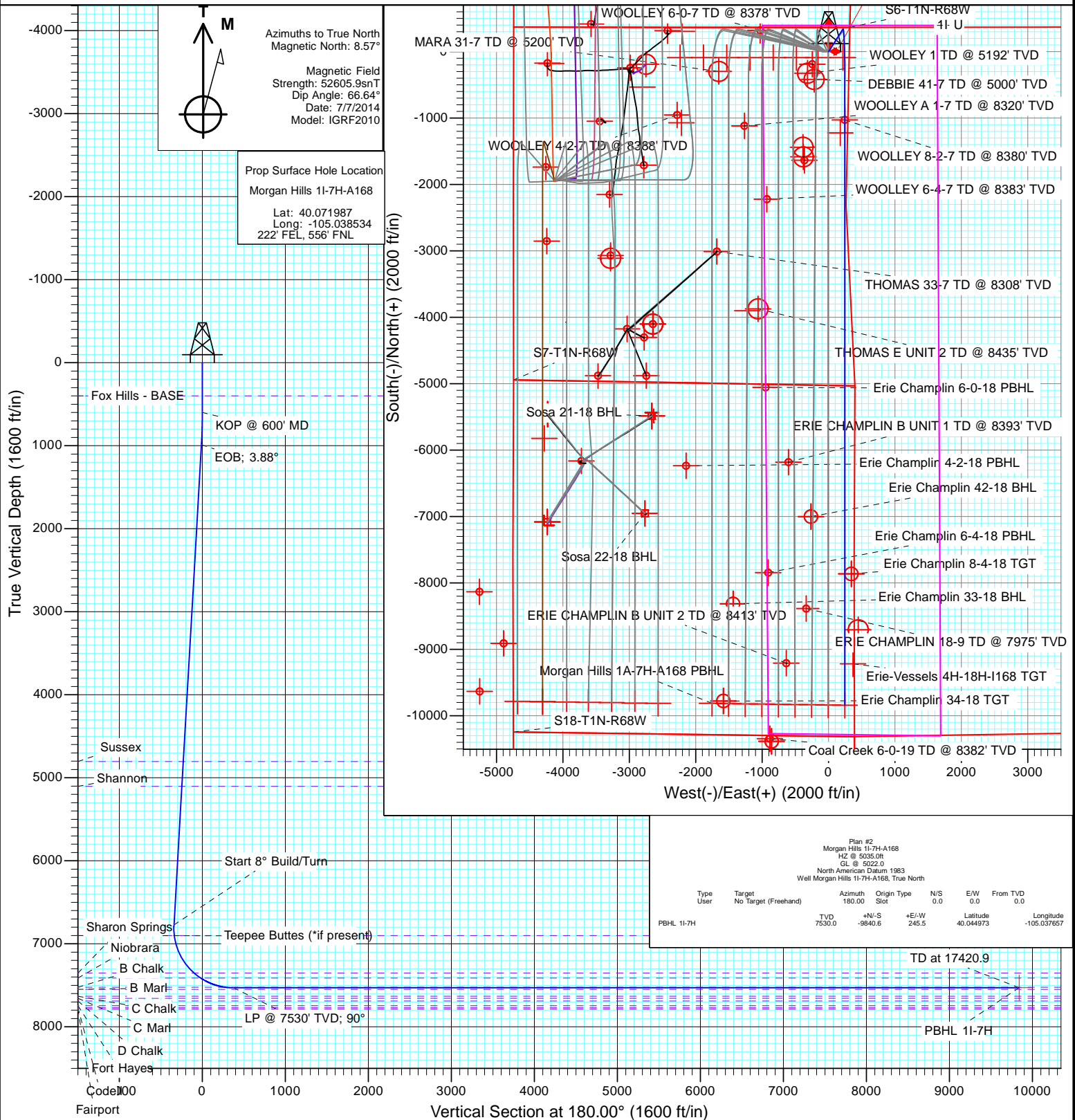




Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)
Well: Morgan Hills 11-7H-A168
Wellbore: HZ
Design: Plan #2



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 @ 600' MD
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0		EOB; 3.88°
3	988.4	3.88	32.47	988.1	11.1	7.1	1.00	32.47	-11.1		Start 8° Build/Turn
4	6787.0	3.88	32.47	6773.4	342.5	218.0	0.00	0.00	-342.5		LP @ 7530' TVD; 90°
5	7952.9	90.00	180.00	7530.0	-372.6	245.5	8.00	147.47	372.6		TD at 17420.9
6	17420.9	90.00	180.00	7530.0	-9840.6	245.5	0.00	0.00	9840.6	PBHL 11-7H	



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1I-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 1I-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 1I-7H-A168					
Well Position	+N/-S	0.0 ft	Northing:	1,269,408.48 ft	Latitude:	40.071987
	+E/-W	0.0 ft	Easting:	3,129,150.57 ft	Longitude:	-105.038534
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)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	180.00

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
988.4	3.88	32.47	988.1	11.1	7.1	1.00	1.00	0.00	32.47	
6,787.0	3.88	32.47	6,773.4	342.5	218.0	0.00	0.00	0.00	0.00	
7,952.9	90.00	180.00	7,530.0	-372.6	245.5	8.00	7.39	12.65	147.47	
17,420.9	90.00	180.00	7,530.0	-9,840.6	245.5	0.00	0.00	0.00	0.00	PBHL 1I-7H

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1I-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 1I-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	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	KOP @ 600' MD
700.0	1.00	32.47	700.0	0.7	0.5	-0.7	1.00	1.00	
800.0	2.00	32.47	800.0	2.9	1.9	-2.9	1.00	1.00	
900.0	3.00	32.47	899.9	6.6	4.2	-6.6	1.00	1.00	
988.4	3.88	32.47	988.1	11.1	7.1	-11.1	1.00	1.00	EOB; 3.88°
1,000.0	3.88	32.47	999.7	11.8	7.5	-11.8	0.00	0.00	
1,100.0	3.88	32.47	1,099.4	17.5	11.1	-17.5	0.00	0.00	
1,200.0	3.88	32.47	1,199.2	23.2	14.8	-23.2	0.00	0.00	
1,300.0	3.88	32.47	1,299.0	28.9	18.4	-28.9	0.00	0.00	
1,400.0	3.88	32.47	1,398.8	34.6	22.0	-34.6	0.00	0.00	
1,500.0	3.88	32.47	1,498.5	40.3	25.7	-40.3	0.00	0.00	
1,600.0	3.88	32.47	1,598.3	46.1	29.3	-46.1	0.00	0.00	
1,700.0	3.88	32.47	1,698.1	51.8	32.9	-51.8	0.00	0.00	
1,800.0	3.88	32.47	1,797.8	57.5	36.6	-57.5	0.00	0.00	
1,900.0	3.88	32.47	1,897.6	63.2	40.2	-63.2	0.00	0.00	
2,000.0	3.88	32.47	1,997.4	68.9	43.9	-68.9	0.00	0.00	
2,100.0	3.88	32.47	2,097.1	74.6	47.5	-74.6	0.00	0.00	
2,200.0	3.88	32.47	2,196.9	80.3	51.1	-80.3	0.00	0.00	
2,300.0	3.88	32.47	2,296.7	86.1	54.8	-86.1	0.00	0.00	
2,400.0	3.88	32.47	2,396.5	91.8	58.4	-91.8	0.00	0.00	
2,500.0	3.88	32.47	2,496.2	97.5	62.0	-97.5	0.00	0.00	
2,600.0	3.88	32.47	2,596.0	103.2	65.7	-103.2	0.00	0.00	
2,700.0	3.88	32.47	2,695.8	108.9	69.3	-108.9	0.00	0.00	
2,800.0	3.88	32.47	2,795.5	114.6	73.0	-114.6	0.00	0.00	
2,900.0	3.88	32.47	2,895.3	120.3	76.6	-120.3	0.00	0.00	
3,000.0	3.88	32.47	2,995.1	126.1	80.2	-126.1	0.00	0.00	
3,100.0	3.88	32.47	3,094.9	131.8	83.9	-131.8	0.00	0.00	
3,200.0	3.88	32.47	3,194.6	137.5	87.5	-137.5	0.00	0.00	
3,300.0	3.88	32.47	3,294.4	143.2	91.1	-143.2	0.00	0.00	
3,400.0	3.88	32.47	3,394.2	148.9	94.8	-148.9	0.00	0.00	
3,500.0	3.88	32.47	3,493.9	154.6	98.4	-154.6	0.00	0.00	
3,600.0	3.88	32.47	3,593.7	160.3	102.0	-160.3	0.00	0.00	
3,700.0	3.88	32.47	3,693.5	166.1	105.7	-166.1	0.00	0.00	
3,800.0	3.88	32.47	3,793.2	171.8	109.3	-171.8	0.00	0.00	
3,900.0	3.88	32.47	3,893.0	177.5	113.0	-177.5	0.00	0.00	
4,000.0	3.88	32.47	3,992.8	183.2	116.6	-183.2	0.00	0.00	
4,100.0	3.88	32.47	4,092.6	188.9	120.2	-188.9	0.00	0.00	
4,200.0	3.88	32.47	4,192.3	194.6	123.9	-194.6	0.00	0.00	
4,300.0	3.88	32.47	4,292.1	200.3	127.5	-200.3	0.00	0.00	
4,400.0	3.88	32.47	4,391.9	206.1	131.1	-206.1	0.00	0.00	
4,500.0	3.88	32.47	4,491.6	211.8	134.8	-211.8	0.00	0.00	
4,600.0	3.88	32.47	4,591.4	217.5	138.4	-217.5	0.00	0.00	
4,700.0	3.88	32.47	4,691.2	223.2	142.1	-223.2	0.00	0.00	
4,800.0	3.88	32.47	4,790.9	228.9	145.7	-228.9	0.00	0.00	
4,813.1	3.88	32.47	4,804.0	229.7	146.2	-229.7	0.00	0.00	Sussex
4,900.0	3.88	32.47	4,890.7	234.6	149.3	-234.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1I-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 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
5,000.0	3.88	32.47	4,990.5	240.3	153.0	-240.3	0.00	0.00	
5,100.0	3.88	32.47	5,090.3	246.1	156.6	-246.1	0.00	0.00	
5,113.8	3.88	32.47	5,104.0	246.8	157.1	-246.8	0.00	0.00	Shannon
5,200.0	3.88	32.47	5,190.0	251.8	160.2	-251.8	0.00	0.00	
5,300.0	3.88	32.47	5,289.8	257.5	163.9	-257.5	0.00	0.00	
5,400.0	3.88	32.47	5,389.6	263.2	167.5	-263.2	0.00	0.00	
5,500.0	3.88	32.47	5,489.3	268.9	171.1	-268.9	0.00	0.00	
5,600.0	3.88	32.47	5,589.1	274.6	174.8	-274.6	0.00	0.00	
5,700.0	3.88	32.47	5,688.9	280.3	178.4	-280.3	0.00	0.00	
5,800.0	3.88	32.47	5,788.7	286.1	182.1	-286.1	0.00	0.00	
5,900.0	3.88	32.47	5,888.4	291.8	185.7	-291.8	0.00	0.00	
6,000.0	3.88	32.47	5,988.2	297.5	189.3	-297.5	0.00	0.00	
6,100.0	3.88	32.47	6,088.0	303.2	193.0	-303.2	0.00	0.00	
6,200.0	3.88	32.47	6,187.7	308.9	196.6	-308.9	0.00	0.00	
6,300.0	3.88	32.47	6,287.5	314.6	200.2	-314.6	0.00	0.00	
6,400.0	3.88	32.47	6,387.3	320.3	203.9	-320.3	0.00	0.00	
6,500.0	3.88	32.47	6,487.0	326.1	207.5	-326.1	0.00	0.00	
6,600.0	3.88	32.47	6,586.8	331.8	211.2	-331.8	0.00	0.00	
6,700.0	3.88	32.47	6,686.6	337.5	214.8	-337.5	0.00	0.00	
6,787.0	3.88	32.47	6,773.4	342.5	218.0	-342.5	0.00	0.00	Start 8° Build/Turn
6,800.0	3.06	43.02	6,786.4	343.1	218.4	-343.1	8.00	-6.35	
6,900.0	6.13	160.16	6,886.2	340.0	222.1	-340.0	8.00	3.07	
6,913.9	7.19	163.20	6,900.0	338.5	222.6	-338.5	8.00	7.59	Teepee Buttes (*if present)
7,000.0	13.92	171.54	6,984.6	323.1	225.7	-323.1	8.00	7.82	
7,100.0	21.86	174.79	7,079.7	292.6	229.1	-292.6	8.00	7.94	
7,200.0	29.83	176.36	7,169.6	249.1	232.4	-249.1	8.00	7.97	
7,300.0	37.81	177.31	7,252.6	193.6	235.4	-193.6	8.00	7.98	
7,400.0	45.80	177.97	7,327.1	127.1	238.1	-127.1	8.00	7.99	
7,439.8	48.98	178.18	7,354.0	97.8	239.1	-97.8	8.00	7.99	Sharon Springs
7,500.0	53.79	178.47	7,391.6	50.8	240.5	-50.8	8.00	7.99	
7,535.8	56.65	178.63	7,412.0	21.4	241.2	-21.4	8.00	7.99	Niobrara
7,600.0	61.78	178.88	7,444.8	-33.7	242.4	33.7	8.00	7.99	
7,700.0	69.78	179.23	7,485.8	-124.8	243.9	124.8	8.00	7.99	
7,800.0	77.77	179.55	7,513.7	-220.8	244.9	220.8	8.00	7.99	
7,852.7	81.99	179.71	7,523.0	-272.6	245.3	272.6	8.00	7.99	B Chalk
7,900.0	85.77	179.85	7,528.0	-319.7	245.5	319.7	8.00	7.99	
7,952.9	90.00	180.00	7,530.0	-372.6	245.5	372.6	8.00	7.99	LP @ 7530' TVD; 90°
8,000.0	90.00	180.00	7,530.0	-419.6	245.5	419.6	0.00	0.00	
8,100.0	90.00	180.00	7,530.0	-519.6	245.5	519.6	0.00	0.00	
8,200.0	90.00	180.00	7,530.0	-619.6	245.5	619.6	0.00	0.00	
8,300.0	90.00	180.00	7,530.0	-719.6	245.5	719.6	0.00	0.00	
8,400.0	90.00	180.00	7,530.0	-819.6	245.5	819.6	0.00	0.00	
8,500.0	90.00	180.00	7,530.0	-919.6	245.5	919.6	0.00	0.00	
8,600.0	90.00	180.00	7,530.0	-1,019.6	245.5	1,019.6	0.00	0.00	
8,700.0	90.00	180.00	7,530.0	-1,119.6	245.5	1,119.6	0.00	0.00	
8,800.0	90.00	180.00	7,530.0	-1,219.6	245.5	1,219.6	0.00	0.00	
8,900.0	90.00	180.00	7,530.0	-1,319.6	245.5	1,319.6	0.00	0.00	
9,000.0	90.00	180.00	7,530.0	-1,419.6	245.5	1,419.6	0.00	0.00	
9,100.0	90.00	180.00	7,530.0	-1,519.6	245.5	1,519.6	0.00	0.00	
9,200.0	90.00	180.00	7,530.0	-1,619.6	245.5	1,619.6	0.00	0.00	
9,300.0	90.00	180.00	7,530.0	-1,719.6	245.5	1,719.6	0.00	0.00	
9,400.0	90.00	180.00	7,530.0	-1,819.6	245.5	1,819.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1I-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 1I-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
9,500.0	90.00	180.00	7,530.0	-1,919.6	245.5	1,919.6	0.00	0.00	
9,600.0	90.00	180.00	7,530.0	-2,019.6	245.5	2,019.6	0.00	0.00	
9,700.0	90.00	180.00	7,530.0	-2,119.6	245.5	2,119.6	0.00	0.00	
9,800.0	90.00	180.00	7,530.0	-2,219.6	245.5	2,219.6	0.00	0.00	
9,900.0	90.00	180.00	7,530.0	-2,319.6	245.5	2,319.6	0.00	0.00	
10,000.0	90.00	180.00	7,530.0	-2,419.6	245.5	2,419.6	0.00	0.00	
10,100.0	90.00	180.00	7,530.0	-2,519.6	245.5	2,519.6	0.00	0.00	
10,200.0	90.00	180.00	7,530.0	-2,619.6	245.5	2,619.6	0.00	0.00	
10,300.0	90.00	180.00	7,530.0	-2,719.6	245.5	2,719.6	0.00	0.00	
10,400.0	90.00	180.00	7,530.0	-2,819.6	245.5	2,819.6	0.00	0.00	
10,500.0	90.00	180.00	7,530.0	-2,919.6	245.5	2,919.6	0.00	0.00	
10,600.0	90.00	180.00	7,530.0	-3,019.6	245.5	3,019.6	0.00	0.00	
10,700.0	90.00	180.00	7,530.0	-3,119.6	245.5	3,119.6	0.00	0.00	
10,800.0	90.00	180.00	7,530.0	-3,219.6	245.5	3,219.6	0.00	0.00	
10,900.0	90.00	180.00	7,530.0	-3,319.6	245.5	3,319.6	0.00	0.00	
11,000.0	90.00	180.00	7,530.0	-3,419.6	245.5	3,419.6	0.00	0.00	
11,100.0	90.00	180.00	7,530.0	-3,519.6	245.5	3,519.6	0.00	0.00	
11,200.0	90.00	180.00	7,530.0	-3,619.6	245.5	3,619.6	0.00	0.00	
11,300.0	90.00	180.00	7,530.0	-3,719.6	245.5	3,719.6	0.00	0.00	
11,400.0	90.00	180.00	7,530.0	-3,819.6	245.5	3,819.6	0.00	0.00	
11,500.0	90.00	180.00	7,530.0	-3,919.6	245.5	3,919.6	0.00	0.00	
11,600.0	90.00	180.00	7,530.0	-4,019.6	245.5	4,019.6	0.00	0.00	
11,700.0	90.00	180.00	7,530.0	-4,119.6	245.5	4,119.6	0.00	0.00	
11,800.0	90.00	180.00	7,530.0	-4,219.6	245.5	4,219.6	0.00	0.00	
11,900.0	90.00	180.00	7,530.0	-4,319.6	245.5	4,319.6	0.00	0.00	
12,000.0	90.00	180.00	7,530.0	-4,419.6	245.5	4,419.6	0.00	0.00	
12,100.0	90.00	180.00	7,530.0	-4,519.6	245.5	4,519.6	0.00	0.00	
12,200.0	90.00	180.00	7,530.0	-4,619.6	245.5	4,619.6	0.00	0.00	
12,300.0	90.00	180.00	7,530.0	-4,719.6	245.5	4,719.6	0.00	0.00	
12,400.0	90.00	180.00	7,530.0	-4,819.6	245.5	4,819.6	0.00	0.00	
12,500.0	90.00	180.00	7,530.0	-4,919.6	245.5	4,919.6	0.00	0.00	
12,600.0	90.00	180.00	7,530.0	-5,019.6	245.5	5,019.6	0.00	0.00	
12,700.0	90.00	180.00	7,530.0	-5,119.6	245.5	5,119.6	0.00	0.00	
12,800.0	90.00	180.00	7,530.0	-5,219.6	245.5	5,219.6	0.00	0.00	
12,900.0	90.00	180.00	7,530.0	-5,319.6	245.5	5,319.6	0.00	0.00	
13,000.0	90.00	180.00	7,530.0	-5,419.6	245.5	5,419.6	0.00	0.00	
13,100.0	90.00	180.00	7,530.0	-5,519.6	245.5	5,519.6	0.00	0.00	
13,200.0	90.00	180.00	7,530.0	-5,619.6	245.5	5,619.6	0.00	0.00	
13,300.0	90.00	180.00	7,530.0	-5,719.6	245.5	5,719.6	0.00	0.00	
13,400.0	90.00	180.00	7,530.0	-5,819.6	245.5	5,819.6	0.00	0.00	
13,500.0	90.00	180.00	7,530.0	-5,919.6	245.5	5,919.6	0.00	0.00	
13,600.0	90.00	180.00	7,530.0	-6,019.6	245.5	6,019.6	0.00	0.00	
13,700.0	90.00	180.00	7,530.0	-6,119.6	245.5	6,119.6	0.00	0.00	
13,800.0	90.00	180.00	7,530.0	-6,219.6	245.5	6,219.6	0.00	0.00	
13,900.0	90.00	180.00	7,530.0	-6,319.6	245.5	6,319.6	0.00	0.00	
14,000.0	90.00	180.00	7,530.0	-6,419.6	245.5	6,419.6	0.00	0.00	
14,100.0	90.00	180.00	7,530.0	-6,519.6	245.5	6,519.6	0.00	0.00	
14,200.0	90.00	180.00	7,530.0	-6,619.6	245.5	6,619.6	0.00	0.00	
14,300.0	90.00	180.00	7,530.0	-6,719.6	245.5	6,719.6	0.00	0.00	
14,400.0	90.00	180.00	7,530.0	-6,819.6	245.5	6,819.6	0.00	0.00	
14,500.0	90.00	180.00	7,530.0	-6,919.6	245.5	6,919.6	0.00	0.00	
14,600.0	90.00	180.00	7,530.0	-7,019.6	245.5	7,019.6	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1I-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 1I-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
14,700.0	90.00	180.00	7,530.0	-7,119.6	245.5	7,119.6	0.00	0.00	
14,800.0	90.00	180.00	7,530.0	-7,219.6	245.5	7,219.6	0.00	0.00	
14,900.0	90.00	180.00	7,530.0	-7,319.6	245.5	7,319.6	0.00	0.00	
15,000.0	90.00	180.00	7,530.0	-7,419.6	245.5	7,419.6	0.00	0.00	
15,100.0	90.00	180.00	7,530.0	-7,519.6	245.5	7,519.6	0.00	0.00	
15,200.0	90.00	180.00	7,530.0	-7,619.6	245.5	7,619.6	0.00	0.00	
15,300.0	90.00	180.00	7,530.0	-7,719.6	245.5	7,719.6	0.00	0.00	
15,400.0	90.00	180.00	7,530.0	-7,819.6	245.5	7,819.6	0.00	0.00	
15,500.0	90.00	180.00	7,530.0	-7,919.6	245.5	7,919.6	0.00	0.00	
15,600.0	90.00	180.00	7,530.0	-8,019.6	245.5	8,019.6	0.00	0.00	
15,700.0	90.00	180.00	7,530.0	-8,119.6	245.5	8,119.6	0.00	0.00	
15,800.0	90.00	180.00	7,530.0	-8,219.6	245.5	8,219.6	0.00	0.00	
15,900.0	90.00	180.00	7,530.0	-8,319.6	245.5	8,319.6	0.00	0.00	
16,000.0	90.00	180.00	7,530.0	-8,419.6	245.5	8,419.6	0.00	0.00	
16,100.0	90.00	180.00	7,530.0	-8,519.6	245.5	8,519.6	0.00	0.00	
16,200.0	90.00	180.00	7,530.0	-8,619.6	245.5	8,619.6	0.00	0.00	
16,300.0	90.00	180.00	7,530.0	-8,719.6	245.5	8,719.6	0.00	0.00	
16,400.0	90.00	180.00	7,530.0	-8,819.6	245.5	8,819.6	0.00	0.00	
16,500.0	90.00	180.00	7,530.0	-8,919.6	245.5	8,919.6	0.00	0.00	
16,600.0	90.00	180.00	7,530.0	-9,019.6	245.5	9,019.6	0.00	0.00	
16,700.0	90.00	180.00	7,530.0	-9,119.6	245.5	9,119.6	0.00	0.00	
16,800.0	90.00	180.00	7,530.0	-9,219.6	245.5	9,219.6	0.00	0.00	
16,900.0	90.00	180.00	7,530.0	-9,319.6	245.5	9,319.6	0.00	0.00	
17,000.0	90.00	180.00	7,530.0	-9,419.6	245.5	9,419.6	0.00	0.00	
17,100.0	90.00	180.00	7,530.0	-9,519.6	245.5	9,519.6	0.00	0.00	
17,200.0	90.00	180.00	7,530.0	-9,619.6	245.5	9,619.6	0.00	0.00	
17,300.0	90.00	180.00	7,530.0	-9,719.6	245.5	9,719.6	0.00	0.00	
17,400.0	90.00	180.00	7,530.0	-9,819.6	245.5	9,819.6	0.00	0.00	
17,420.9	90.00	180.00	7,530.0	-9,840.6	245.5	9,840.6	0.00	0.00	TD at 17420.9

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 1I-7H	0.00	0.00	7,530.0	-9,840.6	245.5	1,259,569.32	3,129,447.31	40.044973	-105.037657
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Morgan Hills 1I-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 1I-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				
4,813.1	4,804.0	Sussex				
5,113.8	5,104.0	Shannon				
6,913.9	6,900.0	Teepee Buttes (*if present)				
7,439.8	7,354.0	Sharon Springs				
7,535.8	7,412.0	Niobrara				
7,852.7	7,523.0	B Chalk				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
600.0	600.0	0.0	0.0	KOP @ 600' MD
988.4	988.1	11.1	7.1	EOB; 3.88°
6,787.0	6,773.4	342.5	218.0	Start 8° Build/Turn
7,952.9	7,530.0	-372.6	245.5	LP @ 7530' TVD; 90°
17,420.9	7,530.0	-9,840.6	245.5	TD at 17420.9

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Morgan Hills 1I-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 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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	17,420.9	Plan #2 (HZ)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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)	Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE	100.0	46.0	3,630.0	3,629.8	10,000.000	CC, ES
BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE	14,500.0	7,771.0	9,929.3	9,792.0	72.338	SF
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	208.2	149.2	3,635.4	3,634.8	6,047.701	CC
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	300.0	219.4	3,635.6	3,634.8	4,113.452	ES
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	15,000.0	7,384.1	9,953.7	9,808.2	68.395	SF
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	600.0	557.0	3,623.4	3,621.5	1,833.409	CC
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	800.0	757.0	3,623.6	3,620.9	1,357.089	ES
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	14,200.0	7,421.1	9,987.2	9,852.6	74.174	SF
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	100.0	55.3	3,632.0	3,631.7	10,000.000	CC
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	500.0	443.4	3,632.8	3,631.2	2,258.557	ES
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	15,500.0	7,376.0	9,977.8	9,818.6	62.668	SF
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	209.5	143.5	3,644.9	3,644.3	6,142.800	CC
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	300.0	217.9	3,645.1	3,644.2	4,136.260	ES
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	14,600.0	7,165.1	9,995.7	9,858.2	72.701	SF
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	12,459.8	7,560.0	2,989.7	2,883.4	28.117	CC
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	12,500.0	7,560.0	2,990.0	2,882.9	27.936	ES
BEARDEN 24-6 (EXISTING) - ENCANA WELL - PLAN O	13,900.0	7,560.0	3,318.5	3,187.1	25.260	SF
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	600.0	556.0	3,625.3	3,623.3	1,832.232	CC
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	800.0	756.0	3,625.5	3,622.8	1,355.899	ES
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	13,900.0	5,503.4	9,938.1	9,821.9	85.495	SF
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	2,222.6	2,282.4	3,550.4	3,537.3	271.329	CC, ES
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	16,400.0	7,631.0	9,986.3	9,802.5	54.344	SF
BECKY 1 (EXISTING) - FOUNDATION WELL - NO SUR	5,257.8	5,010.0	5,550.3	5,531.2	290.936	CC, ES
BECKY 1 (EXISTING) - FOUNDATION WELL - NO SUR	11,800.0	5,010.0	9,978.7	9,910.7	146.783	SF
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	6,804.6	6,715.9	5,480.9	5,455.4	215.494	CC, ES
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	12,400.0	7,455.0	9,951.4	9,851.1	99.263	SF
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	6,794.3	6,709.6	5,422.0	5,396.5	212.424	CC
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	6,800.0	6,715.4	5,422.0	5,396.5	212.251	ES
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	12,900.0	7,459.0	9,963.8	9,854.9	91.463	SF
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	6,804.0	6,710.4	6,340.9	6,315.5	249.302	CC, ES
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	11,500.0	7,450.0	9,921.3	9,836.6	117.168	SF
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	6,804.9	6,717.3	4,485.6	4,460.1	176.397	CC, ES
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,400.0	7,456.0	9,986.4	9,868.7	84.897	SF
BILLINGS 21-7 (EXISTING) - KPK WELL - Plan #1	600.0	631.0	2,896.8	2,894.7	1,376.224	CC, ES
BILLINGS 21-7 (EXISTING) - KPK WELL - Plan #1	17,000.0	5,183.2	9,993.0	9,853.0	71.368	SF
BILLINGS 21-7 (EXISTING) - KPK WELL - Plan #2	600.0	631.0	2,896.8	2,894.7	1,376.224	CC, ES
BILLINGS 21-7 (EXISTING) - KPK WELL - Plan #2	17,000.0	5,183.2	9,993.0	9,853.0	71.368	SF
BILLINGS 21-7 (EXISTING) - KPK WELL - SURVEYS	0.0	0.0	2,896.9			
BILLINGS 21-7 (EXISTING) - KPK WELL - SURVEYS	16,900.0	5,126.0	9,916.9	9,787.4	76.586	SF
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	1,805.2	1,594.7	4,042.2	4,036.1	662.503	CC
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	2,000.0	1,771.8	4,042.7	4,035.9	594.389	ES
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	12,800.0	7,440.0	9,927.5	9,815.5	88.643	SF
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	0.0	10.0	2,112.5			
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	800.0	801.1	2,113.3	2,110.6	761.163	ES
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	15,500.0	7,515.0	9,917.3	9,758.5	62.455	SF
ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO SUR	13,761.1	7,565.0	849.1	725.0	6.841	CC, ES
ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO SUR	13,900.0	7,565.0	860.4	733.8	6.800	SF
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	16,788.2	7,560.0	882.7	705.8	4.989	CC
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	16,800.0	7,560.0	882.8	705.7	4.983	ES
ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO SUR	16,900.0	7,560.0	889.8	710.9	4.974	SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	166.3	167.3	80.0	79.5	149.060	CC
Morgan Hills 1A-7H-A168 - HZ - Plan #2	200.0	201.0	80.0	79.4	122.297	ES
Morgan Hills 1A-7H-A168 - HZ - Plan #2	17,420.9	17,589.7	2,000.3	1,651.1	5.728	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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Morgan Hills 1B-7H-A168 - HZ - Plan #2	247.0	248.0	70.0	69.1	85.487	CC, ES
Morgan Hills 1B-7H-A168 - HZ - Plan #2	17,420.9	17,775.9	1,766.5	1,420.3	5.103	SF
Morgan Hills 1C-7H-A168 - HZ - Plan #2	300.0	300.0	59.9	58.9	59.781	CC, ES
Morgan Hills 1C-7H-A168 - HZ - Plan #2	17,420.9	17,490.0	1,500.2	1,150.9	4.295	SF
Morgan Hills 1D-7H-A168 - HZ - Plan #2	333.4	333.4	50.1	49.0	44.797	CC
Morgan Hills 1D-7H-A168 - HZ - Plan #2	400.0	399.6	50.3	48.9	37.250	ES
Morgan Hills 1D-7H-A168 - HZ - Plan #2	17,420.9	17,701.3	1,273.0	929.7	3.708	SF
Morgan Hills 1E-7H-A168 - HZ - Plan #2	400.0	400.0	40.0	38.7	29.625	CC, ES
Morgan Hills 1E-7H-A168 - HZ - Plan #2	17,420.9	17,440.2	1,000.1	650.7	2.862	SF
Morgan Hills 1F-7H-A168 - HZ - Plan #2	433.4	433.4	29.9	28.5	20.404	CC
Morgan Hills 1F-7H-A168 - HZ - Plan #2	500.0	499.8	30.1	28.4	17.721	ES
Morgan Hills 1F-7H-A168 - HZ - Plan #2	17,420.9	17,664.2	787.6	454.2	2.362	SF
Morgan Hills 1G-7H-A168 - HZ - Plan #2	500.0	500.0	19.9	18.2	11.689	CC, ES
Morgan Hills 1G-7H-A168 - HZ - Plan #2	17,420.9	17,411.2	500.1	150.6	1.431	Level 3, SF
Morgan Hills 1H-7H-A168 - HZ - Plan #2	600.0	600.0	10.1	8.0	4.916	CC, ES
Morgan Hills 1H-7H-A168 - HZ - Plan #2	17,420.9	17,653.1	346.6	90.9	1.356	Level 3, SF
Sosa 11-18 - DD - DD	13,052.3	7,608.0	4,470.5	4,354.2	38.442	CC
Sosa 11-18 - DD - DD	13,100.0	7,608.2	4,470.8	4,353.6	38.172	ES
Sosa 11-18 - DD - DD	16,100.0	7,620.6	5,410.5	5,241.1	31.929	SF
Sosa 11-18 - DD - Plan #1	13,039.5	7,591.3	4,474.0	4,357.9	38.533	CC
Sosa 11-18 - DD - Plan #1	13,100.0	7,591.3	4,474.4	4,357.3	38.190	ES
Sosa 11-18 - DD - Plan #1	16,100.0	7,591.3	5,420.7	5,251.2	31.984	SF
Sosa 12-18 - DD - DD	14,687.9	7,667.3	4,469.2	4,320.5	30.058	CC
Sosa 12-18 - DD - DD	14,800.0	7,666.9	4,470.6	4,319.9	29.677	ES
Sosa 12-18 - DD - DD	17,000.0	7,659.9	5,031.8	4,842.8	26.613	SF
Sosa 12-18 - DD - Plan #3	14,660.5	7,635.1	4,479.9	4,332.1	30.311	CC
Sosa 12-18 - DD - Plan #3	14,700.0	7,635.1	4,480.1	4,331.6	30.171	ES
Sosa 12-18 - DD - Plan #3	17,000.0	7,635.1	5,054.0	4,865.3	26.788	SF
Sosa 21-18 - DD (Gyro) - DD	1,016.7	1,500.0	7,112.9	7,109.8	2,275.551	CC
Sosa 21-18 - DD (Gyro) - DD	13,700.0	1,500.0	7,153.7	7,090.4	112.973	ES
Sosa 21-18 - DD (Gyro) - DD	17,420.9	1,500.0	8,073.4	7,974.7	81.802	SF
Sosa 21-18 - DD (MWD) - DD	13,062.2	7,614.3	2,912.1	2,795.8	25.033	CC
Sosa 21-18 - DD (MWD) - DD	13,100.0	7,613.6	2,912.4	2,795.4	24.895	ES
Sosa 21-18 - DD (MWD) - DD	14,300.0	7,591.5	3,164.2	3,026.4	22.959	SF
Sosa 21-18 - DD (MWD) - Plan #2	13,065.2	7,654.2	2,906.1	2,789.7	24.966	CC
Sosa 21-18 - DD (MWD) - Plan #2	13,100.0	7,654.2	2,906.3	2,789.3	24.839	ES
Sosa 21-18 - DD (MWD) - Plan #2	14,300.0	7,654.2	3,157.5	3,019.6	22.897	SF
Sosa 22-18 - DD - DD	14,549.8	7,689.4	2,995.2	2,850.7	20.729	CC
Sosa 22-18 - DD - DD	14,600.0	7,689.6	2,995.6	2,850.2	20.607	ES
Sosa 22-18 - DD - DD	15,600.0	7,693.6	3,174.0	3,011.1	19.492	SF
Sosa 22-18 - DD - Plan #2	14,533.2	7,648.1	3,010.2	2,866.2	20.910	CC
Sosa 22-18 - DD - Plan #2	14,600.0	7,648.1	3,010.9	2,865.8	20.748	ES
Sosa 22-18 - DD - Plan #2	15,600.0	7,648.1	3,193.6	3,031.1	19.644	SF
SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTING	13,747.3	7,646.6	3,976.4	3,852.5	32.082	CC
SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTING	13,800.0	7,646.9	3,976.8	3,851.9	31.849	ES
SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTING	16,000.0	7,657.5	4,570.2	4,406.9	27.998	SF
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	11,654.1	4,993.0	4,885.2	4,812.8	67.455	CC
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	11,700.0	4,993.0	4,885.4	4,812.3	66.829	ES
THOMAS 14-7(EXISTING) - EXISTING - NO SURVEY	16,600.0	4,993.0	6,951.7	6,805.2	47.423	SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - Plan #1	11,892.2	7,524.9	3,021.1	2,929.3	32.920	CC
THOMAS 24-7 (EXISTING) - ENCANA WELL - Plan #1	11,900.0	7,524.9	3,021.1	2,929.2	32.872	ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - Plan #1	13,600.0	7,524.9	3,470.4	3,349.0	28.581	SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - Plan #2	11,892.2	7,524.9	3,021.1	2,929.3	32.920	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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 24-7 (EXISTING) - ENCANA WELL - Plan #2	11,900.0	7,524.9	3,021.1	2,929.2	32.872	ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - Plan #2	13,600.0	7,524.9	3,470.4	3,349.0	28.581	SF
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	11,884.8	7,536.0	3,026.1	2,934.5	33.028	CC
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	11,900.0	7,535.9	3,026.2	2,934.3	32.934	ES
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	13,600.0	7,522.6	3,478.4	3,357.0	28.658	SF
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	11,754.4	7,497.0	3,279.4	3,190.3	36.786	CC
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	11,800.0	7,497.0	3,279.7	3,189.8	36.467	ES
THOMAS 24-7 (Existing) - Existing - NO SURVEYS	13,900.0	7,497.0	3,918.9	3,792.5	31.003	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - Plan #1	12,489.5	7,573.0	3,712.5	3,605.7	34.738	CC
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - Plan #1	12,600.0	7,573.0	3,714.2	3,605.4	34.141	ES
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - Plan #1	14,700.0	7,573.0	4,320.8	4,175.5	29.727	SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	12,459.0	7,527.8	3,718.9	3,613.0	35.128	CC
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	12,500.0	7,527.7	3,719.1	3,612.5	34.895	ES
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY	14,700.0	7,519.5	4,341.9	4,197.0	29.974	SF
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #1	10,591.8	7,786.8	1,923.8	1,842.7	23.725	CC
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #1	10,600.0	7,786.8	1,923.8	1,842.6	23.684	ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #1	11,400.0	7,786.8	2,086.6	1,991.7	21.977	SF
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #2	10,591.8	7,789.3	1,923.8	1,842.7	23.724	CC
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #2	10,600.0	7,789.3	1,923.8	1,842.6	23.684	ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #2	11,400.0	7,789.3	2,086.6	1,991.7	21.976	SF
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #3	10,591.8	7,789.4	1,923.8	1,842.7	23.726	CC
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #3	10,600.0	7,789.4	1,923.8	1,842.6	23.685	ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - Plan #3	11,400.0	7,789.4	2,086.6	1,991.7	21.977	SF
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	10,590.1	7,781.5	1,928.8	1,847.8	23.812	CC
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	10,600.0	7,781.5	1,928.9	1,847.7	23.763	ES
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY	11,400.0	7,783.0	2,092.0	1,997.1	22.045	SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	10,432.7	7,490.0	4,489.2	4,422.8	67.559	CC
Thomas 7-12 (Existing) - Existing - NO SURVEYS	10,500.0	7,490.0	4,489.7	4,422.1	66.422	ES
Thomas 7-12 (Existing) - Existing - NO SURVEYS	15,800.0	7,490.0	6,997.2	6,837.7	43.857	SF
Thomas 7-14 (Existing) - Existing - NO SURVEYS	11,682.0	5,000.0	3,814.5	3,749.3	58.498	CC
Thomas 7-14 (Existing) - Existing - NO SURVEYS	11,700.0	5,000.0	3,814.6	3,749.1	58.287	ES
Thomas 7-14 (Existing) - Existing - NO SURVEYS	14,700.0	5,000.0	4,864.1	4,759.0	46.281	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	10,648.8	7,496.0	3,527.0	3,456.9	50.283	CC
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	10,700.0	7,496.0	3,527.4	3,456.4	49.670	ES
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY	13,800.0	7,496.0	4,729.6	4,605.0	37.939	SF
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	10,691.5	5,000.0	4,321.5	4,265.9	77.643	CC
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	10,800.0	5,000.0	4,322.9	4,265.7	75.608	ES
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV	15,500.0	5,000.0	6,465.1	6,341.2	52.172	SF
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	0.0	0.0	3,002.2			
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	16,700.0	7,475.9	9,956.7	9,781.7	56.886	SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	9,318.3	7,590.0	4,501.6	4,453.6	93.766	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	9,400.0	7,590.0	4,502.4	4,453.0	91.254	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	17,000.0	7,590.0	8,903.5	8,722.8	49.273	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	420.5	441.5	2,947.1	2,945.6	1,984.436	CC
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	500.0	511.7	2,947.2	2,945.5	1,687.922	ES
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	15,400.0	7,200.0	8,221.0	8,069.8	54.361	SF
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	843.3	954.4	2,999.0	2,995.3	813.110	CC
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	9,300.0	7,740.1	3,023.5	2,960.5	47.982	ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	11,800.0	7,745.9	3,926.0	3,820.6	37.246	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	0.0	14.3	3,006.1			
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	12,600.0	7,848.2	4,548.5	4,422.3	36.039	SF
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	3,965.3	4,146.8	2,533.8	2,514.3	129.901	CC
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	4,000.0	4,175.0	2,533.9	2,514.3	129.096	ES

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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)						
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	15,500.0	7,466.3	8,639.6	8,482.5	54.982 SF	
WOOLLEY 41-7 (EXISTING) - ENCANA WELL - NO SU	600.0	597.0	309.1	307.1	149.587 CC, ES	
WOOLLEY 41-7 (EXISTING) - ENCANA WELL - NO SU	7,850.0	7,519.6	497.2	469.4	17.931 SF	
WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WELL - N	600.0	604.0	1,628.4	1,626.3	783.290 CC, ES	
WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WELL - N	5,400.0	5,193.0	1,936.4	1,917.9	104.224 SF	
WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA - NO S	9,215.6	7,535.0	609.4	563.1	13.175 CC, ES	
WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA - NO S	9,300.0	7,535.0	615.2	567.6	12.920 SF	
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU	8,696.9	7,551.0	1,513.3	1,475.2	39.634 CC	
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU	8,700.0	7,551.0	1,513.4	1,475.1	39.586 ES	
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU	9,700.0	7,551.0	1,815.6	1,761.4	33.487 SF	
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	533.2	543.3	3,521.7	3,519.9	1,896.298 CC	
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	600.0	605.0	3,521.8	3,519.7	1,692.095 ES	
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	15,500.0	7,728.8	7,806.3	7,651.7	50.513 SF	
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	200.0	185.0	4,503.2	4,502.6	7,435.560 CC, ES	
Woolley-Becky 2A-7H-E168 - Hz - Plan #1	17,420.9	7,246.1	9,200.8	9,013.6	49.168 SF	
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	9,381.7	7,435.9	4,391.9	4,343.0	89.708 CC	
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	9,500.0	7,376.3	4,393.0	4,342.3	86.708 ES	
Woolley-Becky 2B-7H-E168 - Hz - Plan #1	16,400.0	7,050.0	8,163.2	7,994.9	48.494 SF	
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	9,354.2	7,650.0	4,038.5	3,989.5	82.401 CC	
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	9,400.0	7,626.6	4,038.7	3,989.0	81.321 ES	
Woolley-Becky 2C-7H-E168 - Hz - Plan #3	15,400.0	7,300.0	7,169.3	7,017.3	47.177 SF	
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	7,450.0	9,415.2	3,759.7	3,706.8	71.036 ES	
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	7,535.0	9,347.2	3,759.3	3,707.5	72.530 CC	
Woolley-Becky 2D-7H-E168 - Hz - Plan #3	14,800.0	7,100.0	6,537.1	6,396.6	46.550 SF	
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	9,174.9	7,978.1	3,334.2	3,286.6	69.955 CC	
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	9,300.0	7,900.0	3,335.2	3,286.1	67.945 ES	
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	13,500.0	7,400.0	5,224.0	5,105.0	43.908 SF	
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	7,450.0	9,238.3	3,041.8	2,988.8	57.422 ES	
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	7,534.7	9,170.5	3,041.3	2,989.5	58.763 CC	
Woolley-Becky 2F-7H-E168 - Hz - Plan #2	13,000.0	7,250.0	4,889.3	4,779.2	44.404 SF	
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	8,843.1	8,250.0	2,752.8	2,706.8	59.855 CC	
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	8,900.0	8,211.4	2,753.0	2,706.6	59.341 ES	
Woolley-Becky 2G-7H-E168 - Hz - Plan #1	12,200.0	7,550.0	4,012.9	3,915.8	41.367 SF	
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	9,093.8	8,000.0	2,286.4	2,239.5	48.739 CC	
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	9,100.0	8,000.0	2,286.4	2,239.4	48.638 ES	
Woolley-Becky 2H-7H-E168 - Hz - Plan #2	11,100.0	7,550.0	2,880.4	2,803.2	37.339 SF	
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	200.0	184.0	4,563.8	4,563.2	7,557.426 CC	
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	300.0	268.9	4,563.9	4,563.0	4,922.858 ES	
Woolley-Sosa 2A-7H-E168 - Hz - Plan #1	17,420.9	15,981.1	4,934.7	4,620.2	15.688 SF	
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	8,978.8	7,432.8	4,544.2	4,499.1	100.597 CC	
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	17,420.9	15,969.8	4,560.0	4,245.4	14.492 ES, SF	
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	9,138.6	7,705.0	4,192.7	4,146.0	89.809 CC	
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	17,420.9	15,974.5	4,196.6	3,882.0	13.339 ES, SF	
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	14,016.0	12,644.4	3,802.7	3,605.6	19.294 CC	
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	17,420.9	15,965.4	3,869.5	3,555.4	12.320 ES, SF	
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	10,228.9	8,882.6	3,469.2	3,399.4	49.653 CC	
Woolley-Sosa 2E-7H-E168 - HZ - Plan #2	17,420.9	16,036.2	3,520.4	3,205.9	11.193 ES, SF	
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	9,524.0	8,222.2	3,169.9	3,117.5	60.492 CC	
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	17,420.9	16,087.8	3,171.3	2,856.7	10.080 ES, SF	
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	9,530.4	8,285.9	2,821.1	2,768.5	53.640 CC	
Woolley-Sosa 2G-7H-E168 - HZ - Plan #1	17,420.9	16,148.7	2,822.5	2,508.2	8.979 ES, SF	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-60.92	1,764.4	-3,172.2	3,630.2					
100.0	100.0	46.0	46.0	0.2	0.1	-60.92	1,764.5	-3,172.3	3,630.0	3,629.8	0.21	N/A CC, ES		
200.0	200.0	127.8	127.8	0.3	0.2	-60.91	1,764.9	-3,172.5	3,630.5	3,630.0	0.53	6,886.720		
300.0	300.0	210.4	210.4	0.5	0.3	-60.90	1,765.8	-3,173.1	3,631.6	3,630.7	0.85	4,287.800		
400.0	400.0	286.0	286.0	0.7	0.5	-60.89	1,767.1	-3,173.6	3,633.1	3,632.0	1.16	3,144.279		
500.0	500.0	344.0	344.0	0.8	0.6	-60.88	1,768.4	-3,174.6	3,635.6	3,634.2	1.43	2,535.983		
600.0	600.0	404.0	403.9	1.0	0.7	-60.87	1,769.9	-3,176.2	3,639.2	3,637.5	1.72	2,120.042		
700.0	700.0	465.0	464.8	1.2	0.8	-93.30	1,771.9	-3,178.7	3,644.2	3,642.3	1.99	1,830.593		
800.0	800.0	497.2	497.0	1.4	0.9	-93.25	1,773.0	-3,180.5	3,650.7	3,648.5	2.22	1,641.514		
900.0	899.9	526.0	525.7	1.6	0.9	-93.18	1,774.1	-3,182.4	3,658.9	3,656.4	2.46	1,489.780		
988.4	988.1	586.0	585.4	1.7	1.1	-93.16	1,776.2	-3,187.4	3,667.3	3,664.6	2.73	1,344.771		
1,000.0	999.7	586.0	585.4	1.7	1.1	-93.16	1,776.2	-3,187.4	3,668.5	3,665.7	2.75	1,334.312		
1,100.0	1,099.4	647.0	646.1	1.9	1.2	-93.25	1,778.0	-3,193.8	3,679.5	3,676.4	3.05	1,206.771		
1,200.0	1,199.2	721.8	720.3	2.1	1.4	-93.38	1,779.3	-3,202.8	3,691.3	3,688.0	3.38	1,092.629		
1,300.0	1,299.0	816.3	814.0	2.3	1.6	-93.55	1,780.6	-3,214.9	3,703.6	3,699.9	3.75	988.118		
1,400.0	1,398.8	891.2	888.3	2.5	1.9	-93.69	1,781.8	-3,224.6	3,716.3	3,712.2	4.09	909.614		
1,500.0	1,498.5	958.4	954.8	2.7	2.0	-93.80	1,783.4	-3,233.6	3,729.7	3,725.3	4.41	845.383		
1,600.0	1,598.3	1,022.3	1,018.0	2.9	2.2	-93.92	1,784.7	-3,242.9	3,744.0	3,739.3	4.74	790.500		
1,700.0	1,698.1	1,085.6	1,080.5	3.2	2.4	-94.05	1,785.5	-3,253.1	3,759.3	3,754.3	5.06	742.304		
1,800.0	1,797.8	1,168.0	1,161.7	3.4	2.7	-94.24	1,785.3	-3,267.3	3,775.1	3,769.7	5.44	694.023		
1,900.0	1,897.6	1,254.0	1,246.2	3.6	3.0	-94.45	1,784.4	-3,283.0	3,791.5	3,785.6	5.83	650.441		
2,000.0	1,997.4	1,316.1	1,307.2	3.8	3.2	-94.61	1,783.7	-3,294.9	3,808.6	3,802.4	6.17	617.130		
2,100.0	2,097.1	1,372.6	1,362.6	4.0	3.5	-94.76	1,783.1	-3,306.2	3,826.6	3,820.1	6.51	588.223		
2,200.0	2,196.9	1,425.0	1,413.7	4.2	3.7	-94.89	1,782.6	-3,317.4	3,845.9	3,839.1	6.83	562.870		
2,300.0	2,296.7	1,471.0	1,458.5	4.4	3.9	-95.02	1,782.1	-3,327.9	3,866.5	3,859.3	7.15	540.680		
2,400.0	2,396.5	1,511.0	1,497.3	4.6	4.1	-95.13	1,781.6	-3,337.5	3,888.3	3,880.8	7.46	521.551		
2,500.0	2,496.2	1,560.7	1,545.4	4.8	4.3	-95.28	1,781.0	-3,350.1	3,911.4	3,903.6	7.79	501.967		
2,600.0	2,596.0	1,596.0	1,579.4	5.0	4.5	-95.39	1,780.4	-3,359.6	3,936.0	3,927.9	8.09	486.438		
2,700.0	2,695.8	1,645.1	1,626.5	5.2	4.7	-95.54	1,779.5	-3,373.7	3,961.8	3,953.4	8.44	469.628		
2,800.0	2,795.5	1,682.0	1,661.6	5.4	4.9	-95.66	1,778.8	-3,384.7	3,989.1	3,980.3	8.75	456.087		
2,900.0	2,895.3	1,749.6	1,725.8	5.6	5.3	-95.89	1,777.0	-3,405.9	4,017.4	4,008.2	9.16	438.664		
3,000.0	2,995.1	1,799.1	1,772.5	5.9	5.6	-96.07	1,775.3	-3,422.1	4,046.7	4,037.1	9.52	425.078		
3,100.0	3,094.9	1,855.0	1,825.0	6.1	6.0	-96.27	1,773.3	-3,441.2	4,077.2	4,067.3	9.90	411.722		
3,200.0	3,194.6	1,901.3	1,868.3	6.3	6.3	-96.44	1,771.8	-3,457.4	4,108.7	4,098.5	10.26	400.561		
3,300.0	3,294.4	1,981.5	1,943.3	6.5	6.8	-96.72	1,769.5	-3,485.9	4,141.1	4,130.3	10.72	386.186		
3,400.0	3,394.2	2,070.9	2,026.8	6.7	7.4	-97.05	1,766.5	-3,517.7	4,173.4	4,162.2	11.21	372.292		
3,500.0	3,493.9	2,157.0	2,107.1	6.9	8.0	-97.35	1,763.5	-3,548.6	4,206.2	4,194.5	11.70	359.520		
3,600.0	3,593.7	2,270.4	2,213.1	7.1	8.7	-97.74	1,760.1	-3,588.8	4,238.9	4,226.6	12.27	345.570		
3,700.0	3,693.5	2,373.0	2,309.2	7.3	9.4	-98.08	1,757.1	-3,624.8	4,271.3	4,258.5	12.79	333.985		
3,800.0	3,793.2	2,467.6	2,397.8	7.5	10.0	-98.39	1,754.5	-3,657.7	4,303.7	4,290.4	13.29	323.870		
3,900.0	3,893.0	2,562.7	2,486.9	7.7	10.6	-98.70	1,751.5	-3,690.8	4,336.1	4,322.3	13.79	314.473		
4,000.0	3,992.8	2,654.9	2,573.2	8.0	11.2	-99.00	1,748.3	-3,723.2	4,368.7	4,354.4	14.28	305.842		
4,100.0	4,092.6	2,781.6	2,691.9	8.2	12.1	-99.42	1,743.1	-3,767.0	4,400.8	4,385.9	14.88	295.780		
4,200.0	4,192.3	2,861.1	2,766.6	8.4	12.6	-99.66	1,740.7	-3,794.2	4,432.9	4,417.6	15.31	289.551		
4,300.0	4,292.1	2,970.0	2,869.2	8.6	13.3	-99.97	1,738.7	-3,830.6	4,464.8	4,449.0	15.81	282.390		
4,400.0	4,391.9	3,055.0	2,949.1	8.8	13.8	-100.22	1,736.3	-3,859.4	4,497.0	4,480.7	16.28	276.311		
4,500.0	4,491.6	3,096.6	2,988.1	9.0	14.1	-100.35	1,734.8	-3,874.1	4,530.0	4,513.4	16.60	272.876		
4,600.0	4,591.4	3,163.7	3,050.7	9.2	14.6	-100.54	1,733.0	-3,897.8	4,563.8	4,546.8	17.00	268.521		
4,700.0	4,691.2	3,243.6	3,125.4	9.4	15.1	-100.77	1,731.4	-3,926.3	4,598.1	4,580.7	17.42	263.955		
4,800.0	4,790.9	3,373.4	3,247.0	9.6	16.0	-101.12	1,729.2	-3,971.7	4,631.8	4,613.8	17.97	257.769		
4,900.0	4,890.7	3,473.7	3,341.1	9.8	16.6	-101.39	1,727.4	-4,006.5	4,665.5	4,647.0	18.44	253.033		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	4,990.5	3,574.6	3,435.6	10.1	17.3	-101.66	1,725.1	-4,041.5	4,699.0	4,680.1	18.92	248.418	
5,100.0	5,090.3	3,663.7	3,519.1	10.3	17.9	-101.91	1,722.0	-4,072.7	4,732.6	4,713.2	19.37	244.317	
5,200.0	5,190.0	3,766.3	3,615.0	10.5	18.6	-102.20	1,718.3	-4,108.6	4,766.3	4,746.4	19.85	240.060	
5,300.0	5,289.8	3,863.1	3,705.8	10.7	19.2	-102.46	1,714.7	-4,142.1	4,799.6	4,779.3	20.31	236.274	
5,400.0	5,389.6	3,929.6	3,768.1	10.9	19.7	-102.63	1,713.0	-4,165.2	4,833.5	4,812.8	20.69	233.649	
5,500.0	5,489.3	4,013.1	3,846.4	11.1	20.2	-102.85	1,711.0	-4,194.5	4,867.7	4,846.6	21.11	230.634	
5,600.0	5,589.1	4,084.0	3,912.7	11.3	20.7	-103.03	1,709.0	-4,219.4	4,902.2	4,880.7	21.50	228.058	
5,700.0	5,688.9	4,145.4	3,970.0	11.5	21.1	-103.19	1,707.1	-4,241.4	4,937.2	4,915.4	21.86	225.867	
5,800.0	5,788.7	4,197.2	4,018.2	11.7	21.5	-103.32	1,705.7	-4,260.4	4,973.1	4,950.9	22.20	224.020	
5,900.0	5,888.4	4,256.0	4,072.7	11.9	21.9	-103.47	1,704.1	-4,282.4	5,009.7	4,987.2	22.56	222.085	
6,000.0	5,988.2	4,492.3	4,292.7	12.2	23.5	-104.07	1,696.3	-4,368.1	5,045.3	5,021.9	23.35	216.027	
6,100.0	6,088.0	4,562.0	4,357.9	12.4	24.0	-104.25	1,693.6	-4,392.7	5,079.8	5,056.1	23.73	214.054	
6,200.0	6,187.7	4,632.0	4,413.1	12.6	24.6	-106.80	1,675.4	-4,700.0	5,084.2	5,057.5	26.63	190.945	
6,300.0	6,287.5	4,619.4	4,417.5	12.8	25.1	-106.86	1,676.1	-4,701.2	5,087.5	5,060.6	26.94	188.867	
6,400.0	6,387.3	4,630.4	4,418.2	13.0	25.2	-106.93	1,677.6	-4,702.2	5,090.7	5,063.4	27.26	186.769	
6,500.0	6,487.0	4,635.4	4,419.2	13.2	25.2	-106.99	1,679.5	-4,702.8	5,093.7	5,066.2	27.58	184.715	
6,600.0	6,586.8	4,737.0	4,492.8	13.4	25.3	-107.05	1,681.1	-4,703.5	5,096.7	5,068.8	27.89	182.715	
6,700.0	6,686.6	4,860.8	4,616.6	13.6	25.4	-107.12	1,682.6	-4,704.0	5,099.5	5,071.2	28.24	180.560	
6,787.0	6,773.4	4,958.0	4,713.8	13.8	25.5	-107.18	1,683.5	-4,704.1	5,101.5	5,073.0	28.54	178.781	
6,800.0	6,786.4	4,970.9	4,726.7	13.8	25.5	-117.75	1,683.6	-4,704.1	5,101.9	5,073.3	28.56	178.610	
6,850.0	6,836.3	5,020.7	4,776.5	13.9	25.5	154.98	1,684.0	-4,704.2	5,103.7	5,075.1	28.62	178.306	
6,900.0	6,886.2	5,070.4	4,826.2	14.0	25.6	124.94	1,684.4	-4,704.3	5,106.5	5,077.9	28.62	178.437	
6,950.0	6,935.7	5,113.1	4,868.9	14.0	25.6	116.89	1,684.7	-4,704.3	5,110.2	5,081.6	28.54	179.073	
7,000.0	6,984.6	5,152.6	4,908.4	14.0	25.6	113.20	1,685.1	-4,704.4	5,114.9	5,086.5	28.39	180.154	
7,050.0	7,032.6	5,191.2	4,947.1	14.0	25.7	110.97	1,685.6	-4,704.6	5,120.5	5,092.3	28.20	181.606	
7,100.0	7,079.7	5,229.0	4,984.8	13.9	25.7	109.39	1,686.1	-4,704.8	5,127.2	5,099.2	27.96	183.386	
7,150.0	7,125.4	5,298.4	5,054.2	13.9	25.7	108.30	1,687.3	-4,705.1	5,134.8	5,107.0	27.77	184.899	
7,200.0	7,169.6	5,436.7	5,192.5	13.8	25.8	107.80	1,688.9	-4,704.0	5,142.5	5,114.8	27.74	185.383	
7,250.0	7,212.1	5,482.7	5,238.5	13.8	25.8	106.96	1,689.3	-4,703.3	5,150.9	5,123.4	27.48	187.439	
7,300.0	7,252.6	5,526.5	5,282.3	13.7	25.8	106.16	1,689.7	-4,702.5	5,160.1	5,132.9	27.22	189.547	
7,350.0	7,291.0	5,567.9	5,323.6	13.7	25.8	105.37	1,690.1	-4,701.8	5,170.3	5,143.3	26.98	191.606	
7,400.0	7,327.1	5,599.0	5,354.8	13.7	25.9	104.50	1,690.4	-4,701.2	5,181.3	5,154.5	26.76	193.624	
7,450.0	7,360.7	5,631.8	5,387.5	13.7	25.9	103.63	1,690.8	-4,700.6	5,193.3	5,166.7	26.60	195.256	
7,500.0	7,391.6	5,656.7	5,412.5	13.7	25.9	102.65	1,690.9	-4,700.2	5,206.2	5,179.7	26.49	196.566	
7,550.0	7,419.7	5,679.5	5,435.3	13.8	25.9	101.61	1,691.0	-4,699.8	5,220.0	5,193.5	26.45	197.353	
7,600.0	7,444.8	5,700.1	5,455.8	13.9	25.9	100.50	1,691.1	-4,699.6	5,234.6	5,208.1	26.50	197.550	
7,650.0	7,466.9	5,718.2	5,474.0	14.1	25.9	99.31	1,691.1	-4,699.4	5,250.1	5,223.5	26.63	197.131	
7,700.0	7,485.8	5,733.9	5,489.6	14.3	25.9	98.05	1,691.0	-4,699.2	5,266.4	5,239.5	26.85	196.116	
7,750.0	7,501.5	5,747.0	5,502.7	14.6	25.9	96.70	1,691.0	-4,699.1	5,283.3	5,256.2	27.15	194.569	
7,800.0	7,513.7	5,771.0	5,526.7	14.9	25.9	95.43	1,690.9	-4,699.0	5,300.9	5,273.4	27.54	192.464	
7,850.0	7,522.6	5,771.0	5,526.7	15.2	25.9	93.85	1,690.9	-4,699.0	5,319.1	5,291.1	27.96	190.221	
7,900.0	7,528.0	5,771.0	5,526.7	15.6	25.9	92.23	1,690.9	-4,699.0	5,337.8	5,309.3	28.43	187.743	
7,952.9	7,530.0	5,771.0	5,526.7	16.1	25.9	90.47	1,690.9	-4,699.0	5,357.9	5,329.0	28.96	184.981	
8,000.0	7,530.0	5,771.0	5,526.7	16.5	25.9	90.47	1,690.9	-4,699.0	5,376.2	5,346.8	29.42	182.741	
8,100.0	7,530.0	5,771.0	5,526.7	17.5	25.9	90.47	1,690.9	-4,699.0	5,416.3	5,385.8	30.48	177.700	
8,200.0	7,530.0	5,771.0	5,526.7	18.7	25.9	90.47	1,690.9	-4,699.0	5,457.9	5,426.2	31.65	172.456	
8,300.0	7,530.0	5,771.0	5,526.7	19.9	25.9	90.47	1,690.9	-4,699.0	5,500.9	5,468.0	32.90	167.182	
8,400.0	7,530.0	5,771.0	5,526.7	21.2	25.9	90.47	1,690.9	-4,699.0	5,545.5	5,511.3	34.23	161.995	
8,500.0	7,530.0	5,771.0	5,526.7	22.6	25.9	90.47	1,690.9	-4,699.0	5,591.5	5,555.8	35.62	156.974	
8,600.0	7,530.0	5,771.0	5,526.7	24.0	25.9	90.47	1,690.9	-4,699.0	5,638.8	5,601.8	37.06	152.167	
8,700.0	7,530.0	5,771.0	5,526.7	25.4	25.9	90.47	1,690.9	-4,699.0	5,687.6	5,649.1	38.53	147.599	
8,800.0	7,530.0	5,771.0	5,526.7	26.9	25.9	90.47	1,690.9	-4,699.0	5,737.7	5,697.6	40.05	143.280	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
8,900.0	7,530.0	7,771.0	7,526.7	28.4	31.0	90.47	1,690.9	-4,699.0	5,789.0	5,747.4	41.58	139.213	
9,000.0	7,530.0	7,771.0	7,526.7	30.0	31.0	90.47	1,690.9	-4,699.0	5,841.7	5,798.5	43.15	135.390	
9,100.0	7,530.0	7,771.0	7,526.7	31.5	31.0	90.47	1,690.9	-4,699.0	5,895.5	5,850.8	44.73	131.801	
9,200.0	7,530.0	7,771.0	7,526.7	33.1	31.0	90.47	1,690.9	-4,699.0	5,950.6	5,904.2	46.33	128.436	
9,300.0	7,530.0	7,771.0	7,526.7	34.7	31.0	90.47	1,690.9	-4,699.0	6,006.8	5,958.8	47.95	125.281	
9,400.0	7,530.0	7,771.0	7,526.7	36.3	31.0	90.47	1,690.9	-4,699.0	6,064.1	6,014.5	49.57	122.322	
9,500.0	7,530.0	7,771.0	7,526.7	38.0	31.0	90.47	1,690.9	-4,699.0	6,122.5	6,071.3	51.21	119.547	
9,600.0	7,530.0	7,771.0	7,526.7	39.6	31.0	90.47	1,690.9	-4,699.0	6,182.0	6,129.2	52.86	116.942	
9,700.0	7,530.0	7,771.0	7,526.7	41.3	31.0	90.47	1,690.9	-4,699.0	6,242.6	6,188.0	54.52	114.496	
9,800.0	7,530.0	7,771.0	7,526.7	42.9	31.0	90.47	1,690.9	-4,699.0	6,304.1	6,247.9	56.19	112.196	
9,900.0	7,530.0	7,771.0	7,526.7	44.6	31.0	90.47	1,690.9	-4,699.0	6,366.6	6,308.8	57.86	110.033	
10,000.0	7,530.0	7,771.0	7,526.7	46.3	31.0	90.47	1,690.9	-4,699.0	6,430.1	6,370.5	59.54	107.997	
10,100.0	7,530.0	7,771.0	7,526.7	47.9	31.0	90.47	1,690.9	-4,699.0	6,494.5	6,433.2	61.22	106.078	
10,200.0	7,530.0	7,771.0	7,526.7	49.6	31.0	90.47	1,690.9	-4,699.0	6,559.7	6,496.8	62.91	104.267	
10,300.0	7,530.0	7,771.0	7,526.7	51.3	31.0	90.47	1,690.9	-4,699.0	6,625.9	6,561.3	64.61	102.558	
10,400.0	7,530.0	7,771.0	7,526.7	53.0	31.0	90.47	1,690.9	-4,699.0	6,692.9	6,626.6	66.30	100.943	
10,500.0	7,530.0	7,771.0	7,526.7	54.7	31.0	90.47	1,690.9	-4,699.0	6,760.7	6,692.6	68.00	99.415	
10,600.0	7,530.0	7,771.0	7,526.7	56.4	31.0	90.47	1,690.9	-4,699.0	6,829.2	6,759.5	69.71	97.969	
10,700.0	7,530.0	7,771.0	7,526.7	58.1	31.0	90.47	1,690.9	-4,699.0	6,898.6	6,827.2	71.42	96.598	
10,800.0	7,530.0	7,771.0	7,526.7	59.8	31.0	90.47	1,690.9	-4,699.0	6,968.7	6,895.6	73.13	95.298	
10,900.0	7,530.0	7,771.0	7,526.7	61.5	31.0	90.47	1,690.9	-4,699.0	7,039.5	6,964.7	74.84	94.064	
11,000.0	7,530.0	7,771.0	7,526.7	63.2	31.0	90.47	1,690.9	-4,699.0	7,111.0	7,034.5	76.55	92.891	
11,100.0	7,530.0	7,771.0	7,526.7	64.9	31.0	90.47	1,690.9	-4,699.0	7,183.2	7,105.0	78.27	91.776	
11,200.0	7,530.0	7,771.0	7,526.7	66.6	31.0	90.47	1,690.9	-4,699.0	7,256.1	7,176.1	79.99	90.715	
11,300.0	7,530.0	7,771.0	7,526.7	68.4	31.0	90.47	1,690.9	-4,699.0	7,329.6	7,247.9	81.71	89.705	
11,400.0	7,530.0	7,771.0	7,526.7	70.1	31.0	90.47	1,690.9	-4,699.0	7,403.7	7,320.3	83.43	88.741	
11,500.0	7,530.0	7,771.0	7,526.7	71.8	31.0	90.47	1,690.9	-4,699.0	7,478.5	7,393.3	85.15	87.823	
11,600.0	7,530.0	7,771.0	7,526.7	73.5	31.0	90.47	1,690.9	-4,699.0	7,553.8	7,466.9	86.88	86.946	
11,700.0	7,530.0	7,771.0	7,526.7	75.2	31.0	90.47	1,690.9	-4,699.0	7,629.7	7,541.0	88.61	86.108	
11,800.0	7,530.0	7,771.0	7,526.7	77.0	31.0	90.47	1,690.9	-4,699.0	7,706.1	7,615.7	90.33	85.307	
11,900.0	7,530.0	7,771.0	7,526.7	78.7	31.0	90.47	1,690.9	-4,699.0	7,783.0	7,691.0	92.06	84.541	
12,000.0	7,530.0	7,771.0	7,526.7	80.4	31.0	90.47	1,690.9	-4,699.0	7,860.5	7,766.7	93.79	83.808	
12,100.0	7,530.0	7,771.0	7,526.7	82.2	31.0	90.47	1,690.9	-4,699.0	7,938.5	7,843.0	95.52	83.106	
12,200.0	7,530.0	7,771.0	7,526.7	83.9	31.0	90.47	1,690.9	-4,699.0	8,017.0	7,919.7	97.26	82.432	
12,300.0	7,530.0	7,771.0	7,526.7	85.6	31.0	90.47	1,690.9	-4,699.0	8,095.9	7,996.9	98.99	81.787	
12,400.0	7,530.0	7,771.0	7,526.7	87.3	31.0	90.47	1,690.9	-4,699.0	8,175.3	8,074.6	100.72	81.168	
12,500.0	7,530.0	7,771.0	7,526.7	89.1	31.0	90.47	1,690.9	-4,699.0	8,255.2	8,152.7	102.46	80.573	
12,600.0	7,530.0	7,771.0	7,526.7	90.8	31.0	90.47	1,690.9	-4,699.0	8,335.5	8,231.3	104.19	80.002	
12,700.0	7,530.0	7,771.0	7,526.7	92.5	31.0	90.47	1,690.9	-4,699.0	8,416.2	8,310.3	105.93	79.453	
12,800.0	7,530.0	7,771.0	7,526.7	94.3	31.0	90.47	1,690.9	-4,699.0	8,497.3	8,389.7	107.66	78.925	
12,900.0	7,530.0	7,771.0	7,526.7	96.0	31.0	90.47	1,690.9	-4,699.0	8,578.9	8,469.5	109.40	78.416	
13,000.0	7,530.0	7,771.0	7,526.7	97.8	31.0	90.47	1,690.9	-4,699.0	8,660.8	8,549.6	111.14	77.927	
13,100.0	7,530.0	7,771.0	7,526.7	99.5	31.0	90.47	1,690.9	-4,699.0	8,743.1	8,630.2	112.88	77.456	
13,200.0	7,530.0	7,771.0	7,526.7	101.2	31.0	90.47	1,690.9	-4,699.0	8,825.7	8,711.1	114.62	77.002	
13,300.0	7,530.0	7,771.0	7,526.7	103.0	31.0	90.47	1,690.9	-4,699.0	8,908.7	8,792.4	116.36	76.564	
13,400.0	7,530.0	7,771.0	7,526.7	104.7	31.0	90.47	1,690.9	-4,699.0	8,992.1	8,874.0	118.10	76.142	
13,500.0	7,530.0	7,771.0	7,526.7	106.4	31.0	90.47	1,690.9	-4,699.0	9,075.8	8,955.9	119.84	75.735	
13,600.0	7,530.0	7,771.0	7,526.7	108.2	31.0	90.47	1,690.9	-4,699.0	9,159.8	9,038.2	121.58	75.341	
13,700.0	7,530.0	7,771.0	7,526.7	109.9	31.0	90.47	1,690.9	-4,699.0	9,244.1	9,120.8	123.32	74.961	
13,800.0	7,530.0	7,771.0	7,526.7	111.7	31.0	90.47	1,690.9	-4,699.0	9,328.8	9,203.7	125.06	74.594	
13,900.0	7,530.0	7,771.0	7,526.7	113.4	31.0	90.47	1,690.9	-4,699.0	9,413.7	9,286.9	126.80	74.239	
14,000.0	7,530.0	7,771.0	7,526.7	115.1	31.0	90.47	1,690.9	-4,699.0	9,498.9	9,370.4	128.54	73.896	

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

Anticollision Report

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

Offset Design													S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - S		Offset Site Error:		0.0 ft	
Survey Program:													46-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)								
14,100.0	7,530.0	7,771.0	7,526.7	116.9	31.0	90.47	1,690.9	-4,699.0	9,584.5	9,454.2	130.29	73.564						
14,200.0	7,530.0	7,771.0	7,526.7	118.6	31.0	90.47	1,690.9	-4,699.0	9,670.3	9,538.2	132.03	73.243						
14,300.0	7,530.0	7,771.0	7,526.7	120.4	31.0	90.47	1,690.9	-4,699.0	9,756.3	9,622.6	133.77	72.932						
14,400.0	7,530.0	7,771.0	7,526.7	122.1	31.0	90.47	1,690.9	-4,699.0	9,842.7	9,707.2	135.52	72.630						
14,500.0	7,530.0	7,771.0	7,526.7	123.9	31.0	90.47	1,690.9	-4,699.0	9,929.3	9,792.0	137.26	72.338 SF						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-60.72	1,778.2	-3,171.1	3,636.2					
100.0	100.0	48.4	48.4	0.2	0.1	-60.72	1,778.2	-3,171.1	3,635.6	3,635.4	0.24	N/A		
200.0	200.0	142.9	142.9	0.3	0.2	-60.72	1,778.1	-3,170.9	3,635.4	3,634.8	0.58	6,312.780		
208.2	208.2	149.2	149.2	0.3	0.3	-60.72	1,778.1	-3,170.9	3,635.4	3,634.8	0.60	6,047.701 CC		
300.0	300.0	219.4	219.4	0.5	0.4	-60.72	1,778.2	-3,171.0	3,635.6	3,634.8	0.88	4,113.452 ES		
400.0	400.0	300.0	300.0	0.7	0.5	-60.72	1,778.5	-3,171.7	3,636.6	3,635.4	1.20	3,032.608		
500.0	500.0	388.1	388.1	0.8	0.7	-60.72	1,778.9	-3,172.9	3,637.9	3,636.4	1.53	2,381.605		
600.0	600.0	470.7	470.7	1.0	0.8	-60.73	1,779.2	-3,174.3	3,639.6	3,637.7	1.85	1,971.024		
700.0	700.0	567.7	567.7	1.2	1.0	-93.19	1,780.3	-3,176.0	3,641.7	3,639.5	2.19	1,662.565		
800.0	800.0	647.1	647.0	1.4	1.1	-93.19	1,782.1	-3,176.9	3,644.0	3,641.5	2.51	1,453.846		
900.0	899.9	717.0	716.8	1.6	1.3	-93.18	1,784.4	-3,178.0	3,647.3	3,644.5	2.81	1,297.207		
988.4	988.1	786.0	785.8	1.7	1.4	-93.18	1,787.4	-3,179.3	3,650.8	3,647.7	3.10	1,177.009		
1,000.0	999.7	800.0	799.8	1.7	1.4	-93.18	1,788.0	-3,179.6	3,651.3	3,648.2	3.15	1,159.598		
1,100.0	1,099.4	885.8	885.5	1.9	1.6	-93.23	1,792.1	-3,181.4	3,655.8	3,652.3	3.50	1,045.759		
1,200.0	1,199.2	986.4	985.9	2.1	1.8	-93.29	1,796.7	-3,183.7	3,660.5	3,656.6	3.87	945.106		
1,300.0	1,299.0	1,111.8	1,111.2	2.3	2.0	-93.37	1,802.2	-3,186.2	3,664.8	3,660.5	4.30	852.735		
1,400.0	1,398.8	1,212.4	1,211.7	2.5	2.2	-93.43	1,806.5	-3,187.8	3,668.7	3,664.0	4.68	783.863		
1,500.0	1,498.5	1,320.0	1,319.2	2.7	2.4	-93.50	1,810.9	-3,189.5	3,672.5	3,667.4	5.08	723.448		
1,600.0	1,598.3	1,417.8	1,416.9	2.9	2.6	-93.56	1,814.6	-3,191.1	3,676.1	3,670.7	5.46	673.881		
1,700.0	1,698.1	1,500.0	1,499.0	3.2	2.7	-93.62	1,817.7	-3,192.8	3,680.2	3,674.4	5.81	633.769		
1,800.0	1,797.8	1,641.1	1,640.0	3.4	3.0	-93.71	1,823.1	-3,195.0	3,683.8	3,677.5	6.27	587.818		
1,900.0	1,897.6	1,741.9	1,740.7	3.6	3.2	-93.77	1,826.7	-3,196.0	3,686.8	3,680.2	6.65	554.042		
2,000.0	1,997.4	1,846.8	1,845.6	3.8	3.4	-93.84	1,830.6	-3,197.1	3,690.0	3,683.0	7.05	523.346		
2,100.0	2,097.1	1,987.5	1,986.2	4.0	3.6	-93.92	1,835.6	-3,197.6	3,692.5	3,684.9	7.51	491.519		
2,200.0	2,196.9	2,096.0	2,094.7	4.2	3.8	-93.99	1,838.6	-3,197.5	3,694.2	3,686.3	7.91	466.773		
2,300.0	2,296.7	2,218.3	2,216.9	4.4	4.1	-94.09	1,841.0	-3,197.3	3,695.4	3,687.1	8.34	443.221		
2,400.0	2,396.5	2,313.3	2,311.9	4.6	4.2	-94.16	1,842.8	-3,197.1	3,696.6	3,687.9	8.71	424.219		
2,500.0	2,496.2	2,455.6	2,454.2	4.8	4.5	-94.29	1,844.1	-3,196.3	3,697.0	3,687.8	9.17	403.139		
2,600.0	2,596.0	2,539.5	2,538.1	5.0	4.6	-94.36	1,844.6	-3,195.6	3,697.1	3,687.6	9.53	388.130		
2,700.0	2,695.8	2,612.5	2,611.1	5.2	4.7	-94.43	1,845.4	-3,195.6	3,698.0	3,688.2	9.86	374.987		
2,800.0	2,795.5	2,700.0	2,698.6	5.4	4.9	-94.51	1,846.5	-3,195.7	3,699.3	3,689.1	10.22	361.839		
2,900.0	2,895.3	2,786.3	2,784.9	5.6	5.0	-94.59	1,847.3	-3,196.3	3,700.9	3,690.4	10.58	349.776		
3,000.0	2,995.1	2,887.5	2,886.1	5.9	5.2	-94.70	1,847.8	-3,197.7	3,702.9	3,691.9	10.96	337.792		
3,100.0	3,094.9	2,987.4	2,985.9	6.1	5.4	-94.82	1,847.7	-3,199.3	3,704.8	3,693.5	11.34	326.687		
3,200.0	3,194.6	3,100.0	3,098.5	6.3	5.6	-94.95	1,847.7	-3,200.7	3,706.6	3,694.8	11.74	315.635		
3,300.0	3,294.4	3,195.7	3,194.2	6.5	5.7	-95.05	1,847.9	-3,201.7	3,708.2	3,696.1	12.12	306.039		
3,400.0	3,394.2	3,287.0	3,285.5	6.7	5.9	-95.15	1,848.0	-3,202.9	3,710.0	3,697.5	12.48	297.218		
3,500.0	3,493.9	3,390.0	3,388.5	6.9	6.1	-95.27	1,847.8	-3,204.5	3,711.9	3,699.1	12.87	288.490		
3,600.0	3,593.7	3,513.1	3,511.6	7.1	6.3	-95.42	1,847.0	-3,206.2	3,713.5	3,700.2	13.29	279.495		
3,700.0	3,693.5	3,600.0	3,598.5	7.3	6.4	-95.52	1,846.7	-3,207.1	3,714.9	3,701.3	13.64	272.258		
3,800.0	3,793.2	3,673.3	3,671.7	7.5	6.6	-95.61	1,846.8	-3,208.2	3,716.9	3,702.9	13.98	265.848		
3,900.0	3,893.0	3,754.8	3,753.3	7.7	6.7	-95.69	1,847.4	-3,209.7	3,719.5	3,705.2	14.33	259.545		
4,000.0	3,992.8	3,852.8	3,851.2	8.0	6.9	-95.81	1,847.7	-3,212.0	3,722.5	3,707.8	14.71	253.078		
4,100.0	4,092.6	3,944.3	3,942.6	8.2	7.0	-95.91	1,848.2	-3,214.1	3,725.4	3,710.4	15.08	247.104		
4,200.0	4,192.3	4,030.5	4,028.8	8.4	7.2	-96.01	1,848.8	-3,216.4	3,728.9	3,713.4	15.43	241.593		
4,300.0	4,292.1	4,135.4	4,133.7	8.6	7.4	-96.13	1,849.3	-3,219.2	3,732.3	3,716.4	15.82	235.849		
4,400.0	4,391.9	4,250.6	4,248.8	8.8	7.6	-96.25	1,850.2	-3,222.2	3,735.6	3,719.4	16.23	230.116		
4,500.0	4,491.6	4,379.2	4,377.4	9.0	7.8	-96.39	1,851.2	-3,224.2	3,738.1	3,721.5	16.67	224.291		
4,600.0	4,591.4	4,461.0	4,459.2	9.2	8.0	-96.47	1,851.6	-3,225.5	3,740.5	3,723.5	17.02	219.793		
4,700.0	4,691.2	4,565.8	4,564.1	9.4	8.1	-96.58	1,852.9	-3,227.3	3,743.4	3,726.0	17.41	215.007		
4,800.0	4,790.9	4,669.5	4,667.7	9.6	8.3	-96.68	1,853.9	-3,228.7	3,745.8	3,728.0	17.80	210.430		
4,900.0	4,890.7	4,774.5	4,772.7	9.8	8.5	-96.78	1,855.1	-3,230.1	3,748.3	3,730.1	18.19	206.026		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,990.5	4,876.4	4,874.6	10.1	8.7	-96.88	1,856.2	-3,231.3	3,750.7	3,732.1	18.58	201.848		
5,100.0	5,090.3	4,977.8	4,975.9	10.3	8.9	-96.96	1,858.0	-3,232.1	3,753.0	3,734.0	18.97	197.844		
5,200.0	5,190.0	5,079.3	5,077.4	10.5	9.0	-97.05	1,859.8	-3,232.9	3,755.3	3,735.9	19.36	193.995		
5,300.0	5,289.8	5,161.7	5,159.8	10.7	9.2	-97.11	1,861.3	-3,233.7	3,757.7	3,738.0	19.71	190.632		
5,400.0	5,389.6	5,255.0	5,253.1	10.9	9.4	-97.20	1,862.9	-3,235.0	3,760.6	3,740.6	20.08	187.238		
5,500.0	5,489.3	5,356.1	5,354.2	11.1	9.5	-97.29	1,864.5	-3,236.5	3,763.5	3,743.0	20.47	183.843		
5,600.0	5,589.1	5,470.5	5,468.6	11.3	9.7	-97.39	1,866.3	-3,238.1	3,766.3	3,745.4	20.88	180.368		
5,700.0	5,688.9	5,556.1	5,554.1	11.5	9.9	-97.46	1,867.8	-3,239.0	3,768.9	3,747.6	21.24	177.434		
5,800.0	5,788.7	5,658.7	5,656.7	11.7	10.1	-97.55	1,869.7	-3,240.6	3,772.0	3,750.4	21.63	174.383		
5,900.0	5,888.4	5,764.8	5,762.8	11.9	10.3	-97.65	1,871.4	-3,241.8	3,774.6	3,752.6	22.03	171.368		
6,000.0	5,988.2	5,847.8	5,845.8	12.2	10.4	-97.72	1,872.9	-3,242.9	3,777.5	3,755.1	22.38	168.777		
6,100.0	6,088.0	5,930.1	5,928.0	12.4	10.6	-97.79	1,874.4	-3,244.4	3,780.8	3,758.1	22.74	166.300		
6,200.0	6,187.7	6,038.0	6,035.9	12.6	10.8	-97.88	1,876.6	-3,246.7	3,784.5	3,761.4	23.13	163.591		
6,300.0	6,287.5	6,185.7	6,183.5	12.8	11.0	-98.00	1,879.6	-3,248.1	3,787.2	3,763.6	23.60	160.453		
6,400.0	6,387.3	6,343.6	6,341.4	13.0	11.3	-98.12	1,882.2	-3,247.7	3,788.5	3,764.4	24.09	157.248		
6,500.0	6,487.0	6,449.7	6,447.4	13.2	11.5	-98.18	1,885.0	-3,245.7	3,788.8	3,764.4	24.49	154.697		
6,600.0	6,586.8	6,529.8	6,527.5	13.4	11.6	-98.23	1,886.8	-3,244.7	3,789.6	3,764.7	24.85	152.528		
6,700.0	6,686.6	6,612.9	6,610.6	13.6	11.8	-98.27	1,889.3	-3,243.8	3,790.8	3,765.6	25.20	150.405		
6,787.0	6,773.4	6,691.6	6,689.3	13.8	11.9	-98.32	1,891.5	-3,243.3	3,792.1	3,766.6	25.53	148.556		
6,800.0	6,786.4	6,700.0	6,697.7	13.8	11.9	-108.87	1,891.7	-3,243.2	3,792.4	3,766.8	25.56	148.347		
6,850.0	6,836.3	6,747.2	6,744.8	13.9	12.0	163.86	1,893.0	-3,243.1	3,794.4	3,768.7	25.70	147.647		
6,900.0	6,886.2	6,790.8	6,788.4	14.0	12.1	133.79	1,894.3	-3,242.9	3,797.8	3,772.0	25.78	147.295		
6,950.0	6,935.7	6,839.3	6,836.9	14.0	12.2	125.71	1,895.8	-3,242.8	3,802.8	3,776.9	25.84	147.187		
7,000.0	6,984.6	6,888.5	6,886.1	14.0	12.3	121.98	1,897.3	-3,242.7	3,809.1	3,783.2	25.85	147.337		
7,050.0	7,032.6	6,957.5	6,955.1	14.0	12.4	119.78	1,899.0	-3,242.5	3,816.7	3,790.8	25.87	147.534		
7,100.0	7,079.7	7,029.1	7,026.6	13.9	12.5	118.27	1,900.0	-3,242.2	3,825.4	3,799.5	25.86	147.906		
7,150.0	7,125.4	7,095.3	7,092.9	13.9	12.6	117.08	1,900.6	-3,241.6	3,835.2	3,809.4	25.83	148.494		
7,200.0	7,169.6	7,131.5	7,129.0	13.8	12.7	115.88	1,901.0	-3,241.2	3,846.4	3,820.6	25.73	149.483		
7,250.0	7,212.1	7,164.0	7,161.5	13.8	12.7	114.70	1,901.3	-3,240.9	3,859.0	3,833.4	25.63	150.567		
7,300.0	7,252.6	7,200.0	7,197.5	13.7	12.8	113.56	1,901.7	-3,240.7	3,873.1	3,847.5	25.55	151.616		
7,350.0	7,291.0	7,227.4	7,225.0	13.7	12.9	112.32	1,902.0	-3,240.5	3,888.6	3,863.1	25.47	152.662		
7,400.0	7,327.1	7,258.7	7,256.3	13.7	12.9	111.06	1,902.3	-3,240.5	3,905.4	3,880.0	25.44	153.520		
7,450.0	7,360.7	7,288.0	7,285.5	13.7	13.0	109.71	1,902.5	-3,240.5	3,923.6	3,898.2	25.45	154.163		
7,500.0	7,391.6	7,314.5	7,312.0	13.7	13.0	108.26	1,902.6	-3,240.6	3,943.0	3,917.5	25.52	154.527		
7,550.0	7,419.7	7,338.1	7,335.7	13.8	13.0	106.69	1,902.8	-3,240.6	3,963.7	3,938.0	25.64	154.562		
7,600.0	7,444.8	7,359.2	7,356.8	13.9	13.1	104.99	1,902.9	-3,240.7	3,985.5	3,959.6	25.84	154.238		
7,650.0	7,466.9	7,377.7	7,375.2	14.1	13.1	103.15	1,903.1	-3,240.8	4,008.3	3,982.2	26.10	153.561		
7,700.0	7,485.8	7,400.0	7,397.5	14.3	13.2	101.28	1,903.2	-3,241.0	4,032.2	4,005.7	26.44	152.530		
7,750.0	7,501.5	7,407.4	7,404.9	14.6	13.2	99.09	1,903.3	-3,241.0	4,056.9	4,030.1	26.81	151.306		
7,800.0	7,513.7	7,419.3	7,416.8	14.9	13.2	96.88	1,903.4	-3,241.1	4,082.4	4,055.1	27.24	149.870		
7,850.0	7,522.6	7,427.7	7,425.3	15.2	13.2	94.54	1,903.5	-3,241.1	4,108.5	4,080.8	27.69	148.358		
7,900.0	7,528.0	7,432.7	7,430.3	15.6	13.2	92.07	1,903.5	-3,241.1	4,135.3	4,107.1	28.16	146.868		
7,952.9	7,530.0	7,434.2	7,431.8	16.1	13.2	89.36	1,903.5	-3,241.2	4,164.0	4,135.4	28.64	145.412		
8,000.0	7,530.0	7,433.8	7,431.4	16.5	13.2	89.35	1,903.5	-3,241.1	4,189.9	4,160.8	29.09	144.031		
8,100.0	7,530.0	7,433.0	7,430.5	17.5	13.2	89.33	1,903.5	-3,241.1	4,246.2	4,216.0	30.15	140.840		
8,200.0	7,530.0	7,432.1	7,429.7	18.7	13.2	89.32	1,903.5	-3,241.1	4,304.0	4,272.7	31.32	137.441		
8,300.0	7,530.0	7,431.3	7,428.8	19.9	13.2	89.31	1,903.5	-3,241.1	4,363.4	4,330.8	32.57	133.969		
8,400.0	7,530.0	7,430.4	7,428.0	21.2	13.2	89.29	1,903.5	-3,241.1	4,424.2	4,390.3	33.90	130.518		
8,500.0	7,530.0	7,429.6	7,427.1	22.6	13.2	89.28	1,903.5	-3,241.1	4,486.5	4,451.2	35.28	127.154		
8,600.0	7,530.0	7,428.7	7,426.3	24.0	13.2	89.26	1,903.5	-3,241.1	4,550.1	4,513.4	36.72	123.916		
8,700.0	7,530.0	7,427.9	7,425.4	25.4	13.2	89.25	1,903.5	-3,241.1	4,615.0	4,576.8	38.19	120.827		
8,800.0	7,530.0	7,427.1	7,424.6	26.9	13.2	89.24	1,903.4	-3,241.1	4,681.1	4,641.4	39.70	117.899		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
8,900.0	7,530.0	7,426.2	7,423.7	28.4	13.2	89.22	1,903.4	-3,241.1	4,748.4	4,707.1	41.24	115.135		
9,000.0	7,530.0	7,425.4	7,422.9	30.0	13.2	89.21	1,903.4	-3,241.1	4,816.8	4,774.0	42.80	112.534		
9,100.0	7,530.0	7,424.6	7,422.1	31.5	13.2	89.20	1,903.4	-3,241.1	4,886.3	4,841.9	44.38	110.090		
9,200.0	7,530.0	7,423.7	7,421.3	33.1	13.2	89.18	1,903.4	-3,241.1	4,956.9	4,910.9	45.98	107.796		
9,300.0	7,530.0	7,422.9	7,420.4	34.7	13.2	89.17	1,903.4	-3,241.1	5,028.5	4,980.9	47.60	105.645		
9,400.0	7,530.0	7,422.1	7,419.6	36.3	13.2	89.16	1,903.4	-3,241.1	5,101.0	5,051.8	49.22	103.626		
9,500.0	7,530.0	7,421.3	7,418.8	38.0	13.2	89.14	1,903.4	-3,241.1	5,174.4	5,123.6	50.86	101.733		
9,600.0	7,530.0	7,420.5	7,418.0	39.6	13.2	89.13	1,903.4	-3,241.1	5,248.7	5,196.2	52.51	99.955		
9,700.0	7,530.0	7,419.6	7,417.2	41.3	13.2	89.12	1,903.4	-3,241.1	5,323.9	5,269.7	54.17	98.286		
9,800.0	7,530.0	7,418.8	7,416.3	42.9	13.2	89.10	1,903.4	-3,241.1	5,399.9	5,344.0	55.83	96.717		
9,900.0	7,530.0	7,418.0	7,415.5	44.6	13.2	89.09	1,903.4	-3,241.1	5,476.6	5,419.1	57.50	95.241		
10,000.0	7,530.0	7,417.2	7,414.7	46.3	13.2	89.08	1,903.4	-3,241.1	5,554.1	5,494.9	59.18	93.851		
10,100.0	7,530.0	7,416.4	7,413.9	47.9	13.2	89.06	1,903.4	-3,241.0	5,632.3	5,571.4	60.86	92.541		
10,200.0	7,530.0	7,415.6	7,413.1	49.6	13.2	89.05	1,903.4	-3,241.0	5,711.1	5,648.6	62.55	91.306		
10,300.0	7,530.0	7,414.8	7,412.3	51.3	13.2	89.04	1,903.3	-3,241.0	5,790.6	5,726.4	64.24	90.139		
10,400.0	7,530.0	7,414.0	7,411.5	53.0	13.2	89.02	1,903.3	-3,241.0	5,870.8	5,804.8	65.94	89.037		
10,500.0	7,530.0	7,413.2	7,410.7	54.7	13.2	89.01	1,903.3	-3,241.0	5,951.5	5,883.9	67.64	87.994		
10,600.0	7,530.0	7,412.4	7,409.9	56.4	13.2	89.00	1,903.3	-3,241.0	6,032.8	5,963.5	69.34	87.006		
10,700.0	7,530.0	7,411.6	7,409.1	58.1	13.2	88.98	1,903.3	-3,241.0	6,114.7	6,043.7	71.04	86.070		
10,800.0	7,530.0	7,410.8	7,408.4	59.8	13.2	88.97	1,903.3	-3,241.0	6,197.1	6,124.4	72.75	85.182		
10,900.0	7,530.0	7,410.0	7,407.6	61.5	13.2	88.96	1,903.3	-3,241.0	6,280.0	6,205.6	74.46	84.339		
11,000.0	7,530.0	7,409.3	7,406.8	63.2	13.2	88.94	1,903.3	-3,241.0	6,363.5	6,287.3	76.17	83.538		
11,100.0	7,530.0	7,408.5	7,406.0	64.9	13.2	88.93	1,903.3	-3,241.0	6,447.3	6,369.4	77.89	82.775		
11,200.0	7,530.0	7,407.7	7,405.2	66.6	13.2	88.92	1,903.3	-3,241.0	6,531.7	6,452.1	79.61	82.049		
11,300.0	7,530.0	7,406.9	7,404.4	68.4	13.2	88.91	1,903.3	-3,241.0	6,616.4	6,535.1	81.33	81.358		
11,400.0	7,530.0	7,406.2	7,403.7	70.1	13.2	88.89	1,903.3	-3,241.0	6,701.6	6,618.6	83.05	80.698		
11,500.0	7,530.0	7,405.4	7,402.9	71.8	13.2	88.88	1,903.3	-3,241.0	6,787.2	6,702.5	84.77	80.069		
11,600.0	7,530.0	7,404.6	7,402.1	73.5	13.2	88.87	1,903.3	-3,241.0	6,873.2	6,786.7	86.49	79.468		
11,700.0	7,530.0	7,403.8	7,401.4	75.2	13.2	88.86	1,903.3	-3,241.0	6,959.6	6,871.4	88.21	78.893		
11,800.0	7,530.0	7,403.1	7,400.6	77.0	13.2	88.84	1,903.2	-3,241.0	7,046.3	6,956.3	89.94	78.344		
11,900.0	7,530.0	7,400.0	7,397.5	78.7	13.2	88.79	1,903.2	-3,241.0	7,133.4	7,041.7	91.66	77.822		
12,000.0	7,530.0	7,400.0	7,397.5	80.4	13.2	88.79	1,903.2	-3,241.0	7,220.8	7,127.4	93.39	77.317		
12,100.0	7,530.0	7,400.0	7,397.5	82.2	13.2	88.79	1,903.2	-3,241.0	7,308.5	7,213.4	95.12	76.832		
12,200.0	7,530.0	7,400.0	7,397.5	83.9	13.2	88.79	1,903.2	-3,241.0	7,396.5	7,299.7	96.85	76.367		
12,300.0	7,530.0	7,400.0	7,397.5	85.6	13.2	88.79	1,903.2	-3,241.0	7,484.9	7,386.3	98.59	75.921		
12,400.0	7,530.0	7,400.0	7,397.5	87.3	13.2	88.79	1,903.2	-3,241.0	7,573.5	7,473.2	100.32	75.493		
12,500.0	7,530.0	7,400.0	7,397.5	89.1	13.2	88.79	1,903.2	-3,241.0	7,662.4	7,560.3	102.05	75.081		
12,600.0	7,530.0	7,400.0	7,397.5	90.8	13.2	88.79	1,903.2	-3,241.0	7,751.6	7,647.8	103.79	74.686		
12,700.0	7,530.0	7,400.0	7,397.5	92.5	13.2	88.79	1,903.2	-3,241.0	7,841.0	7,735.5	105.53	74.305		
12,800.0	7,530.0	7,400.0	7,397.5	94.3	13.2	88.79	1,903.2	-3,241.0	7,930.7	7,823.4	107.26	73.938		
12,900.0	7,530.0	7,400.0	7,397.5	96.0	13.2	88.79	1,903.2	-3,241.0	8,020.6	7,911.6	109.00	73.585		
13,000.0	7,530.0	7,400.0	7,397.5	97.8	13.2	88.79	1,903.2	-3,241.0	8,110.8	8,000.1	110.74	73.245		
13,100.0	7,530.0	7,400.0	7,397.5	99.5	13.2	88.79	1,903.2	-3,241.0	8,201.2	8,088.7	112.47	72.916		
13,200.0	7,530.0	7,400.0	7,397.5	101.2	13.2	88.79	1,903.2	-3,241.0	8,291.8	8,177.6	114.21	72.600		
13,300.0	7,530.0	7,400.0	7,397.5	103.0	13.2	88.79	1,903.2	-3,241.0	8,382.6	8,266.7	115.95	72.294		
13,400.0	7,530.0	7,400.0	7,397.5	104.7	13.2	88.79	1,903.2	-3,241.0	8,473.7	8,356.0	117.69	71.999		
13,500.0	7,530.0	7,400.0	7,397.5	106.4	13.2	88.79	1,903.2	-3,241.0	8,564.9	8,445.5	119.43	71.714		
13,600.0	7,530.0	7,400.0	7,397.5	108.2	13.2	88.79	1,903.2	-3,241.0	8,656.4	8,535.2	121.17	71.439		
13,700.0	7,530.0	7,400.0	7,397.5	109.9	13.2	88.79	1,903.2	-3,241.0	8,748.0	8,625.1	122.91	71.172		
13,800.0	7,530.0	7,400.0	7,397.5	111.7	13.2	88.79	1,903.2	-3,241.0	8,839.8	8,715.1	124.65	70.914		
13,900.0	7,530.0	7,400.0	7,397.5	113.4	13.2	88.79	1,903.2	-3,241.0	8,931.8	8,805.4	126.40	70.665		
14,000.0	7,530.0	7,400.0	7,397.5	115.1	13.2	88.79	1,903.2	-3,241.0	9,023.9	8,895.8	128.14	70.423		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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					
14,100.0	7,530.0	7,400.0	7,397.5	116.9	13.2	88.79	1,903.2	-3,241.0	9,116.2	8,986.3	129.88	70.189						
14,200.0	7,530.0	7,400.0	7,397.5	118.6	13.2	88.79	1,903.2	-3,241.0	9,208.7	9,077.1	131.62	69.962						
14,300.0	7,530.0	7,400.0	7,397.5	120.4	13.2	88.79	1,903.2	-3,241.0	9,301.3	9,167.9	133.37	69.743						
14,400.0	7,530.0	7,400.0	7,397.5	122.1	13.2	88.79	1,903.2	-3,241.0	9,394.1	9,259.0	135.11	69.529						
14,500.0	7,530.0	7,400.0	7,397.5	123.9	13.2	88.79	1,903.2	-3,241.0	9,487.0	9,350.2	136.85	69.323						
14,600.0	7,530.0	7,400.0	7,397.5	125.6	13.2	88.79	1,903.2	-3,241.0	9,580.1	9,441.5	138.60	69.122						
14,700.0	7,530.0	7,400.0	7,397.5	127.3	13.2	88.79	1,903.2	-3,241.0	9,673.3	9,533.0	140.34	68.927						
14,800.0	7,530.0	7,385.2	7,382.7	129.1	13.1	88.55	1,903.1	-3,240.9	9,766.6	9,624.6	142.05	68.756						
14,900.0	7,530.0	7,384.6	7,382.1	130.8	13.1	88.54	1,903.1	-3,240.9	9,860.1	9,716.3	143.79	68.573						
15,000.0	7,530.0	7,384.1	7,381.6	132.6	13.1	88.53	1,903.1	-3,240.9	9,953.7	9,808.2	145.53	68.395 SF						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-60.20	1,800.8	-3,144.3	3,623.7					
100.0	100.0	57.0	57.0	0.2	0.1	-60.20	1,800.8	-3,144.3	3,623.4	3,623.2	0.25	N/A		
200.0	200.0	157.0	157.0	0.3	0.3	-60.20	1,800.8	-3,144.3	3,623.4	3,622.8	0.59	6,093.100		
300.0	300.0	257.0	257.0	0.5	0.4	-60.20	1,800.8	-3,144.3	3,623.4	3,622.5	0.94	3,854.335		
400.0	400.0	357.0	357.0	0.7	0.6	-60.20	1,800.8	-3,144.3	3,623.4	3,622.2	1.29	2,818.679		
500.0	500.0	457.0	457.0	0.8	0.8	-60.20	1,800.8	-3,144.3	3,623.4	3,621.8	1.63	2,221.708		
600.0	600.0	557.0	557.0	1.0	1.0	-60.20	1,800.8	-3,144.3	3,623.4	3,621.5	1.98	1,833.409 CC		
700.0	700.0	657.0	657.0	1.2	1.1	-92.69	1,800.8	-3,144.3	3,623.5	3,621.2	2.32	1,560.411		
800.0	800.0	757.0	757.0	1.4	1.3	-92.73	1,800.8	-3,144.3	3,623.6	3,620.9	2.67	1,357.089 ES		
900.0	899.9	838.4	838.4	1.6	1.4	-92.78	1,801.0	-3,144.5	3,624.2	3,621.2	2.99	1,210.428		
988.4	988.1	923.0	923.0	1.7	1.6	-92.85	1,801.3	-3,144.9	3,624.9	3,621.6	3.31	1,095.303		
1,000.0	999.7	933.5	933.5	1.7	1.6	-92.86	1,801.3	-3,144.9	3,625.0	3,621.7	3.35	1,082.113		
1,100.0	1,099.4	997.3	997.3	1.9	1.7	-92.93	1,801.4	-3,145.6	3,626.4	3,622.8	3.66	992.019		
1,200.0	1,199.2	1,040.1	1,040.1	2.1	1.8	-92.98	1,802.0	-3,146.4	3,629.1	3,625.2	3.93	924.016		
1,300.0	1,299.0	1,074.0	1,074.0	2.3	1.8	-93.01	1,802.9	-3,147.4	3,633.6	3,629.4	4.19	867.952		
1,400.0	1,398.8	1,118.0	1,117.9	2.5	1.9	-93.04	1,804.7	-3,149.3	3,639.7	3,635.2	4.46	815.170		
1,500.0	1,498.5	1,157.5	1,157.2	2.7	2.0	-93.07	1,806.9	-3,151.4	3,647.4	3,642.7	4.74	769.992		
1,600.0	1,598.3	1,200.0	1,199.6	2.9	2.1	-93.11	1,809.4	-3,154.4	3,656.8	3,651.8	5.02	729.158		
1,700.0	1,698.1	1,263.0	1,262.2	3.2	2.2	-93.16	1,813.2	-3,160.0	3,667.7	3,662.3	5.33	688.137		
1,800.0	1,797.8	1,302.8	1,301.8	3.4	2.3	-93.20	1,815.7	-3,164.0	3,679.7	3,674.1	5.61	656.480		
1,900.0	1,897.6	1,349.7	1,348.3	3.6	2.4	-93.25	1,818.8	-3,169.2	3,693.1	3,687.2	5.89	626.672		
2,000.0	1,997.4	1,397.5	1,395.5	3.8	2.5	-93.30	1,822.3	-3,175.2	3,708.0	3,701.8	6.18	599.704		
2,100.0	2,097.1	1,449.0	1,446.4	4.0	2.7	-93.35	1,826.0	-3,182.1	3,723.9	3,717.4	6.48	574.726		
2,200.0	2,196.9	1,515.4	1,511.9	4.2	2.8	-93.43	1,831.0	-3,191.9	3,740.9	3,734.1	6.80	549.936		
2,300.0	2,296.7	1,626.2	1,621.1	4.4	3.1	-93.56	1,839.3	-3,208.7	3,758.2	3,751.0	7.20	521.774		
2,400.0	2,396.5	1,699.0	1,692.8	4.6	3.4	-93.63	1,845.6	-3,219.6	3,775.9	3,768.4	7.54	500.965		
2,500.0	2,496.2	1,740.7	1,733.8	4.8	3.5	-93.67	1,849.2	-3,226.3	3,794.6	3,786.8	7.82	485.356		
2,600.0	2,596.0	1,801.2	1,793.2	5.0	3.7	-93.74	1,854.8	-3,236.8	3,814.6	3,806.5	8.13	469.105		
2,700.0	2,695.8	1,868.5	1,859.1	5.2	3.9	-93.80	1,861.3	-3,248.7	3,835.4	3,826.9	8.46	453.502		
2,800.0	2,795.5	1,936.7	1,925.7	5.4	4.2	-93.86	1,868.8	-3,261.0	3,857.0	3,848.2	8.78	439.062		
2,900.0	2,895.3	2,012.0	1,999.3	5.6	4.5	-93.92	1,877.3	-3,274.8	3,879.0	3,869.9	9.12	425.131		
3,000.0	2,995.1	2,074.0	2,059.7	5.9	4.7	-93.98	1,884.5	-3,286.7	3,901.9	3,892.5	9.44	413.293		
3,100.0	3,094.9	2,113.8	2,098.3	6.1	4.9	-94.01	1,889.5	-3,294.9	3,926.2	3,916.5	9.72	403.943		
3,200.0	3,194.6	2,220.4	2,201.7	6.3	5.3	-94.09	1,903.0	-3,316.8	3,950.8	3,940.7	10.11	390.622		
3,300.0	3,294.4	2,282.5	2,261.9	6.5	5.6	-94.15	1,910.6	-3,330.1	3,975.9	3,965.4	10.43	381.166		
3,400.0	3,394.2	2,367.3	2,344.0	6.7	6.0	-94.25	1,919.5	-3,349.4	4,001.5	3,990.7	10.79	371.000		
3,500.0	3,493.9	2,476.3	2,449.5	6.9	6.5	-94.37	1,931.4	-3,374.0	4,027.0	4,015.9	11.18	360.096		
3,600.0	3,593.7	2,570.0	2,540.3	7.1	6.9	-94.46	1,942.5	-3,394.5	4,052.5	4,040.9	11.55	350.718		
3,700.0	3,693.5	2,690.9	2,657.4	7.3	7.4	-94.55	1,957.9	-3,420.3	4,078.0	4,066.0	11.97	340.567		
3,800.0	3,793.2	2,819.3	2,782.0	7.5	8.0	-94.66	1,973.2	-3,446.9	4,102.3	4,089.9	12.41	330.665		
3,900.0	3,893.0	2,926.2	2,886.0	7.7	8.5	-94.72	1,986.9	-3,468.0	4,126.4	4,113.6	12.80	322.298		
4,000.0	3,992.8	3,041.9	2,998.5	8.0	9.0	-94.79	2,002.3	-3,490.2	4,150.1	4,136.8	13.22	314.023		
4,100.0	4,092.6	3,122.8	3,077.2	8.2	9.3	-94.82	2,013.2	-3,505.5	4,173.7	4,160.2	13.57	307.605		
4,200.0	4,192.3	3,275.6	3,225.9	8.4	10.0	-94.92	2,031.9	-3,534.6	4,196.8	4,182.7	14.04	298.818		
4,300.0	4,292.1	3,352.0	3,300.4	8.6	10.3	-94.99	2,039.6	-3,549.7	4,219.6	4,205.2	14.39	293.301		
4,400.0	4,391.9	3,536.2	3,480.3	8.8	11.0	-95.12	2,061.0	-3,583.3	4,241.7	4,226.8	14.92	284.288		
4,500.0	4,491.6	3,819.0	3,758.0	9.0	12.1	-95.28	2,091.0	-3,627.2	4,261.6	4,245.9	15.63	272.659		
4,600.0	4,591.4	3,854.4	3,792.9	9.2	12.2	-95.31	2,093.8	-3,632.5	4,279.1	4,263.2	15.90	269.123		
4,700.0	4,691.2	3,893.6	3,831.5	9.4	12.4	-95.35	2,096.8	-3,639.1	4,298.2	4,282.0	16.18	265.678		
4,800.0	4,790.9	3,958.2	3,894.8	9.6	12.6	-95.41	2,102.9	-3,650.0	4,318.2	4,301.7	16.50	261.677		
4,900.0	4,890.7	4,006.0	3,941.6	9.8	12.8	-95.43	2,108.3	-3,658.1	4,339.1	4,322.3	16.80	258.321		
5,000.0	4,990.5	4,039.3	3,974.2	10.1	12.9	-95.45	2,112.4	-3,664.0	4,361.3	4,344.3	17.07	255.553		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	4,069.0	4,003.0	10.3	13.1	-95.47	2,116.1	-3,669.8	4,385.1	4,367.8	17.33	253.055		
5,200.0	5,190.0	4,131.0	4,063.1	10.5	13.4	-95.50	2,124.0	-3,682.7	4,410.1	4,392.4	17.65	249.892		
5,300.0	5,289.8	4,249.2	4,177.7	10.7	13.9	-95.59	2,138.3	-3,708.2	4,435.4	4,417.4	18.06	245.562		
5,400.0	5,389.6	4,414.4	4,338.3	10.9	14.6	-95.76	2,153.8	-3,743.6	4,459.6	4,441.1	18.55	240.354		
5,500.0	5,489.3	4,522.9	4,444.0	11.1	15.1	-95.89	2,162.5	-3,766.3	4,482.6	4,463.7	18.95	236.588		
5,600.0	5,589.1	4,612.2	4,531.0	11.3	15.5	-96.02	2,168.0	-3,785.9	4,505.8	4,486.5	19.31	233.390		
5,700.0	5,688.9	4,787.4	4,702.1	11.5	16.2	-96.22	2,180.9	-3,821.0	4,527.5	4,507.7	19.82	228.477		
5,800.0	5,788.7	4,866.3	4,779.3	11.7	16.5	-96.27	2,189.3	-3,835.3	4,549.2	4,529.0	20.17	225.589		
5,900.0	5,888.4	4,939.0	4,850.2	11.9	16.8	-96.30	2,198.7	-3,848.0	4,571.4	4,550.9	20.51	222.924		
6,000.0	5,988.2	5,021.2	4,930.3	12.2	17.2	-96.32	2,209.9	-3,862.7	4,594.2	4,573.3	20.87	220.185		
6,100.0	6,088.0	5,184.2	5,089.3	12.4	17.9	-96.34	2,233.1	-3,889.9	4,616.0	4,594.7	21.37	215.968		
6,200.0	6,187.7	5,256.4	5,159.8	12.6	18.2	-96.35	2,243.7	-3,901.7	4,637.8	4,616.1	21.72	213.557		
6,300.0	6,287.5	5,362.1	5,263.0	12.8	18.6	-96.37	2,257.9	-3,919.4	4,659.5	4,637.4	22.12	210.669		
6,400.0	6,387.3	5,646.2	5,541.8	13.0	19.7	-96.62	2,280.7	-3,968.7	4,679.5	4,656.7	22.82	205.100		
6,500.0	6,487.0	5,724.0	5,618.3	13.2	19.9	-96.71	2,284.5	-3,981.9	4,697.7	4,674.5	23.16	202.857		
6,600.0	6,586.8	5,808.0	5,701.0	13.4	20.2	-96.81	2,288.8	-3,996.4	4,716.3	4,692.8	23.51	200.625		
6,700.0	6,686.6	5,901.0	5,792.3	13.6	20.6	-96.94	2,292.3	-4,013.2	4,735.2	4,711.3	23.87	198.344		
6,787.0	6,773.4	6,026.2	5,915.6	13.8	21.0	-97.08	2,299.0	-4,034.3	4,751.2	4,726.9	24.27	195.758		
6,800.0	6,786.4	6,038.5	5,927.7	13.8	21.0	-107.79	2,299.7	-4,036.3	4,753.6	4,729.3	24.31	195.533		
6,850.0	6,836.3	6,078.9	5,967.5	13.9	21.2	164.31	2,302.4	-4,042.7	4,763.7	4,739.3	24.42	195.045		
6,900.0	6,886.2	6,113.5	6,001.5	14.0	21.3	133.59	2,304.9	-4,048.2	4,775.4	4,750.9	24.50	194.904		
6,950.0	6,935.7	6,318.3	6,203.7	14.0	22.0	125.13	2,319.7	-4,077.4	4,787.6	4,762.8	24.84	192.757		
7,000.0	6,984.6	6,359.3	6,244.3	14.0	22.1	120.82	2,322.7	-4,082.5	4,800.5	4,775.6	24.89	192.871		
7,050.0	7,032.6	6,652.5	6,535.4	14.0	22.9	118.84	2,341.0	-4,112.5	4,813.3	4,788.0	25.31	190.185		
7,100.0	7,079.7	7,065.0	6,947.0	13.9	23.5	118.25	2,347.8	-4,134.1	4,823.9	4,798.1	25.82	186.834		
7,150.0	7,125.4	7,106.8	6,988.9	13.9	23.6	116.78	2,348.5	-4,134.6	4,834.9	4,809.0	25.81	187.321		
7,200.0	7,169.6	7,149.6	7,031.6	13.8	23.6	115.46	2,349.4	-4,135.2	4,847.2	4,821.4	25.82	187.725		
7,250.0	7,212.1	7,200.8	7,082.8	13.8	23.7	114.26	2,350.1	-4,135.9	4,860.9	4,835.0	25.87	187.910		
7,300.0	7,252.6	7,270.7	7,152.7	13.7	23.8	113.21	2,350.6	-4,136.8	4,875.6	4,849.7	25.97	187.768		
7,350.0	7,291.0	7,315.9	7,197.9	13.7	23.8	112.00	2,351.0	-4,137.1	4,891.5	4,865.4	26.10	187.445		
7,400.0	7,327.1	7,349.7	7,231.7	13.7	23.9	110.67	2,351.4	-4,137.3	4,908.7	4,882.4	26.28	186.754		
7,450.0	7,360.7	7,380.0	7,262.0	13.7	23.9	109.25	2,351.8	-4,137.5	4,927.0	4,900.5	26.54	185.613		
7,500.0	7,391.6	7,404.7	7,286.7	13.7	23.9	107.71	2,352.2	-4,137.6	4,946.5	4,919.6	26.88	183.997		
7,550.0	7,419.7	7,426.3	7,308.3	13.8	23.9	106.05	2,352.6	-4,137.7	4,967.1	4,939.8	27.30	181.942		
7,600.0	7,444.8	7,445.6	7,327.5	13.9	24.0	104.28	2,352.9	-4,137.8	4,988.8	4,961.0	27.79	179.520		
7,650.0	7,466.9	7,462.2	7,344.2	14.1	24.0	102.40	2,353.3	-4,138.0	5,011.5	4,983.1	28.34	176.833		
7,700.0	7,485.8	7,476.3	7,358.3	14.3	24.0	100.39	2,353.6	-4,138.1	5,035.0	5,006.1	28.94	174.011		
7,750.0	7,501.5	7,487.8	7,369.7	14.6	24.0	98.28	2,353.8	-4,138.1	5,059.3	5,029.8	29.55	171.191		
7,800.0	7,513.7	7,505.0	7,387.0	14.9	24.0	96.16	2,354.2	-4,138.3	5,084.3	5,054.1	30.18	168.491		
7,850.0	7,522.6	7,505.0	7,387.0	15.2	24.0	93.76	2,354.2	-4,138.3	5,109.8	5,079.0	30.77	166.086		
7,900.0	7,528.0	7,507.2	7,389.2	15.6	24.0	91.34	2,354.2	-4,138.3	5,135.8	5,104.5	31.31	164.042		
7,952.9	7,530.0	7,508.6	7,390.6	16.1	24.0	88.74	2,354.3	-4,138.3	5,163.6	5,131.8	31.80	162.360		
8,000.0	7,530.0	7,506.5	7,388.5	16.5	24.0	88.71	2,354.2	-4,138.3	5,188.6	5,156.4	32.26	160.861		
8,100.0	7,530.0	7,505.0	7,387.0	17.5	24.0	88.69	2,354.2	-4,138.3	5,242.8	5,209.4	33.31	157.379		
8,200.0	7,530.0	7,505.0	7,387.0	18.7	24.0	88.69	2,354.2	-4,138.3	5,298.2	5,263.8	34.48	153.657		
8,300.0	7,530.0	7,505.0	7,387.0	19.9	24.0	88.69	2,354.2	-4,138.3	5,355.0	5,319.3	35.74	149.844		
8,400.0	7,530.0	7,505.0	7,387.0	21.2	24.0	88.69	2,354.2	-4,138.3	5,413.0	5,376.0	37.07	146.039		
8,500.0	7,530.0	7,505.0	7,387.0	22.6	24.0	88.69	2,354.2	-4,138.3	5,472.3	5,433.8	38.45	142.308		
8,600.0	7,530.0	7,505.0	7,387.0	24.0	24.0	88.69	2,354.2	-4,138.3	5,532.7	5,492.8	39.89	138.697		
8,700.0	7,530.0	7,505.0	7,387.0	25.4	24.0	88.69	2,354.2	-4,138.3	5,594.2	5,552.8	41.37	135.232		
8,800.0	7,530.0	7,505.0	7,387.0	26.9	24.0	88.69	2,354.2	-4,138.3	5,656.8	5,614.0	42.88	131.929		
8,900.0	7,530.0	7,505.0	7,387.0	28.4	24.0	88.69	2,354.2	-4,138.3	5,720.5	5,676.1	44.42	128.792		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
9,000.0	7,530.0	7,505.0	7,387.0	30.0	24.0	88.69	2,354.2	-4,138.3	5,785.3	5,739.3	45.98	125.822		
9,100.0	7,530.0	7,487.0	7,369.0	31.5	24.0	88.46	2,353.8	-4,138.1	5,851.0	5,803.4	47.53	123.093		
9,200.0	7,530.0	7,485.4	7,367.4	33.1	24.0	88.44	2,353.8	-4,138.1	5,917.6	5,868.5	49.13	120.448		
9,300.0	7,530.0	7,483.8	7,365.8	34.7	24.0	88.42	2,353.7	-4,138.1	5,985.2	5,934.5	50.74	117.953		
9,400.0	7,530.0	7,482.3	7,364.2	36.3	24.0	88.40	2,353.7	-4,138.1	6,053.7	6,001.4	52.37	115.600		
9,500.0	7,530.0	7,480.7	7,362.7	38.0	24.0	88.38	2,353.6	-4,138.1	6,123.1	6,069.1	54.00	113.381		
9,600.0	7,530.0	7,479.2	7,361.1	39.6	24.0	88.36	2,353.6	-4,138.1	6,193.3	6,137.7	55.65	111.288		
9,700.0	7,530.0	7,477.6	7,359.6	41.3	24.0	88.34	2,353.6	-4,138.1	6,264.3	6,207.0	57.31	109.313		
9,800.0	7,530.0	7,476.1	7,358.1	42.9	24.0	88.32	2,353.6	-4,138.0	6,336.1	6,277.1	58.97	107.449		
9,900.0	7,530.0	7,474.6	7,356.6	44.6	24.0	88.30	2,353.5	-4,138.0	6,408.7	6,348.0	60.64	105.687		
10,000.0	7,530.0	7,473.1	7,355.1	46.3	24.0	88.28	2,353.5	-4,138.0	6,481.9	6,419.6	62.31	104.021		
10,100.0	7,530.0	7,471.7	7,353.6	47.9	24.0	88.26	2,353.5	-4,138.0	6,555.9	6,491.9	63.99	102.445		
10,200.0	7,530.0	7,470.2	7,352.2	49.6	24.0	88.24	2,353.4	-4,138.0	6,630.6	6,564.9	65.68	100.953		
10,300.0	7,530.0	7,468.8	7,350.8	51.3	24.0	88.22	2,353.4	-4,138.0	6,705.9	6,638.6	67.37	99.539		
10,400.0	7,530.0	7,467.4	7,349.3	53.0	24.0	88.20	2,353.4	-4,138.0	6,781.9	6,712.8	69.06	98.197		
10,500.0	7,530.0	7,465.9	7,347.9	54.7	24.0	88.18	2,353.3	-4,138.0	6,858.5	6,787.7	70.76	96.924		
10,600.0	7,530.0	7,464.5	7,346.5	56.4	24.0	88.16	2,353.3	-4,138.0	6,935.6	6,863.2	72.46	95.714		
10,700.0	7,530.0	7,463.1	7,345.1	58.1	24.0	88.15	2,353.3	-4,138.0	7,013.4	6,939.2	74.17	94.564		
10,800.0	7,530.0	7,461.8	7,343.7	59.8	24.0	88.13	2,353.3	-4,137.9	7,091.7	7,015.8	75.87	93.469		
10,900.0	7,530.0	7,460.4	7,342.4	61.5	24.0	88.11	2,353.2	-4,137.9	7,170.6	7,093.0	77.58	92.426		
11,000.0	7,530.0	7,459.0	7,341.0	63.2	24.0	88.09	2,353.2	-4,137.9	7,249.9	7,170.6	79.29	91.433		
11,100.0	7,530.0	7,457.7	7,339.7	64.9	24.0	88.07	2,353.2	-4,137.9	7,329.8	7,248.8	81.01	90.485		
11,200.0	7,530.0	7,456.4	7,338.3	66.6	24.0	88.06	2,353.1	-4,137.9	7,410.2	7,327.5	82.72	89.580		
11,300.0	7,530.0	7,455.0	7,337.0	68.4	24.0	88.04	2,353.1	-4,137.9	7,491.0	7,406.6	84.44	88.716		
11,400.0	7,530.0	7,453.7	7,335.7	70.1	24.0	88.02	2,353.1	-4,137.9	7,572.3	7,486.1	86.16	87.890		
11,500.0	7,530.0	7,452.4	7,334.4	71.8	24.0	88.01	2,353.1	-4,137.9	7,654.0	7,566.2	87.88	87.100		
11,600.0	7,530.0	7,451.1	7,333.1	73.5	24.0	87.99	2,353.0	-4,137.9	7,736.2	7,646.6	89.60	86.344		
11,700.0	7,530.0	7,449.9	7,331.8	75.2	24.0	87.97	2,353.0	-4,137.9	7,818.8	7,727.5	91.32	85.619		
11,800.0	7,530.0	7,448.6	7,330.6	77.0	24.0	87.96	2,353.0	-4,137.9	7,901.8	7,808.7	93.04	84.924		
11,900.0	7,530.0	7,447.3	7,329.3	78.7	24.0	87.94	2,353.0	-4,137.9	7,985.1	7,890.4	94.77	84.258		
12,000.0	7,530.0	7,446.1	7,328.1	80.4	24.0	87.92	2,352.9	-4,137.8	8,068.9	7,972.4	96.50	83.619		
12,100.0	7,530.0	7,444.9	7,326.8	82.2	24.0	87.91	2,352.9	-4,137.8	8,153.0	8,054.8	98.22	83.005		
12,200.0	7,530.0	7,443.6	7,325.6	83.9	24.0	87.89	2,352.9	-4,137.8	8,237.5	8,137.5	99.95	82.415		
12,300.0	7,530.0	7,442.4	7,324.4	85.6	24.0	87.88	2,352.9	-4,137.8	8,322.3	8,220.6	101.68	81.847		
12,400.0	7,530.0	7,441.2	7,323.2	87.3	24.0	87.86	2,352.9	-4,137.8	8,407.4	8,304.0	103.41	81.301		
12,500.0	7,530.0	7,440.0	7,322.0	89.1	24.0	87.84	2,352.8	-4,137.8	8,492.9	8,387.8	105.14	80.776		
12,600.0	7,530.0	7,438.9	7,320.8	90.8	24.0	87.83	2,352.8	-4,137.8	8,578.7	8,471.8	106.87	80.270		
12,700.0	7,530.0	7,437.7	7,319.7	92.5	24.0	87.81	2,352.8	-4,137.8	8,664.8	8,556.2	108.60	79.783		
12,800.0	7,530.0	7,436.5	7,318.5	94.3	24.0	87.80	2,352.8	-4,137.8	8,751.2	8,640.8	110.34	79.313		
12,900.0	7,530.0	7,435.4	7,317.3	96.0	24.0	87.78	2,352.7	-4,137.8	8,837.8	8,725.8	112.07	78.859		
13,000.0	7,530.0	7,434.2	7,316.2	97.8	24.0	87.77	2,352.7	-4,137.8	8,924.8	8,811.0	113.80	78.422		
13,100.0	7,530.0	7,433.1	7,315.0	99.5	24.0	87.75	2,352.7	-4,137.8	9,012.0	8,896.5	115.54	78.000		
13,200.0	7,530.0	7,431.9	7,313.9	101.2	24.0	87.74	2,352.7	-4,137.8	9,099.5	8,982.2	117.27	77.592		
13,300.0	7,530.0	7,430.8	7,312.8	103.0	23.9	87.72	2,352.7	-4,137.7	9,187.2	9,068.2	119.01	77.197		
13,400.0	7,530.0	7,429.7	7,311.7	104.7	23.9	87.71	2,352.6	-4,137.7	9,275.2	9,154.5	120.75	76.816		
13,500.0	7,530.0	7,428.6	7,310.6	106.4	23.9	87.70	2,352.6	-4,137.7	9,363.4	9,241.0	122.48	76.448		
13,600.0	7,530.0	7,427.5	7,309.5	108.2	23.9	87.68	2,352.6	-4,137.7	9,451.9	9,327.7	124.22	76.091		
13,700.0	7,530.0	7,426.4	7,308.4	109.9	23.9	87.67	2,352.6	-4,137.7	9,540.6	9,414.6	125.96	75.746		
13,800.0	7,530.0	7,425.4	7,307.3	111.7	23.9	87.65	2,352.6	-4,137.7	9,629.5	9,501.8	127.69	75.411		
13,900.0	7,530.0	7,424.3	7,306.3	113.4	23.9	87.64	2,352.5	-4,137.7	9,718.6	9,589.2	129.43	75.087		
14,000.0	7,530.0	7,423.2	7,305.2	115.1	23.9	87.62	2,352.5	-4,137.7	9,808.0	9,676.8	131.17	74.773		
14,100.0	7,530.0	7,422.2	7,304.2	116.9	23.9	87.61	2,352.5	-4,137.7	9,897.5	9,764.6	132.91	74.469		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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)		Depth (ft)		Depth (ft)		(')		(ft)		(ft)		(ft)						(ft)		SF	
14,200.0		7,530.0		7,421.1		7,303.1		118.6		23.9		87.60		2,352.5		-4,137.7		9,987.2		9,852.6		134.65		74.174 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-61.13	1,753.5	-3,180.6	3,632.2					
100.0	100.0	55.3	55.3	0.2	0.1	-61.13	1,753.5	-3,180.7	3,632.0	3,631.7	0.25	N/A CC		
200.0	200.0	152.4	152.4	0.3	0.3	-61.13	1,753.4	-3,180.8	3,632.1	3,631.5	0.59	6,187.865		
300.0	300.0	249.4	249.4	0.5	0.4	-61.14	1,753.4	-3,181.0	3,632.2	3,631.3	0.93	3,916.292		
400.0	400.0	346.4	346.4	0.7	0.6	-61.14	1,753.3	-3,181.3	3,632.5	3,631.2	1.27	2,864.807		
500.0	500.0	443.4	443.4	0.8	0.8	-61.14	1,753.3	-3,181.7	3,632.8	3,631.2	1.61	2,258.557 ES		
600.0	600.0	540.5	540.5	1.0	0.9	-61.15	1,753.2	-3,182.2	3,633.2	3,631.3	1.95	1,864.184		
700.0	700.0	637.5	637.5	1.2	1.1	-93.64	1,753.0	-3,182.8	3,633.8	3,631.5	2.29	1,585.799		
800.0	800.0	734.5	734.5	1.4	1.3	-93.68	1,752.9	-3,183.5	3,634.5	3,631.9	2.63	1,379.461		
900.0	899.9	830.6	830.6	1.6	1.4	-93.74	1,752.8	-3,184.4	3,635.5	3,632.5	2.98	1,218.791		
988.4	988.1	914.4	914.4	1.7	1.6	-93.82	1,752.7	-3,185.2	3,636.5	3,633.2	3.30	1,103.059		
1,000.0	999.7	925.4	925.4	1.7	1.6	-93.83	1,752.7	-3,185.3	3,636.7	3,633.3	3.34	1,089.402		
1,100.0	1,099.4	1,012.4	1,012.4	1.9	1.7	-93.93	1,752.6	-3,186.3	3,638.1	3,634.4	3.68	987.333		
1,200.0	1,199.2	1,080.4	1,080.4	2.1	1.9	-94.02	1,752.3	-3,187.6	3,640.2	3,636.2	4.00	909.496		
1,300.0	1,299.0	1,144.0	1,143.9	2.3	2.0	-94.11	1,751.4	-3,190.1	3,643.4	3,639.0	4.32	844.117		
1,400.0	1,398.8	1,207.7	1,207.4	2.5	2.1	-94.23	1,749.8	-3,193.7	3,647.5	3,642.9	4.64	786.835		
1,500.0	1,498.5	1,272.0	1,271.6	2.7	2.2	-94.37	1,747.4	-3,198.2	3,652.6	3,647.6	4.96	736.115		
1,600.0	1,598.3	1,333.0	1,332.3	2.9	2.4	-94.51	1,744.5	-3,203.6	3,658.7	3,653.4	5.29	692.039		
1,700.0	1,698.1	1,394.2	1,393.0	3.2	2.5	-94.67	1,740.9	-3,210.1	3,666.0	3,660.3	5.62	651.905		
1,800.0	1,797.8	1,527.8	1,525.1	3.4	2.9	-95.09	1,729.4	-3,226.5	3,673.7	3,667.5	6.15	597.664		
1,900.0	1,897.6	1,617.0	1,612.9	3.6	3.1	-95.41	1,718.9	-3,237.9	3,680.5	3,673.9	6.59	558.241		
2,000.0	1,997.4	1,695.3	1,689.8	3.8	3.4	-95.71	1,708.5	-3,248.8	3,687.8	3,680.8	7.03	524.342		
2,100.0	2,097.1	1,750.9	1,744.1	4.0	3.6	-95.94	1,700.7	-3,257.3	3,696.2	3,688.8	7.41	498.511		
2,200.0	2,196.9	1,807.0	1,798.9	4.2	3.8	-96.17	1,692.9	-3,266.7	3,706.0	3,698.2	7.80	474.982		
2,300.0	2,296.7	1,876.1	1,866.2	4.4	4.0	-96.45	1,683.3	-3,279.0	3,716.8	3,708.6	8.24	451.046		
2,400.0	2,396.5	1,933.2	1,921.8	4.6	4.2	-96.69	1,675.4	-3,289.4	3,728.6	3,719.9	8.65	431.270		
2,500.0	2,496.2	1,997.0	1,983.7	4.8	4.5	-96.97	1,666.6	-3,302.2	3,741.7	3,732.7	9.08	412.090		
2,600.0	2,596.0	2,028.3	2,014.0	5.0	4.7	-97.10	1,662.2	-3,308.9	3,756.2	3,746.8	9.41	399.164		
2,700.0	2,695.8	2,090.0	2,073.3	5.2	4.9	-97.38	1,653.2	-3,323.1	3,772.1	3,762.3	9.86	382.622		
2,800.0	2,795.5	2,129.4	2,111.0	5.4	5.1	-97.57	1,647.2	-3,332.8	3,789.4	3,779.1	10.23	370.494		
2,900.0	2,895.3	2,298.4	2,272.4	5.6	6.0	-98.38	1,619.5	-3,374.7	3,807.2	3,796.1	11.15	341.415		
3,000.0	2,995.1	2,374.0	2,344.6	5.9	6.4	-98.75	1,606.5	-3,393.0	3,824.1	3,812.4	11.68	327.378		
3,100.0	3,094.9	2,433.8	2,401.6	6.1	6.7	-99.03	1,596.6	-3,407.7	3,841.8	3,829.7	12.14	316.396		
3,200.0	3,194.6	2,626.4	2,585.0	6.3	7.7	-100.00	1,560.2	-3,454.3	3,858.7	3,845.4	13.24	291.517		
3,300.0	3,294.4	2,769.7	2,721.6	6.5	8.5	-100.71	1,531.8	-3,486.4	3,873.9	3,859.8	14.09	274.897		
3,400.0	3,394.2	2,842.5	2,791.2	6.7	8.9	-101.07	1,517.3	-3,502.5	3,889.3	3,874.6	14.63	265.835		
3,500.0	3,493.9	2,968.5	2,911.7	6.9	9.6	-101.68	1,492.3	-3,529.6	3,904.2	3,888.8	15.40	253.502		
3,600.0	3,593.7	3,030.0	2,970.4	7.1	9.9	-101.97	1,480.2	-3,543.2	3,920.0	3,904.1	15.88	246.783		
3,700.0	3,693.5	3,073.1	3,011.6	7.3	10.1	-102.18	1,471.9	-3,553.1	3,937.1	3,920.8	16.28	241.820		
3,800.0	3,793.2	3,125.0	3,061.0	7.5	10.4	-102.42	1,462.3	-3,565.5	3,955.4	3,938.6	16.71	236.641		
3,900.0	3,893.0	3,314.0	3,242.1	7.7	11.4	-103.27	1,429.3	-3,608.2	3,972.8	3,955.1	17.69	224.546		
4,000.0	3,992.8	3,360.4	3,286.8	8.0	11.6	-103.46	1,421.5	-3,618.2	3,990.2	3,972.1	18.09	220.606		
4,100.0	4,092.6	3,407.0	3,331.4	8.2	11.9	-103.66	1,413.9	-3,629.1	4,009.3	3,990.8	18.48	216.928		
4,200.0	4,192.3	3,568.0	3,485.8	8.4	12.7	-104.35	1,386.8	-3,665.6	4,027.6	4,008.3	19.34	208.202		
4,300.0	4,292.1	3,663.0	3,576.7	8.6	13.3	-104.78	1,368.9	-3,687.2	4,046.0	4,026.0	19.96	202.708		
4,400.0	4,391.9	3,741.6	3,651.6	8.8	13.7	-105.13	1,353.7	-3,705.2	4,064.5	4,044.0	20.50	198.314		
4,500.0	4,491.6	3,807.6	3,714.7	9.0	14.1	-105.42	1,341.5	-3,720.5	4,083.9	4,062.9	20.97	194.729		
4,600.0	4,591.4	3,879.0	3,782.8	9.2	14.5	-105.73	1,328.8	-3,737.5	4,104.2	4,082.7	21.47	191.197		
4,700.0	4,691.2	3,966.9	3,866.7	9.4	14.9	-106.10	1,313.5	-3,758.8	4,125.0	4,103.0	22.02	187.327		
4,800.0	4,790.9	4,044.2	3,940.5	9.6	15.4	-106.43	1,300.0	-3,777.5	4,146.1	4,123.6	22.54	183.963		
4,900.0	4,890.7	4,140.5	4,032.3	9.8	15.9	-106.83	1,283.0	-3,801.1	4,167.7	4,144.6	23.12	180.253		
5,000.0	4,990.5	4,208.9	4,097.5	10.1	16.3	-107.12	1,270.9	-3,817.8	4,189.5	4,165.9	23.61	177.424		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,100.0	5,090.3	4,382.3	4,262.1	10.3	17.3	-107.87	1,237.6	-3,861.0	4,212.0	4,187.5	24.51	171.825		
5,200.0	5,190.0	4,476.0	4,351.8	10.5	17.8	-108.25	1,220.7	-3,882.2	4,232.3	4,207.3	25.07	168.800		
5,300.0	5,289.8	4,540.0	4,412.8	10.7	18.2	-108.51	1,209.4	-3,897.7	4,254.2	4,228.7	25.52	166.677		
5,400.0	5,389.6	4,568.7	4,440.2	10.9	18.3	-108.62	1,204.4	-3,905.0	4,277.0	4,251.2	25.83	165.585		
5,500.0	5,489.3	4,658.3	4,525.7	11.1	18.8	-108.96	1,190.0	-3,927.2	4,300.3	4,273.9	26.35	163.178		
5,600.0	5,589.1	4,730.0	4,594.0	11.3	19.3	-109.24	1,177.9	-3,945.7	4,324.5	4,297.6	26.83	161.180		
5,700.0	5,688.9	4,792.1	4,652.8	11.5	19.6	-109.48	1,167.2	-3,962.1	4,349.4	4,322.1	27.26	159.522		
5,800.0	5,788.7	5,166.3	5,011.4	11.7	21.6	-110.86	1,104.7	-4,048.7	4,371.4	4,342.7	28.72	152.227		
5,900.0	5,888.4	5,536.8	5,374.3	11.9	23.0	-111.89	1,060.6	-4,108.2	4,387.6	4,357.8	29.80	147.238		
6,000.0	5,988.2	6,011.5	5,846.4	12.2	24.0	-112.76	1,029.3	-4,142.1	4,393.9	4,363.2	30.73	142.973		
6,100.0	6,088.0	6,114.4	5,949.3	12.4	24.1	-112.87	1,027.5	-4,144.7	4,398.8	4,367.8	31.03	141.753		
6,200.0	6,187.7	6,217.8	6,052.6	12.6	24.2	-112.97	1,026.9	-4,147.0	4,403.6	4,372.2	31.33	140.560		
6,300.0	6,287.5	6,335.0	6,169.8	12.8	24.3	-113.07	1,026.2	-4,149.4	4,408.1	4,376.5	31.64	139.321		
6,400.0	6,387.3	6,430.0	6,264.7	13.0	24.4	-113.16	1,025.8	-4,151.2	4,412.6	4,380.6	31.93	138.212		
6,500.0	6,487.0	6,521.9	6,356.6	13.2	24.5	-113.24	1,025.7	-4,153.0	4,417.1	4,384.9	32.21	137.131		
6,600.0	6,586.8	6,608.6	6,443.3	13.4	24.6	-113.31	1,025.6	-4,154.8	4,421.9	4,389.4	32.49	136.090		
6,700.0	6,686.6	6,694.8	6,529.5	13.6	24.7	-113.39	1,025.6	-4,156.9	4,427.0	4,394.3	32.78	135.061		
6,787.0	6,773.4	6,769.5	6,604.2	13.8	24.8	-113.46	1,025.4	-4,159.0	4,431.7	4,398.7	33.03	134.178		
6,800.0	6,786.4	6,780.6	6,615.3	13.8	24.8	-124.05	1,025.4	-4,159.4	4,432.5	4,399.4	33.05	134.118		
6,850.0	6,836.3	6,839.3	6,674.0	13.9	24.9	148.56	1,025.1	-4,161.1	4,435.7	4,402.6	33.11	133.968		
6,900.0	6,886.2	6,925.6	6,760.2	14.0	25.0	118.47	1,024.4	-4,163.2	4,439.1	4,406.0	33.18	133.792		
6,950.0	6,935.7	7,004.8	6,839.4	14.0	25.1	110.49	1,023.5	-4,164.6	4,442.7	4,409.5	33.21	133.762		
7,000.0	6,984.6	7,053.4	6,888.0	14.0	25.1	106.87	1,022.9	-4,165.2	4,446.6	4,413.5	33.16	134.082		
7,050.0	7,032.6	7,101.1	6,935.7	14.0	25.2	104.77	1,022.4	-4,165.9	4,451.1	4,418.0	33.08	134.543		
7,100.0	7,079.7	7,147.8	6,982.4	13.9	25.2	103.37	1,022.1	-4,166.5	4,456.1	4,423.1	32.98	135.130		
7,150.0	7,125.4	7,187.0	7,021.6	13.9	25.3	102.30	1,021.9	-4,167.1	4,461.7	4,428.8	32.83	135.881		
7,200.0	7,169.6	7,228.6	7,063.2	13.8	25.3	101.46	1,021.8	-4,167.6	4,467.8	4,435.1	32.67	136.748		
7,250.0	7,212.1	7,263.5	7,098.1	13.8	25.3	100.70	1,022.0	-4,168.1	4,474.6	4,442.1	32.49	137.719		
7,300.0	7,252.6	7,296.6	7,131.2	13.7	25.4	100.01	1,022.3	-4,168.6	4,482.0	4,449.7	32.31	138.721		
7,350.0	7,291.0	7,327.6	7,162.2	13.7	25.4	99.34	1,022.8	-4,169.1	4,490.1	4,458.0	32.14	139.714		
7,400.0	7,327.1	7,356.4	7,191.0	13.7	25.4	98.67	1,023.3	-4,169.6	4,498.9	4,466.9	31.99	140.652		
7,450.0	7,360.7	7,384.5	7,219.0	13.7	25.4	97.99	1,023.9	-4,170.1	4,508.3	4,476.5	31.87	141.475		
7,500.0	7,391.6	7,414.0	7,248.5	13.7	25.5	97.33	1,024.7	-4,170.6	4,518.4	4,486.6	31.79	142.114		
7,550.0	7,419.7	7,440.7	7,275.2	13.8	25.5	96.62	1,025.3	-4,171.0	4,529.1	4,497.4	31.77	142.563		
7,600.0	7,444.8	7,464.5	7,299.0	13.9	25.5	95.86	1,025.9	-4,171.5	4,540.5	4,508.7	31.80	142.783		
7,650.0	7,466.9	7,485.2	7,319.7	14.1	25.5	95.04	1,026.4	-4,171.8	4,552.4	4,520.5	31.89	142.745		
7,700.0	7,485.8	7,503.1	7,337.6	14.3	25.5	94.16	1,026.8	-4,172.1	4,565.0	4,532.9	32.05	142.427		
7,750.0	7,501.5	7,524.0	7,358.5	14.6	25.6	93.28	1,027.3	-4,172.5	4,578.1	4,545.8	32.29	141.782		
7,800.0	7,513.7	7,540.1	7,374.6	14.9	25.6	92.31	1,027.7	-4,172.8	4,591.7	4,559.1	32.59	140.881		
7,850.0	7,522.6	7,551.3	7,385.8	15.2	25.6	91.25	1,027.9	-4,172.9	4,605.8	4,572.9	32.96	139.742		
7,900.0	7,528.0	7,557.6	7,392.0	15.6	25.6	90.10	1,028.0	-4,173.0	4,620.4	4,587.0	33.39	138.393		
7,952.9	7,530.0	7,558.7	7,393.2	16.1	25.6	88.78	1,028.1	-4,173.0	4,636.2	4,602.3	33.90	136.775		
8,000.0	7,530.0	7,557.2	7,391.6	16.5	25.6	88.76	1,028.0	-4,173.0	4,650.6	4,616.3	34.35	135.389		
8,100.0	7,530.0	7,553.9	7,388.4	17.5	25.6	88.72	1,028.0	-4,173.0	4,682.7	4,647.3	35.41	132.255		
8,200.0	7,530.0	7,550.6	7,385.1	18.7	25.6	88.68	1,027.9	-4,172.9	4,716.7	4,680.1	36.57	128.974		
8,300.0	7,530.0	7,547.3	7,381.8	19.9	25.6	88.64	1,027.8	-4,172.9	4,752.6	4,714.7	37.82	125.650		
8,400.0	7,530.0	7,544.0	7,378.5	21.2	25.6	88.59	1,027.7	-4,172.8	4,790.2	4,751.1	39.15	122.360		
8,500.0	7,530.0	7,540.6	7,375.1	22.6	25.6	88.55	1,027.7	-4,172.8	4,829.7	4,789.1	40.53	119.155		
8,600.0	7,530.0	7,537.2	7,371.7	24.0	25.6	88.51	1,027.6	-4,172.7	4,870.9	4,828.9	41.97	116.068		
8,700.0	7,530.0	7,533.8	7,368.3	25.4	25.6	88.46	1,027.5	-4,172.7	4,913.7	4,870.3	43.44	113.119		
8,800.0	7,530.0	7,530.3	7,364.8	26.9	25.6	88.42	1,027.4	-4,172.6	4,958.2	4,913.3	44.95	110.317		
8,900.0	7,530.0	7,526.9	7,361.4	28.4	25.6	88.37	1,027.3	-4,172.5	5,004.3	4,957.9	46.48	107.666		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
9,000.0	7,530.0	7,523.4	7,357.8	30.0	25.6	88.33	1,027.3	-4,172.5	5,052.0	5,004.0	48.04	105.166		
9,100.0	7,530.0	7,519.8	7,354.3	31.5	25.6	88.28	1,027.2	-4,172.4	5,101.2	5,051.6	49.62	102.811		
9,200.0	7,530.0	7,516.2	7,350.7	33.1	25.6	88.23	1,027.1	-4,172.4	5,151.9	5,100.6	51.21	100.597		
9,300.0	7,530.0	7,512.6	7,347.1	34.7	25.6	88.19	1,027.0	-4,172.3	5,203.9	5,151.1	52.82	98.515		
9,400.0	7,530.0	7,509.0	7,343.5	36.3	25.5	88.14	1,026.9	-4,172.2	5,257.4	5,203.0	54.45	96.560		
9,500.0	7,530.0	7,505.3	7,339.8	38.0	25.5	88.09	1,026.8	-4,172.2	5,312.2	5,256.1	56.08	94.723		
9,600.0	7,530.0	7,502.0	7,336.5	39.6	25.5	88.05	1,026.8	-4,172.1	5,368.3	5,310.6	57.73	92.997		
9,700.0	7,530.0	7,499.4	7,333.9	41.3	25.5	88.01	1,026.7	-4,172.1	5,425.7	5,366.3	59.38	91.372		
9,800.0	7,530.0	7,497.0	7,331.5	42.9	25.5	87.98	1,026.6	-4,172.0	5,484.3	5,423.2	61.04	89.844		
9,900.0	7,530.0	7,494.7	7,329.2	44.6	25.5	87.95	1,026.6	-4,172.0	5,544.1	5,481.4	62.71	88.406		
10,000.0	7,530.0	7,492.3	7,326.8	46.3	25.5	87.92	1,026.5	-4,172.0	5,605.0	5,540.6	64.39	87.052		
10,100.0	7,530.0	7,489.9	7,324.4	47.9	25.5	87.89	1,026.5	-4,171.9	5,667.0	5,601.0	66.07	85.778		
10,200.0	7,530.0	7,487.6	7,322.1	49.6	25.5	87.86	1,026.4	-4,171.9	5,730.1	5,662.4	67.75	84.576		
10,300.0	7,530.0	7,485.2	7,319.7	51.3	25.5	87.83	1,026.4	-4,171.8	5,794.3	5,724.8	69.44	83.442		
10,400.0	7,530.0	7,482.8	7,317.3	53.0	25.5	87.80	1,026.3	-4,171.8	5,859.4	5,788.3	71.13	82.372		
10,500.0	7,530.0	7,480.4	7,315.0	54.7	25.5	87.77	1,026.3	-4,171.7	5,925.5	5,852.7	72.83	81.361		
10,600.0	7,530.0	7,478.1	7,312.6	56.4	25.5	87.74	1,026.2	-4,171.7	5,992.6	5,918.1	74.53	80.405		
10,700.0	7,530.0	7,475.7	7,310.2	58.1	25.5	87.71	1,026.1	-4,171.7	6,060.5	5,984.3	76.23	79.501		
10,800.0	7,530.0	7,473.3	7,307.8	59.8	25.5	87.68	1,026.1	-4,171.6	6,129.4	6,051.4	77.94	78.644		
10,900.0	7,530.0	7,470.9	7,305.4	61.5	25.5	87.65	1,026.0	-4,171.6	6,199.1	6,119.4	79.65	77.833		
11,000.0	7,530.0	7,468.6	7,303.1	63.2	25.5	87.62	1,026.0	-4,171.5	6,269.6	6,188.2	81.36	77.064		
11,100.0	7,530.0	7,466.2	7,300.7	64.9	25.5	87.58	1,025.9	-4,171.5	6,340.9	6,257.8	83.07	76.334		
11,200.0	7,530.0	7,463.8	7,298.3	66.6	25.5	87.55	1,025.9	-4,171.5	6,412.9	6,328.2	84.78	75.641		
11,300.0	7,530.0	7,461.4	7,295.9	68.4	25.5	87.52	1,025.8	-4,171.4	6,485.7	6,399.3	86.50	74.983		
11,400.0	7,530.0	7,459.0	7,293.5	70.1	25.5	87.49	1,025.7	-4,171.4	6,559.3	6,471.1	88.21	74.357		
11,500.0	7,530.0	7,456.6	7,291.2	71.8	25.5	87.46	1,025.7	-4,171.3	6,633.5	6,543.5	89.93	73.761		
11,600.0	7,530.0	7,454.3	7,288.8	73.5	25.5	87.43	1,025.6	-4,171.3	6,708.4	6,616.7	91.65	73.194		
11,700.0	7,530.0	7,451.9	7,286.4	75.2	25.5	87.40	1,025.6	-4,171.2	6,783.9	6,690.5	93.37	72.654		
11,800.0	7,530.0	7,449.5	7,284.0	77.0	25.5	87.37	1,025.5	-4,171.2	6,860.0	6,764.9	95.09	72.139		
11,900.0	7,530.0	7,447.1	7,281.6	78.7	25.5	87.34	1,025.5	-4,171.2	6,936.8	6,840.0	96.82	71.648		
12,000.0	7,530.0	7,444.7	7,279.2	80.4	25.5	87.31	1,025.4	-4,171.1	7,014.1	6,915.6	98.54	71.180		
12,100.0	7,530.0	7,442.3	7,276.8	82.2	25.5	87.28	1,025.3	-4,171.1	7,092.1	6,991.8	100.27	70.732		
12,200.0	7,530.0	7,439.9	7,274.4	83.9	25.5	87.24	1,025.3	-4,171.0	7,170.5	7,068.5	101.99	70.305		
12,300.0	7,530.0	7,437.5	7,272.0	85.6	25.5	87.21	1,025.2	-4,171.0	7,249.5	7,145.8	103.72	69.896		
12,400.0	7,530.0	7,435.1	7,269.6	87.3	25.5	87.18	1,025.2	-4,171.0	7,329.0	7,223.5	105.45	69.505		
12,500.0	7,530.0	7,432.7	7,267.2	89.1	25.5	87.15	1,025.1	-4,170.9	7,409.0	7,301.8	107.17	69.131		
12,600.0	7,530.0	7,430.3	7,264.8	90.8	25.5	87.12	1,025.1	-4,170.9	7,489.5	7,380.6	108.90	68.772		
12,700.0	7,530.0	7,427.9	7,262.4	92.5	25.5	87.09	1,025.0	-4,170.8	7,570.4	7,459.8	110.63	68.429		
12,800.0	7,530.0	7,425.5	7,260.0	94.3	25.5	87.06	1,024.9	-4,170.8	7,651.8	7,539.4	112.36	68.100		
12,900.0	7,530.0	7,423.1	7,257.6	96.0	25.5	87.03	1,024.9	-4,170.7	7,733.6	7,619.5	114.09	67.784		
13,000.0	7,530.0	7,420.7	7,255.2	97.8	25.5	87.00	1,024.8	-4,170.7	7,815.9	7,700.0	115.82	67.482		
13,100.0	7,530.0	7,418.3	7,252.8	99.5	25.5	86.96	1,024.8	-4,170.7	7,898.5	7,781.0	117.55	67.191		
13,200.0	7,530.0	7,415.9	7,250.4	101.2	25.5	86.93	1,024.7	-4,170.6	7,981.6	7,862.3	119.28	66.912		
13,300.0	7,530.0	7,413.5	7,248.0	103.0	25.5	86.90	1,024.6	-4,170.6	8,065.0	7,944.0	121.02	66.644		
13,400.0	7,530.0	7,411.1	7,245.6	104.7	25.5	86.87	1,024.6	-4,170.5	8,148.8	8,026.1	122.75	66.386		
13,500.0	7,530.0	7,408.6	7,243.2	106.4	25.5	86.84	1,024.5	-4,170.5	8,233.0	8,108.5	124.48	66.138		
13,600.0	7,530.0	7,406.2	7,240.8	108.2	25.5	86.81	1,024.5	-4,170.4	8,317.5	8,191.3	126.21	65.900		
13,700.0	7,530.0	7,403.8	7,238.4	109.9	25.5	86.78	1,024.4	-4,170.4	8,402.4	8,274.4	127.95	65.670		
13,800.0	7,530.0	7,401.4	7,235.9	111.7	25.5	86.75	1,024.4	-4,170.4	8,487.5	8,357.9	129.68	65.450		
13,900.0	7,530.0	7,399.0	7,233.5	113.4	25.5	86.71	1,024.3	-4,170.3	8,573.1	8,441.6	131.41	65.237		
14,000.0	7,530.0	7,396.6	7,231.1	115.1	25.4	86.68	1,024.2	-4,170.3	8,658.9	8,525.7	133.15	65.032		
14,100.0	7,530.0	7,394.1	7,228.7	116.9	25.4	86.65	1,024.2	-4,170.2	8,745.0	8,610.1	134.88	64.834		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
14,200.0	7,530.0	7,391.7	7,226.3	118.6	25.4	86.62	1,024.1	-4,170.2	8,831.4	8,694.8	136.62	64.644			
14,300.0	7,530.0	7,389.3	7,223.9	120.4	25.4	86.59	1,024.1	-4,170.2	8,918.1	8,779.7	138.35	64.460			
14,400.0	7,530.0	7,386.9	7,221.4	122.1	25.4	86.56	1,024.0	-4,170.1	9,005.1	8,865.0	140.09	64.283			
14,500.0	7,530.0	7,384.5	7,219.0	123.9	25.4	86.53	1,023.9	-4,170.1	9,092.3	8,950.5	141.82	64.112			
14,600.0	7,530.0	7,382.0	7,216.6	125.6	25.4	86.50	1,023.9	-4,170.0	9,179.8	9,036.2	143.55	63.946			
14,700.0	7,530.0	7,379.6	7,214.2	127.3	25.4	86.46	1,023.8	-4,170.0	9,267.5	9,122.2	145.29	63.787			
14,800.0	7,530.0	7,377.2	7,211.7	129.1	25.4	86.43	1,023.8	-4,169.9	9,355.5	9,208.5	147.02	63.632			
14,900.0	7,530.0	7,376.0	7,210.6	130.8	25.4	86.42	1,023.7	-4,169.9	9,443.8	9,295.0	148.76	63.482			
15,000.0	7,530.0	7,376.0	7,210.6	132.6	25.4	86.42	1,023.7	-4,169.9	9,532.2	9,381.7	150.50	63.335			
15,100.0	7,530.0	7,376.0	7,210.6	134.3	25.4	86.42	1,023.7	-4,169.9	9,620.9	9,468.7	152.25	63.193			
15,200.0	7,530.0	7,376.0	7,210.6	136.1	25.4	86.42	1,023.7	-4,169.9	9,709.8	9,555.8	153.99	63.055			
15,300.0	7,530.0	7,376.0	7,210.6	137.8	25.4	86.42	1,023.7	-4,169.9	9,798.9	9,643.2	155.73	62.922			
15,400.0	7,530.0	7,376.0	7,210.6	139.6	25.4	86.42	1,023.7	-4,169.9	9,888.3	9,730.8	157.47	62.793			
15,500.0	7,530.0	7,376.0	7,210.6	141.3	25.4	86.42	1,023.7	-4,169.9	9,977.8	9,818.6	159.22	62.668 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 23-6 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-48.55	2,412.8	-2,732.3	3,645.7					
100.0	100.0	37.6	37.6	0.2	0.1	-48.55	2,412.7	-2,732.3	3,645.1	3,644.9	0.22	N/A		
200.0	200.0	135.7	135.7	0.3	0.2	-48.56	2,412.5	-2,732.2	3,644.9	3,644.3	0.56	6,470.299		
209.5	209.5	143.5	143.5	0.3	0.3	-48.56	2,412.5	-2,732.3	3,644.9	3,644.3	0.59	6,142.800 CC		
300.0	300.0	217.9	217.9	0.5	0.4	-48.56	2,412.7	-2,732.3	3,645.1	3,644.2	0.88	4,136.260 ES		
400.0	400.0	300.0	300.0	0.7	0.5	-48.55	2,413.2	-2,732.6	3,645.8	3,644.6	1.20	3,040.208		
500.0	500.0	390.4	390.4	0.8	0.7	-48.55	2,414.0	-2,733.2	3,646.8	3,645.3	1.53	2,380.791		
600.0	600.0	517.1	517.1	1.0	0.9	-48.55	2,414.7	-2,733.8	3,647.6	3,645.7	1.93	1,892.358		
700.0	700.0	600.0	600.0	1.2	1.0	-81.03	2,414.8	-2,734.5	3,648.1	3,645.9	2.25	1,623.817		
800.0	800.0	667.0	667.0	1.4	1.2	-81.06	2,415.1	-2,735.4	3,649.1	3,646.5	2.54	1,436.188		
900.0	899.9	751.9	751.9	1.6	1.3	-81.11	2,416.0	-2,737.1	3,650.6	3,647.7	2.87	1,271.518		
988.4	988.1	848.7	848.7	1.7	1.5	-81.19	2,417.0	-2,739.0	3,651.7	3,648.5	3.21	1,138.463		
1,000.0	999.7	862.0	861.9	1.7	1.5	-81.21	2,417.1	-2,739.3	3,651.8	3,648.5	3.25	1,122.614		
1,100.0	1,099.4	946.2	946.1	1.9	1.7	-81.31	2,417.6	-2,741.1	3,652.8	3,649.2	3.59	1,016.325		
1,200.0	1,199.2	1,024.6	1,024.4	2.1	1.8	-81.41	2,418.4	-2,743.3	3,654.6	3,650.6	3.93	930.352		
1,300.0	1,299.0	1,129.6	1,129.4	2.3	2.0	-81.53	2,419.5	-2,746.3	3,656.4	3,652.1	4.31	848.090		
1,400.0	1,398.8	1,223.8	1,223.6	2.5	2.2	-81.65	2,420.5	-2,749.1	3,658.3	3,653.7	4.68	782.120		
1,500.0	1,498.5	1,318.1	1,317.8	2.7	2.3	-81.76	2,421.6	-2,751.9	3,660.4	3,655.4	5.04	725.565		
1,600.0	1,598.3	1,423.4	1,423.0	2.9	2.5	-81.89	2,422.9	-2,755.1	3,662.6	3,657.1	5.43	674.120		
1,700.0	1,698.1	1,532.7	1,532.3	3.2	2.7	-82.03	2,423.6	-2,758.5	3,664.4	3,658.6	5.83	628.540		
1,800.0	1,797.8	1,627.2	1,626.8	3.4	2.9	-82.16	2,424.1	-2,761.6	3,666.3	3,660.1	6.20	591.190		
1,900.0	1,897.6	1,728.4	1,727.9	3.6	3.1	-82.29	2,424.6	-2,764.9	3,668.2	3,661.6	6.59	557.005		
2,000.0	1,997.4	1,831.9	1,831.4	3.8	3.3	-82.43	2,425.2	-2,768.2	3,670.2	3,663.2	6.97	526.246		
2,100.0	2,097.1	1,952.4	1,951.8	4.0	3.5	-82.58	2,425.6	-2,771.7	3,671.7	3,664.3	7.39	496.616		
2,200.0	2,196.9	2,115.5	2,114.8	4.2	3.8	-82.80	2,424.6	-2,775.5	3,672.3	3,664.4	7.89	465.451		
2,300.0	2,296.7	2,217.3	2,216.6	4.4	4.0	-82.95	2,422.9	-2,777.4	3,671.8	3,663.6	8.28	443.577		
2,400.0	2,396.5	2,310.6	2,309.9	4.6	4.1	-83.07	2,422.1	-2,778.6	3,671.5	3,662.8	8.65	424.497		
2,469.6	2,465.9	2,370.9	2,370.2	4.7	4.2	-83.14	2,422.0	-2,779.2	3,671.4	3,662.5	8.90	412.559		
2,500.0	2,496.2	2,400.0	2,399.3	4.8	4.3	-83.17	2,422.1	-2,779.5	3,671.4	3,662.4	9.01	407.344		
2,600.0	2,506.0	2,478.4	2,477.7	5.0	4.4	-83.26	2,422.2	-2,780.6	3,671.8	3,662.4	9.36	392.331		
2,700.0	2,695.8	2,571.1	2,570.4	5.2	4.6	-83.38	2,422.4	-2,782.3	3,672.5	3,662.8	9.73	377.446		
2,800.0	2,795.5	2,676.4	2,675.7	5.4	4.8	-83.50	2,422.6	-2,784.3	3,673.3	3,663.2	10.12	362.867		
2,900.0	2,895.3	2,766.1	2,765.3	5.6	4.9	-83.60	2,423.1	-2,785.7	3,674.1	3,663.6	10.49	350.333		
3,000.0	2,995.1	2,872.7	2,871.9	5.9	5.1	-83.71	2,424.5	-2,786.9	3,675.2	3,664.3	10.88	337.752		
3,100.0	3,094.9	2,968.7	2,967.9	6.1	5.3	-83.81	2,425.7	-2,787.9	3,675.9	3,664.7	11.26	326.554		
3,200.0	3,194.6	3,062.2	3,061.4	6.3	5.4	-83.90	2,427.0	-2,789.0	3,677.0	3,665.4	11.63	316.215		
3,300.0	3,294.4	3,147.8	3,147.0	6.5	5.6	-83.98	2,428.3	-2,790.0	3,678.2	3,666.3	11.99	306.883		
3,400.0	3,394.2	3,232.4	3,231.5	6.7	5.7	-84.07	2,430.0	-2,791.4	3,680.0	3,667.7	12.34	298.178		
3,500.0	3,493.9	3,323.6	3,322.7	6.9	5.9	-84.15	2,431.9	-2,793.0	3,682.0	3,669.3	12.71	289.714		
3,600.0	3,593.7	3,404.7	3,403.8	7.1	6.1	-84.23	2,434.1	-2,794.5	3,684.5	3,671.4	13.06	282.140		
3,700.0	3,693.5	3,500.0	3,499.0	7.3	6.2	-84.31	2,436.7	-2,796.6	3,687.2	3,673.8	13.43	274.470		
3,800.0	3,793.2	3,611.9	3,610.9	7.5	6.4	-84.42	2,439.5	-2,799.2	3,689.9	3,676.1	13.84	266.647		
3,900.0	3,893.0	3,730.3	3,729.2	7.7	6.6	-84.54	2,442.0	-2,801.6	3,692.2	3,677.9	14.25	259.029		
4,000.0	3,992.8	3,841.3	3,840.2	8.0	6.8	-84.65	2,444.1	-2,803.4	3,694.0	3,679.3	14.66	252.033		
4,100.0	4,092.6	3,946.7	3,945.6	8.2	7.0	-84.75	2,445.9	-2,805.0	3,695.6	3,680.6	15.05	245.552		
4,200.0	4,192.3	4,050.1	4,048.9	8.4	7.2	-84.86	2,447.3	-2,806.7	3,697.2	3,681.7	15.44	239.447		
4,300.0	4,292.1	4,146.9	4,145.7	8.6	7.4	-84.96	2,448.6	-2,808.3	3,698.6	3,682.8	15.82	233.807		
4,400.0	4,391.9	4,244.5	4,243.2	8.8	7.6	-85.06	2,449.9	-2,810.1	3,700.3	3,684.1	16.20	228.421		
4,500.0	4,491.6	4,357.5	4,356.3	9.0	7.8	-85.19	2,450.9	-2,812.3	3,701.8	3,685.2	16.61	222.901		
4,600.0	4,591.4	4,466.5	4,465.2	9.2	8.0	-85.32	2,451.1	-2,814.4	3,703.0	3,686.0	17.01	217.713		
4,700.0	4,691.2	4,563.4	4,562.1	9.4	8.1	-85.43	2,451.3	-2,816.3	3,704.1	3,686.7	17.39	213.020		
4,800.0	4,790.9	4,666.8	4,665.5	9.6	8.3	-85.55	2,451.8	-2,818.2	3,705.3	3,687.5	17.78	208.398		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
4,900.0	4,890.7	4,763.2	4,761.9		9.8	8.5	-85.66	2,452.1	-2,819.8	3,706.3	3,688.2	18.16	204.110	
5,000.0	4,990.5	4,869.5	4,868.2	10.1	8.7	-85.78		2,452.9	-2,821.5	3,707.5	3,689.0	18.55	199.821	
5,100.0	5,090.3	4,967.8	4,966.5	10.3	8.8	-85.88		2,453.8	-2,822.6	3,708.5	3,689.6	18.94	195.843	
5,200.0	5,190.0	5,067.8	5,066.4	10.5	9.0	-85.99		2,454.4	-2,824.1	3,709.6	3,690.3	19.32	191.999	
5,300.0	5,289.8	5,177.0	5,175.6	10.7	9.2	-86.11		2,455.3	-2,825.4	3,710.6	3,690.9	19.72	188.149	
5,400.0	5,389.6	5,276.7	5,275.3	10.9	9.4	-86.21		2,456.4	-2,826.2	3,711.4	3,691.3	20.11	184.595	
5,500.0	5,489.3	5,376.9	5,375.5		11.1	9.6	-86.31	2,457.4	-2,827.1	3,712.3	3,691.8	20.49	181.168	
5,600.0	5,589.1	5,471.6	5,470.2	11.3	9.7	-86.40		2,458.3	-2,828.0	3,713.2	3,692.3	20.87	177.952	
5,700.0	5,688.9	5,588.0	5,586.6	11.5	9.9	-86.51		2,459.6	-2,828.9	3,714.1	3,692.8	21.28	174.537	
5,800.0	5,788.7	5,682.3	5,680.9	11.7	10.1	-86.60		2,460.7	-2,829.2	3,714.7	3,693.0	21.65	171.547	
5,900.0	5,888.4	5,772.0	5,770.6	11.9	10.3	-86.69		2,461.9	-2,829.8	3,715.5	3,693.5	22.02	168.729	
6,000.0	5,988.2	5,867.3	5,865.9		12.2	10.4	-86.78	2,463.0	-2,830.7	3,716.6	3,694.2	22.40	165.939	
6,100.0	6,088.0	5,974.4	5,973.0	12.4	10.6	-86.89		2,463.9	-2,832.0	3,717.7	3,694.9	22.80	163.093	
6,200.0	6,187.7	6,062.6	6,061.1	12.6	10.8	-86.98		2,464.7	-2,833.0	3,718.8	3,695.6	23.16	160.573	
6,300.0	6,287.5	6,153.7	6,152.2	12.8	10.9	-87.08		2,465.6	-2,834.3	3,720.2	3,696.7	23.53	158.113	
6,400.0	6,387.3	6,246.7	6,245.2	13.0	11.1	-87.17		2,467.0	-2,835.5	3,721.8	3,697.9	23.90	155.713	
6,500.0	6,487.0	6,339.3	6,337.8		13.2	11.3	-87.27	2,468.0	-2,837.3	3,723.7	3,699.4	24.27	153.401	
6,600.0	6,586.8	6,444.0	6,442.4	13.4	11.4	-87.38		2,469.0	-2,839.4	3,725.6	3,700.9	24.67	151.030	
6,700.0	6,686.6	6,545.5	6,544.0	13.6	11.6	-87.50		2,469.6	-2,841.5	3,727.3	3,702.2	25.06	148.759	
6,787.0	6,773.4	6,630.2	6,628.6	13.8	11.8	-87.59		2,470.3	-2,843.2	3,728.9	3,703.5	25.39	146.882	
6,800.0	6,786.4	6,643.8	6,642.2	13.8	11.8	-98.15		2,470.4	-2,843.4	3,729.2	3,703.7	25.43	146.621	
6,850.0	6,836.3	6,696.0	6,694.4		13.9	11.9	174.54	2,470.9	-2,844.4	3,731.6	3,706.0	25.57	145.927	
6,900.0	6,886.2	6,733.5	6,731.9	14.0	12.0	144.40		2,471.3	-2,845.1	3,736.0	3,710.4	25.63	145.768	
6,950.0	6,935.7	6,769.6	6,768.0	14.0	12.0	136.19		2,471.6	-2,846.0	3,742.6	3,717.0	25.63	145.998	
7,000.0	6,984.6	6,806.4	6,804.8	14.0	12.1	132.26		2,472.0	-2,847.1	3,751.3	3,725.7	25.59	146.568	
7,050.0	7,032.6	6,850.1	6,848.4	14.0	12.2	129.76		2,472.4	-2,848.5	3,762.1	3,736.5	25.53	147.386	
7,100.0	7,079.7	6,892.7	6,891.0		13.9	12.3	127.85	2,472.8	-2,849.8	3,774.7	3,749.3	25.42	148.487	
7,150.0	7,125.4	6,933.1	6,931.3	13.9	12.3	126.20		2,473.2	-2,851.2	3,789.2	3,763.9	25.29	149.833	
7,200.0	7,169.6	6,971.8	6,970.1	13.8	12.4	124.64		2,473.6	-2,852.5	3,805.6	3,780.5	25.14	151.355	
7,250.0	7,212.1	7,008.9	7,007.1	13.8	12.5	123.10		2,474.0	-2,853.9	3,823.8	3,798.8	25.00	152.976	
7,300.0	7,252.6	7,043.9	7,042.1	13.7	12.5	121.50		2,474.5	-2,855.1	3,843.8	3,818.9	24.86	154.607	
7,350.0	7,291.0	7,076.9	7,075.1		13.7	12.6	119.82	2,475.1	-2,856.3	3,865.4	3,840.7	24.76	156.145	
7,400.0	7,327.1	7,113.9	7,112.1	13.7	12.7	118.08		2,475.8	-2,857.5	3,888.7	3,864.0	24.70	157.434	
7,450.0	7,360.7	7,166.1	7,164.3	13.7	12.8	116.42		2,477.0	-2,859.0	3,913.3	3,888.6	24.72	158.310	
7,500.0	7,391.6	7,209.7	7,207.8	13.7	12.8	114.57		2,478.1	-2,859.8	3,939.3	3,914.5	24.80	158.840	
7,550.0	7,419.7	7,239.7	7,237.8	13.8	12.9	112.42		2,478.9	-2,860.3	3,966.5	3,941.5	24.95	158.957	
7,600.0	7,444.8	7,266.2	7,264.2		13.9	12.9	110.07	2,479.7	-2,860.7	3,995.0	3,969.8	25.19	158.575	
7,650.0	7,466.9	7,289.0	7,287.0	14.1	13.0	107.52		2,480.4	-2,860.9	4,024.6	3,999.1	25.52	157.712	
7,700.0	7,485.8	7,311.0	7,309.0	14.3	13.0	104.80		2,481.2	-2,861.1	4,055.2	4,029.3	25.92	156.431	
7,750.0	7,501.5	7,331.8	7,329.8	14.6	13.1	101.91		2,481.9	-2,861.2	4,086.7	4,060.4	26.39	154.850	
7,800.0	7,513.7	7,347.4	7,345.4	14.9	13.1	98.80		2,482.4	-2,861.3	4,119.0	4,092.1	26.90	153.133	
7,850.0	7,522.6	7,357.9	7,355.9		15.2	13.1	95.48	2,482.8	-2,861.3	4,151.9	4,124.5	27.42	151.447	
7,900.0	7,528.0	7,363.2	7,361.2	15.6	13.1	91.98		2,483.0	-2,861.3	4,185.3	4,157.4	27.91	149.956	
7,952.9	7,530.0	7,363.2	7,361.2	16.1	13.1	88.11		2,483.0	-2,861.3	4,221.0	4,192.7	28.38	148.743	
8,000.0	7,530.0	7,360.7	7,358.7	16.5	13.1	88.06		2,482.9	-2,861.3	4,253.0	4,224.2	28.83	147.530	
8,100.0	7,530.0	7,355.5	7,353.5	17.5	13.1	87.96		2,482.7	-2,861.3	4,321.9	4,292.0	29.88	144.655	
8,200.0	7,530.0	7,350.3	7,348.3		18.7	13.1	87.87	2,482.5	-2,861.3	4,391.9	4,360.9	31.03	141.520	
8,300.0	7,530.0	7,345.2	7,343.2	19.9	13.1	87.77		2,482.3	-2,861.3	4,463.1	4,430.8	32.28	138.266	
8,400.0	7,530.0	7,340.1	7,338.1	21.2	13.1	87.68		2,482.2	-2,861.3	4,535.4	4,501.8	33.60	134.996	
8,500.0	7,530.0	7,335.1	7,333.2	22.6	13.1	87.59		2,482.0	-2,861.3	4,608.7	4,573.7	34.97	131.778	
8,600.0	7,530.0	7,330.2	7,328.3	24.0	13.0	87.50		2,481.8	-2,861.2	4,683.0	4,646.6	36.40	128.660	
8,700.0	7,530.0	7,325.4	7,323.5	25.4	13.0	87.41		2,481.7	-2,861.2	4,758.2	4,720.4	37.86	125.667	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
8,800.0	7,530.0	7,320.7	7,318.7	26.9	13.0	87.32	2,481.5	-2,861.2	4,834.4	4,795.0	39.36	122.815		
8,900.0	7,530.0	7,316.0	7,314.0	28.4	13.0	87.24	2,481.3	-2,861.2	4,911.3	4,870.4	40.89	120.111		
9,000.0	7,530.0	7,311.3	7,309.4	30.0	13.0	87.15	2,481.2	-2,861.1	4,989.1	4,946.7	42.44	117.555		
9,100.0	7,530.0	7,306.8	7,304.8	31.5	13.0	87.07	2,481.0	-2,861.1	5,067.7	5,023.7	44.01	115.144		
9,200.0	7,530.0	7,302.3	7,300.3	33.1	13.0	86.98	2,480.9	-2,861.1	5,147.0	5,101.4	45.60	112.874		
9,300.0	7,530.0	7,300.0	7,298.1	34.7	13.0	86.94	2,480.8	-2,861.0	5,227.0	5,179.8	47.21	110.724		
9,400.0	7,530.0	7,295.3	7,293.3	36.3	13.0	86.86	2,480.6	-2,861.0	5,307.7	5,258.9	48.82	108.715		
9,500.0	7,530.0	7,292.1	7,290.2	38.0	13.0	86.80	2,480.5	-2,861.0	5,389.0	5,338.6	50.45	106.815		
9,600.0	7,530.0	7,289.1	7,287.1	39.6	13.0	86.74	2,480.4	-2,860.9	5,471.0	5,418.9	52.09	105.027		
9,700.0	7,530.0	7,286.0	7,284.1	41.3	13.0	86.69	2,480.3	-2,860.9	5,553.5	5,499.8	53.74	103.342		
9,800.0	7,530.0	7,283.0	7,281.1	42.9	13.0	86.63	2,480.2	-2,860.9	5,636.7	5,581.3	55.39	101.754		
9,900.0	7,530.0	7,280.1	7,278.1	44.6	13.0	86.58	2,480.1	-2,860.8	5,720.3	5,663.2	57.06	100.256		
10,000.0	7,530.0	7,277.2	7,275.2	46.3	13.0	86.52	2,480.0	-2,860.8	5,804.5	5,745.7	58.72	98.842		
10,100.0	7,530.0	7,274.3	7,272.4	47.9	13.0	86.47	2,480.0	-2,860.8	5,889.1	5,828.7	60.40	97.505		
10,200.0	7,530.0	7,271.5	7,269.6	49.6	12.9	86.42	2,479.9	-2,860.7	5,974.2	5,912.2	62.08	96.241		
10,300.0	7,530.0	7,268.7	7,266.8	51.3	12.9	86.37	2,479.8	-2,860.7	6,059.8	5,996.1	63.76	95.044		
10,400.0	7,530.0	7,266.0	7,264.0	53.0	12.9	86.32	2,479.7	-2,860.7	6,145.8	6,080.4	65.44	93.910		
10,500.0	7,530.0	7,263.3	7,261.3	54.7	12.9	86.27	2,479.6	-2,860.6	6,232.3	6,165.1	67.13	92.834		
10,600.0	7,530.0	7,260.6	7,258.7	56.4	12.9	86.22	2,479.5	-2,860.6	6,319.1	6,250.3	68.83	91.812		
10,700.0	7,530.0	7,258.0	7,256.0	58.1	12.9	86.17	2,479.5	-2,860.6	6,406.3	6,335.8	70.52	90.841		
10,800.0	7,530.0	7,255.4	7,253.5	59.8	12.9	86.12	2,479.4	-2,860.5	6,493.9	6,421.7	72.22	89.918		
10,900.0	7,530.0	7,252.8	7,250.9	61.5	12.9	86.08	2,479.3	-2,860.5	6,581.8	6,507.9	73.92	89.039		
11,000.0	7,530.0	7,250.3	7,248.4	63.2	12.9	86.03	2,479.2	-2,860.5	6,670.1	6,594.5	75.62	88.202		
11,100.0	7,530.0	7,247.8	7,245.9	64.9	12.9	85.98	2,479.2	-2,860.4	6,758.7	6,681.4	77.33	87.403		
11,200.0	7,530.0	7,245.4	7,243.4	66.6	12.9	85.94	2,479.1	-2,860.4	6,847.6	6,768.6	79.03	86.641		
11,300.0	7,530.0	7,242.9	7,241.0	68.4	12.9	85.89	2,479.0	-2,860.4	6,936.8	6,856.1	80.74	85.913		
11,400.0	7,530.0	7,240.5	7,238.6	70.1	12.9	85.85	2,478.9	-2,860.3	7,026.3	6,943.9	82.45	85.218		
11,500.0	7,530.0	7,238.2	7,236.3	71.8	12.9	85.81	2,478.9	-2,860.3	7,116.1	7,031.9	84.16	84.552		
11,600.0	7,530.0	7,235.9	7,233.9	73.5	12.9	85.76	2,478.8	-2,860.3	7,206.2	7,120.3	85.87	83.914		
11,700.0	7,530.0	7,233.6	7,231.6	75.2	12.9	85.72	2,478.7	-2,860.2	7,296.5	7,208.9	87.59	83.304		
11,800.0	7,530.0	7,231.3	7,229.4	77.0	12.9	85.68	2,478.7	-2,860.2	7,387.0	7,297.7	89.30	82.718		
11,900.0	7,530.0	7,229.0	7,227.1	78.7	12.9	85.64	2,478.6	-2,860.2	7,477.8	7,386.8	91.02	82.157		
12,000.0	7,530.0	7,226.8	7,224.9	80.4	12.9	85.60	2,478.6	-2,860.1	7,568.8	7,476.1	92.74	81.618		
12,100.0	7,530.0	7,224.6	7,222.7	82.2	12.9	85.56	2,478.5	-2,860.1	7,660.1	7,565.6	94.45	81.099		
12,200.0	7,530.0	7,222.5	7,220.6	83.9	12.9	85.52	2,478.4	-2,860.1	7,751.5	7,655.4	96.17	80.601		
12,300.0	7,530.0	7,220.4	7,218.5	85.6	12.9	85.48	2,478.4	-2,860.0	7,843.2	7,745.3	97.89	80.122		
12,400.0	7,530.0	7,218.3	7,216.4	87.3	12.8	85.44	2,478.3	-2,860.0	7,935.1	7,835.5	99.61	79.661		
12,500.0	7,530.0	7,216.2	7,214.3	89.1	12.8	85.40	2,478.3	-2,860.0	8,027.2	7,925.8	101.33	79.217		
12,600.0	7,530.0	7,214.1	7,212.2	90.8	12.8	85.36	2,478.2	-2,859.9	8,119.4	8,016.4	103.05	78.789		
12,700.0	7,530.0	7,212.1	7,210.2	92.5	12.8	85.33	2,478.2	-2,859.9	8,211.8	8,107.1	104.77	78.377		
12,800.0	7,530.0	7,200.0	7,198.1	94.3	12.8	85.11	2,477.9	-2,859.7	8,304.5	8,198.0	106.45	78.012		
12,900.0	7,530.0	7,200.0	7,198.1	96.0	12.8	85.11	2,477.9	-2,859.7	8,397.2	8,289.1	108.18	77.621		
13,000.0	7,530.0	7,200.0	7,198.1	97.8	12.8	85.11	2,477.9	-2,859.7	8,490.2	8,380.3	109.91	77.243		
13,100.0	7,530.0	7,200.0	7,198.1	99.5	12.8	85.11	2,477.9	-2,859.7	8,583.3	8,471.6	111.65	76.879		
13,200.0	7,530.0	7,200.0	7,198.1	101.2	12.8	85.11	2,477.9	-2,859.7	8,676.5	8,563.1	113.38	76.526		
13,300.0	7,530.0	7,200.0	7,198.1	103.0	12.8	85.11	2,477.9	-2,859.7	8,769.9	8,654.8	115.11	76.186		
13,400.0	7,530.0	7,197.8	7,195.9	104.7	12.8	85.07	2,477.8	-2,859.6	8,863.5	8,746.6	116.84	75.862		
13,500.0	7,530.0	7,194.9	7,193.0	106.4	12.8	85.01	2,477.7	-2,859.6	8,957.2	8,838.6	118.56	75.552		
13,600.0	7,530.0	7,192.1	7,190.2	108.2	12.8	84.96	2,477.7	-2,859.5	9,051.0	8,930.7	120.28	75.251		
13,700.0	7,530.0	7,189.3	7,187.4	109.9	12.8	84.91	2,477.6	-2,859.5	9,144.9	9,022.9	122.00	74.960		
13,800.0	7,530.0	7,186.5	7,184.6	111.7	12.8	84.86	2,477.5	-2,859.4	9,239.0	9,115.3	123.72	74.677		
13,900.0	7,530.0	7,183.7	7,181.8	113.4	12.8	84.81	2,477.4	-2,859.3	9,333.2	9,207.7	125.44	74.404		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						
14,000.0	7,530.0	7,181.0	7,179.1	115.1	12.8	84.76	2,477.4	-2,859.3	9,427.5	9,300.3	127.16	74.138						
14,100.0	7,530.0	7,178.3	7,176.4	116.9	12.8	84.71	2,477.3	-2,859.2	9,521.9	9,393.0	128.88	73.881						
14,200.0	7,530.0	7,175.6	7,173.7	118.6	12.8	84.66	2,477.2	-2,859.2	9,616.5	9,485.9	130.60	73.631						
14,300.0	7,530.0	7,173.0	7,171.1	120.4	12.8	84.61	2,477.2	-2,859.1	9,711.1	9,578.8	132.33	73.388						
14,400.0	7,530.0	7,170.3	7,168.4	122.1	12.8	84.56	2,477.1	-2,859.1	9,805.9	9,671.8	134.05	73.153						
14,500.0	7,530.0	7,167.7	7,165.8	123.9	12.8	84.51	2,477.1	-2,859.0	9,900.7	9,765.0	135.77	72.924						
14,600.0	7,530.0	7,165.1	7,163.3	125.6	12.8	84.47	2,477.0	-2,858.9	9,995.7	9,858.2	137.49	72.701 SF						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
0.0	0.0	0.0	0.0	0.0	0.0	-143.99	-4,173.3	-3,033.1	5,159.3				
100.0	100.0	57.0	57.0	0.2	0.1	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.8	0.24	N/A	
200.0	200.0	157.0	157.0	0.3	0.2	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.5	0.57	9,011.719	
300.0	300.0	257.0	257.0	0.5	0.4	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.2	0.92	5,598.255	
400.0	400.0	357.0	357.0	0.7	0.6	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.8	1.27	4,060.294	
500.0	500.0	457.0	457.0	0.8	0.8	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.5	1.62	3,185.240	
600.0	600.0	557.0	557.0	1.0	0.9	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.1	1.97	2,620.487	
700.0	700.0	657.0	657.0	1.2	1.1	-176.47	-4,173.3	-3,033.1	5,160.0	5,157.6	2.32	2,226.438	
800.0	800.0	757.0	757.0	1.4	1.3	-176.47	-4,173.3	-3,033.1	5,162.6	5,159.9	2.67	1,936.557	
900.0	899.9	856.9	856.9	1.6	1.5	-176.47	-4,173.3	-3,033.1	5,166.9	5,163.9	3.01	1,714.655	
988.4	988.1	945.1	945.1	1.7	1.6	-176.47	-4,173.3	-3,033.1	5,172.2	5,168.9	3.32	1,557.953	
1,000.0	999.7	956.7	956.7	1.7	1.6	-176.47	-4,173.3	-3,033.1	5,173.0	5,169.6	3.36	1,539.430	
1,100.0	1,099.4	1,056.5	1,056.5	1.9	1.8	-176.47	-4,173.3	-3,033.1	5,179.8	5,176.1	3.71	1,396.531	
1,200.0	1,199.2	1,156.2	1,156.2	2.1	2.0	-176.48	-4,173.3	-3,033.1	5,186.5	5,182.5	4.06	1,278.193	
1,300.0	1,299.0	1,256.0	1,256.0	2.3	2.2	-176.48	-4,173.3	-3,033.1	5,193.3	5,188.9	4.41	1,178.585	
1,400.0	1,398.8	1,355.8	1,355.8	2.5	2.3	-176.49	-4,173.3	-3,033.1	5,200.0	5,195.3	4.76	1,093.586	
1,500.0	1,498.5	1,455.5	1,455.5	2.7	2.5	-176.49	-4,173.3	-3,033.1	5,206.8	5,201.7	5.10	1,020.201	
1,600.0	1,598.3	1,528.2	1,528.2	2.9	2.6	-176.49	-4,173.5	-3,033.0	5,213.7	5,208.3	5.41	964.556	
1,700.0	1,698.1	1,600.0	1,600.0	3.2	2.8	-176.51	-4,174.9	-3,032.4	5,221.5	5,215.8	5.71	915.178	
1,800.0	1,797.8	1,629.9	1,629.8	3.4	2.8	-176.53	-4,176.1	-3,031.9	5,230.1	5,224.2	5.93	881.503	
1,900.0	1,897.6	1,700.0	1,699.8	3.6	2.9	-176.57	-4,179.8	-3,030.4	5,239.8	5,233.6	6.23	840.694	
2,000.0	1,997.4	1,730.9	1,730.6	3.8	3.0	-176.59	-4,181.9	-3,029.5	5,250.3	5,243.8	6.46	812.186	
2,100.0	2,097.1	1,800.0	1,799.5	4.0	3.1	-176.65	-4,187.9	-3,027.1	5,261.8	5,255.1	6.77	777.521	
2,200.0	2,196.9	1,831.1	1,830.3	4.2	3.2	-176.68	-4,191.0	-3,025.8	5,274.2	5,267.2	7.00	753.091	
2,300.0	2,296.7	1,900.0	1,898.7	4.4	3.3	-176.77	-4,199.1	-3,022.5	5,287.6	5,280.3	7.32	722.797	
2,400.0	2,396.5	1,930.1	1,928.5	4.6	3.4	-176.81	-4,203.2	-3,020.9	5,301.8	5,294.2	7.56	701.728	
2,500.0	2,496.2	2,000.0	1,997.5	4.8	3.6	-176.92	-4,213.6	-3,016.6	5,317.1	5,309.2	7.88	674.486	
2,600.0	2,596.0	2,027.9	2,024.9	5.0	3.7	-176.96	-4,218.2	-3,014.7	5,333.1	5,325.0	8.12	656.450	
2,700.0	2,695.8	2,077.6	2,073.7	5.2	3.8	-177.05	-4,227.0	-3,011.1	5,350.2	5,341.8	8.42	635.553	
2,800.0	2,795.5	2,174.6	2,168.7	5.4	4.1	-177.23	-4,244.9	-3,003.8	5,367.7	5,358.9	8.84	607.382	
2,900.0	2,895.3	2,271.5	2,263.7	5.6	4.4	-177.41	-4,262.8	-2,996.4	5,385.4	5,376.1	9.27	581.120	
3,000.0	2,995.1	2,368.5	2,358.8	5.9	4.7	-177.59	-4,280.7	-2,989.1	5,403.0	5,393.3	9.71	556.676	
3,100.0	3,094.9	2,465.5	2,453.8	6.1	5.0	-177.77	-4,298.6	-2,981.8	5,420.7	5,410.6	10.15	533.968	
3,200.0	3,194.6	2,562.5	2,548.9	6.3	5.3	-177.95	-4,316.5	-2,974.5	5,438.5	5,427.9	10.60	512.891	
3,300.0	3,294.4	2,659.5	2,643.9	6.5	5.6	-178.12	-4,334.4	-2,967.1	5,456.3	5,445.2	11.06	493.326	
3,400.0	3,394.2	2,756.5	2,738.9	6.7	6.0	-178.30	-4,352.3	-2,959.8	5,474.2	5,462.6	11.52	475.155	
3,500.0	3,493.9	2,853.5	2,834.0	6.9	6.3	-178.47	-4,370.2	-2,952.5	5,492.1	5,480.1	11.98	458.263	
3,600.0	3,593.7	2,950.5	2,929.0	7.1	6.6	-178.64	-4,388.1	-2,945.2	5,510.0	5,497.6	12.45	442.541	
3,700.0	3,693.5	3,047.4	3,024.1	7.3	7.0	-178.81	-4,406.0	-2,937.9	5,528.0	5,515.1	12.92	427.889	
3,800.0	3,793.2	3,144.4	3,119.1	7.5	7.3	-178.98	-4,423.9	-2,930.5	5,546.1	5,532.7	13.39	414.213	
3,900.0	3,893.0	3,241.4	3,214.1	7.7	7.7	-179.15	-4,441.8	-2,923.2	5,564.2	5,550.3	13.86	401.428	
4,000.0	3,992.8	3,338.4	3,309.2	8.0	8.0	-179.32	-4,459.7	-2,915.9	5,582.4	5,568.0	14.33	389.459	
4,100.0	4,092.6	3,435.4	3,404.2	8.2	8.4	-179.48	-4,477.6	-2,908.6	5,600.6	5,585.7	14.81	378.235	
4,200.0	4,192.3	3,532.4	3,499.3	8.4	8.8	-179.65	-4,495.5	-2,901.2	5,618.8	5,603.5	15.28	367.694	
4,300.0	4,292.1	3,629.4	3,594.3	8.6	9.1	-179.81	-4,513.4	-2,893.9	5,637.1	5,621.3	15.76	357.780	
4,400.0	4,391.9	3,726.4	3,689.3	8.8	9.5	-179.98	-4,531.3	-2,886.6	5,655.4	5,639.2	16.23	348.441	
4,500.0	4,491.6	3,823.3	3,784.4	9.0	9.9	179.86	-4,549.2	-2,879.3	5,673.8	5,657.1	16.71	339.632	
4,600.0	4,591.4	3,920.3	3,879.4	9.2	10.2	179.70	-4,567.1	-2,872.0	5,692.2	5,675.1	17.18	331.311	
4,700.0	4,691.2	4,017.3	3,974.5	9.4	10.6	179.54	-4,585.0	-2,864.6	5,710.7	5,693.1	17.66	323.441	
4,800.0	4,790.9	4,114.3	4,069.5	9.6	10.9	179.38	-4,602.8	-2,857.3	5,729.2	5,711.1	18.13	315.986	
4,900.0	4,890.7	4,211.3	4,164.6	9.8	11.3	179.22	-4,620.7	-2,850.0	5,747.8	5,729.2	18.61	308.918	
5,000.0	4,990.5	4,308.3	4,259.6	10.1	11.7	179.07	-4,638.6	-2,842.7	5,766.4	5,747.3	19.08	302.206	

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,100.0	5,090.3	4,405.3	4,354.6	10.3	12.1	178.91	-4,656.5	-2,835.3	5,785.1	5,765.5	19.56	295.827		
5,200.0	5,190.0	4,502.3	4,449.7	10.5	12.4	178.75	-4,674.4	-2,828.0	5,803.7	5,783.7	20.03	289.757		
5,300.0	5,289.8	4,599.2	4,544.7	10.7	12.8	178.60	-4,692.3	-2,820.7	5,822.5	5,802.0	20.50	283.974		
5,400.0	5,389.6	4,696.2	4,639.8	10.9	13.2	178.45	-4,710.2	-2,813.4	5,841.3	5,820.3	20.98	278.460		
5,500.0	5,489.3	4,793.2	4,734.8	11.1	13.5	178.29	-4,728.1	-2,806.1	5,860.1	5,838.6	21.45	273.196		
5,600.0	5,589.1	4,890.2	4,829.8	11.3	13.9	178.14	-4,746.0	-2,798.7	5,878.9	5,857.0	21.92	268.166		
5,700.0	5,688.9	4,987.2	4,924.9	11.5	14.3	177.99	-4,763.9	-2,791.4	5,897.8	5,875.4	22.39	263.357		
5,800.0	5,788.7	5,084.2	5,019.9	11.7	14.6	177.84	-4,781.8	-2,784.1	5,916.8	5,893.9	22.87	258.753		
5,900.0	5,888.4	5,181.2	5,115.0	11.9	15.0	177.69	-4,799.7	-2,776.8	5,935.7	5,912.4	23.34	254.342		
6,000.0	5,988.2	6,018.1	5,945.2	12.2	17.0	177.06	-4,879.4	-2,744.2	5,950.2	5,925.0	25.22	235.954		
6,100.0	6,088.0	6,117.9	6,045.0	12.4	17.1	177.06	-4,879.4	-2,744.2	5,957.0	5,931.5	25.52	233.460		
6,200.0	6,187.7	6,217.7	6,144.7	12.6	17.2	177.06	-4,879.4	-2,744.2	5,963.8	5,938.0	25.82	231.015		
6,300.0	6,287.5	6,317.5	6,244.5	12.8	17.3	177.07	-4,879.4	-2,744.2	5,970.5	5,944.4	26.12	228.618		
6,400.0	6,387.3	6,417.2	6,344.3	13.0	17.4	177.07	-4,879.4	-2,744.2	5,977.3	5,950.9	26.42	226.266		
6,500.0	6,487.0	6,517.0	6,444.1	13.2	17.5	177.07	-4,879.4	-2,744.2	5,984.1	5,957.3	26.72	223.961		
6,600.0	6,586.8	6,616.8	6,543.8	13.4	17.6	177.08	-4,879.4	-2,744.2	5,990.8	5,963.8	27.02	221.699		
6,700.0	6,686.6	6,716.5	6,643.6	13.6	17.7	177.08	-4,879.4	-2,744.2	5,997.6	5,970.3	27.33	219.480		
6,787.0	6,773.4	6,803.3	6,730.4	13.8	17.8	177.08	-4,879.4	-2,744.2	6,003.5	5,975.9	27.59	217.585		
6,800.0	6,786.4	6,816.3	6,743.4	13.8	17.9	166.53	-4,879.4	-2,744.2	6,004.3	5,976.6	27.65	217.170		
6,850.0	6,836.3	6,866.3	6,793.3	13.9	17.9	79.37	-4,879.4	-2,744.2	6,005.3	5,977.5	27.83	215.771		
6,900.0	6,886.2	6,916.1	6,843.2	14.0	18.0	49.61	-4,879.4	-2,744.2	6,003.4	5,975.4	27.96	214.683		
6,950.0	6,935.7	6,965.6	6,892.7	14.0	18.0	42.04	-4,879.4	-2,744.2	5,998.4	5,970.4	28.04	213.894		
7,000.0	6,984.6	7,014.5	6,941.6	14.0	18.1	39.01	-4,879.4	-2,744.2	5,990.4	5,962.4	28.07	213.383		
7,050.0	7,032.6	7,062.6	6,989.7	14.0	18.2	37.65	-4,879.4	-2,744.2	5,979.5	5,951.4	28.06	213.116		
7,100.0	7,079.7	7,109.6	7,036.7	13.9	18.2	37.14	-4,879.4	-2,744.2	5,965.7	5,937.7	28.00	213.046		
7,150.0	7,125.4	7,155.3	7,082.4	13.9	18.3	37.18	-4,879.4	-2,744.2	5,949.1	5,921.2	27.92	213.111		
7,200.0	7,169.6	7,199.5	7,126.6	13.8	18.3	37.63	-4,879.4	-2,744.2	5,929.7	5,901.9	27.81	213.229		
7,250.0	7,212.1	7,242.0	7,169.1	13.8	18.4	38.43	-4,879.4	-2,744.2	5,907.8	5,880.1	27.70	213.295		
7,300.0	7,252.6	7,282.5	7,209.6	13.7	18.4	39.55	-4,879.4	-2,744.2	5,883.3	5,855.7	27.60	213.184		
7,350.0	7,291.0	7,321.0	7,248.0	13.7	18.5	40.99	-4,879.4	-2,744.2	5,856.5	5,828.9	27.53	212.745		
7,400.0	7,327.1	7,357.0	7,284.1	13.7	18.5	42.77	-4,879.4	-2,744.2	5,827.4	5,799.9	27.51	211.811		
7,450.0	7,360.7	7,390.6	7,317.7	13.7	18.5	44.89	-4,879.4	-2,744.2	5,796.3	5,768.7	27.57	210.210		
7,500.0	7,391.6	7,421.5	7,348.6	13.7	18.6	47.40	-4,879.4	-2,744.2	5,763.2	5,735.5	27.74	207.786		
7,550.0	7,419.7	7,449.6	7,376.7	13.8	18.6	50.33	-4,879.4	-2,744.2	5,728.4	5,700.4	28.02	204.431		
7,600.0	7,444.8	7,474.8	7,401.8	13.9	18.6	53.70	-4,879.4	-2,744.2	5,692.1	5,663.7	28.44	200.116		
7,650.0	7,466.9	7,496.9	7,423.9	14.1	18.7	57.55	-4,879.4	-2,744.2	5,654.4	5,625.4	29.01	194.923		
7,700.0	7,485.8	7,515.8	7,442.8	14.3	18.7	61.90	-4,879.4	-2,744.2	5,615.5	5,585.8	29.70	189.056		
7,750.0	7,501.5	7,531.4	7,458.5	14.6	18.7	66.74	-4,879.4	-2,744.2	5,575.7	5,545.2	30.50	182.829		
7,800.0	7,513.7	7,543.7	7,470.8	14.9	18.7	72.03	-4,879.4	-2,744.2	5,535.1	5,503.8	31.34	176.621		
7,850.0	7,522.6	7,552.6	7,479.6	15.2	18.7	77.69	-4,879.4	-2,744.2	5,493.9	5,461.8	32.16	170.811		
7,900.0	7,528.0	7,558.0	7,485.1	15.6	18.7	83.61	-4,879.4	-2,744.2	5,452.4	5,419.5	32.90	165.710		
7,952.9	7,530.0	7,560.0	7,487.0	16.1	18.7	90.00	-4,879.4	-2,744.2	5,408.3	5,374.8	33.53	161.288		
8,000.0	7,530.0	7,560.0	7,487.0	16.5	18.7	90.00	-4,879.4	-2,744.2	5,369.1	5,335.2	33.99	157.976		
8,100.0	7,530.0	7,560.0	7,487.0	17.5	18.7	90.00	-4,879.4	-2,744.2	5,286.4	5,251.3	35.05	150.836		
8,200.0	7,530.0	7,560.0	7,487.0	18.7	18.7	90.00	-4,879.4	-2,744.2	5,204.2	5,168.0	36.22	143.702		
8,300.0	7,530.0	7,560.0	7,487.0	19.9	18.7	90.00	-4,879.4	-2,744.2	5,122.7	5,085.2	37.47	136.709		
8,400.0	7,530.0	7,560.0	7,487.0	21.2	18.7	90.00	-4,879.4	-2,744.2	5,041.8	5,003.0	38.80	129.943		
8,500.0	7,530.0	7,560.0	7,487.0	22.6	18.7	90.00	-4,879.4	-2,744.2	4,961.6	4,921.5	40.19	123.460		
8,600.0	7,530.0	7,560.0	7,487.0	24.0	18.7	90.00	-4,879.4	-2,744.2	4,882.2	4,840.6	41.63	117.290		
8,700.0	7,530.0	7,560.0	7,487.0	25.4	18.7	90.00	-4,879.4	-2,744.2	4,803.5	4,760.4	43.10	111.445		
8,800.0	7,530.0	7,560.0	7,487.0	26.9	18.7	90.00	-4,879.4	-2,744.2	4,725.7	4,681.1	44.61	105.926		
8,900.0	7,530.0	7,560.0	7,487.0	28.4	18.7	90.00	-4,879.4	-2,744.2	4,648.7	4,602.5	46.15	100.724		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,530.0	7,560.0	7,487.0	30.0	18.7	90.00	-4,879.4	-2,744.2	4,572.5	4,524.8	47.72	95.829	
9,100.0	7,530.0	7,560.0	7,487.0	31.5	18.7	90.00	-4,879.4	-2,744.2	4,497.4	4,448.1	49.30	91.226	
9,200.0	7,530.0	7,560.0	7,487.0	33.1	18.7	90.00	-4,879.4	-2,744.2	4,423.2	4,372.3	50.90	86.900	
9,300.0	7,530.0	7,560.0	7,487.0	34.7	18.7	90.00	-4,879.4	-2,744.2	4,350.0	4,297.5	52.52	82.833	
9,400.0	7,530.0	7,560.0	7,487.0	36.3	18.7	90.00	-4,879.4	-2,744.2	4,277.9	4,223.8	54.14	79.010	
9,500.0	7,530.0	7,560.0	7,487.0	38.0	18.7	90.00	-4,879.4	-2,744.2	4,207.0	4,151.2	55.78	75.416	
9,600.0	7,530.0	7,560.0	7,487.0	39.6	18.7	90.00	-4,879.4	-2,744.2	4,137.2	4,079.8	57.43	72.035	
9,700.0	7,530.0	7,560.0	7,487.0	41.3	18.7	90.00	-4,879.4	-2,744.2	4,068.7	4,009.6	59.09	68.855	
9,800.0	7,530.0	7,560.0	7,487.0	42.9	18.7	90.00	-4,879.4	-2,744.2	4,001.6	3,940.8	60.76	65.861	
9,900.0	7,530.0	7,560.0	7,487.0	44.6	18.7	90.00	-4,879.4	-2,744.2	3,935.8	3,873.4	62.43	63.043	
10,000.0	7,530.0	7,560.0	7,487.0	46.3	18.7	90.00	-4,879.4	-2,744.2	3,871.5	3,807.4	64.11	60.390	
10,100.0	7,530.0	7,560.0	7,487.0	47.9	18.7	90.00	-4,879.4	-2,744.2	3,808.8	3,743.0	65.79	57.890	
10,200.0	7,530.0	7,560.0	7,487.0	49.6	18.7	90.00	-4,879.4	-2,744.2	3,747.6	3,680.2	67.48	55.535	
10,300.0	7,530.0	7,560.0	7,487.0	51.3	18.7	90.00	-4,879.4	-2,744.2	3,688.2	3,619.0	69.18	53.316	
10,400.0	7,530.0	7,560.0	7,487.0	53.0	18.7	90.00	-4,879.4	-2,744.2	3,630.5	3,559.7	70.87	51.226	
10,500.0	7,530.0	7,560.0	7,487.0	54.7	18.7	90.00	-4,879.4	-2,744.2	3,574.8	3,502.2	72.57	49.257	
10,600.0	7,530.0	7,560.0	7,487.0	56.4	18.7	90.00	-4,879.4	-2,744.2	3,520.9	3,446.7	74.28	47.402	
10,700.0	7,530.0	7,560.0	7,487.0	58.1	18.7	90.00	-4,879.4	-2,744.2	3,469.2	3,393.2	75.99	45.655	
10,800.0	7,530.0	7,560.0	7,487.0	59.8	18.7	90.00	-4,879.4	-2,744.2	3,419.5	3,341.8	77.70	44.012	
10,900.0	7,530.0	7,560.0	7,487.0	61.5	18.7	90.00	-4,879.4	-2,744.2	3,372.1	3,292.7	79.41	42.466	
11,000.0	7,530.0	7,560.0	7,487.0	63.2	18.7	90.00	-4,879.4	-2,744.2	3,327.0	3,245.9	81.12	41.012	
11,100.0	7,530.0	7,560.0	7,487.0	64.9	18.7	90.00	-4,879.4	-2,744.2	3,284.4	3,201.5	82.84	39.648	
11,200.0	7,530.0	7,560.0	7,487.0	66.6	18.7	90.00	-4,879.4	-2,744.2	3,244.3	3,159.7	84.56	38.367	
11,300.0	7,530.0	7,560.0	7,487.0	68.4	18.7	90.00	-4,879.4	-2,744.2	3,206.8	3,120.5	86.28	37.167	
11,400.0	7,530.0	7,560.0	7,487.0	70.1	18.7	90.00	-4,879.4	-2,744.2	3,172.0	3,084.0	88.00	36.045	
11,500.0	7,530.0	7,560.0	7,487.0	71.8	18.7	90.00	-4,879.4	-2,744.2	3,140.0	3,050.2	89.72	34.996	
11,600.0	7,530.0	7,560.0	7,487.0	73.5	18.7	90.00	-4,879.4	-2,744.2	3,110.9	3,019.4	91.45	34.017	
11,700.0	7,530.0	7,560.0	7,487.0	75.2	18.7	90.00	-4,879.4	-2,744.2	3,084.7	2,991.5	93.18	33.106	
11,800.0	7,530.0	7,560.0	7,487.0	77.0	18.7	90.00	-4,879.4	-2,744.2	3,061.6	2,966.7	94.90	32.260	
11,900.0	7,530.0	7,560.0	7,487.0	78.7	18.7	90.00	-4,879.4	-2,744.2	3,041.6	2,945.0	96.63	31.476	
12,000.0	7,530.0	7,560.0	7,487.0	80.4	18.7	90.00	-4,879.4	-2,744.2	3,024.8	2,926.5	98.36	30.752	
12,100.0	7,530.0	7,560.0	7,487.0	82.2	18.7	90.00	-4,879.4	-2,744.2	3,011.3	2,911.2	100.09	30.084	
12,200.0	7,530.0	7,560.0	7,487.0	83.9	18.7	90.00	-4,879.4	-2,744.2	3,001.0	2,899.1	101.83	29.471	
12,300.0	7,530.0	7,560.0	7,487.0	85.6	18.7	90.00	-4,879.4	-2,744.2	2,994.0	2,890.4	103.56	28.911	
12,400.0	7,530.0	7,560.0	7,487.0	87.3	18.7	90.00	-4,879.4	-2,744.2	2,990.3	2,885.0	105.29	28.400	
12,459.8	7,530.0	7,560.0	7,487.0	88.4	18.7	90.00	-4,879.4	-2,744.2	2,989.7	2,883.4	106.33	28.117 CC	
12,500.0	7,530.0	7,560.0	7,487.0	89.1	18.7	90.00	-4,879.4	-2,744.2	2,990.0	2,882.9	107.03	27.936 ES	
12,600.0	7,530.0	7,560.0	7,487.0	90.8	18.7	90.00	-4,879.4	-2,744.2	2,993.0	2,884.2	108.76	27.518	
12,700.0	7,530.0	7,560.0	7,487.0	92.5	18.7	90.00	-4,879.4	-2,744.2	2,999.3	2,888.8	110.50	27.144	
12,800.0	7,530.0	7,560.0	7,487.0	94.3	18.7	90.00	-4,879.4	-2,744.2	3,009.0	2,896.8	112.24	26.810	
12,900.0	7,530.0	7,560.0	7,487.0	96.0	18.7	90.00	-4,879.4	-2,744.2	3,021.9	2,908.0	113.97	26.515	
13,000.0	7,530.0	7,560.0	7,487.0	97.8	18.7	90.00	-4,879.4	-2,744.2	3,038.1	2,922.4	115.71	26.256	
13,100.0	7,530.0	7,560.0	7,487.0	99.5	18.7	90.00	-4,879.4	-2,744.2	3,057.5	2,940.0	117.45	26.032	
13,200.0	7,530.0	7,560.0	7,487.0	101.2	18.7	90.00	-4,879.4	-2,744.2	3,080.0	2,960.8	119.19	25.841	
13,300.0	7,530.0	7,560.0	7,487.0	103.0	18.7	90.00	-4,879.4	-2,744.2	3,105.5	2,984.6	120.93	25.681	
13,400.0	7,530.0	7,560.0	7,487.0	104.7	18.7	90.00	-4,879.4	-2,744.2	3,134.1	3,011.4	122.67	25.549	
13,500.0	7,530.0	7,560.0	7,487.0	106.4	18.7	90.00	-4,879.4	-2,744.2	3,165.5	3,041.1	124.41	25.444	
13,600.0	7,530.0	7,560.0	7,487.0	108.2	18.7	90.00	-4,879.4	-2,744.2	3,199.8	3,073.6	126.15	25.365	
13,700.0	7,530.0	7,560.0	7,487.0	109.9	18.7	90.00	-4,879.4	-2,744.2	3,236.7	3,108.8	127.89	25.309	
13,800.0	7,530.0	7,560.0	7,487.0	111.7	18.7	90.00	-4,879.4	-2,744.2	3,276.4	3,146.7	129.63	25.274	
13,900.0	7,530.0	7,560.0	7,487.0	113.4	18.7	90.00	-4,879.4	-2,744.2	3,318.5	3,187.1	131.37	25.260 SF	
14,000.0	7,530.0	7,560.0	7,487.0	115.1	18.7	90.00	-4,879.4	-2,744.2	3,363.1	3,230.0	133.12	25.265	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,100.0	7,530.0	7,560.0	7,487.0	116.9	18.7	90.00	-4,879.4	-2,744.2	3,410.1	3,275.2	134.86	25.286		
14,200.0	7,530.0	7,560.0	7,487.0	118.6	18.7	90.00	-4,879.4	-2,744.2	3,459.3	3,322.7	136.60	25.324		
14,300.0	7,530.0	7,560.0	7,487.0	120.4	18.7	90.00	-4,879.4	-2,744.2	3,510.7	3,372.3	138.35	25.376		
14,400.0	7,530.0	7,560.0	7,487.0	122.1	18.7	90.00	-4,879.4	-2,744.2	3,564.1	3,424.0	140.09	25.442		
14,500.0	7,530.0	7,560.0	7,487.0	123.9	18.7	90.00	-4,879.4	-2,744.2	3,619.5	3,477.7	141.83	25.519		
14,600.0	7,530.0	7,560.0	7,487.0	125.6	18.7	90.00	-4,879.4	-2,744.2	3,676.8	3,533.2	143.58	25.608		
14,700.0	7,530.0	7,560.0	7,487.0	127.3	18.7	90.00	-4,879.4	-2,744.2	3,735.9	3,590.6	145.32	25.708		
14,800.0	7,530.0	7,560.0	7,487.0	129.1	18.7	90.00	-4,879.4	-2,744.2	3,796.7	3,649.6	147.07	25.816		
14,900.0	7,530.0	7,560.0	7,487.0	130.8	18.7	90.00	-4,879.4	-2,744.2	3,859.2	3,710.3	148.81	25.933		
15,000.0	7,530.0	7,560.0	7,487.0	132.6	18.7	90.00	-4,879.4	-2,744.2	3,923.1	3,772.6	150.56	26.057		
15,100.0	7,530.0	7,560.0	7,487.0	134.3	18.7	90.00	-4,879.4	-2,744.2	3,988.6	3,836.3	152.30	26.189		
15,200.0	7,530.0	7,560.0	7,487.0	136.1	18.7	90.00	-4,879.4	-2,744.2	4,055.5	3,901.5	154.05	26.326		
15,300.0	7,530.0	7,560.0	7,487.0	137.8	18.7	90.00	-4,879.4	-2,744.2	4,123.7	3,967.9	155.80	26.469		
15,400.0	7,530.0	7,560.0	7,487.0	139.6	18.7	90.00	-4,879.4	-2,744.2	4,193.2	4,035.7	157.54	26.617		
15,500.0	7,530.0	7,560.0	7,487.0	141.3	18.7	90.00	-4,879.4	-2,744.2	4,264.0	4,104.7	159.29	26.769		
15,600.0	7,530.0	7,560.0	7,487.0	143.0	18.7	90.00	-4,879.4	-2,744.2	4,335.8	4,174.8	161.03	26.925		
15,700.0	7,530.0	7,560.0	7,487.0	144.8	18.7	90.00	-4,879.4	-2,744.2	4,408.8	4,246.0	162.78	27.084		
15,800.0	7,530.0	7,560.0	7,487.0	146.5	18.7	90.00	-4,879.4	-2,744.2	4,482.8	4,318.3	164.53	27.246		
15,900.0	7,530.0	7,560.0	7,487.0	148.3	18.7	90.00	-4,879.4	-2,744.2	4,557.8	4,391.5	166.28	27.411		
16,000.0	7,530.0	7,560.0	7,487.0	150.0	18.7	90.00	-4,879.4	-2,744.2	4,633.7	4,465.7	168.02	27.578		
16,100.0	7,530.0	7,560.0	7,487.0	151.8	18.7	90.00	-4,879.4	-2,744.2	4,710.6	4,540.8	169.77	27.747		
16,200.0	7,530.0	7,560.0	7,487.0	153.5	18.7	90.00	-4,879.4	-2,744.2	4,788.3	4,616.8	171.52	27.917		
16,300.0	7,530.0	7,560.0	7,487.0	155.3	18.7	90.00	-4,879.4	-2,744.2	4,866.8	4,693.5	173.26	28.089		
16,400.0	7,530.0	7,560.0	7,487.0	157.0	18.7	90.00	-4,879.4	-2,744.2	4,946.1	4,771.1	175.01	28.261		
16,500.0	7,530.0	7,560.0	7,487.0	158.8	18.7	90.00	-4,879.4	-2,744.2	5,026.1	4,849.4	176.76	28.435		
16,600.0	7,530.0	7,560.0	7,487.0	160.5	18.7	90.00	-4,879.4	-2,744.2	5,106.8	4,928.3	178.51	28.608		
16,700.0	7,530.0	7,560.0	7,487.0	162.3	18.7	90.00	-4,879.4	-2,744.2	5,188.2	5,008.0	180.26	28.782		
16,800.0	7,530.0	7,560.0	7,487.0	164.0	18.7	90.00	-4,879.4	-2,744.2	5,270.3	5,088.3	182.01	28.957		
16,900.0	7,530.0	7,560.0	7,487.0	165.8	18.7	90.00	-4,879.4	-2,744.2	5,352.9	5,169.2	183.75	29.131		
17,000.0	7,530.0	7,560.0	7,487.0	167.5	18.7	90.00	-4,879.4	-2,744.2	5,436.2	5,250.7	185.50	29.305		
17,100.0	7,530.0	7,560.0	7,487.0	169.3	18.7	90.00	-4,879.4	-2,744.2	5,520.0	5,332.7	187.25	29.479		
17,200.0	7,530.0	7,560.0	7,487.0	171.0	18.7	90.00	-4,879.4	-2,744.2	5,604.3	5,415.3	189.00	29.652		
17,300.0	7,530.0	7,560.0	7,487.0	172.8	18.7	90.00	-4,879.4	-2,744.2	5,689.1	5,498.4	190.75	29.825		
17,400.0	7,530.0	7,560.0	7,487.0	174.5	18.7	90.00	-4,879.4	-2,744.2	5,774.4	5,582.0	192.50	29.997		
17,420.9	7,530.0	7,560.0	7,487.0	174.9	18.7	90.00	-4,879.4	-2,744.2	5,792.4	5,599.5	192.86	30.033		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-60.41	1,789.9	-3,152.7	3,625.6						
100.0	100.0	56.0	56.0	0.2	0.1	-60.41	1,789.9	-3,152.7	3,625.3	3,625.1	0.25	N/A			
200.0	200.0	156.0	156.0	0.3	0.3	-60.41	1,789.9	-3,152.7	3,625.3	3,624.7	0.59	6,102.394			
300.0	300.0	256.0	256.0	0.5	0.4	-60.41	1,789.9	-3,152.7	3,625.3	3,624.4	0.94	3,855.820			
400.0	400.0	356.0	356.0	0.7	0.6	-60.41	1,789.9	-3,152.7	3,625.3	3,624.0	1.29	2,818.281			
500.0	500.0	456.0	456.0	0.8	0.8	-60.41	1,789.9	-3,152.7	3,625.3	3,623.7	1.63	2,220.720			
600.0	600.0	556.0	556.0	1.0	1.0	-60.41	1,789.9	-3,152.7	3,625.3	3,623.3	1.98	1,832.232 CC			
700.0	700.0	656.0	656.0	1.2	1.1	-92.90	1,789.9	-3,152.7	3,625.4	3,623.0	2.33	1,559.195			
800.0	800.0	756.0	756.0	1.4	1.3	-92.94	1,789.9	-3,152.7	3,625.5	3,622.8	2.67	1,355.899 ES			
900.0	899.9	775.0	775.0	1.6	1.3	-92.94	1,789.9	-3,152.7	3,626.6	3,623.7	2.89	1,255.423			
988.4	988.1	775.0	775.0	1.7	1.3	-92.91	1,789.9	-3,152.7	3,629.9	3,626.9	3.06	1,187.678			
1,000.0	999.7	775.0	775.0	1.7	1.3	-92.91	1,789.9	-3,152.7	3,630.5	3,627.5	3.08	1,179.279			
1,100.0	1,099.4	775.0	775.0	1.9	1.3	-92.91	1,789.9	-3,152.7	3,637.2	3,634.0	3.27	1,111.363			
1,179.5	1,178.7	961.6	961.5	2.1	1.9	-93.04	1,795.7	-3,154.5	3,635.3	3,631.4	3.92	927.207			
1,200.0	1,199.2	972.2	972.1	2.1	1.9	-93.05	1,796.3	-3,154.7	3,636.4	3,632.4	3.99	911.841			
1,300.0	1,299.0	1,023.9	1,023.6	2.3	2.1	-93.06	1,800.2	-3,156.0	3,642.5	3,638.1	4.32	843.886			
1,400.0	1,398.8	1,075.6	1,075.0	2.5	2.3	-93.06	1,804.9	-3,157.5	3,649.8	3,645.2	4.64	785.881			
1,500.0	1,498.5	1,127.1	1,126.2	2.7	2.4	-93.05	1,810.4	-3,159.3	3,658.5	3,653.6	4.97	735.869			
1,600.0	1,598.3	1,178.4	1,177.1	2.9	2.6	-93.03	1,816.9	-3,161.3	3,668.5	3,663.2	5.30	692.373			
1,700.0	1,698.1	1,229.6	1,227.7	3.2	2.8	-93.01	1,824.1	-3,163.7	3,679.9	3,674.2	5.62	654.255			
1,800.0	1,797.8	1,380.6	1,376.1	3.4	3.3	-92.87	1,850.6	-3,172.1	3,695.1	3,688.9	6.18	597.816			
1,900.0	1,897.6	1,380.6	1,376.1	3.6	3.3	-92.87	1,850.6	-3,172.1	3,707.0	3,700.6	6.39	580.383			
2,000.0	1,997.4	1,383.0	1,378.4	3.8	3.3	-92.87	1,851.1	-3,172.3	3,721.6	3,715.0	6.60	563.792			
2,100.0	2,097.1	1,481.4	1,474.7	4.0	3.7	-92.75	1,870.7	-3,178.6	3,737.4	3,730.3	7.10	526.170			
2,200.0	2,196.9	1,579.9	1,571.0	4.2	4.1	-92.64	1,890.4	-3,184.9	3,753.3	3,745.7	7.60	493.577			
2,300.0	2,296.7	1,678.3	1,667.2	4.4	4.5	-92.52	1,910.1	-3,191.2	3,769.1	3,761.0	8.10	465.065			
2,400.0	2,396.5	1,776.8	1,763.5	4.6	4.8	-92.41	1,929.7	-3,197.5	3,785.0	3,776.4	8.60	439.912			
2,500.0	2,496.2	1,875.3	1,859.8	4.8	5.2	-92.30	1,949.4	-3,203.9	3,800.9	3,791.8	9.10	417.557			
2,600.0	2,596.0	1,973.7	1,956.0	5.0	5.6	-92.19	1,969.1	-3,210.2	3,816.8	3,807.2	9.60	397.557			
2,700.0	2,695.8	2,072.2	2,052.3	5.2	6.0	-92.08	1,988.7	-3,216.5	3,832.7	3,822.6	10.10	379.559			
2,800.0	2,795.5	2,170.6	2,148.6	5.4	6.4	-91.97	2,008.4	-3,222.8	3,848.6	3,838.0	10.59	363.277			
2,900.0	2,895.3	2,269.1	2,244.8	5.6	6.8	-91.86	2,028.1	-3,229.1	3,864.6	3,853.5	11.09	348.477			
3,000.0	2,995.1	2,367.6	2,341.1	5.9	7.2	-91.76	2,047.7	-3,235.4	3,880.5	3,868.9	11.58	334.966			
3,100.0	3,094.9	2,466.0	2,437.4	6.1	7.6	-91.65	2,067.4	-3,241.7	3,896.5	3,884.4	12.08	322.583			
3,200.0	3,194.6	2,564.5	2,533.6	6.3	8.0	-91.54	2,087.1	-3,248.0	3,912.5	3,899.9	12.57	311.192			
3,300.0	3,294.4	2,662.9	2,629.9	6.5	8.4	-91.44	2,106.7	-3,254.3	3,928.5	3,915.4	13.07	300.678			
3,400.0	3,394.2	2,761.4	2,726.2	6.7	8.8	-91.34	2,126.4	-3,260.7	3,944.5	3,930.9	13.56	290.945			
3,500.0	3,493.9	2,859.8	2,822.4	6.9	9.2	-91.23	2,146.1	-3,267.0	3,960.5	3,946.4	14.05	281.909			
3,600.0	3,593.7	2,958.3	2,918.7	7.1	9.6	-91.13	2,165.7	-3,273.3	3,976.5	3,962.0	14.54	273.498			
3,700.0	3,693.5	3,056.8	3,015.0	7.3	10.0	-91.03	2,185.4	-3,279.6	3,992.6	3,977.5	15.03	265.649			
3,800.0	3,793.2	3,155.2	3,111.2	7.5	10.4	-90.93	2,205.1	-3,285.9	4,008.6	3,993.1	15.52	258.307			
3,900.0	3,893.0	3,253.7	3,207.5	7.7	10.8	-90.83	2,224.7	-3,292.2	4,024.7	4,008.7	16.01	251.426			
4,000.0	3,992.8	3,352.1	3,303.8	8.0	11.2	-90.73	2,244.4	-3,298.5	4,040.8	4,024.3	16.50	244.964			
4,100.0	4,092.6	3,450.6	3,400.0	8.2	11.6	-90.63	2,264.1	-3,304.8	4,056.8	4,039.9	16.98	238.882			
4,200.0	4,192.3	3,549.1	3,496.3	8.4	12.0	-90.53	2,283.7	-3,311.2	4,073.0	4,055.5	17.47	233.150			
4,300.0	4,292.1	3,647.5	3,592.6	8.6	12.4	-90.44	2,303.4	-3,317.5	4,089.1	4,071.1	17.96	227.737			
4,400.0	4,391.9	3,746.0	3,688.8	8.8	12.8	-90.34	2,323.1	-3,323.8	4,105.2	4,086.7	18.44	222.618			
4,500.0	4,491.6	3,844.4	3,785.1	9.0	13.2	-90.25	2,342.8	-3,330.1	4,121.3	4,102.4	18.93	217.770			
4,600.0	4,591.4	3,942.9	3,881.4	9.2	13.6	-90.15	2,362.4	-3,336.4	4,137.5	4,118.1	19.41	213.171			
4,700.0	4,691.2	4,041.3	3,977.6	9.4	14.0	-90.06	2,382.1	-3,342.7	4,153.6	4,133.7	19.89	208.804			
4,800.0	4,790.9	4,139.8	4,073.9	9.6	14.4	-89.97	2,401.8	-3,349.0	4,169.8	4,149.4	20.38	204.650			
4,900.0	4,890.7	4,238.3	4,170.2	9.8	14.8	-89.87	2,421.4	-3,355.3	4,186.0	4,165.1	20.86	200.695			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 775-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	4,990.5	4,336.7	4,266.4	10.1	15.2	-89.78	2,441.1	-3,361.6	4,202.2	4,180.8	21.34	196.926		
5,100.0	5,090.3	4,435.2	4,362.7	10.3	15.5	-89.69	2,460.8	-3,368.0	4,218.4	4,196.6	21.82	193.328		
5,200.0	5,190.0	4,533.6	4,459.0	10.5	15.9	-89.60	2,480.4	-3,374.3	4,234.6	4,212.3	22.30	189.891		
5,300.0	5,289.8	4,632.1	4,555.2	10.7	16.3	-89.51	2,500.1	-3,380.6	4,250.8	4,228.0	22.78	186.605		
5,400.0	5,389.6	4,730.6	4,651.5	10.9	16.7	-89.42	2,519.8	-3,386.9	4,267.0	4,243.8	23.26	183.459		
5,500.0	5,489.3	4,829.0	4,747.8	11.1	17.1	-89.34	2,539.4	-3,393.2	4,283.3	4,259.5	23.74	180.445		
5,600.0	5,589.1	4,927.5	4,844.0	11.3	17.5	-89.25	2,559.1	-3,399.5	4,299.5	4,275.3	24.22	177.555		
5,700.0	5,688.9	5,025.9	4,940.3	11.5	17.9	-89.16	2,578.8	-3,405.8	4,315.8	4,291.1	24.69	174.782		
5,800.0	5,788.7	5,124.4	5,036.6	11.7	18.3	-89.08	2,598.4	-3,412.1	4,332.1	4,306.9	25.17	172.117		
5,900.0	5,888.4	5,222.8	5,132.8	11.9	18.7	-88.99	2,618.1	-3,418.5	4,348.3	4,322.7	25.65	169.556		
6,000.0	5,988.2	5,321.3	5,229.1	12.2	19.1	-88.91	2,637.8	-3,424.8	4,364.6	4,338.5	26.12	167.093		
6,100.0	6,088.0	5,419.8	5,325.4	12.4	19.5	-88.82	2,657.4	-3,431.1	4,380.9	4,354.3	26.60	164.721		
6,200.0	6,187.7	5,518.2	5,421.6	12.6	19.9	-88.74	2,677.1	-3,437.4	4,397.2	4,370.2	27.07	162.436		
6,300.0	6,287.5	5,616.7	5,517.9	12.8	20.3	-88.66	2,696.8	-3,443.7	4,413.5	4,386.0	27.54	160.234		
6,400.0	6,387.3	5,715.1	5,614.2	13.0	20.7	-88.57	2,716.4	-3,450.0	4,429.9	4,401.9	28.02	158.109		
6,500.0	6,487.0	5,813.6	5,710.4	13.2	21.1	-88.49	2,736.1	-3,456.3	4,446.2	4,417.7	28.49	156.058		
6,600.0	6,586.8	5,912.1	5,806.7	13.4	21.5	-88.41	2,755.8	-3,462.6	4,462.5	4,433.6	28.96	154.078		
6,700.0	6,686.6	6,010.5	5,903.0	13.6	21.9	-88.33	2,775.4	-3,468.9	4,478.9	4,449.5	29.43	152.164		
6,787.0	6,773.4	6,096.2	5,986.7	13.8	22.2	-88.26	2,792.5	-3,474.4	4,493.1	4,463.3	29.84	150.550		
6,800.0	6,786.4	6,109.0	5,999.2	13.8	22.3	-98.92	2,795.1	-3,475.3	4,495.3	4,465.4	29.92	150.247		
6,850.0	6,836.3	6,157.7	6,046.9	13.9	22.5	173.36	2,804.8	-3,478.4	4,505.0	4,474.8	30.19	149.231		
6,900.0	6,886.2	6,205.7	6,093.8	14.0	22.7	142.81	2,814.4	-3,481.5	4,516.5	4,486.1	30.44	148.354		
6,950.0	6,935.7	6,252.6	6,139.7	14.0	22.9	134.19	2,823.8	-3,484.5	4,529.9	4,499.2	30.69	147.590		
7,000.0	6,984.6	6,298.3	6,184.4	14.0	23.1	129.86	2,832.9	-3,487.4	4,545.1	4,514.2	30.94	146.906		
7,050.0	7,032.6	6,342.5	6,227.6	14.0	23.2	126.92	2,841.7	-3,490.2	4,562.1	4,530.9	31.19	146.265		
7,100.0	7,079.7	6,385.0	6,269.1	13.9	23.4	124.55	2,850.2	-3,493.0	4,580.7	4,549.3	31.45	145.630		
7,150.0	7,125.4	6,425.5	6,308.8	13.9	23.6	122.42	2,858.3	-3,495.6	4,601.0	4,569.3	31.74	144.962		
7,200.0	7,169.6	6,464.0	6,346.4	13.8	23.7	120.36	2,866.0	-3,498.0	4,622.9	4,590.8	32.05	144.223		
7,250.0	7,212.1	6,500.2	6,381.7	13.8	23.9	118.30	2,873.2	-3,500.3	4,646.3	4,613.9	32.41	143.379		
7,300.0	7,252.6	6,533.9	6,414.7	13.7	24.0	116.16	2,880.0	-3,502.5	4,671.1	4,638.3	32.80	142.404		
7,350.0	7,291.0	7,373.5	7,247.0	13.7	25.1	121.12	2,966.3	-3,530.2	4,696.4	4,663.8	32.58	144.155		
7,400.0	7,327.1	7,409.6	7,283.1	13.7	25.2	119.47	2,966.3	-3,530.2	4,718.2	4,685.3	32.88	143.479		
7,450.0	7,360.7	7,443.2	7,316.7	13.7	25.2	117.69	2,966.3	-3,530.2	4,741.5	4,708.3	33.27	142.522		
7,500.0	7,391.6	7,474.1	7,347.6	13.7	25.2	115.76	2,966.3	-3,530.2	4,766.4	4,732.6	33.74	141.273		
7,550.0	7,419.7	7,502.2	7,375.7	13.8	25.3	113.65	2,966.3	-3,530.2	4,792.6	4,758.3	34.30	139.739		
7,600.0	7,444.8	7,527.4	7,400.8	13.9	25.3	111.37	2,966.3	-3,530.2	4,820.0	4,785.1	34.94	137.958		
7,650.0	7,466.9	7,549.4	7,422.9	14.1	25.3	108.89	2,966.3	-3,530.2	4,848.7	4,813.0	35.65	135.995		
7,700.0	7,485.8	7,568.4	7,441.8	14.3	25.3	106.22	2,966.3	-3,530.2	4,878.4	4,842.0	36.42	133.938		
7,750.0	7,501.5	7,584.0	7,457.5	14.6	25.3	103.35	2,966.3	-3,530.2	4,909.1	4,871.9	37.22	131.898		
7,800.0	7,513.7	7,596.3	7,469.7	14.9	25.3	100.30	2,966.3	-3,530.2	4,940.5	4,902.5	38.01	129.990		
7,850.0	7,522.6	7,605.1	7,478.6	15.2	25.3	97.07	2,966.3	-3,530.2	4,972.7	4,933.9	38.75	128.332		
7,900.0	7,528.0	7,610.6	7,484.0	15.6	25.4	93.70	2,966.3	-3,530.2	5,005.3	4,965.9	39.40	127.030		
7,952.9	7,530.0	7,612.5	7,486.0	16.1	25.4	90.00	2,966.3	-3,530.2	5,040.2	5,000.3	39.96	126.135		
8,000.0	7,530.0	7,612.5	7,486.0	16.5	25.4	90.00	2,966.3	-3,530.2	5,071.5	5,031.1	40.41	125.489		
8,100.0	7,530.0	7,612.5	7,486.0	17.5	25.4	90.00	2,966.3	-3,530.2	5,138.8	5,097.4	41.47	123.904		
8,200.0	7,530.0	7,612.5	7,486.0	18.7	25.4	90.00	2,966.3	-3,530.2	5,207.2	5,164.5	42.64	122.114		
8,300.0	7,530.0	7,612.5	7,486.0	19.9	25.4	90.00	2,966.3	-3,530.2	5,276.5	5,232.6	43.90	120.199		
8,400.0	7,530.0	7,612.5	7,486.0	21.2	25.4	90.00	2,966.3	-3,530.2	5,346.9	5,301.7	45.23	118.223		
8,500.0	7,530.0	7,612.5	7,486.0	22.6	25.4	90.00	2,966.3	-3,530.2	5,418.1	5,371.5	46.62	116.231		
8,600.0	7,530.0	7,612.5	7,486.0	24.0	25.4	90.00	2,966.3	-3,530.2	5,490.3	5,442.3	48.05	114.258		
8,700.0	7,530.0	7,612.5	7,486.0	25.4	25.4	90.00	2,966.3	-3,530.2	5,563.3	5,513.8	49.53	112.324		
8,800.0	7,530.0	7,612.5	7,486.0	26.9	25.4	90.00	2,966.3	-3,530.2	5,637.2	5,586.1	51.04	110.446		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P													Offset Site Error:	0.0 ft
Survey Program: 775-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,612.5	7,486.0	28.4	25.4	90.00	2,966.3	-3,530.2	5,711.8	5,659.3	52.58	108.632		
9,000.0	7,530.0	7,612.5	7,486.0	30.0	25.4	90.00	2,966.3	-3,530.2	5,787.2	5,733.1	54.14	106.889		
9,100.0	7,530.0	7,612.5	7,486.0	31.5	25.4	90.00	2,966.3	-3,530.2	5,863.4	5,807.7	55.73	105.219		
9,200.0	7,530.0	7,612.5	7,486.0	33.1	25.4	90.00	2,966.3	-3,530.2	5,940.3	5,882.9	57.33	103.621		
9,300.0	7,530.0	7,612.5	7,486.0	34.7	25.4	90.00	2,966.3	-3,530.2	6,017.8	5,958.8	58.94	102.096		
9,400.0	7,530.0	7,612.5	7,486.0	36.3	25.4	90.00	2,966.3	-3,530.2	6,096.0	6,035.4	60.57	100.642		
9,500.0	7,530.0	7,612.5	7,486.0	38.0	25.4	90.00	2,966.3	-3,530.2	6,174.8	6,112.6	62.21	99.256		
9,600.0	7,530.0	7,612.5	7,486.0	39.6	25.4	90.00	2,966.3	-3,530.2	6,254.2	6,190.4	63.86	97.936		
9,700.0	7,530.0	7,612.5	7,486.0	41.3	25.4	90.00	2,966.3	-3,530.2	6,334.2	6,268.7	65.52	96.679		
9,800.0	7,530.0	7,612.5	7,486.0	42.9	25.4	90.00	2,966.3	-3,530.2	6,414.8	6,347.6	67.18	95.480		
9,900.0	7,530.0	6,302.4	6,188.4	44.6	23.1	70.83	2,833.7	-3,487.7	6,494.4	6,431.2	63.28	102.622		
10,000.0	7,530.0	6,282.4	6,168.9	46.3	23.0	70.56	2,829.8	-3,486.4	6,574.0	6,509.3	64.70	101.608		
10,100.0	7,530.0	6,262.5	6,149.3	47.9	22.9	70.29	2,825.8	-3,485.1	6,654.1	6,588.0	66.11	100.645		
10,200.0	7,530.0	6,242.5	6,129.8	49.6	22.8	70.02	2,821.8	-3,483.8	6,734.7	6,667.2	67.53	99.732		
10,300.0	7,530.0	6,222.5	6,110.3	51.3	22.7	69.74	2,817.8	-3,482.5	6,815.7	6,746.8	68.94	98.867		
10,400.0	7,530.0	6,202.5	6,090.7	53.0	22.7	69.47	2,813.8	-3,481.3	6,897.2	6,826.8	70.35	98.046		
10,500.0	7,530.0	6,182.6	6,071.2	54.7	22.6	69.21	2,809.8	-3,480.0	6,979.1	6,907.3	71.75	97.267		
10,600.0	7,530.0	6,162.6	6,051.7	56.4	22.5	68.94	2,805.8	-3,478.7	7,061.4	6,988.2	73.15	96.528		
10,700.0	7,530.0	6,142.6	6,032.1	58.1	22.4	68.67	2,801.8	-3,477.4	7,144.1	7,069.5	74.55	95.827		
10,800.0	7,530.0	6,122.6	6,012.6	59.8	22.3	68.40	2,797.8	-3,476.1	7,227.1	7,151.2	75.95	95.163		
10,900.0	7,530.0	6,102.7	5,993.1	61.5	22.3	68.14	2,793.8	-3,474.9	7,310.6	7,233.2	77.33	94.532		
11,000.0	7,530.0	6,082.7	5,973.6	63.2	22.2	67.87	2,789.9	-3,473.6	7,394.4	7,315.7	78.72	93.933		
11,100.0	7,530.0	6,062.7	5,954.0	64.9	22.1	67.61	2,785.9	-3,472.3	7,478.5	7,398.4	80.10	93.366		
11,200.0	7,530.0	6,042.7	5,934.5	66.6	22.0	67.34	2,781.9	-3,471.0	7,563.0	7,481.5	81.47	92.827		
11,300.0	7,530.0	6,022.8	5,915.0	68.4	21.9	67.08	2,777.9	-3,469.7	7,647.8	7,565.0	82.84	92.316		
11,400.0	7,530.0	6,002.8	5,895.4	70.1	21.9	66.82	2,773.9	-3,468.5	7,732.9	7,648.7	84.21	91.831		
11,500.0	7,530.0	5,982.8	5,875.9	71.8	21.8	66.55	2,769.9	-3,467.2	7,818.3	7,732.8	85.57	91.371		
11,600.0	7,530.0	5,962.8	5,856.4	73.5	21.7	66.29	2,765.9	-3,465.9	7,904.0	7,817.1	86.92	90.935		
11,700.0	7,530.0	5,942.9	5,836.8	75.2	21.6	66.03	2,761.9	-3,464.6	7,990.0	7,901.8	88.27	90.521		
11,800.0	7,530.0	5,922.9	5,817.3	77.0	21.5	65.78	2,757.9	-3,463.3	8,076.3	7,986.7	89.61	90.129		
11,900.0	7,530.0	5,902.9	5,797.8	78.7	21.5	65.52	2,753.9	-3,462.0	8,162.8	8,071.9	90.94	89.757		
12,000.0	7,530.0	5,882.9	5,778.2	80.4	21.4	65.26	2,750.0	-3,460.8	8,249.6	8,157.3	92.27	89.405		
12,100.0	7,530.0	5,863.0	5,758.7	82.2	21.3	65.00	2,746.0	-3,459.5	8,336.6	8,243.0	93.59	89.071		
12,200.0	7,530.0	5,843.0	5,739.2	83.9	21.2	64.75	2,742.0	-3,458.2	8,423.9	8,329.0	94.91	88.756		
12,300.0	7,530.0	5,823.0	5,719.7	85.6	21.1	64.50	2,738.0	-3,456.9	8,511.4	8,415.2	96.22	88.457		
12,400.0	7,530.0	5,803.0	5,700.1	87.3	21.1	64.24	2,734.0	-3,455.6	8,599.1	8,501.6	97.52	88.175		
12,500.0	7,530.0	5,783.1	5,680.6	89.1	21.0	63.99	2,730.0	-3,454.4	8,687.1	8,588.3	98.82	87.908		
12,600.0	7,530.0	5,763.1	5,661.1	90.8	20.9	63.74	2,726.0	-3,453.1	8,775.3	8,675.1	100.11	87.656		
12,700.0	7,530.0	5,743.1	5,641.5	92.5	20.8	63.49	2,722.0	-3,451.8	8,863.6	8,762.2	101.39	87.418		
12,800.0	7,530.0	5,723.1	5,622.0	94.3	20.7	63.24	2,718.0	-3,450.5	8,952.2	8,849.5	102.67	87.195		
12,900.0	7,530.0	5,703.2	5,602.5	96.0	20.7	62.99	2,714.0	-3,449.2	9,041.0	8,937.0	103.94	86.984		
13,000.0	7,530.0	5,683.2	5,582.9	97.8	20.6	62.74	2,710.1	-3,448.0	9,129.9	9,024.7	105.20	86.786		
13,100.0	7,530.0	5,663.2	5,563.4	99.5	20.5	62.49	2,706.1	-3,446.7	9,219.0	9,112.6	106.46	86.600		
13,200.0	7,530.0	5,643.2	5,543.9	101.2	20.4	62.25	2,702.1	-3,445.4	9,308.4	9,200.6	107.70	86.425		
13,300.0	7,530.0	5,623.3	5,524.3	103.0	20.3	62.00	2,698.1	-3,444.1	9,397.8	9,288.9	108.95	86.262		
13,400.0	7,530.0	5,603.3	5,504.8	104.7	20.3	61.76	2,694.1	-3,442.8	9,487.5	9,377.3	110.18	86.110		
13,500.0	7,530.0	5,583.3	5,485.3	106.4	20.2	61.51	2,690.1	-3,441.6	9,577.3	9,465.9	111.41	85.967		
13,600.0	7,530.0	5,563.3	5,465.7	108.2	20.1	61.27	2,686.1	-3,440.3	9,667.3	9,554.7	112.63	85.835		
13,700.0	7,530.0	5,543.4	5,446.2	109.9	20.0	61.03	2,682.1	-3,439.0	9,757.4	9,643.6	113.84	85.713		
13,800.0	7,530.0	5,523.4	5,426.7	111.7	19.9	60.79	2,678.1	-3,437.7	9,847.7	9,732.7	115.04	85.600		
13,900.0	7,530.0	5,503.4	5,407.2	113.4	19.9	60.55	2,674.1	-3,436.4	9,938.1	9,821.9	116.24	85.495 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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S														Offset Site Error:	0.0 ft
Survey Program: 76-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-61.35	1,742.5	-3,189.0	3,634.3						
100.0	100.0	371.4	370.6	0.2	0.8	-61.48	1,725.9	-3,176.7	3,628.9	3,628.0	0.87	4,164.912			
200.0	200.0	461.9	460.6	0.3	1.0	-61.59	1,716.3	-3,173.1	3,620.4	3,619.1	1.28	2,833.650			
300.0	300.0	549.5	547.4	0.5	1.2	-61.73	1,705.2	-3,170.9	3,612.1	3,610.4	1.70	2,128.952			
400.0	400.0	617.0	614.2	0.7	1.4	-61.86	1,695.4	-3,170.2	3,604.3	3,602.2	2.08	1,733.946			
500.0	500.0	678.0	674.5	0.8	1.6	-62.00	1,685.9	-3,170.5	3,597.5	3,595.1	2.44	1,473.609			
600.0	600.0	710.0	706.1	1.0	1.7	-62.07	1,680.9	-3,171.2	3,592.3	3,589.6	2.72	1,322.457			
700.0	700.0	802.4	797.3	1.2	2.0	-94.83	1,666.4	-3,174.1	3,587.8	3,584.8	2.99	1,198.901			
800.0	800.0	869.0	863.0	1.4	2.2	-95.05	1,656.1	-3,177.0	3,584.6	3,581.2	3.38	1,061.745			
900.0	899.9	978.8	971.1	1.6	2.6	-95.46	1,637.7	-3,182.9	3,582.1	3,578.1	3.96	904.683			
988.4	988.1	1,155.6	1,143.5	1.7	3.3	-96.27	1,599.9	-3,193.1	3,578.4	3,573.6	4.85	737.265			
1,000.0	999.7	1,171.7	1,159.1	1.7	3.4	-96.35	1,596.1	-3,194.0	3,577.9	3,572.9	4.95	723.340			
1,100.0	1,099.4	1,255.5	1,240.4	1.9	3.7	-96.76	1,576.3	-3,198.6	3,573.0	3,567.5	5.51	648.462			
1,200.0	1,199.2	1,334.6	1,317.2	2.1	4.1	-97.14	1,557.8	-3,203.5	3,569.1	3,563.0	6.06	588.661			
1,300.0	1,299.0	1,417.1	1,397.0	2.3	4.5	-97.55	1,538.0	-3,208.9	3,565.5	3,558.9	6.64	536.652			
1,400.0	1,398.8	1,468.0	1,446.3	2.5	4.7	-97.81	1,525.7	-3,212.7	3,563.0	3,555.9	7.08	502.973			
1,500.0	1,498.5	1,554.0	1,529.5	2.7	5.1	-98.25	1,505.2	-3,219.9	3,561.6	3,553.9	7.70	462.741			
1,600.0	1,598.3	1,736.6	1,704.6	2.9	6.1	-99.26	1,455.7	-3,235.4	3,559.2	3,550.3	8.89	400.565			
1,700.0	1,698.1	1,835.3	1,798.4	3.2	6.6	-99.85	1,426.5	-3,243.8	3,556.4	3,546.8	9.64	368.903			
1,800.0	1,797.8	1,935.0	1,893.5	3.4	7.1	-100.43	1,397.5	-3,251.2	3,553.1	3,542.8	10.38	342.373			
1,900.0	1,897.6	1,982.0	1,938.7	3.6	7.4	-100.69	1,384.8	-3,254.7	3,551.1	3,540.3	10.82	328.145			
1,978.3	1,975.7	2,022.0	1,977.2	3.7	7.6	-100.90	1,374.5	-3,258.0	3,550.6	3,539.4	11.19	317.398			
2,000.0	1,997.4	2,031.5	1,986.3	3.8	7.6	-100.95	1,372.1	-3,258.8	3,550.7	3,539.4	11.28	314.782			
2,100.0	2,097.1	2,184.9	2,133.6	4.0	8.4	-101.80	1,331.6	-3,272.9	3,551.3	3,539.0	12.30	288.738			
2,200.0	2,196.9	2,270.0	2,215.1	4.2	8.9	-102.28	1,308.0	-3,279.7	3,550.4	3,537.5	12.97	273.761			
2,222.6	2,219.5	2,282.4	2,227.0	4.2	8.9	-102.35	1,304.5	-3,280.8	3,550.4	3,537.3	13.09	271.329 CC, ES			
2,300.0	2,296.7	2,324.0	2,266.6	4.4	9.2	-102.59	1,292.7	-3,284.7	3,550.8	3,537.3	13.48	263.451			
2,400.0	2,396.5	2,410.0	2,348.5	4.6	9.7	-103.11	1,267.9	-3,293.5	3,552.2	3,538.1	14.18	250.540			
2,500.0	2,496.2	2,516.2	2,449.5	4.8	10.2	-103.74	1,237.1	-3,304.3	3,554.0	3,539.0	14.98	237.226			
2,600.0	2,596.0	2,698.1	2,622.9	5.0	11.3	-104.81	1,184.2	-3,320.1	3,554.9	3,538.7	16.22	219.171			
2,657.7	2,653.6	2,750.6	2,672.6	5.1	11.6	-105.13	1,167.9	-3,324.3	3,554.8	3,538.2	16.65	213.506			
2,700.0	2,695.8	2,775.8	2,696.5	5.2	11.7	-105.29	1,160.0	-3,326.4	3,554.9	3,538.0	16.89	210.467			
2,800.0	2,795.5	2,838.0	2,755.2	5.4	12.1	-105.68	1,140.3	-3,332.0	3,556.1	3,538.6	17.48	203.487			
2,900.0	2,895.3	2,910.8	2,824.0	5.6	12.5	-106.13	1,117.6	-3,339.1	3,558.4	3,540.3	18.10	196.553			
3,000.0	2,995.1	3,037.9	2,944.8	5.9	13.2	-106.90	1,079.6	-3,349.9	3,560.2	3,541.2	19.03	187.088			
3,100.0	3,094.9	3,094.0	2,998.1	6.1	13.6	-107.23	1,063.0	-3,355.1	3,563.2	3,543.7	19.55	182.219			
3,200.0	3,194.6	3,147.1	3,048.5	6.3	13.9	-107.55	1,047.4	-3,360.6	3,567.6	3,547.5	20.07	177.796			
3,300.0	3,294.4	3,266.0	3,161.5	6.5	14.5	-108.26	1,012.3	-3,372.8	3,572.5	3,551.5	20.94	170.590			
3,400.0	3,394.2	3,322.0	3,214.7	6.7	14.9	-108.59	995.7	-3,378.5	3,577.6	3,556.1	21.48	166.590			
3,500.0	3,493.9	3,416.8	3,304.5	6.9	15.4	-109.17	967.4	-3,389.3	3,584.1	3,561.9	22.22	161.323			
3,600.0	3,593.7	3,504.1	3,387.5	7.1	15.9	-109.68	941.7	-3,398.7	3,590.5	3,567.6	22.92	156.670			
3,700.0	3,693.5	3,589.8	3,468.8	7.3	16.4	-110.19	916.5	-3,408.2	3,597.7	3,574.1	23.59	152.477			
3,800.0	3,793.2	3,675.3	3,550.2	7.5	16.9	-110.68	892.3	-3,417.6	3,605.3	3,581.0	24.26	148.630			
3,900.0	3,893.0	3,884.5	3,749.5	7.7	18.0	-111.88	832.4	-3,438.6	3,612.8	3,587.2	25.59	141.173			
4,000.0	3,992.8	4,020.0	3,879.0	8.0	18.8	-112.64	793.5	-3,448.5	3,617.7	3,591.2	26.49	136.566			
4,100.0	4,092.6	4,091.8	3,947.8	8.2	19.1	-113.03	773.7	-3,453.4	3,622.6	3,595.5	27.06	133.858			
4,200.0	4,192.3	4,159.4	4,012.5	8.4	19.5	-113.41	754.6	-3,458.6	3,628.5	3,600.9	27.61	131.401			
4,300.0	4,292.1	4,228.6	4,078.6	8.6	19.9	-113.79	735.2	-3,464.4	3,635.4	3,607.2	28.18	128.990			
4,400.0	4,391.9	4,293.0	4,139.7	8.8	20.3	-114.17	715.8	-3,470.4	3,643.4	3,614.6	28.75	126.720			
4,500.0	4,491.6	4,424.5	4,264.7	9.0	21.0	-114.92	676.6	-3,482.3	3,651.4	3,621.8	29.63	123.222			
4,600.0	4,591.4	4,543.8	4,378.9	9.2	21.6	-115.57	643.6	-3,492.0	3,659.2	3,628.8	30.42	120.293			
4,700.0	4,691.2	4,776.7	4,602.0	9.4	22.9	-116.82	578.0	-3,505.8	3,665.4	3,633.6	31.77	115.386			

