9	2,956.1	28.82	103.580		
8,150.0	7,769.0	7,853.4	7,850.5	15.5	13.8	91.24	-252.0	-2,978.4	2,985.8	2,956.5	29.23	102.136		
8,188.1	7,770.0	7,853.3	7,850.4	15.9	13.8	91.14	-252.0	-2,978.4	2,987.1	2,957.5	29.57	101.007		
8,200.0	7,770.0	7,853.0	7,850.2	16.0	13.8	91.14	-252.0	-2,978.4	2,987.6	2,957.9	29.68	100.649		
8,300.0	7,770.0	7,850.6	7,847.8	17.0	13.8	91.09	-252.1	-2,978.5	2,993.6	2,963.0	30.68	97.583		
8,400.0	7,770.0	7,848.3	7,845.4	18.1	13.7	91.04	-252.2	-2,978.5	3,003.1	2,971.3	31.79	94.470		
8,500.0	7,770.0	7,845.9	7,843.0	19.3	13.7	91.00	-252.2	-2,978.6	3,015.7	2,982.8	32.99	91.402		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,600.0	7,770.0	7,843.6	7,840.7	20.6	13.7	90.95	-252.3	-2,978.6	3,031.7	2,997.4	34.28	88.442		
8,700.0	7,770.0	7,841.3	7,838.4	21.9	13.7	90.91	-252.4	-2,978.7	3,050.8	3,015.2	35.63	85.630		
8,800.0	7,770.0	7,839.0	7,836.1	23.3	13.7	90.87	-252.4	-2,978.7	3,073.1	3,036.1	37.03	82.988		
8,900.0	7,770.0	7,836.7	7,833.8	24.8	13.7	90.82	-252.5	-2,978.8	3,098.4	3,059.9	38.48	80.525		
9,000.0	7,770.0	7,834.5	7,831.6	26.3	13.7	90.78	-252.6	-2,978.8	3,126.8	3,086.8	39.96	78.244		
9,100.0	7,770.0	7,832.2	7,829.4	27.8	13.7	90.74	-252.6	-2,978.9	3,158.0	3,116.5	41.48	76.138		
9,200.0	7,770.0	7,830.0	7,827.1	29.3	13.7	90.69	-252.7	-2,978.9	3,192.1	3,149.0	43.02	74.202		
9,300.0	7,770.0	7,827.8	7,825.0	30.9	13.7	90.65	-252.7	-2,979.0	3,228.9	3,184.3	44.58	72.425		
9,400.0	7,770.0	7,825.7	7,822.8	32.5	13.7	90.61	-252.8	-2,979.0	3,268.3	3,222.1	46.17	70.796		
9,500.0	7,770.0	7,823.5	7,820.6	34.1	13.7	90.57	-252.8	-2,979.1	3,310.3	3,262.5	47.76	69.304		
9,600.0	7,770.0	7,821.4	7,818.5	35.7	13.7	90.53	-252.9	-2,979.1	3,354.8	3,305.4	49.38	67.940		
9,700.0	7,770.0	7,819.3	7,816.4	37.3	13.7	90.49	-253.0	-2,979.2	3,401.6	3,350.6	51.00	66.691		
9,800.0	7,770.0	7,817.2	7,814.3	39.0	13.7	90.45	-253.0	-2,979.2	3,450.6	3,398.0	52.64	65.550		
9,900.0	7,770.0	7,815.1	7,812.2	40.6	13.7	90.41	-253.1	-2,979.3	3,501.9	3,447.6	54.29	64.506		
10,000.0	7,770.0	7,813.0	7,810.2	42.3	13.7	90.37	-253.1	-2,979.3	3,555.2	3,499.2	55.94	63.551		
10,100.0	7,770.0	7,811.0	7,808.1	44.0	13.7	90.33	-253.2	-2,979.4	3,610.5	3,552.9	57.60	62.677		
10,200.0	7,770.0	7,800.0	7,797.1	45.6	13.7	90.12	-253.5	-2,979.6	3,667.7	3,608.4	59.26	61.893		
10,300.0	7,770.0	7,800.0	7,797.1	47.3	13.7	90.12	-253.5	-2,979.6	3,726.7	3,665.7	60.94	61.156		
10,400.0	7,770.0	7,800.0	7,797.1	49.0	13.7	90.12	-253.5	-2,979.6	3,787.4	3,724.8	62.62	60.481		
10,500.0	7,770.0	7,800.0	7,797.1	50.7	13.7	90.12	-253.5	-2,979.6	3,849.7	3,785.4	64.31	59.863		
10,600.0	7,770.0	7,800.0	7,797.1	52.4	13.7	90.12	-253.5	-2,979.6	3,913.6	3,847.6	66.00	59.296		
10,700.0	7,770.0	7,800.0	7,797.1	54.1	13.7	90.12	-253.5	-2,979.6	3,979.0	3,911.3	67.70	58.776		
10,800.0	7,770.0	7,800.0	7,797.1	55.8	13.7	90.12	-253.5	-2,979.6	4,045.8	3,976.4	69.40	58.299		
10,900.0	7,770.0	7,800.0	7,797.1	57.5	13.7	90.12	-253.5	-2,979.6	4,114.0	4,042.9	71.10	57.861		
11,000.0	7,770.0	7,800.0	7,797.1	59.2	13.7	90.12	-253.5	-2,979.6	4,183.4	4,110.6	72.81	57.459		
11,100.0	7,770.0	7,790.6	7,787.8	60.9	13.6	89.94	-253.7	-2,979.9	4,254.1	4,179.6	74.50	57.101		
11,200.0	7,770.0	7,788.5	7,785.7	62.6	13.6	89.90	-253.7	-2,979.9	4,325.9	4,249.7	76.21	56.764		
11,300.0	7,770.0	7,786.4	7,783.5	64.3	13.6	89.86	-253.8	-2,980.0	4,398.8	4,320.9	77.92	56.454		
11,400.0	7,770.0	7,784.3	7,781.4	66.0	13.6	89.82	-253.9	-2,980.0	4,472.7	4,393.1	79.63	56.169		
11,500.0	7,770.0	7,782.2	7,779.3	67.7	13.6	89.78	-253.9	-2,980.1	4,547.7	4,466.4	81.34	55.907		
11,600.0	7,770.0	7,780.1	7,777.2	69.5	13.6	89.74	-254.0	-2,980.1	4,623.6	4,540.5	83.06	55.666		
11,700.0	7,770.0	7,778.0	7,775.1	71.2	13.6	89.70	-254.0	-2,980.2	4,700.4	4,615.6	84.78	55.444		
11,800.0	7,770.0	7,775.8	7,773.0	72.9	13.6	89.65	-254.1	-2,980.2	4,778.0	4,691.5	86.50	55.240		
11,900.0	7,770.0	7,773.7	7,770.9	74.6	13.6	89.61	-254.1	-2,980.3	4,856.5	4,768.3	88.22	55.052		
12,000.0	7,770.0	7,771.6	7,768.8	76.4	13.6	89.57	-254.2	-2,980.3	4,935.8	4,845.8	89.94	54.879		
12,100.0	7,770.0	7,769.5	7,766.7	78.1	13.6	89.53	-254.2	-2,980.4	5,015.7	4,924.1	91.66	54.721		
12,200.0	7,770.0	7,767.4	7,764.6	79.8	13.6	89.49	-254.3	-2,980.5	5,096.4	5,003.1	93.38	54.575		
12,300.0	7,770.0	7,765.3	7,762.5	81.5	13.6	89.45	-254.3	-2,980.5	5,177.8	5,082.7	95.11	54.440		
12,400.0	7,770.0	7,763.2	7,760.3	83.3	13.6	89.41	-254.4	-2,980.6	5,259.8	5,163.0	96.84	54.317		
12,500.0	7,770.0	7,761.1	7,758.2	85.0	13.6	89.37	-254.4	-2,980.6	5,342.4	5,243.9	98.56	54.203		
12,600.0	7,770.0	7,759.0	7,756.1	86.7	13.6	89.33	-254.5	-2,980.7	5,425.6	5,325.4	100.29	54.099		
12,700.0	7,770.0	7,756.8	7,754.0	88.5	13.6	89.29	-254.5	-2,980.7	5,509.4	5,407.4	102.02	54.004		
12,800.0	7,770.0	7,754.7	7,751.9	90.2	13.6	89.25	-254.6	-2,980.8	5,593.7	5,490.0	103.75	53.916		
12,900.0	7,770.0	7,752.6	7,749.8	91.9	13.6	89.21	-254.7	-2,980.8	5,678.5	5,573.0	105.48	53.836		
13,000.0	7,770.0	7,750.5	7,747.7	93.7	13.6	89.17	-254.7	-2,980.9	5,763.8	5,656.6	107.21	53.763		
13,100.0	7,770.0	7,748.4	7,745.6	95.4	13.6	89.13	-254.8	-2,981.0	5,849.5	5,740.6	108.94	53.695		
13,200.0	7,770.0	7,746.3	7,743.5	97.1	13.6	89.09	-254.8	-2,981.0	5,935.7	5,825.1	110.67	53.634		
13,300.0	7,770.0	7,744.2	7,741.3	98.9	13.6	89.05	-254.9	-2,981.1	6,022.4	5,910.0	112.40	53.578		
13,400.0	7,770.0	7,742.0	7,739.2	100.6	13.6	89.01	-254.9	-2,981.1	6,109.4	5,995.3	114.14	53.527		
13,500.0	7,770.0	7,739.9	7,737.1	102.4	13.6	88.97	-255.0	-2,981.2	6,196.8	6,081.0	115.87	53.481		
13,600.0	7,770.0	7,737.8	7,735.0	104.1	13.6	88.93	-255.0	-2,981.3	6,284.6	6,167.0	117.60	53.439		
13,700.0	7,770.0	7,735.7	7,732.9	105.8	13.6	88.89	-255.1	-2,981.3	6,372.8	6,253.4	119.34	53.402		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
13,800.0	7,770.0	7,733.6	7,730.8	107.6	13.5	88.85	-255.1	-2,981.4	6,461.3	6,340.2	121.07	53.368		
13,900.0	7,770.0	7,731.5	7,728.7	109.3	13.5	88.80	-255.2	-2,981.4	6,550.1	6,427.3	122.81	53.337		
14,000.0	7,770.0	7,729.4	7,726.6	111.1	13.5	88.76	-255.2	-2,981.5	6,639.3	6,514.7	124.54	53.310		
14,100.0	7,770.0	7,727.2	7,724.4	112.8	13.5	88.72	-255.3	-2,981.6	6,728.7	6,602.4	126.28	53.286		
14,200.0	7,770.0	7,725.1	7,722.3	114.5	13.5	88.68	-255.3	-2,981.6	6,818.5	6,690.4	128.01	53.264		
14,300.0	7,770.0	7,723.0	7,720.2	116.3	13.5	88.64	-255.4	-2,981.7	6,908.5	6,778.7	129.75	53.246		
14,400.0	7,770.0	7,720.9	7,718.1	118.0	13.5	88.60	-255.5	-2,981.7	6,998.8	6,867.3	131.48	53.229		
14,500.0	7,770.0	7,718.8	7,716.0	119.8	13.5	88.56	-255.5	-2,981.8	7,089.3	6,956.1	133.22	53.215		
14,600.0	7,770.0	7,716.7	7,713.9	121.5	13.5	88.52	-255.6	-2,981.9	7,180.1	7,045.2	134.96	53.203		
14,700.0	7,770.0	7,714.6	7,711.8	123.3	13.5	88.48	-255.6	-2,981.9	7,271.2	7,134.5	136.69	53.194		
14,800.0	7,770.0	7,712.4	7,709.6	125.0	13.5	88.44	-255.7	-2,982.0	7,362.5	7,224.0	138.43	53.186		
14,900.0	7,770.0	7,710.3	7,707.5	126.7	13.5	88.40	-255.7	-2,982.0	7,454.0	7,313.8	140.17	53.179		
15,000.0	7,770.0	7,708.2	7,705.4	128.5	13.5	88.36	-255.8	-2,982.1	7,545.7	7,403.8	141.90	53.175		
15,100.0	7,770.0	7,706.0	7,697.2	130.2	13.5	88.20	-256.0	-2,982.4	7,637.6	7,494.0	143.62	53.178		
15,200.0	7,770.0	7,704.0	7,697.2	132.0	13.5	88.20	-256.0	-2,982.4	7,729.7	7,584.4	145.37	53.174		
15,300.0	7,770.0	7,702.0	7,697.2	133.7	13.5	88.20	-256.0	-2,982.4	7,822.0	7,674.9	147.11	53.171		
15,400.0	7,770.0	7,700.0	7,697.2	135.5	13.5	88.20	-256.0	-2,982.4	7,914.5	7,765.7	148.85	53.170		
15,500.0	7,770.0	7,700.0	7,697.2	137.2	13.5	88.20	-256.0	-2,982.4	8,007.2	7,856.6	150.60	53.169 SF		
15,600.0	7,770.0	7,700.0	7,697.2	139.0	13.5	88.20	-256.0	-2,982.4	8,100.1	7,947.7	152.34	53.170		
15,700.0	7,770.0	7,700.0	7,697.2	140.7	13.5	88.20	-256.0	-2,982.4	8,193.1	8,039.0	154.09	53.171		
15,800.0	7,770.0	7,700.0	7,697.2	142.4	13.5	88.20	-256.0	-2,982.4	8,286.3	8,130.5	155.83	53.174		
15,900.0	7,770.0	7,689.5	7,686.7	144.2	13.5	88.00	-256.2	-2,982.7	8,379.6	8,222.1	157.54	53.189		
16,000.0	7,770.0	7,687.5	7,684.7	145.9	13.5	87.96	-256.3	-2,982.7	8,473.1	8,313.8	159.28	53.196		
16,100.0	7,770.0	7,685.4	7,682.6	147.7	13.5	87.92	-256.3	-2,982.8	8,566.8	8,405.7	161.02	53.203		
16,200.0	7,770.0	7,683.4	7,680.6	149.4	13.5	87.88	-256.4	-2,982.9	8,660.5	8,497.8	162.76	53.211		
16,300.0	7,770.0	7,681.4	7,678.6	151.2	13.5	87.85	-256.5	-2,982.9	8,754.4	8,590.0	164.50	53.219		
16,400.0	7,770.0	7,679.3	7,676.6	152.9	13.5	87.81	-256.5	-2,983.0	8,848.5	8,682.3	166.24	53.229		
16,500.0	7,770.0	7,677.3	7,674.5	154.7	13.5	87.77	-256.6	-2,983.1	8,942.7	8,774.7	167.97	53.239		
16,600.0	7,770.0	7,675.3	7,672.5	156.4	13.4	87.73	-256.6	-2,983.1	9,037.0	8,867.3	169.71	53.249		
16,700.0	7,770.0	7,673.2	7,670.5	158.2	13.4	87.69	-256.7	-2,983.2	9,131.4	8,960.0	171.45	53.260		
16,800.0	7,770.0	7,671.2	7,668.5	159.9	13.4	87.65	-256.7	-2,983.3	9,225.9	9,052.8	173.19	53.271		
16,900.0	7,770.0	7,669.2	7,666.4	161.7	13.4	87.61	-256.8	-2,983.3	9,320.6	9,145.7	174.93	53.283		
17,000.0	7,770.0	7,667.2	7,664.4	163.4	13.4	87.58	-256.8	-2,983.4	9,415.4	9,238.7	176.67	53.295		
17,100.0	7,770.0	7,665.2	7,662.4	165.2	13.4	87.54	-256.9	-2,983.5	9,510.2	9,331.8	178.40	53.307		
17,200.0	7,770.0	7,663.2	7,660.4	166.9	13.4	87.50	-256.9	-2,983.5	9,605.2	9,425.1	180.14	53.320		
17,300.0	7,770.0	7,661.2	7,658.4	168.7	13.4	87.46	-257.0	-2,983.6	9,700.3	9,518.4	181.88	53.334		
17,400.0	7,770.0	7,659.2	7,656.4	170.4	13.4	87.42	-257.0	-2,983.7	9,795.5	9,611.8	183.62	53.347		
17,500.0	7,770.0	7,657.2	7,654.4	172.2	13.4	87.38	-257.1	-2,983.7	9,890.7	9,705.4	185.36	53.361		
17,600.0	7,770.0	7,655.2	7,652.4	173.9	13.4	87.35	-257.1	-2,983.8	9,986.1	9,799.0	187.09	53.375		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	25.3	25.3	0.0	0.0	-95.27	-275.2	-2,982.2	2,994.9					
100.0	100.0	124.0	124.0	0.2	0.2	-95.27	-275.3	-2,982.1	2,994.8	2,994.4	0.37	8,133.242		
200.0	200.0	215.9	215.9	0.3	0.4	-95.27	-275.1	-2,982.3	2,994.9	2,994.2	0.70	4,258.375		
300.0	300.0	300.1	300.1	0.5	0.5	-95.26	-274.6	-2,982.7	2,995.4	2,994.4	1.02	2,922.565		
400.0	400.0	394.0	394.0	0.7	0.7	-95.26	-274.8	-2,983.7	2,996.5	2,995.1	1.36	2,197.316		
500.0	500.0	587.5	587.0	0.8	1.1	-95.47	-285.7	-2,981.0	2,995.3	2,993.4	1.92	1,563.611		
550.0	550.0	643.8	643.0	0.9	1.2	-95.61	-292.5	-2,979.2	2,994.3	2,992.2	2.14	1,398.946		
600.0	600.0	725.0	723.1	1.0	1.4	-96.71	-304.9	-2,975.5	2,992.8	2,990.3	2.46	1,218.199		
700.0	700.0	804.0	800.7	1.2	1.7	-97.04	-319.1	-2,971.8	2,990.2	2,987.3	2.89	1,035.075		
800.0	799.9	923.9	918.1	1.4	2.1	-97.61	-343.0	-2,965.8	2,987.7	2,984.2	3.50	853.794		
861.1	860.9	965.5	958.7	1.5	2.3	-97.83	-351.5	-2,963.6	2,986.4	2,982.6	3.77	792.053		
900.0	899.8	989.0	981.7	1.6	2.4	-97.95	-356.5	-2,962.5	2,985.8	2,981.9	3.93	759.212		
990.5	990.1	1,046.2	1,037.4	1.7	2.6	-98.25	-369.2	-2,960.0	2,985.2	2,980.9	4.34	687.326		
1,000.0	999.6	1,051.9	1,043.0	1.8	2.6	-98.28	-370.5	-2,959.8	2,985.2	2,980.9	4.39	680.761		
1,100.0	1,099.5	1,121.1	1,109.9	1.9	3.0	-98.68	-387.3	-2,957.6	2,986.0	2,981.1	4.89	610.042		
1,200.0	1,199.3	1,206.9	1,192.3	2.1	3.4	-99.22	-411.2	-2,954.9	2,987.7	2,982.2	5.52	541.127		
1,300.0	1,299.2	1,297.4	1,278.5	2.3	3.9	-99.84	-438.7	-2,951.7	2,989.8	2,983.6	6.20	481.927		
1,400.0	1,399.1	1,404.4	1,379.9	2.5	4.5	-100.60	-472.7	-2,947.7	2,992.4	2,985.4	7.00	427.497		
1,500.0	1,498.9	1,508.5	1,478.2	2.7	5.1	-101.35	-506.6	-2,943.0	2,994.9	2,987.1	7.80	383.842		
1,600.0	1,598.8	1,613.9	1,577.7	2.9	5.7	-102.12	-541.0	-2,937.9	2,997.5	2,988.9	8.60	348.441		
1,700.0	1,698.6	1,734.0	1,691.3	3.1	6.4	-102.98	-579.5	-2,931.1	2,999.7	2,990.2	9.50	315.751		
1,800.0	1,798.5	1,847.8	1,798.6	3.3	7.1	-103.81	-616.9	-2,924.0	3,002.1	2,991.7	10.37	289.459		
1,900.0	1,898.3	1,901.6	1,849.2	3.5	7.4	-104.20	-634.4	-2,920.5	3,004.9	2,994.0	10.88	276.196		
2,000.0	1,998.2	1,949.0	1,894.0	3.7	7.7	-104.54	-649.9	-2,918.4	3,009.6	2,998.3	11.35	265.188		
2,100.0	2,098.0	2,124.0	2,059.9	3.9	8.7	-105.76	-705.0	-2,910.0	3,014.6	3,002.1	12.52	240.741		
2,200.0	2,197.9	2,211.0	2,142.5	4.1	9.2	-106.36	-731.6	-2,904.7	3,018.4	3,005.2	13.21	228.486		
2,300.0	2,297.7	2,298.5	2,225.3	4.3	9.7	-106.98	-759.7	-2,899.3	3,023.0	3,009.1	13.92	217.151		
2,400.0	2,397.6	2,379.7	2,301.8	4.5	10.2	-107.56	-786.1	-2,894.3	3,028.2	3,013.6	14.59	207.612		
2,500.0	2,497.4	2,452.3	2,370.5	4.7	10.6	-108.07	-809.3	-2,890.4	3,034.3	3,019.2	15.19	199.808		
2,600.0	2,597.3	2,541.3	2,454.9	4.9	11.1	-108.68	-837.3	-2,886.1	3,041.4	3,025.5	15.88	191.569		
2,700.0	2,697.1	2,623.4	2,532.8	5.1	11.6	-109.24	-863.1	-2,882.3	3,048.9	3,032.4	16.52	184.577		
2,800.0	2,797.0	2,729.9	2,633.8	5.3	12.2	-109.96	-896.3	-2,877.6	3,057.0	3,039.7	17.30	176.735		
2,900.0	2,896.8	2,779.4	2,680.7	5.5	12.5	-110.30	-912.1	-2,875.5	3,065.8	3,048.1	17.77	172.508		
3,000.0	2,996.7	2,822.0	2,720.9	5.7	12.8	-110.59	-926.2	-2,874.1	3,076.5	3,058.3	18.21	168.967		
3,100.0	3,096.5	2,888.5	2,783.4	5.9	13.2	-111.06	-949.1	-2,872.5	3,088.7	3,069.9	18.79	164.364		
3,200.0	3,196.4	3,002.6	2,889.9	6.1	13.9	-111.89	-989.6	-2,869.6	3,101.7	3,082.0	19.66	157.799		
3,300.0	3,296.3	3,098.0	2,979.2	6.3	14.5	-112.57	-1,023.2	-2,866.7	3,114.6	3,094.2	20.40	152.713		
3,400.0	3,396.1	3,208.2	3,082.4	6.5	15.2	-113.36	-1,061.7	-2,862.6	3,127.2	3,106.0	21.22	147.373		
3,500.0	3,496.0	3,259.0	3,129.9	6.7	15.6	-113.72	-1,079.5	-2,860.8	3,140.9	3,119.2	21.70	144.734		
3,600.0	3,595.8	3,328.8	3,195.2	6.9	16.0	-114.20	-1,104.0	-2,859.3	3,155.8	3,133.5	22.27	141.679		
3,700.0	3,695.7	3,595.4	3,446.9	7.0	17.6	-115.95	-1,191.3	-2,850.3	3,169.3	3,145.5	23.84	132.956		
3,800.0	3,795.5	3,768.8	3,612.2	7.2	18.5	-117.01	-1,242.1	-2,839.0	3,178.8	3,153.9	24.85	127.936		
3,900.0	3,895.4	3,831.5	3,672.8	7.4	18.8	-117.35	-1,258.3	-2,835.6	3,188.3	3,163.0	25.28	126.096		
4,000.0	3,995.2	3,870.0	3,710.1	7.6	19.0	-117.55	-1,267.6	-2,834.3	3,199.3	3,173.7	25.62	124.861		
4,100.0	4,095.1	3,927.3	3,765.6	7.8	19.2	-117.83	-1,281.7	-2,833.2	3,211.9	3,185.9	26.04	123.324		
4,200.0	4,194.9	3,976.2	3,812.8	8.0	19.5	-118.08	-1,294.6	-2,832.9	3,226.3	3,199.9	26.44	122.024		
4,300.0	4,294.8	4,153.1	3,981.9	8.2	20.5	-119.07	-1,346.3	-2,829.1	3,241.8	3,214.3	27.44	118.136		
4,400.0	4,394.6	4,219.0	4,044.4	8.4	20.9	-119.48	-1,366.9	-2,825.6	3,255.3	3,227.3	27.96	116.430		
4,500.0	4,494.5	4,273.3	4,095.6	8.6	21.2	-119.82	-1,384.9	-2,822.7	3,270.1	3,241.7	28.43	115.013		
4,600.0	4,594.3	4,328.9	4,147.7	8.8	21.6	-120.19	-1,404.1	-2,820.0	3,286.5	3,257.6	28.91	113.684		
4,700.0	4,694.2	4,398.0	4,212.2	9.0	22.0	-120.64	-1,428.4	-2,817.2	3,304.1	3,274.6	29.45	112.191		
4,800.0	4,794.0	4,661.3	4,460.5	9.2	23.6	-122.26	-1,514.9	-2,804.2	3,320.7	3,289.8	30.86	107.616		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,893.9	4,756.3	4,551.4	9.4	24.1	-122.78	-1,542.1	-2,798.9	3,334.5	3,303.0	31.44	106.052		
5,000.0	4,993.7	4,830.0	4,622.2	9.6	24.4	-123.17	-1,562.4	-2,795.4	3,348.6	3,316.7	31.92	104.920		
5,100.0	5,093.6	4,901.8	4,691.3	9.8	24.8	-123.52	-1,581.6	-2,792.9	3,363.7	3,331.3	32.37	103.917		
5,200.0	5,193.5	5,154.2	4,936.4	10.0	25.9	-124.64	-1,640.9	-2,785.0	3,377.5	3,344.1	33.35	101.267		
5,300.0	5,293.3	5,313.0	5,093.0	10.2	26.4	-125.17	-1,667.5	-2,780.9	3,387.9	3,354.0	33.91	99.899		
5,400.0	5,393.2	5,434.7	5,213.4	10.4	26.7	-125.51	-1,684.1	-2,778.6	3,397.3	3,363.0	34.34	98.919		
5,500.0	5,493.0	5,579.3	5,357.3	10.6	27.0	-125.84	-1,699.3	-2,777.4	3,405.9	3,371.1	34.75	98.011		
5,600.0	5,592.9	5,825.7	5,603.3	10.8	27.3	-126.21	-1,711.8	-2,775.7	3,411.1	3,376.0	35.17	96.983		
5,700.0	5,692.7	5,891.5	5,669.1	11.0	27.4	-126.26	-1,712.0	-2,776.3	3,415.4	3,380.0	35.39	96.498		
5,800.0	5,792.6	6,051.0	5,828.5	11.2	27.5	-126.37	-1,712.4	-2,777.1	3,419.1	3,383.4	35.70	95.782		
5,900.0	5,892.4	6,161.7	5,939.3	11.4	27.5	-126.46	-1,712.5	-2,776.3	3,421.8	3,385.9	35.95	95.188		
6,000.0	5,992.3	6,271.8	6,049.4	11.6	27.6	-126.54	-1,711.9	-2,775.6	3,424.2	3,388.0	36.21	94.574		
6,100.0	6,092.1	6,381.4	6,158.9	11.8	27.7	-126.63	-1,711.4	-2,774.5	3,426.4	3,389.9	36.47	93.943		
6,200.0	6,192.0	6,474.4	6,251.9	12.0	27.8	-126.70	-1,711.1	-2,773.4	3,428.4	3,391.7	36.72	93.359		
6,300.0	6,291.8	6,563.6	6,341.1	12.2	27.8	-126.77	-1,710.8	-2,772.6	3,430.8	3,393.8	36.97	92.798		
6,400.0	6,391.7	6,660.9	6,438.4	12.4	27.9	-126.84	-1,710.5	-2,772.0	3,433.3	3,396.1	37.23	92.226		
6,500.0	6,491.5	6,759.5	6,537.0	12.6	28.0	-126.92	-1,710.3	-2,771.4	3,436.0	3,398.5	37.49	91.658		
6,600.0	6,591.4	6,858.9	6,636.4	12.8	28.0	-127.00	-1,710.3	-2,770.6	3,438.6	3,400.8	37.75	91.085		
6,700.0	6,691.2	6,958.8	6,736.3	13.0	28.1	-127.08	-1,710.4	-2,769.8	3,441.3	3,403.2	38.02	90.517		
6,800.0	6,791.1	7,059.6	6,837.1	13.2	28.2	-127.16	-1,710.6	-2,768.8	3,443.9	3,405.6	38.29	89.950		
6,900.0	6,890.9	7,156.9	6,934.4	13.4	28.3	-127.25	-1,711.0	-2,767.8	3,446.6	3,408.0	38.57	89.368		
7,000.0	6,990.8	7,251.7	7,029.2	13.6	28.4	-127.34	-1,712.0	-2,766.5	3,449.4	3,410.5	38.85	88.787		
7,024.2	7,014.9	7,275.0	7,052.5	13.6	28.4	-127.37	-1,712.3	-2,766.1	3,450.1	3,411.2	38.92	88.649		
7,050.0	7,040.7	7,297.9	7,075.4	13.7	28.4	-129.07	-1,712.7	-2,765.8	3,450.6	3,411.6	38.99	88.506		
7,100.0	7,090.7	7,343.1	7,120.6	13.7	28.5	54.34	-1,713.3	-2,765.2	3,450.0	3,410.9	39.11	88.220		
7,150.0	7,140.5	7,388.2	7,165.7	13.8	28.5	54.04	-1,713.8	-2,764.8	3,447.4	3,408.2	39.21	87.910		
7,200.0	7,189.9	7,432.9	7,210.4	13.8	28.6	54.29	-1,714.1	-2,764.5	3,442.8	3,403.5	39.31	87.574		
7,250.0	7,238.6	7,472.8	7,250.3	13.8	28.6	54.77	-1,714.4	-2,764.4	3,436.3	3,396.9	39.39	87.237		
7,300.0	7,286.4	7,509.7	7,287.1	13.7	28.6	55.43	-1,714.6	-2,764.5	3,428.0	3,388.5	39.45	86.886		
7,350.0	7,333.1	7,545.6	7,323.1	13.7	28.6	56.27	-1,714.7	-2,764.8	3,417.9	3,378.4	39.51	86.496		
7,400.0	7,378.5	7,580.5	7,358.0	13.6	28.7	57.28	-1,714.9	-2,765.2	3,406.1	3,366.5	39.58	86.059		
7,450.0	7,422.2	7,624.0	7,401.4	13.6	28.7	58.53	-1,715.0	-2,765.9	3,392.8	3,353.1	39.68	85.514		
7,500.0	7,464.1	7,659.4	7,436.9	13.5	28.7	59.89	-1,715.1	-2,766.5	3,377.9	3,338.1	39.78	84.919		
7,550.0	7,504.1	7,708.0	7,485.4	13.5	28.8	61.57	-1,715.2	-2,767.3	3,361.4	3,321.4	39.94	84.154		
7,600.0	7,541.8	7,753.8	7,531.3	13.5	28.8	63.42	-1,715.3	-2,767.8	3,343.4	3,303.3	40.14	83.291		
7,650.0	7,577.2	7,796.8	7,574.2	13.4	28.9	65.43	-1,715.4	-2,768.3	3,324.2	3,283.8	40.38	82.331		
7,700.0	7,610.0	7,834.6	7,612.0	13.5	28.9	67.56	-1,715.4	-2,768.6	3,303.8	3,263.2	40.64	81.293		
7,750.0	7,640.2	7,869.1	7,646.5	13.5	28.9	69.80	-1,715.4	-2,768.8	3,282.5	3,241.6	40.94	80.171		
7,800.0	7,667.4	7,900.2	7,677.6	13.6	28.9	72.14	-1,715.3	-2,769.0	3,260.5	3,219.2	41.28	78.976		
7,850.0	7,691.7	7,927.8	7,705.2	13.7	28.9	74.54	-1,715.3	-2,769.2	3,237.8	3,196.2	41.66	77.726		
7,900.0	7,712.8	7,951.7	7,729.1	13.9	29.0	76.97	-1,715.2	-2,769.3	3,214.8	3,172.7	42.06	76.439		
7,950.0	7,730.8	7,971.9	7,749.3	14.1	29.0	79.40	-1,715.1	-2,769.4	3,191.5	3,149.1	42.48	75.134		
8,000.0	7,745.5	7,987.4	7,764.8	14.4	29.0	81.78	-1,715.0	-2,769.5	3,168.2	3,125.3	42.91	73.830		
8,050.0	7,756.7	7,999.2	7,776.6	14.7	29.0	84.09	-1,714.9	-2,769.6	3,145.1	3,101.7	43.36	72.538		
8,100.0	7,764.6	8,007.3	7,784.7	15.1	29.0	86.30	-1,714.9	-2,769.6	3,122.2	3,078.3	43.81	71.265		
8,150.0	7,769.0	8,011.7	7,789.1	15.5	29.0	88.41	-1,714.9	-2,769.6	3,099.7	3,055.4	44.27	70.020		
8,188.1	7,770.0	8,012.6	7,790.0	15.9	29.0	89.92	-1,714.9	-2,769.6	3,082.9	3,038.3	44.62	69.092		
8,200.0	7,770.0	8,012.5	7,789.9	16.0	29.0	89.92	-1,714.9	-2,769.6	3,077.7	3,033.0	44.73	68.806		
8,300.0	7,770.0	8,011.9	7,789.3	17.0	29.0	89.90	-1,714.9	-2,769.6	3,035.8	2,990.1	45.73	66.387		
8,400.0	7,770.0	8,011.3	7,788.8	18.1	29.0	89.89	-1,714.9	-2,769.6	2,996.7	2,949.9	46.84	63.972		
8,500.0	7,770.0	8,010.8	7,788.2	19.3	29.0	89.88	-1,714.9	-2,769.6	2,960.4	2,912.4	48.05	61.607		
8,600.0	7,770.0	8,010.2	7,787.6	20.6	29.0	89.87	-1,714.9	-2,769.6	2,927.1	2,877.8	49.34	59.324		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,700.0	7,770.0	8,009.6	7,787.0	21.9	29.0	89.86	-1,714.9	-2,769.6	2,896.9	2,846.2	50.69	57.145	
8,800.0	7,770.0	8,009.0	7,786.4	23.3	29.0	89.84	-1,714.9	-2,769.6	2,869.8	2,817.7	52.10	55.083	
8,900.0	7,770.0	8,008.5	7,785.9	24.8	29.0	89.83	-1,714.9	-2,769.6	2,846.0	2,792.4	53.55	53.146	
9,000.0	7,770.0	8,007.9	7,785.3	26.3	29.0	89.82	-1,714.9	-2,769.6	2,825.5	2,770.5	55.04	51.338	
9,100.0	7,770.0	8,007.3	7,784.7	27.8	29.0	89.81	-1,714.9	-2,769.6	2,808.4	2,751.9	56.56	49.658	
9,200.0	7,770.0	8,006.7	7,784.2	29.3	29.0	89.80	-1,714.9	-2,769.6	2,794.8	2,736.7	58.10	48.103	
9,300.0	7,770.0	8,006.2	7,783.6	30.9	29.0	89.78	-1,714.9	-2,769.6	2,784.8	2,725.1	59.67	46.672	
9,400.0	7,770.0	8,005.6	7,783.0	32.5	29.0	89.77	-1,714.9	-2,769.6	2,778.3	2,717.0	61.25	45.357	
9,500.0	7,770.0	8,005.0	7,782.4	34.1	29.0	89.76	-1,714.9	-2,769.6	2,775.4	2,712.5	62.86	44.154	
9,530.7	7,770.0	8,004.9	7,782.3	34.6	29.0	89.76	-1,714.9	-2,769.6	2,775.2	2,711.9	63.35	43.806 CC	
9,600.0	7,770.0	8,004.5	7,781.9	35.7	29.0	89.75	-1,714.9	-2,769.6	2,776.1	2,711.6	64.47	43.058 ES	
9,700.0	7,770.0	8,003.9	7,781.3	37.3	29.0	89.74	-1,714.9	-2,769.6	2,780.4	2,714.3	66.10	42.062	
9,800.0	7,770.0	8,003.3	7,780.8	39.0	29.0	89.73	-1,714.9	-2,769.6	2,788.3	2,720.5	67.74	41.160	
9,900.0	7,770.0	8,002.8	7,780.2	40.6	29.0	89.71	-1,714.9	-2,769.6	2,799.7	2,730.3	69.39	40.346	
10,000.0	7,770.0	8,002.2	7,779.6	42.3	29.0	89.70	-1,714.9	-2,769.6	2,814.6	2,743.6	71.05	39.615	
10,100.0	7,770.0	8,001.7	7,779.1	44.0	29.0	89.69	-1,714.9	-2,769.6	2,833.0	2,760.3	72.71	38.961	
10,200.0	7,770.0	8,001.1	7,778.5	45.6	29.0	89.68	-1,714.9	-2,769.6	2,854.8	2,780.4	74.39	38.378	
10,300.0	7,770.0	8,000.5	7,778.0	47.3	29.0	89.67	-1,714.9	-2,769.6	2,879.9	2,803.8	76.06	37.861	
10,400.0	7,770.0	8,000.0	7,777.4	49.0	29.0	89.66	-1,714.9	-2,769.6	2,908.2	2,830.4	77.75	37.406	
10,500.0	7,770.0	7,999.4	7,776.8	50.7	29.0	89.65	-1,714.9	-2,769.6	2,939.6	2,860.2	79.43	37.007	
10,600.0	7,770.0	7,998.9	7,776.3	52.4	29.0	89.63	-1,714.9	-2,769.6	2,974.1	2,893.0	81.13	36.660	
10,700.0	7,770.0	7,998.3	7,775.7	54.1	29.0	89.62	-1,714.9	-2,769.6	3,011.5	2,928.7	82.82	36.361	
10,800.0	7,770.0	7,997.8	7,775.2	55.8	29.0	89.61	-1,714.9	-2,769.6	3,051.7	2,967.2	84.52	36.106	
10,900.0	7,770.0	7,997.2	7,774.6	57.5	29.0	89.60	-1,714.9	-2,769.6	3,094.6	3,008.4	86.22	35.891	
11,000.0	7,770.0	7,996.7	7,774.1	59.2	29.0	89.59	-1,714.9	-2,769.6	3,140.2	3,052.2	87.93	35.712	
11,100.0	7,770.0	7,996.1	7,773.5	60.9	29.0	89.58	-1,714.9	-2,769.6	3,188.2	3,098.6	89.64	35.567	
11,200.0	7,770.0	7,995.6	7,773.0	62.6	29.0	89.57	-1,714.9	-2,769.5	3,238.6	3,147.2	91.35	35.453	
11,300.0	7,770.0	7,995.0	7,772.4	64.3	29.0	89.55	-1,714.9	-2,769.5	3,291.2	3,198.2	93.06	35.366	
11,400.0	7,770.0	7,994.5	7,771.9	66.0	29.0	89.54	-1,715.0	-2,769.5	3,346.1	3,251.3	94.78	35.304	
11,500.0	7,770.0	7,993.9	7,771.3	67.7	29.0	89.53	-1,715.0	-2,769.5	3,402.9	3,306.4	96.50	35.265	
11,600.0	7,770.0	7,993.4	7,770.8	69.5	29.0	89.52	-1,715.0	-2,769.5	3,461.8	3,363.6	98.21	35.247 SF	
11,700.0	7,770.0	7,992.8	7,770.3	71.2	29.0	89.51	-1,715.0	-2,769.5	3,522.5	3,422.5	99.94	35.247	
11,800.0	7,770.0	7,992.3	7,769.7	72.9	29.0	89.50	-1,715.0	-2,769.5	3,584.9	3,483.2	101.66	35.265	
11,900.0	7,770.0	7,991.8	7,769.2	74.6	29.0	89.49	-1,715.0	-2,769.5	3,649.0	3,545.6	103.38	35.297	
12,000.0	7,770.0	7,991.2	7,768.6	76.4	29.0	89.48	-1,715.0	-2,769.5	3,714.7	3,609.6	105.11	35.343	
12,100.0	7,770.0	7,990.7	7,768.1	78.1	29.0	89.47	-1,715.0	-2,769.5	3,781.9	3,675.1	106.83	35.401	
12,200.0	7,770.0	7,990.1	7,767.6	79.8	29.0	89.45	-1,715.0	-2,769.5	3,850.6	3,742.0	108.56	35.470	
12,300.0	7,770.0	7,989.6	7,767.0	81.5	29.0	89.44	-1,715.0	-2,769.5	3,920.6	3,810.3	110.29	35.548	
12,400.0	7,770.0	7,989.1	7,766.5	83.3	29.0	89.43	-1,715.0	-2,769.5	3,991.8	3,879.8	112.02	35.636	
12,500.0	7,770.0	7,988.5	7,766.0	85.0	29.0	89.42	-1,715.0	-2,769.5	4,064.3	3,950.5	113.75	35.731	
12,600.0	7,770.0	7,988.0	7,765.4	86.7	29.0	89.41	-1,715.0	-2,769.5	4,137.9	4,022.4	115.48	35.832	
12,700.0	7,770.0	7,987.5	7,764.9	88.5	29.0	89.40	-1,715.0	-2,769.5	4,212.6	4,095.4	117.21	35.940	
12,800.0	7,770.0	7,986.9	7,764.4	90.2	29.0	89.39	-1,715.0	-2,769.5	4,288.4	4,169.4	118.95	36.053	
12,900.0	7,770.0	7,986.4	7,763.8	91.9	29.0	89.38	-1,715.0	-2,769.5	4,365.1	4,244.4	120.68	36.171	
13,000.0	7,770.0	7,985.9	7,763.3	93.7	29.0	89.37	-1,715.0	-2,769.5	4,442.7	4,320.3	122.41	36.293	
13,100.0	7,770.0	7,985.4	7,762.8	95.4	29.0	89.36	-1,715.0	-2,769.5	4,521.2	4,397.1	124.15	36.418	
13,200.0	7,770.0	7,984.8	7,762.3	97.1	29.0	89.34	-1,715.0	-2,769.5	4,600.6	4,474.7	125.89	36.546	
13,300.0	7,770.0	7,984.3	7,761.7	98.9	29.0	89.33	-1,715.0	-2,769.5	4,680.7	4,553.1	127.62	36.677	
13,400.0	7,770.0	7,983.8	7,761.2	100.6	29.0	89.32	-1,715.0	-2,769.5	4,761.6	4,632.3	129.36	36.810	
13,500.0	7,770.0	7,983.3	7,760.7	102.4	29.0	89.31	-1,715.0	-2,769.5	4,843.2	4,712.1	131.10	36.944	
13,600.0	7,770.0	7,982.7	7,760.2	104.1	29.0	89.30	-1,715.0	-2,769.5	4,925.5	4,792.7	132.83	37.080	
13,700.0	7,770.0	7,982.2	7,759.6	105.8	29.0	89.29	-1,715.0	-2,769.5	5,008.5	4,873.9	134.57	37.217	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,800.0	7,770.0	7,981.7	7,759.1	107.6	29.0	89.28	-1,715.0	-2,769.5	5,092.0	4,955.7	136.31	37.355		
13,900.0	7,770.0	7,981.2	7,758.6	109.3	29.0	89.27	-1,715.0	-2,769.5	5,176.1	5,038.1	138.05	37.494		
14,000.0	7,770.0	7,980.7	7,758.1	111.1	29.0	89.26	-1,715.0	-2,769.5	5,260.8	5,121.0	139.79	37.633		
14,100.0	7,770.0	7,980.1	7,757.6	112.8	29.0	89.25	-1,715.0	-2,769.5	5,346.0	5,204.5	141.53	37.773		
14,200.0	7,770.0	7,979.6	7,757.0	114.5	29.0	89.24	-1,715.0	-2,769.5	5,431.7	5,288.5	143.27	37.912		
14,300.0	7,770.0	7,979.1	7,756.5	116.3	29.0	89.23	-1,715.0	-2,769.5	5,517.9	5,372.9	145.01	38.051		
14,400.0	7,770.0	7,978.6	7,756.0	118.0	29.0	89.22	-1,715.0	-2,769.5	5,604.6	5,457.8	146.76	38.190		
14,500.0	7,770.0	7,978.1	7,755.5	119.8	29.0	89.21	-1,715.0	-2,769.5	5,691.7	5,543.2	148.50	38.329		
14,600.0	7,770.0	7,977.6	7,755.0	121.5	29.0	89.19	-1,715.0	-2,769.5	5,779.2	5,629.0	150.24	38.467		
14,700.0	7,770.0	7,977.1	7,754.5	123.3	29.0	89.18	-1,715.0	-2,769.5	5,867.1	5,715.1	151.98	38.604		
14,800.0	7,770.0	7,976.6	7,754.0	125.0	29.0	89.17	-1,715.0	-2,769.5	5,955.4	5,801.7	153.72	38.741		
14,900.0	7,770.0	7,976.0	7,753.5	126.7	29.0	89.16	-1,715.0	-2,769.5	6,044.1	5,888.6	155.47	38.877		
15,000.0	7,770.0	7,975.5	7,753.0	128.5	29.0	89.15	-1,715.1	-2,769.5	6,133.1	5,975.9	157.21	39.012		
15,100.0	7,770.0	7,975.0	7,752.5	130.2	29.0	89.14	-1,715.1	-2,769.5	6,222.4	6,063.5	158.95	39.146		
15,200.0	7,770.0	7,974.5	7,751.9	132.0	29.0	89.13	-1,715.1	-2,769.5	6,312.1	6,151.4	160.70	39.279		
15,300.0	7,770.0	7,974.0	7,751.4	133.7	29.0	89.12	-1,715.1	-2,769.5	6,402.0	6,239.6	162.44	39.411		
15,400.0	7,770.0	7,973.0	7,750.4	135.5	29.0	89.10	-1,715.1	-2,769.4	6,492.3	6,328.1	164.18	39.543		
15,500.0	7,770.0	7,973.0	7,750.4	137.2	29.0	89.10	-1,715.1	-2,769.4	6,582.8	6,416.9	165.93	39.673		
15,600.0	7,770.0	7,973.0	7,750.4	139.0	29.0	89.10	-1,715.1	-2,769.4	6,673.6	6,506.0	167.67	39.801		
15,700.0	7,770.0	7,973.0	7,750.4	140.7	29.0	89.10	-1,715.1	-2,769.4	6,764.7	6,595.3	169.42	39.929		
15,800.0	7,770.0	7,973.0	7,750.4	142.4	29.0	89.10	-1,715.1	-2,769.4	6,856.0	6,684.9	171.17	40.055		
15,900.0	7,770.0	7,973.0	7,750.4	144.2	29.0	89.10	-1,715.1	-2,769.4	6,947.6	6,774.7	172.91	40.180		
16,000.0	7,770.0	7,973.0	7,750.4	145.9	29.0	89.10	-1,715.1	-2,769.4	7,039.4	6,864.7	174.66	40.304		
16,100.0	7,770.0	7,973.0	7,750.4	147.7	29.0	89.10	-1,715.1	-2,769.4	7,131.4	6,955.0	176.40	40.426		
16,200.0	7,770.0	7,973.0	7,750.4	149.4	29.0	89.10	-1,715.1	-2,769.4	7,223.6	7,045.5	178.15	40.548		
16,300.0	7,770.0	7,973.0	7,750.4	151.2	29.0	89.10	-1,715.1	-2,769.4	7,316.0	7,136.1	179.90	40.668		
16,400.0	7,770.0	7,973.0	7,750.4	152.9	29.0	89.10	-1,715.1	-2,769.4	7,408.7	7,227.0	181.65	40.786		
16,500.0	7,770.0	7,973.0	7,750.4	154.7	29.0	89.10	-1,715.1	-2,769.4	7,501.5	7,318.1	183.39	40.904		
16,600.0	7,770.0	7,973.0	7,750.4	156.4	29.0	89.10	-1,715.1	-2,769.4	7,594.5	7,409.3	185.14	41.020		
16,700.0	7,770.0	7,973.0	7,750.4	158.2	29.0	89.10	-1,715.1	-2,769.4	7,687.6	7,500.7	186.89	41.135		
16,800.0	7,770.0	7,973.0	7,750.4	159.9	29.0	89.10	-1,715.1	-2,769.4	7,781.0	7,592.3	188.63	41.249		
16,900.0	7,770.0	7,973.0	7,750.4	161.7	29.0	89.10	-1,715.1	-2,769.4	7,874.5	7,684.1	190.38	41.362		
17,000.0	7,770.0	7,973.0	7,750.4	163.4	29.0	89.10	-1,715.1	-2,769.4	7,968.1	7,776.0	192.13	41.473		
17,100.0	7,770.0	7,973.0	7,750.4	165.2	29.0	89.10	-1,715.1	-2,769.4	8,062.0	7,868.1	193.88	41.583		
17,200.0	7,770.0	7,973.0	7,750.4	166.9	29.0	89.10	-1,715.1	-2,769.4	8,155.9	7,960.3	195.63	41.691		
17,300.0	7,770.0	7,973.0	7,750.4	168.7	29.0	89.10	-1,715.1	-2,769.4	8,250.0	8,052.6	197.37	41.799		
17,400.0	7,770.0	7,973.0	7,750.4	170.4	29.0	89.10	-1,715.1	-2,769.4	8,344.3	8,145.1	199.12	41.905		
17,500.0	7,770.0	7,973.0	7,750.4	172.2	29.0	89.10	-1,715.1	-2,769.4	8,438.6	8,237.8	200.87	42.010		
17,600.0	7,770.0	7,973.0	7,750.4	173.9	29.0	89.10	-1,715.1	-2,769.4	8,533.1	8,330.5	202.62	42.114		
17,653.1	7,770.0	7,973.0	7,750.4	174.8	29.0	89.10	-1,715.1	-2,769.4	8,583.3	8,379.8	203.55	42.169		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	14.3	14.3	0.0	0.0	-95.45	-284.3	-2,982.5	2,996.0					
100.0	100.0	81.3	81.3	0.2	0.1	-95.46	-285.0	-2,983.1	2,997.0	2,996.7	0.30	N/A		
200.0	200.0	154.8	154.8	0.3	0.3	-95.49	-286.9	-2,984.3	2,998.9	2,998.2	0.60	4,957.730		
300.0	300.0	230.7	230.6	0.5	0.4	-95.55	-290.2	-2,986.1	3,001.6	3,000.6	0.93	3,243.634		
400.0	400.0	315.0	314.6	0.7	0.6	-95.65	-295.8	-2,988.3	3,004.9	3,003.7	1.28	2,353.682		
500.0	500.0	407.0	406.2	0.8	0.8	-95.81	-304.2	-2,991.1	3,008.8	3,007.1	1.67	1,804.111		
550.0	550.0	445.6	444.6	0.9	1.0	-95.89	-308.6	-2,992.3	3,010.9	3,009.1	1.86	1,619.298		
600.0	600.0	491.1	489.7	1.0	1.1	-96.81	-314.3	-2,993.7	3,013.1	3,011.1	2.07	1,454.310		
700.0	700.0	618.0	615.3	1.2	1.5	-97.14	-332.3	-2,996.6	3,017.2	3,014.6	2.62	1,149.832		
800.0	799.9	709.9	705.8	1.4	1.8	-97.45	-347.9	-2,998.4	3,021.5	3,018.4	3.11	971.342		
861.1	860.9	782.3	777.0	1.5	2.0	-97.74	-361.0	-2,999.5	3,024.2	3,020.7	3.47	870.655		
900.0	899.8	815.9	810.0	1.6	2.2	-97.89	-367.4	-2,999.9	3,025.9	3,022.2	3.67	824.557		
1,000.0	999.6	941.4	933.2	1.8	2.6	-98.46	-391.3	-3,001.0	3,030.1	3,025.8	4.30	704.199		
1,100.0	1,099.5	1,026.5	1,016.8	1.9	2.9	-98.84	-407.1	-3,001.4	3,034.1	3,029.3	4.80	631.770		
1,200.0	1,199.3	1,097.0	1,085.8	2.1	3.2	-99.17	-421.3	-3,002.1	3,038.9	3,033.6	5.27	576.978		
1,300.0	1,299.2	1,164.0	1,151.2	2.3	3.5	-99.51	-436.0	-3,003.3	3,044.9	3,039.2	5.73	531.333		
1,400.0	1,399.1	1,227.6	1,213.0	2.5	3.8	-99.85	-451.1	-3,004.9	3,052.2	3,046.0	6.21	491.407		
1,500.0	1,498.9	1,293.3	1,276.3	2.7	4.1	-100.22	-468.2	-3,006.9	3,060.6	3,053.9	6.71	455.810		
1,600.0	1,598.8	1,362.2	1,342.4	2.9	4.5	-100.64	-487.5	-3,009.3	3,070.2	3,063.0	7.25	423.733		
1,700.0	1,698.6	1,443.1	1,419.7	3.1	4.9	-101.14	-511.1	-3,012.5	3,080.8	3,072.9	7.85	392.553		
1,800.0	1,798.5	1,529.8	1,502.2	3.3	5.4	-101.70	-537.7	-3,015.9	3,091.9	3,083.4	8.50	363.787		
1,900.0	1,898.3	1,610.3	1,578.5	3.5	5.9	-102.23	-563.4	-3,019.1	3,103.8	3,094.6	9.13	339.973		
2,000.0	1,998.2	1,687.0	1,650.7	3.7	6.4	-102.75	-588.8	-3,022.2	3,116.5	3,106.7	9.75	319.592		
2,100.0	2,098.0	1,756.3	1,715.6	3.9	6.8	-103.24	-613.0	-3,025.2	3,130.1	3,119.8	10.36	302.057		
2,200.0	2,197.9	1,808.9	1,764.4	4.1	7.2	-103.63	-632.5	-3,027.5	3,145.1	3,134.2	10.88	289.016		
2,300.0	2,297.7	1,862.0	1,813.3	4.3	7.5	-104.03	-653.0	-3,030.6	3,161.8	3,150.4	11.41	277.157		
2,400.0	2,397.6	1,971.9	1,913.7	4.5	8.3	-104.89	-697.4	-3,036.1	3,179.1	3,166.8	12.32	257.998		
2,500.0	2,497.4	2,037.0	1,972.8	4.7	8.8	-105.41	-724.3	-3,039.4	3,197.3	3,184.3	12.94	247.074		
2,600.0	2,597.3	2,119.8	2,047.8	4.9	9.4	-106.07	-759.1	-3,043.7	3,216.4	3,202.7	13.68	235.035		
2,700.0	2,697.1	2,202.7	2,122.3	5.1	10.1	-106.76	-795.3	-3,047.6	3,236.1	3,221.6	14.45	223.908		
2,800.0	2,797.0	2,256.4	2,170.1	5.3	10.5	-107.21	-819.6	-3,050.0	3,256.9	3,241.9	15.03	216.706		
2,900.0	2,896.8	2,309.4	2,217.0	5.5	11.0	-107.66	-844.3	-3,052.8	3,279.3	3,263.7	15.60	210.255		
3,000.0	2,996.7	2,386.0	2,284.7	5.7	11.6	-108.31	-879.8	-3,057.4	3,302.9	3,286.6	16.31	202.468		
3,100.0	3,096.5	2,500.4	2,386.4	5.9	12.5	-109.24	-931.8	-3,064.5	3,327.0	3,309.7	17.26	192.707		
3,200.0	3,196.4	2,602.8	2,478.0	6.1	13.3	-110.05	-977.0	-3,070.1	3,350.5	3,332.4	18.10	185.073		
3,300.0	3,296.3	2,674.4	2,542.5	6.3	13.9	-110.59	-1,007.8	-3,074.8	3,375.1	3,356.4	18.74	180.107		
3,400.0	3,396.1	2,822.0	2,675.3	6.5	15.0	-111.70	-1,071.8	-3,082.8	3,399.3	3,379.5	19.84	171.372		
3,500.0	3,496.0	2,873.1	2,721.4	6.7	15.4	-112.08	-1,093.7	-3,085.3	3,423.6	3,403.3	20.34	168.319		
3,600.0	3,595.8	2,910.0	2,754.5	6.9	15.7	-112.35	-1,109.9	-3,087.6	3,449.9	3,429.1	20.76	166.209		
3,700.0	3,695.7	2,997.0	2,832.3	7.0	16.4	-112.99	-1,148.2	-3,093.7	3,477.2	3,455.8	21.47	161.995		
3,800.0	3,795.5	3,059.3	2,888.1	7.2	16.9	-113.44	-1,175.4	-3,098.4	3,505.3	3,483.3	22.01	159.249		
3,900.0	3,895.4	3,157.2	2,976.1	7.4	17.7	-114.12	-1,217.7	-3,106.6	3,534.3	3,511.6	22.75	155.374		
4,000.0	3,995.2	3,219.3	3,031.9	7.6	18.2	-114.54	-1,244.3	-3,111.8	3,563.6	3,540.3	23.29	153.029		
4,100.0	4,095.1	3,346.0	3,145.3	7.8	19.2	-115.42	-1,300.1	-3,122.0	3,593.7	3,569.5	24.19	148.583		
4,200.0	4,194.9	3,398.8	3,192.5	8.0	19.6	-115.78	-1,323.4	-3,125.8	3,623.6	3,599.0	24.67	146.903		
4,300.0	4,294.8	3,509.5	3,291.3	8.2	20.5	-116.53	-1,372.5	-3,134.7	3,654.7	3,629.3	25.46	143.543		
4,400.0	4,394.6	3,608.0	3,379.3	8.4	21.3	-117.20	-1,416.3	-3,141.1	3,685.0	3,658.8	26.19	140.723		
4,500.0	4,494.5	3,675.6	3,439.7	8.6	21.8	-117.65	-1,446.2	-3,145.7	3,715.8	3,689.1	26.73	139.033		
4,600.0	4,594.3	3,746.7	3,503.3	8.8	22.4	-118.11	-1,477.4	-3,151.4	3,747.7	3,720.5	27.27	137.434		
4,700.0	4,694.2	3,857.0	3,602.8	9.0	23.2	-118.77	-1,524.0	-3,161.4	3,780.0	3,752.1	27.96	135.185		
4,800.0	4,794.0	4,007.0	3,739.4	9.2	24.3	-119.62	-1,584.4	-3,175.0	3,811.6	3,782.8	28.82	132.256		
4,900.0	4,893.9	4,097.6	3,821.9	9.4	25.0	-120.14	-1,621.5	-3,181.6	3,842.4	3,813.0	29.42	130.595		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,263.8	3,972.2	9.6	26.3	-121.13	-1,691.7	-3,190.5	3,872.8	3,842.4	30.40	127.409		
5,100.0	5,093.6	4,383.8	4,080.8	9.8	27.2	-121.84	-1,742.6	-3,195.1	3,902.6	3,871.5	31.13	125.352		
5,200.0	5,193.5	4,424.1	4,117.3	10.0	27.5	-122.08	-1,759.6	-3,196.6	3,932.6	3,901.1	31.52	124.761		
5,300.0	5,293.3	4,481.0	4,168.1	10.2	28.0	-122.43	-1,785.1	-3,199.0	3,964.4	3,932.4	31.99	123.927		
5,400.0	5,393.2	4,481.0	4,168.1	10.4	28.0	-122.43	-1,785.1	-3,199.0	3,997.3	3,965.1	32.18	124.212		
5,500.0	5,493.0	4,532.6	4,213.7	10.6	28.4	-122.75	-1,809.1	-3,201.7	4,031.8	3,999.2	32.62	123.594		
5,600.0	5,592.9	5,663.2	5,283.7	10.8	34.4	-127.13	-2,143.4	-3,247.2	4,060.0	4,024.2	35.87	113.179		
5,700.0	5,692.7	6,021.1	5,640.9	11.0	34.8	-127.48	-2,161.0	-3,255.0	4,067.1	4,030.8	36.28	112.116		
5,800.0	5,792.6	6,143.4	5,763.3	11.2	34.8	-127.54	-2,161.0	-3,257.3	4,071.8	4,035.3	36.51	111.530		
5,900.0	5,892.4	6,239.4	5,859.2	11.4	34.9	-127.58	-2,160.9	-3,258.9	4,076.5	4,039.8	36.74	110.962		
6,000.0	5,992.3	6,337.0	5,956.7	11.6	35.0	-127.63	-2,161.0	-3,260.6	4,081.3	4,044.3	36.97	110.401		
6,100.0	6,092.1	6,440.2	6,060.0	11.8	35.0	-127.67	-2,161.1	-3,262.3	4,086.0	4,048.8	37.20	109.833		
6,200.0	6,192.0	6,565.7	6,185.5	12.0	35.1	-127.74	-2,161.2	-3,264.1	4,090.5	4,053.1	37.45	109.236		
6,300.0	6,291.8	6,693.2	6,313.0	12.2	35.2	-127.80	-2,160.5	-3,265.1	4,094.1	4,056.4	37.69	108.612		
6,400.0	6,391.7	6,783.2	6,403.0	12.4	35.2	-127.84	-2,160.1	-3,265.6	4,097.6	4,059.7	37.93	108.030		
6,500.0	6,491.5	6,874.6	6,494.4	12.6	35.3	-127.89	-2,159.9	-3,266.2	4,101.4	4,063.2	38.17	107.458		
6,600.0	6,591.4	6,968.2	6,587.9	12.8	35.3	-127.94	-2,159.9	-3,267.0	4,105.3	4,066.9	38.41	106.892		
6,700.0	6,691.2	7,059.3	6,679.0	13.0	35.4	-127.99	-2,160.0	-3,267.8	4,109.4	4,070.8	38.64	106.341		
6,800.0	6,791.1	7,148.1	6,767.9	13.2	35.4	-128.03	-2,160.2	-3,268.8	4,113.8	4,074.9	38.88	105.806		
6,900.0	6,890.9	7,241.3	6,861.0	13.4	35.5	-128.08	-2,160.4	-3,270.0	4,118.4	4,079.2	39.12	105.277		
7,000.0	6,990.8	7,337.8	6,957.5	13.6	35.6	-128.13	-2,160.7	-3,271.5	4,123.1	4,083.7	39.36	104.751		
7,024.2	7,014.9	7,362.0	6,981.7	13.6	35.6	-128.14	-2,160.8	-3,271.8	4,124.2	4,084.8	39.42	104.623		
7,050.0	7,040.7	7,386.1	7,005.8	13.7	35.6	-129.86	-2,160.9	-3,272.2	4,125.2	4,085.7	39.47	104.518		
7,100.0	7,090.7	7,434.5	7,054.2	13.7	35.6	53.51	-2,161.0	-3,273.0	4,125.4	4,085.8	39.59	104.197		
7,150.0	7,140.5	7,482.7	7,102.4	13.8	35.7	53.17	-2,161.0	-3,273.9	4,123.6	4,083.8	39.76	103.715		
7,200.0	7,189.9	7,530.6	7,150.2	13.8	35.7	53.38	-2,161.1	-3,274.7	4,119.6	4,079.7	39.97	103.075		
7,250.0	7,238.6	7,580.2	7,199.9	13.8	35.7	53.84	-2,161.1	-3,275.7	4,113.6	4,073.4	40.22	102.272		
7,300.0	7,286.4	7,629.3	7,249.0	13.7	35.8	54.50	-2,161.1	-3,276.6	4,105.6	4,065.1	40.52	101.313		
7,350.0	7,333.1	7,677.2	7,296.9	13.7	35.8	55.35	-2,161.0	-3,277.5	4,095.6	4,054.8	40.87	100.205		
7,400.0	7,378.5	7,724.4	7,344.0	13.6	35.8	56.39	-2,161.0	-3,278.5	4,083.8	4,042.5	41.27	98.947		
7,450.0	7,422.2	7,771.3	7,390.9	13.6	35.9	57.62	-2,160.8	-3,279.4	4,070.1	4,028.3	41.73	97.542		
7,500.0	7,464.1	7,816.2	7,435.8	13.5	35.9	59.03	-2,160.7	-3,280.2	4,054.6	4,012.4	42.24	96.001		
7,550.0	7,504.1	7,858.9	7,478.5	13.5	35.9	60.61	-2,160.4	-3,281.1	4,037.6	3,994.8	42.80	94.337		
7,600.0	7,541.8	7,903.1	7,522.8	13.5	35.9	62.40	-2,160.1	-3,281.9	4,019.2	3,975.7	43.43	92.533		
7,650.0	7,577.2	7,952.3	7,572.0	13.4	36.0	64.44	-2,159.7	-3,282.7	3,999.3	3,955.2	44.15	90.582		
7,700.0	7,610.0	7,997.9	7,617.5	13.5	36.0	66.64	-2,159.3	-3,283.3	3,978.2	3,933.3	44.91	88.582		
7,750.0	7,640.2	8,039.5	7,659.1	13.5	36.0	68.97	-2,158.9	-3,283.7	3,956.0	3,910.3	45.70	86.569		
7,800.0	7,667.4	8,073.2	7,692.8	13.6	36.0	71.36	-2,158.6	-3,284.0	3,932.9	3,886.4	46.49	84.604		
7,850.0	7,691.7	8,099.1	7,718.7	13.7	36.1	73.79	-2,158.3	-3,284.1	3,909.1	3,861.8	47.26	82.715		
7,900.0	7,712.8	8,121.6	7,741.2	13.9	36.1	76.26	-2,158.1	-3,284.2	3,884.8	3,836.8	48.02	80.897		
7,950.0	7,730.8	8,140.6	7,760.2	14.1	36.1	78.77	-2,157.9	-3,284.3	3,860.2	3,811.4	48.76	79.173		
8,000.0	7,745.5	8,156.0	7,775.6	14.4	36.1	81.26	-2,157.7	-3,284.4	3,835.4	3,785.9	49.45	77.561		
8,050.0	7,756.7	8,167.7	7,787.3	14.7	36.1	83.73	-2,157.6	-3,284.4	3,810.6	3,760.5	50.09	76.071		
8,100.0	7,764.6	8,175.7	7,795.3	15.1	36.1	86.12	-2,157.5	-3,284.5	3,785.9	3,735.2	50.68	74.708		
8,150.0	7,769.0	8,179.9	7,799.5	15.5	36.1	88.43	-2,157.5	-3,284.5	3,761.5	3,710.3	51.20	73.467		
8,188.1	7,770.0	8,180.6	7,800.2	15.9	36.1	90.11	-2,157.5	-3,284.5	3,743.2	3,691.7	51.56	72.601		
8,200.0	7,770.0	8,180.5	7,800.1	16.0	36.1	90.11	-2,157.5	-3,284.5	3,737.5	3,685.9	51.67	72.336		
8,300.0	7,770.0	8,179.4	7,798.9	17.0	36.1	90.09	-2,157.5	-3,284.5	3,691.1	3,638.5	52.67	70.084		
8,400.0	7,770.0	8,178.2	7,797.8	18.1	36.1	90.07	-2,157.5	-3,284.5	3,646.9	3,593.1	53.78	67.809		
8,500.0	7,770.0	8,177.1	7,796.7	19.3	36.1	90.05	-2,157.5	-3,284.5	3,604.9	3,549.9	54.99	65.554		
8,600.0	7,770.0	8,176.0	7,795.6	20.6	36.1	90.03	-2,157.5	-3,284.5	3,565.2	3,508.9	56.28	63.349		
8,700.0	7,770.0	8,174.9	7,794.5	21.9	36.1	90.01	-2,157.5	-3,284.5	3,527.9	3,470.2	57.63	61.215		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	8,173.8	7,793.4	23.3	36.1	89.99	-2,157.5	-3,284.5	3,493.0	3,434.0	59.04	59.166		
8,900.0	7,770.0	8,172.7	7,792.3	24.8	36.1	89.97	-2,157.6	-3,284.5	3,460.7	3,400.2	60.49	57.214		
9,000.0	7,770.0	8,171.6	7,791.2	26.3	36.1	89.95	-2,157.6	-3,284.5	3,431.0	3,369.0	61.98	55.361		
9,100.0	7,770.0	8,170.5	7,790.1	27.8	36.1	89.93	-2,157.6	-3,284.5	3,404.0	3,340.5	63.49	53.612		
9,200.0	7,770.0	8,169.3	7,788.9	29.3	36.1	89.91	-2,157.6	-3,284.5	3,379.7	3,314.7	65.04	51.965		
9,300.0	7,770.0	8,168.2	7,787.8	30.9	36.1	89.89	-2,157.6	-3,284.5	3,358.3	3,291.7	66.61	50.420		
9,400.0	7,770.0	8,167.1	7,786.7	32.5	36.1	89.87	-2,157.6	-3,284.4	3,339.6	3,271.5	68.19	48.975		
9,500.0	7,770.0	8,166.0	7,785.6	34.1	36.1	89.85	-2,157.6	-3,284.4	3,323.9	3,254.1	69.79	47.625		
9,600.0	7,770.0	8,164.9	7,784.5	35.7	36.1	89.83	-2,157.6	-3,284.4	3,311.2	3,239.8	71.41	46.368		
9,700.0	7,770.0	8,163.8	7,783.4	37.3	36.1	89.82	-2,157.7	-3,284.4	3,301.4	3,228.4	73.04	45.200		
9,800.0	7,770.0	8,162.7	7,782.3	39.0	36.1	89.80	-2,157.7	-3,284.4	3,294.6	3,219.9	74.68	44.117		
9,900.0	7,770.0	8,161.6	7,781.2	40.6	36.1	89.78	-2,157.7	-3,284.4	3,290.9	3,214.5	76.33	43.115		
9,973.5	7,770.0	8,160.7	7,780.3	41.8	36.1	89.76	-2,157.7	-3,284.4	3,290.0	3,212.5	77.55	42.427		
10,000.0	7,770.0	8,160.4	7,780.0	42.3	36.1	89.76	-2,157.7	-3,284.4	3,290.2	3,212.2	77.99	42.189		
10,100.0	7,770.0	8,159.3	7,778.9	44.0	36.1	89.74	-2,157.7	-3,284.4	3,292.5	3,212.8	79.65	41.337		
10,200.0	7,770.0	8,158.2	7,777.8	45.6	36.1	89.72	-2,157.7	-3,284.4	3,297.8	3,216.5	81.32	40.553		
10,300.0	7,770.0	8,157.1	7,776.7	47.3	36.1	89.70	-2,157.7	-3,284.4	3,306.2	3,223.2	83.00	39.834		
10,400.0	7,770.0	8,156.0	7,775.6	49.0	36.1	89.68	-2,157.7	-3,284.4	3,317.6	3,232.9	84.68	39.177		
10,500.0	7,770.0	8,154.9	7,774.5	50.7	36.1	89.66	-2,157.7	-3,284.4	3,331.9	3,245.5	86.37	38.577		
10,600.0	7,770.0	8,153.8	7,773.4	52.4	36.1	89.64	-2,157.8	-3,284.4	3,349.2	3,261.1	88.06	38.032		
10,700.0	7,770.0	8,152.7	7,772.2	54.1	36.1	89.62	-2,157.8	-3,284.4	3,369.3	3,279.5	89.76	37.538		
10,800.0	7,770.0	8,151.5	7,771.1	55.8	36.1	89.60	-2,157.8	-3,284.4	3,392.3	3,300.8	91.46	37.091		
10,900.0	7,770.0	8,150.4	7,770.0	57.5	36.1	89.58	-2,157.8	-3,284.4	3,418.0	3,324.9	93.16	36.690		
11,000.0	7,770.0	8,149.3	7,768.9	59.2	36.1	89.56	-2,157.8	-3,284.4	3,446.5	3,351.6	94.87	36.330		
11,100.0	7,770.0	8,148.2	7,767.8	60.9	36.1	89.54	-2,157.8	-3,284.4	3,477.6	3,381.0	96.57	36.009		
11,200.0	7,770.0	8,147.1	7,766.7	62.6	36.1	89.52	-2,157.8	-3,284.4	3,511.2	3,412.9	98.28	35.725		
11,300.0	7,770.0	8,146.0	7,765.6	64.3	36.1	89.50	-2,157.8	-3,284.4	3,547.4	3,447.4	100.00	35.475		
11,400.0	7,770.0	8,144.9	7,764.5	66.0	36.1	89.49	-2,157.8	-3,284.4	3,586.0	3,484.3	101.71	35.256		
11,500.0	7,770.0	8,143.7	7,763.3	67.7	36.1	89.47	-2,157.9	-3,284.3	3,626.9	3,523.5	103.43	35.067		
11,600.0	7,770.0	8,142.6	7,762.2	69.5	36.1	89.45	-2,157.9	-3,284.3	3,670.1	3,565.0	105.15	34.904		
11,700.0	7,770.0	8,141.5	7,761.1	71.2	36.1	89.43	-2,157.9	-3,284.3	3,715.5	3,608.6	106.87	34.767		
11,800.0	7,770.0	8,140.4	7,760.0	72.9	36.1	89.41	-2,157.9	-3,284.3	3,763.0	3,654.4	108.59	34.653		
11,900.0	7,770.0	8,139.3	7,758.9	74.6	36.1	89.39	-2,157.9	-3,284.3	3,812.6	3,702.2	110.31	34.561		
12,000.0	7,770.0	8,138.2	7,757.8	76.4	36.1	89.37	-2,157.9	-3,284.3	3,864.0	3,752.0	112.04	34.489		
12,100.0	7,770.0	8,137.1	7,756.7	78.1	36.1	89.35	-2,157.9	-3,284.3	3,917.4	3,803.6	113.76	34.435		
12,200.0	7,770.0	8,135.9	7,755.5	79.8	36.1	89.33	-2,157.9	-3,284.3	3,972.6	3,857.1	115.49	34.397		
12,300.0	7,770.0	8,134.8	7,754.4	81.5	36.1	89.31	-2,157.9	-3,284.3	4,029.5	3,912.3	117.22	34.375		
12,400.0	7,770.0	8,133.7	7,753.3	83.3	36.1	89.29	-2,158.0	-3,284.3	4,088.0	3,969.1	118.95	34.368 SF		
12,500.0	7,770.0	8,132.6	7,752.2	85.0	36.1	89.27	-2,158.0	-3,284.3	4,148.1	4,027.5	120.68	34.374		
12,600.0	7,770.0	8,131.5	7,751.1	86.7	36.1	89.25	-2,158.0	-3,284.3	4,209.8	4,087.4	122.41	34.391		
12,700.0	7,770.0	8,130.4	7,750.0	88.5	36.1	89.23	-2,158.0	-3,284.3	4,272.9	4,148.8	124.14	34.420		
12,800.0	7,770.0	8,129.2	7,748.8	90.2	36.1	89.21	-2,158.0	-3,284.3	4,337.4	4,211.5	125.87	34.458		
12,900.0	7,770.0	8,128.1	7,747.7	91.9	36.1	89.19	-2,158.0	-3,284.3	4,403.2	4,275.6	127.61	34.506		
13,000.0	7,770.0	8,127.0	7,746.6	93.7	36.1	89.17	-2,158.0	-3,284.3	4,470.3	4,340.9	129.34	34.562		
13,100.0	7,770.0	8,125.9	7,745.5	95.4	36.1	89.16	-2,158.0	-3,284.3	4,538.6	4,407.5	131.08	34.625		
13,200.0	7,770.0	8,124.8	7,744.4	97.1	36.1	89.14	-2,158.1	-3,284.3	4,608.0	4,475.2	132.81	34.696		
13,300.0	7,770.0	8,123.7	7,743.3	98.9	36.1	89.12	-2,158.1	-3,284.3	4,678.6	4,544.0	134.55	34.773		
13,400.0	7,770.0	8,122.6	7,742.2	100.6	36.1	89.10	-2,158.1	-3,284.2	4,750.2	4,613.9	136.28	34.855		
13,500.0	7,770.0	8,121.4	7,741.0	102.4	36.1	89.08	-2,158.1	-3,284.2	4,822.8	4,684.8	138.02	34.943		
13,600.0	7,770.0	8,120.3	7,739.9	104.1	36.1	89.06	-2,158.1	-3,284.2	4,896.4	4,756.6	139.76	35.035		
13,700.0	7,770.0	8,119.2	7,738.8	105.8	36.1	89.04	-2,158.1	-3,284.2	4,970.9	4,829.4	141.50	35.131		
13,800.0	7,770.0	8,118.1	7,737.7	107.6	36.1	89.02	-2,158.1	-3,284.2	5,046.3	4,903.1	143.23	35.231		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
13,900.0	7,770.0	8,117.0	7,736.6	109.3	36.1	89.00	-2,158.1	-3,284.2	5,122.5	4,977.6	144.97	35.334		
14,000.0	7,770.0	8,115.9	7,735.5	111.1	36.1	88.98	-2,158.1	-3,284.2	5,199.6	5,052.9	146.71	35.441		
14,100.0	7,770.0	8,114.7	7,734.3	112.8	36.1	88.96	-2,158.2	-3,284.2	5,277.4	5,128.9	148.45	35.550		
14,200.0	7,770.0	8,113.6	7,733.2	114.5	36.1	88.94	-2,158.2	-3,284.2	5,355.9	5,205.7	150.19	35.661		
14,300.0	7,770.0	8,112.5	7,732.1	116.3	36.1	88.92	-2,158.2	-3,284.2	5,435.2	5,283.3	151.93	35.774		
14,400.0	7,770.0	8,111.4	7,731.0	118.0	36.1	88.90	-2,158.2	-3,284.2	5,515.1	5,361.4	153.67	35.889		
14,500.0	7,770.0	8,110.3	7,729.9	119.8	36.1	88.88	-2,158.2	-3,284.2	5,595.7	5,440.3	155.41	36.005		
14,600.0	7,770.0	8,109.2	7,728.8	121.5	36.1	88.86	-2,158.2	-3,284.2	5,676.9	5,519.7	157.15	36.123		
14,700.0	7,770.0	8,108.0	7,727.6	123.3	36.1	88.84	-2,158.2	-3,284.2	5,758.7	5,599.8	158.90	36.242		
14,800.0	7,770.0	8,106.9	7,726.5	125.0	36.1	88.82	-2,158.2	-3,284.2	5,841.0	5,680.4	160.64	36.361		
14,900.0	7,770.0	8,105.8	7,725.4	126.7	36.1	88.81	-2,158.2	-3,284.2	5,923.9	5,761.5	162.38	36.482		
15,000.0	7,770.0	8,104.7	7,724.3	128.5	36.1	88.79	-2,158.3	-3,284.1	6,007.3	5,843.2	164.12	36.603		
15,100.0	7,770.0	8,103.6	7,723.2	130.2	36.1	88.77	-2,158.3	-3,284.1	6,091.2	5,925.4	165.86	36.724		
15,200.0	7,770.0	8,102.5	7,722.1	132.0	36.1	88.75	-2,158.3	-3,284.1	6,175.6	6,008.0	167.61	36.846		
15,300.0	7,770.0	8,101.3	7,720.9	133.7	36.1	88.73	-2,158.3	-3,284.1	6,260.5	6,091.1	169.35	36.968		
15,400.0	7,770.0	8,100.2	7,719.8	135.5	36.1	88.71	-2,158.3	-3,284.1	6,345.7	6,174.7	171.09	37.090		
15,500.0	7,770.0	8,099.1	7,718.7	137.2	36.1	88.69	-2,158.3	-3,284.1	6,431.5	6,258.6	172.84	37.212		
15,600.0	7,770.0	8,098.0	7,717.6	139.0	36.1	88.67	-2,158.3	-3,284.1	6,517.6	6,343.0	174.58	37.333		
15,700.0	7,770.0	8,096.9	7,716.5	140.7	36.1	88.65	-2,158.3	-3,284.1	6,604.1	6,427.8	176.32	37.455		
15,800.0	7,770.0	8,095.7	7,715.3	142.4	36.1	88.63	-2,158.3	-3,284.1	6,691.0	6,512.9	178.07	37.576		
15,900.0	7,770.0	8,094.6	7,714.2	144.2	36.0	88.61	-2,158.4	-3,284.1	6,778.2	6,598.4	179.81	37.697		
16,000.0	7,770.0	8,093.5	7,713.1	145.9	36.0	88.59	-2,158.4	-3,284.1	6,865.8	6,684.3	181.55	37.817		
16,100.0	7,770.0	8,092.4	7,712.0	147.7	36.0	88.57	-2,158.4	-3,284.1	6,953.8	6,770.5	183.30	37.937		
16,200.0	7,770.0	8,091.3	7,710.9	149.4	36.0	88.55	-2,158.4	-3,284.1	7,042.0	6,857.0	185.04	38.056		
16,300.0	7,770.0	8,090.2	7,709.8	151.2	36.0	88.53	-2,158.4	-3,284.1	7,130.6	6,943.8	186.79	38.175		
16,400.0	7,770.0	8,089.0	7,708.6	152.9	36.0	88.51	-2,158.4	-3,284.1	7,219.4	7,030.9	188.53	38.293		
16,500.0	7,770.0	8,087.9	7,707.5	154.7	36.0	88.49	-2,158.4	-3,284.1	7,308.6	7,118.3	190.27	38.411		
16,600.0	7,770.0	8,086.8	7,706.4	156.4	36.0	88.47	-2,158.4	-3,284.0	7,398.0	7,206.0	192.02	38.527		
16,700.0	7,770.0	8,085.7	7,705.3	158.2	36.0	88.46	-2,158.5	-3,284.0	7,487.7	7,293.9	193.76	38.643		
16,800.0	7,770.0	8,084.6	7,704.2	159.9	36.0	88.44	-2,158.5	-3,284.0	7,577.7	7,382.1	195.51	38.759		
16,900.0	7,770.0	8,083.4	7,703.0	161.7	36.0	88.42	-2,158.5	-3,284.0	7,667.9	7,470.6	197.25	38.873		
17,000.0	7,770.0	8,082.3	7,701.9	163.4	36.0	88.40	-2,158.5	-3,284.0	7,758.3	7,559.3	199.00	38.987		
17,100.0	7,770.0	8,081.2	7,700.8	165.2	36.0	88.38	-2,158.5	-3,284.0	7,849.0	7,648.2	200.74	39.099		
17,200.0	7,770.0	8,080.1	7,699.7	166.9	36.0	88.36	-2,158.5	-3,284.0	7,939.9	7,737.4	202.49	39.211		
17,300.0	7,770.0	8,079.0	7,698.6	168.7	36.0	88.34	-2,158.5	-3,284.0	8,031.0	7,826.7	204.23	39.322		
17,400.0	7,770.0	8,077.8	7,697.4	170.4	36.0	88.32	-2,158.5	-3,284.0	8,122.3	7,916.3	205.98	39.433		
17,500.0	7,770.0	8,076.7	7,696.3	172.2	36.0	88.30	-2,158.5	-3,284.0	8,213.8	8,006.1	207.72	39.542		
17,600.0	7,770.0	8,075.6	7,695.2	173.9	36.0	88.28	-2,158.6	-3,284.0	8,305.5	8,096.1	209.47	39.650		
17,653.1	7,770.0	8,075.0	7,694.6	174.8	36.0	88.27	-2,158.6	-3,284.0	8,354.3	8,143.9	210.40	39.708		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	25.7	25.7	0.0	0.0	-94.88	-254.5	-2,981.6	2,992.5					
100.0	100.0	458.4	457.3	0.2	1.0	-94.64	-240.4	-2,961.0	2,989.4	2,988.4	1.00	2,984.870		
200.0	200.0	712.0	706.4	0.3	1.9	-94.06	-207.6	-2,926.9	2,973.7	2,971.8	1.83	1,623.865		
300.0	300.0	786.0	778.7	0.5	2.2	-93.85	-196.5	-2,915.9	2,957.6	2,955.4	2.22	1,334.386		
400.0	400.0	840.6	832.2	0.7	2.4	-93.71	-188.7	-2,908.4	2,943.0	2,940.5	2.54	1,159.167		
500.0	500.0	918.3	908.6	0.8	2.7	-93.53	-178.8	-2,898.7	2,929.6	2,926.7	2.92	1,004.420		
550.0	550.0	975.6	965.1	0.9	2.9	-93.40	-172.0	-2,891.7	2,923.1	2,919.9	3.16	926.452		
600.0	600.0	1,133.6	1,120.1	1.0	3.5	-93.94	-151.1	-2,869.3	2,915.8	2,912.1	3.72	784.743		
700.0	700.0	1,236.2	1,220.1	1.2	3.9	-93.84	-134.9	-2,852.8	2,898.9	2,894.7	4.22	687.579		
800.0	799.9	1,332.8	1,314.0	1.4	4.4	-93.77	-118.9	-2,837.1	2,881.8	2,877.1	4.71	612.069		
861.1	860.9	1,382.0	1,361.9	1.5	4.6	-93.76	-110.6	-2,829.3	2,871.8	2,866.8	4.98	576.560		
900.0	899.8	1,399.5	1,378.9	1.6	4.6	-93.73	-107.7	-2,826.7	2,865.7	2,860.5	5.11	560.803		
1,000.0	999.6	1,469.0	1,446.8	1.8	4.9	-93.58	-96.3	-2,816.8	2,850.8	2,845.3	5.52	516.158		
1,100.0	1,099.5	1,553.6	1,529.6	1.9	5.2	-93.42	-83.5	-2,805.3	2,836.8	2,830.8	5.97	475.264		
1,200.0	1,199.3	1,689.3	1,662.6	2.1	5.8	-93.22	-65.4	-2,785.1	2,821.5	2,814.9	6.55	430.513		
1,300.0	1,299.2	1,762.7	1,734.4	2.3	6.1	-93.08	-54.5	-2,774.5	2,806.6	2,799.7	6.98	402.008		
1,400.0	1,399.1	2,003.7	1,969.5	2.5	7.1	-92.62	-18.2	-2,736.3	2,791.5	2,783.5	7.93	351.897		
1,500.0	1,498.9	2,092.8	2,056.1	2.7	7.5	-92.47	-5.8	-2,719.6	2,772.4	2,764.0	8.40	330.172		
1,600.0	1,598.8	2,220.0	2,179.6	2.9	8.1	-92.25	12.2	-2,694.6	2,752.5	2,743.5	8.99	306.213		
1,700.0	1,698.6	2,305.2	2,262.2	3.1	8.5	-92.09	24.6	-2,677.9	2,732.6	2,723.2	9.45	289.027		
1,800.0	1,798.5	2,378.9	2,333.8	3.3	8.8	-91.95	35.3	-2,663.8	2,713.4	2,703.5	9.88	274.544		
1,900.0	1,898.3	2,445.2	2,398.3	3.5	9.1	-91.83	44.7	-2,651.9	2,695.3	2,685.0	10.29	261.974		
2,000.0	1,998.2	2,517.0	2,468.3	3.7	9.4	-91.69	55.0	-2,640.0	2,678.4	2,667.7	10.71	250.010		
2,100.0	2,098.0	2,575.9	2,526.0	3.9	9.6	-91.60	62.4	-2,630.8	2,662.8	2,651.7	11.05	240.891		
2,200.0	2,197.9	2,651.3	2,600.3	4.1	9.9	-91.53	69.8	-2,619.9	2,648.2	2,636.8	11.45	231.331		
2,300.0	2,297.7	2,809.1	2,755.0	4.3	10.5	-91.29	89.4	-2,596.4	2,633.6	2,621.5	12.11	217.416		
2,400.0	2,397.6	2,917.0	2,860.6	4.5	10.9	-91.14	102.2	-2,578.2	2,616.6	2,604.0	12.61	207.540		
2,500.0	2,497.4	2,984.5	2,926.9	4.7	11.2	-91.06	109.5	-2,567.2	2,600.5	2,587.5	12.98	200.335		
2,600.0	2,597.3	3,058.4	2,999.6	4.9	11.4	-90.98	116.7	-2,556.3	2,585.7	2,572.3	13.37	193.395		
2,700.0	2,697.1	3,204.4	3,142.4	5.1	12.1	-90.73	135.7	-2,533.1	2,569.6	2,555.5	14.04	182.994		
2,800.0	2,797.0	3,321.0	3,256.2	5.3	12.5	-90.50	151.9	-2,513.4	2,552.7	2,538.1	14.60	174.825		
2,900.0	2,896.8	3,391.7	3,325.3	5.5	12.8	-90.38	161.1	-2,501.7	2,536.2	2,521.2	15.02	168.845		
3,000.0	2,996.7	3,586.8	3,515.1	5.7	13.7	-89.92	190.7	-2,467.5	2,519.2	2,503.2	15.92	158.229		
3,100.0	3,096.5	3,652.0	3,578.2	5.9	14.0	-89.75	201.2	-2,455.2	2,500.3	2,484.0	16.36	152.855		
3,200.0	3,196.4	3,693.3	3,618.3	6.1	14.2	-89.65	207.6	-2,448.1	2,483.2	2,466.5	16.69	148.755		
3,300.0	3,296.3	3,739.0	3,663.1	6.3	14.4	-89.55	214.2	-2,441.1	2,468.1	2,451.1	17.04	144.817		
3,400.0	3,396.1	3,826.0	3,748.5	6.5	14.7	-89.38	225.7	-2,429.1	2,454.6	2,437.1	17.51	140.157		
3,500.0	3,496.0	3,865.5	3,787.4	6.7	14.8	-89.31	230.7	-2,424.3	2,442.5	2,424.7	17.83	136.986		
3,600.0	3,595.8	3,914.0	3,835.2	6.9	15.0	-89.23	236.6	-2,419.4	2,432.6	2,414.4	18.17	133.850		
3,700.0	3,695.7	3,968.0	3,888.7	7.0	15.1	-89.15	242.8	-2,415.0	2,424.6	2,406.1	18.52	130.944		
3,800.0	3,795.5	4,028.6	3,948.8	7.2	15.2	-89.08	249.0	-2,411.1	2,418.4	2,399.5	18.87	128.181		
3,900.0	3,895.4	4,088.0	4,007.9	7.4	15.4	-89.03	254.3	-2,408.1	2,413.7	2,394.4	19.20	125.683		
4,000.0	3,995.2	4,175.0	4,094.7	7.6	15.5	-88.99	260.4	-2,404.9	2,410.0	2,390.5	19.57	123.160		
4,100.0	4,095.1	4,263.0	4,182.5	7.8	15.7	-89.01	264.5	-2,402.3	2,407.2	2,387.3	19.91	120.925		
4,200.0	4,194.9	4,350.0	4,269.4	8.0	15.8	-89.04	267.8	-2,400.4	2,404.9	2,384.7	20.24	118.838		
4,300.0	4,294.8	4,417.8	4,337.2	8.2	15.9	-89.07	270.2	-2,399.5	2,403.5	2,383.0	20.54	117.037		
4,400.0	4,394.6	4,524.3	4,443.7	8.4	16.0	-89.16	272.3	-2,398.6	2,402.7	2,381.9	20.85	115.244		
4,500.0	4,494.5	4,609.2	4,528.6	8.6	16.0	-89.27	272.2	-2,398.0	2,401.9	2,380.8	21.12	113.701		
4,600.0	4,594.3	4,699.0	4,618.4	8.8	16.1	-89.39	272.1	-2,397.9	2,401.7	2,380.3	21.40	112.206		
4,601.4	4,595.8	4,699.0	4,618.4	8.8	16.1	-89.39	272.1	-2,397.9	2,401.7	2,380.3	21.41	112.191 CC, ES		
4,700.0	4,694.2	4,777.4	4,696.7	9.0	16.2	-89.50	271.8	-2,398.3	2,402.2	2,380.6	21.67	110.858		
4,800.0	4,794.0	4,874.0	4,793.3	9.2	16.2	-89.64	271.1	-2,399.6	2,403.5	2,381.5	21.95	109.502		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,893.9	4,963.9	4,883.3	9.4	16.3	-89.78	270.2	-2,401.0	2,405.0	2,382.8	22.22	108.243		
5,000.0	4,993.7	5,068.9	4,988.2	9.6	16.4	-89.95	268.7	-2,402.4	2,406.3	2,383.8	22.50	106.942		
5,100.0	5,093.6	5,166.4	5,085.7	9.8	16.4	-90.10	267.5	-2,403.7	2,407.6	2,384.8	22.78	105.669		
5,200.0	5,193.5	5,264.6	5,183.8	10.0	16.5	-90.26	266.4	-2,405.0	2,408.9	2,385.9	23.07	104.409		
5,300.0	5,293.3	5,363.7	5,283.0	10.2	16.6	-90.40	265.6	-2,406.4	2,410.4	2,387.0	23.37	103.154		
5,400.0	5,393.2	5,467.0	5,386.3	10.4	16.7	-90.55	265.0	-2,407.9	2,411.8	2,388.1	23.67	101.878		
5,500.0	5,493.0	5,572.0	5,491.2	10.6	16.8	-90.69	264.8	-2,409.1	2,413.0	2,389.0	23.99	100.597		
5,600.0	5,592.9	5,666.7	5,585.9	10.8	16.8	-90.81	265.0	-2,410.2	2,414.3	2,390.0	24.30	99.360		
5,700.0	5,692.7	5,762.1	5,681.3	11.0	16.9	-90.92	265.4	-2,411.5	2,415.8	2,391.1	24.61	98.154		
5,800.0	5,792.6	5,864.3	5,783.5	11.2	17.0	-91.04	266.0	-2,413.0	2,417.3	2,392.3	24.94	96.926		
5,900.0	5,892.4	5,967.1	5,886.3	11.4	17.1	-91.15	266.9	-2,414.3	2,418.7	2,393.4	25.27	95.711		
6,000.0	5,992.3	6,070.5	5,989.7	11.6	17.2	-91.26	268.0	-2,415.6	2,420.0	2,394.4	25.61	94.507		
6,100.0	6,092.1	6,175.9	6,095.1	11.8	17.4	-91.36	269.3	-2,416.6	2,421.1	2,395.1	25.95	93.285		
6,200.0	6,192.0	6,281.3	6,200.4	12.0	17.5	-91.45	271.2	-2,417.4	2,422.0	2,395.7	26.31	92.072		
6,300.0	6,291.8	6,380.5	6,299.6	12.2	17.6	-91.53	273.0	-2,418.1	2,422.8	2,396.1	26.65	90.928		
6,400.0	6,391.7	6,478.1	6,397.2	12.4	17.7	-91.62	274.6	-2,418.8	2,423.6	2,396.6	26.98	89.825		
6,500.0	6,491.5	6,572.7	6,491.8	12.6	17.8	-91.71	276.0	-2,419.6	2,424.6	2,397.3	27.31	88.773		
6,600.0	6,591.4	6,672.7	6,591.8	12.8	18.0	-91.80	277.4	-2,420.7	2,425.8	2,398.2	27.65	87.721		
6,700.0	6,691.2	6,777.9	6,697.0	13.0	18.1	-91.90	279.1	-2,421.6	2,426.9	2,398.9	28.01	86.654		
6,800.0	6,791.1	6,878.4	6,797.5	13.2	18.2	-91.99	280.7	-2,422.4	2,427.8	2,399.4	28.35	85.650		
6,900.0	6,890.9	6,980.4	6,899.4	13.4	18.3	-92.09	281.9	-2,423.2	2,428.7	2,400.0	28.69	84.664		
7,000.0	6,990.8	7,105.4	7,024.4	13.6	18.5	-92.20	284.0	-2,423.4	2,429.0	2,400.0	29.08	83.521		
7,024.2	7,014.9	7,135.7	7,054.7	13.6	18.5	-92.22	284.8	-2,423.2	2,429.0	2,399.8	29.18	83.243		
7,050.0	7,040.7	7,163.8	7,082.8	13.7	18.6	-93.87	285.5	-2,423.0	2,428.8	2,399.5	29.27	82.979		
7,100.0	7,090.7	7,215.5	7,134.5	13.7	18.7	89.58	286.9	-2,422.7	2,428.5	2,399.0	29.42	82.534		
7,150.0	7,140.5	7,266.8	7,185.8	13.8	18.7	89.25	288.3	-2,422.3	2,428.0	2,398.4	29.56	82.133		
7,200.0	7,189.9	7,317.7	7,236.6	13.8	18.8	89.38	289.6	-2,421.8	2,427.4	2,397.7	29.68	81.774		
7,250.0	7,238.6	7,364.1	7,283.0	13.8	18.9	89.63	290.8	-2,421.4	2,426.9	2,397.1	29.78	81.486		
7,300.0	7,286.4	7,409.6	7,328.5	13.7	19.0	89.97	292.0	-2,421.1	2,426.4	2,396.5	29.87	81.242		
7,350.0	7,333.1	7,454.0	7,372.9	13.7	19.0	90.37	293.0	-2,420.8	2,426.1	2,396.1	29.94	81.040		
7,390.6	7,370.0	7,489.0	7,407.9	13.7	19.1	90.73	293.8	-2,420.6	2,426.0	2,396.0	29.99	80.904		
7,400.0	7,378.5	7,497.8	7,416.7	13.6	19.1	90.82	294.0	-2,420.5	2,426.0	2,396.0	30.00	80.869		
7,450.0	7,422.2	7,546.8	7,465.7	13.6	19.2	91.38	295.1	-2,420.1	2,426.1	2,396.1	30.07	80.675		
7,500.0	7,464.1	7,593.7	7,512.6	13.5	19.2	91.96	296.2	-2,419.7	2,426.5	2,396.4	30.14	80.508		
7,550.0	7,504.1	7,638.2	7,557.1	13.5	19.3	92.54	297.2	-2,419.2	2,427.3	2,397.1	30.20	80.362		
7,600.0	7,541.8	7,678.4	7,597.3	13.5	19.4	93.07	298.1	-2,418.6	2,428.6	2,398.4	30.26	80.246		