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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		
4,800.0	4,790.9	4,852.3	4,674.7	9.6	23.2	-117.21	557.5	-3,508.8	3,670.0	3,637.7	32.31	113.574		
4,900.0	4,890.7	4,934.9	4,754.5	9.8	23.6	-117.62	536.6	-3,512.6	3,675.5	3,642.6	32.86	111.839		
5,000.0	4,990.5	5,073.0	4,888.9	10.1	24.2	-118.24	505.3	-3,517.8	3,680.8	3,647.2	33.60	109.546		
5,100.0	5,090.3	5,167.5	4,981.2	10.3	24.6	-118.63	485.6	-3,520.7	3,685.7	3,651.6	34.14	107.958		
5,200.0	5,190.0	5,271.2	5,083.0	10.5	25.0	-119.04	465.6	-3,523.9	3,690.8	3,656.2	34.68	106.415		
5,300.0	5,289.8	5,405.5	5,215.4	10.7	25.4	-119.50	443.6	-3,526.7	3,695.4	3,660.1	35.26	104.795		
5,400.0	5,389.6	5,497.2	5,306.3	10.9	25.6	-119.77	431.9	-3,528.1	3,699.7	3,664.0	35.67	103.731		
5,500.0	5,489.3	5,593.9	5,402.5	11.1	25.8	-120.00	422.3	-3,529.5	3,704.1	3,668.1	36.04	102.772		
5,600.0	5,589.1	5,671.2	5,479.6	11.3	25.9	-120.16	416.6	-3,530.9	3,709.0	3,672.6	36.36	102.011		
5,700.0	5,688.9	5,759.4	5,567.7	11.5	26.1	-120.32	411.9	-3,532.8	3,714.4	3,677.7	36.67	101.300		
5,800.0	5,788.7	5,856.2	5,664.4	11.7	26.2	-120.46	408.3	-3,535.0	3,719.9	3,683.0	36.95	100.682		
5,900.0	5,888.4	5,949.2	5,757.3	11.9	26.2	-120.57	406.5	-3,537.1	3,725.6	3,688.3	37.22	100.099		
6,000.0	5,988.2	6,034.6	5,842.7	12.2	26.3	-120.66	405.7	-3,539.3	3,731.6	3,694.1	37.47	99.581		
6,100.0	6,088.0	6,138.7	5,946.7	12.4	26.4	-120.76	405.5	-3,542.2	3,737.8	3,700.1	37.74	99.034		
6,200.0	6,187.7	6,275.9	6,084.0	12.6	26.5	-120.90	404.6	-3,545.1	3,743.4	3,705.4	38.05	98.393		
6,300.0	6,287.5	6,400.0	6,208.0	12.8	26.6	-121.02	403.8	-3,546.7	3,748.2	3,709.8	38.33	97.780		
6,400.0	6,387.3	6,501.5	6,309.5	13.0	26.7	-121.12	403.5	-3,547.6	3,752.5	3,713.9	38.60	97.227		
6,500.0	6,487.0	6,594.9	6,402.9	13.2	26.8	-121.19	403.8	-3,548.5	3,757.0	3,718.2	38.85	96.705		
6,600.0	6,586.8	6,686.5	6,494.5	13.4	26.8	-121.27	404.3	-3,549.5	3,761.7	3,722.6	39.11	96.191		
6,700.0	6,686.6	6,775.0	6,583.0	13.6	26.9	-121.34	404.7	-3,550.8	3,766.6	3,727.3	39.36	95.693		
6,787.0	6,773.4	6,855.0	6,663.0	13.8	27.0	-121.40	405.3	-3,552.1	3,771.1	3,731.5	39.58	95.287		
6,800.0	6,786.4	6,866.6	6,674.5	13.8	27.0	-131.99	405.4	-3,552.3	3,771.8	3,732.2	39.60	95.249		
6,850.0	6,836.3	6,910.9	6,718.9	13.9	27.0	140.66	405.9	-3,553.1	3,774.6	3,734.9	39.66	95.166		
6,900.0	6,886.2	6,955.5	6,763.4	14.0	27.0	110.62	406.5	-3,554.0	3,777.4	3,737.7	39.70	95.142		
6,950.0	6,935.7	7,000.9	6,808.8	14.0	27.0	102.67	407.2	-3,554.9	3,780.4	3,740.7	39.72	95.177		
7,000.0	6,984.6	7,045.6	6,853.5	14.0	27.1	99.15	407.9	-3,555.9	3,783.5	3,743.8	39.72	95.259		
7,050.0	7,032.6	7,089.5	6,897.4	14.0	27.1	97.19	408.8	-3,556.9	3,786.7	3,747.0	39.70	95.382		
7,100.0	7,079.7	7,118.0	6,925.9	13.9	27.1	95.87	409.4	-3,557.6	3,790.1	3,750.5	39.65	95.578		
7,150.0	7,125.4	7,165.7	6,973.6	13.9	27.2	95.06	410.3	-3,558.9	3,793.7	3,754.0	39.64	95.692		
7,200.0	7,169.6	7,200.2	7,008.1	13.8	27.2	94.40	410.7	-3,559.9	3,797.5	3,757.9	39.61	95.876		
7,250.0	7,212.1	7,233.6	7,041.4	13.8	27.2	93.89	410.9	-3,560.9	3,801.6	3,762.1	39.57	96.068		
7,300.0	7,252.6	7,265.6	7,073.4	13.7	27.3	93.47	410.9	-3,562.0	3,806.1	3,766.5	39.54	96.256		
7,350.0	7,291.0	7,300.4	7,108.2	13.7	27.3	93.10	410.6	-3,563.3	3,810.8	3,771.3	39.53	96.405		
7,400.0	7,327.1	7,345.8	7,153.6	13.7	27.4	93.05	410.2	-3,564.9	3,815.8	3,776.2	39.56	96.460		
7,450.0	7,360.7	7,388.3	7,196.0	13.7	27.4	92.86	409.8	-3,566.4	3,821.1	3,781.4	39.61	96.470		
7,500.0	7,391.6	7,427.5	7,235.2	13.7	27.4	92.73	409.4	-3,567.6	3,826.6	3,786.9	39.69	96.422		
7,550.0	7,419.7	7,463.7	7,271.3	13.8	27.5	92.58	409.0	-3,568.7	3,832.5	3,792.7	39.80	96.302		
7,600.0	7,444.8	7,498.6	7,306.3	13.9	27.5	92.42	408.6	-3,569.6	3,838.8	3,798.9	39.95	96.100		
7,650.0	7,466.9	7,529.1	7,336.8	14.1	27.6	92.21	408.3	-3,570.4	3,845.5	3,805.4	40.14	95.808		
7,700.0	7,485.8	7,555.1	7,362.7	14.3	27.6	91.92	408.2	-3,571.0	3,852.8	3,812.4	40.38	95.424		
7,750.0	7,501.5	7,576.4	7,384.1	14.6	27.6	91.55	408.0	-3,571.4	3,860.5	3,819.8	40.66	94.947		
7,800.0	7,513.7	7,593.1	7,400.7	14.9	27.6	91.08	408.0	-3,571.7	3,868.7	3,827.7	40.99	94.380		
7,850.0	7,522.6	7,605.1	7,412.7	15.2	27.6	90.52	407.9	-3,572.0	3,877.5	3,836.1	41.37	93.730		
7,900.0	7,528.0	7,612.5	7,420.1	15.6	27.6	89.86	407.9	-3,572.1	3,886.8	3,845.0	41.79	93.011		
7,952.9	7,530.0	7,615.2	7,422.8	16.1	27.6	89.05	407.9	-3,572.1	3,897.1	3,854.9	42.27	92.192		
8,000.0	7,530.0	7,615.3	7,422.9	16.5	27.6	89.05	407.9	-3,572.1	3,906.8	3,864.1	42.73	91.436		
8,100.0	7,530.0	7,615.5	7,423.1	17.5	27.6	89.06	407.9	-3,572.1	3,929.2	3,885.4	43.79	89.733		
8,200.0	7,530.0	7,615.7	7,423.4	18.7	27.6	89.06	407.9	-3,572.1	3,954.0	3,909.1	44.96	87.953		
8,300.0	7,530.0	7,615.9	7,423.6	19.9	27.6	89.06	407.9	-3,572.1	3,981.2	3,935.0	46.21	86.149		
8,400.0	7,530.0	7,616.2	7,423.8	21.2	27.6	89.07	407.9	-3,572.1	4,010.7	3,963.1	47.54	84.361		
8,500.0	7,530.0	7,616.4	7,424.0	22.6	27.6	89.07	407.9	-3,572.2	4,042.4	3,993.5	48.93	82.616		
8,600.0	7,530.0	7,616.6	7,424.2	24.0	27.6	89.07	407.9	-3,572.2	4,076.3	4,026.0	50.37	80.933		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 76-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
8,700.0	7,530.0	7,616.8	7,424.4	25.4	27.6	89.08	407.9	-3,572.2	4,112.4	4,060.6	51.84	79.322		
8,800.0	7,530.0	7,617.0	7,424.6	26.9	27.6	89.08	407.9	-3,572.2	4,150.6	4,097.2	53.36	77.792		
8,900.0	7,530.0	7,617.2	7,424.8	28.4	27.6	89.08	407.9	-3,572.2	4,190.8	4,135.9	54.89	76.343		
9,000.0	7,530.0	7,617.4	7,425.0	30.0	27.6	89.08	407.9	-3,572.2	4,233.0	4,176.6	56.46	74.977		
9,100.0	7,530.0	7,617.6	7,425.2	31.5	27.6	89.09	407.9	-3,572.2	4,277.1	4,219.1	58.04	73.691		
9,200.0	7,530.0	7,617.8	7,425.4	33.1	27.6	89.09	407.9	-3,572.2	4,323.1	4,263.5	59.64	72.485		
9,300.0	7,530.0	7,617.9	7,425.6	34.7	27.6	89.09	407.9	-3,572.2	4,370.9	4,309.7	61.26	71.353		
9,400.0	7,530.0	7,618.1	7,425.8	36.3	27.6	89.10	407.9	-3,572.2	4,420.5	4,357.6	62.89	70.293		
9,500.0	7,530.0	7,618.3	7,425.9	38.0	27.6	89.10	407.9	-3,572.2	4,471.7	4,407.2	64.53	69.300		
9,600.0	7,530.0	7,618.5	7,426.1	39.6	27.6	89.10	407.9	-3,572.2	4,524.5	4,458.4	66.18	68.371		
9,700.0	7,530.0	7,618.7	7,426.3	41.3	27.6	89.10	407.9	-3,572.2	4,579.0	4,511.1	67.83	67.502		
9,800.0	7,530.0	7,618.8	7,426.5	42.9	27.6	89.11	407.9	-3,572.2	4,634.9	4,565.4	69.50	66.689		
9,900.0	7,530.0	7,619.0	7,426.6	44.6	27.6	89.11	407.9	-3,572.2	4,692.3	4,621.2	71.17	65.929		
10,000.0	7,530.0	7,619.2	7,426.8	46.3	27.6	89.11	407.9	-3,572.2	4,751.2	4,678.3	72.85	65.217		
10,100.0	7,530.0	7,619.3	7,427.0	47.9	27.6	89.11	407.9	-3,572.2	4,811.3	4,736.8	74.54	64.550		
10,200.0	7,530.0	7,619.5	7,427.1	49.6	27.6	89.12	407.9	-3,572.2	4,872.8	4,796.6	76.23	63.927		
10,300.0	7,530.0	7,619.7	7,427.3	51.3	27.6	89.12	407.9	-3,572.2	4,935.6	4,857.7	77.92	63.343		
10,400.0	7,530.0	7,619.8	7,427.4	53.0	27.6	89.12	407.9	-3,572.2	4,999.6	4,919.9	79.62	62.796		
10,500.0	7,530.0	7,620.0	7,427.6	54.7	27.6	89.12	407.9	-3,572.2	5,064.7	4,983.4	81.32	62.283		
10,600.0	7,530.0	7,620.1	7,427.7	56.4	27.6	89.13	407.9	-3,572.2	5,130.9	5,047.9	83.02	61.803		
10,700.0	7,530.0	7,620.3	7,427.9	58.1	27.6	89.13	407.9	-3,572.2	5,198.3	5,113.6	84.73	61.352		
10,800.0	7,530.0	7,620.4	7,428.0	59.8	27.6	89.13	407.9	-3,572.2	5,266.7	5,180.2	86.44	60.929		
10,900.0	7,530.0	7,620.6	7,428.2	61.5	27.6	89.13	407.9	-3,572.2	5,336.0	5,247.9	88.15	60.533		
11,000.0	7,530.0	7,620.7	7,428.3	63.2	27.6	89.13	407.9	-3,572.2	5,406.4	5,316.5	89.87	60.160		
11,100.0	7,530.0	7,620.9	7,428.5	64.9	27.6	89.14	407.9	-3,572.2	5,477.6	5,386.0	91.58	59.811		
11,200.0	7,530.0	7,621.0	7,428.6	66.6	27.6	89.14	407.9	-3,572.2	5,549.7	5,456.4	93.30	59.482		
11,300.0	7,530.0	7,621.1	7,428.8	68.4	27.6	89.14	407.9	-3,572.2	5,622.7	5,527.7	95.02	59.173		
11,400.0	7,530.0	7,621.3	7,428.9	70.1	27.6	89.14	407.9	-3,572.2	5,696.6	5,599.8	96.74	58.883		
11,500.0	7,530.0	7,621.4	7,429.0	71.8	27.6	89.15	407.9	-3,572.2	5,771.2	5,672.7	98.47	58.610		
11,600.0	7,530.0	7,621.5	7,429.2	73.5	27.6	89.15	407.9	-3,572.2	5,846.5	5,746.3	100.19	58.353		
11,700.0	7,530.0	7,621.7	7,429.3	75.2	27.6	89.15	407.9	-3,572.2	5,922.6	5,820.7	101.92	58.111		
11,800.0	7,530.0	7,621.8	7,429.4	77.0	27.6	89.15	407.9	-3,572.2	5,999.4	5,895.7	103.65	57.883		
11,900.0	7,530.0	7,621.9	7,429.5	78.7	27.6	89.15	407.9	-3,572.2	6,076.9	5,971.5	105.38	57.668		
12,000.0	7,530.0	7,622.0	7,429.7	80.4	27.6	89.15	407.9	-3,572.2	6,155.0	6,047.9	107.11	57.466		
12,100.0	7,530.0	7,622.2	7,429.8	82.2	27.6	89.16	407.9	-3,572.2	6,233.7	6,124.9	108.84	57.276		
12,200.0	7,530.0	7,622.3	7,429.9	83.9	27.6	89.16	407.9	-3,572.3	6,313.1	6,202.5	110.57	57.096		
12,300.0	7,530.0	7,622.4	7,430.0	85.6	27.6	89.16	407.9	-3,572.3	6,393.0	6,280.7	112.30	56.927		
12,400.0	7,530.0	7,622.5	7,430.2	87.3	27.6	89.16	407.9	-3,572.3	6,473.5	6,359.4	114.04	56.767		
12,500.0	7,530.0	7,622.6	7,430.3	89.1	27.6	89.16	407.9	-3,572.3	6,554.5	6,438.7	115.77	56.616		
12,600.0	7,530.0	7,622.8	7,430.4	90.8	27.6	89.17	407.9	-3,572.3	6,636.0	6,518.5	117.51	56.474		
12,700.0	7,530.0	7,622.9	7,430.5	92.5	27.6	89.17	407.9	-3,572.3	6,718.1	6,598.8	119.24	56.340		
12,800.0	7,530.0	7,623.0	7,430.6	94.3	27.6	89.17	407.9	-3,572.3	6,800.6	6,679.6	120.98	56.213		
12,900.0	7,530.0	7,623.1	7,430.7	96.0	27.6	89.17	407.9	-3,572.3	6,883.6	6,760.8	122.72	56.094		
13,000.0	7,530.0	7,623.2	7,430.8	97.8	27.6	89.17	407.9	-3,572.3	6,967.0	6,842.5	124.45	55.981		
13,100.0	7,530.0	7,623.3	7,431.0	99.5	27.6	89.17	407.9	-3,572.3	7,050.8	6,924.6	126.19	55.874		
13,200.0	7,530.0	7,623.4	7,431.1	101.2	27.6	89.18	407.9	-3,572.3	7,135.1	7,007.2	127.93	55.773		
13,300.0	7,530.0	7,623.5	7,431.2	103.0	27.6	89.18	407.9	-3,572.3	7,219.8	7,090.1	129.67	55.678		
13,400.0	7,530.0	7,623.6	7,431.3	104.7	27.6	89.18	407.9	-3,572.3	7,304.9	7,173.4	131.41	55.588		
13,500.0	7,530.0	7,623.8	7,431.4	106.4	27.6	89.18	407.9	-3,572.3	7,390.3	7,257.1	133.15	55.503		
13,600.0	7,530.0	7,623.9	7,431.5	108.2	27.6	89.18	407.9	-3,572.3	7,476.1	7,341.2	134.89	55.423		
13,700.0	7,530.0	7,624.0	7,431.6	109.9	27.6	89.18	407.9	-3,572.3	7,562.2	7,425.6	136.63	55.347		
13,800.0	7,530.0	7,624.1	7,431.7	111.7	27.6	89.18	407.9	-3,572.3	7,648.7	7,510.3	138.37	55.276		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
13,900.0	7,530.0	7,624.2	7,431.8	113.4	27.6	89.19	407.9	-3,572.3	7,735.5	7,595.4	140.12	55.208		
14,000.0	7,530.0	7,624.3	7,431.9	115.1	27.6	89.19	407.9	-3,572.3	7,822.7	7,680.8	141.86	55.144		
14,100.0	7,530.0	7,624.4	7,432.0	116.9	27.6	89.19	407.9	-3,572.3	7,910.1	7,766.5	143.60	55.084		
14,200.0	7,530.0	7,624.4	7,432.1	118.6	27.6	89.19	407.9	-3,572.3	7,997.8	7,852.5	145.34	55.027		
14,300.0	7,530.0	7,624.5	7,432.2	120.4	27.6	89.19	407.9	-3,572.3	8,085.8	7,938.7	147.09	54.973		
14,400.0	7,530.0	7,624.6	7,432.3	122.1	27.6	89.19	407.9	-3,572.3	8,174.1	8,025.3	148.83	54.922		
14,500.0	7,530.0	7,624.7	7,432.4	123.9	27.6	89.19	407.9	-3,572.3	8,262.7	8,112.1	150.58	54.874		
14,600.0	7,530.0	7,624.8	7,432.4	125.6	27.6	89.20	407.9	-3,572.3	8,351.5	8,199.1	152.32	54.828		
14,700.0	7,530.0	7,631.0	7,438.6	127.3	27.6	89.29	407.9	-3,572.4	8,440.5	8,286.5	154.07	54.783		
14,800.0	7,530.0	7,631.0	7,438.6	129.1	27.6	89.29	407.9	-3,572.4	8,529.8	8,374.0	155.82	54.742		
14,900.0	7,530.0	7,631.0	7,438.6	130.8	27.6	89.29	407.9	-3,572.4	8,619.4	8,461.8	157.56	54.704		
15,000.0	7,530.0	7,631.0	7,438.6	132.6	27.6	89.29	407.9	-3,572.4	8,709.1	8,549.8	159.31	54.669		
15,100.0	7,530.0	7,631.0	7,438.6	134.3	27.6	89.29	407.9	-3,572.4	8,799.1	8,638.1	161.05	54.635		
15,200.0	7,530.0	7,631.0	7,438.6	136.1	27.6	89.29	407.9	-3,572.4	8,889.3	8,726.5	162.80	54.603		
15,300.0	7,530.0	7,631.0	7,438.6	137.8	27.6	89.29	407.9	-3,572.4	8,979.7	8,815.2	164.54	54.573		
15,400.0	7,530.0	7,631.0	7,438.6	139.6	27.6	89.29	407.9	-3,572.4	9,070.3	8,904.0	166.29	54.545		
15,500.0	7,530.0	7,631.0	7,438.6	141.3	27.6	89.29	407.9	-3,572.4	9,161.1	8,993.1	168.04	54.519		
15,600.0	7,530.0	7,631.0	7,438.6	143.0	27.6	89.29	407.9	-3,572.4	9,252.1	9,082.4	169.78	54.494		
15,700.0	7,530.0	7,631.0	7,438.6	144.8	27.6	89.29	407.9	-3,572.4	9,343.3	9,171.8	171.53	54.470		
15,800.0	7,530.0	7,631.0	7,438.6	146.5	27.6	89.29	407.9	-3,572.4	9,434.7	9,261.4	173.28	54.449		
15,900.0	7,530.0	7,631.0	7,438.6	148.3	27.6	89.29	407.9	-3,572.4	9,526.2	9,351.2	175.02	54.428		
16,000.0	7,530.0	7,631.0	7,438.6	150.0	27.6	89.29	407.9	-3,572.4	9,617.9	9,441.1	176.77	54.409		
16,100.0	7,530.0	7,631.0	7,438.6	151.8	27.6	89.29	407.9	-3,572.4	9,709.8	9,531.2	178.52	54.391		
16,200.0	7,530.0	7,631.0	7,438.6	153.5	27.6	89.29	407.9	-3,572.4	9,801.8	9,621.5	180.27	54.374		
16,300.0	7,530.0	7,631.0	7,438.6	155.3	27.6	89.29	407.9	-3,572.4	9,894.0	9,712.0	182.01	54.359		
16,400.0	7,530.0	7,631.0	7,438.6	157.0	27.6	89.29	407.9	-3,572.4	9,986.3	9,802.5	183.76	54.344 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 1 (EXISTING) - FOUNDATION WELL - NO														Offset Site Error:	0.0 ft
Survey Program:		5010-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-28.85	4,980.9	-2,743.7	5,687.1						
100.0	100.0	27.0	27.0	0.2	0.0	-28.85	4,980.9	-2,743.7	5,686.6	5,686.4	0.20	N/A			
200.0	200.0	127.0	127.0	0.3	0.2	-28.85	4,980.9	-2,743.7	5,686.6	5,686.1	0.55	N/A			
300.0	300.0	227.0	227.0	0.5	0.4	-28.85	4,980.9	-2,743.7	5,686.6	5,685.7	0.90	6,337.547			
400.0	400.0	327.0	327.0	0.7	0.6	-28.85	4,980.9	-2,743.7	5,686.6	5,685.4	1.25	4,562.611			
500.0	500.0	427.0	427.0	0.8	0.7	-28.85	4,980.9	-2,743.7	5,686.6	5,685.0	1.60	3,564.354			
600.0	600.0	527.0	527.0	1.0	0.9	-28.85	4,980.9	-2,743.7	5,686.6	5,684.7	1.94	2,924.500			
700.0	700.0	627.0	627.0	1.2	1.1	-61.33	4,980.9	-2,743.7	5,686.2	5,683.9	2.29	2,478.971			
800.0	800.0	727.0	727.0	1.4	1.3	-61.37	4,980.9	-2,743.7	5,684.9	5,682.3	2.64	2,149.606			
900.0	899.9	826.9	826.9	1.6	1.4	-61.42	4,980.9	-2,743.7	5,682.9	5,679.9	3.00	1,894.801			
988.4	988.1	915.1	915.1	1.7	1.6	-61.49	4,980.9	-2,743.7	5,680.3	5,677.0	3.32	1,712.290			
1,000.0	999.7	926.7	926.7	1.7	1.6	-61.50	4,980.9	-2,743.7	5,679.9	5,676.6	3.36	1,690.757			
1,100.0	1,099.4	1,026.4	1,026.4	1.9	1.8	-61.56	4,980.9	-2,743.7	5,676.7	5,673.0	3.72	1,524.617			
1,200.0	1,199.2	1,126.2	1,126.2	2.1	2.0	-61.62	4,980.9	-2,743.7	5,673.5	5,669.4	4.09	1,387.217			
1,300.0	1,299.0	1,226.0	1,226.0	2.3	2.1	-61.68	4,980.9	-2,743.7	5,670.3	5,665.8	4.46	1,271.874			
1,400.0	1,398.8	1,325.8	1,325.8	2.5	2.3	-61.74	4,980.9	-2,743.7	5,667.0	5,662.2	4.83	1,173.780			
1,500.0	1,498.5	1,425.5	1,425.5	2.7	2.5	-61.80	4,980.9	-2,743.7	5,663.8	5,658.6	5.20	1,089.402			
1,600.0	1,598.3	1,525.3	1,525.3	2.9	2.7	-61.86	4,980.9	-2,743.7	5,660.6	5,655.1	5.57	1,016.093			
1,700.0	1,698.1	1,625.1	1,625.1	3.2	2.8	-61.92	4,980.9	-2,743.7	5,657.4	5,651.5	5.94	951.838			
1,800.0	1,797.8	1,724.8	1,724.8	3.4	3.0	-61.98	4,980.9	-2,743.7	5,654.2	5,647.9	6.32	895.075			
1,900.0	1,897.6	1,824.6	1,824.6	3.6	3.2	-62.04	4,980.9	-2,743.7	5,651.1	5,644.4	6.69	844.579			
2,000.0	1,997.4	1,924.4	1,924.4	3.8	3.4	-62.10	4,980.9	-2,743.7	5,647.9	5,640.8	7.07	799.376			
2,100.0	2,097.1	2,024.1	2,024.1	4.0	3.5	-62.16	4,980.9	-2,743.7	5,644.7	5,637.3	7.44	758.682			
2,200.0	2,196.9	2,123.9	2,123.9	4.2	3.7	-62.22	4,980.9	-2,743.7	5,641.5	5,633.7	7.82	721.860			
2,300.0	2,296.7	2,223.7	2,223.7	4.4	3.9	-62.29	4,980.9	-2,743.7	5,638.4	5,630.2	8.19	688.385			
2,400.0	2,396.5	2,323.5	2,323.5	4.6	4.1	-62.35	4,980.9	-2,743.7	5,635.2	5,626.7	8.57	657.823			
2,500.0	2,496.2	2,423.2	2,423.2	4.8	4.2	-62.41	4,980.9	-2,743.7	5,632.1	5,623.1	8.94	629.813			
2,600.0	2,596.0	2,523.0	2,523.0	5.0	4.4	-62.47	4,980.9	-2,743.7	5,628.9	5,619.6	9.32	604.049			
2,700.0	2,695.8	2,622.8	2,622.8	5.2	4.6	-62.53	4,980.9	-2,743.7	5,625.8	5,616.1	9.70	580.273			
2,800.0	2,795.5	2,722.5	2,722.5	5.4	4.8	-62.59	4,980.9	-2,743.7	5,622.7	5,612.6	10.07	558.264			
2,900.0	2,895.3	2,822.3	2,822.3	5.6	4.9	-62.65	4,980.9	-2,743.7	5,619.6	5,609.1	10.45	537.833			
3,000.0	2,995.1	2,922.1	2,922.1	5.9	5.1	-62.71	4,980.9	-2,743.7	5,616.4	5,605.6	10.83	518.817			
3,100.0	3,094.9	3,021.9	3,021.9	6.1	5.3	-62.77	4,980.9	-2,743.7	5,613.3	5,602.1	11.20	501.075			
3,200.0	3,194.6	3,121.6	3,121.6	6.3	5.4	-62.84	4,980.9	-2,743.7	5,610.2	5,598.7	11.58	484.483			
3,300.0	3,294.4	3,221.4	3,221.4	6.5	5.6	-62.90	4,980.9	-2,743.7	5,607.1	5,595.2	11.96	468.933			
3,400.0	3,394.2	3,321.2	3,321.2	6.7	5.8	-62.96	4,980.9	-2,743.7	5,604.1	5,591.7	12.33	454.330			
3,500.0	3,493.9	3,420.9	3,420.9	6.9	6.0	-63.02	4,980.9	-2,743.7	5,601.0	5,588.3	12.71	440.591			
3,600.0	3,593.7	3,520.7	3,520.7	7.1	6.1	-63.08	4,980.9	-2,743.7	5,597.9	5,584.8	13.09	427.641			
3,700.0	3,693.5	3,620.5	3,620.5	7.3	6.3	-63.14	4,980.9	-2,743.7	5,594.8	5,581.4	13.47	415.415			
3,800.0	3,793.2	3,720.2	3,720.2	7.5	6.5	-63.21	4,980.9	-2,743.7	5,591.8	5,577.9	13.85	403.853			
3,900.0	3,893.0	3,820.0	3,820.0	7.7	6.7	-63.27	4,980.9	-2,743.7	5,588.7	5,574.5	14.22	392.904			
4,000.0	3,992.8	3,919.8	3,919.8	8.0	6.8	-63.33	4,980.9	-2,743.7	5,585.7	5,571.1	14.60	382.519			
4,100.0	4,092.6	4,019.6	4,019.6	8.2	7.0	-63.39	4,980.9	-2,743.7	5,582.6	5,567.6	14.98	372.657			
4,200.0	4,192.3	4,119.3	4,119.3	8.4	7.2	-63.45	4,980.9	-2,743.7	5,579.6	5,564.2	15.36	363.279			
4,300.0	4,292.1	4,219.1	4,219.1	8.6	7.4	-63.52	4,980.9	-2,743.7	5,576.6	5,560.8	15.74	354.349			
4,400.0	4,391.9	4,318.9	4,318.9	8.8	7.5	-63.58	4,980.9	-2,743.7	5,573.5	5,557.4	16.12	345.838			
4,500.0	4,491.6	4,418.6	4,418.6	9.0	7.7	-63.64	4,980.9	-2,743.7	5,570.5	5,554.0	16.49	337.717			
4,600.0	4,591.4	4,518.4	4,518.4	9.2	7.9	-63.70	4,980.9	-2,743.7	5,567.5	5,550.6	16.87	329.958			
4,700.0	4,691.2	4,618.2	4,618.2	9.4	8.1	-63.77	4,980.9	-2,743.7	5,564.5	5,547.2	17.25	322.539			
4,800.0	4,790.9	4,717.9	4,717.9	9.6	8.2	-63.83	4,980.9	-2,743.7	5,561.5	5,543.9	17.63	315.437			
4,900.0	4,890.7	4,817.7	4,817.7	9.8	8.4	-63.89	4,980.9	-2,743.7	5,558.5	5,540.5	18.01	308.634			
5,000.0	4,990.5	4,917.5	4,917.5	10.1	8.6	-63.95	4,980.9	-2,743.7	5,555.5	5,537.1	18.39	302.110			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 1 (EXISTING) - FOUNDATION WELL - NO										Offset Site Error:		0.0 ft	
Survey Program: 5010-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,100.0	5,090.3	5,010.0	5,010.0	10.3	8.7	-64.01	4,980.9	-2,743.7	5,552.6	5,533.8	18.76	296.050	CC, ES
5,200.0	5,190.0	5,010.0	5,010.0	10.5	8.7	-64.01	4,980.9	-2,743.7	5,550.6	5,531.7	18.96	292.762	
5,257.8	5,247.7	5,010.0	5,010.0	10.6	8.7	-64.01	4,980.9	-2,743.7	5,550.3	5,531.2	19.08	290.936	
5,300.0	5,289.8	5,010.0	5,010.0	10.7	8.7	-64.01	4,980.9	-2,743.7	5,550.5	5,531.3	19.16	289.639	
5,400.0	5,389.6	5,010.0	5,010.0	10.9	8.7	-64.01	4,980.9	-2,743.7	5,552.1	5,532.8	19.37	286.674	
5,500.0	5,489.3	5,010.0	5,010.0	11.1	8.7	-64.01	4,980.9	-2,743.7	5,555.6	5,536.0	19.57	283.863	
5,600.0	5,589.1	5,010.0	5,010.0	11.3	8.7	-64.01	4,980.9	-2,743.7	5,560.9	5,541.1	19.78	281.200	
5,700.0	5,688.9	5,010.0	5,010.0	11.5	8.7	-64.01	4,980.9	-2,743.7	5,567.9	5,547.9	19.98	278.681	
5,800.0	5,788.7	5,010.0	5,010.0	11.7	8.7	-64.01	4,980.9	-2,743.7	5,576.7	5,556.5	20.18	276.302	
5,900.0	5,888.4	5,010.0	5,010.0	11.9	8.7	-64.01	4,980.9	-2,743.7	5,587.3	5,567.0	20.39	274.057	
6,000.0	5,988.2	5,010.0	5,010.0	12.2	8.7	-64.01	4,980.9	-2,743.7	5,599.7	5,579.1	20.59	271.942	
6,100.0	6,088.0	5,010.0	5,010.0	12.4	8.7	-64.01	4,980.9	-2,743.7	5,613.8	5,593.0	20.80	269.952	
6,200.0	6,187.7	5,010.0	5,010.0	12.6	8.7	-64.01	4,980.9	-2,743.7	5,629.7	5,608.7	21.00	268.084	
6,300.0	6,287.5	5,010.0	5,010.0	12.8	8.7	-64.01	4,980.9	-2,743.7	5,647.3	5,626.1	21.20	266.334	
6,400.0	6,387.3	5,010.0	5,010.0	13.0	8.7	-64.01	4,980.9	-2,743.7	5,666.6	5,645.2	21.41	264.696	
6,500.0	6,487.0	5,010.0	5,010.0	13.2	8.7	-64.01	4,980.9	-2,743.7	5,687.6	5,666.0	21.61	263.168	
6,600.0	6,586.8	5,010.0	5,010.0	13.4	8.7	-64.01	4,980.9	-2,743.7	5,710.3	5,688.5	21.82	261.745	
6,700.0	6,686.6	5,010.0	5,010.0	13.6	8.7	-64.01	4,980.9	-2,743.7	5,734.6	5,712.6	22.02	260.423	
6,787.0	6,773.4	5,010.0	5,010.0	13.8	8.7	-64.01	4,980.9	-2,743.7	5,757.1	5,734.9	22.20	259.353	
6,800.0	6,786.4	5,010.0	5,010.0	13.8	8.7	-74.69	4,980.9	-2,743.7	5,760.7	5,738.4	22.23	259.154	
6,850.0	6,836.3	5,010.0	5,010.0	13.9	8.7	-162.52	4,980.9	-2,743.7	5,776.4	5,754.1	22.30	259.020	
6,900.0	6,886.2	5,010.0	5,010.0	14.0	8.7	166.73	4,980.9	-2,743.7	5,795.3	5,773.0	22.31	259.760	
6,950.0	6,935.7	5,010.0	5,010.0	14.0	8.7	157.83	4,980.9	-2,743.7	5,817.2	5,794.9	22.26	261.339	
7,000.0	6,984.6	5,010.0	5,010.0	14.0	8.7	153.10	4,980.9	-2,743.7	5,842.0	5,819.8	22.15	263.706	
7,050.0	7,032.6	5,010.0	5,010.0	14.0	8.7	149.64	4,980.9	-2,743.7	5,869.5	5,847.5	22.00	266.794	
7,100.0	7,079.7	5,010.0	5,010.0	13.9	8.7	146.58	4,980.9	-2,743.7	5,899.6	5,877.8	21.81	270.502	
7,150.0	7,125.4	5,010.0	5,010.0	13.9	8.7	143.56	4,980.9	-2,743.7	5,932.0	5,910.4	21.60	274.681	
7,200.0	7,169.6	5,010.0	5,010.0	13.8	8.7	140.37	4,980.9	-2,743.7	5,966.6	5,945.3	21.38	279.114	
7,250.0	7,212.1	5,010.0	5,010.0	13.8	8.7	136.86	4,980.9	-2,743.7	6,003.2	5,982.1	21.18	283.498	
7,300.0	7,252.6	5,010.0	5,010.0	13.7	8.7	132.92	4,980.9	-2,743.7	6,041.6	6,020.6	21.02	287.439	
7,350.0	7,291.0	5,010.0	5,010.0	13.7	8.7	128.44	4,980.9	-2,743.7	6,081.5	6,060.5	20.94	290.477	
7,400.0	7,327.1	5,010.0	5,010.0	13.7	8.7	123.33	4,980.9	-2,743.7	6,122.7	6,101.7	20.96	292.178	
7,450.0	7,360.7	5,010.0	5,010.0	13.7	8.7	117.53	4,980.9	-2,743.7	6,165.0	6,143.9	21.09	292.287	
7,500.0	7,391.6	5,010.0	5,010.0	13.7	8.7	111.02	4,980.9	-2,743.7	6,208.2	6,186.8	21.34	290.922	
7,550.0	7,419.7	5,010.0	5,010.0	13.8	8.7	103.87	4,980.9	-2,743.7	6,252.0	6,230.3	21.66	288.695	
7,600.0	7,444.8	5,010.0	5,010.0	13.9	8.7	96.26	4,980.9	-2,743.7	6,296.2	6,274.2	21.97	286.613	
7,650.0	7,466.9	5,010.0	5,010.0	14.1	8.7	88.45	4,980.9	-2,743.7	6,340.6	6,318.4	22.19	285.777	
7,700.0	7,485.8	5,010.0	5,010.0	14.3	8.7	80.73	4,980.9	-2,743.7	6,385.0	6,362.8	22.25	287.007	
7,750.0	7,501.5	5,010.0	5,010.0	14.6	8.7	73.42	4,980.9	-2,743.7	6,429.2	6,407.1	22.12	290.626	
7,800.0	7,513.7	5,010.0	5,010.0	14.9	8.7	66.71	4,980.9	-2,743.7	6,472.9	6,451.1	21.83	296.458	
7,850.0	7,522.6	5,010.0	5,010.0	15.2	8.7	60.72	4,980.9	-2,743.7	6,516.0	6,494.5	21.44	303.973	
7,900.0	7,528.0	5,010.0	5,010.0	15.6	8.7	55.47	4,980.9	-2,743.7	6,558.2	6,537.2	20.99	312.461	
7,952.9	7,530.0	5,010.0	5,010.0	16.1	8.7	50.70	4,980.9	-2,743.7	6,601.8	6,581.2	20.52	321.675	
8,000.0	7,530.0	5,010.0	5,010.0	16.5	8.7	50.70	4,980.9	-2,743.7	6,640.0	6,619.1	20.88	317.981	
8,100.0	7,530.0	5,010.0	5,010.0	17.5	8.7	50.70	4,980.9	-2,743.7	6,721.6	6,699.9	21.71	309.609	
8,200.0	7,530.0	5,010.0	5,010.0	18.7	8.7	50.70	4,980.9	-2,743.7	6,803.6	6,781.0	22.62	300.839	
8,300.0	7,530.0	5,010.0	5,010.0	19.9	8.7	50.70	4,980.9	-2,743.7	6,886.2	6,862.6	23.59	291.964	
8,400.0	7,530.0	5,010.0	5,010.0	21.2	8.7	50.70	4,980.9	-2,743.7	6,969.2	6,944.6	24.61	283.192	
8,500.0	7,530.0	5,010.0	5,010.0	22.6	8.7	50.70	4,980.9	-2,743.7	7,052.7	7,027.0	25.68	274.660	
8,600.0	7,530.0	5,010.0	5,010.0	24.0	8.7	50.70	4,980.9	-2,743.7	7,136.5	7,109.7	26.78	266.456	
8,700.0	7,530.0	5,010.0	5,010.0	25.4	8.7	50.70	4,980.9	-2,743.7	7,220.8	7,192.9	27.92	258.628	
8,800.0	7,530.0	5,010.0	5,010.0	26.9	8.7	50.70	4,980.9	-2,743.7	7,305.5	7,276.4	29.08	251.200	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 1 (EXISTING) - FOUNDATION WELL - NO													Offset Site Error: 0.0 ft	
Survey Program: 5010-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,530.0	5,010.0	5,010.0	28.4	8.7	50.70	4,980.9	-2,743.7	7,390.6	7,360.3	30.27	244.177		
9,000.0	7,530.0	5,010.0	5,010.0	30.0	8.7	50.70	4,980.9	-2,743.7	7,476.0	7,444.5	31.47	237.551		
9,100.0	7,530.0	5,010.0	5,010.0	31.5	8.7	50.70	4,980.9	-2,743.7	7,561.8	7,529.1	32.69	231.310		
9,200.0	7,530.0	5,010.0	5,010.0	33.1	8.7	50.70	4,980.9	-2,743.7	7,647.9	7,614.0	33.93	225.436		
9,300.0	7,530.0	5,010.0	5,010.0	34.7	8.7	50.70	4,980.9	-2,743.7	7,734.4	7,699.2	35.17	219.908		
9,400.0	7,530.0	5,010.0	5,010.0	36.3	8.7	50.70	4,980.9	-2,743.7	7,821.2	7,784.8	36.43	214.704		
9,500.0	7,530.0	5,010.0	5,010.0	38.0	8.7	50.70	4,980.9	-2,743.7	7,908.3	7,870.6	37.69	209.805		
9,600.0	7,530.0	5,010.0	5,010.0	39.6	8.7	50.70	4,980.9	-2,743.7	7,995.7	7,956.7	38.97	205.190		
9,700.0	7,530.0	5,010.0	5,010.0	41.3	8.7	50.70	4,980.9	-2,743.7	8,083.4	8,043.1	40.25	200.838		
9,800.0	7,530.0	5,010.0	5,010.0	42.9	8.7	50.70	4,980.9	-2,743.7	8,171.4	8,129.8	41.54	196.731		
9,900.0	7,530.0	5,010.0	5,010.0	44.6	8.7	50.70	4,980.9	-2,743.7	8,259.6	8,216.8	42.83	192.852		
10,000.0	7,530.0	5,010.0	5,010.0	46.3	8.7	50.70	4,980.9	-2,743.7	8,348.1	8,304.0	44.13	189.184		
10,100.0	7,530.0	5,010.0	5,010.0	47.9	8.7	50.70	4,980.9	-2,743.7	8,436.9	8,391.5	45.43	185.714		
10,200.0	7,530.0	5,010.0	5,010.0	49.6	8.7	50.70	4,980.9	-2,743.7	8,525.9	8,479.2	46.74	182.426		
10,300.0	7,530.0	5,010.0	5,010.0	51.3	8.7	50.70	4,980.9	-2,743.7	8,615.2	8,567.2	48.05	179.308		
10,400.0	7,530.0	5,010.0	5,010.0	53.0	8.7	50.70	4,980.9	-2,743.7	8,704.7	8,655.3	49.36	176.349		
10,500.0	7,530.0	5,010.0	5,010.0	54.7	8.7	50.70	4,980.9	-2,743.7	8,794.4	8,743.8	50.68	173.537		
10,600.0	7,530.0	5,010.0	5,010.0	56.4	8.7	50.70	4,980.9	-2,743.7	8,884.4	8,832.4	52.00	170.863		
10,700.0	7,530.0	5,010.0	5,010.0	58.1	8.7	50.70	4,980.9	-2,743.7	8,974.5	8,921.2	53.32	168.317		
10,800.0	7,530.0	5,010.0	5,010.0	59.8	8.7	50.70	4,980.9	-2,743.7	9,064.9	9,010.3	54.64	165.891		
10,900.0	7,530.0	5,010.0	5,010.0	61.5	8.7	50.70	4,980.9	-2,743.7	9,155.5	9,099.5	55.97	163.577		
11,000.0	7,530.0	5,010.0	5,010.0	63.2	8.7	50.70	4,980.9	-2,743.7	9,246.2	9,188.9	57.30	161.368		
11,100.0	7,530.0	5,010.0	5,010.0	64.9	8.7	50.70	4,980.9	-2,743.7	9,337.2	9,278.5	58.63	159.258		
11,200.0	7,530.0	5,010.0	5,010.0	66.6	8.7	50.70	4,980.9	-2,743.7	9,428.3	9,368.3	59.96	157.240		
11,300.0	7,530.0	5,010.0	5,010.0	68.4	8.7	50.70	4,980.9	-2,743.7	9,519.6	9,458.3	61.29	155.308		
11,400.0	7,530.0	5,010.0	5,010.0	70.1	8.7	50.70	4,980.9	-2,743.7	9,611.1	9,548.5	62.63	153.459		
11,500.0	7,530.0	5,010.0	5,010.0	71.8	8.7	50.70	4,980.9	-2,743.7	9,702.7	9,638.8	63.97	151.685		
11,600.0	7,530.0	5,010.0	5,010.0	73.5	8.7	50.70	4,980.9	-2,743.7	9,794.6	9,729.2	65.30	149.984		
11,700.0	7,530.0	5,010.0	5,010.0	75.2	8.7	50.70	4,980.9	-2,743.7	9,886.5	9,819.9	66.64	148.352		
11,800.0	7,530.0	5,010.0	5,010.0	77.0	8.7	50.70	4,980.9	-2,743.7	9,978.7	9,910.7	67.98	146.783 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 2-6 (EXISTING) - NOBLE WELL - NO SUR														Offset Site Error:	0.0 ft
Survey Program: 8164-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	-37.87	4,424.0	-3,440.2	5,604.7						
100.0	100.0	25.0	25.0	0.2	0.0	-37.87	4,424.0	-3,440.2	5,604.2	5,604.0	0.20	N/A			
200.0	200.0	125.0	125.0	0.3	0.2	-37.87	4,424.0	-3,440.2	5,604.2	5,603.7	0.54	N/A			
300.0	300.0	225.0	225.0	0.5	0.4	-37.87	4,424.0	-3,440.2	5,604.2	5,603.3	0.89	6,270.077			
400.0	400.0	325.0	325.0	0.7	0.6	-37.87	4,424.0	-3,440.2	5,604.2	5,603.0	1.24	4,509.105			
500.0	500.0	425.0	425.0	0.8	0.7	-37.87	4,424.0	-3,440.2	5,604.2	5,602.6	1.59	3,520.391			
600.0	600.0	525.0	525.0	1.0	0.9	-37.87	4,424.0	-3,440.2	5,604.2	5,602.3	1.94	2,887.292			
700.0	700.0	625.0	625.0	1.2	1.1	-70.35	4,424.0	-3,440.2	5,603.9	5,601.6	2.29	2,446.737			
800.0	800.0	725.0	725.0	1.4	1.3	-70.39	4,424.0	-3,440.2	5,603.0	5,600.4	2.64	2,121.051			
900.0	899.9	824.9	824.9	1.6	1.4	-70.44	4,424.0	-3,440.2	5,601.6	5,598.6	3.00	1,868.917			
988.4	988.1	913.1	913.1	1.7	1.6	-70.51	4,424.0	-3,440.2	5,599.8	5,596.5	3.32	1,688.121			
1,000.0	999.7	924.7	924.7	1.7	1.6	-70.52	4,424.0	-3,440.2	5,599.5	5,596.2	3.36	1,666.806			
1,100.0	1,099.4	1,024.4	1,024.4	1.9	1.8	-70.58	4,424.0	-3,440.2	5,597.3	5,593.6	3.73	1,502.357			
1,200.0	1,199.2	1,124.2	1,124.2	2.1	2.0	-70.65	4,424.0	-3,440.2	5,595.0	5,590.9	4.09	1,366.394			
1,300.0	1,299.0	1,224.0	1,224.0	2.3	2.1	-70.72	4,424.0	-3,440.2	5,592.8	5,588.3	4.47	1,252.314			
1,400.0	1,398.8	1,323.8	1,323.8	2.5	2.3	-70.78	4,424.0	-3,440.2	5,590.5	5,585.7	4.84	1,155.349			
1,500.0	1,498.5	1,423.5	1,423.5	2.7	2.5	-70.85	4,424.0	-3,440.2	5,588.3	5,583.1	5.21	1,071.991			
1,600.0	1,598.3	1,523.3	1,523.3	2.9	2.7	-70.91	4,424.0	-3,440.2	5,586.1	5,580.5	5.59	999.613			
1,700.0	1,698.1	1,623.1	1,623.1	3.2	2.8	-70.98	4,424.0	-3,440.2	5,583.9	5,577.9	5.96	936.210			
1,800.0	1,797.8	1,722.8	1,722.8	3.4	3.0	-71.04	4,424.0	-3,440.2	5,581.7	5,575.3	6.34	880.231			
1,900.0	1,897.6	1,822.6	1,822.6	3.6	3.2	-71.11	4,424.0	-3,440.2	5,579.5	5,572.7	6.72	830.459			
2,000.0	1,997.4	1,922.4	1,922.4	3.8	3.4	-71.17	4,424.0	-3,440.2	5,577.3	5,570.2	7.10	785.926			
2,100.0	2,097.1	2,022.1	2,022.1	4.0	3.5	-71.24	4,424.0	-3,440.2	5,575.1	5,567.6	7.47	745.854			
2,200.0	2,196.9	2,121.9	2,121.9	4.2	3.7	-71.31	4,424.0	-3,440.2	5,572.9	5,565.1	7.85	709.610			
2,300.0	2,296.7	2,221.7	2,221.7	4.4	3.9	-71.37	4,424.0	-3,440.2	5,570.7	5,562.5	8.23	676.674			
2,400.0	2,396.5	2,321.5	2,321.5	4.6	4.1	-71.44	4,424.0	-3,440.2	5,568.6	5,560.0	8.61	646.617			
2,500.0	2,496.2	2,421.2	2,421.2	4.8	4.2	-71.50	4,424.0	-3,440.2	5,566.4	5,557.4	8.99	619.078			
2,600.0	2,596.0	2,521.0	2,521.0	5.0	4.4	-71.57	4,424.0	-3,440.2	5,564.3	5,554.9	9.37	593.757			
2,700.0	2,695.8	2,620.8	2,620.8	5.2	4.6	-71.64	4,424.0	-3,440.2	5,562.1	5,552.4	9.75	570.396			
2,800.0	2,795.5	2,720.5	2,720.5	5.4	4.7	-71.70	4,424.0	-3,440.2	5,560.0	5,549.9	10.13	548.779			
2,900.0	2,895.3	2,820.3	2,820.3	5.6	4.9	-71.77	4,424.0	-3,440.2	5,557.9	5,547.3	10.51	528.717			
3,000.0	2,995.1	2,920.1	2,920.1	5.9	5.1	-71.83	4,424.0	-3,440.2	5,555.7	5,544.8	10.89	510.050			
3,100.0	3,094.9	3,019.9	3,019.9	6.1	5.3	-71.90	4,424.0	-3,440.2	5,553.6	5,542.4	11.27	492.637			
3,200.0	3,194.6	3,119.6	3,119.6	6.3	5.4	-71.97	4,424.0	-3,440.2	5,551.5	5,539.9	11.65	476.357			
3,300.0	3,294.4	3,219.4	3,219.4	6.5	5.6	-72.03	4,424.0	-3,440.2	5,549.4	5,537.4	12.04	461.103			
3,400.0	3,394.2	3,319.2	3,319.2	6.7	5.8	-72.10	4,424.0	-3,440.2	5,547.3	5,534.9	12.42	446.781			
3,500.0	3,493.9	3,418.9	3,418.9	6.9	6.0	-72.17	4,424.0	-3,440.2	5,545.2	5,532.5	12.80	433.309			
3,600.0	3,593.7	3,518.7	3,518.7	7.1	6.1	-72.23	4,424.0	-3,440.2	5,543.2	5,530.0	13.18	420.613			
3,700.0	3,693.5	3,618.5	3,618.5	7.3	6.3	-72.30	4,424.0	-3,440.2	5,541.1	5,527.5	13.56	408.629			
3,800.0	3,793.2	3,718.2	3,718.2	7.5	6.5	-72.37	4,424.0	-3,440.2	5,539.0	5,525.1	13.94	397.299			
3,900.0	3,893.0	3,818.0	3,818.0	7.7	6.7	-72.43	4,424.0	-3,440.2	5,537.0	5,522.7	14.32	386.570			
4,000.0	3,992.8	3,917.8	3,917.8	8.0	6.8	-72.50	4,424.0	-3,440.2	5,534.9	5,520.2	14.71	376.396			
4,100.0	4,092.6	4,017.6	4,017.6	8.2	7.0	-72.57	4,424.0	-3,440.2	5,532.9	5,517.8	15.09	366.736			
4,200.0	4,192.3	4,117.3	4,117.3	8.4	7.2	-72.63	4,424.0	-3,440.2	5,530.9	5,515.4	15.47	357.550			
4,300.0	4,292.1	4,217.1	4,217.1	8.6	7.4	-72.70	4,424.0	-3,440.2	5,528.9	5,513.0	15.85	348.807			
4,400.0	4,391.9	4,316.9	4,316.9	8.8	7.5	-72.77	4,424.0	-3,440.2	5,526.8	5,510.6	16.23	340.473			
4,500.0	4,491.6	4,416.6	4,416.6	9.0	7.7	-72.83	4,424.0	-3,440.2	5,524.8	5,508.2	16.61	332.522			
4,600.0	4,591.4	4,516.4	4,516.4	9.2	7.9	-72.90	4,424.0	-3,440.2	5,522.8	5,505.8	17.00	324.928			
4,700.0	4,691.2	4,616.2	4,616.2	9.4	8.1	-72.97	4,424.0	-3,440.2	5,520.8	5,503.5	17.38	317.666			
4,800.0	4,790.9	4,715.9	4,715.9	9.6	8.2	-73.03	4,424.0	-3,440.2	5,518.9	5,501.1	17.76	310.717			
4,900.0	4,890.7	4,815.7	4,815.7	9.8	8.4	-73.10	4,424.0	-3,440.2	5,516.9	5,498.7	18.14	304.059			
5,000.0	4,990.5	4,915.5	4,915.5	10.1	8.6	-73.17	4,424.0	-3,440.2	5,514.9	5,496.4	18.53	297.676			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,100.0	5,090.3	5,015.3	5,015.3	10.3	8.8	-73.24	4,424.0	-3,440.2	5,513.0	5,494.0	18.91	291.551		
5,200.0	5,190.0	5,115.0	5,115.0	10.5	8.9	-73.30	4,424.0	-3,440.2	5,511.0	5,491.7	19.29	285.668		
5,300.0	5,289.8	5,214.8	5,214.8	10.7	9.1	-73.37	4,424.0	-3,440.2	5,509.1	5,489.4	19.67	280.013		
5,400.0	5,389.6	5,314.6	5,314.6	10.9	9.3	-73.44	4,424.0	-3,440.2	5,507.1	5,487.1	20.06	274.573		
5,500.0	5,489.3	5,414.3	5,414.3	11.1	9.4	-73.51	4,424.0	-3,440.2	5,505.2	5,484.7	20.44	269.337		
5,600.0	5,589.1	5,514.1	5,514.1	11.3	9.6	-73.57	4,424.0	-3,440.2	5,503.3	5,482.4	20.82	264.293		
5,700.0	5,688.9	5,613.9	5,613.9	11.5	9.8	-73.64	4,424.0	-3,440.2	5,501.3	5,480.1	21.21	259.431		
5,800.0	5,788.7	5,713.7	5,713.7	11.7	10.0	-73.71	4,424.0	-3,440.2	5,499.4	5,477.8	21.59	254.741		
5,900.0	5,888.4	5,813.4	5,813.4	11.9	10.1	-73.78	4,424.0	-3,440.2	5,497.5	5,475.6	21.97	250.214		
6,000.0	5,988.2	5,913.2	5,913.2	12.2	10.3	-73.84	4,424.0	-3,440.2	5,495.6	5,473.3	22.35	245.842		
6,100.0	6,088.0	6,013.0	6,013.0	12.4	10.5	-73.91	4,424.0	-3,440.2	5,493.8	5,471.0	22.74	241.618		
6,200.0	6,187.7	6,112.7	6,112.7	12.6	10.7	-73.98	4,424.0	-3,440.2	5,491.9	5,468.8	23.12	237.533		
6,300.0	6,287.5	6,212.5	6,212.5	12.8	10.8	-74.05	4,424.0	-3,440.2	5,490.0	5,466.5	23.50	233.581		
6,400.0	6,387.3	6,312.3	6,312.3	13.0	11.0	-74.11	4,424.0	-3,440.2	5,488.1	5,464.3	23.89	229.755		
6,500.0	6,487.0	6,412.0	6,412.0	13.2	11.2	-74.18	4,424.0	-3,440.2	5,486.3	5,462.0	24.27	226.051		
6,600.0	6,586.8	6,511.8	6,511.8	13.4	11.4	-74.25	4,424.0	-3,440.2	5,484.4	5,459.8	24.65	222.461		
6,700.0	6,686.6	6,611.6	6,611.6	13.6	11.5	-74.32	4,424.0	-3,440.2	5,482.6	5,457.6	25.04	218.981		
6,787.0	6,773.4	6,698.4	6,698.4	13.8	11.7	-74.38	4,424.0	-3,440.2	5,481.0	5,455.6	25.37	216.040		
6,800.0	6,786.4	6,711.4	6,711.4	13.8	11.7	-84.91	4,424.0	-3,440.2	5,480.9	5,455.4	25.42	215.618		
6,804.6	6,790.9	6,715.9	6,715.9	13.8	11.7	-90.00	4,424.0	-3,440.2	5,480.9	5,455.4	25.43	215.494 CC, ES		
6,850.0	6,836.3	6,761.3	6,761.3	13.9	11.8	-172.11	4,424.0	-3,440.2	5,481.9	5,456.4	25.56	214.484		
6,900.0	6,886.2	6,811.2	6,811.2	14.0	11.9	157.84	4,424.0	-3,440.2	5,485.6	5,460.0	25.63	214.007		
6,950.0	6,935.7	6,860.7	6,860.7	14.0	12.0	149.72	4,424.0	-3,440.2	5,491.8	5,466.2	25.64	214.165		
7,000.0	6,984.6	6,909.6	6,909.6	14.0	12.1	145.88	4,424.0	-3,440.2	5,500.6	5,475.0	25.59	214.930		
7,050.0	7,032.6	6,957.6	6,957.6	14.0	12.1	143.43	4,424.0	-3,440.2	5,511.9	5,486.4	25.49	216.268		
7,100.0	7,079.7	7,004.7	7,004.7	13.9	12.2	141.54	4,424.0	-3,440.2	5,525.7	5,500.3	25.33	218.131		
7,150.0	7,125.4	7,050.4	7,050.4	13.9	12.3	139.89	4,424.0	-3,440.2	5,541.9	5,516.7	25.14	220.456		
7,200.0	7,169.6	7,094.6	7,094.6	13.8	12.4	138.31	4,424.0	-3,440.2	5,560.4	5,535.5	24.92	223.154		
7,250.0	7,212.1	7,137.1	7,137.1	13.8	12.5	136.70	4,424.0	-3,440.2	5,581.2	5,556.5	24.68	226.106		
7,300.0	7,252.6	7,177.6	7,177.6	13.7	12.5	135.02	4,424.0	-3,440.2	5,604.2	5,579.7	24.46	229.158		
7,350.0	7,291.0	7,216.0	7,216.0	13.7	12.6	133.19	4,424.0	-3,440.2	5,629.3	5,605.0	24.25	232.111		
7,400.0	7,327.1	7,252.1	7,252.1	13.7	12.7	131.20	4,424.0	-3,440.2	5,656.4	5,632.3	24.10	234.730		
7,450.0	7,360.7	7,285.7	7,285.7	13.7	12.7	128.99	4,424.0	-3,440.2	5,685.3	5,661.3	24.01	236.753		
7,500.0	7,391.6	7,316.6	7,316.6	13.7	12.8	126.54	4,424.0	-3,440.2	5,716.0	5,692.0	24.03	237.913		
7,550.0	7,419.7	7,344.7	7,344.7	13.8	12.8	123.82	4,424.0	-3,440.2	5,748.4	5,724.2	24.15	237.989		
7,600.0	7,444.8	7,369.8	7,369.8	13.9	12.9	120.78	4,424.0	-3,440.2	5,782.2	5,757.8	24.41	236.848		
7,650.0	7,466.9	7,391.9	7,391.9	14.1	12.9	117.41	4,424.0	-3,440.2	5,817.3	5,792.5	24.81	234.497		
7,700.0	7,485.8	7,410.8	7,410.8	14.3	12.9	113.69	4,424.0	-3,440.2	5,853.7	5,828.3	25.33	231.109		
7,750.0	7,501.5	7,426.5	7,426.5	14.6	13.0	109.61	4,424.0	-3,440.2	5,891.0	5,865.0	25.95	227.011		
7,800.0	7,513.7	7,438.7	7,438.7	14.9	13.0	105.18	4,424.0	-3,440.2	5,929.1	5,902.5	26.63	222.642		
7,850.0	7,522.6	7,447.6	7,447.6	15.2	13.0	100.44	4,424.0	-3,440.2	5,968.0	5,940.6	27.32	218.478		
7,900.0	7,528.0	7,453.0	7,453.0	15.6	13.0	95.46	4,424.0	-3,440.2	6,007.2	5,979.3	27.95	214.958		
7,952.9	7,530.0	7,455.0	7,455.0	16.1	13.0	90.00	4,424.0	-3,440.2	6,049.1	6,020.7	28.49	212.315		
8,000.0	7,530.0	7,455.0	7,455.0	16.5	13.0	90.00	4,424.0	-3,440.2	6,086.5	6,057.6	28.95	210.268		
8,100.0	7,530.0	7,455.0	7,455.0	17.5	13.0	90.00	4,424.0	-3,440.2	6,166.4	6,136.4	30.01	205.501		
8,200.0	7,530.0	7,455.0	7,455.0	18.7	13.0	90.00	4,424.0	-3,440.2	6,246.9	6,215.7	31.17	200.383		
8,300.0	7,530.0	7,455.0	7,455.0	19.9	13.0	90.00	4,424.0	-3,440.2	6,327.9	6,295.4	32.43	195.118		
8,400.0	7,530.0	7,455.0	7,455.0	21.2	13.0	90.00	4,424.0	-3,440.2	6,409.4	6,375.7	33.76	189.855		
8,500.0	7,530.0	7,455.0	7,455.0	22.6	13.0	90.00	4,424.0	-3,440.2	6,491.5	6,456.3	35.15	184.692		
8,600.0	7,530.0	7,455.0	7,455.0	24.0	13.0	90.00	4,424.0	-3,440.2	6,574.1	6,537.5	36.58	179.695		
8,700.0	7,530.0	7,455.0	7,455.0	25.4	13.0	90.00	4,424.0	-3,440.2	6,657.1	6,619.0	38.06	174.903		
8,800.0	7,530.0	7,455.0	7,455.0	26.9	13.0	90.00	4,424.0	-3,440.2	6,740.6	6,701.0	39.57	170.335		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,900.0	7,530.0	7,455.0	7,455.0	28.4	13.0	90.00	4,424.0	-3,440.2	6,824.5	6,783.4	41.11	165.999			
9,000.0	7,530.0	7,455.0	7,455.0	30.0	13.0	90.00	4,424.0	-3,440.2	6,908.9	6,866.2	42.67	161.896			
9,100.0	7,530.0	7,455.0	7,455.0	31.5	13.0	90.00	4,424.0	-3,440.2	6,993.7	6,949.4	44.26	158.020			
9,200.0	7,530.0	7,455.0	7,455.0	33.1	13.0	90.00	4,424.0	-3,440.2	7,078.9	7,033.0	45.86	154.362			
9,300.0	7,530.0	7,455.0	7,455.0	34.7	13.0	90.00	4,424.0	-3,440.2	7,164.4	7,117.0	47.47	150.911			
9,400.0	7,530.0	7,455.0	7,455.0	36.3	13.0	90.00	4,424.0	-3,440.2	7,250.4	7,201.3	49.10	147.656			
9,500.0	7,530.0	7,455.0	7,455.0	38.0	13.0	90.00	4,424.0	-3,440.2	7,336.7	7,285.9	50.74	144.585			
9,600.0	7,530.0	7,455.0	7,455.0	39.6	13.0	90.00	4,424.0	-3,440.2	7,423.3	7,370.9	52.39	141.686			
9,700.0	7,530.0	7,455.0	7,455.0	41.3	13.0	90.00	4,424.0	-3,440.2	7,510.3	7,456.2	54.05	138.948			
9,800.0	7,530.0	7,455.0	7,455.0	42.9	13.0	90.00	4,424.0	-3,440.2	7,597.6	7,541.8	55.72	136.360			
9,900.0	7,530.0	7,455.0	7,455.0	44.6	13.0	90.00	4,424.0	-3,440.2	7,685.2	7,627.8	57.39	133.912			
10,000.0	7,530.0	7,455.0	7,455.0	46.3	13.0	90.00	4,424.0	-3,440.2	7,773.1	7,714.0	59.07	131.594			
10,100.0	7,530.0	7,455.0	7,455.0	47.9	13.0	90.00	4,424.0	-3,440.2	7,861.2	7,800.5	60.75	129.397			
10,200.0	7,530.0	7,455.0	7,455.0	49.6	13.0	90.00	4,424.0	-3,440.2	7,949.7	7,887.3	62.44	127.314			
10,300.0	7,530.0	7,455.0	7,455.0	51.3	13.0	90.00	4,424.0	-3,440.2	8,038.4	7,974.3	64.14	125.336			
10,400.0	7,530.0	7,455.0	7,455.0	53.0	13.0	90.00	4,424.0	-3,440.2	8,127.4	8,061.6	65.83	123.456			
10,500.0	7,530.0	7,455.0	7,455.0	54.7	13.0	90.00	4,424.0	-3,440.2	8,216.7	8,149.2	67.53	121.668			
10,600.0	7,530.0	7,455.0	7,455.0	56.4	13.0	90.00	4,424.0	-3,440.2	8,306.2	8,237.0	69.24	119.966			
10,700.0	7,530.0	7,455.0	7,455.0	58.1	13.0	90.00	4,424.0	-3,440.2	8,395.9	8,325.0	70.95	118.344			
10,800.0	7,530.0	7,455.0	7,455.0	59.8	13.0	90.00	4,424.0	-3,440.2	8,485.9	8,413.2	72.65	116.797			
10,900.0	7,530.0	7,455.0	7,455.0	61.5	13.0	90.00	4,424.0	-3,440.2	8,576.1	8,501.7	74.37	115.320			
11,000.0	7,530.0	7,455.0	7,455.0	63.2	13.0	90.00	4,424.0	-3,440.2	8,666.5	8,590.4	76.08	113.909			
11,100.0	7,530.0	7,455.0	7,455.0	64.9	13.0	90.00	4,424.0	-3,440.2	8,757.1	8,679.3	77.80	112.560			
11,200.0	7,530.0	7,455.0	7,455.0	66.6	13.0	90.00	4,424.0	-3,440.2	8,847.9	8,768.4	79.52	111.270			
11,300.0	7,530.0	7,455.0	7,455.0	68.4	13.0	90.00	4,424.0	-3,440.2	8,938.9	8,857.7	81.24	110.033			
11,400.0	7,530.0	7,455.0	7,455.0	70.1	13.0	90.00	4,424.0	-3,440.2	9,030.1	8,947.1	82.96	108.848			
11,500.0	7,530.0	7,455.0	7,455.0	71.8	13.0	90.00	4,424.0	-3,440.2	9,121.5	9,036.8	84.68	107.712			
11,600.0	7,530.0	7,455.0	7,455.0	73.5	13.0	90.00	4,424.0	-3,440.2	9,213.0	9,126.6	86.41	106.621			
11,700.0	7,530.0	7,455.0	7,455.0	75.2	13.0	90.00	4,424.0	-3,440.2	9,304.8	9,216.6	88.14	105.573			
11,800.0	7,530.0	7,455.0	7,455.0	77.0	13.0	90.00	4,424.0	-3,440.2	9,396.7	9,306.8	89.86	104.566			
11,900.0	7,530.0	7,455.0	7,455.0	78.7	13.0	90.00	4,424.0	-3,440.2	9,488.7	9,397.1	91.59	103.597			
12,000.0	7,530.0	7,455.0	7,455.0	80.4	13.0	90.00	4,424.0	-3,440.2	9,581.0	9,487.6	93.32	102.665			
12,100.0	7,530.0	7,455.0	7,455.0	82.2	13.0	90.00	4,424.0	-3,440.2	9,673.3	9,578.3	95.05	101.767			
12,200.0	7,530.0	7,455.0	7,455.0	83.9	13.0	90.00	4,424.0	-3,440.2	9,765.9	9,669.1	96.79	100.902			
12,300.0	7,530.0	7,455.0	7,455.0	85.6	13.0	90.00	4,424.0	-3,440.2	9,858.6	9,760.0	98.52	100.068			
12,400.0	7,530.0	7,455.0	7,455.0	87.3	13.0	90.00	4,424.0	-3,440.2	9,951.4	9,851.1	100.25	99.263 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 4 (EXISTING) - MARTIN EXP WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8200-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-48.02	3,661.3	-4,069.7	5,474.7					
100.0	100.0	29.0	29.0	0.2	0.1	-48.02	3,661.3	-4,069.7	5,474.2	5,474.0	0.20	N/A		
200.0	200.0	129.0	129.0	0.3	0.2	-48.02	3,661.3	-4,069.7	5,474.2	5,473.7	0.55	9,922.131		
300.0	300.0	229.0	229.0	0.5	0.4	-48.02	3,661.3	-4,069.7	5,474.2	5,473.3	0.90	6,077.202		
400.0	400.0	329.0	329.0	0.7	0.6	-48.02	3,661.3	-4,069.7	5,474.2	5,473.0	1.25	4,379.932		
500.0	500.0	429.0	429.0	0.8	0.7	-48.02	3,661.3	-4,069.7	5,474.2	5,472.6	1.60	3,423.735		
600.0	600.0	529.0	529.0	1.0	0.9	-48.02	3,661.3	-4,069.7	5,474.2	5,472.3	1.95	2,810.226		
700.0	700.0	629.0	629.0	1.2	1.1	-80.51	3,661.3	-4,069.7	5,474.1	5,471.8	2.30	2,382.740		
800.0	800.0	729.0	729.0	1.4	1.3	-80.54	3,661.3	-4,069.7	5,473.7	5,471.0	2.65	2,066.349		
900.0	899.9	828.9	828.9	1.6	1.4	-80.59	3,661.3	-4,069.7	5,473.0	5,470.0	3.01	1,821.086		
988.4	988.1	917.1	917.1	1.7	1.6	-80.65	3,661.3	-4,069.7	5,472.1	5,468.8	3.33	1,644.977		
1,000.0	999.7	928.7	928.7	1.7	1.6	-80.66	3,661.3	-4,069.7	5,472.0	5,468.6	3.37	1,624.220		
1,100.0	1,099.4	1,028.4	1,028.4	1.9	1.8	-80.73	3,661.3	-4,069.7	5,470.9	5,467.1	3.74	1,464.037		
1,200.0	1,199.2	1,128.2	1,128.2	2.1	2.0	-80.80	3,661.3	-4,069.7	5,469.8	5,465.7	4.11	1,331.565		
1,300.0	1,299.0	1,228.0	1,228.0	2.3	2.1	-80.87	3,661.3	-4,069.7	5,468.7	5,464.2	4.48	1,220.408		
1,400.0	1,398.8	1,327.8	1,327.8	2.5	2.3	-80.94	3,661.3	-4,069.7	5,467.6	5,462.8	4.86	1,125.934		
1,500.0	1,498.5	1,427.5	1,427.5	2.7	2.5	-81.01	3,661.3	-4,069.7	5,466.6	5,461.3	5.23	1,044.730		
1,600.0	1,598.3	1,527.3	1,527.3	2.9	2.7	-81.08	3,661.3	-4,069.7	5,465.5	5,459.9	5.61	974.235		
1,700.0	1,698.1	1,627.1	1,627.1	3.2	2.8	-81.15	3,661.3	-4,069.7	5,464.5	5,458.5	5.99	912.493		
1,800.0	1,797.8	1,726.8	1,726.8	3.4	3.0	-81.22	3,661.3	-4,069.7	5,463.4	5,457.0	6.37	857.993		
1,900.0	1,897.6	1,826.6	1,826.6	3.6	3.2	-81.29	3,661.3	-4,069.7	5,462.4	5,455.6	6.75	809.547		
2,000.0	1,997.4	1,926.4	1,926.4	3.8	3.4	-81.36	3,661.3	-4,069.7	5,461.4	5,454.2	7.13	766.208		
2,100.0	2,097.1	2,026.1	2,026.1	4.0	3.5	-81.43	3,661.3	-4,069.7	5,460.3	5,452.8	7.51	727.219		
2,200.0	2,196.9	2,125.9	2,125.9	4.2	3.7	-81.50	3,661.3	-4,069.7	5,459.3	5,451.4	7.89	691.961		
2,300.0	2,296.7	2,225.7	2,225.7	4.4	3.9	-81.57	3,661.3	-4,069.7	5,458.3	5,450.1	8.27	659.927		
2,400.0	2,396.5	2,325.5	2,325.5	4.6	4.1	-81.64	3,661.3	-4,069.7	5,457.3	5,448.7	8.65	630.698		
2,500.0	2,496.2	2,425.2	2,425.2	4.8	4.2	-81.71	3,661.3	-4,069.7	5,456.4	5,447.3	9.03	603.922		
2,600.0	2,596.0	2,525.0	2,525.0	5.0	4.4	-81.78	3,661.3	-4,069.7	5,455.4	5,446.0	9.42	579.307		
2,700.0	2,695.8	2,624.8	2,624.8	5.2	4.6	-81.85	3,661.3	-4,069.7	5,454.4	5,444.6	9.80	556.601		
2,800.0	2,795.5	2,724.5	2,724.5	5.4	4.8	-81.92	3,661.3	-4,069.7	5,453.5	5,443.3	10.18	535.592		
2,900.0	2,895.3	2,824.3	2,824.3	5.6	4.9	-81.99	3,661.3	-4,069.7	5,452.5	5,441.9	10.56	516.098		
3,000.0	2,995.1	2,924.1	2,924.1	5.9	5.1	-82.06	3,661.3	-4,069.7	5,451.6	5,440.6	10.95	497.961		
3,100.0	3,094.9	3,023.9	3,023.9	6.1	5.3	-82.13	3,661.3	-4,069.7	5,450.6	5,439.3	11.33	481.044		
3,200.0	3,194.6	3,123.6	3,123.6	6.3	5.5	-82.21	3,661.3	-4,069.7	5,449.7	5,438.0	11.71	465.231		
3,300.0	3,294.4	3,223.4	3,223.4	6.5	5.6	-82.28	3,661.3	-4,069.7	5,448.8	5,436.7	12.10	450.415		
3,400.0	3,394.2	3,323.2	3,323.2	6.7	5.8	-82.35	3,661.3	-4,069.7	5,447.9	5,435.4	12.48	436.507		
3,500.0	3,493.9	3,422.9	3,422.9	6.9	6.0	-82.42	3,661.3	-4,069.7	5,447.0	5,434.1	12.86	423.425		
3,600.0	3,593.7	3,522.7	3,522.7	7.1	6.1	-82.49	3,661.3	-4,069.7	5,446.1	5,432.9	13.25	411.098		
3,700.0	3,693.5	3,622.5	3,622.5	7.3	6.3	-82.56	3,661.3	-4,069.7	5,445.2	5,431.6	13.63	399.463		
3,800.0	3,793.2	3,722.2	3,722.2	7.5	6.5	-82.63	3,661.3	-4,069.7	5,444.3	5,430.3	14.02	388.464		
3,900.0	3,893.0	3,822.0	3,822.0	7.7	6.7	-82.70	3,661.3	-4,069.7	5,443.5	5,429.1	14.40	378.049		
4,000.0	3,992.8	3,921.8	3,921.8	8.0	6.8	-82.77	3,661.3	-4,069.7	5,442.6	5,427.8	14.78	368.175		
4,100.0	4,092.6	4,021.6	4,021.6	8.2	7.0	-82.84	3,661.3	-4,069.7	5,441.8	5,426.6	15.17	358.799		
4,200.0	4,192.3	4,121.3	4,121.3	8.4	7.2	-82.91	3,661.3	-4,069.7	5,440.9	5,425.4	15.55	349.885		
4,300.0	4,292.1	4,221.1	4,221.1	8.6	7.4	-82.98	3,661.3	-4,069.7	5,440.1	5,424.2	15.93	341.401		
4,400.0	4,391.9	4,320.9	4,320.9	8.8	7.5	-83.05	3,661.3	-4,069.7	5,439.3	5,422.9	16.32	333.315		
4,500.0	4,491.6	4,420.6	4,420.6	9.0	7.7	-83.12	3,661.3	-4,069.7	5,438.4	5,421.7	16.70	325.600		
4,600.0	4,591.4	4,520.4	4,520.4	9.2	7.9	-83.19	3,661.3	-4,069.7	5,437.6	5,420.5	17.09	318.232		
4,700.0	4,691.2	4,620.2	4,620.2	9.4	8.1	-83.26	3,661.3	-4,069.7	5,436.8	5,419.4	17.47	311.188		
4,800.0	4,790.9	4,719.9	4,719.9	9.6	8.2	-83.33	3,661.3	-4,069.7	5,436.0	5,418.2	17.86	304.446		
4,900.0	4,890.7	4,819.7	4,819.7	9.8	8.4	-83.41	3,661.3	-4,069.7	5,435.3	5,417.0	18.24	297.989		
5,000.0	4,990.5	4,919.5	4,919.5	10.1	8.6	-83.48	3,661.3	-4,069.7	5,434.5	5,415.9	18.62	291.797		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 4 (EXISTING) - MARTIN EXP WELL - NO												Offset Site Error: 0.0 ft	
Survey Program: 8200-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.3	5,019.3	5,019.3	10.3	8.8	-83.55	3,661.3	-4,069.7	5,433.7	5,414.7	19.01	285.856	
5,200.0	5,190.0	5,119.0	5,119.0	10.5	8.9	-83.62	3,661.3	-4,069.7	5,433.0	5,413.6	19.39	280.151	
5,300.0	5,289.8	5,218.8	5,218.8	10.7	9.1	-83.69	3,661.3	-4,069.7	5,432.2	5,412.4	19.78	274.667	
5,400.0	5,389.6	5,318.6	5,318.6	10.9	9.3	-83.76	3,661.3	-4,069.7	5,431.5	5,411.3	20.16	269.392	
5,500.0	5,489.3	5,418.3	5,418.3	11.1	9.5	-83.83	3,661.3	-4,069.7	5,430.7	5,410.2	20.55	264.315	
5,600.0	5,589.1	5,518.1	5,518.1	11.3	9.6	-83.90	3,661.3	-4,069.7	5,430.0	5,409.1	20.93	259.424	
5,700.0	5,688.9	5,617.9	5,617.9	11.5	9.8	-83.97	3,661.3	-4,069.7	5,429.3	5,408.0	21.32	254.710	
5,800.0	5,788.7	5,717.7	5,717.7	11.7	10.0	-84.04	3,661.3	-4,069.7	5,428.6	5,406.9	21.70	250.163	
5,900.0	5,888.4	5,817.4	5,817.4	11.9	10.2	-84.11	3,661.3	-4,069.7	5,427.9	5,405.8	22.08	245.774	
6,000.0	5,988.2	5,917.2	5,917.2	12.2	10.3	-84.18	3,661.3	-4,069.7	5,427.2	5,404.7	22.47	241.536	
6,100.0	6,088.0	6,017.0	6,017.0	12.4	10.5	-84.26	3,661.3	-4,069.7	5,426.5	5,403.6	22.85	237.441	
6,200.0	6,187.7	6,116.7	6,116.7	12.6	10.7	-84.33	3,661.3	-4,069.7	5,425.8	5,402.6	23.24	233.481	
6,300.0	6,287.5	6,216.5	6,216.5	12.8	10.8	-84.40	3,661.3	-4,069.7	5,425.2	5,401.5	23.62	229.650	
6,400.0	6,387.3	6,316.3	6,316.3	13.0	11.0	-84.47	3,661.3	-4,069.7	5,424.5	5,400.5	24.01	225.943	
6,500.0	6,487.0	6,416.0	6,416.0	13.2	11.2	-84.54	3,661.3	-4,069.7	5,423.9	5,399.5	24.39	222.352	
6,600.0	6,586.8	6,515.8	6,515.8	13.4	11.4	-84.61	3,661.3	-4,069.7	5,423.2	5,398.4	24.78	218.873	
6,700.0	6,686.6	6,615.6	6,615.6	13.6	11.5	-84.68	3,661.3	-4,069.7	5,422.6	5,397.4	25.16	215.501	
6,787.0	6,773.4	6,702.4	6,702.4	13.8	11.7	-84.74	3,661.3	-4,069.7	5,422.0	5,396.5	25.50	212.650	
6,794.3	6,780.6	6,709.6	6,709.6	13.8	11.7	-90.00	3,661.3	-4,069.7	5,422.0	5,396.5	25.52	212.424 CC	
6,800.0	6,786.4	6,715.4	6,715.4	13.8	11.7	-95.28	3,661.3	-4,069.7	5,422.0	5,396.5	25.55	212.251 ES	
6,850.0	6,836.3	6,765.3	6,765.3	13.9	11.8	177.50	3,661.3	-4,069.7	5,423.3	5,397.7	25.68	211.153	
6,900.0	6,886.2	6,815.2	6,815.2	14.0	11.9	147.43	3,661.3	-4,069.7	5,426.8	5,401.0	25.77	210.610	
6,950.0	6,935.7	6,864.7	6,864.7	14.0	12.0	139.30	3,661.3	-4,069.7	5,432.3	5,406.6	25.79	210.598	
7,000.0	6,984.6	6,913.6	6,913.6	14.0	12.1	135.46	3,661.3	-4,069.7	5,440.0	5,414.2	25.77	211.085	
7,050.0	7,032.6	6,961.6	6,961.6	14.0	12.2	133.02	3,661.3	-4,069.7	5,449.7	5,424.0	25.70	212.031	
7,100.0	7,079.7	7,008.7	7,008.7	13.9	12.2	131.17	3,661.3	-4,069.7	5,461.5	5,435.9	25.59	213.383	
7,150.0	7,125.4	7,054.4	7,054.4	13.9	12.3	129.57	3,661.3	-4,069.7	5,475.3	5,449.8	25.46	215.076	
7,200.0	7,169.6	7,098.6	7,098.6	13.8	12.4	128.06	3,661.3	-4,069.7	5,491.0	5,465.7	25.30	217.022	
7,250.0	7,212.1	7,141.1	7,141.1	13.8	12.5	126.55	3,661.3	-4,069.7	5,508.6	5,483.4	25.14	219.115	
7,300.0	7,252.6	7,181.6	7,181.6	13.7	12.5	124.99	3,661.3	-4,069.7	5,528.0	5,503.0	24.99	221.224	
7,350.0	7,291.0	7,220.0	7,220.0	13.7	12.6	123.34	3,661.3	-4,069.7	5,549.2	5,524.3	24.86	223.199	
7,400.0	7,327.1	7,256.1	7,256.1	13.7	12.7	121.57	3,661.3	-4,069.7	5,572.1	5,547.3	24.78	224.873	
7,450.0	7,360.7	7,289.7	7,289.7	13.7	12.7	119.66	3,661.3	-4,069.7	5,596.6	5,571.8	24.76	226.077	
7,500.0	7,391.6	7,320.6	7,320.6	13.7	12.8	117.58	3,661.3	-4,069.7	5,622.6	5,597.8	24.81	226.656	
7,550.0	7,419.7	7,348.7	7,348.7	13.8	12.8	115.31	3,661.3	-4,069.7	5,650.0	5,625.0	24.95	226.498	
7,600.0	7,444.8	7,373.8	7,373.8	13.9	12.9	112.85	3,661.3	-4,069.7	5,678.7	5,653.5	25.18	225.549	
7,650.0	7,466.9	7,395.9	7,395.9	14.1	12.9	110.19	3,661.3	-4,069.7	5,708.6	5,683.1	25.50	223.837	
7,700.0	7,485.8	7,414.8	7,414.8	14.3	12.9	107.31	3,661.3	-4,069.7	5,739.5	5,713.6	25.91	221.475	
7,750.0	7,501.5	7,430.5	7,430.5	14.6	13.0	104.23	3,661.3	-4,069.7	5,771.4	5,745.0	26.40	218.647	
7,800.0	7,513.7	7,442.7	7,442.7	14.9	13.0	100.96	3,661.3	-4,069.7	5,804.0	5,777.1	26.92	215.587	
7,850.0	7,522.6	7,451.6	7,451.6	15.2	13.0	97.51	3,661.3	-4,069.7	5,837.3	5,809.8	27.46	212.543	
7,900.0	7,528.0	7,457.0	7,457.0	15.6	13.0	93.92	3,661.3	-4,069.7	5,871.0	5,843.0	27.99	209.749	
7,952.9	7,530.0	7,459.0	7,459.0	16.1	13.0	90.00	3,661.3	-4,069.7	5,907.0	5,878.5	28.50	207.276	
8,000.0	7,530.0	7,459.0	7,459.0	16.5	13.0	90.00	3,661.3	-4,069.7	5,939.3	5,910.3	28.95	205.131	
8,100.0	7,530.0	7,459.0	7,459.0	17.5	13.0	90.00	3,661.3	-4,069.7	6,008.4	5,978.4	30.01	200.190	
8,200.0	7,530.0	7,459.0	7,459.0	18.7	13.0	90.00	3,661.3	-4,069.7	6,078.4	6,047.3	31.18	194.936	
8,300.0	7,530.0	7,459.0	7,459.0	19.9	13.0	90.00	3,661.3	-4,069.7	6,149.3	6,116.8	32.44	189.570	
8,400.0	7,530.0	7,459.0	7,459.0	21.2	13.0	90.00	3,661.3	-4,069.7	6,220.9	6,187.1	33.77	184.232	
8,500.0	7,530.0	7,459.0	7,459.0	22.6	13.0	90.00	3,661.3	-4,069.7	6,293.3	6,258.2	35.15	179.018	
8,600.0	7,530.0	7,459.0	7,459.0	24.0	13.0	90.00	3,661.3	-4,069.7	6,366.5	6,329.9	36.59	173.988	
8,700.0	7,530.0	7,459.0	7,459.0	25.4	13.0	90.00	3,661.3	-4,069.7	6,440.4	6,402.3	38.07	169.177	
8,800.0	7,530.0	7,459.0	7,459.0	26.9	13.0	90.00	3,661.3	-4,069.7	6,514.9	6,475.4	39.58	164.603	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
8,900.0	7,530.0	7,459.0	7,459.0	28.4	13.0	90.00	3,661.3	-4,069.7	6,590.2	6,549.1	41.12	160.272	
9,000.0	7,530.0	7,459.0	7,459.0	30.0	13.0	90.00	3,661.3	-4,069.7	6,666.1	6,623.4	42.68	156.181	
9,100.0	7,530.0	7,459.0	7,459.0	31.5	13.0	90.00	3,661.3	-4,069.7	6,742.6	6,698.4	44.27	152.323	
9,200.0	7,530.0	7,459.0	7,459.0	33.1	13.0	90.00	3,661.3	-4,069.7	6,819.8	6,773.9	45.87	148.689	
9,300.0	7,530.0	7,459.0	7,459.0	34.7	13.0	90.00	3,661.3	-4,069.7	6,897.5	6,850.0	47.48	145.267	
9,400.0	7,530.0	7,459.0	7,459.0	36.3	13.0	90.00	3,661.3	-4,069.7	6,975.8	6,926.7	49.11	142.044	
9,500.0	7,530.0	7,459.0	7,459.0	38.0	13.0	90.00	3,661.3	-4,069.7	7,054.6	7,003.9	50.75	139.007	
9,600.0	7,530.0	7,459.0	7,459.0	39.6	13.0	90.00	3,661.3	-4,069.7	7,134.0	7,081.6	52.40	136.146	
9,700.0	7,530.0	7,459.0	7,459.0	41.3	13.0	90.00	3,661.3	-4,069.7	7,213.9	7,159.8	54.06	133.447	
9,800.0	7,530.0	7,459.0	7,459.0	42.9	13.0	90.00	3,661.3	-4,069.7	7,294.3	7,238.5	55.72	130.900	
9,900.0	7,530.0	7,459.0	7,459.0	44.6	13.0	90.00	3,661.3	-4,069.7	7,375.1	7,317.7	57.40	128.494	
10,000.0	7,530.0	7,459.0	7,459.0	46.3	13.0	90.00	3,661.3	-4,069.7	7,456.5	7,397.4	59.08	126.219	
10,100.0	7,530.0	7,459.0	7,459.0	47.9	13.0	90.00	3,661.3	-4,069.7	7,538.2	7,477.5	60.76	124.066	
10,200.0	7,530.0	7,459.0	7,459.0	49.6	13.0	90.00	3,661.3	-4,069.7	7,620.4	7,558.0	62.45	122.027	
10,300.0	7,530.0	7,459.0	7,459.0	51.3	13.0	90.00	3,661.3	-4,069.7	7,703.1	7,638.9	64.14	120.094	
10,400.0	7,530.0	7,459.0	7,459.0	53.0	13.0	90.00	3,661.3	-4,069.7	7,786.1	7,720.3	65.84	118.259	
10,500.0	7,530.0	7,459.0	7,459.0	54.7	13.0	90.00	3,661.3	-4,069.7	7,869.5	7,802.0	67.54	116.516	
10,600.0	7,530.0	7,459.0	7,459.0	56.4	13.0	90.00	3,661.3	-4,069.7	7,953.4	7,884.1	69.24	114.859	
10,700.0	7,530.0	7,459.0	7,459.0	58.1	13.0	90.00	3,661.3	-4,069.7	8,037.5	7,966.6	70.95	113.281	
10,800.0	7,530.0	7,459.0	7,459.0	59.8	13.0	90.00	3,661.3	-4,069.7	8,122.1	8,049.4	72.66	111.779	
10,900.0	7,530.0	7,459.0	7,459.0	61.5	13.0	90.00	3,661.3	-4,069.7	8,207.0	8,132.6	74.37	110.347	
11,000.0	7,530.0	7,459.0	7,459.0	63.2	13.0	90.00	3,661.3	-4,069.7	8,292.2	8,216.1	76.09	108.980	
11,100.0	7,530.0	7,459.0	7,459.0	64.9	13.0	90.00	3,661.3	-4,069.7	8,377.8	8,300.0	77.81	107.675	
11,200.0	7,530.0	7,459.0	7,459.0	66.6	13.0	90.00	3,661.3	-4,069.7	8,463.6	8,384.1	79.52	106.428	
11,300.0	7,530.0	7,459.0	7,459.0	68.4	13.0	90.00	3,661.3	-4,069.7	8,549.8	8,468.6	81.25	105.235	
11,400.0	7,530.0	7,459.0	7,459.0	70.1	13.0	90.00	3,661.3	-4,069.7	8,636.3	8,553.3	82.97	104.093	
11,500.0	7,530.0	7,459.0	7,459.0	71.8	13.0	90.00	3,661.3	-4,069.7	8,723.0	8,638.4	84.69	102.998	
11,600.0	7,530.0	7,459.0	7,459.0	73.5	13.0	90.00	3,661.3	-4,069.7	8,810.1	8,723.7	86.42	101.949	
11,700.0	7,530.0	7,459.0	7,459.0	75.2	13.0	90.00	3,661.3	-4,069.7	8,897.4	8,809.3	88.14	100.943	
11,800.0	7,530.0	7,459.0	7,459.0	77.0	13.0	90.00	3,661.3	-4,069.7	8,985.0	8,895.1	89.87	99.977	
11,900.0	7,530.0	7,459.0	7,459.0	78.7	13.0	90.00	3,661.3	-4,069.7	9,072.8	8,981.2	91.60	99.049	
12,000.0	7,530.0	7,459.0	7,459.0	80.4	13.0	90.00	3,661.3	-4,069.7	9,160.9	9,067.6	93.33	98.157	
12,100.0	7,530.0	7,459.0	7,459.0	82.2	13.0	90.00	3,661.3	-4,069.7	9,249.3	9,154.2	95.06	97.298	
12,200.0	7,530.0	7,459.0	7,459.0	83.9	13.0	90.00	3,661.3	-4,069.7	9,337.8	9,241.0	96.79	96.472	
12,300.0	7,530.0	7,459.0	7,459.0	85.6	13.0	90.00	3,661.3	-4,069.7	9,426.6	9,328.1	98.53	95.677	
12,400.0	7,530.0	7,459.0	7,459.0	87.3	13.0	90.00	3,661.3	-4,069.7	9,515.6	9,415.4	100.26	94.910	
12,500.0	7,530.0	7,459.0	7,459.0	89.1	13.0	90.00	3,661.3	-4,069.7	9,604.9	9,502.9	101.99	94.171	
12,600.0	7,530.0	7,459.0	7,459.0	90.8	13.0	90.00	3,661.3	-4,069.7	9,694.3	9,590.6	103.73	93.458	
12,700.0	7,530.0	7,459.0	7,459.0	92.5	13.0	90.00	3,661.3	-4,069.7	9,784.0	9,678.5	105.47	92.770	
12,800.0	7,530.0	7,459.0	7,459.0	94.3	13.0	90.00	3,661.3	-4,069.7	9,873.8	9,766.6	107.20	92.105	
12,900.0	7,530.0	7,459.0	7,459.0	96.0	13.0	90.00	3,661.3	-4,069.7	9,963.8	9,854.9	108.94	91.463 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-39.07	5,013.9	-4,070.0	6,458.4					
100.0	100.0	20.0	20.0	0.2	0.0	-39.07	5,013.9	-4,070.0	6,457.9	6,457.7	0.19	N/A		
200.0	200.0	120.0	120.0	0.3	0.2	-39.07	5,013.9	-4,070.0	6,457.9	6,457.3	0.54	N/A		
300.0	300.0	220.0	220.0	0.5	0.4	-39.07	5,013.9	-4,070.0	6,457.9	6,457.0	0.89	7,296.384		
400.0	400.0	320.0	320.0	0.7	0.6	-39.07	5,013.9	-4,070.0	6,457.9	6,456.6	1.23	5,232.679		
500.0	500.0	420.0	420.0	0.8	0.7	-39.07	5,013.9	-4,070.0	6,457.9	6,456.3	1.58	4,078.982		
600.0	600.0	520.0	520.0	1.0	0.9	-39.07	5,013.9	-4,070.0	6,457.9	6,455.9	1.93	3,342.116		
700.0	700.0	620.0	620.0	1.2	1.1	-71.55	5,013.9	-4,070.0	6,457.6	6,455.3	2.28	2,830.229		
800.0	800.0	720.0	720.0	1.4	1.3	-71.58	5,013.9	-4,070.0	6,456.8	6,454.1	2.63	2,452.280		
900.0	899.9	819.9	819.9	1.6	1.4	-71.63	5,013.9	-4,070.0	6,455.4	6,452.4	2.99	2,159.948		
988.4	988.1	908.1	908.1	1.7	1.6	-71.69	5,013.9	-4,070.0	6,453.7	6,450.4	3.31	1,950.461		
1,000.0	999.7	919.7	919.7	1.7	1.6	-71.70	5,013.9	-4,070.0	6,453.5	6,450.1	3.35	1,925.775		
1,100.0	1,099.4	1,019.4	1,019.4	1.9	1.8	-71.76	5,013.9	-4,070.0	6,451.3	6,447.6	3.72	1,735.367		
1,200.0	1,199.2	1,119.2	1,119.2	2.1	2.0	-71.81	5,013.9	-4,070.0	6,449.2	6,445.1	4.09	1,578.018		
1,300.0	1,299.0	1,219.0	1,219.0	2.3	2.1	-71.87	5,013.9	-4,070.0	6,447.1	6,442.6	4.46	1,446.050		
1,400.0	1,398.8	1,318.8	1,318.8	2.5	2.3	-71.93	5,013.9	-4,070.0	6,445.0	6,440.1	4.83	1,333.923		
1,500.0	1,498.5	1,418.5	1,418.5	2.7	2.5	-71.98	5,013.9	-4,070.0	6,442.9	6,437.7	5.21	1,237.563		
1,600.0	1,598.3	1,518.3	1,518.3	2.9	2.7	-72.04	5,013.9	-4,070.0	6,440.8	6,435.2	5.58	1,153.920		
1,700.0	1,698.1	1,618.1	1,618.1	3.2	2.8	-72.10	5,013.9	-4,070.0	6,438.7	6,432.7	5.96	1,080.669		
1,800.0	1,797.8	1,717.8	1,717.8	3.4	3.0	-72.16	5,013.9	-4,070.0	6,436.6	6,430.3	6.34	1,016.010		
1,900.0	1,897.6	1,817.6	1,817.6	3.6	3.2	-72.21	5,013.9	-4,070.0	6,434.5	6,427.8	6.71	958.533		
2,000.0	1,997.4	1,917.4	1,917.4	3.8	3.3	-72.27	5,013.9	-4,070.0	6,432.5	6,425.4	7.09	907.116		
2,100.0	2,097.1	2,017.1	2,017.1	4.0	3.5	-72.33	5,013.9	-4,070.0	6,430.4	6,422.9	7.47	860.857		
2,200.0	2,196.9	2,116.9	2,116.9	4.2	3.7	-72.38	5,013.9	-4,070.0	6,428.3	6,420.5	7.85	819.024		
2,300.0	2,296.7	2,216.7	2,216.7	4.4	3.9	-72.44	5,013.9	-4,070.0	6,426.3	6,418.1	8.23	781.014		
2,400.0	2,396.5	2,316.5	2,316.5	4.6	4.0	-72.50	5,013.9	-4,070.0	6,424.2	6,415.6	8.61	746.331		
2,500.0	2,496.2	2,416.2	2,416.2	4.8	4.2	-72.56	5,013.9	-4,070.0	6,422.2	6,413.2	8.99	714.558		
2,600.0	2,596.0	2,516.0	2,516.0	5.0	4.4	-72.61	5,013.9	-4,070.0	6,420.2	6,410.8	9.37	685.346		
2,700.0	2,695.8	2,615.8	2,615.8	5.2	4.6	-72.67	5,013.9	-4,070.0	6,418.2	6,408.4	9.75	658.400		
2,800.0	2,795.5	2,715.5	2,715.5	5.4	4.7	-72.73	5,013.9	-4,070.0	6,416.1	6,406.0	10.13	633.466		
2,900.0	2,895.3	2,815.3	2,815.3	5.6	4.9	-72.79	5,013.9	-4,070.0	6,414.1	6,403.6	10.51	610.328		
3,000.0	2,995.1	2,915.1	2,915.1	5.9	5.1	-72.85	5,013.9	-4,070.0	6,412.1	6,401.2	10.89	588.800		
3,100.0	3,094.9	3,014.9	3,014.9	6.1	5.3	-72.90	5,013.9	-4,070.0	6,410.1	6,398.8	11.27	568.721		
3,200.0	3,194.6	3,114.6	3,114.6	6.3	5.4	-72.96	5,013.9	-4,070.0	6,408.1	6,396.5	11.65	549.948		
3,300.0	3,294.4	3,214.4	3,214.4	6.5	5.6	-73.02	5,013.9	-4,070.0	6,406.1	6,394.1	12.03	532.360		
3,400.0	3,394.2	3,314.2	3,314.2	6.7	5.8	-73.08	5,013.9	-4,070.0	6,404.2	6,391.7	12.41	515.848		
3,500.0	3,493.9	3,413.9	3,413.9	6.9	6.0	-73.13	5,013.9	-4,070.0	6,402.2	6,389.4	12.80	500.316		
3,600.0	3,593.7	3,513.7	3,513.7	7.1	6.1	-73.19	5,013.9	-4,070.0	6,400.2	6,387.0	13.18	485.681		
3,700.0	3,693.5	3,613.5	3,613.5	7.3	6.3	-73.25	5,013.9	-4,070.0	6,398.3	6,384.7	13.56	471.866		
3,800.0	3,793.2	3,713.2	3,713.2	7.5	6.5	-73.31	5,013.9	-4,070.0	6,396.3	6,382.4	13.94	458.805		
3,900.0	3,893.0	3,813.0	3,813.0	7.7	6.7	-73.37	5,013.9	-4,070.0	6,394.4	6,380.0	14.32	446.438		
4,000.0	3,992.8	3,912.8	3,912.8	8.0	6.8	-73.42	5,013.9	-4,070.0	6,392.4	6,377.7	14.70	434.711		
4,100.0	4,092.6	4,012.6	4,012.6	8.2	7.0	-73.48	5,013.9	-4,070.0	6,390.5	6,375.4	15.09	423.576		
4,200.0	4,192.3	4,112.3	4,112.3	8.4	7.2	-73.54	5,013.9	-4,070.0	6,388.6	6,373.1	15.47	412.990		
4,300.0	4,292.1	4,212.1	4,212.1	8.6	7.4	-73.60	5,013.9	-4,070.0	6,386.6	6,370.8	15.85	402.912		
4,400.0	4,391.9	4,311.9	4,311.9	8.8	7.5	-73.66	5,013.9	-4,070.0	6,384.7	6,368.5	16.23	393.308		
4,500.0	4,491.6	4,411.6	4,411.6	9.0	7.7	-73.72	5,013.9	-4,070.0	6,382.8	6,366.2	16.62	384.145		
4,600.0	4,591.4	4,511.4	4,511.4	9.2	7.9	-73.77	5,013.9	-4,070.0	6,380.9	6,363.9	17.00	375.392		
4,700.0	4,691.2	4,611.2	4,611.2	9.4	8.0	-73.83	5,013.9	-4,070.0	6,379.0	6,361.6	17.38	367.024		
4,800.0	4,790.9	4,710.9	4,710.9	9.6	8.2	-73.89	5,013.9	-4,070.0	6,377.1	6,359.4	17.76	359.015		
4,900.0	4,890.7	4,810.7	4,810.7	9.8	8.4	-73.95	5,013.9	-4,070.0	6,375.3	6,357.1	18.15	351.343		
5,000.0	4,990.5	4,910.5	4,910.5	10.1	8.6	-74.01	5,013.9	-4,070.0	6,373.4	6,354.9	18.53	343.987		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 5-6 (EXISTING) - FOUNDATION WELL - N												Offset Site Error: 0.0 ft	
Survey Program: 7771-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.3	5,010.3	5,010.3	10.3	8.7	-74.07	5,013.9	-4,070.0	6,371.5	6,352.6	18.91	336.928	249.302 CC, ES
5,200.0	5,190.0	5,110.0	5,110.0	10.5	8.9	-74.12	5,013.9	-4,070.0	6,369.7	6,350.4	19.29	330.148	
5,300.0	5,289.8	5,209.8	5,209.8	10.7	9.1	-74.18	5,013.9	-4,070.0	6,367.8	6,348.1	19.68	323.632	
5,400.0	5,389.6	5,309.6	5,309.6	10.9	9.3	-74.24	5,013.9	-4,070.0	6,366.0	6,345.9	20.06	317.364	
5,500.0	5,489.3	5,409.3	5,409.3	11.1	9.4	-74.30	5,013.9	-4,070.0	6,364.1	6,343.7	20.44	311.330	
5,600.0	5,589.1	5,509.1	5,509.1	11.3	9.6	-74.36	5,013.9	-4,070.0	6,362.3	6,341.5	20.82	305.518	
5,700.0	5,688.9	5,608.9	5,608.9	11.5	9.8	-74.42	5,013.9	-4,070.0	6,360.5	6,339.3	21.21	299.915	
5,800.0	5,788.7	5,708.7	5,708.7	11.7	10.0	-74.48	5,013.9	-4,070.0	6,358.6	6,337.0	21.59	294.510	
5,900.0	5,888.4	5,808.4	5,808.4	11.9	10.1	-74.53	5,013.9	-4,070.0	6,356.8	6,334.9	21.97	289.294	
6,000.0	5,988.2	5,908.2	5,908.2	12.2	10.3	-74.59	5,013.9	-4,070.0	6,355.0	6,332.7	22.36	284.256	
6,100.0	6,088.0	6,008.0	6,008.0	12.4	10.5	-74.65	5,013.9	-4,070.0	6,353.2	6,330.5	22.74	279.388	
6,200.0	6,187.7	6,107.7	6,107.7	12.6	10.7	-74.71	5,013.9	-4,070.0	6,351.4	6,328.3	23.12	274.681	
6,300.0	6,287.5	6,207.5	6,207.5	12.8	10.8	-74.77	5,013.9	-4,070.0	6,349.6	6,326.1	23.51	270.126	
6,400.0	6,387.3	6,307.3	6,307.3	13.0	11.0	-74.83	5,013.9	-4,070.0	6,347.9	6,324.0	23.89	265.718	
6,500.0	6,487.0	6,407.0	6,407.0	13.2	11.2	-74.89	5,013.9	-4,070.0	6,346.1	6,321.8	24.27	261.449	
6,600.0	6,586.8	6,506.8	6,506.8	13.4	11.4	-74.95	5,013.9	-4,070.0	6,344.3	6,319.7	24.66	257.313	
6,700.0	6,686.6	6,606.6	6,606.6	13.6	11.5	-75.00	5,013.9	-4,070.0	6,342.6	6,317.5	25.04	253.303	
6,787.0	6,773.4	6,693.4	6,693.4	13.8	11.7	-75.06	5,013.9	-4,070.0	6,341.0	6,315.7	25.37	249.913	
6,800.0	6,786.4	6,706.4	6,706.4	13.8	11.7	-85.58	5,013.9	-4,070.0	6,340.9	6,315.5	25.42	249.427	
6,804.0	6,790.4	6,710.4	6,710.4	13.8	11.7	-90.00	5,013.9	-4,070.0	6,340.9	6,315.5	25.43	249.302 CC, ES	
6,850.0	6,836.3	6,756.3	6,756.3	13.9	11.8	-172.78	5,013.9	-4,070.0	6,342.0	6,316.4	25.56	248.111	
6,900.0	6,886.2	6,806.2	6,806.2	14.0	11.9	157.16	5,013.9	-4,070.0	6,345.6	6,320.0	25.64	247.531	
6,950.0	6,935.7	6,855.7	6,855.7	14.0	12.0	149.04	5,013.9	-4,070.0	6,351.8	6,326.2	25.65	247.662	
7,000.0	6,984.6	6,904.6	6,904.6	14.0	12.1	145.18	5,013.9	-4,070.0	6,360.5	6,334.9	25.60	248.472	
7,050.0	7,032.6	6,952.6	6,952.6	14.0	12.1	142.72	5,013.9	-4,070.0	6,371.7	6,346.2	25.50	249.919	
7,100.0	7,079.7	6,999.7	6,999.7	13.9	12.2	140.82	5,013.9	-4,070.0	6,385.4	6,360.0	25.34	251.946	
7,150.0	7,125.4	7,045.4	7,045.4	13.9	12.3	139.15	5,013.9	-4,070.0	6,401.4	6,376.3	25.16	254.477	
7,200.0	7,169.6	7,089.6	7,089.6	13.8	12.4	137.55	5,013.9	-4,070.0	6,419.8	6,394.8	24.94	257.408	
7,250.0	7,212.1	7,132.1	7,132.1	13.8	12.4	135.92	5,013.9	-4,070.0	6,440.4	6,415.6	24.71	260.601	
7,300.0	7,252.6	7,172.6	7,172.6	13.7	12.5	134.21	5,013.9	-4,070.0	6,463.1	6,438.6	24.49	263.875	
7,350.0	7,291.0	7,211.0	7,211.0	13.7	12.6	132.37	5,013.9	-4,070.0	6,487.9	6,463.6	24.30	267.005	
7,400.0	7,327.1	7,247.1	7,247.1	13.7	12.6	130.35	5,013.9	-4,070.0	6,514.7	6,490.5	24.15	269.725	
7,450.0	7,360.7	7,280.7	7,280.7	13.7	12.7	128.14	5,013.9	-4,070.0	6,543.3	6,519.2	24.08	271.745	
7,500.0	7,391.6	7,311.6	7,311.6	13.7	12.8	125.68	5,013.9	-4,070.0	6,573.6	6,549.5	24.10	272.777	
7,550.0	7,419.7	7,339.7	7,339.7	13.8	12.8	122.95	5,013.9	-4,070.0	6,605.6	6,581.3	24.23	272.585	
7,600.0	7,444.8	7,364.8	7,364.8	13.9	12.9	119.93	5,013.9	-4,070.0	6,638.9	6,614.4	24.49	271.042	
7,650.0	7,466.9	7,386.9	7,386.9	14.1	12.9	116.60	5,013.9	-4,070.0	6,673.6	6,648.7	24.89	268.173	
7,700.0	7,485.8	7,405.8	7,405.8	14.3	12.9	112.94	5,013.9	-4,070.0	6,709.4	6,684.0	25.40	264.184	
7,750.0	7,501.5	7,421.5	7,421.5	14.6	13.0	108.94	5,013.9	-4,070.0	6,746.2	6,720.2	26.00	259.442	
7,800.0	7,513.7	7,433.7	7,433.7	14.9	13.0	104.63	5,013.9	-4,070.0	6,783.8	6,757.2	26.66	254.420	
7,850.0	7,522.6	7,442.6	7,442.6	15.2	13.0	100.05	5,013.9	-4,070.0	6,822.1	6,794.7	27.33	249.626	
7,900.0	7,528.0	7,448.0	7,448.0	15.6	13.0	95.24	5,013.9	-4,070.0	6,860.8	6,832.8	27.94	245.523	
7,952.9	7,530.0	7,450.0	7,450.0	16.1	13.0	90.00	5,013.9	-4,070.0	6,902.0	6,873.5	28.48	242.323	
8,000.0	7,530.0	7,450.0	7,450.0	16.5	13.0	90.00	5,013.9	-4,070.0	6,938.8	6,909.9	28.94	239.783	
8,100.0	7,530.0	7,450.0	7,450.0	17.5	13.0	90.00	5,013.9	-4,070.0	7,017.4	6,987.4	30.00	233.928	
8,200.0	7,530.0	7,450.0	7,450.0	18.7	13.0	90.00	5,013.9	-4,070.0	7,096.5	7,065.3	31.17	227.701	
8,300.0	7,530.0	7,450.0	7,450.0	19.9	13.0	90.00	5,013.9	-4,070.0	7,176.1	7,143.7	32.42	221.334	
8,400.0	7,530.0	7,450.0	7,450.0	21.2	13.0	90.00	5,013.9	-4,070.0	7,256.3	7,222.5	33.75	214.995	
8,500.0	7,530.0	7,450.0	7,450.0	22.6	13.0	90.00	5,013.9	-4,070.0	7,336.9	7,301.8	35.14	208.797	
8,600.0	7,530.0	7,450.0	7,450.0	24.0	13.0	90.00	5,013.9	-4,070.0	7,418.0	7,381.4	36.58	202.813	
8,700.0	7,530.0	7,450.0	7,450.0	25.4	13.0	90.00	5,013.9	-4,070.0	7,499.6	7,461.5	38.05	197.082	
8,800.0	7,530.0	7,450.0	7,450.0	26.9	13.0	90.00	5,013.9	-4,070.0	7,581.6	7,542.0	39.56	191.629	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 5-6 (EXISTING) - FOUNDATION WELL - N										Offset Site Error:		0.0 ft	
Survey Program: 7771-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
8,900.0	7,530.0	7,450.0	7,450.0	28.4	13.0	90.00	5,013.9	-4,070.0	7,664.0	7,622.9	41.10	186.458	
9,000.0	7,530.0	7,450.0	7,450.0	30.0	13.0	90.00	5,013.9	-4,070.0	7,746.9	7,704.2	42.67	181.569	
9,100.0	7,530.0	7,450.0	7,450.0	31.5	13.0	90.00	5,013.9	-4,070.0	7,830.1	7,785.9	44.25	176.953	
9,200.0	7,530.0	7,450.0	7,450.0	33.1	13.0	90.00	5,013.9	-4,070.0	7,913.7	7,867.9	45.85	172.599	
9,300.0	7,530.0	7,450.0	7,450.0	34.7	13.0	90.00	5,013.9	-4,070.0	7,997.7	7,950.3	47.47	168.494	
9,400.0	7,530.0	7,450.0	7,450.0	36.3	13.0	90.00	5,013.9	-4,070.0	8,082.1	8,033.0	49.09	164.624	
9,500.0	7,530.0	7,450.0	7,450.0	38.0	13.0	90.00	5,013.9	-4,070.0	8,166.8	8,116.1	50.73	160.973	
9,600.0	7,530.0	7,450.0	7,450.0	39.6	13.0	90.00	5,013.9	-4,070.0	8,251.9	8,199.5	52.38	157.527	
9,700.0	7,530.0	7,450.0	7,450.0	41.3	13.0	90.00	5,013.9	-4,070.0	8,337.3	8,283.3	54.04	154.274	
9,800.0	7,530.0	7,450.0	7,450.0	42.9	13.0	90.00	5,013.9	-4,070.0	8,423.0	8,367.3	55.71	151.199	
9,900.0	7,530.0	7,450.0	7,450.0	44.6	13.0	90.00	5,013.9	-4,070.0	8,509.1	8,451.7	57.38	148.291	
10,000.0	7,530.0	7,450.0	7,450.0	46.3	13.0	90.00	5,013.9	-4,070.0	8,595.4	8,536.3	59.06	145.537	
10,100.0	7,530.0	7,450.0	7,450.0	47.9	13.0	90.00	5,013.9	-4,070.0	8,682.0	8,621.3	60.74	142.928	
10,200.0	7,530.0	7,450.0	7,450.0	49.6	13.0	90.00	5,013.9	-4,070.0	8,768.9	8,706.5	62.43	140.453	
10,300.0	7,530.0	7,450.0	7,450.0	51.3	13.0	90.00	5,013.9	-4,070.0	8,856.1	8,792.0	64.13	138.104	
10,400.0	7,530.0	7,450.0	7,450.0	53.0	13.0	90.00	5,013.9	-4,070.0	8,943.6	8,877.8	65.82	135.871	
10,500.0	7,530.0	7,450.0	7,450.0	54.7	13.0	90.00	5,013.9	-4,070.0	9,031.3	8,963.8	67.52	133.748	
10,600.0	7,530.0	7,450.0	7,450.0	56.4	13.0	90.00	5,013.9	-4,070.0	9,119.3	9,050.0	69.23	131.726	
10,700.0	7,530.0	7,450.0	7,450.0	58.1	13.0	90.00	5,013.9	-4,070.0	9,207.5	9,136.5	70.94	129.799	
10,800.0	7,530.0	7,450.0	7,450.0	59.8	13.0	90.00	5,013.9	-4,070.0	9,295.9	9,223.3	72.65	127.962	
10,900.0	7,530.0	7,450.0	7,450.0	61.5	13.0	90.00	5,013.9	-4,070.0	9,384.6	9,310.3	74.36	126.208	
11,000.0	7,530.0	7,450.0	7,450.0	63.2	13.0	90.00	5,013.9	-4,070.0	9,473.5	9,397.5	76.07	124.532	
11,100.0	7,530.0	7,450.0	7,450.0	64.9	13.0	90.00	5,013.9	-4,070.0	9,562.7	9,484.9	77.79	122.929	
11,200.0	7,530.0	7,450.0	7,450.0	66.6	13.0	90.00	5,013.9	-4,070.0	9,652.0	9,572.5	79.51	121.395	
11,300.0	7,530.0	7,450.0	7,450.0	68.4	13.0	90.00	5,013.9	-4,070.0	9,741.6	9,660.3	81.23	119.926	
11,400.0	7,530.0	7,450.0	7,450.0	70.1	13.0	90.00	5,013.9	-4,070.0	9,831.3	9,748.4	82.95	118.519	
11,500.0	7,530.0	7,450.0	7,450.0	71.8	13.0	90.00	5,013.9	-4,070.0	9,921.3	9,836.6	84.68	117.168 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-36.55	3,707.4	-2,748.4	4,615.6					
100.0	100.0	26.0	26.0	0.2	0.0	-36.55	3,707.4	-2,748.4	4,615.0	4,614.8	0.20	N/A		
200.0	200.0	126.0	126.0	0.3	0.2	-36.55	3,707.4	-2,748.4	4,615.0	4,614.5	0.55	8,444.895		
300.0	300.0	226.0	226.0	0.5	0.4	-36.55	3,707.4	-2,748.4	4,615.0	4,614.1	0.90	5,153.277		
400.0	400.0	326.0	326.0	0.7	0.6	-36.55	3,707.4	-2,748.4	4,615.0	4,613.8	1.24	3,707.991		
500.0	500.0	426.0	426.0	0.8	0.7	-36.55	3,707.4	-2,748.4	4,615.0	4,613.4	1.59	2,895.828		
600.0	600.0	526.0	526.0	1.0	0.9	-36.55	3,707.4	-2,748.4	4,615.0	4,613.1	1.94	2,375.518		
700.0	700.0	626.0	626.0	1.2	1.1	-69.04	3,707.4	-2,748.4	4,614.7	4,612.4	2.29	2,013.304		
800.0	800.0	726.0	726.0	1.4	1.3	-69.08	3,707.4	-2,748.4	4,613.8	4,611.1	2.64	1,745.442		
900.0	899.9	825.9	825.9	1.6	1.4	-69.14	3,707.4	-2,748.4	4,612.2	4,609.2	3.00	1,538.025		
988.4	988.1	914.1	914.1	1.7	1.6	-69.22	3,707.4	-2,748.4	4,610.3	4,607.0	3.32	1,389.270		
1,000.0	999.7	925.7	925.7	1.7	1.6	-69.23	3,707.4	-2,748.4	4,610.0	4,606.7	3.36	1,371.729		
1,100.0	1,099.4	1,025.4	1,025.4	1.9	1.8	-69.31	3,707.4	-2,748.4	4,607.6	4,603.9	3.73	1,236.385		
1,200.0	1,199.2	1,125.2	1,125.2	2.1	2.0	-69.39	3,707.4	-2,748.4	4,605.2	4,601.1	4.10	1,124.474		
1,300.0	1,299.0	1,225.0	1,225.0	2.3	2.1	-69.47	3,707.4	-2,748.4	4,602.9	4,598.4	4.47	1,030.562		
1,400.0	1,398.8	1,324.8	1,324.8	2.5	2.3	-69.54	3,707.4	-2,748.4	4,600.5	4,595.6	4.84	950.731		
1,500.0	1,498.5	1,424.5	1,424.5	2.7	2.5	-69.62	3,707.4	-2,748.4	4,598.1	4,592.9	5.21	882.094		
1,600.0	1,598.3	1,524.3	1,524.3	2.9	2.7	-69.70	3,707.4	-2,748.4	4,595.8	4,590.2	5.59	822.491		
1,700.0	1,698.1	1,624.1	1,624.1	3.2	2.8	-69.78	3,707.4	-2,748.4	4,593.4	4,587.4	5.96	770.274		
1,800.0	1,797.8	1,723.8	1,723.8	3.4	3.0	-69.86	3,707.4	-2,748.4	4,591.1	4,584.7	6.34	724.167		
1,900.0	1,897.6	1,823.6	1,823.6	3.6	3.2	-69.94	3,707.4	-2,748.4	4,588.7	4,582.0	6.72	683.169		
2,000.0	1,997.4	1,923.4	1,923.4	3.8	3.4	-70.02	3,707.4	-2,748.4	4,586.4	4,579.3	7.09	646.483		
2,100.0	2,097.1	2,023.1	2,023.1	4.0	3.5	-70.10	3,707.4	-2,748.4	4,584.1	4,576.6	7.47	613.470		
2,200.0	2,196.9	2,122.9	2,122.9	4.2	3.7	-70.18	3,707.4	-2,748.4	4,581.8	4,573.9	7.85	583.609		
2,300.0	2,296.7	2,222.7	2,222.7	4.4	3.9	-70.26	3,707.4	-2,748.4	4,579.5	4,571.3	8.23	556.471		
2,400.0	2,396.5	2,322.5	2,322.5	4.6	4.1	-70.34	3,707.4	-2,748.4	4,577.2	4,568.6	8.61	531.705		
2,500.0	2,496.2	2,422.2	2,422.2	4.8	4.2	-70.42	3,707.4	-2,748.4	4,574.9	4,565.9	8.99	509.012		
2,600.0	2,596.0	2,522.0	2,522.0	5.0	4.4	-70.50	3,707.4	-2,748.4	4,572.6	4,563.3	9.37	488.146		
2,700.0	2,695.8	2,621.8	2,621.8	5.2	4.6	-70.58	3,707.4	-2,748.4	4,570.4	4,560.6	9.75	468.895		
2,800.0	2,795.5	2,721.5	2,721.5	5.4	4.8	-70.66	3,707.4	-2,748.4	4,568.1	4,558.0	10.13	451.080		
2,900.0	2,895.3	2,821.3	2,821.3	5.6	4.9	-70.74	3,707.4	-2,748.4	4,565.9	4,555.4	10.51	434.546		
3,000.0	2,995.1	2,921.1	2,921.1	5.9	5.1	-70.82	3,707.4	-2,748.4	4,563.7	4,552.8	10.89	419.161		
3,100.0	3,094.9	3,020.9	3,020.9	6.1	5.3	-70.90	3,707.4	-2,748.4	4,561.4	4,550.2	11.27	404.810		
3,200.0	3,194.6	3,120.6	3,120.6	6.3	5.4	-70.98	3,707.4	-2,748.4	4,559.2	4,547.6	11.65	391.392		
3,300.0	3,294.4	3,220.4	3,220.4	6.5	5.6	-71.06	3,707.4	-2,748.4	4,557.0	4,545.0	12.03	378.819		
3,400.0	3,394.2	3,320.2	3,320.2	6.7	5.8	-71.14	3,707.4	-2,748.4	4,554.8	4,542.4	12.41	367.015		
3,500.0	3,493.9	3,419.9	3,419.9	6.9	6.0	-71.22	3,707.4	-2,748.4	4,552.6	4,539.8	12.79	355.911		
3,600.0	3,593.7	3,519.7	3,519.7	7.1	6.1	-71.30	3,707.4	-2,748.4	4,550.4	4,537.3	13.17	345.447		
3,700.0	3,693.5	3,619.5	3,619.5	7.3	6.3	-71.38	3,707.4	-2,748.4	4,548.3	4,534.7	13.55	335.569		
3,800.0	3,793.2	3,719.2	3,719.2	7.5	6.5	-71.46	3,707.4	-2,748.4	4,546.1	4,532.2	13.94	326.230		
3,900.0	3,893.0	3,819.0	3,819.0	7.7	6.7	-71.54	3,707.4	-2,748.4	4,543.9	4,529.6	14.32	317.387		
4,000.0	3,992.8	3,918.8	3,918.8	8.0	6.8	-71.62	3,707.4	-2,748.4	4,541.8	4,527.1	14.70	309.001		
4,100.0	4,092.6	4,018.6	4,018.6	8.2	7.0	-71.70	3,707.4	-2,748.4	4,539.7	4,524.6	15.08	301.039		
4,200.0	4,192.3	4,118.3	4,118.3	8.4	7.2	-71.78	3,707.4	-2,748.4	4,537.5	4,522.1	15.46	293.468		
4,300.0	4,292.1	4,218.1	4,218.1	8.6	7.4	-71.87	3,707.4	-2,748.4	4,535.4	4,519.6	15.84	286.261		
4,400.0	4,391.9	4,317.9	4,317.9	8.8	7.5	-71.95	3,707.4	-2,748.4	4,533.3	4,517.1	16.23	279.393		
4,500.0	4,491.6	4,417.6	4,417.6	9.0	7.7	-72.03	3,707.4	-2,748.4	4,531.2	4,514.6	16.61	272.839		
4,600.0	4,591.4	4,517.4	4,517.4	9.2	7.9	-72.11	3,707.4	-2,748.4	4,529.1	4,512.1	16.99	266.580		
4,700.0	4,691.2	4,617.2	4,617.2	9.4	8.1	-72.19	3,707.4	-2,748.4	4,527.0	4,509.7	17.37	260.595		
4,800.0	4,790.9	4,716.9	4,716.9	9.6	8.2	-72.27	3,707.4	-2,748.4	4,525.0	4,507.2	17.75	254.867		
4,900.0	4,890.7	4,816.7	4,816.7	9.8	8.4	-72.35	3,707.4	-2,748.4	4,522.9	4,504.8	18.14	249.381		
5,000.0	4,990.5	4,916.5	4,916.5	10.1	8.6	-72.44	3,707.4	-2,748.4	4,520.9	4,502.3	18.52	244.120		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
5,100.0	5,090.3	5,016.3	5,016.3	10.3	8.8	-72.52	3,707.4	-2,748.4	4,518.8	4,499.9	18.90	239.072		
5,200.0	5,190.0	5,116.0	5,116.0	10.5	8.9	-72.60	3,707.4	-2,748.4	4,516.8	4,497.5	19.28	234.223		
5,300.0	5,289.8	5,215.8	5,215.8	10.7	9.1	-72.68	3,707.4	-2,748.4	4,514.8	4,495.1	19.67	229.563		
5,400.0	5,389.6	5,315.6	5,315.6	10.9	9.3	-72.76	3,707.4	-2,748.4	4,512.7	4,492.7	20.05	225.081		
5,500.0	5,489.3	5,415.3	5,415.3	11.1	9.5	-72.84	3,707.4	-2,748.4	4,510.7	4,490.3	20.43	220.766		
5,600.0	5,589.1	5,515.1	5,515.1	11.3	9.6	-72.93	3,707.4	-2,748.4	4,508.7	4,487.9	20.82	216.609		
5,700.0	5,688.9	5,614.9	5,614.9	11.5	9.8	-73.01	3,707.4	-2,748.4	4,506.7	4,485.5	21.20	212.603		
5,800.0	5,788.7	5,714.7	5,714.7	11.7	10.0	-73.09	3,707.4	-2,748.4	4,504.8	4,483.2	21.58	208.738		
5,900.0	5,888.4	5,814.4	5,814.4	11.9	10.1	-73.17	3,707.4	-2,748.4	4,502.8	4,480.8	21.96	205.008		
6,000.0	5,988.2	5,914.2	5,914.2	12.2	10.3	-73.26	3,707.4	-2,748.4	4,500.8	4,478.5	22.35	201.406		
6,100.0	6,088.0	6,014.0	6,014.0	12.4	10.5	-73.34	3,707.4	-2,748.4	4,498.9	4,476.2	22.73	197.925		
6,200.0	6,187.7	6,113.7	6,113.7	12.6	10.7	-73.42	3,707.4	-2,748.4	4,496.9	4,473.8	23.11	194.560		
6,300.0	6,287.5	6,213.5	6,213.5	12.8	10.8	-73.50	3,707.4	-2,748.4	4,495.0	4,471.5	23.50	191.304		
6,400.0	6,387.3	6,313.3	6,313.3	13.0	11.0	-73.59	3,707.4	-2,748.4	4,493.1	4,469.2	23.88	188.153		
6,500.0	6,487.0	6,413.0	6,413.0	13.2	11.2	-73.67	3,707.4	-2,748.4	4,491.2	4,466.9	24.26	185.101		
6,600.0	6,586.8	6,512.8	6,512.8	13.4	11.4	-73.75	3,707.4	-2,748.4	4,489.3	4,464.6	24.65	182.144		
6,700.0	6,686.6	6,612.6	6,612.6	13.6	11.5	-73.83	3,707.4	-2,748.4	4,487.4	4,462.3	25.03	179.277		
6,787.0	6,773.4	6,699.4	6,699.4	13.8	11.7	-73.91	3,707.4	-2,748.4	4,485.7	4,460.4	25.36	176.854		
6,800.0	6,786.4	6,712.4	6,712.4	13.8	11.7	-84.44	3,707.4	-2,748.4	4,485.6	4,460.2	25.41	176.507		
6,804.9	6,791.3	6,717.3	6,717.3	13.8	11.7	-90.00	3,707.4	-2,748.4	4,485.6	4,460.1	25.43	176.397 CC, ES		
6,850.0	6,836.3	6,762.3	6,762.3	13.9	11.8	-171.64	3,707.4	-2,748.4	4,486.6	4,461.1	25.55	175.585		
6,900.0	6,886.2	6,812.2	6,812.2	14.0	11.9	158.31	3,707.4	-2,748.4	4,490.3	4,464.7	25.63	175.223		
6,950.0	6,935.7	6,861.7	6,861.7	14.0	12.0	150.20	3,707.4	-2,748.4	4,496.6	4,470.9	25.64	175.403		
7,000.0	6,984.6	6,910.6	6,910.6	14.0	12.1	146.37	3,707.4	-2,748.4	4,505.4	4,479.8	25.58	176.104		
7,050.0	7,032.6	6,958.6	6,958.6	14.0	12.1	143.94	3,707.4	-2,748.4	4,516.7	4,491.3	25.48	177.298		
7,100.0	7,079.7	7,005.7	7,005.7	13.9	12.2	142.08	3,707.4	-2,748.4	4,530.6	4,505.3	25.32	178.949		
7,150.0	7,125.4	7,051.4	7,051.4	13.9	12.3	140.45	3,707.4	-2,748.4	4,546.9	4,521.8	25.12	181.005		
7,200.0	7,169.6	7,095.6	7,095.6	13.8	12.4	138.90	3,707.4	-2,748.4	4,565.6	4,540.7	24.89	183.398		
7,250.0	7,212.1	7,138.1	7,138.1	13.8	12.5	137.34	3,707.4	-2,748.4	4,586.5	4,561.9	24.65	186.031		
7,300.0	7,252.6	7,178.6	7,178.6	13.7	12.5	135.69	3,707.4	-2,748.4	4,609.7	4,585.3	24.42	188.778		
7,350.0	7,291.0	7,217.0	7,217.0	13.7	12.6	133.90	3,707.4	-2,748.4	4,635.1	4,610.8	24.21	191.477		
7,400.0	7,327.1	7,253.1	7,253.1	13.7	12.7	131.95	3,707.4	-2,748.4	4,662.4	4,638.4	24.04	193.930		
7,450.0	7,360.7	7,286.7	7,286.7	13.7	12.7	129.78	3,707.4	-2,748.4	4,691.7	4,667.7	23.95	195.913		
7,500.0	7,391.6	7,317.6	7,317.6	13.7	12.8	127.36	3,707.4	-2,748.4	4,722.7	4,698.8	23.95	197.194		
7,550.0	7,419.7	7,345.7	7,345.7	13.8	12.8	124.65	3,707.4	-2,748.4	4,755.4	4,731.4	24.07	197.570		
7,600.0	7,444.8	7,370.8	7,370.8	13.9	12.9	121.62	3,707.4	-2,748.4	4,789.7	4,765.3	24.32	196.911		
7,650.0	7,466.9	7,392.9	7,392.9	14.1	12.9	118.24	3,707.4	-2,748.4	4,825.3	4,800.6	24.72	195.201		
7,700.0	7,485.8	7,411.8	7,411.8	14.3	12.9	114.47	3,707.4	-2,748.4	4,862.1	4,836.8	25.25	192.574		
7,750.0	7,501.5	7,427.5	7,427.5	14.6	13.0	110.32	3,707.4	-2,748.4	4,899.9	4,874.1	25.88	189.302		
7,800.0	7,513.7	7,439.7	7,439.7	14.9	13.0	105.78	3,707.4	-2,748.4	4,938.7	4,912.1	26.59	185.767		
7,850.0	7,522.6	7,448.6	7,448.6	15.2	13.0	100.88	3,707.4	-2,748.4	4,978.1	4,950.8	27.29	182.397		
7,900.0	7,528.0	7,454.0	7,454.0	15.6	13.0	95.70	3,707.4	-2,748.4	5,018.0	4,990.1	27.94	179.595		
7,952.9	7,530.0	7,456.0	7,456.0	16.1	13.0	90.00	3,707.4	-2,748.4	5,060.6	5,032.1	28.49	177.607		
8,000.0	7,530.0	7,456.0	7,456.0	16.5	13.0	90.00	3,707.4	-2,748.4	5,098.6	5,069.7	28.95	176.128		
8,100.0	7,530.0	7,456.0	7,456.0	17.5	13.0	90.00	3,707.4	-2,748.4	5,179.9	5,149.9	30.01	172.614		
8,200.0	7,530.0	7,456.0	7,456.0	18.7	13.0	90.00	3,707.4	-2,748.4	5,261.8	5,230.6	31.18	168.775		
8,300.0	7,530.0	7,456.0	7,456.0	19.9	13.0	90.00	3,707.4	-2,748.4	5,344.3	5,311.9	32.43	164.782		
8,400.0	7,530.0	7,456.0	7,456.0	21.2	13.0	90.00	3,707.4	-2,748.4	5,427.5	5,393.7	33.76	160.759		
8,500.0	7,530.0	7,456.0	7,456.0	22.6	13.0	90.00	3,707.4	-2,748.4	5,511.1	5,476.0	35.15	156.792		
8,600.0	7,530.0	7,456.0	7,456.0	24.0	13.0	90.00	3,707.4	-2,748.4	5,595.4	5,558.8	36.59	152.937		
8,700.0	7,530.0	7,456.0	7,456.0	25.4	13.0	90.00	3,707.4	-2,748.4	5,680.1	5,642.0	38.06	149.227		
8,800.0	7,530.0	7,456.0	7,456.0	26.9	13.0	90.00	3,707.4	-2,748.4	5,765.3	5,725.7	39.57	145.683		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 7-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error:	0.0 ft
Survey Program: 7756-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,456.0	7,456.0	28.4	13.0	90.00	3,707.4	-2,748.4	5,851.0	5,809.9	41.11	142.313		
9,000.0	7,530.0	7,456.0	7,456.0	30.0	13.0	90.00	3,707.4	-2,748.4	5,937.2	5,894.5	42.68	139.119		
9,100.0	7,530.0	7,456.0	7,456.0	31.5	13.0	90.00	3,707.4	-2,748.4	6,023.7	5,979.5	44.26	136.098		
9,200.0	7,530.0	7,456.0	7,456.0	33.1	13.0	90.00	3,707.4	-2,748.4	6,110.7	6,064.8	45.86	133.244		
9,300.0	7,530.0	7,456.0	7,456.0	34.7	13.0	90.00	3,707.4	-2,748.4	6,198.1	6,150.6	47.48	130.550		
9,400.0	7,530.0	7,456.0	7,456.0	36.3	13.0	90.00	3,707.4	-2,748.4	6,285.8	6,236.7	49.10	128.008		
9,500.0	7,530.0	7,456.0	7,456.0	38.0	13.0	90.00	3,707.4	-2,748.4	6,373.9	6,323.2	50.74	125.607		
9,600.0	7,530.0	7,456.0	7,456.0	39.6	13.0	90.00	3,707.4	-2,748.4	6,462.4	6,410.0	52.39	123.341		
9,700.0	7,530.0	7,456.0	7,456.0	41.3	13.0	90.00	3,707.4	-2,748.4	6,551.2	6,497.1	54.05	121.199		
9,800.0	7,530.0	7,456.0	7,456.0	42.9	13.0	90.00	3,707.4	-2,748.4	6,640.3	6,584.5	55.72	119.175		
9,900.0	7,530.0	7,456.0	7,456.0	44.6	13.0	90.00	3,707.4	-2,748.4	6,729.7	6,672.3	57.39	117.259		
10,000.0	7,530.0	7,456.0	7,456.0	46.3	13.0	90.00	3,707.4	-2,748.4	6,819.4	6,760.3	59.07	115.445		
10,100.0	7,530.0	7,456.0	7,456.0	47.9	13.0	90.00	3,707.4	-2,748.4	6,909.4	6,848.6	60.75	113.726		
10,200.0	7,530.0	7,456.0	7,456.0	49.6	13.0	90.00	3,707.4	-2,748.4	6,999.6	6,937.2	62.44	112.095		
10,300.0	7,530.0	7,456.0	7,456.0	51.3	13.0	90.00	3,707.4	-2,748.4	7,090.1	7,026.0	64.14	110.547		
10,400.0	7,530.0	7,456.0	7,456.0	53.0	13.0	90.00	3,707.4	-2,748.4	7,180.9	7,115.1	65.83	109.075		
10,500.0	7,530.0	7,456.0	7,456.0	54.7	13.0	90.00	3,707.4	-2,748.4	7,271.9	7,204.4	67.54	107.676		
10,600.0	7,530.0	7,456.0	7,456.0	56.4	13.0	90.00	3,707.4	-2,748.4	7,363.2	7,293.9	69.24	106.343		
10,700.0	7,530.0	7,456.0	7,456.0	58.1	13.0	90.00	3,707.4	-2,748.4	7,454.6	7,383.7	70.95	105.074		
10,800.0	7,530.0	7,456.0	7,456.0	59.8	13.0	90.00	3,707.4	-2,748.4	7,546.3	7,473.7	72.66	103.863		
10,900.0	7,530.0	7,456.0	7,456.0	61.5	13.0	90.00	3,707.4	-2,748.4	7,638.2	7,563.9	74.37	102.707		
11,000.0	7,530.0	7,456.0	7,456.0	63.2	13.0	90.00	3,707.4	-2,748.4	7,730.3	7,654.2	76.08	101.603		
11,100.0	7,530.0	7,456.0	7,456.0	64.9	13.0	90.00	3,707.4	-2,748.4	7,822.6	7,744.8	77.80	100.547		
11,200.0	7,530.0	7,456.0	7,456.0	66.6	13.0	90.00	3,707.4	-2,748.4	7,915.1	7,835.6	79.52	99.537		
11,300.0	7,530.0	7,456.0	7,456.0	68.4	13.0	90.00	3,707.4	-2,748.4	8,007.8	7,926.5	81.24	98.569		
11,400.0	7,530.0	7,456.0	7,456.0	70.1	13.0	90.00	3,707.4	-2,748.4	8,100.6	8,017.6	82.96	97.642		
11,500.0	7,530.0	7,456.0	7,456.0	71.8	13.0	90.00	3,707.4	-2,748.4	8,193.6	8,108.9	84.69	96.753		
11,600.0	7,530.0	7,456.0	7,456.0	73.5	13.0	90.00	3,707.4	-2,748.4	8,286.8	8,200.3	86.41	95.899		
11,700.0	7,530.0	7,456.0	7,456.0	75.2	13.0	90.00	3,707.4	-2,748.4	8,380.1	8,291.9	88.14	95.079		
11,800.0	7,530.0	7,456.0	7,456.0	77.0	13.0	90.00	3,707.4	-2,748.4	8,473.6	8,383.7	89.87	94.292		
11,900.0	7,530.0	7,456.0	7,456.0	78.7	13.0	90.00	3,707.4	-2,748.4	8,567.2	8,475.6	91.59	93.534		
12,000.0	7,530.0	7,456.0	7,456.0	80.4	13.0	90.00	3,707.4	-2,748.4	8,660.9	8,567.6	93.32	92.805		
12,100.0	7,530.0	7,456.0	7,456.0	82.2	13.0	90.00	3,707.4	-2,748.4	8,754.8	8,659.8	95.06	92.103		
12,200.0	7,530.0	7,456.0	7,456.0	83.9	13.0	90.00	3,707.4	-2,748.4	8,848.9	8,752.1	96.79	91.426		
12,300.0	7,530.0	7,456.0	7,456.0	85.6	13.0	90.00	3,707.4	-2,748.4	8,943.0	8,844.5	98.52	90.774		
12,400.0	7,530.0	7,456.0	7,456.0	87.3	13.0	90.00	3,707.4	-2,748.4	9,037.3	8,937.1	100.25	90.144		
12,500.0	7,530.0	7,456.0	7,456.0	89.1	13.0	90.00	3,707.4	-2,748.4	9,131.8	9,029.8	101.99	89.537		
12,600.0	7,530.0	7,456.0	7,456.0	90.8	13.0	90.00	3,707.4	-2,748.4	9,226.3	9,122.6	103.72	88.950		
12,700.0	7,530.0	7,456.0	7,456.0	92.5	13.0	90.00	3,707.4	-2,748.4	9,320.9	9,215.5	105.46	88.384		
12,800.0	7,530.0	7,456.0	7,456.0	94.3	13.0	90.00	3,707.4	-2,748.4	9,415.7	9,308.5	107.20	87.836		
12,900.0	7,530.0	7,456.0	7,456.0	96.0	13.0	90.00	3,707.4	-2,748.4	9,510.5	9,401.6	108.93	87.306		
13,000.0	7,530.0	7,456.0	7,456.0	97.8	13.0	90.00	3,707.4	-2,748.4	9,605.5	9,494.8	110.67	86.793		
13,100.0	7,530.0	7,456.0	7,456.0	99.5	13.0	90.00	3,707.4	-2,748.4	9,700.6	9,588.2	112.41	86.296		
13,200.0	7,530.0	7,456.0	7,456.0	101.2	13.0	90.00	3,707.4	-2,748.4	9,795.8	9,681.6	114.15	85.815		
13,300.0	7,530.0	7,456.0	7,456.0	103.0	13.0	90.00	3,707.4	-2,748.4	9,891.0	9,775.1	115.89	85.349		
13,400.0	7,530.0	7,456.0	7,456.0	104.7	13.0	90.00	3,707.4	-2,748.4	9,986.4	9,868.7	117.63	84.897 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - 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	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	31.0	31.0	0.0	0.0	-95.89	-297.5	-2,881.5	2,896.8					
100.0	100.0	131.0	131.0	0.2	0.2	-95.89	-297.5	-2,881.5	2,896.8	2,896.4	0.36	8,056.917		
200.0	200.0	231.0	231.0	0.3	0.4	-95.89	-297.5	-2,881.5	2,896.8	2,896.1	0.71	4,087.994		
300.0	300.0	331.0	331.0	0.5	0.6	-95.89	-297.5	-2,881.5	2,896.8	2,895.7	1.06	2,738.822		
400.0	400.0	431.0	431.0	0.7	0.7	-95.89	-297.5	-2,881.5	2,896.8	2,895.4	1.41	2,059.213		
500.0	500.0	531.0	531.0	0.8	0.9	-95.89	-297.5	-2,881.5	2,896.8	2,895.0	1.76	1,649.827		
600.0	600.0	631.0	631.0	1.0	1.1	-95.89	-297.5	-2,881.5	2,896.8	2,894.7	2.10	1,376.224	CC, ES	
700.0	700.0	731.0	731.0	1.2	1.3	-128.38	-297.5	-2,881.5	2,897.3	2,894.9	2.45	1,180.615		
800.0	800.0	831.0	831.0	1.4	1.4	-128.40	-297.5	-2,881.5	2,898.9	2,896.1	2.80	1,033.712		
900.0	899.9	930.9	930.9	1.6	1.6	-128.45	-297.5	-2,881.5	2,901.6	2,898.5	3.16	918.981		
988.4	988.1	1,019.1	1,019.1	1.7	1.8	-128.51	-297.5	-2,881.5	2,905.0	2,901.5	3.47	836.395		
1,000.0	999.7	1,030.7	1,030.7	1.7	1.8	-128.52	-297.5	-2,881.5	2,905.4	2,901.9	3.51	826.613		
1,100.0	1,099.4	1,130.5	1,130.5	1.9	2.0	-128.62	-297.5	-2,881.5	2,909.7	2,905.8	3.88	750.774		
1,200.0	1,199.2	1,230.2	1,230.2	2.1	2.1	-128.73	-297.5	-2,881.5	2,913.9	2,909.7	4.24	687.544		
1,300.0	1,299.0	1,330.0	1,330.0	2.3	2.3	-128.83	-297.5	-2,881.5	2,918.2	2,913.6	4.60	634.090		
1,400.0	1,398.8	1,429.8	1,429.8	2.5	2.5	-128.93	-297.5	-2,881.5	2,922.4	2,917.5	4.97	588.349		
1,500.0	1,498.5	1,529.5	1,529.5	2.7	2.6	-129.04	-297.5	-2,881.5	2,926.7	2,921.4	5.33	548.791		
1,600.0	1,598.3	1,629.3	1,629.3	2.9	2.8	-129.14	-297.5	-2,881.5	2,931.0	2,925.3	5.70	514.258		
1,700.0	1,698.1	1,729.1	1,729.1	3.2	3.0	-129.24	-297.5	-2,881.5	2,935.3	2,929.2	6.07	483.861		
1,800.0	1,797.8	1,828.8	1,828.8	3.4	3.2	-129.34	-297.5	-2,881.5	2,939.5	2,933.1	6.43	456.907		
1,900.0	1,897.6	1,928.6	1,928.6	3.6	3.3	-129.45	-297.5	-2,881.5	2,943.9	2,937.0	6.80	432.847		
2,000.0	1,997.4	2,028.4	2,028.4	3.8	3.5	-129.55	-297.5	-2,881.5	2,948.2	2,941.0	7.17	411.243		
2,100.0	2,097.1	2,128.2	2,128.2	4.0	3.7	-129.65	-297.5	-2,881.5	2,952.5	2,945.0	7.54	391.740		
2,200.0	2,196.9	2,227.9	2,227.9	4.2	3.9	-129.75	-297.5	-2,881.5	2,956.8	2,948.9	7.90	374.048		
2,300.0	2,296.7	2,327.7	2,327.7	4.4	4.0	-129.85	-297.5	-2,881.5	2,961.2	2,952.9	8.27	357.927		
2,400.0	2,396.5	2,427.5	2,427.5	4.6	4.2	-129.95	-297.5	-2,881.5	2,965.5	2,956.9	8.64	343.179		
2,500.0	2,496.2	2,527.2	2,527.2	4.8	4.4	-130.05	-297.5	-2,881.5	2,969.9	2,960.9	9.01	329.635		
2,600.0	2,596.0	2,627.0	2,627.0	5.0	4.6	-130.15	-297.5	-2,881.5	2,974.2	2,964.9	9.38	317.156		
2,700.0	2,695.8	2,726.8	2,726.8	5.2	4.7	-130.25	-297.5	-2,881.5	2,978.6	2,968.9	9.75	305.620		
2,800.0	2,795.5	2,826.6	2,826.6	5.4	4.9	-130.35	-297.5	-2,881.5	2,983.0	2,972.9	10.11	294.925		
2,900.0	2,895.3	2,926.3	2,926.3	5.6	5.1	-130.45	-297.5	-2,881.5	2,987.4	2,976.9	10.48	284.984		
3,000.0	2,995.1	3,026.1	3,026.1	5.9	5.3	-130.55	-297.5	-2,881.5	2,991.8	2,981.0	10.85	275.719		
3,100.0	3,094.9	3,347.6	3,347.2	6.1	5.8	-130.74	-289.6	-2,871.9	2,993.8	2,982.2	11.61	257.928		
3,200.0	3,194.6	3,447.5	3,446.8	6.3	6.0	-130.75	-284.1	-2,865.2	2,990.8	2,978.8	11.98	249.664		
3,300.0	3,294.4	3,547.5	3,546.4	6.5	6.2	-130.77	-278.6	-2,858.5	2,987.8	2,975.5	12.35	241.883		
3,400.0	3,394.2	3,647.4	3,645.9	6.7	6.4	-130.78	-273.2	-2,851.8	2,984.9	2,972.1	12.73	234.543		
3,500.0	3,493.9	3,747.4	3,745.5	6.9	6.6	-130.79	-267.7	-2,845.2	2,981.9	2,968.8	13.10	227.610		
3,600.0	3,593.7	3,847.3	3,845.1	7.1	6.8	-130.80	-262.2	-2,838.5	2,978.9	2,965.4	13.48	221.051		
3,700.0	3,693.5	3,947.3	3,944.7	7.3	7.0	-130.82	-256.7	-2,831.8	2,975.9	2,962.1	13.85	214.837		
3,800.0	3,793.2	4,047.2	4,044.3	7.5	7.2	-130.83	-251.3	-2,825.1	2,972.9	2,958.7	14.23	208.944		
3,900.0	3,893.0	4,147.2	4,143.8	7.7	7.4	-130.84	-245.8	-2,818.4	2,970.0	2,955.3	14.61	203.347		
4,000.0	3,992.8	4,247.2	4,243.4	8.0	7.6	-130.86	-240.3	-2,811.8	2,967.0	2,952.0	14.98	198.025		
4,100.0	4,092.6	4,347.1	4,343.0	8.2	7.8	-130.87	-234.9	-2,805.1	2,964.0	2,948.6	15.36	192.960		
4,200.0	4,192.3	4,447.1	4,442.6	8.4	8.0	-130.88	-229.4	-2,798.4	2,961.0	2,945.3	15.74	188.133		
4,300.0	4,292.1	4,547.0	4,542.2	8.6	8.2	-130.90	-223.9	-2,791.7	2,958.0	2,941.9	16.12	183.528		
4,400.0	4,391.9	4,647.0	4,641.7	8.8	8.4	-130.91	-218.4	-2,785.1	2,955.1	2,938.6	16.50	179.131		
4,500.0	4,491.6	4,746.9	4,741.3	9.0	8.6	-130.92	-213.0	-2,778.4	2,952.1	2,935.2	16.88	174.928		
4,600.0	4,591.4	4,846.9	4,840.9	9.2	8.8	-130.94	-207.5	-2,771.7	2,949.1	2,931.8	17.26	170.907		
4,700.0	4,691.2	4,946.8	4,940.5	9.4	9.0	-130.95	-202.0	-2,765.0	2,946.1	2,928.5	17.64	167.056		
4,800.0	4,790.9	5,046.8	5,040.0	9.6	9.2	-130.96	-196.5	-2,758.4	2,943.1	2,925.1	18.02	163.366		
4,900.0	4,890.7	5,146.7	5,139.6	9.8	9.5	-130.97	-191.1	-2,751.7	2,940.2	2,921.8	18.40	159.826		
5,000.0	4,990.5	5,183.2	5,176.0	10.1	9.5	-130.98	-189.1	-2,749.2	2,937.9	2,919.2	18.66	157.448		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - 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)	
5,024.1	5,014.5	5,183.2	5,176.0	10.1	9.5	-130.98	-189.1	-2,749.2	2,937.8	2,919.1	18.71	157.047		
5,100.0	5,090.3	5,183.2	5,176.0	10.3	9.5	-130.98	-189.1	-2,749.2	2,938.8	2,919.9	18.85	155.861		
5,200.0	5,190.0	5,183.2	5,176.0	10.5	9.5	-130.98	-189.1	-2,749.2	2,943.0	2,924.0	19.05	154.484		
5,300.0	5,289.8	5,183.2	5,176.0	10.7	9.5	-130.98	-189.1	-2,749.2	2,950.7	2,931.5	19.25	153.311		
5,400.0	5,389.6	5,183.2	5,176.0	10.9	9.5	-130.98	-189.1	-2,749.2	2,961.7	2,942.3	19.44	152.334		
5,500.0	5,489.3	5,183.2	5,176.0	11.1	9.5	-130.98	-189.1	-2,749.2	2,976.1	2,956.4	19.64	151.546		
5,600.0	5,589.1	5,183.2	5,176.0	11.3	9.5	-130.98	-189.1	-2,749.2	2,993.7	2,973.9	19.83	150.939		
5,700.0	5,688.9	5,183.2	5,176.0	11.5	9.5	-130.98	-189.1	-2,749.2	3,014.5	2,994.5	20.03	150.503		
5,800.0	5,788.7	5,183.2	5,176.0	11.7	9.5	-130.98	-189.1	-2,749.2	3,038.5	3,018.3	20.23	150.232		
5,900.0	5,888.4	5,183.2	5,176.0	11.9	9.5	-130.98	-189.1	-2,749.2	3,065.6	3,045.2	20.42	150.117		
6,000.0	5,988.2	5,183.2	5,176.0	12.2	9.5	-130.98	-189.1	-2,749.2	3,095.6	3,075.0	20.62	150.148		
6,100.0	6,088.0	5,183.2	5,176.0	12.4	9.5	-130.98	-189.1	-2,749.2	3,128.6	3,107.8	20.81	150.320		
6,200.0	6,187.7	5,183.2	5,176.0	12.6	9.5	-130.98	-189.1	-2,749.2	3,164.4	3,143.4	21.01	150.621		
6,300.0	6,287.5	5,183.2	5,176.0	12.8	9.5	-130.98	-189.1	-2,749.2	3,202.9	3,181.7	21.20	151.046		
6,400.0	6,387.3	5,183.2	5,176.0	13.0	9.5	-130.98	-189.1	-2,749.2	3,244.0	3,222.6	21.40	151.586		
6,500.0	6,487.0	5,183.2	5,176.0	13.2	9.5	-130.98	-189.1	-2,749.2	3,287.7	3,266.1	21.60	152.233		
6,600.0	6,586.8	5,183.2	5,176.0	13.4	9.5	-130.98	-189.1	-2,749.2	3,333.8	3,312.0	21.79	152.979		
6,700.0	6,686.6	5,183.2	5,176.0	13.6	9.5	-130.98	-189.1	-2,749.2	3,382.2	3,360.2	21.99	153.819		
6,787.0	6,773.4	5,183.2	5,176.0	13.8	9.5	-130.98	-189.1	-2,749.2	3,426.1	3,404.0	22.16	154.619		
6,800.0	6,786.4	5,183.2	5,176.0	13.8	9.5	-142.13	-189.1	-2,749.2	3,432.8	3,410.7	22.16	154.932		
6,850.0	6,836.3	5,183.2	5,176.0	13.9	9.5	128.38	-189.1	-2,749.2	3,458.6	3,436.5	22.13	156.310		
6,900.0	6,886.2	5,183.2	5,176.0	14.0	9.5	96.18	-189.1	-2,749.2	3,484.3	3,462.2	22.07	157.841		
6,950.0	6,935.7	5,183.2	5,176.0	14.0	9.5	86.07	-189.1	-2,749.2	3,509.8	3,487.8	22.00	159.504		
7,000.0	6,984.6	5,183.2	5,176.0	14.0	9.5	80.42	-189.1	-2,749.2	3,535.0	3,513.1	21.92	161.286		
7,050.0	7,032.6	5,183.2	5,176.0	14.0	9.5	76.37	-189.1	-2,749.2	3,559.8	3,538.0	21.82	163.174		
7,100.0	7,079.7	5,183.2	5,176.0	13.9	9.5	73.10	-189.1	-2,749.2	3,584.1	3,562.4	21.70	165.157		
7,150.0	7,125.4	5,183.2	5,176.0	13.9	9.5	70.31	-189.1	-2,749.2	3,607.7	3,586.1	21.57	167.225		
7,200.0	7,169.6	5,183.2	5,176.0	13.8	9.5	67.86	-189.1	-2,749.2	3,630.6	3,609.2	21.44	169.366		
7,250.0	7,212.1	5,183.2	5,176.0	13.8	9.5	65.66	-189.1	-2,749.2	3,652.7	3,631.4	21.29	171.564		
7,300.0	7,252.6	5,183.2	5,176.0	13.7	9.5	63.68	-189.1	-2,749.2	3,673.8	3,652.6	21.14	173.795		
7,350.0	7,291.0	5,183.2	5,176.0	13.7	9.5	61.89	-189.1	-2,749.2	3,693.9	3,672.9	20.98	176.032		
7,400.0	7,327.1	5,183.2	5,176.0	13.7	9.5	60.28	-189.1	-2,749.2	3,712.9	3,692.1	20.83	178.234		
7,450.0	7,360.7	5,183.2	5,176.0	13.7	9.5	58.82	-189.1	-2,749.2	3,730.8	3,710.1	20.69	180.354		
7,500.0	7,391.6	5,183.2	5,176.0	13.7	9.5	57.51	-189.1	-2,749.2	3,747.4	3,726.9	20.55	182.334		
7,550.0	7,419.7	5,183.2	5,176.0	13.8	9.5	56.34	-189.1	-2,749.2	3,762.7	3,742.3	20.44	184.108		
7,600.0	7,444.8	5,183.2	5,176.0	13.9	9.5	55.31	-189.1	-2,749.2	3,776.7	3,756.4	20.35	185.603		
7,650.0	7,466.9	5,183.2	5,176.0	14.1	9.5	54.41	-189.1	-2,749.2	3,789.3	3,769.0	20.29	186.747		
7,700.0	7,485.8	5,183.2	5,176.0	14.3	9.5	53.63	-189.1	-2,749.2	3,800.4	3,780.1	20.27	187.466		
7,750.0	7,501.5	5,183.2	5,176.0	14.6	9.5	52.97	-189.1	-2,749.2	3,809.9	3,789.6	20.30	187.697		
7,800.0	7,513.7	5,183.2	5,176.0	14.9	9.5	52.43	-189.1	-2,749.2	3,818.0	3,797.6	20.37	187.390		
7,850.0	7,522.6	5,183.2	5,176.0	15.2	9.5	52.00	-189.1	-2,749.2	3,824.5	3,804.0	20.51	186.512		
7,900.0	7,528.0	5,183.2	5,176.0	15.6	9.5	51.68	-189.1	-2,749.2	3,829.4	3,808.7	20.69	185.054		
7,952.9	7,530.0	5,183.2	5,176.0	16.1	9.5	51.47	-189.1	-2,749.2	3,832.8	3,811.9	20.96	182.894		
8,000.0	7,530.0	5,183.2	5,176.0	16.5	9.5	51.47	-189.1	-2,749.2	3,835.4	3,814.1	21.32	179.906		
8,100.0	7,530.0	5,183.2	5,176.0	17.5	9.5	51.47	-189.1	-2,749.2	3,842.7	3,820.5	22.16	173.440		
8,200.0	7,530.0	5,183.2	5,176.0	18.7	9.5	51.47	-189.1	-2,749.2	3,852.6	3,829.5	23.07	166.986		
8,300.0	7,530.0	5,183.2	5,176.0	19.9	9.5	51.47	-189.1	-2,749.2	3,865.0	3,841.0	24.05	160.694		
8,400.0	7,530.0	5,183.2	5,176.0	21.2	9.5	51.47	-189.1	-2,749.2	3,880.0	3,854.9	25.09	154.660		
8,500.0	7,530.0	5,183.2	5,176.0	22.6	9.5	51.47	-189.1	-2,749.2	3,897.5	3,871.4	26.17	148.944		
8,600.0	7,530.0	5,183.2	5,176.0	24.0	9.5	51.47	-189.1	-2,749.2	3,917.5	3,890.2	27.29	143.574		
8,700.0	7,530.0	5,183.2	5,176.0	25.4	9.5	51.47	-189.1	-2,749.2	3,939.9	3,911.5	28.43	138.559		
8,800.0	7,530.0	5,183.2	5,176.0	26.9	9.5	51.47	-189.1	-2,749.2	3,964.7	3,935.1	29.61	133.895		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Plan #1										Offset Site Error:		0.0 ft	
Survey Program: O-MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
8,900.0	7,530.0	5,183.2	5,176.0	28.4	9.5	51.47	-189.1	-2,749.2	3,991.9	3,961.1	30.81	129.570	
9,000.0	7,530.0	5,183.2	5,176.0	30.0	9.5	51.47	-189.1	-2,749.2	4,021.3	3,989.3	32.03	125.565	
9,100.0	7,530.0	5,183.2	5,176.0	31.5	9.5	51.47	-189.1	-2,749.2	4,053.1	4,019.8	33.26	121.861	
9,200.0	7,530.0	5,183.2	5,176.0	33.1	9.5	51.47	-189.1	-2,749.2	4,087.0	4,052.5	34.51	118.438	
9,300.0	7,530.0	5,183.2	5,176.0	34.7	9.5	51.47	-189.1	-2,749.2	4,123.1	4,087.3	35.77	115.274	
9,400.0	7,530.0	5,183.2	5,176.0	36.3	9.5	51.47	-189.1	-2,749.2	4,161.2	4,124.2	37.04	112.350	
9,500.0	7,530.0	5,183.2	5,176.0	38.0	9.5	51.47	-189.1	-2,749.2	4,201.4	4,163.1	38.32	109.647	
9,600.0	7,530.0	5,183.2	5,176.0	39.6	9.5	51.47	-189.1	-2,749.2	4,243.6	4,204.0	39.61	107.146	
9,700.0	7,530.0	5,183.2	5,176.0	41.3	9.5	51.47	-189.1	-2,749.2	4,287.7	4,246.8	40.90	104.831	
9,800.0	7,530.0	5,183.2	5,176.0	42.9	9.5	51.47	-189.1	-2,749.2	4,333.6	4,291.4	42.20	102.686	
9,900.0	7,530.0	5,183.2	5,176.0	44.6	9.5	51.47	-189.1	-2,749.2	4,381.4	4,337.8	43.51	100.698	
10,000.0	7,530.0	5,183.2	5,176.0	46.3	9.5	51.47	-189.1	-2,749.2	4,430.8	4,386.0	44.82	98.854	
10,100.0	7,530.0	5,183.2	5,176.0	47.9	9.5	51.47	-189.1	-2,749.2	4,482.0	4,435.9	46.14	97.142	
10,200.0	7,530.0	5,183.2	5,176.0	49.6	9.5	51.47	-189.1	-2,749.2	4,534.8	4,487.4	47.46	95.550	
10,300.0	7,530.0	5,183.2	5,176.0	51.3	9.5	51.47	-189.1	-2,749.2	4,589.2	4,540.4	48.78	94.070	
10,400.0	7,530.0	5,183.2	5,176.0	53.0	9.5	51.47	-189.1	-2,749.2	4,645.1	4,595.0	50.11	92.692	
10,500.0	7,530.0	5,183.2	5,176.0	54.7	9.5	51.47	-189.1	-2,749.2	4,702.4	4,651.0	51.44	91.409	
10,600.0	7,530.0	5,183.2	5,176.0	56.4	9.5	51.47	-189.1	-2,749.2	4,761.2	4,708.4	52.78	90.212	
10,700.0	7,530.0	5,183.2	5,176.0	58.1	9.5	51.47	-189.1	-2,749.2	4,821.3	4,767.2	54.11	89.095	
10,800.0	7,530.0	5,183.2	5,176.0	59.8	9.5	51.47	-189.1	-2,749.2	4,882.7	4,827.3	55.45	88.051	
10,900.0	7,530.0	5,183.2	5,176.0	61.5	9.5	51.47	-189.1	-2,749.2	4,945.4	4,888.6	56.79	87.076	
11,000.0	7,530.0	5,183.2	5,176.0	63.2	9.5	51.47	-189.1	-2,749.2	5,009.3	4,951.2	58.14	86.164	
11,100.0	7,530.0	5,183.2	5,176.0	64.9	9.5	51.47	-189.1	-2,749.2	5,074.4	5,014.9	59.48	85.310	
11,200.0	7,530.0	5,183.2	5,176.0	66.6	9.5	51.47	-189.1	-2,749.2	5,140.6	5,079.8	60.83	84.509	
11,300.0	7,530.0	5,183.2	5,176.0	68.4	9.5	51.47	-189.1	-2,749.2	5,207.9	5,145.7	62.18	83.759	
11,400.0	7,530.0	5,183.2	5,176.0	70.1	9.5	51.47	-189.1	-2,749.2	5,276.2	5,212.6	63.53	83.055	
11,500.0	7,530.0	5,183.2	5,176.0	71.8	9.5	51.47	-189.1	-2,749.2	5,345.5	5,280.6	64.88	82.394	
11,600.0	7,530.0	5,183.2	5,176.0	73.5	9.5	51.47	-189.1	-2,749.2	5,415.7	5,349.5	66.23	81.773	
11,700.0	7,530.0	5,183.2	5,176.0	75.2	9.5	51.47	-189.1	-2,749.2	5,486.9	5,419.3	67.58	81.189	
11,800.0	7,530.0	5,183.2	5,176.0	77.0	9.5	51.47	-189.1	-2,749.2	5,559.0	5,490.1	68.94	80.639	
11,900.0	7,530.0	5,183.2	5,176.0	78.7	9.5	51.47	-189.1	-2,749.2	5,631.9	5,561.6	70.29	80.122	
12,000.0	7,530.0	5,183.2	5,176.0	80.4	9.5	51.47	-189.1	-2,749.2	5,705.7	5,634.0	71.65	79.635	
12,100.0	7,530.0	5,183.2	5,176.0	82.2	9.5	51.47	-189.1	-2,749.2	5,780.2	5,707.2	73.01	79.175	
12,200.0	7,530.0	5,183.2	5,176.0	83.9	9.5	51.47	-189.1	-2,749.2	5,855.5	5,781.1	74.36	78.742	
12,300.0	7,530.0	5,183.2	5,176.0	85.6	9.5	51.47	-189.1	-2,749.2	5,931.5	5,855.8	75.72	78.333	
12,400.0	7,530.0	5,183.2	5,176.0	87.3	9.5	51.47	-189.1	-2,749.2	6,008.2	5,931.2	77.08	77.947	
12,500.0	7,530.0	5,183.2	5,176.0	89.1	9.5	51.47	-189.1	-2,749.2	6,085.6	6,007.2	78.44	77.582	
12,600.0	7,530.0	5,183.2	5,176.0	90.8	9.5	51.47	-189.1	-2,749.2	6,163.7	6,083.9	79.80	77.237	
12,700.0	7,530.0	5,183.2	5,176.0	92.5	9.5	51.47	-189.1	-2,749.2	6,242.4	6,161.2	81.16	76.911	
12,800.0	7,530.0	5,183.2	5,176.0	94.3	9.5	51.47	-189.1	-2,749.2	6,321.7	6,239.1	82.53	76.602	
12,900.0	7,530.0	5,183.2	5,176.0	96.0	9.5	51.47	-189.1	-2,749.2	6,401.5	6,317.6	83.89	76.310	
13,000.0	7,530.0	5,183.2	5,176.0	97.8	9.5	51.47	-189.1	-2,749.2	6,482.0	6,396.7	85.25	76.033	
13,100.0	7,530.0	5,183.2	5,176.0	99.5	9.5	51.47	-189.1	-2,749.2	6,562.9	6,476.3	86.62	75.771	
13,200.0	7,530.0	5,183.2	5,176.0	101.2	9.5	51.47	-189.1	-2,749.2	6,644.4	6,556.4	87.98	75.522	
13,300.0	7,530.0	5,183.2	5,176.0	103.0	9.5	51.47	-189.1	-2,749.2	6,726.4	6,637.0	89.34	75.286	
13,400.0	7,530.0	5,183.2	5,176.0	104.7	9.5	51.47	-189.1	-2,749.2	6,808.8	6,718.1	90.71	75.062	
13,500.0	7,530.0	5,183.2	5,176.0	106.4	9.5	51.47	-189.1	-2,749.2	6,891.8	6,799.7	92.07	74.850	
13,600.0	7,530.0	5,183.2	5,176.0	108.2	9.5	51.47	-189.1	-2,749.2	6,975.1	6,881.7	93.44	74.648	
13,700.0	7,530.0	5,183.2	5,176.0	109.9	9.5	51.47	-189.1	-2,749.2	7,058.9	6,964.1	94.81	74.456	
13,800.0	7,530.0	5,183.2	5,176.0	111.7	9.5	51.47	-189.1	-2,749.2	7,143.1	7,047.0	96.17	74.274	
13,900.0	7,530.0	5,183.2	5,176.0	113.4	9.5	51.47	-189.1	-2,749.2	7,227.8	7,130.2	97.54	74.101	
14,000.0	7,530.0	5,183.2	5,176.0	115.1	9.5	51.47	-189.1	-2,749.2	7,312.8	7,213.9	98.91	73.936	

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
14,100.0	7,530.0	5,183.2	5,176.0	116.9	9.5	51.47	-189.1	-2,749.2	7,398.2	7,297.9	100.27	73.779		
14,200.0	7,530.0	5,183.2	5,176.0	118.6	9.5	51.47	-189.1	-2,749.2	7,483.9	7,382.3	101.64	73.630		
14,300.0	7,530.0	5,183.2	5,176.0	120.4	9.5	51.47	-189.1	-2,749.2	7,570.0	7,467.0	103.01	73.488		
14,400.0	7,530.0	5,183.2	5,176.0	122.1	9.5	51.47	-189.1	-2,749.2	7,656.5	7,552.1	104.38	73.353		
14,500.0	7,530.0	5,183.2	5,176.0	123.9	9.5	51.47	-189.1	-2,749.2	7,743.2	7,637.5	105.75	73.224		
14,600.0	7,530.0	5,183.2	5,176.0	125.6	9.5	51.47	-189.1	-2,749.2	7,830.3	7,723.2	107.12	73.101		
14,700.0	7,530.0	5,183.2	5,176.0	127.3	9.5	51.47	-189.1	-2,749.2	7,917.7	7,809.2	108.48	72.984		
14,800.0	7,530.0	5,183.2	5,176.0	129.1	9.5	51.47	-189.1	-2,749.2	8,005.4	7,895.5	109.85	72.873		
14,900.0	7,530.0	5,183.2	5,176.0	130.8	9.5	51.47	-189.1	-2,749.2	8,093.3	7,982.1	111.22	72.766		
15,000.0	7,530.0	5,183.2	5,176.0	132.6	9.5	51.47	-189.1	-2,749.2	8,181.6	8,069.0	112.59	72.665		
15,100.0	7,530.0	5,183.2	5,176.0	134.3	9.5	51.47	-189.1	-2,749.2	8,270.1	8,156.1	113.96	72.568		
15,200.0	7,530.0	5,183.2	5,176.0	136.1	9.5	51.47	-189.1	-2,749.2	8,358.8	8,243.5	115.33	72.476		
15,300.0	7,530.0	5,183.2	5,176.0	137.8	9.5	51.47	-189.1	-2,749.2	8,447.9	8,331.2	116.70	72.387		
15,400.0	7,530.0	5,183.2	5,176.0	139.6	9.5	51.47	-189.1	-2,749.2	8,537.1	8,419.0	118.07	72.303		
15,500.0	7,530.0	5,183.2	5,176.0	141.3	9.5	51.47	-189.1	-2,749.2	8,626.6	8,507.2	119.44	72.223		
15,600.0	7,530.0	5,183.2	5,176.0	143.0	9.5	51.47	-189.1	-2,749.2	8,716.3	8,595.5	120.82	72.146		
15,700.0	7,530.0	5,183.2	5,176.0	144.8	9.5	51.47	-189.1	-2,749.2	8,806.3	8,684.1	122.19	72.073		
15,800.0	7,530.0	5,183.2	5,176.0	146.5	9.5	51.47	-189.1	-2,749.2	8,896.4	8,772.9	123.56	72.003		
15,900.0	7,530.0	5,183.2	5,176.0	148.3	9.5	51.47	-189.1	-2,749.2	8,986.8	8,861.9	124.93	71.936		
16,000.0	7,530.0	5,183.2	5,176.0	150.0	9.5	51.47	-189.1	-2,749.2	9,077.4	8,951.1	126.30	71.872		
16,100.0	7,530.0	5,183.2	5,176.0	151.8	9.5	51.47	-189.1	-2,749.2	9,168.2	9,040.5	127.67	71.811		
16,200.0	7,530.0	5,183.2	5,176.0	153.5	9.5	51.47	-189.1	-2,749.2	9,259.1	9,130.1	129.04	71.752		
16,300.0	7,530.0	5,183.2	5,176.0	155.3	9.5	51.47	-189.1	-2,749.2	9,350.3	9,219.8	130.41	71.696		
16,400.0	7,530.0	5,183.2	5,176.0	157.0	9.5	51.47	-189.1	-2,749.2	9,441.6	9,309.8	131.79	71.643		
16,500.0	7,530.0	5,183.2	5,176.0	158.8	9.5	51.47	-189.1	-2,749.2	9,533.1	9,399.9	133.16	71.592		
16,600.0	7,530.0	5,183.2	5,176.0	160.5	9.5	51.47	-189.1	-2,749.2	9,624.7	9,490.2	134.53	71.543		
16,700.0	7,530.0	5,183.2	5,176.0	162.3	9.5	51.47	-189.1	-2,749.2	9,716.6	9,580.7	135.90	71.496		
16,800.0	7,530.0	5,183.2	5,176.0	164.0	9.5	51.47	-189.1	-2,749.2	9,808.6	9,671.3	137.28	71.452		
16,900.0	7,530.0	5,183.2	5,176.0	165.8	9.5	51.47	-189.1	-2,749.2	9,900.7	9,762.1	138.65	71.409		
17,000.0	7,530.0	5,183.2	5,176.0	167.5	9.5	51.47	-189.1	-2,749.2	9,993.0	9,853.0	140.02	71.368 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	31.0	31.0	0.0	0.0	-95.89	-297.5	-2,881.5	2,896.8					
100.0	100.0	131.0	131.0	0.2	0.2	-95.89	-297.5	-2,881.5	2,896.8	2,896.4	0.36	8,056.917		
200.0	200.0	231.0	231.0	0.3	0.4	-95.89	-297.5	-2,881.5	2,896.8	2,896.1	0.71	4,087.994		
300.0	300.0	331.0	331.0	0.5	0.6	-95.89	-297.5	-2,881.5	2,896.8	2,895.7	1.06	2,738.822		
400.0	400.0	431.0	431.0	0.7	0.7	-95.89	-297.5	-2,881.5	2,896.8	2,895.4	1.41	2,059.213		
500.0	500.0	531.0	531.0	0.8	0.9	-95.89	-297.5	-2,881.5	2,896.8	2,895.0	1.76	1,649.827		
600.0	600.0	631.0	631.0	1.0	1.1	-95.89	-297.5	-2,881.5	2,896.8	2,894.7	2.10	1,376.224	CC, ES	
700.0	700.0	731.0	731.0	1.2	1.3	-128.38	-297.5	-2,881.5	2,897.3	2,894.9	2.45	1,180.615		
800.0	800.0	831.0	831.0	1.4	1.4	-128.40	-297.5	-2,881.5	2,898.9	2,896.1	2.80	1,033.712		
900.0	899.9	930.9	930.9	1.6	1.6	-128.45	-297.5	-2,881.5	2,901.6	2,898.5	3.16	918.981		
988.4	988.1	1,019.1	1,019.1	1.7	1.8	-128.51	-297.5	-2,881.5	2,905.0	2,901.5	3.47	836.395		
1,000.0	999.7	1,030.7	1,030.7	1.7	1.8	-128.52	-297.5	-2,881.5	2,905.4	2,901.9	3.51	826.613		
1,100.0	1,099.4	1,130.5	1,130.5	1.9	2.0	-128.62	-297.5	-2,881.5	2,909.7	2,905.8	3.88	750.774		
1,200.0	1,199.2	1,230.2	1,230.2	2.1	2.1	-128.73	-297.5	-2,881.5	2,913.9	2,909.7	4.24	687.544		
1,300.0	1,299.0	1,330.0	1,330.0	2.3	2.3	-128.83	-297.5	-2,881.5	2,918.2	2,913.6	4.60	634.090		
1,400.0	1,398.8	1,429.8	1,429.8	2.5	2.5	-128.93	-297.5	-2,881.5	2,922.4	2,917.5	4.97	588.349		
1,500.0	1,498.5	1,529.5	1,529.5	2.7	2.6	-129.04	-297.5	-2,881.5	2,926.7	2,921.4	5.33	548.791		
1,600.0	1,598.3	1,629.3	1,629.3	2.9	2.8	-129.14	-297.5	-2,881.5	2,931.0	2,925.3	5.70	514.258		
1,700.0	1,698.1	1,729.1	1,729.1	3.2	3.0	-129.24	-297.5	-2,881.5	2,935.3	2,929.2	6.07	483.861		
1,800.0	1,797.8	1,828.8	1,828.8	3.4	3.2	-129.34	-297.5	-2,881.5	2,939.5	2,933.1	6.43	456.907		
1,900.0	1,897.6	1,928.6	1,928.6	3.6	3.3	-129.45	-297.5	-2,881.5	2,943.9	2,937.0	6.80	432.847		
2,000.0	1,997.4	2,028.4	2,028.4	3.8	3.5	-129.55	-297.5	-2,881.5	2,948.2	2,941.0	7.17	411.243		
2,100.0	2,097.1	2,128.2	2,128.2	4.0	3.7	-129.65	-297.5	-2,881.5	2,952.5	2,945.0	7.54	391.740		
2,200.0	2,196.9	2,227.9	2,227.9	4.2	3.9	-129.75	-297.5	-2,881.5	2,956.8	2,948.9	7.90	374.048		
2,300.0	2,296.7	2,327.7	2,327.7	4.4	4.0	-129.85	-297.5	-2,881.5	2,961.2	2,952.9	8.27	357.927		
2,400.0	2,396.5	2,427.5	2,427.5	4.6	4.2	-129.95	-297.5	-2,881.5	2,965.5	2,956.9	8.64	343.179		
2,500.0	2,496.2	2,527.2	2,527.2	4.8	4.4	-130.05	-297.5	-2,881.5	2,969.9	2,960.9	9.01	329.635		
2,600.0	2,596.0	2,627.0	2,627.0	5.0	4.6	-130.15	-297.5	-2,881.5	2,974.2	2,964.9	9.38	317.156		
2,700.0	2,695.8	2,726.8	2,726.8	5.2	4.7	-130.25	-297.5	-2,881.5	2,978.6	2,968.9	9.75	305.620		
2,800.0	2,795.5	2,826.6	2,826.6	5.4	4.9	-130.35	-297.5	-2,881.5	2,983.0	2,972.9	10.11	294.925		
2,900.0	2,895.3	2,926.3	2,926.3	5.6	5.1	-130.45	-297.5	-2,881.5	2,987.4	2,976.9	10.48	284.984		
3,000.0	2,995.1	3,026.1	3,026.1	5.9	5.3	-130.55	-297.5	-2,881.5	2,991.8	2,981.0	10.85	275.719		
3,100.0	3,094.9	3,347.6	3,347.2	6.1	5.8	-130.74	-289.6	-2,871.9	2,993.8	2,982.2	11.61	257.928		
3,200.0	3,194.6	3,447.5	3,446.8	6.3	6.0	-130.75	-284.1	-2,865.2	2,990.8	2,978.8	11.98	249.664		
3,300.0	3,294.4	3,547.5	3,546.4	6.5	6.2	-130.77	-278.6	-2,858.5	2,987.8	2,975.5	12.35	241.883		
3,400.0	3,394.2	3,647.4	3,645.9	6.7	6.4	-130.78	-273.2	-2,851.8	2,984.9	2,972.1	12.73	234.543		
3,500.0	3,493.9	3,747.4	3,745.5	6.9	6.6	-130.79	-267.7	-2,845.2	2,981.9	2,968.8	13.10	227.610		
3,600.0	3,593.7	3,847.3	3,845.1	7.1	6.8	-130.80	-262.2	-2,838.5	2,978.9	2,965.4	13.48	221.051		
3,700.0	3,693.5	3,947.3	3,944.7	7.3	7.0	-130.82	-256.7	-2,831.8	2,975.9	2,962.1	13.85	214.837		
3,800.0	3,793.2	4,047.2	4,044.3	7.5	7.2	-130.83	-251.3	-2,825.1	2,972.9	2,958.7	14.23	208.944		
3,900.0	3,893.0	4,147.2	4,143.8	7.7	7.4	-130.84	-245.8	-2,818.4	2,970.0	2,955.3	14.61	203.347		
4,000.0	3,992.8	4,247.2	4,243.4	8.0	7.6	-130.86	-240.3	-2,811.8	2,967.0	2,952.0	14.98	198.025		
4,100.0	4,092.6	4,347.1	4,343.0	8.2	7.8	-130.87	-234.9	-2,805.1	2,964.0	2,948.6	15.36	192.960		
4,200.0	4,192.3	4,447.1	4,442.6	8.4	8.0	-130.88	-229.4	-2,798.4	2,961.0	2,945.3	15.74	188.133		
4,300.0	4,292.1	4,547.0	4,542.2	8.6	8.2	-130.90	-223.9	-2,791.7	2,958.0	2,941.9	16.12	183.528		
4,400.0	4,391.9	4,647.0	4,641.7	8.8	8.4	-130.91	-218.4	-2,785.1	2,955.1	2,938.6	16.50	179.131		
4,500.0	4,491.6	4,746.9	4,741.3	9.0	8.6	-130.92	-213.0	-2,778.4	2,952.1	2,935.2	16.88	174.928		
4,600.0	4,591.4	4,846.9	4,840.9	9.2	8.8	-130.94	-207.5	-2,771.7	2,949.1	2,931.8	17.26	170.907		
4,700.0	4,691.2	4,946.8	4,940.5	9.4	9.0	-130.95	-202.0	-2,765.0	2,946.1	2,928.5	17.64	167.056		
4,800.0	4,790.9	5,046.8	5,040.0	9.6	9.2	-130.96	-196.5	-2,758.4	2,943.1	2,925.1	18.02	163.366		
4,900.0	4,890.7	5,146.7	5,139.6	9.8	9.5	-130.97	-191.1	-2,751.7	2,940.2	2,921.8	18.40	159.826		
5,000.0	4,990.5	5,183.2	5,176.0	10.1	9.5	-130.98	-189.1	-2,749.2	2,937.9	2,919.2	18.66	157.448		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - 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)				
5,024.1	5,014.5	5,183.2	5,176.0	10.1	9.5	-130.98	-189.1	-2,749.2	2,937.8	2,919.1	18.71	157.047		
5,100.0	5,090.3	5,183.2	5,176.0	10.3	9.5	-130.98	-189.1	-2,749.2	2,938.8	2,919.9	18.85	155.861		
5,200.0	5,190.0	5,183.2	5,176.0	10.5	9.5	-130.98	-189.1	-2,749.2	2,943.0	2,924.0	19.05	154.484		
5,300.0	5,289.8	5,183.2	5,176.0	10.7	9.5	-130.98	-189.1	-2,749.2	2,950.7	2,931.5	19.25	153.311		
5,400.0	5,389.6	5,183.2	5,176.0	10.9	9.5	-130.98	-189.1	-2,749.2	2,961.7	2,942.3	19.44	152.334		
5,500.0	5,489.3	5,183.2	5,176.0	11.1	9.5	-130.98	-189.1	-2,749.2	2,976.1	2,956.4	19.64	151.546		
5,600.0	5,589.1	5,183.2	5,176.0	11.3	9.5	-130.98	-189.1	-2,749.2	2,993.7	2,973.9	19.83	150.939		
5,700.0	5,688.9	5,183.2	5,176.0	11.5	9.5	-130.98	-189.1	-2,749.2	3,014.5	2,994.5	20.03	150.503		
5,800.0	5,788.7	5,183.2	5,176.0	11.7	9.5	-130.98	-189.1	-2,749.2	3,038.5	3,018.3	20.23	150.232		
5,900.0	5,888.4	5,183.2	5,176.0	11.9	9.5	-130.98	-189.1	-2,749.2	3,065.6	3,045.2	20.42	150.117		
6,000.0	5,988.2	5,183.2	5,176.0	12.2	9.5	-130.98	-189.1	-2,749.2	3,095.6	3,075.0	20.62	150.148		
6,100.0	6,088.0	5,183.2	5,176.0	12.4	9.5	-130.98	-189.1	-2,749.2	3,128.6	3,107.8	20.81	150.320		
6,200.0	6,187.7	5,183.2	5,176.0	12.6	9.5	-130.98	-189.1	-2,749.2	3,164.4	3,143.4	21.01	150.621		
6,300.0	6,287.5	5,183.2	5,176.0	12.8	9.5	-130.98	-189.1	-2,749.2	3,202.9	3,181.7	21.20	151.046		
6,400.0	6,387.3	5,183.2	5,176.0	13.0	9.5	-130.98	-189.1	-2,749.2	3,244.0	3,222.6	21.40	151.586		
6,500.0	6,487.0	5,183.2	5,176.0	13.2	9.5	-130.98	-189.1	-2,749.2	3,287.7	3,266.1	21.60	152.233		
6,600.0	6,586.8	5,183.2	5,176.0	13.4	9.5	-130.98	-189.1	-2,749.2	3,333.8	3,312.0	21.79	152.979		
6,700.0	6,686.6	5,183.2	5,176.0	13.6	9.5	-130.98	-189.1	-2,749.2	3,382.2	3,360.2	21.99	153.819		
6,787.0	6,773.4	5,183.2	5,176.0	13.8	9.5	-130.98	-189.1	-2,749.2	3,426.1	3,404.0	22.16	154.619		
6,800.0	6,786.4	5,183.2	5,176.0	13.8	9.5	-142.13	-189.1	-2,749.2	3,432.8	3,410.7	22.16	154.932		
6,850.0	6,836.3	5,183.2	5,176.0	13.9	9.5	128.38	-189.1	-2,749.2	3,458.6	3,436.5	22.13	156.310		
6,900.0	6,886.2	5,183.2	5,176.0	14.0	9.5	96.18	-189.1	-2,749.2	3,484.3	3,462.2	22.07	157.841		
6,950.0	6,935.7	5,183.2	5,176.0	14.0	9.5	86.07	-189.1	-2,749.2	3,509.8	3,487.8	22.00	159.504		
7,000.0	6,984.6	5,183.2	5,176.0	14.0	9.5	80.42	-189.1	-2,749.2	3,535.0	3,513.1	21.92	161.286		
7,050.0	7,032.6	5,183.2	5,176.0	14.0	9.5	76.37	-189.1	-2,749.2	3,559.8	3,538.0	21.82	163.174		
7,100.0	7,079.7	5,183.2	5,176.0	13.9	9.5	73.10	-189.1	-2,749.2	3,584.1	3,562.4	21.70	165.157		
7,150.0	7,125.4	5,183.2	5,176.0	13.9	9.5	70.31	-189.1	-2,749.2	3,607.7	3,586.1	21.57	167.225		
7,200.0	7,169.6	5,183.2	5,176.0	13.8	9.5	67.86	-189.1	-2,749.2	3,630.6	3,609.2	21.44	169.366		
7,250.0	7,212.1	5,183.2	5,176.0	13.8	9.5	65.66	-189.1	-2,749.2	3,652.7	3,631.4	21.29	171.564		
7,300.0	7,252.6	5,183.2	5,176.0	13.7	9.5	63.68	-189.1	-2,749.2	3,673.8	3,652.6	21.14	173.795		
7,350.0	7,291.0	5,183.2	5,176.0	13.7	9.5	61.89	-189.1	-2,749.2	3,693.9	3,672.9	20.98	176.032		
7,400.0	7,327.1	5,183.2	5,176.0	13.7	9.5	60.28	-189.1	-2,749.2	3,712.9	3,692.1	20.83	178.234		
7,450.0	7,360.7	5,183.2	5,176.0	13.7	9.5	58.82	-189.1	-2,749.2	3,730.8	3,710.1	20.69	180.354		
7,500.0	7,391.6	5,183.2	5,176.0	13.7	9.5	57.51	-189.1	-2,749.2	3,747.4	3,726.9	20.55	182.334		
7,550.0	7,419.7	5,183.2	5,176.0	13.8	9.5	56.34	-189.1	-2,749.2	3,762.7	3,742.3	20.44	184.108		
7,600.0	7,444.8	5,183.2	5,176.0	13.9	9.5	55.31	-189.1	-2,749.2	3,776.7	3,756.4	20.35	185.603		
7,650.0	7,466.9	5,183.2	5,176.0	14.1	9.5	54.41	-189.1	-2,749.2	3,789.3	3,769.0	20.29	186.747		
7,700.0	7,485.8	5,183.2	5,176.0	14.3	9.5	53.63	-189.1	-2,749.2	3,800.4	3,780.1	20.27	187.466		
7,750.0	7,501.5	5,183.2	5,176.0	14.6	9.5	52.97	-189.1	-2,749.2	3,809.9	3,789.6	20.30	187.697		
7,800.0	7,513.7	5,183.2	5,176.0	14.9	9.5	52.43	-189.1	-2,749.2	3,818.0	3,797.6	20.37	187.390		
7,850.0	7,522.6	5,183.2	5,176.0	15.2	9.5	52.00	-189.1	-2,749.2	3,824.5	3,804.0	20.51	186.512		
7,900.0	7,528.0	5,183.2	5,176.0	15.6	9.5	51.68	-189.1	-2,749.2	3,829.4	3,808.7	20.69	185.054		
7,952.9	7,530.0	5,183.2	5,176.0	16.1	9.5	51.47	-189.1	-2,749.2	3,832.8	3,811.9	20.96	182.894		
8,000.0	7,530.0	5,183.2	5,176.0	16.5	9.5	51.47	-189.1	-2,749.2	3,835.4	3,814.1	21.32	179.906		
8,100.0	7,530.0	5,183.2	5,176.0	17.5	9.5	51.47	-189.1	-2,749.2	3,842.7	3,820.5	22.16	173.440		
8,200.0	7,530.0	5,183.2	5,176.0	18.7	9.5	51.47	-189.1	-2,749.2	3,852.6	3,829.5	23.07	166.986		
8,300.0	7,530.0	5,183.2	5,176.0	19.9	9.5	51.47	-189.1	-2,749.2	3,865.0	3,841.0	24.05	160.694		
8,400.0	7,530.0	5,183.2	5,176.0	21.2	9.5	51.47	-189.1	-2,749.2	3,880.0	3,854.9	25.09	154.660		
8,500.0	7,530.0	5,183.2	5,176.0	22.6	9.5	51.47	-189.1	-2,749.2	3,897.5	3,871.4	26.17	148.944		
8,600.0	7,530.0	5,183.2	5,176.0	24.0	9.5	51.47	-189.1	-2,749.2	3,917.5	3,890.2	27.29	143.574		
8,700.0	7,530.0	5,183.2	5,176.0	25.4	9.5	51.47	-189.1	-2,749.2	3,939.9	3,911.5	28.43	138.559		
8,800.0	7,530.0	5,183.2	5,176.0	26.9	9.5	51.47	-189.1	-2,749.2	3,964.7	3,935.1	29.61	133.895		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Plan #2										Offset Site Error:		0.0 ft	
Survey Program: O-MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
8,900.0	7,530.0	5,183.2	5,176.0	28.4	9.5	51.47	-189.1	-2,749.2	3,991.9	3,961.1	30.81	129.570	
9,000.0	7,530.0	5,183.2	5,176.0	30.0	9.5	51.47	-189.1	-2,749.2	4,021.3	3,989.3	32.03	125.565	
9,100.0	7,530.0	5,183.2	5,176.0	31.5	9.5	51.47	-189.1	-2,749.2	4,053.1	4,019.8	33.26	121.861	
9,200.0	7,530.0	5,183.2	5,176.0	33.1	9.5	51.47	-189.1	-2,749.2	4,087.0	4,052.5	34.51	118.438	
9,300.0	7,530.0	5,183.2	5,176.0	34.7	9.5	51.47	-189.1	-2,749.2	4,123.1	4,087.3	35.77	115.274	
9,400.0	7,530.0	5,183.2	5,176.0	36.3	9.5	51.47	-189.1	-2,749.2	4,161.2	4,124.2	37.04	112.350	
9,500.0	7,530.0	5,183.2	5,176.0	38.0	9.5	51.47	-189.1	-2,749.2	4,201.4	4,163.1	38.32	109.647	
9,600.0	7,530.0	5,183.2	5,176.0	39.6	9.5	51.47	-189.1	-2,749.2	4,243.6	4,204.0	39.61	107.146	
9,700.0	7,530.0	5,183.2	5,176.0	41.3	9.5	51.47	-189.1	-2,749.2	4,287.7	4,246.8	40.90	104.831	
9,800.0	7,530.0	5,183.2	5,176.0	42.9	9.5	51.47	-189.1	-2,749.2	4,333.6	4,291.4	42.20	102.686	
9,900.0	7,530.0	5,183.2	5,176.0	44.6	9.5	51.47	-189.1	-2,749.2	4,381.4	4,337.8	43.51	100.698	
10,000.0	7,530.0	5,183.2	5,176.0	46.3	9.5	51.47	-189.1	-2,749.2	4,430.8	4,386.0	44.82	98.854	
10,100.0	7,530.0	5,183.2	5,176.0	47.9	9.5	51.47	-189.1	-2,749.2	4,482.0	4,435.9	46.14	97.142	
10,200.0	7,530.0	5,183.2	5,176.0	49.6	9.5	51.47	-189.1	-2,749.2	4,534.8	4,487.4	47.46	95.550	
10,300.0	7,530.0	5,183.2	5,176.0	51.3	9.5	51.47	-189.1	-2,749.2	4,589.2	4,540.4	48.78	94.070	
10,400.0	7,530.0	5,183.2	5,176.0	53.0	9.5	51.47	-189.1	-2,749.2	4,645.1	4,595.0	50.11	92.692	
10,500.0	7,530.0	5,183.2	5,176.0	54.7	9.5	51.47	-189.1	-2,749.2	4,702.4	4,651.0	51.44	91.409	
10,600.0	7,530.0	5,183.2	5,176.0	56.4	9.5	51.47	-189.1	-2,749.2	4,761.2	4,708.4	52.78	90.212	
10,700.0	7,530.0	5,183.2	5,176.0	58.1	9.5	51.47	-189.1	-2,749.2	4,821.3	4,767.2	54.11	89.095	
10,800.0	7,530.0	5,183.2	5,176.0	59.8	9.5	51.47	-189.1	-2,749.2	4,882.7	4,827.3	55.45	88.051	
10,900.0	7,530.0	5,183.2	5,176.0	61.5	9.5	51.47	-189.1	-2,749.2	4,945.4	4,888.6	56.79	87.076	
11,000.0	7,530.0	5,183.2	5,176.0	63.2	9.5	51.47	-189.1	-2,749.2	5,009.3	4,951.2	58.14	86.164	
11,100.0	7,530.0	5,183.2	5,176.0	64.9	9.5	51.47	-189.1	-2,749.2	5,074.4	5,014.9	59.48	85.310	
11,200.0	7,530.0	5,183.2	5,176.0	66.6	9.5	51.47	-189.1	-2,749.2	5,140.6	5,079.8	60.83	84.509	
11,300.0	7,530.0	5,183.2	5,176.0	68.4	9.5	51.47	-189.1	-2,749.2	5,207.9	5,145.7	62.18	83.759	
11,400.0	7,530.0	5,183.2	5,176.0	70.1	9.5	51.47	-189.1	-2,749.2	5,276.2	5,212.6	63.53	83.055	
11,500.0	7,530.0	5,183.2	5,176.0	71.8	9.5	51.47	-189.1	-2,749.2	5,345.5	5,280.6	64.88	82.394	
11,600.0	7,530.0	5,183.2	5,176.0	73.5	9.5	51.47	-189.1	-2,749.2	5,415.7	5,349.5	66.23	81.773	
11,700.0	7,530.0	5,183.2	5,176.0	75.2	9.5	51.47	-189.1	-2,749.2	5,486.9	5,419.3	67.58	81.189	
11,800.0	7,530.0	5,183.2	5,176.0	77.0	9.5	51.47	-189.1	-2,749.2	5,559.0	5,490.1	68.94	80.639	
11,900.0	7,530.0	5,183.2	5,176.0	78.7	9.5	51.47	-189.1	-2,749.2	5,631.9	5,561.6	70.29	80.122	
12,000.0	7,530.0	5,183.2	5,176.0	80.4	9.5	51.47	-189.1	-2,749.2	5,705.7	5,634.0	71.65	79.635	
12,100.0	7,530.0	5,183.2	5,176.0	82.2	9.5	51.47	-189.1	-2,749.2	5,780.2	5,707.2	73.01	79.175	
12,200.0	7,530.0	5,183.2	5,176.0	83.9	9.5	51.47	-189.1	-2,749.2	5,855.5	5,781.1	74.36	78.742	
12,300.0	7,530.0	5,183.2	5,176.0	85.6	9.5	51.47	-189.1	-2,749.2	5,931.5	5,855.8	75.72	78.333	
12,400.0	7,530.0	5,183.2	5,176.0	87.3	9.5	51.47	-189.1	-2,749.2	6,008.2	5,931.2	77.08	77.947	
12,500.0	7,530.0	5,183.2	5,176.0	89.1	9.5	51.47	-189.1	-2,749.2	6,085.6	6,007.2	78.44	77.582	
12,600.0	7,530.0	5,183.2	5,176.0	90.8	9.5	51.47	-189.1	-2,749.2	6,163.7	6,083.9	79.80	77.237	
12,700.0	7,530.0	5,183.2	5,176.0	92.5	9.5	51.47	-189.1	-2,749.2	6,242.4	6,161.2	81.16	76.911	
12,800.0	7,530.0	5,183.2	5,176.0	94.3	9.5	51.47	-189.1	-2,749.2	6,321.7	6,239.1	82.53	76.602	
12,900.0	7,530.0	5,183.2	5,176.0	96.0	9.5	51.47	-189.1	-2,749.2	6,401.5	6,317.6	83.89	76.310	
13,000.0	7,530.0	5,183.2	5,176.0	97.8	9.5	51.47	-189.1	-2,749.2	6,482.0	6,396.7	85.25	76.033	
13,100.0	7,530.0	5,183.2	5,176.0	99.5	9.5	51.47	-189.1	-2,749.2	6,562.9	6,476.3	86.62	75.771	
13,200.0	7,530.0	5,183.2	5,176.0	101.2	9.5	51.47	-189.1	-2,749.2	6,644.4	6,556.4	87.98	75.522	
13,300.0	7,530.0	5,183.2	5,176.0	103.0	9.5	51.47	-189.1	-2,749.2	6,726.4	6,637.0	89.34	75.286	
13,400.0	7,530.0	5,183.2	5,176.0	104.7	9.5	51.47	-189.1	-2,749.2	6,808.8	6,718.1	90.71	75.062	
13,500.0	7,530.0	5,183.2	5,176.0	106.4	9.5	51.47	-189.1	-2,749.2	6,891.8	6,799.7	92.07	74.850	
13,600.0	7,530.0	5,183.2	5,176.0	108.2	9.5	51.47	-189.1	-2,749.2	6,975.1	6,881.7	93.44	74.648	
13,700.0	7,530.0	5,183.2	5,176.0	109.9	9.5	51.47	-189.1	-2,749.2	7,058.9	6,964.1	94.81	74.456	
13,800.0	7,530.0	5,183.2	5,176.0	111.7	9.5	51.47	-189.1	-2,749.2	7,143.1	7,047.0	96.17	74.274	
13,900.0	7,530.0	5,183.2	5,176.0	113.4	9.5	51.47	-189.1	-2,749.2	7,227.8	7,130.2	97.54	74.101	
14,000.0	7,530.0	5,183.2	5,176.0	115.1	9.5	51.47	-189.1	-2,749.2	7,312.8	7,213.9	98.91	73.936	

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - 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			
14,100.0	7,530.0	5,183.2	5,176.0	116.9	9.5	51.47	-189.1	-2,749.2	7,398.2	7,297.9	100.27	73.779		
14,200.0	7,530.0	5,183.2	5,176.0	118.6	9.5	51.47	-189.1	-2,749.2	7,483.9	7,382.3	101.64	73.630		
14,300.0	7,530.0	5,183.2	5,176.0	120.4	9.5	51.47	-189.1	-2,749.2	7,570.0	7,467.0	103.01	73.488		
14,400.0	7,530.0	5,183.2	5,176.0	122.1	9.5	51.47	-189.1	-2,749.2	7,656.5	7,552.1	104.38	73.353		
14,500.0	7,530.0	5,183.2	5,176.0	123.9	9.5	51.47	-189.1	-2,749.2	7,743.2	7,637.5	105.75	73.224		
14,600.0	7,530.0	5,183.2	5,176.0	125.6	9.5	51.47	-189.1	-2,749.2	7,830.3	7,723.2	107.12	73.101		
14,700.0	7,530.0	5,183.2	5,176.0	127.3	9.5	51.47	-189.1	-2,749.2	7,917.7	7,809.2	108.48	72.984		
14,800.0	7,530.0	5,183.2	5,176.0	129.1	9.5	51.47	-189.1	-2,749.2	8,005.4	7,895.5	109.85	72.873		
14,900.0	7,530.0	5,183.2	5,176.0	130.8	9.5	51.47	-189.1	-2,749.2	8,093.3	7,982.1	111.22	72.766		
15,000.0	7,530.0	5,183.2	5,176.0	132.6	9.5	51.47	-189.1	-2,749.2	8,181.6	8,069.0	112.59	72.665		
15,100.0	7,530.0	5,183.2	5,176.0	134.3	9.5	51.47	-189.1	-2,749.2	8,270.1	8,156.1	113.96	72.568		
15,200.0	7,530.0	5,183.2	5,176.0	136.1	9.5	51.47	-189.1	-2,749.2	8,358.8	8,243.5	115.33	72.476		
15,300.0	7,530.0	5,183.2	5,176.0	137.8	9.5	51.47	-189.1	-2,749.2	8,447.9	8,331.2	116.70	72.387		
15,400.0	7,530.0	5,183.2	5,176.0	139.6	9.5	51.47	-189.1	-2,749.2	8,537.1	8,419.0	118.07	72.303		
15,500.0	7,530.0	5,183.2	5,176.0	141.3	9.5	51.47	-189.1	-2,749.2	8,626.6	8,507.2	119.44	72.223		
15,600.0	7,530.0	5,183.2	5,176.0	143.0	9.5	51.47	-189.1	-2,749.2	8,716.3	8,595.5	120.82	72.146		
15,700.0	7,530.0	5,183.2	5,176.0	144.8	9.5	51.47	-189.1	-2,749.2	8,806.3	8,684.1	122.19	72.073		
15,800.0	7,530.0	5,183.2	5,176.0	146.5	9.5	51.47	-189.1	-2,749.2	8,896.4	8,772.9	123.56	72.003		
15,900.0	7,530.0	5,183.2	5,176.0	148.3	9.5	51.47	-189.1	-2,749.2	8,986.8	8,861.9	124.93	71.936		
16,000.0	7,530.0	5,183.2	5,176.0	150.0	9.5	51.47	-189.1	-2,749.2	9,077.4	8,951.1	126.30	71.872		
16,100.0	7,530.0	5,183.2	5,176.0	151.8	9.5	51.47	-189.1	-2,749.2	9,168.2	9,040.5	127.67	71.811		
16,200.0	7,530.0	5,183.2	5,176.0	153.5	9.5	51.47	-189.1	-2,749.2	9,259.1	9,130.1	129.04	71.752		
16,300.0	7,530.0	5,183.2	5,176.0	155.3	9.5	51.47	-189.1	-2,749.2	9,350.3	9,219.8	130.41	71.696		
16,400.0	7,530.0	5,183.2	5,176.0	157.0	9.5	51.47	-189.1	-2,749.2	9,441.6	9,309.8	131.79	71.643		
16,500.0	7,530.0	5,183.2	5,176.0	158.8	9.5	51.47	-189.1	-2,749.2	9,533.1	9,399.9	133.16	71.592		
16,600.0	7,530.0	5,183.2	5,176.0	160.5	9.5	51.47	-189.1	-2,749.2	9,624.7	9,490.2	134.53	71.543		
16,700.0	7,530.0	5,183.2	5,176.0	162.3	9.5	51.47	-189.1	-2,749.2	9,716.6	9,580.7	135.90	71.496		
16,800.0	7,530.0	5,183.2	5,176.0	164.0	9.5	51.47	-189.1	-2,749.2	9,808.6	9,671.3	137.28	71.452		
16,900.0	7,530.0	5,183.2	5,176.0	165.8	9.5	51.47	-189.1	-2,749.2	9,900.7	9,762.1	138.65	71.409		
17,000.0	7,530.0	5,183.2	5,176.0	167.5	9.5	51.47	-189.1	-2,749.2	9,993.0	9,853.0	140.02	71.368 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-95.89	-297.5	-2,881.5	2,896.9						
100.0	100.0	114.6	114.6	0.2	0.0	-95.90	-297.6	-2,881.8	2,897.1	2,897.0	0.15	N/A			
200.0	200.0	202.1	202.1	0.3	0.0	-95.90	-297.9	-2,882.4	2,897.9	2,897.6	0.33	8,877.850			
300.0	300.0	289.6	289.6	0.5	0.0	-95.91	-298.4	-2,883.4	2,899.1	2,898.6	0.50	5,786.998			
400.0	400.0	377.1	377.0	0.7	0.0	-95.92	-299.0	-2,884.8	2,900.8	2,900.1	0.68	4,294.104			
500.0	500.0	464.5	464.5	0.8	0.0	-95.93	-299.8	-2,886.6	2,902.9	2,902.0	0.85	3,414.809			
600.0	600.0	551.9	551.9	1.0	0.0	-95.94	-300.8	-2,888.7	2,905.4	2,904.3	1.02	2,835.523			
700.0	700.0	639.3	639.2	1.2	0.0	-128.42	-301.9	-2,891.1	2,908.8	2,907.6	1.20	2,425.297			
800.0	800.0	726.6	726.4	1.4	0.0	-128.44	-303.2	-2,894.0	2,913.8	2,912.5	1.38	2,118.504			
900.0	899.9	813.7	813.5	1.6	0.0	-128.47	-304.7	-2,897.1	2,920.4	2,918.8	1.55	1,878.657			
988.4	988.1	903.0	902.7	1.7	0.0	-128.52	-306.4	-2,900.8	2,927.4	2,925.7	1.72	1,705.253			
1,000.0	999.7	903.0	902.7	1.7	0.0	-128.52	-306.4	-2,900.8	2,928.4	2,926.7	1.74	1,684.711			
1,100.0	1,099.4	1,008.5	1,008.0	1.9	0.0	-128.66	-308.5	-2,905.1	2,936.9	2,935.0	1.92	1,525.800			
1,200.0	1,199.2	1,117.0	1,116.4	2.1	0.0	-128.81	-310.8	-2,909.2	2,945.2	2,943.1	2.11	1,393.619			
1,300.0	1,299.0	1,225.5	1,224.8	2.3	0.0	-128.96	-313.1	-2,913.0	2,953.2	2,950.9	2.30	1,282.205			
1,400.0	1,398.8	1,334.0	1,333.3	2.5	0.0	-129.11	-315.5	-2,916.5	2,960.9	2,958.4	2.49	1,187.167			
1,500.0	1,498.5	1,442.6	1,441.8	2.7	0.0	-129.26	-318.0	-2,919.6	2,968.2	2,965.6	2.69	1,105.226			
1,600.0	1,598.3	1,551.2	1,550.3	2.9	0.0	-129.41	-320.6	-2,922.3	2,975.3	2,972.5	2.88	1,033.898			
1,700.0	1,698.1	1,655.7	1,654.8	3.2	0.0	-129.56	-323.0	-2,924.7	2,982.2	2,979.1	3.07	971.282			
1,800.0	1,797.8	1,758.5	1,757.5	3.4	0.0	-129.70	-325.2	-2,926.9	2,989.0	2,985.7	3.26	915.929			
1,900.0	1,897.6	1,861.2	1,860.2	3.6	0.0	-129.83	-327.1	-2,929.1	2,995.6	2,992.2	3.46	866.664			
2,000.0	1,997.4	1,964.0	1,963.0	3.8	0.0	-129.96	-328.8	-2,931.2	3,002.2	2,998.6	3.65	822.542			
2,100.0	2,097.1	2,066.9	2,065.8	4.0	0.0	-130.08	-330.2	-2,933.2	3,008.7	3,004.9	3.84	782.803			
2,200.0	2,196.9	2,169.8	2,168.7	4.2	0.0	-130.20	-331.3	-2,935.2	3,015.1	3,011.1	4.04	746.827			
2,300.0	2,296.7	2,272.8	2,271.7	4.4	0.0	-130.31	-332.2	-2,937.0	3,021.4	3,017.2	4.23	714.104			
2,400.0	2,396.5	2,375.8	2,374.6	4.6	0.0	-130.42	-332.8	-2,938.8	3,027.6	3,023.2	4.42	684.213			
2,500.0	2,496.2	2,475.1	2,474.0	4.8	0.0	-130.52	-333.1	-2,940.5	3,033.7	3,029.1	4.62	656.804			
2,600.0	2,596.0	2,574.0	2,572.8	5.0	0.0	-130.60	-332.8	-2,942.3	3,039.9	3,035.1	4.81	631.597			
2,700.0	2,695.8	2,672.9	2,671.7	5.2	0.0	-130.68	-331.9	-2,944.2	3,046.1	3,041.1	5.01	608.336			
2,800.0	2,795.5	2,771.9	2,770.7	5.4	0.0	-130.74	-330.5	-2,946.3	3,052.4	3,047.2	5.20	586.805			
2,900.0	2,895.3	3,268.0	3,265.5	5.6	0.0	-131.03	-316.6	-2,922.4	3,049.5	3,044.1	5.39	565.377			
3,000.0	2,995.1	3,340.0	3,337.1	5.9	0.0	-131.06	-313.4	-2,914.9	3,043.2	3,037.6	5.59	544.548			
3,100.0	3,094.9	3,441.9	3,438.4	6.1	0.0	-131.12	-309.9	-2,905.1	3,037.6	3,031.8	5.78	525.279			
3,200.0	3,194.6	3,579.9	3,575.6	6.3	0.0	-131.22	-305.9	-2,890.4	3,031.0	3,025.1	5.98	507.152			
3,300.0	3,294.4	3,682.3	3,677.2	6.5	0.0	-131.28	-302.5	-2,878.8	3,023.7	3,017.6	6.17	490.009			
3,400.0	3,394.2	3,771.0	3,765.4	6.7	0.0	-131.34	-299.3	-2,869.2	3,016.9	3,010.5	6.37	473.969			
3,500.0	3,493.9	3,832.2	3,826.2	6.9	0.0	-131.37	-296.9	-2,863.0	3,010.8	3,004.2	6.56	458.979			
3,600.0	3,593.7	3,896.0	3,889.7	7.1	0.0	-131.40	-294.4	-2,857.3	3,005.8	2,999.0	6.75	445.008			
3,700.0	3,693.5	3,965.0	3,958.4	7.3	0.0	-131.44	-291.8	-2,851.8	3,001.9	2,994.9	6.95	431.982			
3,800.0	3,793.2	4,037.6	4,030.8	7.5	0.0	-131.47	-289.2	-2,846.9	2,999.0	2,991.9	7.14	419.822			
3,900.0	3,893.0	4,225.0	4,217.5	7.7	0.0	-131.53	-280.4	-2,833.2	2,996.0	2,988.6	7.34	408.288			
4,000.0	3,992.8	4,361.8	4,353.2	8.0	0.0	-131.49	-269.3	-2,820.5	2,989.9	2,982.4	7.53	396.870			
4,100.0	4,092.6	4,457.4	4,447.9	8.2	0.0	-131.42	-259.3	-2,811.4	2,983.4	2,975.7	7.73	385.943			
4,200.0	4,192.3	4,534.8	4,524.5	8.4	0.0	-131.36	-251.1	-2,804.5	2,977.3	2,969.4	7.93	375.618			
4,300.0	4,292.1	4,674.5	4,662.8	8.6	0.0	-131.25	-236.1	-2,791.8	2,971.2	2,963.1	8.12	365.731			
4,400.0	4,391.9	4,777.1	4,764.3	8.8	0.0	-131.17	-224.9	-2,781.5	2,964.0	2,955.7	8.32	356.211			
4,500.0	4,491.6	4,860.3	4,846.6	9.0	0.0	-131.11	-216.5	-2,773.3	2,957.2	2,948.7	8.52	347.188			
4,600.0	4,591.4	4,943.8	4,929.3	9.2	0.0	-131.05	-208.0	-2,765.6	2,951.0	2,942.3	8.71	338.634			
4,700.0	4,691.2	5,044.5	5,029.1	9.4	0.0	-130.98	-197.6	-2,756.5	2,945.0	2,936.1	8.91	330.468			
4,800.0	4,790.9	5,126.0	5,109.8	9.6	0.0	-130.91	-189.0	-2,749.2	2,939.1	2,930.0	9.11	322.666			
4,900.0	4,890.7	5,126.0	5,109.8	9.8	0.0	-130.91	-189.0	-2,749.2	2,935.4	2,926.1	9.30	315.483			
4,958.1	4,948.6	5,126.0	5,109.8	10.0	0.0	-130.91	-189.0	-2,749.2	2,934.8	2,925.4	9.42	311.614			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BILLINGS 21-7 (EXISTING) - KPK WELL - SURVE													Offset Site Error:	0.0 ft
Survey Program: 903-Reference													Offset Well Error:	0.0 ft
Offset		Semi Major Axis		Distance										Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,990.5	5,126.0	5,109.8	10.1	0.0	-130.91	-189.0	-2,749.2	2,935.1	2,925.6	9.50	308.953		
5,100.0	5,090.3	5,126.0	5,109.8	10.3	0.0	-130.91	-189.0	-2,749.2	2,938.2	2,928.6	9.70	303.038		
5,200.0	5,190.0	5,126.0	5,109.8	10.5	0.0	-130.91	-189.0	-2,749.2	2,944.8	2,934.9	9.89	297.699		
5,300.0	5,289.8	5,126.0	5,109.8	10.7	0.0	-130.91	-189.0	-2,749.2	2,954.7	2,944.6	10.09	292.902		
5,400.0	5,389.6	5,126.0	5,109.8	10.9	0.0	-130.91	-189.0	-2,749.2	2,967.9	2,957.6	10.28	288.612		
5,500.0	5,489.3	5,126.0	5,109.8	11.1	0.0	-130.91	-189.0	-2,749.2	2,984.4	2,974.0	10.48	284.796		
5,600.0	5,589.1	5,126.0	5,109.8	11.3	0.0	-130.91	-189.0	-2,749.2	3,004.2	2,993.5	10.68	281.423		
5,700.0	5,688.9	5,126.0	5,109.8	11.5	0.0	-130.91	-189.0	-2,749.2	3,027.2	3,016.3	10.87	278.463		
5,800.0	5,788.7	5,126.0	5,109.8	11.7	0.0	-130.91	-189.0	-2,749.2	3,053.2	3,042.1	11.07	275.889		
5,900.0	5,888.4	5,126.0	5,109.8	11.9	0.0	-130.91	-189.0	-2,749.2	3,082.3	3,071.0	11.26	273.672		
6,000.0	5,988.2	5,126.0	5,109.8	12.2	0.0	-130.91	-189.0	-2,749.2	3,114.3	3,102.8	11.46	271.788		
6,100.0	6,088.0	5,126.0	5,109.8	12.4	0.0	-130.91	-189.0	-2,749.2	3,149.2	3,137.5	11.65	270.212		
6,200.0	6,187.7	5,126.0	5,109.8	12.6	0.0	-130.91	-189.0	-2,749.2	3,186.8	3,174.9	11.85	268.920		
6,300.0	6,287.5	5,126.0	5,109.8	12.8	0.0	-130.91	-189.0	-2,749.2	3,227.1	3,215.0	12.05	267.891		
6,400.0	6,387.3	5,126.0	5,109.8	13.0	0.0	-130.91	-189.0	-2,749.2	3,269.9	3,257.7	12.24	267.104		
6,500.0	6,487.0	5,126.0	5,109.8	13.2	0.0	-130.91	-189.0	-2,749.2	3,315.2	3,302.8	12.44	266.540		
6,600.0	6,586.8	5,126.0	5,109.8	13.4	0.0	-130.91	-189.0	-2,749.2	3,362.9	3,350.3	12.63	266.180		
6,700.0	6,686.6	5,126.0	5,109.8	13.6	0.0	-130.91	-189.0	-2,749.2	3,412.8	3,400.0	12.83	266.007		
6,787.0	6,773.4	5,126.0	5,109.8	13.8	0.0	-130.91	-189.0	-2,749.2	3,458.1	3,445.1	13.00	265.997		
6,800.0	6,786.4	5,126.0	5,109.8	13.8	0.0	-142.08	-189.0	-2,749.2	3,464.9	3,451.9	13.00	266.483		
6,850.0	6,836.3	5,126.0	5,109.8	13.9	0.0	128.33	-189.0	-2,749.2	3,491.4	3,478.4	12.99	268.859		
6,900.0	6,886.2	5,126.0	5,109.8	14.0	0.0	96.05	-189.0	-2,749.2	3,517.8	3,504.9	12.95	271.677		
6,950.0	6,935.7	5,126.0	5,109.8	14.0	0.0	85.85	-189.0	-2,749.2	3,544.0	3,531.1	12.89	274.854		
7,000.0	6,984.6	5,126.0	5,109.8	14.0	0.0	80.13	-189.0	-2,749.2	3,569.9	3,557.0	12.83	278.310		
7,050.0	7,032.6	5,126.0	5,109.8	14.0	0.0	76.00	-189.0	-2,749.2	3,595.3	3,582.6	12.75	281.968		
7,100.0	7,079.7	5,126.0	5,109.8	13.9	0.0	72.67	-189.0	-2,749.2	3,620.2	3,607.5	12.67	285.757		
7,150.0	7,125.4	5,126.0	5,109.8	13.9	0.0	69.83	-189.0	-2,749.2	3,644.4	3,631.8	12.58	289.608		
7,200.0	7,169.6	5,126.0	5,109.8	13.8	0.0	67.32	-189.0	-2,749.2	3,667.9	3,655.4	12.50	293.456		
7,250.0	7,212.1	5,126.0	5,109.8	13.8	0.0	65.08	-189.0	-2,749.2	3,690.5	3,678.1	12.42	297.236		
7,300.0	7,252.6	5,126.0	5,109.8	13.7	0.0	63.07	-189.0	-2,749.2	3,712.1	3,699.8	12.34	300.877		
7,350.0	7,291.0	5,126.0	5,109.8	13.7	0.0	61.24	-189.0	-2,749.2	3,732.7	3,720.4	12.27	304.305		
7,400.0	7,327.1	5,126.0	5,109.8	13.7	0.0	59.60	-189.0	-2,749.2	3,752.2	3,740.0	12.20	307.438		
7,450.0	7,360.7	5,126.0	5,109.8	13.7	0.0	58.12	-189.0	-2,749.2	3,770.5	3,758.3	12.16	310.183		
7,500.0	7,391.6	5,126.0	5,109.8	13.7	0.0	56.79	-189.0	-2,749.2	3,787.4	3,775.3	12.12	312.442		
7,550.0	7,419.7	5,126.0	5,109.8	13.8	0.0	55.61	-189.0	-2,749.2	3,803.1	3,791.0	12.11	314.113		
7,600.0	7,444.8	5,126.0	5,109.8	13.9	0.0	54.56	-189.0	-2,749.2	3,817.3	3,805.2	12.12	315.091		
7,650.0	7,466.9	5,126.0	5,109.8	14.1	0.0	53.65	-189.0	-2,749.2	3,830.1	3,818.0	12.15	315.282		
7,700.0	7,485.8	5,126.0	5,109.8	14.3	0.0	52.87	-189.0	-2,749.2	3,841.4	3,829.2	12.21	314.606		
7,750.0	7,501.5	5,126.0	5,109.8	14.6	0.0	52.20	-189.0	-2,749.2	3,851.2	3,838.9	12.30	313.002		
7,800.0	7,513.7	5,126.0	5,109.8	14.9	0.0	51.66	-189.0	-2,749.2	3,859.4	3,847.0	12.43	310.441		
7,850.0	7,522.6	5,126.0	5,109.8	15.2	0.0	51.23	-189.0	-2,749.2	3,866.0	3,853.4	12.60	306.926		
7,900.0	7,528.0	5,126.0	5,109.8	15.6	0.0	50.91	-189.0	-2,749.2	3,870.9	3,858.1	12.80	302.494		
7,952.9	7,530.0	5,126.0	5,109.8	16.1	0.0	50.70	-189.0	-2,749.2	3,874.3	3,861.3	13.05	296.879		
8,000.0	7,530.0	5,126.0	5,109.8	16.5	0.0	50.70	-189.0	-2,749.2	3,876.9	3,863.4	13.41	289.126		
8,100.0	7,530.0	5,126.0	5,109.8	17.5	0.0	50.70	-189.0	-2,749.2	3,884.1	3,869.9	14.24	272.816		
8,200.0	7,530.0	5,126.0	5,109.8	18.7	0.0	50.70	-189.0	-2,749.2	3,893.9	3,878.7	15.14	257.144		
8,300.0	7,530.0	5,126.0	5,109.8	19.9	0.0	50.70	-189.0	-2,749.2	3,906.2	3,890.1	16.11	242.424		
8,400.0	7,530.0	5,126.0	5,109.8	21.2	0.0	50.70	-189.0	-2,749.2	3,921.0	3,903.9	17.14	228.807		
8,500.0	7,530.0	5,126.0	5,109.8	22.6	0.0	50.70	-189.0	-2,749.2	3,938.4	3,920.1	18.21	216.331		
8,600.0	7,530.0	5,126.0	5,109.8	24.0	0.0	50.70	-189.0	-2,749.2	3,958.1	3,938.8	19.31	204.971		
8,700.0	7,530.0	5,126.0	5,109.8	25.4	0.0	50.70	-189.0	-2,749.2	3,980.3	3,959.9	20.45	194.663		
8,800.0	7,530.0	5,126.0	5,109.8	26.9	0.0	50.70	-189.0	-2,749.2	4,004.9	3,983.3	21.61	185.325		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BILLINGS 21-7 (EXISTING) - KPK WELL - SURVE													Offset Site Error:	0.0 ft
Survey Program: 903-Reference													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	5,126.0	5,109.8	28.4	0.0	50.70	-189.0	-2,749.2	4,031.8	4,009.0	22.79	176.871		
9,000.0	7,530.0	5,126.0	5,109.8	30.0	0.0	50.70	-189.0	-2,749.2	4,060.9	4,036.9	24.00	169.214		
9,100.0	7,530.0	5,126.0	5,109.8	31.5	0.0	50.70	-189.0	-2,749.2	4,092.4	4,067.1	25.22	162.273		
9,200.0	7,530.0	5,126.0	5,109.8	33.1	0.0	50.70	-189.0	-2,749.2	4,125.9	4,099.5	26.45	155.973		
9,300.0	7,530.0	5,126.0	5,109.8	34.7	0.0	50.70	-189.0	-2,749.2	4,161.7	4,134.0	27.70	150.246		
9,400.0	7,530.0	5,126.0	5,109.8	36.3	0.0	50.70	-189.0	-2,749.2	4,199.5	4,170.5	28.96	145.031		
9,500.0	7,530.0	5,126.0	5,109.8	38.0	0.0	50.70	-189.0	-2,749.2	4,239.3	4,209.1	30.22	140.275		
9,600.0	7,530.0	5,126.0	5,109.8	39.6	0.0	50.70	-189.0	-2,749.2	4,281.1	4,249.6	31.50	135.928		
9,700.0	7,530.0	5,126.0	5,109.8	41.3	0.0	50.70	-189.0	-2,749.2	4,324.8	4,292.0	32.78	131.948		
9,800.0	7,530.0	5,126.0	5,109.8	42.9	0.0	50.70	-189.0	-2,749.2	4,370.4	4,336.3	34.06	128.298		
9,900.0	7,530.0	5,126.0	5,109.8	44.6	0.0	50.70	-189.0	-2,749.2	4,417.7	4,382.4	35.36	124.945		
10,000.0	7,530.0	5,126.0	5,109.8	46.3	0.0	50.70	-189.0	-2,749.2	4,466.8	4,430.2	36.66	121.859		
10,100.0	7,530.0	5,126.0	5,109.8	47.9	0.0	50.70	-189.0	-2,749.2	4,517.6	4,479.6	37.96	119.015		
10,200.0	7,530.0	5,126.0	5,109.8	49.6	0.0	50.70	-189.0	-2,749.2	4,570.0	4,530.7	39.27	116.388		
10,300.0	7,530.0	5,126.0	5,109.8	51.3	0.0	50.70	-189.0	-2,749.2	4,623.9	4,583.4	40.58	113.959		
10,400.0	7,530.0	5,126.0	5,109.8	53.0	0.0	50.70	-189.0	-2,749.2	4,679.4	4,637.5	41.89	111.709		
10,500.0	7,530.0	5,126.0	5,109.8	54.7	0.0	50.70	-189.0	-2,749.2	4,736.4	4,693.1	43.21	109.622		
10,600.0	7,530.0	5,126.0	5,109.8	56.4	0.0	50.70	-189.0	-2,749.2	4,794.7	4,750.2	44.53	107.683		
10,700.0	7,530.0	5,126.0	5,109.8	58.1	0.0	50.70	-189.0	-2,749.2	4,854.4	4,808.6	45.85	105.880		
10,800.0	7,530.0	5,126.0	5,109.8	59.8	0.0	50.70	-189.0	-2,749.2	4,915.4	4,868.3	47.17	104.200		
10,900.0	7,530.0	5,126.0	5,109.8	61.5	0.0	50.70	-189.0	-2,749.2	4,977.7	4,929.2	48.50	102.634		
11,000.0	7,530.0	5,126.0	5,109.8	63.2	0.0	50.70	-189.0	-2,749.2	5,041.2	4,991.4	49.83	101.172		
11,100.0	7,530.0	5,126.0	5,109.8	64.9	0.0	50.70	-189.0	-2,749.2	5,105.9	5,054.7	51.16	99.805		
11,200.0	7,530.0	5,126.0	5,109.8	66.6	0.0	50.70	-189.0	-2,749.2	5,171.6	5,119.1	52.49	98.525		
11,300.0	7,530.0	5,126.0	5,109.8	68.4	0.0	50.70	-189.0	-2,749.2	5,238.5	5,184.7	53.82	97.326		
11,400.0	7,530.0	5,126.0	5,109.8	70.1	0.0	50.70	-189.0	-2,749.2	5,306.4	5,251.3	55.16	96.202		
11,500.0	7,530.0	5,126.0	5,109.8	71.8	0.0	50.70	-189.0	-2,749.2	5,375.3	5,318.8	56.50	95.146		
11,600.0	7,530.0	5,126.0	5,109.8	73.5	0.0	50.70	-189.0	-2,749.2	5,445.2	5,387.4	57.83	94.153		
11,700.0	7,530.0	5,126.0	5,109.8	75.2	0.0	50.70	-189.0	-2,749.2	5,516.0	5,456.8	59.17	93.220		
11,800.0	7,530.0	5,126.0	5,109.8	77.0	0.0	50.70	-189.0	-2,749.2	5,587.7	5,527.2	60.51	92.340		
11,900.0	7,530.0	5,126.0	5,109.8	78.7	0.0	50.70	-189.0	-2,749.2	5,660.3	5,598.4	61.85	91.512		
12,000.0	7,530.0	5,126.0	5,109.8	80.4	0.0	50.70	-189.0	-2,749.2	5,733.7	5,670.5	63.19	90.730		
12,100.0	7,530.0	5,126.0	5,109.8	82.2	0.0	50.70	-189.0	-2,749.2	5,807.8	5,743.3	64.54	89.992		
12,200.0	7,530.0	5,126.0	5,109.8	83.9	0.0	50.70	-189.0	-2,749.2	5,882.8	5,816.9	65.88	89.294		
12,300.0	7,530.0	5,126.0	5,109.8	85.6	0.0	50.70	-189.0	-2,749.2	5,958.5	5,891.2	67.23	88.634		
12,400.0	7,530.0	5,126.0	5,109.8	87.3	0.0	50.70	-189.0	-2,749.2	6,034.8	5,966.3	68.57	88.009		
12,500.0	7,530.0	5,126.0	5,109.8	89.1	0.0	50.70	-189.0	-2,749.2	6,111.9	6,042.0	69.92	87.417		
12,600.0	7,530.0	5,126.0	5,109.8	90.8	0.0	50.70	-189.0	-2,749.2	6,189.6	6,118.4	71.26	86.856		
12,700.0	7,530.0	5,126.0	5,109.8	92.5	0.0	50.70	-189.0	-2,749.2	6,268.0	6,195.4	72.61	86.324		
12,800.0	7,530.0	5,126.0	5,109.8	94.3	0.0	50.70	-189.0	-2,749.2	6,347.0	6,273.0	73.96	85.819		
12,900.0	7,530.0	5,126.0	5,109.8	96.0	0.0	50.70	-189.0	-2,749.2	6,426.5	6,351.2	75.31	85.339		
13,000.0	7,530.0	5,126.0	5,109.8	97.8	0.0	50.70	-189.0	-2,749.2	6,506.6	6,430.0	76.65	84.883		
13,100.0	7,530.0	5,126.0	5,109.8	99.5	0.0	50.70	-189.0	-2,749.2	6,587.3	6,509.3	78.00	84.448		
13,200.0	7,530.0	5,126.0	5,109.8	101.2	0.0	50.70	-189.0	-2,749.2	6,668.5	6,589.1	79.35	84.035		
13,300.0	7,530.0	5,126.0	5,109.8	103.0	0.0	50.70	-189.0	-2,749.2	6,750.1	6,669.4	80.70	83.642		
13,400.0	7,530.0	5,126.0	5,109.8	104.7	0.0	50.70	-189.0	-2,749.2	6,832.3	6,750.3	82.05	83.266		
13,500.0	7,530.0	5,126.0	5,109.8	106.4	0.0	50.70	-189.0	-2,749.2	6,915.0	6,831.6	83.40	82.908		
13,600.0	7,530.0	5,126.0	5,109.8	108.2	0.0	50.70	-189.0	-2,749.2	6,998.1	6,913.3	84.76	82.567		
13,700.0	7,530.0	5,126.0	5,109.8	109.9	0.0	50.70	-189.0	-2,749.2	7,081.6	6,995.5	86.11	82.241		
13,800.0	7,530.0	5,126.0	5,109.8	111.7	0.0	50.70	-189.0	-2,749.2	7,165.5	7,078.1	87.46	81.930		
13,900.0	7,530.0	5,126.0	5,109.8	113.4	0.0	50.70	-189.0	-2,749.2	7,249.9	7,161.1	88.81	81.632		
14,000.0	7,530.0	5,126.0	5,109.8	115.1	0.0	50.70	-189.0	-2,749.2	7,334.7	7,244.5	90.16	81.347		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BILLINGS 21-7 (EXISTING) - KPK WELL - SURVE													Offset Site Error: 0.0 ft		
Survey Program: 903-Reference		Offset		Semi Major Axis		Distance								Offset Well Error: 0.0 ft	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
14,100.0	7,530.0	5,126.0	5,109.8	116.9	0.0	50.70	-189.0	-2,749.2	7,419.8	7,328.3	91.52	81.075			
14,200.0	7,530.0	5,126.0	5,109.8	118.6	0.0	50.70	-189.0	-2,749.2	7,505.3	7,412.4	92.87	80.814			
14,300.0	7,530.0	5,126.0	5,109.8	120.4	0.0	50.70	-189.0	-2,749.2	7,591.2	7,496.9	94.22	80.564			
14,400.0	7,530.0	5,126.0	5,109.8	122.1	0.0	50.70	-189.0	-2,749.2	7,677.4	7,581.8	95.58	80.325			
14,500.0	7,530.0	5,126.0	5,109.8	123.9	0.0	50.70	-189.0	-2,749.2	7,763.9	7,666.9	96.93	80.096			
14,600.0	7,530.0	5,126.0	5,109.8	125.6	0.0	50.70	-189.0	-2,749.2	7,850.7	7,752.4	98.29	79.876			
14,700.0	7,530.0	5,126.0	5,109.8	127.3	0.0	50.70	-189.0	-2,749.2	7,937.9	7,838.2	99.64	79.664			
14,800.0	7,530.0	5,126.0	5,109.8	129.1	0.0	50.70	-189.0	-2,749.2	8,025.3	7,924.4	101.00	79.462			
14,900.0	7,530.0	5,126.0	5,109.8	130.8	0.0	50.70	-189.0	-2,749.2	8,113.1	8,010.7	102.35	79.267			
15,000.0	7,530.0	5,126.0	5,109.8	132.6	0.0	50.70	-189.0	-2,749.2	8,201.1	8,097.4	103.71	79.080			
15,100.0	7,530.0	5,126.0	5,109.8	134.3	0.0	50.70	-189.0	-2,749.2	8,289.4	8,184.4	105.06	78.900			
15,200.0	7,530.0	5,126.0	5,109.8	136.1	0.0	50.70	-189.0	-2,749.2	8,378.0	8,271.6	106.42	78.727			
15,300.0	7,530.0	5,126.0	5,109.8	137.8	0.0	50.70	-189.0	-2,749.2	8,466.8	8,359.0	107.77	78.561			
15,400.0	7,530.0	5,126.0	5,109.8	139.6	0.0	50.70	-189.0	-2,749.2	8,555.9	8,446.7	109.13	78.401			
15,500.0	7,530.0	5,126.0	5,109.8	141.3	0.0	50.70	-189.0	-2,749.2	8,645.2	8,534.7	110.49	78.247			
15,600.0	7,530.0	5,126.0	5,109.8	143.0	0.0	50.70	-189.0	-2,749.2	8,734.7	8,622.9	111.84	78.099			
15,700.0	7,530.0	5,126.0	5,109.8	144.8	0.0	50.70	-189.0	-2,749.2	8,824.5	8,711.3	113.20	77.956			
15,800.0	7,530.0	5,126.0	5,109.8	146.5	0.0	50.70	-189.0	-2,749.2	8,914.4	8,799.9	114.55	77.818			
15,900.0	7,530.0	5,126.0	5,109.8	148.3	0.0	50.70	-189.0	-2,749.2	9,004.6	8,888.7	115.91	77.685			
16,000.0	7,530.0	5,126.0	5,109.8	150.0	0.0	50.70	-189.0	-2,749.2	9,095.0	8,977.8	117.27	77.557			
16,100.0	7,530.0	5,126.0	5,109.8	151.8	0.0	50.70	-189.0	-2,749.2	9,185.6	9,067.0	118.63	77.434			
16,200.0	7,530.0	5,126.0	5,109.8	153.5	0.0	50.70	-189.0	-2,749.2	9,276.4	9,156.4	119.98	77.314			
16,300.0	7,530.0	5,126.0	5,109.8	155.3	0.0	50.70	-189.0	-2,749.2	9,367.4	9,246.0	121.34	77.199			
16,400.0	7,530.0	5,126.0	5,109.8	157.0	0.0	50.70	-189.0	-2,749.2	9,458.5	9,335.8	122.70	77.088			
16,500.0	7,530.0	5,126.0	5,109.8	158.8	0.0	50.70	-189.0	-2,749.2	9,549.9	9,425.8	124.06	76.981			
16,600.0	7,530.0	5,126.0	5,109.8	160.5	0.0	50.70	-189.0	-2,749.2	9,641.4	9,516.0	125.41	76.877			
16,700.0	7,530.0	5,126.0	5,109.8	162.3	0.0	50.70	-189.0	-2,749.2	9,733.1	9,606.3	126.77	76.777			
16,800.0	7,530.0	5,126.0	5,109.8	164.0	0.0	50.70	-189.0	-2,749.2	9,824.9	9,696.8	128.13	76.680			
16,900.0	7,530.0	5,126.0	5,109.8	165.8	0.0	50.70	-189.0	-2,749.2	9,916.9	9,787.4	129.49	76.586 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-24.22	3,719.3	-1,673.3	4,078.9					
100.0	100.0	41.1	41.1	0.2	0.1	-24.22	3,719.3	-1,673.3	4,078.4	4,078.2	0.22	N/A		
200.0	200.0	153.0	153.0	0.3	0.3	-24.22	3,719.0	-1,673.3	4,078.1	4,077.5	0.59	6,871.765		
300.0	300.0	264.6	264.6	0.5	0.5	-24.23	3,718.4	-1,673.2	4,077.6	4,076.6	0.96	4,234.520		
400.0	400.0	376.0	376.0	0.7	0.7	-24.23	3,717.4	-1,673.2	4,076.8	4,075.5	1.33	3,059.867		
500.0	500.0	487.9	487.8	0.8	0.9	-24.24	3,716.1	-1,673.1	4,075.7	4,074.0	1.70	2,393.474		
600.0	600.0	599.7	599.7	1.0	1.1	-24.25	3,714.5	-1,673.0	4,074.3	4,072.2	2.07	1,964.761		
700.0	700.0	710.8	710.7	1.2	1.2	-56.76	3,712.5	-1,672.8	4,072.1	4,069.7	2.44	1,668.579		
800.0	800.0	822.5	822.5	1.4	1.4	-56.83	3,710.1	-1,672.7	4,068.7	4,065.9	2.81	1,446.953		
900.0	899.9	920.0	919.9	1.6	1.6	-56.93	3,707.9	-1,672.5	4,064.2	4,061.0	3.16	1,285.349		
988.4	988.1	982.9	982.8	1.7	1.7	-57.03	3,706.6	-1,672.8	4,059.8	4,056.3	3.44	1,181.782		
1,000.0	999.7	991.1	991.0	1.7	1.7	-57.03	3,706.4	-1,672.8	4,059.2	4,055.7	3.47	1,169.297		
1,100.0	1,099.4	1,064.6	1,064.4	1.9	1.9	-57.11	3,705.2	-1,673.8	4,054.5	4,050.7	3.79	1,069.910		
1,200.0	1,199.2	1,132.8	1,132.7	2.1	2.0	-57.19	3,704.2	-1,675.3	4,050.5	4,046.4	4.10	987.564		
1,300.0	1,299.0	1,200.0	1,199.8	2.3	2.1	-57.27	3,703.8	-1,677.0	4,047.3	4,042.9	4.41	917.049		
1,400.0	1,398.8	1,267.9	1,267.7	2.5	2.2	-57.35	3,703.9	-1,678.9	4,044.9	4,040.2	4.73	855.528		
1,500.0	1,498.5	1,332.7	1,332.5	2.7	2.3	-57.42	3,704.6	-1,680.7	4,043.4	4,038.4	5.04	802.605		
1,600.0	1,598.3	1,404.9	1,404.6	2.9	2.5	-57.49	3,706.1	-1,682.5	4,042.7	4,037.3	5.36	754.103		
1,700.0	1,698.1	1,496.5	1,496.1	3.2	2.6	-57.59	3,708.3	-1,685.1	4,042.4	4,036.7	5.72	706.787		
1,800.0	1,797.8	1,590.9	1,590.5	3.4	2.8	-57.69	3,710.4	-1,688.1	4,042.2	4,036.1	6.08	664.351		
1,805.2	1,803.0	1,594.7	1,594.3	3.4	2.8	-57.69	3,710.5	-1,688.2	4,042.2	4,036.1	6.10	662.503 CC		
1,900.0	1,897.6	1,672.5	1,672.0	3.6	2.9	-57.78	3,712.6	-1,691.0	4,042.5	4,036.0	6.43	628.953		
2,000.0	1,997.4	1,771.8	1,771.2	3.8	3.1	-57.89	3,715.3	-1,694.2	4,042.7	4,035.9	6.80	594.389 ES		
2,100.0	2,097.1	1,819.4	1,818.8	4.0	3.2	-57.93	3,716.9	-1,695.8	4,043.8	4,036.7	7.08	570.817		
2,200.0	2,196.9	1,866.9	1,866.1	4.2	3.3	-57.98	3,719.2	-1,697.8	4,046.2	4,038.8	7.37	549.171		
2,300.0	2,296.7	1,920.0	1,919.1	4.4	3.4	-58.04	3,722.3	-1,700.3	4,049.9	4,042.2	7.66	528.652		
2,400.0	2,396.5	1,971.4	1,970.3	4.6	3.5	-58.10	3,725.8	-1,703.0	4,054.8	4,046.8	7.95	509.953		
2,500.0	2,496.2	2,040.0	2,038.6	4.8	3.6	-58.16	3,731.2	-1,706.6	4,060.5	4,052.2	8.27	490.883		
2,600.0	2,596.0	2,093.4	2,091.7	5.0	3.7	-58.22	3,735.8	-1,709.5	4,067.2	4,058.6	8.57	474.806		
2,700.0	2,695.8	2,147.9	2,145.9	5.2	3.8	-58.27	3,741.1	-1,713.0	4,075.1	4,066.2	8.86	459.800		
2,800.0	2,795.5	2,200.0	2,197.6	5.4	4.0	-58.33	3,746.5	-1,716.6	4,084.0	4,074.8	9.16	446.079		
2,900.0	2,895.3	2,254.7	2,251.8	5.6	4.1	-58.38	3,752.6	-1,720.6	4,094.0	4,084.5	9.45	433.096		
3,000.0	2,995.1	2,293.9	2,290.5	5.9	4.2	-58.42	3,757.6	-1,723.7	4,105.4	4,095.7	9.72	422.251		
3,100.0	3,094.9	2,335.3	2,331.4	6.1	4.3	-58.47	3,763.4	-1,727.3	4,118.2	4,108.2	10.00	411.970		
3,200.0	3,194.6	2,381.7	2,377.0	6.3	4.4	-58.51	3,770.5	-1,731.5	4,132.4	4,122.1	10.28	402.001		
3,300.0	3,294.4	2,426.1	2,420.6	6.5	4.5	-58.56	3,777.6	-1,735.9	4,147.8	4,137.3	10.56	392.817		
3,400.0	3,394.2	2,467.5	2,461.2	6.7	4.6	-58.60	3,784.8	-1,740.2	4,164.6	4,153.8	10.83	384.428		
3,500.0	3,493.9	2,520.0	2,512.4	6.9	4.8	-58.65	3,794.8	-1,745.7	4,182.8	4,171.6	11.13	375.938		
3,600.0	3,593.7	2,560.0	2,551.3	7.1	4.9	-58.69	3,803.0	-1,750.1	4,202.2	4,190.8	11.40	368.688		
3,700.0	3,693.5	2,600.0	2,590.2	7.3	5.1	-58.73	3,811.4	-1,754.7	4,222.8	4,211.1	11.67	361.870		
3,800.0	3,793.2	2,666.5	2,654.6	7.5	5.3	-58.79	3,825.9	-1,762.7	4,244.3	4,232.4	11.99	354.067		
3,900.0	3,893.0	2,720.0	2,706.3	7.7	5.5	-58.83	3,838.1	-1,769.1	4,266.7	4,254.5	12.28	347.398		
4,000.0	3,992.8	2,776.9	2,761.0	8.0	5.7	-58.88	3,851.5	-1,776.3	4,290.1	4,277.6	12.58	340.925		
4,100.0	4,092.6	2,931.5	2,910.1	8.2	6.3	-59.04	3,887.4	-1,796.8	4,313.6	4,300.5	13.06	330.317		
4,200.0	4,192.3	3,037.8	3,012.7	8.4	6.8	-59.14	3,911.0	-1,810.8	4,336.1	4,322.6	13.45	322.415		
4,300.0	4,292.1	3,158.6	3,129.5	8.6	7.3	-59.27	3,937.6	-1,826.7	4,358.3	4,344.4	13.86	314.347		
4,400.0	4,391.9	3,240.0	3,208.2	8.8	7.6	-59.36	3,955.0	-1,837.8	4,380.3	4,366.1	14.21	308.211		
4,500.0	4,491.6	3,351.0	3,315.6	9.0	8.1	-59.49	3,978.6	-1,853.8	4,402.6	4,388.0	14.61	301.253		
4,600.0	4,591.4	3,445.7	3,407.1	9.2	8.5	-59.60	3,998.5	-1,867.5	4,424.6	4,409.6	14.99	295.237		
4,700.0	4,691.2	3,628.6	3,584.4	9.4	9.3	-59.81	4,035.8	-1,892.6	4,445.8	4,430.3	15.52	286.527		
4,800.0	4,790.9	3,734.1	3,687.0	9.6	9.8	-59.91	4,056.7	-1,905.7	4,465.8	4,449.9	15.90	280.797		
4,900.0	4,890.7	3,836.8	3,786.9	9.8	10.2	-60.00	4,077.4	-1,917.7	4,485.8	4,469.5	16.29	275.447		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,000.0	4,990.5	3,896.9	3,845.3	10.1	10.5	-60.06	4,089.6	-1,924.8	4,506.1	4,489.5	16.59	271.572	
5,100.0	5,090.3	3,965.2	3,911.5	10.3	10.8	-60.12	4,104.0	-1,933.2	4,527.3	4,510.3	16.91	267.663	
5,200.0	5,190.0	4,054.6	3,998.1	10.5	11.2	-60.19	4,123.5	-1,943.7	4,548.8	4,531.5	17.27	263.385	
5,300.0	5,289.8	4,144.9	4,085.5	10.7	11.6	-60.25	4,143.4	-1,954.0	4,570.3	4,552.7	17.63	259.269	
5,400.0	5,389.6	4,213.5	4,151.9	10.9	11.9	-60.29	4,159.0	-1,961.6	4,592.4	4,574.5	17.95	255.890	
5,500.0	5,489.3	4,374.1	4,307.5	11.1	12.6	-60.40	4,194.5	-1,979.7	4,613.9	4,595.5	18.43	250.405	
5,600.0	5,589.1	4,440.0	4,371.4	11.3	12.9	-60.46	4,208.4	-1,987.7	4,635.2	4,616.4	18.74	247.295	
5,700.0	5,688.9	4,498.8	4,428.3	11.5	13.2	-60.51	4,221.3	-1,995.3	4,657.2	4,638.2	19.05	244.491	
5,800.0	5,788.7	4,560.0	4,487.4	11.7	13.5	-60.56	4,235.0	-2,003.4	4,680.1	4,660.8	19.36	241.766	
5,900.0	5,888.4	4,694.1	4,616.7	11.9	14.1	-60.69	4,265.0	-2,021.9	4,703.3	4,683.5	19.80	237.586	
6,000.0	5,988.2	6,008.2	5,912.0	12.2	17.8	-61.79	4,410.7	-2,116.4	4,715.4	4,693.1	22.30	211.435	
6,100.0	6,088.0	6,127.3	6,031.2	12.4	18.0	-61.86	4,411.3	-2,115.3	4,712.2	4,689.5	22.71	207.478	
6,200.0	6,187.7	6,200.0	6,103.8	12.6	18.0	-61.91	4,411.7	-2,114.8	4,709.2	4,686.1	23.04	204.379	
6,300.0	6,287.5	6,285.5	6,189.3	12.8	18.1	-61.97	4,412.4	-2,114.7	4,706.6	4,683.2	23.39	201.191	
6,400.0	6,387.3	6,378.7	6,282.5	13.0	18.2	-62.03	4,413.3	-2,114.6	4,704.2	4,680.5	23.76	197.993	
6,500.0	6,487.0	6,462.1	6,365.9	13.2	18.3	-62.08	4,414.4	-2,114.5	4,702.1	4,678.0	24.11	195.042	
6,600.0	6,586.8	6,555.6	6,459.4	13.4	18.5	-62.14	4,416.0	-2,114.2	4,700.3	4,675.8	24.47	192.050	
6,700.0	6,686.6	6,703.8	6,607.6	13.6	18.6	-62.23	4,417.9	-2,113.5	4,697.9	4,673.0	24.94	188.400	
6,787.0	6,773.4	6,775.5	6,679.3	13.8	18.7	-62.27	4,418.5	-2,113.1	4,695.6	4,670.4	25.24	186.052	
6,800.0	6,786.4	6,786.4	6,690.2	13.8	18.7	-72.80	4,418.6	-2,113.1	4,695.4	4,670.1	25.27	185.807	
6,806.4	6,792.8	6,791.8	6,695.6	13.9	18.7	-80.26	4,418.7	-2,113.1	4,695.4	4,670.1	25.28	185.714	
6,850.0	6,836.3	6,832.0	6,735.8	13.9	18.8	-159.98	4,419.1	-2,112.9	4,696.5	4,671.2	25.35	185.294	
6,900.0	6,886.2	6,880.0	6,783.8	14.0	18.9	170.00	4,419.7	-2,112.6	4,700.7	4,675.3	25.35	185.426	
6,950.0	6,935.7	6,936.9	6,840.7	14.0	18.9	161.92	4,420.4	-2,112.3	4,707.8	4,682.5	25.30	186.103	
7,000.0	6,984.6	7,004.4	6,908.2	14.0	19.0	158.16	4,421.1	-2,111.8	4,717.8	4,692.6	25.19	187.274	
7,050.0	7,032.6	7,083.8	6,987.5	14.0	19.1	155.85	4,421.6	-2,110.9	4,730.4	4,705.4	25.04	188.884	
7,100.0	7,079.7	7,144.6	7,048.4	13.9	19.1	154.11	4,421.9	-2,109.7	4,745.7	4,720.9	24.81	191.260	
7,150.0	7,125.4	7,187.8	7,091.5	13.9	19.2	152.58	4,422.1	-2,108.7	4,763.8	4,739.3	24.52	194.315	
7,200.0	7,169.6	7,222.9	7,126.6	13.8	19.2	151.11	4,422.4	-2,107.9	4,784.6	4,760.5	24.19	197.813	
7,250.0	7,212.1	7,253.2	7,156.9	13.8	19.3	149.59	4,422.6	-2,107.2	4,808.2	4,784.4	23.86	201.535	
7,300.0	7,252.6	7,280.0	7,183.7	13.7	19.3	147.96	4,422.8	-2,106.8	4,834.5	4,810.9	23.56	205.212	
7,350.0	7,291.0	7,300.6	7,204.3	13.7	19.3	146.13	4,423.0	-2,106.6	4,863.3	4,840.0	23.32	208.525	
7,400.0	7,327.1	7,320.0	7,223.7	13.7	19.3	144.06	4,423.1	-2,106.7	4,894.5	4,871.3	23.20	210.989	
7,450.0	7,360.7	7,340.0	7,243.7	13.7	19.4	141.71	4,423.2	-2,106.8	4,927.9	4,904.7	23.23	212.139	
7,500.0	7,391.6	7,360.0	7,263.7	13.7	19.4	139.01	4,423.3	-2,107.2	4,963.4	4,939.9	23.46	211.540	
7,550.0	7,419.7	7,381.1	7,284.8	13.8	19.4	135.92	4,423.5	-2,107.6	5,000.7	4,976.8	23.94	208.897	
7,600.0	7,444.8	7,402.7	7,306.4	13.9	19.5	132.34	4,423.6	-2,108.0	5,039.6	5,015.0	24.69	204.157	
7,650.0	7,466.9	7,421.5	7,325.2	14.1	19.5	128.18	4,423.7	-2,108.3	5,080.1	5,054.3	25.72	197.516	
7,700.0	7,485.8	7,440.0	7,343.7	14.3	19.5	123.36	4,423.9	-2,108.7	5,121.7	5,094.7	27.02	189.559	
7,750.0	7,501.5	7,448.2	7,351.9	14.6	19.5	117.66	4,424.0	-2,108.8	5,164.5	5,135.9	28.54	180.934	
7,800.0	7,513.7	7,456.1	7,359.8	14.9	19.5	111.20	4,424.1	-2,108.9	5,208.0	5,177.9	30.14	172.785	
7,850.0	7,522.6	7,461.6	7,365.3	15.2	19.5	103.99	4,424.1	-2,109.0	5,252.3	5,220.6	31.63	166.056	
7,900.0	7,528.0	7,464.8	7,368.5	15.6	19.5	96.20	4,424.2	-2,109.1	5,296.9	5,264.1	32.79	161.564	
7,952.9	7,530.0	7,465.6	7,369.3	16.1	19.5	87.62	4,424.2	-2,109.1	5,344.4	5,311.0	33.44	159.834	
8,000.0	7,530.0	7,465.2	7,368.9	16.5	19.5	87.61	4,424.2	-2,109.1	5,386.7	5,352.8	33.89	158.938	
8,100.0	7,530.0	7,464.4	7,368.1	17.5	19.5	87.59	4,424.2	-2,109.1	5,476.8	5,441.8	34.95	156.704	
8,200.0	7,530.0	7,463.6	7,367.3	18.7	19.5	87.58	4,424.2	-2,109.0	5,567.2	5,531.1	36.12	154.149	
8,300.0	7,530.0	7,462.8	7,366.5	19.9	19.5	87.56	4,424.2	-2,109.0	5,658.0	5,620.6	37.37	151.404	
8,400.0	7,530.0	7,462.1	7,365.7	21.2	19.5	87.54	4,424.1	-2,109.0	5,749.0	5,710.3	38.70	148.567	
8,500.0	7,530.0	7,461.3	7,365.0	22.6	19.5	87.52	4,424.1	-2,109.0	5,840.4	5,800.3	40.08	145.710	
8,600.0	7,530.0	7,460.5	7,364.2	24.0	19.5	87.50	4,424.1	-2,109.0	5,932.0	5,890.5	41.52	142.883	
8,700.0	7,530.0	7,459.8	7,363.5	25.4	19.5	87.48	4,424.1	-2,109.0	6,023.9	5,980.9	42.99	140.119	

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 40-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		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)						
8,800.0	7,530.0	7,459.1	7,362.8	26.9	19.5	87.47	4,424.1	-2,109.0	6,116.1	6,071.6	44.50	137.441		
8,900.0	7,530.0	7,458.4	7,362.1	28.4	19.5	87.45	4,424.1	-2,109.0	6,208.5	6,162.4	46.04	134.861		
9,000.0	7,530.0	7,457.7	7,361.4	30.0	19.5	87.43	4,424.1	-2,109.0	6,301.1	6,253.5	47.60	132.386		
9,100.0	7,530.0	7,457.0	7,360.7	31.5	19.5	87.41	4,424.1	-2,108.9	6,393.9	6,344.8	49.18	130.019		
9,200.0	7,530.0	7,456.3	7,360.0	33.1	19.5	87.40	4,424.1	-2,108.9	6,487.0	6,436.2	50.77	127.760		
9,300.0	7,530.0	7,455.6	7,359.3	34.7	19.5	87.38	4,424.1	-2,108.9	6,580.3	6,527.9	52.39	125.608		
9,400.0	7,530.0	7,455.0	7,358.7	36.3	19.5	87.37	4,424.1	-2,108.9	6,673.7	6,619.7	54.01	123.558		
9,500.0	7,530.0	7,454.3	7,358.0	38.0	19.5	87.35	4,424.1	-2,108.9	6,767.4	6,711.7	55.65	121.606		
9,600.0	7,530.0	7,453.7	7,357.4	39.6	19.5	87.33	4,424.0	-2,108.9	6,861.2	6,803.9	57.30	119.749		
9,700.0	7,530.0	7,453.1	7,356.7	41.3	19.5	87.32	4,424.0	-2,108.9	6,955.2	6,896.3	58.95	117.982		
9,800.0	7,530.0	7,452.4	7,356.1	42.9	19.5	87.30	4,424.0	-2,108.9	7,049.4	6,988.8	60.61	116.299		
9,900.0	7,530.0	7,451.8	7,355.5	44.6	19.5	87.29	4,424.0	-2,108.9	7,143.7	7,081.4	62.28	114.696		
10,000.0	7,530.0	7,451.2	7,354.9	46.3	19.5	87.27	4,424.0	-2,108.8	7,238.2	7,174.2	63.96	113.168		
10,100.0	7,530.0	7,450.6	7,354.3	47.9	19.5	87.26	4,424.0	-2,108.8	7,332.8	7,267.2	65.64	111.711		
10,200.0	7,530.0	7,450.0	7,353.7	49.6	19.5	87.25	4,424.0	-2,108.8	7,427.6	7,360.2	67.33	110.322		
10,300.0	7,530.0	7,449.5	7,353.2	51.3	19.5	87.23	4,424.0	-2,108.8	7,522.5	7,453.4	69.02	108.995		
10,400.0	7,530.0	7,449.0	7,343.7	53.0	19.5	87.00	4,423.9	-2,108.7	7,617.5	7,546.8	70.69	107.764		
10,500.0	7,530.0	7,449.0	7,343.7	54.7	19.5	87.00	4,423.9	-2,108.7	7,712.6	7,640.3	72.39	106.550		
10,600.0	7,530.0	7,449.0	7,343.7	56.4	19.5	87.00	4,423.9	-2,108.7	7,807.9	7,733.8	74.09	105.388		
10,700.0	7,530.0	7,449.0	7,343.7	58.1	19.5	87.00	4,423.9	-2,108.7	7,903.3	7,827.5	75.79	104.276		
10,800.0	7,530.0	7,449.0	7,343.7	59.8	19.5	87.00	4,423.9	-2,108.7	7,998.8	7,921.3	77.50	103.210		
10,900.0	7,530.0	7,449.0	7,343.7	61.5	19.5	87.00	4,423.9	-2,108.7	8,094.4	8,015.2	79.21	102.189		
11,000.0	7,530.0	7,449.0	7,343.7	63.2	19.5	87.00	4,423.9	-2,108.7	8,190.1	8,109.2	80.92	101.209		
11,100.0	7,530.0	7,449.0	7,343.7	64.9	19.5	87.00	4,423.9	-2,108.7	8,286.0	8,203.3	82.64	100.269		
11,200.0	7,530.0	7,449.0	7,343.7	66.6	19.5	87.00	4,423.9	-2,108.7	8,381.9	8,297.5	84.35	99.366		
11,300.0	7,530.0	7,449.0	7,343.7	68.4	19.5	87.00	4,423.9	-2,108.7	8,477.9	8,391.8	86.07	98.498		
11,400.0	7,530.0	7,449.0	7,343.7	70.1	19.5	87.00	4,423.9	-2,108.7	8,574.0	8,486.2	87.79	97.663		
11,500.0	7,530.0	7,449.0	7,343.7	71.8	19.5	87.00	4,423.9	-2,108.7	8,670.2	8,580.7	89.51	96.859		
11,600.0	7,530.0	7,449.0	7,343.7	73.5	19.5	87.00	4,423.9	-2,108.7	8,766.5	8,675.2	91.24	96.085		
11,700.0	7,530.0	7,449.0	7,343.7	75.2	19.5	87.00	4,423.9	-2,108.7	8,862.8	8,769.8	92.96	95.339		
11,800.0	7,530.0	7,449.0	7,343.7	77.0	19.5	87.00	4,423.9	-2,108.7	8,959.2	8,864.6	94.69	94.621		
11,900.0	7,530.0	7,449.0	7,343.7	78.7	19.5	87.00	4,423.9	-2,108.7	9,055.8	8,959.3	96.41	93.927		
12,000.0	7,530.0	7,449.0	7,343.7	80.4	19.5	87.00	4,423.9	-2,108.7	9,152.3	9,054.2	98.14	93.258		
12,100.0	7,530.0	7,449.0	7,343.7	82.2	19.5	87.00	4,423.9	-2,108.7	9,249.0	9,149.1	99.87	92.611		
12,200.0	7,530.0	7,449.0	7,343.7	83.9	19.5	87.00	4,423.9	-2,108.7	9,345.7	9,244.1	101.60	91.987		
12,300.0	7,530.0	7,449.0	7,343.7	85.6	19.5	87.00	4,423.9	-2,108.7	9,442.5	9,339.2	103.33	91.383		
12,400.0	7,530.0	7,449.0	7,343.7	87.3	19.5	87.00	4,423.9	-2,108.7	9,539.4	9,434.3	105.06	90.799		
12,500.0	7,530.0	7,449.0	7,343.7	89.1	19.5	87.00	4,423.9	-2,108.7	9,636.3	9,529.5	106.79	90.234		
12,600.0	7,530.0	7,449.0	7,343.7	90.8	19.5	87.00	4,423.9	-2,108.7	9,733.3	9,624.8	108.53	89.687		
12,700.0	7,530.0	7,449.0	7,343.7	92.5	19.5	87.00	4,423.9	-2,108.7	9,830.4	9,720.1	110.26	89.157		
12,800.0	7,530.0	7,449.0	7,343.7	94.3	19.5	87.00	4,423.9	-2,108.7	9,927.5	9,815.5	111.99	88.643 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 771-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	10.0	10.0	0.0	0.0	-60.82	1,029.9	-1,844.5	2,112.5					
100.0	100.0	109.6	109.6	0.2	0.2	-60.82	1,029.9	-1,844.5	2,112.5	2,112.2	0.34	6,151.432		
200.0	200.0	209.2	209.2	0.3	0.4	-60.83	1,029.8	-1,844.6	2,112.6	2,111.9	0.69	3,053.126		
300.0	300.0	308.9	308.9	0.5	0.5	-60.83	1,029.6	-1,844.7	2,112.6	2,111.6	1.04	2,030.481		
400.0	400.0	408.5	408.5	0.7	0.7	-60.84	1,029.5	-1,844.9	2,112.7	2,111.3	1.39	1,521.046		
500.0	500.0	508.1	508.1	0.8	0.9	-60.85	1,029.3	-1,845.1	2,112.7	2,111.0	1.74	1,215.993		
600.0	600.0	607.8	607.8	1.0	1.1	-60.86	1,029.0	-1,845.3	2,112.8	2,110.8	2.09	1,012.880		
700.0	700.0	707.4	707.4	1.2	1.2	-93.36	1,028.7	-1,845.7	2,113.0	2,110.6	2.44	867.533		
800.0	800.0	801.1	801.1	1.4	1.4	-93.44	1,028.3	-1,846.0	2,113.3	2,110.6	2.78	761.163 ES		
900.0	899.9	891.5	891.5	1.6	1.6	-93.54	1,028.5	-1,846.8	2,114.4	2,111.3	3.12	678.471		
988.4	988.1	984.5	984.5	1.7	1.7	-93.68	1,028.9	-1,847.2	2,115.3	2,111.8	3.45	613.827		
1,000.0	999.7	994.5	994.5	1.7	1.7	-93.70	1,028.9	-1,847.3	2,115.4	2,111.9	3.49	606.865		
1,100.0	1,099.4	1,090.1	1,090.1	1.9	1.9	-93.88	1,029.1	-1,848.2	2,116.8	2,113.0	3.85	550.273		
1,200.0	1,199.2	1,189.9	1,189.9	2.1	2.1	-94.07	1,029.1	-1,849.0	2,118.0	2,113.8	4.22	502.093		
1,300.0	1,299.0	1,277.4	1,277.4	2.3	2.2	-94.24	1,029.5	-1,850.1	2,119.8	2,115.2	4.57	463.808		
1,400.0	1,398.8	1,364.2	1,364.1	2.5	2.4	-94.39	1,030.4	-1,851.1	2,121.9	2,116.9	4.92	431.013		
1,500.0	1,498.5	1,436.0	1,435.9	2.7	2.5	-94.49	1,032.4	-1,852.7	2,125.5	2,120.2	5.25	404.846		
1,600.0	1,598.3	1,485.4	1,485.2	2.9	2.6	-94.55	1,034.5	-1,854.4	2,130.9	2,125.3	5.54	384.617		
1,700.0	1,698.1	1,549.7	1,549.4	3.2	2.7	-94.63	1,037.7	-1,857.6	2,138.1	2,132.2	5.86	365.037		
1,800.0	1,797.8	1,625.0	1,624.4	3.4	2.9	-94.71	1,042.4	-1,862.0	2,146.7	2,140.5	6.19	346.585		
1,900.0	1,897.6	1,685.0	1,684.0	3.6	3.0	-94.76	1,047.1	-1,866.0	2,156.8	2,150.3	6.51	331.473		
2,000.0	1,997.4	1,756.4	1,754.9	3.8	3.2	-94.78	1,054.3	-1,871.3	2,168.5	2,161.7	6.84	316.941		
2,100.0	2,097.1	1,834.1	1,831.8	4.0	3.3	-94.77	1,063.6	-1,877.0	2,181.2	2,174.0	7.19	303.253		
2,200.0	2,196.9	1,910.0	1,906.7	4.2	3.5	-94.72	1,074.6	-1,882.8	2,195.1	2,187.6	7.55	290.900		
2,300.0	2,296.7	1,979.9	1,975.4	4.4	3.7	-94.63	1,086.4	-1,888.1	2,210.3	2,202.4	7.90	279.815		
2,400.0	2,396.5	2,070.9	2,064.6	4.6	4.0	-94.49	1,103.2	-1,895.0	2,226.1	2,217.8	8.30	268.162		
2,500.0	2,496.2	2,164.3	2,156.0	4.8	4.3	-94.33	1,120.8	-1,901.9	2,242.1	2,233.4	8.72	257.146		
2,600.0	2,596.0	2,273.0	2,262.4	5.0	4.6	-94.14	1,141.7	-1,909.9	2,258.2	2,249.0	9.18	246.072		
2,700.0	2,695.8	2,362.0	2,349.6	5.2	4.9	-94.00	1,158.2	-1,916.5	2,274.0	2,264.4	9.59	237.039		
2,800.0	2,795.5	2,465.3	2,450.8	5.4	5.3	-93.84	1,177.5	-1,924.4	2,290.2	2,280.2	10.05	227.871		
2,900.0	2,895.3	2,563.2	2,546.6	5.6	5.7	-93.66	1,196.5	-1,931.3	2,306.2	2,295.7	10.51	219.514		
3,000.0	2,995.1	2,640.8	2,622.4	5.9	5.9	-93.52	1,212.2	-1,936.8	2,322.6	2,311.7	10.91	212.797		
3,100.0	3,094.9	2,734.9	2,714.3	6.1	6.3	-93.34	1,231.4	-1,944.1	2,339.8	2,328.4	11.36	205.925		
3,200.0	3,194.6	2,870.4	2,846.8	6.3	6.8	-93.11	1,258.0	-1,954.1	2,356.2	2,344.2	11.92	197.632		
3,300.0	3,294.4	2,957.9	2,932.3	6.5	7.1	-92.97	1,274.8	-1,960.1	2,372.0	2,359.7	12.35	192.005		
3,400.0	3,394.2	3,055.9	3,028.3	6.7	7.5	-92.81	1,293.5	-1,967.1	2,388.1	2,375.3	12.82	186.293		
3,500.0	3,493.9	3,146.7	3,117.1	6.9	7.8	-92.66	1,311.5	-1,973.5	2,404.4	2,391.1	13.27	181.179		
3,600.0	3,593.7	3,260.2	3,228.0	7.1	8.3	-92.46	1,333.9	-1,981.2	2,420.4	2,406.6	13.78	175.643		
3,700.0	3,693.5	3,346.4	3,312.4	7.3	8.6	-92.33	1,350.6	-1,987.2	2,436.4	2,422.2	14.21	171.407		
3,800.0	3,793.2	3,428.0	3,392.2	7.5	8.9	-92.20	1,366.6	-1,993.6	2,453.3	2,438.7	14.64	167.586		
3,900.0	3,893.0	3,524.3	3,486.2	7.7	9.3	-92.05	1,385.9	-2,001.3	2,470.6	2,455.5	15.10	163.575		
4,000.0	3,992.8	3,629.7	3,589.2	8.0	9.7	-91.90	1,406.6	-2,009.4	2,487.5	2,472.0	15.59	159.556		
4,100.0	4,092.6	3,712.0	3,669.6	8.2	10.0	-91.77	1,423.1	-2,016.0	2,504.8	2,488.8	16.02	156.355		
4,200.0	4,192.3	3,869.4	3,823.6	8.4	10.7	-91.51	1,454.4	-2,026.0	2,520.4	2,503.7	16.66	151.287		
4,300.0	4,292.1	3,963.7	3,915.7	8.6	11.0	-91.34	1,473.3	-2,031.2	2,535.7	2,518.6	17.13	148.006		
4,400.0	4,391.9	4,062.3	4,012.2	8.8	11.4	-91.17	1,493.3	-2,036.7	2,551.2	2,533.6	17.61	144.875		
4,500.0	4,491.6	4,137.0	4,085.2	9.0	11.7	-91.06	1,507.8	-2,041.5	2,567.0	2,549.0	18.01	142.520		
4,600.0	4,591.4	4,205.4	4,152.2	9.2	12.0	-90.98	1,520.8	-2,047.1	2,584.0	2,565.6	18.39	140.474		
4,700.0	4,691.2	4,292.4	4,237.2	9.4	12.3	-90.87	1,537.7	-2,054.8	2,601.8	2,583.0	18.83	138.171		
4,800.0	4,790.9	4,431.6	4,373.1	9.6	12.9	-90.67	1,565.9	-2,065.5	2,619.1	2,599.7	19.41	134.922		
4,900.0	4,890.7	4,526.2	4,465.6	9.8	13.3	-90.54	1,584.2	-2,072.1	2,635.4	2,615.5	19.87	132.603		
5,000.0	4,990.5	4,608.4	4,545.9	10.1	13.6	-90.42	1,601.0	-2,078.0	2,652.4	2,632.1	20.31	130.611		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 771-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	4,697.6	4,632.9	10.3	14.0	-90.28	1,619.7	-2,084.5	2,669.7	2,649.0	20.76	128.588		
5,200.0	5,190.0	4,954.5	4,884.7	10.5	14.9	-89.98	1,667.1	-2,101.9	2,687.0	2,665.4	21.59	124.434		
5,300.0	5,289.8	5,364.4	5,293.2	10.7	15.6	-90.25	1,691.9	-2,112.5	2,690.6	2,668.1	22.52	119.492		
5,400.0	5,389.6	5,453.1	5,381.9	10.9	15.7	-90.38	1,692.0	-2,113.0	2,691.2	2,668.3	22.86	117.709		
5,500.0	5,489.3	5,547.5	5,476.3	11.1	15.8	-90.52	1,692.3	-2,113.6	2,691.9	2,668.7	23.22	115.932		
5,600.0	5,589.1	5,638.1	5,566.9	11.3	15.9	-90.64	1,693.0	-2,114.3	2,693.1	2,669.5	23.57	114.247		
5,700.0	5,688.9	5,732.5	5,661.3	11.5	16.0	-90.78	1,693.7	-2,115.2	2,694.4	2,670.5	23.93	112.598		
5,800.0	5,788.7	5,820.1	5,748.9	11.7	16.2	-90.90	1,694.4	-2,116.5	2,696.2	2,671.9	24.28	111.067		
5,900.0	5,888.4	5,926.6	5,855.3	11.9	16.3	-91.06	1,695.4	-2,118.0	2,698.0	2,673.3	24.65	109.430		
6,000.0	5,988.2	6,027.9	5,956.7	12.2	16.4	-91.19	1,696.6	-2,119.2	2,699.7	2,674.7	25.03	107.867		
6,100.0	6,088.0	6,132.4	6,061.2	12.4	16.6	-91.33	1,697.7	-2,120.2	2,701.3	2,675.9	25.40	106.329		
6,200.0	6,187.7	6,229.6	6,158.3	12.6	16.7	-91.47	1,698.5	-2,121.4	2,702.8	2,677.1	25.77	104.897		
6,300.0	6,287.5	6,325.2	6,253.9	12.8	16.8	-91.61	1,699.1	-2,122.7	2,704.6	2,678.4	26.13	103.499		
6,400.0	6,387.3	6,425.4	6,354.2	13.0	16.9	-91.74	1,700.5	-2,123.8	2,706.4	2,679.9	26.51	102.108		
6,500.0	6,487.0	6,511.1	6,439.8	13.2	17.1	-91.86	1,701.6	-2,124.8	2,708.3	2,681.5	26.86	100.841		
6,600.0	6,586.8	6,662.5	6,591.1	13.4	17.3	-92.06	1,703.5	-2,126.7	2,710.6	2,683.3	27.31	99.263		
6,700.0	6,686.6	6,759.7	6,688.4	13.6	17.4	-92.21	1,703.3	-2,127.1	2,711.1	2,683.4	27.67	97.973		
6,787.0	6,773.4	6,841.0	6,769.7	13.8	17.5	-92.32	1,703.4	-2,127.4	2,711.7	2,683.7	27.99	96.895		
6,800.0	6,786.4	6,853.3	6,782.0	13.8	17.5	-102.88	1,703.4	-2,127.5	2,711.8	2,683.8	28.02	96.774		
6,850.0	6,836.3	6,900.8	6,829.5	13.9	17.6	169.85	1,703.6	-2,127.7	2,713.6	2,685.5	28.13	96.463		
6,900.0	6,886.2	6,941.0	6,869.7	14.0	17.6	139.77	1,703.7	-2,127.9	2,717.2	2,689.0	28.20	96.369		
6,950.0	6,935.7	6,989.4	6,918.0	14.0	17.7	131.67	1,704.0	-2,128.3	2,722.5	2,694.3	28.24	96.402		
7,000.0	6,984.6	7,038.0	6,966.7	14.0	17.7	127.91	1,704.4	-2,128.7	2,729.8	2,701.5	28.26	96.598		
7,050.0	7,032.6	7,089.3	7,018.0	14.0	17.8	125.63	1,704.9	-2,129.1	2,738.7	2,710.5	28.26	96.924		
7,100.0	7,079.7	7,144.4	7,073.0	13.9	17.9	124.01	1,705.3	-2,129.3	2,749.2	2,720.9	28.24	97.356		
7,150.0	7,125.4	7,183.3	7,111.9	13.9	17.9	122.59	1,705.6	-2,129.4	2,761.3	2,733.1	28.20	97.919		
7,200.0	7,169.6	7,220.8	7,149.4	13.8	18.0	121.29	1,705.9	-2,129.7	2,775.3	2,747.1	28.17	98.537		
7,250.0	7,212.1	7,270.5	7,199.1	13.8	18.0	120.16	1,706.3	-2,130.0	2,790.9	2,762.8	28.15	99.162		
7,300.0	7,252.6	7,321.4	7,250.0	13.7	18.1	119.07	1,706.7	-2,130.1	2,808.1	2,779.9	28.15	99.772		
7,350.0	7,291.0	7,353.6	7,282.2	13.7	18.2	117.73	1,706.8	-2,130.2	2,826.8	2,798.6	28.18	100.300		
7,400.0	7,327.1	7,382.8	7,311.5	13.7	18.2	116.28	1,707.0	-2,130.4	2,847.2	2,819.0	28.28	100.697		
7,450.0	7,360.7	7,410.0	7,338.6	13.7	18.2	114.69	1,707.2	-2,130.6	2,869.3	2,840.9	28.43	100.916		
7,500.0	7,391.6	7,438.3	7,366.9	13.7	18.3	113.01	1,707.5	-2,130.8	2,892.9	2,864.2	28.66	100.934		
7,550.0	7,419.7	7,465.8	7,394.4	13.8	18.3	111.19	1,707.7	-2,131.0	2,917.9	2,889.0	28.97	100.728		
7,600.0	7,444.8	7,490.4	7,419.0	13.9	18.3	109.18	1,707.9	-2,131.3	2,944.3	2,915.0	29.36	100.288		
7,650.0	7,466.9	7,512.0	7,440.6	14.1	18.4	106.97	1,708.1	-2,131.5	2,972.0	2,942.2	29.83	99.636		
7,700.0	7,485.8	7,530.7	7,459.4	14.3	18.4	104.55	1,708.2	-2,131.6	3,000.8	2,970.4	30.37	98.817		
7,750.0	7,501.5	7,546.1	7,474.7	14.6	18.4	101.92	1,708.4	-2,131.8	3,030.7	2,999.7	30.96	97.903		
7,800.0	7,513.7	7,557.9	7,486.5	14.9	18.4	99.05	1,708.5	-2,131.9	3,061.5	3,029.9	31.57	96.982		
7,850.0	7,522.6	7,566.2	7,494.9	15.2	18.5	95.97	1,708.6	-2,131.9	3,093.1	3,060.9	32.17	96.148		
7,900.0	7,528.0	7,571.1	7,499.7	15.6	18.5	92.70	1,708.7	-2,131.9	3,125.3	3,092.6	32.73	95.494		
7,952.9	7,530.0	7,572.4	7,501.0	16.1	18.5	89.06	1,708.7	-2,131.9	3,160.0	3,126.7	33.23	95.090		
8,000.0	7,530.0	7,571.8	7,500.4	16.5	18.5	89.05	1,708.7	-2,131.9	3,191.2	3,157.5	33.69	94.734		
8,100.0	7,530.0	7,570.6	7,499.2	17.5	18.5	89.02	1,708.6	-2,131.9	3,258.7	3,224.0	34.74	93.792		
8,200.0	7,530.0	7,569.4	7,498.1	18.7	18.5	88.99	1,708.6	-2,131.9	3,327.9	3,292.0	35.91	92.673		
8,300.0	7,530.0	7,568.3	7,496.9	19.9	18.5	88.96	1,708.6	-2,131.9	3,398.6	3,361.4	37.16	91.448		
8,400.0	7,530.0	7,567.2	7,495.8	21.2	18.5	88.93	1,708.6	-2,131.9	3,470.8	3,432.3	38.49	90.170		
8,500.0	7,530.0	7,566.0	7,494.7	22.6	18.5	88.91	1,708.6	-2,131.9	3,544.3	3,504.4	39.88	88.879		
8,600.0	7,530.0	7,564.9	7,493.6	24.0	18.5	88.88	1,708.6	-2,131.9	3,619.0	3,577.7	41.31	87.602		
8,700.0	7,530.0	7,563.9	7,492.5	25.4	18.5	88.86	1,708.6	-2,131.9	3,695.0	3,652.2	42.79	86.357		
8,800.0	7,530.0	7,562.8	7,491.4	26.9	18.4	88.83	1,708.6	-2,131.9	3,772.1	3,727.8	44.30	85.156		
8,900.0	7,530.0	7,561.8	7,490.4	28.4	18.4	88.80	1,708.5	-2,131.9	3,850.2	3,804.4	45.83	84.005		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
9,000.0	7,530.0	7,560.7	7,489.4	30.0	18.4	88.78	1,708.5	-2,131.9	3,929.4	3,882.0	47.39	82.908		
9,100.0	7,530.0	7,559.7	7,488.4	31.5	18.4	88.76	1,708.5	-2,131.9	4,009.4	3,960.5	48.98	81.865		
9,200.0	7,530.0	7,558.7	7,487.4	33.1	18.4	88.73	1,708.5	-2,131.9	4,090.4	4,039.8	50.57	80.878		
9,300.0	7,530.0	7,557.8	7,486.4	34.7	18.4	88.71	1,708.5	-2,131.9	4,172.2	4,120.0	52.19	79.944		
9,400.0	7,530.0	7,556.8	7,485.4	36.3	18.4	88.68	1,708.5	-2,131.8	4,254.7	4,200.9	53.81	79.062		
9,500.0	7,530.0	7,555.8	7,484.5	38.0	18.4	88.66	1,708.5	-2,131.8	4,338.0	4,282.5	55.45	78.229		
9,600.0	7,530.0	7,554.9	7,483.5	39.6	18.4	88.64	1,708.5	-2,131.8	4,422.0	4,364.9	57.10	77.443		
9,700.0	7,530.0	7,554.0	7,482.6	41.3	18.4	88.62	1,708.5	-2,131.8	4,506.6	4,447.8	58.76	76.700		
9,800.0	7,530.0	7,553.1	7,481.7	42.9	18.4	88.60	1,708.4	-2,131.8	4,591.8	4,531.4	60.42	75.999		
9,900.0	7,530.0	7,552.2	7,480.8	44.6	18.4	88.57	1,708.4	-2,131.8	4,677.7	4,615.6	62.09	75.337		
10,000.0	7,530.0	7,551.3	7,479.9	46.3	18.4	88.55	1,708.4	-2,131.8	4,764.1	4,700.3	63.77	74.711		
10,100.0	7,530.0	7,550.4	7,479.0	47.9	18.4	88.53	1,708.4	-2,131.8	4,851.0	4,785.5	65.45	74.118		
10,200.0	7,530.0	7,549.6	7,478.2	49.6	18.4	88.51	1,708.4	-2,131.8	4,938.4	4,871.2	67.14	73.558		
10,300.0	7,530.0	7,548.7	7,477.3	51.3	18.4	88.49	1,708.4	-2,131.8	5,026.2	4,957.4	68.83	73.027		
10,400.0	7,530.0	7,547.9	7,476.5	53.0	18.4	88.47	1,708.4	-2,131.8	5,114.5	5,044.0	70.52	72.524		
10,500.0	7,530.0	7,547.1	7,475.7	54.7	18.4	88.45	1,708.4	-2,131.8	5,203.3	5,131.1	72.22	72.047		
10,600.0	7,530.0	7,546.2	7,474.9	56.4	18.4	88.43	1,708.4	-2,131.8	5,292.4	5,218.5	73.92	71.594		
10,700.0	7,530.0	7,545.4	7,474.1	58.1	18.4	88.41	1,708.4	-2,131.8	5,382.0	5,306.3	75.63	71.164		
10,800.0	7,530.0	7,544.7	7,473.3	59.8	18.4	88.39	1,708.4	-2,131.8	5,471.8	5,394.5	77.33	70.755		
10,900.0	7,530.0	7,543.9	7,472.5	61.5	18.4	88.37	1,708.4	-2,131.8	5,562.1	5,483.0	79.04	70.366		
11,000.0	7,530.0	7,543.1	7,471.7	63.2	18.4	88.36	1,708.3	-2,131.7	5,652.6	5,571.9	80.76	69.995		
11,100.0	7,530.0	7,542.4	7,471.0	64.9	18.4	88.34	1,708.3	-2,131.7	5,743.5	5,661.0	82.47	69.642		
11,200.0	7,530.0	7,541.6	7,470.2	66.6	18.4	88.32	1,708.3	-2,131.7	5,834.7	5,750.5	84.19	69.305		
11,300.0	7,530.0	7,540.9	7,469.5	68.4	18.4	88.30	1,708.3	-2,131.7	5,926.1	5,840.2	85.91	68.984		
11,400.0	7,530.0	7,540.1	7,468.8	70.1	18.4	88.28	1,708.3	-2,131.7	6,017.9	5,930.2	87.63	68.677		
11,500.0	7,530.0	7,539.4	7,468.0	71.8	18.4	88.27	1,708.3	-2,131.7	6,109.8	6,020.5	89.35	68.383		
11,600.0	7,530.0	7,538.7	7,467.3	73.5	18.4	88.25	1,708.3	-2,131.7	6,202.1	6,111.0	91.07	68.102		
11,700.0	7,530.0	7,538.0	7,466.6	75.2	18.4	88.23	1,708.3	-2,131.7	6,294.5	6,201.8	92.79	67.834		
11,800.0	7,530.0	7,537.3	7,465.9	77.0	18.4	88.22	1,708.3	-2,131.7	6,387.2	6,292.7	94.52	67.576		
11,900.0	7,530.0	7,536.6	7,465.3	78.7	18.4	88.20	1,708.3	-2,131.7	6,480.2	6,383.9	96.25	67.330		
12,000.0	7,530.0	7,536.0	7,464.6	80.4	18.4	88.18	1,708.3	-2,131.7	6,573.3	6,475.3	97.97	67.093		
12,100.0	7,530.0	7,535.3	7,463.9	82.2	18.4	88.17	1,708.3	-2,131.7	6,666.6	6,566.9	99.70	66.866		
12,200.0	7,530.0	7,534.6	7,463.3	83.9	18.4	88.15	1,708.3	-2,131.7	6,760.1	6,658.7	101.43	66.648		
12,300.0	7,530.0	7,534.0	7,462.6	85.6	18.4	88.14	1,708.3	-2,131.7	6,853.8	6,750.7	103.16	66.438		
12,400.0	7,530.0	7,533.4	7,462.0	87.3	18.4	88.12	1,708.3	-2,131.7	6,947.7	6,842.8	104.89	66.237		
12,500.0	7,530.0	7,532.7	7,461.3	89.1	18.4	88.10	1,708.3	-2,131.7	7,041.7	6,935.1	106.62	66.043		
12,600.0	7,530.0	7,532.1	7,460.7	90.8	18.4	88.09	1,708.2	-2,131.7	7,135.9	7,027.6	108.36	65.856		
12,700.0	7,530.0	7,531.5	7,460.1	92.5	18.4	88.07	1,708.2	-2,131.7	7,230.3	7,120.2	110.09	65.676		
12,800.0	7,530.0	7,530.9	7,459.5	94.3	18.4	88.06	1,708.2	-2,131.6	7,324.8	7,213.0	111.82	65.503		
12,900.0	7,530.0	7,530.3	7,458.9	96.0	18.4	88.05	1,708.2	-2,131.6	7,419.5	7,305.9	113.56	65.336		
13,000.0	7,530.0	7,529.7	7,458.3	97.8	18.4	88.03	1,708.2	-2,131.6	7,514.2	7,398.9	115.29	65.175		
13,100.0	7,530.0	7,515.0	7,443.6	99.5	18.4	87.68	1,708.1	-2,131.5	7,609.2	7,492.2	116.99	65.044		
13,200.0	7,530.0	7,515.0	7,443.6	101.2	18.4	87.68	1,708.1	-2,131.5	7,704.2	7,585.5	118.72	64.893		
13,300.0	7,530.0	7,515.0	7,443.6	103.0	18.4	87.68	1,708.1	-2,131.5	7,799.4	7,678.9	120.46	64.746		
13,400.0	7,530.0	7,515.0	7,443.6	104.7	18.4	87.68	1,708.1	-2,131.5	7,894.7	7,772.5	122.20	64.605		
13,500.0	7,530.0	7,515.0	7,443.6	106.4	18.4	87.68	1,708.1	-2,131.5	7,990.1	7,866.2	123.94	64.468		
13,600.0	7,530.0	7,515.0	7,443.6	108.2	18.4	87.68	1,708.1	-2,131.5	8,085.6	7,960.0	125.68	64.336		
13,700.0	7,530.0	7,515.0	7,443.6	109.9	18.4	87.68	1,708.1	-2,131.5	8,181.3	8,053.8	127.42	64.208		
13,800.0	7,530.0	7,515.0	7,443.6	111.7	18.4	87.68	1,708.1	-2,131.5	8,277.0	8,147.8	129.16	64.084		
13,900.0	7,530.0	7,515.0	7,443.6	113.4	18.4	87.68	1,708.1	-2,131.5	8,372.8	8,241.9	130.90	63.964		
14,000.0	7,530.0	7,515.0	7,443.6	115.1	18.4	87.68	1,708.1	-2,131.5	8,468.7	8,336.1	132.64	63.847		
14,100.0	7,530.0	7,515.0	7,443.6	116.9	18.4	87.68	1,708.1	-2,131.5	8,564.8	8,430.4	134.38	63.735		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
14,200.0	7,530.0	7,515.0	7,443.6	118.6	18.4	87.68	1,708.1	-2,131.5	8,660.9	8,524.7	136.12	63.625	
14,300.0	7,530.0	7,515.0	7,443.6	120.4	18.4	87.68	1,708.1	-2,131.5	8,757.1	8,619.2	137.87	63.519	
14,400.0	7,530.0	7,515.0	7,443.6	122.1	18.4	87.68	1,708.1	-2,131.5	8,853.3	8,713.7	139.61	63.416	
14,500.0	7,530.0	7,515.0	7,443.6	123.9	18.4	87.68	1,708.1	-2,131.5	8,949.7	8,808.4	141.35	63.316	
14,600.0	7,530.0	7,515.0	7,443.6	125.6	18.4	87.68	1,708.1	-2,131.5	9,046.2	8,903.1	143.09	63.219	
14,700.0	7,530.0	7,515.0	7,443.6	127.3	18.4	87.68	1,708.1	-2,131.5	9,142.7	8,997.8	144.84	63.124	
14,800.0	7,530.0	7,515.0	7,443.6	129.1	18.4	87.68	1,708.1	-2,131.5	9,239.3	9,092.7	146.58	63.032	
14,900.0	7,530.0	7,515.0	7,443.6	130.8	18.4	87.68	1,708.1	-2,131.5	9,335.9	9,187.6	148.32	62.943	
15,000.0	7,530.0	7,515.0	7,443.6	132.6	18.4	87.68	1,708.1	-2,131.5	9,432.7	9,282.6	150.07	62.856	
15,100.0	7,530.0	7,515.0	7,443.6	134.3	18.4	87.68	1,708.1	-2,131.5	9,529.5	9,377.6	151.81	62.772	
15,200.0	7,530.0	7,515.0	7,443.6	136.1	18.4	87.68	1,708.1	-2,131.5	9,626.3	9,472.8	153.56	62.689	
15,300.0	7,530.0	7,515.0	7,443.6	137.8	18.4	87.68	1,708.1	-2,131.5	9,723.3	9,568.0	155.30	62.609	
15,400.0	7,530.0	7,515.0	7,443.6	139.6	18.4	87.68	1,708.1	-2,131.5	9,820.2	9,663.2	157.05	62.531	
15,500.0	7,530.0	7,515.0	7,443.6	141.3	18.4	87.68	1,708.1	-2,131.5	9,917.3	9,758.5	158.79	62.455 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8393-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	35.0	35.0	0.0	0.1	-174.42	-6,180.7	-603.5	6,210.1					
100.0	100.0	135.0	135.0	0.2	0.2	-174.42	-6,180.7	-603.5	6,210.1	6,209.7	0.39	N/A		
200.0	200.0	235.0	235.0	0.3	0.4	-174.42	-6,180.7	-603.5	6,210.1	6,209.3	0.74	8,429.320		
300.0	300.0	335.0	335.0	0.5	0.6	-174.42	-6,180.7	-603.5	6,210.1	6,209.0	1.09	5,719.426		
400.0	400.0	435.0	435.0	0.7	0.8	-174.42	-6,180.7	-603.5	6,210.1	6,208.6	1.43	4,328.032		
500.0	500.0	535.0	535.0	0.8	0.9	-174.42	-6,180.7	-603.5	6,210.1	6,208.3	1.78	3,481.153		
600.0	600.0	635.0	635.0	1.0	1.1	-174.42	-6,180.7	-603.5	6,210.1	6,207.9	2.13	2,911.460		
700.0	700.0	735.0	735.0	1.2	1.3	153.10	-6,180.7	-603.5	6,210.9	6,208.4	2.48	2,502.443		
800.0	800.0	835.0	835.0	1.4	1.5	153.10	-6,180.7	-603.5	6,213.2	6,210.4	2.83	2,194.835		
900.0	899.9	934.9	934.9	1.6	1.6	153.10	-6,180.7	-603.5	6,217.1	6,213.9	3.18	1,954.977		
988.4	988.1	1,023.1	1,023.1	1.7	1.8	153.10	-6,180.7	-603.5	6,221.8	6,218.3	3.49	1,782.954		
1,000.0	999.7	1,034.7	1,034.7	1.7	1.8	153.11	-6,180.7	-603.5	6,222.5	6,219.0	3.53	1,762.514		
1,100.0	1,099.4	1,134.4	1,134.4	1.9	2.0	153.14	-6,180.7	-603.5	6,228.6	6,224.7	3.88	1,603.992		
1,200.0	1,199.2	1,234.2	1,234.2	2.1	2.2	153.16	-6,180.7	-603.5	6,234.6	6,230.4	4.24	1,471.643		
1,300.0	1,299.0	1,334.0	1,334.0	2.3	2.3	153.19	-6,180.7	-603.5	6,240.7	6,236.1	4.59	1,359.528		
1,400.0	1,398.8	1,433.8	1,433.8	2.5	2.5	153.22	-6,180.7	-603.5	6,246.7	6,241.8	4.94	1,263.364		
1,500.0	1,498.5	1,533.5	1,533.5	2.7	2.7	153.25	-6,180.7	-603.5	6,252.8	6,247.5	5.30	1,179.993		
1,600.0	1,598.3	1,633.3	1,633.3	2.9	2.9	153.28	-6,180.7	-603.5	6,258.8	6,253.2	5.65	1,107.031		
1,700.0	1,698.1	1,733.1	1,733.1	3.2	3.0	153.30	-6,180.7	-603.5	6,264.9	6,258.9	6.01	1,042.654		
1,800.0	1,797.8	1,832.8	1,832.8	3.4	3.2	153.33	-6,180.7	-603.5	6,270.9	6,264.6	6.36	985.435		
1,900.0	1,897.6	1,932.6	1,932.6	3.6	3.4	153.36	-6,180.7	-603.5	6,277.0	6,270.3	6.72	934.247		
2,000.0	1,997.4	2,032.4	2,032.4	3.8	3.5	153.39	-6,180.7	-603.5	6,283.0	6,276.0	7.07	888.187		
2,100.0	2,097.1	2,132.1	2,132.1	4.0	3.7	153.42	-6,180.7	-603.5	6,289.1	6,281.7	7.43	846.524		
2,200.0	2,196.9	2,231.9	2,231.9	4.2	3.9	153.44	-6,180.7	-603.5	6,295.2	6,287.4	7.78	808.657		
2,300.0	2,296.7	2,331.7	2,331.7	4.4	4.1	153.47	-6,180.7	-603.5	6,301.2	6,293.1	8.14	774.093		
2,400.0	2,396.5	2,431.5	2,431.5	4.6	4.2	153.50	-6,180.7	-603.5	6,307.3	6,298.8	8.50	742.418		
2,500.0	2,496.2	2,531.2	2,531.2	4.8	4.4	153.53	-6,180.7	-603.5	6,313.3	6,304.5	8.85	713.284		
2,600.0	2,596.0	2,631.0	2,631.0	5.0	4.6	153.55	-6,180.7	-603.5	6,319.4	6,310.2	9.21	686.399		
2,700.0	2,695.8	2,730.8	2,730.8	5.2	4.8	153.58	-6,180.7	-603.5	6,325.5	6,315.9	9.56	661.511		
2,800.0	2,795.5	2,830.5	2,830.5	5.4	4.9	153.61	-6,180.7	-603.5	6,331.5	6,321.6	9.92	638.408		
2,900.0	2,895.3	2,930.3	2,930.3	5.6	5.1	153.63	-6,180.7	-603.5	6,337.6	6,327.3	10.27	616.903		
3,000.0	2,995.1	3,030.1	3,030.1	5.9	5.3	153.66	-6,180.7	-603.5	6,343.7	6,333.1	10.63	596.837		
3,100.0	3,094.9	3,129.9	3,129.9	6.1	5.5	153.69	-6,180.7	-603.5	6,349.8	6,338.8	10.98	578.070		
3,200.0	3,194.6	3,229.6	3,229.6	6.3	5.6	153.72	-6,180.7	-603.5	6,355.8	6,344.5	11.34	560.480		
3,300.0	3,294.4	3,329.4	3,329.4	6.5	5.8	153.74	-6,180.7	-603.5	6,361.9	6,350.2	11.70	543.960		
3,400.0	3,394.2	3,429.2	3,429.2	6.7	6.0	153.77	-6,180.7	-603.5	6,368.0	6,355.9	12.05	528.415		
3,500.0	3,493.9	3,528.9	3,528.9	6.9	6.2	153.80	-6,180.7	-603.5	6,374.1	6,361.7	12.41	513.762		
3,600.0	3,593.7	3,628.7	3,628.7	7.1	6.3	153.82	-6,180.7	-603.5	6,380.2	6,367.4	12.76	499.925		
3,700.0	3,693.5	3,728.5	3,728.5	7.3	6.5	153.85	-6,180.7	-603.5	6,386.2	6,373.1	13.12	486.839		
3,800.0	3,793.2	3,828.2	3,828.2	7.5	6.7	153.88	-6,180.7	-603.5	6,392.3	6,378.8	13.47	474.444		
3,900.0	3,893.0	3,928.0	3,928.0	7.7	6.9	153.90	-6,180.7	-603.5	6,398.4	6,384.6	13.83	462.688		
4,000.0	3,992.8	4,027.8	4,027.8	8.0	7.0	153.93	-6,180.7	-603.5	6,404.5	6,390.3	14.18	451.520		
4,100.0	4,092.6	4,127.6	4,127.6	8.2	7.2	153.96	-6,180.7	-603.5	6,410.6	6,396.0	14.54	440.900		
4,200.0	4,192.3	4,227.3	4,227.3	8.4	7.4	153.98	-6,180.7	-603.5	6,416.7	6,401.8	14.90	430.787		
4,300.0	4,292.1	4,327.1	4,327.1	8.6	7.6	154.01	-6,180.7	-603.5	6,422.8	6,407.5	15.25	421.146		
4,400.0	4,391.9	4,426.9	4,426.9	8.8	7.7	154.04	-6,180.7	-603.5	6,428.9	6,413.2	15.61	411.945		
4,500.0	4,491.6	4,526.6	4,526.6	9.0	7.9	154.06	-6,180.7	-603.5	6,434.9	6,419.0	15.96	403.154		
4,600.0	4,591.4	4,626.4	4,626.4	9.2	8.1	154.09	-6,180.7	-603.5	6,441.0	6,424.7	16.32	394.746		
4,700.0	4,691.2	4,726.2	4,726.2	9.4	8.2	154.12	-6,180.7	-603.5	6,447.1	6,430.5	16.67	386.697		
4,800.0	4,790.9	4,825.9	4,825.9	9.6	8.4	154.14	-6,180.7	-603.5	6,453.2	6,436.2	17.03	378.985		
4,900.0	4,890.7	4,925.7	4,925.7	9.8	8.6	154.17	-6,180.7	-603.5	6,459.3	6,442.0	17.38	371.589		
5,000.0	4,990.5	5,025.5	5,025.5	10.1	8.8	154.19	-6,180.7	-603.5	6,465.4	6,447.7	17.74	364.490		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8393-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)		Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.3	5,125.3	5,125.3	10.3	8.9	154.22	-6,180.7	-603.5	6,471.5	6,453.4	18.09	357.669		
5,200.0	5,190.0	5,225.0	5,225.0	10.5	9.1	154.25	-6,180.7	-603.5	6,477.6	6,459.2	18.45	351.112		
5,300.0	5,289.8	5,324.8	5,324.8	10.7	9.3	154.27	-6,180.7	-603.5	6,483.7	6,464.9	18.80	344.804		
5,400.0	5,389.6	5,424.6	5,424.6	10.9	9.5	154.30	-6,180.7	-603.5	6,489.8	6,470.7	19.16	338.729		
5,500.0	5,489.3	5,524.3	5,524.3	11.1	9.6	154.32	-6,180.7	-603.5	6,496.0	6,476.4	19.51	332.876		
5,600.0	5,589.1	5,624.1	5,624.1	11.3	9.8	154.35	-6,180.7	-603.5	6,502.1	6,482.2	19.87	327.233		
5,700.0	5,688.9	5,723.9	5,723.9	11.5	10.0	154.38	-6,180.7	-603.5	6,508.2	6,487.9	20.22	321.789		
5,800.0	5,788.7	5,823.7	5,823.7	11.7	10.2	154.40	-6,180.7	-603.5	6,514.3	6,493.7	20.58	316.532		
5,900.0	5,888.4	5,923.4	5,923.4	11.9	10.3	154.43	-6,180.7	-603.5	6,520.4	6,499.5	20.94	311.455		
6,000.0	5,988.2	6,023.2	6,023.2	12.2	10.5	154.45	-6,180.7	-603.5	6,526.5	6,505.2	21.29	306.547		
6,100.0	6,088.0	6,123.0	6,123.0	12.4	10.7	154.48	-6,180.7	-603.5	6,532.6	6,511.0	21.65	301.801		
6,200.0	6,187.7	6,222.7	6,222.7	12.6	10.9	154.50	-6,180.7	-603.5	6,538.7	6,516.7	22.00	297.208		
6,300.0	6,287.5	6,322.5	6,322.5	12.8	11.0	154.53	-6,180.7	-603.5	6,544.9	6,522.5	22.36	292.761		
6,400.0	6,387.3	6,422.3	6,422.3	13.0	11.2	154.55	-6,180.7	-603.5	6,551.0	6,528.3	22.71	288.454		
6,500.0	6,487.0	6,522.0	6,522.0	13.2	11.4	154.58	-6,180.7	-603.5	6,557.1	6,534.0	23.07	284.280		
6,600.0	6,586.8	6,621.8	6,621.8	13.4	11.6	154.61	-6,180.7	-603.5	6,563.2	6,539.8	23.42	280.232		
6,700.0	6,686.6	6,721.6	6,721.6	13.6	11.7	154.63	-6,180.7	-603.5	6,569.3	6,545.6	23.78	276.306		
6,787.0	6,773.4	6,808.4	6,808.4	13.8	11.9	154.65	-6,180.7	-603.5	6,574.7	6,550.6	24.08	272.985		
6,800.0	6,786.4	6,821.4	6,821.4	13.8	11.9	144.12	-6,180.7	-603.5	6,575.3	6,551.2	24.14	272.407		
6,850.0	6,836.3	6,871.3	6,871.3	13.9	12.0	57.01	-6,180.7	-603.5	6,575.8	6,551.5	24.29	270.664		
6,900.0	6,886.2	6,921.2	6,921.2	14.0	12.1	27.19	-6,180.7	-603.5	6,572.7	6,548.4	24.37	269.679		
6,950.0	6,935.7	6,970.7	6,970.7	14.0	12.2	19.46	-6,180.7	-603.5	6,566.3	6,541.9	24.37	269.437		
7,000.0	6,984.6	7,019.6	7,019.6	14.0	12.3	16.17	-6,180.7	-603.5	6,556.4	6,532.1	24.29	269.927		
7,050.0	7,032.6	7,067.6	7,067.6	14.0	12.3	14.45	-6,180.7	-603.5	6,543.1	6,519.0	24.13	271.141		
7,100.0	7,079.7	7,114.7	7,114.7	13.9	12.4	13.48	-6,180.7	-603.5	6,526.6	6,502.7	23.90	273.073		
7,150.0	7,125.4	7,160.4	7,160.4	13.9	12.5	12.94	-6,180.7	-603.5	6,506.8	6,483.2	23.60	275.715		
7,200.0	7,169.6	7,204.6	7,204.6	13.8	12.6	12.69	-6,180.7	-603.5	6,483.9	6,460.7	23.24	279.052		
7,250.0	7,212.1	7,247.1	7,247.1	13.8	12.6	12.66	-6,180.7	-603.5	6,458.0	6,435.2	22.82	283.059		
7,300.0	7,252.6	7,287.6	7,287.6	13.7	12.7	12.82	-6,180.7	-603.5	6,429.3	6,406.9	22.35	287.689		
7,350.0	7,291.0	7,326.0	7,326.0	13.7	12.8	13.16	-6,180.7	-603.5	6,397.7	6,375.9	21.85	292.862		
7,400.0	7,327.1	7,362.1	7,362.1	13.7	12.8	13.68	-6,180.7	-603.5	6,363.6	6,342.3	21.32	298.444		
7,450.0	7,360.7	7,395.7	7,395.7	13.7	12.9	14.42	-6,180.7	-603.5	6,327.1	6,306.3	20.80	304.220		
7,500.0	7,391.6	7,426.6	7,426.6	13.7	13.0	15.40	-6,180.7	-603.5	6,288.4	6,268.1	20.29	309.857		
7,550.0	7,419.7	7,454.7	7,454.7	13.8	13.0	16.71	-6,180.7	-603.5	6,247.5	6,227.7	19.84	314.842		
7,600.0	7,444.8	7,479.8	7,479.8	13.9	13.1	18.44	-6,180.7	-603.5	6,204.9	6,185.4	19.49	318.402		
7,650.0	7,466.9	7,501.9	7,501.9	14.1	13.1	20.76	-6,180.7	-603.5	6,160.6	6,141.3	19.29	319.401		
7,700.0	7,485.8	7,520.8	7,520.8	14.3	13.1	23.97	-6,180.7	-603.5	6,114.8	6,095.5	19.34	316.204		
7,750.0	7,501.5	7,536.5	7,536.5	14.6	13.2	28.54	-6,180.7	-603.5	6,067.9	6,048.1	19.79	306.599		
7,800.0	7,513.7	7,548.7	7,548.7	14.9	13.2	35.39	-6,180.7	-603.5	6,020.0	5,999.1	20.90	288.071		
7,850.0	7,522.6	7,557.6	7,557.6	15.2	13.2	46.15	-6,180.7	-603.5	5,971.3	5,948.3	23.01	259.455		
7,900.0	7,528.0	7,563.0	7,563.0	15.6	13.2	63.43	-6,180.7	-603.5	5,922.2	5,896.0	26.21	225.989		
7,952.9	7,530.0	7,565.0	7,565.0	16.1	13.2	90.00	-6,180.7	-603.5	5,869.8	5,841.2	28.68	204.643		
8,000.0	7,530.0	7,565.0	7,565.0	16.5	13.2	90.00	-6,180.7	-603.5	5,823.3	5,794.2	29.14	199.848		
8,100.0	7,530.0	7,565.0	7,565.0	17.5	13.2	90.00	-6,180.7	-603.5	5,724.4	5,694.2	30.20	189.557		
8,200.0	7,530.0	7,565.0	7,565.0	18.7	13.2	90.00	-6,180.7	-603.5	5,625.5	5,594.1	31.37	179.347		
8,300.0	7,530.0	7,565.0	7,565.0	19.9	13.2	90.00	-6,180.7	-603.5	5,526.7	5,494.0	32.62	169.410		
8,400.0	7,530.0	7,565.0	7,565.0	21.2	13.2	90.00	-6,180.7	-603.5	5,427.9	5,393.9	33.95	159.871		
8,500.0	7,530.0	7,565.0	7,565.0	22.6	13.2	90.00	-6,180.7	-603.5	5,329.1	5,293.8	35.34	150.798		
8,600.0	7,530.0	7,565.0	7,565.0	24.0	13.2	90.00	-6,180.7	-603.5	5,230.4	5,193.7	36.78	142.222		
8,700.0	7,530.0	7,565.0	7,565.0	25.4	13.2	90.00	-6,180.7	-603.5	5,131.8	5,093.5	38.25	134.151		
8,800.0	7,530.0	7,565.0	7,565.0	26.9	13.2	90.00	-6,180.7	-603.5	5,033.2	4,993.4	39.76	126.574		
8,900.0	7,530.0	7,565.0	7,565.0	28.4	13.2	90.00	-6,180.7	-603.5	4,934.7	4,893.3	41.30	119.472		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 1 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8393-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,565.0	7,565.0	30.0	13.2	90.00	-6,180.7	-603.5	4,836.2	4,793.3	42.87	112.818		
9,100.0	7,530.0	7,565.0	7,565.0	31.5	13.2	90.00	-6,180.7	-603.5	4,737.8	4,693.3	44.45	106.585		
9,200.0	7,530.0	7,565.0	7,565.0	33.1	13.2	90.00	-6,180.7	-603.5	4,639.4	4,593.4	46.05	100.745		
9,300.0	7,530.0	7,565.0	7,565.0	34.7	13.2	90.00	-6,180.7	-603.5	4,541.1	4,493.5	47.67	95.269		
9,400.0	7,530.0	7,565.0	7,565.0	36.3	13.2	90.00	-6,180.7	-603.5	4,442.9	4,393.6	49.30	90.129		
9,500.0	7,530.0	7,565.0	7,565.0	38.0	13.2	90.00	-6,180.7	-603.5	4,344.8	4,293.9	50.94	85.301		
9,600.0	7,530.0	7,565.0	7,565.0	39.6	13.2	90.00	-6,180.7	-603.5	4,246.8	4,194.2	52.58	80.761		
9,700.0	7,530.0	7,565.0	7,565.0	41.3	13.2	90.00	-6,180.7	-603.5	4,148.9	4,094.6	54.24	76.487		
9,800.0	7,530.0	7,565.0	7,565.0	42.9	13.2	90.00	-6,180.7	-603.5	4,051.0	3,995.1	55.91	72.458		
9,900.0	7,530.0	7,565.0	7,565.0	44.6	13.2	90.00	-6,180.7	-603.5	3,953.3	3,895.7	57.58	68.656		
10,000.0	7,530.0	7,565.0	7,565.0	46.3	13.2	90.00	-6,180.7	-603.5	3,855.7	3,796.4	59.26	65.064		
10,100.0	7,530.0	7,565.0	7,565.0	47.9	13.2	90.00	-6,180.7	-603.5	3,758.2	3,697.3	60.94	61.666		
10,200.0	7,530.0	7,565.0	7,565.0	49.6	13.2	90.00	-6,180.7	-603.5	3,660.9	3,598.2	62.63	58.449		
10,300.0	7,530.0	7,565.0	7,565.0	51.3	13.2	90.00	-6,180.7	-603.5	3,563.7	3,499.4	64.33	55.399		
10,400.0	7,530.0	7,565.0	7,565.0	53.0	13.2	90.00	-6,180.7	-603.5	3,466.6	3,400.6	66.02	52.505		
10,500.0	7,530.0	7,565.0	7,565.0	54.7	13.2	90.00	-6,180.7	-603.5	3,369.8	3,302.1	67.73	49.756		
10,600.0	7,530.0	7,565.0	7,565.0	56.4	13.2	90.00	-6,180.7	-603.5	3,273.1	3,203.7	69.43	47.143		
10,700.0	7,530.0	7,565.0	7,565.0	58.1	13.2	90.00	-6,180.7	-603.5	3,176.6	3,105.5	71.14	44.655		
10,800.0	7,530.0	7,565.0	7,565.0	59.8	13.2	90.00	-6,180.7	-603.5	3,080.4	3,007.5	72.85	42.286		
10,900.0	7,530.0	7,565.0	7,565.0	61.5	13.2	90.00	-6,180.7	-603.5	2,984.4	2,909.8	74.56	40.027		
11,000.0	7,530.0	7,565.0	7,565.0	63.2	13.2	90.00	-6,180.7	-603.5	2,888.7	2,812.4	76.27	37.872		
11,100.0	7,530.0	7,565.0	7,565.0	64.9	13.2	90.00	-6,180.7	-603.5	2,793.2	2,715.2	77.99	35.815		
11,200.0	7,530.0	7,565.0	7,565.0	66.6	13.2	90.00	-6,180.7	-603.5	2,698.1	2,618.4	79.71	33.850		
11,300.0	7,530.0	7,565.0	7,565.0	68.4	13.2	90.00	-6,180.7	-603.5	2,603.4	2,522.0	81.43	31.971		
11,400.0	7,530.0	7,565.0	7,565.0	70.1	13.2	90.00	-6,180.7	-603.5	2,509.1	2,425.9	83.15	30.175		
11,500.0	7,530.0	7,565.0	7,565.0	71.8	13.2	90.00	-6,180.7	-603.5	2,415.2	2,330.3	84.88	28.456		
11,600.0	7,530.0	7,565.0	7,565.0	73.5	13.2	90.00	-6,180.7	-603.5	2,321.9	2,235.3	86.60	26.811		
11,700.0	7,530.0	7,565.0	7,565.0	75.2	13.2	90.00	-6,180.7	-603.5	2,229.1	2,140.8	88.33	25.237		
11,800.0	7,530.0	7,565.0	7,565.0	77.0	13.2	90.00	-6,180.7	-603.5	2,137.0	2,046.9	90.06	23.729		
11,900.0	7,530.0	7,565.0	7,565.0	78.7	13.2	90.00	-6,180.7	-603.5	2,045.6	1,953.8	91.78	22.287		
12,000.0	7,530.0	7,565.0	7,565.0	80.4	13.2	90.00	-6,180.7	-603.5	1,955.1	1,861.5	93.51	20.906		
12,100.0	7,530.0	7,565.0	7,565.0	82.2	13.2	90.00	-6,180.7	-603.5	1,865.5	1,770.2	95.25	19.586		
12,200.0	7,530.0	7,565.0	7,565.0	83.9	13.2	90.00	-6,180.7	-603.5	1,777.0	1,680.0	96.98	18.324		
12,300.0	7,530.0	7,565.0	7,565.0	85.6	13.2	90.00	-6,180.7	-603.5	1,689.9	1,591.1	98.71	17.119		
12,400.0	7,530.0	7,565.0	7,565.0	87.3	13.2	90.00	-6,180.7	-603.5	1,604.2	1,503.7	100.44	15.971		
12,500.0	7,530.0	7,565.0	7,565.0	89.1	13.2	90.00	-6,180.7	-603.5	1,520.3	1,418.1	102.18	14.878		
12,600.0	7,530.0	7,565.0	7,565.0	90.8	13.2	90.00	-6,180.7	-603.5	1,438.4	1,334.5	103.91	13.842		
12,700.0	7,530.0	7,565.0	7,565.0	92.5	13.2	90.00	-6,180.7	-603.5	1,359.0	1,253.3	105.65	12.863		
12,800.0	7,530.0	7,565.0	7,565.0	94.3	13.2	90.00	-6,180.7	-603.5	1,282.4	1,175.0	107.39	11.942		
12,900.0	7,530.0	7,565.0	7,565.0	96.0	13.2	90.00	-6,180.7	-603.5	1,209.3	1,100.1	109.12	11.082		
13,000.0	7,530.0	7,565.0	7,565.0	97.8	13.2	90.00	-6,180.7	-603.5	1,140.2	1,029.4	110.86	10.285		
13,100.0	7,530.0	7,565.0	7,565.0	99.5	13.2	90.00	-6,180.7	-603.5	1,076.1	963.5	112.60	9.556		
13,200.0	7,530.0	7,565.0	7,565.0	101.2	13.2	90.00	-6,180.7	-603.5	1,017.7	903.3	114.34	8.901		
13,300.0	7,530.0	7,565.0	7,565.0	103.0	13.2	90.00	-6,180.7	-603.5	966.2	850.1	116.08	8.323		
13,400.0	7,530.0	7,565.0	7,565.0	104.7	13.2	90.00	-6,180.7	-603.5	922.6	804.8	117.82	7.831		
13,500.0	7,530.0	7,565.0	7,565.0	106.4	13.2	90.00	-6,180.7	-603.5	888.3	768.7	119.56	7.430		
13,600.0	7,530.0	7,565.0	7,565.0	108.2	13.2	90.00	-6,180.7	-603.5	864.2	742.9	121.30	7.124		
13,700.0	7,530.0	7,565.0	7,565.0	109.9	13.2	90.00	-6,180.7	-603.5	851.3	728.2	123.04	6.918		
13,761.1	7,530.0	7,565.0	7,565.0	111.0	13.2	90.00	-6,180.7	-603.5	849.1	725.0	124.11	6.841 CC, ES		
13,800.0	7,530.0	7,565.0	7,565.0	111.7	13.2	90.00	-6,180.7	-603.5	850.0	725.2	124.78	6.811		
13,900.0	7,530.0	7,565.0	7,565.0	113.4	13.2	90.00	-6,180.7	-603.5	860.4	733.8	126.53	6.800 SF		
14,000.0	7,530.0	7,565.0	7,565.0	115.1	13.2	90.00	-6,180.7	-603.5	882.0	753.8	128.27	6.877		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,100.0	7,530.0	7,565.0	7,565.0	116.9	13.2	90.00	-6,180.7	-603.5	914.2	784.2	130.01	7.032	
14,200.0	7,530.0	7,565.0	7,565.0	118.6	13.2	90.00	-6,180.7	-603.5	955.8	824.1	131.75	7.255	
14,300.0	7,530.0	7,565.0	7,565.0	120.4	13.2	90.00	-6,180.7	-603.5	1,005.7	872.2	133.50	7.533	
14,400.0	7,530.0	7,565.0	7,565.0	122.1	13.2	90.00	-6,180.7	-603.5	1,062.6	927.4	135.24	7.857	
14,500.0	7,530.0	7,565.0	7,565.0	123.9	13.2	90.00	-6,180.7	-603.5	1,125.6	988.6	136.99	8.217	
14,600.0	7,530.0	7,565.0	7,565.0	125.6	13.2	90.00	-6,180.7	-603.5	1,193.6	1,054.9	138.73	8.604	
14,700.0	7,530.0	7,565.0	7,565.0	127.3	13.2	90.00	-6,180.7	-603.5	1,265.9	1,125.4	140.47	9.012	
14,800.0	7,530.0	7,565.0	7,565.0	129.1	13.2	90.00	-6,180.7	-603.5	1,341.8	1,199.5	142.22	9.434	
14,900.0	7,530.0	7,565.0	7,565.0	130.8	13.2	90.00	-6,180.7	-603.5	1,420.6	1,276.6	143.96	9.868	
15,000.0	7,530.0	7,565.0	7,565.0	132.6	13.2	90.00	-6,180.7	-603.5	1,502.0	1,356.2	145.71	10.308	
15,100.0	7,530.0	7,565.0	7,565.0	134.3	13.2	90.00	-6,180.7	-603.5	1,585.5	1,438.0	147.45	10.752	
15,200.0	7,530.0	7,565.0	7,565.0	136.1	13.2	90.00	-6,180.7	-603.5	1,670.8	1,521.6	149.20	11.198	
15,300.0	7,530.0	7,565.0	7,565.0	137.8	13.2	90.00	-6,180.7	-603.5	1,757.6	1,606.7	150.95	11.644	
15,400.0	7,530.0	7,565.0	7,565.0	139.6	13.2	90.00	-6,180.7	-603.5	1,845.8	1,693.1	152.69	12.088	
15,500.0	7,530.0	7,565.0	7,565.0	141.3	13.2	90.00	-6,180.7	-603.5	1,935.2	1,780.7	154.44	12.530	
15,600.0	7,530.0	7,565.0	7,565.0	143.0	13.2	90.00	-6,180.7	-603.5	2,025.5	1,869.3	156.19	12.968	
15,700.0	7,530.0	7,565.0	7,565.0	144.8	13.2	90.00	-6,180.7	-603.5	2,116.7	1,958.8	157.93	13.403	
15,800.0	7,530.0	7,565.0	7,565.0	146.5	13.2	90.00	-6,180.7	-603.5	2,208.7	2,049.0	159.68	13.832	
15,900.0	7,530.0	7,565.0	7,565.0	148.3	13.2	90.00	-6,180.7	-603.5	2,301.3	2,139.9	161.43	14.256	
16,000.0	7,530.0	7,565.0	7,565.0	150.0	13.2	90.00	-6,180.7	-603.5	2,394.5	2,231.4	163.17	14.675	
16,100.0	7,530.0	7,565.0	7,565.0	151.8	13.2	90.00	-6,180.7	-603.5	2,488.3	2,323.4	164.92	15.088	
16,200.0	7,530.0	7,565.0	7,565.0	153.5	13.2	90.00	-6,180.7	-603.5	2,582.5	2,415.8	166.67	15.495	
16,300.0	7,530.0	7,565.0	7,565.0	155.3	13.2	90.00	-6,180.7	-603.5	2,677.1	2,508.7	168.42	15.896	
16,400.0	7,530.0	7,565.0	7,565.0	157.0	13.2	90.00	-6,180.7	-603.5	2,772.2	2,602.0	170.16	16.291	
16,500.0	7,530.0	7,565.0	7,565.0	158.8	13.2	90.00	-6,180.7	-603.5	2,867.5	2,695.6	171.91	16.680	
16,600.0	7,530.0	7,565.0	7,565.0	160.5	13.2	90.00	-6,180.7	-603.5	2,963.2	2,789.5	173.66	17.063	
16,700.0	7,530.0	7,565.0	7,565.0	162.3	13.2	90.00	-6,180.7	-603.5	3,059.1	2,883.7	175.41	17.440	
16,800.0	7,530.0	7,565.0	7,565.0	164.0	13.2	90.00	-6,180.7	-603.5	3,155.3	2,978.2	177.16	17.811	
16,900.0	7,530.0	7,565.0	7,565.0	165.8	13.2	90.00	-6,180.7	-603.5	3,251.7	3,072.8	178.91	18.176	
17,000.0	7,530.0	7,565.0	7,565.0	167.5	13.2	90.00	-6,180.7	-603.5	3,348.4	3,167.7	180.65	18.535	
17,100.0	7,530.0	7,565.0	7,565.0	169.3	13.2	90.00	-6,180.7	-603.5	3,445.2	3,262.8	182.40	18.888	
17,200.0	7,530.0	7,565.0	7,565.0	171.0	13.2	90.00	-6,180.7	-603.5	3,542.2	3,358.1	184.15	19.235	
17,300.0	7,530.0	7,565.0	7,565.0	172.8	13.2	90.00	-6,180.7	-603.5	3,639.4	3,453.5	185.90	19.577	
17,400.0	7,530.0	7,565.0	7,565.0	174.5	13.2	90.00	-6,180.7	-603.5	3,736.7	3,549.0	187.65	19.913	
17,420.9	7,530.0	7,565.0	7,565.0	174.9	13.2	90.00	-6,180.7	-603.5	3,757.1	3,569.1	188.02	19.983	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	30.0	30.0	0.0	0.1	-176.04	-9,207.8	-637.2	9,229.8					
100.0	100.0	130.0	130.0	0.2	0.2	-176.04	-9,207.8	-637.2	9,229.8	9,229.5	0.38	N/A		
200.0	200.0	230.0	230.0	0.3	0.4	-176.04	-9,207.8	-637.2	9,229.8	9,229.1	0.73	N/A		
300.0	300.0	330.0	330.0	0.5	0.6	-176.04	-9,207.8	-637.2	9,229.8	9,228.8	1.08	8,569.472		
400.0	400.0	430.0	430.0	0.7	0.8	-176.04	-9,207.8	-637.2	9,229.8	9,228.4	1.43	6,471.976		
500.0	500.0	530.0	530.0	0.8	0.9	-176.04	-9,207.8	-637.2	9,229.8	9,228.1	1.78	5,199.361		
600.0	600.0	630.0	630.0	1.0	1.1	-176.04	-9,207.8	-637.2	9,229.8	9,227.7	2.12	4,344.986		
700.0	700.0	730.0	730.0	1.2	1.3	151.48	-9,207.8	-637.2	9,230.6	9,228.1	2.47	3,732.243		
800.0	800.0	830.0	830.0	1.4	1.4	151.48	-9,207.8	-637.2	9,232.9	9,230.1	2.82	3,271.534		
900.0	899.9	929.9	929.9	1.6	1.6	151.48	-9,207.8	-637.2	9,236.7	9,233.6	3.17	2,912.217		
988.4	988.1	1,018.1	1,018.1	1.7	1.8	151.47	-9,207.8	-637.2	9,241.4	9,237.9	3.48	2,654.379		
1,000.0	999.7	1,029.7	1,029.7	1.7	1.8	151.47	-9,207.8	-637.2	9,242.1	9,238.6	3.52	2,623.743		
1,100.0	1,099.4	1,129.4	1,129.4	1.9	2.0	151.49	-9,207.8	-637.2	9,248.1	9,244.2	3.88	2,386.197		
1,200.0	1,199.2	1,229.2	1,229.2	2.1	2.1	151.51	-9,207.8	-637.2	9,254.0	9,249.8	4.23	2,187.951		
1,300.0	1,299.0	1,329.0	1,329.0	2.3	2.3	151.53	-9,207.8	-637.2	9,260.0	9,255.4	4.58	2,020.075		
1,400.0	1,398.8	1,428.8	1,428.8	2.5	2.5	151.55	-9,207.8	-637.2	9,265.9	9,261.0	4.94	1,876.136		
1,500.0	1,498.5	1,528.5	1,528.5	2.7	2.7	151.57	-9,207.8	-637.2	9,271.9	9,266.6	5.29	1,751.386		
1,600.0	1,598.3	1,628.3	1,628.3	2.9	2.8	151.59	-9,207.8	-637.2	9,277.8	9,272.2	5.65	1,642.246		
1,700.0	1,698.1	1,728.1	1,728.1	3.2	3.0	151.61	-9,207.8	-637.2	9,283.8	9,277.8	6.01	1,545.974		
1,800.0	1,797.8	1,827.8	1,827.8	3.4	3.2	151.63	-9,207.8	-637.2	9,289.8	9,283.4	6.36	1,460.428		
1,900.0	1,897.6	1,927.6	1,927.6	3.6	3.4	151.65	-9,207.8	-637.2	9,295.7	9,289.0	6.72	1,383.918		
2,000.0	1,997.4	2,027.4	2,027.4	3.8	3.5	151.67	-9,207.8	-637.2	9,301.7	9,294.6	7.07	1,315.088		
2,100.0	2,097.1	2,127.1	2,127.1	4.0	3.7	151.69	-9,207.8	-637.2	9,307.7	9,300.2	7.43	1,252.840		
2,200.0	2,196.9	2,226.9	2,226.9	4.2	3.9	151.71	-9,207.8	-637.2	9,313.6	9,305.8	7.79	1,196.276		
2,300.0	2,296.7	2,326.7	2,326.7	4.4	4.1	151.73	-9,207.8	-637.2	9,319.6	9,311.5	8.14	1,144.654		
2,400.0	2,396.5	2,426.5	2,426.5	4.6	4.2	151.75	-9,207.8	-637.2	9,325.6	9,317.1	8.50	1,097.354		
2,500.0	2,496.2	2,526.2	2,526.2	4.8	4.4	151.77	-9,207.8	-637.2	9,331.5	9,322.7	8.85	1,053.856		
2,600.0	2,596.0	2,626.0	2,626.0	5.0	4.6	151.79	-9,207.8	-637.2	9,337.5	9,328.3	9.21	1,013.720		
2,700.0	2,695.8	2,725.8	2,725.8	5.2	4.8	151.81	-9,207.8	-637.2	9,343.5	9,333.9	9.57	976.573		
2,800.0	2,795.5	2,825.5	2,825.5	5.4	4.9	151.83	-9,207.8	-637.2	9,349.5	9,339.5	9.92	942.091		
2,900.0	2,895.3	2,925.3	2,925.3	5.6	5.1	151.85	-9,207.8	-637.2	9,355.4	9,345.1	10.28	910.000		
3,000.0	2,995.1	3,025.1	3,025.1	5.9	5.3	151.87	-9,207.8	-637.2	9,361.4	9,350.8	10.64	880.059		
3,100.0	3,094.9	3,124.9	3,124.9	6.1	5.5	151.89	-9,207.8	-637.2	9,367.4	9,356.4	10.99	852.059		
3,200.0	3,194.6	3,224.6	3,224.6	6.3	5.6	151.91	-9,207.8	-637.2	9,373.4	9,362.0	11.35	825.818		
3,300.0	3,294.4	3,324.4	3,324.4	6.5	5.8	151.93	-9,207.8	-637.2	9,379.3	9,367.6	11.71	801.175		
3,400.0	3,394.2	3,424.2	3,424.2	6.7	6.0	151.94	-9,207.8	-637.2	9,385.3	9,373.3	12.06	777.989		
3,500.0	3,493.9	3,523.9	3,523.9	6.9	6.2	151.96	-9,207.8	-637.2	9,391.3	9,378.9	12.42	756.134		
3,600.0	3,593.7	3,623.7	3,623.7	7.1	6.3	151.98	-9,207.8	-637.2	9,397.3	9,384.5	12.78	735.499		
3,700.0	3,693.5	3,723.5	3,723.5	7.3	6.5	152.00	-9,207.8	-637.2	9,403.3	9,390.1	13.13	715.985		
3,800.0	3,793.2	3,823.2	3,823.2	7.5	6.7	152.02	-9,207.8	-637.2	9,409.2	9,395.8	13.49	697.503		
3,900.0	3,893.0	3,923.0	3,923.0	7.7	6.8	152.04	-9,207.8	-637.2	9,415.2	9,401.4	13.85	679.973		
4,000.0	3,992.8	4,022.8	4,022.8	8.0	7.0	152.06	-9,207.8	-637.2	9,421.2	9,407.0	14.20	663.324		
4,100.0	4,092.6	4,122.6	4,122.6	8.2	7.2	152.08	-9,207.8	-637.2	9,427.2	9,412.6	14.56	647.490		
4,200.0	4,192.3	4,222.3	4,222.3	8.4	7.4	152.10	-9,207.8	-637.2	9,433.2	9,418.3	14.92	632.414		
4,300.0	4,292.1	4,322.1	4,322.1	8.6	7.5	152.12	-9,207.8	-637.2	9,439.2	9,423.9	15.27	618.042		
4,400.0	4,391.9	4,421.9	4,421.9	8.8	7.7	152.14	-9,207.8	-637.2	9,445.2	9,429.5	15.63	604.327		
4,500.0	4,491.6	4,521.6	4,521.6	9.0	7.9	152.16	-9,207.8	-637.2	9,451.2	9,435.2	15.99	591.223		
4,600.0	4,591.4	4,621.4	4,621.4	9.2	8.1	152.18	-9,207.8	-637.2	9,457.2	9,440.8	16.34	578.692		
4,700.0	4,691.2	4,721.2	4,721.2	9.4	8.2	152.20	-9,207.8	-637.2	9,463.2	9,446.5	16.70	566.696		
4,800.0	4,790.9	4,820.9	4,820.9	9.6	8.4	152.21	-9,207.8	-637.2	9,469.2	9,452.1	17.06	555.203		
4,900.0	4,890.7	4,920.7	4,920.7	9.8	8.6	152.23	-9,207.8	-637.2	9,475.1	9,457.7	17.41	544.180		
5,000.0	4,990.5	5,020.5	5,020.5	10.1	8.8	152.25	-9,207.8	-637.2	9,481.1	9,463.4	17.77	533.600		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,090.3	5,120.3	5,120.3	10.3	8.9	152.27	-9,207.8	-637.2	9,487.1	9,469.0	18.12	523.437		
5,200.0	5,190.0	5,220.0	5,220.0	10.5	9.1	152.29	-9,207.8	-637.2	9,493.1	9,474.7	18.48	513.666		
5,300.0	5,289.8	5,319.8	5,319.8	10.7	9.3	152.31	-9,207.8	-637.2	9,499.1	9,480.3	18.84	504.266		
5,400.0	5,389.6	5,419.6	5,419.6	10.9	9.5	152.33	-9,207.8	-637.2	9,505.1	9,486.0	19.19	495.215		
5,500.0	5,489.3	5,519.3	5,519.3	11.1	9.6	152.35	-9,207.8	-637.2	9,511.1	9,491.6	19.55	486.494		
5,600.0	5,589.1	5,619.1	5,619.1	11.3	9.8	152.37	-9,207.8	-637.2	9,517.2	9,497.2	19.91	478.086		
5,700.0	5,688.9	5,718.9	5,718.9	11.5	10.0	152.39	-9,207.8	-637.2	9,523.2	9,502.9	20.26	469.974		
5,800.0	5,788.7	5,818.7	5,818.7	11.7	10.2	152.40	-9,207.8	-637.2	9,529.2	9,508.5	20.62	462.143		
5,900.0	5,888.4	5,918.4	5,918.4	11.9	10.3	152.42	-9,207.8	-637.2	9,535.2	9,514.2	20.98	454.579		
6,000.0	5,988.2	6,018.2	6,018.2	12.2	10.5	152.44	-9,207.8	-637.2	9,541.2	9,519.8	21.33	447.268		
6,100.0	6,088.0	6,118.0	6,118.0	12.4	10.7	152.46	-9,207.8	-637.2	9,547.2	9,525.5	21.69	440.197		
6,200.0	6,187.7	6,217.7	6,217.7	12.6	10.9	152.48	-9,207.8	-637.2	9,553.2	9,531.1	22.04	433.355		
6,300.0	6,287.5	6,317.5	6,317.5	12.8	11.0	152.50	-9,207.8	-637.2	9,559.2	9,536.8	22.40	426.731		
6,400.0	6,387.3	6,417.3	6,417.3	13.0	11.2	152.52	-9,207.8	-637.2	9,565.2	9,542.5	22.76	420.315		
6,500.0	6,487.0	6,517.0	6,517.0	13.2	11.4	152.54	-9,207.8	-637.2	9,571.2	9,548.1	23.11	414.097		
6,600.0	6,586.8	6,616.8	6,616.8	13.4	11.5	152.55	-9,207.8	-637.2	9,577.2	9,553.8	23.47	408.068		
6,700.0	6,686.6	6,716.6	6,716.6	13.6	11.7	152.57	-9,207.8	-637.2	9,583.3	9,559.4	23.83	402.219		
6,787.0	6,773.4	6,803.4	6,803.4	13.8	11.9	152.59	-9,207.8	-637.2	9,588.5	9,564.4	24.14	397.272		
6,800.0	6,786.4	6,816.4	6,816.4	13.8	11.9	142.06	-9,207.8	-637.2	9,589.2	9,565.0	24.19	396.421		
6,850.0	6,836.3	6,866.3	6,866.3	13.9	12.0	54.94	-9,207.8	-637.2	9,589.5	9,565.2	24.35	393.897		
6,900.0	6,886.2	6,916.2	6,916.2	14.0	12.1	25.11	-9,207.8	-637.2	9,586.4	9,562.0	24.42	392.552		
6,950.0	6,935.7	6,965.7	6,965.7	14.0	12.2	17.36	-9,207.8	-637.2	9,579.9	9,555.4	24.42	392.366		
7,000.0	6,984.6	7,014.6	7,014.6	14.0	12.2	14.03	-9,207.8	-637.2	9,569.9	9,545.5	24.33	393.326		
7,050.0	7,032.6	7,062.6	7,062.6	14.0	12.3	12.25	-9,207.8	-637.2	9,556.5	9,532.3	24.17	395.428		
7,100.0	7,079.7	7,109.7	7,109.7	13.9	12.4	11.21	-9,207.8	-637.2	9,539.8	9,515.9	23.93	398.671		
7,150.0	7,125.4	7,155.4	7,155.4	13.9	12.5	10.59	-9,207.8	-637.2	9,519.9	9,496.3	23.62	403.059		
7,200.0	7,169.6	7,199.6	7,199.6	13.8	12.6	10.23	-9,207.8	-637.2	9,496.9	9,473.6	23.24	408.589		
7,250.0	7,212.1	7,242.1	7,242.1	13.8	12.6	10.07	-9,207.8	-637.2	9,470.8	9,448.0	22.81	415.250		
7,300.0	7,252.6	7,282.6	7,282.6	13.7	12.7	10.08	-9,207.8	-637.2	9,441.8	9,419.5	22.32	423.008		
7,350.0	7,291.0	7,321.0	7,321.0	13.7	12.8	10.24	-9,207.8	-637.2	9,410.1	9,388.3	21.79	431.798		
7,400.0	7,327.1	7,357.1	7,357.1	13.7	12.8	10.54	-9,207.8	-637.2	9,375.8	9,354.6	21.24	441.493		
7,450.0	7,360.7	7,390.7	7,390.7	13.7	12.9	11.00	-9,207.8	-637.2	9,339.1	9,318.4	20.67	451.880		
7,500.0	7,391.6	7,421.6	7,421.6	13.7	13.0	11.65	-9,207.8	-637.2	9,300.1	9,280.0	20.10	462.609		
7,550.0	7,419.7	7,449.7	7,449.7	13.8	13.0	12.54	-9,207.8	-637.2	9,259.1	9,239.5	19.57	473.126		
7,600.0	7,444.8	7,474.8	7,474.8	13.9	13.0	13.75	-9,207.8	-637.2	9,216.2	9,197.1	19.10	482.568		
7,650.0	7,466.9	7,496.9	7,496.9	14.1	13.1	15.40	-9,207.8	-637.2	9,171.6	9,152.9	18.73	489.595		
7,700.0	7,485.8	7,515.8	7,515.8	14.3	13.1	17.74	-9,207.8	-637.2	9,125.6	9,107.1	18.54	492.105		
7,750.0	7,501.5	7,531.5	7,531.5	14.6	13.1	21.19	-9,207.8	-637.2	9,078.4	9,059.8	18.65	486.711		
7,800.0	7,513.7	7,543.7	7,543.7	14.9	13.2	26.62	-9,207.8	-637.2	9,030.2	9,010.9	19.30	467.859		
7,850.0	7,522.6	7,552.6	7,552.6	15.2	13.2	36.02	-9,207.8	-637.2	8,981.3	8,960.3	21.02	427.343		
7,900.0	7,528.0	7,558.0	7,558.0	15.6	13.2	54.12	-9,207.8	-637.2	8,931.9	8,907.2	24.69	361.749		
7,952.9	7,530.0	7,560.0	7,560.0	16.1	13.2	90.00	-9,207.8	-637.2	8,879.2	8,850.6	28.67	309.654		
8,000.0	7,530.0	7,560.0	7,560.0	16.5	13.2	90.00	-9,207.8	-637.2	8,832.4	8,803.3	29.13	303.209		
8,100.0	7,530.0	7,560.0	7,560.0	17.5	13.2	90.00	-9,207.8	-637.2	8,732.9	8,702.7	30.19	289.266		
8,200.0	7,530.0	7,560.0	7,560.0	18.7	13.2	90.00	-9,207.8	-637.2	8,633.4	8,602.1	31.36	275.319		
8,300.0	7,530.0	7,560.0	7,560.0	19.9	13.2	90.00	-9,207.8	-637.2	8,534.0	8,501.4	32.61	261.664		
8,400.0	7,530.0	7,560.0	7,560.0	21.2	13.2	90.00	-9,207.8	-637.2	8,434.5	8,400.6	33.94	248.491		
8,500.0	7,530.0	7,560.0	7,560.0	22.6	13.2	90.00	-9,207.8	-637.2	8,335.1	8,299.7	35.33	235.914		
8,600.0	7,530.0	7,560.0	7,560.0	24.0	13.2	90.00	-9,207.8	-637.2	8,235.6	8,198.9	36.77	223.991		
8,700.0	7,530.0	7,560.0	7,560.0	25.4	13.2	90.00	-9,207.8	-637.2	8,136.2	8,098.0	38.25	212.739		
8,800.0	7,530.0	7,560.0	7,560.0	26.9	13.2	90.00	-9,207.8	-637.2	8,036.8	7,997.1	39.76	202.154		
8,900.0	7,530.0	7,560.0	7,560.0	28.4	13.2	90.00	-9,207.8	-637.2	7,937.4	7,896.1	41.30	192.212		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,560.0	7,560.0	30.0	13.2	90.00	-9,207.8	-637.2	7,838.1	7,795.2	42.86	182.883		
9,100.0	7,530.0	7,560.0	7,560.0	31.5	13.2	90.00	-9,207.8	-637.2	7,738.7	7,694.3	44.44	174.132		
9,200.0	7,530.0	7,560.0	7,560.0	33.1	13.2	90.00	-9,207.8	-637.2	7,639.4	7,593.3	46.04	165.921		
9,300.0	7,530.0	7,560.0	7,560.0	34.7	13.2	90.00	-9,207.8	-637.2	7,540.0	7,492.4	47.66	158.212		
9,400.0	7,530.0	7,560.0	7,560.0	36.3	13.2	90.00	-9,207.8	-637.2	7,440.7	7,391.5	49.29	150.969		
9,500.0	7,530.0	7,560.0	7,560.0	38.0	13.2	90.00	-9,207.8	-637.2	7,341.5	7,290.5	50.93	144.158		
9,600.0	7,530.0	7,560.0	7,560.0	39.6	13.2	90.00	-9,207.8	-637.2	7,242.2	7,189.6	52.58	137.747		
9,700.0	7,530.0	7,560.0	7,560.0	41.3	13.2	90.00	-9,207.8	-637.2	7,142.9	7,088.7	54.23	131.706		
9,800.0	7,530.0	7,560.0	7,560.0	42.9	13.2	90.00	-9,207.8	-637.2	7,043.7	6,987.8	55.90	126.005		
9,900.0	7,530.0	7,560.0	7,560.0	44.6	13.2	90.00	-9,207.8	-637.2	6,944.5	6,887.0	57.57	120.621		
10,000.0	7,530.0	7,560.0	7,560.0	46.3	13.2	90.00	-9,207.8	-637.2	6,845.4	6,786.1	59.25	115.530		
10,100.0	7,530.0	7,560.0	7,560.0	47.9	13.2	90.00	-9,207.8	-637.2	6,746.2	6,685.3	60.94	110.710		
10,200.0	7,530.0	7,560.0	7,560.0	49.6	13.2	90.00	-9,207.8	-637.2	6,647.1	6,584.4	62.63	106.141		
10,300.0	7,530.0	7,560.0	7,560.0	51.3	13.2	90.00	-9,207.8	-637.2	6,548.0	6,483.7	64.32	101.805		
10,400.0	7,530.0	7,560.0	7,560.0	53.0	13.2	90.00	-9,207.8	-637.2	6,448.9	6,382.9	66.02	97.687		
10,500.0	7,530.0	7,560.0	7,560.0	54.7	13.2	90.00	-9,207.8	-637.2	6,349.9	6,282.1	67.72	93.771		
10,600.0	7,530.0	7,560.0	7,560.0	56.4	13.2	90.00	-9,207.8	-637.2	6,250.8	6,181.4	69.42	90.042		
10,700.0	7,530.0	7,560.0	7,560.0	58.1	13.2	90.00	-9,207.8	-637.2	6,151.9	6,080.7	71.13	86.490		
10,800.0	7,530.0	7,560.0	7,560.0	59.8	13.2	90.00	-9,207.8	-637.2	6,052.9	5,980.1	72.84	83.101		
10,900.0	7,530.0	7,560.0	7,560.0	61.5	13.2	90.00	-9,207.8	-637.2	5,954.0	5,879.4	74.55	79.865		
11,000.0	7,530.0	7,560.0	7,560.0	63.2	13.2	90.00	-9,207.8	-637.2	5,855.1	5,778.9	76.27	76.773		
11,100.0	7,530.0	7,560.0	7,560.0	64.9	13.2	90.00	-9,207.8	-637.2	5,756.3	5,678.3	77.98	73.815		
11,200.0	7,530.0	7,560.0	7,560.0	66.6	13.2	90.00	-9,207.8	-637.2	5,657.5	5,577.8	79.70	70.984		
11,300.0	7,530.0	7,560.0	7,560.0	68.4	13.2	90.00	-9,207.8	-637.2	5,558.7	5,477.3	81.42	68.271		
11,400.0	7,530.0	7,560.0	7,560.0	70.1	13.2	90.00	-9,207.8	-637.2	5,460.0	5,376.9	83.14	65.670		
11,500.0	7,530.0	7,560.0	7,560.0	71.8	13.2	90.00	-9,207.8	-637.2	5,361.4	5,276.5	84.87	63.173		
11,600.0	7,530.0	7,560.0	7,560.0	73.5	13.2	90.00	-9,207.8	-637.2	5,262.8	5,176.2	86.59	60.776		
11,700.0	7,530.0	7,560.0	7,560.0	75.2	13.2	90.00	-9,207.8	-637.2	5,164.2	5,075.9	88.32	58.472		
11,800.0	7,530.0	7,560.0	7,560.0	77.0	13.2	90.00	-9,207.8	-637.2	5,065.7	4,975.7	90.05	56.256		
11,900.0	7,530.0	7,560.0	7,560.0	78.7	13.2	90.00	-9,207.8	-637.2	4,967.3	4,875.5	91.78	54.124		
12,000.0	7,530.0	7,560.0	7,560.0	80.4	13.2	90.00	-9,207.8	-637.2	4,868.9	4,775.4	93.51	52.070		
12,100.0	7,530.0	7,560.0	7,560.0	82.2	13.2	90.00	-9,207.8	-637.2	4,770.6	4,675.3	95.24	50.092		
12,200.0	7,530.0	7,560.0	7,560.0	83.9	13.2	90.00	-9,207.8	-637.2	4,672.3	4,575.4	96.97	48.184		
12,300.0	7,530.0	7,560.0	7,560.0	85.6	13.2	90.00	-9,207.8	-637.2	4,574.2	4,475.5	98.70	46.343		
12,400.0	7,530.0	7,560.0	7,560.0	87.3	13.2	90.00	-9,207.8	-637.2	4,476.1	4,375.7	100.44	44.567		
12,500.0	7,530.0	7,560.0	7,560.0	89.1	13.2	90.00	-9,207.8	-637.2	4,378.1	4,275.9	102.17	42.851		
12,600.0	7,530.0	7,560.0	7,560.0	90.8	13.2	90.00	-9,207.8	-637.2	4,280.2	4,176.3	103.91	41.193		
12,700.0	7,530.0	7,560.0	7,560.0	92.5	13.2	90.00	-9,207.8	-637.2	4,182.4	4,076.8	105.64	39.591		
12,800.0	7,530.0	7,560.0	7,560.0	94.3	13.2	90.00	-9,207.8	-637.2	4,084.7	3,977.3	107.38	38.041		
12,900.0	7,530.0	7,560.0	7,560.0	96.0	13.2	90.00	-9,207.8	-637.2	3,987.1	3,878.0	109.12	36.541		
13,000.0	7,530.0	7,560.0	7,560.0	97.8	13.2	90.00	-9,207.8	-637.2	3,889.7	3,778.8	110.85	35.089		
13,100.0	7,530.0	7,560.0	7,560.0	99.5	13.2	90.00	-9,207.8	-637.2	3,792.4	3,679.8	112.59	33.682		
13,200.0	7,530.0	7,560.0	7,560.0	101.2	13.2	90.00	-9,207.8	-637.2	3,695.2	3,580.8	114.33	32.320		
13,300.0	7,530.0	7,560.0	7,560.0	103.0	13.2	90.00	-9,207.8	-637.2	3,598.2	3,482.1	116.07	31.000		
13,400.0	7,530.0	7,560.0	7,560.0	104.7	13.2	90.00	-9,207.8	-637.2	3,501.3	3,383.5	117.81	29.720		
13,500.0	7,530.0	7,560.0	7,560.0	106.4	13.2	90.00	-9,207.8	-637.2	3,404.6	3,285.1	119.55	28.478		
13,600.0	7,530.0	7,560.0	7,560.0	108.2	13.2	90.00	-9,207.8	-637.2	3,308.1	3,186.9	121.29	27.274		
13,700.0	7,530.0	7,560.0	7,560.0	109.9	13.2	90.00	-9,207.8	-637.2	3,211.9	3,088.8	123.03	26.106		
13,800.0	7,530.0	7,560.0	7,560.0	111.7	13.2	90.00	-9,207.8	-637.2	3,115.9	2,991.1	124.77	24.972		
13,900.0	7,530.0	7,560.0	7,560.0	113.4	13.2	90.00	-9,207.8	-637.2	3,020.1	2,893.6	126.52	23.871		
14,000.0	7,530.0	7,560.0	7,560.0	115.1	13.2	90.00	-9,207.8	-637.2	2,924.6	2,796.3	128.26	22.802		
14,100.0	7,530.0	7,560.0	7,560.0	116.9	13.2	90.00	-9,207.8	-637.2	2,829.4	2,699.4	130.00	21.764		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - ERIE CHAMPLIN B UNIT 2 - ENCANA WELL - NO													Offset Site Error:	0.0 ft
Survey Program: 8413-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,200.0	7,530.0	7,560.0	7,560.0	118.6	13.2	90.00	-9,207.8	-637.2	2,734.6	2,602.8	131.75	20.757		
14,300.0	7,530.0	7,560.0	7,560.0	120.4	13.2	90.00	-9,207.8	-637.2	2,640.1	2,506.6	133.49	19.778		
14,400.0	7,530.0	7,560.0	7,560.0	122.1	13.2	90.00	-9,207.8	-637.2	2,546.1	2,410.9	135.23	18.828		
14,500.0	7,530.0	7,560.0	7,560.0	123.9	13.2	90.00	-9,207.8	-637.2	2,452.6	2,315.6	136.98	17.905		
14,600.0	7,530.0	7,560.0	7,560.0	125.6	13.2	90.00	-9,207.8	-637.2	2,359.5	2,220.8	138.72	17.009		
14,700.0	7,530.0	7,560.0	7,560.0	127.3	13.2	90.00	-9,207.8	-637.2	2,267.1	2,126.6	140.47	16.140		
14,800.0	7,530.0	7,560.0	7,560.0	129.1	13.2	90.00	-9,207.8	-637.2	2,175.3	2,033.1	142.21	15.297		
14,900.0	7,530.0	7,560.0	7,560.0	130.8	13.2	90.00	-9,207.8	-637.2	2,084.3	1,940.4	143.96	14.479		
15,000.0	7,530.0	7,560.0	7,560.0	132.6	13.2	90.00	-9,207.8	-637.2	1,994.2	1,848.5	145.70	13.687		
15,100.0	7,530.0	7,560.0	7,560.0	134.3	13.2	90.00	-9,207.8	-637.2	1,905.0	1,757.6	147.45	12.920		
15,200.0	7,530.0	7,560.0	7,560.0	136.1	13.2	90.00	-9,207.8	-637.2	1,817.0	1,667.8	149.19	12.179		
15,300.0	7,530.0	7,560.0	7,560.0	137.8	13.2	90.00	-9,207.8	-637.2	1,730.3	1,579.4	150.94	11.464		
15,400.0	7,530.0	7,560.0	7,560.0	139.6	13.2	90.00	-9,207.8	-637.2	1,645.1	1,492.4	152.68	10.774		
15,500.0	7,530.0	7,560.0	7,560.0	141.3	13.2	90.00	-9,207.8	-637.2	1,561.6	1,407.2	154.43	10.112		
15,600.0	7,530.0	7,560.0	7,560.0	143.0	13.2	90.00	-9,207.8	-637.2	1,480.2	1,324.0	156.18	9.478		
15,700.0	7,530.0	7,560.0	7,560.0	144.8	13.2	90.00	-9,207.8	-637.2	1,401.2	1,243.3	157.92	8.873		
15,800.0	7,530.0	7,560.0	7,560.0	146.5	13.2	90.00	-9,207.8	-637.2	1,325.0	1,165.4	159.67	8.299		
15,900.0	7,530.0	7,560.0	7,560.0	148.3	13.2	90.00	-9,207.8	-637.2	1,252.2	1,090.8	161.42	7.758		
16,000.0	7,530.0	7,560.0	7,560.0	150.0	13.2	90.00	-9,207.8	-637.2	1,183.4	1,020.2	163.16	7.253		
16,100.0	7,530.0	7,560.0	7,560.0	151.8	13.2	90.00	-9,207.8	-637.2	1,119.3	954.4	164.91	6.787		
16,200.0	7,530.0	7,560.0	7,560.0	153.5	13.2	90.00	-9,207.8	-637.2	1,060.7	894.1	166.66	6.365		
16,300.0	7,530.0	7,560.0	7,560.0	155.3	13.2	90.00	-9,207.8	-637.2	1,008.7	840.3	168.41	5.990		
16,400.0	7,530.0	7,560.0	7,560.0	157.0	13.2	90.00	-9,207.8	-637.2	964.3	794.2	170.16	5.667		
16,500.0	7,530.0	7,560.0	7,560.0	158.8	13.2	90.00	-9,207.8	-637.2	928.6	756.7	171.90	5.402		
16,600.0	7,530.0	7,560.0	7,560.0	160.5	13.2	90.00	-9,207.8	-637.2	902.6	728.9	173.65	5.198		
16,700.0	7,530.0	7,560.0	7,560.0	162.3	13.2	90.00	-9,207.8	-637.2	887.1	711.7	175.40	5.058		
16,788.2	7,530.0	7,560.0	7,560.0	163.8	13.2	90.00	-9,207.8	-637.2	882.7	705.8	176.94	4.989 CC		
16,800.0	7,530.0	7,560.0	7,560.0	164.0	13.2	90.00	-9,207.8	-637.2	882.8	705.7	177.15	4.983 ES		
16,900.0	7,530.0	7,560.0	7,560.0	165.8	13.2	90.00	-9,207.8	-637.2	889.8	710.9	178.90	4.974 SF		
17,000.0	7,530.0	7,560.0	7,560.0	167.5	13.2	90.00	-9,207.8	-637.2	907.8	727.1	180.65	5.025		
17,100.0	7,530.0	7,560.0	7,560.0	169.3	13.2	90.00	-9,207.8	-637.2	936.2	753.8	182.39	5.133		
17,200.0	7,530.0	7,560.0	7,560.0	171.0	13.2	90.00	-9,207.8	-637.2	974.1	789.9	184.14	5.290		
17,300.0	7,530.0	7,560.0	7,560.0	172.8	13.2	90.00	-9,207.8	-637.2	1,020.4	834.5	185.89	5.489		
17,400.0	7,530.0	7,560.0	7,560.0	174.5	13.2	90.00	-9,207.8	-637.2	1,074.0	886.4	187.64	5.724		
17,420.9	7,530.0	7,560.0	7,560.0	174.9	13.2	90.00	-9,207.8	-637.2	1,086.1	898.1	188.01	5.777		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-89.74	0.4	-80.0	80.0					
100.0	100.0	101.0	101.0	0.2	0.2	-89.74	0.4	-80.0	80.0	79.7	0.31	262.055		
166.3	166.3	167.3	167.3	0.3	0.3	-89.74	0.4	-80.0	80.0	79.5	0.54	149.060	CC	
200.0	200.0	201.0	201.0	0.3	0.3	-89.74	0.4	-80.0	80.0	79.4	0.65	122.297	ES	
300.0	300.0	300.0	300.0	0.5	0.5	-89.60	0.6	-80.9	80.9	79.9	1.00	80.714		
400.0	400.0	398.2	398.2	0.7	0.7	-89.22	1.1	-83.4	83.4	82.1	1.35	61.769		
500.0	500.0	496.7	496.6	0.8	0.9	-88.64	2.1	-87.5	87.7	86.0	1.70	51.463		
600.0	600.0	595.0	594.7	1.0	1.1	-87.91	3.4	-93.3	93.6	91.5	2.06	45.411		
700.0	700.0	693.0	692.4	1.2	1.3	-119.92	5.1	-100.7	101.6	99.2	2.39	42.547		
800.0	800.0	790.7	789.6	1.4	1.5	-120.12	7.2	-109.7	112.2	109.5	2.74	41.001		
900.0	899.9	887.8	886.2	1.6	1.7	-120.77	9.6	-120.2	125.3	122.3	3.09	40.577		
988.4	988.1	973.2	970.8	1.7	2.0	-121.60	12.0	-130.8	139.1	135.7	3.41	40.838		
1,000.0	999.7	984.3	981.9	1.7	2.0	-121.73	12.4	-132.3	141.0	137.6	3.45	40.906		
1,100.0	1,099.4	1,080.3	1,076.8	1.9	2.3	-122.66	15.5	-145.8	158.7	154.9	3.81	41.645		
1,200.0	1,199.2	1,175.7	1,171.0	2.1	2.6	-123.27	18.9	-160.8	178.0	173.9	4.18	42.611		
1,300.0	1,299.0	1,270.4	1,264.2	2.3	2.9	-123.65	22.7	-177.2	199.0	194.4	4.55	43.747		
1,400.0	1,398.8	1,364.5	1,356.5	2.5	3.3	-123.85	26.7	-195.0	221.4	216.5	4.92	45.012		
1,500.0	1,498.5	1,457.9	1,447.8	2.7	3.6	-123.92	31.1	-214.1	245.4	240.2	5.29	46.377		
1,600.0	1,598.3	1,550.6	1,538.1	2.9	4.0	-123.89	35.8	-234.5	271.0	265.3	5.67	47.823		
1,700.0	1,698.1	1,642.4	1,627.2	3.2	4.4	-123.79	40.8	-256.1	298.0	292.0	6.04	49.337		
1,800.0	1,797.8	1,737.5	1,719.3	3.4	4.9	-123.66	46.1	-279.4	326.1	319.6	6.42	50.772		
1,900.0	1,897.6	1,833.5	1,812.2	3.6	5.3	-123.55	51.5	-303.0	354.1	347.3	6.81	52.031		
2,000.0	1,997.4	1,929.5	1,905.0	3.8	5.8	-123.45	56.9	-326.6	382.2	375.0	7.19	53.151		
2,100.0	2,097.1	2,025.5	1,997.9	4.0	6.2	-123.36	62.3	-350.1	410.3	402.7	7.58	54.152		
2,200.0	2,196.9	2,121.4	2,090.8	4.2	6.7	-123.29	67.8	-373.7	438.3	430.4	7.96	55.053		
2,300.0	2,296.7	2,217.4	2,183.7	4.4	7.1	-123.23	73.2	-397.3	466.4	458.1	8.35	55.867		
2,400.0	2,396.5	2,313.4	2,276.6	4.6	7.6	-123.17	78.6	-420.9	494.5	485.7	8.74	56.607		
2,500.0	2,496.2	2,409.4	2,369.4	4.8	8.1	-123.12	84.0	-444.5	522.6	513.4	9.12	57.282		
2,600.0	2,596.0	2,505.4	2,462.3	5.0	8.5	-123.07	89.4	-468.0	550.6	541.1	9.51	57.900		
2,700.0	2,695.8	2,601.3	2,555.2	5.2	9.0	-123.03	94.8	-491.6	578.7	568.8	9.90	58.468		
2,800.0	2,795.5	2,697.3	2,648.1	5.4	9.4	-122.99	100.2	-515.2	606.8	596.5	10.29	58.992		
2,900.0	2,895.3	2,793.3	2,741.0	5.6	9.9	-122.96	105.6	-538.8	634.8	624.2	10.67	59.476		
3,000.0	2,995.1	2,889.3	2,833.8	5.9	10.4	-122.93	111.0	-562.4	662.9	651.9	11.06	59.926		
3,100.0	3,094.9	2,985.2	2,926.7	6.1	10.8	-122.90	116.4	-585.9	691.0	679.5	11.45	60.344		
3,200.0	3,194.6	3,081.2	3,019.6	6.3	11.3	-122.87	121.9	-609.5	719.1	707.2	11.84	60.734		
3,300.0	3,294.4	3,177.2	3,112.5	6.5	11.7	-122.85	127.3	-633.1	747.1	734.9	12.23	61.099		
3,400.0	3,394.2	3,273.2	3,205.3	6.7	12.2	-122.83	132.7	-656.7	775.2	762.6	12.62	61.440		
3,500.0	3,493.9	3,369.2	3,298.2	6.9	12.7	-122.81	138.1	-680.2	803.3	790.3	13.01	61.761		
3,600.0	3,593.7	3,465.1	3,391.1	7.1	13.1	-122.79	143.5	-703.8	831.4	818.0	13.40	62.062		
3,700.0	3,693.5	3,561.1	3,484.0	7.3	13.6	-122.77	148.9	-727.4	859.4	845.7	13.78	62.346		
3,800.0	3,793.2	3,657.1	3,576.9	7.5	14.1	-122.75	154.3	-751.0	887.5	873.3	14.17	62.614		
3,900.0	3,893.0	3,753.1	3,669.7	7.7	14.5	-122.73	159.7	-774.6	915.6	901.0	14.56	62.868		
4,000.0	3,992.8	3,849.0	3,762.6	8.0	15.0	-122.72	165.1	-798.1	943.7	928.7	14.95	63.107		
4,100.0	4,092.6	3,945.0	3,855.5	8.2	15.4	-122.70	170.5	-821.7	971.7	956.4	15.34	63.335		
4,200.0	4,192.3	4,041.0	3,948.4	8.4	15.9	-122.69	176.0	-845.3	999.8	984.1	15.73	63.551		
4,300.0	4,292.1	4,137.0	4,041.3	8.6	16.4	-122.68	181.4	-868.9	1,027.9	1,011.8	16.12	63.756		
4,400.0	4,391.9	4,233.0	4,134.1	8.8	16.8	-122.67	186.8	-892.5	1,056.0	1,039.5	16.51	63.951		
4,500.0	4,491.6	4,328.9	4,227.0	9.0	17.3	-122.65	192.2	-916.0	1,084.0	1,067.1	16.90	64.137		
4,600.0	4,591.4	4,424.9	4,319.9	9.2	17.8	-122.64	197.6	-939.6	1,112.1	1,094.8	17.29	64.315		
4,700.0	4,691.2	4,520.9	4,412.8	9.4	18.2	-122.63	203.0	-963.2	1,140.2	1,122.5	17.68	64.484		
4,800.0	4,790.9	4,616.9	4,505.7	9.6	18.7	-122.62	208.4	-986.8	1,168.3	1,150.2	18.07	64.646		
4,900.0	4,890.7	4,712.8	4,598.5	9.8	19.2	-122.61	213.8	-1,010.3	1,196.3	1,177.9	18.46	64.802		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
5,000.0	4,990.5	4,808.8	4,691.4	10.1	19.6	-122.60	219.2	-1,033.9	1,224.4	1,205.6	18.85	64.950		
5,100.0	5,090.3	4,904.8	4,784.3	10.3	20.1	-122.60	224.7	-1,057.5	1,252.5	1,233.2	19.24	65.093		
5,200.0	5,190.0	5,000.8	4,877.2	10.5	20.6	-122.59	230.1	-1,081.1	1,280.6	1,260.9	19.63	65.229		
5,300.0	5,289.8	5,096.8	4,970.1	10.7	21.0	-122.58	235.5	-1,104.7	1,308.6	1,288.6	20.02	65.361		
5,400.0	5,389.6	5,192.7	5,062.9	10.9	21.5	-122.57	240.9	-1,128.2	1,336.7	1,316.3	20.41	65.487		
5,500.0	5,489.3	5,288.7	5,155.8	11.1	21.9	-122.57	246.3	-1,151.8	1,364.8	1,344.0	20.80	65.608		
5,600.0	5,589.1	5,384.7	5,248.7	11.3	22.4	-122.56	251.7	-1,175.4	1,392.9	1,371.7	21.19	65.725		
5,700.0	5,688.9	5,480.7	5,341.6	11.5	22.9	-122.55	257.1	-1,199.0	1,420.9	1,399.4	21.58	65.837		
5,800.0	5,788.7	5,576.6	5,434.4	11.7	23.3	-122.55	262.5	-1,222.6	1,449.0	1,427.0	21.97	65.946		
5,900.0	5,888.4	5,672.6	5,527.3	11.9	23.8	-122.54	267.9	-1,246.1	1,477.1	1,454.7	22.36	66.050		
6,000.0	5,988.2	5,768.6	5,620.2	12.2	24.3	-122.53	273.3	-1,269.7	1,505.2	1,482.4	22.75	66.151		
6,100.0	6,088.0	5,864.6	5,713.1	12.4	24.7	-122.53	278.8	-1,293.3	1,533.2	1,510.1	23.14	66.249		
6,200.0	6,187.7	5,960.6	5,806.0	12.6	25.2	-122.52	284.2	-1,316.9	1,561.3	1,537.8	23.53	66.343		
6,300.0	6,287.5	6,056.5	5,898.8	12.8	25.7	-122.52	289.6	-1,340.4	1,589.4	1,565.5	23.92	66.434		
6,400.0	6,387.3	6,152.5	5,991.7	13.0	26.1	-122.51	295.0	-1,364.0	1,617.5	1,593.2	24.31	66.522		
6,500.0	6,487.0	6,248.5	6,084.6	13.2	26.6	-122.51	300.4	-1,387.6	1,645.5	1,620.8	24.71	66.607		
6,600.0	6,586.8	6,344.5	6,177.5	13.4	27.1	-122.50	305.8	-1,411.2	1,673.6	1,648.5	25.10	66.690		
6,700.0	6,686.6	6,440.4	6,270.4	13.6	27.5	-122.50	311.2	-1,434.8	1,701.7	1,676.2	25.49	66.770		
6,787.0	6,773.4	6,523.9	6,351.2	13.8	27.9	-122.49	315.9	-1,455.3	1,726.1	1,700.3	25.83	66.838		
6,800.0	6,786.4	6,536.4	6,363.2	13.8	28.0	-133.32	316.6	-1,458.3	1,729.8	1,703.8	25.92	66.722		
6,850.0	6,836.3	6,584.3	6,409.6	13.9	28.2	138.48	319.3	-1,470.1	1,743.8	1,717.5	26.28	66.355		
6,900.0	6,886.2	6,631.9	6,455.7	14.0	28.5	107.66	322.0	-1,481.8	1,757.7	1,731.1	26.60	66.075		
6,950.0	6,935.7	6,679.0	6,501.2	14.0	28.7	99.00	324.7	-1,493.4	1,771.6	1,744.7	26.89	65.893		
7,000.0	6,984.6	6,725.3	6,546.0	14.0	28.9	94.86	327.3	-1,504.7	1,785.3	1,758.2	27.13	65.812		
7,050.0	7,032.6	6,770.7	6,589.9	14.0	29.1	92.33	329.8	-1,515.9	1,799.0	1,771.7	27.33	65.830		
7,100.0	7,079.7	6,814.8	6,632.6	13.9	29.3	90.59	332.3	-1,526.7	1,812.5	1,785.1	27.49	65.941		
7,150.0	7,125.4	6,857.5	6,673.9	13.9	29.6	89.30	334.7	-1,537.2	1,826.0	1,798.4	27.61	66.135		
7,200.0	7,169.6	6,898.6	6,713.7	13.8	29.8	88.28	337.0	-1,547.3	1,839.5	1,811.8	27.70	66.399		
7,250.0	7,212.1	6,937.8	6,751.6	13.8	29.9	87.45	339.2	-1,556.9	1,853.0	1,825.3	27.78	66.714		
7,300.0	7,252.6	6,975.0	6,787.7	13.7	30.1	86.74	341.3	-1,566.1	1,866.6	1,838.8	27.83	67.065		
7,350.0	7,291.0	7,018.7	6,830.0	13.7	30.3	86.27	343.0	-1,576.8	1,880.3	1,852.5	27.85	67.517		
7,400.0	7,327.1	7,067.9	6,877.6	13.7	30.5	85.97	341.7	-1,588.9	1,894.0	1,866.1	27.83	68.059		
7,450.0	7,360.7	7,120.7	6,928.5	13.7	30.8	85.78	336.6	-1,601.8	1,907.5	1,879.7	27.78	68.666		
7,500.0	7,391.6	7,177.9	6,983.2	13.7	31.0	85.73	326.7	-1,615.7	1,920.7	1,893.0	27.71	69.328		
7,550.0	7,419.7	7,240.8	7,042.1	13.8	31.2	85.80	310.7	-1,630.7	1,933.7	1,906.1	27.61	70.027		
7,600.0	7,444.8	7,310.7	7,105.7	13.9	31.4	86.03	286.7	-1,646.8	1,946.2	1,918.7	27.51	70.746		
7,650.0	7,466.9	7,389.4	7,174.2	14.1	31.7	86.41	252.2	-1,664.2	1,958.1	1,930.7	27.41	71.436		
7,700.0	7,485.8	7,478.8	7,247.1	14.3	31.9	86.95	203.8	-1,682.7	1,969.1	1,941.8	27.35	72.005		
7,750.0	7,501.5	7,581.4	7,322.7	14.6	32.2	87.63	137.3	-1,701.9	1,979.1	1,951.7	27.38	72.283		
7,800.0	7,513.7	7,699.2	7,397.1	14.9	32.5	88.40	48.2	-1,720.8	1,987.5	1,959.9	27.61	71.980		
7,850.0	7,522.6	7,833.0	7,463.2	15.2	32.9	89.16	-66.6	-1,737.6	1,994.2	1,965.9	28.22	70.674		
7,900.0	7,528.0	7,981.2	7,510.9	15.6	33.3	89.73	-206.2	-1,749.7	1,998.4	1,969.1	29.34	68.117		
7,952.9	7,530.0	8,147.7	7,530.0	16.1	34.0	89.97	-371.2	-1,754.5	2,000.1	1,968.9	31.14	64.226		
8,000.0	7,530.0	8,196.2	7,530.0	16.5	34.2	89.97	-419.6	-1,754.5	2,000.1	1,968.0	32.06	62.383		
8,100.0	7,530.0	8,296.2	7,530.0	17.5	34.7	89.97	-519.6	-1,754.5	2,000.1	1,965.9	34.17	58.525		
8,200.0	7,530.0	8,396.2	7,530.0	18.7	35.2	89.97	-619.6	-1,754.5	2,000.1	1,963.6	36.50	54.793		
8,300.0	7,530.0	8,496.2	7,530.0	19.9	35.9	89.97	-719.6	-1,754.5	2,000.1	1,961.1	39.01	51.275		
8,400.0	7,530.0	8,596.2	7,530.0	21.2	36.6	89.97	-819.6	-1,754.5	2,000.1	1,958.4	41.66	48.013		
8,500.0	7,530.0	8,696.2	7,530.0	22.6	37.4	89.97	-919.6	-1,754.5	2,000.1	1,955.6	44.43	45.021		
8,600.0	7,530.0	8,796.2	7,530.0	24.0	38.2	89.97	-1,019.6	-1,754.5	2,000.1	1,952.8	47.29	42.291		
8,700.0	7,530.0	8,896.2	7,530.0	25.4	39.1	89.97	-1,119.6	-1,754.5	2,000.1	1,949.8	50.24	39.809		
8,800.0	7,530.0	8,996.2	7,530.0	26.9	40.1	89.97	-1,219.6	-1,754.5	2,000.1	1,946.8	53.26	37.554		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,530.0	9,096.2	7,530.0	28.4	41.1	89.97	-1,319.6	-1,754.5	2,000.1	1,943.7	56.33	35.505		
9,000.0	7,530.0	9,196.2	7,530.0	30.0	42.2	89.97	-1,419.6	-1,754.5	2,000.1	1,940.6	59.45	33.641		
9,100.0	7,530.0	9,296.2	7,530.0	31.5	43.3	89.97	-1,519.6	-1,754.5	2,000.1	1,937.5	62.62	31.942		
9,200.0	7,530.0	9,396.2	7,530.0	33.1	44.5	89.97	-1,619.6	-1,754.5	2,000.1	1,934.3	65.81	30.390		
9,300.0	7,530.0	9,496.2	7,530.0	34.7	45.6	89.97	-1,719.6	-1,754.5	2,000.1	1,931.0	69.04	28.969		
9,400.0	7,530.0	9,596.2	7,530.0	36.3	46.9	89.97	-1,819.6	-1,754.5	2,000.1	1,927.8	72.29	27.666		
9,500.0	7,530.0	9,696.2	7,530.0	38.0	48.1	89.97	-1,919.6	-1,754.5	2,000.1	1,924.5	75.57	26.466		
9,600.0	7,530.0	9,796.2	7,530.0	39.6	49.4	89.97	-2,019.6	-1,754.5	2,000.1	1,921.2	78.87	25.360		
9,700.0	7,530.0	9,896.2	7,530.0	41.3	50.8	89.97	-2,119.6	-1,754.5	2,000.1	1,917.9	82.18	24.337		
9,800.0	7,530.0	9,996.2	7,530.0	42.9	52.1	89.97	-2,219.6	-1,754.5	2,000.1	1,914.6	85.51	23.390		
9,900.0	7,530.0	10,096.2	7,530.0	44.6	53.5	89.97	-2,319.6	-1,754.5	2,000.1	1,911.2	88.85	22.510		
10,000.0	7,530.0	10,196.2	7,530.0	46.3	54.9	89.97	-2,419.6	-1,754.5	2,000.1	1,907.9	92.21	21.690		
10,100.0	7,530.0	10,296.2	7,530.0	47.9	56.3	89.97	-2,519.6	-1,754.5	2,000.1	1,904.5	95.58	20.926		
10,200.0	7,530.0	10,396.2	7,530.0	49.6	57.7	89.97	-2,619.6	-1,754.5	2,000.1	1,901.1	98.95	20.212		
10,300.0	7,530.0	10,496.2	7,530.0	51.3	59.2	89.97	-2,719.6	-1,754.5	2,000.1	1,897.7	102.34	19.544		
10,400.0	7,530.0	10,596.2	7,530.0	53.0	60.6	89.97	-2,819.6	-1,754.5	2,000.1	1,894.3	105.73	18.917		
10,500.0	7,530.0	10,696.2	7,530.0	54.7	62.1	89.97	-2,919.6	-1,754.5	2,000.1	1,890.9	109.13	18.327		
10,600.0	7,530.0	10,796.2	7,530.0	56.4	63.6	89.97	-3,019.6	-1,754.5	2,000.1	1,887.5	112.54	17.772		
10,700.0	7,530.0	10,896.2	7,530.0	58.1	65.1	89.97	-3,119.6	-1,754.5	2,000.1	1,884.1	115.95	17.249		
10,800.0	7,530.0	10,996.2	7,530.0	59.8	66.7	89.97	-3,219.6	-1,754.5	2,000.1	1,880.7	119.37	16.755		
10,900.0	7,530.0	11,096.2	7,530.0	61.5	68.2	89.97	-3,319.6	-1,754.5	2,000.1	1,877.3	122.79	16.288		
11,000.0	7,530.0	11,196.2	7,530.0	63.2	69.7	89.97	-3,419.6	-1,754.5	2,000.1	1,873.9	126.22	15.846		
11,100.0	7,530.0	11,296.2	7,530.0	64.9	71.3	89.97	-3,519.6	-1,754.5	2,000.1	1,870.4	129.65	15.426		
11,200.0	7,530.0	11,396.2	7,530.0	66.6	72.9	89.97	-3,619.6	-1,754.5	2,000.1	1,867.0	133.09	15.028		
11,300.0	7,530.0	11,496.2	7,530.0	68.4	74.4	89.97	-3,719.6	-1,754.5	2,000.1	1,863.5	136.53	14.649		
11,400.0	7,530.0	11,596.2	7,530.0	70.1	76.0	89.97	-3,819.6	-1,754.5	2,000.1	1,860.1	139.98	14.289		
11,500.0	7,530.0	11,696.2	7,530.0	71.8	77.6	89.97	-3,919.6	-1,754.5	2,000.1	1,856.7	143.42	13.945		
11,600.0	7,530.0	11,796.2	7,530.0	73.5	79.2	89.97	-4,019.6	-1,754.5	2,000.1	1,853.2	146.87	13.618		
11,700.0	7,530.0	11,896.2	7,530.0	75.2	80.8	89.97	-4,119.6	-1,754.5	2,000.1	1,849.8	150.32	13.305		
11,800.0	7,530.0	11,996.2	7,530.0	77.0	82.4	89.97	-4,219.6	-1,754.5	2,000.1	1,846.3	153.78	13.006		
11,900.0	7,530.0	12,096.2	7,530.0	78.7	84.0	89.97	-4,319.6	-1,754.5	2,000.1	1,842.8	157.24	12.720		
12,000.0	7,530.0	12,196.2	7,530.0	80.4	85.6	89.97	-4,419.6	-1,754.5	2,000.1	1,839.4	160.69	12.446		
12,100.0	7,530.0	12,296.2	7,530.0	82.2	87.3	89.97	-4,519.6	-1,754.5	2,000.1	1,835.9	164.16	12.184		
12,200.0	7,530.0	12,396.2	7,530.0	83.9	88.9	89.97	-4,619.6	-1,754.5	2,000.1	1,832.5	167.62	11.932		
12,300.0	7,530.0	12,496.2	7,530.0	85.6	90.5	89.97	-4,719.6	-1,754.5	2,000.1	1,829.0	171.08	11.691		
12,400.0	7,530.0	12,596.2	7,530.0	87.3	92.2	89.97	-4,819.6	-1,754.6	2,000.1	1,825.5	174.55	11.458		
12,500.0	7,530.0	12,696.2	7,530.0	89.1	93.8	89.97	-4,919.6	-1,754.6	2,000.1	1,822.1	178.02	11.235		
12,600.0	7,530.0	12,796.2	7,530.0	90.8	95.5	89.97	-5,019.6	-1,754.6	2,000.1	1,818.6	181.49	11.020		
12,700.0	7,530.0	12,896.2	7,530.0	92.5	97.1	89.97	-5,119.6	-1,754.6	2,000.1	1,815.1	184.96	10.814		
12,800.0	7,530.0	12,996.2	7,530.0	94.3	98.8	89.97	-5,219.6	-1,754.6	2,000.1	1,811.7	188.43	10.614		
12,900.0	7,530.0	13,096.2	7,530.0	96.0	100.4	89.97	-5,319.6	-1,754.6	2,000.1	1,808.2	191.91	10.422		
13,000.0	7,530.0	13,196.2	7,530.0	97.8	102.1	89.97	-5,419.6	-1,754.6	2,000.1	1,804.7	195.38	10.237		
13,100.0	7,530.0	13,296.2	7,530.0	99.5	103.7	89.97	-5,519.6	-1,754.6	2,000.1	1,801.2	198.86	10.058		
13,200.0	7,530.0	13,396.2	7,530.0	101.2	105.4	89.97	-5,619.6	-1,754.6	2,000.1	1,797.7	202.34	9.885		
13,300.0	7,530.0	13,496.2	7,530.0	103.0	107.1	89.97	-5,719.6	-1,754.6	2,000.1	1,794.3	205.82	9.718		
13,400.0	7,530.0	13,596.2	7,530.0	104.7	108.8	89.97	-5,819.6	-1,754.6	2,000.1	1,790.8	209.30	9.556		
13,500.0	7,530.0	13,696.2	7,530.0	106.4	110.4	89.97	-5,919.6	-1,754.6	2,000.1	1,787.3	212.78	9.400		
13,600.0	7,530.0	13,796.2	7,530.0	108.2	112.1	89.97	-6,019.6	-1,754.6	2,000.1	1,783.8	216.26	9.249		
13,700.0	7,530.0	13,896.2	7,530.0	109.9	113.8	89.97	-6,119.6	-1,754.6	2,000.1	1,780.3	219.74	9.102		
13,800.0	7,530.0	13,996.2	7,530.0	111.7	115.5	89.97	-6,219.6	-1,754.6	2,000.1	1,776.9	223.22	8.960		
13,900.0	7,530.0	14,096.2	7,530.0	113.4	117.2	89.97	-6,319.6	-1,754.6	2,000.1	1,773.4	226.71	8.822		
14,000.0	7,530.0	14,196.2	7,530.0	115.1	118.8	89.97	-6,419.6	-1,754.6	2,000.1	1,769.9	230.19	8.689		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,100.0	7,530.0	14,296.2	7,530.0	116.9	120.5	89.97	-6,519.6	-1,754.6	2,000.1	1,766.4	233.68	8.559		
14,200.0	7,530.0	14,396.2	7,530.0	118.6	122.2	89.97	-6,619.6	-1,754.6	2,000.1	1,762.9	237.16	8.433		
14,300.0	7,530.0	14,496.2	7,530.0	120.4	123.9	89.97	-6,719.6	-1,754.6	2,000.1	1,759.4	240.65	8.311		
14,400.0	7,530.0	14,596.2	7,530.0	122.1	125.6	89.97	-6,819.6	-1,754.6	2,000.1	1,756.0	244.14	8.193		
14,500.0	7,530.0	14,696.2	7,530.0	123.9	127.3	89.97	-6,919.6	-1,754.6	2,000.1	1,752.5	247.62	8.077		
14,600.0	7,530.0	14,796.2	7,530.0	125.6	129.0	89.97	-7,019.6	-1,754.6	2,000.1	1,749.0	251.11	7.965		
14,700.0	7,530.0	14,896.2	7,530.0	127.3	130.7	89.97	-7,119.6	-1,754.6	2,000.1	1,745.5	254.60	7.856		
14,800.0	7,530.0	14,996.2	7,530.0	129.1	132.4	89.97	-7,219.6	-1,754.6	2,000.1	1,742.0	258.09	7.750		
14,900.0	7,530.0	15,096.2	7,530.0	130.8	134.1	89.97	-7,319.6	-1,754.6	2,000.1	1,738.5	261.58	7.646		
15,000.0	7,530.0	15,196.2	7,530.0	132.6	135.8	89.97	-7,419.6	-1,754.6	2,000.1	1,735.0	265.07	7.545		
15,100.0	7,530.0	15,296.2	7,530.0	134.3	137.5	89.97	-7,519.6	-1,754.6	2,000.1	1,731.5	268.56	7.447		
15,200.0	7,530.0	15,396.2	7,530.0	136.1	139.2	89.97	-7,619.6	-1,754.6	2,000.1	1,728.0	272.05	7.352		
15,300.0	7,530.0	15,496.2	7,530.0	137.8	140.9	89.97	-7,719.6	-1,754.6	2,000.1	1,724.5	275.54	7.259		
15,400.0	7,530.0	15,596.2	7,530.0	139.6	142.6	89.97	-7,819.6	-1,754.6	2,000.1	1,721.1	279.04	7.168		
15,500.0	7,530.0	15,696.2	7,530.0	141.3	144.3	89.97	-7,919.6	-1,754.6	2,000.1	1,717.6	282.53	7.079		
15,600.0	7,530.0	15,796.2	7,530.0	143.0	146.0	89.97	-8,019.6	-1,754.6	2,000.1	1,714.1	286.02	6.993		
15,700.0	7,530.0	15,896.2	7,530.0	144.8	147.8	89.97	-8,119.6	-1,754.6	2,000.1	1,710.6	289.52	6.908		
15,800.0	7,530.0	15,996.2	7,530.0	146.5	149.5	89.97	-8,219.6	-1,754.6	2,000.1	1,707.1	293.01	6.826		
15,900.0	7,530.0	16,096.2	7,530.0	148.3	151.2	89.97	-8,319.6	-1,754.6	2,000.1	1,703.6	296.50	6.746		
16,000.0	7,530.0	16,196.2	7,530.0	150.0	152.9	89.97	-8,419.6	-1,754.6	2,000.1	1,700.1	300.00	6.667		
16,100.0	7,530.0	16,296.2	7,530.0	151.8	154.6	89.97	-8,519.6	-1,754.6	2,000.1	1,696.6	303.49	6.590		
16,200.0	7,530.0	16,396.2	7,530.0	153.5	156.3	89.97	-8,619.6	-1,754.6	2,000.1	1,693.1	306.99	6.515		
16,300.0	7,530.0	16,496.2	7,530.0	155.3	158.0	89.97	-8,719.6	-1,754.6	2,000.1	1,689.6	310.48	6.442		
16,400.0	7,530.0	16,596.2	7,530.0	157.0	159.8	89.97	-8,819.6	-1,754.6	2,000.1	1,686.1	313.98	6.370		
16,500.0	7,530.0	16,696.2	7,530.0	158.8	161.5	89.97	-8,919.6	-1,754.6	2,000.1	1,682.6	317.47	6.300		
16,600.0	7,530.0	16,796.2	7,530.0	160.5	163.2	89.97	-9,019.6	-1,754.6	2,000.1	1,679.1	320.97	6.231		
16,700.0	7,530.0	16,896.2	7,530.0	162.3	164.9	89.97	-9,119.6	-1,754.6	2,000.1	1,675.6	324.47	6.164		
16,800.0	7,530.0	16,996.2	7,530.0	164.0	166.6	89.97	-9,219.6	-1,754.6	2,000.1	1,672.1	327.96	6.099		
16,900.0	7,530.0	17,096.2	7,530.0	165.8	168.4	89.97	-9,319.6	-1,754.6	2,000.1	1,668.6	331.46	6.034		
17,000.0	7,530.0	17,196.2	7,530.0	167.5	170.1	89.97	-9,419.6	-1,754.6	2,000.1	1,665.1	334.96	5.971		
17,100.0	7,530.0	17,296.2	7,530.0	169.3	171.8	89.97	-9,519.6	-1,754.6	2,000.1	1,661.6	338.45	5.910		
17,200.0	7,530.0	17,396.2	7,530.0	171.0	173.5	89.97	-9,619.6	-1,754.6	2,000.1	1,658.1	341.95	5.849		
17,300.0	7,530.0	17,496.2	7,530.0	172.8	175.2	89.97	-9,719.6	-1,754.6	2,000.1	1,654.7	345.45	5.790		
17,358.8	7,530.0	17,554.9	7,530.0	173.8	176.3	89.97	-9,778.4	-1,754.6	2,000.1	1,652.6	347.50	5.756		
17,400.0	7,530.0	17,589.7	7,530.0	174.5	176.9	89.97	-9,813.2	-1,754.6	2,000.1	1,651.3	348.83	5.734		
17,420.9	7,530.0	17,589.7	7,530.0	174.9	176.9	89.97	-9,813.2	-1,754.6	2,000.3	1,651.1	349.20	5.728 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
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		
200.0	200.0	201.0	201.0	0.3	0.3	-89.70	0.4	-70.0	70.0	69.3	0.65	106.899		
247.0	247.0	248.0	248.0	0.4	0.4	-89.70	0.4	-70.0	70.0	69.1	0.82	85.487	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-89.66	0.4	-70.2	70.2	69.2	1.00	70.054		
400.0	400.0	399.2	399.2	0.7	0.7	-89.31	0.9	-71.8	71.9	70.5	1.35	53.213		
500.0	500.0	497.9	497.8	0.8	0.9	-88.67	1.8	-75.1	75.2	73.5	1.70	44.219		
600.0	600.0	596.5	596.3	1.0	1.0	-87.80	3.1	-80.1	80.3	78.2	2.06	39.043		
700.0	700.0	694.8	694.4	1.2	1.2	-119.72	4.8	-86.6	87.5	85.1	2.39	36.566		
800.0	800.0	792.8	792.0	1.4	1.5	-119.89	7.0	-94.8	97.2	94.4	2.74	35.449		
900.0	899.9	890.3	889.0	1.6	1.7	-120.59	9.6	-104.5	109.4	106.3	3.09	35.357		
988.4	988.1	976.1	974.1	1.7	1.9	-121.47	12.2	-114.3	122.3	118.9	3.41	35.856		
1,000.0	999.7	987.3	985.2	1.7	1.9	-121.61	12.6	-115.7	124.2	120.7	3.45	35.953		
1,100.0	1,099.4	1,083.7	1,080.7	1.9	2.2	-122.55	16.0	-128.5	141.0	137.1	3.82	36.909		
1,200.0	1,199.2	1,179.5	1,175.5	2.1	2.5	-123.13	19.8	-142.6	159.4	155.2	4.19	38.053		
1,300.0	1,299.0	1,274.8	1,269.4	2.3	2.8	-123.44	24.0	-158.3	179.4	174.8	4.56	39.334		
1,400.0	1,398.8	1,369.5	1,362.3	2.5	3.2	-123.56	28.6	-175.3	200.9	196.0	4.93	40.720		
1,500.0	1,498.5	1,463.4	1,454.4	2.7	3.5	-123.54	33.5	-193.6	224.0	218.7	5.31	42.191		
1,600.0	1,598.3	1,560.6	1,549.3	2.9	3.9	-123.47	38.7	-213.3	247.8	242.1	5.69	43.541		
1,700.0	1,698.1	1,657.7	1,644.3	3.2	4.3	-123.41	44.0	-233.0	271.7	265.6	6.08	44.712		
1,800.0	1,797.8	1,754.8	1,739.2	3.4	4.7	-123.37	49.3	-252.8	295.5	289.1	6.46	45.735		
1,900.0	1,897.6	1,851.9	1,834.2	3.6	5.0	-123.32	54.6	-272.5	319.4	312.5	6.85	46.637		
2,000.0	1,997.4	1,949.0	1,929.1	3.8	5.4	-123.29	59.8	-292.2	343.2	336.0	7.23	47.438		
2,100.0	2,097.1	2,046.1	2,024.1	4.0	5.8	-123.26	65.1	-311.9	367.0	359.4	7.62	48.153		
2,200.0	2,196.9	2,143.3	2,119.0	4.2	6.2	-123.23	70.4	-331.6	390.9	382.9	8.01	48.795		
2,300.0	2,296.7	2,240.4	2,214.0	4.4	6.6	-123.21	75.7	-351.3	414.7	406.3	8.40	49.376		
2,400.0	2,396.5	2,337.5	2,308.9	4.6	7.0	-123.19	80.9	-371.0	438.6	429.8	8.79	49.902		
2,500.0	2,496.2	2,434.6	2,403.9	4.8	7.4	-123.17	86.2	-390.7	462.4	453.2	9.18	50.382		
2,600.0	2,596.0	2,531.7	2,498.8	5.0	7.8	-123.15	91.5	-410.4	486.2	476.7	9.57	50.821		
2,700.0	2,695.8	2,628.8	2,593.8	5.2	8.2	-123.13	96.8	-430.1	510.1	500.1	9.96	51.225		
2,800.0	2,795.5	2,726.0	2,688.7	5.4	8.6	-123.12	102.0	-449.8	533.9	523.6	10.35	51.596		
2,900.0	2,895.3	2,823.1	2,783.7	5.6	9.0	-123.11	107.3	-469.5	557.8	547.0	10.74	51.940		
3,000.0	2,995.1	2,920.2	2,878.6	5.9	9.4	-123.10	112.6	-489.2	581.6	570.5	11.13	52.259		
3,100.0	3,094.9	3,017.3	2,973.6	6.1	9.8	-123.08	117.9	-509.0	605.5	593.9	11.52	52.555		
3,200.0	3,194.6	3,114.4	3,068.5	6.3	10.2	-123.07	123.2	-528.7	629.3	617.4	11.91	52.831		
3,300.0	3,294.4	3,211.5	3,163.5	6.5	10.6	-123.06	128.4	-548.4	653.1	640.8	12.30	53.088		
3,400.0	3,394.2	3,308.7	3,258.4	6.7	11.0	-123.06	133.7	-568.1	677.0	664.3	12.69	53.330		
3,500.0	3,493.9	3,405.8	3,353.4	6.9	11.4	-123.05	139.0	-587.8	700.8	687.7	13.09	53.556		
3,600.0	3,593.7	3,502.9	3,448.3	7.1	11.8	-123.04	144.3	-607.5	724.7	711.2	13.48	53.769		
3,700.0	3,693.5	3,600.0	3,543.3	7.3	12.2	-123.03	149.5	-627.2	748.5	734.6	13.87	53.969		
3,800.0	3,793.2	3,697.1	3,638.2	7.5	12.6	-123.03	154.8	-646.9	772.3	758.1	14.26	54.158		
3,900.0	3,893.0	3,794.2	3,733.2	7.7	13.0	-123.02	160.1	-666.6	796.2	781.5	14.65	54.337		
4,000.0	3,992.8	3,891.3	3,828.1	8.0	13.4	-123.01	165.4	-686.3	820.0	805.0	15.04	54.506		
4,100.0	4,092.6	3,988.5	3,923.1	8.2	13.8	-123.01	170.6	-706.0	843.9	828.4	15.44	54.666		
4,200.0	4,192.3	4,085.6	4,018.0	8.4	14.2	-123.00	175.9	-725.7	867.7	851.9	15.83	54.818		
4,300.0	4,292.1	4,182.7	4,113.0	8.6	14.6	-123.00	181.2	-745.5	891.6	875.3	16.22	54.963		
4,400.0	4,391.9	4,279.8	4,207.9	8.8	15.0	-122.99	186.5	-765.2	915.4	898.8	16.61	55.100		
4,500.0	4,491.6	4,376.9	4,302.9	9.0	15.4	-122.99	191.7	-784.9	939.2	922.2	17.01	55.231		
4,600.0	4,591.4	4,474.0	4,397.8	9.2	15.8	-122.98	197.0	-804.6	963.1	945.7	17.40	55.356		
4,700.0	4,691.2	4,571.2	4,492.8	9.4	16.2	-122.98	202.3	-824.3	986.9	969.1	17.79	55.475		
4,800.0	4,790.9	4,668.3	4,587.7	9.6	16.6	-122.98	207.6	-844.0	1,010.8	992.6	18.18	55.589		
4,900.0	4,890.7	4,765.4	4,682.7	9.8	17.0	-122.97	212.8	-863.7	1,034.6	1,016.0	18.58	55.698		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,000.0	4,990.5	4,862.5	4,777.6	10.1	17.4	-122.97	218.1	-883.4	1,058.4	1,039.5	18.97	55.803		
5,100.0	5,090.3	4,959.6	4,872.6	10.3	17.8	-122.97	223.4	-903.1	1,082.3	1,062.9	19.36	55.903		
5,200.0	5,190.0	5,056.7	4,967.5	10.5	18.2	-122.96	228.7	-922.8	1,106.1	1,086.4	19.75	55.999		
5,300.0	5,289.8	5,153.9	5,062.5	10.7	18.6	-122.96	233.9	-942.5	1,130.0	1,109.8	20.15	56.091		
5,400.0	5,389.6	5,251.0	5,157.4	10.9	19.0	-122.96	239.2	-962.2	1,153.8	1,133.3	20.54	56.180		
5,500.0	5,489.3	5,348.1	5,252.4	11.1	19.4	-122.95	244.5	-982.0	1,177.7	1,156.7	20.93	56.265		
5,600.0	5,589.1	5,445.2	5,347.3	11.3	19.8	-122.95	249.8	-1,001.7	1,201.5	1,180.2	21.32	56.347		
5,700.0	5,688.9	5,542.3	5,442.3	11.5	20.2	-122.95	255.0	-1,021.4	1,225.3	1,203.6	21.72	56.426		
5,800.0	5,788.7	5,639.4	5,537.2	11.7	20.6	-122.95	260.3	-1,041.1	1,249.2	1,227.1	22.11	56.502		
5,900.0	5,888.4	5,736.6	5,632.2	11.9	21.0	-122.94	265.6	-1,060.8	1,273.0	1,250.5	22.50	56.575		
6,000.0	5,988.2	5,833.7	5,727.1	12.2	21.4	-122.94	270.9	-1,080.5	1,296.9	1,274.0	22.89	56.646		
6,100.0	6,088.0	5,930.8	5,822.0	12.4	21.8	-122.94	276.1	-1,100.2	1,320.7	1,297.4	23.29	56.714		
6,200.0	6,187.7	6,027.9	5,917.0	12.6	22.2	-122.94	281.4	-1,119.9	1,344.5	1,320.9	23.68	56.780		
6,300.0	6,287.5	6,125.0	6,011.9	12.8	22.6	-122.93	286.7	-1,139.6	1,368.4	1,344.3	24.07	56.844		
6,400.0	6,387.3	6,222.1	6,106.9	13.0	23.0	-122.93	292.0	-1,159.3	1,392.2	1,367.8	24.47	56.906		
6,500.0	6,487.0	6,319.3	6,201.8	13.2	23.4	-122.93	297.2	-1,179.0	1,416.1	1,391.2	24.86	56.965		
6,600.0	6,586.8	6,416.4	6,296.8	13.4	23.8	-122.93	302.5	-1,198.7	1,439.9	1,414.7	25.25	57.023		
6,700.0	6,686.6	6,513.5	6,391.7	13.6	24.2	-122.93	307.8	-1,218.4	1,463.8	1,438.1	25.64	57.079		
6,787.0	6,773.4	6,598.0	6,474.3	13.8	24.5	-122.93	312.4	-1,235.6	1,484.5	1,458.5	25.99	57.127		
6,800.0	6,786.4	6,610.6	6,486.7	13.8	24.6	-133.70	313.1	-1,238.2	1,487.6	1,461.5	26.07	57.063		
6,850.0	6,836.3	6,659.1	6,534.1	13.9	24.8	138.29	315.7	-1,248.0	1,499.5	1,473.1	26.36	56.892		
6,900.0	6,886.2	6,707.3	6,581.2	14.0	25.0	107.70	318.3	-1,257.8	1,511.3	1,484.7	26.61	56.802		
6,950.0	6,935.7	6,754.9	6,627.8	14.0	25.1	99.28	320.9	-1,267.4	1,523.0	1,496.2	26.81	56.799		
7,000.0	6,984.6	6,801.8	6,673.7	14.0	25.3	95.38	323.5	-1,277.0	1,534.6	1,507.7	26.98	56.880		
7,050.0	7,032.6	6,847.8	6,718.5	14.0	25.5	93.11	326.0	-1,286.3	1,546.2	1,519.1	27.11	57.040		
7,100.0	7,079.7	6,892.4	6,762.2	13.9	25.7	91.63	328.4	-1,295.4	1,557.8	1,530.6	27.20	57.273		
7,150.0	7,125.4	6,935.7	6,804.5	13.9	25.9	90.60	330.7	-1,304.1	1,569.4	1,542.1	27.26	57.568		
7,200.0	7,169.6	6,977.3	6,845.2	13.8	26.1	89.85	333.0	-1,312.6	1,581.1	1,553.8	27.30	57.911		
7,250.0	7,212.1	7,017.1	6,884.1	13.8	26.2	89.27	335.2	-1,320.7	1,593.0	1,565.6	27.33	58.287		
7,300.0	7,252.6	7,054.9	6,921.0	13.7	26.4	88.80	337.2	-1,328.3	1,605.1	1,577.8	27.35	58.680		
7,350.0	7,291.0	7,090.4	6,955.8	13.7	26.5	88.38	339.1	-1,335.5	1,617.7	1,590.3	27.38	59.072		
7,400.0	7,327.1	7,123.5	6,988.2	13.7	26.7	87.97	340.9	-1,342.2	1,630.6	1,603.2	27.43	59.448		
7,450.0	7,360.7	7,154.1	7,018.1	13.7	26.8	87.54	342.6	-1,348.4	1,644.1	1,616.6	27.50	59.792		
7,500.0	7,391.6	7,192.4	7,055.5	13.7	26.9	87.35	344.2	-1,356.2	1,658.1	1,630.5	27.57	60.149		
7,550.0	7,419.7	7,242.2	7,104.2	13.8	27.1	87.49	343.4	-1,366.3	1,672.4	1,644.8	27.62	60.544		
7,600.0	7,444.8	7,298.1	7,158.8	13.9	27.3	87.80	338.4	-1,377.7	1,686.9	1,659.2	27.68	60.934		
7,650.0	7,466.9	7,362.6	7,221.0	14.1	27.5	88.32	327.3	-1,390.6	1,701.5	1,673.7	27.74	61.334		
7,700.0	7,485.8	7,439.6	7,293.5	14.3	27.7	89.14	306.6	-1,405.6	1,716.0	1,688.2	27.79	61.740		
7,750.0	7,501.5	7,535.1	7,379.9	14.6	28.0	90.37	270.0	-1,423.6	1,730.0	1,702.2	27.83	62.165		
7,800.0	7,513.7	7,658.9	7,483.3	14.9	28.2	92.12	205.8	-1,445.0	1,743.3	1,715.4	27.87	62.555		
7,850.0	7,522.6	7,824.9	7,602.1	15.2	28.5	94.37	93.1	-1,469.7	1,754.7	1,726.7	28.04	62.590		
7,900.0	7,528.0	8,046.9	7,715.6	15.6	29.1	96.66	-95.2	-1,493.2	1,763.0	1,734.2	28.81	61.200		
7,952.9	7,530.0	8,331.6	7,770.0	16.1	30.2	97.78	-372.6	-1,504.5	1,766.3	1,735.2	31.11	56.769		
8,000.0	7,530.0	8,378.7	7,770.0	16.5	30.4	97.78	-419.6	-1,504.5	1,766.3	1,734.3	32.02	55.169		
8,100.0	7,530.0	8,478.7	7,770.0	17.5	31.0	97.78	-519.6	-1,504.5	1,766.3	1,732.2	34.11	51.790		
8,200.0	7,530.0	8,578.7	7,770.0	18.7	31.6	97.78	-619.6	-1,504.5	1,766.3	1,729.9	36.40	48.521		
8,300.0	7,530.0	8,678.7	7,770.0	19.9	32.4	97.78	-719.6	-1,504.5	1,766.3	1,727.4	38.88	45.434		
8,400.0	7,530.0	8,778.7	7,770.0	21.2	33.2	97.78	-819.6	-1,504.5	1,766.3	1,724.8	41.49	42.568		
8,500.0	7,530.0	8,878.7	7,770.0	22.6	34.0	97.78	-919.6	-1,504.5	1,766.3	1,722.1	44.23	39.935		
8,600.0	7,530.0	8,978.7	7,770.0	24.0	35.0	97.78	-1,019.6	-1,504.5	1,766.3	1,719.2	47.06	37.530		
8,700.0	7,530.0	9,078.7	7,770.0	25.4	36.0	97.78	-1,119.6	-1,504.5	1,766.3	1,716.3	49.98	35.341		
8,800.0	7,530.0	9,178.7	7,770.0	26.9	37.0	97.78	-1,219.6	-1,504.5	1,766.3	1,713.3	52.96	33.351		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,900.0	7,530.0	9,278.7	7,770.0	28.4	38.2	97.78	-1,319.6	-1,504.5	1,766.3	1,710.3	56.00	31.540		
9,000.0	7,530.0	9,378.7	7,770.0	30.0	39.3	97.78	-1,419.6	-1,504.5	1,766.3	1,707.2	59.09	29.892		
9,100.0	7,530.0	9,478.7	7,770.0	31.5	40.5	97.78	-1,519.6	-1,504.5	1,766.3	1,704.1	62.22	28.389		
9,200.0	7,530.0	9,578.7	7,770.0	33.1	41.8	97.78	-1,619.6	-1,504.5	1,766.3	1,700.9	65.38	27.015		
9,300.0	7,530.0	9,678.7	7,770.0	34.7	43.0	97.78	-1,719.6	-1,504.5	1,766.3	1,697.7	68.58	25.757		
9,400.0	7,530.0	9,778.7	7,770.0	36.3	44.3	97.78	-1,819.6	-1,504.5	1,766.3	1,694.5	71.80	24.601		
9,500.0	7,530.0	9,878.7	7,770.0	38.0	45.7	97.78	-1,919.6	-1,504.5	1,766.3	1,691.3	75.04	23.538		
9,600.0	7,530.0	9,978.7	7,770.0	39.6	47.1	97.78	-2,019.6	-1,504.5	1,766.3	1,688.0	78.30	22.557		
9,700.0	7,530.0	10,078.7	7,770.0	41.3	48.4	97.78	-2,119.6	-1,504.5	1,766.3	1,684.7	81.59	21.650		
9,800.0	7,530.0	10,178.7	7,770.0	42.9	49.9	97.78	-2,219.6	-1,504.5	1,766.3	1,681.4	84.88	20.809		
9,900.0	7,530.0	10,278.7	7,770.0	44.6	51.3	97.78	-2,319.6	-1,504.5	1,766.3	1,678.1	88.19	20.028		
10,000.0	7,530.0	10,378.7	7,770.0	46.3	52.8	97.78	-2,419.6	-1,504.5	1,766.3	1,674.8	91.51	19.301		
10,100.0	7,530.0	10,478.7	7,770.0	47.9	54.2	97.78	-2,519.6	-1,504.5	1,766.3	1,671.5	94.85	18.622		
10,200.0	7,530.0	10,578.7	7,770.0	49.6	55.7	97.78	-2,619.6	-1,504.5	1,766.3	1,668.1	98.19	17.988		
10,300.0	7,530.0	10,678.7	7,770.0	51.3	57.2	97.78	-2,719.6	-1,504.5	1,766.3	1,664.8	101.54	17.394		
10,400.0	7,530.0	10,778.7	7,770.0	53.0	58.8	97.78	-2,819.6	-1,504.5	1,766.3	1,661.4	104.91	16.837		
10,500.0	7,530.0	10,878.7	7,770.0	54.7	60.3	97.78	-2,919.6	-1,504.5	1,766.3	1,658.0	108.27	16.314		
10,600.0	7,530.0	10,978.7	7,770.0	56.4	61.8	97.78	-3,019.6	-1,504.5	1,766.3	1,654.7	111.65	15.820		
10,700.0	7,530.0	11,078.7	7,770.0	58.1	63.4	97.78	-3,119.6	-1,504.5	1,766.3	1,651.3	115.03	15.356		
10,800.0	7,530.0	11,178.7	7,770.0	59.8	65.0	97.78	-3,219.6	-1,504.5	1,766.3	1,647.9	118.41	14.916		
10,900.0	7,530.0	11,278.7	7,770.0	61.5	66.5	97.78	-3,319.6	-1,504.5	1,766.3	1,644.5	121.81	14.501		
11,000.0	7,530.0	11,378.7	7,770.0	63.2	68.1	97.78	-3,419.6	-1,504.5	1,766.3	1,641.1	125.20	14.108		
11,100.0	7,530.0	11,478.7	7,770.0	64.9	69.7	97.78	-3,519.6	-1,504.5	1,766.3	1,637.7	128.60	13.735		
11,200.0	7,530.0	11,578.7	7,770.0	66.6	71.3	97.78	-3,619.6	-1,504.5	1,766.3	1,634.3	132.01	13.381		
11,300.0	7,530.0	11,678.7	7,770.0	68.4	72.9	97.78	-3,719.6	-1,504.5	1,766.3	1,630.9	135.41	13.044		
11,400.0	7,530.0	11,778.7	7,770.0	70.1	74.5	97.78	-3,819.6	-1,504.5	1,766.3	1,627.5	138.82	12.723		
11,500.0	7,530.0	11,878.7	7,770.0	71.8	76.2	97.78	-3,919.6	-1,504.5	1,766.3	1,624.1	142.24	12.418		
11,600.0	7,530.0	11,978.7	7,770.0	73.5	77.8	97.78	-4,019.6	-1,504.5	1,766.3	1,620.7	145.66	12.127		
11,700.0	7,530.0	12,078.7	7,770.0	75.2	79.4	97.78	-4,119.6	-1,504.5	1,766.3	1,617.2	149.08	11.848		
11,800.0	7,530.0	12,178.7	7,770.0	77.0	81.1	97.78	-4,219.6	-1,504.5	1,766.3	1,613.8	152.50	11.583		
11,900.0	7,530.0	12,278.7	7,770.0	78.7	82.7	97.78	-4,319.6	-1,504.5	1,766.3	1,610.4	155.92	11.328		
12,000.0	7,530.0	12,378.7	7,770.0	80.4	84.3	97.78	-4,419.6	-1,504.5	1,766.3	1,607.0	159.35	11.085		
12,100.0	7,530.0	12,478.7	7,770.0	82.2	86.0	97.78	-4,519.6	-1,504.5	1,766.3	1,603.5	162.78	10.851		
12,200.0	7,530.0	12,578.7	7,770.0	83.9	87.6	97.78	-4,619.6	-1,504.5	1,766.3	1,600.1	166.21	10.627		
12,300.0	7,530.0	12,678.7	7,770.0	85.6	89.3	97.78	-4,719.6	-1,504.5	1,766.3	1,596.7	169.64	10.412		
12,400.0	7,530.0	12,778.7	7,770.0	87.3	91.0	97.78	-4,819.6	-1,504.5	1,766.3	1,593.2	173.08	10.205		
12,500.0	7,530.0	12,878.7	7,770.0	89.1	92.6	97.78	-4,919.6	-1,504.5	1,766.3	1,589.8	176.51	10.007		
12,600.0	7,530.0	12,978.7	7,770.0	90.8	94.3	97.78	-5,019.6	-1,504.5	1,766.3	1,586.4	179.95	9.815		
12,700.0	7,530.0	13,078.7	7,770.0	92.5	96.0	97.78	-5,119.6	-1,504.5	1,766.3	1,582.9	183.39	9.631		
12,800.0	7,530.0	13,178.7	7,770.0	94.3	97.7	97.78	-5,219.6	-1,504.5	1,766.3	1,579.5	186.83	9.454		
12,900.0	7,530.0	13,278.7	7,770.0	96.0	99.3	97.78	-5,319.6	-1,504.5	1,766.3	1,576.0	190.27	9.283		
13,000.0	7,530.0	13,378.7	7,770.0	97.8	101.0	97.78	-5,419.6	-1,504.5	1,766.3	1,572.6	193.72	9.118		
13,100.0	7,530.0	13,478.7	7,770.0	99.5	102.7	97.78	-5,519.6	-1,504.5	1,766.3	1,569.2	197.16	8.959		
13,200.0	7,530.0	13,578.7	7,770.0	101.2	104.4	97.78	-5,619.6	-1,504.5	1,766.3	1,565.7	200.61	8.805		
13,300.0	7,530.0	13,678.7	7,770.0	103.0	106.1	97.78	-5,719.6	-1,504.5	1,766.3	1,562.3	204.05	8.656		
13,400.0	7,530.0	13,778.7	7,770.0	104.7	107.8	97.78	-5,819.6	-1,504.5	1,766.3	1,558.8	207.50	8.512		
13,500.0	7,530.0	13,878.7	7,770.0	106.4	109.4	97.78	-5,919.6	-1,504.5	1,766.3	1,555.4	210.95	8.373		
13,600.0	7,530.0	13,978.7	7,770.0	108.2	111.1	97.78	-6,019.6	-1,504.5	1,766.3	1,551.9	214.40	8.238		
13,700.0	7,530.0	14,078.7	7,770.0	109.9	112.8	97.78	-6,119.6	-1,504.5	1,766.3	1,548.5	217.85	8.108		
13,800.0	7,530.0	14,178.7	7,770.0	111.7	114.5	97.78	-6,219.6	-1,504.5	1,766.3	1,545.0	221.30	7.982		
13,900.0	7,530.0	14,278.7	7,770.0	113.4	116.2	97.78	-6,319.6	-1,504.5	1,766.3	1,541.6	224.75	7.859		
14,000.0	7,530.0	14,378.7	7,770.0	115.1	117.9	97.78	-6,419.6	-1,504.5	1,766.3	1,538.1	228.20	7.740		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	14,478.7	7,770.0	116.9	119.6	97.78	-6,519.6	-1,504.5	1,766.3	1,534.7	231.66	7.625		
14,200.0	7,530.0	14,578.7	7,770.0	118.6	121.3	97.78	-6,619.6	-1,504.5	1,766.3	1,531.2	235.11	7.513		
14,300.0	7,530.0	14,678.7	7,770.0	120.4	123.0	97.78	-6,719.6	-1,504.5	1,766.3	1,527.8	238.57	7.404		
14,400.0	7,530.0	14,778.7	7,770.0	122.1	124.7	97.78	-6,819.6	-1,504.5	1,766.3	1,524.3	242.02	7.298		
14,500.0	7,530.0	14,878.7	7,770.0	123.9	126.5	97.78	-6,919.6	-1,504.5	1,766.3	1,520.8	245.48	7.195		
14,600.0	7,530.0	14,978.7	7,770.0	125.6	128.2	97.78	-7,019.6	-1,504.5	1,766.3	1,517.4	248.93	7.096		
14,700.0	7,530.0	15,078.7	7,770.0	127.3	129.9	97.78	-7,119.6	-1,504.5	1,766.3	1,513.9	252.39	6.998		
14,800.0	7,530.0	15,178.7	7,770.0	129.1	131.6	97.78	-7,219.6	-1,504.5	1,766.3	1,510.5	255.85	6.904		
14,900.0	7,530.0	15,278.7	7,770.0	130.8	133.3	97.78	-7,319.6	-1,504.5	1,766.3	1,507.0	259.30	6.812		
15,000.0	7,530.0	15,378.7	7,770.0	132.6	135.0	97.78	-7,419.6	-1,504.5	1,766.3	1,503.6	262.76	6.722		
15,100.0	7,530.0	15,478.7	7,770.0	134.3	136.7	97.78	-7,519.6	-1,504.5	1,766.3	1,500.1	266.22	6.635		
15,200.0	7,530.0	15,578.7	7,770.0	136.1	138.4	97.78	-7,619.6	-1,504.5	1,766.3	1,496.6	269.68	6.550		
15,300.0	7,530.0	15,678.7	7,770.0	137.8	140.2	97.78	-7,719.6	-1,504.5	1,766.3	1,493.2	273.14	6.467		
15,400.0	7,530.0	15,778.7	7,770.0	139.6	141.9	97.78	-7,819.6	-1,504.5	1,766.3	1,489.7	276.60	6.386		
15,500.0	7,530.0	15,878.7	7,770.0	141.3	143.6	97.78	-7,919.6	-1,504.5	1,766.3	1,486.3	280.06	6.307		
15,600.0	7,530.0	15,978.7	7,770.0	143.0	145.3	97.78	-8,019.6	-1,504.5	1,766.3	1,482.8	283.52	6.230		
15,700.0	7,530.0	16,078.7	7,770.0	144.8	147.0	97.78	-8,119.6	-1,504.5	1,766.3	1,479.3	286.98	6.155		
15,800.0	7,530.0	16,178.7	7,770.0	146.5	148.8	97.78	-8,219.6	-1,504.5	1,766.3	1,475.9	290.45	6.081		
15,900.0	7,530.0	16,278.7	7,770.0	148.3	150.5	97.78	-8,319.6	-1,504.5	1,766.3	1,472.4	293.91	6.010		
16,000.0	7,530.0	16,378.7	7,770.0	150.0	152.2	97.78	-8,419.6	-1,504.6	1,766.3	1,469.0	297.37	5.940		
16,100.0	7,530.0	16,478.7	7,770.0	151.8	153.9	97.78	-8,519.6	-1,504.6	1,766.3	1,465.5	300.83	5.871		
16,200.0	7,530.0	16,578.7	7,770.0	153.5	155.6	97.78	-8,619.6	-1,504.6	1,766.3	1,462.0	304.30	5.805		
16,300.0	7,530.0	16,678.7	7,770.0	155.3	157.4	97.78	-8,719.6	-1,504.6	1,766.3	1,458.6	307.76	5.739		
16,400.0	7,530.0	16,778.7	7,770.0	157.0	159.1	97.78	-8,819.6	-1,504.6	1,766.3	1,455.1	311.22	5.675		
16,500.0	7,530.0	16,878.7	7,770.0	158.8	160.8	97.78	-8,919.6	-1,504.6	1,766.3	1,451.6	314.69	5.613		
16,600.0	7,530.0	16,978.7	7,770.0	160.5	162.5	97.78	-9,019.6	-1,504.6	1,766.3	1,448.2	318.15	5.552		
16,700.0	7,530.0	17,078.7	7,770.0	162.3	164.3	97.78	-9,119.6	-1,504.6	1,766.3	1,444.7	321.61	5.492		
16,800.0	7,530.0	17,178.7	7,770.0	164.0	166.0	97.78	-9,219.6	-1,504.6	1,766.3	1,441.3	325.08	5.434		
16,900.0	7,530.0	17,278.7	7,770.0	165.8	167.7	97.78	-9,319.6	-1,504.6	1,766.3	1,437.8	328.54	5.376		
17,000.0	7,530.0	17,378.7	7,770.0	167.5	169.5	97.78	-9,419.6	-1,504.6	1,766.3	1,434.3	332.01	5.320		
17,100.0	7,530.0	17,478.7	7,770.0	169.3	171.2	97.78	-9,519.6	-1,504.6	1,766.3	1,430.9	335.47	5.265		
17,200.0	7,530.0	17,578.7	7,770.0	171.0	172.9	97.78	-9,619.6	-1,504.6	1,766.3	1,427.4	338.94	5.211		
17,300.0	7,530.0	17,678.7	7,770.0	172.8	174.6	97.78	-9,719.6	-1,504.6	1,766.3	1,423.9	342.41	5.159		
17,360.1	7,530.0	17,738.7	7,770.0	173.8	175.7	97.78	-9,779.7	-1,504.6	1,766.3	1,421.8	344.49	5.127		
17,400.0	7,530.0	17,775.9	7,770.0	174.5	176.3	97.78	-9,816.8	-1,504.6	1,766.3	1,420.5	345.82	5.108		
17,420.9	7,530.0	17,775.9	7,770.0	174.9	176.3	97.78	-9,816.8	-1,504.6	1,766.5	1,420.3	346.19	5.103 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-59.9	59.9						
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-59.9	59.9	59.6	0.30	197.208			
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-59.9	59.9	59.2	0.65	91.749			
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-59.9	59.9	58.9	1.00	59.781	CC, ES		
400.0	400.0	399.0	399.0	0.7	0.7	-89.74	0.3	-60.7	60.7	59.4	1.35	44.984			
500.0	500.0	498.0	497.9	0.8	0.9	-89.01	1.1	-63.1	63.2	61.5	1.70	37.178			
600.0	600.0	596.8	596.7	1.0	1.0	-87.91	2.5	-67.2	67.3	65.2	2.05	32.790			
700.0	700.0	695.4	695.1	1.2	1.2	-119.58	4.4	-72.8	73.5	71.1	2.39	30.729			
800.0	800.0	793.8	793.1	1.4	1.4	-119.62	6.8	-80.0	82.3	79.5	2.74	29.995			
900.0	899.9	891.7	890.6	1.6	1.7	-120.26	9.8	-88.8	93.5	90.4	3.10	30.191			
988.4	988.1	977.8	976.2	1.7	1.9	-121.11	12.8	-97.8	105.6	102.2	3.42	30.891			
1,000.0	999.7	989.1	987.4	1.7	1.9	-121.25	13.2	-99.1	107.3	103.8	3.46	31.011			
1,100.0	1,099.4	1,086.0	1,083.5	1.9	2.2	-122.12	17.2	-110.9	123.1	119.2	3.83	32.142			
1,200.0	1,199.2	1,182.3	1,178.9	2.1	2.4	-122.56	21.7	-124.1	140.4	136.2	4.20	33.422			
1,300.0	1,299.0	1,278.2	1,273.4	2.3	2.7	-122.72	26.6	-138.8	159.3	154.7	4.58	34.810			
1,400.0	1,398.8	1,375.1	1,368.9	2.5	3.1	-122.70	32.0	-154.9	179.5	174.5	4.96	36.210			
1,500.0	1,498.5	1,473.0	1,465.2	2.7	3.4	-122.67	37.6	-171.3	199.8	194.4	5.34	37.405			
1,600.0	1,598.3	1,570.9	1,561.6	2.9	3.7	-122.65	43.1	-187.6	220.0	214.3	5.73	38.429			
1,700.0	1,698.1	1,668.9	1,658.0	3.2	4.0	-122.63	48.6	-204.0	240.3	234.2	6.11	39.315			
1,800.0	1,797.8	1,766.8	1,754.4	3.4	4.4	-122.61	54.1	-220.4	260.6	254.1	6.50	40.089			
1,900.0	1,897.6	1,864.7	1,850.8	3.6	4.7	-122.60	59.6	-236.7	280.9	274.0	6.89	40.770			
2,000.0	1,997.4	1,962.6	1,947.2	3.8	5.1	-122.58	65.2	-253.1	301.2	293.9	7.28	41.375			
2,100.0	2,097.1	2,060.5	2,043.6	4.0	5.4	-122.57	70.7	-269.5	321.5	313.8	7.67	41.914			
2,200.0	2,196.9	2,158.5	2,139.9	4.2	5.7	-122.57	76.2	-285.8	341.8	333.7	8.06	42.398			
2,300.0	2,296.7	2,256.4	2,236.3	4.4	6.1	-122.56	81.7	-302.2	362.1	353.6	8.45	42.835			
2,400.0	2,396.5	2,354.3	2,332.7	4.6	6.4	-122.55	87.2	-318.6	382.4	373.5	8.84	43.231			
2,500.0	2,496.2	2,452.2	2,429.1	4.8	6.8	-122.54	92.7	-334.9	402.6	393.4	9.24	43.592			
2,600.0	2,596.0	2,550.1	2,525.5	5.0	7.1	-122.54	98.3	-351.3	422.9	413.3	9.63	43.922			
2,700.0	2,695.8	2,648.1	2,621.9	5.2	7.5	-122.53	103.8	-367.7	443.2	433.2	10.02	44.225			
2,800.0	2,795.5	2,746.0	2,718.2	5.4	7.8	-122.53	109.3	-384.0	463.5	453.1	10.42	44.504			
2,900.0	2,895.3	2,843.9	2,814.6	5.6	8.2	-122.52	114.8	-400.4	483.8	473.0	10.81	44.761			
3,000.0	2,995.1	2,941.8	2,911.0	5.9	8.5	-122.52	120.3	-416.8	504.1	492.9	11.20	45.000			
3,100.0	3,094.9	3,039.7	3,007.4	6.1	8.9	-122.51	125.9	-433.1	524.4	512.8	11.60	45.222			
3,200.0	3,194.6	3,137.7	3,103.8	6.3	9.2	-122.51	131.4	-449.5	544.7	532.7	11.99	45.429			
3,300.0	3,294.4	3,235.6	3,200.2	6.5	9.6	-122.51	136.9	-465.9	564.9	552.6	12.38	45.622			
3,400.0	3,394.2	3,333.5	3,296.6	6.7	9.9	-122.50	142.4	-482.2	585.2	572.5	12.78	45.803			
3,500.0	3,493.9	3,431.4	3,392.9	6.9	10.2	-122.50	147.9	-498.6	605.5	592.4	13.17	45.973			
3,600.0	3,593.7	3,529.3	3,489.3	7.1	10.6	-122.50	153.5	-515.0	625.8	612.2	13.57	46.132			
3,700.0	3,693.5	3,627.3	3,585.7	7.3	10.9	-122.50	159.0	-531.3	646.1	632.1	13.96	46.282			
3,800.0	3,793.2	3,725.2	3,682.1	7.5	11.3	-122.49	164.5	-547.7	666.4	652.0	14.35	46.423			
3,900.0	3,893.0	3,823.1	3,778.5	7.7	11.6	-122.49	170.0	-564.1	686.7	671.9	14.75	46.557			
4,000.0	3,992.8	3,921.0	3,874.9	8.0	12.0	-122.49	175.5	-580.4	707.0	691.8	15.14	46.684			
4,100.0	4,092.6	4,018.9	3,971.3	8.2	12.3	-122.49	181.1	-596.8	727.3	711.7	15.54	46.803			
4,200.0	4,192.3	4,116.9	4,067.6	8.4	12.7	-122.49	186.6	-613.2	747.5	731.6	15.93	46.917			
4,300.0	4,292.1	4,214.8	4,164.0	8.6	13.0	-122.48	192.1	-629.5	767.8	751.5	16.33	47.025			
4,400.0	4,391.9	4,312.7	4,260.4	8.8	13.4	-122.48	197.6	-645.9	788.1	771.4	16.72	47.128			
4,500.0	4,491.6	4,410.6	4,356.8	9.0	13.7	-122.48	203.1	-662.3	808.4	791.3	17.12	47.225			
4,600.0	4,591.4	4,508.6	4,453.2	9.2	14.1	-122.48	208.6	-678.6	828.7	811.2	17.51	47.319			
4,700.0	4,691.2	4,606.5	4,549.6	9.4	14.4	-122.48	214.2	-695.0	849.0	831.1	17.91	47.408			
4,800.0	4,790.9	4,704.4	4,645.9	9.6	14.8	-122.48	219.7	-711.4	869.3	851.0	18.30	47.493			
4,900.0	4,890.7	4,802.3	4,742.3	9.8	15.1	-122.48	225.2	-727.7	889.6	870.9	18.70	47.574			
5,000.0	4,990.5	4,900.2	4,838.7	10.1	15.5	-122.47	230.7	-744.1	909.9	890.8	19.09	47.652			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1C-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,090.3	4,998.2	4,935.1	10.3	15.8	-122.47	236.2	-760.5	930.1	910.7	19.49	47.727		
5,200.0	5,190.0	5,096.1	5,031.5	10.5	16.2	-122.47	241.8	-776.8	950.4	930.6	19.88	47.799		
5,300.0	5,289.8	5,194.0	5,127.9	10.7	16.5	-122.47	247.3	-793.2	970.7	950.4	20.28	47.867		
5,400.0	5,389.6	5,291.9	5,224.3	10.9	16.9	-122.47	252.8	-809.6	991.0	970.3	20.67	47.933		
5,500.0	5,489.3	5,389.8	5,320.6	11.1	17.2	-122.47	258.3	-825.9	1,011.3	990.2	21.07	47.997		
5,600.0	5,589.1	5,487.8	5,417.0	11.3	17.6	-122.47	263.8	-842.3	1,031.6	1,010.1	21.47	48.058		
5,700.0	5,688.9	5,585.7	5,513.4	11.5	17.9	-122.47	269.4	-858.7	1,051.9	1,030.0	21.86	48.117		
5,800.0	5,788.7	5,683.6	5,609.8	11.7	18.3	-122.47	274.9	-875.0	1,072.2	1,049.9	22.26	48.174		
5,900.0	5,888.4	5,781.5	5,706.2	11.9	18.6	-122.46	280.4	-891.4	1,092.5	1,069.8	22.65	48.228		
6,000.0	5,988.2	5,879.4	5,802.6	12.2	19.0	-122.46	285.9	-907.8	1,112.7	1,089.7	23.05	48.281		
6,100.0	6,088.0	5,977.4	5,899.0	12.4	19.3	-122.46	291.4	-924.1	1,133.0	1,109.6	23.44	48.332		
6,200.0	6,187.7	6,075.3	5,995.3	12.6	19.7	-122.46	297.0	-940.5	1,153.3	1,129.5	23.84	48.381		
6,300.0	6,287.5	6,173.2	6,091.7	12.8	20.0	-122.46	302.5	-956.9	1,173.6	1,149.4	24.23	48.429		
6,400.0	6,387.3	6,271.1	6,188.1	13.0	20.4	-122.46	308.0	-973.2	1,193.9	1,169.3	24.63	48.475		
6,500.0	6,487.0	6,369.0	6,284.5	13.2	20.7	-122.46	313.5	-989.6	1,214.2	1,189.2	25.02	48.519		
6,600.0	6,586.8	6,467.0	6,380.9	13.4	21.1	-122.46	319.0	-1,006.0	1,234.5	1,209.1	25.42	48.562		
6,700.0	6,686.6	6,564.9	6,477.3	13.6	21.4	-122.46	324.5	-1,022.3	1,254.8	1,228.9	25.82	48.604		
6,787.0	6,773.4	6,650.1	6,561.1	13.8	21.7	-122.46	329.3	-1,036.6	1,272.4	1,246.3	26.16	48.639		
6,800.0	6,786.4	6,662.8	6,573.6	13.8	21.8	-133.20	330.1	-1,038.7	1,275.1	1,248.8	26.23	48.606		
6,850.0	6,836.3	6,711.7	6,621.8	13.9	21.9	138.97	332.8	-1,046.9	1,285.2	1,258.7	26.48	48.542		
6,900.0	6,886.2	6,760.3	6,669.6	14.0	22.1	108.55	335.6	-1,055.0	1,295.3	1,268.6	26.68	48.550		
6,950.0	6,935.7	6,808.3	6,716.9	14.0	22.3	100.33	338.3	-1,063.0	1,305.4	1,278.5	26.84	48.631		
7,000.0	6,984.6	6,855.6	6,763.4	14.0	22.5	96.64	340.9	-1,070.9	1,315.4	1,288.4	26.97	48.782		
7,050.0	7,032.6	6,902.8	6,809.9	14.0	22.6	94.59	343.1	-1,078.8	1,325.5	1,298.5	27.05	49.010		
7,100.0	7,079.7	6,951.4	6,857.9	13.9	22.8	93.27	342.5	-1,087.0	1,335.6	1,308.5	27.07	49.333		
7,150.0	7,125.4	7,001.3	6,906.8	13.9	22.9	92.34	338.4	-1,095.3	1,345.6	1,318.6	27.06	49.731		
7,200.0	7,169.6	7,052.5	6,956.7	13.8	23.0	91.65	330.6	-1,103.8	1,355.5	1,328.5	27.01	50.196		
7,250.0	7,212.1	7,105.1	7,007.2	13.8	23.1	91.14	318.9	-1,112.5	1,365.3	1,338.4	26.92	50.715		
7,300.0	7,252.6	7,159.2	7,058.2	13.7	23.3	90.74	302.9	-1,121.3	1,374.9	1,348.1	26.81	51.273		
7,350.0	7,291.0	7,215.0	7,109.3	13.7	23.3	90.44	282.4	-1,130.1	1,384.2	1,357.5	26.70	51.849		
7,400.0	7,327.1	7,272.6	7,160.2	13.7	23.4	90.21	257.1	-1,138.9	1,393.1	1,366.6	26.58	52.416		
7,450.0	7,360.7	7,332.0	7,210.5	13.7	23.5	90.05	226.7	-1,147.6	1,401.7	1,375.2	26.48	52.939		
7,500.0	7,391.6	7,393.4	7,259.7	13.7	23.6	89.93	191.0	-1,156.1	1,409.8	1,383.4	26.41	53.378		
7,550.0	7,419.7	7,456.7	7,307.0	13.8	23.7	89.87	149.9	-1,164.4	1,417.4	1,391.0	26.40	53.683		
7,600.0	7,444.8	7,522.0	7,351.9	13.9	23.8	89.83	103.1	-1,172.3	1,424.3	1,397.9	26.48	53.798		
7,650.0	7,466.9	7,589.4	7,393.6	14.1	23.9	89.83	50.8	-1,179.6	1,430.6	1,404.0	26.65	53.681		
7,700.0	7,485.8	7,658.6	7,431.2	14.3	24.1	89.84	-7.0	-1,186.3	1,436.1	1,409.2	26.96	53.275		
7,750.0	7,501.5	7,729.6	7,463.9	14.6	24.3	89.87	-69.7	-1,192.2	1,440.9	1,413.4	27.41	52.558		
7,800.0	7,513.7	7,802.2	7,490.8	14.9	24.5	89.91	-136.9	-1,197.1	1,444.7	1,416.7	28.03	51.543		
7,850.0	7,522.6	7,876.1	7,511.1	15.2	24.8	89.95	-207.8	-1,201.0	1,447.6	1,418.8	28.82	50.225		
7,900.0	7,528.0	7,951.0	7,524.3	15.6	25.1	89.98	-281.5	-1,203.6	1,449.6	1,419.8	29.77	48.692		
7,952.9	7,530.0	8,031.0	7,529.9	16.1	25.5	90.00	-361.2	-1,205.0	1,450.6	1,419.6	30.94	46.877		
8,000.0	7,530.0	8,081.8	7,530.0	16.5	25.8	90.00	-412.0	-1,205.3	1,450.8	1,418.9	31.88	45.503		
8,100.0	7,530.0	8,181.8	7,530.0	17.5	26.5	90.00	-512.0	-1,205.8	1,451.3	1,417.3	34.00	42.693		
8,200.0	7,530.0	8,281.8	7,530.0	18.7	27.3	90.00	-612.0	-1,206.3	1,451.9	1,415.5	36.32	39.976		
8,300.0	7,530.0	8,381.8	7,530.0	19.9	28.1	90.00	-712.0	-1,206.8	1,452.4	1,413.6	38.82	37.414		
8,400.0	7,530.0	8,481.8	7,530.0	21.2	29.0	90.00	-812.0	-1,207.4	1,452.9	1,411.4	41.47	35.037		
8,500.0	7,530.0	8,581.8	7,530.0	22.6	30.0	90.00	-912.0	-1,207.9	1,453.4	1,409.2	44.24	32.857		
8,600.0	7,530.0	8,681.8	7,530.0	24.0	31.1	90.00	-1,012.0	-1,208.4	1,454.0	1,406.9	47.10	30.868		
8,700.0	7,530.0	8,781.8	7,530.0	25.4	32.2	90.00	-1,112.0	-1,208.9	1,454.5	1,404.4	50.05	29.061		
8,800.0	7,530.0	8,881.8	7,530.0	26.9	33.4	90.00	-1,212.0	-1,209.4	1,455.0	1,401.9	53.07	27.418		
8,900.0	7,530.0	8,981.8	7,530.0	28.4	34.6	90.00	-1,312.0	-1,210.0	1,455.5	1,399.4	56.14	25.927		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1C-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	9,081.8	7,530.0	30.0	35.9	90.00	-1,412.0	-1,210.5	1,456.0	1,396.8	59.26	24.570		
9,100.0	7,530.0	9,181.8	7,530.0	31.5	37.2	90.00	-1,512.0	-1,211.0	1,456.6	1,394.1	62.43	23.333		
9,200.0	7,530.0	9,281.8	7,530.0	33.1	38.6	90.00	-1,612.0	-1,211.5	1,457.1	1,391.5	65.62	22.204		
9,300.0	7,530.0	9,381.8	7,530.0	34.7	40.0	90.00	-1,712.0	-1,212.1	1,457.6	1,388.8	68.85	21.170		
9,400.0	7,530.0	9,481.8	7,530.0	36.3	41.4	90.00	-1,812.0	-1,212.6	1,458.1	1,386.0	72.11	20.222		
9,500.0	7,530.0	9,581.8	7,530.0	38.0	42.8	90.00	-1,912.0	-1,213.1	1,458.7	1,383.3	75.38	19.350		
9,600.0	7,530.0	9,681.8	7,530.0	39.6	44.3	90.00	-2,012.0	-1,213.6	1,459.2	1,380.5	78.68	18.546		
9,700.0	7,530.0	9,781.8	7,530.0	41.3	45.7	90.00	-2,112.0	-1,214.2	1,459.7	1,377.7	82.00	17.802		
9,800.0	7,530.0	9,881.8	7,530.0	42.9	47.2	90.00	-2,212.0	-1,214.7	1,460.2	1,374.9	85.33	17.114		
9,900.0	7,530.0	9,981.8	7,530.0	44.6	48.7	90.00	-2,312.0	-1,215.2	1,460.8	1,372.1	88.67	16.474		
10,000.0	7,530.0	10,081.8	7,530.0	46.3	50.3	90.00	-2,412.0	-1,215.7	1,461.3	1,369.3	92.03	15.879		
10,100.0	7,530.0	10,181.8	7,530.0	47.9	51.8	90.00	-2,512.0	-1,216.3	1,461.8	1,366.4	95.39	15.324		
10,200.0	7,530.0	10,281.8	7,530.0	49.6	53.4	90.00	-2,612.0	-1,216.8	1,462.3	1,363.6	98.77	14.806		
10,300.0	7,530.0	10,381.8	7,530.0	51.3	55.0	90.00	-2,712.0	-1,217.3	1,462.9	1,360.7	102.16	14.320		
10,400.0	7,530.0	10,481.8	7,530.0	53.0	56.5	90.00	-2,812.0	-1,217.8	1,463.4	1,357.8	105.55	13.864		
10,500.0	7,530.0	10,581.8	7,530.0	54.7	58.1	90.00	-2,912.0	-1,218.4	1,463.9	1,355.0	108.95	13.437		
10,600.0	7,530.0	10,681.8	7,530.0	56.4	59.7	90.00	-3,012.0	-1,218.9	1,464.4	1,352.1	112.36	13.034		
10,700.0	7,530.0	10,781.8	7,530.0	58.1	61.3	90.00	-3,111.9	-1,219.4	1,465.0	1,349.2	115.77	12.654		
10,800.0	7,530.0	10,881.8	7,530.0	59.8	63.0	90.00	-3,211.9	-1,219.9	1,465.5	1,346.3	119.19	12.295		
10,900.0	7,530.0	10,981.8	7,530.0	61.5	64.6	90.00	-3,311.9	-1,220.4	1,466.0	1,343.4	122.61	11.956		
11,000.0	7,530.0	11,081.8	7,530.0	63.2	66.2	90.00	-3,411.9	-1,221.0	1,466.5	1,340.5	126.04	11.635		
11,100.0	7,530.0	11,181.8	7,530.0	64.9	67.8	90.00	-3,511.9	-1,221.5	1,467.0	1,337.6	129.48	11.331		
11,200.0	7,530.0	11,281.8	7,530.0	66.6	69.5	90.00	-3,611.9	-1,222.0	1,467.6	1,334.7	132.91	11.042		
11,300.0	7,530.0	11,381.8	7,530.0	68.4	71.1	90.00	-3,711.9	-1,222.5	1,468.1	1,331.7	136.35	10.767		
11,400.0	7,530.0	11,481.8	7,530.0	70.1	72.8	90.00	-3,811.9	-1,223.1	1,468.6	1,328.8	139.80	10.505		
11,500.0	7,530.0	11,581.8	7,530.0	71.8	74.4	90.00	-3,911.9	-1,223.6	1,469.1	1,325.9	143.24	10.256		
11,600.0	7,530.0	11,681.7	7,530.0	73.5	76.1	90.00	-4,011.9	-1,224.1	1,469.7	1,323.0	146.69	10.019		
11,700.0	7,530.0	11,781.7	7,530.0	75.2	77.8	90.00	-4,111.9	-1,224.6	1,470.2	1,320.0	150.15	9.792		
11,800.0	7,530.0	11,881.7	7,530.0	77.0	79.4	90.00	-4,211.9	-1,225.2	1,470.7	1,317.1	153.60	9.575		
11,900.0	7,530.0	11,981.7	7,530.0	78.7	81.1	90.00	-4,311.9	-1,225.7	1,471.2	1,314.2	157.06	9.367		
12,000.0	7,530.0	12,081.7	7,530.0	80.4	82.8	90.00	-4,411.9	-1,226.2	1,471.8	1,311.2	160.52	9.169		
12,100.0	7,530.0	12,181.7	7,530.0	82.2	84.5	90.00	-4,511.9	-1,226.7	1,472.3	1,308.3	163.98	8.978		
12,200.0	7,530.0	12,281.7	7,530.0	83.9	86.2	90.00	-4,611.9	-1,227.3	1,472.8	1,305.4	167.44	8.796		
12,300.0	7,530.0	12,381.7	7,530.0	85.6	87.8	90.00	-4,711.9	-1,227.8	1,473.3	1,302.4	170.91	8.621		
12,400.0	7,530.0	12,481.7	7,530.0	87.3	89.5	90.00	-4,811.9	-1,228.3	1,473.9	1,299.5	174.38	8.452		
12,500.0	7,530.0	12,581.7	7,530.0	89.1	91.2	90.00	-4,911.9	-1,228.8	1,474.4	1,296.5	177.84	8.290		
12,600.0	7,530.0	12,681.7	7,530.0	90.8	92.9	90.00	-5,011.9	-1,229.4	1,474.9	1,293.6	181.32	8.134		
12,700.0	7,530.0	12,781.7	7,530.0	92.5	94.6	90.00	-5,111.9	-1,229.9	1,475.4	1,290.6	184.79	7.985		
12,800.0	7,530.0	12,881.7	7,530.0	94.3	96.3	90.00	-5,211.9	-1,230.4	1,476.0	1,287.7	188.26	7.840		
12,900.0	7,530.0	12,981.7	7,530.0	96.0	98.0	90.00	-5,311.9	-1,230.9	1,476.5	1,284.7	191.73	7.701		
13,000.0	7,530.0	13,081.7	7,530.0	97.8	99.7	90.00	-5,411.9	-1,231.4	1,477.0	1,281.8	195.21	7.566		
13,100.0	7,530.0	13,181.7	7,530.0	99.5	101.4	90.00	-5,511.9	-1,232.0	1,477.5	1,278.8	198.69	7.436		
13,200.0	7,530.0	13,281.7	7,530.0	101.2	103.1	90.00	-5,611.9	-1,232.5	1,478.1	1,275.9	202.16	7.311		
13,300.0	7,530.0	13,381.7	7,530.0	103.0	104.8	90.00	-5,711.9	-1,233.0	1,478.6	1,272.9	205.64	7.190		
13,400.0	7,530.0	13,481.7	7,530.0	104.7	106.5	90.00	-5,811.9	-1,233.5	1,479.1	1,270.0	209.12	7.073		
13,500.0	7,530.0	13,581.7	7,530.0	106.4	108.2	90.00	-5,911.9	-1,234.1	1,479.6	1,267.0	212.60	6.960		
13,600.0	7,530.0	13,681.7	7,530.0	108.2	109.9	90.00	-6,011.9	-1,234.6	1,480.1	1,264.1	216.08	6.850		
13,700.0	7,530.0	13,781.7	7,530.0	109.9	111.7	90.00	-6,111.9	-1,235.1	1,480.7	1,261.1	219.57	6.744		
13,800.0	7,530.0	13,881.7	7,530.0	111.7	113.4	90.00	-6,211.9	-1,235.6	1,481.2	1,258.1	223.05	6.641		
13,900.0	7,530.0	13,981.7	7,530.0	113.4	115.1	90.00	-6,311.9	-1,236.2	1,481.7	1,255.2	226.53	6.541		
14,000.0	7,530.0	14,081.7	7,530.0	115.1	116.8	90.00	-6,411.9	-1,236.7	1,482.2	1,252.2	230.02	6.444		
14,100.0	7,530.0	14,181.7	7,530.0	116.9	118.5	90.00	-6,511.9	-1,237.2	1,482.8	1,249.3	233.50	6.350		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
14,200.0	7,530.0	14,281.7	7,530.0	118.6	120.2	90.00	-6,611.9	-1,237.7	1,483.3	1,246.3	236.99	6.259		
14,300.0	7,530.0	14,381.7	7,530.0	120.4	122.0	90.00	-6,711.8	-1,238.3	1,483.8	1,243.3	240.48	6.170		
14,400.0	7,530.0	14,481.7	7,530.0	122.1	123.7	90.00	-6,811.8	-1,238.8	1,484.3	1,240.4	243.96	6.084		
14,500.0	7,530.0	14,581.7	7,530.0	123.9	125.4	90.00	-6,911.8	-1,239.3	1,484.9	1,237.4	247.45	6.001		
14,600.0	7,530.0	14,681.7	7,530.0	125.6	127.1	90.00	-7,011.8	-1,239.8	1,485.4	1,234.4	250.94	5.919		
14,700.0	7,530.0	14,781.7	7,530.0	127.3	128.8	90.00	-7,111.8	-1,240.4	1,485.9	1,231.5	254.43	5.840		
14,800.0	7,530.0	14,881.7	7,530.0	129.1	130.6	90.00	-7,211.8	-1,240.9	1,486.4	1,228.5	257.92	5.763		
14,900.0	7,530.0	14,981.7	7,530.0	130.8	132.3	90.00	-7,311.8	-1,241.4	1,487.0	1,225.5	261.41	5.688		
15,000.0	7,530.0	15,081.7	7,530.0	132.6	134.0	90.00	-7,411.8	-1,241.9	1,487.5	1,222.6	264.90	5.615		
15,100.0	7,530.0	15,181.7	7,530.0	134.3	135.7	90.00	-7,511.8	-1,242.4	1,488.0	1,219.6	268.39	5.544		
15,200.0	7,530.0	15,281.7	7,530.0	136.1	137.5	90.00	-7,611.8	-1,243.0	1,488.5	1,216.6	271.88	5.475		
15,300.0	7,530.0	15,381.7	7,530.0	137.8	139.2	90.00	-7,711.8	-1,243.5	1,489.1	1,213.7	275.37	5.407		
15,400.0	7,530.0	15,481.7	7,530.0	139.6	140.9	90.00	-7,811.8	-1,244.0	1,489.6	1,210.7	278.87	5.342		
15,500.0	7,530.0	15,581.7	7,530.0	141.3	142.7	90.00	-7,911.8	-1,244.5	1,490.1	1,207.7	282.36	5.277		
15,600.0	7,530.0	15,681.7	7,530.0	143.0	144.4	90.00	-8,011.8	-1,245.1	1,490.6	1,204.8	285.85	5.215		
15,700.0	7,530.0	15,781.7	7,530.0	144.8	146.1	90.00	-8,111.8	-1,245.6	1,491.1	1,201.8	289.35	5.154		
15,800.0	7,530.0	15,881.7	7,530.0	146.5	147.8	90.00	-8,211.8	-1,246.1	1,491.7	1,198.8	292.84	5.094		
15,900.0	7,530.0	15,981.7	7,530.0	148.3	149.6	90.00	-8,311.8	-1,246.6	1,492.2	1,195.9	296.33	5.036		
16,000.0	7,530.0	16,081.7	7,530.0	150.0	151.3	90.00	-8,411.8	-1,247.2	1,492.7	1,192.9	299.83	4.979		
16,100.0	7,530.0	16,181.7	7,530.0	151.8	153.0	90.00	-8,511.8	-1,247.7	1,493.2	1,189.9	303.32	4.923		
16,200.0	7,530.0	16,281.7	7,530.0	153.5	154.8	90.00	-8,611.8	-1,248.2	1,493.8	1,186.9	306.82	4.869		
16,300.0	7,530.0	16,381.7	7,530.0	155.3	156.5	90.00	-8,711.8	-1,248.7	1,494.3	1,184.0	310.31	4.815		
16,400.0	7,530.0	16,481.7	7,530.0	157.0	158.2	90.00	-8,811.8	-1,249.3	1,494.8	1,181.0	313.81	4.763		
16,500.0	7,530.0	16,581.7	7,530.0	158.8	160.0	90.00	-8,911.8	-1,249.8	1,495.3	1,178.0	317.30	4.713		
16,600.0	7,530.0	16,681.7	7,530.0	160.5	161.7	90.00	-9,011.8	-1,250.3	1,495.9	1,175.1	320.80	4.663		
16,700.0	7,530.0	16,781.7	7,530.0	162.3	163.4	90.00	-9,111.8	-1,250.8	1,496.4	1,172.1	324.30	4.614		
16,800.0	7,530.0	16,881.7	7,530.0	164.0	165.2	90.00	-9,211.8	-1,251.4	1,496.9	1,169.1	327.79	4.567		
16,900.0	7,530.0	16,981.7	7,530.0	165.8	166.9	90.00	-9,311.8	-1,251.9	1,497.4	1,166.1	331.29	4.520		
17,000.0	7,530.0	17,081.7	7,530.0	167.5	168.6	90.00	-9,411.8	-1,252.4	1,498.0	1,163.2	334.79	4.474		
17,100.0	7,530.0	17,181.7	7,530.0	169.3	170.4	90.00	-9,511.8	-1,252.9	1,498.5	1,160.2	338.28	4.430		
17,200.0	7,530.0	17,281.7	7,530.0	171.0	172.1	90.00	-9,611.8	-1,253.5	1,499.0	1,157.2	341.78	4.386		
17,300.0	7,530.0	17,381.7	7,530.0	172.8	173.9	90.00	-9,711.8	-1,254.0	1,499.5	1,154.2	345.28	4.343		
17,400.0	7,530.0	17,481.7	7,530.0	174.5	175.6	90.00	-9,811.8	-1,254.5	1,500.1	1,151.3	348.78	4.301		
17,420.9	7,530.0	17,490.0	7,530.0	174.9	175.7	90.00	-9,820.1	-1,254.5	1,500.2	1,150.9	349.29	4.295 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	-50.1	50.1						
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-50.1	50.1	49.8	0.30	164.955			
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-50.1	50.1	49.4	0.65	76.744			
300.0	300.0	300.0	300.0	0.5	0.5	-90.00	0.0	-50.1	50.1	49.1	1.00	50.004			
333.4	333.4	333.4	333.4	0.6	0.6	-90.00	0.0	-50.1	50.1	49.0	1.12	44.797 CC			
400.0	400.0	399.6	399.6	0.7	0.7	-89.91	0.1	-50.3	50.3	48.9	1.35	37.250 ES			
500.0	500.0	498.8	498.7	0.8	0.8	-89.21	0.7	-51.9	51.9	50.2	1.70	30.554			
600.0	600.0	597.8	597.8	1.0	1.0	-87.93	2.0	-55.1	55.2	53.1	2.05	26.900			
700.0	700.0	696.7	696.5	1.2	1.2	-119.41	3.9	-59.8	60.5	58.1	2.39	25.254			
800.0	800.0	795.4	794.9	1.4	1.4	-119.39	6.4	-66.2	68.3	65.6	2.75	24.874			
900.0	899.9	893.7	892.8	1.6	1.6	-120.04	9.6	-74.0	78.6	75.5	3.10	25.341			
988.4	988.1	980.1	978.9	1.7	1.8	-120.93	12.9	-82.2	89.8	86.4	3.42	26.230			
1,000.0	999.7	991.5	990.1	1.7	1.9	-121.07	13.3	-83.4	91.4	87.9	3.47	26.372			
1,100.0	1,099.4	1,088.8	1,086.8	1.9	2.1	-121.90	17.7	-94.2	106.1	102.3	3.84	27.672			
1,200.0	1,199.2	1,185.7	1,182.7	2.1	2.4	-122.23	22.6	-106.6	122.4	118.2	4.21	29.086			
1,300.0	1,299.0	1,284.2	1,280.2	2.3	2.6	-122.36	28.0	-119.8	139.5	134.9	4.59	30.397			
1,400.0	1,398.8	1,382.7	1,377.7	2.5	2.9	-122.46	33.3	-133.1	156.6	151.6	4.97	31.491			
1,500.0	1,498.5	1,481.3	1,475.2	2.7	3.2	-122.54	38.6	-146.4	173.7	168.3	5.36	32.416			
1,600.0	1,598.3	1,579.8	1,572.6	2.9	3.5	-122.61	43.9	-159.7	190.8	185.0	5.74	33.209			
1,700.0	1,698.1	1,678.3	1,670.1	3.2	3.8	-122.66	49.3	-173.0	207.9	201.7	6.13	33.894			
1,800.0	1,797.8	1,776.8	1,767.6	3.4	4.1	-122.71	54.6	-186.3	224.9	218.4	6.52	34.492			
1,900.0	1,897.6	1,875.4	1,865.1	3.6	4.4	-122.75	59.9	-199.6	242.0	235.1	6.91	35.018			
2,000.0	1,997.4	1,973.9	1,962.6	3.8	4.7	-122.79	65.3	-212.9	259.1	251.8	7.30	35.484			
2,100.0	2,097.1	2,072.4	2,060.1	4.0	5.0	-122.82	70.6	-226.2	276.2	268.5	7.69	35.901			
2,200.0	2,196.9	2,171.0	2,157.6	4.2	5.3	-122.85	75.9	-239.4	293.3	285.2	8.08	36.274			
2,300.0	2,296.7	2,269.5	2,255.0	4.4	5.6	-122.87	81.2	-252.7	310.3	301.9	8.48	36.611			
2,400.0	2,396.5	2,368.0	2,352.5	4.6	5.9	-122.89	86.6	-266.0	327.4	318.6	8.87	36.916			
2,500.0	2,496.2	2,466.6	2,450.0	4.8	6.2	-122.91	91.9	-279.3	344.5	335.3	9.26	37.194			
2,600.0	2,596.0	2,565.1	2,547.5	5.0	6.5	-122.93	97.2	-292.6	361.6	351.9	9.66	37.448			
2,700.0	2,695.8	2,663.6	2,645.0	5.2	6.8	-122.94	102.5	-305.9	378.7	368.6	10.05	37.681			
2,800.0	2,795.5	2,762.1	2,742.5	5.4	7.1	-122.96	107.9	-319.2	395.8	385.3	10.44	37.896			
2,900.0	2,895.3	2,860.7	2,839.9	5.6	7.4	-122.97	113.2	-332.5	412.8	402.0	10.84	38.095			
3,000.0	2,995.1	2,959.2	2,937.4	5.9	7.7	-122.99	118.5	-345.8	429.9	418.7	11.23	38.278			
3,100.0	3,094.9	3,057.7	3,034.9	6.1	8.0	-123.00	123.8	-359.0	447.0	435.4	11.63	38.449			
3,200.0	3,194.6	3,156.3	3,132.4	6.3	8.3	-123.01	129.2	-372.3	464.1	452.1	12.02	38.608			
3,300.0	3,294.4	3,254.8	3,229.9	6.5	8.6	-123.02	134.5	-385.6	481.2	468.8	12.42	38.757			
3,400.0	3,394.2	3,353.3	3,327.4	6.7	8.9	-123.03	139.8	-398.9	498.3	485.5	12.81	38.896			
3,500.0	3,493.9	3,451.9	3,424.8	6.9	9.2	-123.04	145.2	-412.2	515.3	502.1	13.21	39.026			
3,600.0	3,593.7	3,550.4	3,522.3	7.1	9.5	-123.04	150.5	-425.5	532.4	518.8	13.60	39.148			
3,700.0	3,693.5	3,648.9	3,619.8	7.3	9.8	-123.05	155.8	-438.8	549.5	535.5	14.00	39.264			
3,800.0	3,793.2	3,747.4	3,717.3	7.5	10.1	-123.06	161.1	-452.1	566.6	552.2	14.39	39.372			
3,900.0	3,893.0	3,846.0	3,814.8	7.7	10.4	-123.06	166.5	-465.4	583.7	568.9	14.79	39.475			
4,000.0	3,992.8	3,944.5	3,912.3	8.0	10.7	-123.07	171.8	-478.6	600.8	585.6	15.18	39.572			
4,100.0	4,092.6	4,043.0	4,009.8	8.2	11.0	-123.08	177.1	-491.9	617.8	602.3	15.58	39.664			
4,200.0	4,192.3	4,141.6	4,107.2	8.4	11.3	-123.08	182.4	-505.2	634.9	619.0	15.97	39.751			
4,300.0	4,292.1	4,240.1	4,204.7	8.6	11.6	-123.09	187.8	-518.5	652.0	635.6	16.37	39.834			
4,400.0	4,391.9	4,338.6	4,302.2	8.8	11.9	-123.09	193.1	-531.8	669.1	652.3	16.76	39.913			
4,500.0	4,491.6	4,437.2	4,399.7	9.0	12.2	-123.10	198.4	-545.1	686.2	669.0	17.16	39.988			
4,600.0	4,591.4	4,535.7	4,497.2	9.2	12.6	-123.10	203.8	-558.4	703.3	685.7	17.56	40.060			
4,700.0	4,691.2	4,634.2	4,594.7	9.4	12.9	-123.11	209.1	-571.7	720.3	702.4	17.95	40.128			
4,800.0	4,790.9	4,732.7	4,692.1	9.6	13.2	-123.11	214.4	-585.0	737.4	719.1	18.35	40.193			
4,900.0	4,890.7	4,831.3	4,789.6	9.8	13.5	-123.11	219.7	-598.2	754.5	735.8	18.74	40.256			

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 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,990.5	4,929.8	4,887.1	10.1	13.8	-123.12	225.1	-611.5	771.6	752.5	19.14	40.316		
5,100.0	5,090.3	5,028.3	4,984.6	10.3	14.1	-123.12	230.4	-624.8	788.7	769.1	19.53	40.373		
5,200.0	5,190.0	5,126.9	5,082.1	10.5	14.4	-123.13	235.7	-638.1	805.8	785.8	19.93	40.428		
5,300.0	5,289.8	5,225.4	5,179.6	10.7	14.7	-123.13	241.0	-651.4	822.8	802.5	20.33	40.481		
5,400.0	5,389.6	5,323.9	5,277.0	10.9	15.0	-123.13	246.4	-664.7	839.9	819.2	20.72	40.531		
5,500.0	5,489.3	5,422.5	5,374.5	11.1	15.3	-123.14	251.7	-678.0	857.0	835.9	21.12	40.580		
5,600.0	5,589.1	5,521.0	5,472.0	11.3	15.6	-123.14	257.0	-691.3	874.1	852.6	21.52	40.627		
5,700.0	5,688.9	5,619.5	5,569.5	11.5	15.9	-123.14	262.4	-704.5	891.2	869.3	21.91	40.672		
5,800.0	5,788.7	5,718.0	5,667.0	11.7	16.2	-123.14	267.7	-717.8	908.3	886.0	22.31	40.715		
5,900.0	5,888.4	5,816.6	5,764.5	11.9	16.5	-123.15	273.0	-731.1	925.3	902.6	22.70	40.757		
6,000.0	5,988.2	5,915.1	5,862.0	12.2	16.8	-123.15	278.3	-744.4	942.4	919.3	23.10	40.798		
6,100.0	6,088.0	6,013.6	5,959.4	12.4	17.1	-123.15	283.7	-757.7	959.5	936.0	23.50	40.837		
6,200.0	6,187.7	6,112.2	6,056.9	12.6	17.4	-123.15	289.0	-771.0	976.6	952.7	23.89	40.874		
6,300.0	6,287.5	6,210.7	6,154.4	12.8	17.7	-123.16	294.3	-784.3	993.7	969.4	24.29	40.911		
6,400.0	6,387.3	6,309.2	6,251.9	13.0	18.0	-123.16	299.6	-797.6	1,010.8	986.1	24.69	40.946		
6,500.0	6,487.0	6,407.8	6,349.4	13.2	18.3	-123.16	305.0	-810.9	1,027.9	1,002.8	25.08	40.980		
6,600.0	6,586.8	6,506.3	6,446.9	13.4	18.6	-123.16	310.3	-824.1	1,044.9	1,019.5	25.48	41.013		
6,700.0	6,686.6	6,604.8	6,544.3	13.6	18.9	-123.16	315.6	-837.4	1,062.0	1,036.1	25.87	41.045		
6,787.0	6,773.4	6,690.5	6,629.2	13.8	19.2	-123.17	320.3	-849.0	1,076.9	1,050.7	26.22	41.072		
6,800.0	6,786.4	6,703.3	6,641.8	13.8	19.3	-133.87	320.9	-850.7	1,079.1	1,052.8	26.28	41.057		
6,850.0	6,836.3	6,752.5	6,690.5	13.9	19.4	138.45	323.6	-857.4	1,087.6	1,061.1	26.49	41.051		
6,900.0	6,886.2	6,801.4	6,738.9	14.0	19.6	108.23	326.3	-864.0	1,096.0	1,069.4	26.66	41.104		
6,950.0	6,935.7	6,849.8	6,786.7	14.0	19.7	100.22	328.9	-870.5	1,104.4	1,077.6	26.80	41.218		
7,000.0	6,984.6	6,897.4	6,833.8	14.0	19.9	96.76	331.4	-876.9	1,112.8	1,085.9	26.89	41.388		
7,050.0	7,032.6	6,944.0	6,879.9	14.0	20.0	94.97	334.0	-883.2	1,121.3	1,094.4	26.95	41.614		
7,100.0	7,079.7	6,989.4	6,924.8	13.9	20.1	93.98	336.4	-889.3	1,129.9	1,103.0	26.97	41.890		
7,150.0	7,125.4	7,033.3	6,968.3	13.9	20.3	93.45	338.8	-895.2	1,138.8	1,111.9	26.98	42.211		
7,200.0	7,169.6	7,075.5	7,010.1	13.8	20.4	93.19	341.1	-900.9	1,148.2	1,121.2	26.97	42.570		
7,250.0	7,212.1	7,121.6	7,055.7	13.8	20.5	93.24	342.8	-907.1	1,158.0	1,131.0	26.94	42.986		
7,300.0	7,252.6	7,171.8	7,105.4	13.7	20.7	93.46	341.3	-913.9	1,168.1	1,141.2	26.88	43.449		
7,350.0	7,291.0	7,224.7	7,157.5	13.7	20.8	93.78	336.0	-921.0	1,178.5	1,151.7	26.82	43.945		
7,400.0	7,327.1	7,280.6	7,212.0	13.7	20.9	94.20	326.2	-928.4	1,189.0	1,162.3	26.74	44.461		
7,450.0	7,360.7	7,340.1	7,269.1	13.7	21.0	94.70	311.1	-936.2	1,199.7	1,173.0	26.67	44.981		
7,500.0	7,391.6	7,403.8	7,328.5	13.7	21.0	95.28	289.7	-944.3	1,210.3	1,183.7	26.61	45.485		
7,550.0	7,419.7	7,472.3	7,389.9	13.8	21.1	95.93	260.8	-952.7	1,220.7	1,194.2	26.57	45.946		
7,600.0	7,444.8	7,546.2	7,453.0	13.9	21.1	96.65	223.2	-961.3	1,230.9	1,204.3	26.57	46.324		
7,650.0	7,466.9	7,626.3	7,516.5	14.1	21.2	97.42	175.3	-969.9	1,240.4	1,213.8	26.64	46.563		
7,700.0	7,485.8	7,713.1	7,578.8	14.3	21.3	98.22	115.6	-978.5	1,249.3	1,222.5	26.81	46.596		
7,750.0	7,501.5	7,807.0	7,637.7	14.6	21.4	99.00	43.0	-986.5	1,257.1	1,229.9	27.13	46.332		
7,800.0	7,513.7	7,907.9	7,690.0	14.9	21.7	99.72	-43.0	-993.6	1,263.6	1,235.9	27.65	45.704		
7,850.0	7,522.6	8,015.2	7,731.8	15.2	22.0	100.31	-141.5	-999.3	1,268.5	1,240.1	28.42	44.636		
7,900.0	7,528.0	8,127.4	7,759.4	15.6	22.5	100.71	-250.1	-1,003.1	1,271.7	1,242.2	29.47	43.153		
7,952.9	7,530.0	8,249.3	7,770.0	16.1	23.2	100.87	-371.4	-1,004.5	1,272.9	1,242.0	30.86	41.240		
8,000.0	7,530.0	8,297.5	7,770.0	16.5	23.5	100.87	-419.6	-1,004.5	1,272.9	1,241.1	31.76	40.073		
8,100.0	7,530.0	8,397.5	7,770.0	17.5	24.2	100.87	-519.6	-1,004.5	1,272.9	1,239.0	33.83	37.622		
8,200.0	7,530.0	8,497.5	7,770.0	18.7	25.1	100.87	-619.6	-1,004.5	1,272.9	1,236.8	36.11	35.247		
8,300.0	7,530.0	8,597.5	7,770.0	19.9	26.0	100.87	-719.6	-1,004.5	1,272.9	1,234.3	38.57	33.004		
8,400.0	7,530.0	8,697.5	7,770.0	21.2	27.0	100.87	-819.6	-1,004.5	1,272.9	1,231.7	41.16	30.923		
8,500.0	7,530.0	8,797.5	7,770.0	22.6	28.1	100.87	-919.6	-1,004.5	1,272.9	1,229.0	43.88	29.011		
8,600.0	7,530.0	8,897.5	7,770.0	24.0	29.2	100.87	-1,019.6	-1,004.5	1,272.9	1,226.2	46.69	27.265		
8,700.0	7,530.0	8,997.5	7,770.0	25.4	30.4	100.87	-1,119.6	-1,004.5	1,272.9	1,223.3	49.58	25.675		
8,800.0	7,530.0	9,097.5	7,770.0	26.9	31.7	100.87	-1,219.6	-1,004.5	1,272.9	1,220.3	52.53	24.230		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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		
8,900.0	7,530.0	9,197.5	7,770.0	28.4	33.0	100.87	-1,319.6	-1,004.5	1,272.9	1,217.3	55.55	22.915		
9,000.0	7,530.0	9,297.5	7,770.0	30.0	34.3	100.87	-1,419.6	-1,004.5	1,272.9	1,214.3	58.61	21.718		
9,100.0	7,530.0	9,397.5	7,770.0	31.5	35.7	100.87	-1,519.6	-1,004.5	1,272.9	1,211.2	61.71	20.627		
9,200.0	7,530.0	9,497.5	7,770.0	33.1	37.1	100.87	-1,619.6	-1,004.5	1,272.9	1,208.0	64.85	19.629		
9,300.0	7,530.0	9,597.5	7,770.0	34.7	38.5	100.87	-1,719.6	-1,004.5	1,272.9	1,204.9	68.01	18.715		
9,400.0	7,530.0	9,697.5	7,770.0	36.3	40.0	100.87	-1,819.6	-1,004.5	1,272.9	1,201.7	71.21	17.876		
9,500.0	7,530.0	9,797.5	7,770.0	38.0	41.5	100.87	-1,919.6	-1,004.5	1,272.9	1,198.5	74.42	17.104		
9,600.0	7,530.0	9,897.5	7,770.0	39.6	43.0	100.87	-2,019.6	-1,004.5	1,272.9	1,195.2	77.66	16.391		
9,700.0	7,530.0	9,997.5	7,770.0	41.3	44.5	100.87	-2,119.6	-1,004.5	1,272.9	1,192.0	80.91	15.732		
9,800.0	7,530.0	10,097.5	7,770.0	42.9	46.1	100.87	-2,219.6	-1,004.5	1,272.9	1,188.7	84.18	15.122		
9,900.0	7,530.0	10,197.5	7,770.0	44.6	47.6	100.87	-2,319.6	-1,004.5	1,272.9	1,185.4	87.46	14.554		
10,000.0	7,530.0	10,297.5	7,770.0	46.3	49.2	100.87	-2,419.6	-1,004.5	1,272.9	1,182.1	90.75	14.026		
10,100.0	7,530.0	10,397.5	7,770.0	47.9	50.8	100.87	-2,519.6	-1,004.5	1,272.9	1,178.8	94.06	13.533		
10,200.0	7,530.0	10,497.5	7,770.0	49.6	52.4	100.87	-2,619.6	-1,004.5	1,272.9	1,175.5	97.37	13.073		
10,300.0	7,530.0	10,597.5	7,770.0	51.3	54.0	100.87	-2,719.6	-1,004.5	1,272.9	1,172.2	100.69	12.641		
10,400.0	7,530.0	10,697.5	7,770.0	53.0	55.6	100.87	-2,819.6	-1,004.5	1,272.9	1,168.9	104.02	12.236		
10,500.0	7,530.0	10,797.5	7,770.0	54.7	57.2	100.87	-2,919.6	-1,004.5	1,272.9	1,165.5	107.36	11.856		
10,600.0	7,530.0	10,897.5	7,770.0	56.4	58.8	100.87	-3,019.6	-1,004.5	1,272.9	1,162.2	110.71	11.498		
10,700.0	7,530.0	10,997.5	7,770.0	58.1	60.5	100.87	-3,119.6	-1,004.5	1,272.9	1,158.8	114.06	11.160		
10,800.0	7,530.0	11,097.5	7,770.0	59.8	62.1	100.87	-3,219.6	-1,004.5	1,272.9	1,155.5	117.42	10.841		
10,900.0	7,530.0	11,197.5	7,770.0	61.5	63.8	100.87	-3,319.6	-1,004.5	1,272.9	1,152.1	120.78	10.539		
11,000.0	7,530.0	11,297.5	7,770.0	63.2	65.4	100.87	-3,419.6	-1,004.5	1,272.9	1,148.7	124.14	10.253		
11,100.0	7,530.0	11,397.5	7,770.0	64.9	67.1	100.87	-3,519.6	-1,004.5	1,272.9	1,145.4	127.51	9.982		
11,200.0	7,530.0	11,497.5	7,770.0	66.6	68.7	100.87	-3,619.6	-1,004.5	1,272.9	1,142.0	130.89	9.725		
11,300.0	7,530.0	11,597.5	7,770.0	68.4	70.4	100.87	-3,719.6	-1,004.5	1,272.9	1,138.6	134.27	9.480		
11,400.0	7,530.0	11,697.5	7,770.0	70.1	72.1	100.87	-3,819.6	-1,004.5	1,272.9	1,135.2	137.65	9.247		
11,500.0	7,530.0	11,797.5	7,770.0	71.8	73.7	100.87	-3,919.6	-1,004.5	1,272.9	1,131.8	141.03	9.025		
11,600.0	7,530.0	11,897.5	7,770.0	73.5	75.4	100.87	-4,019.6	-1,004.5	1,272.9	1,128.5	144.42	8.814		
11,700.0	7,530.0	11,997.5	7,770.0	75.2	77.1	100.87	-4,119.6	-1,004.5	1,272.9	1,125.1	147.81	8.612		
11,800.0	7,530.0	12,097.5	7,770.0	77.0	78.8	100.87	-4,219.6	-1,004.5	1,272.9	1,121.7	151.20	8.418		
11,900.0	7,530.0	12,197.5	7,770.0	78.7	80.5	100.87	-4,319.6	-1,004.5	1,272.9	1,118.3	154.60	8.234		
12,000.0	7,530.0	12,297.5	7,770.0	80.4	82.2	100.87	-4,419.6	-1,004.5	1,272.9	1,114.9	157.99	8.057		
12,100.0	7,530.0	12,397.5	7,770.0	82.2	83.9	100.87	-4,519.6	-1,004.5	1,272.9	1,111.5	161.39	7.887		
12,200.0	7,530.0	12,497.5	7,770.0	83.9	85.6	100.87	-4,619.6	-1,004.5	1,272.9	1,108.1	164.79	7.724		
12,300.0	7,530.0	12,597.5	7,770.0	85.6	87.3	100.87	-4,719.6	-1,004.5	1,272.9	1,104.7	168.20	7.568		
12,400.0	7,530.0	12,697.5	7,770.0	87.3	89.0	100.87	-4,819.6	-1,004.5	1,272.9	1,101.3	171.60	7.418		
12,500.0	7,530.0	12,797.5	7,770.0	89.1	90.7	100.87	-4,919.6	-1,004.5	1,272.9	1,097.9	175.01	7.273		
12,600.0	7,530.0	12,897.5	7,770.0	90.8	92.4	100.87	-5,019.6	-1,004.5	1,272.9	1,094.5	178.42	7.134		
12,700.0	7,530.0	12,997.5	7,770.0	92.5	94.1	100.87	-5,119.6	-1,004.5	1,272.9	1,091.1	181.83	7.001		
12,800.0	7,530.0	13,097.5	7,770.0	94.3	95.8	100.87	-5,219.6	-1,004.5	1,272.9	1,087.6	185.24	6.872		
12,900.0	7,530.0	13,197.5	7,770.0	96.0	97.5	100.87	-5,319.6	-1,004.5	1,272.9	1,084.2	188.65	6.747		
13,000.0	7,530.0	13,297.5	7,770.0	97.8	99.2	100.87	-5,419.6	-1,004.5	1,272.9	1,080.8	192.06	6.627		
13,100.0	7,530.0	13,397.5	7,770.0	99.5	100.9	100.87	-5,519.6	-1,004.5	1,272.9	1,077.4	195.48	6.512		
13,200.0	7,530.0	13,497.5	7,770.0	101.2	102.6	100.87	-5,619.6	-1,004.5	1,272.9	1,074.0	198.89	6.400		
13,300.0	7,530.0	13,597.5	7,770.0	103.0	104.3	100.87	-5,719.6	-1,004.5	1,272.9	1,070.6	202.31	6.292		
13,400.0	7,530.0	13,697.5	7,770.0	104.7	106.1	100.87	-5,819.6	-1,004.5	1,272.9	1,067.2	205.73	6.187		
13,500.0	7,530.0	13,797.5	7,770.0	106.4	107.8	100.87	-5,919.6	-1,004.5	1,272.9	1,063.7	209.14	6.086		
13,600.0	7,530.0	13,897.5	7,770.0	108.2	109.5	100.87	-6,019.6	-1,004.5	1,272.9	1,060.3	212.56	5.988		
13,700.0	7,530.0	13,997.5	7,770.0	109.9	111.2	100.87	-6,119.6	-1,004.5	1,272.9	1,056.9	215.98	5.893		
13,800.0	7,530.0	14,097.5	7,770.0	111.7	112.9	100.87	-6,219.6	-1,004.5	1,272.9	1,053.5	219.40	5.802		
13,900.0	7,530.0	14,197.5	7,770.0	113.4	114.7	100.87	-6,319.6	-1,004.5	1,272.9	1,050.1	222.83	5.712		
14,000.0	7,530.0	14,297.5	7,770.0	115.1	116.4	100.87	-6,419.6	-1,004.5	1,272.9	1,046.6	226.25	5.626		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
14,100.0	7,530.0	14,397.5	7,770.0	116.9	118.1	100.87	-6,519.6	-1,004.5	1,272.9	1,043.2	229.67	5.542		
14,200.0	7,530.0	14,497.5	7,770.0	118.6	119.8	100.87	-6,619.6	-1,004.5	1,272.9	1,039.8	233.09	5.461		
14,300.0	7,530.0	14,597.5	7,770.0	120.4	121.6	100.87	-6,719.6	-1,004.5	1,272.9	1,036.4	236.52	5.382		
14,400.0	7,530.0	14,697.5	7,770.0	122.1	123.3	100.87	-6,819.6	-1,004.5	1,272.9	1,032.9	239.94	5.305		
14,500.0	7,530.0	14,797.5	7,770.0	123.9	125.0	100.87	-6,919.6	-1,004.5	1,272.9	1,029.5	243.37	5.230		
14,600.0	7,530.0	14,897.5	7,770.0	125.6	126.7	100.87	-7,019.6	-1,004.5	1,272.9	1,026.1	246.80	5.158		
14,700.0	7,530.0	14,997.5	7,770.0	127.3	128.5	100.87	-7,119.6	-1,004.5	1,272.9	1,022.7	250.22	5.087		
14,800.0	7,530.0	15,097.5	7,770.0	129.1	130.2	100.87	-7,219.6	-1,004.5	1,272.9	1,019.2	253.65	5.018		
14,900.0	7,530.0	15,197.5	7,770.0	130.8	131.9	100.87	-7,319.6	-1,004.5	1,272.9	1,015.8	257.08	4.951		
15,000.0	7,530.0	15,297.5	7,770.0	132.6	133.7	100.87	-7,419.6	-1,004.5	1,272.9	1,012.4	260.51	4.886		
15,100.0	7,530.0	15,397.5	7,770.0	134.3	135.4	100.87	-7,519.6	-1,004.5	1,272.9	1,009.0	263.93	4.823		
15,200.0	7,530.0	15,497.5	7,770.0	136.1	137.1	100.87	-7,619.6	-1,004.5	1,272.9	1,005.5	267.36	4.761		
15,300.0	7,530.0	15,597.5	7,770.0	137.8	138.9	100.87	-7,719.6	-1,004.5	1,272.9	1,002.1	270.79	4.701		
15,400.0	7,530.0	15,697.5	7,770.0	139.6	140.6	100.87	-7,819.6	-1,004.5	1,272.9	998.7	274.22	4.642		
15,500.0	7,530.0	15,797.5	7,770.0	141.3	142.3	100.87	-7,919.6	-1,004.5	1,272.9	995.2	277.65	4.584		
15,600.0	7,530.0	15,897.5	7,770.0	143.0	144.1	100.87	-8,019.6	-1,004.5	1,272.9	991.8	281.08	4.528		
15,700.0	7,530.0	15,997.5	7,770.0	144.8	145.8	100.87	-8,119.6	-1,004.5	1,272.9	988.4	284.52	4.474		
15,800.0	7,530.0	16,097.5	7,770.0	146.5	147.5	100.87	-8,219.6	-1,004.5	1,272.9	984.9	287.95	4.421		
15,900.0	7,530.0	16,197.5	7,770.0	148.3	149.3	100.87	-8,319.6	-1,004.5	1,272.9	981.5	291.38	4.368		
16,000.0	7,530.0	16,297.5	7,770.0	150.0	151.0	100.87	-8,419.6	-1,004.5	1,272.9	978.1	294.81	4.318		
16,100.0	7,530.0	16,397.5	7,770.0	151.8	152.7	100.87	-8,519.6	-1,004.5	1,272.9	974.6	298.24	4.268		
16,200.0	7,530.0	16,497.5	7,770.0	153.5	154.5	100.87	-8,619.6	-1,004.5	1,272.9	971.2	301.68	4.219		
16,300.0	7,530.0	16,597.5	7,770.0	155.3	156.2	100.87	-8,719.6	-1,004.5	1,272.9	967.8	305.11	4.172		
16,400.0	7,530.0	16,697.5	7,770.0	157.0	157.9	100.87	-8,819.6	-1,004.5	1,272.9	964.3	308.54	4.125		
16,500.0	7,530.0	16,797.5	7,770.0	158.8	159.7	100.87	-8,919.6	-1,004.5	1,272.9	960.9	311.98	4.080		
16,600.0	7,530.0	16,897.5	7,770.0	160.5	161.4	100.87	-9,019.6	-1,004.5	1,272.9	957.5	315.41	4.036		
16,700.0	7,530.0	16,997.5	7,770.0	162.3	163.2	100.87	-9,119.6	-1,004.5	1,272.9	954.0	318.84	3.992		
16,800.0	7,530.0	17,097.5	7,770.0	164.0	164.9	100.87	-9,219.6	-1,004.5	1,272.9	950.6	322.28	3.950		
16,900.0	7,530.0	17,197.5	7,770.0	165.8	166.6	100.87	-9,319.6	-1,004.5	1,272.9	947.2	325.71	3.908		
17,000.0	7,530.0	17,297.5	7,770.0	167.5	168.4	100.87	-9,419.6	-1,004.5	1,272.9	943.7	329.15	3.867		
17,100.0	7,530.0	17,397.5	7,770.0	169.3	170.1	100.87	-9,519.6	-1,004.5	1,272.9	940.3	332.58	3.827		
17,200.0	7,530.0	17,497.5	7,770.0	171.0	171.9	100.87	-9,619.6	-1,004.5	1,272.9	936.9	336.02	3.788		
17,300.0	7,530.0	17,597.5	7,770.0	172.8	173.6	100.87	-9,719.6	-1,004.5	1,272.9	933.4	339.45	3.750		
17,400.0	7,530.0	17,697.5	7,770.0	174.5	175.3	100.87	-9,819.6	-1,004.5	1,272.9	930.0	342.89	3.712		
17,420.9	7,530.0	17,701.3	7,770.0	174.9	175.4	100.87	-9,823.4	-1,004.5	1,273.0	929.7	343.32	3.708 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-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		
400.0	400.0	400.0	400.0	0.7	0.7	-90.00	0.0	-40.0	40.0	38.7	1.35	29.625 CC, ES		
500.0	500.0	499.4	499.4	0.8	0.8	-89.42	0.4	-40.8	40.8	39.1	1.70	24.001		
600.0	600.0	598.7	598.7	1.0	1.0	-87.82	1.6	-43.1	43.1	41.1	2.05	21.029		
700.0	700.0	697.9	697.8	1.2	1.2	-118.87	3.7	-46.8	47.4	45.0	2.40	19.794		
800.0	800.0	796.9	796.5	1.4	1.4	-118.55	6.5	-52.1	54.2	51.5	2.75	19.718		
900.0	899.9	895.5	894.9	1.6	1.6	-119.01	10.2	-58.9	63.4	60.3	3.11	20.396		
988.4	988.1	982.4	981.4	1.7	1.8	-119.80	14.0	-66.0	73.5	70.0	3.43	21.416		
1,000.0	999.7	993.8	992.7	1.7	1.8	-119.92	14.6	-67.1	74.9	71.5	3.47	21.573		
1,100.0	1,099.4	1,091.7	1,090.1	1.9	2.1	-120.54	19.8	-76.7	88.4	84.5	3.85	22.970		
1,200.0	1,199.2	1,190.8	1,188.4	2.1	2.3	-120.82	25.4	-87.1	102.4	98.2	4.23	24.231		
1,300.0	1,299.0	1,289.8	1,286.7	2.3	2.6	-121.04	31.0	-97.4	116.5	111.9	4.61	25.268		
1,400.0	1,398.8	1,388.8	1,385.0	2.5	2.8	-121.20	36.6	-107.8	130.5	125.5	4.99	26.133		
1,500.0	1,498.5	1,487.8	1,483.3	2.7	3.1	-121.34	42.2	-118.1	144.6	139.2	5.38	26.864		
1,600.0	1,598.3	1,586.8	1,581.6	2.9	3.3	-121.45	47.7	-128.4	158.6	152.9	5.77	27.489		
1,700.0	1,698.1	1,685.8	1,679.9	3.2	3.6	-121.54	53.3	-138.8	172.7	166.5	6.16	28.030		
1,800.0	1,797.8	1,784.8	1,778.2	3.4	3.8	-121.62	58.9	-149.1	186.8	180.2	6.55	28.502		
1,900.0	1,897.6	1,883.8	1,876.5	3.6	4.1	-121.69	64.5	-159.5	200.8	193.9	6.94	28.917		
2,000.0	1,997.4	1,982.8	1,974.8	3.8	4.4	-121.75	70.1	-169.8	214.9	207.5	7.34	29.285		
2,100.0	2,097.1	2,081.8	2,073.1	4.0	4.6	-121.80	75.7	-180.2	228.9	221.2	7.73	29.613		
2,200.0	2,196.9	2,180.8	2,171.4	4.2	4.9	-121.85	81.3	-190.5	243.0	234.9	8.12	29.908		
2,300.0	2,296.7	2,279.8	2,269.7	4.4	5.2	-121.89	86.8	-200.9	257.1	248.5	8.52	30.173		
2,400.0	2,396.5	2,378.8	2,368.0	4.6	5.4	-121.93	92.4	-211.2	271.1	262.2	8.91	30.414		
2,500.0	2,496.2	2,477.8	2,466.4	4.8	5.7	-121.96	98.0	-221.6	285.2	275.9	9.31	30.633		
2,600.0	2,596.0	2,576.8	2,564.7	5.0	6.0	-121.99	103.6	-231.9	299.2	289.5	9.70	30.833		
2,700.0	2,695.8	2,675.9	2,663.0	5.2	6.2	-122.02	109.2	-242.3	313.3	303.2	10.10	31.017		
2,800.0	2,795.5	2,774.9	2,761.3	5.4	6.5	-122.04	114.8	-252.6	327.4	316.9	10.50	31.186		
2,900.0	2,895.3	2,873.9	2,859.6	5.6	6.8	-122.07	120.4	-262.9	341.4	330.5	10.89	31.343		
3,000.0	2,995.1	2,972.9	2,957.9	5.9	7.0	-122.09	125.9	-273.3	355.5	344.2	11.29	31.488		
3,100.0	3,094.9	3,071.9	3,056.2	6.1	7.3	-122.11	131.5	-283.6	369.5	357.8	11.69	31.622		
3,200.0	3,194.6	3,170.9	3,154.5	6.3	7.6	-122.12	137.1	-294.0	383.6	371.5	12.08	31.747		
3,300.0	3,294.4	3,269.9	3,252.8	6.5	7.8	-122.14	142.7	-304.3	397.7	385.2	12.48	31.864		
3,400.0	3,394.2	3,368.9	3,351.1	6.7	8.1	-122.16	148.3	-314.7	411.7	398.8	12.88	31.974		
3,500.0	3,493.9	3,467.9	3,449.4	6.9	8.4	-122.17	153.9	-325.0	425.8	412.5	13.27	32.076		
3,600.0	3,593.7	3,566.9	3,547.7	7.1	8.6	-122.18	159.5	-335.4	439.8	426.2	13.67	32.173		
3,700.0	3,693.5	3,665.9	3,646.0	7.3	8.9	-122.20	165.0	-345.7	453.9	439.8	14.07	32.264		
3,800.0	3,793.2	3,764.9	3,744.3	7.5	9.2	-122.21	170.6	-356.1	468.0	453.5	14.47	32.349		
3,900.0	3,893.0	3,863.9	3,842.6	7.7	9.4	-122.22	176.2	-366.4	482.0	467.1	14.86	32.430		
4,000.0	3,992.8	3,962.9	3,940.9	8.0	9.7	-122.23	181.8	-376.8	496.1	480.8	15.26	32.506		
4,100.0	4,092.6	4,061.9	4,039.2	8.2	10.0	-122.24	187.4	-387.1	510.1	494.5	15.66	32.579		
4,200.0	4,192.3	4,161.0	4,137.6	8.4	10.2	-122.25	193.0	-397.5	524.2	508.1	16.06	32.648		
4,300.0	4,292.1	4,260.0	4,235.9	8.6	10.5	-122.26	198.6	-407.8	538.3	521.8	16.45	32.713		
4,400.0	4,391.9	4,359.0	4,334.2	8.8	10.8	-122.27	204.1	-418.1	552.3	535.5	16.85	32.775		
4,500.0	4,491.6	4,458.0	4,432.5	9.0	11.0	-122.28	209.7	-428.5	566.4	549.1	17.25	32.834		
4,600.0	4,591.4	4,557.0	4,530.8	9.2	11.3	-122.28	215.3	-438.8	580.4	562.8	17.65	32.890		
4,700.0	4,691.2	4,656.0	4,629.1	9.4	11.6	-122.29	220.9	-449.2	594.5	576.4	18.05	32.944		
4,800.0	4,790.9	4,755.0	4,727.4	9.6	11.8	-122.30	226.5	-459.5	608.6	590.1	18.44	32.996		
4,900.0	4,890.7	4,854.0	4,825.7	9.8	12.1	-122.31	232.1	-469.9	622.6	603.8	18.84	33.045		
5,000.0	4,990.5	4,953.0	4,924.0	10.1	12.4	-122.31	237.7	-480.2	636.7	617.4	19.24	33.092		

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 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,100.0	5,090.3	5,052.0	5,022.3	10.3	12.6	-122.32	243.2	-490.6	650.7	631.1	19.64	33.137		
5,200.0	5,190.0	5,151.0	5,120.6	10.5	12.9	-122.32	248.8	-500.9	664.8	644.8	20.04	33.180		
5,300.0	5,289.8	5,250.0	5,218.9	10.7	13.2	-122.33	254.4	-511.3	678.9	658.4	20.43	33.222		
5,400.0	5,389.6	5,349.0	5,317.2	10.9	13.4	-122.34	260.0	-521.6	692.9	672.1	20.83	33.262		
5,500.0	5,489.3	5,448.0	5,415.5	11.1	13.7	-122.34	265.6	-532.0	707.0	685.7	21.23	33.300		
5,600.0	5,589.1	5,547.0	5,513.8	11.3	14.0	-122.35	271.2	-542.3	721.0	699.4	21.63	33.337		
5,700.0	5,688.9	5,646.1	5,612.1	11.5	14.3	-122.35	276.8	-552.7	735.1	713.1	22.03	33.372		
5,800.0	5,788.7	5,745.1	5,710.4	11.7	14.5	-122.36	282.3	-563.0	749.2	726.7	22.43	33.407		
5,900.0	5,888.4	5,844.1	5,808.8	11.9	14.8	-122.36	287.9	-573.3	763.2	740.4	22.82	33.440		
6,000.0	5,988.2	5,943.1	5,907.1	12.2	15.1	-122.36	293.5	-583.7	777.3	754.1	23.22	33.471		
6,100.0	6,088.0	6,042.1	6,005.4	12.4	15.3	-122.37	299.1	-594.0	791.3	767.7	23.62	33.502		
6,200.0	6,187.7	6,141.1	6,103.7	12.6	15.6	-122.37	304.7	-604.4	805.4	781.4	24.02	33.532		
6,300.0	6,287.5	6,240.1	6,202.0	12.8	15.9	-122.38	310.3	-614.7	819.5	795.0	24.42	33.561		
6,400.0	6,387.3	6,339.1	6,300.3	13.0	16.1	-122.38	315.9	-625.1	833.5	808.7	24.82	33.588		
6,500.0	6,487.0	6,438.1	6,398.6	13.2	16.4	-122.38	321.4	-635.4	847.6	822.4	25.21	33.615		
6,600.0	6,586.8	6,537.1	6,496.9	13.4	16.7	-122.39	327.0	-645.8	861.6	836.0	25.61	33.641		
6,700.0	6,686.6	6,636.1	6,595.2	13.6	16.9	-122.39	332.6	-656.1	875.7	849.7	26.01	33.666		
6,787.0	6,773.4	6,722.2	6,680.7	13.8	17.2	-122.39	337.5	-665.1	887.9	861.6	26.36	33.688		
6,800.0	6,786.4	6,735.1	6,693.5	13.8	17.2	-133.06	338.2	-666.5	889.8	863.3	26.42	33.683		
6,850.0	6,836.3	6,784.5	6,742.6	13.9	17.3	139.41	341.0	-671.6	896.8	870.2	26.60	33.709		
6,900.0	6,886.2	6,833.7	6,791.4	14.0	17.5	109.36	343.6	-676.8	903.8	877.1	26.75	33.789		
6,950.0	6,935.7	6,883.3	6,840.7	14.0	17.6	101.41	343.7	-682.0	910.8	884.0	26.84	33.941		
7,000.0	6,984.6	6,933.3	6,890.3	14.0	17.7	97.86	340.4	-687.2	917.8	891.0	26.87	34.154		
7,050.0	7,032.6	6,983.8	6,940.0	14.0	17.7	95.84	333.5	-692.4	924.8	897.9	26.87	34.422		
7,100.0	7,079.7	7,034.9	6,989.7	13.9	17.8	94.52	322.9	-697.6	931.6	904.8	26.82	34.738		
7,150.0	7,125.4	7,086.5	7,039.0	13.9	17.8	93.58	308.7	-702.8	938.3	911.6	26.74	35.095		
7,200.0	7,169.6	7,138.6	7,087.7	13.8	17.8	92.88	290.7	-708.0	944.8	918.2	26.63	35.480		
7,250.0	7,212.1	7,191.4	7,135.5	13.8	17.9	92.33	268.9	-713.0	951.1	924.6	26.51	35.880		
7,300.0	7,252.6	7,244.7	7,182.0	13.7	17.9	91.89	243.4	-717.9	957.2	930.8	26.39	36.277		
7,350.0	7,291.0	7,298.6	7,227.0	13.7	17.9	91.53	214.1	-722.6	963.0	936.7	26.27	36.651		
7,400.0	7,327.1	7,353.1	7,270.2	13.7	17.9	91.23	181.1	-727.2	968.5	942.3	26.19	36.978		
7,450.0	7,360.7	7,408.2	7,311.1	13.7	17.9	90.98	144.5	-731.5	973.6	947.5	26.15	37.231		
7,500.0	7,391.6	7,463.8	7,349.4	13.7	17.9	90.77	104.5	-735.5	978.4	952.2	26.17	37.383		
7,550.0	7,419.7	7,519.9	7,384.9	13.8	18.0	90.59	61.2	-739.2	982.7	956.5	26.27	37.412		
7,600.0	7,444.8	7,576.5	7,417.2	13.9	18.1	90.45	14.8	-742.6	986.6	960.2	26.46	37.291		
7,650.0	7,466.9	7,633.6	7,445.9	14.1	18.2	90.32	-34.4	-745.6	990.1	963.3	26.75	37.014		
7,700.0	7,485.8	7,691.1	7,470.8	14.3	18.4	90.22	-86.1	-748.3	993.1	965.9	27.15	36.573		
7,750.0	7,501.5	7,748.9	7,491.6	14.6	18.6	90.14	-140.0	-750.5	995.5	967.8	27.68	35.972		
7,800.0	7,513.7	7,807.0	7,508.1	14.9	18.9	90.08	-195.7	-752.2	997.5	969.1	28.32	35.216		
7,850.0	7,522.6	7,865.3	7,520.0	15.2	19.2	90.04	-252.7	-753.5	998.9	969.8	29.09	34.337		
7,900.0	7,528.0	7,923.8	7,527.4	15.6	19.6	90.01	-310.7	-754.2	999.7	969.8	29.96	33.364		
7,952.9	7,530.0	7,985.7	7,530.0	16.1	20.0	90.00	-372.6	-754.5	1,000.0	969.0	30.99	32.268		
8,000.0	7,530.0	8,032.7	7,530.0	16.5	20.3	90.00	-419.6	-754.5	1,000.0	968.1	31.92	31.334		
8,100.0	7,530.0	8,132.7	7,530.0	17.5	21.2	90.00	-519.6	-754.5	1,000.0	966.0	34.03	29.386		
8,200.0	7,530.0	8,232.7	7,530.0	18.7	22.1	90.00	-619.6	-754.5	1,000.0	963.7	36.36	27.501		
8,300.0	7,530.0	8,332.7	7,530.0	19.9	23.2	90.00	-719.6	-754.5	1,000.0	961.2	38.87	25.726		
8,400.0	7,530.0	8,432.7	7,530.0	21.2	24.3	90.00	-819.6	-754.5	1,000.0	958.5	41.53	24.081		
8,500.0	7,530.0	8,532.7	7,530.0	22.6	25.5	90.00	-919.6	-754.5	1,000.0	955.7	44.30	22.573		
8,600.0	7,530.0	8,632.7	7,530.0	24.0	26.7	90.00	-1,019.6	-754.5	1,000.0	952.9	47.17	21.199		
8,700.0	7,530.0	8,732.7	7,530.0	25.4	28.0	90.00	-1,119.6	-754.5	1,000.0	949.9	50.13	19.950		
8,800.0	7,530.0	8,832.7	7,530.0	26.9	29.4	90.00	-1,219.6	-754.5	1,000.0	946.9	53.15	18.817		
8,900.0	7,530.0	8,932.7	7,530.0	28.4	30.8	90.00	-1,319.6	-754.5	1,000.0	943.8	56.22	17.787		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
9,000.0	7,530.0	9,032.7	7,530.0	30.0	32.2	90.00	-1,419.6	-754.5	1,000.0	940.7	59.35	16.850	
9,100.0	7,530.0	9,132.7	7,530.0	31.5	33.7	90.00	-1,519.6	-754.5	1,000.0	937.5	62.51	15.997	
9,200.0	7,530.0	9,232.7	7,530.0	33.1	35.2	90.00	-1,619.6	-754.5	1,000.0	934.3	65.71	15.218	
9,300.0	7,530.0	9,332.7	7,530.0	34.7	36.7	90.00	-1,719.6	-754.5	1,000.0	931.1	68.94	14.505	
9,400.0	7,530.0	9,432.7	7,530.0	36.3	38.2	90.00	-1,819.6	-754.5	1,000.0	927.8	72.20	13.851	
9,500.0	7,530.0	9,532.7	7,530.0	38.0	39.8	90.00	-1,919.6	-754.5	1,000.0	924.6	75.48	13.249	
9,600.0	7,530.0	9,632.7	7,530.0	39.6	41.4	90.00	-2,019.6	-754.5	1,000.0	921.3	78.78	12.694	
9,700.0	7,530.0	9,732.7	7,530.0	41.3	42.9	90.00	-2,119.6	-754.5	1,000.0	917.9	82.09	12.181	
9,800.0	7,530.0	9,832.7	7,530.0	42.9	44.5	90.00	-2,219.6	-754.5	1,000.0	914.6	85.43	11.706	
9,900.0	7,530.0	9,932.7	7,530.0	44.6	46.1	90.00	-2,319.6	-754.5	1,000.0	911.3	88.77	11.265	
10,000.0	7,530.0	10,032.7	7,530.0	46.3	47.8	90.00	-2,419.6	-754.5	1,000.0	907.9	92.13	10.855	
10,100.0	7,530.0	10,132.7	7,530.0	47.9	49.4	90.00	-2,519.6	-754.5	1,000.0	904.5	95.50	10.472	
10,200.0	7,530.0	10,232.7	7,530.0	49.6	51.0	90.00	-2,619.6	-754.5	1,000.0	901.2	98.87	10.114	
10,300.0	7,530.0	10,332.7	7,530.0	51.3	52.7	90.00	-2,719.6	-754.5	1,000.0	897.8	102.26	9.779	
10,400.0	7,530.0	10,432.7	7,530.0	53.0	54.3	90.00	-2,819.6	-754.5	1,000.0	894.4	105.66	9.465	
10,500.0	7,530.0	10,532.7	7,530.0	54.7	56.0	90.00	-2,919.6	-754.5	1,000.0	891.0	109.06	9.170	
10,600.0	7,530.0	10,632.7	7,530.0	56.4	57.6	90.00	-3,019.6	-754.5	1,000.0	887.6	112.47	8.892	
10,700.0	7,530.0	10,732.7	7,530.0	58.1	59.3	90.00	-3,119.6	-754.5	1,000.0	884.2	115.88	8.630	
10,800.0	7,530.0	10,832.7	7,530.0	59.8	61.0	90.00	-3,219.6	-754.5	1,000.0	880.7	119.30	8.383	
10,900.0	7,530.0	10,932.7	7,530.0	61.5	62.6	90.00	-3,319.6	-754.5	1,000.0	877.3	122.72	8.149	
11,000.0	7,530.0	11,032.7	7,530.0	63.2	64.3	90.00	-3,419.6	-754.5	1,000.0	873.9	126.15	7.927	
11,100.0	7,530.0	11,132.7	7,530.0	64.9	66.0	90.00	-3,519.6	-754.5	1,000.0	870.5	129.59	7.717	
11,200.0	7,530.0	11,232.7	7,530.0	66.6	67.7	90.00	-3,619.6	-754.5	1,000.0	867.0	133.02	7.518	
11,300.0	7,530.0	11,332.7	7,530.0	68.4	69.4	90.00	-3,719.6	-754.5	1,000.0	863.6	136.46	7.328	
11,400.0	7,530.0	11,432.7	7,530.0	70.1	71.1	90.00	-3,819.6	-754.5	1,000.0	860.1	139.91	7.148	
11,500.0	7,530.0	11,532.7	7,530.0	71.8	72.8	90.00	-3,919.6	-754.5	1,000.0	856.7	143.36	6.976	
11,600.0	7,530.0	11,632.7	7,530.0	73.5	74.5	90.00	-4,019.6	-754.5	1,000.0	853.2	146.81	6.812	
11,700.0	7,530.0	11,732.7	7,530.0	75.2	76.2	90.00	-4,119.6	-754.5	1,000.0	849.8	150.26	6.655	
11,800.0	7,530.0	11,832.7	7,530.0	77.0	77.9	90.00	-4,219.6	-754.5	1,000.0	846.3	153.71	6.506	
11,900.0	7,530.0	11,932.7	7,530.0	78.7	79.6	90.00	-4,319.6	-754.5	1,000.0	842.9	157.17	6.363	
12,000.0	7,530.0	12,032.7	7,530.0	80.4	81.3	90.00	-4,419.6	-754.5	1,000.0	839.4	160.63	6.226	
12,100.0	7,530.0	12,132.7	7,530.0	82.2	83.0	90.00	-4,519.6	-754.5	1,000.0	835.9	164.09	6.094	
12,200.0	7,530.0	12,232.7	7,530.0	83.9	84.7	90.00	-4,619.6	-754.5	1,000.0	832.5	167.56	5.968	
12,300.0	7,530.0	12,332.7	7,530.0	85.6	86.4	90.00	-4,719.6	-754.5	1,000.0	829.0	171.02	5.847	
12,400.0	7,530.0	12,432.7	7,530.0	87.3	88.1	90.00	-4,819.6	-754.5	1,000.0	825.6	174.49	5.731	
12,500.0	7,530.0	12,532.7	7,530.0	89.1	89.9	90.00	-4,919.6	-754.5	1,000.0	822.1	177.96	5.619	
12,600.0	7,530.0	12,632.7	7,530.0	90.8	91.6	90.00	-5,019.6	-754.5	1,000.0	818.6	181.43	5.512	
12,700.0	7,530.0	12,732.7	7,530.0	92.5	93.3	90.00	-5,119.6	-754.5	1,000.0	815.1	184.90	5.408	
12,800.0	7,530.0	12,832.7	7,530.0	94.3	95.0	90.00	-5,219.6	-754.5	1,000.0	811.7	188.38	5.309	
12,900.0	7,530.0	12,932.7	7,530.0	96.0	96.7	90.00	-5,319.6	-754.5	1,000.0	808.2	191.85	5.213	
13,000.0	7,530.0	13,032.7	7,530.0	97.8	98.5	90.00	-5,419.6	-754.5	1,000.0	804.7	195.33	5.120	
13,100.0	7,530.0	13,132.7	7,530.0	99.5	100.2	90.00	-5,519.6	-754.5	1,000.0	801.2	198.80	5.030	
13,200.0	7,530.0	13,232.7	7,530.0	101.2	101.9	90.00	-5,619.6	-754.5	1,000.0	797.8	202.28	4.944	
13,300.0	7,530.0	13,332.7	7,530.0	103.0	103.6	90.00	-5,719.6	-754.5	1,000.0	794.3	205.76	4.860	
13,400.0	7,530.0	13,432.7	7,530.0	104.7	105.4	90.00	-5,819.6	-754.5	1,000.0	790.8	209.24	4.779	
13,500.0	7,530.0	13,532.7	7,530.0	106.4	107.1	90.00	-5,919.6	-754.5	1,000.0	787.3	212.72	4.701	
13,600.0	7,530.0	13,632.7	7,530.0	108.2	108.8	90.00	-6,019.6	-754.5	1,000.0	783.8	216.20	4.626	
13,700.0	7,530.0	13,732.7	7,530.0	109.9	110.6	90.00	-6,119.6	-754.5	1,000.0	780.4	219.68	4.552	
13,800.0	7,530.0	13,832.7	7,530.0	111.7	112.3	90.00	-6,219.6	-754.5	1,000.0	776.9	223.17	4.481	
13,900.0	7,530.0	13,932.7	7,530.0	113.4	114.0	90.00	-6,319.6	-754.5	1,000.0	773.4	226.65	4.412	
14,000.0	7,530.0	14,032.7	7,530.0	115.1	115.8	90.00	-6,419.6	-754.5	1,000.0	769.9	230.14	4.345	
14,100.0	7,530.0	14,132.7	7,530.0	116.9	117.5	90.00	-6,519.6	-754.5	1,000.0	766.4	233.62	4.281	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,200.0	7,530.0	14,232.7	7,530.0	118.6	119.2	90.00	-6,619.6	-754.5	1,000.0	762.9	237.11	4.218		
14,300.0	7,530.0	14,332.7	7,530.0	120.4	121.0	90.00	-6,719.6	-754.5	1,000.0	759.4	240.60	4.157		
14,400.0	7,530.0	14,432.7	7,530.0	122.1	122.7	90.00	-6,819.6	-754.5	1,000.0	756.0	244.08	4.097		
14,500.0	7,530.0	14,532.7	7,530.0	123.9	124.4	90.00	-6,919.6	-754.5	1,000.0	752.5	247.57	4.039		
14,600.0	7,530.0	14,632.7	7,530.0	125.6	126.2	90.00	-7,019.6	-754.5	1,000.0	749.0	251.06	3.983		
14,700.0	7,530.0	14,732.7	7,530.0	127.3	127.9	90.00	-7,119.6	-754.5	1,000.0	745.5	254.55	3.929		
14,800.0	7,530.0	14,832.7	7,530.0	129.1	129.6	90.00	-7,219.6	-754.5	1,000.0	742.0	258.04	3.876		
14,900.0	7,530.0	14,932.7	7,530.0	130.8	131.4	90.00	-7,319.6	-754.5	1,000.0	738.5	261.53	3.824		
15,000.0	7,530.0	15,032.7	7,530.0	132.6	133.1	90.00	-7,419.6	-754.5	1,000.0	735.0	265.02	3.773		
15,100.0	7,530.0	15,132.7	7,530.0	134.3	134.8	90.00	-7,519.6	-754.5	1,000.0	731.5	268.51	3.724		
15,200.0	7,530.0	15,232.7	7,530.0	136.1	136.6	90.00	-7,619.6	-754.5	1,000.0	728.0	272.00	3.677		
15,300.0	7,530.0	15,332.7	7,530.0	137.8	138.3	90.00	-7,719.6	-754.5	1,000.0	724.6	275.49	3.630		
15,400.0	7,530.0	15,432.7	7,530.0	139.6	140.1	90.00	-7,819.6	-754.5	1,000.0	721.1	278.99	3.585		
15,500.0	7,530.0	15,532.7	7,530.0	141.3	141.8	90.00	-7,919.6	-754.5	1,000.0	717.6	282.48	3.540		
15,600.0	7,530.0	15,632.7	7,530.0	143.0	143.5	90.00	-8,019.6	-754.5	1,000.0	714.1	285.97	3.497		
15,700.0	7,530.0	15,732.7	7,530.0	144.8	145.3	90.00	-8,119.6	-754.5	1,000.0	710.6	289.47	3.455		
15,800.0	7,530.0	15,832.7	7,530.0	146.5	147.0	90.00	-8,219.6	-754.5	1,000.0	707.1	292.96	3.414		
15,900.0	7,530.0	15,932.7	7,530.0	148.3	148.8	90.00	-8,319.6	-754.5	1,000.0	703.6	296.45	3.373		
16,000.0	7,530.0	16,032.7	7,530.0	150.0	150.5	90.00	-8,419.6	-754.5	1,000.0	700.1	299.95	3.334		
16,100.0	7,530.0	16,132.7	7,530.0	151.8	152.2	90.00	-8,519.6	-754.5	1,000.0	696.6	303.44	3.296		
16,200.0	7,530.0	16,232.7	7,530.0	153.5	154.0	90.00	-8,619.6	-754.5	1,000.0	693.1	306.94	3.258		
16,300.0	7,530.0	16,332.7	7,530.0	155.3	155.7	90.00	-8,719.6	-754.5	1,000.0	689.6	310.43	3.221		
16,400.0	7,530.0	16,432.7	7,530.0	157.0	157.5	90.00	-8,819.6	-754.5	1,000.0	686.1	313.93	3.186		
16,500.0	7,530.0	16,532.7	7,530.0	158.8	159.2	90.00	-8,919.6	-754.5	1,000.0	682.6	317.42	3.151		
16,600.0	7,530.0	16,632.7	7,530.0	160.5	161.0	90.00	-9,019.6	-754.5	1,000.0	679.1	320.92	3.116		
16,700.0	7,530.0	16,732.7	7,530.0	162.3	162.7	90.00	-9,119.6	-754.5	1,000.0	675.6	324.42	3.083		
16,800.0	7,530.0	16,832.7	7,530.0	164.0	164.4	90.00	-9,219.6	-754.5	1,000.0	672.1	327.91	3.050		
16,900.0	7,530.0	16,932.7	7,530.0	165.8	166.2	90.00	-9,319.6	-754.5	1,000.0	668.6	331.41	3.018		
17,000.0	7,530.0	17,032.7	7,530.0	167.5	167.9	90.00	-9,419.6	-754.5	1,000.0	665.1	334.91	2.986		
17,100.0	7,530.0	17,132.7	7,530.0	169.3	169.7	90.00	-9,519.6	-754.5	1,000.0	661.6	338.41	2.955		
17,200.0	7,530.0	17,232.7	7,530.0	171.0	171.4	90.00	-9,619.6	-754.5	1,000.0	658.1	341.90	2.925		
17,300.0	7,530.0	17,332.7	7,530.0	172.8	173.2	90.00	-9,719.6	-754.5	1,000.1	654.6	345.40	2.895		
17,400.0	7,530.0	17,432.7	7,530.0	174.5	174.9	90.00	-9,819.6	-754.5	1,000.1	651.2	348.90	2.866		
17,400.0	7,530.0	17,432.8	7,530.0	174.5	174.9	90.00	-9,819.7	-754.5	1,000.1	651.1	348.90	2.866		
17,420.9	7,530.0	17,440.2	7,530.0	174.9	175.0	90.00	-9,827.1	-754.5	1,000.1	650.7	349.40	2.862 SF		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1F-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
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		
433.4	433.4	433.4	433.4	0.7	0.7	-90.00	0.0	-29.9	29.9	28.5	1.47	20.404	CC	
500.0	500.0	499.8	499.8	0.8	0.8	-89.75	0.1	-30.1	30.1	28.4	1.70	17.721	ES	
600.0	600.0	599.3	599.3	1.0	1.0	-87.87	1.2	-31.5	31.5	29.5	2.05	15.387		
700.0	700.0	698.8	698.7	1.2	1.2	-118.30	3.2	-34.3	34.8	32.4	2.40	14.529		
800.0	800.0	798.1	797.9	1.4	1.4	-117.53	6.4	-38.4	40.5	37.7	2.75	14.706		
900.0	899.9	897.1	896.7	1.6	1.6	-117.68	10.5	-43.9	48.4	45.2	3.11	15.542		
988.4	988.1	984.6	983.8	1.7	1.8	-118.28	15.0	-49.8	57.2	53.8	3.44	16.641		
1,000.0	999.7	996.1	995.3	1.7	1.8	-118.40	15.6	-50.7	58.4	55.0	3.48	16.793		
1,100.0	1,099.4	1,095.5	1,094.3	1.9	2.0	-119.26	21.0	-57.8	69.2	65.4	3.86	17.949		
1,200.0	1,199.2	1,194.9	1,193.3	2.1	2.2	-119.90	26.4	-65.0	80.0	75.8	4.24	18.885		
1,300.0	1,299.0	1,294.3	1,292.3	2.3	2.4	-120.38	31.7	-72.1	90.8	86.2	4.62	19.655		
1,400.0	1,398.8	1,393.7	1,391.3	2.5	2.7	-120.76	37.1	-79.3	101.6	96.6	5.01	20.298		
1,500.0	1,498.5	1,493.1	1,490.3	2.7	2.9	-121.07	42.5	-86.4	112.4	107.0	5.39	20.843		
1,600.0	1,598.3	1,592.6	1,589.3	2.9	3.1	-121.32	47.9	-93.6	123.2	117.5	5.78	21.309		
1,700.0	1,698.1	1,692.0	1,688.3	3.2	3.3	-121.53	53.3	-100.7	134.0	127.9	6.17	21.713		
1,800.0	1,797.8	1,791.4	1,787.3	3.4	3.6	-121.71	58.6	-107.9	144.9	138.3	6.56	22.066		
1,900.0	1,897.6	1,890.8	1,886.3	3.6	3.8	-121.87	64.0	-115.0	155.7	148.7	6.96	22.376		
2,000.0	1,997.4	1,990.2	1,985.4	3.8	4.0	-122.00	69.4	-122.2	166.5	159.1	7.35	22.652		
2,100.0	2,097.1	2,089.6	2,084.4	4.0	4.3	-122.12	74.8	-129.4	177.3	169.6	7.74	22.897		
2,200.0	2,196.9	2,189.0	2,183.4	4.2	4.5	-122.23	80.2	-136.5	188.1	180.0	8.14	23.118		
2,300.0	2,296.7	2,288.5	2,282.4	4.4	4.7	-122.32	85.6	-143.7	198.9	190.4	8.53	23.317		
2,400.0	2,396.5	2,387.9	2,381.4	4.6	5.0	-122.41	90.9	-150.8	209.8	200.8	8.93	23.498		
2,500.0	2,496.2	2,487.3	2,480.4	4.8	5.2	-122.48	96.3	-158.0	220.6	211.3	9.32	23.663		
2,600.0	2,596.0	2,586.7	2,579.4	5.0	5.4	-122.55	101.7	-165.1	231.4	221.7	9.72	23.813		
2,700.0	2,695.8	2,686.1	2,678.4	5.2	5.7	-122.61	107.1	-172.3	242.2	232.1	10.11	23.951		
2,800.0	2,795.5	2,785.5	2,777.4	5.4	5.9	-122.67	112.5	-179.4	253.0	242.5	10.51	24.079		
2,900.0	2,895.3	2,884.9	2,876.4	5.6	6.1	-122.72	117.8	-186.6	263.9	253.0	10.90	24.196		
3,000.0	2,995.1	2,984.3	2,975.4	5.9	6.3	-122.77	123.2	-193.7	274.7	263.4	11.30	24.305		
3,100.0	3,094.9	3,083.8	3,074.5	6.1	6.6	-122.82	128.6	-200.9	285.5	273.8	11.70	24.407		
3,200.0	3,194.6	3,183.2	3,173.5	6.3	6.8	-122.86	134.0	-208.0	296.3	284.2	12.09	24.501		
3,300.0	3,294.4	3,282.6	3,272.5	6.5	7.0	-122.90	139.4	-215.2	307.1	294.6	12.49	24.589		
3,400.0	3,394.2	3,382.0	3,371.5	6.7	7.3	-122.93	144.8	-222.3	318.0	305.1	12.89	24.672		
3,500.0	3,493.9	3,481.4	3,470.5	6.9	7.5	-122.97	150.1	-229.5	328.8	315.5	13.28	24.749		
3,600.0	3,593.7	3,580.8	3,569.5	7.1	7.7	-123.00	155.5	-236.7	339.6	325.9	13.68	24.822		
3,700.0	3,693.5	3,680.2	3,668.5	7.3	8.0	-123.03	160.9	-243.8	350.4	336.3	14.08	24.890		
3,800.0	3,793.2	3,779.6	3,767.5	7.5	8.2	-123.05	166.3	-251.0	361.2	346.8	14.48	24.955		
3,900.0	3,893.0	3,879.1	3,866.5	7.7	8.4	-123.08	171.7	-258.1	372.1	357.2	14.87	25.016		
4,000.0	3,992.8	3,978.5	3,965.5	8.0	8.7	-123.10	177.0	-265.3	382.9	367.6	15.27	25.074		
4,100.0	4,092.6	4,077.9	4,064.5	8.2	8.9	-123.13	182.4	-272.4	393.7	378.0	15.67	25.128		
4,200.0	4,192.3	4,177.3	4,163.5	8.4	9.1	-123.15	187.8	-279.6	404.5	388.5	16.07	25.180		
4,300.0	4,292.1	4,276.7	4,262.6	8.6	9.4	-123.17	193.2	-286.7	415.3	398.9	16.46	25.230		
4,400.0	4,391.9	4,376.1	4,361.6	8.8	9.6	-123.19	198.6	-293.9	426.2	409.3	16.86	25.276		
4,500.0	4,491.6	4,475.5	4,460.6	9.0	9.8	-123.21	204.0	-301.0	437.0	419.7	17.26	25.321		
4,600.0	4,591.4	4,574.9	4,559.6	9.2	10.1	-123.23	209.3	-308.2	447.8	430.2	17.66	25.364		
4,700.0	4,691.2	4,674.4	4,658.6	9.4	10.3	-123.24	214.7	-315.3	458.6	440.6	18.05	25.404		
4,800.0	4,790.9	4,773.8	4,757.6	9.6	10.5	-123.26	220.1	-322.5	469.5	451.0	18.45	25.443		
4,900.0	4,890.7	4,873.2	4,856.6	9.8	10.8	-123.28	225.5	-329.7	480.3	461.4	18.85	25.480		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1F-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,000.0	4,990.5	4,972.6	4,955.6	10.1	11.0	-123.29	230.9	-336.8	491.1	471.9	19.25	25.516		
5,100.0	5,090.3	5,072.0	5,054.6	10.3	11.2	-123.31	236.2	-344.0	501.9	482.3	19.64	25.550		
5,200.0	5,190.0	5,171.4	5,153.6	10.5	11.5	-123.32	241.6	-351.1	512.7	492.7	20.04	25.583		
5,300.0	5,289.8	5,270.8	5,252.6	10.7	11.7	-123.33	247.0	-358.3	523.6	503.1	20.44	25.614		
5,400.0	5,389.6	5,370.2	5,351.7	10.9	11.9	-123.34	252.4	-365.4	534.4	513.5	20.84	25.644		
5,500.0	5,489.3	5,469.7	5,450.7	11.1	12.2	-123.36	257.8	-372.6	545.2	524.0	21.24	25.673		
5,600.0	5,589.1	5,569.1	5,549.7	11.3	12.4	-123.37	263.2	-379.7	556.0	534.4	21.63	25.701		
5,700.0	5,688.9	5,668.5	5,648.7	11.5	12.6	-123.38	268.5	-386.9	566.8	544.8	22.03	25.728		
5,800.0	5,788.7	5,767.9	5,747.7	11.7	12.9	-123.39	273.9	-394.0	577.7	555.2	22.43	25.754		
5,900.0	5,888.4	5,867.3	5,846.7	11.9	13.1	-123.40	279.3	-401.2	588.5	565.7	22.83	25.779		
6,000.0	5,988.2	5,966.7	5,945.7	12.2	13.3	-123.41	284.7	-408.3	599.3	576.1	23.23	25.803		
6,100.0	6,088.0	6,066.1	6,044.7	12.4	13.6	-123.42	290.1	-415.5	610.1	586.5	23.62	25.827		
6,200.0	6,187.7	6,165.5	6,143.7	12.6	13.8	-123.43	295.4	-422.6	621.0	596.9	24.02	25.849		
6,300.0	6,287.5	6,265.0	6,242.7	12.8	14.0	-123.44	300.8	-429.8	631.8	607.4	24.42	25.871		
6,400.0	6,387.3	6,364.4	6,341.7	13.0	14.3	-123.45	306.2	-437.0	642.6	617.8	24.82	25.892		
6,500.0	6,487.0	6,463.8	6,440.8	13.2	14.5	-123.46	311.6	-444.1	653.4	628.2	25.22	25.912		
6,600.0	6,586.8	6,563.2	6,539.8	13.4	14.7	-123.46	317.0	-451.3	664.2	638.6	25.62	25.932		
6,700.0	6,686.6	6,662.6	6,638.8	13.6	15.0	-123.47	322.4	-458.4	675.1	649.1	26.01	25.951		
6,787.0	6,773.4	6,749.1	6,724.9	13.8	15.2	-123.48	327.0	-464.6	684.5	658.1	26.36	25.967		
6,800.0	6,786.4	6,762.0	6,737.8	13.8	15.2	-134.11	327.7	-465.6	685.9	659.5	26.41	25.968		
6,850.0	6,836.3	6,811.7	6,787.2	13.9	15.3	138.55	330.4	-469.1	691.3	664.7	26.59	26.002		
6,900.0	6,886.2	6,861.0	6,836.3	14.0	15.4	108.75	333.1	-472.7	696.6	669.8	26.72	26.068		
6,950.0	6,935.7	6,909.8	6,884.9	14.0	15.5	101.27	335.7	-476.2	701.9	675.1	26.82	26.168		
7,000.0	6,984.6	6,957.8	6,932.8	14.0	15.7	98.42	338.3	-479.7	707.4	680.5	26.89	26.305		
7,050.0	7,032.6	7,004.8	6,979.6	14.0	15.8	97.29	340.9	-483.0	713.1	686.2	26.93	26.483		
7,100.0	7,079.7	7,051.3	7,025.9	13.9	15.9	97.02	343.3	-486.4	719.3	692.4	26.93	26.706		
7,150.0	7,125.4	7,101.1	7,075.5	13.9	16.0	97.27	343.7	-490.0	726.0	699.1	26.90	26.990		
7,200.0	7,169.6	7,152.5	7,126.7	13.8	16.0	97.74	340.4	-493.6	733.0	706.2	26.83	27.324		
7,250.0	7,212.1	7,205.7	7,179.3	13.8	16.1	98.35	333.1	-497.4	740.3	713.6	26.73	27.700		
7,300.0	7,252.6	7,260.9	7,233.1	13.7	16.1	99.05	321.5	-501.2	747.9	721.3	26.61	28.111		
7,350.0	7,291.0	7,318.3	7,287.9	13.7	16.1	99.81	305.0	-505.1	755.7	729.2	26.48	28.543		
7,400.0	7,327.1	7,378.0	7,343.3	13.7	16.1	100.62	283.2	-509.0	763.5	737.2	26.35	28.981		
7,450.0	7,360.7	7,440.2	7,399.0	13.7	16.1	101.44	255.7	-513.0	771.3	745.1	26.23	29.406		
7,500.0	7,391.6	7,505.1	7,454.2	13.7	16.1	102.27	222.0	-516.8	779.0	752.8	26.15	29.792		
7,550.0	7,419.7	7,572.8	7,508.4	13.8	16.0	103.08	181.6	-520.6	786.3	760.2	26.12	30.109		
7,600.0	7,444.8	7,643.4	7,560.6	13.9	16.0	103.87	134.2	-524.2	793.3	767.1	26.16	30.328		
7,650.0	7,466.9	7,716.9	7,609.7	14.1	16.1	104.62	79.7	-527.5	799.7	773.4	26.30	30.404		
7,700.0	7,485.8	7,793.2	7,654.5	14.3	16.2	105.30	18.0	-530.5	805.4	778.8	26.57	30.318		
7,750.0	7,501.5	7,872.2	7,693.7	14.6	16.4	105.89	-50.4	-533.1	810.3	783.3	26.98	30.032		
7,800.0	7,513.7	7,953.4	7,726.0	14.9	16.7	106.38	-124.9	-535.2	814.2	786.6	27.56	29.546		
7,850.0	7,522.6	8,036.6	7,750.1	15.2	17.1	106.74	-204.4	-536.7	817.0	788.7	28.31	28.856		
7,900.0	7,528.0	8,121.0	7,765.0	15.6	17.6	106.96	-287.4	-537.4	818.6	789.4	29.24	27.998		
7,952.9	7,530.0	8,209.0	7,770.0	16.1	18.2	107.04	-375.3	-537.5	819.0	788.6	30.37	26.967		
8,000.0	7,530.0	8,256.1	7,770.0	16.5	18.6	107.04	-422.4	-537.3	818.8	787.6	31.25	26.204		
8,100.0	7,530.0	8,356.1	7,770.0	17.5	19.5	107.05	-522.4	-537.0	818.5	785.2	33.26	24.608		
8,200.0	7,530.0	8,456.1	7,770.0	18.7	20.6	107.06	-622.4	-536.6	818.2	782.7	35.48	23.061		
8,300.0	7,530.0	8,556.1	7,770.0	19.9	21.7	107.07	-722.4	-536.3	817.8	780.0	37.86	21.600		
8,400.0	7,530.0	8,656.1	7,770.0	21.2	22.9	107.07	-822.3	-535.9	817.5	777.1	40.38	20.243		
8,500.0	7,530.0	8,756.1	7,770.0	22.6	24.2	107.08	-922.3	-535.6	817.2	774.1	43.02	18.995		
8,600.0	7,530.0	8,856.1	7,770.0	24.0	25.5	107.09	-1,022.3	-535.2	816.8	771.1	45.75	17.854		
8,700.0	7,530.0	8,956.1	7,770.0	25.4	26.9	107.09	-1,122.3	-534.9	816.5	767.9	48.56	16.814		
8,800.0	7,530.0	9,056.1	7,770.0	26.9	28.3	107.10	-1,222.3	-534.5	816.2	764.7	51.43	15.869		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,900.0	7,530.0	9,156.1	7,770.0	28.4	29.7	107.11	-1,322.3	-534.2	815.8	761.5	54.36	15.008	
9,000.0	7,530.0	9,256.1	7,770.0	30.0	31.2	107.12	-1,422.3	-533.8	815.5	758.2	57.34	14.223	
9,100.0	7,530.0	9,356.1	7,770.0	31.5	32.7	107.12	-1,522.3	-533.5	815.2	754.8	60.35	13.507	
9,200.0	7,530.0	9,456.1	7,770.0	33.1	34.3	107.13	-1,622.3	-533.1	814.8	751.4	63.40	12.853	
9,300.0	7,530.0	9,556.1	7,770.0	34.7	35.8	107.14	-1,722.3	-532.8	814.5	748.0	66.48	12.253	
9,400.0	7,530.0	9,656.1	7,770.0	36.3	37.4	107.14	-1,822.3	-532.4	814.2	744.6	69.58	11.702	
9,500.0	7,530.0	9,756.1	7,770.0	38.0	39.0	107.15	-1,922.3	-532.1	813.8	741.1	72.70	11.194	
9,600.0	7,530.0	9,856.1	7,770.0	39.6	40.6	107.16	-2,022.3	-531.8	813.5	737.7	75.85	10.726	
9,700.0	7,530.0	9,956.1	7,770.0	41.3	42.2	107.17	-2,122.3	-531.4	813.2	734.2	79.01	10.292	
9,800.0	7,530.0	10,056.1	7,770.0	42.9	43.8	107.17	-2,222.3	-531.1	812.8	730.6	82.18	9.891	
9,900.0	7,530.0	10,156.1	7,770.0	44.6	45.5	107.18	-2,322.3	-530.7	812.5	727.1	85.37	9.517	
10,000.0	7,530.0	10,256.1	7,770.0	46.3	47.1	107.19	-2,422.3	-530.4	812.2	723.6	88.57	9.170	
10,100.0	7,530.0	10,356.1	7,770.0	47.9	48.8	107.20	-2,522.3	-530.0	811.8	720.1	91.78	8.845	
10,200.0	7,530.0	10,456.1	7,770.0	49.6	50.4	107.20	-2,622.3	-529.7	811.5	716.5	95.00	8.542	
10,300.0	7,530.0	10,556.1	7,770.0	51.3	52.1	107.21	-2,722.3	-529.3	811.2	712.9	98.23	8.258	
10,400.0	7,530.0	10,656.1	7,770.0	53.0	53.7	107.22	-2,822.3	-529.0	810.8	709.4	101.46	7.991	
10,500.0	7,530.0	10,756.1	7,770.0	54.7	55.4	107.22	-2,922.3	-528.6	810.5	705.8	104.71	7.741	
10,600.0	7,530.0	10,856.1	7,770.0	56.4	57.1	107.23	-3,022.3	-528.3	810.2	702.2	107.96	7.505	
10,700.0	7,530.0	10,956.1	7,770.0	58.1	58.8	107.24	-3,122.3	-527.9	809.8	698.6	111.21	7.282	
10,800.0	7,530.0	11,056.1	7,770.0	59.8	60.5	107.25	-3,222.3	-527.6	809.5	695.0	114.47	7.072	
10,900.0	7,530.0	11,156.1	7,770.0	61.5	62.2	107.25	-3,322.3	-527.2	809.2	691.4	117.74	6.873	
11,000.0	7,530.0	11,256.1	7,770.0	63.2	63.9	107.26	-3,422.3	-526.9	808.8	687.8	121.00	6.684	
11,100.0	7,530.0	11,356.1	7,770.0	64.9	65.6	107.27	-3,522.3	-526.5	808.5	684.2	124.28	6.506	
11,200.0	7,530.0	11,456.1	7,770.0	66.6	67.3	107.28	-3,622.3	-526.2	808.2	680.6	127.55	6.336	
11,300.0	7,530.0	11,556.1	7,770.0	68.4	69.0	107.28	-3,722.3	-525.8	807.8	677.0	130.83	6.174	
11,400.0	7,530.0	11,656.1	7,770.0	70.1	70.7	107.29	-3,822.3	-525.5	807.5	673.4	134.12	6.021	
11,500.0	7,530.0	11,756.1	7,770.0	71.8	72.4	107.30	-3,922.3	-525.1	807.2	669.8	137.40	5.874	
11,600.0	7,530.0	11,856.1	7,770.0	73.5	74.1	107.31	-4,022.3	-524.8	806.8	666.1	140.69	5.735	
11,700.0	7,530.0	11,956.1	7,770.0	75.2	75.8	107.31	-4,122.3	-524.4	806.5	662.5	143.98	5.601	
11,800.0	7,530.0	12,056.1	7,770.0	77.0	77.5	107.32	-4,222.3	-524.1	806.2	658.9	147.27	5.474	
11,900.0	7,530.0	12,156.1	7,770.0	78.7	79.2	107.33	-4,322.3	-523.7	805.8	655.3	150.57	5.352	
12,000.0	7,530.0	12,256.1	7,770.0	80.4	80.9	107.33	-4,422.3	-523.4	805.5	651.6	153.87	5.235	
12,100.0	7,530.0	12,356.1	7,770.0	82.2	82.7	107.34	-4,522.3	-523.0	805.2	648.0	157.16	5.123	
12,200.0	7,530.0	12,456.1	7,770.0	83.9	84.4	107.35	-4,622.3	-522.7	804.8	644.4	160.47	5.016	
12,300.0	7,530.0	12,556.1	7,770.0	85.6	86.1	107.36	-4,722.3	-522.3	804.5	640.7	163.77	4.912	
12,400.0	7,530.0	12,656.1	7,770.0	87.3	87.8	107.36	-4,822.3	-522.0	804.2	637.1	167.07	4.813	
12,500.0	7,530.0	12,756.1	7,770.0	89.1	89.6	107.37	-4,922.3	-521.6	803.8	633.5	170.37	4.718	
12,600.0	7,530.0	12,856.1	7,770.0	90.8	91.3	107.38	-5,022.3	-521.3	803.5	629.8	173.68	4.626	
12,700.0	7,530.0	12,956.1	7,770.0	92.5	93.0	107.39	-5,122.3	-520.9	803.2	626.2	176.99	4.538	
12,800.0	7,530.0	13,056.1	7,770.0	94.3	94.7	107.39	-5,222.3	-520.6	802.8	622.5	180.30	4.453	
12,900.0	7,530.0	13,156.1	7,770.0	96.0	96.5	107.40	-5,322.3	-520.2	802.5	618.9	183.60	4.371	
13,000.0	7,530.0	13,256.1	7,770.0	97.8	98.2	107.41	-5,422.3	-519.9	802.2	615.3	186.91	4.292	
13,100.0	7,530.0	13,356.1	7,770.0	99.5	99.9	107.42	-5,522.3	-519.5	801.8	611.6	190.22	4.215	
13,200.0	7,530.0	13,456.1	7,770.0	101.2	101.7	107.42	-5,622.3	-519.2	801.5	608.0	193.54	4.141	
13,300.0	7,530.0	13,556.1	7,770.0	103.0	103.4	107.43	-5,722.3	-518.8	801.2	604.3	196.85	4.070	
13,400.0	7,530.0	13,656.1	7,770.0	104.7	105.1	107.44	-5,822.3	-518.5	800.8	600.7	200.16	4.001	
13,500.0	7,530.0	13,756.1	7,770.0	106.4	106.9	107.45	-5,922.3	-518.1	800.5	597.0	203.48	3.934	
13,600.0	7,530.0	13,856.1	7,770.0	108.2	108.6	107.45	-6,022.3	-517.8	800.2	593.4	206.79	3.869	
13,700.0	7,530.0	13,956.1	7,770.0	109.9	110.3	107.46	-6,122.3	-517.4	799.8	589.7	210.10	3.807	
13,800.0	7,530.0	14,056.1	7,770.0	111.7	112.1	107.47	-6,222.3	-517.1	799.5	586.1	213.42	3.746	
13,900.0	7,530.0	14,156.1	7,770.0	113.4	113.8	107.48	-6,322.3	-516.7	799.2	582.4	216.74	3.687	
14,000.0	7,530.0	14,256.1	7,770.0	115.1	115.5	107.48	-6,422.3	-516.4	798.8	578.8	220.05	3.630	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,100.0	7,530.0	14,356.1	7,770.0	116.9	117.3	107.49	-6,522.3	-516.0	798.5	575.1	223.37	3.575		
14,200.0	7,530.0	14,456.1	7,770.0	118.6	119.0	107.50	-6,622.3	-515.7	798.2	571.5	226.69	3.521		
14,300.0	7,530.0	14,556.1	7,770.0	120.4	120.7	107.51	-6,722.3	-515.4	797.8	567.8	230.00	3.469		
14,400.0	7,530.0	14,656.1	7,770.0	122.1	122.5	107.51	-6,822.3	-515.0	797.5	564.2	233.32	3.418		
14,500.0	7,530.0	14,756.1	7,770.0	123.9	124.2	107.52	-6,922.3	-514.7	797.2	560.5	236.64	3.369		
14,600.0	7,530.0	14,856.1	7,770.0	125.6	126.0	107.53	-7,022.3	-514.3	796.8	556.9	239.96	3.321		
14,700.0	7,530.0	14,956.1	7,770.0	127.3	127.7	107.54	-7,122.3	-514.0	796.5	553.2	243.27	3.274		
14,800.0	7,530.0	15,056.1	7,770.0	129.1	129.4	107.54	-7,222.3	-513.6	796.2	549.6	246.59	3.229		
14,900.0	7,530.0	15,156.1	7,770.0	130.8	131.2	107.55	-7,322.3	-513.3	795.8	545.9	249.91	3.184		
15,000.0	7,530.0	15,256.1	7,770.0	132.6	132.9	107.56	-7,422.3	-512.9	795.5	542.3	253.23	3.141		
15,100.0	7,530.0	15,356.0	7,770.0	134.3	134.7	107.57	-7,522.3	-512.6	795.2	538.6	256.55	3.100		
15,200.0	7,530.0	15,456.0	7,770.0	136.1	136.4	107.57	-7,622.3	-512.2	794.8	535.0	259.87	3.059		
15,300.0	7,530.0	15,556.0	7,770.0	137.8	138.1	107.58	-7,722.3	-511.9	794.5	531.3	263.19	3.019		
15,400.0	7,530.0	15,656.0	7,770.0	139.6	139.9	107.59	-7,822.3	-511.5	794.2	527.7	266.51	2.980		
15,500.0	7,530.0	15,756.0	7,770.0	141.3	141.6	107.60	-7,922.3	-511.2	793.8	524.0	269.83	2.942		
15,600.0	7,530.0	15,856.0	7,770.0	143.0	143.4	107.60	-8,022.3	-510.8	793.5	520.4	273.15	2.905		
15,700.0	7,530.0	15,956.0	7,770.0	144.8	145.1	107.61	-8,122.3	-510.5	793.2	516.7	276.47	2.869		
15,800.0	7,530.0	16,056.0	7,770.0	146.5	146.9	107.62	-8,222.3	-510.1	792.9	513.1	279.79	2.834		
15,900.0	7,530.0	16,156.0	7,770.0	148.3	148.6	107.63	-8,322.3	-509.8	792.5	509.4	283.11	2.799		
16,000.0	7,530.0	16,256.0	7,770.0	150.0	150.3	107.64	-8,422.3	-509.4	792.2	505.8	286.43	2.766		
16,100.0	7,530.0	16,356.0	7,770.0	151.8	152.1	107.64	-8,522.3	-509.1	791.9	502.1	289.75	2.733		
16,200.0	7,530.0	16,456.0	7,770.0	153.5	153.8	107.65	-8,622.3	-508.7	791.5	498.5	293.07	2.701		
16,300.0	7,530.0	16,556.0	7,770.0	155.3	155.6	107.66	-8,722.3	-508.4	791.2	494.8	296.39	2.669		
16,400.0	7,530.0	16,656.0	7,770.0	157.0	157.3	107.67	-8,822.3	-508.0	790.9	491.1	299.71	2.639		
16,500.0	7,530.0	16,756.0	7,770.0	158.8	159.1	107.67	-8,922.3	-507.7	790.5	487.5	303.03	2.609		
16,600.0	7,530.0	16,856.0	7,770.0	160.5	160.8	107.68	-9,022.2	-507.3	790.2	483.8	306.35	2.579		
16,700.0	7,530.0	16,956.0	7,770.0	162.3	162.6	107.69	-9,122.2	-507.0	789.9	480.2	309.67	2.551		
16,800.0	7,530.0	17,056.0	7,770.0	164.0	164.3	107.70	-9,222.2	-506.6	789.5	476.5	312.99	2.523		
16,900.0	7,530.0	17,156.0	7,770.0	165.8	166.0	107.70	-9,322.2	-506.3	789.2	472.9	316.31	2.495		
17,000.0	7,530.0	17,256.0	7,770.0	167.5	167.8	107.71	-9,422.2	-505.9	788.9	469.2	319.63	2.468		
17,100.0	7,530.0	17,356.0	7,770.0	169.3	169.5	107.72	-9,522.2	-505.6	788.5	465.6	322.95	2.442		
17,200.0	7,530.0	17,456.0	7,770.0	171.0	171.3	107.73	-9,622.2	-505.2	788.2	461.9	326.27	2.416		
17,300.0	7,530.0	17,556.0	7,770.0	172.8	173.0	107.74	-9,722.2	-504.9	787.9	458.3	329.59	2.390		
17,400.0	7,530.0	17,656.0	7,770.0	174.5	174.8	107.74	-9,822.2	-504.5	787.5	454.6	332.91	2.366		
17,410.7	7,530.0	17,664.2	7,770.0	174.7	174.9	107.74	-9,830.4	-504.5	787.5	454.3	333.22	2.363		
17,420.9	7,530.0	17,664.2	7,770.0	174.9	174.9	107.74	-9,830.4	-504.5	787.6	454.2	333.39	2.362 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				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			
500.0	500.0	500.0	500.0	0.8	0.8	-90.00	0.0	-19.9	19.9	18.2	1.70	11.689 CC, ES			
600.0	600.0	599.9	599.8	1.0	1.0	-87.73	0.8	-20.2	20.2	18.2	2.05	9.870			
700.0	700.0	699.7	699.6	1.2	1.2	-115.97	3.2	-21.2	21.8	19.4	2.40	9.099			
800.0	800.0	799.4	799.2	1.4	1.4	-112.68	7.2	-22.9	25.2	22.4	2.76	9.131			
900.0	899.9	899.1	898.8	1.6	1.6	-110.90	12.6	-25.2	30.0	26.9	3.12	9.625			
988.4	988.1	987.4	986.9	1.7	1.7	-111.72	17.5	-27.3	35.0	31.5	3.45	10.136			
1,000.0	999.7	999.0	998.5	1.7	1.8	-111.95	18.2	-27.6	35.7	32.2	3.50	10.205			
1,100.0	1,099.4	1,098.8	1,098.1	1.9	2.0	-113.62	23.8	-30.0	41.6	37.7	3.88	10.727			
1,200.0	1,199.2	1,198.6	1,197.7	2.1	2.2	-114.87	29.3	-32.3	47.5	43.3	4.26	11.152			
1,300.0	1,299.0	1,298.4	1,297.4	2.3	2.4	-115.84	34.9	-34.7	53.5	48.8	4.65	11.504			
1,400.0	1,398.8	1,398.3	1,397.0	2.5	2.6	-116.62	40.5	-37.1	59.4	54.4	5.04	11.799			
1,500.0	1,498.5	1,498.1	1,496.7	2.7	2.8	-117.25	46.1	-39.5	65.4	60.0	5.43	12.049			
1,600.0	1,598.3	1,597.9	1,596.3	2.9	3.0	-117.78	51.7	-41.8	71.4	65.6	5.82	12.264			
1,700.0	1,698.1	1,697.7	1,695.9	3.2	3.2	-118.23	57.3	-44.2	77.4	71.2	6.21	12.451			
1,800.0	1,797.8	1,797.5	1,795.6	3.4	3.4	-118.61	62.9	-46.6	83.4	76.8	6.61	12.614			
1,900.0	1,897.6	1,897.3	1,895.2	3.6	3.6	-118.95	68.5	-48.9	89.4	82.3	7.00	12.758			
2,000.0	1,997.4	1,997.2	1,994.8	3.8	3.8	-119.24	74.0	-51.3	95.3	87.9	7.40	12.886			
2,100.0	2,097.1	2,097.0	2,094.5	4.0	4.0	-119.49	79.6	-53.7	101.3	93.5	7.80	13.001			
2,200.0	2,196.9	2,196.8	2,194.1	4.2	4.2	-119.72	85.2	-56.1	107.3	99.2	8.19	13.104			
2,300.0	2,296.7	2,296.6	2,293.7	4.4	4.4	-119.92	90.8	-58.4	113.3	104.8	8.59	13.197			
2,400.0	2,396.5	2,396.4	2,393.4	4.6	4.6	-120.10	96.4	-60.8	119.3	110.4	8.99	13.282			
2,500.0	2,496.2	2,496.3	2,493.0	4.8	4.8	-120.27	102.0	-63.2	125.3	116.0	9.38	13.359			
2,600.0	2,596.0	2,596.1	2,592.6	5.0	5.0	-120.42	107.6	-65.6	131.3	121.6	9.78	13.429			
2,700.0	2,695.8	2,695.9	2,692.3	5.2	5.2	-120.56	113.2	-67.9	137.4	127.2	10.18	13.494			
2,800.0	2,795.5	2,795.7	2,791.9	5.4	5.4	-120.68	118.7	-70.3	143.4	132.8	10.58	13.554			
2,900.0	2,895.3	2,895.5	2,891.5	5.6	5.6	-120.80	124.3	-72.7	149.4	138.4	10.97	13.610			
3,000.0	2,995.1	2,995.4	2,991.2	5.9	5.8	-120.90	129.9	-75.0	155.4	144.0	11.37	13.661			
3,100.0	3,094.9	3,095.2	3,090.8	6.1	6.0	-121.00	135.5	-77.4	161.4	149.6	11.77	13.709			
3,200.0	3,194.6	3,195.0	3,190.4	6.3	6.2	-121.09	141.1	-79.8	167.4	155.2	12.17	13.753			
3,300.0	3,294.4	3,294.8	3,290.1	6.5	6.4	-121.18	146.7	-82.2	173.4	160.8	12.57	13.795			
3,400.0	3,394.2	3,394.6	3,389.7	6.7	6.6	-121.26	152.3	-84.5	179.4	166.4	12.97	13.834			
3,500.0	3,493.9	3,494.5	3,489.3	6.9	6.8	-121.33	157.9	-86.9	185.4	172.0	13.37	13.871			
3,600.0	3,593.7	3,594.3	3,589.0	7.1	7.0	-121.40	163.4	-89.3	191.4	177.6	13.77	13.905			
3,700.0	3,693.5	3,694.1	3,688.6	7.3	7.2	-121.47	169.0	-91.7	197.4	183.3	14.16	13.938			
3,800.0	3,793.2	3,793.9	3,788.2	7.5	7.4	-121.53	174.6	-94.0	203.4	188.9	14.56	13.968			
3,900.0	3,893.0	3,893.7	3,887.9	7.7	7.6	-121.59	180.2	-96.4	209.4	194.5	14.96	13.997			
4,000.0	3,992.8	3,993.5	3,987.5	8.0	7.8	-121.64	185.8	-98.8	215.5	200.1	15.36	14.024			
4,100.0	4,092.6	4,093.4	4,087.1	8.2	8.0	-121.70	191.4	-101.2	221.5	205.7	15.76	14.050			
4,200.0	4,192.3	4,193.2	4,186.8	8.4	8.2	-121.74	197.0	-103.5	227.5	211.3	16.16	14.075			
4,300.0	4,292.1	4,293.0	4,286.4	8.6	8.4	-121.79	202.6	-105.9	233.5	216.9	16.56	14.099			
4,400.0	4,391.9	4,392.8	4,386.0	8.8	8.6	-121.83	208.1	-108.3	239.5	222.5	16.96	14.121			
4,500.0	4,491.6	4,492.6	4,485.7	9.0	8.8	-121.88	213.7	-110.6	245.5	228.1	17.36	14.142			
4,600.0	4,591.4	4,592.5	4,585.3	9.2	9.0	-121.92	219.3	-113.0	251.5	233.8	17.76	14.162			
4,700.0	4,691.2	4,692.3	4,685.0	9.4	9.2	-121.96	224.9	-115.4	257.5	239.4	18.16	14.182			
4,800.0	4,790.9	4,792.1	4,784.6	9.6	9.4	-121.99	230.5	-117.8	263.5	245.0	18.56	14.200			
4,900.0	4,890.7	4,891.9	4,884.2	9.8	9.6	-122.03	236.1	-120.1	269.5	250.6	18.96	14.218			
5,000.0	4,990.5	4,991.7	4,983.9	10.1	9.8	-122.06	241.7	-122.5	275.6	256.2	19.36	14.235			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	5,091.6	5,083.5	10.3	10.1	-122.09	247.3	-124.9	281.6	261.8	19.76	14.251		
5,200.0	5,190.0	5,191.4	5,183.1	10.5	10.3	-122.12	252.8	-127.3	287.6	267.4	20.16	14.267		
5,300.0	5,289.8	5,291.2	5,282.8	10.7	10.5	-122.15	258.4	-129.6	293.6	273.0	20.56	14.282		
5,400.0	5,389.6	5,391.0	5,382.4	10.9	10.7	-122.18	264.0	-132.0	299.6	278.6	20.96	14.296		
5,500.0	5,489.3	5,490.8	5,482.0	11.1	10.9	-122.21	269.6	-134.4	305.6	284.2	21.36	14.310		
5,600.0	5,589.1	5,590.7	5,581.7	11.3	11.1	-122.23	275.2	-136.7	311.6	289.9	21.76	14.323		
5,700.0	5,688.9	5,690.5	5,681.3	11.5	11.3	-122.26	280.8	-139.1	317.6	295.5	22.16	14.336		
5,800.0	5,788.7	5,790.3	5,780.9	11.7	11.5	-122.28	286.4	-141.5	323.6	301.1	22.56	14.349		
5,900.0	5,888.4	5,890.1	5,880.6	11.9	11.7	-122.30	292.0	-143.9	329.7	306.7	22.96	14.361		
6,000.0	5,988.2	5,989.9	5,980.2	12.2	11.9	-122.33	297.5	-146.2	335.7	312.3	23.36	14.372		
6,100.0	6,088.0	6,089.7	6,079.8	12.4	12.1	-122.35	303.1	-148.6	341.7	317.9	23.76	14.383		
6,200.0	6,187.7	6,189.6	6,179.5	12.6	12.3	-122.37	308.7	-151.0	347.7	323.5	24.15	14.394		
6,300.0	6,287.5	6,289.4	6,279.1	12.8	12.5	-122.39	314.3	-153.4	353.7	329.1	24.55	14.404		
6,400.0	6,387.3	6,389.2	6,378.7	13.0	12.7	-122.41	319.9	-155.7	359.7	334.8	24.95	14.414		
6,500.0	6,487.0	6,489.0	6,478.4	13.2	12.9	-122.43	325.5	-158.1	365.7	340.4	25.35	14.424		
6,600.0	6,586.8	6,588.8	6,578.0	13.4	13.1	-122.45	331.1	-160.5	371.7	346.0	25.75	14.434		
6,700.0	6,686.6	6,688.7	6,677.6	13.6	13.3	-122.46	336.7	-162.8	377.7	351.6	26.15	14.443		
6,787.0	6,773.4	6,775.5	6,764.3	13.8	13.5	-122.48	341.5	-164.9	383.0	356.5	26.50	14.450		
6,800.0	6,786.4	6,788.5	6,777.3	13.8	13.5	-133.05	342.2	-165.2	383.8	357.2	26.55	14.453		
6,850.0	6,836.3	6,838.1	6,826.9	13.9	13.6	139.67	343.1	-166.4	386.8	360.1	26.69	14.494		
6,900.0	6,886.2	6,887.9	6,876.5	14.0	13.6	109.66	340.5	-167.6	389.8	363.1	26.77	14.563		
6,950.0	6,935.7	6,937.6	6,925.9	14.0	13.7	101.70	334.4	-168.9	392.9	366.1	26.80	14.659		
7,000.0	6,984.6	6,987.4	6,974.8	14.0	13.7	98.14	324.9	-170.1	395.9	369.1	26.79	14.780		
7,050.0	7,032.6	7,037.3	7,022.9	14.0	13.6	96.10	312.1	-171.4	398.9	372.2	26.73	14.921		
7,100.0	7,079.7	7,087.2	7,070.1	13.9	13.6	94.77	295.8	-172.6	401.9	375.2	26.65	15.080		
7,150.0	7,125.4	7,137.2	7,116.1	13.9	13.6	93.82	276.4	-173.9	404.8	378.2	26.54	15.251		
7,200.0	7,169.6	7,187.2	7,160.7	13.8	13.5	93.10	253.7	-175.1	407.6	381.2	26.42	15.427		
7,250.0	7,212.1	7,237.3	7,203.6	13.8	13.4	92.53	228.0	-176.3	410.4	384.1	26.30	15.603		
7,300.0	7,252.6	7,287.4	7,244.7	13.7	13.4	92.07	199.2	-177.5	413.1	386.9	26.19	15.769		
7,350.0	7,291.0	7,337.6	7,283.7	13.7	13.4	91.69	167.7	-178.7	415.6	389.5	26.11	15.918		
7,400.0	7,327.1	7,387.9	7,320.4	13.7	13.3	91.37	133.4	-179.8	418.1	392.0	26.07	16.039		
7,450.0	7,360.7	7,438.2	7,354.7	13.7	13.3	91.09	96.6	-180.9	420.4	394.3	26.07	16.123		
7,500.0	7,391.6	7,488.6	7,386.3	13.7	13.4	90.86	57.5	-182.0	422.5	396.4	26.14	16.162		
7,550.0	7,419.7	7,539.0	7,415.2	13.8	13.4	90.67	16.1	-182.9	424.5	398.2	26.29	16.147		
7,600.0	7,444.8	7,589.4	7,441.0	13.9	13.6	90.50	-27.2	-183.9	426.4	399.8	26.53	16.073		
7,650.0	7,466.9	7,640.0	7,463.8	14.1	13.7	90.36	-72.2	-184.7	428.0	401.2	26.86	15.938		
7,700.0	7,485.8	7,690.5	7,483.4	14.3	13.9	90.24	-118.8	-185.5	429.5	402.2	27.28	15.743		
7,750.0	7,501.5	7,741.1	7,499.7	14.6	14.2	90.15	-166.7	-186.3	430.8	403.0	27.81	15.490		
7,800.0	7,513.7	7,791.8	7,512.5	14.9	14.5	90.08	-215.7	-186.9	431.9	403.4	28.44	15.186		
7,850.0	7,522.6	7,842.4	7,521.9	15.2	14.9	90.03	-265.5	-187.5	432.8	403.6	29.17	14.839		
7,900.0	7,528.0	7,893.1	7,527.7	15.6	15.3	90.01	-315.8	-188.0	433.5	403.5	29.98	14.458		
7,952.9	7,530.0	7,946.9	7,530.0	16.1	15.7	90.00	-369.5	-188.4	434.0	403.0	30.93	14.030		
8,000.0	7,530.0	7,994.0	7,530.0	16.5	16.2	90.00	-416.6	-188.7	434.3	402.4	31.84	13.640		
8,100.0	7,530.0	8,094.0	7,530.0	17.5	17.2	90.00	-516.6	-189.4	435.0	401.0	33.96	12.809		
8,200.0	7,530.0	8,194.0	7,530.0	18.7	18.4	90.00	-616.6	-190.1	435.7	399.4	36.29	12.005		
8,300.0	7,530.0	8,294.0	7,530.0	19.9	19.6	90.00	-716.6	-190.8	436.4	397.6	38.80	11.247		
8,400.0	7,530.0	8,394.0	7,530.0	21.2	20.9	90.00	-816.6	-191.5	437.1	395.6	41.46	10.543		
8,500.0	7,530.0	8,494.0	7,530.0	22.6	22.3	90.00	-916.6	-192.2	437.8	393.5	44.23	9.898		
8,600.0	7,530.0	8,594.0	7,530.0	24.0	23.7	90.00	-1,016.6	-192.9	438.5	391.4	47.10	9.309		
8,700.0	7,530.0	8,693.9	7,530.0	25.4	25.2	90.00	-1,116.6	-193.6	439.2	389.1	50.06	8.774		
8,800.0	7,530.0	8,793.9	7,530.0	26.9	26.7	90.00	-1,216.6	-194.3	439.9	386.8	53.08	8.287		
8,900.0	7,530.0	8,893.9	7,530.0	28.4	28.2	90.00	-1,316.5	-195.0	440.6	384.4	56.15	7.846		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
9,000.0	7,530.0	8,993.9	7,530.0	30.0	29.8	90.00	-1,416.5	-195.7	441.3	382.0	59.28	7.444		
9,100.0	7,530.0	9,093.9	7,530.0	31.5	31.4	90.00	-1,516.5	-196.4	442.0	379.5	62.45	7.078		
9,200.0	7,530.0	9,193.9	7,530.0	33.1	32.9	90.00	-1,616.5	-197.1	442.7	377.0	65.65	6.743		
9,300.0	7,530.0	9,293.9	7,530.0	34.7	34.6	90.00	-1,716.5	-197.8	443.4	374.5	68.88	6.437		
9,400.0	7,530.0	9,393.9	7,530.0	36.3	36.2	90.00	-1,816.5	-198.5	444.1	371.9	72.13	6.156		
9,500.0	7,530.0	9,493.9	7,530.0	38.0	37.8	90.00	-1,916.5	-199.2	444.8	369.3	75.41	5.898		
9,600.0	7,530.0	9,593.9	7,530.0	39.6	39.5	90.00	-2,016.5	-199.9	445.5	366.7	78.71	5.659		
9,700.0	7,530.0	9,693.9	7,530.0	41.3	41.1	90.00	-2,116.5	-200.6	446.2	364.1	82.03	5.439		
9,800.0	7,530.0	9,793.9	7,530.0	42.9	42.8	90.00	-2,216.5	-201.3	446.9	361.5	85.36	5.235		
9,900.0	7,530.0	9,893.9	7,530.0	44.6	44.4	90.00	-2,316.5	-202.0	447.5	358.8	88.71	5.045		
10,000.0	7,530.0	9,993.9	7,530.0	46.3	46.1	90.00	-2,416.5	-202.7	448.2	356.2	92.06	4.869		
10,100.0	7,530.0	10,093.9	7,530.0	47.9	47.8	90.00	-2,516.5	-203.4	448.9	353.5	95.43	4.704		
10,200.0	7,530.0	10,193.9	7,530.0	49.6	49.5	90.00	-2,616.5	-204.1	449.6	350.8	98.81	4.551		
10,300.0	7,530.0	10,293.9	7,530.0	51.3	51.2	90.00	-2,716.5	-204.8	450.3	348.1	102.20	4.407		
10,400.0	7,530.0	10,393.9	7,530.0	53.0	52.9	90.00	-2,816.5	-205.5	451.0	345.4	105.59	4.272		
10,500.0	7,530.0	10,493.9	7,530.0	54.7	54.6	90.00	-2,916.5	-206.2	451.7	342.7	108.99	4.145		
10,600.0	7,530.0	10,593.9	7,530.0	56.4	56.3	90.00	-3,016.5	-206.9	452.4	340.0	112.40	4.025		
10,700.0	7,530.0	10,693.9	7,530.0	58.1	58.0	90.00	-3,116.5	-207.6	453.1	337.3	115.82	3.913		
10,800.0	7,530.0	10,793.9	7,530.0	59.8	59.7	90.00	-3,216.5	-208.3	453.8	334.6	119.24	3.806		
10,900.0	7,530.0	10,893.9	7,530.0	61.5	61.4	90.00	-3,316.4	-209.0	454.5	331.9	122.66	3.706		
11,000.0	7,530.0	10,993.9	7,530.0	63.2	63.1	90.00	-3,416.4	-209.7	455.2	329.1	126.09	3.610		
11,100.0	7,530.0	11,093.9	7,530.0	64.9	64.8	90.00	-3,516.4	-210.4	455.9	326.4	129.52	3.520		
11,200.0	7,530.0	11,193.9	7,530.0	66.6	66.5	90.00	-3,616.4	-211.1	456.6	323.7	132.96	3.434		
11,300.0	7,530.0	11,293.9	7,530.0	68.4	68.3	90.00	-3,716.4	-211.8	457.3	320.9	136.40	3.353		
11,400.0	7,530.0	11,393.9	7,530.0	70.1	70.0	90.00	-3,816.4	-212.5	458.0	318.2	139.85	3.275		
11,500.0	7,530.0	11,493.9	7,530.0	71.8	71.7	90.00	-3,916.4	-213.2	458.7	315.4	143.29	3.201		
11,600.0	7,530.0	11,593.9	7,530.0	73.5	73.4	90.00	-4,016.4	-213.9	459.4	312.7	146.74	3.131		
11,700.0	7,530.0	11,693.9	7,530.0	75.2	75.1	90.00	-4,116.4	-214.6	460.1	309.9	150.20	3.063		
11,800.0	7,530.0	11,793.9	7,530.0	77.0	76.9	90.00	-4,216.4	-215.3	460.8	307.2	153.65	2.999		
11,900.0	7,530.0	11,893.9	7,530.0	78.7	78.6	90.00	-4,316.4	-216.0	461.5	304.4	157.11	2.938		
12,000.0	7,530.0	11,993.9	7,530.0	80.4	80.3	90.00	-4,416.4	-216.7	462.2	301.6	160.57	2.879		
12,100.0	7,530.0	12,093.9	7,530.0	82.2	82.1	90.00	-4,516.4	-217.4	462.9	298.9	164.03	2.822		
12,200.0	7,530.0	12,193.9	7,530.0	83.9	83.8	90.00	-4,616.4	-218.1	463.6	296.1	167.50	2.768		
12,300.0	7,530.0	12,293.9	7,530.0	85.6	85.5	90.00	-4,716.4	-218.8	464.3	293.3	170.96	2.716		
12,400.0	7,530.0	12,393.9	7,530.0	87.3	87.3	90.00	-4,816.4	-219.5	465.0	290.6	174.43	2.666		
12,500.0	7,530.0	12,493.9	7,530.0	89.1	89.0	90.00	-4,916.4	-220.2	465.7	287.8	177.90	2.618		
12,600.0	7,530.0	12,593.9	7,530.0	90.8	90.7	90.00	-5,016.4	-220.9	466.4	285.0	181.37	2.572		
12,700.0	7,530.0	12,693.9	7,530.0	92.5	92.5	90.00	-5,116.4	-221.6	467.1	282.3	184.84	2.527		
12,800.0	7,530.0	12,793.8	7,530.0	94.3	94.2	90.00	-5,216.4	-222.3	467.8	279.5	188.31	2.484		
12,900.0	7,530.0	12,893.8	7,530.0	96.0	95.9	90.00	-5,316.4	-223.0	468.5	276.7	191.79	2.443		
13,000.0	7,530.0	12,993.8	7,530.0	97.8	97.7	90.00	-5,416.3	-223.6	469.2	273.9	195.26	2.403		
13,100.0	7,530.0	13,093.8	7,530.0	99.5	99.4	90.00	-5,516.3	-224.3	469.9	271.2	198.74	2.364		
13,200.0	7,530.0	13,193.8	7,530.0	101.2	101.1	90.00	-5,616.3	-225.0	470.6	268.4	202.22	2.327		
13,300.0	7,530.0	13,293.8	7,530.0	103.0	102.9	90.00	-5,716.3	-225.7	471.3	265.6	205.70	2.291		
13,400.0	7,530.0	13,393.8	7,530.0	104.7	104.6	90.00	-5,816.3	-226.4	472.0	262.8	209.18	2.256		
13,500.0	7,530.0	13,493.8	7,530.0	106.4	106.4	90.00	-5,916.3	-227.1	472.7	260.0	212.66	2.223		
13,600.0	7,530.0	13,593.8	7,530.0	108.2	108.1	90.00	-6,016.3	-227.8	473.4	257.2	216.14	2.190		
13,700.0	7,530.0	13,693.8	7,530.0	109.9	109.8	90.00	-6,116.3	-228.5	474.1	254.5	219.62	2.159		
13,800.0	7,530.0	13,793.8	7,530.0	111.7	111.6	90.00	-6,216.3	-229.2	474.8	251.7	223.11	2.128		
13,900.0	7,530.0	13,893.8	7,530.0	113.4	113.3	90.00	-6,316.3	-229.9	475.5	248.9	226.59	2.098		
14,000.0	7,530.0	13,993.8	7,530.0	115.1	115.1	90.00	-6,416.3	-230.6	476.2	246.1	230.07	2.070		
14,100.0	7,530.0	14,093.8	7,530.0	116.9	116.8	90.00	-6,516.3	-231.3	476.9	243.3	233.56	2.042		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,200.0	7,530.0	14,193.8	7,530.0	118.6	118.6	90.00	-6,616.3	-232.0	477.6	240.5	237.05	2.015		
14,300.0	7,530.0	14,293.8	7,530.0	120.4	120.3	90.00	-6,716.3	-232.7	478.3	237.7	240.53	1.988		
14,400.0	7,530.0	14,393.8	7,530.0	122.1	122.0	90.00	-6,816.3	-233.4	479.0	234.9	244.02	1.963		
14,500.0	7,530.0	14,493.8	7,530.0	123.9	123.8	90.00	-6,916.3	-234.1	479.7	232.2	247.51	1.938		
14,600.0	7,530.0	14,593.8	7,530.0	125.6	125.5	90.00	-7,016.3	-234.8	480.4	229.4	251.00	1.914		
14,700.0	7,530.0	14,693.8	7,530.0	127.3	127.3	90.00	-7,116.3	-235.5	481.1	226.6	254.49	1.890		
14,800.0	7,530.0	14,793.8	7,530.0	129.1	129.0	90.00	-7,216.3	-236.2	481.8	223.8	257.98	1.867		
14,900.0	7,530.0	14,893.8	7,530.0	130.8	130.8	90.00	-7,316.3	-236.9	482.5	221.0	261.47	1.845		
15,000.0	7,530.0	14,993.8	7,530.0	132.6	132.5	90.00	-7,416.2	-237.6	483.2	218.2	264.96	1.824		
15,100.0	7,530.0	15,093.8	7,530.0	134.3	134.3	90.00	-7,516.2	-238.3	483.9	215.4	268.45	1.802		
15,200.0	7,530.0	15,193.8	7,530.0	136.1	136.0	90.00	-7,616.2	-239.0	484.6	212.6	271.94	1.782		
15,300.0	7,530.0	15,293.8	7,530.0	137.8	137.7	90.00	-7,716.2	-239.7	485.3	209.8	275.43	1.762		
15,400.0	7,530.0	15,393.8	7,530.0	139.6	139.5	90.00	-7,816.2	-240.4	486.0	207.0	278.92	1.742		
15,500.0	7,530.0	15,493.8	7,530.0	141.3	141.2	90.00	-7,916.2	-241.1	486.6	204.2	282.42	1.723		
15,600.0	7,530.0	15,593.8	7,530.0	143.0	143.0	90.00	-8,016.2	-241.8	487.3	201.4	285.91	1.705		
15,700.0	7,530.0	15,693.8	7,530.0	144.8	144.7	90.00	-8,116.2	-242.5	488.0	198.6	289.40	1.686		
15,800.0	7,530.0	15,793.8	7,530.0	146.5	146.5	90.00	-8,216.2	-243.2	488.7	195.8	292.90	1.669		
15,900.0	7,530.0	15,893.8	7,530.0	148.3	148.2	90.00	-8,316.2	-243.9	489.4	193.1	296.39	1.651		
16,000.0	7,530.0	15,993.8	7,530.0	150.0	150.0	90.00	-8,416.2	-244.6	490.1	190.3	299.89	1.634		
16,100.0	7,530.0	16,093.8	7,530.0	151.8	151.7	90.00	-8,516.2	-245.3	490.8	187.5	303.38	1.618		
16,200.0	7,530.0	16,193.8	7,530.0	153.5	153.5	90.00	-8,616.2	-246.0	491.5	184.7	306.88	1.602		
16,300.0	7,530.0	16,293.8	7,530.0	155.3	155.2	90.00	-8,716.2	-246.7	492.2	181.9	310.37	1.586		
16,400.0	7,530.0	16,393.8	7,530.0	157.0	157.0	90.00	-8,816.2	-247.4	492.9	179.1	313.87	1.571		
16,500.0	7,530.0	16,493.8	7,530.0	158.8	158.7	90.00	-8,916.2	-248.1	493.6	176.3	317.36	1.555		
16,600.0	7,530.0	16,593.8	7,530.0	160.5	160.5	90.00	-9,016.2	-248.8	494.3	173.5	320.86	1.541		
16,700.0	7,530.0	16,693.8	7,530.0	162.3	162.2	90.00	-9,116.2	-249.5	495.0	170.7	324.36	1.526		
16,800.0	7,530.0	16,793.8	7,530.0	164.0	163.9	90.00	-9,216.2	-250.2	495.7	167.9	327.85	1.512		
16,900.0	7,530.0	16,893.7	7,530.0	165.8	165.7	90.00	-9,316.2	-250.9	496.4	165.1	331.35	1.498 Level 3		
17,000.0	7,530.0	16,993.7	7,530.0	167.5	167.4	90.00	-9,416.2	-251.6	497.1	162.3	334.85	1.485 Level 3		
17,100.0	7,530.0	17,093.7	7,530.0	169.3	169.2	90.00	-9,516.1	-252.3	497.8	159.5	338.34	1.471 Level 3		
17,200.0	7,530.0	17,193.7	7,530.0	171.0	170.9	90.00	-9,616.1	-253.0	498.5	156.7	341.84	1.458 Level 3		
17,300.0	7,530.0	17,293.7	7,530.0	172.8	172.7	90.00	-9,716.1	-253.7	499.2	153.9	345.34	1.446 Level 3		
17,400.0	7,530.0	17,393.7	7,530.0	174.5	174.4	90.00	-9,816.1	-254.4	499.9	151.1	348.84	1.433 Level 3		
17,420.9	7,530.0	17,411.2	7,530.0	174.9	174.7	90.00	-9,833.6	-254.5	500.1	150.6	349.51	1.431 Level 3, SF		