7,650.0	7,577.2	7,712.5	7,631.3	13.4	19.4	93.49	299.0	-2,418.1	2,430.6	2,400.3	30.32	80.162		
7,700.0	7,610.0	7,743.9	7,662.7	13.5	19.5	93.83	299.7	-2,417.7	2,433.3	2,403.0	30.39	80.073		
7,750.0	7,640.2	7,772.7	7,691.5	13.5	19.5	94.09	300.4	-2,417.3	2,437.0	2,406.5	30.48	79.965		
7,800.0	7,667.4	7,798.5	7,717.3	13.6	19.5	94.24	301.0	-2,416.9	2,441.6	2,411.0	30.59	79.824		
7,850.0	7,691.7	7,821.4	7,740.2	13.7	19.6	94.26	301.6	-2,416.6	2,447.2	2,416.4	30.73	79.636		
7,900.0	7,712.8	7,842.0	7,760.8	13.9	19.6	94.17	302.1	-2,416.3	2,453.8	2,422.9	30.91	79.385		
7,950.0	7,730.8	7,857.9	7,776.7	14.1	19.6	93.89	302.5	-2,416.1	2,461.6	2,430.5	31.13	79.077		
8,000.0	7,745.5	7,871.5	7,790.2	14.4	19.7	93.48	302.8	-2,415.9	2,470.5	2,439.1	31.39	78.693		
8,050.0	7,756.7	7,881.6	7,800.4	14.7	19.7	92.89	303.1	-2,415.8	2,480.5	2,448.8	31.70	78.238		
8,100.0	7,764.6	7,888.3	7,807.1	15.1	19.7	92.14	303.2	-2,415.7	2,491.6	2,459.6	32.06	77.716		
8,150.0	7,769.0	7,891.6	7,810.3	15.5	19.7	91.21	303.3	-2,415.6	2,503.8	2,471.4	32.46	77.137		
8,188.1	7,770.0	7,891.7	7,810.4	15.9	19.7	90.39	303.3	-2,415.6	2,513.8	2,481.0	32.79	76.665		
8,200.0	7,770.0	7,891.4	7,810.1	16.0	19.7	90.38	303.3	-2,415.6	2,517.0	2,484.1	32.90	76.507		
8,300.0	7,770.0	7,889.0	7,807.8	17.0	19.7	90.33	303.2	-2,415.7	2,546.2	2,512.3	33.89	75.121		
8,400.0	7,770.0	7,886.7	7,805.4	18.1	19.7	90.27	303.2	-2,415.7	2,578.8	2,543.8	35.00	73.672		
8,500.0	7,770.0	7,884.3	7,803.0	19.3	19.7	90.21	303.1	-2,415.7	2,614.9	2,578.7	36.21	72.216		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,600.0	7,770.0	7,881.9	7,800.7	20.6	19.7	90.16	303.1	-2,415.8	2,654.3	2,616.8	37.49	70.793		
8,700.0	7,770.0	7,879.5	7,798.3	21.9	19.7	90.10	303.0	-2,415.8	2,696.8	2,658.0	38.84	69.429		
8,800.0	7,770.0	7,877.1	7,795.8	23.3	19.7	90.04	302.9	-2,415.8	2,742.3	2,702.1	40.24	68.140		
8,900.0	7,770.0	7,874.7	7,793.4	24.8	19.7	89.99	302.9	-2,415.9	2,790.6	2,748.9	41.69	66.936		
9,000.0	7,770.0	7,872.2	7,791.0	26.3	19.7	89.93	302.8	-2,415.9	2,841.7	2,798.5	43.17	65.818		
9,100.0	7,770.0	7,869.8	7,788.6	27.8	19.7	89.87	302.8	-2,415.9	2,895.2	2,850.6	44.69	64.786		
9,200.0	7,770.0	7,867.4	7,786.1	29.3	19.7	89.81	302.7	-2,416.0	2,951.2	2,905.0	46.23	63.839		
9,300.0	7,770.0	7,864.9	7,783.7	30.9	19.6	89.76	302.7	-2,416.0	3,009.5	2,961.7	47.79	62.971		
9,400.0	7,770.0	7,862.4	7,781.2	32.5	19.6	89.70	302.6	-2,416.0	3,070.0	3,020.6	49.37	62.177		
9,500.0	7,770.0	7,859.9	7,778.7	34.1	19.6	89.64	302.5	-2,416.1	3,132.4	3,081.4	50.97	61.453		
9,600.0	7,770.0	7,857.4	7,776.2	35.7	19.6	89.58	302.5	-2,416.1	3,196.8	3,144.2	52.58	60.793		
9,700.0	7,770.0	7,854.9	7,773.7	37.3	19.6	89.52	302.4	-2,416.1	3,262.9	3,208.7	54.21	60.191		
9,800.0	7,770.0	7,852.4	7,771.2	39.0	19.6	89.46	302.4	-2,416.2	3,330.8	3,274.9	55.84	59.644		
9,900.0	7,770.0	7,849.9	7,768.7	40.6	19.6	89.40	302.3	-2,416.2	3,400.2	3,342.7	57.49	59.145		
10,000.0	7,770.0	7,847.4	7,766.1	42.3	19.6	89.34	302.2	-2,416.2	3,471.1	3,412.0	59.14	58.691		
10,100.0	7,770.0	7,844.8	7,763.6	44.0	19.6	89.28	302.2	-2,416.3	3,543.4	3,482.6	60.80	58.278		
10,200.0	7,770.0	7,842.3	7,761.0	45.6	19.6	89.22	302.1	-2,416.3	3,617.1	3,554.6	62.47	57.902		
10,300.0	7,770.0	7,839.8	7,758.6	47.3	19.6	89.16	302.0	-2,416.3	3,691.9	3,627.8	64.14	57.559		
10,400.0	7,770.0	7,837.5	7,756.2	49.0	19.6	89.11	302.0	-2,416.4	3,768.0	3,702.2	65.82	57.247		
10,500.0	7,770.0	7,835.1	7,753.8	50.7	19.6	89.05	301.9	-2,416.4	3,845.1	3,777.6	67.50	56.963		
10,600.0	7,770.0	7,832.7	7,751.5	52.4	19.6	88.99	301.9	-2,416.4	3,923.3	3,854.1	69.19	56.704		
10,700.0	7,770.0	7,830.3	7,749.1	54.1	19.6	88.94	301.8	-2,416.5	4,002.4	3,931.5	70.88	56.468		
10,800.0	7,770.0	7,827.9	7,746.7	55.8	19.6	88.88	301.8	-2,416.5	4,082.5	4,009.9	72.57	56.253		
10,900.0	7,770.0	7,825.5	7,744.3	57.5	19.6	88.82	301.7	-2,416.5	4,163.4	4,089.1	74.27	56.057		
11,000.0	7,770.0	7,823.2	7,741.9	59.2	19.6	88.77	301.6	-2,416.6	4,245.1	4,169.1	75.97	55.878		
11,100.0	7,770.0	7,820.8	7,739.6	60.9	19.6	88.71	301.6	-2,416.6	4,327.6	4,249.9	77.67	55.715		
11,200.0	7,770.0	7,818.4	7,737.2	62.6	19.6	88.66	301.5	-2,416.6	4,410.8	4,331.4	79.38	55.567		
11,300.0	7,770.0	7,816.0	7,734.8	64.3	19.6	88.60	301.5	-2,416.7	4,494.7	4,413.6	81.09	55.431		
11,400.0	7,770.0	7,813.6	7,732.4	66.0	19.6	88.54	301.4	-2,416.7	4,579.2	4,496.5	82.80	55.308		
11,500.0	7,770.0	7,811.3	7,730.1	67.7	19.6	88.49	301.4	-2,416.7	4,664.4	4,579.9	84.51	55.196		
11,600.0	7,770.0	7,808.9	7,727.7	69.5	19.6	88.43	301.3	-2,416.8	4,750.1	4,663.9	86.22	55.094		
11,700.0	7,770.0	7,806.5	7,725.3	71.2	19.6	88.38	301.2	-2,416.8	4,836.4	4,748.5	87.93	55.001		
11,800.0	7,770.0	7,804.2	7,722.9	72.9	19.6	88.32	301.2	-2,416.8	4,923.2	4,833.6	89.65	54.917		
11,900.0	7,770.0	7,801.8	7,720.6	74.6	19.6	88.26	301.1	-2,416.9	5,010.5	4,919.1	91.36	54.840		
12,000.0	7,770.0	7,799.4	7,718.2	76.4	19.5	88.21	301.1	-2,416.9	5,098.2	5,005.2	93.08	54.771		
12,100.0	7,770.0	7,797.1	7,715.9	78.1	19.5	88.15	301.0	-2,416.9	5,186.4	5,091.6	94.80	54.708		
12,200.0	7,770.0	7,794.7	7,713.5	79.8	19.5	88.10	300.9	-2,417.0	5,275.1	5,178.5	96.52	54.651		
12,300.0	7,770.0	7,792.3	7,711.1	81.5	19.5	88.04	300.9	-2,417.0	5,364.1	5,265.8	98.24	54.600		
12,400.0	7,770.0	7,790.0	7,708.8	83.3	19.5	87.99	300.8	-2,417.0	5,453.5	5,353.5	99.96	54.554		
12,500.0	7,770.0	7,787.6	7,706.4	85.0	19.5	87.93	300.8	-2,417.1	5,543.2	5,441.5	101.69	54.513		
12,600.0	7,770.0	7,785.3	7,704.1	86.7	19.5	87.87	300.7	-2,417.1	5,633.3	5,529.9	103.41	54.475		
12,700.0	7,770.0	7,782.9	7,701.7	88.5	19.5	87.82	300.7	-2,417.1	5,723.7	5,618.6	105.13	54.442		
12,800.0	7,770.0	7,780.6	7,699.4	90.2	19.5	87.76	300.6	-2,417.2	5,814.5	5,707.6	106.86	54.413		
12,900.0	7,770.0	7,778.2	7,697.0	91.9	19.5	87.71	300.5	-2,417.2	5,905.5	5,796.9	108.58	54.387		
13,000.0	7,770.0	7,775.9	7,694.7	93.7	19.5	87.65	300.5	-2,417.2	5,996.8	5,886.5	110.31	54.364		
13,100.0	7,770.0	7,773.5	7,692.3	95.4	19.5	87.60	300.4	-2,417.2	6,088.4	5,976.4	112.04	54.344		
13,200.0	7,770.0	7,771.2	7,690.0	97.1	19.5	87.54	300.4	-2,417.3	6,180.3	6,066.5	113.76	54.327		
13,300.0	7,770.0	7,768.8	7,687.6	98.9	19.5	87.49	300.3	-2,417.3	6,272.4	6,156.9	115.49	54.312		
13,400.0	7,770.0	7,766.5	7,685.3	100.6	19.5	87.43	300.3	-2,417.3	6,364.7	6,247.5	117.22	54.299		
13,500.0	7,770.0	7,764.1	7,682.9	102.4	19.5	87.38	300.2	-2,417.4	6,457.3	6,338.4	118.94	54.289		
13,600.0	7,770.0	7,761.8	7,680.6	104.1	19.5	87.32	300.1	-2,417.4	6,550.1	6,429.4	120.67	54.281		
13,700.0	7,770.0	7,759.4	7,678.2	105.8	19.5	87.26	300.1	-2,417.4	6,643.1	6,520.7	122.40	54.274		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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		
13,800.0	7,770.0	7,757.1	7,675.9	107.6	19.5	87.21	300.0	-2,417.5	6,736.3	6,612.1	124.13	54.269		
13,900.0	7,770.0	7,754.8	7,673.6	109.3	19.5	87.15	300.0	-2,417.5	6,829.7	6,703.8	125.86	54.266		
14,000.0	7,770.0	7,752.4	7,671.2	111.1	19.5	87.10	299.9	-2,417.5	6,923.2	6,795.6	127.58	54.264		
14,100.0	7,770.0	7,750.1	7,668.9	112.8	19.5	87.04	299.9	-2,417.6	7,017.0	6,887.7	129.31	54.264 SF		
14,200.0	7,770.0	7,747.8	7,666.6	114.5	19.5	86.99	299.8	-2,417.6	7,110.9	6,979.8	131.04	54.264		
14,300.0	7,770.0	7,745.4	7,664.2	116.3	19.5	86.93	299.8	-2,417.6	7,205.0	7,072.2	132.77	54.266		
14,400.0	7,770.0	7,743.1	7,661.9	118.0	19.5	86.88	299.7	-2,417.7	7,299.2	7,164.7	134.50	54.269		
14,500.0	7,770.0	7,740.8	7,659.6	119.8	19.5	86.83	299.6	-2,417.7	7,393.6	7,257.3	136.23	54.274		
14,600.0	7,770.0	7,738.4	7,657.3	121.5	19.5	86.77	299.6	-2,417.7	7,488.1	7,350.1	137.96	54.279		
14,700.0	7,770.0	7,736.1	7,654.9	123.3	19.4	86.72	299.5	-2,417.8	7,582.8	7,443.1	139.69	54.284		
14,800.0	7,770.0	7,733.8	7,652.6	125.0	19.4	86.66	299.5	-2,417.8	7,677.6	7,536.2	141.42	54.291		
14,900.0	7,770.0	7,731.5	7,650.3	126.7	19.4	86.61	299.4	-2,417.8	7,772.5	7,629.4	143.14	54.298		
15,000.0	7,770.0	7,729.1	7,648.0	128.5	19.4	86.55	299.4	-2,417.9	7,867.6	7,722.7	144.87	54.307		
15,100.0	7,770.0	7,726.8	7,645.6	130.2	19.4	86.50	299.3	-2,417.9	7,962.8	7,816.2	146.60	54.315		
15,200.0	7,770.0	7,724.5	7,643.3	132.0	19.4	86.44	299.2	-2,417.9	8,058.0	7,909.7	148.33	54.325		
15,300.0	7,770.0	7,722.2	7,641.0	133.7	19.4	86.39	299.2	-2,418.0	8,153.5	8,003.4	150.06	54.335		
15,400.0	7,770.0	7,719.9	7,638.7	135.5	19.4	86.33	299.1	-2,418.0	8,249.0	8,097.2	151.79	54.345		
15,500.0	7,770.0	7,717.6	7,636.4	137.2	19.4	86.28	299.1	-2,418.0	8,344.6	8,191.1	153.52	54.356		
15,600.0	7,770.0	7,715.2	7,634.1	139.0	19.4	86.22	299.0	-2,418.1	8,440.3	8,285.1	155.25	54.367		
15,700.0	7,770.0	7,712.9	7,631.8	140.7	19.4	86.17	299.0	-2,418.1	8,536.1	8,379.2	156.97	54.379		
15,800.0	7,770.0	7,710.6	7,629.4	142.4	19.4	86.12	298.9	-2,418.1	8,632.0	8,473.3	158.70	54.391		
15,900.0	7,770.0	7,708.3	7,627.1	144.2	19.4	86.06	298.9	-2,418.2	8,728.0	8,567.6	160.43	54.404		
16,000.0	7,770.0	7,706.0	7,624.8	145.9	19.4	86.01	298.8	-2,418.2	8,824.1	8,662.0	162.16	54.417		
16,100.0	7,770.0	7,703.7	7,622.5	147.7	19.4	85.95	298.7	-2,418.2	8,920.3	8,756.4	163.89	54.430		
16,200.0	7,770.0	7,701.4	7,620.2	149.4	19.4	85.90	298.7	-2,418.3	9,016.6	8,851.0	165.61	54.443		
16,300.0	7,770.0	7,699.1	7,617.9	151.2	19.4	85.85	298.6	-2,418.3	9,112.9	8,945.6	167.34	54.457		
16,400.0	7,770.0	7,696.8	7,615.6	152.9	19.4	85.79	298.6	-2,418.3	9,209.3	9,040.3	169.07	54.471		
16,500.0	7,770.0	7,694.5	7,613.3	154.7	19.4	85.74	298.5	-2,418.4	9,305.8	9,135.0	170.80	54.485		
16,600.0	7,770.0	7,692.2	7,611.0	156.4	19.4	85.68	298.5	-2,418.4	9,402.4	9,229.9	172.52	54.500		
16,700.0	7,770.0	7,689.9	7,608.7	158.2	19.4	85.63	298.4	-2,418.4	9,499.0	9,324.8	174.25	54.514		
16,800.0	7,770.0	7,687.6	7,606.4	159.9	19.4	85.58	298.4	-2,418.5	9,595.7	9,419.7	175.97	54.529		
16,900.0	7,770.0	7,685.3	7,604.1	161.7	19.4	85.52	298.3	-2,418.5	9,692.5	9,514.8	177.70	54.544		
17,000.0	7,770.0	7,683.0	7,601.8	163.4	19.4	85.47	298.3	-2,418.5	9,789.3	9,609.9	179.43	54.559		
17,100.0	7,770.0	7,680.7	7,599.5	165.2	19.4	85.41	298.2	-2,418.6	9,886.2	9,705.1	181.15	54.574		
17,200.0	7,770.0	7,678.4	7,597.3	166.9	19.4	85.36	298.1	-2,418.6	9,983.2	9,800.3	182.88	54.590		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-128.70	-188.3	-235.1	301.2					
100.0	100.0	97.0	97.0	0.2	0.2	-128.70	-188.3	-235.1	301.2	300.9	0.32	937.385		
200.0	200.0	197.0	197.0	0.3	0.3	-128.70	-188.3	-235.1	301.2	300.5	0.67	449.310		
300.0	300.0	297.0	297.0	0.5	0.5	-128.70	-188.3	-235.1	301.2	300.2	1.02	295.467		
400.0	400.0	397.0	397.0	0.7	0.7	-128.70	-188.3	-235.1	301.2	299.8	1.37	220.103		
500.0	500.0	497.0	497.0	0.8	0.9	-128.70	-188.3	-235.1	301.2	299.5	1.72	175.372		
550.0	550.0	547.0	547.0	0.9	1.0	-128.70	-188.3	-235.1	301.2	299.3	1.89	159.196		
600.0	600.0	597.0	597.0	1.0	1.0	-129.57	-188.3	-235.1	301.4	299.3	2.07	145.819		
700.0	700.0	697.0	697.0	1.2	1.2	-129.81	-188.3	-235.1	302.5	300.1	2.42	125.186		
800.0	799.9	796.9	796.9	1.4	1.4	-130.30	-188.3	-235.1	304.7	302.0	2.77	110.104		
861.1	860.9	857.9	857.9	1.5	1.5	-130.71	-188.3	-235.1	306.7	303.7	2.98	102.788		
900.0	899.8	896.8	896.8	1.6	1.6	-131.01	-188.3	-235.1	308.0	304.9	3.12	98.681		
1,000.0	999.6	996.6	996.6	1.8	1.7	-131.76	-188.3	-235.1	311.6	308.2	3.48	89.614		
1,100.0	1,099.5	1,096.5	1,096.5	1.9	1.9	-132.49	-188.3	-235.1	315.3	311.4	3.83	82.226		
1,200.0	1,199.3	1,196.3	1,196.3	2.1	2.1	-133.21	-188.3	-235.1	319.0	314.8	4.19	76.099		
1,300.0	1,299.2	1,296.2	1,296.2	2.3	2.3	-133.91	-188.3	-235.1	322.7	318.2	4.55	70.942		
1,400.0	1,399.1	1,396.1	1,396.1	2.5	2.4	-134.60	-188.3	-235.1	326.5	321.6	4.91	66.544		
1,500.0	1,498.9	1,495.9	1,495.9	2.7	2.6	-135.27	-188.3	-235.1	330.3	325.1	5.26	62.753		
1,600.0	1,598.8	1,595.8	1,595.8	2.9	2.8	-135.92	-188.3	-235.1	334.2	328.6	5.62	59.454		
1,700.0	1,698.6	1,695.6	1,695.6	3.1	3.0	-136.56	-188.3	-235.1	338.1	332.2	5.98	56.558		
1,800.0	1,798.5	1,795.5	1,795.5	3.3	3.1	-137.19	-188.3	-235.1	342.1	335.8	6.34	53.996		
1,900.0	1,898.3	1,895.3	1,895.3	3.5	3.3	-137.80	-188.3	-235.1	346.1	339.4	6.69	51.716		
2,000.0	1,998.2	1,995.2	1,995.2	3.7	3.5	-138.39	-188.3	-235.1	350.2	343.1	7.05	49.674		
2,100.0	2,098.0	2,095.0	2,095.0	3.9	3.7	-138.98	-188.3	-235.1	354.2	346.8	7.41	47.836		
2,200.0	2,197.9	2,194.9	2,194.9	4.1	3.8	-139.55	-188.3	-235.1	358.3	350.6	7.76	46.172		
2,300.0	2,297.7	2,294.7	2,294.7	4.3	4.0	-140.10	-188.3	-235.1	362.5	354.4	8.12	44.660		
2,400.0	2,397.6	2,394.6	2,394.6	4.5	4.2	-140.65	-188.3	-235.1	366.7	358.2	8.47	43.281		
2,500.0	2,497.4	2,494.4	2,494.4	4.7	4.4	-141.18	-188.3	-235.1	370.9	362.1	8.83	42.018		
2,600.0	2,597.3	2,594.3	2,594.3	4.9	4.5	-141.70	-188.3	-235.1	375.1	366.0	9.18	40.857		
2,700.0	2,697.1	2,694.1	2,694.1	5.1	4.7	-142.20	-188.3	-235.1	379.4	369.9	9.54	39.786		
2,800.0	2,797.0	2,794.0	2,794.0	5.3	4.9	-142.70	-188.3	-235.1	383.7	373.8	9.89	38.797		
2,900.0	2,896.8	2,893.8	2,893.8	5.5	5.1	-143.19	-188.3	-235.1	388.0	377.8	10.24	37.879		
3,000.0	2,996.7	2,993.7	2,993.7	5.7	5.2	-143.66	-188.3	-235.1	392.4	381.8	10.60	37.027		
3,100.0	3,096.5	3,093.5	3,093.5	5.9	5.4	-144.12	-188.3	-235.1	396.8	385.8	10.95	36.232		
3,200.0	3,196.4	3,193.4	3,193.4	6.1	5.6	-144.58	-188.3	-235.1	401.2	389.9	11.30	35.490		
3,300.0	3,296.3	3,293.3	3,293.3	6.3	5.7	-145.02	-188.3	-235.1	405.6	394.0	11.66	34.796		
3,400.0	3,396.1	3,393.1	3,393.1	6.5	5.9	-145.46	-188.3	-235.1	410.1	398.1	12.01	34.146		
3,500.0	3,496.0	3,493.0	3,493.0	6.7	6.1	-145.88	-188.3	-235.1	414.6	402.2	12.36	33.535		
3,600.0	3,595.8	3,592.8	3,592.8	6.9	6.3	-146.30	-188.3	-235.1	419.1	406.4	12.72	32.960		
3,700.0	3,695.7	3,692.7	3,692.7	7.0	6.4	-146.70	-188.3	-235.1	423.6	410.6	13.07	32.418		
3,800.0	3,795.5	3,792.5	3,792.5	7.2	6.6	-147.10	-188.3	-235.1	428.2	414.7	13.42	31.907		
3,900.0	3,895.4	3,892.4	3,892.4	7.4	6.8	-147.49	-188.3	-235.1	432.7	419.0	13.77	31.424		
4,000.0	3,995.2	3,992.2	3,992.2	7.6	7.0	-147.87	-188.3	-235.1	437.3	423.2	14.12	30.966		
4,100.0	4,095.1	4,092.1	4,092.1	7.8	7.1	-148.25	-188.3	-235.1	441.9	427.5	14.47	30.533		
4,200.0	4,194.9	4,191.9	4,191.9	8.0	7.3	-148.61	-188.3	-235.1	446.6	431.7	14.83	30.121		
4,300.0	4,294.8	4,291.8	4,291.8	8.2	7.5	-148.97	-188.3	-235.1	451.2	436.0	15.18	29.730		
4,400.0	4,394.6	4,391.6	4,391.6	8.4	7.7	-149.33	-188.3	-235.1	455.9	440.3	15.53	29.358		
4,500.0	4,494.5	4,491.5	4,491.5	8.6	7.8	-149.67	-188.3	-235.1	460.5	444.7	15.88	29.004		
4,600.0	4,594.3	4,591.3	4,591.3	8.8	8.0	-150.01	-188.3	-235.1	465.2	449.0	16.23	28.667		
4,700.0	4,694.2	4,691.2	4,691.2	9.0	8.2	-150.34	-188.3	-235.1	469.9	453.4	16.58	28.345		
4,800.0	4,794.0	4,791.0	4,791.0	9.2	8.4	-150.66	-188.3	-235.1	474.7	457.7	16.93	28.037		
4,900.0	4,893.9	4,890.9	4,890.9	9.4	8.5	-150.98	-188.3	-235.1	479.4	462.1	17.28	27.743		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,000.0	4,993.7	4,990.7	4,990.7	9.6	8.7	-151.29	-188.3	-235.1	484.2	466.5	17.63	27.462		
5,100.0	5,093.6	5,090.6	5,090.6	9.8	8.9	-151.60	-188.3	-235.1	488.9	470.9	17.98	27.192		
5,200.0	5,193.5	5,190.5	5,190.5	10.0	9.1	-151.90	-188.3	-235.1	493.7	475.4	18.33	26.934		
5,300.0	5,293.3	5,290.3	5,290.3	10.2	9.2	-152.19	-188.3	-235.1	498.5	479.8	18.68	26.686		
5,400.0	5,393.2	5,390.2	5,390.2	10.4	9.4	-152.48	-188.3	-235.1	503.3	484.3	19.03	26.448		
5,500.0	5,493.0	5,490.0	5,490.0	10.6	9.6	-152.76	-188.3	-235.1	508.1	488.8	19.38	26.220		
5,600.0	5,592.9	5,589.9	5,589.9	10.8	9.8	-153.04	-188.3	-235.1	513.0	493.2	19.73	26.000		
5,700.0	5,692.7	5,689.7	5,689.7	11.0	9.9	-153.31	-188.3	-235.1	517.8	497.7	20.08	25.788		
5,800.0	5,792.6	5,789.6	5,789.6	11.2	10.1	-153.58	-188.3	-235.1	522.7	502.2	20.43	25.585		
5,900.0	5,892.4	5,889.4	5,889.4	11.4	10.3	-153.84	-188.3	-235.1	527.5	506.8	20.78	25.389		
6,000.0	5,992.3	5,989.3	5,989.3	11.6	10.5	-154.10	-188.3	-235.1	532.4	511.3	21.13	25.200		
6,100.0	6,092.1	6,089.1	6,089.1	11.8	10.6	-154.35	-188.3	-235.1	537.3	515.8	21.48	25.018		
6,200.0	6,192.0	6,189.0	6,189.0	12.0	10.8	-154.60	-188.3	-235.1	542.2	520.4	21.83	24.842		
6,300.0	6,291.8	6,288.8	6,288.8	12.2	11.0	-154.84	-188.3	-235.1	547.1	524.9	22.17	24.672		
6,400.0	6,391.7	6,388.7	6,388.7	12.4	11.2	-155.08	-188.3	-235.1	552.0	529.5	22.52	24.508		
6,500.0	6,491.5	6,488.5	6,488.5	12.6	11.3	-155.32	-188.3	-235.1	556.9	534.1	22.87	24.350		
6,600.0	6,591.4	6,588.4	6,588.4	12.8	11.5	-155.55	-188.3	-235.1	561.9	538.7	23.22	24.196		
6,700.0	6,691.2	6,688.2	6,688.2	13.0	11.7	-155.77	-188.3	-235.1	566.8	543.3	23.57	24.048		
6,800.0	6,791.1	6,788.1	6,788.1	13.2	11.8	-156.00	-188.3	-235.1	571.8	547.9	23.92	23.904		
6,900.0	6,890.9	6,887.9	6,887.9	13.4	12.0	-156.22	-188.3	-235.1	576.7	552.5	24.27	23.765		
7,000.0	6,990.8	6,987.8	6,987.8	13.6	12.2	-156.43	-188.3	-235.1	581.7	557.1	24.62	23.630		
7,024.2	7,014.9	7,011.9	7,011.9	13.6	12.2	-156.48	-188.3	-235.1	582.9	558.2	24.70	23.598		
7,050.0	7,040.7	7,037.7	7,037.7	13.7	12.3	-158.20	-188.3	-235.1	583.8	559.0	24.80	23.543		
7,100.0	7,090.7	7,087.7	7,087.7	13.7	12.4	25.23	-188.3	-235.1	583.0	558.1	24.93	23.389		
7,150.0	7,140.5	7,137.5	7,137.5	13.8	12.5	25.04	-188.3	-235.1	579.1	554.1	24.99	23.171		
7,200.0	7,189.9	7,186.9	7,186.9	13.8	12.5	25.47	-188.3	-235.1	572.1	547.1	25.00	22.886		
7,250.0	7,238.6	7,235.6	7,235.6	13.8	12.6	26.26	-188.3	-235.1	561.9	537.0	24.94	22.532		
7,300.0	7,286.4	7,283.4	7,283.4	13.7	12.7	27.38	-188.3	-235.1	548.8	524.0	24.83	22.102		
7,350.0	7,333.1	7,330.1	7,330.1	13.7	12.8	28.87	-188.3	-235.1	532.8	508.1	24.68	21.585		
7,400.0	7,378.5	7,375.5	7,375.5	13.6	12.9	30.78	-188.3	-235.1	514.1	489.6	24.52	20.968		
7,450.0	7,422.2	7,419.2	7,419.2	13.6	12.9	33.17	-188.3	-235.1	492.8	468.5	24.35	20.236		
7,500.0	7,464.1	7,461.1	7,461.1	13.5	13.0	36.12	-188.3	-235.1	469.3	445.1	24.23	19.371		
7,550.0	7,504.1	7,501.1	7,501.1	13.5	13.1	39.72	-188.3	-235.1	443.8	419.6	24.18	18.356		
7,600.0	7,541.8	7,538.8	7,538.8	13.5	13.2	44.06	-188.3	-235.1	416.6	392.4	24.25	17.183		
7,650.0	7,577.2	7,574.2	7,574.2	13.4	13.2	49.18	-188.3	-235.1	388.3	363.9	24.48	15.865		
7,700.0	7,610.0	7,607.0	7,607.0	13.5	13.3	55.06	-188.3	-235.1	359.5	334.6	24.88	14.448		
7,750.0	7,640.2	7,637.2	7,637.2	13.5	13.3	61.55	-188.3	-235.1	331.0	305.5	25.44	13.010		
7,800.0	7,667.4	7,664.4	7,664.4	13.6	13.4	68.35	-188.3	-235.1	303.7	277.7	26.07	11.653		
7,850.0	7,691.7	7,688.7	7,688.7	13.7	13.4	75.02	-188.3	-235.1	279.2	252.6	26.67	10.470		
7,900.0	7,712.8	7,709.8	7,709.8	13.9	13.5	81.10	-188.3	-235.1	259.2	232.0	27.18	9.537		
7,950.0	7,730.8	7,727.8	7,727.8	14.1	13.5	86.15	-188.3	-235.1	245.7	218.2	27.58	8.909		
8,000.0	7,745.5	7,742.5	7,742.5	14.4	13.5	89.88	-188.3	-235.1	240.7	212.7	27.92	8.619		
8,002.0	7,746.0	7,743.0	7,743.0	14.4	13.5	90.00	-188.3	-235.1	240.7	212.7	27.94	8.615 CC, ES, SF		
8,050.0	7,756.7	7,753.7	7,753.7	14.7	13.5	92.13	-188.3	-235.1	245.2	216.9	28.25	8.678		
8,100.0	7,764.6	7,761.6	7,761.6	15.1	13.5	92.80	-188.3	-235.1	259.2	230.5	28.63	9.054		
8,150.0	7,769.0	7,766.0	7,766.0	15.5	13.6	91.84	-188.3	-235.1	281.5	252.4	29.06	9.687		
8,188.1	7,770.0	7,767.0	7,767.0	15.9	13.6	90.00	-188.3	-235.1	302.9	273.5	29.41	10.301		
8,200.0	7,770.0	7,767.0	7,767.0	16.0	13.6	90.00	-188.3	-235.1	310.3	280.8	29.52	10.513		
8,300.0	7,770.0	7,767.0	7,767.0	17.0	13.6	90.00	-188.3	-235.1	381.4	350.9	30.52	12.499		
8,400.0	7,770.0	7,767.0	7,767.0	18.1	13.6	90.00	-188.3	-235.1	463.3	431.7	31.63	14.647		
8,500.0	7,770.0	7,767.0	7,767.0	19.3	13.6	90.00	-188.3	-235.1	551.2	518.4	32.84	16.784		
8,600.0	7,770.0	7,767.0	7,767.0	20.6	13.6	90.00	-188.3	-235.1	642.7	608.5	34.13	18.830		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,700.0	7,770.0	7,767.0	7,767.0	21.9	13.6	90.00	-188.3	-235.1	736.3	700.9	35.48	20.752		
8,800.0	7,770.0	7,767.0	7,767.0	23.3	13.6	90.00	-188.3	-235.1	831.5	794.6	36.89	22.540		
8,900.0	7,770.0	7,767.0	7,767.0	24.8	13.6	90.00	-188.3	-235.1	927.7	889.3	38.34	24.196		
9,000.0	7,770.0	7,767.0	7,767.0	26.3	13.6	90.00	-188.3	-235.1	1,024.6	984.7	39.83	25.725		
9,100.0	7,770.0	7,767.0	7,767.0	27.8	13.6	90.00	-188.3	-235.1	1,122.0	1,080.7	41.35	27.137		
9,200.0	7,770.0	7,767.0	7,767.0	29.3	13.6	90.00	-188.3	-235.1	1,219.9	1,177.0	42.89	28.440		
9,300.0	7,770.0	7,767.0	7,767.0	30.9	13.6	90.00	-188.3	-235.1	1,318.1	1,273.6	44.46	29.646		
9,400.0	7,770.0	7,767.0	7,767.0	32.5	13.6	90.00	-188.3	-235.1	1,416.5	1,370.5	46.05	30.762		
9,500.0	7,770.0	7,767.0	7,767.0	34.1	13.6	90.00	-188.3	-235.1	1,515.1	1,467.5	47.65	31.798		
9,600.0	7,770.0	7,767.0	7,767.0	35.7	13.6	90.00	-188.3	-235.1	1,613.9	1,564.7	49.27	32.759		
9,700.0	7,770.0	7,767.0	7,767.0	37.3	13.6	90.00	-188.3	-235.1	1,712.9	1,662.0	50.90	33.655		
9,800.0	7,770.0	7,767.0	7,767.0	39.0	13.6	90.00	-188.3	-235.1	1,812.0	1,759.4	52.54	34.489		
9,900.0	7,770.0	7,767.0	7,767.0	40.6	13.6	90.00	-188.3	-235.1	1,911.1	1,856.9	54.19	35.269		
10,000.0	7,770.0	7,767.0	7,767.0	42.3	13.6	90.00	-188.3	-235.1	2,010.4	1,954.5	55.84	35.999		
10,100.0	7,770.0	7,767.0	7,767.0	44.0	13.6	90.00	-188.3	-235.1	2,109.7	2,052.2	57.51	36.683		
10,200.0	7,770.0	7,767.0	7,767.0	45.6	13.6	90.00	-188.3	-235.1	2,209.1	2,149.9	59.18	37.326		
10,300.0	7,770.0	7,767.0	7,767.0	47.3	13.6	90.00	-188.3	-235.1	2,308.5	2,247.6	60.86	37.930		
10,400.0	7,770.0	7,767.0	7,767.0	49.0	13.6	90.00	-188.3	-235.1	2,408.0	2,345.4	62.54	38.500		
10,500.0	7,770.0	7,767.0	7,767.0	50.7	13.6	90.00	-188.3	-235.1	2,507.5	2,443.2	64.23	39.037		
10,600.0	7,770.0	7,767.0	7,767.0	52.4	13.6	90.00	-188.3	-235.1	2,607.0	2,541.1	65.93	39.545		
10,700.0	7,770.0	7,767.0	7,767.0	54.1	13.6	90.00	-188.3	-235.1	2,706.6	2,639.0	67.62	40.026		
10,800.0	7,770.0	7,767.0	7,767.0	55.8	13.6	90.00	-188.3	-235.1	2,806.2	2,736.9	69.32	40.481		
10,900.0	7,770.0	7,767.0	7,767.0	57.5	13.6	90.00	-188.3	-235.1	2,905.9	2,834.9	71.03	40.913		
11,000.0	7,770.0	7,767.0	7,767.0	59.2	13.6	90.00	-188.3	-235.1	3,005.6	2,932.8	72.73	41.324		
11,100.0	7,770.0	7,767.0	7,767.0	60.9	13.6	90.00	-188.3	-235.1	3,105.2	3,030.8	74.44	41.714		
11,200.0	7,770.0	7,767.0	7,767.0	62.6	13.6	90.00	-188.3	-235.1	3,205.0	3,128.8	76.15	42.086		
11,300.0	7,770.0	7,767.0	7,767.0	64.3	13.6	90.00	-188.3	-235.1	3,304.7	3,226.8	77.87	42.440		
11,400.0	7,770.0	7,767.0	7,767.0	66.0	13.6	90.00	-188.3	-235.1	3,404.4	3,324.8	79.58	42.779		
11,500.0	7,770.0	7,767.0	7,767.0	67.7	13.6	90.00	-188.3	-235.1	3,504.2	3,422.9	81.30	43.102		
11,600.0	7,770.0	7,767.0	7,767.0	69.5	13.6	90.00	-188.3	-235.1	3,603.9	3,520.9	83.02	43.411		
11,700.0	7,770.0	7,767.0	7,767.0	71.2	13.6	90.00	-188.3	-235.1	3,703.7	3,619.0	84.74	43.706		
11,800.0	7,770.0	7,767.0	7,767.0	72.9	13.6	90.00	-188.3	-235.1	3,803.5	3,717.1	86.46	43.990		
11,900.0	7,770.0	7,767.0	7,767.0	74.6	13.6	90.00	-188.3	-235.1	3,903.3	3,815.1	88.19	44.261		
12,000.0	7,770.0	7,767.0	7,767.0	76.4	13.6	90.00	-188.3	-235.1	4,003.1	3,913.2	89.91	44.522		
12,100.0	7,770.0	7,767.0	7,767.0	78.1	13.6	90.00	-188.3	-235.1	4,103.0	4,011.3	91.64	44.772		
12,200.0	7,770.0	7,767.0	7,767.0	79.8	13.6	90.00	-188.3	-235.1	4,202.8	4,109.4	93.37	45.013		
12,300.0	7,770.0	7,767.0	7,767.0	81.5	13.6	90.00	-188.3	-235.1	4,302.6	4,207.5	95.10	45.244		
12,400.0	7,770.0	7,767.0	7,767.0	83.3	13.6	90.00	-188.3	-235.1	4,402.5	4,305.7	96.83	45.467		
12,500.0	7,770.0	7,767.0	7,767.0	85.0	13.6	90.00	-188.3	-235.1	4,502.3	4,403.8	98.56	45.681		
12,600.0	7,770.0	7,767.0	7,767.0	86.7	13.6	90.00	-188.3	-235.1	4,602.2	4,501.9	100.29	45.888		
12,700.0	7,770.0	7,767.0	7,767.0	88.5	13.6	90.00	-188.3	-235.1	4,702.1	4,600.0	102.03	46.087		
12,800.0	7,770.0	7,767.0	7,767.0	90.2	13.6	90.00	-188.3	-235.1	4,801.9	4,698.2	103.76	46.280		
12,900.0	7,770.0	7,767.0	7,767.0	91.9	13.6	90.00	-188.3	-235.1	4,901.8	4,796.3	105.49	46.465		
13,000.0	7,770.0	7,767.0	7,767.0	93.7	13.6	90.00	-188.3	-235.1	5,001.7	4,894.5	107.23	46.645		
13,100.0	7,770.0	7,767.0	7,767.0	95.4	13.6	90.00	-188.3	-235.1	5,101.6	4,992.6	108.97	46.819		
13,200.0	7,770.0	7,767.0	7,767.0	97.1	13.6	90.00	-188.3	-235.1	5,201.5	5,090.8	110.70	46.986		
13,300.0	7,770.0	7,767.0	7,767.0	98.9	13.6	90.00	-188.3	-235.1	5,301.4	5,188.9	112.44	47.149		
13,400.0	7,770.0	7,767.0	7,767.0	100.6	13.6	90.00	-188.3	-235.1	5,401.3	5,287.1	114.18	47.306		
13,500.0	7,770.0	7,767.0	7,767.0	102.4	13.6	90.00	-188.3	-235.1	5,501.2	5,385.3	115.92	47.459		
13,600.0	7,770.0	7,767.0	7,767.0	104.1	13.6	90.00	-188.3	-235.1	5,601.1	5,483.4	117.65	47.606		
13,700.0	7,770.0	7,767.0	7,767.0	105.8	13.6	90.00	-188.3	-235.1	5,701.0	5,581.6	119.39	47.749		
13,800.0	7,770.0	7,767.0	7,767.0	107.6	13.6	90.00	-188.3	-235.1	5,800.9	5,679.8	121.13	47.888		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	7,767.0	7,767.0	109.3	13.6	90.00	-188.3	-235.1	5,900.8	5,777.9	122.87	48.023			
14,000.0	7,770.0	7,767.0	7,767.0	111.1	13.6	90.00	-188.3	-235.1	6,000.7	5,876.1	124.61	48.154			
14,100.0	7,770.0	7,767.0	7,767.0	112.8	13.6	90.00	-188.3	-235.1	6,100.7	5,974.3	126.36	48.281			
14,200.0	7,770.0	7,767.0	7,767.0	114.5	13.6	90.00	-188.3	-235.1	6,200.6	6,072.5	128.10	48.405			
14,300.0	7,770.0	7,767.0	7,767.0	116.3	13.6	90.00	-188.3	-235.1	6,300.5	6,170.7	129.84	48.525			
14,400.0	7,770.0	7,767.0	7,767.0	118.0	13.6	90.00	-188.3	-235.1	6,400.4	6,268.8	131.58	48.642			
14,500.0	7,770.0	7,767.0	7,767.0	119.8	13.6	90.00	-188.3	-235.1	6,500.4	6,367.0	133.32	48.756			
14,600.0	7,770.0	7,767.0	7,767.0	121.5	13.6	90.00	-188.3	-235.1	6,600.3	6,465.2	135.07	48.867			
14,700.0	7,770.0	7,767.0	7,767.0	123.3	13.6	90.00	-188.3	-235.1	6,700.2	6,563.4	136.81	48.974			
14,800.0	7,770.0	7,767.0	7,767.0	125.0	13.6	90.00	-188.3	-235.1	6,800.2	6,661.6	138.55	49.079			
14,900.0	7,770.0	7,767.0	7,767.0	126.7	13.6	90.00	-188.3	-235.1	6,900.1	6,759.8	140.30	49.182			
15,000.0	7,770.0	7,767.0	7,767.0	128.5	13.6	90.00	-188.3	-235.1	7,000.0	6,858.0	142.04	49.281			
15,100.0	7,770.0	7,767.0	7,767.0	130.2	13.6	90.00	-188.3	-235.1	7,100.0	6,956.2	143.79	49.378			
15,200.0	7,770.0	7,767.0	7,767.0	132.0	13.6	90.00	-188.3	-235.1	7,199.9	7,054.4	145.53	49.473			
15,300.0	7,770.0	7,767.0	7,767.0	133.7	13.6	90.00	-188.3	-235.1	7,299.9	7,152.6	147.28	49.566			
15,400.0	7,770.0	7,767.0	7,767.0	135.5	13.6	90.00	-188.3	-235.1	7,399.8	7,250.8	149.02	49.656			
15,500.0	7,770.0	7,767.0	7,767.0	137.2	13.6	90.00	-188.3	-235.1	7,499.8	7,349.0	150.77	49.744			
15,600.0	7,770.0	7,767.0	7,767.0	139.0	13.6	90.00	-188.3	-235.1	7,599.7	7,447.2	152.51	49.830			
15,700.0	7,770.0	7,767.0	7,767.0	140.7	13.6	90.00	-188.3	-235.1	7,699.7	7,545.4	154.26	49.914			
15,800.0	7,770.0	7,767.0	7,767.0	142.4	13.6	90.00	-188.3	-235.1	7,799.6	7,643.6	156.00	49.996			
15,900.0	7,770.0	7,767.0	7,767.0	144.2	13.6	90.00	-188.3	-235.1	7,899.6	7,741.8	157.75	50.076			
16,000.0	7,770.0	7,767.0	7,767.0	145.9	13.6	90.00	-188.3	-235.1	7,999.5	7,840.0	159.50	50.155			
16,100.0	7,770.0	7,767.0	7,767.0	147.7	13.6	90.00	-188.3	-235.1	8,099.5	7,938.2	161.24	50.231			
16,200.0	7,770.0	7,767.0	7,767.0	149.4	13.6	90.00	-188.3	-235.1	8,199.4	8,036.4	162.99	50.306			
16,300.0	7,770.0	7,767.0	7,767.0	151.2	13.6	90.00	-188.3	-235.1	8,299.4	8,134.7	164.74	50.379			
16,400.0	7,770.0	7,767.0	7,767.0	152.9	13.6	90.00	-188.3	-235.1	8,399.4	8,232.9	166.48	50.451			
16,500.0	7,770.0	7,767.0	7,767.0	154.7	13.6	90.00	-188.3	-235.1	8,499.3	8,331.1	168.23	50.521			
16,600.0	7,770.0	7,767.0	7,767.0	156.4	13.6	90.00	-188.3	-235.1	8,599.3	8,429.3	169.98	50.590			
16,700.0	7,770.0	7,767.0	7,767.0	158.2	13.6	90.00	-188.3	-235.1	8,699.2	8,527.5	171.73	50.657			
16,800.0	7,770.0	7,767.0	7,767.0	159.9	13.6	90.00	-188.3	-235.1	8,799.2	8,625.7	173.47	50.723			
16,900.0	7,770.0	7,767.0	7,767.0	161.7	13.6	90.00	-188.3	-235.1	8,899.2	8,723.9	175.22	50.788			
17,000.0	7,770.0	7,767.0	7,767.0	163.4	13.6	90.00	-188.3	-235.1	8,999.1	8,822.2	176.97	50.851			
17,100.0	7,770.0	7,767.0	7,767.0	165.2	13.6	90.00	-188.3	-235.1	9,099.1	8,920.4	178.72	50.913			
17,200.0	7,770.0	7,767.0	7,767.0	166.9	13.6	90.00	-188.3	-235.1	9,199.1	9,018.6	180.47	50.974			
17,300.0	7,770.0	7,767.0	7,767.0	168.7	13.6	90.00	-188.3	-235.1	9,299.0	9,116.8	182.22	51.033			
17,400.0	7,770.0	7,767.0	7,767.0	170.4	13.6	90.00	-188.3	-235.1	9,399.0	9,215.0	183.96	51.092			
17,500.0	7,770.0	7,767.0	7,767.0	172.2	13.6	90.00	-188.3	-235.1	9,499.0	9,313.2	185.71	51.149			
17,600.0	7,770.0	7,767.0	7,767.0	173.9	13.6	90.00	-188.3	-235.1	9,598.9	9,411.5	187.46	51.205			
17,653.1	7,770.0	7,767.0	7,767.0	174.8	13.6	90.00	-188.3	-235.1	9,652.0	9,463.6	188.39	51.234			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-166.87	-1,583.5	-369.4	1,626.0						
100.0	100.0	104.0	104.0	0.2	0.2	-166.87	-1,583.5	-369.4	1,626.0	1,625.7	0.33	4,874.877			
200.0	200.0	204.0	204.0	0.3	0.4	-166.87	-1,583.5	-369.4	1,626.0	1,625.4	0.68	2,382.064			
300.0	300.0	304.0	304.0	0.5	0.5	-166.87	-1,583.5	-369.4	1,626.0	1,625.0	1.03	1,576.107			
400.0	400.0	404.0	404.0	0.7	0.7	-166.87	-1,583.5	-369.4	1,626.0	1,624.7	1.38	1,177.655			
500.0	500.0	504.0	504.0	0.8	0.9	-166.87	-1,583.5	-369.4	1,626.0	1,624.3	1.73	940.012			
550.0	550.0	554.0	554.0	0.9	1.0	-166.87	-1,583.5	-369.4	1,626.0	1,624.1	1.90	853.861	CC, ES		
600.0	600.0	604.0	604.0	1.0	1.1	-167.70	-1,583.5	-369.4	1,626.2	1,624.2	2.08	782.296			
700.0	700.0	704.0	704.0	1.2	1.2	-167.71	-1,583.5	-369.4	1,628.0	1,625.5	2.43	670.641			
800.0	799.9	803.9	803.9	1.4	1.4	-167.73	-1,583.5	-369.4	1,631.4	1,628.6	2.78	587.741			
861.1	860.9	864.9	864.9	1.5	1.5	-167.75	-1,583.5	-369.4	1,634.3	1,631.3	2.99	546.939			
900.0	899.8	903.8	903.8	1.6	1.6	-167.76	-1,583.5	-369.4	1,636.3	1,633.2	3.12	523.797			
1,000.0	999.6	1,003.6	1,003.6	1.8	1.8	-167.80	-1,583.5	-369.4	1,641.7	1,638.2	3.47	472.640			
1,100.0	1,099.5	1,103.5	1,103.5	1.9	1.9	-167.84	-1,583.5	-369.4	1,647.0	1,643.1	3.82	430.824			
1,200.0	1,199.3	1,203.3	1,203.3	2.1	2.1	-167.88	-1,583.5	-369.4	1,652.3	1,648.1	4.17	396.008			
1,300.0	1,299.2	1,303.2	1,303.2	2.3	2.3	-167.92	-1,583.5	-369.4	1,657.6	1,653.0	4.52	366.570			
1,400.0	1,399.1	1,403.1	1,403.1	2.5	2.4	-167.96	-1,583.5	-369.4	1,662.9	1,658.0	4.87	341.356			
1,500.0	1,498.9	1,502.9	1,502.9	2.7	2.6	-168.00	-1,583.5	-369.4	1,668.2	1,663.0	5.22	319.516			
1,600.0	1,598.8	1,602.8	1,602.8	2.9	2.8	-168.04	-1,583.5	-369.4	1,673.5	1,667.9	5.57	300.417			
1,700.0	1,698.6	1,702.6	1,702.6	3.1	3.0	-168.08	-1,583.5	-369.4	1,678.8	1,672.9	5.92	283.573			
1,800.0	1,798.5	1,802.5	1,802.5	3.3	3.1	-168.12	-1,583.5	-369.4	1,684.1	1,677.8	6.27	268.608			
1,900.0	1,898.3	1,902.3	1,902.3	3.5	3.3	-168.15	-1,583.5	-369.4	1,689.4	1,682.8	6.62	255.223			
2,000.0	1,998.2	2,002.2	2,002.2	3.7	3.5	-168.19	-1,583.5	-369.4	1,694.7	1,687.8	6.97	243.182			
2,100.0	2,098.0	2,102.0	2,102.0	3.9	3.7	-168.23	-1,583.5	-369.4	1,700.0	1,692.7	7.32	232.291			
2,200.0	2,197.9	2,201.9	2,201.9	4.1	3.8	-168.27	-1,583.5	-369.4	1,705.4	1,697.7	7.67	222.393			
2,300.0	2,297.7	2,301.7	2,301.7	4.3	4.0	-168.30	-1,583.5	-369.4	1,710.7	1,702.7	8.02	213.359			
2,400.0	2,397.6	2,401.6	2,401.6	4.5	4.2	-168.34	-1,583.5	-369.4	1,716.0	1,707.6	8.37	205.080			
2,500.0	2,497.4	2,501.4	2,501.4	4.7	4.4	-168.38	-1,583.5	-369.4	1,721.3	1,712.6	8.72	197.465			
2,600.0	2,597.3	2,601.3	2,601.3	4.9	4.5	-168.41	-1,583.5	-369.4	1,726.6	1,717.6	9.07	190.437			
2,700.0	2,697.1	2,701.1	2,701.1	5.1	4.7	-168.45	-1,583.5	-369.4	1,731.9	1,722.5	9.42	183.932			
2,800.0	2,797.0	2,801.0	2,801.0	5.3	4.9	-168.49	-1,583.5	-369.4	1,737.3	1,727.5	9.77	177.892			
2,900.0	2,896.8	2,900.8	2,900.8	5.5	5.1	-168.52	-1,583.5	-369.4	1,742.6	1,732.5	10.12	172.270			
3,000.0	2,996.7	3,000.7	3,000.7	5.7	5.2	-168.56	-1,583.5	-369.4	1,747.9	1,737.4	10.46	167.024			
3,100.0	3,096.5	3,100.5	3,100.5	5.9	5.4	-168.59	-1,583.5	-369.4	1,753.2	1,742.4	10.81	162.117			
3,200.0	3,196.4	3,200.4	3,200.4	6.1	5.6	-168.63	-1,583.5	-369.4	1,758.5	1,747.4	11.16	157.518			
3,300.0	3,296.3	3,300.3	3,300.3	6.3	5.8	-168.66	-1,583.5	-369.4	1,763.9	1,752.3	11.51	153.198			
3,400.0	3,396.1	3,400.1	3,400.1	6.5	5.9	-168.70	-1,583.5	-369.4	1,769.2	1,757.3	11.86	149.133			
3,500.0	3,496.0	3,500.0	3,500.0	6.7	6.1	-168.73	-1,583.5	-369.4	1,774.5	1,762.3	12.21	145.301			
3,600.0	3,595.8	3,599.8	3,599.8	6.9	6.3	-168.76	-1,583.5	-369.4	1,779.8	1,767.3	12.56	141.682			
3,700.0	3,695.7	3,699.7	3,699.7	7.0	6.5	-168.80	-1,583.5	-369.4	1,785.1	1,772.2	12.91	138.259			
3,800.0	3,795.5	3,799.5	3,799.5	7.2	6.6	-168.83	-1,583.5	-369.4	1,790.5	1,777.2	13.26	135.017			
3,900.0	3,895.4	3,899.4	3,899.4	7.4	6.8	-168.87	-1,583.5	-369.4	1,795.8	1,782.2	13.61	131.941			
4,000.0	3,995.2	3,999.2	3,999.2	7.6	7.0	-168.90	-1,583.5	-369.4	1,801.1	1,787.2	13.96	129.019			
4,100.0	4,095.1	4,099.1	4,099.1	7.8	7.2	-168.93	-1,583.5	-369.4	1,806.4	1,792.1	14.31	126.241			
4,200.0	4,194.9	4,198.9	4,198.9	8.0	7.3	-168.96	-1,583.5	-369.4	1,811.8	1,797.1	14.66	123.594			
4,300.0	4,294.8	4,298.8	4,298.8	8.2	7.5	-169.00	-1,583.5	-369.4	1,817.1	1,802.1	15.01	121.072			
4,400.0	4,394.6	4,398.6	4,398.6	8.4	7.7	-169.03	-1,583.5	-369.4	1,822.4	1,807.1	15.36	118.664			
4,500.0	4,494.5	4,498.5	4,498.5	8.6	7.9	-169.06	-1,583.5	-369.4	1,827.8	1,812.0	15.71	116.363			
4,600.0	4,594.3	4,598.3	4,598.3	8.8	8.0	-169.09	-1,583.5	-369.4	1,833.1	1,817.0	16.06	114.163			
4,700.0	4,694.2	4,698.2	4,698.2	9.0	8.2	-169.13	-1,583.5	-369.4	1,838.4	1,822.0	16.41	112.056			
4,800.0	4,794.0	4,798.0	4,798.0	9.2	8.4	-169.16	-1,583.5	-369.4	1,843.7	1,827.0	16.76	110.037			
4,900.0	4,893.9	4,897.9	4,897.9	9.4	8.5	-169.19	-1,583.5	-369.4	1,849.1	1,832.0	17.10	108.101			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
5,000.0	4,993.7	4,997.7	4,997.7	9.6	8.7	-169.22	-1,583.5	-369.4	1,854.4	1,836.9	17.45	106.243		
5,100.0	5,093.6	5,097.6	5,097.6	9.8	8.9	-169.25	-1,583.5	-369.4	1,859.7	1,841.9	17.80	104.457		
5,200.0	5,193.5	5,193.0	5,193.0	10.0	9.1	-169.28	-1,583.5	-369.4	1,865.1	1,846.9	18.15	102.785		
5,300.0	5,293.3	5,193.0	5,193.0	10.2	9.1	-169.28	-1,583.5	-369.4	1,873.3	1,855.0	18.32	102.250		
5,400.0	5,393.2	5,193.0	5,193.0	10.4	9.1	-169.28	-1,583.5	-369.4	1,886.8	1,868.3	18.50	102.010 SF		
5,500.0	5,493.0	5,193.0	5,193.0	10.6	9.1	-169.28	-1,583.5	-369.4	1,905.5	1,886.8	18.67	102.051		
5,600.0	5,592.9	5,193.0	5,193.0	10.8	9.1	-169.28	-1,583.5	-369.4	1,929.1	1,910.3	18.85	102.357		
5,700.0	5,692.7	5,193.0	5,193.0	11.0	9.1	-169.28	-1,583.5	-369.4	1,957.6	1,938.6	19.02	102.911		
5,800.0	5,792.6	5,193.0	5,193.0	11.2	9.1	-169.28	-1,583.5	-369.4	1,990.8	1,971.6	19.20	103.696		
5,900.0	5,892.4	5,193.0	5,193.0	11.4	9.1	-169.28	-1,583.5	-369.4	2,028.3	2,008.9	19.37	104.693		
6,000.0	5,992.3	5,193.0	5,193.0	11.6	9.1	-169.28	-1,583.5	-369.4	2,070.0	2,050.4	19.55	105.885		
6,100.0	6,092.1	5,193.0	5,193.0	11.8	9.1	-169.28	-1,583.5	-369.4	2,115.5	2,095.8	19.72	107.254		
6,200.0	6,192.0	5,193.0	5,193.0	12.0	9.1	-169.28	-1,583.5	-369.4	2,164.8	2,144.9	19.90	108.783		
6,300.0	6,291.8	5,193.0	5,193.0	12.2	9.1	-169.28	-1,583.5	-369.4	2,217.4	2,197.4	20.08	110.455		
6,400.0	6,391.7	5,193.0	5,193.0	12.4	9.1	-169.28	-1,583.5	-369.4	2,273.3	2,253.0	20.25	112.255		
6,500.0	6,491.5	5,193.0	5,193.0	12.6	9.1	-169.28	-1,583.5	-369.4	2,332.1	2,311.7	20.43	114.170		
6,600.0	6,591.4	5,193.0	5,193.0	12.8	9.1	-169.28	-1,583.5	-369.4	2,393.6	2,373.0	20.60	116.184		
6,700.0	6,691.2	5,193.0	5,193.0	13.0	9.1	-169.28	-1,583.5	-369.4	2,457.7	2,436.9	20.78	118.286		
6,800.0	6,791.1	5,193.0	5,193.0	13.2	9.1	-169.28	-1,583.5	-369.4	2,524.1	2,503.1	20.95	120.464		
6,900.0	6,890.9	5,193.0	5,193.0	13.4	9.1	-169.28	-1,583.5	-369.4	2,592.6	2,571.5	21.13	122.708		
7,000.0	6,990.8	5,193.0	5,193.0	13.6	9.1	-169.28	-1,583.5	-369.4	2,663.2	2,641.9	21.30	125.009		
7,024.2	7,014.9	5,193.0	5,193.0	13.6	9.1	-169.28	-1,583.5	-369.4	2,680.5	2,659.2	21.35	125.573		
7,050.0	7,040.7	5,193.0	5,193.0	13.7	9.1	-171.34	-1,583.5	-369.4	2,698.8	2,677.4	21.39	126.163		
7,100.0	7,090.7	5,193.0	5,193.0	13.7	9.1	11.33	-1,583.5	-369.4	2,732.8	2,711.4	21.43	127.529		
7,150.0	7,140.5	5,193.0	5,193.0	13.8	9.1	10.24	-1,583.5	-369.4	2,764.7	2,743.3	21.40	129.197		
7,200.0	7,189.9	5,193.0	5,193.0	13.8	9.1	9.61	-1,583.5	-369.4	2,794.4	2,773.1	21.30	131.177		
7,250.0	7,238.6	5,193.0	5,193.0	13.8	9.1	9.13	-1,583.5	-369.4	2,821.9	2,800.8	21.14	133.479		
7,300.0	7,286.4	5,193.0	5,193.0	13.7	9.1	8.74	-1,583.5	-369.4	2,847.2	2,826.3	20.92	136.114		
7,350.0	7,333.1	5,193.0	5,193.0	13.7	9.1	8.41	-1,583.5	-369.4	2,870.1	2,849.4	20.63	139.092		
7,400.0	7,378.5	5,193.0	5,193.0	13.6	9.1	8.14	-1,583.5	-369.4	2,890.5	2,870.2	20.30	142.423		
7,450.0	7,422.2	5,193.0	5,193.0	13.6	9.1	7.91	-1,583.5	-369.4	2,908.6	2,888.7	19.91	146.114		
7,500.0	7,464.1	5,193.0	5,193.0	13.5	9.1	7.73	-1,583.5	-369.4	2,924.1	2,904.6	19.47	150.167		
7,550.0	7,504.1	5,193.0	5,193.0	13.5	9.1	7.58	-1,583.5	-369.4	2,937.1	2,918.1	19.00	154.579		
7,600.0	7,541.8	5,193.0	5,193.0	13.5	9.1	7.46	-1,583.5	-369.4	2,947.5	2,929.0	18.50	159.332		
7,650.0	7,577.2	5,193.0	5,193.0	13.4	9.1	7.38	-1,583.5	-369.4	2,955.4	2,937.4	17.98	164.394		
7,700.0	7,610.0	5,193.0	5,193.0	13.5	9.1	7.32	-1,583.5	-369.4	2,960.7	2,943.2	17.45	169.710		
7,750.0	7,640.2	5,193.0	5,193.0	13.5	9.1	7.29	-1,583.5	-369.4	2,963.3	2,946.4	16.91	175.190		
7,800.0	7,667.4	5,193.0	5,193.0	13.6	9.1	7.29	-1,583.5	-369.4	2,963.3	2,946.9	16.40	180.709		
7,850.0	7,691.7	5,193.0	5,193.0	13.7	9.1	7.31	-1,583.5	-369.4	2,960.7	2,944.8	15.91	186.092		
7,900.0	7,712.8	5,193.0	5,193.0	13.9	9.1	7.36	-1,583.5	-369.4	2,955.5	2,940.1	15.46	191.113		
7,950.0	7,730.8	5,193.0	5,193.0	14.1	9.1	7.44	-1,583.5	-369.4	2,947.7	2,932.7	15.08	195.498		
8,000.0	7,745.5	5,193.0	5,193.0	14.4	9.1	7.55	-1,583.5	-369.4	2,937.4	2,922.6	14.76	198.943		
8,050.0	7,756.7	5,193.0	5,193.0	14.7	9.1	7.69	-1,583.5	-369.4	2,924.4	2,909.9	14.54	201.139		
8,100.0	7,764.6	5,193.0	5,193.0	15.1	9.1	7.87	-1,583.5	-369.4	2,908.9	2,894.5	14.41	201.821		
8,150.0	7,769.0	5,193.0	5,193.0	15.5	9.1	8.08	-1,583.5	-369.4	2,891.0	2,876.6	14.40	200.815		
8,188.1	7,770.0	5,193.0	5,193.0	15.9	9.1	8.27	-1,583.5	-369.4	2,875.6	2,861.2	14.46	198.879		
8,200.0	7,770.0	5,193.0	5,193.0	16.0	9.1	8.27	-1,583.5	-369.4	2,870.6	2,856.1	14.50	198.035		
8,300.0	7,770.0	5,193.0	5,193.0	17.0	9.1	8.27	-1,583.5	-369.4	2,830.3	2,815.5	14.80	191.234		
8,400.0	7,770.0	5,193.0	5,193.0	18.1	9.1	8.27	-1,583.5	-369.4	2,793.0	2,777.9	15.11	184.897		
8,500.0	7,770.0	5,193.0	5,193.0	19.3	9.1	8.27	-1,583.5	-369.4	2,758.8	2,743.4	15.41	179.004		
8,600.0	7,770.0	5,193.0	5,193.0	20.6	9.1	8.27	-1,583.5	-369.4	2,727.8	2,712.1	15.72	173.540		
8,700.0	7,770.0	5,193.0	5,193.0	21.9	9.1	8.27	-1,583.5	-369.4	2,700.2	2,684.2	16.03	168.487		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,770.0	5,193.0	5,193.0	23.3	9.1	8.27	-1,583.5	-369.4	2,676.1	2,659.7	16.33	163.831		
8,900.0	7,770.0	5,193.0	5,193.0	24.8	9.1	8.27	-1,583.5	-369.4	2,655.5	2,638.8	16.64	159.555		
9,000.0	7,770.0	5,193.0	5,193.0	26.3	9.1	8.27	-1,583.5	-369.4	2,638.5	2,621.5	16.95	155.644		
9,100.0	7,770.0	5,193.0	5,193.0	27.8	9.1	8.27	-1,583.5	-369.4	2,625.2	2,608.0	17.26	152.084		
9,200.0	7,770.0	5,193.0	5,193.0	29.3	9.1	8.27	-1,583.5	-369.4	2,615.7	2,598.1	17.57	148.860		
9,300.0	7,770.0	5,193.0	5,193.0	30.9	9.1	8.27	-1,583.5	-369.4	2,610.0	2,592.1	17.88	145.957		
9,399.3	7,770.0	5,193.0	5,193.0	32.5	9.1	8.27	-1,583.5	-369.4	2,608.1	2,589.9	18.19	143.378		
9,400.0	7,770.0	5,193.0	5,193.0	32.5	9.1	8.27	-1,583.5	-369.4	2,608.1	2,589.9	18.19	143.360		
9,500.0	7,770.0	5,193.0	5,193.0	34.1	9.1	8.27	-1,583.5	-369.4	2,610.0	2,591.5	18.50	141.055		
9,600.0	7,770.0	5,193.0	5,193.0	35.7	9.1	8.27	-1,583.5	-369.4	2,615.8	2,597.0	18.82	139.028		
9,700.0	7,770.0	5,193.0	5,193.0	37.3	9.1	8.27	-1,583.5	-369.4	2,625.4	2,606.3	19.13	137.263		
9,800.0	7,770.0	5,193.0	5,193.0	39.0	9.1	8.27	-1,583.5	-369.4	2,638.7	2,619.3	19.44	135.746		
9,900.0	7,770.0	5,193.0	5,193.0	40.6	9.1	8.27	-1,583.5	-369.4	2,655.7	2,636.0	19.75	134.462		
10,000.0	7,770.0	5,193.0	5,193.0	42.3	9.1	8.27	-1,583.5	-369.4	2,676.4	2,656.3	20.06	133.398		
10,100.0	7,770.0	5,193.0	5,193.0	44.0	9.1	8.27	-1,583.5	-369.4	2,700.6	2,680.2	20.38	132.540		
10,200.0	7,770.0	5,193.0	5,193.0	45.6	9.1	8.27	-1,583.5	-369.4	2,728.3	2,707.6	20.69	131.872		
10,300.0	7,770.0	5,193.0	5,193.0	47.3	9.1	8.27	-1,583.5	-369.4	2,759.3	2,738.3	21.00	131.383		
10,400.0	7,770.0	5,193.0	5,193.0	49.0	9.1	8.27	-1,583.5	-369.4	2,793.5	2,772.2	21.31	131.059		
10,500.0	7,770.0	5,193.0	5,193.0	50.7	9.1	8.27	-1,583.5	-369.4	2,830.9	2,809.2	21.63	130.888		
10,600.0	7,770.0	5,193.0	5,193.0	52.4	9.1	8.27	-1,583.5	-369.4	2,871.2	2,849.3	21.94	130.857		
10,700.0	7,770.0	5,193.0	5,193.0	54.1	9.1	8.27	-1,583.5	-369.4	2,914.5	2,892.2	22.26	130.955		
10,800.0	7,770.0	5,193.0	5,193.0	55.8	9.1	8.27	-1,583.5	-369.4	2,960.4	2,937.9	22.57	131.172		
10,900.0	7,770.0	5,193.0	5,193.0	57.5	9.1	8.27	-1,583.5	-369.4	3,009.0	2,986.2	22.88	131.496		
11,000.0	7,770.0	5,193.0	5,193.0	59.2	9.1	8.27	-1,583.5	-369.4	3,060.2	3,037.0	23.20	131.919		
11,100.0	7,770.0	5,193.0	5,193.0	60.9	9.1	8.27	-1,583.5	-369.4	3,113.6	3,090.1	23.51	132.430		
11,200.0	7,770.0	5,193.0	5,193.0	62.6	9.1	8.27	-1,583.5	-369.4	3,169.4	3,145.5	23.83	133.022		
11,300.0	7,770.0	5,193.0	5,193.0	64.3	9.1	8.27	-1,583.5	-369.4	3,227.2	3,203.1	24.14	133.686		
11,400.0	7,770.0	5,193.0	5,193.0	66.0	9.1	8.27	-1,583.5	-369.4	3,287.1	3,262.7	24.45	134.416		
11,500.0	7,770.0	5,193.0	5,193.0	67.7	9.1	8.27	-1,583.5	-369.4	3,348.9	3,324.1	24.77	135.203		
11,600.0	7,770.0	5,193.0	5,193.0	69.5	9.1	8.27	-1,583.5	-369.4	3,412.5	3,387.4	25.08	136.043		
11,700.0	7,770.0	5,193.0	5,193.0	71.2	9.1	8.27	-1,583.5	-369.4	3,477.9	3,452.5	25.40	136.929		
11,800.0	7,770.0	5,193.0	5,193.0	72.9	9.1	8.27	-1,583.5	-369.4	3,544.8	3,519.1	25.71	137.855		
11,900.0	7,770.0	5,193.0	5,193.0	74.6	9.1	8.27	-1,583.5	-369.4	3,613.3	3,587.3	26.03	138.818		
12,000.0	7,770.0	5,193.0	5,193.0	76.4	9.1	8.27	-1,583.5	-369.4	3,683.2	3,656.9	26.34	139.811		
12,100.0	7,770.0	5,193.0	5,193.0	78.1	9.1	8.27	-1,583.5	-369.4	3,754.5	3,727.8	26.66	140.832		
12,200.0	7,770.0	5,193.0	5,193.0	79.8	9.1	8.27	-1,583.5	-369.4	3,827.0	3,800.1	26.97	141.876		
12,300.0	7,770.0	5,193.0	5,193.0	81.5	9.1	8.27	-1,583.5	-369.4	3,900.8	3,873.5	27.29	142.940		
12,400.0	7,770.0	5,193.0	5,193.0	83.3	9.1	8.27	-1,583.5	-369.4	3,975.7	3,948.1	27.61	144.022		
12,500.0	7,770.0	5,193.0	5,193.0	85.0	9.1	8.27	-1,583.5	-369.4	4,051.8	4,023.8	27.92	145.117		
12,600.0	7,770.0	5,193.0	5,193.0	86.7	9.1	8.27	-1,583.5	-369.4	4,128.8	4,100.5	28.24	146.223		
12,700.0	7,770.0	5,193.0	5,193.0	88.5	9.1	8.27	-1,583.5	-369.4	4,206.8	4,178.2	28.55	147.339		
12,800.0	7,770.0	5,193.0	5,193.0	90.2	9.1	8.27	-1,583.5	-369.4	4,285.7	4,256.8	28.87	148.462		
12,900.0	7,770.0	5,193.0	5,193.0	91.9	9.1	8.27	-1,583.5	-369.4	4,365.5	4,336.3	29.18	149.589		
13,000.0	7,770.0	5,193.0	5,193.0	93.7	9.1	8.27	-1,583.5	-369.4	4,446.1	4,416.6	29.50	150.720		
13,100.0	7,770.0	5,193.0	5,193.0	95.4	9.1	8.27	-1,583.5	-369.4	4,527.4	4,497.6	29.81	151.853		
13,200.0	7,770.0	5,193.0	5,193.0	97.1	9.1	8.27	-1,583.5	-369.4	4,609.5	4,579.4	30.13	152.986		
13,300.0	7,770.0	5,193.0	5,193.0	98.9	9.1	8.27	-1,583.5	-369.4	4,692.3	4,661.9	30.45	154.118		
13,400.0	7,770.0	5,193.0	5,193.0	100.6	9.1	8.27	-1,583.5	-369.4	4,775.8	4,745.0	30.76	155.249		
13,500.0	7,770.0	5,193.0	5,193.0	102.4	9.1	8.27	-1,583.5	-369.4	4,859.8	4,828.8	31.08	156.376		
13,600.0	7,770.0	5,193.0	5,193.0	104.1	9.1	8.27	-1,583.5	-369.4	4,944.5	4,913.1	31.39	157.499		
13,700.0	7,770.0	5,193.0	5,193.0	105.8	9.1	8.27	-1,583.5	-369.4	5,029.8	4,998.0	31.71	158.617		
13,800.0	7,770.0	5,193.0	5,193.0	107.6	9.1	8.27	-1,583.5	-369.4	5,115.5	5,083.5	32.03	159.730		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)						
13,900.0	7,770.0	5,193.0	5,193.0	109.3	9.1	8.27	-1,583.5	-369.4	5,201.8	5,169.5	32.34	160.836		
14,000.0	7,770.0	5,193.0	5,193.0	111.1	9.1	8.27	-1,583.5	-369.4	5,288.6	5,255.9	32.66	161.936		
14,100.0	7,770.0	5,193.0	5,193.0	112.8	9.1	8.27	-1,583.5	-369.4	5,375.8	5,342.8	32.97	163.028		
14,200.0	7,770.0	5,193.0	5,193.0	114.5	9.1	8.27	-1,583.5	-369.4	5,463.4	5,430.1	33.29	164.112		
14,300.0	7,770.0	5,193.0	5,193.0	116.3	9.1	8.27	-1,583.5	-369.4	5,551.5	5,517.9	33.61	165.189		
14,400.0	7,770.0	5,193.0	5,193.0	118.0	9.1	8.27	-1,583.5	-369.4	5,640.0	5,606.1	33.92	166.257		
14,500.0	7,770.0	5,193.0	5,193.0	119.8	9.1	8.27	-1,583.5	-369.4	5,728.8	5,694.6	34.24	167.316		
14,600.0	7,770.0	5,193.0	5,193.0	121.5	9.1	8.27	-1,583.5	-369.4	5,818.1	5,783.5	34.56	168.366		
14,700.0	7,770.0	5,193.0	5,193.0	123.3	9.1	8.27	-1,583.5	-369.4	5,907.6	5,872.7	34.87	169.407		
14,800.0	7,770.0	5,193.0	5,193.0	125.0	9.1	8.27	-1,583.5	-369.4	5,997.5	5,962.3	35.19	170.438		
14,900.0	7,770.0	5,193.0	5,193.0	126.7	9.1	8.27	-1,583.5	-369.4	6,087.7	6,052.2	35.51	171.460		
15,000.0	7,770.0	5,193.0	5,193.0	128.5	9.1	8.27	-1,583.5	-369.4	6,178.2	6,142.4	35.82	172.472		
15,100.0	7,770.0	5,193.0	5,193.0	130.2	9.1	8.27	-1,583.5	-369.4	6,269.0	6,232.9	36.14	173.474		
15,200.0	7,770.0	5,193.0	5,193.0	132.0	9.1	8.27	-1,583.5	-369.4	6,360.1	6,323.6	36.45	174.466		
15,300.0	7,770.0	5,193.0	5,193.0	133.7	9.1	8.27	-1,583.5	-369.4	6,451.4	6,414.6	36.77	175.448		
15,400.0	7,770.0	5,193.0	5,193.0	135.5	9.1	8.27	-1,583.5	-369.4	6,543.0	6,505.9	37.09	176.420		
15,500.0	7,770.0	5,193.0	5,193.0	137.2	9.1	8.27	-1,583.5	-369.4	6,634.8	6,597.4	37.40	177.382		
15,600.0	7,770.0	5,193.0	5,193.0	139.0	9.1	8.27	-1,583.5	-369.4	6,726.9	6,689.2	37.72	178.334		
15,700.0	7,770.0	5,193.0	5,193.0	140.7	9.1	8.27	-1,583.5	-369.4	6,819.2	6,781.1	38.04	179.276		
15,800.0	7,770.0	5,193.0	5,193.0	142.4	9.1	8.27	-1,583.5	-369.4	6,911.7	6,873.3	38.35	180.208		
15,900.0	7,770.0	5,193.0	5,193.0	144.2	9.1	8.27	-1,583.5	-369.4	7,004.4	6,965.7	38.67	181.129		
16,000.0	7,770.0	5,193.0	5,193.0	145.9	9.1	8.27	-1,583.5	-369.4	7,097.3	7,058.3	38.99	182.041		
16,100.0	7,770.0	5,193.0	5,193.0	147.7	9.1	8.27	-1,583.5	-369.4	7,190.4	7,151.1	39.30	182.943		
16,200.0	7,770.0	5,193.0	5,193.0	149.4	9.1	8.27	-1,583.5	-369.4	7,283.7	7,244.1	39.62	183.835		
16,300.0	7,770.0	5,193.0	5,193.0	151.2	9.1	8.27	-1,583.5	-369.4	7,377.1	7,337.2	39.94	184.717		
16,400.0	7,770.0	5,193.0	5,193.0	152.9	9.1	8.27	-1,583.5	-369.4	7,470.8	7,430.5	40.25	185.590		
16,500.0	7,770.0	5,193.0	5,193.0	154.7	9.1	8.27	-1,583.5	-369.4	7,564.6	7,524.0	40.57	186.453		
16,600.0	7,770.0	5,193.0	5,193.0	156.4	9.1	8.27	-1,583.5	-369.4	7,658.5	7,617.6	40.89	187.306		
16,700.0	7,770.0	5,193.0	5,193.0	158.2	9.1	8.27	-1,583.5	-369.4	7,752.6	7,711.4	41.20	188.149		
16,800.0	7,770.0	5,193.0	5,193.0	159.9	9.1	8.27	-1,583.5	-369.4	7,846.8	7,805.3	41.52	188.984		
16,900.0	7,770.0	5,193.0	5,193.0	161.7	9.1	8.27	-1,583.5	-369.4	7,941.2	7,899.4	41.84	189.808		
17,000.0	7,770.0	5,193.0	5,193.0	163.4	9.1	8.27	-1,583.5	-369.4	8,035.7	7,993.6	42.15	190.624		
17,100.0	7,770.0	5,193.0	5,193.0	165.2	9.1	8.27	-1,583.5	-369.4	8,130.4	8,087.9	42.47	191.431		
17,200.0	7,770.0	5,193.0	5,193.0	166.9	9.1	8.27	-1,583.5	-369.4	8,225.2	8,182.4	42.79	192.228		
17,300.0	7,770.0	5,193.0	5,193.0	168.7	9.1	8.27	-1,583.5	-369.4	8,320.1	8,277.0	43.11	193.016		
17,400.0	7,770.0	5,193.0	5,193.0	170.4	9.1	8.27	-1,583.5	-369.4	8,415.1	8,371.7	43.42	193.796		
17,500.0	7,770.0	5,193.0	5,193.0	172.2	9.1	8.27	-1,583.5	-369.4	8,510.2	8,466.5	43.74	194.567		
17,600.0	7,770.0	5,193.0	5,193.0	173.9	9.1	8.27	-1,583.5	-369.4	8,605.5	8,561.4	44.06	195.329		
17,653.1	7,770.0	5,193.0	5,193.0	174.8	9.1	8.27	-1,583.5	-369.4	8,656.0	8,611.8	44.22	195.730		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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	5.0	5.0	0.0	0.0	-167.79	-1,635.2	-353.8	1,673.1					
100.0	100.0	105.0	105.0	0.2	0.2	-167.79	-1,635.2	-353.8	1,673.1	1,672.7	0.34		4,989.749	
200.0	200.0	205.0	205.0	0.3	0.4	-167.79	-1,635.2	-353.8	1,673.1	1,672.4	0.68		2,444.703	
300.0	300.0	305.0	305.0	0.5	0.5	-167.79	-1,635.2	-353.8	1,673.1	1,672.0	1.03		1,618.949	
400.0	400.0	405.0	405.0	0.7	0.7	-167.79	-1,635.2	-353.8	1,673.1	1,671.7	1.38		1,210.183	
500.0	500.0	505.0	505.0	0.8	0.9	-167.79	-1,635.2	-353.8	1,673.1	1,671.3	1.73		966.223	
550.0	550.0	555.0	555.0	0.9	1.0	-167.79	-1,635.2	-353.8	1,673.1	1,671.2	1.91		877.750	
600.0	600.0	605.0	605.0	1.0	1.1	-168.63	-1,635.2	-353.8	1,673.3	1,671.2	2.08		804.242	
700.0	700.0	705.0	705.0	1.2	1.2	-168.64	-1,635.2	-353.8	1,675.0	1,672.6	2.43		689.523	
800.0	799.9	804.9	804.9	1.4	1.4	-168.65	-1,635.2	-353.8	1,678.4	1,675.6	2.78		604.320	
861.1	860.9	865.9	865.9	1.5	1.5	-168.67	-1,635.2	-353.8	1,681.3	1,678.4	2.99		562.375	
900.0	899.8	904.8	904.8	1.6	1.6	-168.68	-1,635.2	-353.8	1,683.4	1,680.3	3.13		538.581	
1,000.0	999.6	1,004.6	1,004.6	1.8	1.8	-168.72	-1,635.2	-353.8	1,688.7	1,685.3	3.47		485.978	
1,100.0	1,099.5	1,104.5	1,104.5	1.9	1.9	-168.76	-1,635.2	-353.8	1,694.1	1,690.2	3.82		442.977	
1,200.0	1,199.3	1,204.3	1,204.3	2.1	2.1	-168.79	-1,635.2	-353.8	1,699.4	1,695.2	4.17		407.169	
1,300.0	1,299.2	1,304.2	1,304.2	2.3	2.3	-168.83	-1,635.2	-353.8	1,704.7	1,700.2	4.52		376.891	
1,400.0	1,399.1	1,404.1	1,404.1	2.5	2.5	-168.86	-1,635.2	-353.8	1,710.0	1,705.2	4.87		350.954	
1,500.0	1,498.9	1,503.9	1,503.9	2.7	2.6	-168.90	-1,635.2	-353.8	1,715.4	1,710.1	5.22		328.487	
1,600.0	1,598.8	1,603.8	1,603.8	2.9	2.8	-168.93	-1,635.2	-353.8	1,720.7	1,715.1	5.57		308.839	
1,700.0	1,698.6	1,703.6	1,703.6	3.1	3.0	-168.97	-1,635.2	-353.8	1,726.0	1,720.1	5.92		291.509	
1,800.0	1,798.5	1,803.5	1,803.5	3.3	3.1	-169.00	-1,635.2	-353.8	1,731.3	1,725.1	6.27		276.111	
1,900.0	1,898.3	1,903.3	1,903.3	3.5	3.3	-169.03	-1,635.2	-353.8	1,736.7	1,730.0	6.62		262.339	
2,000.0	1,998.2	2,003.2	2,003.2	3.7	3.5	-169.07	-1,635.2	-353.8	1,742.0	1,735.0	6.97		249.948	
2,100.0	2,098.0	2,103.0	2,103.0	3.9	3.7	-169.10	-1,635.2	-353.8	1,747.3	1,740.0	7.32		238.741	
2,200.0	2,197.9	2,202.9	2,202.9	4.1	3.8	-169.14	-1,635.2	-353.8	1,752.6	1,745.0	7.67		228.555	
2,300.0	2,297.7	2,302.7	2,302.7	4.3	4.0	-169.17	-1,635.2	-353.8	1,758.0	1,750.0	8.02		219.258	
2,400.0	2,397.6	2,402.6	2,402.6	4.5	4.2	-169.20	-1,635.2	-353.8	1,763.3	1,754.9	8.37		210.737	
2,500.0	2,497.4	2,502.4	2,502.4	4.7	4.4	-169.24	-1,635.2	-353.8	1,768.6	1,759.9	8.72		202.900	
2,600.0	2,497.3	2,602.3	2,602.3	4.9	4.5	-169.27	-1,635.2	-353.8	1,774.0	1,764.9	9.07		195.667	
2,700.0	2,497.1	2,702.1	2,702.1	5.1	4.7	-169.30	-1,635.2	-353.8	1,779.3	1,769.9	9.42		188.971	
2,800.0	2,797.0	2,802.0	2,802.0	5.3	4.9	-169.33	-1,635.2	-353.8	1,784.6	1,774.9	9.77		182.755	
2,900.0	2,896.8	2,901.8	2,901.8	5.5	5.1	-169.36	-1,635.2	-353.8	1,790.0	1,779.9	10.11		176.968	
3,000.0	2,996.7	3,001.7	3,001.7	5.7	5.2	-169.40	-1,635.2	-353.8	1,795.3	1,784.8	10.46		171.568	
3,100.0	3,096.5	3,101.5	3,101.5	5.9	5.4	-169.43	-1,635.2	-353.8	1,800.6	1,789.8	10.81		166.517	
3,200.0	3,196.4	3,201.4	3,201.4	6.1	5.6	-169.46	-1,635.2	-353.8	1,806.0	1,794.8	11.16		161.783	
3,300.0	3,296.3	3,301.3	3,301.3	6.3	5.8	-169.49	-1,635.2	-353.8	1,811.3	1,799.8	11.51		157.336	
3,400.0	3,396.1	3,401.1	3,401.1	6.5	5.9	-169.52	-1,635.2	-353.8	1,816.6	1,804.8	11.86		153.151	
3,500.0	3,496.0	3,501.0	3,501.0	6.7	6.1	-169.55	-1,635.2	-353.8	1,822.0	1,809.8	12.21		149.206	
3,600.0	3,595.8	3,600.8	3,600.8	6.9	6.3	-169.58	-1,635.2	-353.8	1,827.3	1,814.8	12.56		145.480	
3,700.0	3,695.7	3,700.7	3,700.7	7.0	6.5	-169.62	-1,635.2	-353.8	1,832.7	1,819.7	12.91		141.956	
3,800.0	3,795.5	3,800.5	3,800.5	7.2	6.6	-169.65	-1,635.2	-353.8	1,838.0	1,824.7	13.26		138.618	
3,900.0	3,895.4	3,900.4	3,900.4	7.4	6.8	-169.68	-1,635.2	-353.8	1,843.3	1,829.7	13.61		135.452	
4,000.0	3,995.2	4,000.2	4,000.2	7.6	7.0	-169.71	-1,635.2	-353.8	1,848.7	1,834.7	13.96		132.444	
4,100.0	4,095.1	4,100.1	4,100.1	7.8	7.2	-169.74	-1,635.2	-353.8	1,854.0	1,839.7	14.31		129.583	
4,200.0	4,194.9	4,199.9	4,199.9	8.0	7.3	-169.77	-1,635.2	-353.8	1,859.4	1,844.7	14.66		126.859	
4,300.0	4,294.8	4,299.8	4,299.8	8.2	7.5	-169.80	-1,635.2	-353.8	1,864.7	1,849.7	15.01		124.261	
4,400.0	4,394.6	4,399.6	4,399.6	8.4	7.7	-169.83	-1,635.2	-353.8	1,870.0	1,854.7	15.36		121.782	
4,500.0	4,494.5	4,499.5	4,499.5	8.6	7.9	-169.85	-1,635.2	-353.8	1,875.4	1,859.7	15.70		119.414	
4,600.0	4,594.3	4,599.3	4,599.3	8.8	8.0	-169.88	-1,635.2	-353.8	1,880.7	1,864.7	16.05		117.148	
4,700.0	4,694.2	4,699.2	4,699.2	9.0	8.2	-169.91	-1,635.2	-353.8	1,886.1	1,869.7	16.40		114.979	
4,800.0	4,794.0	4,799.0	4,799.0	9.2	8.4	-169.94	-1,635.2	-353.8	1,891.4	1,874.7	16.75		112.900	
4,900.0	4,893.9	4,898.9	4,898.9	9.4	8.6	-169.97	-1,635.2	-353.8	1,896.7	1,879.6	17.10		110.907	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
5,000.0	4,993.7	4,998.7	4,998.7	9.6	8.7	-170.00	-1,635.2	-353.8	1,902.1	1,884.6	17.45	108.993	
5,100.0	5,093.6	5,098.6	5,098.6	9.8	8.9	-170.03	-1,635.2	-353.8	1,907.4	1,889.6	17.80	107.155	
5,200.0	5,193.5	5,198.5	5,198.5	10.0	9.1	-170.05	-1,635.2	-353.8	1,912.8	1,894.6	18.15	105.387	
5,300.0	5,293.3	5,298.3	5,298.3	10.2	9.2	-170.08	-1,635.2	-353.8	1,918.1	1,899.6	18.50	103.686	
5,400.0	5,393.2	5,398.2	5,398.2	10.4	9.4	-170.11	-1,635.2	-353.8	1,923.5	1,904.6	18.85	102.049	
5,500.0	5,493.0	5,498.0	5,498.0	10.6	9.6	-170.14	-1,635.2	-353.8	1,928.8	1,909.6	19.20	100.470	
5,600.0	5,592.9	5,597.9	5,597.9	10.8	9.8	-170.17	-1,635.2	-353.8	1,934.2	1,914.6	19.55	98.949	
5,700.0	5,692.7	5,697.7	5,697.7	11.0	9.9	-170.19	-1,635.2	-353.8	1,939.5	1,919.6	19.90	97.481	
5,800.0	5,792.6	5,797.6	5,797.6	11.2	10.1	-170.22	-1,635.2	-353.8	1,944.9	1,924.6	20.25	96.063	
5,900.0	5,892.4	5,897.4	5,897.4	11.4	10.3	-170.25	-1,635.2	-353.8	1,950.2	1,929.6	20.59	94.694	
6,000.0	5,992.3	5,997.3	5,997.3	11.6	10.5	-170.27	-1,635.2	-353.8	1,955.6	1,934.6	20.94	93.370	
6,100.0	6,092.1	6,097.1	6,097.1	11.8	10.6	-170.30	-1,635.2	-353.8	1,960.9	1,939.6	21.29	92.090	
6,200.0	6,192.0	6,197.0	6,197.0	12.0	10.8	-170.33	-1,635.2	-353.8	1,966.3	1,944.6	21.64	90.851	
6,300.0	6,291.8	6,296.8	6,296.8	12.2	11.0	-170.35	-1,635.2	-353.8	1,971.6	1,949.6	21.99	89.652	
6,400.0	6,391.7	6,396.7	6,396.7	12.4	11.2	-170.38	-1,635.2	-353.8	1,977.0	1,954.6	22.34	88.490	
6,500.0	6,491.5	6,496.5	6,496.5	12.6	11.3	-170.41	-1,635.2	-353.8	1,982.3	1,959.6	22.69	87.364	
6,600.0	6,591.4	6,596.4	6,596.4	12.8	11.5	-170.43	-1,635.2	-353.8	1,987.7	1,964.6	23.04	86.272	
6,700.0	6,691.2	6,696.2	6,696.2	13.0	11.7	-170.46	-1,635.2	-353.8	1,993.0	1,969.6	23.39	85.213	
6,800.0	6,791.1	6,796.1	6,796.1	13.2	11.9	-170.48	-1,635.2	-353.8	1,998.4	1,974.6	23.74	84.185	
6,900.0	6,890.9	6,895.9	6,895.9	13.4	12.0	-170.51	-1,635.2	-353.8	2,003.7	1,979.6	24.09	83.187	
7,000.0	6,990.8	6,995.8	6,995.8	13.6	12.2	-170.54	-1,635.2	-353.8	2,009.1	1,984.6	24.44	82.217	
7,024.2	7,014.9	7,019.9	7,019.9	13.6	12.3	-170.54	-1,635.2	-353.8	2,010.4	1,985.8	24.52	81.987	
7,050.0	7,040.7	7,045.7	7,045.7	13.7	12.3	-172.21	-1,635.2	-353.8	2,011.3	1,986.7	24.62	81.702	
7,100.0	7,090.7	7,095.7	7,095.7	13.7	12.4	11.18	-1,635.2	-353.8	2,010.5	1,985.7	24.75	81.246	
7,150.0	7,140.5	7,145.5	7,145.5	13.8	12.5	10.75	-1,635.2	-353.8	2,006.2	1,981.4	24.79	80.913	
7,200.0	7,189.9	7,194.9	7,194.9	13.8	12.6	10.77	-1,635.2	-353.8	1,998.6	1,973.8	24.77	80.698	
7,250.0	7,238.6	7,243.6	7,243.6	13.8	12.6	10.94	-1,635.2	-353.8	1,987.6	1,962.9	24.66	80.596	
7,300.0	7,286.4	7,291.4	7,291.4	13.7	12.7	11.21	-1,635.2	-353.8	1,973.2	1,948.8	24.48	80.602	
7,350.0	7,333.1	7,338.1	7,338.1	13.7	12.8	11.58	-1,635.2	-353.8	1,955.7	1,931.4	24.23	80.708	
7,400.0	7,378.5	7,383.5	7,383.5	13.6	12.9	12.06	-1,635.2	-353.8	1,934.9	1,911.0	23.92	80.904	
7,450.0	7,422.2	7,427.2	7,427.2	13.6	13.0	12.66	-1,635.2	-353.8	1,911.2	1,887.6	23.54	81.172	
7,500.0	7,464.1	7,469.1	7,469.1	13.5	13.0	13.40	-1,635.2	-353.8	1,884.5	1,861.4	23.13	81.488	
7,550.0	7,504.1	7,509.1	7,509.1	13.5	13.1	14.31	-1,635.2	-353.8	1,855.0	1,832.3	22.67	81.818	
7,600.0	7,541.8	7,546.8	7,546.8	13.5	13.2	15.42	-1,635.2	-353.8	1,822.9	1,800.7	22.20	82.107	
7,650.0	7,577.2	7,582.2	7,582.2	13.4	13.2	16.78	-1,635.2	-353.8	1,788.3	1,766.5	21.73	82.277	
7,700.0	7,610.0	7,615.0	7,615.0	13.5	13.3	18.46	-1,635.2	-353.8	1,751.3	1,730.0	21.30	82.213	
7,750.0	7,640.2	7,645.2	7,645.2	13.5	13.3	20.54	-1,635.2	-353.8	1,712.3	1,691.4	20.95	81.749	
7,800.0	7,667.4	7,672.4	7,672.4	13.6	13.4	23.16	-1,635.2	-353.8	1,671.4	1,650.6	20.72	80.662	
7,850.0	7,691.7	7,696.7	7,696.7	13.7	13.4	26.49	-1,635.2	-353.8	1,628.7	1,608.0	20.70	78.669	
7,900.0	7,712.8	7,717.8	7,717.8	13.9	13.5	30.78	-1,635.2	-353.8	1,584.6	1,563.6	21.00	75.469	
7,950.0	7,730.8	7,735.8	7,735.8	14.1	13.5	36.38	-1,635.2	-353.8	1,539.2	1,517.5	21.72	70.851	
8,000.0	7,745.5	7,750.5	7,750.5	14.4	13.5	43.72	-1,635.2	-353.8	1,492.8	1,469.7	23.00	64.899	
8,050.0	7,756.7	7,761.7	7,761.7	14.7	13.5	53.28	-1,635.2	-353.8	1,445.5	1,420.7	24.84	58.201	
8,100.0	7,764.6	7,769.6	7,769.6	15.1	13.6	65.26	-1,635.2	-353.8	1,397.8	1,370.8	26.96	51.844	
8,150.0	7,769.0	7,774.0	7,774.0	15.5	13.6	79.12	-1,635.2	-353.8	1,349.7	1,321.0	28.73	46.978	
8,188.1	7,770.0	7,775.0	7,775.0	15.9	13.6	90.00	-1,635.2	-353.8	1,313.1	1,283.7	29.42	44.631	
8,200.0	7,770.0	7,775.0	7,775.0	16.0	13.6	90.00	-1,635.2	-353.8	1,301.6	1,272.1	29.53	44.075	
8,300.0	7,770.0	7,775.0	7,775.0	17.0	13.6	90.00	-1,635.2	-353.8	1,205.8	1,175.3	30.53	39.495	