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1I-7H-A168 - HZ - Plan #2														Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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			
573.6	573.6	573.6	573.6	1.0	1.0	-89.72	0.0	-10.1	10.1	8.1	1.96	5.149			
600.0	600.0	600.0	600.0	1.0	1.0	-88.76	0.2	-10.1	10.1	8.0	2.05	4.916	CC, ES		
700.0	700.0	700.0	700.0	1.2	1.2	-115.81	2.0	-10.0	10.6	8.2	2.40	4.412			
800.0	800.0	799.9	799.9	1.4	1.4	-110.53	5.4	-10.0	12.1	9.4	2.76	4.403			
900.0	899.9	899.9	899.7	1.6	1.6	-106.91	10.5	-9.9	14.7	11.6	3.12	4.702			
988.4	988.1	988.2	987.9	1.7	1.7	-108.32	15.3	-9.9	17.4	14.0	3.45	5.053			
1,000.0	999.7	999.8	999.5	1.7	1.8	-108.75	16.0	-9.8	17.8	14.3	3.50	5.102			
1,100.0	1,099.4	1,099.8	1,099.3	1.9	1.9	-111.78	21.4	-9.8	21.3	17.4	3.88	5.483			
1,200.0	1,199.2	1,199.7	1,199.0	2.1	2.1	-113.97	26.8	-9.7	24.7	20.5	4.26	5.801			
1,300.0	1,299.0	1,299.6	1,298.8	2.3	2.3	-115.62	32.2	-9.6	28.2	23.6	4.65	6.070			
1,400.0	1,398.8	1,399.6	1,398.6	2.5	2.5	-116.91	37.7	-9.5	31.7	26.7	5.03	6.299			
1,500.0	1,498.5	1,499.5	1,498.4	2.7	2.7	-117.94	43.1	-9.4	35.2	29.8	5.42	6.495			
1,600.0	1,598.3	1,599.4	1,598.2	2.9	2.9	-118.78	48.5	-9.4	38.8	32.9	5.81	6.666			
1,700.0	1,698.1	1,699.4	1,698.0	3.2	3.1	-119.48	53.9	-9.3	42.3	36.1	6.21	6.815			
1,800.0	1,797.8	1,799.3	1,797.8	3.4	3.3	-120.07	59.4	-9.2	45.8	39.2	6.60	6.947			
1,900.0	1,897.6	1,899.2	1,897.6	3.6	3.5	-120.58	64.8	-9.1	49.4	42.4	6.99	7.064			
2,000.0	1,997.4	1,999.2	1,997.4	3.8	3.7	-121.02	70.2	-9.1	52.9	45.5	7.38	7.169			
2,100.0	2,097.1	2,099.1	2,097.1	4.0	3.9	-121.41	75.6	-9.0	56.5	48.7	7.78	7.263			
2,200.0	2,196.9	2,199.1	2,196.9	4.2	4.1	-121.75	81.0	-8.9	60.0	51.9	8.17	7.348			
2,300.0	2,296.7	2,299.0	2,296.7	4.4	4.3	-122.05	86.5	-8.8	63.6	55.0	8.56	7.425			
2,400.0	2,396.5	2,398.9	2,396.5	4.6	4.5	-122.32	91.9	-8.7	67.1	58.2	8.96	7.495			
2,500.0	2,496.2	2,498.9	2,496.3	4.8	4.7	-122.56	97.3	-8.7	70.7	61.3	9.35	7.560			
2,600.0	2,596.0	2,598.8	2,596.1	5.0	4.9	-122.78	102.7	-8.6	74.3	64.5	9.75	7.619			
2,700.0	2,695.8	2,698.7	2,695.9	5.2	5.1	-122.98	108.2	-8.5	77.8	67.7	10.14	7.673			
2,800.0	2,795.5	2,798.7	2,795.7	5.4	5.3	-123.16	113.6	-8.4	81.4	70.8	10.54	7.724			
2,900.0	2,895.3	2,898.6	2,895.5	5.6	5.5	-123.32	119.0	-8.3	84.9	74.0	10.93	7.770			
3,000.0	2,995.1	2,998.5	2,995.2	5.9	5.7	-123.48	124.4	-8.3	88.5	77.2	11.33	7.814			
3,100.0	3,094.9	3,098.5	3,095.0	6.1	5.9	-123.62	129.8	-8.2	92.1	80.3	11.72	7.854			
3,200.0	3,194.6	3,198.4	3,194.8	6.3	6.1	-123.75	135.3	-8.1	95.6	83.5	12.12	7.892			
3,300.0	3,294.4	3,298.4	3,294.6	6.5	6.3	-123.87	140.7	-8.0	99.2	86.7	12.51	7.928			
3,400.0	3,394.2	3,398.3	3,394.4	6.7	6.5	-123.98	146.1	-7.9	102.8	89.8	12.91	7.961			
3,500.0	3,493.9	3,498.2	3,494.2	6.9	6.6	-124.09	151.5	-7.9	106.3	93.0	13.30	7.992			
3,600.0	3,593.7	3,598.2	3,594.0	7.1	6.8	-124.19	157.0	-7.8	109.9	96.2	13.70	8.022			
3,700.0	3,693.5	3,698.1	3,693.8	7.3	7.0	-124.28	162.4	-7.7	113.4	99.4	14.09	8.049			
3,800.0	3,793.2	3,798.0	3,793.6	7.5	7.2	-124.36	167.8	-7.6	117.0	102.5	14.49	8.076			
3,900.0	3,893.0	3,898.0	3,893.3	7.7	7.4	-124.45	173.2	-7.5	120.6	105.7	14.89	8.101			
4,000.0	3,992.8	3,997.9	3,993.1	8.0	7.6	-124.52	178.6	-7.5	124.1	108.9	15.28	8.124			
4,100.0	4,092.6	4,097.8	4,092.9	8.2	7.8	-124.59	184.1	-7.4	127.7	112.0	15.68	8.146			
4,200.0	4,192.3	4,197.8	4,192.7	8.4	8.0	-124.66	189.5	-7.3	131.3	115.2	16.07	8.168			
4,300.0	4,292.1	4,297.7	4,292.5	8.6	8.2	-124.73	194.9	-7.2	134.8	118.4	16.47	8.188			
4,400.0	4,391.9	4,397.7	4,392.3	8.8	8.4	-124.79	200.3	-7.2	138.4	121.5	16.86	8.207			
4,500.0	4,491.6	4,497.6	4,492.1	9.0	8.6	-124.85	205.8	-7.1	142.0	124.7	17.26	8.226			
4,600.0	4,591.4	4,597.5	4,591.9	9.2	8.8	-124.90	211.2	-7.0	145.5	127.9	17.66	8.243			
4,700.0	4,691.2	4,697.5	4,691.7	9.4	9.0	-124.96	216.6	-6.9	149.1	131.1	18.05	8.260			
4,800.0	4,790.9	4,797.4	4,791.4	9.6	9.2	-125.01	222.0	-6.8	152.7	134.2	18.45	8.276			
4,900.0	4,890.7	4,897.3	4,891.2	9.8	9.4	-125.06	227.5	-6.8	156.2	137.4	18.84	8.291			

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1H-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,990.5	4,997.3	4,991.0	10.1	9.6	-125.10	232.9	-6.7	159.8	140.6	19.24	8.306		
5,100.0	5,090.3	5,097.2	5,090.8	10.3	9.8	-125.15	238.3	-6.6	163.4	143.7	19.64	8.320		
5,200.0	5,190.0	5,197.1	5,190.6	10.5	10.0	-125.19	243.7	-6.5	167.0	146.9	20.03	8.334		
5,300.0	5,289.8	5,297.1	5,290.4	10.7	10.2	-125.23	249.1	-6.4	170.5	150.1	20.43	8.347		
5,400.0	5,389.6	5,397.0	5,390.2	10.9	10.4	-125.27	254.6	-6.4	174.1	153.3	20.83	8.359		
5,500.0	5,489.3	5,497.0	5,490.0	11.1	10.6	-125.30	260.0	-6.3	177.7	156.4	21.22	8.371		
5,600.0	5,589.1	5,596.9	5,589.8	11.3	10.8	-125.34	265.4	-6.2	181.2	159.6	21.62	8.383		
5,700.0	5,688.9	5,696.8	5,689.5	11.5	11.0	-125.37	270.8	-6.1	184.8	162.8	22.01	8.394		
5,800.0	5,788.7	5,796.8	5,789.3	11.7	11.2	-125.41	276.3	-6.0	188.4	165.9	22.41	8.405		
5,900.0	5,888.4	5,896.7	5,889.1	11.9	11.4	-125.44	281.7	-6.0	191.9	169.1	22.81	8.415		
6,000.0	5,988.2	5,996.6	5,988.9	12.2	11.6	-125.47	287.1	-5.9	195.5	172.3	23.20	8.426		
6,100.0	6,088.0	6,096.6	6,088.7	12.4	11.8	-125.50	292.5	-5.8	199.1	175.5	23.60	8.435		
6,200.0	6,187.7	6,196.5	6,188.5	12.6	12.0	-125.53	297.9	-5.7	202.6	178.6	24.00	8.445		
6,300.0	6,287.5	6,296.4	6,288.3	12.8	12.2	-125.56	303.4	-5.6	206.2	181.8	24.39	8.454		
6,400.0	6,387.3	6,396.4	6,388.1	13.0	12.4	-125.58	308.8	-5.6	209.8	185.0	24.79	8.463		
6,500.0	6,487.0	6,496.3	6,487.9	13.2	12.6	-125.61	314.2	-5.5	213.3	188.2	25.18	8.471		
6,600.0	6,586.8	6,596.2	6,587.6	13.4	12.8	-125.63	319.6	-5.4	216.9	191.3	25.58	8.479		
6,700.0	6,686.6	6,696.2	6,687.4	13.6	13.0	-125.66	325.1	-5.3	220.5	194.5	25.98	8.487		
6,787.0	6,773.4	6,783.1	6,774.2	13.8	13.2	-125.68	329.8	-5.3	223.6	197.3	26.32	8.494		
6,800.0	6,786.4	6,796.1	6,787.2	13.8	13.2	-136.21	330.5	-5.3	224.0	197.7	26.37	8.495		
6,850.0	6,836.3	6,846.0	6,837.0	13.9	13.3	137.19	333.2	-5.2	225.7	199.1	26.56	8.499		
6,900.0	6,886.2	6,895.6	6,886.6	14.0	13.4	108.71	335.9	-5.2	227.3	200.5	26.74	8.499		
6,950.0	6,935.7	6,944.7	6,935.6	14.0	13.5	103.08	338.5	-5.1	229.1	202.2	26.92	8.511		
7,000.0	6,984.6	6,993.0	6,983.8	14.0	13.6	102.53	341.2	-5.1	231.5	204.4	27.06	8.552		
7,050.0	7,032.6	7,041.0	7,031.8	14.0	13.7	104.08	343.6	-5.1	235.0	207.8	27.17	8.648		
7,100.0	7,079.7	7,091.1	7,081.8	13.9	13.7	106.45	343.4	-5.0	239.6	212.4	27.18	8.815		
7,150.0	7,125.4	7,142.5	7,133.0	13.9	13.8	109.07	339.5	-5.0	245.2	218.1	27.10	9.050		
7,200.0	7,169.6	7,195.2	7,185.2	13.8	13.8	111.74	331.8	-4.9	251.8	224.9	26.93	9.350		
7,250.0	7,212.1	7,249.4	7,238.1	13.8	13.8	114.38	319.8	-4.9	259.1	232.4	26.68	9.713		
7,300.0	7,252.6	7,305.2	7,291.4	13.7	13.7	116.93	303.4	-4.9	267.0	240.6	26.35	10.133		
7,350.0	7,291.0	7,362.7	7,344.8	13.7	13.7	119.34	282.1	-4.8	275.3	249.3	25.97	10.602		
7,400.0	7,327.1	7,421.9	7,397.8	13.7	13.6	121.59	255.9	-4.8	283.9	258.4	25.55	11.111		
7,450.0	7,360.7	7,482.9	7,450.0	13.7	13.6	123.67	224.3	-4.7	292.6	267.4	25.12	11.646		
7,500.0	7,391.6	7,545.8	7,500.8	13.7	13.5	125.56	187.3	-4.7	301.1	276.4	24.70	12.190		
7,550.0	7,419.7	7,610.6	7,549.5	13.8	13.5	127.27	144.6	-4.7	309.4	285.1	24.32	12.720		
7,600.0	7,444.8	7,677.2	7,595.4	13.9	13.5	128.78	96.4	-4.6	317.2	293.2	24.01	13.210		
7,650.0	7,466.9	7,745.6	7,637.6	14.1	13.5	130.11	42.6	-4.6	324.4	300.6	23.80	13.632		
7,700.0	7,485.8	7,815.7	7,675.4	14.3	13.6	131.23	-16.5	-4.6	330.8	307.1	23.71	13.953		
7,750.0	7,501.5	7,887.3	7,707.8	14.6	13.9	132.16	-80.3	-4.5	336.2	312.5	23.77	14.146		
7,800.0	7,513.7	7,960.2	7,734.1	14.9	14.2	132.88	-148.3	-4.5	340.6	316.6	24.00	14.192		
7,850.0	7,522.6	8,034.2	7,753.5	15.2	14.6	133.40	-219.6	-4.5	343.9	319.4	24.42	14.082		
7,900.0	7,528.0	8,109.0	7,765.6	15.6	15.2	133.72	-293.3	-4.5	345.9	320.8	25.02	13.821		
7,952.9	7,530.0	8,188.3	7,770.0	16.1	15.9	133.83	-372.6	-4.5	346.6	320.7	25.87	13.396		
8,000.0	7,530.0	8,235.4	7,770.0	16.5	16.3	133.83	-419.6	-4.5	346.6	320.0	26.54	13.060		
8,100.0	7,530.0	8,335.4	7,770.0	17.5	17.4	133.83	-519.6	-4.5	346.6	318.5	28.05	12.356		
8,200.0	7,530.0	8,435.4	7,770.0	18.7	18.5	133.83	-619.6	-4.5	346.6	316.9	29.70	11.668		
8,300.0	7,530.0	8,535.4	7,770.0	19.9	19.7	133.83	-719.6	-4.5	346.6	315.1	31.48	11.011		
8,400.0	7,530.0	8,635.4	7,770.0	21.2	21.1	133.83	-819.6	-4.5	346.6	313.2	33.35	10.392		
8,500.0	7,530.0	8,735.4	7,770.0	22.6	22.4	133.83	-919.6	-4.5	346.6	311.3	35.31	9.816		
8,600.0	7,530.0	8,835.4	7,770.0	24.0	23.8	133.83	-1,019.6	-4.5	346.6	309.2	37.33	9.283		
8,700.0	7,530.0	8,935.4	7,770.0	25.4	25.3	133.83	-1,119.6	-4.5	346.6	307.1	39.42	8.791		
8,800.0	7,530.0	9,035.4	7,770.0	26.9	26.8	133.83	-1,219.6	-4.5	346.6	305.0	41.56	8.338		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1H-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,530.0	9,135.4	7,770.0	28.4	28.3	133.83	-1,319.6	-4.5	346.6	302.8	43.75	7.922		
9,000.0	7,530.0	9,235.4	7,770.0	30.0	29.9	133.83	-1,419.6	-4.5	346.6	300.6	45.97	7.539		
9,100.0	7,530.0	9,335.4	7,770.0	31.5	31.5	133.83	-1,519.6	-4.5	346.6	298.3	48.22	7.187		
9,200.0	7,530.0	9,435.4	7,770.0	33.1	33.1	133.83	-1,619.6	-4.5	346.6	296.1	50.50	6.863		
9,300.0	7,530.0	9,535.4	7,770.0	34.7	34.7	133.83	-1,719.6	-4.5	346.6	293.8	52.80	6.563		
9,400.0	7,530.0	9,635.4	7,770.0	36.3	36.3	133.83	-1,819.6	-4.5	346.6	291.4	55.13	6.286		
9,500.0	7,530.0	9,735.4	7,770.0	38.0	37.9	133.83	-1,919.6	-4.5	346.6	289.1	57.47	6.030		
9,600.0	7,530.0	9,835.4	7,770.0	39.6	39.6	133.83	-2,019.6	-4.5	346.6	286.7	59.83	5.792		
9,700.0	7,530.0	9,935.4	7,770.0	41.3	41.2	133.83	-2,119.6	-4.5	346.6	284.4	62.21	5.571		
9,800.0	7,530.0	10,035.4	7,770.0	42.9	42.9	133.83	-2,219.6	-4.5	346.6	282.0	64.60	5.365		
9,900.0	7,530.0	10,135.4	7,770.0	44.6	44.5	133.83	-2,319.6	-4.5	346.6	279.6	67.00	5.173		
10,000.0	7,530.0	10,235.4	7,770.0	46.3	46.2	133.83	-2,419.6	-4.5	346.6	277.2	69.41	4.993		
10,100.0	7,530.0	10,335.4	7,770.0	47.9	47.9	133.83	-2,519.6	-4.5	346.6	274.7	71.83	4.825		
10,200.0	7,530.0	10,435.4	7,770.0	49.6	49.6	133.83	-2,619.6	-4.5	346.6	272.3	74.26	4.667		
10,300.0	7,530.0	10,535.4	7,770.0	51.3	51.3	133.83	-2,719.6	-4.5	346.6	269.9	76.69	4.519		
10,400.0	7,530.0	10,635.4	7,770.0	53.0	53.0	133.83	-2,819.6	-4.5	346.6	267.4	79.13	4.379		
10,500.0	7,530.0	10,735.4	7,770.0	54.7	54.7	133.83	-2,919.6	-4.5	346.6	265.0	81.58	4.248		
10,600.0	7,530.0	10,835.4	7,770.0	56.4	56.4	133.83	-3,019.6	-4.5	346.6	262.5	84.04	4.124		
10,700.0	7,530.0	10,935.4	7,770.0	58.1	58.1	133.83	-3,119.6	-4.5	346.6	260.1	86.50	4.007		
10,800.0	7,530.0	11,035.4	7,770.0	59.8	59.8	133.83	-3,219.6	-4.5	346.6	257.6	88.96	3.896		
10,900.0	7,530.0	11,135.4	7,770.0	61.5	61.5	133.83	-3,319.6	-4.5	346.6	255.1	91.43	3.790		
11,000.0	7,530.0	11,235.4	7,770.0	63.2	63.2	133.83	-3,419.6	-4.5	346.6	252.7	93.90	3.691		
11,100.0	7,530.0	11,335.4	7,770.0	64.9	64.9	133.83	-3,519.6	-4.5	346.6	250.2	96.38	3.596		
11,200.0	7,530.0	11,435.4	7,770.0	66.6	66.6	133.83	-3,619.6	-4.5	346.6	247.7	98.86	3.506		
11,300.0	7,530.0	11,535.4	7,770.0	68.4	68.4	133.83	-3,719.6	-4.5	346.6	245.2	101.34	3.420		
11,400.0	7,530.0	11,635.4	7,770.0	70.1	70.1	133.83	-3,819.6	-4.5	346.6	242.7	103.83	3.338		
11,500.0	7,530.0	11,735.4	7,770.0	71.8	71.8	133.83	-3,919.6	-4.5	346.6	240.2	106.32	3.260		
11,600.0	7,530.0	11,835.4	7,770.0	73.5	73.5	133.83	-4,019.6	-4.5	346.6	237.8	108.81	3.185		
11,700.0	7,530.0	11,935.4	7,770.0	75.2	75.2	133.83	-4,119.6	-4.5	346.6	235.3	111.30	3.114		
11,800.0	7,530.0	12,035.4	7,770.0	77.0	77.0	133.83	-4,219.6	-4.5	346.6	232.8	113.80	3.045		
11,900.0	7,530.0	12,135.4	7,770.0	78.7	78.7	133.83	-4,319.6	-4.5	346.6	230.3	116.30	2.980		
12,000.0	7,530.0	12,235.4	7,770.0	80.4	80.4	133.83	-4,419.6	-4.5	346.6	227.8	118.80	2.917		
12,100.0	7,530.0	12,335.4	7,770.0	82.2	82.2	133.83	-4,519.6	-4.5	346.6	225.3	121.30	2.857		
12,200.0	7,530.0	12,435.4	7,770.0	83.9	83.9	133.83	-4,619.6	-4.5	346.6	222.8	123.81	2.799		
12,300.0	7,530.0	12,535.4	7,770.0	85.6	85.6	133.83	-4,719.6	-4.5	346.6	220.3	126.31	2.744		
12,400.0	7,530.0	12,635.4	7,770.0	87.3	87.3	133.83	-4,819.6	-4.5	346.6	217.7	128.82	2.690		
12,500.0	7,530.0	12,735.4	7,770.0	89.1	89.1	133.83	-4,919.6	-4.5	346.6	215.2	131.33	2.639		
12,600.0	7,530.0	12,835.4	7,770.0	90.8	90.8	133.83	-5,019.6	-4.5	346.6	212.7	133.84	2.589		
12,700.0	7,530.0	12,935.4	7,770.0	92.5	92.6	133.83	-5,119.6	-4.5	346.6	210.2	136.35	2.542		
12,800.0	7,530.0	13,035.4	7,770.0	94.3	94.3	133.83	-5,219.6	-4.5	346.6	207.7	138.86	2.496		
12,900.0	7,530.0	13,135.4	7,770.0	96.0	96.0	133.83	-5,319.6	-4.5	346.6	205.2	141.38	2.451		
13,000.0	7,530.0	13,235.4	7,770.0	97.8	97.8	133.83	-5,419.6	-4.5	346.6	202.7	143.89	2.409		
13,100.0	7,530.0	13,335.4	7,770.0	99.5	99.5	133.83	-5,519.6	-4.5	346.6	200.2	146.41	2.367		
13,200.0	7,530.0	13,435.4	7,770.0	101.2	101.2	133.83	-5,619.6	-4.5	346.6	197.6	148.92	2.327		
13,300.0	7,530.0	13,535.4	7,770.0	103.0	103.0	133.83	-5,719.6	-4.5	346.6	195.1	151.44	2.288		
13,400.0	7,530.0	13,635.4	7,770.0	104.7	104.7	133.83	-5,819.6	-4.5	346.6	192.6	153.96	2.251		
13,500.0	7,530.0	13,735.4	7,770.0	106.4	106.5	133.83	-5,919.6	-4.5	346.6	190.1	156.48	2.215		
13,600.0	7,530.0	13,835.4	7,770.0	108.2	108.2	133.83	-6,019.6	-4.5	346.6	187.6	159.00	2.180		
13,700.0	7,530.0	13,935.4	7,770.0	109.9	109.9	133.83	-6,119.6	-4.5	346.6	185.0	161.52	2.146		
13,800.0	7,530.0	14,035.4	7,770.0	111.7	111.7	133.83	-6,219.6	-4.5	346.6	182.5	164.04	2.113		
13,900.0	7,530.0	14,135.4	7,770.0	113.4	113.4	133.83	-6,319.6	-4.5	346.6	180.0	166.57	2.081		
14,000.0	7,530.0	14,235.4	7,770.0	115.1	115.2	133.83	-6,419.6	-4.5	346.6	177.5	169.09	2.050		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1H-7H-A168 - HZ - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	14,335.4	7,770.0	116.9	116.9	133.83	-6,519.6	-4.5	346.6	174.9	171.61	2.019		
14,200.0	7,530.0	14,435.4	7,770.0	118.6	118.6	133.83	-6,619.6	-4.5	346.6	172.4	174.14	1.990		
14,300.0	7,530.0	14,535.4	7,770.0	120.4	120.4	133.83	-6,719.6	-4.5	346.6	169.9	176.66	1.962		
14,400.0	7,530.0	14,635.4	7,770.0	122.1	122.1	133.83	-6,819.6	-4.5	346.6	167.4	179.19	1.934		
14,500.0	7,530.0	14,735.4	7,770.0	123.9	123.9	133.83	-6,919.6	-4.5	346.6	164.8	181.72	1.907		
14,600.0	7,530.0	14,835.4	7,770.0	125.6	125.6	133.83	-7,019.6	-4.5	346.6	162.3	184.24	1.881		
14,700.0	7,530.0	14,935.4	7,770.0	127.3	127.4	133.83	-7,119.6	-4.5	346.6	159.8	186.77	1.856		
14,800.0	7,530.0	15,035.4	7,770.0	129.1	129.1	133.83	-7,219.6	-4.5	346.6	157.3	189.30	1.831		
14,900.0	7,530.0	15,135.4	7,770.0	130.8	130.8	133.83	-7,319.6	-4.5	346.6	154.7	191.83	1.807		
15,000.0	7,530.0	15,235.4	7,770.0	132.6	132.6	133.83	-7,419.6	-4.5	346.6	152.2	194.35	1.783		
15,100.0	7,530.0	15,335.4	7,770.0	134.3	134.3	133.83	-7,519.6	-4.5	346.6	149.7	196.88	1.760		
15,200.0	7,530.0	15,435.4	7,770.0	136.1	136.1	133.83	-7,619.6	-4.5	346.6	147.1	199.41	1.738		
15,300.0	7,530.0	15,535.4	7,770.0	137.8	137.8	133.83	-7,719.6	-4.5	346.6	144.6	201.94	1.716		
15,400.0	7,530.0	15,635.4	7,770.0	139.6	139.6	133.83	-7,819.6	-4.5	346.6	142.1	204.47	1.695		
15,500.0	7,530.0	15,735.4	7,770.0	141.3	141.3	133.83	-7,919.6	-4.5	346.6	139.6	207.00	1.674		
15,600.0	7,530.0	15,835.4	7,770.0	143.0	143.1	133.83	-8,019.6	-4.5	346.6	137.0	209.54	1.654		
15,700.0	7,530.0	15,935.4	7,770.0	144.8	144.8	133.83	-8,119.6	-4.5	346.6	134.5	212.07	1.634		
15,800.0	7,530.0	16,035.4	7,770.0	146.5	146.6	133.83	-8,219.6	-4.5	346.6	132.0	214.60	1.615		
15,900.0	7,530.0	16,135.4	7,770.0	148.3	148.3	133.83	-8,319.6	-4.5	346.6	129.4	217.13	1.596		
16,000.0	7,530.0	16,235.4	7,770.0	150.0	150.1	133.83	-8,419.6	-4.5	346.6	126.9	219.66	1.578		
16,100.0	7,530.0	16,335.4	7,770.0	151.8	151.8	133.83	-8,519.6	-4.5	346.6	124.4	222.20	1.560		
16,200.0	7,530.0	16,435.4	7,770.0	153.5	153.5	133.83	-8,619.6	-4.5	346.6	121.8	224.73	1.542		
16,300.0	7,530.0	16,535.4	7,770.0	155.3	155.3	133.83	-8,719.6	-4.5	346.6	119.3	227.26	1.525		
16,400.0	7,530.0	16,635.4	7,770.0	157.0	157.0	133.83	-8,819.6	-4.5	346.6	116.8	229.79	1.508		
16,500.0	7,530.0	16,735.4	7,770.0	158.8	158.8	133.83	-8,919.6	-4.5	346.6	114.2	232.33	1.492	Level 3	
16,600.0	7,530.0	16,835.4	7,770.0	160.5	160.5	133.83	-9,019.6	-4.5	346.6	111.7	234.86	1.476	Level 3	
16,700.0	7,530.0	16,935.4	7,770.0	162.3	162.3	133.83	-9,119.6	-4.5	346.6	109.2	237.40	1.460	Level 3	
16,800.0	7,530.0	17,035.4	7,770.0	164.0	164.0	133.83	-9,219.6	-4.5	346.6	106.6	239.93	1.444	Level 3	
16,900.0	7,530.0	17,135.4	7,770.0	165.8	165.8	133.83	-9,319.6	-4.5	346.6	104.1	242.47	1.429	Level 3	
17,000.0	7,530.0	17,235.4	7,770.0	167.5	167.5	133.83	-9,419.6	-4.5	346.6	101.6	245.00	1.415	Level 3	
17,100.0	7,530.0	17,335.4	7,770.0	169.3	169.3	133.83	-9,519.6	-4.5	346.6	99.0	247.54	1.400	Level 3	
17,200.0	7,530.0	17,435.4	7,770.0	171.0	171.0	133.83	-9,619.6	-4.5	346.6	96.5	250.07	1.386	Level 3	
17,300.0	7,530.0	17,535.4	7,770.0	172.8	172.8	133.83	-9,719.6	-4.5	346.6	94.0	252.61	1.372	Level 3	
17,400.0	7,530.0	17,635.4	7,770.0	174.5	174.5	133.83	-9,819.6	-4.5	346.6	91.4	255.14	1.358	Level 3	
17,407.1	7,530.0	17,642.5	7,770.0	174.6	174.6	133.83	-9,826.7	-4.5	346.6	91.2	255.32	1.357	Level 3	
17,420.9	7,530.0	17,653.1	7,770.0	174.9	174.8	133.83	-9,837.3	-4.5	346.6	90.9	255.63	1.356	Level 3, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	+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	-148.97	-6,136.7	-3,691.1	7,161.3						
100.0	100.0	109.7	109.7	0.2	0.2	-148.97	-6,136.6	-3,691.2	7,161.2	7,160.8	0.34	N/A			
200.0	200.0	223.9	223.9	0.3	0.4	-148.97	-6,136.1	-3,691.4	7,160.9	7,160.2	0.71	N/A			
300.0	300.0	338.2	338.2	0.5	0.6	-148.96	-6,135.2	-3,691.7	7,160.4	7,159.3	1.08	6,618.600			
400.0	400.0	452.4	452.4	0.7	0.8	-148.96	-6,134.0	-3,692.1	7,159.7	7,158.3	1.45	4,928.769			
500.0	500.0	566.6	566.6	0.8	1.0	-148.95	-6,132.5	-3,692.7	7,158.8	7,157.0	1.82	3,926.088			
600.0	600.0	680.8	680.8	1.0	1.2	-148.93	-6,130.6	-3,693.4	7,157.7	7,155.5	2.19	3,262.202			
676.6	676.6	768.3	768.2	1.2	1.3	178.60	-6,129.0	-3,694.0	7,157.3	7,154.8	2.49	2,868.949			
700.0	700.0	795.0	795.0	1.2	1.4	178.61	-6,128.4	-3,694.2	7,157.3	7,154.7	2.58	2,771.998			
800.0	800.0	972.4	972.2	1.4	1.7	178.66	-6,122.2	-3,698.4	7,158.3	7,155.2	3.09	2,317.016			
900.0	899.9	1,092.1	1,091.5	1.6	2.0	178.74	-6,114.8	-3,704.9	7,160.1	7,156.6	3.52	2,036.932			
988.4	988.1	1,314.7	1,312.2	1.7	2.6	178.96	-6,093.2	-3,724.1	7,161.8	7,157.6	4.22	1,695.993			
1,000.0	999.7	1,323.4	1,320.7	1.7	2.6	178.97	-6,092.2	-3,725.0	7,162.1	7,157.8	4.27	1,678.425			
1,100.0	1,099.4	1,513.0	1,507.5	1.9	3.2	179.22	-6,068.0	-3,746.3	7,163.9	7,158.9	5.01	1,431.036			
1,200.0	1,199.2	1,588.5	1,581.7	2.1	3.4	179.33	-6,057.1	-3,755.9	7,165.0	7,159.6	5.43	1,319.156			
1,300.0	1,299.0	1,636.2	1,628.4	2.3	3.6	179.40	-6,050.4	-3,762.1	7,166.7	7,161.0	5.76	1,244.327			
1,400.0	1,398.8	1,876.0	1,864.2	2.5	4.4	179.74	-6,017.2	-3,790.7	7,168.1	7,161.4	6.73	1,065.048			
1,500.0	1,498.5	1,924.0	1,911.3	2.7	4.6	179.81	-6,010.0	-3,796.6	7,168.7	7,161.6	7.07	1,013.678			
1,600.0	1,598.3	2,014.5	2,000.1	2.9	4.9	179.94	-5,996.8	-3,807.9	7,169.7	7,162.2	7.56	948.514			
1,700.0	1,698.1	2,153.9	2,137.0	3.2	5.4	-179.86	-5,976.2	-3,824.6	7,170.3	7,162.0	8.22	872.283			
1,800.0	1,797.8	2,212.0	2,194.0	3.4	5.6	-179.77	-5,967.6	-3,831.8	7,171.2	7,162.6	8.60	833.635			
1,900.0	1,897.6	2,255.5	2,236.7	3.6	5.8	-179.71	-5,961.4	-3,837.3	7,172.8	7,163.8	8.93	803.505			
2,000.0	1,997.4	2,496.0	2,473.2	3.8	6.7	-179.38	-5,927.4	-3,864.8	7,173.9	7,163.9	9.93	722.372			
2,100.0	2,097.1	2,560.0	2,536.1	4.0	6.9	-179.29	-5,918.1	-3,872.0	7,174.3	7,164.0	10.32	695.129			
2,200.0	2,196.9	2,619.2	2,594.3	4.2	7.1	-179.21	-5,909.8	-3,878.7	7,175.4	7,164.6	10.70	670.367			
2,300.0	2,296.7	2,744.6	2,717.4	4.4	7.6	-179.03	-5,891.0	-3,893.8	7,176.2	7,164.8	11.33	633.249			
2,400.0	2,396.5	2,808.8	2,780.5	4.6	7.8	-178.94	-5,881.9	-3,901.2	7,177.3	7,165.6	11.73	611.893			
2,500.0	2,496.2	2,931.0	2,900.6	4.8	8.2	-178.77	-5,864.5	-3,915.4	7,178.6	7,166.2	12.34	581.957			
2,600.0	2,596.0	3,024.8	2,992.7	5.0	8.6	-178.64	-5,851.0	-3,926.3	7,179.8	7,166.9	12.84	558.988			
2,700.0	2,695.8	3,105.0	3,071.6	5.2	8.9	-178.52	-5,839.5	-3,935.8	7,181.1	7,167.8	13.30	539.829			
2,800.0	2,795.5	3,221.2	3,185.8	5.4	9.3	-178.36	-5,822.8	-3,949.3	7,182.4	7,168.6	13.89	517.052			
2,900.0	2,895.3	3,290.0	3,253.4	5.6	9.5	-178.26	-5,812.9	-3,957.4	7,183.8	7,169.5	14.31	501.957			
3,000.0	2,995.1	3,386.0	3,347.8	5.9	9.9	-178.13	-5,799.7	-3,968.4	7,185.6	7,170.8	14.82	484.997			
3,100.0	3,094.9	3,511.8	3,471.5	6.1	10.3	-177.96	-5,782.0	-3,983.1	7,187.3	7,171.9	15.44	465.357			
3,200.0	3,194.6	3,605.8	3,563.9	6.3	10.7	-177.83	-5,768.6	-3,994.0	7,188.9	7,172.9	15.95	450.641			
3,300.0	3,294.4	3,709.8	3,666.1	6.5	11.1	-177.69	-5,753.9	-4,005.9	7,190.5	7,174.0	16.49	435.947			
3,400.0	3,394.2	3,806.7	3,761.4	6.7	11.4	-177.56	-5,740.2	-4,016.8	7,192.0	7,175.0	17.01	422.715			
3,500.0	3,493.9	3,975.2	3,927.0	6.9	12.0	-177.32	-5,715.5	-4,036.4	7,193.4	7,175.6	17.80	404.206			
3,600.0	3,593.7	4,058.3	4,008.7	7.1	12.3	-177.21	-5,703.2	-4,045.4	7,194.3	7,176.0	18.26	393.942			
3,700.0	3,693.5	4,149.0	4,097.9	7.3	12.6	-177.08	-5,690.0	-4,055.0	7,195.2	7,176.5	18.75	383.688			
3,800.0	3,793.2	4,201.4	4,149.5	7.5	12.8	-177.01	-5,682.5	-4,060.8	7,196.6	7,177.5	19.12	376.419			
3,900.0	3,893.0	4,243.0	4,190.3	7.7	13.0	-176.96	-5,676.6	-4,065.7	7,198.8	7,179.3	19.45	370.210			
4,000.0	3,992.8	4,321.9	4,267.9	8.0	13.3	-176.85	-5,666.0	-4,075.0	7,201.4	7,181.5	19.89	362.002			
4,100.0	4,092.6	4,454.2	4,398.2	8.2	13.7	-176.68	-5,648.7	-4,089.8	7,204.0	7,183.5	20.52	351.070			
4,200.0	4,192.3	4,529.0	4,472.1	8.4	14.0	-176.58	-5,639.3	-4,097.8	7,206.8	7,185.9	20.94	344.142			
4,300.0	4,292.1	4,640.4	4,581.9	8.6	14.4	-176.44	-5,625.1	-4,110.1	7,209.7	7,188.2	21.50	335.269			
4,400.0	4,391.9	4,726.8	4,667.0	8.8	14.7	-176.33	-5,614.2	-4,119.5	7,212.6	7,190.6	21.97	328.354			
4,500.0	4,491.6	4,845.7	4,784.4	9.0	15.0	-176.19	-5,599.4	-4,131.6	7,215.2	7,192.7	22.52	320.338			
4,600.0	4,591.4	4,922.2	4,860.1	9.2	15.3	-176.11	-5,590.6	-4,138.6	7,218.1	7,195.1	22.93	314.769			
4,700.0	4,691.2	5,067.4	5,003.8	9.4	15.7	-175.96	-5,573.8	-4,150.8	7,220.4	7,196.8	23.54	306.734			
4,800.0	4,790.9	5,100.0	5,036.1	9.6	15.8	-175.92	-5,570.2	-4,153.4	7,223.2	7,199.4	23.81	303.397			
4,900.0	4,890.7	5,164.0	5,099.5	9.8	16.0	-175.86	-5,563.6	-4,158.9	7,226.7	7,202.6	24.17	298.974			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	4,990.5	5,300.4	5,234.6	10.1	16.4	-175.72	-5,548.9	-4,171.2	7,230.1	7,205.4	24.76	292.003		
5,100.0	5,090.3	5,366.4	5,299.9	10.3	16.6	-175.65	-5,541.9	-4,177.0	7,233.7	7,208.6	25.13	287.852		
5,200.0	5,190.0	5,482.0	5,414.5	10.5	16.9	-175.53	-5,530.0	-4,187.0	7,237.4	7,211.8	25.64	282.253		
5,300.0	5,289.8	5,565.0	5,496.7	10.7	17.2	-175.46	-5,521.8	-4,193.7	7,241.1	7,215.1	26.05	277.995		
5,400.0	5,389.6	5,694.9	5,625.6	10.9	17.5	-175.34	-5,509.0	-4,203.9	7,244.7	7,218.1	26.58	272.567		
5,500.0	5,489.3	5,764.7	5,695.0	11.1	17.7	-175.28	-5,502.5	-4,208.8	7,248.3	7,221.3	26.93	269.116		
5,600.0	5,589.1	5,801.0	5,731.0	11.3	17.8	-175.25	-5,499.4	-4,211.3	7,252.5	7,225.3	27.20	266.626		
5,700.0	5,688.9	5,869.3	5,799.0	11.5	18.0	-175.20	-5,494.2	-4,215.8	7,257.2	7,229.7	27.53	263.599		
5,800.0	5,788.7	5,972.3	5,901.6	11.7	18.2	-175.14	-5,488.0	-4,221.6	7,262.6	7,234.6	27.92	260.089		
5,900.0	5,888.4	6,094.4	6,023.6	11.9	18.4	-175.09	-5,482.4	-4,225.7	7,267.8	7,239.5	28.30	256.855		
6,000.0	5,988.2	6,161.8	6,090.9	12.2	18.5	-175.08	-5,480.3	-4,226.4	7,272.7	7,244.2	28.56	254.650		
6,100.0	6,088.0	6,215.0	6,144.1	12.4	18.5	-175.07	-5,479.2	-4,226.8	7,278.4	7,249.6	28.80	252.703		
6,200.0	6,187.7	6,278.0	6,207.1	12.6	18.6	-175.07	-5,478.4	-4,227.5	7,284.6	7,255.6	29.06	250.693		
6,300.0	6,287.5	6,470.0	6,399.1	12.8	18.8	-175.06	-5,475.7	-4,227.3	7,290.0	7,260.6	29.44	247.586		
6,400.0	6,387.3	6,503.3	6,432.4	13.0	18.9	-175.07	-5,475.5	-4,226.9	7,295.6	7,266.0	29.66	246.009		
6,500.0	6,487.0	6,566.0	6,495.1	13.2	18.9	-175.07	-5,475.7	-4,226.9	7,302.4	7,272.5	29.90	244.226		
6,600.0	6,586.8	6,568.4	6,497.5	13.4	18.9	-175.07	-5,475.7	-4,227.0	7,309.7	7,279.6	30.08	243.026		
6,700.0	6,686.6	6,763.5	6,692.6	13.6	19.1	-175.08	-5,476.0	-4,227.6	7,316.5	7,286.1	30.47	240.154		
6,787.0	6,773.4	6,897.7	6,826.8	13.8	19.3	-175.08	-5,475.3	-4,227.4	7,322.0	7,291.2	30.77	237.957		
6,800.0	6,786.4	6,911.4	6,840.4	13.8	19.3	174.36	-5,475.2	-4,227.4	7,322.7	7,291.9	30.82	237.606		
6,850.0	6,836.3	6,964.0	6,893.0	13.9	19.4	87.20	-5,474.8	-4,227.3	7,323.5	7,292.6	30.97	236.506		
6,900.0	6,886.2	7,016.4	6,945.4	14.0	19.4	57.46	-5,474.4	-4,227.0	7,321.6	7,290.6	31.05	235.786		
6,950.0	6,935.7	7,057.7	6,986.7	14.0	19.5	49.91	-5,474.1	-4,226.9	7,316.9	7,285.9	31.07	235.523		
7,000.0	6,984.6	7,095.8	7,024.8	14.0	19.5	46.90	-5,473.9	-4,226.7	7,309.6	7,278.6	31.02	235.616		
7,050.0	7,032.6	7,147.4	7,076.5	14.0	19.6	45.59	-5,473.7	-4,226.5	7,299.6	7,268.7	30.95	235.859		
7,100.0	7,079.7	7,215.0	7,144.0	13.9	19.7	45.19	-5,473.3	-4,226.2	7,286.9	7,256.0	30.86	236.149		
7,150.0	7,125.4	7,258.5	7,187.5	13.9	19.7	45.30	-5,472.9	-4,226.0	7,271.6	7,240.8	30.71	236.817		
7,200.0	7,169.6	7,295.2	7,224.2	13.8	19.7	45.81	-5,472.6	-4,225.8	7,253.8	7,223.2	30.53	237.622		
7,250.0	7,212.1	7,330.4	7,259.5	13.8	19.8	46.66	-5,472.3	-4,225.7	7,233.7	7,203.3	30.34	238.407		
7,300.0	7,252.6	7,342.0	7,271.0	13.7	19.8	47.73	-5,472.3	-4,225.7	7,211.4	7,181.2	30.13	239.319		
7,350.0	7,291.0	7,395.0	7,324.0	13.7	19.9	49.28	-5,472.0	-4,225.5	7,186.9	7,156.9	30.01	239.483		
7,400.0	7,327.1	7,424.5	7,353.5	13.7	19.9	51.03	-5,471.9	-4,225.4	7,160.5	7,130.6	29.90	239.487		
7,450.0	7,360.7	7,452.0	7,381.0	13.7	19.9	53.09	-5,471.8	-4,225.4	7,132.2	7,102.4	29.85	238.953		
7,500.0	7,391.6	7,477.3	7,406.4	13.7	19.9	55.45	-5,471.7	-4,225.3	7,102.2	7,072.4	29.87	237.768		
7,550.0	7,419.7	7,500.4	7,429.5	13.8	20.0	58.13	-5,471.7	-4,225.2	7,070.7	7,040.8	29.98	235.861		
7,600.0	7,444.8	7,521.2	7,450.2	13.9	20.0	61.13	-5,471.7	-4,225.2	7,037.8	7,007.7	30.18	233.215		
7,650.0	7,466.9	7,539.4	7,468.4	14.1	20.0	64.46	-5,471.7	-4,225.1	7,003.7	6,973.3	30.47	229.884		
7,700.0	7,485.8	7,555.1	7,484.1	14.3	20.0	68.10	-5,471.8	-4,225.1	6,968.6	6,937.8	30.84	225.989		
7,750.0	7,501.5	7,568.1	7,497.1	14.6	20.0	72.03	-5,471.8	-4,225.1	6,932.6	6,901.3	31.27	221.707		
7,800.0	7,513.7	7,578.4	7,507.4	14.9	20.1	76.21	-5,471.8	-4,225.0	6,895.9	6,864.2	31.74	217.243		
7,850.0	7,522.6	7,585.9	7,514.9	15.2	20.1	80.60	-5,471.8	-4,225.0	6,858.8	6,826.5	32.23	212.799		
7,900.0	7,528.0	7,590.5	7,519.5	15.6	20.1	85.11	-5,471.8	-4,225.0	6,821.3	6,788.6	32.71	208.539		
7,952.9	7,530.0	7,592.3	7,521.3	16.1	20.1	89.94	-5,471.8	-4,225.0	6,781.5	6,748.3	33.19	204.345		
8,000.0	7,530.0	7,592.4	7,521.4	16.5	20.1	89.94	-5,471.9	-4,225.0	6,746.2	6,712.5	33.64	200.530		
8,100.0	7,530.0	7,592.6	7,521.7	17.5	20.1	89.94	-5,471.9	-4,225.0	6,671.6	6,636.9	34.70	192.253		
8,200.0	7,530.0	7,592.9	7,521.9	18.7	20.1	89.95	-5,471.9	-4,225.0	6,597.7	6,561.8	35.87	183.932		
8,300.0	7,530.0	7,593.2	7,522.2	19.9	20.1	89.95	-5,471.9	-4,225.0	6,524.5	6,487.4	37.13	175.735		
8,400.0	7,530.0	7,593.4	7,522.5	21.2	20.1	89.95	-5,471.9	-4,225.0	6,452.0	6,413.6	38.46	167.777		
8,500.0	7,530.0	7,593.7	7,522.7	22.6	20.1	89.96	-5,471.9	-4,225.0	6,380.3	6,340.5	39.84	160.131		
8,600.0	7,530.0	7,594.0	7,523.0	24.0	20.1	89.96	-5,471.9	-4,225.0	6,309.4	6,268.1	41.28	152.837		
8,700.0	7,530.0	7,594.2	7,523.3	25.4	20.1	89.96	-5,471.9	-4,225.0	6,239.2	6,196.4	42.76	145.915		
8,800.0	7,530.0	7,594.5	7,523.5	26.9	20.1	89.97	-5,471.9	-4,225.0	6,169.9	6,125.6	44.27	139.367		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,530.0	7,594.8	7,523.8	28.4	20.1	89.97	-5,471.9	-4,225.0	6,101.4	6,055.6	45.81	133.189		
9,000.0	7,530.0	7,595.1	7,524.1	30.0	20.1	89.98	-5,471.9	-4,225.0	6,033.8	5,986.4	47.37	127.366		
9,100.0	7,530.0	7,595.3	7,524.4	31.5	20.1	89.98	-5,471.9	-4,225.0	5,967.1	5,918.1	48.96	121.884		
9,200.0	7,530.0	7,595.6	7,524.6	33.1	20.1	89.98	-5,471.9	-4,225.0	5,901.3	5,850.7	50.56	116.723		
9,300.0	7,530.0	7,595.9	7,524.9	34.7	20.1	89.99	-5,471.9	-4,225.0	5,836.5	5,784.3	52.17	111.866		
9,400.0	7,530.0	7,596.2	7,525.2	36.3	20.1	89.99	-5,471.9	-4,225.0	5,772.7	5,718.9	53.80	107.294		
9,500.0	7,530.0	7,596.5	7,525.5	38.0	20.1	89.99	-5,471.9	-4,225.0	5,710.0	5,654.5	55.44	102.988		
9,600.0	7,530.0	7,596.8	7,525.8	39.6	20.1	90.00	-5,471.9	-4,225.0	5,648.3	5,591.2	57.09	98.932		
9,700.0	7,530.0	7,597.0	7,526.1	41.3	20.1	90.00	-5,471.9	-4,225.0	5,587.8	5,529.0	58.75	95.108		
9,800.0	7,530.0	7,597.3	7,526.4	42.9	20.1	90.00	-5,471.9	-4,225.0	5,528.3	5,467.9	60.42	91.502		
9,900.0	7,530.0	7,597.6	7,526.6	44.6	20.1	90.01	-5,471.9	-4,225.0	5,470.1	5,408.0	62.09	88.098		
10,000.0	7,530.0	7,597.9	7,526.9	46.3	20.1	90.01	-5,471.9	-4,225.0	5,413.1	5,349.3	63.77	84.885		
10,100.0	7,530.0	7,598.2	7,527.2	47.9	20.1	90.02	-5,471.9	-4,225.0	5,357.4	5,291.9	65.45	81.848		
10,200.0	7,530.0	7,598.5	7,527.5	49.6	20.1	90.02	-5,471.9	-4,225.0	5,302.9	5,235.8	67.14	78.978		
10,300.0	7,530.0	7,598.8	7,527.8	51.3	20.1	90.02	-5,471.9	-4,225.0	5,249.8	5,181.0	68.84	76.263		
10,400.0	7,530.0	7,599.1	7,528.1	53.0	20.1	90.03	-5,471.9	-4,225.0	5,198.1	5,127.5	70.54	73.694		
10,500.0	7,530.0	7,599.4	7,528.4	54.7	20.1	90.03	-5,471.9	-4,225.0	5,147.8	5,075.5	72.24	71.262		
10,600.0	7,530.0	7,599.7	7,528.8	56.4	20.1	90.04	-5,471.9	-4,225.0	5,098.9	5,025.0	73.94	68.959		
10,700.0	7,530.0	7,600.0	7,529.1	58.1	20.1	90.04	-5,471.9	-4,225.0	5,051.6	4,975.9	75.65	66.777		
10,800.0	7,530.0	7,600.4	7,529.4	59.8	20.1	90.04	-5,471.9	-4,225.0	5,005.8	4,928.4	77.36	64.708		
10,900.0	7,530.0	7,600.7	7,529.7	61.5	20.1	90.05	-5,471.9	-4,225.0	4,961.6	4,882.5	79.07	62.748		
11,000.0	7,530.0	7,601.0	7,530.0	63.2	20.1	90.05	-5,471.9	-4,225.0	4,919.1	4,838.3	80.79	60.889		
11,100.0	7,530.0	7,601.3	7,530.3	64.9	20.1	90.06	-5,471.9	-4,225.0	4,878.2	4,795.7	82.50	59.126		
11,200.0	7,530.0	7,601.6	7,530.6	66.6	20.1	90.06	-5,471.9	-4,225.0	4,839.0	4,754.8	84.22	57.455		
11,300.0	7,530.0	7,601.9	7,531.0	68.4	20.1	90.06	-5,471.9	-4,225.0	4,801.7	4,715.7	85.94	55.869		
11,400.0	7,530.0	7,602.3	7,531.3	70.1	20.1	90.07	-5,471.9	-4,225.0	4,766.1	4,678.4	87.67	54.366		
11,500.0	7,530.0	7,602.6	7,531.6	71.8	20.1	90.07	-5,471.9	-4,225.0	4,732.3	4,642.9	89.39	52.940		
11,600.0	7,530.0	7,602.9	7,531.9	73.5	20.1	90.08	-5,471.9	-4,225.0	4,700.5	4,609.4	91.12	51.587		
11,700.0	7,530.0	7,603.3	7,532.3	75.2	20.1	90.08	-5,471.9	-4,225.0	4,670.6	4,577.7	92.84	50.306		
11,800.0	7,530.0	7,603.6	7,532.6	77.0	20.1	90.08	-5,471.9	-4,225.0	4,642.6	4,548.0	94.57	49.091		
11,900.0	7,530.0	7,603.9	7,532.9	78.7	20.1	90.09	-5,471.9	-4,225.0	4,616.6	4,520.3	96.30	47.939		
12,000.0	7,530.0	7,604.3	7,533.3	80.4	20.1	90.09	-5,471.9	-4,225.0	4,592.7	4,494.6	98.03	46.849		
12,100.0	7,530.0	7,604.6	7,533.6	82.2	20.1	90.10	-5,471.9	-4,225.0	4,570.8	4,471.0	99.76	45.817		
12,200.0	7,530.0	7,604.9	7,534.0	83.9	20.1	90.10	-5,471.9	-4,225.0	4,551.0	4,449.5	101.50	44.840		
12,300.0	7,530.0	7,605.3	7,534.3	85.6	20.1	90.11	-5,471.9	-4,225.0	4,533.4	4,430.1	103.23	43.916		
12,400.0	7,530.0	7,605.6	7,534.7	87.3	20.1	90.11	-5,471.9	-4,225.0	4,517.8	4,412.9	104.96	43.042		
12,500.0	7,530.0	7,606.0	7,535.0	89.1	20.1	90.12	-5,471.9	-4,225.0	4,504.5	4,397.8	106.70	42.217		
12,600.0	7,530.0	7,606.3	7,535.4	90.8	20.1	90.12	-5,471.9	-4,225.0	4,493.3	4,384.9	108.43	41.439		
12,700.0	7,530.0	7,606.7	7,535.7	92.5	20.1	90.12	-5,471.9	-4,225.0	4,484.4	4,374.2	110.17	40.704		
12,800.0	7,530.0	7,607.1	7,536.1	94.3	20.1	90.13	-5,471.9	-4,225.0	4,477.6	4,365.7	111.91	40.012		
12,900.0	7,530.0	7,607.4	7,536.4	96.0	20.1	90.13	-5,471.9	-4,225.0	4,473.1	4,359.5	113.64	39.360		
13,000.0	7,530.0	7,607.8	7,536.8	97.8	20.1	90.14	-5,471.9	-4,225.0	4,470.8	4,355.4	115.38	38.748		
13,052.3	7,530.0	7,608.0	7,537.0	98.7	20.1	90.14	-5,471.9	-4,225.0	4,470.5	4,354.2	116.29	38.442 CC		
13,100.0	7,530.0	7,608.2	7,537.2	99.5	20.1	90.14	-5,471.9	-4,225.0	4,470.8	4,353.6	117.12	38.172 ES		
13,200.0	7,530.0	7,608.5	7,537.5	101.2	20.1	90.15	-5,471.9	-4,225.0	4,472.9	4,354.1	118.86	37.632		
13,300.0	7,530.0	7,608.9	7,537.9	103.0	20.1	90.15	-5,471.9	-4,225.0	4,477.4	4,356.8	120.60	37.125		
13,400.0	7,530.0	7,609.3	7,538.3	104.7	20.1	90.16	-5,471.9	-4,225.0	4,484.0	4,361.7	122.34	36.652		
13,500.0	7,530.0	7,609.7	7,538.7	106.4	20.1	90.16	-5,471.9	-4,225.0	4,492.9	4,368.8	124.08	36.209		
13,600.0	7,530.0	7,610.0	7,539.1	108.2	20.1	90.17	-5,471.9	-4,225.0	4,503.9	4,378.1	125.82	35.796		
13,700.0	7,530.0	7,610.4	7,539.4	109.9	20.1	90.17	-5,471.9	-4,225.0	4,517.2	4,389.6	127.57	35.411		
13,800.0	7,530.0	7,610.8	7,539.8	111.7	20.1	90.18	-5,471.9	-4,225.0	4,532.6	4,403.3	129.31	35.053		
13,900.0	7,530.0	7,611.2	7,540.2	113.4	20.1	90.18	-5,471.9	-4,224.9	4,550.2	4,419.1	131.05	34.721		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
14,000.0	7,530.0	7,611.6	7,540.6	115.1	20.1	90.19	-5,471.9	-4,224.9	4,569.9	4,437.1	132.79	34.413		
14,100.0	7,530.0	7,612.0	7,541.0	116.9	20.1	90.19	-5,471.9	-4,224.9	4,591.6	4,457.1	134.54	34.129		
14,200.0	7,530.0	7,612.4	7,541.4	118.6	20.1	90.20	-5,471.9	-4,224.9	4,615.5	4,479.2	136.28	33.868		
14,300.0	7,530.0	7,612.8	7,541.8	120.4	20.1	90.20	-5,471.9	-4,224.9	4,641.4	4,503.3	138.02	33.627		
14,400.0	7,530.0	7,613.2	7,542.2	122.1	20.1	90.21	-5,471.9	-4,224.9	4,669.2	4,529.5	139.77	33.407		
14,500.0	7,530.0	7,613.6	7,542.6	123.9	20.1	90.21	-5,471.9	-4,224.9	4,699.1	4,557.6	141.51	33.206		
14,600.0	7,530.0	7,614.0	7,543.0	125.6	20.1	90.22	-5,471.9	-4,224.9	4,730.8	4,587.6	143.26	33.024		
14,700.0	7,530.0	7,614.4	7,543.4	127.3	20.1	90.22	-5,471.9	-4,224.9	4,764.5	4,619.5	145.00	32.858		
14,800.0	7,530.0	7,614.8	7,543.9	129.1	20.1	90.23	-5,471.9	-4,224.9	4,800.0	4,653.2	146.75	32.709		
14,900.0	7,530.0	7,615.3	7,544.3	130.8	20.1	90.23	-5,471.9	-4,224.9	4,837.3	4,688.8	148.49	32.576		
15,000.0	7,530.0	7,615.7	7,544.7	132.6	20.1	90.24	-5,471.9	-4,224.9	4,876.4	4,726.1	150.24	32.458		
15,100.0	7,530.0	7,616.1	7,545.1	134.3	20.1	90.25	-5,471.9	-4,224.9	4,917.2	4,765.2	151.98	32.353		
15,200.0	7,530.0	7,616.6	7,545.6	136.1	20.1	90.25	-5,471.9	-4,224.9	4,959.6	4,805.9	153.73	32.262		
15,300.0	7,530.0	7,617.0	7,546.0	137.8	20.1	90.26	-5,471.9	-4,224.9	5,003.8	4,848.3	155.48	32.183		
15,400.0	7,530.0	7,617.4	7,546.5	139.6	20.1	90.26	-5,471.9	-4,224.9	5,049.5	4,892.2	157.22	32.117		
15,500.0	7,530.0	7,617.9	7,546.9	141.3	20.1	90.27	-5,471.9	-4,224.9	5,096.7	4,937.8	158.97	32.061		
15,600.0	7,530.0	7,618.3	7,547.3	143.0	20.1	90.27	-5,471.9	-4,224.9	5,145.5	4,984.8	160.72	32.016		
15,700.0	7,530.0	7,618.8	7,547.8	144.8	20.1	90.28	-5,471.9	-4,224.9	5,195.7	5,033.3	162.46	31.981		
15,800.0	7,530.0	7,619.2	7,548.2	146.5	20.1	90.29	-5,471.9	-4,224.9	5,247.4	5,083.2	164.21	31.955		
15,900.0	7,530.0	7,619.7	7,548.7	148.3	20.1	90.29	-5,471.9	-4,224.9	5,300.5	5,134.5	165.96	31.938		
16,000.0	7,530.0	7,620.1	7,549.2	150.0	20.1	90.30	-5,472.0	-4,224.9	5,354.8	5,187.1	167.71	31.930		
16,100.0	7,530.0	7,620.6	7,549.6	151.8	20.1	90.30	-5,472.0	-4,224.9	5,410.5	5,241.1	169.45	31.929 SF		
16,200.0	7,530.0	7,621.1	7,550.1	153.5	20.1	90.31	-5,472.0	-4,224.9	5,467.5	5,296.3	171.20	31.936		
16,300.0	7,530.0	7,621.6	7,550.6	155.3	20.1	90.31	-5,472.0	-4,224.9	5,525.7	5,352.7	172.95	31.949		
16,400.0	7,530.0	7,622.0	7,551.1	157.0	20.1	90.32	-5,472.0	-4,224.9	5,585.0	5,410.3	174.70	31.969		
16,500.0	7,530.0	7,622.5	7,551.5	158.8	20.1	90.33	-5,472.0	-4,224.9	5,645.5	5,469.1	176.45	31.996		
16,600.0	7,530.0	7,623.0	7,552.0	160.5	20.1	90.33	-5,472.0	-4,224.9	5,707.1	5,529.0	178.20	32.027		
16,700.0	7,530.0	7,623.5	7,552.5	162.3	20.1	90.34	-5,472.0	-4,224.9	5,769.8	5,589.9	179.94	32.065		
16,800.0	7,530.0	7,624.0	7,553.0	164.0	20.1	90.35	-5,472.0	-4,224.9	5,833.6	5,651.9	181.69	32.107		
16,900.0	7,530.0	7,624.5	7,553.5	165.8	20.1	90.35	-5,472.0	-4,224.9	5,898.3	5,714.9	183.44	32.154		
17,000.0	7,530.0	7,625.0	7,554.0	167.5	20.1	90.36	-5,472.0	-4,224.9	5,964.0	5,778.8	185.19	32.205		
17,100.0	7,530.0	7,625.5	7,554.5	169.3	20.1	90.37	-5,472.0	-4,224.9	6,030.7	5,843.7	186.94	32.260		
17,200.0	7,530.0	7,626.0	7,555.0	171.0	20.1	90.37	-5,472.0	-4,224.9	6,098.3	5,909.6	188.69	32.319		
17,300.0	7,530.0	7,626.5	7,555.6	172.8	20.1	90.38	-5,472.0	-4,224.9	6,166.7	5,976.3	190.44	32.382		
17,400.0	7,530.0	7,627.1	7,556.1	174.5	20.1	90.39	-5,472.0	-4,224.9	6,236.0	6,043.8	192.19	32.447		
17,420.9	7,530.0	7,627.2	7,556.2	174.9	20.1	90.39	-5,472.0	-4,224.9	6,250.6	6,058.1	192.55	32.462		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-148.97	-6,136.7	-3,691.1	7,161.3						
100.0	100.0	96.0	96.0	0.2	0.1	-148.97	-6,136.7	-3,691.1	7,161.3	7,161.0	0.29	N/A			
200.0	200.0	196.0	196.0	0.3	0.3	-148.97	-6,136.7	-3,691.1	7,161.3	7,160.6	0.64	N/A			
300.0	300.0	296.0	296.0	0.5	0.5	-148.97	-6,136.7	-3,691.1	7,161.3	7,160.3	0.99	7,223.647			
400.0	400.0	396.0	396.0	0.7	0.7	-148.97	-6,136.7	-3,691.1	7,161.3	7,159.9	1.34	5,342.514			
500.0	500.0	496.0	496.0	0.8	0.8	-148.97	-6,136.7	-3,691.1	7,161.3	7,159.6	1.69	4,238.700			
600.0	600.0	596.0	596.0	1.0	1.0	-148.97	-6,136.7	-3,691.1	7,161.3	7,159.2	2.04	3,512.902			
700.0	700.0	696.0	696.0	1.2	1.2	178.55	-6,136.7	-3,691.1	7,162.1	7,159.8	2.39	2,999.993			
800.0	800.0	796.0	796.0	1.4	1.4	178.55	-6,136.7	-3,691.1	7,164.8	7,162.0	2.74	2,619.064			
900.0	899.9	895.9	895.9	1.6	1.5	178.55	-6,136.7	-3,691.1	7,169.1	7,166.0	3.08	2,325.300			
988.4	988.1	984.1	984.1	1.7	1.7	178.55	-6,136.7	-3,691.1	7,174.4	7,171.0	3.39	2,116.665			
1,000.0	999.7	995.7	995.7	1.7	1.7	178.55	-6,136.7	-3,691.1	7,175.2	7,171.8	3.43	2,091.932			
1,100.0	1,099.4	1,095.5	1,095.5	1.9	1.9	178.55	-6,136.7	-3,691.1	7,182.0	7,178.2	3.78	1,900.717			
1,200.0	1,199.2	1,195.2	1,195.2	2.1	2.1	178.55	-6,136.7	-3,691.1	7,188.8	7,184.6	4.13	1,741.812			
1,300.0	1,299.0	1,291.8	1,291.8	2.3	2.3	178.86	-6,104.9	-3,716.4	7,191.8	7,186.6	5.26	1,367.225			
1,400.0	1,398.8	1,387.7	1,387.7	2.5	2.5	178.98	-6,093.0	-3,725.8	7,193.2	7,187.5	5.67	1,267.949			
1,500.0	1,498.5	1,486.6	1,486.6	2.7	2.7	179.09	-6,081.0	-3,735.3	7,194.6	7,188.5	6.10	1,180.171			
1,600.0	1,598.3	1,586.6	1,586.6	2.9	2.9	179.21	-6,069.1	-3,744.8	7,196.1	7,189.6	6.53	1,102.363			
1,700.0	1,698.1	1,686.6	1,686.6	3.2	3.2	179.32	-6,057.1	-3,754.2	7,197.6	7,190.6	6.97	1,033.188			
1,800.0	1,797.8	1,786.6	1,786.6	3.4	3.4	179.44	-6,045.2	-3,763.7	7,199.1	7,191.7	7.41	971.463			
1,900.0	1,897.6	1,886.6	1,886.6	3.6	3.6	179.55	-6,033.3	-3,773.2	7,200.7	7,192.8	7.86	916.171			
2,000.0	1,997.4	1,986.6	1,986.6	3.8	3.8	179.67	-6,021.3	-3,782.6	7,202.2	7,193.9	8.31	866.442			
2,100.0	2,097.1	2,086.6	2,086.6	4.0	4.0	179.78	-6,009.4	-3,792.1	7,203.8	7,195.1	8.77	821.538			
2,200.0	2,196.9	2,186.6	2,186.6	4.2	4.2	179.90	-5,997.4	-3,801.6	7,205.5	7,196.3	9.23	780.834			
2,300.0	2,296.7	2,286.6	2,286.6	4.4	4.4	-179.99	-5,985.5	-3,811.0	7,207.2	7,197.5	9.69	743.799			
2,400.0	2,396.5	2,386.6	2,386.6	4.6	4.6	-179.87	-5,973.5	-3,820.5	7,208.8	7,198.7	10.15	709.982			
2,500.0	2,496.2	2,486.6	2,486.6	4.8	4.8	-179.76	-5,961.6	-3,830.0	7,210.6	7,200.0	10.62	679.000			
2,600.0	2,596.0	2,586.6	2,586.6	5.0	5.0	-179.65	-5,949.7	-3,839.5	7,212.3	7,201.2	11.09	650.524			
2,700.0	2,695.8	2,686.6	2,686.6	5.2	5.2	-179.53	-5,937.7	-3,848.9	7,214.1	7,202.6	11.56	624.272			
2,800.0	2,795.5	2,786.6	2,786.6	5.4	5.4	-179.42	-5,925.8	-3,858.4	7,215.9	7,203.9	12.03	600.003			
2,900.0	2,895.3	2,886.6	2,886.6	5.6	5.6	-179.30	-5,913.8	-3,867.9	7,217.8	7,205.3	12.50	577.505			
3,000.0	2,995.1	2,986.6	2,986.6	5.9	5.9	-179.19	-5,901.9	-3,877.3	7,219.6	7,206.7	12.97	556.598			
3,100.0	3,094.9	3,086.6	3,086.6	6.1	6.1	-179.07	-5,890.0	-3,886.8	7,221.5	7,208.1	13.44	537.122			
3,200.0	3,194.6	3,186.6	3,186.6	6.3	6.3	-178.96	-5,878.0	-3,896.3	7,223.5	7,209.5	13.92	518.939			
3,300.0	3,294.4	3,286.6	3,286.6	6.5	6.5	-178.85	-5,866.1	-3,905.7	7,225.4	7,211.0	14.40	501.927			
3,400.0	3,394.2	3,386.6	3,386.6	6.7	6.7	-178.73	-5,854.1	-3,915.2	7,227.4	7,212.5	14.87	485.978			
3,500.0	3,493.9	3,486.6	3,486.6	6.9	6.9	-178.62	-5,842.2	-3,924.7	7,229.4	7,214.1	15.35	470.998			
3,600.0	3,593.7	3,586.6	3,586.6	7.1	7.1	-178.51	-5,830.3	-3,934.1	7,231.5	7,215.7	15.83	456.903			
3,700.0	3,693.5	3,686.6	3,686.6	7.3	7.3	-178.39	-5,818.3	-3,943.6	7,233.6	7,217.2	16.31	443.618			
3,800.0	3,793.2	3,786.6	3,786.6	7.5	7.5	-178.28	-5,806.4	-3,953.1	7,235.7	7,218.9	16.79	431.076			
3,900.0	3,893.0	3,886.6	3,886.6	7.7	7.7	-178.16	-5,794.4	-3,962.5	7,237.8	7,220.5	17.27	419.217			
4,000.0	3,992.8	3,986.6	3,986.6	8.0	8.0	-178.05	-5,782.5	-3,972.0	7,240.0	7,222.2	17.75	407.989			
4,100.0	4,092.6	4,086.6	4,086.6	8.2	8.2	-177.94	-5,770.6	-3,981.5	7,242.1	7,223.9	18.23	397.342			
4,200.0	4,192.3	4,186.6	4,186.6	8.4	8.4	-177.82	-5,758.6	-3,990.9	7,244.4	7,225.7	18.71	387.234			
4,300.0	4,292.1	4,286.6	4,286.6	8.6	8.6	-177.71	-5,746.7	-4,000.4	7,246.6	7,227.4	19.19	377.624			
4,400.0	4,391.9	4,386.6	4,386.6	8.8	8.8	-177.60	-5,734.7	-4,009.9	7,248.9	7,229.2	19.67	368.478			
4,500.0	4,491.6	4,486.6	4,486.6	9.0	9.0	-177.48	-5,722.8	-4,019.3	7,251.2	7,231.0	20.16	359.764			
4,600.0	4,591.4	4,586.6	4,586.6	9.2	9.2	-177.37	-5,710.9	-4,028.8	7,253.5	7,232.9	20.64	351.451			
4,700.0	4,691.2	4,686.6	4,686.6	9.4	9.4	-177.26	-5,699.9	-4,038.3	7,255.9	7,234.8	21.12	343.513			
4,800.0	4,790.9	4,786.6	4,786.6	9.6	9.6	-177.15	-5,687.0	-4,047.8	7,258.3	7,236.7	21.61	335.926			
4,900.0	4,890.7	4,886.6	4,886.6	9.8	9.8	-177.03	-5,675.0	-4,057.2	7,260.7	7,238.6	22.09	328.666			
5,000.0	4,990.5	4,986.6	4,986.6	10.1	10.1	-176.92	-5,663.1	-4,066.7	7,263.2	7,240.6	22.58	321.714			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	5,443.8	5,396.7	10.3	14.5	-176.81	-5,651.2	-4,076.2	7,265.7	7,242.6	23.06	315.051		
5,200.0	5,190.0	5,542.7	5,494.4	10.5	14.8	-176.69	-5,639.2	-4,085.6	7,268.2	7,244.6	23.55	308.659		
5,300.0	5,289.8	5,641.6	5,592.1	10.7	15.1	-176.58	-5,627.3	-4,095.1	7,270.7	7,246.7	24.03	302.522		
5,400.0	5,389.6	5,740.6	5,689.9	10.9	15.5	-176.47	-5,615.3	-4,104.6	7,273.3	7,248.7	24.52	296.625		
5,500.0	5,489.3	5,839.5	5,787.6	11.1	15.8	-176.36	-5,603.4	-4,114.0	7,275.9	7,250.9	25.01	290.955		
5,600.0	5,589.1	5,938.4	5,885.4	11.3	16.1	-176.24	-5,591.5	-4,123.5	7,278.5	7,253.0	25.49	285.499		
5,700.0	5,688.9	6,037.3	5,983.1	11.5	16.4	-176.13	-5,579.5	-4,133.0	7,281.1	7,255.2	25.98	280.245		
5,800.0	5,788.7	6,136.2	6,080.8	11.7	16.7	-176.02	-5,567.6	-4,142.4	7,283.8	7,257.3	26.47	275.182		
5,900.0	5,888.4	6,235.2	6,178.6	11.9	17.0	-175.91	-5,555.6	-4,151.9	7,286.5	7,259.6	26.96	270.301		
6,000.0	5,988.2	6,334.1	6,276.3	12.2	17.4	-175.80	-5,543.7	-4,161.4	7,289.3	7,261.8	27.45	265.591		
6,100.0	6,088.0	6,433.0	6,374.1	12.4	17.7	-175.68	-5,531.8	-4,170.8	7,292.0	7,264.1	27.93	261.044		
6,200.0	6,187.7	6,531.9	6,471.8	12.6	18.0	-175.57	-5,519.8	-4,180.3	7,294.8	7,266.4	28.42	256.652		
6,300.0	6,287.5	6,630.9	6,569.6	12.8	18.3	-175.46	-5,507.9	-4,189.8	7,297.6	7,268.7	28.91	252.408		
6,400.0	6,387.3	6,729.8	6,667.3	13.0	18.6	-175.35	-5,495.9	-4,199.2	7,300.5	7,271.1	29.40	248.303		
6,500.0	6,487.0	6,813.2	6,749.7	13.2	18.9	-175.25	-5,485.9	-4,207.2	7,303.4	7,273.6	29.84	244.736		
6,600.0	6,586.8	6,900.0	6,835.7	13.4	19.1	-175.17	-5,476.4	-4,214.7	7,306.7	7,276.4	30.26	241.473		
6,700.0	6,686.6	6,944.0	6,879.4	13.6	19.2	-175.13	-5,472.4	-4,217.9	7,310.4	7,279.9	30.54	239.405		
6,787.0	6,773.4	7,000.0	6,935.1	13.8	19.4	-175.09	-5,468.0	-4,221.4	7,314.2	7,283.3	30.82	237.337		
6,800.0	6,786.4	7,000.0	6,935.1	13.8	19.4	174.36	-5,468.0	-4,221.4	7,314.7	7,283.8	30.85	237.097		
6,850.0	6,836.3	7,035.6	6,970.6	13.9	19.4	87.25	-5,465.7	-4,223.2	7,314.9	7,283.9	31.01	235.920		
6,900.0	6,886.2	7,066.0	7,000.9	14.0	19.5	57.53	-5,464.0	-4,224.5	7,312.5	7,281.4	31.09	235.203		
6,950.0	6,935.7	7,100.0	7,034.8	14.0	19.5	50.01	-5,462.4	-4,225.8	7,307.5	7,276.4	31.12	234.794		
7,000.0	6,984.6	7,126.1	7,060.9	14.0	19.6	47.01	-5,461.4	-4,226.6	7,299.9	7,268.9	31.07	234.916		
7,050.0	7,032.6	7,155.5	7,090.3	14.0	19.6	45.68	-5,460.5	-4,227.4	7,289.8	7,258.8	30.98	235.286		
7,100.0	7,079.7	7,200.0	7,134.8	13.9	19.7	45.25	-5,459.5	-4,228.1	7,277.2	7,246.3	30.87	235.715		
7,150.0	7,125.4	7,212.8	7,147.5	13.9	19.7	45.28	-5,459.3	-4,228.3	7,262.0	7,231.3	30.68	236.696		
7,200.0	7,169.6	7,240.3	7,175.1	13.8	19.7	45.74	-5,459.1	-4,228.4	7,244.5	7,214.1	30.49	237.614		
7,250.0	7,212.1	7,273.3	7,208.1	13.8	19.8	46.56	-5,459.1	-4,228.5	7,224.8	7,194.5	30.30	238.452		
7,300.0	7,252.6	7,313.9	7,248.6	13.7	19.8	47.73	-5,459.1	-4,228.5	7,202.7	7,172.6	30.13	239.051		
7,350.0	7,291.0	7,352.3	7,287.0	13.7	19.8	49.19	-5,459.1	-4,228.5	7,178.5	7,148.5	29.99	239.379		
7,400.0	7,327.1	7,388.3	7,323.1	13.7	19.9	50.95	-5,459.1	-4,228.5	7,152.3	7,122.4	29.89	239.299		
7,450.0	7,360.7	7,421.9	7,356.7	13.7	19.9	53.02	-5,459.1	-4,228.5	7,124.2	7,094.4	29.85	238.679		
7,500.0	7,391.6	7,452.8	7,387.6	13.7	20.0	55.40	-5,459.1	-4,228.5	7,094.4	7,064.5	29.88	237.410		
7,550.0	7,419.7	7,480.9	7,415.7	13.8	20.0	58.10	-5,459.1	-4,228.5	7,063.0	7,033.0	30.00	235.421		
7,600.0	7,444.8	7,506.1	7,440.8	13.9	20.0	61.13	-5,459.1	-4,228.5	7,030.2	7,000.0	30.21	232.703		
7,650.0	7,466.9	7,528.2	7,462.9	14.1	20.0	64.48	-5,459.1	-4,228.5	6,996.1	6,965.6	30.51	229.311		
7,700.0	7,485.8	7,547.1	7,481.8	14.3	20.1	68.14	-5,459.1	-4,228.5	6,961.1	6,930.2	30.89	225.372		
7,750.0	7,501.5	7,562.7	7,497.5	14.6	20.1	72.09	-5,459.1	-4,228.5	6,925.1	6,893.8	31.33	221.065		
7,800.0	7,513.7	7,575.0	7,509.8	14.9	20.1	76.28	-5,459.1	-4,228.5	6,888.5	6,856.7	31.80	216.597		
7,850.0	7,522.6	7,583.9	7,518.6	15.2	20.1	80.67	-5,459.1	-4,228.5	6,851.4	6,819.1	32.29	212.164		
7,900.0	7,528.0	7,589.3	7,524.1	15.6	20.1	85.18	-5,459.1	-4,228.5	6,813.9	6,781.2	32.77	207.927		
7,952.9	7,530.0	7,591.3	7,526.0	16.1	20.1	90.00	-5,459.1	-4,228.5	6,774.2	6,740.9	33.25	203.763		
8,000.0	7,530.0	7,591.3	7,526.0	16.5	20.1	90.00	-5,459.1	-4,228.5	6,738.9	6,705.2	33.70	199.965		
8,100.0	7,530.0	7,591.3	7,526.0	17.5	20.1	90.00	-5,459.1	-4,228.5	6,664.5	6,629.7	34.76	191.725		
8,200.0	7,530.0	7,591.3	7,526.0	18.7	20.1	90.00	-5,459.1	-4,228.5	6,590.7	6,554.7	35.93	183.439		
8,300.0	7,530.0	7,591.3	7,526.0	19.9	20.1	90.00	-5,459.1	-4,228.5	6,517.6	6,480.4	37.18	175.276		
8,400.0	7,530.0	7,591.3	7,526.0	21.2	20.1	90.00	-5,459.1	-4,228.5	6,445.2	6,406.7	38.51	167.350		
8,500.0	7,530.0	7,591.3	7,526.0	22.6	20.1	90.00	-5,459.1	-4,228.5	6,373.6	6,333.7	39.90	159.735		
8,600.0	7,530.0	7,591.3	7,526.0	24.0	20.1	90.00	-5,459.1	-4,228.5	6,302.8	6,261.5	41.34	152.469		
8,700.0	7,530.0	7,591.3	7,526.0	25.4	20.1	90.00	-5,459.1	-4,228.5	6,232.8	6,190.0	42.82	145.573		
8,800.0	7,530.0	7,591.3	7,526.0	26.9	20.1	90.00	-5,459.1	-4,228.5	6,163.6	6,119.2	44.33	139.049		
8,900.0	7,530.0	7,591.3	7,526.0	28.4	20.1	90.00	-5,459.1	-4,228.5	6,095.2	6,049.4	45.87	132.893		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
9,000.0	7,530.0	7,591.3	7,526.0	30.0	20.1	90.00	-5,459.1	-4,228.5	6,027.8	5,980.3	47.43	127.091		
9,100.0	7,530.0	7,591.3	7,526.0	31.5	20.1	90.00	-5,459.1	-4,228.5	5,961.2	5,912.2	49.01	121.627		
9,200.0	7,530.0	7,591.3	7,526.0	33.1	20.1	90.00	-5,459.1	-4,228.5	5,895.6	5,845.0	50.61	116.484		
9,300.0	7,530.0	7,591.3	7,526.0	34.7	20.1	90.00	-5,459.1	-4,228.5	5,831.0	5,778.7	52.23	111.643		
9,400.0	7,530.0	7,591.3	7,526.0	36.3	20.1	90.00	-5,459.1	-4,228.5	5,767.3	5,713.5	53.86	107.086		
9,500.0	7,530.0	7,591.3	7,526.0	38.0	20.1	90.00	-5,459.1	-4,228.5	5,704.8	5,649.3	55.50	102.795		
9,600.0	7,530.0	7,591.3	7,526.0	39.6	20.1	90.00	-5,459.1	-4,228.5	5,643.3	5,586.1	57.15	98.751		
9,700.0	7,530.0	7,591.3	7,526.0	41.3	20.1	90.00	-5,459.1	-4,228.5	5,582.9	5,524.1	58.80	94.939		
9,800.0	7,530.0	7,591.3	7,526.0	42.9	20.1	90.00	-5,459.1	-4,228.5	5,523.7	5,463.2	60.47	91.344		
9,900.0	7,530.0	7,591.3	7,526.0	44.6	20.1	90.00	-5,459.1	-4,228.5	5,465.6	5,403.5	62.14	87.951		
10,000.0	7,530.0	7,591.3	7,526.0	46.3	20.1	90.00	-5,459.1	-4,228.5	5,408.8	5,345.0	63.82	84.748		
10,100.0	7,530.0	7,591.3	7,526.0	47.9	20.1	90.00	-5,459.1	-4,228.5	5,353.2	5,287.7	65.51	81.721		
10,200.0	7,530.0	7,591.3	7,526.0	49.6	20.1	90.00	-5,459.1	-4,228.5	5,299.0	5,231.8	67.20	78.859		
10,300.0	7,530.0	7,591.3	7,526.0	51.3	20.1	90.00	-5,459.1	-4,228.5	5,246.1	5,177.2	68.89	76.153		
10,400.0	7,530.0	7,591.3	7,526.0	53.0	20.1	90.00	-5,459.1	-4,228.5	5,194.6	5,124.0	70.59	73.591		
10,500.0	7,530.0	7,591.3	7,526.0	54.7	20.1	90.00	-5,459.1	-4,228.5	5,144.5	5,072.2	72.29	71.167		
10,600.0	7,530.0	7,591.3	7,526.0	56.4	20.1	90.00	-5,459.1	-4,228.5	5,095.8	5,021.9	73.99	68.871		
10,700.0	7,530.0	7,591.3	7,526.0	58.1	20.1	90.00	-5,459.1	-4,228.5	5,048.7	4,973.0	75.70	66.695		
10,800.0	7,530.0	7,591.3	7,526.0	59.8	20.1	90.00	-5,459.1	-4,228.5	5,003.2	4,925.8	77.41	64.633		
10,900.0	7,530.0	7,591.3	7,526.0	61.5	20.1	90.00	-5,459.1	-4,228.5	4,959.2	4,880.1	79.12	62.679		
11,000.0	7,530.0	7,591.3	7,526.0	63.2	20.1	90.00	-5,459.1	-4,228.5	4,916.9	4,836.1	80.84	60.826		
11,100.0	7,530.0	7,591.3	7,526.0	64.9	20.1	90.00	-5,459.1	-4,228.5	4,876.3	4,793.7	82.55	59.069		
11,200.0	7,530.0	7,591.3	7,526.0	66.6	20.1	90.00	-5,459.1	-4,228.5	4,837.4	4,753.1	84.27	57.402		
11,300.0	7,530.0	7,591.3	7,526.0	68.4	20.1	90.00	-5,459.1	-4,228.5	4,800.3	4,714.3	85.99	55.822		
11,400.0	7,530.0	7,591.3	7,526.0	70.1	20.1	90.00	-5,459.1	-4,228.5	4,764.9	4,677.2	87.71	54.323		
11,500.0	7,530.0	7,591.3	7,526.0	71.8	20.1	90.00	-5,459.1	-4,228.5	4,731.5	4,642.0	89.44	52.902		
11,600.0	7,530.0	7,591.3	7,526.0	73.5	20.1	90.00	-5,459.1	-4,228.5	4,699.9	4,608.7	91.16	51.554		
11,700.0	7,530.0	7,591.3	7,526.0	75.2	20.1	90.00	-5,459.1	-4,228.5	4,670.2	4,577.3	92.89	50.277		
11,800.0	7,530.0	7,591.3	7,526.0	77.0	20.1	90.00	-5,459.1	-4,228.5	4,642.5	4,547.9	94.62	49.066		
11,900.0	7,530.0	7,591.3	7,526.0	78.7	20.1	90.00	-5,459.1	-4,228.5	4,616.8	4,520.5	96.35	47.919		
12,000.0	7,530.0	7,591.3	7,526.0	80.4	20.1	90.00	-5,459.1	-4,228.5	4,593.2	4,495.1	98.08	46.833		
12,100.0	7,530.0	7,591.3	7,526.0	82.2	20.1	90.00	-5,459.1	-4,228.5	4,571.6	4,471.8	99.81	45.804		
12,200.0	7,530.0	7,591.3	7,526.0	83.9	20.1	90.00	-5,459.1	-4,228.5	4,552.1	4,450.5	101.54	44.831		
12,300.0	7,530.0	7,591.3	7,526.0	85.6	20.1	90.00	-5,459.1	-4,228.5	4,534.7	4,431.4	103.27	43.910		
12,400.0	7,530.0	7,591.3	7,526.0	87.3	20.1	90.00	-5,459.1	-4,228.5	4,519.5	4,414.5	105.01	43.040		
12,500.0	7,530.0	7,591.3	7,526.0	89.1	20.1	90.00	-5,459.1	-4,228.5	4,506.4	4,399.7	106.74	42.218		
12,600.0	7,530.0	7,591.3	7,526.0	90.8	20.1	90.00	-5,459.1	-4,228.5	4,495.5	4,387.1	108.48	41.443		
12,700.0	7,530.0	7,591.3	7,526.0	92.5	20.1	90.00	-5,459.1	-4,228.5	4,486.9	4,376.7	110.21	40.711		
12,800.0	7,530.0	7,591.3	7,526.0	94.3	20.1	90.00	-5,459.1	-4,228.5	4,480.4	4,368.5	111.95	40.022		
12,900.0	7,530.0	7,591.3	7,526.0	96.0	20.1	90.00	-5,459.1	-4,228.5	4,476.2	4,362.5	113.69	39.373		
13,000.0	7,530.0	7,591.3	7,526.0	97.8	20.1	90.00	-5,459.1	-4,228.5	4,474.2	4,358.8	115.42	38.763		
13,039.5	7,530.0	7,591.3	7,526.0	98.4	20.1	90.00	-5,459.1	-4,228.5	4,474.0	4,357.9	116.11	38.533 CC		
13,100.0	7,530.0	7,591.3	7,526.0	99.5	20.1	90.00	-5,459.1	-4,228.5	4,474.4	4,357.3	117.16	38.190 ES		
13,200.0	7,530.0	7,591.3	7,526.0	101.2	20.1	90.00	-5,459.1	-4,228.5	4,476.9	4,358.0	118.90	37.652		
13,300.0	7,530.0	7,591.3	7,526.0	103.0	20.1	90.00	-5,459.1	-4,228.5	4,481.6	4,360.9	120.64	37.148		
13,400.0	7,530.0	7,591.3	7,526.0	104.7	20.1	90.00	-5,459.1	-4,228.5	4,488.5	4,366.1	122.38	36.677		
13,500.0	7,530.0	7,591.3	7,526.0	106.4	20.1	90.00	-5,459.1	-4,228.5	4,497.6	4,373.5	124.12	36.236		
13,600.0	7,530.0	7,591.3	7,526.0	108.2	20.1	90.00	-5,459.1	-4,228.5	4,509.0	4,383.1	125.86	35.825		
13,700.0	7,530.0	7,591.3	7,526.0	109.9	20.1	90.00	-5,459.1	-4,228.5	4,522.5	4,394.9	127.60	35.442		
13,800.0	7,530.0	7,591.3	7,526.0	111.7	20.1	90.00	-5,459.1	-4,228.5	4,538.2	4,408.8	129.35	35.086		
13,900.0	7,530.0	7,591.3	7,526.0	113.4	20.1	90.00	-5,459.1	-4,228.5	4,556.0	4,424.9	131.09	34.756		
14,000.0	7,530.0	7,591.3	7,526.0	115.1	20.1	90.00	-5,459.1	-4,228.5	4,576.0	4,443.1	132.83	34.450		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
14,100.0	7,530.0	7,591.3	7,526.0	116.9	20.1	90.00	-5,459.1	-4,228.5	4,598.0	4,463.4	134.57	34.167		
14,200.0	7,530.0	7,591.3	7,526.0	118.6	20.1	90.00	-5,459.1	-4,228.5	4,622.1	4,485.8	136.32	33.907		
14,300.0	7,530.0	7,591.3	7,526.0	120.4	20.1	90.00	-5,459.1	-4,228.5	4,648.2	4,510.1	138.06	33.668		
14,400.0	7,530.0	7,591.3	7,526.0	122.1	20.1	90.00	-5,459.1	-4,228.5	4,676.3	4,536.5	139.80	33.449		
14,500.0	7,530.0	7,591.3	7,526.0	123.9	20.1	90.00	-5,459.1	-4,228.5	4,706.4	4,564.8	141.55	33.250		
14,600.0	7,530.0	7,591.3	7,526.0	125.6	20.1	90.00	-5,459.1	-4,228.5	4,738.4	4,595.1	143.29	33.068		
14,700.0	7,530.0	7,591.3	7,526.0	127.3	20.1	90.00	-5,459.1	-4,228.5	4,772.2	4,627.2	145.04	32.904		
14,800.0	7,530.0	7,591.3	7,526.0	129.1	20.1	90.00	-5,459.1	-4,228.5	4,807.9	4,661.2	146.78	32.756		
14,900.0	7,530.0	7,591.3	7,526.0	130.8	20.1	90.00	-5,459.1	-4,228.5	4,845.4	4,696.9	148.53	32.624		
15,000.0	7,530.0	7,591.3	7,526.0	132.6	20.1	90.00	-5,459.1	-4,228.5	4,884.7	4,734.4	150.27	32.506		
15,100.0	7,530.0	7,591.3	7,526.0	134.3	20.1	90.00	-5,459.1	-4,228.5	4,925.7	4,773.7	152.02	32.402		
15,200.0	7,530.0	7,591.3	7,526.0	136.1	20.1	90.00	-5,459.1	-4,228.5	4,968.4	4,814.6	153.76	32.312		
15,300.0	7,530.0	7,591.3	7,526.0	137.8	20.1	90.00	-5,459.1	-4,228.5	5,012.7	4,857.2	155.51	32.234		
15,400.0	7,530.0	7,591.3	7,526.0	139.6	20.1	90.00	-5,459.1	-4,228.5	5,058.5	4,901.3	157.25	32.168		
15,500.0	7,530.0	7,591.3	7,526.0	141.3	20.1	90.00	-5,459.1	-4,228.5	5,106.0	4,947.0	159.00	32.113		
15,600.0	7,530.0	7,591.3	7,526.0	143.0	20.1	90.00	-5,459.1	-4,228.5	5,154.9	4,994.2	160.75	32.068		
15,700.0	7,530.0	7,591.3	7,526.0	144.8	20.1	90.00	-5,459.1	-4,228.5	5,205.3	5,042.8	162.49	32.034		
15,800.0	7,530.0	7,591.3	7,526.0	146.5	20.1	90.00	-5,459.1	-4,228.5	5,257.1	5,092.9	164.24	32.009		
15,900.0	7,530.0	7,591.3	7,526.0	148.3	20.1	90.00	-5,459.1	-4,228.5	5,310.3	5,144.3	165.99	31.992		
16,000.0	7,530.0	7,591.3	7,526.0	150.0	20.1	90.00	-5,459.1	-4,228.5	5,364.8	5,197.1	167.74	31.984		
16,100.0	7,530.0	7,591.3	7,526.0	151.8	20.1	90.00	-5,459.1	-4,228.5	5,420.7	5,251.2	169.48	31.984 SF		
16,200.0	7,530.0	7,591.3	7,526.0	153.5	20.1	90.00	-5,459.1	-4,228.5	5,477.8	5,306.5	171.23	31.991		
16,300.0	7,530.0	7,591.3	7,526.0	155.3	20.1	90.00	-5,459.1	-4,228.5	5,536.1	5,363.1	172.98	32.004		
16,400.0	7,530.0	7,591.3	7,526.0	157.0	20.1	90.00	-5,459.1	-4,228.5	5,595.5	5,420.8	174.73	32.025		
16,500.0	7,530.0	7,591.3	7,526.0	158.8	20.1	90.00	-5,459.1	-4,228.5	5,656.2	5,479.7	176.47	32.051		
16,600.0	7,530.0	7,591.3	7,526.0	160.5	20.1	90.00	-5,459.1	-4,228.5	5,717.9	5,539.7	178.22	32.083		
16,700.0	7,530.0	7,591.3	7,526.0	162.3	20.1	90.00	-5,459.1	-4,228.5	5,780.7	5,600.7	179.97	32.120		
16,800.0	7,530.0	7,591.3	7,526.0	164.0	20.1	90.00	-5,459.1	-4,228.5	5,844.5	5,662.8	181.72	32.162		
16,900.0	7,530.0	7,591.3	7,526.0	165.8	20.1	90.00	-5,459.1	-4,228.5	5,909.4	5,725.9	183.47	32.209		
17,000.0	7,530.0	7,591.3	7,526.0	167.5	20.1	90.00	-5,459.1	-4,228.5	5,975.2	5,790.0	185.22	32.261		
17,100.0	7,530.0	7,591.3	7,526.0	169.3	20.1	90.00	-5,459.1	-4,228.5	6,041.9	5,855.0	186.96	32.316		
17,200.0	7,530.0	7,591.3	7,526.0	171.0	20.1	90.00	-5,459.1	-4,228.5	6,109.6	5,920.9	188.71	32.375		
17,300.0	7,530.0	7,591.3	7,526.0	172.8	20.1	90.00	-5,459.1	-4,228.5	6,178.1	5,987.6	190.46	32.437		
17,400.0	7,530.0	7,591.3	7,526.0	174.5	20.1	90.00	-5,459.1	-4,228.5	6,247.5	6,055.3	192.21	32.503		
17,420.9	7,530.0	7,591.3	7,526.0	174.9	20.1	90.00	-5,459.1	-4,228.5	6,262.1	6,069.5	192.58	32.517		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-149.19	-6,136.7	-3,660.3	7,145.5					
100.0	100.0	37.9	37.9	0.2	0.0	-149.18	-6,136.8	-3,660.5	7,145.8	7,145.6	0.20	N/A		
200.0	200.0	96.7	96.7	0.3	0.1	-149.18	-6,137.2	-3,661.2	7,147.0	7,146.5	0.47	N/A		
300.0	300.0	207.0	207.0	0.5	0.3	-149.17	-6,138.0	-3,662.7	7,148.3	7,147.4	0.84	8,520.949		
400.0	400.0	284.5	284.4	0.7	0.5	-149.17	-6,138.9	-3,663.3	7,149.7	7,148.6	1.15	6,223.066		
500.0	500.0	340.4	340.4	0.8	0.6	-149.18	-6,139.9	-3,663.7	7,151.6	7,150.1	1.42	5,031.842		
600.0	600.0	388.0	387.9	1.0	0.7	-149.18	-6,141.1	-3,664.1	7,154.1	7,152.5	1.68	4,260.173		
700.0	700.0	419.0	418.9	1.2	0.7	178.35	-6,142.1	-3,664.4	7,158.4	7,156.5	1.90	3,759.830		
800.0	800.0	450.0	449.9	1.4	0.8	178.34	-6,143.3	-3,664.8	7,165.2	7,163.1	2.13	3,361.231		
900.0	899.9	511.0	510.8	1.6	0.9	178.33	-6,146.5	-3,665.4	7,174.7	7,172.3	2.41	2,975.132		
988.4	988.1	537.0	536.8	1.7	0.9	178.32	-6,148.2	-3,665.7	7,185.2	7,182.5	2.61	2,752.899		
1,000.0	999.7	542.7	542.5	1.7	1.0	178.32	-6,148.6	-3,665.8	7,186.7	7,184.0	2.64	2,721.899		
1,100.0	1,099.4	606.0	605.6	1.9	1.1	178.31	-6,152.9	-3,666.8	7,200.1	7,197.2	2.93	2,460.975		
1,200.0	1,199.2	642.0	641.4	2.1	1.2	178.31	-6,155.6	-3,667.5	7,214.1	7,211.0	3.16	2,280.261		
1,300.0	1,299.0	692.0	691.3	2.3	1.3	178.30	-6,159.7	-3,668.6	7,228.9	7,225.4	3.43	2,109.684		
1,400.0	1,398.8	792.9	791.8	2.5	1.5	178.28	-6,168.4	-3,671.0	7,244.2	7,240.4	3.78	1,917.052		
1,500.0	1,498.5	861.5	860.2	2.7	1.6	178.27	-6,174.0	-3,672.7	7,259.4	7,255.3	4.07	1,781.585		
1,600.0	1,598.3	908.8	907.2	2.9	1.8	178.26	-6,178.3	-3,673.9	7,275.2	7,270.8	4.33	1,679.001		
1,700.0	1,698.1	940.0	938.3	3.2	1.8	178.26	-6,181.3	-3,674.8	7,291.7	7,287.2	4.56	1,597.986		
1,800.0	1,797.8	1,004.0	1,001.9	3.4	2.0	178.24	-6,188.2	-3,676.7	7,309.1	7,304.3	4.85	1,506.342		
1,900.0	1,897.6	1,004.0	1,001.9	3.6	2.0	178.24	-6,188.2	-3,676.7	7,327.3	7,322.3	5.03	1,457.613		
2,000.0	1,997.4	1,068.0	1,065.3	3.8	2.2	178.22	-6,196.2	-3,678.7	7,346.5	7,341.1	5.32	1,381.521		
2,100.0	2,097.1	1,068.0	1,065.3	4.0	2.2	178.22	-6,196.2	-3,678.7	7,366.4	7,360.9	5.49	1,341.215		
2,200.0	2,196.9	1,133.0	1,129.6	4.2	2.4	178.20	-6,205.6	-3,680.8	7,387.3	7,381.5	5.79	1,276.547		
2,300.0	2,296.7	1,133.0	1,129.6	4.4	2.4	178.20	-6,205.6	-3,680.8	7,409.0	7,403.0	5.96	1,242.782		
2,400.0	2,296.5	1,197.0	1,192.7	4.6	2.6	178.18	-6,216.0	-3,683.3	7,431.5	7,425.3	6.25	1,188.200		
2,500.0	2,496.2	1,197.0	1,192.7	4.8	2.6	178.18	-6,216.0	-3,683.3	7,455.0	7,448.5	6.43	1,159.558		
2,600.0	2,596.0	1,233.4	1,228.5	5.0	2.7	178.16	-6,222.4	-3,685.1	7,479.3	7,472.6	6.67	1,121.304		
2,700.0	2,695.8	1,260.0	1,254.6	5.2	2.8	178.16	-6,227.2	-3,686.7	7,504.6	7,497.7	6.89	1,088.736		
2,800.0	2,795.5	1,288.1	1,282.2	5.4	2.9	178.15	-6,232.4	-3,688.7	7,530.8	7,523.7	7.12	1,058.163		
2,900.0	2,895.3	1,324.0	1,317.3	5.6	3.0	178.14	-6,239.2	-3,691.8	7,557.9	7,550.5	7.35	1,027.804		
3,000.0	2,995.1	1,362.7	1,355.0	5.9	3.2	178.14	-6,246.4	-3,695.7	7,585.7	7,578.1	7.59	999.037		
3,100.0	3,094.9	1,420.0	1,411.0	6.1	3.4	178.15	-6,257.1	-3,702.4	7,614.1	7,606.3	7.86	968.627		
3,200.0	3,194.6	1,454.3	1,444.4	6.3	3.5	178.15	-6,263.6	-3,706.6	7,643.2	7,635.1	8.09	944.249		
3,300.0	3,294.4	1,516.0	1,504.4	6.5	3.8	178.15	-6,275.9	-3,714.2	7,673.0	7,664.6	8.37	916.431		
3,400.0	3,394.2	1,613.5	1,599.2	6.7	4.2	178.15	-6,295.5	-3,725.8	7,703.0	7,694.3	8.71	884.147		
3,500.0	3,493.9	1,642.0	1,626.9	6.9	4.3	178.15	-6,301.3	-3,729.2	7,733.0	7,724.1	8.94	865.465		
3,600.0	3,593.7	1,693.9	1,677.3	7.1	4.5	178.15	-6,312.1	-3,735.3	7,763.7	7,754.5	9.20	843.920		
3,700.0	3,693.5	1,738.0	1,720.0	7.3	4.8	178.15	-6,321.8	-3,740.7	7,795.3	7,785.8	9.45	824.974		
3,800.0	3,793.2	1,778.0	1,758.5	7.5	4.9	178.15	-6,330.9	-3,745.7	7,827.5	7,817.8	9.69	807.620		
3,900.0	3,893.0	2,024.8	1,997.6	7.7	6.0	178.14	-6,384.6	-3,776.0	7,858.9	7,848.6	10.29	764.023		
4,000.0	3,992.8	2,103.6	2,074.0	8.0	6.4	178.14	-6,401.0	-3,785.6	7,889.5	7,878.9	10.59	744.739		
4,100.0	4,092.6	2,184.0	2,152.0	8.2	6.8	178.15	-6,417.8	-3,795.8	7,920.5	7,909.6	10.90	726.394		
4,200.0	4,192.3	2,375.0	2,337.6	8.4	7.6	178.14	-6,457.0	-3,818.1	7,950.4	7,939.0	11.40	697.112		
4,300.0	4,292.1	2,442.4	2,403.2	8.6	7.9	178.15	-6,470.4	-3,826.3	7,980.2	7,968.5	11.69	682.622		
4,400.0	4,391.9	2,663.9	2,618.6	8.8	8.9	178.19	-6,511.7	-3,856.7	8,010.1	7,997.9	12.23	654.717		
4,500.0	4,491.6	2,724.0	2,677.2	9.0	9.1	178.19	-6,523.2	-3,863.7	8,039.0	8,026.5	12.51	642.519		
4,600.0	4,591.4	2,724.0	2,677.2	9.2	9.1	178.19	-6,523.2	-3,863.7	8,068.6	8,056.0	12.69	636.008		
4,700.0	4,691.2	2,788.5	2,739.9	9.4	9.4	178.19	-6,536.2	-3,871.4	8,098.7	8,085.7	12.97	624.391		
4,800.0	4,790.9	2,819.0	2,769.5	9.6	9.5	178.19	-6,542.5	-3,875.3	8,129.6	8,116.4	13.20	616.025		
4,900.0	4,890.7	2,900.8	2,848.6	9.8	9.9	178.20	-6,559.9	-3,885.8	8,161.0	8,147.5	13.51	604.060		
5,000.0	4,990.5	3,049.8	2,993.1	10.1	10.6	178.20	-6,591.3	-3,904.9	8,192.2	8,178.3	13.94	587.792		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,100.0	5,090.3	3,200.2	3,139.1	10.3	11.3	178.21	-6,621.9	-3,924.5	8,222.9	8,208.5	14.37	572.370			
5,200.0	5,190.0	3,338.6	3,273.5	10.5	11.9	178.22	-6,649.6	-3,941.8	8,253.1	8,238.3	14.78	558.551			
5,300.0	5,289.8	3,423.0	3,355.6	10.7	12.3	178.22	-6,666.4	-3,951.9	8,282.8	8,267.7	15.09	548.744			
5,400.0	5,389.6	3,464.2	3,395.7	10.9	12.5	178.22	-6,674.7	-3,957.0	8,312.9	8,297.6	15.34	541.952			
5,500.0	5,489.3	3,614.0	3,541.2	11.1	13.1	178.23	-6,704.7	-3,975.9	8,343.2	8,327.4	15.77	529.142			
5,600.0	5,589.1	3,659.2	3,585.1	11.3	13.3	178.24	-6,713.7	-3,981.6	8,373.3	8,357.3	16.02	522.714			
5,700.0	5,688.9	3,712.4	3,636.7	11.5	13.6	178.24	-6,724.6	-3,988.4	8,404.0	8,387.7	16.28	516.094			
5,800.0	5,788.7	3,873.7	3,793.5	11.7	14.3	178.25	-6,756.9	-4,008.9	8,434.0	8,417.2	16.73	504.054			
5,900.0	5,888.4	4,091.0	4,005.1	11.9	15.2	178.26	-6,798.5	-4,035.3	8,462.9	8,445.6	17.28	489.863			
6,000.0	5,988.2	4,139.6	4,052.4	12.2	15.5	178.27	-6,807.6	-4,041.3	8,491.9	8,474.3	17.53	484.324			
6,100.0	6,088.0	4,186.0	4,097.6	12.4	15.7	178.27	-6,816.6	-4,047.1	8,521.5	8,503.7	17.79	479.080			
6,200.0	6,187.7	4,568.0	4,470.3	12.6	17.3	178.29	-6,887.2	-4,092.1	8,550.6	8,532.0	18.61	459.412			
6,300.0	6,287.5	4,628.5	4,529.5	12.8	17.5	178.30	-6,897.4	-4,098.9	8,577.4	8,558.5	18.89	454.074			
6,400.0	6,387.3	4,687.9	4,587.6	13.0	17.7	178.30	-6,907.6	-4,105.8	8,604.7	8,585.5	19.17	448.957			
6,500.0	6,487.0	5,206.1	5,096.3	13.2	19.6	178.33	-6,990.7	-4,157.8	8,632.1	8,611.9	20.23	426.746			
6,600.0	6,586.8	5,394.5	5,282.5	13.4	20.2	178.33	-7,015.3	-4,173.5	8,654.2	8,633.5	20.73	417.542			
6,700.0	6,686.6	6,885.0	6,766.2	13.6	23.1	178.33	-7,111.4	-4,227.5	8,673.3	8,649.8	23.49	369.195			
6,787.0	6,773.4	6,961.1	6,842.3	13.8	23.2	178.33	-7,111.0	-4,226.8	8,678.4	8,654.7	23.78	364.978			
6,800.0	6,786.4	6,973.9	6,855.1	13.8	23.2	167.78	-7,110.9	-4,226.7	8,679.1	8,655.3	23.85	363.886			
6,850.0	6,836.3	7,021.5	6,902.7	13.9	23.2	80.63	-7,110.7	-4,226.4	8,679.8	8,655.7	24.09	360.237			
6,900.0	6,886.2	7,062.7	6,943.9	14.0	23.3	50.88	-7,110.4	-4,226.2	8,677.5	8,653.3	24.27	357.509			
6,950.0	6,935.7	7,102.3	6,983.5	14.0	23.3	43.30	-7,110.3	-4,225.9	8,672.3	8,647.9	24.39	355.501			
7,000.0	6,984.6	7,140.7	7,021.9	14.0	23.3	40.26	-7,110.2	-4,225.7	8,664.2	8,639.8	24.47	354.084			
7,050.0	7,032.6	7,188.1	7,069.3	14.0	23.4	38.89	-7,110.2	-4,225.2	8,653.3	8,628.8	24.52	352.850			
7,100.0	7,079.7	7,269.5	7,150.7	13.9	23.4	38.43	-7,109.9	-4,224.6	8,639.4	8,614.8	24.62	350.956			
7,150.0	7,125.4	7,314.8	7,196.0	13.9	23.5	38.47	-7,109.6	-4,224.4	8,622.6	8,597.9	24.64	349.920			
7,200.0	7,169.6	7,351.9	7,233.1	13.8	23.5	38.90	-7,109.3	-4,224.3	8,603.1	8,578.4	24.67	348.740			
7,250.0	7,212.1	7,384.2	7,265.4	13.8	23.5	39.67	-7,109.1	-4,224.2	8,581.1	8,556.4	24.73	346.987			
7,300.0	7,252.6	7,416.4	7,297.6	13.7	23.6	40.75	-7,108.9	-4,224.2	8,556.7	8,531.8	24.86	344.156			
7,350.0	7,291.0	7,447.7	7,328.8	13.7	23.6	42.15	-7,108.7	-4,224.2	8,529.9	8,504.8	25.10	339.899			
7,400.0	7,327.1	7,487.6	7,368.8	13.7	23.6	43.92	-7,108.5	-4,224.2	8,501.0	8,475.5	25.48	333.618			
7,450.0	7,360.7	7,529.2	7,410.4	13.7	23.7	46.05	-7,108.2	-4,224.1	8,470.0	8,443.9	26.04	325.308			
7,500.0	7,391.6	7,552.0	7,433.2	13.7	23.7	48.48	-7,108.1	-4,224.0	8,437.0	8,410.3	26.73	315.591			
7,550.0	7,419.7	7,587.2	7,468.4	13.8	23.7	51.40	-7,107.9	-4,223.9	8,402.3	8,374.7	27.67	303.704			
7,600.0	7,444.8	7,609.0	7,490.2	13.9	23.7	54.70	-7,107.8	-4,223.9	8,366.1	8,337.4	28.76	290.901			
7,650.0	7,466.9	7,628.2	7,509.3	14.1	23.8	58.47	-7,107.7	-4,223.8	8,328.5	8,298.5	30.02	277.430			
7,700.0	7,485.8	7,644.6	7,525.8	14.3	23.8	62.73	-7,107.6	-4,223.7	8,289.8	8,258.4	31.40	263.975			
7,750.0	7,501.5	7,658.2	7,539.4	14.6	23.8	67.47	-7,107.6	-4,223.6	8,250.1	8,217.2	32.84	251.231			
7,800.0	7,513.7	7,668.9	7,550.0	14.9	23.8	72.67	-7,107.5	-4,223.6	8,209.6	8,175.3	34.23	239.831			
7,850.0	7,522.6	7,676.6	7,557.8	15.2	23.8	78.25	-7,107.5	-4,223.5	8,168.5	8,133.0	35.47	230.286			
7,900.0	7,528.0	7,681.3	7,562.4	15.6	23.8	84.12	-7,107.5	-4,223.5	8,127.0	8,090.5	36.45	222.937			
7,952.9	7,530.0	7,682.9	7,564.1	16.1	23.8	90.49	-7,107.5	-4,223.5	8,082.9	8,045.8	37.13	217.721			
8,000.0	7,530.0	7,682.8	7,564.0	16.5	23.8	90.49	-7,107.5	-4,223.5	8,043.7	8,006.2	37.58	214.043			
8,100.0	7,530.0	7,682.6	7,563.8	17.5	23.8	90.48	-7,107.5	-4,223.5	7,960.8	7,922.1	38.64	206.025			
8,200.0	7,530.0	7,682.4	7,563.6	18.7	23.8	90.48	-7,107.5	-4,223.5	7,878.2	7,838.4	39.81	197.908			
8,300.0	7,530.0	7,682.2	7,563.4	19.9	23.8	90.48	-7,107.5	-4,223.5	7,796.1	7,755.0	41.06	189.855			
8,400.0	7,530.0	7,682.0	7,563.2	21.2	23.8	90.48	-7,107.5	-4,223.5	7,714.4	7,672.0	42.39	181.978			
8,500.0	7,530.0	7,681.8	7,563.0	22.6	23.8	90.47	-7,107.5	-4,223.5	7,633.1	7,589.3	43.78	174.353			
8,600.0	7,530.0	7,681.7	7,562.8	24.0	23.8	90.47	-7,107.5	-4,223.5	7,552.2	7,507.0	45.22	167.026			
8,700.0	7,530.0	7,681.5	7,562.6	25.4	23.8	90.47	-7,107.5	-4,223.5	7,471.9	7,425.2	46.69	160.021			
8,800.0	7,530.0	7,681.3	7,562.4	26.9	23.8	90.47	-7,107.5	-4,223.5	7,392.0	7,343.8	48.20	153.349			
8,900.0	7,530.0	7,681.1	7,562.3	28.4	23.8	90.46	-7,107.5	-4,223.5	7,312.6	7,262.8	49.74	147.008			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 56-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,680.9	7,562.1	30.0	23.8	90.46	-7,107.5	-4,223.5	7,233.7	7,182.4	51.31	140.993		
9,100.0	7,530.0	7,680.7	7,561.9	31.5	23.8	90.46	-7,107.5	-4,223.5	7,155.3	7,102.4	52.89	135.291		
9,200.0	7,530.0	7,680.5	7,561.7	33.1	23.8	90.46	-7,107.5	-4,223.5	7,077.5	7,023.0	54.49	129.889		
9,300.0	7,530.0	7,680.3	7,561.5	34.7	23.8	90.45	-7,107.5	-4,223.5	7,000.2	6,944.1	56.10	124.772		
9,400.0	7,530.0	7,680.1	7,561.3	36.3	23.8	90.45	-7,107.5	-4,223.5	6,923.6	6,865.8	57.73	119.925		
9,500.0	7,530.0	7,679.9	7,561.0	38.0	23.8	90.45	-7,107.5	-4,223.5	6,847.5	6,788.1	59.37	115.332		
9,600.0	7,530.0	7,679.7	7,560.8	39.6	23.8	90.45	-7,107.5	-4,223.5	6,772.0	6,711.0	61.02	110.978		
9,700.0	7,530.0	7,679.5	7,560.6	41.3	23.8	90.44	-7,107.5	-4,223.5	6,697.2	6,634.6	62.68	106.849		
9,800.0	7,530.0	7,679.2	7,560.4	42.9	23.8	90.44	-7,107.5	-4,223.5	6,623.1	6,558.7	64.34	102.931		
9,900.0	7,530.0	7,679.0	7,560.2	44.6	23.8	90.44	-7,107.5	-4,223.5	6,549.6	6,483.6	66.02	99.211		
10,000.0	7,530.0	7,678.8	7,560.0	46.3	23.8	90.44	-7,107.5	-4,223.5	6,476.9	6,409.2	67.70	95.676		
10,100.0	7,530.0	7,678.6	7,559.8	47.9	23.8	90.43	-7,107.5	-4,223.5	6,404.9	6,335.5	69.38	92.316		
10,200.0	7,530.0	7,678.4	7,559.6	49.6	23.8	90.43	-7,107.5	-4,223.5	6,333.6	6,262.6	71.07	89.120		
10,300.0	7,530.0	7,678.2	7,559.4	51.3	23.8	90.43	-7,107.5	-4,223.5	6,263.2	6,190.4	72.76	86.078		
10,400.0	7,530.0	7,678.0	7,559.2	53.0	23.8	90.42	-7,107.5	-4,223.5	6,193.5	6,119.1	74.46	83.180		
10,500.0	7,530.0	7,677.8	7,558.9	54.7	23.8	90.42	-7,107.5	-4,223.5	6,124.7	6,048.6	76.16	80.419		
10,600.0	7,530.0	7,677.5	7,558.7	56.4	23.8	90.42	-7,107.5	-4,223.5	6,056.8	5,978.9	77.86	77.787		
10,700.0	7,530.0	7,677.3	7,558.5	58.1	23.8	90.42	-7,107.5	-4,223.5	5,989.7	5,910.2	79.57	75.276		
10,800.0	7,530.0	7,677.1	7,558.3	59.8	23.8	90.41	-7,107.5	-4,223.5	5,923.6	5,842.4	81.28	72.879		
10,900.0	7,530.0	7,676.9	7,558.1	61.5	23.8	90.41	-7,107.5	-4,223.5	5,858.5	5,775.5	82.99	70.591		
11,000.0	7,530.0	7,676.7	7,557.8	63.2	23.8	90.41	-7,107.5	-4,223.5	5,794.3	5,709.6	84.71	68.404		
11,100.0	7,530.0	7,676.4	7,557.6	64.9	23.8	90.41	-7,107.5	-4,223.5	5,731.2	5,644.8	86.42	66.315		
11,200.0	7,530.0	7,676.2	7,557.4	66.6	23.8	90.40	-7,107.5	-4,223.5	5,669.1	5,581.0	88.14	64.318		
11,300.0	7,530.0	7,676.0	7,557.2	68.4	23.8	90.40	-7,107.5	-4,223.6	5,608.2	5,518.3	89.86	62.408		
11,400.0	7,530.0	7,675.7	7,556.9	70.1	23.8	90.40	-7,107.5	-4,223.6	5,548.3	5,456.8	91.58	60.582		
11,500.0	7,530.0	7,675.5	7,556.7	71.8	23.8	90.39	-7,107.5	-4,223.6	5,489.7	5,396.4	93.31	58.834		
11,600.0	7,530.0	7,675.3	7,556.5	73.5	23.8	90.39	-7,107.5	-4,223.6	5,432.2	5,337.2	95.03	57.161		
11,700.0	7,530.0	7,675.0	7,556.2	75.2	23.8	90.39	-7,107.5	-4,223.6	5,376.0	5,279.2	96.76	55.561		
11,800.0	7,530.0	7,674.8	7,556.0	77.0	23.8	90.38	-7,107.5	-4,223.6	5,321.1	5,222.6	98.49	54.028		
11,900.0	7,530.0	7,674.6	7,555.8	78.7	23.8	90.38	-7,107.5	-4,223.6	5,267.5	5,167.2	100.22	52.561		
12,000.0	7,530.0	7,674.3	7,555.5	80.4	23.8	90.38	-7,107.5	-4,223.6	5,215.2	5,113.3	101.95	51.157		
12,100.0	7,530.0	7,674.1	7,555.3	82.2	23.8	90.38	-7,107.5	-4,223.6	5,164.4	5,060.7	103.68	49.813		
12,200.0	7,530.0	7,673.9	7,555.0	83.9	23.8	90.37	-7,107.5	-4,223.6	5,115.0	5,009.6	105.41	48.526		
12,300.0	7,530.0	7,673.6	7,554.8	85.6	23.8	90.37	-7,107.5	-4,223.6	5,067.1	4,960.0	107.14	47.294		
12,400.0	7,530.0	7,673.4	7,554.5	87.3	23.8	90.37	-7,107.5	-4,223.6	5,020.8	4,911.9	108.87	46.116		
12,500.0	7,530.0	7,673.1	7,554.3	89.1	23.8	90.36	-7,107.5	-4,223.6	4,976.0	4,865.4	110.61	44.988		
12,600.0	7,530.0	7,672.9	7,554.0	90.8	23.8	90.36	-7,107.5	-4,223.6	4,932.9	4,820.5	112.34	43.909		
12,700.0	7,530.0	7,672.6	7,553.8	92.5	23.8	90.36	-7,107.5	-4,223.6	4,891.4	4,777.3	114.08	42.877		
12,800.0	7,530.0	7,672.4	7,553.5	94.3	23.8	90.35	-7,107.5	-4,223.6	4,851.6	4,735.8	115.82	41.891		
12,900.0	7,530.0	7,672.1	7,553.3	96.0	23.8	90.35	-7,107.5	-4,223.6	4,813.6	4,696.0	117.55	40.948		
13,000.0	7,530.0	7,671.9	7,553.0	97.8	23.8	90.35	-7,107.5	-4,223.6	4,777.3	4,658.0	119.29	40.048		
13,100.0	7,530.0	7,671.6	7,552.8	99.5	23.8	90.34	-7,107.5	-4,223.6	4,742.9	4,621.9	121.03	39.188		
13,200.0	7,530.0	7,671.3	7,552.5	101.2	23.8	90.34	-7,107.5	-4,223.6	4,710.4	4,587.6	122.77	38.368		
13,300.0	7,530.0	7,671.1	7,552.3	103.0	23.8	90.34	-7,107.5	-4,223.6	4,679.7	4,555.2	124.51	37.586		
13,400.0	7,530.0	7,670.8	7,552.0	104.7	23.8	90.33	-7,107.5	-4,223.6	4,651.1	4,524.8	126.25	36.841		
13,500.0	7,530.0	7,670.6	7,551.7	106.4	23.8	90.33	-7,107.5	-4,223.6	4,624.4	4,496.4	127.99	36.132		
13,600.0	7,530.0	7,670.3	7,551.5	108.2	23.8	90.33	-7,107.5	-4,223.6	4,599.7	4,470.0	129.73	35.457		
13,700.0	7,530.0	7,670.0	7,551.2	109.9	23.8	90.32	-7,107.5	-4,223.6	4,577.1	4,445.6	131.47	34.815		
13,800.0	7,530.0	7,669.7	7,550.9	111.7	23.8	90.32	-7,107.5	-4,223.6	4,556.5	4,423.3	133.21	34.206		
13,900.0	7,530.0	7,669.5	7,550.7	113.4	23.8	90.32	-7,107.5	-4,223.6	4,538.1	4,403.2	134.95	33.628		
14,000.0	7,530.0	7,669.2	7,550.4	115.1	23.8	90.31	-7,107.5	-4,223.6	4,521.8	4,385.1	136.69	33.080		
14,100.0	7,530.0	7,668.9	7,550.1	116.9	23.8	90.31	-7,107.5	-4,223.6	4,507.7	4,369.3	138.44	32.562		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,200.0	7,530.0	7,668.6	7,549.8	118.6	23.8	90.31	-7,107.5	-4,223.6	4,495.7	4,355.6	140.18	32.072		
14,300.0	7,530.0	7,668.4	7,549.5	120.4	23.8	90.30	-7,107.5	-4,223.6	4,486.0	4,344.1	141.92	31.609		
14,400.0	7,530.0	7,668.1	7,549.3	122.1	23.8	90.30	-7,107.5	-4,223.6	4,478.4	4,334.8	143.67	31.173		
14,500.0	7,530.0	7,667.8	7,549.0	123.9	23.8	90.29	-7,107.6	-4,223.6	4,473.1	4,327.7	145.41	30.762		
14,600.0	7,530.0	7,667.5	7,548.7	125.6	23.8	90.29	-7,107.6	-4,223.6	4,470.0	4,322.9	147.15	30.377		
14,687.9	7,530.0	7,667.3	7,548.4	127.1	23.8	90.29	-7,107.6	-4,223.6	4,469.2	4,320.5	148.69	30.058	CC	
14,700.0	7,530.0	7,667.2	7,548.4	127.3	23.8	90.29	-7,107.6	-4,223.6	4,469.2	4,320.3	148.90	30.015		
14,800.0	7,530.0	7,666.9	7,548.1	129.1	23.8	90.28	-7,107.6	-4,223.6	4,470.6	4,319.9	150.64	29.677	ES	
14,900.0	7,530.0	7,666.6	7,547.8	130.8	23.8	90.28	-7,107.6	-4,223.6	4,474.2	4,321.8	152.39	29.361		
15,000.0	7,530.0	7,666.3	7,547.5	132.6	23.8	90.28	-7,107.6	-4,223.6	4,480.1	4,325.9	154.13	29.066		
15,100.0	7,530.0	7,666.0	7,547.2	134.3	23.8	90.27	-7,107.6	-4,223.6	4,488.1	4,332.3	155.88	28.793		
15,200.0	7,530.0	7,665.7	7,546.9	136.1	23.8	90.27	-7,107.6	-4,223.6	4,498.4	4,340.8	157.62	28.539		
15,300.0	7,530.0	7,665.4	7,546.6	137.8	23.8	90.26	-7,107.6	-4,223.6	4,510.9	4,351.5	159.37	28.305		
15,400.0	7,530.0	7,665.1	7,546.3	139.6	23.8	90.26	-7,107.6	-4,223.6	4,525.6	4,364.4	161.11	28.089		
15,500.0	7,530.0	7,664.8	7,546.0	141.3	23.8	90.26	-7,107.6	-4,223.6	4,542.4	4,379.5	162.86	27.891		
15,600.0	7,530.0	7,664.5	7,545.7	143.0	23.8	90.25	-7,107.6	-4,223.6	4,561.3	4,396.7	164.61	27.710		
15,700.0	7,530.0	7,664.2	7,545.4	144.8	23.8	90.25	-7,107.6	-4,223.6	4,582.3	4,416.0	166.35	27.546		
15,800.0	7,530.0	7,663.9	7,545.1	146.5	23.8	90.24	-7,107.6	-4,223.6	4,605.5	4,437.4	168.10	27.397		
15,900.0	7,530.0	7,663.6	7,544.8	148.3	23.8	90.24	-7,107.6	-4,223.6	4,630.6	4,460.8	169.85	27.264		
16,000.0	7,530.0	7,663.3	7,544.4	150.0	23.8	90.24	-7,107.6	-4,223.6	4,657.8	4,486.2	171.59	27.144		
16,100.0	7,530.0	7,662.9	7,544.1	151.8	23.8	90.23	-7,107.6	-4,223.6	4,687.0	4,513.6	173.34	27.039		
16,200.0	7,530.0	7,662.6	7,543.8	153.5	23.8	90.23	-7,107.6	-4,223.6	4,718.0	4,543.0	175.09	26.947		
16,300.0	7,530.0	7,662.3	7,543.5	155.3	23.8	90.22	-7,107.6	-4,223.6	4,751.0	4,574.2	176.84	26.867		
16,400.0	7,530.0	7,662.0	7,543.2	157.0	23.8	90.22	-7,107.6	-4,223.6	4,785.9	4,607.3	178.58	26.799		
16,500.0	7,530.0	7,661.6	7,542.8	158.8	23.8	90.22	-7,107.6	-4,223.6	4,822.6	4,642.2	180.33	26.743		
16,600.0	7,530.0	7,661.3	7,542.5	160.5	23.8	90.21	-7,107.6	-4,223.6	4,861.0	4,678.9	182.08	26.697		
16,700.0	7,530.0	7,661.0	7,542.1	162.3	23.8	90.21	-7,107.6	-4,223.6	4,901.2	4,717.4	183.83	26.662		
16,800.0	7,530.0	7,660.6	7,541.8	164.0	23.8	90.20	-7,107.6	-4,223.6	4,943.1	4,757.5	185.57	26.637		
16,900.0	7,530.0	7,660.3	7,541.5	165.8	23.8	90.20	-7,107.6	-4,223.6	4,986.7	4,799.3	187.32	26.621		
17,000.0	7,530.0	7,659.9	7,541.1	167.5	23.8	90.19	-7,107.6	-4,223.6	5,031.8	4,842.8	189.07	26.613	SF	
17,100.0	7,530.0	7,659.6	7,540.8	169.3	23.8	90.19	-7,107.6	-4,223.6	5,078.5	4,887.7	190.82	26.614		
17,200.0	7,530.0	7,659.2	7,540.4	171.0	23.8	90.18	-7,107.6	-4,223.6	5,126.8	4,934.2	192.57	26.623		
17,300.0	7,530.0	7,658.9	7,540.1	172.8	23.8	90.18	-7,107.6	-4,223.6	5,176.5	4,982.2	194.32	26.640		
17,400.0	7,530.0	7,658.5	7,539.7	174.5	23.8	90.18	-7,107.6	-4,223.6	5,227.7	5,031.6	196.07	26.663		
17,420.9	7,530.0	7,658.5	7,539.6	174.9	23.8	90.17	-7,107.6	-4,223.6	5,238.6	5,042.2	196.43	26.669		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - Plan #3														Offset Site Error:	0.0 ft
Survey Program: O-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-149.19	-6,136.7	-3,660.3	7,145.5						
100.0	100.0	96.0	96.0	0.2	0.1	-149.19	-6,136.7	-3,660.3	7,145.5	7,145.2	0.29	N/A			
200.0	200.0	196.0	196.0	0.3	0.3	-149.19	-6,136.7	-3,660.3	7,145.5	7,144.8	0.64	N/A			
300.0	300.0	245.2	245.2	0.5	0.4	-149.19	-6,136.9	-3,660.3	7,145.8	7,144.9	0.90	7,915.666			
400.0	400.0	300.0	300.0	0.7	0.5	-149.19	-6,137.6	-3,660.4	7,146.9	7,145.7	1.17	6,093.456			
500.0	500.0	339.4	339.4	0.8	0.6	-149.19	-6,138.4	-3,660.5	7,148.7	7,147.3	1.42	5,047.662			
600.0	600.0	400.0	400.0	1.0	0.7	-149.20	-6,140.2	-3,660.6	7,151.3	7,149.6	1.70	4,215.181			
700.0	700.0	433.5	433.5	1.2	0.7	178.32	-6,141.5	-3,660.7	7,155.4	7,153.5	1.93	3,704.959			
800.0	800.0	500.0	499.9	1.4	0.9	178.31	-6,144.5	-3,661.0	7,162.1	7,159.9	2.22	3,222.196			
900.0	899.9	527.3	527.1	1.6	0.9	178.30	-6,146.0	-3,661.1	7,171.2	7,168.8	2.44	2,933.024			
988.4	988.1	568.5	568.3	1.7	1.0	178.29	-6,148.5	-3,661.4	7,181.3	7,178.7	2.67	2,688.051			
1,000.0	999.7	600.0	599.7	1.7	1.1	178.28	-6,150.6	-3,661.6	7,182.9	7,180.1	2.75	2,613.825			
1,100.0	1,099.4	643.6	643.2	1.9	1.2	178.28	-6,153.7	-3,661.8	7,195.7	7,192.7	3.00	2,397.755			
1,200.0	1,199.2	742.7	742.0	2.1	1.4	178.25	-6,160.5	-3,662.4	7,208.7	7,205.4	3.35	2,149.449			
1,300.0	1,299.0	825.0	824.1	2.3	1.5	178.23	-6,166.3	-3,662.9	7,221.8	7,218.1	3.68	1,964.251			
1,400.0	1,398.8	858.6	857.6	2.5	1.6	178.23	-6,168.7	-3,663.3	7,235.4	7,231.5	3.91	1,849.844			
1,500.0	1,498.5	900.0	898.9	2.7	1.7	178.22	-6,172.2	-3,664.1	7,250.1	7,246.0	4.16	1,742.936			
1,600.0	1,598.3	900.0	898.9	2.9	1.7	178.22	-6,172.2	-3,664.1	7,265.7	7,261.4	4.33	1,676.284			
1,700.0	1,698.1	944.3	943.0	3.2	1.8	178.21	-6,176.3	-3,665.4	7,282.2	7,277.6	4.59	1,587.375			
1,800.0	1,797.8	1,000.0	998.3	3.4	1.9	178.21	-6,182.2	-3,667.7	7,299.9	7,295.0	4.86	1,502.298			
1,900.0	1,897.6	1,000.0	998.3	3.6	1.9	178.21	-6,182.2	-3,667.7	7,318.2	7,313.1	5.03	1,453.789			
2,000.0	1,997.4	1,000.0	998.3	3.8	1.9	178.21	-6,182.2	-3,667.7	7,337.8	7,332.5	5.21	1,408.788			
2,100.0	2,097.1	1,057.2	1,055.0	4.0	2.1	178.20	-6,189.1	-3,671.0	7,357.9	7,352.4	5.48	1,341.927			
2,200.0	2,196.9	1,100.0	1,097.3	4.2	2.2	178.20	-6,194.7	-3,673.9	7,379.2	7,373.4	5.73	1,287.732			
2,300.0	2,296.7	1,100.0	1,097.3	4.4	2.2	178.20	-6,194.7	-3,673.9	7,401.3	7,395.4	5.91	1,253.388			
2,400.0	2,296.5	1,140.8	1,137.6	4.6	2.4	178.20	-6,200.5	-3,677.1	7,424.4	7,418.2	6.15	1,207.130			
2,500.0	2,496.2	1,200.0	1,195.8	4.8	2.5	178.20	-6,209.6	-3,682.4	7,448.6	7,442.2	6.42	1,159.445			
2,600.0	2,596.0	1,200.0	1,195.8	5.0	2.5	178.20	-6,209.6	-3,682.4	7,473.2	7,466.6	6.60	1,132.489			
2,700.0	2,695.8	1,223.2	1,218.6	5.2	2.6	178.20	-6,213.4	-3,684.8	7,499.0	7,492.2	6.81	1,100.675			
2,800.0	2,795.5	1,250.7	1,245.6	5.4	2.7	178.20	-6,218.1	-3,687.7	7,525.7	7,518.7	7.03	1,069.922			
2,900.0	2,895.3	1,345.8	1,338.6	5.6	3.1	178.21	-6,234.6	-3,698.2	7,552.9	7,545.5	7.37	1,024.814			
3,000.0	2,995.1	1,442.0	1,432.7	5.9	3.4	178.21	-6,251.3	-3,708.8	7,580.0	7,572.3	7.71	983.499			
3,100.0	3,094.9	1,538.2	1,526.9	6.1	3.8	178.22	-6,268.1	-3,719.4	7,607.1	7,599.1	8.04	945.607			
3,200.0	3,194.6	1,634.5	1,621.1	6.3	4.1	178.22	-6,284.8	-3,730.0	7,634.3	7,625.9	8.38	910.737			
3,300.0	3,294.4	1,730.7	1,715.3	6.5	4.5	178.23	-6,301.5	-3,740.6	7,661.4	7,652.7	8.72	878.546			
3,400.0	3,394.2	1,827.0	1,809.5	6.7	4.9	178.24	-6,318.2	-3,751.2	7,688.5	7,679.5	9.06	848.742			
3,500.0	3,493.9	1,923.2	1,903.7	6.9	5.3	178.24	-6,334.9	-3,761.8	7,715.7	7,706.3	9.40	821.069			
3,600.0	3,593.7	2,019.5	1,997.9	7.1	5.6	178.25	-6,351.6	-3,772.4	7,742.8	7,733.1	9.74	795.310			
3,700.0	3,693.5	2,115.7	2,092.0	7.3	6.0	178.25	-6,368.4	-3,783.0	7,770.0	7,759.9	10.07	771.274			
3,800.0	3,793.2	2,212.0	2,186.2	7.5	6.4	178.26	-6,385.1	-3,793.6	7,797.1	7,786.7	10.41	748.794			
3,900.0	3,893.0	2,308.2	2,280.4	7.7	6.8	178.27	-6,401.8	-3,804.2	7,824.2	7,813.5	10.75	727.725			
4,000.0	3,992.8	2,404.4	2,374.6	8.0	7.1	178.27	-6,418.5	-3,814.8	7,851.4	7,840.3	11.09	707.939			
4,100.0	4,092.6	2,500.7	2,468.8	8.2	7.5	178.28	-6,435.2	-3,825.4	7,878.5	7,867.1	11.43	689.323			
4,200.0	4,192.3	2,596.9	2,563.0	8.4	7.9	178.28	-6,451.9	-3,836.0	7,905.6	7,893.9	11.77	671.774			
4,300.0	4,292.1	2,693.2	2,657.2	8.6	8.3	178.29	-6,468.7	-3,846.6	7,932.8	7,920.7	12.11	655.206			
4,400.0	4,391.9	2,789.4	2,751.4	8.8	8.7	178.29	-6,485.4	-3,857.2	7,959.9	7,947.5	12.45	639.538			
4,500.0	4,491.6	2,885.7	2,845.5	9.0	9.0	178.30	-6,502.1	-3,867.8	7,987.1	7,974.3	12.79	624.700			
4,600.0	4,591.4	2,981.9	2,939.7	9.2	9.4	178.31	-6,518.8	-3,878.4	8,014.2	8,001.1	13.12	610.627			
4,700.0	4,691.2	3,078.1	3,033.9	9.4	9.8	178.31	-6,535.5	-3,889.0	8,041.3	8,027.9	13.46	597.262			
4,800.0	4,790.9	3,174.4	3,128.1	9.6	10.2	178.32	-6,552.2	-3,899.6	8,068.5	8,054.7	13.80	584.553			
4,900.0	4,890.7	3,270.6	3,222.3	9.8	10.6	178.32	-6,569.0	-3,910.2	8,095.6	8,081.5	14.14	572.453			
5,000.0	4,990.5	3,366.9	3,316.5	10.1	11.0	178.33	-6,585.7	-3,920.8	8,122.8	8,108.3	14.48	560.918			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
5,100.0	5,090.3	3,463.1	3,410.7	10.3	11.3	178.33	-6,602.4	-3,931.4	8,149.9	8,135.1	14.82	549.911		
5,200.0	5,190.0	3,559.4	3,504.8	10.5	11.7	178.34	-6,619.1	-3,942.0	8,177.0	8,161.9	15.16	539.396		
5,300.0	5,289.8	3,655.6	3,599.0	10.7	12.1	178.34	-6,635.8	-3,952.6	8,204.2	8,188.7	15.50	529.341		
5,400.0	5,389.6	3,751.9	3,693.2	10.9	12.5	178.35	-6,652.5	-3,963.2	8,231.3	8,215.5	15.84	519.716		
5,500.0	5,489.3	3,848.1	3,787.4	11.1	12.9	178.35	-6,669.3	-3,973.8	8,258.4	8,242.3	16.18	510.494		
5,600.0	5,589.1	3,944.3	3,881.6	11.3	13.3	178.36	-6,686.0	-3,984.4	8,285.6	8,269.1	16.52	501.651		
5,700.0	5,688.9	4,040.6	3,975.8	11.5	13.7	178.36	-6,702.7	-3,995.0	8,312.7	8,295.9	16.86	493.164		
5,800.0	5,788.7	4,136.8	4,070.0	11.7	14.0	178.37	-6,719.4	-4,005.6	8,339.9	8,322.7	17.20	485.011		
5,900.0	5,888.4	4,233.1	4,164.2	11.9	14.4	178.37	-6,736.1	-4,016.2	8,367.0	8,349.5	17.53	477.174		
6,000.0	5,988.2	4,329.3	4,258.3	12.2	14.8	178.38	-6,752.8	-4,026.8	8,394.1	8,376.3	17.87	469.634		
6,100.0	6,088.0	4,425.6	4,352.5	12.4	15.2	178.38	-6,769.6	-4,037.4	8,421.3	8,403.1	18.21	462.374		
6,200.0	6,187.7	4,521.8	4,446.7	12.6	15.6	178.39	-6,786.3	-4,048.0	8,448.4	8,429.9	18.55	455.380		
6,300.0	6,287.5	4,618.1	4,540.9	12.8	16.0	178.39	-6,803.0	-4,058.6	8,475.6	8,456.7	18.89	448.638		
6,400.0	6,387.3	4,714.3	4,635.1	13.0	16.3	178.40	-6,819.7	-4,069.2	8,502.7	8,483.5	19.23	442.133		
6,500.0	6,487.0	4,810.5	4,729.3	13.2	16.7	178.40	-6,836.4	-4,079.8	8,529.8	8,510.3	19.57	435.853		
6,600.0	6,586.8	4,906.8	4,823.5	13.4	17.1	178.41	-6,853.1	-4,090.4	8,557.0	8,537.1	19.91	429.788		
6,700.0	6,686.6	5,003.0	4,917.6	13.6	17.5	178.41	-6,869.9	-4,101.0	8,584.1	8,563.9	20.25	423.925		
6,787.0	6,773.4	5,086.8	4,999.6	13.8	17.8	178.42	-6,884.4	-4,110.2	8,607.7	8,587.2	20.54	418.983		
6,800.0	6,786.4	5,099.3	5,011.9	13.8	17.9	167.74	-6,886.6	-4,111.6	8,611.2	8,590.6	20.61	417.805		
6,850.0	6,836.3	5,148.0	5,059.5	13.9	18.1	80.15	-6,895.0	-4,117.0	8,622.5	8,601.7	20.84	413.817		
6,900.0	6,886.2	5,197.1	5,107.6	14.0	18.3	49.97	-6,903.6	-4,122.4	8,630.9	8,609.9	21.01	410.721		
6,950.0	6,935.7	5,246.5	5,155.9	14.0	18.5	41.97	-6,912.2	-4,127.8	8,636.4	8,615.2	21.14	408.512		
7,000.0	6,984.6	5,296.0	5,204.3	14.0	18.7	38.50	-6,920.7	-4,133.3	8,638.8	8,617.5	21.22	407.137		
7,050.0	7,032.6	7,137.8	7,028.7	14.0	23.0	38.99	-7,080.1	-4,234.3	8,632.1	8,607.7	24.40	353.717		
7,100.0	7,079.7	7,184.8	7,075.7	13.9	23.1	38.47	-7,080.1	-4,234.3	8,618.5	8,594.1	24.42	352.905		
7,150.0	7,125.4	7,230.5	7,121.4	13.9	23.1	38.49	-7,080.1	-4,234.3	8,602.2	8,577.7	24.43	352.109		
7,200.0	7,169.6	7,274.7	7,165.6	13.8	23.1	38.91	-7,080.1	-4,234.3	8,583.1	8,558.7	24.45	351.028		
7,250.0	7,212.1	7,317.2	7,208.1	13.8	23.2	39.68	-7,080.1	-4,234.3	8,561.5	8,536.9	24.51	349.307		
7,300.0	7,252.6	7,357.7	7,248.6	13.7	23.2	40.77	-7,080.1	-4,234.3	8,537.3	8,512.7	24.63	346.558		
7,350.0	7,291.0	7,396.1	7,287.0	13.7	23.3	42.17	-7,080.1	-4,234.3	8,510.8	8,486.0	24.86	342.400		
7,400.0	7,327.1	7,432.2	7,323.1	13.7	23.3	43.90	-7,080.1	-4,234.3	8,482.1	8,456.9	25.21	336.503		
7,450.0	7,360.7	7,465.8	7,356.7	13.7	23.3	45.96	-7,080.1	-4,234.3	8,451.3	8,425.6	25.71	328.669		
7,500.0	7,391.6	7,496.7	7,387.6	13.7	23.4	48.40	-7,080.1	-4,234.3	8,418.7	8,392.2	26.40	318.880		
7,550.0	7,419.7	7,524.8	7,415.7	13.8	23.4	51.24	-7,080.1	-4,234.3	8,384.2	8,356.9	27.28	307.337		
7,600.0	7,444.8	7,550.0	7,440.8	13.9	23.4	54.51	-7,080.1	-4,234.3	8,348.2	8,319.9	28.35	294.468		
7,650.0	7,466.9	7,572.1	7,462.9	14.1	23.4	58.25	-7,080.1	-4,234.3	8,310.8	8,281.3	29.59	280.868		
7,700.0	7,485.8	7,591.0	7,481.8	14.3	23.4	62.47	-7,080.1	-4,234.3	8,272.3	8,241.3	30.95	267.236		
7,750.0	7,501.5	7,606.6	7,497.5	14.6	23.5	67.17	-7,080.1	-4,234.3	8,232.7	8,200.3	32.38	254.282		
7,800.0	7,513.7	7,618.9	7,509.8	14.9	23.5	72.32	-7,080.1	-4,234.3	8,192.3	8,158.6	33.76	242.652		
7,850.0	7,522.6	7,627.8	7,518.6	15.2	23.5	77.86	-7,080.1	-4,234.3	8,151.4	8,116.4	35.00	232.865		
7,900.0	7,528.0	7,633.2	7,524.1	15.6	23.5	83.68	-7,080.1	-4,234.3	8,110.0	8,074.0	36.00	225.273		
7,952.9	7,530.0	7,635.1	7,526.0	16.1	23.5	90.00	-7,080.1	-4,234.3	8,066.0	8,029.3	36.70	219.801		
8,000.0	7,530.0	7,635.1	7,526.0	16.5	23.5	90.00	-7,080.1	-4,234.3	8,026.9	7,989.8	37.15	216.056		
8,100.0	7,530.0	7,635.1	7,526.0	17.5	23.5	90.00	-7,080.1	-4,234.3	7,944.1	7,905.9	38.21	207.896		
8,200.0	7,530.0	7,635.1	7,526.0	18.7	23.5	90.00	-7,080.1	-4,234.3	7,861.8	7,822.4	39.38	199.638		
8,300.0	7,530.0	7,635.1	7,526.0	19.9	23.5	90.00	-7,080.1	-4,234.3	7,779.8	7,739.1	40.64	191.449		
8,400.0	7,530.0	7,635.1	7,526.0	21.2	23.5	90.00	-7,080.1	-4,234.3	7,698.2	7,656.3	41.97	183.444		
8,500.0	7,530.0	7,635.1	7,526.0	22.6	23.5	90.00	-7,080.1	-4,234.3	7,617.1	7,573.8	43.35	175.700		
8,600.0	7,530.0	7,635.1	7,526.0	24.0	23.5	90.00	-7,080.1	-4,234.3	7,536.5	7,491.7	44.79	168.263		
8,700.0	7,530.0	7,635.1	7,526.0	25.4	23.5	90.00	-7,080.1	-4,234.3	7,456.3	7,410.0	46.27	161.158		
8,800.0	7,530.0	7,635.1	7,526.0	26.9	23.5	90.00	-7,080.1	-4,234.3	7,376.6	7,328.8	47.78	154.393		
8,900.0	7,530.0	7,635.1	7,526.0	28.4	23.5	90.00	-7,080.1	-4,234.3	7,297.4	7,248.1	49.32	147.969		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,635.1	7,526.0	30.0	23.5	90.00	-7,080.1	-4,234.3	7,218.8	7,167.9	50.88	141.877		
9,100.0	7,530.0	7,635.1	7,526.0	31.5	23.5	90.00	-7,080.1	-4,234.3	7,140.6	7,088.1	52.46	136.106		
9,200.0	7,530.0	7,635.1	7,526.0	33.1	23.5	90.00	-7,080.1	-4,234.3	7,063.0	7,009.0	54.06	130.641		
9,300.0	7,530.0	7,635.1	7,526.0	34.7	23.5	90.00	-7,080.1	-4,234.3	6,986.0	6,930.3	55.68	125.467		
9,400.0	7,530.0	7,635.1	7,526.0	36.3	23.5	90.00	-7,080.1	-4,234.3	6,909.6	6,852.2	57.31	120.568		
9,500.0	7,530.0	7,635.1	7,526.0	38.0	23.5	90.00	-7,080.1	-4,234.3	6,833.7	6,774.8	58.95	115.927		
9,600.0	7,530.0	7,635.1	7,526.0	39.6	23.5	90.00	-7,080.1	-4,234.3	6,758.5	6,697.9	60.60	111.531		
9,700.0	7,530.0	7,635.1	7,526.0	41.3	23.5	90.00	-7,080.1	-4,234.3	6,684.0	6,621.7	62.26	107.362		
9,800.0	7,530.0	7,635.1	7,526.0	42.9	23.5	90.00	-7,080.1	-4,234.3	6,610.1	6,546.2	63.92	103.409		
9,900.0	7,530.0	7,635.1	7,526.0	44.6	23.5	90.00	-7,080.1	-4,234.3	6,536.9	6,471.3	65.60	99.656		
10,000.0	7,530.0	7,635.1	7,526.0	46.3	23.5	90.00	-7,080.1	-4,234.3	6,464.5	6,397.2	67.27	96.092		
10,100.0	7,530.0	7,635.1	7,526.0	47.9	23.5	90.00	-7,080.1	-4,234.3	6,392.8	6,323.8	68.96	92.705		
10,200.0	7,530.0	7,635.1	7,526.0	49.6	23.5	90.00	-7,080.1	-4,234.3	6,321.8	6,251.2	70.65	89.484		
10,300.0	7,530.0	7,635.1	7,526.0	51.3	23.5	90.00	-7,080.1	-4,234.3	6,251.6	6,179.3	72.34	86.420		
10,400.0	7,530.0	7,635.1	7,526.0	53.0	23.5	90.00	-7,080.1	-4,234.3	6,182.3	6,108.3	74.04	83.502		
10,500.0	7,530.0	7,635.1	7,526.0	54.7	23.5	90.00	-7,080.1	-4,234.3	6,113.8	6,038.1	75.74	80.722		
10,600.0	7,530.0	7,635.1	7,526.0	56.4	23.5	90.00	-7,080.1	-4,234.3	6,046.2	5,968.8	77.44	78.073		
10,700.0	7,530.0	7,635.1	7,526.0	58.1	23.5	90.00	-7,080.1	-4,234.3	5,979.5	5,900.4	79.15	75.546		
10,800.0	7,530.0	7,635.1	7,526.0	59.8	23.5	90.00	-7,080.1	-4,234.3	5,913.8	5,832.9	80.86	73.136		
10,900.0	7,530.0	7,635.1	7,526.0	61.5	23.5	90.00	-7,080.1	-4,234.3	5,849.0	5,766.4	82.57	70.834		
11,000.0	7,530.0	7,635.1	7,526.0	63.2	23.5	90.00	-7,080.1	-4,234.3	5,785.2	5,700.9	84.29	68.636		
11,100.0	7,530.0	7,635.1	7,526.0	64.9	23.5	90.00	-7,080.1	-4,234.3	5,722.4	5,636.4	86.00	66.537		
11,200.0	7,530.0	7,635.1	7,526.0	66.6	23.5	90.00	-7,080.1	-4,234.3	5,660.8	5,573.0	87.72	64.530		
11,300.0	7,530.0	7,635.1	7,526.0	68.4	23.5	90.00	-7,080.1	-4,234.3	5,600.2	5,510.7	89.44	62.611		
11,400.0	7,530.0	7,635.1	7,526.0	70.1	23.5	90.00	-7,080.1	-4,234.3	5,540.8	5,449.6	91.17	60.777		
11,500.0	7,530.0	7,635.1	7,526.0	71.8	23.5	90.00	-7,080.1	-4,234.3	5,482.5	5,389.6	92.89	59.022		
11,600.0	7,530.0	7,635.1	7,526.0	73.5	23.5	90.00	-7,080.1	-4,234.3	5,425.5	5,330.9	94.61	57.343		
11,700.0	7,530.0	7,635.1	7,526.0	75.2	23.5	90.00	-7,080.1	-4,234.3	5,369.7	5,273.4	96.34	55.736		
11,800.0	7,530.0	7,635.1	7,526.0	77.0	23.5	90.00	-7,080.1	-4,234.3	5,315.2	5,217.2	98.07	54.199		
11,900.0	7,530.0	7,635.1	7,526.0	78.7	23.5	90.00	-7,080.1	-4,234.3	5,262.1	5,162.3	99.80	52.727		
12,000.0	7,530.0	7,635.1	7,526.0	80.4	23.5	90.00	-7,080.1	-4,234.3	5,210.3	5,108.8	101.53	51.319		
12,100.0	7,530.0	7,635.1	7,526.0	82.2	23.5	90.00	-7,080.1	-4,234.3	5,160.0	5,056.7	103.26	49.971		
12,200.0	7,530.0	7,635.1	7,526.0	83.9	23.5	90.00	-7,080.1	-4,234.3	5,111.1	5,006.1	104.99	48.681		
12,300.0	7,530.0	7,635.1	7,526.0	85.6	23.5	90.00	-7,080.1	-4,234.3	5,063.7	4,957.0	106.72	47.447		
12,400.0	7,530.0	7,635.1	7,526.0	87.3	23.5	90.00	-7,080.1	-4,234.3	5,017.9	4,909.4	108.46	46.266		
12,500.0	7,530.0	7,635.1	7,526.0	89.1	23.5	90.00	-7,080.1	-4,234.3	4,973.6	4,863.4	110.19	45.136		
12,600.0	7,530.0	7,635.1	7,526.0	90.8	23.5	90.00	-7,080.1	-4,234.3	4,931.0	4,819.1	111.93	44.055		
12,700.0	7,530.0	7,635.1	7,526.0	92.5	23.5	90.00	-7,080.1	-4,234.3	4,890.1	4,776.4	113.66	43.022		
12,800.0	7,530.0	7,635.1	7,526.0	94.3	23.5	90.00	-7,080.1	-4,234.3	4,850.8	4,735.4	115.40	42.035		
12,900.0	7,530.0	7,635.1	7,526.0	96.0	23.5	90.00	-7,080.1	-4,234.3	4,813.4	4,696.2	117.14	41.092		
13,000.0	7,530.0	7,635.1	7,526.0	97.8	23.5	90.00	-7,080.1	-4,234.3	4,777.7	4,658.8	118.88	40.191		
13,100.0	7,530.0	7,635.1	7,526.0	99.5	23.5	90.00	-7,080.1	-4,234.3	4,743.9	4,623.3	120.61	39.331		
13,200.0	7,530.0	7,635.1	7,526.0	101.2	23.5	90.00	-7,080.1	-4,234.3	4,711.9	4,589.6	122.35	38.511		
13,300.0	7,530.0	7,635.1	7,526.0	103.0	23.5	90.00	-7,080.1	-4,234.3	4,681.9	4,557.8	124.09	37.729		
13,400.0	7,530.0	7,635.1	7,526.0	104.7	23.5	90.00	-7,080.1	-4,234.3	4,653.8	4,528.0	125.83	36.984		
13,500.0	7,530.0	7,635.1	7,526.0	106.4	23.5	90.00	-7,080.1	-4,234.3	4,627.7	4,500.2	127.57	36.275		
13,600.0	7,530.0	7,635.1	7,526.0	108.2	23.5	90.00	-7,080.1	-4,234.3	4,603.7	4,474.4	129.31	35.601		
13,700.0	7,530.0	7,635.1	7,526.0	109.9	23.5	90.00	-7,080.1	-4,234.3	4,581.7	4,450.6	131.06	34.960		
13,800.0	7,530.0	7,635.1	7,526.0	111.7	23.5	90.00	-7,080.1	-4,234.3	4,561.8	4,429.0	132.80	34.352		
13,900.0	7,530.0	7,635.1	7,526.0	113.4	23.5	90.00	-7,080.1	-4,234.3	4,544.0	4,409.4	134.54	33.774		
14,000.0	7,530.0	7,635.1	7,526.0	115.1	23.5	90.00	-7,080.1	-4,234.3	4,528.3	4,392.0	136.28	33.228		
14,100.0	7,530.0	7,635.1	7,526.0	116.9	23.5	90.00	-7,080.1	-4,234.3	4,514.8	4,376.8	138.02	32.710		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 12-18 - DD - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,200.0	7,530.0	7,635.1	7,526.0	118.6	23.5	90.00	-7,080.1	-4,234.3	4,503.5	4,363.7	139.77	32.221		
14,300.0	7,530.0	7,635.1	7,526.0	120.4	23.5	90.00	-7,080.1	-4,234.3	4,494.4	4,352.8	141.51	31.760		
14,400.0	7,530.0	7,635.1	7,526.0	122.1	23.5	90.00	-7,080.1	-4,234.3	4,487.4	4,344.2	143.25	31.325		
14,500.0	7,530.0	7,635.1	7,526.0	123.9	23.5	90.00	-7,080.1	-4,234.3	4,482.8	4,337.8	145.00	30.916		
14,600.0	7,530.0	7,635.1	7,526.0	125.6	23.5	90.00	-7,080.1	-4,234.3	4,480.3	4,333.5	146.74	30.532		
14,660.5	7,530.0	7,635.1	7,526.0	126.7	23.5	90.00	-7,080.1	-4,234.3	4,479.9	4,332.1	147.80	30.311	CC	
14,700.0	7,530.0	7,635.1	7,526.0	127.3	23.5	90.00	-7,080.1	-4,234.3	4,480.1	4,331.6	148.49	30.171	ES	
14,800.0	7,530.0	7,635.1	7,526.0	129.1	23.5	90.00	-7,080.1	-4,234.3	4,482.1	4,331.8	150.23	29.834		
14,900.0	7,530.0	7,635.1	7,526.0	130.8	23.5	90.00	-7,080.1	-4,234.3	4,486.3	4,334.3	151.98	29.519		
15,000.0	7,530.0	7,635.1	7,526.0	132.6	23.5	90.00	-7,080.1	-4,234.3	4,492.7	4,339.0	153.72	29.226		
15,100.0	7,530.0	7,635.1	7,526.0	134.3	23.5	90.00	-7,080.1	-4,234.3	4,501.4	4,345.9	155.47	28.954		
15,200.0	7,530.0	7,635.1	7,526.0	136.1	23.5	90.00	-7,080.1	-4,234.3	4,512.3	4,355.0	157.21	28.701		
15,300.0	7,530.0	7,635.1	7,526.0	137.8	23.5	90.00	-7,080.1	-4,234.3	4,525.3	4,366.3	158.96	28.468		
15,400.0	7,530.0	7,635.1	7,526.0	139.6	23.5	90.00	-7,080.1	-4,234.3	4,540.5	4,379.8	160.71	28.253		
15,500.0	7,530.0	7,635.1	7,526.0	141.3	23.5	90.00	-7,080.1	-4,234.3	4,557.9	4,395.4	162.45	28.057		
15,600.0	7,530.0	7,635.1	7,526.0	143.0	23.5	90.00	-7,080.1	-4,234.3	4,577.3	4,413.1	164.20	27.877		
15,700.0	7,530.0	7,635.1	7,526.0	144.8	23.5	90.00	-7,080.1	-4,234.3	4,598.9	4,433.0	165.95	27.713		
15,800.0	7,530.0	7,635.1	7,526.0	146.5	23.5	90.00	-7,080.1	-4,234.3	4,622.5	4,454.8	167.69	27.566		
15,900.0	7,530.0	7,635.1	7,526.0	148.3	23.5	90.00	-7,080.1	-4,234.3	4,648.2	4,478.8	169.44	27.433		
16,000.0	7,530.0	7,635.1	7,526.0	150.0	23.5	90.00	-7,080.1	-4,234.3	4,675.9	4,504.7	171.19	27.314		
16,100.0	7,530.0	7,635.1	7,526.0	151.8	23.5	90.00	-7,080.1	-4,234.3	4,705.5	4,532.5	172.93	27.210		
16,200.0	7,530.0	7,635.1	7,526.0	153.5	23.5	90.00	-7,080.1	-4,234.3	4,737.0	4,562.3	174.68	27.118		
16,300.0	7,530.0	7,635.1	7,526.0	155.3	23.5	90.00	-7,080.1	-4,234.3	4,770.5	4,594.0	176.43	27.039		
16,400.0	7,530.0	7,635.1	7,526.0	157.0	23.5	90.00	-7,080.1	-4,234.3	4,805.8	4,627.6	178.18	26.972		
16,500.0	7,530.0	7,635.1	7,526.0	158.8	23.5	90.00	-7,080.1	-4,234.3	4,842.8	4,662.9	179.93	26.916		
16,600.0	7,530.0	7,635.1	7,526.0	160.5	23.5	90.00	-7,080.1	-4,234.3	4,881.7	4,700.0	181.67	26.871		
16,700.0	7,530.0	7,635.1	7,526.0	162.3	23.5	90.00	-7,080.1	-4,234.3	4,922.3	4,738.9	183.42	26.836		
16,800.0	7,530.0	7,635.1	7,526.0	164.0	23.5	90.00	-7,080.1	-4,234.3	4,964.6	4,779.4	185.17	26.811		
16,900.0	7,530.0	7,635.1	7,526.0	165.8	23.5	90.00	-7,080.1	-4,234.3	5,008.5	4,821.6	186.92	26.795		
17,000.0	7,530.0	7,635.1	7,526.0	167.5	23.5	90.00	-7,080.1	-4,234.3	5,054.0	4,865.3	188.67	26.788	SF	
17,100.0	7,530.0	7,635.1	7,526.0	169.3	23.5	90.00	-7,080.1	-4,234.3	5,101.0	4,910.6	190.42	26.789		
17,200.0	7,530.0	7,635.1	7,526.0	171.0	23.5	90.00	-7,080.1	-4,234.3	5,149.6	4,957.4	192.16	26.798		
17,300.0	7,530.0	7,635.1	7,526.0	172.8	23.5	90.00	-7,080.1	-4,234.3	5,199.7	5,005.7	193.91	26.814		
17,400.0	7,530.0	7,635.1	7,526.0	174.5	23.5	90.00	-7,080.1	-4,234.3	5,251.1	5,055.5	195.66	26.838		
17,420.9	7,530.0	7,635.1	7,526.0	174.9	23.5	90.00	-7,080.1	-4,234.3	5,262.1	5,066.0	196.03	26.843		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-149.07	-6,136.7	-3,677.1	7,154.1					
100.0	100.0	64.8	64.8	0.2	0.0	-149.07	-6,136.9	-3,677.1	7,154.3	7,154.1	0.20	N/A		
200.0	200.0	168.0	168.0	0.3	0.1	-149.08	-6,137.7	-3,676.8	7,154.8	7,154.3	0.46	N/A		
300.0	300.0	266.2	266.2	0.5	0.2	-149.08	-6,138.4	-3,676.2	7,155.1	7,154.4	0.72	9,932.662		
400.0	400.0	341.3	341.3	0.7	0.3	-149.09	-6,139.2	-3,675.7	7,155.7	7,154.7	0.96	7,449.810		
500.0	500.0	1,500.0	1,492.9	0.8	1.6	-149.45	-6,098.2	-3,600.0	7,151.5	7,149.2	2.36	3,031.504		
600.0	600.0	1,500.0	1,492.9	1.0	1.6	-149.45	-6,098.2	-3,600.0	7,138.2	7,135.7	2.53	2,817.436		
700.0	700.0	1,500.0	1,492.9	1.2	1.6	178.08	-6,098.2	-3,600.0	7,127.2	7,124.6	2.58	2,767.369		
800.0	800.0	1,500.0	1,492.9	1.4	1.6	178.09	-6,098.2	-3,600.0	7,119.3	7,116.6	2.75	2,589.553		
900.0	899.9	1,500.0	1,492.9	1.6	1.6	178.09	-6,098.2	-3,600.0	7,114.6	7,111.7	2.92	2,434.084		
988.4	988.1	1,500.0	1,492.9	1.7	1.6	178.09	-6,098.2	-3,600.0	7,113.0	7,109.9	3.08	2,312.216		
1,000.0	999.7	1,500.0	1,492.9	1.7	1.6	178.09	-6,098.2	-3,600.0	7,113.0	7,109.9	3.10	2,297.062		
1,016.7	1,016.3	1,500.0	1,492.9	1.8	1.6	178.09	-6,098.2	-3,600.0	7,112.9	7,109.8	3.13	2,275.551	CC	
1,100.0	1,099.4	1,500.0	1,492.9	1.9	1.6	178.09	-6,098.2	-3,600.0	7,113.4	7,110.2	3.27	2,174.487		
1,200.0	1,199.2	1,500.0	1,492.9	2.1	1.6	178.09	-6,098.2	-3,600.0	7,115.3	7,111.9	3.45	2,064.761		
1,300.0	1,299.0	1,500.0	1,492.9	2.3	1.6	178.09	-6,098.2	-3,600.0	7,118.6	7,115.0	3.62	1,966.021		
1,400.0	1,398.8	1,500.0	1,492.9	2.5	1.6	178.09	-6,098.2	-3,600.0	7,123.3	7,119.5	3.80	1,876.746		
1,500.0	1,498.5	1,500.0	1,492.9	2.7	1.6	178.09	-6,098.2	-3,600.0	7,129.3	7,125.4	3.97	1,795.685		
1,600.0	1,598.3	1,500.0	1,492.9	2.9	1.6	178.09	-6,098.2	-3,600.0	7,136.8	7,132.7	4.14	1,721.798		
1,700.0	1,698.1	1,500.0	1,492.9	3.2	1.6	178.09	-6,098.2	-3,600.0	7,145.7	7,141.4	4.32	1,654.211		
1,800.0	1,797.8	1,500.0	1,492.9	3.4	1.6	178.09	-6,098.2	-3,600.0	7,155.9	7,151.4	4.49	1,592.189		
1,900.0	1,897.6	1,500.0	1,492.9	3.6	1.6	178.09	-6,098.2	-3,600.0	7,167.6	7,162.9	4.67	1,535.106		
2,000.0	1,997.4	1,500.0	1,492.9	3.8	1.6	178.09	-6,098.2	-3,600.0	7,180.6	7,175.7	4.84	1,482.425		
2,100.0	2,097.1	1,500.0	1,492.9	4.0	1.6	178.09	-6,098.2	-3,600.0	7,195.0	7,189.9	5.02	1,433.684		
2,200.0	2,196.9	1,500.0	1,492.9	4.2	1.6	178.09	-6,098.2	-3,600.0	7,210.7	7,205.5	5.19	1,388.485		
2,300.0	2,296.7	1,500.0	1,492.9	4.4	1.6	178.09	-6,098.2	-3,600.0	7,227.8	7,222.4	5.37	1,346.480		
2,400.0	2,396.5	1,500.0	1,492.9	4.6	1.6	178.09	-6,098.2	-3,600.0	7,246.2	7,240.7	5.54	1,307.365		
2,500.0	2,496.2	1,500.0	1,492.9	4.8	1.6	178.09	-6,098.2	-3,600.0	7,266.0	7,260.2	5.72	1,270.873		
2,600.0	2,596.0	1,500.0	1,492.9	5.0	1.6	178.09	-6,098.2	-3,600.0	7,287.0	7,281.1	5.89	1,236.769		
2,700.0	2,695.8	1,500.0	1,492.9	5.2	1.6	178.09	-6,098.2	-3,600.0	7,309.4	7,303.3	6.07	1,204.845		
2,800.0	2,795.5	1,500.0	1,492.9	5.4	1.6	178.09	-6,098.2	-3,600.0	7,333.1	7,326.8	6.24	1,174.916		
2,900.0	2,895.3	1,500.0	1,492.9	5.6	1.6	178.09	-6,098.2	-3,600.0	7,358.0	7,351.6	6.42	1,146.816		
3,000.0	2,995.1	1,500.0	1,492.9	5.9	1.6	178.09	-6,098.2	-3,600.0	7,384.3	7,377.7	6.59	1,120.399		
3,100.0	3,094.9	1,500.0	1,492.9	6.1	1.6	178.09	-6,098.2	-3,600.0	7,411.8	7,405.0	6.77	1,095.532		
3,200.0	3,194.6	1,500.0	1,492.9	6.3	1.6	178.09	-6,098.2	-3,600.0	7,440.5	7,433.5	6.94	1,072.096		
3,300.0	3,294.4	1,500.0	1,492.9	6.5	1.6	178.09	-6,098.2	-3,600.0	7,470.4	7,463.3	7.11	1,049.984		
3,400.0	3,394.2	1,500.0	1,492.9	6.7	1.6	178.09	-6,098.2	-3,600.0	7,501.6	7,494.3	7.29	1,029.098		
3,500.0	3,493.9	1,500.0	1,492.9	6.9	1.6	178.09	-6,098.2	-3,600.0	7,534.0	7,526.5	7.46	1,009.350		
3,600.0	3,593.7	1,500.0	1,492.9	7.1	1.6	178.09	-6,098.2	-3,600.0	7,567.5	7,559.9	7.64	990.660		
3,700.0	3,693.5	1,500.0	1,492.9	7.3	1.6	178.09	-6,098.2	-3,600.0	7,602.2	7,594.4	7.81	972.956		
3,800.0	3,793.2	1,500.0	1,492.9	7.5	1.6	178.09	-6,098.2	-3,600.0	7,638.1	7,630.1	7.99	956.170		
3,900.0	3,893.0	1,500.0	1,492.9	7.7	1.6	178.09	-6,098.2	-3,600.0	7,675.1	7,667.0	8.16	940.241		
4,000.0	3,992.8	1,500.0	1,492.9	8.0	1.6	178.09	-6,098.2	-3,600.0	7,713.2	7,704.9	8.34	925.115		
4,100.0	4,092.6	1,500.0	1,492.9	8.2	1.6	178.09	-6,098.2	-3,600.0	7,752.5	7,744.0	8.51	910.738		
4,200.0	4,192.3	1,500.0	1,492.9	8.4	1.6	178.09	-6,098.2	-3,600.0	7,792.8	7,784.1	8.69	897.065		
4,300.0	4,292.1	1,500.0	1,492.9	8.6	1.6	178.09	-6,098.2	-3,600.0	7,834.2	7,825.3	8.86	884.052		
4,400.0	4,391.9	1,500.0	1,492.9	8.8	1.6	178.09	-6,098.2	-3,600.0	7,876.6	7,867.6	9.04	871.658		
4,500.0	4,491.6	1,500.0	1,492.9	9.0	1.6	178.09	-6,098.2	-3,600.0	7,920.1	7,910.8	9.21	859.847		
4,600.0	4,591.4	1,500.0	1,492.9	9.2	1.6	178.09	-6,098.2	-3,600.0	7,964.5	7,955.2	9.39	848.583		
4,700.0	4,691.2	1,500.0	1,492.9	9.4	1.6	178.09	-6,098.2	-3,600.0	8,010.0	8,000.5	9.56	837.837		
4,800.0	4,790.9	1,500.0	1,492.9	9.6	1.6	178.09	-6,098.2	-3,600.0	8,056.5	8,046.8	9.74	827.577		
4,900.0	4,890.7	1,500.0	1,492.9	9.8	1.6	178.09	-6,098.2	-3,600.0	8,104.0	8,094.0	9.91	817.776		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (Gyro) - DD													Offset Site Error:	0.0 ft
Survey Program: 100-Gyro													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,990.5	1,500.0	1,492.9	10.1	1.6	178.09	-6,098.2	-3,600.0	8,152.3	8,142.3	10.08	808.409		
5,100.0	5,090.3	1,500.0	1,492.9	10.3	1.6	178.09	-6,098.2	-3,600.0	8,201.7	8,191.4	10.26	799.452		
5,200.0	5,190.0	1,500.0	1,492.9	10.5	1.6	178.09	-6,098.2	-3,600.0	8,251.9	8,241.5	10.43	790.883		
5,300.0	5,289.8	1,500.0	1,492.9	10.7	1.6	178.09	-6,098.2	-3,600.0	8,303.1	8,292.4	10.61	782.681		
5,400.0	5,389.6	1,500.0	1,492.9	10.9	1.6	178.09	-6,098.2	-3,600.0	8,355.1	8,344.3	10.78	774.827		
5,500.0	5,489.3	1,500.0	1,492.9	11.1	1.6	178.09	-6,098.2	-3,600.0	8,408.0	8,397.0	10.96	767.303		
5,600.0	5,589.1	1,500.0	1,492.9	11.3	1.6	178.09	-6,098.2	-3,600.0	8,461.7	8,450.6	11.13	760.091		
5,700.0	5,688.9	1,500.0	1,492.9	11.5	1.6	178.09	-6,098.2	-3,600.0	8,516.3	8,505.0	11.31	753.175		
5,800.0	5,788.7	1,500.0	1,492.9	11.7	1.6	178.09	-6,098.2	-3,600.0	8,571.7	8,560.2	11.48	746.542		
5,900.0	5,888.4	1,500.0	1,492.9	11.9	1.6	178.09	-6,098.2	-3,600.0	8,627.9	8,616.2	11.66	740.176		
6,000.0	5,988.2	1,500.0	1,492.9	12.2	1.6	178.09	-6,098.2	-3,600.0	8,684.9	8,673.1	11.83	734.065		
6,100.0	6,088.0	1,500.0	1,492.9	12.4	1.6	178.09	-6,098.2	-3,600.0	8,742.7	8,730.6	12.01	728.196		
6,200.0	6,187.7	1,500.0	1,492.9	12.6	1.6	178.09	-6,098.2	-3,600.0	8,801.2	8,789.0	12.18	722.557		
6,300.0	6,287.5	1,500.0	1,492.9	12.8	1.6	178.09	-6,098.2	-3,600.0	8,860.4	8,848.1	12.36	717.138		
6,400.0	6,387.3	1,500.0	1,492.9	13.0	1.6	178.09	-6,098.2	-3,600.0	8,920.4	8,907.9	12.53	711.928		
6,500.0	6,487.0	1,500.0	1,492.9	13.2	1.6	178.09	-6,098.2	-3,600.0	8,981.1	8,968.4	12.70	706.917		
6,600.0	6,586.8	1,500.0	1,492.9	13.4	1.6	178.09	-6,098.2	-3,600.0	9,042.5	9,029.6	12.88	702.097		
6,700.0	6,686.6	1,500.0	1,492.9	13.6	1.6	178.09	-6,098.2	-3,600.0	9,104.6	9,091.6	13.05	697.458		
6,787.0	6,773.4	1,500.0	1,492.9	13.8	1.6	178.09	-6,098.2	-3,600.0	9,159.2	9,146.0	13.21	693.564		
6,800.0	6,786.4	1,500.0	1,492.9	13.8	1.6	167.14	-6,098.2	-3,600.0	9,167.3	9,154.1	13.23	692.820		
6,850.0	6,836.3	1,500.0	1,492.9	13.9	1.6	78.55	-6,098.2	-3,600.0	9,197.1	9,183.8	13.31	690.765		
6,900.0	6,886.2	1,500.0	1,492.9	14.0	1.6	47.45	-6,098.2	-3,600.0	9,224.6	9,211.2	13.37	690.074		
6,950.0	6,935.7	1,500.0	1,492.9	14.0	1.6	38.58	-6,098.2	-3,600.0	9,249.6	9,236.2	13.39	690.799		
7,000.0	6,984.6	1,500.0	1,492.9	14.0	1.6	34.27	-6,098.2	-3,600.0	9,272.1	9,258.8	13.38	692.955		
7,050.0	7,032.6	1,500.0	1,492.9	14.0	1.6	31.64	-6,098.2	-3,600.0	9,292.0	9,278.7	13.34	696.526		
7,100.0	7,079.7	1,500.0	1,492.9	13.9	1.6	29.83	-6,098.2	-3,600.0	9,309.2	9,295.9	13.27	701.474		
7,150.0	7,125.4	1,500.0	1,492.9	13.9	1.6	28.52	-6,098.2	-3,600.0	9,323.6	9,310.4	13.17	707.733		
7,200.0	7,169.6	1,500.0	1,492.9	13.8	1.6	27.55	-6,098.2	-3,600.0	9,335.1	9,322.1	13.05	715.205		
7,250.0	7,212.1	1,500.0	1,492.9	13.8	1.6	26.82	-6,098.2	-3,600.0	9,343.8	9,330.9	12.91	723.760		
7,300.0	7,252.6	1,500.0	1,492.9	13.7	1.6	26.30	-6,098.2	-3,600.0	9,349.6	9,336.8	12.75	733.218		
7,350.0	7,291.0	1,500.0	1,492.9	13.7	1.6	25.93	-6,098.2	-3,600.0	9,352.4	9,339.8	12.58	743.342		
7,400.0	7,327.1	1,500.0	1,492.9	13.7	1.6	25.72	-6,098.2	-3,600.0	9,352.3	9,339.9	12.41	753.825		
7,450.0	7,360.7	1,500.0	1,492.9	13.7	1.6	25.64	-6,098.2	-3,600.0	9,349.2	9,337.0	12.23	764.278		
7,500.0	7,391.6	1,500.0	1,492.9	13.7	1.6	25.68	-6,098.2	-3,600.0	9,343.2	9,331.1	12.07	774.218		
7,550.0	7,419.7	1,500.0	1,492.9	13.8	1.6	25.84	-6,098.2	-3,600.0	9,334.3	9,322.4	11.92	783.075		
7,600.0	7,444.8	1,500.0	1,492.9	13.9	1.6	26.13	-6,098.2	-3,600.0	9,322.5	9,310.7	11.80	790.195		
7,650.0	7,466.9	1,500.0	1,492.9	14.1	1.6	26.55	-6,098.2	-3,600.0	9,307.9	9,296.2	11.71	794.870		
7,700.0	7,485.8	1,500.0	1,492.9	14.3	1.6	27.11	-6,098.2	-3,600.0	9,290.5	9,278.8	11.67	796.388		
7,750.0	7,501.5	1,500.0	1,492.9	14.6	1.6	27.81	-6,098.2	-3,600.0	9,270.4	9,258.7	11.67	794.094		
7,800.0	7,513.7	1,500.0	1,492.9	14.9	1.6	28.67	-6,098.2	-3,600.0	9,247.6	9,235.9	11.74	787.462		
7,850.0	7,522.6	1,500.0	1,492.9	15.2	1.6	29.70	-6,098.2	-3,600.0	9,222.4	9,210.5	11.88	776.167		
7,900.0	7,528.0	1,500.0	1,492.9	15.6	1.6	30.95	-6,098.2	-3,600.0	9,194.7	9,182.6	12.10	760.123		
7,952.9	7,530.0	1,500.0	1,492.9	16.1	1.6	32.52	-6,098.2	-3,600.0	9,162.9	9,150.4	12.41	738.149		
8,000.0	7,530.0	1,500.0	1,492.9	16.5	1.6	32.52	-6,098.2	-3,600.0	9,133.5	9,120.9	12.67	720.650		
8,100.0	7,530.0	1,500.0	1,492.9	17.5	1.6	32.52	-6,098.2	-3,600.0	9,071.7	9,058.4	13.27	683.827		
8,200.0	7,530.0	1,500.0	1,492.9	18.7	1.6	32.52	-6,098.2	-3,600.0	9,010.5	8,996.6	13.90	648.070		
8,300.0	7,530.0	1,500.0	1,492.9	19.9	1.6	32.52	-6,098.2	-3,600.0	8,950.1	8,935.5	14.58	613.855		
8,400.0	7,530.0	1,500.0	1,492.9	21.2	1.6	32.52	-6,098.2	-3,600.0	8,890.4	8,875.1	15.29	581.456		
8,500.0	7,530.0	1,500.0	1,492.9	22.6	1.6	32.52	-6,098.2	-3,600.0	8,831.4	8,815.3	16.03	551.000		
8,600.0	7,530.0	1,500.0	1,492.9	24.0	1.6	32.52	-6,098.2	-3,600.0	8,773.1	8,756.3	16.79	522.515		
8,700.0	7,530.0	1,500.0	1,492.9	25.4	1.6	32.52	-6,098.2	-3,600.0	8,715.6	8,698.0	17.57	495.959		
8,800.0	7,530.0	1,500.0	1,492.9	26.9	1.6	32.52	-6,098.2	-3,600.0	8,658.8	8,640.5	18.37	471.250		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
8,900.0	7,530.0	1,500.0	1,492.9	28.4	1.6	32.52	-6,098.2	-3,600.0	8,602.9	8,583.7	19.19	448.285		
9,000.0	7,530.0	1,500.0	1,492.9	30.0	1.6	32.52	-6,098.2	-3,600.0	8,547.8	8,527.7	20.02	426.948		
9,100.0	7,530.0	1,500.0	1,492.9	31.5	1.6	32.52	-6,098.2	-3,600.0	8,493.4	8,472.6	20.86	407.120		
9,200.0	7,530.0	1,500.0	1,492.9	33.1	1.6	32.52	-6,098.2	-3,600.0	8,439.9	8,418.2	21.71	388.684		
9,300.0	7,530.0	1,500.0	1,492.9	34.7	1.6	32.52	-6,098.2	-3,600.0	8,387.3	8,364.7	22.58	371.529		
9,400.0	7,530.0	1,500.0	1,492.9	36.3	1.6	32.52	-6,098.2	-3,600.0	8,335.5	8,312.1	23.44	355.551		
9,500.0	7,530.0	1,500.0	1,492.9	38.0	1.6	32.52	-6,098.2	-3,600.0	8,284.7	8,260.3	24.32	340.653		
9,600.0	7,530.0	1,500.0	1,492.9	39.6	1.6	32.52	-6,098.2	-3,600.0	8,234.7	8,209.5	25.20	326.745		
9,700.0	7,530.0	1,500.0	1,492.9	41.3	1.6	32.52	-6,098.2	-3,600.0	8,185.6	8,159.5	26.09	313.746		
9,800.0	7,530.0	1,500.0	1,492.9	42.9	1.6	32.52	-6,098.2	-3,600.0	8,137.5	8,110.5	26.98	301.580		
9,900.0	7,530.0	1,500.0	1,492.9	44.6	1.6	32.52	-6,098.2	-3,600.0	8,090.3	8,062.4	27.88	290.181		
10,000.0	7,530.0	1,500.0	1,492.9	46.3	1.6	32.52	-6,098.2	-3,600.0	8,044.1	8,015.3	28.78	279.488		
10,100.0	7,530.0	1,500.0	1,492.9	47.9	1.6	32.52	-6,098.2	-3,600.0	7,998.8	7,969.1	29.69	269.443		
10,200.0	7,530.0	1,500.0	1,492.9	49.6	1.6	32.52	-6,098.2	-3,600.0	7,954.6	7,924.0	30.59	259.997		
10,300.0	7,530.0	1,500.0	1,492.9	51.3	1.6	32.52	-6,098.2	-3,600.0	7,911.4	7,879.9	31.51	251.104		
10,400.0	7,530.0	1,500.0	1,492.9	53.0	1.6	32.52	-6,098.2	-3,600.0	7,869.2	7,836.8	32.42	242.722		
10,500.0	7,530.0	1,500.0	1,492.9	54.7	1.6	32.52	-6,098.2	-3,600.0	7,828.0	7,794.7	33.34	234.814		
10,600.0	7,530.0	1,500.0	1,492.9	56.4	1.6	32.52	-6,098.2	-3,600.0	7,788.0	7,753.7	34.26	227.345		
10,700.0	7,530.0	1,500.0	1,492.9	58.1	1.6	32.52	-6,098.2	-3,600.0	7,749.0	7,713.8	35.18	220.284		
10,800.0	7,530.0	1,500.0	1,492.9	59.8	1.6	32.52	-6,098.2	-3,600.0	7,711.1	7,675.0	36.10	213.602		
10,900.0	7,530.0	1,500.0	1,492.9	61.5	1.6	32.52	-6,098.2	-3,600.0	7,674.3	7,637.3	37.03	207.273		
11,000.0	7,530.0	1,500.0	1,492.9	63.2	1.6	32.52	-6,098.2	-3,600.0	7,638.7	7,600.7	37.95	201.273		
11,100.0	7,530.0	1,500.0	1,492.9	64.9	1.6	32.52	-6,098.2	-3,600.0	7,604.2	7,565.3	38.88	195.582		
11,200.0	7,530.0	1,500.0	1,492.9	66.6	1.6	32.52	-6,098.2	-3,600.0	7,570.9	7,531.1	39.81	190.178		
11,300.0	7,530.0	1,500.0	1,492.9	68.4	1.6	32.52	-6,098.2	-3,600.0	7,538.7	7,498.0	40.74	185.044		
11,400.0	7,530.0	1,500.0	1,492.9	70.1	1.6	32.52	-6,098.2	-3,600.0	7,507.8	7,466.1	41.67	180.162		
11,500.0	7,530.0	1,500.0	1,492.9	71.8	1.6	32.52	-6,098.2	-3,600.0	7,478.0	7,435.4	42.61	175.518		
11,600.0	7,530.0	1,500.0	1,492.9	73.5	1.6	32.52	-6,098.2	-3,600.0	7,449.5	7,406.0	43.54	171.096		
11,700.0	7,530.0	1,500.0	1,492.9	75.2	1.6	32.52	-6,098.2	-3,600.0	7,422.2	7,377.8	44.48	166.885		
11,800.0	7,530.0	1,500.0	1,492.9	77.0	1.6	32.52	-6,098.2	-3,600.0	7,396.2	7,350.8	45.41	162.871		
11,900.0	7,530.0	1,500.0	1,492.9	78.7	1.6	32.52	-6,098.2	-3,600.0	7,371.4	7,325.1	46.35	159.044		
12,000.0	7,530.0	1,500.0	1,492.9	80.4	1.6	32.52	-6,098.2	-3,600.0	7,348.0	7,300.7	47.29	155.392		
12,100.0	7,530.0	1,500.0	1,492.9	82.2	1.6	32.52	-6,098.2	-3,600.0	7,325.8	7,277.5	48.23	151.907		
12,200.0	7,530.0	1,500.0	1,492.9	83.9	1.6	32.52	-6,098.2	-3,600.0	7,304.9	7,255.7	49.16	148.579		
12,300.0	7,530.0	1,500.0	1,492.9	85.6	1.6	32.52	-6,098.2	-3,600.0	7,285.3	7,235.2	50.10	145.401		
12,400.0	7,530.0	1,500.0	1,492.9	87.3	1.6	32.52	-6,098.2	-3,600.0	7,267.0	7,216.0	51.05	142.363		
12,500.0	7,530.0	1,500.0	1,492.9	89.1	1.6	32.52	-6,098.2	-3,600.0	7,250.1	7,198.1	51.99	139.459		
12,600.0	7,530.0	1,500.0	1,492.9	90.8	1.6	32.52	-6,098.2	-3,600.0	7,234.5	7,181.6	52.93	136.683		
12,700.0	7,530.0	1,500.0	1,492.9	92.5	1.6	32.52	-6,098.2	-3,600.0	7,220.3	7,166.4	53.87	134.027		
12,800.0	7,530.0	1,500.0	1,492.9	94.3	1.6	32.52	-6,098.2	-3,600.0	7,207.4	7,152.6	54.81	131.487		
12,900.0	7,530.0	1,500.0	1,492.9	96.0	1.6	32.52	-6,098.2	-3,600.0	7,195.9	7,140.1	55.76	129.055		
13,000.0	7,530.0	1,500.0	1,492.9	97.8	1.6	32.52	-6,098.2	-3,600.0	7,185.8	7,129.1	56.70	126.728		
13,100.0	7,530.0	1,500.0	1,492.9	99.5	1.6	32.52	-6,098.2	-3,600.0	7,177.0	7,119.4	57.65	124.500		
13,200.0	7,530.0	1,500.0	1,492.9	101.2	1.6	32.52	-6,098.2	-3,600.0	7,169.6	7,111.0	58.59	122.366		
13,300.0	7,530.0	1,500.0	1,492.9	103.0	1.6	32.52	-6,098.2	-3,600.0	7,163.7	7,104.1	59.54	120.323		
13,400.0	7,530.0	1,500.0	1,492.9	104.7	1.6	32.52	-6,098.2	-3,600.0	7,159.1	7,098.6	60.48	118.366		
13,500.0	7,530.0	1,500.0	1,492.9	106.4	1.6	32.52	-6,098.2	-3,600.0	7,155.9	7,094.4	61.43	116.491		
13,600.0	7,530.0	1,500.0	1,492.9	108.2	1.6	32.52	-6,098.2	-3,600.0	7,154.1	7,091.7	62.38	114.694		
13,678.6	7,530.0	1,500.0	1,492.9	109.6	1.6	32.52	-6,098.2	-3,600.0	7,153.6	7,090.5	63.12	113.335		
13,700.0	7,530.0	1,500.0	1,492.9	109.9	1.6	32.52	-6,098.2	-3,600.0	7,153.7	7,090.4	63.32	112.973 ES		
13,800.0	7,530.0	1,500.0	1,492.9	111.7	1.6	32.52	-6,098.2	-3,600.0	7,154.7	7,090.4	64.27	111.324		
13,900.0	7,530.0	1,500.0	1,492.9	113.4	1.6	32.52	-6,098.2	-3,600.0	7,157.1	7,091.9	65.22	109.744		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (Gyro) - DD													Offset Site Error: 0.0 ft	
Survey Program: 100-Gyro													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	1,500.0	1,492.9	115.1	1.6	32.52	-6,098.2	-3,600.0	7,160.9	7,094.7	66.16	108.229		
14,100.0	7,530.0	1,500.0	1,492.9	116.9	1.6	32.52	-6,098.2	-3,600.0	7,166.0	7,098.9	67.11	106.778		
14,200.0	7,530.0	1,500.0	1,492.9	118.6	1.6	32.52	-6,098.2	-3,600.0	7,172.6	7,104.6	68.06	105.387		
14,300.0	7,530.0	1,500.0	1,492.9	120.4	1.6	32.52	-6,098.2	-3,600.0	7,180.6	7,111.6	69.01	104.054		
14,400.0	7,530.0	1,500.0	1,492.9	122.1	1.6	32.52	-6,098.2	-3,600.0	7,189.9	7,120.0	69.96	102.776		
14,500.0	7,530.0	1,500.0	1,492.9	123.9	1.6	32.52	-6,098.2	-3,600.0	7,200.6	7,129.7	70.91	101.552		
14,600.0	7,530.0	1,500.0	1,492.9	125.6	1.6	32.52	-6,098.2	-3,600.0	7,212.7	7,140.9	71.85	100.379		
14,700.0	7,530.0	1,500.0	1,492.9	127.3	1.6	32.52	-6,098.2	-3,600.0	7,226.2	7,153.4	72.80	99.255		
14,800.0	7,530.0	1,500.0	1,492.9	129.1	1.6	32.52	-6,098.2	-3,600.0	7,241.0	7,167.3	73.75	98.178		
14,900.0	7,530.0	1,500.0	1,492.9	130.8	1.6	32.52	-6,098.2	-3,600.0	7,257.2	7,182.5	74.70	97.146		
15,000.0	7,530.0	1,500.0	1,492.9	132.6	1.6	32.52	-6,098.2	-3,600.0	7,274.7	7,199.0	75.65	96.158		
15,100.0	7,530.0	1,500.0	1,492.9	134.3	1.6	32.52	-6,098.2	-3,600.0	7,293.5	7,216.9	76.60	95.211		
15,200.0	7,530.0	1,500.0	1,492.9	136.1	1.6	32.52	-6,098.2	-3,600.0	7,313.6	7,236.1	77.55	94.304		
15,300.0	7,530.0	1,500.0	1,492.9	137.8	1.6	32.52	-6,098.2	-3,600.0	7,335.1	7,256.6	78.50	93.435		
15,400.0	7,530.0	1,500.0	1,492.9	139.6	1.6	32.52	-6,098.2	-3,600.0	7,357.8	7,278.4	79.45	92.604		
15,500.0	7,530.0	1,500.0	1,492.9	141.3	1.6	32.52	-6,098.2	-3,600.0	7,381.9	7,301.5	80.41	91.808		
15,600.0	7,530.0	1,500.0	1,492.9	143.0	1.6	32.52	-6,098.2	-3,600.0	7,407.2	7,325.8	81.36	91.046		
15,700.0	7,530.0	1,500.0	1,492.9	144.8	1.6	32.52	-6,098.2	-3,600.0	7,433.8	7,351.4	82.31	90.317		
15,800.0	7,530.0	1,500.0	1,492.9	146.5	1.6	32.52	-6,098.2	-3,600.0	7,461.6	7,378.3	83.26	89.619		
15,900.0	7,530.0	1,500.0	1,492.9	148.3	1.6	32.52	-6,098.2	-3,600.0	7,490.6	7,406.4	84.21	88.951		
16,000.0	7,530.0	1,500.0	1,492.9	150.0	1.6	32.52	-6,098.2	-3,600.0	7,520.9	7,435.7	85.16	88.313		
16,100.0	7,530.0	1,500.0	1,492.9	151.8	1.6	32.52	-6,098.2	-3,600.0	7,552.3	7,466.2	86.11	87.702		
16,200.0	7,530.0	1,500.0	1,492.9	153.5	1.6	32.52	-6,098.2	-3,600.0	7,585.0	7,497.9	87.07	87.118		
16,300.0	7,530.0	1,500.0	1,492.9	155.3	1.6	32.52	-6,098.2	-3,600.0	7,618.8	7,530.8	88.02	86.561		
16,400.0	7,530.0	1,500.0	1,492.9	157.0	1.6	32.52	-6,098.2	-3,600.0	7,653.8	7,564.8	88.97	86.028		
16,500.0	7,530.0	1,500.0	1,492.9	158.8	1.6	32.52	-6,098.2	-3,600.0	7,689.9	7,600.0	89.92	85.519		
16,600.0	7,530.0	1,500.0	1,492.9	160.5	1.6	32.52	-6,098.2	-3,600.0	7,727.2	7,636.3	90.87	85.032		
16,700.0	7,530.0	1,500.0	1,492.9	162.3	1.6	32.52	-6,098.2	-3,600.0	7,765.5	7,673.7	91.83	84.568		
16,800.0	7,530.0	1,500.0	1,492.9	164.0	1.6	32.52	-6,098.2	-3,600.0	7,805.0	7,712.2	92.78	84.125		
16,900.0	7,530.0	1,500.0	1,492.9	165.8	1.6	32.52	-6,098.2	-3,600.0	7,845.5	7,751.8	93.73	83.703		
17,000.0	7,530.0	1,500.0	1,492.9	167.5	1.6	32.52	-6,098.2	-3,600.0	7,887.1	7,792.4	94.68	83.300		
17,100.0	7,530.0	1,500.0	1,492.9	169.3	1.6	32.52	-6,098.2	-3,600.0	7,929.7	7,834.1	95.64	82.916		
17,200.0	7,530.0	1,500.0	1,492.9	171.0	1.6	32.52	-6,098.2	-3,600.0	7,973.4	7,876.8	96.59	82.550		
17,300.0	7,530.0	1,500.0	1,492.9	172.8	1.6	32.52	-6,098.2	-3,600.0	8,018.0	7,920.5	97.54	82.201		
17,400.0	7,530.0	1,500.0	1,492.9	174.5	1.6	32.52	-6,098.2	-3,600.0	8,063.7	7,965.2	98.49	81.870		
17,420.9	7,530.0	1,500.0	1,492.9	174.9	1.6	32.52	-6,098.2	-3,600.0	8,073.4	7,974.7	98.69	81.802 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-149.07	-6,136.7	-3,677.1	7,154.1					
100.0	100.0	96.5	96.5	0.2	0.2	-149.07	-6,136.7	-3,677.1	7,154.1	7,153.7	0.32	N/A		
200.0	200.0	198.0	198.0	0.3	0.3	-149.07	-6,136.7	-3,677.1	7,154.0	7,153.4	0.67	N/A		
300.0	300.0	299.6	299.6	0.5	0.5	-149.07	-6,136.6	-3,677.1	7,154.0	7,153.0	1.01	7,053.861		
400.0	400.0	2,153.8	2,125.1	0.7	6.0	-150.01	-6,003.9	-3,465.6	7,145.0	7,138.8	6.18	1,156.626		
500.0	500.0	2,247.4	2,215.2	0.8	6.4	-150.10	-5,990.3	-3,444.1	7,120.7	7,114.0	6.76	1,054.046		
600.0	600.0	2,311.0	2,276.5	1.0	6.7	-150.17	-5,981.0	-3,429.9	7,096.8	7,089.6	7.20	985.854		
700.0	700.0	2,380.5	2,343.6	1.2	7.1	177.30	-5,971.0	-3,414.6	7,074.1	7,068.0	6.12	1,155.877		
800.0	800.0	2,453.5	2,414.1	1.4	7.4	177.24	-5,960.9	-3,398.5	7,053.5	7,047.0	6.49	1,086.215		
900.0	899.9	2,533.0	2,490.9	1.6	7.8	177.17	-5,950.1	-3,381.2	7,035.0	7,028.1	6.88	1,022.029		
988.4	988.1	2,591.5	2,547.4	1.7	8.1	177.12	-5,942.3	-3,368.5	7,020.3	7,013.1	7.20	974.850		
1,000.0	999.7	2,599.2	2,554.9	1.7	8.1	177.11	-5,941.3	-3,366.8	7,018.5	7,011.2	7.24	968.947		
1,100.0	1,099.4	2,779.4	2,728.9	1.9	9.0	176.93	-5,916.9	-3,327.0	7,002.2	6,994.3	7.92	884.140		
1,200.0	1,199.2	2,858.8	2,805.5	2.1	9.4	176.85	-5,905.8	-3,309.5	6,985.7	6,977.3	8.32	839.919		
1,300.0	1,299.0	2,976.3	2,918.9	2.3	9.9	176.73	-5,889.4	-3,283.3	6,969.1	6,960.3	8.82	789.713		
1,400.0	1,398.8	3,137.0	3,073.8	2.5	10.8	176.57	-5,865.8	-3,247.4	6,951.7	6,942.3	9.45	735.285		
1,500.0	1,498.5	3,232.0	3,165.2	2.7	11.2	176.47	-5,851.7	-3,225.8	6,934.2	6,924.3	9.90	700.166		
1,600.0	1,598.3	3,296.0	3,226.9	2.9	11.6	176.40	-5,842.7	-3,211.2	6,917.2	6,906.9	10.27	673.484		
1,700.0	1,698.1	3,359.0	3,287.6	3.2	11.9	176.33	-5,834.0	-3,196.8	6,900.4	6,889.8	10.63	649.056		
1,800.0	1,797.8	3,404.1	3,331.2	3.4	12.1	176.28	-5,828.0	-3,186.7	6,884.4	6,873.5	10.94	629.317		
1,900.0	1,897.6	3,563.1	3,484.7	3.6	12.9	176.12	-5,806.1	-3,152.0	6,868.3	6,856.7	11.58	593.303		
2,000.0	1,997.4	3,709.0	3,625.2	3.8	13.6	175.96	-5,785.8	-3,118.1	6,851.4	6,839.2	12.20	561.401		
2,100.0	2,097.1	3,753.5	3,668.0	4.0	13.8	175.91	-5,779.7	-3,107.8	6,834.6	6,822.1	12.51	546.322		
2,200.0	2,196.9	3,804.0	3,716.8	4.2	14.1	175.85	-5,772.8	-3,096.6	6,818.6	6,805.7	12.83	531.293		
2,300.0	2,296.7	3,859.0	3,770.0	4.4	14.3	175.79	-5,765.6	-3,084.7	6,803.2	6,790.0	13.17	516.464		
2,400.0	2,396.5	3,931.0	3,839.7	4.6	14.7	175.72	-5,756.5	-3,069.3	6,788.4	6,774.8	13.56	500.502		
2,500.0	2,496.2	4,161.3	4,062.4	4.8	15.8	175.47	-5,726.3	-3,019.1	6,773.3	6,758.9	14.43	469.357		
2,600.0	2,596.0	4,284.1	4,180.9	5.0	16.4	175.34	-5,708.1	-2,992.2	6,756.4	6,741.5	14.97	451.397		
2,700.0	2,695.8	4,375.0	4,268.6	5.2	16.9	175.25	-5,694.7	-2,972.4	6,739.7	6,724.3	15.41	437.302		
2,800.0	2,795.5	4,412.2	4,304.6	5.4	17.0	175.21	-5,689.4	-2,964.3	6,723.4	6,707.7	15.70	428.299		
2,900.0	2,895.3	4,439.0	4,330.4	5.6	17.2	175.19	-5,685.7	-2,958.6	6,707.9	6,692.0	15.95	420.491		
3,000.0	2,995.1	4,503.0	4,392.4	5.9	17.5	175.12	-5,677.5	-2,945.0	6,693.3	6,676.9	16.32	410.062		
3,100.0	3,094.9	4,661.0	4,545.6	6.1	18.2	174.95	-5,657.4	-2,911.7	6,678.8	6,661.8	16.97	393.458		
3,200.0	3,194.6	4,718.2	4,601.0	6.3	18.5	174.89	-5,649.8	-2,899.7	6,664.0	6,646.6	17.32	384.827		
3,300.0	3,294.4	4,757.0	4,638.7	6.5	18.7	174.85	-5,644.8	-2,891.9	6,649.8	6,632.2	17.61	377.720		
3,400.0	3,394.2	4,817.7	4,697.6	6.7	18.9	174.79	-5,637.2	-2,880.0	6,636.3	6,618.3	17.95	369.800		
3,500.0	3,493.9	4,884.0	4,762.4	6.9	19.2	174.73	-5,629.3	-2,867.7	6,623.7	6,605.4	18.30	361.924		
3,600.0	3,593.7	4,927.0	4,804.4	7.1	19.4	174.70	-5,624.3	-2,860.1	6,611.7	6,593.1	18.59	355.627		
3,700.0	3,693.5	5,003.0	4,878.8	7.3	19.7	174.63	-5,615.7	-2,846.8	6,600.2	6,581.2	18.97	347.929		
3,800.0	3,793.2	5,076.0	4,950.2	7.5	20.0	174.57	-5,607.5	-2,834.3	6,589.0	6,569.7	19.34	340.717		
3,900.0	3,893.0	5,138.5	5,011.4	7.7	20.2	174.52	-5,600.7	-2,823.9	6,578.3	6,558.6	19.67	334.348		
4,000.0	3,992.8	5,261.9	5,132.3	8.0	20.7	174.42	-5,587.5	-2,803.2	6,567.8	6,547.7	20.18	325.450		
4,100.0	4,092.6	5,328.9	5,198.0	8.2	20.9	174.36	-5,580.3	-2,792.0	6,557.3	6,536.8	20.53	319.398		
4,200.0	4,192.3	5,393.0	5,260.9	8.4	21.2	174.31	-5,573.6	-2,781.8	6,547.4	6,526.5	20.87	313.768		
4,300.0	4,292.1	5,444.1	5,311.1	8.6	21.4	174.28	-5,568.5	-2,774.0	6,538.1	6,516.9	21.17	308.816		
4,400.0	4,391.9	5,504.3	5,370.4	8.8	21.6	174.23	-5,562.7	-2,764.9	6,529.4	6,507.9	21.50	303.684		
4,500.0	4,491.6	5,670.2	5,533.5	9.0	22.2	174.10	-5,547.1	-2,739.2	6,520.7	6,498.6	22.10	295.005		
4,600.0	4,591.4	5,710.0	5,572.7	9.2	22.3	174.07	-5,543.1	-2,733.1	6,511.7	6,489.3	22.38	290.971		
4,700.0	4,691.2	5,774.0	5,635.8	9.4	22.5	174.02	-5,537.2	-2,723.9	6,503.6	6,480.9	22.71	286.366		
4,800.0	4,790.9	5,805.9	5,667.2	9.6	22.6	174.00	-5,534.5	-2,719.5	6,496.4	6,473.4	22.96	282.897		
4,900.0	4,890.7	5,883.8	5,744.2	9.8	22.9	173.95	-5,528.2	-2,708.9	6,489.7	6,466.4	23.33	278.135		
5,000.0	4,990.5	5,963.0	5,822.4	10.1	23.2	173.89	-5,522.1	-2,698.1	6,483.4	6,459.7	23.70	273.540		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,090.3	5,992.8	5,851.8	10.3	23.2	173.87	-5,520.0	-2,694.3	6,477.8	6,453.9	23.95	270.520		
5,200.0	5,190.0	6,027.0	5,885.7	10.5	23.3	173.85	-5,517.7	-2,690.2	6,473.2	6,449.0	24.20	267.492		
5,300.0	5,289.8	6,091.0	5,949.2	10.7	23.5	173.82	-5,513.5	-2,683.6	6,469.4	6,444.9	24.50	264.036		
5,400.0	5,389.6	6,138.5	5,996.4	10.9	23.6	173.80	-5,510.4	-2,679.4	6,466.3	6,441.6	24.77	261.104		
5,500.0	5,489.3	6,185.2	6,042.9	11.1	23.7	173.78	-5,507.5	-2,675.7	6,464.0	6,439.0	25.03	258.299		
5,600.0	5,589.1	6,219.0	6,076.6	11.3	23.8	173.77	-5,505.6	-2,673.2	6,462.5	6,437.3	25.26	255.834		
5,700.0	5,688.9	6,283.0	6,140.3	11.5	23.9	173.76	-5,502.4	-2,668.8	6,461.8	6,436.3	25.55	252.927		
5,721.4	5,710.2	6,283.0	6,140.3	11.6	23.9	173.76	-5,502.4	-2,668.8	6,461.8	6,436.2	25.59	252.555		
5,800.0	5,788.7	6,283.0	6,140.3	11.7	23.9	173.76	-5,502.4	-2,668.8	6,462.3	6,436.5	25.72	251.222		
5,900.0	5,888.4	6,345.1	6,202.3	11.9	24.0	173.74	-5,499.9	-2,665.3	6,463.3	6,437.3	25.99	248.638		
6,000.0	5,988.2	6,379.0	6,236.2	12.2	24.1	173.74	-5,499.0	-2,663.9	6,465.6	6,439.4	26.22	246.573		
6,100.0	6,088.0	6,427.6	6,284.7	12.4	24.1	173.73	-5,497.8	-2,662.6	6,468.9	6,442.4	26.45	244.611		
6,200.0	6,187.7	6,506.0	6,363.1	12.6	24.2	173.74	-5,495.7	-2,662.2	6,472.9	6,446.2	26.70	242.471		
6,300.0	6,287.5	6,506.0	6,363.1	12.8	24.2	173.74	-5,495.7	-2,662.2	6,477.7	6,450.8	26.87	241.067		
6,400.0	6,387.3	6,543.4	6,400.4	13.0	24.2	173.75	-5,495.0	-2,662.7	6,483.5	6,456.4	27.09	239.370		
6,500.0	6,487.0	6,571.0	6,428.1	13.2	24.2	173.76	-5,494.9	-2,663.1	6,490.5	6,463.2	27.29	237.832		
6,600.0	6,586.8	6,771.8	6,628.9	13.4	24.4	173.77	-5,494.9	-2,663.2	6,497.3	6,469.6	27.72	234.355		
6,700.0	6,686.6	6,871.5	6,728.5	13.6	24.5	173.78	-5,494.4	-2,662.7	6,503.3	6,475.3	28.03	232.052		
6,787.0	6,773.4	6,971.8	6,828.9	13.8	24.6	173.78	-5,493.6	-2,662.4	6,508.5	6,480.1	28.30	229.949		
6,800.0	6,786.4	6,988.1	6,845.2	13.8	24.6	163.23	-5,493.5	-2,662.4	6,509.1	6,480.7	28.35	229.613		
6,850.0	6,836.3	7,050.5	6,907.5	13.9	24.7	76.11	-5,492.8	-2,662.2	6,509.5	6,481.1	28.43	228.953		
6,900.0	6,886.2	7,103.3	6,960.4	14.0	24.7	46.37	-5,492.1	-2,662.2	6,506.8	6,478.5	28.37	229.383		
6,950.0	6,935.7	7,159.2	7,016.3	14.0	24.8	38.82	-5,491.3	-2,662.3	6,500.9	6,472.8	28.17	230.757		
7,000.0	6,984.6	7,226.5	7,083.6	14.0	24.8	35.82	-5,490.0	-2,662.6	6,491.9	6,464.0	27.86	233.013		
7,050.0	7,032.6	7,276.0	7,133.0	14.0	24.9	34.46	-5,489.0	-2,662.7	6,479.7	6,452.3	27.42	236.346		
7,100.0	7,079.7	7,326.1	7,183.1	13.9	24.9	33.95	-5,488.1	-2,662.9	6,464.6	6,437.7	26.87	240.614		
7,150.0	7,125.4	7,384.0	7,241.0	13.9	25.0	34.00	-5,486.8	-2,663.1	6,446.5	6,420.3	26.23	245.724		
7,200.0	7,169.6	7,421.4	7,278.4	13.8	25.0	34.42	-5,485.9	-2,663.3	6,425.7	6,400.1	25.52	251.791		
7,250.0	7,212.1	7,451.3	7,308.3	13.8	25.1	35.16	-5,485.2	-2,663.6	6,402.2	6,377.4	24.76	258.530		
7,300.0	7,252.6	7,493.0	7,350.0	13.7	25.1	36.27	-5,484.3	-2,664.1	6,376.2	6,352.2	24.02	265.408		
7,350.0	7,291.0	7,507.4	7,364.4	13.7	25.1	37.59	-5,484.0	-2,664.3	6,347.9	6,324.6	23.32	272.241		
7,400.0	7,327.1	7,533.9	7,390.9	13.7	25.1	39.30	-5,483.4	-2,664.7	6,317.3	6,294.6	22.75	277.712		
7,450.0	7,360.7	7,558.6	7,415.5	13.7	25.1	41.36	-5,482.9	-2,665.1	6,284.7	6,262.3	22.38	280.766		
7,500.0	7,391.6	7,582.9	7,439.8	13.7	25.2	43.84	-5,482.5	-2,665.5	6,250.2	6,227.8	22.32	280.053		
7,550.0	7,419.7	7,610.1	7,467.0	13.8	25.2	46.82	-5,481.9	-2,666.0	6,213.8	6,191.2	22.64	274.484		
7,600.0	7,444.8	7,634.3	7,491.2	13.9	25.2	50.30	-5,481.5	-2,666.5	6,175.9	6,152.6	23.38	264.190		
7,650.0	7,466.9	7,655.4	7,512.3	14.1	25.2	54.35	-5,481.1	-2,666.9	6,136.6	6,112.1	24.52	250.248		
7,700.0	7,485.8	7,673.3	7,530.2	14.3	25.2	59.01	-5,480.7	-2,667.2	6,096.1	6,070.1	26.00	234.421		
7,750.0	7,501.5	7,687.9	7,544.8	14.6	25.3	64.31	-5,480.4	-2,667.5	6,054.6	6,026.9	27.70	218.546		
7,800.0	7,513.7	7,699.1	7,556.0	14.9	25.3	70.21	-5,480.2	-2,667.7	6,012.3	5,982.8	29.46	204.105		
7,850.0	7,522.6	7,704.0	7,560.9	15.2	25.3	76.60	-5,480.1	-2,667.8	5,969.4	5,938.3	31.06	192.159		
7,900.0	7,528.0	7,704.0	7,560.9	15.6	25.3	83.33	-5,480.1	-2,667.8	5,926.1	5,893.7	32.36	183.132		
7,952.9	7,530.0	7,704.0	7,560.9	16.1	25.3	90.71	-5,480.1	-2,667.8	5,880.1	5,846.9	33.26	176.804		
8,000.0	7,530.0	7,704.0	7,560.9	16.5	25.3	90.71	-5,480.1	-2,667.8	5,839.3	5,805.6	33.71	173.207		
8,100.0	7,530.0	7,704.0	7,560.9	17.5	25.3	90.71	-5,480.1	-2,667.8	5,752.8	5,718.1	34.77	165.441		
8,200.0	7,530.0	7,704.0	7,560.9	18.7	25.3	90.71	-5,480.1	-2,667.8	5,666.8	5,630.9	35.94	157.673		
8,300.0	7,530.0	7,704.0	7,560.9	19.9	25.3	90.71	-5,480.1	-2,667.8	5,581.3	5,544.1	37.20	150.049		
8,400.0	7,530.0	7,704.0	7,560.9	21.2	25.3	90.71	-5,480.1	-2,667.8	5,496.3	5,457.7	38.52	142.668		
8,500.0	7,530.0	7,701.5	7,558.4	22.6	25.3	90.66	-5,480.2	-2,667.8	5,411.7	5,371.8	39.91	135.605		
8,600.0	7,530.0	7,699.5	7,556.4	24.0	25.3	90.62	-5,480.2	-2,667.7	5,327.7	5,286.4	41.34	128.872		
8,700.0	7,530.0	7,697.6	7,554.4	25.4	25.3	90.58	-5,480.2	-2,667.7	5,244.3	5,201.5	42.81	122.488		
8,800.0	7,530.0	7,695.6	7,552.5	26.9	25.3	90.54	-5,480.3	-2,667.6	5,161.4	5,117.1	44.32	116.453		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 21-18 - DD (MWD) - DD													Offset Site Error:	0.0 ft
Survey Program: 814-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,693.6	7,550.5	28.4	25.3	90.50	-5,480.3	-2,667.6	5,079.2	5,033.3	45.86	110.760		
9,000.0	7,530.0	7,691.7	7,548.6	30.0	25.3	90.46	-5,480.3	-2,667.6	4,997.6	4,950.2	47.42	105.397		
9,100.0	7,530.0	7,689.7	7,546.6	31.5	25.3	90.43	-5,480.4	-2,667.5	4,916.7	4,867.7	49.00	100.347		
9,200.0	7,530.0	7,687.8	7,544.7	33.1	25.3	90.39	-5,480.4	-2,667.5	4,836.5	4,785.9	50.59	95.594		
9,300.0	7,530.0	7,685.8	7,542.7	34.7	25.3	90.35	-5,480.5	-2,667.5	4,757.1	4,704.9	52.21	91.121		
9,400.0	7,530.0	7,683.9	7,540.8	36.3	25.3	90.31	-5,480.5	-2,667.4	4,678.4	4,624.6	53.83	86.909		
9,500.0	7,530.0	7,682.0	7,538.9	38.0	25.3	90.27	-5,480.5	-2,667.4	4,600.6	4,545.1	55.47	82.942		
9,600.0	7,530.0	7,680.0	7,536.9	39.6	25.3	90.23	-5,480.6	-2,667.3	4,523.6	4,466.5	57.11	79.204		
9,700.0	7,530.0	7,678.1	7,535.0	41.3	25.2	90.20	-5,480.6	-2,667.3	4,447.6	4,388.8	58.77	75.680		
9,800.0	7,530.0	7,676.2	7,533.0	42.9	25.2	90.16	-5,480.7	-2,667.3	4,372.5	4,312.1	60.43	72.356		
9,900.0	7,530.0	7,674.2	7,531.1	44.6	25.2	90.12	-5,480.7	-2,667.2	4,298.4	4,236.3	62.10	69.218		
10,000.0	7,530.0	7,672.3	7,529.2	46.3	25.2	90.08	-5,480.7	-2,667.2	4,225.4	4,161.7	63.78	66.255		
10,100.0	7,530.0	7,670.4	7,527.3	47.9	25.2	90.04	-5,480.8	-2,667.2	4,153.6	4,088.1	65.46	63.456		
10,200.0	7,530.0	7,668.4	7,525.3	49.6	25.2	90.01	-5,480.8	-2,667.1	4,082.9	4,015.7	67.14	60.810		
10,300.0	7,530.0	7,666.5	7,523.4	51.3	25.2	89.97	-5,480.8	-2,667.1	4,013.4	3,944.6	68.83	58.308		
10,400.0	7,530.0	7,664.6	7,521.5	53.0	25.2	89.93	-5,480.9	-2,667.0	3,945.3	3,874.8	70.52	55.942		
10,500.0	7,530.0	7,662.7	7,519.6	54.7	25.2	89.89	-5,480.9	-2,667.0	3,878.5	3,806.3	72.22	53.703		
10,600.0	7,530.0	7,660.8	7,517.7	56.4	25.2	89.86	-5,481.0	-2,667.0	3,813.2	3,739.3	73.92	51.584		
10,700.0	7,530.0	7,658.9	7,515.8	58.1	25.2	89.82	-5,481.0	-2,666.9	3,749.5	3,673.9	75.63	49.579		
10,800.0	7,530.0	7,656.9	7,513.8	59.8	25.2	89.78	-5,481.0	-2,666.9	3,687.3	3,610.0	77.33	47.681		
10,900.0	7,530.0	7,655.0	7,511.9	61.5	25.2	89.74	-5,481.1	-2,666.9	3,626.8	3,547.8	79.04	45.886		
11,000.0	7,530.0	7,653.1	7,510.0	63.2	25.2	89.71	-5,481.1	-2,666.8	3,568.2	3,487.4	80.75	44.187		
11,100.0	7,530.0	7,651.2	7,508.1	64.9	25.2	89.67	-5,481.1	-2,666.8	3,511.3	3,428.9	82.46	42.580		
11,200.0	7,530.0	7,649.3	7,506.2	66.6	25.2	89.63	-5,481.2	-2,666.8	3,456.5	3,372.3	84.18	41.060		
11,300.0	7,530.0	7,647.4	7,504.3	68.4	25.2	89.59	-5,481.2	-2,666.7	3,403.6	3,317.8	85.90	39.625		
11,400.0	7,530.0	7,645.5	7,502.4	70.1	25.2	89.56	-5,481.3	-2,666.7	3,353.0	3,265.4	87.61	38.270		
11,500.0	7,530.0	7,643.6	7,500.5	71.8	25.2	89.52	-5,481.3	-2,666.6	3,304.6	3,215.2	89.33	36.991		
11,600.0	7,530.0	7,641.7	7,498.7	73.5	25.2	89.48	-5,481.3	-2,666.6	3,258.5	3,167.4	91.06	35.786		
11,700.0	7,530.0	7,639.9	7,496.8	75.2	25.2	89.44	-5,481.4	-2,666.6	3,214.9	3,122.1	92.78	34.651		
11,800.0	7,530.0	7,638.0	7,494.9	77.0	25.2	89.41	-5,481.4	-2,666.5	3,173.8	3,079.3	94.50	33.585		
11,900.0	7,530.0	7,636.1	7,493.0	78.7	25.2	89.37	-5,481.4	-2,666.5	3,135.4	3,039.2	96.23	32.584		
12,000.0	7,530.0	7,634.2	7,491.1	80.4	25.2	89.33	-5,481.5	-2,666.5	3,099.7	3,001.8	97.95	31.645		
12,100.0	7,530.0	7,632.3	7,489.2	82.2	25.2	89.30	-5,481.5	-2,666.4	3,066.9	2,967.2	99.68	30.768		
12,200.0	7,530.0	7,630.4	7,487.4	83.9	25.2	89.26	-5,481.5	-2,666.4	3,037.0	2,935.6	101.41	29.949		
12,300.0	7,530.0	7,628.6	7,485.5	85.6	25.2	89.22	-5,481.6	-2,666.4	3,010.2	2,907.1	103.13	29.187		
12,400.0	7,530.0	7,626.7	7,483.6	87.3	25.2	89.19	-5,481.6	-2,666.3	2,986.4	2,881.6	104.86	28.479		
12,500.0	7,530.0	7,624.8	7,481.7	89.1	25.2	89.15	-5,481.7	-2,666.3	2,965.9	2,859.3	106.59	27.824		
12,600.0	7,530.0	7,623.0	7,479.9	90.8	25.2	89.11	-5,481.7	-2,666.3	2,948.6	2,840.2	108.32	27.220		
12,700.0	7,530.0	7,621.1	7,478.0	92.5	25.2	89.08	-5,481.7	-2,666.2	2,934.6	2,824.5	110.06	26.664		
12,800.0	7,530.0	7,619.2	7,476.1	94.3	25.2	89.04	-5,481.8	-2,666.2	2,923.9	2,812.1	111.79	26.156		
12,900.0	7,530.0	7,617.4	7,474.3	96.0	25.2	89.00	-5,481.8	-2,666.2	2,916.6	2,803.1	113.52	25.693		
13,000.0	7,530.0	7,615.5	7,472.4	97.8	25.2	88.97	-5,481.8	-2,666.1	2,912.8	2,797.5	115.25	25.273		
13,062.2	7,530.0	7,614.3	7,471.3	98.8	25.2	88.94	-5,481.9	-2,666.1	2,912.1	2,795.8	116.33	25.033 CC		
13,100.0	7,530.0	7,613.6	7,470.6	99.5	25.2	88.93	-5,481.9	-2,666.1	2,912.4	2,795.4	116.99	24.895 ES		
13,200.0	7,530.0	7,611.8	7,468.7	101.2	25.2	88.89	-5,481.9	-2,666.0	2,915.4	2,796.7	118.72	24.557		
13,300.0	7,530.0	7,609.9	7,466.8	103.0	25.2	88.86	-5,481.9	-2,666.0	2,921.8	2,801.4	120.46	24.256		
13,400.0	7,530.0	7,608.1	7,465.0	104.7	25.2	88.82	-5,482.0	-2,666.0	2,931.6	2,809.5	122.19	23.993		
13,500.0	7,530.0	7,606.2	7,463.1	106.4	25.2	88.78	-5,482.0	-2,665.9	2,944.8	2,820.9	123.92	23.763		
13,600.0	7,530.0	7,604.4	7,461.3	108.2	25.2	88.75	-5,482.0	-2,665.9	2,961.3	2,835.7	125.66	23.566		
13,700.0	7,530.0	7,602.5	7,459.5	109.9	25.2	88.71	-5,482.1	-2,665.9	2,981.1	2,853.7	127.40	23.400		
13,800.0	7,530.0	7,600.7	7,457.6	111.7	25.2	88.67	-5,482.1	-2,665.8	3,004.1	2,875.0	129.13	23.264		
13,900.0	7,530.0	7,598.9	7,455.8	113.4	25.2	88.64	-5,482.2	-2,665.8	3,030.2	2,899.3	130.87	23.154		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,000.0	7,530.0	7,597.0	7,453.9	115.1	25.2	88.60	-5,482.2	-2,665.8	3,059.3	2,926.7	132.61	23.071		
14,100.0	7,530.0	7,595.2	7,452.1	116.9	25.2	88.57	-5,482.2	-2,665.7	3,091.4	2,957.1	134.34	23.012		
14,200.0	7,530.0	7,593.3	7,450.3	118.6	25.2	88.53	-5,482.3	-2,665.7	3,126.4	2,990.3	136.08	22.975		
14,300.0	7,530.0	7,591.5	7,448.4	120.4	25.2	88.49	-5,482.3	-2,665.7	3,164.2	3,026.4	137.82	22.959 SF		
14,400.0	7,530.0	7,589.7	7,446.6	122.1	25.2	88.46	-5,482.3	-2,665.6	3,204.6	3,065.0	139.55	22.963		
14,500.0	7,530.0	7,587.9	7,444.8	123.9	25.2	88.42	-5,482.4	-2,665.6	3,247.6	3,106.3	141.29	22.985		
14,600.0	7,530.0	7,586.0	7,443.0	125.6	25.2	88.39	-5,482.4	-2,665.6	3,293.1	3,150.0	143.03	23.024		
14,700.0	7,530.0	7,584.2	7,441.1	127.3	25.2	88.35	-5,482.4	-2,665.5	3,340.9	3,196.2	144.77	23.078		
14,800.0	7,530.0	7,582.4	7,439.3	129.1	25.2	88.31	-5,482.5	-2,665.5	3,391.1	3,244.5	146.51	23.146		
14,900.0	7,530.0	7,580.6	7,437.5	130.8	25.2	88.28	-5,482.5	-2,665.5	3,443.4	3,295.1	148.24	23.227		
15,000.0	7,530.0	7,576.0	7,432.9	132.6	25.2	88.19	-5,482.6	-2,665.4	3,497.7	3,347.8	149.97	23.322		
15,100.0	7,530.0	7,576.0	7,432.9	134.3	25.2	88.19	-5,482.6	-2,665.4	3,554.1	3,402.4	151.72	23.425		
15,200.0	7,530.0	7,576.0	7,432.9	136.1	25.2	88.19	-5,482.6	-2,665.4	3,612.3	3,458.9	153.46	23.539		
15,300.0	7,530.0	7,573.3	7,430.2	137.8	25.2	88.14	-5,482.6	-2,665.4	3,672.4	3,517.2	155.20	23.662		
15,400.0	7,530.0	7,571.5	7,428.4	139.6	25.2	88.10	-5,482.7	-2,665.3	3,734.1	3,577.2	156.94	23.794		
15,500.0	7,530.0	7,569.7	7,426.6	141.3	25.2	88.06	-5,482.7	-2,665.3	3,797.5	3,638.8	158.68	23.932		
15,600.0	7,530.0	7,567.8	7,424.7	143.0	25.2	88.03	-5,482.7	-2,665.3	3,862.4	3,702.0	160.42	24.078		
15,700.0	7,530.0	7,565.9	7,422.9	144.8	25.2	87.99	-5,482.8	-2,665.2	3,928.8	3,766.7	162.16	24.229		
15,800.0	7,530.0	7,564.1	7,421.0	146.5	25.2	87.95	-5,482.8	-2,665.2	3,996.6	3,832.8	163.89	24.386		
15,900.0	7,530.0	7,562.2	7,419.1	148.3	25.2	87.92	-5,482.9	-2,665.2	4,065.8	3,900.1	165.63	24.547		
16,000.0	7,530.0	7,560.3	7,417.2	150.0	25.2	87.88	-5,482.9	-2,665.1	4,136.2	3,968.8	167.37	24.713		
16,100.0	7,530.0	7,558.4	7,415.3	151.8	25.1	87.84	-5,482.9	-2,665.1	4,207.8	4,038.6	169.11	24.882		
16,200.0	7,530.0	7,556.4	7,413.4	153.5	25.1	87.80	-5,483.0	-2,665.1	4,280.5	4,109.6	170.85	25.054		
16,300.0	7,530.0	7,554.5	7,411.4	155.3	25.1	87.77	-5,483.0	-2,665.0	4,354.3	4,181.7	172.59	25.229		
16,400.0	7,530.0	7,552.5	7,409.5	157.0	25.1	87.73	-5,483.0	-2,665.0	4,429.1	4,254.8	174.33	25.407		
16,500.0	7,530.0	7,550.6	7,407.5	158.8	25.1	87.69	-5,483.1	-2,665.0	4,504.9	4,328.9	176.06	25.587		
16,600.0	7,530.0	7,548.6	7,405.5	160.5	25.1	87.65	-5,483.1	-2,664.9	4,581.7	4,403.9	177.80	25.768		
16,700.0	7,530.0	7,546.6	7,403.5	162.3	25.1	87.61	-5,483.2	-2,664.9	4,659.3	4,479.8	179.54	25.951		
16,800.0	7,530.0	7,544.6	7,401.5	164.0	25.1	87.57	-5,483.2	-2,664.9	4,737.8	4,556.5	181.28	26.135		
16,900.0	7,530.0	7,542.5	7,399.5	165.8	25.1	87.53	-5,483.2	-2,664.8	4,817.0	4,634.0	183.02	26.320		
17,000.0	7,530.0	7,540.5	7,397.5	167.5	25.1	87.49	-5,483.3	-2,664.8	4,897.0	4,712.3	184.76	26.506		
17,100.0	7,530.0	7,538.5	7,395.4	169.3	25.1	87.45	-5,483.3	-2,664.8	4,977.8	4,791.3	186.49	26.691		
17,200.0	7,530.0	7,536.4	7,393.3	171.0	25.1	87.41	-5,483.4	-2,664.7	5,059.2	4,871.0	188.23	26.878		
17,300.0	7,530.0	7,534.3	7,391.2	172.8	25.1	87.37	-5,483.4	-2,664.7	5,141.3	4,951.3	189.97	27.064		
17,400.0	7,530.0	7,532.2	7,389.1	174.5	25.1	87.33	-5,483.5	-2,664.7	5,224.0	5,032.3	191.71	27.250		
17,420.9	7,530.0	7,531.8	7,388.7	174.9	25.1	87.32	-5,483.5	-2,664.6	5,241.4	5,049.3	192.07	27.289		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	-149.07	-6,136.7	-3,677.1	7,154.1						
100.0	100.0	95.0	95.0	0.2	0.1	-149.07	-6,136.7	-3,677.1	7,154.1	7,153.8	0.29	N/A			
200.0	200.0	195.0	195.0	0.3	0.3	-149.07	-6,136.7	-3,677.1	7,154.1	7,153.4	0.64	N/A			
300.0	300.0	295.0	295.0	0.5	0.5	-149.07	-6,136.7	-3,677.1	7,154.1	7,153.1	0.99	7,229.116			
400.0	400.0	395.0	395.0	0.7	0.7	-149.07	-6,136.7	-3,677.1	7,154.1	7,152.7	1.34	5,344.104			
500.0	500.0	495.0	495.0	0.8	0.8	-149.07	-6,136.7	-3,677.1	7,154.1	7,152.4	1.69	4,238.820			
600.0	600.0	595.0	595.0	1.0	1.0	-149.07	-6,136.7	-3,677.1	7,154.1	7,152.0	2.04	3,512.379			
700.0	700.0	695.0	695.0	1.2	1.2	178.46	-6,136.7	-3,677.1	7,154.9	7,152.6	2.39	2,999.172			
800.0	800.0	795.0	795.0	1.4	1.4	178.46	-6,136.7	-3,677.1	7,157.6	7,154.8	2.73	2,618.103			
900.0	899.9	2,318.3	2,301.3	1.6	5.2	177.84	-6,041.5	-3,528.7	7,144.2	7,138.3	5.84	1,223.249			
988.4	988.1	2,405.5	2,386.3	1.7	5.5	177.77	-6,031.2	-3,512.5	7,132.0	7,125.8	6.19	1,151.734			
1,000.0	999.7	2,416.9	2,397.5	1.7	5.6	177.76	-6,029.8	-3,510.4	7,130.5	7,124.3	6.24	1,142.853			
1,100.0	1,099.4	2,515.6	2,493.7	1.9	6.0	177.68	-6,018.1	-3,492.1	7,117.5	7,110.9	6.64	1,071.571			
1,200.0	1,199.2	2,614.3	2,590.0	2.1	6.4	177.61	-6,006.4	-3,473.9	7,104.5	7,097.5	7.05	1,008.103			
1,300.0	1,299.0	2,713.0	2,686.3	2.3	6.8	177.53	-5,994.7	-3,455.6	7,091.6	7,084.1	7.45	951.262			
1,400.0	1,398.8	2,811.6	2,782.5	2.5	7.2	177.45	-5,983.0	-3,437.3	7,078.6	7,070.8	7.86	900.087			
1,500.0	1,498.5	2,910.3	2,878.8	2.7	7.6	177.37	-5,971.2	-3,419.1	7,065.7	7,057.4	8.28	853.788			
1,600.0	1,598.3	3,009.0	2,975.1	2.9	8.0	177.29	-5,959.5	-3,400.8	7,052.8	7,044.1	8.69	811.715			
1,700.0	1,698.1	3,107.7	3,071.3	3.2	8.4	177.21	-5,947.8	-3,382.5	7,039.9	7,030.8	9.10	773.326			
1,800.0	1,797.8	3,206.4	3,167.6	3.4	8.8	177.13	-5,936.1	-3,364.3	7,027.0	7,017.5	9.52	738.165			
1,900.0	1,897.6	3,305.0	3,263.9	3.6	9.2	177.05	-5,924.4	-3,346.0	7,014.1	7,004.2	9.94	705.849			
2,000.0	1,997.4	3,403.7	3,360.1	3.8	9.6	176.97	-5,912.7	-3,327.7	7,001.3	6,990.9	10.36	676.052			
2,100.0	2,097.1	3,502.4	3,456.4	4.0	10.0	176.89	-5,901.0	-3,309.5	6,988.4	6,977.6	10.78	648.494			
2,200.0	2,196.9	3,601.1	3,552.6	4.2	10.4	176.81	-5,889.2	-3,291.2	6,975.6	6,964.4	11.20	622.936			
2,300.0	2,296.7	3,699.8	3,648.9	4.4	10.8	176.72	-5,877.5	-3,272.9	6,962.7	6,951.1	11.62	599.171			
2,400.0	2,396.5	3,798.4	3,745.2	4.6	11.2	176.64	-5,865.8	-3,254.7	6,949.9	6,937.9	12.04	577.019			
2,500.0	2,496.2	3,897.1	3,841.4	4.8	11.6	176.56	-5,854.1	-3,236.4	6,937.1	6,924.7	12.47	556.323			
2,600.0	2,596.0	3,995.8	3,937.7	5.0	12.1	176.48	-5,842.4	-3,218.1	6,924.4	6,911.5	12.90	536.946			
2,700.0	2,695.8	4,094.5	4,034.0	5.2	12.5	176.39	-5,830.7	-3,199.9	6,911.6	6,898.3	13.32	518.768			
2,800.0	2,795.5	4,193.1	4,130.2	5.4	12.9	176.31	-5,818.9	-3,181.6	6,898.8	6,885.1	13.75	501.682			
2,900.0	2,895.3	4,291.8	4,226.5	5.6	13.3	176.23	-5,807.2	-3,163.3	6,886.1	6,871.9	14.18	485.592			
3,000.0	2,995.1	4,390.5	4,322.8	5.9	13.7	176.14	-5,795.5	-3,145.1	6,873.4	6,858.8	14.61	470.417			
3,100.0	3,094.9	4,489.2	4,419.0	6.1	14.1	176.06	-5,783.8	-3,126.8	6,860.7	6,845.6	15.04	456.079			
3,200.0	3,194.6	4,587.9	4,515.3	6.3	14.5	175.98	-5,772.1	-3,108.5	6,848.0	6,832.5	15.48	442.514			
3,300.0	3,294.4	4,686.5	4,611.6	6.5	15.0	175.89	-5,760.4	-3,090.3	6,835.3	6,819.4	15.91	429.660			
3,400.0	3,394.2	4,785.2	4,707.8	6.7	15.4	175.81	-5,748.7	-3,072.0	6,822.7	6,806.3	16.34	417.463			
3,500.0	3,493.9	4,883.9	4,804.1	6.9	15.8	175.72	-5,736.9	-3,053.7	6,810.0	6,793.2	16.78	405.876			
3,600.0	3,593.7	4,982.6	4,900.3	7.1	16.2	175.64	-5,725.2	-3,035.5	6,797.4	6,780.2	17.21	394.853			
3,700.0	3,693.5	5,081.3	4,996.6	7.3	16.6	175.55	-5,713.5	-3,017.2	6,784.8	6,767.1	17.65	384.354			
3,800.0	3,793.2	5,179.9	5,092.9	7.5	17.1	175.46	-5,701.8	-2,998.9	6,772.2	6,754.1	18.09	374.345			
3,900.0	3,893.0	5,278.6	5,189.1	7.7	17.5	175.38	-5,690.1	-2,980.7	6,759.6	6,741.0	18.53	364.791			
4,000.0	3,992.8	5,377.3	5,285.4	8.0	17.9	175.29	-5,678.4	-2,962.4	6,747.0	6,728.0	18.97	355.662			
4,100.0	4,092.6	5,476.0	5,381.7	8.2	18.3	175.20	-5,666.7	-2,944.1	6,734.4	6,715.0	19.41	346.931			
4,200.0	4,192.3	5,574.7	5,477.9	8.4	18.7	175.12	-5,654.9	-2,925.9	6,721.9	6,702.0	19.85	338.572			
4,300.0	4,292.1	5,673.3	5,574.2	8.6	19.1	175.03	-5,643.2	-2,907.6	6,709.4	6,689.1	20.30	330.563			
4,400.0	4,391.9	5,772.0	5,670.5	8.8	19.6	174.94	-5,631.5	-2,889.3	6,696.9	6,676.1	20.74	322.883			
4,500.0	4,491.6	5,870.7	5,766.7	9.0	20.0	174.85	-5,619.8	-2,871.1	6,684.4	6,663.2	21.19	315.510			
4,600.0	4,591.4	5,969.4	5,863.0	9.2	20.4	174.76	-5,608.1	-2,852.8	6,671.9	6,650.3	21.63	308.429			
4,700.0	4,691.2	6,068.1	5,959.2	9.4	20.8	174.67	-5,596.4	-2,834.5	6,659.4	6,637.4	22.08	301.621			
4,800.0	4,790.9	6,166.7	6,055.5	9.6	21.2	174.58	-5,584.7	-2,816.3	6,647.0	6,624.5	22.53	295.071			
4,900.0	4,890.7	6,265.4	6,151.8	9.8	21.7	174.49	-5,572.9	-2,798.0	6,634.6	6,611.6	22.98	288.766			
5,000.0	4,990.5	6,364.1	6,248.0	10.1	22.1	174.40	-5,561.2	-2,779.7	6,622.1	6,598.7	23.43	282.691			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,090.3	6,462.8	6,344.3	10.3	22.5	174.31	-5,549.5	-2,761.4	6,609.7	6,585.9	23.88	276.834		
5,200.0	5,190.0	6,561.5	6,440.6	10.5	22.9	174.22	-5,537.8	-2,743.2	6,597.4	6,573.0	24.33	271.185		
5,300.0	5,289.8	6,660.1	6,536.8	10.7	23.3	174.13	-5,526.1	-2,724.9	6,585.0	6,560.2	24.78	265.732		
5,400.0	5,389.6	6,700.0	6,575.7	10.9	23.5	174.09	-5,521.4	-2,717.5	6,572.9	6,547.9	25.07	262.206		
5,500.0	5,489.3	6,745.6	6,620.3	11.1	23.7	174.05	-5,516.2	-2,709.5	6,561.8	6,536.4	25.36	258.740		
5,600.0	5,589.1	6,800.0	6,673.7	11.3	23.9	174.01	-5,510.6	-2,700.8	6,551.7	6,526.1	25.68	255.179		
5,700.0	5,688.9	6,800.0	6,673.7	11.5	23.9	174.01	-5,510.6	-2,700.8	6,542.5	6,516.7	25.85	253.095		
5,800.0	5,788.7	6,845.8	6,718.8	11.7	24.0	173.98	-5,506.3	-2,694.1	6,534.4	6,508.3	26.13	250.050		
5,900.0	5,888.4	6,900.0	6,772.4	11.9	24.2	173.94	-5,501.7	-2,686.9	6,527.4	6,500.9	26.43	246.937		
6,000.0	5,988.2	6,900.0	6,772.4	12.2	24.2	173.94	-5,501.7	-2,686.9	6,521.2	6,494.6	26.61	245.081		
6,100.0	6,088.0	6,946.8	6,818.7	12.4	24.3	173.92	-5,498.2	-2,681.4	6,516.1	6,489.2	26.88	242.399		
6,200.0	6,187.7	7,000.0	6,871.5	12.6	24.4	173.89	-5,494.7	-2,676.0	6,512.1	6,485.0	27.17	239.701		
6,300.0	6,287.5	7,000.0	6,871.5	12.8	24.4	173.89	-5,494.7	-2,676.0	6,509.0	6,481.7	27.34	238.053		
6,400.0	6,387.3	7,048.2	6,919.4	13.0	24.5	173.87	-5,492.0	-2,671.7	6,507.0	6,479.3	27.61	235.696		
6,500.0	6,487.0	7,100.0	6,971.0	13.2	24.6	173.85	-5,489.5	-2,667.9	6,506.0	6,478.1	27.88	233.375		
6,551.0	6,537.9	7,100.0	6,971.0	13.3	24.6	173.85	-5,489.5	-2,667.9	6,505.8	6,477.8	27.97	232.623		
6,600.0	6,586.8	7,100.0	6,971.0	13.4	24.6	173.85	-5,489.5	-2,667.9	6,506.0	6,477.9	28.05	231.918		
6,700.0	6,686.6	7,149.9	7,020.8	13.6	24.7	173.84	-5,487.7	-2,665.0	6,507.0	6,478.6	28.31	229.854		
6,787.0	6,773.4	7,200.0	7,070.8	13.8	24.8	173.83	-5,486.2	-2,662.8	6,508.8	6,480.2	28.54	228.044		
6,800.0	6,786.4	7,200.0	7,070.8	13.8	24.8	163.30	-5,486.2	-2,662.8	6,508.9	6,480.4	28.56	227.890		
6,850.0	6,836.3	7,200.0	7,070.8	13.9	24.8	76.21	-5,486.2	-2,662.8	6,507.9	6,479.3	28.56	227.873		
6,900.0	6,886.2	7,200.0	7,070.8	14.0	24.8	46.48	-5,486.2	-2,662.8	6,504.1	6,475.7	28.43	228.781		
6,950.0	6,935.7	7,234.5	7,105.3	14.0	24.8	38.92	-5,485.5	-2,661.7	6,497.3	6,469.1	28.22	230.271		
7,000.0	6,984.6	7,251.0	7,121.8	14.0	24.9	35.87	-5,485.3	-2,661.3	6,487.8	6,460.0	27.86	232.884		
7,050.0	7,032.6	7,300.0	7,170.8	14.0	24.9	34.52	-5,484.8	-2,660.6	6,475.8	6,448.3	27.42	236.153		
7,100.0	7,079.7	7,300.0	7,170.8	13.9	24.9	33.92	-5,484.8	-2,660.6	6,460.5	6,433.7	26.83	240.801		
7,150.0	7,125.4	7,300.0	7,170.8	13.9	24.9	33.83	-5,484.8	-2,660.6	6,442.7	6,416.6	26.15	246.372		
7,200.0	7,169.6	7,313.8	7,184.6	13.8	24.9	34.14	-5,484.8	-2,660.5	6,422.4	6,397.0	25.42	252.670		
7,250.0	7,212.1	7,336.3	7,207.1	13.8	24.9	34.81	-5,484.8	-2,660.5	6,399.6	6,374.9	24.65	259.570		
7,300.0	7,252.6	7,376.8	7,247.6	13.7	25.0	35.84	-5,484.8	-2,660.5	6,374.2	6,350.3	23.91	266.611		
7,350.0	7,291.0	7,415.2	7,286.0	13.7	25.0	37.20	-5,484.8	-2,660.5	6,346.4	6,323.2	23.21	273.415		
7,400.0	7,327.1	7,451.3	7,322.1	13.7	25.0	38.89	-5,484.8	-2,660.5	6,316.3	6,293.6	22.63	279.091		
7,450.0	7,360.7	7,484.9	7,355.7	13.7	25.1	40.94	-5,484.8	-2,660.5	6,284.0	6,261.7	22.25	282.428		
7,500.0	7,391.6	7,515.8	7,386.6	13.7	25.1	43.40	-5,484.8	-2,660.5	6,249.7	6,227.5	22.16	282.073		
7,550.0	7,419.7	7,543.9	7,414.7	13.8	25.1	46.31	-5,484.8	-2,660.5	6,213.6	6,191.1	22.43	277.003		
7,600.0	7,444.8	7,569.1	7,439.8	13.9	25.1	49.72	-5,484.8	-2,660.5	6,175.9	6,152.7	23.12	267.085		
7,650.0	7,466.9	7,591.1	7,461.9	14.1	25.2	53.70	-5,484.8	-2,660.5	6,136.7	6,112.5	24.23	253.299		
7,700.0	7,485.8	7,610.0	7,480.8	14.3	25.2	58.29	-5,484.8	-2,660.5	6,096.3	6,070.6	25.68	237.390		
7,750.0	7,501.5	7,625.7	7,496.5	14.6	25.2	63.51	-5,484.8	-2,660.5	6,054.9	6,027.5	27.37	221.241		
7,800.0	7,513.7	7,638.0	7,508.8	14.9	25.2	69.36	-5,484.8	-2,660.5	6,012.6	5,983.5	29.13	206.407		
7,850.0	7,522.6	7,646.8	7,517.6	15.2	25.2	75.76	-5,484.8	-2,660.5	5,969.7	5,939.0	30.78	193.942		
7,900.0	7,528.0	7,652.3	7,523.1	15.6	25.2	82.57	-5,484.8	-2,660.5	5,926.5	5,894.3	32.14	184.418		
7,952.9	7,530.0	7,654.2	7,525.0	16.1	25.2	90.00	-5,484.8	-2,660.5	5,880.5	5,847.4	33.09	177.719		
8,000.0	7,530.0	7,654.2	7,525.0	16.5	25.2	90.00	-5,484.8	-2,660.5	5,839.6	5,806.1	33.54	174.089		
8,100.0	7,530.0	7,654.2	7,525.0	17.5	25.2	90.00	-5,484.8	-2,660.5	5,753.1	5,718.5	34.60	166.256		
8,200.0	7,530.0	7,654.2	7,525.0	18.7	25.2	90.00	-5,484.8	-2,660.5	5,667.0	5,631.2	35.77	158.421		
8,300.0	7,530.0	7,654.2	7,525.0	19.9	25.2	90.00	-5,484.8	-2,660.5	5,581.4	5,544.4	37.03	150.734		
8,400.0	7,530.0	7,654.2	7,525.0	21.2	25.2	90.00	-5,484.8	-2,660.5	5,496.3	5,457.9	38.36	143.293		
8,500.0	7,530.0	7,654.2	7,525.0	22.6	25.2	90.00	-5,484.8	-2,660.5	5,411.6	5,371.9	39.74	136.160		
8,600.0	7,530.0	7,654.2	7,525.0	24.0	25.2	90.00	-5,484.8	-2,660.5	5,327.6	5,286.4	41.18	129.367		
8,700.0	7,530.0	7,654.2	7,525.0	25.4	25.2	90.00	-5,484.8	-2,660.5	5,244.0	5,201.4	42.66	122.929		
8,800.0	7,530.0	7,654.2	7,525.0	26.9	25.2	90.00	-5,484.8	-2,660.5	5,161.1	5,116.9	44.17	116.846		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,900.0	7,530.0	7,654.2	7,525.0	28.4	25.2	90.00	-5,484.8	-2,660.5	5,078.8	5,033.1	45.71	111.110		
9,000.0	7,530.0	7,654.2	7,525.0	30.0	25.2	90.00	-5,484.8	-2,660.5	4,997.1	4,949.8	47.27	105.709		
9,100.0	7,530.0	7,654.2	7,525.0	31.5	25.2	90.00	-5,484.8	-2,660.5	4,916.1	4,867.2	48.86	100.625		
9,200.0	7,530.0	7,654.2	7,525.0	33.1	25.2	90.00	-5,484.8	-2,660.5	4,835.8	4,785.3	50.46	95.841		
9,300.0	7,530.0	7,654.2	7,525.0	34.7	25.2	90.00	-5,484.8	-2,660.5	4,756.2	4,704.2	52.07	91.340		
9,400.0	7,530.0	7,654.2	7,525.0	36.3	25.2	90.00	-5,484.8	-2,660.5	4,677.5	4,623.8	53.70	87.103		
9,500.0	7,530.0	7,654.2	7,525.0	38.0	25.2	90.00	-5,484.8	-2,660.5	4,599.5	4,544.2	55.34	83.114		
9,600.0	7,530.0	7,654.2	7,525.0	39.6	25.2	90.00	-5,484.8	-2,660.5	4,522.5	4,465.5	56.99	79.355		
9,700.0	7,530.0	7,654.2	7,525.0	41.3	25.2	90.00	-5,484.8	-2,660.5	4,446.3	4,387.6	58.65	75.813		
9,800.0	7,530.0	7,654.2	7,525.0	42.9	25.2	90.00	-5,484.8	-2,660.5	4,371.1	4,310.8	60.31	72.472		
9,900.0	7,530.0	7,654.2	7,525.0	44.6	25.2	90.00	-5,484.8	-2,660.5	4,296.9	4,234.9	61.99	69.320		
10,000.0	7,530.0	7,654.2	7,525.0	46.3	25.2	90.00	-5,484.8	-2,660.5	4,223.8	4,160.1	63.67	66.343		
10,100.0	7,530.0	7,654.2	7,525.0	47.9	25.2	90.00	-5,484.8	-2,660.5	4,151.8	4,086.4	65.35	63.532		
10,200.0	7,530.0	7,654.2	7,525.0	49.6	25.2	90.00	-5,484.8	-2,660.5	4,081.0	4,013.9	67.04	60.875		
10,300.0	7,530.0	7,654.2	7,525.0	51.3	25.2	90.00	-5,484.8	-2,660.5	4,011.4	3,942.7	68.73	58.363		
10,400.0	7,530.0	7,654.2	7,525.0	53.0	25.2	90.00	-5,484.8	-2,660.5	3,943.1	3,872.7	70.43	55.987		
10,500.0	7,530.0	7,654.2	7,525.0	54.7	25.2	90.00	-5,484.8	-2,660.5	3,876.2	3,804.1	72.13	53.739		
10,600.0	7,530.0	7,654.2	7,525.0	56.4	25.2	90.00	-5,484.8	-2,660.5	3,810.8	3,737.0	73.84	51.612		
10,700.0	7,530.0	7,654.2	7,525.0	58.1	25.2	90.00	-5,484.8	-2,660.5	3,746.9	3,671.4	75.54	49.600		
10,800.0	7,530.0	7,654.2	7,525.0	59.8	25.2	90.00	-5,484.8	-2,660.5	3,684.6	3,607.3	77.25	47.696		
10,900.0	7,530.0	7,654.2	7,525.0	61.5	25.2	90.00	-5,484.8	-2,660.5	3,624.0	3,545.0	78.96	45.894		
11,000.0	7,530.0	7,654.2	7,525.0	63.2	25.2	90.00	-5,484.8	-2,660.5	3,565.1	3,484.4	80.68	44.189		
11,100.0	7,530.0	7,654.2	7,525.0	64.9	25.2	90.00	-5,484.8	-2,660.5	3,508.1	3,425.7	82.40	42.577		
11,200.0	7,530.0	7,654.2	7,525.0	66.6	25.2	90.00	-5,484.8	-2,660.5	3,453.1	3,369.0	84.11	41.052		
11,300.0	7,530.0	7,654.2	7,525.0	68.4	25.2	90.00	-5,484.8	-2,660.5	3,400.1	3,314.3	85.84	39.612		
11,400.0	7,530.0	7,654.2	7,525.0	70.1	25.2	90.00	-5,484.8	-2,660.5	3,349.3	3,261.8	87.56	38.253		
11,500.0	7,530.0	7,654.2	7,525.0	71.8	25.2	90.00	-5,484.8	-2,660.5	3,300.8	3,211.5	89.28	36.970		
11,600.0	7,530.0	7,654.2	7,525.0	73.5	25.2	90.00	-5,484.8	-2,660.5	3,254.5	3,163.5	91.01	35.761		
11,700.0	7,530.0	7,654.2	7,525.0	75.2	25.2	90.00	-5,484.8	-2,660.5	3,210.7	3,118.0	92.73	34.624		
11,800.0	7,530.0	7,654.2	7,525.0	77.0	25.2	90.00	-5,484.8	-2,660.5	3,169.5	3,075.1	94.46	33.554		
11,900.0	7,530.0	7,654.2	7,525.0	78.7	25.2	90.00	-5,484.8	-2,660.5	3,130.9	3,034.8	96.19	32.550		
12,000.0	7,530.0	7,654.2	7,525.0	80.4	25.2	90.00	-5,484.8	-2,660.5	3,095.1	2,997.2	97.92	31.609		
12,100.0	7,530.0	7,654.2	7,525.0	82.2	25.2	90.00	-5,484.8	-2,660.5	3,062.1	2,962.5	99.65	30.729		
12,200.0	7,530.0	7,654.2	7,525.0	83.9	25.2	90.00	-5,484.8	-2,660.5	3,032.1	2,930.7	101.38	29.908		
12,300.0	7,530.0	7,654.2	7,525.0	85.6	25.2	90.00	-5,484.8	-2,660.5	3,005.1	2,902.0	103.12	29.143		
12,400.0	7,530.0	7,654.2	7,525.0	87.3	25.2	90.00	-5,484.8	-2,660.5	2,981.2	2,876.4	104.85	28.433		
12,500.0	7,530.0	7,654.2	7,525.0	89.1	25.2	90.00	-5,484.8	-2,660.5	2,960.5	2,853.9	106.58	27.776		
12,600.0	7,530.0	7,654.2	7,525.0	90.8	25.2	90.00	-5,484.8	-2,660.5	2,943.1	2,834.7	108.32	27.170		
12,700.0	7,530.0	7,654.2	7,525.0	92.5	25.2	90.00	-5,484.8	-2,660.5	2,928.9	2,818.9	110.06	26.613		
12,800.0	7,530.0	7,654.2	7,525.0	94.3	25.2	90.00	-5,484.8	-2,660.5	2,918.1	2,806.3	111.79	26.103		
12,900.0	7,530.0	7,654.2	7,525.0	96.0	25.2	90.00	-5,484.8	-2,660.5	2,910.8	2,797.2	113.53	25.639		
13,000.0	7,530.0	7,654.2	7,525.0	97.8	25.2	90.00	-5,484.8	-2,660.5	2,906.8	2,791.5	115.27	25.218		
13,065.2	7,530.0	7,654.2	7,525.0	98.9	25.2	90.00	-5,484.8	-2,660.5	2,906.1	2,789.7	116.40	24.966 CC		
13,100.0	7,530.0	7,654.2	7,525.0	99.5	25.2	90.00	-5,484.8	-2,660.5	2,906.3	2,789.3	117.01	24.839 ES		
13,200.0	7,530.0	7,654.2	7,525.0	101.2	25.2	90.00	-5,484.8	-2,660.5	2,909.2	2,790.4	118.74	24.500		
13,300.0	7,530.0	7,654.2	7,525.0	103.0	25.2	90.00	-5,484.8	-2,660.5	2,915.5	2,795.1	120.48	24.199		
13,400.0	7,530.0	7,654.2	7,525.0	104.7	25.2	90.00	-5,484.8	-2,660.5	2,925.3	2,803.1	122.22	23.934		
13,500.0	7,530.0	7,654.2	7,525.0	106.4	25.2	90.00	-5,484.8	-2,660.5	2,938.4	2,814.5	123.96	23.704		
13,600.0	7,530.0	7,654.2	7,525.0	108.2	25.2	90.00	-5,484.8	-2,660.5	2,954.9	2,829.2	125.71	23.506		
13,700.0	7,530.0	7,654.2	7,525.0	109.9	25.2	90.00	-5,484.8	-2,660.5	2,974.6	2,847.1	127.45	23.340		
13,800.0	7,530.0	7,654.2	7,525.0	111.7	25.2	90.00	-5,484.8	-2,660.5	2,997.5	2,868.3	129.19	23.203		
13,900.0	7,530.0	7,654.2	7,525.0	113.4	25.2	90.00	-5,484.8	-2,660.5	3,023.6	2,892.7	130.93	23.093		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,000.0	7,530.0	7,654.2	7,525.0	115.1	25.2	90.00	-5,484.8	-2,660.5	3,052.7	2,920.1	132.67	23.009			
14,100.0	7,530.0	7,654.2	7,525.0	116.9	25.2	90.00	-5,484.8	-2,660.5	3,084.8	2,950.4	134.42	22.950			
14,200.0	7,530.0	7,654.2	7,525.0	118.6	25.2	90.00	-5,484.8	-2,660.5	3,119.8	2,983.6	136.16	22.913			
14,300.0	7,530.0	7,654.2	7,525.0	120.4	25.2	90.00	-5,484.8	-2,660.5	3,157.5	3,019.6	137.90	22.897 SF			
14,400.0	7,530.0	7,654.2	7,525.0	122.1	25.2	90.00	-5,484.8	-2,660.5	3,198.0	3,058.3	139.65	22.900			
14,500.0	7,530.0	7,654.2	7,525.0	123.9	25.2	90.00	-5,484.8	-2,660.5	3,241.0	3,099.6	141.39	22.922			
14,600.0	7,530.0	7,654.2	7,525.0	125.6	25.2	90.00	-5,484.8	-2,660.5	3,286.5	3,143.3	143.13	22.961			
14,700.0	7,530.0	7,654.2	7,525.0	127.3	25.2	90.00	-5,484.8	-2,660.5	3,334.3	3,189.5	144.88	23.015			
14,800.0	7,530.0	7,654.2	7,525.0	129.1	25.2	90.00	-5,484.8	-2,660.5	3,384.5	3,237.9	146.62	23.083			
14,900.0	7,530.0	7,654.2	7,525.0	130.8	25.2	90.00	-5,484.8	-2,660.5	3,436.8	3,288.5	148.37	23.164			
15,000.0	7,530.0	7,654.2	7,525.0	132.6	25.2	90.00	-5,484.8	-2,660.5	3,491.2	3,341.1	150.11	23.257			
15,100.0	7,530.0	7,654.2	7,525.0	134.3	25.2	90.00	-5,484.8	-2,660.5	3,547.6	3,395.8	151.86	23.361			
15,200.0	7,530.0	7,654.2	7,525.0	136.1	25.2	90.00	-5,484.8	-2,660.5	3,605.9	3,452.3	153.61	23.475			
15,300.0	7,530.0	7,654.2	7,525.0	137.8	25.2	90.00	-5,484.8	-2,660.5	3,666.0	3,510.7	155.35	23.598			
15,400.0	7,530.0	7,654.2	7,525.0	139.6	25.2	90.00	-5,484.8	-2,660.5	3,727.8	3,570.7	157.10	23.729			
15,500.0	7,530.0	7,654.2	7,525.0	141.3	25.2	90.00	-5,484.8	-2,660.5	3,791.3	3,632.4	158.84	23.868			
15,600.0	7,530.0	7,654.2	7,525.0	143.0	25.2	90.00	-5,484.8	-2,660.5	3,856.2	3,695.6	160.59	24.013			
15,700.0	7,530.0	7,654.2	7,525.0	144.8	25.2	90.00	-5,484.8	-2,660.5	3,922.7	3,760.4	162.34	24.164			
15,800.0	7,530.0	7,654.2	7,525.0	146.5	25.2	90.00	-5,484.8	-2,660.5	3,990.6	3,826.5	164.08	24.320			
15,900.0	7,530.0	7,654.2	7,525.0	148.3	25.2	90.00	-5,484.8	-2,660.5	4,059.7	3,893.9	165.83	24.481			
16,000.0	7,530.0	7,654.2	7,525.0	150.0	25.2	90.00	-5,484.8	-2,660.5	4,130.2	3,962.6	167.58	24.646			
16,100.0	7,530.0	7,654.2	7,525.0	151.8	25.2	90.00	-5,484.8	-2,660.5	4,201.8	4,032.5	169.33	24.815			
16,200.0	7,530.0	7,654.2	7,525.0	153.5	25.2	90.00	-5,484.8	-2,660.5	4,274.6	4,103.5	171.07	24.987			
16,300.0	7,530.0	7,654.2	7,525.0	155.3	25.2	90.00	-5,484.8	-2,660.5	4,348.5	4,175.7	172.82	25.162			
16,400.0	7,530.0	7,654.2	7,525.0	157.0	25.2	90.00	-5,484.8	-2,660.5	4,423.4	4,248.8	174.57	25.339			
16,500.0	7,530.0	7,654.2	7,525.0	158.8	25.2	90.00	-5,484.8	-2,660.5	4,499.3	4,322.9	176.32	25.518			
16,600.0	7,530.0	7,654.2	7,525.0	160.5	25.2	90.00	-5,484.8	-2,660.5	4,576.1	4,398.0	178.07	25.699			
16,700.0	7,530.0	7,654.2	7,525.0	162.3	25.2	90.00	-5,484.8	-2,660.5	4,653.7	4,473.9	179.81	25.881			
16,800.0	7,530.0	7,654.2	7,525.0	164.0	25.2	90.00	-5,484.8	-2,660.5	4,732.3	4,550.7	181.56	26.064			
16,900.0	7,530.0	7,654.2	7,525.0	165.8	25.2	90.00	-5,484.8	-2,660.5	4,811.6	4,628.3	183.31	26.248			
17,000.0	7,530.0	7,654.2	7,525.0	167.5	25.2	90.00	-5,484.8	-2,660.5	4,891.6	4,706.6	185.06	26.433			
17,100.0	7,530.0	7,654.2	7,525.0	169.3	25.2	90.00	-5,484.8	-2,660.5	4,972.4	4,785.6	186.81	26.618			
17,200.0	7,530.0	7,654.2	7,525.0	171.0	25.2	90.00	-5,484.8	-2,660.5	5,053.9	4,865.4	188.56	26.803			
17,300.0	7,530.0	7,654.2	7,525.0	172.8	25.2	90.00	-5,484.8	-2,660.5	5,136.1	4,945.7	190.31	26.988			
17,400.0	7,530.0	7,654.2	7,525.0	174.5	25.2	90.00	-5,484.8	-2,660.5	5,218.8	5,026.8	192.05	27.174			
17,420.9	7,530.0	7,654.2	7,525.0	174.9	25.2	90.00	-5,484.8	-2,660.5	5,236.2	5,043.8	192.42	27.212			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD														Offset Site Error:	0.0 ft
Survey Program: 41-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	-149.28	-6,136.7	-3,646.3	7,138.3						
100.0	100.0	106.4	106.4	0.2	0.2	-149.28	-6,136.6	-3,646.2	7,138.1	7,137.8	0.31	N/A			
123.0	123.0	118.0	118.0	0.2	0.2	-149.28	-6,136.6	-3,646.1	7,138.1	7,137.7	0.37	N/A			
200.0	200.0	178.0	178.0	0.3	0.3	-149.29	-6,137.1	-3,645.5	7,138.2	7,137.6	0.61	N/A			
300.0	300.0	233.0	233.0	0.5	0.4	-149.30	-6,138.3	-3,644.1	7,138.8	7,137.9	0.89	8,045.340			
400.0	400.0	298.8	298.7	0.7	0.5	-149.33	-6,140.8	-3,641.3	7,139.9	7,138.7	1.19	6,015.450			
500.0	500.0	362.0	361.6	0.8	0.7	-149.37	-6,144.2	-3,637.5	7,141.5	7,140.0	1.49	4,802.492			
600.0	600.0	412.8	412.2	1.0	0.8	-149.41	-6,147.8	-3,633.8	7,143.7	7,141.9	1.77	4,030.768			
700.0	700.0	454.0	453.1	1.2	0.9	178.07	-6,151.2	-3,630.2	7,147.5	7,145.4	2.09	3,412.447			
800.0	800.0	519.0	517.4	1.4	1.1	178.00	-6,157.5	-3,623.9	7,153.7	7,151.2	2.46	2,908.306			
900.0	899.9	588.1	585.7	1.6	1.3	177.91	-6,165.5	-3,616.0	7,162.2	7,159.3	2.86	2,503.221			
988.4	988.1	662.6	658.8	1.7	1.6	177.80	-6,175.2	-3,605.8	7,171.4	7,168.1	3.28	2,183.728			
1,000.0	999.7	673.3	669.2	1.7	1.7	177.78	-6,176.7	-3,604.2	7,172.7	7,169.3	3.35	2,143.788			
1,100.0	1,099.4	772.6	766.3	1.9	2.0	177.62	-6,190.9	-3,588.6	7,184.0	7,180.1	3.90	1,842.610			
1,200.0	1,199.2	853.0	845.1	2.1	2.3	177.49	-6,202.0	-3,576.7	7,195.4	7,191.0	4.37	1,645.676			
1,300.0	1,299.0	940.0	930.2	2.3	2.7	177.36	-6,214.3	-3,563.9	7,207.2	7,202.3	4.89	1,475.096			
1,400.0	1,398.8	1,004.0	992.6	2.5	3.0	177.25	-6,224.2	-3,553.4	7,219.3	7,213.9	5.33	1,353.722			
1,500.0	1,498.5	1,056.2	1,043.2	2.7	3.2	177.15	-6,232.9	-3,544.3	7,232.0	7,226.2	5.74	1,259.484			
1,600.0	1,598.3	1,161.3	1,144.9	2.9	3.7	176.95	-6,251.2	-3,524.9	7,245.0	7,238.6	6.40	1,131.864			
1,700.0	1,698.1	1,236.1	1,217.2	3.2	4.1	176.80	-6,264.4	-3,510.9	7,258.1	7,251.1	6.92	1,048.637			
1,800.0	1,797.8	1,441.4	1,416.1	3.4	5.0	176.41	-6,298.5	-3,473.5	7,270.6	7,262.5	8.02	906.991			
1,900.0	1,897.6	1,513.0	1,485.6	3.6	5.4	176.28	-6,310.0	-3,460.5	7,282.7	7,274.2	8.51	855.843			
2,000.0	1,997.4	1,577.0	1,547.7	3.8	5.6	176.17	-6,320.4	-3,449.1	7,295.3	7,286.3	8.97	813.636			
2,100.0	2,097.1	1,657.7	1,626.0	4.0	6.0	176.02	-6,333.8	-3,434.7	7,308.3	7,298.8	9.50	768.950			
2,200.0	2,196.9	1,767.1	1,731.9	4.2	6.5	175.81	-6,352.3	-3,414.5	7,321.2	7,311.1	10.18	718.940			
2,300.0	2,296.7	1,925.0	1,884.6	4.4	7.3	175.51	-6,378.9	-3,384.7	7,334.3	7,323.2	11.09	661.502			
2,400.0	2,396.5	1,991.3	1,948.8	4.6	7.6	175.39	-6,389.8	-3,372.1	7,346.7	7,335.2	11.57	635.252			
2,500.0	2,496.2	2,071.8	2,026.7	4.8	8.0	175.24	-6,403.2	-3,357.1	7,359.7	7,347.6	12.10	608.014			
2,600.0	2,596.0	2,147.2	2,099.8	5.0	8.4	175.10	-6,415.7	-3,343.3	7,372.8	7,360.2	12.62	584.117			
2,700.0	2,695.8	2,213.0	2,163.5	5.2	8.7	174.98	-6,427.1	-3,331.2	7,386.6	7,373.5	13.10	563.868			
2,800.0	2,795.5	2,403.0	2,347.8	5.4	9.5	174.64	-6,458.8	-3,297.4	7,400.3	7,386.2	14.11	524.540			
2,900.0	2,895.3	2,471.9	2,414.6	5.6	9.9	174.51	-6,469.9	-3,284.5	7,413.2	7,398.5	14.60	507.593			
3,000.0	2,995.1	2,529.5	2,470.2	5.9	10.2	174.40	-6,479.7	-3,273.6	7,426.6	7,411.5	15.04	493.758			
3,100.0	3,094.9	2,625.0	2,562.8	6.1	10.6	174.23	-6,495.8	-3,256.5	7,440.5	7,424.8	15.63	475.902			
3,200.0	3,194.6	2,702.1	2,637.7	6.3	10.9	174.10	-6,508.6	-3,243.2	7,454.4	7,438.3	16.14	461.816			
3,300.0	3,294.4	2,880.0	2,810.3	6.5	11.8	173.79	-6,537.7	-3,212.0	7,468.3	7,451.2	17.10	436.856			
3,400.0	3,394.2	2,933.7	2,862.4	6.7	12.0	173.70	-6,546.4	-3,202.1	7,481.6	7,464.1	17.51	427.177			
3,500.0	3,493.9	2,975.0	2,902.4	6.9	12.2	173.62	-6,553.5	-3,194.5	7,495.7	7,477.8	17.88	419.316			
3,600.0	3,593.7	3,022.0	2,947.8	7.1	12.5	173.54	-6,561.9	-3,185.9	7,510.6	7,492.3	18.27	411.180			
3,700.0	3,693.5	3,074.6	2,998.6	7.3	12.7	173.44	-6,571.6	-3,176.3	7,526.2	7,507.5	18.68	402.883			
3,800.0	3,793.2	3,192.8	3,112.9	7.5	13.3	173.23	-6,593.1	-3,155.1	7,541.6	7,522.2	19.39	388.936			
3,900.0	3,893.0	3,498.3	3,408.3	7.7	14.8	172.68	-6,645.5	-3,098.0	7,556.0	7,535.1	20.95	360.718			
4,000.0	3,992.8	3,558.6	3,466.7	8.0	15.0	172.57	-6,655.2	-3,086.4	7,569.3	7,547.9	21.40	353.773			
4,100.0	4,092.6	3,643.0	3,548.4	8.2	15.5	172.42	-6,669.1	-3,070.2	7,583.0	7,561.0	21.95	345.390			
4,200.0	4,192.3	3,706.0	3,609.4	8.4	15.8	172.31	-6,679.6	-3,058.4	7,597.0	7,574.6	22.41	339.040			
4,300.0	4,292.1	3,788.5	3,689.4	8.6	16.1	172.17	-6,693.2	-3,043.5	7,611.4	7,588.5	22.94	331.789			
4,400.0	4,391.9	3,873.7	3,772.0	8.8	16.5	172.02	-6,707.4	-3,028.3	7,626.1	7,602.6	23.48	324.773			
4,500.0	4,491.6	4,041.9	3,935.4	9.0	17.3	171.75	-6,734.6	-2,998.7	7,640.3	7,615.9	24.37	313.452			
4,600.0	4,591.4	4,131.4	4,022.3	9.2	17.7	171.60	-6,748.8	-2,982.8	7,654.4	7,629.5	24.92	307.108			
4,700.0	4,691.2	4,213.0	4,101.7	9.4	18.1	171.47	-6,761.5	-2,968.9	7,668.5	7,643.0	25.44	301.479			
4,800.0	4,790.9	4,263.0	4,150.3	9.6	18.3	171.39	-6,769.4	-2,960.6	7,683.1	7,657.3	25.81	297.685			
4,900.0	4,890.7	4,323.5	4,209.2	9.8	18.5	171.30	-6,779.3	-2,951.0	7,698.3	7,672.1	26.22	293.589			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,990.5	4,623.5	4,503.3	10.1	19.7	170.91	-6,820.7	-2,908.6	7,711.3	7,683.9	27.44	281.003		
5,100.0	5,090.3	4,720.0	4,598.1	10.3	20.0	170.79	-6,832.7	-2,895.4	7,724.1	7,696.1	27.95	276.305		
5,200.0	5,190.0	4,786.0	4,662.9	10.5	20.3	170.71	-6,841.2	-2,886.1	7,737.1	7,708.8	28.36	272.806		
5,300.0	5,289.8	4,854.1	4,729.7	10.7	20.6	170.62	-6,850.3	-2,876.8	7,750.7	7,722.0	28.77	269.416		
5,400.0	5,389.6	5,150.7	5,022.3	10.9	21.5	170.31	-6,884.3	-2,842.0	7,763.7	7,733.9	29.84	260.197		
5,500.0	5,489.3	5,236.8	5,107.3	11.1	21.8	170.22	-6,893.0	-2,831.7	7,775.1	7,744.8	30.28	256.779		
5,600.0	5,589.1	5,327.9	5,197.2	11.3	22.1	170.12	-6,902.5	-2,820.5	7,786.7	7,756.0	30.73	253.358		
5,700.0	5,688.9	5,503.4	5,370.9	11.5	22.6	169.96	-6,918.8	-2,801.4	7,797.7	7,766.3	31.38	248.488		
5,800.0	5,788.7	5,622.1	5,488.7	11.7	22.9	169.87	-6,928.2	-2,790.8	7,808.3	7,776.5	31.84	245.237		
5,900.0	5,888.4	5,696.9	5,563.1	11.9	23.1	169.82	-6,933.9	-2,784.5	7,818.9	7,786.7	32.20	242.857		
6,000.0	5,988.2	5,765.0	5,630.7	12.2	23.3	169.77	-6,939.4	-2,778.7	7,829.8	7,797.3	32.53	240.671		
6,100.0	6,088.0	5,965.3	5,830.0	12.4	23.7	169.65	-6,953.6	-2,764.2	7,840.3	7,807.2	33.12	236.704		
6,200.0	6,187.7	6,202.8	6,067.0	12.6	24.1	169.58	-6,963.2	-2,754.4	7,848.9	7,815.3	33.64	233.287		
6,300.0	6,287.5	6,286.5	6,150.7	12.8	24.2	169.58	-6,964.9	-2,753.6	7,857.1	7,823.2	33.89	231.817		
6,400.0	6,387.3	6,519.7	6,384.0	13.0	24.3	169.61	-6,965.6	-2,755.3	7,864.0	7,829.7	34.24	229.653		
6,500.0	6,487.0	6,622.1	6,486.3	13.2	24.4	169.62	-6,965.2	-2,755.9	7,870.5	7,836.0	34.50	228.115		
6,600.0	6,586.8	6,694.0	6,558.2	13.4	24.5	169.63	-6,965.3	-2,756.1	7,877.3	7,842.6	34.74	226.744		
6,700.0	6,686.6	6,836.8	6,701.0	13.6	24.6	169.64	-6,965.3	-2,755.8	7,883.9	7,848.8	35.05	224.929		
6,787.0	6,773.4	6,925.7	6,790.0	13.8	24.7	169.65	-6,965.2	-2,755.4	7,889.5	7,854.2	35.29	223.559		
6,800.0	6,786.4	6,939.4	6,803.6	13.8	24.7	159.10	-6,965.2	-2,755.3	7,890.2	7,854.8	35.35	223.192		
6,850.0	6,836.3	6,980.0	6,844.2	13.9	24.7	71.95	-6,965.2	-2,755.0	7,890.9	7,855.4	35.51	222.197		
6,900.0	6,886.2	7,022.4	6,886.6	14.0	24.8	42.18	-6,965.3	-2,754.7	7,888.5	7,852.9	35.58	221.707		
6,950.0	6,935.7	7,056.8	6,921.0	14.0	24.8	34.55	-6,965.4	-2,754.4	7,882.9	7,847.4	35.54	221.807		
7,000.0	6,984.6	7,102.2	6,966.4	14.0	24.9	31.44	-6,965.7	-2,754.0	7,874.3	7,838.8	35.41	222.353		
7,050.0	7,032.6	7,159.9	7,024.1	14.0	24.9	29.97	-6,965.9	-2,753.4	7,862.4	7,827.2	35.21	223.312		
7,100.0	7,079.7	7,200.2	7,064.4	13.9	25.0	29.32	-6,966.1	-2,753.1	7,847.4	7,812.5	34.90	224.877		
7,150.0	7,125.4	7,235.5	7,099.7	13.9	25.0	29.18	-6,966.3	-2,752.9	7,829.5	7,795.0	34.50	226.929		
7,200.0	7,169.6	7,266.0	7,130.2	13.8	25.0	29.41	-6,966.4	-2,752.8	7,808.8	7,774.7	34.04	229.426		
7,250.0	7,212.1	7,304.9	7,169.1	13.8	25.1	29.97	-6,966.7	-2,752.6	7,785.2	7,751.7	33.53	232.181		
7,300.0	7,252.6	7,338.4	7,202.6	13.7	25.1	30.82	-6,967.0	-2,752.4	7,759.1	7,726.1	32.99	235.230		
7,350.0	7,291.0	7,374.3	7,238.5	13.7	25.1	31.97	-6,967.3	-2,752.2	7,730.3	7,697.9	32.43	238.371		
7,400.0	7,327.1	7,417.2	7,281.4	13.7	25.2	33.48	-6,967.7	-2,751.8	7,699.2	7,667.3	31.90	241.362		
7,450.0	7,360.7	7,457.1	7,321.3	13.7	25.2	35.35	-6,968.0	-2,751.5	7,665.7	7,634.3	31.41	244.038		
7,500.0	7,391.6	7,493.9	7,358.1	13.7	25.3	37.64	-6,968.3	-2,751.2	7,630.2	7,599.1	31.01	246.078		
7,550.0	7,419.7	7,527.3	7,391.5	13.8	25.3	40.41	-6,968.6	-2,751.0	7,592.7	7,561.9	30.73	247.095		
7,600.0	7,444.8	7,557.2	7,421.4	13.9	25.3	43.76	-6,968.8	-2,750.7	7,553.4	7,522.8	30.62	246.674		
7,650.0	7,466.9	7,583.5	7,447.7	14.1	25.3	47.78	-6,968.9	-2,750.5	7,512.6	7,481.9	30.73	244.445		
7,700.0	7,485.8	7,606.0	7,470.1	14.3	25.4	52.57	-6,969.1	-2,750.3	7,470.5	7,439.4	31.10	240.210		
7,750.0	7,501.5	7,624.6	7,488.8	14.6	25.4	58.25	-6,969.2	-2,750.1	7,427.3	7,395.6	31.73	234.081		
7,800.0	7,513.7	7,639.3	7,503.4	14.9	25.4	64.88	-6,969.2	-2,750.0	7,383.2	7,350.6	32.58	226.585		
7,850.0	7,522.6	7,649.9	7,514.1	15.2	25.4	72.42	-6,969.3	-2,749.9	7,338.4	7,304.8	33.56	218.639		
7,900.0	7,528.0	7,656.5	7,520.7	15.6	25.4	80.72	-6,969.3	-2,749.8	7,293.1	7,258.6	34.51	211.334		
7,952.9	7,530.0	7,659.1	7,523.3	16.1	25.4	89.97	-6,969.3	-2,749.8	7,244.9	7,209.7	35.29	205.301		
8,000.0	7,530.0	7,659.3	7,523.5	16.5	25.4	89.97	-6,969.3	-2,749.8	7,202.1	7,166.4	35.74	201.487		
8,100.0	7,530.0	7,659.9	7,524.0	17.5	25.4	89.98	-6,969.3	-2,749.8	7,111.3	7,074.5	36.81	193.212		
8,200.0	7,530.0	7,660.4	7,524.5	18.7	25.4	89.99	-6,969.3	-2,749.8	7,020.7	6,982.8	37.97	184.880		
8,300.0	7,530.0	7,660.9	7,525.1	19.9	25.4	90.00	-6,969.3	-2,749.8	6,930.4	6,891.2	39.23	176.654		
8,400.0	7,530.0	7,661.4	7,525.6	21.2	25.4	90.01	-6,969.3	-2,749.8	6,840.4	6,799.8	40.56	168.645		
8,500.0	7,530.0	7,661.9	7,526.1	22.6	25.4	90.02	-6,969.3	-2,749.8	6,750.6	6,708.7	41.95	160.922		
8,600.0	7,530.0	7,662.4	7,526.6	24.0	25.4	90.03	-6,969.3	-2,749.8	6,661.2	6,617.8	43.39	153.528		
8,700.0	7,530.0	7,662.9	7,527.1	25.4	25.4	90.04	-6,969.3	-2,749.8	6,572.0	6,527.1	44.87	146.483		
8,800.0	7,530.0	7,663.4	7,527.6	26.9	25.4	90.05	-6,969.3	-2,749.8	6,483.1	6,436.8	46.38	139.793		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,664.0	7,528.1	28.4	25.4	90.06	-6,969.3	-2,749.8	6,394.6	6,346.7	47.92	133.453		
9,000.0	7,530.0	7,664.5	7,528.6	30.0	25.4	90.07	-6,969.3	-2,749.8	6,306.4	6,257.0	49.48	127.453		
9,100.0	7,530.0	7,665.0	7,529.1	31.5	25.4	90.08	-6,969.4	-2,749.7	6,218.6	6,167.6	51.06	121.780		
9,200.0	7,530.0	7,665.5	7,529.6	33.1	25.4	90.09	-6,969.4	-2,749.7	6,131.2	6,078.5	52.67	116.416		
9,300.0	7,530.0	7,666.0	7,530.1	34.7	25.4	90.10	-6,969.4	-2,749.7	6,044.1	5,989.8	54.28	111.346		
9,400.0	7,530.0	7,666.4	7,530.6	36.3	25.4	90.11	-6,969.4	-2,749.7	5,957.5	5,901.6	55.91	106.552		
9,500.0	7,530.0	7,666.9	7,531.1	38.0	25.4	90.12	-6,969.4	-2,749.7	5,871.2	5,813.7	57.55	102.016		
9,600.0	7,530.0	7,667.4	7,531.6	39.6	25.4	90.13	-6,969.4	-2,749.7	5,785.5	5,726.3	59.20	97.724		
9,700.0	7,530.0	7,667.9	7,532.1	41.3	25.4	90.14	-6,969.4	-2,749.7	5,700.1	5,639.3	60.86	93.658		
9,800.0	7,530.0	7,668.4	7,532.6	42.9	25.4	90.14	-6,969.4	-2,749.7	5,615.3	5,552.8	62.53	89.805		
9,900.0	7,530.0	7,668.9	7,533.1	44.6	25.4	90.15	-6,969.4	-2,749.7	5,531.0	5,466.8	64.20	86.151		
10,000.0	7,530.0	7,669.4	7,533.5	46.3	25.4	90.16	-6,969.4	-2,749.7	5,447.2	5,381.3	65.88	82.683		
10,100.0	7,530.0	7,669.9	7,534.0	47.9	25.4	90.17	-6,969.4	-2,749.7	5,363.9	5,296.4	67.57	79.389		
10,200.0	7,530.0	7,670.3	7,534.5	49.6	25.4	90.18	-6,969.4	-2,749.7	5,281.3	5,212.0	69.26	76.258		
10,300.0	7,530.0	7,670.8	7,535.0	51.3	25.4	90.19	-6,969.4	-2,749.7	5,199.2	5,128.3	70.95	73.281		
10,400.0	7,530.0	7,671.3	7,535.5	53.0	25.4	90.20	-6,969.4	-2,749.7	5,117.8	5,045.2	72.65	70.447		
10,500.0	7,530.0	7,671.8	7,535.9	54.7	25.4	90.21	-6,969.4	-2,749.7	5,037.1	4,962.7	74.35	67.749		
10,600.0	7,530.0	7,672.2	7,536.4	56.4	25.4	90.22	-6,969.4	-2,749.7	4,957.0	4,881.0	76.05	65.178		
10,700.0	7,530.0	7,672.7	7,536.9	58.1	25.4	90.23	-6,969.4	-2,749.7	4,877.7	4,800.0	77.76	62.727		
10,800.0	7,530.0	7,673.2	7,537.3	59.8	25.4	90.24	-6,969.4	-2,749.7	4,799.2	4,719.7	79.47	60.388		
10,900.0	7,530.0	7,673.6	7,537.8	61.5	25.4	90.24	-6,969.4	-2,749.7	4,721.5	4,640.3	81.18	58.157		
11,000.0	7,530.0	7,674.1	7,538.3	63.2	25.4	90.25	-6,969.4	-2,749.7	4,644.6	4,561.7	82.90	56.026		
11,100.0	7,530.0	7,674.6	7,538.7	64.9	25.4	90.26	-6,969.4	-2,749.7	4,568.6	4,484.0	84.62	53.991		
11,200.0	7,530.0	7,675.0	7,539.2	66.6	25.4	90.27	-6,969.4	-2,749.7	4,493.6	4,407.2	86.34	52.047		
11,300.0	7,530.0	7,675.5	7,539.7	68.4	25.4	90.28	-6,969.4	-2,749.7	4,419.5	4,331.5	88.06	50.189		
11,400.0	7,530.0	7,675.9	7,540.1	70.1	25.4	90.29	-6,969.4	-2,749.6	4,346.5	4,256.8	89.78	48.413		
11,500.0	7,530.0	7,676.4	7,540.6	71.8	25.4	90.30	-6,969.4	-2,749.6	4,274.6	4,183.1	91.50	46.715		
11,600.0	7,530.0	7,676.8	7,541.0	73.5	25.4	90.31	-6,969.4	-2,749.6	4,203.9	4,110.6	93.23	45.091		
11,700.0	7,530.0	7,677.3	7,541.5	75.2	25.4	90.31	-6,969.4	-2,749.6	4,134.3	4,039.4	94.96	43.538		
11,800.0	7,530.0	7,677.7	7,541.9	77.0	25.4	90.32	-6,969.4	-2,749.6	4,066.0	3,969.3	96.69	42.054		
11,900.0	7,530.0	7,678.2	7,542.4	78.7	25.4	90.33	-6,969.4	-2,749.6	3,999.1	3,900.7	98.42	40.635		
12,000.0	7,530.0	7,678.6	7,542.8	80.4	25.4	90.34	-6,969.4	-2,749.6	3,933.5	3,833.4	100.15	39.278		
12,100.0	7,530.0	7,679.1	7,543.3	82.2	25.4	90.35	-6,969.4	-2,749.6	3,869.5	3,767.6	101.88	37.981		
12,200.0	7,530.0	7,679.5	7,543.7	83.9	25.4	90.36	-6,969.4	-2,749.6	3,806.9	3,703.3	103.61	36.743		
12,300.0	7,530.0	7,680.0	7,544.1	85.6	25.4	90.37	-6,969.4	-2,749.6	3,746.0	3,640.7	105.34	35.560		
12,400.0	7,530.0	7,680.4	7,544.6	87.3	25.4	90.37	-6,969.4	-2,749.6	3,686.8	3,579.8	107.08	34.432		
12,500.0	7,530.0	7,680.8	7,545.0	89.1	25.4	90.38	-6,969.4	-2,749.6	3,629.4	3,520.6	108.81	33.355		
12,600.0	7,530.0	7,681.3	7,545.4	90.8	25.4	90.39	-6,969.4	-2,749.6	3,573.9	3,463.4	110.55	32.329		
12,700.0	7,530.0	7,681.7	7,545.9	92.5	25.4	90.40	-6,969.4	-2,749.6	3,520.4	3,408.1	112.28	31.352		
12,800.0	7,530.0	7,682.1	7,546.3	94.3	25.4	90.41	-6,969.4	-2,749.6	3,468.9	3,354.8	114.02	30.423		
12,900.0	7,530.0	7,682.6	7,546.7	96.0	25.4	90.42	-6,969.4	-2,749.6	3,419.5	3,303.7	115.76	29.540		
13,000.0	7,530.0	7,683.0	7,547.2	97.8	25.4	90.42	-6,969.4	-2,749.6	3,372.4	3,254.9	117.50	28.702		
13,100.0	7,530.0	7,683.4	7,547.6	99.5	25.4	90.43	-6,969.4	-2,749.6	3,327.6	3,208.4	119.24	27.908		
13,200.0	7,530.0	7,683.9	7,548.0	101.2	25.4	90.44	-6,969.4	-2,749.6	3,285.3	3,164.3	120.98	27.157		
13,300.0	7,530.0	7,684.3	7,548.4	103.0	25.4	90.45	-6,969.4	-2,749.6	3,245.5	3,122.8	122.72	26.447		
13,400.0	7,530.0	7,684.7	7,548.9	104.7	25.4	90.46	-6,969.4	-2,749.6	3,208.3	3,083.9	124.46	25.779		
13,500.0	7,530.0	7,685.1	7,549.3	106.4	25.4	90.46	-6,969.4	-2,749.6	3,173.8	3,047.6	126.20	25.150		
13,600.0	7,530.0	7,685.5	7,549.7	108.2	25.4	90.47	-6,969.4	-2,749.6	3,142.2	3,014.2	127.94	24.560		
13,700.0	7,530.0	7,686.0	7,550.1	109.9	25.4	90.48	-6,969.4	-2,749.6	3,113.4	2,983.7	129.68	24.008		
13,800.0	7,530.0	7,686.4	7,550.5	111.7	25.4	90.49	-6,969.4	-2,749.5	3,087.6	2,956.2	131.42	23.494		
13,900.0	7,530.0	7,686.8	7,551.0	113.4	25.4	90.50	-6,969.4	-2,749.5	3,064.9	2,931.7	133.16	23.016		
14,000.0	7,530.0	7,687.2	7,551.4	115.1	25.4	90.50	-6,969.4	-2,749.5	3,045.2	2,910.3	134.91	22.573		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - DD													Offset Site Error:	0.0 ft
Survey Program: 41-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
14,100.0	7,530.0	7,687.6	7,551.8	116.9	25.4	90.51	-6,969.4	-2,749.5	3,028.8	2,892.1	136.65	22.164		
14,200.0	7,530.0	7,688.0	7,552.2	118.6	25.4	90.52	-6,969.4	-2,749.5	3,015.5	2,877.2	138.39	21.790		
14,300.0	7,530.0	7,688.4	7,552.6	120.4	25.4	90.53	-6,969.4	-2,749.5	3,005.6	2,865.5	140.14	21.447		
14,400.0	7,530.0	7,688.8	7,553.0	122.1	25.4	90.54	-6,969.5	-2,749.5	2,998.9	2,857.1	141.88	21.137		
14,500.0	7,530.0	7,689.2	7,553.4	123.9	25.4	90.54	-6,969.5	-2,749.5	2,995.6	2,852.0	143.63	20.857		
14,549.8	7,530.0	7,689.4	7,553.6	124.7	25.4	90.55	-6,969.5	-2,749.5	2,995.2	2,850.7	144.50	20.729 CC		
14,600.0	7,530.0	7,689.6	7,553.8	125.6	25.4	90.55	-6,969.5	-2,749.5	2,995.6	2,850.2	145.37	20.607 ES		
14,700.0	7,530.0	7,690.1	7,554.2	127.3	25.4	90.56	-6,969.5	-2,749.5	2,998.9	2,851.8	147.12	20.385		
14,800.0	7,530.0	7,690.5	7,554.6	129.1	25.4	90.57	-6,969.5	-2,749.5	3,005.6	2,856.8	148.86	20.191		
14,900.0	7,530.0	7,690.9	7,555.0	130.8	25.5	90.57	-6,969.5	-2,749.5	3,015.6	2,865.0	150.61	20.023		
15,000.0	7,530.0	7,691.2	7,555.4	132.6	25.5	90.58	-6,969.5	-2,749.5	3,028.8	2,876.5	152.35	19.880		
15,100.0	7,530.0	7,691.6	7,555.8	134.3	25.5	90.59	-6,969.5	-2,749.5	3,045.3	2,891.2	154.10	19.762		
15,200.0	7,530.0	7,692.0	7,556.2	136.1	25.5	90.60	-6,969.5	-2,749.5	3,064.9	2,909.1	155.84	19.667		
15,300.0	7,530.0	7,692.4	7,556.6	137.8	25.5	90.60	-6,969.5	-2,749.5	3,087.7	2,930.1	157.59	19.593		
15,400.0	7,530.0	7,692.8	7,557.0	139.6	25.5	90.61	-6,969.5	-2,749.5	3,113.5	2,954.2	159.34	19.540		
15,500.0	7,530.0	7,693.2	7,557.4	141.3	25.5	90.62	-6,969.5	-2,749.5	3,142.3	2,981.2	161.08	19.507		
15,600.0	7,530.0	7,693.6	7,557.8	143.0	25.5	90.63	-6,969.5	-2,749.5	3,174.0	3,011.1	162.83	19.492 SF		
15,700.0	7,530.0	7,694.0	7,558.2	144.8	25.5	90.63	-6,969.5	-2,749.5	3,208.4	3,043.9	164.58	19.495		
15,800.0	7,530.0	7,694.4	7,558.5	146.5	25.5	90.64	-6,969.5	-2,749.5	3,245.6	3,079.3	166.32	19.514		
15,900.0	7,530.0	7,694.8	7,558.9	148.3	25.5	90.65	-6,969.5	-2,749.5	3,285.4	3,117.4	168.07	19.548		
16,000.0	7,530.0	7,695.1	7,559.3	150.0	25.5	90.66	-6,969.5	-2,749.5	3,327.8	3,158.0	169.82	19.596		
16,100.0	7,530.0	7,695.5	7,559.7	151.8	25.5	90.66	-6,969.5	-2,749.5	3,372.6	3,201.0	171.57	19.657		
16,200.0	7,530.0	7,695.9	7,560.1	153.5	25.5	90.67	-6,969.5	-2,749.5	3,419.7	3,246.4	173.31	19.731		
16,300.0	7,530.0	7,696.3	7,560.5	155.3	25.5	90.68	-6,969.5	-2,749.5	3,469.0	3,294.0	175.06	19.816		
16,400.0	7,530.0	7,696.7	7,560.8	157.0	25.5	90.69	-6,969.5	-2,749.4	3,520.5	3,343.7	176.81	19.911		
16,500.0	7,530.0	7,697.0	7,561.2	158.8	25.5	90.69	-6,969.5	-2,749.4	3,574.1	3,395.6	178.56	20.017		
16,600.0	7,530.0	7,697.4	7,561.6	160.5	25.5	90.70	-6,969.5	-2,749.4	3,629.6	3,449.3	180.31	20.130		
16,700.0	7,530.0	7,697.8	7,562.0	162.3	25.5	90.71	-6,969.5	-2,749.4	3,687.0	3,505.0	182.05	20.252		
16,800.0	7,530.0	7,698.2	7,562.3	164.0	25.5	90.71	-6,969.5	-2,749.4	3,746.2	3,562.4	183.80	20.382		
16,900.0	7,530.0	7,698.5	7,562.7	165.8	25.5	90.72	-6,969.5	-2,749.4	3,807.1	3,621.6	185.55	20.518		
17,000.0	7,530.0	7,698.9	7,563.1	167.5	25.5	90.73	-6,969.5	-2,749.4	3,869.7	3,682.4	187.30	20.660		
17,100.0	7,530.0	7,699.3	7,563.4	169.3	25.5	90.74	-6,969.5	-2,749.4	3,933.8	3,744.7	189.05	20.808		
17,200.0	7,530.0	7,699.6	7,563.8	171.0	25.5	90.74	-6,969.5	-2,749.4	3,999.3	3,808.5	190.80	20.961		
17,300.0	7,530.0	7,700.0	7,564.2	172.8	25.5	90.75	-6,969.5	-2,749.4	4,066.3	3,873.7	192.55	21.118		
17,400.0	7,530.0	7,700.4	7,564.5	174.5	25.5	90.76	-6,969.5	-2,749.4	4,134.5	3,940.3	194.30	21.280		
17,420.9	7,530.0	7,700.4	7,564.6	174.9	25.5	90.76	-6,969.5	-2,749.4	4,149.0	3,954.4	194.66	21.314		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)					
0.0	0.0	0.0	0.0	0.0	0.0	-149.28	-6,136.7	-3,646.3	7,138.3						
100.0	100.0	95.0	95.0	0.2	0.1	-149.28	-6,136.7	-3,646.3	7,138.3	7,138.0	0.29	N/A			
200.0	200.0	195.0	195.0	0.3	0.3	-149.28	-6,136.7	-3,646.3	7,138.3	7,137.7	0.64	N/A			
300.0	300.0	262.5	262.5	0.5	0.4	-149.29	-6,137.2	-3,645.8	7,138.5	7,137.6	0.93	7,642.898			
400.0	400.0	328.1	328.1	0.7	0.6	-149.30	-6,138.7	-3,644.2	7,139.2	7,138.0	1.23	5,819.006			
500.0	500.0	400.0	399.8	0.8	0.7	-149.34	-6,141.5	-3,641.2	7,140.4	7,138.9	1.53	4,653.416			
600.0	600.0	459.0	458.6	1.0	0.8	-149.37	-6,144.7	-3,637.8	7,142.1	7,140.2	1.83	3,907.683			
700.0	700.0	524.0	523.4	1.2	1.0	178.10	-6,149.2	-3,632.9	7,145.1	7,142.9	2.18	3,277.135			
800.0	800.0	600.0	598.7	1.4	1.2	178.02	-6,155.7	-3,625.9	7,150.4	7,147.8	2.55	2,799.069			
900.0	899.9	652.9	651.0	1.6	1.4	177.96	-6,161.0	-3,620.1	7,157.9	7,155.0	2.89	2,475.952			
988.4	988.1	700.0	697.5	1.7	1.5	177.90	-6,166.3	-3,614.4	7,166.4	7,163.2	3.19	2,246.444			
1,000.0	999.7	700.0	697.5	1.7	1.5	177.90	-6,166.3	-3,614.4	7,167.6	7,164.4	3.21	2,232.646			
1,100.0	1,099.4	779.5	775.6	1.9	1.8	177.78	-6,176.4	-3,603.5	7,178.5	7,174.9	3.67	1,953.510			
1,200.0	1,199.2	862.0	856.2	2.1	2.1	177.65	-6,188.1	-3,590.8	7,189.9	7,185.8	4.16	1,729.590			
1,300.0	1,299.0	959.3	951.3	2.3	2.5	177.49	-6,202.0	-3,575.8	7,201.4	7,196.7	4.70	1,531.550			
1,400.0	1,398.8	1,056.6	1,046.5	2.5	2.9	177.33	-6,215.9	-3,560.8	7,212.9	7,207.7	5.25	1,373.448			
1,500.0	1,498.5	1,153.9	1,141.6	2.7	3.3	177.18	-6,229.8	-3,545.8	7,224.5	7,218.7	5.80	1,244.692			
1,600.0	1,598.3	1,251.1	1,236.7	2.9	3.7	177.02	-6,243.6	-3,530.8	7,236.2	7,229.8	6.36	1,137.999			
1,700.0	1,698.1	1,348.4	1,331.8	3.2	4.1	176.86	-6,257.5	-3,515.9	7,247.9	7,241.0	6.91	1,048.245			
1,800.0	1,797.8	1,445.7	1,426.9	3.4	4.4	176.71	-6,271.4	-3,500.9	7,259.6	7,252.2	7.47	971.751			
1,900.0	1,897.6	1,543.0	1,522.1	3.6	4.8	176.55	-6,285.3	-3,485.9	7,271.4	7,263.4	8.03	905.814			
2,000.0	1,997.4	1,640.3	1,617.2	3.8	5.2	176.40	-6,299.2	-3,470.9	7,283.3	7,274.7	8.58	848.410			
2,100.0	2,097.1	1,737.6	1,712.3	4.0	5.6	176.25	-6,313.1	-3,455.9	7,295.2	7,286.1	9.14	797.998			
2,200.0	2,196.9	1,834.9	1,807.4	4.2	6.0	176.09	-6,326.9	-3,440.9	7,307.2	7,297.5	9.70	753.383			
2,300.0	2,296.7	1,932.2	1,902.5	4.4	6.4	175.94	-6,340.8	-3,425.9	7,319.2	7,309.0	10.26	713.626			
2,400.0	2,296.5	2,029.5	1,997.6	4.6	6.8	175.79	-6,354.7	-3,410.9	7,331.3	7,320.5	10.81	677.979			
2,500.0	2,496.2	2,126.7	2,092.8	4.8	7.2	175.64	-6,368.6	-3,395.9	7,343.4	7,332.1	11.37	645.840			
2,600.0	2,596.0	2,224.0	2,187.9	5.0	7.6	175.49	-6,382.5	-3,380.9	7,355.6	7,343.7	11.93	616.718			
2,700.0	2,695.8	2,321.3	2,283.0	5.2	8.0	175.33	-6,396.3	-3,365.9	7,367.8	7,355.4	12.48	590.210			
2,800.0	2,795.5	2,418.6	2,378.1	5.4	8.4	175.18	-6,410.2	-3,350.9	7,380.1	7,367.1	13.04	565.980			
2,900.0	2,895.3	2,515.9	2,473.2	5.6	8.8	175.03	-6,424.1	-3,335.9	7,392.5	7,378.9	13.60	543.748			
3,000.0	2,995.1	2,613.2	2,568.4	5.9	9.2	174.89	-6,438.0	-3,320.9	7,404.9	7,390.7	14.15	523.279			
3,100.0	3,094.9	2,710.5	2,663.5	6.1	9.6	174.74	-6,451.9	-3,305.9	7,417.3	7,402.6	14.71	504.371			
3,200.0	3,194.6	2,807.8	2,758.6	6.3	10.0	174.59	-6,465.8	-3,290.9	7,429.8	7,414.5	15.26	486.853			
3,300.0	3,294.4	2,905.1	2,853.7	6.5	10.4	174.44	-6,479.6	-3,275.9	7,442.4	7,426.5	15.82	470.579			
3,400.0	3,394.2	3,002.4	2,948.8	6.7	10.8	174.29	-6,493.5	-3,260.9	7,454.9	7,438.6	16.37	455.420			
3,500.0	3,493.9	3,099.6	3,044.0	6.9	11.2	174.15	-6,507.4	-3,245.9	7,467.6	7,450.7	16.92	441.267			
3,600.0	3,593.7	3,196.9	3,139.1	7.1	11.6	174.00	-6,521.3	-3,230.9	7,480.3	7,462.8	17.48	428.023			
3,700.0	3,693.5	3,294.2	3,234.2	7.3	12.0	173.85	-6,535.2	-3,215.9	7,493.0	7,475.0	18.03	415.605			
3,800.0	3,793.2	3,391.5	3,329.3	7.5	12.4	173.71	-6,549.1	-3,200.9	7,505.8	7,487.3	18.58	403.936			
3,900.0	3,893.0	3,488.8	3,424.4	7.7	12.8	173.56	-6,562.9	-3,185.9	7,518.7	7,499.5	19.13	392.953			
4,000.0	3,992.8	3,586.1	3,519.5	8.0	13.2	173.42	-6,576.8	-3,170.9	7,531.6	7,511.9	19.69	382.596			
4,100.0	4,092.6	3,683.4	3,614.7	8.2	13.6	173.27	-6,590.7	-3,155.9	7,544.5	7,524.3	20.24	372.815			
4,200.0	4,192.3	3,780.7	3,709.8	8.4	14.0	173.13	-6,604.6	-3,140.9	7,557.5	7,536.7	20.79	363.562			
4,300.0	4,292.1	3,878.0	3,804.9	8.6	14.4	172.99	-6,618.5	-3,125.9	7,570.6	7,549.2	21.34	354.796			
4,400.0	4,391.9	3,975.2	3,900.0	8.8	14.8	172.84	-6,632.4	-3,110.9	7,583.6	7,561.8	21.89	346.480			
4,500.0	4,491.6	4,072.5	3,995.1	9.0	15.2	172.70	-6,646.2	-3,095.9	7,596.8	7,574.3	22.44	338.580			
4,600.0	4,591.4	4,169.8	4,090.3	9.2	15.6	172.56	-6,660.1	-3,080.9	7,610.0	7,587.0	22.99	331.066			
4,700.0	4,691.2	4,267.1	4,185.4	9.4	16.0	172.42	-6,674.0	-3,065.9	7,623.2	7,599.7	23.53	323.912			
4,800.0	4,790.9	4,364.4	4,280.5	9.6	16.4	172.28	-6,687.9	-3,050.9	7,636.5	7,612.4	24.08	317.091			
4,900.0	4,890.7	4,461.7	4,375.6	9.8	16.8	172.14	-6,701.8	-3,035.9	7,649.8	7,625.2	24.63	310.581			
5,000.0	4,990.5	4,559.0	4,470.7	10.1	17.2	172.00	-6,715.6	-3,020.9	7,663.2	7,638.0	25.18	304.362			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
5,100.0	5,090.3	4,656.3	4,565.8	10.3	17.6	171.86	-6,729.5	-3,005.9	7,676.6	7,650.9	25.72	298.414		
5,200.0	5,190.0	4,753.6	4,661.0	10.5	18.0	171.72	-6,743.4	-2,990.9	7,690.1	7,663.8	26.27	292.721		
5,300.0	5,289.8	4,850.8	4,756.1	10.7	18.4	171.58	-6,757.3	-2,975.9	7,703.6	7,676.7	26.82	287.267		
5,400.0	5,389.6	4,948.1	4,851.2	10.9	18.8	171.44	-6,771.2	-2,960.9	7,717.1	7,689.8	27.36	282.036		
5,500.0	5,489.3	5,045.4	4,946.3	11.1	19.2	171.31	-6,785.1	-2,945.9	7,730.7	7,702.8	27.91	277.017		
5,600.0	5,589.1	5,142.7	5,041.4	11.3	19.6	171.17	-6,798.9	-2,930.9	7,744.4	7,715.9	28.45	272.195		
5,700.0	5,688.9	5,240.0	5,136.6	11.5	20.0	171.03	-6,812.8	-2,915.9	7,758.1	7,729.1	29.00	267.561		
5,800.0	5,788.7	5,337.3	5,231.7	11.7	20.4	170.90	-6,826.7	-2,900.9	7,771.8	7,742.3	29.54	263.103		
5,900.0	5,888.4	5,434.6	5,326.8	11.9	20.8	170.76	-6,840.6	-2,885.9	7,785.6	7,755.5	30.08	258.811		
6,000.0	5,988.2	5,531.9	5,421.9	12.2	21.2	170.62	-6,854.5	-2,870.9	7,799.4	7,768.8	30.62	254.678		
6,100.0	6,088.0	5,629.2	5,517.0	12.4	21.6	170.49	-6,868.4	-2,855.9	7,813.3	7,782.1	31.17	250.693		
6,200.0	6,187.7	5,726.5	5,612.2	12.6	22.0	170.36	-6,882.2	-2,840.9	7,827.2	7,795.5	31.71	246.849		
6,300.0	6,287.5	5,823.7	5,707.3	12.8	22.4	170.22	-6,896.1	-2,825.9	7,841.1	7,808.9	32.25	243.140		
6,400.0	6,387.3	6,034.1	5,913.4	13.0	23.1	169.95	-6,924.5	-2,795.2	7,855.1	7,822.0	33.15	236.968		
6,500.0	6,487.0	6,605.1	6,482.1	13.2	24.1	169.71	-6,952.8	-2,764.7	7,862.3	7,828.0	34.27	229.438		
6,600.0	6,586.8	6,704.9	6,581.8	13.4	24.2	169.72	-6,952.8	-2,764.7	7,869.0	7,834.4	34.53	227.875		
6,700.0	6,686.6	6,804.7	6,681.6	13.6	24.3	169.73	-6,952.8	-2,764.7	7,875.6	7,840.8	34.80	226.329		
6,787.0	6,773.4	6,891.5	6,768.4	13.8	24.4	169.74	-6,952.8	-2,764.7	7,881.4	7,846.4	35.03	224.998		
6,800.0	6,786.4	6,904.4	6,781.4	13.8	24.4	159.19	-6,952.8	-2,764.7	7,882.2	7,847.1	35.09	224.642		
6,850.0	6,836.3	6,954.4	6,831.3	13.9	24.4	72.05	-6,952.8	-2,764.7	7,883.1	7,847.8	35.25	223.609		
6,900.0	6,886.2	7,004.2	6,881.2	14.0	24.5	42.28	-6,952.8	-2,764.7	7,880.7	7,845.4	35.32	223.118		
6,950.0	6,935.7	7,053.7	6,930.7	14.0	24.5	34.66	-6,952.8	-2,764.7	7,875.2	7,839.9	35.29	223.156		
7,000.0	6,984.6	7,102.6	6,979.6	14.0	24.6	31.56	-6,952.8	-2,764.7	7,866.4	7,831.2	35.16	223.715		
7,050.0	7,032.6	7,150.7	7,027.7	14.0	24.6	30.09	-6,952.8	-2,764.7	7,854.5	7,819.6	34.94	224.775		
7,100.0	7,079.7	7,197.7	7,074.7	13.9	24.6	29.46	-6,952.8	-2,764.7	7,839.5	7,804.9	34.64	226.320		
7,150.0	7,125.4	7,243.5	7,120.4	13.9	24.7	29.34	-6,952.8	-2,764.7	7,821.6	7,787.3	34.26	228.315		
7,200.0	7,169.6	7,287.7	7,164.6	13.8	24.7	29.61	-6,952.8	-2,764.7	7,800.7	7,766.9	33.81	230.720		
7,250.0	7,212.1	7,330.1	7,207.1	13.8	24.8	30.19	-6,952.8	-2,764.7	7,777.0	7,743.7	33.31	233.466		
7,300.0	7,252.6	7,370.7	7,247.6	13.7	24.8	31.08	-6,952.8	-2,764.7	7,750.6	7,717.8	32.78	236.460		
7,350.0	7,291.0	7,409.1	7,286.0	13.7	24.8	32.28	-6,952.8	-2,764.7	7,721.7	7,689.4	32.23	239.565		
7,400.0	7,327.1	7,445.2	7,322.1	13.7	24.9	33.80	-6,952.8	-2,764.7	7,690.3	7,658.6	31.70	242.590		
7,450.0	7,360.7	7,478.7	7,355.7	13.7	24.9	35.68	-6,952.8	-2,764.7	7,656.8	7,625.6	31.22	245.282		
7,500.0	7,391.6	7,509.7	7,386.6	13.7	24.9	37.97	-6,952.8	-2,764.7	7,621.1	7,590.3	30.82	247.317		
7,550.0	7,419.7	7,537.8	7,414.7	13.8	24.9	40.75	-6,952.8	-2,764.7	7,583.6	7,553.0	30.54	248.306		
7,600.0	7,444.8	7,562.9	7,439.8	13.9	25.0	44.09	-6,952.8	-2,764.7	7,544.3	7,513.8	30.44	247.840		
7,650.0	7,466.9	7,585.0	7,461.9	14.1	25.0	48.10	-6,952.8	-2,764.7	7,503.5	7,473.0	30.56	245.559		
7,700.0	7,485.8	7,603.9	7,480.8	14.3	25.0	52.88	-6,952.8	-2,764.7	7,461.4	7,430.5	30.92	241.275		
7,750.0	7,501.5	7,619.5	7,496.5	14.6	25.0	58.53	-6,952.8	-2,764.7	7,418.2	7,386.7	31.55	235.112		
7,800.0	7,513.7	7,631.8	7,508.8	14.9	25.0	65.11	-6,952.8	-2,764.7	7,374.1	7,341.7	32.40	227.601		
7,850.0	7,522.6	7,640.7	7,517.6	15.2	25.0	72.60	-6,952.8	-2,764.7	7,329.4	7,296.0	33.37	219.655		
7,900.0	7,528.0	7,646.1	7,523.1	15.6	25.0	80.83	-6,952.8	-2,764.7	7,284.2	7,249.9	34.30	212.349		
7,952.9	7,530.0	7,648.1	7,525.0	16.1	25.0	90.00	-6,952.8	-2,764.7	7,236.1	7,201.0	35.08	206.300		
8,000.0	7,530.0	7,648.1	7,525.0	16.5	25.0	90.00	-6,952.8	-2,764.7	7,193.3	7,157.8	35.53	202.453		
8,100.0	7,530.0	7,648.1	7,525.0	17.5	25.0	90.00	-6,952.8	-2,764.7	7,102.6	7,066.0	36.59	194.109		
8,200.0	7,530.0	7,648.1	7,525.0	18.7	25.0	90.00	-6,952.8	-2,764.7	7,012.2	6,974.4	37.76	185.710		
8,300.0	7,530.0	7,648.1	7,525.0	19.9	25.0	90.00	-6,952.8	-2,764.7	6,922.0	6,883.0	39.02	177.418		
8,400.0	7,530.0	7,648.1	7,525.0	21.2	25.0	90.00	-6,952.8	-2,764.7	6,832.1	6,791.7	40.34	169.346		
8,500.0	7,530.0	7,648.1	7,525.0	22.6	25.0	90.00	-6,952.8	-2,764.7	6,742.5	6,700.7	41.73	161.566		
8,600.0	7,530.0	7,648.1	7,525.0	24.0	25.0	90.00	-6,952.8	-2,764.7	6,653.1	6,610.0	43.17	154.119		
8,700.0	7,530.0	7,648.1	7,525.0	25.4	25.0	90.00	-6,952.8	-2,764.7	6,564.1	6,519.5	44.65	147.026		
8,800.0	7,530.0	7,648.1	7,525.0	26.9	25.0	90.00	-6,952.8	-2,764.7	6,475.4	6,429.2	46.16	140.291		
8,900.0	7,530.0	7,648.1	7,525.0	28.4	25.0	90.00	-6,952.8	-2,764.7	6,387.0	6,339.3	47.70	133.911		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,648.1	7,525.0	30.0	25.0	90.00	-6,952.8	-2,764.7	6,299.0	6,249.7	49.26	127.875		
9,100.0	7,530.0	7,648.1	7,525.0	31.5	25.0	90.00	-6,952.8	-2,764.7	6,211.3	6,160.5	50.84	122.168		
9,200.0	7,530.0	7,648.1	7,525.0	33.1	25.0	90.00	-6,952.8	-2,764.7	6,124.1	6,071.6	52.44	116.775		
9,300.0	7,530.0	7,648.1	7,525.0	34.7	25.0	90.00	-6,952.8	-2,764.7	6,037.2	5,983.1	54.06	111.678		
9,400.0	7,530.0	7,648.1	7,525.0	36.3	25.0	90.00	-6,952.8	-2,764.7	5,950.7	5,895.0	55.69	106.859		
9,500.0	7,530.0	7,648.1	7,525.0	38.0	25.0	90.00	-6,952.8	-2,764.7	5,864.7	5,807.3	57.33	102.302		
9,600.0	7,530.0	7,648.1	7,525.0	39.6	25.0	90.00	-6,952.8	-2,764.7	5,779.1	5,720.1	58.98	97.989		
9,700.0	7,530.0	7,648.1	7,525.0	41.3	25.0	90.00	-6,952.8	-2,764.7	5,693.9	5,633.3	60.64	93.905		
9,800.0	7,530.0	7,648.1	7,525.0	42.9	25.0	90.00	-6,952.8	-2,764.7	5,609.3	5,547.0	62.30	90.035		
9,900.0	7,530.0	7,648.1	7,525.0	44.6	25.0	90.00	-6,952.8	-2,764.7	5,525.2	5,461.2	63.97	86.366		
10,000.0	7,530.0	7,648.1	7,525.0	46.3	25.0	90.00	-6,952.8	-2,764.7	5,441.6	5,376.0	65.65	82.885		
10,100.0	7,530.0	7,648.1	7,525.0	47.9	25.0	90.00	-6,952.8	-2,764.7	5,358.6	5,291.3	67.34	79.579		
10,200.0	7,530.0	7,648.1	7,525.0	49.6	25.0	90.00	-6,952.8	-2,764.7	5,276.2	5,207.1	69.03	76.437		
10,300.0	7,530.0	7,648.1	7,525.0	51.3	25.0	90.00	-6,952.8	-2,764.7	5,194.3	5,123.6	70.72	73.450		
10,400.0	7,530.0	7,648.1	7,525.0	53.0	25.0	90.00	-6,952.8	-2,764.7	5,113.2	5,040.8	72.42	70.608		
10,500.0	7,530.0	7,648.1	7,525.0	54.7	25.0	90.00	-6,952.8	-2,764.7	5,032.7	4,958.6	74.12	67.901		
10,600.0	7,530.0	7,648.1	7,525.0	56.4	25.0	90.00	-6,952.8	-2,764.7	4,952.9	4,877.1	75.82	65.323		
10,700.0	7,530.0	7,648.1	7,525.0	58.1	25.0	90.00	-6,952.8	-2,764.7	4,873.9	4,796.3	77.53	62.865		
10,800.0	7,530.0	7,648.1	7,525.0	59.8	25.0	90.00	-6,952.8	-2,764.7	4,795.6	4,716.4	79.24	60.521		
10,900.0	7,530.0	7,648.1	7,525.0	61.5	25.0	90.00	-6,952.8	-2,764.7	4,718.2	4,637.2	80.95	58.284		
11,000.0	7,530.0	7,648.1	7,525.0	63.2	25.0	90.00	-6,952.8	-2,764.7	4,641.6	4,559.0	82.67	56.149		
11,100.0	7,530.0	7,648.1	7,525.0	64.9	25.0	90.00	-6,952.8	-2,764.7	4,566.0	4,481.6	84.38	54.110		
11,200.0	7,530.0	7,648.1	7,525.0	66.6	25.0	90.00	-6,952.8	-2,764.7	4,491.3	4,405.2	86.10	52.162		
11,300.0	7,530.0	7,648.1	7,525.0	68.4	25.0	90.00	-6,952.8	-2,764.7	4,417.6	4,329.7	87.82	50.301		
11,400.0	7,530.0	7,648.1	7,525.0	70.1	25.0	90.00	-6,952.8	-2,764.7	4,344.9	4,255.4	89.54	48.522		
11,500.0	7,530.0	7,648.1	7,525.0	71.8	25.0	90.00	-6,952.8	-2,764.7	4,273.4	4,182.1	91.27	46.822		
11,600.0	7,530.0	7,648.1	7,525.0	73.5	25.0	90.00	-6,952.8	-2,764.7	4,203.0	4,110.0	92.99	45.196		
11,700.0	7,530.0	7,648.1	7,525.0	75.2	25.0	90.00	-6,952.8	-2,764.7	4,133.8	4,039.1	94.72	43.642		
11,800.0	7,530.0	7,648.1	7,525.0	77.0	25.0	90.00	-6,952.8	-2,764.7	4,065.9	3,969.5	96.45	42.157		
11,900.0	7,530.0	7,648.1	7,525.0	78.7	25.0	90.00	-6,952.8	-2,764.7	3,999.4	3,901.2	98.18	40.736		
12,000.0	7,530.0	7,648.1	7,525.0	80.4	25.0	90.00	-6,952.8	-2,764.7	3,934.3	3,834.3	99.91	39.379		
12,100.0	7,530.0	7,648.1	7,525.0	82.2	25.0	90.00	-6,952.8	-2,764.7	3,870.6	3,769.0	101.64	38.082		
12,200.0	7,530.0	7,648.1	7,525.0	83.9	25.0	90.00	-6,952.8	-2,764.7	3,808.5	3,705.2	103.37	36.844		
12,300.0	7,530.0	7,648.1	7,525.0	85.6	25.0	90.00	-6,952.8	-2,764.7	3,748.1	3,643.0	105.10	35.661		
12,400.0	7,530.0	7,648.1	7,525.0	87.3	25.0	90.00	-6,952.8	-2,764.7	3,689.4	3,582.6	106.84	34.533		
12,500.0	7,530.0	7,648.1	7,525.0	89.1	25.0	90.00	-6,952.8	-2,764.7	3,632.5	3,523.9	108.57	33.457		
12,600.0	7,530.0	7,648.1	7,525.0	90.8	25.0	90.00	-6,952.8	-2,764.7	3,577.5	3,467.2	110.31	32.432		
12,700.0	7,530.0	7,648.1	7,525.0	92.5	25.0	90.00	-6,952.8	-2,764.7	3,524.5	3,412.4	112.04	31.457		
12,800.0	7,530.0	7,648.1	7,525.0	94.3	25.0	90.00	-6,952.8	-2,764.7	3,473.5	3,359.7	113.78	30.528		
12,900.0	7,530.0	7,648.1	7,525.0	96.0	25.0	90.00	-6,952.8	-2,764.7	3,424.7	3,309.2	115.52	29.647		
13,000.0	7,530.0	7,648.1	7,525.0	97.8	25.0	90.00	-6,952.8	-2,764.7	3,378.2	3,260.9	117.25	28.811		
13,100.0	7,530.0	7,648.1	7,525.0	99.5	25.0	90.00	-6,952.8	-2,764.7	3,334.0	3,215.0	118.99	28.018		
13,200.0	7,530.0	7,648.1	7,525.0	101.2	25.0	90.00	-6,952.8	-2,764.7	3,292.2	3,171.5	120.73	27.269		
13,300.0	7,530.0	7,648.1	7,525.0	103.0	25.0	90.00	-6,952.8	-2,764.7	3,253.0	3,130.5	122.47	26.561		
13,400.0	7,530.0	7,648.1	7,525.0	104.7	25.0	90.00	-6,952.8	-2,764.7	3,216.4	3,092.2	124.21	25.895		
13,500.0	7,530.0	7,648.1	7,525.0	106.4	25.0	90.00	-6,952.8	-2,764.7	3,182.6	3,056.6	125.95	25.268		
13,600.0	7,530.0	7,648.1	7,525.0	108.2	25.0	90.00	-6,952.8	-2,764.7	3,151.5	3,023.8	127.69	24.681		
13,700.0	7,530.0	7,648.1	7,525.0	109.9	25.0	90.00	-6,952.8	-2,764.7	3,123.4	2,993.9	129.43	24.131		
13,800.0	7,530.0	7,648.1	7,525.0	111.7	25.0	90.00	-6,952.8	-2,764.7	3,098.2	2,967.0	131.18	23.619		
13,900.0	7,530.0	7,648.1	7,525.0	113.4	25.0	90.00	-6,952.8	-2,764.7	3,076.1	2,943.1	132.92	23.143		
14,000.0	7,530.0	7,648.1	7,525.0	115.1	25.0	90.00	-6,952.8	-2,764.7	3,057.0	2,922.4	134.66	22.702		
14,100.0	7,530.0	7,648.1	7,525.0	116.9	25.0	90.00	-6,952.8	-2,764.7	3,041.2	2,904.8	136.40	22.296		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Sosa 22-18 - DD - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
14,200.0	7,530.0	7,648.1	7,525.0	118.6	25.0	90.00	-6,952.8	-2,764.7	3,028.6	2,890.4	138.15	21.923		
14,300.0	7,530.0	7,648.1	7,525.0	120.4	25.0	90.00	-6,952.8	-2,764.7	3,019.2	2,879.3	139.89	21.583		
14,400.0	7,530.0	7,648.1	7,525.0	122.1	25.0	90.00	-6,952.8	-2,764.7	3,013.1	2,871.5	141.63	21.274		
14,500.0	7,530.0	7,648.1	7,525.0	123.9	25.0	90.00	-6,952.8	-2,764.7	3,010.4	2,867.0	143.38	20.996		
14,533.2	7,530.0	7,648.1	7,525.0	124.4	25.0	90.00	-6,952.8	-2,764.7	3,010.2	2,866.2	143.96	20.910 CC		
14,600.0	7,530.0	7,648.1	7,525.0	125.6	25.0	90.00	-6,952.8	-2,764.7	3,010.9	2,865.8	145.12	20.748 ES		
14,700.0	7,530.0	7,648.1	7,525.0	127.3	25.0	90.00	-6,952.8	-2,764.7	3,014.8	2,867.9	146.87	20.528		
14,800.0	7,530.0	7,648.1	7,525.0	129.1	25.0	90.00	-6,952.8	-2,764.7	3,022.0	2,873.4	148.61	20.335		
14,900.0	7,530.0	7,648.1	7,525.0	130.8	25.0	90.00	-6,952.8	-2,764.7	3,032.5	2,882.1	150.36	20.168		
15,000.0	7,530.0	7,648.1	7,525.0	132.6	25.0	90.00	-6,952.8	-2,764.7	3,046.2	2,894.1	152.10	20.027		
15,100.0	7,530.0	7,648.1	7,525.0	134.3	25.0	90.00	-6,952.8	-2,764.7	3,063.1	2,909.2	153.85	19.910		
15,200.0	7,530.0	7,648.1	7,525.0	136.1	25.0	90.00	-6,952.8	-2,764.7	3,083.2	2,927.6	155.59	19.816		
15,300.0	7,530.0	7,648.1	7,525.0	137.8	25.0	90.00	-6,952.8	-2,764.7	3,106.3	2,949.0	157.34	19.743		
15,400.0	7,530.0	7,648.1	7,525.0	139.6	25.0	90.00	-6,952.8	-2,764.7	3,132.5	2,973.4	159.08	19.691		
15,500.0	7,530.0	7,648.1	7,525.0	141.3	25.0	90.00	-6,952.8	-2,764.7	3,161.6	3,000.8	160.83	19.658		
15,600.0	7,530.0	7,648.1	7,525.0	143.0	25.0	90.00	-6,952.8	-2,764.7	3,193.6	3,031.1	162.58	19.644 SF		
15,700.0	7,530.0	7,648.1	7,525.0	144.8	25.0	90.00	-6,952.8	-2,764.7	3,228.4	3,064.1	164.32	19.647		
15,800.0	7,530.0	7,648.1	7,525.0	146.5	25.0	90.00	-6,952.8	-2,764.7	3,265.9	3,099.8	166.07	19.666		
15,900.0	7,530.0	7,648.1	7,525.0	148.3	25.0	90.00	-6,952.8	-2,764.7	3,306.0	3,138.1	167.82	19.700		
16,000.0	7,530.0	7,648.1	7,525.0	150.0	25.0	90.00	-6,952.8	-2,764.7	3,348.5	3,179.0	169.57	19.748		
16,100.0	7,530.0	7,648.1	7,525.0	151.8	25.0	90.00	-6,952.8	-2,764.7	3,393.5	3,222.2	171.31	19.809		
16,200.0	7,530.0	7,648.1	7,525.0	153.5	25.0	90.00	-6,952.8	-2,764.7	3,440.9	3,267.8	173.06	19.882		
16,300.0	7,530.0	7,648.1	7,525.0	155.3	25.0	90.00	-6,952.8	-2,764.7	3,490.4	3,315.6	174.81	19.967		
16,400.0	7,530.0	7,648.1	7,525.0	157.0	25.0	90.00	-6,952.8	-2,764.7	3,542.1	3,365.5	176.56	20.062		
16,500.0	7,530.0	7,648.1	7,525.0	158.8	25.0	90.00	-6,952.8	-2,764.7	3,595.8	3,417.5	178.30	20.166		
16,600.0	7,530.0	7,648.1	7,525.0	160.5	25.0	90.00	-6,952.8	-2,764.7	3,651.4	3,471.4	180.05	20.280		
16,700.0	7,530.0	7,648.1	7,525.0	162.3	25.0	90.00	-6,952.8	-2,764.7	3,708.9	3,527.1	181.80	20.401		
16,800.0	7,530.0	7,648.1	7,525.0	164.0	25.0	90.00	-6,952.8	-2,764.7	3,768.2	3,584.7	183.55	20.530		
16,900.0	7,530.0	7,648.1	7,525.0	165.8	25.0	90.00	-6,952.8	-2,764.7	3,829.2	3,643.9	185.30	20.665		
17,000.0	7,530.0	7,648.1	7,525.0	167.5	25.0	90.00	-6,952.8	-2,764.7	3,891.8	3,704.8	187.05	20.807		
17,100.0	7,530.0	7,648.1	7,525.0	169.3	25.0	90.00	-6,952.8	-2,764.7	3,956.0	3,767.2	188.79	20.954		
17,200.0	7,530.0	7,648.1	7,525.0	171.0	25.0	90.00	-6,952.8	-2,764.7	4,021.6	3,831.0	190.54	21.106		
17,300.0	7,530.0	7,648.1	7,525.0	172.8	25.0	90.00	-6,952.8	-2,764.7	4,088.6	3,896.3	192.29	21.262		
17,400.0	7,530.0	7,648.1	7,525.0	174.5	25.0	90.00	-6,952.8	-2,764.7	4,156.9	3,962.9	194.04	21.423		
17,420.9	7,530.0	7,648.1	7,525.0	174.9	25.0	90.00	-6,952.8	-2,764.7	4,171.4	3,977.0	194.41	21.457		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-149.46	-6,195.0	-3,654.7	7,192.7					
100.0	100.0	68.3	68.3	0.2	0.1	-149.46	-6,195.1	-3,654.6	7,192.8	7,192.5	0.27	N/A		
200.0	200.0	141.2	141.2	0.3	0.2	-149.47	-6,195.5	-3,654.3	7,193.0	7,192.5	0.57	N/A		
300.0	300.0	208.5	208.5	0.5	0.4	-149.47	-6,196.2	-3,654.1	7,193.8	7,192.9	0.86	8,317.286		
400.0	400.0	312.7	312.7	0.7	0.5	-149.47	-6,197.1	-3,654.5	7,194.7	7,193.5	1.22	5,891.791		
500.0	500.0	424.7	424.6	0.8	0.7	-149.47	-6,198.1	-3,654.6	7,195.5	7,193.9	1.59	4,522.193		
600.0	600.0	525.5	525.5	1.0	0.9	-149.48	-6,198.8	-3,654.9	7,196.2	7,194.3	1.94	3,706.177		
700.0	700.0	641.6	641.5	1.2	1.1	178.05	-6,199.2	-3,655.6	7,197.7	7,195.4	2.32	3,104.196		
800.0	800.0	733.8	733.8	1.4	1.3	178.05	-6,199.5	-3,655.9	7,200.8	7,198.1	2.65	2,713.890		
900.0	899.9	811.0	810.9	1.6	1.4	178.06	-6,199.7	-3,656.8	7,205.9	7,203.0	2.96	2,433.685		
988.4	988.1	900.0	900.0	1.7	1.6	178.06	-6,199.9	-3,657.7	7,211.9	7,208.6	3.27	2,206.404		
1,000.0	999.7	922.9	922.9	1.7	1.6	178.06	-6,200.0	-3,657.9	7,212.8	7,209.4	3.33	2,166.751		
1,100.0	1,099.4	1,000.0	1,000.0	1.9	1.8	178.07	-6,200.3	-3,658.8	7,220.5	7,216.9	3.64	1,984.736		
1,200.0	1,199.2	1,104.3	1,104.3	2.1	1.9	178.08	-6,200.7	-3,660.5	7,228.4	7,224.4	3.99	1,809.397		
1,300.0	1,299.0	1,200.0	1,199.9	2.3	2.1	178.09	-6,200.9	-3,662.0	7,236.1	7,231.8	4.34	1,668.530		
1,400.0	1,398.8	1,278.2	1,278.1	2.5	2.2	178.11	-6,201.0	-3,663.5	7,244.0	7,239.4	4.65	1,558.294		
1,500.0	1,498.5	1,381.6	1,381.5	2.7	2.4	178.12	-6,201.2	-3,666.0	7,252.2	7,247.2	5.01	1,448.933		
1,600.0	1,598.3	1,512.6	1,512.5	2.9	2.7	178.14	-6,201.3	-3,668.7	7,260.0	7,254.6	5.41	1,342.065		
1,700.0	1,698.1	1,617.5	1,617.3	3.2	2.8	178.16	-6,201.0	-3,670.8	7,267.6	7,261.8	5.77	1,259.757		
1,800.0	1,797.8	1,701.8	1,701.7	3.4	3.0	178.17	-6,200.9	-3,672.5	7,275.3	7,269.2	6.09	1,194.204		
1,900.0	1,897.6	1,810.0	1,809.8	3.6	3.2	178.20	-6,200.5	-3,675.1	7,283.0	7,276.5	6.46	1,127.605		
2,000.0	1,997.4	1,900.0	1,899.8	3.8	3.3	178.22	-6,200.0	-3,677.6	7,290.7	7,283.9	6.79	1,073.223		
2,100.0	2,097.1	1,980.3	1,980.0	4.0	3.5	178.23	-6,199.8	-3,679.7	7,298.6	7,291.5	7.11	1,026.488		
2,200.0	2,196.9	2,100.0	2,099.7	4.2	3.7	178.26	-6,199.5	-3,682.9	7,306.5	7,299.0	7.50	974.493		
2,300.0	2,296.7	2,174.1	2,173.8	4.4	3.8	178.27	-6,199.4	-3,684.8	7,314.4	7,306.6	7.80	937.323		
2,400.0	2,396.5	2,262.9	2,262.5	4.6	4.0	178.29	-6,199.5	-3,687.2	7,322.7	7,314.5	8.14	899.955		
2,500.0	2,496.2	2,361.6	2,361.2	4.8	4.2	178.31	-6,199.3	-3,690.4	7,331.0	7,322.5	8.49	863.659		
2,600.0	2,596.0	2,508.8	2,508.2	5.0	4.4	178.35	-6,198.5	-3,695.4	7,339.0	7,330.1	8.93	821.993		
2,700.0	2,695.8	2,613.9	2,613.4	5.2	4.6	178.38	-6,197.4	-3,699.0	7,346.7	7,337.4	9.29	790.606		
2,800.0	2,795.5	2,723.7	2,723.1	5.4	4.8	178.40	-6,196.7	-3,701.7	7,354.1	7,344.5	9.66	761.135		
2,900.0	2,895.3	2,826.3	2,825.6	5.6	5.0	178.42	-6,196.2	-3,704.0	7,361.6	7,351.6	10.02	734.790		
3,000.0	2,995.1	2,963.2	2,962.5	5.9	5.3	178.44	-6,195.4	-3,706.1	7,368.6	7,358.2	10.44	706.146		
3,100.0	3,094.9	3,047.5	3,046.8	6.1	5.4	178.46	-6,194.7	-3,707.5	7,375.6	7,364.8	10.76	685.539		
3,200.0	3,194.6	3,133.3	3,132.6	6.3	5.6	178.47	-6,194.3	-3,709.1	7,382.9	7,371.8	11.09	665.995		
3,300.0	3,294.4	3,234.1	3,233.3	6.5	5.7	178.48	-6,193.8	-3,710.8	7,390.1	7,378.7	11.44	646.133		
3,400.0	3,394.2	3,327.9	3,327.2	6.7	5.9	178.49	-6,193.8	-3,711.9	7,397.5	7,385.7	11.78	628.193		
3,500.0	3,493.9	3,438.6	3,437.8	6.9	6.1	178.50	-6,193.8	-3,712.8	7,404.7	7,392.5	12.14	609.799		
3,600.0	3,593.7	3,520.7	3,520.0	7.1	6.2	178.51	-6,194.0	-3,713.5	7,412.0	7,399.6	12.46	594.841		
3,700.0	3,693.5	3,629.4	3,628.7	7.3	6.4	178.51	-6,194.2	-3,714.5	7,419.5	7,406.6	12.82	578.544		
3,800.0	3,793.2	3,748.0	3,747.3	7.5	6.6	178.52	-6,194.2	-3,715.3	7,426.6	7,413.4	13.21	562.407		
3,900.0	3,893.0	3,835.4	3,834.6	7.7	6.8	178.52	-6,194.3	-3,715.8	7,433.7	7,420.2	13.53	549.355		
4,000.0	3,992.8	3,912.1	3,911.4	8.0	6.9	178.53	-6,194.4	-3,716.7	7,441.1	7,427.3	13.84	537.617		
4,100.0	4,092.6	4,000.0	3,999.3	8.2	7.1	178.54	-6,194.5	-3,718.0	7,448.8	7,434.6	14.17	525.676		
4,200.0	4,192.3	4,086.0	4,085.3	8.4	7.2	178.55	-6,194.6	-3,719.6	7,456.7	7,442.2	14.50	514.368		
4,300.0	4,292.1	4,215.2	4,214.4	8.6	7.5	178.57	-6,194.4	-3,722.2	7,464.3	7,449.4	14.90	500.960		
4,400.0	4,391.9	4,300.0	4,299.2	8.8	7.6	178.59	-6,194.1	-3,724.2	7,472.0	7,456.8	15.23	490.729		
4,500.0	4,491.6	4,382.9	4,382.1	9.0	7.8	178.60	-6,193.8	-3,726.5	7,479.9	7,464.4	15.55	481.052		
4,600.0	4,591.4	4,500.0	4,499.1	9.2	8.0	178.62	-6,193.6	-3,729.3	7,487.7	7,471.8	15.93	470.025		
4,700.0	4,691.2	4,590.0	4,589.1	9.4	8.1	178.64	-6,193.6	-3,730.9	7,495.4	7,479.1	16.26	460.866		
4,800.0	4,790.9	4,732.5	4,731.6	9.6	8.4	178.66	-6,193.0	-3,733.5	7,502.7	7,486.0	16.69	449.514		
4,900.0	4,890.7	4,800.0	4,799.1	9.8	8.5	178.67	-6,192.8	-3,734.9	7,510.2	7,493.2	16.99	442.168		
5,000.0	4,990.5	4,985.9	4,985.0	10.1	8.8	178.70	-6,191.7	-3,738.5	7,517.7	7,500.2	17.49	429.859		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
5,100.0	5,090.3	5,083.0	5,082.0	10.3	9.0	178.71	-6,190.7	-3,739.6	7,524.2	7,506.3	17.83	421.889	
5,200.0	5,190.0	5,225.1	5,224.1	10.5	9.2	178.73	-6,189.0	-3,741.3	7,530.5	7,512.3	18.26	412.402	
5,300.0	5,289.8	5,344.2	5,343.2	10.7	9.5	178.75	-6,187.0	-3,742.3	7,536.3	7,517.7	18.64	404.205	
5,400.0	5,389.6	5,425.2	5,424.1	10.9	9.6	178.76	-6,185.8	-3,743.0	7,542.2	7,523.2	18.96	397.750	
5,500.0	5,489.3	5,500.0	5,498.9	11.1	9.7	178.76	-6,184.8	-3,743.7	7,548.4	7,529.1	19.27	391.741	
5,600.0	5,589.1	5,635.7	5,634.7	11.3	10.0	178.78	-6,182.9	-3,744.8	7,554.3	7,534.6	19.68	383.820	
5,700.0	5,688.9	5,714.7	5,713.6	11.5	10.1	178.79	-6,181.9	-3,745.2	7,560.3	7,540.3	19.99	378.116	
5,800.0	5,788.7	5,855.3	5,854.3	11.7	10.3	178.80	-6,180.1	-3,746.0	7,566.3	7,545.9	20.42	370.604	
5,900.0	5,888.4	5,949.7	5,948.6	11.9	10.5	178.81	-6,178.5	-3,746.2	7,571.8	7,551.0	20.76	364.807	
6,000.0	5,988.2	6,000.0	5,998.9	12.2	10.6	178.81	-6,178.0	-3,746.3	7,577.7	7,556.7	21.02	360.538	
6,100.0	6,088.0	6,078.1	6,077.0	12.4	10.7	178.82	-6,177.4	-3,746.5	7,584.1	7,562.7	21.33	355.582	
6,200.0	6,187.7	6,135.6	6,134.5	12.6	10.8	178.82	-6,177.2	-3,746.9	7,590.9	7,569.3	21.60	351.378	
6,300.0	6,287.5	6,200.0	6,198.9	12.8	10.9	178.83	-6,177.4	-3,747.6	7,598.4	7,576.5	21.89	347.112	
6,400.0	6,387.3	6,382.6	6,381.4	13.0	11.3	178.84	-6,177.7	-3,748.9	7,605.9	7,583.5	22.38	339.822	
6,500.0	6,487.0	6,482.9	6,481.8	13.2	11.4	178.84	-6,177.0	-3,749.4	7,612.4	7,589.6	22.73	334.870	
6,600.0	6,586.8	6,575.0	6,573.8	13.4	11.6	178.85	-6,176.4	-3,750.2	7,619.0	7,595.9	23.07	330.282	
6,700.0	6,686.6	6,695.9	6,694.8	13.6	11.8	178.86	-6,175.5	-3,751.0	7,625.5	7,602.1	23.45	325.123	
6,787.0	6,773.4	6,813.3	6,812.2	13.8	12.0	178.87	-6,174.2	-3,751.9	7,630.9	7,607.0	23.81	320.451	
6,800.0	6,786.4	6,828.8	6,827.7	13.8	12.0	168.32	-6,173.9	-3,752.0	7,631.5	7,607.7	23.87	319.696	
6,850.0	6,836.3	6,888.6	6,887.5	13.9	12.2	81.18	-6,173.0	-3,752.5	7,632.2	7,608.1	24.06	317.222	
6,900.0	6,886.2	6,948.6	6,947.4	14.0	12.3	51.45	-6,172.1	-3,752.8	7,629.8	7,605.6	24.19	315.414	
6,950.0	6,935.7	7,006.5	7,005.3	14.0	12.4	43.91	-6,171.3	-3,752.8	7,624.4	7,600.2	24.26	314.273	
7,000.0	6,984.6	7,053.3	7,052.1	14.0	12.4	40.90	-6,170.7	-3,752.7	7,616.1	7,591.8	24.26	313.950	
7,050.0	7,032.6	7,336.3	7,335.0	14.0	12.9	39.89	-6,167.1	-3,745.0	7,604.7	7,580.1	24.60	309.131	
7,100.0	7,079.7	7,374.7	7,373.3	13.9	13.0	39.46	-6,166.6	-3,742.6	7,589.2	7,564.7	24.49	309.837	
7,150.0	7,125.4	7,400.0	7,398.5	13.9	13.0	39.56	-6,166.4	-3,741.0	7,571.1	7,546.8	24.34	311.066	
7,200.0	7,169.6	7,427.7	7,426.1	13.8	13.1	40.07	-6,166.3	-3,739.1	7,550.4	7,526.3	24.17	312.349	
7,250.0	7,212.1	7,447.6	7,446.0	13.8	13.1	40.91	-6,166.3	-3,737.9	7,527.4	7,503.4	23.99	313.720	
7,300.0	7,252.6	7,466.6	7,465.0	13.7	13.1	42.07	-6,166.2	-3,736.7	7,502.1	7,478.2	23.83	314.805	
7,350.0	7,291.0	7,500.0	7,498.3	13.7	13.2	43.60	-6,166.3	-3,734.9	7,474.6	7,450.9	23.73	314.976	
7,400.0	7,327.1	7,500.0	7,498.3	13.7	13.2	45.32	-6,166.3	-3,734.9	7,445.0	7,421.4	23.63	315.069	
7,450.0	7,360.7	7,500.0	7,498.3	13.7	13.2	47.36	-6,166.3	-3,734.9	7,413.6	7,390.0	23.61	314.038	
7,500.0	7,391.6	7,538.6	7,536.9	13.7	13.2	49.99	-6,166.4	-3,732.9	7,380.3	7,356.6	23.77	310.517	
7,550.0	7,419.7	7,554.6	7,552.8	13.8	13.3	52.91	-6,166.4	-3,732.1	7,345.5	7,321.5	24.01	305.997	
7,600.0	7,444.8	7,568.9	7,567.1	13.9	13.3	56.26	-6,166.5	-3,731.5	7,309.2	7,284.8	24.37	299.893	
7,650.0	7,466.9	7,600.0	7,598.2	14.1	13.3	60.23	-6,166.7	-3,730.2	7,271.7	7,246.7	24.92	291.806	
7,700.0	7,485.8	7,600.0	7,598.2	14.3	13.3	64.40	-6,166.7	-3,730.2	7,233.0	7,207.5	25.50	283.601	
7,750.0	7,501.5	7,600.0	7,598.2	14.6	13.3	69.03	-6,166.7	-3,730.2	7,193.4	7,167.2	26.17	274.822	
7,800.0	7,513.7	7,600.0	7,598.2	14.9	13.3	74.08	-6,166.7	-3,730.2	7,153.1	7,126.2	26.89	266.045	
7,850.0	7,522.6	7,600.0	7,598.2	15.2	13.3	79.49	-6,166.7	-3,730.2	7,112.3	7,084.7	27.59	257.831	
7,900.0	7,528.0	7,620.0	7,618.2	15.6	13.4	85.45	-6,166.8	-3,729.5	7,071.2	7,042.9	28.26	250.255	
7,952.9	7,530.0	7,621.5	7,619.7	16.1	13.4	91.62	-6,166.8	-3,729.4	7,027.5	6,998.7	28.79	244.117	
8,000.0	7,530.0	7,621.7	7,619.9	16.5	13.4	91.63	-6,166.8	-3,729.4	6,988.8	6,959.5	29.24	238.993	
8,100.0	7,530.0	7,622.1	7,620.3	17.5	13.4	91.63	-6,166.8	-3,729.4	6,906.8	6,876.5	30.30	227.927	
8,200.0	7,530.0	7,622.5	7,620.7	18.7	13.4	91.64	-6,166.8	-3,729.4	6,825.2	6,793.8	31.47	216.879	
8,300.0	7,530.0	7,622.9	7,621.1	19.9	13.4	91.64	-6,166.8	-3,729.3	6,744.2	6,711.5	32.73	206.079	
8,400.0	7,530.0	7,623.3	7,621.5	21.2	13.4	91.65	-6,166.8	-3,729.3	6,663.7	6,629.7	34.05	195.677	
8,500.0	7,530.0	7,623.7	7,621.9	22.6	13.4	91.66	-6,166.8	-3,729.3	6,583.7	6,548.3	35.44	185.759	
8,600.0	7,530.0	7,624.1	7,622.3	24.0	13.4	91.66	-6,166.8	-3,729.3	6,504.3	6,467.4	36.88	176.369	
8,700.0	7,530.0	7,624.6	7,622.8	25.4	13.4	91.67	-6,166.8	-3,729.3	6,425.5	6,387.1	38.36	167.522	
8,800.0	7,530.0	7,625.0	7,623.2	26.9	13.4	91.67	-6,166.8	-3,729.3	6,347.2	6,307.4	39.87	159.212	
8,900.0	7,530.0	7,625.4	7,623.6	28.4	13.4	91.68	-6,166.8	-3,729.3	6,269.6	6,228.2	41.41	151.419	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - SOSAA UNIT 1 (EXISTING) - EXISTING - EXISTI											Offset Site Error: 0.0 ft		
Survey Program: 100-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,000.0	7,530.0	7,625.8	7,624.0	30.0	13.4	91.69	-6,166.8	-3,729.2	6,192.6	6,149.6	42.97	144.120	
9,100.0	7,530.0	7,626.2	7,624.4	31.5	13.4	91.69	-6,166.8	-3,729.2	6,116.3	6,071.7	44.55	137.286	
9,200.0	7,530.0	7,626.6	7,624.8	33.1	13.4	91.70	-6,166.8	-3,729.2	6,040.7	5,994.5	46.15	130.887	
9,300.0	7,530.0	7,627.0	7,625.2	34.7	13.4	91.70	-6,166.8	-3,729.2	5,965.7	5,918.0	47.77	124.892	
9,400.0	7,530.0	7,627.4	7,625.6	36.3	13.4	91.71	-6,166.8	-3,729.2	5,891.6	5,842.2	49.40	119.274	
9,500.0	7,530.0	7,627.9	7,626.1	38.0	13.4	91.72	-6,166.8	-3,729.2	5,818.2	5,767.1	51.03	114.004	
9,600.0	7,530.0	7,628.3	7,626.5	39.6	13.4	91.72	-6,166.8	-3,729.2	5,745.6	5,692.9	52.68	109.057	
9,700.0	7,530.0	7,628.7	7,626.9	41.3	13.4	91.73	-6,166.8	-3,729.1	5,673.8	5,619.5	54.34	104.409	
9,800.0	7,530.0	7,629.1	7,627.3	42.9	13.4	91.73	-6,166.8	-3,729.1	5,602.9	5,546.9	56.01	100.038	
9,900.0	7,530.0	7,629.5	7,627.7	44.6	13.4	91.74	-6,166.8	-3,729.1	5,532.9	5,475.3	57.68	95.924	
10,000.0	7,530.0	7,630.0	7,628.1	46.3	13.4	91.75	-6,166.8	-3,729.1	5,463.9	5,404.5	59.36	92.048	
10,100.0	7,530.0	7,630.4	7,628.6	47.9	13.4	91.75	-6,166.8	-3,729.1	5,395.8	5,334.7	61.04	88.393	
10,200.0	7,530.0	7,630.8	7,629.0	49.6	13.4	91.76	-6,166.8	-3,729.1	5,328.7	5,266.0	62.73	84.944	
10,300.0	7,530.0	7,631.2	7,629.4	51.3	13.4	91.76	-6,166.8	-3,729.0	5,262.7	5,198.2	64.42	81.687	
10,400.0	7,530.0	7,631.7	7,629.8	53.0	13.4	91.77	-6,166.8	-3,729.0	5,197.7	5,131.6	66.12	78.608	
10,500.0	7,530.0	7,632.1	7,630.3	54.7	13.4	91.78	-6,166.9	-3,729.0	5,133.9	5,066.1	67.82	75.696	
10,600.0	7,530.0	7,632.5	7,630.7	56.4	13.4	91.78	-6,166.9	-3,729.0	5,071.2	5,001.7	69.53	72.940	
10,700.0	7,530.0	7,632.9	7,631.1	58.1	13.4	91.79	-6,166.9	-3,729.0	5,009.8	4,938.5	71.23	70.329	
10,800.0	7,530.0	7,633.4	7,631.6	59.8	13.4	91.80	-6,166.9	-3,729.0	4,949.6	4,876.6	72.94	67.856	
10,900.0	7,530.0	7,633.8	7,632.0	61.5	13.4	91.80	-6,166.9	-3,729.0	4,890.7	4,816.0	74.65	65.511	
11,000.0	7,530.0	7,634.2	7,632.4	63.2	13.4	91.81	-6,166.9	-3,728.9	4,833.2	4,756.8	76.37	63.287	
11,100.0	7,530.0	7,634.7	7,632.9	64.9	13.4	91.81	-6,166.9	-3,728.9	4,777.0	4,698.9	78.09	61.177	
11,200.0	7,530.0	7,635.1	7,633.3	66.6	13.4	91.82	-6,166.9	-3,728.9	4,722.3	4,642.5	79.80	59.174	
11,300.0	7,530.0	7,635.5	7,633.7	68.4	13.4	91.83	-6,166.9	-3,728.9	4,669.2	4,587.6	81.52	57.274	
11,400.0	7,530.0	7,636.0	7,634.2	70.1	13.4	91.83	-6,166.9	-3,728.9	4,617.5	4,534.3	83.25	55.469	
11,500.0	7,530.0	7,636.4	7,634.6	71.8	13.4	91.84	-6,166.9	-3,728.9	4,567.5	4,482.6	84.97	53.755	
11,600.0	7,530.0	7,636.9	7,635.1	73.5	13.4	91.85	-6,166.9	-3,728.8	4,519.2	4,432.5	86.69	52.128	
11,700.0	7,530.0	7,637.3	7,635.5	75.2	13.4	91.85	-6,166.9	-3,728.8	4,472.5	4,384.1	88.42	50.583	
11,800.0	7,530.0	7,637.7	7,635.9	77.0	13.4	91.86	-6,166.9	-3,728.8	4,427.6	4,337.5	90.15	49.115	
11,900.0	7,530.0	7,638.2	7,636.4	78.7	13.4	91.86	-6,166.9	-3,728.8	4,384.6	4,292.7	91.88	47.723	
12,000.0	7,530.0	7,638.6	7,636.8	80.4	13.4	91.87	-6,166.9	-3,728.8	4,343.4	4,249.8	93.61	46.401	
12,100.0	7,530.0	7,639.1	7,637.3	82.2	13.4	91.88	-6,166.9	-3,728.8	4,304.1	4,208.8	95.34	45.147	
12,200.0	7,530.0	7,639.5	7,637.7	83.9	13.4	91.88	-6,166.9	-3,728.7	4,266.9	4,169.8	97.07	43.958	
12,300.0	7,530.0	7,640.0	7,638.2	85.6	13.4	91.89	-6,166.9	-3,728.7	4,231.6	4,132.8	98.80	42.830	
12,400.0	7,530.0	7,640.4	7,638.6	87.3	13.4	91.90	-6,166.9	-3,728.7	4,198.5	4,097.9	100.53	41.762	
12,500.0	7,530.0	7,640.9	7,639.1	89.1	13.4	91.90	-6,166.9	-3,728.7	4,167.5	4,065.2	102.27	40.751	
12,600.0	7,530.0	7,641.3	7,639.5	90.8	13.4	91.91	-6,166.9	-3,728.7	4,138.6	4,034.6	104.00	39.794	
12,700.0	7,530.0	7,641.8	7,640.0	92.5	13.4	91.92	-6,166.9	-3,728.7	4,112.0	4,006.3	105.74	38.889	
12,800.0	7,530.0	7,642.2	7,640.4	94.3	13.4	91.92	-6,166.9	-3,728.7	4,087.7	3,980.2	107.47	38.035	
12,900.0	7,530.0	7,642.7	7,640.9	96.0	13.4	91.93	-6,166.9	-3,728.6	4,065.7	3,956.5	109.21	37.228	
13,000.0	7,530.0	7,643.2	7,641.3	97.8	13.4	91.94	-6,166.9	-3,728.6	4,046.0	3,935.1	110.95	36.468	
13,100.0	7,530.0	7,643.6	7,641.8	99.5	13.4	91.94	-6,166.9	-3,728.6	4,028.8	3,916.1	112.69	35.752	
13,200.0	7,530.0	7,644.1	7,642.3	101.2	13.4	91.95	-6,166.9	-3,728.6	4,013.9	3,899.5	114.42	35.079	
13,300.0	7,530.0	7,644.5	7,642.7	103.0	13.4	91.96	-6,166.9	-3,728.6	4,001.5	3,885.3	116.16	34.448	
13,400.0	7,530.0	7,645.0	7,643.2	104.7	13.4	91.96	-6,166.9	-3,728.6	3,991.6	3,873.7	117.90	33.855	
13,500.0	7,530.0	7,645.5	7,643.7	106.4	13.4	91.97	-6,166.9	-3,728.5	3,984.1	3,864.5	119.64	33.300	
13,600.0	7,530.0	7,645.9	7,644.1	108.2	13.4	91.98	-6,166.9	-3,728.5	3,979.1	3,857.8	121.38	32.782	
13,700.0	7,530.0	7,646.4	7,644.6	109.9	13.4	91.98	-6,166.9	-3,728.5	3,976.7	3,853.6	123.12	32.299	
13,747.3	7,530.0	7,646.6	7,644.8	110.7	13.4	91.99	-6,166.9	-3,728.5	3,976.4	3,852.5	123.95	32.082 CC	
13,800.0	7,530.0	7,646.9	7,645.1	111.7	13.4	91.99	-6,166.9	-3,728.5	3,976.8	3,851.9	124.86	31.849 ES	
13,900.0	7,530.0	7,647.3	7,645.5	113.4	13.4	92.00	-6,166.9	-3,728.5	3,979.4	3,852.7	126.60	31.431	
14,000.0	7,530.0	7,647.8	7,646.0	115.1	13.4	92.00	-6,167.0	-3,728.5	3,984.4	3,856.1	128.35	31.044	