8,400.0	7,770.0	7,775.0	7,775.0	18.1	13.6	90.00	-1,635.2	-353.8	1,110.7	1,079.1	31.65	35.100	
8,500.0	7,770.0	7,775.0	7,775.0	19.3	13.6	90.00	-1,635.2	-353.8	1,016.6	983.8	32.86	30.943	
8,600.0	7,770.0	7,775.0	7,775.0	20.6	13.6	90.00	-1,635.2	-353.8	923.8	889.6	34.14	27.055	
8,700.0	7,770.0	7,775.0	7,775.0	21.9	13.6	90.00	-1,635.2	-353.8	832.6	797.1	35.50	23.454	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	7,775.0	7,775.0	23.3	13.6	90.00	-1,635.2	-353.8	743.6	706.7	36.90	20.150		
8,900.0	7,770.0	7,775.0	7,775.0	24.8	13.6	90.00	-1,635.2	-353.8	657.8	619.5	38.35	17.152		
9,000.0	7,770.0	7,775.0	7,775.0	26.3	13.6	90.00	-1,635.2	-353.8	576.7	536.8	39.84	14.474		
9,100.0	7,770.0	7,775.0	7,775.0	27.8	13.6	90.00	-1,635.2	-353.8	502.3	461.0	41.36	12.145		
9,200.0	7,770.0	7,775.0	7,775.0	29.3	13.6	90.00	-1,635.2	-353.8	438.3	395.4	42.91	10.216		
9,300.0	7,770.0	7,775.0	7,775.0	30.9	13.6	90.00	-1,635.2	-353.8	389.8	345.3	44.47	8.765		
9,400.0	7,770.0	7,775.0	7,775.0	32.5	13.6	90.00	-1,635.2	-353.8	363.0	316.9	46.06	7.880		
9,451.0	7,770.0	7,775.0	7,775.0	33.3	13.6	90.00	-1,635.2	-353.8	359.4	312.5	46.88	7.666 CC, ES		
9,500.0	7,770.0	7,775.0	7,775.0	34.1	13.6	90.00	-1,635.2	-353.8	362.7	315.0	47.66	7.609 SF		
9,600.0	7,770.0	7,775.0	7,775.0	35.7	13.6	90.00	-1,635.2	-353.8	389.0	339.7	49.28	7.894		
9,700.0	7,770.0	7,775.0	7,775.0	37.3	13.6	90.00	-1,635.2	-353.8	437.2	386.3	50.91	8.588		
9,800.0	7,770.0	7,775.0	7,775.0	39.0	13.6	90.00	-1,635.2	-353.8	500.9	448.4	52.55	9.532		
9,900.0	7,770.0	7,775.0	7,775.0	40.6	13.6	90.00	-1,635.2	-353.8	575.1	520.9	54.20	10.611		
10,000.0	7,770.0	7,775.0	7,775.0	42.3	13.6	90.00	-1,635.2	-353.8	656.2	600.3	55.86	11.747		
10,100.0	7,770.0	7,775.0	7,775.0	44.0	13.6	90.00	-1,635.2	-353.8	741.8	684.3	57.52	12.896		
10,200.0	7,770.0	7,775.0	7,775.0	45.6	13.6	90.00	-1,635.2	-353.8	830.7	771.5	59.20	14.034		
10,300.0	7,770.0	7,775.0	7,775.0	47.3	13.6	90.00	-1,635.2	-353.8	921.9	861.0	60.87	15.144		
10,400.0	7,770.0	7,775.0	7,775.0	49.0	13.6	90.00	-1,635.2	-353.8	1,014.8	952.2	62.56	16.221		
10,500.0	7,770.0	7,775.0	7,775.0	50.7	13.6	90.00	-1,635.2	-353.8	1,108.8	1,044.6	64.25	17.259		
10,600.0	7,770.0	7,775.0	7,775.0	52.4	13.6	90.00	-1,635.2	-353.8	1,203.9	1,137.9	65.94	18.257		
10,700.0	7,770.0	7,775.0	7,775.0	54.1	13.6	90.00	-1,635.2	-353.8	1,299.7	1,232.0	67.64	19.216		
10,800.0	7,770.0	7,775.0	7,775.0	55.8	13.6	90.00	-1,635.2	-353.8	1,396.0	1,326.7	69.34	20.134		
10,900.0	7,770.0	7,775.0	7,775.0	57.5	13.6	90.00	-1,635.2	-353.8	1,492.9	1,421.9	71.04	21.015		
11,000.0	7,770.0	7,775.0	7,775.0	59.2	13.6	90.00	-1,635.2	-353.8	1,590.1	1,517.4	72.75	21.859		
11,100.0	7,770.0	7,775.0	7,775.0	60.9	13.6	90.00	-1,635.2	-353.8	1,687.7	1,613.2	74.45	22.667		
11,200.0	7,770.0	7,775.0	7,775.0	62.6	13.6	90.00	-1,635.2	-353.8	1,785.5	1,709.4	76.17	23.443		
11,300.0	7,770.0	7,775.0	7,775.0	64.3	13.6	90.00	-1,635.2	-353.8	1,883.6	1,805.7	77.88	24.186		
11,400.0	7,770.0	7,775.0	7,775.0	66.0	13.6	90.00	-1,635.2	-353.8	1,981.8	1,902.3	79.60	24.899		
11,500.0	7,770.0	7,775.0	7,775.0	67.7	13.6	90.00	-1,635.2	-353.8	2,080.3	1,999.0	81.31	25.583		
11,600.0	7,770.0	7,775.0	7,775.0	69.5	13.6	90.00	-1,635.2	-353.8	2,178.8	2,095.8	83.03	26.240		
11,700.0	7,770.0	7,775.0	7,775.0	71.2	13.6	90.00	-1,635.2	-353.8	2,277.5	2,192.8	84.75	26.872		
11,800.0	7,770.0	7,775.0	7,775.0	72.9	13.6	90.00	-1,635.2	-353.8	2,376.3	2,289.8	86.48	27.479		
11,900.0	7,770.0	7,775.0	7,775.0	74.6	13.6	90.00	-1,635.2	-353.8	2,475.2	2,387.0	88.20	28.063		
12,000.0	7,770.0	7,775.0	7,775.0	76.4	13.6	90.00	-1,635.2	-353.8	2,574.2	2,484.3	89.93	28.625		
12,100.0	7,770.0	7,775.0	7,775.0	78.1	13.6	90.00	-1,635.2	-353.8	2,673.3	2,581.6	91.65	29.167		
12,200.0	7,770.0	7,775.0	7,775.0	79.8	13.6	90.00	-1,635.2	-353.8	2,772.4	2,679.0	93.38	29.688		
12,300.0	7,770.0	7,775.0	7,775.0	81.5	13.6	90.00	-1,635.2	-353.8	2,871.6	2,776.5	95.11	30.191		
12,400.0	7,770.0	7,775.0	7,775.0	83.3	13.6	90.00	-1,635.2	-353.8	2,970.8	2,874.0	96.84	30.677		
12,500.0	7,770.0	7,775.0	7,775.0	85.0	13.6	90.00	-1,635.2	-353.8	3,070.1	2,971.5	98.57	31.145		
12,600.0	7,770.0	7,775.0	7,775.0	86.7	13.6	90.00	-1,635.2	-353.8	3,169.4	3,069.1	100.31	31.598		
12,700.0	7,770.0	7,775.0	7,775.0	88.5	13.6	90.00	-1,635.2	-353.8	3,268.8	3,166.8	102.04	32.035		
12,800.0	7,770.0	7,775.0	7,775.0	90.2	13.6	90.00	-1,635.2	-353.8	3,368.2	3,264.4	103.77	32.458		
12,900.0	7,770.0	7,775.0	7,775.0	91.9	13.6	90.00	-1,635.2	-353.8	3,467.7	3,362.2	105.51	32.866		
13,000.0	7,770.0	7,775.0	7,775.0	93.7	13.6	90.00	-1,635.2	-353.8	3,567.1	3,459.9	107.24	33.262		
13,100.0	7,770.0	7,775.0	7,775.0	95.4	13.6	90.00	-1,635.2	-353.8	3,666.6	3,557.7	108.98	33.645		
13,200.0	7,770.0	7,775.0	7,775.0	97.1	13.6	90.00	-1,635.2	-353.8	3,766.2	3,655.5	110.72	34.017		
13,300.0	7,770.0	7,775.0	7,775.0	98.9	13.6	90.00	-1,635.2	-353.8	3,865.7	3,753.3	112.45	34.376		
13,400.0	7,770.0	7,775.0	7,775.0	100.6	13.6	90.00	-1,635.2	-353.8	3,965.3	3,851.1	114.19	34.725		
13,500.0	7,770.0	7,775.0	7,775.0	102.4	13.6	90.00	-1,635.2	-353.8	4,064.9	3,949.0	115.93	35.064		
13,600.0	7,770.0	7,775.0	7,775.0	104.1	13.6	90.00	-1,635.2	-353.8	4,164.5	4,046.9	117.67	35.392		
13,700.0	7,770.0	7,775.0	7,775.0	105.8	13.6	90.00	-1,635.2	-353.8	4,264.2	4,144.8	119.41	35.711		
13,800.0	7,770.0	7,775.0	7,775.0	107.6	13.6	90.00	-1,635.2	-353.8	4,363.8	4,242.7	121.15	36.021		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,900.0	7,770.0	7,775.0	7,775.0	109.3	13.6	90.00	-1,635.2	-353.8	4,463.5	4,340.6	122.89	36.322		
14,000.0	7,770.0	7,775.0	7,775.0	111.1	13.6	90.00	-1,635.2	-353.8	4,563.2	4,438.5	124.63	36.614		
14,100.0	7,770.0	7,775.0	7,775.0	112.8	13.6	90.00	-1,635.2	-353.8	4,662.9	4,536.5	126.37	36.899		
14,200.0	7,770.0	7,775.0	7,775.0	114.5	13.6	90.00	-1,635.2	-353.8	4,762.6	4,634.5	128.11	37.175		
14,300.0	7,770.0	7,775.0	7,775.0	116.3	13.6	90.00	-1,635.2	-353.8	4,862.3	4,732.4	129.85	37.444		
14,400.0	7,770.0	7,775.0	7,775.0	118.0	13.6	90.00	-1,635.2	-353.8	4,962.0	4,830.4	131.60	37.707		
14,500.0	7,770.0	7,775.0	7,775.0	119.8	13.6	90.00	-1,635.2	-353.8	5,061.8	4,928.4	133.34	37.962		
14,600.0	7,770.0	7,775.0	7,775.0	121.5	13.6	90.00	-1,635.2	-353.8	5,161.5	5,026.4	135.08	38.210		
14,700.0	7,770.0	7,775.0	7,775.0	123.3	13.6	90.00	-1,635.2	-353.8	5,261.3	5,124.5	136.82	38.453		
14,800.0	7,770.0	7,775.0	7,775.0	125.0	13.6	90.00	-1,635.2	-353.8	5,361.1	5,222.5	138.57	38.689		
14,900.0	7,770.0	7,775.0	7,775.0	126.7	13.6	90.00	-1,635.2	-353.8	5,460.8	5,320.5	140.31	38.919		
15,000.0	7,770.0	7,775.0	7,775.0	128.5	13.6	90.00	-1,635.2	-353.8	5,560.6	5,418.6	142.06	39.144		
15,100.0	7,770.0	7,775.0	7,775.0	130.2	13.6	90.00	-1,635.2	-353.8	5,660.4	5,516.6	143.80	39.363		
15,200.0	7,770.0	7,775.0	7,775.0	132.0	13.6	90.00	-1,635.2	-353.8	5,760.2	5,614.7	145.55	39.577		
15,300.0	7,770.0	7,775.0	7,775.0	133.7	13.6	90.00	-1,635.2	-353.8	5,860.0	5,712.7	147.29	39.785		
15,400.0	7,770.0	7,775.0	7,775.0	135.5	13.6	90.00	-1,635.2	-353.8	5,959.8	5,810.8	149.04	39.989		
15,500.0	7,770.0	7,775.0	7,775.0	137.2	13.6	90.00	-1,635.2	-353.8	6,059.7	5,908.9	150.78	40.188		
15,600.0	7,770.0	7,775.0	7,775.0	139.0	13.6	90.00	-1,635.2	-353.8	6,159.5	6,007.0	152.53	40.383		
15,700.0	7,770.0	7,775.0	7,775.0	140.7	13.6	90.00	-1,635.2	-353.8	6,259.3	6,105.0	154.27	40.573		
15,800.0	7,770.0	7,775.0	7,775.0	142.4	13.6	90.00	-1,635.2	-353.8	6,359.2	6,203.1	156.02	40.759		
15,900.0	7,770.0	7,775.0	7,775.0	144.2	13.6	90.00	-1,635.2	-353.8	6,459.0	6,301.2	157.76	40.941		
16,000.0	7,770.0	7,775.0	7,775.0	145.9	13.6	90.00	-1,635.2	-353.8	6,558.8	6,399.3	159.51	41.118		
16,100.0	7,770.0	7,775.0	7,775.0	147.7	13.6	90.00	-1,635.2	-353.8	6,658.7	6,497.4	161.26	41.292		
16,200.0	7,770.0	7,775.0	7,775.0	149.4	13.6	90.00	-1,635.2	-353.8	6,758.6	6,595.5	163.00	41.462		
16,300.0	7,770.0	7,775.0	7,775.0	151.2	13.6	90.00	-1,635.2	-353.8	6,858.4	6,693.7	164.75	41.629		
16,400.0	7,770.0	7,775.0	7,775.0	152.9	13.6	90.00	-1,635.2	-353.8	6,958.3	6,791.8	166.50	41.792		
16,500.0	7,770.0	7,775.0	7,775.0	154.7	13.6	90.00	-1,635.2	-353.8	7,058.1	6,889.9	168.25	41.951		
16,600.0	7,770.0	7,775.0	7,775.0	156.4	13.6	90.00	-1,635.2	-353.8	7,158.0	6,988.0	169.99	42.108		
16,700.0	7,770.0	7,775.0	7,775.0	158.2	13.6	90.00	-1,635.2	-353.8	7,257.9	7,086.2	171.74	42.261		
16,800.0	7,770.0	7,775.0	7,775.0	159.9	13.6	90.00	-1,635.2	-353.8	7,357.8	7,184.3	173.49	42.411		
16,900.0	7,770.0	7,775.0	7,775.0	161.7	13.6	90.00	-1,635.2	-353.8	7,457.7	7,282.4	175.24	42.558		
17,000.0	7,770.0	7,775.0	7,775.0	163.4	13.6	90.00	-1,635.2	-353.8	7,557.5	7,380.6	176.98	42.702		
17,100.0	7,770.0	7,775.0	7,775.0	165.2	13.6	90.00	-1,635.2	-353.8	7,657.4	7,478.7	178.73	42.843		
17,200.0	7,770.0	7,775.0	7,775.0	166.9	13.6	90.00	-1,635.2	-353.8	7,757.3	7,576.8	180.48	42.981		
17,300.0	7,770.0	7,775.0	7,775.0	168.7	13.6	90.00	-1,635.2	-353.8	7,857.2	7,675.0	182.23	43.117		
17,400.0	7,770.0	7,775.0	7,775.0	170.4	13.6	90.00	-1,635.2	-353.8	7,957.1	7,773.1	183.98	43.250		
17,500.0	7,770.0	7,775.0	7,775.0	172.2	13.6	90.00	-1,635.2	-353.8	8,057.0	7,871.3	185.73	43.381		
17,600.0	7,770.0	7,775.0	7,775.0	173.9	13.6	90.00	-1,635.2	-353.8	8,156.9	7,969.4	187.47	43.509		
17,653.1	7,770.0	7,775.0	7,775.0	174.8	13.6	90.00	-1,635.2	-353.8	8,209.9	8,021.5	188.40	43.576		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	21.0	21.0	0.0	0.0	-131.60	-1,116.5	-1,257.7	1,681.8					
100.0	100.0	121.0	121.0	0.2	0.2	-131.60	-1,116.5	-1,257.7	1,681.8	1,681.4	0.36	4,630.165		
200.0	200.0	221.0	221.0	0.3	0.4	-131.60	-1,116.5	-1,257.7	1,681.8	1,681.1	0.71	2,361.113		
300.0	300.0	321.0	321.0	0.5	0.6	-131.60	-1,116.5	-1,257.7	1,681.8	1,680.7	1.06	1,584.577		
400.0	400.0	421.0	421.0	0.7	0.7	-131.60	-1,116.5	-1,257.7	1,681.8	1,680.4	1.41	1,192.411		
500.0	500.0	521.0	521.0	0.8	0.9	-131.60	-1,116.5	-1,257.7	1,681.8	1,680.0	1.76	955.848		
550.0	550.0	571.0	571.0	0.9	1.0	-131.60	-1,116.5	-1,257.7	1,681.8	1,679.9	1.93	869.589		
600.0	600.0	621.0	621.0	1.0	1.1	-132.44	-1,116.5	-1,257.7	1,681.9	1,679.8	2.11	797.684		
700.0	700.0	721.0	721.0	1.2	1.3	-132.47	-1,116.5	-1,257.7	1,683.1	1,680.7	2.46	684.756		
800.0	799.9	820.9	820.9	1.4	1.4	-132.54	-1,116.5	-1,257.7	1,685.5	1,682.7	2.81	600.002		
861.1	860.9	881.9	881.9	1.5	1.5	-132.60	-1,116.5	-1,257.7	1,687.5	1,684.5	3.02	557.881		
900.0	899.8	920.8	920.8	1.6	1.6	-132.65	-1,116.5	-1,257.7	1,688.9	1,685.8	3.16	533.973		
1,000.0	999.6	1,020.6	1,020.6	1.8	1.8	-132.79	-1,116.5	-1,257.7	1,692.6	1,689.1	3.52	481.020		
1,100.0	1,099.5	1,120.5	1,120.5	1.9	2.0	-132.92	-1,116.5	-1,257.7	1,696.3	1,692.4	3.88	437.669		
1,200.0	1,199.3	1,220.3	1,220.3	2.1	2.1	-133.06	-1,116.5	-1,257.7	1,700.0	1,695.8	4.23	401.557		
1,300.0	1,299.2	1,320.2	1,320.2	2.3	2.3	-133.19	-1,116.5	-1,257.7	1,703.7	1,699.1	4.59	371.027		
1,400.0	1,399.1	1,420.1	1,420.1	2.5	2.5	-133.32	-1,116.5	-1,257.7	1,707.4	1,702.5	4.95	344.890		
1,500.0	1,498.9	1,519.9	1,519.9	2.7	2.7	-133.45	-1,116.5	-1,257.7	1,711.2	1,705.9	5.31	322.267		
1,600.0	1,598.8	1,619.8	1,619.8	2.9	2.8	-133.59	-1,116.5	-1,257.7	1,714.9	1,709.3	5.67	302.500		
1,700.0	1,698.6	1,719.6	1,719.6	3.1	3.0	-133.72	-1,116.5	-1,257.7	1,718.7	1,712.6	6.03	285.083		
1,800.0	1,798.5	1,819.5	1,819.5	3.3	3.2	-133.85	-1,116.5	-1,257.7	1,722.4	1,716.0	6.39	269.622		
1,900.0	1,898.3	1,919.3	1,919.3	3.5	3.3	-133.98	-1,116.5	-1,257.7	1,726.2	1,719.4	6.75	255.808		
2,000.0	1,998.2	2,019.2	2,019.2	3.7	3.5	-134.11	-1,116.5	-1,257.7	1,730.0	1,722.9	7.11	243.391		
2,100.0	2,098.0	2,119.0	2,119.0	3.9	3.7	-134.23	-1,116.5	-1,257.7	1,733.8	1,726.3	7.47	232.171		
2,200.0	2,197.9	2,218.9	2,218.9	4.1	3.9	-134.36	-1,116.5	-1,257.7	1,737.5	1,729.7	7.83	221.983		
2,300.0	2,297.7	2,318.7	2,318.7	4.3	4.0	-134.49	-1,116.5	-1,257.7	1,741.3	1,733.2	8.19	212.691		
2,400.0	2,397.6	2,418.6	2,418.6	4.5	4.2	-134.62	-1,116.5	-1,257.7	1,745.2	1,736.6	8.55	204.183		
2,500.0	2,497.4	2,518.4	2,518.4	4.7	4.4	-134.74	-1,116.5	-1,257.7	1,749.0	1,740.1	8.91	196.365		
2,600.0	2,597.3	2,618.3	2,618.3	4.9	4.6	-134.87	-1,116.5	-1,257.7	1,752.8	1,743.5	9.27	189.154		
2,700.0	2,697.1	2,718.1	2,718.1	5.1	4.7	-134.99	-1,116.5	-1,257.7	1,756.6	1,747.0	9.63	182.485		
2,800.0	2,797.0	2,818.0	2,818.0	5.3	4.9	-135.12	-1,116.5	-1,257.7	1,760.5	1,750.5	9.99	176.297		
2,900.0	2,896.8	2,917.8	2,917.8	5.5	5.1	-135.24	-1,116.5	-1,257.7	1,764.3	1,754.0	10.35	170.542		
3,000.0	2,996.7	3,017.7	3,017.7	5.7	5.3	-135.37	-1,116.5	-1,257.7	1,768.2	1,757.5	10.71	165.175		
3,100.0	3,096.5	3,117.5	3,117.5	5.9	5.4	-135.49	-1,116.5	-1,257.7	1,772.1	1,761.0	11.06	160.158		
3,200.0	3,196.4	3,217.4	3,217.4	6.1	5.6	-135.61	-1,116.5	-1,257.7	1,775.9	1,764.5	11.42	155.458		
3,300.0	3,296.3	3,317.3	3,317.3	6.3	5.8	-135.74	-1,116.5	-1,257.7	1,779.8	1,768.0	11.78	151.047		
3,400.0	3,396.1	3,417.1	3,417.1	6.5	6.0	-135.86	-1,116.5	-1,257.7	1,783.7	1,771.6	12.14	146.898		
3,500.0	3,496.0	3,517.0	3,517.0	6.7	6.1	-135.98	-1,116.5	-1,257.7	1,787.6	1,775.1	12.50	142.990		
3,600.0	3,595.8	3,616.8	3,616.8	6.9	6.3	-136.10	-1,116.5	-1,257.7	1,791.5	1,778.7	12.86	139.300		
3,700.0	3,695.7	3,716.7	3,716.7	7.0	6.5	-136.22	-1,116.5	-1,257.7	1,795.4	1,782.2	13.22	135.813		
3,800.0	3,795.5	3,816.5	3,816.5	7.2	6.7	-136.34	-1,116.5	-1,257.7	1,799.4	1,785.8	13.58	132.512		
3,900.0	3,895.4	3,916.4	3,916.4	7.4	6.8	-136.46	-1,116.5	-1,257.7	1,803.3	1,789.4	13.94	129.382		
4,000.0	3,995.2	4,016.2	4,016.2	7.6	7.0	-136.58	-1,116.5	-1,257.7	1,807.2	1,792.9	14.30	126.410		
4,100.0	4,095.1	4,116.1	4,116.1	7.8	7.2	-136.69	-1,116.5	-1,257.7	1,811.2	1,796.5	14.66	123.585		
4,200.0	4,194.9	4,215.9	4,215.9	8.0	7.4	-136.81	-1,116.5	-1,257.7	1,815.1	1,800.1	15.01	120.896		
4,300.0	4,294.8	4,315.8	4,315.8	8.2	7.5	-136.93	-1,116.5	-1,257.7	1,819.1	1,803.7	15.37	118.333		
4,400.0	4,394.6	4,415.6	4,415.6	8.4	7.7	-137.04	-1,116.5	-1,257.7	1,823.1	1,807.3	15.73	115.889		
4,500.0	4,494.5	4,515.5	4,515.5	8.6	7.9	-137.16	-1,116.5	-1,257.7	1,827.1	1,811.0	16.09	113.554		
4,600.0	4,594.3	4,615.3	4,615.3	8.8	8.1	-137.28	-1,116.5	-1,257.7	1,831.0	1,814.6	16.45	111.323		
4,700.0	4,694.2	4,715.2	4,715.2	9.0	8.2	-137.39	-1,116.5	-1,257.7	1,835.0	1,818.2	16.81	109.187		
4,800.0	4,794.0	4,815.0	4,815.0	9.2	8.4	-137.50	-1,116.5	-1,257.7	1,839.0	1,821.9	17.16	107.141		
4,900.0	4,893.9	4,914.9	4,914.9	9.4	8.6	-137.62	-1,116.5	-1,257.7	1,843.0	1,825.5	17.52	105.180		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,000.0	4,993.7	5,014.7	5,014.7	9.6	8.8	-137.73	-1,116.5	-1,257.7	1,847.1	1,829.2	17.88	103.299		
5,100.0	5,093.6	5,114.6	5,114.6	9.8	8.9	-137.85	-1,116.5	-1,257.7	1,851.1	1,832.8	18.24	101.492		
5,200.0	5,193.5	5,214.5	5,214.5	10.0	9.1	-137.96	-1,116.5	-1,257.7	1,855.1	1,836.5	18.60	99.755		
5,300.0	5,293.3	5,314.3	5,314.3	10.2	9.3	-138.07	-1,116.5	-1,257.7	1,859.1	1,840.2	18.95	98.085		
5,400.0	5,393.2	5,414.2	5,414.2	10.4	9.4	-138.18	-1,116.5	-1,257.7	1,863.2	1,843.9	19.31	96.477		
5,500.0	5,493.0	5,514.0	5,514.0	10.6	9.6	-138.29	-1,116.5	-1,257.7	1,867.2	1,847.6	19.67	94.929		
5,600.0	5,592.9	5,613.9	5,613.9	10.8	9.8	-138.40	-1,116.5	-1,257.7	1,871.3	1,851.3	20.03	93.437		
5,700.0	5,692.7	5,713.7	5,713.7	11.0	10.0	-138.51	-1,116.5	-1,257.7	1,875.4	1,855.0	20.38	91.997		
5,800.0	5,792.6	5,813.6	5,813.6	11.2	10.1	-138.62	-1,116.5	-1,257.7	1,879.4	1,858.7	20.74	90.608		
5,900.0	5,892.4	5,913.4	5,913.4	11.4	10.3	-138.73	-1,116.5	-1,257.7	1,883.5	1,862.4	21.10	89.267		
6,000.0	5,992.3	6,013.3	6,013.3	11.6	10.5	-138.84	-1,116.5	-1,257.7	1,887.6	1,866.1	21.46	87.971		
6,100.0	6,092.1	6,113.1	6,113.1	11.8	10.7	-138.95	-1,116.5	-1,257.7	1,891.7	1,869.9	21.81	86.718		
6,200.0	6,192.0	6,213.0	6,213.0	12.0	10.8	-139.06	-1,116.5	-1,257.7	1,895.8	1,873.6	22.17	85.506		
6,300.0	6,291.8	6,312.8	6,312.8	12.2	11.0	-139.16	-1,116.5	-1,257.7	1,899.9	1,877.4	22.53	84.333		
6,400.0	6,391.7	6,412.7	6,412.7	12.4	11.2	-139.27	-1,116.5	-1,257.7	1,904.0	1,881.1	22.89	83.198		
6,500.0	6,491.5	6,512.5	6,512.5	12.6	11.4	-139.38	-1,116.5	-1,257.7	1,908.1	1,884.9	23.24	82.097		
6,600.0	6,591.4	6,612.4	6,612.4	12.8	11.5	-139.48	-1,116.5	-1,257.7	1,912.2	1,888.6	23.60	81.031		
6,700.0	6,691.2	6,712.2	6,712.2	13.0	11.7	-139.59	-1,116.5	-1,257.7	1,916.4	1,892.4	23.96	79.996		
6,800.0	6,791.1	6,812.1	6,812.1	13.2	11.9	-139.69	-1,116.5	-1,257.7	1,920.5	1,896.2	24.31	78.993		
6,900.0	6,890.9	6,911.9	6,911.9	13.4	12.1	-139.80	-1,116.5	-1,257.7	1,924.7	1,900.0	24.67	78.019		
7,000.0	6,990.8	7,011.8	7,011.8	13.6	12.2	-139.90	-1,116.5	-1,257.7	1,928.8	1,903.8	25.03	77.074		
7,024.2	7,014.9	7,035.9	7,035.9	13.6	12.3	-139.92	-1,116.5	-1,257.7	1,929.8	1,904.7	25.11	76.849		
7,050.0	7,040.7	7,061.7	7,061.7	13.7	12.3	-141.63	-1,116.5	-1,257.7	1,930.5	1,905.3	25.20	76.596		
7,100.0	7,090.7	7,111.7	7,111.7	13.7	12.4	41.79	-1,116.5	-1,257.7	1,929.9	1,904.6	25.34	76.158		
7,150.0	7,140.5	7,161.5	7,161.5	13.8	12.5	41.54	-1,116.5	-1,257.7	1,926.7	1,901.3	25.43	75.774		
7,200.0	7,189.9	7,210.9	7,210.9	13.8	12.6	41.86	-1,116.5	-1,257.7	1,920.8	1,895.4	25.46	75.435		
7,250.0	7,238.6	7,259.6	7,259.6	13.8	12.7	42.48	-1,116.5	-1,257.7	1,912.4	1,887.0	25.46	75.126		
7,300.0	7,286.4	7,307.4	7,307.4	13.7	12.8	43.34	-1,116.5	-1,257.7	1,901.5	1,876.1	25.41	74.829		
7,350.0	7,333.1	7,354.1	7,354.1	13.7	12.8	44.45	-1,116.5	-1,257.7	1,888.2	1,862.9	25.34	74.516		
7,400.0	7,378.5	7,399.5	7,399.5	13.6	12.9	45.79	-1,116.5	-1,257.7	1,872.6	1,847.4	25.25	74.154		
7,450.0	7,422.2	7,443.2	7,443.2	13.6	13.0	47.39	-1,116.5	-1,257.7	1,854.9	1,829.7	25.17	73.705		
7,500.0	7,464.1	7,485.1	7,485.1	13.5	13.1	49.24	-1,116.5	-1,257.7	1,835.1	1,810.0	25.09	73.125		
7,550.0	7,504.1	7,525.1	7,525.1	13.5	13.1	51.36	-1,116.5	-1,257.7	1,813.4	1,788.3	25.06	72.370		
7,600.0	7,541.8	7,562.8	7,562.8	13.5	13.2	53.73	-1,116.5	-1,257.7	1,790.1	1,765.0	25.07	71.399		
7,650.0	7,577.2	7,598.2	7,598.2	13.4	13.3	56.36	-1,116.5	-1,257.7	1,765.2	1,740.1	25.15	70.184		
7,700.0	7,610.0	7,631.0	7,631.0	13.5	13.3	59.23	-1,116.5	-1,257.7	1,739.1	1,713.8	25.31	68.715		
7,750.0	7,640.2	7,661.2	7,661.2	13.5	13.4	62.32	-1,116.5	-1,257.7	1,712.0	1,686.4	25.55	67.006		
7,800.0	7,667.4	7,688.4	7,688.4	13.6	13.4	65.58	-1,116.5	-1,257.7	1,684.0	1,658.1	25.87	65.098		
7,850.0	7,691.7	7,712.7	7,712.7	13.7	13.5	68.96	-1,116.5	-1,257.7	1,655.4	1,629.2	26.26	63.048		
7,900.0	7,712.8	7,733.8	7,733.8	13.9	13.5	72.40	-1,116.5	-1,257.7	1,626.5	1,599.8	26.70	60.926		
7,950.0	7,730.8	7,751.8	7,751.8	14.1	13.5	75.83	-1,116.5	-1,257.7	1,597.6	1,570.4	27.17	58.798		
8,000.0	7,745.5	7,766.5	7,766.5	14.4	13.6	79.19	-1,116.5	-1,257.7	1,568.8	1,541.1	27.66	56.718		
8,050.0	7,756.7	7,777.7	7,777.7	14.7	13.6	82.39	-1,116.5	-1,257.7	1,540.4	1,512.3	28.15	54.726		
8,100.0	7,764.6	7,785.6	7,785.6	15.1	13.6	85.38	-1,116.5	-1,257.7	1,512.7	1,484.1	28.63	52.839		
8,150.0	7,769.0	7,790.0	7,790.0	15.5	13.6	88.12	-1,116.5	-1,257.7	1,485.9	1,456.8	29.10	51.066		
8,188.1	7,770.0	7,791.0	7,791.0	15.9	13.6	90.00	-1,116.5	-1,257.7	1,466.2	1,436.8	29.45	49.789		
8,200.0	7,770.0	7,791.0	7,791.0	16.0	13.6	90.00	-1,116.5	-1,257.7	1,460.2	1,430.6	29.56	49.399		
8,300.0	7,770.0	7,791.0	7,791.0	17.0	13.6	90.00	-1,116.5	-1,257.7	1,412.7	1,382.2	30.56	46.229		
8,400.0	7,770.0	7,791.0	7,791.0	18.1	13.6	90.00	-1,116.5	-1,257.7	1,370.9	1,339.2	31.67	43.282		
8,500.0	7,770.0	7,791.0	7,791.0	19.3	13.6	90.00	-1,116.5	-1,257.7	1,335.2	1,302.4	32.88	40.606		
8,600.0	7,770.0	7,791.0	7,791.0	20.6	13.6	90.00	-1,116.5	-1,257.7	1,306.3	1,272.1	34.17	38.228		
8,700.0	7,770.0	7,791.0	7,791.0	21.9	13.6	90.00	-1,116.5	-1,257.7	1,284.5	1,249.0	35.52	36.158		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,770.0	7,791.0	7,791.0	23.3	13.6	90.00	-1,116.5	-1,257.7	1,270.2	1,233.3	36.93	34.395	CC, ES	
8,900.0	7,770.0	7,791.0	7,791.0	24.8	13.6	90.00	-1,116.5	-1,257.7	1,263.8	1,225.4	38.38	32.925		
8,932.2	7,770.0	7,791.0	7,791.0	25.3	13.6	90.00	-1,116.5	-1,257.7	1,263.3	1,224.5	38.86	32.508		
9,000.0	7,770.0	7,791.0	7,791.0	26.3	13.6	90.00	-1,116.5	-1,257.7	1,265.2	1,225.3	39.87	31.732		
9,100.0	7,770.0	7,791.0	7,791.0	27.8	13.6	90.00	-1,116.5	-1,257.7	1,274.4	1,233.0	41.39	30.791		
9,200.0	7,770.0	7,791.0	7,791.0	29.3	13.6	90.00	-1,116.5	-1,257.7	1,291.4	1,248.5	42.93	30.079		
9,300.0	7,770.0	7,791.0	7,791.0	30.9	13.6	90.00	-1,116.5	-1,257.7	1,315.8	1,271.3	44.50	29.567	SF	
9,400.0	7,770.0	7,791.0	7,791.0	32.5	13.6	90.00	-1,116.5	-1,257.7	1,347.2	1,301.1	46.09	29.230		
9,500.0	7,770.0	7,791.0	7,791.0	34.1	13.6	90.00	-1,116.5	-1,257.7	1,385.1	1,337.4	47.69	29.042		
9,600.0	7,770.0	7,791.0	7,791.0	35.7	13.6	90.00	-1,116.5	-1,257.7	1,429.0	1,379.6	49.31	28.980		
9,700.0	7,770.0	7,791.0	7,791.0	37.3	13.6	90.00	-1,116.5	-1,257.7	1,478.3	1,427.4	50.94	29.022		
9,800.0	7,770.0	7,791.0	7,791.0	39.0	13.6	90.00	-1,116.5	-1,257.7	1,532.7	1,480.1	52.58	29.150		
9,900.0	7,770.0	7,791.0	7,791.0	40.6	13.6	90.00	-1,116.5	-1,257.7	1,591.4	1,537.2	54.23	29.346		
10,000.0	7,770.0	7,791.0	7,791.0	42.3	13.6	90.00	-1,116.5	-1,257.7	1,654.1	1,598.2	55.89	29.598		
10,100.0	7,770.0	7,791.0	7,791.0	44.0	13.6	90.00	-1,116.5	-1,257.7	1,720.4	1,662.8	57.55	29.892		
10,200.0	7,770.0	7,791.0	7,791.0	45.6	13.6	90.00	-1,116.5	-1,257.7	1,789.8	1,730.5	59.22	30.220		
10,300.0	7,770.0	7,791.0	7,791.0	47.3	13.6	90.00	-1,116.5	-1,257.7	1,861.9	1,801.0	60.90	30.572		
10,400.0	7,770.0	7,791.0	7,791.0	49.0	13.6	90.00	-1,116.5	-1,257.7	1,936.6	1,874.0	62.59	30.942		
10,500.0	7,770.0	7,791.0	7,791.0	50.7	13.6	90.00	-1,116.5	-1,257.7	2,013.4	1,949.2	64.27	31.325		
10,600.0	7,770.0	7,791.0	7,791.0	52.4	13.6	90.00	-1,116.5	-1,257.7	2,092.2	2,026.3	65.97	31.716		
10,700.0	7,770.0	7,791.0	7,791.0	54.1	13.6	90.00	-1,116.5	-1,257.7	2,172.8	2,105.1	67.66	32.111		
10,800.0	7,770.0	7,791.0	7,791.0	55.8	13.6	90.00	-1,116.5	-1,257.7	2,254.9	2,185.5	69.36	32.508		
10,900.0	7,770.0	7,791.0	7,791.0	57.5	13.6	90.00	-1,116.5	-1,257.7	2,338.4	2,267.3	71.07	32.904		
11,000.0	7,770.0	7,791.0	7,791.0	59.2	13.6	90.00	-1,116.5	-1,257.7	2,423.1	2,350.4	72.77	33.297		
11,100.0	7,770.0	7,791.0	7,791.0	60.9	13.6	90.00	-1,116.5	-1,257.7	2,509.0	2,434.5	74.48	33.686		
11,200.0	7,770.0	7,791.0	7,791.0	62.6	13.6	90.00	-1,116.5	-1,257.7	2,595.9	2,519.7	76.19	34.070		
11,300.0	7,770.0	7,791.0	7,791.0	64.3	13.6	90.00	-1,116.5	-1,257.7	2,683.7	2,605.8	77.91	34.447		
11,400.0	7,770.0	7,791.0	7,791.0	66.0	13.6	90.00	-1,116.5	-1,257.7	2,772.3	2,692.7	79.62	34.818		
11,500.0	7,770.0	7,791.0	7,791.0	67.7	13.6	90.00	-1,116.5	-1,257.7	2,861.7	2,780.4	81.34	35.181		
11,600.0	7,770.0	7,791.0	7,791.0	69.5	13.6	90.00	-1,116.5	-1,257.7	2,951.8	2,868.7	83.06	35.537		
11,700.0	7,770.0	7,791.0	7,791.0	71.2	13.6	90.00	-1,116.5	-1,257.7	3,042.4	2,957.7	84.78	35.885		
11,800.0	7,770.0	7,791.0	7,791.0	72.9	13.6	90.00	-1,116.5	-1,257.7	3,133.7	3,047.2	86.51	36.225		
11,900.0	7,770.0	7,791.0	7,791.0	74.6	13.6	90.00	-1,116.5	-1,257.7	3,225.5	3,137.2	88.23	36.557		
12,000.0	7,770.0	7,791.0	7,791.0	76.4	13.6	90.00	-1,116.5	-1,257.7	3,317.7	3,227.7	89.96	36.881		
12,100.0	7,770.0	7,791.0	7,791.0	78.1	13.6	90.00	-1,116.5	-1,257.7	3,410.4	3,318.7	91.68	37.198		
12,200.0	7,770.0	7,791.0	7,791.0	79.8	13.6	90.00	-1,116.5	-1,257.7	3,503.5	3,410.1	93.41	37.506		
12,300.0	7,770.0	7,791.0	7,791.0	81.5	13.6	90.00	-1,116.5	-1,257.7	3,596.9	3,501.8	95.14	37.806		
12,400.0	7,770.0	7,791.0	7,791.0	83.3	13.6	90.00	-1,116.5	-1,257.7	3,690.7	3,593.8	96.87	38.099		
12,500.0	7,770.0	7,791.0	7,791.0	85.0	13.6	90.00	-1,116.5	-1,257.7	3,784.8	3,686.2	98.60	38.385		
12,600.0	7,770.0	7,791.0	7,791.0	86.7	13.6	90.00	-1,116.5	-1,257.7	3,879.2	3,778.9	100.33	38.663		
12,700.0	7,770.0	7,791.0	7,791.0	88.5	13.6	90.00	-1,116.5	-1,257.7	3,973.9	3,871.8	102.07	38.934		
12,800.0	7,770.0	7,791.0	7,791.0	90.2	13.6	90.00	-1,116.5	-1,257.7	4,068.9	3,965.0	103.80	39.199		
12,900.0	7,770.0	7,791.0	7,791.0	91.9	13.6	90.00	-1,116.5	-1,257.7	4,164.0	4,058.5	105.54	39.456		
13,000.0	7,770.0	7,791.0	7,791.0	93.7	13.6	90.00	-1,116.5	-1,257.7	4,259.4	4,152.1	107.27	39.707		
13,100.0	7,770.0	7,791.0	7,791.0	95.4	13.6	90.00	-1,116.5	-1,257.7	4,355.0	4,246.0	109.01	39.952		
13,200.0	7,770.0	7,791.0	7,791.0	97.1	13.6	90.00	-1,116.5	-1,257.7	4,450.8	4,340.1	110.74	40.190		
13,300.0	7,770.0	7,791.0	7,791.0	98.9	13.6	90.00	-1,116.5	-1,257.7	4,546.8	4,434.3	112.48	40.423		
13,400.0	7,770.0	7,791.0	7,791.0	100.6	13.6	90.00	-1,116.5	-1,257.7	4,642.9	4,528.7	114.22	40.649		
13,500.0	7,770.0	7,791.0	7,791.0	102.4	13.6	90.00	-1,116.5	-1,257.7	4,739.2	4,623.3	115.96	40.871		
13,600.0	7,770.0	7,791.0	7,791.0	104.1	13.6	90.00	-1,116.5	-1,257.7	4,835.7	4,718.0	117.70	41.086		
13,700.0	7,770.0	7,791.0	7,791.0	105.8	13.6	90.00	-1,116.5	-1,257.7	4,932.3	4,812.9	119.44	41.297		
13,800.0	7,770.0	7,791.0	7,791.0	107.6	13.6	90.00	-1,116.5	-1,257.7	5,029.0	4,907.8	121.18	41.502		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
13,900.0	7,770.0	7,791.0	7,791.0	109.3	13.6	90.00	-1,116.5	-1,257.7	5,125.9	5,003.0	122.92	41.702		
14,000.0	7,770.0	7,791.0	7,791.0	111.1	13.6	90.00	-1,116.5	-1,257.7	5,222.8	5,098.2	124.66	41.898		
14,100.0	7,770.0	7,791.0	7,791.0	112.8	13.6	90.00	-1,116.5	-1,257.7	5,319.9	5,193.5	126.40	42.089		
14,200.0	7,770.0	7,791.0	7,791.0	114.5	13.6	90.00	-1,116.5	-1,257.7	5,417.1	5,289.0	128.14	42.275		
14,300.0	7,770.0	7,791.0	7,791.0	116.3	13.6	90.00	-1,116.5	-1,257.7	5,514.4	5,384.5	129.88	42.457		
14,400.0	7,770.0	7,791.0	7,791.0	118.0	13.6	90.00	-1,116.5	-1,257.7	5,611.8	5,480.2	131.62	42.635		
14,500.0	7,770.0	7,791.0	7,791.0	119.8	13.6	90.00	-1,116.5	-1,257.7	5,709.3	5,575.9	133.37	42.809		
14,600.0	7,770.0	7,791.0	7,791.0	121.5	13.6	90.00	-1,116.5	-1,257.7	5,806.8	5,671.7	135.11	42.979		
14,700.0	7,770.0	7,791.0	7,791.0	123.3	13.6	90.00	-1,116.5	-1,257.7	5,904.5	5,767.6	136.85	43.145		
14,800.0	7,770.0	7,791.0	7,791.0	125.0	13.6	90.00	-1,116.5	-1,257.7	6,002.2	5,863.6	138.60	43.307		
14,900.0	7,770.0	7,791.0	7,791.0	126.7	13.6	90.00	-1,116.5	-1,257.7	6,100.0	5,959.7	140.34	43.466		
15,000.0	7,770.0	7,791.0	7,791.0	128.5	13.6	90.00	-1,116.5	-1,257.7	6,197.9	6,055.8	142.08	43.621		
15,100.0	7,770.0	7,791.0	7,791.0	130.2	13.6	90.00	-1,116.5	-1,257.7	6,295.8	6,152.0	143.83	43.773		
15,200.0	7,770.0	7,791.0	7,791.0	132.0	13.6	90.00	-1,116.5	-1,257.7	6,393.8	6,248.2	145.57	43.921		
15,300.0	7,770.0	7,791.0	7,791.0	133.7	13.6	90.00	-1,116.5	-1,257.7	6,491.9	6,344.5	147.32	44.067		
15,400.0	7,770.0	7,791.0	7,791.0	135.5	13.6	90.00	-1,116.5	-1,257.7	6,590.0	6,440.9	149.06	44.209		
15,500.0	7,770.0	7,791.0	7,791.0	137.2	13.6	90.00	-1,116.5	-1,257.7	6,688.2	6,537.3	150.81	44.348		
15,600.0	7,770.0	7,791.0	7,791.0	139.0	13.6	90.00	-1,116.5	-1,257.7	6,786.4	6,633.8	152.55	44.485		
15,700.0	7,770.0	7,791.0	7,791.0	140.7	13.6	90.00	-1,116.5	-1,257.7	6,884.7	6,730.4	154.30	44.618		
15,800.0	7,770.0	7,791.0	7,791.0	142.4	13.6	90.00	-1,116.5	-1,257.7	6,983.0	6,826.9	156.05	44.749		
15,900.0	7,770.0	7,791.0	7,791.0	144.2	13.6	90.00	-1,116.5	-1,257.7	7,081.4	6,923.6	157.79	44.878		
16,000.0	7,770.0	7,791.0	7,791.0	145.9	13.6	90.00	-1,116.5	-1,257.7	7,179.8	7,020.2	159.54	45.003		
16,100.0	7,770.0	7,791.0	7,791.0	147.7	13.6	90.00	-1,116.5	-1,257.7	7,278.2	7,117.0	161.29	45.126		
16,200.0	7,770.0	7,791.0	7,791.0	149.4	13.6	90.00	-1,116.5	-1,257.7	7,376.7	7,213.7	163.03	45.247		
16,300.0	7,770.0	7,791.0	7,791.0	151.2	13.6	90.00	-1,116.5	-1,257.7	7,475.3	7,310.5	164.78	45.365		
16,400.0	7,770.0	7,791.0	7,791.0	152.9	13.6	90.00	-1,116.5	-1,257.7	7,573.9	7,407.3	166.53	45.481		
16,500.0	7,770.0	7,791.0	7,791.0	154.7	13.6	90.00	-1,116.5	-1,257.7	7,672.5	7,504.2	168.27	45.595		
16,600.0	7,770.0	7,791.0	7,791.0	156.4	13.6	90.00	-1,116.5	-1,257.7	7,771.1	7,601.1	170.02	45.707		
16,700.0	7,770.0	7,791.0	7,791.0	158.2	13.6	90.00	-1,116.5	-1,257.7	7,869.8	7,698.0	171.77	45.816		
16,800.0	7,770.0	7,791.0	7,791.0	159.9	13.6	90.00	-1,116.5	-1,257.7	7,968.5	7,795.0	173.52	45.924		
16,900.0	7,770.0	7,791.0	7,791.0	161.7	13.6	90.00	-1,116.5	-1,257.7	8,067.3	7,892.0	175.26	46.029		
17,000.0	7,770.0	7,791.0	7,791.0	163.4	13.6	90.00	-1,116.5	-1,257.7	8,166.1	7,989.1	177.01	46.133		
17,100.0	7,770.0	7,791.0	7,791.0	165.2	13.6	90.00	-1,116.5	-1,257.7	8,264.9	8,086.1	178.76	46.234		
17,200.0	7,770.0	7,791.0	7,791.0	166.9	13.6	90.00	-1,116.5	-1,257.7	8,363.7	8,183.2	180.51	46.334		
17,300.0	7,770.0	7,791.0	7,791.0	168.7	13.6	90.00	-1,116.5	-1,257.7	8,462.6	8,280.3	182.26	46.432		
17,400.0	7,770.0	7,791.0	7,791.0	170.4	13.6	90.00	-1,116.5	-1,257.7	8,561.5	8,377.5	184.01	46.528		
17,500.0	7,770.0	7,791.0	7,791.0	172.2	13.6	90.00	-1,116.5	-1,257.7	8,660.4	8,474.6	185.75	46.623		
17,600.0	7,770.0	7,791.0	7,791.0	173.9	13.6	90.00	-1,116.5	-1,257.7	8,759.3	8,571.8	187.50	46.716		
17,653.1	7,770.0	7,791.0	7,791.0	174.8	13.6	90.00	-1,116.5	-1,257.7	8,811.8	8,623.4	188.43	46.764		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	21.5	21.5	0.0	0.0	-107.68	-1,068.2	-3,350.6	3,516.7					
100.0	100.0	183.3	183.3	0.2	0.3	-107.69	-1,067.8	-3,348.4	3,515.3	3,514.8	0.47	7,449.696		
200.0	200.0	258.8	258.7	0.3	0.5	-107.69	-1,067.6	-3,346.9	3,513.4	3,512.7	0.78	4,514.751		
300.0	300.0	330.2	330.1	0.5	0.6	-107.69	-1,067.5	-3,346.3	3,512.5	3,511.4	1.08	3,260.377		
400.0	400.0	410.6	410.5	0.7	0.7	-107.69	-1,067.5	-3,346.1	3,512.2	3,510.8	1.39	2,523.007		
500.0	500.0	512.7	512.7	0.8	0.9	-107.69	-1,067.1	-3,346.1	3,512.2	3,510.4	1.74	2,012.890		
533.3	533.3	543.4	543.3	0.9	1.0	-107.69	-1,067.0	-3,346.2	3,512.1	3,510.3	1.86	1,891.778		
550.0	550.0	558.7	558.7	0.9	1.0	-107.68	-1,066.9	-3,346.2	3,512.2	3,510.2	1.91	1,836.568		
600.0	600.0	605.0	605.0	1.0	1.1	-108.52	-1,066.9	-3,346.2	3,512.3	3,510.2	2.08	1,688.200		
700.0	700.0	700.0	700.0	1.2	1.2	-108.54	-1,066.9	-3,346.4	3,513.0	3,510.6	2.42	1,450.558		
800.0	799.9	773.3	773.3	1.4	1.4	-108.56	-1,067.0	-3,346.8	3,514.7	3,512.0	2.73	1,288.081		
861.1	860.9	824.7	824.7	1.5	1.4	-108.58	-1,067.1	-3,347.5	3,516.4	3,513.5	2.93	1,200.144		
900.0	899.8	866.1	866.0	1.6	1.5	-108.61	-1,067.1	-3,348.0	3,517.6	3,514.5	3.07	1,144.302		
1,000.0	999.6	965.5	965.4	1.8	1.7	-108.69	-1,067.0	-3,349.4	3,520.6	3,517.1	3.43	1,025.255		
1,100.0	1,099.5	1,065.9	1,065.9	1.9	1.9	-108.77	-1,067.3	-3,350.6	3,523.6	3,519.8	3.80	927.903		
1,200.0	1,199.3	1,156.8	1,156.8	2.1	2.0	-108.85	-1,067.6	-3,351.7	3,526.6	3,522.5	4.15	850.681		
1,300.0	1,299.2	1,246.6	1,246.5	2.3	2.2	-108.92	-1,067.9	-3,353.2	3,530.1	3,525.6	4.49	785.665		
1,400.0	1,399.1	1,354.1	1,354.0	2.5	2.4	-109.00	-1,068.0	-3,355.2	3,533.6	3,528.7	4.87	725.258		
1,500.0	1,498.9	1,464.1	1,464.0	2.7	2.6	-109.08	-1,067.6	-3,356.9	3,536.7	3,531.5	5.26	672.813		
1,600.0	1,598.8	1,558.4	1,558.3	2.9	2.7	-109.14	-1,067.1	-3,358.3	3,539.8	3,534.2	5.61	630.506		
1,700.0	1,698.6	1,668.3	1,668.2	3.1	2.9	-109.22	-1,066.6	-3,360.1	3,543.0	3,537.0	6.00	590.548		
1,800.0	1,798.5	1,775.9	1,775.7	3.3	3.1	-109.28	-1,065.7	-3,361.5	3,545.8	3,539.4	6.38	555.657		
1,900.0	1,898.3	1,871.2	1,871.0	3.5	3.3	-109.34	-1,064.8	-3,362.8	3,548.5	3,541.8	6.74	526.333		
2,000.0	1,998.2	1,976.4	1,976.2	3.7	3.5	-109.40	-1,063.5	-3,364.4	3,551.4	3,544.2	7.12	498.728		
2,100.0	2,098.0	2,108.0	2,107.8	3.9	3.7	-109.47	-1,061.3	-3,365.8	3,553.7	3,546.1	7.55	470.882		
2,200.0	2,197.9	2,221.3	2,221.0	4.1	3.9	-109.52	-1,058.7	-3,366.4	3,555.3	3,547.4	7.94	447.694		
2,300.0	2,297.7	2,326.6	2,326.3	4.3	4.1	-109.57	-1,056.3	-3,366.7	3,556.6	3,548.3	8.32	427.384		
2,400.0	2,397.6	2,418.2	2,417.9	4.5	4.2	-109.61	-1,054.5	-3,366.9	3,558.0	3,549.4	8.68	410.015		
2,500.0	2,497.4	2,514.7	2,514.4	4.7	4.4	-109.67	-1,053.2	-3,367.1	3,559.6	3,550.6	9.04	393.694		
2,600.0	2,597.3	2,608.8	2,608.4	4.9	4.6	-109.73	-1,052.2	-3,367.3	3,561.3	3,551.9	9.40	378.815		
2,700.0	2,697.1	2,700.0	2,699.7	5.1	4.7	-109.79	-1,051.4	-3,367.7	3,563.3	3,553.5	9.76	365.245		
2,800.0	2,797.0	2,807.4	2,807.1	5.3	4.9	-109.87	-1,050.5	-3,368.1	3,565.2	3,555.1	10.14	351.646		
2,900.0	2,896.8	2,900.0	2,899.7	5.5	5.1	-109.93	-1,049.8	-3,368.5	3,567.2	3,556.7	10.50	339.879		
3,000.0	2,996.7	2,978.3	2,978.0	5.7	5.2	-109.98	-1,049.1	-3,369.3	3,569.7	3,558.8	10.83	329.661		
3,100.0	3,096.5	3,077.9	3,077.6	5.9	5.4	-110.04	-1,048.2	-3,370.5	3,572.4	3,561.2	11.20	319.019		
3,200.0	3,196.4	3,168.4	3,168.1	6.1	5.6	-110.10	-1,047.5	-3,371.6	3,575.2	3,563.6	11.55	309.488		
3,300.0	3,296.3	3,262.2	3,261.8	6.3	5.7	-110.16	-1,046.8	-3,373.1	3,578.2	3,566.3	11.91	300.398		
3,400.0	3,396.1	3,371.0	3,370.6	6.5	5.9	-110.22	-1,045.6	-3,374.8	3,581.3	3,569.0	12.30	291.198		
3,500.0	3,496.0	3,500.5	3,500.1	6.7	6.1	-110.29	-1,043.9	-3,376.3	3,583.8	3,571.1	12.72	281.716		
3,600.0	3,595.8	3,632.6	3,632.2	6.9	6.4	-110.36	-1,041.5	-3,376.7	3,585.4	3,572.2	13.15	272.644		
3,700.0	3,695.7	3,736.2	3,735.8	7.0	6.6	-110.40	-1,038.7	-3,376.6	3,586.3	3,572.8	13.53	265.061		
3,800.0	3,795.5	3,811.9	3,811.4	7.2	6.7	-110.43	-1,036.8	-3,376.9	3,587.7	3,573.8	13.86	258.861		
3,900.0	3,895.4	3,900.0	3,899.5	7.4	6.8	-110.48	-1,035.3	-3,377.4	3,589.5	3,575.3	14.21	252.614		
4,000.0	3,995.2	3,986.8	3,986.3	7.6	7.0	-110.53	-1,034.3	-3,378.0	3,591.7	3,577.2	14.56	246.735		
4,100.0	4,095.1	4,058.0	4,057.5	7.8	7.1	-110.58	-1,033.8	-3,378.8	3,594.5	3,579.6	14.88	241.624		
4,200.0	4,194.9	4,137.9	4,137.3	8.0	7.3	-110.63	-1,033.8	-3,380.3	3,598.1	3,582.9	15.21	236.541		
4,300.0	4,294.8	4,243.1	4,242.5	8.2	7.5	-110.70	-1,033.3	-3,382.6	3,601.9	3,586.3	15.59	231.031		
4,400.0	4,394.6	4,358.1	4,357.5	8.4	7.7	-110.78	-1,033.3	-3,384.4	3,605.3	3,589.3	15.99	225.533		
4,500.0	4,494.5	4,444.3	4,443.8	8.6	7.8	-110.84	-1,033.2	-3,385.7	3,608.6	3,592.3	16.33	220.955		
4,600.0	4,594.3	4,528.8	4,528.2	8.8	8.0	-110.89	-1,032.7	-3,387.7	3,612.6	3,595.9	16.68	216.629		
4,700.0	4,694.2	4,649.1	4,648.4	9.0	8.2	-110.95	-1,030.8	-3,390.7	3,616.3	3,599.2	17.08	211.668		
4,800.0	4,794.0	4,746.9	4,746.2	9.2	8.3	-111.00	-1,029.8	-3,392.6	3,619.7	3,602.3	17.45	207.411		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
4,900.0	4,893.9	4,857.2	4,856.5	9.4	8.5	-111.07	-1,029.1	-3,394.8	3,623.3	3,605.5	17.84	203.106		
5,000.0	4,993.7	4,959.2	4,958.5	9.6	8.7	-111.14	-1,029.4	-3,395.9	3,626.4	3,608.2	18.21	199.129		
5,100.0	5,093.6	5,054.9	5,054.2	9.8	8.9	-111.22	-1,029.7	-3,397.2	3,629.8	3,611.2	18.57	195.434		
5,200.0	5,193.5	5,150.7	5,150.0	10.0	9.1	-111.28	-1,029.4	-3,398.7	3,633.1	3,614.1	18.94	191.866		
5,300.0	5,293.3	5,239.2	5,238.4	10.2	9.2	-111.34	-1,028.9	-3,400.4	3,636.7	3,617.4	19.29	188.570		
5,400.0	5,393.2	5,366.1	5,365.3	10.4	9.4	-111.42	-1,028.4	-3,402.9	3,640.4	3,620.7	19.70	184.766		
5,500.0	5,493.0	5,472.8	5,472.0	10.6	9.6	-111.48	-1,027.7	-3,404.0	3,643.1	3,623.1	20.08	181.395		
5,600.0	5,592.9	5,569.6	5,568.8	10.8	9.8	-111.55	-1,027.4	-3,405.1	3,646.1	3,625.6	20.45	178.307		
5,700.0	5,692.7	5,656.4	5,655.6	11.0	9.9	-111.61	-1,026.9	-3,406.2	3,649.1	3,628.3	20.80	175.478		
5,800.0	5,792.6	5,740.3	5,739.5	11.2	10.1	-111.66	-1,026.4	-3,407.8	3,652.7	3,631.5	21.14	172.806		
5,900.0	5,892.4	5,834.2	5,833.3	11.4	10.3	-111.71	-1,026.0	-3,409.8	3,656.5	3,635.0	21.50	170.096		
6,000.0	5,992.3	5,942.4	5,941.5	11.6	10.5	-111.78	-1,025.4	-3,412.1	3,660.3	3,638.5	21.88	167.280		
6,100.0	6,092.1	6,036.0	6,035.1	11.8	10.6	-111.84	-1,025.0	-3,413.9	3,664.0	3,641.7	22.24	164.746		
6,200.0	6,192.0	6,114.4	6,113.5	12.0	10.8	-111.89	-1,025.0	-3,415.7	3,668.2	3,645.6	22.57	162.510		
6,300.0	6,291.8	6,215.9	6,214.9	12.2	10.9	-111.95	-1,025.1	-3,418.3	3,672.6	3,649.7	22.94	160.070		
6,400.0	6,391.7	6,329.6	6,328.6	12.4	11.1	-112.03	-1,025.2	-3,420.9	3,676.9	3,653.5	23.34	157.556		
6,500.0	6,491.5	6,444.2	6,443.2	12.6	11.3	-112.10	-1,025.1	-3,423.1	3,680.6	3,656.9	23.73	155.088		
6,600.0	6,591.4	6,563.8	6,562.8	12.8	11.6	-112.17	-1,023.9	-3,425.4	3,684.1	3,660.0	24.14	152.631		
6,700.0	6,691.2	6,665.5	6,664.5	13.0	11.7	-112.23	-1,023.2	-3,426.7	3,687.0	3,662.5	24.51	150.429		
6,800.0	6,791.1	6,764.6	6,763.6	13.2	11.9	-112.29	-1,022.6	-3,428.0	3,690.2	3,665.3	24.88	148.331		
6,900.0	6,890.9	6,850.3	6,849.3	13.4	12.1	-112.35	-1,022.4	-3,429.1	3,693.3	3,668.1	25.22	146.433		
7,000.0	6,990.8	6,931.4	6,930.4	13.6	12.2	-112.40	-1,022.3	-3,430.7	3,697.1	3,671.6	25.56	144.651		
7,024.2	7,014.9	6,953.6	6,952.5	13.6	12.2	-112.42	-1,022.2	-3,431.2	3,698.1	3,672.4	25.64	144.204		
7,050.0	7,040.7	6,977.3	6,976.2	13.7	12.3	-114.14	-1,022.1	-3,431.7	3,699.0	3,673.2	25.73	143.751		
7,100.0	7,090.7	7,034.1	7,033.0	13.7	12.4	69.20	-1,021.8	-3,433.0	3,699.7	3,673.8	25.89	142.907		
7,150.0	7,140.5	7,100.0	7,098.9	13.8	12.5	68.84	-1,021.9	-3,434.1	3,698.9	3,672.9	26.03	142.097		
7,200.0	7,189.9	7,134.4	7,133.3	13.8	12.6	68.94	-1,022.0	-3,434.7	3,696.9	3,670.8	26.09	141.701		
7,250.0	7,238.6	7,167.5	7,166.4	13.8	12.6	69.21	-1,022.1	-3,435.4	3,693.8	3,667.7	26.12	141.417		
7,300.0	7,286.4	7,200.0	7,198.9	13.7	12.7	69.62	-1,022.2	-3,436.2	3,689.8	3,663.6	26.13	141.216		
7,350.0	7,333.1	7,234.0	7,232.9	13.7	12.7	70.16	-1,022.4	-3,437.1	3,684.7	3,658.6	26.12	141.046		
7,400.0	7,378.5	7,267.1	7,266.0	13.6	12.8	70.81	-1,022.7	-3,438.1	3,678.7	3,652.6	26.11	140.899		
7,450.0	7,422.2	7,300.0	7,298.8	13.6	12.9	71.56	-1,023.0	-3,439.2	3,671.9	3,645.8	26.09	140.729		
7,500.0	7,464.1	7,300.0	7,298.8	13.5	12.9	72.12	-1,023.0	-3,439.2	3,664.4	3,638.4	26.01	140.859		
7,550.0	7,504.1	7,344.3	7,343.1	13.5	12.9	73.14	-1,023.8	-3,440.9	3,656.0	3,630.0	26.04	140.417		
7,600.0	7,541.8	7,365.6	7,364.3	13.5	13.0	74.03	-1,024.5	-3,441.8	3,647.2	3,621.2	26.03	140.091		
7,650.0	7,577.2	7,643.7	7,641.7	13.4	13.4	77.72	-1,043.5	-3,441.0	3,636.9	3,610.3	26.59	136.788		
7,700.0	7,610.0	7,668.1	7,666.0	13.5	13.5	78.99	-1,044.3	-3,440.4	3,624.6	3,597.9	26.67	135.917		
7,750.0	7,640.2	7,700.0	7,697.9	13.5	13.5	80.41	-1,045.2	-3,439.8	3,612.1	3,585.3	26.80	134.768		
7,800.0	7,667.4	7,720.0	7,717.9	13.6	13.6	81.71	-1,045.5	-3,439.4	3,599.5	3,572.5	26.95	133.540		
7,850.0	7,691.7	7,755.2	7,753.1	13.7	13.6	83.24	-1,046.1	-3,438.8	3,586.8	3,559.6	27.18	131.949		
7,900.0	7,712.8	7,785.6	7,783.5	13.9	13.7	84.73	-1,046.5	-3,438.2	3,574.1	3,546.6	27.45	130.225		
7,950.0	7,730.8	7,807.9	7,805.8	14.1	13.7	86.10	-1,046.8	-3,437.7	3,561.6	3,533.9	27.74	128.414		
8,000.0	7,745.5	7,822.6	7,820.4	14.4	13.7	87.33	-1,046.9	-3,437.4	3,549.5	3,521.4	28.05	126.528		
8,050.0	7,756.7	7,833.9	7,831.7	14.7	13.8	88.47	-1,047.0	-3,437.1	3,537.8	3,509.4	28.41	124.543		
8,100.0	7,764.6	7,841.8	7,839.7	15.1	13.8	89.52	-1,047.1	-3,437.0	3,526.6	3,497.8	28.79	122.484		
8,150.0	7,769.0	7,846.4	7,844.2	15.5	13.8	90.45	-1,047.1	-3,436.9	3,516.1	3,486.9	29.21	120.373		
8,188.1	7,770.0	7,847.6	7,845.5	15.9	13.8	91.09	-1,047.1	-3,436.8	3,508.6	3,479.0	29.55	118.746		
8,200.0	7,770.0	7,847.7	7,845.5	16.0	13.8	91.09	-1,047.1	-3,436.8	3,506.3	3,476.6	29.66	118.226		
8,300.0	7,770.0	7,848.4	7,846.2	17.0	13.8	91.10	-1,047.1	-3,436.8	3,488.8	3,458.1	30.66	113.798		
8,400.0	7,770.0	7,849.0	7,846.9	18.1	13.8	91.11	-1,047.2	-3,436.8	3,474.0	3,442.3	31.77	109.340		
8,500.0	7,770.0	7,849.7	7,847.6	19.3	13.8	91.12	-1,047.2	-3,436.8	3,462.1	3,429.2	32.98	104.965		
8,600.0	7,770.0	7,850.4	7,848.2	20.6	13.8	91.14	-1,047.2	-3,436.8	3,453.1	3,418.8	34.27	100.753		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,700.0	7,770.0	7,851.0	7,848.9	21.9	13.8	91.15	-1,047.2	-3,436.8	3,446.9	3,411.3	35.63	96.751		
8,800.0	7,770.0	7,851.7	7,849.5	23.3	13.8	91.16	-1,047.2	-3,436.8	3,443.6	3,406.6	37.03	92.986		
8,862.9	7,770.0	7,852.0	7,849.9	24.2	13.8	91.16	-1,047.2	-3,436.8	3,443.1	3,405.1	37.95	90.732 CC		
8,900.0	7,770.0	7,852.3	7,850.1	24.8	13.8	91.17	-1,047.2	-3,436.8	3,443.3	3,404.8	38.49	89.469 ES		
9,000.0	7,770.0	7,852.9	7,850.8	26.3	13.8	91.18	-1,047.2	-3,436.7	3,445.8	3,405.8	39.97	86.201		
9,100.0	7,770.0	7,853.5	7,851.4	27.8	13.8	91.19	-1,047.2	-3,436.7	3,451.2	3,409.7	41.49	83.175		
9,200.0	7,770.0	7,854.1	7,852.0	29.3	13.8	91.20	-1,047.2	-3,436.7	3,459.5	3,416.5	43.04	80.380		
9,300.0	7,770.0	7,854.7	7,852.6	30.9	13.8	91.21	-1,047.2	-3,436.7	3,470.7	3,426.1	44.61	77.805		
9,400.0	7,770.0	7,855.3	7,853.2	32.5	13.8	91.22	-1,047.2	-3,436.7	3,484.7	3,438.5	46.19	75.435		
9,500.0	7,770.0	7,855.9	7,853.7	34.1	13.8	91.23	-1,047.2	-3,436.7	3,501.5	3,453.7	47.80	73.256		
9,600.0	7,770.0	7,856.5	7,854.3	35.7	13.8	91.24	-1,047.2	-3,436.7	3,521.1	3,471.7	49.42	71.254		
9,700.0	7,770.0	7,857.0	7,854.9	37.3	13.8	91.25	-1,047.2	-3,436.7	3,543.4	3,492.3	51.05	69.415		
9,800.0	7,770.0	7,857.6	7,855.4	39.0	13.8	91.26	-1,047.2	-3,436.6	3,568.3	3,515.6	52.69	67.727		
9,900.0	7,770.0	7,858.1	7,856.0	40.6	13.8	91.26	-1,047.2	-3,436.6	3,595.9	3,541.5	54.34	66.177		
10,000.0	7,770.0	7,858.7	7,856.5	42.3	13.8	91.27	-1,047.2	-3,436.6	3,626.0	3,570.0	56.00	64.755		
10,100.0	7,770.0	7,859.2	7,857.1	44.0	13.8	91.28	-1,047.2	-3,436.6	3,658.5	3,600.9	57.66	63.449		
10,200.0	7,770.0	7,859.8	7,857.6	45.6	13.8	91.29	-1,047.2	-3,436.6	3,693.6	3,634.2	59.33	62.250		
10,300.0	7,770.0	7,860.3	7,858.1	47.3	13.8	91.30	-1,047.2	-3,436.6	3,730.9	3,669.9	61.01	61.150		
10,400.0	7,770.0	7,860.8	7,858.6	49.0	13.8	91.31	-1,047.2	-3,436.6	3,770.6	3,707.9	62.70	60.140		
10,500.0	7,770.0	7,861.3	7,859.2	50.7	13.8	91.32	-1,047.2	-3,436.6	3,812.4	3,748.0	64.38	59.213		
10,600.0	7,770.0	7,861.8	7,859.7	52.4	13.8	91.33	-1,047.2	-3,436.6	3,856.4	3,790.3	66.08	58.362		
10,700.0	7,770.0	7,862.3	7,860.2	54.1	13.8	91.33	-1,047.2	-3,436.5	3,902.5	3,834.7	67.77	57.580		
10,800.0	7,770.0	7,862.8	7,860.7	55.8	13.8	91.34	-1,047.2	-3,436.5	3,950.5	3,881.1	69.47	56.863		
10,900.0	7,770.0	7,863.3	7,861.1	57.5	13.8	91.35	-1,047.2	-3,436.5	4,000.5	3,929.3	71.18	56.204		
11,000.0	7,770.0	7,863.8	7,861.6	59.2	13.8	91.36	-1,047.2	-3,436.5	4,052.4	3,979.5	72.88	55.599		
11,100.0	7,770.0	7,864.3	7,862.1	60.9	13.8	91.37	-1,047.3	-3,436.5	4,106.0	4,031.4	74.59	55.044		
11,200.0	7,770.0	7,864.7	7,862.6	62.6	13.8	91.37	-1,047.3	-3,436.5	4,161.3	4,085.0	76.31	54.535		
11,300.0	7,770.0	7,865.2	7,863.0	64.3	13.8	91.38	-1,047.3	-3,436.5	4,218.3	4,140.2	78.02	54.067		
11,400.0	7,770.0	7,865.7	7,863.5	66.0	13.8	91.39	-1,047.3	-3,436.5	4,276.8	4,197.1	79.74	53.638		
11,500.0	7,770.0	7,866.1	7,864.0	67.7	13.8	91.40	-1,047.3	-3,436.5	4,336.9	4,255.4	81.45	53.244		
11,600.0	7,770.0	7,866.6	7,864.4	69.5	13.8	91.40	-1,047.3	-3,436.5	4,398.4	4,315.2	83.17	52.883		
11,700.0	7,770.0	7,867.0	7,864.9	71.2	13.8	91.41	-1,047.3	-3,436.5	4,461.3	4,376.4	84.89	52.551		
11,800.0	7,770.0	7,867.4	7,865.3	72.9	13.8	91.42	-1,047.3	-3,436.4	4,525.6	4,438.9	86.62	52.248		
11,900.0	7,770.0	7,867.9	7,865.7	74.6	13.8	91.43	-1,047.3	-3,436.4	4,591.1	4,502.7	88.34	51.970		
12,000.0	7,770.0	7,868.3	7,866.2	76.4	13.8	91.43	-1,047.3	-3,436.4	4,657.8	4,567.8	90.07	51.715		
12,100.0	7,770.0	7,868.7	7,866.6	78.1	13.8	91.44	-1,047.3	-3,436.4	4,725.8	4,634.0	91.79	51.482		
12,200.0	7,770.0	7,869.2	7,867.0	79.8	13.8	91.45	-1,047.3	-3,436.4	4,794.8	4,701.3	93.52	51.269		
12,300.0	7,770.0	7,869.6	7,867.4	81.5	13.8	91.45	-1,047.3	-3,436.4	4,864.9	4,769.7	95.25	51.075		
12,400.0	7,770.0	7,870.0	7,867.8	83.3	13.8	91.46	-1,047.3	-3,436.4	4,936.1	4,839.1	96.98	50.897		
12,500.0	7,770.0	7,870.4	7,868.2	85.0	13.8	91.47	-1,047.3	-3,436.4	5,008.2	4,909.5	98.71	50.735		
12,600.0	7,770.0	7,870.8	7,868.6	86.7	13.8	91.48	-1,047.3	-3,436.4	5,081.3	4,980.9	100.44	50.588		
12,700.0	7,770.0	7,871.2	7,869.0	88.5	13.8	91.48	-1,047.3	-3,436.4	5,155.3	5,053.1	102.18	50.454		
12,800.0	7,770.0	7,871.6	7,869.4	90.2	13.8	91.49	-1,047.3	-3,436.4	5,230.2	5,126.3	103.91	50.333		
12,900.0	7,770.0	7,872.0	7,869.8	91.9	13.8	91.49	-1,047.3	-3,436.4	5,305.8	5,200.2	105.65	50.223		
13,000.0	7,770.0	7,872.4	7,870.2	93.7	13.8	91.50	-1,047.3	-3,436.3	5,382.3	5,274.9	107.38	50.124		
13,100.0	7,770.0	7,872.7	7,870.6	95.4	13.8	91.51	-1,047.3	-3,436.3	5,459.6	5,350.4	109.12	50.034		
13,200.0	7,770.0	7,873.1	7,871.0	97.1	13.8	91.51	-1,047.3	-3,436.3	5,537.5	5,426.7	110.85	49.954		
13,300.0	7,770.0	7,873.5	7,871.3	98.9	13.8	91.52	-1,047.3	-3,436.3	5,616.2	5,503.6	112.59	49.882		
13,400.0	7,770.0	7,873.9	7,871.7	100.6	13.8	91.53	-1,047.3	-3,436.3	5,695.5	5,581.2	114.33	49.817		
13,500.0	7,770.0	7,874.2	7,872.1	102.4	13.8	91.53	-1,047.3	-3,436.3	5,775.5	5,659.4	116.07	49.760		
13,600.0	7,770.0	7,874.6	7,872.4	104.1	13.8	91.54	-1,047.3	-3,436.3	5,856.1	5,738.3	117.80	49.710		
13,700.0	7,770.0	7,874.9	7,872.8	105.8	13.8	91.54	-1,047.3	-3,436.3	5,937.3	5,817.7	119.54	49.666		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,800.0	7,770.0	7,875.3	7,873.1	107.6	13.8	91.55	-1,047.3	-3,436.3	6,019.0	5,897.7	121.28	49.628		
13,900.0	7,770.0	7,875.7	7,873.5	109.3	13.8	91.56	-1,047.3	-3,436.3	6,101.3	5,978.3	123.02	49.595		
14,000.0	7,770.0	7,876.0	7,873.8	111.1	13.8	91.56	-1,047.3	-3,436.3	6,184.1	6,059.3	124.76	49.567		
14,100.0	7,770.0	7,876.3	7,874.2	112.8	13.8	91.57	-1,047.3	-3,436.3	6,267.4	6,140.9	126.50	49.543		
14,200.0	7,770.0	7,876.7	7,874.5	114.5	13.8	91.57	-1,047.3	-3,436.3	6,351.2	6,223.0	128.25	49.524		
14,300.0	7,770.0	7,877.0	7,874.9	116.3	13.8	91.58	-1,047.3	-3,436.3	6,435.5	6,305.5	129.99	49.509		
14,400.0	7,770.0	7,877.4	7,875.2	118.0	13.8	91.58	-1,047.3	-3,436.3	6,520.2	6,388.5	131.73	49.497		
14,500.0	7,770.0	7,877.7	7,875.5	119.8	13.8	91.59	-1,047.3	-3,436.2	6,605.3	6,471.8	133.47	49.489		
14,600.0	7,770.0	7,878.0	7,875.9	121.5	13.8	91.60	-1,047.3	-3,436.2	6,690.9	6,555.6	135.21	49.483		
14,700.0	7,770.0	7,878.3	7,876.2	123.3	13.8	91.60	-1,047.3	-3,436.2	6,776.8	6,639.8	136.96	49.481 SF		
14,800.0	7,770.0	7,878.7	7,876.5	125.0	13.8	91.61	-1,047.3	-3,436.2	6,863.1	6,724.4	138.70	49.482		
14,900.0	7,770.0	7,879.0	7,876.8	126.7	13.8	91.61	-1,047.3	-3,436.2	6,949.8	6,809.4	140.44	49.485		
15,000.0	7,770.0	7,879.3	7,877.1	128.5	13.8	91.62	-1,047.3	-3,436.2	7,036.8	6,894.6	142.19	49.490		
15,100.0	7,770.0	7,879.6	7,877.5	130.2	13.8	91.62	-1,047.3	-3,436.2	7,124.2	6,980.3	143.93	49.497		
15,200.0	7,770.0	7,879.9	7,877.8	132.0	13.8	91.63	-1,047.3	-3,436.2	7,211.9	7,066.2	145.68	49.507		
15,300.0	7,770.0	7,880.2	7,878.1	133.7	13.8	91.63	-1,047.3	-3,436.2	7,299.9	7,152.5	147.42	49.518		
15,400.0	7,770.0	7,880.5	7,878.4	135.5	13.8	91.64	-1,047.3	-3,436.2	7,388.3	7,239.1	149.16	49.531		
15,500.0	7,770.0	7,880.8	7,878.7	137.2	13.8	91.64	-1,047.3	-3,436.2	7,476.9	7,326.0	150.91	49.546		
15,600.0	7,770.0	7,881.1	7,879.0	139.0	13.8	91.65	-1,047.3	-3,436.2	7,565.8	7,413.1	152.65	49.562		
15,700.0	7,770.0	7,900.0	7,897.8	140.7	13.9	91.96	-1,047.4	-3,435.8	7,655.0	7,500.6	154.41	49.577		
15,800.0	7,770.0	7,900.0	7,897.8	142.4	13.9	91.96	-1,047.4	-3,435.8	7,744.5	7,588.3	156.15	49.596		
15,900.0	7,770.0	7,900.0	7,897.8	144.2	13.9	91.96	-1,047.4	-3,435.8	7,834.2	7,676.3	157.90	49.616		
16,000.0	7,770.0	7,900.0	7,897.8	145.9	13.9	91.96	-1,047.4	-3,435.8	7,924.1	7,764.5	159.64	49.637		
16,100.0	7,770.0	7,900.0	7,897.8	147.7	13.9	91.96	-1,047.4	-3,435.8	8,014.3	7,852.9	161.39	49.658		
16,200.0	7,770.0	7,900.0	7,897.8	149.4	13.9	91.96	-1,047.4	-3,435.8	8,104.7	7,941.6	163.13	49.681		
16,300.0	7,770.0	7,900.0	7,897.8	151.2	13.9	91.96	-1,047.4	-3,435.8	8,195.3	8,030.4	164.88	49.705		
16,400.0	7,770.0	7,900.0	7,897.8	152.9	13.9	91.96	-1,047.4	-3,435.8	8,286.2	8,119.6	166.63	49.729		
16,500.0	7,770.0	7,900.0	7,897.8	154.7	13.9	91.96	-1,047.4	-3,435.8	8,377.2	8,208.9	168.37	49.754		
16,600.0	7,770.0	7,900.0	7,897.8	156.4	13.9	91.96	-1,047.4	-3,435.8	8,468.5	8,298.4	170.12	49.780		
16,700.0	7,770.0	7,900.0	7,897.8	158.2	13.9	91.96	-1,047.4	-3,435.8	8,560.0	8,388.1	171.86	49.806		
16,800.0	7,770.0	7,900.0	7,897.8	159.9	13.9	91.96	-1,047.4	-3,435.8	8,651.6	8,478.0	173.61	49.833		
16,900.0	7,770.0	7,900.0	7,897.8	161.7	13.9	91.96	-1,047.4	-3,435.8	8,743.4	8,568.1	175.36	49.860		
17,000.0	7,770.0	7,900.0	7,897.8	163.4	13.9	91.96	-1,047.4	-3,435.8	8,835.4	8,658.3	177.11	49.888		
17,100.0	7,770.0	7,900.0	7,897.8	165.2	13.9	91.96	-1,047.4	-3,435.8	8,927.6	8,748.8	178.85	49.916		
17,200.0	7,770.0	7,900.0	7,897.8	166.9	13.9	91.96	-1,047.4	-3,435.8	9,020.0	8,839.4	180.60	49.945		
17,300.0	7,770.0	7,900.0	7,897.8	168.7	13.9	91.96	-1,047.4	-3,435.8	9,112.5	8,930.1	182.35	49.973		
17,400.0	7,770.0	7,900.0	7,897.8	170.4	13.9	91.96	-1,047.4	-3,435.8	9,205.1	9,021.0	184.09	50.002		
17,500.0	7,770.0	7,900.0	7,897.8	172.2	13.9	91.96	-1,047.4	-3,435.8	9,297.9	9,112.1	185.84	50.031		
17,600.0	7,770.0	7,900.0	7,897.8	173.9	13.9	91.96	-1,047.4	-3,435.8	9,390.9	9,203.3	187.59	50.061		
17,653.1	7,770.0	7,900.0	7,897.8	174.8	13.9	91.96	-1,047.4	-3,435.8	9,440.3	9,251.8	188.52	50.077		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.53	-1,936.5	-4,055.5	4,494.1						
100.0	100.0	85.0	85.0	0.2	0.1	-115.53	-1,936.5	-4,055.5	4,494.1	4,493.8	0.26	N/A			
200.0	200.0	185.0	185.0	0.3	0.3	-115.53	-1,936.5	-4,055.5	4,494.1	4,493.5	0.61	7,420.545 CC			
300.0	300.0	247.7	247.7	0.5	0.4	-115.53	-1,936.6	-4,055.6	4,494.5	4,493.6	0.89	5,051.877			
400.0	400.0	300.0	300.0	0.7	0.5	-115.53	-1,937.0	-4,056.2	4,495.8	4,494.6	1.16	3,891.047			
500.0	500.0	359.9	359.9	0.8	0.6	-115.53	-1,937.6	-4,057.4	4,498.1	4,496.6	1.43	3,135.361			
550.0	550.0	400.0	400.0	0.9	0.7	-115.53	-1,938.3	-4,058.5	4,499.6	4,498.0	1.59	2,826.787			
600.0	600.0	400.0	400.0	1.0	0.7	-116.35	-1,938.3	-4,058.5	4,501.5	4,499.8	1.68	2,680.959			
700.0	700.0	471.9	471.8	1.2	0.8	-116.32	-1,939.8	-4,061.1	4,506.5	4,504.5	1.98	2,275.832			
800.0	799.9	527.8	527.6	1.4	0.9	-116.28	-1,941.2	-4,063.6	4,513.2	4,511.0	2.26	2,000.562			
861.1	860.9	561.8	561.6	1.5	1.0	-116.26	-1,942.2	-4,065.4	4,518.2	4,515.8	2.43	1,862.082			
900.0	899.8	600.0	599.7	1.6	1.0	-116.28	-1,943.5	-4,067.6	4,521.7	4,519.1	2.56	1,763.397			
1,000.0	999.6	695.2	694.7	1.8	1.2	-116.34	-1,946.0	-4,073.4	4,530.8	4,527.9	2.91	1,554.310			
1,100.0	1,099.5	818.9	818.1	1.9	1.5	-116.39	-1,947.1	-4,081.2	4,539.2	4,535.9	3.32	1,368.025			
1,200.0	1,199.3	918.5	917.5	2.1	1.7	-116.42	-1,947.3	-4,087.6	4,547.5	4,543.8	3.68	1,235.178			
1,300.0	1,299.2	1,018.1	1,016.9	2.3	1.9	-116.44	-1,947.6	-4,093.9	4,555.8	4,551.8	4.05	1,125.735			
1,400.0	1,399.1	1,117.8	1,116.4	2.5	2.1	-116.47	-1,947.9	-4,100.3	4,564.1	4,559.7	4.41	1,034.111			
1,500.0	1,498.9	1,217.4	1,215.8	2.7	2.3	-116.50	-1,948.1	-4,106.7	4,572.4	4,567.6	4.78	956.341			
1,600.0	1,598.8	1,317.0	1,315.2	2.9	2.5	-116.53	-1,948.4	-4,113.0	4,580.7	4,575.5	5.15	889.540			
1,700.0	1,698.6	1,416.7	1,414.6	3.1	2.7	-116.56	-1,948.7	-4,119.4	4,589.0	4,583.5	5.52	831.563			
1,800.0	1,798.5	1,516.3	1,514.1	3.3	2.9	-116.59	-1,948.9	-4,125.7	4,597.3	4,591.4	5.89	780.786			
1,900.0	1,898.3	1,615.9	1,613.5	3.5	3.1	-116.62	-1,949.2	-4,132.1	4,605.6	4,599.3	6.26	735.955			
2,000.0	1,998.2	1,715.6	1,712.9	3.7	3.3	-116.65	-1,949.5	-4,138.5	4,613.9	4,607.2	6.63	696.092			
2,100.0	2,098.0	1,815.2	1,812.4	3.9	3.5	-116.68	-1,949.7	-4,144.8	4,622.1	4,615.1	7.00	660.419			
2,200.0	2,197.9	1,914.8	1,911.8	4.1	3.7	-116.70	-1,950.0	-4,151.2	4,630.4	4,623.1	7.37	628.312			
2,300.0	2,297.7	2,014.4	2,011.2	4.3	3.9	-116.73	-1,950.3	-4,157.6	4,638.7	4,631.0	7.74	599.265			
2,400.0	2,397.6	2,114.1	2,110.6	4.5	4.1	-116.76	-1,950.5	-4,163.9	4,647.0	4,638.9	8.11	572.861			
2,500.0	2,497.4	2,213.7	2,210.1	4.7	4.3	-116.79	-1,950.8	-4,170.3	4,655.3	4,646.9	8.48	548.758			
2,600.0	2,597.3	2,313.3	2,309.5	4.9	4.6	-116.82	-1,951.0	-4,176.6	4,663.6	4,654.8	8.85	526.668			
2,700.0	2,697.1	2,413.0	2,408.9	5.1	4.8	-116.84	-1,951.3	-4,183.0	4,671.9	4,662.7	9.23	506.351			
2,800.0	2,797.0	2,512.6	2,508.3	5.3	5.0	-116.87	-1,951.6	-4,189.4	4,680.2	4,670.6	9.60	487.601			
2,900.0	2,896.8	2,612.2	2,607.8	5.5	5.2	-116.90	-1,951.8	-4,195.7	4,688.6	4,678.6	9.97	470.245			
3,000.0	2,996.7	2,711.8	2,707.2	5.7	5.4	-116.93	-1,952.1	-4,202.1	4,696.9	4,686.5	10.34	454.133			
3,100.0	3,096.5	2,811.5	2,806.6	5.9	5.6	-116.95	-1,952.4	-4,208.4	4,705.2	4,694.4	10.71	439.137			
3,200.0	3,196.4	2,911.1	2,906.0	6.1	5.8	-116.98	-1,952.6	-4,214.8	4,713.5	4,702.4	11.09	425.144			
3,300.0	3,296.3	3,010.7	3,005.5	6.3	6.0	-117.01	-1,952.9	-4,221.2	4,721.8	4,710.3	11.46	412.058			
3,400.0	3,396.1	3,110.4	3,104.9	6.5	6.2	-117.04	-1,953.2	-4,227.5	4,730.1	4,718.3	11.83	399.794			
3,500.0	3,496.0	3,210.0	3,204.3	6.7	6.4	-117.06	-1,953.4	-4,233.9	4,738.4	4,726.2	12.20	388.276			
3,600.0	3,595.8	3,309.6	3,303.7	6.9	6.6	-117.09	-1,953.7	-4,240.3	4,746.7	4,734.1	12.58	377.438			
3,700.0	3,695.7	3,409.2	3,403.2	7.0	6.8	-117.12	-1,954.0	-4,246.6	4,755.0	4,742.1	12.95	367.223			
3,800.0	3,795.5	3,508.9	3,502.6	7.2	7.0	-117.14	-1,954.2	-4,253.0	4,763.3	4,750.0	13.32	357.577			
3,900.0	3,895.4	3,608.5	3,602.0	7.4	7.2	-117.17	-1,954.5	-4,259.3	4,771.7	4,758.0	13.69	348.456			
4,000.0	3,995.2	3,708.1	3,701.4	7.6	7.4	-117.20	-1,954.8	-4,265.7	4,780.0	4,765.9	14.07	339.817			
4,100.0	4,095.1	3,807.8	3,800.9	7.8	7.6	-117.22	-1,955.0	-4,272.1	4,788.3	4,773.8	14.44	331.622			
4,200.0	4,194.9	3,907.4	3,900.3	8.0	7.9	-117.25	-1,955.3	-4,278.4	4,796.6	4,781.8	14.81	323.840			
4,300.0	4,294.8	4,007.0	3,999.7	8.2	8.1	-117.28	-1,955.5	-4,284.8	4,804.9	4,789.7	15.18	316.439			
4,400.0	4,394.6	4,106.6	4,099.1	8.4	8.3	-117.30	-1,955.8	-4,291.2	4,813.2	4,797.7	15.56	309.392			
4,500.0	4,494.5	4,206.3	4,198.6	8.6	8.5	-117.33	-1,956.1	-4,297.5	4,821.6	4,805.6	15.93	302.674			
4,600.0	4,594.3	4,305.9	4,298.0	8.8	8.7	-117.36	-1,956.3	-4,303.9	4,829.9	4,813.6	16.30	296.263			
4,700.0	4,694.2	4,405.5	4,397.4	9.0	8.9	-117.38	-1,956.6	-4,310.2	4,838.2	4,821.5	16.68	290.138			
4,800.0	4,794.0	4,505.2	4,496.8	9.2	9.1	-117.41	-1,956.9	-4,316.6	4,846.5	4,829.5	17.05	284.281			
4,900.0	4,893.9	4,604.8	4,596.3	9.4	9.3	-117.43	-1,957.1	-4,323.0	4,854.9	4,837.4	17.42	278.674			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	4,704.4	4,695.7	9.6	9.5	-117.46	-1,957.4	-4,329.3	4,863.2	4,845.4	17.79	273.302		
5,100.0	5,093.6	4,804.1	4,795.1	9.8	9.7	-117.48	-1,957.7	-4,335.7	4,871.5	4,853.3	18.17	268.151		
5,200.0	5,193.5	4,903.7	4,894.5	10.0	9.9	-117.51	-1,957.9	-4,342.0	4,879.8	4,861.3	18.54	263.206		
5,300.0	5,293.3	5,003.3	4,994.0	10.2	10.1	-117.54	-1,958.2	-4,348.4	4,888.2	4,869.3	18.91	258.456		
5,400.0	5,393.2	5,102.9	5,093.4	10.4	10.3	-117.56	-1,958.5	-4,354.8	4,896.5	4,877.2	19.29	253.889		
5,500.0	5,493.0	5,202.6	5,192.8	10.6	10.5	-117.59	-1,958.7	-4,361.1	4,904.8	4,885.2	19.66	249.496		
5,600.0	5,592.9	5,302.2	5,292.2	10.8	10.7	-117.61	-1,959.0	-4,367.5	4,913.2	4,893.1	20.03	245.266		
5,700.0	5,692.7	5,401.8	5,391.7	11.0	10.9	-117.64	-1,959.3	-4,373.9	4,921.5	4,901.1	20.40	241.190		
5,800.0	5,792.6	5,501.5	5,491.1	11.2	11.2	-117.66	-1,959.5	-4,380.2	4,929.8	4,909.0	20.78	237.261		
5,900.0	5,892.4	5,601.1	5,590.5	11.4	11.4	-117.69	-1,959.8	-4,386.6	4,938.2	4,917.0	21.15	233.470		
6,000.0	5,992.3	9,759.6	7,817.0	11.6	42.5	-93.07	208.2	-4,566.6	4,927.8	4,874.4	53.40	92.286		
6,100.0	6,092.1	9,765.0	7,817.0	11.8	42.6	-93.01	213.7	-4,566.7	4,891.6	4,837.9	53.68	91.129		
6,200.0	6,192.0	9,770.5	7,817.0	12.0	42.6	-92.94	219.1	-4,566.8	4,857.1	4,803.1	53.96	90.016		
6,300.0	6,291.8	9,775.9	7,817.0	12.2	42.7	-92.87	224.5	-4,566.9	4,824.5	4,770.2	54.24	88.949		
6,400.0	6,391.7	9,781.3	7,817.0	12.4	42.8	-92.80	229.9	-4,567.0	4,793.7	4,739.2	54.52	87.927		
6,500.0	6,491.5	9,786.7	7,817.0	12.6	42.9	-92.73	235.4	-4,567.1	4,764.8	4,710.0	54.80	86.950		
6,600.0	6,591.4	9,792.1	7,817.0	12.8	43.0	-92.67	240.8	-4,567.2	4,737.9	4,682.8	55.08	86.018		
6,700.0	6,691.2	9,797.6	7,817.0	13.0	43.1	-92.60	246.2	-4,567.3	4,712.9	4,657.5	55.36	85.131		
6,800.0	6,791.1	9,803.0	7,817.0	13.2	43.2	-92.53	251.6	-4,567.4	4,689.9	4,634.2	55.64	84.288		
6,900.0	6,890.9	9,808.4	7,817.0	13.4	43.3	-92.46	257.1	-4,567.5	4,668.9	4,613.0	55.92	83.490		
7,000.0	6,990.8	9,813.8	7,817.0	13.6	43.3	-92.40	262.5	-4,567.6	4,650.0	4,593.8	56.20	82.737		
7,024.2	7,014.9	9,815.2	7,817.0	13.6	43.4	-92.38	263.8	-4,567.6	4,645.7	4,589.4	56.27	82.561		
7,050.0	7,040.7	9,816.1	7,817.0	13.7	43.4	-93.66	264.7	-4,567.6	4,641.3	4,585.0	56.28	82.464		
7,100.0	7,090.7	9,815.3	7,817.0	13.7	43.4	90.37	263.9	-4,567.6	4,633.0	4,576.8	56.24	82.381		
7,150.0	7,140.5	9,810.9	7,817.0	13.8	43.3	90.44	259.6	-4,567.5	4,625.3	4,569.2	56.12	82.419		
7,200.0	7,189.9	9,803.2	7,817.0	13.8	43.2	90.79	251.8	-4,567.4	4,618.1	4,562.1	55.93	82.572		
7,250.0	7,238.6	9,791.9	7,817.0	13.8	43.0	91.13	240.6	-4,567.2	4,611.4	4,555.7	55.67	82.833		
7,300.0	7,286.4	9,777.4	7,817.0	13.7	42.8	91.41	226.0	-4,566.9	4,605.3	4,549.9	55.35	83.198		
7,350.0	7,333.1	9,759.5	7,817.0	13.7	42.5	91.62	208.1	-4,566.6	4,599.7	4,544.7	54.98	83.660		
7,400.0	7,378.5	9,738.4	7,817.0	13.6	42.1	91.77	187.1	-4,566.3	4,594.7	4,540.1	54.56	84.215		
7,450.0	7,422.2	9,714.2	7,817.0	13.6	41.7	91.86	162.9	-4,565.8	4,590.2	4,536.1	54.09	84.857		
7,500.0	7,464.1	9,687.0	7,817.0	13.5	41.3	91.88	135.7	-4,565.4	4,586.2	4,532.6	53.59	85.577		
7,550.0	7,504.1	9,657.0	7,817.0	13.5	40.8	91.86	105.6	-4,564.9	4,582.7	4,529.6	53.06	86.367		
7,600.0	7,541.8	9,624.2	7,817.0	13.5	40.3	91.79	72.9	-4,564.3	4,579.6	4,527.1	52.50	87.222		
7,650.0	7,577.2	9,588.9	7,817.0	13.4	39.7	91.69	37.6	-4,563.7	4,576.9	4,525.0	51.93	88.130		
7,700.0	7,610.0	9,551.2	7,817.0	13.5	39.1	91.56	-0.1	-4,563.0	4,574.6	4,523.2	51.36	89.077		
7,750.0	7,640.2	9,511.3	7,817.0	13.5	38.4	91.42	-40.0	-4,562.3	4,572.5	4,521.8	50.77	90.057		
7,800.0	7,667.4	9,469.4	7,817.0	13.6	37.8	91.27	-81.9	-4,561.6	4,570.8	4,520.6	50.20	91.050		
7,850.0	7,691.7	9,425.7	7,817.0	13.7	37.1	91.13	-125.6	-4,560.9	4,569.2	4,519.6	49.64	92.048		
7,900.0	7,712.8	9,380.4	7,817.0	13.9	36.4	91.00	-170.9	-4,560.1	4,567.9	4,518.8	49.10	93.035		
7,950.0	7,730.8	9,333.8	7,817.0	14.1	35.6	90.88	-217.5	-4,559.3	4,566.6	4,518.1	48.58	93.997		
8,000.0	7,745.5	9,286.0	7,817.0	14.4	34.9	90.80	-265.3	-4,558.4	4,565.5	4,517.4	48.10	94.925		
8,050.0	7,756.7	9,237.3	7,817.0	14.7	34.1	90.74	-314.0	-4,557.6	4,564.5	4,516.8	47.64	95.804		
8,100.0	7,764.6	9,187.9	7,817.0	15.1	33.3	90.72	-363.3	-4,556.7	4,563.5	4,516.3	47.23	96.629		
8,150.0	7,769.0	9,138.1	7,817.0	15.5	32.6	90.74	-413.1	-4,555.9	4,562.6	4,515.8	46.85	97.387		
8,188.1	7,770.0	9,100.1	7,817.0	15.9	32.0	90.78	-451.2	-4,555.2	4,561.9	4,515.3	46.59	97.923		
8,200.0	7,770.0	9,088.2	7,817.0	16.0	31.8	90.78	-463.1	-4,555.0	4,561.7	4,515.2	46.51	98.082		
8,300.0	7,770.0	8,988.2	7,817.0	17.0	30.3	90.78	-563.1	-4,553.3	4,560.0	4,514.1	45.93	99.272		
8,400.0	7,770.0	8,888.2	7,817.0	18.1	28.8	90.78	-663.0	-4,551.6	4,558.3	4,512.8	45.50	100.188		
8,500.0	7,770.0	8,788.2	7,817.0	19.3	27.3	90.78	-763.0	-4,549.8	4,556.5	4,511.4	45.18	100.851		
8,600.0	7,770.0	8,688.2	7,817.0	20.6	25.9	90.78	-863.0	-4,548.1	4,554.8	4,509.8	44.97	101.277		
8,700.0	7,770.0	8,588.2	7,817.0	21.9	24.5	90.78	-962.9	-4,546.4	4,553.1	4,508.2	44.87	101.477		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	8,488.3	7,817.0	23.3	23.2	90.78	-1,062.9	-4,544.7	4,551.4	4,506.5	44.86	101.457		
8,900.0	7,770.0	8,388.3	7,817.0	24.8	21.9	90.78	-1,162.9	-4,542.9	4,549.6	4,504.7	44.95	101.216		
9,000.0	7,770.0	8,288.3	7,817.0	26.3	20.7	90.78	-1,262.9	-4,541.2	4,547.9	4,502.8	45.14	100.748		
9,100.0	7,770.0	8,188.3	7,817.0	27.8	19.6	90.78	-1,362.8	-4,539.5	4,546.2	4,500.7	45.44	100.049		
9,200.0	7,770.0	7,981.2	7,789.6	29.3	17.6	90.44	-1,567.0	-4,534.2	4,543.6	4,498.8	44.82	101.385		
9,300.0	7,770.0	7,782.0	7,697.5	30.9	16.3	89.27	-1,742.3	-4,525.3	4,538.6	4,493.6	44.95	100.980		
9,400.0	7,770.0	7,651.3	7,606.7	32.5	15.7	88.12	-1,835.6	-4,517.8	4,532.8	4,486.9	45.94	98.662		
9,500.0	7,770.0	7,567.2	7,538.0	34.1	15.5	87.25	-1,883.7	-4,512.6	4,527.8	4,480.5	47.28	95.766		
9,600.0	7,770.0	7,510.8	7,488.4	35.7	15.3	86.62	-1,910.1	-4,509.0	4,524.2	4,475.4	48.74	92.814		
9,700.0	7,770.0	7,471.1	7,451.9	37.3	15.2	86.16	-1,925.7	-4,506.4	4,522.3	4,472.0	50.27	89.954		
9,746.5	7,770.0	7,456.4	7,438.2	38.1	15.2	85.98	-1,930.8	-4,505.4	4,522.1	4,471.1	51.00	88.669		
9,800.0	7,770.0	7,441.9	7,424.5	39.0	15.2	85.81	-1,935.5	-4,504.4	4,522.4	4,470.5	51.84	87.238 ES		
9,900.0	7,770.0	7,419.5	7,403.2	40.6	15.1	85.54	-1,942.1	-4,503.0	4,524.5	4,471.1	53.43	84.678		
10,000.0	7,770.0	7,400.0	7,384.3	42.3	15.1	85.30	-1,947.1	-4,501.7	4,528.7	4,473.6	55.04	82.284		
10,100.0	7,770.0	7,387.9	7,372.6	44.0	15.1	85.15	-1,949.9	-4,500.9	4,535.0	4,478.3	56.67	80.028		
10,200.0	7,770.0	7,376.2	7,361.2	45.6	15.0	85.01	-1,952.4	-4,500.1	4,543.4	4,485.1	58.30	77.925		
10,300.0	7,770.0	7,366.5	7,351.7	47.3	15.0	84.88	-1,954.3	-4,499.4	4,554.0	4,494.0	59.95	75.961		
10,400.0	7,770.0	7,350.0	7,335.5	49.0	15.0	84.68	-1,957.1	-4,498.4	4,566.7	4,505.1	61.59	74.153		
10,500.0	7,770.0	7,350.0	7,335.5	50.7	15.0	84.68	-1,957.1	-4,498.4	4,581.5	4,518.3	63.27	72.417		
10,600.0	7,770.0	7,350.0	7,335.5	52.4	15.0	84.68	-1,957.1	-4,498.4	4,598.5	4,533.5	64.95	70.798		
10,700.0	7,770.0	7,350.0	7,335.5	54.1	15.0	84.68	-1,957.1	-4,498.4	4,617.5	4,550.8	66.64	69.289		
10,800.0	7,770.0	7,350.0	7,335.5	55.8	15.0	84.68	-1,957.1	-4,498.4	4,638.6	4,570.3	68.33	67.882		
10,900.0	7,770.0	7,330.8	7,316.5	57.5	14.9	84.44	-1,959.8	-4,497.1	4,661.6	4,591.7	69.98	66.618		
11,000.0	7,770.0	7,327.1	7,312.8	59.2	14.9	84.39	-1,960.2	-4,496.9	4,686.8	4,615.1	71.66	65.400		
11,100.0	7,770.0	7,323.7	7,309.5	60.9	14.9	84.35	-1,960.6	-4,496.6	4,713.9	4,640.5	73.35	64.262		
11,200.0	7,770.0	7,320.6	7,306.4	62.6	14.9	84.31	-1,961.0	-4,496.4	4,742.9	4,667.9	75.05	63.199		
11,300.0	7,770.0	7,300.0	7,285.9	64.3	14.9	84.05	-1,962.8	-4,495.1	4,774.0	4,697.3	76.69	62.251		
11,400.0	7,770.0	7,300.0	7,285.9	66.0	14.9	84.05	-1,962.8	-4,495.1	4,806.8	4,728.4	78.40	61.314		
11,500.0	7,770.0	7,300.0	7,285.9	67.7	14.9	84.05	-1,962.8	-4,495.1	4,841.4	4,761.3	80.10	60.439		
11,600.0	7,770.0	7,300.0	7,285.9	69.5	14.9	84.05	-1,962.8	-4,495.1	4,877.9	4,796.1	81.81	59.621		
11,700.0	7,770.0	7,300.0	7,285.9	71.2	14.9	84.05	-1,962.8	-4,495.1	4,916.1	4,832.6	83.53	58.857		
11,800.0	7,770.0	7,300.0	7,285.9	72.9	14.9	84.05	-1,962.8	-4,495.1	4,956.1	4,870.8	85.24	58.142		
11,900.0	7,770.0	7,300.0	7,285.9	74.6	14.9	84.05	-1,962.8	-4,495.1	4,997.7	4,910.7	86.96	57.474		
12,000.0	7,770.0	7,300.0	7,285.9	76.4	14.9	84.05	-1,962.8	-4,495.1	5,040.9	4,952.3	88.67	56.849		
12,100.0	7,770.0	7,300.0	7,285.9	78.1	14.9	84.05	-1,962.8	-4,495.1	5,085.8	4,995.4	90.39	56.265		
12,200.0	7,770.0	7,300.0	7,285.9	79.8	14.9	84.05	-1,962.8	-4,495.1	5,132.2	5,040.1	92.11	55.719		
12,300.0	7,770.0	7,300.0	7,285.9	81.5	14.9	84.05	-1,962.8	-4,495.1	5,180.1	5,086.3	93.83	55.208		
12,400.0	7,770.0	7,300.0	7,285.9	83.3	14.9	84.05	-1,962.8	-4,495.1	5,229.6	5,134.0	95.55	54.731		
12,500.0	7,770.0	7,300.0	7,285.9	85.0	14.9	84.05	-1,962.8	-4,495.1	5,280.4	5,183.1	97.27	54.285		
12,600.0	7,770.0	7,300.0	7,285.9	86.7	14.9	84.05	-1,962.8	-4,495.1	5,332.6	5,233.6	98.99	53.868		
12,700.0	7,770.0	7,300.0	7,285.9	88.5	14.9	84.05	-1,962.8	-4,495.1	5,386.2	5,285.5	100.72	53.478		
12,800.0	7,770.0	7,300.0	7,285.9	90.2	14.9	84.05	-1,962.8	-4,495.1	5,441.1	5,338.6	102.44	53.113		
12,900.0	7,770.0	7,300.0	7,285.9	91.9	14.9	84.05	-1,962.8	-4,495.1	5,497.2	5,393.1	104.17	52.773		
13,000.0	7,770.0	7,300.0	7,285.9	93.7	14.9	84.05	-1,962.8	-4,495.1	5,554.6	5,448.7	105.89	52.454		
13,100.0	7,770.0	7,300.0	7,285.9	95.4	14.9	84.05	-1,962.8	-4,495.1	5,613.2	5,505.6	107.62	52.157		
13,200.0	7,770.0	7,300.0	7,285.9	97.1	14.9	84.05	-1,962.8	-4,495.1	5,673.0	5,563.6	109.35	51.880		
13,300.0	7,770.0	7,300.0	7,285.9	98.9	14.9	84.05	-1,962.8	-4,495.1	5,733.8	5,622.8	111.08	51.620		
13,400.0	7,770.0	7,300.0	7,285.9	100.6	14.9	84.05	-1,962.8	-4,495.1	5,795.8	5,683.0	112.81	51.379		
13,500.0	7,770.0	7,300.0	7,285.9	102.4	14.9	84.05	-1,962.8	-4,495.1	5,858.8	5,744.3	114.53	51.153		
13,600.0	7,770.0	7,300.0	7,285.9	104.1	14.9	84.05	-1,962.8	-4,495.1	5,922.8	5,806.5	116.26	50.943		
13,700.0	7,770.0	7,300.0	7,285.9	105.8	14.9	84.05	-1,962.8	-4,495.1	5,987.8	5,869.8	117.99	50.747		
13,800.0	7,770.0	7,300.0	7,285.9	107.6	14.9	84.05	-1,962.8	-4,495.1	6,053.8	5,934.1	119.72	50.564		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	7,300.0	7,285.9	109.3	14.9	84.05	-1,962.8	-4,495.1	6,120.7	5,999.2	121.46	50.394		
14,000.0	7,770.0	7,300.0	7,285.9	111.1	14.9	84.05	-1,962.8	-4,495.1	6,188.4	6,065.3	123.19	50.236		
14,100.0	7,770.0	7,300.0	7,285.9	112.8	14.9	84.05	-1,962.8	-4,495.1	6,257.1	6,132.2	124.92	50.089		
14,200.0	7,770.0	7,300.0	7,285.9	114.5	14.9	84.05	-1,962.8	-4,495.1	6,326.6	6,199.9	126.65	49.953		
14,300.0	7,770.0	7,300.0	7,285.9	116.3	14.9	84.05	-1,962.8	-4,495.1	6,396.9	6,268.5	128.38	49.826		
14,400.0	7,770.0	7,300.0	7,285.9	118.0	14.9	84.05	-1,962.8	-4,495.1	6,467.9	6,337.8	130.12	49.708		
14,500.0	7,770.0	7,300.0	7,285.9	119.8	14.9	84.05	-1,962.8	-4,495.1	6,539.8	6,407.9	131.85	49.600		
14,600.0	7,770.0	7,300.0	7,285.9	121.5	14.9	84.05	-1,962.8	-4,495.1	6,612.3	6,478.7	133.58	49.499		
14,700.0	7,770.0	7,300.0	7,285.9	123.3	14.9	84.05	-1,962.8	-4,495.1	6,685.6	6,550.3	135.32	49.406		
14,800.0	7,770.0	7,300.0	7,285.9	125.0	14.9	84.05	-1,962.8	-4,495.1	6,759.5	6,622.5	137.05	49.321		
14,900.0	7,770.0	7,300.0	7,285.9	126.7	14.9	84.05	-1,962.8	-4,495.1	6,834.1	6,695.4	138.79	49.242		
15,000.0	7,770.0	7,300.0	7,285.9	128.5	14.9	84.05	-1,962.8	-4,495.1	6,909.4	6,768.9	140.52	49.169		
15,100.0	7,770.0	7,281.0	7,267.0	130.2	14.8	83.81	-1,963.8	-4,493.9	6,985.0	6,842.8	142.17	49.132		
15,200.0	7,770.0	7,280.6	7,266.6	132.0	14.8	83.81	-1,963.8	-4,493.8	7,061.5	6,917.6	143.90	49.072		
15,300.0	7,770.0	7,280.3	7,266.3	133.7	14.8	83.80	-1,963.8	-4,493.8	7,138.5	6,992.9	145.63	49.017		
15,400.0	7,770.0	7,280.0	7,266.0	135.5	14.8	83.80	-1,963.8	-4,493.8	7,216.1	7,068.8	147.37	48.967		
15,500.0	7,770.0	7,279.6	7,265.6	137.2	14.8	83.79	-1,963.8	-4,493.8	7,294.3	7,145.2	149.10	48.922		
15,600.0	7,770.0	7,279.3	7,265.3	139.0	14.8	83.79	-1,963.9	-4,493.7	7,373.0	7,222.1	150.83	48.881		
15,700.0	7,770.0	7,279.0	7,265.0	140.7	14.8	83.79	-1,963.9	-4,493.7	7,452.2	7,299.6	152.57	48.845		
15,800.0	7,770.0	7,278.8	7,264.8	142.4	14.8	83.78	-1,963.9	-4,493.7	7,531.9	7,377.6	154.30	48.812		
15,900.0	7,770.0	7,278.5	7,264.5	144.2	14.8	83.78	-1,963.9	-4,493.7	7,612.0	7,456.0	156.04	48.783		
16,000.0	7,770.0	7,278.2	7,264.2	145.9	14.8	83.77	-1,963.9	-4,493.7	7,692.7	7,534.9	157.77	48.758		
16,100.0	7,770.0	7,277.9	7,263.9	147.7	14.8	83.77	-1,963.9	-4,493.7	7,773.7	7,614.2	159.51	48.736		
16,200.0	7,770.0	7,277.7	7,263.7	149.4	14.8	83.77	-1,963.9	-4,493.6	7,855.3	7,694.0	161.24	48.717		
16,300.0	7,770.0	7,258.3	7,244.3	151.2	14.8	83.52	-1,964.2	-4,492.4	7,937.5	7,774.6	162.88	48.733		
16,400.0	7,770.0	7,258.3	7,244.3	152.9	14.8	83.52	-1,964.2	-4,492.4	8,019.8	7,855.2	164.61	48.720		
16,500.0	7,770.0	7,258.3	7,244.3	154.7	14.8	83.52	-1,964.2	-4,492.4	8,102.6	7,936.2	166.35	48.709		
16,600.0	7,770.0	7,258.3	7,244.3	156.4	14.8	83.52	-1,964.2	-4,492.4	8,185.7	8,017.6	168.08	48.700		
16,700.0	7,770.0	7,258.3	7,244.3	158.2	14.8	83.52	-1,964.2	-4,492.4	8,269.2	8,099.4	169.82	48.694		
16,800.0	7,770.0	7,258.3	7,244.3	159.9	14.8	83.52	-1,964.2	-4,492.4	8,353.1	8,181.5	171.56	48.690		
16,900.0	7,770.0	7,258.3	7,244.3	161.7	14.8	83.52	-1,964.2	-4,492.4	8,437.3	8,264.0	173.29	48.688		
17,000.0	7,770.0	7,258.3	7,244.3	163.4	14.8	83.52	-1,964.2	-4,492.4	8,521.8	8,346.8	175.03	48.688 SF		
17,100.0	7,770.0	7,258.3	7,244.3	165.2	14.8	83.52	-1,964.2	-4,492.4	8,606.7	8,430.0	176.77	48.689		
17,200.0	7,770.0	7,258.3	7,244.3	166.9	14.8	83.52	-1,964.2	-4,492.4	8,691.9	8,513.4	178.51	48.693		
17,300.0	7,770.0	7,258.3	7,244.3	168.7	14.8	83.52	-1,964.2	-4,492.4	8,777.5	8,597.2	180.24	48.698		
17,400.0	7,770.0	7,258.3	7,244.3	170.4	14.8	83.52	-1,964.2	-4,492.4	8,863.3	8,681.3	181.98	48.705		
17,500.0	7,770.0	7,258.3	7,244.3	172.2	14.8	83.52	-1,964.2	-4,492.4	8,949.4	8,765.7	183.72	48.713		
17,600.0	7,770.0	7,258.3	7,244.3	173.9	14.8	83.52	-1,964.2	-4,492.4	9,035.8	8,850.4	185.46	48.722		
17,653.1	7,770.0	7,258.3	7,244.3	174.8	14.8	83.52	-1,964.2	-4,492.4	9,081.8	8,895.4	186.38	48.728		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.47	-1,929.2	-4,049.9	4,485.9						
100.0	100.0	85.0	85.0	0.2	0.1	-115.47	-1,929.2	-4,049.9	4,485.9	4,485.6	0.26	N/A			
200.0	200.0	185.0	185.0	0.3	0.3	-115.47	-1,929.2	-4,049.9	4,485.9	4,485.3	0.61	7,407.023			
300.0	300.0	285.0	285.0	0.5	0.5	-115.47	-1,929.2	-4,049.9	4,485.9	4,485.0	0.95	4,698.789			
400.0	400.0	349.6	349.6	0.7	0.6	-115.47	-1,929.4	-4,050.0	4,486.2	4,485.0	1.24	3,611.650			
500.0	500.0	400.0	400.0	0.8	0.7	-115.48	-1,929.9	-4,050.4	4,487.5	4,486.0	1.50	2,982.547			
550.0	550.0	437.2	437.2	0.9	0.7	-115.48	-1,930.5	-4,050.9	4,488.5	4,486.8	1.66	2,708.458			
600.0	600.0	466.4	466.4	1.0	0.8	-116.31	-1,931.1	-4,051.4	4,489.8	4,488.0	1.80	2,500.394			
700.0	700.0	524.7	524.6	1.2	0.9	-116.30	-1,932.6	-4,052.7	4,493.7	4,491.6	2.07	2,167.174			
800.0	799.9	600.0	599.9	1.4	1.0	-116.30	-1,935.3	-4,054.9	4,499.3	4,496.9	2.38	1,886.876			
861.1	860.9	690.4	690.2	1.5	1.2	-116.34	-1,938.3	-4,057.6	4,503.2	4,500.6	2.65	1,696.657			
900.0	899.8	802.4	802.1	1.6	1.4	-116.42	-1,940.3	-4,059.9	4,505.2	4,502.3	2.92	1,542.519			
1,000.0	999.6	937.4	937.1	1.8	1.6	-116.49	-1,940.7	-4,061.5	4,508.7	4,505.4	3.34	1,349.844			
1,100.0	1,099.5	1,037.2	1,036.9	1.9	1.8	-116.55	-1,940.9	-4,062.6	4,512.2	4,508.5	3.70	1,219.318			
1,200.0	1,199.3	1,137.0	1,136.7	2.1	2.0	-116.61	-1,941.1	-4,063.7	4,515.7	4,511.6	4.06	1,111.582			
1,300.0	1,299.2	1,236.9	1,236.6	2.3	2.1	-116.67	-1,941.2	-4,064.8	4,519.2	4,514.8	4.43	1,021.228			
1,400.0	1,399.1	1,336.7	1,336.4	2.5	2.3	-116.72	-1,941.4	-4,065.9	4,522.7	4,517.9	4.79	944.413			
1,500.0	1,498.9	1,436.5	1,436.2	2.7	2.5	-116.78	-1,941.5	-4,067.0	4,526.2	4,521.0	5.15	878.336			
1,600.0	1,598.8	1,536.4	1,536.1	2.9	2.7	-116.84	-1,941.7	-4,068.1	4,529.7	4,524.2	5.52	820.912			
1,700.0	1,698.6	1,636.2	1,635.9	3.1	2.8	-116.89	-1,941.9	-4,069.2	4,533.2	4,527.3	5.88	770.558			
1,800.0	1,798.5	1,736.1	1,735.7	3.3	3.0	-116.95	-1,942.0	-4,070.2	4,536.7	4,530.5	6.25	726.054			
1,900.0	1,898.3	1,835.9	1,835.6	3.5	3.2	-117.01	-1,942.2	-4,071.3	4,540.2	4,533.6	6.61	686.441			
2,000.0	1,998.2	1,935.7	1,935.4	3.7	3.4	-117.06	-1,942.3	-4,072.4	4,543.8	4,536.8	6.98	650.961			
2,100.0	2,098.0	2,035.6	2,035.2	3.9	3.5	-117.12	-1,942.5	-4,073.5	4,547.3	4,539.9	7.35	619.001			
2,200.0	2,197.9	2,135.4	2,135.1	4.1	3.7	-117.18	-1,942.7	-4,074.6	4,550.8	4,543.1	7.71	590.065			
2,300.0	2,297.7	2,235.2	2,234.9	4.3	3.9	-117.23	-1,942.8	-4,075.7	4,554.4	4,546.3	8.08	563.745			
2,400.0	2,397.6	2,335.1	2,334.7	4.5	4.1	-117.29	-1,943.0	-4,076.8	4,557.9	4,549.5	8.45	539.702			
2,500.0	2,497.4	2,434.9	2,434.5	4.7	4.2	-117.35	-1,943.1	-4,077.9	4,561.4	4,552.6	8.81	517.655			
2,600.0	2,597.3	2,534.8	2,534.4	4.9	4.4	-117.40	-1,943.3	-4,079.0	4,565.0	4,555.8	9.18	497.366			
2,700.0	2,697.1	2,634.6	2,634.2	5.1	4.6	-117.46	-1,943.5	-4,080.1	4,568.5	4,559.0	9.54	478.633			
2,800.0	2,797.0	2,734.4	2,734.0	5.3	4.8	-117.51	-1,943.6	-4,081.2	4,572.1	4,562.2	9.91	461.284			
2,900.0	2,896.8	2,834.3	2,833.9	5.5	4.9	-117.57	-1,943.8	-4,082.3	4,575.7	4,565.4	10.28	445.172			
3,000.0	2,996.7	2,934.1	2,933.7	5.7	5.1	-117.63	-1,943.9	-4,083.3	4,579.2	4,568.6	10.65	430.169			
3,100.0	3,096.5	3,033.9	3,033.5	5.9	5.3	-117.68	-1,944.1	-4,084.4	4,582.8	4,571.8	11.01	416.165			
3,200.0	3,196.4	3,133.8	3,133.4	6.1	5.5	-117.74	-1,944.3	-4,085.5	4,586.4	4,575.0	11.38	403.064			
3,300.0	3,296.3	3,233.6	3,233.2	6.3	5.6	-117.79	-1,944.4	-4,086.6	4,589.9	4,578.2	11.75	390.781			
3,400.0	3,396.1	3,333.5	3,333.0	6.5	5.8	-117.85	-1,944.6	-4,087.7	4,593.5	4,581.4	12.11	379.242			
3,500.0	3,496.0	3,433.3	3,432.9	6.7	6.0	-117.90	-1,944.7	-4,088.8	4,597.1	4,584.6	12.48	368.381			
3,600.0	3,595.8	3,533.1	3,532.7	6.9	6.2	-117.96	-1,944.9	-4,089.9	4,600.7	4,587.9	12.85	358.142			
3,700.0	3,695.7	3,633.0	3,632.5	7.0	6.3	-118.01	-1,945.1	-4,091.0	4,604.3	4,591.1	13.21	348.471			
3,800.0	3,795.5	3,732.8	3,732.3	7.2	6.5	-118.07	-1,945.2	-4,092.1	4,607.9	4,594.3	13.58	339.323			
3,900.0	3,895.4	3,832.6	3,832.2	7.4	6.7	-118.12	-1,945.4	-4,093.2	4,611.5	4,597.6	13.95	330.657			
4,000.0	3,995.2	3,932.5	3,932.0	7.6	6.9	-118.18	-1,945.5	-4,094.3	4,615.1	4,600.8	14.31	322.435			
4,100.0	4,095.1	4,032.3	4,031.8	7.8	7.0	-118.23	-1,945.7	-4,095.4	4,618.7	4,604.1	14.68	314.625			
4,200.0	4,194.9	4,132.1	4,131.7	8.0	7.2	-118.29	-1,945.9	-4,096.4	4,622.4	4,607.3	15.05	307.196			
4,300.0	4,294.8	4,232.0	4,231.5	8.2	7.4	-118.34	-1,946.0	-4,097.5	4,626.0	4,610.6	15.41	300.122			
4,400.0	4,394.6	4,331.8	4,331.3	8.4	7.6	-118.40	-1,946.2	-4,098.6	4,629.6	4,613.8	15.78	293.376			
4,500.0	4,494.5	4,431.7	4,431.2	8.6	7.7	-118.45	-1,946.3	-4,099.7	4,633.2	4,617.1	16.15	286.938			
4,600.0	4,594.3	4,531.5	4,531.0	8.8	7.9	-118.51	-1,946.5	-4,100.8	4,636.9	4,620.4	16.51	280.786			
4,700.0	4,694.2	4,631.3	4,630.8	9.0	8.1	-118.56	-1,946.7	-4,101.9	4,640.5	4,623.6	16.88	274.903			
4,800.0	4,794.0	4,731.2	4,730.7	9.2	8.3	-118.62	-1,946.8	-4,103.0	4,644.1	4,626.9	17.25	269.269			
4,900.0	4,893.9	4,831.0	4,830.5	9.4	8.4	-118.67	-1,947.0	-4,104.1	4,647.8	4,630.2	17.61	263.871			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	4,993.7	4,930.8	4,930.3	9.6	8.6	-118.72	-1,947.1	-4,105.2	4,651.4	4,633.5	17.98	258.694		
5,100.0	5,093.6	5,030.7	5,030.1	9.8	8.8	-118.78	-1,947.3	-4,106.3	4,655.1	4,636.8	18.35	253.724		
5,200.0	5,193.5	5,130.5	5,130.0	10.0	9.0	-118.83	-1,947.5	-4,107.4	4,658.8	4,640.0	18.71	248.950		
5,300.0	5,293.3	5,230.4	5,229.8	10.2	9.1	-118.89	-1,947.6	-4,108.5	4,662.4	4,643.3	19.08	244.359		
5,400.0	5,393.2	5,330.2	5,329.6	10.4	9.3	-118.94	-1,947.8	-4,109.5	4,666.1	4,646.6	19.45	239.942		
5,500.0	5,493.0	5,430.0	5,429.5	10.6	9.5	-118.99	-1,947.9	-4,110.6	4,669.8	4,649.9	19.81	235.689		
5,600.0	5,592.9	9,369.6	7,585.0	10.8	39.1	-94.88	78.9	-4,171.5	4,636.5	4,586.6	49.91	92.898		
5,700.0	5,692.7	9,372.8	7,585.0	11.0	39.2	-94.84	82.0	-4,171.6	4,594.4	4,544.3	50.16	91.595		
5,800.0	5,792.6	9,375.9	7,585.0	11.2	39.2	-94.79	85.2	-4,171.8	4,554.2	4,503.8	50.41	90.342		
5,900.0	5,892.4	9,400.0	7,585.0	11.4	39.6	-94.46	109.2	-4,172.9	4,515.9	4,464.9	51.01	88.529		
6,000.0	5,992.3	9,400.0	7,585.0	11.6	39.6	-94.46	109.2	-4,172.9	4,479.4	4,428.1	51.21	87.473		
6,100.0	6,092.1	9,400.0	7,585.0	11.8	39.6	-94.46	109.2	-4,172.9	4,444.8	4,393.4	51.41	86.463		
6,200.0	6,192.0	9,400.0	7,585.0	12.0	39.6	-94.46	109.2	-4,172.9	4,412.2	4,360.6	51.60	85.500		
6,300.0	6,291.8	9,400.0	7,585.0	12.2	39.6	-94.46	109.2	-4,172.9	4,381.7	4,329.9	51.80	84.583		
6,400.0	6,391.7	9,400.0	7,585.0	12.4	39.6	-94.46	109.2	-4,172.9	4,353.2	4,301.2	52.00	83.714		
6,500.0	6,491.5	9,400.0	7,585.0	12.6	39.6	-94.46	109.2	-4,172.9	4,326.9	4,274.7	52.20	82.892		
6,600.0	6,591.4	9,400.0	7,585.0	12.8	39.6	-94.46	109.2	-4,172.9	4,302.8	4,250.4	52.40	82.117		
6,700.0	6,691.2	9,400.0	7,585.0	13.0	39.6	-94.46	109.2	-4,172.9	4,280.8	4,228.2	52.60	81.390		
6,800.0	6,791.1	9,400.0	7,585.0	13.2	39.6	-94.46	109.2	-4,172.9	4,261.1	4,208.3	52.79	80.711		
6,900.0	6,890.9	9,400.0	7,585.0	13.4	39.6	-94.46	109.2	-4,172.9	4,243.6	4,190.6	52.99	80.079		
7,000.0	6,990.8	9,400.0	7,585.0	13.6	39.6	-94.46	109.2	-4,172.9	4,228.5	4,175.3	53.19	79.496		
7,024.2	7,014.9	9,400.0	7,585.0	13.6	39.6	-94.46	109.2	-4,172.9	4,225.1	4,171.9	53.24	79.362		
7,050.0	7,040.7	9,400.0	7,585.0	13.7	39.6	-95.84	109.2	-4,172.9	4,221.7	4,168.4	53.28	79.230		
7,100.0	7,090.7	9,400.0	7,585.0	13.7	39.6	88.04	109.2	-4,172.9	4,215.4	4,162.0	53.34	79.025		
7,150.0	7,140.5	9,400.0	7,585.0	13.8	39.6	88.01	109.2	-4,172.9	4,209.5	4,156.1	53.37	78.869		
7,200.0	7,189.9	9,400.0	7,585.0	13.8	39.6	88.32	109.2	-4,172.9	4,204.0	4,150.6	53.38	78.761		
7,250.0	7,238.6	9,400.0	7,585.0	13.8	39.6	88.66	109.2	-4,172.9	4,199.0	4,145.6	53.36	78.695		
7,300.0	7,286.4	9,400.0	7,585.0	13.7	39.6	88.98	109.2	-4,172.9	4,194.4	4,141.1	53.32	78.665		
7,350.0	7,333.1	9,400.0	7,585.0	13.7	39.6	89.28	109.2	-4,172.9	4,190.5	4,137.2	53.27	78.666		
7,400.0	7,378.5	9,369.9	7,585.0	13.6	39.1	89.17	79.2	-4,171.5	4,186.8	4,134.1	52.72	79.419		
7,450.0	7,422.2	9,355.9	7,585.0	13.6	38.9	89.24	65.2	-4,170.9	4,183.7	4,131.3	52.43	79.801		
7,500.0	7,464.1	9,340.2	7,585.0	13.5	38.6	89.26	49.5	-4,170.2	4,181.1	4,129.0	52.11	80.236		
7,550.0	7,504.1	9,322.8	7,585.0	13.5	38.3	89.24	32.2	-4,169.6	4,178.8	4,127.1	51.77	80.714		
7,600.0	7,541.8	9,300.0	7,585.0	13.5	37.9	89.15	9.3	-4,168.8	4,177.0	4,125.7	51.36	81.325		
7,650.0	7,577.2	9,300.0	7,585.0	13.4	37.9	89.25	9.3	-4,168.8	4,175.7	4,124.3	51.35	81.321		
7,700.0	7,610.0	9,261.7	7,585.0	13.5	37.3	88.98	-29.0	-4,167.7	4,174.5	4,123.8	50.73	82.283		
7,750.0	7,640.2	9,238.6	7,585.0	13.5	36.9	88.85	-52.0	-4,167.1	4,173.8	4,123.4	50.40	82.810		
7,800.0	7,667.4	9,212.7	7,585.0	13.6	36.5	88.69	-77.9	-4,166.6	4,173.3	4,123.3	50.06	83.363		
7,850.0	7,691.7	9,171.9	7,585.0	13.7	35.8	88.44	-118.8	-4,165.9	4,173.1	4,123.6	49.52	84.269		
7,900.0	7,712.8	9,126.6	7,585.0	13.9	35.1	88.19	-164.1	-4,165.1	4,172.8	4,123.9	48.95	85.242		
7,950.0	7,730.8	9,079.9	7,585.0	14.1	34.3	87.98	-210.7	-4,164.3	4,172.6	4,124.1	48.41	86.189		
8,000.0	7,745.5	9,032.1	7,585.0	14.4	33.6	87.82	-258.5	-4,163.5	4,172.2	4,124.3	47.90	87.096		
8,050.0	7,756.7	8,983.5	7,585.0	14.7	32.8	87.70	-307.2	-4,162.6	4,171.8	4,124.4	47.43	87.955		
8,100.0	7,764.6	8,934.1	7,585.0	15.1	32.0	87.63	-356.5	-4,161.8	4,171.3	4,124.3	47.00	88.754		
8,150.0	7,769.0	8,884.3	7,585.0	15.5	31.2	87.63	-406.3	-4,160.9	4,170.6	4,124.0	46.60	89.489		
8,188.1	7,770.0	8,846.3	7,585.0	15.9	30.6	87.66	-444.3	-4,160.3	4,170.0	4,123.6	46.33	89.999		
8,200.0	7,770.0	8,834.3	7,585.0	16.0	30.4	87.66	-456.3	-4,160.1	4,169.8	4,123.5	46.25	90.149		
8,300.0	7,770.0	8,734.3	7,585.0	17.0	28.8	87.66	-556.2	-4,158.3	4,168.0	4,122.4	45.67	91.263		
8,400.0	7,770.0	8,634.4	7,585.0	18.1	27.2	87.66	-656.2	-4,156.6	4,166.3	4,121.1	45.22	92.126		
8,500.0	7,770.0	8,534.4	7,585.0	19.3	25.7	87.66	-756.2	-4,154.9	4,164.6	4,119.7	44.90	92.758		
8,600.0	7,770.0	8,434.4	7,585.0	20.6	24.2	87.66	-856.1	-4,153.2	4,162.8	4,118.2	44.68	93.173		
8,700.0	7,770.0	8,334.4	7,585.0	21.9	22.7	87.66	-956.1	-4,151.4	4,161.1	4,116.6	44.56	93.381		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	8,234.4	7,585.0	23.3	21.3	87.66	-1,056.1	-4,149.7	4,159.4	4,114.9	44.54	93.389		
8,900.0	7,770.0	8,134.4	7,585.0	24.8	19.9	87.66	-1,156.1	-4,148.0	4,157.7	4,113.1	44.61	93.194		
9,000.0	7,770.0	8,034.4	7,585.0	26.3	18.6	87.66	-1,256.0	-4,146.2	4,155.9	4,111.1	44.79	92.790		
9,100.0	7,770.0	7,934.5	7,585.0	27.8	17.4	87.65	-1,356.0	-4,144.5	4,154.2	4,109.1	45.07	92.173		
9,200.0	7,770.0	7,850.0	7,581.6	29.3	16.4	87.61	-1,440.3	-4,143.0	4,152.6	4,107.0	45.64	90.992		
9,300.0	7,770.0	7,769.4	7,567.2	30.9	15.6	87.41	-1,519.6	-4,141.5	4,151.5	4,105.1	46.36	89.548		
9,400.0	7,770.0	7,700.0	7,546.0	32.5	14.9	87.11	-1,585.6	-4,140.1	4,151.0	4,103.7	47.29	87.781		
9,412.8	7,770.0	7,686.3	7,540.8	32.7	14.8	87.04	-1,598.3	-4,139.8	4,151.0	4,103.6	47.38	87.615 CC		
9,500.0	7,770.0	7,628.1	7,515.7	34.1	14.4	86.70	-1,650.8	-4,138.7	4,151.3	4,103.0	48.30	85.945 ES		
9,600.0	7,770.0	7,568.4	7,484.6	35.7	13.9	86.27	-1,701.6	-4,137.4	4,152.7	4,103.2	49.49	83.907		
9,700.0	7,770.0	7,516.2	7,453.2	37.3	13.6	85.83	-1,743.3	-4,136.4	4,155.3	4,104.5	50.79	81.809		
9,800.0	7,770.0	7,470.8	7,422.9	39.0	13.4	85.41	-1,777.0	-4,135.5	4,159.5	4,107.3	52.18	79.714		
9,900.0	7,770.0	7,431.5	7,394.5	40.6	13.2	85.02	-1,804.2	-4,134.7	4,165.4	4,111.7	53.63	77.667		
10,000.0	7,770.0	7,400.0	7,370.5	42.3	13.1	84.69	-1,824.6	-4,134.1	4,173.0	4,117.9	55.14	75.684		
10,100.0	7,770.0	7,367.7	7,344.8	44.0	13.0	84.34	-1,844.1	-4,133.4	4,182.5	4,125.9	56.66	73.815		
10,200.0	7,770.0	7,350.0	7,330.2	45.6	13.0	84.14	-1,854.1	-4,133.1	4,194.1	4,135.8	58.25	71.999		
10,300.0	7,770.0	7,319.1	7,304.0	47.3	12.9	83.78	-1,870.6	-4,132.5	4,207.6	4,147.8	59.80	70.356		
10,400.0	7,770.0	7,300.0	7,287.4	49.0	12.8	83.55	-1,880.0	-4,132.2	4,223.2	4,161.8	61.40	68.779		
10,500.0	7,770.0	7,281.3	7,270.9	50.7	12.8	83.33	-1,888.8	-4,131.9	4,241.0	4,177.9	63.01	67.302		
10,600.0	7,770.0	7,250.0	7,242.6	52.4	12.7	82.94	-1,902.1	-4,131.3	4,260.8	4,196.3	64.58	65.980		
10,700.0	7,770.0	7,250.0	7,242.6	54.1	12.7	82.94	-1,902.1	-4,131.3	4,282.7	4,216.4	66.26	64.632		
10,800.0	7,770.0	7,250.0	7,242.6	55.8	12.7	82.94	-1,902.1	-4,131.3	4,306.7	4,238.7	67.95	63.381		
10,900.0	7,770.0	7,227.0	7,221.4	57.5	12.7	82.65	-1,910.9	-4,130.9	4,332.7	4,263.1	69.55	62.292		
11,000.0	7,770.0	7,200.0	7,196.0	59.2	12.6	82.30	-1,920.2	-4,130.5	4,360.9	4,289.8	71.14	61.297		
11,100.0	7,770.0	7,200.0	7,196.0	60.9	12.6	82.30	-1,920.2	-4,130.5	4,390.9	4,318.1	72.84	60.284		
11,200.0	7,770.0	7,200.0	7,196.0	62.6	12.6	82.30	-1,920.2	-4,130.5	4,423.0	4,348.5	74.53	59.343		
11,300.0	7,770.0	7,200.0	7,196.0	64.3	12.6	82.30	-1,920.2	-4,130.5	4,457.1	4,380.9	76.23	58.468		
11,400.0	7,770.0	7,200.0	7,196.0	66.0	12.6	82.30	-1,920.2	-4,130.5	4,493.2	4,415.3	77.93	57.655		
11,500.0	7,770.0	7,176.3	7,173.4	67.7	12.6	82.00	-1,927.3	-4,130.1	4,530.9	4,451.4	79.54	56.964		
11,600.0	7,770.0	7,170.0	7,167.4	69.5	12.6	81.91	-1,929.1	-4,130.0	4,570.6	4,489.4	81.22	56.276		
11,700.0	7,770.0	7,150.0	7,148.0	71.2	12.5	81.65	-1,934.2	-4,129.7	4,612.2	4,529.3	82.84	55.678		
11,800.0	7,770.0	7,150.0	7,148.0	72.9	12.5	81.65	-1,934.2	-4,129.7	4,655.3	4,570.8	84.54	55.066		
11,900.0	7,770.0	7,150.0	7,148.0	74.6	12.5	81.65	-1,934.2	-4,129.7	4,700.2	4,614.0	86.25	54.497		
12,000.0	7,770.0	7,150.0	7,148.0	76.4	12.5	81.65	-1,934.2	-4,129.7	4,746.8	4,658.8	87.95	53.969		
12,100.0	7,770.0	7,150.0	7,148.0	78.1	12.5	81.65	-1,934.2	-4,129.7	4,795.0	4,705.4	89.66	53.478		
12,200.0	7,770.0	7,150.0	7,148.0	79.8	12.5	81.65	-1,934.2	-4,129.7	4,844.8	4,753.4	91.37	53.022		
12,300.0	7,770.0	7,150.0	7,148.0	81.5	12.5	81.65	-1,934.2	-4,129.7	4,896.1	4,803.1	93.08	52.599		
12,400.0	7,770.0	7,150.0	7,148.0	83.3	12.5	81.65	-1,934.2	-4,129.7	4,949.0	4,854.2	94.80	52.206		
12,500.0	7,770.0	7,150.0	7,148.0	85.0	12.5	81.65	-1,934.2	-4,129.7	5,003.2	4,906.7	96.51	51.842		
12,600.0	7,770.0	7,126.2	7,124.8	86.7	12.5	81.33	-1,939.3	-4,129.4	5,058.5	4,960.4	98.11	51.560		
12,700.0	7,770.0	7,123.1	7,121.8	88.5	12.5	81.29	-1,939.9	-4,129.3	5,115.4	5,015.6	99.81	51.253		
12,800.0	7,770.0	7,100.0	7,099.0	90.2	12.4	80.98	-1,943.9	-4,129.0	5,173.9	5,072.5	101.40	51.022		
12,900.0	7,770.0	7,100.0	7,099.0	91.9	12.4	80.98	-1,943.9	-4,129.0	5,233.3	5,130.2	103.12	50.750		
13,000.0	7,770.0	7,100.0	7,099.0	93.7	12.4	80.98	-1,943.9	-4,129.0	5,293.9	5,189.1	104.83	50.499		
13,100.0	7,770.0	7,100.0	7,099.0	95.4	12.4	80.98	-1,943.9	-4,129.0	5,355.7	5,249.1	106.55	50.266		
13,200.0	7,770.0	7,100.0	7,099.0	97.1	12.4	80.98	-1,943.9	-4,129.0	5,418.6	5,310.4	108.26	50.051		
13,300.0	7,770.0	7,100.0	7,099.0	98.9	12.4	80.98	-1,943.9	-4,129.0	5,482.7	5,372.7	109.98	49.852		
13,400.0	7,770.0	7,100.0	7,099.0	100.6	12.4	80.98	-1,943.9	-4,129.0	5,547.8	5,436.1	111.69	49.669		
13,500.0	7,770.0	7,100.0	7,099.0	102.4	12.4	80.98	-1,943.9	-4,129.0	5,613.9	5,500.5	113.41	49.500		
13,600.0	7,770.0	7,100.0	7,099.0	104.1	12.4	80.98	-1,943.9	-4,129.0	5,681.0	5,565.9	115.13	49.344		
13,700.0	7,770.0	7,100.0	7,099.0	105.8	12.4	80.98	-1,943.9	-4,129.0	5,749.1	5,632.2	116.85	49.201		
13,800.0	7,770.0	7,100.0	7,099.0	107.6	12.4	80.98	-1,943.9	-4,129.0	5,818.1	5,699.5	118.57	49.070		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	7,100.0	7,099.0	109.3	12.4	80.98	-1,943.9	-4,129.0	5,887.9	5,767.7	120.29	48.950		
14,000.0	7,770.0	7,100.0	7,099.0	111.1	12.4	80.98	-1,943.9	-4,129.0	5,958.7	5,836.7	122.00	48.840		
14,100.0	7,770.0	7,100.0	7,099.0	112.8	12.4	80.98	-1,943.9	-4,129.0	6,030.3	5,906.5	123.72	48.739		
14,200.0	7,770.0	7,100.0	7,099.0	114.5	12.4	80.98	-1,943.9	-4,129.0	6,102.6	5,977.2	125.44	48.648		
14,300.0	7,770.0	7,100.0	7,099.0	116.3	12.4	80.98	-1,943.9	-4,129.0	6,175.8	6,048.6	127.17	48.565		
14,400.0	7,770.0	7,100.0	7,099.0	118.0	12.4	80.98	-1,943.9	-4,129.0	6,249.7	6,120.8	128.89	48.490		
14,500.0	7,770.0	7,100.0	7,099.0	119.8	12.4	80.98	-1,943.9	-4,129.0	6,324.3	6,193.7	130.61	48.422		
14,600.0	7,770.0	7,100.0	7,099.0	121.5	12.4	80.98	-1,943.9	-4,129.0	6,399.6	6,267.2	132.33	48.361		
14,700.0	7,770.0	7,100.0	7,099.0	123.3	12.4	80.98	-1,943.9	-4,129.0	6,475.5	6,341.5	134.05	48.306		
14,800.0	7,770.0	7,100.0	7,099.0	125.0	12.4	80.98	-1,943.9	-4,129.0	6,552.1	6,416.4	135.77	48.258		
14,900.0	7,770.0	7,100.0	7,099.0	126.7	12.4	80.98	-1,943.9	-4,129.0	6,629.4	6,491.9	137.50	48.215		
15,000.0	7,770.0	7,100.0	7,099.0	128.5	12.4	80.98	-1,943.9	-4,129.0	6,707.2	6,568.0	139.22	48.177		
15,100.0	7,770.0	7,100.0	7,099.0	130.2	12.4	80.98	-1,943.9	-4,129.0	6,785.6	6,644.7	140.94	48.145		
15,200.0	7,770.0	7,100.0	7,099.0	132.0	12.4	80.98	-1,943.9	-4,129.0	6,864.6	6,721.9	142.67	48.117		
15,300.0	7,770.0	7,077.3	7,076.5	133.7	12.4	80.68	-1,946.9	-4,128.7	6,943.7	6,799.5	144.24	48.142		
15,400.0	7,770.0	7,076.2	7,075.4	135.5	12.4	80.67	-1,947.0	-4,128.7	7,023.7	6,877.8	145.95	48.124		
15,500.0	7,770.0	7,075.3	7,074.5	137.2	12.4	80.65	-1,947.1	-4,128.7	7,104.2	6,956.6	147.67	48.110		
15,600.0	7,770.0	7,074.3	7,073.5	139.0	12.4	80.64	-1,947.2	-4,128.7	7,185.2	7,035.9	149.38	48.100		
15,700.0	7,770.0	7,073.4	7,072.6	140.7	12.4	80.63	-1,947.3	-4,128.7	7,266.7	7,115.6	151.10	48.093 SF		
15,800.0	7,770.0	7,050.0	7,049.3	142.4	12.3	80.31	-1,949.3	-4,128.4	7,349.0	7,196.4	152.65	48.143		
15,900.0	7,770.0	7,050.0	7,049.3	144.2	12.3	80.31	-1,949.3	-4,128.4	7,431.4	7,277.0	154.37	48.140		
16,000.0	7,770.0	7,050.0	7,049.3	145.9	12.3	80.31	-1,949.3	-4,128.4	7,514.1	7,358.0	156.09	48.139		
16,100.0	7,770.0	7,050.0	7,049.3	147.7	12.3	80.31	-1,949.3	-4,128.4	7,597.3	7,439.5	157.82	48.141		
16,200.0	7,770.0	7,050.0	7,049.3	149.4	12.3	80.31	-1,949.3	-4,128.4	7,680.9	7,521.4	159.54	48.145		
16,300.0	7,770.0	7,050.0	7,049.3	151.2	12.3	80.31	-1,949.3	-4,128.4	7,764.9	7,603.6	161.26	48.151		
16,400.0	7,770.0	7,050.0	7,049.3	152.9	12.3	80.31	-1,949.3	-4,128.4	7,849.2	7,686.2	162.98	48.160		
16,500.0	7,770.0	7,050.0	7,049.3	154.7	12.3	80.31	-1,949.3	-4,128.4	7,933.9	7,769.2	164.70	48.171		
16,600.0	7,770.0	7,050.0	7,049.3	156.4	12.3	80.31	-1,949.3	-4,128.4	8,019.0	7,852.6	166.43	48.183		
16,700.0	7,770.0	7,050.0	7,049.3	158.2	12.3	80.31	-1,949.3	-4,128.4	8,104.4	7,936.2	168.15	48.197		
16,800.0	7,770.0	7,050.0	7,049.3	159.9	12.3	80.31	-1,949.3	-4,128.4	8,190.1	8,020.3	169.87	48.213		
16,900.0	7,770.0	7,050.0	7,049.3	161.7	12.3	80.31	-1,949.3	-4,128.4	8,276.2	8,104.6	171.60	48.231		
17,000.0	7,770.0	7,050.0	7,049.3	163.4	12.3	80.31	-1,949.3	-4,128.4	8,362.5	8,189.2	173.32	48.249		
17,100.0	7,770.0	7,050.0	7,049.3	165.2	12.3	80.31	-1,949.3	-4,128.4	8,449.2	8,274.2	175.04	48.269		
17,200.0	7,770.0	7,050.0	7,049.3	166.9	12.3	80.31	-1,949.3	-4,128.4	8,536.2	8,359.4	176.77	48.291		
17,300.0	7,770.0	7,050.0	7,049.3	168.7	12.3	80.31	-1,949.3	-4,128.4	8,623.4	8,444.9	178.49	48.313		
17,400.0	7,770.0	7,050.0	7,049.3	170.4	12.3	80.31	-1,949.3	-4,128.4	8,710.9	8,530.7	180.21	48.336		
17,500.0	7,770.0	7,050.0	7,049.3	172.2	12.3	80.31	-1,949.3	-4,128.4	8,798.7	8,616.8	181.94	48.361		
17,600.0	7,770.0	7,050.0	7,049.3	173.9	12.3	80.31	-1,949.3	-4,128.4	8,886.7	8,703.1	183.66	48.386		
17,653.1	7,770.0	7,050.0	7,049.3	174.8	12.3	80.31	-1,949.3	-4,128.4	8,933.6	8,749.0	184.58	48.400		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.57	-1,936.5	-4,047.1	4,486.5						
100.0	100.0	86.0	86.0	0.2	0.1	-115.57	-1,936.5	-4,047.1	4,486.5	4,486.3	0.26	N/A			
200.0	200.0	186.0	186.0	0.3	0.3	-115.57	-1,936.5	-4,047.1	4,486.5	4,485.9	0.61	7,386.750			
300.0	300.0	286.0	286.0	0.5	0.5	-115.57	-1,936.5	-4,047.1	4,486.5	4,485.6	0.96	4,690.857			
400.0	400.0	386.0	386.0	0.7	0.6	-115.57	-1,936.5	-4,047.1	4,486.5	4,485.2	1.31	3,436.617			
500.0	500.0	486.0	486.0	0.8	0.8	-115.57	-1,936.5	-4,047.1	4,486.5	4,484.9	1.65	2,711.593			
550.0	550.0	536.0	536.0	0.9	0.9	-115.57	-1,936.5	-4,047.1	4,486.5	4,484.7	1.83	2,452.853			
600.0	600.0	586.0	586.0	1.0	1.0	-116.41	-1,936.5	-4,047.1	4,486.6	4,484.6	2.00	2,239.225			
700.0	700.0	851.1	851.1	1.2	1.4	-116.49	-1,935.9	-4,041.7	4,485.3	4,482.7	2.64	1,697.396			
800.0	799.9	951.0	950.9	1.4	1.6	-116.57	-1,935.5	-4,037.8	4,483.2	4,480.2	3.00	1,496.483			
861.1	860.9	1,012.0	1,011.8	1.5	1.7	-116.62	-1,935.2	-4,035.4	4,482.3	4,479.1	3.21	1,394.715			
900.0	899.8	1,050.8	1,050.6	1.6	1.8	-116.65	-1,935.1	-4,033.9	4,481.8	4,478.4	3.35	1,336.510			
1,000.0	999.6	1,150.6	1,150.3	1.8	2.0	-116.73	-1,934.6	-4,030.1	4,480.5	4,476.8	3.71	1,206.530			
1,100.0	1,099.5	1,250.5	1,250.1	1.9	2.2	-116.81	-1,934.2	-4,026.2	4,479.3	4,475.2	4.08	1,099.049			
1,200.0	1,199.3	1,350.3	1,349.8	2.1	2.4	-116.89	-1,933.8	-4,022.3	4,478.1	4,473.7	4.44	1,008.805			
1,300.0	1,299.2	1,450.1	1,449.5	2.3	2.5	-116.97	-1,933.4	-4,018.5	4,476.9	4,472.1	4.80	932.025			
1,400.0	1,399.1	1,549.9	1,549.3	2.5	2.7	-117.04	-1,932.9	-4,014.6	4,475.7	4,470.5	5.17	865.946			
1,500.0	1,498.9	1,649.7	1,649.0	2.7	2.9	-117.12	-1,932.5	-4,010.7	4,474.5	4,468.9	5.53	808.501			
1,600.0	1,598.8	1,749.5	1,748.7	2.9	3.1	-117.20	-1,932.1	-4,006.8	4,473.3	4,467.4	5.90	758.118			
1,700.0	1,698.6	1,849.3	1,848.4	3.1	3.3	-117.28	-1,931.6	-4,003.0	4,472.1	4,465.8	6.27	713.582			
1,800.0	1,798.5	1,949.1	1,948.2	3.3	3.5	-117.36	-1,931.2	-3,999.1	4,470.9	4,464.3	6.63	673.938			
1,900.0	1,898.3	2,048.9	2,047.9	3.5	3.7	-117.44	-1,930.8	-3,995.2	4,469.8	4,462.8	7.00	638.428			
2,000.0	1,998.2	2,148.7	2,147.6	3.7	3.8	-117.52	-1,930.4	-3,991.4	4,468.6	4,461.2	7.37	606.440			
2,100.0	2,098.0	2,248.5	2,247.3	3.9	4.0	-117.60	-1,929.9	-3,987.5	4,467.5	4,459.7	7.74	577.479			
2,200.0	2,197.9	2,348.3	2,347.1	4.1	4.2	-117.68	-1,929.5	-3,983.6	4,466.3	4,458.2	8.10	551.136			
2,300.0	2,297.7	2,448.1	2,446.8	4.3	4.4	-117.75	-1,929.1	-3,979.8	4,465.2	4,456.7	8.47	527.073			
2,400.0	2,397.6	2,547.9	2,546.5	4.5	4.6	-117.83	-1,928.6	-3,975.9	4,464.1	4,455.2	8.84	505.008			
2,500.0	2,497.4	2,647.7	2,646.2	4.7	4.8	-117.91	-1,928.2	-3,972.0	4,462.9	4,453.7	9.21	484.703			
2,600.0	2,597.3	2,747.5	2,746.0	4.9	5.0	-117.99	-1,927.8	-3,968.2	4,461.8	4,452.3	9.58	465.956			
2,700.0	2,697.1	2,847.3	2,845.7	5.1	5.1	-118.07	-1,927.4	-3,964.3	4,460.7	4,450.8	9.94	448.595			
2,800.0	2,797.0	2,947.1	2,945.4	5.3	5.3	-118.15	-1,926.9	-3,960.4	4,459.7	4,449.3	10.31	432.472			
2,900.0	2,896.8	3,046.9	3,045.2	5.5	5.5	-118.23	-1,926.5	-3,956.6	4,458.6	4,447.9	10.68	417.460			
3,000.0	2,996.7	3,146.7	3,144.9	5.7	5.7	-118.31	-1,926.1	-3,952.7	4,457.5	4,446.5	11.05	403.449			
3,100.0	3,096.5	3,246.5	3,244.6	5.9	5.9	-118.39	-1,925.6	-3,948.8	4,456.4	4,445.0	11.42	390.341			
3,200.0	3,196.4	3,346.3	3,344.3	6.1	6.1	-118.47	-1,925.2	-3,945.0	4,455.4	4,443.6	11.79	378.052			
3,300.0	3,296.3	3,446.1	3,444.1	6.3	6.3	-118.55	-1,924.8	-3,941.1	4,454.3	4,442.2	12.15	366.508			
3,400.0	3,396.1	3,545.9	3,543.8	6.5	6.5	-118.63	-1,924.4	-3,937.2	4,453.3	4,440.8	12.52	355.644			
3,500.0	3,496.0	3,645.7	3,643.5	6.7	6.6	-118.71	-1,923.9	-3,933.4	4,452.3	4,439.4	12.89	345.401			
3,600.0	3,595.8	3,745.5	3,743.2	6.9	6.8	-118.79	-1,923.5	-3,929.5	4,451.3	4,438.0	13.26	335.728			
3,700.0	3,695.7	3,845.3	3,843.0	7.0	7.0	-118.86	-1,923.1	-3,925.6	4,450.2	4,436.6	13.63	326.578			
3,800.0	3,795.5	3,945.1	3,942.7	7.2	7.2	-118.94	-1,922.7	-3,921.8	4,449.2	4,435.3	14.00	317.911			
3,900.0	3,895.4	4,044.9	4,042.4	7.4	7.4	-119.02	-1,922.2	-3,917.9	4,448.3	4,433.9	14.36	309.689			
4,000.0	3,995.2	4,144.7	4,142.2	7.6	7.6	-119.10	-1,921.8	-3,914.0	4,447.3	4,432.5	14.73	301.879			
4,100.0	4,095.1	4,244.5	4,241.9	7.8	7.8	-119.18	-1,921.4	-3,910.1	4,446.3	4,431.2	15.10	294.450			
4,200.0	4,194.9	4,344.3	4,341.6	8.0	7.9	-119.26	-1,920.9	-3,906.3	4,445.3	4,429.9	15.47	287.376			
4,300.0	4,294.8	4,444.1	4,441.3	8.2	8.1	-119.34	-1,920.5	-3,902.4	4,444.4	4,428.5	15.84	280.632			
4,400.0	4,394.6	4,544.0	4,541.1	8.4	8.3	-119.42	-1,920.1	-3,898.5	4,443.4	4,427.2	16.21	274.195			
4,500.0	4,494.5	4,643.8	4,640.8	8.6	8.5	-119.50	-1,919.7	-3,894.7	4,442.5	4,425.9	16.57	268.044			
4,600.0	4,594.3	4,743.6	4,740.5	8.8	8.7	-119.58	-1,919.2	-3,890.8	4,441.5	4,424.6	16.94	262.162			
4,700.0	4,694.2	4,843.4	4,840.2	9.0	8.9	-119.66	-1,918.8	-3,886.9	4,440.6	4,423.3	17.31	256.531			
4,800.0	4,794.0	4,943.2	4,940.0	9.2	9.1	-119.74	-1,918.4	-3,883.1	4,439.7	4,422.0	17.68	251.136			
4,900.0	4,893.9	5,043.0	5,039.7	9.4	9.3	-119.82	-1,917.9	-3,879.2	4,438.8	4,420.7	18.05	245.961			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	5,142.8	5,139.4	9.6	9.4	-119.90	-1,917.5	-3,875.3	4,437.9	4,419.5	18.41	240.994		
5,100.0	5,093.6	5,242.6	5,239.2	9.8	9.6	-119.98	-1,917.1	-3,871.5	4,437.0	4,418.2	18.78	236.222		
5,200.0	5,193.5	5,342.4	5,338.9	10.0	9.8	-120.06	-1,916.7	-3,867.6	4,436.1	4,417.0	19.15	231.635		
5,300.0	5,293.3	5,442.2	5,438.6	10.2	10.0	-120.14	-1,916.2	-3,863.7	4,435.2	4,415.7	19.52	227.221		
5,400.0	5,393.2	5,542.0	5,538.3	10.4	10.2	-120.22	-1,915.8	-3,859.9	4,434.4	4,414.5	19.89	222.972		
5,500.0	5,493.0	5,641.8	5,638.1	10.6	10.4	-120.30	-1,915.4	-3,856.0	4,433.5	4,413.3	20.26	218.877		
5,600.0	5,592.9	9,684.5	7,817.0	10.8	41.5	-93.65	199.7	-3,807.9	4,420.8	4,368.9	51.90	85.183		
5,700.0	5,692.7	9,689.9	7,817.0	11.0	41.6	-93.56	205.1	-3,808.0	4,371.2	4,319.0	52.19	83.750		
5,800.0	5,792.6	9,695.4	7,817.0	11.2	41.7	-93.48	210.5	-3,808.1	4,323.4	4,270.9	52.49	82.367		
5,900.0	5,892.4	9,700.8	7,817.0	11.4	41.8	-93.40	215.9	-3,808.2	4,277.4	4,224.6	52.79	81.033		
6,000.0	5,992.3	9,706.2	7,817.0	11.6	41.9	-93.32	221.4	-3,808.3	4,233.2	4,180.1	53.08	79.748		
6,100.0	6,092.1	9,711.6	7,817.0	11.8	42.0	-93.24	226.8	-3,808.4	4,191.0	4,137.6	53.38	78.514		
6,200.0	6,192.0	9,717.1	7,817.0	12.0	42.1	-93.16	232.2	-3,808.5	4,150.7	4,097.0	53.68	77.330		
6,300.0	6,291.8	9,722.5	7,817.0	12.2	42.2	-93.08	237.6	-3,808.6	4,112.4	4,058.5	53.97	76.197		
6,400.0	6,391.7	9,727.9	7,817.0	12.4	42.2	-93.00	243.0	-3,808.6	4,076.3	4,022.0	54.27	75.114		
6,500.0	6,491.5	9,733.3	7,817.0	12.6	42.3	-92.91	248.5	-3,808.7	4,042.3	3,987.7	54.56	74.083		
6,600.0	6,591.4	9,738.8	7,817.0	12.8	42.4	-92.83	253.9	-3,808.8	4,010.5	3,955.6	54.86	73.103		
6,700.0	6,691.2	9,744.2	7,817.0	13.0	42.5	-92.75	259.3	-3,808.9	3,980.9	3,925.7	55.16	72.175		
6,800.0	6,791.1	9,749.6	7,817.0	13.2	42.6	-92.67	264.7	-3,809.0	3,953.6	3,898.2	55.45	71.297		
6,900.0	6,890.9	9,755.0	7,817.0	13.4	42.7	-92.59	270.2	-3,809.1	3,928.7	3,873.0	55.75	70.472		
7,000.0	6,990.8	9,760.4	7,817.0	13.6	42.8	-92.51	275.6	-3,809.2	3,906.2	3,850.1	56.04	69.698		
7,024.2	7,014.9	9,761.8	7,817.0	13.6	42.8	-92.49	276.9	-3,809.2	3,901.1	3,845.0	56.12	69.519		
7,050.0	7,040.7	9,762.7	7,817.0	13.7	42.8	-93.70	277.8	-3,809.2	3,895.8	3,839.6	56.21	69.305		
7,100.0	7,090.7	9,761.9	7,817.0	13.7	42.8	90.46	277.0	-3,809.2	3,886.0	3,829.7	56.32	69.001		
7,150.0	7,140.5	9,757.5	7,817.0	13.8	42.7	90.64	272.7	-3,809.2	3,876.8	3,820.5	56.33	68.828		
7,200.0	7,189.9	9,749.8	7,817.0	13.8	42.6	91.09	264.9	-3,809.0	3,868.2	3,812.0	56.24	68.780		
7,250.0	7,238.6	9,738.6	7,817.0	13.8	42.4	91.50	253.7	-3,808.8	3,860.3	3,804.2	56.07	68.853		
7,300.0	7,286.4	9,724.0	7,817.0	13.7	42.2	91.84	239.1	-3,808.6	3,853.0	3,797.2	55.81	69.040		
7,350.0	7,333.1	9,706.1	7,817.0	13.7	41.9	92.10	221.2	-3,808.3	3,846.5	3,791.0	55.47	69.337		
7,400.0	7,378.5	9,685.0	7,817.0	13.6	41.5	92.28	200.2	-3,807.9	3,840.5	3,785.4	55.07	69.734		
7,450.0	7,422.2	9,660.8	7,817.0	13.6	41.1	92.37	176.0	-3,807.5	3,835.2	3,780.6	54.61	70.225		
7,500.0	7,464.1	9,633.6	7,817.0	13.5	40.7	92.40	148.8	-3,807.0	3,830.6	3,776.5	54.10	70.803		
7,550.0	7,504.1	9,603.6	7,817.0	13.5	40.2	92.36	118.7	-3,806.5	3,826.4	3,772.9	53.55	71.459		
7,600.0	7,541.8	9,570.8	7,817.0	13.5	39.7	92.27	86.0	-3,805.9	3,822.9	3,769.9	52.96	72.179		
7,650.0	7,577.2	9,535.5	7,817.0	13.4	39.1	92.14	50.7	-3,805.3	3,819.8	3,767.4	52.36	72.955		
7,700.0	7,610.0	9,497.8	7,817.0	13.5	38.5	91.98	13.0	-3,804.7	3,817.1	3,765.4	51.74	73.774		
7,750.0	7,640.2	9,457.9	7,817.0	13.5	37.8	91.80	-26.9	-3,804.0	3,814.8	3,763.7	51.12	74.619		
7,800.0	7,667.4	9,416.0	7,817.0	13.6	37.1	91.61	-68.8	-3,803.3	3,812.9	3,762.3	50.51	75.481		
7,850.0	7,691.7	9,372.3	7,817.0	13.7	36.4	91.43	-112.5	-3,802.5	3,811.2	3,761.2	49.92	76.343		
7,900.0	7,712.8	9,327.0	7,817.0	13.9	35.7	91.26	-157.8	-3,801.7	3,809.7	3,760.3	49.35	77.194		
7,950.0	7,730.8	9,280.4	7,817.0	14.1	34.9	91.11	-204.4	-3,800.9	3,808.4	3,759.6	48.81	78.020		
8,000.0	7,745.5	9,232.6	7,817.0	14.4	34.2	90.99	-252.2	-3,800.1	3,807.2	3,758.9	48.31	78.812		
8,050.0	7,756.7	9,183.9	7,817.0	14.7	33.4	90.91	-300.9	-3,799.2	3,806.1	3,758.3	47.84	79.561		
8,100.0	7,764.6	9,134.5	7,817.0	15.1	32.6	90.87	-350.2	-3,798.4	3,805.1	3,757.7	47.41	80.259		
8,150.0	7,769.0	9,084.7	7,817.0	15.5	31.8	90.88	-400.0	-3,797.5	3,804.2	3,757.2	47.02	80.906		
8,188.1	7,770.0	9,046.7	7,817.0	15.9	31.2	90.92	-438.0	-3,796.9	3,803.5	3,756.8	46.75	81.358		
8,200.0	7,770.0	9,034.8	7,817.0	16.0	31.0	90.92	-450.0	-3,796.7	3,803.3	3,756.6	46.67	81.492		
8,300.0	7,770.0	8,934.8	7,817.0	17.0	29.5	90.92	-550.0	-3,794.9	3,801.6	3,755.5	46.09	82.479		
8,400.0	7,770.0	8,834.8	7,817.0	18.1	27.9	90.92	-649.9	-3,793.2	3,799.9	3,754.2	45.65	83.240		
8,500.0	7,770.0	8,734.8	7,817.0	19.3	26.4	90.92	-749.9	-3,791.5	3,798.1	3,752.8	45.33	83.794		
8,600.0	7,770.0	8,634.8	7,817.0	20.6	25.0	90.92	-849.9	-3,789.7	3,796.4	3,751.3	45.11	84.153		
8,700.0	7,770.0	8,534.8	7,817.0	21.9	23.5	90.92	-949.8	-3,788.0	3,794.7	3,749.7	45.00	84.327		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	8,434.9	7,817.0	23.3	22.1	90.92	-1,049.8	-3,786.3	3,792.9	3,748.0	44.98	84.322		
8,900.0	7,770.0	8,334.9	7,817.0	24.8	20.8	90.92	-1,149.8	-3,784.6	3,791.2	3,746.2	45.06	84.136		
9,000.0	7,770.0	8,234.9	7,817.0	26.3	19.5	90.92	-1,249.7	-3,782.8	3,789.5	3,744.3	45.24	83.765		
9,100.0	7,770.0	8,136.8	7,816.9	27.8	18.4	90.92	-1,347.8	-3,781.1	3,787.8	3,742.2	45.54	83.173		
9,200.0	7,770.0	8,050.0	7,808.4	29.3	17.4	90.79	-1,434.1	-3,780.0	3,786.3	3,740.2	46.09	82.152		
9,300.0	7,770.0	7,969.1	7,788.9	30.9	16.6	90.50	-1,512.5	-3,779.4	3,785.2	3,738.4	46.82	80.844		
9,392.6	7,770.0	7,900.0	7,763.6	32.4	16.0	90.12	-1,576.8	-3,779.3	3,784.9	3,737.2	47.65	79.432 CC		
9,400.0	7,770.0	7,894.3	7,761.2	32.5	15.9	90.08	-1,582.0	-3,779.3	3,784.9	3,737.1	47.72	79.315		
9,500.0	7,770.0	7,827.7	7,729.1	34.1	15.4	89.59	-1,640.3	-3,779.5	3,785.4	3,736.7	48.79	77.580 ES		
9,600.0	7,770.0	7,769.5	7,695.7	35.7	15.1	89.09	-1,687.9	-3,780.0	3,787.3	3,737.3	50.01	75.733		
9,700.0	7,770.0	7,719.3	7,663.1	37.3	14.8	88.59	-1,726.1	-3,780.6	3,790.6	3,739.3	51.33	73.845		
9,800.0	7,770.0	7,676.1	7,632.5	39.0	14.6	88.13	-1,756.5	-3,781.2	3,795.7	3,742.9	52.74	71.972		
9,900.0	7,770.0	7,650.0	7,612.9	40.6	14.4	87.84	-1,773.8	-3,781.7	3,802.7	3,748.4	54.25	70.092		
10,000.0	7,770.0	7,600.0	7,573.3	42.3	14.2	87.24	-1,804.3	-3,782.7	3,811.7	3,756.0	55.68	68.454		
10,100.0	7,770.0	7,579.3	7,556.2	44.0	14.2	86.98	-1,815.9	-3,783.2	3,822.8	3,765.6	57.26	66.760		
10,200.0	7,770.0	7,550.0	7,531.2	45.6	14.1	86.61	-1,831.2	-3,783.9	3,836.2	3,777.4	58.81	65.229		
10,300.0	7,770.0	7,534.0	7,517.3	47.3	14.0	86.40	-1,839.0	-3,784.3	3,851.8	3,791.4	60.43	63.744		
10,400.0	7,770.0	7,515.4	7,500.8	49.0	14.0	86.15	-1,847.7	-3,784.8	3,869.7	3,807.7	62.04	62.379		
10,500.0	7,770.0	7,500.0	7,487.0	50.7	13.9	85.94	-1,854.4	-3,785.2	3,889.9	3,826.2	63.66	61.104		
10,600.0	7,770.0	7,500.0	7,487.0	52.4	13.9	85.94	-1,854.4	-3,785.2	3,912.4	3,847.1	65.35	59.871		
10,700.0	7,770.0	7,471.2	7,460.6	54.1	13.9	85.54	-1,865.9	-3,786.0	3,937.1	3,870.2	66.94	58.819		
10,800.0	7,770.0	7,450.0	7,440.8	55.8	13.8	85.25	-1,873.6	-3,786.7	3,964.1	3,895.6	68.55	57.828		
10,900.0	7,770.0	7,450.0	7,440.8	57.5	13.8	85.25	-1,873.6	-3,786.7	3,993.3	3,923.0	70.25	56.846		
11,000.0	7,770.0	7,450.0	7,440.8	59.2	13.8	85.25	-1,873.6	-3,786.7	4,024.7	3,952.8	71.95	55.939		
11,100.0	7,770.0	7,430.3	7,422.2	60.9	13.8	84.97	-1,880.0	-3,787.3	4,058.2	3,984.6	73.58	55.155		
11,200.0	7,770.0	7,422.2	7,414.5	62.6	13.7	84.86	-1,882.5	-3,787.5	4,093.9	4,018.6	75.25	54.402		
11,300.0	7,770.0	7,400.0	7,393.2	64.3	13.7	84.54	-1,888.7	-3,788.3	4,131.7	4,054.8	76.87	53.747		
11,400.0	7,770.0	7,400.0	7,393.2	66.0	13.7	84.54	-1,888.7	-3,788.3	4,171.3	4,092.7	78.58	53.083		
11,500.0	7,770.0	7,400.0	7,393.2	67.7	13.7	84.54	-1,888.7	-3,788.3	4,212.9	4,132.7	80.29	52.471		
11,600.0	7,770.0	7,400.0	7,393.2	69.5	13.7	84.54	-1,888.7	-3,788.3	4,256.5	4,174.5	82.00	51.907		
11,700.0	7,770.0	7,400.0	7,393.2	71.2	13.7	84.54	-1,888.7	-3,788.3	4,302.0	4,218.3	83.72	51.388		
11,800.0	7,770.0	7,400.0	7,393.2	72.9	13.7	84.54	-1,888.7	-3,788.3	4,349.3	4,263.8	85.43	50.909		
11,900.0	7,770.0	7,400.0	7,393.2	74.6	13.7	84.54	-1,888.7	-3,788.3	4,398.3	4,311.2	87.15	50.470		
12,000.0	7,770.0	7,376.5	7,370.4	76.4	13.6	84.20	-1,894.3	-3,789.0	4,448.8	4,360.0	88.77	50.116		
12,100.0	7,770.0	7,372.4	7,366.4	78.1	13.6	84.14	-1,895.2	-3,789.2	4,501.1	4,410.6	90.47	49.751		
12,200.0	7,770.0	7,350.0	7,344.5	79.8	13.6	83.81	-1,899.6	-3,790.0	4,555.1	4,463.0	92.09	49.462		
12,300.0	7,770.0	7,350.0	7,344.5	81.5	13.6	83.81	-1,899.6	-3,790.0	4,610.4	4,516.6	93.81	49.145		
12,400.0	7,770.0	7,350.0	7,344.5	83.3	13.6	83.81	-1,899.6	-3,790.0	4,667.2	4,571.7	95.53	48.855		
12,500.0	7,770.0	7,350.0	7,344.5	85.0	13.6	83.81	-1,899.6	-3,790.0	4,725.4	4,628.2	97.25	48.589		
12,600.0	7,770.0	7,350.0	7,344.5	86.7	13.6	83.81	-1,899.6	-3,790.0	4,785.1	4,686.1	98.98	48.346		
12,700.0	7,770.0	7,350.0	7,344.5	88.5	13.6	83.81	-1,899.6	-3,790.0	4,846.0	4,745.3	100.70	48.124		
12,800.0	7,770.0	7,350.0	7,344.5	90.2	13.6	83.81	-1,899.6	-3,790.0	4,908.2	4,805.8	102.42	47.921		
12,900.0	7,770.0	7,350.0	7,344.5	91.9	13.6	83.81	-1,899.6	-3,790.0	4,971.7	4,867.5	104.15	47.737		
13,000.0	7,770.0	7,350.0	7,344.5	93.7	13.6	83.81	-1,899.6	-3,790.0	5,036.3	4,930.4	105.87	47.570		
13,100.0	7,770.0	7,350.0	7,344.5	95.4	13.6	83.81	-1,899.6	-3,790.0	5,102.1	4,994.5	107.60	47.418		
13,200.0	7,770.0	7,350.0	7,344.5	97.1	13.6	83.81	-1,899.6	-3,790.0	5,169.0	5,059.7	109.32	47.281		
13,300.0	7,770.0	7,350.0	7,344.5	98.9	13.6	83.81	-1,899.6	-3,790.0	5,236.9	5,125.9	111.05	47.157		
13,400.0	7,770.0	7,350.0	7,344.5	100.6	13.6	83.81	-1,899.6	-3,790.0	5,305.9	5,193.1	112.78	47.046		
13,500.0	7,770.0	7,350.0	7,344.5	102.4	13.6	83.81	-1,899.6	-3,790.0	5,375.8	5,261.3	114.51	46.947		
13,600.0	7,770.0	7,350.0	7,344.5	104.1	13.6	83.81	-1,899.6	-3,790.0	5,446.7	5,330.4	116.24	46.858		
13,700.0	7,770.0	7,350.0	7,344.5	105.8	13.6	83.81	-1,899.6	-3,790.0	5,518.4	5,400.5	117.97	46.780		
13,800.0	7,770.0	7,350.0	7,344.5	107.6	13.6	83.81	-1,899.6	-3,790.0	5,591.1	5,471.4	119.70	46.710		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	7,327.0	7,321.8	109.3	13.5	83.47	-1,903.2	-3,790.8	5,664.1	5,542.8	121.31	46.692		
14,000.0	7,770.0	7,325.4	7,320.2	111.1	13.5	83.45	-1,903.4	-3,790.8	5,738.3	5,615.3	123.03	46.642		
14,100.0	7,770.0	7,323.9	7,318.7	112.8	13.5	83.43	-1,903.6	-3,790.9	5,813.3	5,688.6	124.75	46.599		
14,200.0	7,770.0	7,322.5	7,317.3	114.5	13.5	83.41	-1,903.8	-3,790.9	5,889.0	5,762.6	126.47	46.564		
14,300.0	7,770.0	7,300.0	7,295.0	116.3	13.5	83.08	-1,906.2	-3,791.8	5,965.8	5,837.7	128.08	46.580		
14,400.0	7,770.0	7,300.0	7,295.0	118.0	13.5	83.08	-1,906.2	-3,791.8	6,042.9	5,913.1	129.81	46.553		
14,500.0	7,770.0	7,300.0	7,295.0	119.8	13.5	83.08	-1,906.2	-3,791.8	6,120.6	5,989.1	131.54	46.531		
14,600.0	7,770.0	7,300.0	7,295.0	121.5	13.5	83.08	-1,906.2	-3,791.8	6,199.0	6,065.7	133.27	46.515		
14,700.0	7,770.0	7,300.0	7,295.0	123.3	13.5	83.08	-1,906.2	-3,791.8	6,278.0	6,143.0	135.00	46.504		
14,800.0	7,770.0	7,300.0	7,295.0	125.0	13.5	83.08	-1,906.2	-3,791.8	6,357.6	6,220.9	136.73	46.497		
14,900.0	7,770.0	7,300.0	7,295.0	126.7	13.5	83.08	-1,906.2	-3,791.8	6,437.8	6,299.3	138.46	46.495 SF		
15,000.0	7,770.0	7,300.0	7,295.0	128.5	13.5	83.08	-1,906.2	-3,791.8	6,518.5	6,378.3	140.19	46.496		
15,100.0	7,770.0	7,300.0	7,295.0	130.2	13.5	83.08	-1,906.2	-3,791.8	6,599.7	6,457.8	141.92	46.501		
15,200.0	7,770.0	7,300.0	7,295.0	132.0	13.5	83.08	-1,906.2	-3,791.8	6,681.4	6,537.8	143.66	46.510		
15,300.0	7,770.0	7,300.0	7,295.0	133.7	13.5	83.08	-1,906.2	-3,791.8	6,763.7	6,618.3	145.39	46.521		
15,400.0	7,770.0	7,300.0	7,295.0	135.5	13.5	83.08	-1,906.2	-3,791.8	6,846.4	6,699.2	147.12	46.535		
15,500.0	7,770.0	7,300.0	7,295.0	137.2	13.5	83.08	-1,906.2	-3,791.8	6,929.5	6,780.7	148.85	46.552		
15,600.0	7,770.0	7,300.0	7,295.0	139.0	13.5	83.08	-1,906.2	-3,791.8	7,013.1	6,862.5	150.59	46.572		
15,700.0	7,770.0	7,300.0	7,295.0	140.7	13.5	83.08	-1,906.2	-3,791.8	7,097.1	6,944.8	152.32	46.593		
15,800.0	7,770.0	7,300.0	7,295.0	142.4	13.5	83.08	-1,906.2	-3,791.8	7,181.6	7,027.5	154.05	46.617		
15,900.0	7,770.0	7,300.0	7,295.0	144.2	13.5	83.08	-1,906.2	-3,791.8	7,266.4	7,110.6	155.79	46.643		
16,000.0	7,770.0	7,300.0	7,295.0	145.9	13.5	83.08	-1,906.2	-3,791.8	7,351.6	7,194.1	157.52	46.671		
16,100.0	7,770.0	7,300.0	7,295.0	147.7	13.5	83.08	-1,906.2	-3,791.8	7,437.2	7,277.9	159.26	46.700		
16,200.0	7,770.0	7,300.0	7,295.0	149.4	13.5	83.08	-1,906.2	-3,791.8	7,523.1	7,362.1	160.99	46.730		
16,300.0	7,770.0	7,300.0	7,295.0	151.2	13.5	83.08	-1,906.2	-3,791.8	7,609.4	7,446.7	162.72	46.763		
16,400.0	7,770.0	7,300.0	7,295.0	152.9	13.5	83.08	-1,906.2	-3,791.8	7,696.0	7,531.6	164.46	46.796		
16,500.0	7,770.0	7,300.0	7,295.0	154.7	13.5	83.08	-1,906.2	-3,791.8	7,783.0	7,616.8	166.19	46.831		
16,600.0	7,770.0	7,300.0	7,295.0	156.4	13.5	83.08	-1,906.2	-3,791.8	7,870.2	7,702.3	167.93	46.866		
16,700.0	7,770.0	7,300.0	7,295.0	158.2	13.5	83.08	-1,906.2	-3,791.8	7,957.7	7,788.1	169.66	46.903		
16,800.0	7,770.0	7,300.0	7,295.0	159.9	13.5	83.08	-1,906.2	-3,791.8	8,045.6	7,874.2	171.40	46.941		
16,900.0	7,770.0	7,300.0	7,295.0	161.7	13.5	83.08	-1,906.2	-3,791.8	8,133.7	7,960.5	173.13	46.979		
17,000.0	7,770.0	7,300.0	7,295.0	163.4	13.5	83.08	-1,906.2	-3,791.8	8,222.1	8,047.2	174.87	47.019		
17,100.0	7,770.0	7,300.0	7,295.0	165.2	13.5	83.08	-1,906.2	-3,791.8	8,310.7	8,134.1	176.60	47.058		
17,200.0	7,770.0	7,300.0	7,295.0	166.9	13.5	83.08	-1,906.2	-3,791.8	8,399.6	8,221.3	178.34	47.099		
17,300.0	7,770.0	7,300.0	7,295.0	168.7	13.5	83.08	-1,906.2	-3,791.8	8,488.8	8,308.7	180.08	47.140		
17,400.0	7,770.0	7,300.0	7,295.0	170.4	13.5	83.08	-1,906.2	-3,791.8	8,578.2	8,396.3	181.81	47.182		
17,500.0	7,770.0	7,300.0	7,295.0	172.2	13.5	83.08	-1,906.2	-3,791.8	8,667.8	8,484.2	183.55	47.224		
17,600.0	7,770.0	7,300.0	7,295.0	173.9	13.5	83.08	-1,906.2	-3,791.8	8,757.6	8,572.3	185.28	47.266		
17,653.1	7,770.0	7,300.0	7,295.0	174.8	13.5	83.08	-1,906.2	-3,791.8	8,805.4	8,619.2	186.20	47.289		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.52	-1,929.2	-4,041.5	4,478.4						
100.0	100.0	86.0	86.0	0.2	0.1	-115.52	-1,929.2	-4,041.5	4,478.3	4,478.1	0.26	N/A			
200.0	200.0	186.0	186.0	0.3	0.3	-115.52	-1,929.2	-4,041.5	4,478.3	4,477.7	0.61	7,373.261			
300.0	300.0	286.0	286.0	0.5	0.5	-115.52	-1,929.2	-4,041.5	4,478.3	4,477.4	0.96	4,682.291			
400.0	400.0	386.0	386.0	0.7	0.6	-115.52	-1,929.2	-4,041.5	4,478.3	4,477.0	1.31	3,430.342			
500.0	500.0	486.0	486.0	0.8	0.8	-115.52	-1,929.2	-4,041.5	4,478.3	4,476.7	1.65	2,706.641			
550.0	550.0	621.1	621.1	0.9	1.0	-115.53	-1,929.3	-4,040.2	4,478.0	4,476.0	1.98	2,263.973			
600.0	600.0	789.2	789.1	1.0	1.3	-116.42	-1,929.3	-4,034.2	4,476.5	4,474.1	2.36	1,896.409			
700.0	700.0	990.2	989.7	1.2	1.7	-116.58	-1,929.4	-4,020.8	4,470.9	4,468.1	2.90	1,544.332			
800.0	799.9	1,089.9	1,089.0	1.4	1.9	-116.71	-1,929.5	-4,013.3	4,465.7	4,462.5	3.25	1,372.671			
861.1	860.9	1,150.7	1,149.7	1.5	2.1	-116.79	-1,929.5	-4,008.7	4,462.9	4,459.4	3.47	1,284.444			
900.0	899.8	1,189.5	1,188.3	1.6	2.1	-116.83	-1,929.5	-4,005.7	4,461.2	4,457.6	3.62	1,233.651			
1,000.0	999.6	1,289.1	1,287.6	1.8	2.4	-116.94	-1,929.6	-3,998.2	4,456.9	4,452.9	3.98	1,119.173			
1,100.0	1,099.5	1,388.6	1,386.9	1.9	2.6	-117.04	-1,929.6	-3,990.7	4,452.6	4,448.2	4.35	1,023.454			
1,200.0	1,199.3	1,488.2	1,486.2	2.1	2.8	-117.15	-1,929.7	-3,983.2	4,448.3	4,443.5	4.72	942.348			
1,300.0	1,299.2	1,587.8	1,585.5	2.3	3.0	-117.25	-1,929.7	-3,975.6	4,444.0	4,438.9	5.09	872.812			
1,400.0	1,399.1	1,687.3	1,684.8	2.5	3.2	-117.36	-1,929.8	-3,968.1	4,439.7	4,434.2	5.46	812.577			
1,500.0	1,498.9	1,786.9	1,784.1	2.7	3.4	-117.46	-1,929.8	-3,960.6	4,435.4	4,429.6	5.84	759.920			
1,600.0	1,598.8	1,886.5	1,883.3	2.9	3.6	-117.57	-1,929.9	-3,953.1	4,431.2	4,425.0	6.21	713.513			
1,700.0	1,698.6	1,986.0	1,982.6	3.1	3.8	-117.68	-1,930.0	-3,945.5	4,427.0	4,420.4	6.58	672.318			
1,800.0	1,798.5	2,085.6	2,081.9	3.3	4.1	-117.78	-1,930.0	-3,938.0	4,422.8	4,415.8	6.96	635.512			
1,900.0	1,898.3	2,185.2	2,181.2	3.5	4.3	-117.89	-1,930.1	-3,930.5	4,418.6	4,411.2	7.33	602.434			
2,000.0	1,998.2	2,284.8	2,280.5	3.7	4.5	-118.00	-1,930.1	-3,923.0	4,414.4	4,406.7	7.71	572.550			
2,100.0	2,098.0	2,384.3	2,379.8	3.9	4.7	-118.10	-1,930.2	-3,915.4	4,410.2	4,402.1	8.09	545.421			
2,200.0	2,197.9	2,483.9	2,479.0	4.1	4.9	-118.21	-1,930.2	-3,907.9	4,406.1	4,397.6	8.46	520.687			
2,300.0	2,297.7	2,583.5	2,578.3	4.3	5.1	-118.32	-1,930.3	-3,900.4	4,401.9	4,393.1	8.84	498.044			
2,400.0	2,397.6	2,683.0	2,677.6	4.5	5.3	-118.43	-1,930.3	-3,892.8	4,397.8	4,388.6	9.22	477.241			
2,500.0	2,497.4	2,782.6	2,776.9	4.7	5.6	-118.53	-1,930.4	-3,885.3	4,393.7	4,384.1	9.59	458.063			
2,600.0	2,597.3	2,882.2	2,876.2	4.9	5.8	-118.64	-1,930.5	-3,877.8	4,389.6	4,379.7	9.97	440.327			
2,700.0	2,697.1	2,981.7	2,975.5	5.1	6.0	-118.75	-1,930.5	-3,870.3	4,385.6	4,375.2	10.35	423.878			
2,800.0	2,797.0	3,081.3	3,074.8	5.3	6.2	-118.86	-1,930.6	-3,862.7	4,381.5	4,370.8	10.72	408.580			
2,900.0	2,896.8	3,180.9	3,174.0	5.5	6.4	-118.97	-1,930.6	-3,855.2	4,377.5	4,366.4	11.10	394.319			
3,000.0	2,996.7	3,280.5	3,273.3	5.7	6.6	-119.08	-1,930.7	-3,847.7	4,373.4	4,362.0	11.48	380.991			
3,100.0	3,096.5	3,380.0	3,372.6	5.9	6.9	-119.19	-1,930.7	-3,840.2	4,369.4	4,357.6	11.86	368.510			
3,200.0	3,196.4	3,479.6	3,471.9	6.1	7.1	-119.30	-1,930.8	-3,832.6	4,365.4	4,353.2	12.24	356.797			
3,300.0	3,296.3	3,579.2	3,571.2	6.3	7.3	-119.41	-1,930.8	-3,825.1	4,361.5	4,348.8	12.61	345.783			
3,400.0	3,396.1	3,678.7	3,670.5	6.5	7.5	-119.52	-1,930.9	-3,817.6	4,357.5	4,344.5	12.99	335.408			
3,500.0	3,496.0	3,778.3	3,769.8	6.7	7.7	-119.63	-1,930.9	-3,810.1	4,353.6	4,340.2	13.37	325.619			
3,600.0	3,595.8	3,877.9	3,869.0	6.9	8.0	-119.74	-1,931.0	-3,802.5	4,349.6	4,335.9	13.75	316.367			
3,700.0	3,695.7	3,977.4	3,968.3	7.0	8.2	-119.85	-1,931.1	-3,795.0	4,345.7	4,331.6	14.13	307.609			
3,800.0	3,795.5	4,077.0	4,067.6	7.2	8.4	-119.96	-1,931.1	-3,787.5	4,341.8	4,327.3	14.51	299.307			
3,900.0	3,895.4	4,176.6	4,166.9	7.4	8.6	-120.07	-1,931.2	-3,780.0	4,337.9	4,323.1	14.89	291.426			
4,000.0	3,995.2	4,276.2	4,266.2	7.6	8.8	-120.18	-1,931.2	-3,772.4	4,334.1	4,318.8	15.26	283.936			
4,100.0	4,095.1	4,375.7	4,365.5	7.8	9.0	-120.29	-1,931.3	-3,764.9	4,330.2	4,314.6	15.64	276.808			
4,200.0	4,194.9	4,475.3	4,464.8	8.0	9.3	-120.40	-1,931.3	-3,757.4	4,326.4	4,310.4	16.02	270.016			
4,300.0	4,294.8	4,574.9	4,564.0	8.2	9.5	-120.51	-1,931.4	-3,749.9	4,322.6	4,306.2	16.40	263.538			
4,400.0	4,394.6	4,674.4	4,663.3	8.4	9.7	-120.62	-1,931.4	-3,742.3	4,318.8	4,302.0	16.78	257.351			
4,500.0	4,494.5	4,774.0	4,762.6	8.6	9.9	-120.74	-1,931.5	-3,734.8	4,315.0	4,297.8	17.16	251.438			
4,600.0	4,594.3	4,873.6	4,861.9	8.8	10.1	-120.85	-1,931.6	-3,727.3	4,311.2	4,293.7	17.54	245.781			
4,700.0	4,694.2	4,973.1	4,961.2	9.0	10.3	-120.96	-1,931.6	-3,719.8	4,307.5	4,289.6	17.92	240.362			
4,800.0	4,794.0	5,072.7	5,060.5	9.2	10.6	-121.07	-1,931.7	-3,712.2	4,303.8	4,285.5	18.30	235.168			
4,900.0	4,893.9	5,172.3	5,159.7	9.4	10.8	-121.19	-1,931.7	-3,704.7	4,300.1	4,281.4	18.68	230.185			

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	5,271.9	5,259.0	9.6	11.0	-121.30	-1,931.8	-3,697.2	4,296.4	4,277.3	19.06	225.400		
5,100.0	5,093.6	5,371.4	5,358.3	9.8	11.2	-121.41	-1,931.8	-3,689.7	4,292.7	4,273.2	19.44	220.803		
5,200.0	5,193.5	9,566.8	7,585.0	10.0	43.4	-92.46	275.0	-3,501.3	4,251.0	4,199.0	52.07	81.642		
5,300.0	5,293.3	9,572.3	7,585.0	10.2	43.5	-92.37	280.5	-3,501.2	4,195.4	4,143.0	52.37	80.105		
5,400.0	5,393.2	9,577.7	7,585.0	10.4	43.5	-92.28	285.9	-3,501.2	4,141.4	4,088.7	52.68	78.617		
5,500.0	5,493.0	9,583.1	7,585.0	10.6	43.6	-92.19	291.3	-3,501.1	4,089.1	4,036.1	52.98	77.180		
5,600.0	5,592.9	9,588.5	7,585.0	10.8	43.7	-92.10	296.7	-3,501.1	4,038.6	3,985.3	53.29	75.792		
5,700.0	5,692.7	9,594.0	7,585.0	11.0	43.8	-92.02	302.2	-3,501.0	3,989.9	3,936.4	53.59	74.455		
5,800.0	5,792.6	9,599.4	7,585.0	11.2	43.9	-91.93	307.6	-3,501.0	3,943.2	3,889.4	53.89	73.169		
5,900.0	5,892.4	9,604.8	7,585.0	11.4	44.0	-91.84	313.0	-3,500.9	3,898.5	3,844.3	54.20	71.933		
6,000.0	5,992.3	9,610.3	7,585.0	11.6	44.1	-91.75	318.4	-3,500.9	3,855.9	3,801.4	54.50	70.750		
6,100.0	6,092.1	9,615.7	7,585.0	11.8	44.2	-91.66	323.9	-3,500.8	3,815.4	3,760.6	54.80	69.619		
6,200.0	6,192.0	9,621.1	7,585.0	12.0	44.3	-91.57	329.3	-3,500.8	3,777.1	3,722.0	55.11	68.540		
6,300.0	6,291.8	9,626.5	7,585.0	12.2	44.3	-91.49	334.7	-3,500.7	3,741.1	3,685.7	55.41	67.514		
6,400.0	6,391.7	9,632.0	7,585.0	12.4	44.4	-91.40	340.1	-3,500.7	3,707.4	3,651.7	55.72	66.542		
6,500.0	6,491.5	9,637.4	7,585.0	12.6	44.5	-91.31	345.6	-3,500.6	3,676.1	3,620.1	56.02	65.623		
6,600.0	6,591.4	9,642.8	7,585.0	12.8	44.6	-91.22	351.0	-3,500.6	3,647.3	3,591.0	56.32	64.758		
6,700.0	6,691.2	9,648.2	7,585.0	13.0	44.7	-91.13	356.4	-3,500.5	3,621.0	3,564.4	56.63	63.947		
6,800.0	6,791.1	9,653.7	7,585.0	13.2	44.8	-91.04	361.9	-3,500.5	3,597.3	3,540.4	56.93	63.190		
6,900.0	6,890.9	9,659.1	7,585.0	13.4	44.9	-90.95	367.3	-3,500.4	3,576.3	3,519.0	57.23	62.487		
7,000.0	6,990.8	9,664.5	7,585.0	13.6	45.0	-90.87	372.7	-3,500.4	3,557.9	3,500.3	57.54	61.838		
7,024.2	7,014.9	9,665.8	7,585.0	13.6	45.0	-90.84	374.0	-3,500.4	3,553.8	3,496.2	57.61	61.689		
7,050.0	7,040.7	9,666.8	7,585.0	13.7	45.0	-92.15	375.0	-3,500.4	3,549.7	3,492.0	57.72	61.496		