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,100.0	7,530.0	7,648.3	7,646.5	116.9	13.4	92.01	-6,167.0	-3,728.4	3,992.0	3,861.9	130.09	30.687		
14,200.0	7,530.0	7,648.8	7,646.9	118.6	13.4	92.02	-6,167.0	-3,728.4	4,002.1	3,870.3	131.83	30.358		
14,300.0	7,530.0	7,649.2	7,647.4	120.4	13.4	92.02	-6,167.0	-3,728.4	4,014.6	3,881.1	133.57	30.056		
14,400.0	7,530.0	7,649.7	7,647.9	122.1	13.4	92.03	-6,167.0	-3,728.4	4,029.6	3,894.3	135.32	29.779		
14,500.0	7,530.0	7,650.2	7,648.4	123.9	13.4	92.04	-6,167.0	-3,728.4	4,047.0	3,910.0	137.06	29.528		
14,600.0	7,530.0	7,650.7	7,648.8	125.6	13.4	92.04	-6,167.0	-3,728.4	4,066.8	3,928.0	138.80	29.299		
14,700.0	7,530.0	7,651.1	7,649.3	127.3	13.4	92.05	-6,167.0	-3,728.3	4,088.9	3,948.4	140.55	29.093		
14,800.0	7,530.0	7,651.6	7,649.8	129.1	13.4	92.06	-6,167.0	-3,728.3	4,113.4	3,971.1	142.29	28.908		
14,900.0	7,530.0	7,652.1	7,650.3	130.8	13.4	92.07	-6,167.0	-3,728.3	4,140.1	3,996.1	144.03	28.744		
15,000.0	7,530.0	7,652.6	7,650.8	132.6	13.4	92.07	-6,167.0	-3,728.3	4,169.1	4,023.3	145.78	28.598		
15,100.0	7,530.0	7,653.1	7,651.3	134.3	13.4	92.08	-6,167.0	-3,728.3	4,200.2	4,052.7	147.52	28.471		
15,200.0	7,530.0	7,653.6	7,651.7	136.1	13.4	92.09	-6,167.0	-3,728.3	4,233.5	4,084.2	149.27	28.361		
15,300.0	7,530.0	7,654.1	7,652.2	137.8	13.4	92.09	-6,167.0	-3,728.2	4,268.8	4,117.8	151.01	28.268		
15,400.0	7,530.0	7,654.5	7,652.7	139.6	13.4	92.10	-6,167.0	-3,728.2	4,306.2	4,153.4	152.76	28.189		
15,500.0	7,530.0	7,655.0	7,653.2	141.3	13.4	92.11	-6,167.0	-3,728.2	4,345.5	4,191.0	154.50	28.126		
15,600.0	7,530.0	7,655.5	7,653.7	143.0	13.4	92.11	-6,167.0	-3,728.2	4,386.8	4,230.6	156.25	28.076		
15,700.0	7,530.0	7,656.0	7,654.2	144.8	13.4	92.12	-6,167.0	-3,728.2	4,430.0	4,272.0	158.00	28.039		
15,800.0	7,530.0	7,656.5	7,654.7	146.5	13.4	92.13	-6,167.0	-3,728.2	4,475.0	4,315.2	159.74	28.014		
15,900.0	7,530.0	7,657.0	7,655.2	148.3	13.4	92.14	-6,167.0	-3,728.1	4,521.7	4,360.2	161.49	28.000		
16,000.0	7,530.0	7,657.5	7,655.7	150.0	13.4	92.14	-6,167.0	-3,728.1	4,570.2	4,406.9	163.23	27.998 SF		
16,100.0	7,530.0	7,658.0	7,656.2	151.8	13.4	92.15	-6,167.0	-3,728.1	4,620.3	4,455.3	164.98	28.005		
16,200.0	7,530.0	7,658.5	7,656.7	153.5	13.4	92.16	-6,167.0	-3,728.1	4,672.0	4,505.3	166.73	28.022		
16,300.0	7,530.0	7,659.0	7,657.2	155.3	13.4	92.16	-6,167.0	-3,728.1	4,725.2	4,556.8	168.47	28.047		
16,400.0	7,530.0	7,659.5	7,657.7	157.0	13.4	92.17	-6,167.0	-3,728.1	4,780.0	4,609.8	170.22	28.081		
16,500.0	7,530.0	7,660.0	7,658.2	158.8	13.4	92.18	-6,167.0	-3,728.0	4,836.2	4,664.2	171.97	28.123		
16,600.0	7,530.0	7,660.5	7,658.7	160.5	13.4	92.19	-6,167.0	-3,728.0	4,893.8	4,720.1	173.71	28.172		
16,700.0	7,530.0	7,661.0	7,659.2	162.3	13.4	92.19	-6,167.0	-3,728.0	4,952.8	4,777.3	175.46	28.227		
16,800.0	7,530.0	7,661.6	7,659.7	164.0	13.4	92.20	-6,167.0	-3,728.0	5,013.0	4,835.8	177.21	28.289		
16,900.0	7,530.0	7,662.1	7,660.2	165.8	13.4	92.21	-6,167.0	-3,728.0	5,074.5	4,895.6	178.96	28.357		
17,000.0	7,530.0	7,662.6	7,660.8	167.5	13.4	92.22	-6,167.0	-3,728.0	5,137.3	4,956.6	180.70	28.429		
17,100.0	7,530.0	7,663.1	7,661.3	169.3	13.4	92.22	-6,167.1	-3,727.9	5,201.2	5,018.7	182.45	28.507		
17,200.0	7,530.0	7,663.6	7,661.8	171.0	13.4	92.23	-6,167.1	-3,727.9	5,266.2	5,082.0	184.20	28.590		
17,300.0	7,530.0	7,664.1	7,662.3	172.8	13.4	92.24	-6,167.1	-3,727.9	5,332.3	5,146.3	185.94	28.677		
17,400.0	7,530.0	7,664.7	7,662.8	174.5	13.4	92.25	-6,167.1	-3,727.9	5,399.4	5,211.7	187.69	28.767		
17,420.9	7,530.0	7,664.8	7,662.9	174.9	13.4	92.25	-6,167.1	-3,727.9	5,413.6	5,225.5	188.06	28.787		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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	-135.85	-4,073.8	-3,954.5	5,677.6						
100.0	100.0	58.0	58.0	0.2	0.1	-135.85	-4,073.8	-3,954.5	5,677.5	5,677.2	0.25	N/A			
200.0	200.0	158.0	158.0	0.3	0.3	-135.85	-4,073.8	-3,954.5	5,677.5	5,676.9	0.60	9,425.786			
300.0	300.0	258.0	258.0	0.5	0.5	-135.85	-4,073.8	-3,954.5	5,677.5	5,676.5	0.95	5,967.512			
400.0	400.0	358.0	358.0	0.7	0.6	-135.85	-4,073.8	-3,954.5	5,677.5	5,676.2	1.30	4,365.743			
500.0	500.0	458.0	458.0	0.8	0.8	-135.85	-4,073.8	-3,954.5	5,677.5	5,675.8	1.65	3,441.888			
600.0	600.0	558.0	558.0	1.0	1.0	-135.85	-4,073.8	-3,954.5	5,677.5	5,675.5	2.00	2,840.745			
700.0	700.0	658.0	658.0	1.2	1.1	-168.33	-4,073.8	-3,954.5	5,678.3	5,676.0	2.35	2,418.950			
800.0	800.0	758.0	758.0	1.4	1.3	-168.33	-4,073.8	-3,954.5	5,680.9	5,678.2	2.70	2,107.301			
900.0	899.9	857.9	857.9	1.6	1.5	-168.33	-4,073.8	-3,954.5	5,685.1	5,682.1	3.04	1,867.860			
988.4	988.1	946.1	946.1	1.7	1.7	-168.33	-4,073.8	-3,954.5	5,690.3	5,687.0	3.35	1,698.251			
1,000.0	999.7	957.7	957.7	1.7	1.7	-168.33	-4,073.8	-3,954.5	5,691.1	5,687.7	3.39	1,678.181			
1,100.0	1,099.4	1,057.4	1,057.4	1.9	1.8	-168.34	-4,073.8	-3,954.5	5,697.7	5,694.0	3.74	1,523.193			
1,200.0	1,199.2	1,157.2	1,157.2	2.1	2.0	-168.35	-4,073.8	-3,954.5	5,704.4	5,700.3	4.09	1,394.647			
1,300.0	1,299.0	1,257.0	1,257.0	2.3	2.2	-168.37	-4,073.8	-3,954.5	5,711.0	5,706.6	4.44	1,286.317			
1,400.0	1,398.8	1,356.8	1,356.8	2.5	2.4	-168.38	-4,073.8	-3,954.5	5,717.7	5,712.9	4.79	1,193.786			
1,500.0	1,498.5	1,456.5	1,456.5	2.7	2.5	-168.40	-4,073.8	-3,954.5	5,724.3	5,719.1	5.14	1,113.836			
1,600.0	1,598.3	1,556.3	1,556.3	2.9	2.7	-168.41	-4,073.8	-3,954.5	5,730.9	5,725.4	5.49	1,044.068			
1,700.0	1,698.1	1,656.1	1,656.1	3.2	2.9	-168.42	-4,073.8	-3,954.5	5,737.6	5,731.7	5.84	982.653			
1,800.0	1,797.8	1,755.8	1,755.8	3.4	3.1	-168.44	-4,073.8	-3,954.5	5,744.2	5,738.0	6.19	928.177			
1,900.0	1,897.6	1,855.6	1,855.6	3.6	3.2	-168.45	-4,073.8	-3,954.5	5,750.8	5,744.3	6.54	879.528			
2,000.0	1,997.4	1,955.4	1,955.4	3.8	3.4	-168.46	-4,073.8	-3,954.5	5,757.5	5,750.6	6.89	835.819			
2,100.0	2,097.1	2,055.1	2,055.1	4.0	3.6	-168.48	-4,073.8	-3,954.5	5,764.1	5,756.9	7.24	796.334			
2,200.0	2,196.9	2,154.9	2,154.9	4.2	3.8	-168.49	-4,073.8	-3,954.5	5,770.7	5,763.2	7.59	760.490			
2,300.0	2,296.7	2,254.7	2,254.7	4.4	3.9	-168.50	-4,073.8	-3,954.5	5,777.4	5,769.4	7.94	727.804			
2,400.0	2,396.5	2,354.5	2,354.5	4.6	4.1	-168.52	-4,073.8	-3,954.5	5,784.0	5,775.7	8.29	697.878			
2,500.0	2,496.2	2,454.2	2,454.2	4.8	4.3	-168.53	-4,073.8	-3,954.5	5,790.7	5,782.0	8.64	670.377			
2,600.0	2,596.0	2,554.0	2,554.0	5.0	4.5	-168.54	-4,073.8	-3,954.5	5,797.3	5,788.3	8.99	645.016			
2,700.0	2,695.8	2,653.8	2,653.8	5.2	4.6	-168.56	-4,073.8	-3,954.5	5,803.9	5,794.6	9.34	621.556			
2,800.0	2,795.5	2,753.5	2,753.5	5.4	4.8	-168.57	-4,073.8	-3,954.5	5,810.6	5,800.9	9.69	599.791			
2,900.0	2,895.3	2,853.3	2,853.3	5.6	5.0	-168.58	-4,073.8	-3,954.5	5,817.2	5,807.2	10.04	579.543			
3,000.0	2,995.1	2,953.1	2,953.1	5.9	5.2	-168.60	-4,073.8	-3,954.5	5,823.9	5,813.5	10.39	560.660			
3,100.0	3,094.9	3,052.9	3,052.9	6.1	5.3	-168.61	-4,073.8	-3,954.5	5,830.5	5,819.8	10.74	543.007			
3,200.0	3,194.6	3,152.6	3,152.6	6.3	5.5	-168.62	-4,073.8	-3,954.5	5,837.1	5,826.1	11.09	526.469			
3,300.0	3,294.4	3,252.4	3,252.4	6.5	5.7	-168.64	-4,073.8	-3,954.5	5,843.8	5,832.3	11.44	510.943			
3,400.0	3,394.2	3,352.2	3,352.2	6.7	5.9	-168.65	-4,073.8	-3,954.5	5,850.4	5,838.6	11.79	496.338			
3,500.0	3,493.9	3,451.9	3,451.9	6.9	6.0	-168.66	-4,073.8	-3,954.5	5,857.1	5,844.9	12.14	482.576			
3,600.0	3,593.7	3,551.7	3,551.7	7.1	6.2	-168.68	-4,073.8	-3,954.5	5,863.7	5,851.2	12.49	469.586			
3,700.0	3,693.5	3,651.5	3,651.5	7.3	6.4	-168.69	-4,073.8	-3,954.5	5,870.4	5,857.5	12.84	457.303			
3,800.0	3,793.2	3,751.2	3,751.2	7.5	6.5	-168.70	-4,073.8	-3,954.5	5,877.0	5,863.8	13.19	445.673			
3,900.0	3,893.0	3,851.0	3,851.0	7.7	6.7	-168.71	-4,073.8	-3,954.5	5,883.6	5,870.1	13.54	434.644			
4,000.0	3,992.8	3,950.8	3,950.8	8.0	6.9	-168.73	-4,073.8	-3,954.5	5,890.3	5,876.4	13.89	424.171			
4,100.0	4,092.6	4,050.6	4,050.6	8.2	7.1	-168.74	-4,073.8	-3,954.5	5,896.9	5,882.7	14.24	414.213			
4,200.0	4,192.3	4,150.3	4,150.3	8.4	7.2	-168.75	-4,073.8	-3,954.5	5,903.6	5,889.0	14.59	404.733			
4,300.0	4,292.1	4,250.1	4,250.1	8.6	7.4	-168.77	-4,073.8	-3,954.5	5,910.2	5,895.3	14.94	395.697			
4,400.0	4,391.9	4,349.9	4,349.9	8.8	7.6	-168.78	-4,073.8	-3,954.5	5,916.9	5,901.6	15.29	387.075			
4,500.0	4,491.6	4,449.6	4,449.6	9.0	7.8	-168.79	-4,073.8	-3,954.5	5,923.5	5,907.9	15.64	378.839			
4,600.0	4,591.4	4,549.4	4,549.4	9.2	7.9	-168.80	-4,073.8	-3,954.5	5,930.1	5,914.2	15.99	370.963			
4,700.0	4,691.2	4,649.2	4,649.2	9.4	8.1	-168.82	-4,073.8	-3,954.5	5,936.8	5,920.5	16.34	363.425			
4,800.0	4,790.9	4,748.9	4,748.9	9.6	8.3	-168.83	-4,073.8	-3,954.5	5,943.4	5,926.8	16.69	356.203			
4,900.0	4,890.7	4,848.7	4,848.7	9.8	8.5	-168.84	-4,073.8	-3,954.5	5,950.1	5,933.1	17.04	349.278			
5,000.0	4,990.5	4,948.5	4,948.5	10.1	8.6	-168.85	-4,073.8	-3,954.5	5,956.7	5,939.3	17.39	342.632			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,100.0	5,090.3	4,993.0	4,993.0	10.3	8.7	-168.86	-4,073.8	-3,954.5	5,963.6	5,946.0	17.64	338.097		
5,200.0	5,190.0	4,993.0	4,993.0	10.5	8.7	-168.86	-4,073.8	-3,954.5	5,972.0	5,954.2	17.81	335.227		
5,300.0	5,289.8	4,993.0	4,993.0	10.7	8.7	-168.86	-4,073.8	-3,954.5	5,982.1	5,964.1	17.99	332.505		
5,400.0	5,389.6	4,993.0	4,993.0	10.9	8.7	-168.86	-4,073.8	-3,954.5	5,993.8	5,975.6	18.17	329.927		
5,500.0	5,489.3	4,993.0	4,993.0	11.1	8.7	-168.86	-4,073.8	-3,954.5	6,007.2	5,988.8	18.34	327.488		
5,600.0	5,589.1	4,993.0	4,993.0	11.3	8.7	-168.86	-4,073.8	-3,954.5	6,022.2	6,003.6	18.52	325.183		
5,700.0	5,688.9	4,993.0	4,993.0	11.5	8.7	-168.86	-4,073.8	-3,954.5	6,038.8	6,020.1	18.70	323.008		
5,800.0	5,788.7	4,993.0	4,993.0	11.7	8.7	-168.86	-4,073.8	-3,954.5	6,057.0	6,038.1	18.87	320.959		
5,900.0	5,888.4	4,993.0	4,993.0	11.9	8.7	-168.86	-4,073.8	-3,954.5	6,076.8	6,057.7	19.05	319.032		
6,000.0	5,988.2	4,993.0	4,993.0	12.2	8.7	-168.86	-4,073.8	-3,954.5	6,098.2	6,078.9	19.22	317.221		
6,100.0	6,088.0	4,993.0	4,993.0	12.4	8.7	-168.86	-4,073.8	-3,954.5	6,121.1	6,101.7	19.40	315.524		
6,200.0	6,187.7	4,993.0	4,993.0	12.6	8.7	-168.86	-4,073.8	-3,954.5	6,145.6	6,126.0	19.58	313.936		
6,300.0	6,287.5	4,993.0	4,993.0	12.8	8.7	-168.86	-4,073.8	-3,954.5	6,171.6	6,151.8	19.75	312.454		
6,400.0	6,387.3	4,993.0	4,993.0	13.0	8.7	-168.86	-4,073.8	-3,954.5	6,199.1	6,179.2	19.93	311.073		
6,500.0	6,487.0	4,993.0	4,993.0	13.2	8.7	-168.86	-4,073.8	-3,954.5	6,228.1	6,208.0	20.10	309.790		
6,600.0	6,586.8	4,993.0	4,993.0	13.4	8.7	-168.86	-4,073.8	-3,954.5	6,258.5	6,238.3	20.28	308.602		
6,700.0	6,686.6	4,993.0	4,993.0	13.6	8.7	-168.86	-4,073.8	-3,954.5	6,290.4	6,270.0	20.46	307.505		
6,787.0	6,773.4	4,993.0	4,993.0	13.8	8.7	-168.86	-4,073.8	-3,954.5	6,319.4	6,298.7	20.61	306.622		
6,800.0	6,786.4	4,993.0	4,993.0	13.8	8.7	-179.64	-4,073.8	-3,954.5	6,323.7	6,303.1	20.63	306.478		
6,850.0	6,836.3	4,993.0	4,993.0	13.9	8.7	92.35	-4,073.8	-3,954.5	6,339.0	6,318.3	20.70	306.221		
6,900.0	6,886.2	4,993.0	4,993.0	14.0	8.7	61.75	-4,073.8	-3,954.5	6,352.3	6,331.6	20.73	306.409		
6,950.0	6,935.7	4,993.0	4,993.0	14.0	8.7	53.33	-4,073.8	-3,954.5	6,363.4	6,342.7	20.72	307.051		
7,000.0	6,984.6	4,993.0	4,993.0	14.0	8.7	49.43	-4,073.8	-3,954.5	6,372.3	6,351.6	20.68	308.140		
7,050.0	7,032.6	4,993.0	4,993.0	14.0	8.7	47.18	-4,073.8	-3,954.5	6,379.0	6,358.4	20.60	309.656		
7,100.0	7,079.7	4,993.0	4,993.0	13.9	8.7	45.76	-4,073.8	-3,954.5	6,383.4	6,362.9	20.49	311.560		
7,150.0	7,125.4	4,993.0	4,993.0	13.9	8.7	44.82	-4,073.8	-3,954.5	6,385.6	6,365.2	20.35	313.796		
7,200.0	7,169.6	4,993.0	4,993.0	13.8	8.7	44.24	-4,073.8	-3,954.5	6,385.5	6,365.3	20.19	316.287		
7,250.0	7,212.1	4,993.0	4,993.0	13.8	8.7	43.91	-4,073.8	-3,954.5	6,383.0	6,363.0	20.01	318.932		
7,300.0	7,252.6	4,993.0	4,993.0	13.7	8.7	43.81	-4,073.8	-3,954.5	6,378.4	6,358.5	19.83	321.603		
7,350.0	7,291.0	4,993.0	4,993.0	13.7	8.7	43.90	-4,073.8	-3,954.5	6,371.4	6,351.8	19.66	324.144		
7,400.0	7,327.1	4,993.0	4,993.0	13.7	8.7	44.17	-4,073.8	-3,954.5	6,362.3	6,342.8	19.49	326.371		
7,450.0	7,360.7	4,993.0	4,993.0	13.7	8.7	44.61	-4,073.8	-3,954.5	6,350.9	6,331.6	19.36	328.074		
7,500.0	7,391.6	4,993.0	4,993.0	13.7	8.7	45.22	-4,073.8	-3,954.5	6,337.4	6,318.2	19.26	329.030		
7,550.0	7,419.7	4,993.0	4,993.0	13.8	8.7	45.99	-4,073.8	-3,954.5	6,321.8	6,302.6	19.21	329.009		
7,600.0	7,444.8	4,993.0	4,993.0	13.9	8.7	46.94	-4,073.8	-3,954.5	6,304.2	6,285.0	19.23	327.801		
7,650.0	7,466.9	4,993.0	4,993.0	14.1	8.7	48.07	-4,073.8	-3,954.5	6,284.6	6,265.3	19.32	325.236		
7,700.0	7,485.8	4,993.0	4,993.0	14.3	8.7	49.39	-4,073.8	-3,954.5	6,263.2	6,243.7	19.50	321.207		
7,750.0	7,501.5	4,993.0	4,993.0	14.6	8.7	50.90	-4,073.8	-3,954.5	6,239.9	6,220.1	19.77	315.691		
7,800.0	7,513.7	4,993.0	4,993.0	14.9	8.7	52.62	-4,073.8	-3,954.5	6,214.9	6,194.8	20.13	308.756		
7,850.0	7,522.6	4,993.0	4,993.0	15.2	8.7	54.56	-4,073.8	-3,954.5	6,188.3	6,167.7	20.59	300.561		
7,900.0	7,528.0	4,993.0	4,993.0	15.6	8.7	56.73	-4,073.8	-3,954.5	6,160.2	6,139.1	21.14	291.340		
7,952.9	7,530.0	4,993.0	4,993.0	16.1	8.7	59.29	-4,073.8	-3,954.5	6,129.0	6,107.1	21.83	280.772		
8,000.0	7,530.0	4,993.0	4,993.0	16.5	8.7	59.29	-4,073.8	-3,954.5	6,100.7	6,078.4	22.22	274.500		
8,100.0	7,530.0	4,993.0	4,993.0	17.5	8.7	59.29	-4,073.8	-3,954.5	6,041.3	6,018.1	23.14	261.054		
8,200.0	7,530.0	4,993.0	4,993.0	18.7	8.7	59.29	-4,073.8	-3,954.5	5,983.0	5,958.9	24.15	247.761		
8,300.0	7,530.0	4,993.0	4,993.0	19.9	8.7	59.29	-4,073.8	-3,954.5	5,925.8	5,900.6	25.23	234.889		
8,400.0	7,530.0	4,993.0	4,993.0	21.2	8.7	59.29	-4,073.8	-3,954.5	5,869.8	5,843.4	26.37	222.604		
8,500.0	7,530.0	4,993.0	4,993.0	22.6	8.7	59.29	-4,073.8	-3,954.5	5,815.0	5,787.4	27.56	210.997		
8,600.0	7,530.0	4,993.0	4,993.0	24.0	8.7	59.29	-4,073.8	-3,954.5	5,761.3	5,732.5	28.79	200.104		
8,700.0	7,530.0	4,993.0	4,993.0	25.4	8.7	59.29	-4,073.8	-3,954.5	5,709.0	5,678.9	30.06	189.927		
8,800.0	7,530.0	4,993.0	4,993.0	26.9	8.7	59.29	-4,073.8	-3,954.5	5,657.9	5,626.5	31.35	180.448		
8,900.0	7,530.0	4,993.0	4,993.0	28.4	8.7	59.29	-4,073.8	-3,954.5	5,608.1	5,575.4	32.67	171.633		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
9,000.0	7,530.0	4,993.0	4,993.0	30.0	8.7	59.29	-4,073.8	-3,954.5	5,559.6	5,525.6	34.02	163.443		
9,100.0	7,530.0	4,993.0	4,993.0	31.5	8.7	59.29	-4,073.8	-3,954.5	5,512.6	5,477.2	35.37	155.836		
9,200.0	7,530.0	4,993.0	4,993.0	33.1	8.7	59.29	-4,073.8	-3,954.5	5,467.0	5,430.2	36.75	148.768		
9,300.0	7,530.0	4,993.0	4,993.0	34.7	8.7	59.29	-4,073.8	-3,954.5	5,422.8	5,384.7	38.14	142.200		
9,400.0	7,530.0	4,993.0	4,993.0	36.3	8.7	59.29	-4,073.8	-3,954.5	5,380.2	5,340.6	39.53	136.091		
9,500.0	7,530.0	4,993.0	4,993.0	38.0	8.7	59.29	-4,073.8	-3,954.5	5,339.1	5,298.1	40.94	130.405		
9,600.0	7,530.0	4,993.0	4,993.0	39.6	8.7	59.29	-4,073.8	-3,954.5	5,299.5	5,257.1	42.36	125.108		
9,700.0	7,530.0	4,993.0	4,993.0	41.3	8.7	59.29	-4,073.8	-3,954.5	5,261.5	5,217.8	43.78	120.170		
9,800.0	7,530.0	4,993.0	4,993.0	42.9	8.7	59.29	-4,073.8	-3,954.5	5,225.2	5,180.0	45.22	115.563		
9,900.0	7,530.0	4,993.0	4,993.0	44.6	8.7	59.29	-4,073.8	-3,954.5	5,190.6	5,143.9	46.65	111.259		
10,000.0	7,530.0	4,993.0	4,993.0	46.3	8.7	59.29	-4,073.8	-3,954.5	5,157.7	5,109.6	48.10	107.236		
10,100.0	7,530.0	4,993.0	4,993.0	47.9	8.7	59.29	-4,073.8	-3,954.5	5,126.5	5,076.9	49.54	103.472		
10,200.0	7,530.0	4,993.0	4,993.0	49.6	8.7	59.29	-4,073.8	-3,954.5	5,097.0	5,046.0	51.00	99.949		
10,300.0	7,530.0	4,993.0	4,993.0	51.3	8.7	59.29	-4,073.8	-3,954.5	5,069.4	5,017.0	52.45	96.647		
10,400.0	7,530.0	4,993.0	4,993.0	53.0	8.7	59.29	-4,073.8	-3,954.5	5,043.6	4,989.7	53.91	93.552		
10,500.0	7,530.0	4,993.0	4,993.0	54.7	8.7	59.29	-4,073.8	-3,954.5	5,019.7	4,964.3	55.38	90.648		
10,600.0	7,530.0	4,993.0	4,993.0	56.4	8.7	59.29	-4,073.8	-3,954.5	4,997.6	4,940.8	56.84	87.923		
10,700.0	7,530.0	4,993.0	4,993.0	58.1	8.7	59.29	-4,073.8	-3,954.5	4,977.5	4,919.2	58.31	85.363		
10,800.0	7,530.0	4,993.0	4,993.0	59.8	8.7	59.29	-4,073.8	-3,954.5	4,959.3	4,899.5	59.78	82.958		
10,900.0	7,530.0	4,993.0	4,993.0	61.5	8.7	59.29	-4,073.8	-3,954.5	4,943.1	4,881.8	61.25	80.698		
11,000.0	7,530.0	4,993.0	4,993.0	63.2	8.7	59.29	-4,073.8	-3,954.5	4,928.8	4,866.1	62.73	78.572		
11,100.0	7,530.0	4,993.0	4,993.0	64.9	8.7	59.29	-4,073.8	-3,954.5	4,916.5	4,852.3	64.21	76.573		
11,200.0	7,530.0	4,993.0	4,993.0	66.6	8.7	59.29	-4,073.8	-3,954.5	4,906.3	4,840.6	65.69	74.693		
11,300.0	7,530.0	4,993.0	4,993.0	68.4	8.7	59.29	-4,073.8	-3,954.5	4,898.0	4,830.9	67.17	72.924		
11,400.0	7,530.0	4,993.0	4,993.0	70.1	8.7	59.29	-4,073.8	-3,954.5	4,891.8	4,823.2	68.65	71.259		
11,500.0	7,530.0	4,993.0	4,993.0	71.8	8.7	59.29	-4,073.8	-3,954.5	4,887.6	4,817.5	70.13	69.692		
11,600.0	7,530.0	4,993.0	4,993.0	73.5	8.7	59.29	-4,073.8	-3,954.5	4,885.5	4,813.9	71.62	68.217		
11,654.1	7,530.0	4,993.0	4,993.0	74.5	8.7	59.29	-4,073.8	-3,954.5	4,885.2	4,812.8	72.42	67.455 CC		
11,700.0	7,530.0	4,993.0	4,993.0	75.2	8.7	59.29	-4,073.8	-3,954.5	4,885.4	4,812.3	73.10	66.829 ES		
11,800.0	7,530.0	4,993.0	4,993.0	77.0	8.7	59.29	-4,073.8	-3,954.5	4,887.4	4,812.8	74.59	65.523		
11,900.0	7,530.0	4,993.0	4,993.0	78.7	8.7	59.29	-4,073.8	-3,954.5	4,891.4	4,815.3	76.08	64.294		
12,000.0	7,530.0	4,993.0	4,993.0	80.4	8.7	59.29	-4,073.8	-3,954.5	4,897.4	4,819.9	77.57	63.137		
12,100.0	7,530.0	4,993.0	4,993.0	82.2	8.7	59.29	-4,073.8	-3,954.5	4,905.5	4,826.4	79.06	62.049		
12,200.0	7,530.0	4,993.0	4,993.0	83.9	8.7	59.29	-4,073.8	-3,954.5	4,915.6	4,835.1	80.55	61.026		
12,300.0	7,530.0	4,993.0	4,993.0	85.6	8.7	59.29	-4,073.8	-3,954.5	4,927.7	4,845.7	82.04	60.064		
12,400.0	7,530.0	4,993.0	4,993.0	87.3	8.7	59.29	-4,073.8	-3,954.5	4,941.8	4,858.3	83.53	59.159		
12,500.0	7,530.0	4,993.0	4,993.0	89.1	8.7	59.29	-4,073.8	-3,954.5	4,957.9	4,872.9	85.03	58.309		
12,600.0	7,530.0	4,993.0	4,993.0	90.8	8.7	59.29	-4,073.8	-3,954.5	4,975.9	4,889.4	86.52	57.511		
12,700.0	7,530.0	4,993.0	4,993.0	92.5	8.7	59.29	-4,073.8	-3,954.5	4,995.9	4,907.9	88.02	56.761		
12,800.0	7,530.0	4,993.0	4,993.0	94.3	8.7	59.29	-4,073.8	-3,954.5	5,017.8	4,928.3	89.51	56.058		
12,900.0	7,530.0	4,993.0	4,993.0	96.0	8.7	59.29	-4,073.8	-3,954.5	5,041.6	4,950.6	91.01	55.397		
13,000.0	7,530.0	4,993.0	4,993.0	97.8	8.7	59.29	-4,073.8	-3,954.5	5,067.2	4,974.7	92.50	54.778		
13,100.0	7,530.0	4,993.0	4,993.0	99.5	8.7	59.29	-4,073.8	-3,954.5	5,094.7	5,000.7	94.00	54.198		
13,200.0	7,530.0	4,993.0	4,993.0	101.2	8.7	59.29	-4,073.8	-3,954.5	5,124.0	5,028.5	95.50	53.655		
13,300.0	7,530.0	4,993.0	4,993.0	103.0	8.7	59.29	-4,073.8	-3,954.5	5,155.0	5,058.0	97.00	53.146		
13,400.0	7,530.0	4,993.0	4,993.0	104.7	8.7	59.29	-4,073.8	-3,954.5	5,187.8	5,089.3	98.49	52.671		
13,500.0	7,530.0	4,993.0	4,993.0	106.4	8.7	59.29	-4,073.8	-3,954.5	5,222.3	5,122.3	99.99	52.226		
13,600.0	7,530.0	4,993.0	4,993.0	108.2	8.7	59.29	-4,073.8	-3,954.5	5,258.5	5,157.0	101.49	51.811		
13,700.0	7,530.0	4,993.0	4,993.0	109.9	8.7	59.29	-4,073.8	-3,954.5	5,296.3	5,193.3	102.99	51.424		
13,800.0	7,530.0	4,993.0	4,993.0	111.7	8.7	59.29	-4,073.8	-3,954.5	5,335.7	5,231.2	104.49	51.063		
13,900.0	7,530.0	4,993.0	4,993.0	113.4	8.7	59.29	-4,073.8	-3,954.5	5,376.7	5,270.7	105.99	50.727		
14,000.0	7,530.0	4,993.0	4,993.0	115.1	8.7	59.29	-4,073.8	-3,954.5	5,419.3	5,311.8	107.49	50.415		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 14-7(EXISTING) - EXISTING - NO SURV													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	4,993.0	4,993.0	116.9	8.7	59.29	-4,073.8	-3,954.5	5,463.3	5,354.3	108.99	50.125		
14,200.0	7,530.0	4,993.0	4,993.0	118.6	8.7	59.29	-4,073.8	-3,954.5	5,508.8	5,398.3	110.50	49.855		
14,300.0	7,530.0	4,993.0	4,993.0	120.4	8.7	59.29	-4,073.8	-3,954.5	5,555.7	5,443.7	112.00	49.606		
14,400.0	7,530.0	4,993.0	4,993.0	122.1	8.7	59.29	-4,073.8	-3,954.5	5,604.0	5,490.5	113.50	49.375		
14,500.0	7,530.0	4,993.0	4,993.0	123.9	8.7	59.29	-4,073.8	-3,954.5	5,653.7	5,538.7	115.00	49.162		
14,600.0	7,530.0	4,993.0	4,993.0	125.6	8.7	59.29	-4,073.8	-3,954.5	5,704.7	5,588.2	116.50	48.966		
14,700.0	7,530.0	4,993.0	4,993.0	127.3	8.7	59.29	-4,073.8	-3,954.5	5,757.0	5,638.9	118.01	48.785		
14,800.0	7,530.0	4,993.0	4,993.0	129.1	8.7	59.29	-4,073.8	-3,954.5	5,810.5	5,691.0	119.51	48.620		
14,900.0	7,530.0	4,993.0	4,993.0	130.8	8.7	59.29	-4,073.8	-3,954.5	5,865.2	5,744.2	121.01	48.468		
15,000.0	7,530.0	4,993.0	4,993.0	132.6	8.7	59.29	-4,073.8	-3,954.5	5,921.1	5,798.6	122.51	48.330		
15,100.0	7,530.0	4,993.0	4,993.0	134.3	8.7	59.29	-4,073.8	-3,954.5	5,978.2	5,854.2	124.02	48.204		
15,200.0	7,530.0	4,993.0	4,993.0	136.1	8.7	59.29	-4,073.8	-3,954.5	6,036.4	5,910.9	125.52	48.090		
15,300.0	7,530.0	4,993.0	4,993.0	137.8	8.7	59.29	-4,073.8	-3,954.5	6,095.7	5,968.7	127.03	47.988		
15,400.0	7,530.0	4,993.0	4,993.0	139.6	8.7	59.29	-4,073.8	-3,954.5	6,156.0	6,027.5	128.53	47.896		
15,500.0	7,530.0	4,993.0	4,993.0	141.3	8.7	59.29	-4,073.8	-3,954.5	6,217.4	6,087.3	130.03	47.813		
15,600.0	7,530.0	4,993.0	4,993.0	143.0	8.7	59.29	-4,073.8	-3,954.5	6,279.7	6,148.2	131.54	47.741		
15,700.0	7,530.0	4,993.0	4,993.0	144.8	8.7	59.29	-4,073.8	-3,954.5	6,343.0	6,210.0	133.04	47.677		
15,800.0	7,530.0	4,993.0	4,993.0	146.5	8.7	59.29	-4,073.8	-3,954.5	6,407.3	6,272.7	134.55	47.621		
15,900.0	7,530.0	4,993.0	4,993.0	148.3	8.7	59.29	-4,073.8	-3,954.5	6,472.4	6,336.4	136.05	47.573		
16,000.0	7,530.0	4,993.0	4,993.0	150.0	8.7	59.29	-4,073.8	-3,954.5	6,538.5	6,400.9	137.56	47.533		
16,100.0	7,530.0	4,993.0	4,993.0	151.8	8.7	59.29	-4,073.8	-3,954.5	6,605.4	6,466.3	139.06	47.499		
16,200.0	7,530.0	4,993.0	4,993.0	153.5	8.7	59.29	-4,073.8	-3,954.5	6,673.1	6,532.5	140.57	47.472		
16,300.0	7,530.0	4,993.0	4,993.0	155.3	8.7	59.29	-4,073.8	-3,954.5	6,741.6	6,599.5	142.07	47.451		
16,400.0	7,530.0	4,993.0	4,993.0	157.0	8.7	59.29	-4,073.8	-3,954.5	6,810.9	6,667.3	143.58	47.436		
16,500.0	7,530.0	4,993.0	4,993.0	158.8	8.7	59.29	-4,073.8	-3,954.5	6,881.0	6,735.9	145.09	47.427		
16,600.0	7,530.0	4,993.0	4,993.0	160.5	8.7	59.29	-4,073.8	-3,954.5	6,951.7	6,805.2	146.59	47.423 SF		
16,700.0	7,530.0	4,993.0	4,993.0	162.3	8.7	59.29	-4,073.8	-3,954.5	7,023.2	6,875.1	148.10	47.423		
16,800.0	7,530.0	4,993.0	4,993.0	164.0	8.7	59.29	-4,073.8	-3,954.5	7,095.4	6,945.8	149.60	47.428		
16,900.0	7,530.0	4,993.0	4,993.0	165.8	8.7	59.29	-4,073.8	-3,954.5	7,168.3	7,017.2	151.11	47.438		
17,000.0	7,530.0	4,993.0	4,993.0	167.5	8.7	59.29	-4,073.8	-3,954.5	7,241.8	7,089.2	152.62	47.451		
17,100.0	7,530.0	4,993.0	4,993.0	169.3	8.7	59.29	-4,073.8	-3,954.5	7,315.9	7,161.8	154.12	47.468		
17,200.0	7,530.0	4,993.0	4,993.0	171.0	8.7	59.29	-4,073.8	-3,954.5	7,390.7	7,235.0	155.63	47.489		
17,300.0	7,530.0	4,993.0	4,993.0	172.8	8.7	59.29	-4,073.8	-3,954.5	7,466.0	7,308.9	157.14	47.513		
17,400.0	7,530.0	4,993.0	4,993.0	174.5	8.7	59.29	-4,073.8	-3,954.5	7,541.9	7,383.3	158.64	47.540		
17,420.9	7,530.0	4,993.0	4,993.0	174.9	8.7	59.29	-4,073.8	-3,954.5	7,557.9	7,398.9	158.96	47.546		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													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	-143.99	-4,173.3	-3,033.1	5,159.1					
100.0	100.0	83.0	83.0	0.2	0.1	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.8	0.27	N/A		
200.0	200.0	183.0	183.0	0.3	0.3	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.5	0.62	8,349.881		
300.0	300.0	283.0	283.0	0.5	0.5	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.1	0.97	5,335.539		
400.0	400.0	383.0	383.0	0.7	0.6	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.8	1.32	3,920.296		
500.0	500.0	483.0	483.0	0.8	0.8	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.4	1.67	3,098.440		
600.0	600.0	583.0	583.0	1.0	1.0	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.1	2.01	2,561.453		
700.0	700.0	683.0	683.0	1.2	1.2	-176.47	-4,173.3	-3,033.1	5,160.0	5,157.6	2.36	2,183.691		
800.0	800.0	783.0	783.0	1.4	1.3	-176.47	-4,173.3	-3,033.1	5,162.6	5,159.9	2.71	1,904.163		
900.0	899.9	882.9	882.9	1.6	1.5	-176.47	-4,173.3	-3,033.1	5,166.9	5,163.9	3.06	1,689.244		
988.4	988.1	971.1	971.1	1.7	1.7	-176.47	-4,173.3	-3,033.1	5,172.2	5,168.9	3.37	1,536.981		
1,000.0	999.7	982.7	982.7	1.7	1.7	-176.47	-4,173.3	-3,033.1	5,173.0	5,169.6	3.41	1,518.953		
1,100.0	1,099.4	1,082.5	1,082.5	1.9	1.9	-176.47	-4,173.3	-3,033.1	5,179.8	5,176.0	3.75	1,379.681		
1,200.0	1,199.2	1,182.2	1,182.2	2.1	2.0	-176.48	-4,173.3	-3,033.1	5,186.5	5,182.4	4.10	1,264.082		
1,300.0	1,299.0	1,300.3	1,300.3	2.3	2.2	-176.50	-4,174.0	-3,031.9	5,193.2	5,188.7	4.48	1,158.152		
1,400.0	1,398.8	1,422.1	1,422.0	2.5	2.5	-176.56	-4,176.4	-3,027.4	5,199.4	5,194.5	4.88	1,066.183		
1,500.0	1,498.5	1,539.4	1,538.9	2.7	2.7	-176.66	-4,180.5	-3,019.8	5,205.1	5,199.9	5.27	987.640		
1,600.0	1,598.3	1,638.8	1,638.0	2.9	2.9	-176.75	-4,184.4	-3,012.5	5,210.8	5,205.2	5.64	924.302		
1,700.0	1,698.1	1,738.3	1,737.1	3.2	3.1	-176.85	-4,188.3	-3,005.2	5,216.5	5,210.5	6.01	868.088		
1,800.0	1,797.8	1,837.7	1,836.3	3.4	3.3	-176.94	-4,192.3	-2,997.8	5,222.2	5,215.8	6.38	817.947		
1,900.0	1,897.6	1,937.2	1,935.4	3.6	3.5	-177.04	-4,196.2	-2,990.5	5,227.9	5,221.1	6.76	773.024		
2,000.0	1,997.4	2,036.7	2,034.5	3.8	3.7	-177.13	-4,200.2	-2,983.2	5,233.6	5,226.5	7.14	732.599		
2,100.0	2,097.1	2,136.1	2,133.6	4.0	3.9	-177.22	-4,204.1	-2,975.8	5,239.4	5,231.8	7.53	696.070		
2,200.0	2,196.9	2,235.6	2,232.7	4.2	4.1	-177.32	-4,208.1	-2,968.5	5,245.1	5,237.2	7.91	662.927		
2,300.0	2,296.7	2,335.1	2,331.8	4.4	4.3	-177.41	-4,212.0	-2,961.2	5,250.9	5,242.6	8.30	632.742		
2,400.0	2,396.5	2,434.5	2,430.9	4.6	4.5	-177.51	-4,216.0	-2,953.8	5,256.7	5,248.0	8.69	605.150		
2,500.0	2,496.2	2,534.0	2,530.0	4.8	4.7	-177.60	-4,219.9	-2,946.5	5,262.5	5,253.4	9.08	579.845		
2,600.0	2,596.0	2,633.4	2,629.2	5.0	5.0	-177.69	-4,223.8	-2,939.2	5,268.3	5,258.8	9.47	556.561		
2,700.0	2,695.8	2,732.9	2,728.3	5.2	5.2	-177.79	-4,227.8	-2,931.8	5,274.1	5,264.3	9.86	535.072		
2,800.0	2,795.5	2,832.4	2,827.4	5.4	5.4	-177.88	-4,231.7	-2,924.5	5,280.0	5,269.7	10.25	515.186		
2,900.0	2,895.3	2,931.8	2,926.5	5.6	5.6	-177.97	-4,235.7	-2,917.2	5,285.8	5,275.2	10.64	496.732		
3,000.0	2,995.1	3,031.3	3,025.6	5.9	5.8	-178.06	-4,239.6	-2,909.8	5,291.7	5,280.6	11.03	479.565		
3,100.0	3,094.9	3,130.7	3,124.7	6.1	6.1	-178.16	-4,243.6	-2,902.5	5,297.6	5,286.1	11.43	463.558		
3,200.0	3,194.6	3,230.2	3,223.8	6.3	6.3	-178.25	-4,247.5	-2,895.2	5,303.4	5,291.6	11.82	448.599		
3,300.0	3,294.4	3,329.7	3,322.9	6.5	6.5	-178.34	-4,251.5	-2,887.8	5,309.4	5,297.1	12.22	434.590		
3,400.0	3,394.2	3,429.1	3,422.1	6.7	6.7	-178.43	-4,255.4	-2,880.5	5,315.3	5,302.7	12.61	421.445		
3,500.0	3,493.9	3,528.6	3,521.2	6.9	6.9	-178.52	-4,259.3	-2,873.1	5,321.2	5,308.2	13.01	409.088		
3,600.0	3,593.7	3,628.1	3,620.3	7.1	7.2	-178.61	-4,263.3	-2,865.8	5,327.2	5,313.8	13.40	397.452		
3,700.0	3,693.5	3,727.5	3,719.4	7.3	7.4	-178.70	-4,267.2	-2,858.5	5,333.1	5,319.3	13.80	386.475		
3,800.0	3,793.2	3,827.0	3,818.5	7.5	7.6	-178.80	-4,271.2	-2,851.1	5,339.1	5,324.9	14.20	376.103		
3,900.0	3,893.0	3,926.4	3,917.6	7.7	7.8	-178.89	-4,275.1	-2,843.8	5,345.1	5,330.5	14.59	366.290		
4,000.0	3,992.8	4,025.9	4,016.7	8.0	8.0	-178.98	-4,279.1	-2,836.5	5,351.1	5,336.1	14.99	356.991		
4,100.0	4,092.6	4,125.4	4,115.8	8.2	8.3	-179.07	-4,283.0	-2,829.1	5,357.1	5,341.7	15.39	348.168		
4,200.0	4,192.3	4,224.8	4,215.0	8.4	8.5	-179.16	-4,287.0	-2,821.8	5,363.1	5,347.4	15.78	339.785		
4,300.0	4,292.1	4,324.3	4,314.1	8.6	8.7	-179.25	-4,290.9	-2,814.5	5,369.2	5,353.0	16.18	331.810		
4,400.0	4,391.9	4,423.7	4,413.2	8.8	8.9	-179.34	-4,294.8	-2,807.1	5,375.2	5,358.7	16.58	324.215		
4,500.0	4,491.6	4,523.2	4,512.3	9.0	9.2	-179.42	-4,298.8	-2,799.8	5,381.3	5,364.3	16.98	316.974		
4,600.0	4,591.4	4,622.7	4,611.4	9.2	9.4	-179.51	-4,302.7	-2,792.5	5,387.4	5,370.0	17.38	310.062		
4,700.0	4,691.2	4,719.0	4,707.4	9.4	9.6	-179.60	-4,306.5	-2,785.5	5,393.5	5,375.7	17.76	303.664		
4,800.0	4,790.9	4,808.5	4,796.7	9.6	9.8	-179.66	-4,309.3	-2,780.3	5,399.7	5,381.6	18.11	298.126		
4,900.0	4,890.7	4,900.0	4,888.1	9.8	9.9	-179.70	-4,311.1	-2,777.0	5,406.2	5,387.7	18.45	293.055		
5,000.0	4,990.5	4,988.0	4,976.1	10.1	10.1	-179.72	-4,311.8	-2,775.6	5,412.8	5,394.1	18.76	288.579		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla											Offset Site Error: 0.0 ft			
Survey Program: O-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	5,085.2	5,073.3	10.3	10.2	-179.72	-4,311.8	-2,775.6	5,419.6	5,400.5	19.08	284.073		
5,200.0	5,190.0	5,184.9	5,173.0	10.5	10.4	-179.72	-4,311.8	-2,775.6	5,426.4	5,407.0	19.40	279.655		
5,300.0	5,289.8	5,284.7	5,272.8	10.7	10.5	-179.72	-4,311.8	-2,775.6	5,433.1	5,413.4	19.73	275.372		
5,400.0	5,389.6	5,384.5	5,372.6	10.9	10.7	-179.72	-4,311.8	-2,775.6	5,439.9	5,419.9	20.06	271.220		
5,500.0	5,489.3	5,484.2	5,472.4	11.1	10.8	-179.72	-4,311.8	-2,775.6	5,446.7	5,426.3	20.38	267.192		
5,600.0	5,589.1	5,584.0	5,572.1	11.3	11.0	-179.72	-4,311.8	-2,775.6	5,453.5	5,432.7	20.71	263.284		
5,700.0	5,688.9	5,683.8	5,671.9	11.5	11.1	-179.72	-4,311.8	-2,775.6	5,460.2	5,439.2	21.04	259.490		
5,800.0	5,788.7	5,783.5	5,771.7	11.7	11.3	-179.72	-4,311.8	-2,775.6	5,467.0	5,445.6	21.37	255.807		
5,900.0	5,888.4	5,883.3	5,871.4	11.9	11.4	-179.72	-4,311.8	-2,775.6	5,473.8	5,452.1	21.70	252.229		
6,000.0	5,988.2	5,983.1	5,971.2	12.2	11.6	-179.72	-4,311.8	-2,775.6	5,480.6	5,458.5	22.03	248.752		
6,100.0	6,088.0	6,082.9	6,071.0	12.4	11.8	-179.72	-4,311.8	-2,775.6	5,487.3	5,465.0	22.36	245.372		
6,200.0	6,187.7	6,182.6	6,170.7	12.6	11.9	-179.72	-4,311.8	-2,775.6	5,494.1	5,471.4	22.69	242.086		
6,300.0	6,287.5	6,282.4	6,270.5	12.8	12.1	-179.72	-4,311.8	-2,775.6	5,500.9	5,477.8	23.03	238.890		
6,400.0	6,387.3	6,382.2	6,370.3	13.0	12.2	-179.72	-4,311.8	-2,775.6	5,507.6	5,484.3	23.36	235.780		
6,500.0	6,487.0	6,481.9	6,470.1	13.2	12.4	-179.72	-4,311.8	-2,775.6	5,514.4	5,490.7	23.69	232.753		
6,600.0	6,586.8	6,581.7	6,569.8	13.4	12.5	-179.72	-4,311.8	-2,775.6	5,521.2	5,497.2	24.03	229.806		
6,700.0	6,686.6	6,681.5	6,669.6	13.6	12.7	-179.72	-4,311.8	-2,775.6	5,528.0	5,503.6	24.36	226.936		
6,787.0	6,773.4	6,768.3	6,756.4	13.8	12.8	-179.73	-4,311.8	-2,775.6	5,533.9	5,509.2	24.65	224.499		
6,800.0	6,786.4	6,781.3	6,769.4	13.8	12.9	169.71	-4,311.8	-2,775.6	5,534.6	5,509.9	24.70	224.061		
6,850.0	6,836.3	6,831.2	6,819.3	13.9	12.9	82.55	-4,311.8	-2,775.6	5,535.8	5,510.9	24.86	222.655		
6,900.0	6,886.2	6,881.1	6,869.2	14.0	13.0	52.80	-4,311.8	-2,775.6	5,534.0	5,509.1	24.96	221.683		
6,950.0	6,935.7	6,930.6	6,918.7	14.0	13.1	45.24	-4,311.8	-2,775.6	5,529.3	5,504.3	25.01	221.122		
7,000.0	6,984.6	6,979.5	6,967.6	14.0	13.2	42.23	-4,311.8	-2,775.6	5,521.7	5,496.7	24.99	220.945		
7,050.0	7,032.6	7,027.5	7,015.7	14.0	13.3	40.90	-4,311.8	-2,775.6	5,511.3	5,486.4	24.93	221.108		
7,100.0	7,079.7	7,074.6	7,062.7	13.9	13.3	40.44	-4,311.8	-2,775.6	5,498.1	5,473.2	24.82	221.554		
7,150.0	7,125.4	7,120.3	7,108.4	13.9	13.4	40.53	-4,311.8	-2,775.6	5,482.1	5,457.4	24.67	222.208		
7,200.0	7,169.6	7,164.5	7,152.6	13.8	13.5	41.03	-4,311.8	-2,775.6	5,463.5	5,439.0	24.50	222.970		
7,250.0	7,212.1	7,207.0	7,195.1	13.8	13.6	41.89	-4,311.8	-2,775.6	5,442.5	5,418.1	24.33	223.715		
7,300.0	7,252.6	7,247.5	7,235.6	13.7	13.6	43.07	-4,311.8	-2,775.6	5,419.0	5,394.8	24.16	224.285		
7,350.0	7,291.0	7,285.9	7,274.0	13.7	13.7	44.57	-4,311.8	-2,775.6	5,393.2	5,369.2	24.02	224.494		
7,400.0	7,327.1	7,322.0	7,310.1	13.7	13.7	46.40	-4,311.8	-2,775.6	5,365.3	5,341.3	23.94	224.138		
7,450.0	7,360.7	7,355.6	7,343.7	13.7	13.8	48.56	-4,311.8	-2,775.6	5,335.4	5,311.5	23.93	223.004		
7,500.0	7,391.6	7,386.5	7,374.6	13.7	13.8	51.08	-4,311.8	-2,775.6	5,303.7	5,279.7	24.01	220.909		
7,550.0	7,419.7	7,414.6	7,402.7	13.8	13.9	53.97	-4,311.8	-2,775.6	5,270.3	5,246.1	24.21	217.732		
7,600.0	7,444.8	7,439.7	7,427.8	13.9	13.9	57.25	-4,311.8	-2,775.6	5,235.5	5,211.0	24.53	213.454		
7,650.0	7,466.9	7,461.8	7,449.9	14.1	14.0	60.94	-4,311.8	-2,775.6	5,199.4	5,174.4	24.98	208.183		
7,700.0	7,485.8	7,480.7	7,468.8	14.3	14.0	65.02	-4,311.8	-2,775.6	5,162.2	5,136.6	25.54	202.159		
7,750.0	7,501.5	7,496.4	7,484.5	14.6	14.0	69.47	-4,311.8	-2,775.6	5,124.1	5,097.9	26.18	195.716		
7,800.0	7,513.7	7,508.6	7,496.8	14.9	14.0	74.24	-4,311.8	-2,775.6	5,085.3	5,058.4	26.87	189.233		
7,850.0	7,522.6	7,517.5	7,505.6	15.2	14.1	79.27	-4,311.8	-2,775.6	5,046.0	5,018.4	27.56	183.061		
7,900.0	7,528.0	7,522.9	7,511.1	15.6	14.1	84.46	-4,311.8	-2,775.6	5,006.4	4,978.2	28.21	177.470		
7,952.9	7,530.0	7,524.9	7,513.0	16.1	14.1	90.00	-4,311.8	-2,775.6	4,964.4	4,935.6	28.80	172.348		
8,000.0	7,530.0	7,524.9	7,513.0	16.5	14.1	90.00	-4,311.8	-2,775.6	4,927.1	4,897.8	29.26	168.393		
8,100.0	7,530.0	7,524.9	7,513.0	17.5	14.1	90.00	-4,311.8	-2,775.6	4,848.5	4,818.2	30.32	159.913		
8,200.0	7,530.0	7,524.9	7,513.0	18.7	14.1	90.00	-4,311.8	-2,775.6	4,770.7	4,739.2	31.49	151.510		
8,300.0	7,530.0	7,524.9	7,513.0	19.9	14.1	90.00	-4,311.8	-2,775.6	4,693.7	4,661.0	32.74	143.346		
8,400.0	7,530.0	7,524.9	7,513.0	21.2	14.1	90.00	-4,311.8	-2,775.6	4,617.6	4,583.6	34.07	135.524		
8,500.0	7,530.0	7,524.9	7,513.0	22.6	14.1	90.00	-4,311.8	-2,775.6	4,542.5	4,507.0	35.46	128.100		
8,600.0	7,530.0	7,524.9	7,513.0	24.0	14.1	90.00	-4,311.8	-2,775.6	4,468.3	4,431.4	36.90	121.101		
8,700.0	7,530.0	7,524.9	7,513.0	25.4	14.1	90.00	-4,311.8	-2,775.6	4,395.1	4,356.8	38.37	114.532		
8,800.0	7,530.0	7,524.9	7,513.0	26.9	14.1	90.00	-4,311.8	-2,775.6	4,323.1	4,283.2	39.89	108.386		
8,900.0	7,530.0	7,524.9	7,513.0	28.4	14.1	90.00	-4,311.8	-2,775.6	4,252.1	4,210.7	41.42	102.646		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,524.9	7,513.0	30.0	14.1	90.00	-4,311.8	-2,775.6	4,182.3	4,139.3	42.99	97.291		
9,100.0	7,530.0	7,524.9	7,513.0	31.5	14.1	90.00	-4,311.8	-2,775.6	4,113.8	4,069.2	44.57	92.298		
9,200.0	7,530.0	7,524.9	7,513.0	33.1	14.1	90.00	-4,311.8	-2,775.6	4,046.6	4,000.4	46.17	87.642		
9,300.0	7,530.0	7,524.9	7,513.0	34.7	14.1	90.00	-4,311.8	-2,775.6	3,980.8	3,933.0	47.79	83.302		
9,400.0	7,530.0	7,524.9	7,513.0	36.3	14.1	90.00	-4,311.8	-2,775.6	3,916.4	3,867.0	49.42	79.253		
9,500.0	7,530.0	7,524.9	7,513.0	38.0	14.1	90.00	-4,311.8	-2,775.6	3,853.5	3,802.5	51.06	75.477		
9,600.0	7,530.0	7,524.9	7,513.0	39.6	14.1	90.00	-4,311.8	-2,775.6	3,792.3	3,739.6	52.71	71.952		
9,700.0	7,530.0	7,524.9	7,513.0	41.3	14.1	90.00	-4,311.8	-2,775.6	3,732.7	3,678.3	54.36	68.661		
9,800.0	7,530.0	7,524.9	7,513.0	42.9	14.1	90.00	-4,311.8	-2,775.6	3,674.8	3,618.8	56.03	65.587		
9,900.0	7,530.0	7,524.9	7,513.0	44.6	14.1	90.00	-4,311.8	-2,775.6	3,618.8	3,561.1	57.70	62.715		
10,000.0	7,530.0	7,524.9	7,513.0	46.3	14.1	90.00	-4,311.8	-2,775.6	3,564.8	3,505.4	59.38	60.032		
10,100.0	7,530.0	7,524.9	7,513.0	47.9	14.1	90.00	-4,311.8	-2,775.6	3,512.7	3,451.6	61.07	57.523		
10,200.0	7,530.0	7,524.9	7,513.0	49.6	14.1	90.00	-4,311.8	-2,775.6	3,462.7	3,400.0	62.75	55.179		
10,300.0	7,530.0	7,524.9	7,513.0	51.3	14.1	90.00	-4,311.8	-2,775.6	3,415.0	3,350.5	64.45	52.988		
10,400.0	7,530.0	7,524.9	7,513.0	53.0	14.1	90.00	-4,311.8	-2,775.6	3,369.5	3,303.4	66.15	50.941		
10,500.0	7,530.0	7,524.9	7,513.0	54.7	14.1	90.00	-4,311.8	-2,775.6	3,326.5	3,258.6	67.85	49.029		
10,600.0	7,530.0	7,524.9	7,513.0	56.4	14.1	90.00	-4,311.8	-2,775.6	3,285.9	3,216.3	69.55	47.244		
10,700.0	7,530.0	7,524.9	7,513.0	58.1	14.1	90.00	-4,311.8	-2,775.6	3,247.8	3,176.6	71.26	45.579		
10,800.0	7,530.0	7,524.9	7,513.0	59.8	14.1	90.00	-4,311.8	-2,775.6	3,212.5	3,139.5	72.97	44.026		
10,900.0	7,530.0	7,524.9	7,513.0	61.5	14.1	90.00	-4,311.8	-2,775.6	3,179.9	3,105.2	74.68	42.580		
11,000.0	7,530.0	7,524.9	7,513.0	63.2	14.1	90.00	-4,311.8	-2,775.6	3,150.1	3,073.7	76.39	41.234		
11,100.0	7,530.0	7,524.9	7,513.0	64.9	14.1	90.00	-4,311.8	-2,775.6	3,123.2	3,045.1	78.11	39.984		
11,200.0	7,530.0	7,524.9	7,513.0	66.6	14.1	90.00	-4,311.8	-2,775.6	3,099.4	3,019.6	79.83	38.825		
11,300.0	7,530.0	7,524.9	7,513.0	68.4	14.1	90.00	-4,311.8	-2,775.6	3,078.6	2,997.1	81.55	37.751		
11,400.0	7,530.0	7,524.9	7,513.0	70.1	14.1	90.00	-4,311.8	-2,775.6	3,060.9	2,977.7	83.27	36.758		
11,500.0	7,530.0	7,524.9	7,513.0	71.8	14.1	90.00	-4,311.8	-2,775.6	3,046.5	2,961.5	85.00	35.842		
11,600.0	7,530.0	7,524.9	7,513.0	73.5	14.1	90.00	-4,311.8	-2,775.6	3,035.2	2,948.5	86.72	34.999		
11,700.0	7,530.0	7,524.9	7,513.0	75.2	14.1	90.00	-4,311.8	-2,775.6	3,027.2	2,938.8	88.45	34.226		
11,800.0	7,530.0	7,524.9	7,513.0	77.0	14.1	90.00	-4,311.8	-2,775.6	3,022.5	2,932.3	90.18	33.518		
11,892.2	7,530.0	7,524.9	7,513.0	78.6	14.1	90.00	-4,311.8	-2,775.6	3,021.1	2,929.3	91.77	32.920 CC		
11,900.0	7,530.0	7,524.9	7,513.0	78.7	14.1	90.00	-4,311.8	-2,775.6	3,021.1	2,929.2	91.91	32.872 ES		
12,000.0	7,530.0	7,524.9	7,513.0	80.4	14.1	90.00	-4,311.8	-2,775.6	3,023.0	2,929.4	93.64	32.285		
12,100.0	7,530.0	7,524.9	7,513.0	82.2	14.1	90.00	-4,311.8	-2,775.6	3,028.2	2,932.9	95.37	31.754		
12,200.0	7,530.0	7,524.9	7,513.0	83.9	14.1	90.00	-4,311.8	-2,775.6	3,036.7	2,939.6	97.10	31.275		
12,300.0	7,530.0	7,524.9	7,513.0	85.6	14.1	90.00	-4,311.8	-2,775.6	3,048.5	2,949.7	98.83	30.845		
12,400.0	7,530.0	7,524.9	7,513.0	87.3	14.1	90.00	-4,311.8	-2,775.6	3,063.5	2,962.9	100.57	30.463		
12,500.0	7,530.0	7,524.9	7,513.0	89.1	14.1	90.00	-4,311.8	-2,775.6	3,081.6	2,979.3	102.30	30.124		
12,600.0	7,530.0	7,524.9	7,513.0	90.8	14.1	90.00	-4,311.8	-2,775.6	3,102.9	2,998.9	104.04	29.826		
12,700.0	7,530.0	7,524.9	7,513.0	92.5	14.1	90.00	-4,311.8	-2,775.6	3,127.2	3,021.5	105.77	29.566		
12,800.0	7,530.0	7,524.9	7,513.0	94.3	14.1	90.00	-4,311.8	-2,775.6	3,154.5	3,047.0	107.51	29.343		
12,900.0	7,530.0	7,524.9	7,513.0	96.0	14.1	90.00	-4,311.8	-2,775.6	3,184.8	3,075.5	109.25	29.153		
13,000.0	7,530.0	7,524.9	7,513.0	97.8	14.1	90.00	-4,311.8	-2,775.6	3,217.8	3,106.8	110.98	28.994		
13,100.0	7,530.0	7,524.9	7,513.0	99.5	14.1	90.00	-4,311.8	-2,775.6	3,253.6	3,140.9	112.72	28.864		
13,200.0	7,530.0	7,524.9	7,513.0	101.2	14.1	90.00	-4,311.8	-2,775.6	3,292.0	3,177.6	114.46	28.761		
13,300.0	7,530.0	7,524.9	7,513.0	103.0	14.1	90.00	-4,311.8	-2,775.6	3,333.0	3,216.8	116.20	28.683		
13,400.0	7,530.0	7,524.9	7,513.0	104.7	14.1	90.00	-4,311.8	-2,775.6	3,376.5	3,258.5	117.94	28.629		
13,500.0	7,530.0	7,524.9	7,513.0	106.4	14.1	90.00	-4,311.8	-2,775.6	3,422.3	3,302.6	119.68	28.595		
13,600.0	7,530.0	7,524.9	7,513.0	108.2	14.1	90.00	-4,311.8	-2,775.6	3,470.4	3,349.0	121.42	28.581 SF		
13,700.0	7,530.0	7,524.9	7,513.0	109.9	14.1	90.00	-4,311.8	-2,775.6	3,520.7	3,397.5	123.16	28.586		
13,800.0	7,530.0	7,524.9	7,513.0	111.7	14.1	90.00	-4,311.8	-2,775.6	3,573.1	3,448.2	124.90	28.606		
13,900.0	7,530.0	7,524.9	7,513.0	113.4	14.1	90.00	-4,311.8	-2,775.6	3,627.4	3,500.8	126.65	28.642		
14,000.0	7,530.0	7,524.9	7,513.0	115.1	14.1	90.00	-4,311.8	-2,775.6	3,683.7	3,555.3	128.39	28.692		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	7,524.9	7,513.0	116.9	14.1	90.00	-4,311.8	-2,775.6	3,741.8	3,611.7	130.13	28.754		
14,200.0	7,530.0	7,524.9	7,513.0	118.6	14.1	90.00	-4,311.8	-2,775.6	3,801.7	3,669.8	131.87	28.828		
14,300.0	7,530.0	7,524.9	7,513.0	120.4	14.1	90.00	-4,311.8	-2,775.6	3,863.2	3,729.6	133.62	28.912		
14,400.0	7,530.0	7,524.9	7,513.0	122.1	14.1	90.00	-4,311.8	-2,775.6	3,926.3	3,791.0	135.36	29.006		
14,500.0	7,530.0	7,524.9	7,513.0	123.9	14.1	90.00	-4,311.8	-2,775.6	3,990.9	3,853.8	137.11	29.108		
14,600.0	7,530.0	7,524.9	7,513.0	125.6	14.1	90.00	-4,311.8	-2,775.6	4,057.0	3,918.1	138.85	29.219		
14,700.0	7,530.0	7,524.9	7,513.0	127.3	14.1	90.00	-4,311.8	-2,775.6	4,124.4	3,983.8	140.59	29.335		
14,800.0	7,530.0	7,524.9	7,513.0	129.1	14.1	90.00	-4,311.8	-2,775.6	4,193.1	4,050.8	142.34	29.459		
14,900.0	7,530.0	7,524.9	7,513.0	130.8	14.1	90.00	-4,311.8	-2,775.6	4,263.1	4,119.0	144.08	29.587		
15,000.0	7,530.0	7,524.9	7,513.0	132.6	14.1	90.00	-4,311.8	-2,775.6	4,334.2	4,188.4	145.83	29.721		
15,100.0	7,530.0	7,524.9	7,513.0	134.3	14.1	90.00	-4,311.8	-2,775.6	4,406.5	4,258.9	147.58	29.859		
15,200.0	7,530.0	7,524.9	7,513.0	136.1	14.1	90.00	-4,311.8	-2,775.6	4,479.8	4,330.5	149.32	30.001		
15,300.0	7,530.0	7,524.9	7,513.0	137.8	14.1	90.00	-4,311.8	-2,775.6	4,554.1	4,403.1	151.07	30.146		
15,400.0	7,530.0	7,524.9	7,513.0	139.6	14.1	90.00	-4,311.8	-2,775.6	4,629.4	4,476.6	152.81	30.295		
15,500.0	7,530.0	7,524.9	7,513.0	141.3	14.1	90.00	-4,311.8	-2,775.6	4,705.7	4,551.1	154.56	30.446		
15,600.0	7,530.0	7,524.9	7,513.0	143.0	14.1	90.00	-4,311.8	-2,775.6	4,782.8	4,626.5	156.31	30.599		
15,700.0	7,530.0	7,524.9	7,513.0	144.8	14.1	90.00	-4,311.8	-2,775.6	4,860.7	4,702.6	158.05	30.754		
15,800.0	7,530.0	7,524.9	7,513.0	146.5	14.1	90.00	-4,311.8	-2,775.6	4,939.4	4,779.6	159.80	30.910		
15,900.0	7,530.0	7,524.9	7,513.0	148.3	14.1	90.00	-4,311.8	-2,775.6	5,018.9	4,857.4	161.55	31.068		
16,000.0	7,530.0	7,524.9	7,513.0	150.0	14.1	90.00	-4,311.8	-2,775.6	5,099.1	4,935.8	163.29	31.227		
16,100.0	7,530.0	7,524.9	7,513.0	151.8	14.1	90.00	-4,311.8	-2,775.6	5,180.0	5,015.0	165.04	31.386		
16,200.0	7,530.0	7,524.9	7,513.0	153.5	14.1	90.00	-4,311.8	-2,775.6	5,261.6	5,094.8	166.79	31.546		
16,300.0	7,530.0	7,524.9	7,513.0	155.3	14.1	90.00	-4,311.8	-2,775.6	5,343.8	5,175.2	168.54	31.707		
16,400.0	7,530.0	7,524.9	7,513.0	157.0	14.1	90.00	-4,311.8	-2,775.6	5,426.5	5,256.3	170.29	31.867		
16,500.0	7,530.0	7,524.9	7,513.0	158.8	14.1	90.00	-4,311.8	-2,775.6	5,509.9	5,337.9	172.03	32.028		
16,600.0	7,530.0	7,524.9	7,513.0	160.5	14.1	90.00	-4,311.8	-2,775.6	5,593.8	5,420.0	173.78	32.189		
16,700.0	7,530.0	7,524.9	7,513.0	162.3	14.1	90.00	-4,311.8	-2,775.6	5,678.2	5,502.7	175.53	32.349		
16,800.0	7,530.0	7,524.9	7,513.0	164.0	14.1	90.00	-4,311.8	-2,775.6	5,763.1	5,585.8	177.28	32.509		
16,900.0	7,530.0	7,524.9	7,513.0	165.8	14.1	90.00	-4,311.8	-2,775.6	5,848.5	5,669.5	179.03	32.668		
17,000.0	7,530.0	7,524.9	7,513.0	167.5	14.1	90.00	-4,311.8	-2,775.6	5,934.4	5,753.6	180.77	32.827		
17,100.0	7,530.0	7,524.9	7,513.0	169.3	14.1	90.00	-4,311.8	-2,775.6	6,020.6	5,838.1	182.52	32.986		
17,200.0	7,530.0	7,524.9	7,513.0	171.0	14.1	90.00	-4,311.8	-2,775.6	6,107.4	5,923.1	184.27	33.143		
17,300.0	7,530.0	7,524.9	7,513.0	172.8	14.1	90.00	-4,311.8	-2,775.6	6,194.5	6,008.4	186.02	33.300		
17,400.0	7,530.0	7,524.9	7,513.0	174.5	14.1	90.00	-4,311.8	-2,775.6	6,281.9	6,094.2	187.77	33.455		
17,420.9	7,530.0	7,524.9	7,513.0	174.9	14.1	90.00	-4,311.8	-2,775.6	6,300.3	6,112.2	188.14	33.488		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla														Offset Site Error:	0.0 ft
Survey Program: O-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-143.99	-4,173.3	-3,033.1	5,159.1						
100.0	100.0	83.0	83.0	0.2	0.1	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.8	0.27	N/A			
200.0	200.0	183.0	183.0	0.3	0.3	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.5	0.62	8,349.881			
300.0	300.0	283.0	283.0	0.5	0.5	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.1	0.97	5,335.539			
400.0	400.0	383.0	383.0	0.7	0.6	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.8	1.32	3,920.296			
500.0	500.0	483.0	483.0	0.8	0.8	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.4	1.67	3,098.440			
600.0	600.0	583.0	583.0	1.0	1.0	-143.99	-4,173.3	-3,033.1	5,159.1	5,157.1	2.01	2,561.453			
700.0	700.0	683.0	683.0	1.2	1.2	-176.47	-4,173.3	-3,033.1	5,160.0	5,157.6	2.36	2,183.691			
800.0	800.0	783.0	783.0	1.4	1.3	-176.47	-4,173.3	-3,033.1	5,162.6	5,159.9	2.71	1,904.163			
900.0	899.9	882.9	882.9	1.6	1.5	-176.47	-4,173.3	-3,033.1	5,166.9	5,163.9	3.06	1,689.244			
988.4	988.1	971.1	971.1	1.7	1.7	-176.47	-4,173.3	-3,033.1	5,172.2	5,168.9	3.37	1,536.981			
1,000.0	999.7	982.7	982.7	1.7	1.7	-176.47	-4,173.3	-3,033.1	5,173.0	5,169.6	3.41	1,518.953			
1,100.0	1,099.4	1,082.5	1,082.5	1.9	1.9	-176.47	-4,173.3	-3,033.1	5,179.8	5,176.0	3.75	1,379.681			
1,200.0	1,199.2	1,182.2	1,182.2	2.1	2.0	-176.48	-4,173.3	-3,033.1	5,186.5	5,182.4	4.10	1,264.082			
1,300.0	1,299.0	1,300.3	1,300.3	2.3	2.2	-176.50	-4,174.0	-3,031.9	5,193.2	5,188.7	4.48	1,158.152			
1,400.0	1,398.8	1,422.1	1,422.0	2.5	2.5	-176.56	-4,176.4	-3,027.4	5,199.4	5,194.5	4.88	1,066.183			
1,500.0	1,498.5	1,539.4	1,538.9	2.7	2.7	-176.66	-4,180.5	-3,019.8	5,205.1	5,199.9	5.27	987.640			
1,600.0	1,598.3	1,638.8	1,638.0	2.9	2.9	-176.75	-4,184.4	-3,012.5	5,210.8	5,205.2	5.64	924.302			
1,700.0	1,698.1	1,738.3	1,737.1	3.2	3.1	-176.85	-4,188.3	-3,005.2	5,216.5	5,210.5	6.01	868.088			
1,800.0	1,797.8	1,837.7	1,836.3	3.4	3.3	-176.94	-4,192.3	-2,997.8	5,222.2	5,215.8	6.38	817.947			
1,900.0	1,897.6	1,937.2	1,935.4	3.6	3.5	-177.04	-4,196.2	-2,990.5	5,227.9	5,221.1	6.76	773.024			
2,000.0	1,997.4	2,036.7	2,034.5	3.8	3.7	-177.13	-4,200.2	-2,983.2	5,233.6	5,226.5	7.14	732.599			
2,100.0	2,097.1	2,136.1	2,133.6	4.0	3.9	-177.22	-4,204.1	-2,975.8	5,239.4	5,231.8	7.53	696.070			
2,200.0	2,196.9	2,235.6	2,232.7	4.2	4.1	-177.32	-4,208.1	-2,968.5	5,245.1	5,237.2	7.91	662.927			
2,300.0	2,296.7	2,335.1	2,331.8	4.4	4.3	-177.41	-4,212.0	-2,961.2	5,250.9	5,242.6	8.30	632.742			
2,400.0	2,396.5	2,434.5	2,430.9	4.6	4.5	-177.51	-4,216.0	-2,953.8	5,256.7	5,248.0	8.69	605.150			
2,500.0	2,496.2	2,534.0	2,530.0	4.8	4.7	-177.60	-4,219.9	-2,946.5	5,262.5	5,253.4	9.08	579.845			
2,600.0	2,596.0	2,633.4	2,629.2	5.0	5.0	-177.69	-4,223.8	-2,939.2	5,268.3	5,258.8	9.47	556.561			
2,700.0	2,695.8	2,732.9	2,728.3	5.2	5.2	-177.79	-4,227.8	-2,931.8	5,274.1	5,264.3	9.86	535.072			
2,800.0	2,795.5	2,832.4	2,827.4	5.4	5.4	-177.88	-4,231.7	-2,924.5	5,280.0	5,269.7	10.25	515.186			
2,900.0	2,895.3	2,931.8	2,926.5	5.6	5.6	-177.97	-4,235.7	-2,917.2	5,285.8	5,275.2	10.64	496.732			
3,000.0	2,995.1	3,031.3	3,025.6	5.9	5.8	-178.06	-4,239.6	-2,909.8	5,291.7	5,280.6	11.03	479.565			
3,100.0	3,094.9	3,130.7	3,124.7	6.1	6.1	-178.16	-4,243.6	-2,902.5	5,297.6	5,286.1	11.43	463.558			
3,200.0	3,194.6	3,230.2	3,223.8	6.3	6.3	-178.25	-4,247.5	-2,895.2	5,303.4	5,291.6	11.82	448.599			
3,300.0	3,294.4	3,329.7	3,322.9	6.5	6.5	-178.34	-4,251.5	-2,887.8	5,309.4	5,297.1	12.22	434.590			
3,400.0	3,394.2	3,429.1	3,422.1	6.7	6.7	-178.43	-4,255.4	-2,880.5	5,315.3	5,302.7	12.61	421.445			
3,500.0	3,493.9	3,528.6	3,521.2	6.9	6.9	-178.52	-4,259.3	-2,873.1	5,321.2	5,308.2	13.01	409.088			
3,600.0	3,593.7	3,628.1	3,620.3	7.1	7.2	-178.61	-4,263.3	-2,865.8	5,327.2	5,313.8	13.40	397.452			
3,700.0	3,693.5	3,727.5	3,719.4	7.3	7.4	-178.70	-4,267.2	-2,858.5	5,333.1	5,319.3	13.80	386.475			
3,800.0	3,793.2	3,827.0	3,818.5	7.5	7.6	-178.80	-4,271.2	-2,851.1	5,339.1	5,324.9	14.20	376.103			
3,900.0	3,893.0	3,926.4	3,917.6	7.7	7.8	-178.89	-4,275.1	-2,843.8	5,345.1	5,330.5	14.59	366.290			
4,000.0	3,992.8	4,025.9	4,016.7	8.0	8.0	-178.98	-4,279.1	-2,836.5	5,351.1	5,336.1	14.99	356.991			
4,100.0	4,092.6	4,125.4	4,115.8	8.2	8.3	-179.07	-4,283.0	-2,829.1	5,357.1	5,341.7	15.39	348.168			
4,200.0	4,192.3	4,224.8	4,215.0	8.4	8.5	-179.16	-4,287.0	-2,821.8	5,363.1	5,347.4	15.78	339.785			
4,300.0	4,292.1	4,324.3	4,314.1	8.6	8.7	-179.25	-4,290.9	-2,814.5	5,369.2	5,353.0	16.18	331.810			
4,400.0	4,391.9	4,423.7	4,413.2	8.8	8.9	-179.34	-4,294.8	-2,807.1	5,375.2	5,358.7	16.58	324.215			
4,500.0	4,491.6	4,523.2	4,512.3	9.0	9.2	-179.42	-4,298.8	-2,799.8	5,381.3	5,364.3	16.98	316.974			
4,600.0	4,591.4	4,622.7	4,611.4	9.2	9.4	-179.51	-4,302.7	-2,792.5	5,387.4	5,370.0	17.38	310.062			
4,700.0	4,691.2	4,719.0	4,707.4	9.4	9.6	-179.60	-4,306.5	-2,785.5	5,393.5	5,375.7	17.76	303.664			
4,800.0	4,790.9	4,808.5	4,796.7	9.6	9.8	-179.66	-4,309.3	-2,780.3	5,399.7	5,381.6	18.11	298.126			
4,900.0	4,890.7	4,900.0	4,888.1	9.8	9.9	-179.70	-4,311.1	-2,777.0	5,406.2	5,387.7	18.45	293.055			
5,000.0	4,990.5	4,988.0	4,976.1	10.1	10.1	-179.72	-4,311.8	-2,775.6	5,412.8	5,394.1	18.76	288.579			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	5,085.2	5,073.3	10.3	10.2	-179.72	-4,311.8	-2,775.6	5,419.6	5,400.5	19.08	284.073		
5,200.0	5,190.0	5,184.9	5,173.0	10.5	10.4	-179.72	-4,311.8	-2,775.6	5,426.4	5,407.0	19.40	279.655		
5,300.0	5,289.8	5,284.7	5,272.8	10.7	10.5	-179.72	-4,311.8	-2,775.6	5,433.1	5,413.4	19.73	275.372		
5,400.0	5,389.6	5,384.5	5,372.6	10.9	10.7	-179.72	-4,311.8	-2,775.6	5,439.9	5,419.9	20.06	271.220		
5,500.0	5,489.3	5,484.2	5,472.4	11.1	10.8	-179.72	-4,311.8	-2,775.6	5,446.7	5,426.3	20.38	267.192		
5,600.0	5,589.1	5,584.0	5,572.1	11.3	11.0	-179.72	-4,311.8	-2,775.6	5,453.5	5,432.7	20.71	263.284		
5,700.0	5,688.9	5,683.8	5,671.9	11.5	11.1	-179.72	-4,311.8	-2,775.6	5,460.2	5,439.2	21.04	259.490		
5,800.0	5,788.7	5,783.5	5,771.7	11.7	11.3	-179.72	-4,311.8	-2,775.6	5,467.0	5,445.6	21.37	255.807		
5,900.0	5,888.4	5,883.3	5,871.4	11.9	11.4	-179.72	-4,311.8	-2,775.6	5,473.8	5,452.1	21.70	252.229		
6,000.0	5,988.2	5,983.1	5,971.2	12.2	11.6	-179.72	-4,311.8	-2,775.6	5,480.6	5,458.5	22.03	248.752		
6,100.0	6,088.0	6,082.9	6,071.0	12.4	11.8	-179.72	-4,311.8	-2,775.6	5,487.3	5,465.0	22.36	245.372		
6,200.0	6,187.7	6,182.6	6,170.7	12.6	11.9	-179.72	-4,311.8	-2,775.6	5,494.1	5,471.4	22.69	242.086		
6,300.0	6,287.5	6,282.4	6,270.5	12.8	12.1	-179.72	-4,311.8	-2,775.6	5,500.9	5,477.8	23.03	238.890		
6,400.0	6,387.3	6,382.2	6,370.3	13.0	12.2	-179.72	-4,311.8	-2,775.6	5,507.6	5,484.3	23.36	235.780		
6,500.0	6,487.0	6,481.9	6,470.1	13.2	12.4	-179.72	-4,311.8	-2,775.6	5,514.4	5,490.7	23.69	232.753		
6,600.0	6,586.8	6,581.7	6,569.8	13.4	12.5	-179.72	-4,311.8	-2,775.6	5,521.2	5,497.2	24.03	229.806		
6,700.0	6,686.6	6,681.5	6,669.6	13.6	12.7	-179.72	-4,311.8	-2,775.6	5,528.0	5,503.6	24.36	226.936		
6,787.0	6,773.4	6,768.3	6,756.4	13.8	12.8	-179.73	-4,311.8	-2,775.6	5,533.9	5,509.2	24.65	224.499		
6,800.0	6,786.4	6,781.3	6,769.4	13.8	12.9	169.71	-4,311.8	-2,775.6	5,534.6	5,509.9	24.70	224.061		
6,850.0	6,836.3	6,831.2	6,819.3	13.9	12.9	82.55	-4,311.8	-2,775.6	5,535.8	5,510.9	24.86	222.655		
6,900.0	6,886.2	6,881.1	6,869.2	14.0	13.0	52.80	-4,311.8	-2,775.6	5,534.0	5,509.1	24.96	221.683		
6,950.0	6,935.7	6,930.6	6,918.7	14.0	13.1	45.24	-4,311.8	-2,775.6	5,529.3	5,504.3	25.01	221.122		
7,000.0	6,984.6	6,979.5	6,967.6	14.0	13.2	42.23	-4,311.8	-2,775.6	5,521.7	5,496.7	24.99	220.945		
7,050.0	7,032.6	7,027.5	7,015.7	14.0	13.3	40.90	-4,311.8	-2,775.6	5,511.3	5,486.4	24.93	221.108		
7,100.0	7,079.7	7,074.6	7,062.7	13.9	13.3	40.44	-4,311.8	-2,775.6	5,498.1	5,473.2	24.82	221.554		
7,150.0	7,125.4	7,120.3	7,108.4	13.9	13.4	40.53	-4,311.8	-2,775.6	5,482.1	5,457.4	24.67	222.208		
7,200.0	7,169.6	7,164.5	7,152.6	13.8	13.5	41.03	-4,311.8	-2,775.6	5,463.5	5,439.0	24.50	222.970		
7,250.0	7,212.1	7,207.0	7,195.1	13.8	13.6	41.89	-4,311.8	-2,775.6	5,442.5	5,418.1	24.33	223.715		
7,300.0	7,252.6	7,247.5	7,235.6	13.7	13.6	43.07	-4,311.8	-2,775.6	5,419.0	5,394.8	24.16	224.285		
7,350.0	7,291.0	7,285.9	7,274.0	13.7	13.7	44.57	-4,311.8	-2,775.6	5,393.2	5,369.2	24.02	224.494		
7,400.0	7,327.1	7,322.0	7,310.1	13.7	13.7	46.40	-4,311.8	-2,775.6	5,365.3	5,341.3	23.94	224.138		
7,450.0	7,360.7	7,355.6	7,343.7	13.7	13.8	48.56	-4,311.8	-2,775.6	5,335.4	5,311.5	23.93	223.004		
7,500.0	7,391.6	7,386.5	7,374.6	13.7	13.8	51.08	-4,311.8	-2,775.6	5,303.7	5,279.7	24.01	220.909		
7,550.0	7,419.7	7,414.6	7,402.7	13.8	13.9	53.97	-4,311.8	-2,775.6	5,270.3	5,246.1	24.21	217.732		
7,600.0	7,444.8	7,439.7	7,427.8	13.9	13.9	57.25	-4,311.8	-2,775.6	5,235.5	5,211.0	24.53	213.454		
7,650.0	7,466.9	7,461.8	7,449.9	14.1	14.0	60.94	-4,311.8	-2,775.6	5,199.4	5,174.4	24.98	208.183		
7,700.0	7,485.8	7,480.7	7,468.8	14.3	14.0	65.02	-4,311.8	-2,775.6	5,162.2	5,136.6	25.54	202.159		
7,750.0	7,501.5	7,496.4	7,484.5	14.6	14.0	69.47	-4,311.8	-2,775.6	5,124.1	5,097.9	26.18	195.716		
7,800.0	7,513.7	7,508.6	7,496.8	14.9	14.0	74.24	-4,311.8	-2,775.6	5,085.3	5,058.4	26.87	189.233		
7,850.0	7,522.6	7,517.5	7,505.6	15.2	14.1	79.27	-4,311.8	-2,775.6	5,046.0	5,018.4	27.56	183.061		
7,900.0	7,528.0	7,522.9	7,511.1	15.6	14.1	84.46	-4,311.8	-2,775.6	5,006.4	4,978.2	28.21	177.470		
7,952.9	7,530.0	7,524.9	7,513.0	16.1	14.1	90.00	-4,311.8	-2,775.6	4,964.4	4,935.6	28.80	172.348		
8,000.0	7,530.0	7,524.9	7,513.0	16.5	14.1	90.00	-4,311.8	-2,775.6	4,927.1	4,897.8	29.26	168.393		
8,100.0	7,530.0	7,524.9	7,513.0	17.5	14.1	90.00	-4,311.8	-2,775.6	4,848.5	4,818.2	30.32	159.913		
8,200.0	7,530.0	7,524.9	7,513.0	18.7	14.1	90.00	-4,311.8	-2,775.6	4,770.7	4,739.2	31.49	151.510		
8,300.0	7,530.0	7,524.9	7,513.0	19.9	14.1	90.00	-4,311.8	-2,775.6	4,693.7	4,661.0	32.74	143.346		
8,400.0	7,530.0	7,524.9	7,513.0	21.2	14.1	90.00	-4,311.8	-2,775.6	4,617.6	4,583.6	34.07	135.524		
8,500.0	7,530.0	7,524.9	7,513.0	22.6	14.1	90.00	-4,311.8	-2,775.6	4,542.5	4,507.0	35.46	128.100		
8,600.0	7,530.0	7,524.9	7,513.0	24.0	14.1	90.00	-4,311.8	-2,775.6	4,468.3	4,431.4	36.90	121.101		
8,700.0	7,530.0	7,524.9	7,513.0	25.4	14.1	90.00	-4,311.8	-2,775.6	4,395.1	4,356.8	38.37	114.532		
8,800.0	7,530.0	7,524.9	7,513.0	26.9	14.1	90.00	-4,311.8	-2,775.6	4,323.1	4,283.2	39.89	108.386		
8,900.0	7,530.0	7,524.9	7,513.0	28.4	14.1	90.00	-4,311.8	-2,775.6	4,252.1	4,210.7	41.42	102.646		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,524.9	7,513.0	30.0	14.1	90.00	-4,311.8	-2,775.6	4,182.3	4,139.3	42.99	97.291		
9,100.0	7,530.0	7,524.9	7,513.0	31.5	14.1	90.00	-4,311.8	-2,775.6	4,113.8	4,069.2	44.57	92.298		
9,200.0	7,530.0	7,524.9	7,513.0	33.1	14.1	90.00	-4,311.8	-2,775.6	4,046.6	4,000.4	46.17	87.642		
9,300.0	7,530.0	7,524.9	7,513.0	34.7	14.1	90.00	-4,311.8	-2,775.6	3,980.8	3,933.0	47.79	83.302		
9,400.0	7,530.0	7,524.9	7,513.0	36.3	14.1	90.00	-4,311.8	-2,775.6	3,916.4	3,867.0	49.42	79.253		
9,500.0	7,530.0	7,524.9	7,513.0	38.0	14.1	90.00	-4,311.8	-2,775.6	3,853.5	3,802.5	51.06	75.477		
9,600.0	7,530.0	7,524.9	7,513.0	39.6	14.1	90.00	-4,311.8	-2,775.6	3,792.3	3,739.6	52.71	71.952		
9,700.0	7,530.0	7,524.9	7,513.0	41.3	14.1	90.00	-4,311.8	-2,775.6	3,732.7	3,678.3	54.36	68.661		
9,800.0	7,530.0	7,524.9	7,513.0	42.9	14.1	90.00	-4,311.8	-2,775.6	3,674.8	3,618.8	56.03	65.587		
9,900.0	7,530.0	7,524.9	7,513.0	44.6	14.1	90.00	-4,311.8	-2,775.6	3,618.8	3,561.1	57.70	62.715		
10,000.0	7,530.0	7,524.9	7,513.0	46.3	14.1	90.00	-4,311.8	-2,775.6	3,564.8	3,505.4	59.38	60.032		
10,100.0	7,530.0	7,524.9	7,513.0	47.9	14.1	90.00	-4,311.8	-2,775.6	3,512.7	3,451.6	61.07	57.523		
10,200.0	7,530.0	7,524.9	7,513.0	49.6	14.1	90.00	-4,311.8	-2,775.6	3,462.7	3,400.0	62.75	55.179		
10,300.0	7,530.0	7,524.9	7,513.0	51.3	14.1	90.00	-4,311.8	-2,775.6	3,415.0	3,350.5	64.45	52.988		
10,400.0	7,530.0	7,524.9	7,513.0	53.0	14.1	90.00	-4,311.8	-2,775.6	3,369.5	3,303.4	66.15	50.941		
10,500.0	7,530.0	7,524.9	7,513.0	54.7	14.1	90.00	-4,311.8	-2,775.6	3,326.5	3,258.6	67.85	49.029		
10,600.0	7,530.0	7,524.9	7,513.0	56.4	14.1	90.00	-4,311.8	-2,775.6	3,285.9	3,216.3	69.55	47.244		
10,700.0	7,530.0	7,524.9	7,513.0	58.1	14.1	90.00	-4,311.8	-2,775.6	3,247.8	3,176.6	71.26	45.579		
10,800.0	7,530.0	7,524.9	7,513.0	59.8	14.1	90.00	-4,311.8	-2,775.6	3,212.5	3,139.5	72.97	44.026		
10,900.0	7,530.0	7,524.9	7,513.0	61.5	14.1	90.00	-4,311.8	-2,775.6	3,179.9	3,105.2	74.68	42.580		
11,000.0	7,530.0	7,524.9	7,513.0	63.2	14.1	90.00	-4,311.8	-2,775.6	3,150.1	3,073.7	76.39	41.234		
11,100.0	7,530.0	7,524.9	7,513.0	64.9	14.1	90.00	-4,311.8	-2,775.6	3,123.2	3,045.1	78.11	39.984		
11,200.0	7,530.0	7,524.9	7,513.0	66.6	14.1	90.00	-4,311.8	-2,775.6	3,099.4	3,019.6	79.83	38.825		
11,300.0	7,530.0	7,524.9	7,513.0	68.4	14.1	90.00	-4,311.8	-2,775.6	3,078.6	2,997.1	81.55	37.751		
11,400.0	7,530.0	7,524.9	7,513.0	70.1	14.1	90.00	-4,311.8	-2,775.6	3,060.9	2,977.7	83.27	36.758		
11,500.0	7,530.0	7,524.9	7,513.0	71.8	14.1	90.00	-4,311.8	-2,775.6	3,046.5	2,961.5	85.00	35.842		
11,600.0	7,530.0	7,524.9	7,513.0	73.5	14.1	90.00	-4,311.8	-2,775.6	3,035.2	2,948.5	86.72	34.999		
11,700.0	7,530.0	7,524.9	7,513.0	75.2	14.1	90.00	-4,311.8	-2,775.6	3,027.2	2,938.8	88.45	34.226		
11,800.0	7,530.0	7,524.9	7,513.0	77.0	14.1	90.00	-4,311.8	-2,775.6	3,022.5	2,932.3	90.18	33.518		
11,892.2	7,530.0	7,524.9	7,513.0	78.6	14.1	90.00	-4,311.8	-2,775.6	3,021.1	2,929.3	91.77	32.920 CC		
11,900.0	7,530.0	7,524.9	7,513.0	78.7	14.1	90.00	-4,311.8	-2,775.6	3,021.1	2,929.2	91.91	32.872 ES		
12,000.0	7,530.0	7,524.9	7,513.0	80.4	14.1	90.00	-4,311.8	-2,775.6	3,023.0	2,929.4	93.64	32.285		
12,100.0	7,530.0	7,524.9	7,513.0	82.2	14.1	90.00	-4,311.8	-2,775.6	3,028.2	2,932.9	95.37	31.754		
12,200.0	7,530.0	7,524.9	7,513.0	83.9	14.1	90.00	-4,311.8	-2,775.6	3,036.7	2,939.6	97.10	31.275		
12,300.0	7,530.0	7,524.9	7,513.0	85.6	14.1	90.00	-4,311.8	-2,775.6	3,048.5	2,949.7	98.83	30.845		
12,400.0	7,530.0	7,524.9	7,513.0	87.3	14.1	90.00	-4,311.8	-2,775.6	3,063.5	2,962.9	100.57	30.463		
12,500.0	7,530.0	7,524.9	7,513.0	89.1	14.1	90.00	-4,311.8	-2,775.6	3,081.6	2,979.3	102.30	30.124		
12,600.0	7,530.0	7,524.9	7,513.0	90.8	14.1	90.00	-4,311.8	-2,775.6	3,102.9	2,998.9	104.04	29.826		
12,700.0	7,530.0	7,524.9	7,513.0	92.5	14.1	90.00	-4,311.8	-2,775.6	3,127.2	3,021.5	105.77	29.566		
12,800.0	7,530.0	7,524.9	7,513.0	94.3	14.1	90.00	-4,311.8	-2,775.6	3,154.5	3,047.0	107.51	29.343		
12,900.0	7,530.0	7,524.9	7,513.0	96.0	14.1	90.00	-4,311.8	-2,775.6	3,184.8	3,075.5	109.25	29.153		
13,000.0	7,530.0	7,524.9	7,513.0	97.8	14.1	90.00	-4,311.8	-2,775.6	3,217.8	3,106.8	110.98	28.994		
13,100.0	7,530.0	7,524.9	7,513.0	99.5	14.1	90.00	-4,311.8	-2,775.6	3,253.6	3,140.9	112.72	28.864		
13,200.0	7,530.0	7,524.9	7,513.0	101.2	14.1	90.00	-4,311.8	-2,775.6	3,292.0	3,177.6	114.46	28.761		
13,300.0	7,530.0	7,524.9	7,513.0	103.0	14.1	90.00	-4,311.8	-2,775.6	3,333.0	3,216.8	116.20	28.683		
13,400.0	7,530.0	7,524.9	7,513.0	104.7	14.1	90.00	-4,311.8	-2,775.6	3,376.5	3,258.5	117.94	28.629		
13,500.0	7,530.0	7,524.9	7,513.0	106.4	14.1	90.00	-4,311.8	-2,775.6	3,422.3	3,302.6	119.68	28.595		
13,600.0	7,530.0	7,524.9	7,513.0	108.2	14.1	90.00	-4,311.8	-2,775.6	3,470.4	3,349.0	121.42	28.581 SF		
13,700.0	7,530.0	7,524.9	7,513.0	109.9	14.1	90.00	-4,311.8	-2,775.6	3,520.7	3,397.5	123.16	28.586		
13,800.0	7,530.0	7,524.9	7,513.0	111.7	14.1	90.00	-4,311.8	-2,775.6	3,573.1	3,448.2	124.90	28.606		
13,900.0	7,530.0	7,524.9	7,513.0	113.4	14.1	90.00	-4,311.8	-2,775.6	3,627.4	3,500.8	126.65	28.642		
14,000.0	7,530.0	7,524.9	7,513.0	115.1	14.1	90.00	-4,311.8	-2,775.6	3,683.7	3,555.3	128.39	28.692		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	7,524.9	7,513.0	116.9	14.1	90.00	-4,311.8	-2,775.6	3,741.8	3,611.7	130.13	28.754		
14,200.0	7,530.0	7,524.9	7,513.0	118.6	14.1	90.00	-4,311.8	-2,775.6	3,801.7	3,669.8	131.87	28.828		
14,300.0	7,530.0	7,524.9	7,513.0	120.4	14.1	90.00	-4,311.8	-2,775.6	3,863.2	3,729.6	133.62	28.912		
14,400.0	7,530.0	7,524.9	7,513.0	122.1	14.1	90.00	-4,311.8	-2,775.6	3,926.3	3,791.0	135.36	29.006		
14,500.0	7,530.0	7,524.9	7,513.0	123.9	14.1	90.00	-4,311.8	-2,775.6	3,990.9	3,853.8	137.11	29.108		
14,600.0	7,530.0	7,524.9	7,513.0	125.6	14.1	90.00	-4,311.8	-2,775.6	4,057.0	3,918.1	138.85	29.219		
14,700.0	7,530.0	7,524.9	7,513.0	127.3	14.1	90.00	-4,311.8	-2,775.6	4,124.4	3,983.8	140.59	29.335		
14,800.0	7,530.0	7,524.9	7,513.0	129.1	14.1	90.00	-4,311.8	-2,775.6	4,193.1	4,050.8	142.34	29.459		
14,900.0	7,530.0	7,524.9	7,513.0	130.8	14.1	90.00	-4,311.8	-2,775.6	4,263.1	4,119.0	144.08	29.587		
15,000.0	7,530.0	7,524.9	7,513.0	132.6	14.1	90.00	-4,311.8	-2,775.6	4,334.2	4,188.4	145.83	29.721		
15,100.0	7,530.0	7,524.9	7,513.0	134.3	14.1	90.00	-4,311.8	-2,775.6	4,406.5	4,258.9	147.58	29.859		
15,200.0	7,530.0	7,524.9	7,513.0	136.1	14.1	90.00	-4,311.8	-2,775.6	4,479.8	4,330.5	149.32	30.001		
15,300.0	7,530.0	7,524.9	7,513.0	137.8	14.1	90.00	-4,311.8	-2,775.6	4,554.1	4,403.1	151.07	30.146		
15,400.0	7,530.0	7,524.9	7,513.0	139.6	14.1	90.00	-4,311.8	-2,775.6	4,629.4	4,476.6	152.81	30.295		
15,500.0	7,530.0	7,524.9	7,513.0	141.3	14.1	90.00	-4,311.8	-2,775.6	4,705.7	4,551.1	154.56	30.446		
15,600.0	7,530.0	7,524.9	7,513.0	143.0	14.1	90.00	-4,311.8	-2,775.6	4,782.8	4,626.5	156.31	30.599		
15,700.0	7,530.0	7,524.9	7,513.0	144.8	14.1	90.00	-4,311.8	-2,775.6	4,860.7	4,702.6	158.05	30.754		
15,800.0	7,530.0	7,524.9	7,513.0	146.5	14.1	90.00	-4,311.8	-2,775.6	4,939.4	4,779.6	159.80	30.910		
15,900.0	7,530.0	7,524.9	7,513.0	148.3	14.1	90.00	-4,311.8	-2,775.6	5,018.9	4,857.4	161.55	31.068		
16,000.0	7,530.0	7,524.9	7,513.0	150.0	14.1	90.00	-4,311.8	-2,775.6	5,099.1	4,935.8	163.29	31.227		
16,100.0	7,530.0	7,524.9	7,513.0	151.8	14.1	90.00	-4,311.8	-2,775.6	5,180.0	5,015.0	165.04	31.386		
16,200.0	7,530.0	7,524.9	7,513.0	153.5	14.1	90.00	-4,311.8	-2,775.6	5,261.6	5,094.8	166.79	31.546		
16,300.0	7,530.0	7,524.9	7,513.0	155.3	14.1	90.00	-4,311.8	-2,775.6	5,343.8	5,175.2	168.54	31.707		
16,400.0	7,530.0	7,524.9	7,513.0	157.0	14.1	90.00	-4,311.8	-2,775.6	5,426.5	5,256.3	170.29	31.867		
16,500.0	7,530.0	7,524.9	7,513.0	158.8	14.1	90.00	-4,311.8	-2,775.6	5,509.9	5,337.9	172.03	32.028		
16,600.0	7,530.0	7,524.9	7,513.0	160.5	14.1	90.00	-4,311.8	-2,775.6	5,593.8	5,420.0	173.78	32.189		
16,700.0	7,530.0	7,524.9	7,513.0	162.3	14.1	90.00	-4,311.8	-2,775.6	5,678.2	5,502.7	175.53	32.349		
16,800.0	7,530.0	7,524.9	7,513.0	164.0	14.1	90.00	-4,311.8	-2,775.6	5,763.1	5,585.8	177.28	32.509		
16,900.0	7,530.0	7,524.9	7,513.0	165.8	14.1	90.00	-4,311.8	-2,775.6	5,848.5	5,669.5	179.03	32.668		
17,000.0	7,530.0	7,524.9	7,513.0	167.5	14.1	90.00	-4,311.8	-2,775.6	5,934.4	5,753.6	180.77	32.827		
17,100.0	7,530.0	7,524.9	7,513.0	169.3	14.1	90.00	-4,311.8	-2,775.6	6,020.6	5,838.1	182.52	32.986		
17,200.0	7,530.0	7,524.9	7,513.0	171.0	14.1	90.00	-4,311.8	-2,775.6	6,107.4	5,923.1	184.27	33.143		
17,300.0	7,530.0	7,524.9	7,513.0	172.8	14.1	90.00	-4,311.8	-2,775.6	6,194.5	6,008.4	186.02	33.300		
17,400.0	7,530.0	7,524.9	7,513.0	174.5	14.1	90.00	-4,311.8	-2,775.6	6,281.9	6,094.2	187.77	33.455		
17,420.9	7,530.0	7,524.9	7,513.0	174.9	14.1	90.00	-4,311.8	-2,775.6	6,300.3	6,112.2	188.14	33.488		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-143.99	-4,173.3	-3,033.1	5,159.1						
100.0	100.0	87.4	87.4	0.2	0.2	-143.99	-4,173.3	-3,033.1	5,159.1	5,158.8	0.30	N/A			
200.0	200.0	192.7	192.7	0.3	0.3	-143.99	-4,173.1	-3,033.1	5,158.9	5,158.3	0.66	7,846.375			
300.0	300.0	298.0	298.0	0.5	0.5	-143.99	-4,172.8	-3,033.0	5,158.7	5,157.7	1.01	5,092.733			
400.0	400.0	403.3	403.3	0.7	0.7	-143.99	-4,172.4	-3,033.0	5,158.3	5,157.0	1.37	3,769.596			
500.0	500.0	508.6	508.6	0.8	0.9	-143.98	-4,171.8	-3,033.0	5,157.9	5,156.2	1.72	2,992.059			
600.0	600.0	613.9	613.9	1.0	1.1	-143.98	-4,171.1	-3,033.0	5,157.3	5,155.3	2.08	2,480.312			
636.5	636.5	652.4	652.4	1.1	1.1	-176.45	-4,170.8	-3,033.0	5,157.2	5,155.0	2.21	2,331.537			
700.0	700.0	719.2	719.2	1.2	1.2	-176.45	-4,170.3	-3,033.0	5,157.6	5,155.1	2.44	2,115.952			
800.0	800.0	824.5	824.5	1.4	1.4	-176.44	-4,169.3	-3,033.0	5,159.4	5,156.6	2.79	1,847.626			
900.0	899.9	929.7	929.7	1.6	1.6	-176.43	-4,168.2	-3,033.0	5,162.9	5,159.8	3.15	1,640.737			
988.4	988.1	1,022.7	1,022.7	1.7	1.8	-176.43	-4,167.1	-3,033.0	5,167.4	5,163.9	3.46	1,493.843			
1,000.0	999.7	1,032.1	1,032.1	1.7	1.8	-176.43	-4,167.0	-3,033.0	5,168.1	5,164.6	3.50	1,478.363			
1,100.0	1,099.4	1,112.1	1,112.1	1.9	1.9	-176.43	-4,166.5	-3,032.6	5,174.1	5,170.3	3.81	1,358.295			
1,200.0	1,199.2	1,183.0	1,183.0	2.1	2.0	-176.45	-4,166.8	-3,031.7	5,180.4	5,176.3	4.11	1,261.646			
1,300.0	1,299.0	1,259.3	1,259.2	2.3	2.2	-176.47	-4,167.9	-3,030.3	5,187.3	5,182.9	4.41	1,175.594			
1,400.0	1,398.8	1,340.2	1,340.1	2.5	2.3	-176.50	-4,169.8	-3,028.5	5,194.7	5,190.0	4.73	1,098.758			
1,500.0	1,498.5	1,452.4	1,452.2	2.7	2.5	-176.55	-4,173.0	-3,025.5	5,202.2	5,197.1	5.10	1,020.180			
1,600.0	1,598.3	1,619.4	1,618.9	2.9	2.8	-176.66	-4,178.5	-3,018.0	5,209.1	5,203.5	5.58	934.152			
1,700.0	1,698.1	1,743.4	1,742.6	3.2	3.1	-176.78	-4,183.2	-3,009.1	5,214.7	5,208.7	5.99	870.757			
1,800.0	1,797.8	1,836.7	1,835.5	3.4	3.2	-176.87	-4,187.1	-3,002.0	5,220.4	5,214.0	6.35	822.503			
1,900.0	1,897.6	1,944.0	1,942.4	3.6	3.5	-176.98	-4,191.4	-2,993.8	5,226.0	5,219.3	6.74	775.599			
2,000.0	1,997.4	2,039.0	2,037.0	3.8	3.7	-177.07	-4,195.2	-2,986.6	5,231.6	5,224.5	7.11	736.299			
2,100.0	2,097.1	2,122.7	2,120.4	4.0	3.8	-177.15	-4,198.9	-2,980.3	5,237.5	5,230.1	7.46	702.416			
2,200.0	2,196.9	2,208.9	2,206.2	4.2	4.0	-177.24	-4,203.1	-2,973.3	5,243.7	5,235.8	7.82	670.885			
2,300.0	2,296.7	2,317.0	2,313.8	4.4	4.3	-177.36	-4,208.8	-2,964.2	5,249.9	5,241.7	8.23	637.828			
2,400.0	2,396.5	2,391.4	2,387.8	4.6	4.4	-177.45	-4,212.9	-2,957.9	5,256.2	5,247.7	8.56	613.733			
2,500.0	2,496.2	2,492.8	2,488.8	4.8	4.6	-177.55	-4,217.8	-2,950.9	5,263.1	5,254.1	8.95	587.824			
2,600.0	2,596.0	2,642.0	2,637.6	5.0	4.9	-177.68	-4,223.5	-2,940.5	5,268.9	5,259.4	9.45	557.762			
2,700.0	2,695.8	2,713.8	2,709.2	5.2	5.1	-177.75	-4,226.4	-2,935.1	5,274.7	5,264.9	9.78	539.421			
2,800.0	2,795.5	2,810.4	2,805.4	5.4	5.3	-177.84	-4,230.8	-2,928.1	5,281.0	5,270.9	10.16	519.572			
2,900.0	2,895.3	2,912.1	2,906.7	5.6	5.5	-177.93	-4,235.0	-2,921.0	5,287.3	5,276.7	10.56	500.859			
3,000.0	2,995.1	3,023.0	3,017.3	5.9	5.8	-178.03	-4,239.2	-2,913.5	5,293.3	5,282.3	10.97	482.511			
3,100.0	3,094.9	3,118.0	3,112.0	6.1	6.0	-178.11	-4,242.9	-2,906.8	5,299.4	5,288.0	11.35	466.861			
3,200.0	3,194.6	3,230.4	3,223.9	6.3	6.2	-178.22	-4,247.6	-2,898.6	5,305.5	5,293.7	11.77	450.597			
3,300.0	3,294.4	3,349.4	3,342.6	6.5	6.5	-178.32	-4,252.0	-2,890.1	5,311.3	5,299.1	12.21	435.029			
3,400.0	3,394.2	3,447.6	3,440.4	6.7	6.7	-178.42	-4,255.6	-2,882.3	5,316.7	5,304.1	12.60	421.850			
3,500.0	3,493.9	3,516.7	3,509.3	6.9	6.9	-178.48	-4,258.4	-2,877.1	5,322.6	5,309.6	12.93	411.617			
3,600.0	3,593.7	3,638.5	3,630.6	7.1	7.1	-178.59	-4,263.6	-2,868.2	5,328.8	5,315.5	13.38	398.333			
3,700.0	3,693.5	3,775.2	3,766.8	7.3	7.4	-178.72	-4,268.4	-2,857.1	5,333.9	5,320.1	13.86	384.834			
3,800.0	3,793.2	3,840.1	3,831.5	7.5	7.6	-178.79	-4,270.7	-2,852.0	5,339.3	5,325.1	14.18	376.527			
3,900.0	3,893.0	3,933.5	3,924.5	7.7	7.8	-178.87	-4,274.6	-2,844.9	5,345.3	5,330.7	14.57	366.909			
4,000.0	3,992.8	4,046.1	4,036.6	8.0	8.1	-178.99	-4,279.3	-2,835.5	5,351.0	5,336.0	15.00	356.659			
4,100.0	4,092.6	4,137.2	4,127.3	8.2	8.3	-179.08	-4,283.2	-2,828.0	5,356.7	5,341.3	15.39	348.083			
4,200.0	4,192.3	4,230.5	4,220.2	8.4	8.5	-179.17	-4,287.4	-2,820.1	5,362.6	5,346.8	15.78	339.725			
4,300.0	4,292.1	4,319.3	4,308.6	8.6	8.7	-179.27	-4,291.6	-2,812.4	5,368.6	5,352.4	16.17	332.036			
4,400.0	4,391.9	4,457.2	4,445.9	8.8	9.0	-179.40	-4,297.6	-2,801.7	5,375.0	5,358.3	16.66	322.669			
4,500.0	4,491.6	4,559.0	4,547.3	9.0	9.3	-179.49	-4,301.3	-2,793.7	5,380.4	5,363.4	17.06	315.371			
4,600.0	4,591.4	4,651.6	4,639.7	9.2	9.5	-179.57	-4,304.1	-2,787.1	5,385.9	5,368.5	17.44	308.907			
4,700.0	4,691.2	4,735.5	4,723.3	9.4	9.6	-179.63	-4,306.5	-2,781.7	5,391.6	5,373.8	17.79	303.132			
4,800.0	4,790.9	4,803.6	4,791.3	9.6	9.8	-179.68	-4,308.5	-2,777.9	5,397.7	5,379.6	18.10	298.280			
4,900.0	4,890.7	4,864.0	4,851.6	9.8	9.9	-179.71	-4,310.2	-2,775.3	5,404.5	5,386.1	18.39	293.954			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error:		0.0 ft	
Survey Program: 1024-MWD											Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,000.0	4,990.5	4,928.7	4,916.2	10.1	10.0	-179.74	-4,311.8	-2,773.6	5,412.0	5,393.4	18.67	289.916		
5,100.0	5,090.3	5,061.5	5,049.1	10.3	10.2	-179.76	-4,313.8	-2,772.8	5,419.8	5,400.8	19.05	284.514		
5,200.0	5,190.0	5,152.1	5,139.6	10.5	10.3	-179.76	-4,314.3	-2,772.8	5,427.1	5,407.7	19.36	280.280		
5,300.0	5,289.8	5,261.5	5,249.0	10.7	10.5	-179.76	-4,314.9	-2,773.1	5,434.4	5,414.7	19.70	275.828		
5,400.0	5,389.6	5,376.3	5,363.9	10.9	10.7	-179.75	-4,314.8	-2,773.7	5,441.4	5,421.4	20.05	271.450		
5,500.0	5,489.3	5,467.4	5,454.9	11.1	10.8	-179.75	-4,314.7	-2,774.3	5,448.4	5,428.1	20.35	267.674		
5,600.0	5,589.1	5,572.2	5,559.7	11.3	11.0	-179.74	-4,314.5	-2,775.2	5,455.5	5,434.8	20.68	263.759		
5,700.0	5,688.9	5,674.1	5,661.7	11.5	11.1	-179.73	-4,314.2	-2,776.0	5,462.5	5,441.4	21.01	259.996		
5,800.0	5,788.7	5,776.3	5,763.8	11.7	11.3	-179.72	-4,313.9	-2,776.7	5,469.4	5,448.1	21.34	256.336		
5,900.0	5,888.4	5,885.0	5,872.5	11.9	11.4	-179.71	-4,313.5	-2,777.6	5,476.3	5,454.6	21.67	252.688		
6,000.0	5,988.2	5,982.6	5,970.1	12.2	11.6	-179.70	-4,312.8	-2,778.6	5,483.0	5,461.0	21.99	249.344		
6,100.0	6,088.0	6,079.0	6,066.5	12.4	11.7	-179.69	-4,312.1	-2,779.9	5,489.9	5,467.6	22.31	246.115		
6,200.0	6,187.7	6,216.4	6,203.9	12.6	11.9	-179.68	-4,311.2	-2,780.2	5,496.1	5,473.5	22.70	242.172		
6,300.0	6,287.5	6,318.2	6,305.7	12.8	12.1	-179.67	-4,310.4	-2,780.3	5,502.3	5,479.3	23.03	238.944		
6,400.0	6,387.3	6,417.9	6,405.4	13.0	12.2	-179.67	-4,309.6	-2,780.3	5,508.4	5,485.1	23.36	235.825		
6,500.0	6,487.0	6,509.5	6,497.0	13.2	12.4	-179.67	-4,309.0	-2,780.3	5,514.7	5,491.0	23.68	232.925		
6,600.0	6,586.8	6,599.9	6,587.4	13.4	12.5	-179.66	-4,308.4	-2,780.5	5,521.0	5,497.0	23.99	230.121		
6,700.0	6,686.6	6,690.1	6,677.6	13.6	12.7	-179.66	-4,308.0	-2,780.7	5,527.6	5,503.3	24.31	227.386		
6,787.0	6,773.4	6,768.2	6,755.7	13.8	12.8	-179.66	-4,307.9	-2,780.9	5,533.4	5,508.8	24.59	225.069		
6,800.0	6,786.4	6,779.9	6,767.4	13.8	12.8	169.78	-4,307.9	-2,780.9	5,534.2	5,509.5	24.63	224.648		
6,850.0	6,836.3	6,824.9	6,812.4	13.9	12.9	82.62	-4,307.8	-2,781.0	5,535.4	5,510.6	24.79	223.309		
6,900.0	6,886.2	6,877.7	6,865.2	14.0	13.0	52.87	-4,307.8	-2,781.1	5,533.7	5,508.8	24.89	222.283		
6,950.0	6,935.7	6,930.9	6,918.4	14.0	13.0	45.31	-4,307.8	-2,781.2	5,529.0	5,504.0	24.94	221.657		
7,000.0	6,984.6	6,976.1	6,963.6	14.0	13.1	42.30	-4,307.8	-2,781.2	5,521.4	5,496.5	24.93	221.521		
7,050.0	7,032.6	7,022.0	7,009.5	14.0	13.2	40.96	-4,307.8	-2,781.3	5,511.1	5,486.2	24.86	221.706		
7,100.0	7,079.7	7,077.5	7,065.0	13.9	13.3	40.52	-4,307.8	-2,781.3	5,497.9	5,473.1	24.76	222.016		
7,150.0	7,125.4	7,138.1	7,125.6	13.9	13.4	40.65	-4,307.8	-2,781.3	5,481.9	5,457.2	24.64	222.434		
7,200.0	7,169.6	7,208.1	7,195.6	13.8	13.5	41.27	-4,307.4	-2,781.1	5,463.1	5,438.5	24.52	222.785		
7,250.0	7,212.1	7,266.1	7,253.6	13.8	13.6	42.23	-4,306.8	-2,781.0	5,441.6	5,417.2	24.37	223.245		
7,300.0	7,252.6	7,308.0	7,295.5	13.7	13.7	43.46	-4,306.3	-2,780.9	5,417.6	5,393.4	24.22	223.723		
7,350.0	7,291.0	7,341.6	7,329.0	13.7	13.7	44.99	-4,305.9	-2,780.8	5,391.5	5,367.4	24.08	223.921		
7,400.0	7,327.1	7,367.0	7,354.5	13.7	13.8	46.79	-4,305.6	-2,780.8	5,363.2	5,339.3	23.98	223.661		
7,450.0	7,360.7	7,390.0	7,377.5	13.7	13.8	48.91	-4,305.4	-2,780.8	5,333.1	5,309.2	23.95	222.643		
7,500.0	7,391.6	7,420.2	7,407.7	13.7	13.8	51.47	-4,305.2	-2,780.7	5,301.3	5,277.2	24.04	220.478		
7,550.0	7,419.7	7,446.8	7,434.3	13.8	13.9	54.38	-4,305.0	-2,780.7	5,267.8	5,243.5	24.25	217.254		
7,600.0	7,444.8	7,470.5	7,458.0	13.9	13.9	57.69	-4,304.9	-2,780.7	5,232.9	5,208.3	24.57	212.941		
7,650.0	7,466.9	7,492.2	7,479.6	14.1	14.0	61.40	-4,304.7	-2,780.7	5,196.7	5,171.6	25.03	207.636		
7,700.0	7,485.8	7,513.3	7,500.8	14.3	14.0	65.55	-4,304.6	-2,780.7	5,159.4	5,133.8	25.60	201.540		
7,750.0	7,501.5	7,530.7	7,518.2	14.6	14.0	70.06	-4,304.5	-2,780.6	5,121.2	5,095.0	26.25	195.076		
7,800.0	7,513.7	7,544.4	7,531.9	14.9	14.0	74.89	-4,304.4	-2,780.6	5,082.4	5,055.5	26.94	188.625		
7,850.0	7,522.6	7,553.4	7,540.8	15.2	14.1	79.94	-4,304.4	-2,780.5	5,043.1	5,015.5	27.63	182.550		
7,900.0	7,528.0	7,558.5	7,546.0	15.6	14.1	85.13	-4,304.3	-2,780.5	5,003.5	4,975.3	28.26	177.080		
7,952.9	7,530.0	7,560.2	7,547.6	16.1	14.1	90.66	-4,304.3	-2,780.5	4,961.5	4,932.7	28.83	172.093		
8,000.0	7,530.0	7,559.9	7,547.4	16.5	14.1	90.65	-4,304.3	-2,780.5	4,924.3	4,895.0	29.29	168.151		
8,100.0	7,530.0	7,559.4	7,546.8	17.5	14.1	90.64	-4,304.3	-2,780.5	4,845.8	4,815.5	30.34	159.696		
8,200.0	7,530.0	7,558.8	7,546.3	18.7	14.1	90.63	-4,304.3	-2,780.5	4,768.1	4,736.6	31.51	151.318		
8,300.0	7,530.0	7,558.3	7,545.7	19.9	14.1	90.62	-4,304.3	-2,780.5	4,691.3	4,658.5	32.77	143.176		
8,400.0	7,530.0	7,557.7	7,545.2	21.2	14.1	90.61	-4,304.3	-2,780.5	4,615.3	4,581.2	34.09	135.373		
8,500.0	7,530.0	7,557.2	7,544.6	22.6	14.1	90.60	-4,304.3	-2,780.5	4,540.3	4,504.8	35.48	127.967		
8,600.0	7,530.0	7,556.6	7,544.1	24.0	14.1	90.59	-4,304.3	-2,780.5	4,466.2	4,429.3	36.92	120.984		
8,700.0	7,530.0	7,556.1	7,543.5	25.4	14.1	90.58	-4,304.3	-2,780.5	4,393.2	4,354.8	38.39	114.431		
8,800.0	7,530.0	7,555.5	7,543.0	26.9	14.1	90.57	-4,304.3	-2,780.5	4,321.3	4,281.4	39.90	108.298		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,900.0	7,530.0	7,555.0	7,542.4	28.4	14.1	90.56	-4,304.3	-2,780.5	4,250.5	4,209.0	41.44	102.569	
9,000.0	7,530.0	7,554.4	7,541.9	30.0	14.1	90.55	-4,304.3	-2,780.5	4,180.8	4,137.8	43.00	97.225	
9,100.0	7,530.0	7,553.9	7,541.3	31.5	14.1	90.54	-4,304.4	-2,780.5	4,112.5	4,067.9	44.58	92.241	
9,200.0	7,530.0	7,553.3	7,540.8	33.1	14.1	90.53	-4,304.4	-2,780.5	4,045.4	3,999.3	46.18	87.594	
9,300.0	7,530.0	7,552.7	7,540.2	34.7	14.1	90.52	-4,304.4	-2,780.5	3,979.8	3,932.0	47.80	83.262	
9,400.0	7,530.0	7,552.2	7,539.7	36.3	14.1	90.50	-4,304.4	-2,780.5	3,915.6	3,866.1	49.43	79.221	
9,500.0	7,530.0	7,551.6	7,539.1	38.0	14.0	90.49	-4,304.4	-2,780.5	3,852.9	3,801.8	51.06	75.451	
9,600.0	7,530.0	7,551.1	7,538.6	39.6	14.0	90.48	-4,304.4	-2,780.5	3,791.8	3,739.1	52.71	71.933	
9,700.0	7,530.0	7,550.5	7,538.0	41.3	14.0	90.47	-4,304.4	-2,780.5	3,732.4	3,678.0	54.37	68.648	
9,800.0	7,530.0	7,550.0	7,537.5	42.9	14.0	90.46	-4,304.4	-2,780.5	3,674.8	3,618.7	56.04	65.579	
9,900.0	7,530.0	7,549.4	7,536.9	44.6	14.0	90.45	-4,304.4	-2,780.5	3,619.0	3,561.3	57.71	62.713	
10,000.0	7,530.0	7,548.9	7,536.4	46.3	14.0	90.44	-4,304.4	-2,780.5	3,565.1	3,505.7	59.38	60.034	
10,100.0	7,530.0	7,548.3	7,535.8	47.9	14.0	90.43	-4,304.4	-2,780.5	3,513.3	3,452.2	61.07	57.530	
10,200.0	7,530.0	7,547.8	7,535.3	49.6	14.0	90.42	-4,304.4	-2,780.6	3,463.5	3,400.8	62.76	55.190	
10,300.0	7,530.0	7,547.2	7,534.7	51.3	14.0	90.41	-4,304.4	-2,780.6	3,416.0	3,351.6	64.45	53.004	
10,400.0	7,530.0	7,546.6	7,534.1	53.0	14.0	90.40	-4,304.4	-2,780.6	3,370.8	3,304.6	66.14	50.961	
10,500.0	7,530.0	7,545.9	7,533.4	54.7	14.0	90.39	-4,304.4	-2,780.6	3,327.9	3,260.1	67.84	49.053	
10,600.0	7,530.0	7,545.2	7,532.7	56.4	14.0	90.37	-4,304.4	-2,780.6	3,287.6	3,218.0	69.55	47.271	
10,700.0	7,530.0	7,544.5	7,532.0	58.1	14.0	90.36	-4,304.4	-2,780.6	3,249.8	3,178.6	71.25	45.609	
10,800.0	7,530.0	7,543.8	7,531.3	59.8	14.0	90.35	-4,304.4	-2,780.6	3,214.7	3,141.7	72.96	44.060	
10,900.0	7,530.0	7,543.1	7,530.6	61.5	14.0	90.33	-4,304.4	-2,780.6	3,182.4	3,107.7	74.67	42.617	
11,000.0	7,530.0	7,542.4	7,529.9	63.2	14.0	90.32	-4,304.4	-2,780.6	3,152.8	3,076.5	76.39	41.275	
11,100.0	7,530.0	7,541.7	7,529.2	64.9	14.0	90.31	-4,304.4	-2,780.6	3,126.3	3,048.2	78.10	40.028	
11,200.0	7,530.0	7,541.0	7,528.5	66.6	14.0	90.29	-4,304.4	-2,780.6	3,102.7	3,022.8	79.82	38.871	
11,300.0	7,530.0	7,540.3	7,527.8	68.4	14.0	90.28	-4,304.4	-2,780.6	3,082.1	3,000.6	81.54	37.799	
11,400.0	7,530.0	7,539.6	7,527.1	70.1	14.0	90.27	-4,304.4	-2,780.6	3,064.7	2,981.5	83.26	36.809	
11,500.0	7,530.0	7,538.9	7,526.4	71.8	14.0	90.25	-4,304.4	-2,780.6	3,050.5	2,965.5	84.98	35.896	
11,600.0	7,530.0	7,538.1	7,525.6	73.5	14.0	90.24	-4,304.4	-2,780.6	3,039.5	2,952.8	86.71	35.055	
11,700.0	7,530.0	7,537.4	7,524.9	75.2	14.0	90.22	-4,304.4	-2,780.6	3,031.8	2,943.4	88.43	34.284	
11,800.0	7,530.0	7,536.7	7,524.2	77.0	14.0	90.21	-4,304.4	-2,780.6	3,027.3	2,937.2	90.16	33.578	
11,884.8	7,530.0	7,536.0	7,523.5	78.4	14.0	90.20	-4,304.5	-2,780.6	3,026.1	2,934.5	91.62	33.028 CC	
11,900.0	7,530.0	7,535.9	7,523.4	78.7	14.0	90.20	-4,304.5	-2,780.6	3,026.2	2,934.3	91.89	32.934 ES	
12,000.0	7,530.0	7,535.2	7,522.7	80.4	14.0	90.18	-4,304.5	-2,780.6	3,028.3	2,934.7	93.61	32.349	
12,100.0	7,530.0	7,534.4	7,521.9	82.2	14.0	90.17	-4,304.5	-2,780.6	3,033.8	2,938.4	95.34	31.819	
12,200.0	7,530.0	7,533.7	7,521.2	83.9	14.0	90.15	-4,304.5	-2,780.6	3,042.5	2,945.4	97.08	31.342	
12,300.0	7,530.0	7,532.9	7,520.4	85.6	14.0	90.14	-4,304.5	-2,780.6	3,054.5	2,955.7	98.81	30.914	
12,400.0	7,530.0	7,532.1	7,519.6	87.3	14.0	90.13	-4,304.5	-2,780.6	3,069.7	2,969.1	100.54	30.532	
12,500.0	7,530.0	7,531.4	7,518.9	89.1	14.0	90.11	-4,304.5	-2,780.6	3,088.0	2,985.8	102.27	30.194	
12,600.0	7,530.0	7,530.6	7,518.1	90.8	14.0	90.10	-4,304.5	-2,780.6	3,109.5	3,005.5	104.01	29.897	
12,700.0	7,530.0	7,529.8	7,517.3	92.5	14.0	90.08	-4,304.5	-2,780.6	3,134.0	3,028.3	105.74	29.639	
12,800.0	7,530.0	7,529.0	7,516.5	94.3	14.0	90.07	-4,304.5	-2,780.6	3,161.5	3,054.0	107.48	29.416	
12,900.0	7,530.0	7,528.2	7,515.7	96.0	14.0	90.05	-4,304.5	-2,780.6	3,191.9	3,082.7	109.21	29.226	
13,000.0	7,530.0	7,527.4	7,514.9	97.8	14.0	90.04	-4,304.5	-2,780.6	3,225.1	3,114.1	110.95	29.068	
13,100.0	7,530.0	7,526.6	7,514.1	99.5	14.0	90.02	-4,304.5	-2,780.6	3,261.0	3,148.3	112.69	28.939	
13,200.0	7,530.0	7,525.8	7,513.3	101.2	14.0	90.01	-4,304.5	-2,780.6	3,299.6	3,185.1	114.42	28.837	
13,300.0	7,530.0	7,525.0	7,512.5	103.0	14.0	89.99	-4,304.5	-2,780.6	3,340.7	3,224.5	116.16	28.759	
13,400.0	7,530.0	7,524.2	7,511.7	104.7	14.0	89.97	-4,304.5	-2,780.6	3,384.3	3,266.4	117.90	28.705	
13,500.0	7,530.0	7,523.4	7,510.9	106.4	14.0	89.96	-4,304.5	-2,780.6	3,430.2	3,310.6	119.64	28.671	
13,600.0	7,530.0	7,522.6	7,510.0	108.2	14.0	89.94	-4,304.5	-2,780.6	3,478.4	3,357.0	121.38	28.658 SF	
13,700.0	7,530.0	7,521.7	7,509.2	109.9	14.0	89.93	-4,304.5	-2,780.6	3,528.8	3,405.7	123.12	28.662	
13,800.0	7,530.0	7,520.9	7,508.4	111.7	14.0	89.91	-4,304.5	-2,780.6	3,581.2	3,456.4	124.86	28.683	
13,900.0	7,530.0	7,520.0	7,507.5	113.4	14.0	89.90	-4,304.5	-2,780.6	3,635.7	3,509.1	126.60	28.718	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error: 0.0 ft	
Survey Program: 1024-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	7,519.2	7,506.7	115.1	14.0	89.88	-4,304.6	-2,780.6	3,692.1	3,563.7	128.34	28.768		
14,100.0	7,530.0	7,518.3	7,505.8	116.9	14.0	89.86	-4,304.6	-2,780.6	3,750.2	3,620.2	130.08	28.830		
14,200.0	7,530.0	7,517.5	7,505.0	118.6	14.0	89.85	-4,304.6	-2,780.6	3,810.2	3,678.3	131.82	28.904		
14,300.0	7,530.0	7,516.6	7,504.1	120.4	14.0	89.83	-4,304.6	-2,780.6	3,871.7	3,738.2	133.56	28.988		
14,400.0	7,530.0	7,515.7	7,503.2	122.1	14.0	89.81	-4,304.6	-2,780.7	3,934.9	3,799.6	135.31	29.082		
14,500.0	7,530.0	7,514.8	7,502.3	123.9	14.0	89.80	-4,304.6	-2,780.7	3,999.5	3,862.5	137.05	29.184		
14,600.0	7,530.0	7,514.0	7,501.4	125.6	14.0	89.78	-4,304.6	-2,780.7	4,065.6	3,926.8	138.79	29.293		
14,700.0	7,530.0	7,513.1	7,500.6	127.3	14.0	89.76	-4,304.6	-2,780.7	4,133.1	3,992.6	140.53	29.410		
14,800.0	7,530.0	7,512.2	7,499.7	129.1	14.0	89.75	-4,304.6	-2,780.7	4,201.8	4,059.6	142.28	29.533		
14,900.0	7,530.0	7,511.3	7,498.7	130.8	14.0	89.73	-4,304.6	-2,780.7	4,271.8	4,127.8	144.02	29.661		
15,000.0	7,530.0	7,510.4	7,497.8	132.6	14.0	89.71	-4,304.6	-2,780.7	4,343.0	4,197.2	145.76	29.795		
15,100.0	7,530.0	7,509.4	7,496.9	134.3	14.0	89.70	-4,304.6	-2,780.7	4,415.2	4,267.7	147.51	29.933		
15,200.0	7,530.0	7,508.5	7,496.0	136.1	14.0	89.68	-4,304.6	-2,780.7	4,488.6	4,339.3	149.25	30.074		
15,300.0	7,530.0	7,507.6	7,495.1	137.8	14.0	89.66	-4,304.6	-2,780.7	4,562.9	4,411.9	150.99	30.219		
15,400.0	7,530.0	7,506.7	7,494.1	139.6	14.0	89.64	-4,304.6	-2,780.7	4,638.3	4,485.5	152.74	30.367		
15,500.0	7,530.0	7,505.7	7,493.2	141.3	14.0	89.62	-4,304.6	-2,780.7	4,714.5	4,560.0	154.48	30.518		
15,600.0	7,530.0	7,504.8	7,492.2	143.0	14.0	89.61	-4,304.6	-2,780.7	4,791.6	4,635.4	156.23	30.671		
15,700.0	7,530.0	7,503.8	7,491.3	144.8	14.0	89.59	-4,304.6	-2,780.7	4,869.5	4,711.6	157.97	30.825		
15,800.0	7,530.0	7,502.8	7,490.3	146.5	14.0	89.57	-4,304.7	-2,780.7	4,948.3	4,788.6	159.72	30.981		
15,900.0	7,530.0	7,501.9	7,489.3	148.3	14.0	89.55	-4,304.7	-2,780.7	5,027.8	4,866.3	161.46	31.139		
16,000.0	7,530.0	7,500.9	7,488.4	150.0	14.0	89.53	-4,304.7	-2,780.7	5,108.0	4,944.8	163.21	31.298		
16,100.0	7,530.0	7,499.9	7,487.4	151.8	14.0	89.51	-4,304.7	-2,780.7	5,188.9	5,023.9	164.95	31.457		
16,200.0	7,530.0	7,498.9	7,486.4	153.5	14.0	89.50	-4,304.7	-2,780.7	5,270.4	5,103.7	166.70	31.617		
16,300.0	7,530.0	7,497.9	7,485.4	155.3	14.0	89.48	-4,304.7	-2,780.7	5,352.6	5,184.2	168.44	31.777		
16,400.0	7,530.0	7,496.9	7,484.4	157.0	14.0	89.46	-4,304.7	-2,780.7	5,435.4	5,265.2	170.19	31.937		
16,500.0	7,530.0	7,495.9	7,483.4	158.8	14.0	89.44	-4,304.7	-2,780.7	5,518.7	5,346.8	171.93	32.098		
16,600.0	7,530.0	7,494.9	7,482.4	160.5	14.0	89.42	-4,304.7	-2,780.7	5,602.6	5,428.9	173.68	32.258		
16,700.0	7,530.0	7,493.8	7,481.3	162.3	14.0	89.40	-4,304.7	-2,780.7	5,687.0	5,511.6	175.43	32.419		
16,800.0	7,530.0	7,492.8	7,480.3	164.0	14.0	89.38	-4,304.7	-2,780.7	5,771.9	5,594.8	177.17	32.578		
16,900.0	7,530.0	7,491.8	7,479.2	165.8	14.0	89.36	-4,304.7	-2,780.7	5,857.3	5,678.4	178.92	32.738		
17,000.0	7,530.0	7,490.7	7,478.2	167.5	13.9	89.34	-4,304.7	-2,780.7	5,943.2	5,762.5	180.66	32.896		
17,100.0	7,530.0	7,489.7	7,477.1	169.3	13.9	89.32	-4,304.7	-2,780.7	6,029.4	5,847.0	182.41	33.055		
17,200.0	7,530.0	7,488.6	7,476.1	171.0	13.9	89.30	-4,304.8	-2,780.7	6,116.1	5,932.0	184.15	33.212		
17,300.0	7,530.0	7,487.5	7,475.0	172.8	13.9	89.28	-4,304.8	-2,780.7	6,203.2	6,017.3	185.90	33.369		
17,400.0	7,530.0	7,487.0	7,474.5	174.5	13.9	89.27	-4,304.8	-2,780.7	6,290.7	6,103.1	187.65	33.524		
17,420.9	7,530.0	7,487.0	7,474.5	174.9	13.9	89.27	-4,304.8	-2,780.7	6,309.1	6,121.1	188.01	33.556		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-143.99	-4,174.1	-3,033.9	5,160.3					
100.0	100.0	67.0	67.0	0.2	0.1	-143.99	-4,174.1	-3,033.9	5,160.2	5,159.9	0.27	N/A		
200.0	200.0	167.0	167.0	0.3	0.3	-143.99	-4,174.1	-3,033.9	5,160.2	5,159.6	0.62	8,349.213		
300.0	300.0	267.0	267.0	0.5	0.5	-143.99	-4,174.1	-3,033.9	5,160.2	5,159.2	0.97	5,335.681		
400.0	400.0	367.0	367.0	0.7	0.6	-143.99	-4,174.1	-3,033.9	5,160.2	5,158.9	1.32	3,920.597		
500.0	500.0	467.0	467.0	0.8	0.8	-143.99	-4,174.1	-3,033.9	5,160.2	5,158.5	1.67	3,098.768		
600.0	600.0	567.0	567.0	1.0	1.0	-143.99	-4,174.1	-3,033.9	5,160.2	5,158.2	2.01	2,561.773		
700.0	700.0	667.0	667.0	1.2	1.2	-176.46	-4,174.1	-3,033.9	5,161.0	5,158.7	2.36	2,183.993		
800.0	800.0	767.0	767.0	1.4	1.3	-176.46	-4,174.1	-3,033.9	5,163.7	5,160.9	2.71	1,904.445		
900.0	899.9	866.9	866.9	1.6	1.5	-176.46	-4,174.1	-3,033.9	5,168.0	5,164.9	3.06	1,689.507		
988.4	988.1	955.1	955.1	1.7	1.7	-176.46	-4,174.1	-3,033.9	5,173.3	5,169.9	3.37	1,537.228		
1,000.0	999.7	966.7	966.7	1.7	1.7	-176.46	-4,174.1	-3,033.9	5,174.1	5,170.7	3.41	1,519.198		
1,100.0	1,099.4	1,066.4	1,066.4	1.9	1.9	-176.47	-4,174.1	-3,033.9	5,180.8	5,177.1	3.75	1,379.910		
1,200.0	1,199.2	1,166.2	1,166.2	2.1	2.0	-176.47	-4,174.1	-3,033.9	5,187.6	5,183.5	4.10	1,264.296		
1,300.0	1,299.0	1,266.0	1,266.0	2.3	2.2	-176.48	-4,174.1	-3,033.9	5,194.4	5,189.9	4.45	1,166.794		
1,400.0	1,398.8	1,365.8	1,365.8	2.5	2.4	-176.48	-4,174.1	-3,033.9	5,201.1	5,196.3	4.80	1,083.457		
1,500.0	1,498.5	1,465.5	1,465.5	2.7	2.6	-176.49	-4,174.1	-3,033.9	5,207.9	5,202.7	5.15	1,011.406		
1,600.0	1,598.3	1,565.3	1,565.3	2.9	2.7	-176.49	-4,174.1	-3,033.9	5,214.7	5,209.2	5.50	948.495		
1,700.0	1,698.1	1,665.1	1,665.1	3.2	2.9	-176.50	-4,174.1	-3,033.9	5,221.4	5,215.6	5.85	893.087		
1,800.0	1,797.8	1,764.8	1,764.8	3.4	3.1	-176.50	-4,174.1	-3,033.9	5,228.2	5,222.0	6.20	843.917		
1,900.0	1,897.6	1,864.6	1,864.6	3.6	3.3	-176.51	-4,174.1	-3,033.9	5,234.9	5,228.4	6.54	799.986		
2,000.0	1,997.4	1,964.4	1,964.4	3.8	3.4	-176.51	-4,174.1	-3,033.9	5,241.7	5,234.8	6.89	760.500		
2,100.0	2,097.1	2,064.1	2,064.1	4.0	3.6	-176.51	-4,174.1	-3,033.9	5,248.5	5,241.2	7.24	724.817		
2,200.0	2,196.9	2,163.9	2,163.9	4.2	3.8	-176.52	-4,174.1	-3,033.9	5,255.2	5,247.6	7.59	692.412		
2,300.0	2,296.7	2,263.7	2,263.7	4.4	4.0	-176.52	-4,174.1	-3,033.9	5,262.0	5,254.0	7.94	662.853		
2,400.0	2,396.5	2,363.5	2,363.5	4.6	4.1	-176.53	-4,174.1	-3,033.9	5,268.7	5,260.5	8.29	635.782		
2,500.0	2,496.2	2,463.2	2,463.2	4.8	4.3	-176.53	-4,174.1	-3,033.9	5,275.5	5,266.9	8.64	610.897		
2,600.0	2,596.0	2,563.0	2,563.0	5.0	4.5	-176.54	-4,174.1	-3,033.9	5,282.3	5,273.3	8.98	587.943		
2,700.0	2,695.8	2,662.8	2,662.8	5.2	4.6	-176.54	-4,174.1	-3,033.9	5,289.0	5,279.7	9.33	566.704		
2,800.0	2,795.5	2,762.5	2,762.5	5.4	4.8	-176.55	-4,174.1	-3,033.9	5,295.8	5,286.1	9.68	546.995		
2,900.0	2,895.3	2,862.3	2,862.3	5.6	5.0	-176.55	-4,174.1	-3,033.9	5,302.6	5,292.5	10.03	528.657		
3,000.0	2,995.1	2,962.1	2,962.1	5.9	5.2	-176.55	-4,174.1	-3,033.9	5,309.3	5,298.9	10.38	511.550		
3,100.0	3,094.9	3,061.9	3,061.9	6.1	5.3	-176.56	-4,174.1	-3,033.9	5,316.1	5,305.3	10.73	495.555		
3,200.0	3,194.6	3,161.6	3,161.6	6.3	5.5	-176.56	-4,174.1	-3,033.9	5,322.8	5,311.8	11.08	480.567		
3,300.0	3,294.4	3,261.4	3,261.4	6.5	5.7	-176.57	-4,174.1	-3,033.9	5,329.6	5,318.2	11.42	466.494		
3,400.0	3,394.2	3,361.2	3,361.2	6.7	5.9	-176.57	-4,174.1	-3,033.9	5,336.4	5,324.6	11.77	453.255		
3,500.0	3,493.9	3,460.9	3,460.9	6.9	6.0	-176.58	-4,174.1	-3,033.9	5,343.1	5,331.0	12.12	440.777		
3,600.0	3,593.7	3,560.7	3,560.7	7.1	6.2	-176.58	-4,174.1	-3,033.9	5,349.9	5,337.4	12.47	428.997		
3,700.0	3,693.5	3,660.5	3,660.5	7.3	6.4	-176.58	-4,174.1	-3,033.9	5,356.6	5,343.8	12.82	417.857		
3,800.0	3,793.2	3,760.2	3,760.2	7.5	6.6	-176.59	-4,174.1	-3,033.9	5,363.4	5,350.2	13.17	407.308		
3,900.0	3,893.0	3,860.0	3,860.0	7.7	6.7	-176.59	-4,174.1	-3,033.9	5,370.2	5,356.6	13.52	397.302		
4,000.0	3,992.8	3,959.8	3,959.8	8.0	6.9	-176.60	-4,174.1	-3,033.9	5,376.9	5,363.1	13.87	387.800		
4,100.0	4,092.6	4,059.6	4,059.6	8.2	7.1	-176.60	-4,174.1	-3,033.9	5,383.7	5,369.5	14.21	378.764		
4,200.0	4,192.3	4,159.3	4,159.3	8.4	7.3	-176.61	-4,174.1	-3,033.9	5,390.5	5,375.9	14.56	370.161		
4,300.0	4,292.1	4,259.1	4,259.1	8.6	7.4	-176.61	-4,174.1	-3,033.9	5,397.2	5,382.3	14.91	361.960		
4,400.0	4,391.9	4,358.9	4,358.9	8.8	7.6	-176.61	-4,174.1	-3,033.9	5,404.0	5,388.7	15.26	354.133		
4,500.0	4,491.6	4,458.6	4,458.6	9.0	7.8	-176.62	-4,174.1	-3,033.9	5,410.7	5,395.1	15.61	346.657		
4,600.0	4,591.4	4,558.4	4,558.4	9.2	8.0	-176.62	-4,174.1	-3,033.9	5,417.5	5,401.5	15.96	339.507		
4,700.0	4,691.2	4,658.2	4,658.2	9.4	8.1	-176.63	-4,174.1	-3,033.9	5,424.3	5,408.0	16.31	332.663		
4,800.0	4,790.9	4,757.9	4,757.9	9.6	8.3	-176.63	-4,174.1	-3,033.9	5,431.0	5,414.4	16.65	326.105		
4,900.0	4,890.7	4,857.7	4,857.7	9.8	8.5	-176.64	-4,174.1	-3,033.9	5,437.8	5,420.8	17.00	319.816		
5,000.0	4,990.5	4,957.5	4,957.5	10.1	8.7	-176.64	-4,174.1	-3,033.9	5,444.5	5,427.2	17.35	313.780		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,100.0	5,090.3	5,057.3	5,057.3	10.3	8.8	-176.64	-4,174.1	-3,033.9	5,451.3	5,433.6	17.70	307.982		
5,200.0	5,190.0	5,157.0	5,157.0	10.5	9.0	-176.65	-4,174.1	-3,033.9	5,458.1	5,440.0	18.05	302.408		
5,300.0	5,289.8	5,256.8	5,256.8	10.7	9.2	-176.65	-4,174.1	-3,033.9	5,464.8	5,446.4	18.40	297.045		
5,400.0	5,389.6	5,356.6	5,356.6	10.9	9.3	-176.66	-4,174.1	-3,033.9	5,471.6	5,452.8	18.75	291.882		
5,500.0	5,489.3	5,456.3	5,456.3	11.1	9.5	-176.66	-4,174.1	-3,033.9	5,478.4	5,459.3	19.09	286.907		
5,600.0	5,589.1	5,556.1	5,556.1	11.3	9.7	-176.66	-4,174.1	-3,033.9	5,485.1	5,465.7	19.44	282.110		
5,700.0	5,688.9	5,655.9	5,655.9	11.5	9.9	-176.67	-4,174.1	-3,033.9	5,491.9	5,472.1	19.79	277.483		
5,800.0	5,788.7	5,755.7	5,755.7	11.7	10.0	-176.67	-4,174.1	-3,033.9	5,498.6	5,478.5	20.14	273.015		
5,900.0	5,888.4	5,855.4	5,855.4	11.9	10.2	-176.68	-4,174.1	-3,033.9	5,505.4	5,484.9	20.49	268.700		
6,000.0	5,988.2	5,955.2	5,955.2	12.2	10.4	-176.68	-4,174.1	-3,033.9	5,512.2	5,491.3	20.84	264.529		
6,100.0	6,088.0	6,055.0	6,055.0	12.4	10.6	-176.69	-4,174.1	-3,033.9	5,518.9	5,497.7	21.19	260.496		
6,200.0	6,187.7	6,154.7	6,154.7	12.6	10.7	-176.69	-4,174.1	-3,033.9	5,525.7	5,504.2	21.53	256.593		
6,300.0	6,287.5	6,254.5	6,254.5	12.8	10.9	-176.69	-4,174.1	-3,033.9	5,532.5	5,510.6	21.88	252.814		
6,400.0	6,387.3	6,354.3	6,354.3	13.0	11.1	-176.70	-4,174.1	-3,033.9	5,539.2	5,517.0	22.23	249.154		
6,500.0	6,487.0	6,454.0	6,454.0	13.2	11.3	-176.70	-4,174.1	-3,033.9	5,546.0	5,523.4	22.58	245.607		
6,600.0	6,586.8	6,553.8	6,553.8	13.4	11.4	-176.71	-4,174.1	-3,033.9	5,552.7	5,529.8	22.93	242.168		
6,700.0	6,686.6	6,653.6	6,653.6	13.6	11.6	-176.71	-4,174.1	-3,033.9	5,559.5	5,536.2	23.28	238.832		
6,787.0	6,773.4	6,740.4	6,740.4	13.8	11.8	-176.71	-4,174.1	-3,033.9	5,565.4	5,541.8	23.58	236.010		
6,800.0	6,786.4	6,753.4	6,753.4	13.8	11.8	172.72	-4,174.1	-3,033.9	5,566.2	5,542.5	23.63	235.521		
6,850.0	6,836.3	6,803.3	6,803.3	13.9	11.9	85.55	-4,174.1	-3,033.9	5,567.4	5,543.6	23.80	233.906		
6,900.0	6,886.2	6,853.2	6,853.2	14.0	12.0	55.80	-4,174.1	-3,033.9	5,565.8	5,541.9	23.92	232.689		
6,950.0	6,935.7	6,902.7	6,902.7	14.0	12.0	48.24	-4,174.1	-3,033.9	5,561.4	5,537.4	23.99	231.846		
7,000.0	6,984.6	6,951.6	6,951.6	14.0	12.1	45.25	-4,174.1	-3,033.9	5,554.2	5,530.2	24.01	231.340		
7,050.0	7,032.6	6,999.6	6,999.6	14.0	12.2	43.93	-4,174.1	-3,033.9	5,544.2	5,520.2	23.99	231.120		
7,100.0	7,079.7	7,046.7	7,046.7	13.9	12.3	43.49	-4,174.1	-3,033.9	5,531.6	5,507.6	23.93	231.116		
7,150.0	7,125.4	7,092.4	7,092.4	13.9	12.4	43.60	-4,174.1	-3,033.9	5,516.3	5,492.4	23.85	231.243		
7,200.0	7,169.6	7,136.6	7,136.6	13.8	12.5	44.14	-4,174.1	-3,033.9	5,498.5	5,474.7	23.76	231.390		
7,250.0	7,212.1	7,179.1	7,179.1	13.8	12.5	45.02	-4,174.1	-3,033.9	5,478.3	5,454.6	23.67	231.423		
7,300.0	7,252.6	7,219.6	7,219.6	13.7	12.6	46.23	-4,174.1	-3,033.9	5,455.7	5,432.1	23.60	231.188		
7,350.0	7,291.0	7,258.0	7,258.0	13.7	12.7	47.74	-4,174.1	-3,033.9	5,431.0	5,407.5	23.56	230.512		
7,400.0	7,327.1	7,294.1	7,294.1	13.7	12.7	49.57	-4,174.1	-3,033.9	5,404.2	5,380.7	23.58	229.220		
7,450.0	7,360.7	7,327.7	7,327.7	13.7	12.8	51.72	-4,174.1	-3,033.9	5,375.6	5,351.9	23.66	227.156		
7,500.0	7,391.6	7,358.6	7,358.6	13.7	12.8	54.19	-4,174.1	-3,033.9	5,345.2	5,321.3	23.84	224.204		
7,550.0	7,419.7	7,386.7	7,386.7	13.8	12.9	57.00	-4,174.1	-3,033.9	5,313.2	5,289.1	24.12	220.321		
7,600.0	7,444.8	7,411.8	7,411.8	13.9	12.9	60.14	-4,174.1	-3,033.9	5,279.8	5,255.3	24.49	215.556		
7,650.0	7,466.9	7,433.9	7,433.9	14.1	13.0	63.63	-4,174.1	-3,033.9	5,245.2	5,220.3	24.97	210.058		
7,700.0	7,485.8	7,452.8	7,452.8	14.3	13.0	67.44	-4,174.1	-3,033.9	5,209.6	5,184.1	25.53	204.062		
7,750.0	7,501.5	7,468.5	7,468.5	14.6	13.0	71.54	-4,174.1	-3,033.9	5,173.2	5,147.0	26.15	197.854		
7,800.0	7,513.7	7,480.7	7,480.7	14.9	13.1	75.89	-4,174.1	-3,033.9	5,136.1	5,109.3	26.79	191.726		
7,850.0	7,522.6	7,489.6	7,489.6	15.2	13.1	80.43	-4,174.1	-3,033.9	5,098.5	5,071.1	27.42	185.936		
7,900.0	7,528.0	7,495.0	7,495.0	15.6	13.1	85.07	-4,174.1	-3,033.9	5,060.7	5,032.7	28.01	180.666		
7,952.9	7,530.0	7,497.0	7,497.0	16.1	13.1	90.00	-4,174.1	-3,033.9	5,020.6	4,992.0	28.56	175.761		
8,000.0	7,530.0	7,497.0	7,497.0	16.5	13.1	90.00	-4,174.1	-3,033.9	4,985.0	4,956.0	29.02	171.780		
8,100.0	7,530.0	7,497.0	7,497.0	17.5	13.1	90.00	-4,174.1	-3,033.9	4,910.2	4,880.1	30.08	163.237		
8,200.0	7,530.0	7,497.0	7,497.0	18.7	13.1	90.00	-4,174.1	-3,033.9	4,836.2	4,804.9	31.25	154.768		
8,300.0	7,530.0	7,497.0	7,497.0	19.9	13.1	90.00	-4,174.1	-3,033.9	4,763.2	4,730.7	32.50	146.540		
8,400.0	7,530.0	7,497.0	7,497.0	21.2	13.1	90.00	-4,174.1	-3,033.9	4,691.2	4,657.3	33.83	138.656		
8,500.0	7,530.0	7,497.0	7,497.0	22.6	13.1	90.00	-4,174.1	-3,033.9	4,620.2	4,585.0	35.22	131.177		
8,600.0	7,530.0	7,497.0	7,497.0	24.0	13.1	90.00	-4,174.1	-3,033.9	4,550.3	4,515.6	36.66	124.129		
8,700.0	7,530.0	7,497.0	7,497.0	25.4	13.1	90.00	-4,174.1	-3,033.9	4,481.5	4,443.4	38.14	117.518		
8,800.0	7,530.0	7,497.0	7,497.0	26.9	13.1	90.00	-4,174.1	-3,033.9	4,414.0	4,374.4	39.65	111.335		
8,900.0	7,530.0	7,497.0	7,497.0	28.4	13.1	90.00	-4,174.1	-3,033.9	4,347.7	4,306.5	41.19	105.565		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		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)						
9,000.0	7,530.0	7,497.0	7,497.0	30.0	13.1	90.00	-4,174.1	-3,033.9	4,282.7	4,240.0	42.75	100.184		
9,100.0	7,530.0	7,497.0	7,497.0	31.5	13.1	90.00	-4,174.1	-3,033.9	4,219.1	4,174.8	44.33	95.171		
9,200.0	7,530.0	7,497.0	7,497.0	33.1	13.1	90.00	-4,174.1	-3,033.9	4,156.9	4,111.0	45.93	90.501		
9,300.0	7,530.0	7,497.0	7,497.0	34.7	13.1	90.00	-4,174.1	-3,033.9	4,096.2	4,048.7	47.55	86.149		
9,400.0	7,530.0	7,497.0	7,497.0	36.3	13.1	90.00	-4,174.1	-3,033.9	4,037.1	3,987.9	49.18	82.094		
9,500.0	7,530.0	7,497.0	7,497.0	38.0	13.1	90.00	-4,174.1	-3,033.9	3,979.6	3,928.8	50.82	78.313		
9,600.0	7,530.0	7,497.0	7,497.0	39.6	13.1	90.00	-4,174.1	-3,033.9	3,923.8	3,871.3	52.47	74.788		
9,700.0	7,530.0	7,497.0	7,497.0	41.3	13.1	90.00	-4,174.1	-3,033.9	3,869.8	3,815.7	54.12	71.498		
9,800.0	7,530.0	7,497.0	7,497.0	42.9	13.1	90.00	-4,174.1	-3,033.9	3,817.7	3,761.9	55.79	68.429		
9,900.0	7,530.0	7,497.0	7,497.0	44.6	13.1	90.00	-4,174.1	-3,033.9	3,767.4	3,710.0	57.46	65.563		
10,000.0	7,530.0	7,497.0	7,497.0	46.3	13.1	90.00	-4,174.1	-3,033.9	3,719.2	3,660.1	59.14	62.887		
10,100.0	7,530.0	7,497.0	7,497.0	47.9	13.1	90.00	-4,174.1	-3,033.9	3,673.1	3,612.3	60.83	60.387		
10,200.0	7,530.0	7,497.0	7,497.0	49.6	13.1	90.00	-4,174.1	-3,033.9	3,629.2	3,566.7	62.52	58.053		
10,300.0	7,530.0	7,497.0	7,497.0	51.3	13.1	90.00	-4,174.1	-3,033.9	3,587.5	3,523.3	64.21	55.872		
10,400.0	7,530.0	7,497.0	7,497.0	53.0	13.1	90.00	-4,174.1	-3,033.9	3,548.1	3,482.2	65.91	53.836		
10,500.0	7,530.0	7,497.0	7,497.0	54.7	13.1	90.00	-4,174.1	-3,033.9	3,511.2	3,443.6	67.61	51.935		
10,600.0	7,530.0	7,497.0	7,497.0	56.4	13.1	90.00	-4,174.1	-3,033.9	3,476.7	3,407.4	69.31	50.161		
10,700.0	7,530.0	7,497.0	7,497.0	58.1	13.1	90.00	-4,174.1	-3,033.9	3,444.8	3,373.8	71.02	48.506		
10,800.0	7,530.0	7,497.0	7,497.0	59.8	13.1	90.00	-4,174.1	-3,033.9	3,415.5	3,342.8	72.73	46.962		
10,900.0	7,530.0	7,497.0	7,497.0	61.5	13.1	90.00	-4,174.1	-3,033.9	3,388.9	3,314.5	74.44	45.525		
11,000.0	7,530.0	7,497.0	7,497.0	63.2	13.1	90.00	-4,174.1	-3,033.9	3,365.1	3,288.9	76.16	44.187		
11,100.0	7,530.0	7,497.0	7,497.0	64.9	13.1	90.00	-4,174.1	-3,033.9	3,344.1	3,266.2	77.87	42.943		
11,200.0	7,530.0	7,497.0	7,497.0	66.6	13.1	90.00	-4,174.1	-3,033.9	3,326.0	3,246.4	79.59	41.788		
11,300.0	7,530.0	7,497.0	7,497.0	68.4	13.1	90.00	-4,174.1	-3,033.9	3,310.8	3,229.5	81.31	40.717		
11,400.0	7,530.0	7,497.0	7,497.0	70.1	13.1	90.00	-4,174.1	-3,033.9	3,298.5	3,215.5	83.03	39.725		
11,500.0	7,530.0	7,497.0	7,497.0	71.8	13.1	90.00	-4,174.1	-3,033.9	3,289.3	3,204.5	84.76	38.808		
11,600.0	7,530.0	7,497.0	7,497.0	73.5	13.1	90.00	-4,174.1	-3,033.9	3,283.1	3,196.6	86.48	37.962		
11,700.0	7,530.0	7,497.0	7,497.0	75.2	13.1	90.00	-4,174.1	-3,033.9	3,279.9	3,191.7	88.21	37.183		
11,754.4	7,530.0	7,497.0	7,497.0	76.2	13.1	90.00	-4,174.1	-3,033.9	3,279.4	3,190.3	89.15	36.786 CC		
11,800.0	7,530.0	7,497.0	7,497.0	77.0	13.1	90.00	-4,174.1	-3,033.9	3,279.7	3,189.8	89.94	36.467 ES		
11,900.0	7,530.0	7,497.0	7,497.0	78.7	13.1	90.00	-4,174.1	-3,033.9	3,282.7	3,191.0	91.67	35.811		
12,000.0	7,530.0	7,497.0	7,497.0	80.4	13.1	90.00	-4,174.1	-3,033.9	3,288.6	3,195.2	93.40	35.211		
12,100.0	7,530.0	7,497.0	7,497.0	82.2	13.1	90.00	-4,174.1	-3,033.9	3,297.6	3,202.5	95.13	34.665		
12,200.0	7,530.0	7,497.0	7,497.0	83.9	13.1	90.00	-4,174.1	-3,033.9	3,309.6	3,212.7	96.86	34.169		
12,300.0	7,530.0	7,497.0	7,497.0	85.6	13.1	90.00	-4,174.1	-3,033.9	3,324.5	3,225.9	98.59	33.720		
12,400.0	7,530.0	7,497.0	7,497.0	87.3	13.1	90.00	-4,174.1	-3,033.9	3,342.4	3,242.0	100.33	33.315		
12,500.0	7,530.0	7,497.0	7,497.0	89.1	13.1	90.00	-4,174.1	-3,033.9	3,363.1	3,261.0	102.06	32.952		
12,600.0	7,530.0	7,497.0	7,497.0	90.8	13.1	90.00	-4,174.1	-3,033.9	3,386.7	3,282.9	103.80	32.628		
12,700.0	7,530.0	7,497.0	7,497.0	92.5	13.1	90.00	-4,174.1	-3,033.9	3,413.0	3,307.5	105.53	32.341		
12,800.0	7,530.0	7,497.0	7,497.0	94.3	13.1	90.00	-4,174.1	-3,033.9	3,442.1	3,334.8	107.27	32.088		
12,900.0	7,530.0	7,497.0	7,497.0	96.0	13.1	90.00	-4,174.1	-3,033.9	3,473.8	3,364.7	109.01	31.868		
13,000.0	7,530.0	7,497.0	7,497.0	97.8	13.1	90.00	-4,174.1	-3,033.9	3,508.0	3,397.3	110.74	31.677		
13,100.0	7,530.0	7,497.0	7,497.0	99.5	13.1	90.00	-4,174.1	-3,033.9	3,544.7	3,432.3	112.48	31.514		
13,200.0	7,530.0	7,497.0	7,497.0	101.2	13.1	90.00	-4,174.1	-3,033.9	3,583.9	3,469.7	114.22	31.377		
13,300.0	7,530.0	7,497.0	7,497.0	103.0	13.1	90.00	-4,174.1	-3,033.9	3,625.4	3,509.4	115.96	31.264		
13,400.0	7,530.0	7,497.0	7,497.0	104.7	13.1	90.00	-4,174.1	-3,033.9	3,669.1	3,551.4	117.70	31.173		
13,500.0	7,530.0	7,497.0	7,497.0	106.4	13.1	90.00	-4,174.1	-3,033.9	3,715.1	3,595.6	119.44	31.104		
13,600.0	7,530.0	7,497.0	7,497.0	108.2	13.1	90.00	-4,174.1	-3,033.9	3,763.1	3,641.9	121.18	31.053		
13,700.0	7,530.0	7,497.0	7,497.0	109.9	13.1	90.00	-4,174.1	-3,033.9	3,813.1	3,690.2	122.92	31.020		
13,800.0	7,530.0	7,497.0	7,497.0	111.7	13.1	90.00	-4,174.1	-3,033.9	3,865.1	3,740.4	124.66	31.004		
13,900.0	7,530.0	7,497.0	7,497.0	113.4	13.1	90.00	-4,174.1	-3,033.9	3,918.9	3,792.5	126.41	31.003 SF		
14,000.0	7,530.0	7,497.0	7,497.0	115.1	13.1	90.00	-4,174.1	-3,033.9	3,974.6	3,846.4	128.15	31.015		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 24-7 (Existing) - Existing - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 8365-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	7,497.0	7,497.0	116.9	13.1	90.00	-4,174.1	-3,033.9	4,031.9	3,902.0	129.89	31.040		
14,200.0	7,530.0	7,497.0	7,497.0	118.6	13.1	90.00	-4,174.1	-3,033.9	4,090.9	3,959.3	131.64	31.078		
14,300.0	7,530.0	7,497.0	7,497.0	120.4	13.1	90.00	-4,174.1	-3,033.9	4,151.4	4,018.1	133.38	31.125		
14,400.0	7,530.0	7,497.0	7,497.0	122.1	13.1	90.00	-4,174.1	-3,033.9	4,213.5	4,078.4	135.12	31.183		
14,500.0	7,530.0	7,497.0	7,497.0	123.9	13.1	90.00	-4,174.1	-3,033.9	4,277.0	4,140.1	136.87	31.249		
14,600.0	7,530.0	7,497.0	7,497.0	125.6	13.1	90.00	-4,174.1	-3,033.9	4,341.9	4,203.3	138.61	31.324		
14,700.0	7,530.0	7,497.0	7,497.0	127.3	13.1	90.00	-4,174.1	-3,033.9	4,408.1	4,267.7	140.36	31.406		
14,800.0	7,530.0	7,497.0	7,497.0	129.1	13.1	90.00	-4,174.1	-3,033.9	4,475.5	4,333.4	142.10	31.495		
14,900.0	7,530.0	7,497.0	7,497.0	130.8	13.1	90.00	-4,174.1	-3,033.9	4,544.1	4,400.3	143.85	31.590		
15,000.0	7,530.0	7,497.0	7,497.0	132.6	13.1	90.00	-4,174.1	-3,033.9	4,613.9	4,468.3	145.59	31.691		
15,100.0	7,530.0	7,497.0	7,497.0	134.3	13.1	90.00	-4,174.1	-3,033.9	4,684.8	4,537.5	147.34	31.797		
15,200.0	7,530.0	7,497.0	7,497.0	136.1	13.1	90.00	-4,174.1	-3,033.9	4,756.7	4,607.7	149.08	31.907		
15,300.0	7,530.0	7,497.0	7,497.0	137.8	13.1	90.00	-4,174.1	-3,033.9	4,829.7	4,678.8	150.83	32.021		
15,400.0	7,530.0	7,497.0	7,497.0	139.6	13.1	90.00	-4,174.1	-3,033.9	4,903.5	4,751.0	152.57	32.139		
15,500.0	7,530.0	7,497.0	7,497.0	141.3	13.1	90.00	-4,174.1	-3,033.9	4,978.3	4,824.0	154.32	32.260		
15,600.0	7,530.0	7,497.0	7,497.0	143.0	13.1	90.00	-4,174.1	-3,033.9	5,054.0	4,897.9	156.07	32.384		
15,700.0	7,530.0	7,497.0	7,497.0	144.8	13.1	90.00	-4,174.1	-3,033.9	5,130.5	4,972.7	157.81	32.510		
15,800.0	7,530.0	7,497.0	7,497.0	146.5	13.1	90.00	-4,174.1	-3,033.9	5,207.8	5,048.2	159.56	32.638		
15,900.0	7,530.0	7,497.0	7,497.0	148.3	13.1	90.00	-4,174.1	-3,033.9	5,285.9	5,124.5	161.31	32.769		
16,000.0	7,530.0	7,497.0	7,497.0	150.0	13.1	90.00	-4,174.1	-3,033.9	5,364.6	5,201.6	163.05	32.901		
16,100.0	7,530.0	7,497.0	7,497.0	151.8	13.1	90.00	-4,174.1	-3,033.9	5,444.1	5,279.3	164.80	33.034		
16,200.0	7,530.0	7,497.0	7,497.0	153.5	13.1	90.00	-4,174.1	-3,033.9	5,524.3	5,357.7	166.55	33.169		
16,300.0	7,530.0	7,497.0	7,497.0	155.3	13.1	90.00	-4,174.1	-3,033.9	5,605.1	5,436.8	168.30	33.304		
16,400.0	7,530.0	7,497.0	7,497.0	157.0	13.1	90.00	-4,174.1	-3,033.9	5,686.5	5,516.4	170.05	33.441		
16,500.0	7,530.0	7,497.0	7,497.0	158.8	13.1	90.00	-4,174.1	-3,033.9	5,768.4	5,596.7	171.79	33.578		
16,600.0	7,530.0	7,497.0	7,497.0	160.5	13.1	90.00	-4,174.1	-3,033.9	5,851.0	5,677.4	173.54	33.715		
16,700.0	7,530.0	7,497.0	7,497.0	162.3	13.1	90.00	-4,174.1	-3,033.9	5,934.1	5,758.8	175.29	33.853		
16,800.0	7,530.0	7,497.0	7,497.0	164.0	13.1	90.00	-4,174.1	-3,033.9	6,017.7	5,840.6	177.04	33.991		
16,900.0	7,530.0	7,497.0	7,497.0	165.8	13.1	90.00	-4,174.1	-3,033.9	6,101.8	5,923.0	178.79	34.129		
17,000.0	7,530.0	7,497.0	7,497.0	167.5	13.1	90.00	-4,174.1	-3,033.9	6,186.3	6,005.8	180.54	34.267		
17,100.0	7,530.0	7,497.0	7,497.0	169.3	13.1	90.00	-4,174.1	-3,033.9	6,271.3	6,089.0	182.28	34.404		
17,200.0	7,530.0	7,497.0	7,497.0	171.0	13.1	90.00	-4,174.1	-3,033.9	6,356.8	6,172.8	184.03	34.542		
17,300.0	7,530.0	7,497.0	7,497.0	172.8	13.1	90.00	-4,174.1	-3,033.9	6,442.7	6,256.9	185.78	34.679		
17,400.0	7,530.0	7,497.0	7,497.0	174.5	13.1	90.00	-4,174.1	-3,033.9	6,528.9	6,341.4	187.53	34.815		
17,420.9	7,530.0	7,497.0	7,497.0	174.9	13.1	90.00	-4,174.1	-3,033.9	6,547.0	6,359.2	187.90	34.844		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - PI														Offset Site Error:	0.0 ft
Survey Program: O-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-144.18	-4,202.5	-3,033.1	5,182.7						
100.0	100.0	83.0	83.0	0.2	0.1	-144.18	-4,202.5	-3,033.1	5,182.7	5,182.4	0.27	N/A			
200.0	200.0	183.0	183.0	0.3	0.3	-144.18	-4,202.5	-3,033.1	5,182.7	5,182.1	0.62	8,364.451			
300.0	300.0	283.0	283.0	0.5	0.5	-144.18	-4,202.5	-3,033.1	5,182.7	5,181.7	0.97	5,350.290			
400.0	400.0	383.0	383.0	0.7	0.6	-144.18	-4,202.5	-3,033.1	5,182.7	5,181.4	1.32	3,933.014			
500.0	500.0	483.0	483.0	0.8	0.8	-144.18	-4,202.5	-3,033.1	5,182.7	5,181.0	1.67	3,109.355			
600.0	600.0	583.0	583.0	1.0	1.0	-144.18	-4,202.5	-3,033.1	5,182.7	5,180.7	2.02	2,570.943			
700.0	700.0	683.0	683.0	1.2	1.2	-176.65	-4,202.5	-3,033.1	5,183.6	5,181.2	2.36	2,192.060			
800.0	800.0	783.0	783.0	1.4	1.3	-176.65	-4,202.5	-3,033.1	5,186.2	5,183.5	2.71	1,911.639			
900.0	899.9	882.9	882.9	1.6	1.5	-176.66	-4,202.5	-3,033.1	5,190.5	5,187.5	3.06	1,695.997			
988.4	988.1	971.1	971.1	1.7	1.7	-176.66	-4,202.5	-3,033.1	5,195.8	5,192.5	3.37	1,543.201			
1,000.0	999.7	982.7	982.7	1.7	1.7	-176.66	-4,202.5	-3,033.1	5,196.6	5,193.2	3.41	1,525.109			
1,100.0	1,099.4	1,082.5	1,082.5	1.9	1.9	-176.66	-4,202.5	-3,033.1	5,203.4	5,199.6	3.76	1,385.332			
1,200.0	1,199.2	1,182.2	1,182.2	2.1	2.0	-176.66	-4,202.5	-3,033.1	5,210.1	5,206.0	4.10	1,269.305			
1,300.0	1,299.0	1,200.0	1,200.0	2.3	2.1	-176.67	-4,202.5	-3,033.1	5,217.5	5,213.2	4.31	1,210.429			
1,400.0	1,398.8	1,264.5	1,264.5	2.5	2.2	-176.67	-4,203.1	-3,033.4	5,225.7	5,221.1	4.60	1,136.589			
1,500.0	1,498.5	1,300.0	1,300.0	2.7	2.2	-176.67	-4,204.0	-3,034.0	5,235.3	5,230.5	4.83	1,082.958			
1,600.0	1,598.3	1,335.0	1,334.9	2.9	2.3	-176.67	-4,205.2	-3,034.7	5,246.1	5,241.1	5.07	1,034.705			
1,700.0	1,698.1	1,400.0	1,399.8	3.2	2.4	-176.68	-4,208.4	-3,036.7	5,258.4	5,253.1	5.36	981.454			
1,800.0	1,797.8	1,400.0	1,399.8	3.4	2.4	-176.68	-4,208.4	-3,036.7	5,271.5	5,265.9	5.53	952.802			
1,900.0	1,897.6	1,439.9	1,439.6	3.6	2.5	-176.68	-4,211.0	-3,038.3	5,285.9	5,280.1	5.78	914.946			
2,000.0	1,997.4	1,500.0	1,499.5	3.8	2.6	-176.69	-4,215.9	-3,041.3	5,301.7	5,295.7	6.06	875.471			
2,100.0	2,097.1	1,500.0	1,499.5	4.0	2.6	-176.69	-4,215.9	-3,041.3	5,318.5	5,312.2	6.23	853.593			
2,200.0	2,196.9	1,543.7	1,542.9	4.2	2.7	-176.70	-4,220.0	-3,043.8	5,336.5	5,330.0	6.48	823.251			
2,300.0	2,296.7	1,600.0	1,598.7	4.4	2.8	-176.71	-4,226.2	-3,047.6	5,355.8	5,349.0	6.75	793.012			
2,400.0	2,396.5	1,612.1	1,610.7	4.6	2.9	-176.71	-4,227.7	-3,048.5	5,376.1	5,369.1	6.95	773.575			
2,500.0	2,496.2	1,687.1	1,684.8	4.8	3.0	-176.72	-4,237.1	-3,054.3	5,397.4	5,390.1	7.25	744.010			
2,600.0	2,596.0	1,784.7	1,781.4	5.0	3.3	-176.73	-4,249.4	-3,061.9	5,418.7	5,411.1	7.60	713.132			
2,700.0	2,695.8	1,882.4	1,878.0	5.2	3.5	-176.75	-4,261.7	-3,069.4	5,440.1	5,432.2	7.94	684.939			
2,800.0	2,795.5	1,980.1	1,974.7	5.4	3.8	-176.76	-4,274.0	-3,076.9	5,461.5	5,453.2	8.29	659.087			
2,900.0	2,895.3	2,077.8	2,071.3	5.6	4.0	-176.78	-4,286.2	-3,084.5	5,482.9	5,474.2	8.63	635.296			
3,000.0	2,995.1	2,175.5	2,167.9	5.9	4.3	-176.80	-4,298.5	-3,092.0	5,504.2	5,495.3	8.97	613.330			
3,100.0	3,094.9	2,273.1	2,264.5	6.1	4.6	-176.81	-4,310.8	-3,099.6	5,525.6	5,516.3	9.32	592.985			
3,200.0	3,194.6	2,370.8	2,361.1	6.3	4.9	-176.82	-4,323.1	-3,107.1	5,547.0	5,537.3	9.66	574.090			
3,300.0	3,294.4	2,468.5	2,457.7	6.5	5.1	-176.84	-4,335.4	-3,114.7	5,568.4	5,558.4	10.01	556.494			
3,400.0	3,394.2	2,566.2	2,554.3	6.7	5.4	-176.85	-4,347.6	-3,122.2	5,589.7	5,579.4	10.35	540.068			
3,500.0	3,493.9	2,663.8	2,650.9	6.9	5.7	-176.87	-4,359.9	-3,129.7	5,611.1	5,600.4	10.69	524.699			
3,600.0	3,593.7	2,761.5	2,747.5	7.1	6.0	-176.88	-4,372.2	-3,137.3	5,632.5	5,621.5	11.04	510.288			
3,700.0	3,693.5	2,859.2	2,844.1	7.3	6.3	-176.90	-4,384.5	-3,144.8	5,653.9	5,642.5	11.38	496.748			
3,800.0	3,793.2	2,956.9	2,940.7	7.5	6.6	-176.91	-4,396.8	-3,152.4	5,675.2	5,663.5	11.73	484.003			
3,900.0	3,893.0	3,054.6	3,037.4	7.7	6.9	-176.92	-4,409.1	-3,159.9	5,696.6	5,684.6	12.07	471.985			
4,000.0	3,992.8	3,152.2	3,134.0	8.0	7.2	-176.94	-4,421.3	-3,167.5	5,718.0	5,705.6	12.41	460.633			
4,100.0	4,092.6	3,249.9	3,230.6	8.2	7.5	-176.95	-4,433.6	-3,175.0	5,739.4	5,726.6	12.76	449.893			
4,200.0	4,192.3	3,347.6	3,327.2	8.4	7.8	-176.97	-4,445.9	-3,182.6	5,760.8	5,747.7	13.10	439.718			
4,300.0	4,292.1	3,445.3	3,423.8	8.6	8.0	-176.98	-4,458.2	-3,190.1	5,782.1	5,768.7	13.44	430.063			
4,400.0	4,391.9	3,543.0	3,520.4	8.8	8.3	-176.99	-4,470.5	-3,197.6	5,803.5	5,789.7	13.79	420.890			
4,500.0	4,491.6	3,640.6	3,617.0	9.0	8.6	-177.01	-4,482.8	-3,205.2	5,824.9	5,810.8	14.13	412.164			
4,600.0	4,591.4	3,738.3	3,713.6	9.2	8.9	-177.02	-4,495.0	-3,212.7	5,846.3	5,831.8	14.48	403.852			
4,700.0	4,691.2	3,836.0	3,810.2	9.4	9.2	-177.03	-4,507.3	-3,220.3	5,867.7	5,852.8	14.82	395.927			
4,800.0	4,790.9	3,933.7	3,906.8	9.6	9.5	-177.05	-4,519.6	-3,227.8	5,889.0	5,873.9	15.16	388.361			
4,900.0	4,890.7	4,031.3	4,003.4	9.8	9.8	-177.06	-4,531.9	-3,235.4	5,910.4	5,894.9	15.51	381.131			
5,000.0	4,990.5	4,129.0	4,100.1	10.1	10.1	-177.07	-4,544.2	-3,242.9	5,931.8	5,916.0	15.85	374.215			

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - PI											Offset Site Error: 0.0 ft			
Survey Program: O-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	4,226.7	4,196.7	10.3	10.4	-177.08	-4,556.5	-3,250.4	5,953.2	5,937.0	16.20	367.592		
5,200.0	5,190.0	4,324.4	4,293.3	10.5	10.7	-177.10	-4,568.7	-3,258.0	5,974.6	5,958.0	16.54	361.246		
5,300.0	5,289.8	4,422.1	4,389.9	10.7	11.0	-177.11	-4,581.0	-3,265.5	5,996.0	5,979.1	16.88	355.157		
5,400.0	5,389.6	4,519.7	4,486.5	10.9	11.3	-177.12	-4,593.3	-3,273.1	6,017.3	6,000.1	17.23	349.312		
5,500.0	5,489.3	4,617.4	4,583.1	11.1	11.6	-177.14	-4,605.6	-3,280.6	6,038.7	6,021.2	17.57	343.696		
5,600.0	5,589.1	4,715.1	4,679.7	11.3	11.9	-177.15	-4,617.9	-3,288.2	6,060.1	6,042.2	17.91	338.296		
5,700.0	5,688.9	4,812.8	4,776.3	11.5	12.2	-177.16	-4,630.2	-3,295.7	6,081.5	6,063.2	18.26	333.099		
5,800.0	5,788.7	4,910.5	4,872.9	11.7	12.5	-177.17	-4,642.4	-3,303.2	6,102.9	6,084.3	18.60	328.094		
5,900.0	5,888.4	5,008.1	4,969.5	11.9	12.8	-177.18	-4,654.7	-3,310.8	6,124.3	6,105.3	18.94	323.272		
6,000.0	5,988.2	5,105.8	5,066.1	12.2	13.1	-177.20	-4,667.0	-3,318.3	6,145.6	6,126.4	19.29	318.621		
6,100.0	6,088.0	5,203.5	5,162.8	12.4	13.4	-177.21	-4,679.3	-3,325.9	6,167.0	6,147.4	19.63	314.133		
6,200.0	6,187.7	5,301.2	5,259.4	12.6	13.7	-177.22	-4,691.6	-3,333.4	6,188.4	6,168.4	19.98	309.800		
6,300.0	6,287.5	5,398.9	5,356.0	12.8	14.0	-177.23	-4,703.9	-3,341.0	6,209.8	6,189.5	20.32	305.613		
6,400.0	6,387.3	5,496.5	5,452.6	13.0	14.3	-177.24	-4,716.1	-3,348.5	6,231.2	6,210.5	20.66	301.566		
6,500.0	6,487.0	5,594.2	5,549.2	13.2	14.6	-177.25	-4,728.4	-3,356.0	6,252.6	6,231.6	21.01	297.651		
6,600.0	6,586.8	5,691.9	5,645.8	13.4	14.9	-177.27	-4,740.7	-3,363.6	6,274.0	6,252.6	21.35	293.863		
6,700.0	6,686.6	5,789.6	5,742.4	13.6	15.2	-177.28	-4,753.0	-3,371.1	6,295.3	6,273.7	21.69	290.194		
6,787.0	6,773.4	5,874.5	5,826.5	13.8	15.5	-177.29	-4,763.7	-3,377.7	6,313.9	6,292.0	21.99	287.096		
6,800.0	6,786.4	5,887.3	5,839.0	13.8	15.5	172.06	-4,765.3	-3,378.7	6,316.6	6,294.6	22.05	286.438		
6,850.0	6,836.3	5,936.5	5,887.7	13.9	15.7	84.54	-4,771.5	-3,382.5	6,325.2	6,302.9	22.26	284.193		
6,900.0	6,886.2	5,986.1	5,936.8	14.0	15.8	54.44	-4,777.7	-3,386.3	6,330.9	6,308.5	22.42	282.403		
6,950.0	6,935.7	6,035.7	5,985.9	14.0	16.0	46.54	-4,783.9	-3,390.1	6,333.8	6,311.2	22.54	281.059		
7,000.0	6,984.6	6,085.3	6,034.9	14.0	16.2	43.18	-4,790.2	-3,394.0	6,333.8	6,311.2	22.61	280.125		
7,050.0	7,032.6	6,134.4	6,083.5	14.0	16.3	41.49	-4,796.3	-3,397.8	6,330.9	6,308.2	22.65	279.536		
7,100.0	7,079.7	6,182.9	6,131.4	13.9	16.5	40.65	-4,802.4	-3,401.5	6,325.2	6,302.5	22.65	279.201		
7,150.0	7,125.4	6,230.5	6,178.5	13.9	16.6	40.34	-4,808.4	-3,405.2	6,316.6	6,294.0	22.64	278.997		
7,200.0	7,169.6	6,277.0	6,224.5	13.8	16.7	40.42	-4,814.3	-3,408.8	6,305.4	6,282.7	22.62	278.766		
7,250.0	7,212.1	6,322.2	6,269.2	13.8	16.9	40.81	-4,820.0	-3,412.3	6,291.4	6,268.8	22.61	278.316		
7,300.0	7,252.6	6,365.9	6,312.4	13.7	17.0	41.48	-4,825.5	-3,415.6	6,274.8	6,252.2	22.62	277.424		
7,350.0	7,291.0	6,407.8	6,353.9	13.7	17.2	42.42	-4,830.7	-3,418.9	6,255.7	6,233.1	22.68	275.845		
7,400.0	7,327.1	6,447.7	6,393.3	13.7	17.3	43.61	-4,835.7	-3,422.0	6,234.3	6,211.5	22.81	273.333		
7,450.0	7,360.7	6,485.5	6,430.7	13.7	17.4	45.07	-4,840.5	-3,424.9	6,210.5	6,187.5	23.03	269.672		
7,500.0	7,391.6	6,520.9	6,465.7	13.7	17.5	46.80	-4,844.9	-3,427.6	6,184.6	6,161.2	23.36	264.709		
7,550.0	7,419.7	6,553.8	6,498.3	13.8	17.6	48.81	-4,849.1	-3,430.1	6,156.7	6,132.8	23.83	258.389		
7,600.0	7,444.8	6,587.8	6,531.4	13.9	17.9	59.17	-4,909.1	-3,467.0	6,126.1	6,098.6	27.48	222.913		
7,650.0	7,466.9	6,620.9	6,565.9	14.1	19.5	62.69	-4,909.1	-3,467.0	6,091.0	6,062.6	28.38	214.634		
7,700.0	7,485.8	6,652.8	6,597.6	14.3	19.6	66.56	-4,909.1	-3,467.0	6,054.8	6,025.4	29.35	206.293		
7,750.0	7,501.5	6,685.7	6,630.7	14.6	19.6	70.77	-4,909.1	-3,467.0	6,017.7	5,987.3	30.35	198.270		
7,800.0	7,513.7	6,718.9	6,663.9	14.9	19.6	75.25	-4,909.1	-3,467.0	5,979.9	5,948.6	31.32	190.903		
7,850.0	7,522.6	6,756.6	6,701.6	15.2	19.6	79.96	-4,909.1	-3,467.0	5,941.6	5,909.4	32.21	184.457		
7,900.0	7,528.0	6,791.0	6,736.0	15.6	19.6	84.82	-4,909.1	-3,467.0	5,903.0	5,870.0	32.96	179.096		
7,952.9	7,530.0	6,823.0	6,768.0	16.1	19.6	90.00	-4,909.1	-3,467.0	5,862.0	5,828.5	33.56	174.672		
8,000.0	7,530.0	6,855.0	6,800.0	16.5	19.6	90.00	-4,909.1	-3,467.0	5,825.7	5,791.7	34.02	171.267		
8,100.0	7,530.0	6,887.0	6,832.0	17.5	19.6	90.00	-4,909.1	-3,467.0	5,749.0	5,713.9	35.08	163.903		
8,200.0	7,530.0	6,919.0	6,864.0	18.7	19.6	90.00	-4,909.1	-3,467.0	5,673.0	5,636.7	36.24	156.525		
8,300.0	7,530.0	6,951.0	6,896.0	19.9	19.6	90.00	-4,909.1	-3,467.0	5,597.8	5,560.3	37.50	149.275		
8,400.0	7,530.0	6,983.0	6,928.0	21.2	19.6	90.00	-4,909.1	-3,467.0	5,523.3	5,484.5	38.83	142.250		
8,500.0	7,530.0	7,015.0	6,960.0	22.6	19.6	90.00	-4,909.1	-3,467.0	5,449.7	5,409.5	40.22	135.509		
8,600.0	7,530.0	7,047.0	6,992.0	24.0	19.6	90.00	-4,909.1	-3,467.0	5,376.9	5,335.3	41.65	129.088		
8,700.0	7,530.0	7,079.0	7,024.0	25.4	19.6	90.00	-4,909.1	-3,467.0	5,305.0	5,261.9	43.13	123.000		
8,800.0	7,530.0	7,111.0	7,056.0	26.9	19.6	90.00	-4,909.1	-3,467.0	5,234.1	5,189.4	44.64	117.247		
8,900.0	7,530.0	7,143.0	7,088.0	28.4	19.6	90.00	-4,909.1	-3,467.0	5,164.1	5,117.9	46.18	111.823		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - PI												Offset Site Error:	0.0 ft
Survey Program: O-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,000.0	7,530.0	7,573.0	7,513.0	30.0	19.6	90.00	-4,909.1	-3,467.0	5,095.1	5,047.3	47.74	106.717	
9,100.0	7,530.0	7,573.0	7,513.0	31.5	19.6	90.00	-4,909.1	-3,467.0	5,027.1	4,977.8	49.33	101.914	
9,200.0	7,530.0	7,573.0	7,513.0	33.1	19.6	90.00	-4,909.1	-3,467.0	4,960.2	4,909.3	50.93	97.397	
9,300.0	7,530.0	7,573.0	7,513.0	34.7	19.6	90.00	-4,909.1	-3,467.0	4,894.5	4,841.9	52.54	93.151	
9,400.0	7,530.0	7,573.0	7,513.0	36.3	19.6	90.00	-4,909.1	-3,467.0	4,829.9	4,775.7	54.17	89.159	
9,500.0	7,530.0	7,573.0	7,513.0	38.0	19.6	90.00	-4,909.1	-3,467.0	4,766.6	4,710.7	55.81	85.404	
9,600.0	7,530.0	7,573.0	7,513.0	39.6	19.6	90.00	-4,909.1	-3,467.0	4,704.5	4,647.0	57.46	81.872	
9,700.0	7,530.0	7,573.0	7,513.0	41.3	19.6	90.00	-4,909.1	-3,467.0	4,643.7	4,584.6	59.12	78.548	
9,800.0	7,530.0	7,573.0	7,513.0	42.9	19.6	90.00	-4,909.1	-3,467.0	4,584.4	4,523.6	60.79	75.419	
9,900.0	7,530.0	7,573.0	7,513.0	44.6	19.6	90.00	-4,909.1	-3,467.0	4,526.4	4,464.0	62.46	72.471	
10,000.0	7,530.0	7,573.0	7,513.0	46.3	19.6	90.00	-4,909.1	-3,467.0	4,470.0	4,405.8	64.14	69.694	
10,100.0	7,530.0	7,573.0	7,513.0	47.9	19.6	90.00	-4,909.1	-3,467.0	4,415.1	4,349.2	65.82	67.076	
10,200.0	7,530.0	7,573.0	7,513.0	49.6	19.6	90.00	-4,909.1	-3,467.0	4,361.7	4,294.2	67.51	64.608	
10,300.0	7,530.0	7,573.0	7,513.0	51.3	19.6	90.00	-4,909.1	-3,467.0	4,310.1	4,240.9	69.20	62.281	
10,400.0	7,530.0	7,573.0	7,513.0	53.0	19.6	90.00	-4,909.1	-3,467.0	4,260.2	4,189.3	70.90	60.086	
10,500.0	7,530.0	7,573.0	7,513.0	54.7	19.6	90.00	-4,909.1	-3,467.0	4,212.0	4,139.4	72.60	58.015	
10,600.0	7,530.0	7,573.0	7,513.0	56.4	19.6	90.00	-4,909.1	-3,467.0	4,165.7	4,091.4	74.31	56.061	
10,700.0	7,530.0	7,573.0	7,513.0	58.1	19.6	90.00	-4,909.1	-3,467.0	4,121.3	4,045.3	76.01	54.218	
10,800.0	7,530.0	7,573.0	7,513.0	59.8	19.6	90.00	-4,909.1	-3,467.0	4,078.9	4,001.2	77.72	52.479	
10,900.0	7,530.0	7,573.0	7,513.0	61.5	19.6	90.00	-4,909.1	-3,467.0	4,038.5	3,959.1	79.44	50.840	
11,000.0	7,530.0	7,573.0	7,513.0	63.2	19.6	90.00	-4,909.1	-3,467.0	4,000.2	3,919.0	81.15	49.293	
11,100.0	7,530.0	7,573.0	7,513.0	64.9	19.6	90.00	-4,909.1	-3,467.0	3,964.0	3,881.2	82.87	47.836	
11,200.0	7,530.0	7,573.0	7,513.0	66.6	19.6	90.00	-4,909.1	-3,467.0	3,930.1	3,845.5	84.59	46.463	
11,300.0	7,530.0	7,573.0	7,513.0	68.4	19.6	90.00	-4,909.1	-3,467.0	3,898.4	3,812.1	86.31	45.170	
11,400.0	7,530.0	7,573.0	7,513.0	70.1	19.6	90.00	-4,909.1	-3,467.0	3,869.1	3,781.1	88.03	43.953	
11,500.0	7,530.0	7,573.0	7,513.0	71.8	19.6	90.00	-4,909.1	-3,467.0	3,842.1	3,752.4	89.75	42.808	
11,600.0	7,530.0	7,573.0	7,513.0	73.5	19.6	90.00	-4,909.1	-3,467.0	3,817.6	3,726.1	91.48	41.733	
11,700.0	7,530.0	7,573.0	7,513.0	75.2	19.6	90.00	-4,909.1	-3,467.0	3,795.6	3,702.4	93.20	40.723	
11,800.0	7,530.0	7,573.0	7,513.0	77.0	19.6	90.00	-4,909.1	-3,467.0	3,776.0	3,681.1	94.93	39.776	
11,900.0	7,530.0	7,573.0	7,513.0	78.7	19.6	90.00	-4,909.1	-3,467.0	3,759.1	3,662.4	96.66	38.889	
12,000.0	7,530.0	7,573.0	7,513.0	80.4	19.6	90.00	-4,909.1	-3,467.0	3,744.7	3,646.3	98.39	38.059	
12,100.0	7,530.0	7,573.0	7,513.0	82.2	19.6	90.00	-4,909.1	-3,467.0	3,732.9	3,632.8	100.12	37.284	
12,200.0	7,530.0	7,573.0	7,513.0	83.9	19.6	90.00	-4,909.1	-3,467.0	3,723.8	3,622.0	101.85	36.560	
12,300.0	7,530.0	7,573.0	7,513.0	85.6	19.6	90.00	-4,909.1	-3,467.0	3,717.4	3,613.8	103.59	35.886	
12,400.0	7,530.0	7,573.0	7,513.0	87.3	19.6	90.00	-4,909.1	-3,467.0	3,713.6	3,608.3	105.32	35.260	
12,489.5	7,530.0	7,573.0	7,513.0	88.9	19.6	90.00	-4,909.1	-3,467.0	3,712.5	3,605.7	106.87	34.738 CC	
12,500.0	7,530.0	7,573.0	7,513.0	89.1	19.6	90.00	-4,909.1	-3,467.0	3,712.6	3,605.5	107.06	34.679	
12,600.0	7,530.0	7,573.0	7,513.0	90.8	19.6	90.00	-4,909.1	-3,467.0	3,714.2	3,605.4	108.79	34.141 ES	
12,700.0	7,530.0	7,573.0	7,513.0	92.5	19.6	90.00	-4,909.1	-3,467.0	3,718.5	3,608.0	110.53	33.644	
12,800.0	7,530.0	7,573.0	7,513.0	94.3	19.6	90.00	-4,909.1	-3,467.0	3,725.5	3,613.2	112.26	33.185	
12,900.0	7,530.0	7,573.0	7,513.0	96.0	19.6	90.00	-4,909.1	-3,467.0	3,735.2	3,621.2	114.00	32.764	
13,000.0	7,530.0	7,573.0	7,513.0	97.8	19.6	90.00	-4,909.1	-3,467.0	3,747.5	3,631.7	115.74	32.379	
13,100.0	7,530.0	7,573.0	7,513.0	99.5	19.6	90.00	-4,909.1	-3,467.0	3,762.4	3,644.9	117.48	32.027	
13,200.0	7,530.0	7,573.0	7,513.0	101.2	19.6	90.00	-4,909.1	-3,467.0	3,779.9	3,660.7	119.22	31.706	
13,300.0	7,530.0	7,573.0	7,513.0	103.0	19.6	90.00	-4,909.1	-3,467.0	3,800.0	3,679.0	120.96	31.416	
13,400.0	7,530.0	7,573.0	7,513.0	104.7	19.6	90.00	-4,909.1	-3,467.0	3,822.6	3,699.9	122.70	31.155	
13,500.0	7,530.0	7,573.0	7,513.0	106.4	19.6	90.00	-4,909.1	-3,467.0	3,847.6	3,723.2	124.44	30.920	
13,600.0	7,530.0	7,573.0	7,513.0	108.2	19.6	90.00	-4,909.1	-3,467.0	3,875.1	3,748.9	126.18	30.711	
13,700.0	7,530.0	7,573.0	7,513.0	109.9	19.6	90.00	-4,909.1	-3,467.0	3,904.9	3,777.0	127.92	30.527	
13,800.0	7,530.0	7,573.0	7,513.0	111.7	19.6	90.00	-4,909.1	-3,467.0	3,937.1	3,807.4	129.66	30.364	
13,900.0	7,530.0	7,573.0	7,513.0	113.4	19.6	90.00	-4,909.1	-3,467.0	3,971.5	3,840.1	131.40	30.224	
14,000.0	7,530.0	7,573.0	7,513.0	115.1	19.6	90.00	-4,909.1	-3,467.0	4,008.1	3,874.9	133.14	30.103	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - PI													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,573.0	7,513.0	116.9	19.6	90.00	-4,909.1	-3,467.0	4,046.8	3,911.9	134.89	30.001		
14,200.0	7,530.0	7,573.0	7,513.0	118.6	19.6	90.00	-4,909.1	-3,467.0	4,087.6	3,951.0	136.63	29.918		
14,300.0	7,530.0	7,573.0	7,513.0	120.4	19.6	90.00	-4,909.1	-3,467.0	4,130.5	3,992.1	138.37	29.850		
14,400.0	7,530.0	7,573.0	7,513.0	122.1	19.6	90.00	-4,909.1	-3,467.0	4,175.3	4,035.2	140.12	29.798		
14,500.0	7,530.0	7,573.0	7,513.0	123.9	19.6	90.00	-4,909.1	-3,467.0	4,222.0	4,080.1	141.86	29.761		
14,600.0	7,530.0	7,573.0	7,513.0	125.6	19.6	90.00	-4,909.1	-3,467.0	4,270.5	4,126.9	143.61	29.738		
14,700.0	7,530.0	7,573.0	7,513.0	127.3	19.6	90.00	-4,909.1	-3,467.0	4,320.8	4,175.5	145.35	29.727 SF		
14,800.0	7,530.0	7,573.0	7,513.0	129.1	19.6	90.00	-4,909.1	-3,467.0	4,372.8	4,225.7	147.10	29.728		
14,900.0	7,530.0	7,573.0	7,513.0	130.8	19.6	90.00	-4,909.1	-3,467.0	4,426.5	4,277.6	148.84	29.740		
15,000.0	7,530.0	7,573.0	7,513.0	132.6	19.6	90.00	-4,909.1	-3,467.0	4,481.7	4,331.1	150.59	29.762		
15,100.0	7,530.0	7,573.0	7,513.0	134.3	19.6	90.00	-4,909.1	-3,467.0	4,538.5	4,386.1	152.33	29.793		
15,200.0	7,530.0	7,573.0	7,513.0	136.1	19.6	90.00	-4,909.1	-3,467.0	4,596.7	4,442.6	154.08	29.834		
15,300.0	7,530.0	7,573.0	7,513.0	137.8	19.6	90.00	-4,909.1	-3,467.0	4,656.4	4,500.6	155.82	29.882		
15,400.0	7,530.0	7,573.0	7,513.0	139.6	19.6	90.00	-4,909.1	-3,467.0	4,717.4	4,559.8	157.57	29.939		
15,500.0	7,530.0	7,573.0	7,513.0	141.3	19.6	90.00	-4,909.1	-3,467.0	4,779.8	4,620.4	159.32	30.002		
15,600.0	7,530.0	7,573.0	7,513.0	143.0	19.6	90.00	-4,909.1	-3,467.0	4,843.4	4,682.3	161.06	30.071		
15,700.0	7,530.0	7,573.0	7,513.0	144.8	19.6	90.00	-4,909.1	-3,467.0	4,908.2	4,745.4	162.81	30.147		
15,800.0	7,530.0	7,573.0	7,513.0	146.5	19.6	90.00	-4,909.1	-3,467.0	4,974.2	4,809.6	164.56	30.228		
15,900.0	7,530.0	7,573.0	7,513.0	148.3	19.6	90.00	-4,909.1	-3,467.0	5,041.3	4,875.0	166.30	30.314		
16,000.0	7,530.0	7,573.0	7,513.0	150.0	19.6	90.00	-4,909.1	-3,467.0	5,109.5	4,941.4	168.05	30.404		
16,100.0	7,530.0	7,573.0	7,513.0	151.8	19.6	90.00	-4,909.1	-3,467.0	5,178.7	5,008.9	169.80	30.499		
16,200.0	7,530.0	7,573.0	7,513.0	153.5	19.6	90.00	-4,909.1	-3,467.0	5,248.9	5,077.3	171.55	30.598		
16,300.0	7,530.0	7,573.0	7,513.0	155.3	19.6	90.00	-4,909.1	-3,467.0	5,320.1	5,146.8	173.29	30.700		
16,400.0	7,530.0	7,573.0	7,513.0	157.0	19.6	90.00	-4,909.1	-3,467.0	5,392.1	5,217.1	175.04	30.805		
16,500.0	7,530.0	7,573.0	7,513.0	158.8	19.6	90.00	-4,909.1	-3,467.0	5,465.1	5,288.3	176.79	30.913		
16,600.0	7,530.0	7,573.0	7,513.0	160.5	19.6	90.00	-4,909.1	-3,467.0	5,538.9	5,360.3	178.54	31.024		
16,700.0	7,530.0	7,573.0	7,513.0	162.3	19.6	90.00	-4,909.1	-3,467.0	5,613.5	5,433.2	180.29	31.137		
16,800.0	7,530.0	7,573.0	7,513.0	164.0	19.6	90.00	-4,909.1	-3,467.0	5,688.9	5,506.9	182.03	31.252		
16,900.0	7,530.0	7,573.0	7,513.0	165.8	19.6	90.00	-4,909.1	-3,467.0	5,765.0	5,581.2	183.78	31.369		
17,000.0	7,530.0	7,573.0	7,513.0	167.5	19.6	90.00	-4,909.1	-3,467.0	5,841.9	5,656.4	185.53	31.487		
17,100.0	7,530.0	7,573.0	7,513.0	169.3	19.6	90.00	-4,909.1	-3,467.0	5,919.4	5,732.2	187.28	31.608		
17,200.0	7,530.0	7,573.0	7,513.0	171.0	19.6	90.00	-4,909.1	-3,467.0	5,997.7	5,808.6	189.03	31.729		
17,300.0	7,530.0	7,573.0	7,513.0	172.8	19.6	90.00	-4,909.1	-3,467.0	6,076.5	5,885.7	190.78	31.851		
17,400.0	7,530.0	7,573.0	7,513.0	174.5	19.6	90.00	-4,909.1	-3,467.0	6,156.0	5,963.5	192.53	31.975		
17,420.9	7,530.0	7,573.0	7,513.0	174.9	19.6	90.00	-4,909.1	-3,467.0	6,172.7	5,979.8	192.89	32.001		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 838-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-144.18	-4,202.5	-3,033.1	5,182.7					
100.0	100.0	81.0	81.0	0.2	0.1	-144.18	-4,202.4	-3,033.1	5,182.7	5,182.4	0.29	N/A		
200.0	200.0	178.7	178.7	0.3	0.3	-144.18	-4,202.3	-3,033.5	5,182.8	5,182.1	0.64	8,094.370		
300.0	300.0	276.3	276.3	0.5	0.5	-144.17	-4,202.0	-3,034.1	5,182.9	5,181.9	0.99	5,254.597		
400.0	400.0	373.9	373.9	0.7	0.7	-144.16	-4,201.6	-3,034.9	5,183.0	5,181.7	1.33	3,889.987		
500.0	500.0	471.6	471.6	0.8	0.8	-144.15	-4,201.0	-3,036.0	5,183.2	5,181.5	1.68	3,088.112		
600.0	600.0	569.2	569.2	1.0	1.0	-144.13	-4,200.4	-3,037.3	5,183.5	5,181.4	2.02	2,560.399		
700.0	700.0	666.8	666.7	1.2	1.2	-176.58	-4,199.6	-3,038.9	5,184.6	5,182.3	2.37	2,183.429		
800.0	800.0	764.3	764.3	1.4	1.3	-176.56	-4,198.7	-3,040.7	5,187.6	5,184.9	2.72	1,906.960		
900.0	899.9	859.1	859.0	1.6	1.5	-176.54	-4,197.7	-3,042.6	5,192.3	5,189.3	3.06	1,696.371		
988.4	988.1	932.0	931.9	1.7	1.6	-176.53	-4,197.6	-3,043.2	5,198.0	5,194.6	3.34	1,557.191		
1,000.0	999.7	932.0	931.9	1.7	1.6	-176.53	-4,197.6	-3,043.2	5,198.9	5,195.5	3.36	1,548.050		
1,100.0	1,099.4	996.0	995.9	1.9	1.8	-176.53	-4,198.4	-3,043.8	5,207.0	5,203.4	3.64	1,429.601		
1,200.0	1,199.2	1,019.2	1,019.1	2.1	1.8	-176.54	-4,198.9	-3,044.1	5,216.3	5,212.4	3.86	1,352.713		
1,300.0	1,299.0	1,060.0	1,059.9	2.3	1.9	-176.54	-4,200.2	-3,044.9	5,226.7	5,222.6	4.10	1,274.780		
1,400.0	1,398.8	1,095.5	1,095.3	2.5	1.9	-176.54	-4,201.7	-3,045.8	5,238.3	5,234.0	4.33	1,209.445		
1,500.0	1,498.5	1,156.0	1,155.7	2.7	2.0	-176.55	-4,205.2	-3,047.6	5,251.3	5,246.7	4.61	1,139.032		
1,600.0	1,598.3	1,156.0	1,155.7	2.9	2.0	-176.55	-4,205.2	-3,047.6	5,265.2	5,260.4	4.79	1,100.324		
1,700.0	1,698.1	1,224.7	1,224.1	3.2	2.2	-176.56	-4,210.2	-3,050.1	5,280.0	5,274.9	5.08	1,040.076		
1,800.0	1,797.8	1,315.0	1,314.1	3.4	2.3	-176.58	-4,217.2	-3,053.9	5,295.4	5,290.0	5.40	980.075		
1,900.0	1,897.6	1,411.0	1,409.7	3.6	2.5	-176.59	-4,224.6	-3,058.2	5,311.0	5,305.3	5.74	925.047		
2,000.0	1,997.4	1,497.2	1,495.6	3.8	2.7	-176.60	-4,231.4	-3,062.2	5,326.9	5,320.8	6.06	878.529		
2,100.0	2,097.1	1,570.0	1,568.0	4.0	2.9	-176.62	-4,237.3	-3,065.6	5,342.9	5,336.5	6.36	839.792		
2,200.0	2,196.9	1,626.3	1,624.0	4.2	3.0	-176.63	-4,242.2	-3,068.3	5,359.5	5,352.9	6.63	807.966		
2,300.0	2,296.7	1,665.0	1,662.5	4.4	3.1	-176.63	-4,245.8	-3,070.3	5,377.0	5,370.2	6.87	782.236		
2,400.0	2,396.5	1,738.1	1,735.1	4.6	3.3	-176.65	-4,253.3	-3,074.4	5,395.3	5,388.1	7.17	752.135		
2,500.0	2,496.2	1,793.7	1,790.3	4.8	3.4	-176.66	-4,259.4	-3,077.6	5,414.3	5,406.8	7.44	727.406		
2,600.0	2,596.0	1,857.0	1,853.1	5.0	3.6	-176.67	-4,266.7	-3,081.8	5,434.1	5,426.4	7.73	703.315		
2,700.0	2,695.8	1,897.3	1,893.0	5.2	3.7	-176.68	-4,271.6	-3,084.8	5,454.7	5,446.8	7.97	684.370		
2,800.0	2,795.5	1,952.0	1,947.0	5.4	3.8	-176.69	-4,278.7	-3,088.8	5,476.2	5,468.0	8.24	664.737		
2,900.0	2,895.3	2,000.4	1,994.8	5.6	4.0	-176.70	-4,285.4	-3,092.5	5,498.5	5,490.0	8.50	647.166		
3,000.0	2,995.1	2,048.0	2,041.8	5.9	4.1	-176.71	-4,292.2	-3,096.4	5,521.6	5,512.9	8.75	630.886		
3,100.0	3,094.9	2,099.3	2,092.3	6.1	4.3	-176.72	-4,299.9	-3,100.8	5,545.6	5,536.6	9.02	615.130		
3,200.0	3,194.6	2,218.0	2,209.0	6.3	4.7	-176.76	-4,318.8	-3,111.3	5,570.3	5,560.9	9.39	593.032		
3,300.0	3,294.4	2,324.8	2,314.2	6.5	5.0	-176.78	-4,335.1	-3,120.2	5,594.2	5,584.5	9.75	573.696		
3,400.0	3,394.2	2,421.6	2,409.6	6.7	5.3	-176.80	-4,349.5	-3,128.6	5,618.0	5,607.9	10.09	556.650		
3,500.0	3,493.9	2,494.0	2,480.8	6.9	5.5	-176.82	-4,360.2	-3,135.2	5,642.0	5,631.6	10.39	542.934		
3,600.0	3,593.7	2,562.9	2,548.6	7.1	5.8	-176.83	-4,370.5	-3,141.9	5,666.5	5,655.8	10.69	530.304		
3,700.0	3,693.5	2,687.5	2,671.1	7.3	6.2	-176.84	-4,389.3	-3,154.4	5,691.2	5,680.2	11.07	513.916		
3,800.0	3,793.2	2,795.2	2,777.2	7.5	6.5	-176.86	-4,405.9	-3,163.9	5,715.5	5,704.0	11.43	499.831		
3,900.0	3,893.0	2,919.8	2,899.9	7.7	7.0	-176.89	-4,424.5	-3,174.4	5,739.2	5,727.4	11.82	485.364		
4,000.0	3,992.8	3,015.1	2,993.8	8.0	7.3	-176.91	-4,438.8	-3,182.4	5,762.9	5,750.7	12.16	473.776		
4,100.0	4,092.6	3,108.4	3,085.7	8.2	7.6	-176.93	-4,452.4	-3,190.6	5,786.5	5,774.0	12.50	462.937		
4,200.0	4,192.3	3,228.4	3,204.0	8.4	8.0	-176.95	-4,470.2	-3,201.0	5,810.3	5,797.4	12.88	451.058		
4,300.0	4,292.1	3,352.0	3,325.9	8.6	8.4	-176.97	-4,487.6	-3,211.3	5,833.1	5,819.9	13.27	439.581		
4,400.0	4,391.9	3,415.8	3,388.8	8.8	8.6	-176.99	-4,496.7	-3,216.5	5,856.2	5,842.6	13.55	432.035		
4,500.0	4,491.6	3,468.8	3,441.1	9.0	8.8	-177.00	-4,504.6	-3,221.2	5,880.0	5,866.2	13.82	425.435		
4,600.0	4,591.4	3,544.0	3,515.0	9.2	9.1	-177.01	-4,516.2	-3,228.3	5,904.6	5,890.5	14.13	418.009		
4,700.0	4,691.2	3,696.8	3,665.4	9.4	9.6	-177.03	-4,539.2	-3,242.4	5,929.0	5,914.4	14.56	407.099		
4,800.0	4,790.9	3,858.2	3,824.6	9.6	10.1	-177.06	-4,562.0	-3,255.8	5,951.9	5,936.8	15.02	396.323		
4,900.0	4,890.7	3,924.0	3,889.5	9.8	10.3	-177.07	-4,571.1	-3,261.5	5,974.7	5,959.4	15.31	390.359		
5,000.0	4,990.5	4,011.2	3,975.5	10.1	10.6	-177.08	-4,583.2	-3,269.4	5,997.9	5,982.3	15.63	383.719		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	4,063.3	4,026.9	10.3	10.8	-177.08	-4,590.6	-3,274.2	6,021.5	6,005.6	15.90	378.824		
5,200.0	5,190.0	4,115.0	4,077.7	10.5	11.0	-177.09	-4,598.2	-3,279.4	6,045.9	6,029.8	16.16	374.157		
5,300.0	5,289.8	4,216.4	4,177.4	10.7	11.3	-177.10	-4,613.7	-3,289.4	6,070.7	6,054.2	16.51	367.735		
5,400.0	5,389.6	4,454.6	4,412.2	10.9	12.1	-177.12	-4,647.6	-3,311.3	6,094.3	6,077.2	17.09	356.532		
5,500.0	5,489.3	4,509.2	4,466.1	11.1	12.3	-177.13	-4,654.8	-3,316.2	6,117.0	6,099.6	17.36	352.320		
5,600.0	5,589.1	4,640.5	4,595.6	11.3	12.8	-177.14	-4,672.9	-3,328.1	6,140.2	6,122.5	17.76	345.674		
5,700.0	5,688.9	4,687.0	4,641.4	11.5	12.9	-177.14	-4,679.3	-3,332.2	6,163.1	6,145.1	18.02	342.056		
5,800.0	5,788.7	4,730.2	4,684.0	11.7	13.1	-177.15	-4,685.5	-3,336.2	6,186.9	6,168.6	18.27	338.689		
5,900.0	5,888.4	4,921.8	4,872.7	11.9	13.7	-177.17	-4,713.4	-3,354.3	6,211.3	6,192.6	18.77	330.894		
6,000.0	5,988.2	5,015.5	4,965.2	12.2	14.0	-177.17	-4,725.8	-3,362.8	6,234.0	6,214.9	19.11	326.264		
6,100.0	6,088.0	5,129.6	5,077.8	12.4	14.4	-177.18	-4,741.0	-3,373.3	6,256.9	6,237.4	19.48	321.219		
6,200.0	6,187.7	5,263.1	5,209.7	12.6	14.8	-177.20	-4,758.9	-3,383.9	6,279.0	6,259.2	19.88	315.777		
6,300.0	6,287.5	5,396.2	5,341.2	12.8	15.2	-177.21	-4,775.9	-3,394.1	6,300.5	6,280.2	20.29	310.545		
6,400.0	6,387.3	5,470.6	5,414.9	13.0	15.5	-177.22	-4,785.0	-3,400.4	6,322.1	6,301.5	20.59	307.024		
6,500.0	6,487.0	5,543.0	5,486.4	13.2	15.7	-177.22	-4,794.3	-3,406.6	6,344.1	6,323.2	20.89	303.674		
6,600.0	6,586.8	5,604.0	5,546.5	13.4	15.9	-177.23	-4,802.4	-3,411.9	6,366.5	6,345.4	21.17	300.725		
6,700.0	6,686.6	5,862.9	5,802.5	13.6	16.7	-177.24	-4,834.8	-3,433.7	6,388.8	6,367.0	21.79	293.185		
6,787.0	6,773.4	6,856.5	6,792.7	13.8	18.5	-177.29	-4,884.0	-3,466.3	6,394.6	6,371.0	23.67	270.187		
6,800.0	6,786.4	6,874.0	6,810.3	13.8	18.5	172.15	-4,883.9	-3,466.3	6,395.3	6,371.6	23.74	269.376		
6,850.0	6,836.3	6,932.5	6,868.8	13.9	18.6	85.00	-4,883.2	-3,466.5	6,396.2	6,372.2	23.98	266.743		
6,900.0	6,886.2	6,978.4	6,914.7	14.0	18.6	55.27	-4,882.7	-3,466.7	6,394.2	6,370.0	24.15	264.815		
6,950.0	6,935.7	7,023.2	6,959.5	14.0	18.7	47.72	-4,882.2	-3,466.9	6,389.4	6,365.1	24.26	263.326		
7,000.0	6,984.6	7,065.8	7,002.1	14.0	18.7	44.72	-4,881.7	-3,467.1	6,381.8	6,357.5	24.34	262.227		
7,050.0	7,032.6	7,107.7	7,043.9	14.0	18.8	43.40	-4,881.3	-3,467.4	6,371.5	6,347.1	24.37	261.402		
7,100.0	7,079.7	7,136.0	7,072.3	13.9	18.8	42.91	-4,881.0	-3,467.6	6,358.6	6,334.2	24.36	260.973		
7,150.0	7,125.4	7,177.4	7,113.7	13.9	18.9	43.00	-4,880.6	-3,467.9	6,343.1	6,318.7	24.37	260.284		
7,200.0	7,169.6	7,207.9	7,144.2	13.8	18.9	43.46	-4,880.4	-3,468.2	6,325.1	6,300.7	24.36	259.624		
7,250.0	7,212.1	7,239.8	7,176.1	13.8	18.9	44.28	-4,880.3	-3,468.5	6,304.8	6,280.4	24.39	258.552		
7,300.0	7,252.6	7,279.5	7,215.8	13.7	19.0	45.44	-4,880.0	-3,469.1	6,282.2	6,257.7	24.47	256.712		
7,350.0	7,291.0	7,317.0	7,253.2	13.7	19.0	46.92	-4,879.7	-3,469.7	6,257.3	6,232.7	24.63	254.075		
7,400.0	7,327.1	7,349.0	7,285.3	13.7	19.1	48.68	-4,879.4	-3,470.3	6,230.4	6,205.5	24.87	250.512		
7,450.0	7,360.7	7,378.0	7,314.2	13.7	19.1	50.75	-4,879.2	-3,470.8	6,201.6	6,176.4	25.22	245.860		
7,500.0	7,391.6	7,404.8	7,341.0	13.7	19.1	53.15	-4,879.1	-3,471.2	6,171.0	6,145.3	25.70	240.073		
7,550.0	7,419.7	7,430.0	7,366.3	13.8	19.2	55.89	-4,879.0	-3,471.6	6,138.8	6,112.5	26.32	233.220		
7,600.0	7,444.8	7,455.1	7,391.3	13.9	19.2	59.00	-4,878.9	-3,472.0	6,105.2	6,078.1	27.08	225.475		
7,650.0	7,466.9	7,477.1	7,413.3	14.1	19.2	62.47	-4,878.8	-3,472.3	6,070.3	6,042.4	27.94	217.230		
7,700.0	7,485.8	7,495.9	7,432.2	14.3	19.2	66.29	-4,878.7	-3,472.6	6,034.3	6,005.4	28.89	208.863		
7,750.0	7,501.5	7,511.5	7,447.7	14.6	19.3	70.43	-4,878.7	-3,472.8	5,997.4	5,967.6	29.87	200.760		
7,800.0	7,513.7	7,524.4	7,460.6	14.9	19.3	74.86	-4,878.6	-3,473.0	5,959.8	5,929.0	30.84	193.257		
7,850.0	7,522.6	7,534.4	7,470.6	15.2	19.3	79.53	-4,878.6	-3,473.1	5,921.7	5,890.0	31.73	186.636		
7,900.0	7,528.0	7,540.5	7,476.7	15.6	19.3	84.34	-4,878.6	-3,473.2	5,883.3	5,850.8	32.49	181.094		
7,952.9	7,530.0	7,542.6	7,478.8	16.1	19.3	89.47	-4,878.6	-3,473.2	5,842.5	5,809.3	33.11	176.474		
8,000.0	7,530.0	7,542.5	7,478.7	16.5	19.3	89.47	-4,878.6	-3,473.2	5,806.2	5,772.7	33.56	173.002		
8,100.0	7,530.0	7,542.2	7,478.4	17.5	19.3	89.47	-4,878.6	-3,473.2	5,729.8	5,695.2	34.62	165.499		
8,200.0	7,530.0	7,541.9	7,478.1	18.7	19.3	89.46	-4,878.6	-3,473.2	5,654.1	5,618.3	35.79	157.984		
8,300.0	7,530.0	7,541.6	7,477.8	19.9	19.3	89.46	-4,878.6	-3,473.2	5,579.2	5,542.1	37.05	150.605		
8,400.0	7,530.0	7,541.2	7,477.5	21.2	19.3	89.45	-4,878.6	-3,473.2	5,505.0	5,466.6	38.37	143.460		
8,500.0	7,530.0	7,540.9	7,477.1	22.6	19.3	89.45	-4,878.6	-3,473.2	5,431.7	5,391.9	39.76	136.609		
8,600.0	7,530.0	7,540.6	7,476.8	24.0	19.3	89.44	-4,878.6	-3,473.2	5,359.3	5,318.1	41.20	130.087		
8,700.0	7,530.0	7,540.3	7,476.5	25.4	19.3	89.44	-4,878.6	-3,473.2	5,287.7	5,245.0	42.67	123.909		
8,800.0	7,530.0	7,540.0	7,476.2	26.9	19.3	89.43	-4,878.6	-3,473.2	5,217.1	5,172.9	44.18	118.074		
8,900.0	7,530.0	7,539.7	7,475.9	28.4	19.3	89.43	-4,878.6	-3,473.2	5,147.5	5,101.7	45.72	112.578		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 838-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,530.0	7,539.4	7,475.6	30.0	19.3	89.42	-4,878.6	-3,473.2	5,078.8	5,031.5	47.29	107.406		
9,100.0	7,530.0	7,539.1	7,475.3	31.5	19.3	89.42	-4,878.6	-3,473.1	5,011.3	4,962.4	48.87	102.544		
9,200.0	7,530.0	7,538.7	7,475.0	33.1	19.3	89.41	-4,878.6	-3,473.1	4,944.8	4,894.3	50.47	97.976		
9,300.0	7,530.0	7,538.4	7,474.6	34.7	19.3	89.41	-4,878.6	-3,473.1	4,879.5	4,827.4	52.08	93.683		
9,400.0	7,530.0	7,538.1	7,474.3	36.3	19.3	89.40	-4,878.6	-3,473.1	4,815.3	4,761.6	53.71	89.650		
9,500.0	7,530.0	7,537.8	7,474.0	38.0	19.3	89.40	-4,878.6	-3,473.1	4,752.4	4,697.1	55.35	85.858		
9,600.0	7,530.0	7,537.5	7,473.7	39.6	19.3	89.39	-4,878.6	-3,473.1	4,690.8	4,633.8	57.00	82.293		
9,700.0	7,530.0	7,537.1	7,473.4	41.3	19.3	89.39	-4,878.6	-3,473.1	4,630.5	4,571.9	58.66	78.940		
9,800.0	7,530.0	7,536.8	7,473.0	42.9	19.3	89.38	-4,878.6	-3,473.1	4,571.7	4,511.3	60.32	75.785		
9,900.0	7,530.0	7,536.5	7,472.7	44.6	19.3	89.38	-4,878.6	-3,473.1	4,514.2	4,452.2	62.00	72.814		
10,000.0	7,530.0	7,536.2	7,472.4	46.3	19.3	89.37	-4,878.6	-3,473.1	4,458.3	4,394.6	63.67	70.017		
10,100.0	7,530.0	7,535.9	7,472.1	47.9	19.3	89.37	-4,878.6	-3,473.1	4,403.9	4,338.6	65.36	67.381		
10,200.0	7,530.0	7,535.5	7,471.7	49.6	19.3	89.36	-4,878.6	-3,473.1	4,351.2	4,284.2	67.05	64.898		
10,300.0	7,530.0	7,535.2	7,471.4	51.3	19.3	89.36	-4,878.6	-3,473.1	4,300.1	4,231.4	68.74	62.556		
10,400.0	7,530.0	7,534.9	7,471.1	53.0	19.3	89.35	-4,878.6	-3,473.1	4,250.8	4,180.4	70.44	60.349		
10,500.0	7,530.0	7,534.5	7,470.7	54.7	19.3	89.35	-4,878.6	-3,473.1	4,203.3	4,131.1	72.14	58.268		
10,600.0	7,530.0	7,534.2	7,470.4	56.4	19.3	89.34	-4,878.6	-3,473.1	4,157.6	4,083.8	73.84	56.305		
10,700.0	7,530.0	7,533.9	7,470.1	58.1	19.3	89.34	-4,878.6	-3,473.1	4,113.9	4,038.3	75.55	54.454		
10,800.0	7,530.0	7,533.5	7,469.7	59.8	19.3	89.33	-4,878.6	-3,473.1	4,072.1	3,994.9	77.26	52.709		
10,900.0	7,530.0	7,533.2	7,469.4	61.5	19.3	89.33	-4,878.6	-3,473.1	4,032.4	3,953.4	78.97	51.063		
11,000.0	7,530.0	7,532.9	7,469.1	63.2	19.3	89.32	-4,878.6	-3,473.1	3,994.8	3,914.1	80.68	49.513		
11,100.0	7,530.0	7,532.5	7,468.7	64.9	19.3	89.32	-4,878.6	-3,473.1	3,959.4	3,877.0	82.40	48.051		
11,200.0	7,530.0	7,532.2	7,468.4	66.6	19.3	89.31	-4,878.6	-3,473.1	3,926.2	3,842.1	84.12	46.675		
11,300.0	7,530.0	7,531.8	7,468.1	68.4	19.3	89.31	-4,878.6	-3,473.1	3,895.3	3,809.4	85.84	45.380		
11,400.0	7,530.0	7,531.5	7,467.7	70.1	19.3	89.30	-4,878.6	-3,473.1	3,866.7	3,779.1	87.56	44.161		
11,500.0	7,530.0	7,531.2	7,467.4	71.8	19.3	89.30	-4,878.6	-3,473.0	3,840.5	3,751.2	89.28	43.016		
11,600.0	7,530.0	7,530.8	7,467.0	73.5	19.3	89.29	-4,878.6	-3,473.0	3,816.8	3,725.8	91.01	41.940		
11,700.0	7,530.0	7,530.5	7,466.7	75.2	19.3	89.29	-4,878.6	-3,473.0	3,795.5	3,702.8	92.73	40.930		
11,800.0	7,530.0	7,530.1	7,466.3	77.0	19.3	89.28	-4,878.6	-3,473.0	3,776.8	3,682.3	94.46	39.983		
11,900.0	7,530.0	7,529.8	7,466.0	78.7	19.3	89.28	-4,878.6	-3,473.0	3,760.6	3,664.5	96.19	39.097		
12,000.0	7,530.0	7,529.4	7,465.6	80.4	19.3	89.27	-4,878.6	-3,473.0	3,747.1	3,649.2	97.92	38.268		
12,100.0	7,530.0	7,529.1	7,465.3	82.2	19.3	89.26	-4,878.6	-3,473.0	3,736.1	3,636.5	99.65	37.494		
12,200.0	7,530.0	7,528.7	7,464.9	83.9	19.3	89.26	-4,878.6	-3,473.0	3,727.9	3,626.5	101.38	36.772		
12,300.0	7,530.0	7,528.4	7,464.6	85.6	19.3	89.25	-4,878.6	-3,473.0	3,722.3	3,619.1	103.11	36.099		
12,400.0	7,530.0	7,528.0	7,464.2	87.3	19.3	89.25	-4,878.6	-3,473.0	3,719.3	3,614.5	104.84	35.475		
12,459.0	7,530.0	7,527.8	7,464.0	88.4	19.3	89.25	-4,878.6	-3,473.0	3,718.9	3,613.0	105.87	35.128 CC		
12,500.0	7,530.0	7,527.7	7,463.9	89.1	19.3	89.24	-4,878.6	-3,473.0	3,719.1	3,612.5	106.58	34.895 ES		
12,600.0	7,530.0	7,527.3	7,463.5	90.8	19.3	89.24	-4,878.6	-3,473.0	3,721.5	3,613.2	108.31	34.359		
12,700.0	7,530.0	7,527.0	7,463.2	92.5	19.3	89.23	-4,878.6	-3,473.0	3,726.7	3,616.6	110.05	33.864		
12,800.0	7,530.0	7,526.6	7,462.8	94.3	19.3	89.23	-4,878.6	-3,473.0	3,734.5	3,622.7	111.78	33.408		
12,900.0	7,530.0	7,526.2	7,462.4	96.0	19.3	89.22	-4,878.6	-3,473.0	3,744.9	3,631.4	113.52	32.989		
13,000.0	7,530.0	7,525.9	7,462.1	97.8	19.3	89.22	-4,878.6	-3,473.0	3,758.0	3,642.7	115.26	32.605		
13,100.0	7,530.0	7,525.5	7,461.7	99.5	19.3	89.21	-4,878.6	-3,473.0	3,773.7	3,656.7	117.00	32.255		
13,200.0	7,530.0	7,525.1	7,461.4	101.2	19.3	89.20	-4,878.6	-3,473.0	3,792.0	3,673.2	118.73	31.937		
13,300.0	7,530.0	7,524.8	7,461.0	103.0	19.3	89.20	-4,878.6	-3,473.0	3,812.8	3,692.3	120.47	31.648		
13,400.0	7,530.0	7,524.4	7,460.6	104.7	19.3	89.19	-4,878.6	-3,473.0	3,836.1	3,713.9	122.21	31.389		
13,500.0	7,530.0	7,524.0	7,460.3	106.4	19.3	89.19	-4,878.6	-3,473.0	3,861.8	3,737.9	123.95	31.156		
13,600.0	7,530.0	7,523.7	7,459.9	108.2	19.3	89.18	-4,878.6	-3,473.0	3,890.0	3,764.3	125.69	30.948		
13,700.0	7,530.0	7,523.3	7,459.5	109.9	19.3	89.18	-4,878.6	-3,472.9	3,920.5	3,793.0	127.43	30.765		
13,800.0	7,530.0	7,522.9	7,459.1	111.7	19.3	89.17	-4,878.6	-3,472.9	3,953.3	3,824.1	129.17	30.604		
13,900.0	7,530.0	7,522.6	7,458.8	113.4	19.3	89.16	-4,878.6	-3,472.9	3,988.3	3,857.4	130.91	30.465		
14,000.0	7,530.0	7,522.2	7,458.4	115.1	19.3	89.16	-4,878.6	-3,472.9	4,025.5	3,892.8	132.66	30.345		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 838-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,521.8	7,458.0	116.9	19.3	89.15	-4,878.6	-3,472.9	4,064.8	3,930.4	134.40	30.245		
14,200.0	7,530.0	7,521.4	7,457.6	118.6	19.3	89.15	-4,878.6	-3,472.9	4,106.2	3,970.1	136.14	30.162		
14,300.0	7,530.0	7,521.1	7,457.3	120.4	19.3	89.14	-4,878.6	-3,472.9	4,149.6	4,011.7	137.88	30.095		
14,400.0	7,530.0	7,520.7	7,456.9	122.1	19.3	89.14	-4,878.6	-3,472.9	4,194.9	4,055.3	139.63	30.044		
14,500.0	7,530.0	7,520.3	7,456.5	123.9	19.3	89.13	-4,878.6	-3,472.9	4,242.1	4,100.7	141.37	30.007		
14,600.0	7,530.0	7,519.9	7,456.1	125.6	19.3	89.12	-4,878.6	-3,472.9	4,291.1	4,148.0	143.11	29.984		
14,700.0	7,530.0	7,519.5	7,455.7	127.3	19.3	89.12	-4,878.6	-3,472.9	4,341.9	4,197.0	144.86	29.974 SF		
14,800.0	7,530.0	7,519.1	7,455.3	129.1	19.3	89.11	-4,878.6	-3,472.9	4,394.3	4,247.7	146.60	29.975		
14,900.0	7,530.0	7,518.8	7,455.0	130.8	19.3	89.11	-4,878.6	-3,472.9	4,448.4	4,300.1	148.34	29.987		
15,000.0	7,530.0	7,518.5	7,454.7	132.6	19.3	89.10	-4,878.6	-3,472.9	4,504.1	4,354.0	150.09	30.009		
15,100.0	7,530.0	7,518.1	7,454.3	134.3	19.3	89.10	-4,878.6	-3,472.9	4,561.2	4,409.4	151.83	30.041		
15,200.0	7,530.0	7,517.8	7,454.0	136.1	19.3	89.09	-4,878.7	-3,472.9	4,619.8	4,466.3	153.58	30.081		
15,300.0	7,530.0	7,517.5	7,453.7	137.8	19.3	89.09	-4,878.7	-3,472.9	4,679.9	4,524.5	155.32	30.130		
15,400.0	7,530.0	7,517.1	7,453.4	139.6	19.3	89.08	-4,878.7	-3,472.9	4,741.2	4,584.2	157.07	30.186		
15,500.0	7,530.0	7,516.8	7,453.0	141.3	19.3	89.08	-4,878.7	-3,472.9	4,803.9	4,645.1	158.81	30.248		
15,600.0	7,530.0	7,516.5	7,452.7	143.0	19.3	89.07	-4,878.7	-3,472.9	4,867.8	4,707.3	160.56	30.318		
15,700.0	7,530.0	7,516.2	7,452.4	144.8	19.3	89.07	-4,878.7	-3,472.8	4,932.9	4,770.6	162.31	30.393		
15,800.0	7,530.0	7,515.8	7,452.0	146.5	19.3	89.06	-4,878.7	-3,472.8	4,999.2	4,835.2	164.05	30.473		
15,900.0	7,530.0	7,515.5	7,451.7	148.3	19.3	89.06	-4,878.7	-3,472.8	5,066.6	4,900.8	165.80	30.559		
16,000.0	7,530.0	7,515.1	7,451.4	150.0	19.3	89.05	-4,878.7	-3,472.8	5,135.0	4,967.5	167.55	30.649		
16,100.0	7,530.0	7,514.8	7,451.0	151.8	19.3	89.04	-4,878.7	-3,472.8	5,204.5	5,035.2	169.29	30.743		
16,200.0	7,530.0	7,514.5	7,450.7	153.5	19.3	89.04	-4,878.7	-3,472.8	5,274.9	5,103.9	171.04	30.841		
16,300.0	7,530.0	7,514.1	7,450.3	155.3	19.3	89.03	-4,878.7	-3,472.8	5,346.3	5,173.5	172.79	30.942		
16,400.0	7,530.0	7,513.8	7,450.0	157.0	19.3	89.03	-4,878.7	-3,472.8	5,418.6	5,244.1	174.53	31.046		
16,500.0	7,530.0	7,513.5	7,449.7	158.8	19.3	89.02	-4,878.7	-3,472.8	5,491.8	5,315.5	176.28	31.154		
16,600.0	7,530.0	7,513.1	7,449.3	160.5	19.3	89.02	-4,878.7	-3,472.8	5,565.8	5,387.7	178.03	31.264		
16,700.0	7,530.0	7,512.8	7,449.0	162.3	19.3	89.01	-4,878.7	-3,472.8	5,640.6	5,460.8	179.77	31.376		
16,800.0	7,530.0	7,512.4	7,448.6	164.0	19.3	89.01	-4,878.7	-3,472.8	5,716.1	5,534.6	181.52	31.490		
16,900.0	7,530.0	7,512.1	7,448.3	165.8	19.3	89.00	-4,878.7	-3,472.8	5,792.4	5,609.2	183.27	31.606		
17,000.0	7,530.0	7,511.8	7,448.0	167.5	19.3	89.00	-4,878.7	-3,472.8	5,869.4	5,684.4	185.02	31.724		
17,100.0	7,530.0	7,511.4	7,447.6	169.3	19.3	88.99	-4,878.7	-3,472.8	5,947.2	5,760.4	186.76	31.843		
17,200.0	7,530.0	7,511.1	7,447.3	171.0	19.3	88.99	-4,878.7	-3,472.8	6,025.5	5,837.0	188.51	31.964		
17,300.0	7,530.0	7,510.7	7,446.9	172.8	19.3	88.98	-4,878.7	-3,472.8	6,104.5	5,914.2	190.26	32.085		
17,400.0	7,530.0	7,510.4	7,446.6	174.5	19.3	88.98	-4,878.7	-3,472.8	6,184.1	5,992.1	192.01	32.208		
17,420.9	7,530.0	7,510.3	7,446.5	174.9	19.3	88.98	-4,878.7	-3,472.8	6,200.9	6,008.5	192.37	32.233		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-144.09	-4,187.9	-3,033.1	5,170.9					
100.0	100.0	82.0	82.0	0.2	0.1	-144.09	-4,187.9	-3,033.1	5,170.9	5,170.6	0.27	N/A		
200.0	200.0	182.0	182.0	0.3	0.3	-144.09	-4,187.9	-3,033.1	5,170.9	5,170.3	0.62	8,368.971		
300.0	300.0	282.0	282.0	0.5	0.5	-144.09	-4,187.9	-3,033.1	5,170.9	5,169.9	0.97	5,347.738		
400.0	400.0	382.0	382.0	0.7	0.6	-144.09	-4,187.9	-3,033.1	5,170.9	5,169.6	1.32	3,929.259		
500.0	500.0	482.0	482.0	0.8	0.8	-144.09	-4,187.9	-3,033.1	5,170.9	5,169.2	1.67	3,105.524		
600.0	600.0	2,203.2	2,166.9	1.0	6.4	-144.81	-4,008.4	-2,826.3	5,154.3	5,148.0	6.35	811.182		
700.0	700.0	2,298.4	2,257.2	1.2	6.9	-177.39	-3,988.7	-2,803.6	5,124.4	5,119.0	5.41	947.906		
800.0	800.0	2,394.0	2,347.9	1.4	7.5	-177.49	-3,968.9	-2,780.8	5,096.2	5,090.4	5.79	880.502		
900.0	899.9	2,490.1	2,439.1	1.6	8.0	-177.59	-3,949.0	-2,757.9	5,069.6	5,063.5	6.17	821.381		
988.4	988.1	2,575.5	2,520.1	1.7	8.5	-177.67	-3,931.3	-2,737.6	5,047.6	5,041.1	6.51	774.909		
1,000.0	999.7	2,586.7	2,530.7	1.7	8.6	-177.69	-3,929.0	-2,734.9	5,044.8	5,038.2	6.56	769.218		
1,100.0	1,099.4	2,683.4	2,622.5	1.9	9.1	-177.78	-3,909.0	-2,711.8	5,020.6	5,013.7	6.94	722.976		
1,200.0	1,199.2	2,780.1	2,714.2	2.1	9.7	-177.87	-3,889.0	-2,688.8	4,996.4	4,989.1	7.33	681.456		
1,300.0	1,299.0	2,876.8	2,806.0	2.3	10.3	-177.96	-3,868.9	-2,665.7	4,972.3	4,964.5	7.72	643.975		
1,400.0	1,398.8	2,973.6	2,897.8	2.5	10.8	-178.06	-3,848.9	-2,642.7	4,948.1	4,940.0	8.11	609.975		
1,500.0	1,498.5	3,070.3	2,989.5	2.7	11.4	-178.15	-3,828.9	-2,619.6	4,924.0	4,915.5	8.50	578.995		
1,600.0	1,598.3	3,167.0	3,081.3	2.9	11.9	-178.25	-3,808.9	-2,596.5	4,899.8	4,891.0	8.90	550.655		
1,700.0	1,698.1	3,263.7	3,173.1	3.2	12.5	-178.34	-3,788.8	-2,573.5	4,875.7	4,866.4	9.29	524.631		
1,800.0	1,797.8	3,360.4	3,264.8	3.4	13.1	-178.44	-3,768.8	-2,550.4	4,851.6	4,841.9	9.69	500.654		
1,900.0	1,897.6	3,457.1	3,356.6	3.6	13.6	-178.54	-3,748.8	-2,527.4	4,827.6	4,817.5	10.09	478.492		
2,000.0	1,997.4	3,553.9	3,448.4	3.8	14.2	-178.64	-3,728.8	-2,504.3	4,803.5	4,793.0	10.49	457.948		
2,100.0	2,097.1	3,650.6	3,540.2	4.0	14.8	-178.74	-3,708.7	-2,481.3	4,779.4	4,768.5	10.89	438.853		
2,200.0	2,196.9	3,747.3	3,631.9	4.2	15.3	-178.84	-3,688.7	-2,458.2	4,755.4	4,744.1	11.29	421.059		
2,300.0	2,296.7	3,844.0	3,723.7	4.4	15.9	-178.94	-3,668.7	-2,435.1	4,731.4	4,719.7	11.70	404.438		
2,400.0	2,396.5	3,940.7	3,815.5	4.6	16.5	-179.05	-3,648.7	-2,412.1	4,707.3	4,695.2	12.10	388.879		
2,500.0	2,496.2	4,037.4	3,907.2	4.8	17.1	-179.15	-3,628.6	-2,389.0	4,683.3	4,670.8	12.51	374.283		
2,600.0	2,596.0	4,134.1	3,999.0	5.0	17.6	-179.26	-3,608.6	-2,366.0	4,659.4	4,646.4	12.92	360.565		
2,700.0	2,695.8	4,230.9	4,090.8	5.2	18.2	-179.37	-3,588.6	-2,342.9	4,635.4	4,622.1	13.33	347.648		
2,800.0	2,795.5	4,327.6	4,182.5	5.4	18.8	-179.47	-3,568.6	-2,319.8	4,611.4	4,597.7	13.75	335.465		
2,900.0	2,895.3	4,424.3	4,274.3	5.6	19.3	-179.58	-3,548.5	-2,296.8	4,587.5	4,573.3	14.16	323.954		
3,000.0	2,995.1	4,521.0	4,366.1	5.9	19.9	-179.69	-3,528.5	-2,273.7	4,563.6	4,549.0	14.58	313.062		
3,100.0	3,094.9	4,617.7	4,457.8	6.1	20.5	-179.81	-3,508.5	-2,250.7	4,539.7	4,524.7	15.00	302.741		
3,200.0	3,194.6	4,714.4	4,549.6	6.3	21.0	-179.92	-3,488.5	-2,227.6	4,515.8	4,500.4	15.41	292.947		
3,300.0	3,294.4	4,811.2	4,641.4	6.5	21.6	179.97	-3,468.4	-2,204.5	4,491.9	4,476.1	15.84	283.641		
3,400.0	3,394.2	4,907.9	4,733.1	6.7	22.2	179.85	-3,448.4	-2,181.5	4,468.0	4,451.8	16.26	274.788		
3,500.0	3,493.9	5,004.6	4,824.9	6.9	22.8	179.74	-3,428.4	-2,158.4	4,444.2	4,427.5	16.69	266.356		
3,600.0	3,593.7	5,101.3	4,916.7	7.1	23.3	179.62	-3,408.4	-2,135.4	4,420.4	4,403.3	17.11	258.315		
3,700.0	3,693.5	5,198.0	5,008.4	7.3	23.9	179.50	-3,388.4	-2,112.3	4,396.6	4,379.0	17.54	250.639		
3,800.0	3,793.2	5,294.7	5,100.2	7.5	24.5	179.38	-3,368.3	-2,089.2	4,372.8	4,354.8	17.97	243.305		
3,900.0	3,893.0	5,391.5	5,192.0	7.7	25.0	179.26	-3,348.3	-2,066.2	4,349.0	4,330.6	18.41	236.289		
4,000.0	3,992.8	5,488.2	5,283.7	8.0	25.6	179.14	-3,328.3	-2,043.1	4,325.3	4,306.5	18.84	229.572		
4,100.0	4,092.6	5,584.9	5,375.5	8.2	26.2	179.01	-3,308.3	-2,020.1	4,301.6	4,282.3	19.28	223.135		
4,200.0	4,192.3	5,681.6	5,467.3	8.4	26.7	178.89	-3,288.2	-1,997.0	4,277.9	4,258.1	19.72	216.962		
4,300.0	4,292.1	5,778.3	5,559.0	8.6	27.3	178.76	-3,268.2	-1,973.9	4,254.2	4,234.0	20.16	211.036		
4,400.0	4,391.9	5,875.0	5,650.8	8.8	27.9	178.63	-3,248.2	-1,950.9	4,230.5	4,209.9	20.60	205.343		
4,500.0	4,491.6	5,971.7	5,742.6	9.0	28.5	178.50	-3,228.2	-1,927.8	4,206.8	4,185.8	21.05	199.870		
4,600.0	4,591.4	6,068.5	5,834.3	9.2	29.0	178.37	-3,208.1	-1,904.8	4,183.2	4,161.7	21.50	194.604		
4,700.0	4,691.2	6,165.2	5,926.1	9.4	29.6	178.24	-3,188.1	-1,881.7	4,159.6	4,137.7	21.95	189.534		
4,800.0	4,790.9	6,261.9	6,017.9	9.6	30.2	178.10	-3,168.1	-1,858.6	4,136.0	4,113.6	22.40	184.650		
4,900.0	4,890.7	6,358.6	6,109.6	9.8	30.8	177.97	-3,148.1	-1,835.6	4,112.5	4,089.6	22.85	179.941		
5,000.0	4,990.5	6,455.3	6,201.4	10.1	31.3	177.83	-3,128.0	-1,812.5	4,088.9	4,065.6	23.31	175.398		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla											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)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
5,100.0	5,090.3	6,552.0	6,293.2	10.3	31.9	177.69	-3,108.0	-1,789.5	4,065.4	4,041.6	23.77	171.014		
5,200.0	5,190.0	6,600.0	6,338.8	10.5	32.2	177.63	-3,098.3	-1,778.3	4,042.6	4,018.5	24.09	167.836		
5,300.0	5,289.8	6,636.3	6,373.5	10.7	32.4	177.58	-3,091.3	-1,770.2	4,021.0	3,996.7	24.36	165.059		
5,400.0	5,389.6	6,700.0	6,434.7	10.9	32.7	177.49	-3,079.7	-1,756.9	4,001.0	3,976.3	24.71	161.916		
5,500.0	5,489.3	6,700.0	6,434.7	11.1	32.7	177.49	-3,079.7	-1,756.9	3,982.3	3,957.4	24.89	160.024		
5,600.0	5,589.1	6,762.8	6,495.3	11.3	33.0	177.42	-3,069.1	-1,744.7	3,964.8	3,939.5	25.22	157.191		
5,700.0	5,688.9	6,800.0	6,531.5	11.5	33.1	177.38	-3,063.3	-1,738.0	3,948.8	3,923.3	25.49	154.897		
5,800.0	5,788.7	6,848.3	6,578.5	11.7	33.3	177.33	-3,056.2	-1,729.8	3,934.2	3,908.4	25.78	152.580		
5,900.0	5,888.4	6,900.0	6,629.1	11.9	33.5	177.28	-3,049.1	-1,721.6	3,921.1	3,895.0	26.08	150.329		
6,000.0	5,988.2	6,934.6	6,663.0	12.2	33.6	177.25	-3,044.7	-1,716.6	3,909.3	3,883.0	26.34	148.441		
6,100.0	6,088.0	7,000.0	6,727.4	12.4	33.8	177.19	-3,037.2	-1,707.9	3,899.2	3,872.5	26.66	146.277		
6,200.0	6,187.7	7,000.0	6,727.4	12.6	33.8	177.19	-3,037.2	-1,707.9	3,890.3	3,863.4	26.83	144.994		
6,300.0	6,287.5	7,065.2	6,791.8	12.8	34.0	177.15	-3,030.6	-1,700.3	3,882.7	3,855.6	27.14	143.065		
6,400.0	6,387.3	7,100.0	6,826.3	13.0	34.1	177.13	-3,027.5	-1,696.7	3,876.7	3,849.3	27.38	141.564		
6,500.0	6,487.0	7,152.8	6,878.7	13.2	34.2	177.10	-3,023.3	-1,691.9	3,872.2	3,844.5	27.66	139.997		
6,600.0	6,586.8	7,200.0	6,925.7	13.4	34.3	177.08	-3,020.1	-1,688.2	3,869.0	3,841.1	27.92	138.573		
6,700.0	6,686.6	7,240.7	6,966.2	13.6	34.4	177.06	-3,017.7	-1,685.5	3,867.4	3,839.2	28.16	137.314		
6,742.9	6,729.4	7,259.6	6,985.0	13.7	34.4	177.05	-3,016.7	-1,684.3	3,867.1	3,838.8	28.27	136.786		
6,787.0	6,773.4	7,300.0	7,025.4	13.8	34.5	177.04	-3,014.9	-1,682.3	3,867.3	3,838.8	28.42	136.097		
6,800.0	6,786.4	7,300.0	7,025.4	13.8	34.5	166.52	-3,014.9	-1,682.3	3,867.1	3,838.7	28.42	136.058		
6,850.0	6,836.3	7,300.0	7,025.4	13.9	34.5	79.47	-3,014.9	-1,682.3	3,865.2	3,836.9	28.36	136.308		
6,900.0	6,886.2	7,328.6	7,053.9	14.0	34.5	49.80	-3,013.9	-1,681.1	3,860.7	3,832.5	28.17	137.036		
6,950.0	6,935.7	7,350.3	7,075.6	14.0	34.6	42.30	-3,013.2	-1,680.3	3,853.5	3,825.7	27.83	138.478		
7,000.0	6,984.6	7,371.7	7,097.0	14.0	34.6	39.33	-3,012.6	-1,679.6	3,843.7	3,816.4	27.34	140.593		
7,050.0	7,032.6	7,400.0	7,125.3	14.0	34.6	38.03	-3,012.1	-1,679.0	3,831.3	3,804.6	26.73	143.352		
7,100.0	7,079.7	7,400.0	7,125.3	13.9	34.6	37.48	-3,012.1	-1,679.0	3,816.5	3,790.5	25.99	146.837		
7,150.0	7,125.4	7,433.7	7,158.9	13.9	34.6	37.58	-3,011.6	-1,678.5	3,799.1	3,773.9	25.20	150.764		
7,200.0	7,169.6	7,453.2	7,178.5	13.8	34.6	38.02	-3,011.5	-1,678.3	3,779.3	3,754.9	24.37	155.087		
7,250.0	7,212.1	7,474.8	7,200.0	13.8	34.7	38.80	-3,011.4	-1,678.2	3,757.2	3,733.7	23.57	159.388		
7,300.0	7,252.6	7,509.4	7,234.6	13.7	34.7	39.99	-3,011.4	-1,678.2	3,732.9	3,710.0	22.91	162.919		
7,350.0	7,291.0	7,547.8	7,273.0	13.7	34.7	41.55	-3,011.4	-1,678.2	3,706.2	3,683.7	22.51	164.681		
7,400.0	7,327.1	7,583.8	7,309.1	13.7	34.7	43.45	-3,011.4	-1,678.2	3,677.3	3,654.8	22.47	163.625		
7,450.0	7,360.7	7,617.4	7,342.7	13.7	34.7	45.71	-3,011.4	-1,678.2	3,646.4	3,623.5	22.92	159.065		
7,500.0	7,391.6	7,648.3	7,373.6	13.7	34.8	48.36	-3,011.4	-1,678.2	3,613.7	3,589.8	23.90	151.205		
7,550.0	7,419.7	7,676.4	7,401.7	13.8	34.8	51.42	-3,011.4	-1,678.2	3,579.3	3,553.9	25.37	141.078		
7,600.0	7,444.8	7,701.6	7,426.8	13.9	34.8	54.91	-3,011.4	-1,678.2	3,543.4	3,516.1	27.25	130.015		
7,650.0	7,466.9	7,723.7	7,448.9	14.1	34.8	58.86	-3,011.4	-1,678.2	3,506.2	3,476.8	29.43	119.143		
7,700.0	7,485.8	7,742.6	7,467.8	14.3	34.8	63.24	-3,011.4	-1,678.2	3,468.0	3,436.2	31.76	109.204		
7,750.0	7,501.5	7,758.2	7,483.5	14.6	34.8	68.04	-3,011.4	-1,678.2	3,428.9	3,394.8	34.08	100.600		
7,800.0	7,513.7	7,770.5	7,495.8	14.9	34.8	73.19	-3,011.4	-1,678.2	3,389.1	3,352.9	36.25	93.489		
7,850.0	7,522.6	7,779.4	7,504.6	15.2	34.9	78.59	-3,011.4	-1,678.2	3,348.9	3,310.8	38.11	87.882		
7,900.0	7,528.0	7,784.8	7,510.1	15.6	34.9	84.14	-3,011.4	-1,678.2	3,308.5	3,269.0	39.53	83.699		
7,952.9	7,530.0	7,786.8	7,512.0	16.1	34.9	90.00	-3,011.4	-1,678.2	3,265.6	3,225.2	40.48	80.674		
8,000.0	7,530.0	7,786.8	7,512.0	16.5	34.9	90.00	-3,011.4	-1,678.2	3,227.7	3,186.8	40.93	78.851		
8,100.0	7,530.0	7,786.8	7,512.0	17.5	34.9	90.00	-3,011.4	-1,678.2	3,148.0	3,106.0	41.99	74.962		
8,200.0	7,530.0	7,786.8	7,512.0	18.7	34.9	90.00	-3,011.4	-1,678.2	3,069.5	3,026.3	43.16	71.114		
8,300.0	7,530.0	7,786.8	7,512.0	19.9	34.9	90.00	-3,011.4	-1,678.2	2,992.2	2,947.8	44.42	67.363		
8,400.0	7,530.0	7,786.8	7,512.0	21.2	34.9	90.00	-3,011.4	-1,678.2	2,916.3	2,870.6	45.75	63.748		
8,500.0	7,530.0	7,786.8	7,512.0	22.6	34.9	90.00	-3,011.4	-1,678.2	2,841.9	2,794.8	47.14	60.292		
8,600.0	7,530.0	7,786.8	7,512.0	24.0	34.9	90.00	-3,011.4	-1,678.2	2,769.1	2,720.6	48.57	57.010		
8,700.0	7,530.0	7,786.8	7,512.0	25.4	34.9	90.00	-3,011.4	-1,678.2	2,698.1	2,648.1	50.05	53.908		
8,800.0	7,530.0	7,786.8	7,512.0	26.9	34.9	90.00	-3,011.4	-1,678.2	2,629.0	2,577.4	51.56	50.988		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,786.8	7,512.0	28.4	34.9	90.00	-3,011.4	-1,678.2	2,561.8	2,508.7	53.10	48.246		
9,000.0	7,530.0	7,786.8	7,512.0	30.0	34.9	90.00	-3,011.4	-1,678.2	2,496.9	2,442.3	54.66	45.679		
9,100.0	7,530.0	7,786.8	7,512.0	31.5	34.9	90.00	-3,011.4	-1,678.2	2,434.4	2,378.2	56.25	43.281		
9,200.0	7,530.0	7,786.8	7,512.0	33.1	34.9	90.00	-3,011.4	-1,678.2	2,374.4	2,316.6	57.85	41.047		
9,300.0	7,530.0	7,786.8	7,512.0	34.7	34.9	90.00	-3,011.4	-1,678.2	2,317.2	2,257.8	59.46	38.970		
9,400.0	7,530.0	7,786.8	7,512.0	36.3	34.9	90.00	-3,011.4	-1,678.2	2,263.0	2,201.9	61.09	37.043		
9,500.0	7,530.0	7,786.8	7,512.0	38.0	34.9	90.00	-3,011.4	-1,678.2	2,212.0	2,149.3	62.73	35.261		
9,600.0	7,530.0	7,786.8	7,512.0	39.6	34.9	90.00	-3,011.4	-1,678.2	2,164.4	2,100.0	64.38	33.618		
9,700.0	7,530.0	7,786.8	7,512.0	41.3	34.9	90.00	-3,011.4	-1,678.2	2,120.4	2,054.4	66.04	32.109		
9,800.0	7,530.0	7,786.8	7,512.0	42.9	34.9	90.00	-3,011.4	-1,678.2	2,080.3	2,012.6	67.70	30.727		
9,900.0	7,530.0	7,786.8	7,512.0	44.6	34.9	90.00	-3,011.4	-1,678.2	2,044.4	1,975.0	69.38	29.467		
10,000.0	7,530.0	7,786.8	7,512.0	46.3	34.9	90.00	-3,011.4	-1,678.2	2,012.7	1,941.7	71.06	28.326		
10,100.0	7,530.0	7,786.8	7,512.0	47.9	34.9	90.00	-3,011.4	-1,678.2	1,985.6	1,912.9	72.74	27.297		
10,200.0	7,530.0	7,786.8	7,512.0	49.6	34.9	90.00	-3,011.4	-1,678.2	1,963.3	1,888.8	74.43	26.377		
10,300.0	7,530.0	7,786.8	7,512.0	51.3	34.9	90.00	-3,011.4	-1,678.2	1,945.8	1,869.6	76.12	25.561		
10,400.0	7,530.0	7,786.8	7,512.0	53.0	34.9	90.00	-3,011.4	-1,678.2	1,933.3	1,855.5	77.82	24.843		
10,500.0	7,530.0	7,786.8	7,512.0	54.7	34.9	90.00	-3,011.4	-1,678.2	1,926.0	1,846.4	79.52	24.219		
10,591.8	7,530.0	7,786.8	7,512.0	56.3	34.9	90.00	-3,011.4	-1,678.2	1,923.8	1,842.7	81.09	23.725 CC		
10,600.0	7,530.0	7,786.8	7,512.0	56.4	34.9	90.00	-3,011.4	-1,678.2	1,923.8	1,842.6	81.23	23.684 ES		
10,700.0	7,530.0	7,786.8	7,512.0	58.1	34.9	90.00	-3,011.4	-1,678.2	1,926.8	1,843.9	82.93	23.233		
10,800.0	7,530.0	7,786.8	7,512.0	59.8	34.9	90.00	-3,011.4	-1,678.2	1,935.0	1,850.4	84.64	22.861		
10,900.0	7,530.0	7,786.8	7,512.0	61.5	34.9	90.00	-3,011.4	-1,678.2	1,948.3	1,861.9	86.36	22.561		
11,000.0	7,530.0	7,786.8	7,512.0	63.2	34.9	90.00	-3,011.4	-1,678.2	1,966.6	1,878.5	88.07	22.330		
11,100.0	7,530.0	7,786.8	7,512.0	64.9	34.9	90.00	-3,011.4	-1,678.2	1,989.8	1,900.0	89.79	22.161		
11,200.0	7,530.0	7,786.8	7,512.0	66.6	34.9	90.00	-3,011.4	-1,678.2	2,017.6	1,926.1	91.51	22.049		
11,300.0	7,530.0	7,786.8	7,512.0	68.4	34.9	90.00	-3,011.4	-1,678.2	2,050.0	1,956.8	93.23	21.989		
11,400.0	7,530.0	7,786.8	7,512.0	70.1	34.9	90.00	-3,011.4	-1,678.2	2,086.6	1,991.7	94.95	21.977 SF		
11,500.0	7,530.0	7,786.8	7,512.0	71.8	34.9	90.00	-3,011.4	-1,678.2	2,127.4	2,030.7	96.67	22.006		
11,600.0	7,530.0	7,786.8	7,512.0	73.5	34.9	90.00	-3,011.4	-1,678.2	2,171.9	2,073.6	98.40	22.073		
11,700.0	7,530.0	7,786.8	7,512.0	75.2	34.9	90.00	-3,011.4	-1,678.2	2,220.1	2,120.0	100.12	22.174		
11,800.0	7,530.0	7,786.8	7,512.0	77.0	34.9	90.00	-3,011.4	-1,678.2	2,271.7	2,169.9	101.85	22.304		
11,900.0	7,530.0	7,786.8	7,512.0	78.7	34.9	90.00	-3,011.4	-1,678.2	2,326.4	2,222.9	103.58	22.460		
12,000.0	7,530.0	7,786.8	7,512.0	80.4	34.9	90.00	-3,011.4	-1,678.2	2,384.1	2,278.8	105.31	22.639		
12,100.0	7,530.0	7,786.8	7,512.0	82.2	34.9	90.00	-3,011.4	-1,678.2	2,444.5	2,337.5	107.04	22.837		
12,200.0	7,530.0	7,786.8	7,512.0	83.9	34.9	90.00	-3,011.4	-1,678.2	2,507.4	2,398.7	108.77	23.052		
12,300.0	7,530.0	7,786.8	7,512.0	85.6	34.9	90.00	-3,011.4	-1,678.2	2,572.7	2,462.2	110.51	23.281		
12,400.0	7,530.0	7,786.8	7,512.0	87.3	34.9	90.00	-3,011.4	-1,678.2	2,640.2	2,527.9	112.24	23.522		
12,500.0	7,530.0	7,786.8	7,512.0	89.1	34.9	90.00	-3,011.4	-1,678.2	2,709.6	2,595.7	113.97	23.774		
12,600.0	7,530.0	7,786.8	7,512.0	90.8	34.9	90.00	-3,011.4	-1,678.2	2,781.0	2,665.3	115.71	24.034		
12,700.0	7,530.0	7,786.8	7,512.0	92.5	34.9	90.00	-3,011.4	-1,678.2	2,854.0	2,736.6	117.45	24.301		
12,800.0	7,530.0	7,786.8	7,512.0	94.3	34.9	90.00	-3,011.4	-1,678.2	2,928.7	2,809.5	119.18	24.573		
12,900.0	7,530.0	7,786.8	7,512.0	96.0	34.9	90.00	-3,011.4	-1,678.2	3,004.8	2,883.9	120.92	24.849		
13,000.0	7,530.0	7,786.8	7,512.0	97.8	34.9	90.00	-3,011.4	-1,678.2	3,082.3	2,959.6	122.66	25.129		
13,100.0	7,530.0	7,786.8	7,512.0	99.5	34.9	90.00	-3,011.4	-1,678.2	3,161.0	3,036.6	124.40	25.411		
13,200.0	7,530.0	7,786.8	7,512.0	101.2	34.9	90.00	-3,011.4	-1,678.2	3,240.9	3,114.8	126.14	25.694		
13,300.0	7,530.0	7,786.8	7,512.0	103.0	34.9	90.00	-3,011.4	-1,678.2	3,321.9	3,194.1	127.87	25.978		
13,400.0	7,530.0	7,786.8	7,512.0	104.7	34.9	90.00	-3,011.4	-1,678.2	3,404.0	3,274.3	129.61	26.262		
13,500.0	7,530.0	7,786.8	7,512.0	106.4	34.9	90.00	-3,011.4	-1,678.2	3,486.9	3,355.6	131.36	26.546		
13,600.0	7,530.0	7,786.8	7,512.0	108.2	34.9	90.00	-3,011.4	-1,678.2	3,570.7	3,437.6	133.10	26.828		
13,700.0	7,530.0	7,786.8	7,512.0	109.9	34.9	90.00	-3,011.4	-1,678.2	3,655.4	3,520.5	134.84	27.110		
13,800.0	7,530.0	7,786.8	7,512.0	111.7	34.9	90.00	-3,011.4	-1,678.2	3,740.8	3,604.2	136.58	27.389		
13,900.0	7,530.0	7,786.8	7,512.0	113.4	34.9	90.00	-3,011.4	-1,678.2	3,826.9	3,688.6	138.32	27.667		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	7,786.8	7,512.0	115.1	34.9	90.00	-3,011.4	-1,678.2	3,913.7	3,773.6	140.06	27.942		
14,100.0	7,530.0	7,786.8	7,512.0	116.9	34.9	90.00	-3,011.4	-1,678.2	4,001.0	3,859.2	141.81	28.215		
14,200.0	7,530.0	7,786.8	7,512.0	118.6	34.9	90.00	-3,011.4	-1,678.2	4,089.0	3,945.5	143.55	28.485		
14,300.0	7,530.0	7,786.8	7,512.0	120.4	34.9	90.00	-3,011.4	-1,678.2	4,177.5	4,032.2	145.29	28.752		
14,400.0	7,530.0	7,786.8	7,512.0	122.1	34.9	90.00	-3,011.4	-1,678.2	4,266.5	4,119.5	147.04	29.017		
14,500.0	7,530.0	7,786.8	7,512.0	123.9	34.9	90.00	-3,011.4	-1,678.2	4,356.0	4,207.2	148.78	29.278		
14,600.0	7,530.0	7,786.8	7,512.0	125.6	34.9	90.00	-3,011.4	-1,678.2	4,446.0	4,295.4	150.53	29.536		
14,700.0	7,530.0	7,786.8	7,512.0	127.3	34.9	90.00	-3,011.4	-1,678.2	4,536.3	4,384.1	152.27	29.791		
14,800.0	7,530.0	7,786.8	7,512.0	129.1	34.9	90.00	-3,011.4	-1,678.2	4,627.1	4,473.1	154.01	30.043		
14,900.0	7,530.0	7,786.8	7,512.0	130.8	34.9	90.00	-3,011.4	-1,678.2	4,718.2	4,562.4	155.76	30.292		
15,000.0	7,530.0	7,786.8	7,512.0	132.6	34.9	90.00	-3,011.4	-1,678.2	4,809.7	4,652.2	157.51	30.537		
15,100.0	7,530.0	7,786.8	7,512.0	134.3	34.9	90.00	-3,011.4	-1,678.2	4,901.5	4,742.3	159.25	30.779		
15,200.0	7,530.0	7,786.8	7,512.0	136.1	34.9	90.00	-3,011.4	-1,678.2	4,993.6	4,832.6	161.00	31.017		
15,300.0	7,530.0	7,786.8	7,512.0	137.8	34.9	90.00	-3,011.4	-1,678.2	5,086.1	4,923.3	162.74	31.252		
15,400.0	7,530.0	7,786.8	7,512.0	139.6	34.9	90.00	-3,011.4	-1,678.2	5,178.8	5,014.3	164.49	31.484		
15,500.0	7,530.0	7,786.8	7,512.0	141.3	34.9	90.00	-3,011.4	-1,678.2	5,271.7	5,105.5	166.24	31.713		
15,600.0	7,530.0	7,786.8	7,512.0	143.0	34.9	90.00	-3,011.4	-1,678.2	5,365.0	5,197.0	167.98	31.938		
15,700.0	7,530.0	7,786.8	7,512.0	144.8	34.9	90.00	-3,011.4	-1,678.2	5,458.4	5,288.7	169.73	32.160		
15,800.0	7,530.0	7,786.8	7,512.0	146.5	34.9	90.00	-3,011.4	-1,678.2	5,552.1	5,380.7	171.48	32.379		
15,900.0	7,530.0	7,786.8	7,512.0	148.3	34.9	90.00	-3,011.4	-1,678.2	5,646.1	5,472.8	173.22	32.594		
16,000.0	7,530.0	7,786.8	7,512.0	150.0	34.9	90.00	-3,011.4	-1,678.2	5,740.2	5,565.2	174.97	32.807		
16,100.0	7,530.0	7,786.8	7,512.0	151.8	34.9	90.00	-3,011.4	-1,678.2	5,834.5	5,657.8	176.72	33.016		
16,200.0	7,530.0	7,786.8	7,512.0	153.5	34.9	90.00	-3,011.4	-1,678.2	5,929.0	5,750.5	178.46	33.222		
16,300.0	7,530.0	7,786.8	7,512.0	155.3	34.9	90.00	-3,011.4	-1,678.2	6,023.7	5,843.4	180.21	33.425		
16,400.0	7,530.0	7,786.8	7,512.0	157.0	34.9	90.00	-3,011.4	-1,678.2	6,118.5	5,936.5	181.96	33.626		
16,500.0	7,530.0	7,786.8	7,512.0	158.8	34.9	90.00	-3,011.4	-1,678.2	6,213.5	6,029.8	183.71	33.823		
16,600.0	7,530.0	7,786.8	7,512.0	160.5	34.9	90.00	-3,011.4	-1,678.2	6,308.7	6,123.2	185.46	34.017		
16,700.0	7,530.0	7,786.8	7,512.0	162.3	34.9	90.00	-3,011.4	-1,678.2	6,404.0	6,216.8	187.20	34.208		
16,800.0	7,530.0	7,786.8	7,512.0	164.0	34.9	90.00	-3,011.4	-1,678.2	6,499.4	6,310.5	188.95	34.397		
16,900.0	7,530.0	7,786.8	7,512.0	165.8	34.9	90.00	-3,011.4	-1,678.2	6,595.0	6,404.3	190.70	34.583		
17,000.0	7,530.0	7,786.8	7,512.0	167.5	34.9	90.00	-3,011.4	-1,678.2	6,690.7	6,498.3	192.45	34.766		
17,100.0	7,530.0	7,786.8	7,512.0	169.3	34.9	90.00	-3,011.4	-1,678.2	6,786.6	6,592.4	194.20	34.947		
17,200.0	7,530.0	7,786.8	7,512.0	171.0	34.9	90.00	-3,011.4	-1,678.2	6,882.5	6,686.6	195.95	35.124		
17,300.0	7,530.0	7,786.8	7,512.0	172.8	34.9	90.00	-3,011.4	-1,678.2	6,978.6	6,780.9	197.70	35.300		
17,400.0	7,530.0	7,786.8	7,512.0	174.5	34.9	90.00	-3,011.4	-1,678.2	7,074.8	6,875.3	199.45	35.472		
17,420.9	7,530.0	7,786.8	7,512.0	174.9	34.9	90.00	-3,011.4	-1,678.2	7,094.9	6,895.1	199.81	35.508		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-144.09	-4,187.9	-3,033.1	5,170.9					
100.0	100.0	82.0	82.0	0.2	0.1	-144.09	-4,187.9	-3,033.1	5,170.9	5,170.6	0.27	N/A		
200.0	200.0	182.0	182.0	0.3	0.3	-144.09	-4,187.9	-3,033.1	5,170.9	5,170.3	0.62	8,368.971		
300.0	300.0	282.0	282.0	0.5	0.5	-144.09	-4,187.9	-3,033.1	5,170.9	5,169.9	0.97	5,347.738		
400.0	400.0	382.0	382.0	0.7	0.6	-144.09	-4,187.9	-3,033.1	5,170.9	5,169.6	1.32	3,929.259		
500.0	500.0	482.0	482.0	0.8	0.8	-144.09	-4,187.9	-3,033.1	5,170.9	5,169.2	1.67	3,105.524		
600.0	600.0	582.0	582.0	1.0	1.0	-144.09	-4,187.9	-3,033.1	5,170.9	5,168.9	2.01	2,567.309		
700.0	700.0	2,322.9	2,282.4	1.2	6.9	-177.61	-4,009.2	-2,794.1	5,143.0	5,137.4	5.57	922.623		
800.0	800.0	2,418.4	2,373.0	1.4	7.4	-177.71	-3,988.9	-2,771.4	5,114.4	5,108.4	5.96	858.389		
900.0	899.9	2,514.5	2,464.0	1.6	8.0	-177.81	-3,968.5	-2,748.5	5,087.5	5,081.1	6.34	801.939		
988.4	988.1	2,599.7	2,544.8	1.7	8.5	-177.89	-3,950.4	-2,728.3	5,065.1	5,058.4	6.69	757.526		
1,000.0	999.7	2,610.9	2,555.4	1.7	8.5	-177.90	-3,948.0	-2,725.6	5,062.2	5,055.5	6.73	752.034		
1,100.0	1,099.4	2,707.6	2,647.0	1.9	9.1	-177.99	-3,927.4	-2,702.6	5,037.6	5,030.5	7.12	707.664		
1,200.0	1,199.2	2,804.2	2,738.6	2.1	9.6	-178.08	-3,906.9	-2,679.7	5,013.1	5,005.6	7.51	667.761		
1,300.0	1,299.0	2,900.9	2,830.2	2.3	10.2	-178.17	-3,886.3	-2,656.7	4,988.5	4,980.6	7.90	631.686		
1,400.0	1,398.8	2,997.5	2,921.8	2.5	10.8	-178.26	-3,865.8	-2,633.7	4,964.0	4,955.7	8.29	598.910		
1,500.0	1,498.5	3,094.1	3,013.4	2.7	11.3	-178.35	-3,845.3	-2,610.7	4,939.4	4,930.8	8.68	569.006		
1,600.0	1,598.3	3,190.8	3,105.0	2.9	11.9	-178.44	-3,824.7	-2,587.8	4,914.9	4,905.9	9.07	541.615		
1,700.0	1,698.1	3,287.4	3,196.6	3.2	12.5	-178.53	-3,804.2	-2,564.8	4,890.4	4,880.9	9.47	516.432		
1,800.0	1,797.8	3,384.1	3,288.2	3.4	13.0	-178.63	-3,783.6	-2,541.8	4,865.9	4,856.1	9.87	493.202		
1,900.0	1,897.6	3,480.7	3,379.7	3.6	13.6	-178.72	-3,763.1	-2,518.8	4,841.4	4,831.2	10.26	471.707		
2,000.0	1,997.4	3,577.3	3,471.3	3.8	14.2	-178.82	-3,742.5	-2,495.9	4,817.0	4,806.3	10.66	451.760		
2,100.0	2,097.1	3,674.0	3,562.9	4.0	14.8	-178.92	-3,722.0	-2,472.9	4,792.5	4,781.5	11.06	433.200		
2,200.0	2,196.9	3,770.6	3,654.5	4.2	15.3	-179.02	-3,701.5	-2,449.9	4,768.1	4,756.6	11.46	415.887		
2,300.0	2,296.7	3,867.3	3,746.1	4.4	15.9	-179.11	-3,680.9	-2,426.9	4,743.6	4,731.8	11.87	399.700		
2,400.0	2,396.5	3,963.9	3,837.7	4.6	16.5	-179.21	-3,660.4	-2,404.0	4,719.2	4,707.0	12.27	384.533		
2,500.0	2,496.2	4,060.5	3,929.3	4.8	17.0	-179.32	-3,639.8	-2,381.0	4,694.8	4,682.1	12.68	370.293		
2,600.0	2,596.0	4,157.2	4,020.9	5.0	17.6	-179.42	-3,619.3	-2,358.0	4,670.4	4,657.4	13.09	356.897		
2,700.0	2,695.8	4,253.8	4,112.5	5.2	18.2	-179.52	-3,598.7	-2,335.0	4,646.1	4,632.6	13.50	344.273		
2,800.0	2,795.5	4,350.5	4,204.1	5.4	18.8	-179.62	-3,578.2	-2,312.1	4,621.7	4,607.8	13.91	332.357		
2,900.0	2,895.3	4,447.1	4,295.7	5.6	19.3	-179.73	-3,557.6	-2,289.1	4,597.4	4,583.0	14.32	321.090		
3,000.0	2,995.1	4,543.7	4,387.3	5.9	19.9	-179.84	-3,537.1	-2,266.1	4,573.0	4,558.3	14.73	310.421		
3,100.0	3,094.9	4,640.4	4,478.9	6.1	20.5	-179.94	-3,516.6	-2,243.1	4,548.7	4,533.6	15.15	300.304		
3,200.0	3,194.6	4,737.0	4,570.5	6.3	21.1	-179.95	-3,496.0	-2,220.2	4,524.4	4,508.9	15.56	290.696		
3,300.0	3,294.4	4,833.7	4,662.1	6.5	21.6	-179.84	-3,475.5	-2,197.2	4,500.1	4,484.1	15.98	281.562		
3,400.0	3,394.2	4,930.3	4,753.6	6.7	22.2	-179.73	-3,454.9	-2,174.2	4,475.9	4,459.5	16.40	272.867		
3,500.0	3,493.9	5,026.9	4,845.2	6.9	22.8	-179.61	-3,434.4	-2,151.2	4,451.6	4,434.8	16.83	264.579		
3,600.0	3,593.7	5,123.6	4,936.8	7.1	23.4	-179.50	-3,413.8	-2,128.3	4,427.4	4,410.1	17.25	256.672		
3,700.0	3,693.5	5,220.2	5,028.4	7.3	23.9	-179.39	-3,393.3	-2,105.3	4,403.2	4,385.5	17.67	249.119		
3,800.0	3,793.2	5,316.9	5,120.0	7.5	24.5	-179.27	-3,372.7	-2,082.3	4,379.0	4,360.9	18.10	241.898		
3,900.0	3,893.0	5,413.5	5,211.6	7.7	25.1	-179.15	-3,352.2	-2,059.3	4,354.8	4,336.2	18.53	234.987		
4,000.0	3,992.8	5,510.1	5,303.2	8.0	25.7	-179.03	-3,331.7	-2,036.4	4,330.6	4,311.6	18.96	228.367		
4,100.0	4,092.6	5,606.8	5,394.8	8.2	26.2	-178.91	-3,311.1	-2,013.4	4,306.5	4,287.1	19.40	222.019		
4,200.0	4,192.3	5,703.4	5,486.4	8.4	26.8	-178.79	-3,290.6	-1,990.4	4,282.3	4,262.5	19.83	215.928		
4,300.0	4,292.1	5,800.1	5,578.0	8.6	27.4	-178.67	-3,270.0	-1,967.4	4,258.2	4,237.9	20.27	210.079		
4,400.0	4,391.9	5,896.7	5,669.6	8.8	28.0	-178.55	-3,249.5	-1,944.5	4,234.1	4,213.4	20.71	204.457		
4,500.0	4,491.6	5,993.3	5,761.2	9.0	28.5	-178.42	-3,228.9	-1,921.5	4,210.0	4,188.9	21.15	199.049		
4,600.0	4,591.4	6,090.0	5,852.8	9.2	29.1	-178.29	-3,208.4	-1,898.5	4,186.0	4,164.4	21.59	193.844		
4,700.0	4,691.2	6,186.6	5,944.4	9.4	29.7	-178.17	-3,187.8	-1,875.5	4,161.9	4,139.9	22.04	188.831		
4,800.0	4,790.9	6,283.3	6,036.0	9.6	30.3	-178.04	-3,167.3	-1,852.6	4,137.9	4,115.4	22.49	183.998		
4,900.0	4,890.7	6,379.9	6,127.5	9.8	30.8	-177.90	-3,146.8	-1,829.6	4,113.9	4,091.0	22.94	179.337		
5,000.0	4,990.5	6,476.5	6,219.1	10.1	31.4	-177.77	-3,126.2	-1,806.6	4,090.0	4,066.6	23.39	174.840		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program:		O-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	6,547.5	6,286.4	10.3	31.8	177.67	-3,111.1	-1,789.8	4,066.1	4,042.3	23.77	171.037		
5,200.0	5,190.0	6,600.0	6,336.3	10.5	32.1	177.60	-3,100.3	-1,777.6	4,043.1	4,019.0	24.10	167.786		
5,300.0	5,289.8	6,641.1	6,375.6	10.7	32.3	177.55	-3,092.2	-1,768.6	4,021.6	3,997.2	24.38	164.936		
5,400.0	5,389.6	6,700.0	6,432.2	10.9	32.6	177.48	-3,081.3	-1,756.4	4,001.5	3,976.8	24.72	161.901		
5,500.0	5,489.3	6,700.0	6,432.2	11.1	32.6	177.48	-3,081.3	-1,756.4	3,982.8	3,957.9	24.89	160.012		
5,600.0	5,589.1	6,767.3	6,497.2	11.3	32.9	177.40	-3,069.8	-1,743.5	3,965.2	3,939.9	25.24	157.124		
5,700.0	5,688.9	6,800.0	6,529.0	11.5	33.1	177.37	-3,064.5	-1,737.6	3,949.2	3,923.7	25.49	154.911		
5,800.0	5,788.7	6,852.6	6,580.2	11.7	33.3	177.31	-3,056.7	-1,728.8	3,934.5	3,908.7	25.79	152.543		
5,900.0	5,888.4	6,900.0	6,626.6	11.9	33.5	177.27	-3,050.1	-1,721.5	3,921.3	3,895.3	26.08	150.362		
6,000.0	5,988.2	6,938.6	6,664.5	12.2	33.6	177.24	-3,045.1	-1,715.9	3,909.6	3,883.2	26.34	148.429		
6,100.0	6,088.0	7,000.0	6,724.9	12.4	33.8	177.19	-3,037.9	-1,707.8	3,899.3	3,872.7	26.65	146.324		
6,200.0	6,187.7	7,000.0	6,724.9	12.6	33.8	177.19	-3,037.9	-1,707.8	3,890.5	3,863.7	26.82	145.042		
6,300.0	6,287.5	7,068.9	6,793.0	12.8	34.0	177.14	-3,030.8	-1,699.9	3,882.8	3,855.7	27.14	143.078		
6,400.0	6,387.3	7,100.0	6,823.8	13.0	34.1	177.12	-3,028.0	-1,696.7	3,876.9	3,849.5	27.37	141.621		
6,500.0	6,487.0	7,156.3	6,879.6	13.2	34.2	177.09	-3,023.4	-1,691.6	3,872.2	3,844.6	27.65	140.023		
6,600.0	6,586.8	7,200.0	6,923.1	13.4	34.3	177.07	-3,020.4	-1,688.2	3,869.1	3,841.2	27.91	138.633		
6,700.0	6,686.6	7,243.9	6,966.9	13.6	34.4	177.06	-3,017.8	-1,685.3	3,867.4	3,839.3	28.16	137.348		
6,787.0	6,773.4	7,300.0	7,022.8	13.8	34.5	177.04	-3,015.1	-1,682.3	3,867.2	3,838.8	28.40	136.157		
6,800.0	6,786.4	7,300.0	7,022.8	13.8	34.5	166.52	-3,015.1	-1,682.3	3,867.1	3,838.7	28.41	136.118		
6,850.0	6,836.3	7,300.0	7,022.8	13.9	34.5	79.47	-3,015.1	-1,682.3	3,865.3	3,836.9	28.34	136.368		
6,900.0	6,886.2	7,331.6	7,054.3	14.0	34.5	49.80	-3,013.9	-1,681.0	3,860.7	3,832.5	28.16	137.077		
6,950.0	6,935.7	7,353.2	7,075.9	14.0	34.5	42.30	-3,013.2	-1,680.2	3,853.5	3,825.7	27.82	138.518		
7,000.0	6,984.6	7,400.0	7,122.7	14.0	34.6	39.38	-3,012.1	-1,679.0	3,843.9	3,816.5	27.35	140.540		
7,050.0	7,032.6	7,400.0	7,122.7	14.0	34.6	38.02	-3,012.1	-1,679.0	3,831.3	3,804.6	26.72	143.399		
7,100.0	7,079.7	7,400.0	7,122.7	13.9	34.6	37.47	-3,012.1	-1,679.0	3,816.5	3,790.5	25.98	146.880		
7,150.0	7,125.4	7,436.4	7,159.1	13.9	34.6	37.58	-3,011.6	-1,678.5	3,799.1	3,773.9	25.19	150.791		
7,200.0	7,169.6	7,477.4	7,200.0	13.8	34.6	38.13	-3,011.4	-1,678.2	3,779.4	3,755.1	24.38	155.031		
7,250.0	7,212.1	7,477.4	7,200.0	13.8	34.6	38.80	-3,011.4	-1,678.2	3,757.2	3,733.7	23.57	159.395		
7,300.0	7,252.6	7,511.9	7,234.6	13.7	34.7	39.99	-3,011.4	-1,678.2	3,732.9	3,710.0	22.91	162.908		
7,350.0	7,291.0	7,550.3	7,273.0	13.7	34.7	41.55	-3,011.4	-1,678.2	3,706.2	3,683.7	22.51	164.652		
7,400.0	7,327.1	7,586.4	7,309.1	13.7	34.7	43.45	-3,011.4	-1,678.2	3,677.3	3,654.8	22.48	163.579		
7,450.0	7,360.7	7,620.0	7,342.7	13.7	34.7	45.71	-3,011.4	-1,678.2	3,646.4	3,623.5	22.93	159.011		
7,500.0	7,391.6	7,650.9	7,373.6	13.7	34.8	48.36	-3,011.4	-1,678.2	3,613.7	3,589.8	23.91	151.150		
7,550.0	7,419.7	7,679.0	7,401.7	13.8	34.8	51.42	-3,011.4	-1,678.2	3,579.3	3,553.9	25.38	141.030		
7,600.0	7,444.8	7,704.2	7,426.8	13.9	34.8	54.91	-3,011.4	-1,678.2	3,543.4	3,516.1	27.26	129.977		
7,650.0	7,466.9	7,726.3	7,448.9	14.1	34.8	58.86	-3,011.4	-1,678.2	3,506.2	3,476.8	29.44	119.114		
7,700.0	7,485.8	7,745.2	7,467.8	14.3	34.8	63.24	-3,011.4	-1,678.2	3,468.0	3,436.2	31.76	109.184		
7,750.0	7,501.5	7,760.8	7,483.5	14.6	34.8	68.04	-3,011.4	-1,678.2	3,428.9	3,394.8	34.09	100.585		
7,800.0	7,513.7	7,773.1	7,495.8	14.9	34.8	73.19	-3,011.4	-1,678.2	3,389.1	3,352.9	36.26	93.479		
7,850.0	7,522.6	7,782.0	7,504.6	15.2	34.8	78.59	-3,011.4	-1,678.2	3,348.9	3,310.8	38.11	87.874		
7,900.0	7,528.0	7,787.4	7,510.1	15.6	34.8	84.14	-3,011.4	-1,678.2	3,308.5	3,269.0	39.53	83.694		
7,952.9	7,530.0	7,789.3	7,512.0	16.1	34.8	90.00	-3,011.4	-1,678.2	3,265.6	3,225.2	40.48	80.669		
8,000.0	7,530.0	7,789.3	7,512.0	16.5	34.8	90.00	-3,011.4	-1,678.2	3,227.7	3,186.8	40.94	78.846		
8,100.0	7,530.0	7,789.3	7,512.0	17.5	34.8	90.00	-3,011.4	-1,678.2	3,148.0	3,106.0	42.00	74.957		
8,200.0	7,530.0	7,789.3	7,512.0	18.7	34.8	90.00	-3,011.4	-1,678.2	3,069.5	3,026.3	43.17	71.110		
8,300.0	7,530.0	7,789.3	7,512.0	19.9	34.8	90.00	-3,011.4	-1,678.2	2,992.2	2,947.8	44.42	67.359		
8,400.0	7,530.0	7,789.3	7,512.0	21.2	34.8	90.00	-3,011.4	-1,678.2	2,916.3	2,870.6	45.75	63.744		
8,500.0	7,530.0	7,789.3	7,512.0	22.6	34.8	90.00	-3,011.4	-1,678.2	2,841.9	2,794.8	47.14	60.289		
8,600.0	7,530.0	7,789.3	7,512.0	24.0	34.8	90.00	-3,011.4	-1,678.2	2,769.1	2,720.6	48.57	57.008		
8,700.0	7,530.0	7,789.3	7,512.0	25.4	34.8	90.00	-3,011.4	-1,678.2	2,698.1	2,648.1	50.05	53.906		
8,800.0	7,530.0	7,789.3	7,512.0	26.9	34.8	90.00	-3,011.4	-1,678.2	2,629.0	2,577.4	51.56	50.985		
8,900.0	7,530.0	7,789.3	7,512.0	28.4	34.8	90.00	-3,011.4	-1,678.2	2,561.8	2,508.7	53.10	48.243		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,789.3	7,512.0	30.0	34.8	90.00	-3,011.4	-1,678.2	2,496.9	2,442.3	54.67	45.677		
9,100.0	7,530.0	7,789.3	7,512.0	31.5	34.8	90.00	-3,011.4	-1,678.2	2,434.4	2,378.2	56.25	43.279		
9,200.0	7,530.0	7,789.3	7,512.0	33.1	34.8	90.00	-3,011.4	-1,678.2	2,374.4	2,316.6	57.85	41.045		
9,300.0	7,530.0	7,789.3	7,512.0	34.7	34.8	90.00	-3,011.4	-1,678.2	2,317.2	2,257.8	59.47	38.968		
9,400.0	7,530.0	7,789.3	7,512.0	36.3	34.8	90.00	-3,011.4	-1,678.2	2,263.0	2,201.9	61.09	37.042		
9,500.0	7,530.0	7,789.3	7,512.0	38.0	34.8	90.00	-3,011.4	-1,678.2	2,212.0	2,149.3	62.73	35.260		
9,600.0	7,530.0	7,789.3	7,512.0	39.6	34.8	90.00	-3,011.4	-1,678.2	2,164.4	2,100.0	64.38	33.617		
9,700.0	7,530.0	7,789.3	7,512.0	41.3	34.8	90.00	-3,011.4	-1,678.2	2,120.4	2,054.4	66.04	32.107		
9,800.0	7,530.0	7,789.3	7,512.0	42.9	34.8	90.00	-3,011.4	-1,678.2	2,080.3	2,012.6	67.71	30.725		
9,900.0	7,530.0	7,789.3	7,512.0	44.6	34.8	90.00	-3,011.4	-1,678.2	2,044.4	1,975.0	69.38	29.466		
10,000.0	7,530.0	7,789.3	7,512.0	46.3	34.8	90.00	-3,011.4	-1,678.2	2,012.7	1,941.7	71.06	28.325		
10,100.0	7,530.0	7,789.3	7,512.0	47.9	34.8	90.00	-3,011.4	-1,678.2	1,985.6	1,912.9	72.74	27.297		
10,200.0	7,530.0	7,789.3	7,512.0	49.6	34.8	90.00	-3,011.4	-1,678.2	1,963.3	1,888.8	74.43	26.376		
10,300.0	7,530.0	7,789.3	7,512.0	51.3	34.8	90.00	-3,011.4	-1,678.2	1,945.8	1,869.6	76.13	25.560		
10,400.0	7,530.0	7,789.3	7,512.0	53.0	34.8	90.00	-3,011.4	-1,678.2	1,933.3	1,855.5	77.82	24.842		
10,500.0	7,530.0	7,789.3	7,512.0	54.7	34.8	90.00	-3,011.4	-1,678.2	1,926.0	1,846.4	79.52	24.219		
10,591.8	7,530.0	7,789.3	7,512.0	56.3	34.8	90.00	-3,011.4	-1,678.2	1,923.8	1,842.7	81.09	23.724 CC		
10,600.0	7,530.0	7,789.3	7,512.0	56.4	34.8	90.00	-3,011.4	-1,678.2	1,923.8	1,842.6	81.23	23.684 ES		
10,700.0	7,530.0	7,789.3	7,512.0	58.1	34.8	90.00	-3,011.4	-1,678.2	1,926.8	1,843.9	82.94	23.233		
10,800.0	7,530.0	7,789.3	7,512.0	59.8	34.8	90.00	-3,011.4	-1,678.2	1,935.0	1,850.4	84.65	22.860		
10,900.0	7,530.0	7,789.3	7,512.0	61.5	34.8	90.00	-3,011.4	-1,678.2	1,948.3	1,861.9	86.36	22.561		
11,000.0	7,530.0	7,789.3	7,512.0	63.2	34.8	90.00	-3,011.4	-1,678.2	1,966.6	1,878.5	88.07	22.329		
11,100.0	7,530.0	7,789.3	7,512.0	64.9	34.8	90.00	-3,011.4	-1,678.2	1,989.8	1,900.0	89.79	22.160		
11,200.0	7,530.0	7,789.3	7,512.0	66.6	34.8	90.00	-3,011.4	-1,678.2	2,017.6	1,926.1	91.51	22.049		
11,300.0	7,530.0	7,789.3	7,512.0	68.4	34.8	90.00	-3,011.4	-1,678.2	2,050.0	1,956.8	93.23	21.989		
11,400.0	7,530.0	7,789.3	7,512.0	70.1	34.8	90.00	-3,011.4	-1,678.2	2,086.6	1,991.7	94.95	21.976 SF		
11,500.0	7,530.0	7,789.3	7,512.0	71.8	34.8	90.00	-3,011.4	-1,678.2	2,127.4	2,030.7	96.67	22.005		
11,600.0	7,530.0	7,789.3	7,512.0	73.5	34.8	90.00	-3,011.4	-1,678.2	2,171.9	2,073.5	98.40	22.073		
11,700.0	7,530.0	7,789.3	7,512.0	75.2	34.8	90.00	-3,011.4	-1,678.2	2,220.1	2,120.0	100.13	22.173		
11,800.0	7,530.0	7,789.3	7,512.0	77.0	34.8	90.00	-3,011.4	-1,678.2	2,271.7	2,169.8	101.85	22.303		
11,900.0	7,530.0	7,789.3	7,512.0	78.7	34.8	90.00	-3,011.4	-1,678.2	2,326.4	2,222.8	103.58	22.460		
12,000.0	7,530.0	7,789.3	7,512.0	80.4	34.8	90.00	-3,011.4	-1,678.2	2,384.1	2,278.8	105.31	22.638		
12,100.0	7,530.0	7,789.3	7,512.0	82.2	34.8	90.00	-3,011.4	-1,678.2	2,444.5	2,337.5	107.04	22.836		
12,200.0	7,530.0	7,789.3	7,512.0	83.9	34.8	90.00	-3,011.4	-1,678.2	2,507.4	2,398.7	108.78	23.051		
12,300.0	7,530.0	7,789.3	7,512.0	85.6	34.8	90.00	-3,011.4	-1,678.2	2,572.7	2,462.2	110.51	23.281		
12,400.0	7,530.0	7,789.3	7,512.0	87.3	34.8	90.00	-3,011.4	-1,678.2	2,640.2	2,527.9	112.24	23.522		
12,500.0	7,530.0	7,789.3	7,512.0	89.1	34.8	90.00	-3,011.4	-1,678.2	2,709.6	2,595.7	113.98	23.773		
12,600.0	7,530.0	7,789.3	7,512.0	90.8	34.8	90.00	-3,011.4	-1,678.2	2,781.0	2,665.3	115.71	24.033		
12,700.0	7,530.0	7,789.3	7,512.0	92.5	34.8	90.00	-3,011.4	-1,678.2	2,854.0	2,736.6	117.45	24.300		
12,800.0	7,530.0	7,789.3	7,512.0	94.3	34.8	90.00	-3,011.4	-1,678.2	2,928.7	2,809.5	119.19	24.572		
12,900.0	7,530.0	7,789.3	7,512.0	96.0	34.8	90.00	-3,011.4	-1,678.2	3,004.8	2,883.9	120.92	24.849		
13,000.0	7,530.0	7,789.3	7,512.0	97.8	34.8	90.00	-3,011.4	-1,678.2	3,082.3	2,959.6	122.66	25.128		
13,100.0	7,530.0	7,789.3	7,512.0	99.5	34.8	90.00	-3,011.4	-1,678.2	3,161.0	3,036.6	124.40	25.410		
13,200.0	7,530.0	7,789.3	7,512.0	101.2	34.8	90.00	-3,011.4	-1,678.2	3,240.9	3,114.8	126.14	25.694		
13,300.0	7,530.0	7,789.3	7,512.0	103.0	34.8	90.00	-3,011.4	-1,678.2	3,321.9	3,194.1	127.88	25.977		
13,400.0	7,530.0	7,789.3	7,512.0	104.7	34.8	90.00	-3,011.4	-1,678.2	3,404.0	3,274.3	129.62	26.262		
13,500.0	7,530.0	7,789.3	7,512.0	106.4	34.8	90.00	-3,011.4	-1,678.2	3,486.9	3,355.6	131.36	26.545		
13,600.0	7,530.0	7,789.3	7,512.0	108.2	34.8	90.00	-3,011.4	-1,678.2	3,570.7	3,437.6	133.10	26.828		
13,700.0	7,530.0	7,789.3	7,512.0	109.9	34.8	90.00	-3,011.4	-1,678.2	3,655.4	3,520.5	134.84	27.109		
13,800.0	7,530.0	7,789.3	7,512.0	111.7	34.8	90.00	-3,011.4	-1,678.2	3,740.8	3,604.2	136.58	27.389		
13,900.0	7,530.0	7,789.3	7,512.0	113.4	34.8	90.00	-3,011.4	-1,678.2	3,826.9	3,688.6	138.32	27.666		
14,000.0	7,530.0	7,789.3	7,512.0	115.1	34.8	90.00	-3,011.4	-1,678.2	3,913.7	3,773.6	140.07	27.941		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	7,789.3	7,512.0	116.9	34.8	90.00	-3,011.4	-1,678.2	4,001.0	3,859.2	141.81	28.214		
14,200.0	7,530.0	7,789.3	7,512.0	118.6	34.8	90.00	-3,011.4	-1,678.2	4,089.0	3,945.5	143.55	28.484		
14,300.0	7,530.0	7,789.3	7,512.0	120.4	34.8	90.00	-3,011.4	-1,678.2	4,177.5	4,032.2	145.30	28.752		
14,400.0	7,530.0	7,789.3	7,512.0	122.1	34.8	90.00	-3,011.4	-1,678.2	4,266.5	4,119.5	147.04	29.016		
14,500.0	7,530.0	7,789.3	7,512.0	123.9	34.8	90.00	-3,011.4	-1,678.2	4,356.0	4,207.2	148.78	29.278		
14,600.0	7,530.0	7,789.3	7,512.0	125.6	34.8	90.00	-3,011.4	-1,678.2	4,446.0	4,295.4	150.53	29.536		
14,700.0	7,530.0	7,789.3	7,512.0	127.3	34.8	90.00	-3,011.4	-1,678.2	4,536.3	4,384.0	152.27	29.791		
14,800.0	7,530.0	7,789.3	7,512.0	129.1	34.8	90.00	-3,011.4	-1,678.2	4,627.1	4,473.1	154.02	30.043		
14,900.0	7,530.0	7,789.3	7,512.0	130.8	34.8	90.00	-3,011.4	-1,678.2	4,718.2	4,562.4	155.76	30.291		
15,000.0	7,530.0	7,789.3	7,512.0	132.6	34.8	90.00	-3,011.4	-1,678.2	4,809.7	4,652.2	157.51	30.536		
15,100.0	7,530.0	7,789.3	7,512.0	134.3	34.8	90.00	-3,011.4	-1,678.2	4,901.5	4,742.3	159.25	30.778		
15,200.0	7,530.0	7,789.3	7,512.0	136.1	34.8	90.00	-3,011.4	-1,678.2	4,993.6	4,832.6	161.00	31.017		
15,300.0	7,530.0	7,789.3	7,512.0	137.8	34.8	90.00	-3,011.4	-1,678.2	5,086.1	4,923.3	162.75	31.252		
15,400.0	7,530.0	7,789.3	7,512.0	139.6	34.8	90.00	-3,011.4	-1,678.2	5,178.8	5,014.3	164.49	31.484		
15,500.0	7,530.0	7,789.3	7,512.0	141.3	34.8	90.00	-3,011.4	-1,678.2	5,271.7	5,105.5	166.24	31.712		
15,600.0	7,530.0	7,789.3	7,512.0	143.0	34.8	90.00	-3,011.4	-1,678.2	5,365.0	5,197.0	167.98	31.937		
15,700.0	7,530.0	7,789.3	7,512.0	144.8	34.8	90.00	-3,011.4	-1,678.2	5,458.4	5,288.7	169.73	32.159		
15,800.0	7,530.0	7,789.3	7,512.0	146.5	34.8	90.00	-3,011.4	-1,678.2	5,552.1	5,380.7	171.48	32.378		
15,900.0	7,530.0	7,789.3	7,512.0	148.3	34.8	90.00	-3,011.4	-1,678.2	5,646.1	5,472.8	173.22	32.594		
16,000.0	7,530.0	7,789.3	7,512.0	150.0	34.8	90.00	-3,011.4	-1,678.2	5,740.2	5,565.2	174.97	32.806		
16,100.0	7,530.0	7,789.3	7,512.0	151.8	34.8	90.00	-3,011.4	-1,678.2	5,834.5	5,657.8	176.72	33.015		
16,200.0	7,530.0	7,789.3	7,512.0	153.5	34.8	90.00	-3,011.4	-1,678.2	5,929.0	5,750.5	178.47	33.222		
16,300.0	7,530.0	7,789.3	7,512.0	155.3	34.8	90.00	-3,011.4	-1,678.2	6,023.7	5,843.4	180.21	33.425		
16,400.0	7,530.0	7,789.3	7,512.0	157.0	34.8	90.00	-3,011.4	-1,678.2	6,118.5	5,936.5	181.96	33.625		
16,500.0	7,530.0	7,789.3	7,512.0	158.8	34.8	90.00	-3,011.4	-1,678.2	6,213.5	6,029.8	183.71	33.822		
16,600.0	7,530.0	7,789.3	7,512.0	160.5	34.8	90.00	-3,011.4	-1,678.2	6,308.7	6,123.2	185.46	34.017		
16,700.0	7,530.0	7,789.3	7,512.0	162.3	34.8	90.00	-3,011.4	-1,678.2	6,404.0	6,216.8	187.21	34.208		
16,800.0	7,530.0	7,789.3	7,512.0	164.0	34.8	90.00	-3,011.4	-1,678.2	6,499.4	6,310.5	188.96	34.397		
16,900.0	7,530.0	7,789.3	7,512.0	165.8	34.8	90.00	-3,011.4	-1,678.2	6,595.0	6,404.3	190.70	34.583		
17,000.0	7,530.0	7,789.3	7,512.0	167.5	34.8	90.00	-3,011.4	-1,678.2	6,690.7	6,498.3	192.45	34.766		
17,100.0	7,530.0	7,789.3	7,512.0	169.3	34.8	90.00	-3,011.4	-1,678.2	6,786.6	6,592.4	194.20	34.946		
17,200.0	7,530.0	7,789.3	7,512.0	171.0	34.8	90.00	-3,011.4	-1,678.2	6,882.5	6,686.6	195.95	35.124		
17,300.0	7,530.0	7,789.3	7,512.0	172.8	34.8	90.00	-3,011.4	-1,678.2	6,978.6	6,780.9	197.70	35.299		
17,400.0	7,530.0	7,789.3	7,512.0	174.5	34.8	90.00	-3,011.4	-1,678.2	7,074.8	6,875.3	199.45	35.472		
17,420.9	7,530.0	7,789.3	7,512.0	174.9	34.8	90.00	-3,011.4	-1,678.2	7,094.9	6,895.1	199.81	35.508		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	1,626.0	1,586.8	0.0	6.2	-145.00	-4,004.0	-2,803.5	5,144.7					
100.0	100.0	1,720.8	1,676.6	0.2	6.7	-145.08	-3,984.0	-2,780.8	5,113.5	5,107.9	5.55	920.699		
200.0	200.0	1,815.5	1,766.4	0.3	7.3	-145.17	-3,963.9	-2,758.1	5,082.3	5,076.1	6.15	826.107		
300.0	300.0	1,910.2	1,856.1	0.5	7.9	-145.26	-3,943.9	-2,735.3	5,051.1	5,044.4	6.75	748.057		
400.0	400.0	2,005.0	1,945.9	0.7	8.4	-145.34	-3,923.8	-2,712.6	5,020.0	5,012.6	7.35	682.577		
500.0	500.0	2,099.7	2,035.6	0.8	9.0	-145.43	-3,903.7	-2,689.9	4,988.8	4,980.9	7.96	626.869		
600.0	600.0	2,194.5	2,125.4	1.0	9.5	-145.52	-3,883.7	-2,667.1	4,957.7	4,949.1	8.56	578.906		
700.0	700.0	2,289.5	2,215.4	1.2	10.1	-178.10	-3,863.6	-2,644.3	4,927.4	4,921.5	5.87	838.907		
800.0	800.0	2,385.0	2,305.9	1.4	10.7	-178.20	-3,843.4	-2,621.4	4,898.8	4,892.5	6.27	780.714		
900.0	899.9	2,481.0	2,396.8	1.6	11.3	-178.30	-3,823.0	-2,598.4	4,871.8	4,865.2	6.68	729.577		
988.4	988.1	2,566.2	2,477.6	1.7	11.8	-178.39	-3,805.0	-2,577.9	4,849.4	4,842.4	7.04	689.326		
1,000.0	999.7	2,577.4	2,488.2	1.7	11.8	-178.40	-3,802.6	-2,575.2	4,846.6	4,839.5	7.08	684.399		
1,100.0	1,099.4	2,674.0	2,579.7	1.9	12.4	-178.50	-3,782.2	-2,552.0	4,822.0	4,814.5	7.48	644.398		
1,200.0	1,199.2	2,770.6	2,671.2	2.1	13.0	-178.60	-3,761.7	-2,528.9	4,797.5	4,789.6	7.89	608.368		
1,300.0	1,299.0	2,867.2	2,762.8	2.3	13.6	-178.70	-3,741.3	-2,505.7	4,772.9	4,764.6	8.29	575.747		
1,400.0	1,398.8	2,963.8	2,854.3	2.5	14.1	-178.80	-3,720.8	-2,482.5	4,748.4	4,739.7	8.70	546.072		
1,500.0	1,498.5	3,060.4	2,945.8	2.7	14.7	-178.90	-3,700.4	-2,459.3	4,723.9	4,714.8	9.10	518.963		
1,600.0	1,598.3	3,157.0	3,037.4	2.9	15.3	-179.00	-3,679.9	-2,436.1	4,699.4	4,689.9	9.51	494.100		
1,700.0	1,698.1	3,253.6	3,128.9	3.2	15.9	-179.10	-3,659.5	-2,412.9	4,674.9	4,665.0	9.92	471.216		
1,800.0	1,797.8	3,350.3	3,220.4	3.4	16.5	-179.21	-3,639.0	-2,389.7	4,650.4	4,640.1	10.33	450.084		
1,900.0	1,897.6	3,446.9	3,311.9	3.6	17.0	-179.31	-3,618.6	-2,366.6	4,626.0	4,615.2	10.75	430.510		
2,000.0	1,997.4	3,543.5	3,403.5	3.8	17.6	-179.42	-3,598.1	-2,343.4	4,601.5	4,590.4	11.16	412.329		
2,100.0	2,097.1	3,640.1	3,495.0	4.0	18.2	-179.53	-3,577.7	-2,320.2	4,577.1	4,565.5	11.58	395.396		
2,200.0	2,196.9	3,736.7	3,586.5	4.2	18.8	-179.64	-3,557.2	-2,297.0	4,552.7	4,540.7	11.99	379.589		
2,300.0	2,296.7	3,833.3	3,678.0	4.4	19.3	-179.75	-3,536.8	-2,273.8	4,528.3	4,515.9	12.41	364.798		
2,400.0	2,396.5	3,929.9	3,769.6	4.6	19.9	-179.86	-3,516.3	-2,250.6	4,503.9	4,491.1	12.83	350.929		
2,500.0	2,496.2	4,026.5	3,861.1	4.8	20.5	-179.97	-3,495.9	-2,227.5	4,479.5	4,466.3	13.26	337.898		
2,600.0	2,596.0	4,123.1	3,952.6	5.0	21.1	179.92	-3,475.4	-2,204.3	4,455.2	4,441.5	13.68	325.632		
2,700.0	2,695.8	4,219.7	4,044.1	5.2	21.7	179.80	-3,455.0	-2,181.1	4,430.9	4,416.7	14.11	314.066		
2,800.0	2,795.5	4,316.3	4,135.7	5.4	22.2	179.68	-3,434.5	-2,157.9	4,406.5	4,392.0	14.54	303.141		
2,900.0	2,895.3	4,412.9	4,227.2	5.6	22.8	179.57	-3,414.1	-2,134.7	4,382.2	4,367.3	14.97	292.806		
3,000.0	2,995.1	4,509.5	4,318.7	5.9	23.4	179.45	-3,393.6	-2,111.5	4,358.0	4,342.6	15.40	283.015		
3,100.0	3,094.9	4,606.1	4,410.2	6.1	24.0	179.33	-3,373.2	-2,088.3	4,333.7	4,317.9	15.83	273.725		
3,200.0	3,194.6	4,702.7	4,501.8	6.3	24.6	179.21	-3,352.7	-2,065.2	4,309.5	4,293.2	16.27	264.900		
3,300.0	3,294.4	4,799.3	4,593.3	6.5	25.1	179.08	-3,332.3	-2,042.0	4,285.2	4,268.5	16.71	256.505		
3,400.0	3,394.2	4,896.0	4,684.8	6.7	25.7	178.96	-3,311.8	-2,018.8	4,261.0	4,243.9	17.15	248.510		
3,500.0	3,493.9	4,992.6	4,776.3	6.9	26.3	178.83	-3,291.4	-1,995.6	4,236.8	4,219.2	17.59	240.887		
3,600.0	3,593.7	5,089.2	4,867.9	7.1	26.9	178.71	-3,270.9	-1,972.4	4,212.7	4,194.6	18.03	233.612		
3,700.0	3,693.5	5,185.8	4,959.4	7.3	27.5	178.58	-3,250.5	-1,949.2	4,188.5	4,170.0	18.48	226.660		
3,800.0	3,793.2	5,282.4	5,050.9	7.5	28.0	178.45	-3,230.0	-1,926.1	4,164.4	4,145.5	18.93	220.011		
3,900.0	3,893.0	5,379.0	5,142.5	7.7	28.6	178.32	-3,209.6	-1,902.9	4,140.3	4,120.9	19.38	213.646		
4,000.0	3,992.8	5,475.6	5,234.0	8.0	29.2	178.19	-3,189.1	-1,879.7	4,116.2	4,096.4	19.83	207.547		
4,100.0	4,092.6	5,572.2	5,325.5	8.2	29.8	178.05	-3,168.7	-1,856.5	4,092.1	4,071.9	20.29	201.698		
4,200.0	4,192.3	5,668.8	5,417.0	8.4	30.4	177.91	-3,148.2	-1,833.3	4,068.1	4,047.4	20.75	196.084		
4,300.0	4,292.1	5,765.4	5,508.6	8.6	30.9	177.78	-3,127.8	-1,810.1	4,044.1	4,022.9	21.21	190.691		
4,400.0	4,391.9	5,844.2	5,583.2	8.8	31.4	177.66	-3,111.1	-1,791.2	4,020.1	3,998.5	21.62	185.966		
4,500.0	4,491.6	5,900.0	5,636.2	9.0	31.7	177.59	-3,099.6	-1,778.2	3,997.0	3,975.1	21.95	182.060		
4,600.0	4,591.4	5,935.2	5,669.8	9.2	31.9	177.54	-3,092.7	-1,770.4	3,975.3	3,953.1	22.23	178.856		
4,700.0	4,691.2	6,000.0	5,732.1	9.4	32.2	177.46	-3,080.8	-1,756.9	3,955.2	3,932.6	22.58	175.169		
4,800.0	4,790.9	6,000.0	5,732.1	9.6	32.2	177.46	-3,080.8	-1,756.9	3,936.2	3,913.4	22.75	172.990		
4,900.0	4,890.7	6,062.3	5,792.3	9.8	32.5	177.38	-3,070.2	-1,744.8	3,918.5	3,895.5	23.09	169.710		
5,000.0	4,990.5	6,100.0	5,828.9	10.1	32.7	177.34	-3,064.2	-1,738.0	3,902.4	3,879.1	23.36	167.047		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla												Offset Site Error: 0.0 ft	
Survey Program: O-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.3	6,148.2	5,875.8	10.3	32.9	177.29	-3,056.9	-1,729.8	3,887.7	3,864.0	23.65	164.370	
5,200.0	5,190.0	6,200.0	5,926.5	10.5	33.1	177.24	-3,049.8	-1,721.7	3,874.4	3,850.5	23.95	161.769	
5,300.0	5,289.8	6,235.0	5,960.8	10.7	33.2	177.21	-3,045.3	-1,716.6	3,862.6	3,838.4	24.20	159.589	
5,400.0	5,389.6	6,300.0	6,024.8	10.9	33.4	177.16	-3,037.7	-1,708.0	3,852.3	3,827.8	24.52	157.101	
5,500.0	5,489.3	6,300.0	6,024.8	11.1	33.4	177.16	-3,037.7	-1,708.0	3,843.3	3,818.6	24.70	155.626	
5,600.0	5,589.1	6,366.3	6,090.3	11.3	33.6	177.11	-3,030.9	-1,700.3	3,835.6	3,810.6	25.01	153.393	
5,700.0	5,688.9	6,400.0	6,123.7	11.5	33.7	177.09	-3,027.8	-1,696.9	3,829.6	3,804.3	25.25	151.682	
5,800.0	5,788.7	6,454.4	6,177.7	11.7	33.8	177.06	-3,023.5	-1,691.9	3,824.9	3,799.4	25.52	149.865	
5,900.0	5,888.4	6,500.0	6,223.0	11.9	33.9	177.04	-3,020.3	-1,688.3	3,821.8	3,796.0	25.78	148.246	
6,000.0	5,988.2	6,542.8	6,265.6	12.2	34.0	177.02	-3,017.8	-1,685.4	3,820.1	3,794.1	26.03	146.780	
6,063.1	6,051.1	6,570.7	6,293.5	12.3	34.0	177.01	-3,016.4	-1,683.8	3,819.8	3,793.6	26.18	145.894	
6,100.0	6,088.0	6,600.0	6,322.7	12.4	34.0	177.01	-3,015.1	-1,682.4	3,819.9	3,793.6	26.29	145.278	
6,200.0	6,187.7	6,631.2	6,353.9	12.6	34.1	177.00	-3,013.9	-1,681.0	3,821.1	3,794.5	26.51	144.112	
6,300.0	6,287.5	6,700.0	6,422.6	12.8	34.1	176.99	-3,012.1	-1,679.0	3,823.9	3,797.1	26.79	142.745	
6,400.0	6,387.3	6,700.0	6,422.6	13.0	34.1	176.99	-3,012.1	-1,679.0	3,828.0	3,801.0	26.96	141.971	
6,500.0	6,487.0	6,777.4	6,500.0	13.2	34.2	176.99	-3,011.4	-1,678.2	3,833.5	3,806.3	27.24	140.737	
6,600.0	6,586.8	6,846.2	6,568.8	13.4	34.2	176.99	-3,011.4	-1,678.2	3,840.1	3,812.6	27.50	139.629	
6,700.0	6,686.6	6,946.0	6,668.6	13.6	34.3	177.00	-3,011.4	-1,678.2	3,846.9	3,819.1	27.81	138.345	
6,787.0	6,773.4	7,032.8	6,755.4	13.8	34.4	177.00	-3,011.4	-1,678.2	3,852.8	3,824.7	28.07	137.248	
6,800.0	6,786.4	7,045.8	6,768.4	13.8	34.4	166.44	-3,011.4	-1,678.2	3,853.6	3,825.5	28.11	137.097	
6,850.0	6,836.3	7,095.7	6,818.3	13.9	34.4	79.30	-3,011.4	-1,678.2	3,854.6	3,826.5	28.14	136.974	
6,900.0	6,886.2	7,145.6	6,868.2	14.0	34.4	49.56	-3,011.4	-1,678.2	3,852.7	3,824.7	28.01	137.564	
6,950.0	6,935.7	7,195.1	6,917.7	14.0	34.5	42.01	-3,011.4	-1,678.2	3,847.7	3,820.0	27.71	138.868	
7,000.0	6,984.6	7,244.0	6,966.6	14.0	34.5	39.02	-3,011.4	-1,678.2	3,839.7	3,812.5	27.26	140.880	
7,050.0	7,032.6	7,292.1	7,014.7	14.0	34.5	37.70	-3,011.4	-1,678.2	3,828.8	3,802.2	26.66	143.591	
7,100.0	7,079.7	7,339.1	7,061.7	13.9	34.5	37.25	-3,011.4	-1,678.2	3,815.0	3,789.1	25.96	146.962	
7,150.0	7,125.4	7,384.8	7,107.4	13.9	34.6	37.35	-3,011.4	-1,678.2	3,798.4	3,773.3	25.17	150.898	
7,200.0	7,169.6	7,429.0	7,151.6	13.8	34.6	37.88	-3,011.4	-1,678.2	3,779.1	3,754.8	24.35	155.183	
7,250.0	7,212.1	7,471.5	7,194.1	13.8	34.6	38.77	-3,011.4	-1,678.2	3,757.2	3,733.7	23.57	159.414	
7,300.0	7,252.6	7,512.0	7,234.6	13.7	34.7	39.99	-3,011.4	-1,678.2	3,732.9	3,710.0	22.92	162.900	
7,350.0	7,291.0	7,550.4	7,273.0	13.7	34.7	41.55	-3,011.4	-1,678.2	3,706.2	3,683.7	22.51	164.650	
7,400.0	7,327.1	7,586.5	7,309.1	13.7	34.7	43.45	-3,011.4	-1,678.2	3,677.3	3,654.8	22.48	163.585	
7,450.0	7,360.7	7,620.1	7,342.7	13.7	34.7	45.71	-3,011.4	-1,678.2	3,646.4	3,623.5	22.93	159.024	
7,500.0	7,391.6	7,651.0	7,373.6	13.7	34.8	48.36	-3,011.4	-1,678.2	3,613.7	3,589.8	23.90	151.168	
7,550.0	7,419.7	7,679.1	7,401.7	13.8	34.8	51.42	-3,011.4	-1,678.2	3,579.3	3,553.9	25.38	141.050	
7,600.0	7,444.8	7,704.3	7,426.8	13.9	34.8	54.91	-3,011.4	-1,678.2	3,543.4	3,516.1	27.26	129.997	
7,650.0	7,466.9	7,726.3	7,448.9	14.1	34.8	58.86	-3,011.4	-1,678.2	3,506.2	3,476.8	29.43	119.133	
7,700.0	7,485.8	7,745.2	7,467.8	14.3	34.8	63.24	-3,011.4	-1,678.2	3,468.0	3,436.2	31.76	109.201	
7,750.0	7,501.5	7,760.9	7,483.5	14.6	34.8	68.04	-3,011.4	-1,678.2	3,428.9	3,394.8	34.08	100.601	
7,800.0	7,513.7	7,773.2	7,495.8	14.9	34.8	73.19	-3,011.4	-1,678.2	3,389.1	3,352.9	36.25	93.492	
7,850.0	7,522.6	7,782.0	7,504.6	15.2	34.8	78.59	-3,011.4	-1,678.2	3,348.9	3,310.8	38.10	87.887	
7,900.0	7,528.0	7,787.5	7,510.1	15.6	34.8	84.14	-3,011.4	-1,678.2	3,308.5	3,269.0	39.53	83.705	
7,952.9	7,530.0	7,789.4	7,512.0	16.1	34.8	90.00	-3,011.4	-1,678.2	3,265.6	3,225.2	40.48	80.680	
8,000.0	7,530.0	7,789.4	7,512.0	16.5	34.8	90.00	-3,011.4	-1,678.2	3,227.7	3,186.8	40.93	78.857	
8,100.0	7,530.0	7,789.4	7,512.0	17.5	34.8	90.00	-3,011.4	-1,678.2	3,148.0	3,106.0	41.99	74.967	
8,200.0	7,530.0	7,789.4	7,512.0	18.7	34.8	90.00	-3,011.4	-1,678.2	3,069.5	3,026.3	43.16	71.119	
8,300.0	7,530.0	7,789.4	7,512.0	19.9	34.8	90.00	-3,011.4	-1,678.2	2,992.2	2,947.8	44.42	67.368	
8,400.0	7,530.0	7,789.4	7,512.0	21.2	34.8	90.00	-3,011.4	-1,678.2	2,916.3	2,870.6	45.74	63.752	
8,500.0	7,530.0	7,789.4	7,512.0	22.6	34.8	90.00	-3,011.4	-1,678.2	2,841.9	2,794.8	47.13	60.296	
8,600.0	7,530.0	7,789.4	7,512.0	24.0	34.8	90.00	-3,011.4	-1,678.2	2,769.1	2,720.6	48.57	57.014	
8,700.0	7,530.0	7,789.4	7,512.0	25.4	34.8	90.00	-3,011.4	-1,678.2	2,698.1	2,648.1	50.05	53.912	
8,800.0	7,530.0	7,789.4	7,512.0	26.9	34.8	90.00	-3,011.4	-1,678.2	2,629.0	2,577.4	51.56	50.991	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla											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	
8,900.0	7,530.0	7,789.4	7,512.0	28.4	34.8	90.00	-3,011.4	-1,678.2	2,561.8	2,508.7	53.10	48.249	
9,000.0	7,530.0	7,789.4	7,512.0	30.0	34.8	90.00	-3,011.4	-1,678.2	2,496.9	2,442.3	54.66	45.681	
9,100.0	7,530.0	7,789.4	7,512.0	31.5	34.8	90.00	-3,011.4	-1,678.2	2,434.4	2,378.2	56.24	43.284	
9,200.0	7,530.0	7,789.4	7,512.0	33.1	34.8	90.00	-3,011.4	-1,678.2	2,374.4	2,316.6	57.84	41.049	
9,300.0	7,530.0	7,789.4	7,512.0	34.7	34.8	90.00	-3,011.4	-1,678.2	2,317.2	2,257.8	59.46	38.972	
9,400.0	7,530.0	7,789.4	7,512.0	36.3	34.8	90.00	-3,011.4	-1,678.2	2,263.0	2,201.9	61.09	37.045	
9,500.0	7,530.0	7,789.4	7,512.0	38.0	34.8	90.00	-3,011.4	-1,678.2	2,212.0	2,149.3	62.73	35.263	
9,600.0	7,530.0	7,789.4	7,512.0	39.6	34.8	90.00	-3,011.4	-1,678.2	2,164.4	2,100.0	64.38	33.620	
9,700.0	7,530.0	7,789.4	7,512.0	41.3	34.8	90.00	-3,011.4	-1,678.2	2,120.4	2,054.4	66.04	32.110	
9,800.0	7,530.0	7,789.4	7,512.0	42.9	34.8	90.00	-3,011.4	-1,678.2	2,080.3	2,012.6	67.70	30.728	
9,900.0	7,530.0	7,789.4	7,512.0	44.6	34.8	90.00	-3,011.4	-1,678.2	2,044.4	1,975.0	69.37	29.469	
10,000.0	7,530.0	7,789.4	7,512.0	46.3	34.8	90.00	-3,011.4	-1,678.2	2,012.7	1,941.7	71.05	28.327	
10,100.0	7,530.0	7,789.4	7,512.0	47.9	34.8	90.00	-3,011.4	-1,678.2	1,985.6	1,912.9	72.74	27.299	
10,200.0	7,530.0	7,789.4	7,512.0	49.6	34.8	90.00	-3,011.4	-1,678.2	1,963.3	1,888.8	74.43	26.378	
10,300.0	7,530.0	7,789.4	7,512.0	51.3	34.8	90.00	-3,011.4	-1,678.2	1,945.8	1,869.7	76.12	25.562	
10,400.0	7,530.0	7,789.4	7,512.0	53.0	34.8	90.00	-3,011.4	-1,678.2	1,933.3	1,855.5	77.82	24.844	
10,500.0	7,530.0	7,789.4	7,512.0	54.7	34.8	90.00	-3,011.4	-1,678.2	1,926.0	1,846.4	79.52	24.220	
10,591.8	7,530.0	7,789.4	7,512.0	56.3	34.8	90.00	-3,011.4	-1,678.2	1,923.8	1,842.7	81.08	23.726 CC	
10,600.0	7,530.0	7,789.4	7,512.0	56.4	34.8	90.00	-3,011.4	-1,678.2	1,923.8	1,842.6	81.22	23.685 ES	
10,700.0	7,530.0	7,789.4	7,512.0	58.1	34.8	90.00	-3,011.4	-1,678.2	1,926.8	1,843.9	82.93	23.234	
10,800.0	7,530.0	7,789.4	7,512.0	59.8	34.8	90.00	-3,011.4	-1,678.2	1,935.0	1,850.4	84.64	22.862	
10,900.0	7,530.0	7,789.4	7,512.0	61.5	34.8	90.00	-3,011.4	-1,678.2	1,948.3	1,861.9	86.35	22.562	
11,000.0	7,530.0	7,789.4	7,512.0	63.2	34.8	90.00	-3,011.4	-1,678.2	1,966.6	1,878.5	88.07	22.331	
11,100.0	7,530.0	7,789.4	7,512.0	64.9	34.8	90.00	-3,011.4	-1,678.2	1,989.8	1,900.0	89.78	22.162	
11,200.0	7,530.0	7,789.4	7,512.0	66.6	34.8	90.00	-3,011.4	-1,678.2	2,017.6	1,926.1	91.50	22.050	
11,300.0	7,530.0	7,789.4	7,512.0	68.4	34.8	90.00	-3,011.4	-1,678.2	2,050.0	1,956.8	93.22	21.990	
11,400.0	7,530.0	7,789.4	7,512.0	70.1	34.8	90.00	-3,011.4	-1,678.2	2,086.6	1,991.7	94.95	21.977 SF	
11,500.0	7,530.0	7,789.4	7,512.0	71.8	34.8	90.00	-3,011.4	-1,678.2	2,127.4	2,030.7	96.67	22.007	
11,600.0	7,530.0	7,789.4	7,512.0	73.5	34.8	90.00	-3,011.4	-1,678.2	2,171.9	2,073.6	98.39	22.074	
11,700.0	7,530.0	7,789.4	7,512.0	75.2	34.8	90.00	-3,011.4	-1,678.2	2,220.1	2,120.0	100.12	22.175	
11,800.0	7,530.0	7,789.4	7,512.0	77.0	34.8	90.00	-3,011.4	-1,678.2	2,271.7	2,169.9	101.85	22.305	
11,900.0	7,530.0	7,789.4	7,512.0	78.7	34.8	90.00	-3,011.4	-1,678.2	2,326.4	2,222.9	103.58	22.461	
12,000.0	7,530.0	7,789.4	7,512.0	80.4	34.8	90.00	-3,011.4	-1,678.2	2,384.1	2,278.8	105.31	22.639	
12,100.0	7,530.0	7,789.4	7,512.0	82.2	34.8	90.00	-3,011.4	-1,678.2	2,444.5	2,337.5	107.04	22.838	
12,200.0	7,530.0	7,789.4	7,512.0	83.9	34.8	90.00	-3,011.4	-1,678.2	2,507.4	2,398.7	108.77	23.052	
12,300.0	7,530.0	7,789.4	7,512.0	85.6	34.8	90.00	-3,011.4	-1,678.2	2,572.7	2,462.2	110.50	23.282	
12,400.0	7,530.0	7,789.4	7,512.0	87.3	34.8	90.00	-3,011.4	-1,678.2	2,640.2	2,527.9	112.24	23.523	
12,500.0	7,530.0	7,789.4	7,512.0	89.1	34.8	90.00	-3,011.4	-1,678.2	2,709.6	2,595.7	113.97	23.775	
12,600.0	7,530.0	7,789.4	7,512.0	90.8	34.8	90.00	-3,011.4	-1,678.2	2,781.0	2,665.3	115.71	24.035	
12,700.0	7,530.0	7,789.4	7,512.0	92.5	34.8	90.00	-3,011.4	-1,678.2	2,854.0	2,736.6	117.44	24.301	
12,800.0	7,530.0	7,789.4	7,512.0	94.3	34.8	90.00	-3,011.4	-1,678.2	2,928.7	2,809.5	119.18	24.573	
12,900.0	7,530.0	7,789.4	7,512.0	96.0	34.8	90.00	-3,011.4	-1,678.2	3,004.8	2,883.9	120.92	24.850	
13,000.0	7,530.0	7,789.4	7,512.0	97.8	34.8	90.00	-3,011.4	-1,678.2	3,082.3	2,959.6	122.65	25.130	
13,100.0	7,530.0	7,789.4	7,512.0	99.5	34.8	90.00	-3,011.4	-1,678.2	3,161.0	3,036.6	124.39	25.411	
13,200.0	7,530.0	7,789.4	7,512.0	101.2	34.8	90.00	-3,011.4	-1,678.2	3,240.9	3,114.8	126.13	25.695	
13,300.0	7,530.0	7,789.4	7,512.0	103.0	34.8	90.00	-3,011.4	-1,678.2	3,321.9	3,194.1	127.87	25.979	
13,400.0	7,530.0	7,789.4	7,512.0	104.7	34.8	90.00	-3,011.4	-1,678.2	3,404.0	3,274.3	129.61	26.263	
13,500.0	7,530.0	7,789.4	7,512.0	106.4	34.8	90.00	-3,011.4	-1,678.2	3,486.9	3,355.6	131.35	26.546	
13,600.0	7,530.0	7,789.4	7,512.0	108.2	34.8	90.00	-3,011.4	-1,678.2	3,570.7	3,437.6	133.09	26.829	
13,700.0	7,530.0	7,789.4	7,512.0	109.9	34.8	90.00	-3,011.4	-1,678.2	3,655.4	3,520.5	134.83	27.110	
13,800.0	7,530.0	7,789.4	7,512.0	111.7	34.8	90.00	-3,011.4	-1,678.2	3,740.8	3,604.2	136.58	27.390	
13,900.0	7,530.0	7,789.4	7,512.0	113.4	34.8	90.00	-3,011.4	-1,678.2	3,826.9	3,688.6	138.32	27.667	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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 - Pla													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	7,789.4	7,512.0	115.1	34.8	90.00	-3,011.4	-1,678.2	3,913.7	3,773.6	140.06	27.943		
14,100.0	7,530.0	7,789.4	7,512.0	116.9	34.8	90.00	-3,011.4	-1,678.2	4,001.0	3,859.2	141.80	28.215		
14,200.0	7,530.0	7,789.4	7,512.0	118.6	34.8	90.00	-3,011.4	-1,678.2	4,089.0	3,945.5	143.55	28.486		
14,300.0	7,530.0	7,789.4	7,512.0	120.4	34.8	90.00	-3,011.4	-1,678.2	4,177.5	4,032.2	145.29	28.753		
14,400.0	7,530.0	7,789.4	7,512.0	122.1	34.8	90.00	-3,011.4	-1,678.2	4,266.5	4,119.5	147.03	29.017		
14,500.0	7,530.0	7,789.4	7,512.0	123.9	34.8	90.00	-3,011.4	-1,678.2	4,356.0	4,207.2	148.78	29.279		
14,600.0	7,530.0	7,789.4	7,512.0	125.6	34.8	90.00	-3,011.4	-1,678.2	4,446.0	4,295.4	150.52	29.537		
14,700.0	7,530.0	7,789.4	7,512.0	127.3	34.8	90.00	-3,011.4	-1,678.2	4,536.3	4,384.1	152.27	29.792		
14,800.0	7,530.0	7,789.4	7,512.0	129.1	34.8	90.00	-3,011.4	-1,678.2	4,627.1	4,473.1	154.01	30.044		
14,900.0	7,530.0	7,789.4	7,512.0	130.8	34.8	90.00	-3,011.4	-1,678.2	4,718.2	4,562.5	155.76	30.292		
15,000.0	7,530.0	7,789.4	7,512.0	132.6	34.8	90.00	-3,011.4	-1,678.2	4,809.7	4,652.2	157.50	30.537		
15,100.0	7,530.0	7,789.4	7,512.0	134.3	34.8	90.00	-3,011.4	-1,678.2	4,901.5	4,742.3	159.25	30.779		
15,200.0	7,530.0	7,789.4	7,512.0	136.1	34.8	90.00	-3,011.4	-1,678.2	4,993.6	4,832.6	160.99	31.018		
15,300.0	7,530.0	7,789.4	7,512.0	137.8	34.8	90.00	-3,011.4	-1,678.2	5,086.1	4,923.3	162.74	31.253		
15,400.0	7,530.0	7,789.4	7,512.0	139.6	34.8	90.00	-3,011.4	-1,678.2	5,178.8	5,014.3	164.49	31.485		
15,500.0	7,530.0	7,789.4	7,512.0	141.3	34.8	90.00	-3,011.4	-1,678.2	5,271.7	5,105.5	166.23	31.713		
15,600.0	7,530.0	7,789.4	7,512.0	143.0	34.8	90.00	-3,011.4	-1,678.2	5,365.0	5,197.0	167.98	31.938		
15,700.0	7,530.0	7,789.4	7,512.0	144.8	34.8	90.00	-3,011.4	-1,678.2	5,458.4	5,288.7	169.73	32.160		
15,800.0	7,530.0	7,789.4	7,512.0	146.5	34.8	90.00	-3,011.4	-1,678.2	5,552.1	5,380.7	171.47	32.379		
15,900.0	7,530.0	7,789.4	7,512.0	148.3	34.8	90.00	-3,011.4	-1,678.2	5,646.1	5,472.8	173.22	32.595		
16,000.0	7,530.0	7,789.4	7,512.0	150.0	34.8	90.00	-3,011.4	-1,678.2	5,740.2	5,565.2	174.97	32.807		
16,100.0	7,530.0	7,789.4	7,512.0	151.8	34.8	90.00	-3,011.4	-1,678.2	5,834.5	5,657.8	176.71	33.017		
16,200.0	7,530.0	7,789.4	7,512.0	153.5	34.8	90.00	-3,011.4	-1,678.2	5,929.0	5,750.5	178.46	33.223		
16,300.0	7,530.0	7,789.4	7,512.0	155.3	34.8	90.00	-3,011.4	-1,678.2	6,023.7	5,843.4	180.21	33.426		
16,400.0	7,530.0	7,789.4	7,512.0	157.0	34.8	90.00	-3,011.4	-1,678.2	6,118.5	5,936.5	181.96	33.626		
16,500.0	7,530.0	7,789.4	7,512.0	158.8	34.8	90.00	-3,011.4	-1,678.2	6,213.5	6,029.8	183.71	33.823		
16,600.0	7,530.0	7,789.4	7,512.0	160.5	34.8	90.00	-3,011.4	-1,678.2	6,308.7	6,123.2	185.45	34.018		
16,700.0	7,530.0	7,789.4	7,512.0	162.3	34.8	90.00	-3,011.4	-1,678.2	6,404.0	6,216.8	187.20	34.209		
16,800.0	7,530.0	7,789.4	7,512.0	164.0	34.8	90.00	-3,011.4	-1,678.2	6,499.4	6,310.5	188.95	34.398		
16,900.0	7,530.0	7,789.4	7,512.0	165.8	34.8	90.00	-3,011.4	-1,678.2	6,595.0	6,404.3	190.70	34.584		
17,000.0	7,530.0	7,789.4	7,512.0	167.5	34.8	90.00	-3,011.4	-1,678.2	6,690.7	6,498.3	192.45	34.767		
17,100.0	7,530.0	7,789.4	7,512.0	169.3	34.8	90.00	-3,011.4	-1,678.2	6,786.6	6,592.4	194.20	34.947		
17,200.0	7,530.0	7,789.4	7,512.0	171.0	34.8	90.00	-3,011.4	-1,678.2	6,882.5	6,686.6	195.94	35.125		
17,300.0	7,530.0	7,789.4	7,512.0	172.8	34.8	90.00	-3,011.4	-1,678.2	6,978.6	6,780.9	197.69	35.300		
17,400.0	7,530.0	7,789.4	7,512.0	174.5	34.8	90.00	-3,011.4	-1,678.2	7,074.8	6,875.3	199.44	35.473		
17,420.9	7,530.0	7,789.4	7,512.0	174.9	34.8	90.00	-3,011.4	-1,678.2	7,094.9	6,895.1	199.81	35.509		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 59-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	1,681.2	1,630.6	0.0	7.2	-145.19	-3,959.5	-2,753.2	5,096.6					
100.0	100.0	1,754.0	1,699.3	0.2	7.6	-145.25	-3,943.5	-2,735.3	5,064.5	5,058.3	6.17	820.759		
200.0	200.0	1,834.7	1,775.6	0.3	8.1	-145.33	-3,926.0	-2,715.6	5,032.6	5,025.9	6.71	749.845		
300.0	300.0	1,944.0	1,878.9	0.5	8.8	-145.43	-3,902.1	-2,689.1	5,000.8	4,993.4	7.39	676.895		
400.0	400.0	1,998.0	1,930.0	0.7	9.1	-145.48	-3,890.4	-2,676.1	4,969.2	4,961.4	7.80	636.883		
500.0	500.0	2,051.2	1,980.4	0.8	9.4	-145.52	-3,879.2	-2,663.7	4,938.5	4,930.3	8.21	601.265		
600.0	600.0	2,177.8	2,100.7	1.0	10.1	-145.65	-3,853.3	-2,633.8	4,908.3	4,899.3	8.97	547.117		
700.0	700.0	2,293.6	2,210.3	1.2	10.8	-178.25	-3,828.8	-2,605.5	4,877.7	4,871.7	5.99	814.388		
800.0	800.0	2,382.2	2,294.1	1.4	11.4	-178.35	-3,810.2	-2,583.8	4,848.9	4,842.6	6.38	759.592		
900.0	899.9	2,456.0	2,364.1	1.6	11.8	-178.44	-3,794.8	-2,565.8	4,822.1	4,815.3	6.74	715.543		
988.4	988.1	2,515.0	2,420.1	1.7	12.2	-178.50	-3,782.6	-2,551.9	4,800.3	4,793.3	7.03	682.416		
1,000.0	999.7	2,518.1	2,423.1	1.7	12.2	-178.50	-3,782.0	-2,551.2	4,797.6	4,790.5	7.06	679.330		
1,100.0	1,099.4	2,634.8	2,533.8	1.9	12.9	-178.63	-3,758.2	-2,523.4	4,773.8	4,766.3	7.52	634.918		
1,200.0	1,199.2	2,750.9	2,644.1	2.1	13.6	-178.74	-3,733.9	-2,496.2	4,749.8	4,741.9	7.97	596.059		
1,300.0	1,299.0	2,896.0	2,781.3	2.3	14.4	-178.90	-3,703.0	-2,460.5	4,724.7	4,716.2	8.50	556.082		
1,400.0	1,398.8	2,965.5	2,847.0	2.5	14.9	-178.98	-3,687.8	-2,443.6	4,699.5	4,690.7	8.84	531.436		
1,500.0	1,498.5	3,078.7	2,954.2	2.7	15.5	-179.10	-3,663.9	-2,416.1	4,675.0	4,665.7	9.30	502.951		
1,600.0	1,598.3	3,221.7	3,089.0	2.9	16.4	-179.25	-3,632.2	-2,380.9	4,649.2	4,639.3	9.82	473.302		
1,700.0	1,698.1	3,276.0	3,140.2	3.2	16.8	-179.32	-3,620.2	-2,367.3	4,623.4	4,613.3	10.14	456.124		
1,800.0	1,797.8	3,347.3	3,207.6	3.4	17.2	-179.40	-3,604.9	-2,349.6	4,598.4	4,587.9	10.49	438.390		
1,900.0	1,897.6	3,405.9	3,263.2	3.6	17.5	-179.47	-3,592.7	-2,335.6	4,574.3	4,563.5	10.81	423.085		
2,000.0	1,997.4	3,473.0	3,326.9	3.8	17.9	-179.54	-3,579.1	-2,319.8	4,550.9	4,539.8	11.16	407.913		
2,100.0	2,097.1	3,605.1	3,452.4	4.0	18.7	-179.69	-3,551.7	-2,288.8	4,527.0	4,515.4	11.66	388.324		
2,200.0	2,196.9	3,695.6	3,538.4	4.2	19.2	-179.79	-3,533.0	-2,267.7	4,503.5	4,491.4	12.06	373.455		
2,300.0	2,296.7	3,836.3	3,671.7	4.4	20.1	-179.95	-3,503.5	-2,234.0	4,479.3	4,466.7	12.60	355.389		
2,400.0	2,396.5	3,978.4	3,805.9	4.6	21.0	179.87	-3,473.0	-2,198.4	4,454.0	4,440.8	13.16	338.474		
2,500.0	2,496.2	4,069.7	3,892.1	4.8	21.5	179.75	-3,452.9	-2,175.7	4,428.5	4,414.9	13.58	326.199		
2,600.0	2,596.0	4,155.1	3,972.6	5.0	22.1	179.65	-3,434.2	-2,154.5	4,403.1	4,389.1	13.98	314.925		
2,700.0	2,695.8	4,228.0	4,041.6	5.2	22.5	179.55	-3,418.7	-2,136.6	4,378.3	4,364.0	14.35	305.062		
2,800.0	2,795.5	4,304.3	4,113.8	5.4	23.0	179.46	-3,402.6	-2,118.2	4,354.1	4,339.3	14.73	295.567		
2,900.0	2,895.3	4,364.0	4,170.5	5.6	23.3	179.39	-3,390.2	-2,104.0	4,330.3	4,315.2	15.06	287.447		
3,000.0	2,995.1	4,450.0	4,252.3	5.9	23.8	179.28	-3,372.6	-2,084.1	4,307.0	4,291.6	15.47	278.453		
3,100.0	3,094.9	4,522.6	4,321.4	6.1	24.2	179.19	-3,357.9	-2,067.4	4,284.3	4,268.4	15.83	270.582		
3,200.0	3,194.6	4,704.0	4,494.0	6.3	25.3	178.98	-3,320.7	-2,025.8	4,261.5	4,245.0	16.50	258.343		
3,300.0	3,294.4	4,740.5	4,528.6	6.5	25.5	178.93	-3,313.1	-2,017.1	4,237.8	4,221.0	16.77	252.719		
3,400.0	3,394.2	4,891.2	4,671.7	6.7	26.4	178.74	-3,281.8	-1,981.7	4,214.2	4,196.9	17.36	242.767		
3,500.0	3,493.9	4,943.3	4,721.1	6.9	26.7	178.67	-3,271.0	-1,969.4	4,190.6	4,172.9	17.68	237.031		
3,600.0	3,593.7	5,042.0	4,815.0	7.1	27.3	178.54	-3,250.7	-1,946.3	4,167.3	4,149.2	18.12	229.921		
3,700.0	3,693.5	5,116.0	4,885.4	7.3	27.7	178.45	-3,235.5	-1,929.6	4,144.5	4,126.0	18.50	224.069		
3,800.0	3,793.2	5,242.5	5,005.9	7.5	28.4	178.30	-3,208.9	-1,901.3	4,121.4	4,102.4	19.01	216.841		
3,900.0	3,893.0	5,318.4	5,078.0	7.7	28.9	178.21	-3,193.1	-1,884.1	4,098.3	4,078.9	19.39	211.384		
4,000.0	3,992.8	5,370.0	5,127.2	8.0	29.2	178.15	-3,182.4	-1,872.8	4,075.9	4,056.2	19.70	206.930		
4,100.0	4,092.6	5,433.0	5,187.6	8.2	29.5	178.08	-3,170.1	-1,859.7	4,054.8	4,034.8	20.03	202.411		
4,200.0	4,192.3	5,477.9	5,230.8	8.4	29.7	178.03	-3,161.7	-1,850.7	4,034.8	4,014.5	20.32	198.531		
4,300.0	4,292.1	5,569.7	5,319.1	8.6	30.2	177.91	-3,145.3	-1,831.6	4,015.4	3,994.6	20.77	193.351		
4,400.0	4,391.9	5,631.4	5,378.3	8.8	30.5	177.82	-3,135.0	-1,817.9	3,996.3	3,975.2	21.13	189.128		
4,500.0	4,491.6	5,751.0	5,493.5	9.0	31.1	177.65	-3,114.8	-1,792.7	3,977.6	3,956.0	21.64	183.778		
4,600.0	4,591.4	5,814.0	5,554.2	9.2	31.4	177.57	-3,103.9	-1,780.2	3,959.1	3,937.1	21.99	180.054		
4,700.0	4,691.2	5,848.9	5,588.0	9.4	31.6	177.53	-3,098.3	-1,773.6	3,941.9	3,919.7	22.25	177.154		
4,800.0	4,790.9	5,906.2	5,643.7	9.6	31.8	177.47	-3,089.3	-1,763.2	3,925.9	3,903.3	22.57	173.942		
4,900.0	4,890.7	5,959.4	5,695.5	9.8	32.1	177.42	-3,081.2	-1,754.1	3,910.9	3,888.0	22.88	170.965		
5,000.0	4,990.5	6,007.7	5,742.7	10.1	32.3	177.37	-3,074.3	-1,746.4	3,897.2	3,874.0	23.17	168.233		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU											Offset Site Error:		0.0 ft
Survey Program: 59-MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.3	6,087.9	5,821.1	10.3	32.6	177.30	-3,063.1	-1,734.4	3,884.2	3,860.7	23.52	165.154	
5,200.0	5,190.0	6,131.0	5,863.4	10.5	32.7	177.27	-3,057.1	-1,728.5	3,872.2	3,848.4	23.78	162.815	
5,300.0	5,289.8	6,195.0	5,926.4	10.7	32.9	177.23	-3,049.1	-1,720.5	3,861.8	3,837.7	24.09	160.320	
5,400.0	5,389.6	6,214.8	5,946.0	10.9	33.0	177.22	-3,046.9	-1,718.3	3,852.7	3,828.4	24.30	158.540	
5,500.0	5,489.3	6,258.0	5,988.7	11.1	33.1	177.19	-3,042.5	-1,713.7	3,845.2	3,820.6	24.56	156.571	
5,600.0	5,589.1	6,322.0	6,052.1	11.3	33.3	177.16	-3,036.4	-1,707.6	3,839.0	3,814.1	24.85	154.477	
5,700.0	5,688.9	6,364.5	6,094.3	11.5	33.4	177.15	-3,032.8	-1,704.0	3,834.0	3,808.9	25.10	152.746	
5,800.0	5,788.7	6,425.8	6,155.2	11.7	33.5	177.12	-3,028.1	-1,699.4	3,830.3	3,804.9	25.38	150.919	
5,900.0	5,888.4	6,449.0	6,178.3	11.9	33.6	177.12	-3,026.3	-1,697.8	3,827.8	3,802.2	25.59	149.560	
6,000.0	5,988.2	6,522.5	6,251.5	12.2	33.7	177.10	-3,021.6	-1,693.3	3,826.2	3,800.3	25.88	147.835	
6,037.9	6,026.0	6,539.1	6,268.1	12.2	33.7	177.09	-3,020.8	-1,692.5	3,826.1	3,800.1	25.97	147.309	
6,100.0	6,088.0	6,575.0	6,303.9	12.4	33.8	177.09	-3,019.1	-1,690.9	3,826.4	3,800.3	26.14	146.404	
6,200.0	6,187.7	6,639.0	6,367.8	12.6	33.9	177.08	-3,016.6	-1,688.5	3,827.8	3,801.4	26.41	144.958	
6,300.0	6,287.5	6,702.0	6,430.8	12.8	33.9	177.07	-3,014.4	-1,686.5	3,829.9	3,803.2	26.67	143.589	
6,400.0	6,387.3	6,748.6	6,477.3	13.0	34.0	177.07	-3,013.2	-1,685.3	3,833.2	3,806.2	26.91	142.418	
6,500.0	6,487.0	6,798.0	6,526.7	13.2	34.0	177.06	-3,012.5	-1,684.4	3,837.8	3,810.7	27.16	141.301	
6,600.0	6,586.8	6,884.8	6,613.5	13.4	34.1	177.06	-3,011.8	-1,683.2	3,843.2	3,815.7	27.45	139.983	
6,700.0	6,686.6	6,950.9	6,679.6	13.6	34.1	177.06	-3,011.3	-1,683.3	3,849.3	3,821.6	27.71	138.914	
6,787.0	6,773.4	7,022.3	6,751.0	13.8	34.2	177.07	-3,011.0	-1,683.6	3,855.1	3,827.1	27.95	137.923	
6,800.0	6,786.4	7,036.8	6,765.5	13.8	34.2	166.52	-3,011.0	-1,683.6	3,855.9	3,827.9	27.99	137.761	
6,850.0	6,836.3	7,092.7	6,821.4	13.9	34.2	79.37	-3,011.0	-1,683.7	3,857.0	3,828.9	28.03	137.599	
6,900.0	6,886.2	7,143.3	6,872.0	14.0	34.3	49.64	-3,011.0	-1,683.6	3,854.9	3,827.0	27.90	138.181	
6,950.0	6,935.7	7,190.2	6,918.9	14.0	34.3	42.09	-3,010.9	-1,683.6	3,849.9	3,822.3	27.60	139.491	
7,000.0	6,984.6	7,243.5	6,972.2	14.0	34.3	39.10	-3,010.9	-1,683.6	3,842.0	3,814.8	27.15	141.491	
7,050.0	7,032.6	7,301.6	7,030.3	14.0	34.4	37.82	-3,010.7	-1,683.7	3,830.9	3,804.3	26.57	144.180	
7,100.0	7,079.7	7,354.2	7,082.9	13.9	34.4	37.41	-3,010.3	-1,683.8	3,816.9	3,791.0	25.87	147.520	
7,150.0	7,125.4	7,401.0	7,129.7	13.9	34.4	37.53	-3,010.0	-1,683.7	3,800.0	3,774.9	25.10	151.409	
7,200.0	7,169.6	7,443.7	7,172.4	13.8	34.5	38.07	-3,009.8	-1,683.6	3,780.5	3,756.2	24.29	155.608	
7,250.0	7,212.1	7,481.8	7,210.5	13.8	34.5	38.96	-3,009.6	-1,683.5	3,758.4	3,734.9	23.53	159.725	
7,300.0	7,252.6	7,518.2	7,246.9	13.7	34.5	40.17	-3,009.5	-1,683.4	3,733.9	3,711.0	22.90	163.063	
7,350.0	7,291.0	7,552.6	7,281.3	13.7	34.5	41.71	-3,009.5	-1,683.3	3,707.1	3,684.6	22.51	164.653	
7,400.0	7,327.1	7,584.8	7,313.5	13.7	34.6	43.58	-3,009.4	-1,683.3	3,678.2	3,655.7	22.50	163.462	
7,450.0	7,360.7	7,614.9	7,343.6	13.7	34.6	45.81	-3,009.4	-1,683.2	3,647.3	3,624.4	22.96	158.860	
7,500.0	7,391.6	7,642.6	7,371.3	13.7	34.6	48.42	-3,009.4	-1,683.2	3,614.6	3,590.7	23.93	151.065	
7,550.0	7,419.7	7,667.8	7,396.5	13.8	34.6	51.43	-3,009.4	-1,683.2	3,580.3	3,554.9	25.38	141.075	
7,600.0	7,444.8	7,690.4	7,419.1	13.9	34.6	54.87	-3,009.5	-1,683.3	3,544.5	3,517.3	27.23	130.163	
7,650.0	7,466.9	7,710.4	7,439.1	14.1	34.6	58.75	-3,009.5	-1,683.3	3,507.4	3,478.1	29.37	119.415	
7,700.0	7,485.8	7,729.1	7,457.8	14.3	34.7	63.10	-3,009.6	-1,683.3	3,469.3	3,437.6	31.68	109.507	
7,750.0	7,501.5	7,745.7	7,474.4	14.6	34.7	67.88	-3,009.7	-1,683.3	3,430.3	3,396.3	34.00	100.883	
7,800.0	7,513.7	7,758.8	7,487.4	14.9	34.7	73.02	-3,009.7	-1,683.3	3,390.6	3,354.4	36.17	93.748	
7,850.0	7,522.6	7,768.2	7,496.9	15.2	34.7	78.41	-3,009.7	-1,683.3	3,350.5	3,312.4	38.02	88.113	
7,900.0	7,528.0	7,774.0	7,502.7	15.6	34.7	83.94	-3,009.7	-1,683.3	3,310.1	3,270.6	39.45	83.900	
7,952.9	7,530.0	7,776.1	7,504.8	16.1	34.7	89.79	-3,009.7	-1,683.3	3,267.3	3,226.9	40.42	80.838	
8,000.0	7,530.0	7,776.2	7,504.9	16.5	34.7	89.79	-3,009.7	-1,683.3	3,229.4	3,188.5	40.87	79.011	
8,100.0	7,530.0	7,776.5	7,505.1	17.5	34.7	89.80	-3,009.7	-1,683.3	3,149.8	3,107.8	41.93	75.114	
8,200.0	7,530.0	7,776.7	7,505.4	18.7	34.7	89.80	-3,009.7	-1,683.3	3,071.3	3,028.2	43.10	71.258	
8,300.0	7,530.0	7,776.9	7,505.6	19.9	34.7	89.81	-3,009.7	-1,683.3	2,994.2	2,949.8	44.36	67.500	
8,400.0	7,530.0	7,777.1	7,505.8	21.2	34.7	89.82	-3,009.7	-1,683.3	2,918.4	2,872.7	45.69	63.878	
8,500.0	7,530.0	7,777.3	7,506.0	22.6	34.7	89.82	-3,009.7	-1,683.3	2,844.1	2,797.0	47.08	60.416	
8,600.0	7,530.0	7,777.5	7,506.2	24.0	34.7	89.83	-3,009.7	-1,683.3	2,771.5	2,722.9	48.51	57.128	
8,700.0	7,530.0	7,777.7	7,506.4	25.4	34.7	89.83	-3,009.7	-1,683.3	2,700.5	2,650.6	49.99	54.021	
8,800.0	7,530.0	7,777.9	7,506.6	26.9	34.7	89.84	-3,009.7	-1,683.3	2,631.5	2,580.0	51.50	51.096	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program:		59-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,778.1	7,506.8	28.4	34.7	89.85	-3,009.7	-1,683.3	2,564.5	2,511.5	53.04	48.350		
9,000.0	7,530.0	7,778.3	7,507.0	30.0	34.7	89.85	-3,009.7	-1,683.3	2,499.8	2,445.2	54.60	45.780		
9,100.0	7,530.0	7,778.5	7,507.2	31.5	34.7	89.86	-3,009.7	-1,683.3	2,437.4	2,381.2	56.19	43.379		
9,200.0	7,530.0	7,778.7	7,507.4	33.1	34.7	89.86	-3,009.7	-1,683.3	2,377.6	2,319.8	57.79	41.142		
9,300.0	7,530.0	7,778.9	7,507.6	34.7	34.7	89.87	-3,009.7	-1,683.3	2,320.5	2,261.1	59.41	39.063		
9,400.0	7,530.0	7,779.2	7,507.8	36.3	34.7	89.88	-3,009.7	-1,683.3	2,266.4	2,205.4	61.03	37.134		
9,500.0	7,530.0	7,779.4	7,508.0	38.0	34.7	89.88	-3,009.7	-1,683.3	2,215.6	2,152.9	62.67	35.351		
9,600.0	7,530.0	7,779.6	7,508.2	39.6	34.7	89.89	-3,009.7	-1,683.3	2,168.1	2,103.8	64.32	33.706		
9,700.0	7,530.0	7,779.7	7,508.4	41.3	34.7	89.89	-3,009.7	-1,683.3	2,124.3	2,058.3	65.98	32.195		
9,800.0	7,530.0	7,779.9	7,508.6	42.9	34.7	89.90	-3,009.7	-1,683.3	2,084.4	2,016.7	67.65	30.812		
9,900.0	7,530.0	7,780.1	7,508.8	44.6	34.7	89.91	-3,009.7	-1,683.3	2,048.6	1,979.3	69.32	29.552		
10,000.0	7,530.0	7,780.3	7,509.0	46.3	34.7	89.91	-3,009.7	-1,683.3	2,017.1	1,946.1	71.00	28.409		
10,100.0	7,530.0	7,780.5	7,509.2	47.9	34.7	89.92	-3,009.7	-1,683.3	1,990.1	1,917.4	72.69	27.380		
10,200.0	7,530.0	7,780.7	7,509.4	49.6	34.7	89.92	-3,009.7	-1,683.3	1,967.9	1,893.5	74.38	26.459		
10,300.0	7,530.0	7,780.9	7,509.6	51.3	34.7	89.93	-3,009.7	-1,683.3	1,950.5	1,874.5	76.07	25.642		
10,400.0	7,530.0	7,781.1	7,509.8	53.0	34.7	89.93	-3,009.7	-1,683.3	1,938.2	1,860.4	77.77	24.923		
10,500.0	7,530.0	7,781.3	7,510.0	54.7	34.7	89.94	-3,009.7	-1,683.3	1,930.9	1,851.5	79.47	24.298		
10,590.1	7,530.0	7,781.5	7,510.2	56.2	34.7	89.95	-3,009.7	-1,683.3	1,928.8	1,847.8	81.00	23.812 CC		
10,600.0	7,530.0	7,781.5	7,510.2	56.4	34.7	89.95	-3,009.7	-1,683.3	1,928.9	1,847.7	81.17	23.763 ES		
10,700.0	7,530.0	7,781.7	7,510.4	58.1	34.7	89.95	-3,009.7	-1,683.3	1,932.0	1,849.1	82.88	23.310		
10,800.0	7,530.0	7,781.9	7,510.6	59.8	34.7	89.96	-3,009.7	-1,683.3	1,940.2	1,855.6	84.59	22.937		
10,900.0	7,530.0	7,782.1	7,510.7	61.5	34.7	89.96	-3,009.7	-1,683.3	1,953.6	1,867.3	86.30	22.636		
11,000.0	7,530.0	7,782.2	7,510.9	63.2	34.7	89.97	-3,009.7	-1,683.3	1,971.9	1,883.9	88.02	22.404		
11,100.0	7,530.0	7,782.4	7,511.1	64.9	34.7	89.97	-3,009.7	-1,683.3	1,995.1	1,905.4	89.73	22.233		
11,200.0	7,530.0	7,782.6	7,511.3	66.6	34.7	89.98	-3,009.7	-1,683.3	2,023.0	1,931.5	91.45	22.120		
11,300.0	7,530.0	7,782.8	7,511.5	68.4	34.7	89.98	-3,009.7	-1,683.3	2,055.3	1,962.1	93.17	22.059		
11,400.0	7,530.0	7,783.0	7,511.7	70.1	34.7	89.99	-3,009.7	-1,683.3	2,092.0	1,997.1	94.90	22.045 SF		
11,500.0	7,530.0	7,783.2	7,511.9	71.8	34.7	90.00	-3,009.8	-1,683.3	2,132.7	2,036.0	96.62	22.073		
11,600.0	7,530.0	7,783.3	7,512.0	73.5	34.7	90.00	-3,009.8	-1,683.3	2,177.2	2,078.9	98.35	22.138		
11,700.0	7,530.0	7,783.5	7,512.2	75.2	34.7	90.01	-3,009.8	-1,683.3	2,225.4	2,125.3	100.07	22.237		
11,800.0	7,530.0	7,783.7	7,512.4	77.0	34.7	90.01	-3,009.8	-1,683.3	2,276.9	2,175.1	101.80	22.366		
11,900.0	7,530.0	7,783.9	7,512.6	78.7	34.7	90.02	-3,009.8	-1,683.3	2,331.6	2,228.0	103.53	22.521		
12,000.0	7,530.0	7,784.1	7,512.8	80.4	34.7	90.02	-3,009.8	-1,683.3	2,389.2	2,283.9	105.26	22.698		
12,100.0	7,530.0	7,784.2	7,512.9	82.2	34.7	90.03	-3,009.8	-1,683.3	2,449.5	2,342.5	106.99	22.894		
12,200.0	7,530.0	7,784.4	7,513.1	83.9	34.7	90.03	-3,009.8	-1,683.3	2,512.4	2,403.7	108.72	23.108		
12,300.0	7,530.0	7,784.6	7,513.3	85.6	34.7	90.04	-3,009.8	-1,683.3	2,577.6	2,467.1	110.46	23.336		
12,400.0	7,530.0	7,784.8	7,513.5	87.3	34.7	90.04	-3,009.8	-1,683.3	2,645.0	2,532.8	112.19	23.576		
12,500.0	7,530.0	7,784.9	7,513.6	89.1	34.7	90.05	-3,009.8	-1,683.3	2,714.4	2,600.5	113.93	23.826		
12,600.0	7,530.0	7,785.1	7,513.8	90.8	34.7	90.05	-3,009.8	-1,683.3	2,785.7	2,670.0	115.66	24.085		
12,700.0	7,530.0	7,785.3	7,514.0	92.5	34.7	90.06	-3,009.8	-1,683.3	2,858.7	2,741.3	117.40	24.350		
12,800.0	7,530.0	7,785.5	7,514.1	94.3	34.7	90.06	-3,009.8	-1,683.3	2,933.2	2,814.1	119.13	24.621		
12,900.0	7,530.0	7,785.6	7,514.3	96.0	34.7	90.07	-3,009.8	-1,683.3	3,009.3	2,888.4	120.87	24.897		
13,000.0	7,530.0	7,785.8	7,514.5	97.8	34.7	90.07	-3,009.8	-1,683.3	3,086.7	2,964.1	122.61	25.175		
13,100.0	7,530.0	7,786.0	7,514.7	99.5	34.7	90.08	-3,009.8	-1,683.3	3,165.4	3,041.1	124.35	25.456		
13,200.0	7,530.0	7,786.1	7,514.8	101.2	34.7	90.08	-3,009.8	-1,683.3	3,245.3	3,119.2	126.09	25.738		
13,300.0	7,530.0	7,786.3	7,515.0	103.0	34.7	90.09	-3,009.8	-1,683.3	3,326.2	3,198.4	127.83	26.021		
13,400.0	7,530.0	7,786.5	7,515.2	104.7	34.7	90.09	-3,009.8	-1,683.3	3,408.2	3,278.6	129.57	26.304		
13,500.0	7,530.0	7,786.6	7,515.3	106.4	34.7	90.10	-3,009.8	-1,683.3	3,491.1	3,359.8	131.31	26.587		
13,600.0	7,530.0	7,786.8	7,515.5	108.2	34.7	90.10	-3,009.8	-1,683.3	3,574.9	3,441.8	133.05	26.869		
13,700.0	7,530.0	7,787.0	7,515.7	109.9	34.7	90.11	-3,009.8	-1,683.3	3,659.5	3,524.7	134.79	27.149		
13,800.0	7,530.0	7,787.1	7,515.8	111.7	34.7	90.11	-3,009.8	-1,683.3	3,744.8	3,608.3	136.53	27.428		
13,900.0	7,530.0	7,787.3	7,516.0	113.4	34.7	90.12	-3,009.8	-1,683.3	3,830.9	3,692.6	138.28	27.705		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS 33-7 (EXISTING) - ENCANA WELL - SU													Offset Site Error:	0.0 ft
Survey Program: 59-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	7,787.5	7,516.1	115.1	34.7	90.12	-3,009.8	-1,683.3	3,917.6	3,777.6	140.02	27.979		
14,100.0	7,530.0	7,787.6	7,516.3	116.9	34.7	90.13	-3,009.8	-1,683.3	4,004.9	3,863.2	141.76	28.251		
14,200.0	7,530.0	7,787.8	7,516.5	118.6	34.7	90.13	-3,009.8	-1,683.3	4,092.9	3,949.4	143.50	28.521		
14,300.0	7,530.0	7,787.9	7,516.6	120.4	34.7	90.14	-3,009.8	-1,683.3	4,181.3	4,036.1	145.25	28.787		
14,400.0	7,530.0	7,788.1	7,516.8	122.1	34.7	90.14	-3,009.8	-1,683.3	4,270.3	4,123.3	146.99	29.051		
14,500.0	7,530.0	7,788.3	7,516.9	123.9	34.7	90.15	-3,009.8	-1,683.3	4,359.8	4,211.0	148.74	29.312		
14,600.0	7,530.0	7,788.4	7,517.1	125.6	34.7	90.15	-3,009.8	-1,683.3	4,449.7	4,299.2	150.48	29.570		
14,700.0	7,530.0	7,788.6	7,517.3	127.3	34.7	90.16	-3,009.8	-1,683.3	4,540.0	4,387.8	152.23	29.824		
14,800.0	7,530.0	7,788.7	7,517.4	129.1	34.7	90.16	-3,009.8	-1,683.3	4,630.7	4,476.7	153.97	30.075		
14,900.0	7,530.0	7,788.9	7,517.6	130.8	34.7	90.17	-3,009.8	-1,683.3	4,721.8	4,566.1	155.72	30.323		
15,000.0	7,530.0	7,789.0	7,517.7	132.6	34.7	90.17	-3,009.8	-1,683.3	4,813.2	4,655.8	157.46	30.568		
15,100.0	7,530.0	7,789.2	7,517.9	134.3	34.7	90.17	-3,009.8	-1,683.3	4,905.0	4,745.8	159.21	30.809		
15,200.0	7,530.0	7,789.3	7,518.0	136.1	34.7	90.18	-3,009.8	-1,683.3	4,997.1	4,836.2	160.95	31.047		
15,300.0	7,530.0	7,789.5	7,518.2	137.8	34.7	90.18	-3,009.8	-1,683.3	5,089.5	4,926.8	162.70	31.282		
15,400.0	7,530.0	7,789.7	7,518.3	139.6	34.7	90.19	-3,009.8	-1,683.3	5,182.2	5,017.8	164.45	31.513		
15,500.0	7,530.0	7,789.8	7,518.5	141.3	34.7	90.19	-3,009.8	-1,683.3	5,275.1	5,109.0	166.19	31.741		
15,600.0	7,530.0	7,790.0	7,518.6	143.0	34.7	90.20	-3,009.8	-1,683.3	5,368.3	5,200.4	167.94	31.966		
15,700.0	7,530.0	7,790.1	7,518.8	144.8	34.7	90.20	-3,009.8	-1,683.3	5,461.8	5,292.1	169.69	32.188		
15,800.0	7,530.0	7,790.3	7,519.0	146.5	34.7	90.21	-3,009.8	-1,683.3	5,555.5	5,384.0	171.43	32.406		
15,900.0	7,530.0	7,790.4	7,519.1	148.3	34.7	90.21	-3,009.8	-1,683.3	5,649.3	5,476.2	173.18	32.621		
16,000.0	7,530.0	7,790.6	7,519.2	150.0	34.7	90.22	-3,009.8	-1,683.3	5,743.4	5,568.5	174.93	32.833		
16,100.0	7,530.0	7,790.7	7,519.4	151.8	34.7	90.22	-3,009.8	-1,683.3	5,837.7	5,661.0	176.68	33.042		
16,200.0	7,530.0	7,790.9	7,519.5	153.5	34.7	90.22	-3,009.8	-1,683.3	5,932.2	5,753.8	178.42	33.248		
16,300.0	7,530.0	7,791.0	7,519.7	155.3	34.7	90.23	-3,009.8	-1,683.3	6,026.9	5,846.7	180.17	33.451		
16,400.0	7,530.0	7,791.1	7,519.8	157.0	34.7	90.23	-3,009.8	-1,683.3	6,121.7	5,939.8	181.92	33.651		
16,500.0	7,530.0	7,791.3	7,520.0	158.8	34.7	90.24	-3,009.8	-1,683.3	6,216.7	6,033.0	183.67	33.848		
16,600.0	7,530.0	7,791.4	7,520.1	160.5	34.7	90.24	-3,009.8	-1,683.3	6,311.8	6,126.4	185.41	34.042		
16,700.0	7,530.0	7,791.6	7,520.3	162.3	34.7	90.25	-3,009.8	-1,683.3	6,407.1	6,219.9	187.16	34.233		
16,800.0	7,530.0	7,791.7	7,520.4	164.0	34.7	90.25	-3,009.8	-1,683.3	6,502.5	6,313.6	188.91	34.421		
16,900.0	7,530.0	7,791.9	7,520.6	165.8	34.7	90.25	-3,009.8	-1,683.3	6,598.1	6,407.4	190.66	34.606		
17,000.0	7,530.0	7,792.0	7,520.7	167.5	34.7	90.26	-3,009.8	-1,683.3	6,693.8	6,501.4	192.41	34.789		
17,100.0	7,530.0	7,792.2	7,520.8	169.3	34.7	90.26	-3,009.8	-1,683.3	6,789.6	6,595.4	194.16	34.969		
17,200.0	7,530.0	7,792.3	7,521.0	171.0	34.7	90.27	-3,009.8	-1,683.3	6,885.5	6,689.6	195.91	35.147		
17,300.0	7,530.0	7,792.4	7,521.1	172.8	34.7	90.27	-3,009.8	-1,683.3	6,981.6	6,783.9	197.66	35.322		
17,400.0	7,530.0	7,792.6	7,521.3	174.5	34.7	90.28	-3,009.8	-1,683.3	7,077.8	6,878.4	199.41	35.494		
17,420.9	7,530.0	7,792.6	7,521.3	174.9	34.7	90.28	-3,009.8	-1,683.3	7,097.9	6,898.1	199.77	35.530		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS												Offset Site Error: 0.0 ft	
Survey Program: 7894-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-123.91	-2,852.3	-4,243.7	5,113.3				
100.0	100.0	60.0	60.0	0.2	0.1	-123.91	-2,852.3	-4,243.7	5,113.2	5,112.9	0.26	N/A	
200.0	200.0	160.0	160.0	0.3	0.3	-123.91	-2,852.3	-4,243.7	5,113.2	5,112.6	0.61	8,440.017	
300.0	300.0	260.0	260.0	0.5	0.5	-123.91	-2,852.3	-4,243.7	5,113.2	5,112.2	0.95	5,354.736	
400.0	400.0	360.0	360.0	0.7	0.6	-123.91	-2,852.3	-4,243.7	5,113.2	5,111.9	1.30	3,921.292	
500.0	500.0	460.0	460.0	0.8	0.8	-123.91	-2,852.3	-4,243.7	5,113.2	5,111.5	1.65	3,093.242	
600.0	600.0	560.0	560.0	1.0	1.0	-123.91	-2,852.3	-4,243.7	5,113.2	5,111.2	2.00	2,553.934	
700.0	700.0	660.0	660.0	1.2	1.2	-156.38	-2,852.3	-4,243.7	5,114.0	5,111.6	2.35	2,175.232	
800.0	800.0	760.0	760.0	1.4	1.3	-156.38	-2,852.3	-4,243.7	5,116.4	5,113.7	2.70	1,895.102	
900.0	899.9	859.9	859.9	1.6	1.5	-156.39	-2,852.3	-4,243.7	5,120.4	5,117.3	3.05	1,679.502	
988.4	988.1	948.1	948.1	1.7	1.7	-156.39	-2,852.3	-4,243.7	5,125.2	5,121.9	3.36	1,526.452	
1,000.0	999.7	959.7	959.7	1.7	1.7	-156.39	-2,852.3	-4,243.7	5,126.0	5,122.6	3.40	1,508.349	
1,100.0	1,099.4	1,059.4	1,059.4	1.9	1.8	-156.42	-2,852.3	-4,243.7	5,132.2	5,128.4	3.75	1,368.508	
1,200.0	1,199.2	1,159.2	1,159.2	2.1	2.0	-156.45	-2,852.3	-4,243.7	5,138.4	5,134.3	4.10	1,252.501	
1,300.0	1,299.0	1,259.0	1,259.0	2.3	2.2	-156.48	-2,852.3	-4,243.7	5,144.6	5,140.1	4.46	1,154.746	
1,400.0	1,398.8	1,358.8	1,358.8	2.5	2.4	-156.51	-2,852.3	-4,243.7	5,150.8	5,146.0	4.81	1,071.268	
1,500.0	1,498.5	1,458.5	1,458.5	2.7	2.5	-156.54	-2,852.3	-4,243.7	5,157.0	5,151.9	5.16	999.166	
1,600.0	1,598.3	1,558.3	1,558.3	2.9	2.7	-156.57	-2,852.3	-4,243.7	5,163.2	5,157.7	5.51	936.271	
1,700.0	1,698.1	1,658.1	1,658.1	3.2	2.9	-156.60	-2,852.3	-4,243.7	5,169.5	5,163.6	5.87	880.930	
1,800.0	1,797.8	1,757.8	1,757.8	3.4	3.1	-156.63	-2,852.3	-4,243.7	5,175.7	5,169.5	6.22	831.864	
1,900.0	1,897.6	1,857.6	1,857.6	3.6	3.2	-156.66	-2,852.3	-4,243.7	5,181.9	5,175.3	6.58	788.064	
2,000.0	1,997.4	1,957.4	1,957.4	3.8	3.4	-156.69	-2,852.3	-4,243.7	5,188.1	5,181.2	6.93	748.729	
2,100.0	2,097.1	2,057.1	2,057.1	4.0	3.6	-156.72	-2,852.3	-4,243.7	5,194.3	5,187.1	7.28	713.210	
2,200.0	2,196.9	2,156.9	2,156.9	4.2	3.8	-156.75	-2,852.3	-4,243.7	5,200.6	5,192.9	7.64	680.978	
2,300.0	2,296.7	2,256.7	2,256.7	4.4	3.9	-156.78	-2,852.3	-4,243.7	5,206.8	5,198.8	7.99	651.599	
2,400.0	2,396.5	2,356.5	2,356.5	4.6	4.1	-156.81	-2,852.3	-4,243.7	5,213.0	5,204.7	8.34	624.709	
2,500.0	2,496.2	2,456.2	2,456.2	4.8	4.3	-156.84	-2,852.3	-4,243.7	5,219.3	5,210.6	8.70	600.007	
2,600.0	2,596.0	2,556.0	2,556.0	5.0	4.5	-156.87	-2,852.3	-4,243.7	5,225.5	5,216.4	9.05	577.235	
2,700.0	2,695.8	2,655.8	2,655.8	5.2	4.6	-156.90	-2,852.3	-4,243.7	5,231.7	5,222.3	9.41	556.177	
2,800.0	2,795.5	2,755.5	2,755.5	5.4	4.8	-156.93	-2,852.3	-4,243.7	5,237.9	5,228.2	9.76	536.646	
2,900.0	2,895.3	2,855.3	2,855.3	5.6	5.0	-156.96	-2,852.3	-4,243.7	5,244.2	5,234.1	10.11	518.482	
3,000.0	2,995.1	2,955.1	2,955.1	5.9	5.2	-156.99	-2,852.3	-4,243.7	5,250.4	5,239.9	10.47	501.546	
3,100.0	3,094.9	3,054.9	3,054.9	6.1	5.3	-157.01	-2,852.3	-4,243.7	5,256.7	5,245.8	10.82	485.719	
3,200.0	3,194.6	3,154.6	3,154.6	6.3	5.5	-157.04	-2,852.3	-4,243.7	5,262.9	5,251.7	11.18	470.894	
3,300.0	3,294.4	3,254.4	3,254.4	6.5	5.7	-157.07	-2,852.3	-4,243.7	5,269.1	5,257.6	11.53	456.980	
3,400.0	3,394.2	3,354.2	3,354.2	6.7	5.9	-157.10	-2,852.3	-4,243.7	5,275.4	5,263.5	11.88	443.895	
3,500.0	3,493.9	3,453.9	3,453.9	6.9	6.0	-157.13	-2,852.3	-4,243.7	5,281.6	5,269.4	12.24	431.568	
3,600.0	3,593.7	3,553.7	3,553.7	7.1	6.2	-157.16	-2,852.3	-4,243.7	5,287.9	5,275.3	12.59	419.934	
3,700.0	3,693.5	3,653.5	3,653.5	7.3	6.4	-157.19	-2,852.3	-4,243.7	5,294.1	5,281.2	12.95	408.937	
3,800.0	3,793.2	3,753.2	3,753.2	7.5	6.6	-157.21	-2,852.3	-4,243.7	5,300.4	5,287.1	13.30	398.525	
3,900.0	3,893.0	3,853.0	3,853.0	7.7	6.7	-157.24	-2,852.3	-4,243.7	5,306.6	5,292.9	13.65	388.654	
4,000.0	3,992.8	3,952.8	3,952.8	8.0	6.9	-157.27	-2,852.3	-4,243.7	5,312.9	5,298.8	14.01	379.282	
4,100.0	4,092.6	4,052.6	4,052.6	8.2	7.1	-157.30	-2,852.3	-4,243.7	5,319.1	5,304.7	14.36	370.372	
4,200.0	4,192.3	4,152.3	4,152.3	8.4	7.2	-157.33	-2,852.3	-4,243.7	5,325.4	5,310.6	14.72	361.891	
4,300.0	4,292.1	4,252.1	4,252.1	8.6	7.4	-157.36	-2,852.3	-4,243.7	5,331.6	5,316.5	15.07	353.809	
4,400.0	4,391.9	4,351.9	4,351.9	8.8	7.6	-157.38	-2,852.3	-4,243.7	5,337.9	5,322.4	15.42	346.099	
4,500.0	4,491.6	4,451.6	4,451.6	9.0	7.8	-157.41	-2,852.3	-4,243.7	5,344.1	5,328.3	15.78	338.734	
4,600.0	4,591.4	4,551.4	4,551.4	9.2	7.9	-157.44	-2,852.3	-4,243.7	5,350.4	5,334.2	16.13	331.694	
4,700.0	4,691.2	4,651.2	4,651.2	9.4	8.1	-157.47	-2,852.3	-4,243.7	5,356.6	5,340.1	16.48	324.955	
4,800.0	4,790.9	4,750.9	4,750.9	9.6	8.3	-157.49	-2,852.3	-4,243.7	5,362.9	5,346.1	16.84	318.501	
4,900.0	4,890.7	4,850.7	4,850.7	9.8	8.5	-157.52	-2,852.3	-4,243.7	5,369.1	5,352.0	17.19	312.312	
5,000.0	4,990.5	4,950.5	4,950.5	10.1	8.6	-157.55	-2,852.3	-4,243.7	5,375.4	5,357.9	17.55	306.373	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
5,100.0	5,090.3	5,050.3	5,050.3	10.3	8.8	-157.58	-2,852.3	-4,243.7	5,381.7	5,363.8	17.90	300.670		
5,200.0	5,190.0	5,150.0	5,150.0	10.5	9.0	-157.61	-2,852.3	-4,243.7	5,387.9	5,369.7	18.25	295.187		
5,300.0	5,289.8	5,249.8	5,249.8	10.7	9.2	-157.63	-2,852.3	-4,243.7	5,394.2	5,375.6	18.61	289.914		
5,400.0	5,389.6	5,349.6	5,349.6	10.9	9.3	-157.66	-2,852.3	-4,243.7	5,400.5	5,381.5	18.96	284.838		
5,500.0	5,489.3	5,449.3	5,449.3	11.1	9.5	-157.69	-2,852.3	-4,243.7	5,406.7	5,387.4	19.31	279.948		
5,600.0	5,589.1	5,549.1	5,549.1	11.3	9.7	-157.71	-2,852.3	-4,243.7	5,413.0	5,393.3	19.67	275.234		
5,700.0	5,688.9	5,648.9	5,648.9	11.5	9.9	-157.74	-2,852.3	-4,243.7	5,419.3	5,399.3	20.02	270.686		
5,800.0	5,788.7	5,748.7	5,748.7	11.7	10.0	-157.77	-2,852.3	-4,243.7	5,425.5	5,405.2	20.37	266.298		
5,900.0	5,888.4	5,848.4	5,848.4	11.9	10.2	-157.80	-2,852.3	-4,243.7	5,431.8	5,411.1	20.73	262.059		
6,000.0	5,988.2	5,948.2	5,948.2	12.2	10.4	-157.82	-2,852.3	-4,243.7	5,438.1	5,417.0	21.08	257.962		
6,100.0	6,088.0	6,048.0	6,048.0	12.4	10.6	-157.85	-2,852.3	-4,243.7	5,444.4	5,422.9	21.43	254.001		
6,200.0	6,187.7	6,147.7	6,147.7	12.6	10.7	-157.88	-2,852.3	-4,243.7	5,450.6	5,428.9	21.79	250.169		
6,300.0	6,287.5	6,247.5	6,247.5	12.8	10.9	-157.90	-2,852.3	-4,243.7	5,456.9	5,434.8	22.14	246.459		
6,400.0	6,387.3	6,347.3	6,347.3	13.0	11.1	-157.93	-2,852.3	-4,243.7	5,463.2	5,440.7	22.49	242.867		
6,500.0	6,487.0	6,447.0	6,447.0	13.2	11.3	-157.96	-2,852.3	-4,243.7	5,469.5	5,446.6	22.85	239.385		
6,600.0	6,586.8	6,546.8	6,546.8	13.4	11.4	-157.98	-2,852.3	-4,243.7	5,475.8	5,452.6	23.20	236.010		
6,700.0	6,686.6	6,646.6	6,646.6	13.6	11.6	-158.01	-2,852.3	-4,243.7	5,482.0	5,458.5	23.55	232.737		
6,787.0	6,773.4	6,733.4	6,733.4	13.8	11.8	-158.03	-2,852.3	-4,243.7	5,487.5	5,463.7	23.86	229.968		
6,800.0	6,786.4	6,746.4	6,746.4	13.8	11.8	-168.61	-2,852.3	-4,243.7	5,488.3	5,464.4	23.91	229.527		
6,850.0	6,836.3	6,796.3	6,796.3	13.9	11.9	104.17	-2,852.3	-4,243.7	5,489.9	5,465.8	24.08	228.013		
6,900.0	6,886.2	6,846.2	6,846.2	14.0	11.9	74.37	-2,852.3	-4,243.7	5,489.4	5,465.2	24.21	226.714		
6,950.0	6,935.7	6,895.7	6,895.7	14.0	12.0	66.78	-2,852.3	-4,243.7	5,487.0	5,462.7	24.32	225.614		
7,000.0	6,984.6	6,944.6	6,944.6	14.0	12.1	63.75	-2,852.3	-4,243.7	5,482.5	5,458.1	24.40	224.683		
7,050.0	7,032.6	6,992.6	6,992.6	14.0	12.2	62.40	-2,852.3	-4,243.7	5,476.1	5,451.6	24.46	223.879		
7,100.0	7,079.7	7,039.7	7,039.7	13.9	12.3	61.91	-2,852.3	-4,243.7	5,467.8	5,443.2	24.50	223.152		
7,150.0	7,125.4	7,085.4	7,085.4	13.9	12.4	61.96	-2,852.3	-4,243.7	5,457.6	5,433.0	24.53	222.440		
7,200.0	7,169.6	7,129.6	7,129.6	13.8	12.4	62.40	-2,852.3	-4,243.7	5,445.6	5,421.0	24.57	221.675		
7,250.0	7,212.1	7,172.1	7,172.1	13.8	12.5	63.15	-2,852.3	-4,243.7	5,431.9	5,407.3	24.60	220.783		
7,300.0	7,252.6	7,212.6	7,212.6	13.7	12.6	64.15	-2,852.3	-4,243.7	5,416.6	5,392.0	24.66	219.692		
7,350.0	7,291.0	7,251.0	7,251.0	13.7	12.7	65.37	-2,852.3	-4,243.7	5,399.9	5,375.2	24.73	218.334		
7,400.0	7,327.1	7,287.1	7,287.1	13.7	12.7	66.80	-2,852.3	-4,243.7	5,381.8	5,356.9	24.84	216.654		
7,450.0	7,360.7	7,320.7	7,320.7	13.7	12.8	68.41	-2,852.3	-4,243.7	5,362.4	5,337.4	24.99	214.614		
7,500.0	7,391.6	7,351.6	7,351.6	13.7	12.8	70.18	-2,852.3	-4,243.7	5,341.9	5,316.7	25.17	212.197		
7,550.0	7,419.7	7,379.7	7,379.7	13.8	12.9	72.09	-2,852.3	-4,243.7	5,320.4	5,295.0	25.41	209.411		
7,600.0	7,444.8	7,404.8	7,404.8	13.9	12.9	74.13	-2,852.3	-4,243.7	5,298.1	5,272.4	25.68	206.286		
7,650.0	7,466.9	7,426.9	7,426.9	14.1	13.0	76.27	-2,852.3	-4,243.7	5,275.0	5,249.0	26.00	202.871		
7,700.0	7,485.8	7,445.8	7,445.8	14.3	13.0	78.48	-2,852.3	-4,243.7	5,251.4	5,225.1	26.36	199.230		
7,750.0	7,501.5	7,461.5	7,461.5	14.6	13.0	80.75	-2,852.3	-4,243.7	5,227.4	5,200.7	26.75	195.430		
7,800.0	7,513.7	7,473.7	7,473.7	14.9	13.0	83.05	-2,852.3	-4,243.7	5,203.1	5,176.0	27.17	191.537		
7,850.0	7,522.6	7,482.6	7,482.6	15.2	13.1	85.35	-2,852.3	-4,243.7	5,178.7	5,151.1	27.60	187.611		
7,900.0	7,528.0	7,488.0	7,488.0	15.6	13.1	87.63	-2,852.3	-4,243.7	5,154.3	5,126.2	28.06	183.701		
7,952.9	7,530.0	7,490.0	7,490.0	16.1	13.1	90.00	-2,852.3	-4,243.7	5,128.6	5,100.0	28.55	179.619		
8,000.0	7,530.0	7,490.0	7,490.0	16.5	13.1	90.00	-2,852.3	-4,243.7	5,106.0	5,077.0	29.01	176.022		
8,100.0	7,530.0	7,490.0	7,490.0	17.5	13.1	90.00	-2,852.3	-4,243.7	5,059.1	5,029.0	30.07	168.257		
8,200.0	7,530.0	7,490.0	7,490.0	18.7	13.1	90.00	-2,852.3	-4,243.7	5,013.8	4,982.5	31.24	160.514		
8,300.0	7,530.0	7,490.0	7,490.0	19.9	13.1	90.00	-2,852.3	-4,243.7	4,970.1	4,937.6	32.49	152.962		
8,400.0	7,530.0	7,490.0	7,490.0	21.2	13.1	90.00	-2,852.3	-4,243.7	4,928.0	4,894.2	33.82	145.709		
8,500.0	7,530.0	7,490.0	7,490.0	22.6	13.1	90.00	-2,852.3	-4,243.7	4,887.6	4,852.4	35.21	138.817		
8,600.0	7,530.0	7,490.0	7,490.0	24.0	13.1	90.00	-2,852.3	-4,243.7	4,848.9	4,812.3	36.65	132.319		
8,700.0	7,530.0	7,490.0	7,490.0	25.4	13.1	90.00	-2,852.3	-4,243.7	4,812.0	4,773.9	38.12	126.224		
8,800.0	7,530.0	7,490.0	7,490.0	26.9	13.1	90.00	-2,852.3	-4,243.7	4,776.9	4,737.3	39.63	120.526		
8,900.0	7,530.0	7,490.0	7,490.0	28.4	13.1	90.00	-2,852.3	-4,243.7	4,743.7	4,702.5	41.17	115.213		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
9,000.0	7,530.0	7,490.0	7,490.0	30.0	13.1	90.00	-2,852.3	-4,243.7	4,712.3	4,669.6	42.74	110.265		
9,100.0	7,530.0	7,490.0	7,490.0	31.5	13.1	90.00	-2,852.3	-4,243.7	4,682.9	4,638.5	44.32	105.662		
9,200.0	7,530.0	7,490.0	7,490.0	33.1	13.1	90.00	-2,852.3	-4,243.7	4,655.4	4,609.5	45.92	101.380		
9,300.0	7,530.0	7,490.0	7,490.0	34.7	13.1	90.00	-2,852.3	-4,243.7	4,629.9	4,582.4	47.54	97.399		
9,400.0	7,530.0	7,490.0	7,490.0	36.3	13.1	90.00	-2,852.3	-4,243.7	4,606.5	4,557.3	49.16	93.696		
9,500.0	7,530.0	7,490.0	7,490.0	38.0	13.1	90.00	-2,852.3	-4,243.7	4,585.1	4,534.3	50.80	90.250		
9,600.0	7,530.0	7,490.0	7,490.0	39.6	13.1	90.00	-2,852.3	-4,243.7	4,565.8	4,513.4	52.45	87.044		
9,700.0	7,530.0	7,490.0	7,490.0	41.3	13.1	90.00	-2,852.3	-4,243.7	4,548.6	4,494.5	54.11	84.059		
9,800.0	7,530.0	7,490.0	7,490.0	42.9	13.1	90.00	-2,852.3	-4,243.7	4,533.6	4,477.8	55.78	81.279		
9,900.0	7,530.0	7,490.0	7,490.0	44.6	13.1	90.00	-2,852.3	-4,243.7	4,520.7	4,463.3	57.45	78.689		
10,000.0	7,530.0	7,490.0	7,490.0	46.3	13.1	90.00	-2,852.3	-4,243.7	4,510.0	4,450.9	59.13	76.274		
10,100.0	7,530.0	7,490.0	7,490.0	47.9	13.1	90.00	-2,852.3	-4,243.7	4,501.5	4,440.7	60.81	74.022		
10,200.0	7,530.0	7,490.0	7,490.0	49.6	13.1	90.00	-2,852.3	-4,243.7	4,495.3	4,432.8	62.50	71.921		
10,300.0	7,530.0	7,490.0	7,490.0	51.3	13.1	90.00	-2,852.3	-4,243.7	4,491.2	4,427.0	64.20	69.960		
10,400.0	7,530.0	7,490.0	7,490.0	53.0	13.1	90.00	-2,852.3	-4,243.7	4,489.4	4,423.5	65.89	68.130		
10,432.7	7,530.0	7,490.0	7,490.0	53.6	13.1	90.00	-2,852.3	-4,243.7	4,489.2	4,422.8	66.45	67.559 CC		
10,500.0	7,530.0	7,490.0	7,490.0	54.7	13.1	90.00	-2,852.3	-4,243.7	4,489.7	4,422.1	67.59	66.422 ES		
10,600.0	7,530.0	7,490.0	7,490.0	56.4	13.1	90.00	-2,852.3	-4,243.7	4,492.4	4,423.1	69.30	64.826		
10,700.0	7,530.0	7,490.0	7,490.0	58.1	13.1	90.00	-2,852.3	-4,243.7	4,497.2	4,426.2	71.01	63.335		
10,800.0	7,530.0	7,490.0	7,490.0	59.8	13.1	90.00	-2,852.3	-4,243.7	4,504.2	4,431.5	72.72	61.943		
10,900.0	7,530.0	7,490.0	7,490.0	61.5	13.1	90.00	-2,852.3	-4,243.7	4,513.5	4,439.1	74.43	60.642		
11,000.0	7,530.0	7,490.0	7,490.0	63.2	13.1	90.00	-2,852.3	-4,243.7	4,524.9	4,448.8	76.14	59.427		
11,100.0	7,530.0	7,490.0	7,490.0	64.9	13.1	90.00	-2,852.3	-4,243.7	4,538.6	4,460.7	77.86	58.291		
11,200.0	7,530.0	7,490.0	7,490.0	66.6	13.1	90.00	-2,852.3	-4,243.7	4,554.3	4,474.8	79.58	57.231		
11,300.0	7,530.0	7,490.0	7,490.0	68.4	13.1	90.00	-2,852.3	-4,243.7	4,572.3	4,491.0	81.30	56.240		
11,400.0	7,530.0	7,490.0	7,490.0	70.1	13.1	90.00	-2,852.3	-4,243.7	4,592.3	4,509.2	83.02	55.314		
11,500.0	7,530.0	7,490.0	7,490.0	71.8	13.1	90.00	-2,852.3	-4,243.7	4,614.4	4,529.6	84.75	54.450		
11,600.0	7,530.0	7,490.0	7,490.0	73.5	13.1	90.00	-2,852.3	-4,243.7	4,638.5	4,552.1	86.47	53.643		
11,700.0	7,530.0	7,490.0	7,490.0	75.2	13.1	90.00	-2,852.3	-4,243.7	4,664.7	4,576.5	88.20	52.889		
11,800.0	7,530.0	7,490.0	7,490.0	77.0	13.1	90.00	-2,852.3	-4,243.7	4,692.8	4,602.9	89.92	52.186		
11,900.0	7,530.0	7,490.0	7,490.0	78.7	13.1	90.00	-2,852.3	-4,243.7	4,723.0	4,631.3	91.65	51.530		
12,000.0	7,530.0	7,490.0	7,490.0	80.4	13.1	90.00	-2,852.3	-4,243.7	4,755.0	4,661.6	93.38	50.919		
12,100.0	7,530.0	7,490.0	7,490.0	82.2	13.1	90.00	-2,852.3	-4,243.7	4,788.9	4,693.7	95.11	50.348		
12,200.0	7,530.0	7,490.0	7,490.0	83.9	13.1	90.00	-2,852.3	-4,243.7	4,824.6	4,727.7	96.85	49.817		
12,300.0	7,530.0	7,490.0	7,490.0	85.6	13.1	90.00	-2,852.3	-4,243.7	4,862.1	4,763.5	98.58	49.322		
12,400.0	7,530.0	7,490.0	7,490.0	87.3	13.1	90.00	-2,852.3	-4,243.7	4,901.4	4,801.1	100.31	48.861		
12,500.0	7,530.0	7,490.0	7,490.0	89.1	13.1	90.00	-2,852.3	-4,243.7	4,942.4	4,840.3	102.05	48.432		
12,600.0	7,530.0	7,490.0	7,490.0	90.8	13.1	90.00	-2,852.3	-4,243.7	4,985.0	4,881.2	103.78	48.033		
12,700.0	7,530.0	7,490.0	7,490.0	92.5	13.1	90.00	-2,852.3	-4,243.7	5,029.3	4,923.8	105.52	47.663		
12,800.0	7,530.0	7,490.0	7,490.0	94.3	13.1	90.00	-2,852.3	-4,243.7	5,075.2	4,967.9	107.26	47.318		
12,900.0	7,530.0	7,490.0	7,490.0	96.0	13.1	90.00	-2,852.3	-4,243.7	5,122.6	5,013.6	108.99	46.999		
13,000.0	7,530.0	7,490.0	7,490.0	97.8	13.1	90.00	-2,852.3	-4,243.7	5,171.5	5,060.8	110.73	46.703		
13,100.0	7,530.0	7,490.0	7,490.0	99.5	13.1	90.00	-2,852.3	-4,243.7	5,221.9	5,109.4	112.47	46.429		
13,200.0	7,530.0	7,490.0	7,490.0	101.2	13.1	90.00	-2,852.3	-4,243.7	5,273.6	5,159.4	114.21	46.176		
13,300.0	7,530.0	7,490.0	7,490.0	103.0	13.1	90.00	-2,852.3	-4,243.7	5,326.8	5,210.9	115.95	45.941		
13,400.0	7,530.0	7,490.0	7,490.0	104.7	13.1	90.00	-2,852.3	-4,243.7	5,381.3	5,263.6	117.69	45.725		
13,500.0	7,530.0	7,490.0	7,490.0	106.4	13.1	90.00	-2,852.3	-4,243.7	5,437.1	5,317.6	119.43	45.526		
13,600.0	7,530.0	7,490.0	7,490.0	108.2	13.1	90.00	-2,852.3	-4,243.7	5,494.1	5,372.9	121.17	45.342		
13,700.0	7,530.0	7,490.0	7,490.0	109.9	13.1	90.00	-2,852.3	-4,243.7	5,552.4	5,429.4	122.91	45.174		
13,800.0	7,530.0	7,490.0	7,490.0	111.7	13.1	90.00	-2,852.3	-4,243.7	5,611.8	5,487.1	124.65	45.019		
13,900.0	7,530.0	7,490.0	7,490.0	113.4	13.1	90.00	-2,852.3	-4,243.7	5,672.4	5,546.0	126.39	44.878		
14,000.0	7,530.0	7,490.0	7,490.0	115.1	13.1	90.00	-2,852.3	-4,243.7	5,734.0	5,605.9	128.14	44.749		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 7894-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,490.0	7,490.0	116.9	13.1	90.00	-2,852.3	-4,243.7	5,796.8	5,666.9	129.88	44.632		
14,200.0	7,530.0	7,490.0	7,490.0	118.6	13.1	90.00	-2,852.3	-4,243.7	5,860.5	5,728.9	131.62	44.525		
14,300.0	7,530.0	7,490.0	7,490.0	120.4	13.1	90.00	-2,852.3	-4,243.7	5,925.3	5,792.0	133.37	44.429		
14,400.0	7,530.0	7,490.0	7,490.0	122.1	13.1	90.00	-2,852.3	-4,243.7	5,991.1	5,856.0	135.11	44.342		
14,500.0	7,530.0	7,490.0	7,490.0	123.9	13.1	90.00	-2,852.3	-4,243.7	6,057.8	5,920.9	136.85	44.264		
14,600.0	7,530.0	7,490.0	7,490.0	125.6	13.1	90.00	-2,852.3	-4,243.7	6,125.3	5,986.7	138.60	44.195		
14,700.0	7,530.0	7,490.0	7,490.0	127.3	13.1	90.00	-2,852.3	-4,243.7	6,193.8	6,053.5	140.34	44.133		
14,800.0	7,530.0	7,490.0	7,490.0	129.1	13.1	90.00	-2,852.3	-4,243.7	6,263.1	6,121.0	142.09	44.079		
14,900.0	7,530.0	7,490.0	7,490.0	130.8	13.1	90.00	-2,852.3	-4,243.7	6,333.3	6,189.4	143.83	44.032		
15,000.0	7,530.0	7,490.0	7,490.0	132.6	13.1	90.00	-2,852.3	-4,243.7	6,404.2	6,258.6	145.58	43.991		
15,100.0	7,530.0	7,490.0	7,490.0	134.3	13.1	90.00	-2,852.3	-4,243.7	6,475.9	6,328.6	147.32	43.957		
15,200.0	7,530.0	7,490.0	7,490.0	136.1	13.1	90.00	-2,852.3	-4,243.7	6,548.3	6,399.3	149.07	43.928		
15,300.0	7,530.0	7,490.0	7,490.0	137.8	13.1	90.00	-2,852.3	-4,243.7	6,621.5	6,470.7	150.82	43.905		
15,400.0	7,530.0	7,490.0	7,490.0	139.6	13.1	90.00	-2,852.3	-4,243.7	6,695.3	6,542.8	152.56	43.886		
15,500.0	7,530.0	7,490.0	7,490.0	141.3	13.1	90.00	-2,852.3	-4,243.7	6,769.9	6,615.6	154.31	43.872		
15,600.0	7,530.0	7,490.0	7,490.0	143.0	13.1	90.00	-2,852.3	-4,243.7	6,845.0	6,689.0	156.05	43.863		
15,700.0	7,530.0	7,490.0	7,490.0	144.8	13.1	90.00	-2,852.3	-4,243.7	6,920.8	6,763.0	157.80	43.858		
15,800.0	7,530.0	7,490.0	7,490.0	146.5	13.1	90.00	-2,852.3	-4,243.7	6,997.2	6,837.7	159.55	43.857 SF		
15,900.0	7,530.0	7,490.0	7,490.0	148.3	13.1	90.00	-2,852.3	-4,243.7	7,074.2	6,912.9	161.30	43.859		
16,000.0	7,530.0	7,490.0	7,490.0	150.0	13.1	90.00	-2,852.3	-4,243.7	7,151.8	6,988.8	163.04	43.865		
16,100.0	7,530.0	7,490.0	7,490.0	151.8	13.1	90.00	-2,852.3	-4,243.7	7,229.9	7,065.1	164.79	43.874		
16,200.0	7,530.0	7,490.0	7,490.0	153.5	13.1	90.00	-2,852.3	-4,243.7	7,308.6	7,142.0	166.54	43.885		
16,300.0	7,530.0	7,490.0	7,490.0	155.3	13.1	90.00	-2,852.3	-4,243.7	7,387.7	7,219.5	168.29	43.900		
16,400.0	7,530.0	7,490.0	7,490.0	157.0	13.1	90.00	-2,852.3	-4,243.7	7,467.4	7,297.4	170.03	43.917		
16,500.0	7,530.0	7,490.0	7,490.0	158.8	13.1	90.00	-2,852.3	-4,243.7	7,547.6	7,375.8	171.78	43.937		
16,600.0	7,530.0	7,490.0	7,490.0	160.5	13.1	90.00	-2,852.3	-4,243.7	7,628.2	7,454.7	173.53	43.959		
16,700.0	7,530.0	7,490.0	7,490.0	162.3	13.1	90.00	-2,852.3	-4,243.7	7,709.3	7,534.0	175.28	43.983		
16,800.0	7,530.0	7,490.0	7,490.0	164.0	13.1	90.00	-2,852.3	-4,243.7	7,790.8	7,613.7	177.03	44.009		
16,900.0	7,530.0	7,490.0	7,490.0	165.8	13.1	90.00	-2,852.3	-4,243.7	7,872.7	7,693.9	178.77	44.037		
17,000.0	7,530.0	7,490.0	7,490.0	167.5	13.1	90.00	-2,852.3	-4,243.7	7,955.1	7,774.5	180.52	44.067		
17,100.0	7,530.0	7,490.0	7,490.0	169.3	13.1	90.00	-2,852.3	-4,243.7	8,037.8	7,855.5	182.27	44.098		
17,200.0	7,530.0	7,490.0	7,490.0	171.0	13.1	90.00	-2,852.3	-4,243.7	8,121.0	7,936.9	184.02	44.131		
17,300.0	7,530.0	7,490.0	7,490.0	172.8	13.1	90.00	-2,852.3	-4,243.7	8,204.5	8,018.7	185.77	44.165		
17,400.0	7,530.0	7,490.0	7,490.0	174.5	13.1	90.00	-2,852.3	-4,243.7	8,288.4	8,100.8	187.52	44.200		
17,420.9	7,530.0	7,490.0	7,490.0	174.9	13.1	90.00	-2,852.3	-4,243.7	8,306.0	8,118.1	187.88	44.208		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-14 (Existing) - Existing - NO SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 5000-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-147.17	-4,101.6	-2,645.9	4,881.2						
100.0	100.0	58.0	58.0	0.2	0.1	-147.17	-4,101.6	-2,645.9	4,881.0	4,880.8	0.25	N/A			
200.0	200.0	158.0	158.0	0.3	0.3	-147.17	-4,101.6	-2,645.9	4,881.0	4,880.4	0.60	8,103.519			
300.0	300.0	258.0	258.0	0.5	0.5	-147.17	-4,101.6	-2,645.9	4,881.0	4,880.1	0.95	5,130.378			
400.0	400.0	358.0	358.0	0.7	0.6	-147.17	-4,101.6	-2,645.9	4,881.0	4,879.7	1.30	3,753.308			
500.0	500.0	458.0	458.0	0.8	0.8	-147.17	-4,101.6	-2,645.9	4,881.0	4,879.4	1.65	2,959.054			
600.0	600.0	558.0	558.0	1.0	1.0	-147.17	-4,101.6	-2,645.9	4,881.0	4,879.0	2.00	2,442.240			
700.0	700.0	658.0	658.0	1.2	1.1	-179.65	-4,101.6	-2,645.9	4,881.9	4,879.5	2.35	2,079.696			
800.0	800.0	758.0	758.0	1.4	1.3	-179.65	-4,101.6	-2,645.9	4,884.5	4,881.8	2.70	1,812.000			
900.0	899.9	857.9	857.9	1.6	1.5	-179.65	-4,101.6	-2,645.9	4,888.9	4,885.8	3.04	1,606.526			
988.4	988.1	946.1	946.1	1.7	1.7	-179.65	-4,101.6	-2,645.9	4,894.2	4,890.8	3.35	1,461.147			
1,000.0	999.7	957.7	957.7	1.7	1.7	-179.65	-4,101.6	-2,645.9	4,895.0	4,891.6	3.39	1,443.945			
1,100.0	1,099.4	1,057.4	1,057.4	1.9	1.8	-179.65	-4,101.6	-2,645.9	4,901.7	4,898.0	3.74	1,311.116			
1,200.0	1,199.2	1,157.2	1,157.2	2.1	2.0	-179.65	-4,101.6	-2,645.9	4,908.5	4,904.4	4.09	1,200.951			
1,300.0	1,299.0	1,257.0	1,257.0	2.3	2.2	-179.65	-4,101.6	-2,645.9	4,915.3	4,910.8	4.44	1,108.105			
1,400.0	1,398.8	1,356.8	1,356.8	2.5	2.4	-179.65	-4,101.6	-2,645.9	4,922.1	4,917.3	4.78	1,028.789			
1,500.0	1,498.5	1,456.5	1,456.5	2.7	2.5	-179.65	-4,101.6	-2,645.9	4,928.8	4,923.7	5.13	960.248			
1,600.0	1,598.3	1,556.3	1,556.3	2.9	2.7	-179.65	-4,101.6	-2,645.9	4,935.6	4,930.1	5.48	900.425			
1,700.0	1,698.1	1,656.1	1,656.1	3.2	2.9	-179.65	-4,101.6	-2,645.9	4,942.4	4,936.5	5.83	847.756			
1,800.0	1,797.8	1,755.8	1,755.8	3.4	3.1	-179.65	-4,101.6	-2,645.9	4,949.1	4,943.0	6.18	801.029			
1,900.0	1,897.6	1,855.6	1,855.6	3.6	3.2	-179.65	-4,101.6	-2,645.9	4,955.9	4,949.4	6.53	759.294			
2,000.0	1,997.4	1,955.4	1,955.4	3.8	3.4	-179.65	-4,101.6	-2,645.9	4,962.7	4,955.8	6.88	721.790			
2,100.0	2,097.1	2,055.1	2,055.1	4.0	3.6	-179.65	-4,101.6	-2,645.9	4,969.5	4,962.2	7.22	687.905			
2,200.0	2,196.9	2,154.9	2,154.9	4.2	3.8	-179.65	-4,101.6	-2,645.9	4,976.2	4,968.7	7.57	657.139			
2,300.0	2,296.7	2,254.7	2,254.7	4.4	3.9	-179.65	-4,101.6	-2,645.9	4,983.0	4,975.1	7.92	629.081			
2,400.0	2,396.5	2,354.5	2,354.5	4.6	4.1	-179.65	-4,101.6	-2,645.9	4,989.8	4,981.5	8.27	603.388			
2,500.0	2,496.2	2,454.2	2,454.2	4.8	4.3	-179.66	-4,101.6	-2,645.9	4,996.6	4,987.9	8.62	579.773			
2,600.0	2,596.0	2,554.0	2,554.0	5.0	4.5	-179.66	-4,101.6	-2,645.9	5,003.3	4,994.4	8.97	557.994			
2,700.0	2,695.8	2,653.8	2,653.8	5.2	4.6	-179.66	-4,101.6	-2,645.9	5,010.1	5,000.8	9.32	537.845			
2,800.0	2,795.5	2,753.5	2,753.5	5.4	4.8	-179.66	-4,101.6	-2,645.9	5,016.9	5,007.2	9.66	519.149			
2,900.0	2,895.3	2,853.3	2,853.3	5.6	5.0	-179.66	-4,101.6	-2,645.9	5,023.7	5,013.6	10.01	501.755			
3,000.0	2,995.1	2,953.1	2,953.1	5.9	5.2	-179.66	-4,101.6	-2,645.9	5,030.4	5,020.1	10.36	485.531			
3,100.0	3,094.9	3,052.9	3,052.9	6.1	5.3	-179.66	-4,101.6	-2,645.9	5,037.2	5,026.5	10.71	470.363			
3,200.0	3,194.6	3,152.6	3,152.6	6.3	5.5	-179.66	-4,101.6	-2,645.9	5,044.0	5,032.9	11.06	456.151			
3,300.0	3,294.4	3,252.4	3,252.4	6.5	5.7	-179.66	-4,101.6	-2,645.9	5,050.7	5,039.3	11.41	442.807			
3,400.0	3,394.2	3,352.2	3,352.2	6.7	5.9	-179.66	-4,101.6	-2,645.9	5,057.5	5,045.8	11.75	430.255			
3,500.0	3,493.9	3,451.9	3,451.9	6.9	6.0	-179.66	-4,101.6	-2,645.9	5,064.3	5,052.2	12.10	418.426			
3,600.0	3,593.7	3,551.7	3,551.7	7.1	6.2	-179.66	-4,101.6	-2,645.9	5,071.1	5,058.6	12.45	407.259			
3,700.0	3,693.5	3,651.5	3,651.5	7.3	6.4	-179.66	-4,101.6	-2,645.9	5,077.8	5,065.0	12.80	396.700			
3,800.0	3,793.2	3,751.2	3,751.2	7.5	6.5	-179.66	-4,101.6	-2,645.9	5,084.6	5,071.5	13.15	386.701			
3,900.0	3,893.0	3,851.0	3,851.0	7.7	6.7	-179.66	-4,101.6	-2,645.9	5,091.4	5,077.9	13.50	377.218			
4,000.0	3,992.8	3,950.8	3,950.8	8.0	6.9	-179.66	-4,101.6	-2,645.9	5,098.2	5,084.3	13.85	368.212			
4,100.0	4,092.6	4,050.6	4,050.6	8.2	7.1	-179.66	-4,101.6	-2,645.9	5,104.9	5,090.7	14.19	359.649			
4,200.0	4,192.3	4,150.3	4,150.3	8.4	7.2	-179.66	-4,101.6	-2,645.9	5,111.7	5,097.2	14.54	351.496			
4,300.0	4,292.1	4,250.1	4,250.1	8.6	7.4	-179.66	-4,101.6	-2,645.9	5,118.5	5,103.6	14.89	343.725			
4,400.0	4,391.9	4,349.9	4,349.9	8.8	7.6	-179.66	-4,101.6	-2,645.9	5,125.3	5,110.0	15.24	336.309			
4,500.0	4,491.6	4,449.6	4,449.6	9.0	7.8	-179.66	-4,101.6	-2,645.9	5,132.0	5,116.4	15.59	329.225			
4,600.0	4,591.4	4,549.4	4,549.4	9.2	7.9	-179.66	-4,101.6	-2,645.9	5,138.8	5,122.9	15.94	322.451			
4,700.0	4,691.2	4,649.2	4,649.2	9.4	8.1	-179.67	-4,101.6	-2,645.9	5,145.6	5,129.3	16.29	315.966			
4,800.0	4,790.9	4,748.9	4,748.9	9.6	8.3	-179.67	-4,101.6	-2,645.9	5,152.4	5,135.7	16.63	309.753			
4,900.0	4,890.7	4,848.7	4,848.7	9.8	8.5	-179.67	-4,101.6	-2,645.9	5,159.1	5,142.1	16.98	303.796			
5,000.0	4,990.5	4,948.5	4,948.5	10.1	8.6	-179.67	-4,101.6	-2,645.9	5,165.9	5,148.6	17.33	298.078			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	5,000.0	5,000.0	10.3	8.7	-179.67	-4,101.6	-2,645.9	5,172.9	5,155.3	17.60	293.996		
5,200.0	5,190.0	5,000.0	5,000.0	10.5	8.7	-179.67	-4,101.6	-2,645.9	5,181.6	5,163.8	17.77	291.594		
5,300.0	5,289.8	5,000.0	5,000.0	10.7	8.7	-179.67	-4,101.6	-2,645.9	5,192.1	5,174.2	17.94	289.346		
5,400.0	5,389.6	5,000.0	5,000.0	10.9	8.7	-179.67	-4,101.6	-2,645.9	5,204.6	5,186.5	18.12	287.245		
5,500.0	5,489.3	5,000.0	5,000.0	11.1	8.7	-179.67	-4,101.6	-2,645.9	5,219.0	5,200.7	18.29	285.288		
5,600.0	5,589.1	5,000.0	5,000.0	11.3	8.7	-179.67	-4,101.6	-2,645.9	5,235.2	5,216.7	18.47	283.470		
5,700.0	5,688.9	5,000.0	5,000.0	11.5	8.7	-179.67	-4,101.6	-2,645.9	5,253.3	5,234.6	18.64	281.784		
5,800.0	5,788.7	5,000.0	5,000.0	11.7	8.7	-179.67	-4,101.6	-2,645.9	5,273.2	5,254.4	18.82	280.228		
5,900.0	5,888.4	5,000.0	5,000.0	11.9	8.7	-179.67	-4,101.6	-2,645.9	5,294.9	5,276.0	18.99	278.796		
6,000.0	5,988.2	5,000.0	5,000.0	12.2	8.7	-179.67	-4,101.6	-2,645.9	5,318.5	5,299.3	19.17	277.483		
6,100.0	6,088.0	5,000.0	5,000.0	12.4	8.7	-179.67	-4,101.6	-2,645.9	5,343.8	5,324.4	19.34	276.285		
6,200.0	6,187.7	5,000.0	5,000.0	12.6	8.7	-179.67	-4,101.6	-2,645.9	5,370.8	5,351.3	19.52	275.198		
6,300.0	6,287.5	5,000.0	5,000.0	12.8	8.7	-179.67	-4,101.6	-2,645.9	5,399.6	5,379.9	19.69	274.218		
6,400.0	6,387.3	5,000.0	5,000.0	13.0	8.7	-179.67	-4,101.6	-2,645.9	5,430.0	5,410.1	19.87	273.340		
6,500.0	6,487.0	5,000.0	5,000.0	13.2	8.7	-179.67	-4,101.6	-2,645.9	5,462.1	5,442.1	20.04	272.560		
6,600.0	6,586.8	5,000.0	5,000.0	13.4	8.7	-179.67	-4,101.6	-2,645.9	5,495.9	5,475.6	20.21	271.874		
6,700.0	6,686.6	5,000.0	5,000.0	13.6	8.7	-179.67	-4,101.6	-2,645.9	5,531.2	5,510.8	20.39	271.279		
6,787.0	6,773.4	5,000.0	5,000.0	13.8	8.7	-179.67	-4,101.6	-2,645.9	5,563.2	5,542.7	20.54	270.832		
6,800.0	6,786.4	5,000.0	5,000.0	13.8	8.7	169.58	-4,101.6	-2,645.9	5,568.0	5,547.4	20.57	270.695		
6,850.0	6,836.3	5,000.0	5,000.0	13.9	8.7	81.68	-4,101.6	-2,645.9	5,585.0	5,564.3	20.65	270.491		
6,900.0	6,886.2	5,000.0	5,000.0	14.0	8.7	51.18	-4,101.6	-2,645.9	5,599.5	5,578.8	20.68	270.805		
6,950.0	6,935.7	5,000.0	5,000.0	14.0	8.7	42.85	-4,101.6	-2,645.9	5,611.6	5,590.9	20.66	271.643		
7,000.0	6,984.6	5,000.0	5,000.0	14.0	8.7	39.04	-4,101.6	-2,645.9	5,621.2	5,600.6	20.59	273.000		
7,050.0	7,032.6	5,000.0	5,000.0	14.0	8.7	36.86	-4,101.6	-2,645.9	5,628.2	5,607.7	20.48	274.862		
7,100.0	7,079.7	5,000.0	5,000.0	13.9	8.7	35.48	-4,101.6	-2,645.9	5,632.7	5,612.4	20.32	277.203		
7,150.0	7,125.4	5,000.0	5,000.0	13.9	8.7	34.58	-4,101.6	-2,645.9	5,634.6	5,614.4	20.12	279.982		
7,200.0	7,169.6	5,000.0	5,000.0	13.8	8.7	34.01	-4,101.6	-2,645.9	5,633.9	5,614.0	19.90	283.145		
7,250.0	7,212.1	5,000.0	5,000.0	13.8	8.7	33.70	-4,101.6	-2,645.9	5,630.6	5,611.0	19.65	286.613		
7,300.0	7,252.6	5,000.0	5,000.0	13.7	8.7	33.59	-4,101.6	-2,645.9	5,624.8	5,605.4	19.38	290.282		
7,350.0	7,291.0	5,000.0	5,000.0	13.7	8.7	33.66	-4,101.6	-2,645.9	5,616.4	5,597.3	19.10	294.015		
7,400.0	7,327.1	5,000.0	5,000.0	13.7	8.7	33.90	-4,101.6	-2,645.9	5,605.5	5,586.6	18.83	297.639		
7,450.0	7,360.7	5,000.0	5,000.0	13.7	8.7	34.29	-4,101.6	-2,645.9	5,592.1	5,573.5	18.58	300.939		
7,500.0	7,391.6	5,000.0	5,000.0	13.7	8.7	34.85	-4,101.6	-2,645.9	5,576.2	5,557.9	18.36	303.663		
7,550.0	7,419.7	5,000.0	5,000.0	13.8	8.7	35.58	-4,101.6	-2,645.9	5,558.0	5,539.8	18.19	305.524		
7,600.0	7,444.8	5,000.0	5,000.0	13.9	8.7	36.48	-4,101.6	-2,645.9	5,537.5	5,519.4	18.08	306.222		
7,650.0	7,466.9	5,000.0	5,000.0	14.1	8.7	37.56	-4,101.6	-2,645.9	5,514.7	5,496.7	18.05	305.466		
7,700.0	7,485.8	5,000.0	5,000.0	14.3	8.7	38.85	-4,101.6	-2,645.9	5,489.8	5,471.7	18.12	303.011		
7,750.0	7,501.5	5,000.0	5,000.0	14.6	8.7	40.35	-4,101.6	-2,645.9	5,462.9	5,444.6	18.29	298.694		
7,800.0	7,513.7	5,000.0	5,000.0	14.9	8.7	42.10	-4,101.6	-2,645.9	5,433.9	5,415.4	18.58	292.469		
7,850.0	7,522.6	5,000.0	5,000.0	15.2	8.7	44.13	-4,101.6	-2,645.9	5,403.1	5,384.2	19.00	284.420		
7,900.0	7,528.0	5,000.0	5,000.0	15.6	8.7	46.46	-4,101.6	-2,645.9	5,370.6	5,351.1	19.55	274.765		
7,952.9	7,530.0	5,000.0	5,000.0	16.1	8.7	49.29	-4,101.6	-2,645.9	5,334.5	5,314.2	20.27	263.154		
8,000.0	7,530.0	5,000.0	5,000.0	16.5	8.7	49.29	-4,101.6	-2,645.9	5,301.7	5,281.1	20.62	257.075		
8,100.0	7,530.0	5,000.0	5,000.0	17.5	8.7	49.29	-4,101.6	-2,645.9	5,232.7	5,211.3	21.43	244.121		
8,200.0	7,530.0	5,000.0	5,000.0	18.7	8.7	49.29	-4,101.6	-2,645.9	5,164.8	5,142.5	22.32	231.374		
8,300.0	7,530.0	5,000.0	5,000.0	19.9	8.7	49.29	-4,101.6	-2,645.9	5,097.9	5,074.6	23.27	219.054		
8,400.0	7,530.0	5,000.0	5,000.0	21.2	8.7	49.29	-4,101.6	-2,645.9	5,032.1	5,007.8	24.27	207.299		
8,500.0	7,530.0	5,000.0	5,000.0	22.6	8.7	49.29	-4,101.6	-2,645.9	4,967.5	4,942.2	25.32	196.184		
8,600.0	7,530.0	5,000.0	5,000.0	24.0	8.7	49.29	-4,101.6	-2,645.9	4,904.0	4,877.6	26.40	185.740		
8,700.0	7,530.0	5,000.0	5,000.0	25.4	8.7	49.29	-4,101.6	-2,645.9	4,841.8	4,814.3	27.52	175.968		
8,800.0	7,530.0	5,000.0	5,000.0	26.9	8.7	49.29	-4,101.6	-2,645.9	4,780.9	4,752.2	28.65	166.851		
8,900.0	7,530.0	5,000.0	5,000.0	28.4	8.7	49.29	-4,101.6	-2,645.9	4,721.3	4,691.4	29.81	158.359		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
9,000.0	7,530.0	5,000.0	5,000.0	30.0	8.7	49.29	-4,101.6	-2,645.9	4,663.0	4,632.0	30.99	150.458		
9,100.0	7,530.0	5,000.0	5,000.0	31.5	8.7	49.29	-4,101.6	-2,645.9	4,606.2	4,574.1	32.19	143.110		
9,200.0	7,530.0	5,000.0	5,000.0	33.1	8.7	49.29	-4,101.6	-2,645.9	4,550.9	4,517.5	33.39	136.276		
9,300.0	7,530.0	5,000.0	5,000.0	34.7	8.7	49.29	-4,101.6	-2,645.9	4,497.2	4,462.6	34.62	129.920		
9,400.0	7,530.0	5,000.0	5,000.0	36.3	8.7	49.29	-4,101.6	-2,645.9	4,445.0	4,409.2	35.85	124.005		
9,500.0	7,530.0	5,000.0	5,000.0	38.0	8.7	49.29	-4,101.6	-2,645.9	4,394.5	4,357.4	37.09	118.498		
9,600.0	7,530.0	5,000.0	5,000.0	39.6	8.7	49.29	-4,101.6	-2,645.9	4,345.7	4,307.4	38.33	113.369		
9,700.0	7,530.0	5,000.0	5,000.0	41.3	8.7	49.29	-4,101.6	-2,645.9	4,298.7	4,259.1	39.59	108.588		
9,800.0	7,530.0	5,000.0	5,000.0	42.9	8.7	49.29	-4,101.6	-2,645.9	4,253.5	4,212.7	40.85	104.130		
9,900.0	7,530.0	5,000.0	5,000.0	44.6	8.7	49.29	-4,101.6	-2,645.9	4,210.3	4,168.1	42.11	99.971		
10,000.0	7,530.0	5,000.0	5,000.0	46.3	8.7	49.29	-4,101.6	-2,645.9	4,168.9	4,125.5	43.39	96.088		
10,100.0	7,530.0	5,000.0	5,000.0	47.9	8.7	49.29	-4,101.6	-2,645.9	4,129.6	4,084.9	44.66	92.462		
10,200.0	7,530.0	5,000.0	5,000.0	49.6	8.7	49.29	-4,101.6	-2,645.9	4,092.3	4,046.4	45.94	89.075		
10,300.0	7,530.0	5,000.0	5,000.0	51.3	8.7	49.29	-4,101.6	-2,645.9	4,057.2	4,009.9	47.23	85.909		
10,400.0	7,530.0	5,000.0	5,000.0	53.0	8.7	49.29	-4,101.6	-2,645.9	4,024.2	3,975.7	48.51	82.951		
10,500.0	7,530.0	5,000.0	5,000.0	54.7	8.7	49.29	-4,101.6	-2,645.9	3,993.5	3,943.7	49.80	80.185		
10,600.0	7,530.0	5,000.0	5,000.0	56.4	8.7	49.29	-4,101.6	-2,645.9	3,965.0	3,913.9	51.10	77.600		
10,700.0	7,530.0	5,000.0	5,000.0	58.1	8.7	49.29	-4,101.6	-2,645.9	3,938.9	3,886.5	52.39	75.183		
10,800.0	7,530.0	5,000.0	5,000.0	59.8	8.7	49.29	-4,101.6	-2,645.9	3,915.2	3,861.5	53.69	72.924		
10,900.0	7,530.0	5,000.0	5,000.0	61.5	8.7	49.29	-4,101.6	-2,645.9	3,893.9	3,838.9	54.99	70.813		
11,000.0	7,530.0	5,000.0	5,000.0	63.2	8.7	49.29	-4,101.6	-2,645.9	3,875.0	3,818.7	56.29	68.840		
11,100.0	7,530.0	5,000.0	5,000.0	64.9	8.7	49.29	-4,101.6	-2,645.9	3,858.7	3,801.1	57.59	66.999		
11,200.0	7,530.0	5,000.0	5,000.0	66.6	8.7	49.29	-4,101.6	-2,645.9	3,844.9	3,786.0	58.90	65.280		
11,300.0	7,530.0	5,000.0	5,000.0	68.4	8.7	49.29	-4,101.6	-2,645.9	3,833.6	3,773.4	60.21	63.676		
11,400.0	7,530.0	5,000.0	5,000.0	70.1	8.7	49.29	-4,101.6	-2,645.9	3,825.0	3,763.4	61.51	62.181		
11,500.0	7,530.0	5,000.0	5,000.0	71.8	8.7	49.29	-4,101.6	-2,645.9	3,818.9	3,756.1	62.82	60.789		
11,600.0	7,530.0	5,000.0	5,000.0	73.5	8.7	49.29	-4,101.6	-2,645.9	3,815.4	3,751.3	64.13	59.493		
11,682.0	7,530.0	5,000.0	5,000.0	74.9	8.7	49.29	-4,101.6	-2,645.9	3,814.5	3,749.3	65.21	58.498 CC		
11,700.0	7,530.0	5,000.0	5,000.0	75.2	8.7	49.29	-4,101.6	-2,645.9	3,814.6	3,749.1	65.44	58.287 ES		
11,800.0	7,530.0	5,000.0	5,000.0	77.0	8.7	49.29	-4,101.6	-2,645.9	3,816.4	3,749.6	66.76	57.168		
11,900.0	7,530.0	5,000.0	5,000.0	78.7	8.7	49.29	-4,101.6	-2,645.9	3,820.8	3,752.7	68.07	56.129		
12,000.0	7,530.0	5,000.0	5,000.0	80.4	8.7	49.29	-4,101.6	-2,645.9	3,827.8	3,758.4	69.39	55.167		
12,100.0	7,530.0	5,000.0	5,000.0	82.2	8.7	49.29	-4,101.6	-2,645.9	3,837.4	3,766.7	70.70	54.276		
12,200.0	7,530.0	5,000.0	5,000.0	83.9	8.7	49.29	-4,101.6	-2,645.9	3,849.6	3,777.5	72.02	53.453		
12,300.0	7,530.0	5,000.0	5,000.0	85.6	8.7	49.29	-4,101.6	-2,645.9	3,864.3	3,790.9	73.33	52.694		
12,400.0	7,530.0	5,000.0	5,000.0	87.3	8.7	49.29	-4,101.6	-2,645.9	3,881.5	3,806.9	74.65	51.995		
12,500.0	7,530.0	5,000.0	5,000.0	89.1	8.7	49.29	-4,101.6	-2,645.9	3,901.3	3,825.3	75.97	51.352		
12,600.0	7,530.0	5,000.0	5,000.0	90.8	8.7	49.29	-4,101.6	-2,645.9	3,923.5	3,846.2	77.29	50.762		
12,700.0	7,530.0	5,000.0	5,000.0	92.5	8.7	49.29	-4,101.6	-2,645.9	3,948.0	3,869.4	78.61	50.223		
12,800.0	7,530.0	5,000.0	5,000.0	94.3	8.7	49.29	-4,101.6	-2,645.9	3,975.0	3,895.1	79.93	49.731		
12,900.0	7,530.0	5,000.0	5,000.0	96.0	8.7	49.29	-4,101.6	-2,645.9	4,004.3	3,923.0	81.25	49.282		
13,000.0	7,530.0	5,000.0	5,000.0	97.8	8.7	49.29	-4,101.6	-2,645.9	4,035.8	3,953.3	82.57	48.876		
13,100.0	7,530.0	5,000.0	5,000.0	99.5	8.7	49.29	-4,101.6	-2,645.9	4,069.6	3,985.7	83.90	48.508		
13,200.0	7,530.0	5,000.0	5,000.0	101.2	8.7	49.29	-4,101.6	-2,645.9	4,105.5	4,020.3	85.22	48.177		
13,300.0	7,530.0	5,000.0	5,000.0	103.0	8.7	49.29	-4,101.6	-2,645.9	4,143.5	4,057.0	86.54	47.879		
13,400.0	7,530.0	5,000.0	5,000.0	104.7	8.7	49.29	-4,101.6	-2,645.9	4,183.6	4,095.7	87.86	47.614		
13,500.0	7,530.0	5,000.0	5,000.0	106.4	8.7	49.29	-4,101.6	-2,645.9	4,225.6	4,136.4	89.19	47.379		
13,600.0	7,530.0	5,000.0	5,000.0	108.2	8.7	49.29	-4,101.6	-2,645.9	4,269.6	4,179.1	90.51	47.172		
13,700.0	7,530.0	5,000.0	5,000.0	109.9	8.7	49.29	-4,101.6	-2,645.9	4,315.4	4,223.6	91.84	46.991		
13,800.0	7,530.0	5,000.0	5,000.0	111.7	8.7	49.29	-4,101.6	-2,645.9	4,363.1	4,269.9	93.16	46.834		
13,900.0	7,530.0	5,000.0	5,000.0	113.4	8.7	49.29	-4,101.6	-2,645.9	4,412.5	4,318.0	94.49	46.700		
14,000.0	7,530.0	5,000.0	5,000.0	115.1	8.7	49.29	-4,101.6	-2,645.9	4,463.6	4,367.8	95.81	46.588		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,100.0	7,530.0	5,000.0	5,000.0	116.9	8.7	49.29	-4,101.6	-2,645.9	4,516.4	4,419.2	97.14	46.495		
14,200.0	7,530.0	5,000.0	5,000.0	118.6	8.7	49.29	-4,101.6	-2,645.9	4,570.7	4,472.2	98.46	46.420		
14,300.0	7,530.0	5,000.0	5,000.0	120.4	8.7	49.29	-4,101.6	-2,645.9	4,626.5	4,526.7	99.79	46.363		
14,400.0	7,530.0	5,000.0	5,000.0	122.1	8.7	49.29	-4,101.6	-2,645.9	4,683.8	4,582.7	101.12	46.321		
14,500.0	7,530.0	5,000.0	5,000.0	123.9	8.7	49.29	-4,101.6	-2,645.9	4,742.6	4,640.1	102.44	46.295		
14,600.0	7,530.0	5,000.0	5,000.0	125.6	8.7	49.29	-4,101.6	-2,645.9	4,802.7	4,698.9	103.77	46.282		
14,700.0	7,530.0	5,000.0	5,000.0	127.3	8.7	49.29	-4,101.6	-2,645.9	4,864.1	4,759.0	105.10	46.281 SF		
14,800.0	7,530.0	5,000.0	5,000.0	129.1	8.7	49.29	-4,101.6	-2,645.9	4,926.7	4,820.3	106.42	46.293		
14,900.0	7,530.0	5,000.0	5,000.0	130.8	8.7	49.29	-4,101.6	-2,645.9	4,990.6	4,882.9	107.75	46.315		
15,000.0	7,530.0	5,000.0	5,000.0	132.6	8.7	49.29	-4,101.6	-2,645.9	5,055.7	4,946.6	109.08	46.348		
15,100.0	7,530.0	5,000.0	5,000.0	134.3	8.7	49.29	-4,101.6	-2,645.9	5,121.9	5,011.5	110.41	46.390		
15,200.0	7,530.0	5,000.0	5,000.0	136.1	8.7	49.29	-4,101.6	-2,645.9	5,189.1	5,077.4	111.74	46.441		
15,300.0	7,530.0	5,000.0	5,000.0	137.8	8.7	49.29	-4,101.6	-2,645.9	5,257.4	5,144.4	113.07	46.499		
15,400.0	7,530.0	5,000.0	5,000.0	139.6	8.7	49.29	-4,101.6	-2,645.9	5,326.8	5,212.4	114.39	46.565		
15,500.0	7,530.0	5,000.0	5,000.0	141.3	8.7	49.29	-4,101.6	-2,645.9	5,397.0	5,281.3	115.72	46.637		
15,600.0	7,530.0	5,000.0	5,000.0	143.0	8.7	49.29	-4,101.6	-2,645.9	5,468.2	5,351.2	117.05	46.716		
15,700.0	7,530.0	5,000.0	5,000.0	144.8	8.7	49.29	-4,101.6	-2,645.9	5,540.3	5,421.9	118.38	46.800		
15,800.0	7,530.0	5,000.0	5,000.0	146.5	8.7	49.29	-4,101.6	-2,645.9	5,613.3	5,493.6	119.71	46.890		
15,900.0	7,530.0	5,000.0	5,000.0	148.3	8.7	49.29	-4,101.6	-2,645.9	5,687.0	5,566.0	121.04	46.985		
16,000.0	7,530.0	5,000.0	5,000.0	150.0	8.7	49.29	-4,101.6	-2,645.9	5,761.6	5,639.2	122.37	47.083		
16,100.0	7,530.0	5,000.0	5,000.0	151.8	8.7	49.29	-4,101.6	-2,645.9	5,836.9	5,713.2	123.70	47.186		
16,200.0	7,530.0	5,000.0	5,000.0	153.5	8.7	49.29	-4,101.6	-2,645.9	5,913.0	5,787.9	125.03	47.292		
16,300.0	7,530.0	5,000.0	5,000.0	155.3	8.7	49.29	-4,101.6	-2,645.9	5,989.7	5,863.4	126.36	47.402		
16,400.0	7,530.0	5,000.0	5,000.0	157.0	8.7	49.29	-4,101.6	-2,645.9	6,067.1	5,939.5	127.69	47.515		
16,500.0	7,530.0	5,000.0	5,000.0	158.8	8.7	49.29	-4,101.6	-2,645.9	6,145.2	6,016.2	129.02	47.630		
16,600.0	7,530.0	5,000.0	5,000.0	160.5	8.7	49.29	-4,101.6	-2,645.9	6,223.9	6,093.6	130.35	47.748		
16,700.0	7,530.0	5,000.0	5,000.0	162.3	8.7	49.29	-4,101.6	-2,645.9	6,303.3	6,171.6	131.68	47.868		
16,800.0	7,530.0	5,000.0	5,000.0	164.0	8.7	49.29	-4,101.6	-2,645.9	6,383.2	6,250.1	133.01	47.989		
16,900.0	7,530.0	5,000.0	5,000.0	165.8	8.7	49.29	-4,101.6	-2,645.9	6,463.6	6,329.3	134.34	48.113		
17,000.0	7,530.0	5,000.0	5,000.0	167.5	8.7	49.29	-4,101.6	-2,645.9	6,544.6	6,408.9	135.67	48.238		
17,100.0	7,530.0	5,000.0	5,000.0	169.3	8.7	49.29	-4,101.6	-2,645.9	6,626.1	6,489.1	137.00	48.364		
17,200.0	7,530.0	5,000.0	5,000.0	171.0	8.7	49.29	-4,101.6	-2,645.9	6,708.1	6,569.8	138.34	48.492		
17,300.0	7,530.0	5,000.0	5,000.0	172.8	8.7	49.29	-4,101.6	-2,645.9	6,790.6	6,651.0	139.67	48.620		
17,400.0	7,530.0	5,000.0	5,000.0	174.5	8.7	49.29	-4,101.6	-2,645.9	6,873.6	6,732.6	141.00	48.750		
17,420.9	7,530.0	5,000.0	5,000.0	174.9	8.7	49.29	-4,101.6	-2,645.9	6,891.0	6,749.8	141.28	48.777		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU														Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +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	-133.08	-3,068.5	-3,281.5	4,492.7						
100.0	100.0	66.0	66.0	0.2	0.1	-133.08	-3,068.5	-3,281.5	4,492.6	4,492.3	0.27	N/A			
200.0	200.0	166.0	166.0	0.3	0.3	-133.08	-3,068.5	-3,281.5	4,492.6	4,492.0	0.62	7,289.663			
300.0	300.0	266.0	266.0	0.5	0.5	-133.08	-3,068.5	-3,281.5	4,492.6	4,491.6	0.97	4,653.804			
400.0	400.0	366.0	366.0	0.7	0.6	-133.08	-3,068.5	-3,281.5	4,492.6	4,491.3	1.31	3,417.922			
500.0	500.0	466.0	466.0	0.8	0.8	-133.08	-3,068.5	-3,281.5	4,492.6	4,490.9	1.66	2,700.711			
600.0	600.0	566.0	566.0	1.0	1.0	-133.08	-3,068.5	-3,281.5	4,492.6	4,490.6	2.01	2,232.291			
700.0	700.0	666.0	666.0	1.2	1.2	-165.55	-3,068.5	-3,281.5	4,493.4	4,491.1	2.36	1,902.863			
800.0	800.0	766.0	766.0	1.4	1.3	-165.56	-3,068.5	-3,281.5	4,496.0	4,493.3	2.71	1,659.118			
900.0	899.9	865.9	865.9	1.6	1.5	-165.56	-3,068.5	-3,281.5	4,500.2	4,497.1	3.06	1,471.659			
988.4	988.1	954.1	954.1	1.7	1.7	-165.56	-3,068.5	-3,281.5	4,505.3	4,502.0	3.37	1,338.776			
1,000.0	999.7	965.7	965.7	1.7	1.7	-165.57	-3,068.5	-3,281.5	4,506.1	4,502.7	3.41	1,323.051			
1,100.0	1,099.4	1,065.4	1,065.4	1.9	1.9	-165.59	-3,068.5	-3,281.5	4,512.7	4,508.9	3.76	1,201.554			
1,200.0	1,199.2	1,165.2	1,165.2	2.1	2.0	-165.61	-3,068.5	-3,281.5	4,519.2	4,515.1	4.11	1,100.716			
1,300.0	1,299.0	1,265.0	1,265.0	2.3	2.2	-165.63	-3,068.5	-3,281.5	4,525.8	4,521.3	4.46	1,015.689			
1,400.0	1,398.8	1,364.8	1,364.8	2.5	2.4	-165.65	-3,068.5	-3,281.5	4,532.4	4,527.5	4.81	943.032			
1,500.0	1,498.5	1,464.5	1,464.5	2.7	2.6	-165.67	-3,068.5	-3,281.5	4,538.9	4,533.8	5.16	880.232			
1,600.0	1,598.3	1,564.3	1,564.3	2.9	2.7	-165.69	-3,068.5	-3,281.5	4,545.5	4,540.0	5.51	825.414			
1,700.0	1,698.1	1,664.1	1,664.1	3.2	2.9	-165.71	-3,068.5	-3,281.5	4,552.0	4,546.2	5.86	777.149			
1,800.0	1,797.8	1,763.8	1,763.8	3.4	3.1	-165.73	-3,068.5	-3,281.5	4,558.6	4,552.4	6.21	734.329			
1,900.0	1,897.6	1,863.6	1,863.6	3.6	3.3	-165.76	-3,068.5	-3,281.5	4,565.2	4,558.6	6.56	696.082			
2,000.0	1,997.4	1,963.4	1,963.4	3.8	3.4	-165.78	-3,068.5	-3,281.5	4,571.7	4,564.8	6.91	661.714			
2,100.0	2,097.1	2,063.1	2,063.1	4.0	3.6	-165.80	-3,068.5	-3,281.5	4,578.3	4,571.1	7.26	630.664			
2,200.0	2,196.9	2,162.9	2,162.9	4.2	3.8	-165.82	-3,068.5	-3,281.5	4,584.9	4,577.3	7.61	602.474			
2,300.0	2,296.7	2,262.7	2,262.7	4.4	3.9	-165.84	-3,068.5	-3,281.5	4,591.4	4,583.5	7.96	576.766			
2,400.0	2,396.5	2,362.5	2,362.5	4.6	4.1	-165.86	-3,068.5	-3,281.5	4,598.0	4,589.7	8.31	553.226			
2,500.0	2,496.2	2,462.2	2,462.2	4.8	4.3	-165.88	-3,068.5	-3,281.5	4,604.6	4,595.9	8.66	531.592			
2,600.0	2,596.0	2,562.0	2,562.0	5.0	4.5	-165.90	-3,068.5	-3,281.5	4,611.2	4,602.1	9.01	511.641			
2,700.0	2,695.8	2,661.8	2,661.8	5.2	4.6	-165.92	-3,068.5	-3,281.5	4,617.7	4,608.4	9.36	493.184			
2,800.0	2,795.5	2,761.5	2,761.5	5.4	4.8	-165.94	-3,068.5	-3,281.5	4,624.3	4,614.6	9.71	476.059			
2,900.0	2,895.3	2,861.3	2,861.3	5.6	5.0	-165.96	-3,068.5	-3,281.5	4,630.9	4,620.8	10.06	460.128			
3,000.0	2,995.1	2,961.1	2,961.1	5.9	5.2	-165.98	-3,068.5	-3,281.5	4,637.4	4,627.0	10.41	445.270			
3,100.0	3,094.9	3,060.9	3,060.9	6.1	5.3	-166.00	-3,068.5	-3,281.5	4,644.0	4,633.3	10.77	431.379			
3,200.0	3,194.6	3,160.6	3,160.6	6.3	5.5	-166.02	-3,068.5	-3,281.5	4,650.6	4,639.5	11.12	418.365			
3,300.0	3,294.4	3,260.4	3,260.4	6.5	5.7	-166.04	-3,068.5	-3,281.5	4,657.2	4,645.7	11.47	406.147			
3,400.0	3,394.2	3,360.2	3,360.2	6.7	5.9	-166.06	-3,068.5	-3,281.5	4,663.7	4,651.9	11.82	394.654			
3,500.0	3,493.9	3,459.9	3,459.9	6.9	6.0	-166.08	-3,068.5	-3,281.5	4,670.3	4,658.1	12.17	383.824			
3,600.0	3,593.7	3,559.7	3,559.7	7.1	6.2	-166.10	-3,068.5	-3,281.5	4,676.9	4,664.4	12.52	373.600			
3,700.0	3,693.5	3,659.5	3,659.5	7.3	6.4	-166.12	-3,068.5	-3,281.5	4,683.5	4,670.6	12.87	363.934			
3,800.0	3,793.2	3,759.2	3,759.2	7.5	6.6	-166.14	-3,068.5	-3,281.5	4,690.0	4,676.8	13.22	354.781			
3,900.0	3,893.0	3,859.0	3,859.0	7.7	6.7	-166.16	-3,068.5	-3,281.5	4,696.6	4,683.1	13.57	346.101			
4,000.0	3,992.8	3,958.8	3,958.8	8.0	6.9	-166.18	-3,068.5	-3,281.5	4,703.2	4,689.3	13.92	337.858			
4,100.0	4,092.6	4,058.6	4,058.6	8.2	7.1	-166.20	-3,068.5	-3,281.5	4,709.8	4,695.5	14.27	330.020			
4,200.0	4,192.3	4,158.3	4,158.3	8.4	7.3	-166.22	-3,068.5	-3,281.5	4,716.4	4,701.7	14.62	322.559			
4,300.0	4,292.1	4,258.1	4,258.1	8.6	7.4	-166.24	-3,068.5	-3,281.5	4,722.9	4,708.0	14.97	315.447			
4,400.0	4,391.9	4,357.9	4,357.9	8.8	7.6	-166.26	-3,068.5	-3,281.5	4,729.5	4,714.2	15.32	308.660			
4,500.0	4,491.6	4,457.6	4,457.6	9.0	7.8	-166.28	-3,068.5	-3,281.5	4,736.1	4,720.4	15.67	302.178			
4,600.0	4,591.4	4,557.4	4,557.4	9.2	8.0	-166.30	-3,068.5	-3,281.5	4,742.7	4,726.7	16.02	295.979			
4,700.0	4,691.2	4,657.2	4,657.2	9.4	8.1	-166.32	-3,068.5	-3,281.5	4,749.3	4,732.9	16.37	290.046			
4,800.0	4,790.9	4,756.9	4,756.9	9.6	8.3	-166.34	-3,068.5	-3,281.5	4,755.8	4,739.1	16.72	284.361			
4,900.0	4,890.7	4,856.7	4,856.7	9.8	8.5	-166.36	-3,068.5	-3,281.5	4,762.4	4,745.4	17.08	278.910			
5,000.0	4,990.5	4,956.5	4,956.5	10.1	8.7	-166.38	-3,068.5	-3,281.5	4,769.0	4,751.6	17.43	273.679			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	5,056.3	5,056.3	10.3	8.8	-166.40	-3,068.5	-3,281.5	4,775.6	4,757.8	17.78	268.654		
5,200.0	5,190.0	5,156.0	5,156.0	10.5	9.0	-166.41	-3,068.5	-3,281.5	4,782.2	4,764.1	18.13	263.823		
5,300.0	5,289.8	5,255.8	5,255.8	10.7	9.2	-166.43	-3,068.5	-3,281.5	4,788.8	4,770.3	18.48	259.176		
5,400.0	5,389.6	5,355.6	5,355.6	10.9	9.3	-166.45	-3,068.5	-3,281.5	4,795.4	4,776.5	18.83	254.702		
5,500.0	5,489.3	5,455.3	5,455.3	11.1	9.5	-166.47	-3,068.5	-3,281.5	4,801.9	4,782.8	19.18	250.392		
5,600.0	5,589.1	5,555.1	5,555.1	11.3	9.7	-166.49	-3,068.5	-3,281.5	4,808.5	4,789.0	19.53	246.236		
5,700.0	5,688.9	5,654.9	5,654.9	11.5	9.9	-166.51	-3,068.5	-3,281.5	4,815.1	4,795.2	19.88	242.227		
5,800.0	5,788.7	5,754.7	5,754.7	11.7	10.0	-166.53	-3,068.5	-3,281.5	4,821.7	4,801.5	20.23	238.357		
5,900.0	5,888.4	5,854.4	5,854.4	11.9	10.2	-166.55	-3,068.5	-3,281.5	4,828.3	4,807.7	20.58	234.619		
6,000.0	5,988.2	5,954.2	5,954.2	12.2	10.4	-166.57	-3,068.5	-3,281.5	4,834.9	4,813.9	20.93	231.007		
6,100.0	6,088.0	6,054.0	6,054.0	12.4	10.6	-166.58	-3,068.5	-3,281.5	4,841.5	4,820.2	21.28	227.513		
6,200.0	6,187.7	6,153.7	6,153.7	12.6	10.7	-166.60	-3,068.5	-3,281.5	4,848.1	4,826.4	21.63	224.133		
6,300.0	6,287.5	6,253.5	6,253.5	12.8	10.9	-166.62	-3,068.5	-3,281.5	4,854.6	4,832.7	21.98	220.860		
6,400.0	6,387.3	6,353.3	6,353.3	13.0	11.1	-166.64	-3,068.5	-3,281.5	4,861.2	4,838.9	22.33	217.691		
6,500.0	6,487.0	6,453.0	6,453.0	13.2	11.3	-166.66	-3,068.5	-3,281.5	4,867.8	4,845.1	22.68	214.619		
6,600.0	6,586.8	6,552.8	6,552.8	13.4	11.4	-166.68	-3,068.5	-3,281.5	4,874.4	4,851.4	23.03	211.641		
6,700.0	6,686.6	6,652.6	6,652.6	13.6	11.6	-166.69	-3,068.5	-3,281.5	4,881.0	4,857.6	23.38	208.752		
6,787.0	6,773.4	6,739.4	6,739.4	13.8	11.8	-166.71	-3,068.5	-3,281.5	4,886.7	4,863.1	23.69	206.309		
6,800.0	6,786.4	6,752.4	6,752.4	13.8	11.8	-177.29	-3,068.5	-3,281.5	4,887.5	4,863.8	23.74	205.902		
6,850.0	6,836.3	6,802.3	6,802.3	13.9	11.9	95.52	-3,068.5	-3,281.5	4,889.0	4,865.1	23.91	204.514		
6,900.0	6,886.2	6,852.2	6,852.2	14.0	12.0	65.75	-3,068.5	-3,281.5	4,888.0	4,863.9	24.03	203.371		
6,950.0	6,935.7	6,901.7	6,901.7	14.0	12.0	58.20	-3,068.5	-3,281.5	4,884.6	4,860.4	24.13	202.452		
7,000.0	6,984.6	6,950.6	6,950.6	14.0	12.1	55.22	-3,068.5	-3,281.5	4,878.8	4,854.6	24.18	201.728		
7,050.0	7,032.6	6,998.6	6,998.6	14.0	12.2	53.94	-3,068.5	-3,281.5	4,870.6	4,846.4	24.21	201.153		
7,100.0	7,079.7	7,045.7	7,045.7	13.9	12.3	53.52	-3,068.5	-3,281.5	4,860.1	4,835.9	24.22	200.672		
7,150.0	7,125.4	7,091.4	7,091.4	13.9	12.4	53.67	-3,068.5	-3,281.5	4,847.4	4,823.2	24.21	200.214		
7,200.0	7,169.6	7,135.6	7,135.6	13.8	12.5	54.23	-3,068.5	-3,281.5	4,832.6	4,808.4	24.20	199.698		
7,250.0	7,212.1	7,178.1	7,178.1	13.8	12.5	55.12	-3,068.5	-3,281.5	4,815.7	4,791.5	24.20	199.035		
7,300.0	7,252.6	7,218.6	7,218.6	13.7	12.6	56.31	-3,068.5	-3,281.5	4,796.8	4,772.6	24.21	198.128		
7,350.0	7,291.0	7,257.0	7,257.0	13.7	12.7	57.78	-3,068.5	-3,281.5	4,776.2	4,751.9	24.26	196.887		
7,400.0	7,327.1	7,293.1	7,293.1	13.7	12.7	59.49	-3,068.5	-3,281.5	4,753.8	4,729.5	24.35	195.232		
7,450.0	7,360.7	7,326.7	7,326.7	13.7	12.8	61.45	-3,068.5	-3,281.5	4,729.9	4,705.5	24.49	193.105		
7,500.0	7,391.6	7,357.6	7,357.6	13.7	12.8	63.63	-3,068.5	-3,281.5	4,704.7	4,680.0	24.70	190.482		
7,550.0	7,419.7	7,385.7	7,385.7	13.8	12.9	66.03	-3,068.5	-3,281.5	4,678.1	4,653.2	24.97	187.379		
7,600.0	7,444.8	7,410.8	7,410.8	13.9	12.9	68.63	-3,068.5	-3,281.5	4,650.5	4,625.2	25.30	183.849		
7,650.0	7,466.9	7,432.9	7,432.9	14.1	13.0	71.40	-3,068.5	-3,281.5	4,622.0	4,596.3	25.68	179.982		
7,700.0	7,485.8	7,451.8	7,451.8	14.3	13.0	74.31	-3,068.5	-3,281.5	4,592.7	4,566.6	26.11	175.886		
7,750.0	7,501.5	7,467.5	7,467.5	14.6	13.0	77.34	-3,068.5	-3,281.5	4,562.9	4,536.3	26.58	171.681		
7,800.0	7,513.7	7,479.7	7,479.7	14.9	13.1	80.45	-3,068.5	-3,281.5	4,532.6	4,505.6	27.06	167.476		
7,850.0	7,522.6	7,488.6	7,488.6	15.2	13.1	83.59	-3,068.5	-3,281.5	4,502.1	4,474.6	27.56	163.362		
7,900.0	7,528.0	7,494.0	7,494.0	15.6	13.1	86.73	-3,068.5	-3,281.5	4,471.6	4,443.5	28.05	159.403		
7,952.9	7,530.0	7,496.0	7,496.0	16.1	13.1	90.00	-3,068.5	-3,281.5	4,439.3	4,410.8	28.56	155.422		
8,000.0	7,530.0	7,496.0	7,496.0	16.5	13.1	90.00	-3,068.5	-3,281.5	4,410.9	4,381.9	29.02	152.005		