7,100.0	7,090.7	9,665.9	7,585.0	13.7	45.0	91.82	374.1	-3,500.4	3,542.2	3,484.4	57.85	61.227		
7,150.0	7,140.5	9,661.6	7,585.0	13.8	44.9	91.78	369.8	-3,500.4	3,535.5	3,477.6	57.88	61.084		
7,200.0	7,189.9	9,653.8	7,585.0	13.8	44.8	92.00	362.0	-3,500.5	3,529.5	3,471.7	57.80	61.062		
7,250.0	7,238.6	9,642.6	7,585.0	13.8	44.6	92.18	350.8	-3,500.6	3,524.4	3,466.7	57.63	61.156		
7,300.0	7,286.4	9,628.0	7,585.0	13.7	44.4	92.26	336.2	-3,500.7	3,520.0	3,462.6	57.36	61.363		
7,350.0	7,333.1	9,610.2	7,585.0	13.7	44.1	92.26	318.4	-3,500.9	3,516.3	3,459.3	57.01	61.675		
7,400.0	7,378.5	9,589.1	7,585.0	13.6	43.7	92.17	297.3	-3,501.1	3,513.4	3,456.8	56.59	62.087		
7,450.0	7,422.2	9,564.9	7,585.0	13.6	43.3	91.99	273.1	-3,501.3	3,511.2	3,455.1	56.10	62.590		
7,500.0	7,464.1	9,537.7	7,585.0	13.5	42.9	91.73	245.9	-3,501.5	3,509.6	3,454.1	55.55	63.178		
7,550.0	7,504.1	9,507.6	7,585.0	13.5	42.4	91.41	215.8	-3,501.8	3,508.6	3,453.6	54.96	63.840 ES		
7,600.0	7,541.8	9,474.9	7,585.0	13.5	41.9	91.04	183.1	-3,502.1	3,508.1	3,453.8	54.33	64.565		
7,631.6	7,564.5	9,452.8	7,585.0	13.4	41.5	90.79	161.0	-3,502.3	3,508.0	3,454.1	53.93	65.047 CC		
7,650.0	7,577.2	9,439.6	7,585.0	13.4	41.3	90.64	147.7	-3,502.4	3,508.0	3,454.4	53.69	65.340		
7,700.0	7,610.0	9,401.9	7,585.0	13.5	40.7	90.20	110.0	-3,502.7	3,508.4	3,455.3	53.03	66.155		
7,750.0	7,640.2	9,362.0	7,585.0	13.5	40.0	89.76	70.2	-3,503.1	3,509.0	3,456.6	52.38	66.991		
7,800.0	7,667.4	9,320.0	7,585.0	13.6	39.4	89.32	28.3	-3,503.5	3,509.8	3,458.0	51.74	67.837		
7,850.0	7,691.7	9,276.3	7,585.0	13.7	38.7	88.89	-15.4	-3,503.8	3,510.7	3,459.6	51.12	68.676		
7,900.0	7,712.8	9,231.1	7,585.0	13.9	37.9	88.50	-60.7	-3,504.2	3,511.8	3,461.2	50.53	69.495		
7,950.0	7,730.8	9,184.4	7,585.0	14.1	37.2	88.14	-107.4	-3,504.7	3,512.8	3,462.9	49.98	70.283		
8,000.0	7,745.5	9,136.6	7,585.0	14.4	36.4	87.83	-155.2	-3,505.1	3,513.9	3,464.4	49.47	71.027		
8,050.0	7,756.7	9,087.9	7,585.0	14.7	35.7	87.57	-203.9	-3,505.5	3,514.8	3,465.8	49.01	71.721		
8,100.0	7,764.6	9,038.6	7,585.0	15.1	34.9	87.38	-253.2	-3,506.0	3,515.6	3,467.0	48.59	72.355		
8,150.0	7,769.0	8,988.8	7,585.0	15.5	34.1	87.26	-303.0	-3,506.4	3,516.2	3,468.0	48.21	72.931		
8,188.1	7,770.0	8,950.7	7,585.0	15.9	33.5	87.21	-341.1	-3,506.7	3,516.6	3,468.7	47.96	73.327		
8,200.0	7,770.0	8,938.8	7,585.0	16.0	33.3	87.21	-353.0	-3,506.8	3,516.7	3,468.9	47.88	73.454		
8,300.0	7,770.0	8,838.8	7,585.0	17.0	31.8	87.21	-453.0	-3,507.7	3,517.6	3,470.4	47.27	74.409		
8,400.0	7,770.0	8,738.8	7,585.0	18.1	30.3	87.21	-553.0	-3,508.6	3,518.5	3,471.7	46.80	75.174		
8,500.0	7,770.0	8,638.8	7,585.0	19.3	28.8	87.21	-653.0	-3,509.5	3,519.4	3,472.9	46.45	75.765		
8,600.0	7,770.0	8,538.8	7,585.0	20.6	27.3	87.22	-753.0	-3,510.4	3,520.3	3,474.1	46.20	76.194		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,700.0	7,770.0	8,438.8	7,585.0	21.9	25.9	87.22	-853.0	-3,511.3	3,521.2	3,475.1	46.05	76.472		
8,800.0	7,770.0	8,338.8	7,585.0	23.3	24.5	87.22	-953.0	-3,512.2	3,522.1	3,476.1	45.98	76.604		
8,900.0	7,770.0	8,238.8	7,585.0	24.8	23.2	87.22	-1,053.0	-3,513.1	3,523.0	3,477.0	46.00	76.591		
9,000.0	7,770.0	8,138.8	7,585.0	26.3	22.0	87.22	-1,152.9	-3,514.0	3,523.8	3,477.7	46.10	76.431		
9,100.0	7,770.0	8,038.8	7,585.0	27.8	20.8	87.22	-1,252.9	-3,514.8	3,524.7	3,478.4	46.31	76.116		
9,200.0	7,770.0	7,938.8	7,585.0	29.3	19.6	87.22	-1,352.9	-3,515.7	3,525.6	3,479.0	46.60	75.650		
9,300.0	7,770.0	7,879.1	7,582.6	30.9	19.0	87.18	-1,412.6	-3,516.4	3,527.0	3,479.6	47.47	74.294		
9,400.0	7,770.0	7,823.5	7,574.9	32.5	18.5	87.06	-1,467.6	-3,517.5	3,529.7	3,481.3	48.44	72.863		
9,500.0	7,770.0	7,769.9	7,562.4	34.1	18.0	86.86	-1,519.7	-3,518.9	3,533.7	3,484.2	49.49	71.406		
9,600.0	7,770.0	7,719.0	7,546.2	35.7	17.6	86.59	-1,567.8	-3,520.6	3,539.0	3,488.4	50.61	69.926		
9,700.0	7,770.0	7,671.5	7,527.2	37.3	17.2	86.29	-1,611.4	-3,522.4	3,545.9	3,494.1	51.81	68.435		
9,800.0	7,770.0	7,627.5	7,506.4	39.0	16.9	85.96	-1,650.1	-3,524.3	3,554.5	3,501.4	53.09	66.949		
9,900.0	7,770.0	7,600.0	7,492.0	40.6	16.7	85.72	-1,673.5	-3,525.6	3,564.8	3,510.3	54.52	65.382		
10,000.0	7,770.0	7,550.0	7,462.9	42.3	16.5	85.26	-1,714.1	-3,528.2	3,577.0	3,521.1	55.82	64.075		
10,100.0	7,770.0	7,516.9	7,441.8	44.0	16.3	84.92	-1,739.5	-3,530.0	3,591.1	3,533.8	57.28	62.698		
10,200.0	7,770.0	7,500.0	7,430.5	45.6	16.2	84.74	-1,752.0	-3,531.0	3,607.4	3,548.5	58.83	61.315		
10,300.0	7,770.0	7,450.0	7,394.8	47.3	16.0	84.17	-1,786.9	-3,534.0	3,625.7	3,565.5	60.22	60.209		
10,400.0	7,770.0	7,450.0	7,394.8	49.0	16.0	84.17	-1,786.9	-3,534.0	3,646.2	3,584.3	61.89	58.912		
10,500.0	7,770.0	7,400.0	7,356.3	50.7	15.8	83.56	-1,818.5	-3,537.2	3,668.9	3,605.6	63.31	57.953		
10,600.0	7,770.0	7,400.0	7,356.3	52.4	15.8	83.56	-1,818.5	-3,537.2	3,693.8	3,628.8	64.99	56.835		
10,700.0	7,770.0	7,372.5	7,334.0	54.1	15.7	83.21	-1,834.5	-3,539.0	3,720.8	3,654.3	66.54	55.917		
10,800.0	7,770.0	7,350.0	7,315.1	55.8	15.6	82.91	-1,846.7	-3,540.6	3,750.2	3,682.0	68.12	55.056		
10,900.0	7,770.0	7,350.0	7,315.1	57.5	15.6	82.91	-1,846.7	-3,540.6	3,781.7	3,711.9	69.81	54.174		
11,000.0	7,770.0	7,325.7	7,294.3	59.2	15.5	82.59	-1,859.1	-3,542.3	3,815.3	3,743.9	71.38	53.448		
11,100.0	7,770.0	7,300.0	7,271.7	60.9	15.5	82.23	-1,871.2	-3,544.1	3,851.2	3,778.2	72.95	52.791		
11,200.0	7,770.0	7,300.0	7,271.7	62.6	15.5	82.23	-1,871.2	-3,544.1	3,889.0	3,814.3	74.65	52.099		
11,300.0	7,770.0	7,300.0	7,271.7	64.3	15.5	82.23	-1,871.2	-3,544.1	3,929.0	3,852.6	76.34	51.463		
11,400.0	7,770.0	7,279.1	7,252.9	66.0	15.4	81.94	-1,880.3	-3,545.6	3,970.8	3,892.9	77.94	50.945		
11,500.0	7,770.0	7,269.5	7,244.2	67.7	15.4	81.80	-1,884.2	-3,546.3	4,014.7	3,935.1	79.60	50.438		
11,600.0	7,770.0	7,250.0	7,226.3	69.5	15.3	81.52	-1,891.8	-3,547.7	4,060.6	3,979.4	81.20	50.008		
11,700.0	7,770.0	7,250.0	7,226.3	71.2	15.3	81.52	-1,891.8	-3,547.7	4,108.1	4,025.2	82.90	49.555		
11,800.0	7,770.0	7,250.0	7,226.3	72.9	15.3	81.52	-1,891.8	-3,547.7	4,157.5	4,072.9	84.60	49.141		
11,900.0	7,770.0	7,250.0	7,226.3	74.6	15.3	81.52	-1,891.8	-3,547.7	4,208.7	4,122.4	86.31	48.763		
12,000.0	7,770.0	7,250.0	7,226.3	76.4	15.3	81.52	-1,891.8	-3,547.7	4,261.7	4,173.7	88.02	48.419		
12,100.0	7,770.0	7,224.3	7,202.3	78.1	15.3	81.15	-1,900.8	-3,549.6	4,315.9	4,226.3	89.59	48.175		
12,200.0	7,770.0	7,200.0	7,179.3	79.8	15.2	80.79	-1,908.3	-3,551.4	4,372.1	4,281.0	91.16	47.960		
12,300.0	7,770.0	7,200.0	7,179.3	81.5	15.2	80.79	-1,908.3	-3,551.4	4,429.5	4,336.6	92.87	47.697		
12,400.0	7,770.0	7,200.0	7,179.3	83.3	15.2	80.79	-1,908.3	-3,551.4	4,488.4	4,393.8	94.58	47.458		
12,500.0	7,770.0	7,200.0	7,179.3	85.0	15.2	80.79	-1,908.3	-3,551.4	4,548.7	4,452.4	96.29	47.242		
12,600.0	7,770.0	7,200.0	7,179.3	86.7	15.2	80.79	-1,908.3	-3,551.4	4,610.4	4,512.4	98.00	47.048		
12,700.0	7,770.0	7,200.0	7,179.3	88.5	15.2	80.79	-1,908.3	-3,551.4	4,673.5	4,573.8	99.71	46.872		
12,800.0	7,770.0	7,200.0	7,179.3	90.2	15.2	80.79	-1,908.3	-3,551.4	4,737.8	4,636.4	101.42	46.715		
12,900.0	7,770.0	7,200.0	7,179.3	91.9	15.2	80.79	-1,908.3	-3,551.4	4,803.3	4,700.2	103.13	46.575		
13,000.0	7,770.0	7,200.0	7,179.3	93.7	15.2	80.79	-1,908.3	-3,551.4	4,870.0	4,765.2	104.84	46.450		
13,100.0	7,770.0	7,177.3	7,157.5	95.4	15.2	80.45	-1,914.4	-3,553.1	4,937.5	4,831.0	106.42	46.397		
13,200.0	7,770.0	7,173.8	7,154.1	97.1	15.2	80.40	-1,915.3	-3,553.4	5,006.2	4,898.1	108.11	46.308		
13,300.0	7,770.0	7,150.0	7,131.0	98.9	15.1	80.04	-1,920.6	-3,555.2	5,076.3	4,966.7	109.66	46.290		
13,400.0	7,770.0	7,150.0	7,131.0	100.6	15.1	80.04	-1,920.6	-3,555.2	5,147.0	5,035.6	111.38	46.213		
13,500.0	7,770.0	7,150.0	7,131.0	102.4	15.1	80.04	-1,920.6	-3,555.2	5,218.7	5,105.6	113.09	46.147		
13,600.0	7,770.0	7,150.0	7,131.0	104.1	15.1	80.04	-1,920.6	-3,555.2	5,291.2	5,176.4	114.80	46.090		
13,700.0	7,770.0	7,150.0	7,131.0	105.8	15.1	80.04	-1,920.6	-3,555.2	5,364.7	5,248.2	116.51	46.043		
13,800.0	7,770.0	7,150.0	7,131.0	107.6	15.1	80.04	-1,920.6	-3,555.2	5,439.0	5,320.8	118.23	46.004		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	7,150.0	7,131.0	109.3	15.1	80.04	-1,920.6	-3,555.2	5,514.1	5,394.2	119.94	45.973		
14,000.0	7,770.0	7,150.0	7,131.0	111.1	15.1	80.04	-1,920.6	-3,555.2	5,590.0	5,468.3	121.66	45.949		
14,100.0	7,770.0	7,150.0	7,131.0	112.8	15.1	80.04	-1,920.6	-3,555.2	5,666.6	5,543.3	123.37	45.931		
14,200.0	7,770.0	7,150.0	7,131.0	114.5	15.1	80.04	-1,920.6	-3,555.2	5,744.0	5,618.9	125.09	45.919		
14,300.0	7,770.0	7,150.0	7,131.0	116.3	15.1	80.04	-1,920.6	-3,555.2	5,822.1	5,695.3	126.80	45.914		
14,400.0	7,770.0	7,150.0	7,131.0	118.0	15.1	80.04	-1,920.6	-3,555.2	5,900.8	5,772.2	128.52	45.913 SF		
14,500.0	7,770.0	7,150.0	7,131.0	119.8	15.1	80.04	-1,920.6	-3,555.2	5,980.1	5,849.9	130.24	45.917		
14,600.0	7,770.0	7,150.0	7,131.0	121.5	15.1	80.04	-1,920.6	-3,555.2	6,060.1	5,928.1	131.95	45.925		
14,700.0	7,770.0	7,150.0	7,131.0	123.3	15.1	80.04	-1,920.6	-3,555.2	6,140.6	6,006.9	133.67	45.938		
14,800.0	7,770.0	7,150.0	7,131.0	125.0	15.1	80.04	-1,920.6	-3,555.2	6,221.7	6,086.3	135.39	45.954		
14,900.0	7,770.0	7,150.0	7,131.0	126.7	15.1	80.04	-1,920.6	-3,555.2	6,303.4	6,166.3	137.11	45.974		
15,000.0	7,770.0	7,150.0	7,131.0	128.5	15.1	80.04	-1,920.6	-3,555.2	6,385.6	6,246.7	138.83	45.997		
15,100.0	7,770.0	7,150.0	7,131.0	130.2	15.1	80.04	-1,920.6	-3,555.2	6,468.2	6,327.7	140.54	46.023		
15,200.0	7,770.0	7,150.0	7,131.0	132.0	15.1	80.04	-1,920.6	-3,555.2	6,551.4	6,409.1	142.26	46.051		
15,300.0	7,770.0	7,126.0	7,107.5	133.7	15.1	79.68	-1,925.0	-3,557.0	6,634.6	6,490.8	143.78	46.143		
15,400.0	7,770.0	7,124.5	7,106.0	135.5	15.0	79.66	-1,925.3	-3,557.1	6,718.6	6,573.1	145.49	46.179		
15,500.0	7,770.0	7,123.1	7,104.6	137.2	15.0	79.64	-1,925.5	-3,557.2	6,803.0	6,655.8	147.19	46.218		
15,600.0	7,770.0	7,100.0	7,081.8	139.0	15.0	79.29	-1,928.7	-3,559.0	6,888.2	6,739.5	148.71	46.320		
15,700.0	7,770.0	7,100.0	7,081.8	140.7	15.0	79.29	-1,928.7	-3,559.0	6,973.5	6,823.0	150.42	46.358		
15,800.0	7,770.0	7,100.0	7,081.8	142.4	15.0	79.29	-1,928.7	-3,559.0	7,059.0	6,906.9	152.14	46.398		
15,900.0	7,770.0	7,100.0	7,081.8	144.2	15.0	79.29	-1,928.7	-3,559.0	7,145.0	6,991.2	153.86	46.439		
16,000.0	7,770.0	7,100.0	7,081.8	145.9	15.0	79.29	-1,928.7	-3,559.0	7,231.3	7,075.8	155.57	46.482		
16,100.0	7,770.0	7,100.0	7,081.8	147.7	15.0	79.29	-1,928.7	-3,559.0	7,318.0	7,160.7	157.29	46.526		
16,200.0	7,770.0	7,100.0	7,081.8	149.4	15.0	79.29	-1,928.7	-3,559.0	7,405.0	7,246.0	159.01	46.571		
16,300.0	7,770.0	7,100.0	7,081.8	151.2	15.0	79.29	-1,928.7	-3,559.0	7,492.4	7,331.6	160.72	46.617		
16,400.0	7,770.0	7,100.0	7,081.8	152.9	15.0	79.29	-1,928.7	-3,559.0	7,580.0	7,417.6	162.44	46.664		
16,500.0	7,770.0	7,100.0	7,081.8	154.7	15.0	79.29	-1,928.7	-3,559.0	7,668.0	7,503.8	164.16	46.711		
16,600.0	7,770.0	7,100.0	7,081.8	156.4	15.0	79.29	-1,928.7	-3,559.0	7,756.2	7,590.3	165.87	46.760		
16,700.0	7,770.0	7,100.0	7,081.8	158.2	15.0	79.29	-1,928.7	-3,559.0	7,844.7	7,677.2	167.59	46.809		
16,800.0	7,770.0	7,100.0	7,081.8	159.9	15.0	79.29	-1,928.7	-3,559.0	7,933.5	7,764.2	169.31	46.858		
16,900.0	7,770.0	7,100.0	7,081.8	161.7	15.0	79.29	-1,928.7	-3,559.0	8,022.6	7,851.6	171.03	46.908		
17,000.0	7,770.0	7,100.0	7,081.8	163.4	15.0	79.29	-1,928.7	-3,559.0	8,111.9	7,939.2	172.74	46.959		
17,100.0	7,770.0	7,100.0	7,081.8	165.2	15.0	79.29	-1,928.7	-3,559.0	8,201.5	8,027.0	174.46	47.010		
17,200.0	7,770.0	7,100.0	7,081.8	166.9	15.0	79.29	-1,928.7	-3,559.0	8,291.3	8,115.1	176.18	47.061		
17,300.0	7,770.0	7,100.0	7,081.8	168.7	15.0	79.29	-1,928.7	-3,559.0	8,381.3	8,203.4	177.90	47.113		
17,400.0	7,770.0	7,100.0	7,081.8	170.4	15.0	79.29	-1,928.7	-3,559.0	8,471.6	8,292.0	179.62	47.165		
17,500.0	7,770.0	7,100.0	7,081.8	172.2	15.0	79.29	-1,928.7	-3,559.0	8,562.1	8,380.7	181.34	47.217		
17,600.0	7,770.0	7,100.0	7,081.8	173.9	15.0	79.29	-1,928.7	-3,559.0	8,652.7	8,469.7	183.05	47.269		
17,653.1	7,770.0	7,100.0	7,081.8	174.8	15.0	79.29	-1,928.7	-3,559.0	8,700.9	8,517.0	183.97	47.296		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.70	-1,936.5	-4,024.7	4,466.4						
100.0	100.0	86.0	86.0	0.2	0.1	-115.70	-1,936.5	-4,024.7	4,466.3	4,466.1	0.26	N/A			
200.0	200.0	186.0	186.0	0.3	0.3	-115.70	-1,936.5	-4,024.7	4,466.3	4,465.7	0.61	7,353.517			
300.0	300.0	286.0	286.0	0.5	0.5	-115.70	-1,936.5	-4,024.7	4,466.3	4,465.4	0.96	4,669.752			
400.0	400.0	386.0	386.0	0.7	0.6	-115.70	-1,936.5	-4,024.7	4,466.3	4,465.0	1.31	3,421.156			
500.0	500.0	686.1	686.0	0.8	1.2	-115.74	-1,936.6	-4,017.5	4,464.4	4,462.4	2.01	2,225.066			
550.0	550.0	851.8	851.4	0.9	1.5	-115.80	-1,936.7	-4,006.9	4,461.5	4,459.1	2.39	1,865.920			
600.0	600.0	1,016.9	1,015.7	1.0	1.9	-116.76	-1,936.8	-3,991.5	4,457.4	4,454.7	2.78	1,602.443			
700.0	700.0	1,235.0	1,232.0	1.2	2.4	-117.06	-1,937.0	-3,964.1	4,446.6	4,443.3	3.38	1,316.603			
800.0	799.9	1,334.0	1,330.1	1.4	2.7	-117.27	-1,937.1	-3,950.6	4,435.9	4,432.2	3.75	1,182.433			
861.1	860.9	1,394.4	1,390.0	1.5	2.9	-117.41	-1,937.2	-3,942.3	4,429.8	4,425.8	3.98	1,112.155			
900.0	899.8	1,432.9	1,428.1	1.6	3.0	-117.46	-1,937.3	-3,937.0	4,426.0	4,421.9	4.13	1,071.300			
1,000.0	999.6	1,531.8	1,526.1	1.8	3.2	-117.61	-1,937.4	-3,923.5	4,416.2	4,411.7	4.51	978.144			
1,100.0	1,099.5	1,630.7	1,624.1	1.9	3.5	-117.75	-1,937.5	-3,909.9	4,406.5	4,401.6	4.90	899.024			
1,200.0	1,199.3	1,729.6	1,722.1	2.1	3.8	-117.89	-1,937.6	-3,896.4	4,396.8	4,391.5	5.29	831.095			
1,300.0	1,299.2	1,828.6	1,820.0	2.3	4.1	-118.04	-1,937.7	-3,882.8	4,387.1	4,381.4	5.68	772.203			
1,400.0	1,399.1	1,927.5	1,918.0	2.5	4.4	-118.18	-1,937.8	-3,869.3	4,377.5	4,371.4	6.07	720.698			
1,500.0	1,498.9	2,026.4	2,016.0	2.7	4.7	-118.33	-1,937.9	-3,855.7	4,367.8	4,361.4	6.47	675.299			
1,600.0	1,598.8	2,125.3	2,114.0	2.9	5.0	-118.47	-1,938.0	-3,842.2	4,358.2	4,351.4	6.86	634.999			
1,700.0	1,698.6	2,224.2	2,212.0	3.1	5.2	-118.62	-1,938.1	-3,828.6	4,348.7	4,341.4	7.26	598.996			
1,800.0	1,798.5	2,323.1	2,310.0	3.3	5.5	-118.77	-1,938.3	-3,815.1	4,339.1	4,331.5	7.66	566.648			
1,900.0	1,898.3	2,422.1	2,407.9	3.5	5.8	-118.91	-1,938.4	-3,801.5	4,329.6	4,321.6	8.06	537.431			
2,000.0	1,998.2	2,521.0	2,505.9	3.7	6.1	-119.06	-1,938.5	-3,788.0	4,320.1	4,311.7	8.46	510.917			
2,100.0	2,098.0	2,619.9	2,603.9	3.9	6.4	-119.21	-1,938.6	-3,774.4	4,310.7	4,301.8	8.86	486.750			
2,200.0	2,197.9	2,718.8	2,701.9	4.1	6.7	-119.36	-1,938.7	-3,760.9	4,301.3	4,292.0	9.26	464.636			
2,300.0	2,297.7	2,817.7	2,799.9	4.3	7.0	-119.51	-1,938.8	-3,747.3	4,291.9	4,282.2	9.66	444.325			
2,400.0	2,397.6	2,916.6	2,897.9	4.5	7.3	-119.66	-1,938.9	-3,733.8	4,282.5	4,272.4	10.06	425.608			
2,500.0	2,497.4	3,015.6	2,995.8	4.7	7.6	-119.81	-1,939.0	-3,720.2	4,273.2	4,262.7	10.47	408.305			
2,600.0	2,597.3	3,114.5	3,093.8	4.9	7.9	-119.96	-1,939.2	-3,706.6	4,263.9	4,253.0	10.87	392.263			
2,700.0	2,697.1	3,213.4	3,191.8	5.1	8.2	-120.12	-1,939.3	-3,693.1	4,254.6	4,243.3	11.27	377.351			
2,800.0	2,797.0	3,312.3	3,289.8	5.3	8.4	-120.27	-1,939.4	-3,679.5	4,245.4	4,233.7	11.68	363.453			
2,900.0	2,896.8	3,411.2	3,387.8	5.5	8.7	-120.42	-1,939.5	-3,666.0	4,236.1	4,224.1	12.09	350.471			
3,000.0	2,996.7	3,510.1	3,485.8	5.7	9.0	-120.58	-1,939.6	-3,652.4	4,227.0	4,214.5	12.49	338.318			
3,100.0	3,096.5	3,609.0	3,583.7	5.9	9.3	-120.74	-1,939.7	-3,638.9	4,217.8	4,204.9	12.90	326.916			
3,200.0	3,196.4	3,708.0	3,681.7	6.1	9.6	-120.89	-1,939.8	-3,625.3	4,208.7	4,195.4	13.31	316.200			
3,300.0	3,296.3	3,806.9	3,779.7	6.3	9.9	-121.05	-1,939.9	-3,611.8	4,199.6	4,185.9	13.72	306.109			
3,400.0	3,396.1	3,905.8	3,877.7	6.5	10.2	-121.21	-1,940.0	-3,598.2	4,190.5	4,176.4	14.13	296.590			
3,500.0	3,496.0	4,004.7	3,975.7	6.7	10.5	-121.36	-1,940.2	-3,584.7	4,181.5	4,167.0	14.54	287.598			
3,600.0	3,595.8	4,103.6	4,073.7	6.9	10.8	-121.52	-1,940.3	-3,571.1	4,172.5	4,157.6	14.95	279.089			
3,700.0	3,695.7	4,202.5	4,171.6	7.0	11.1	-121.68	-1,940.4	-3,557.6	4,163.6	4,148.2	15.36	271.025			
3,800.0	3,795.5	4,301.5	4,269.6	7.2	11.4	-121.84	-1,940.5	-3,544.0	4,154.6	4,138.9	15.77	263.374			
3,900.0	3,895.4	4,400.4	4,367.6	7.4	11.7	-122.00	-1,940.6	-3,530.5	4,145.8	4,129.6	16.19	256.104			
4,000.0	3,995.2	4,499.3	4,465.6	7.6	12.0	-122.16	-1,940.7	-3,516.9	4,136.9	4,120.3	16.60	249.189			
4,100.0	4,095.1	4,598.2	4,563.6	7.8	12.3	-122.33	-1,940.8	-3,503.4	4,128.1	4,111.0	17.02	242.602			
4,200.0	4,194.9	4,697.1	4,661.5	8.0	12.5	-122.49	-1,940.9	-3,489.8	4,119.3	4,101.8	17.43	236.321			
4,300.0	4,294.8	4,796.0	4,759.5	8.2	12.8	-122.65	-1,941.0	-3,476.3	4,110.5	4,092.7	17.85	230.325			
4,400.0	4,394.6	4,895.0	4,857.5	8.4	13.1	-122.82	-1,941.2	-3,462.7	4,101.8	4,083.5	18.26	224.596			
4,500.0	4,494.5	4,993.9	4,955.5	8.6	13.4	-122.98	-1,941.3	-3,449.2	4,093.1	4,074.4	18.68	219.117			
4,600.0	4,594.3	5,092.8	5,053.5	8.8	13.7	-123.15	-1,941.4	-3,435.6	4,084.4	4,065.3	19.10	213.871			
4,700.0	4,694.2	5,191.7	5,151.5	9.0	14.0	-123.31	-1,941.5	-3,422.1	4,075.8	4,056.3	19.52	208.845			
4,800.0	4,794.0	5,290.6	5,249.4	9.2	14.3	-123.48	-1,941.6	-3,408.5	4,067.2	4,047.3	19.93	204.024			
4,900.0	4,893.9	5,389.5	5,347.4	9.4	14.6	-123.65	-1,941.7	-3,395.0	4,058.7	4,038.3	20.35	199.397			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	4,993.7	5,488.4	5,445.4	9.6	14.9	-123.82	-1,941.8	-3,381.4	4,050.2	4,029.4	20.78	194.953		
5,100.0	5,093.6	5,587.4	5,543.4	9.8	15.2	-123.99	-1,941.9	-3,367.9	4,041.7	4,020.5	21.20	190.680		
5,200.0	5,193.5	5,686.3	5,641.4	10.0	15.5	-124.16	-1,942.0	-3,354.3	4,033.2	4,011.6	21.62	186.569		
5,300.0	5,293.3	9,747.5	7,817.0	10.2	43.9	-94.85	168.3	-3,108.4	4,016.4	3,966.4	49.97	80.382		
5,400.0	5,393.2	9,753.0	7,817.0	10.4	44.0	-94.75	173.7	-3,108.5	3,954.2	3,903.9	50.28	78.638		
5,500.0	5,493.0	9,758.4	7,817.0	10.6	44.1	-94.65	179.2	-3,108.7	3,893.6	3,843.0	50.60	76.948		
5,600.0	5,592.9	9,763.8	7,817.0	10.8	44.2	-94.55	184.6	-3,108.8	3,834.7	3,783.7	50.92	75.311		
5,700.0	5,692.7	9,769.2	7,817.0	11.0	44.3	-94.45	190.0	-3,109.0	3,777.4	3,726.2	51.24	73.727		
5,800.0	5,792.6	9,774.7	7,817.0	11.2	44.4	-94.35	195.4	-3,109.1	3,722.0	3,670.5	51.55	72.199		
5,900.0	5,892.4	9,780.1	7,817.0	11.4	44.4	-94.25	200.8	-3,109.2	3,668.5	3,616.6	51.87	70.725		
6,000.0	5,992.3	9,785.5	7,817.0	11.6	44.5	-94.15	206.3	-3,109.4	3,616.9	3,564.7	52.19	69.307		
6,100.0	6,092.1	9,790.9	7,817.0	11.8	44.6	-94.05	211.7	-3,109.5	3,567.3	3,514.8	52.50	67.945		
6,200.0	6,192.0	9,796.3	7,817.0	12.0	44.7	-93.96	217.1	-3,109.7	3,519.9	3,467.1	52.82	66.640		
6,300.0	6,291.8	9,801.8	7,817.0	12.2	44.8	-93.86	222.5	-3,109.8	3,474.8	3,421.6	53.14	65.392		
6,400.0	6,391.7	9,807.2	7,817.0	12.4	44.9	-93.76	227.9	-3,109.9	3,431.9	3,378.5	53.45	64.202		
6,500.0	6,491.5	9,812.6	7,817.0	12.6	44.9	-93.66	233.4	-3,110.1	3,391.4	3,337.7	53.77	63.071		
6,600.0	6,591.4	9,818.0	7,817.0	12.8	45.0	-93.56	238.8	-3,110.2	3,353.5	3,299.4	54.09	61.999		
6,700.0	6,691.2	9,823.5	7,817.0	13.0	45.1	-93.46	244.2	-3,110.4	3,318.1	3,263.7	54.41	60.986		
6,800.0	6,791.1	9,828.9	7,817.0	13.2	45.2	-93.36	249.6	-3,110.5	3,285.3	3,230.6	54.72	60.035		
6,900.0	6,890.9	9,834.3	7,817.0	13.4	45.3	-93.26	255.0	-3,110.6	3,255.3	3,200.2	55.04	59.144		
7,000.0	6,990.8	9,839.7	7,817.0	13.6	45.4	-93.16	260.5	-3,110.8	3,228.1	3,172.7	55.36	58.313		
7,024.2	7,014.9	9,841.0	7,817.0	13.6	45.4	-93.14	261.8	-3,110.8	3,221.9	3,166.5	55.43	58.122		
7,050.0	7,040.7	9,842.0	7,817.0	13.7	45.4	-94.24	262.7	-3,110.8	3,215.5	3,159.9	55.65	57.786		
7,100.0	7,090.7	9,841.1	7,817.0	13.7	45.4	90.09	261.9	-3,110.8	3,203.6	3,147.7	55.95	57.255		
7,150.0	7,140.5	9,836.8	7,817.0	13.8	45.3	90.43	257.6	-3,110.7	3,192.4	3,136.3	56.14	56.870		
7,200.0	7,189.9	9,829.0	7,817.0	13.8	45.2	91.01	249.8	-3,110.5	3,182.0	3,125.8	56.19	56.624		
7,250.0	7,238.6	9,817.8	7,817.0	13.8	45.0	91.53	238.6	-3,110.2	3,172.2	3,116.1	56.13	56.512		
7,300.0	7,286.4	9,803.3	7,817.0	13.7	44.8	91.97	224.0	-3,109.8	3,163.3	3,107.4	55.96	56.528		
7,350.0	7,333.1	9,785.4	7,817.0	13.7	44.5	92.30	206.1	-3,109.4	3,155.2	3,099.5	55.68	56.662		
7,400.0	7,378.5	9,764.3	7,817.0	13.6	44.2	92.52	185.1	-3,108.8	3,147.9	3,092.6	55.32	56.908		
7,450.0	7,422.2	9,740.1	7,817.0	13.6	43.8	92.65	160.9	-3,108.2	3,141.3	3,086.4	54.86	57.256		
7,500.0	7,464.1	9,712.9	7,817.0	13.5	43.4	92.70	133.7	-3,107.5	3,135.4	3,081.1	54.34	57.698		
7,550.0	7,504.1	9,682.9	7,817.0	13.5	43.0	92.67	103.7	-3,106.7	3,130.3	3,076.5	53.76	58.222		
7,600.0	7,541.8	9,650.1	7,817.0	13.5	42.5	92.57	70.9	-3,105.9	3,125.7	3,072.6	53.15	58.814		
7,650.0	7,577.2	9,614.8	7,817.0	13.4	41.9	92.43	35.6	-3,104.9	3,121.8	3,069.3	52.50	59.464		
7,700.0	7,610.0	9,577.1	7,817.0	13.5	41.4	92.24	-2.1	-3,104.0	3,118.3	3,066.5	51.84	60.156		
7,750.0	7,640.2	9,537.2	7,817.0	13.5	40.8	92.04	-41.9	-3,102.9	3,115.3	3,064.1	51.17	60.876		
7,800.0	7,667.4	9,495.3	7,817.0	13.6	40.1	91.83	-83.8	-3,101.8	3,112.7	3,062.2	50.52	61.611		
7,850.0	7,691.7	9,451.7	7,817.0	13.7	39.5	91.62	-127.5	-3,100.7	3,110.4	3,060.5	49.89	62.343		
7,900.0	7,712.8	9,406.4	7,817.0	13.9	38.8	91.43	-172.7	-3,099.5	3,108.4	3,059.1	49.29	63.064		
7,950.0	7,730.8	9,359.7	7,817.0	14.1	38.2	91.27	-219.4	-3,098.3	3,106.5	3,057.8	48.72	63.757		
8,000.0	7,745.5	9,312.0	7,817.0	14.4	37.5	91.14	-267.1	-3,097.1	3,104.9	3,056.7	48.20	64.419		
8,050.0	7,756.7	9,263.3	7,817.0	14.7	36.8	91.06	-315.8	-3,095.8	3,103.3	3,055.6	47.72	65.037		
8,100.0	7,764.6	9,213.9	7,817.0	15.1	36.1	91.04	-365.1	-3,094.5	3,101.9	3,054.6	47.27	65.614		
8,150.0	7,769.0	9,164.1	7,817.0	15.5	35.4	91.07	-414.9	-3,093.2	3,100.5	3,053.6	46.88	66.143		
8,188.1	7,770.0	9,126.1	7,817.0	15.9	34.9	91.13	-452.9	-3,092.2	3,099.5	3,052.9	46.60	66.518		
8,200.0	7,770.0	9,114.2	7,817.0	16.0	34.7	91.13	-464.8	-3,091.9	3,099.2	3,052.6	46.52	66.625		
8,300.0	7,770.0	9,014.2	7,817.0	17.0	33.3	91.13	-564.8	-3,089.3	3,096.6	3,050.6	45.94	67.399		
8,400.0	7,770.0	8,914.2	7,817.0	18.1	32.0	91.13	-664.7	-3,086.7	3,094.0	3,048.5	45.51	67.988		
8,500.0	7,770.0	8,814.3	7,817.0	19.3	30.8	91.13	-764.6	-3,084.1	3,091.4	3,046.2	45.19	68.403		
8,600.0	7,770.0	8,714.3	7,817.0	20.6	29.5	91.13	-864.6	-3,081.5	3,088.8	3,043.8	44.99	68.658		
8,700.0	7,770.0	8,614.3	7,817.0	21.9	28.4	91.13	-964.5	-3,078.9	3,086.2	3,041.3	44.88	68.759		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	8,514.4	7,817.0	23.3	27.3	91.13	-1,064.4	-3,076.3	3,083.6	3,038.7	44.88	68.710		
8,900.0	7,770.0	8,414.4	7,817.0	24.8	26.3	91.13	-1,164.4	-3,073.7	3,081.0	3,036.0	44.97	68.512		
9,000.0	7,770.0	8,314.5	7,817.0	26.3	25.3	91.14	-1,264.3	-3,071.1	3,078.4	3,033.2	45.16	68.160		
9,100.0	7,770.0	8,214.5	7,817.0	27.8	24.4	91.14	-1,364.2	-3,068.5	3,075.8	3,030.3	45.46	67.653		
9,200.0	7,770.0	8,150.0	7,813.9	29.3	23.9	91.08	-1,428.6	-3,067.3	3,073.7	3,027.4	46.27	66.426		
9,293.8	7,770.0	8,100.0	7,806.6	30.8	23.6	90.94	-1,478.0	-3,067.0	3,073.0	3,025.8	47.21	65.096 CC		
9,300.0	7,770.0	8,100.0	7,806.6	30.9	23.6	90.94	-1,478.0	-3,067.0	3,073.0	3,025.7	47.30	64.963		
9,400.0	7,770.0	8,034.1	7,790.6	32.5	23.1	90.64	-1,541.9	-3,067.5	3,073.6	3,025.4	48.24	63.713 ES		
9,500.0	7,770.0	7,980.0	7,772.0	34.1	22.8	90.30	-1,592.7	-3,068.8	3,075.8	3,026.4	49.36	62.315		
9,600.0	7,770.0	7,929.9	7,750.7	35.7	22.5	89.90	-1,638.0	-3,070.6	3,079.6	3,029.1	50.57	60.901		
9,700.0	7,770.0	7,884.0	7,727.8	37.3	22.3	89.47	-1,677.7	-3,072.7	3,085.3	3,033.5	51.86	59.495		
9,800.0	7,770.0	7,850.0	7,708.8	39.0	22.1	89.12	-1,705.8	-3,074.6	3,093.1	3,039.8	53.26	58.070		
9,900.0	7,770.0	7,800.0	7,678.0	40.6	21.9	88.55	-1,745.1	-3,077.8	3,103.0	3,048.4	54.61	56.822		
10,000.0	7,770.0	7,770.8	7,658.5	42.3	21.8	88.19	-1,766.7	-3,079.9	3,115.2	3,059.1	56.11	55.521		
10,100.0	7,770.0	7,750.0	7,644.0	44.0	21.7	87.92	-1,781.5	-3,081.6	3,129.9	3,072.2	57.66	54.282		
10,200.0	7,770.0	7,700.0	7,606.9	45.6	21.5	87.24	-1,814.7	-3,085.8	3,147.0	3,087.9	59.09	53.262		
10,300.0	7,770.0	7,700.0	7,606.9	47.3	21.5	87.24	-1,814.7	-3,085.8	3,166.6	3,105.9	60.76	52.115		
10,400.0	7,770.0	7,666.2	7,580.3	49.0	21.4	86.75	-1,835.3	-3,089.0	3,188.8	3,126.5	62.29	51.190		
10,500.0	7,770.0	7,650.0	7,567.1	50.7	21.3	86.51	-1,844.6	-3,090.6	3,213.5	3,149.6	63.90	50.287		
10,600.0	7,770.0	7,628.1	7,548.9	52.4	21.2	86.18	-1,856.6	-3,092.8	3,240.9	3,175.4	65.50	49.478		
10,700.0	7,770.0	7,600.0	7,524.9	54.1	21.2	85.74	-1,870.9	-3,095.7	3,270.8	3,203.8	67.07	48.765		
10,800.0	7,770.0	7,600.0	7,524.9	55.8	21.2	85.74	-1,870.9	-3,095.7	3,303.2	3,234.4	68.77	48.033		
10,900.0	7,770.0	7,600.0	7,524.9	57.5	21.2	85.74	-1,870.9	-3,095.7	3,338.2	3,267.8	70.47	47.373		
11,000.0	7,770.0	7,570.3	7,498.9	59.2	21.1	85.27	-1,884.7	-3,099.0	3,375.4	3,303.3	72.05	46.851		
11,100.0	7,770.0	7,550.0	7,480.6	60.9	21.0	84.93	-1,893.4	-3,101.3	3,415.1	3,341.4	73.66	46.363		
11,200.0	7,770.0	7,550.0	7,480.6	62.6	21.0	84.93	-1,893.4	-3,101.3	3,457.0	3,381.7	75.36	45.870		
11,300.0	7,770.0	7,550.0	7,480.6	64.3	21.0	84.93	-1,893.4	-3,101.3	3,501.3	3,424.2	77.07	45.429		
11,400.0	7,770.0	7,529.3	7,461.7	66.0	20.9	84.59	-1,901.5	-3,103.6	3,547.6	3,468.9	78.69	45.082		
11,500.0	7,770.0	7,520.9	7,454.0	67.7	20.9	84.45	-1,904.6	-3,104.6	3,596.1	3,515.7	80.37	44.747		
11,600.0	7,770.0	7,500.0	7,434.5	69.5	20.9	84.10	-1,911.9	-3,107.1	3,646.7	3,564.7	81.98	44.482		
11,700.0	7,770.0	7,500.0	7,434.5	71.2	20.9	84.10	-1,911.9	-3,107.1	3,699.0	3,615.3	83.69	44.197		
11,800.0	7,770.0	7,500.0	7,434.5	72.9	20.9	84.10	-1,911.9	-3,107.1	3,753.3	3,667.9	85.41	43.946		
11,900.0	7,770.0	7,500.0	7,434.5	74.6	20.9	84.10	-1,911.9	-3,107.1	3,809.4	3,722.3	87.12	43.725		
12,000.0	7,770.0	7,500.0	7,434.5	76.4	20.9	84.10	-1,911.9	-3,107.1	3,867.3	3,778.5	88.84	43.532		
12,100.0	7,770.0	7,500.0	7,434.5	78.1	20.9	84.10	-1,911.9	-3,107.1	3,926.9	3,836.3	90.56	43.364		
12,200.0	7,770.0	7,475.7	7,411.6	79.8	20.8	83.69	-1,919.4	-3,110.1	3,987.7	3,895.5	92.16	43.270		
12,300.0	7,770.0	7,470.7	7,406.9	81.5	20.8	83.61	-1,920.8	-3,110.7	4,050.2	3,956.4	93.85	43.156		
12,400.0	7,770.0	7,450.0	7,387.1	83.3	20.7	83.25	-1,926.3	-3,113.3	4,114.4	4,019.0	95.46	43.100		
12,500.0	7,770.0	7,450.0	7,387.1	85.0	20.7	83.25	-1,926.3	-3,113.3	4,179.7	4,082.5	97.18	43.009		
12,600.0	7,770.0	7,450.0	7,387.1	86.7	20.7	83.25	-1,926.3	-3,113.3	4,246.4	4,147.5	98.90	42.935		
12,700.0	7,770.0	7,450.0	7,387.1	88.5	20.7	83.25	-1,926.3	-3,113.3	4,314.3	4,213.7	100.62	42.876		
12,800.0	7,770.0	7,450.0	7,387.1	90.2	20.7	83.25	-1,926.3	-3,113.3	4,383.5	4,281.1	102.35	42.830		
12,900.0	7,770.0	7,450.0	7,387.1	91.9	20.7	83.25	-1,926.3	-3,113.3	4,453.8	4,349.7	104.07	42.797		
13,000.0	7,770.0	7,450.0	7,387.1	93.7	20.7	83.25	-1,926.3	-3,113.3	4,525.3	4,419.5	105.79	42.775		
13,100.0	7,770.0	7,450.0	7,387.1	95.4	20.7	83.25	-1,926.3	-3,113.3	4,597.8	4,490.3	107.52	42.764		
13,200.0	7,770.0	7,450.0	7,387.1	97.1	20.7	83.25	-1,926.3	-3,113.3	4,671.3	4,562.1	109.24	42.762 SF		
13,300.0	7,770.0	7,450.0	7,387.1	98.9	20.7	83.25	-1,926.3	-3,113.3	4,745.8	4,634.9	110.97	42.768		
13,400.0	7,770.0	7,450.0	7,387.1	100.6	20.7	83.25	-1,926.3	-3,113.3	4,821.2	4,708.6	112.69	42.782		
13,500.0	7,770.0	7,427.7	7,365.5	102.4	20.7	82.87	-1,931.4	-3,116.2	4,897.2	4,782.9	114.29	42.850		
13,600.0	7,770.0	7,425.1	7,363.0	104.1	20.6	82.83	-1,931.9	-3,116.5	4,974.2	4,858.2	116.00	42.883		
13,700.0	7,770.0	7,422.6	7,360.6	105.8	20.6	82.78	-1,932.4	-3,116.8	5,052.0	4,934.3	117.71	42.921		
13,800.0	7,770.0	7,400.0	7,338.6	107.6	20.6	82.39	-1,936.4	-3,119.8	5,131.0	5,011.7	119.29	43.014		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
13,900.0	7,770.0	7,400.0	7,338.6	109.3	20.6	82.39	-1,936.4	-3,119.8	5,210.2	5,089.2	121.01	43.055	
14,000.0	7,770.0	7,400.0	7,338.6	111.1	20.6	82.39	-1,936.4	-3,119.8	5,290.2	5,167.4	122.74	43.101	
14,100.0	7,770.0	7,400.0	7,338.6	112.8	20.6	82.39	-1,936.4	-3,119.8	5,370.8	5,246.3	124.46	43.151	
14,200.0	7,770.0	7,400.0	7,338.6	114.5	20.6	82.39	-1,936.4	-3,119.8	5,452.1	5,325.9	126.19	43.205	
14,300.0	7,770.0	7,400.0	7,338.6	116.3	20.6	82.39	-1,936.4	-3,119.8	5,533.9	5,406.0	127.92	43.262	
14,400.0	7,770.0	7,400.0	7,338.6	118.0	20.6	82.39	-1,936.4	-3,119.8	5,616.4	5,486.8	129.64	43.322	
14,500.0	7,770.0	7,400.0	7,338.6	119.8	20.6	82.39	-1,936.4	-3,119.8	5,699.4	5,568.1	131.37	43.384	
14,600.0	7,770.0	7,400.0	7,338.6	121.5	20.6	82.39	-1,936.4	-3,119.8	5,783.0	5,649.9	133.10	43.449	
14,700.0	7,770.0	7,400.0	7,338.6	123.3	20.6	82.39	-1,936.4	-3,119.8	5,867.1	5,732.3	134.83	43.515	
14,800.0	7,770.0	7,400.0	7,338.6	125.0	20.6	82.39	-1,936.4	-3,119.8	5,951.7	5,815.1	136.56	43.584	
14,900.0	7,770.0	7,400.0	7,338.6	126.7	20.6	82.39	-1,936.4	-3,119.8	6,036.7	5,898.4	138.28	43.654	
15,000.0	7,770.0	7,400.0	7,338.6	128.5	20.6	82.39	-1,936.4	-3,119.8	6,122.2	5,982.2	140.01	43.726	
15,100.0	7,770.0	7,400.0	7,338.6	130.2	20.6	82.39	-1,936.4	-3,119.8	6,208.1	6,066.4	141.74	43.799	
15,200.0	7,770.0	7,400.0	7,338.6	132.0	20.6	82.39	-1,936.4	-3,119.8	6,294.5	6,151.0	143.47	43.872	
15,300.0	7,770.0	7,400.0	7,338.6	133.7	20.6	82.39	-1,936.4	-3,119.8	6,381.2	6,236.0	145.20	43.947	
15,400.0	7,770.0	7,400.0	7,338.6	135.5	20.6	82.39	-1,936.4	-3,119.8	6,468.4	6,321.4	146.93	44.023	
15,500.0	7,770.0	7,400.0	7,338.6	137.2	20.6	82.39	-1,936.4	-3,119.8	6,555.9	6,407.2	148.66	44.099	
15,600.0	7,770.0	7,400.0	7,338.6	139.0	20.6	82.39	-1,936.4	-3,119.8	6,643.7	6,493.3	150.39	44.176	
15,700.0	7,770.0	7,400.0	7,338.6	140.7	20.6	82.39	-1,936.4	-3,119.8	6,731.9	6,579.8	152.12	44.253	
15,800.0	7,770.0	7,400.0	7,338.6	142.4	20.6	82.39	-1,936.4	-3,119.8	6,820.4	6,666.5	153.85	44.330	
15,900.0	7,770.0	7,400.0	7,338.6	144.2	20.6	82.39	-1,936.4	-3,119.8	6,909.2	6,753.6	155.59	44.408	
16,000.0	7,770.0	7,400.0	7,338.6	145.9	20.6	82.39	-1,936.4	-3,119.8	6,998.4	6,841.0	157.32	44.486	
16,100.0	7,770.0	7,400.0	7,338.6	147.7	20.6	82.39	-1,936.4	-3,119.8	7,087.8	6,928.7	159.05	44.564	
16,200.0	7,770.0	7,400.0	7,338.6	149.4	20.6	82.39	-1,936.4	-3,119.8	7,177.5	7,016.7	160.78	44.642	
16,300.0	7,770.0	7,400.0	7,338.6	151.2	20.6	82.39	-1,936.4	-3,119.8	7,267.4	7,104.9	162.51	44.720	
16,400.0	7,770.0	7,400.0	7,338.6	152.9	20.6	82.39	-1,936.4	-3,119.8	7,357.7	7,193.4	164.24	44.797	
16,500.0	7,770.0	7,400.0	7,338.6	154.7	20.6	82.39	-1,936.4	-3,119.8	7,448.1	7,282.2	165.97	44.875	
16,600.0	7,770.0	7,400.0	7,338.6	156.4	20.6	82.39	-1,936.4	-3,119.8	7,538.9	7,371.2	167.71	44.953	
16,700.0	7,770.0	7,400.0	7,338.6	158.2	20.6	82.39	-1,936.4	-3,119.8	7,629.8	7,460.4	169.44	45.030	
16,800.0	7,770.0	7,376.8	7,315.8	159.9	20.5	81.99	-1,939.7	-3,122.8	7,720.5	7,549.5	170.97	45.157	
16,900.0	7,770.0	7,376.0	7,315.0	161.7	20.5	81.98	-1,939.8	-3,122.9	7,811.9	7,639.2	172.69	45.236	
17,000.0	7,770.0	7,375.1	7,314.1	163.4	20.5	81.96	-1,939.9	-3,123.1	7,903.4	7,729.0	174.42	45.314	
17,100.0	7,770.0	7,374.3	7,313.3	165.2	20.5	81.95	-1,940.0	-3,123.2	7,995.2	7,819.0	176.14	45.391	
17,200.0	7,770.0	7,373.4	7,312.5	166.9	20.5	81.93	-1,940.1	-3,123.3	8,087.1	7,909.3	177.86	45.468	
17,300.0	7,770.0	7,350.0	7,289.4	168.7	20.4	81.53	-1,942.3	-3,126.4	8,179.7	8,000.4	179.37	45.602	
17,400.0	7,770.0	7,350.0	7,289.4	170.4	20.4	81.53	-1,942.3	-3,126.4	8,272.0	8,090.9	181.10	45.676	
17,500.0	7,770.0	7,350.0	7,289.4	172.2	20.4	81.53	-1,942.3	-3,126.4	8,364.5	8,181.7	182.83	45.750	
17,600.0	7,770.0	7,350.0	7,289.4	173.9	20.4	81.53	-1,942.3	-3,126.4	8,457.1	8,272.6	184.56	45.823	
17,653.1	7,770.0	7,350.0	7,289.4	174.8	20.4	81.53	-1,942.3	-3,126.4	8,506.3	8,320.9	185.48	45.862	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-115.63	-1,929.3	-4,021.9	4,460.7					
100.0	100.0	87.0	87.0	0.2	0.1	-115.63	-1,929.3	-4,021.9	4,460.7	4,460.4	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.63	-1,929.3	-4,021.9	4,460.7	4,460.1	0.61	7,323.124		
300.0	300.0	287.0	287.0	0.5	0.5	-115.63	-1,929.3	-4,021.9	4,460.7	4,459.7	0.96	4,655.320		
400.0	400.0	653.7	653.5	0.7	1.1	-115.66	-1,927.1	-4,011.2	4,458.1	4,456.3	1.77	2,511.827		
500.0	500.0	1,056.8	1,054.6	0.8	2.1	-115.79	-1,919.5	-3,972.9	4,448.7	4,446.0	2.67	1,666.435		
550.0	550.0	1,255.8	1,251.4	0.9	2.6	-115.88	-1,913.7	-3,943.9	4,441.5	4,438.3	3.12	1,421.994		
600.0	600.0	1,374.6	1,368.4	1.0	3.0	-116.87	-1,909.6	-3,923.4	4,432.9	4,429.5	3.43	1,292.858		
700.0	700.0	1,473.0	1,465.1	1.2	3.4	-117.10	-1,906.0	-3,905.8	4,416.1	4,412.3	3.79	1,164.792		
800.0	799.9	1,571.4	1,561.9	1.4	3.7	-117.35	-1,902.5	-3,888.3	4,400.0	4,395.9	4.16	1,058.119		
861.1	860.9	1,631.5	1,621.0	1.5	3.9	-117.50	-1,900.4	-3,877.6	4,390.6	4,386.2	4.39	1,001.183		
900.0	899.8	1,669.8	1,658.6	1.6	4.1	-117.55	-1,899.0	-3,870.7	4,384.7	4,380.2	4.53	967.891		
1,000.0	999.6	1,768.2	1,755.4	1.8	4.4	-117.68	-1,895.5	-3,853.2	4,369.6	4,364.7	4.90	890.983		
1,100.0	1,099.5	1,866.6	1,852.1	1.9	4.8	-117.80	-1,892.0	-3,835.6	4,354.5	4,349.2	5.28	824.578		
1,200.0	1,199.3	1,965.0	1,948.9	2.1	5.1	-117.93	-1,888.5	-3,818.0	4,339.4	4,333.7	5.66	766.736		
1,300.0	1,299.2	2,063.4	2,045.6	2.3	5.5	-118.06	-1,885.0	-3,800.5	4,324.3	4,318.3	6.04	715.946		
1,400.0	1,399.1	2,161.8	2,142.4	2.5	5.8	-118.19	-1,881.5	-3,782.9	4,309.3	4,302.9	6.42	671.023		
1,500.0	1,498.9	2,260.2	2,239.1	2.7	6.2	-118.32	-1,878.0	-3,765.4	4,294.2	4,287.4	6.81	631.024		
1,600.0	1,598.8	2,358.6	2,335.9	2.9	6.5	-118.45	-1,874.4	-3,747.8	4,279.2	4,272.1	7.19	595.193		
1,700.0	1,698.6	2,457.0	2,432.6	3.1	6.9	-118.58	-1,870.9	-3,730.2	4,264.3	4,256.7	7.58	562.921		
1,800.0	1,798.5	2,555.4	2,529.4	3.3	7.2	-118.71	-1,867.4	-3,712.7	4,249.3	4,241.3	7.96	533.709		
1,900.0	1,898.3	2,653.8	2,626.1	3.5	7.6	-118.84	-1,863.9	-3,695.1	4,234.4	4,226.0	8.35	507.145		
2,000.0	1,998.2	2,752.1	2,722.9	3.7	7.9	-118.98	-1,860.4	-3,677.6	4,219.4	4,210.7	8.74	482.889		
2,100.0	2,098.0	2,850.5	2,819.6	3.9	8.3	-119.11	-1,856.9	-3,660.0	4,204.5	4,195.4	9.13	460.655		
2,200.0	2,197.9	2,948.9	2,916.4	4.1	8.7	-119.25	-1,853.4	-3,642.5	4,189.7	4,180.2	9.52	440.201		
2,300.0	2,297.7	3,047.3	3,013.1	4.3	9.0	-119.38	-1,849.9	-3,624.9	4,174.8	4,164.9	9.91	421.325		
2,400.0	2,397.6	3,145.7	3,109.9	4.5	9.4	-119.52	-1,846.4	-3,607.3	4,160.0	4,149.7	10.30	403.851		
2,500.0	2,497.4	3,244.1	3,206.6	4.7	9.7	-119.66	-1,842.8	-3,589.8	4,145.2	4,134.5	10.69	387.630		
2,600.0	2,597.3	3,342.5	3,303.4	4.9	10.1	-119.80	-1,839.3	-3,572.2	4,130.4	4,119.3	11.09	372.532		
2,700.0	2,697.1	3,440.9	3,400.1	5.1	10.5	-119.94	-1,835.8	-3,554.7	4,115.7	4,104.2	11.48	358.446		
2,800.0	2,797.0	3,539.3	3,496.9	5.3	10.8	-120.08	-1,832.3	-3,537.1	4,100.9	4,089.1	11.88	345.273		
2,900.0	2,896.8	3,637.7	3,593.6	5.5	11.2	-120.22	-1,828.8	-3,519.5	4,086.2	4,074.0	12.27	332.928		
3,000.0	2,996.7	3,736.1	3,690.4	5.7	11.5	-120.37	-1,825.3	-3,502.0	4,071.6	4,058.9	12.67	321.336		
3,100.0	3,096.5	3,834.5	3,787.1	5.9	11.9	-120.51	-1,821.8	-3,484.4	4,056.9	4,043.8	13.07	310.430		
3,200.0	3,196.4	3,932.9	3,883.9	6.1	12.2	-120.66	-1,818.3	-3,466.9	4,042.3	4,028.8	13.47	300.151		
3,300.0	3,296.3	4,031.3	3,980.6	6.3	12.6	-120.80	-1,814.8	-3,449.3	4,027.7	4,013.8	13.87	290.447		
3,400.0	3,396.1	4,129.6	4,077.4	6.5	13.0	-120.95	-1,811.2	-3,431.7	4,013.1	3,998.8	14.27	281.272		
3,500.0	3,496.0	4,228.0	4,174.1	6.7	13.3	-121.10	-1,807.7	-3,414.2	3,998.6	3,983.9	14.67	272.583		
3,600.0	3,595.8	4,326.4	4,270.9	6.9	13.7	-121.25	-1,804.2	-3,396.6	3,984.1	3,969.0	15.07	264.343		
3,700.0	3,695.7	4,424.8	4,367.6	7.0	14.0	-121.40	-1,800.7	-3,379.1	3,969.6	3,954.1	15.47	256.518		
3,800.0	3,795.5	4,523.2	4,464.4	7.2	14.4	-121.55	-1,797.2	-3,361.5	3,955.1	3,939.2	15.88	249.078		
3,900.0	3,895.4	4,621.6	4,561.1	7.4	14.8	-121.71	-1,793.7	-3,343.9	3,940.7	3,924.4	16.28	241.996		
4,000.0	3,995.2	4,720.0	4,657.9	7.6	15.1	-121.86	-1,790.2	-3,326.4	3,926.2	3,909.6	16.69	235.245		
4,100.0	4,095.1	4,818.4	4,754.6	7.8	15.5	-122.02	-1,786.7	-3,308.8	3,911.9	3,894.8	17.10	228.805		
4,200.0	4,194.9	4,916.8	4,851.4	8.0	15.8	-122.17	-1,783.2	-3,291.3	3,897.5	3,880.0	17.50	222.653		
4,300.0	4,294.8	5,015.2	4,948.1	8.2	16.2	-122.33	-1,779.6	-3,273.7	3,883.2	3,865.3	17.91	216.771		
4,400.0	4,394.6	5,113.6	5,044.9	8.4	16.6	-122.49	-1,776.1	-3,256.2	3,868.9	3,850.6	18.32	211.142		
4,500.0	4,494.5	5,212.0	5,141.6	8.6	16.9	-122.65	-1,772.6	-3,238.6	3,854.6	3,835.9	18.73	205.750		
4,600.0	4,594.3	5,310.4	5,238.4	8.8	17.3	-122.81	-1,769.1	-3,221.0	3,840.4	3,821.3	19.15	200.580		
4,700.0	4,694.2	5,408.8	5,335.1	9.0	17.6	-122.97	-1,765.6	-3,203.5	3,826.2	3,806.6	19.56	195.619		
4,800.0	4,794.0	5,507.1	5,431.9	9.2	18.0	-123.14	-1,762.1	-3,185.9	3,812.0	3,792.1	19.97	190.855		
4,900.0	4,893.9	5,605.5	5,528.6	9.4	18.4	-123.30	-1,758.6	-3,168.4	3,797.9	3,777.5	20.39	186.277		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	5,703.9	5,625.4	9.6	18.7	-123.47	-1,755.1	-3,150.8	3,783.8	3,763.0	20.80	181.873		
5,100.0	5,093.6	9,384.5	7,550.0	9.8	47.4	-93.08	263.2	-2,784.2	3,724.2	3,673.1	51.04	72.971		
5,200.0	5,193.5	9,389.9	7,550.0	10.0	47.5	-92.97	268.7	-2,784.1	3,658.8	3,607.4	51.37	71.228		
5,300.0	5,293.3	9,395.3	7,550.0	10.2	47.6	-92.85	274.1	-2,784.1	3,594.9	3,543.2	51.70	69.538		
5,400.0	5,393.2	9,400.7	7,550.0	10.4	47.6	-92.74	279.5	-2,784.0	3,532.8	3,480.7	52.03	67.901		
5,500.0	5,493.0	9,406.2	7,550.0	10.6	47.7	-92.63	284.9	-2,784.0	3,472.3	3,420.0	52.36	66.318		
5,600.0	5,592.9	9,411.6	7,550.0	10.8	47.8	-92.52	290.4	-2,783.9	3,413.8	3,361.1	52.69	64.791		
5,700.0	5,692.7	9,417.0	7,550.0	11.0	47.9	-92.41	295.8	-2,783.9	3,357.2	3,304.2	53.02	63.319		
5,800.0	5,792.6	9,422.4	7,550.0	11.2	48.0	-92.30	301.2	-2,783.8	3,302.6	3,249.3	53.35	61.904		
5,900.0	5,892.4	9,427.9	7,550.0	11.4	48.1	-92.19	306.6	-2,783.8	3,250.2	3,196.5	53.68	60.547		
6,000.0	5,992.3	9,433.3	7,550.0	11.6	48.1	-92.08	312.1	-2,783.7	3,200.1	3,146.0	54.01	59.248		
6,100.0	6,092.1	9,438.7	7,550.0	11.8	48.2	-91.97	317.5	-2,783.7	3,152.3	3,097.9	54.34	58.009		
6,200.0	6,192.0	9,444.2	7,550.0	12.0	48.3	-91.85	322.9	-2,783.6	3,107.0	3,052.3	54.67	56.830		
6,300.0	6,291.8	9,449.6	7,550.0	12.2	48.4	-91.74	328.3	-2,783.6	3,064.2	3,009.2	55.00	55.712		
6,400.0	6,391.7	9,455.0	7,550.0	12.4	48.5	-91.63	333.8	-2,783.5	3,024.2	2,968.9	55.33	54.657		
6,500.0	6,491.5	9,460.4	7,550.0	12.6	48.5	-91.52	339.2	-2,783.5	2,987.0	2,931.3	55.66	53.664		
6,600.0	6,591.4	9,465.9	7,550.0	12.8	48.6	-91.41	344.6	-2,783.4	2,952.7	2,896.7	55.99	52.735		
6,700.0	6,691.2	9,471.3	7,550.0	13.0	48.7	-91.30	350.0	-2,783.4	2,921.4	2,865.0	56.32	51.870		
6,800.0	6,791.1	9,476.7	7,550.0	13.2	48.8	-91.19	355.5	-2,783.4	2,893.2	2,836.5	56.65	51.071		
6,900.0	6,890.9	9,482.1	7,550.0	13.4	48.9	-91.08	360.9	-2,783.3	2,868.2	2,811.2	56.98	50.337		
7,000.0	6,990.8	9,487.6	7,550.0	13.6	48.9	-90.96	366.3	-2,783.3	2,846.5	2,789.1	57.31	49.669		
7,024.2	7,014.9	9,488.9	7,550.0	13.6	49.0	-90.94	367.6	-2,783.2	2,841.7	2,784.3	57.39	49.517		
7,050.0	7,040.7	9,489.8	7,550.0	13.7	49.0	-92.18	368.6	-2,783.2	2,836.9	2,779.3	57.59	49.256		
7,100.0	7,090.7	9,489.0	7,550.0	13.7	49.0	91.89	367.7	-2,783.2	2,828.1	2,770.2	57.88	48.862		
7,150.0	7,140.5	9,484.7	7,550.0	13.8	48.9	91.93	363.4	-2,783.3	2,820.3	2,762.3	58.02	48.606		
7,200.0	7,189.9	9,476.9	7,550.0	13.8	48.8	92.19	355.6	-2,783.4	2,813.4	2,755.4	58.03	48.485		
7,250.0	7,238.6	9,465.7	7,550.0	13.8	48.6	92.37	344.4	-2,783.5	2,807.5	2,749.6	57.90	48.492		
7,300.0	7,286.4	9,451.1	7,550.0	13.7	48.4	92.45	329.9	-2,783.6	2,802.6	2,744.9	57.64	48.620		
7,350.0	7,333.1	9,433.2	7,550.0	13.7	48.1	92.41	312.0	-2,783.7	2,798.6	2,741.3	57.27	48.864		
7,400.0	7,378.5	9,412.1	7,550.0	13.6	47.8	92.25	290.9	-2,783.9	2,795.4	2,738.6	56.80	49.215		
7,450.0	7,422.2	9,387.9	7,550.0	13.6	47.5	91.99	266.7	-2,784.1	2,793.1	2,736.9	56.24	49.664		
7,500.0	7,464.1	9,360.7	7,550.0	13.5	47.0	91.63	239.5	-2,784.4	2,791.6	2,736.0	55.61	50.199		
7,550.0	7,504.1	9,330.7	7,550.0	13.5	46.6	91.20	209.5	-2,784.6	2,790.8	2,735.8	54.93	50.810 ES		
7,594.8	7,538.0	9,301.4	7,550.0	13.5	46.2	90.76	180.2	-2,784.9	2,790.5	2,736.3	54.28	51.411 CC		
7,600.0	7,541.8	9,297.9	7,550.0	13.5	46.1	90.70	176.7	-2,784.9	2,790.6	2,736.3	54.20	51.484		
7,650.0	7,577.2	9,262.6	7,550.0	13.4	45.6	90.16	141.4	-2,785.3	2,790.8	2,737.4	53.46	52.203		
7,700.0	7,610.0	9,224.9	7,550.0	13.5	45.0	89.59	103.7	-2,785.6	2,791.6	2,738.9	52.72	52.953		
7,750.0	7,640.2	9,185.0	7,550.0	13.5	44.5	89.01	63.8	-2,785.9	2,792.6	2,740.6	51.99	53.716		
7,800.0	7,667.4	9,143.1	7,550.0	13.6	43.9	88.44	21.9	-2,786.3	2,793.9	2,742.6	51.29	54.475		
7,850.0	7,691.7	9,099.4	7,550.0	13.7	43.2	87.89	-21.8	-2,786.7	2,795.3	2,744.7	50.63	55.216		
7,900.0	7,712.8	9,054.1	7,550.0	13.9	42.6	87.38	-67.1	-2,787.1	2,796.8	2,746.8	50.02	55.918		
7,950.0	7,730.8	9,007.5	7,550.0	14.1	41.9	86.92	-113.8	-2,787.5	2,798.2	2,748.8	49.46	56.574		
8,000.0	7,745.5	8,959.7	7,550.0	14.4	41.3	86.53	-161.6	-2,787.9	2,799.6	2,750.6	48.97	57.169		
8,050.0	7,756.7	8,911.0	7,550.0	14.7	40.6	86.21	-210.3	-2,788.4	2,800.8	2,752.2	48.54	57.701		
8,100.0	7,764.6	8,861.6	7,550.0	15.1	39.9	85.97	-259.6	-2,788.8	2,801.8	2,753.6	48.17	58.163		
8,150.0	7,769.0	8,811.8	7,550.0	15.5	39.2	85.82	-309.4	-2,789.3	2,802.6	2,754.7	47.86	58.561		
8,188.1	7,770.0	8,773.8	7,550.0	15.9	38.7	85.76	-347.4	-2,789.6	2,803.0	2,755.3	47.65	58.821		
8,200.0	7,770.0	8,761.8	7,550.0	16.0	38.6	85.76	-359.4	-2,789.7	2,803.1	2,755.5	47.57	58.924		
8,300.0	7,770.0	8,661.8	7,550.0	17.0	37.2	85.77	-459.4	-2,790.6	2,804.0	2,757.0	46.96	59.706		
8,400.0	7,770.0	8,561.8	7,550.0	18.1	36.0	85.77	-559.4	-2,791.5	2,804.8	2,758.4	46.49	60.336		
8,500.0	7,770.0	8,461.8	7,550.0	19.3	34.7	85.77	-659.4	-2,792.4	2,805.7	2,759.6	46.13	60.826		
8,600.0	7,770.0	8,361.8	7,550.0	20.6	33.5	85.77	-759.4	-2,793.3	2,806.6	2,760.7	45.87	61.187		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,700.0	7,770.0	8,261.8	7,550.0	21.9	32.4	85.77	-859.3	-2,794.2	2,807.5	2,761.8	45.70	61.428	
8,800.0	7,770.0	8,161.8	7,550.0	23.3	31.3	85.77	-959.3	-2,795.0	2,808.4	2,762.8	45.63	61.551	
8,900.0	7,770.0	8,061.9	7,550.0	24.8	30.3	85.77	-1,059.3	-2,795.9	2,809.3	2,763.6	45.64	61.558	
9,000.0	7,770.0	7,976.2	7,549.9	26.3	29.5	85.77	-1,145.0	-2,796.7	2,810.2	2,764.3	45.92	61.196	
9,100.0	7,770.0	7,931.5	7,547.3	27.8	29.1	85.72	-1,189.6	-2,797.6	2,812.6	2,765.8	46.83	60.061	
9,200.0	7,770.0	7,900.0	7,543.4	29.3	28.8	85.64	-1,220.8	-2,798.6	2,817.0	2,769.1	47.94	58.757	
9,300.0	7,770.0	7,850.0	7,533.7	30.9	28.3	85.45	-1,269.8	-2,800.7	2,823.4	2,774.5	48.85	57.799	
9,400.0	7,770.0	7,800.0	7,519.9	32.5	27.9	85.18	-1,317.8	-2,803.7	2,831.8	2,782.0	49.79	56.874	
9,500.0	7,770.0	7,750.0	7,502.1	34.1	27.5	84.82	-1,364.3	-2,807.3	2,842.5	2,791.7	50.77	55.984	
9,600.0	7,770.0	7,726.8	7,492.5	35.7	27.3	84.63	-1,385.3	-2,809.3	2,855.3	2,803.1	52.11	54.790	
9,700.0	7,770.0	7,700.0	7,480.3	37.3	27.1	84.39	-1,409.1	-2,811.7	2,870.4	2,817.0	53.42	53.734	
9,800.0	7,770.0	7,650.0	7,454.8	39.0	26.7	83.89	-1,451.8	-2,816.7	2,887.9	2,833.4	54.49	52.997	
9,900.0	7,770.0	7,628.6	7,442.7	40.6	26.6	83.65	-1,469.3	-2,819.0	2,907.8	2,851.9	55.91	52.011	
10,000.0	7,770.0	7,600.0	7,425.6	42.3	26.4	83.32	-1,492.0	-2,822.3	2,930.2	2,872.9	57.25	51.183	
10,100.0	7,770.0	7,574.1	7,409.2	44.0	26.2	83.00	-1,511.8	-2,825.5	2,955.1	2,896.4	58.65	50.389	
10,200.0	7,770.0	7,550.0	7,393.2	45.6	26.1	82.69	-1,529.5	-2,828.5	2,982.5	2,922.4	60.06	49.658	
10,300.0	7,770.0	7,527.4	7,377.5	47.3	25.9	82.38	-1,545.5	-2,831.5	3,012.4	2,950.9	61.51	48.974	
10,400.0	7,770.0	7,500.0	7,357.6	49.0	25.8	82.00	-1,564.0	-2,835.3	3,044.8	2,981.9	62.91	48.397	
10,500.0	7,770.0	7,500.0	7,357.6	50.7	25.8	82.00	-1,564.0	-2,835.3	3,079.8	3,015.2	64.59	47.685	
10,600.0	7,770.0	7,469.7	7,334.7	52.4	25.6	81.56	-1,583.3	-2,839.6	3,117.0	3,051.0	65.98	47.238	
10,700.0	7,770.0	7,450.0	7,319.3	54.1	25.5	81.26	-1,595.2	-2,842.5	3,156.7	3,089.2	67.48	46.782	
10,800.0	7,770.0	7,450.0	7,319.3	55.8	25.5	81.26	-1,595.2	-2,842.5	3,198.9	3,129.7	69.16	46.254	
10,900.0	7,770.0	7,423.8	7,298.1	57.5	25.3	80.86	-1,610.1	-2,846.5	3,243.1	3,172.5	70.61	45.930	
11,000.0	7,770.0	7,400.0	7,278.3	59.2	25.2	80.48	-1,622.8	-2,850.2	3,289.7	3,217.7	72.08	45.641	
11,100.0	7,770.0	7,400.0	7,278.3	60.9	25.2	80.48	-1,622.8	-2,850.2	3,338.4	3,264.6	73.76	45.258	
11,200.0	7,770.0	7,400.0	7,278.3	62.6	25.2	80.48	-1,622.8	-2,850.2	3,389.2	3,313.8	75.45	44.919	
11,300.0	7,770.0	7,376.1	7,258.0	64.3	25.1	80.10	-1,634.8	-2,853.9	3,441.9	3,364.9	76.93	44.739	
11,400.0	7,770.0	7,350.0	7,235.2	66.0	24.9	79.67	-1,646.8	-2,858.2	3,496.7	3,418.4	78.39	44.609	
11,500.0	7,770.0	7,350.0	7,235.2	67.7	24.9	79.67	-1,646.8	-2,858.2	3,553.1	3,473.0	80.08	44.371	
11,600.0	7,770.0	7,350.0	7,235.2	69.5	24.9	79.67	-1,646.8	-2,858.2	3,611.4	3,529.6	81.77	44.166	
11,700.0	7,770.0	7,350.0	7,235.2	71.2	24.9	79.67	-1,646.8	-2,858.2	3,671.5	3,588.0	83.46	43.990	
11,800.0	7,770.0	7,350.0	7,235.2	72.9	24.9	79.67	-1,646.8	-2,858.2	3,733.3	3,648.1	85.16	43.839	
11,900.0	7,770.0	7,324.3	7,212.3	74.6	24.8	79.25	-1,657.6	-2,862.4	3,796.2	3,709.6	86.62	43.824	
12,000.0	7,770.0	7,300.0	7,190.2	76.4	24.7	78.84	-1,666.8	-2,866.5	3,861.1	3,773.0	88.09	43.830	
12,100.0	7,770.0	7,300.0	7,190.2	78.1	24.7	78.84	-1,666.8	-2,866.5	3,927.0	3,837.2	89.79	43.737	
12,200.0	7,770.0	7,300.0	7,190.2	79.8	24.7	78.84	-1,666.8	-2,866.5	3,994.3	3,902.9	91.48	43.663	
12,300.0	7,770.0	7,300.0	7,190.2	81.5	24.7	78.84	-1,666.8	-2,866.5	4,063.0	3,969.9	93.18	43.605	
12,400.0	7,770.0	7,300.0	7,190.2	83.3	24.7	78.84	-1,666.8	-2,866.5	4,133.0	4,038.1	94.88	43.562	
12,500.0	7,770.0	7,300.0	7,190.2	85.0	24.7	78.84	-1,666.8	-2,866.5	4,204.2	4,107.6	96.57	43.533	
12,600.0	7,770.0	7,300.0	7,190.2	86.7	24.7	78.84	-1,666.8	-2,866.5	4,276.5	4,178.3	98.27	43.516 SF	
12,700.0	7,770.0	7,277.8	7,169.7	88.5	24.6	78.46	-1,674.4	-2,870.3	4,349.6	4,249.8	99.76	43.600	
12,800.0	7,770.0	7,273.2	7,165.4	90.2	24.6	78.38	-1,675.9	-2,871.1	4,423.9	4,322.4	101.42	43.621	
12,900.0	7,770.0	7,250.0	7,143.6	91.9	24.5	77.98	-1,682.8	-2,875.1	4,499.4	4,396.5	102.88	43.734	
13,000.0	7,770.0	7,250.0	7,143.6	93.7	24.5	77.98	-1,682.8	-2,875.1	4,575.5	4,470.9	104.58	43.752	
13,100.0	7,770.0	7,250.0	7,143.6	95.4	24.5	77.98	-1,682.8	-2,875.1	4,652.4	4,546.2	106.28	43.777	
13,200.0	7,770.0	7,250.0	7,143.6	97.1	24.5	77.98	-1,682.8	-2,875.1	4,730.3	4,622.3	107.98	43.809	
13,300.0	7,770.0	7,250.0	7,143.6	98.9	24.5	77.98	-1,682.8	-2,875.1	4,808.9	4,699.3	109.67	43.847	
13,400.0	7,770.0	7,250.0	7,143.6	100.6	24.5	77.98	-1,682.8	-2,875.1	4,888.4	4,777.0	111.37	43.891	
13,500.0	7,770.0	7,250.0	7,143.6	102.4	24.5	77.98	-1,682.8	-2,875.1	4,968.5	4,855.5	113.08	43.940	
13,600.0	7,770.0	7,250.0	7,143.6	104.1	24.5	77.98	-1,682.8	-2,875.1	5,049.4	4,934.7	114.78	43.994	
13,700.0	7,770.0	7,250.0	7,143.6	105.8	24.5	77.98	-1,682.8	-2,875.1	5,131.0	5,014.5	116.48	44.051	
13,800.0	7,770.0	7,250.0	7,143.6	107.6	24.5	77.98	-1,682.8	-2,875.1	5,213.2	5,095.0	118.18	44.112	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
13,900.0	7,770.0	7,250.0	7,143.6	109.3	24.5	77.98	-1,682.8	-2,875.1	5,296.0	5,176.1	119.88	44.176		
14,000.0	7,770.0	7,250.0	7,143.6	111.1	24.5	77.98	-1,682.8	-2,875.1	5,379.4	5,257.8	121.59	44.244		
14,100.0	7,770.0	7,250.0	7,143.6	112.8	24.5	77.98	-1,682.8	-2,875.1	5,463.3	5,340.1	123.29	44.313		
14,200.0	7,770.0	7,226.0	7,120.8	114.5	24.4	77.56	-1,688.9	-2,879.3	5,547.3	5,422.6	124.72	44.477		
14,300.0	7,770.0	7,223.5	7,118.4	116.3	24.3	77.52	-1,689.5	-2,879.7	5,632.2	5,505.8	126.40	44.560		
14,400.0	7,770.0	7,200.0	7,095.8	118.0	24.2	77.11	-1,694.5	-2,883.9	5,718.0	5,590.2	127.82	44.733		
14,500.0	7,770.0	7,200.0	7,095.8	119.8	24.2	77.11	-1,694.5	-2,883.9	5,803.7	5,674.2	129.52	44.808		
14,600.0	7,770.0	7,200.0	7,095.8	121.5	24.2	77.11	-1,694.5	-2,883.9	5,889.9	5,758.7	131.22	44.885		
14,700.0	7,770.0	7,200.0	7,095.8	123.3	24.2	77.11	-1,694.5	-2,883.9	5,976.5	5,843.6	132.92	44.963		
14,800.0	7,770.0	7,200.0	7,095.8	125.0	24.2	77.11	-1,694.5	-2,883.9	6,063.6	5,929.0	134.62	45.041		
14,900.0	7,770.0	7,200.0	7,095.8	126.7	24.2	77.11	-1,694.5	-2,883.9	6,151.0	6,014.7	136.32	45.121		
15,000.0	7,770.0	7,200.0	7,095.8	128.5	24.2	77.11	-1,694.5	-2,883.9	6,238.8	6,100.8	138.02	45.201		
15,100.0	7,770.0	7,200.0	7,095.8	130.2	24.2	77.11	-1,694.5	-2,883.9	6,327.0	6,187.3	139.72	45.282		
15,200.0	7,770.0	7,200.0	7,095.8	132.0	24.2	77.11	-1,694.5	-2,883.9	6,415.5	6,274.1	141.43	45.363		
15,300.0	7,770.0	7,200.0	7,095.8	133.7	24.2	77.11	-1,694.5	-2,883.9	6,504.4	6,361.2	143.13	45.445		
15,400.0	7,770.0	7,200.0	7,095.8	135.5	24.2	77.11	-1,694.5	-2,883.9	6,593.5	6,448.7	144.83	45.526		
15,500.0	7,770.0	7,200.0	7,095.8	137.2	24.2	77.11	-1,694.5	-2,883.9	6,683.0	6,536.5	146.53	45.608		
15,600.0	7,770.0	7,200.0	7,095.8	139.0	24.2	77.11	-1,694.5	-2,883.9	6,772.8	6,624.5	148.23	45.690		
15,700.0	7,770.0	7,200.0	7,095.8	140.7	24.2	77.11	-1,694.5	-2,883.9	6,862.8	6,712.9	149.93	45.772		
15,800.0	7,770.0	7,200.0	7,095.8	142.4	24.2	77.11	-1,694.5	-2,883.9	6,953.2	6,801.5	151.64	45.854		
15,900.0	7,770.0	7,200.0	7,095.8	144.2	24.2	77.11	-1,694.5	-2,883.9	7,043.7	6,890.4	153.34	45.935		
16,000.0	7,770.0	7,200.0	7,095.8	145.9	24.2	77.11	-1,694.5	-2,883.9	7,134.6	6,979.5	155.04	46.017		
16,100.0	7,770.0	7,200.0	7,095.8	147.7	24.2	77.11	-1,694.5	-2,883.9	7,225.7	7,068.9	156.75	46.098		
16,200.0	7,770.0	7,200.0	7,095.8	149.4	24.2	77.11	-1,694.5	-2,883.9	7,317.0	7,158.5	158.45	46.179		
16,300.0	7,770.0	7,200.0	7,095.8	151.2	24.2	77.11	-1,694.5	-2,883.9	7,408.5	7,248.4	160.15	46.259		
16,400.0	7,770.0	7,200.0	7,095.8	152.9	24.2	77.11	-1,694.5	-2,883.9	7,500.3	7,338.4	161.86	46.339		
16,500.0	7,770.0	7,200.0	7,095.8	154.7	24.2	77.11	-1,694.5	-2,883.9	7,592.2	7,428.7	163.56	46.419		
16,600.0	7,770.0	7,200.0	7,095.8	156.4	24.2	77.11	-1,694.5	-2,883.9	7,684.4	7,519.1	165.26	46.498		
16,700.0	7,770.0	7,200.0	7,095.8	158.2	24.2	77.11	-1,694.5	-2,883.9	7,776.8	7,609.8	166.97	46.576		
16,800.0	7,770.0	7,200.0	7,095.8	159.9	24.2	77.11	-1,694.5	-2,883.9	7,869.3	7,700.6	168.67	46.655		
16,900.0	7,770.0	7,200.0	7,095.8	161.7	24.2	77.11	-1,694.5	-2,883.9	7,962.0	7,791.6	170.38	46.732		
17,000.0	7,770.0	7,200.0	7,095.8	163.4	24.2	77.11	-1,694.5	-2,883.9	8,054.9	7,882.8	172.08	46.809		
17,100.0	7,770.0	7,200.0	7,095.8	165.2	24.2	77.11	-1,694.5	-2,883.9	8,148.0	7,974.2	173.78	46.885		
17,200.0	7,770.0	7,200.0	7,095.8	166.9	24.2	77.11	-1,694.5	-2,883.9	8,241.2	8,065.7	175.49	46.961		
17,300.0	7,770.0	7,176.0	7,072.5	168.7	24.1	76.69	-1,698.7	-2,888.1	8,334.1	8,157.3	176.84	47.129		
17,400.0	7,770.0	7,174.9	7,071.5	170.4	24.1	76.67	-1,698.8	-2,888.3	8,427.6	8,249.1	178.52	47.207		
17,500.0	7,770.0	7,173.9	7,070.5	172.2	24.1	76.66	-1,699.0	-2,888.5	8,521.2	8,341.0	180.21	47.285		
17,600.0	7,770.0	7,150.0	7,047.2	173.9	24.0	76.24	-1,702.0	-2,892.7	8,615.5	8,433.9	181.54	47.459		
17,653.1	7,770.0	7,150.0	7,047.2	174.8	24.0	76.24	-1,702.0	-2,892.7	8,665.3	8,482.8	182.44	47.497		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-115.74	-1,936.5	-4,016.3	4,458.8					
100.0	100.0	87.0	87.0	0.2	0.1	-115.74	-1,936.5	-4,016.3	4,458.8	4,458.5	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.74	-1,936.5	-4,016.3	4,458.8	4,458.2	0.61	7,320.028		
300.0	300.0	350.4	350.4	0.5	0.6	-115.75	-1,936.7	-4,015.4	4,458.5	4,457.4	1.07	4,169.866		
400.0	400.0	621.3	621.1	0.7	1.1	-115.83	-1,938.6	-4,004.4	4,455.2	4,453.4	1.73	2,577.728		
500.0	500.0	890.6	889.2	0.8	1.7	-116.01	-1,942.8	-3,981.1	4,448.0	4,445.6	2.42	1,837.045		
550.0	550.0	1,024.2	1,021.9	0.9	2.0	-116.14	-1,945.6	-3,964.8	4,443.0	4,440.2	2.79	1,593.455		
600.0	600.0	1,157.0	1,153.2	1.0	2.4	-117.18	-1,949.0	-3,945.7	4,437.2	4,434.0	3.17	1,401.402		
700.0	700.0	1,419.3	1,411.2	1.2	3.3	-117.73	-1,957.2	-3,899.2	4,423.4	4,419.4	3.99	1,108.857		
800.0	799.9	1,676.5	1,661.8	1.4	4.4	-118.43	-1,967.2	-3,842.3	4,406.9	4,402.0	4.91	897.906		
861.1	860.9	1,830.5	1,810.5	1.5	5.2	-118.95	-1,974.2	-3,803.0	4,395.6	4,390.0	5.52	796.192		
900.0	899.8	1,899.0	1,876.4	1.6	5.5	-119.14	-1,977.3	-3,784.4	4,387.9	4,382.1	5.82	753.862		
1,000.0	999.6	2,057.0	2,028.3	1.8	6.3	-119.56	-1,981.3	-3,741.2	4,367.2	4,360.7	6.50	671.896		
1,100.0	1,099.5	2,201.5	2,167.3	1.9	7.0	-119.90	-1,981.2	-3,701.5	4,345.4	4,338.2	7.11	610.757		
1,200.0	1,199.3	2,297.6	2,259.6	2.1	7.5	-120.13	-1,980.3	-3,675.0	4,323.1	4,315.5	7.59	569.881		
1,300.0	1,299.2	2,393.6	2,352.0	2.3	8.0	-120.35	-1,979.4	-3,648.6	4,301.0	4,292.9	8.06	533.543		
1,400.0	1,399.1	2,489.7	2,444.3	2.5	8.5	-120.58	-1,978.5	-3,622.1	4,278.9	4,270.3	8.54	501.046		
1,500.0	1,498.9	2,585.8	2,536.6	2.7	9.0	-120.81	-1,977.6	-3,595.7	4,256.8	4,247.8	9.02	471.825		
1,600.0	1,598.8	2,681.8	2,629.0	2.9	9.5	-121.04	-1,976.6	-3,569.2	4,234.8	4,225.3	9.51	445.417		
1,700.0	1,698.6	2,777.9	2,721.3	3.1	10.0	-121.28	-1,975.7	-3,542.7	4,212.9	4,202.9	10.00	421.443		
1,800.0	1,798.5	2,873.9	2,813.6	3.3	10.5	-121.51	-1,974.8	-3,516.3	4,191.1	4,180.6	10.49	399.587		
1,900.0	1,898.3	2,970.0	2,906.0	3.5	11.0	-121.75	-1,973.9	-3,489.8	4,169.4	4,158.4	10.98	379.583		
2,000.0	1,998.2	3,066.1	2,998.3	3.7	11.5	-121.99	-1,973.0	-3,463.4	4,147.7	4,136.2	11.48	361.211		
2,100.0	2,098.0	3,162.1	3,090.7	3.9	12.0	-122.24	-1,972.0	-3,436.9	4,126.0	4,114.1	11.98	344.279		
2,200.0	2,197.9	3,258.1	3,160.9	4.1	12.4	-122.42	-1,971.2	-3,417.0	4,104.7	4,092.3	12.40	330.906		
2,300.0	2,297.7	3,300.0	3,223.5	4.3	12.7	-122.58	-1,970.2	-3,400.0	4,084.1	4,071.3	12.79	319.264		
2,400.0	2,397.6	3,371.7	3,292.8	4.5	13.0	-122.74	-1,968.7	-3,382.0	4,064.3	4,051.1	13.19	308.213		
2,500.0	2,497.4	3,440.5	3,359.7	4.7	13.3	-122.89	-1,967.0	-3,365.4	4,045.1	4,031.6	13.57	298.203		
2,600.0	2,597.3	3,500.0	3,417.5	4.9	13.6	-123.01	-1,965.2	-3,351.7	4,026.7	4,012.8	13.91	289.414		
2,700.0	2,697.1	3,579.4	3,495.0	5.1	13.9	-123.16	-1,962.4	-3,334.2	4,009.0	3,994.7	14.30	280.389		
2,800.0	2,797.0	3,649.4	3,563.3	5.3	14.2	-123.29	-1,959.5	-3,319.7	3,992.1	3,977.4	14.65	272.509		
2,900.0	2,896.8	3,726.8	3,639.1	5.5	14.5	-123.41	-1,956.0	-3,304.4	3,975.8	3,960.8	15.01	264.821		
3,000.0	2,996.7	3,824.9	3,735.2	5.7	14.8	-123.57	-1,951.4	-3,285.3	3,959.7	3,944.3	15.42	256.729		
3,100.0	3,096.5	3,923.0	3,831.4	5.9	15.2	-123.73	-1,946.8	-3,266.2	3,943.7	3,927.9	15.84	249.040		
3,200.0	3,196.4	4,021.1	3,927.5	6.1	15.6	-123.89	-1,942.3	-3,247.2	3,927.7	3,911.5	16.24	241.858		
3,300.0	3,296.3	4,119.2	4,023.6	6.3	16.0	-124.05	-1,937.7	-3,228.1	3,911.8	3,895.1	16.67	234.637		
3,400.0	3,396.1	4,217.3	4,119.7	6.5	16.4	-124.22	-1,933.1	-3,209.0	3,895.8	3,878.7	17.08	228.026		
3,500.0	3,496.0	4,315.4	4,215.8	6.7	16.7	-124.38	-1,928.5	-3,189.9	3,879.9	3,862.4	17.50	221.673		
3,600.0	3,595.8	4,413.5	4,312.0	6.9	17.1	-124.55	-1,923.9	-3,170.8	3,864.0	3,846.1	17.92	215.596		
3,700.0	3,695.7	4,511.6	4,408.1	7.0	17.5	-124.71	-1,919.3	-3,151.8	3,848.2	3,829.9	18.34	209.781		
3,800.0	3,795.5	4,609.7	4,504.2	7.2	17.9	-124.88	-1,914.7	-3,132.7	3,832.4	3,813.6	18.77	204.212		
3,900.0	3,895.4	4,707.8	4,600.3	7.4	18.3	-125.05	-1,910.2	-3,113.6	3,816.6	3,797.4	19.19	198.874		
4,000.0	3,995.2	4,805.9	4,696.4	7.6	18.7	-125.22	-1,905.6	-3,094.5	3,800.9	3,781.3	19.62	193.755		
4,100.0	4,095.1	4,904.0	4,792.6	7.8	19.0	-125.40	-1,901.0	-3,075.4	3,785.2	3,765.1	20.04	188.840		
4,200.0	4,194.9	5,002.2	4,888.7	8.0	19.4	-125.57	-1,896.4	-3,056.3	3,769.5	3,749.0	20.47	184.118		
4,300.0	4,294.8	5,100.3	4,984.8	8.2	19.8	-125.74	-1,891.8	-3,037.3	3,753.9	3,733.0	20.90	179.578		
4,400.0	4,394.6	5,198.4	5,080.9	8.4	20.2	-125.92	-1,887.2	-3,018.2	3,738.3	3,716.9	21.34	175.211		
4,500.0	4,494.5	5,296.5	5,177.1	8.6	20.6	-126.10	-1,882.7	-2,999.1	3,722.7	3,700.9	21.77	171.006		
4,600.0	4,594.3	5,394.6	5,273.2	8.8	21.0	-126.28	-1,878.1	-2,980.0	3,707.2	3,685.0	22.20	166.956		
4,700.0	4,694.2	5,492.7	5,369.3	9.0	21.3	-126.46	-1,873.5	-2,960.9	3,691.7	3,669.0	22.64	163.051		
4,800.0	4,794.0	5,590.8	5,465.4	9.2	21.7	-126.64	-1,868.9	-2,941.9	3,676.2	3,653.1	23.08	159.285		
4,900.0	4,893.9	5,688.9	5,561.5	9.4	22.1	-126.83	-1,864.3	-2,922.8	3,660.8	3,637.3	23.52	155.651		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	5,787.0	5,657.7	9.6	22.5	-127.01	-1,859.7	-2,903.7	3,645.4	3,621.5	23.96	152.141		
5,100.0	5,093.6	5,885.1	5,753.8	9.8	22.9	-127.20	-1,855.2	-2,884.6	3,630.1	3,605.7	24.40	148.750		
5,200.0	5,193.5	5,983.2	5,849.9	10.0	23.3	-127.39	-1,850.6	-2,865.5	3,614.8	3,589.9	24.85	145.472		
5,300.0	5,293.3	9,740.7	7,803.0	10.2	49.8	-94.46	227.9	-2,494.8	3,550.6	3,500.2	50.40	70.444		
5,400.0	5,393.2	9,746.2	7,803.0	10.4	49.9	-94.33	233.3	-2,494.9	3,480.5	3,429.7	50.75	68.582		
5,500.0	5,493.0	9,751.6	7,803.0	10.6	49.9	-94.21	238.7	-2,494.9	3,411.8	3,360.7	51.09	66.774		
5,600.0	5,592.9	9,757.0	7,803.0	10.8	50.0	-94.08	244.2	-2,495.0	3,344.7	3,293.3	51.44	65.021		
5,700.0	5,692.7	9,762.4	7,803.0	11.0	50.1	-93.96	249.6	-2,495.0	3,279.3	3,227.5	51.79	63.324		
5,800.0	5,792.6	9,767.9	7,803.0	11.2	50.2	-93.84	255.0	-2,495.1	3,215.6	3,163.5	52.13	61.683		
5,900.0	5,892.4	9,773.3	7,803.0	11.4	50.2	-93.71	260.4	-2,495.1	3,153.8	3,101.4	52.48	60.100		
6,000.0	5,992.3	9,778.7	7,803.0	11.6	50.3	-93.59	265.9	-2,495.1	3,094.0	3,041.2	52.82	58.575		
6,100.0	6,092.1	9,784.1	7,803.0	11.8	50.4	-93.47	271.3	-2,495.2	3,036.4	2,983.2	53.17	57.110		
6,200.0	6,192.0	9,789.6	7,803.0	12.0	50.5	-93.34	276.7	-2,495.2	2,980.9	2,927.4	53.51	55.706		
6,300.0	6,291.8	9,795.0	7,803.0	12.2	50.5	-93.22	282.1	-2,495.3	2,927.8	2,874.0	53.86	54.363		
6,400.0	6,391.7	9,800.4	7,803.0	12.4	50.6	-93.09	287.6	-2,495.3	2,877.2	2,823.0	54.20	53.083		
6,500.0	6,491.5	9,805.8	7,803.0	12.6	50.7	-92.97	293.0	-2,495.4	2,829.2	2,774.7	54.55	51.867		
6,600.0	6,591.4	9,811.3	7,803.0	12.8	50.8	-92.85	298.4	-2,495.4	2,784.0	2,729.1	54.89	50.717		
6,700.0	6,691.2	9,816.7	7,803.0	13.0	50.8	-92.72	303.8	-2,495.5	2,741.6	2,686.4	55.24	49.634		
6,800.0	6,791.1	9,822.1	7,803.0	13.2	50.9	-92.60	309.3	-2,495.5	2,702.3	2,646.8	55.58	48.618		
6,900.0	6,890.9	9,827.6	7,803.0	13.4	51.0	-92.47	314.7	-2,495.6	2,666.2	2,610.3	55.93	47.672		
7,000.0	6,990.8	9,833.0	7,803.0	13.6	51.1	-92.35	320.1	-2,495.6	2,633.3	2,577.1	56.27	46.796		
7,024.2	7,014.9	9,834.3	7,803.0	13.6	51.1	-92.32	321.4	-2,495.6	2,625.9	2,569.5	56.36	46.595		
7,050.0	7,040.7	9,835.2	7,803.0	13.7	51.1	-93.30	322.4	-2,495.6	2,618.2	2,561.4	56.71	46.165		
7,100.0	7,090.7	9,834.4	7,803.0	13.7	51.1	91.24	321.5	-2,495.6	2,603.8	2,546.6	57.27	45.465		
7,150.0	7,140.5	9,830.1	7,803.0	13.8	51.0	91.76	317.2	-2,495.6	2,590.4	2,532.7	57.66	44.925		
7,200.0	7,189.9	9,822.3	7,803.0	13.8	50.9	92.47	309.4	-2,495.5	2,577.9	2,520.1	57.88	44.539		
7,250.0	7,238.6	9,811.1	7,803.0	13.8	50.8	93.10	298.2	-2,495.4	2,566.5	2,508.5	57.94	44.298		
7,300.0	7,286.4	9,796.5	7,803.0	13.7	50.6	93.60	283.7	-2,495.3	2,556.1	2,498.2	57.84	44.193		
7,350.0	7,333.1	9,778.6	7,803.0	13.7	50.3	93.96	265.8	-2,495.1	2,546.7	2,489.1	57.60	44.215		
7,400.0	7,378.5	9,757.5	7,803.0	13.6	50.0	94.18	244.7	-2,495.0	2,538.3	2,481.1	57.23	44.356		
7,450.0	7,422.2	9,733.3	7,803.0	13.6	49.7	94.28	220.5	-2,494.8	2,531.0	2,474.3	56.74	44.605		
7,500.0	7,464.1	9,706.1	7,803.0	13.5	49.3	94.26	193.3	-2,494.5	2,524.6	2,468.5	56.16	44.951		
7,550.0	7,504.1	9,676.1	7,803.0	13.5	48.9	94.15	163.2	-2,494.3	2,519.1	2,463.6	55.51	45.381		
7,600.0	7,541.8	9,643.3	7,803.0	13.5	48.5	93.95	130.5	-2,494.0	2,514.5	2,459.7	54.80	45.884		
7,650.0	7,577.2	9,608.0	7,803.0	13.4	48.0	93.69	95.2	-2,493.7	2,510.6	2,456.6	54.06	46.445		
7,700.0	7,610.0	9,570.3	7,803.0	13.5	47.5	93.38	57.5	-2,493.4	2,507.4	2,454.1	53.29	47.049		
7,750.0	7,640.2	9,530.4	7,803.0	13.5	46.9	93.03	17.6	-2,493.0	2,504.8	2,452.3	52.53	47.682		
7,800.0	7,667.4	9,488.5	7,803.0	13.6	46.4	92.68	-24.3	-2,492.7	2,502.7	2,450.9	51.79	48.328		
7,850.0	7,691.7	9,444.8	7,803.0	13.7	45.8	92.33	-68.0	-2,492.3	2,501.0	2,449.9	51.07	48.972		
7,900.0	7,712.8	9,399.5	7,803.0	13.9	45.2	91.99	-113.3	-2,491.9	2,499.7	2,449.3	50.39	49.602		
7,950.0	7,730.8	9,352.9	7,803.0	14.1	44.6	91.69	-160.0	-2,491.5	2,498.6	2,448.8	49.77	50.205		
8,000.0	7,745.5	9,305.1	7,803.0	14.4	44.0	91.44	-207.8	-2,491.1	2,497.8	2,448.6	49.19	50.775		
8,050.0	7,756.7	9,256.4	7,803.0	14.7	43.4	91.24	-256.5	-2,490.7	2,497.1	2,448.4	48.67	51.303		
8,100.0	7,764.6	9,207.0	7,803.0	15.1	42.8	91.11	-305.8	-2,490.3	2,496.5	2,448.3	48.20	51.791		
8,150.0	7,769.0	9,157.2	7,803.0	15.5	42.2	91.05	-355.6	-2,489.8	2,496.0	2,448.2	47.78	52.236		
8,188.1	7,770.0	9,119.2	7,803.0	15.9	41.7	91.06	-393.7	-2,489.5	2,495.6	2,448.1	47.49	52.551		
8,200.0	7,770.0	9,107.2	7,803.0	16.0	41.6	91.06	-405.6	-2,489.4	2,495.5	2,448.1	47.41	52.638		
8,300.0	7,770.0	9,007.2	7,803.0	17.0	40.4	91.06	-505.6	-2,488.5	2,494.7	2,447.8	46.82	53.280		
8,400.0	7,770.0	8,907.2	7,803.0	18.1	39.3	91.06	-605.6	-2,487.7	2,493.8	2,447.4	46.37	53.782		
8,500.0	7,770.0	8,807.2	7,803.0	19.3	38.2	91.06	-705.6	-2,486.8	2,492.9	2,446.9	46.03	54.154		
8,600.0	7,770.0	8,707.2	7,803.0	20.6	37.2	91.06	-805.6	-2,486.0	2,492.1	2,446.3	45.81	54.404		
8,700.0	7,770.0	8,607.2	7,803.0	21.9	36.2	91.06	-905.6	-2,485.1	2,491.2	2,445.6	45.68	54.541		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	8,507.2	7,803.0	23.3	35.3	91.06	-1,005.6	-2,484.3	2,490.4	2,444.7	45.64	54.568		
8,900.0	7,770.0	8,407.2	7,803.0	24.8	34.5	91.06	-1,105.6	-2,483.4	2,489.5	2,443.8	45.69	54.485		
9,000.0	7,770.0	8,307.3	7,803.0	26.3	33.7	91.06	-1,205.5	-2,482.5	2,488.7	2,442.8	45.84	54.291		
9,053.2	7,770.0	8,275.4	7,802.3	27.1	33.5	91.04	-1,237.4	-2,482.4	2,488.4	2,442.2	46.24	53.820 CC		
9,100.0	7,770.0	8,250.0	7,800.6	27.8	33.3	91.00	-1,262.7	-2,482.5	2,488.6	2,442.0	46.62	53.380 ES		
9,200.0	7,770.0	8,200.0	7,793.9	29.3	33.0	90.85	-1,312.3	-2,483.4	2,490.3	2,442.8	47.54	52.381		
9,300.0	7,770.0	8,150.0	7,783.1	30.9	32.6	90.60	-1,361.0	-2,485.2	2,494.0	2,445.4	48.51	51.408		
9,400.0	7,770.0	8,100.0	7,768.1	32.5	32.3	90.25	-1,408.6	-2,487.8	2,499.6	2,450.0	49.53	50.465		
9,500.0	7,770.0	8,050.0	7,749.1	34.1	32.0	89.82	-1,454.7	-2,491.1	2,507.3	2,456.7	50.60	49.555		
9,600.0	7,770.0	8,000.0	7,726.2	35.7	31.7	89.29	-1,499.0	-2,495.3	2,517.3	2,465.6	51.71	48.683		
9,700.0	7,770.0	7,950.0	7,699.6	37.3	31.4	88.69	-1,541.0	-2,500.2	2,529.9	2,477.0	52.87	47.854		
9,800.0	7,770.0	7,921.2	7,682.8	39.0	31.2	88.31	-1,564.1	-2,503.4	2,545.0	2,490.7	54.26	46.907		
9,900.0	7,770.0	7,900.0	7,669.6	40.6	31.1	88.01	-1,580.6	-2,505.9	2,563.0	2,507.2	55.72	46.000		
10,000.0	7,770.0	7,850.0	7,636.3	42.3	30.8	87.26	-1,617.3	-2,512.2	2,583.6	2,526.7	56.97	45.355		
10,100.0	7,770.0	7,830.1	7,622.2	44.0	30.7	86.94	-1,631.1	-2,514.9	2,607.2	2,548.7	58.48	44.584		
10,200.0	7,770.0	7,800.0	7,600.0	45.6	30.6	86.44	-1,650.9	-2,519.1	2,633.7	2,573.8	59.92	43.957		
10,300.0	7,770.0	7,782.7	7,586.8	47.3	30.5	86.15	-1,661.8	-2,521.7	2,663.2	2,601.7	61.47	43.326		
10,400.0	7,770.0	7,750.0	7,560.9	49.0	30.3	85.57	-1,681.2	-2,526.6	2,695.6	2,632.7	62.91	42.849		
10,500.0	7,770.0	7,750.0	7,560.9	50.7	30.3	85.57	-1,681.2	-2,526.6	2,730.7	2,666.1	64.59	42.276		
10,600.0	7,770.0	7,726.5	7,541.7	52.4	30.2	85.15	-1,694.2	-2,530.3	2,768.7	2,702.5	66.12	41.875		
10,700.0	7,770.0	7,700.0	7,519.4	54.1	30.1	84.66	-1,707.9	-2,534.7	2,809.5	2,741.8	67.62	41.548		
10,800.0	7,770.0	7,700.0	7,519.4	55.8	30.1	84.66	-1,707.9	-2,534.7	2,852.8	2,783.5	69.31	41.158		
10,900.0	7,770.0	7,700.0	7,519.4	57.5	30.1	84.66	-1,707.9	-2,534.7	2,898.9	2,827.9	71.01	40.825		
11,000.0	7,770.0	7,671.5	7,494.8	59.2	30.0	84.12	-1,721.5	-2,539.4	2,947.1	2,874.6	72.51	40.644		
11,100.0	7,770.0	7,650.0	7,475.8	60.9	29.9	83.70	-1,730.8	-2,543.1	2,998.0	2,924.0	74.06	40.482		
11,200.0	7,770.0	7,650.0	7,475.8	62.6	29.9	83.70	-1,730.8	-2,543.1	3,051.0	2,975.3	75.76	40.273		
11,300.0	7,770.0	7,650.0	7,475.8	64.3	29.9	83.70	-1,730.8	-2,543.1	3,106.4	3,028.9	77.46	40.101		
11,400.0	7,770.0	7,650.0	7,475.8	66.0	29.9	83.70	-1,730.8	-2,543.1	3,163.9	3,084.7	79.17	39.964		
11,500.0	7,770.0	7,623.2	7,451.7	67.7	29.7	83.18	-1,741.5	-2,547.8	3,223.0	3,142.3	80.69	39.943		
11,600.0	7,770.0	7,600.0	7,430.4	69.5	29.6	82.72	-1,749.8	-2,552.0	3,284.3	3,202.1	82.23	39.943		
11,700.0	7,770.0	7,600.0	7,430.4	71.2	29.6	82.72	-1,749.8	-2,552.0	3,347.2	3,263.3	83.93	39.880		
11,800.0	7,770.0	7,600.0	7,430.4	72.9	29.6	82.72	-1,749.8	-2,552.0	3,411.8	3,326.2	85.64	39.839		
11,900.0	7,770.0	7,600.0	7,430.4	74.6	29.6	82.72	-1,749.8	-2,552.0	3,478.2	3,390.8	87.35	39.818		
12,000.0	7,770.0	7,600.0	7,430.4	76.4	29.6	82.72	-1,749.8	-2,552.0	3,546.0	3,457.0	89.06	39.815 SF		
12,100.0	7,770.0	7,600.0	7,430.4	78.1	29.6	82.72	-1,749.8	-2,552.0	3,615.4	3,524.6	90.78	39.827		
12,200.0	7,770.0	7,578.1	7,410.1	79.8	29.6	82.29	-1,756.8	-2,556.0	3,685.8	3,593.5	92.33	39.922		
12,300.0	7,770.0	7,573.1	7,405.4	81.5	29.5	82.19	-1,758.3	-2,556.9	3,757.8	3,663.8	94.00	39.976		
12,400.0	7,770.0	7,550.0	7,383.6	83.3	29.4	81.72	-1,764.7	-2,561.2	3,831.2	3,735.6	95.53	40.104		
12,500.0	7,770.0	7,550.0	7,383.6	85.0	29.4	81.72	-1,764.7	-2,561.2	3,905.4	3,808.1	97.24	40.160		
12,600.0	7,770.0	7,550.0	7,383.6	86.7	29.4	81.72	-1,764.7	-2,561.2	3,980.7	3,881.7	98.96	40.226		
12,700.0	7,770.0	7,550.0	7,383.6	88.5	29.4	81.72	-1,764.7	-2,561.2	4,057.0	3,956.4	100.67	40.299		
12,800.0	7,770.0	7,550.0	7,383.6	90.2	29.4	81.72	-1,764.7	-2,561.2	4,134.4	4,032.0	102.39	40.379		
12,900.0	7,770.0	7,550.0	7,383.6	91.9	29.4	81.72	-1,764.7	-2,561.2	4,212.8	4,108.7	104.11	40.466		
13,000.0	7,770.0	7,550.0	7,383.6	93.7	29.4	81.72	-1,764.7	-2,561.2	4,292.0	4,186.2	105.82	40.558		
13,100.0	7,770.0	7,550.0	7,383.6	95.4	29.4	81.72	-1,764.7	-2,561.2	4,372.1	4,264.6	107.54	40.655		
13,200.0	7,770.0	7,550.0	7,383.6	97.1	29.4	81.72	-1,764.7	-2,561.2	4,453.0	4,343.7	109.26	40.756		
13,300.0	7,770.0	7,550.0	7,383.6	98.9	29.4	81.72	-1,764.7	-2,561.2	4,534.7	4,423.7	110.98	40.860		
13,400.0	7,770.0	7,550.0	7,383.6	100.6	29.4	81.72	-1,764.7	-2,561.2	4,617.0	4,504.3	112.70	40.968		
13,500.0	7,770.0	7,550.0	7,383.6	102.4	29.4	81.72	-1,764.7	-2,561.2	4,700.1	4,585.7	114.42	41.078		
13,600.0	7,770.0	7,526.5	7,361.2	104.1	29.3	81.25	-1,770.2	-2,565.6	4,783.3	4,667.4	115.93	41.260		
13,700.0	7,770.0	7,523.9	7,358.7	105.8	29.3	81.20	-1,770.7	-2,566.1	4,867.6	4,749.9	117.63	41.381		
13,800.0	7,770.0	7,500.0	7,335.7	107.6	29.2	80.71	-1,775.3	-2,570.6	4,952.7	4,833.6	119.12	41.578		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
13,900.0	7,770.0	7,500.0	7,335.7	109.3	29.2	80.71	-1,775.3	-2,570.6	5,038.0	4,917.2	120.84	41.692		
14,000.0	7,770.0	7,500.0	7,335.7	111.1	29.2	80.71	-1,775.3	-2,570.6	5,123.8	5,001.2	122.56	41.808		
14,100.0	7,770.0	7,500.0	7,335.7	112.8	29.2	80.71	-1,775.3	-2,570.6	5,210.1	5,085.8	124.27	41.924		
14,200.0	7,770.0	7,500.0	7,335.7	114.5	29.2	80.71	-1,775.3	-2,570.6	5,296.9	5,170.9	125.99	42.041		
14,300.0	7,770.0	7,500.0	7,335.7	116.3	29.2	80.71	-1,775.3	-2,570.6	5,384.1	5,256.4	127.71	42.158		
14,400.0	7,770.0	7,500.0	7,335.7	118.0	29.2	80.71	-1,775.3	-2,570.6	5,471.8	5,342.3	129.43	42.275		
14,500.0	7,770.0	7,500.0	7,335.7	119.8	29.2	80.71	-1,775.3	-2,570.6	5,559.9	5,428.7	131.15	42.392		
14,600.0	7,770.0	7,500.0	7,335.7	121.5	29.2	80.71	-1,775.3	-2,570.6	5,648.4	5,515.5	132.87	42.509		
14,700.0	7,770.0	7,500.0	7,335.7	123.3	29.2	80.71	-1,775.3	-2,570.6	5,737.2	5,602.6	134.59	42.626		
14,800.0	7,770.0	7,500.0	7,335.7	125.0	29.2	80.71	-1,775.3	-2,570.6	5,826.4	5,690.1	136.31	42.743		
14,900.0	7,770.0	7,500.0	7,335.7	126.7	29.2	80.71	-1,775.3	-2,570.6	5,916.0	5,778.0	138.04	42.859		
15,000.0	7,770.0	7,500.0	7,335.7	128.5	29.2	80.71	-1,775.3	-2,570.6	6,005.9	5,866.2	139.76	42.974		
15,100.0	7,770.0	7,500.0	7,335.7	130.2	29.2	80.71	-1,775.3	-2,570.6	6,096.1	5,954.7	141.48	43.089		
15,200.0	7,770.0	7,500.0	7,335.7	132.0	29.2	80.71	-1,775.3	-2,570.6	6,186.7	6,043.5	143.20	43.203		
15,300.0	7,770.0	7,500.0	7,335.7	133.7	29.2	80.71	-1,775.3	-2,570.6	6,277.5	6,132.5	144.92	43.316		
15,400.0	7,770.0	7,500.0	7,335.7	135.5	29.2	80.71	-1,775.3	-2,570.6	6,368.5	6,221.9	146.65	43.428		
15,500.0	7,770.0	7,500.0	7,335.7	137.2	29.2	80.71	-1,775.3	-2,570.6	6,459.9	6,311.5	148.37	43.539		
15,600.0	7,770.0	7,500.0	7,335.7	139.0	29.2	80.71	-1,775.3	-2,570.6	6,551.5	6,401.4	150.09	43.650		
15,700.0	7,770.0	7,500.0	7,335.7	140.7	29.2	80.71	-1,775.3	-2,570.6	6,643.3	6,491.5	151.81	43.759		
15,800.0	7,770.0	7,500.0	7,335.7	142.4	29.2	80.71	-1,775.3	-2,570.6	6,735.4	6,581.8	153.54	43.868		
15,900.0	7,770.0	7,500.0	7,335.7	144.2	29.2	80.71	-1,775.3	-2,570.6	6,827.7	6,672.4	155.26	43.975		
16,000.0	7,770.0	7,500.0	7,335.7	145.9	29.2	80.71	-1,775.3	-2,570.6	6,920.2	6,763.2	156.99	44.082		
16,100.0	7,770.0	7,500.0	7,335.7	147.7	29.2	80.71	-1,775.3	-2,570.6	7,012.9	6,854.2	158.71	44.187		
16,200.0	7,770.0	7,500.0	7,335.7	149.4	29.2	80.71	-1,775.3	-2,570.6	7,105.8	6,945.4	160.43	44.291		
16,300.0	7,770.0	7,500.0	7,335.7	151.2	29.2	80.71	-1,775.3	-2,570.6	7,198.9	7,036.8	162.16	44.395		
16,400.0	7,770.0	7,500.0	7,335.7	152.9	29.2	80.71	-1,775.3	-2,570.6	7,292.2	7,128.3	163.88	44.497		
16,500.0	7,770.0	7,500.0	7,335.7	154.7	29.2	80.71	-1,775.3	-2,570.6	7,385.7	7,220.0	165.61	44.598		
16,600.0	7,770.0	7,500.0	7,335.7	156.4	29.2	80.71	-1,775.3	-2,570.6	7,479.3	7,312.0	167.33	44.697		
16,700.0	7,770.0	7,500.0	7,335.7	158.2	29.2	80.71	-1,775.3	-2,570.6	7,573.1	7,404.0	169.06	44.796		
16,800.0	7,770.0	7,476.2	7,312.6	159.9	29.1	80.23	-1,778.9	-2,575.2	7,666.5	7,496.0	170.48	44.969		
16,900.0	7,770.0	7,475.2	7,311.7	161.7	29.1	80.21	-1,779.0	-2,575.4	7,760.6	7,588.4	172.20	45.068		
17,000.0	7,770.0	7,474.3	7,310.8	163.4	29.1	80.19	-1,779.1	-2,575.5	7,854.8	7,680.9	173.91	45.167		
17,100.0	7,770.0	7,473.5	7,309.9	165.2	29.1	80.17	-1,779.2	-2,575.7	7,949.1	7,773.5	175.62	45.264		
17,200.0	7,770.0	7,450.0	7,287.0	166.9	29.0	79.70	-1,781.6	-2,580.2	8,044.1	7,867.0	177.03	45.440		
17,300.0	7,770.0	7,450.0	7,287.0	168.7	29.0	79.70	-1,781.6	-2,580.2	8,138.6	7,959.9	178.75	45.531		
17,400.0	7,770.0	7,450.0	7,287.0	170.4	29.0	79.70	-1,781.6	-2,580.2	8,233.3	8,052.9	180.47	45.622		
17,500.0	7,770.0	7,450.0	7,287.0	172.2	29.0	79.70	-1,781.6	-2,580.2	8,328.2	8,146.0	182.19	45.712		
17,600.0	7,770.0	7,450.0	7,287.0	173.9	29.0	79.70	-1,781.6	-2,580.2	8,423.1	8,239.2	183.91	45.800		
17,653.1	7,770.0	7,450.0	7,287.0	174.8	29.0	79.70	-1,781.6	-2,580.2	8,473.5	8,288.7	184.82	45.847		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.69	-1,929.3	-4,010.7	4,450.6					
100.0	100.0	87.0	87.0	0.2	0.1	-115.69	-1,929.3	-4,010.7	4,450.6	4,450.3	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.69	-1,929.3	-4,010.7	4,450.6	4,450.0	0.61	7,306.558		
300.0	300.0	489.7	489.6	0.5	0.8	-115.73	-1,929.3	-4,003.4	4,448.6	4,447.3	1.32	3,381.166		
400.0	400.0	820.8	819.6	0.7	1.5	-115.88	-1,929.3	-3,977.1	4,441.4	4,439.3	2.10	2,116.992		
500.0	500.0	1,147.7	1,143.4	0.8	2.5	-116.13	-1,929.3	-3,932.5	4,429.1	4,426.2	2.93	1,513.329		
550.0	550.0	1,309.0	1,302.1	0.9	3.0	-116.30	-1,929.3	-3,903.7	4,421.1	4,417.7	3.36	1,313.984		
600.0	600.0	1,468.6	1,458.3	1.0	3.7	-117.42	-1,929.3	-3,870.8	4,411.9	4,408.1	3.81	1,157.943		
700.0	700.0	1,781.5	1,761.5	1.2	5.1	-118.14	-1,929.3	-3,793.8	4,390.6	4,385.8	4.79	916.241		
800.0	799.9	1,985.4	1,956.7	1.4	6.2	-118.81	-1,929.3	-3,734.9	4,366.0	4,360.4	5.57	783.874		
861.1	860.9	2,043.7	2,012.3	1.5	6.5	-119.09	-1,929.3	-3,717.5	4,351.0	4,345.2	5.86	742.070		
900.0	899.8	2,080.8	2,047.7	1.6	6.7	-119.18	-1,929.3	-3,706.4	4,341.6	4,335.6	6.05	717.857		
1,000.0	999.6	2,176.1	2,138.6	1.8	7.3	-119.42	-1,929.3	-3,677.9	4,317.4	4,310.9	6.53	661.415		
1,100.0	1,099.5	2,271.4	2,229.6	1.9	7.8	-119.67	-1,929.3	-3,649.4	4,293.3	4,286.3	7.01	612.130		
1,200.0	1,199.3	2,366.7	2,320.6	2.1	8.3	-119.92	-1,929.3	-3,621.0	4,269.3	4,261.8	7.51	568.790		
1,300.0	1,299.2	2,462.0	2,411.5	2.3	8.9	-120.17	-1,929.3	-3,592.5	4,245.4	4,237.4	8.00	530.428		
1,400.0	1,399.1	2,557.3	2,502.5	2.5	9.4	-120.43	-1,929.3	-3,564.0	4,221.5	4,213.0	8.51	496.263		
1,500.0	1,498.9	2,652.6	2,593.4	2.7	9.9	-120.68	-1,929.3	-3,535.5	4,197.8	4,188.8	9.01	465.666		
1,600.0	1,598.8	2,747.9	2,684.4	2.9	10.5	-120.94	-1,929.3	-3,507.0	4,174.1	4,164.6	9.53	438.120		
1,700.0	1,698.6	2,843.2	2,775.3	3.1	11.0	-121.21	-1,929.3	-3,478.5	4,150.5	4,140.4	10.04	413.205		
1,800.0	1,798.5	2,938.6	2,866.3	3.3	11.5	-121.47	-1,929.3	-3,450.0	4,127.0	4,116.4	10.57	390.570		
1,900.0	1,898.3	3,033.9	2,957.2	3.5	12.1	-121.74	-1,929.4	-3,421.5	4,103.5	4,092.5	11.09	369.924		
2,000.0	1,998.2	3,129.2	3,048.2	3.7	12.6	-122.01	-1,929.4	-3,393.0	4,080.2	4,068.6	11.62	351.021		
2,100.0	2,098.0	3,224.5	3,139.1	3.9	13.2	-122.29	-1,929.4	-3,364.6	4,057.0	4,044.8	12.16	333.656		
2,200.0	2,197.9	3,319.8	3,230.1	4.1	13.7	-122.57	-1,929.4	-3,336.1	4,033.8	4,021.1	12.70	317.653		
2,300.0	2,297.7	3,415.1	3,321.0	4.3	14.2	-122.85	-1,929.4	-3,307.6	4,010.8	3,997.5	13.24	302.861		
2,400.0	2,397.6	3,510.4	3,412.0	4.5	14.8	-123.13	-1,929.4	-3,279.1	3,987.8	3,974.0	13.79	289.151		
2,500.0	2,497.4	3,605.7	3,503.0	4.7	15.3	-123.42	-1,929.4	-3,250.6	3,964.9	3,950.6	14.34	276.412		
2,600.0	2,597.3	3,701.0	3,593.9	4.9	15.9	-123.71	-1,929.4	-3,222.1	3,942.2	3,927.3	14.90	264.546		
2,700.0	2,697.1	3,796.4	3,684.9	5.1	16.4	-124.00	-1,929.4	-3,193.6	3,919.5	3,904.1	15.46	253.470		
2,800.0	2,797.0	3,891.7	3,775.8	5.3	16.9	-124.30	-1,929.4	-3,165.1	3,897.0	3,880.9	16.03	243.109		
2,900.0	2,896.8	3,987.0	3,866.8	5.5	17.5	-124.60	-1,929.4	-3,136.6	3,874.5	3,857.9	16.60	233.398		
3,000.0	2,996.7	4,082.3	3,957.7	5.7	18.0	-124.90	-1,929.4	-3,108.2	3,852.2	3,835.0	17.18	224.280		
3,100.0	3,096.5	4,177.6	4,048.7	5.9	18.6	-125.21	-1,929.4	-3,079.7	3,829.9	3,812.2	17.76	215.704		
3,200.0	3,196.4	4,272.9	4,139.6	6.1	19.1	-125.52	-1,929.4	-3,051.2	3,807.8	3,789.5	18.34	207.624		
3,300.0	3,296.3	4,368.2	4,230.6	6.3	19.7	-125.84	-1,929.4	-3,022.7	3,785.8	3,766.9	18.93	200.000		
3,400.0	3,396.1	4,463.5	4,321.5	6.5	20.2	-126.15	-1,929.4	-2,994.2	3,763.9	3,744.4	19.52	192.797		
3,500.0	3,496.0	4,558.8	4,412.5	6.7	20.7	-126.47	-1,929.4	-2,965.7	3,742.1	3,722.0	20.12	185.981		
3,600.0	3,595.8	4,654.1	4,503.4	6.9	21.3	-126.80	-1,929.4	-2,937.2	3,720.4	3,699.7	20.72	179.523		
3,700.0	3,695.7	4,749.5	4,594.4	7.0	21.8	-127.13	-1,929.4	-2,908.7	3,698.9	3,677.6	21.33	173.398		
3,800.0	3,795.5	4,844.8	4,685.3	7.2	22.4	-127.46	-1,929.4	-2,880.2	3,677.5	3,655.5	21.94	167.581		
3,900.0	3,895.4	4,940.1	4,776.3	7.4	22.9	-127.79	-1,929.4	-2,851.7	3,656.2	3,633.6	22.56	162.051		
4,000.0	3,995.2	5,035.4	4,867.3	7.6	23.5	-128.13	-1,929.5	-2,823.3	3,635.0	3,611.8	23.18	156.788		
4,100.0	4,095.1	5,130.7	4,958.2	7.8	24.0	-128.48	-1,929.5	-2,794.8	3,614.0	3,590.2	23.81	151.775		
4,200.0	4,194.9	5,226.0	5,049.2	8.0	24.6	-128.82	-1,929.5	-2,766.3	3,593.1	3,568.6	24.44	146.994		
4,300.0	4,294.8	5,321.3	5,140.1	8.2	25.1	-129.17	-1,929.5	-2,737.8	3,572.3	3,547.2	25.08	142.432		
4,400.0	4,394.6	5,416.6	5,231.1	8.4	25.6	-129.53	-1,929.5	-2,709.3	3,551.7	3,525.9	25.72	138.074		
4,500.0	4,494.5	5,511.9	5,322.0	8.6	26.2	-129.89	-1,929.5	-2,680.8	3,531.2	3,504.8	26.37	133.908		
4,600.0	4,594.3	5,607.3	5,413.0	8.8	26.7	-130.25	-1,929.5	-2,652.3	3,510.8	3,483.8	27.02	129.923		
4,700.0	4,694.2	5,702.6	5,503.9	9.0	27.3	-130.62	-1,929.5	-2,623.8	3,490.6	3,462.9	27.68	126.107		
4,800.0	4,794.0	5,797.9	5,594.9	9.2	27.8	-130.99	-1,929.5	-2,595.3	3,470.5	3,442.2	28.34	122.452		
4,900.0	4,893.9	5,941.1	5,750.0	9.4	50.8	-100.06	18.7	-2,170.2	3,448.5	3,405.9	42.63	80.887		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,000.0	4,993.7	9,546.5	7,550.0	9.6	50.9	-99.92	24.0	-2,170.7	3,372.2	3,329.2	43.00	78.424	
5,100.0	5,093.6	9,551.9	7,550.0	9.8	50.9	-99.78	29.4	-2,171.3	3,297.1	3,253.8	43.36	76.033	
5,200.0	5,193.5	9,557.3	7,550.0	10.0	51.0	-99.64	34.8	-2,171.8	3,223.4	3,179.7	43.73	73.711	
5,300.0	5,293.3	9,562.7	7,550.0	10.2	51.0	-99.50	40.1	-2,172.3	3,151.2	3,107.1	44.10	71.461	
5,400.0	5,393.2	9,568.1	7,550.0	10.4	51.1	-99.36	45.5	-2,172.8	3,080.5	3,036.0	44.46	69.282	
5,500.0	5,493.0	9,573.4	7,550.0	10.6	51.2	-99.22	50.9	-2,173.3	3,011.4	2,966.6	44.83	67.176	
5,600.0	5,592.9	9,578.8	7,550.0	10.8	51.2	-99.08	56.2	-2,173.8	2,944.1	2,898.9	45.19	65.143	
5,700.0	5,692.7	9,584.2	7,550.0	11.0	51.3	-98.94	61.6	-2,174.4	2,878.7	2,833.1	45.56	63.184	
5,800.0	5,792.6	9,589.6	7,550.0	11.2	51.3	-98.80	67.0	-2,174.9	2,815.3	2,769.4	45.93	61.300	
5,900.0	5,892.4	9,595.0	7,550.0	11.4	51.4	-98.66	72.3	-2,175.4	2,754.1	2,707.8	46.29	59.492	
6,000.0	5,992.3	9,600.4	7,550.0	11.6	51.5	-98.52	77.7	-2,175.9	2,695.2	2,648.5	46.66	57.762	
6,100.0	6,092.1	9,605.8	7,550.0	11.8	51.5	-98.38	83.1	-2,176.4	2,638.7	2,591.7	47.03	56.111	
6,200.0	6,192.0	9,611.2	7,550.0	12.0	51.6	-98.24	88.5	-2,176.9	2,584.9	2,537.5	47.39	54.540	
6,300.0	6,291.8	9,616.6	7,550.0	12.2	51.7	-98.10	93.8	-2,177.4	2,533.9	2,486.1	47.76	53.053	
6,400.0	6,391.7	9,622.0	7,550.0	12.4	51.7	-97.96	99.2	-2,178.0	2,485.8	2,437.7	48.13	51.649	
6,500.0	6,491.5	9,627.4	7,550.0	12.6	51.8	-97.82	104.6	-2,178.5	2,440.9	2,392.4	48.50	50.332	
6,600.0	6,591.4	9,632.8	7,550.0	12.8	51.8	-97.68	109.9	-2,179.0	2,399.3	2,350.4	48.86	49.102	
6,700.0	6,691.2	9,638.2	7,550.0	13.0	51.9	-97.54	115.3	-2,179.5	2,361.1	2,311.9	49.23	47.961	
6,800.0	6,791.1	9,643.6	7,550.0	13.2	52.0	-97.40	120.7	-2,180.0	2,326.7	2,277.1	49.60	46.911	
6,900.0	6,890.9	9,649.0	7,550.0	13.4	52.0	-97.26	126.0	-2,180.5	2,296.1	2,246.1	49.96	45.954	
7,000.0	6,990.8	9,654.4	7,550.0	13.6	52.1	-97.12	131.4	-2,181.1	2,269.4	2,219.1	50.33	45.089	
7,024.2	7,014.9	9,655.7	7,550.0	13.6	52.1	-97.09	132.7	-2,181.2	2,263.6	2,213.2	50.42	44.894	
7,050.0	7,040.7	9,656.6	7,550.0	13.7	52.1	-98.22	133.6	-2,181.3	2,257.6	2,206.8	50.77	44.469	
7,100.0	7,090.7	9,655.8	7,550.0	13.7	52.1	86.03	132.8	-2,181.2	2,246.5	2,195.2	51.31	43.781	
7,150.0	7,140.5	9,651.5	7,550.0	13.8	52.1	86.25	128.5	-2,180.8	2,236.2	2,184.5	51.69	43.259	
7,200.0	7,189.9	9,643.7	7,550.0	13.8	52.0	86.69	120.8	-2,180.0	2,226.7	2,174.8	51.91	42.897	
7,250.0	7,238.6	9,632.5	7,550.0	13.8	51.8	87.04	109.7	-2,179.0	2,218.1	2,166.1	51.96	42.685	
7,300.0	7,286.4	9,618.0	7,550.0	13.7	51.7	87.28	95.2	-2,177.6	2,210.2	2,158.4	51.87	42.614	
7,350.0	7,333.1	9,600.2	7,550.0	13.7	51.5	87.38	77.5	-2,175.9	2,203.2	2,151.6	51.63	42.674	
7,400.0	7,378.5	9,579.2	7,550.0	13.6	51.2	87.37	56.6	-2,173.9	2,197.0	2,145.7	51.27	42.851	
7,450.0	7,422.2	9,555.1	7,550.0	13.6	51.0	87.25	32.6	-2,171.6	2,191.5	2,140.6	50.81	43.132	
7,500.0	7,464.1	9,528.1	7,550.0	13.5	50.6	87.03	5.7	-2,169.0	2,186.6	2,136.3	50.26	43.503	
7,550.0	7,504.1	9,498.1	7,550.0	13.5	50.3	86.74	-24.1	-2,166.1	2,182.3	2,132.6	49.66	43.946	
7,600.0	7,541.8	9,465.5	7,550.0	13.5	50.0	86.39	-56.6	-2,163.0	2,178.5	2,129.5	49.02	44.441	
7,650.0	7,577.2	9,430.4	7,550.0	13.4	49.6	86.00	-91.6	-2,159.6	2,175.1	2,126.7	48.37	44.971	
7,700.0	7,610.0	9,392.8	7,550.0	13.5	49.2	85.59	-128.9	-2,156.0	2,172.0	2,124.3	47.72	45.514	
7,750.0	7,640.2	9,353.1	7,550.0	13.5	48.7	85.19	-168.5	-2,152.2	2,169.1	2,121.9	47.11	46.047	
7,800.0	7,667.4	9,311.4	7,550.0	13.6	48.3	84.81	-210.0	-2,148.2	2,166.2	2,119.7	46.53	46.554	
7,850.0	7,691.7	9,267.9	7,550.0	13.7	47.9	84.47	-253.3	-2,144.1	2,163.4	2,117.3	46.02	47.012	
7,900.0	7,712.8	9,222.8	7,550.0	13.9	47.4	84.19	-298.2	-2,139.8	2,160.4	2,114.8	45.57	47.411	
7,950.0	7,730.8	9,176.4	7,550.0	14.1	47.0	83.99	-344.4	-2,135.3	2,157.3	2,112.1	45.19	47.739	
8,000.0	7,745.5	9,128.8	7,550.0	14.4	46.5	83.87	-391.7	-2,130.8	2,153.9	2,109.1	44.88	47.991	
8,050.0	7,756.7	9,080.3	7,550.0	14.7	46.0	83.86	-440.0	-2,126.1	2,150.3	2,105.7	44.64	48.168	
8,100.0	7,764.6	9,031.2	7,550.0	15.1	45.6	83.96	-488.9	-2,121.4	2,146.3	2,101.9	44.46	48.275	
8,150.0	7,769.0	8,981.6	7,550.0	15.5	45.1	84.17	-538.3	-2,116.7	2,142.0	2,097.7	44.32	48.325	
8,188.1	7,770.0	8,943.7	7,550.0	15.9	44.8	84.42	-575.9	-2,113.1	2,138.5	2,094.2	44.25	48.332	
8,200.0	7,770.0	8,931.9	7,550.0	16.0	44.7	84.42	-587.8	-2,111.9	2,137.3	2,093.2	44.17	48.390	
8,300.0	7,770.0	8,832.3	7,550.0	17.0	43.9	84.39	-686.9	-2,102.4	2,127.8	2,084.2	43.62	48.784	
8,400.0	7,770.0	8,732.8	7,550.0	18.1	43.1	84.37	-786.0	-2,092.9	2,118.3	2,075.1	43.21	49.029	
8,500.0	7,770.0	8,633.2	7,550.0	19.3	42.4	84.34	-885.0	-2,083.4	2,108.8	2,065.9	42.92	49.135	
8,600.0	7,770.0	8,533.7	7,550.0	20.6	41.8	84.32	-984.1	-2,073.8	2,099.2	2,056.5	42.74	49.111	
8,700.0	7,770.0	8,434.1	7,550.0	21.9	41.2	84.29	-1,083.2	-2,064.3	2,089.7	2,047.0	42.68	48.963	

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	8,334.6	7,550.0	23.3	40.7	84.26	-1,182.3	-2,054.8	2,080.2	2,037.5	42.72	48.693		
8,900.0	7,770.0	8,235.1	7,550.0	24.8	40.2	84.24	-1,281.4	-2,045.3	2,070.7	2,027.8	42.87	48.300		
9,000.0	7,770.0	8,157.7	7,549.8	26.3	39.9	84.21	-1,358.4	-2,037.9	2,061.4	2,018.0	43.39	47.507		
9,100.0	7,770.0	8,116.5	7,547.3	27.8	39.8	84.13	-1,399.4	-2,034.8	2,054.3	2,009.9	44.41	46.255		
9,200.0	7,770.0	8,075.7	7,542.1	29.3	39.6	83.98	-1,439.8	-2,032.5	2,050.2	2,004.7	45.48	45.082		
9,280.8	7,770.0	8,050.0	7,537.3	30.6	39.5	83.85	-1,465.0	-2,031.6	2,049.0	2,002.5	46.44	44.121	CC	
9,300.0	7,770.0	8,050.0	7,537.3	30.9	39.5	83.85	-1,465.0	-2,031.6	2,049.1	2,002.3	46.74	43.840	ES	
9,400.0	7,770.0	8,000.0	7,525.1	32.5	39.4	83.50	-1,513.5	-2,030.7	2,050.7	2,003.0	47.77	42.932		
9,500.0	7,770.0	7,950.0	7,508.9	34.1	39.2	83.06	-1,560.8	-2,031.3	2,055.6	2,006.8	48.84	42.093		
9,600.0	7,770.0	7,923.7	7,498.9	35.7	39.1	82.78	-1,585.0	-2,032.1	2,063.6	2,013.4	50.18	41.124		
9,700.0	7,770.0	7,900.0	7,488.9	37.3	39.0	82.51	-1,606.5	-2,033.2	2,075.0	2,023.4	51.56	40.247		
9,800.0	7,770.0	7,850.0	7,465.1	39.0	38.8	81.87	-1,650.4	-2,036.4	2,089.6	2,036.9	52.71	39.646		
9,900.0	7,770.0	7,827.8	7,453.4	40.6	38.7	81.55	-1,669.1	-2,038.2	2,107.5	2,053.4	54.14	38.928		
10,000.0	7,770.0	7,800.0	7,437.9	42.3	38.6	81.14	-1,692.0	-2,040.9	2,128.9	2,073.4	55.52	38.343		
10,100.0	7,770.0	7,773.4	7,422.0	44.0	38.5	80.72	-1,713.2	-2,043.9	2,153.7	2,096.8	56.94	37.826		
10,200.0	7,770.0	7,750.0	7,407.3	45.6	38.5	80.33	-1,731.1	-2,046.7	2,181.9	2,123.6	58.38	37.375		
10,300.0	7,770.0	7,726.0	7,391.5	47.3	38.4	79.92	-1,748.9	-2,050.0	2,213.5	2,153.7	59.83	36.995		
10,400.0	7,770.0	7,700.0	7,373.6	49.0	38.3	79.45	-1,767.4	-2,053.8	2,248.4	2,187.1	61.26	36.700		
10,500.0	7,770.0	7,700.0	7,373.6	50.7	38.3	79.45	-1,767.4	-2,053.8	2,286.6	2,223.7	62.92	36.340		
10,600.0	7,770.0	7,650.0	7,337.2	52.4	38.1	78.52	-1,800.6	-2,062.0	2,327.8	2,263.7	64.16	36.281		
10,700.0	7,770.0	7,650.0	7,337.2	54.1	38.1	78.52	-1,800.6	-2,062.0	2,371.8	2,306.0	65.82	36.033		
10,800.0	7,770.0	7,650.0	7,337.2	55.8	38.1	78.52	-1,800.6	-2,062.0	2,419.2	2,351.7	67.49	35.845		
10,900.0	7,770.0	7,600.0	7,298.1	57.5	37.8	77.54	-1,830.4	-2,071.4	2,469.1	2,400.4	68.72	35.928		
11,000.0	7,770.0	7,600.0	7,298.1	59.2	37.8	77.54	-1,830.4	-2,071.4	2,521.4	2,451.0	70.39	35.820		
11,100.0	7,770.0	7,600.0	7,298.1	60.9	37.8	77.54	-1,830.4	-2,071.4	2,576.4	2,504.4	72.06	35.754	SF	
11,200.0	7,770.0	7,579.6	7,281.6	62.6	37.8	77.13	-1,841.5	-2,075.5	2,633.8	2,560.3	73.55	35.810		
11,300.0	7,770.0	7,550.0	7,256.9	64.3	37.6	76.53	-1,856.6	-2,081.8	2,693.8	2,618.8	74.95	35.943		
11,400.0	7,770.0	7,550.0	7,256.9	66.0	37.6	76.53	-1,856.6	-2,081.8	2,755.3	2,678.7	76.61	35.964		
11,500.0	7,770.0	7,550.0	7,256.9	67.7	37.6	76.53	-1,856.6	-2,081.8	2,819.1	2,740.8	78.28	36.011		
11,600.0	7,770.0	7,550.0	7,256.9	69.5	37.6	76.53	-1,856.6	-2,081.8	2,885.0	2,805.0	79.96	36.081		
11,700.0	7,770.0	7,529.2	7,239.1	71.2	37.5	76.10	-1,866.4	-2,086.4	2,952.3	2,870.9	81.43	36.256		
11,800.0	7,770.0	7,520.8	7,231.8	72.9	37.5	75.92	-1,870.2	-2,088.3	3,021.5	2,938.5	83.02	36.396		
11,900.0	7,770.0	7,500.0	7,213.7	74.6	37.4	75.49	-1,879.0	-2,093.1	3,092.4	3,007.9	84.48	36.606		
12,000.0	7,770.0	7,500.0	7,213.7	76.4	37.4	75.49	-1,879.0	-2,093.1	3,164.5	3,078.3	86.15	36.733		
12,100.0	7,770.0	7,500.0	7,213.7	78.1	37.4	75.49	-1,879.0	-2,093.1	3,238.0	3,150.2	87.82	36.872		
12,200.0	7,770.0	7,500.0	7,213.7	79.8	37.4	75.49	-1,879.0	-2,093.1	3,313.0	3,223.5	89.49	37.020		
12,300.0	7,770.0	7,500.0	7,213.7	81.5	37.4	75.49	-1,879.0	-2,093.1	3,389.2	3,298.1	91.17	37.176		
12,400.0	7,770.0	7,500.0	7,213.7	83.3	37.4	75.49	-1,879.0	-2,093.1	3,466.7	3,373.8	92.84	37.340		
12,500.0	7,770.0	7,473.4	7,190.0	85.0	37.3	74.93	-1,889.4	-2,099.6	3,544.6	3,450.4	94.22	37.620		
12,600.0	7,770.0	7,450.0	7,168.9	86.7	37.2	74.43	-1,897.5	-2,105.4	3,624.3	3,528.6	95.62	37.903		
12,700.0	7,770.0	7,450.0	7,168.9	88.5	37.2	74.43	-1,897.5	-2,105.4	3,704.4	3,607.1	97.29	38.076		
12,800.0	7,770.0	7,450.0	7,168.9	90.2	37.2	74.43	-1,897.5	-2,105.4	3,785.5	3,686.5	98.96	38.252		
12,900.0	7,770.0	7,450.0	7,168.9	91.9	37.2	74.43	-1,897.5	-2,105.4	3,867.5	3,766.8	100.63	38.432		
13,000.0	7,770.0	7,450.0	7,168.9	93.7	37.2	74.43	-1,897.5	-2,105.4	3,950.3	3,848.0	102.30	38.613		
13,100.0	7,770.0	7,450.0	7,168.9	95.4	37.2	74.43	-1,897.5	-2,105.4	4,033.9	3,929.9	103.98	38.796		
13,200.0	7,770.0	7,450.0	7,168.9	97.1	37.2	74.43	-1,897.5	-2,105.4	4,118.2	4,012.5	105.65	38.979		
13,300.0	7,770.0	7,450.0	7,168.9	98.9	37.2	74.43	-1,897.5	-2,105.4	4,203.2	4,095.8	107.32	39.163		
13,400.0	7,770.0	7,450.0	7,168.9	100.6	37.2	74.43	-1,897.5	-2,105.4	4,288.8	4,179.8	109.00	39.347		
13,500.0	7,770.0	7,450.0	7,168.9	102.4	37.2	74.43	-1,897.5	-2,105.4	4,375.1	4,264.4	110.67	39.531		
13,600.0	7,770.0	7,425.0	7,146.0	104.1	37.0	73.90	-1,905.2	-2,111.8	4,461.3	4,349.3	112.01	39.828		
13,700.0	7,770.0	7,400.0	7,122.8	105.8	36.9	73.38	-1,911.9	-2,118.4	4,549.0	4,435.6	113.34	40.136		
13,800.0	7,770.0	7,400.0	7,122.8	107.6	36.9	73.38	-1,911.9	-2,118.4	4,636.5	4,521.5	115.01	40.316		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	7,400.0	7,122.8	109.3	36.9	73.38	-1,911.9	-2,118.4	4,724.6	4,607.9	116.67	40.494		
14,000.0	7,770.0	7,400.0	7,122.8	111.1	36.9	73.38	-1,911.9	-2,118.4	4,813.2	4,694.8	118.34	40.671		
14,100.0	7,770.0	7,400.0	7,122.8	112.8	36.9	73.38	-1,911.9	-2,118.4	4,902.1	4,782.1	120.01	40.847		
14,200.0	7,770.0	7,400.0	7,122.8	114.5	36.9	73.38	-1,911.9	-2,118.4	4,991.5	4,869.9	121.68	41.022		
14,300.0	7,770.0	7,400.0	7,122.8	116.3	36.9	73.38	-1,911.9	-2,118.4	5,081.3	4,958.0	123.35	41.194		
14,400.0	7,770.0	7,400.0	7,122.8	118.0	36.9	73.38	-1,911.9	-2,118.4	5,171.5	5,046.5	125.02	41.365		
14,500.0	7,770.0	7,400.0	7,122.8	119.8	36.9	73.38	-1,911.9	-2,118.4	5,262.0	5,135.3	126.69	41.534		
14,600.0	7,770.0	7,400.0	7,122.8	121.5	36.9	73.38	-1,911.9	-2,118.4	5,352.9	5,224.5	128.36	41.701		
14,700.0	7,770.0	7,400.0	7,122.8	123.3	36.9	73.38	-1,911.9	-2,118.4	5,444.1	5,314.0	130.03	41.867		
14,800.0	7,770.0	7,400.0	7,122.8	125.0	36.9	73.38	-1,911.9	-2,118.4	5,535.5	5,403.8	131.70	42.030		
14,900.0	7,770.0	7,400.0	7,122.8	126.7	36.9	73.38	-1,911.9	-2,118.4	5,627.3	5,493.9	133.38	42.191		
15,000.0	7,770.0	7,400.0	7,122.8	128.5	36.9	73.38	-1,911.9	-2,118.4	5,719.4	5,584.3	135.05	42.351		
15,100.0	7,770.0	7,400.0	7,122.8	130.2	36.9	73.38	-1,911.9	-2,118.4	5,811.7	5,675.0	136.72	42.508		
15,200.0	7,770.0	7,400.0	7,122.8	132.0	36.9	73.38	-1,911.9	-2,118.4	5,904.2	5,765.9	138.39	42.663		
15,300.0	7,770.0	7,400.0	7,122.8	133.7	36.9	73.38	-1,911.9	-2,118.4	5,997.0	5,857.0	140.07	42.816		
15,400.0	7,770.0	7,400.0	7,122.8	135.5	36.9	73.38	-1,911.9	-2,118.4	6,090.1	5,948.3	141.74	42.967		
15,500.0	7,770.0	7,400.0	7,122.8	137.2	36.9	73.38	-1,911.9	-2,118.4	6,183.3	6,039.9	143.41	43.116		
15,600.0	7,770.0	7,375.8	7,100.2	139.0	36.8	72.87	-1,917.4	-2,125.0	6,276.2	6,131.6	144.66	43.386		
15,700.0	7,770.0	7,374.1	7,098.6	140.7	36.8	72.83	-1,917.7	-2,125.5	6,369.8	6,223.5	146.30	43.540		
15,800.0	7,770.0	7,350.0	7,075.9	142.4	36.7	72.33	-1,922.1	-2,132.2	6,464.0	6,316.5	147.53	43.816		
15,900.0	7,770.0	7,350.0	7,075.9	144.2	36.7	72.33	-1,922.1	-2,132.2	6,557.9	6,408.7	149.19	43.956		
16,000.0	7,770.0	7,350.0	7,075.9	145.9	36.7	72.33	-1,922.1	-2,132.2	6,652.0	6,501.1	150.86	44.095		
16,100.0	7,770.0	7,350.0	7,075.9	147.7	36.7	72.33	-1,922.1	-2,132.2	6,746.2	6,593.7	152.52	44.231		
16,200.0	7,770.0	7,350.0	7,075.9	149.4	36.7	72.33	-1,922.1	-2,132.2	6,840.6	6,686.4	154.19	44.365		
16,300.0	7,770.0	7,350.0	7,075.9	151.2	36.7	72.33	-1,922.1	-2,132.2	6,935.1	6,779.3	155.85	44.498		
16,400.0	7,770.0	7,350.0	7,075.9	152.9	36.7	72.33	-1,922.1	-2,132.2	7,029.8	6,872.3	157.52	44.629		
16,500.0	7,770.0	7,350.0	7,075.9	154.7	36.7	72.33	-1,922.1	-2,132.2	7,124.7	6,965.5	159.18	44.758		
16,600.0	7,770.0	7,350.0	7,075.9	156.4	36.7	72.33	-1,922.1	-2,132.2	7,219.6	7,058.8	160.85	44.885		
16,700.0	7,770.0	7,350.0	7,075.9	158.2	36.7	72.33	-1,922.1	-2,132.2	7,314.8	7,152.2	162.52	45.010		
16,800.0	7,770.0	7,350.0	7,075.9	159.9	36.7	72.33	-1,922.1	-2,132.2	7,410.0	7,245.8	164.18	45.133		
16,900.0	7,770.0	7,350.0	7,075.9	161.7	36.7	72.33	-1,922.1	-2,132.2	7,505.4	7,339.5	165.85	45.255		
17,000.0	7,770.0	7,350.0	7,075.9	163.4	36.7	72.33	-1,922.1	-2,132.2	7,600.9	7,433.3	167.51	45.374		
17,100.0	7,770.0	7,350.0	7,075.9	165.2	36.7	72.33	-1,922.1	-2,132.2	7,696.5	7,527.3	169.18	45.493		
17,200.0	7,770.0	7,350.0	7,075.9	166.9	36.7	72.33	-1,922.1	-2,132.2	7,792.2	7,621.3	170.85	45.609		
17,300.0	7,770.0	7,350.0	7,075.9	168.7	36.7	72.33	-1,922.1	-2,132.2	7,888.0	7,715.5	172.51	45.724		
17,400.0	7,770.0	7,350.0	7,075.9	170.4	36.7	72.33	-1,922.1	-2,132.2	7,983.9	7,809.7	174.18	45.837		
17,500.0	7,770.0	7,350.0	7,075.9	172.2	36.7	72.33	-1,922.1	-2,132.2	8,079.9	7,904.1	175.85	45.948		
17,600.0	7,770.0	7,350.0	7,075.9	173.9	36.7	72.33	-1,922.1	-2,132.2	8,176.0	7,998.5	177.51	46.058		
17,653.1	7,770.0	7,350.0	7,075.9	174.8	36.7	72.33	-1,922.1	-2,132.2	8,227.1	8,048.7	178.40	46.116		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-115.17	-1,937.1	-4,122.2	4,554.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.17	-1,937.1	-4,122.2	4,554.7	4,554.4	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.17	-1,937.1	-4,122.2	4,554.7	4,554.1	0.60	7,542.323 CC		
300.0	300.0	268.9	268.9	0.5	0.4	-115.16	-1,936.8	-4,122.5	4,554.8	4,553.9	0.93	4,912.324		
400.0	400.0	351.0	351.0	0.7	0.6	-115.15	-1,935.6	-4,123.5	4,555.4	4,554.1	1.25	3,651.034		
500.0	500.0	433.0	432.9	0.8	0.7	-115.11	-1,933.5	-4,125.4	4,556.3	4,554.7	1.57	2,898.618		
550.0	550.0	473.9	473.8	0.9	0.8	-115.09	-1,932.2	-4,126.5	4,556.9	4,555.2	1.74	2,625.170		
600.0	600.0	514.8	514.7	1.0	0.9	-115.90	-1,930.6	-4,127.9	4,557.7	4,555.8	1.90	2,397.274		
700.0	700.0	600.0	599.7	1.2	1.0	-115.83	-1,926.6	-4,131.4	4,560.2	4,557.9	2.25	2,031.060		
800.0	799.9	678.4	677.8	1.4	1.2	-115.75	-1,922.1	-4,135.4	4,563.8	4,561.2	2.59	1,762.540		
861.1	860.9	728.3	727.5	1.5	1.3	-115.70	-1,918.8	-4,138.2	4,566.6	4,563.8	2.81	1,624.796		
900.0	899.8	760.0	759.2	1.6	1.4	-115.68	-1,916.5	-4,140.2	4,568.6	4,565.6	2.95	1,546.292		
1,000.0	999.6	841.6	840.2	1.8	1.6	-115.63	-1,910.1	-4,145.8	4,573.8	4,570.5	3.33	1,373.111		
1,100.0	1,099.5	937.4	935.4	1.9	1.8	-115.56	-1,901.8	-4,153.0	4,579.4	4,575.7	3.75	1,220.717		
1,200.0	1,199.3	1,037.0	1,034.4	2.1	2.1	-115.48	-1,893.2	-4,160.6	4,585.0	4,580.8	4.19	1,095.298		
1,300.0	1,299.2	1,136.7	1,133.4	2.3	2.3	-115.41	-1,884.6	-4,168.1	4,590.6	4,586.0	4.62	992.693		
1,400.0	1,399.1	1,236.3	1,232.4	2.5	2.6	-115.33	-1,876.0	-4,175.6	4,596.2	4,591.1	5.07	907.386		
1,500.0	1,498.9	1,336.0	1,331.4	2.7	2.9	-115.25	-1,867.4	-4,183.1	4,601.8	4,596.3	5.51	835.447		
1,600.0	1,598.8	1,435.6	1,430.4	2.9	3.1	-115.18	-1,858.7	-4,190.6	4,607.4	4,601.5	5.95	774.026		
1,700.0	1,698.6	1,535.3	1,529.4	3.1	3.4	-115.10	-1,850.1	-4,198.2	4,613.0	4,606.6	6.40	721.010		
1,800.0	1,798.5	1,635.0	1,628.4	3.3	3.6	-115.03	-1,841.5	-4,205.7	4,618.7	4,611.8	6.84	674.809		
1,900.0	1,898.3	1,734.6	1,727.4	3.5	3.9	-114.95	-1,832.9	-4,213.2	4,624.3	4,617.0	7.29	634.205		
2,000.0	1,998.2	1,834.3	1,826.4	3.7	4.2	-114.88	-1,824.3	-4,220.7	4,630.0	4,622.2	7.74	598.249		
2,100.0	2,098.0	1,933.9	1,925.4	3.9	4.4	-114.80	-1,815.7	-4,228.2	4,635.6	4,627.4	8.19	566.194		
2,200.0	2,197.9	2,033.6	2,024.4	4.1	4.7	-114.73	-1,807.1	-4,235.7	4,641.3	4,632.6	8.64	537.444		
2,300.0	2,297.7	2,133.2	2,123.4	4.3	5.0	-114.65	-1,798.4	-4,243.3	4,647.0	4,637.9	9.08	511.515		
2,400.0	2,397.6	2,232.9	2,222.4	4.5	5.2	-114.58	-1,789.8	-4,250.8	4,652.6	4,643.1	9.53	488.016		
2,500.0	2,497.4	2,332.5	2,321.4	4.7	5.5	-114.50	-1,781.2	-4,258.3	4,658.3	4,648.3	9.98	466.622		
2,600.0	2,597.3	2,432.2	2,420.4	4.9	5.7	-114.43	-1,772.6	-4,265.8	4,664.0	4,653.6	10.43	447.064		
2,700.0	2,697.1	2,531.9	2,519.4	5.1	6.0	-114.36	-1,764.0	-4,273.3	4,669.7	4,658.8	10.88	429.117		
2,800.0	2,797.0	2,631.5	2,618.4	5.3	6.3	-114.28	-1,755.4	-4,280.9	4,675.4	4,664.1	11.33	412.591		
2,900.0	2,896.8	2,731.2	2,717.4	5.5	6.5	-114.21	-1,746.8	-4,288.4	4,681.2	4,669.4	11.78	397.323		
3,000.0	2,996.7	2,830.8	2,816.4	5.7	6.8	-114.14	-1,738.2	-4,295.9	4,686.9	4,674.6	12.23	383.177		
3,100.0	3,096.5	2,930.5	2,915.4	5.9	7.1	-114.06	-1,729.5	-4,303.4	4,692.6	4,679.9	12.68	370.034		
3,200.0	3,196.4	3,030.1	3,014.4	6.1	7.3	-113.99	-1,720.9	-4,310.9	4,698.4	4,685.2	13.13	357.791		
3,300.0	3,296.3	3,129.8	3,113.4	6.3	7.6	-113.92	-1,712.3	-4,318.5	4,704.1	4,690.5	13.58	346.359		
3,400.0	3,396.1	3,229.5	3,212.4	6.5	7.9	-113.85	-1,703.7	-4,326.0	4,709.9	4,695.8	14.03	335.660		
3,500.0	3,496.0	3,329.1	3,311.4	6.7	8.1	-113.77	-1,695.1	-4,333.5	4,715.6	4,701.1	14.48	325.626		
3,600.0	3,595.8	3,428.8	3,410.3	6.9	8.4	-113.70	-1,686.5	-4,341.0	4,721.4	4,706.5	14.93	316.198		
3,700.0	3,695.7	3,528.4	3,509.3	7.0	8.7	-113.63	-1,677.9	-4,348.5	4,727.2	4,711.8	15.38	307.322		
3,800.0	3,795.5	3,628.1	3,608.3	7.2	8.9	-113.56	-1,669.3	-4,356.0	4,733.0	4,717.1	15.83	298.952		
3,900.0	3,895.4	3,727.7	3,707.3	7.4	9.2	-113.49	-1,660.6	-4,363.6	4,738.8	4,722.5	16.28	291.045		
4,000.0	3,995.2	3,827.4	3,806.3	7.6	9.4	-113.41	-1,652.0	-4,371.1	4,744.6	4,727.8	16.73	283.564		
4,100.0	4,095.1	3,927.1	3,905.3	7.8	9.7	-113.34	-1,643.4	-4,378.6	4,750.4	4,733.2	17.18	276.476		
4,200.0	4,194.9	4,026.7	4,004.3	8.0	10.0	-113.27	-1,634.8	-4,386.1	4,756.2	4,738.6	17.63	269.750		
4,300.0	4,294.8	4,126.4	4,103.3	8.2	10.2	-113.20	-1,626.2	-4,393.6	4,762.0	4,743.9	18.08	263.360		
4,400.0	4,394.6	4,226.0	4,202.3	8.4	10.5	-113.13	-1,617.6	-4,401.2	4,767.8	4,749.3	18.53	257.282		
4,500.0	4,494.5	4,325.7	4,301.3	8.6	10.8	-113.06	-1,609.0	-4,408.7	4,773.7	4,754.7	18.98	251.492		
4,600.0	4,594.3	4,425.3	4,400.3	8.8	11.0	-112.99	-1,600.3	-4,416.2	4,779.5	4,760.1	19.43	245.972		
4,700.0	4,694.2	4,525.0	4,499.3	9.0	11.3	-112.92	-1,591.7	-4,423.7	4,785.4	4,765.5	19.88	240.702		
4,800.0	4,794.0	4,624.6	4,598.3	9.2	11.6	-112.85	-1,583.1	-4,431.2	4,791.2	4,770.9	20.33	235.666		
4,900.0	4,893.9	4,724.3	4,697.3	9.4	11.8	-112.78	-1,574.5	-4,438.7	4,797.1	4,776.3	20.78	230.850		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,993.7	4,824.0	4,796.3	9.6	12.1	-112.71	-1,565.9	-4,446.3	4,803.0	4,781.7	21.23	226.238		
5,100.0	5,093.6	4,923.6	4,895.3	9.8	12.4	-112.64	-1,557.3	-4,453.8	4,808.9	4,787.2	21.68	221.818		
5,200.0	5,193.5	5,023.3	4,994.3	10.0	12.6	-112.57	-1,548.7	-4,461.3	4,814.7	4,792.6	22.13	217.579		
5,300.0	5,293.3	5,122.9	5,093.3	10.2	12.9	-112.50	-1,540.1	-4,468.8	4,820.6	4,798.1	22.58	213.510		
5,400.0	5,393.2	5,222.6	5,192.3	10.4	13.2	-112.43	-1,531.4	-4,476.3	4,826.5	4,803.5	23.03	209.600		
5,500.0	5,493.0	5,322.2	5,291.3	10.6	13.4	-112.36	-1,522.8	-4,483.9	4,832.4	4,809.0	23.48	205.841		
5,600.0	5,592.9	5,421.9	5,390.3	10.8	13.7	-112.29	-1,514.2	-4,491.4	4,838.4	4,814.4	23.93	202.224		
5,700.0	5,692.7	5,521.6	5,489.3	11.0	13.9	-112.23	-1,505.6	-4,498.9	4,844.3	4,819.9	24.37	198.741		
5,800.0	5,792.6	5,621.2	5,588.3	11.2	14.2	-112.16	-1,497.0	-4,506.4	4,850.2	4,825.4	24.82	195.385		
5,900.0	5,892.4	5,720.9	5,687.3	11.4	14.5	-112.09	-1,488.4	-4,513.9	4,856.2	4,830.9	25.27	192.149		
6,000.0	5,992.3	5,820.5	5,786.3	11.6	14.7	-112.02	-1,479.8	-4,521.5	4,862.1	4,836.4	25.72	189.026		
6,100.0	6,092.1	5,920.2	5,885.3	11.8	15.0	-111.95	-1,471.1	-4,529.0	4,868.0	4,841.9	26.17	186.012		
6,200.0	6,192.0	6,019.8	5,984.3	12.0	15.3	-111.89	-1,462.5	-4,536.5	4,874.0	4,847.4	26.62	183.100		
6,300.0	6,291.8	6,119.5	6,083.3	12.2	15.5	-111.82	-1,453.9	-4,544.0	4,880.0	4,852.9	27.07	180.285		
6,400.0	6,391.7	6,219.1	6,182.3	12.4	15.8	-111.75	-1,445.3	-4,551.5	4,885.9	4,858.4	27.52	177.563		
6,500.0	6,491.5	6,318.8	6,281.3	12.6	16.1	-111.68	-1,436.7	-4,559.0	4,891.9	4,863.9	27.97	174.929		
6,600.0	6,591.4	6,418.5	6,380.3	12.8	16.3	-111.62	-1,428.1	-4,566.6	4,897.9	4,869.5	28.41	172.379		
6,700.0	6,691.2	6,518.1	6,479.3	13.0	16.6	-111.55	-1,419.5	-4,574.1	4,903.9	4,875.0	28.86	169.908		
6,800.0	6,791.1	6,617.8	6,578.3	13.2	16.9	-111.48	-1,410.9	-4,581.6	4,909.9	4,880.6	29.31	167.514		
6,900.0	6,890.9	6,717.4	6,677.3	13.4	17.1	-111.42	-1,402.2	-4,589.1	4,915.9	4,886.1	29.76	165.193		
7,000.0	6,990.8	6,817.1	6,776.3	13.6	17.4	-111.35	-1,393.6	-4,596.6	4,921.9	4,891.7	30.21	162.941		
7,024.2	7,014.9	6,841.2	6,800.2	13.6	17.5	-111.33	-1,391.5	-4,598.5	4,923.4	4,893.0	30.31	162.407		
7,050.0	7,040.7	6,866.9	6,825.8	13.7	17.5	-113.07	-1,389.3	-4,600.4	4,924.7	4,894.3	30.43	161.816		
7,100.0	7,090.7	6,916.5	6,875.0	13.7	17.7	70.24	-1,385.0	-4,604.1	4,926.5	4,895.9	30.62	160.873		
7,150.0	7,140.5	6,965.6	6,923.8	13.8	17.8	69.80	-1,380.8	-4,607.8	4,927.1	4,896.3	30.77	160.146		
7,200.0	7,189.9	7,013.9	6,971.9	13.8	17.9	69.85	-1,376.6	-4,611.5	4,926.4	4,895.6	30.86	159.622		
7,250.0	7,238.6	7,061.4	7,019.0	13.8	18.0	70.10	-1,372.5	-4,615.1	4,924.6	4,893.7	30.92	159.283		
7,300.0	7,286.4	7,107.6	7,064.9	13.7	18.2	70.49	-1,368.5	-4,618.6	4,921.6	4,890.7	30.93	159.105		
7,350.0	7,333.1	7,152.4	7,109.4	13.7	18.3	71.00	-1,364.6	-4,621.9	4,917.6	4,886.7	30.92	159.059		
7,400.0	7,378.5	7,181.5	7,138.3	13.6	18.4	71.54	-1,362.1	-4,624.1	4,912.5	4,881.7	30.84	159.282		
7,450.0	7,422.2	7,200.0	7,156.7	13.6	18.4	72.09	-1,360.8	-4,625.5	4,906.7	4,876.0	30.72	159.715		
7,500.0	7,464.1	7,200.0	7,156.7	13.5	18.4	72.58	-1,360.8	-4,625.5	4,900.2	4,869.7	30.56	160.344		
7,550.0	7,504.1	7,200.0	7,156.7	13.5	18.4	73.11	-1,360.8	-4,625.5	4,893.2	4,862.8	30.40	160.941		
7,600.0	7,541.8	7,227.3	7,183.9	13.5	18.4	73.91	-1,360.0	-4,627.6	4,885.4	4,855.2	30.29	161.299		
7,650.0	7,577.2	7,250.0	7,206.5	13.4	18.5	74.74	-1,360.3	-4,629.3	4,877.3	4,847.1	30.19	161.548		
7,700.0	7,610.0	7,250.0	7,206.5	13.5	18.5	75.42	-1,360.3	-4,629.3	4,868.5	4,838.4	30.10	161.735		
7,750.0	7,640.2	7,250.0	7,206.5	13.5	18.5	76.14	-1,360.3	-4,629.3	4,859.4	4,829.4	30.05	161.702		
7,800.0	7,667.4	7,250.0	7,206.5	13.6	18.5	76.88	-1,360.3	-4,629.3	4,849.9	4,819.9	30.05	161.410		
7,850.0	7,691.7	7,272.2	7,228.7	13.7	18.5	77.89	-1,361.5	-4,631.0	4,840.0	4,809.9	30.10	160.794		
7,900.0	7,712.8	7,279.7	7,236.1	13.9	18.5	78.77	-1,362.0	-4,631.6	4,829.9	4,799.7	30.21	159.891		
7,950.0	7,730.8	7,300.0	7,256.2	14.1	18.5	79.82	-1,364.1	-4,633.1	4,819.7	4,789.3	30.38	158.658		
8,000.0	7,745.5	7,300.0	7,256.2	14.4	18.5	80.67	-1,364.1	-4,633.1	4,809.2	4,778.6	30.60	157.159		
8,050.0	7,756.7	7,300.0	7,256.2	14.7	18.5	81.52	-1,364.1	-4,633.1	4,798.6	4,767.7	30.88	155.390		
8,100.0	7,764.6	7,300.0	7,256.2	15.1	18.5	82.38	-1,364.1	-4,633.1	4,788.1	4,756.8	31.22	153.381		
8,150.0	7,769.0	7,300.0	7,256.2	15.5	18.5	83.23	-1,364.1	-4,633.1	4,777.5	4,745.9	31.60	151.172		
8,188.1	7,770.0	7,300.0	7,256.2	15.9	18.5	83.88	-1,364.1	-4,633.1	4,769.6	4,737.7	31.93	149.381		
8,200.0	7,770.0	7,300.0	7,256.2	16.0	18.5	83.88	-1,364.1	-4,633.1	4,767.1	4,735.1	32.04	148.792		
8,300.0	7,770.0	7,300.0	7,256.2	17.0	18.5	83.88	-1,364.1	-4,633.1	4,747.6	4,714.5	33.03	143.725		
8,400.0	7,770.0	7,321.1	7,277.1	18.1	18.5	84.13	-1,367.0	-4,634.7	4,729.9	4,695.8	34.13	138.573		
8,500.0	7,770.0	7,328.2	7,284.0	19.3	18.5	84.22	-1,368.2	-4,635.2	4,714.4	4,679.1	35.33	133.424		
8,600.0	7,770.0	7,336.4	7,292.1	20.6	18.5	84.32	-1,369.6	-4,635.8	4,700.9	4,664.3	36.61	128.395		
8,700.0	7,770.0	7,350.0	7,305.4	21.9	18.5	84.48	-1,372.3	-4,636.8	4,689.5	4,651.6	37.96	123.554		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	7,350.0	7,305.4	23.3	18.5	84.48	-1,372.3	-4,636.8	4,680.2	4,640.8	39.36	118.922		
8,900.0	7,770.0	7,372.3	7,327.1	24.8	18.5	84.75	-1,377.3	-4,638.5	4,672.9	4,632.1	40.77	114.603		
9,000.0	7,770.0	7,390.3	7,344.4	26.3	18.5	84.96	-1,382.0	-4,639.8	4,667.6	4,625.4	42.24	110.513		
9,100.0	7,770.0	7,413.2	7,366.3	27.8	18.4	85.23	-1,388.7	-4,641.5	4,664.4	4,620.7	43.71	106.705		
9,200.0	7,770.0	7,443.6	7,394.8	29.3	18.4	85.58	-1,399.0	-4,643.6	4,663.1	4,617.9	45.19	103.179		
9,217.0	7,770.0	7,449.8	7,400.5	29.6	18.4	85.65	-1,401.2	-4,644.1	4,663.1	4,617.6	45.45	102.603		
9,300.0	7,770.0	7,485.4	7,433.0	30.9	18.3	86.05	-1,415.5	-4,646.5	4,663.7	4,617.0	46.65	99.967		
9,400.0	7,770.0	7,545.6	7,485.8	32.5	18.2	86.70	-1,444.1	-4,650.5	4,666.0	4,617.9	48.05	97.109		
9,500.0	7,770.0	7,637.0	7,559.4	34.1	17.9	87.61	-1,497.8	-4,656.1	4,669.5	4,620.2	49.30	94.718		
9,600.0	7,770.0	7,781.4	7,655.9	35.7	17.4	88.80	-1,604.6	-4,663.5	4,673.6	4,623.3	50.32	92.877		
9,700.0	7,770.0	8,000.7	7,744.3	37.3	17.0	89.88	-1,803.7	-4,670.2	4,676.5	4,625.1	51.39	91.002		
9,800.0	7,770.0	8,181.6	7,759.0	39.0	17.2	90.06	-1,983.5	-4,671.4	4,677.0	4,623.7	53.27	87.803		
9,900.0	7,770.0	8,281.6	7,759.0	40.6	17.6	90.06	-2,083.5	-4,671.4	4,677.0	4,621.7	55.34	84.508		
10,000.0	7,770.0	8,381.6	7,759.0	42.3	18.1	90.06	-2,183.5	-4,671.4	4,677.0	4,619.4	57.61	81.180		
10,100.0	7,770.0	8,481.6	7,759.0	44.0	18.8	90.06	-2,283.5	-4,671.4	4,677.0	4,617.0	60.06	77.876		
10,200.0	7,770.0	8,581.6	7,759.0	45.6	19.6	90.06	-2,383.5	-4,671.4	4,677.1	4,614.4	62.65	74.648		
10,300.0	7,770.0	8,681.6	7,759.0	47.3	20.5	90.06	-2,483.5	-4,671.5	4,677.1	4,611.7	65.38	71.535		
10,400.0	7,770.0	8,781.6	7,759.0	49.0	21.5	90.06	-2,583.5	-4,671.5	4,677.1	4,608.9	68.22	68.562		
10,500.0	7,770.0	8,881.6	7,759.0	50.7	22.6	90.06	-2,683.5	-4,671.5	4,677.1	4,606.0	71.14	65.743		
10,600.0	7,770.0	8,981.6	7,759.0	52.4	23.8	90.06	-2,783.5	-4,671.5	4,677.1	4,603.0	74.14	63.082		
10,700.0	7,770.0	9,081.6	7,759.0	54.1	25.1	90.06	-2,883.5	-4,671.5	4,677.1	4,599.9	77.21	60.579		
10,800.0	7,770.0	9,181.6	7,759.0	55.8	26.4	90.06	-2,983.5	-4,671.5	4,677.2	4,596.8	80.32	58.228		
10,900.0	7,770.0	9,281.6	7,759.0	57.5	27.7	90.06	-3,083.5	-4,671.6	4,677.2	4,593.7	83.49	56.024		
11,000.0	7,770.0	9,381.6	7,759.0	59.2	29.1	90.06	-3,183.5	-4,671.6	4,677.2	4,590.5	86.68	53.956		
11,100.0	7,770.0	9,481.6	7,759.0	60.9	30.6	90.06	-3,283.5	-4,671.6	4,677.2	4,587.3	89.92	52.018		
11,200.0	7,770.0	9,581.6	7,759.0	62.6	32.1	90.06	-3,383.5	-4,671.6	4,677.2	4,584.0	93.17	50.199		
11,300.0	7,770.0	9,681.6	7,759.0	64.3	33.6	90.06	-3,483.5	-4,671.6	4,677.2	4,580.8	96.46	48.491		
11,400.0	7,770.0	9,781.6	7,759.0	66.0	35.1	90.06	-3,583.5	-4,671.6	4,677.3	4,577.5	99.76	46.886		
11,500.0	7,770.0	9,881.6	7,759.0	67.7	36.6	90.06	-3,683.5	-4,671.7	4,677.3	4,574.2	103.08	45.376		
11,600.0	7,770.0	9,981.6	7,759.0	69.5	38.2	90.06	-3,783.5	-4,671.7	4,677.3	4,570.9	106.41	43.953		
11,700.0	7,770.0	10,081.6	7,759.0	71.2	39.8	90.06	-3,883.5	-4,671.7	4,677.3	4,567.5	109.76	42.612		
11,800.0	7,770.0	10,181.6	7,759.0	72.9	41.4	90.06	-3,983.5	-4,671.7	4,677.3	4,564.2	113.13	41.346		
11,900.0	7,770.0	10,281.6	7,759.0	74.6	43.0	90.06	-4,083.5	-4,671.7	4,677.3	4,560.8	116.50	40.149		
12,000.0	7,770.0	10,381.6	7,759.0	76.4	44.6	90.06	-4,183.5	-4,671.7	4,677.4	4,557.5	119.88	39.017		
12,100.0	7,770.0	10,481.6	7,759.0	78.1	46.2	90.06	-4,283.5	-4,671.8	4,677.4	4,554.1	123.27	37.944		
12,200.0	7,770.0	10,581.6	7,759.0	79.8	47.8	90.06	-4,383.5	-4,671.8	4,677.4	4,550.7	126.67	36.926		
12,300.0	7,770.0	10,681.6	7,759.0	81.5	49.5	90.06	-4,483.5	-4,671.8	4,677.4	4,547.3	130.08	35.959		
12,400.0	7,770.0	10,781.6	7,759.0	83.3	51.1	90.06	-4,583.5	-4,671.8	4,677.4	4,543.9	133.49	35.040		
12,500.0	7,770.0	10,881.6	7,759.0	85.0	52.8	90.06	-4,683.5	-4,671.8	4,677.4	4,540.5	136.90	34.166		
12,600.0	7,770.0	10,981.6	7,759.0	86.7	54.5	90.06	-4,783.5	-4,671.8	4,677.5	4,537.1	140.33	33.332		
12,700.0	7,770.0	11,081.6	7,759.0	88.5	56.1	90.06	-4,883.5	-4,671.9	4,677.5	4,533.7	143.76	32.538		
12,800.0	7,770.0	11,181.6	7,759.0	90.2	57.8	90.06	-4,983.5	-4,671.9	4,677.5	4,530.3	147.19	31.779		
12,900.0	7,770.0	11,281.6	7,759.0	91.9	59.5	90.06	-5,083.5	-4,671.9	4,677.5	4,526.9	150.62	31.054		
13,000.0	7,770.0	11,381.6	7,759.0	93.7	61.2	90.06	-5,183.5	-4,671.9	4,677.5	4,523.5	154.06	30.361		
13,100.0	7,770.0	11,481.6	7,759.0	95.4	62.8	90.06	-5,283.5	-4,671.9	4,677.5	4,520.0	157.51	29.697		
13,200.0	7,770.0	11,581.6	7,759.0	97.1	64.5	90.06	-5,383.5	-4,671.9	4,677.5	4,516.6	160.95	29.062		
13,300.0	7,770.0	11,681.6	7,759.0	98.9	66.2	90.06	-5,483.5	-4,672.0	4,677.6	4,513.2	164.40	28.452		
13,400.0	7,770.0	11,781.6	7,759.0	100.6	67.9	90.06	-5,583.5	-4,672.0	4,677.6	4,509.7	167.86	27.867		
13,500.0	7,770.0	11,881.6	7,759.0	102.4	69.6	90.06	-5,683.5	-4,672.0	4,677.6	4,506.3	171.31	27.305		
13,600.0	7,770.0	11,981.6	7,759.0	104.1	71.3	90.06	-5,783.5	-4,672.0	4,677.6	4,502.8	174.77	26.765		
13,700.0	7,770.0	12,081.6	7,759.0	105.8	73.0	90.06	-5,883.5	-4,672.0	4,677.6	4,499.4	178.23	26.245		
13,800.0	7,770.0	12,181.6	7,759.0	107.6	74.7	90.06	-5,983.5	-4,672.0	4,677.6	4,496.0	181.69	25.746		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)						
13,900.0	7,770.0	12,281.6	7,759.0	109.3	76.4	90.06	-6,083.5	-4,672.1	4,677.7	4,492.5	185.15	25.264		
14,000.0	7,770.0	12,381.6	7,759.0	111.1	78.2	90.06	-6,183.5	-4,672.1	4,677.7	4,489.1	188.62	24.800		
14,100.0	7,770.0	12,481.6	7,759.0	112.8	79.9	90.06	-6,283.5	-4,672.1	4,677.7	4,485.6	192.08	24.352		
14,200.0	7,770.0	12,581.6	7,759.0	114.5	81.6	90.06	-6,383.5	-4,672.1	4,677.7	4,482.2	195.55	23.921		
14,300.0	7,770.0	12,681.6	7,759.0	116.3	83.3	90.06	-6,483.5	-4,672.1	4,677.7	4,478.7	199.02	23.504		
14,400.0	7,770.0	12,781.6	7,759.0	118.0	85.0	90.06	-6,583.5	-4,672.1	4,677.7	4,475.3	202.49	23.101		
14,500.0	7,770.0	12,881.6	7,759.0	119.8	86.7	90.06	-6,683.5	-4,672.2	4,677.8	4,471.8	205.97	22.711		
14,600.0	7,770.0	12,981.6	7,759.0	121.5	88.5	90.06	-6,783.5	-4,672.2	4,677.8	4,468.3	209.44	22.335		
14,700.0	7,770.0	13,081.6	7,759.0	123.3	90.2	90.06	-6,883.5	-4,672.2	4,677.8	4,464.9	212.92	21.970		
14,800.0	7,770.0	13,181.6	7,759.0	125.0	91.9	90.06	-6,983.5	-4,672.2	4,677.8	4,461.4	216.39	21.617		
14,900.0	7,770.0	13,281.6	7,759.0	126.7	93.6	90.06	-7,083.5	-4,672.2	4,677.8	4,458.0	219.87	21.276		
15,000.0	7,770.0	13,381.6	7,759.0	128.5	95.4	90.06	-7,183.5	-4,672.2	4,677.8	4,454.5	223.35	20.944		
15,100.0	7,770.0	13,481.6	7,759.0	130.2	97.1	90.06	-7,283.5	-4,672.3	4,677.9	4,451.0	226.83	20.623		
15,200.0	7,770.0	13,581.6	7,759.0	132.0	98.8	90.06	-7,383.5	-4,672.3	4,677.9	4,447.6	230.31	20.311		
15,300.0	7,770.0	13,681.6	7,759.0	133.7	100.5	90.06	-7,483.5	-4,672.3	4,677.9	4,444.1	233.79	20.009		
15,400.0	7,770.0	13,781.6	7,759.0	135.5	102.3	90.06	-7,583.5	-4,672.3	4,677.9	4,440.6	237.27	19.715		
15,500.0	7,770.0	13,881.6	7,759.0	137.2	104.0	90.06	-7,683.5	-4,672.3	4,677.9	4,437.2	240.75	19.430		
15,600.0	7,770.0	13,981.6	7,759.0	139.0	105.7	90.06	-7,783.5	-4,672.3	4,677.9	4,433.7	244.24	19.153		
15,700.0	7,770.0	14,081.6	7,759.0	140.7	107.5	90.06	-7,883.5	-4,672.4	4,678.0	4,430.2	247.72	18.884		
15,800.0	7,770.0	14,181.6	7,759.0	142.4	109.2	90.06	-7,983.5	-4,672.4	4,678.0	4,426.8	251.21	18.622		
15,900.0	7,770.0	14,281.6	7,759.0	144.2	110.9	90.06	-8,083.5	-4,672.4	4,678.0	4,423.3	254.69	18.367		
16,000.0	7,770.0	14,381.6	7,759.0	145.9	112.7	90.06	-8,183.5	-4,672.4	4,678.0	4,419.8	258.18	18.119		
16,100.0	7,770.0	14,481.6	7,759.0	147.7	114.4	90.06	-8,283.5	-4,672.4	4,678.0	4,416.4	261.67	17.878		
16,200.0	7,770.0	14,581.6	7,759.0	149.4	116.1	90.06	-8,383.5	-4,672.4	4,678.0	4,412.9	265.15	17.643		
16,300.0	7,770.0	14,681.6	7,759.0	151.2	117.9	90.06	-8,483.5	-4,672.5	4,678.1	4,409.4	268.64	17.414		
16,400.0	7,770.0	14,781.6	7,759.0	152.9	119.6	90.06	-8,583.5	-4,672.5	4,678.1	4,405.9	272.13	17.191		
16,500.0	7,770.0	14,881.6	7,759.0	154.7	121.3	90.06	-8,683.5	-4,672.5	4,678.1	4,402.5	275.62	16.973		
16,600.0	7,770.0	14,981.6	7,759.0	156.4	123.1	90.06	-8,783.5	-4,672.5	4,678.1	4,399.0	279.11	16.761		
16,700.0	7,770.0	15,081.6	7,759.0	158.2	124.8	90.06	-8,883.5	-4,672.5	4,678.1	4,395.5	282.60	16.554		
16,800.0	7,770.0	15,181.6	7,759.0	159.9	126.5	90.06	-8,983.5	-4,672.5	4,678.1	4,392.1	286.09	16.352		
16,900.0	7,770.0	15,281.6	7,759.0	161.7	128.3	90.06	-9,083.5	-4,672.6	4,678.2	4,388.6	289.58	16.155		
17,000.0	7,770.0	15,381.6	7,759.0	163.4	130.0	90.06	-9,183.5	-4,672.6	4,678.2	4,385.1	293.07	15.962		
17,100.0	7,770.0	15,481.6	7,759.0	165.2	131.8	90.06	-9,283.5	-4,672.6	4,678.2	4,381.6	296.57	15.775		
17,200.0	7,770.0	15,581.6	7,759.0	166.9	133.5	90.06	-9,383.5	-4,672.6	4,678.2	4,378.2	300.06	15.591		
17,300.0	7,770.0	15,681.6	7,759.0	168.7	135.2	90.06	-9,483.5	-4,672.6	4,678.2	4,374.7	303.55	15.412		
17,400.0	7,770.0	15,781.6	7,759.0	170.4	137.0	90.06	-9,583.5	-4,672.6	4,678.2	4,371.2	307.04	15.236		
17,500.0	7,770.0	15,881.6	7,759.0	172.2	138.7	90.06	-9,683.5	-4,672.7	4,678.3	4,367.7	310.54	15.065		
17,600.0	7,770.0	15,981.1	7,759.0	173.9	140.4	90.06	-9,782.9	-4,672.7	4,678.3	4,364.3	314.02	14.898		
17,653.1	7,770.0	15,981.1	7,759.0	174.8	140.4	90.06	-9,782.9	-4,672.7	4,678.6	4,363.6	314.95	14.855 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-115.13	-1,931.1	-4,117.2	4,547.6					
100.0	100.0	84.0	84.0	0.2	0.1	-115.13	-1,931.1	-4,117.2	4,547.6	4,547.3	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.13	-1,931.1	-4,117.2	4,547.6	4,547.0	0.60	7,530.577		
300.0	300.0	284.0	284.0	0.5	0.5	-115.13	-1,931.1	-4,117.2	4,547.6	4,546.6	0.95	4,772.125		
400.0	400.0	396.2	396.2	0.7	0.6	-115.12	-1,930.3	-4,117.4	4,547.5	4,546.2	1.32	3,434.820		
500.0	500.0	510.6	510.6	0.8	0.9	-115.08	-1,927.4	-4,118.3	4,547.1	4,545.4	1.70	2,669.193		
550.0	550.0	567.8	567.7	0.9	1.0	-115.05	-1,925.1	-4,118.9	4,546.7	4,544.8	1.90	2,396.956		
600.0	600.0	624.9	624.7	1.0	1.1	-115.86	-1,922.3	-4,119.7	4,546.4	4,544.3	2.09	2,172.307		
700.0	700.0	739.0	738.6	1.2	1.3	-115.79	-1,915.0	-4,121.8	4,546.1	4,543.6	2.50	1,820.217		
713.7	713.7	754.7	754.2	1.2	1.3	-115.78	-1,913.8	-4,122.2	4,546.1	4,543.6	2.55	1,779.387		
800.0	799.9	848.6	847.7	1.4	1.5	-115.71	-1,906.0	-4,124.4	4,546.3	4,543.4	2.91	1,562.624		
861.1	860.9	909.6	908.5	1.5	1.7	-115.67	-1,900.7	-4,125.9	4,546.7	4,543.6	3.15	1,441.689		
900.0	899.8	948.5	947.2	1.6	1.8	-115.65	-1,897.3	-4,126.9	4,547.1	4,543.8	3.31	1,373.222		
1,000.0	999.6	1,048.4	1,046.7	1.8	2.0	-115.60	-1,888.7	-4,129.3	4,548.1	4,544.4	3.72	1,222.921		
1,100.0	1,099.5	1,148.3	1,146.2	1.9	2.2	-115.55	-1,880.0	-4,131.8	4,549.0	4,544.9	4.13	1,101.218		
1,200.0	1,199.3	1,248.2	1,245.8	2.1	2.4	-115.50	-1,871.3	-4,134.3	4,550.0	4,545.5	4.55	1,000.918		
1,300.0	1,299.2	1,348.1	1,345.3	2.3	2.7	-115.45	-1,862.7	-4,136.8	4,551.0	4,546.0	4.96	916.977		
1,400.0	1,399.1	1,448.0	1,444.8	2.5	2.9	-115.40	-1,854.0	-4,139.2	4,551.9	4,546.6	5.38	845.778		
1,500.0	1,498.9	1,548.0	1,544.3	2.7	3.1	-115.35	-1,845.4	-4,141.7	4,552.9	4,547.1	5.80	784.675		
1,600.0	1,598.8	1,647.9	1,643.8	2.9	3.4	-115.30	-1,836.7	-4,144.2	4,553.9	4,547.7	6.22	731.697		
1,700.0	1,698.6	1,747.8	1,743.3	3.1	3.6	-115.25	-1,828.1	-4,146.6	4,554.9	4,548.2	6.65	685.344		
1,800.0	1,798.5	1,847.7	1,842.8	3.3	3.8	-115.20	-1,819.4	-4,149.1	4,555.9	4,548.8	7.07	644.462		
1,900.0	1,898.3	1,947.6	1,942.3	3.5	4.0	-115.15	-1,810.7	-4,151.6	4,556.8	4,549.4	7.49	608.146		
2,000.0	1,998.2	2,047.5	2,041.8	3.7	4.3	-115.10	-1,802.1	-4,154.1	4,557.8	4,549.9	7.92	575.679		
2,100.0	2,098.0	2,147.4	2,141.3	3.9	4.5	-115.05	-1,793.4	-4,156.5	4,558.8	4,550.5	8.34	546.484		
2,200.0	2,197.9	2,247.4	2,240.8	4.1	4.7	-115.00	-1,784.8	-4,159.0	4,559.8	4,551.1	8.77	520.094		
2,300.0	2,297.7	2,347.3	2,340.3	4.3	5.0	-114.95	-1,776.1	-4,161.5	4,560.8	4,551.6	9.19	496.126		
2,400.0	2,397.6	2,447.2	2,439.9	4.5	5.2	-114.90	-1,767.5	-4,163.9	4,561.8	4,552.2	9.62	474.264		
2,500.0	2,497.4	2,547.1	2,539.4	4.7	5.4	-114.85	-1,758.8	-4,166.4	4,562.9	4,552.8	10.04	454.243		
2,600.0	2,597.3	2,647.0	2,638.9	4.9	5.7	-114.80	-1,750.1	-4,168.9	4,563.9	4,553.4	10.47	435.842		
2,700.0	2,697.1	2,746.9	2,738.4	5.1	5.9	-114.74	-1,741.5	-4,171.4	4,564.9	4,554.0	10.90	418.871		
2,800.0	2,797.0	2,846.8	2,837.9	5.3	6.1	-114.69	-1,732.8	-4,173.8	4,565.9	4,554.6	11.32	403.173		
2,900.0	2,896.8	2,946.8	2,937.4	5.5	6.4	-114.64	-1,724.2	-4,176.3	4,566.9	4,555.2	11.75	388.608		
3,000.0	2,996.7	3,046.7	3,036.9	5.7	6.6	-114.59	-1,715.5	-4,178.8	4,568.0	4,555.8	12.18	375.060		
3,100.0	3,096.5	3,146.6	3,136.4	5.9	6.8	-114.54	-1,706.9	-4,181.3	4,569.0	4,556.4	12.61	362.426		
3,200.0	3,196.4	3,246.5	3,235.9	6.1	7.1	-114.49	-1,698.2	-4,183.7	4,570.0	4,557.0	13.03	350.616		
3,300.0	3,296.3	3,346.4	3,335.4	6.3	7.3	-114.44	-1,689.5	-4,186.2	4,571.1	4,557.6	13.46	339.553		
3,400.0	3,396.1	3,446.3	3,434.9	6.5	7.5	-114.39	-1,680.9	-4,188.7	4,572.1	4,558.2	13.89	329.169		
3,500.0	3,496.0	3,546.2	3,534.4	6.7	7.8	-114.34	-1,672.2	-4,191.1	4,573.1	4,558.8	14.32	319.402		
3,600.0	3,595.8	3,646.2	3,634.0	6.9	8.0	-114.29	-1,663.6	-4,193.6	4,574.2	4,559.5	14.75	310.200		
3,700.0	3,695.7	3,746.1	3,733.5	7.0	8.3	-114.24	-1,654.9	-4,196.1	4,575.3	4,560.1	15.17	301.515		
3,800.0	3,795.5	3,846.0	3,833.0	7.2	8.5	-114.19	-1,646.3	-4,198.6	4,576.3	4,560.7	15.60	293.306		
3,900.0	3,895.4	3,945.9	3,932.5	7.4	8.7	-114.14	-1,637.6	-4,201.0	4,577.4	4,561.3	16.03	285.533		
4,000.0	3,995.2	4,045.8	4,032.0	7.6	9.0	-114.09	-1,628.9	-4,203.5	4,578.4	4,562.0	16.46	278.163		
4,100.0	4,095.1	4,145.7	4,131.5	7.8	9.2	-114.04	-1,620.3	-4,206.0	4,579.5	4,562.6	16.89	271.166		
4,200.0	4,194.9	4,245.6	4,231.0	8.0	9.4	-113.99	-1,611.6	-4,208.5	4,580.6	4,563.2	17.32	264.515		
4,300.0	4,294.8	4,345.6	4,330.5	8.2	9.7	-113.94	-1,603.0	-4,210.9	4,581.6	4,563.9	17.75	258.183		
4,400.0	4,394.6	4,445.5	4,430.0	8.4	9.9	-113.89	-1,594.3	-4,213.4	4,582.7	4,564.5	18.17	252.150		
4,500.0	4,494.5	4,545.4	4,529.5	8.6	10.1	-113.84	-1,585.7	-4,215.9	4,583.8	4,565.2	18.60	246.393		
4,600.0	4,594.3	4,645.3	4,629.0	8.8	10.4	-113.79	-1,577.0	-4,218.3	4,584.9	4,565.8	19.03	240.896		
4,700.0	4,694.2	4,745.2	4,728.5	9.0	10.6	-113.75	-1,568.3	-4,220.8	4,586.0	4,566.5	19.46	235.640		