8,100.0	7,530.0	7,496.0	7,496.0	17.5	13.1	90.00	-3,068.5	-3,281.5	4,351.6	4,321.5	30.08	144.675		
8,200.0	7,530.0	7,496.0	7,496.0	18.7	13.1	90.00	-3,068.5	-3,281.5	4,293.8	4,262.5	31.25	137.418		
8,300.0	7,530.0	7,496.0	7,496.0	19.9	13.1	90.00	-3,068.5	-3,281.5	4,237.5	4,205.0	32.50	130.376		
8,400.0	7,530.0	7,496.0	7,496.0	21.2	13.1	90.00	-3,068.5	-3,281.5	4,182.9	4,149.1	33.83	123.641		
8,500.0	7,530.0	7,496.0	7,496.0	22.6	13.1	90.00	-3,068.5	-3,281.5	4,130.0	4,094.8	35.22	117.267		
8,600.0	7,530.0	7,496.0	7,496.0	24.0	13.1	90.00	-3,068.5	-3,281.5	4,078.9	4,042.2	36.66	111.275		
8,700.0	7,530.0	7,496.0	7,496.0	25.4	13.1	90.00	-3,068.5	-3,281.5	4,029.6	3,991.5	38.13	105.671		
8,800.0	7,530.0	7,496.0	7,496.0	26.9	13.1	90.00	-3,068.5	-3,281.5	3,982.2	3,942.6	39.64	100.448		
8,900.0	7,530.0	7,496.0	7,496.0	28.4	13.1	90.00	-3,068.5	-3,281.5	3,936.8	3,895.6	41.18	95.591		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU													Offset Site Error:	0.0 ft
Survey Program: 8332-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,530.0	7,496.0	7,496.0	30.0	13.1	90.00	-3,068.5	-3,281.5	3,893.4	3,850.6	42.75	91.080		
9,100.0	7,530.0	7,496.0	7,496.0	31.5	13.1	90.00	-3,068.5	-3,281.5	3,852.1	3,807.8	44.33	86.896		
9,200.0	7,530.0	7,496.0	7,496.0	33.1	13.1	90.00	-3,068.5	-3,281.5	3,813.0	3,767.1	45.93	83.016		
9,300.0	7,530.0	7,496.0	7,496.0	34.7	13.1	90.00	-3,068.5	-3,281.5	3,776.1	3,728.6	47.55	79.420		
9,400.0	7,530.0	7,496.0	7,496.0	36.3	13.1	90.00	-3,068.5	-3,281.5	3,741.6	3,692.4	49.17	76.087		
9,500.0	7,530.0	7,496.0	7,496.0	38.0	13.1	90.00	-3,068.5	-3,281.5	3,709.4	3,658.6	50.81	72.998		
9,600.0	7,530.0	7,496.0	7,496.0	39.6	13.1	90.00	-3,068.5	-3,281.5	3,679.6	3,627.2	52.46	70.136		
9,700.0	7,530.0	7,496.0	7,496.0	41.3	13.1	90.00	-3,068.5	-3,281.5	3,652.4	3,598.3	54.12	67.484		
9,800.0	7,530.0	7,496.0	7,496.0	42.9	13.1	90.00	-3,068.5	-3,281.5	3,627.7	3,571.9	55.79	65.026		
9,900.0	7,530.0	7,496.0	7,496.0	44.6	13.1	90.00	-3,068.5	-3,281.5	3,605.6	3,548.2	57.46	62.749		
10,000.0	7,530.0	7,496.0	7,496.0	46.3	13.1	90.00	-3,068.5	-3,281.5	3,586.2	3,527.0	59.14	60.639		
10,100.0	7,530.0	7,496.0	7,496.0	47.9	13.1	90.00	-3,068.5	-3,281.5	3,569.4	3,508.6	60.82	58.685		
10,200.0	7,530.0	7,496.0	7,496.0	49.6	13.1	90.00	-3,068.5	-3,281.5	3,555.4	3,492.9	62.51	56.875		
10,300.0	7,530.0	7,496.0	7,496.0	51.3	13.1	90.00	-3,068.5	-3,281.5	3,544.2	3,480.0	64.21	55.200		
10,400.0	7,530.0	7,496.0	7,496.0	53.0	13.1	90.00	-3,068.5	-3,281.5	3,535.8	3,469.9	65.90	53.650		
10,500.0	7,530.0	7,496.0	7,496.0	54.7	13.1	90.00	-3,068.5	-3,281.5	3,530.1	3,462.5	67.61	52.217		
10,600.0	7,530.0	7,496.0	7,496.0	56.4	13.1	90.00	-3,068.5	-3,281.5	3,527.3	3,458.0	69.31	50.893		
10,648.8	7,530.0	7,496.0	7,496.0	57.2	13.1	90.00	-3,068.5	-3,281.5	3,527.0	3,456.9	70.14	50.283 CC		
10,700.0	7,530.0	7,496.0	7,496.0	58.1	13.1	90.00	-3,068.5	-3,281.5	3,527.4	3,456.4	71.02	49.670 ES		
10,800.0	7,530.0	7,496.0	7,496.0	59.8	13.1	90.00	-3,068.5	-3,281.5	3,530.2	3,457.5	72.73	48.541		
10,900.0	7,530.0	7,496.0	7,496.0	61.5	13.1	90.00	-3,068.5	-3,281.5	3,535.9	3,461.5	74.44	47.501		
11,000.0	7,530.0	7,496.0	7,496.0	63.2	13.1	90.00	-3,068.5	-3,281.5	3,544.4	3,468.3	76.15	46.543		
11,100.0	7,530.0	7,496.0	7,496.0	64.9	13.1	90.00	-3,068.5	-3,281.5	3,555.7	3,477.9	77.87	45.662		
11,200.0	7,530.0	7,496.0	7,496.0	66.6	13.1	90.00	-3,068.5	-3,281.5	3,569.8	3,490.2	79.59	44.853		
11,300.0	7,530.0	7,496.0	7,496.0	68.4	13.1	90.00	-3,068.5	-3,281.5	3,586.6	3,505.3	81.31	44.110		
11,400.0	7,530.0	7,496.0	7,496.0	70.1	13.1	90.00	-3,068.5	-3,281.5	3,606.1	3,523.1	83.03	43.430		
11,500.0	7,530.0	7,496.0	7,496.0	71.8	13.1	90.00	-3,068.5	-3,281.5	3,628.3	3,543.5	84.76	42.808		
11,600.0	7,530.0	7,496.0	7,496.0	73.5	13.1	90.00	-3,068.5	-3,281.5	3,653.0	3,566.5	86.48	42.241		
11,700.0	7,530.0	7,496.0	7,496.0	75.2	13.1	90.00	-3,068.5	-3,281.5	3,680.3	3,592.1	88.21	41.723		
11,800.0	7,530.0	7,496.0	7,496.0	77.0	13.1	90.00	-3,068.5	-3,281.5	3,710.1	3,620.2	89.94	41.253		
11,900.0	7,530.0	7,496.0	7,496.0	78.7	13.1	90.00	-3,068.5	-3,281.5	3,742.3	3,650.7	91.66	40.827		
12,000.0	7,530.0	7,496.0	7,496.0	80.4	13.1	90.00	-3,068.5	-3,281.5	3,777.0	3,683.6	93.39	40.441		
12,100.0	7,530.0	7,496.0	7,496.0	82.2	13.1	90.00	-3,068.5	-3,281.5	3,813.9	3,718.7	95.13	40.093		
12,200.0	7,530.0	7,496.0	7,496.0	83.9	13.1	90.00	-3,068.5	-3,281.5	3,853.0	3,756.2	96.86	39.781		
12,300.0	7,530.0	7,496.0	7,496.0	85.6	13.1	90.00	-3,068.5	-3,281.5	3,894.4	3,795.8	98.59	39.501		
12,400.0	7,530.0	7,496.0	7,496.0	87.3	13.1	90.00	-3,068.5	-3,281.5	3,937.8	3,837.5	100.32	39.251		
12,500.0	7,530.0	7,496.0	7,496.0	89.1	13.1	90.00	-3,068.5	-3,281.5	3,983.3	3,881.2	102.06	39.029		
12,600.0	7,530.0	7,496.0	7,496.0	90.8	13.1	90.00	-3,068.5	-3,281.5	4,030.7	3,926.9	103.79	38.834		
12,700.0	7,530.0	7,496.0	7,496.0	92.5	13.1	90.00	-3,068.5	-3,281.5	4,080.1	3,974.5	105.53	38.663		
12,800.0	7,530.0	7,496.0	7,496.0	94.3	13.1	90.00	-3,068.5	-3,281.5	4,131.3	4,024.0	107.27	38.514		
12,900.0	7,530.0	7,496.0	7,496.0	96.0	13.1	90.00	-3,068.5	-3,281.5	4,184.2	4,075.2	109.00	38.386		
13,000.0	7,530.0	7,496.0	7,496.0	97.8	13.1	90.00	-3,068.5	-3,281.5	4,238.8	4,128.1	110.74	38.277		
13,100.0	7,530.0	7,496.0	7,496.0	99.5	13.1	90.00	-3,068.5	-3,281.5	4,295.1	4,182.6	112.48	38.185		
13,200.0	7,530.0	7,496.0	7,496.0	101.2	13.1	90.00	-3,068.5	-3,281.5	4,352.9	4,238.7	114.22	38.111		
13,300.0	7,530.0	7,496.0	7,496.0	103.0	13.1	90.00	-3,068.5	-3,281.5	4,412.3	4,296.3	115.96	38.051		
13,400.0	7,530.0	7,496.0	7,496.0	104.7	13.1	90.00	-3,068.5	-3,281.5	4,473.1	4,355.4	117.70	38.005		
13,500.0	7,530.0	7,496.0	7,496.0	106.4	13.1	90.00	-3,068.5	-3,281.5	4,535.3	4,415.9	119.44	37.972		
13,600.0	7,530.0	7,496.0	7,496.0	108.2	13.1	90.00	-3,068.5	-3,281.5	4,598.8	4,477.6	121.18	37.950		
13,700.0	7,530.0	7,496.0	7,496.0	109.9	13.1	90.00	-3,068.5	-3,281.5	4,663.6	4,540.7	122.92	37.940		
13,800.0	7,530.0	7,496.0	7,496.0	111.7	13.1	90.00	-3,068.5	-3,281.5	4,729.6	4,605.0	124.66	37.939 SF		
13,900.0	7,530.0	7,496.0	7,496.0	113.4	13.1	90.00	-3,068.5	-3,281.5	4,796.9	4,670.4	126.40	37.948		
14,000.0	7,530.0	7,496.0	7,496.0	115.1	13.1	90.00	-3,068.5	-3,281.5	4,865.2	4,737.0	128.15	37.966		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS E UNIT 1 (EXISTING) - Existing - NO SU											Offset Site Error:		0.0 ft	
Survey Program: 8332-Geolink MWD											Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,496.0	7,496.0	116.9	13.1	90.00	-3,068.5	-3,281.5	4,934.6	4,804.7	129.89	37.991		
14,200.0	7,530.0	7,496.0	7,496.0	118.6	13.1	90.00	-3,068.5	-3,281.5	5,005.0	4,873.4	131.63	38.023		
14,300.0	7,530.0	7,496.0	7,496.0	120.4	13.1	90.00	-3,068.5	-3,281.5	5,076.5	4,943.1	133.38	38.061		
14,400.0	7,530.0	7,496.0	7,496.0	122.1	13.1	90.00	-3,068.5	-3,281.5	5,148.9	5,013.8	135.12	38.106		
14,500.0	7,530.0	7,496.0	7,496.0	123.9	13.1	90.00	-3,068.5	-3,281.5	5,222.2	5,085.3	136.86	38.156		
14,600.0	7,530.0	7,496.0	7,496.0	125.6	13.1	90.00	-3,068.5	-3,281.5	5,296.4	5,157.8	138.61	38.211		
14,700.0	7,530.0	7,496.0	7,496.0	127.3	13.1	90.00	-3,068.5	-3,281.5	5,371.4	5,231.0	140.35	38.270		
14,800.0	7,530.0	7,496.0	7,496.0	129.1	13.1	90.00	-3,068.5	-3,281.5	5,447.2	5,305.1	142.10	38.334		
14,900.0	7,530.0	7,496.0	7,496.0	130.8	13.1	90.00	-3,068.5	-3,281.5	5,523.8	5,379.9	143.84	38.401		
15,000.0	7,530.0	7,496.0	7,496.0	132.6	13.1	90.00	-3,068.5	-3,281.5	5,601.1	5,455.5	145.59	38.472		
15,100.0	7,530.0	7,496.0	7,496.0	134.3	13.1	90.00	-3,068.5	-3,281.5	5,679.1	5,531.8	147.33	38.546		
15,200.0	7,530.0	7,496.0	7,496.0	136.1	13.1	90.00	-3,068.5	-3,281.5	5,757.8	5,608.8	149.08	38.623		
15,300.0	7,530.0	7,496.0	7,496.0	137.8	13.1	90.00	-3,068.5	-3,281.5	5,837.2	5,686.4	150.83	38.702		
15,400.0	7,530.0	7,496.0	7,496.0	139.6	13.1	90.00	-3,068.5	-3,281.5	5,917.2	5,764.6	152.57	38.783		
15,500.0	7,530.0	7,496.0	7,496.0	141.3	13.1	90.00	-3,068.5	-3,281.5	5,997.8	5,843.5	154.32	38.866		
15,600.0	7,530.0	7,496.0	7,496.0	143.0	13.1	90.00	-3,068.5	-3,281.5	6,079.0	5,922.9	156.07	38.951		
15,700.0	7,530.0	7,496.0	7,496.0	144.8	13.1	90.00	-3,068.5	-3,281.5	6,160.7	6,002.9	157.81	39.038		
15,800.0	7,530.0	7,496.0	7,496.0	146.5	13.1	90.00	-3,068.5	-3,281.5	6,242.9	6,083.4	159.56	39.126		
15,900.0	7,530.0	7,496.0	7,496.0	148.3	13.1	90.00	-3,068.5	-3,281.5	6,325.7	6,164.4	161.31	39.216		
16,000.0	7,530.0	7,496.0	7,496.0	150.0	13.1	90.00	-3,068.5	-3,281.5	6,409.0	6,245.9	163.05	39.306		
16,100.0	7,530.0	7,496.0	7,496.0	151.8	13.1	90.00	-3,068.5	-3,281.5	6,492.7	6,327.9	164.80	39.397		
16,200.0	7,530.0	7,496.0	7,496.0	153.5	13.1	90.00	-3,068.5	-3,281.5	6,576.9	6,410.3	166.55	39.489		
16,300.0	7,530.0	7,496.0	7,496.0	155.3	13.1	90.00	-3,068.5	-3,281.5	6,661.5	6,493.2	168.30	39.582		
16,400.0	7,530.0	7,496.0	7,496.0	157.0	13.1	90.00	-3,068.5	-3,281.5	6,746.5	6,576.5	170.04	39.675		
16,500.0	7,530.0	7,496.0	7,496.0	158.8	13.1	90.00	-3,068.5	-3,281.5	6,832.0	6,660.2	171.79	39.769		
16,600.0	7,530.0	7,496.0	7,496.0	160.5	13.1	90.00	-3,068.5	-3,281.5	6,917.8	6,744.3	173.54	39.863		
16,700.0	7,530.0	7,496.0	7,496.0	162.3	13.1	90.00	-3,068.5	-3,281.5	7,004.0	6,828.7	175.29	39.957		
16,800.0	7,530.0	7,496.0	7,496.0	164.0	13.1	90.00	-3,068.5	-3,281.5	7,090.6	6,913.6	177.04	40.052		
16,900.0	7,530.0	7,496.0	7,496.0	165.8	13.1	90.00	-3,068.5	-3,281.5	7,177.5	6,998.7	178.78	40.146		
17,000.0	7,530.0	7,496.0	7,496.0	167.5	13.1	90.00	-3,068.5	-3,281.5	7,264.8	7,084.2	180.53	40.241		
17,100.0	7,530.0	7,496.0	7,496.0	169.3	13.1	90.00	-3,068.5	-3,281.5	7,352.4	7,170.1	182.28	40.335		
17,200.0	7,530.0	7,496.0	7,496.0	171.0	13.1	90.00	-3,068.5	-3,281.5	7,440.3	7,256.2	184.03	40.429		
17,300.0	7,530.0	7,496.0	7,496.0	172.8	13.1	90.00	-3,068.5	-3,281.5	7,528.5	7,342.7	185.78	40.524		
17,400.0	7,530.0	7,496.0	7,496.0	174.5	13.1	90.00	-3,068.5	-3,281.5	7,617.0	7,429.4	187.53	40.617		
17,420.9	7,530.0	7,496.0	7,496.0	174.9	13.1	90.00	-3,068.5	-3,281.5	7,635.5	7,447.6	187.90	40.637		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-133.47	-3,111.1	-3,282.3	4,522.6					
100.0	100.0	66.0	66.0	0.2	0.1	-133.47	-3,111.1	-3,282.3	4,522.4	4,522.2	0.27	N/A		
200.0	200.0	166.0	166.0	0.3	0.3	-133.47	-3,111.1	-3,282.3	4,522.4	4,521.8	0.62	7,338.092		
300.0	300.0	266.0	266.0	0.5	0.5	-133.47	-3,111.1	-3,282.3	4,522.4	4,521.5	0.97	4,684.723		
400.0	400.0	366.0	366.0	0.7	0.6	-133.47	-3,111.1	-3,282.3	4,522.4	4,521.1	1.31	3,440.630		
500.0	500.0	466.0	466.0	0.8	0.8	-133.47	-3,111.1	-3,282.3	4,522.4	4,520.8	1.66	2,718.654		
600.0	600.0	566.0	566.0	1.0	1.0	-133.47	-3,111.1	-3,282.3	4,522.4	4,520.4	2.01	2,247.122		
700.0	700.0	666.0	666.0	1.2	1.2	-165.94	-3,111.1	-3,282.3	4,523.3	4,520.9	2.36	1,915.505		
800.0	800.0	766.0	766.0	1.4	1.3	-165.94	-3,111.1	-3,282.3	4,525.8	4,523.1	2.71	1,670.143		
900.0	899.9	865.9	865.9	1.6	1.5	-165.95	-3,111.1	-3,282.3	4,530.0	4,527.0	3.06	1,481.445		
988.4	988.1	954.1	954.1	1.7	1.7	-165.95	-3,111.1	-3,282.3	4,535.2	4,531.8	3.37	1,347.689		
1,000.0	999.7	965.7	965.7	1.7	1.7	-165.95	-3,111.1	-3,282.3	4,536.0	4,532.6	3.41	1,331.860		
1,100.0	1,099.4	1,065.4	1,065.4	1.9	1.9	-165.97	-3,111.1	-3,282.3	4,542.5	4,538.8	3.76	1,209.563		
1,200.0	1,199.2	1,165.2	1,165.2	2.1	2.0	-165.99	-3,111.1	-3,282.3	4,549.1	4,545.0	4.11	1,108.060		
1,300.0	1,299.0	1,265.0	1,265.0	2.3	2.2	-166.01	-3,111.1	-3,282.3	4,555.7	4,551.2	4.46	1,022.473		
1,400.0	1,398.8	1,364.8	1,364.8	2.5	2.4	-166.03	-3,111.1	-3,282.3	4,562.2	4,557.4	4.81	949.337		
1,500.0	1,498.5	1,464.5	1,464.5	2.7	2.6	-166.05	-3,111.1	-3,282.3	4,568.8	4,563.7	5.16	886.122		
1,600.0	1,598.3	1,564.3	1,564.3	2.9	2.7	-166.08	-3,111.1	-3,282.3	4,575.4	4,569.9	5.51	830.941		
1,700.0	1,698.1	1,664.1	1,664.1	3.2	2.9	-166.10	-3,111.1	-3,282.3	4,582.0	4,576.1	5.86	782.355		
1,800.0	1,797.8	1,763.8	1,763.8	3.4	3.1	-166.12	-3,111.1	-3,282.3	4,588.6	4,582.3	6.21	739.249		
1,900.0	1,897.6	1,863.6	1,863.6	3.6	3.3	-166.14	-3,111.1	-3,282.3	4,595.1	4,588.6	6.56	700.748		
2,000.0	1,997.4	1,963.4	1,963.4	3.8	3.4	-166.16	-3,111.1	-3,282.3	4,601.7	4,594.8	6.91	666.150		
2,100.0	2,097.1	2,063.1	2,063.1	4.0	3.6	-166.18	-3,111.1	-3,282.3	4,608.3	4,601.0	7.26	634.892		
2,200.0	2,196.9	2,162.9	2,162.9	4.2	3.8	-166.20	-3,111.1	-3,282.3	4,614.9	4,607.3	7.61	606.513		
2,300.0	2,296.7	2,262.7	2,262.7	4.4	3.9	-166.22	-3,111.1	-3,282.3	4,621.4	4,613.5	7.96	580.632		
2,400.0	2,396.5	2,362.5	2,362.5	4.6	4.1	-166.24	-3,111.1	-3,282.3	4,628.0	4,619.7	8.31	556.934		
2,500.0	2,496.2	2,462.2	2,462.2	4.8	4.3	-166.26	-3,111.1	-3,282.3	4,634.6	4,625.9	8.66	535.154		
2,600.0	2,596.0	2,562.0	2,562.0	5.0	4.5	-166.28	-3,111.1	-3,282.3	4,641.2	4,632.2	9.01	515.068		
2,700.0	2,695.8	2,661.8	2,661.8	5.2	4.6	-166.30	-3,111.1	-3,282.3	4,647.8	4,638.4	9.36	496.487		
2,800.0	2,795.5	2,761.5	2,761.5	5.4	4.8	-166.32	-3,111.1	-3,282.3	4,654.3	4,644.6	9.71	479.246		
2,900.0	2,895.3	2,861.3	2,861.3	5.6	5.0	-166.34	-3,111.1	-3,282.3	4,660.9	4,650.9	10.06	463.207		
3,000.0	2,995.1	2,961.1	2,961.1	5.9	5.2	-166.36	-3,111.1	-3,282.3	4,667.5	4,657.1	10.41	448.248		
3,100.0	3,094.9	3,060.9	3,060.9	6.1	5.3	-166.37	-3,111.1	-3,282.3	4,674.1	4,663.3	10.76	434.263		
3,200.0	3,194.6	3,160.6	3,160.6	6.3	5.5	-166.39	-3,111.1	-3,282.3	4,680.7	4,669.6	11.11	421.160		
3,300.0	3,294.4	3,260.4	3,260.4	6.5	5.7	-166.41	-3,111.1	-3,282.3	4,687.3	4,675.8	11.46	408.859		
3,400.0	3,394.2	3,360.2	3,360.2	6.7	5.9	-166.43	-3,111.1	-3,282.3	4,693.8	4,682.0	11.81	397.288		
3,500.0	3,493.9	3,459.9	3,459.9	6.9	6.0	-166.45	-3,111.1	-3,282.3	4,700.4	4,688.3	12.17	386.383		
3,600.0	3,593.7	3,559.7	3,559.7	7.1	6.2	-166.47	-3,111.1	-3,282.3	4,707.0	4,694.5	12.52	376.090		
3,700.0	3,693.5	3,659.5	3,659.5	7.3	6.4	-166.49	-3,111.1	-3,282.3	4,713.6	4,700.7	12.87	366.358		
3,800.0	3,793.2	3,759.2	3,759.2	7.5	6.6	-166.51	-3,111.1	-3,282.3	4,720.2	4,707.0	13.22	357.142		
3,900.0	3,893.0	3,859.0	3,859.0	7.7	6.7	-166.53	-3,111.1	-3,282.3	4,726.8	4,713.2	13.57	348.402		
4,000.0	3,992.8	3,958.8	3,958.8	8.0	6.9	-166.55	-3,111.1	-3,282.3	4,733.4	4,719.5	13.92	340.103		
4,100.0	4,092.6	4,058.6	4,058.6	8.2	7.1	-166.57	-3,111.1	-3,282.3	4,740.0	4,725.7	14.27	332.212		
4,200.0	4,192.3	4,158.3	4,158.3	8.4	7.3	-166.59	-3,111.1	-3,282.3	4,746.5	4,731.9	14.62	324.699		
4,300.0	4,292.1	4,258.1	4,258.1	8.6	7.4	-166.61	-3,111.1	-3,282.3	4,753.1	4,738.2	14.97	317.538		
4,400.0	4,391.9	4,357.9	4,357.9	8.8	7.6	-166.62	-3,111.1	-3,282.3	4,759.7	4,744.4	15.32	310.705		
4,500.0	4,491.6	4,457.6	4,457.6	9.0	7.8	-166.64	-3,111.1	-3,282.3	4,766.3	4,750.7	15.67	304.178		
4,600.0	4,591.4	4,557.4	4,557.4	9.2	8.0	-166.66	-3,111.1	-3,282.3	4,772.9	4,756.9	16.02	297.936		
4,700.0	4,691.2	4,657.2	4,657.2	9.4	8.1	-166.68	-3,111.1	-3,282.3	4,779.5	4,763.1	16.37	291.962		
4,800.0	4,790.9	4,756.9	4,756.9	9.6	8.3	-166.70	-3,111.1	-3,282.3	4,786.1	4,769.4	16.72	286.238		
4,900.0	4,890.7	4,856.7	4,856.7	9.8	8.5	-166.72	-3,111.1	-3,282.3	4,792.7	4,775.6	17.07	280.750		
5,000.0	4,990.5	4,956.5	4,956.5	10.1	8.7	-166.74	-3,111.1	-3,282.3	4,799.3	4,781.9	17.42	275.482		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	5,000.0	5,000.0	10.3	8.7	-166.74	-3,111.1	-3,282.3	4,806.2	4,788.5	17.67	271.940		
5,200.0	5,190.0	5,000.0	5,000.0	10.5	8.7	-166.74	-3,111.1	-3,282.3	4,815.0	4,797.1	17.85	269.741		
5,300.0	5,289.8	5,000.0	5,000.0	10.7	8.7	-166.74	-3,111.1	-3,282.3	4,825.9	4,807.8	18.03	267.699		
5,400.0	5,389.6	5,000.0	5,000.0	10.9	8.7	-166.74	-3,111.1	-3,282.3	4,838.7	4,820.5	18.20	265.809		
5,500.0	5,489.3	5,000.0	5,000.0	11.1	8.7	-166.74	-3,111.1	-3,282.3	4,853.7	4,835.3	18.38	264.065		
5,600.0	5,589.1	5,000.0	5,000.0	11.3	8.7	-166.74	-3,111.1	-3,282.3	4,870.6	4,852.0	18.56	262.463		
5,700.0	5,688.9	5,000.0	5,000.0	11.5	8.7	-166.74	-3,111.1	-3,282.3	4,889.5	4,870.8	18.73	260.997		
5,800.0	5,788.7	5,000.0	5,000.0	11.7	8.7	-166.74	-3,111.1	-3,282.3	4,910.4	4,891.5	18.91	259.663		
5,900.0	5,888.4	5,000.0	5,000.0	11.9	8.7	-166.74	-3,111.1	-3,282.3	4,933.2	4,914.1	19.09	258.455		
6,000.0	5,988.2	5,000.0	5,000.0	12.2	8.7	-166.74	-3,111.1	-3,282.3	4,957.9	4,938.7	19.26	257.368		
6,100.0	6,088.0	5,000.0	5,000.0	12.4	8.7	-166.74	-3,111.1	-3,282.3	4,984.5	4,965.1	19.44	256.398		
6,200.0	6,187.7	5,000.0	5,000.0	12.6	8.7	-166.74	-3,111.1	-3,282.3	5,013.0	4,993.4	19.62	255.539		
6,300.0	6,287.5	5,000.0	5,000.0	12.8	8.7	-166.74	-3,111.1	-3,282.3	5,043.3	5,023.5	19.79	254.788		
6,400.0	6,387.3	5,000.0	5,000.0	13.0	8.7	-166.74	-3,111.1	-3,282.3	5,075.4	5,055.4	19.97	254.140		
6,500.0	6,487.0	5,000.0	5,000.0	13.2	8.7	-166.74	-3,111.1	-3,282.3	5,109.2	5,089.1	20.15	253.591		
6,600.0	6,586.8	5,000.0	5,000.0	13.4	8.7	-166.74	-3,111.1	-3,282.3	5,144.8	5,124.5	20.32	253.136		
6,700.0	6,686.6	5,000.0	5,000.0	13.6	8.7	-166.74	-3,111.1	-3,282.3	5,182.0	5,161.5	20.50	252.771		
6,787.0	6,773.4	5,000.0	5,000.0	13.8	8.7	-166.74	-3,111.1	-3,282.3	5,215.8	5,195.1	20.65	252.523		
6,800.0	6,786.4	5,000.0	5,000.0	13.8	8.7	-177.59	-3,111.1	-3,282.3	5,220.8	5,200.2	20.68	252.500		
6,850.0	6,836.3	5,000.0	5,000.0	13.9	8.7	94.17	-3,111.1	-3,282.3	5,239.2	5,218.4	20.74	252.631		
6,900.0	6,886.2	5,000.0	5,000.0	14.0	8.7	63.34	-3,111.1	-3,282.3	5,255.6	5,234.8	20.77	253.091		
6,950.0	6,935.7	5,000.0	5,000.0	14.0	8.7	54.70	-3,111.1	-3,282.3	5,270.0	5,249.3	20.76	253.896		
7,000.0	6,984.6	5,000.0	5,000.0	14.0	8.7	50.60	-3,111.1	-3,282.3	5,282.4	5,261.7	20.71	255.049		
7,050.0	7,032.6	5,000.0	5,000.0	14.0	8.7	48.14	-3,111.1	-3,282.3	5,292.7	5,272.1	20.63	256.542		
7,100.0	7,079.7	5,000.0	5,000.0	13.9	8.7	46.50	-3,111.1	-3,282.3	5,300.9	5,280.4	20.52	258.352		
7,150.0	7,125.4	5,000.0	5,000.0	13.9	8.7	45.37	-3,111.1	-3,282.3	5,307.0	5,286.6	20.38	260.442		
7,200.0	7,169.6	5,000.0	5,000.0	13.8	8.7	44.57	-3,111.1	-3,282.3	5,310.8	5,290.6	20.21	262.756		
7,250.0	7,212.1	5,000.0	5,000.0	13.8	8.7	44.03	-3,111.1	-3,282.3	5,312.5	5,292.5	20.03	265.223		
7,300.0	7,252.6	5,000.0	5,000.0	13.7	8.7	43.71	-3,111.1	-3,282.3	5,312.0	5,292.2	19.84	267.748		
7,350.0	7,291.0	5,000.0	5,000.0	13.7	8.7	43.58	-3,111.1	-3,282.3	5,309.3	5,289.7	19.65	270.214		
7,400.0	7,327.1	5,000.0	5,000.0	13.7	8.7	43.62	-3,111.1	-3,282.3	5,304.5	5,285.0	19.47	272.480		
7,450.0	7,360.7	5,000.0	5,000.0	13.7	8.7	43.81	-3,111.1	-3,282.3	5,297.4	5,278.1	19.31	274.386		
7,500.0	7,391.6	5,000.0	5,000.0	13.7	8.7	44.16	-3,111.1	-3,282.3	5,288.3	5,269.1	19.18	275.751		
7,550.0	7,419.7	5,000.0	5,000.0	13.8	8.7	44.65	-3,111.1	-3,282.3	5,277.0	5,257.9	19.09	276.389		
7,600.0	7,444.8	5,000.0	5,000.0	13.9	8.7	45.30	-3,111.1	-3,282.3	5,263.6	5,244.6	19.06	276.118		
7,650.0	7,466.9	5,000.0	5,000.0	14.1	8.7	46.11	-3,111.1	-3,282.3	5,248.3	5,229.2	19.10	274.781		
7,700.0	7,485.8	5,000.0	5,000.0	14.3	8.7	47.08	-3,111.1	-3,282.3	5,231.0	5,211.8	19.21	272.261		
7,750.0	7,501.5	5,000.0	5,000.0	14.6	8.7	48.21	-3,111.1	-3,282.3	5,211.8	5,192.4	19.41	268.499		
7,800.0	7,513.7	5,000.0	5,000.0	14.9	8.7	49.52	-3,111.1	-3,282.3	5,190.8	5,171.1	19.70	263.506		
7,850.0	7,522.6	5,000.0	5,000.0	15.2	8.7	51.02	-3,111.1	-3,282.3	5,168.1	5,148.0	20.08	257.366		
7,900.0	7,528.0	5,000.0	5,000.0	15.6	8.7	52.71	-3,111.1	-3,282.3	5,143.7	5,123.1	20.56	250.227		
7,952.9	7,530.0	5,000.0	5,000.0	16.1	8.7	54.72	-3,111.1	-3,282.3	5,116.2	5,095.0	21.16	241.800		
8,000.0	7,530.0	5,000.0	5,000.0	16.5	8.7	54.72	-3,111.1	-3,282.3	5,091.1	5,069.6	21.54	236.406		
8,100.0	7,530.0	5,000.0	5,000.0	17.5	8.7	54.72	-3,111.1	-3,282.3	5,039.0	5,016.6	22.41	224.877		
8,200.0	7,530.0	5,000.0	5,000.0	18.7	8.7	54.72	-3,111.1	-3,282.3	4,988.3	4,964.9	23.36	213.511		
8,300.0	7,530.0	5,000.0	5,000.0	19.9	8.7	54.72	-3,111.1	-3,282.3	4,939.1	4,914.7	24.39	202.525		
8,400.0	7,530.0	5,000.0	5,000.0	21.2	8.7	54.72	-3,111.1	-3,282.3	4,891.5	4,866.0	25.47	192.054		
8,500.0	7,530.0	5,000.0	5,000.0	22.6	8.7	54.72	-3,111.1	-3,282.3	4,845.4	4,818.8	26.60	182.172		
8,600.0	7,530.0	5,000.0	5,000.0	24.0	8.7	54.72	-3,111.1	-3,282.3	4,801.0	4,773.3	27.77	172.909		
8,700.0	7,530.0	5,000.0	5,000.0	25.4	8.7	54.72	-3,111.1	-3,282.3	4,758.3	4,729.4	28.97	164.266		
8,800.0	7,530.0	5,000.0	5,000.0	26.9	8.7	54.72	-3,111.1	-3,282.3	4,717.3	4,687.1	30.20	156.225		
8,900.0	7,530.0	5,000.0	5,000.0	28.4	8.7	54.72	-3,111.1	-3,282.3	4,678.1	4,646.7	31.45	148.759		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS K UNIT 1 (EXISTING) - EXISTING - NO													Offset Site Error:	0.0 ft
Survey Program: 5000-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,000.0	7,530.0	5,000.0	5,000.0	30.0	8.7	54.72	-3,111.1	-3,282.3	4,640.8	4,608.0	32.72	141.835		
9,100.0	7,530.0	5,000.0	5,000.0	31.5	8.7	54.72	-3,111.1	-3,282.3	4,605.3	4,571.3	34.01	135.417		
9,200.0	7,530.0	5,000.0	5,000.0	33.1	8.7	54.72	-3,111.1	-3,282.3	4,571.7	4,536.4	35.31	129.468		
9,300.0	7,530.0	5,000.0	5,000.0	34.7	8.7	54.72	-3,111.1	-3,282.3	4,540.0	4,503.4	36.63	123.953		
9,400.0	7,530.0	5,000.0	5,000.0	36.3	8.7	54.72	-3,111.1	-3,282.3	4,510.4	4,472.4	37.95	118.838		
9,500.0	7,530.0	5,000.0	5,000.0	38.0	8.7	54.72	-3,111.1	-3,282.3	4,482.8	4,443.5	39.29	114.094		
9,600.0	7,530.0	5,000.0	5,000.0	39.6	8.7	54.72	-3,111.1	-3,282.3	4,457.2	4,416.6	40.64	109.690		
9,700.0	7,530.0	5,000.0	5,000.0	41.3	8.7	54.72	-3,111.1	-3,282.3	4,433.8	4,391.8	41.99	105.599		
9,800.0	7,530.0	5,000.0	5,000.0	42.9	8.7	54.72	-3,111.1	-3,282.3	4,412.5	4,369.2	43.35	101.798		
9,900.0	7,530.0	5,000.0	5,000.0	44.6	8.7	54.72	-3,111.1	-3,282.3	4,393.4	4,348.7	44.71	98.263		
10,000.0	7,530.0	5,000.0	5,000.0	46.3	8.7	54.72	-3,111.1	-3,282.3	4,376.5	4,330.4	46.08	94.975		
10,100.0	7,530.0	5,000.0	5,000.0	47.9	8.7	54.72	-3,111.1	-3,282.3	4,361.8	4,314.4	47.46	91.915		
10,200.0	7,530.0	5,000.0	5,000.0	49.6	8.7	54.72	-3,111.1	-3,282.3	4,349.4	4,300.6	48.83	89.065		
10,300.0	7,530.0	5,000.0	5,000.0	51.3	8.7	54.72	-3,111.1	-3,282.3	4,339.2	4,289.0	50.22	86.411		
10,400.0	7,530.0	5,000.0	5,000.0	53.0	8.7	54.72	-3,111.1	-3,282.3	4,331.4	4,279.8	51.60	83.937		
10,500.0	7,530.0	5,000.0	5,000.0	54.7	8.7	54.72	-3,111.1	-3,282.3	4,325.8	4,272.8	52.99	81.631		
10,600.0	7,530.0	5,000.0	5,000.0	56.4	8.7	54.72	-3,111.1	-3,282.3	4,322.5	4,268.1	54.38	79.482		
10,691.5	7,530.0	5,000.0	5,000.0	57.9	8.7	54.72	-3,111.1	-3,282.3	4,321.5	4,265.9	55.66	77.643 CC		
10,700.0	7,530.0	5,000.0	5,000.0	58.1	8.7	54.72	-3,111.1	-3,282.3	4,321.5	4,265.8	55.78	77.477		
10,800.0	7,530.0	5,000.0	5,000.0	59.8	8.7	54.72	-3,111.1	-3,282.3	4,322.9	4,265.7	57.18	75.608 ES		
10,900.0	7,530.0	5,000.0	5,000.0	61.5	8.7	54.72	-3,111.1	-3,282.3	4,326.6	4,268.0	58.57	73.864		
11,000.0	7,530.0	5,000.0	5,000.0	63.2	8.7	54.72	-3,111.1	-3,282.3	4,332.5	4,272.6	59.98	72.238		
11,100.0	7,530.0	5,000.0	5,000.0	64.9	8.7	54.72	-3,111.1	-3,282.3	4,340.8	4,279.4	61.38	70.722		
11,200.0	7,530.0	5,000.0	5,000.0	66.6	8.7	54.72	-3,111.1	-3,282.3	4,351.4	4,288.6	62.78	69.307		
11,300.0	7,530.0	5,000.0	5,000.0	68.4	8.7	54.72	-3,111.1	-3,282.3	4,364.2	4,300.0	64.19	67.989		
11,400.0	7,530.0	5,000.0	5,000.0	70.1	8.7	54.72	-3,111.1	-3,282.3	4,379.2	4,313.6	65.60	66.759		
11,500.0	7,530.0	5,000.0	5,000.0	71.8	8.7	54.72	-3,111.1	-3,282.3	4,396.5	4,329.5	67.01	65.613		
11,600.0	7,530.0	5,000.0	5,000.0	73.5	8.7	54.72	-3,111.1	-3,282.3	4,416.0	4,347.6	68.42	64.545		
11,700.0	7,530.0	5,000.0	5,000.0	75.2	8.7	54.72	-3,111.1	-3,282.3	4,437.7	4,367.8	69.83	63.550		
11,800.0	7,530.0	5,000.0	5,000.0	77.0	8.7	54.72	-3,111.1	-3,282.3	4,461.5	4,390.2	71.24	62.624		
11,900.0	7,530.0	5,000.0	5,000.0	78.7	8.7	54.72	-3,111.1	-3,282.3	4,487.3	4,414.7	72.66	61.762		
12,000.0	7,530.0	5,000.0	5,000.0	80.4	8.7	54.72	-3,111.1	-3,282.3	4,515.3	4,441.2	74.07	60.960		
12,100.0	7,530.0	5,000.0	5,000.0	82.2	8.7	54.72	-3,111.1	-3,282.3	4,545.3	4,469.8	75.49	60.214		
12,200.0	7,530.0	5,000.0	5,000.0	83.9	8.7	54.72	-3,111.1	-3,282.3	4,577.3	4,500.4	76.90	59.520		
12,300.0	7,530.0	5,000.0	5,000.0	85.6	8.7	54.72	-3,111.1	-3,282.3	4,611.2	4,532.9	78.32	58.877		
12,400.0	7,530.0	5,000.0	5,000.0	87.3	8.7	54.72	-3,111.1	-3,282.3	4,647.0	4,567.3	79.74	58.279		
12,500.0	7,530.0	5,000.0	5,000.0	89.1	8.7	54.72	-3,111.1	-3,282.3	4,684.7	4,603.6	81.16	57.724		
12,600.0	7,530.0	5,000.0	5,000.0	90.8	8.7	54.72	-3,111.1	-3,282.3	4,724.2	4,641.6	82.58	57.211		
12,700.0	7,530.0	5,000.0	5,000.0	92.5	8.7	54.72	-3,111.1	-3,282.3	4,765.5	4,681.5	84.00	56.735		
12,800.0	7,530.0	5,000.0	5,000.0	94.3	8.7	54.72	-3,111.1	-3,282.3	4,808.5	4,723.1	85.42	56.295		
12,900.0	7,530.0	5,000.0	5,000.0	96.0	8.7	54.72	-3,111.1	-3,282.3	4,853.2	4,766.3	86.84	55.888		
13,000.0	7,530.0	5,000.0	5,000.0	97.8	8.7	54.72	-3,111.1	-3,282.3	4,899.5	4,811.2	88.26	55.512		
13,100.0	7,530.0	5,000.0	5,000.0	99.5	8.7	54.72	-3,111.1	-3,282.3	4,947.4	4,857.7	89.68	55.166		
13,200.0	7,530.0	5,000.0	5,000.0	101.2	8.7	54.72	-3,111.1	-3,282.3	4,996.9	4,905.7	91.10	54.847		
13,300.0	7,530.0	5,000.0	5,000.0	103.0	8.7	54.72	-3,111.1	-3,282.3	5,047.8	4,955.3	92.53	54.554		
13,400.0	7,530.0	5,000.0	5,000.0	104.7	8.7	54.72	-3,111.1	-3,282.3	5,100.2	5,006.2	93.95	54.285		
13,500.0	7,530.0	5,000.0	5,000.0	106.4	8.7	54.72	-3,111.1	-3,282.3	5,154.0	5,058.6	95.38	54.039		
13,600.0	7,530.0	5,000.0	5,000.0	108.2	8.7	54.72	-3,111.1	-3,282.3	5,209.2	5,112.4	96.80	53.813		
13,700.0	7,530.0	5,000.0	5,000.0	109.9	8.7	54.72	-3,111.1	-3,282.3	5,265.6	5,167.4	98.23	53.608		
13,800.0	7,530.0	5,000.0	5,000.0	111.7	8.7	54.72	-3,111.1	-3,282.3	5,323.4	5,223.8	99.65	53.421		
13,900.0	7,530.0	5,000.0	5,000.0	113.4	8.7	54.72	-3,111.1	-3,282.3	5,382.4	5,281.3	101.08	53.251		
14,000.0	7,530.0	5,000.0	5,000.0	115.1	8.7	54.72	-3,111.1	-3,282.3	5,442.6	5,340.1	102.50	53.098		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - THOMAS K UNIT 1 (EXISTING) - EXISTING - NO													Offset Site Error:	0.0 ft
Survey Program: 5000-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	5,000.0	5,000.0	116.9	8.7	54.72	-3,111.1	-3,282.3	5,504.0	5,400.1	103.93	52.960		
14,200.0	7,530.0	5,000.0	5,000.0	118.6	8.7	54.72	-3,111.1	-3,282.3	5,566.5	5,461.1	105.35	52.836		
14,300.0	7,530.0	5,000.0	5,000.0	120.4	8.7	54.72	-3,111.1	-3,282.3	5,630.0	5,523.3	106.78	52.725		
14,400.0	7,530.0	5,000.0	5,000.0	122.1	8.7	54.72	-3,111.1	-3,282.3	5,694.6	5,586.4	108.21	52.627		
14,500.0	7,530.0	5,000.0	5,000.0	123.9	8.7	54.72	-3,111.1	-3,282.3	5,760.3	5,650.6	109.64	52.540		
14,600.0	7,530.0	5,000.0	5,000.0	125.6	8.7	54.72	-3,111.1	-3,282.3	5,826.9	5,715.8	111.06	52.465		
14,700.0	7,530.0	5,000.0	5,000.0	127.3	8.7	54.72	-3,111.1	-3,282.3	5,894.4	5,781.9	112.49	52.399		
14,800.0	7,530.0	5,000.0	5,000.0	129.1	8.7	54.72	-3,111.1	-3,282.3	5,962.9	5,849.0	113.92	52.343		
14,900.0	7,530.0	5,000.0	5,000.0	130.8	8.7	54.72	-3,111.1	-3,282.3	6,032.2	5,916.9	115.35	52.296		
15,000.0	7,530.0	5,000.0	5,000.0	132.6	8.7	54.72	-3,111.1	-3,282.3	6,102.4	5,985.6	116.78	52.258		
15,100.0	7,530.0	5,000.0	5,000.0	134.3	8.7	54.72	-3,111.1	-3,282.3	6,173.4	6,055.2	118.20	52.227		
15,200.0	7,530.0	5,000.0	5,000.0	136.1	8.7	54.72	-3,111.1	-3,282.3	6,245.2	6,125.6	119.63	52.203		
15,300.0	7,530.0	5,000.0	5,000.0	137.8	8.7	54.72	-3,111.1	-3,282.3	6,317.8	6,196.7	121.06	52.186		
15,400.0	7,530.0	5,000.0	5,000.0	139.6	8.7	54.72	-3,111.1	-3,282.3	6,391.1	6,268.6	122.49	52.176		
15,500.0	7,530.0	5,000.0	5,000.0	141.3	8.7	54.72	-3,111.1	-3,282.3	6,465.1	6,341.2	123.92	52.172 SF		
15,600.0	7,530.0	5,000.0	5,000.0	143.0	8.7	54.72	-3,111.1	-3,282.3	6,539.8	6,414.5	125.35	52.173		
15,700.0	7,530.0	5,000.0	5,000.0	144.8	8.7	54.72	-3,111.1	-3,282.3	6,615.2	6,488.4	126.78	52.179		
15,800.0	7,530.0	5,000.0	5,000.0	146.5	8.7	54.72	-3,111.1	-3,282.3	6,691.3	6,563.1	128.21	52.190		
15,900.0	7,530.0	5,000.0	5,000.0	148.3	8.7	54.72	-3,111.1	-3,282.3	6,767.9	6,638.3	129.64	52.206		
16,000.0	7,530.0	5,000.0	5,000.0	150.0	8.7	54.72	-3,111.1	-3,282.3	6,845.2	6,714.1	131.07	52.225		
16,100.0	7,530.0	5,000.0	5,000.0	151.8	8.7	54.72	-3,111.1	-3,282.3	6,923.0	6,790.5	132.50	52.249		
16,200.0	7,530.0	5,000.0	5,000.0	153.5	8.7	54.72	-3,111.1	-3,282.3	7,001.4	6,867.5	133.93	52.276		
16,300.0	7,530.0	5,000.0	5,000.0	155.3	8.7	54.72	-3,111.1	-3,282.3	7,080.4	6,945.0	135.36	52.307		
16,400.0	7,530.0	5,000.0	5,000.0	157.0	8.7	54.72	-3,111.1	-3,282.3	7,159.8	7,023.0	136.79	52.341		
16,500.0	7,530.0	5,000.0	5,000.0	158.8	8.7	54.72	-3,111.1	-3,282.3	7,239.8	7,101.6	138.22	52.378		
16,600.0	7,530.0	5,000.0	5,000.0	160.5	8.7	54.72	-3,111.1	-3,282.3	7,320.3	7,180.6	139.65	52.417		
16,700.0	7,530.0	5,000.0	5,000.0	162.3	8.7	54.72	-3,111.1	-3,282.3	7,401.2	7,260.2	141.08	52.460		
16,800.0	7,530.0	5,000.0	5,000.0	164.0	8.7	54.72	-3,111.1	-3,282.3	7,482.7	7,340.1	142.52	52.504		
16,900.0	7,530.0	5,000.0	5,000.0	165.8	8.7	54.72	-3,111.1	-3,282.3	7,564.5	7,420.6	143.95	52.551		
17,000.0	7,530.0	5,000.0	5,000.0	167.5	8.7	54.72	-3,111.1	-3,282.3	7,646.8	7,501.4	145.38	52.599		
17,100.0	7,530.0	5,000.0	5,000.0	169.3	8.7	54.72	-3,111.1	-3,282.3	7,729.5	7,582.7	146.81	52.650		
17,200.0	7,530.0	5,000.0	5,000.0	171.0	8.7	54.72	-3,111.1	-3,282.3	7,812.6	7,664.4	148.24	52.702		
17,300.0	7,530.0	5,000.0	5,000.0	172.8	8.7	54.72	-3,111.1	-3,282.3	7,896.1	7,746.4	149.67	52.756		
17,400.0	7,530.0	5,000.0	5,000.0	174.5	8.7	54.72	-3,111.1	-3,282.3	7,980.0	7,828.9	151.11	52.811		
17,420.9	7,530.0	5,000.0	5,000.0	174.9	8.7	54.72	-3,111.1	-3,282.3	7,997.6	7,846.2	151.40	52.823		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-95.02	-262.5	-2,990.6	3,002.2						
100.0	100.0	86.3	86.3	0.2	0.2	-95.02	-262.5	-2,991.1	3,002.9	3,002.6	0.30	9,900.552			
200.0	200.0	157.8	157.8	0.3	0.3	-95.02	-262.7	-2,992.4	3,004.6	3,004.0	0.60	4,980.983			
300.0	300.0	223.0	223.0	0.5	0.4	-95.02	-263.1	-2,994.0	3,007.3	3,006.4	0.89	3,370.250			
400.0	400.0	315.0	314.9	0.7	0.6	-95.04	-264.1	-2,997.2	3,010.8	3,009.6	1.23	2,450.363			
500.0	500.0	361.0	360.8	0.8	0.7	-95.04	-264.7	-2,999.4	3,015.5	3,014.0	1.49	2,028.940			
600.0	600.0	419.7	419.4	1.0	0.8	-95.05	-265.4	-3,003.0	3,021.6	3,019.8	1.77	1,708.636			
700.0	700.0	498.0	497.5	1.2	1.0	-127.45	-264.9	-3,008.7	3,029.4	3,027.3	2.07	1,464.793			
800.0	800.0	533.7	533.1	1.4	1.0	-127.37	-264.1	-3,011.9	3,039.5	3,037.2	2.31	1,317.394			
900.0	899.9	590.0	589.0	1.6	1.2	-127.26	-262.6	-3,018.2	3,052.9	3,050.3	2.59	1,180.887			
988.4	988.1	590.0	589.0	1.7	1.2	-127.15	-262.6	-3,018.2	3,067.0	3,064.2	2.75	1,116.416			
1,000.0	999.7	590.0	589.0	1.7	1.2	-127.15	-262.6	-3,018.2	3,069.1	3,066.3	2.77	1,108.481			
1,100.0	1,099.4	643.8	642.2	1.9	1.4	-127.16	-261.1	-3,025.9	3,087.5	3,084.5	3.05	1,011.607			
1,200.0	1,199.2	681.0	678.9	2.1	1.5	-127.17	-260.2	-3,032.3	3,108.2	3,104.9	3.31	939.573			
1,300.0	1,299.0	722.5	719.6	2.3	1.6	-127.19	-259.3	-3,040.0	3,130.7	3,127.1	3.57	876.362			
1,400.0	1,398.8	773.0	769.0	2.5	1.8	-127.21	-258.6	-3,050.3	3,154.8	3,151.0	3.85	818.586			
1,500.0	1,498.5	843.6	838.0	2.7	2.1	-127.25	-258.3	-3,065.5	3,180.2	3,176.0	4.17	762.496			
1,600.0	1,598.3	946.0	938.0	2.9	2.5	-127.33	-259.3	-3,087.6	3,205.7	3,201.2	4.54	705.872			
1,700.0	1,698.1	1,015.2	1,005.6	3.2	2.8	-127.39	-260.1	-3,102.5	3,231.4	3,226.5	4.85	665.737			
1,800.0	1,797.8	1,072.5	1,061.3	3.4	3.1	-127.44	-261.3	-3,115.5	3,258.2	3,253.0	5.15	633.208			
1,900.0	1,897.6	1,120.0	1,107.5	3.6	3.3	-127.49	-262.2	-3,126.8	3,286.1	3,280.7	5.42	606.001			
2,000.0	1,997.4	1,176.9	1,162.5	3.8	3.5	-127.54	-263.5	-3,141.0	3,315.4	3,309.6	5.72	580.053			
2,100.0	2,097.1	1,233.6	1,217.2	4.0	3.8	-127.60	-264.9	-3,156.1	3,345.9	3,339.9	6.01	556.961			
2,200.0	2,196.9	1,306.4	1,287.2	4.2	4.2	-127.65	-266.2	-3,176.0	3,377.3	3,371.0	6.33	533.679			
2,300.0	2,296.7	1,402.9	1,380.0	4.4	4.7	-127.74	-268.6	-3,202.4	3,408.8	3,402.1	6.69	509.741			
2,400.0	2,396.5	1,475.0	1,449.2	4.6	5.1	-127.81	-270.6	-3,222.4	3,440.7	3,433.7	7.01	491.121			
2,500.0	2,496.2	1,589.0	1,558.6	4.8	5.7	-127.90	-272.7	-3,254.5	3,472.9	3,465.5	7.40	469.427			
2,600.0	2,596.0	1,705.2	1,670.4	5.0	6.3	-127.97	-274.3	-3,286.0	3,504.0	3,496.2	7.79	449.588			
2,700.0	2,695.8	1,767.1	1,729.9	5.2	6.6	-128.02	-275.5	-3,302.9	3,535.5	3,527.4	8.10	436.642			
2,800.0	2,795.5	1,819.0	1,779.7	5.4	6.9	-128.05	-276.1	-3,317.8	3,568.1	3,559.7	8.38	425.588			
2,900.0	2,895.3	1,891.7	1,849.2	5.6	7.3	-128.09	-276.7	-3,339.3	3,601.5	3,592.8	8.71	413.681			
3,000.0	2,995.1	1,987.9	1,941.0	5.9	7.8	-128.14	-277.9	-3,367.9	3,635.3	3,626.2	9.07	400.847			
3,100.0	3,094.9	2,168.0	2,113.7	6.1	8.8	-128.28	-282.1	-3,418.6	3,667.3	3,657.7	9.57	383.139			
3,200.0	3,194.6	2,215.0	2,158.8	6.3	9.1	-128.31	-282.7	-3,431.6	3,699.2	3,689.3	9.85	375.563			
3,300.0	3,294.4	2,255.0	2,197.1	6.5	9.3	-128.33	-283.3	-3,443.4	3,732.6	3,722.5	10.12	368.989			
3,400.0	3,394.2	2,316.9	2,256.0	6.7	9.6	-128.37	-284.6	-3,462.3	3,767.2	3,756.8	10.42	361.636			
3,500.0	3,493.9	2,419.6	2,353.7	6.9	10.2	-128.44	-286.8	-3,494.0	3,802.1	3,791.3	10.79	352.303			
3,600.0	3,593.7	2,599.8	2,525.7	7.1	11.2	-128.47	-285.5	-3,547.6	3,835.5	3,824.2	11.31	339.116			
3,700.0	3,693.5	2,692.0	2,614.0	7.3	11.7	-128.48	-284.3	-3,574.1	3,868.0	3,856.3	11.67	331.333			
3,800.0	3,793.2	2,779.0	2,697.3	7.5	12.2	-128.49	-283.2	-3,599.4	3,900.7	3,888.7	12.03	324.322			
3,900.0	3,893.0	2,913.8	2,826.4	7.7	13.0	-128.53	-283.1	-3,638.0	3,933.3	3,920.9	12.46	315.674			
4,000.0	3,992.8	3,041.0	2,948.8	8.0	13.6	-128.60	-284.9	-3,672.5	3,964.5	3,951.6	12.88	307.856			
4,100.0	4,092.6	3,107.0	3,012.3	8.2	14.0	-128.64	-286.3	-3,690.5	3,995.8	3,982.6	13.18	303.064			
4,200.0	4,192.3	3,176.9	3,079.4	8.4	14.3	-128.70	-288.5	-3,709.9	4,027.9	4,014.4	13.50	298.312			
4,300.0	4,292.1	3,256.6	3,155.8	8.6	14.8	-128.74	-289.8	-3,732.6	4,060.4	4,046.5	13.84	293.436			
4,400.0	4,391.9	3,366.4	3,261.0	8.8	15.4	-128.80	-291.3	-3,764.0	4,093.0	4,078.8	14.23	287.692			
4,500.0	4,491.6	3,565.0	3,452.2	9.0	16.4	-128.88	-292.7	-3,817.7	4,124.0	4,109.3	14.77	279.161			
4,600.0	4,591.4	3,617.9	3,503.2	9.2	16.7	-128.89	-292.3	-3,831.7	4,154.4	4,139.3	15.07	275.681			
4,700.0	4,691.2	3,673.0	3,556.1	9.4	17.0	-128.88	-291.0	-3,847.1	4,185.8	4,170.4	15.37	272.339			
4,800.0	4,790.9	3,760.1	3,639.6	9.6	17.4	-128.87	-288.6	-3,871.8	4,217.8	4,202.0	15.73	268.180			
4,900.0	4,890.7	3,867.7	3,743.0	9.8	18.0	-128.90	-288.4	-3,901.6	4,249.3	4,233.2	16.11	263.705			
5,000.0	4,990.5	3,943.1	3,815.4	10.1	18.4	-128.93	-288.9	-3,922.7	4,281.3	4,264.8	16.45	260.334			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	4,001.0	3,870.9	10.3	18.7	-128.94	-289.0	-3,939.1	4,313.6	4,296.9	16.75	257.583		
5,200.0	5,190.0	4,066.3	3,933.4	10.5	19.1	-128.96	-289.1	-3,958.1	4,346.6	4,329.6	17.06	254.788		
5,300.0	5,289.8	4,161.5	4,024.2	10.7	19.6	-128.99	-290.0	-3,986.4	4,380.4	4,362.9	17.42	251.427		
5,400.0	5,389.6	5,211.4	5,052.8	10.9	23.4	-129.30	-281.2	-4,181.4	4,397.6	4,378.1	19.52	225.280		
5,500.0	5,489.3	5,518.9	5,359.6	11.1	23.8	-129.40	-275.3	-4,199.0	4,406.6	4,386.3	20.28	217.297		
5,600.0	5,589.1	5,633.2	5,473.9	11.3	24.0	-129.45	-273.4	-4,203.1	4,414.2	4,393.5	20.68	213.424		
5,700.0	5,688.9	5,758.2	5,598.8	11.5	24.1	-129.50	-271.1	-4,207.0	4,421.4	4,400.3	21.11	209.433		
5,800.0	5,788.7	5,877.5	5,718.0	11.7	24.3	-129.53	-267.9	-4,210.2	4,428.0	4,406.5	21.53	205.683		
5,900.0	5,888.4	5,983.8	5,824.3	11.9	24.4	-129.57	-265.2	-4,212.7	4,434.4	4,412.5	21.92	202.302		
6,000.0	5,988.2	6,138.1	5,978.5	12.2	24.5	-129.62	-261.7	-4,215.4	4,440.2	4,417.9	22.39	198.281		
6,100.0	6,088.0	6,243.5	6,083.9	12.4	24.6	-129.67	-259.7	-4,216.2	4,445.1	4,422.3	22.78	195.115		
6,200.0	6,187.7	6,325.1	6,165.5	12.6	24.7	-129.70	-258.3	-4,217.1	4,450.2	4,427.1	23.13	192.430		
6,300.0	6,287.5	6,410.6	6,251.0	12.8	24.8	-129.74	-256.7	-4,218.4	4,455.8	4,432.3	23.48	189.776		
6,400.0	6,387.3	6,498.8	6,339.1	13.0	24.9	-129.77	-255.0	-4,219.9	4,461.6	4,437.8	23.84	187.171		
6,500.0	6,487.0	6,586.3	6,426.5	13.2	25.0	-129.80	-253.1	-4,221.7	4,467.7	4,443.5	24.19	184.670		
6,600.0	6,586.8	6,673.2	6,513.5	13.4	25.1	-129.84	-251.4	-4,223.7	4,474.1	4,449.5	24.55	182.263		
6,700.0	6,686.6	6,779.5	6,619.6	13.6	25.2	-129.88	-249.4	-4,226.3	4,480.6	4,455.7	24.94	179.670		
6,787.0	6,773.4	6,882.5	6,722.7	13.8	25.3	-129.91	-247.0	-4,228.5	4,486.0	4,460.7	25.30	177.325		
6,800.0	6,786.4	6,897.1	6,737.2	13.8	25.3	-140.50	-246.7	-4,228.8	4,486.8	4,461.4	25.36	176.941		
6,850.0	6,836.3	6,953.2	6,793.3	13.9	25.4	132.18	-245.3	-4,229.9	4,489.4	4,463.8	25.55	175.678		
6,900.0	6,886.2	7,009.1	6,849.2	14.0	25.5	102.22	-243.8	-4,230.9	4,491.5	4,465.8	25.72	174.645		
6,950.0	6,935.7	7,065.1	6,905.2	14.0	25.5	94.40	-242.3	-4,231.8	4,493.0	4,467.2	25.85	173.826		
7,000.0	6,984.6	7,123.9	6,963.9	14.0	25.6	91.08	-240.7	-4,232.7	4,494.0	4,468.1	25.95	173.173		
7,050.0	7,032.6	7,181.5	7,021.5	14.0	25.6	89.36	-239.2	-4,233.4	4,494.5	4,468.5	26.03	172.698		
7,100.0	7,079.7	7,236.8	7,076.7	13.9	25.7	88.42	-237.6	-4,233.9	4,494.5	4,468.4	26.07	172.378		
7,150.0	7,125.4	7,283.4	7,123.3	13.9	25.7	87.89	-236.3	-4,234.4	4,494.1	4,468.0	26.09	172.243		
7,200.0	7,169.6	7,328.4	7,168.3	13.8	25.8	87.63	-235.2	-4,234.8	4,493.4	4,467.3	26.10	172.170		
7,250.0	7,212.1	7,371.5	7,211.4	13.8	25.8	87.57	-234.1	-4,235.1	4,492.4	4,466.3	26.10	172.117		
7,300.0	7,252.6	7,415.0	7,254.9	13.7	25.9	87.65	-233.1	-4,235.4	4,491.2	4,465.1	26.11	172.020		
7,350.0	7,291.0	7,467.0	7,306.9	13.7	25.9	87.92	-231.8	-4,235.7	4,489.8	4,463.7	26.14	171.752		
7,400.0	7,327.1	7,515.6	7,355.5	13.7	25.9	88.27	-230.6	-4,235.9	4,488.3	4,462.1	26.19	171.383		
7,450.0	7,360.7	7,560.6	7,400.4	13.7	26.0	88.66	-229.4	-4,235.8	4,486.6	4,460.4	26.26	170.877		
7,500.0	7,391.6	7,596.5	7,436.3	13.7	26.0	89.01	-228.4	-4,235.8	4,485.0	4,458.6	26.34	170.248		
7,550.0	7,419.7	7,624.8	7,464.6	13.8	26.0	89.31	-227.6	-4,235.7	4,483.5	4,457.0	26.46	169.456		
7,600.0	7,444.8	7,649.8	7,489.6	13.9	26.1	89.60	-226.9	-4,235.6	4,482.2	4,455.6	26.61	168.437		
7,650.0	7,466.9	7,671.6	7,511.4	14.1	26.1	89.85	-226.2	-4,235.5	4,481.2	4,454.4	26.80	167.179		
7,700.0	7,485.8	7,689.9	7,529.7	14.3	26.1	90.06	-225.7	-4,235.5	4,480.6	4,453.5	27.04	165.681		
7,750.0	7,501.5	7,704.8	7,544.5	14.6	26.1	90.22	-225.2	-4,235.4	4,480.2	4,452.9	27.33	163.951		
7,764.4	7,505.3	7,708.4	7,548.2	14.7	26.1	90.25	-225.1	-4,235.4	4,480.2	4,452.8	27.42	163.382		
7,800.0	7,513.7	7,716.1	7,555.8	14.9	26.1	90.31	-224.9	-4,235.3	4,480.3	4,452.7	27.65	162.009		
7,850.0	7,522.6	7,723.8	7,563.5	15.2	26.1	90.34	-224.6	-4,235.3	4,480.8	4,452.8	28.03	159.885		
7,900.0	7,528.0	7,727.8	7,567.6	15.6	26.1	90.30	-224.5	-4,235.3	4,481.8	4,453.4	28.44	157.615		
7,952.9	7,530.0	7,728.2	7,568.0	16.1	26.1	90.18	-224.5	-4,235.3	4,483.3	4,454.4	28.91	155.099		
8,000.0	7,530.0	7,726.7	7,566.5	16.5	26.1	90.16	-224.6	-4,235.3	4,485.1	4,455.7	29.36	152.768		
8,100.0	7,530.0	7,723.5	7,563.3	17.5	26.1	90.12	-224.7	-4,235.3	4,490.6	4,460.1	30.41	147.646		
8,200.0	7,530.0	7,720.3	7,560.1	18.7	26.1	90.08	-224.8	-4,235.3	4,498.2	4,466.7	31.58	142.451		
8,300.0	7,530.0	7,717.2	7,557.0	19.9	26.1	90.04	-224.8	-4,235.3	4,508.1	4,475.3	32.83	137.321		
8,400.0	7,530.0	7,714.1	7,553.8	21.2	26.1	90.00	-224.9	-4,235.4	4,520.2	4,486.0	34.15	132.351		
8,500.0	7,530.0	7,710.9	7,550.7	22.6	26.1	89.96	-225.0	-4,235.4	4,534.4	4,498.9	35.54	127.599		
8,600.0	7,530.0	7,707.8	7,547.6	24.0	26.1	89.92	-225.1	-4,235.4	4,550.8	4,513.8	36.97	123.099		
8,700.0	7,530.0	7,704.7	7,544.5	25.4	26.1	89.88	-225.2	-4,235.4	4,569.3	4,530.9	38.44	118.865		
8,800.0	7,530.0	7,701.6	7,541.4	26.9	26.1	89.84	-225.3	-4,235.4	4,589.9	4,550.0	39.95	114.899		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
8,900.0	7,530.0	7,698.6	7,538.4	28.4	26.1	89.80	-225.4	-4,235.4	4,612.6	4,571.2	41.48	111.196		
9,000.0	7,530.0	7,695.5	7,535.3	30.0	26.1	89.76	-225.5	-4,235.4	4,637.4	4,594.3	43.04	107.744		
9,100.0	7,530.0	7,692.5	7,532.2	31.5	26.1	89.72	-225.6	-4,235.4	4,664.1	4,619.5	44.62	104.532		
9,200.0	7,530.0	7,689.4	7,529.2	33.1	26.1	89.68	-225.7	-4,235.5	4,692.9	4,646.6	46.22	101.543		
9,300.0	7,530.0	7,686.4	7,526.2	34.7	26.1	89.64	-225.8	-4,235.5	4,723.5	4,675.7	47.83	98.764		
9,400.0	7,530.0	7,683.4	7,523.2	36.3	26.1	89.61	-225.9	-4,235.5	4,756.1	4,706.6	49.45	96.179		
9,500.0	7,530.0	7,680.4	7,520.2	38.0	26.1	89.57	-226.0	-4,235.5	4,790.5	4,739.4	51.09	93.775		
9,600.0	7,530.0	7,677.4	7,517.2	39.6	26.1	89.53	-226.0	-4,235.5	4,826.8	4,774.1	52.73	91.537		
9,700.0	7,530.0	7,674.4	7,514.2	41.3	26.1	89.49	-226.1	-4,235.5	4,864.8	4,810.5	54.38	89.453		
9,800.0	7,530.0	7,671.4	7,511.2	42.9	26.1	89.45	-226.2	-4,235.5	4,904.6	4,848.6	56.05	87.512		
9,900.0	7,530.0	7,668.5	7,508.3	44.6	26.1	89.42	-226.3	-4,235.5	4,946.1	4,888.4	57.71	85.701		
10,000.0	7,530.0	7,665.5	7,505.3	46.3	26.1	89.38	-226.4	-4,235.5	4,989.3	4,929.9	59.39	84.012		
10,100.0	7,530.0	7,662.6	7,502.4	47.9	26.1	89.34	-226.5	-4,235.5	5,034.0	4,972.9	61.07	82.435		
10,200.0	7,530.0	7,659.6	7,499.4	49.6	26.1	89.30	-226.6	-4,235.6	5,080.3	5,017.6	62.75	80.960		
10,300.0	7,530.0	7,656.7	7,496.5	51.3	26.1	89.27	-226.7	-4,235.6	5,128.2	5,063.8	64.44	79.582		
10,400.0	7,530.0	7,653.8	7,493.6	53.0	26.1	89.23	-226.7	-4,235.6	5,177.6	5,111.4	66.13	78.291		
10,500.0	7,530.0	7,650.9	7,490.7	54.7	26.1	89.19	-226.8	-4,235.6	5,228.4	5,160.5	67.83	77.082		
10,600.0	7,530.0	7,648.1	7,487.9	56.4	26.1	89.15	-226.9	-4,235.6	5,280.5	5,211.0	69.53	75.949		
10,700.0	7,530.0	7,645.2	7,485.0	58.1	26.1	89.12	-227.0	-4,235.6	5,334.1	5,262.9	71.23	74.886		
10,800.0	7,530.0	7,642.3	7,482.1	59.8	26.1	89.08	-227.1	-4,235.6	5,389.0	5,316.1	72.93	73.888		
10,900.0	7,530.0	7,639.5	7,479.3	61.5	26.1	89.04	-227.2	-4,235.6	5,445.2	5,370.5	74.64	72.950		
11,000.0	7,530.0	7,636.6	7,476.4	63.2	26.1	89.01	-227.2	-4,235.6	5,502.6	5,426.2	76.35	72.069		
11,100.0	7,530.0	7,633.8	7,473.6	64.9	26.0	88.97	-227.3	-4,235.6	5,561.2	5,483.1	78.06	71.240		
11,200.0	7,530.0	7,631.0	7,470.8	66.6	26.0	88.94	-227.4	-4,235.7	5,621.0	5,541.2	79.78	70.459		
11,300.0	7,530.0	7,628.2	7,468.0	68.4	26.0	88.90	-227.5	-4,235.7	5,681.9	5,600.4	81.49	69.723		
11,400.0	7,530.0	7,625.4	7,465.2	70.1	26.0	88.86	-227.6	-4,235.7	5,743.9	5,660.7	83.21	69.030		
11,500.0	7,530.0	7,622.6	7,462.4	71.8	26.0	88.83	-227.6	-4,235.7	5,806.9	5,722.0	84.93	68.375		
11,600.0	7,530.0	7,619.8	7,459.6	73.5	26.0	88.79	-227.7	-4,235.7	5,871.0	5,784.4	86.65	67.758		
11,700.0	7,530.0	7,617.0	7,456.9	75.2	26.0	88.76	-227.8	-4,235.7	5,936.1	5,847.7	88.37	67.175		
11,800.0	7,530.0	7,614.3	7,454.1	77.0	26.0	88.72	-227.9	-4,235.7	6,002.1	5,912.0	90.09	66.623		
11,900.0	7,530.0	7,611.5	7,451.4	78.7	26.0	88.69	-228.0	-4,235.7	6,069.1	5,977.3	91.81	66.102		
12,000.0	7,530.0	7,608.8	7,448.6	80.4	26.0	88.65	-228.0	-4,235.7	6,137.0	6,043.4	93.54	65.609		
12,100.0	7,530.0	7,606.1	7,445.9	82.2	26.0	88.62	-228.1	-4,235.7	6,205.7	6,110.4	95.26	65.142		
12,200.0	7,530.0	7,603.4	7,443.2	83.9	26.0	88.58	-228.2	-4,235.7	6,275.3	6,178.3	96.99	64.700		
12,300.0	7,530.0	7,600.7	7,440.5	85.6	26.0	88.55	-228.3	-4,235.7	6,345.6	6,246.9	98.72	64.281		
12,400.0	7,530.0	7,598.0	7,437.8	87.3	26.0	88.51	-228.3	-4,235.8	6,416.8	6,316.4	100.44	63.884		
12,500.0	7,530.0	7,595.3	7,435.1	89.1	26.0	88.48	-228.4	-4,235.8	6,488.7	6,386.6	102.17	63.507		
12,600.0	7,530.0	7,592.6	7,432.4	90.8	26.0	88.45	-228.5	-4,235.8	6,561.4	6,457.5	103.90	63.150		
12,700.0	7,530.0	7,589.9	7,429.8	92.5	26.0	88.41	-228.6	-4,235.8	6,634.8	6,529.1	105.63	62.810		
12,800.0	7,530.0	7,587.3	7,427.1	94.3	26.0	88.38	-228.6	-4,235.8	6,708.8	6,601.5	107.36	62.487		
12,900.0	7,530.0	7,584.6	7,424.5	96.0	26.0	88.34	-228.7	-4,235.8	6,783.5	6,674.5	109.09	62.181		
13,000.0	7,530.0	7,580.0	7,419.8	97.8	26.0	88.29	-228.8	-4,235.8	6,858.9	6,748.1	110.82	61.892		
13,100.0	7,530.0	7,579.2	7,419.1	99.5	26.0	88.28	-228.9	-4,235.8	6,934.9	6,822.3	112.56	61.612		
13,200.0	7,530.0	7,576.0	7,415.9	101.2	26.0	88.23	-228.9	-4,235.8	7,011.5	6,897.2	114.29	61.349		
13,300.0	7,530.0	7,572.9	7,412.7	103.0	26.0	88.19	-229.0	-4,235.8	7,088.7	6,972.6	116.02	61.098		
13,400.0	7,530.0	7,569.8	7,409.6	104.7	26.0	88.15	-229.1	-4,235.8	7,166.4	7,048.6	117.75	60.860		
13,500.0	7,530.0	7,566.6	7,406.5	106.4	26.0	88.11	-229.2	-4,235.8	7,244.7	7,125.2	119.48	60.633		
13,600.0	7,530.0	7,563.5	7,403.4	108.2	26.0	88.08	-229.3	-4,235.8	7,323.5	7,202.3	121.22	60.416		
13,700.0	7,530.0	7,560.5	7,400.3	109.9	26.0	88.04	-229.4	-4,235.8	7,402.8	7,279.8	122.95	60.209		
13,800.0	7,530.0	7,557.4	7,397.2	111.7	26.0	88.00	-229.5	-4,235.9	7,482.6	7,357.9	124.68	60.012		
13,900.0	7,530.0	7,554.4	7,394.2	113.4	26.0	87.96	-229.5	-4,235.9	7,562.9	7,436.5	126.42	59.824		
14,000.0	7,530.0	7,551.3	7,391.2	115.1	26.0	87.92	-229.6	-4,235.9	7,643.7	7,515.5	128.15	59.645		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 11-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 132-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
14,100.0	7,530.0	7,548.3	7,388.2	116.9	26.0	87.88	-229.7	-4,235.9	7,724.9	7,595.0	129.89	59.474		
14,200.0	7,530.0	7,545.3	7,385.2	118.6	26.0	87.84	-229.8	-4,235.9	7,806.5	7,674.9	131.62	59.310		
14,300.0	7,530.0	7,542.4	7,382.2	120.4	26.0	87.80	-229.9	-4,235.9	7,888.6	7,755.2	133.36	59.154		
14,400.0	7,530.0	7,539.4	7,379.3	122.1	26.0	87.77	-229.9	-4,235.9	7,971.0	7,835.9	135.09	59.005		
14,500.0	7,530.0	7,536.5	7,376.3	123.9	26.0	87.73	-230.0	-4,235.9	8,053.9	7,917.1	136.83	58.862		
14,600.0	7,530.0	7,533.5	7,373.4	125.6	26.0	87.69	-230.1	-4,235.9	8,137.1	7,998.6	138.56	58.726		
14,700.0	7,530.0	7,530.6	7,370.5	127.3	26.0	87.66	-230.2	-4,235.9	8,220.8	8,080.5	140.30	58.595		
14,800.0	7,530.0	7,527.8	7,367.6	129.1	26.0	87.62	-230.3	-4,235.9	8,304.8	8,162.7	142.03	58.471		
14,900.0	7,530.0	7,524.9	7,364.7	130.8	26.0	87.58	-230.3	-4,235.9	8,389.1	8,245.3	143.77	58.351		
15,000.0	7,530.0	7,522.0	7,361.9	132.6	26.0	87.55	-230.4	-4,235.9	8,473.8	8,328.3	145.50	58.237		
15,100.0	7,530.0	7,519.2	7,359.0	134.3	26.0	87.51	-230.5	-4,235.9	8,558.8	8,411.5	147.24	58.128		
15,200.0	7,530.0	7,516.4	7,356.2	136.1	26.0	87.47	-230.6	-4,235.9	8,644.1	8,495.1	148.98	58.023		
15,300.0	7,530.0	7,513.6	7,353.4	137.8	25.9	87.44	-230.6	-4,235.9	8,729.7	8,579.0	150.71	57.923		
15,400.0	7,530.0	7,510.8	7,350.6	139.6	25.9	87.40	-230.7	-4,235.9	8,815.7	8,663.2	152.45	57.827		
15,500.0	7,530.0	7,508.0	7,347.9	141.3	25.9	87.37	-230.8	-4,235.8	8,901.9	8,747.7	154.19	57.735		
15,600.0	7,530.0	7,505.2	7,345.1	143.0	25.9	87.33	-230.8	-4,235.8	8,988.4	8,832.5	155.92	57.647		
15,700.0	7,530.0	7,502.5	7,342.4	144.8	25.9	87.30	-230.9	-4,235.8	9,075.2	8,917.5	157.66	57.562		
15,800.0	7,530.0	7,499.8	7,339.6	146.5	25.9	87.26	-231.0	-4,235.8	9,162.3	9,002.9	159.40	57.481		
15,900.0	7,530.0	7,497.0	7,336.9	148.3	25.9	87.23	-231.1	-4,235.8	9,249.6	9,088.4	161.13	57.403		
16,000.0	7,530.0	7,494.3	7,334.2	150.0	25.9	87.19	-231.1	-4,235.8	9,337.2	9,174.3	162.87	57.329		
16,100.0	7,530.0	7,491.7	7,331.5	151.8	25.9	87.16	-231.2	-4,235.8	9,425.0	9,260.4	164.61	57.258		
16,200.0	7,530.0	7,489.0	7,328.9	153.5	25.9	87.12	-231.3	-4,235.8	9,513.0	9,346.7	166.34	57.189		
16,300.0	7,530.0	7,486.3	7,326.2	155.3	25.9	87.09	-231.3	-4,235.8	9,601.3	9,433.2	168.08	57.123		
16,400.0	7,530.0	7,483.7	7,323.6	157.0	25.9	87.06	-231.4	-4,235.8	9,689.8	9,520.0	169.82	57.060		
16,500.0	7,530.0	7,481.1	7,320.9	158.8	25.9	87.02	-231.5	-4,235.8	9,778.6	9,607.0	171.55	57.000		
16,600.0	7,530.0	7,478.5	7,318.3	160.5	25.9	86.99	-231.5	-4,235.8	9,867.5	9,694.2	173.29	56.942		
16,700.0	7,530.0	7,475.9	7,315.7	162.3	25.9	86.96	-231.6	-4,235.8	9,956.7	9,781.7	175.03	56.886 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	60.0	60.0	0.0	0.1	-112.21	-1,738.0	-4,256.1	4,597.3					
100.0	100.0	160.0	160.0	0.2	0.3	-112.21	-1,738.0	-4,256.1	4,597.3	4,596.8	0.43	N/A		
200.0	200.0	260.0	260.0	0.3	0.5	-112.21	-1,738.0	-4,256.1	4,597.3	4,596.5	0.78	5,891.258		
300.0	300.0	360.0	360.0	0.5	0.6	-112.21	-1,738.0	-4,256.1	4,597.3	4,596.1	1.13	4,070.479		
400.0	400.0	460.0	460.0	0.7	0.8	-112.21	-1,738.0	-4,256.1	4,597.3	4,595.8	1.48	3,109.457		
500.0	500.0	560.0	560.0	0.8	1.0	-112.21	-1,738.0	-4,256.1	4,597.3	4,595.5	1.83	2,515.547		
600.0	600.0	660.0	660.0	1.0	1.2	-112.21	-1,738.0	-4,256.1	4,597.3	4,595.1	2.18	2,112.128		
700.0	700.0	760.0	760.0	1.2	1.3	-144.69	-1,738.0	-4,256.1	4,598.0	4,595.5	2.53	1,820.533		
800.0	800.0	860.0	860.0	1.4	1.5	-144.70	-1,738.0	-4,256.1	4,600.1	4,597.3	2.87	1,600.060		
900.0	899.9	959.9	959.9	1.6	1.7	-144.71	-1,738.0	-4,256.1	4,603.7	4,600.5	3.23	1,427.300		
988.4	988.1	1,048.1	1,048.1	1.7	1.8	-144.72	-1,738.0	-4,256.1	4,608.0	4,604.5	3.54	1,302.845		
1,000.0	999.7	1,059.7	1,059.7	1.7	1.8	-144.72	-1,738.0	-4,256.1	4,608.7	4,605.1	3.58	1,288.048		
1,100.0	1,099.4	1,159.4	1,159.4	1.9	2.0	-144.77	-1,738.0	-4,256.1	4,614.2	4,610.3	3.93	1,173.126		
1,200.0	1,199.2	1,259.2	1,259.2	2.1	2.2	-144.82	-1,738.0	-4,256.1	4,619.7	4,615.5	4.29	1,076.979		
1,300.0	1,299.0	1,359.0	1,359.0	2.3	2.4	-144.87	-1,738.0	-4,256.1	4,625.3	4,620.6	4.65	995.412		
1,400.0	1,398.8	1,458.8	1,458.8	2.5	2.5	-144.92	-1,738.0	-4,256.1	4,630.8	4,625.8	5.00	925.378		
1,500.0	1,498.5	1,558.5	1,558.5	2.7	2.7	-144.97	-1,738.0	-4,256.1	4,636.4	4,631.0	5.36	864.612		
1,600.0	1,598.3	1,658.3	1,658.3	2.9	2.9	-145.01	-1,738.0	-4,256.1	4,641.9	4,636.2	5.72	811.405		
1,700.0	1,698.1	1,758.1	1,758.1	3.2	3.1	-145.06	-1,738.0	-4,256.1	4,647.5	4,641.4	6.08	764.438		
1,800.0	1,797.8	1,857.8	1,857.8	3.4	3.2	-145.11	-1,738.0	-4,256.1	4,653.0	4,646.6	6.44	722.681		
1,900.0	1,897.6	1,957.6	1,957.6	3.6	3.4	-145.16	-1,738.0	-4,256.1	4,658.6	4,651.8	6.80	685.316		
2,000.0	1,997.4	2,057.4	2,057.4	3.8	3.6	-145.20	-1,738.0	-4,256.1	4,664.2	4,657.0	7.16	651.690		
2,100.0	2,097.1	2,157.1	2,157.1	4.0	3.8	-145.25	-1,738.0	-4,256.1	4,669.7	4,662.2	7.52	621.269		
2,200.0	2,196.9	2,256.9	2,256.9	4.2	3.9	-145.30	-1,738.0	-4,256.1	4,675.3	4,667.4	7.88	593.619		
2,300.0	2,296.7	2,356.7	2,356.7	4.4	4.1	-145.35	-1,738.0	-4,256.1	4,680.9	4,672.6	8.24	568.379		
2,400.0	2,396.5	2,456.5	2,456.5	4.6	4.3	-145.39	-1,738.0	-4,256.1	4,686.5	4,677.9	8.60	545.247		
2,500.0	2,496.2	2,556.2	2,556.2	4.8	4.5	-145.44	-1,738.0	-4,256.1	4,692.0	4,683.1	8.95	523.971		
2,600.0	2,596.0	2,656.0	2,656.0	5.0	4.6	-145.49	-1,738.0	-4,256.1	4,697.6	4,688.3	9.31	504.338		
2,700.0	2,695.8	2,755.8	2,755.8	5.2	4.8	-145.53	-1,738.0	-4,256.1	4,703.2	4,693.5	9.67	486.163		
2,800.0	2,795.5	2,855.5	2,855.5	5.4	5.0	-145.58	-1,738.0	-4,256.1	4,708.8	4,698.8	10.03	469.292		
2,900.0	2,895.3	2,955.3	2,955.3	5.6	5.2	-145.63	-1,738.0	-4,256.1	4,714.4	4,704.0	10.39	453.588		
3,000.0	2,995.1	3,055.1	3,055.1	5.9	5.3	-145.67	-1,738.0	-4,256.1	4,720.0	4,709.2	10.75	438.935		
3,100.0	3,094.9	3,154.9	3,154.9	6.1	5.5	-145.72	-1,738.0	-4,256.1	4,725.6	4,714.5	11.11	425.232		
3,200.0	3,194.6	3,254.6	3,254.6	6.3	5.7	-145.77	-1,738.0	-4,256.1	4,731.2	4,719.7	11.47	412.388		
3,300.0	3,294.4	3,354.4	3,354.4	6.5	5.9	-145.81	-1,738.0	-4,256.1	4,736.8	4,725.0	11.83	400.327		
3,400.0	3,394.2	3,454.2	3,454.2	6.7	6.0	-145.86	-1,738.0	-4,256.1	4,742.4	4,730.2	12.19	388.977		
3,500.0	3,493.9	3,553.9	3,553.9	6.9	6.2	-145.90	-1,738.0	-4,256.1	4,748.0	4,735.5	12.55	378.279		
3,600.0	3,593.7	3,653.7	3,653.7	7.1	6.4	-145.95	-1,738.0	-4,256.1	4,753.6	4,740.7	12.91	368.178		
3,700.0	3,693.5	3,753.5	3,753.5	7.3	6.6	-146.00	-1,738.0	-4,256.1	4,759.3	4,746.0	13.27	358.625		
3,800.0	3,793.2	3,853.2	3,853.2	7.5	6.7	-146.04	-1,738.0	-4,256.1	4,764.9	4,751.2	13.63	349.578		
3,900.0	3,893.0	3,953.0	3,953.0	7.7	6.9	-146.09	-1,738.0	-4,256.1	4,770.5	4,756.5	13.99	340.996		
4,000.0	3,992.8	4,052.8	4,052.8	8.0	7.1	-146.13	-1,738.0	-4,256.1	4,776.1	4,761.8	14.35	332.845		
4,100.0	4,092.6	4,152.6	4,152.6	8.2	7.2	-146.18	-1,738.0	-4,256.1	4,781.8	4,767.0	14.71	325.094		
4,200.0	4,192.3	4,252.3	4,252.3	8.4	7.4	-146.22	-1,738.0	-4,256.1	4,787.4	4,772.3	15.07	317.713		
4,300.0	4,292.1	4,352.1	4,352.1	8.6	7.6	-146.27	-1,738.0	-4,256.1	4,793.0	4,777.6	15.43	310.677		
4,400.0	4,391.9	4,451.9	4,451.9	8.8	7.8	-146.31	-1,738.0	-4,256.1	4,798.7	4,782.9	15.79	303.963		
4,500.0	4,491.6	4,551.6	4,551.6	9.0	7.9	-146.36	-1,738.0	-4,256.1	4,804.3	4,788.2	16.15	297.548		
4,600.0	4,591.4	4,651.4	4,651.4	9.2	8.1	-146.40	-1,738.0	-4,256.1	4,809.9	4,793.4	16.51	291.413		
4,700.0	4,691.2	4,751.2	4,751.2	9.4	8.3	-146.45	-1,738.0	-4,256.1	4,815.6	4,798.7	16.86	285.541		
4,800.0	4,790.9	4,850.9	4,850.9	9.6	8.5	-146.49	-1,738.0	-4,256.1	4,821.2	4,804.0	17.22	279.914		
4,900.0	4,890.7	4,950.7	4,950.7	9.8	8.6	-146.53	-1,738.0	-4,256.1	4,826.9	4,809.3	17.58	274.518		
5,000.0	4,990.5	5,050.5	5,050.5	10.1	8.8	-146.58	-1,738.0	-4,256.1	4,832.6	4,814.6	17.94	269.339		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N													Offset Site Error: 0.0 ft	
Survey Program: 8325-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	5,150.3	5,150.3	10.3	9.0	-146.62	-1,738.0	-4,256.1	4,838.2	4,819.9	18.30	264.363		
5,200.0	5,190.0	5,250.0	5,250.0	10.5	9.2	-146.67	-1,738.0	-4,256.1	4,843.9	4,825.2	18.66	259.580		
5,300.0	5,289.8	5,349.8	5,349.8	10.7	9.3	-146.71	-1,738.0	-4,256.1	4,849.5	4,830.5	19.02	254.978		
5,400.0	5,389.6	5,449.6	5,449.6	10.9	9.5	-146.75	-1,738.0	-4,256.1	4,855.2	4,835.8	19.38	250.548		
5,500.0	5,489.3	5,549.3	5,549.3	11.1	9.7	-146.80	-1,738.0	-4,256.1	4,860.9	4,841.1	19.74	246.279		
5,600.0	5,589.1	5,649.1	5,649.1	11.3	9.9	-146.84	-1,738.0	-4,256.1	4,866.6	4,846.5	20.10	242.164		
5,700.0	5,688.9	5,748.9	5,748.9	11.5	10.0	-146.89	-1,738.0	-4,256.1	4,872.2	4,851.8	20.45	238.193		
5,800.0	5,788.7	5,848.7	5,848.7	11.7	10.2	-146.93	-1,738.0	-4,256.1	4,877.9	4,857.1	20.81	234.360		
5,900.0	5,888.4	5,948.4	5,948.4	11.9	10.4	-146.97	-1,738.0	-4,256.1	4,883.6	4,862.4	21.17	230.657		
6,000.0	5,988.2	6,048.2	6,048.2	12.2	10.6	-147.02	-1,738.0	-4,256.1	4,889.3	4,867.7	21.53	227.079		
6,100.0	6,088.0	6,148.0	6,148.0	12.4	10.7	-147.06	-1,738.0	-4,256.1	4,895.0	4,873.1	21.89	223.618		
6,200.0	6,187.7	6,247.7	6,247.7	12.6	10.9	-147.10	-1,738.0	-4,256.1	4,900.7	4,878.4	22.25	220.269		
6,300.0	6,287.5	6,347.5	6,347.5	12.8	11.1	-147.14	-1,738.0	-4,256.1	4,906.3	4,883.7	22.61	217.027		
6,400.0	6,387.3	6,447.3	6,447.3	13.0	11.3	-147.19	-1,738.0	-4,256.1	4,912.0	4,889.1	22.97	213.887		
6,500.0	6,487.0	6,547.0	6,547.0	13.2	11.4	-147.23	-1,738.0	-4,256.1	4,917.7	4,894.4	23.32	210.844		
6,600.0	6,586.8	6,646.8	6,646.8	13.4	11.6	-147.27	-1,738.0	-4,256.1	4,923.4	4,899.8	23.68	207.894		
6,700.0	6,686.6	6,746.6	6,746.6	13.6	11.8	-147.32	-1,738.0	-4,256.1	4,929.1	4,905.1	24.04	205.032		
6,787.0	6,773.4	6,833.4	6,833.4	13.8	11.9	-147.35	-1,738.0	-4,256.1	4,934.1	4,909.8	24.35	202.611		
6,800.0	6,786.4	6,846.4	6,846.4	13.8	11.9	-157.94	-1,738.0	-4,256.1	4,934.8	4,910.4	24.40	202.246		
6,850.0	6,836.3	6,896.3	6,896.3	13.9	12.0	114.82	-1,738.0	-4,256.1	4,936.5	4,912.0	24.56	200.988		
6,900.0	6,886.2	6,946.2	6,946.2	14.0	12.1	84.98	-1,738.0	-4,256.1	4,936.8	4,912.1	24.70	199.872		
6,950.0	6,935.7	6,995.7	6,995.7	14.0	12.2	77.33	-1,738.0	-4,256.1	4,935.6	4,910.8	24.82	198.886		
7,000.0	6,984.6	7,044.6	7,044.6	14.0	12.3	74.21	-1,738.0	-4,256.1	4,933.0	4,908.0	24.91	198.010		
7,050.0	7,032.6	7,092.6	7,092.6	14.0	12.4	72.76	-1,738.0	-4,256.1	4,928.9	4,903.9	24.99	197.219		
7,100.0	7,079.7	7,139.7	7,139.7	13.9	12.5	72.14	-1,738.0	-4,256.1	4,923.4	4,898.4	25.06	196.479		
7,150.0	7,125.4	7,185.4	7,185.4	13.9	12.5	72.03	-1,738.0	-4,256.1	4,916.7	4,891.6	25.12	195.755		
7,200.0	7,169.6	7,229.6	7,229.6	13.8	12.6	72.27	-1,738.0	-4,256.1	4,908.7	4,883.5	25.17	195.006		
7,250.0	7,212.1	7,272.1	7,272.1	13.8	12.7	72.77	-1,738.0	-4,256.1	4,899.5	4,874.3	25.23	194.190		
7,300.0	7,252.6	7,312.6	7,312.6	13.7	12.8	73.48	-1,738.0	-4,256.1	4,889.3	4,864.0	25.30	193.266		
7,350.0	7,291.0	7,351.0	7,351.0	13.7	12.8	74.36	-1,738.0	-4,256.1	4,878.0	4,852.6	25.38	192.195		
7,400.0	7,327.1	7,387.1	7,387.1	13.7	12.9	75.39	-1,738.0	-4,256.1	4,865.9	4,840.4	25.48	190.944		
7,450.0	7,360.7	7,420.7	7,420.7	13.7	13.0	76.53	-1,738.0	-4,256.1	4,852.9	4,827.3	25.61	189.488		
7,500.0	7,391.6	7,451.6	7,451.6	13.7	13.0	77.76	-1,738.0	-4,256.1	4,839.3	4,813.5	25.77	187.808		
7,550.0	7,419.7	7,479.7	7,479.7	13.8	13.1	79.07	-1,738.0	-4,256.1	4,825.1	4,799.2	25.96	185.897		
7,600.0	7,444.8	7,504.8	7,504.8	13.9	13.1	80.43	-1,738.0	-4,256.1	4,810.5	4,784.4	26.18	183.757		
7,650.0	7,466.9	7,526.9	7,526.9	14.1	13.1	81.82	-1,738.0	-4,256.1	4,795.6	4,769.1	26.44	181.396		
7,700.0	7,485.8	7,545.8	7,545.8	14.3	13.2	83.23	-1,738.0	-4,256.1	4,780.4	4,753.7	26.73	178.834		
7,750.0	7,501.5	7,561.5	7,561.5	14.6	13.2	84.64	-1,738.0	-4,256.1	4,765.1	4,738.1	27.06	176.093		
7,800.0	7,513.7	7,573.7	7,573.7	14.9	13.2	86.02	-1,738.0	-4,256.1	4,749.9	4,722.4	27.42	173.202		
7,850.0	7,522.6	7,582.6	7,582.6	15.2	13.2	87.37	-1,738.0	-4,256.1	4,734.7	4,706.9	27.82	170.191		
7,900.0	7,528.0	7,588.0	7,588.0	15.6	13.2	88.68	-1,738.0	-4,256.1	4,719.7	4,691.5	28.25	167.093		
7,952.9	7,530.0	7,590.0	7,590.0	16.1	13.2	90.00	-1,738.0	-4,256.1	4,704.2	4,675.4	28.73	163.754		
8,000.0	7,530.0	7,590.0	7,590.0	16.5	13.2	90.00	-1,738.0	-4,256.1	4,690.7	4,661.5	29.18	160.739		
8,100.0	7,530.0	7,590.0	7,590.0	17.5	13.2	90.00	-1,738.0	-4,256.1	4,663.6	4,633.4	30.24	154.208		
8,200.0	7,530.0	7,590.0	7,590.0	18.7	13.2	90.00	-1,738.0	-4,256.1	4,638.5	4,607.1	31.41	147.674		
8,300.0	7,530.0	7,590.0	7,590.0	19.9	13.2	90.00	-1,738.0	-4,256.1	4,615.4	4,582.7	32.67	141.288		
8,400.0	7,530.0	7,590.0	7,590.0	21.2	13.2	90.00	-1,738.0	-4,256.1	4,594.4	4,560.4	34.00	135.147		
8,500.0	7,530.0	7,590.0	7,590.0	22.6	13.2	90.00	-1,738.0	-4,256.1	4,575.4	4,540.0	35.38	129.310		
8,600.0	7,530.0	7,590.0	7,590.0	24.0	13.2	90.00	-1,738.0	-4,256.1	4,558.6	4,521.8	36.82	123.807		
8,700.0	7,530.0	7,590.0	7,590.0	25.4	13.2	90.00	-1,738.0	-4,256.1	4,543.9	4,505.6	38.30	118.648		
8,800.0	7,530.0	7,590.0	7,590.0	26.9	13.2	90.00	-1,738.0	-4,256.1	4,531.4	4,491.6	39.81	113.830		
8,900.0	7,530.0	7,590.0	7,590.0	28.4	13.2	90.00	-1,738.0	-4,256.1	4,521.0	4,479.7	41.35	109.342		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
9,000.0	7,530.0	7,590.0	7,590.0	30.0	13.2	90.00	-1,738.0	-4,256.1	4,512.9	4,470.0	42.91	105.169		
9,100.0	7,530.0	7,590.0	7,590.0	31.5	13.2	90.00	-1,738.0	-4,256.1	4,506.9	4,462.4	44.49	101.293		
9,200.0	7,530.0	7,590.0	7,590.0	33.1	13.2	90.00	-1,738.0	-4,256.1	4,503.2	4,457.1	46.09	97.694		
9,300.0	7,530.0	7,590.0	7,590.0	34.7	13.2	90.00	-1,738.0	-4,256.1	4,501.7	4,454.0	47.71	94.354		
9,318.3	7,530.0	7,590.0	7,590.0	35.0	13.2	90.00	-1,738.0	-4,256.1	4,501.6	4,453.6	48.01	93.766 CC		
9,400.0	7,530.0	7,590.0	7,590.0	36.3	13.2	90.00	-1,738.0	-4,256.1	4,502.4	4,453.0	49.34	91.254 ES		
9,500.0	7,530.0	7,590.0	7,590.0	38.0	13.2	90.00	-1,738.0	-4,256.1	4,505.3	4,454.3	50.98	88.376		
9,600.0	7,530.0	7,590.0	7,590.0	39.6	13.2	90.00	-1,738.0	-4,256.1	4,510.4	4,457.8	52.63	85.704		
9,700.0	7,530.0	7,590.0	7,590.0	41.3	13.2	90.00	-1,738.0	-4,256.1	4,517.8	4,463.5	54.29	83.221		
9,800.0	7,530.0	7,590.0	7,590.0	42.9	13.2	90.00	-1,738.0	-4,256.1	4,527.3	4,471.4	55.95	80.914		
9,900.0	7,530.0	7,590.0	7,590.0	44.6	13.2	90.00	-1,738.0	-4,256.1	4,539.1	4,481.4	57.63	78.769		
10,000.0	7,530.0	7,590.0	7,590.0	46.3	13.2	90.00	-1,738.0	-4,256.1	4,553.0	4,493.7	59.30	76.773		
10,100.0	7,530.0	7,590.0	7,590.0	47.9	13.2	90.00	-1,738.0	-4,256.1	4,569.0	4,508.0	60.99	74.916		
10,200.0	7,530.0	7,590.0	7,590.0	49.6	13.2	90.00	-1,738.0	-4,256.1	4,587.2	4,524.5	62.68	73.187		
10,300.0	7,530.0	7,590.0	7,590.0	51.3	13.2	90.00	-1,738.0	-4,256.1	4,607.4	4,543.1	64.37	71.576		
10,400.0	7,530.0	7,590.0	7,590.0	53.0	13.2	90.00	-1,738.0	-4,256.1	4,629.8	4,563.7	66.07	70.076		
10,500.0	7,530.0	7,590.0	7,590.0	54.7	13.2	90.00	-1,738.0	-4,256.1	4,654.1	4,586.4	67.77	68.676		
10,600.0	7,530.0	7,590.0	7,590.0	56.4	13.2	90.00	-1,738.0	-4,256.1	4,680.5	4,611.1	69.47	67.372		
10,700.0	7,530.0	7,590.0	7,590.0	58.1	13.2	90.00	-1,738.0	-4,256.1	4,708.9	4,637.7	71.18	66.154		
10,800.0	7,530.0	7,590.0	7,590.0	59.8	13.2	90.00	-1,738.0	-4,256.1	4,739.2	4,666.3	72.89	65.018		
10,900.0	7,530.0	7,590.0	7,590.0	61.5	13.2	90.00	-1,738.0	-4,256.1	4,771.4	4,696.8	74.60	63.957		
11,000.0	7,530.0	7,590.0	7,590.0	63.2	13.2	90.00	-1,738.0	-4,256.1	4,805.5	4,729.2	76.32	62.967		
11,100.0	7,530.0	7,590.0	7,590.0	64.9	13.2	90.00	-1,738.0	-4,256.1	4,841.4	4,763.4	78.03	62.042		
11,200.0	7,530.0	7,590.0	7,590.0	66.6	13.2	90.00	-1,738.0	-4,256.1	4,879.1	4,799.3	79.75	61.177		
11,300.0	7,530.0	7,590.0	7,590.0	68.4	13.2	90.00	-1,738.0	-4,256.1	4,918.5	4,837.0	81.47	60.369		
11,400.0	7,530.0	7,590.0	7,590.0	70.1	13.2	90.00	-1,738.0	-4,256.1	4,959.6	4,876.4	83.20	59.614		
11,500.0	7,530.0	7,590.0	7,590.0	71.8	13.2	90.00	-1,738.0	-4,256.1	5,002.4	4,917.5	84.92	58.908		
11,600.0	7,530.0	7,590.0	7,590.0	73.5	13.2	90.00	-1,738.0	-4,256.1	5,046.8	4,960.2	86.64	58.247		
11,700.0	7,530.0	7,590.0	7,590.0	75.2	13.2	90.00	-1,738.0	-4,256.1	5,092.8	5,004.5	88.37	57.630		
11,800.0	7,530.0	7,590.0	7,590.0	77.0	13.2	90.00	-1,738.0	-4,256.1	5,140.4	5,050.3	90.10	57.052		
11,900.0	7,530.0	7,590.0	7,590.0	78.7	13.2	90.00	-1,738.0	-4,256.1	5,189.4	5,097.6	91.83	56.512		
12,000.0	7,530.0	7,590.0	7,590.0	80.4	13.2	90.00	-1,738.0	-4,256.1	5,239.8	5,146.3	93.56	56.006		
12,100.0	7,530.0	7,590.0	7,590.0	82.2	13.2	90.00	-1,738.0	-4,256.1	5,291.7	5,196.4	95.29	55.533		
12,200.0	7,530.0	7,590.0	7,590.0	83.9	13.2	90.00	-1,738.0	-4,256.1	5,345.0	5,247.9	97.02	55.091		
12,300.0	7,530.0	7,590.0	7,590.0	85.6	13.2	90.00	-1,738.0	-4,256.1	5,399.5	5,300.8	98.75	54.677		
12,400.0	7,530.0	7,590.0	7,590.0	87.3	13.2	90.00	-1,738.0	-4,256.1	5,455.4	5,354.9	100.49	54.289		
12,500.0	7,530.0	7,590.0	7,590.0	89.1	13.2	90.00	-1,738.0	-4,256.1	5,512.5	5,410.3	102.22	53.927		
12,600.0	7,530.0	7,590.0	7,590.0	90.8	13.2	90.00	-1,738.0	-4,256.1	5,570.8	5,466.9	103.96	53.587		
12,700.0	7,530.0	7,590.0	7,590.0	92.5	13.2	90.00	-1,738.0	-4,256.1	5,630.3	5,524.6	105.69	53.270		
12,800.0	7,530.0	7,590.0	7,590.0	94.3	13.2	90.00	-1,738.0	-4,256.1	5,690.9	5,583.5	107.43	52.973		
12,900.0	7,530.0	7,590.0	7,590.0	96.0	13.2	90.00	-1,738.0	-4,256.1	5,752.6	5,643.5	109.17	52.696		
13,000.0	7,530.0	7,590.0	7,590.0	97.8	13.2	90.00	-1,738.0	-4,256.1	5,815.4	5,704.5	110.91	52.436		
13,100.0	7,530.0	7,590.0	7,590.0	99.5	13.2	90.00	-1,738.0	-4,256.1	5,879.3	5,766.6	112.64	52.193		
13,200.0	7,530.0	7,590.0	7,590.0	101.2	13.2	90.00	-1,738.0	-4,256.1	5,944.1	5,829.7	114.38	51.966		
13,300.0	7,530.0	7,590.0	7,590.0	103.0	13.2	90.00	-1,738.0	-4,256.1	6,009.9	5,893.7	116.12	51.754		
13,400.0	7,530.0	7,590.0	7,590.0	104.7	13.2	90.00	-1,738.0	-4,256.1	6,076.6	5,958.7	117.86	51.556		
13,500.0	7,530.0	7,590.0	7,590.0	106.4	13.2	90.00	-1,738.0	-4,256.1	6,144.2	6,024.6	119.60	51.371		
13,600.0	7,530.0	7,590.0	7,590.0	108.2	13.2	90.00	-1,738.0	-4,256.1	6,212.7	6,091.3	121.34	51.199		
13,700.0	7,530.0	7,590.0	7,590.0	109.9	13.2	90.00	-1,738.0	-4,256.1	6,282.0	6,158.9	123.09	51.038		
13,800.0	7,530.0	7,590.0	7,590.0	111.7	13.2	90.00	-1,738.0	-4,256.1	6,352.2	6,227.3	124.83	50.888		
13,900.0	7,530.0	7,590.0	7,590.0	113.4	13.2	90.00	-1,738.0	-4,256.1	6,423.1	6,296.5	126.57	50.748		
14,000.0	7,530.0	7,590.0	7,590.0	115.1	13.2	90.00	-1,738.0	-4,256.1	6,494.8	6,366.5	128.31	50.618		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
14,100.0	7,530.0	7,590.0	7,590.0	116.9	13.2	90.00	-1,738.0	-4,256.1	6,567.3	6,437.2	130.05	50.496		
14,200.0	7,530.0	7,590.0	7,590.0	118.6	13.2	90.00	-1,738.0	-4,256.1	6,640.4	6,508.6	131.80	50.384		
14,300.0	7,530.0	7,590.0	7,590.0	120.4	13.2	90.00	-1,738.0	-4,256.1	6,714.3	6,580.7	133.54	50.279		
14,400.0	7,530.0	7,590.0	7,590.0	122.1	13.2	90.00	-1,738.0	-4,256.1	6,788.8	6,653.5	135.28	50.182		
14,500.0	7,530.0	7,590.0	7,590.0	123.9	13.2	90.00	-1,738.0	-4,256.1	6,864.0	6,727.0	137.03	50.092		
14,600.0	7,530.0	7,590.0	7,590.0	125.6	13.2	90.00	-1,738.0	-4,256.1	6,939.8	6,801.0	138.77	50.008		
14,700.0	7,530.0	7,590.0	7,590.0	127.3	13.2	90.00	-1,738.0	-4,256.1	7,016.2	6,875.7	140.52	49.931		
14,800.0	7,530.0	7,590.0	7,590.0	129.1	13.2	90.00	-1,738.0	-4,256.1	7,093.2	6,950.9	142.26	49.860		
14,900.0	7,530.0	7,590.0	7,590.0	130.8	13.2	90.00	-1,738.0	-4,256.1	7,170.7	7,026.7	144.01	49.794		
15,000.0	7,530.0	7,590.0	7,590.0	132.6	13.2	90.00	-1,738.0	-4,256.1	7,248.9	7,103.1	145.75	49.734		
15,100.0	7,530.0	7,590.0	7,590.0	134.3	13.2	90.00	-1,738.0	-4,256.1	7,327.5	7,180.0	147.50	49.678		
15,200.0	7,530.0	7,590.0	7,590.0	136.1	13.2	90.00	-1,738.0	-4,256.1	7,406.7	7,257.4	149.24	49.628		
15,300.0	7,530.0	7,590.0	7,590.0	137.8	13.2	90.00	-1,738.0	-4,256.1	7,486.3	7,335.3	150.99	49.581		
15,400.0	7,530.0	7,590.0	7,590.0	139.6	13.2	90.00	-1,738.0	-4,256.1	7,566.5	7,413.7	152.74	49.539		
15,500.0	7,530.0	7,590.0	7,590.0	141.3	13.2	90.00	-1,738.0	-4,256.1	7,647.1	7,492.6	154.48	49.501		
15,600.0	7,530.0	7,590.0	7,590.0	143.0	13.2	90.00	-1,738.0	-4,256.1	7,728.1	7,571.9	156.23	49.467		
15,700.0	7,530.0	7,590.0	7,590.0	144.8	13.2	90.00	-1,738.0	-4,256.1	7,809.6	7,651.6	157.98	49.435		
15,800.0	7,530.0	7,590.0	7,590.0	146.5	13.2	90.00	-1,738.0	-4,256.1	7,891.5	7,731.8	159.72	49.408		
15,900.0	7,530.0	7,590.0	7,590.0	148.3	13.2	90.00	-1,738.0	-4,256.1	7,973.9	7,812.4	161.47	49.383		
16,000.0	7,530.0	7,590.0	7,590.0	150.0	13.2	90.00	-1,738.0	-4,256.1	8,056.6	7,893.4	163.22	49.361		
16,100.0	7,530.0	7,590.0	7,590.0	151.8	13.2	90.00	-1,738.0	-4,256.1	8,139.8	7,974.8	164.96	49.342		
16,200.0	7,530.0	7,590.0	7,590.0	153.5	13.2	90.00	-1,738.0	-4,256.1	8,223.3	8,056.5	166.71	49.326		
16,300.0	7,530.0	7,590.0	7,590.0	155.3	13.2	90.00	-1,738.0	-4,256.1	8,307.1	8,138.7	168.46	49.312		
16,400.0	7,530.0	7,590.0	7,590.0	157.0	13.2	90.00	-1,738.0	-4,256.1	8,391.3	8,221.1	170.21	49.301		
16,500.0	7,530.0	7,590.0	7,590.0	158.8	13.2	90.00	-1,738.0	-4,256.1	8,475.9	8,303.9	171.96	49.291		
16,600.0	7,530.0	7,590.0	7,590.0	160.5	13.2	90.00	-1,738.0	-4,256.1	8,560.8	8,387.1	173.70	49.284		
16,700.0	7,530.0	7,590.0	7,590.0	162.3	13.2	90.00	-1,738.0	-4,256.1	8,646.0	8,470.6	175.45	49.278		
16,800.0	7,530.0	7,590.0	7,590.0	164.0	13.2	90.00	-1,738.0	-4,256.1	8,731.5	8,554.3	177.20	49.275		
16,900.0	7,530.0	7,590.0	7,590.0	165.8	13.2	90.00	-1,738.0	-4,256.1	8,817.4	8,638.4	178.95	49.273		
17,000.0	7,530.0	7,590.0	7,590.0	167.5	13.2	90.00	-1,738.0	-4,256.1	8,903.5	8,722.8	180.70	49.273 SF		
17,100.0	7,530.0	7,590.0	7,590.0	169.3	13.2	90.00	-1,738.0	-4,256.1	8,989.9	8,807.5	182.45	49.274		
17,200.0	7,530.0	7,590.0	7,590.0	171.0	13.2	90.00	-1,738.0	-4,256.1	9,076.6	8,892.4	184.20	49.277		
17,300.0	7,530.0	7,590.0	7,590.0	172.8	13.2	90.00	-1,738.0	-4,256.1	9,163.6	8,977.7	185.94	49.281		
17,400.0	7,530.0	7,590.0	7,590.0	174.5	13.2	90.00	-1,738.0	-4,256.1	9,250.8	9,063.1	187.69	49.287		
17,420.9	7,530.0	7,590.0	7,590.0	174.9	13.2	90.00	-1,738.0	-4,256.1	9,269.1	9,081.1	188.06	49.288		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	32.3	32.3	0.0	0.1	-95.70	-293.1	-2,936.0	2,950.6					
100.0	100.0	160.2	160.2	0.2	0.3	-95.71	-293.5	-2,934.6	2,949.5	2,949.1	0.43	6,798.914		
200.0	200.0	252.7	252.6	0.3	0.4	-95.73	-294.4	-2,933.3	2,948.2	2,947.5	0.77	3,823.437		
300.0	300.0	337.2	337.2	0.5	0.6	-95.74	-294.9	-2,932.6	2,947.4	2,946.3	1.09	2,695.612		
400.0	400.0	423.6	423.6	0.7	0.7	-95.75	-295.2	-2,932.3	2,947.1	2,945.7	1.42	2,077.902		
420.5	420.5	441.5	441.5	0.7	0.8	-95.75	-295.3	-2,932.3	2,947.1	2,945.6	1.49	1,984.436	CC	
500.0	500.0	511.7	511.7	0.8	0.9	-95.75	-295.5	-2,932.4	2,947.2	2,945.5	1.75	1,687.922	ES	
600.0	600.0	600.0	600.0	1.0	1.0	-95.76	-295.7	-2,932.7	2,947.7	2,945.6	2.07	1,421.309		
700.0	700.0	694.2	694.2	1.2	1.2	-128.24	-296.0	-2,933.4	2,949.0	2,946.5	2.41	1,222.372		
800.0	800.0	791.6	791.5	1.4	1.4	-128.27	-297.0	-2,934.2	2,951.5	2,948.8	2.76	1,069.762		
900.0	899.9	900.0	899.9	1.6	1.6	-128.35	-298.7	-2,934.9	2,955.0	2,951.9	3.13	944.466		
988.4	988.1	979.7	979.6	1.7	1.7	-128.42	-300.1	-2,935.4	2,959.0	2,955.6	3.43	862.494		
1,000.0	999.7	989.7	989.6	1.7	1.7	-128.43	-300.2	-2,935.5	2,959.6	2,956.2	3.47	852.965		
1,100.0	1,099.4	1,082.0	1,081.9	1.9	1.9	-128.55	-301.7	-2,936.4	2,965.0	2,961.2	3.82	776.410		
1,200.0	1,199.2	1,162.9	1,162.8	2.1	2.0	-128.65	-302.9	-2,937.6	2,970.9	2,966.7	4.15	715.982		
1,300.0	1,299.0	1,251.1	1,250.9	2.3	2.2	-128.76	-304.0	-2,939.4	2,977.3	2,972.8	4.49	662.548		
1,400.0	1,398.8	1,343.7	1,343.5	2.5	2.4	-128.87	-305.1	-2,941.5	2,984.0	2,979.1	4.85	615.688		
1,500.0	1,498.5	1,432.3	1,432.1	2.7	2.5	-128.97	-305.9	-2,943.9	2,991.0	2,985.8	5.19	575.996		
1,600.0	1,598.3	1,531.9	1,531.6	2.9	2.7	-129.07	-306.3	-2,946.9	2,998.3	2,992.7	5.56	539.444		
1,700.0	1,698.1	1,640.0	1,639.7	3.2	2.9	-129.18	-306.8	-2,949.7	3,005.2	2,999.2	5.94	505.995		
1,800.0	1,797.8	1,730.2	1,729.9	3.4	3.0	-129.28	-307.2	-2,952.2	3,012.3	3,006.0	6.29	478.974		
1,900.0	1,897.6	1,834.5	1,834.1	3.6	3.2	-129.37	-307.1	-2,955.3	3,019.5	3,012.9	6.66	453.151		
2,000.0	1,997.4	1,955.8	1,955.4	3.8	3.4	-129.49	-307.2	-2,958.3	3,026.3	3,019.2	7.07	428.176		
2,100.0	2,097.1	2,069.9	2,069.5	4.0	3.6	-129.59	-307.0	-2,960.4	3,032.4	3,025.0	7.46	406.508		
2,200.0	2,196.9	2,180.9	2,180.5	4.2	3.8	-129.69	-306.5	-2,962.1	3,038.2	3,030.3	7.85	387.190		
2,300.0	2,296.7	2,295.2	2,294.8	4.4	4.0	-129.80	-306.5	-2,963.2	3,043.5	3,035.3	8.24	369.364		
2,400.0	2,396.5	2,387.2	2,386.7	4.6	4.2	-129.89	-306.6	-2,964.0	3,048.7	3,040.1	8.59	354.735		
2,500.0	2,496.2	2,483.3	2,482.9	4.8	4.4	-129.97	-306.3	-2,965.1	3,054.1	3,045.2	8.96	341.029		
2,600.0	2,596.0	2,579.7	2,579.2	5.0	4.5	-130.04	-305.1	-2,966.4	3,059.7	3,050.4	9.32	328.396		
2,700.0	2,695.8	2,670.3	2,669.8	5.2	4.7	-130.09	-303.3	-2,967.9	3,065.4	3,055.7	9.67	317.035		
2,800.0	2,795.5	2,758.1	2,757.6	5.4	4.9	-130.15	-301.8	-2,969.6	3,071.5	3,061.5	10.02	306.646		
2,900.0	2,895.3	2,866.3	2,865.7	5.6	5.0	-130.22	-300.3	-2,971.9	3,077.8	3,067.4	10.40	295.962		
3,000.0	2,995.1	2,988.8	2,988.2	5.9	5.3	-130.30	-298.9	-2,973.7	3,083.5	3,072.7	10.81	285.311		
3,100.0	3,094.9	3,101.1	3,100.5	6.1	5.5	-130.38	-297.5	-2,974.7	3,088.5	3,077.3	11.20	275.814		
3,200.0	3,194.6	3,200.0	3,199.4	6.3	5.6	-130.45	-296.3	-2,975.4	3,093.5	3,081.9	11.57	267.483		
3,300.0	3,294.4	3,288.5	3,287.9	6.5	5.8	-130.53	-295.9	-2,976.1	3,098.6	3,086.7	11.91	260.081		
3,400.0	3,394.2	3,379.2	3,378.6	6.7	5.9	-130.62	-296.1	-2,977.0	3,104.0	3,091.8	12.27	253.051		
3,500.0	3,493.9	3,470.6	3,470.0	6.9	6.1	-130.71	-296.6	-2,978.1	3,109.8	3,097.1	12.62	246.418		
3,600.0	3,593.7	3,566.7	3,566.0	7.1	6.3	-130.82	-297.7	-2,979.4	3,115.7	3,102.7	12.98	240.017		
3,700.0	3,693.5	3,664.2	3,663.5	7.3	6.4	-130.94	-299.4	-2,980.8	3,121.8	3,108.4	13.34	233.929		
3,800.0	3,793.2	3,795.6	3,794.9	7.5	6.7	-131.12	-302.7	-2,982.0	3,127.5	3,113.8	13.77	227.179		
3,900.0	3,893.0	3,883.6	3,882.8	7.7	6.8	-131.23	-304.7	-2,982.3	3,132.8	3,118.7	14.11	221.960		
4,000.0	3,992.8	3,958.3	3,957.5	8.0	7.0	-131.33	-306.5	-2,983.1	3,138.6	3,124.2	14.44	217.379		
4,100.0	4,092.6	4,068.2	4,067.3	8.2	7.2	-131.48	-309.4	-2,984.8	3,145.1	3,130.3	14.82	212.166		
4,200.0	4,192.3	4,163.5	4,162.6	8.4	7.3	-131.62	-312.3	-2,985.6	3,150.9	3,135.7	15.18	207.519		
4,300.0	4,292.1	4,253.9	4,253.0	8.6	7.5	-131.75	-315.0	-2,986.8	3,157.3	3,141.7	15.54	203.233		
4,400.0	4,391.9	4,361.4	4,360.5	8.8	7.7	-131.89	-317.6	-2,988.4	3,163.6	3,147.7	15.92	198.771		
4,500.0	4,491.6	4,474.3	4,473.3	9.0	7.9	-132.01	-319.0	-2,989.8	3,169.6	3,153.3	16.31	194.389		
4,600.0	4,591.4	4,582.4	4,581.5	9.2	8.1	-132.12	-319.7	-2,990.9	3,175.2	3,158.5	16.69	190.284		
4,700.0	4,691.2	4,673.2	4,672.2	9.4	8.2	-132.21	-320.3	-2,991.8	3,180.9	3,163.8	17.04	186.689		
4,800.0	4,790.9	4,779.2	4,778.2	9.6	8.4	-132.32	-321.1	-2,993.0	3,186.7	3,169.2	17.42	182.975		
4,900.0	4,890.7	4,872.1	4,871.1	9.8	8.6	-132.41	-321.7	-2,993.9	3,192.3	3,174.6	17.77	179.641		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,990.5	4,964.4	4,963.4	10.1	8.7	-132.50	-322.1	-2,995.1	3,198.3	3,180.2	18.12	176.467		
5,100.0	5,090.3	5,071.6	5,070.6	10.3	8.9	-132.59	-322.3	-2,996.7	3,204.4	3,185.9	18.50	173.179		
5,200.0	5,190.0	5,185.4	5,184.4	10.5	9.1	-132.68	-322.0	-2,998.0	3,210.0	3,191.1	18.89	169.899		
5,300.0	5,289.8	5,276.4	5,275.4	10.7	9.3	-132.76	-321.8	-2,998.8	3,215.5	3,196.3	19.24	167.087		
5,400.0	5,389.6	5,380.9	5,379.9	10.9	9.5	-132.83	-321.0	-3,000.2	3,221.2	3,201.6	19.62	164.191		
5,500.0	5,489.3	5,479.4	5,478.4	11.1	9.6	-132.89	-319.8	-3,001.3	3,226.8	3,206.8	19.98	161.478		
5,600.0	5,589.1	5,573.0	5,571.9	11.3	9.8	-132.95	-318.8	-3,002.5	3,232.5	3,212.1	20.34	158.936		
5,700.0	5,688.9	5,671.3	5,670.2	11.5	10.0	-133.01	-317.5	-3,004.0	3,238.3	3,217.6	20.70	156.426		
5,800.0	5,788.7	5,775.5	5,774.4	11.7	10.2	-133.08	-316.4	-3,005.4	3,244.1	3,223.1	21.08	153.928		
5,900.0	5,888.4	5,874.9	5,873.8	11.9	10.3	-133.14	-315.0	-3,006.8	3,249.8	3,228.4	21.44	151.568		
6,000.0	5,988.2	5,980.3	5,979.1	12.2	10.5	-133.20	-313.2	-3,008.2	3,255.5	3,233.7	21.82	149.215		
6,100.0	6,088.0	6,104.8	6,103.6	12.4	10.7	-133.26	-310.9	-3,009.4	3,260.7	3,238.5	22.23	146.702		
6,200.0	6,187.7	6,200.0	6,198.8	12.6	10.9	-133.31	-309.2	-3,010.0	3,265.6	3,243.1	22.59	144.589		
6,300.0	6,287.5	6,287.5	6,286.2	12.8	11.1	-133.36	-307.6	-3,010.8	3,270.8	3,247.9	22.93	142.636		
6,400.0	6,387.3	6,400.0	6,398.8	13.0	11.3	-133.42	-305.7	-3,011.7	3,276.0	3,252.7	23.32	140.480		
6,500.0	6,487.0	6,477.8	6,476.5	13.2	11.4	-133.46	-304.2	-3,012.5	3,281.3	3,257.6	23.65	138.749		
6,600.0	6,586.8	6,581.1	6,579.8	13.4	11.6	-133.51	-302.4	-3,013.9	3,287.0	3,262.9	24.02	136.832		
6,700.0	6,686.6	6,689.4	6,688.1	13.6	11.8	-133.56	-300.1	-3,015.2	3,292.3	3,267.9	24.40	134.909		
6,787.0	6,773.4	6,803.2	6,801.9	13.8	12.0	-133.59	-296.6	-3,016.1	3,296.6	3,271.8	24.77	133.080		
6,800.0	6,786.4	6,822.7	6,821.3	13.8	12.0	-144.17	-295.9	-3,016.2	3,297.1	3,272.3	24.83	132.790		
6,850.0	6,836.3	6,897.3	6,895.9	13.9	12.1	128.64	-293.3	-3,016.1	3,298.6	3,273.5	25.03	131.777		
6,900.0	6,886.2	6,969.0	6,967.6	14.0	12.2	98.88	-290.7	-3,015.5	3,299.0	3,273.8	25.21	130.862		
6,950.0	6,935.7	7,035.7	7,034.2	14.0	12.4	91.31	-288.0	-3,014.6	3,298.4	3,273.1	25.36	130.059		
7,000.0	6,984.6	7,098.1	7,096.5	14.0	12.5	88.27	-285.2	-3,013.5	3,297.0	3,271.5	25.49	129.356		
7,050.0	7,032.6	7,165.6	7,163.9	14.0	12.6	86.92	-281.6	-3,012.1	3,294.8	3,269.2	25.61	128.645		
7,100.0	7,079.7	7,245.5	7,243.6	13.9	12.7	86.51	-276.5	-3,009.9	3,291.8	3,266.0	25.75	127.838		
7,150.0	7,125.4	7,316.5	7,314.4	13.9	12.8	86.58	-271.5	-3,007.3	3,287.7	3,261.9	25.86	127.124		
7,200.0	7,169.6	7,355.7	7,353.5	13.8	12.9	86.69	-268.9	-3,005.7	3,283.3	3,257.4	25.91	126.740		
7,250.0	7,212.1	7,393.5	7,391.1	13.8	13.0	86.99	-266.6	-3,004.2	3,278.8	3,252.8	25.95	126.366		
7,300.0	7,252.6	7,432.9	7,430.4	13.7	13.0	87.45	-264.6	-3,002.6	3,274.0	3,248.0	25.99	125.954		
7,350.0	7,291.0	7,471.0	7,468.5	13.7	13.1	88.00	-262.8	-3,001.0	3,269.3	3,243.2	26.05	125.505		
7,400.0	7,327.1	7,500.0	7,497.4	13.7	13.1	88.52	-261.6	-2,999.8	3,264.6	3,238.5	26.10	125.072		
7,450.0	7,360.7	7,530.2	7,527.6	13.7	13.2	89.11	-260.5	-2,998.5	3,260.0	3,233.9	26.18	124.533		
7,500.0	7,391.6	7,553.3	7,550.7	13.7	13.2	89.63	-259.8	-2,997.5	3,255.8	3,229.5	26.27	123.943		
7,550.0	7,419.7	7,574.4	7,571.7	13.8	13.3	90.13	-259.1	-2,996.7	3,252.0	3,225.6	26.39	123.230		
7,600.0	7,444.8	7,600.0	7,597.3	13.9	13.3	90.70	-258.5	-2,995.8	3,248.7	3,222.1	26.56	122.324		
7,650.0	7,466.9	7,610.5	7,607.8	14.1	13.3	91.01	-258.2	-2,995.4	3,245.8	3,219.1	26.74	121.370		
7,700.0	7,485.8	7,625.5	7,622.8	14.3	13.4	91.38	-257.8	-2,994.9	3,243.6	3,216.6	26.98	120.207		
7,750.0	7,501.5	7,637.8	7,635.0	14.6	13.4	91.66	-257.5	-2,994.4	3,242.0	3,214.7	27.27	118.895		
7,800.0	7,513.7	7,647.1	7,644.4	14.9	13.4	91.85	-257.3	-2,994.1	3,241.1	3,213.5	27.60	117.446		
7,835.3	7,520.4	7,652.0	7,649.3	15.1	13.4	91.93	-257.2	-2,994.0	3,240.9	3,213.1	27.86	116.328		
7,850.0	7,522.6	7,653.6	7,650.9	15.2	13.4	91.95	-257.1	-2,993.9	3,241.0	3,213.0	27.97	115.877		
7,900.0	7,528.0	7,657.1	7,654.4	15.6	13.4	91.95	-257.1	-2,993.8	3,241.6	3,213.2	28.38	114.215		
7,952.9	7,530.0	7,657.7	7,654.9	16.1	13.4	91.84	-257.0	-2,993.8	3,243.0	3,214.2	28.86	112.384		
8,000.0	7,530.0	7,656.7	7,653.9	16.5	13.4	91.82	-257.1	-2,993.8	3,245.1	3,215.7	29.31	110.716		
8,100.0	7,530.0	7,654.6	7,651.8	17.5	13.4	91.78	-257.1	-2,993.9	3,251.6	3,221.2	30.37	107.082		
8,200.0	7,530.0	7,652.5	7,649.7	18.7	13.4	91.75	-257.2	-2,994.0	3,261.2	3,229.7	31.53	103.435		
8,300.0	7,530.0	7,650.4	7,647.6	19.9	13.4	91.71	-257.2	-2,994.0	3,273.8	3,241.0	32.78	99.869		
8,400.0	7,530.0	7,648.3	7,645.5	21.2	13.4	91.67	-257.3	-2,994.1	3,289.4	3,255.3	34.11	96.449		
8,500.0	7,530.0	7,646.2	7,643.5	22.6	13.4	91.63	-257.3	-2,994.2	3,308.0	3,272.5	35.49	93.211		
8,600.0	7,530.0	7,644.1	7,641.4	24.0	13.4	91.60	-257.4	-2,994.2	3,329.5	3,292.5	36.92	90.176		
8,700.0	7,530.0	7,642.0	7,639.3	25.4	13.4	91.56	-257.4	-2,994.3	3,353.8	3,315.4	38.40	87.349		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
8,800.0	7,530.0	7,639.9	7,637.2	26.9	13.4	91.52	-257.5	-2,994.4	3,380.8	3,340.9	39.90	84.729		
8,900.0	7,530.0	7,637.9	7,635.1	28.4	13.4	91.49	-257.5	-2,994.4	3,410.7	3,369.2	41.44	82.309		
9,000.0	7,530.0	7,635.8	7,633.1	30.0	13.4	91.45	-257.6	-2,994.5	3,443.1	3,400.1	43.00	80.079		
9,100.0	7,530.0	7,633.7	7,631.0	31.5	13.4	91.41	-257.6	-2,994.6	3,478.1	3,433.6	44.58	78.027		
9,200.0	7,530.0	7,631.6	7,628.9	33.1	13.4	91.38	-257.7	-2,994.7	3,515.6	3,469.5	46.17	76.141		
9,300.0	7,530.0	7,629.6	7,626.8	34.7	13.4	91.34	-257.7	-2,994.7	3,555.6	3,507.8	47.78	74.408		
9,400.0	7,530.0	7,627.5	7,624.8	36.3	13.4	91.30	-257.8	-2,994.8	3,597.8	3,548.4	49.41	72.816		
9,500.0	7,530.0	7,625.4	7,622.7	38.0	13.4	91.27	-257.8	-2,994.9	3,642.4	3,591.3	51.05	71.355		
9,600.0	7,530.0	7,623.4	7,620.7	39.6	13.4	91.23	-257.9	-2,994.9	3,689.1	3,636.4	52.69	70.012		
9,700.0	7,530.0	7,621.3	7,618.6	41.3	13.4	91.20	-257.9	-2,995.0	3,737.9	3,683.5	54.35	68.778		
9,800.0	7,530.0	7,619.3	7,616.6	42.9	13.4	91.16	-258.0	-2,995.1	3,788.7	3,732.6	56.01	67.643		
9,900.0	7,530.0	7,617.2	7,614.5	44.6	13.3	91.12	-258.0	-2,995.2	3,841.4	3,783.7	57.68	66.600		
10,000.0	7,530.0	7,615.2	7,612.5	46.3	13.3	91.09	-258.1	-2,995.2	3,896.0	3,836.6	59.35	65.639		
10,100.0	7,530.0	7,613.1	7,610.4	47.9	13.3	91.05	-258.1	-2,995.3	3,952.3	3,891.3	61.04	64.755		
10,200.0	7,530.0	7,611.1	7,608.4	49.6	13.3	91.01	-258.2	-2,995.4	4,010.4	3,947.7	62.72	63.940		
10,300.0	7,530.0	7,609.0	7,606.3	51.3	13.3	90.98	-258.2	-2,995.4	4,070.1	4,005.7	64.41	63.189		
10,400.0	7,530.0	7,600.0	7,597.3	53.0	13.3	90.82	-258.5	-2,995.8	4,131.3	4,065.2	66.09	62.506		
10,500.0	7,530.0	7,600.0	7,597.3	54.7	13.3	90.82	-258.5	-2,995.8	4,194.0	4,126.2	67.80	61.863		
10,600.0	7,530.0	7,600.0	7,597.3	56.4	13.3	90.82	-258.5	-2,995.8	4,258.2	4,188.7	69.50	61.270		
10,700.0	7,530.0	7,600.0	7,597.3	58.1	13.3	90.82	-258.5	-2,995.8	4,323.7	4,252.5	71.21	60.721		
10,800.0	7,530.0	7,598.4	7,595.7	59.8	13.3	90.79	-258.5	-2,995.8	4,390.5	4,317.6	72.91	60.215		
10,900.0	7,530.0	7,595.3	7,592.6	61.5	13.3	90.74	-258.6	-2,995.9	4,458.6	4,384.0	74.62	59.749		
11,000.0	7,530.0	7,592.2	7,589.5	63.2	13.3	90.68	-258.7	-2,996.1	4,527.8	4,451.5	76.33	59.318		
11,100.0	7,530.0	7,588.9	7,586.2	64.9	13.3	90.62	-258.7	-2,996.2	4,598.2	4,520.1	78.04	58.919		
11,200.0	7,530.0	7,585.5	7,582.9	66.6	13.3	90.56	-258.8	-2,996.3	4,669.6	4,589.9	79.76	58.549		
11,300.0	7,530.0	7,582.0	7,579.3	68.4	13.3	90.50	-258.9	-2,996.4	4,742.1	4,660.6	81.47	58.206		
11,400.0	7,530.0	7,578.4	7,575.7	70.1	13.3	90.44	-259.0	-2,996.6	4,815.6	4,732.4	83.19	57.888		
11,500.0	7,530.0	7,574.6	7,571.9	71.8	13.3	90.37	-259.1	-2,996.7	4,890.0	4,805.1	84.91	57.593		
11,600.0	7,530.0	7,570.7	7,568.0	73.5	13.3	90.30	-259.2	-2,996.9	4,965.3	4,878.6	86.62	57.320		
11,700.0	7,530.0	7,566.6	7,563.9	75.2	13.3	90.23	-259.4	-2,997.0	5,041.4	4,953.1	88.34	57.066		
11,800.0	7,530.0	7,562.4	7,559.7	77.0	13.3	90.15	-259.5	-2,997.2	5,118.4	5,028.3	90.06	56.830		
11,900.0	7,530.0	7,557.9	7,555.3	78.7	13.2	90.08	-259.6	-2,997.4	5,196.2	5,104.4	91.79	56.612		
12,000.0	7,530.0	7,553.3	7,550.7	80.4	13.2	89.99	-259.8	-2,997.5	5,274.7	5,181.1	93.51	56.409		
12,100.0	7,530.0	7,548.5	7,545.9	82.2	13.2	89.91	-259.9	-2,997.7	5,353.9	5,258.6	95.23	56.220		
12,200.0	7,530.0	7,543.5	7,540.8	83.9	13.2	89.82	-260.1	-2,997.9	5,433.8	5,336.8	96.95	56.045		
12,300.0	7,530.0	7,538.2	7,535.6	85.6	13.2	89.73	-260.2	-2,998.1	5,514.3	5,415.6	98.68	55.883		
12,400.0	7,530.0	7,532.7	7,530.1	87.3	13.2	89.63	-260.4	-2,998.4	5,595.5	5,495.1	100.40	55.732		
12,500.0	7,530.0	7,527.0	7,524.3	89.1	13.2	89.53	-260.6	-2,998.6	5,677.3	5,575.2	102.12	55.593		
12,600.0	7,530.0	7,520.9	7,518.3	90.8	13.2	89.42	-260.8	-2,998.9	5,759.6	5,655.8	103.85	55.463		
12,700.0	7,530.0	7,514.6	7,512.0	92.5	13.2	89.31	-261.1	-2,999.1	5,842.5	5,736.9	105.57	55.343		
12,800.0	7,530.0	7,507.9	7,505.3	94.3	13.2	89.19	-261.3	-2,999.4	5,925.9	5,818.6	107.29	55.233		
12,900.0	7,530.0	7,500.9	7,498.3	96.0	13.1	89.07	-261.6	-2,999.7	6,009.8	5,900.8	109.01	55.130		
13,000.0	7,530.0	7,399.3	7,397.0	97.8	13.0	87.29	-266.3	-3,004.0	6,094.2	5,983.8	110.47	55.166		
13,100.0	7,530.0	7,331.3	7,329.1	99.5	12.9	86.10	-270.5	-3,006.7	6,179.0	6,067.0	111.96	55.188		
13,200.0	7,530.0	7,295.3	7,293.2	101.2	12.8	85.47	-273.0	-3,008.1	6,264.1	6,150.6	113.55	55.167		
13,300.0	7,530.0	7,288.1	7,286.1	103.0	12.8	85.35	-273.5	-3,008.4	6,349.7	6,234.4	115.25	55.094		
13,400.0	7,530.0	7,281.1	7,279.1	104.7	12.8	85.22	-274.0	-3,008.7	6,435.7	6,318.7	116.96	55.027		
13,500.0	7,530.0	7,274.2	7,272.2	106.4	12.8	85.10	-274.5	-3,008.9	6,522.0	6,403.4	118.66	54.965		
13,600.0	7,530.0	7,267.4	7,265.5	108.2	12.8	84.99	-275.0	-3,009.2	6,608.8	6,488.4	120.36	54.908		
13,700.0	7,530.0	7,260.8	7,258.8	109.9	12.7	84.87	-275.4	-3,009.4	6,695.9	6,573.8	122.06	54.856		
13,800.0	7,530.0	7,254.2	7,252.3	111.7	12.7	84.76	-275.9	-3,009.6	6,783.3	6,659.6	123.77	54.808		
13,900.0	7,530.0	7,247.7	7,245.8	113.4	12.7	84.64	-276.3	-3,009.9	6,871.1	6,745.6	125.47	54.764		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
14,000.0	7,530.0	7,241.4	7,239.5	115.1	12.7	84.53	-276.7	-3,010.1	6,959.2	6,832.1	127.17	54.724		
14,100.0	7,530.0	7,235.1	7,233.3	116.9	12.7	84.43	-277.2	-3,010.2	7,047.6	6,918.8	128.87	54.687		
14,200.0	7,530.0	7,229.0	7,227.1	118.6	12.7	84.32	-277.6	-3,010.4	7,136.4	7,005.8	130.57	54.654		
14,300.0	7,530.0	7,222.9	7,221.1	120.4	12.7	84.21	-278.0	-3,010.6	7,225.4	7,093.1	132.28	54.624		
14,400.0	7,530.0	7,217.0	7,215.2	122.1	12.7	84.11	-278.4	-3,010.8	7,314.7	7,180.7	133.98	54.596		
14,500.0	7,530.0	7,211.1	7,209.3	123.9	12.7	84.01	-278.7	-3,010.9	7,404.2	7,268.6	135.68	54.572		
14,600.0	7,530.0	7,200.0	7,198.2	125.6	12.6	83.82	-279.5	-3,011.2	7,494.1	7,356.7	137.35	54.562		
14,700.0	7,530.0	7,200.0	7,198.2	127.3	12.6	83.82	-279.5	-3,011.2	7,584.1	7,445.0	139.08	54.530		
14,800.0	7,530.0	7,200.0	7,198.2	129.1	12.6	83.82	-279.5	-3,011.2	7,674.4	7,533.6	140.82	54.499		
14,900.0	7,530.0	7,200.0	7,198.2	130.8	12.6	83.82	-279.5	-3,011.2	7,765.0	7,622.4	142.55	54.471		
15,000.0	7,530.0	7,200.0	7,198.2	132.6	12.6	83.82	-279.5	-3,011.2	7,855.8	7,711.5	144.29	54.445		
15,100.0	7,530.0	7,200.0	7,198.2	134.3	12.6	83.82	-279.5	-3,011.2	7,946.8	7,800.7	146.02	54.421		
15,200.0	7,530.0	7,200.0	7,198.2	136.1	12.6	83.82	-279.5	-3,011.2	8,038.0	7,890.2	147.76	54.399		
15,300.0	7,530.0	7,200.0	7,198.2	137.8	12.6	83.82	-279.5	-3,011.2	8,129.4	7,979.9	149.50	54.379		
15,400.0	7,530.0	7,200.0	7,198.2	139.6	12.6	83.82	-279.5	-3,011.2	8,221.0	8,069.8	151.23	54.361 SF		
15,500.0	7,530.0	7,173.7	7,172.0	141.3	12.6	83.36	-281.1	-3,011.9	8,312.7	8,160.0	152.79	54.405		
15,600.0	7,530.0	7,170.7	7,169.0	143.0	12.6	83.31	-281.3	-3,012.0	8,404.7	8,250.2	154.51	54.397		
15,700.0	7,530.0	7,167.7	7,166.0	144.8	12.6	83.26	-281.4	-3,012.0	8,496.9	8,340.7	156.22	54.390		
15,800.0	7,530.0	7,164.8	7,163.0	146.5	12.6	83.21	-281.6	-3,012.1	8,589.2	8,431.3	157.94	54.384		
15,900.0	7,530.0	7,161.9	7,160.2	148.3	12.6	83.16	-281.8	-3,012.2	8,681.7	8,522.1	159.65	54.380		
16,000.0	7,530.0	7,159.0	7,157.3	150.0	12.6	83.11	-281.9	-3,012.2	8,774.4	8,613.0	161.36	54.376		
16,100.0	7,530.0	7,156.2	7,154.5	151.8	12.6	83.06	-282.1	-3,012.3	8,867.2	8,704.1	163.08	54.374		
16,200.0	7,530.0	7,153.4	7,151.7	153.5	12.6	83.01	-282.3	-3,012.4	8,960.2	8,795.4	164.79	54.372		
16,300.0	7,530.0	7,150.7	7,149.0	155.3	12.6	82.97	-282.4	-3,012.4	9,053.3	8,886.8	166.51	54.372		
16,400.0	7,530.0	7,148.0	7,146.3	157.0	12.5	82.92	-282.6	-3,012.5	9,146.6	8,978.3	168.22	54.372		
16,500.0	7,530.0	7,145.4	7,143.7	158.8	12.5	82.87	-282.7	-3,012.5	9,240.0	9,070.0	169.94	54.373		
16,600.0	7,530.0	7,142.8	7,141.1	160.5	12.5	82.83	-282.9	-3,012.6	9,333.5	9,161.9	171.65	54.375		
16,700.0	7,530.0	7,140.2	7,138.5	162.3	12.5	82.78	-283.0	-3,012.6	9,427.2	9,253.8	173.36	54.378		
16,800.0	7,530.0	7,137.6	7,136.0	164.0	12.5	82.74	-283.1	-3,012.7	9,521.0	9,345.9	175.08	54.381		
16,900.0	7,530.0	7,135.1	7,133.5	165.8	12.5	82.70	-283.3	-3,012.8	9,614.9	9,438.1	176.79	54.385		
17,000.0	7,530.0	7,132.7	7,131.0	167.5	12.5	82.66	-283.4	-3,012.8	9,708.9	9,530.4	178.51	54.390		
17,100.0	7,530.0	7,130.2	7,128.6	169.3	12.5	82.61	-283.5	-3,012.9	9,803.1	9,622.9	180.22	54.395		
17,200.0	7,530.0	7,127.8	7,126.2	171.0	12.5	82.57	-283.7	-3,012.9	9,897.4	9,715.4	181.94	54.401		
17,300.0	7,530.0	7,100.0	7,098.4	172.8	12.5	82.09	-285.1	-3,013.5	9,991.8	9,808.4	183.43	54.474		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	25.3	25.3	0.0	0.0	-95.26	-275.2	-2,992.3	3,004.9					
100.0	100.0	124.0	124.0	0.2	0.2	-95.26	-275.3	-2,992.2	3,004.8	3,004.5	0.37	8,160.478		
200.0	200.0	215.9	215.9	0.3	0.4	-95.25	-275.1	-2,992.3	3,005.0	3,004.3	0.70	4,272.894		
300.0	300.0	300.0	300.0	0.5	0.5	-95.24	-274.6	-2,992.8	3,005.4	3,004.4	1.03	2,932.075		
400.0	400.0	393.9	393.9	0.7	0.7	-95.24	-274.8	-2,993.7	3,006.5	3,005.1	1.36	2,204.946		
500.0	500.0	587.7	587.3	0.8	1.1	-95.46	-285.7	-2,991.1	3,005.3	3,003.4	1.91	1,576.038		
600.0	600.0	725.4	723.5	1.0	1.4	-95.83	-304.9	-2,985.6	3,002.8	3,000.3	2.43	1,234.885		
700.0	700.0	804.0	800.7	1.2	1.7	-128.61	-319.1	-2,981.9	3,000.5	2,997.6	2.89	1,039.034		
800.0	800.0	924.8	918.9	1.4	2.1	-129.14	-343.1	-2,975.8	2,999.2	2,995.7	3.50	857.471		
843.3	843.3	954.4	947.8	1.5	2.2	-129.27	-349.2	-2,974.2	2,999.0	2,995.3	3.69	813.110 CC		
900.0	899.9	989.0	981.7	1.6	2.4	-129.43	-356.5	-2,972.5	2,999.4	2,995.4	3.92	764.799		
988.4	988.1	1,046.0	1,037.2	1.7	2.6	-129.71	-369.1	-2,970.1	3,001.5	2,997.2	4.32	694.362		
1,000.0	999.7	1,053.0	1,044.0	1.7	2.6	-129.75	-370.7	-2,969.9	3,001.9	2,997.5	4.37	686.395		
1,100.0	1,099.4	1,122.3	1,111.2	1.9	3.0	-130.14	-387.7	-2,967.6	3,006.2	3,001.3	4.88	615.867		
1,200.0	1,199.2	1,208.8	1,194.1	2.1	3.4	-130.69	-411.8	-2,964.9	3,011.4	3,005.8	5.51	546.755		
1,300.0	1,299.0	1,299.0	1,280.0	2.3	3.9	-131.29	-439.2	-2,961.7	3,016.9	3,010.7	6.19	487.773		
1,400.0	1,398.8	1,407.3	1,382.6	2.5	4.5	-132.05	-473.6	-2,957.7	3,023.0	3,016.0	6.98	432.848		
1,500.0	1,498.5	1,510.9	1,480.5	2.7	5.1	-132.79	-507.4	-2,953.0	3,028.9	3,021.1	7.78	389.355		
1,600.0	1,598.3	1,617.8	1,581.4	2.9	5.7	-133.55	-542.2	-2,947.8	3,035.0	3,026.4	8.58	353.612		
1,700.0	1,698.1	1,736.6	1,693.7	3.2	6.4	-134.38	-580.4	-2,941.0	3,040.6	3,031.1	9.47	321.162		
1,800.0	1,797.8	1,852.5	1,803.0	3.4	7.1	-135.21	-618.4	-2,933.7	3,046.3	3,035.9	10.34	294.490		
1,900.0	1,897.6	1,902.8	1,850.4	3.6	7.4	-135.57	-634.8	-2,930.6	3,052.5	3,041.7	10.83	281.948		
2,000.0	1,997.4	1,949.0	1,894.0	3.8	7.7	-135.89	-649.9	-2,928.5	3,060.6	3,049.4	11.28	271.243		
2,100.0	2,097.1	2,134.5	2,069.9	4.0	8.7	-137.14	-708.1	-2,919.4	3,068.9	3,056.4	12.51	245.352		
2,200.0	2,196.9	2,211.0	2,142.5	4.2	9.2	-137.65	-731.6	-2,914.8	3,076.0	3,062.9	13.13	234.276		
2,300.0	2,296.7	2,299.0	2,225.7	4.4	9.7	-138.26	-759.8	-2,909.4	3,083.9	3,070.1	13.84	222.887		
2,400.0	2,396.5	2,386.0	2,307.8	4.6	10.2	-138.86	-788.1	-2,904.0	3,092.4	3,077.9	14.53	212.867		
2,500.0	2,496.2	2,454.1	2,372.3	4.8	10.6	-139.32	-809.9	-2,900.3	3,101.8	3,086.7	15.09	205.493		
2,600.0	2,596.0	2,543.5	2,457.0	5.0	11.1	-139.91	-838.0	-2,896.1	3,112.0	3,096.2	15.78	197.222		
2,700.0	2,695.8	2,624.9	2,534.2	5.2	11.6	-140.44	-863.6	-2,892.3	3,122.8	3,106.3	16.41	190.298		
2,800.0	2,795.5	2,732.8	2,636.6	5.4	12.2	-141.14	-897.2	-2,887.6	3,134.0	3,116.8	17.19	182.332		
2,900.0	2,895.3	2,780.1	2,681.3	5.6	12.5	-141.45	-912.3	-2,885.5	3,146.0	3,128.3	17.64	178.302		
3,000.0	2,995.1	2,822.0	2,720.9	5.9	12.8	-141.73	-926.2	-2,884.1	3,159.7	3,141.6	18.07	174.871		
3,100.0	3,094.9	2,888.4	2,783.2	6.1	13.2	-142.18	-949.0	-2,882.5	3,174.9	3,156.3	18.64	170.287		
3,200.0	3,194.6	3,003.2	2,890.5	6.3	13.9	-142.97	-989.8	-2,879.6	3,191.0	3,171.4	19.51	163.592		
3,300.0	3,294.4	3,098.8	2,980.0	6.5	14.5	-143.63	-1,023.4	-2,876.8	3,206.9	3,186.6	20.24	158.454		
3,400.0	3,394.2	3,209.0	3,083.1	6.7	15.2	-144.37	-1,061.9	-2,872.6	3,222.4	3,201.3	21.06	153.044		
3,500.0	3,493.9	3,259.0	3,129.9	6.9	15.6	-144.71	-1,079.5	-2,870.9	3,238.9	3,217.4	21.53	150.471		
3,600.0	3,593.7	3,327.9	3,194.3	7.1	16.0	-145.17	-1,103.7	-2,869.3	3,256.7	3,234.6	22.09	147.451		
3,700.0	3,693.5	3,599.4	3,450.7	7.3	17.6	-146.85	-1,192.6	-2,860.1	3,273.1	3,249.4	23.67	138.274		
3,800.0	3,793.2	3,773.6	3,616.9	7.5	18.5	-147.85	-1,243.4	-2,848.7	3,285.3	3,260.6	24.68	133.129		
3,900.0	3,893.0	3,832.5	3,673.7	7.7	18.8	-148.15	-1,258.5	-2,845.6	3,297.7	3,272.6	25.09	131.426		
4,000.0	3,992.8	3,870.0	3,710.1	8.0	19.0	-148.33	-1,267.6	-2,844.4	3,311.5	3,286.1	25.42	130.277		
4,100.0	4,092.6	3,926.3	3,764.7	8.2	19.2	-148.59	-1,281.5	-2,843.3	3,326.9	3,301.1	25.83	128.797		
4,200.0	4,192.3	3,974.1	3,810.7	8.4	19.5	-148.81	-1,294.0	-2,843.0	3,344.1	3,317.9	26.21	127.566		
4,300.0	4,292.1	4,155.3	3,984.0	8.6	20.5	-149.77	-1,347.0	-2,839.1	3,362.3	3,335.1	27.24	123.448		
4,400.0	4,391.9	4,219.0	4,044.4	8.8	20.9	-150.14	-1,366.9	-2,835.6	3,378.4	3,350.7	27.74	121.794		
4,500.0	4,491.6	4,274.6	4,096.8	9.0	21.2	-150.47	-1,385.3	-2,832.7	3,395.9	3,367.6	28.21	120.360		
4,600.0	4,591.4	4,330.0	4,148.7	9.2	21.6	-150.81	-1,404.5	-2,830.1	3,414.8	3,386.1	28.68	119.045		
4,700.0	4,691.2	4,399.0	4,213.2	9.4	22.0	-151.23	-1,428.7	-2,827.3	3,434.8	3,405.6	29.22	117.540		
4,800.0	4,790.9	4,665.0	4,464.1	9.6	23.6	-152.76	-1,516.0	-2,814.1	3,453.7	3,423.0	30.65	112.672		
4,900.0	4,890.7	4,759.3	4,554.3	9.8	24.1	-153.24	-1,542.9	-2,808.8	3,469.9	3,438.7	31.23	111.098		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,000.0	4,990.5	4,830.0	4,622.2	10.1	24.4	-153.58	-1,562.4	-2,805.5	3,486.6	3,454.9	31.69	110.008		
5,100.0	5,090.3	4,901.2	4,690.7	10.3	24.8	-153.91	-1,581.5	-2,803.0	3,504.1	3,472.0	32.14	109.015		
5,200.0	5,190.0	5,154.7	4,936.9	10.5	25.9	-154.93	-1,641.0	-2,795.1	3,520.4	3,487.3	33.15	106.206		
5,300.0	5,289.8	5,311.9	5,091.8	10.7	26.4	-155.40	-1,667.3	-2,791.0	3,533.5	3,499.8	33.71	104.820		
5,400.0	5,389.6	5,432.1	5,210.8	10.9	26.7	-155.70	-1,683.8	-2,788.7	3,545.6	3,511.4	34.14	103.853		
5,500.0	5,489.3	5,573.8	5,351.7	11.1	27.0	-155.98	-1,698.8	-2,787.5	3,556.9	3,522.4	34.55	102.961		
5,600.0	5,589.1	5,823.9	5,601.4	11.3	27.3	-156.28	-1,711.7	-2,785.7	3,565.2	3,530.2	34.98	101.913		
5,700.0	5,688.9	5,879.8	5,657.4	11.5	27.4	-156.30	-1,712.0	-2,786.2	3,572.3	3,537.2	35.19	101.518		
5,800.0	5,788.7	6,046.7	5,824.2	11.7	27.5	-156.37	-1,712.4	-2,787.2	3,579.2	3,543.7	35.50	100.829		
5,900.0	5,888.4	6,158.7	5,936.3	11.9	27.5	-156.43	-1,712.5	-2,786.4	3,584.9	3,549.1	35.75	100.286		
6,000.0	5,988.2	6,269.1	6,046.6	12.2	27.6	-156.48	-1,711.9	-2,785.7	3,590.3	3,554.3	36.00	99.727		
6,100.0	6,088.0	6,379.6	6,157.1	12.4	27.7	-156.53	-1,711.4	-2,784.6	3,595.4	3,559.1	36.26	99.146		
6,200.0	6,187.7	6,472.5	6,250.0	12.6	27.8	-156.57	-1,711.1	-2,783.5	3,600.4	3,563.9	36.51	98.617		
6,300.0	6,287.5	6,561.0	6,338.5	12.8	27.8	-156.61	-1,710.8	-2,782.7	3,605.7	3,568.9	36.75	98.113		
6,400.0	6,387.3	6,657.9	6,435.4	13.0	27.9	-156.66	-1,710.5	-2,782.1	3,611.2	3,574.2	37.00	97.594		
6,500.0	6,487.0	6,756.5	6,534.0	13.2	28.0	-156.70	-1,710.3	-2,781.5	3,616.8	3,579.5	37.26	97.077		
6,600.0	6,586.8	6,856.1	6,633.6	13.4	28.0	-156.75	-1,710.3	-2,780.7	3,622.4	3,584.9	37.52	96.552		
6,700.0	6,686.6	6,956.0	6,733.5	13.6	28.1	-156.80	-1,710.4	-2,779.9	3,628.0	3,590.2	37.78	96.030		
6,787.0	6,773.4	7,043.9	6,821.4	13.8	28.2	-156.85	-1,710.6	-2,779.1	3,632.8	3,594.8	38.01	95.575		
6,800.0	6,786.4	7,057.0	6,834.5	13.8	28.2	-167.43	-1,710.6	-2,778.9	3,633.5	3,595.5	38.05	95.489		
6,850.0	6,836.3	7,107.2	6,884.7	13.9	28.2	105.37	-1,710.7	-2,778.4	3,634.8	3,596.6	38.21	95.134		
6,900.0	6,886.2	7,154.9	6,932.4	14.0	28.3	75.60	-1,711.0	-2,777.9	3,634.1	3,595.7	38.37	94.718		
6,950.0	6,935.7	7,202.4	6,979.9	14.0	28.3	68.04	-1,711.4	-2,777.3	3,631.5	3,593.0	38.53	94.264		
7,000.0	6,984.6	7,249.4	7,026.9	14.0	28.4	65.05	-1,711.9	-2,776.6	3,627.0	3,588.3	38.68	93.769		
7,050.0	7,032.6	7,294.2	7,071.7	14.0	28.4	63.75	-1,712.6	-2,775.9	3,620.6	3,581.8	38.83	93.251		
7,100.0	7,079.7	7,336.2	7,113.6	13.9	28.5	63.30	-1,713.2	-2,775.3	3,612.5	3,573.5	38.97	92.709		
7,150.0	7,125.4	7,376.9	7,154.4	13.9	28.5	63.39	-1,713.6	-2,774.9	3,602.6	3,563.5	39.11	92.117		
7,200.0	7,169.6	7,416.3	7,193.7	13.8	28.5	63.86	-1,714.0	-2,774.7	3,591.1	3,551.9	39.26	91.470		
7,250.0	7,212.1	7,449.0	7,226.4	13.8	28.6	64.60	-1,714.2	-2,774.5	3,578.2	3,538.7	39.41	90.791		
7,300.0	7,252.6	7,483.8	7,261.3	13.7	28.6	65.62	-1,714.4	-2,774.5	3,563.8	3,524.2	39.58	90.040		
7,350.0	7,291.0	7,512.8	7,290.2	13.7	28.6	66.80	-1,714.6	-2,774.6	3,548.2	3,508.4	39.76	89.242		
7,400.0	7,327.1	7,539.9	7,317.4	13.7	28.6	68.16	-1,714.7	-2,774.8	3,531.4	3,491.5	39.96	88.371		
7,450.0	7,360.7	7,565.2	7,342.6	13.7	28.7	69.67	-1,714.8	-2,775.0	3,513.7	3,473.5	40.19	87.427		
7,500.0	7,391.6	7,588.4	7,365.8	13.7	28.7	71.32	-1,714.9	-2,775.3	3,495.1	3,454.6	40.45	86.413		
7,550.0	7,419.7	7,624.0	7,401.4	13.8	28.7	73.29	-1,715.0	-2,775.9	3,475.7	3,434.9	40.77	85.252		
7,600.0	7,444.8	7,631.2	7,408.6	13.9	28.7	74.96	-1,715.0	-2,776.1	3,455.7	3,414.6	41.05	84.176		
7,650.0	7,466.9	7,658.5	7,436.0	14.1	28.7	77.04	-1,715.1	-2,776.6	3,435.2	3,393.8	41.42	82.929		
7,700.0	7,485.8	7,681.9	7,459.4	14.3	28.8	79.15	-1,715.1	-2,777.0	3,414.3	3,372.5	41.81	81.656		
7,750.0	7,501.5	7,701.3	7,478.8	14.6	28.8	81.26	-1,715.2	-2,777.2	3,393.1	3,350.9	42.22	80.369		
7,800.0	7,513.7	7,716.6	7,494.0	14.9	28.8	83.34	-1,715.2	-2,777.5	3,372.0	3,329.3	42.64	79.076		
7,850.0	7,522.6	7,727.7	7,505.1	15.2	28.8	85.36	-1,715.2	-2,777.6	3,350.9	3,307.8	43.08	77.783		
7,900.0	7,528.0	7,734.5	7,511.9	15.6	28.8	87.31	-1,715.2	-2,777.7	3,330.0	3,286.4	43.53	76.495		
7,952.9	7,530.0	7,737.0	7,514.4	16.1	28.8	89.25	-1,715.3	-2,777.7	3,308.2	3,264.2	44.03	75.141		
8,000.0	7,530.0	7,737.1	7,514.5	16.5	28.8	89.25	-1,715.3	-2,777.7	3,289.4	3,244.9	44.48	73.949		
8,100.0	7,530.0	7,737.3	7,514.8	17.5	28.8	89.26	-1,715.3	-2,777.7	3,251.3	3,205.8	45.54	71.391		
8,200.0	7,530.0	7,737.6	7,515.0	18.7	28.8	89.26	-1,715.3	-2,777.7	3,215.9	3,169.2	46.71	68.847		
8,300.0	7,530.0	7,737.8	7,515.2	19.9	28.8	89.27	-1,715.3	-2,777.7	3,183.2	3,135.3	47.97	66.362		
8,400.0	7,530.0	7,738.0	7,515.5	21.2	28.8	89.27	-1,715.3	-2,777.7	3,153.4	3,104.1	49.30	63.967		
8,500.0	7,530.0	7,738.3	7,515.7	22.6	28.8	89.27	-1,715.3	-2,777.7	3,126.4	3,075.8	50.68	61.684		
8,600.0	7,530.0	7,738.5	7,515.9	24.0	28.8	89.28	-1,715.3	-2,777.7	3,102.5	3,050.4	52.12	59.524		
8,700.0	7,530.0	7,738.7	7,516.2	25.4	28.8	89.28	-1,715.3	-2,777.7	3,081.6	3,028.0	53.60	57.493		
8,800.0	7,530.0	7,739.0	7,516.4	26.9	28.8	89.29	-1,715.3	-2,777.7	3,063.9	3,008.8	55.11	55.595		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
8,900.0	7,530.0	7,739.2	7,516.6	28.4	28.8	89.29	-1,715.3	-2,777.7	3,049.3	2,992.6	56.65	53.827		
9,000.0	7,530.0	7,739.4	7,516.9	30.0	28.8	89.30	-1,715.3	-2,777.7	3,037.9	2,979.7	58.21	52.186		
9,100.0	7,530.0	7,739.7	7,517.1	31.5	28.8	89.30	-1,715.3	-2,777.7	3,029.8	2,970.0	59.80	50.669		
9,200.0	7,530.0	7,739.9	7,517.3	33.1	28.8	89.31	-1,715.3	-2,777.8	3,025.0	2,963.6	61.40	49.269		
9,295.6	7,530.0	7,740.1	7,517.6	34.7	28.8	89.31	-1,715.3	-2,777.8	3,023.5	2,960.6	62.94	48.035		
9,300.0	7,530.0	7,740.1	7,517.6	34.7	28.8	89.31	-1,715.3	-2,777.8	3,023.5	2,960.5	63.01	47.982 ES		
9,400.0	7,530.0	7,740.4	7,517.8	36.3	28.8	89.31	-1,715.3	-2,777.8	3,025.3	2,960.7	64.64	46.801		
9,500.0	7,530.0	7,740.6	7,518.0	38.0	28.8	89.32	-1,715.3	-2,777.8	3,030.4	2,964.1	66.28	45.719		
9,600.0	7,530.0	7,740.8	7,518.3	39.6	28.8	89.32	-1,715.3	-2,777.8	3,038.8	2,970.9	67.93	44.733		
9,700.0	7,530.0	7,741.1	7,518.5	41.3	28.8	89.33	-1,715.3	-2,777.8	3,050.4	2,980.8	69.59	43.834		
9,800.0	7,530.0	7,741.3	7,518.7	42.9	28.8	89.33	-1,715.3	-2,777.8	3,065.3	2,994.0	71.26	43.017		
9,900.0	7,530.0	7,741.5	7,519.0	44.6	28.8	89.34	-1,715.3	-2,777.8	3,083.3	3,010.4	72.93	42.278		
10,000.0	7,530.0	7,741.8	7,519.2	46.3	28.8	89.34	-1,715.3	-2,777.8	3,104.5	3,029.9	74.61	41.610		
10,100.0	7,530.0	7,742.0	7,519.4	47.9	28.8	89.34	-1,715.3	-2,777.8	3,128.7	3,052.4	76.29	41.008		
10,200.0	7,530.0	7,742.2	7,519.6	49.6	28.8	89.35	-1,715.3	-2,777.8	3,155.9	3,077.9	77.98	40.469		
10,300.0	7,530.0	7,742.5	7,519.9	51.3	28.8	89.35	-1,715.3	-2,777.8	3,186.0	3,106.3	79.68	39.986		
10,400.0	7,530.0	7,742.7	7,520.1	53.0	28.8	89.36	-1,715.3	-2,777.8	3,218.9	3,137.5	81.37	39.557		
10,500.0	7,530.0	7,742.9	7,520.3	54.7	28.8	89.36	-1,715.3	-2,777.8	3,254.5	3,171.5	83.08	39.176		
10,600.0	7,530.0	7,743.1	7,520.6	56.4	28.8	89.37	-1,715.3	-2,777.8	3,292.9	3,208.1	84.78	38.840		
10,700.0	7,530.0	7,743.4	7,520.8	58.1	28.8	89.37	-1,715.3	-2,777.8	3,333.7	3,247.3	86.49	38.546		
10,800.0	7,530.0	7,743.6	7,521.0	59.8	28.8	89.38	-1,715.3	-2,777.8	3,377.1	3,288.9	88.20	38.290		
10,900.0	7,530.0	7,743.8	7,521.2	61.5	28.8	89.38	-1,715.3	-2,777.8	3,422.8	3,332.9	89.91	38.069		
11,000.0	7,530.0	7,744.1	7,521.5	63.2	28.8	89.38	-1,715.3	-2,777.8	3,470.8	3,379.2	91.62	37.881		
11,100.0	7,530.0	7,744.3	7,521.7	64.9	28.8	89.39	-1,715.3	-2,777.8	3,521.0	3,427.6	93.34	37.721		
11,200.0	7,530.0	7,744.5	7,521.9	66.6	28.8	89.39	-1,715.3	-2,777.8	3,573.3	3,478.2	95.06	37.589		
11,300.0	7,530.0	7,744.7	7,522.2	68.4	28.8	89.40	-1,715.3	-2,777.8	3,627.5	3,530.8	96.78	37.482		
11,400.0	7,530.0	7,745.0	7,522.4	70.1	28.8	89.40	-1,715.3	-2,777.8	3,683.7	3,585.2	98.50	37.397		
11,500.0	7,530.0	7,745.2	7,522.6	71.8	28.8	89.41	-1,715.3	-2,777.8	3,741.8	3,641.5	100.23	37.333		
11,600.0	7,530.0	7,745.4	7,522.8	73.5	28.8	89.41	-1,715.3	-2,777.8	3,801.5	3,699.6	101.95	37.287		
11,700.0	7,530.0	7,745.6	7,523.1	75.2	28.8	89.41	-1,715.3	-2,777.8	3,863.0	3,759.3	103.68	37.259		
11,800.0	7,530.0	7,745.9	7,523.3	77.0	28.8	89.42	-1,715.3	-2,777.8	3,926.0	3,820.6	105.41	37.246 SF		
11,900.0	7,530.0	7,746.1	7,523.5	78.7	28.8	89.42	-1,715.3	-2,777.8	3,990.5	3,883.4	107.14	37.247		
12,000.0	7,530.0	7,746.3	7,523.7	80.4	28.8	89.43	-1,715.3	-2,777.8	4,056.5	3,947.6	108.87	37.261		
12,100.0	7,530.0	7,746.5	7,524.0	82.2	28.8	89.43	-1,715.3	-2,777.8	4,123.8	4,013.2	110.60	37.287		
12,200.0	7,530.0	7,746.8	7,524.2	83.9	28.8	89.44	-1,715.3	-2,777.8	4,192.5	4,080.1	112.33	37.323		
12,300.0	7,530.0	7,747.0	7,524.4	85.6	28.8	89.44	-1,715.3	-2,777.8	4,262.4	4,148.3	114.06	37.368		
12,400.0	7,530.0	7,747.2	7,524.6	87.3	28.8	89.44	-1,715.3	-2,777.8	4,333.4	4,217.6	115.80	37.422		
12,500.0	7,530.0	7,747.4	7,524.9	89.1	28.8	89.45	-1,715.3	-2,777.8	4,405.6	4,288.1	117.53	37.484		
12,600.0	7,530.0	7,747.7	7,525.1	90.8	28.8	89.45	-1,715.3	-2,777.8	4,478.9	4,359.6	119.27	37.553		
12,700.0	7,530.0	7,747.9	7,525.3	92.5	28.8	89.46	-1,715.3	-2,777.8	4,553.2	4,432.2	121.00	37.628		
12,800.0	7,530.0	7,748.1	7,525.5	94.3	28.8	89.46	-1,715.3	-2,777.8	4,628.4	4,505.7	122.74	37.709		
12,900.0	7,530.0	7,748.3	7,525.8	96.0	28.8	89.46	-1,715.3	-2,777.9	4,704.6	4,580.1	124.48	37.794		
13,000.0	7,530.0	7,748.6	7,526.0	97.8	28.8	89.47	-1,715.3	-2,777.9	4,781.6	4,655.4	126.22	37.884		
13,100.0	7,530.0	7,748.8	7,526.2	99.5	28.8	89.47	-1,715.3	-2,777.9	4,859.5	4,731.5	127.96	37.978		
13,200.0	7,530.0	7,749.0	7,526.4	101.2	28.8	89.48	-1,715.3	-2,777.9	4,938.2	4,808.5	129.69	38.075		
13,300.0	7,530.0	7,749.2	7,526.7	103.0	28.8	89.48	-1,715.3	-2,777.9	5,017.6	4,886.2	131.43	38.176		
13,400.0	7,530.0	7,749.5	7,526.9	104.7	28.8	89.49	-1,715.3	-2,777.9	5,097.8	4,964.6	133.17	38.279		
13,500.0	7,530.0	7,749.7	7,527.1	106.4	28.8	89.49	-1,715.3	-2,777.9	5,178.6	5,043.7	134.92	38.384		
13,600.0	7,530.0	7,749.9	7,527.3	108.2	28.8	89.49	-1,715.3	-2,777.9	5,260.1	5,123.5	136.66	38.492		
13,700.0	7,530.0	7,750.1	7,527.5	109.9	28.8	89.50	-1,715.3	-2,777.9	5,342.3	5,203.9	138.40	38.601		
13,800.0	7,530.0	7,750.3	7,527.8	111.7	28.8	89.50	-1,715.3	-2,777.9	5,425.0	5,284.9	140.14	38.711		
13,900.0	7,530.0	7,750.6	7,528.0	113.4	28.8	89.51	-1,715.3	-2,777.9	5,508.3	5,366.4	141.88	38.823		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
14,000.0	7,530.0	7,750.8	7,528.2	115.1	28.8	89.51	-1,715.3	-2,777.9	5,592.2	5,448.6	143.62	38.936		
14,100.0	7,530.0	7,751.0	7,528.4	116.9	28.8	89.52	-1,715.3	-2,777.9	5,676.6	5,531.2	145.37	39.050		
14,200.0	7,530.0	7,751.2	7,528.6	118.6	28.8	89.52	-1,715.3	-2,777.9	5,761.4	5,614.3	147.11	39.164		
14,300.0	7,530.0	7,751.4	7,528.9	120.4	28.8	89.52	-1,715.3	-2,777.9	5,846.8	5,698.0	148.85	39.279		
14,400.0	7,530.0	7,751.7	7,529.1	122.1	28.8	89.53	-1,715.3	-2,777.9	5,932.6	5,782.0	150.60	39.394		
14,500.0	7,530.0	7,751.9	7,529.3	123.9	28.8	89.53	-1,715.3	-2,777.9	6,018.9	5,866.5	152.34	39.509		
14,600.0	7,530.0	7,752.1	7,529.5	125.6	28.8	89.54	-1,715.3	-2,777.9	6,105.5	5,951.5	154.09	39.624		
14,700.0	7,530.0	7,752.3	7,529.7	127.3	28.8	89.54	-1,715.3	-2,777.9	6,192.6	6,036.8	155.83	39.739		
14,800.0	7,530.0	7,752.5	7,530.0	129.1	28.8	89.54	-1,715.3	-2,777.9	6,280.1	6,122.5	157.58	39.854		
14,900.0	7,530.0	7,752.8	7,530.2	130.8	28.8	89.55	-1,715.3	-2,777.9	6,367.9	6,208.6	159.32	39.969		
15,000.0	7,530.0	7,753.0	7,530.4	132.6	28.8	89.55	-1,715.3	-2,777.9	6,456.1	6,295.0	161.07	40.083		
15,100.0	7,530.0	7,753.2	7,530.6	134.3	28.8	89.56	-1,715.3	-2,777.9	6,544.6	6,381.8	162.81	40.197		
15,200.0	7,530.0	7,753.4	7,530.8	136.1	28.8	89.56	-1,715.3	-2,777.9	6,633.5	6,468.9	164.56	40.310		
15,300.0	7,530.0	7,753.6	7,531.0	137.8	28.8	89.57	-1,715.3	-2,777.9	6,722.6	6,556.3	166.31	40.423		
15,400.0	7,530.0	7,753.8	7,531.3	139.6	28.8	89.57	-1,715.3	-2,777.9	6,812.1	6,644.0	168.05	40.535		
15,500.0	7,530.0	7,754.1	7,531.5	141.3	28.8	89.57	-1,715.3	-2,777.9	6,901.9	6,732.1	169.80	40.647		
15,600.0	7,530.0	7,754.3	7,531.7	143.0	28.8	89.58	-1,715.3	-2,777.9	6,991.9	6,820.3	171.55	40.758		
15,700.0	7,530.0	7,754.5	7,531.9	144.8	28.8	89.58	-1,715.3	-2,777.9	7,082.2	6,908.9	173.29	40.868		
15,800.0	7,530.0	7,754.7	7,532.1	146.5	28.8	89.59	-1,715.3	-2,777.9	7,172.7	6,997.7	175.04	40.978		
15,900.0	7,530.0	7,754.9	7,532.3	148.3	28.8	89.59	-1,715.3	-2,777.9	7,263.5	7,086.8	176.79	41.086		
16,000.0	7,530.0	7,755.1	7,532.6	150.0	28.8	89.59	-1,715.3	-2,777.9	7,354.6	7,176.0	178.54	41.194		
16,100.0	7,530.0	7,755.4	7,532.8	151.8	28.8	89.60	-1,715.3	-2,777.9	7,445.9	7,265.6	180.28	41.301		
16,200.0	7,530.0	7,755.6	7,533.0	153.5	28.8	89.60	-1,715.3	-2,777.9	7,537.3	7,355.3	182.03	41.407		
16,300.0	7,530.0	7,755.8	7,533.2	155.3	28.8	89.61	-1,715.3	-2,777.9	7,629.1	7,445.3	183.78	41.512		
16,400.0	7,530.0	7,756.0	7,533.4	157.0	28.8	89.61	-1,715.3	-2,777.9	7,721.0	7,535.4	185.53	41.617		
16,500.0	7,530.0	7,756.2	7,533.6	158.8	28.8	89.61	-1,715.3	-2,777.9	7,813.1	7,625.8	187.27	41.720		
16,600.0	7,530.0	7,756.4	7,533.9	160.5	28.8	89.62	-1,715.3	-2,777.9	7,905.4	7,716.4	189.02	41.822		
16,700.0	7,530.0	7,756.6	7,534.1	162.3	28.8	89.62	-1,715.3	-2,777.9	7,997.9	7,807.1	190.77	41.924		
16,800.0	7,530.0	7,756.9	7,534.3	164.0	28.8	89.63	-1,715.3	-2,777.9	8,090.5	7,898.0	192.52	42.024		
16,900.0	7,530.0	7,757.1	7,534.5	165.8	28.8	89.63	-1,715.3	-2,777.9	8,183.4	7,989.1	194.27	42.124		
17,000.0	7,530.0	7,757.3	7,534.7	167.5	28.8	89.63	-1,715.3	-2,778.0	8,276.4	8,080.4	196.02	42.223		
17,100.0	7,530.0	7,757.5	7,534.9	169.3	28.8	89.64	-1,715.3	-2,778.0	8,369.6	8,171.8	197.77	42.320		
17,200.0	7,530.0	7,757.7	7,535.1	171.0	28.8	89.64	-1,715.3	-2,778.0	8,462.9	8,263.4	199.52	42.417		
17,300.0	7,530.0	7,757.9	7,535.4	172.8	28.8	89.65	-1,715.3	-2,778.0	8,556.4	8,355.1	201.27	42.513		
17,400.0	7,530.0	7,758.1	7,535.6	174.5	28.8	89.65	-1,715.3	-2,778.0	8,650.0	8,447.0	203.01	42.608		
17,420.9	7,530.0	7,758.2	7,535.6	174.9	28.8	89.65	-1,715.3	-2,778.0	8,669.6	8,466.2	203.38	42.627		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program:		41-Geolink MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	14.3	14.3	0.0	0.0	-95.43	-284.3	-2,992.6	3,006.1					
100.0	100.0	81.2	81.2	0.2	0.1	-95.44	-285.0	-2,993.2	3,007.0	3,006.7	0.29	N/A		
200.0	200.0	154.7	154.6	0.3	0.3	-95.47	-286.9	-2,994.4	3,008.9	3,008.3	0.60	5,030.464		
300.0	300.0	230.5	230.4	0.5	0.4	-95.53	-290.2	-2,996.1	3,011.6	3,010.7	0.91	3,315.177		
400.0	400.0	315.0	314.6	0.7	0.6	-95.63	-295.8	-2,998.4	3,015.0	3,013.7	1.24	2,431.224		
500.0	500.0	407.0	406.2	0.8	0.8	-95.79	-304.2	-3,001.1	3,018.8	3,017.2	1.60	1,890.832		
600.0	600.0	490.8	489.4	1.0	1.1	-95.97	-314.2	-3,003.7	3,023.1	3,021.2	1.95	1,548.282		
700.0	700.0	618.0	615.3	1.2	1.5	-128.76	-332.3	-3,006.7	3,027.5	3,024.9	2.62	1,154.221		
800.0	800.0	710.2	706.1	1.4	1.8	-129.04	-347.9	-3,008.4	3,033.0	3,029.9	3.11	976.129		
900.0	899.9	816.5	810.6	1.6	2.2	-129.42	-367.5	-3,010.0	3,039.4	3,035.8	3.66	830.135		
988.4	988.1	931.0	922.9	1.7	2.6	-129.88	-389.4	-3,011.0	3,045.8	3,041.6	4.23	720.095		
1,000.0	999.7	942.1	933.9	1.7	2.6	-129.93	-391.4	-3,011.1	3,046.7	3,042.4	4.29	710.120		
1,100.0	1,099.4	1,026.9	1,017.2	1.9	2.9	-130.30	-407.2	-3,011.5	3,054.2	3,049.4	4.79	638.204		
1,200.0	1,199.2	1,097.2	1,086.0	2.1	3.2	-130.63	-421.4	-3,012.2	3,062.5	3,057.3	5.25	583.792		
1,300.0	1,299.0	1,164.0	1,151.2	2.3	3.5	-130.96	-436.0	-3,013.4	3,072.0	3,066.3	5.71	538.422		
1,400.0	1,398.8	1,227.4	1,212.7	2.5	3.8	-131.29	-451.0	-3,015.0	3,082.8	3,076.6	6.18	498.705		
1,500.0	1,498.5	1,292.7	1,275.8	2.7	4.1	-131.66	-468.1	-3,016.9	3,094.6	3,087.9	6.68	463.246		
1,600.0	1,598.3	1,361.2	1,341.4	2.9	4.5	-132.07	-487.2	-3,019.4	3,107.7	3,100.5	7.21	431.312		
1,700.0	1,698.1	1,441.6	1,418.3	3.2	4.9	-132.56	-510.7	-3,022.6	3,121.6	3,113.8	7.80	400.163		
1,800.0	1,797.8	1,528.3	1,500.8	3.4	5.4	-133.11	-537.2	-3,025.9	3,136.2	3,127.8	8.45	371.270		
1,900.0	1,897.6	1,608.6	1,576.8	3.6	5.9	-133.63	-562.8	-3,029.1	3,151.4	3,142.3	9.07	347.400		
2,000.0	1,997.4	1,687.0	1,650.7	3.8	6.4	-134.15	-588.8	-3,032.3	3,167.4	3,157.7	9.70	326.599		
2,100.0	2,097.1	1,754.1	1,713.6	4.0	6.8	-134.61	-612.3	-3,035.1	3,184.4	3,174.1	10.29	309.411		
2,200.0	2,196.9	1,807.0	1,762.7	4.2	7.2	-134.99	-631.8	-3,037.5	3,202.7	3,191.8	10.81	296.329		
2,300.0	2,296.7	1,862.0	1,813.3	4.4	7.5	-135.40	-653.0	-3,040.6	3,222.6	3,211.3	11.34	284.173		
2,400.0	2,396.5	1,969.4	1,911.4	4.6	8.3	-136.23	-696.3	-3,046.0	3,243.1	3,230.9	12.23	265.145		
2,500.0	2,496.2	2,037.0	1,972.8	4.8	8.8	-136.75	-724.3	-3,049.4	3,264.4	3,251.5	12.86	253.841		
2,600.0	2,596.0	2,114.1	2,042.7	5.0	9.4	-137.35	-756.7	-3,053.5	3,286.7	3,273.1	13.56	242.369		
2,700.0	2,695.8	2,198.1	2,118.2	5.2	10.1	-138.02	-793.2	-3,057.5	3,309.4	3,295.1	14.33	230.983		
2,800.0	2,795.5	2,253.1	2,167.2	5.4	10.5	-138.47	-818.1	-3,059.9	3,333.2	3,318.3	14.91	223.620		
2,900.0	2,895.3	2,299.0	2,207.8	5.6	10.9	-138.86	-839.4	-3,062.3	3,358.5	3,343.1	15.42	217.809		
3,000.0	2,995.1	2,374.6	2,274.6	5.9	11.5	-139.48	-874.5	-3,066.7	3,385.1	3,369.0	16.12	209.957		
3,100.0	3,094.9	2,481.7	2,369.6	6.1	12.4	-140.33	-923.3	-3,073.5	3,412.2	3,395.2	17.02	200.444		
3,200.0	3,194.6	2,597.2	2,473.0	6.3	13.3	-141.21	-974.6	-3,079.9	3,438.7	3,420.8	17.94	191.649		
3,300.0	3,294.4	2,663.1	2,532.4	6.5	13.8	-141.70	-1,003.0	-3,084.1	3,466.1	3,447.6	18.54	186.999		
3,400.0	3,394.2	2,822.0	2,675.3	6.7	15.0	-142.85	-1,071.8	-3,092.9	3,493.3	3,473.6	19.70	177.357		
3,500.0	3,493.9	2,869.6	2,718.2	6.9	15.4	-143.19	-1,092.2	-3,095.1	3,520.3	3,500.2	20.17	174.505		
3,600.0	3,593.7	2,910.0	2,754.5	7.1	15.7	-143.48	-1,109.9	-3,097.7	3,549.2	3,528.6	20.60	172.255		
3,700.0	3,693.5	2,990.5	2,826.5	7.3	16.4	-144.05	-1,145.4	-3,103.4	3,579.3	3,558.1	21.27	168.281		
3,800.0	3,793.2	3,050.6	2,880.3	7.5	16.8	-144.47	-1,171.6	-3,107.8	3,610.0	3,588.2	21.80	165.601		
3,900.0	3,893.0	3,137.0	2,957.9	7.7	17.5	-145.05	-1,209.0	-3,115.0	3,641.7	3,619.2	22.47	162.079		
4,000.0	3,992.8	3,210.3	3,023.9	8.0	18.1	-145.53	-1,240.4	-3,121.1	3,673.6	3,650.5	23.06	159.272		
4,100.0	4,092.6	3,346.0	3,145.3	8.2	19.2	-146.43	-1,300.1	-3,132.1	3,706.5	3,682.4	24.01	154.358		
4,200.0	4,192.3	3,391.2	3,185.7	8.4	19.5	-146.73	-1,320.0	-3,135.3	3,738.8	3,714.3	24.45	152.944		
4,300.0	4,292.1	3,451.8	3,239.8	8.6	20.0	-147.12	-1,346.9	-3,140.4	3,772.4	3,747.5	24.96	151.122		
4,400.0	4,391.9	3,608.0	3,379.3	8.8	21.3	-148.14	-1,416.3	-3,151.2	3,805.3	3,779.3	26.00	146.339		
4,500.0	4,491.6	3,665.7	3,430.9	9.0	21.7	-148.50	-1,441.9	-3,155.0	3,838.5	3,812.0	26.49	144.908		
4,600.0	4,591.4	3,730.8	3,489.1	9.2	22.3	-148.91	-1,470.5	-3,160.1	3,872.7	3,845.7	27.00	143.423		
4,700.0	4,691.2	3,827.1	3,575.7	9.4	23.0	-149.47	-1,511.7	-3,168.6	3,907.5	3,879.9	27.64	141.370		
4,800.0	4,790.9	3,963.9	3,700.2	9.6	24.0	-150.21	-1,567.1	-3,181.5	3,941.9	3,913.4	28.44	138.606		
4,900.0	4,890.7	4,085.2	3,810.6	9.8	24.9	-150.86	-1,616.3	-3,190.8	3,975.1	3,946.0	29.18	136.210		
5,000.0	4,990.5	4,253.4	3,962.8	10.1	26.2	-151.81	-1,687.2	-3,200.2	4,008.2	3,978.0	30.18	132.824		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	4,359.4	4,058.6	10.3	27.0	-152.42	-1,732.3	-3,204.3	4,040.3	4,009.5	30.86	130.938		
5,200.0	5,190.0	4,394.0	4,090.0	10.5	27.3	-152.61	-1,746.8	-3,205.6	4,072.6	4,041.4	31.20	130.538		
5,300.0	5,289.8	4,450.4	4,140.9	10.7	27.7	-152.93	-1,771.2	-3,207.8	4,106.0	4,074.3	31.67	129.653		
5,400.0	5,389.6	4,481.0	4,168.1	10.9	28.0	-153.11	-1,785.1	-3,209.1	4,141.0	4,109.0	32.00	129.392		
5,500.0	5,489.3	4,524.0	4,206.1	11.1	28.3	-153.36	-1,805.1	-3,211.3	4,177.4	4,145.0	32.40	128.935		
5,600.0	5,589.1	5,649.7	5,270.3	11.3	34.3	-157.46	-2,142.1	-3,256.9	4,211.2	4,175.4	35.84	117.487		
5,700.0	5,688.9	6,005.7	5,625.6	11.5	34.8	-157.73	-2,160.9	-3,264.8	4,221.7	4,185.4	36.28	116.356		
5,800.0	5,788.7	6,136.1	5,755.9	11.7	34.8	-157.76	-2,161.0	-3,267.2	4,229.5	4,193.0	36.52	115.815		
5,900.0	5,888.4	6,232.3	5,852.2	11.9	34.9	-157.78	-2,160.9	-3,268.9	4,237.1	4,200.4	36.75	115.307		
6,000.0	5,988.2	6,329.2	5,949.0	12.2	35.0	-157.80	-2,161.0	-3,270.6	4,244.9	4,207.9	36.97	114.805		
6,100.0	6,088.0	6,432.6	6,052.4	12.4	35.0	-157.83	-2,161.1	-3,272.3	4,252.6	4,215.4	37.21	114.292		
6,200.0	6,187.7	6,556.2	6,175.9	12.6	35.1	-157.86	-2,161.2	-3,274.1	4,260.1	4,222.7	37.45	113.748		
6,300.0	6,287.5	6,688.4	6,308.1	12.8	35.2	-157.89	-2,160.6	-3,275.2	4,266.7	4,229.0	37.70	113.165		
6,400.0	6,387.3	6,778.1	6,397.9	13.0	35.2	-157.91	-2,160.1	-3,275.7	4,273.2	4,235.3	37.94	112.640		
6,500.0	6,487.0	6,869.0	6,488.7	13.2	35.3	-157.93	-2,159.9	-3,276.3	4,279.9	4,241.7	38.17	112.125		
6,600.0	6,586.8	6,962.2	6,582.0	13.4	35.3	-157.96	-2,159.9	-3,277.0	4,286.8	4,248.4	38.41	111.612		
6,700.0	6,686.6	7,053.2	6,672.9	13.6	35.4	-157.98	-2,160.0	-3,277.8	4,293.8	4,255.2	38.64	111.114		
6,787.0	6,773.4	7,130.0	6,749.7	13.8	35.4	-158.00	-2,160.1	-3,278.6	4,300.1	4,261.3	38.85	110.695		
6,800.0	6,786.4	7,141.4	6,761.2	13.8	35.4	-168.59	-2,160.1	-3,278.8	4,301.0	4,262.2	38.87	110.644		
6,850.0	6,836.3	7,187.0	6,806.7	13.9	35.5	104.15	-2,160.3	-3,279.4	4,303.2	4,264.2	39.00	110.333		
6,900.0	6,886.2	7,233.5	6,853.3	14.0	35.5	74.32	-2,160.4	-3,280.0	4,303.5	4,264.3	39.18	109.830		
6,950.0	6,935.7	7,281.3	6,901.0	14.0	35.5	66.71	-2,160.5	-3,280.7	4,301.7	4,262.3	39.41	109.141		
7,000.0	6,984.6	7,328.4	6,948.1	14.0	35.6	63.66	-2,160.7	-3,281.4	4,297.9	4,258.2	39.69	108.279		
7,050.0	7,032.6	7,374.8	6,994.5	14.0	35.6	62.30	-2,160.8	-3,282.1	4,292.2	4,252.2	40.02	107.253		
7,100.0	7,079.7	7,420.1	7,039.8	13.9	35.6	61.79	-2,160.9	-3,282.8	4,284.6	4,244.2	40.39	106.077		
7,150.0	7,125.4	7,464.1	7,083.8	13.9	35.7	61.83	-2,161.0	-3,283.6	4,275.1	4,234.3	40.81	104.755		
7,200.0	7,169.6	7,506.7	7,126.4	13.8	35.7	62.26	-2,161.1	-3,284.4	4,263.9	4,222.7	41.28	103.296		
7,250.0	7,212.1	7,548.2	7,167.9	13.8	35.7	63.00	-2,161.1	-3,285.2	4,251.1	4,209.3	41.80	101.710		
7,300.0	7,252.6	7,589.8	7,209.5	13.7	35.8	64.01	-2,161.1	-3,285.9	4,236.6	4,194.3	42.37	100.001		
7,350.0	7,291.0	7,629.2	7,248.8	13.7	35.8	65.25	-2,161.1	-3,286.7	4,220.7	4,177.8	42.98	98.202		
7,400.0	7,327.1	7,666.1	7,285.8	13.7	35.8	66.68	-2,161.0	-3,287.4	4,203.5	4,159.8	43.63	96.335		
7,450.0	7,360.7	7,700.4	7,320.1	13.7	35.8	68.29	-2,161.0	-3,288.1	4,185.0	4,140.7	44.32	94.423		
7,500.0	7,391.6	7,732.9	7,352.6	13.7	35.8	70.06	-2,161.0	-3,288.7	4,165.4	4,120.4	45.04	92.490		
7,550.0	7,419.7	7,762.7	7,382.4	13.8	35.9	71.97	-2,160.9	-3,289.3	4,144.9	4,099.2	45.77	90.564		
7,600.0	7,444.8	7,789.3	7,408.9	13.9	35.9	73.99	-2,160.8	-3,289.8	4,123.6	4,077.1	46.50	88.673		
7,650.0	7,466.9	7,812.5	7,432.2	14.1	35.9	76.08	-2,160.7	-3,290.2	4,101.7	4,054.5	47.23	86.840		
7,700.0	7,485.8	7,832.3	7,451.9	14.3	35.9	78.24	-2,160.6	-3,290.6	4,079.3	4,031.3	47.94	85.083		
7,750.0	7,501.5	7,848.5	7,468.2	14.6	35.9	80.42	-2,160.5	-3,290.9	4,056.5	4,007.9	48.63	83.416		
7,800.0	7,513.7	7,861.2	7,480.8	14.9	35.9	82.61	-2,160.4	-3,291.2	4,033.5	3,984.3	49.28	81.849		
7,850.0	7,522.6	7,870.2	7,489.9	15.2	35.9	84.78	-2,160.3	-3,291.4	4,010.5	3,960.6	49.89	80.384		
7,900.0	7,528.0	7,875.6	7,495.2	15.6	35.9	86.90	-2,160.3	-3,291.5	3,987.6	3,937.1	50.46	79.022		
7,952.9	7,530.0	7,877.2	7,496.9	16.1	35.9	89.07	-2,160.3	-3,291.5	3,963.6	3,912.5	51.02	77.685		
8,000.0	7,530.0	7,876.9	7,496.5	16.5	35.9	89.07	-2,160.3	-3,291.5	3,942.6	3,891.1	51.48	76.590		
8,100.0	7,530.0	7,876.2	7,495.8	17.5	35.9	89.06	-2,160.3	-3,291.5	3,899.4	3,846.9	52.54	74.225		
8,200.0	7,530.0	7,875.5	7,495.1	18.7	35.9	89.05	-2,160.3	-3,291.5	3,858.4	3,804.7	53.70	71.848		
8,300.0	7,530.0	7,874.8	7,494.4	19.9	35.9	89.03	-2,160.3	-3,291.4	3,819.6	3,764.6	54.96	69.499		
8,400.0	7,530.0	7,874.1	7,493.7	21.2	35.9	89.02	-2,160.3	-3,291.4	3,783.0	3,726.7	56.29	67.210		
8,500.0	7,530.0	7,873.4	7,493.0	22.6	35.9	89.01	-2,160.3	-3,291.4	3,748.7	3,691.1	57.67	64.999		
8,600.0	7,530.0	7,872.7	7,492.3	24.0	35.9	89.00	-2,160.3	-3,291.4	3,716.8	3,657.7	59.11	62.880		
8,700.0	7,530.0	7,872.0	7,491.6	25.4	35.9	88.99	-2,160.3	-3,291.4	3,687.4	3,626.8	60.59	60.861		
8,800.0	7,530.0	7,871.3	7,490.9	26.9	35.9	88.98	-2,160.3	-3,291.4	3,660.4	3,598.3	62.10	58.946		
8,900.0	7,530.0	7,870.6	7,490.2	28.4	35.9	88.97	-2,160.3	-3,291.4	3,636.0	3,572.4	63.64	57.138		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
9,000.0	7,530.0	7,869.9	7,489.5	30.0	35.9	88.96	-2,160.3	-3,291.4	3,614.2	3,549.0	65.20	55.434		
9,100.0	7,530.0	7,869.2	7,488.9	31.5	35.9	88.94	-2,160.4	-3,291.3	3,595.0	3,528.2	66.78	53.833		
9,200.0	7,530.0	7,868.6	7,488.2	33.1	35.9	88.93	-2,160.4	-3,291.3	3,578.6	3,510.2	68.38	52.333		
9,300.0	7,530.0	7,867.9	7,487.5	34.7	35.9	88.92	-2,160.4	-3,291.3	3,564.8	3,494.8	70.00	50.929		
9,400.0	7,530.0	7,867.2	7,486.9	36.3	35.9	88.91	-2,160.4	-3,291.3	3,553.8	3,482.2	71.62	49.618		
9,500.0	7,530.0	7,866.6	7,486.2	38.0	35.9	88.90	-2,160.4	-3,291.3	3,545.7	3,472.4	73.26	48.397		
9,600.0	7,530.0	7,865.9	7,485.6	39.6	35.9	88.89	-2,160.4	-3,291.3	3,540.3	3,465.4	74.91	47.259		
9,700.0	7,530.0	7,865.3	7,484.9	41.3	35.9	88.88	-2,160.4	-3,291.3	3,537.7	3,461.1	76.57	46.203		
9,740.8	7,530.0	7,865.0	7,484.7	41.9	35.9	88.88	-2,160.4	-3,291.3	3,537.5	3,460.2	77.25	45.794		
9,800.0	7,530.0	7,864.6	7,484.3	42.9	35.9	88.87	-2,160.4	-3,291.2	3,538.0	3,459.7	78.23	45.223		
9,900.0	7,530.0	7,864.0	7,483.6	44.6	35.9	88.86	-2,160.4	-3,291.2	3,541.1	3,461.1	79.91	44.315		
10,000.0	7,530.0	7,863.4	7,483.0	46.3	35.9	88.85	-2,160.4	-3,291.2	3,547.0	3,465.4	81.58	43.476		
10,100.0	7,530.0	7,862.7	7,482.4	47.9	35.9	88.84	-2,160.4	-3,291.2	3,555.7	3,472.4	83.27	42.702		
10,200.0	7,530.0	7,862.1	7,481.7	49.6	35.9	88.83	-2,160.4	-3,291.2	3,567.2	3,482.2	84.96	41.989		
10,300.0	7,530.0	7,861.5	7,481.1	51.3	35.9	88.82	-2,160.4	-3,291.2	3,581.4	3,494.8	86.65	41.333		
10,400.0	7,530.0	7,860.9	7,480.5	53.0	35.9	88.81	-2,160.4	-3,291.2	3,598.4	3,510.0	88.34	40.731		
10,500.0	7,530.0	7,860.3	7,479.9	54.7	35.9	88.80	-2,160.4	-3,291.2	3,618.0	3,528.0	90.04	40.181		
10,600.0	7,530.0	7,859.6	7,479.3	56.4	35.9	88.79	-2,160.4	-3,291.2	3,640.3	3,548.6	91.75	39.678		
10,700.0	7,530.0	7,859.0	7,478.7	58.1	35.9	88.78	-2,160.4	-3,291.1	3,665.2	3,571.8	93.45	39.220		
10,800.0	7,530.0	7,858.4	7,478.1	59.8	35.9	88.77	-2,160.4	-3,291.1	3,692.6	3,597.5	95.16	38.804		
10,900.0	7,530.0	7,857.8	7,477.5	61.5	35.9	88.76	-2,160.4	-3,291.1	3,722.6	3,625.7	96.87	38.427		
11,000.0	7,530.0	7,857.2	7,476.9	63.2	35.9	88.75	-2,160.4	-3,291.1	3,754.9	3,656.3	98.59	38.087		
11,100.0	7,530.0	7,856.6	7,476.3	64.9	35.9	88.74	-2,160.4	-3,291.1	3,789.6	3,689.3	100.30	37.782		
11,200.0	7,530.0	7,856.0	7,475.7	66.6	35.9	88.73	-2,160.4	-3,291.1	3,826.6	3,724.6	102.02	37.508		
11,300.0	7,530.0	7,855.5	7,475.1	68.4	35.9	88.72	-2,160.4	-3,291.1	3,865.9	3,762.1	103.74	37.265		
11,400.0	7,530.0	7,854.9	7,474.5	70.1	35.9	88.71	-2,160.4	-3,291.1	3,907.3	3,801.8	105.46	37.049		
11,500.0	7,530.0	7,854.3	7,473.9	71.8	35.9	88.70	-2,160.4	-3,291.0	3,950.8	3,843.6	107.18	36.859		
11,600.0	7,530.0	7,853.7	7,473.4	73.5	35.9	88.69	-2,160.4	-3,291.0	3,996.3	3,887.4	108.91	36.694		
11,700.0	7,530.0	7,853.2	7,472.8	75.2	35.9	88.68	-2,160.5	-3,291.0	4,043.8	3,933.1	110.63	36.551		
11,800.0	7,530.0	7,852.6	7,472.2	77.0	35.9	88.68	-2,160.5	-3,291.0	4,093.2	3,980.8	112.36	36.429		
11,900.0	7,530.0	7,852.0	7,471.7	78.7	35.9	88.67	-2,160.5	-3,291.0	4,144.4	4,030.3	114.09	36.326		
12,000.0	7,530.0	7,851.5	7,471.1	80.4	35.9	88.66	-2,160.5	-3,291.0	4,197.3	4,081.5	115.82	36.241		
12,100.0	7,530.0	7,850.9	7,470.5	82.2	35.9	88.65	-2,160.5	-3,291.0	4,252.0	4,134.5	117.55	36.173		
12,200.0	7,530.0	7,850.4	7,470.0	83.9	35.9	88.64	-2,160.5	-3,291.0	4,308.3	4,189.0	119.28	36.120		
12,300.0	7,530.0	7,849.8	7,469.4	85.6	35.9	88.63	-2,160.5	-3,291.0	4,366.1	4,245.1	121.01	36.081		
12,400.0	7,530.0	7,849.3	7,468.9	87.3	35.9	88.62	-2,160.5	-3,290.9	4,425.5	4,302.8	122.74	36.055		
12,500.0	7,530.0	7,848.7	7,468.3	89.1	35.9	88.61	-2,160.5	-3,290.9	4,486.3	4,361.8	124.48	36.042		
12,600.0	7,530.0	7,848.2	7,467.8	90.8	35.9	88.60	-2,160.5	-3,290.9	4,548.5	4,422.3	126.21	36.039 SF		
12,700.0	7,530.0	7,847.6	7,467.3	92.5	35.9	88.60	-2,160.5	-3,290.9	4,612.0	4,484.0	127.94	36.047		
12,800.0	7,530.0	7,847.1	7,466.7	94.3	35.9	88.59	-2,160.5	-3,290.9	4,676.8	4,547.1	129.68	36.064		
12,900.0	7,530.0	7,846.6	7,466.2	96.0	35.9	88.58	-2,160.5	-3,290.9	4,742.8	4,611.4	131.42	36.090		
13,000.0	7,530.0	7,846.0	7,465.7	97.8	35.9	88.57	-2,160.5	-3,290.9	4,810.0	4,676.8	133.15	36.124		
13,100.0	7,530.0	7,845.5	7,465.2	99.5	35.9	88.56	-2,160.5	-3,290.9	4,878.3	4,743.4	134.89	36.165		
13,200.0	7,530.0	7,845.0	7,464.6	101.2	35.9	88.55	-2,160.5	-3,290.9	4,947.7	4,811.1	136.63	36.213		
13,300.0	7,530.0	7,844.5	7,464.1	103.0	35.9	88.54	-2,160.5	-3,290.9	5,018.1	4,879.7	138.37	36.267		
13,400.0	7,530.0	7,844.0	7,463.6	104.7	35.9	88.54	-2,160.5	-3,290.8	5,089.5	4,949.4	140.10	36.327		
13,500.0	7,530.0	7,843.4	7,463.1	106.4	35.9	88.53	-2,160.5	-3,290.8	5,161.9	5,020.0	141.84	36.391		
13,600.0	7,530.0	7,842.9	7,462.6	108.2	35.9	88.52	-2,160.5	-3,290.8	5,235.2	5,091.6	143.58	36.461		
13,700.0	7,530.0	7,842.4	7,462.1	109.9	35.9	88.51	-2,160.5	-3,290.8	5,309.3	5,164.0	145.32	36.535		
13,800.0	7,530.0	7,841.9	7,461.6	111.7	35.9	88.50	-2,160.5	-3,290.8	5,384.3	5,237.2	147.06	36.612		
13,900.0	7,530.0	7,841.4	7,461.1	113.4	35.9	88.49	-2,160.5	-3,290.8	5,460.1	5,311.3	148.80	36.693		
14,000.0	7,530.0	7,840.9	7,460.6	115.1	35.9	88.49	-2,160.5	-3,290.8	5,536.6	5,386.1	150.55	36.777		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,100.0	7,530.0	7,840.4	7,460.1	116.9	35.9	88.48	-2,160.5	-3,290.8	5,613.9	5,461.6	152.29	36.864		
14,200.0	7,530.0	7,839.9	7,459.6	118.6	35.9	88.47	-2,160.5	-3,290.8	5,691.9	5,537.9	154.03	36.954		
14,300.0	7,530.0	7,839.5	7,459.1	120.4	35.9	88.46	-2,160.5	-3,290.8	5,770.6	5,614.8	155.77	37.045		
14,400.0	7,530.0	7,839.0	7,458.6	122.1	35.9	88.45	-2,160.5	-3,290.7	5,849.9	5,692.4	157.51	37.139		
14,500.0	7,530.0	7,838.5	7,458.1	123.9	35.9	88.45	-2,160.5	-3,290.7	5,929.9	5,770.6	159.26	37.235		
14,600.0	7,530.0	7,838.0	7,457.6	125.6	35.9	88.44	-2,160.5	-3,290.7	6,010.4	5,849.4	161.00	37.332		
14,700.0	7,530.0	7,837.5	7,457.2	127.3	35.9	88.43	-2,160.5	-3,290.7	6,091.5	5,928.8	162.74	37.431		
14,800.0	7,530.0	7,837.0	7,456.7	129.1	35.9	88.42	-2,160.5	-3,290.7	6,173.2	6,008.7	164.48	37.531		
14,900.0	7,530.0	7,836.6	7,456.2	130.8	35.9	88.42	-2,160.6	-3,290.7	6,255.4	6,089.2	166.23	37.632		
15,000.0	7,530.0	7,836.1	7,455.7	132.6	35.9	88.41	-2,160.6	-3,290.7	6,338.2	6,170.2	167.97	37.733		
15,100.0	7,530.0	7,835.6	7,455.3	134.3	35.9	88.40	-2,160.6	-3,290.7	6,421.4	6,251.7	169.72	37.836		
15,200.0	7,530.0	7,835.2	7,454.8	136.1	35.9	88.39	-2,160.6	-3,290.7	6,505.1	6,333.6	171.46	37.939		
15,300.0	7,530.0	7,834.7	7,454.3	137.8	35.9	88.39	-2,160.6	-3,290.7	6,589.2	6,416.0	173.20	38.043		
15,400.0	7,530.0	7,834.2	7,453.9	139.6	35.9	88.38	-2,160.6	-3,290.7	6,673.8	6,498.9	174.95	38.147		
15,500.0	7,530.0	7,833.8	7,453.4	141.3	35.9	88.37	-2,160.6	-3,290.6	6,758.8	6,582.1	176.69	38.251		
15,600.0	7,530.0	7,833.3	7,453.0	143.0	35.9	88.36	-2,160.6	-3,290.6	6,844.2	6,665.8	178.44	38.356		
15,700.0	7,530.0	7,832.9	7,452.5	144.8	35.9	88.36	-2,160.6	-3,290.6	6,930.0	6,749.8	180.18	38.461		
15,800.0	7,530.0	7,832.4	7,452.1	146.5	35.9	88.35	-2,160.6	-3,290.6	7,016.2	6,834.3	181.93	38.565		
15,900.0	7,530.0	7,832.0	7,451.6	148.3	35.9	88.34	-2,160.6	-3,290.6	7,102.7	6,919.0	183.68	38.670		
16,000.0	7,530.0	7,831.5	7,451.2	150.0	35.9	88.33	-2,160.6	-3,290.6	7,189.6	7,004.2	185.42	38.775		
16,100.0	7,530.0	7,831.1	7,450.7	151.8	35.9	88.33	-2,160.6	-3,290.6	7,276.8	7,089.7	187.17	38.879		
16,200.0	7,530.0	7,830.6	7,450.3	153.5	35.9	88.32	-2,160.6	-3,290.6	7,364.4	7,175.5	188.91	38.983		
16,300.0	7,530.0	7,830.2	7,449.8	155.3	35.9	88.31	-2,160.6	-3,290.6	7,452.2	7,261.6	190.66	39.087		
16,400.0	7,530.0	7,829.8	7,449.4	157.0	35.9	88.31	-2,160.6	-3,290.6	7,540.4	7,348.0	192.40	39.190		
16,500.0	7,530.0	7,829.3	7,449.0	158.8	35.9	88.30	-2,160.6	-3,290.6	7,628.9	7,434.7	194.15	39.293		
16,600.0	7,530.0	7,828.9	7,448.5	160.5	35.9	88.29	-2,160.6	-3,290.5	7,717.6	7,521.7	195.90	39.396		
16,700.0	7,530.0	7,828.5	7,448.1	162.3	35.9	88.28	-2,160.6	-3,290.5	7,806.6	7,609.0	197.64	39.498		
16,800.0	7,530.0	7,828.1	7,447.7	164.0	35.9	88.28	-2,160.6	-3,290.5	7,895.9	7,696.5	199.39	39.600		
16,900.0	7,530.0	7,827.6	7,447.3	165.8	35.9	88.27	-2,160.6	-3,290.5	7,985.4	7,784.3	201.14	39.701		
17,000.0	7,530.0	7,827.2	7,446.8	167.5	35.9	88.26	-2,160.6	-3,290.5	8,075.2	7,872.3	202.88	39.802		
17,100.0	7,530.0	7,826.8	7,446.4	169.3	35.9	88.26	-2,160.6	-3,290.5	8,165.2	7,960.6	204.63	39.902		
17,200.0	7,530.0	7,826.4	7,446.0	171.0	35.9	88.25	-2,160.6	-3,290.5	8,255.4	8,049.1	206.38	40.001		
17,300.0	7,530.0	7,825.9	7,445.6	172.8	35.9	88.24	-2,160.6	-3,290.5	8,345.9	8,137.8	208.13	40.100		
17,400.0	7,530.0	7,825.5	7,445.2	174.5	35.9	88.24	-2,160.6	-3,290.5	8,436.6	8,226.7	209.87	40.198		
17,420.9	7,530.0	7,825.4	7,445.1	174.9	35.9	88.24	-2,160.6	-3,290.5	8,455.6	8,245.3	210.24	40.219		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-94.86	-254.5	-2,991.7	3,002.5					
100.0	100.0	465.4	464.2	0.2	1.0	-94.61	-239.7	-2,970.3	2,999.3	2,998.4	0.97	3,106.750		
200.0	200.0	712.0	706.4	0.3	1.9	-94.04	-207.6	-2,937.0	2,983.6	2,982.0	1.57	1,897.201		
300.0	300.0	786.0	778.7	0.5	2.2	-93.84	-196.5	-2,925.9	2,967.6	2,965.7	1.88	1,578.425		
400.0	400.0	841.4	832.9	0.7	2.4	-93.70	-188.6	-2,918.4	2,952.9	2,950.8	2.15	1,370.691		
500.0	500.0	919.4	909.7	0.8	2.7	-93.52	-178.7	-2,908.7	2,939.6	2,937.1	2.47	1,190.753		
600.0	600.0	1,135.1	1,121.6	1.0	3.5	-93.00	-150.8	-2,879.1	2,925.7	2,922.6	3.03	964.845		
700.0	700.0	1,238.2	1,222.0	1.2	3.9	-125.32	-134.6	-2,862.6	2,909.2	2,905.0	4.23	688.178		
800.0	800.0	1,333.8	1,315.0	1.4	4.4	-125.18	-118.7	-2,847.0	2,893.4	2,888.7	4.72	613.319		
900.0	899.9	1,400.4	1,379.8	1.6	4.6	-125.13	-107.5	-2,836.6	2,879.4	2,874.3	5.12	562.864		
988.4	988.1	1,469.0	1,446.8	1.7	4.9	-125.07	-96.3	-2,826.8	2,869.1	2,863.6	5.50	521.649		
1,000.0	999.7	1,469.0	1,446.8	1.7	4.9	-125.07	-96.3	-2,826.8	2,867.8	2,862.2	5.52	519.372		
1,100.0	1,099.4	1,555.9	1,531.9	1.9	5.3	-124.91	-83.1	-2,815.0	2,857.3	2,851.3	5.97	478.362		
1,200.0	1,199.2	1,691.6	1,664.8	2.1	5.8	-124.71	-65.1	-2,794.9	2,845.5	2,838.9	6.56	433.900		
1,300.0	1,299.0	1,765.1	1,736.7	2.3	6.1	-124.58	-54.1	-2,784.3	2,834.3	2,827.3	6.99	405.679		
1,400.0	1,398.8	2,008.2	1,973.9	2.5	7.1	-124.13	-17.6	-2,745.6	2,822.4	2,814.5	7.95	355.241		
1,500.0	1,498.5	2,103.6	2,066.6	2.7	7.6	-123.98	-4.3	-2,727.6	2,806.9	2,798.4	8.43	332.955		
1,600.0	1,598.3	2,226.3	2,185.7	2.9	8.1	-123.77	13.1	-2,703.4	2,790.4	2,781.4	9.01	309.683		
1,700.0	1,698.1	2,311.4	2,268.2	3.2	8.5	-123.62	25.5	-2,686.8	2,774.1	2,764.6	9.48	292.707		
1,800.0	1,797.8	2,384.1	2,338.8	3.4	8.8	-123.49	36.0	-2,673.0	2,758.5	2,748.6	9.90	278.512		
1,900.0	1,897.6	2,450.2	2,403.1	3.6	9.1	-123.37	45.4	-2,661.1	2,744.0	2,733.7	10.31	266.132		
2,000.0	1,997.4	2,517.0	2,468.3	3.8	9.4	-123.25	55.0	-2,650.0	2,730.7	2,720.0	10.72	254.700		
2,100.0	2,097.1	2,581.0	2,531.0	4.0	9.6	-123.16	62.9	-2,640.1	2,718.7	2,707.6	11.08	245.461		
2,200.0	2,196.9	2,657.5	2,606.3	4.2	9.9	-123.09	70.5	-2,629.1	2,707.8	2,696.3	11.48	235.941		
2,300.0	2,296.7	2,825.8	2,771.4	4.4	10.6	-122.85	91.5	-2,603.7	2,696.4	2,684.3	12.17	221.480		
2,400.0	2,396.5	2,924.8	2,868.2	4.6	11.0	-122.72	103.0	-2,587.0	2,683.0	2,670.4	12.65	212.174		
2,500.0	2,496.2	2,990.5	2,932.7	4.8	11.2	-122.65	110.1	-2,576.4	2,670.5	2,657.5	13.01	205.202		
2,600.0	2,596.0	3,087.9	3,028.6	5.0	11.6	-122.56	119.9	-2,562.0	2,659.3	2,645.8	13.48	197.273		
2,700.0	2,695.8	3,216.7	3,154.4	5.2	12.1	-122.33	137.6	-2,541.1	2,646.5	2,632.4	14.11	187.597		
2,800.0	2,795.5	3,329.9	3,264.9	5.4	12.6	-122.13	153.0	-2,521.9	2,633.1	2,618.4	14.66	179.665		
2,900.0	2,895.3	3,404.4	3,337.7	5.6	12.9	-122.01	162.8	-2,509.7	2,620.3	2,605.2	15.09	173.603		
3,000.0	2,995.1	3,596.2	3,524.2	5.9	13.8	-121.59	192.3	-2,475.7	2,606.2	2,590.2	15.99	163.016		
3,100.0	3,094.9	3,652.0	3,578.2	6.1	14.0	-121.45	201.2	-2,465.2	2,591.1	2,574.7	16.39	158.069		
3,200.0	3,194.6	3,700.0	3,624.9	6.3	14.2	-121.34	208.6	-2,457.1	2,577.8	2,561.0	16.75	153.867		
3,300.0	3,294.4	3,751.4	3,675.2	6.5	14.4	-121.24	215.9	-2,449.4	2,566.5	2,549.4	17.12	149.890		
3,400.0	3,394.2	3,826.0	3,748.5	6.7	14.7	-121.11	225.7	-2,439.2	2,556.6	2,539.0	17.56	145.619		
3,500.0	3,493.9	3,870.3	3,792.1	6.9	14.8	-121.04	231.3	-2,433.9	2,548.2	2,530.3	17.89	142.433		
3,600.0	3,593.7	3,914.0	3,835.2	7.1	15.0	-120.98	236.6	-2,429.5	2,542.0	2,523.8	18.22	139.497		
3,700.0	3,693.5	3,971.5	3,892.2	7.3	15.1	-120.90	243.2	-2,424.8	2,537.7	2,519.1	18.58	136.600		
3,800.0	3,793.2	4,031.7	3,951.9	7.5	15.3	-120.84	249.3	-2,421.0	2,535.1	2,516.2	18.93	133.927		
3,900.0	3,893.0	4,088.0	4,007.9	7.7	15.4	-120.80	254.3	-2,418.2	2,534.0	2,514.7	19.26	131.555		
3,965.3	3,958.2	4,146.8	4,066.6	7.9	15.5	-120.78	258.6	-2,415.9	2,533.8	2,514.3	19.51	129.901 CC		
4,000.0	3,992.8	4,175.0	4,094.7	8.0	15.5	-120.77	260.4	-2,414.9	2,533.9	2,514.3	19.63	129.096 ES		
4,100.0	4,092.6	4,263.0	4,182.5	8.2	15.7	-120.79	264.5	-2,412.4	2,534.6	2,514.6	19.97	126.932		
4,200.0	4,192.3	4,350.0	4,269.4	8.4	15.8	-120.83	267.8	-2,410.4	2,535.9	2,515.6	20.30	124.917		
4,300.0	4,292.1	4,416.8	4,336.2	8.6	15.9	-120.87	270.1	-2,409.5	2,538.1	2,517.5	20.60	123.202		
4,400.0	4,391.9	4,522.8	4,442.1	8.8	16.0	-120.96	272.3	-2,408.7	2,540.8	2,519.9	20.91	121.485		
4,500.0	4,491.6	4,607.3	4,526.7	9.0	16.0	-121.07	272.2	-2,408.0	2,543.6	2,522.4	21.19	120.028		
4,600.0	4,591.4	4,699.0	4,618.4	9.2	16.1	-121.19	272.1	-2,408.0	2,547.0	2,525.5	21.47	118.605		
4,700.0	4,691.2	4,773.7	4,693.1	9.4	16.2	-121.30	271.8	-2,408.4	2,551.0	2,529.3	21.74	117.356		
4,800.0	4,790.9	4,856.1	4,775.4	9.6	16.2	-121.41	271.2	-2,409.4	2,555.7	2,533.7	22.01	116.138		
4,900.0	4,890.7	4,958.0	4,877.3	9.8	16.3	-121.57	270.2	-2,411.0	2,560.9	2,538.6	22.29	114.910		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,990.5	5,063.7	4,983.0	10.1	16.4	-121.74	268.8	-2,412.4	2,565.7	2,543.2	22.57	113.687		
5,100.0	5,090.3	5,160.9	5,080.2	10.3	16.4	-121.89	267.5	-2,413.7	2,570.6	2,547.8	22.85	112.491		
5,200.0	5,190.0	5,258.8	5,178.0	10.5	16.5	-122.04	266.5	-2,415.0	2,575.6	2,552.4	23.14	111.308		
5,300.0	5,289.8	5,357.8	5,277.0	10.7	16.6	-122.19	265.6	-2,416.4	2,580.6	2,557.2	23.43	110.123		
5,400.0	5,389.6	5,460.8	5,380.1	10.9	16.7	-122.33	265.0	-2,417.9	2,585.6	2,561.9	23.74	108.916		
5,500.0	5,489.3	5,566.7	5,485.9	11.1	16.7	-122.47	264.8	-2,419.1	2,590.4	2,566.4	24.05	107.693		
5,600.0	5,589.1	5,661.0	5,580.2	11.3	16.8	-122.59	265.0	-2,420.2	2,595.2	2,570.8	24.36	106.519		
5,700.0	5,688.9	5,755.4	5,674.6	11.5	16.9	-122.70	265.3	-2,421.5	2,600.3	2,575.6	24.68	105.376		
5,800.0	5,788.7	5,857.7	5,776.9	11.7	17.0	-122.81	266.0	-2,423.0	2,605.3	2,580.3	25.00	104.199		
5,900.0	5,888.4	5,960.5	5,879.7	11.9	17.1	-122.92	266.8	-2,424.3	2,610.4	2,585.0	25.33	103.036		
6,000.0	5,988.2	6,064.1	5,983.3	12.2	17.2	-123.03	267.9	-2,425.6	2,615.2	2,589.6	25.67	101.879		
6,100.0	6,088.0	6,169.8	6,088.9	12.4	17.4	-123.13	269.2	-2,426.6	2,619.9	2,593.9	26.02	100.701		
6,200.0	6,187.7	6,275.9	6,195.1	12.6	17.5	-123.22	271.1	-2,427.5	2,624.4	2,598.0	26.37	99.523		
6,300.0	6,287.5	6,375.0	6,294.1	12.8	17.6	-123.30	272.9	-2,428.1	2,628.8	2,602.1	26.71	98.421		
6,400.0	6,387.3	6,472.5	6,391.7	13.0	17.7	-123.39	274.5	-2,428.8	2,633.2	2,606.1	27.05	97.360		
6,500.0	6,487.0	6,566.6	6,485.7	13.2	17.8	-123.47	275.9	-2,429.7	2,637.8	2,610.4	27.38	96.353		
6,600.0	6,586.8	6,665.7	6,584.8	13.4	17.9	-123.56	277.3	-2,430.7	2,642.5	2,614.8	27.72	95.345		
6,700.0	6,686.6	6,771.4	6,690.4	13.6	18.1	-123.65	279.0	-2,431.7	2,647.2	2,619.1	28.07	94.313		
6,787.0	6,773.4	6,859.2	6,778.3	13.8	18.2	-123.73	280.4	-2,432.3	2,651.1	2,622.7	28.36	93.466		
6,800.0	6,786.4	6,872.2	6,791.2	13.8	18.2	-134.31	280.6	-2,432.4	2,651.6	2,623.2	28.40	93.369		
6,850.0	6,836.3	6,922.0	6,841.0	13.9	18.3	138.39	281.3	-2,432.8	2,653.8	2,625.3	28.52	93.062		
6,900.0	6,886.2	6,972.4	6,891.4	14.0	18.3	108.45	281.8	-2,433.2	2,655.9	2,627.3	28.62	92.796		
6,950.0	6,935.7	7,035.6	6,954.7	14.0	18.4	100.68	282.6	-2,433.5	2,657.8	2,629.1	28.75	92.443		
7,000.0	6,984.6	7,097.9	7,016.9	14.0	18.5	97.44	283.8	-2,433.5	2,659.4	2,630.5	28.87	92.105		
7,050.0	7,032.6	7,156.1	7,075.1	14.0	18.6	95.80	285.3	-2,433.2	2,660.7	2,631.8	28.98	91.810		
7,100.0	7,079.7	7,204.4	7,123.4	13.9	18.7	94.88	286.6	-2,432.8	2,662.0	2,633.0	29.06	91.616		
7,150.0	7,125.4	7,251.3	7,170.3	13.9	18.7	94.38	287.9	-2,432.5	2,663.4	2,634.3	29.12	91.458		
7,200.0	7,169.6	7,296.5	7,215.5	13.8	18.8	94.14	289.1	-2,432.1	2,664.9	2,635.7	29.18	91.333		
7,250.0	7,212.1	7,338.2	7,257.1	13.8	18.9	94.05	290.2	-2,431.7	2,666.6	2,637.4	29.22	91.253		
7,300.0	7,252.6	7,376.3	7,295.2	13.7	18.9	94.03	291.2	-2,431.4	2,668.7	2,639.4	29.26	91.211		
7,350.0	7,291.0	7,412.4	7,331.3	13.7	19.0	94.06	292.0	-2,431.1	2,671.2	2,641.9	29.30	91.177		
7,400.0	7,327.1	7,446.2	7,365.1	13.7	19.0	94.12	292.8	-2,430.9	2,674.2	2,644.9	29.34	91.136		
7,450.0	7,360.7	7,477.6	7,396.5	13.7	19.1	94.16	293.5	-2,430.7	2,677.8	2,648.4	29.40	91.073		
7,500.0	7,391.6	7,509.1	7,428.0	13.7	19.1	94.21	294.2	-2,430.5	2,682.1	2,652.6	29.49	90.946		
7,550.0	7,419.7	7,540.3	7,459.2	13.8	19.1	94.25	294.9	-2,430.3	2,687.0	2,657.4	29.61	90.741		
7,600.0	7,444.8	7,568.1	7,487.0	13.9	19.2	94.21	295.6	-2,430.0	2,692.7	2,663.0	29.76	90.468		
7,650.0	7,466.9	7,592.2	7,511.1	14.1	19.2	94.08	296.1	-2,429.8	2,699.2	2,669.3	29.95	90.113		
7,700.0	7,485.8	7,612.7	7,531.5	14.3	19.3	93.83	296.6	-2,429.5	2,706.6	2,676.4	30.19	89.666		
7,750.0	7,501.5	7,629.3	7,548.2	14.6	19.3	93.45	297.0	-2,429.3	2,714.8	2,684.3	30.46	89.123		
7,800.0	7,513.7	7,642.1	7,560.9	14.9	19.3	92.93	297.3	-2,429.2	2,723.9	2,693.2	30.78	88.486		
7,850.0	7,522.6	7,650.9	7,569.7	15.2	19.3	92.28	297.5	-2,429.1	2,734.0	2,702.8	31.15	87.765		
7,900.0	7,528.0	7,655.8	7,574.6	15.6	19.3	91.47	297.6	-2,429.0	2,744.9	2,713.3	31.56	86.974		
7,952.9	7,530.0	7,656.6	7,575.4	16.1	19.3	90.46	297.6	-2,429.0	2,757.3	2,725.3	32.03	86.081		
8,000.0	7,530.0	7,655.3	7,574.1	16.5	19.3	90.43	297.6	-2,429.0	2,769.1	2,736.6	32.48	85.245		
8,100.0	7,530.0	7,652.6	7,571.4	17.5	19.3	90.37	297.5	-2,429.0	2,796.7	2,763.1	33.54	83.386		
8,200.0	7,530.0	7,649.9	7,568.7	18.7	19.3	90.32	297.5	-2,429.1	2,827.5	2,792.8	34.70	81.480		
8,300.0	7,530.0	7,647.2	7,566.0	19.9	19.3	90.26	297.4	-2,429.1	2,861.5	2,825.6	35.95	79.590		
8,400.0	7,530.0	7,644.5	7,563.3	21.2	19.3	90.20	297.3	-2,429.1	2,898.6	2,861.3	37.28	77.758		
8,500.0	7,530.0	7,641.8	7,560.7	22.6	19.3	90.14	297.3	-2,429.2	2,938.5	2,899.9	38.66	76.011		
8,600.0	7,530.0	7,639.1	7,558.0	24.0	19.3	90.09	297.2	-2,429.2	2,981.3	2,941.2	40.09	74.364		
8,700.0	7,530.0	7,636.5	7,555.3	25.4	19.3	90.03	297.1	-2,429.3	3,026.8	2,985.3	41.56	72.825		
8,800.0	7,530.0	7,633.8	7,552.7	26.9	19.3	89.97	297.1	-2,429.3	3,074.9	3,031.8	43.07	71.395		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,631.2	7,550.0	28.4	19.3	89.91	297.0	-2,429.3	3,125.4	3,080.8	44.60	70.072		
9,000.0	7,530.0	7,628.5	7,547.4	30.0	19.3	89.86	297.0	-2,429.4	3,178.3	3,132.2	46.16	68.853		
9,100.0	7,530.0	7,625.9	7,544.7	31.5	19.3	89.80	296.9	-2,429.4	3,233.4	3,185.7	47.74	67.731		
9,200.0	7,530.0	7,623.2	7,542.1	33.1	19.3	89.74	296.8	-2,429.4	3,290.6	3,241.3	49.34	66.700		
9,300.0	7,530.0	7,620.6	7,539.5	34.7	19.3	89.69	296.8	-2,429.5	3,349.9	3,298.9	50.95	65.754		
9,400.0	7,530.0	7,618.0	7,536.9	36.3	19.3	89.63	296.7	-2,429.5	3,411.0	3,358.4	52.57	64.886		
9,500.0	7,530.0	7,615.4	7,534.2	38.0	19.3	89.58	296.7	-2,429.5	3,473.9	3,419.7	54.20	64.091		
9,600.0	7,530.0	7,612.8	7,531.6	39.6	19.3	89.52	296.6	-2,429.5	3,538.6	3,482.7	55.85	63.361		
9,700.0	7,530.0	7,610.2	7,529.0	41.3	19.3	89.47	296.5	-2,429.6	3,604.8	3,547.3	57.50	62.692		
9,800.0	7,530.0	7,607.6	7,526.4	42.9	19.3	89.41	296.5	-2,429.6	3,672.6	3,613.4	59.16	62.078		
9,900.0	7,530.0	7,605.0	7,523.9	44.6	19.2	89.35	296.4	-2,429.6	3,741.8	3,681.0	60.83	61.514		
10,000.0	7,530.0	7,602.4	7,521.3	46.3	19.2	89.30	296.4	-2,429.7	3,812.4	3,749.9	62.50	60.996		
10,100.0	7,530.0	7,599.8	7,518.7	47.9	19.2	89.24	296.3	-2,429.7	3,884.3	3,820.1	64.18	60.521		
10,200.0	7,530.0	7,597.3	7,516.1	49.6	19.2	89.19	296.2	-2,429.7	3,957.4	3,891.5	65.86	60.084		
10,300.0	7,530.0	7,594.7	7,513.6	51.3	19.2	89.13	296.2	-2,429.8	4,031.6	3,964.1	67.55	59.682		
10,400.0	7,530.0	7,592.2	7,511.0	53.0	19.2	89.08	296.1	-2,429.8	4,106.9	4,037.7	69.24	59.312		
10,500.0	7,530.0	7,589.6	7,508.5	54.7	19.2	89.03	296.1	-2,429.8	4,183.3	4,112.4	70.94	58.972		
10,600.0	7,530.0	7,587.1	7,505.9	56.4	19.2	88.97	296.0	-2,429.8	4,260.7	4,188.0	72.64	58.658		
10,700.0	7,530.0	7,584.5	7,503.4	58.1	19.2	88.92	295.9	-2,429.9	4,338.9	4,264.6	74.34	58.368		
10,800.0	7,530.0	7,582.0	7,500.9	59.8	19.2	88.86	295.9	-2,429.9	4,418.1	4,342.0	76.04	58.102		
10,900.0	7,530.0	7,579.5	7,498.4	61.5	19.2	88.81	295.8	-2,429.9	4,498.1	4,420.3	77.75	57.855		
11,000.0	7,530.0	7,577.0	7,495.8	63.2	19.2	88.75	295.8	-2,429.9	4,578.8	4,499.4	79.46	57.628		
11,100.0	7,530.0	7,574.5	7,493.3	64.9	19.2	88.70	295.7	-2,430.0	4,660.3	4,579.2	81.17	57.418		
11,200.0	7,530.0	7,572.0	7,490.8	66.6	19.2	88.65	295.7	-2,430.0	4,742.5	4,659.7	82.88	57.224		
11,300.0	7,530.0	7,569.5	7,488.3	68.4	19.2	88.59	295.6	-2,430.0	4,825.4	4,740.8	84.59	57.044		
11,400.0	7,530.0	7,567.0	7,485.8	70.1	19.2	88.54	295.5	-2,430.0	4,909.0	4,822.7	86.31	56.878		
11,500.0	7,530.0	7,564.5	7,483.4	71.8	19.2	88.49	295.5	-2,430.1	4,993.1	4,905.1	88.02	56.725		
11,600.0	7,530.0	7,562.0	7,480.9	73.5	19.2	88.43	295.4	-2,430.1	5,077.8	4,988.0	89.74	56.583		
11,700.0	7,530.0	7,559.5	7,478.4	75.2	19.2	88.38	295.4	-2,430.1	5,163.0	5,071.6	91.46	56.451		
11,800.0	7,530.0	7,557.1	7,476.0	77.0	19.2	88.33	295.3	-2,430.1	5,248.8	5,155.6	93.18	56.330		
11,900.0	7,530.0	7,554.6	7,473.5	78.7	19.2	88.28	295.3	-2,430.1	5,335.1	5,240.2	94.90	56.217		
12,000.0	7,530.0	7,552.2	7,471.0	80.4	19.2	88.22	295.2	-2,430.2	5,421.8	5,325.2	96.62	56.112		
12,100.0	7,530.0	7,549.7	7,468.6	82.2	19.2	88.17	295.1	-2,430.2	5,509.0	5,410.6	98.35	56.016		
12,200.0	7,530.0	7,547.3	7,466.1	83.9	19.2	88.12	295.1	-2,430.2	5,596.6	5,496.5	100.07	55.926		
12,300.0	7,530.0	7,544.8	7,463.7	85.6	19.2	88.07	295.0	-2,430.2	5,684.6	5,582.8	101.80	55.844		
12,400.0	7,530.0	7,542.4	7,461.3	87.3	19.1	88.02	295.0	-2,430.3	5,773.0	5,669.5	103.52	55.767		
12,500.0	7,530.0	7,540.0	7,458.9	89.1	19.1	87.96	294.9	-2,430.3	5,861.8	5,756.5	105.25	55.696		
12,600.0	7,530.0	7,537.6	7,456.4	90.8	19.1	87.91	294.9	-2,430.3	5,950.9	5,843.9	106.97	55.630		
12,700.0	7,530.0	7,535.1	7,454.0	92.5	19.1	87.86	294.8	-2,430.3	6,040.4	5,931.7	108.70	55.569		
12,800.0	7,530.0	7,532.7	7,451.6	94.3	19.1	87.81	294.8	-2,430.3	6,130.2	6,019.8	110.43	55.513		
12,900.0	7,530.0	7,530.3	7,449.2	96.0	19.1	87.76	294.7	-2,430.3	6,220.3	6,108.1	112.16	55.461		
13,000.0	7,530.0	7,527.9	7,446.8	97.8	19.1	87.71	294.7	-2,430.4	6,310.7	6,196.8	113.88	55.413		
13,100.0	7,530.0	7,525.6	7,444.4	99.5	19.1	87.66	294.6	-2,430.4	6,401.4	6,285.8	115.61	55.369		
13,200.0	7,530.0	7,523.2	7,442.1	101.2	19.1	87.60	294.6	-2,430.4	6,492.4	6,375.0	117.34	55.329		
13,300.0	7,530.0	7,520.8	7,439.7	103.0	19.1	87.55	294.5	-2,430.4	6,583.6	6,464.5	119.07	55.291		
13,400.0	7,530.0	7,518.4	7,437.3	104.7	19.1	87.50	294.4	-2,430.4	6,675.1	6,554.3	120.80	55.257		
13,500.0	7,530.0	7,516.1	7,434.9	106.4	19.1	87.45	294.4	-2,430.5	6,766.8	6,644.2	122.53	55.225		
13,600.0	7,530.0	7,513.7	7,432.6	108.2	19.1	87.40	294.3	-2,430.5	6,858.7	6,734.4	124.26	55.196		
13,700.0	7,530.0	7,511.3	7,430.2	109.9	19.1	87.35	294.3	-2,430.5	6,950.9	6,824.9	125.99	55.169		
13,800.0	7,530.0	7,509.0	7,427.9	111.7	19.1	87.30	294.2	-2,430.5	7,043.3	6,915.5	127.72	55.145		
13,900.0	7,530.0	7,506.6	7,425.5	113.4	19.1	87.25	294.2	-2,430.5	7,135.8	7,006.4	129.45	55.123		
14,000.0	7,530.0	7,504.3	7,423.2	115.1	19.1	87.20	294.1	-2,430.5	7,228.6	7,097.4	131.18	55.103		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,100.0	7,530.0	7,502.0	7,420.9	116.9	19.1	87.15	294.1	-2,430.5	7,321.6	7,188.7	132.91	55.085		
14,200.0	7,530.0	7,499.6	7,418.5	118.6	19.1	87.10	294.0	-2,430.6	7,414.7	7,280.1	134.65	55.068		
14,300.0	7,530.0	7,497.3	7,416.2	120.4	19.1	87.05	294.0	-2,430.6	7,508.1	7,371.7	136.38	55.054		
14,400.0	7,530.0	7,495.0	7,413.9	122.1	19.1	87.00	293.9	-2,430.6	7,601.6	7,463.5	138.11	55.040		
14,500.0	7,530.0	7,492.7	7,411.6	123.9	19.1	86.95	293.9	-2,430.6	7,695.2	7,555.4	139.84	55.029		
14,600.0	7,530.0	7,490.1	7,409.0	125.6	19.1	86.90	293.8	-2,430.6	7,789.1	7,647.5	141.57	55.019		
14,700.0	7,530.0	7,487.5	7,406.4	127.3	19.1	86.84	293.8	-2,430.6	7,883.0	7,739.7	143.30	55.010		
14,800.0	7,530.0	7,484.9	7,403.8	129.1	19.1	86.79	293.7	-2,430.7	7,977.1	7,832.1	145.03	55.003		
14,900.0	7,530.0	7,482.3	7,401.2	130.8	19.1	86.73	293.7	-2,430.7	8,071.4	7,924.6	146.76	54.997		
15,000.0	7,530.0	7,479.7	7,398.6	132.6	19.1	86.68	293.6	-2,430.7	8,165.8	8,017.3	148.49	54.992		
15,100.0	7,530.0	7,477.1	7,396.0	134.3	19.1	86.62	293.5	-2,430.7	8,260.3	8,110.1	150.22	54.988		
15,200.0	7,530.0	7,474.4	7,393.3	136.1	19.0	86.56	293.5	-2,430.7	8,355.0	8,203.0	151.95	54.985		
15,300.0	7,530.0	7,471.7	7,390.6	137.8	19.0	86.51	293.4	-2,430.7	8,449.7	8,296.0	153.68	54.983		
15,400.0	7,530.0	7,469.1	7,388.0	139.6	19.0	86.45	293.4	-2,430.7	8,544.6	8,389.2	155.41	54.982		
15,500.0	7,530.0	7,466.3	7,385.2	141.3	19.0	86.39	293.3	-2,430.8	8,639.6	8,482.5	157.14	54.982 SF		
15,600.0	7,530.0	7,463.6	7,382.5	143.0	19.0	86.33	293.2	-2,430.8	8,734.7	8,575.9	158.87	54.982		
15,700.0	7,530.0	7,460.9	7,379.8	144.8	19.0	86.28	293.2	-2,430.8	8,830.0	8,669.4	160.59	54.983		
15,800.0	7,530.0	7,458.1	7,377.0	146.5	19.0	86.22	293.1	-2,430.8	8,925.3	8,763.0	162.32	54.985		
15,900.0	7,530.0	7,455.4	7,374.3	148.3	19.0	86.16	293.0	-2,430.8	9,020.7	8,856.7	164.05	54.988		
16,000.0	7,530.0	7,452.6	7,371.5	150.0	19.0	86.10	293.0	-2,430.9	9,116.2	8,950.5	165.78	54.991		
16,100.0	7,530.0	7,449.8	7,368.7	151.8	19.0	86.04	292.9	-2,430.9	9,211.9	9,044.4	167.50	54.995		
16,200.0	7,530.0	7,446.9	7,365.8	153.5	19.0	85.98	292.9	-2,430.9	9,307.6	9,138.3	169.23	55.000		
16,300.0	7,530.0	7,444.1	7,363.0	155.3	19.0	85.92	292.8	-2,430.9	9,403.4	9,232.4	170.96	55.005		
16,400.0	7,530.0	7,441.2	7,360.1	157.0	19.0	85.86	292.7	-2,430.9	9,499.3	9,326.6	172.68	55.010		
16,500.0	7,530.0	7,438.3	7,357.2	158.8	19.0	85.80	292.7	-2,431.0	9,595.2	9,420.8	174.41	55.016		
16,600.0	7,530.0	7,435.4	7,354.3	160.5	19.0	85.73	292.6	-2,431.0	9,691.3	9,515.1	176.13	55.023		
16,700.0	7,530.0	7,432.5	7,351.4	162.3	19.0	85.67	292.5	-2,431.0	9,787.4	9,609.5	177.86	55.030		
16,800.0	7,530.0	7,429.6	7,348.5	164.0	19.0	85.61	292.4	-2,431.0	9,883.6	9,704.0	179.58	55.037		
16,900.0	7,530.0	7,426.6	7,345.5	165.8	19.0	85.55	292.4	-2,431.0	9,979.9	9,798.6	181.30	55.045		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-127.53	-188.3	-245.2	309.2					
100.0	100.0	97.0	97.0	0.2	0.2	-127.53	-188.3	-245.2	309.1	308.8	0.32	962.054		
200.0	200.0	197.0	197.0	0.3	0.3	-127.53	-188.3	-245.2	309.1	308.5	0.67	461.134		
300.0	300.0	297.0	297.0	0.5	0.5	-127.53	-188.3	-245.2	309.1	308.1	1.02	303.242		
400.0	400.0	397.0	397.0	0.7	0.7	-127.53	-188.3	-245.2	309.1	307.8	1.37	225.896		
500.0	500.0	497.0	497.0	0.8	0.9	-127.53	-188.3	-245.2	309.1	307.4	1.72	179.987		
600.0	600.0	597.0	597.0	1.0	1.0	-127.53	-188.3	-245.2	309.1	307.1	2.07	149.587	CC, ES	
700.0	700.0	697.0	697.0	1.2	1.2	-160.06	-188.3	-245.2	310.0	307.5	2.42	128.321		
800.0	800.0	797.0	797.0	1.4	1.4	-160.21	-188.3	-245.2	312.4	309.7	2.76	113.028		
900.0	899.9	896.9	896.9	1.6	1.6	-160.47	-188.3	-245.2	316.5	313.4	3.11	101.694		
988.4	988.1	985.1	985.1	1.7	1.7	-160.77	-188.3	-245.2	321.5	318.1	3.42	94.001		
1,000.0	999.7	996.7	996.7	1.7	1.7	-160.81	-188.3	-245.2	322.3	318.8	3.46	93.112		
1,100.0	1,099.4	1,096.4	1,096.4	1.9	1.9	-161.20	-188.3	-245.2	328.7	324.9	3.81	86.229		
1,200.0	1,199.2	1,196.2	1,196.2	2.1	2.1	-161.57	-188.3	-245.2	335.1	330.9	4.16	80.506		
1,300.0	1,299.0	1,296.0	1,296.0	2.3	2.3	-161.93	-188.3	-245.2	341.5	337.0	4.51	75.674		
1,400.0	1,398.8	1,395.8	1,395.8	2.5	2.4	-162.28	-188.3	-245.2	348.0	343.1	4.86	71.542		
1,500.0	1,498.5	1,495.5	1,495.5	2.7	2.6	-162.61	-188.3	-245.2	354.5	349.2	5.21	67.969		
1,600.0	1,598.3	1,595.3	1,595.3	2.9	2.8	-162.93	-188.3	-245.2	360.9	355.4	5.57	64.848		
1,700.0	1,698.1	1,695.1	1,695.1	3.2	3.0	-163.24	-188.3	-245.2	367.4	361.5	5.92	62.101		
1,800.0	1,797.8	1,794.8	1,794.8	3.4	3.1	-163.54	-188.3	-245.2	373.9	367.6	6.27	59.663		
1,900.0	1,897.6	1,894.6	1,894.6	3.6	3.3	-163.83	-188.3	-245.2	380.4	373.8	6.62	57.486		
2,000.0	1,997.4	1,994.4	1,994.4	3.8	3.5	-164.11	-188.3	-245.2	386.9	379.9	6.97	55.530		
2,100.0	2,097.1	2,094.1	2,094.1	4.0	3.7	-164.38	-188.3	-245.2	393.4	386.1	7.32	53.763		
2,200.0	2,196.9	2,193.9	2,193.9	4.2	3.8	-164.64	-188.3	-245.2	400.0	392.3	7.67	52.159		
2,300.0	2,296.7	2,293.7	2,293.7	4.4	4.0	-164.89	-188.3	-245.2	406.5	398.5	8.02	50.697		
2,400.0	2,396.5	2,393.5	2,393.5	4.6	4.2	-165.14	-188.3	-245.2	413.0	404.7	8.37	49.359		
2,500.0	2,496.2	2,493.2	2,493.2	4.8	4.4	-165.38	-188.3	-245.2	419.6	410.9	8.72	48.130		
2,600.0	2,596.0	2,593.0	2,593.0	5.0	4.5	-165.61	-188.3	-245.2	426.2	417.1	9.07	46.996		
2,700.0	2,695.8	2,692.8	2,692.8	5.2	4.7	-165.83	-188.3	-245.2	432.7	423.3	9.42	45.948		
2,800.0	2,795.5	2,792.5	2,792.5	5.4	4.9	-166.05	-188.3	-245.2	439.3	429.5	9.77	44.976		
2,900.0	2,895.3	2,892.3	2,892.3	5.6	5.0	-166.26	-188.3	-245.2	445.9	435.8	10.12	44.072		
3,000.0	2,995.1	2,992.1	2,992.1	5.9	5.2	-166.46	-188.3	-245.2	452.5	442.0	10.47	43.229		
3,100.0	3,094.9	3,091.9	3,091.9	6.1	5.4	-166.66	-188.3	-245.2	459.0	448.2	10.82	42.442		
3,200.0	3,194.6	3,191.6	3,191.6	6.3	5.6	-166.85	-188.3	-245.2	465.6	454.5	11.17	41.704		
3,300.0	3,294.4	3,291.4	3,291.4	6.5	5.7	-167.04	-188.3	-245.2	472.2	460.7	11.51	41.012		
3,400.0	3,394.2	3,391.2	3,391.2	6.7	5.9	-167.22	-188.3	-245.2	478.8	467.0	11.86	40.361		
3,500.0	3,493.9	3,490.9	3,490.9	6.9	6.1	-167.39	-188.3	-245.2	485.4	473.2	12.21	39.748		
3,600.0	3,593.7	3,590.7	3,590.7	7.1	6.3	-167.57	-188.3	-245.2	492.1	479.5	12.56	39.170		
3,700.0	3,693.5	3,690.5	3,690.5	7.3	6.4	-167.73	-188.3	-245.2	498.7	485.8	12.91	38.623		
3,800.0	3,793.2	3,790.2	3,790.2	7.5	6.6	-167.90	-188.3	-245.2	505.3	492.0	13.26	38.106		
3,900.0	3,893.0	3,890.0	3,890.0	7.7	6.8	-168.06	-188.3	-245.2	511.9	498.3	13.61	37.616		
4,000.0	3,992.8	3,989.8	3,989.8	8.0	7.0	-168.21	-188.3	-245.2	518.6	504.6	13.96	37.150		
4,100.0	4,092.6	4,089.6	4,089.6	8.2	7.1	-168.36	-188.3	-245.2	525.2	510.9	14.31	36.708		
4,200.0	4,192.3	4,189.3	4,189.3	8.4	7.3	-168.51	-188.3	-245.2	531.8	517.2	14.66	36.286		
4,300.0	4,292.1	4,289.1	4,289.1	8.6	7.5	-168.65	-188.3	-245.2	538.5	523.5	15.01	35.885		
4,400.0	4,391.9	4,388.9	4,388.9	8.8	7.7	-168.79	-188.3	-245.2	545.1	529.8	15.35	35.503		
4,500.0	4,491.6	4,488.6	4,488.6	9.0	7.8	-168.93	-188.3	-245.2	551.8	536.1	15.70	35.137		
4,600.0	4,591.4	4,588.4	4,588.4	9.2	8.0	-169.06	-188.3	-245.2	558.4	542.4	16.05	34.788		
4,700.0	4,691.2	4,688.2	4,688.2	9.4	8.2	-169.19	-188.3	-245.2	565.1	548.7	16.40	34.454		
4,800.0	4,790.9	4,787.9	4,787.9	9.6	8.4	-169.32	-188.3	-245.2	571.7	555.0	16.75	34.134		
4,900.0	4,890.7	4,887.7	4,887.7	9.8	8.5	-169.45	-188.3	-245.2	578.4	561.3	17.10	33.827		
5,000.0	4,990.5	4,987.5	4,987.5	10.1	8.7	-169.57	-188.3	-245.2	585.0	567.6	17.45	33.533		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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
5,100.0	5,090.3	5,087.3	5,087.3	10.3	8.9	-169.69	-188.3	-245.2	591.7	573.9	17.80	33.250	
5,200.0	5,190.0	5,187.0	5,187.0	10.5	9.1	-169.80	-188.3	-245.2	598.4	580.2	18.14	32.978	
5,300.0	5,289.8	5,286.8	5,286.8	10.7	9.2	-169.92	-188.3	-245.2	605.0	586.5	18.49	32.717	
5,400.0	5,389.6	5,386.6	5,386.6	10.9	9.4	-170.03	-188.3	-245.2	611.7	592.9	18.84	32.466	
5,500.0	5,489.3	5,486.3	5,486.3	11.1	9.6	-170.14	-188.3	-245.2	618.4	599.2	19.19	32.224	
5,600.0	5,589.1	5,586.1	5,586.1	11.3	9.7	-170.24	-188.3	-245.2	625.0	605.5	19.54	31.991	
5,700.0	5,688.9	5,685.9	5,685.9	11.5	9.9	-170.35	-188.3	-245.2	631.7	611.8	19.89	31.766	
5,800.0	5,788.7	5,785.7	5,785.7	11.7	10.1	-170.45	-188.3	-245.2	638.4	618.2	20.24	31.548	
5,900.0	5,888.4	5,885.4	5,885.4	11.9	10.3	-170.55	-188.3	-245.2	645.1	624.5	20.58	31.339	
6,000.0	5,988.2	5,985.2	5,985.2	12.2	10.4	-170.65	-188.3	-245.2	651.8	630.8	20.93	31.136	
6,100.0	6,088.0	6,085.0	6,085.0	12.4	10.6	-170.74	-188.3	-245.2	658.5	637.2	21.28	30.940	
6,200.0	6,187.7	6,184.7	6,184.7	12.6	10.8	-170.83	-188.3	-245.2	665.1	643.5	21.63	30.751	
6,300.0	6,287.5	6,284.5	6,284.5	12.8	11.0	-170.93	-188.3	-245.2	671.8	649.8	21.98	30.568	
6,400.0	6,387.3	6,384.3	6,384.3	13.0	11.1	-171.02	-188.3	-245.2	678.5	656.2	22.33	30.390	
6,500.0	6,487.0	6,484.0	6,484.0	13.2	11.3	-171.11	-188.3	-245.2	685.2	662.5	22.68	30.218	
6,600.0	6,586.8	6,583.8	6,583.8	13.4	11.5	-171.19	-188.3	-245.2	691.9	668.9	23.02	30.052	
6,700.0	6,686.6	6,683.6	6,683.6	13.6	11.7	-171.28	-188.3	-245.2	698.6	675.2	23.37	29.890	
6,787.0	6,773.4	6,770.4	6,770.4	13.8	11.8	-171.35	-188.3	-245.2	704.4	680.7	23.68	29.753	
6,800.0	6,786.4	6,783.4	6,783.4	13.8	11.8	178.08	-188.3	-245.2	705.2	681.5	23.73	29.722	
6,850.0	6,836.3	6,833.3	6,833.3	13.9	11.9	90.98	-188.3	-245.2	706.6	682.7	23.90	29.568	
6,900.0	6,886.2	6,883.2	6,883.2	14.0	12.0	61.47	-188.3	-245.2	705.3	681.3	24.02	29.358	
6,950.0	6,935.7	6,932.7	6,932.7	14.0	12.1	54.33	-188.3	-245.2	701.5	677.3	24.11	29.091	
7,000.0	6,984.6	6,981.6	6,981.6	14.0	12.2	51.92	-188.3	-245.2	695.1	670.9	24.17	28.762	
7,050.0	7,032.6	7,029.6	7,029.6	14.0	12.3	51.39	-188.3	-245.2	686.4	662.2	24.20	28.363	
7,100.0	7,079.7	7,076.7	7,076.7	13.9	12.4	51.91	-188.3	-245.2	675.4	651.2	24.22	27.887	
7,150.0	7,125.4	7,122.4	7,122.4	13.9	12.4	53.18	-188.3	-245.2	662.4	638.2	24.25	27.323	
7,200.0	7,169.6	7,166.6	7,166.6	13.8	12.5	55.06	-188.3	-245.2	647.6	623.4	24.29	26.663	
7,250.0	7,212.1	7,209.1	7,209.1	13.8	12.6	57.47	-188.3	-245.2	631.3	607.0	24.37	25.905	
7,300.0	7,252.6	7,249.6	7,249.6	13.7	12.7	60.34	-188.3	-245.2	613.9	589.4	24.50	25.054	
7,350.0	7,291.0	7,288.0	7,288.0	13.7	12.7	63.61	-188.3	-245.2	595.6	570.9	24.69	24.126	
7,400.0	7,327.1	7,324.1	7,324.1	13.7	12.8	67.19	-188.3	-245.2	577.1	552.2	24.93	23.151	
7,450.0	7,360.7	7,357.7	7,357.7	13.7	12.8	70.97	-188.3	-245.2	558.8	533.6	25.21	22.166	
7,500.0	7,391.6	7,388.6	7,388.6	13.7	12.9	74.81	-188.3	-245.2	541.3	515.8	25.51	21.216	
7,550.0	7,419.7	7,416.7	7,416.7	13.8	12.9	78.55	-188.3	-245.2	525.3	499.5	25.82	20.342	
7,600.0	7,444.8	7,441.8	7,441.8	13.9	13.0	82.04	-188.3	-245.2	511.5	485.4	26.13	19.577	
7,650.0	7,466.9	7,463.9	7,463.9	14.1	13.0	85.13	-188.3	-245.2	500.6	474.1	26.42	18.945	
7,700.0	7,485.8	7,482.8	7,482.8	14.3	13.1	87.70	-188.3	-245.2	493.2	466.5	26.71	18.461	
7,750.0	7,501.5	7,498.5	7,498.5	14.6	13.1	89.65	-188.3	-245.2	489.9	462.9	27.02	18.132	
7,761.6	7,504.6	7,501.6	7,501.6	14.6	13.1	90.00	-188.3	-245.2	489.8	462.7	27.10	18.075	
7,800.0	7,513.7	7,510.7	7,510.7	14.9	13.1	90.90	-188.3	-245.2	491.2	463.8	27.35	17.957	
7,850.0	7,522.6	7,519.6	7,519.6	15.2	13.1	91.41	-188.3	-245.2	497.2	469.4	27.73	17.931 SF	
7,900.0	7,528.0	7,525.0	7,525.0	15.6	13.1	91.14	-188.3	-245.2	507.9	479.8	28.14	18.047	
7,952.9	7,530.0	7,527.0	7,527.0	16.1	13.1	90.00	-188.3	-245.2	524.1	495.5	28.62	18.316	
8,000.0	7,530.0	7,527.0	7,527.0	16.5	13.1	90.00	-188.3	-245.2	542.5	513.4	29.07	18.659	
8,100.0	7,530.0	7,527.0	7,527.0	17.5	13.1	90.00	-188.3	-245.2	592.1	561.9	30.13	19.649	
8,200.0	7,530.0	7,527.0	7,527.0	18.7	13.1	90.00	-188.3	-245.2	653.3	622.0	31.30	20.872	
8,300.0	7,530.0	7,527.0	7,527.0	19.9	13.1	90.00	-188.3	-245.2	723.2	690.7	32.56	22.214	
8,400.0	7,530.0	7,527.0	7,527.0	21.2	13.1	90.00	-188.3	-245.2	799.6	765.7	33.89	23.596	
8,500.0	7,530.0	7,527.0	7,527.0	22.6	13.1	90.00	-188.3	-245.2	880.7	845.4	35.27	24.967	
8,600.0	7,530.0	7,527.0	7,527.0	24.0	13.1	90.00	-188.3	-245.2	965.3	928.6	36.71	26.295	
8,700.0	7,530.0	7,527.0	7,527.0	25.4	13.1	90.00	-188.3	-245.2	1,052.7	1,014.5	38.19	27.566	
8,800.0	7,530.0	7,527.0	7,527.0	26.9	13.1	90.00	-188.3	-245.2	1,142.1	1,102.4	39.70	28.769	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 41-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8370-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,900.0	7,530.0	7,527.0	7,527.0	28.4	13.1	90.00	-188.3	-245.2	1,233.1	1,191.9	41.24	29.903		
9,000.0	7,530.0	7,527.0	7,527.0	30.0	13.1	90.00	-188.3	-245.2	1,325.5	1,282.7	42.80	30.968		
9,100.0	7,530.0	7,527.0	7,527.0	31.5	13.1	90.00	-188.3	-245.2	1,418.8	1,374.5	44.38	31.967		
9,200.0	7,530.0	7,527.0	7,527.0	33.1	13.1	90.00	-188.3	-245.2	1,513.1	1,467.1	45.98	32.904		
9,300.0	7,530.0	7,527.0	7,527.0	34.7	13.1	90.00	-188.3	-245.2	1,608.0	1,560.4	47.60	33.781		
9,400.0	7,530.0	7,527.0	7,527.0	36.3	13.1	90.00	-188.3	-245.2	1,703.5	1,654.3	49.23	34.604		
9,500.0	7,530.0	7,527.0	7,527.0	38.0	13.1	90.00	-188.3	-245.2	1,799.5	1,748.6	50.87	35.375		
9,600.0	7,530.0	7,527.0	7,527.0	39.6	13.1	90.00	-188.3	-245.2	1,895.9	1,843.4	52.52	36.100		
9,700.0	7,530.0	7,527.0	7,527.0	41.3	13.1	90.00	-188.3	-245.2	1,992.7	1,938.5	54.18	36.781		
9,800.0	7,530.0	7,527.0	7,527.0	42.9	13.1	90.00	-188.3	-245.2	2,089.7	2,033.9	55.84	37.422		
9,900.0	7,530.0	7,527.0	7,527.0	44.6	13.1	90.00	-188.3	-245.2	2,187.0	2,129.5	57.52	38.025		
10,000.0	7,530.0	7,527.0	7,527.0	46.3	13.1	90.00	-188.3	-245.2	2,284.6	2,225.4	59.19	38.595		
10,100.0	7,530.0	7,527.0	7,527.0	47.9	13.1	90.00	-188.3	-245.2	2,382.4	2,321.5	60.88	39.133		
10,200.0	7,530.0	7,527.0	7,527.0	49.6	13.1	90.00	-188.3	-245.2	2,480.3	2,417.7	62.57	39.642		
10,300.0	7,530.0	7,527.0	7,527.0	51.3	13.1	90.00	-188.3	-245.2	2,578.4	2,514.2	64.26	40.124		
10,400.0	7,530.0	7,527.0	7,527.0	53.0	13.1	90.00	-188.3	-245.2	2,676.7	2,610.7	65.96	40.581		
10,500.0	7,530.0	7,527.0	7,527.0	54.7	13.1	90.00	-188.3	-245.2	2,775.0	2,707.4	67.66	41.015		
10,600.0	7,530.0	7,527.0	7,527.0	56.4	13.1	90.00	-188.3	-245.2	2,873.5	2,804.1	69.36	41.427		
10,700.0	7,530.0	7,527.0	7,527.0	58.1	13.1	90.00	-188.3	-245.2	2,972.1	2,901.0	71.07	41.819		
10,800.0	7,530.0	7,527.0	7,527.0	59.8	13.1	90.00	-188.3	-245.2	3,070.8	2,998.0	72.78	42.192		
10,900.0	7,530.0	7,527.0	7,527.0	61.5	13.1	90.00	-188.3	-245.2	3,169.5	3,095.0	74.49	42.548		
11,000.0	7,530.0	7,527.0	7,527.0	63.2	13.1	90.00	-188.3	-245.2	3,268.3	3,192.1	76.21	42.887		
11,100.0	7,530.0	7,527.0	7,527.0	64.9	13.1	90.00	-188.3	-245.2	3,367.2	3,289.3	77.92	43.212		
11,200.0	7,530.0	7,527.0	7,527.0	66.6	13.1	90.00	-188.3	-245.2	3,466.2	3,386.6	79.64	43.522		
11,300.0	7,530.0	7,527.0	7,527.0	68.4	13.1	90.00	-188.3	-245.2	3,565.2	3,483.9	81.36	43.818		
11,400.0	7,530.0	7,527.0	7,527.0	70.1	13.1	90.00	-188.3	-245.2	3,664.3	3,581.2	83.09	44.102		
11,500.0	7,530.0	7,527.0	7,527.0	71.8	13.1	90.00	-188.3	-245.2	3,763.4	3,678.6	84.81	44.375		
11,600.0	7,530.0	7,527.0	7,527.0	73.5	13.1	90.00	-188.3	-245.2	3,862.6	3,776.1	86.54	44.636		
11,700.0	7,530.0	7,527.0	7,527.0	75.2	13.1	90.00	-188.3	-245.2	3,961.8	3,873.5	88.26	44.887		
11,800.0	7,530.0	7,527.0	7,527.0	77.0	13.1	90.00	-188.3	-245.2	4,061.0	3,971.1	89.99	45.128		
11,900.0	7,530.0	7,527.0	7,527.0	78.7	13.1	90.00	-188.3	-245.2	4,160.3	4,068.6	91.72	45.360		
12,000.0	7,530.0	7,527.0	7,527.0	80.4	13.1	90.00	-188.3	-245.2	4,259.6	4,166.2	93.45	45.583		
12,100.0	7,530.0	7,527.0	7,527.0	82.2	13.1	90.00	-188.3	-245.2	4,359.0	4,263.8	95.18	45.798		
12,200.0	7,530.0	7,527.0	7,527.0	83.9	13.1	90.00	-188.3	-245.2	4,458.4	4,361.5	96.91	46.005		
12,300.0	7,530.0	7,527.0	7,527.0	85.6	13.1	90.00	-188.3	-245.2	4,557.8	4,459.1	98.64	46.204		
12,400.0	7,530.0	7,527.0	7,527.0	87.3	13.1	90.00	-188.3	-245.2	4,657.2	4,556.8	100.38	46.397		
12,500.0	7,530.0	7,527.0	7,527.0	89.1	13.1	90.00	-188.3	-245.2	4,756.7	4,654.6	102.11	46.583		
12,600.0	7,530.0	7,527.0	7,527.0	90.8	13.1	90.00	-188.3	-245.2	4,856.1	4,752.3	103.85	46.762		
12,700.0	7,530.0	7,527.0	7,527.0	92.5	13.1	90.00	-188.3	-245.2	4,955.6	4,850.1	105.58	46.936		
12,800.0	7,530.0	7,527.0	7,527.0	94.3	13.1	90.00	-188.3	-245.2	5,055.2	4,947.8	107.32	47.103		
12,900.0	7,530.0	7,527.0	7,527.0	96.0	13.1	90.00	-188.3	-245.2	5,154.7	5,045.6	109.06	47.266		
13,000.0	7,530.0	7,527.0	7,527.0	97.8	13.1	90.00	-188.3	-245.2	5,254.3	5,143.5	110.80	47.423		
13,100.0	7,530.0	7,527.0	7,527.0	99.5	13.1	90.00	-188.3	-245.2	5,353.8	5,241.3	112.53	47.575		
13,200.0	7,530.0	7,527.0	7,527.0	101.2	13.1	90.00	-188.3	-245.2	5,453.4	5,339.1	114.27	47.723		
13,300.0	7,530.0	7,527.0	7,527.0	103.0	13.1	90.00	-188.3	-245.2	5,553.0	5,437.0	116.01	47.866		
13,400.0	7,530.0	7,527.0	7,527.0	104.7	13.1	90.00	-188.3	-245.2	5,652.6	5,534.9	117.75	48.004		
13,500.0	7,530.0	7,527.0	7,527.0	106.4	13.1	90.00	-188.3	-245.2	5,752.3	5,632.8	119.49	48.139		
13,600.0	7,530.0	7,527.0	7,527.0	108.2	13.1	90.00	-188.3	-245.2	5,851.9	5,730.7	121.23	48.269		
13,700.0	7,530.0	7,527.0	7,527.0	109.9	13.1	90.00	-188.3	-245.2	5,951.6	5,828.6	122.98	48.396		
13,800.0	7,530.0	7,527.0	7,527.0	111.7	13.1	90.00	-188.3	-245.2	6,051.2	5,926.5	124.72	48.520		
13,900.0	7,530.0	7,527.0	7,527.0	113.4	13.1	90.00	-188.3	-245.2	6,150.9	6,024.4	126.46	48.639		
14,000.0	7,530.0	7,527.0	7,527.0	115.1	13.1	90.00	-188.3	-245.2	6,250.6	6,122.4	128.20	48.756		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,527.0	7,527.0	116.9	13.1	90.00	-188.3	-245.2	6,350.3	6,220.3	129.94	48.869		
14,200.0	7,530.0	7,527.0	7,527.0	118.6	13.1	90.00	-188.3	-245.2	6,450.0	6,318.3	131.69	48.979		
14,300.0	7,530.0	7,527.0	7,527.0	120.4	13.1	90.00	-188.3	-245.2	6,549.7	6,416.3	133.43	49.087		
14,400.0	7,530.0	7,527.0	7,527.0	122.1	13.1	90.00	-188.3	-245.2	6,649.4	6,514.2	135.17	49.191		
14,500.0	7,530.0	7,527.0	7,527.0	123.9	13.1	90.00	-188.3	-245.2	6,749.2	6,612.2	136.92	49.293		
14,600.0	7,530.0	7,527.0	7,527.0	125.6	13.1	90.00	-188.3	-245.2	6,848.9	6,710.2	138.66	49.392		
14,700.0	7,530.0	7,527.0	7,527.0	127.3	13.1	90.00	-188.3	-245.2	6,948.6	6,808.2	140.41	49.489		
14,800.0	7,530.0	7,527.0	7,527.0	129.1	13.1	90.00	-188.3	-245.2	7,048.4	6,906.2	142.15	49.583		
14,900.0	7,530.0	7,527.0	7,527.0	130.8	13.1	90.00	-188.3	-245.2	7,148.2	7,004.3	143.90	49.675		
15,000.0	7,530.0	7,527.0	7,527.0	132.6	13.1	90.00	-188.3	-245.2	7,247.9	7,102.3	145.64	49.765		
15,100.0	7,530.0	7,527.0	7,527.0	134.3	13.1	90.00	-188.3	-245.2	7,347.7	7,200.3	147.39	49.853		
15,200.0	7,530.0	7,527.0	7,527.0	136.1	13.1	90.00	-188.3	-245.2	7,447.5	7,298.3	149.13	49.938		
15,300.0	7,530.0	7,527.0	7,527.0	137.8	13.1	90.00	-188.3	-245.2	7,547.3	7,396.4	150.88	50.022		
15,400.0	7,530.0	7,527.0	7,527.0	139.6	13.1	90.00	-188.3	-245.2	7,647.1	7,494.4	152.63	50.103		
15,500.0	7,530.0	7,527.0	7,527.0	141.3	13.1	90.00	-188.3	-245.2	7,746.8	7,592.5	154.37	50.183		
15,600.0	7,530.0	7,527.0	7,527.0	143.0	13.1	90.00	-188.3	-245.2	7,846.7	7,690.5	156.12	50.261		
15,700.0	7,530.0	7,527.0	7,527.0	144.8	13.1	90.00	-188.3	-245.2	7,946.5	7,788.6	157.87	50.337		
15,800.0	7,530.0	7,527.0	7,527.0	146.5	13.1	90.00	-188.3	-245.2	8,046.3	7,886.7	159.61	50.411		
15,900.0	7,530.0	7,527.0	7,527.0	148.3	13.1	90.00	-188.3	-245.2	8,146.1	7,984.7	161.36	50.484		
16,000.0	7,530.0	7,527.0	7,527.0	150.0	13.1	90.00	-188.3	-245.2	8,245.9	8,082.8	163.11	50.555		
16,100.0	7,530.0	7,527.0	7,527.0	151.8	13.1	90.00	-188.3	-245.2	8,345.7	8,180.9	164.85	50.625		
16,200.0	7,530.0	7,527.0	7,527.0	153.5	13.1	90.00	-188.3	-245.2	8,445.6	8,279.0	166.60	50.693		
16,300.0	7,530.0	7,527.0	7,527.0	155.3	13.1	90.00	-188.3	-245.2	8,545.4	8,377.0	168.35	50.760		
16,400.0	7,530.0	7,527.0	7,527.0	157.0	13.1	90.00	-188.3	-245.2	8,645.2	8,475.1	170.10	50.825		
16,500.0	7,530.0	7,527.0	7,527.0	158.8	13.1	90.00	-188.3	-245.2	8,745.1	8,573.2	171.85	50.889		
16,600.0	7,530.0	7,527.0	7,527.0	160.5	13.1	90.00	-188.3	-245.2	8,844.9	8,671.3	173.59	50.952		
16,700.0	7,530.0	7,527.0	7,527.0	162.3	13.1	90.00	-188.3	-245.2	8,944.8	8,769.4	175.34	51.013		
16,800.0	7,530.0	7,527.0	7,527.0	164.0	13.1	90.00	-188.3	-245.2	9,044.6	8,867.5	177.09	51.073		
16,900.0	7,530.0	7,527.0	7,527.0	165.8	13.1	90.00	-188.3	-245.2	9,144.5	8,965.6	178.84	51.132		
17,000.0	7,530.0	7,527.0	7,527.0	167.5	13.1	90.00	-188.3	-245.2	9,244.3	9,063.7	180.59	51.190		
17,100.0	7,530.0	7,527.0	7,527.0	169.3	13.1	90.00	-188.3	-245.2	9,344.2	9,161.8	182.34	51.247		
17,200.0	7,530.0	7,527.0	7,527.0	171.0	13.1	90.00	-188.3	-245.2	9,444.0	9,260.0	184.09	51.303		