4,800.0	4,794.0	4,845.1	4,828.0	9.2	10.8	-113.70	-1,559.7	-4,223.3	4,587.1	4,567.2	19.89	230.610		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,893.9	4,945.1	4,927.6	9.4	11.1	-113.65	-1,551.0	-4,225.8	4,588.1	4,567.8	20.32	225.792			
5,000.0	4,993.7	5,045.0	5,027.1	9.6	11.3	-113.60	-1,542.4	-4,228.2	4,589.2	4,568.5	20.75	221.172			
5,100.0	5,093.6	5,144.9	5,126.6	9.8	11.5	-113.55	-1,533.7	-4,230.7	4,590.3	4,569.2	21.18	216.740			
5,200.0	5,193.5	5,244.8	5,226.1	10.0	11.8	-113.50	-1,525.1	-4,233.2	4,591.5	4,569.8	21.61	212.483			
5,300.0	5,293.3	5,344.7	5,325.6	10.2	12.0	-113.45	-1,516.4	-4,235.7	4,592.6	4,570.5	22.04	208.392			
5,400.0	5,393.2	5,444.6	5,425.1	10.4	12.2	-113.40	-1,507.7	-4,238.1	4,593.7	4,571.2	22.47	204.456			
5,500.0	5,493.0	5,544.5	5,524.6	10.6	12.5	-113.35	-1,499.1	-4,240.6	4,594.8	4,571.9	22.90	200.668			
5,600.0	5,592.9	5,644.5	5,624.1	10.8	12.7	-113.30	-1,490.4	-4,243.1	4,595.9	4,572.6	23.33	197.019			
5,700.0	5,692.7	5,744.4	5,723.6	11.0	12.9	-113.25	-1,481.8	-4,245.5	4,597.0	4,573.3	23.76	193.502			
5,800.0	5,792.6	5,844.3	5,823.1	11.2	13.2	-113.20	-1,473.1	-4,248.0	4,598.1	4,574.0	24.19	190.109			
5,900.0	5,892.4	5,944.2	5,922.6	11.4	13.4	-113.15	-1,464.5	-4,250.5	4,599.3	4,574.7	24.62	186.835			
6,000.0	5,992.3	6,044.1	6,022.1	11.6	13.6	-113.10	-1,455.8	-4,253.0	4,600.4	4,575.4	25.05	183.673			
6,100.0	6,092.1	6,144.0	6,121.7	11.8	13.9	-113.05	-1,447.1	-4,255.4	4,601.5	4,576.1	25.48	180.617			
6,200.0	6,192.0	6,243.9	6,221.2	12.0	14.1	-113.00	-1,438.5	-4,257.9	4,602.7	4,576.8	25.91	177.662			
6,300.0	6,291.8	6,343.9	6,320.7	12.2	14.3	-112.95	-1,429.8	-4,260.4	4,603.8	4,577.5	26.34	174.804			
6,400.0	6,391.7	6,443.8	6,420.2	12.4	14.6	-112.90	-1,421.2	-4,262.8	4,605.0	4,578.2	26.77	172.037			
6,500.0	6,491.5	6,543.7	6,519.7	12.6	14.8	-112.85	-1,412.5	-4,265.3	4,606.1	4,578.9	27.20	169.358			
6,600.0	6,591.4	6,643.6	6,619.2	12.8	15.1	-112.80	-1,403.9	-4,267.8	4,607.3	4,579.6	27.63	166.762			
6,700.0	6,691.2	6,743.5	6,718.7	13.0	15.3	-112.75	-1,395.2	-4,270.3	4,608.4	4,580.4	28.06	164.245			
6,800.0	6,791.1	6,843.4	6,818.2	13.2	15.5	-112.71	-1,386.5	-4,272.7	4,609.6	4,581.1	28.49	161.805			
6,900.0	6,890.9	6,943.3	6,917.7	13.4	15.8	-112.66	-1,377.9	-4,275.2	4,610.7	4,581.8	28.92	159.436			
7,000.0	6,990.8	7,043.3	7,017.2	13.6	16.0	-112.61	-1,369.2	-4,277.7	4,611.9	4,582.6	29.35	157.137			
7,024.2	7,014.9	7,067.4	7,041.3	13.6	16.0	-112.60	-1,367.1	-4,278.3	4,612.2	4,582.7	29.45	156.592			
7,050.0	7,040.7	7,093.2	7,067.0	13.7	16.1	-114.24	-1,364.9	-4,278.9	4,612.3	4,582.8	29.56	156.036			
7,100.0	7,090.7	7,142.9	7,116.5	13.7	16.2	69.25	-1,360.6	-4,280.1	4,611.6	4,581.9	29.73	155.095			
7,150.0	7,140.5	7,163.1	7,136.6	13.8	16.3	68.92	-1,358.8	-4,280.6	4,609.7	4,579.9	29.81	154.652			
7,200.0	7,189.9	7,182.7	7,156.2	13.8	16.3	69.05	-1,357.5	-4,281.1	4,606.8	4,577.0	29.84	154.408			
7,250.0	7,238.6	7,200.0	7,173.4	13.8	16.3	69.32	-1,356.8	-4,281.6	4,603.2	4,573.3	29.83	154.296			
7,300.0	7,286.4	7,200.0	7,173.4	13.7	16.3	69.62	-1,356.8	-4,281.6	4,598.7	4,568.9	29.78	154.432			
7,350.0	7,333.1	7,219.1	7,192.5	13.7	16.3	70.08	-1,356.7	-4,282.0	4,593.4	4,563.6	29.72	154.543			
7,400.0	7,378.5	7,231.0	7,204.4	13.6	16.4	70.58	-1,357.0	-4,282.3	4,587.3	4,557.6	29.65	154.721			
7,450.0	7,422.2	7,250.0	7,223.4	13.6	16.4	71.19	-1,357.9	-4,282.8	4,580.5	4,550.9	29.58	154.865			
7,500.0	7,464.1	7,250.0	7,223.4	13.5	16.4	71.76	-1,357.9	-4,282.8	4,573.0	4,543.5	29.49	155.067			
7,550.0	7,504.1	7,250.0	7,223.4	13.5	16.4	72.38	-1,357.9	-4,282.8	4,564.9	4,535.5	29.41	155.202			
7,600.0	7,541.8	7,276.7	7,249.9	13.5	16.4	73.24	-1,360.2	-4,283.5	4,556.0	4,526.7	29.36	155.194			
7,650.0	7,577.2	7,300.0	7,273.0	13.4	16.4	74.15	-1,363.3	-4,284.0	4,546.7	4,517.4	29.33	155.034			
7,700.0	7,610.0	7,300.0	7,273.0	13.5	16.4	74.92	-1,363.3	-4,284.0	4,536.8	4,507.5	29.33	154.699			
7,750.0	7,640.2	7,300.0	7,273.0	13.5	16.4	75.73	-1,363.3	-4,284.0	4,526.6	4,497.2	29.37	154.147			
7,800.0	7,667.4	7,318.2	7,291.0	13.6	16.3	76.74	-1,366.4	-4,284.5	4,515.9	4,486.4	29.44	153.402			
7,850.0	7,691.7	7,327.7	7,300.3	13.7	16.3	77.71	-1,368.2	-4,284.7	4,504.8	4,475.3	29.57	152.367			
7,900.0	7,712.8	7,350.0	7,322.1	13.9	16.3	78.85	-1,373.0	-4,285.3	4,493.6	4,463.9	29.74	151.105			
7,950.0	7,730.8	7,350.0	7,322.1	14.1	16.3	79.78	-1,373.0	-4,285.3	4,482.1	4,452.1	29.98	149.518			
8,000.0	7,745.5	7,350.0	7,322.1	14.4	16.3	80.72	-1,373.0	-4,285.3	4,470.5	4,440.2	30.27	147.697			
8,050.0	7,756.7	7,350.0	7,322.1	14.7	16.3	81.66	-1,373.0	-4,285.3	4,458.9	4,428.3	30.61	145.669			
8,100.0	7,764.6	7,367.6	7,339.0	15.1	16.3	82.82	-1,377.5	-4,285.7	4,447.2	4,416.2	30.97	143.577			
8,150.0	7,769.0	7,373.6	7,344.9	15.5	16.3	83.84	-1,379.1	-4,285.8	4,435.6	4,404.2	31.40	141.275			
8,188.1	7,770.0	7,377.7	7,348.7	15.9	16.3	84.61	-1,380.2	-4,285.9	4,426.9	4,395.1	31.74	139.453			
8,200.0	7,770.0	7,378.9	7,349.9	16.0	16.3	84.62	-1,380.6	-4,286.0	4,424.2	4,392.3	31.85	138.893			
8,300.0	7,770.0	7,400.0	7,370.0	17.0	16.2	84.89	-1,387.0	-4,286.5	4,402.7	4,369.9	32.82	134.161			
8,400.0	7,770.0	7,400.0	7,370.0	18.1	16.2	84.89	-1,387.0	-4,286.5	4,383.3	4,349.4	33.93	129.199			
8,500.0	7,770.0	7,415.9	7,385.0	19.3	16.2	85.09	-1,392.3	-4,286.8	4,366.1	4,331.0	35.10	124.398			
8,600.0	7,770.0	7,431.9	7,400.0	20.6	16.1	85.29	-1,398.1	-4,287.2	4,350.9	4,314.6	36.35	119.707			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,700.0	7,770.0	7,450.0	7,416.6	21.9	16.1	85.51	-1,405.1	-4,287.6	4,337.8	4,300.2	37.66	115.199	
8,800.0	7,770.0	7,472.6	7,437.1	23.3	16.0	85.78	-1,414.6	-4,288.1	4,326.9	4,287.9	38.99	110.962	
8,900.0	7,770.0	7,500.0	7,461.4	24.8	15.9	86.10	-1,427.2	-4,288.7	4,317.9	4,277.6	40.36	106.976	
9,000.0	7,770.0	7,529.9	7,487.3	26.3	15.8	86.45	-1,442.2	-4,289.4	4,311.0	4,269.2	41.75	103.262	
9,100.0	7,770.0	7,567.9	7,518.9	27.8	15.7	86.87	-1,463.3	-4,290.2	4,305.9	4,262.8	43.13	99.837	
9,200.0	7,770.0	7,614.5	7,555.7	29.3	15.5	87.36	-1,491.8	-4,291.1	4,302.6	4,258.1	44.49	96.703	
9,300.0	7,770.0	7,672.2	7,597.8	30.9	15.3	87.92	-1,531.2	-4,292.1	4,300.8	4,255.0	45.83	93.853	
9,400.0	7,770.0	7,743.8	7,644.3	32.5	15.0	88.54	-1,585.7	-4,293.3	4,300.3	4,253.2	47.12	91.260	
9,403.9	7,770.0	7,747.0	7,646.2	32.6	14.9	88.56	-1,588.2	-4,293.4	4,300.3	4,253.1	47.17	91.163 CC	
9,500.0	7,770.0	7,831.9	7,691.5	34.1	14.7	89.17	-1,659.8	-4,294.5	4,300.6	4,252.2	48.41	88.833	
9,600.0	7,770.0	7,937.0	7,732.2	35.7	14.4	89.71	-1,756.5	-4,295.5	4,301.3	4,251.5	49.78	86.404	
9,700.0	7,770.0	8,055.7	7,756.2	37.3	14.4	90.03	-1,872.6	-4,296.1	4,301.8	4,250.4	51.37	83.736	
9,800.0	7,770.0	8,166.7	7,759.0	39.0	14.6	90.07	-1,983.5	-4,296.2	4,301.8	4,248.6	53.27	80.759	
9,900.0	7,770.0	8,266.7	7,759.0	40.6	15.0	90.07	-2,083.5	-4,296.2	4,301.8	4,246.5	55.35	77.715	
10,000.0	7,770.0	8,366.7	7,759.0	42.3	15.7	90.07	-2,183.5	-4,296.3	4,301.9	4,244.2	57.63	74.641	
10,100.0	7,770.0	8,466.7	7,759.0	44.0	16.4	90.07	-2,283.5	-4,296.3	4,301.9	4,241.8	60.09	71.592	
10,200.0	7,770.0	8,566.7	7,759.0	45.6	17.4	90.07	-2,383.5	-4,296.3	4,301.9	4,239.2	62.69	68.617	
10,300.0	7,770.0	8,666.7	7,759.0	47.3	18.4	90.07	-2,483.5	-4,296.3	4,301.9	4,236.5	65.43	65.750	
10,400.0	7,770.0	8,766.7	7,759.0	49.0	19.5	90.07	-2,583.5	-4,296.3	4,301.9	4,233.7	68.27	63.014	
10,500.0	7,770.0	8,866.7	7,759.0	50.7	20.8	90.07	-2,683.5	-4,296.3	4,301.9	4,230.7	71.20	60.421	
10,600.0	7,770.0	8,966.7	7,759.0	52.4	22.1	90.07	-2,783.5	-4,296.4	4,302.0	4,227.8	74.21	57.974	
10,700.0	7,770.0	9,066.7	7,759.0	54.1	23.4	90.07	-2,883.5	-4,296.4	4,302.0	4,224.7	77.27	55.672	
10,800.0	7,770.0	9,166.7	7,759.0	55.8	24.8	90.07	-2,983.5	-4,296.4	4,302.0	4,221.6	80.39	53.512	
10,900.0	7,770.0	9,266.7	7,759.0	57.5	26.3	90.07	-3,083.5	-4,296.4	4,302.0	4,218.5	83.56	51.485	
11,000.0	7,770.0	9,366.7	7,759.0	59.2	27.8	90.07	-3,183.5	-4,296.4	4,302.0	4,215.3	86.76	49.586	
11,100.0	7,770.0	9,466.7	7,759.0	60.9	29.3	90.07	-3,283.5	-4,296.4	4,302.0	4,212.1	89.99	47.804	
11,200.0	7,770.0	9,566.7	7,759.0	62.6	30.8	90.07	-3,383.5	-4,296.5	4,302.1	4,208.8	93.25	46.133	
11,300.0	7,770.0	9,666.7	7,759.0	64.3	32.4	90.07	-3,483.5	-4,296.5	4,302.1	4,205.5	96.54	44.564	
11,400.0	7,770.0	9,766.7	7,759.0	66.0	34.0	90.07	-3,583.5	-4,296.5	4,302.1	4,202.3	99.84	43.090	
11,500.0	7,770.0	9,866.7	7,759.0	67.7	35.6	90.07	-3,683.5	-4,296.5	4,302.1	4,198.9	103.16	41.703	
11,600.0	7,770.0	9,966.7	7,759.0	69.5	37.2	90.07	-3,783.5	-4,296.5	4,302.1	4,195.6	106.50	40.396	
11,700.0	7,770.0	10,066.7	7,759.0	71.2	38.8	90.07	-3,883.5	-4,296.5	4,302.1	4,192.3	109.85	39.164	
11,800.0	7,770.0	10,166.7	7,759.0	72.9	40.4	90.07	-3,983.5	-4,296.6	4,302.2	4,188.9	113.21	38.001	
11,900.0	7,770.0	10,266.7	7,759.0	74.6	42.1	90.07	-4,083.5	-4,296.6	4,302.2	4,185.6	116.59	36.902	
12,000.0	7,770.0	10,366.7	7,759.0	76.4	43.7	90.07	-4,183.5	-4,296.6	4,302.2	4,182.2	119.97	35.861	
12,100.0	7,770.0	10,466.7	7,759.0	78.1	45.4	90.07	-4,283.5	-4,296.6	4,302.2	4,178.9	123.36	34.875	
12,200.0	7,770.0	10,566.7	7,759.0	79.8	47.1	90.07	-4,383.5	-4,296.6	4,302.2	4,175.5	126.76	33.940	
12,300.0	7,770.0	10,666.7	7,759.0	81.5	48.7	90.07	-4,483.5	-4,296.6	4,302.2	4,172.1	130.16	33.052	
12,400.0	7,770.0	10,766.7	7,759.0	83.3	50.4	90.07	-4,583.5	-4,296.7	4,302.3	4,168.7	133.58	32.208	
12,500.0	7,770.0	10,866.7	7,759.0	85.0	52.1	90.07	-4,683.5	-4,296.7	4,302.3	4,165.3	137.00	31.405	
12,600.0	7,770.0	10,966.7	7,759.0	86.7	53.8	90.07	-4,783.5	-4,296.7	4,302.3	4,161.9	140.42	30.639	
12,700.0	7,770.0	11,066.7	7,759.0	88.5	55.5	90.07	-4,883.5	-4,296.7	4,302.3	4,158.5	143.85	29.909	
12,800.0	7,770.0	11,166.7	7,759.0	90.2	57.2	90.07	-4,983.5	-4,296.7	4,302.3	4,155.0	147.28	29.212	
12,900.0	7,770.0	11,266.7	7,759.0	91.9	58.9	90.07	-5,083.5	-4,296.7	4,302.3	4,151.6	150.72	28.546	
13,000.0	7,770.0	11,366.7	7,759.0	93.7	60.6	90.07	-5,183.5	-4,296.8	4,302.4	4,148.2	154.16	27.909	
13,100.0	7,770.0	11,466.7	7,759.0	95.4	62.3	90.07	-5,283.5	-4,296.8	4,302.4	4,144.8	157.60	27.299	
13,200.0	7,770.0	11,566.7	7,759.0	97.1	64.0	90.07	-5,383.5	-4,296.8	4,302.4	4,141.3	161.05	26.715	
13,300.0	7,770.0	11,666.7	7,759.0	98.9	65.7	90.07	-5,483.5	-4,296.8	4,302.4	4,137.9	164.50	26.155	
13,400.0	7,770.0	11,766.7	7,759.0	100.6	67.4	90.07	-5,583.5	-4,296.8	4,302.4	4,134.5	167.95	25.617	
13,500.0	7,770.0	11,866.7	7,759.0	102.4	69.1	90.07	-5,683.5	-4,296.8	4,302.4	4,131.0	171.40	25.101	
13,600.0	7,770.0	11,966.7	7,759.0	104.1	70.8	90.07	-5,783.5	-4,296.9	4,302.5	4,127.6	174.86	24.605	
13,700.0	7,770.0	12,066.7	7,759.0	105.8	72.6	90.07	-5,883.5	-4,296.9	4,302.5	4,124.2	178.32	24.128	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			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	7,770.0	12,166.7	7,759.0	107.6	74.3	90.07	-5,983.5	-4,296.9	4,302.5	4,120.7	181.78	23.668		
13,900.0	7,770.0	12,266.7	7,759.0	109.3	76.0	90.07	-6,083.5	-4,296.9	4,302.5	4,117.3	185.25	23.226		
14,000.0	7,770.0	12,366.7	7,759.0	111.1	77.7	90.07	-6,183.5	-4,296.9	4,302.5	4,113.8	188.71	22.799		
14,100.0	7,770.0	12,466.7	7,759.0	112.8	79.4	90.07	-6,283.5	-4,296.9	4,302.5	4,110.4	192.18	22.388		
14,200.0	7,770.0	12,566.7	7,759.0	114.5	81.2	90.07	-6,383.5	-4,297.0	4,302.6	4,106.9	195.65	21.991		
14,300.0	7,770.0	12,666.7	7,759.0	116.3	82.9	90.07	-6,483.5	-4,297.0	4,302.6	4,103.5	199.12	21.608		
14,400.0	7,770.0	12,766.7	7,759.0	118.0	84.6	90.07	-6,583.5	-4,297.0	4,302.6	4,100.0	202.59	21.238		
14,500.0	7,770.0	12,866.7	7,759.0	119.8	86.4	90.07	-6,683.5	-4,297.0	4,302.6	4,096.5	206.06	20.880		
14,600.0	7,770.0	12,966.7	7,759.0	121.5	88.1	90.07	-6,783.5	-4,297.0	4,302.6	4,093.1	209.54	20.534		
14,700.0	7,770.0	13,066.7	7,759.0	123.3	89.8	90.07	-6,883.5	-4,297.0	4,302.6	4,089.6	213.01	20.199		
14,800.0	7,770.0	13,166.7	7,759.0	125.0	91.5	90.07	-6,983.5	-4,297.1	4,302.7	4,086.2	216.49	19.875		
14,900.0	7,770.0	13,266.7	7,759.0	126.7	93.3	90.07	-7,083.5	-4,297.1	4,302.7	4,082.7	219.97	19.561		
15,000.0	7,770.0	13,366.7	7,759.0	128.5	95.0	90.07	-7,183.5	-4,297.1	4,302.7	4,079.2	223.44	19.256		
15,100.0	7,770.0	13,466.7	7,759.0	130.2	96.7	90.07	-7,283.5	-4,297.1	4,302.7	4,075.8	226.92	18.961		
15,200.0	7,770.0	13,566.7	7,759.0	132.0	98.5	90.07	-7,383.5	-4,297.1	4,302.7	4,072.3	230.40	18.675		
15,300.0	7,770.0	13,666.7	7,759.0	133.7	100.2	90.07	-7,483.5	-4,297.1	4,302.7	4,068.9	233.89	18.397		
15,400.0	7,770.0	13,766.7	7,759.0	135.5	102.0	90.07	-7,583.5	-4,297.2	4,302.8	4,065.4	237.37	18.127		
15,500.0	7,770.0	13,866.7	7,759.0	137.2	103.7	90.07	-7,683.5	-4,297.2	4,302.8	4,061.9	240.85	17.865		
15,600.0	7,770.0	13,966.7	7,759.0	139.0	105.4	90.07	-7,783.5	-4,297.2	4,302.8	4,058.5	244.34	17.610		
15,700.0	7,770.0	14,066.7	7,759.0	140.7	107.2	90.07	-7,883.5	-4,297.2	4,302.8	4,055.0	247.82	17.363		
15,800.0	7,770.0	14,166.7	7,759.0	142.4	108.9	90.07	-7,983.5	-4,297.2	4,302.8	4,051.5	251.31	17.122		
15,900.0	7,770.0	14,266.7	7,759.0	144.2	110.6	90.07	-8,083.5	-4,297.2	4,302.8	4,048.0	254.79	16.888		
16,000.0	7,770.0	14,366.7	7,759.0	145.9	112.4	90.07	-8,183.5	-4,297.3	4,302.9	4,044.6	258.28	16.660		
16,100.0	7,770.0	14,466.7	7,759.0	147.7	114.1	90.07	-8,283.5	-4,297.3	4,302.9	4,041.1	261.76	16.438		
16,200.0	7,770.0	14,566.7	7,759.0	149.4	115.9	90.07	-8,383.5	-4,297.3	4,302.9	4,037.6	265.25	16.222		
16,300.0	7,770.0	14,666.7	7,759.0	151.2	117.6	90.07	-8,483.5	-4,297.3	4,302.9	4,034.2	268.74	16.011		
16,400.0	7,770.0	14,766.7	7,759.0	152.9	119.3	90.07	-8,583.5	-4,297.3	4,302.9	4,030.7	272.23	15.806		
16,500.0	7,770.0	14,866.7	7,759.0	154.7	121.1	90.07	-8,683.5	-4,297.3	4,302.9	4,027.2	275.72	15.606		
16,600.0	7,770.0	14,966.7	7,759.0	156.4	122.8	90.07	-8,783.5	-4,297.4	4,303.0	4,023.7	279.21	15.411		
16,700.0	7,770.0	15,066.7	7,759.0	158.2	124.6	90.07	-8,883.5	-4,297.4	4,303.0	4,020.3	282.70	15.221		
16,800.0	7,770.0	15,166.7	7,759.0	159.9	126.3	90.07	-8,983.5	-4,297.4	4,303.0	4,016.8	286.19	15.035		
16,900.0	7,770.0	15,266.7	7,759.0	161.7	128.1	90.07	-9,083.5	-4,297.4	4,303.0	4,013.3	289.68	14.854		
17,000.0	7,770.0	15,366.7	7,759.0	163.4	129.8	90.07	-9,183.5	-4,297.4	4,303.0	4,009.9	293.17	14.677		
17,100.0	7,770.0	15,466.7	7,759.0	165.2	131.5	90.07	-9,283.5	-4,297.4	4,303.0	4,006.4	296.66	14.505		
17,200.0	7,770.0	15,566.7	7,759.0	166.9	133.3	90.07	-9,383.5	-4,297.5	4,303.1	4,002.9	300.16	14.336		
17,300.0	7,770.0	15,666.7	7,759.0	168.7	135.0	90.07	-9,483.5	-4,297.5	4,303.1	3,999.4	303.65	14.171		
17,400.0	7,770.0	15,766.7	7,759.0	170.4	136.8	90.07	-9,583.5	-4,297.5	4,303.1	3,995.9	307.14	14.010		
17,500.0	7,770.0	15,866.7	7,759.0	172.2	138.5	90.07	-9,683.5	-4,297.5	4,303.1	3,992.5	310.64	13.853		
17,600.0	7,770.0	15,966.7	7,759.0	173.9	140.3	90.07	-9,783.5	-4,297.5	4,303.1	3,989.0	314.13	13.699		
17,653.1	7,770.0	15,969.8	7,759.0	174.8	140.3	90.07	-9,786.6	-4,297.5	4,303.4	3,988.3	315.11	13.657 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.22	-1,937.2	-4,112.2	4,545.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.22	-1,937.2	-4,112.2	4,545.7	4,545.4	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.22	-1,937.2	-4,112.2	4,545.7	4,545.1	0.60	7,527.376		
300.0	300.0	284.0	284.0	0.5	0.5	-115.22	-1,937.2	-4,112.2	4,545.7	4,544.7	0.95	4,770.096		
400.0	400.0	384.0	384.0	0.7	0.6	-115.22	-1,937.2	-4,112.2	4,545.7	4,544.4	1.30	3,491.251		
500.0	500.0	575.8	575.7	0.8	1.0	-115.20	-1,934.6	-4,111.5	4,544.8	4,543.0	1.81	2,506.618		
550.0	550.0	680.3	680.2	0.9	1.2	-115.16	-1,930.6	-4,110.4	4,543.5	4,541.4	2.09	2,176.322		
600.0	600.0	784.6	784.3	1.0	1.4	-115.96	-1,924.7	-4,108.7	4,541.7	4,539.3	2.37	1,917.961		
700.0	700.0	959.0	958.1	1.2	1.7	-115.90	-1,911.0	-4,104.8	4,537.0	4,534.1	2.88	1,573.860		
800.0	799.9	1,058.8	1,057.5	1.4	1.9	-115.89	-1,902.2	-4,102.3	4,532.5	4,529.2	3.26	1,389.671		
861.1	860.9	1,119.8	1,118.3	1.5	2.1	-115.89	-1,896.8	-4,100.7	4,530.1	4,526.6	3.50	1,295.743		
900.0	899.8	1,158.7	1,157.0	1.6	2.2	-115.88	-1,893.4	-4,099.7	4,528.6	4,525.0	3.65	1,241.784		
1,000.0	999.6	1,258.6	1,256.5	1.8	2.4	-115.85	-1,884.5	-4,097.2	4,525.0	4,520.9	4.04	1,120.964		
1,100.0	1,099.5	1,358.5	1,356.0	1.9	2.6	-115.83	-1,875.7	-4,094.7	4,521.3	4,516.9	4.43	1,020.695		
1,200.0	1,199.3	1,458.4	1,455.4	2.1	2.8	-115.80	-1,866.9	-4,092.2	4,517.6	4,512.8	4.82	936.304		
1,300.0	1,299.2	1,558.4	1,554.9	2.3	3.1	-115.78	-1,858.0	-4,089.6	4,514.0	4,508.7	5.22	864.388		
1,400.0	1,399.1	1,658.3	1,654.4	2.5	3.3	-115.75	-1,849.2	-4,087.1	4,510.3	4,504.7	5.62	802.429		
1,500.0	1,498.9	1,758.2	1,753.9	2.7	3.5	-115.72	-1,840.3	-4,084.6	4,506.6	4,500.6	6.02	748.530		
1,600.0	1,598.8	1,858.1	1,853.4	2.9	3.8	-115.70	-1,831.5	-4,082.1	4,503.0	4,496.5	6.42	701.237		
1,700.0	1,698.6	1,958.0	1,952.9	3.1	4.0	-115.67	-1,822.7	-4,079.5	4,499.3	4,492.5	6.82	659.423		
1,800.0	1,798.5	2,057.9	2,052.4	3.3	4.2	-115.64	-1,813.8	-4,077.0	4,495.6	4,488.4	7.23	622.198		
1,900.0	1,898.3	2,157.8	2,151.9	3.5	4.5	-115.62	-1,805.0	-4,074.5	4,492.0	4,484.4	7.63	588.854		
2,000.0	1,998.2	2,257.7	2,251.3	3.7	4.7	-115.59	-1,796.2	-4,072.0	4,488.3	4,480.3	8.03	558.821		
2,100.0	2,098.0	2,357.6	2,350.8	3.9	4.9	-115.56	-1,787.3	-4,069.4	4,484.7	4,476.2	8.44	531.632		
2,200.0	2,197.9	2,457.6	2,450.3	4.1	5.2	-115.54	-1,778.5	-4,066.9	4,481.0	4,472.2	8.84	506.905		
2,300.0	2,297.7	2,557.5	2,549.8	4.3	5.4	-115.51	-1,769.6	-4,064.4	4,477.3	4,468.1	9.24	484.322		
2,400.0	2,397.6	2,657.4	2,649.3	4.5	5.6	-115.48	-1,760.8	-4,061.9	4,473.7	4,464.0	9.65	463.618		
2,500.0	2,497.4	2,757.3	2,748.8	4.7	5.9	-115.46	-1,752.0	-4,059.3	4,470.0	4,460.0	10.05	444.568		
2,600.0	2,597.3	2,857.2	2,848.3	4.9	6.1	-115.43	-1,743.1	-4,056.8	4,466.4	4,455.9	10.46	426.984		
2,700.0	2,697.1	2,957.1	2,947.8	5.1	6.4	-115.40	-1,734.3	-4,054.3	4,462.7	4,451.9	10.87	410.704		
2,800.0	2,797.0	3,057.0	3,047.2	5.3	6.6	-115.38	-1,725.5	-4,051.7	4,459.1	4,447.8	11.27	395.588		
2,900.0	2,896.8	3,156.9	3,146.7	5.5	6.8	-115.35	-1,716.6	-4,049.2	4,455.4	4,443.7	11.68	381.516		
3,000.0	2,996.7	3,256.8	3,246.2	5.7	7.1	-115.32	-1,707.8	-4,046.7	4,451.8	4,439.7	12.08	368.384		
3,100.0	3,096.5	3,356.8	3,345.7	5.9	7.3	-115.29	-1,698.9	-4,044.2	4,448.1	4,435.6	12.49	356.101		
3,200.0	3,196.4	3,456.7	3,445.2	6.1	7.5	-115.27	-1,690.1	-4,041.6	4,444.5	4,431.6	12.90	344.588		
3,300.0	3,296.3	3,556.6	3,544.7	6.3	7.8	-115.24	-1,681.3	-4,039.1	4,440.8	4,427.5	13.30	333.775		
3,400.0	3,396.1	3,656.5	3,644.2	6.5	8.0	-115.21	-1,672.4	-4,036.6	4,437.2	4,423.5	13.71	323.600		
3,500.0	3,496.0	3,756.4	3,743.7	6.7	8.2	-115.19	-1,663.6	-4,034.1	4,433.5	4,419.4	14.12	314.009		
3,600.0	3,595.8	3,856.3	3,843.1	6.9	8.5	-115.16	-1,654.8	-4,031.5	4,429.9	4,415.4	14.53	304.952		
3,700.0	3,695.7	3,956.2	3,942.6	7.0	8.7	-115.13	-1,645.9	-4,029.0	4,426.2	4,411.3	14.93	296.387		
3,800.0	3,795.5	4,056.1	4,042.1	7.2	8.9	-115.10	-1,637.1	-4,026.5	4,422.6	4,407.3	15.34	288.274		
3,900.0	3,895.4	4,156.0	4,141.6	7.4	9.2	-115.08	-1,628.2	-4,024.0	4,419.0	4,403.2	15.75	280.579		
4,000.0	3,995.2	4,256.0	4,241.1	7.6	9.4	-115.05	-1,619.4	-4,021.4	4,415.3	4,399.2	16.16	273.271		
4,100.0	4,095.1	4,355.9	4,340.6	7.8	9.7	-115.02	-1,610.6	-4,018.9	4,411.7	4,395.1	16.57	266.320		
4,200.0	4,194.9	4,455.8	4,440.1	8.0	9.9	-114.99	-1,601.7	-4,016.4	4,408.0	4,391.1	16.97	259.702		
4,300.0	4,294.8	4,555.7	4,539.6	8.2	10.1	-114.97	-1,592.9	-4,013.9	4,404.4	4,387.0	17.38	253.393		
4,400.0	4,394.6	4,655.6	4,639.0	8.4	10.4	-114.94	-1,584.0	-4,011.3	4,400.8	4,383.0	17.79	247.372		
4,500.0	4,494.5	4,755.5	4,738.5	8.6	10.6	-114.91	-1,575.2	-4,008.8	4,397.1	4,378.9	18.20	241.620		
4,600.0	4,594.3	4,855.4	4,838.0	8.8	10.8	-114.88	-1,566.4	-4,006.3	4,393.5	4,374.9	18.61	236.119		
4,700.0	4,694.2	4,955.3	4,937.5	9.0	11.1	-114.85	-1,557.5	-4,003.8	4,389.9	4,370.8	19.02	230.853		
4,800.0	4,794.0	5,055.2	5,037.0	9.2	11.3	-114.83	-1,548.7	-4,001.2	4,386.2	4,366.8	19.42	225.808		
4,900.0	4,893.9	5,155.2	5,136.5	9.4	11.5	-114.80	-1,539.9	-3,998.7	4,382.6	4,362.8	19.83	220.969		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,993.7	5,255.1	5,236.0	9.6	11.8	-114.77	-1,531.0	-3,996.2	4,379.0	4,358.7	20.24	216.325		
5,100.0	5,093.6	5,355.0	5,335.5	9.8	12.0	-114.74	-1,522.2	-3,993.7	4,375.3	4,354.7	20.65	211.864		
5,200.0	5,193.5	5,454.9	5,434.9	10.0	12.3	-114.71	-1,513.3	-3,991.1	4,371.7	4,350.6	21.06	207.576		
5,300.0	5,293.3	5,554.8	5,534.4	10.2	12.5	-114.69	-1,504.5	-3,988.6	4,368.1	4,346.6	21.47	203.449		
5,400.0	5,393.2	5,654.7	5,633.9	10.4	12.7	-114.66	-1,495.7	-3,986.1	4,364.4	4,342.6	21.88	199.477		
5,500.0	5,493.0	5,754.6	5,733.4	10.6	13.0	-114.63	-1,486.8	-3,983.6	4,360.8	4,338.5	22.29	195.650		
5,600.0	5,592.9	5,854.5	5,832.9	10.8	13.2	-114.60	-1,478.0	-3,981.0	4,357.2	4,334.5	22.70	191.959		
5,700.0	5,692.7	5,954.4	5,932.4	11.0	13.4	-114.57	-1,469.2	-3,978.5	4,353.6	4,330.5	23.11	188.399		
5,800.0	5,792.6	6,054.4	6,031.9	11.2	13.7	-114.55	-1,460.3	-3,976.0	4,350.0	4,326.4	23.52	184.963		
5,900.0	5,892.4	6,154.3	6,131.4	11.4	13.9	-114.52	-1,451.5	-3,973.5	4,346.3	4,322.4	23.93	181.643		
6,000.0	5,992.3	6,254.2	6,230.8	11.6	14.1	-114.49	-1,442.6	-3,970.9	4,342.7	4,318.4	24.34	178.435		
6,100.0	6,092.1	6,354.1	6,330.3	11.8	14.4	-114.46	-1,433.8	-3,968.4	4,339.1	4,314.3	24.75	175.332		
6,200.0	6,192.0	6,454.0	6,429.8	12.0	14.6	-114.43	-1,425.0	-3,965.9	4,335.5	4,310.3	25.16	172.330		
6,300.0	6,291.8	6,553.9	6,529.3	12.2	14.9	-114.40	-1,416.1	-3,963.4	4,331.9	4,306.3	25.57	169.423		
6,400.0	6,391.7	6,653.8	6,628.8	12.4	15.1	-114.37	-1,407.3	-3,960.8	4,328.2	4,302.3	25.98	166.608		
6,500.0	6,491.5	6,753.7	6,728.3	12.6	15.3	-114.35	-1,398.5	-3,958.3	4,324.6	4,298.2	26.39	163.880		
6,600.0	6,591.4	6,853.6	6,827.8	12.8	15.6	-114.32	-1,389.6	-3,955.8	4,321.0	4,294.2	26.80	161.235		
6,700.0	6,691.2	6,953.6	6,927.3	13.0	15.8	-114.29	-1,380.8	-3,953.3	4,317.4	4,290.2	27.21	158.669		
6,800.0	6,791.1	7,053.5	7,026.7	13.2	16.0	-114.26	-1,371.9	-3,950.7	4,313.8	4,286.2	27.62	156.179		
6,900.0	6,890.9	7,153.4	7,126.2	13.4	16.3	-114.23	-1,363.1	-3,948.2	4,310.2	4,282.1	28.03	153.762		
7,000.0	6,990.8	7,153.5	7,158.3	13.6	16.3	-114.23	-1,360.7	-3,947.4	4,307.3	4,279.0	28.28	152.296		
7,024.2	7,014.9	7,200.0	7,172.7	13.6	16.4	-114.23	-1,360.2	-3,947.0	4,306.9	4,278.5	28.35	151.909		
7,050.0	7,040.7	7,200.0	7,172.7	13.7	16.4	-115.84	-1,360.2	-3,947.0	4,306.3	4,277.9	28.39	151.661		
7,100.0	7,090.7	7,200.0	7,172.7	13.7	16.4	67.66	-1,360.2	-3,947.0	4,304.6	4,276.1	28.45	151.295		
7,150.0	7,140.5	7,223.2	7,195.9	13.8	16.4	67.37	-1,360.1	-3,946.4	4,301.8	4,273.3	28.51	150.909		
7,200.0	7,189.9	7,250.0	7,222.7	13.8	16.4	67.54	-1,361.2	-3,945.8	4,298.3	4,269.7	28.54	150.585		
7,250.0	7,238.6	7,250.0	7,222.7	13.8	16.4	67.82	-1,361.2	-3,945.8	4,293.6	4,265.1	28.54	150.446		
7,300.0	7,286.4	7,250.0	7,222.7	13.7	16.4	68.19	-1,361.2	-3,945.8	4,288.2	4,259.7	28.52	150.357		
7,350.0	7,333.1	7,272.9	7,245.5	13.7	16.4	68.71	-1,363.1	-3,945.2	4,281.9	4,253.4	28.50	150.243		
7,400.0	7,378.5	7,300.0	7,272.4	13.6	16.4	69.34	-1,366.6	-3,944.5	4,274.9	4,246.4	28.48	150.109		
7,450.0	7,422.2	7,300.0	7,272.4	13.6	16.4	69.93	-1,366.6	-3,944.5	4,266.9	4,238.4	28.45	149.970		
7,500.0	7,464.1	7,300.0	7,272.4	13.5	16.4	70.58	-1,366.6	-3,944.5	4,258.3	4,229.8	28.43	149.764		
7,550.0	7,504.1	7,320.9	7,293.0	13.5	16.4	71.41	-1,370.1	-3,944.0	4,248.9	4,220.4	28.43	149.475		
7,600.0	7,541.8	7,350.0	7,321.4	13.5	16.3	72.37	-1,376.2	-3,943.3	4,239.0	4,210.5	28.44	149.056		
7,650.0	7,577.2	7,350.0	7,321.4	13.4	16.3	73.20	-1,376.2	-3,943.3	4,228.3	4,199.8	28.49	148.411		
7,700.0	7,610.0	7,350.0	7,321.4	13.5	16.3	74.08	-1,376.2	-3,943.3	4,217.1	4,188.5	28.58	147.571		
7,750.0	7,640.2	7,350.0	7,321.4	13.5	16.3	74.99	-1,376.2	-3,943.3	4,205.6	4,176.9	28.70	146.518		
7,800.0	7,667.4	7,376.7	7,347.2	13.6	16.3	76.18	-1,383.1	-3,942.6	4,193.5	4,164.6	28.85	145.350		
7,850.0	7,691.7	7,400.0	7,369.4	13.7	16.2	77.39	-1,390.1	-3,942.1	4,181.2	4,152.1	29.05	143.944		
7,900.0	7,712.8	7,400.0	7,369.4	13.9	16.2	78.42	-1,390.1	-3,942.1	4,168.5	4,139.2	29.31	142.199		
7,950.0	7,730.8	7,400.0	7,369.4	14.1	16.2	79.46	-1,390.1	-3,942.1	4,155.6	4,126.0	29.63	140.256		
8,000.0	7,745.5	7,400.0	7,369.4	14.4	16.2	80.51	-1,390.1	-3,942.1	4,142.8	4,112.8	29.99	138.138		
8,050.0	7,756.7	7,424.2	7,392.2	14.7	16.2	81.86	-1,398.4	-3,941.5	4,129.7	4,099.3	30.35	136.072		
8,100.0	7,764.6	7,432.3	7,399.7	15.1	16.2	83.02	-1,401.3	-3,941.3	4,116.7	4,085.9	30.77	133.771		
8,150.0	7,769.0	7,450.0	7,416.0	15.5	16.1	84.31	-1,408.2	-3,940.9	4,103.8	4,072.6	31.21	131.487		
8,188.1	7,770.0	7,450.0	7,416.0	15.9	16.1	85.10	-1,408.2	-3,940.9	4,094.1	4,062.5	31.59	129.606		
8,200.0	7,770.0	7,450.0	7,416.0	16.0	16.1	85.10	-1,408.2	-3,940.9	4,091.1	4,059.4	31.70	129.061		
8,300.0	7,770.0	7,450.0	7,416.0	17.0	16.1	85.10	-1,408.2	-3,940.9	4,067.3	4,034.6	32.69	124.401		
8,400.0	7,770.0	7,476.8	7,440.3	18.1	16.0	85.45	-1,419.5	-3,940.3	4,045.5	4,011.7	33.73	119.933		
8,500.0	7,770.0	7,500.0	7,460.9	19.3	16.0	85.75	-1,430.2	-3,939.7	4,025.9	3,991.1	34.87	115.448		
8,600.0	7,770.0	7,515.1	7,474.0	20.6	15.9	85.94	-1,437.6	-3,939.4	4,008.5	3,972.4	36.11	111.017		
8,700.0	7,770.0	7,550.0	7,503.6	21.9	15.8	86.37	-1,456.0	-3,938.7	3,993.3	3,956.0	37.34	106.942		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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	7,770.0	7,564.7	7,515.8	23.3	15.7	86.54	-1,464.4	-3,938.4	3,980.2	3,941.5	38.69	102.873		
8,900.0	7,770.0	7,600.0	7,544.0	24.8	15.6	86.95	-1,485.5	-3,937.6	3,969.2	3,929.2	40.01	99.211		
9,000.0	7,770.0	7,630.5	7,567.3	26.3	15.5	87.29	-1,505.2	-3,937.1	3,960.1	3,918.7	41.37	95.719		
9,100.0	7,770.0	7,671.5	7,596.9	27.8	15.3	87.72	-1,533.5	-3,936.3	3,952.9	3,910.2	42.72	92.521		
9,200.0	7,770.0	7,719.1	7,628.5	29.3	15.1	88.18	-1,569.0	-3,935.5	3,947.4	3,903.4	44.08	89.557		
9,300.0	7,770.0	7,774.1	7,661.4	30.9	14.9	88.65	-1,613.1	-3,934.7	3,943.5	3,898.0	45.43	86.799		
9,400.0	7,770.0	7,837.3	7,693.7	32.5	14.7	89.12	-1,667.4	-3,933.9	3,940.8	3,894.0	46.80	84.200		
9,500.0	7,770.0	7,908.7	7,722.8	34.1	14.5	89.55	-1,732.5	-3,933.1	3,939.2	3,890.9	48.22	81.688		
9,600.0	7,770.0	7,987.4	7,745.2	35.7	14.4	89.87	-1,807.9	-3,932.6	3,938.3	3,888.5	49.74	79.181		
9,700.0	7,770.0	8,071.2	7,757.4	37.3	14.4	90.05	-1,890.7	-3,932.3	3,937.9	3,886.5	51.40	76.619		
9,747.2	7,770.0	8,111.6	7,759.0	38.1	14.5	90.07	-1,931.1	-3,932.3	3,937.9	3,885.6	52.23	75.394 CC		
9,800.0	7,770.0	8,164.1	7,759.0	39.0	14.6	90.07	-1,983.6	-3,932.3	3,937.9	3,884.6	53.25	73.944		
9,900.0	7,770.0	8,264.1	7,759.0	40.6	15.0	90.07	-2,083.6	-3,932.3	3,937.9	3,882.6	55.33	71.171		
10,000.0	7,770.0	8,364.1	7,759.0	42.3	15.6	90.07	-2,183.6	-3,932.3	3,937.9	3,880.3	57.60	68.368		
10,100.0	7,770.0	8,464.1	7,759.0	44.0	16.4	90.07	-2,283.6	-3,932.3	3,937.9	3,877.9	60.04	65.585		
10,200.0	7,770.0	8,564.1	7,759.0	45.6	17.3	90.07	-2,383.6	-3,932.3	3,937.9	3,875.3	62.64	62.866		
10,300.0	7,770.0	8,664.1	7,759.0	47.3	18.3	90.07	-2,483.6	-3,932.4	3,938.0	3,872.6	65.37	60.244		
10,400.0	7,770.0	8,764.1	7,759.0	49.0	19.5	90.07	-2,583.6	-3,932.4	3,938.0	3,869.8	68.20	57.740		
10,500.0	7,770.0	8,864.1	7,759.0	50.7	20.7	90.07	-2,683.6	-3,932.4	3,938.0	3,866.9	71.13	55.365		
10,600.0	7,770.0	8,964.1	7,759.0	52.4	22.0	90.07	-2,783.6	-3,932.4	3,938.0	3,863.9	74.13	53.123		
10,700.0	7,770.0	9,064.1	7,759.0	54.1	23.3	90.07	-2,883.6	-3,932.4	3,938.0	3,860.8	77.19	51.014		
10,800.0	7,770.0	9,164.1	7,759.0	55.8	24.7	90.07	-2,983.6	-3,932.4	3,938.0	3,857.7	80.31	49.035		
10,900.0	7,770.0	9,264.1	7,759.0	57.5	26.2	90.07	-3,083.6	-3,932.5	3,938.1	3,854.6	83.47	47.177		
11,000.0	7,770.0	9,364.1	7,759.0	59.2	27.7	90.07	-3,183.6	-3,932.5	3,938.1	3,851.4	86.67	45.436		
11,100.0	7,770.0	9,464.1	7,759.0	60.9	29.2	90.07	-3,283.6	-3,932.5	3,938.1	3,848.2	89.90	43.803		
11,200.0	7,770.0	9,564.1	7,759.0	62.6	30.7	90.07	-3,383.6	-3,932.5	3,938.1	3,844.9	93.16	42.271		
11,300.0	7,770.0	9,664.1	7,759.0	64.3	32.3	90.07	-3,483.6	-3,932.5	3,938.1	3,841.7	96.44	40.833		
11,400.0	7,770.0	9,764.1	7,759.0	66.0	33.9	90.07	-3,583.6	-3,932.5	3,938.1	3,838.4	99.75	39.481		
11,500.0	7,770.0	9,864.1	7,759.0	67.7	35.5	90.07	-3,683.6	-3,932.6	3,938.2	3,835.1	103.07	38.209		
11,600.0	7,770.0	9,964.1	7,759.0	69.5	37.1	90.07	-3,783.6	-3,932.6	3,938.2	3,831.8	106.40	37.011		
11,700.0	7,770.0	10,064.1	7,759.0	71.2	38.7	90.07	-3,883.6	-3,932.6	3,938.2	3,828.4	109.75	35.882		
11,800.0	7,770.0	10,164.1	7,759.0	72.9	40.3	90.07	-3,983.6	-3,932.6	3,938.2	3,825.1	113.12	34.816		
11,900.0	7,770.0	10,264.1	7,759.0	74.6	42.0	90.07	-4,083.6	-3,932.6	3,938.2	3,821.7	116.49	33.808		
12,000.0	7,770.0	10,364.1	7,759.0	76.4	43.6	90.07	-4,183.6	-3,932.6	3,938.2	3,818.4	119.87	32.854		
12,100.0	7,770.0	10,464.1	7,759.0	78.1	45.3	90.07	-4,283.6	-3,932.6	3,938.3	3,815.0	123.26	31.950		
12,200.0	7,770.0	10,564.1	7,759.0	79.8	47.0	90.07	-4,383.6	-3,932.7	3,938.3	3,811.6	126.66	31.093		
12,300.0	7,770.0	10,664.1	7,759.0	81.5	48.6	90.07	-4,483.6	-3,932.7	3,938.3	3,808.2	130.07	30.279		
12,400.0	7,770.0	10,764.1	7,759.0	83.3	50.3	90.07	-4,583.6	-3,932.7	3,938.3	3,804.8	133.48	29.505		
12,500.0	7,770.0	10,864.1	7,759.0	85.0	52.0	90.07	-4,683.6	-3,932.7	3,938.3	3,801.4	136.90	28.769		
12,600.0	7,770.0	10,964.1	7,759.0	86.7	53.7	90.07	-4,783.6	-3,932.7	3,938.3	3,798.0	140.32	28.067		
12,700.0	7,770.0	11,064.1	7,759.0	88.5	55.4	90.07	-4,883.6	-3,932.7	3,938.4	3,794.6	143.75	27.398		
12,800.0	7,770.0	11,164.1	7,759.0	90.2	57.1	90.07	-4,983.6	-3,932.8	3,938.4	3,791.2	147.18	26.759		
12,900.0	7,770.0	11,264.1	7,759.0	91.9	58.8	90.07	-5,083.6	-3,932.8	3,938.4	3,787.8	150.62	26.149		
13,000.0	7,770.0	11,364.1	7,759.0	93.7	60.5	90.07	-5,183.6	-3,932.8	3,938.4	3,784.3	154.06	25.565		
13,100.0	7,770.0	11,464.1	7,759.0	95.4	62.2	90.07	-5,283.6	-3,932.8	3,938.4	3,780.9	157.50	25.006		
13,200.0	7,770.0	11,564.1	7,759.0	97.1	63.9	90.07	-5,383.6	-3,932.8	3,938.4	3,777.5	160.95	24.471		
13,300.0	7,770.0	11,664.1	7,759.0	98.9	65.6	90.07	-5,483.6	-3,932.8	3,938.5	3,774.1	164.40	23.957		
13,400.0	7,770.0	11,764.1	7,759.0	100.6	67.3	90.07	-5,583.6	-3,932.9	3,938.5	3,770.6	167.85	23.465		
13,500.0	7,770.0	11,864.1	7,759.0	102.4	69.0	90.07	-5,683.6	-3,932.9	3,938.5	3,767.2	171.30	22.991		
13,600.0	7,770.0	11,964.1	7,759.0	104.1	70.7	90.07	-5,783.6	-3,932.9	3,938.5	3,763.7	174.76	22.537		
13,700.0	7,770.0	12,064.1	7,759.0	105.8	72.5	90.07	-5,883.6	-3,932.9	3,938.5	3,760.3	178.22	22.099		
13,800.0	7,770.0	12,164.1	7,759.0	107.6	74.2	90.07	-5,983.6	-3,932.9	3,938.5	3,756.9	181.68	21.678		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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)						
13,900.0	7,770.0	12,264.1	7,759.0	109.3	75.9	90.07	-6,083.6	-3,932.9	3,938.6	3,753.4	185.14	21.273		
14,000.0	7,770.0	12,364.1	7,759.0	111.1	77.6	90.07	-6,183.6	-3,933.0	3,938.6	3,750.0	188.61	20.882		
14,100.0	7,770.0	12,464.1	7,759.0	112.8	79.3	90.07	-6,283.6	-3,933.0	3,938.6	3,746.5	192.08	20.505		
14,200.0	7,770.0	12,564.1	7,759.0	114.5	81.1	90.07	-6,383.6	-3,933.0	3,938.6	3,743.1	195.55	20.142		
14,300.0	7,770.0	12,664.1	7,759.0	116.3	82.8	90.07	-6,483.6	-3,933.0	3,938.6	3,739.6	199.02	19.791		
14,400.0	7,770.0	12,764.1	7,759.0	118.0	84.5	90.07	-6,583.6	-3,933.0	3,938.6	3,736.1	202.49	19.451		
14,500.0	7,770.0	12,864.1	7,759.0	119.8	86.2	90.07	-6,683.6	-3,933.0	3,938.6	3,732.7	205.96	19.123		
14,600.0	7,770.0	12,964.1	7,759.0	121.5	88.0	90.07	-6,783.6	-3,933.1	3,938.7	3,729.2	209.43	18.806		
14,700.0	7,770.0	13,064.1	7,759.0	123.3	89.7	90.07	-6,883.6	-3,933.1	3,938.7	3,725.8	212.91	18.499		
14,800.0	7,770.0	13,164.1	7,759.0	125.0	91.4	90.07	-6,983.6	-3,933.1	3,938.7	3,722.3	216.39	18.202		
14,900.0	7,770.0	13,264.1	7,759.0	126.7	93.2	90.07	-7,083.6	-3,933.1	3,938.7	3,718.9	219.86	17.914		
15,000.0	7,770.0	13,364.1	7,759.0	128.5	94.9	90.07	-7,183.6	-3,933.1	3,938.7	3,715.4	223.34	17.635		
15,100.0	7,770.0	13,464.1	7,759.0	130.2	96.6	90.07	-7,283.6	-3,933.1	3,938.7	3,711.9	226.82	17.365		
15,200.0	7,770.0	13,564.1	7,759.0	132.0	98.4	90.07	-7,383.6	-3,933.2	3,938.8	3,708.5	230.30	17.103		
15,300.0	7,770.0	13,664.1	7,759.0	133.7	100.1	90.07	-7,483.6	-3,933.2	3,938.8	3,705.0	233.78	16.848		
15,400.0	7,770.0	13,764.1	7,759.0	135.5	101.8	90.07	-7,583.6	-3,933.2	3,938.8	3,701.5	237.27	16.601		
15,500.0	7,770.0	13,864.1	7,759.0	137.2	103.6	90.07	-7,683.6	-3,933.2	3,938.8	3,698.1	240.75	16.361		
15,600.0	7,770.0	13,964.1	7,759.0	139.0	105.3	90.07	-7,783.6	-3,933.2	3,938.8	3,694.6	244.23	16.127		
15,700.0	7,770.0	14,064.1	7,759.0	140.7	107.1	90.07	-7,883.6	-3,933.2	3,938.8	3,691.1	247.72	15.901		
15,800.0	7,770.0	14,164.1	7,759.0	142.4	108.8	90.07	-7,983.6	-3,933.3	3,938.9	3,687.7	251.20	15.680		
15,900.0	7,770.0	14,264.1	7,759.0	144.2	110.5	90.07	-8,083.6	-3,933.3	3,938.9	3,684.2	254.69	15.466		
16,000.0	7,770.0	14,364.1	7,759.0	145.9	112.3	90.07	-8,183.6	-3,933.3	3,938.9	3,680.7	258.17	15.257		
16,100.0	7,770.0	14,464.1	7,759.0	147.7	114.0	90.07	-8,283.6	-3,933.3	3,938.9	3,677.3	261.66	15.053		
16,200.0	7,770.0	14,564.1	7,759.0	149.4	115.8	90.07	-8,383.6	-3,933.3	3,938.9	3,673.8	265.15	14.856		
16,300.0	7,770.0	14,664.1	7,759.0	151.2	117.5	90.07	-8,483.6	-3,933.3	3,938.9	3,670.3	268.64	14.663		
16,400.0	7,770.0	14,764.1	7,759.0	152.9	119.2	90.07	-8,583.6	-3,933.4	3,939.0	3,666.8	272.13	14.475		
16,500.0	7,770.0	14,864.1	7,759.0	154.7	121.0	90.07	-8,683.6	-3,933.4	3,939.0	3,663.4	275.62	14.292		
16,600.0	7,770.0	14,964.1	7,759.0	156.4	122.7	90.07	-8,783.6	-3,933.4	3,939.0	3,659.9	279.11	14.113		
16,700.0	7,770.0	15,064.1	7,759.0	158.2	124.5	90.07	-8,883.6	-3,933.4	3,939.0	3,656.4	282.60	13.939		
16,800.0	7,770.0	15,164.1	7,759.0	159.9	126.2	90.07	-8,983.6	-3,933.4	3,939.0	3,652.9	286.09	13.769		
16,900.0	7,770.0	15,264.1	7,759.0	161.7	128.0	90.07	-9,083.6	-3,933.4	3,939.0	3,649.5	289.58	13.603		
17,000.0	7,770.0	15,364.1	7,759.0	163.4	129.7	90.07	-9,183.6	-3,933.5	3,939.1	3,646.0	293.07	13.441		
17,100.0	7,770.0	15,464.1	7,759.0	165.2	131.4	90.07	-9,283.6	-3,933.5	3,939.1	3,642.5	296.56	13.283		
17,200.0	7,770.0	15,564.1	7,759.0	166.9	133.2	90.07	-9,383.6	-3,933.5	3,939.1	3,639.0	300.05	13.128		
17,300.0	7,770.0	15,664.1	7,759.0	168.7	134.9	90.07	-9,483.6	-3,933.5	3,939.1	3,635.6	303.55	12.977		
17,400.0	7,770.0	15,764.1	7,759.0	170.4	136.7	90.07	-9,583.6	-3,933.5	3,939.1	3,632.1	307.04	12.829		
17,500.0	7,770.0	15,864.1	7,759.0	172.2	138.4	90.07	-9,683.6	-3,933.5	3,939.1	3,628.6	310.53	12.685		
17,600.0	7,770.0	15,964.1	7,759.0	173.9	140.2	90.07	-9,783.6	-3,933.6	3,939.2	3,625.1	314.03	12.544		
17,653.1	7,770.0	15,974.5	7,759.0	174.8	140.3	90.07	-9,794.0	-3,933.6	3,939.4	3,624.3	315.14	12.501 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-115.18	-1,931.2	-4,107.2	4,538.6					
100.0	100.0	84.0	84.0	0.2	0.1	-115.18	-1,931.2	-4,107.2	4,538.6	4,538.3	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.18	-1,931.2	-4,107.2	4,538.6	4,538.0	0.60	7,515.625		
300.0	300.0	284.0	284.0	0.5	0.5	-115.18	-1,931.2	-4,107.2	4,538.6	4,537.6	0.95	4,762.650		
400.0	400.0	384.0	384.0	0.7	0.6	-115.18	-1,931.2	-4,107.2	4,538.6	4,537.3	1.30	3,485.800		
500.0	500.0	484.0	484.0	0.8	0.8	-115.18	-1,931.2	-4,107.2	4,538.6	4,536.9	1.65	2,748.845		
550.0	550.0	617.6	617.6	0.9	1.0	-115.18	-1,930.2	-4,106.5	4,538.3	4,536.3	1.97	2,301.626		
600.0	600.0	790.3	790.2	1.0	1.3	-116.00	-1,925.4	-4,102.6	4,536.8	4,534.4	2.36	1,920.231		
700.0	700.0	1,134.4	1,133.1	1.2	2.1	-115.97	-1,903.8	-4,085.3	4,530.3	4,527.1	3.16	1,432.824		
800.0	799.9	1,254.1	1,252.0	1.4	2.3	-116.02	-1,893.0	-4,076.7	4,521.5	4,517.9	3.56	1,268.306		
861.1	860.9	1,315.0	1,312.5	1.5	2.5	-116.06	-1,887.6	-4,072.3	4,516.4	4,512.7	3.79	1,191.438		
900.0	899.8	1,353.8	1,351.0	1.6	2.6	-116.06	-1,884.1	-4,069.5	4,513.3	4,509.4	3.94	1,146.723		
1,000.0	999.6	1,453.4	1,450.0	1.8	2.8	-116.05	-1,875.1	-4,062.3	4,505.3	4,501.0	4.31	1,045.227		
1,100.0	1,099.5	1,553.1	1,549.0	1.9	3.1	-116.05	-1,866.1	-4,055.2	4,497.4	4,492.7	4.69	959.426		
1,200.0	1,199.3	1,652.8	1,648.1	2.1	3.3	-116.05	-1,857.1	-4,048.0	4,489.4	4,484.3	5.07	886.059		
1,300.0	1,299.2	1,752.5	1,747.1	2.3	3.6	-116.05	-1,848.1	-4,040.8	4,481.4	4,475.9	5.45	822.676		
1,400.0	1,399.1	1,852.2	1,846.1	2.5	3.9	-116.04	-1,839.1	-4,033.6	4,473.4	4,467.6	5.83	767.412		
1,500.0	1,498.9	1,951.8	1,945.1	2.7	4.1	-116.04	-1,830.1	-4,026.4	4,465.4	4,459.2	6.21	718.831		
1,600.0	1,598.8	2,051.5	2,044.1	2.9	4.4	-116.04	-1,821.2	-4,019.2	4,457.4	4,450.8	6.60	675.807		
1,700.0	1,698.6	2,151.2	2,143.1	3.1	4.6	-116.03	-1,812.2	-4,012.1	4,449.4	4,442.5	6.98	637.453		
1,800.0	1,798.5	2,250.9	2,242.1	3.3	4.9	-116.03	-1,803.2	-4,004.9	4,441.4	4,434.1	7.36	603.056		
1,900.0	1,898.3	2,350.6	2,341.1	3.5	5.1	-116.03	-1,794.2	-3,997.7	4,433.5	4,425.7	7.75	572.040		
2,000.0	1,998.2	2,450.2	2,440.2	3.7	5.4	-116.02	-1,785.2	-3,990.5	4,425.5	4,417.3	8.14	543.935		
2,100.0	2,098.0	2,549.9	2,539.2	3.9	5.7	-116.02	-1,776.2	-3,983.3	4,417.5	4,409.0	8.52	518.354		
2,200.0	2,197.9	2,649.6	2,638.2	4.1	5.9	-116.02	-1,767.2	-3,976.1	4,409.5	4,400.6	8.91	494.972		
2,300.0	2,297.7	2,749.3	2,737.2	4.3	6.2	-116.02	-1,758.3	-3,969.0	4,401.5	4,392.2	9.30	473.521		
2,400.0	2,397.6	2,849.0	2,836.2	4.5	6.5	-116.01	-1,749.3	-3,961.8	4,393.5	4,383.8	9.68	453.773		
2,500.0	2,497.4	2,948.6	2,935.2	4.7	6.7	-116.01	-1,740.3	-3,954.6	4,385.5	4,375.5	10.07	435.533		
2,600.0	2,597.3	3,048.3	3,034.2	4.9	7.0	-116.01	-1,731.3	-3,947.4	4,377.5	4,367.1	10.46	418.636		
2,700.0	2,697.1	3,148.0	3,133.3	5.1	7.2	-116.00	-1,722.3	-3,940.2	4,369.6	4,358.7	10.84	402.940		
2,800.0	2,797.0	3,247.7	3,232.3	5.3	7.5	-116.00	-1,713.3	-3,933.0	4,361.6	4,350.3	11.23	388.321		
2,900.0	2,896.8	3,347.4	3,331.3	5.5	7.8	-116.00	-1,704.3	-3,925.9	4,353.6	4,342.0	11.62	374.674		
3,000.0	2,996.7	3,447.0	3,430.3	5.7	8.0	-115.99	-1,695.4	-3,918.7	4,345.6	4,333.6	12.01	361.904		
3,100.0	3,096.5	3,546.7	3,529.3	5.9	8.3	-115.99	-1,686.4	-3,911.5	4,337.6	4,325.2	12.40	349.930		
3,200.0	3,196.4	3,646.4	3,628.3	6.1	8.6	-115.99	-1,677.4	-3,904.3	4,329.6	4,316.8	12.78	338.681		
3,300.0	3,296.3	3,746.1	3,727.3	6.3	8.8	-115.98	-1,668.4	-3,897.1	4,321.6	4,308.5	13.17	328.092		
3,400.0	3,396.1	3,845.8	3,826.4	6.5	9.1	-115.98	-1,659.4	-3,889.9	4,313.6	4,300.1	13.56	318.107		
3,500.0	3,496.0	3,945.4	3,925.4	6.7	9.4	-115.98	-1,650.4	-3,882.7	4,305.7	4,291.7	13.95	308.676		
3,600.0	3,595.8	4,045.1	4,024.4	6.9	9.6	-115.97	-1,641.4	-3,875.6	4,297.7	4,283.3	14.34	299.755		
3,700.0	3,695.7	4,144.8	4,123.4	7.0	9.9	-115.97	-1,632.5	-3,868.4	4,289.7	4,275.0	14.73	291.303		
3,800.0	3,795.5	4,244.5	4,222.4	7.2	10.2	-115.97	-1,623.5	-3,861.2	4,281.7	4,266.6	15.11	283.284		
3,900.0	3,895.4	4,344.2	4,321.4	7.4	10.4	-115.96	-1,614.5	-3,854.0	4,273.7	4,258.2	15.50	275.666		
4,000.0	3,995.2	4,443.8	4,420.4	7.6	10.7	-115.96	-1,605.5	-3,846.8	4,265.7	4,249.8	15.89	268.420		
4,100.0	4,095.1	4,543.5	4,519.5	7.8	10.9	-115.96	-1,596.5	-3,839.6	4,257.7	4,241.5	16.28	261.519		
4,200.0	4,194.9	4,643.2	4,618.5	8.0	11.2	-115.96	-1,587.5	-3,832.5	4,249.7	4,233.1	16.67	254.939		
4,300.0	4,294.8	4,742.9	4,717.5	8.2	11.5	-115.95	-1,578.5	-3,825.3	4,241.8	4,224.7	17.06	248.658		
4,400.0	4,394.6	4,842.6	4,816.5	8.4	11.7	-115.95	-1,569.6	-3,818.1	4,233.8	4,216.3	17.45	242.656		
4,500.0	4,494.5	4,942.3	4,915.5	8.6	12.0	-115.95	-1,560.6	-3,810.9	4,225.8	4,207.9	17.84	236.916		
4,600.0	4,594.3	5,041.9	5,014.5	8.8	12.3	-115.94	-1,551.6	-3,803.7	4,217.8	4,199.6	18.23	231.420		
4,700.0	4,694.2	5,141.6	5,113.5	9.0	12.5	-115.94	-1,542.6	-3,796.5	4,209.8	4,191.2	18.61	226.154		
4,800.0	4,794.0	5,241.3	5,212.6	9.2	12.8	-115.94	-1,533.6	-3,789.4	4,201.8	4,182.8	19.00	221.103		
4,900.0	4,893.9	5,341.0	5,311.6	9.4	13.1	-115.93	-1,524.6	-3,782.2	4,193.8	4,174.4	19.39	216.254		

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,993.7	5,440.7	5,410.6	9.6	13.3	-115.93	-1,515.6	-3,775.0	4,185.9	4,166.1	19.78	211.595	
5,100.0	5,093.6	5,540.3	5,509.6	9.8	13.6	-115.93	-1,506.7	-3,767.8	4,177.9	4,157.7	20.17	207.116	
5,200.0	5,193.5	5,640.0	5,608.6	10.0	13.9	-115.92	-1,497.7	-3,760.6	4,169.9	4,149.3	20.56	202.806	
5,300.0	5,293.3	5,739.7	5,707.6	10.2	14.1	-115.92	-1,488.7	-3,753.4	4,161.9	4,140.9	20.95	198.656	
5,400.0	5,393.2	5,839.4	5,806.6	10.4	14.4	-115.91	-1,479.7	-3,746.2	4,153.9	4,132.6	21.34	194.657	
5,500.0	5,493.0	5,939.1	5,905.7	10.6	14.7	-115.91	-1,470.7	-3,739.1	4,145.9	4,124.2	21.73	190.801	
5,600.0	5,592.9	6,038.7	6,004.7	10.8	14.9	-115.91	-1,461.7	-3,731.9	4,137.9	4,115.8	22.12	187.080	
5,700.0	5,692.7	6,138.4	6,103.7	11.0	15.2	-115.90	-1,452.7	-3,724.7	4,129.9	4,107.4	22.51	183.488	
5,800.0	5,792.6	6,238.1	6,202.7	11.2	15.5	-115.90	-1,443.8	-3,717.5	4,122.0	4,099.1	22.90	180.018	
5,900.0	5,892.4	6,337.8	6,301.7	11.4	15.7	-115.90	-1,434.8	-3,710.3	4,114.0	4,090.7	23.29	176.664	
6,000.0	5,992.3	6,437.5	6,400.7	11.6	16.0	-115.89	-1,425.8	-3,703.1	4,106.0	4,082.3	23.68	173.420	
6,100.0	6,092.1	6,537.1	6,499.7	11.8	16.3	-115.89	-1,416.8	-3,696.0	4,098.0	4,073.9	24.07	170.281	
6,200.0	6,192.0	6,636.8	6,598.8	12.0	16.5	-115.89	-1,407.8	-3,688.8	4,090.0	4,065.6	24.46	167.242	
6,300.0	6,291.8	6,736.5	6,697.8	12.2	16.8	-115.88	-1,398.8	-3,681.6	4,082.0	4,057.2	24.85	164.298	
6,400.0	6,391.7	6,836.2	6,796.8	12.4	17.1	-115.88	-1,389.8	-3,674.4	4,074.0	4,048.8	25.23	161.444	
6,500.0	6,491.5	6,935.9	6,895.8	12.6	17.3	-115.88	-1,380.9	-3,667.2	4,066.0	4,040.4	25.62	158.678	
6,600.0	6,591.4	7,035.5	6,994.8	12.8	17.6	-115.87	-1,371.9	-3,660.0	4,058.1	4,032.0	26.01	155.994	
6,700.0	6,691.2	7,135.2	7,093.8	13.0	17.8	-115.87	-1,362.9	-3,652.9	4,050.1	4,023.7	26.40	153.389	
6,800.0	6,791.1	7,200.0	7,158.2	13.2	18.0	-115.87	-1,357.5	-3,648.2	4,042.4	4,015.7	26.72	151.294	
6,900.0	6,890.9	7,200.0	7,158.2	13.4	18.0	-115.87	-1,357.5	-3,648.2	4,036.5	4,009.6	26.91	149.984	
7,000.0	6,990.8	7,250.0	7,208.1	13.6	18.1	-115.92	-1,357.1	-3,644.6	4,032.2	4,005.1	27.16	148.471	
7,024.2	7,014.9	7,250.0	7,208.1	13.6	18.1	-115.92	-1,357.1	-3,644.6	4,031.5	4,004.3	27.21	148.187	
7,050.0	7,040.7	7,250.0	7,208.1	13.7	18.1	-117.52	-1,357.1	-3,644.6	4,030.6	4,003.4	27.24	147.944	
7,100.0	7,090.7	7,250.0	7,208.1	13.7	18.1	66.02	-1,357.1	-3,644.6	4,028.4	4,001.1	27.30	147.568	
7,150.0	7,140.5	7,280.1	7,238.0	13.8	18.1	65.75	-1,359.0	-3,642.4	4,024.8	3,997.4	27.35	147.156	
7,200.0	7,189.9	7,300.0	7,257.8	13.8	18.1	65.95	-1,361.1	-3,641.0	4,020.4	3,993.0	27.38	146.828	
7,250.0	7,238.6	7,300.0	7,257.8	13.8	18.1	66.28	-1,361.1	-3,641.0	4,015.0	3,987.6	27.39	146.591	
7,300.0	7,286.4	7,300.0	7,257.8	13.7	18.1	66.70	-1,361.1	-3,641.0	4,008.8	3,981.5	27.39	146.372	
7,350.0	7,333.1	7,330.0	7,287.4	13.7	18.1	67.28	-1,365.5	-3,638.8	4,001.5	3,974.1	27.39	146.090	
7,400.0	7,378.5	7,350.0	7,306.9	13.6	18.1	67.93	-1,369.4	-3,637.4	3,993.4	3,966.0	27.40	145.768	
7,450.0	7,422.2	7,350.0	7,306.9	13.6	18.1	68.60	-1,369.4	-3,637.4	3,984.4	3,957.0	27.41	145.376	
7,500.0	7,464.1	7,350.0	7,306.9	13.5	18.1	69.32	-1,369.4	-3,637.4	3,974.8	3,947.3	27.44	144.874	
7,550.0	7,504.1	7,378.7	7,334.8	13.5	18.1	70.26	-1,376.1	-3,635.4	3,964.2	3,936.7	27.48	144.254	
7,600.0	7,541.8	7,400.0	7,355.2	13.5	18.1	71.24	-1,381.9	-3,633.9	3,953.0	3,925.5	27.56	143.450	
7,650.0	7,577.2	7,400.0	7,355.2	13.4	18.1	72.16	-1,381.9	-3,633.9	3,941.2	3,913.5	27.68	142.404	
7,700.0	7,610.0	7,400.0	7,355.2	13.5	18.1	73.13	-1,381.9	-3,633.9	3,928.9	3,901.0	27.84	141.147	
7,750.0	7,640.2	7,425.0	7,378.9	13.5	18.0	74.34	-1,389.8	-3,632.2	3,915.9	3,887.9	28.02	139.770	
7,800.0	7,667.4	7,450.0	7,402.1	13.6	18.0	75.62	-1,398.7	-3,630.5	3,902.7	3,874.4	28.24	138.186	
7,850.0	7,691.7	7,450.0	7,402.1	13.7	18.0	76.73	-1,398.7	-3,630.5	3,888.9	3,860.4	28.54	136.266	
7,900.0	7,712.8	7,450.0	7,402.1	13.9	18.0	77.86	-1,398.7	-3,630.5	3,874.9	3,846.1	28.88	134.165	
7,950.0	7,730.8	7,450.0	7,402.1	14.1	18.0	79.01	-1,398.7	-3,630.5	3,860.9	3,831.6	29.27	131.909	
8,000.0	7,745.5	7,477.1	7,427.0	14.4	17.9	80.48	-1,409.4	-3,628.7	3,846.5	3,816.8	29.65	129.745	
8,050.0	7,756.7	7,500.0	7,447.5	14.7	17.9	81.94	-1,419.4	-3,627.2	3,832.2	3,802.2	30.06	127.486	
8,100.0	7,764.6	7,500.0	7,447.5	15.1	17.9	83.13	-1,419.4	-3,627.2	3,817.9	3,787.3	30.55	124.981	
8,150.0	7,769.0	7,500.0	7,447.5	15.5	17.9	84.30	-1,419.4	-3,627.2	3,803.7	3,772.7	31.06	122.468	
8,188.1	7,770.0	7,500.0	7,447.5	15.9	17.9	85.18	-1,419.4	-3,627.2	3,793.1	3,761.7	31.46	120.569	
8,200.0	7,770.0	7,500.0	7,447.5	16.0	17.9	85.18	-1,419.4	-3,627.2	3,789.8	3,758.3	31.57	120.044	
8,300.0	7,770.0	7,527.7	7,471.8	17.0	17.8	85.56	-1,432.6	-3,625.4	3,763.5	3,731.0	32.48	115.866	
8,400.0	7,770.0	7,550.0	7,490.9	18.1	17.7	85.85	-1,444.1	-3,624.1	3,739.4	3,705.9	33.52	111.545	
8,500.0	7,770.0	7,565.8	7,504.1	19.3	17.7	86.06	-1,452.7	-3,623.1	3,717.6	3,682.9	34.67	107.213	
8,600.0	7,770.0	7,600.0	7,531.9	20.6	17.6	86.50	-1,472.4	-3,621.1	3,698.1	3,662.3	35.84	103.184	
8,700.0	7,770.0	7,600.0	7,531.9	21.9	17.6	86.50	-1,472.4	-3,621.1	3,680.8	3,643.6	37.19	98.972	

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,800.0	7,770.0	7,650.0	7,570.4	23.3	17.4	87.10	-1,504.3	-3,618.3	3,665.6	3,627.2	38.40	95.450		
8,900.0	7,770.0	7,673.6	7,587.5	24.8	17.3	87.37	-1,520.5	-3,617.1	3,652.6	3,612.9	39.76	91.868		
9,000.0	7,770.0	7,700.0	7,605.9	26.3	17.3	87.66	-1,539.3	-3,615.7	3,641.7	3,600.6	41.14	88.517		
9,100.0	7,770.0	7,750.0	7,638.2	27.8	17.1	88.17	-1,577.4	-3,613.4	3,632.7	3,590.2	42.46	85.549		
9,200.0	7,770.0	7,800.0	7,667.1	29.3	16.9	88.62	-1,618.1	-3,611.3	3,625.5	3,581.7	43.82	82.731		
9,300.0	7,770.0	7,850.0	7,692.4	30.9	16.8	89.02	-1,661.2	-3,609.5	3,619.9	3,574.7	45.23	80.042		
9,400.0	7,770.0	7,900.0	7,713.8	32.5	16.7	89.36	-1,706.3	-3,607.9	3,615.8	3,569.1	46.68	77.464		
9,500.0	7,770.0	7,964.1	7,735.4	34.1	16.6	89.70	-1,766.7	-3,606.4	3,613.0	3,564.8	48.17	75.006		
9,600.0	7,770.0	8,029.5	7,750.3	35.7	16.6	89.94	-1,830.3	-3,605.3	3,611.2	3,561.5	49.75	72.590		
9,700.0	7,770.0	8,100.0	7,758.2	37.3	16.6	90.07	-1,900.3	-3,604.7	3,610.4	3,559.0	51.43	70.203		
9,745.8	7,770.0	8,129.4	7,759.0	38.1	16.7	90.08	-1,929.7	-3,604.7	3,610.3	3,558.1	52.24	69.116		
9,800.0	7,770.0	8,183.4	7,759.0	39.0	16.8	90.08	-1,983.6	-3,604.7	3,610.3	3,557.0	53.28	67.759		
9,900.0	7,770.0	8,283.4	7,759.0	40.6	17.2	90.08	-2,083.6	-3,604.7	3,610.3	3,555.0	55.37	65.205		
10,000.0	7,770.0	8,383.4	7,759.0	42.3	17.7	90.08	-2,183.6	-3,604.7	3,610.3	3,552.7	57.65	62.627		
10,100.0	7,770.0	8,483.4	7,759.0	44.0	18.4	90.08	-2,283.6	-3,604.8	3,610.4	3,550.3	60.10	60.069		
10,200.0	7,770.0	8,583.4	7,759.0	45.6	19.2	90.08	-2,383.6	-3,604.8	3,610.4	3,547.7	62.71	57.574		
10,300.0	7,770.0	8,683.4	7,759.0	47.3	20.2	90.08	-2,483.6	-3,604.8	3,610.4	3,545.0	65.44	55.170		
10,400.0	7,770.0	8,783.4	7,759.0	49.0	21.2	90.08	-2,583.6	-3,604.8	3,610.4	3,542.1	68.28	52.875		
10,500.0	7,770.0	8,883.4	7,759.0	50.7	22.3	90.08	-2,683.6	-3,604.8	3,610.4	3,539.2	71.21	50.699		
10,600.0	7,770.0	8,983.4	7,759.0	52.4	23.6	90.08	-2,783.6	-3,604.8	3,610.4	3,536.2	74.22	48.647		
10,700.0	7,770.0	9,083.4	7,759.0	54.1	24.8	90.08	-2,883.6	-3,604.9	3,610.5	3,533.2	77.29	46.716		
10,800.0	7,770.0	9,183.4	7,759.0	55.8	26.2	90.08	-2,983.6	-3,604.9	3,610.5	3,530.1	80.41	44.904		
10,900.0	7,770.0	9,283.4	7,759.0	57.5	27.5	90.08	-3,083.6	-3,604.9	3,610.5	3,526.9	83.57	43.204		
11,000.0	7,770.0	9,383.4	7,759.0	59.2	29.0	90.08	-3,183.6	-3,604.9	3,610.5	3,523.7	86.77	41.610		
11,100.0	7,770.0	9,483.4	7,759.0	60.9	30.4	90.08	-3,283.6	-3,604.9	3,610.5	3,520.5	90.00	40.116		
11,200.0	7,770.0	9,583.4	7,759.0	62.6	31.9	90.08	-3,383.6	-3,604.9	3,610.5	3,517.3	93.26	38.714		
11,300.0	7,770.0	9,683.4	7,759.0	64.3	33.4	90.08	-3,483.6	-3,605.0	3,610.6	3,514.0	96.55	37.398		
11,400.0	7,770.0	9,783.4	7,759.0	66.0	35.0	90.08	-3,583.6	-3,605.0	3,610.6	3,510.7	99.85	36.160		
11,500.0	7,770.0	9,883.4	7,759.0	67.7	36.5	90.08	-3,683.6	-3,605.0	3,610.6	3,507.4	103.17	34.997		
11,600.0	7,770.0	9,983.4	7,759.0	69.5	38.1	90.08	-3,783.6	-3,605.0	3,610.6	3,504.1	106.51	33.900		
11,700.0	7,770.0	10,083.4	7,759.0	71.2	39.7	90.08	-3,883.6	-3,605.0	3,610.6	3,500.8	109.86	32.867		
11,800.0	7,770.0	10,183.4	7,759.0	72.9	41.3	90.08	-3,983.6	-3,605.0	3,610.6	3,497.4	113.22	31.891		
11,900.0	7,770.0	10,283.4	7,759.0	74.6	42.9	90.08	-4,083.6	-3,605.1	3,610.7	3,494.1	116.59	30.968		
12,000.0	7,770.0	10,383.4	7,759.0	76.4	44.5	90.08	-4,183.6	-3,605.1	3,610.7	3,490.7	119.97	30.095		
12,100.0	7,770.0	10,483.4	7,759.0	78.1	46.1	90.08	-4,283.6	-3,605.1	3,610.7	3,487.3	123.37	29.268		
12,200.0	7,770.0	10,583.4	7,759.0	79.8	47.8	90.08	-4,383.6	-3,605.1	3,610.7	3,483.9	126.76	28.483		
12,300.0	7,770.0	10,683.4	7,759.0	81.5	49.4	90.08	-4,483.6	-3,605.1	3,610.7	3,480.6	130.17	27.738		
12,400.0	7,770.0	10,783.4	7,759.0	83.3	51.1	90.08	-4,583.6	-3,605.1	3,610.7	3,477.2	133.58	27.030		
12,500.0	7,770.0	10,883.4	7,759.0	85.0	52.7	90.08	-4,683.6	-3,605.2	3,610.8	3,473.8	137.00	26.356		
12,600.0	7,770.0	10,983.4	7,759.0	86.7	54.4	90.08	-4,783.6	-3,605.2	3,610.8	3,470.3	140.42	25.713		
12,700.0	7,770.0	11,083.4	7,759.0	88.5	56.1	90.08	-4,883.6	-3,605.2	3,610.8	3,466.9	143.85	25.101		
12,800.0	7,770.0	11,183.4	7,759.0	90.2	57.8	90.08	-4,983.6	-3,605.2	3,610.8	3,463.5	147.28	24.516		
12,900.0	7,770.0	11,283.4	7,759.0	91.9	59.4	90.08	-5,083.6	-3,605.2	3,610.8	3,460.1	150.72	23.957		
13,000.0	7,770.0	11,383.4	7,759.0	93.7	61.1	90.08	-5,183.6	-3,605.2	3,610.8	3,456.7	154.16	23.423		
13,100.0	7,770.0	11,735.5	7,759.0	95.4	67.1	90.08	-5,535.5	-3,595.8	3,610.2	3,448.3	161.91	22.297		
13,200.0	7,770.0	11,835.2	7,759.0	97.1	68.8	90.08	-5,635.0	-3,588.9	3,603.2	3,437.9	165.36	21.791		
13,300.0	7,770.0	11,935.0	7,759.0	98.9	70.5	90.08	-5,734.5	-3,582.0	3,596.3	3,427.5	168.80	21.305		
13,400.0	7,770.0	12,034.7	7,759.0	100.6	72.2	90.08	-5,834.0	-3,575.0	3,589.3	3,417.1	172.25	20.838		
13,500.0	7,770.0	12,134.5	7,759.0	102.4	74.0	90.08	-5,933.5	-3,568.1	3,582.4	3,406.7	175.70	20.389		
13,600.0	7,770.0	12,234.2	7,759.0	104.1	75.7	90.08	-6,033.0	-3,561.1	3,575.4	3,396.2	179.16	19.957		
13,700.0	7,770.0	12,334.0	7,759.0	105.8	77.4	90.08	-6,132.6	-3,554.2	3,568.4	3,385.8	182.61	19.541		
13,800.0	7,770.0	12,433.8	7,759.0	107.6	79.1	90.08	-6,232.1	-3,547.2	3,561.5	3,375.4	186.07	19.141		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
13,900.0	7,770.0	12,500.0	7,759.0	109.3	80.3	90.08	-6,298.2	-3,543.1	3,555.1	3,366.2	188.95	18.815		
14,000.0	7,770.0	12,531.9	7,759.0	111.1	80.8	90.08	-6,330.0	-3,541.6	3,550.2	3,358.9	191.24	18.564		
14,100.0	7,770.0	12,600.0	7,759.0	112.8	82.0	90.08	-6,398.1	-3,539.6	3,547.0	3,352.9	194.16	18.268		
14,200.0	7,770.0	12,600.0	7,759.0	114.5	82.0	90.08	-6,398.1	-3,539.6	3,545.2	3,349.3	195.90	18.097		
14,276.2	7,770.0	12,655.2	7,759.0	115.9	82.9	90.08	-6,453.3	-3,539.2	3,544.8	3,346.6	198.18	17.886 CC		
14,300.0	7,770.0	12,665.9	7,759.0	116.3	83.1	90.08	-6,464.0	-3,539.2	3,544.9	3,346.1	198.78	17.833		
14,400.0	7,770.0	12,714.8	7,759.0	118.0	83.9	90.08	-6,512.9	-3,539.9	3,546.2	3,344.9	201.37	17.610		
14,500.0	7,770.0	12,814.8	7,759.0	119.8	85.7	90.08	-6,612.8	-3,541.9	3,548.2	3,343.4	204.84	17.322		
14,600.0	7,770.0	12,914.7	7,759.0	121.5	87.4	90.08	-6,712.8	-3,543.9	3,550.2	3,341.9	208.32	17.043		
14,700.0	7,770.0	13,014.7	7,759.0	123.3	89.1	90.08	-6,812.8	-3,545.9	3,552.3	3,340.5	211.79	16.773		
14,800.0	7,770.0	13,114.7	7,759.0	125.0	90.8	90.08	-6,912.7	-3,547.9	3,554.3	3,339.0	215.27	16.511		
14,900.0	7,770.0	13,214.7	7,759.0	126.7	92.5	90.08	-7,012.7	-3,550.0	3,556.3	3,337.5	218.74	16.258		
15,000.0	7,770.0	13,314.7	7,759.0	128.5	94.2	90.08	-7,112.6	-3,552.0	3,558.3	3,336.1	222.22	16.012		
15,100.0	7,770.0	13,414.6	7,759.0	130.2	96.0	90.08	-7,212.6	-3,554.0	3,560.3	3,334.6	225.70	15.775		
15,200.0	7,770.0	13,514.6	7,759.0	132.0	97.7	90.08	-7,312.6	-3,556.0	3,562.3	3,333.1	229.18	15.544		
15,300.0	7,770.0	13,614.6	7,759.0	133.7	99.4	90.08	-7,412.5	-3,558.0	3,564.3	3,331.7	232.66	15.320		
15,400.0	7,770.0	13,714.6	7,759.0	135.5	101.1	90.08	-7,512.5	-3,560.0	3,566.3	3,330.2	236.14	15.103		
15,500.0	7,770.0	13,814.6	7,759.0	137.2	102.9	90.08	-7,612.4	-3,562.0	3,568.4	3,328.7	239.62	14.892		
15,600.0	7,770.0	13,914.5	7,759.0	139.0	104.6	90.08	-7,712.4	-3,564.0	3,570.4	3,327.3	243.11	14.686		
15,700.0	7,770.0	14,014.5	7,759.0	140.7	106.3	90.08	-7,812.4	-3,566.1	3,572.4	3,325.8	246.59	14.487		
15,800.0	7,770.0	14,114.5	7,759.0	142.4	108.0	90.08	-7,912.3	-3,568.1	3,574.4	3,324.3	250.07	14.293		
15,900.0	7,770.0	14,214.5	7,759.0	144.2	109.8	90.08	-8,012.3	-3,570.1	3,576.4	3,322.8	253.56	14.105		
16,000.0	7,770.0	14,314.4	7,759.0	145.9	111.5	90.08	-8,112.2	-3,572.1	3,578.4	3,321.4	257.04	13.921		
16,100.0	7,770.0	14,414.4	7,759.0	147.7	113.2	90.08	-8,212.2	-3,574.1	3,580.4	3,319.9	260.53	13.743		
16,200.0	7,770.0	14,514.4	7,759.0	149.4	115.0	90.08	-8,312.2	-3,576.1	3,582.4	3,318.4	264.02	13.569		
16,300.0	7,770.0	14,614.4	7,759.0	151.2	116.7	90.08	-8,412.1	-3,578.1	3,584.4	3,316.9	267.51	13.400		
16,400.0	7,770.0	14,714.4	7,759.0	152.9	118.4	90.08	-8,512.1	-3,580.1	3,586.5	3,315.5	270.99	13.234		
16,500.0	7,770.0	14,814.3	7,759.0	154.7	120.2	90.08	-8,612.0	-3,582.1	3,588.5	3,314.0	274.48	13.074		
16,600.0	7,770.0	14,914.3	7,759.0	156.4	121.9	90.08	-8,712.0	-3,584.2	3,590.5	3,312.5	277.97	12.917		
16,700.0	7,770.0	15,014.3	7,759.0	158.2	123.6	90.08	-8,812.0	-3,586.2	3,592.5	3,311.0	281.46	12.764		
16,800.0	7,770.0	15,114.3	7,759.0	159.9	125.4	90.08	-8,911.9	-3,588.2	3,594.5	3,309.6	284.95	12.614		
16,900.0	7,770.0	15,214.3	7,759.0	161.7	127.1	90.08	-9,011.9	-3,590.2	3,596.5	3,308.1	288.44	12.469		
17,000.0	7,770.0	15,314.2	7,759.0	163.4	128.8	90.08	-9,111.8	-3,592.2	3,598.5	3,306.6	291.93	12.327		
17,100.0	7,770.0	15,414.2	7,759.0	165.2	130.6	90.08	-9,211.8	-3,594.2	3,600.5	3,305.1	295.42	12.188		
17,200.0	7,770.0	15,514.2	7,759.0	166.9	132.3	90.08	-9,311.8	-3,596.2	3,602.6	3,303.6	298.92	12.052		
17,300.0	7,770.0	15,614.2	7,759.0	168.7	134.0	90.08	-9,411.7	-3,598.2	3,604.6	3,302.2	302.41	11.920		
17,400.0	7,770.0	15,714.2	7,759.0	170.4	135.8	90.08	-9,511.7	-3,600.2	3,606.6	3,300.7	305.90	11.790		
17,500.0	7,770.0	15,814.1	7,759.0	172.2	137.5	90.08	-9,611.6	-3,602.3	3,608.6	3,299.2	309.39	11.663		
17,600.0	7,770.0	15,914.1	7,759.0	173.9	139.3	90.08	-9,711.6	-3,604.3	3,610.6	3,297.7	312.89	11.540		
17,653.1	7,770.0	15,967.2	7,759.0	174.8	140.2	90.08	-9,764.6	-3,605.3	3,611.7	3,296.9	314.74	11.475 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	0.0	0.0	0.0	0.0	-115.33	-1,937.3	-4,092.2	4,527.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.33	-1,937.3	-4,092.2	4,527.6	4,527.4	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.33	-1,937.3	-4,092.2	4,527.6	4,527.0	0.60	7,497.502		
300.0	300.0	284.0	284.0	0.5	0.5	-115.33	-1,937.3	-4,092.2	4,527.6	4,526.7	0.95	4,751.165		
400.0	400.0	384.0	384.0	0.7	0.6	-115.33	-1,937.3	-4,092.2	4,527.6	4,526.3	1.30	3,477.395		
500.0	500.0	484.0	484.0	0.8	0.8	-115.33	-1,937.3	-4,092.2	4,527.6	4,526.0	1.65	2,742.216		
550.0	550.0	534.0	534.0	0.9	0.9	-115.33	-1,937.3	-4,092.2	4,527.6	4,525.8	1.83	2,480.054		
600.0	600.0	584.0	584.0	1.0	1.0	-116.17	-1,937.3	-4,092.2	4,527.7	4,525.7	2.00	2,263.679		
700.0	700.0	684.0	684.0	1.2	1.2	-116.18	-1,937.3	-4,092.2	4,528.5	4,526.1	2.35	1,926.983		
800.0	799.9	783.9	783.9	1.4	1.3	-116.21	-1,937.3	-4,092.2	4,530.0	4,527.3	2.70	1,676.082		
861.1	860.9	844.9	844.9	1.5	1.4	-116.23	-1,937.3	-4,092.2	4,531.4	4,528.4	2.92	1,551.708		
900.0	899.8	883.8	883.8	1.6	1.5	-116.25	-1,937.3	-4,092.2	4,532.3	4,529.2	3.06	1,481.381		
1,000.0	999.6	983.6	983.6	1.8	1.7	-116.32	-1,937.3	-4,092.2	4,534.7	4,531.3	3.42	1,326.379		
1,100.0	1,099.5	1,367.9	1,367.6	1.9	2.4	-116.52	-1,930.0	-4,082.9	4,534.5	4,530.2	4.28	1,060.130		
1,200.0	1,199.3	1,805.7	1,803.1	2.1	3.3	-116.67	-1,902.4	-4,047.7	4,526.9	4,521.7	5.24	864.198		
1,300.0	1,299.2	1,997.6	1,992.7	2.3	3.8	-116.71	-1,884.2	-4,024.3	4,513.9	4,508.1	5.77	782.180		
1,400.0	1,399.1	2,096.7	2,090.5	2.5	4.1	-116.72	-1,874.4	-4,011.7	4,500.5	4,494.4	6.14	733.122		
1,500.0	1,498.9	2,195.8	2,188.3	2.7	4.4	-116.74	-1,864.6	-3,999.2	4,487.2	4,480.7	6.51	689.516		
1,600.0	1,598.8	2,294.9	2,286.1	2.9	4.7	-116.76	-1,854.8	-3,986.6	4,473.9	4,467.0	6.88	650.517		
1,700.0	1,698.6	2,394.0	2,383.9	3.1	5.0	-116.78	-1,844.9	-3,974.0	4,460.6	4,453.3	7.25	615.444		
1,800.0	1,798.5	2,493.1	2,481.7	3.3	5.3	-116.80	-1,835.1	-3,961.5	4,447.3	4,439.7	7.62	583.741		
1,900.0	1,898.3	2,592.2	2,579.5	3.5	5.6	-116.82	-1,825.3	-3,948.9	4,434.0	4,426.0	7.99	554.951		
2,000.0	1,998.2	2,691.3	2,677.3	3.7	5.9	-116.84	-1,815.5	-3,936.3	4,420.6	4,412.3	8.36	528.695		
2,100.0	2,098.0	2,790.4	2,775.1	3.9	6.2	-116.85	-1,805.7	-3,923.8	4,407.3	4,398.6	8.73	504.655		
2,200.0	2,197.9	2,889.5	2,873.0	4.1	6.5	-116.87	-1,795.9	-3,911.2	4,394.0	4,384.9	9.11	482.566		
2,300.0	2,297.7	2,988.6	2,970.8	4.3	6.8	-116.89	-1,786.0	-3,898.6	4,380.7	4,371.2	9.48	462.201		
2,400.0	2,397.6	3,087.7	3,068.6	4.5	7.1	-116.91	-1,776.2	-3,886.1	4,367.4	4,357.5	9.85	443.367		
2,500.0	2,497.4	3,186.8	3,166.4	4.7	7.5	-116.93	-1,766.4	-3,873.5	4,354.1	4,343.8	10.22	425.900		
2,600.0	2,597.3	3,285.9	3,264.2	4.9	7.8	-116.95	-1,756.6	-3,860.9	4,340.7	4,330.1	10.60	409.657		
2,700.0	2,697.1	3,385.0	3,362.0	5.1	8.1	-116.97	-1,746.8	-3,848.4	4,327.4	4,316.5	10.97	394.514		
2,800.0	2,797.0	3,484.1	3,459.8	5.3	8.4	-116.99	-1,737.0	-3,835.8	4,314.1	4,302.8	11.34	380.364		
2,900.0	2,896.8	3,583.2	3,557.6	5.5	8.7	-117.01	-1,727.2	-3,823.2	4,300.8	4,289.1	11.72	367.112		
3,000.0	2,996.7	3,682.3	3,655.4	5.7	9.1	-117.03	-1,717.3	-3,810.7	4,287.5	4,275.4	12.09	354.678		
3,100.0	3,096.5	3,781.4	3,753.2	5.9	9.4	-117.05	-1,707.5	-3,798.1	4,274.2	4,261.7	12.46	342.986		
3,200.0	3,196.4	3,880.5	3,851.0	6.1	9.7	-117.07	-1,697.7	-3,785.5	4,260.9	4,248.0	12.83	331.974		
3,300.0	3,296.3	3,979.6	3,948.8	6.3	10.0	-117.09	-1,687.9	-3,773.0	4,247.6	4,234.3	13.21	321.584		
3,400.0	3,396.1	4,078.7	4,046.6	6.5	10.3	-117.11	-1,678.1	-3,760.4	4,234.2	4,220.7	13.58	311.764		
3,500.0	3,496.0	4,177.8	4,144.4	6.7	10.7	-117.13	-1,668.3	-3,747.8	4,220.9	4,207.0	13.95	302.470		
3,600.0	3,595.8	4,276.9	4,242.3	6.9	11.0	-117.15	-1,658.4	-3,735.3	4,207.6	4,193.3	14.33	293.660		
3,700.0	3,695.7	4,376.0	4,340.1	7.0	11.3	-117.17	-1,648.6	-3,722.7	4,194.3	4,179.6	14.70	285.297		
3,800.0	3,795.5	4,475.1	4,437.9	7.2	11.6	-117.19	-1,638.8	-3,710.1	4,181.0	4,165.9	15.07	277.349		
3,900.0	3,895.4	4,574.2	4,535.7	7.4	12.0	-117.21	-1,629.0	-3,697.5	4,167.7	4,152.3	15.45	269.786		
4,000.0	3,995.2	4,673.3	4,633.5	7.6	12.3	-117.23	-1,619.2	-3,685.0	4,154.4	4,138.6	15.82	262.579		
4,100.0	4,095.1	4,772.4	4,731.3	7.8	12.6	-117.26	-1,609.4	-3,672.4	4,141.1	4,124.9	16.19	255.706		
4,200.0	4,194.9	4,871.5	4,829.1	8.0	12.9	-117.28	-1,599.5	-3,659.8	4,127.8	4,111.2	16.57	249.142		
4,300.0	4,294.8	4,970.6	4,926.9	8.2	13.3	-117.30	-1,589.7	-3,647.3	4,114.5	4,097.5	16.94	242.869		
4,400.0	4,394.6	5,069.7	5,024.7	8.4	13.6	-117.32	-1,579.9	-3,634.7	4,101.2	4,083.9	17.31	236.866		
4,500.0	4,494.5	5,168.8	5,122.5	8.6	13.9	-117.34	-1,570.1	-3,622.1	4,087.9	4,070.2	17.69	231.117		
4,600.0	4,594.3	5,267.9	5,220.3	8.8	14.2	-117.37	-1,560.3	-3,609.6	4,074.6	4,056.5	18.06	225.606		
4,700.0	4,694.2	5,367.0	5,318.1	9.0	14.6	-117.39	-1,550.5	-3,597.0	4,061.3	4,042.8	18.43	220.319		
4,800.0	4,794.0	5,466.1	5,415.9	9.2	14.9	-117.41	-1,540.7	-3,584.4	4,048.0	4,029.1	18.81	215.243		
4,900.0	4,893.9	5,565.2	5,513.8	9.4	15.2	-117.43	-1,530.8	-3,571.9	4,034.7	4,015.5	19.18	210.364		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,993.7	5,664.3	5,611.6	9.6	15.5	-117.45	-1,521.0	-3,559.3	4,021.4	4,001.8	19.55	205.672		
5,100.0	5,093.6	5,763.4	5,709.4	9.8	15.9	-117.48	-1,511.2	-3,546.7	4,008.0	3,988.1	19.93	201.157		
5,200.0	5,193.5	5,862.5	5,807.2	10.0	16.2	-117.50	-1,501.4	-3,534.2	3,994.7	3,974.5	20.30	196.807		
5,300.0	5,293.3	5,961.6	5,905.0	10.2	16.5	-117.52	-1,491.6	-3,521.6	3,981.4	3,960.8	20.67	192.616		
5,400.0	5,393.2	6,060.7	6,002.8	10.4	16.8	-117.55	-1,481.8	-3,509.0	3,968.2	3,947.1	21.04	188.573		
5,500.0	5,493.0	6,159.8	6,100.6	10.6	17.2	-117.57	-1,471.9	-3,496.5	3,954.9	3,933.4	21.42	184.672		
5,600.0	5,592.9	6,258.9	6,198.4	10.8	17.5	-117.59	-1,462.1	-3,483.9	3,941.6	3,919.8	21.79	180.904		
5,700.0	5,692.7	6,358.0	6,296.2	11.0	17.8	-117.62	-1,452.3	-3,471.3	3,928.3	3,906.1	22.16	177.264		
5,800.0	5,792.6	6,457.1	6,394.0	11.2	18.2	-117.64	-1,442.5	-3,458.8	3,915.0	3,892.4	22.53	173.745		
5,900.0	5,892.4	6,556.2	6,491.8	11.4	18.5	-117.67	-1,432.7	-3,446.2	3,901.7	3,878.8	22.91	170.341		
6,000.0	5,992.3	6,655.3	6,589.6	11.6	18.8	-117.69	-1,422.9	-3,433.6	3,888.4	3,865.1	23.28	167.046		
6,100.0	6,092.1	6,754.4	6,687.4	11.8	19.1	-117.71	-1,413.1	-3,421.1	3,875.1	3,851.4	23.65	163.856		
6,200.0	6,192.0	6,853.5	6,785.3	12.0	19.5	-117.74	-1,403.2	-3,408.5	3,861.8	3,837.8	24.02	160.765		
6,300.0	6,291.8	6,952.6	6,883.1	12.2	19.8	-117.76	-1,393.4	-3,395.9	3,848.5	3,824.1	24.39	157.769		
6,400.0	6,391.7	7,051.7	6,980.9	12.4	20.1	-117.79	-1,383.6	-3,383.4	3,835.2	3,810.4	24.77	154.863		
6,500.0	6,491.5	7,150.8	7,078.7	12.6	20.5	-117.81	-1,373.8	-3,370.8	3,821.9	3,796.8	25.14	152.044		
6,600.0	6,591.4	7,250.0	7,176.7	13.0	20.8	-117.85	-1,365.2	-3,358.1	3,797.1	3,771.4	25.69	147.796		
6,700.0	6,691.2	7,350.0	7,275.5	13.2	20.8	-117.90	-1,364.9	-3,354.2	3,787.3	3,761.4	25.92	146.128		
6,800.0	6,791.1	7,450.0	7,375.5	13.4	20.9	-117.94	-1,365.6	-3,351.4	3,779.4	3,753.3	26.13	144.622		
6,900.0	6,890.9	7,550.0	7,475.5	13.6	20.9	-118.09	-1,370.4	-3,344.4	3,773.5	3,747.1	26.36	143.140		
7,000.0	6,990.8	7,650.0	7,575.5	13.6	20.9	-118.09	-1,370.4	-3,344.4	3,773.5	3,747.1	26.36	143.140		
7,024.2	7,014.9	7,350.0	7,275.5	13.6	20.9	-118.09	-1,370.4	-3,344.4	3,772.2	3,745.8	26.41	142.840		
7,050.0	7,040.7	7,350.0	7,275.5	13.7	20.9	-119.65	-1,370.4	-3,344.4	3,770.9	3,744.4	26.44	142.602		
7,100.0	7,090.7	7,350.0	7,275.5	13.7	20.9	63.96	-1,370.4	-3,344.4	3,767.6	3,741.1	26.49	142.244		
7,150.0	7,140.5	7,375.4	7,300.2	13.8	21.0	63.72	-1,374.4	-3,340.7	3,763.0	3,736.5	26.52	141.888		
7,200.0	7,189.9	7,400.0	7,324.1	13.8	21.0	63.95	-1,379.5	-3,337.1	3,757.5	3,730.9	26.54	141.599		
7,250.0	7,238.6	7,400.0	7,324.1	13.8	21.0	64.37	-1,379.5	-3,337.1	3,750.8	3,724.3	26.53	141.398		
7,300.0	7,286.4	7,400.0	7,324.1	13.7	21.0	64.89	-1,379.5	-3,337.1	3,743.2	3,716.7	26.51	141.195		
7,350.0	7,333.1	7,429.8	7,352.6	13.7	21.0	65.51	-1,386.9	-3,332.8	3,734.5	3,708.0	26.50	140.912		
7,400.0	7,378.5	7,450.0	7,371.7	13.6	21.0	66.23	-1,392.8	-3,329.8	3,724.9	3,698.4	26.50	140.567		
7,450.0	7,422.2	7,450.0	7,371.7	13.6	21.0	67.01	-1,392.8	-3,329.8	3,714.3	3,687.8	26.51	140.094		
7,500.0	7,464.1	7,470.3	7,390.7	13.5	21.0	67.92	-1,399.4	-3,326.7	3,702.9	3,676.3	26.55	139.483		
7,550.0	7,504.1	7,500.0	7,417.9	13.5	21.0	68.94	-1,410.3	-3,322.3	3,690.8	3,664.2	26.61	138.711		
7,600.0	7,541.8	7,500.0	7,417.9	13.5	21.0	69.95	-1,410.3	-3,322.3	3,677.7	3,651.0	26.73	137.613		
7,650.0	7,577.2	7,500.0	7,417.9	13.4	21.0	71.02	-1,410.3	-3,322.3	3,664.1	3,637.2	26.89	136.261		
7,700.0	7,610.0	7,523.1	7,438.7	13.5	21.0	72.27	-1,419.7	-3,318.8	3,649.7	3,622.7	27.08	134.767		
7,750.0	7,640.2	7,550.0	7,462.4	13.5	21.0	73.63	-1,431.7	-3,314.8	3,635.0	3,607.7	27.32	133.070		
7,800.0	7,667.4	7,550.0	7,462.4	13.6	21.0	74.87	-1,431.7	-3,314.8	3,619.6	3,591.9	27.64	130.968		
7,850.0	7,691.7	7,550.0	7,462.4	13.7	21.0	76.14	-1,431.7	-3,314.8	3,603.9	3,575.9	28.01	128.670		
7,900.0	7,712.8	7,573.5	7,482.6	13.9	20.9	77.66	-1,443.1	-3,311.2	3,587.8	3,559.5	28.38	126.413		
7,950.0	7,730.8	7,600.0	7,504.9	14.1	20.9	79.26	-1,457.0	-3,307.2	3,571.7	3,542.9	28.78	124.099		
8,000.0	7,745.5	7,600.0	7,504.9	14.4	20.9	80.63	-1,457.0	-3,307.2	3,555.2	3,526.0	29.27	121.462		
8,050.0	7,756.7	7,600.0	7,504.9	14.7	20.9	82.00	-1,457.0	-3,307.2	3,538.9	3,509.1	29.79	118.807		
8,100.0	7,764.6	7,619.9	7,521.1	15.1	20.9	83.61	-1,468.1	-3,304.3	3,522.5	3,492.2	30.26	116.410		
8,150.0	7,769.0	7,630.7	7,529.8	15.5	20.9	85.10	-1,474.4	-3,302.7	3,506.3	3,475.6	30.77	113.969		
8,188.1	7,770.0	7,650.0	7,544.9	15.9	20.8	86.38	-1,486.0	-3,299.8	3,494.2	3,463.1	31.11	112.316		
8,200.0	7,770.0	7,650.0	7,544.9	16.0	20.8	86.38	-1,486.0	-3,299.8	3,490.4	3,459.2	31.22	111.797		
8,300.0	7,770.0	7,650.0	7,544.9	17.0	20.8	86.38	-1,486.0	-3,299.8	3,460.2	3,428.0	32.22	107.398		
8,400.0	7,770.0	7,700.0	7,582.3	18.1	20.8	87.02	-1,518.4	-3,292.5	3,432.1	3,399.0	33.14	103.568		
8,500.0	7,770.0	7,700.0	7,582.3	19.3	20.8	87.02	-1,518.4	-3,292.5	3,406.2	3,371.9	34.35	99.172		
8,600.0	7,770.0	7,750.0	7,616.7	20.6	20.7	87.61	-1,553.9	-3,285.3	3,382.5	3,347.1	35.44	95.452		
8,700.0	7,770.0	7,774.8	7,632.6	21.9	20.7	87.88	-1,572.7	-3,281.9	3,361.0	3,324.3	36.69	91.596		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,800.0	7,770.0	7,800.0	7,647.8	23.3	20.6	88.15	-1,592.4	-3,278.4	3,341.6	3,303.6	38.00	87.932		
8,900.0	7,770.0	7,850.0	7,675.5	24.8	20.6	88.63	-1,633.5	-3,271.8	3,324.0	3,284.8	39.27	84.641		
9,000.0	7,770.0	7,900.0	7,699.5	26.3	20.5	89.04	-1,676.9	-3,265.5	3,308.5	3,267.9	40.60	81.484		
9,100.0	7,770.0	7,950.0	7,719.6	27.8	20.5	89.40	-1,722.3	-3,259.6	3,294.7	3,252.7	42.00	78.453		
9,200.0	7,770.0	7,988.5	7,732.3	29.3	20.5	89.62	-1,758.3	-3,255.4	3,282.5	3,239.0	43.47	75.503		
9,300.0	7,770.0	8,050.0	7,747.6	30.9	20.5	89.89	-1,817.6	-3,249.2	3,271.8	3,226.8	44.98	72.738		
9,400.0	7,770.0	8,100.0	7,755.4	32.5	20.6	90.02	-1,866.8	-3,244.7	3,262.6	3,216.0	46.58	70.047		
9,500.0	7,770.0	8,150.0	7,758.8	34.1	20.7	90.08	-1,916.5	-3,240.8	3,254.7	3,206.4	48.24	67.467		
9,600.0	7,770.0	8,244.0	7,759.0	35.7	20.9	90.09	-2,010.2	-3,234.2	3,247.7	3,197.6	50.14	64.769		
9,700.0	7,770.0	8,343.8	7,759.0	37.3	21.4	90.09	-2,109.8	-3,227.3	3,240.7	3,188.5	52.24	62.035		
9,800.0	7,770.0	8,443.5	7,759.0	39.0	21.9	90.09	-2,209.3	-3,220.3	3,233.8	3,179.3	54.52	59.313		
9,900.0	7,770.0	8,500.0	7,759.0	40.6	22.3	90.09	-2,265.6	-3,216.5	3,227.2	3,170.6	56.61	57.011		
10,000.0	7,770.0	8,578.8	7,759.0	42.3	22.8	90.09	-2,344.3	-3,212.1	3,221.6	3,162.7	58.98	54.627		
10,100.0	7,770.0	8,642.8	7,759.0	44.0	23.3	90.09	-2,408.2	-3,209.2	3,217.2	3,156.0	61.27	52.508		
10,200.0	7,770.0	8,700.0	7,759.0	45.6	23.8	90.09	-2,465.4	-3,207.3	3,213.9	3,150.4	63.53	50.588		
10,300.0	7,770.0	8,770.9	7,759.0	47.3	24.4	90.09	-2,536.3	-3,205.7	3,211.7	3,145.7	66.01	48.654		
10,400.0	7,770.0	8,835.0	7,759.0	49.0	25.0	90.09	-2,600.3	-3,205.0	3,210.7	3,142.2	68.45	46.907		
10,451.9	7,770.0	8,870.2	7,759.0	49.9	25.3	90.09	-2,635.6	-3,205.0	3,210.6	3,140.8	69.75	46.028 CC		
10,500.0	7,770.0	8,918.3	7,759.0	50.7	25.8	90.09	-2,683.7	-3,205.0	3,210.6	3,139.4	71.17	45.109		
10,600.0	7,770.0	9,018.3	7,759.0	52.4	26.8	90.09	-2,783.7	-3,205.0	3,210.6	3,136.4	74.17	43.285		
10,700.0	7,770.0	9,118.3	7,759.0	54.1	28.0	90.09	-2,883.7	-3,205.0	3,210.6	3,133.4	77.24	41.569		
10,800.0	7,770.0	9,218.3	7,759.0	55.8	29.1	90.09	-2,983.7	-3,205.0	3,210.6	3,130.3	80.35	39.958		
10,900.0	7,770.0	9,318.3	7,759.0	57.5	30.4	90.09	-3,083.7	-3,205.0	3,210.6	3,127.1	83.51	38.446		
11,000.0	7,770.0	9,399.0	7,759.0	59.2	31.4	90.09	-3,164.4	-3,205.2	3,210.8	3,124.4	86.42	37.155		
11,100.0	7,770.0	9,494.2	7,759.0	60.9	32.7	90.09	-3,259.6	-3,205.9	3,211.6	3,122.0	89.57	35.856		
11,200.0	7,770.0	9,594.2	7,759.0	62.6	34.0	90.09	-3,359.6	-3,206.7	3,212.4	3,119.5	92.82	34.608		
11,300.0	7,770.0	9,694.2	7,759.0	64.3	35.4	90.09	-3,459.6	-3,207.4	3,213.1	3,117.0	96.10	33.436		
11,400.0	7,770.0	9,794.2	7,759.0	66.0	36.8	90.09	-3,559.6	-3,208.2	3,213.9	3,114.5	99.39	32.335		
11,500.0	7,770.0	9,894.2	7,759.0	67.7	38.3	90.09	-3,659.6	-3,209.0	3,214.7	3,111.9	102.71	31.298		
11,600.0	7,770.0	9,994.2	7,759.0	69.5	39.7	90.09	-3,759.6	-3,209.7	3,215.4	3,109.4	106.04	30.322		
11,700.0	7,770.0	10,094.2	7,759.0	71.2	41.2	90.09	-3,859.6	-3,210.5	3,216.2	3,106.8	109.39	29.402		
11,800.0	7,770.0	10,194.2	7,759.0	72.9	42.7	90.09	-3,959.6	-3,211.3	3,217.0	3,104.2	112.75	28.532		
11,900.0	7,770.0	10,294.2	7,759.0	74.6	44.3	90.09	-4,059.6	-3,212.0	3,217.7	3,101.6	116.12	27.711		
12,000.0	7,770.0	10,394.2	7,759.0	76.4	45.8	90.09	-4,159.6	-3,212.8	3,218.5	3,099.0	119.50	26.934		
12,100.0	7,770.0	10,494.2	7,759.0	78.1	47.4	90.09	-4,259.6	-3,213.6	3,219.3	3,096.4	122.89	26.197		
12,200.0	7,770.0	10,594.2	7,759.0	79.8	49.0	90.09	-4,359.5	-3,214.3	3,220.0	3,093.7	126.28	25.499		
12,300.0	7,770.0	10,694.2	7,759.0	81.5	50.6	90.09	-4,459.5	-3,215.1	3,220.8	3,091.1	129.69	24.835		
12,400.0	7,770.0	10,794.2	7,759.0	83.3	52.2	90.09	-4,559.5	-3,215.9	3,221.6	3,088.5	133.10	24.205		
12,500.0	7,770.0	10,894.2	7,759.0	85.0	53.8	90.09	-4,659.5	-3,216.6	3,222.3	3,085.8	136.51	23.605		
12,600.0	7,770.0	10,994.2	7,759.0	86.7	55.4	90.09	-4,759.5	-3,217.4	3,223.1	3,083.2	139.93	23.033		
12,700.0	7,770.0	11,094.2	7,759.0	88.5	57.0	90.09	-4,859.5	-3,218.2	3,223.9	3,080.5	143.36	22.488		
12,800.0	7,770.0	11,194.2	7,759.0	90.2	58.6	90.09	-4,959.5	-3,218.9	3,224.6	3,077.8	146.79	21.967		
12,900.0	7,770.0	11,294.2	7,759.0	91.9	60.3	90.09	-5,059.5	-3,219.7	3,225.4	3,075.2	150.23	21.470		
13,000.0	7,770.0	11,394.2	7,759.0	93.7	61.9	90.09	-5,159.5	-3,220.5	3,226.2	3,072.5	153.66	20.995		
13,100.0	7,770.0	11,494.2	7,759.0	95.4	63.6	90.09	-5,259.5	-3,221.2	3,226.9	3,069.8	157.11	20.540		
13,200.0	7,770.0	11,594.2	7,759.0	97.1	65.2	90.09	-5,359.5	-3,222.0	3,227.7	3,067.1	160.55	20.104		
13,300.0	7,770.0	11,694.2	7,759.0	98.9	66.9	90.09	-5,459.5	-3,222.8	3,228.5	3,064.4	164.00	19.685		
13,400.0	7,770.0	11,794.2	7,759.0	100.6	68.6	90.09	-5,559.5	-3,223.5	3,229.2	3,061.8	167.45	19.284		
13,500.0	7,770.0	11,894.2	7,759.0	102.4	70.2	90.09	-5,659.5	-3,224.3	3,230.0	3,059.1	170.91	18.899		
13,600.0	7,770.0	11,994.2	7,759.0	104.1	71.9	90.09	-5,759.5	-3,225.1	3,230.7	3,056.4	174.36	18.529		
13,700.0	7,770.0	12,094.2	7,759.0	105.8	73.6	90.09	-5,859.5	-3,225.8	3,231.5	3,053.7	177.82	18.173		
13,800.0	7,770.0	12,194.2	7,759.0	107.6	75.3	90.09	-5,959.5	-3,226.6	3,232.3	3,051.0	181.28	17.830		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
13,900.0	7,770.0	12,294.2	7,759.0	109.3	76.9	90.09	-6,059.4	-3,227.4	3,233.0	3,048.3	184.75	17.500		
14,000.0	7,770.0	12,394.1	7,759.0	111.1	78.6	90.09	-6,159.4	-3,228.1	3,233.8	3,045.6	188.21	17.182		
14,100.0	7,770.0	12,494.1	7,759.0	112.8	80.3	90.09	-6,259.4	-3,228.9	3,234.6	3,042.9	191.68	16.875		
14,200.0	7,770.0	12,594.1	7,759.0	114.5	82.0	90.09	-6,359.4	-3,229.7	3,235.3	3,040.2	195.14	16.579		
14,300.0	7,770.0	12,694.1	7,759.0	116.3	83.7	90.09	-6,459.4	-3,230.4	3,236.1	3,037.5	198.61	16.293		
14,400.0	7,770.0	12,794.1	7,759.0	118.0	85.4	90.09	-6,559.4	-3,231.2	3,236.9	3,034.8	202.09	16.017		
14,500.0	7,770.0	12,894.1	7,759.0	119.8	87.1	90.09	-6,659.4	-3,232.0	3,237.6	3,032.1	205.56	15.751		
14,600.0	7,770.0	12,994.1	7,759.0	121.5	88.8	90.09	-6,759.4	-3,232.7	3,238.4	3,029.4	209.03	15.492		
14,700.0	7,770.0	13,094.1	7,759.0	123.3	90.5	90.09	-6,859.4	-3,233.5	3,239.2	3,026.7	212.51	15.243		
14,800.0	7,770.0	13,194.1	7,759.0	125.0	92.2	90.09	-6,959.4	-3,234.3	3,239.9	3,024.0	215.98	15.001		
14,900.0	7,770.0	13,294.1	7,759.0	126.7	93.9	90.09	-7,059.4	-3,235.0	3,240.7	3,021.3	219.46	14.767		
15,000.0	7,770.0	13,394.1	7,759.0	128.5	95.6	90.09	-7,159.4	-3,235.8	3,241.5	3,018.5	222.94	14.540		
15,100.0	7,770.0	13,494.1	7,759.0	130.2	97.4	90.09	-7,259.4	-3,236.6	3,242.2	3,015.8	226.42	14.320		
15,200.0	7,770.0	13,594.1	7,759.0	132.0	99.1	90.09	-7,359.4	-3,237.3	3,243.0	3,013.1	229.90	14.106		
15,300.0	7,770.0	13,694.1	7,759.0	133.7	100.8	90.09	-7,459.4	-3,238.1	3,243.8	3,010.4	233.38	13.899		
15,400.0	7,770.0	13,794.1	7,759.0	135.5	102.5	90.09	-7,559.4	-3,238.9	3,244.5	3,007.7	236.86	13.698		
15,500.0	7,770.0	13,894.1	7,759.0	137.2	104.2	90.09	-7,659.4	-3,239.6	3,245.3	3,005.0	240.34	13.503		
15,600.0	7,770.0	13,994.1	7,759.0	139.0	105.9	90.09	-7,759.3	-3,240.4	3,246.1	3,002.3	243.83	13.313		
15,700.0	7,770.0	14,094.1	7,759.0	140.7	107.7	90.09	-7,859.3	-3,241.2	3,246.8	2,999.5	247.31	13.129		
15,800.0	7,770.0	14,194.1	7,759.0	142.4	109.4	90.09	-7,959.3	-3,241.9	3,247.6	2,996.8	250.80	12.949		
15,900.0	7,770.0	14,294.1	7,759.0	144.2	111.1	90.09	-8,059.3	-3,242.7	3,248.4	2,994.1	254.28	12.775		
16,000.0	7,770.0	14,394.1	7,759.0	145.9	112.8	90.09	-8,159.3	-3,243.5	3,249.1	2,991.4	257.77	12.605		
16,100.0	7,770.0	14,494.1	7,759.0	147.7	114.5	90.09	-8,259.3	-3,244.2	3,249.9	2,988.7	261.25	12.440		
16,200.0	7,770.0	14,594.1	7,759.0	149.4	116.3	90.09	-8,359.3	-3,245.0	3,250.7	2,985.9	264.74	12.279		
16,300.0	7,770.0	14,694.1	7,759.0	151.2	118.0	90.09	-8,459.3	-3,245.8	3,251.4	2,983.2	268.23	12.122		
16,400.0	7,770.0	14,794.1	7,759.0	152.9	119.7	90.09	-8,559.3	-3,246.5	3,252.2	2,980.5	271.72	11.969		
16,500.0	7,770.0	14,894.1	7,759.0	154.7	121.4	90.09	-8,659.3	-3,247.3	3,253.0	2,977.8	275.21	11.820		
16,600.0	7,770.0	14,994.1	7,759.0	156.4	123.2	90.09	-8,759.3	-3,248.0	3,253.7	2,975.1	278.70	11.675		
16,700.0	7,770.0	15,094.1	7,759.0	158.2	124.9	90.09	-8,859.3	-3,248.8	3,254.5	2,972.3	282.19	11.533		
16,800.0	7,770.0	15,194.1	7,759.0	159.9	126.6	90.09	-8,959.3	-3,249.6	3,255.3	2,969.6	285.68	11.395		
16,900.0	7,770.0	15,294.1	7,759.0	161.7	128.4	90.09	-9,059.3	-3,250.3	3,256.0	2,966.9	289.17	11.260		
17,000.0	7,770.0	15,394.1	7,759.0	163.4	130.1	90.09	-9,159.3	-3,251.1	3,256.8	2,964.2	292.66	11.128		
17,100.0	7,770.0	15,494.1	7,759.0	165.2	131.8	90.09	-9,259.3	-3,251.9	3,257.6	2,961.4	296.15	11.000		
17,200.0	7,770.0	15,594.1	7,759.0	166.9	133.6	90.09	-9,359.3	-3,252.6	3,258.3	2,958.7	299.64	10.874		
17,300.0	7,770.0	15,694.1	7,759.0	168.7	135.3	90.09	-9,459.2	-3,253.4	3,259.1	2,956.0	303.14	10.751		
17,400.0	7,770.0	15,794.0	7,759.0	170.4	137.0	90.09	-9,559.2	-3,254.2	3,259.9	2,953.3	306.63	10.631		
17,500.0	7,770.0	15,894.0	7,759.0	172.2	138.8	90.09	-9,659.2	-3,254.9	3,260.6	2,950.5	310.12	10.514		
17,600.0	7,770.0	15,994.0	7,759.0	173.9	140.5	90.09	-9,759.2	-3,255.7	3,261.4	2,947.8	313.62	10.399		
17,653.1	7,770.0	16,036.2	7,759.0	174.8	141.2	90.09	-9,801.4	-3,256.0	3,261.8	2,946.6	315.28	10.346 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.29	-1,931.3	-4,087.2	4,520.5					
100.0	100.0	84.0	84.0	0.2	0.1	-115.29	-1,931.3	-4,087.2	4,520.5	4,520.3	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.29	-1,931.3	-4,087.2	4,520.5	4,519.9	0.60	7,485.741		
300.0	300.0	284.0	284.0	0.5	0.5	-115.29	-1,931.3	-4,087.2	4,520.5	4,519.6	0.95	4,743.713		
400.0	400.0	695.8	695.5	0.7	1.2	-115.28	-1,924.9	-4,075.1	4,517.6	4,515.8	1.85	2,446.885		
500.0	500.0	1,161.8	1,158.6	0.8	2.4	-115.25	-1,900.9	-4,030.1	4,506.7	4,503.8	2.83	1,590.166		
550.0	550.0	1,391.0	1,384.4	0.9	3.1	-115.23	-1,882.7	-3,995.8	4,498.2	4,494.9	3.32	1,354.800		
600.0	600.0	1,444.7	1,437.1	1.0	3.3	-116.15	-1,877.9	-3,986.7	4,488.8	4,485.3	3.50	1,281.513		
700.0	700.0	1,543.0	1,533.7	1.2	3.6	-116.32	-1,869.1	-3,970.2	4,470.5	4,466.7	3.85	1,161.139		
800.0	799.9	1,641.5	1,630.3	1.4	4.0	-116.51	-1,860.3	-3,953.7	4,453.1	4,448.9	4.20	1,060.050		
861.1	860.9	1,701.6	1,689.4	1.5	4.2	-116.63	-1,855.0	-3,943.6	4,442.8	4,438.3	4.42	1,005.826		
900.0	899.8	1,740.0	1,727.0	1.6	4.4	-116.65	-1,851.5	-3,937.1	4,436.3	4,431.7	4.56	973.833		
1,000.0	999.6	1,838.5	1,823.7	1.8	4.7	-116.70	-1,842.8	-3,920.6	4,419.6	4,414.7	4.91	899.728		
1,100.0	1,099.5	1,937.0	1,920.5	1.9	5.1	-116.76	-1,834.0	-3,904.0	4,403.0	4,397.8	5.27	835.393		
1,200.0	1,199.3	2,035.5	2,017.2	2.1	5.4	-116.81	-1,825.2	-3,887.5	4,386.4	4,380.8	5.63	779.082		
1,300.0	1,299.2	2,134.1	2,113.9	2.3	5.8	-116.86	-1,816.4	-3,870.9	4,369.8	4,363.8	5.99	729.424		
1,400.0	1,399.1	2,232.6	2,210.6	2.5	6.2	-116.92	-1,807.6	-3,854.3	4,353.2	4,346.8	6.35	685.331		
1,500.0	1,498.9	2,331.1	2,307.4	2.7	6.5	-116.97	-1,798.8	-3,837.8	4,336.6	4,329.8	6.71	645.934		
1,600.0	1,598.8	2,429.6	2,404.1	2.9	6.9	-117.03	-1,790.0	-3,821.2	4,319.9	4,312.9	7.08	610.530		
1,700.0	1,698.6	2,528.2	2,500.8	3.1	7.3	-117.08	-1,781.2	-3,804.7	4,303.3	4,295.9	7.44	578.550		
1,800.0	1,798.5	2,626.7	2,597.5	3.3	7.6	-117.14	-1,772.4	-3,788.1	4,286.7	4,278.9	7.80	549.525		
1,900.0	1,898.3	2,725.2	2,694.3	3.5	8.0	-117.20	-1,763.6	-3,771.6	4,270.1	4,262.0	8.16	523.066		
2,000.0	1,998.2	2,823.8	2,791.0	3.7	8.4	-117.25	-1,754.8	-3,755.0	4,253.6	4,245.0	8.53	498.851		
2,100.0	2,098.0	2,922.3	2,887.7	3.9	8.8	-117.31	-1,746.0	-3,738.4	4,237.0	4,228.1	8.89	476.608		
2,200.0	2,197.9	3,020.8	2,984.5	4.1	9.1	-117.37	-1,737.2	-3,721.9	4,220.4	4,211.1	9.25	456.106		
2,300.0	2,297.7	3,119.3	3,081.2	4.3	9.5	-117.43	-1,728.4	-3,705.3	4,203.8	4,194.2	9.62	437.151		
2,400.0	2,397.6	3,217.9	3,177.9	4.5	9.9	-117.48	-1,719.6	-3,688.8	4,187.2	4,177.3	9.98	419.573		
2,500.0	2,497.4	3,316.4	3,274.6	4.7	10.2	-117.54	-1,710.8	-3,672.2	4,170.7	4,160.3	10.34	403.229		
2,600.0	2,597.3	3,414.9	3,371.4	4.9	10.6	-117.60	-1,702.0	-3,655.7	4,154.1	4,143.4	10.71	387.994		
2,700.0	2,697.1	3,513.4	3,468.1	5.1	11.0	-117.66	-1,693.2	-3,639.1	4,137.5	4,126.5	11.07	373.759		
2,800.0	2,797.0	3,612.0	3,564.8	5.3	11.3	-117.72	-1,684.4	-3,622.6	4,121.0	4,109.5	11.43	360.429		
2,900.0	2,896.8	3,710.5	3,661.5	5.5	11.7	-117.78	-1,675.7	-3,606.0	4,104.4	4,092.6	11.80	347.920		
3,000.0	2,996.7	3,809.0	3,758.3	5.7	12.1	-117.84	-1,666.9	-3,589.4	4,087.9	4,075.7	12.16	336.159		
3,100.0	3,096.5	3,907.5	3,855.0	5.9	12.5	-117.91	-1,658.1	-3,572.9	4,071.3	4,058.8	12.52	325.082		
3,200.0	3,196.4	4,006.1	3,951.7	6.1	12.8	-117.97	-1,649.3	-3,556.3	4,054.8	4,041.9	12.89	314.630		
3,300.0	3,296.3	4,104.6	4,048.4	6.3	13.2	-118.03	-1,640.5	-3,539.8	4,038.3	4,025.0	13.25	304.751		
3,400.0	3,396.1	4,203.1	4,145.2	6.5	13.6	-118.10	-1,631.7	-3,523.2	4,021.7	4,008.1	13.61	295.401		
3,500.0	3,496.0	4,301.6	4,241.9	6.7	14.0	-118.16	-1,622.9	-3,506.7	4,005.2	3,991.2	13.98	286.538		
3,600.0	3,595.8	4,400.2	4,338.6	6.9	14.3	-118.22	-1,614.1	-3,490.1	3,988.7	3,974.3	14.34	278.124		
3,700.0	3,695.7	4,498.7	4,435.3	7.0	14.7	-118.29	-1,605.3	-3,473.6	3,972.2	3,957.5	14.70	270.127		
3,800.0	3,795.5	4,597.2	4,532.1	7.2	15.1	-118.35	-1,596.5	-3,457.0	3,955.7	3,940.6	15.07	262.516		
3,900.0	3,895.4	4,695.7	4,628.8	7.4	15.4	-118.42	-1,587.7	-3,440.4	3,939.2	3,923.7	15.43	255.264		
4,000.0	3,995.2	4,794.3	4,725.5	7.6	15.8	-118.49	-1,578.9	-3,423.9	3,922.7	3,906.9	15.80	248.347		
4,100.0	4,095.1	4,892.8	4,822.2	7.8	16.2	-118.55	-1,570.1	-3,407.3	3,906.2	3,890.0	16.16	241.741		
4,200.0	4,194.9	4,991.3	4,919.0	8.0	16.6	-118.62	-1,561.3	-3,390.8	3,889.7	3,873.2	16.52	235.426		
4,300.0	4,294.8	5,089.9	5,015.7	8.2	16.9	-118.69	-1,552.5	-3,374.2	3,873.2	3,856.3	16.89	229.383		
4,400.0	4,394.6	5,188.4	5,112.4	8.4	17.3	-118.76	-1,543.7	-3,357.7	3,856.7	3,839.5	17.25	223.595		
4,500.0	4,494.5	5,286.9	5,209.2	8.6	17.7	-118.83	-1,534.9	-3,341.1	3,840.2	3,822.6	17.61	218.047		
4,600.0	4,594.3	5,385.4	5,305.9	8.8	18.0	-118.90	-1,526.1	-3,324.6	3,823.8	3,805.8	17.98	212.723		
4,700.0	4,694.2	5,484.0	5,402.6	9.0	18.4	-118.97	-1,517.3	-3,308.0	3,807.3	3,789.0	18.34	207.610		
4,800.0	4,794.0	5,582.5	5,499.3	9.2	18.8	-119.04	-1,508.5	-3,291.4	3,790.9	3,772.2	18.70	202.697		
4,900.0	4,893.9	5,681.0	5,596.1	9.4	19.2	-119.11	-1,499.8	-3,274.9	3,774.4	3,755.3	19.07	197.971		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,993.7	5,779.5	5,692.8	9.6	19.5	-119.18	-1,491.0	-3,258.3	3,758.0	3,738.5	19.43	193.422		
5,100.0	5,093.6	5,878.1	5,789.5	9.8	19.9	-119.26	-1,482.2	-3,241.8	3,741.5	3,721.7	19.79	189.040		
5,200.0	5,193.5	5,976.6	5,886.2	10.0	20.3	-119.33	-1,473.4	-3,225.2	3,725.1	3,704.9	20.16	184.817		
5,300.0	5,293.3	6,075.1	5,983.0	10.2	20.7	-119.41	-1,464.6	-3,208.7	3,708.7	3,688.1	20.52	180.743		
5,400.0	5,393.2	6,173.6	6,079.7	10.4	21.0	-119.48	-1,455.8	-3,192.1	3,692.2	3,671.4	20.88	176.811		
5,500.0	5,493.0	6,272.2	6,176.4	10.6	21.4	-119.56	-1,447.0	-3,175.6	3,675.8	3,654.6	21.25	173.014		
5,600.0	5,592.9	6,370.7	6,273.1	10.8	21.8	-119.63	-1,438.2	-3,159.0	3,659.4	3,637.8	21.61	169.344		
5,700.0	5,692.7	6,469.2	6,369.9	11.0	22.2	-119.71	-1,429.4	-3,142.4	3,643.0	3,621.0	21.97	165.796		
5,800.0	5,792.6	6,567.7	6,466.6	11.2	22.5	-119.79	-1,420.6	-3,125.9	3,626.6	3,604.3	22.34	162.364		
5,900.0	5,892.4	6,666.3	6,563.3	11.4	22.9	-119.87	-1,411.8	-3,109.3	3,610.2	3,587.5	22.70	159.041		
6,000.0	5,992.3	6,764.8	6,660.0	11.6	23.3	-119.95	-1,403.0	-3,092.8	3,593.9	3,570.8	23.06	155.824		
6,100.0	6,092.1	6,863.3	6,756.8	11.8	23.6	-120.03	-1,394.2	-3,076.2	3,577.5	3,554.1	23.43	152.706		
6,200.0	6,192.0	6,961.9	6,853.5	12.0	24.0	-120.11	-1,385.4	-3,059.7	3,561.1	3,537.3	23.79	149.683		
6,300.0	6,291.8	7,060.4	6,950.2	12.2	24.4	-120.19	-1,376.6	-3,043.1	3,544.8	3,520.6	24.15	146.752		
6,400.0	6,391.7	7,158.9	7,047.0	12.4	24.8	-120.27	-1,367.8	-3,026.6	3,528.4	3,503.9	24.52	143.907		
6,500.0	6,491.5	7,257.4	7,143.7	12.6	25.1	-120.35	-1,359.0	-3,010.0	3,512.1	3,487.2	24.88	141.146		
6,600.0	6,591.4	7,282.6	7,168.4	12.8	25.2	-120.38	-1,357.3	-3,005.8	3,496.7	3,471.6	25.12	139.201		
6,700.0	6,691.2	7,300.0	7,185.6	13.0	25.3	-120.41	-1,356.8	-3,002.8	3,483.6	3,458.2	25.34	137.452		
6,800.0	6,791.1	7,350.0	7,234.8	13.2	25.4	-120.54	-1,358.2	-2,994.4	3,472.6	3,447.0	25.63	135.484		
6,900.0	6,890.9	7,350.0	7,234.8	13.4	25.4	-120.54	-1,358.2	-2,994.4	3,463.5	3,437.7	25.82	134.122		
7,000.0	6,990.8	7,400.0	7,283.8	13.6	25.5	-120.73	-1,364.0	-2,986.0	3,456.9	3,430.8	26.12	132.351		
7,024.2	7,014.9	7,400.0	7,283.8	13.6	25.5	-120.73	-1,364.0	-2,986.0	3,455.5	3,429.4	26.17	132.062		
7,050.0	7,040.7	7,400.0	7,283.8	13.7	25.5	-122.28	-1,364.0	-2,986.0	3,454.0	3,427.8	26.19	131.902		
7,100.0	7,090.7	7,400.0	7,283.8	13.7	25.5	61.36	-1,364.0	-2,986.0	3,450.2	3,424.0	26.19	131.751		
7,150.0	7,140.5	7,400.0	7,283.8	13.8	25.5	61.18	-1,364.0	-2,986.0	3,445.4	3,419.3	26.15	131.758		
7,200.0	7,189.9	7,430.4	7,313.2	13.8	25.6	61.41	-1,369.6	-2,981.0	3,439.2	3,413.0	26.14	131.567		
7,250.0	7,238.6	7,450.0	7,332.0	13.8	25.6	61.84	-1,374.0	-2,977.8	3,432.0	3,405.9	26.08	131.602		
7,300.0	7,286.4	7,450.0	7,332.0	13.7	25.6	62.40	-1,374.0	-2,977.8	3,423.7	3,397.7	25.97	131.853		
7,350.0	7,333.1	7,450.0	7,332.0	13.7	25.6	63.04	-1,374.0	-2,977.8	3,414.4	3,388.6	25.85	132.067		
7,400.0	7,378.5	7,479.2	7,359.7	13.6	25.6	63.81	-1,381.9	-2,973.0	3,403.9	3,378.1	25.80	131.941		
7,450.0	7,422.2	7,500.0	7,379.2	13.6	25.6	64.68	-1,388.3	-2,969.7	3,392.5	3,366.8	25.75	131.746		
7,500.0	7,464.1	7,500.0	7,379.2	13.5	25.6	65.60	-1,388.3	-2,969.7	3,380.1	3,354.4	25.72	131.428		
7,550.0	7,504.1	7,500.0	7,379.2	13.5	25.6	66.58	-1,388.3	-2,969.7	3,367.1	3,341.3	25.74	130.790		
7,600.0	7,541.8	7,527.1	7,404.3	13.5	25.6	67.76	-1,397.8	-2,965.4	3,352.9	3,327.1	25.85	129.690		
7,650.0	7,577.2	7,550.0	7,425.0	13.4	25.6	69.03	-1,406.8	-2,961.9	3,338.3	3,312.2	26.02	128.273		
7,700.0	7,610.0	7,550.0	7,425.0	13.5	25.6	70.25	-1,406.8	-2,961.9	3,322.7	3,296.5	26.26	126.509		
7,750.0	7,640.2	7,550.0	7,425.0	13.5	25.6	71.52	-1,406.8	-2,961.9	3,306.8	3,280.2	26.58	124.389		
7,800.0	7,667.4	7,573.1	7,445.6	13.6	25.6	73.03	-1,416.6	-2,958.3	3,290.2	3,263.2	26.97	121.996		
7,850.0	7,691.7	7,600.0	7,469.1	13.7	25.6	74.66	-1,429.2	-2,954.3	3,273.3	3,245.9	27.41	119.424		
7,900.0	7,712.8	7,600.0	7,469.1	13.9	25.6	76.10	-1,429.2	-2,954.3	3,255.9	3,228.0	27.92	116.601		
7,950.0	7,730.8	7,600.0	7,469.1	14.1	25.6	77.56	-1,429.2	-2,954.3	3,238.3	3,209.9	28.48	113.689		
8,000.0	7,745.5	7,600.0	7,469.1	14.4	25.6	79.03	-1,429.2	-2,954.3	3,220.8	3,191.7	29.08	110.756		
8,050.0	7,756.7	7,625.6	7,490.8	14.7	25.6	80.84	-1,442.1	-2,950.6	3,202.9	3,173.2	29.64	108.043		
8,100.0	7,764.6	7,650.0	7,511.0	15.1	25.6	82.68	-1,455.4	-2,947.1	3,185.3	3,155.1	30.20	105.461		
8,150.0	7,769.0	7,650.0	7,511.0	15.5	25.6	84.18	-1,455.4	-2,947.1	3,167.7	3,136.9	30.81	102.800		
8,188.1	7,770.0	7,650.0	7,511.0	15.9	25.6	85.30	-1,455.4	-2,947.1	3,154.5	3,123.2	31.27	100.876		
8,200.0	7,770.0	7,650.0	7,511.0	16.0	25.6	85.30	-1,455.4	-2,947.1	3,150.4	3,119.0	31.38	100.391		
8,300.0	7,770.0	7,671.0	7,527.9	17.0	25.6	85.62	-1,467.4	-2,944.3	3,117.6	3,085.3	32.31	96.505		
8,400.0	7,770.0	7,700.0	7,550.6	18.1	25.6	86.05	-1,485.2	-2,940.4	3,087.4	3,054.1	33.32	92.670		
8,500.0	7,770.0	7,700.0	7,550.6	19.3	25.6	86.05	-1,485.2	-2,940.4	3,059.7	3,025.2	34.52	88.629		
8,600.0	7,770.0	7,750.0	7,587.4	20.6	25.5	86.76	-1,518.4	-2,934.1	3,034.5	2,998.9	35.62	85.184		
8,700.0	7,770.0	7,750.0	7,587.4	21.9	25.5	86.76	-1,518.4	-2,934.1	3,011.9	2,974.9	36.97	81.460		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,770.0	7,800.0	7,621.2	23.3	25.5	87.41	-1,554.7	-2,928.3	2,991.8	2,953.6	38.19	78.340		
8,900.0	7,770.0	7,822.6	7,635.5	24.8	25.5	87.69	-1,572.1	-2,925.9	2,974.1	2,934.6	39.56	75.187		
9,000.0	7,770.0	7,850.0	7,651.8	26.3	25.4	88.00	-1,593.9	-2,923.1	2,958.9	2,918.0	40.94	72.272		
9,100.0	7,770.0	7,900.0	7,678.9	27.8	25.4	88.53	-1,635.6	-2,918.4	2,946.0	2,903.7	42.29	69.662		
9,200.0	7,770.0	7,936.1	7,696.2	29.3	25.4	88.87	-1,667.2	-2,915.5	2,935.3	2,891.6	43.73	67.124		
9,300.0	7,770.0	7,980.4	7,714.7	30.9	25.3	89.23	-1,707.3	-2,912.3	2,926.7	2,881.5	45.19	64.770		
9,400.0	7,770.0	8,027.9	7,731.1	32.5	25.3	89.55	-1,751.8	-2,909.5	2,920.0	2,873.3	46.69	62.546		
9,500.0	7,770.0	8,078.1	7,744.4	34.1	25.3	89.81	-1,800.1	-2,907.3	2,915.2	2,866.9	48.24	60.431		
9,600.0	7,770.0	8,130.3	7,753.7	35.7	25.3	89.99	-1,851.5	-2,905.7	2,912.0	2,862.2	49.86	58.407		
9,700.0	7,770.0	8,184.0	7,758.5	37.3	25.4	90.09	-1,904.9	-2,904.9	2,910.5	2,859.0	51.55	56.465		
9,752.7	7,770.0	8,215.6	7,759.0	38.2	25.4	90.10	-1,936.5	-2,904.8	2,910.4	2,857.9	52.47	55.463 CC		
9,800.0	7,770.0	8,262.9	7,759.0	39.0	25.5	90.10	-1,983.8	-2,904.8	2,910.4	2,857.0	53.40	54.504		
9,900.0	7,770.0	8,362.9	7,759.0	40.6	25.7	90.10	-2,083.8	-2,904.8	2,910.4	2,854.9	55.48	52.457		
10,000.0	7,770.0	8,462.9	7,759.0	42.3	26.0	90.10	-2,183.8	-2,904.8	2,910.4	2,852.7	57.76	50.390		
10,100.0	7,770.0	8,562.9	7,759.0	44.0	26.5	90.10	-2,283.8	-2,904.8	2,910.4	2,850.2	60.21	48.340		
10,200.0	7,770.0	8,662.9	7,759.0	45.6	27.1	90.10	-2,383.8	-2,904.9	2,910.5	2,847.7	62.81	46.339		
10,300.0	7,770.0	8,762.9	7,759.0	47.3	27.7	90.10	-2,483.8	-2,904.9	2,910.5	2,844.9	65.54	44.410		
10,400.0	7,770.0	8,862.9	7,759.0	49.0	28.5	90.10	-2,583.8	-2,904.9	2,910.5	2,842.1	68.37	42.568		
10,500.0	7,770.0	8,962.9	7,759.0	50.7	29.3	90.10	-2,683.8	-2,904.9	2,910.5	2,839.2	71.30	40.822		
10,600.0	7,770.0	9,062.9	7,759.0	52.4	30.3	90.10	-2,783.8	-2,904.9	2,910.5	2,836.2	74.30	39.173		
10,700.0	7,770.0	9,162.9	7,759.0	54.1	31.3	90.10	-2,883.8	-2,904.9	2,910.5	2,833.2	77.36	37.622		
10,800.0	7,770.0	9,262.9	7,759.0	55.8	32.3	90.10	-2,983.8	-2,905.0	2,910.6	2,830.1	80.48	36.166		
10,900.0	7,770.0	9,362.9	7,759.0	57.5	33.4	90.10	-3,083.8	-2,905.0	2,910.6	2,826.9	83.64	34.799		
11,000.0	7,770.0	9,462.9	7,759.0	59.2	34.6	90.10	-3,183.8	-2,905.0	2,910.6	2,823.8	86.84	33.518		
11,100.0	7,770.0	9,562.9	7,759.0	60.9	35.8	90.10	-3,283.8	-2,905.0	2,910.6	2,820.5	90.07	32.316		
11,200.0	7,770.0	9,662.9	7,759.0	62.6	37.1	90.10	-3,383.8	-2,905.0	2,910.6	2,817.3	93.32	31.188		
11,300.0	7,770.0	9,762.9	7,759.0	64.3	38.4	90.10	-3,483.8	-2,905.0	2,910.6	2,814.0	96.60	30.129		
11,400.0	7,770.0	9,862.9	7,759.0	66.0	39.8	90.10	-3,583.8	-2,905.1	2,910.7	2,810.8	99.91	29.134		
11,500.0	7,770.0	9,962.9	7,759.0	67.7	41.1	90.10	-3,683.8	-2,905.1	2,910.7	2,807.4	103.23	28.197		
11,600.0	7,770.0	10,062.9	7,759.0	69.5	42.5	90.10	-3,783.8	-2,905.1	2,910.7	2,804.1	106.56	27.315		
11,700.0	7,770.0	10,162.9	7,759.0	71.2	43.9	90.10	-3,883.8	-2,905.1	2,910.7	2,800.8	109.91	26.483		
11,800.0	7,770.0	10,262.9	7,759.0	72.9	45.4	90.10	-3,983.8	-2,905.1	2,910.7	2,797.5	113.27	25.697		
11,900.0	7,770.0	10,362.9	7,759.0	74.6	46.9	90.10	-4,083.8	-2,905.1	2,910.7	2,794.1	116.64	24.955		
12,000.0	7,770.0	10,462.9	7,759.0	76.4	48.4	90.10	-4,183.8	-2,905.2	2,910.8	2,790.7	120.02	24.252		
12,100.0	7,770.0	10,562.9	7,759.0	78.1	49.9	90.10	-4,283.8	-2,905.2	2,910.8	2,787.4	123.41	23.586		
12,200.0	7,770.0	10,662.9	7,759.0	79.8	51.4	90.10	-4,383.8	-2,905.2	2,910.8	2,784.0	126.81	22.954		
12,300.0	7,770.0	10,762.9	7,759.0	81.5	52.9	90.10	-4,483.8	-2,905.2	2,910.8	2,780.6	130.22	22.354		
12,400.0	7,770.0	10,862.9	7,759.0	83.3	54.5	90.10	-4,583.8	-2,905.2	2,910.8	2,777.2	133.63	21.783		
12,500.0	7,770.0	10,962.9	7,759.0	85.0	56.0	90.10	-4,683.8	-2,905.2	2,910.8	2,773.8	137.04	21.240		
12,600.0	7,770.0	11,062.9	7,759.0	86.7	57.6	90.10	-4,783.8	-2,905.3	2,910.9	2,770.4	140.47	20.723		
12,700.0	7,770.0	11,162.9	7,759.0	88.5	59.2	90.10	-4,883.8	-2,905.3	2,910.9	2,767.0	143.89	20.229		
12,800.0	7,770.0	11,262.9	7,759.0	90.2	60.8	90.10	-4,983.8	-2,905.3	2,910.9	2,763.6	147.32	19.758		
12,900.0	7,770.0	11,362.9	7,759.0	91.9	62.4	90.10	-5,083.8	-2,905.3	2,910.9	2,760.1	150.76	19.308		
13,000.0	7,770.0	11,462.9	7,759.0	93.7	64.0	90.10	-5,183.8	-2,905.3	2,910.9	2,756.7	154.20	18.878		
13,100.0	7,770.0	11,562.9	7,759.0	95.4	65.6	90.10	-5,283.8	-2,905.3	2,910.9	2,753.3	157.64	18.465		
13,200.0	7,770.0	11,662.9	7,759.0	97.1	67.2	90.10	-5,383.8	-2,905.3	2,911.0	2,749.9	161.09	18.071		
13,300.0	7,770.0	11,762.9	7,759.0	98.9	68.9	90.10	-5,483.8	-2,905.4	2,911.0	2,746.4	164.54	17.692		
13,400.0	7,770.0	11,862.9	7,759.0	100.6	70.5	90.10	-5,583.8	-2,905.4	2,911.0	2,743.0	167.99	17.328		
13,500.0	7,770.0	11,962.9	7,759.0	102.4	72.1	90.10	-5,683.8	-2,905.4	2,911.0	2,739.6	171.44	16.979		
13,600.0	7,770.0	12,062.9	7,759.0	104.1	73.8	90.10	-5,783.8	-2,905.4	2,911.0	2,736.1	174.90	16.644		
13,700.0	7,770.0	12,162.9	7,759.0	105.8	75.4	90.10	-5,883.8	-2,905.4	2,911.0	2,732.7	178.36	16.321		
13,800.0	7,770.0	12,262.9	7,759.0	107.6	77.1	90.10	-5,983.8	-2,905.4	2,911.1	2,729.2	181.82	16.011		

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
13,900.0	7,770.0	12,362.9	7,759.0	109.3	78.8	90.10	-6,083.8	-2,905.5	2,911.1	2,725.8	185.28	15.711		
14,000.0	7,770.0	12,462.9	7,759.0	111.1	80.4	90.10	-6,183.8	-2,905.5	2,911.1	2,722.3	188.75	15.423		
14,100.0	7,770.0	12,562.9	7,759.0	112.8	82.1	90.10	-6,283.8	-2,905.5	2,911.1	2,718.9	192.21	15.145		
14,200.0	7,770.0	12,662.9	7,759.0	114.5	83.8	90.10	-6,383.8	-2,905.5	2,911.1	2,715.4	195.68	14.877		
14,300.0	7,770.0	12,762.9	7,759.0	116.3	85.4	90.10	-6,483.8	-2,905.5	2,911.1	2,712.0	199.15	14.618		
14,400.0	7,770.0	12,862.9	7,759.0	118.0	87.1	90.10	-6,583.8	-2,905.5	2,911.2	2,708.5	202.62	14.367		
14,500.0	7,770.0	12,962.9	7,759.0	119.8	88.8	90.10	-6,683.8	-2,905.6	2,911.2	2,705.1	206.10	14.125		
14,600.0	7,770.0	13,062.9	7,759.0	121.5	90.5	90.10	-6,783.8	-2,905.6	2,911.2	2,701.6	209.57	13.891		
14,700.0	7,770.0	13,162.9	7,759.0	123.3	92.2	90.10	-6,883.8	-2,905.6	2,911.2	2,698.2	213.05	13.665		
14,800.0	7,770.0	13,262.9	7,759.0	125.0	93.8	90.10	-6,983.8	-2,905.6	2,911.2	2,694.7	216.52	13.445		
14,900.0	7,770.0	13,362.9	7,759.0	126.7	95.5	90.10	-7,083.8	-2,905.6	2,911.2	2,691.2	220.00	13.233		
15,000.0	7,770.0	13,462.9	7,759.0	128.5	97.2	90.10	-7,183.8	-2,905.6	2,911.3	2,687.8	223.48	13.027		
15,100.0	7,770.0	13,562.9	7,759.0	130.2	98.9	90.10	-7,283.8	-2,905.7	2,911.3	2,684.3	226.96	12.827		
15,200.0	7,770.0	13,662.9	7,759.0	132.0	100.6	90.10	-7,383.8	-2,905.7	2,911.3	2,680.8	230.44	12.634		
15,300.0	7,770.0	13,762.9	7,759.0	133.7	102.3	90.10	-7,483.8	-2,905.7	2,911.3	2,677.4	233.92	12.446		
15,400.0	7,770.0	13,862.9	7,759.0	135.5	104.0	90.10	-7,583.8	-2,905.7	2,911.3	2,673.9	237.40	12.263		
15,500.0	7,770.0	13,962.9	7,759.0	137.2	105.7	90.10	-7,683.8	-2,905.7	2,911.3	2,670.5	240.88	12.086		
15,600.0	7,770.0	14,062.9	7,759.0	139.0	107.4	90.10	-7,783.8	-2,905.7	2,911.3	2,667.0	244.37	11.914		
15,700.0	7,770.0	14,162.9	7,759.0	140.7	109.1	90.10	-7,883.8	-2,905.8	2,911.4	2,663.5	247.85	11.746		
15,800.0	7,770.0	14,262.9	7,759.0	142.4	110.8	90.10	-7,983.8	-2,905.8	2,911.4	2,660.0	251.34	11.584		
15,900.0	7,770.0	14,362.9	7,759.0	144.2	112.6	90.10	-8,083.8	-2,905.8	2,911.4	2,656.6	254.82	11.425		
16,000.0	7,770.0	14,462.9	7,759.0	145.9	114.3	90.10	-8,183.8	-2,905.8	2,911.4	2,653.1	258.31	11.271		
16,100.0	7,770.0	14,562.9	7,759.0	147.7	116.0	90.10	-8,283.8	-2,905.8	2,911.4	2,649.6	261.79	11.121		
16,200.0	7,770.0	14,662.9	7,759.0	149.4	117.7	90.10	-8,383.8	-2,905.8	2,911.4	2,646.2	265.28	10.975		
16,300.0	7,770.0	14,762.9	7,759.0	151.2	119.4	90.10	-8,483.8	-2,905.9	2,911.5	2,642.7	268.77	10.833		
16,400.0	7,770.0	14,862.9	7,759.0	152.9	121.1	90.10	-8,583.8	-2,905.9	2,911.5	2,639.2	272.26	10.694		
16,500.0	7,770.0	14,962.9	7,759.0	154.7	122.8	90.10	-8,683.8	-2,905.9	2,911.5	2,635.7	275.75	10.559		
16,600.0	7,770.0	15,062.9	7,759.0	156.4	124.6	90.10	-8,783.8	-2,905.9	2,911.5	2,632.3	279.24	10.427		
16,700.0	7,770.0	15,162.9	7,759.0	158.2	126.3	90.10	-8,883.8	-2,905.9	2,911.5	2,628.8	282.73	10.298		
16,800.0	7,770.0	15,262.9	7,759.0	159.9	128.0	90.10	-8,983.8	-2,905.9	2,911.5	2,625.3	286.22	10.172		
16,900.0	7,770.0	15,362.9	7,759.0	161.7	129.7	90.10	-9,083.8	-2,906.0	2,911.6	2,621.9	289.71	10.050		
17,000.0	7,770.0	15,462.9	7,759.0	163.4	131.4	90.10	-9,183.8	-2,906.0	2,911.6	2,618.4	293.20	9.930		
17,100.0	7,770.0	15,562.9	7,759.0	165.2	133.2	90.10	-9,283.8	-2,906.0	2,911.6	2,614.9	296.69	9.814		
17,200.0	7,770.0	15,662.9	7,759.0	166.9	134.9	90.10	-9,383.8	-2,906.0	2,911.6	2,611.4	300.18	9.699		
17,300.0	7,770.0	15,762.9	7,759.0	168.7	136.6	90.10	-9,483.8	-2,906.0	2,911.6	2,608.0	303.68	9.588		
17,400.0	7,770.0	15,862.9	7,759.0	170.4	138.3	90.10	-9,583.8	-2,906.0	2,911.6	2,604.5	307.17	9.479		
17,500.0	7,770.0	15,962.9	7,759.0	172.2	140.1	90.10	-9,683.8	-2,906.1	2,911.7	2,601.0	310.66	9.372		
17,600.0	7,770.0	16,062.9	7,759.0	173.9	141.8	90.10	-9,783.8	-2,906.1	2,911.7	2,597.5	314.16	9.268		
17,607.2	7,770.0	16,070.1	7,759.0	174.0	141.9	90.10	-9,791.0	-2,906.1	2,911.7	2,597.3	314.41	9.261		
17,653.1	7,770.0	16,087.8	7,759.0	174.8	142.2	90.10	-9,808.7	-2,906.1	2,911.8	2,596.3	315.52	9.229 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-115.39	-1,937.3	-4,082.2	4,518.6						
100.0	100.0	84.0	84.0	0.2	0.1	-115.39	-1,937.3	-4,082.2	4,518.6	4,518.3	0.26	N/A			
200.0	200.0	184.0	184.0	0.3	0.3	-115.39	-1,937.3	-4,082.2	4,518.6	4,518.0	0.60	7,482.576			
300.0	300.0	594.7	594.4	0.5	1.0	-115.40	-1,932.1	-4,069.7	4,515.7	4,514.2	1.50	3,019.651			
400.0	400.0	1,059.4	1,056.2	0.7	2.2	-115.43	-1,912.9	-4,022.7	4,504.8	4,502.3	2.48	1,814.738			
500.0	500.0	1,513.1	1,501.6	0.8	3.9	-115.49	-1,880.4	-3,943.7	4,486.0	4,482.5	3.45	1,300.136			
550.0	550.0	1,590.1	1,576.5	0.9	4.2	-115.51	-1,873.6	-3,927.1	4,474.3	4,470.7	3.67	1,218.366			
600.0	600.0	1,638.7	1,623.8	1.0	4.4	-116.46	-1,869.3	-3,916.6	4,462.8	4,458.9	3.84	1,161.401			
700.0	700.0	1,736.1	1,718.5	1.2	4.8	-116.70	-1,860.7	-3,895.6	4,440.2	4,436.1	4.19	1,059.553			
800.0	799.9	1,833.6	1,813.3	1.4	5.2	-116.96	-1,852.0	-3,874.6	4,418.5	4,413.9	4.54	972.655			
861.1	860.9	1,893.2	1,871.3	1.5	5.5	-117.12	-1,846.8	-3,861.7	4,405.6	4,400.8	4.76	925.500			
900.0	899.8	1,931.2	1,908.2	1.6	5.7	-117.16	-1,843.4	-3,853.5	4,397.4	4,392.5	4.90	897.691			
1,000.0	999.6	2,028.8	2,003.1	1.8	6.1	-117.24	-1,834.8	-3,832.4	4,376.5	4,371.3	5.26	832.746			
1,100.0	1,099.5	2,126.4	2,098.0	1.9	6.5	-117.32	-1,826.1	-3,811.4	4,355.6	4,350.0	5.61	775.802			
1,200.0	1,199.3	2,224.0	2,192.9	2.1	7.0	-117.41	-1,817.5	-3,790.3	4,334.7	4,328.8	5.97	725.526			
1,300.0	1,299.2	2,321.6	2,287.8	2.3	7.4	-117.49	-1,808.8	-3,769.2	4,313.9	4,307.5	6.34	680.848			
1,400.0	1,399.1	2,419.2	2,382.7	2.5	7.8	-117.58	-1,800.2	-3,748.2	4,293.0	4,286.3	6.70	640.904			
1,500.0	1,498.9	2,516.8	2,477.6	2.7	8.3	-117.67	-1,791.5	-3,727.1	4,272.2	4,265.1	7.06	604.995			
1,600.0	1,598.8	2,614.4	2,572.5	2.9	8.7	-117.75	-1,782.9	-3,706.0	4,251.3	4,243.9	7.43	572.549			
1,700.0	1,698.6	2,711.9	2,667.4	3.1	9.1	-117.84	-1,774.2	-3,685.0	4,230.5	4,222.7	7.79	543.092			
1,800.0	1,798.5	2,809.5	2,762.3	3.3	9.6	-117.93	-1,765.6	-3,663.9	4,209.6	4,201.5	8.15	516.236			
1,900.0	1,898.3	2,907.1	2,857.2	3.5	10.0	-118.02	-1,756.9	-3,642.8	4,188.8	4,180.3	8.52	491.654			
2,000.0	1,998.2	3,004.7	2,952.1	3.7	10.4	-118.11	-1,748.3	-3,621.8	4,168.0	4,159.1	8.89	469.070			
2,100.0	2,098.0	3,102.3	3,047.0	3.9	10.9	-118.20	-1,739.6	-3,600.7	4,147.2	4,138.0	9.25	448.252			
2,200.0	2,197.9	3,199.9	3,141.9	4.1	11.3	-118.30	-1,731.0	-3,579.6	4,126.4	4,116.8	9.62	429.001			
2,300.0	2,297.7	3,297.5	3,236.8	4.3	11.8	-118.39	-1,722.3	-3,558.6	4,105.7	4,095.7	9.99	411.149			
2,400.0	2,397.6	3,395.1	3,331.7	4.5	12.2	-118.49	-1,713.7	-3,537.5	4,084.9	4,074.6	10.35	394.548			
2,500.0	2,497.4	3,492.7	3,426.6	4.7	12.6	-118.58	-1,705.0	-3,516.4	4,064.2	4,053.4	10.72	379.072			
2,600.0	2,597.3	3,590.3	3,521.5	4.9	13.1	-118.68	-1,696.4	-3,495.4	4,043.4	4,032.3	11.09	364.611			
2,700.0	2,697.1	3,687.9	3,616.4	5.1	13.5	-118.78	-1,687.7	-3,474.3	4,022.7	4,011.2	11.46	351.068			
2,800.0	2,797.0	3,785.5	3,711.3	5.3	13.9	-118.88	-1,679.1	-3,453.2	4,002.0	3,990.1	11.83	338.359			
2,900.0	2,896.8	3,883.1	3,806.2	5.5	14.4	-118.98	-1,670.4	-3,432.2	3,981.3	3,969.1	12.20	326.409			
3,000.0	2,996.7	3,980.7	3,901.1	5.7	14.8	-119.08	-1,661.8	-3,411.1	3,960.6	3,948.0	12.57	315.153			
3,100.0	3,096.5	4,078.3	3,996.0	5.9	15.3	-119.18	-1,653.1	-3,390.0	3,939.9	3,926.9	12.94	304.530			
3,200.0	3,196.4	4,175.9	4,090.9	6.1	15.7	-119.28	-1,644.5	-3,369.0	3,919.2	3,905.9	13.31	294.491			
3,300.0	3,296.3	4,273.5	4,185.8	6.3	16.1	-119.39	-1,635.8	-3,347.9	3,898.5	3,884.9	13.68	284.987			
3,400.0	3,396.1	4,371.0	4,280.7	6.5	16.6	-119.49	-1,627.2	-3,326.8	3,877.9	3,863.8	14.05	275.977			
3,500.0	3,496.0	4,468.6	4,375.6	6.7	17.0	-119.60	-1,618.5	-3,305.8	3,857.3	3,842.8	14.42	267.423			
3,600.0	3,595.8	4,566.2	4,470.5	6.9	17.5	-119.70	-1,609.9	-3,284.7	3,836.6	3,821.8	14.80	259.293			
3,700.0	3,695.7	4,663.8	4,565.4	7.0	17.9	-119.81	-1,601.2	-3,263.6	3,816.0	3,800.9	15.17	251.554			
3,800.0	3,795.5	4,761.4	4,660.3	7.2	18.3	-119.92	-1,592.6	-3,242.6	3,795.4	3,779.9	15.54	244.179			
3,900.0	3,895.4	4,859.0	4,755.2	7.4	18.8	-120.03	-1,583.9	-3,221.5	3,774.9	3,758.9	15.92	237.144			
4,000.0	3,995.2	4,956.6	4,850.1	7.6	19.2	-120.15	-1,575.3	-3,200.4	3,754.3	3,738.0	16.29	230.425			
4,100.0	4,095.1	5,054.2	4,945.0	7.8	19.7	-120.26	-1,566.6	-3,179.4	3,733.7	3,717.1	16.67	224.001			
4,200.0	4,194.9	5,151.8	5,039.9	8.0	20.1	-120.37	-1,558.0	-3,158.3	3,713.2	3,696.2	17.04	217.854			
4,300.0	4,294.8	5,249.4	5,134.8	8.2	20.5	-120.49	-1,549.3	-3,137.3	3,692.7	3,675.2	17.42	211.965			
4,400.0	4,394.6	5,347.0	5,229.7	8.4	21.0	-120.61	-1,540.7	-3,116.2	3,672.2	3,654.4	17.80	206.319			
4,500.0	4,494.5	5,444.6	5,324.6	8.6	21.4	-120.73	-1,532.0	-3,095.1	3,651.7	3,633.5	18.18	200.902			
4,600.0	4,594.3	5,542.2	5,419.5	8.8	21.9	-120.85	-1,523.4	-3,074.1	3,631.2	3,612.6	18.56	195.698			
4,700.0	4,694.2	5,639.8	5,514.4	9.0	22.3	-120.97	-1,514.7	-3,053.0	3,610.7	3,591.8	18.93	190.696			
4,800.0	4,794.0	5,737.4	5,609.3	9.2	22.7	-121.09	-1,506.1	-3,031.9	3,590.3	3,571.0	19.31	185.885			
4,900.0	4,893.9	5,835.0	5,704.2	9.4	23.2	-121.21	-1,497.4	-3,010.9	3,569.8	3,550.1	19.70	181.253			

CC - Min centre to center distance 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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,000.0	4,993.7	5,932.6	5,799.1	9.6	23.6	-121.34	-1,488.8	-2,989.8	3,549.4	3,529.3	20.08	176.791	
5,100.0	5,093.6	6,030.1	5,894.0	9.8	24.1	-121.47	-1,480.1	-2,968.7	3,529.0	3,508.6	20.46	172.490	
5,200.0	5,193.5	6,127.7	5,988.9	10.0	24.5	-121.60	-1,471.5	-2,947.7	3,508.6	3,487.8	20.84	168.341	
5,300.0	5,293.3	6,225.3	6,083.8	10.2	24.9	-121.72	-1,462.8	-2,926.6	3,488.3	3,467.1	21.23	164.335	
5,400.0	5,393.2	6,322.9	6,178.7	10.4	25.4	-121.86	-1,454.2	-2,905.5	3,467.9	3,446.3	21.61	160.467	
5,500.0	5,493.0	6,420.5	6,273.6	10.6	25.8	-121.99	-1,445.5	-2,884.5	3,447.6	3,425.6	22.00	156.728	
5,600.0	5,592.9	6,518.1	6,368.5	10.8	26.3	-122.12	-1,436.9	-2,863.4	3,427.3	3,404.9	22.38	153.112	
5,700.0	5,692.7	6,615.7	6,463.4	11.0	26.7	-122.26	-1,428.2	-2,842.3	3,407.0	3,384.2	22.77	149.613	
5,800.0	5,792.6	6,713.3	6,558.3	11.2	27.1	-122.40	-1,419.6	-2,821.3	3,386.7	3,363.6	23.16	146.227	
5,900.0	5,892.4	6,810.9	6,653.2	11.4	27.6	-122.54	-1,410.9	-2,800.2	3,366.5	3,342.9	23.55	142.946	
6,000.0	5,992.3	6,908.5	6,748.1	11.6	28.0	-122.68	-1,402.3	-2,779.1	3,346.2	3,322.3	23.94	139.767	
6,100.0	6,092.1	7,006.1	6,843.0	11.8	28.5	-122.82	-1,393.6	-2,758.1	3,326.0	3,301.7	24.33	136.685	
6,200.0	6,192.0	7,103.7	6,937.9	12.0	28.9	-122.96	-1,385.0	-2,737.0	3,305.8	3,281.1	24.73	133.695	
6,300.0	6,291.8	7,201.3	7,032.8	12.2	29.3	-123.11	-1,376.3	-2,715.9	3,285.6	3,260.5	25.12	130.793	
6,400.0	6,391.7	7,298.9	7,127.7	12.4	29.8	-123.26	-1,367.7	-2,694.9	3,265.5	3,240.0	25.52	127.976	
6,500.0	6,491.5	7,350.0	7,177.5	12.6	30.0	-123.35	-1,363.9	-2,683.8	3,246.0	3,220.2	25.82	125.698	
6,600.0	6,591.4	7,350.0	7,177.5	12.8	30.0	-123.35	-1,363.9	-2,683.8	3,228.8	3,202.8	26.02	124.110	
6,700.0	6,691.2	7,400.0	7,226.3	13.0	30.2	-123.50	-1,364.1	-2,673.0	3,213.7	3,187.3	26.36	121.914	
6,800.0	6,791.1	7,400.0	7,226.3	13.2	30.2	-123.50	-1,364.1	-2,673.0	3,201.0	3,174.4	26.55	120.557	
6,900.0	6,890.9	7,450.0	7,274.9	13.4	30.3	-123.71	-1,368.6	-2,662.2	3,190.5	3,163.6	26.93	118.461	
7,000.0	6,990.8	7,450.0	7,274.9	13.6	30.3	-123.71	-1,368.6	-2,662.2	3,182.5	3,155.4	27.12	117.330	
7,024.2	7,014.9	7,450.0	7,274.9	13.6	30.3	-123.71	-1,368.6	-2,662.2	3,181.1	3,153.9	27.17	117.077	
7,050.0	7,040.7	7,474.8	7,298.8	13.7	30.4	-125.37	-1,372.5	-2,656.9	3,179.1	3,151.8	27.29	116.511	
7,100.0	7,090.7	7,500.0	7,322.9	13.7	30.5	58.18	-1,377.5	-2,651.5	3,174.7	3,147.4	27.33	116.146	
7,150.0	7,140.5	7,500.0	7,322.9	13.8	30.5	58.07	-1,377.5	-2,651.5	3,168.9	3,141.7	27.19	116.536	
7,200.0	7,189.9	7,500.0	7,322.9	13.8	30.5	58.41	-1,377.5	-2,651.5	3,162.0	3,135.1	26.99	117.175	
7,250.0	7,238.6	7,522.6	7,344.3	13.8	30.5	58.85	-1,382.9	-2,646.8	3,153.8	3,127.0	26.82	117.602	
7,300.0	7,286.4	7,550.0	7,370.0	13.7	30.6	59.43	-1,390.6	-2,641.1	3,144.5	3,117.9	26.61	118.153	
7,350.0	7,333.1	7,550.0	7,370.0	13.7	30.6	60.16	-1,390.6	-2,641.1	3,133.8	3,107.6	26.28	119.247	
7,400.0	7,378.5	7,550.0	7,370.0	13.6	30.6	60.98	-1,390.6	-2,641.1	3,122.2	3,096.2	25.95	120.305	
7,450.0	7,422.2	7,570.5	7,388.9	13.6	30.6	61.91	-1,397.2	-2,636.9	3,109.4	3,083.7	25.72	120.911	
7,500.0	7,464.1	7,600.0	7,415.8	13.5	30.7	62.97	-1,407.9	-2,630.9	3,095.8	3,070.2	25.54	121.210	
7,550.0	7,504.1	7,600.0	7,415.8	13.5	30.7	64.08	-1,407.9	-2,630.9	3,080.8	3,055.5	25.36	121.475	
7,600.0	7,541.8	7,600.0	7,415.8	13.5	30.7	65.27	-1,407.9	-2,630.9	3,065.2	3,039.9	25.29	121.209	
7,650.0	7,577.2	7,600.0	7,415.8	13.4	30.7	66.52	-1,407.9	-2,630.9	3,048.9	3,023.5	25.34	120.341	
7,700.0	7,610.0	7,628.9	7,441.5	13.5	30.7	68.03	-1,419.8	-2,625.2	3,031.4	3,005.9	25.54	118.682	
7,750.0	7,640.2	7,650.0	7,459.9	13.5	30.7	69.61	-1,429.2	-2,621.1	3,013.6	2,987.7	25.85	116.575	
7,800.0	7,667.4	7,650.0	7,459.9	13.6	30.7	71.11	-1,429.2	-2,621.1	2,995.0	2,968.8	26.26	114.045	
7,850.0	7,691.7	7,650.0	7,459.9	13.7	30.7	72.66	-1,429.2	-2,621.1	2,976.1	2,949.4	26.78	111.137	
7,900.0	7,712.8	7,673.2	7,479.7	13.9	30.7	74.50	-1,440.4	-2,616.7	2,956.7	2,929.3	27.37	108.008	
7,950.0	7,730.8	7,700.0	7,502.1	14.1	30.8	76.46	-1,454.4	-2,611.8	2,937.2	2,909.2	28.01	104.846	
8,000.0	7,745.5	7,700.0	7,502.1	14.4	30.8	78.16	-1,454.4	-2,611.8	2,917.2	2,888.5	28.71	101.609	
8,050.0	7,756.7	7,700.0	7,502.1	14.7	30.8	79.87	-1,454.4	-2,611.8	2,897.3	2,867.9	29.42	98.464	
8,100.0	7,764.6	7,700.0	7,502.1	15.1	30.8	81.57	-1,454.4	-2,611.8	2,877.5	2,847.4	30.14	95.477	
8,150.0	7,769.0	7,722.7	7,520.4	15.5	30.8	83.62	-1,467.0	-2,607.7	2,857.7	2,826.9	30.77	92.870	
8,188.1	7,770.0	7,729.4	7,525.8	15.9	30.8	85.01	-1,470.9	-2,606.5	2,842.9	2,811.7	31.25	90.971	
8,200.0	7,770.0	7,731.5	7,527.4	16.0	30.8	85.04	-1,472.1	-2,606.1	2,838.3	2,807.0	31.35	90.524	
8,300.0	7,770.0	7,750.0	7,541.9	17.0	30.8	85.35	-1,483.2	-2,602.9	2,801.3	2,769.0	32.29	86.754	
8,400.0	7,770.0	7,769.7	7,556.9	18.1	30.8	85.67	-1,495.5	-2,599.6	2,767.0	2,733.7	33.33	83.011	
8,500.0	7,770.0	7,800.0	7,579.2	19.3	30.8	86.15	-1,515.5	-2,594.7	2,735.5	2,701.1	34.43	79.444	
8,600.0	7,770.0	7,800.0	7,579.2	20.6	30.8	86.15	-1,515.5	-2,594.7	2,706.8	2,671.1	35.72	75.781	
8,700.0	7,770.0	7,850.0	7,613.5	21.9	30.8	86.90	-1,551.0	-2,587.0	2,680.7	2,643.8	36.89	72.671	

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 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,770.0	7,869.6	7,626.2	23.3	30.8	87.17	-1,565.7	-2,584.2	2,657.4	2,619.2	38.22	69.524		
8,900.0	7,770.0	7,900.0	7,644.8	24.8	30.8	87.58	-1,589.4	-2,580.1	2,636.9	2,597.3	39.56	66.652		
9,000.0	7,770.0	7,934.4	7,664.3	26.3	30.8	88.01	-1,617.4	-2,575.8	2,619.0	2,578.1	40.93	63.983		
9,100.0	7,770.0	7,971.1	7,683.3	27.8	30.8	88.43	-1,648.5	-2,571.6	2,603.8	2,561.4	42.34	61.502		
9,200.0	7,770.0	8,000.0	7,696.8	29.3	30.8	88.73	-1,673.8	-2,568.6	2,591.1	2,547.3	43.79	59.165		
9,300.0	7,770.0	8,050.0	7,717.3	30.9	30.8	89.18	-1,719.2	-2,564.0	2,580.6	2,535.4	45.24	57.042		
9,400.0	7,770.0	8,100.0	7,733.8	32.5	30.8	89.55	-1,766.3	-2,560.4	2,572.5	2,525.8	46.74	55.033		
9,500.0	7,770.0	8,150.0	7,746.2	34.1	30.8	89.83	-1,814.6	-2,557.6	2,566.6	2,518.3	48.31	53.128		
9,600.0	7,770.0	8,200.0	7,754.5	35.7	30.8	90.01	-1,863.9	-2,555.8	2,562.6	2,512.7	49.94	51.319		
9,700.0	7,770.0	8,250.0	7,758.6	37.3	30.9	90.10	-1,913.7	-2,554.9	2,560.7	2,509.1	51.63	49.601		
9,754.5	7,770.0	8,274.6	7,759.0	38.2	30.9	90.11	-1,938.3	-2,554.8	2,560.4	2,507.9	52.57	48.706 CC		
9,800.0	7,770.0	8,320.1	7,759.0	39.0	30.9	90.11	-1,983.8	-2,554.8	2,560.4	2,507.0	53.45	47.899		
9,900.0	7,770.0	8,420.1	7,759.0	40.6	31.1	90.11	-2,083.8	-2,554.8	2,560.5	2,504.9	55.52	46.116		
10,000.0	7,770.0	8,520.1	7,759.0	42.3	31.4	90.11	-2,183.8	-2,554.9	2,560.5	2,502.7	57.79	44.309		
10,100.0	7,770.0	8,620.1	7,759.0	44.0	31.8	90.11	-2,283.8	-2,554.9	2,560.5	2,500.3	60.22	42.516		
10,200.0	7,770.0	8,720.1	7,759.0	45.6	32.2	90.11	-2,383.8	-2,554.9	2,560.5	2,497.7	62.81	40.763		
10,300.0	7,770.0	8,820.1	7,759.0	47.3	32.8	90.11	-2,483.8	-2,554.9	2,560.5	2,495.0	65.53	39.072		
10,400.0	7,770.0	8,920.1	7,759.0	49.0	33.4	90.11	-2,583.8	-2,554.9	2,560.5	2,492.2	68.36	37.456		
10,500.0	7,770.0	9,020.1	7,759.0	50.7	34.1	90.11	-2,683.8	-2,554.9	2,560.5	2,489.3	71.28	35.922		
10,600.0	7,770.0	9,120.1	7,759.0	52.4	34.9	90.11	-2,783.8	-2,555.0	2,560.6	2,486.3	74.27	34.474		
10,700.0	7,770.0	9,220.1	7,759.0	54.1	35.7	90.11	-2,883.8	-2,555.0	2,560.6	2,483.3	77.33	33.112		
10,800.0	7,770.0	9,320.1	7,759.0	55.8	36.6	90.11	-2,983.8	-2,555.0	2,560.6	2,480.2	80.44	31.831		
10,900.0	7,770.0	9,420.1	7,759.0	57.5	37.6	90.11	-3,083.8	-2,555.0	2,560.6	2,477.0	83.60	30.630		
11,000.0	7,770.0	9,520.1	7,759.0	59.2	38.7	90.11	-3,183.8	-2,555.0	2,560.6	2,473.8	86.79	29.503		
11,100.0	7,770.0	9,620.1	7,759.0	60.9	39.7	90.11	-3,283.8	-2,555.0	2,560.6	2,470.6	90.02	28.446		
11,200.0	7,770.0	9,720.1	7,759.0	62.6	40.9	90.11	-3,383.8	-2,555.1	2,560.7	2,467.4	93.27	27.453		
11,300.0	7,770.0	9,820.1	7,759.0	64.3	42.0	90.11	-3,483.8	-2,555.1	2,560.7	2,464.1	96.55	26.521		
11,400.0	7,770.0	9,920.1	7,759.0	66.0	43.3	90.11	-3,583.8	-2,555.1	2,560.7	2,460.8	99.85	25.645		
11,500.0	7,770.0	10,020.1	7,759.0	67.7	44.5	90.11	-3,683.8	-2,555.1	2,560.7	2,457.5	103.17	24.821		
11,600.0	7,770.0	10,120.1	7,759.0	69.5	45.8	90.11	-3,783.8	-2,555.1	2,560.7	2,454.2	106.50	24.044		
11,700.0	7,770.0	10,220.1	7,759.0	71.2	47.1	90.11	-3,883.8	-2,555.1	2,560.7	2,450.9	109.85	23.312		
11,800.0	7,770.0	10,320.1	7,759.0	72.9	48.5	90.11	-3,983.8	-2,555.2	2,560.8	2,447.6	113.21	22.620		
11,900.0	7,770.0	10,420.1	7,759.0	74.6	49.8	90.11	-4,083.8	-2,555.2	2,560.8	2,444.2	116.58	21.967		
12,000.0	7,770.0	10,520.1	7,759.0	76.4	51.2	90.11	-4,183.8	-2,555.2	2,560.8	2,440.8	119.96	21.348		
12,100.0	7,770.0	10,620.1	7,759.0	78.1	52.6	90.11	-4,283.8	-2,555.2	2,560.8	2,437.5	123.34	20.761		
12,200.0	7,770.0	10,720.1	7,759.0	79.8	54.1	90.11	-4,383.8	-2,555.2	2,560.8	2,434.1	126.74	20.205		
12,300.0	7,770.0	10,820.1	7,759.0	81.5	55.5	90.11	-4,483.8	-2,555.2	2,560.8	2,430.7	130.14	19.677		
12,400.0	7,770.0	10,920.1	7,759.0	83.3	57.0	90.11	-4,583.8	-2,555.3	2,560.9	2,427.3	133.56	19.175		
12,500.0	7,770.0	11,020.1	7,759.0	85.0	58.5	90.11	-4,683.8	-2,555.3	2,560.9	2,423.9	136.97	18.696		
12,600.0	7,770.0	11,120.1	7,759.0	86.7	60.0	90.11	-4,783.8	-2,555.3	2,560.9	2,420.5	140.39	18.241		
12,700.0	7,770.0	11,220.1	7,759.0	88.5	61.5	90.11	-4,883.8	-2,555.3	2,560.9	2,417.1	143.82	17.807		
12,800.0	7,770.0	11,320.1	7,759.0	90.2	63.1	90.11	-4,983.8	-2,555.3	2,560.9	2,413.7	147.25	17.392		
12,900.0	7,770.0	11,420.1	7,759.0	91.9	64.6	90.11	-5,083.8	-2,555.3	2,560.9	2,410.3	150.68	16.995		
13,000.0	7,770.0	11,520.1	7,759.0	93.7	66.1	90.11	-5,183.8	-2,555.4	2,561.0	2,406.8	154.12	16.616		
13,100.0	7,770.0	11,620.1	7,759.0	95.4	67.7	90.11	-5,283.8	-2,555.4	2,561.0	2,403.4	157.57	16.253		
13,200.0	7,770.0	11,720.1	7,759.0	97.1	69.3	90.11	-5,383.8	-2,555.4	2,561.0	2,400.0	161.01	15.906		
13,300.0	7,770.0	11,820.1	7,759.0	98.9	70.9	90.11	-5,483.8	-2,555.4	2,561.0	2,396.6	164.46	15.572		
13,400.0	7,770.0	11,920.1	7,759.0	100.6	72.4	90.11	-5,583.8	-2,555.4	2,561.0	2,393.1	167.91	15.252		
13,500.0	7,770.0	12,020.1	7,759.0	102.4	74.0	90.11	-5,683.8	-2,555.4	2,561.0	2,389.7	171.36	14.945		
13,600.0	7,770.0	12,120.1	7,759.0	104.1	75.6	90.11	-5,783.8	-2,555.5	2,561.1	2,386.2	174.82	14.650		
13,700.0	7,770.0	12,220.1	7,759.0	105.8	77.3	90.11	-5,883.8	-2,555.5	2,561.1	2,382.8	178.28	14.366		
13,800.0	7,770.0	12,320.1	7,759.0	107.6	78.9	90.11	-5,983.8	-2,555.5	2,561.1	2,379.4	181.74	14.092		

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

Anticollision Report

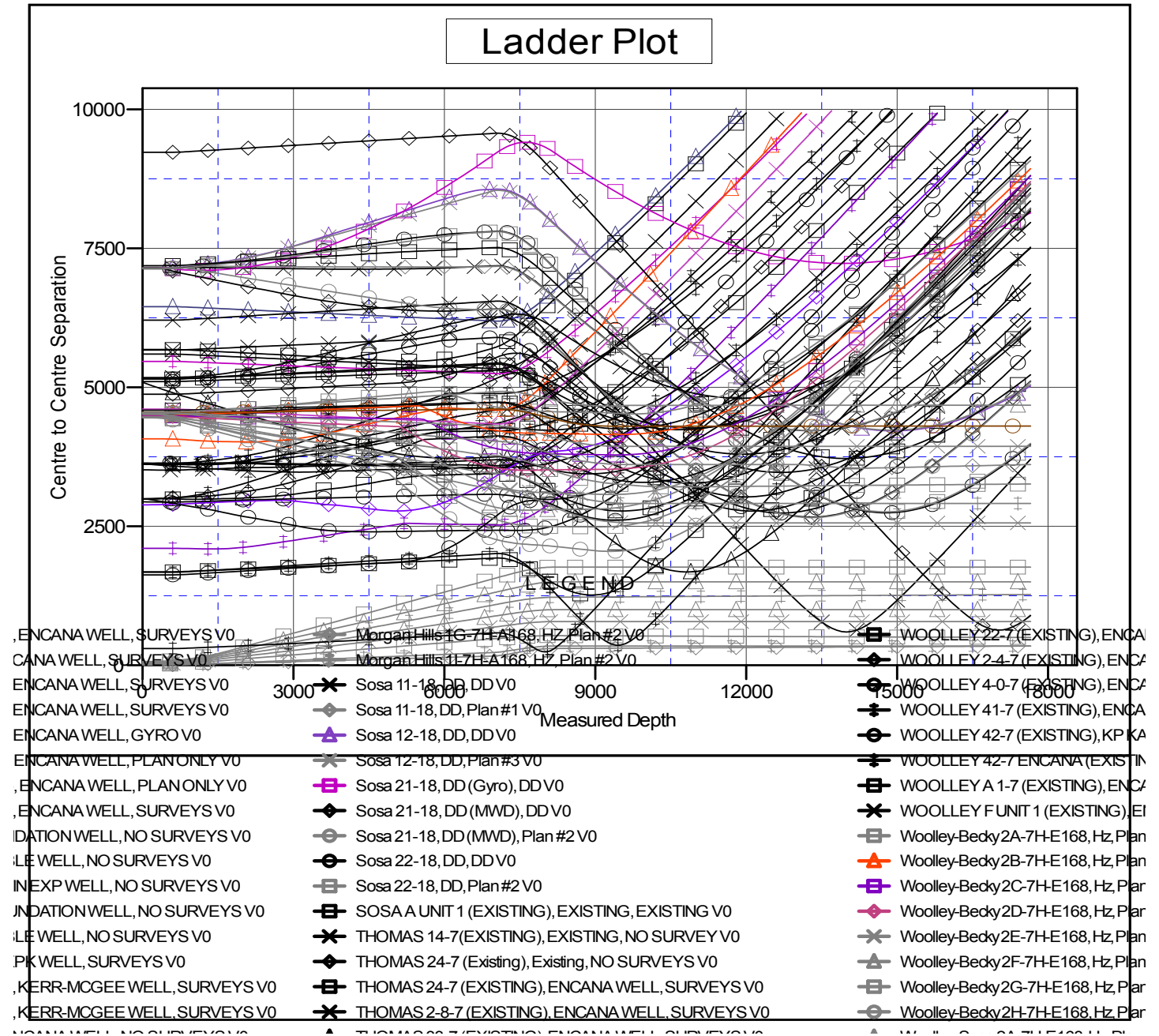
Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
13,900.0	7,770.0	12,420.1	7,759.0	109.3	80.5	90.11	-6,083.8	-2,555.5	2,561.1	2,375.9	185.20	13.829		
14,000.0	7,770.0	12,520.1	7,759.0	111.1	82.1	90.11	-6,183.8	-2,555.5	2,561.1	2,372.5	188.67	13.575		
14,100.0	7,770.0	12,620.1	7,759.0	112.8	83.7	90.11	-6,283.8	-2,555.5	2,561.1	2,369.0	192.13	13.330		
14,200.0	7,770.0	12,720.1	7,759.0	114.5	85.4	90.11	-6,383.8	-2,555.6	2,561.2	2,365.6	195.60	13.094		
14,300.0	7,770.0	12,820.1	7,759.0	116.3	87.0	90.11	-6,483.8	-2,555.6	2,561.2	2,362.1	199.07	12.866		
14,400.0	7,770.0	12,920.1	7,759.0	118.0	88.7	90.11	-6,583.8	-2,555.6	2,561.2	2,358.6	202.54	12.645		
14,500.0	7,770.0	13,020.1	7,759.0	119.8	90.3	90.11	-6,683.8	-2,555.6	2,561.2	2,355.2	206.01	12.432		
14,600.0	7,770.0	13,120.1	7,759.0	121.5	92.0	90.11	-6,783.8	-2,555.6	2,561.2	2,351.7	209.49	12.226		
14,700.0	7,770.0	13,220.1	7,759.0	123.3	93.6	90.11	-6,883.8	-2,555.6	2,561.2	2,348.3	212.96	12.027		
14,800.0	7,770.0	13,320.1	7,759.0	125.0	95.3	90.11	-6,983.8	-2,555.7	2,561.3	2,344.8	216.44	11.834		
14,900.0	7,770.0	13,420.1	7,759.0	126.7	97.0	90.11	-7,083.8	-2,555.7	2,561.3	2,341.4	219.91	11.647		
15,000.0	7,770.0	13,520.1	7,759.0	128.5	98.6	90.11	-7,183.8	-2,555.7	2,561.3	2,337.9	223.39	11.465		
15,100.0	7,770.0	13,620.1	7,759.0	130.2	100.3	90.11	-7,283.8	-2,555.7	2,561.3	2,334.4	226.87	11.290		
15,200.0	7,770.0	13,720.1	7,759.0	132.0	102.0	90.11	-7,383.8	-2,555.7	2,561.3	2,331.0	230.35	11.119		
15,300.0	7,770.0	13,820.1	7,759.0	133.7	103.6	90.11	-7,483.8	-2,555.7	2,561.3	2,327.5	233.83	10.954		
15,400.0	7,770.0	13,920.1	7,759.0	135.5	105.3	90.11	-7,583.8	-2,555.8	2,561.4	2,324.0	237.31	10.793		
15,500.0	7,770.0	14,020.1	7,759.0	137.2	107.0	90.11	-7,683.8	-2,555.8	2,561.4	2,320.6	240.80	10.637		
15,600.0	7,770.0	14,120.1	7,759.0	139.0	108.7	90.11	-7,783.8	-2,555.8	2,561.4	2,317.1	244.28	10.485		
15,700.0	7,770.0	14,220.1	7,759.0	140.7	110.4	90.11	-7,883.8	-2,555.8	2,561.4	2,313.6	247.76	10.338		
15,800.0	7,770.0	14,320.1	7,759.0	142.4	112.1	90.11	-7,983.8	-2,555.8	2,561.4	2,310.2	251.25	10.195		
15,900.0	7,770.0	14,420.1	7,759.0	144.2	113.7	90.11	-8,083.8	-2,555.8	2,561.4	2,306.7	254.73	10.055		
16,000.0	7,770.0	14,520.1	7,759.0	145.9	115.4	90.11	-8,183.8	-2,555.8	2,561.5	2,303.2	258.22	9.920		
16,100.0	7,770.0	14,620.1	7,759.0	147.7	117.1	90.11	-8,283.8	-2,555.9	2,561.5	2,299.8	261.71	9.788		
16,200.0	7,770.0	14,720.1	7,759.0	149.4	118.8	90.11	-8,383.8	-2,555.9	2,561.5	2,296.3	265.19	9.659		
16,300.0	7,770.0	14,820.1	7,759.0	151.2	120.5	90.11	-8,483.8	-2,555.9	2,561.5	2,292.8	268.68	9.534		
16,400.0	7,770.0	14,920.1	7,759.0	152.9	122.2	90.11	-8,583.8	-2,555.9	2,561.5	2,289.3	272.17	9.411		
16,500.0	7,770.0	15,020.1	7,759.0	154.7	123.9	90.11	-8,683.8	-2,555.9	2,561.5	2,285.9	275.66	9.292		
16,600.0	7,770.0	15,120.1	7,759.0	156.4	125.6	90.11	-8,783.8	-2,555.9	2,561.6	2,282.4	279.15	9.176		
16,700.0	7,770.0	15,220.1	7,759.0	158.2	127.3	90.11	-8,883.8	-2,556.0	2,561.6	2,278.9	282.64	9.063		
16,800.0	7,770.0	15,320.1	7,759.0	159.9	129.0	90.11	-8,983.8	-2,556.0	2,561.6	2,275.5	286.13	8.953		
16,900.0	7,770.0	15,420.1	7,759.0	161.7	130.7	90.11	-9,083.8	-2,556.0	2,561.6	2,272.0	289.62	8.845		
17,000.0	7,770.0	15,520.1	7,759.0	163.4	132.4	90.11	-9,183.8	-2,556.0	2,561.6	2,268.5	293.11	8.739		
17,100.0	7,770.0	15,620.1	7,759.0	165.2	134.1	90.11	-9,283.8	-2,556.0	2,561.6	2,265.0	296.60	8.637		
17,200.0	7,770.0	15,720.1	7,759.0	166.9	135.9	90.11	-9,383.8	-2,556.0	2,561.7	2,261.6	300.10	8.536		
17,300.0	7,770.0	15,820.1	7,759.0	168.7	137.6	90.11	-9,483.8	-2,556.1	2,561.7	2,258.1	303.59	8.438		
17,400.0	7,770.0	15,920.1	7,759.0	170.4	139.3	90.11	-9,583.8	-2,556.1	2,561.7	2,254.6	307.08	8.342		
17,500.0	7,770.0	16,020.1	7,759.0	172.2	141.0	90.11	-9,683.8	-2,556.1	2,561.7	2,251.1	310.57	8.248		
17,600.0	7,770.0	16,120.1	7,759.0	173.9	142.7	90.11	-9,783.8	-2,556.1	2,561.7	2,247.7	314.07	8.157		
17,613.1	7,770.0	16,133.2	7,759.0	174.1	142.9	90.11	-9,796.9	-2,556.1	2,561.7	2,247.2	314.52	8.145		
17,653.1	7,770.0	16,148.7	7,759.0	174.8	143.2	90.11	-9,812.4	-2,556.1	2,561.8	2,246.3	315.49	8.120 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1H-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1H-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 1H-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