17,300.0	7,530.0	7,527.0	7,527.0	172.8	13.1	90.00	-188.3	-245.2	9,543.9	9,358.1	185.83	51.357		
17,400.0	7,530.0	7,527.0	7,527.0	174.5	13.1	90.00	-188.3	-245.2	9,643.8	9,456.2	187.58	51.411		
17,420.9	7,530.0	7,527.0	7,527.0	174.9	13.1	90.00	-188.3	-245.2	9,664.7	9,476.8	187.95	51.422		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE														Offset Site Error:	0.0 ft
Survey Program: 5193-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	4.0	4.0	0.0	0.0	-166.52	-1,583.5	-379.5	1,628.4						
100.0	100.0	104.0	104.0	0.2	0.2	-166.52	-1,583.5	-379.5	1,628.4	1,628.0	0.33	4,881.828			
200.0	200.0	204.0	204.0	0.3	0.4	-166.52	-1,583.5	-379.5	1,628.4	1,627.7	0.68	2,385.461			
300.0	300.0	304.0	304.0	0.5	0.5	-166.52	-1,583.5	-379.5	1,628.4	1,627.3	1.03	1,578.354			
400.0	400.0	404.0	404.0	0.7	0.7	-166.52	-1,583.5	-379.5	1,628.4	1,627.0	1.38	1,179.334			
500.0	500.0	504.0	504.0	0.8	0.9	-166.52	-1,583.5	-379.5	1,628.4	1,626.6	1.73	941.353			
600.0	600.0	604.0	604.0	1.0	1.1	-166.52	-1,583.5	-379.5	1,628.4	1,626.3	2.08	783.290 CC, ES			
700.0	700.0	704.0	704.0	1.2	1.2	161.01	-1,583.5	-379.5	1,629.2	1,626.8	2.43	671.067			
800.0	800.0	804.0	804.0	1.4	1.4	161.03	-1,583.5	-379.5	1,631.7	1,628.9	2.78	587.703			
900.0	899.9	903.9	903.9	1.6	1.6	161.07	-1,583.5	-379.5	1,635.8	1,632.7	3.12	523.494			
988.4	988.1	992.1	992.1	1.7	1.7	161.11	-1,583.5	-379.5	1,640.8	1,637.4	3.43	477.991			
1,000.0	999.7	1,003.7	1,003.7	1.7	1.8	161.12	-1,583.5	-379.5	1,641.5	1,638.1	3.47	472.610			
1,100.0	1,099.4	1,103.4	1,103.4	1.9	1.9	161.20	-1,583.5	-379.5	1,648.0	1,644.1	3.82	430.948			
1,200.0	1,199.2	1,203.2	1,203.2	2.1	2.1	161.27	-1,583.5	-379.5	1,654.4	1,650.2	4.17	396.258			
1,300.0	1,299.0	1,303.0	1,303.0	2.3	2.3	161.35	-1,583.5	-379.5	1,660.8	1,656.3	4.53	366.931			
1,400.0	1,398.8	1,402.8	1,402.8	2.5	2.4	161.42	-1,583.5	-379.5	1,667.2	1,662.3	4.88	341.818			
1,500.0	1,498.5	1,502.5	1,502.5	2.7	2.6	161.50	-1,583.5	-379.5	1,673.6	1,668.4	5.23	320.073			
1,600.0	1,598.3	1,602.3	1,602.3	2.9	2.8	161.57	-1,583.5	-379.5	1,680.1	1,674.5	5.58	301.063			
1,700.0	1,698.1	1,702.1	1,702.1	3.2	3.0	161.64	-1,583.5	-379.5	1,686.5	1,680.6	5.93	284.304			
1,800.0	1,797.8	1,801.8	1,801.8	3.4	3.1	161.72	-1,583.5	-379.5	1,692.9	1,686.6	6.28	269.419			
1,900.0	1,897.6	1,901.6	1,901.6	3.6	3.3	161.79	-1,583.5	-379.5	1,699.4	1,692.7	6.64	256.111			
2,000.0	1,997.4	2,001.4	2,001.4	3.8	3.5	161.86	-1,583.5	-379.5	1,705.8	1,698.8	6.99	244.143			
2,100.0	2,097.1	2,101.1	2,101.1	4.0	3.7	161.93	-1,583.5	-379.5	1,712.2	1,704.9	7.34	233.322			
2,200.0	2,196.9	2,200.9	2,200.9	4.2	3.8	162.00	-1,583.5	-379.5	1,718.7	1,711.0	7.69	223.491			
2,300.0	2,296.7	2,300.7	2,300.7	4.4	4.0	162.07	-1,583.5	-379.5	1,725.1	1,717.1	8.04	214.520			
2,400.0	2,396.5	2,400.5	2,400.5	4.6	4.2	162.14	-1,583.5	-379.5	1,731.6	1,723.2	8.39	206.302			
2,500.0	2,496.2	2,500.2	2,500.2	4.8	4.4	162.21	-1,583.5	-379.5	1,738.0	1,729.3	8.74	198.745			
2,600.0	2,596.0	2,600.0	2,600.0	5.0	4.5	162.27	-1,583.5	-379.5	1,744.5	1,735.4	9.10	191.774			
2,700.0	2,695.8	2,699.8	2,699.8	5.2	4.7	162.34	-1,583.5	-379.5	1,750.9	1,741.5	9.45	185.321			
2,800.0	2,795.5	2,799.5	2,799.5	5.4	4.9	162.41	-1,583.5	-379.5	1,757.4	1,747.6	9.80	179.333			
2,900.0	2,895.3	2,899.3	2,899.3	5.6	5.1	162.47	-1,583.5	-379.5	1,763.8	1,753.7	10.15	173.760			
3,000.0	2,995.1	2,999.1	2,999.1	5.9	5.2	162.54	-1,583.5	-379.5	1,770.3	1,759.8	10.50	168.560			
3,100.0	3,094.9	3,098.9	3,098.9	6.1	5.4	162.61	-1,583.5	-379.5	1,776.8	1,765.9	10.85	163.698			
3,200.0	3,194.6	3,198.6	3,198.6	6.3	5.6	162.67	-1,583.5	-379.5	1,783.2	1,772.0	11.21	159.142			
3,300.0	3,294.4	3,298.4	3,298.4	6.5	5.8	162.74	-1,583.5	-379.5	1,789.7	1,778.1	11.56	154.863			
3,400.0	3,394.2	3,398.2	3,398.2	6.7	5.9	162.80	-1,583.5	-379.5	1,796.2	1,784.3	11.91	150.838			
3,500.0	3,493.9	3,497.9	3,497.9	6.9	6.1	162.86	-1,583.5	-379.5	1,802.6	1,790.4	12.26	147.044			
3,600.0	3,593.7	3,597.7	3,597.7	7.1	6.3	162.93	-1,583.5	-379.5	1,809.1	1,796.5	12.61	143.461			
3,700.0	3,693.5	3,697.5	3,697.5	7.3	6.5	162.99	-1,583.5	-379.5	1,815.6	1,802.6	12.96	140.074			
3,800.0	3,793.2	3,797.2	3,797.2	7.5	6.6	163.05	-1,583.5	-379.5	1,822.1	1,808.8	13.31	136.865			
3,900.0	3,893.0	3,897.0	3,897.0	7.7	6.8	163.11	-1,583.5	-379.5	1,828.6	1,814.9	13.66	133.822			
4,000.0	3,992.8	3,996.8	3,996.8	8.0	7.0	163.17	-1,583.5	-379.5	1,835.0	1,821.0	14.02	130.932			
4,100.0	4,092.6	4,096.6	4,096.6	8.2	7.1	163.24	-1,583.5	-379.5	1,841.5	1,827.2	14.37	128.184			
4,200.0	4,192.3	4,196.3	4,196.3	8.4	7.3	163.30	-1,583.5	-379.5	1,848.0	1,833.3	14.72	125.567			
4,300.0	4,292.1	4,296.1	4,296.1	8.6	7.5	163.36	-1,583.5	-379.5	1,854.5	1,839.4	15.07	123.073			
4,400.0	4,391.9	4,395.9	4,395.9	8.8	7.7	163.42	-1,583.5	-379.5	1,861.0	1,845.6	15.42	120.692			
4,500.0	4,491.6	4,495.6	4,495.6	9.0	7.8	163.48	-1,583.5	-379.5	1,867.5	1,851.7	15.77	118.418			
4,600.0	4,591.4	4,595.4	4,595.4	9.2	8.0	163.53	-1,583.5	-379.5	1,874.0	1,857.9	16.12	116.244			
4,700.0	4,691.2	4,695.2	4,695.2	9.4	8.2	163.59	-1,583.5	-379.5	1,880.5	1,864.0	16.47	114.162			
4,800.0	4,790.9	4,794.9	4,794.9	9.6	8.4	163.65	-1,583.5	-379.5	1,887.0	1,870.2	16.82	112.167			
4,900.0	4,890.7	4,894.7	4,894.7	9.8	8.5	163.71	-1,583.5	-379.5	1,893.5	1,876.3	17.17	110.255			
5,000.0	4,990.5	4,994.5	4,994.5	10.1	8.7	163.77	-1,583.5	-379.5	1,900.0	1,882.5	17.52	108.419			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE													Offset Site Error:	0.0 ft
Survey Program:		5193-Geolink MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor	
5,100.0	5,090.3	5,094.3	5,094.3	10.3	8.9	163.82	-1,583.5	-379.5	1,906.5	1,888.6	17.88	106.655		
5,200.0	5,190.0	5,193.0	5,193.0	10.5	9.1	163.88	-1,583.5	-379.5	1,913.0	1,894.8	18.22	104.970		
5,300.0	5,289.8	5,193.0	5,193.0	10.7	9.1	163.88	-1,583.5	-379.5	1,922.2	1,903.8	18.40	104.454		
5,400.0	5,389.6	5,193.0	5,193.0	10.9	9.1	163.88	-1,583.5	-379.5	1,936.4	1,917.9	18.58	104.224 SF		
5,500.0	5,489.3	5,193.0	5,193.0	11.1	9.1	163.88	-1,583.5	-379.5	1,955.7	1,937.0	18.76	104.266		
5,600.0	5,589.1	5,193.0	5,193.0	11.3	9.1	163.88	-1,583.5	-379.5	1,979.9	1,961.0	18.93	104.564		
5,700.0	5,688.9	5,193.0	5,193.0	11.5	9.1	163.88	-1,583.5	-379.5	2,008.8	1,989.7	19.11	105.102		
5,800.0	5,788.7	5,193.0	5,193.0	11.7	9.1	163.88	-1,583.5	-379.5	2,042.1	2,022.8	19.29	105.863		
5,900.0	5,888.4	5,193.0	5,193.0	11.9	9.1	163.88	-1,583.5	-379.5	2,079.7	2,060.3	19.47	106.830		
6,000.0	5,988.2	5,193.0	5,193.0	12.2	9.1	163.88	-1,583.5	-379.5	2,121.4	2,101.8	19.65	107.986		
6,100.0	6,088.0	5,193.0	5,193.0	12.4	9.1	163.88	-1,583.5	-379.5	2,166.9	2,147.1	19.82	109.313		
6,200.0	6,187.7	5,193.0	5,193.0	12.6	9.1	163.88	-1,583.5	-379.5	2,216.0	2,196.0	20.00	110.796		
6,300.0	6,287.5	5,193.0	5,193.0	12.8	9.1	163.88	-1,583.5	-379.5	2,268.4	2,248.3	20.18	112.419		
6,400.0	6,387.3	5,193.0	5,193.0	13.0	9.1	163.88	-1,583.5	-379.5	2,324.0	2,303.6	20.36	114.167		
6,500.0	6,487.0	5,193.0	5,193.0	13.2	9.1	163.88	-1,583.5	-379.5	2,382.4	2,361.9	20.53	116.026		
6,600.0	6,586.8	5,193.0	5,193.0	13.4	9.1	163.88	-1,583.5	-379.5	2,443.6	2,422.9	20.71	117.983		
6,700.0	6,686.6	5,193.0	5,193.0	13.6	9.1	163.88	-1,583.5	-379.5	2,507.2	2,486.3	20.89	120.026		
6,787.0	6,773.4	5,193.0	5,193.0	13.8	9.1	163.88	-1,583.5	-379.5	2,564.5	2,543.4	21.04	121.866		
6,800.0	6,786.4	5,193.0	5,193.0	13.8	9.1	153.09	-1,583.5	-379.5	2,573.1	2,552.0	21.08	122.077		
6,850.0	6,836.3	5,193.0	5,193.0	13.9	9.1	65.07	-1,583.5	-379.5	2,605.0	2,583.8	21.17	123.057		
6,900.0	6,886.2	5,193.0	5,193.0	14.0	9.1	34.44	-1,583.5	-379.5	2,634.8	2,613.6	21.19	124.322		
6,950.0	6,935.7	5,193.0	5,193.0	14.0	9.1	25.97	-1,583.5	-379.5	2,662.5	2,641.3	21.15	125.880		
7,000.0	6,984.6	5,193.0	5,193.0	14.0	9.1	22.00	-1,583.5	-379.5	2,688.0	2,667.0	21.04	127.739		
7,050.0	7,032.6	5,193.0	5,193.0	14.0	9.1	19.63	-1,583.5	-379.5	2,711.2	2,690.4	20.87	129.909		
7,100.0	7,079.7	5,193.0	5,193.0	13.9	9.1	18.02	-1,583.5	-379.5	2,732.2	2,711.5	20.64	132.395		
7,150.0	7,125.4	5,193.0	5,193.0	13.9	9.1	16.86	-1,583.5	-379.5	2,750.7	2,730.4	20.35	135.204		
7,200.0	7,169.6	5,193.0	5,193.0	13.8	9.1	15.99	-1,583.5	-379.5	2,766.9	2,746.9	20.00	138.340		
7,250.0	7,212.1	5,193.0	5,193.0	13.8	9.1	15.31	-1,583.5	-379.5	2,780.6	2,761.0	19.61	141.802		
7,300.0	7,252.6	5,193.0	5,193.0	13.7	9.1	14.78	-1,583.5	-379.5	2,791.9	2,772.7	19.18	145.585		
7,350.0	7,291.0	5,193.0	5,193.0	13.7	9.1	14.37	-1,583.5	-379.5	2,800.7	2,782.0	18.71	149.671		
7,400.0	7,327.1	5,193.0	5,193.0	13.7	9.1	14.05	-1,583.5	-379.5	2,806.9	2,788.7	18.22	154.030		
7,450.0	7,360.7	5,193.0	5,193.0	13.7	9.1	13.81	-1,583.5	-379.5	2,810.7	2,793.0	17.72	158.612		
7,500.0	7,391.6	5,193.0	5,193.0	13.7	9.1	13.65	-1,583.5	-379.5	2,811.9	2,794.7	17.21	163.340		
7,550.0	7,419.7	5,193.0	5,193.0	13.8	9.1	13.55	-1,583.5	-379.5	2,810.5	2,793.8	16.72	168.106		
7,600.0	7,444.8	5,193.0	5,193.0	13.9	9.1	13.51	-1,583.5	-379.5	2,806.7	2,790.4	16.25	172.762		
7,650.0	7,466.9	5,193.0	5,193.0	14.1	9.1	13.53	-1,583.5	-379.5	2,800.3	2,784.5	15.81	177.117		
7,700.0	7,485.8	5,193.0	5,193.0	14.3	9.1	13.61	-1,583.5	-379.5	2,791.4	2,775.9	15.43	180.939		
7,750.0	7,501.5	5,193.0	5,193.0	14.6	9.1	13.74	-1,583.5	-379.5	2,780.0	2,764.9	15.11	183.972		
7,800.0	7,513.7	5,193.0	5,193.0	14.9	9.1	13.94	-1,583.5	-379.5	2,766.1	2,751.2	14.88	185.950		
7,850.0	7,522.6	5,193.0	5,193.0	15.2	9.1	14.20	-1,583.5	-379.5	2,749.8	2,735.1	14.73	186.640		
7,900.0	7,528.0	5,193.0	5,193.0	15.6	9.1	14.52	-1,583.5	-379.5	2,731.1	2,716.4	14.69	185.876		
7,952.9	7,530.0	5,193.0	5,193.0	16.1	9.1	14.95	-1,583.5	-379.5	2,708.8	2,694.0	14.77	183.413		
8,000.0	7,530.0	5,193.0	5,193.0	16.5	9.1	14.95	-1,583.5	-379.5	2,688.0	2,673.1	14.94	179.970		
8,100.0	7,530.0	5,193.0	5,193.0	17.5	9.1	14.95	-1,583.5	-379.5	2,646.3	2,631.0	15.30	172.953		
8,200.0	7,530.0	5,193.0	5,193.0	18.7	9.1	14.95	-1,583.5	-379.5	2,607.7	2,592.0	15.68	166.353		
8,300.0	7,530.0	5,193.0	5,193.0	19.9	9.1	14.95	-1,583.5	-379.5	2,572.4	2,556.3	16.06	160.173		
8,400.0	7,530.0	5,193.0	5,193.0	21.2	9.1	14.95	-1,583.5	-379.5	2,540.6	2,524.1	16.45	154.412		
8,500.0	7,530.0	5,193.0	5,193.0	22.6	9.1	14.95	-1,583.5	-379.5	2,512.3	2,495.5	16.85	149.065		
8,600.0	7,530.0	5,193.0	5,193.0	24.0	9.1	14.95	-1,583.5	-379.5	2,487.8	2,470.5	17.26	144.124		
8,700.0	7,530.0	5,193.0	5,193.0	25.4	9.1	14.95	-1,583.5	-379.5	2,467.0	2,449.3	17.67	139.578		
8,800.0	7,530.0	5,193.0	5,193.0	26.9	9.1	14.95	-1,583.5	-379.5	2,450.2	2,432.1	18.09	135.415		
8,900.0	7,530.0	5,193.0	5,193.0	28.4	9.1	14.95	-1,583.5	-379.5	2,437.3	2,418.8	18.52	131.621		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE													Offset Site Error:	0.0 ft
Survey Program: 5193-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,530.0	5,193.0	5,193.0	30.0	9.1	14.95	-1,583.5	-379.5	2,428.5	2,409.6	18.95	128.180		
9,100.0	7,530.0	5,193.0	5,193.0	31.5	9.1	14.95	-1,583.5	-379.5	2,423.8	2,404.5	19.38	125.076		
9,163.9	7,530.0	5,193.0	5,193.0	32.6	9.1	14.95	-1,583.5	-379.5	2,423.0	2,403.3	19.66	123.261		
9,200.0	7,530.0	5,193.0	5,193.0	33.1	9.1	14.95	-1,583.5	-379.5	2,423.3	2,403.5	19.82	122.293		
9,300.0	7,530.0	5,193.0	5,193.0	34.7	9.1	14.95	-1,583.5	-379.5	2,426.8	2,406.6	20.26	119.813		
9,400.0	7,530.0	5,193.0	5,193.0	36.3	9.1	14.95	-1,583.5	-379.5	2,434.5	2,413.8	20.70	117.619		
9,500.0	7,530.0	5,193.0	5,193.0	38.0	9.1	14.95	-1,583.5	-379.5	2,446.2	2,425.1	21.14	115.695		
9,600.0	7,530.0	5,193.0	5,193.0	39.6	9.1	14.95	-1,583.5	-379.5	2,461.9	2,440.3	21.59	114.021		
9,700.0	7,530.0	5,193.0	5,193.0	41.3	9.1	14.95	-1,583.5	-379.5	2,481.6	2,459.6	22.04	112.583		
9,800.0	7,530.0	5,193.0	5,193.0	42.9	9.1	14.95	-1,583.5	-379.5	2,505.1	2,482.6	22.50	111.361		
9,900.0	7,530.0	5,193.0	5,193.0	44.6	9.1	14.95	-1,583.5	-379.5	2,532.4	2,509.4	22.95	110.341		
10,000.0	7,530.0	5,193.0	5,193.0	46.3	9.1	14.95	-1,583.5	-379.5	2,563.2	2,539.8	23.41	109.506		
10,100.0	7,530.0	5,193.0	5,193.0	47.9	9.1	14.95	-1,583.5	-379.5	2,597.6	2,573.7	23.87	108.842		
10,200.0	7,530.0	5,193.0	5,193.0	49.6	9.1	14.95	-1,583.5	-379.5	2,635.2	2,610.9	24.33	108.332		
10,300.0	7,530.0	5,193.0	5,193.0	51.3	9.1	14.95	-1,583.5	-379.5	2,676.1	2,651.4	24.79	107.965		
10,400.0	7,530.0	5,193.0	5,193.0	53.0	9.1	14.95	-1,583.5	-379.5	2,720.1	2,694.8	25.25	107.727		
10,500.0	7,530.0	5,193.0	5,193.0	54.7	9.1	14.95	-1,583.5	-379.5	2,767.0	2,741.3	25.71	107.605		
10,600.0	7,530.0	5,193.0	5,193.0	56.4	9.1	14.95	-1,583.5	-379.5	2,816.6	2,790.4	26.18	107.589		
10,700.0	7,530.0	5,193.0	5,193.0	58.1	9.1	14.95	-1,583.5	-379.5	2,868.9	2,842.3	26.65	107.667		
10,800.0	7,530.0	5,193.0	5,193.0	59.8	9.1	14.95	-1,583.5	-379.5	2,923.7	2,896.6	27.11	107.830		
10,900.0	7,530.0	5,193.0	5,193.0	61.5	9.1	14.95	-1,583.5	-379.5	2,980.8	2,953.2	27.58	108.069		
11,000.0	7,530.0	5,193.0	5,193.0	63.2	9.1	14.95	-1,583.5	-379.5	3,040.1	3,012.1	28.05	108.375		
11,100.0	7,530.0	5,193.0	5,193.0	64.9	9.1	14.95	-1,583.5	-379.5	3,101.5	3,073.0	28.52	108.741		
11,200.0	7,530.0	5,193.0	5,193.0	66.6	9.1	14.95	-1,583.5	-379.5	3,164.9	3,135.9	28.99	109.160		
11,300.0	7,530.0	5,193.0	5,193.0	68.4	9.1	14.95	-1,583.5	-379.5	3,230.2	3,200.7	29.47	109.626		
11,400.0	7,530.0	5,193.0	5,193.0	70.1	9.1	14.95	-1,583.5	-379.5	3,297.1	3,267.2	29.94	110.133		
11,500.0	7,530.0	5,193.0	5,193.0	71.8	9.1	14.95	-1,583.5	-379.5	3,365.8	3,335.4	30.41	110.675		
11,600.0	7,530.0	5,193.0	5,193.0	73.5	9.1	14.95	-1,583.5	-379.5	3,435.9	3,405.0	30.89	111.249		
11,700.0	7,530.0	5,193.0	5,193.0	75.2	9.1	14.95	-1,583.5	-379.5	3,507.5	3,476.2	31.36	111.849		
11,800.0	7,530.0	5,193.0	5,193.0	77.0	9.1	14.95	-1,583.5	-379.5	3,580.5	3,548.7	31.83	112.471		
11,900.0	7,530.0	5,193.0	5,193.0	78.7	9.1	14.95	-1,583.5	-379.5	3,654.8	3,622.4	32.31	113.114		
12,000.0	7,530.0	5,193.0	5,193.0	80.4	9.1	14.95	-1,583.5	-379.5	3,730.2	3,697.4	32.79	113.772		
12,100.0	7,530.0	5,193.0	5,193.0	82.2	9.1	14.95	-1,583.5	-379.5	3,806.8	3,773.5	33.26	114.444		
12,200.0	7,530.0	5,193.0	5,193.0	83.9	9.1	14.95	-1,583.5	-379.5	3,884.4	3,850.7	33.74	115.127		
12,300.0	7,530.0	5,193.0	5,193.0	85.6	9.1	14.95	-1,583.5	-379.5	3,963.1	3,928.9	34.22	115.819		
12,400.0	7,530.0	5,193.0	5,193.0	87.3	9.1	14.95	-1,583.5	-379.5	4,042.7	4,008.0	34.70	116.517		
12,500.0	7,530.0	5,193.0	5,193.0	89.1	9.1	14.95	-1,583.5	-379.5	4,123.2	4,088.0	35.17	117.220		
12,600.0	7,530.0	5,193.0	5,193.0	90.8	9.1	14.95	-1,583.5	-379.5	4,204.5	4,168.8	35.65	117.927		
12,700.0	7,530.0	5,193.0	5,193.0	92.5	9.1	14.95	-1,583.5	-379.5	4,286.6	4,250.5	36.13	118.636		
12,800.0	7,530.0	5,193.0	5,193.0	94.3	9.1	14.95	-1,583.5	-379.5	4,369.5	4,332.9	36.61	119.345		
12,900.0	7,530.0	5,193.0	5,193.0	96.0	9.1	14.95	-1,583.5	-379.5	4,453.0	4,415.9	37.09	120.054		
13,000.0	7,530.0	5,193.0	5,193.0	97.8	9.1	14.95	-1,583.5	-379.5	4,537.3	4,499.7	37.57	120.762		
13,100.0	7,530.0	5,193.0	5,193.0	99.5	9.1	14.95	-1,583.5	-379.5	4,622.1	4,584.1	38.05	121.467		
13,200.0	7,530.0	5,193.0	5,193.0	101.2	9.1	14.95	-1,583.5	-379.5	4,707.6	4,669.0	38.53	122.169		
13,300.0	7,530.0	5,193.0	5,193.0	103.0	9.1	14.95	-1,583.5	-379.5	4,793.6	4,754.6	39.01	122.868		
13,400.0	7,530.0	5,193.0	5,193.0	104.7	9.1	14.95	-1,583.5	-379.5	4,880.1	4,840.6	39.50	123.562		
13,500.0	7,530.0	5,193.0	5,193.0	106.4	9.1	14.95	-1,583.5	-379.5	4,967.2	4,927.2	39.98	124.251		
13,600.0	7,530.0	5,193.0	5,193.0	108.2	9.1	14.95	-1,583.5	-379.5	5,054.7	5,014.2	40.46	124.935		
13,700.0	7,530.0	5,193.0	5,193.0	109.9	9.1	14.95	-1,583.5	-379.5	5,142.7	5,101.8	40.94	125.614		
13,800.0	7,530.0	5,193.0	5,193.0	111.7	9.1	14.95	-1,583.5	-379.5	5,231.1	5,189.7	41.42	126.286		
13,900.0	7,530.0	5,193.0	5,193.0	113.4	9.1	14.95	-1,583.5	-379.5	5,319.9	5,278.0	41.91	126.952		
14,000.0	7,530.0	5,193.0	5,193.0	115.1	9.1	14.95	-1,583.5	-379.5	5,409.2	5,366.8	42.39	127.611		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 (EXISTING) - KP KAUFFMAN WE													Offset Site Error: 0.0 ft	
Survey Program: 5193-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	5,193.0	5,193.0	116.9	9.1	14.95	-1,583.5	-379.5	5,498.7	5,455.9	42.87	128.264		
14,200.0	7,530.0	5,193.0	5,193.0	118.6	9.1	14.95	-1,583.5	-379.5	5,588.7	5,545.3	43.35	128.909		
14,300.0	7,530.0	5,193.0	5,193.0	120.4	9.1	14.95	-1,583.5	-379.5	5,679.0	5,635.1	43.84	129.548		
14,400.0	7,530.0	5,193.0	5,193.0	122.1	9.1	14.95	-1,583.5	-379.5	5,769.6	5,725.2	44.32	130.179		
14,500.0	7,530.0	5,193.0	5,193.0	123.9	9.1	14.95	-1,583.5	-379.5	5,860.5	5,815.7	44.80	130.803		
14,600.0	7,530.0	5,193.0	5,193.0	125.6	9.1	14.95	-1,583.5	-379.5	5,951.7	5,906.4	45.29	131.420		
14,700.0	7,530.0	5,193.0	5,193.0	127.3	9.1	14.95	-1,583.5	-379.5	6,043.1	5,997.4	45.77	132.029		
14,800.0	7,530.0	5,193.0	5,193.0	129.1	9.1	14.95	-1,583.5	-379.5	6,134.9	6,088.6	46.26	132.631		
14,900.0	7,530.0	5,193.0	5,193.0	130.8	9.1	14.95	-1,583.5	-379.5	6,226.9	6,180.1	46.74	133.225		
15,000.0	7,530.0	5,193.0	5,193.0	132.6	9.1	14.95	-1,583.5	-379.5	6,319.1	6,271.9	47.22	133.812		
15,100.0	7,530.0	5,193.0	5,193.0	134.3	9.1	14.95	-1,583.5	-379.5	6,411.6	6,363.9	47.71	134.392		
15,200.0	7,530.0	5,193.0	5,193.0	136.1	9.1	14.95	-1,583.5	-379.5	6,504.3	6,456.1	48.19	134.964		
15,300.0	7,530.0	5,193.0	5,193.0	137.8	9.1	14.95	-1,583.5	-379.5	6,597.2	6,548.5	48.68	135.529		
15,400.0	7,530.0	5,193.0	5,193.0	139.6	9.1	14.95	-1,583.5	-379.5	6,690.3	6,641.1	49.16	136.086		
15,500.0	7,530.0	5,193.0	5,193.0	141.3	9.1	14.95	-1,583.5	-379.5	6,783.6	6,734.0	49.65	136.636		
15,600.0	7,530.0	5,193.0	5,193.0	143.0	9.1	14.95	-1,583.5	-379.5	6,877.1	6,827.0	50.13	137.179		
15,700.0	7,530.0	5,193.0	5,193.0	144.8	9.1	14.95	-1,583.5	-379.5	6,970.8	6,920.2	50.62	137.715		
15,800.0	7,530.0	5,193.0	5,193.0	146.5	9.1	14.95	-1,583.5	-379.5	7,064.6	7,013.5	51.10	138.244		
15,900.0	7,530.0	5,193.0	5,193.0	148.3	9.1	14.95	-1,583.5	-379.5	7,158.6	7,107.1	51.59	138.766		
16,000.0	7,530.0	5,193.0	5,193.0	150.0	9.1	14.95	-1,583.5	-379.5	7,252.8	7,200.7	52.07	139.281		
16,100.0	7,530.0	5,193.0	5,193.0	151.8	9.1	14.95	-1,583.5	-379.5	7,347.1	7,294.6	52.56	139.789		
16,200.0	7,530.0	5,193.0	5,193.0	153.5	9.1	14.95	-1,583.5	-379.5	7,441.6	7,388.6	53.04	140.290		
16,300.0	7,530.0	5,193.0	5,193.0	155.3	9.1	14.95	-1,583.5	-379.5	7,536.2	7,482.7	53.53	140.785		
16,400.0	7,530.0	5,193.0	5,193.0	157.0	9.1	14.95	-1,583.5	-379.5	7,631.0	7,577.0	54.02	141.273		
16,500.0	7,530.0	5,193.0	5,193.0	158.8	9.1	14.95	-1,583.5	-379.5	7,725.9	7,671.4	54.50	141.754		
16,600.0	7,530.0	5,193.0	5,193.0	160.5	9.1	14.95	-1,583.5	-379.5	7,820.9	7,765.9	54.99	142.229		
16,700.0	7,530.0	5,193.0	5,193.0	162.3	9.1	14.95	-1,583.5	-379.5	7,916.1	7,860.6	55.47	142.698		
16,800.0	7,530.0	5,193.0	5,193.0	164.0	9.1	14.95	-1,583.5	-379.5	8,011.3	7,955.4	55.96	143.160		
16,900.0	7,530.0	5,193.0	5,193.0	165.8	9.1	14.95	-1,583.5	-379.5	8,106.7	8,050.2	56.45	143.617		
17,000.0	7,530.0	5,193.0	5,193.0	167.5	9.1	14.95	-1,583.5	-379.5	8,202.2	8,145.2	56.93	144.067		
17,100.0	7,530.0	5,193.0	5,193.0	169.3	9.1	14.95	-1,583.5	-379.5	8,297.8	8,240.3	57.42	144.511		
17,200.0	7,530.0	5,193.0	5,193.0	171.0	9.1	14.95	-1,583.5	-379.5	8,393.5	8,335.5	57.91	144.950		
17,300.0	7,530.0	5,193.0	5,193.0	172.8	9.1	14.95	-1,583.5	-379.5	8,489.2	8,430.9	58.39	145.383		
17,400.0	7,530.0	5,193.0	5,193.0	174.5	9.1	14.95	-1,583.5	-379.5	8,585.1	8,526.3	58.88	145.810		
17,420.9	7,530.0	5,193.0	5,193.0	174.9	9.1	14.95	-1,583.5	-379.5	8,605.2	8,546.2	58.98	145.899		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
0.0	0.0	5.0	5.0	0.0	0.0	-167.46	-1,635.2	-363.8	1,675.2					
100.0	100.0	105.0	105.0	0.2	0.2	-167.46	-1,635.2	-363.8	1,675.2	1,674.9	0.34	4,996.189		
200.0	200.0	205.0	205.0	0.3	0.4	-167.46	-1,635.2	-363.8	1,675.2	1,674.5	0.68	2,447.858		
300.0	300.0	305.0	305.0	0.5	0.5	-167.46	-1,635.2	-363.8	1,675.2	1,674.2	1.03	1,621.039		
400.0	400.0	405.0	405.0	0.7	0.7	-167.46	-1,635.2	-363.8	1,675.2	1,673.8	1.38	1,211.745		
500.0	500.0	505.0	505.0	0.8	0.9	-167.46	-1,635.2	-363.8	1,675.2	1,673.5	1.73	967.470		
600.0	600.0	605.0	605.0	1.0	1.1	-167.46	-1,635.2	-363.8	1,675.2	1,673.1	2.08	805.158		
700.0	700.0	705.0	705.0	1.2	1.2	160.08	-1,635.2	-363.8	1,676.0	1,673.6	2.43	689.871		
800.0	800.0	805.0	805.0	1.4	1.4	160.10	-1,635.2	-363.8	1,678.5	1,675.7	2.78	604.188		
900.0	899.9	904.9	904.9	1.6	1.6	160.14	-1,635.2	-363.8	1,682.6	1,679.5	3.13	538.155		
988.4	988.1	993.1	993.1	1.7	1.7	160.18	-1,635.2	-363.8	1,687.6	1,684.2	3.43	491.332		
1,000.0	999.7	1,004.7	1,004.7	1.7	1.8	160.19	-1,635.2	-363.8	1,688.3	1,684.9	3.48	485.794		
1,100.0	1,099.4	1,104.4	1,104.4	1.9	1.9	160.27	-1,635.2	-363.8	1,694.7	1,690.9	3.83	442.913		
1,200.0	1,199.2	1,204.2	1,204.2	2.1	2.1	160.34	-1,635.2	-363.8	1,701.1	1,696.9	4.18	407.205		
1,300.0	1,299.0	1,304.0	1,304.0	2.3	2.3	160.42	-1,635.2	-363.8	1,707.5	1,703.0	4.53	377.017		
1,400.0	1,398.8	1,403.8	1,403.8	2.5	2.5	160.50	-1,635.2	-363.8	1,713.9	1,709.0	4.88	351.164		
1,500.0	1,498.5	1,503.5	1,503.5	2.7	2.6	160.57	-1,635.2	-363.8	1,720.3	1,715.0	5.23	328.779		
1,600.0	1,598.3	1,603.3	1,603.3	2.9	2.8	160.65	-1,635.2	-363.8	1,726.6	1,721.1	5.58	309.209		
1,700.0	1,698.1	1,703.1	1,703.1	3.2	3.0	160.72	-1,635.2	-363.8	1,733.0	1,727.1	5.94	291.957		
1,800.0	1,797.8	1,802.8	1,802.8	3.4	3.1	160.79	-1,635.2	-363.8	1,739.4	1,733.1	6.29	276.634		
1,900.0	1,897.6	1,902.6	1,902.6	3.6	3.3	160.87	-1,635.2	-363.8	1,745.8	1,739.2	6.64	262.935		
2,000.0	1,997.4	2,002.4	2,002.4	3.8	3.5	160.94	-1,635.2	-363.8	1,752.2	1,745.2	6.99	250.615		
2,100.0	2,097.1	2,102.1	2,102.1	4.0	3.7	161.01	-1,635.2	-363.8	1,758.6	1,751.3	7.34	239.476		
2,200.0	2,196.9	2,201.9	2,201.9	4.2	3.8	161.08	-1,635.2	-363.8	1,765.1	1,757.4	7.70	229.357		
2,300.0	2,296.7	2,301.7	2,301.7	4.4	4.0	161.15	-1,635.2	-363.8	1,771.5	1,763.4	8.05	220.123		
2,400.0	2,396.5	2,401.5	2,401.5	4.6	4.2	161.22	-1,635.2	-363.8	1,777.9	1,769.5	8.40	211.664		
2,500.0	2,496.2	2,501.2	2,501.2	4.8	4.4	161.29	-1,635.2	-363.8	1,784.3	1,775.5	8.75	203.886		
2,600.0	2,596.0	2,601.0	2,601.0	5.0	4.5	161.36	-1,635.2	-363.8	1,790.7	1,781.6	9.10	196.710		
2,700.0	2,695.8	2,700.8	2,700.8	5.2	4.7	161.43	-1,635.2	-363.8	1,797.1	1,787.7	9.46	190.069		
2,800.0	2,795.5	2,800.5	2,800.5	5.4	4.9	161.50	-1,635.2	-363.8	1,803.6	1,793.7	9.81	183.905		
2,900.0	2,895.3	2,900.3	2,900.3	5.6	5.1	161.57	-1,635.2	-363.8	1,810.0	1,799.8	10.16	178.169		
3,000.0	2,995.1	3,000.1	3,000.1	5.9	5.2	161.64	-1,635.2	-363.8	1,816.4	1,805.9	10.51	172.818		
3,100.0	3,094.9	3,099.9	3,099.9	6.1	5.4	161.70	-1,635.2	-363.8	1,822.8	1,812.0	10.86	167.814		
3,200.0	3,194.6	3,199.6	3,199.6	6.3	5.6	161.77	-1,635.2	-363.8	1,829.3	1,818.1	11.21	163.124		
3,300.0	3,294.4	3,299.4	3,299.4	6.5	5.8	161.84	-1,635.2	-363.8	1,835.7	1,824.1	11.57	158.721		
3,400.0	3,394.2	3,399.2	3,399.2	6.7	5.9	161.90	-1,635.2	-363.8	1,842.2	1,830.2	11.92	154.578		
3,500.0	3,493.9	3,498.9	3,498.9	6.9	6.1	161.97	-1,635.2	-363.8	1,848.6	1,836.3	12.27	150.673		
3,600.0	3,593.7	3,598.7	3,598.7	7.1	6.3	162.03	-1,635.2	-363.8	1,855.0	1,842.4	12.62	146.987		
3,700.0	3,693.5	3,698.5	3,698.5	7.3	6.5	162.10	-1,635.2	-363.8	1,861.5	1,848.5	12.97	143.500		
3,800.0	3,793.2	3,798.2	3,798.2	7.5	6.6	162.16	-1,635.2	-363.8	1,867.9	1,854.6	13.32	140.199		
3,900.0	3,893.0	3,898.0	3,898.0	7.7	6.8	162.22	-1,635.2	-363.8	1,874.4	1,860.7	13.67	137.067		
4,000.0	3,992.8	3,997.8	3,997.8	8.0	7.0	162.29	-1,635.2	-363.8	1,880.8	1,866.8	14.03	134.093		
4,100.0	4,092.6	4,097.6	4,097.6	8.2	7.2	162.35	-1,635.2	-363.8	1,887.3	1,872.9	14.38	131.265		
4,200.0	4,192.3	4,197.3	4,197.3	8.4	7.3	162.41	-1,635.2	-363.8	1,893.7	1,879.0	14.73	128.572		
4,300.0	4,292.1	4,297.1	4,297.1	8.6	7.5	162.47	-1,635.2	-363.8	1,900.2	1,885.1	15.08	126.005		
4,400.0	4,391.9	4,396.9	4,396.9	8.8	7.7	162.54	-1,635.2	-363.8	1,906.7	1,891.2	15.43	123.556		
4,500.0	4,491.6	4,496.6	4,496.6	9.0	7.8	162.60	-1,635.2	-363.8	1,913.1	1,897.3	15.78	121.216		
4,600.0	4,591.4	4,596.4	4,596.4	9.2	8.0	162.66	-1,635.2	-363.8	1,919.6	1,903.5	16.13	118.978		
4,700.0	4,691.2	4,696.2	4,696.2	9.4	8.2	162.72	-1,635.2	-363.8	1,926.1	1,909.6	16.49	116.836		
4,800.0	4,790.9	4,795.9	4,795.9	9.6	8.4	162.78	-1,635.2	-363.8	1,932.5	1,915.7	16.84	114.784		
4,900.0	4,890.7	4,895.7	4,895.7	9.8	8.5	162.84	-1,635.2	-363.8	1,939.0	1,921.8	17.19	112.815		
5,000.0	4,990.5	4,995.5	4,995.5	10.1	8.7	162.89	-1,635.2	-363.8	1,945.5	1,927.9	17.54	110.926		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,100.0	5,090.3	5,095.3	5,095.3	10.3	8.9	162.95	-1,635.2	-363.8	1,952.0	1,934.1	17.89	109.112		
5,200.0	5,190.0	5,195.0	5,195.0	10.5	9.1	163.01	-1,635.2	-363.8	1,958.4	1,940.2	18.24	107.367		
5,300.0	5,289.8	5,294.8	5,294.8	10.7	9.2	163.07	-1,635.2	-363.8	1,964.9	1,946.3	18.59	105.689		
5,400.0	5,389.6	5,394.6	5,394.6	10.9	9.4	163.13	-1,635.2	-363.8	1,971.4	1,952.5	18.94	104.073		
5,500.0	5,489.3	5,494.3	5,494.3	11.1	9.6	163.18	-1,635.2	-363.8	1,977.9	1,958.6	19.29	102.517		
5,600.0	5,589.1	5,594.1	5,594.1	11.3	9.8	163.24	-1,635.2	-363.8	1,984.4	1,964.7	19.64	101.016		
5,700.0	5,688.9	5,693.9	5,693.9	11.5	9.9	163.30	-1,635.2	-363.8	1,990.9	1,970.9	19.99	99.568		
5,800.0	5,788.7	5,793.7	5,793.7	11.7	10.1	163.35	-1,635.2	-363.8	1,997.3	1,977.0	20.35	98.170		
5,900.0	5,888.4	5,893.4	5,893.4	11.9	10.3	163.41	-1,635.2	-363.8	2,003.8	1,983.1	20.70	96.820		
6,000.0	5,988.2	5,993.2	5,993.2	12.2	10.5	163.46	-1,635.2	-363.8	2,010.3	1,989.3	21.05	95.515		
6,100.0	6,088.0	6,093.0	6,093.0	12.4	10.6	163.52	-1,635.2	-363.8	2,016.8	1,995.4	21.40	94.253		
6,200.0	6,187.7	6,192.7	6,192.7	12.6	10.8	163.57	-1,635.2	-363.8	2,023.3	2,001.6	21.75	93.032		
6,300.0	6,287.5	6,292.5	6,292.5	12.8	11.0	163.63	-1,635.2	-363.8	2,029.8	2,007.7	22.10	91.850		
6,400.0	6,387.3	6,392.3	6,392.3	13.0	11.2	163.68	-1,635.2	-363.8	2,036.3	2,013.9	22.45	90.705		
6,500.0	6,487.0	6,492.0	6,492.0	13.2	11.3	163.73	-1,635.2	-363.8	2,042.8	2,020.0	22.80	89.596		
6,600.0	6,586.8	6,591.8	6,591.8	13.4	11.5	163.79	-1,635.2	-363.8	2,049.3	2,026.2	23.15	88.520		
6,700.0	6,686.6	6,691.6	6,691.6	13.6	11.7	163.84	-1,635.2	-363.8	2,055.8	2,032.3	23.50	87.476		
6,787.0	6,773.4	6,778.4	6,778.4	13.8	11.8	163.88	-1,635.2	-363.8	2,061.5	2,037.7	23.81	86.594		
6,800.0	6,786.4	6,791.4	6,791.4	13.8	11.9	153.35	-1,635.2	-363.8	2,062.2	2,038.4	23.86	86.430		
6,850.0	6,836.3	6,841.3	6,841.3	13.9	11.9	66.25	-1,635.2	-363.8	2,062.9	2,038.9	24.02	85.878		
6,900.0	6,886.2	6,891.2	6,891.2	14.0	12.0	36.52	-1,635.2	-363.8	2,060.3	2,036.2	24.11	85.455		
6,950.0	6,935.7	6,940.7	6,940.7	14.0	12.1	28.94	-1,635.2	-363.8	2,054.4	2,030.2	24.13	85.152		
7,000.0	6,984.6	6,989.6	6,989.6	14.0	12.2	25.88	-1,635.2	-363.8	2,045.1	2,021.0	24.07	84.961		
7,050.0	7,032.6	7,037.6	7,037.6	14.0	12.3	24.45	-1,635.2	-363.8	2,032.6	2,008.7	23.95	84.872		
7,100.0	7,079.7	7,084.7	7,084.7	13.9	12.4	23.85	-1,635.2	-363.8	2,016.9	1,993.2	23.77	84.867		
7,150.0	7,125.4	7,130.4	7,130.4	13.9	12.4	23.78	-1,635.2	-363.8	1,998.2	1,974.7	23.53	84.925		
7,200.0	7,169.6	7,174.6	7,174.6	13.8	12.5	24.09	-1,635.2	-363.8	1,976.5	1,953.2	23.25	85.016		
7,250.0	7,212.1	7,217.1	7,217.1	13.8	12.6	24.75	-1,635.2	-363.8	1,951.9	1,928.9	22.94	85.096		
7,300.0	7,252.6	7,257.6	7,257.6	13.7	12.7	25.72	-1,635.2	-363.8	1,924.5	1,901.9	22.61	85.106		
7,350.0	7,291.0	7,296.0	7,296.0	13.7	12.7	27.03	-1,635.2	-363.8	1,894.6	1,872.3	22.30	84.966		
7,400.0	7,327.1	7,332.1	7,332.1	13.7	12.8	28.70	-1,635.2	-363.8	1,862.3	1,840.3	22.02	84.568		
7,450.0	7,360.7	7,365.7	7,365.7	13.7	12.9	30.79	-1,635.2	-363.8	1,827.7	1,805.9	21.82	83.779		
7,500.0	7,391.6	7,396.6	7,396.6	13.7	12.9	33.36	-1,635.2	-363.8	1,791.1	1,769.3	21.72	82.446		
7,550.0	7,419.7	7,424.7	7,424.7	13.8	13.0	36.50	-1,635.2	-363.8	1,752.6	1,730.8	21.79	80.412		
7,600.0	7,444.8	7,449.8	7,449.8	13.9	13.0	40.31	-1,635.2	-363.8	1,712.4	1,690.3	22.08	77.563		
7,650.0	7,466.9	7,471.9	7,471.9	14.1	13.0	44.91	-1,635.2	-363.8	1,670.8	1,648.2	22.62	73.879		
7,700.0	7,485.8	7,490.8	7,490.8	14.3	13.1	50.42	-1,635.2	-363.8	1,628.1	1,604.7	23.43	69.492		
7,750.0	7,501.5	7,506.5	7,506.5	14.6	13.1	56.88	-1,635.2	-363.8	1,584.4	1,559.9	24.49	64.703		
7,800.0	7,513.7	7,518.7	7,518.7	14.9	13.1	64.29	-1,635.2	-363.8	1,539.9	1,514.2	25.70	59.928		
7,850.0	7,522.6	7,527.6	7,527.6	15.2	13.1	72.44	-1,635.2	-363.8	1,495.0	1,468.1	26.90	55.582		
7,900.0	7,528.0	7,533.0	7,533.0	15.6	13.1	81.01	-1,635.2	-363.8	1,449.8	1,421.9	27.91	51.951		
7,952.9	7,530.0	7,535.0	7,535.0	16.1	13.2	90.00	-1,635.2	-363.8	1,402.0	1,373.4	28.63	48.969		
8,000.0	7,530.0	7,535.0	7,535.0	16.5	13.2	90.00	-1,635.2	-363.8	1,359.8	1,330.7	29.09	46.751		
8,100.0	7,530.0	7,535.0	7,535.0	17.5	13.2	90.00	-1,635.2	-363.8	1,271.2	1,241.0	30.15	42.167		
8,200.0	7,530.0	7,535.0	7,535.0	18.7	13.2	90.00	-1,635.2	-363.8	1,184.4	1,153.1	31.31	37.823		
8,300.0	7,530.0	7,535.0	7,535.0	19.9	13.2	90.00	-1,635.2	-363.8	1,099.9	1,067.3	32.57	33.768		
8,400.0	7,530.0	7,535.0	7,535.0	21.2	13.2	90.00	-1,635.2	-363.8	1,018.1	984.2	33.90	30.034		
8,500.0	7,530.0	7,535.0	7,535.0	22.6	13.2	90.00	-1,635.2	-363.8	939.9	904.6	35.29	26.636		
8,600.0	7,530.0	7,535.0	7,535.0	24.0	13.2	90.00	-1,635.2	-363.8	866.2	829.5	36.72	23.587		
8,700.0	7,530.0	7,535.0	7,535.0	25.4	13.2	90.00	-1,635.2	-363.8	798.2	760.0	38.20	20.896		
8,800.0	7,530.0	7,535.0	7,535.0	26.9	13.2	90.00	-1,635.2	-363.8	737.6	697.9	39.71	18.574		
8,900.0	7,530.0	7,535.0	7,535.0	28.4	13.2	90.00	-1,635.2	-363.8	686.3	645.0	41.25	16.636		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
9,000.0	7,530.0	7,535.0	7,535.0	30.0	13.2	90.00	-1,635.2	-363.8	646.4	603.6	42.81	15.098		
9,100.0	7,530.0	7,535.0	7,535.0	31.5	13.2	90.00	-1,635.2	-363.8	620.2	575.8	44.40	13.970		
9,200.0	7,530.0	7,535.0	7,535.0	33.1	13.2	90.00	-1,635.2	-363.8	609.6	563.6	46.00	13.252		
9,215.6	7,530.0	7,535.0	7,535.0	33.4	13.2	90.00	-1,635.2	-363.8	609.4	563.1	46.25	13.175 CC, ES		
9,300.0	7,530.0	7,535.0	7,535.0	34.7	13.2	90.00	-1,635.2	-363.8	615.2	567.6	47.61	12.920 SF		
9,400.0	7,530.0	7,535.0	7,535.0	36.3	13.2	90.00	-1,635.2	-363.8	636.7	587.4	49.24	12.929		
9,500.0	7,530.0	7,535.0	7,535.0	38.0	13.2	90.00	-1,635.2	-363.8	672.5	621.6	50.88	13.216		
9,600.0	7,530.0	7,535.0	7,535.0	39.6	13.2	90.00	-1,635.2	-363.8	720.5	667.9	52.53	13.715		
9,700.0	7,530.0	7,535.0	7,535.0	41.3	13.2	90.00	-1,635.2	-363.8	778.4	724.2	54.19	14.365		
9,800.0	7,530.0	7,535.0	7,535.0	42.9	13.2	90.00	-1,635.2	-363.8	844.3	788.4	55.86	15.115		
9,900.0	7,530.0	7,535.0	7,535.0	44.6	13.2	90.00	-1,635.2	-363.8	916.4	858.8	57.53	15.929		
10,000.0	7,530.0	7,535.0	7,535.0	46.3	13.2	90.00	-1,635.2	-363.8	993.3	934.1	59.21	16.776		
10,100.0	7,530.0	7,535.0	7,535.0	47.9	13.2	90.00	-1,635.2	-363.8	1,074.0	1,013.1	60.89	17.638		
10,200.0	7,530.0	7,535.0	7,535.0	49.6	13.2	90.00	-1,635.2	-363.8	1,157.7	1,095.2	62.58	18.500		
10,300.0	7,530.0	7,535.0	7,535.0	51.3	13.2	90.00	-1,635.2	-363.8	1,243.9	1,179.6	64.27	19.352		
10,400.0	7,530.0	7,535.0	7,535.0	53.0	13.2	90.00	-1,635.2	-363.8	1,332.0	1,266.0	65.97	20.190		
10,500.0	7,530.0	7,535.0	7,535.0	54.7	13.2	90.00	-1,635.2	-363.8	1,421.6	1,353.9	67.67	21.007		
10,600.0	7,530.0	7,535.0	7,535.0	56.4	13.2	90.00	-1,635.2	-363.8	1,512.6	1,443.2	69.38	21.802		
10,700.0	7,530.0	7,535.0	7,535.0	58.1	13.2	90.00	-1,635.2	-363.8	1,604.6	1,533.5	71.08	22.573		
10,800.0	7,530.0	7,535.0	7,535.0	59.8	13.2	90.00	-1,635.2	-363.8	1,697.5	1,624.7	72.79	23.319		
10,900.0	7,530.0	7,535.0	7,535.0	61.5	13.2	90.00	-1,635.2	-363.8	1,791.2	1,716.7	74.51	24.041		
11,000.0	7,530.0	7,535.0	7,535.0	63.2	13.2	90.00	-1,635.2	-363.8	1,885.6	1,809.3	76.22	24.738		
11,100.0	7,530.0	7,535.0	7,535.0	64.9	13.2	90.00	-1,635.2	-363.8	1,980.5	1,902.5	77.94	25.411		
11,200.0	7,530.0	7,535.0	7,535.0	66.6	13.2	90.00	-1,635.2	-363.8	2,075.8	1,996.2	79.66	26.060		
11,300.0	7,530.0	7,535.0	7,535.0	68.4	13.2	90.00	-1,635.2	-363.8	2,171.6	2,090.3	81.38	26.686		
11,400.0	7,530.0	7,535.0	7,535.0	70.1	13.2	90.00	-1,635.2	-363.8	2,267.8	2,184.7	83.10	27.290		
11,500.0	7,530.0	7,535.0	7,535.0	71.8	13.2	90.00	-1,635.2	-363.8	2,364.3	2,279.4	84.82	27.873		
11,600.0	7,530.0	7,535.0	7,535.0	73.5	13.2	90.00	-1,635.2	-363.8	2,461.0	2,374.5	86.55	28.435		
11,700.0	7,530.0	7,535.0	7,535.0	75.2	13.2	90.00	-1,635.2	-363.8	2,558.0	2,469.8	88.28	28.978		
11,800.0	7,530.0	7,535.0	7,535.0	77.0	13.2	90.00	-1,635.2	-363.8	2,655.3	2,565.3	90.00	29.502		
11,900.0	7,530.0	7,535.0	7,535.0	78.7	13.2	90.00	-1,635.2	-363.8	2,752.7	2,660.9	91.73	30.008		
12,000.0	7,530.0	7,535.0	7,535.0	80.4	13.2	90.00	-1,635.2	-363.8	2,850.3	2,756.8	93.46	30.497		
12,100.0	7,530.0	7,535.0	7,535.0	82.2	13.2	90.00	-1,635.2	-363.8	2,948.1	2,852.9	95.19	30.969		
12,200.0	7,530.0	7,535.0	7,535.0	83.9	13.2	90.00	-1,635.2	-363.8	3,046.0	2,949.0	96.93	31.426		
12,300.0	7,530.0	7,535.0	7,535.0	85.6	13.2	90.00	-1,635.2	-363.8	3,144.0	3,045.3	98.66	31.868		
12,400.0	7,530.0	7,535.0	7,535.0	87.3	13.2	90.00	-1,635.2	-363.8	3,242.2	3,141.8	100.39	32.295		
12,500.0	7,530.0	7,535.0	7,535.0	89.1	13.2	90.00	-1,635.2	-363.8	3,340.4	3,238.3	102.13	32.709		
12,600.0	7,530.0	7,535.0	7,535.0	90.8	13.2	90.00	-1,635.2	-363.8	3,438.8	3,334.9	103.86	33.109		
12,700.0	7,530.0	7,535.0	7,535.0	92.5	13.2	90.00	-1,635.2	-363.8	3,537.3	3,431.7	105.60	33.498		
12,800.0	7,530.0	7,535.0	7,535.0	94.3	13.2	90.00	-1,635.2	-363.8	3,635.8	3,528.5	107.33	33.874		
12,900.0	7,530.0	7,535.0	7,535.0	96.0	13.2	90.00	-1,635.2	-363.8	3,734.4	3,625.4	109.07	34.238		
13,000.0	7,530.0	7,535.0	7,535.0	97.8	13.2	90.00	-1,635.2	-363.8	3,833.1	3,722.3	110.81	34.592		
13,100.0	7,530.0	7,535.0	7,535.0	99.5	13.2	90.00	-1,635.2	-363.8	3,931.9	3,819.3	112.55	34.935		
13,200.0	7,530.0	7,535.0	7,535.0	101.2	13.2	90.00	-1,635.2	-363.8	4,030.7	3,916.4	114.29	35.268		
13,300.0	7,530.0	7,535.0	7,535.0	103.0	13.2	90.00	-1,635.2	-363.8	4,129.6	4,013.6	116.03	35.592		
13,400.0	7,530.0	7,535.0	7,535.0	104.7	13.2	90.00	-1,635.2	-363.8	4,228.5	4,110.8	117.77	35.906		
13,500.0	7,530.0	7,535.0	7,535.0	106.4	13.2	90.00	-1,635.2	-363.8	4,327.5	4,208.0	119.51	36.211		
13,600.0	7,530.0	7,535.0	7,535.0	108.2	13.2	90.00	-1,635.2	-363.8	4,426.5	4,305.3	121.25	36.508		
13,700.0	7,530.0	7,535.0	7,535.0	109.9	13.2	90.00	-1,635.2	-363.8	4,525.6	4,402.6	122.99	36.797		
13,800.0	7,530.0	7,535.0	7,535.0	111.7	13.2	90.00	-1,635.2	-363.8	4,624.7	4,500.0	124.73	37.077		
13,900.0	7,530.0	7,535.0	7,535.0	113.4	13.2	90.00	-1,635.2	-363.8	4,723.9	4,597.4	126.47	37.351		
14,000.0	7,530.0	7,535.0	7,535.0	115.1	13.2	90.00	-1,635.2	-363.8	4,823.0	4,694.8	128.22	37.617		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 42-7 ENCANA (EXISTING) - ENCANA													Offset Site Error: 0.0 ft	
Survey Program: 8381-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	7,535.0	7,535.0	116.9	13.2	90.00	-1,635.2	-363.8	4,922.3	4,792.3	129.96	37.876		
14,200.0	7,530.0	7,535.0	7,535.0	118.6	13.2	90.00	-1,635.2	-363.8	5,021.5	4,889.8	131.70	38.128		
14,300.0	7,530.0	7,535.0	7,535.0	120.4	13.2	90.00	-1,635.2	-363.8	5,120.8	4,987.3	133.44	38.374		
14,400.0	7,530.0	7,535.0	7,535.0	122.1	13.2	90.00	-1,635.2	-363.8	5,220.1	5,084.9	135.19	38.613		
14,500.0	7,530.0	7,535.0	7,535.0	123.9	13.2	90.00	-1,635.2	-363.8	5,319.4	5,182.5	136.93	38.847		
14,600.0	7,530.0	7,535.0	7,535.0	125.6	13.2	90.00	-1,635.2	-363.8	5,418.8	5,280.1	138.68	39.075		
14,700.0	7,530.0	7,535.0	7,535.0	127.3	13.2	90.00	-1,635.2	-363.8	5,518.1	5,377.7	140.42	39.297		
14,800.0	7,530.0	7,535.0	7,535.0	129.1	13.2	90.00	-1,635.2	-363.8	5,617.5	5,475.4	142.17	39.514		
14,900.0	7,530.0	7,535.0	7,535.0	130.8	13.2	90.00	-1,635.2	-363.8	5,717.0	5,573.0	143.91	39.725		
15,000.0	7,530.0	7,535.0	7,535.0	132.6	13.2	90.00	-1,635.2	-363.8	5,816.4	5,670.7	145.66	39.932		
15,100.0	7,530.0	7,535.0	7,535.0	134.3	13.2	90.00	-1,635.2	-363.8	5,915.9	5,768.5	147.40	40.134		
15,200.0	7,530.0	7,535.0	7,535.0	136.1	13.2	90.00	-1,635.2	-363.8	6,015.3	5,866.2	149.15	40.331		
15,300.0	7,530.0	7,535.0	7,535.0	137.8	13.2	90.00	-1,635.2	-363.8	6,114.8	5,963.9	150.89	40.524		
15,400.0	7,530.0	7,535.0	7,535.0	139.6	13.2	90.00	-1,635.2	-363.8	6,214.3	6,061.7	152.64	40.712		
15,500.0	7,530.0	7,535.0	7,535.0	141.3	13.2	90.00	-1,635.2	-363.8	6,313.9	6,159.5	154.39	40.896		
15,600.0	7,530.0	7,535.0	7,535.0	143.0	13.2	90.00	-1,635.2	-363.8	6,413.4	6,257.3	156.13	41.076		
15,700.0	7,530.0	7,535.0	7,535.0	144.8	13.2	90.00	-1,635.2	-363.8	6,513.0	6,355.1	157.88	41.253		
15,800.0	7,530.0	7,535.0	7,535.0	146.5	13.2	90.00	-1,635.2	-363.8	6,612.5	6,452.9	159.63	41.425		
15,900.0	7,530.0	7,535.0	7,535.0	148.3	13.2	90.00	-1,635.2	-363.8	6,712.1	6,550.7	161.37	41.593		
16,000.0	7,530.0	7,535.0	7,535.0	150.0	13.2	90.00	-1,635.2	-363.8	6,811.7	6,648.6	163.12	41.758		
16,100.0	7,530.0	7,535.0	7,535.0	151.8	13.2	90.00	-1,635.2	-363.8	6,911.3	6,746.4	164.87	41.920		
16,200.0	7,530.0	7,535.0	7,535.0	153.5	13.2	90.00	-1,635.2	-363.8	7,010.9	6,844.3	166.62	42.078		
16,300.0	7,530.0	7,535.0	7,535.0	155.3	13.2	90.00	-1,635.2	-363.8	7,110.5	6,942.2	168.36	42.233		
16,400.0	7,530.0	7,535.0	7,535.0	157.0	13.2	90.00	-1,635.2	-363.8	7,210.2	7,040.1	170.11	42.385		
16,500.0	7,530.0	7,535.0	7,535.0	158.8	13.2	90.00	-1,635.2	-363.8	7,309.8	7,138.0	171.86	42.534		
16,600.0	7,530.0	7,535.0	7,535.0	160.5	13.2	90.00	-1,635.2	-363.8	7,409.5	7,235.9	173.61	42.679		
16,700.0	7,530.0	7,535.0	7,535.0	162.3	13.2	90.00	-1,635.2	-363.8	7,509.2	7,333.8	175.36	42.822		
16,800.0	7,530.0	7,535.0	7,535.0	164.0	13.2	90.00	-1,635.2	-363.8	7,608.8	7,431.7	177.10	42.962		
16,900.0	7,530.0	7,535.0	7,535.0	165.8	13.2	90.00	-1,635.2	-363.8	7,708.5	7,529.7	178.85	43.100		
17,000.0	7,530.0	7,535.0	7,535.0	167.5	13.2	90.00	-1,635.2	-363.8	7,808.2	7,627.6	180.60	43.234		
17,100.0	7,530.0	7,535.0	7,535.0	169.3	13.2	90.00	-1,635.2	-363.8	7,907.9	7,725.5	182.35	43.367		
17,200.0	7,530.0	7,535.0	7,535.0	171.0	13.2	90.00	-1,635.2	-363.8	8,007.6	7,823.5	184.10	43.496		
17,300.0	7,530.0	7,535.0	7,535.0	172.8	13.2	90.00	-1,635.2	-363.8	8,107.3	7,921.5	185.85	43.623		
17,400.0	7,530.0	7,535.0	7,535.0	174.5	13.2	90.00	-1,635.2	-363.8	8,207.0	8,019.4	187.60	43.748		
17,420.9	7,530.0	7,535.0	7,535.0	174.9	13.2	90.00	-1,635.2	-363.8	8,227.9	8,040.0	187.96	43.774		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-131.37	-1,116.5	-1,267.8	1,689.3					
100.0	100.0	121.0	121.0	0.2	0.2	-131.37	-1,116.5	-1,267.8	1,689.3	1,689.0	0.36	4,650.945		
200.0	200.0	221.0	221.0	0.3	0.4	-131.37	-1,116.5	-1,267.8	1,689.3	1,688.6	0.71	2,371.709		
300.0	300.0	321.0	321.0	0.5	0.6	-131.37	-1,116.5	-1,267.8	1,689.3	1,688.3	1.06	1,591.689		
400.0	400.0	421.0	421.0	0.7	0.7	-131.37	-1,116.5	-1,267.8	1,689.3	1,687.9	1.41	1,197.762		
500.0	500.0	521.0	521.0	0.8	0.9	-131.37	-1,116.5	-1,267.8	1,689.3	1,687.6	1.76	960.138		
600.0	600.0	621.0	621.0	1.0	1.1	-131.37	-1,116.5	-1,267.8	1,689.3	1,687.2	2.11	801.190		
700.0	700.0	721.0	721.0	1.2	1.3	-163.85	-1,116.5	-1,267.8	1,690.2	1,687.7	2.46	687.791		
800.0	800.0	821.0	821.0	1.4	1.4	-163.87	-1,116.5	-1,267.8	1,692.7	1,689.9	2.81	603.268		
900.0	899.9	920.9	920.9	1.6	1.6	-163.89	-1,116.5	-1,267.8	1,696.9	1,693.7	3.15	538.008		
988.4	988.1	1,009.1	1,009.1	1.7	1.8	-163.93	-1,116.5	-1,267.8	1,702.0	1,698.5	3.46	491.685		
1,000.0	999.7	1,020.7	1,020.7	1.7	1.8	-163.94	-1,116.5	-1,267.8	1,702.7	1,699.2	3.50	486.200		
1,100.0	1,099.4	1,120.4	1,120.4	1.9	2.0	-164.00	-1,116.5	-1,267.8	1,709.3	1,705.4	3.85	443.702		
1,200.0	1,199.2	1,220.2	1,220.2	2.1	2.1	-164.06	-1,116.5	-1,267.8	1,715.8	1,711.6	4.20	408.265		
1,300.0	1,299.0	1,320.0	1,320.0	2.3	2.3	-164.12	-1,116.5	-1,267.8	1,722.3	1,717.7	4.55	378.269		
1,400.0	1,398.8	1,419.8	1,419.8	2.5	2.5	-164.19	-1,116.5	-1,267.8	1,728.8	1,723.9	4.90	352.554		
1,500.0	1,498.5	1,519.5	1,519.5	2.7	2.7	-164.25	-1,116.5	-1,267.8	1,735.3	1,730.1	5.25	330.265		
1,600.0	1,598.3	1,619.3	1,619.3	2.9	2.8	-164.31	-1,116.5	-1,267.8	1,741.8	1,736.2	5.61	310.763		
1,700.0	1,698.1	1,719.1	1,719.1	3.2	3.0	-164.37	-1,116.5	-1,267.8	1,748.4	1,742.4	5.96	293.556		
1,800.0	1,797.8	1,818.8	1,818.8	3.4	3.2	-164.43	-1,116.5	-1,267.8	1,754.9	1,748.6	6.31	278.262		
1,900.0	1,897.6	1,918.6	1,918.6	3.6	3.3	-164.49	-1,116.5	-1,267.8	1,761.4	1,754.8	6.66	264.580		
2,000.0	1,997.4	2,018.4	2,018.4	3.8	3.5	-164.54	-1,116.5	-1,267.8	1,767.9	1,760.9	7.01	252.268		
2,100.0	2,097.1	2,118.1	2,118.1	4.0	3.7	-164.60	-1,116.5	-1,267.8	1,774.5	1,767.1	7.36	241.129		
2,200.0	2,196.9	2,217.9	2,217.9	4.2	3.9	-164.66	-1,116.5	-1,267.8	1,781.0	1,773.3	7.71	231.005		
2,300.0	2,296.7	2,317.7	2,317.7	4.4	4.0	-164.72	-1,116.5	-1,267.8	1,787.5	1,779.5	8.06	221.762		
2,400.0	2,396.5	2,417.5	2,417.5	4.6	4.2	-164.78	-1,116.5	-1,267.8	1,794.1	1,785.7	8.41	213.291		
2,500.0	2,496.2	2,517.2	2,517.2	4.8	4.4	-164.83	-1,116.5	-1,267.8	1,800.6	1,791.9	8.76	205.498		
2,600.0	2,596.0	2,617.0	2,617.0	5.0	4.6	-164.89	-1,116.5	-1,267.8	1,807.2	1,798.0	9.11	198.306		
2,700.0	2,695.8	2,716.8	2,716.8	5.2	4.7	-164.94	-1,116.5	-1,267.8	1,813.7	1,804.2	9.46	191.648		
2,800.0	2,795.5	2,816.5	2,816.5	5.4	4.9	-165.00	-1,116.5	-1,267.8	1,820.2	1,810.4	9.81	185.466		
2,900.0	2,895.3	2,916.3	2,916.3	5.6	5.1	-165.05	-1,116.5	-1,267.8	1,826.8	1,816.6	10.17	179.711		
3,000.0	2,995.1	3,016.1	3,016.1	5.9	5.3	-165.11	-1,116.5	-1,267.8	1,833.3	1,822.8	10.52	174.341		
3,100.0	3,094.9	3,115.9	3,115.9	6.1	5.4	-165.16	-1,116.5	-1,267.8	1,839.9	1,829.0	10.87	169.317		
3,200.0	3,194.6	3,215.6	3,215.6	6.3	5.6	-165.22	-1,116.5	-1,267.8	1,846.4	1,835.2	11.22	164.608		
3,300.0	3,294.4	3,315.4	3,315.4	6.5	5.8	-165.27	-1,116.5	-1,267.8	1,853.0	1,841.4	11.57	160.186		
3,400.0	3,394.2	3,415.2	3,415.2	6.7	6.0	-165.32	-1,116.5	-1,267.8	1,859.5	1,847.6	11.92	156.023		
3,500.0	3,493.9	3,514.9	3,514.9	6.9	6.1	-165.38	-1,116.5	-1,267.8	1,866.1	1,853.8	12.27	152.099		
3,600.0	3,593.7	3,614.7	3,614.7	7.1	6.3	-165.43	-1,116.5	-1,267.8	1,872.6	1,860.0	12.62	148.394		
3,700.0	3,693.5	3,714.5	3,714.5	7.3	6.5	-165.48	-1,116.5	-1,267.8	1,879.2	1,866.2	12.97	144.889		
3,800.0	3,793.2	3,814.2	3,814.2	7.5	6.7	-165.53	-1,116.5	-1,267.8	1,885.8	1,872.4	13.32	141.569		
3,900.0	3,893.0	3,914.0	3,914.0	7.7	6.8	-165.58	-1,116.5	-1,267.8	1,892.3	1,878.6	13.67	138.420		
4,000.0	3,992.8	4,013.8	4,013.8	8.0	7.0	-165.63	-1,116.5	-1,267.8	1,898.9	1,884.9	14.02	135.428		
4,100.0	4,092.6	4,113.6	4,113.6	8.2	7.2	-165.68	-1,116.5	-1,267.8	1,905.4	1,891.1	14.37	132.583		
4,200.0	4,192.3	4,213.3	4,213.3	8.4	7.4	-165.73	-1,116.5	-1,267.8	1,912.0	1,897.3	14.72	129.873		
4,300.0	4,292.1	4,313.1	4,313.1	8.6	7.5	-165.78	-1,116.5	-1,267.8	1,918.6	1,903.5	15.07	127.290		
4,400.0	4,391.9	4,412.9	4,412.9	8.8	7.7	-165.83	-1,116.5	-1,267.8	1,925.1	1,909.7	15.42	124.824		
4,500.0	4,491.6	4,512.6	4,512.6	9.0	7.9	-165.88	-1,116.5	-1,267.8	1,931.7	1,915.9	15.77	122.469		
4,600.0	4,591.4	4,612.4	4,612.4	9.2	8.1	-165.93	-1,116.5	-1,267.8	1,938.3	1,922.2	16.12	120.215		
4,700.0	4,691.2	4,712.2	4,712.2	9.4	8.2	-165.98	-1,116.5	-1,267.8	1,944.9	1,928.4	16.47	118.058		
4,800.0	4,790.9	4,811.9	4,811.9	9.6	8.4	-166.03	-1,116.5	-1,267.8	1,951.4	1,934.6	16.82	115.991		
4,900.0	4,890.7	4,911.7	4,911.7	9.8	8.6	-166.08	-1,116.5	-1,267.8	1,958.0	1,940.8	17.17	114.009		
5,000.0	4,990.5	5,011.5	5,011.5	10.1	8.7	-166.12	-1,116.5	-1,267.8	1,964.6	1,947.1	17.52	112.106		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
5,100.0	5,090.3	5,111.3	5,111.3	10.3	8.9	-166.17	-1,116.5	-1,267.8	1,971.2	1,953.3	17.87	110.277		
5,200.0	5,190.0	5,211.0	5,211.0	10.5	9.1	-166.22	-1,116.5	-1,267.8	1,977.7	1,959.5	18.22	108.519		
5,300.0	5,289.8	5,310.8	5,310.8	10.7	9.3	-166.26	-1,116.5	-1,267.8	1,984.3	1,965.7	18.57	106.828		
5,400.0	5,389.6	5,410.6	5,410.6	10.9	9.4	-166.31	-1,116.5	-1,267.8	1,990.9	1,972.0	18.92	105.200		
5,500.0	5,489.3	5,510.3	5,510.3	11.1	9.6	-166.36	-1,116.5	-1,267.8	1,997.5	1,978.2	19.28	103.630		
5,600.0	5,589.1	5,610.1	5,610.1	11.3	9.8	-166.40	-1,116.5	-1,267.8	2,004.1	1,984.4	19.63	102.117		
5,700.0	5,688.9	5,709.9	5,709.9	11.5	10.0	-166.45	-1,116.5	-1,267.8	2,010.6	1,990.7	19.98	100.657		
5,800.0	5,788.7	5,809.7	5,809.7	11.7	10.1	-166.49	-1,116.5	-1,267.8	2,017.2	1,996.9	20.33	99.248		
5,900.0	5,888.4	5,909.4	5,909.4	11.9	10.3	-166.54	-1,116.5	-1,267.8	2,023.8	2,003.1	20.68	97.887		
6,000.0	5,988.2	6,009.2	6,009.2	12.2	10.5	-166.58	-1,116.5	-1,267.8	2,030.4	2,009.4	21.03	96.570		
6,100.0	6,088.0	6,109.0	6,109.0	12.4	10.7	-166.63	-1,116.5	-1,267.8	2,037.0	2,015.6	21.38	95.298		
6,200.0	6,187.7	6,208.7	6,208.7	12.6	10.8	-166.67	-1,116.5	-1,267.8	2,043.6	2,021.9	21.73	94.066		
6,300.0	6,287.5	6,308.5	6,308.5	12.8	11.0	-166.71	-1,116.5	-1,267.8	2,050.2	2,028.1	22.08	92.874		
6,400.0	6,387.3	6,408.3	6,408.3	13.0	11.2	-166.76	-1,116.5	-1,267.8	2,056.8	2,034.4	22.42	91.718		
6,500.0	6,487.0	6,508.0	6,508.0	13.2	11.4	-166.80	-1,116.5	-1,267.8	2,063.4	2,040.6	22.77	90.599		
6,600.0	6,586.8	6,607.8	6,607.8	13.4	11.5	-166.84	-1,116.5	-1,267.8	2,070.0	2,046.8	23.12	89.513		
6,700.0	6,686.6	6,707.6	6,707.6	13.6	11.7	-166.89	-1,116.5	-1,267.8	2,076.6	2,053.1	23.47	88.460		
6,787.0	6,773.4	6,794.4	6,794.4	13.8	11.9	-166.92	-1,116.5	-1,267.8	2,082.3	2,058.5	23.78	87.570		
6,800.0	6,786.4	6,807.4	6,807.4	13.8	11.9	-177.50	-1,116.5	-1,267.8	2,083.1	2,059.3	23.83	87.416		
6,850.0	6,836.3	6,857.3	6,857.3	13.9	12.0	95.32	-1,116.5	-1,267.8	2,084.5	2,060.5	24.00	86.862		
6,900.0	6,886.2	6,907.2	6,907.2	14.0	12.1	65.61	-1,116.5	-1,267.8	2,083.5	2,059.4	24.13	86.352		
6,950.0	6,935.7	6,956.7	6,956.7	14.0	12.1	58.16	-1,116.5	-1,267.8	2,080.1	2,055.9	24.22	85.877		
7,000.0	6,984.6	7,005.6	7,005.6	14.0	12.2	55.31	-1,116.5	-1,267.8	2,074.3	2,050.0	24.28	85.424		
7,050.0	7,032.6	7,053.6	7,053.6	14.0	12.3	54.20	-1,116.5	-1,267.8	2,066.2	2,041.9	24.32	84.973		
7,100.0	7,079.7	7,100.7	7,100.7	13.9	12.4	54.00	-1,116.5	-1,267.8	2,055.8	2,031.5	24.33	84.498		
7,150.0	7,125.4	7,146.4	7,146.4	13.9	12.5	54.39	-1,116.5	-1,267.8	2,043.3	2,018.9	24.33	83.969		
7,200.0	7,169.6	7,190.6	7,190.6	13.8	12.5	55.23	-1,116.5	-1,267.8	2,028.7	2,004.3	24.34	83.352		
7,250.0	7,212.1	7,233.1	7,233.1	13.8	12.6	56.44	-1,116.5	-1,267.8	2,012.2	1,987.9	24.36	82.612		
7,300.0	7,252.6	7,273.6	7,273.6	13.7	12.7	57.97	-1,116.5	-1,267.8	1,994.0	1,969.6	24.40	81.714		
7,350.0	7,291.0	7,312.0	7,312.0	13.7	12.8	59.78	-1,116.5	-1,267.8	1,974.2	1,949.7	24.48	80.634		
7,400.0	7,327.1	7,348.1	7,348.1	13.7	12.8	61.84	-1,116.5	-1,267.8	1,953.0	1,928.4	24.61	79.354		
7,450.0	7,360.7	7,381.7	7,381.7	13.7	12.9	64.13	-1,116.5	-1,267.8	1,930.6	1,905.8	24.79	77.875		
7,500.0	7,391.6	7,412.6	7,412.6	13.7	12.9	66.61	-1,116.5	-1,267.8	1,907.2	1,882.2	25.03	76.211		
7,550.0	7,419.7	7,440.7	7,440.7	13.8	13.0	69.25	-1,116.5	-1,267.8	1,883.0	1,857.7	25.31	74.393		
7,600.0	7,444.8	7,465.8	7,465.8	13.9	13.0	71.99	-1,116.5	-1,267.8	1,858.3	1,832.6	25.64	72.463		
7,650.0	7,466.9	7,487.9	7,487.9	14.1	13.1	74.78	-1,116.5	-1,267.8	1,833.2	1,807.2	26.02	70.465		
7,700.0	7,485.8	7,506.8	7,506.8	14.3	13.1	77.58	-1,116.5	-1,267.8	1,807.9	1,781.5	26.41	68.445		
7,750.0	7,501.5	7,522.5	7,522.5	14.6	13.1	80.33	-1,116.5	-1,267.8	1,782.8	1,756.0	26.83	66.438		
7,800.0	7,513.7	7,534.7	7,534.7	14.9	13.2	82.98	-1,116.5	-1,267.8	1,758.0	1,730.8	27.27	64.471		
7,850.0	7,522.6	7,543.6	7,543.6	15.2	13.2	85.48	-1,116.5	-1,267.8	1,733.8	1,706.1	27.71	62.562		
7,900.0	7,528.0	7,549.0	7,549.0	15.6	13.2	87.79	-1,116.5	-1,267.8	1,710.2	1,682.1	28.17	60.718		
7,952.9	7,530.0	7,551.0	7,551.0	16.1	13.2	90.00	-1,116.5	-1,267.8	1,686.3	1,657.6	28.66	58.840		
8,000.0	7,530.0	7,551.0	7,551.0	16.5	13.2	90.00	-1,116.5	-1,267.8	1,666.1	1,637.0	29.11	57.226		
8,100.0	7,530.0	7,551.0	7,551.0	17.5	13.2	90.00	-1,116.5	-1,267.8	1,626.8	1,596.6	30.17	53.913		
8,200.0	7,530.0	7,551.0	7,551.0	18.7	13.2	90.00	-1,116.5	-1,267.8	1,592.8	1,561.5	31.34	50.820		
8,300.0	7,530.0	7,551.0	7,551.0	19.9	13.2	90.00	-1,116.5	-1,267.8	1,564.5	1,531.9	32.60	47.994		
8,400.0	7,530.0	7,551.0	7,551.0	21.2	13.2	90.00	-1,116.5	-1,267.8	1,542.2	1,508.3	33.93	45.456		
8,500.0	7,530.0	7,551.0	7,551.0	22.6	13.2	90.00	-1,116.5	-1,267.8	1,526.1	1,490.8	35.32	43.214		
8,600.0	7,530.0	7,551.0	7,551.0	24.0	13.2	90.00	-1,116.5	-1,267.8	1,516.4	1,479.7	36.75	41.262		
8,696.9	7,530.0	7,551.0	7,551.0	25.4	13.2	90.00	-1,116.5	-1,267.8	1,513.3	1,475.2	38.18	39.634 CC		
8,700.0	7,530.0	7,551.0	7,551.0	25.4	13.2	90.00	-1,116.5	-1,267.8	1,513.4	1,475.1	38.23	39.586 ES		
8,800.0	7,530.0	7,551.0	7,551.0	26.9	13.2	90.00	-1,116.5	-1,267.8	1,516.9	1,477.1	39.74	38.169		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8320-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
8,900.0	7,530.0	7,551.0	7,551.0	28.4	13.2	90.00	-1,116.5	-1,267.8	1,526.9	1,485.6	41.28	36.990		
9,000.0	7,530.0	7,551.0	7,551.0	30.0	13.2	90.00	-1,116.5	-1,267.8	1,543.4	1,500.6	42.84	36.025		
9,100.0	7,530.0	7,551.0	7,551.0	31.5	13.2	90.00	-1,116.5	-1,267.8	1,566.1	1,521.7	44.43	35.253		
9,200.0	7,530.0	7,551.0	7,551.0	33.1	13.2	90.00	-1,116.5	-1,267.8	1,594.8	1,548.8	46.03	34.649		
9,300.0	7,530.0	7,551.0	7,551.0	34.7	13.2	90.00	-1,116.5	-1,267.8	1,629.1	1,581.5	47.64	34.195		
9,400.0	7,530.0	7,551.0	7,551.0	36.3	13.2	90.00	-1,116.5	-1,267.8	1,668.7	1,619.5	49.27	33.868		
9,500.0	7,530.0	7,551.0	7,551.0	38.0	13.2	90.00	-1,116.5	-1,267.8	1,713.3	1,662.4	50.91	33.652		
9,600.0	7,530.0	7,551.0	7,551.0	39.6	13.2	90.00	-1,116.5	-1,267.8	1,762.4	1,709.8	52.56	33.530		
9,700.0	7,530.0	7,551.0	7,551.0	41.3	13.2	90.00	-1,116.5	-1,267.8	1,815.6	1,761.4	54.22	33.487 SF		
9,800.0	7,530.0	7,551.0	7,551.0	42.9	13.2	90.00	-1,116.5	-1,267.8	1,872.7	1,816.9	55.88	33.511		
9,900.0	7,530.0	7,551.0	7,551.0	44.6	13.2	90.00	-1,116.5	-1,267.8	1,933.3	1,875.8	57.56	33.590		
10,000.0	7,530.0	7,551.0	7,551.0	46.3	13.2	90.00	-1,116.5	-1,267.8	1,997.1	1,937.9	59.24	33.714		
10,100.0	7,530.0	7,551.0	7,551.0	47.9	13.2	90.00	-1,116.5	-1,267.8	2,063.7	2,002.8	60.92	33.876		
10,200.0	7,530.0	7,551.0	7,551.0	49.6	13.2	90.00	-1,116.5	-1,267.8	2,133.0	2,070.4	62.61	34.068		
10,300.0	7,530.0	7,551.0	7,551.0	51.3	13.2	90.00	-1,116.5	-1,267.8	2,204.6	2,140.3	64.30	34.285		
10,400.0	7,530.0	7,551.0	7,551.0	53.0	13.2	90.00	-1,116.5	-1,267.8	2,278.4	2,212.4	66.00	34.521		
10,500.0	7,530.0	7,551.0	7,551.0	54.7	13.2	90.00	-1,116.5	-1,267.8	2,354.1	2,286.3	67.70	34.771		
10,600.0	7,530.0	7,551.0	7,551.0	56.4	13.2	90.00	-1,116.5	-1,267.8	2,431.5	2,362.1	69.41	35.033		
10,700.0	7,530.0	7,551.0	7,551.0	58.1	13.2	90.00	-1,116.5	-1,267.8	2,510.5	2,439.4	71.11	35.304		
10,800.0	7,530.0	7,551.0	7,551.0	59.8	13.2	90.00	-1,116.5	-1,267.8	2,591.0	2,518.2	72.82	35.580		
10,900.0	7,530.0	7,551.0	7,551.0	61.5	13.2	90.00	-1,116.5	-1,267.8	2,672.8	2,598.3	74.53	35.860		
11,000.0	7,530.0	7,551.0	7,551.0	63.2	13.2	90.00	-1,116.5	-1,267.8	2,755.8	2,679.6	76.25	36.142		
11,100.0	7,530.0	7,551.0	7,551.0	64.9	13.2	90.00	-1,116.5	-1,267.8	2,840.0	2,762.0	77.97	36.425		
11,200.0	7,530.0	7,551.0	7,551.0	66.6	13.2	90.00	-1,116.5	-1,267.8	2,925.1	2,845.4	79.69	36.708		
11,300.0	7,530.0	7,551.0	7,551.0	68.4	13.2	90.00	-1,116.5	-1,267.8	3,011.1	2,929.7	81.41	36.989		
11,400.0	7,530.0	7,551.0	7,551.0	70.1	13.2	90.00	-1,116.5	-1,267.8	3,097.9	3,014.8	83.13	37.267		
11,500.0	7,530.0	7,551.0	7,551.0	71.8	13.2	90.00	-1,116.5	-1,267.8	3,185.6	3,100.7	84.85	37.543		
11,600.0	7,530.0	7,551.0	7,551.0	73.5	13.2	90.00	-1,116.5	-1,267.8	3,273.9	3,187.3	86.58	37.815		
11,700.0	7,530.0	7,551.0	7,551.0	75.2	13.2	90.00	-1,116.5	-1,267.8	3,362.9	3,274.6	88.30	38.083		
11,800.0	7,530.0	7,551.0	7,551.0	77.0	13.2	90.00	-1,116.5	-1,267.8	3,452.5	3,362.5	90.03	38.348		
11,900.0	7,530.0	7,551.0	7,551.0	78.7	13.2	90.00	-1,116.5	-1,267.8	3,542.6	3,450.9	91.76	38.608		
12,000.0	7,530.0	7,551.0	7,551.0	80.4	13.2	90.00	-1,116.5	-1,267.8	3,633.3	3,539.8	93.49	38.863		
12,100.0	7,530.0	7,551.0	7,551.0	82.2	13.2	90.00	-1,116.5	-1,267.8	3,724.5	3,629.2	95.22	39.114		
12,200.0	7,530.0	7,551.0	7,551.0	83.9	13.2	90.00	-1,116.5	-1,267.8	3,816.1	3,719.1	96.95	39.360		
12,300.0	7,530.0	7,551.0	7,551.0	85.6	13.2	90.00	-1,116.5	-1,267.8	3,908.1	3,809.4	98.69	39.601		
12,400.0	7,530.0	7,551.0	7,551.0	87.3	13.2	90.00	-1,116.5	-1,267.8	4,000.4	3,900.0	100.42	39.837		
12,500.0	7,530.0	7,551.0	7,551.0	89.1	13.2	90.00	-1,116.5	-1,267.8	4,093.2	3,991.0	102.15	40.069		
12,600.0	7,530.0	7,551.0	7,551.0	90.8	13.2	90.00	-1,116.5	-1,267.8	4,186.3	4,082.4	103.89	40.295		
12,700.0	7,530.0	7,551.0	7,551.0	92.5	13.2	90.00	-1,116.5	-1,267.8	4,279.6	4,174.0	105.63	40.517		
12,800.0	7,530.0	7,551.0	7,551.0	94.3	13.2	90.00	-1,116.5	-1,267.8	4,373.3	4,266.0	107.36	40.734		
12,900.0	7,530.0	7,551.0	7,551.0	96.0	13.2	90.00	-1,116.5	-1,267.8	4,467.3	4,358.2	109.10	40.947		
13,000.0	7,530.0	7,551.0	7,551.0	97.8	13.2	90.00	-1,116.5	-1,267.8	4,561.5	4,450.7	110.84	41.155		
13,100.0	7,530.0	7,551.0	7,551.0	99.5	13.2	90.00	-1,116.5	-1,267.8	4,656.0	4,543.4	112.58	41.358		
13,200.0	7,530.0	7,551.0	7,551.0	101.2	13.2	90.00	-1,116.5	-1,267.8	4,750.6	4,636.3	114.31	41.557		
13,300.0	7,530.0	7,551.0	7,551.0	103.0	13.2	90.00	-1,116.5	-1,267.8	4,845.5	4,729.5	116.05	41.752		
13,400.0	7,530.0	7,551.0	7,551.0	104.7	13.2	90.00	-1,116.5	-1,267.8	4,940.6	4,822.8	117.79	41.943		
13,500.0	7,530.0	7,551.0	7,551.0	106.4	13.2	90.00	-1,116.5	-1,267.8	5,035.9	4,916.4	119.53	42.129		
13,600.0	7,530.0	7,551.0	7,551.0	108.2	13.2	90.00	-1,116.5	-1,267.8	5,131.4	5,010.1	121.28	42.312		
13,700.0	7,530.0	7,551.0	7,551.0	109.9	13.2	90.00	-1,116.5	-1,267.8	5,227.0	5,104.0	123.02	42.490		
13,800.0	7,530.0	7,551.0	7,551.0	111.7	13.2	90.00	-1,116.5	-1,267.8	5,322.8	5,198.1	124.76	42.665		
13,900.0	7,530.0	7,551.0	7,551.0	113.4	13.2	90.00	-1,116.5	-1,267.8	5,418.8	5,292.3	126.50	42.836		
14,000.0	7,530.0	7,551.0	7,551.0	115.1	13.2	90.00	-1,116.5	-1,267.8	5,514.9	5,386.6	128.24	43.003		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,100.0	7,530.0	7,551.0	7,551.0	116.9	13.2	90.00	-1,116.5	-1,267.8	5,611.1	5,481.1	129.99	43.167		
14,200.0	7,530.0	7,551.0	7,551.0	118.6	13.2	90.00	-1,116.5	-1,267.8	5,707.4	5,575.7	131.73	43.327		
14,300.0	7,530.0	7,551.0	7,551.0	120.4	13.2	90.00	-1,116.5	-1,267.8	5,803.9	5,670.4	133.47	43.484		
14,400.0	7,530.0	7,551.0	7,551.0	122.1	13.2	90.00	-1,116.5	-1,267.8	5,900.5	5,765.3	135.22	43.638		
14,500.0	7,530.0	7,551.0	7,551.0	123.9	13.2	90.00	-1,116.5	-1,267.8	5,997.2	5,860.3	136.96	43.788		
14,600.0	7,530.0	7,551.0	7,551.0	125.6	13.2	90.00	-1,116.5	-1,267.8	6,094.0	5,955.3	138.70	43.935		
14,700.0	7,530.0	7,551.0	7,551.0	127.3	13.2	90.00	-1,116.5	-1,267.8	6,191.0	6,050.5	140.45	44.080		
14,800.0	7,530.0	7,551.0	7,551.0	129.1	13.2	90.00	-1,116.5	-1,267.8	6,288.0	6,145.8	142.19	44.221		
14,900.0	7,530.0	7,551.0	7,551.0	130.8	13.2	90.00	-1,116.5	-1,267.8	6,385.1	6,241.1	143.94	44.359		
15,000.0	7,530.0	7,551.0	7,551.0	132.6	13.2	90.00	-1,116.5	-1,267.8	6,482.3	6,336.6	145.68	44.495		
15,100.0	7,530.0	7,551.0	7,551.0	134.3	13.2	90.00	-1,116.5	-1,267.8	6,579.6	6,432.1	147.43	44.628		
15,200.0	7,530.0	7,551.0	7,551.0	136.1	13.2	90.00	-1,116.5	-1,267.8	6,676.9	6,527.7	149.18	44.759		
15,300.0	7,530.0	7,551.0	7,551.0	137.8	13.2	90.00	-1,116.5	-1,267.8	6,774.3	6,623.4	150.92	44.886		
15,400.0	7,530.0	7,551.0	7,551.0	139.6	13.2	90.00	-1,116.5	-1,267.8	6,871.9	6,719.2	152.67	45.012		
15,500.0	7,530.0	7,551.0	7,551.0	141.3	13.2	90.00	-1,116.5	-1,267.8	6,969.4	6,815.0	154.41	45.135		
15,600.0	7,530.0	7,551.0	7,551.0	143.0	13.2	90.00	-1,116.5	-1,267.8	7,067.1	6,910.9	156.16	45.255		
15,700.0	7,530.0	7,551.0	7,551.0	144.8	13.2	90.00	-1,116.5	-1,267.8	7,164.8	7,006.9	157.91	45.373		
15,800.0	7,530.0	7,551.0	7,551.0	146.5	13.2	90.00	-1,116.5	-1,267.8	7,262.6	7,102.9	159.65	45.489		
15,900.0	7,530.0	7,551.0	7,551.0	148.3	13.2	90.00	-1,116.5	-1,267.8	7,360.4	7,199.0	161.40	45.603		
16,000.0	7,530.0	7,551.0	7,551.0	150.0	13.2	90.00	-1,116.5	-1,267.8	7,458.3	7,295.1	163.15	45.715		
16,100.0	7,530.0	7,551.0	7,551.0	151.8	13.2	90.00	-1,116.5	-1,267.8	7,556.2	7,391.3	164.90	45.824		
16,200.0	7,530.0	7,551.0	7,551.0	153.5	13.2	90.00	-1,116.5	-1,267.8	7,654.2	7,487.6	166.64	45.932		
16,300.0	7,530.0	7,551.0	7,551.0	155.3	13.2	90.00	-1,116.5	-1,267.8	7,752.3	7,583.9	168.39	46.037		
16,400.0	7,530.0	7,551.0	7,551.0	157.0	13.2	90.00	-1,116.5	-1,267.8	7,850.4	7,680.3	170.14	46.141		
16,500.0	7,530.0	7,551.0	7,551.0	158.8	13.2	90.00	-1,116.5	-1,267.8	7,948.5	7,776.7	171.89	46.243		
16,600.0	7,530.0	7,551.0	7,551.0	160.5	13.2	90.00	-1,116.5	-1,267.8	8,046.7	7,873.1	173.64	46.343		
16,700.0	7,530.0	7,551.0	7,551.0	162.3	13.2	90.00	-1,116.5	-1,267.8	8,145.0	7,969.6	175.38	46.441		
16,800.0	7,530.0	7,551.0	7,551.0	164.0	13.2	90.00	-1,116.5	-1,267.8	8,243.3	8,066.1	177.13	46.537		
16,900.0	7,530.0	7,551.0	7,551.0	165.8	13.2	90.00	-1,116.5	-1,267.8	8,341.6	8,162.7	178.88	46.632		
17,000.0	7,530.0	7,551.0	7,551.0	167.5	13.2	90.00	-1,116.5	-1,267.8	8,439.9	8,259.3	180.63	46.725		
17,100.0	7,530.0	7,551.0	7,551.0	169.3	13.2	90.00	-1,116.5	-1,267.8	8,538.3	8,356.0	182.38	46.817		
17,200.0	7,530.0	7,551.0	7,551.0	171.0	13.2	90.00	-1,116.5	-1,267.8	8,636.8	8,452.6	184.13	46.907		
17,300.0	7,530.0	7,551.0	7,551.0	172.8	13.2	90.00	-1,116.5	-1,267.8	8,735.2	8,549.4	185.88	46.995		
17,400.0	7,530.0	7,551.0	7,551.0	174.5	13.2	90.00	-1,116.5	-1,267.8	8,833.7	8,646.1	187.63	47.082		
17,420.9	7,530.0	7,551.0	7,551.0	174.9	13.2	90.00	-1,116.5	-1,267.8	8,854.4	8,666.4	187.99	47.100		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL														Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	21.5	21.5	0.0	0.0	-107.63	-1,068.2	-3,360.7	3,526.3						
100.0	100.0	183.5	183.5	0.2	0.3	-107.64	-1,067.8	-3,358.4	3,524.9	3,524.4	0.47	7,427.579			
200.0	200.0	258.9	258.8	0.3	0.5	-107.64	-1,067.6	-3,357.0	3,523.0	3,522.3	0.78	4,511.530			
300.0	300.0	330.2	330.2	0.5	0.6	-107.64	-1,067.5	-3,356.3	3,522.1	3,521.0	1.08	3,262.010			
400.0	400.0	410.5	410.5	0.7	0.7	-107.64	-1,067.5	-3,356.1	3,521.8	3,520.4	1.39	2,526.683			
500.0	500.0	512.7	512.7	0.8	0.9	-107.64	-1,067.1	-3,356.2	3,521.8	3,520.0	1.75	2,017.128			
533.2	533.2	543.3	543.2	0.9	1.0	-107.64	-1,067.0	-3,356.2	3,521.7	3,519.9	1.86	1,896.298 CC			
600.0	600.0	605.0	605.0	1.0	1.1	-107.63	-1,066.9	-3,356.3	3,521.8	3,519.7	2.08	1,692.095 ES			
700.0	700.0	700.0	700.0	1.2	1.2	-140.11	-1,066.9	-3,356.5	3,522.6	3,520.2	2.42	1,455.121			
800.0	800.0	773.3	773.2	1.4	1.4	-140.11	-1,067.0	-3,356.9	3,525.3	3,522.5	2.72	1,294.172			
900.0	899.9	865.9	865.9	1.6	1.5	-140.12	-1,067.1	-3,358.1	3,529.9	3,526.8	3.06	1,152.562			
988.4	988.1	954.1	954.1	1.7	1.7	-140.14	-1,066.9	-3,359.3	3,535.0	3,531.7	3.38	1,047.322			
1,000.0	999.7	965.3	965.2	1.7	1.7	-140.14	-1,067.0	-3,359.4	3,535.8	3,532.4	3.42	1,035.111			
1,100.0	1,099.4	1,065.6	1,065.6	1.9	1.9	-140.21	-1,067.3	-3,360.7	3,542.3	3,538.5	3.77	938.724			
1,200.0	1,199.2	1,156.4	1,156.4	2.1	2.0	-140.28	-1,067.6	-3,361.8	3,548.8	3,544.7	4.12	862.226			
1,300.0	1,299.0	1,246.0	1,245.9	2.3	2.2	-140.34	-1,067.9	-3,363.3	3,555.7	3,551.2	4.46	797.787			
1,400.0	1,398.8	1,353.0	1,352.9	2.5	2.4	-140.40	-1,068.0	-3,365.2	3,562.6	3,557.8	4.83	737.709			
1,500.0	1,498.5	1,463.1	1,463.0	2.7	2.6	-140.46	-1,067.6	-3,366.9	3,569.2	3,564.0	5.21	685.357			
1,600.0	1,598.3	1,557.4	1,557.3	2.9	2.7	-140.51	-1,067.1	-3,368.4	3,575.8	3,570.2	5.56	643.209			
1,700.0	1,698.1	1,666.9	1,666.7	3.2	2.9	-140.57	-1,066.6	-3,370.2	3,582.4	3,576.5	5.94	603.352			
1,800.0	1,797.8	1,774.6	1,774.5	3.4	3.1	-140.63	-1,065.7	-3,371.6	3,588.6	3,582.3	6.31	568.417			
1,900.0	1,897.6	1,869.8	1,869.6	3.6	3.3	-140.67	-1,064.8	-3,372.8	3,594.8	3,588.2	6.67	539.139			
2,000.0	1,997.4	1,974.7	1,974.5	3.8	3.5	-140.72	-1,063.6	-3,374.4	3,601.1	3,594.1	7.04	511.549			
2,100.0	2,097.1	2,106.6	2,106.4	4.0	3.7	-140.77	-1,061.3	-3,375.9	3,606.9	3,599.4	7.46	483.514			
2,200.0	2,196.9	2,219.9	2,219.7	4.2	3.9	-140.80	-1,058.7	-3,376.5	3,612.0	3,604.1	7.85	460.233			
2,300.0	2,296.7	2,325.5	2,325.2	4.4	4.1	-140.83	-1,056.3	-3,376.8	3,616.7	3,608.5	8.22	439.838			
2,400.0	2,396.5	2,417.0	2,416.7	4.6	4.2	-140.87	-1,054.5	-3,377.0	3,621.6	3,613.0	8.57	422.479			
2,500.0	2,496.2	2,513.4	2,513.1	4.8	4.4	-140.91	-1,053.2	-3,377.2	3,626.6	3,617.7	8.93	406.131			
2,600.0	2,596.0	2,607.4	2,607.1	5.0	4.6	-140.96	-1,052.2	-3,377.4	3,631.8	3,622.5	9.28	391.240			
2,700.0	2,695.8	2,700.0	2,699.7	5.2	4.7	-141.01	-1,051.4	-3,377.8	3,637.1	3,627.5	9.63	377.562			
2,800.0	2,795.5	2,800.0	2,799.7	5.4	4.9	-141.06	-1,050.6	-3,378.2	3,642.5	3,632.5	10.00	364.376			
2,900.0	2,895.3	2,892.2	2,891.8	5.6	5.1	-141.11	-1,049.9	-3,378.6	3,648.0	3,637.6	10.35	352.587			
3,000.0	2,995.1	2,976.1	2,975.8	5.9	5.2	-141.15	-1,049.2	-3,379.3	3,653.8	3,643.2	10.68	342.046			
3,100.0	3,094.9	3,075.0	3,074.7	6.1	5.4	-141.20	-1,048.2	-3,380.6	3,660.0	3,648.9	11.04	331.392			
3,200.0	3,194.6	3,165.8	3,165.4	6.3	5.6	-141.24	-1,047.5	-3,381.7	3,666.2	3,654.8	11.39	321.824			
3,300.0	3,294.4	3,258.8	3,258.5	6.5	5.7	-141.29	-1,046.8	-3,383.1	3,672.7	3,660.9	11.74	312.734			
3,400.0	3,394.2	3,367.0	3,366.6	6.7	5.9	-141.33	-1,045.7	-3,384.8	3,679.1	3,667.0	12.12	303.493			
3,500.0	3,493.9	3,496.8	3,496.4	6.9	6.1	-141.39	-1,044.0	-3,386.3	3,685.1	3,672.6	12.54	293.881			
3,600.0	3,593.7	3,629.8	3,629.3	7.1	6.4	-141.43	-1,041.5	-3,386.8	3,690.2	3,677.2	12.96	284.664			
3,700.0	3,693.5	3,734.7	3,734.2	7.3	6.6	-141.46	-1,038.8	-3,386.7	3,694.5	3,681.2	13.34	276.979			
3,800.0	3,793.2	3,809.1	3,808.7	7.5	6.7	-141.48	-1,036.9	-3,387.0	3,699.3	3,685.7	13.66	270.823			
3,900.0	3,893.0	3,900.0	3,899.5	7.7	6.8	-141.52	-1,035.3	-3,387.5	3,704.6	3,690.6	14.01	264.467			
4,000.0	3,992.8	3,983.9	3,983.4	8.0	7.0	-141.56	-1,034.4	-3,388.0	3,710.2	3,695.8	14.34	258.667			
4,100.0	4,092.6	4,054.9	4,054.4	8.2	7.1	-141.59	-1,033.9	-3,388.9	3,716.4	3,701.7	14.66	253.573			
4,200.0	4,192.3	4,132.8	4,132.2	8.4	7.3	-141.63	-1,033.8	-3,390.3	3,723.3	3,708.4	14.98	248.548			
4,300.0	4,292.1	4,236.6	4,236.1	8.6	7.4	-141.68	-1,033.3	-3,392.5	3,730.6	3,715.2	15.35	243.027			
4,400.0	4,391.9	4,352.9	4,352.3	8.8	7.6	-141.75	-1,033.3	-3,394.4	3,737.4	3,721.6	15.74	237.435			
4,500.0	4,491.6	4,440.4	4,439.8	9.0	7.8	-141.80	-1,033.2	-3,395.7	3,744.1	3,728.0	16.08	232.813			
4,600.0	4,591.4	4,520.1	4,519.5	9.2	7.9	-141.83	-1,032.8	-3,397.6	3,751.4	3,735.0	16.41	228.592			
4,700.0	4,691.2	4,642.3	4,641.6	9.4	8.2	-141.87	-1,030.9	-3,400.6	3,758.6	3,741.7	16.82	223.515			
4,800.0	4,790.9	4,741.6	4,740.9	9.6	8.3	-141.90	-1,029.8	-3,402.6	3,765.4	3,748.2	17.18	219.192			
4,900.0	4,890.7	4,849.0	4,848.3	9.8	8.5	-141.95	-1,029.1	-3,404.7	3,772.4	3,754.9	17.55	214.900			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
5,000.0	4,990.5	4,954.9	4,954.2	10.1	8.7	-142.02	-1,029.3	-3,405.9	3,778.9	3,760.9	17.93	210.812		
5,100.0	5,090.3	5,048.8	5,048.1	10.3	8.9	-142.07	-1,029.7	-3,407.2	3,785.6	3,767.3	18.28	207.130		
5,200.0	5,190.0	5,145.2	5,144.5	10.5	9.0	-142.12	-1,029.4	-3,408.6	3,792.3	3,773.7	18.63	203.527		
5,300.0	5,289.8	5,232.9	5,232.1	10.7	9.2	-142.16	-1,029.0	-3,410.3	3,799.3	3,780.3	18.97	200.229		
5,400.0	5,389.6	5,353.3	5,352.5	10.9	9.4	-142.22	-1,028.5	-3,412.8	3,806.4	3,787.1	19.37	196.482		
5,500.0	5,489.3	5,468.0	5,467.2	11.1	9.6	-142.27	-1,027.7	-3,414.0	3,812.6	3,792.8	19.76	192.934		
5,600.0	5,589.1	5,563.7	5,562.9	11.3	9.8	-142.32	-1,027.4	-3,415.1	3,818.9	3,798.7	20.12	189.843		
5,700.0	5,688.9	5,651.0	5,650.2	11.5	9.9	-142.36	-1,026.9	-3,416.2	3,825.3	3,804.8	20.46	186.995		
5,800.0	5,788.7	5,733.5	5,732.7	11.7	10.1	-142.40	-1,026.4	-3,417.7	3,832.2	3,811.4	20.79	184.334		
5,900.0	5,888.4	5,825.5	5,824.6	11.9	10.2	-142.44	-1,026.0	-3,419.7	3,839.4	3,818.3	21.14	181.635		
6,000.0	5,988.2	5,933.5	5,932.6	12.2	10.4	-142.49	-1,025.5	-3,422.0	3,846.6	3,825.1	21.51	178.787		
6,100.0	6,088.0	6,029.9	6,029.0	12.4	10.6	-142.53	-1,025.0	-3,423.9	3,853.6	3,831.7	21.87	176.196		
6,200.0	6,187.7	6,105.0	6,104.1	12.6	10.7	-142.57	-1,025.0	-3,425.6	3,861.1	3,838.9	22.19	174.002		
6,300.0	6,287.5	6,205.3	6,204.4	12.8	10.9	-142.62	-1,025.1	-3,428.1	3,868.9	3,846.4	22.55	171.554		
6,400.0	6,387.3	6,318.5	6,317.5	13.0	11.1	-142.68	-1,025.2	-3,430.8	3,876.6	3,853.6	22.94	169.012		
6,500.0	6,487.0	6,435.5	6,434.5	13.2	11.3	-142.73	-1,025.1	-3,433.1	3,883.7	3,860.4	23.33	166.480		
6,600.0	6,586.8	6,552.9	6,551.8	13.4	11.5	-142.78	-1,024.0	-3,435.3	3,890.6	3,866.9	23.72	164.007		
6,700.0	6,686.6	6,658.9	6,657.9	13.6	11.7	-142.83	-1,023.3	-3,436.6	3,896.9	3,872.8	24.10	161.731		
6,787.0	6,773.4	6,742.8	6,741.7	13.8	11.9	-142.86	-1,022.7	-3,437.8	3,902.6	3,878.2	24.40	159.911		
6,800.0	6,786.4	6,756.7	6,755.6	13.8	11.9	-153.46	-1,022.6	-3,438.0	3,903.4	3,878.9	24.45	159.626		
6,850.0	6,836.3	6,800.0	6,799.0	13.9	12.0	119.25	-1,022.5	-3,438.5	3,905.7	3,881.1	24.60	158.759		
6,900.0	6,886.2	6,844.1	6,843.1	14.0	12.1	89.35	-1,022.4	-3,439.1	3,906.8	3,882.1	24.73	157.983		
6,950.0	6,935.7	6,881.0	6,879.9	14.0	12.1	81.61	-1,022.4	-3,439.7	3,906.9	3,882.1	24.82	157.386		
7,000.0	6,984.6	6,921.2	6,920.1	14.0	12.2	78.38	-1,022.3	-3,440.5	3,905.9	3,881.0	24.91	156.828		
7,050.0	7,032.6	6,964.8	6,963.7	14.0	12.3	76.82	-1,022.2	-3,441.5	3,903.9	3,878.9	24.98	156.284		
7,100.0	7,079.7	7,011.5	7,010.4	13.9	12.3	76.09	-1,021.9	-3,442.6	3,900.7	3,875.7	25.05	155.734		
7,150.0	7,125.4	7,076.1	7,075.0	13.9	12.5	75.98	-1,021.8	-3,443.9	3,896.4	3,871.2	25.14	154.967		
7,200.0	7,169.6	7,118.2	7,117.1	13.8	12.5	76.09	-1,021.9	-3,444.5	3,890.9	3,865.7	25.19	154.432		
7,250.0	7,212.1	7,146.5	7,145.4	13.8	12.6	76.34	-1,022.0	-3,445.0	3,884.6	3,859.4	25.22	154.012		
7,300.0	7,252.6	7,173.5	7,172.4	13.7	12.6	76.77	-1,022.1	-3,445.6	3,877.6	3,852.3	25.26	153.524		
7,350.0	7,291.0	7,200.0	7,198.9	13.7	12.7	77.33	-1,022.2	-3,446.2	3,870.0	3,844.7	25.31	152.928		
7,400.0	7,327.1	7,225.2	7,224.1	13.7	12.7	78.01	-1,022.4	-3,446.9	3,861.8	3,836.4	25.37	152.202		
7,450.0	7,360.7	7,249.6	7,248.5	13.7	12.8	78.78	-1,022.5	-3,447.7	3,853.2	3,827.7	25.47	151.311		
7,500.0	7,391.6	7,272.2	7,271.1	13.7	12.8	79.61	-1,022.7	-3,448.4	3,844.1	3,818.5	25.59	150.247		
7,550.0	7,419.7	7,300.0	7,298.8	13.8	12.9	80.59	-1,023.0	-3,449.3	3,834.7	3,809.0	25.75	148.906		
7,600.0	7,444.8	7,300.0	7,298.8	13.9	12.9	81.25	-1,023.0	-3,449.3	3,825.2	3,799.3	25.90	147.689		
7,650.0	7,466.9	7,321.8	7,320.6	14.1	12.9	82.24	-1,023.3	-3,450.1	3,815.5	3,789.3	26.14	145.979		
7,700.0	7,485.8	7,333.2	7,332.0	14.3	12.9	83.12	-1,023.6	-3,450.5	3,805.7	3,779.3	26.40	144.177		
7,750.0	7,501.5	7,342.9	7,341.7	14.6	12.9	83.99	-1,023.8	-3,450.9	3,796.0	3,769.3	26.70	142.187		
7,800.0	7,513.7	7,350.9	7,349.7	14.9	13.0	84.84	-1,024.0	-3,451.2	3,786.5	3,759.4	27.04	140.031		
7,850.0	7,522.6	7,357.0	7,355.8	15.2	13.0	85.67	-1,024.2	-3,451.5	3,777.1	3,749.6	27.42	137.735		
7,900.0	7,528.0	7,361.3	7,360.0	15.6	13.0	86.46	-1,024.4	-3,451.7	3,767.9	3,740.1	27.84	135.331		
7,952.9	7,530.0	7,630.7	7,628.6	16.1	13.4	91.37	-1,043.0	-3,451.5	3,758.4	3,729.6	28.80	130.491		
8,000.0	7,530.0	7,631.9	7,629.9	16.5	13.4	91.39	-1,043.0	-3,451.4	3,750.2	3,721.0	29.26	128.176		
8,100.0	7,530.0	7,634.5	7,632.4	17.5	13.4	91.43	-1,043.1	-3,451.4	3,734.9	3,704.6	30.32	123.174		
8,200.0	7,530.0	7,637.0	7,634.9	18.7	13.4	91.47	-1,043.2	-3,451.3	3,722.2	3,690.7	31.49	118.190		
8,300.0	7,530.0	7,639.3	7,637.3	19.9	13.4	91.51	-1,043.3	-3,451.2	3,712.2	3,679.4	32.75	113.339		
8,400.0	7,530.0	7,641.6	7,639.5	21.2	13.4	91.54	-1,043.4	-3,451.2	3,704.8	3,670.7	34.08	108.695		
8,500.0	7,530.0	7,643.8	7,641.7	22.6	13.4	91.58	-1,043.5	-3,451.1	3,700.1	3,664.6	35.47	104.302		
8,600.0	7,530.0	7,645.9	7,643.9	24.0	13.4	91.61	-1,043.6	-3,451.0	3,698.1	3,661.2	36.91	100.181		
8,624.0	7,530.0	7,646.4	7,644.4	24.3	13.4	91.62	-1,043.6	-3,451.0	3,698.0	3,660.8	37.27	99.225		
8,700.0	7,530.0	7,648.0	7,645.9	25.4	13.4	91.64	-1,043.7	-3,451.0	3,698.8	3,660.4	38.39	96.339		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			
8,800.0	7,530.0	7,650.0	7,647.9	26.9	13.4	91.67	-1,043.7	-3,450.9	3,702.2	3,662.3	39.91	92.771		
8,900.0	7,530.0	7,651.9	7,649.8	28.4	13.5	91.70	-1,043.8	-3,450.9	3,708.3	3,666.9	41.45	89.469		
9,000.0	7,530.0	7,653.7	7,651.6	30.0	13.5	91.73	-1,043.9	-3,450.8	3,717.1	3,674.1	43.01	86.418		
9,100.0	7,530.0	7,655.5	7,653.4	31.5	13.5	91.76	-1,043.9	-3,450.8	3,728.5	3,683.9	44.60	83.603		
9,200.0	7,530.0	7,657.2	7,655.1	33.1	13.5	91.78	-1,044.0	-3,450.7	3,742.6	3,696.4	46.20	81.008		
9,300.0	7,530.0	7,658.9	7,656.8	34.7	13.5	91.81	-1,044.0	-3,450.7	3,759.3	3,711.4	47.82	78.618		
9,400.0	7,530.0	7,660.5	7,658.4	36.3	13.5	91.84	-1,044.1	-3,450.6	3,778.5	3,729.1	49.45	76.416		
9,500.0	7,530.0	7,662.1	7,660.0	38.0	13.5	91.86	-1,044.2	-3,450.6	3,800.3	3,749.2	51.09	74.388		
9,600.0	7,530.0	7,663.6	7,661.5	39.6	13.5	91.88	-1,044.2	-3,450.6	3,824.6	3,771.8	52.74	72.520		
9,700.0	7,530.0	7,665.1	7,663.0	41.3	13.5	91.91	-1,044.2	-3,450.5	3,851.3	3,796.9	54.40	70.799		
9,800.0	7,530.0	7,666.5	7,664.4	42.9	13.5	91.93	-1,044.3	-3,450.5	3,880.4	3,824.3	56.06	69.213		
9,900.0	7,530.0	7,667.9	7,665.8	44.6	13.5	91.95	-1,044.3	-3,450.5	3,911.8	3,854.1	57.74	67.752		
10,000.0	7,530.0	7,669.3	7,667.2	46.3	13.5	91.97	-1,044.4	-3,450.4	3,945.6	3,886.2	59.42	66.405		
10,100.0	7,530.0	7,670.6	7,668.5	47.9	13.5	91.99	-1,044.4	-3,450.4	3,981.5	3,920.4	61.10	65.162		
10,200.0	7,530.0	7,700.0	7,697.9	49.6	13.5	92.45	-1,045.2	-3,449.8	4,019.9	3,957.1	62.82	63.986		
10,300.0	7,530.0	7,700.0	7,697.9	51.3	13.5	92.45	-1,045.2	-3,449.8	4,060.1	3,995.6	64.52	62.932		
10,400.0	7,530.0	7,700.0	7,697.9	53.0	13.5	92.45	-1,045.2	-3,449.8	4,102.4	4,036.1	66.21	61.958		
10,500.0	7,530.0	7,700.0	7,697.9	54.7	13.5	92.45	-1,045.2	-3,449.8	4,146.6	4,078.7	67.91	61.059		
10,600.0	7,530.0	7,700.0	7,697.9	56.4	13.5	92.45	-1,045.2	-3,449.8	4,192.7	4,123.1	69.61	60.229		
10,700.0	7,530.0	7,700.0	7,697.9	58.1	13.5	92.45	-1,045.2	-3,449.8	4,240.8	4,169.4	71.32	59.462		
10,800.0	7,530.0	7,700.0	7,697.9	59.8	13.5	92.45	-1,045.2	-3,449.8	4,290.6	4,217.5	73.03	58.753		
10,900.0	7,530.0	7,700.0	7,697.9	61.5	13.5	92.45	-1,045.2	-3,449.8	4,342.1	4,267.4	74.74	58.097		
11,000.0	7,530.0	7,700.0	7,697.9	63.2	13.5	92.45	-1,045.2	-3,449.8	4,395.3	4,318.9	76.45	57.492		
11,100.0	7,530.0	7,700.0	7,697.9	64.9	13.5	92.45	-1,045.2	-3,449.8	4,450.1	4,372.0	78.17	56.931		
11,200.0	7,530.0	7,700.0	7,697.9	66.6	13.5	92.45	-1,045.2	-3,449.8	4,506.5	4,426.6	79.88	56.413		
11,300.0	7,530.0	7,700.0	7,697.9	68.4	13.5	92.45	-1,045.2	-3,449.8	4,564.4	4,482.8	81.60	55.934		
11,400.0	7,530.0	7,700.0	7,697.9	70.1	13.5	92.45	-1,045.2	-3,449.8	4,623.7	4,540.3	83.32	55.491		
11,500.0	7,530.0	7,700.0	7,697.9	71.8	13.5	92.45	-1,045.2	-3,449.8	4,684.4	4,599.3	85.05	55.081		
11,600.0	7,530.0	7,700.0	7,697.9	73.5	13.5	92.45	-1,045.2	-3,449.8	4,746.4	4,659.6	86.77	54.701		
11,700.0	7,530.0	7,700.0	7,697.9	75.2	13.5	92.45	-1,045.2	-3,449.8	4,809.7	4,721.2	88.49	54.350		
11,800.0	7,530.0	7,700.0	7,697.9	77.0	13.5	92.45	-1,045.2	-3,449.8	4,874.2	4,784.0	90.22	54.026		
11,900.0	7,530.0	7,700.0	7,697.9	78.7	13.5	92.45	-1,045.2	-3,449.8	4,939.9	4,848.0	91.95	53.725		
12,000.0	7,530.0	7,700.0	7,697.9	80.4	13.5	92.45	-1,045.2	-3,449.8	5,006.8	4,913.1	93.68	53.448		
12,100.0	7,530.0	7,700.0	7,697.9	82.2	13.5	92.45	-1,045.2	-3,449.8	5,074.7	4,979.3	95.41	53.191		
12,200.0	7,530.0	7,700.0	7,697.9	83.9	13.5	92.45	-1,045.2	-3,449.8	5,143.7	5,046.5	97.14	52.954		
12,300.0	7,530.0	7,700.0	7,697.9	85.6	13.5	92.45	-1,045.2	-3,449.8	5,213.7	5,114.8	98.87	52.734		
12,400.0	7,530.0	7,700.0	7,697.9	87.3	13.5	92.45	-1,045.2	-3,449.8	5,284.6	5,184.0	100.60	52.532		
12,500.0	7,530.0	7,700.0	7,697.9	89.1	13.5	92.45	-1,045.2	-3,449.8	5,356.5	5,254.2	102.33	52.344		
12,600.0	7,530.0	7,700.0	7,697.9	90.8	13.5	92.45	-1,045.2	-3,449.8	5,429.3	5,325.2	104.07	52.172		
12,700.0	7,530.0	7,700.0	7,697.9	92.5	13.5	92.45	-1,045.2	-3,449.8	5,502.9	5,397.1	105.80	52.012		
12,800.0	7,530.0	7,700.0	7,697.9	94.3	13.5	92.45	-1,045.2	-3,449.8	5,577.3	5,469.8	107.54	51.865		
12,900.0	7,530.0	7,700.0	7,697.9	96.0	13.5	92.45	-1,045.2	-3,449.8	5,652.6	5,543.3	109.27	51.730		
13,000.0	7,530.0	7,700.0	7,697.9	97.8	13.5	92.45	-1,045.2	-3,449.8	5,728.6	5,617.6	111.01	51.606		
13,100.0	7,530.0	7,700.0	7,697.9	99.5	13.5	92.45	-1,045.2	-3,449.8	5,805.3	5,692.6	112.74	51.491		
13,200.0	7,530.0	7,700.0	7,697.9	101.2	13.5	92.45	-1,045.2	-3,449.8	5,882.7	5,768.2	114.48	51.386		
13,300.0	7,530.0	7,700.0	7,697.9	103.0	13.5	92.45	-1,045.2	-3,449.8	5,960.8	5,844.6	116.22	51.289		
13,400.0	7,530.0	7,700.0	7,697.9	104.7	13.5	92.45	-1,045.2	-3,449.8	6,039.5	5,921.6	117.96	51.201		
13,500.0	7,530.0	7,700.0	7,697.9	106.4	13.5	92.45	-1,045.2	-3,449.8	6,118.9	5,999.2	119.70	51.120		
13,600.0	7,530.0	7,700.0	7,697.9	108.2	13.5	92.45	-1,045.2	-3,449.8	6,198.9	6,077.4	121.44	51.046		
13,700.0	7,530.0	7,700.0	7,697.9	109.9	13.5	92.45	-1,045.2	-3,449.8	6,279.4	6,156.2	123.18	50.979		
13,800.0	7,530.0	7,700.0	7,697.9	111.7	13.5	92.45	-1,045.2	-3,449.8	6,360.5	6,235.6	124.92	50.918		
13,900.0	7,530.0	7,700.0	7,697.9	113.4	13.5	92.45	-1,045.2	-3,449.8	6,442.1	6,315.4	126.66	50.863		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
14,000.0	7,530.0	7,700.0	7,697.9	115.1	13.5	92.45	-1,045.2	-3,449.8	6,524.2	6,395.8	128.40	50.813		
14,100.0	7,530.0	7,700.0	7,697.9	116.9	13.5	92.45	-1,045.2	-3,449.8	6,606.8	6,476.7	130.14	50.768		
14,200.0	7,530.0	7,700.0	7,697.9	118.6	13.5	92.45	-1,045.2	-3,449.8	6,689.9	6,558.1	131.88	50.728		
14,300.0	7,530.0	7,713.0	7,710.9	120.4	13.6	92.65	-1,045.4	-3,449.6	6,773.5	6,639.8	133.62	50.690		
14,400.0	7,530.0	7,714.5	7,712.3	122.1	13.6	92.67	-1,045.4	-3,449.6	6,857.5	6,722.1	135.37	50.658		
14,500.0	7,530.0	7,715.9	7,713.7	123.9	13.6	92.69	-1,045.5	-3,449.6	6,941.9	6,804.8	137.11	50.630		
14,600.0	7,530.0	7,717.2	7,715.1	125.6	13.6	92.71	-1,045.5	-3,449.5	7,026.7	6,887.8	138.85	50.606		
14,700.0	7,530.0	7,718.6	7,716.5	127.3	13.6	92.73	-1,045.5	-3,449.5	7,111.9	6,971.3	140.59	50.585		
14,800.0	7,530.0	7,719.9	7,717.8	129.1	13.6	92.76	-1,045.5	-3,449.5	7,197.5	7,055.2	142.34	50.567		
14,900.0	7,530.0	7,721.3	7,719.1	130.8	13.6	92.78	-1,045.6	-3,449.5	7,283.5	7,139.4	144.08	50.552		
15,000.0	7,530.0	7,722.6	7,720.4	132.6	13.6	92.80	-1,045.6	-3,449.4	7,369.8	7,224.0	145.82	50.539		
15,100.0	7,530.0	7,723.8	7,721.7	134.3	13.6	92.82	-1,045.6	-3,449.4	7,456.4	7,308.9	147.57	50.529		
15,200.0	7,530.0	7,725.1	7,723.0	136.1	13.6	92.84	-1,045.6	-3,449.4	7,543.4	7,394.1	149.31	50.522		
15,300.0	7,530.0	7,726.4	7,724.2	137.8	13.6	92.85	-1,045.7	-3,449.4	7,630.7	7,479.7	151.05	50.517		
15,400.0	7,530.0	7,727.6	7,725.5	139.6	13.6	92.87	-1,045.7	-3,449.4	7,718.3	7,565.6	152.80	50.514		
15,500.0	7,530.0	7,728.8	7,726.7	141.3	13.6	92.89	-1,045.7	-3,449.3	7,806.3	7,651.7	154.54	50.513 SF		
15,600.0	7,530.0	7,730.0	7,727.9	143.0	13.6	92.91	-1,045.7	-3,449.3	7,894.5	7,738.2	156.29	50.513		
15,700.0	7,530.0	7,731.2	7,729.1	144.8	13.6	92.93	-1,045.7	-3,449.3	7,982.9	7,824.9	158.03	50.516		
15,800.0	7,530.0	7,732.4	7,730.3	146.5	13.6	92.95	-1,045.8	-3,449.3	8,071.7	7,911.9	159.77	50.520		
15,900.0	7,530.0	7,733.5	7,731.4	148.3	13.6	92.97	-1,045.8	-3,449.3	8,160.7	7,999.2	161.52	50.525		
16,000.0	7,530.0	7,734.7	7,732.6	150.0	13.6	92.98	-1,045.8	-3,449.2	8,249.9	8,086.7	163.26	50.532		
16,100.0	7,530.0	7,735.8	7,733.7	151.8	13.6	93.00	-1,045.8	-3,449.2	8,339.4	8,174.4	165.01	50.540		
16,200.0	7,530.0	7,736.9	7,734.8	153.5	13.6	93.02	-1,045.8	-3,449.2	8,429.2	8,262.4	166.75	50.549		
16,300.0	7,530.0	7,738.0	7,735.9	155.3	13.6	93.04	-1,045.9	-3,449.2	8,519.1	8,350.6	168.50	50.560		
16,400.0	7,530.0	7,739.1	7,737.0	157.0	13.6	93.05	-1,045.9	-3,449.1	8,609.3	8,439.1	170.24	50.572		
16,500.0	7,530.0	7,740.2	7,738.1	158.8	13.6	93.07	-1,045.9	-3,449.1	8,699.7	8,527.7	171.99	50.584		
16,600.0	7,530.0	7,741.2	7,739.1	160.5	13.6	93.08	-1,045.9	-3,449.1	8,790.3	8,616.6	173.73	50.598		
16,700.0	7,530.0	7,742.3	7,740.2	162.3	13.6	93.10	-1,045.9	-3,449.1	8,881.1	8,705.7	175.48	50.612		
16,800.0	7,530.0	7,743.3	7,741.2	164.0	13.6	93.12	-1,045.9	-3,449.1	8,972.2	8,794.9	177.22	50.627		
16,900.0	7,530.0	7,744.3	7,742.2	165.8	13.6	93.13	-1,046.0	-3,449.1	9,063.3	8,884.4	178.97	50.643		
17,000.0	7,530.0	7,745.3	7,743.2	167.5	13.6	93.15	-1,046.0	-3,449.0	9,154.7	8,974.0	180.71	50.660		
17,100.0	7,530.0	7,746.3	7,744.2	169.3	13.6	93.16	-1,046.0	-3,449.0	9,246.3	9,063.8	182.46	50.677		
17,200.0	7,530.0	7,747.3	7,745.2	171.0	13.6	93.18	-1,046.0	-3,449.0	9,338.0	9,153.8	184.20	50.695		
17,300.0	7,530.0	7,748.3	7,746.2	172.8	13.6	93.19	-1,046.0	-3,449.0	9,429.9	9,244.0	185.95	50.713		
17,400.0	7,530.0	7,749.3	7,747.1	174.5	13.6	93.21	-1,046.0	-3,449.0	9,522.0	9,334.3	187.69	50.732		
17,420.9	7,530.0	7,749.5	7,747.3	174.9	13.6	93.21	-1,046.0	-3,449.0	9,541.3	9,353.2	188.06	50.736		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	-115.47	-1,936.5	-4,065.5	4,503.2					
100.0	100.0	85.0	85.0	0.2	0.1	-115.47	-1,936.5	-4,065.5	4,503.2	4,502.9	0.26	N/A		
200.0	200.0	185.0	185.0	0.3	0.3	-115.47	-1,936.5	-4,065.5	4,503.2	4,502.6	0.61	7,435.560 CC, ES		
300.0	300.0	247.7	247.7	0.5	0.4	-115.47	-1,936.6	-4,065.7	4,503.5	4,502.7	0.89	5,061.891		
400.0	400.0	300.0	300.0	0.7	0.5	-115.47	-1,937.0	-4,066.3	4,504.9	4,503.7	1.16	3,898.215		
500.0	500.0	359.8	359.7	0.8	0.6	-115.47	-1,937.6	-4,067.5	4,507.2	4,505.7	1.44	3,140.205		
600.0	600.0	400.0	400.0	1.0	0.7	-115.47	-1,938.3	-4,068.6	4,510.5	4,508.8	1.68	2,684.143		
700.0	700.0	471.7	471.6	1.2	0.8	-147.93	-1,939.7	-4,071.1	4,515.4	4,513.4	1.98	2,281.850		
800.0	800.0	527.5	527.3	1.4	0.9	-147.90	-1,941.2	-4,073.6	4,522.8	4,520.6	2.25	2,009.226		
900.0	899.9	600.0	599.7	1.6	1.0	-147.87	-1,943.5	-4,077.6	4,532.7	4,530.2	2.55	1,775.483		
988.4	988.1	678.3	677.8	1.7	1.2	-147.85	-1,945.7	-4,082.4	4,543.1	4,540.3	2.85	1,596.453		
1,000.0	999.7	693.9	693.4	1.7	1.2	-147.86	-1,946.0	-4,083.4	4,544.6	4,541.7	2.89	1,570.471		
1,100.0	1,099.4	817.5	816.7	1.9	1.5	-147.88	-1,947.1	-4,091.2	4,556.3	4,553.0	3.29	1,385.053		
1,200.0	1,199.2	916.8	915.8	2.1	1.7	-147.90	-1,947.3	-4,097.5	4,567.9	4,564.3	3.65	1,253.102		
1,300.0	1,299.0	1,016.2	1,015.0	2.3	1.9	-147.91	-1,947.6	-4,103.9	4,579.5	4,575.5	4.00	1,144.202		
1,400.0	1,398.8	1,115.5	1,114.1	2.5	2.1	-147.92	-1,947.9	-4,110.2	4,591.1	4,586.8	4.36	1,052.884		
1,500.0	1,498.5	1,214.8	1,213.2	2.7	2.3	-147.94	-1,948.1	-4,116.6	4,602.7	4,598.0	4.72	975.259		
1,600.0	1,598.3	1,314.1	1,312.3	2.9	2.5	-147.95	-1,948.4	-4,122.9	4,614.3	4,609.3	5.08	908.492		
1,700.0	1,698.1	1,413.4	1,411.4	3.2	2.7	-147.96	-1,948.7	-4,129.3	4,625.9	4,620.5	5.44	850.475		
1,800.0	1,797.8	1,512.8	1,510.5	3.4	2.9	-147.98	-1,948.9	-4,135.6	4,637.5	4,631.7	5.80	799.605		
1,900.0	1,897.6	1,612.1	1,609.7	3.6	3.1	-147.99	-1,949.2	-4,141.9	4,649.2	4,643.0	6.16	754.647		
2,000.0	1,997.4	1,711.4	1,708.8	3.8	3.3	-148.00	-1,949.4	-4,148.3	4,660.8	4,654.2	6.52	714.634		
2,100.0	2,097.1	1,810.7	1,807.9	4.0	3.5	-148.02	-1,949.7	-4,154.6	4,672.4	4,665.5	6.88	678.796		
2,200.0	2,196.9	1,910.0	1,907.0	4.2	3.7	-148.03	-1,950.0	-4,161.0	4,684.0	4,676.7	7.24	646.516		
2,300.0	2,296.7	2,009.3	2,006.1	4.4	3.9	-148.04	-1,950.2	-4,167.3	4,695.6	4,688.0	7.61	617.291		
2,400.0	2,296.5	2,108.7	2,105.2	4.6	4.1	-148.05	-1,950.5	-4,173.6	4,707.2	4,699.2	7.97	590.709		
2,500.0	2,496.2	2,208.0	2,204.4	4.8	4.3	-148.07	-1,950.8	-4,180.0	4,718.8	4,710.4	8.33	566.428		
2,600.0	2,596.0	2,307.3	2,303.5	5.0	4.5	-148.08	-1,951.0	-4,186.3	4,730.4	4,721.7	8.69	544.162		
2,700.0	2,695.8	2,406.6	2,402.6	5.2	4.7	-148.09	-1,951.3	-4,192.7	4,742.0	4,732.9	9.06	523.672		
2,800.0	2,795.5	2,505.9	2,501.7	5.4	5.0	-148.11	-1,951.6	-4,199.0	4,753.6	4,744.2	9.42	504.754		
2,900.0	2,895.3	2,605.3	2,600.8	5.6	5.2	-148.12	-1,951.8	-4,205.4	4,765.2	4,755.4	9.78	487.233		
3,000.0	2,995.1	2,704.6	2,699.9	5.9	5.4	-148.13	-1,952.1	-4,211.7	4,776.8	4,766.7	10.14	470.962		
3,100.0	3,094.9	2,803.9	2,799.0	6.1	5.6	-148.14	-1,952.4	-4,218.0	4,788.4	4,777.9	10.51	455.811		
3,200.0	3,194.6	2,903.2	2,898.2	6.3	5.8	-148.16	-1,952.6	-4,224.4	4,800.0	4,789.1	10.87	441.669		
3,300.0	3,294.4	3,002.5	2,997.3	6.5	6.0	-148.17	-1,952.9	-4,230.7	4,811.6	4,800.4	11.23	428.439		
3,400.0	3,394.2	3,101.9	3,096.4	6.7	6.2	-148.18	-1,953.1	-4,237.1	4,823.2	4,811.6	11.59	416.034		
3,500.0	3,493.9	3,201.2	3,195.5	6.9	6.4	-148.19	-1,953.4	-4,243.4	4,834.8	4,822.9	11.96	404.381		
3,600.0	3,593.7	3,300.5	3,294.6	7.1	6.6	-148.20	-1,953.7	-4,249.7	4,846.4	4,834.1	12.32	393.413		
3,700.0	3,693.5	3,399.8	3,393.7	7.3	6.8	-148.22	-1,953.9	-4,256.1	4,858.0	4,845.4	12.68	383.072		
3,800.0	3,793.2	3,499.1	3,492.9	7.5	7.0	-148.23	-1,954.2	-4,262.4	4,869.6	4,856.6	13.04	373.305		
3,900.0	3,893.0	3,598.4	3,592.0	7.7	7.2	-148.24	-1,954.5	-4,268.8	4,881.2	4,867.8	13.41	364.066		
4,000.0	3,992.8	3,697.8	3,691.1	8.0	7.4	-148.25	-1,954.7	-4,275.1	4,892.9	4,879.1	13.77	355.314		
4,100.0	4,092.6	3,797.1	3,790.2	8.2	7.6	-148.26	-1,955.0	-4,281.5	4,904.5	4,890.3	14.13	347.010		
4,200.0	4,192.3	3,896.4	3,889.3	8.4	7.8	-148.28	-1,955.3	-4,287.8	4,916.1	4,901.6	14.50	339.122		
4,300.0	4,292.1	3,995.7	3,988.4	8.6	8.0	-148.29	-1,955.5	-4,294.1	4,927.7	4,912.8	14.86	331.619		
4,400.0	4,391.9	4,095.0	4,087.6	8.8	8.2	-148.30	-1,955.8	-4,300.5	4,939.3	4,924.1	15.22	324.473		
4,500.0	4,491.6	4,194.4	4,186.7	9.0	8.4	-148.31	-1,956.0	-4,306.8	4,950.9	4,935.3	15.59	317.660		
4,600.0	4,591.4	4,293.7	4,285.8	9.2	8.7	-148.32	-1,956.3	-4,313.2	4,962.5	4,946.6	15.95	311.157		
4,700.0	4,691.2	4,393.0	4,384.9	9.4	8.9	-148.33	-1,956.6	-4,319.5	4,974.1	4,957.8	16.31	304.943		
4,800.0	4,790.9	4,492.3	4,484.0	9.6	9.1	-148.35	-1,956.8	-4,325.9	4,985.7	4,969.0	16.67	298.999		
4,900.0	4,890.7	4,591.6	4,583.1	9.8	9.3	-148.36	-1,957.1	-4,332.2	4,997.3	4,980.3	17.04	293.309		
5,000.0	4,990.5	4,691.0	4,682.2	10.1	9.5	-148.37	-1,957.4	-4,338.5	5,008.9	4,991.5	17.40	287.855		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	4,790.3	4,781.4	10.3	9.7	-148.38	-1,957.6	-4,344.9	5,020.5	5,002.8	17.76	282.625		
5,200.0	5,190.0	4,889.6	4,880.5	10.5	9.9	-148.39	-1,957.9	-4,351.2	5,032.2	5,014.0	18.13	277.604		
5,300.0	5,289.8	4,988.9	4,979.6	10.7	10.1	-148.40	-1,958.2	-4,357.6	5,043.8	5,025.3	18.49	272.780		
5,400.0	5,389.6	5,088.2	5,078.7	10.9	10.3	-148.41	-1,958.4	-4,363.9	5,055.4	5,036.5	18.85	268.142		
5,500.0	5,489.3	5,187.6	5,177.8	11.1	10.5	-148.42	-1,958.7	-4,370.2	5,067.0	5,047.8	19.22	263.679		
5,600.0	5,589.1	5,286.9	5,276.9	11.3	10.7	-148.44	-1,958.9	-4,376.6	5,078.6	5,059.0	19.58	259.381		
5,700.0	5,688.9	5,386.2	5,376.1	11.5	10.9	-148.45	-1,959.2	-4,382.9	5,090.2	5,070.3	19.94	255.240		
5,800.0	5,788.7	5,485.5	5,475.2	11.7	11.1	-148.46	-1,959.5	-4,389.3	5,101.8	5,081.5	20.31	251.247		
5,900.0	5,888.4	5,584.8	5,574.3	11.9	11.3	-148.47	-1,959.7	-4,395.6	5,113.4	5,092.8	20.67	247.394		
6,000.0	5,988.2	5,686.4	5,676.4	12.2	11.6	-124.64	215.1	-4,576.8	5,111.0	5,057.5	53.49	95.549		
6,100.0	6,088.0	5,772.1	5,762.1	12.4	11.8	-124.57	220.7	-4,576.9	5,079.4	5,025.6	53.78	94.450		
6,200.0	6,187.7	5,777.7	5,767.7	12.6	12.0	-124.51	226.4	-4,577.0	5,049.5	4,995.5	54.07	93.396		
6,300.0	6,287.5	5,783.4	5,773.4	12.8	12.2	-124.44	232.0	-4,577.1	5,021.5	4,967.1	54.35	92.386		
6,400.0	6,387.3	5,789.0	5,779.0	13.0	12.4	-124.37	237.7	-4,577.2	4,995.3	4,940.6	54.64	91.420		
6,500.0	6,487.0	5,794.7	5,784.7	13.2	12.6	-124.31	243.3	-4,577.3	4,970.9	4,916.0	54.93	90.499		
6,600.0	6,586.8	5,800.3	5,790.3	13.4	12.8	-124.24	249.0	-4,577.4	4,948.5	4,893.3	55.22	89.621		
6,700.0	6,686.6	5,806.0	5,796.0	13.6	13.0	-124.17	254.6	-4,577.5	4,928.0	4,872.5	55.50	88.786		
6,787.0	6,773.4	5,810.9	5,800.9	13.8	13.2	-124.11	259.5	-4,577.6	4,911.7	4,855.9	55.75	88.095		
6,800.0	6,786.4	5,811.5	5,801.5	13.8	13.2	-134.45	260.2	-4,577.6	4,909.4	4,853.6	55.77	88.027		
6,850.0	6,836.3	5,811.7	5,801.7	13.9	13.3	139.13	260.3	-4,577.6	4,900.8	4,845.0	55.77	87.875		
6,900.0	6,886.2	5,808.4	5,798.4	14.0	13.4	109.89	257.0	-4,577.5	4,892.6	4,836.9	55.68	87.863		
6,950.0	6,935.7	5,801.6	5,791.6	14.0	13.4	102.61	250.2	-4,577.4	4,885.0	4,829.4	55.52	87.986		
7,000.0	6,984.6	5,791.4	5,781.4	14.0	13.4	99.65	240.0	-4,577.3	4,877.8	4,822.5	55.28	88.235		
7,050.0	7,032.6	5,777.8	5,767.8	14.0	13.4	98.13	226.4	-4,577.0	4,871.2	4,816.2	54.98	88.605		
7,100.0	7,079.7	5,760.8	5,750.8	13.9	13.3	97.24	209.5	-4,576.7	4,865.1	4,810.5	54.61	89.089		
7,150.0	7,125.4	5,740.7	5,730.7	13.9	13.3	96.64	189.3	-4,576.4	4,859.5	4,805.3	54.19	89.680		
7,200.0	7,169.6	5,717.4	5,707.4	13.8	13.2	96.21	166.0	-4,576.0	4,854.5	4,800.8	53.72	90.371		
7,250.0	7,212.1	5,691.0	5,681.0	13.8	13.2	95.86	139.7	-4,575.5	4,850.0	4,796.8	53.21	91.151		
7,300.0	7,252.6	5,661.8	5,651.8	13.7	13.1	95.56	110.4	-4,575.0	4,845.9	4,793.3	52.67	92.009		
7,350.0	7,291.0	5,629.8	5,619.8	13.7	13.1	95.28	78.4	-4,574.5	4,842.3	4,790.2	52.10	92.938		
7,400.0	7,327.1	5,595.2	5,585.2	13.7	13.1	95.02	43.9	-4,573.9	4,839.1	4,787.6	51.52	93.925		
7,450.0	7,360.7	5,558.2	5,548.2	13.7	13.1	94.77	6.8	-4,573.2	4,836.3	4,785.4	50.93	94.953		
7,500.0	7,391.6	5,518.9	5,508.9	13.7	13.1	94.54	-32.4	-4,572.5	4,833.9	4,783.5	50.35	96.013		
7,550.0	7,419.7	5,477.5	5,467.5	13.8	13.2	94.32	-73.8	-4,571.8	4,831.7	4,781.9	49.77	97.087		
7,600.0	7,444.8	5,434.3	5,424.3	13.9	13.3	94.11	-117.0	-4,571.1	4,829.8	4,780.6	49.20	98.160		
7,650.0	7,466.9	5,389.5	5,379.5	14.1	13.5	93.94	-161.8	-4,570.3	4,828.1	4,779.4	48.66	99.221		
7,700.0	7,485.8	5,343.2	5,333.2	14.3	13.7	93.78	-208.1	-4,569.5	4,826.6	4,778.4	48.15	100.249		
7,750.0	7,501.5	5,295.7	5,285.7	14.6	14.0	93.67	-255.6	-4,568.7	4,825.2	4,777.6	47.66	101.242		
7,800.0	7,513.7	5,247.3	5,237.3	14.9	14.3	93.58	-304.0	-4,567.8	4,824.0	4,776.8	47.21	102.175		
7,850.0	7,522.6	5,198.1	5,188.1	15.2	14.6	93.54	-353.2	-4,567.0	4,822.9	4,776.1	46.80	103.054		
7,900.0	7,528.0	5,148.4	5,138.4	15.6	15.0	93.54	-402.9	-4,566.1	4,821.9	4,775.5	46.43	103.856		
7,952.9	7,530.0	5,095.5	5,085.5	16.1	15.5	93.59	-455.7	-4,565.2	4,820.9	4,774.9	46.08	104.631		
8,000.0	7,530.0	5,048.5	5,038.5	16.5	15.9	93.59	-502.8	-4,564.4	4,820.1	4,774.3	45.79	105.268		
8,100.0	7,530.0	5,048.5	5,038.5	17.5	16.9	93.59	-602.8	-4,562.7	4,818.4	4,773.1	45.28	106.406		
8,200.0	7,530.0	5,048.5	5,038.5	18.7	18.1	93.60	-702.7	-4,561.0	4,816.7	4,771.8	44.91	107.256		
8,300.0	7,530.0	5,048.5	5,038.5	19.9	19.3	93.60	-802.7	-4,559.2	4,815.0	4,770.3	44.65	107.839		
8,400.0	7,530.0	5,048.5	5,038.5	21.2	20.6	93.60	-902.7	-4,557.5	4,813.2	4,768.7	44.50	108.174		
8,500.0	7,530.0	5,048.5	5,038.5	22.6	22.0	93.60	-1,002.6	-4,555.8	4,811.5	4,767.1	44.44	108.269		
8,600.0	7,530.0	5,048.5	5,038.5	24.0	23.4	93.60	-1,102.6	-4,554.0	4,809.8	4,765.3	44.48	108.131		
8,700.0	7,530.0	5,048.5	5,038.5	25.4	24.8	93.60	-1,202.6	-4,552.3	4,808.1	4,763.4	44.62	107.755		
8,800.0	7,530.0	5,048.5	5,038.5	26.9	26.3	93.60	-1,302.6	-4,550.6	4,806.3	4,761.5	44.86	107.133		
8,900.0	7,530.0	5,223.5	5,209.6	28.4	27.8	86.32	-1,964.1	-4,500.3	4,799.1	4,758.4	40.62	118.141		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,223.8	7,209.9	30.0	14.7	86.32	-1,964.1	-4,500.3	4,786.7	4,744.5	42.18	113.476		
9,100.0	7,530.0	7,224.0	7,210.2	31.5	14.7	86.32	-1,964.1	-4,500.3	4,776.3	4,732.6	43.76	109.140		
9,200.0	7,530.0	7,224.3	7,210.4	33.1	14.7	86.33	-1,964.1	-4,500.3	4,768.1	4,722.7	45.36	105.113		
9,300.0	7,530.0	7,224.6	7,210.7	34.7	14.7	86.33	-1,964.1	-4,500.3	4,761.9	4,714.9	46.97	101.371		
9,400.0	7,530.0	7,224.8	7,210.9	36.3	14.7	86.33	-1,964.1	-4,500.3	4,757.8	4,709.2	48.60	97.896		
9,500.0	7,530.0	7,225.1	7,211.2	38.0	14.7	86.34	-1,964.1	-4,500.4	4,755.8	4,705.6	50.24	94.666		
9,544.5	7,530.0	7,225.2	7,211.3	38.7	14.7	86.34	-1,964.1	-4,500.4	4,755.6	4,704.6	50.97	93.301		
9,600.0	7,530.0	7,225.4	7,211.5	39.6	14.7	86.34	-1,964.1	-4,500.4	4,755.9	4,704.0	51.89	91.663		
9,700.0	7,530.0	7,225.6	7,211.7	41.3	14.7	86.34	-1,964.1	-4,500.4	4,758.1	4,704.6	53.54	88.870		
9,800.0	7,530.0	7,225.9	7,212.0	42.9	14.7	86.35	-1,964.1	-4,500.4	4,762.5	4,707.3	55.20	86.270		
9,900.0	7,530.0	7,226.2	7,212.3	44.6	14.7	86.35	-1,964.1	-4,500.4	4,768.9	4,712.0	56.87	83.849		
10,000.0	7,530.0	7,226.4	7,212.5	46.3	14.7	86.35	-1,964.1	-4,500.4	4,777.4	4,718.8	58.55	81.594		
10,100.0	7,530.0	7,226.7	7,212.8	47.9	14.7	86.36	-1,964.1	-4,500.5	4,787.9	4,727.7	60.23	79.492		
10,200.0	7,530.0	7,227.0	7,213.1	49.6	14.7	86.36	-1,964.1	-4,500.5	4,800.6	4,738.6	61.92	77.530		
10,300.0	7,530.0	7,227.2	7,213.3	51.3	14.7	86.36	-1,964.1	-4,500.5	4,815.2	4,751.6	63.61	75.700		
10,400.0	7,530.0	7,227.5	7,213.6	53.0	14.7	86.37	-1,964.1	-4,500.5	4,831.9	4,766.6	65.30	73.991		
10,500.0	7,530.0	7,227.8	7,213.9	54.7	14.7	86.37	-1,964.1	-4,500.5	4,850.6	4,783.6	67.00	72.395		
10,600.0	7,530.0	7,228.0	7,214.1	56.4	14.7	86.37	-1,964.1	-4,500.5	4,871.3	4,802.6	68.70	70.903		
10,700.0	7,530.0	7,228.3	7,214.4	58.1	14.7	86.38	-1,964.1	-4,500.6	4,894.0	4,823.6	70.41	69.508		
10,800.0	7,530.0	7,228.6	7,214.7	59.8	14.7	86.38	-1,964.1	-4,500.6	4,918.5	4,846.4	72.12	68.203		
10,900.0	7,530.0	7,228.8	7,214.9	61.5	14.7	86.38	-1,964.1	-4,500.6	4,945.0	4,871.2	73.83	66.982		
11,000.0	7,530.0	7,229.1	7,215.2	63.2	14.7	86.39	-1,964.1	-4,500.6	4,973.4	4,897.8	75.54	65.839		
11,100.0	7,530.0	7,229.4	7,215.5	64.9	14.7	86.39	-1,964.1	-4,500.6	5,003.5	4,926.3	77.25	64.769		
11,200.0	7,530.0	7,229.6	7,215.7	66.6	14.7	86.39	-1,964.1	-4,500.6	5,035.5	4,956.6	78.97	63.767		
11,300.0	7,530.0	7,229.9	7,216.0	68.4	14.7	86.40	-1,964.1	-4,500.7	5,069.3	4,988.6	80.69	62.827		
11,400.0	7,530.0	7,230.1	7,216.3	70.1	14.7	86.40	-1,964.1	-4,500.7	5,104.8	5,022.4	82.41	61.947		
11,500.0	7,530.0	7,230.4	7,216.5	71.8	14.7	86.40	-1,964.1	-4,500.7	5,142.0	5,057.8	84.13	61.122		
11,600.0	7,530.0	7,230.7	7,216.8	73.5	14.7	86.40	-1,964.1	-4,500.7	5,180.8	5,095.0	85.85	60.348		
11,700.0	7,530.0	7,230.9	7,217.0	75.2	14.7	86.41	-1,964.1	-4,500.7	5,221.3	5,133.7	87.57	59.622		
11,800.0	7,530.0	7,231.2	7,217.3	77.0	14.7	86.41	-1,964.1	-4,500.7	5,263.4	5,174.1	89.30	58.941		
11,900.0	7,530.0	7,231.5	7,217.6	78.7	14.7	86.41	-1,964.1	-4,500.8	5,307.0	5,216.0	91.02	58.303		
12,000.0	7,530.0	7,231.7	7,217.8	80.4	14.7	86.42	-1,964.1	-4,500.8	5,352.1	5,259.4	92.75	57.704		
12,100.0	7,530.0	7,232.0	7,218.1	82.2	14.7	86.42	-1,964.1	-4,500.8	5,398.7	5,304.3	94.48	57.141		
12,200.0	7,530.0	7,232.3	7,218.4	83.9	14.7	86.42	-1,964.1	-4,500.8	5,446.8	5,350.6	96.21	56.613		
12,300.0	7,530.0	7,232.5	7,218.6	85.6	14.7	86.43	-1,964.1	-4,500.8	5,496.2	5,398.3	97.94	56.118		
12,400.0	7,530.0	7,232.8	7,218.9	87.3	14.7	86.43	-1,964.1	-4,500.8	5,547.0	5,447.4	99.67	55.653		
12,500.0	7,530.0	7,233.1	7,219.2	89.1	14.7	86.43	-1,964.1	-4,500.9	5,599.2	5,497.8	101.40	55.217		
12,600.0	7,530.0	7,233.3	7,219.4	90.8	14.7	86.44	-1,964.1	-4,500.9	5,652.6	5,549.5	103.14	54.807		
12,700.0	7,530.0	7,233.6	7,219.7	92.5	14.7	86.44	-1,964.1	-4,500.9	5,707.3	5,602.4	104.87	54.422		
12,800.0	7,530.0	7,233.9	7,220.0	94.3	14.7	86.44	-1,964.1	-4,500.9	5,763.2	5,656.6	106.60	54.061		
12,900.0	7,530.0	7,234.1	7,220.2	96.0	14.7	86.45	-1,964.1	-4,500.9	5,820.2	5,711.9	108.34	53.723		
13,000.0	7,530.0	7,234.4	7,220.5	97.8	14.7	86.45	-1,964.1	-4,500.9	5,878.5	5,768.4	110.07	53.404		
13,100.0	7,530.0	7,234.7	7,220.8	99.5	14.7	86.45	-1,964.1	-4,501.0	5,937.8	5,826.0	111.81	53.106		
13,200.0	7,530.0	7,234.9	7,221.0	101.2	14.7	86.46	-1,964.1	-4,501.0	5,998.2	5,884.7	113.55	52.826		
13,300.0	7,530.0	7,235.2	7,221.3	103.0	14.7	86.46	-1,964.1	-4,501.0	6,059.7	5,944.4	115.28	52.563		
13,400.0	7,530.0	7,235.5	7,221.6	104.7	14.7	86.46	-1,964.1	-4,501.0	6,122.2	6,005.1	117.02	52.316		
13,500.0	7,530.0	7,235.7	7,221.8	106.4	14.7	86.47	-1,964.1	-4,501.0	6,185.6	6,066.9	118.76	52.085		
13,600.0	7,530.0	7,236.0	7,222.1	108.2	14.7	86.47	-1,964.1	-4,501.0	6,250.0	6,129.5	120.50	51.868		
13,700.0	7,530.0	7,236.3	7,222.3	109.9	14.7	86.47	-1,964.1	-4,501.1	6,315.4	6,193.1	122.24	51.665		
13,800.0	7,530.0	7,236.5	7,222.6	111.7	14.7	86.48	-1,964.1	-4,501.1	6,381.6	6,257.6	123.98	51.475		
13,900.0	7,530.0	7,236.8	7,222.9	113.4	14.7	86.48	-1,964.1	-4,501.1	6,448.7	6,323.0	125.72	51.296		
14,000.0	7,530.0	7,237.1	7,223.1	115.1	14.7	86.48	-1,964.1	-4,501.1	6,516.7	6,389.2	127.46	51.129		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
14,100.0	7,530.0	7,237.3	7,223.4	116.9	14.8	86.48	-1,964.1	-4,501.1	6,585.5	6,456.3	129.20	50.973		
14,200.0	7,530.0	7,237.6	7,223.7	118.6	14.8	86.49	-1,964.1	-4,501.2	6,655.0	6,524.1	130.94	50.826		
14,300.0	7,530.0	7,237.9	7,223.9	120.4	14.8	86.49	-1,964.1	-4,501.2	6,725.4	6,592.7	132.68	50.689		
14,400.0	7,530.0	7,238.1	7,224.2	122.1	14.8	86.49	-1,964.1	-4,501.2	6,796.4	6,662.0	134.42	50.561		
14,500.0	7,530.0	7,238.4	7,224.5	123.9	14.8	86.50	-1,964.1	-4,501.2	6,868.2	6,732.1	136.16	50.442		
14,600.0	7,530.0	7,238.6	7,224.7	125.6	14.8	86.50	-1,964.1	-4,501.2	6,940.7	6,802.8	137.90	50.330		
14,700.0	7,530.0	7,238.9	7,225.0	127.3	14.8	86.50	-1,964.1	-4,501.2	7,013.9	6,874.3	139.65	50.227		
14,800.0	7,530.0	7,239.2	7,225.3	129.1	14.8	86.51	-1,964.1	-4,501.3	7,087.7	6,946.4	141.39	50.130		
14,900.0	7,530.0	7,239.4	7,225.5	130.8	14.8	86.51	-1,964.1	-4,501.3	7,162.2	7,019.1	143.13	50.040		
15,000.0	7,530.0	7,239.7	7,225.8	132.6	14.8	86.51	-1,964.1	-4,501.3	7,237.3	7,092.4	144.87	49.956		
15,100.0	7,530.0	7,240.0	7,226.1	134.3	14.8	86.52	-1,964.1	-4,501.3	7,313.0	7,166.3	146.62	49.878		
15,200.0	7,530.0	7,240.2	7,226.3	136.1	14.8	86.52	-1,964.1	-4,501.3	7,389.2	7,240.9	148.36	49.806		
15,300.0	7,530.0	7,240.5	7,226.6	137.8	14.8	86.52	-1,964.1	-4,501.3	7,466.0	7,315.9	150.10	49.739		
15,400.0	7,530.0	7,240.8	7,226.9	139.6	14.8	86.53	-1,964.1	-4,501.4	7,543.4	7,391.5	151.85	49.677		
15,500.0	7,530.0	7,241.0	7,227.1	141.3	14.8	86.53	-1,964.1	-4,501.4	7,621.3	7,467.7	153.59	49.620		
15,600.0	7,530.0	7,241.3	7,227.4	143.0	14.8	86.53	-1,964.1	-4,501.4	7,699.7	7,544.3	155.34	49.568		
15,700.0	7,530.0	7,241.6	7,227.6	144.8	14.8	86.54	-1,964.1	-4,501.4	7,778.6	7,621.5	157.08	49.519		
15,800.0	7,530.0	7,241.8	7,227.9	146.5	14.8	86.54	-1,964.1	-4,501.4	7,857.9	7,699.1	158.83	49.475		
15,900.0	7,530.0	7,242.1	7,228.2	148.3	14.8	86.54	-1,964.1	-4,501.4	7,937.8	7,777.2	160.57	49.435		
16,000.0	7,530.0	7,242.4	7,228.4	150.0	14.8	86.55	-1,964.1	-4,501.5	8,018.1	7,855.7	162.32	49.398		
16,100.0	7,530.0	7,242.6	7,228.7	151.8	14.8	86.55	-1,964.1	-4,501.5	8,098.8	7,934.7	164.06	49.364		
16,200.0	7,530.0	7,242.9	7,229.0	153.5	14.8	86.55	-1,964.1	-4,501.5	8,179.9	8,014.1	165.81	49.334		
16,300.0	7,530.0	7,243.2	7,229.2	155.3	14.8	86.56	-1,964.1	-4,501.5	8,261.5	8,094.0	167.55	49.307		
16,400.0	7,530.0	7,243.4	7,229.5	157.0	14.8	86.56	-1,964.1	-4,501.5	8,343.5	8,174.2	169.30	49.283		
16,500.0	7,530.0	7,243.7	7,229.8	158.8	14.8	86.56	-1,964.1	-4,501.5	8,425.8	8,254.8	171.04	49.261		
16,600.0	7,530.0	7,244.0	7,230.0	160.5	14.8	86.56	-1,964.1	-4,501.6	8,508.6	8,335.8	172.79	49.242		
16,700.0	7,530.0	7,244.2	7,230.3	162.3	14.8	86.57	-1,964.1	-4,501.6	8,591.7	8,417.1	174.54	49.226		
16,800.0	7,530.0	7,244.5	7,230.6	164.0	14.8	86.57	-1,964.1	-4,501.6	8,675.1	8,498.9	176.28	49.212		
16,900.0	7,530.0	7,244.8	7,230.8	165.8	14.8	86.57	-1,964.1	-4,501.6	8,758.9	8,580.9	178.03	49.200		
17,000.0	7,530.0	7,245.0	7,231.1	167.5	14.8	86.58	-1,964.1	-4,501.6	8,843.1	8,663.3	179.78	49.190		
17,100.0	7,530.0	7,245.3	7,231.4	169.3	14.8	86.58	-1,964.1	-4,501.6	8,927.6	8,746.0	181.52	49.182		
17,200.0	7,530.0	7,245.6	7,231.6	171.0	14.8	86.58	-1,964.1	-4,501.7	9,012.3	8,829.1	183.27	49.176		
17,300.0	7,530.0	7,245.8	7,231.9	172.8	14.8	86.59	-1,964.1	-4,501.7	9,097.4	8,912.4	185.02	49.171		
17,400.0	7,530.0	7,246.1	7,232.2	174.5	14.8	86.59	-1,964.2	-4,501.7	9,182.8	8,996.1	186.76	49.169		
17,420.9	7,530.0	7,246.1	7,232.2	174.9	14.8	86.59	-1,964.2	-4,501.7	9,200.8	9,013.6	187.13	49.168 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-115.42	-1,929.2	-4,059.9	4,495.0					
100.0	100.0	85.0	85.0	0.2	0.1	-115.42	-1,929.2	-4,059.9	4,495.0	4,494.7	0.26	N/A		
200.0	200.0	185.0	185.0	0.3	0.3	-115.42	-1,929.2	-4,059.9	4,495.0	4,494.4	0.61	7,422.045		
300.0	300.0	285.0	285.0	0.5	0.5	-115.42	-1,929.2	-4,059.9	4,495.0	4,494.1	0.95	4,708.318		
400.0	400.0	349.6	349.6	0.7	0.6	-115.42	-1,929.4	-4,060.1	4,495.3	4,494.1	1.24	3,619.263		
500.0	500.0	400.0	400.0	0.8	0.7	-115.42	-1,929.9	-4,060.5	4,496.6	4,495.1	1.50	2,988.792		
600.0	600.0	466.3	466.3	1.0	0.8	-115.43	-1,931.1	-4,061.5	4,498.8	4,497.0	1.79	2,506.411		
700.0	700.0	524.6	524.5	1.2	0.9	-147.90	-1,932.6	-4,062.8	4,502.6	4,500.5	2.07	2,172.683		
800.0	800.0	600.0	599.9	1.4	1.0	-147.90	-1,935.3	-4,065.0	4,508.9	4,506.5	2.38	1,894.459		
900.0	899.9	802.1	801.8	1.6	1.4	-147.95	-1,940.3	-4,070.0	4,516.2	4,513.3	2.91	1,552.652		
988.4	988.1	925.6	925.4	1.7	1.6	-147.97	-1,940.7	-4,071.5	4,521.8	4,518.5	3.28	1,378.639		
1,000.0	999.7	937.2	936.9	1.7	1.6	-147.97	-1,940.7	-4,071.6	4,522.5	4,519.2	3.32	1,361.883		
1,100.0	1,099.4	1,036.9	1,036.6	1.9	1.8	-148.01	-1,940.9	-4,072.7	4,529.3	4,525.7	3.67	1,232.723		
1,200.0	1,199.2	1,136.6	1,136.4	2.1	2.0	-148.05	-1,941.1	-4,073.8	4,536.1	4,532.1	4.03	1,125.951		
1,300.0	1,299.0	1,236.4	1,236.1	2.3	2.1	-148.10	-1,941.2	-4,074.9	4,543.0	4,538.6	4.38	1,036.270		
1,400.0	1,398.8	1,336.1	1,335.8	2.5	2.3	-148.14	-1,941.4	-4,075.9	4,549.8	4,545.0	4.74	959.918		
1,500.0	1,498.5	1,435.8	1,435.5	2.7	2.5	-148.18	-1,941.5	-4,077.0	4,556.6	4,551.5	5.10	894.151		
1,600.0	1,598.3	1,535.5	1,535.2	2.9	2.7	-148.22	-1,941.7	-4,078.1	4,563.4	4,557.9	5.45	836.924		
1,700.0	1,698.1	1,635.2	1,634.9	3.2	2.8	-148.26	-1,941.9	-4,079.2	4,570.2	4,564.4	5.81	786.686		
1,800.0	1,797.8	1,734.9	1,734.6	3.4	3.0	-148.30	-1,942.0	-4,080.3	4,577.0	4,570.9	6.17	742.237		
1,900.0	1,897.6	1,834.7	1,834.3	3.6	3.2	-148.34	-1,942.2	-4,081.4	4,583.8	4,577.3	6.52	702.635		
2,000.0	1,997.4	1,934.4	1,934.0	3.8	3.4	-148.38	-1,942.3	-4,082.5	4,590.7	4,583.8	6.88	667.132		
2,100.0	2,097.1	2,034.1	2,033.7	4.0	3.5	-148.42	-1,942.5	-4,083.6	4,597.5	4,590.2	7.24	635.125		
2,200.0	2,196.9	2,133.8	2,133.4	4.2	3.7	-148.46	-1,942.7	-4,084.7	4,604.3	4,596.7	7.60	606.123		
2,300.0	2,296.7	2,233.5	2,233.2	4.4	3.9	-148.50	-1,942.8	-4,085.8	4,611.1	4,603.2	7.95	579.725		
2,400.0	2,296.5	2,233.2	2,232.9	4.6	4.1	-148.54	-1,943.0	-4,086.9	4,618.0	4,609.7	8.31	555.595		
2,500.0	2,496.2	2,432.9	2,432.6	4.8	4.2	-148.58	-1,943.1	-4,087.9	4,624.8	4,616.1	8.67	533.453		
2,600.0	2,596.0	2,532.7	2,532.3	5.0	4.4	-148.62	-1,943.3	-4,089.0	4,631.6	4,622.6	9.03	513.066		
2,700.0	2,695.8	2,632.4	2,632.0	5.2	4.6	-148.66	-1,943.5	-4,090.1	4,638.5	4,629.1	9.39	494.231		
2,800.0	2,795.5	2,732.1	2,731.7	5.4	4.8	-148.70	-1,943.6	-4,091.2	4,645.3	4,635.6	9.74	476.779		
2,900.0	2,895.3	2,831.8	2,831.4	5.6	4.9	-148.74	-1,943.8	-4,092.3	4,652.2	4,642.1	10.10	460.564		
3,000.0	2,995.1	2,931.5	2,931.1	5.9	5.1	-148.77	-1,943.9	-4,093.4	4,659.0	4,648.5	10.46	445.458		
3,100.0	3,094.9	3,031.2	3,030.8	6.1	5.3	-148.81	-1,944.1	-4,094.5	4,665.9	4,655.0	10.82	431.352		
3,200.0	3,194.6	3,131.0	3,130.5	6.3	5.5	-148.85	-1,944.3	-4,095.6	4,672.7	4,661.5	11.17	418.150		
3,300.0	3,294.4	3,230.7	3,230.2	6.5	5.6	-148.89	-1,944.4	-4,096.7	4,679.6	4,668.0	11.53	405.768		
3,400.0	3,394.2	3,330.4	3,330.0	6.7	5.8	-148.93	-1,944.6	-4,097.8	4,686.4	4,674.5	11.89	394.131		
3,500.0	3,493.9	3,430.1	3,429.7	6.9	6.0	-148.97	-1,944.7	-4,098.8	4,693.3	4,681.0	12.25	383.175		
3,600.0	3,593.7	3,529.8	3,529.4	7.1	6.2	-149.01	-1,944.9	-4,099.9	4,700.1	4,687.5	12.61	372.842		
3,700.0	3,693.5	3,629.5	3,629.1	7.3	6.3	-149.04	-1,945.1	-4,101.0	4,707.0	4,694.0	12.96	363.080		
3,800.0	3,793.2	3,729.2	3,728.8	7.5	6.5	-149.08	-1,945.2	-4,102.1	4,713.8	4,700.5	13.32	353.842		
3,900.0	3,893.0	3,829.0	3,828.5	7.7	6.7	-149.12	-1,945.4	-4,103.2	4,720.7	4,707.0	13.68	345.089		
4,000.0	3,992.8	3,928.7	3,928.2	8.0	6.9	-149.16	-1,945.5	-4,104.3	4,727.6	4,713.5	14.04	336.783		
4,100.0	4,092.6	4,028.4	4,027.9	8.2	7.0	-149.20	-1,945.7	-4,105.4	4,734.4	4,720.0	14.40	328.890		
4,200.0	4,192.3	4,128.1	4,127.6	8.4	7.2	-149.23	-1,945.9	-4,106.5	4,741.3	4,726.6	14.75	321.380		
4,300.0	4,292.1	4,227.8	4,227.3	8.6	7.4	-149.27	-1,946.0	-4,107.6	4,748.2	4,733.1	15.11	314.227		
4,400.0	4,391.9	4,327.5	4,327.0	8.8	7.6	-149.31	-1,946.2	-4,108.7	4,755.1	4,739.6	15.47	307.406		
4,500.0	4,491.6	4,427.2	4,426.8	9.0	7.7	-149.35	-1,946.3	-4,109.8	4,761.9	4,746.1	15.83	300.893		
4,600.0	4,591.4	4,527.0	4,526.5	9.2	7.9	-149.38	-1,946.5	-4,110.8	4,768.8	4,752.6	16.18	294.669		
4,700.0	4,691.2	4,626.7	4,626.2	9.4	8.1	-149.42	-1,946.7	-4,111.9	4,775.7	4,759.1	16.54	288.714		
4,800.0	4,790.9	4,726.4	4,725.9	9.6	8.3	-149.46	-1,946.8	-4,113.0	4,782.6	4,765.7	16.90	283.012		
4,900.0	4,890.7	4,826.1	4,825.6	9.8	8.4	-149.49	-1,947.0	-4,114.1	4,789.4	4,772.2	17.26	277.547		
5,000.0	4,990.5	4,925.8	4,925.3	10.1	8.6	-149.53	-1,947.1	-4,115.2	4,796.3	4,778.7	17.61	272.305		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,090.3	5,025.5	5,025.0	10.3	8.8	-149.57	-1,947.3	-4,116.3	4,803.2	4,785.3	17.97	267.271		
5,200.0	5,190.0	5,125.3	5,124.7	10.5	9.0	-149.60	-1,947.5	-4,117.4	4,810.1	4,791.8	18.33	262.435		
5,300.0	5,289.8	5,225.0	5,224.4	10.7	9.1	-149.64	-1,947.6	-4,118.5	4,817.0	4,798.3	18.69	257.784		
5,400.0	5,389.6	5,324.7	5,324.1	10.9	9.3	-149.68	-1,947.8	-4,119.6	4,823.9	4,804.9	19.04	253.308		
5,500.0	5,489.3	5,424.4	5,423.8	11.1	9.5	-149.71	-1,947.9	-4,120.7	4,830.8	4,811.4	19.40	248.997		
5,600.0	5,589.1	9,370.2	7,585.0	11.3	39.1	-126.42	79.5	-4,181.6	4,802.0	4,752.2	49.88	96.279		
5,700.0	5,688.9	9,373.3	7,585.0	11.5	39.2	-126.38	82.6	-4,181.7	4,764.7	4,714.6	50.13	95.050		
5,800.0	5,788.7	9,376.5	7,585.0	11.7	39.2	-126.34	85.7	-4,181.9	4,729.1	4,678.8	50.38	93.869		
5,900.0	5,888.4	9,400.0	7,585.0	11.9	39.6	-126.03	109.2	-4,183.0	4,695.5	4,644.6	50.98	92.110		
6,000.0	5,988.2	9,400.0	7,585.0	12.2	39.6	-126.03	109.2	-4,183.0	4,663.7	4,612.6	51.18	91.131		
6,100.0	6,088.0	9,400.0	7,585.0	12.4	39.6	-126.03	109.2	-4,183.0	4,633.9	4,582.5	51.38	90.197		
6,200.0	6,187.7	9,400.0	7,585.0	12.6	39.6	-126.03	109.2	-4,183.0	4,606.0	4,554.4	51.57	89.309		
6,300.0	6,287.5	9,400.0	7,585.0	12.8	39.6	-126.03	109.2	-4,183.0	4,580.1	4,528.3	51.77	88.466		
6,400.0	6,387.3	9,400.0	7,585.0	13.0	39.6	-126.03	109.2	-4,183.0	4,556.3	4,504.3	51.97	87.669		
6,500.0	6,487.0	9,400.0	7,585.0	13.2	39.6	-126.03	109.2	-4,183.0	4,534.5	4,482.4	52.17	86.918		
6,600.0	6,586.8	9,400.0	7,585.0	13.4	39.6	-126.03	109.2	-4,183.0	4,514.9	4,462.5	52.37	86.213		
6,700.0	6,686.6	9,400.0	7,585.0	13.6	39.6	-126.03	109.2	-4,183.0	4,497.4	4,444.9	52.57	85.554		
6,787.0	6,773.4	9,400.0	7,585.0	13.8	39.6	-126.03	109.2	-4,183.0	4,484.0	4,431.2	52.74	85.019		
6,800.0	6,786.4	9,400.0	7,585.0	13.8	39.6	-136.41	109.2	-4,183.0	4,482.1	4,429.3	52.77	84.934		
6,850.0	6,836.3	9,400.0	7,585.0	13.9	39.6	137.03	109.2	-4,183.0	4,475.1	4,422.2	52.86	84.662		
6,900.0	6,886.2	9,400.0	7,585.0	14.0	39.6	107.70	109.2	-4,183.0	4,468.5	4,415.6	52.91	84.450		
6,950.0	6,935.7	9,400.0	7,585.0	14.0	39.6	100.38	109.2	-4,183.0	4,462.3	4,409.3	52.94	84.294		
7,000.0	6,984.6	9,400.0	7,585.0	14.0	39.6	97.42	109.2	-4,183.0	4,456.5	4,403.6	52.93	84.190		
7,050.0	7,032.6	9,400.0	7,585.0	14.0	39.6	95.95	109.2	-4,183.0	4,451.2	4,398.3	52.91	84.132		
7,100.0	7,079.7	9,400.0	7,585.0	13.9	39.6	95.14	109.2	-4,183.0	4,446.5	4,393.6	52.86	84.114		
7,150.0	7,125.4	9,367.5	7,585.0	13.9	39.1	94.28	76.8	-4,181.5	4,442.0	4,389.7	52.27	84.980		
7,200.0	7,169.6	9,354.4	7,585.0	13.8	38.9	93.85	63.6	-4,180.9	4,438.1	4,386.1	51.99	85.363		
7,250.0	7,212.1	9,339.5	7,585.0	13.8	38.6	93.51	48.8	-4,180.3	4,434.7	4,383.0	51.68	85.806		
7,300.0	7,252.6	9,323.0	7,585.0	13.7	38.3	93.23	32.3	-4,179.7	4,431.7	4,380.3	51.35	86.298		
7,350.0	7,291.0	9,300.0	7,585.0	13.7	37.9	92.94	9.3	-4,178.9	4,429.1	4,378.2	50.93	86.960		
7,400.0	7,327.1	9,300.0	7,585.0	13.7	37.9	92.89	9.3	-4,178.9	4,427.0	4,376.1	50.91	86.964		
7,450.0	7,360.7	9,264.4	7,585.0	13.7	37.4	92.54	-26.2	-4,177.8	4,425.2	4,374.8	50.33	87.922		
7,500.0	7,391.6	9,242.3	7,585.0	13.7	37.0	92.32	-48.4	-4,177.3	4,423.8	4,373.8	50.01	88.466		
7,550.0	7,419.7	9,212.7	7,585.0	13.8	36.5	92.07	-77.9	-4,176.7	4,422.7	4,373.1	49.60	89.169		
7,600.0	7,444.8	9,180.5	7,585.0	13.9	36.0	91.83	-110.1	-4,176.1	4,421.9	4,372.7	49.20	89.885		
7,650.0	7,466.9	9,135.7	7,585.0	14.1	35.2	91.55	-155.0	-4,175.4	4,421.2	4,372.6	48.63	90.910		
7,700.0	7,485.8	9,089.4	7,585.0	14.3	34.5	91.31	-201.3	-4,174.6	4,420.6	4,372.5	48.10	91.910		
7,750.0	7,501.5	9,041.9	7,585.0	14.6	33.7	91.12	-248.7	-4,173.7	4,420.0	4,372.4	47.59	92.870		
7,800.0	7,513.7	8,993.4	7,585.0	14.9	32.9	90.98	-297.2	-4,172.9	4,419.3	4,372.2	47.12	93.786		
7,850.0	7,522.6	8,944.2	7,585.0	15.2	32.1	90.89	-346.4	-4,172.0	4,418.6	4,372.0	46.69	94.640		
7,900.0	7,528.0	8,894.6	7,585.0	15.6	31.3	90.87	-396.0	-4,171.2	4,417.9	4,371.6	46.29	95.436		
7,952.9	7,530.0	8,841.7	7,585.0	16.1	30.5	90.91	-448.9	-4,170.3	4,417.0	4,371.1	45.92	96.197		
8,000.0	7,530.0	8,794.6	7,585.0	16.5	29.8	90.91	-496.0	-4,169.5	4,416.2	4,370.6	45.62	96.800		
8,100.0	7,530.0	8,694.6	7,585.0	17.5	28.2	90.91	-595.9	-4,167.7	4,414.5	4,369.4	45.11	97.868		
8,200.0	7,530.0	8,594.7	7,585.0	18.7	26.6	90.91	-695.9	-4,166.0	4,412.7	4,368.0	44.72	98.672		
8,300.0	7,530.0	8,494.7	7,585.0	19.9	25.1	90.91	-795.9	-4,164.3	4,411.0	4,366.6	44.45	99.232		
8,400.0	7,530.0	8,394.7	7,585.0	21.2	23.6	90.91	-895.8	-4,162.5	4,409.3	4,365.0	44.29	99.565		
8,500.0	7,530.0	8,294.7	7,585.0	22.6	22.2	90.91	-995.8	-4,160.8	4,407.6	4,363.3	44.22	99.680		
8,600.0	7,530.0	8,194.7	7,585.0	24.0	20.7	90.91	-1,095.8	-4,159.1	4,405.8	4,361.6	44.24	99.581		
8,700.0	7,530.0	8,094.7	7,585.0	25.4	19.4	90.91	-1,195.8	-4,157.4	4,404.1	4,359.7	44.37	99.264		
8,800.0	7,530.0	7,994.7	7,585.0	26.9	18.1	90.91	-1,295.7	-4,155.6	4,402.4	4,357.8	44.59	98.723		
8,900.0	7,530.0	7,890.1	7,584.6	28.4	16.9	90.91	-1,400.3	-4,153.8	4,400.6	4,355.8	44.88	98.055		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1												Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,000.0	7,530.0	7,767.3	7,566.6	30.0	15.6	90.67	-1,521.6	-4,151.5	4,398.5	4,353.4	45.13	97.460	
9,100.0	7,530.0	7,656.7	7,528.7	31.5	14.6	90.18	-1,625.3	-4,149.3	4,396.1	4,350.4	45.73	96.130	
9,200.0	7,530.0	7,563.2	7,481.6	33.1	13.9	89.56	-1,705.9	-4,147.4	4,393.9	4,347.2	46.67	94.141	
9,300.0	7,530.0	7,486.9	7,433.9	34.7	13.5	88.94	-1,765.3	-4,145.9	4,392.4	4,344.5	47.86	91.769	
9,381.7	7,530.0	7,435.9	7,397.8	36.1	13.3	88.47	-1,801.3	-4,144.8	4,391.9	4,343.0	48.96	89.708 CC	
9,400.0	7,530.0	7,425.6	7,390.1	36.3	13.2	88.37	-1,808.1	-4,144.6	4,392.0	4,342.7	49.21	89.241	
9,500.0	7,530.0	7,376.3	7,351.7	38.0	13.0	87.87	-1,839.0	-4,143.7	4,393.0	4,342.3	50.66	86.708 ES	
9,600.0	7,530.0	7,336.3	7,318.7	39.6	12.9	87.44	-1,861.6	-4,142.9	4,395.7	4,343.5	52.18	84.246	
9,700.0	7,530.0	7,300.0	7,287.4	41.3	12.8	87.03	-1,880.0	-4,142.3	4,400.2	4,346.5	53.72	81.912	
9,800.0	7,530.0	7,276.4	7,266.5	42.9	12.8	86.76	-1,891.0	-4,141.8	4,406.7	4,351.4	55.32	79.663	
9,900.0	7,530.0	7,250.0	7,242.6	44.6	12.7	86.45	-1,902.1	-4,141.4	4,415.2	4,358.2	56.91	77.581	
10,000.0	7,530.0	7,234.2	7,228.0	46.3	12.7	86.26	-1,908.3	-4,141.1	4,425.7	4,367.1	58.54	75.596	
10,100.0	7,530.0	7,217.6	7,212.6	47.9	12.6	86.06	-1,914.3	-4,140.8	4,438.3	4,378.1	60.18	73.751	
10,200.0	7,530.0	7,200.0	7,196.0	49.6	12.6	85.84	-1,920.2	-4,140.6	4,453.0	4,391.1	61.82	72.037	
10,300.0	7,530.0	7,200.0	7,196.0	51.3	12.6	85.84	-1,920.2	-4,140.6	4,469.8	4,406.2	63.50	70.385	
10,400.0	7,530.0	7,179.6	7,176.6	53.0	12.6	85.59	-1,926.4	-4,140.2	4,488.6	4,423.4	65.14	68.905	
10,500.0	7,530.0	7,169.8	7,167.2	54.7	12.5	85.47	-1,929.1	-4,140.1	4,509.5	4,442.7	66.81	67.497	
10,600.0	7,530.0	7,150.0	7,148.0	56.4	12.5	85.22	-1,934.2	-4,139.8	4,532.6	4,464.1	68.45	66.215	
10,700.0	7,530.0	7,150.0	7,148.0	58.1	12.5	85.22	-1,934.2	-4,139.8	4,557.5	4,487.4	70.15	64.965	
10,800.0	7,530.0	7,150.0	7,148.0	59.8	12.5	85.22	-1,934.2	-4,139.8	4,584.6	4,512.7	71.86	63.800	
10,900.0	7,530.0	7,150.0	7,148.0	61.5	12.5	85.22	-1,934.2	-4,139.8	4,613.6	4,540.0	73.56	62.715	
11,000.0	7,530.0	7,150.0	7,148.0	63.2	12.5	85.22	-1,934.2	-4,139.8	4,644.6	4,569.3	75.27	61.703	
11,100.0	7,530.0	7,128.7	7,127.3	64.9	12.5	84.95	-1,938.8	-4,139.5	4,677.4	4,600.4	76.92	60.808	
11,200.0	7,530.0	7,123.8	7,122.5	66.6	12.5	84.88	-1,939.8	-4,139.4	4,712.1	4,633.5	78.62	59.937	
11,300.0	7,530.0	7,119.4	7,118.1	68.4	12.5	84.83	-1,940.6	-4,139.4	4,748.6	4,668.3	80.32	59.124	
11,400.0	7,530.0	7,100.0	7,099.0	70.1	12.4	84.58	-1,943.9	-4,139.1	4,787.1	4,705.1	81.97	58.401	
11,500.0	7,530.0	7,100.0	7,099.0	71.8	12.4	84.58	-1,943.9	-4,139.1	4,827.2	4,743.5	83.69	57.682	
11,600.0	7,530.0	7,100.0	7,099.0	73.5	12.4	84.58	-1,943.9	-4,139.1	4,869.0	4,783.6	85.40	57.011	
11,700.0	7,530.0	7,100.0	7,099.0	75.2	12.4	84.58	-1,943.9	-4,139.1	4,912.4	4,825.3	87.12	56.385	
11,800.0	7,530.0	7,100.0	7,099.0	77.0	12.4	84.58	-1,943.9	-4,139.1	4,957.5	4,868.7	88.84	55.801	
11,900.0	7,530.0	7,100.0	7,099.0	78.7	12.4	84.58	-1,943.9	-4,139.1	5,004.2	4,913.7	90.56	55.256	
12,000.0	7,530.0	7,100.0	7,099.0	80.4	12.4	84.58	-1,943.9	-4,139.1	5,052.5	4,960.2	92.29	54.747	
12,100.0	7,530.0	7,100.0	7,099.0	82.2	12.4	84.58	-1,943.9	-4,139.1	5,102.2	5,008.2	94.01	54.273	
12,200.0	7,530.0	7,100.0	7,099.0	83.9	12.4	84.58	-1,943.9	-4,139.1	5,153.4	5,057.7	95.73	53.830	
12,300.0	7,530.0	7,100.0	7,099.0	85.6	12.4	84.58	-1,943.9	-4,139.1	5,206.0	5,108.6	97.46	53.417	
12,400.0	7,530.0	7,100.0	7,099.0	87.3	12.4	84.58	-1,943.9	-4,139.1	5,260.0	5,160.8	99.19	53.032	
12,500.0	7,530.0	7,100.0	7,099.0	89.1	12.4	84.58	-1,943.9	-4,139.1	5,315.4	5,214.4	100.91	52.673	
12,600.0	7,530.0	7,100.0	7,099.0	90.8	12.4	84.58	-1,943.9	-4,139.1	5,372.0	5,269.3	102.64	52.338	
12,700.0	7,530.0	7,100.0	7,099.0	92.5	12.4	84.58	-1,943.9	-4,139.1	5,429.9	5,325.5	104.37	52.026	
12,800.0	7,530.0	7,100.0	7,099.0	94.3	12.4	84.58	-1,943.9	-4,139.1	5,488.9	5,382.8	106.10	51.735	
12,900.0	7,530.0	7,077.4	7,076.6	96.0	12.4	84.29	-1,946.9	-4,138.8	5,548.9	5,441.1	107.74	51.502	
13,000.0	7,530.0	7,075.9	7,075.1	97.8	12.4	84.27	-1,947.0	-4,138.8	5,610.2	5,500.8	109.46	51.252	
13,100.0	7,530.0	7,074.4	7,073.6	99.5	12.4	84.25	-1,947.2	-4,138.8	5,672.7	5,561.5	111.19	51.019	
13,200.0	7,530.0	7,073.0	7,072.2	101.2	12.4	84.23	-1,947.3	-4,138.7	5,736.2	5,623.3	112.91	50.802	
13,300.0	7,530.0	7,050.0	7,049.3	103.0	12.3	83.94	-1,949.3	-4,138.5	5,801.0	5,686.5	114.55	50.642	
13,400.0	7,530.0	7,050.0	7,049.3	104.7	12.3	83.94	-1,949.3	-4,138.5	5,866.5	5,750.2	116.28	50.452	
13,500.0	7,530.0	7,050.0	7,049.3	106.4	12.3	83.94	-1,949.3	-4,138.5	5,932.9	5,814.9	118.01	50.275	
13,600.0	7,530.0	7,050.0	7,049.3	108.2	12.3	83.94	-1,949.3	-4,138.5	6,000.3	5,880.6	119.74	50.111	
13,700.0	7,530.0	7,050.0	7,049.3	109.9	12.3	83.94	-1,949.3	-4,138.5	6,068.6	5,947.1	121.47	49.959	
13,800.0	7,530.0	7,050.0	7,049.3	111.7	12.3	83.94	-1,949.3	-4,138.5	6,137.8	6,014.5	123.20	49.818	
13,900.0	7,530.0	7,050.0	7,049.3	113.4	12.3	83.94	-1,949.3	-4,138.5	6,207.7	6,082.8	124.94	49.687	
14,000.0	7,530.0	7,050.0	7,049.3	115.1	12.3	83.94	-1,949.3	-4,138.5	6,278.5	6,151.9	126.67	49.566	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,050.0	7,049.3	116.9	12.3	83.94	-1,949.3	-4,138.5	6,350.1	6,221.7	128.40	49.455		
14,200.0	7,530.0	7,050.0	7,049.3	118.6	12.3	83.94	-1,949.3	-4,138.5	6,422.5	6,292.3	130.14	49.352		
14,300.0	7,530.0	7,050.0	7,049.3	120.4	12.3	83.94	-1,949.3	-4,138.5	6,495.6	6,363.7	131.87	49.257		
14,400.0	7,530.0	7,050.0	7,049.3	122.1	12.3	83.94	-1,949.3	-4,138.5	6,569.4	6,435.7	133.60	49.170		
14,500.0	7,530.0	7,050.0	7,049.3	123.9	12.3	83.94	-1,949.3	-4,138.5	6,643.8	6,508.5	135.34	49.090		
14,600.0	7,530.0	7,050.0	7,049.3	125.6	12.3	83.94	-1,949.3	-4,138.5	6,719.0	6,581.9	137.07	49.017		
14,700.0	7,530.0	7,050.0	7,049.3	127.3	12.3	83.94	-1,949.3	-4,138.5	6,794.7	6,655.9	138.81	48.950		
14,800.0	7,530.0	7,050.0	7,049.3	129.1	12.3	83.94	-1,949.3	-4,138.5	6,871.1	6,730.6	140.54	48.890		
14,900.0	7,530.0	7,050.0	7,049.3	130.8	12.3	83.94	-1,949.3	-4,138.5	6,948.1	6,805.9	142.28	48.835		
15,000.0	7,530.0	7,050.0	7,049.3	132.6	12.3	83.94	-1,949.3	-4,138.5	7,025.7	6,881.7	144.02	48.785		
15,100.0	7,530.0	7,050.0	7,049.3	134.3	12.3	83.94	-1,949.3	-4,138.5	7,103.9	6,958.1	145.75	48.740		
15,200.0	7,530.0	7,050.0	7,049.3	136.1	12.3	83.94	-1,949.3	-4,138.5	7,182.5	7,035.1	147.49	48.699		
15,300.0	7,530.0	7,050.0	7,049.3	137.8	12.3	83.94	-1,949.3	-4,138.5	7,261.8	7,112.5	149.22	48.664		
15,400.0	7,530.0	7,050.0	7,049.3	139.6	12.3	83.94	-1,949.3	-4,138.5	7,341.5	7,190.5	150.96	48.632		
15,500.0	7,530.0	7,050.0	7,049.3	141.3	12.3	83.94	-1,949.3	-4,138.5	7,421.7	7,269.0	152.70	48.604		
15,600.0	7,530.0	7,050.0	7,049.3	143.0	12.3	83.94	-1,949.3	-4,138.5	7,502.3	7,347.9	154.43	48.580		
15,700.0	7,530.0	7,050.0	7,049.3	144.8	12.3	83.94	-1,949.3	-4,138.5	7,583.5	7,427.3	156.17	48.559		
15,800.0	7,530.0	7,050.0	7,049.3	146.5	12.3	83.94	-1,949.3	-4,138.5	7,665.1	7,507.2	157.91	48.541		
15,900.0	7,530.0	7,050.0	7,049.3	148.3	12.3	83.94	-1,949.3	-4,138.5	7,747.1	7,587.4	159.65	48.527		
16,000.0	7,530.0	7,050.0	7,049.3	150.0	12.3	83.94	-1,949.3	-4,138.5	7,829.5	7,668.1	161.38	48.515		
16,100.0	7,530.0	7,050.0	7,049.3	151.8	12.3	83.94	-1,949.3	-4,138.5	7,912.4	7,749.2	163.12	48.506		
16,200.0	7,530.0	7,050.0	7,049.3	153.5	12.3	83.94	-1,949.3	-4,138.5	7,995.6	7,830.7	164.86	48.500		
16,300.0	7,530.0	7,050.0	7,049.3	155.3	12.3	83.94	-1,949.3	-4,138.5	8,079.2	7,912.6	166.60	48.496		
16,400.0	7,530.0	7,050.0	7,049.3	157.0	12.3	83.94	-1,949.3	-4,138.5	8,163.2	7,994.9	168.34	48.494 SF		
16,500.0	7,530.0	7,050.0	7,049.3	158.8	12.3	83.94	-1,949.3	-4,138.5	8,247.5	8,077.5	170.07	48.494		
16,600.0	7,530.0	7,050.0	7,049.3	160.5	12.3	83.94	-1,949.3	-4,138.5	8,332.2	8,160.4	171.81	48.496		
16,700.0	7,530.0	7,050.0	7,049.3	162.3	12.3	83.94	-1,949.3	-4,138.5	8,417.2	8,243.7	173.55	48.500		
16,800.0	7,530.0	7,050.0	7,049.3	164.0	12.3	83.94	-1,949.3	-4,138.5	8,502.6	8,327.3	175.29	48.506		
16,900.0	7,530.0	7,050.0	7,049.3	165.8	12.3	83.94	-1,949.3	-4,138.5	8,588.3	8,411.2	177.03	48.514		
17,000.0	7,530.0	7,050.0	7,049.3	167.5	12.3	83.94	-1,949.3	-4,138.5	8,674.2	8,495.5	178.77	48.523		
17,100.0	7,530.0	7,050.0	7,049.3	169.3	12.3	83.94	-1,949.3	-4,138.5	8,760.5	8,580.0	180.51	48.533		
17,200.0	7,530.0	7,050.0	7,049.3	171.0	12.3	83.94	-1,949.3	-4,138.5	8,847.1	8,664.8	182.25	48.545		
17,300.0	7,530.0	7,050.0	7,049.3	172.8	12.3	83.94	-1,949.3	-4,138.5	8,933.9	8,749.9	183.98	48.558		
17,400.0	7,530.0	7,050.0	7,049.3	174.5	12.3	83.94	-1,949.3	-4,138.5	9,021.0	8,835.3	185.72	48.572		
17,420.9	7,530.0	7,050.0	7,049.3	174.9	12.3	83.94	-1,949.3	-4,138.5	9,039.3	8,853.2	186.09	48.575		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-115.52	-1,936.5	-4,057.1	4,495.6					
100.0	100.0	86.0	86.0	0.2	0.1	-115.52	-1,936.5	-4,057.1	4,495.6	4,495.4	0.26	N/A		
200.0	200.0	186.0	186.0	0.3	0.3	-115.52	-1,936.5	-4,057.1	4,495.6	4,495.0	0.61	7,401.717		
300.0	300.0	286.0	286.0	0.5	0.5	-115.52	-1,936.5	-4,057.1	4,495.6	4,494.7	0.96	4,700.361		
400.0	400.0	386.0	386.0	0.7	0.6	-115.52	-1,936.5	-4,057.1	4,495.6	4,494.3	1.31	3,443.580		
500.0	500.0	486.0	486.0	0.8	0.8	-115.52	-1,936.5	-4,057.1	4,495.6	4,494.0	1.65	2,717.087		
600.0	600.0	586.0	586.0	1.0	1.0	-115.52	-1,936.5	-4,057.1	4,495.6	4,493.6	2.00	2,243.727		
700.0	700.0	681.6	681.5	1.2	1.4	-148.03	-1,935.9	-4,051.7	4,494.3	4,491.6	2.64	1,700.898		
800.0	800.0	951.5	951.4	1.4	1.6	-148.08	-1,935.5	-4,047.9	4,492.8	4,489.8	2.99	1,501.471		
848.5	848.4	1,000.0	999.8	1.5	1.7	-148.10	-1,935.3	-4,046.0	4,492.6	4,489.5	3.16	1,420.469		
900.0	899.9	1,051.4	1,051.2	1.6	1.8	-148.12	-1,935.1	-4,044.0	4,492.8	4,489.5	3.34	1,343.798		
988.4	988.1	1,139.7	1,139.5	1.7	2.0	-148.17	-1,934.7	-4,040.6	4,494.1	4,490.4	3.66	1,229.500		
1,000.0	999.7	1,151.3	1,151.0	1.7	2.0	-148.17	-1,934.6	-4,040.1	4,494.3	4,490.6	3.70	1,215.869		
1,100.0	1,099.4	1,251.2	1,250.8	1.9	2.2	-148.23	-1,934.2	-4,036.2	4,496.4	4,492.3	4.05	1,109.697		
1,200.0	1,199.2	1,351.1	1,350.6	2.1	2.4	-148.30	-1,933.8	-4,032.4	4,498.5	4,494.1	4.41	1,020.438		
1,300.0	1,299.0	1,450.9	1,450.4	2.3	2.5	-148.36	-1,933.4	-4,028.5	4,500.6	4,495.8	4.77	944.396		
1,400.0	1,398.8	1,550.8	1,550.2	2.5	2.7	-148.42	-1,932.9	-4,024.6	4,502.7	4,497.6	5.12	878.868		
1,500.0	1,498.5	1,650.6	1,649.9	2.7	2.9	-148.48	-1,932.5	-4,020.8	4,504.8	4,499.3	5.48	821.831		
1,600.0	1,598.3	1,750.5	1,749.7	2.9	3.1	-148.54	-1,932.1	-4,016.9	4,506.9	4,501.0	5.84	771.749		
1,700.0	1,698.1	1,850.4	1,849.5	3.2	3.3	-148.60	-1,931.6	-4,013.0	4,509.0	4,502.8	6.20	727.430		
1,800.0	1,797.8	1,950.2	1,949.3	3.4	3.5	-148.67	-1,931.2	-4,009.1	4,511.1	4,504.6	6.56	687.940		
1,900.0	1,897.6	2,050.1	2,049.1	3.6	3.7	-148.73	-1,930.8	-4,005.3	4,513.2	4,506.3	6.92	652.533		
2,000.0	1,997.4	2,149.9	2,148.9	3.8	3.8	-148.79	-1,930.4	-4,001.4	4,515.4	4,508.1	7.28	620.611		
2,100.0	2,097.1	2,249.8	2,248.7	4.0	4.0	-148.85	-1,929.9	-3,997.5	4,517.5	4,509.9	7.63	591.686		
2,200.0	2,196.9	2,349.7	2,348.4	4.2	4.2	-148.91	-1,929.5	-3,993.7	4,519.6	4,511.7	7.99	565.356		
2,300.0	2,296.7	2,449.5	2,448.2	4.4	4.4	-148.97	-1,929.1	-3,989.8	4,521.8	4,513.4	8.35	541.287		
2,400.0	2,396.5	2,549.4	2,548.0	4.6	4.6	-149.03	-1,928.6	-3,985.9	4,523.9	4,515.2	8.71	519.202		
2,500.0	2,496.2	2,649.2	2,647.8	4.8	4.8	-149.10	-1,928.2	-3,982.1	4,526.1	4,517.0	9.07	498.866		
2,600.0	2,596.0	2,749.1	2,747.6	5.0	5.0	-149.16	-1,927.8	-3,978.2	4,528.3	4,518.8	9.43	480.079		
2,700.0	2,695.8	2,849.0	2,847.4	5.2	5.1	-149.22	-1,927.4	-3,974.3	4,530.4	4,520.6	9.79	462.672		
2,800.0	2,795.5	2,948.8	2,947.1	5.4	5.3	-149.28	-1,926.9	-3,970.4	4,532.6	4,522.4	10.15	446.498		
2,900.0	2,895.3	3,048.7	3,046.9	5.6	5.5	-149.34	-1,926.5	-3,966.6	4,534.8	4,524.3	10.51	431.431		
3,000.0	2,995.1	3,148.5	3,146.7	5.9	5.7	-149.40	-1,926.1	-3,962.7	4,536.9	4,526.1	10.87	417.361		
3,100.0	3,094.9	3,248.4	3,246.5	6.1	5.9	-149.46	-1,925.6	-3,958.8	4,539.1	4,527.9	11.23	404.193		
3,200.0	3,194.6	3,348.3	3,346.3	6.3	6.1	-149.52	-1,925.2	-3,955.0	4,541.3	4,529.7	11.59	391.842		
3,300.0	3,294.4	3,448.1	3,446.1	6.5	6.3	-149.58	-1,924.8	-3,951.1	4,543.5	4,531.6	11.95	380.236		
3,400.0	3,394.2	3,548.0	3,545.8	6.7	6.5	-149.64	-1,924.4	-3,947.2	4,545.7	4,533.4	12.31	369.309		
3,500.0	3,493.9	3,647.8	3,645.6	6.9	6.6	-149.70	-1,923.9	-3,943.4	4,547.9	4,535.3	12.67	359.003		
3,600.0	3,593.7	3,747.7	3,745.4	7.1	6.8	-149.76	-1,923.5	-3,939.5	4,550.1	4,537.1	13.03	349.266		
3,700.0	3,693.5	3,847.6	3,845.2	7.3	7.0	-149.82	-1,923.1	-3,935.6	4,552.4	4,539.0	13.39	340.054		
3,800.0	3,793.2	3,947.4	3,945.0	7.5	7.2	-149.88	-1,922.6	-3,931.7	4,554.6	4,540.8	13.75	331.324		
3,900.0	3,893.0	4,047.3	4,044.8	7.7	7.4	-149.94	-1,922.2	-3,927.9	4,556.8	4,542.7	14.11	323.040		
4,000.0	3,992.8	4,147.1	4,144.5	8.0	7.6	-150.01	-1,921.8	-3,924.0	4,559.0	4,544.6	14.47	315.169		
4,100.0	4,092.6	4,247.0	4,244.3	8.2	7.8	-150.07	-1,921.4	-3,920.1	4,561.3	4,546.4	14.82	307.681		
4,200.0	4,192.3	4,346.9	4,344.1	8.4	7.9	-150.13	-1,920.9	-3,916.3	4,563.5	4,548.3	15.18	300.547		
4,300.0	4,292.1	4,446.7	4,443.9	8.6	8.1	-150.19	-1,920.5	-3,912.4	4,565.8	4,550.2	15.54	293.745		
4,400.0	4,391.9	4,546.6	4,543.7	8.8	8.3	-150.25	-1,920.1	-3,908.5	4,568.0	4,552.1	15.90	287.251		
4,500.0	4,491.6	4,646.4	4,643.5	9.0	8.5	-150.31	-1,919.6	-3,904.6	4,570.3	4,554.0	16.26	281.044		
4,600.0	4,591.4	4,746.3	4,743.3	9.2	8.7	-150.37	-1,919.2	-3,900.8	4,572.5	4,555.9	16.62	275.107		
4,700.0	4,691.2	4,846.2	4,843.0	9.4	8.9	-150.43	-1,918.8	-3,896.9	4,574.8	4,557.8	16.98	269.422		
4,800.0	4,790.9	4,946.0	4,942.8	9.6	9.1	-150.49	-1,918.4	-3,893.0	4,577.1	4,559.7	17.34	263.973		
4,900.0	4,890.7	5,045.9	5,042.6	9.8	9.3	-150.54	-1,917.9	-3,889.2	4,579.3	4,561.7	17.70	258.746		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,000.0	4,990.5	5,145.7	5,142.4	10.1	9.4	-150.60	-1,917.5	-3,885.3	4,581.6	4,563.6	18.06	253.728		
5,100.0	5,090.3	5,245.6	5,242.2	10.3	9.6	-150.66	-1,917.1	-3,881.4	4,583.9	4,565.5	18.42	248.906		
5,200.0	5,190.0	5,345.5	5,342.0	10.5	9.8	-150.72	-1,916.6	-3,877.6	4,586.2	4,567.4	18.78	244.269		
5,300.0	5,289.8	5,445.3	5,441.7	10.7	10.0	-150.78	-1,916.2	-3,873.7	4,588.5	4,569.4	19.13	239.807		
5,400.0	5,389.6	5,545.2	5,541.5	10.9	10.2	-150.84	-1,915.8	-3,869.8	4,590.8	4,571.3	19.49	235.510		
5,500.0	5,489.3	5,645.0	5,641.3	11.1	10.4	-150.90	-1,915.4	-3,865.9	4,593.1	4,573.3	19.85	231.369		
5,600.0	5,589.1	9,690.4	7,817.0	11.3	41.6	-125.19	205.6	-3,818.1	4,579.7	4,527.7	52.00	88.071		
5,700.0	5,688.9	9,696.1	7,817.0	11.5	41.7	-125.11	211.2	-3,818.2	4,535.0	4,482.7	52.30	86.707		
5,800.0	5,788.7	9,701.7	7,817.0	11.7	41.8	-125.03	216.9	-3,818.3	4,492.1	4,439.5	52.61	85.392		
5,900.0	5,888.4	9,707.4	7,817.0	11.9	41.9	-124.95	222.5	-3,818.4	4,450.9	4,398.0	52.91	84.126		
6,000.0	5,988.2	9,713.0	7,817.0	12.2	42.0	-124.87	228.2	-3,818.5	4,411.7	4,358.5	53.21	82.909		
6,100.0	6,088.0	9,718.7	7,817.0	12.4	42.1	-124.79	233.8	-3,818.6	4,374.4	4,320.9	53.51	81.742		
6,200.0	6,187.7	9,724.3	7,817.0	12.6	42.2	-124.71	239.5	-3,818.7	4,339.1	4,285.2	53.82	80.625		
6,300.0	6,287.5	9,730.0	7,817.0	12.8	42.3	-124.63	245.1	-3,818.8	4,305.8	4,251.6	54.12	79.558		
6,400.0	6,387.3	9,735.6	7,817.0	13.0	42.4	-124.55	250.8	-3,818.9	4,274.5	4,220.1	54.42	78.541		
6,500.0	6,487.0	9,741.3	7,817.0	13.2	42.5	-124.47	256.4	-3,819.0	4,245.4	4,190.7	54.73	77.574		
6,600.0	6,586.8	9,746.9	7,817.0	13.4	42.6	-124.39	262.1	-3,819.1	4,218.5	4,163.4	55.03	76.656		
6,700.0	6,686.6	9,752.6	7,817.0	13.6	42.7	-124.31	267.7	-3,819.1	4,193.7	4,138.4	55.33	75.789		
6,787.0	6,773.4	9,757.5	7,817.0	13.8	42.7	-124.24	272.7	-3,819.2	4,174.0	4,118.4	55.60	75.075		
6,800.0	6,786.4	9,758.1	7,817.0	13.8	42.7	-134.54	273.3	-3,819.2	4,171.2	4,115.5	55.66	74.940		
6,850.0	6,836.3	9,758.3	7,817.0	13.9	42.7	139.20	273.4	-3,819.2	4,160.7	4,104.9	55.82	74.533		
6,900.0	6,886.2	9,755.0	7,817.0	14.0	42.7	110.10	270.1	-3,819.2	4,150.8	4,094.9	55.88	74.277		
6,950.0	6,935.7	9,748.2	7,817.0	14.0	42.6	102.94	263.3	-3,819.1	4,141.5	4,085.6	55.84	74.167		
7,000.0	6,984.6	9,738.0	7,817.0	14.0	42.4	100.09	253.1	-3,818.9	4,132.8	4,077.1	55.70	74.198		
7,050.0	7,032.6	9,724.4	7,817.0	14.0	42.2	98.67	239.5	-3,818.7	4,124.7	4,069.2	55.47	74.361		
7,100.0	7,079.7	9,707.4	7,817.0	13.9	41.9	97.85	222.6	-3,818.4	4,117.2	4,062.1	55.15	74.652		
7,150.0	7,125.4	9,687.3	7,817.0	13.9	41.6	97.32	202.4	-3,818.0	4,110.4	4,055.7	54.76	75.059		
7,200.0	7,169.6	9,664.0	7,817.0	13.8	41.2	96.93	179.1	-3,817.6	4,104.3	4,050.0	54.31	75.576		
7,250.0	7,212.1	9,637.6	7,817.0	13.8	40.8	96.61	152.8	-3,817.2	4,098.7	4,044.9	53.79	76.192		
7,300.0	7,252.6	9,608.4	7,817.0	13.7	40.3	96.33	123.5	-3,816.7	4,093.7	4,040.5	53.24	76.897		
7,350.0	7,291.0	9,576.4	7,817.0	13.7	39.7	96.07	91.6	-3,816.1	4,089.3	4,036.7	52.65	77.677		
7,400.0	7,327.1	9,541.8	7,817.0	13.7	39.2	95.81	57.0	-3,815.5	4,085.4	4,033.4	52.03	78.519		
7,450.0	7,360.7	9,504.8	7,817.0	13.7	38.6	95.56	19.9	-3,814.9	4,082.0	4,030.6	51.40	79.410		
7,500.0	7,391.6	9,465.5	7,817.0	13.7	37.9	95.31	-19.3	-3,814.2	4,079.0	4,028.2	50.78	80.332		
7,550.0	7,419.7	9,424.1	7,817.0	13.8	37.3	95.08	-60.7	-3,813.5	4,076.4	4,026.2	50.16	81.272		
7,600.0	7,444.8	9,380.9	7,817.0	13.9	36.6	94.86	-103.9	-3,812.7	4,074.1	4,024.5	49.56	82.214		
7,650.0	7,466.9	9,336.1	7,817.0	14.1	35.8	94.66	-148.7	-3,811.9	4,072.1	4,023.1	48.98	83.142		
7,700.0	7,485.8	9,289.8	7,817.0	14.3	35.1	94.49	-195.0	-3,811.1	4,070.3	4,021.9	48.43	84.048		
7,750.0	7,501.5	9,242.3	7,817.0	14.6	34.3	94.36	-242.4	-3,810.3	4,068.8	4,020.9	47.92	84.913		
7,800.0	7,513.7	9,193.9	7,817.0	14.9	33.5	94.26	-290.9	-3,809.5	4,067.4	4,020.0	47.44	85.737		
7,850.0	7,522.6	9,144.7	7,817.0	15.2	32.8	94.21	-340.1	-3,808.6	4,066.2	4,019.2	47.01	86.503		
7,900.0	7,528.0	9,095.0	7,817.0	15.6	32.0	94.20	-389.8	-3,807.8	4,065.2	4,018.5	46.61	87.218		
7,952.9	7,530.0	9,042.1	7,817.0	16.1	31.1	94.25	-442.6	-3,806.9	4,064.2	4,017.9	46.23	87.902		
8,000.0	7,530.0	8,995.1	7,817.0	16.5	30.4	94.25	-489.7	-3,806.1	4,063.4	4,017.4	45.94	88.443		
8,100.0	7,530.0	8,895.1	7,817.0	17.5	28.9	94.25	-589.7	-3,804.3	4,061.6	4,016.2	45.43	89.398		
8,200.0	7,530.0	8,795.1	7,817.0	18.7	27.3	94.25	-689.6	-3,802.6	4,059.9	4,014.9	45.05	90.113		
8,300.0	7,530.0	8,695.1	7,817.0	19.9	25.8	94.25	-789.6	-3,800.9	4,058.2	4,013.4	44.79	90.608		
8,400.0	7,530.0	8,595.1	7,817.0	21.2	24.4	94.26	-889.6	-3,799.1	4,056.5	4,011.8	44.63	90.896		
8,500.0	7,530.0	8,495.1	7,817.0	22.6	23.0	94.26	-989.5	-3,797.4	4,054.7	4,010.2	44.56	90.987		
8,600.0	7,530.0	8,395.2	7,817.0	24.0	21.6	94.26	-1,089.5	-3,795.7	4,053.0	4,008.4	44.60	90.884		
8,700.0	7,530.0	8,295.2	7,817.0	25.4	20.3	94.26	-1,189.5	-3,794.0	4,051.3	4,006.6	44.72	90.587		
8,800.0	7,530.0	8,195.2	7,817.0	26.9	19.0	94.26	-1,289.4	-3,792.2	4,049.6	4,004.6	44.95	90.090		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
8,900.0	7,530.0	8,077.4	7,812.5	28.4	17.7	94.20	-1,407.0	-3,790.4	4,047.7	4,002.6	45.09	89.764		
9,000.0	7,530.0	7,951.6	7,783.2	30.0	16.4	93.79	-1,529.1	-3,789.4	4,045.2	3,999.9	45.35	89.191		
9,100.0	7,530.0	7,842.8	7,737.0	31.5	15.5	93.13	-1,627.4	-3,789.5	4,042.5	3,996.5	46.03	87.827		
9,200.0	7,530.0	7,753.8	7,685.9	33.1	15.0	92.41	-1,700.2	-3,790.2	4,040.1	3,993.1	47.04	85.891		
9,300.0	7,530.0	7,682.9	7,637.4	34.7	14.6	91.72	-1,751.9	-3,791.2	4,038.7	3,990.4	48.28	83.650		
9,354.2	7,530.0	7,650.0	7,612.9	35.6	14.4	91.38	-1,773.8	-3,791.8	4,038.5	3,989.5	49.01	82.401 CC		
9,400.0	7,530.0	7,626.6	7,594.7	36.3	14.3	91.12	-1,788.5	-3,792.2	4,038.7	3,989.0	49.66	81.321 ES		
9,500.0	7,530.0	7,581.7	7,558.2	38.0	14.2	90.60	-1,814.6	-3,793.2	4,040.3	3,989.2	51.13	79.015		
9,600.0	7,530.0	7,550.0	7,531.2	39.6	14.1	90.22	-1,831.2	-3,794.0	4,043.9	3,991.2	52.67	76.774		
9,700.0	7,530.0	7,515.8	7,501.1	41.3	14.0	89.79	-1,847.5	-3,794.8	4,049.6	3,995.3	54.23	74.677		
9,800.0	7,530.0	7,500.0	7,487.0	42.9	13.9	89.59	-1,854.4	-3,795.3	4,057.4	4,001.5	55.84	72.655		
9,900.0	7,530.0	7,470.5	7,460.0	44.6	13.9	89.21	-1,866.2	-3,796.1	4,067.4	4,010.0	57.44	70.816		
10,000.0	7,530.0	7,450.0	7,440.8	46.3	13.8	88.93	-1,873.6	-3,796.7	4,079.7	4,020.6	59.06	69.081		
10,100.0	7,530.0	7,450.0	7,440.8	47.9	13.8	88.93	-1,873.6	-3,796.7	4,094.3	4,033.5	60.74	67.405		
10,200.0	7,530.0	7,424.8	7,417.0	49.6	13.7	88.60	-1,881.7	-3,797.5	4,111.0	4,048.7	62.36	65.920		
10,300.0	7,530.0	7,400.0	7,393.2	51.3	13.7	88.26	-1,888.7	-3,798.3	4,130.2	4,066.2	63.99	64.544		
10,400.0	7,530.0	7,400.0	7,393.2	53.0	13.7	88.26	-1,888.7	-3,798.3	4,151.5	4,085.8	65.69	63.201		
10,500.0	7,530.0	7,400.0	7,393.2	54.7	13.7	88.26	-1,888.7	-3,798.3	4,175.0	4,107.6	67.39	61.956		
10,600.0	7,530.0	7,400.0	7,393.2	56.4	13.7	88.26	-1,888.7	-3,798.3	4,200.8	4,131.7	69.09	60.802		
10,700.0	7,530.0	7,379.3	7,373.2	58.1	13.6	87.98	-1,893.7	-3,799.0	4,228.7	4,157.9	70.74	59.775		
10,800.0	7,530.0	7,372.9	7,366.9	59.8	13.6	87.89	-1,895.1	-3,799.2	4,258.7	4,186.3	72.43	58.794		
10,900.0	7,530.0	7,350.0	7,344.5	61.5	13.6	87.57	-1,899.6	-3,800.0	4,291.0	4,216.9	74.08	57.921		
11,000.0	7,530.0	7,350.0	7,344.5	63.2	13.6	87.57	-1,899.6	-3,800.0	4,325.1	4,249.3	75.80	57.062		
11,100.0	7,530.0	7,350.0	7,344.5	64.9	13.6	87.57	-1,899.6	-3,800.0	4,361.3	4,283.7	77.51	56.266		
11,200.0	7,530.0	7,350.0	7,344.5	66.6	13.6	87.57	-1,899.6	-3,800.0	4,399.4	4,320.2	79.23	55.528		
11,300.0	7,530.0	7,350.0	7,344.5	68.4	13.6	87.57	-1,899.6	-3,800.0	4,439.4	4,358.5	80.95	54.843		
11,400.0	7,530.0	7,350.0	7,344.5	70.1	13.6	87.57	-1,899.6	-3,800.0	4,481.4	4,398.7	82.67	54.209		
11,500.0	7,530.0	7,350.0	7,344.5	71.8	13.6	87.57	-1,899.6	-3,800.0	4,525.1	4,440.7	84.39	53.621		
11,600.0	7,530.0	7,350.0	7,344.5	73.5	13.6	87.57	-1,899.6	-3,800.0	4,570.6	4,484.5	86.11	53.076		
11,700.0	7,530.0	7,350.0	7,344.5	75.2	13.6	87.57	-1,899.6	-3,800.0	4,617.9	4,530.0	87.84	52.572		
11,800.0	7,530.0	7,350.0	7,344.5	77.0	13.6	87.57	-1,899.6	-3,800.0	4,666.8	4,577.2	89.57	52.104		
11,900.0	7,530.0	7,329.0	7,323.7	78.7	13.5	87.28	-1,902.9	-3,800.8	4,717.0	4,625.8	91.23	51.703		
12,000.0	7,530.0	7,326.5	7,321.3	80.4	13.5	87.24	-1,903.2	-3,800.9	4,769.0	4,676.1	92.95	51.306		
12,100.0	7,530.0	7,324.1	7,318.9	82.2	13.5	87.21	-1,903.5	-3,801.0	4,822.5	4,727.9	94.68	50.938		
12,200.0	7,530.0	7,321.9	7,316.7	83.9	13.5	87.18	-1,903.8	-3,801.0	4,877.5	4,781.1	96.40	50.597		
12,300.0	7,530.0	7,300.0	7,295.0	85.6	13.5	86.87	-1,906.2	-3,801.8	4,934.1	4,836.1	98.06	50.317		
12,400.0	7,530.0	7,300.0	7,295.0	87.3	13.5	86.87	-1,906.2	-3,801.8	4,991.8	4,892.0	99.79	50.022		
12,500.0	7,530.0	7,300.0	7,295.0	89.1	13.5	86.87	-1,906.2	-3,801.8	5,050.8	4,949.3	101.52	49.750		
12,600.0	7,530.0	7,300.0	7,295.0	90.8	13.5	86.87	-1,906.2	-3,801.8	5,111.1	5,007.9	103.26	49.499		
12,700.0	7,530.0	7,300.0	7,295.0	92.5	13.5	86.87	-1,906.2	-3,801.8	5,172.6	5,067.7	104.99	49.268		
12,800.0	7,530.0	7,300.0	7,295.0	94.3	13.5	86.87	-1,906.2	-3,801.8	5,235.4	5,128.6	106.72	49.055		
12,900.0	7,530.0	7,300.0	7,295.0	96.0	13.5	86.87	-1,906.2	-3,801.8	5,299.2	5,190.8	108.46	48.859		
13,000.0	7,530.0	7,300.0	7,295.0	97.8	13.5	86.87	-1,906.2	-3,801.8	5,364.2	5,254.0	110.19	48.679		
13,100.0	7,530.0	7,300.0	7,295.0	99.5	13.5	86.87	-1,906.2	-3,801.8	5,430.2	5,318.3	111.93	48.514		
13,200.0	7,530.0	7,300.0	7,295.0	101.2	13.5	86.87	-1,906.2	-3,801.8	5,497.2	5,383.6	113.67	48.363		
13,300.0	7,530.0	7,300.0	7,295.0	103.0	13.5	86.87	-1,906.2	-3,801.8	5,565.3	5,449.9	115.40	48.224		
13,400.0	7,530.0	7,300.0	7,295.0	104.7	13.5	86.87	-1,906.2	-3,801.8	5,634.3	5,517.1	117.14	48.098		
13,500.0	7,530.0	7,300.0	7,295.0	106.4	13.5	86.87	-1,906.2	-3,801.8	5,704.2	5,585.3	118.88	47.983		
13,600.0	7,530.0	7,300.0	7,295.0	108.2	13.5	86.87	-1,906.2	-3,801.8	5,775.0	5,654.4	120.62	47.878		
13,700.0	7,530.0	7,300.0	7,295.0	109.9	13.5	86.87	-1,906.2	-3,801.8	5,846.6	5,724.3	122.36	47.784		
13,800.0	7,530.0	7,300.0	7,295.0	111.7	13.5	86.87	-1,906.2	-3,801.8	5,919.1	5,795.0	124.10	47.698		
13,900.0	7,530.0	7,300.0	7,295.0	113.4	13.5	86.87	-1,906.2	-3,801.8	5,992.4	5,866.5	125.84	47.621		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,000.0	7,530.0	7,300.0	7,295.0	115.1	13.5	86.87	-1,906.2	-3,801.8	6,066.4	5,938.8	127.58	47.551		
14,100.0	7,530.0	7,300.0	7,295.0	116.9	13.5	86.87	-1,906.2	-3,801.8	6,141.2	6,011.8	129.32	47.490		
14,200.0	7,530.0	7,300.0	7,295.0	118.6	13.5	86.87	-1,906.2	-3,801.8	6,216.6	6,085.6	131.06	47.435		
14,300.0	7,530.0	7,300.0	7,295.0	120.4	13.5	86.87	-1,906.2	-3,801.8	6,292.8	6,160.0	132.80	47.387		
14,400.0	7,530.0	7,300.0	7,295.0	122.1	13.5	86.87	-1,906.2	-3,801.8	6,369.6	6,235.1	134.54	47.344		
14,500.0	7,530.0	7,300.0	7,295.0	123.9	13.5	86.87	-1,906.2	-3,801.8	6,447.1	6,310.8	136.28	47.308		
14,600.0	7,530.0	7,300.0	7,295.0	125.6	13.5	86.87	-1,906.2	-3,801.8	6,525.1	6,387.1	138.02	47.276		
14,700.0	7,530.0	7,300.0	7,295.0	127.3	13.5	86.87	-1,906.2	-3,801.8	6,603.8	6,464.0	139.76	47.250		
14,800.0	7,530.0	7,300.0	7,295.0	129.1	13.5	86.87	-1,906.2	-3,801.8	6,683.0	6,541.5	141.51	47.228		
14,900.0	7,530.0	7,300.0	7,295.0	130.8	13.5	86.87	-1,906.2	-3,801.8	6,762.8	6,619.5	143.25	47.210		
15,000.0	7,530.0	7,300.0	7,295.0	132.6	13.5	86.87	-1,906.2	-3,801.8	6,843.1	6,698.1	144.99	47.197		
15,100.0	7,530.0	7,300.0	7,295.0	134.3	13.5	86.87	-1,906.2	-3,801.8	6,923.9	6,777.2	146.73	47.187		
15,200.0	7,530.0	7,300.0	7,295.0	136.1	13.5	86.87	-1,906.2	-3,801.8	7,005.2	6,856.8	148.48	47.180		
15,300.0	7,530.0	7,300.0	7,295.0	137.8	13.5	86.87	-1,906.2	-3,801.8	7,087.0	6,936.8	150.22	47.177		
15,400.0	7,530.0	7,300.0	7,295.0	139.6	13.5	86.87	-1,906.2	-3,801.8	7,169.3	7,017.3	151.96	47.177 SF		
15,500.0	7,530.0	7,300.0	7,295.0	141.3	13.5	86.87	-1,906.2	-3,801.8	7,252.0	7,098.3	153.71	47.180		
15,600.0	7,530.0	7,300.0	7,295.0	143.0	13.5	86.87	-1,906.2	-3,801.8	7,335.1	7,179.7	155.45	47.186		
15,700.0	7,530.0	7,300.0	7,295.0	144.8	13.5	86.87	-1,906.2	-3,801.8	7,418.7	7,261.5	157.20	47.194		
15,800.0	7,530.0	7,300.0	7,295.0	146.5	13.5	86.87	-1,906.2	-3,801.8	7,502.6	7,343.7	158.94	47.204		
15,900.0	7,530.0	7,300.0	7,295.0	148.3	13.5	86.87	-1,906.2	-3,801.8	7,587.0	7,426.3	160.69	47.216		
16,000.0	7,530.0	7,300.0	7,295.0	150.0	13.5	86.87	-1,906.2	-3,801.8	7,671.7	7,509.3	162.43	47.231		
16,100.0	7,530.0	7,300.0	7,295.0	151.8	13.5	86.87	-1,906.2	-3,801.8	7,756.8	7,592.6	164.17	47.247		
16,200.0	7,530.0	7,300.0	7,295.0	153.5	13.5	86.87	-1,906.2	-3,801.8	7,842.2	7,676.3	165.92	47.265		
16,300.0	7,530.0	7,300.0	7,295.0	155.3	13.5	86.87	-1,906.2	-3,801.8	7,928.0	7,760.3	167.67	47.285		
16,400.0	7,530.0	7,300.0	7,295.0	157.0	13.5	86.87	-1,906.2	-3,801.8	8,014.1	7,844.7	169.41	47.306		
16,500.0	7,530.0	7,300.0	7,295.0	158.8	13.5	86.87	-1,906.2	-3,801.8	8,100.5	7,929.4	171.16	47.328		
16,600.0	7,530.0	7,300.0	7,295.0	160.5	13.5	86.87	-1,906.2	-3,801.8	8,187.2	8,014.3	172.90	47.352		
16,700.0	7,530.0	7,300.0	7,295.0	162.3	13.5	86.87	-1,906.2	-3,801.8	8,274.3	8,099.6	174.65	47.377		
16,800.0	7,530.0	7,300.0	7,295.0	164.0	13.5	86.87	-1,906.2	-3,801.8	8,361.6	8,185.2	176.39	47.403		
16,900.0	7,530.0	7,300.0	7,295.0	165.8	13.5	86.87	-1,906.2	-3,801.8	8,449.2	8,271.1	178.14	47.430		
17,000.0	7,530.0	7,300.0	7,295.0	167.5	13.5	86.87	-1,906.2	-3,801.8	8,537.1	8,357.2	179.88	47.459		
17,100.0	7,530.0	7,300.0	7,295.0	169.3	13.5	86.87	-1,906.2	-3,801.8	8,625.2	8,443.6	181.63	47.488		
17,200.0	7,530.0	7,300.0	7,295.0	171.0	13.5	86.87	-1,906.2	-3,801.8	8,713.6	8,530.2	183.38	47.517		
17,300.0	7,530.0	7,300.0	7,295.0	172.8	13.5	86.87	-1,906.2	-3,801.8	8,802.3	8,617.1	185.12	47.548		
17,400.0	7,530.0	7,300.0	7,295.0	174.5	13.5	86.87	-1,906.2	-3,801.8	8,891.1	8,704.3	186.87	47.579		
17,420.9	7,530.0	7,300.0	7,295.0	174.9	13.5	86.87	-1,906.2	-3,801.8	8,909.8	8,722.6	187.24	47.586		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.46	-1,929.2	-4,051.5	4,487.5					
100.0	100.0	86.0	86.0	0.2	0.1	-115.46	-1,929.2	-4,051.5	4,487.4	4,487.2	0.26	N/A		
200.0	200.0	186.0	186.0	0.3	0.3	-115.46	-1,929.2	-4,051.5	4,487.4	4,486.8	0.61	7,388.234		
300.0	300.0	286.0	286.0	0.5	0.5	-115.46	-1,929.2	-4,051.5	4,487.4	4,486.5	0.96	4,691.799		
400.0	400.0	386.0	386.0	0.7	0.6	-115.46	-1,929.2	-4,051.5	4,487.4	4,486.1	1.31	3,437.308		
500.0	500.0	486.0	486.0	0.8	0.8	-115.46	-1,929.2	-4,051.5	4,487.4	4,485.8	1.65	2,712.138		
600.0	600.0	790.9	790.8	1.0	1.3	-115.50	-1,929.3	-4,044.2	4,485.5	4,483.1	2.37	1,892.891		
700.0	700.0	991.1	990.5	1.2	1.7	-148.09	-1,929.4	-4,030.8	4,479.9	4,477.0	2.90	1,547.147		
800.0	800.0	1,090.8	1,090.0	1.4	1.9	-148.17	-1,929.5	-4,023.3	4,475.3	4,472.1	3.25	1,376.776		
900.0	899.9	1,190.6	1,189.5	1.6	2.1	-148.26	-1,929.5	-4,015.7	4,472.2	4,468.6	3.61	1,239.757		
988.4	988.1	1,278.8	1,277.4	1.7	2.3	-148.34	-1,929.6	-4,009.1	4,470.7	4,466.8	3.92	1,139.158		
1,000.0	999.7	1,290.4	1,289.0	1.7	2.4	-148.35	-1,929.6	-4,008.2	4,470.6	4,466.6	3.97	1,127.100		
1,100.0	1,099.4	1,390.2	1,388.4	1.9	2.6	-148.44	-1,929.6	-4,000.6	4,469.6	4,465.3	4.33	1,032.628		
1,200.0	1,199.2	1,489.9	1,487.9	2.1	2.8	-148.53	-1,929.7	-3,993.1	4,468.6	4,463.9	4.69	952.487		
1,300.0	1,299.0	1,589.7	1,587.4	2.3	3.0	-148.62	-1,929.7	-3,985.6	4,467.6	4,462.5	5.06	883.697		
1,400.0	1,398.8	1,689.4	1,686.9	2.5	3.2	-148.71	-1,929.8	-3,978.0	4,466.6	4,461.2	5.42	824.038		
1,500.0	1,498.5	1,789.2	1,786.3	2.7	3.4	-148.80	-1,929.8	-3,970.5	4,465.6	4,459.9	5.79	771.824		
1,600.0	1,598.3	1,888.9	1,885.8	2.9	3.6	-148.88	-1,929.9	-3,962.9	4,464.7	4,458.5	6.15	725.758		
1,700.0	1,698.1	1,988.7	1,985.3	3.2	3.8	-148.97	-1,930.0	-3,955.4	4,463.7	4,457.2	6.52	684.823		
1,800.0	1,797.8	2,088.5	2,084.7	3.4	4.1	-149.06	-1,930.0	-3,947.9	4,462.8	4,455.9	6.88	648.213		
1,900.0	1,897.6	2,188.2	2,184.2	3.6	4.3	-149.15	-1,930.1	-3,940.3	4,461.9	4,454.6	7.25	615.282		
2,000.0	1,997.4	2,288.0	2,283.7	3.8	4.5	-149.24	-1,930.1	-3,932.8	4,460.9	4,453.3	7.62	585.506		
2,100.0	2,097.1	2,387.7	2,383.2	4.0	4.7	-149.33	-1,930.2	-3,925.2	4,460.0	4,452.0	7.99	558.454		
2,200.0	2,196.9	2,487.5	2,482.6	4.2	4.9	-149.42	-1,930.2	-3,917.7	4,459.1	4,450.8	8.35	533.771		
2,300.0	2,296.7	2,587.2	2,582.1	4.4	5.1	-149.50	-1,930.3	-3,910.2	4,458.2	4,449.5	8.72	511.159		
2,400.0	2,396.5	2,687.0	2,681.6	4.6	5.4	-149.59	-1,930.3	-3,902.6	4,457.4	4,448.3	9.09	490.371		
2,500.0	2,496.2	2,786.8	2,781.0	4.8	5.6	-149.68	-1,930.4	-3,895.1	4,456.5	4,447.0	9.46	471.195		
2,600.0	2,596.0	2,886.5	2,880.5	5.0	5.8	-149.77	-1,930.5	-3,887.5	4,455.6	4,445.8	9.83	453.450		
2,700.0	2,695.8	2,986.3	2,980.0	5.2	6.0	-149.86	-1,930.5	-3,880.0	4,454.8	4,444.6	10.19	436.984		
2,800.0	2,795.5	3,086.0	3,079.5	5.4	6.2	-149.95	-1,930.6	-3,872.5	4,454.0	4,443.4	10.56	421.663		
2,900.0	2,895.3	3,185.8	3,178.9	5.6	6.4	-150.04	-1,930.6	-3,864.9	4,453.2	4,442.2	10.93	407.373		
3,000.0	2,995.1	3,285.5	3,278.4	5.9	6.7	-150.13	-1,930.7	-3,857.4	4,452.3	4,441.0	11.30	394.012		
3,100.0	3,094.9	3,385.3	3,377.9	6.1	6.9	-150.21	-1,930.7	-3,849.8	4,451.5	4,439.9	11.67	381.493		
3,200.0	3,194.6	3,485.0	3,477.3	6.3	7.1	-150.30	-1,930.8	-3,842.3	4,450.7	4,438.7	12.04	369.740		
3,300.0	3,294.4	3,584.8	3,576.8	6.5	7.3	-150.39	-1,930.8	-3,834.8	4,450.0	4,437.6	12.41	358.685		
3,400.0	3,394.2	3,684.6	3,676.3	6.7	7.5	-150.48	-1,930.9	-3,827.2	4,449.2	4,436.4	12.78	348.266		
3,500.0	3,493.9	3,784.3	3,775.8	6.9	7.7	-150.57	-1,931.0	-3,819.7	4,448.4	4,435.3	13.14	338.432		
3,600.0	3,593.7	3,884.1	3,875.2	7.1	8.0	-150.66	-1,931.0	-3,812.2	4,447.7	4,434.2	13.51	329.134		
3,700.0	3,693.5	3,983.8	3,974.7	7.3	8.2	-150.75	-1,931.1	-3,804.6	4,447.0	4,433.1	13.88	320.330		
3,800.0	3,793.2	4,083.6	4,074.2	7.5	8.4	-150.84	-1,931.1	-3,797.1	4,446.2	4,432.0	14.25	311.981		
3,900.0	3,893.0	4,183.3	4,173.6	7.7	8.6	-150.93	-1,931.2	-3,789.5	4,445.5	4,430.9	14.62	304.054		
4,000.0	3,992.8	4,283.1	4,273.1	8.0	8.8	-151.02	-1,931.2	-3,782.0	4,444.8	4,429.8	14.99	296.516		
4,100.0	4,092.6	4,382.9	4,372.6	8.2	9.1	-151.11	-1,931.3	-3,774.5	4,444.1	4,428.8	15.36	289.341		
4,200.0	4,192.3	4,482.6	4,472.0	8.4	9.3	-151.19	-1,931.3	-3,766.9	4,443.4	4,427.7	15.73	282.502		
4,300.0	4,292.1	4,582.4	4,571.5	8.6	9.5	-151.28	-1,931.4	-3,759.4	4,442.8	4,426.7	16.10	275.977		
4,400.0	4,391.9	4,682.1	4,671.0	8.8	9.7	-151.37	-1,931.4	-3,751.8	4,442.1	4,425.6	16.47	269.745		
4,500.0	4,491.6	4,781.9	4,770.5	9.0	9.9	-151.46	-1,931.5	-3,744.3	4,441.5	4,424.6	16.84	263.786		
4,600.0	4,591.4	4,881.6	4,869.9	9.2	10.1	-151.55	-1,931.6	-3,736.8	4,440.8	4,423.6	17.21	258.083		
4,700.0	4,691.2	4,981.4	4,969.4	9.4	10.4	-151.64	-1,931.6	-3,729.2	4,440.2	4,422.6	17.58	252.620		
4,800.0	4,790.9	5,081.2	5,068.9	9.6	10.6	-151.73	-1,931.7	-3,721.7	4,439.6	4,421.6	17.95	247.381		
4,900.0	4,890.7	5,180.9	5,168.3	9.8	10.8	-151.82	-1,931.7	-3,714.1	4,439.0	4,420.7	18.32	242.355		
5,000.0	4,990.5	5,280.7	5,267.8	10.1	11.0	-151.91	-1,931.8	-3,706.6	4,438.4	4,419.7	18.69	237.527		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,090.3	5,380.4	5,367.3	10.3	11.2	-152.00	-1,931.8	-3,699.1	4,437.8	4,418.7	19.06	232.886		
5,200.0	5,190.0	5,576.2	7,585.0	10.5	43.5	-124.02	284.4	-3,511.2	4,391.4	4,339.1	52.26	84.023		
5,300.0	5,289.8	9,582.0	7,585.0	10.7	43.6	-123.93	290.2	-3,511.2	4,340.5	4,287.9	52.58	82.556		
5,400.0	5,389.6	9,587.7	7,585.0	10.9	43.7	-123.84	295.9	-3,511.1	4,291.3	4,238.4	52.89	81.138		
5,500.0	5,489.3	9,593.5	7,585.0	11.1	43.8	-123.76	301.7	-3,511.1	4,243.9	4,190.7	53.20	79.770		
5,600.0	5,589.1	9,599.2	7,585.0	11.3	43.9	-123.67	307.4	-3,511.0	4,198.3	4,144.8	53.51	78.453		
5,700.0	5,688.9	9,605.0	7,585.0	11.5	44.0	-123.58	313.1	-3,511.0	4,154.7	4,100.9	53.83	77.186		
5,800.0	5,788.7	9,610.7	7,585.0	11.7	44.1	-123.49	318.9	-3,510.9	4,113.0	4,058.8	54.14	75.969		
5,900.0	5,888.4	9,616.4	7,585.0	11.9	44.2	-123.41	324.6	-3,510.9	4,073.3	4,018.9	54.45	74.804		
6,000.0	5,988.2	9,622.2	7,585.0	12.2	44.3	-123.32	330.4	-3,510.8	4,035.7	3,981.0	54.77	73.690		
6,100.0	6,088.0	9,627.9	7,585.0	12.4	44.4	-123.23	336.1	-3,510.8	4,000.3	3,945.2	55.08	72.627		
6,200.0	6,187.7	9,633.7	7,585.0	12.6	44.5	-123.14	341.9	-3,510.7	3,967.0	3,911.6	55.39	71.616		
6,300.0	6,287.5	9,639.4	7,585.0	12.8	44.6	-123.06	347.6	-3,510.7	3,936.0	3,880.3	55.71	70.657		
6,400.0	6,387.3	9,645.2	7,585.0	13.0	44.6	-122.97	353.4	-3,510.6	3,907.3	3,851.3	56.02	69.749		
6,500.0	6,487.0	9,650.9	7,585.0	13.2	44.7	-122.88	359.1	-3,510.6	3,881.0	3,824.6	56.33	68.894		
6,600.0	6,586.8	9,656.7	7,585.0	13.4	44.8	-122.79	364.9	-3,510.5	3,857.0	3,800.4	56.65	68.090		
6,700.0	6,686.6	9,662.4	7,585.0	13.6	44.9	-122.71	370.6	-3,510.5	3,835.5	3,778.6	56.96	67.338		
6,787.0	6,773.4	9,667.4	7,585.0	13.8	45.0	-122.63	376.6	-3,510.4	3,818.9	3,761.6	57.23	66.726		
6,800.0	6,786.4	9,668.0	7,585.0	13.8	45.0	-132.96	376.2	-3,510.4	3,816.5	3,759.2	57.30	66.602		
6,850.0	6,836.3	9,668.3	7,585.0	13.9	45.0	140.61	376.5	-3,510.4	3,808.0	3,750.5	57.50	66.230		
6,900.0	6,886.2	9,665.0	7,585.0	14.0	45.0	111.33	373.2	-3,510.5	3,800.1	3,742.5	57.58	66.002		
6,950.0	6,935.7	9,658.3	7,585.0	14.0	44.9	103.99	366.5	-3,510.5	3,793.0	3,735.4	57.55	65.912		
7,000.0	6,984.6	9,648.1	7,585.0	14.0	44.7	100.94	356.3	-3,510.6	3,786.6	3,729.2	57.41	65.957		
7,050.0	7,032.6	9,634.5	7,585.0	14.0	44.5	99.29	342.7	-3,510.7	3,780.9	3,723.8	57.18	66.128		
7,100.0	7,079.7	9,617.6	7,585.0	13.9	44.2	98.25	325.8	-3,510.9	3,776.0	3,719.2	56.85	66.421		
7,150.0	7,125.4	9,597.5	7,585.0	13.9	43.9	97.48	305.7	-3,511.1	3,771.8	3,715.4	56.44	66.826		
7,200.0	7,169.6	9,574.2	7,585.0	13.8	43.5	96.85	282.4	-3,511.3	3,768.4	3,712.4	55.97	67.333		
7,250.0	7,212.1	9,547.9	7,585.0	13.8	43.1	96.29	256.1	-3,511.5	3,765.5	3,710.1	55.43	67.935		
7,300.0	7,252.6	9,518.7	7,585.0	13.7	42.6	95.76	226.9	-3,511.8	3,763.3	3,708.5	54.84	68.619		
7,350.0	7,291.0	9,486.8	7,585.0	13.7	42.1	95.25	195.0	-3,512.0	3,761.6	3,707.4	54.22	69.374		
7,400.0	7,327.1	9,452.2	7,585.0	13.7	41.5	94.74	160.4	-3,512.4	3,760.5	3,706.9	53.58	70.183		
7,450.0	7,360.7	9,415.2	7,585.0	13.7	40.9	94.24	123.4	-3,512.7	3,759.7	3,706.8	52.93	71.036 ES		
7,500.0	7,391.6	9,376.0	7,585.0	13.7	40.3	93.76	84.2	-3,513.0	3,759.4	3,707.1	52.28	71.914		
7,535.0	7,411.6	9,347.2	7,585.0	13.8	39.8	93.42	55.4	-3,513.3	3,759.3	3,707.5	51.83	72.530 CC		
7,550.0	7,419.7	9,334.6	7,585.0	13.8	39.6	93.29	42.8	-3,513.4	3,759.3	3,707.7	51.64	72.803		
7,600.0	7,444.8	9,291.5	7,585.0	13.9	38.9	92.84	-0.3	-3,513.8	3,759.5	3,708.5	51.02	73.691		
7,650.0	7,466.9	9,246.6	7,585.0	14.1	38.2	92.43	-45.2	-3,514.2	3,759.9	3,709.5	50.43	74.559		
7,700.0	7,485.8	9,200.4	7,585.0	14.3	37.4	92.06	-91.4	-3,514.6	3,760.4	3,710.5	49.87	75.401		
7,750.0	7,501.5	9,152.9	7,585.0	14.6	36.7	91.74	-138.9	-3,515.0	3,760.9	3,711.6	49.36	76.200		
7,800.0	7,513.7	9,104.4	7,585.0	14.9	35.9	91.47	-187.4	-3,515.4	3,761.5	3,712.6	48.88	76.956		
7,850.0	7,522.6	9,055.2	7,585.0	15.2	35.1	91.27	-236.5	-3,515.9	3,762.1	3,713.6	48.45	77.655		
7,900.0	7,528.0	9,005.6	7,585.0	15.6	34.4	91.13	-286.2	-3,516.3	3,762.6	3,714.5	48.05	78.303		
7,952.9	7,530.0	8,952.7	7,585.0	16.1	33.5	91.05	-339.1	-3,516.8	3,763.1	3,715.4	47.68	78.922		
8,000.0	7,530.0	8,905.6	7,585.0	16.5	32.8	91.05	-386.2	-3,517.2	3,763.5	3,716.1	47.38	79.435		
8,100.0	7,530.0	8,805.6	7,585.0	17.5	31.3	91.05	-486.2	-3,518.1	3,764.4	3,717.6	46.84	80.363		
8,200.0	7,530.0	8,705.6	7,585.0	18.7	29.8	91.05	-586.2	-3,519.0	3,765.3	3,718.9	46.43	81.091		
8,300.0	7,530.0	8,605.6	7,585.0	19.9	28.3	91.05	-686.1	-3,519.9	3,766.2	3,720.1	46.13	81.636		
8,400.0	7,530.0	8,505.6	7,585.0	21.2	26.9	91.05	-786.1	-3,520.8	3,767.1	3,721.1	45.93	82.012		
8,500.0	7,530.0	8,405.6	7,585.0	22.6	25.5	91.05	-886.1	-3,521.7	3,768.0	3,722.1	45.82	82.228		
8,600.0	7,530.0	8,305.6	7,585.0	24.0	24.1	91.05	-986.1	-3,522.5	3,768.9	3,723.1	45.80	82.290		
8,700.0	7,530.0	8,205.6	7,585.0	25.4	22.8	91.05	-1,086.1	-3,523.4	3,769.7	3,723.9	45.86	82.198		
8,800.0	7,530.0	8,105.6	7,585.0	26.9	21.5	91.05	-1,186.1	-3,524.3	3,770.6	3,724.6	46.01	81.948		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
8,900.0	7,530.0	8,005.6	7,585.0	28.4	20.4	91.05	-1,286.1	-3,525.2	3,771.5	3,725.3	46.26	81.529		
9,000.0	7,530.0	7,912.7	7,584.7	30.0	19.4	91.04	-1,379.0	-3,526.1	3,772.4	3,725.7	46.70	80.788		
9,100.0	7,530.0	7,840.9	7,577.9	31.5	18.7	90.94	-1,450.4	-3,527.2	3,773.9	3,726.4	47.47	79.502		
9,200.0	7,530.0	7,771.9	7,563.0	33.1	18.0	90.71	-1,517.8	-3,528.9	3,776.1	3,727.8	48.36	78.091		
9,300.0	7,530.0	7,700.0	7,539.0	34.7	17.4	90.35	-1,585.5	-3,531.4	3,779.3	3,730.0	49.30	76.659		
9,400.0	7,530.0	7,650.0	7,517.4	36.3	17.1	90.02	-1,630.5	-3,533.4	3,783.7	3,733.1	50.52	74.898		
9,500.0	7,530.0	7,600.0	7,492.0	38.0	16.7	89.64	-1,673.5	-3,535.7	3,789.3	3,737.5	51.79	73.168		
9,600.0	7,530.0	7,550.0	7,462.9	39.6	16.5	89.20	-1,714.1	-3,538.3	3,796.5	3,743.4	53.11	71.480		
9,700.0	7,530.0	7,500.0	7,430.5	41.3	16.2	88.71	-1,752.0	-3,541.1	3,805.4	3,750.9	54.48	69.843		
9,800.0	7,530.0	7,468.7	7,408.5	42.9	16.1	88.38	-1,774.2	-3,542.9	3,816.1	3,760.1	55.99	68.151		
9,900.0	7,530.0	7,436.2	7,384.5	44.6	15.9	88.01	-1,795.9	-3,544.9	3,828.7	3,771.2	57.51	66.574		
10,000.0	7,530.0	7,400.0	7,356.3	46.3	15.8	87.59	-1,818.5	-3,547.3	3,843.5	3,784.4	59.03	65.112		
10,100.0	7,530.0	7,382.1	7,341.8	47.9	15.7	87.37	-1,829.0	-3,548.5	3,860.3	3,799.6	60.64	63.658		
10,200.0	7,530.0	7,350.0	7,315.1	49.6	15.6	86.97	-1,846.7	-3,550.7	3,879.3	3,817.1	62.20	62.368		
10,300.0	7,530.0	7,350.0	7,315.1	51.3	15.6	86.97	-1,846.7	-3,550.7	3,900.4	3,836.5	63.89	61.048		
10,400.0	7,530.0	7,321.5	7,290.6	53.0	15.5	86.60	-1,861.1	-3,552.6	3,923.7	3,858.2	65.48	59.920		
10,500.0	7,530.0	7,300.0	7,271.7	54.7	15.5	86.32	-1,871.2	-3,554.2	3,949.3	3,882.2	67.10	58.856		
10,600.0	7,530.0	7,300.0	7,271.7	56.4	15.5	86.32	-1,871.2	-3,554.2	3,977.0	3,908.2	68.80	57.804		
10,700.0	7,530.0	7,277.6	7,251.6	58.1	15.4	86.02	-1,880.9	-3,555.8	4,006.8	3,936.4	70.43	56.893		
10,800.0	7,530.0	7,250.0	7,226.3	59.8	15.3	85.64	-1,891.8	-3,557.8	4,038.9	3,966.8	72.03	56.069		
10,900.0	7,530.0	7,250.0	7,226.3	61.5	15.3	85.64	-1,891.8	-3,557.8	4,072.8	3,999.1	73.74	55.232		
11,000.0	7,530.0	7,250.0	7,226.3	63.2	15.3	85.64	-1,891.8	-3,557.8	4,109.0	4,033.5	75.45	54.459		
11,100.0	7,530.0	7,250.0	7,226.3	64.9	15.3	85.64	-1,891.8	-3,557.8	4,147.2	4,070.0	77.16	53.746		
11,200.0	7,530.0	7,227.1	7,204.9	66.6	15.3	85.33	-1,899.8	-3,559.5	4,187.2	4,108.4	78.79	53.140		
11,300.0	7,530.0	7,219.3	7,197.6	68.4	15.3	85.22	-1,902.4	-3,560.1	4,229.2	4,148.7	80.48	52.549		
11,400.0	7,530.0	7,200.0	7,179.3	70.1	15.2	84.95	-1,908.3	-3,561.5	4,273.2	4,191.1	82.12	52.033		
11,500.0	7,530.0	7,200.0	7,179.3	71.8	15.2	84.95	-1,908.3	-3,561.5	4,318.8	4,235.0	83.84	51.512		
11,600.0	7,530.0	7,200.0	7,179.3	73.5	15.2	84.95	-1,908.3	-3,561.5	4,366.3	4,280.7	85.56	51.032		
11,700.0	7,530.0	7,200.0	7,179.3	75.2	15.2	84.95	-1,908.3	-3,561.5	4,415.5	4,328.3	87.28	50.590		
11,800.0	7,530.0	7,200.0	7,179.3	77.0	15.2	84.95	-1,908.3	-3,561.5	4,466.5	4,377.4	89.00	50.184		
11,900.0	7,530.0	7,200.0	7,179.3	78.7	15.2	84.95	-1,908.3	-3,561.5	4,519.0	4,428.3	90.72	49.811		
12,000.0	7,530.0	7,178.1	7,158.2	80.4	15.2	84.63	-1,914.2	-3,563.1	4,572.9	4,480.5	92.36	49.511		
12,100.0	7,530.0	7,173.6	7,153.9	82.2	15.2	84.57	-1,915.3	-3,563.5	4,628.4	4,534.3	94.07	49.203		
12,200.0	7,530.0	7,150.0	7,131.0	83.9	15.1	84.23	-1,920.6	-3,565.3	4,685.6	4,589.9	95.69	48.965		
12,300.0	7,530.0	7,150.0	7,131.0	85.6	15.1	84.23	-1,920.6	-3,565.3	4,743.9	4,646.5	97.42	48.697		
12,400.0	7,530.0	7,150.0	7,131.0	87.3	15.1	84.23	-1,920.6	-3,565.3	4,803.6	4,704.5	99.14	48.452		
12,500.0	7,530.0	7,150.0	7,131.0	89.1	15.1	84.23	-1,920.6	-3,565.3	4,864.6	4,763.7	100.87	48.228		
12,600.0	7,530.0	7,150.0	7,131.0	90.8	15.1	84.23	-1,920.6	-3,565.3	4,926.9	4,824.3	102.59	48.023		
12,700.0	7,530.0	7,150.0	7,131.0	92.5	15.1	84.23	-1,920.6	-3,565.3	4,990.4	4,886.1	104.32	47.837		
12,800.0	7,530.0	7,150.0	7,131.0	94.3	15.1	84.23	-1,920.6	-3,565.3	5,055.1	4,949.0	106.05	47.667		
12,900.0	7,530.0	7,150.0	7,131.0	96.0	15.1	84.23	-1,920.6	-3,565.3	5,120.9	5,013.1	107.78	47.513		
13,000.0	7,530.0	7,150.0	7,131.0	97.8	15.1	84.23	-1,920.6	-3,565.3	5,187.8	5,078.3	109.51	47.374		
13,100.0	7,530.0	7,150.0	7,131.0	99.5	15.1	84.23	-1,920.6	-3,565.3	5,255.8	5,144.5	111.24	47.248		
13,200.0	7,530.0	7,150.0	7,131.0	101.2	15.1	84.23	-1,920.6	-3,565.3	5,324.8	5,211.8	112.97	47.135		
13,300.0	7,530.0	7,150.0	7,131.0	103.0	15.1	84.23	-1,920.6	-3,565.3	5,394.7	5,280.0	114.70	47.034		
13,400.0	7,530.0	7,150.0	7,131.0	104.7	15.1	84.23	-1,920.6	-3,565.3	5,465.6	5,349.2	116.43	46.943		
13,500.0	7,530.0	7,150.0	7,131.0	106.4	15.1	84.23	-1,920.6	-3,565.3	5,537.4	5,419.2	118.16	46.863		
13,600.0	7,530.0	7,150.0	7,131.0	108.2	15.1	84.23	-1,920.6	-3,565.3	5,610.0	5,490.1	119.89	46.792		
13,700.0	7,530.0	7,126.7	7,108.2	109.9	15.1	83.89	-1,924.9	-3,567.0	5,683.1	5,561.6	121.51	46.770		
13,800.0	7,530.0	7,124.8	7,106.3	111.7	15.0	83.87	-1,925.2	-3,567.2	5,757.3	5,634.1	123.23	46.718		
13,900.0	7,530.0	7,122.9	7,104.4	113.4	15.0	83.84	-1,925.5	-3,567.3	5,832.3	5,707.3	124.96	46.674		
14,000.0	7,530.0	7,100.0	7,081.8	115.1	15.0	83.51	-1,928.7	-3,569.1	5,908.3	5,781.7	126.57	46.680		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,100.0	7,081.8	116.9	15.0	83.51	-1,928.7	-3,569.1	5,984.7	5,856.4	128.30	46.645		
14,200.0	7,530.0	7,100.0	7,081.8	118.6	15.0	83.51	-1,928.7	-3,569.1	6,061.7	5,931.7	130.03	46.616		
14,300.0	7,530.0	7,100.0	7,081.8	120.4	15.0	83.51	-1,928.7	-3,569.1	6,139.4	6,007.7	131.77	46.593		
14,400.0	7,530.0	7,100.0	7,081.8	122.1	15.0	83.51	-1,928.7	-3,569.1	6,217.8	6,084.3	133.50	46.575		
14,500.0	7,530.0	7,100.0	7,081.8	123.9	15.0	83.51	-1,928.7	-3,569.1	6,296.7	6,161.5	135.23	46.563		
14,600.0	7,530.0	7,100.0	7,081.8	125.6	15.0	83.51	-1,928.7	-3,569.1	6,376.3	6,239.3	136.97	46.554		
14,700.0	7,530.0	7,100.0	7,081.8	127.3	15.0	83.51	-1,928.7	-3,569.1	6,456.4	6,317.7	138.70	46.550		
14,800.0	7,530.0	7,100.0	7,081.8	129.1	15.0	83.51	-1,928.7	-3,569.1	6,537.1	6,396.6	140.43	46.550 SF		
14,900.0	7,530.0	7,100.0	7,081.8	130.8	15.0	83.51	-1,928.7	-3,569.1	6,618.3	6,476.1	142.17	46.553		
15,000.0	7,530.0	7,100.0	7,081.8	132.6	15.0	83.51	-1,928.7	-3,569.1	6,700.0	6,556.1	143.90	46.560		
15,100.0	7,530.0	7,100.0	7,081.8	134.3	15.0	83.51	-1,928.7	-3,569.1	6,782.2	6,636.5	145.64	46.570		
15,200.0	7,530.0	7,100.0	7,081.8	136.1	15.0	83.51	-1,928.7	-3,569.1	6,864.8	6,717.5	147.37	46.582		
15,300.0	7,530.0	7,100.0	7,081.8	137.8	15.0	83.51	-1,928.7	-3,569.1	6,948.0	6,798.9	149.10	46.598		
15,400.0	7,530.0	7,100.0	7,081.8	139.6	15.0	83.51	-1,928.7	-3,569.1	7,031.5	6,880.7	150.84	46.616		
15,500.0	7,530.0	7,100.0	7,081.8	141.3	15.0	83.51	-1,928.7	-3,569.1	7,115.5	6,962.9	152.58	46.636		
15,600.0	7,530.0	7,100.0	7,081.8	143.0	15.0	83.51	-1,928.7	-3,569.1	7,199.9	7,045.6	154.31	46.659		
15,700.0	7,530.0	7,100.0	7,081.8	144.8	15.0	83.51	-1,928.7	-3,569.1	7,284.7	7,128.7	156.05	46.683		
15,800.0	7,530.0	7,100.0	7,081.8	146.5	15.0	83.51	-1,928.7	-3,569.1	7,369.9	7,212.1	157.78	46.709		
15,900.0	7,530.0	7,100.0	7,081.8	148.3	15.0	83.51	-1,928.7	-3,569.1	7,455.4	7,295.9	159.52	46.737		
16,000.0	7,530.0	7,100.0	7,081.8	150.0	15.0	83.51	-1,928.7	-3,569.1	7,541.3	7,380.1	161.25	46.767		
16,100.0	7,530.0	7,100.0	7,081.8	151.8	15.0	83.51	-1,928.7	-3,569.1	7,627.6	7,464.6	162.99	46.797		
16,200.0	7,530.0	7,100.0	7,081.8	153.5	15.0	83.51	-1,928.7	-3,569.1	7,714.1	7,549.4	164.73	46.830		
16,300.0	7,530.0	7,100.0	7,081.8	155.3	15.0	83.51	-1,928.7	-3,569.1	7,801.0	7,634.6	166.46	46.863		
16,400.0	7,530.0	7,100.0	7,081.8	157.0	15.0	83.51	-1,928.7	-3,569.1	7,888.2	7,720.0	168.20	46.898		
16,500.0	7,530.0	7,100.0	7,081.8	158.8	15.0	83.51	-1,928.7	-3,569.1	7,975.7	7,805.8	169.94	46.933		
16,600.0	7,530.0	7,100.0	7,081.8	160.5	15.0	83.51	-1,928.7	-3,569.1	8,063.5	7,891.9	171.67	46.970		
16,700.0	7,530.0	7,100.0	7,081.8	162.3	15.0	83.51	-1,928.7	-3,569.1	8,151.6	7,978.2	173.41	47.007		
16,800.0	7,530.0	7,100.0	7,081.8	164.0	15.0	83.51	-1,928.7	-3,569.1	8,240.0	8,064.8	175.15	47.045		
16,900.0	7,530.0	7,100.0	7,081.8	165.8	15.0	83.51	-1,928.7	-3,569.1	8,328.6	8,151.7	176.89	47.084		
17,000.0	7,530.0	7,100.0	7,081.8	167.5	15.0	83.51	-1,928.7	-3,569.1	8,417.4	8,238.8	178.62	47.124		
17,100.0	7,530.0	7,100.0	7,081.8	169.3	15.0	83.51	-1,928.7	-3,569.1	8,506.6	8,326.2	180.36	47.164		
17,200.0	7,530.0	7,100.0	7,081.8	171.0	15.0	83.51	-1,928.7	-3,569.1	8,595.9	8,413.8	182.10	47.204		
17,300.0	7,530.0	7,100.0	7,081.8	172.8	15.0	83.51	-1,928.7	-3,569.1	8,685.5	8,501.7	183.84	47.246		
17,400.0	7,530.0	7,100.0	7,081.8	174.5	15.0	83.51	-1,928.7	-3,569.1	8,775.3	8,589.7	185.58	47.287		
17,420.9	7,530.0	7,100.0	7,081.8	174.9	15.0	83.51	-1,928.7	-3,569.1	8,794.2	8,608.2	185.94	47.296		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-115.64	-1,936.5	-4,034.8	4,475.4					
100.0	100.0	86.0	86.0	0.2	0.1	-115.64	-1,936.5	-4,034.8	4,475.4	4,475.2	0.26	N/A		
200.0	200.0	186.0	186.0	0.3	0.3	-115.64	-1,936.5	-4,034.8	4,475.4	4,474.8	0.61	7,368.467		
300.0	300.0	286.0	286.0	0.5	0.5	-115.64	-1,936.5	-4,034.8	4,475.4	4,474.5	0.96	4,679.247		
400.0	400.0	386.0	386.0	0.7	0.6	-115.64	-1,936.5	-4,034.8	4,475.4	4,474.1	1.31	3,428.112		
500.0	500.0	687.8	687.6	0.8	1.2	-115.68	-1,936.6	-4,027.5	4,473.5	4,471.5	2.02	2,218.856		
600.0	600.0	1,020.5	1,019.2	1.0	1.9	-115.83	-1,936.8	-4,001.2	4,466.4	4,463.5	2.86	1,562.560		
700.0	700.0	1,236.4	1,233.5	1.2	2.4	-148.53	-1,937.0	-3,974.0	4,455.5	4,452.1	3.38	1,318.696		
800.0	800.0	1,335.6	1,331.8	1.4	2.7	-148.68	-1,937.1	-3,960.4	4,445.4	4,441.7	3.75	1,185.576		
900.0	899.9	1,434.9	1,430.1	1.6	3.0	-148.83	-1,937.3	-3,946.8	4,436.8	4,432.7	4.12	1,076.014		
988.4	988.1	1,522.7	1,517.1	1.7	3.2	-148.97	-1,937.4	-3,934.8	4,430.5	4,426.1	4.46	994.164		
1,000.0	999.7	1,534.2	1,528.5	1.7	3.2	-148.98	-1,937.4	-3,933.2	4,429.8	4,425.3	4.50	984.280		
1,100.0	1,099.4	1,633.6	1,626.9	1.9	3.5	-149.11	-1,937.5	-3,919.6	4,423.3	4,418.4	4.88	906.273		
1,200.0	1,199.2	1,732.9	1,725.3	2.1	3.8	-149.23	-1,937.6	-3,906.0	4,416.9	4,411.6	5.26	839.240		
1,300.0	1,299.0	1,832.2	1,823.6	2.3	4.1	-149.36	-1,937.7	-3,892.4	4,410.4	4,404.8	5.65	781.068		
1,400.0	1,398.8	1,931.5	1,922.0	2.5	4.4	-149.48	-1,937.8	-3,878.8	4,404.0	4,398.0	6.03	730.140		
1,500.0	1,498.5	2,030.8	2,020.4	2.7	4.7	-149.61	-1,937.9	-3,865.2	4,397.7	4,391.2	6.42	685.204		
1,600.0	1,598.3	2,130.2	2,118.8	2.9	5.0	-149.73	-1,938.0	-3,851.6	4,391.3	4,384.5	6.81	645.274		
1,700.0	1,698.1	2,229.5	2,217.2	3.2	5.3	-149.86	-1,938.2	-3,838.0	4,385.0	4,377.8	7.19	609.570		
1,800.0	1,797.8	2,328.8	2,315.6	3.4	5.5	-149.99	-1,938.3	-3,824.4	4,378.7	4,371.1	7.58	577.460		
1,900.0	1,897.6	2,428.1	2,413.9	3.6	5.8	-150.12	-1,938.4	-3,810.8	4,372.4	4,364.4	7.97	548.434		
2,000.0	1,997.4	2,527.4	2,512.3	3.8	6.1	-150.24	-1,938.5	-3,797.1	4,366.1	4,357.7	8.36	522.072		
2,100.0	2,097.1	2,626.8	2,610.7	4.0	6.4	-150.37	-1,938.6	-3,783.5	4,359.8	4,351.1	8.75	498.025		
2,200.0	2,196.9	2,726.1	2,709.1	4.2	6.7	-150.50	-1,938.7	-3,769.9	4,353.6	4,344.5	9.15	476.005		
2,300.0	2,296.7	2,825.4	2,807.5	4.4	7.0	-150.63	-1,938.8	-3,756.3	4,347.4	4,337.9	9.54	455.767		
2,400.0	2,396.5	2,924.7	2,905.9	4.6	7.3	-150.76	-1,938.9	-3,742.7	4,341.2	4,331.3	9.93	437.104		
2,500.0	2,496.2	3,024.0	3,004.3	4.8	7.6	-150.89	-1,939.0	-3,729.1	4,335.1	4,324.7	10.33	419.841		
2,600.0	2,596.0	3,123.4	3,102.6	5.0	7.9	-151.02	-1,939.2	-3,715.5	4,328.9	4,318.2	10.72	403.828		
2,700.0	2,695.8	3,222.7	3,201.0	5.2	8.2	-151.15	-1,939.3	-3,701.9	4,322.8	4,311.7	11.11	388.933		
2,800.0	2,795.5	3,322.0	3,299.4	5.4	8.5	-151.28	-1,939.4	-3,688.3	4,316.7	4,305.2	11.51	375.044		
2,900.0	2,895.3	3,421.3	3,397.8	5.6	8.8	-151.41	-1,939.5	-3,674.7	4,310.7	4,298.7	11.91	362.064		
3,000.0	2,995.1	3,520.7	3,496.2	5.9	9.1	-151.55	-1,939.6	-3,661.1	4,304.6	4,292.3	12.30	349.906		
3,100.0	3,094.9	3,620.0	3,594.6	6.1	9.4	-151.68	-1,939.7	-3,647.5	4,298.6	4,285.9	12.70	338.495		
3,200.0	3,194.6	3,719.3	3,692.9	6.3	9.6	-151.81	-1,939.8	-3,633.9	4,292.6	4,279.5	13.10	327.765		
3,300.0	3,294.4	3,818.6	3,791.3	6.5	9.9	-151.94	-1,939.9	-3,620.3	4,286.6	4,273.1	13.49	317.656		
3,400.0	3,394.2	3,917.9	3,889.7	6.7	10.2	-152.08	-1,940.1	-3,606.6	4,280.6	4,266.8	13.89	308.118		
3,500.0	3,493.9	4,017.3	3,988.1	6.9	10.5	-152.21	-1,940.2	-3,593.0	4,274.7	4,260.4	14.29	299.102		
3,600.0	3,593.7	4,116.6	4,086.5	7.1	10.8	-152.34	-1,940.3	-3,579.4	4,268.8	4,254.1	14.69	290.567		
3,700.0	3,693.5	4,215.9	4,184.9	7.3	11.1	-152.48	-1,940.4	-3,565.8	4,262.9	4,247.8	15.09	282.477		
3,800.0	3,793.2	4,315.2	4,283.3	7.5	11.4	-152.61	-1,940.5	-3,552.2	4,257.1	4,241.6	15.49	274.797		
3,900.0	3,893.0	4,414.5	4,381.6	7.7	11.7	-152.75	-1,940.6	-3,538.6	4,251.2	4,235.3	15.89	267.497		
4,000.0	3,992.8	4,513.9	4,480.0	8.0	12.0	-152.88	-1,940.7	-3,525.0	4,245.4	4,229.1	16.29	260.550		
4,100.0	4,092.6	4,613.2	4,578.4	8.2	12.3	-153.02	-1,940.8	-3,511.4	4,239.6	4,222.9	16.70	253.931		
4,200.0	4,192.3	4,712.5	4,676.8	8.4	12.6	-153.16	-1,941.0	-3,497.8	4,233.9	4,216.8	17.10	247.617		
4,300.0	4,292.1	4,811.8	4,775.2	8.6	12.9	-153.29	-1,941.1	-3,484.2	4,228.1	4,210.6	17.50	241.588		
4,400.0	4,391.9	4,911.2	4,873.6	8.8	13.2	-153.43	-1,941.2	-3,470.6	4,222.4	4,204.5	17.90	235.826		
4,500.0	4,491.6	5,010.5	4,971.9	9.0	13.5	-153.57	-1,941.3	-3,457.0	4,216.7	4,198.4	18.31	230.312		
4,600.0	4,591.4	5,109.8	5,070.3	9.2	13.8	-153.70	-1,941.4	-3,443.4	4,211.0	4,192.3	18.71	225.031		
4,700.0	4,691.2	5,209.1	5,168.7	9.4	14.1	-153.84	-1,941.5	-3,429.8	4,205.4	4,186.3	19.12	219.970		
4,800.0	4,790.9	5,308.4	5,267.1	9.6	14.4	-153.98	-1,941.6	-3,416.1	4,199.8	4,180.3	19.52	215.114		
4,900.0	4,890.7	5,407.8	5,365.5	9.8	14.7	-154.12	-1,941.7	-3,402.5	4,194.2	4,174.3	19.93	210.452		
5,000.0	4,990.5	5,507.1	5,463.9	10.1	15.0	-154.26	-1,941.8	-3,388.9	4,188.6	4,168.3	20.34	205.971		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
5,100.0	5,090.3	5,606.4	5,562.3	10.3	15.2	-154.40	-1,942.0	-3,375.3	4,183.1	4,162.3	20.74	201.663		
5,200.0	5,190.0	5,705.7	5,660.6	10.5	15.5	-154.54	-1,942.1	-3,361.7	4,177.6	4,156.4	21.15	197.517		
5,300.0	5,289.8	9,751.3	7,817.0	10.7	44.0	-126.33	172.1	-3,118.6	4,152.0	4,102.0	50.07	82.930		
5,400.0	5,389.6	9,756.9	7,817.0	10.9	44.1	-126.23	177.7	-3,118.7	4,094.8	4,044.4	50.39	81.265		
5,500.0	5,489.3	9,762.5	7,817.0	11.1	44.2	-126.14	183.3	-3,118.9	4,039.2	3,988.4	50.71	79.653		
5,600.0	5,589.1	9,768.2	7,817.0	11.3	44.3	-126.04	188.9	-3,119.0	3,985.3	3,934.2	51.03	78.095		
5,700.0	5,688.9	9,773.8	7,817.0	11.5	44.3	-125.95	194.5	-3,119.1	3,933.2	3,881.8	51.35	76.591		
5,800.0	5,788.7	9,779.4	7,817.0	11.7	44.4	-125.85	200.1	-3,119.3	3,883.0	3,831.3	51.67	75.142		
5,900.0	5,888.4	9,785.0	7,817.0	11.9	44.5	-125.76	205.8	-3,119.4	3,834.7	3,782.7	52.00	73.749		
6,000.0	5,988.2	9,790.6	7,817.0	12.2	44.6	-125.66	211.4	-3,119.6	3,788.4	3,736.1	52.32	72.411		
6,100.0	6,088.0	9,796.2	7,817.0	12.4	44.7	-125.57	217.0	-3,119.7	3,744.3	3,691.6	52.64	71.129		
6,200.0	6,187.7	9,801.9	7,817.0	12.6	44.8	-125.47	222.6	-3,119.9	3,702.3	3,649.3	52.96	69.903		
6,300.0	6,287.5	9,807.5	7,817.0	12.8	44.9	-125.38	228.2	-3,120.0	3,662.5	3,609.2	53.29	68.734		
6,400.0	6,387.3	9,813.1	7,817.0	13.0	44.9	-125.28	233.8	-3,120.2	3,625.1	3,571.5	53.61	67.622		
6,500.0	6,487.0	9,818.7	7,817.0	13.2	45.0	-125.19	239.5	-3,120.3	3,590.0	3,536.1	53.93	66.567		
6,600.0	6,586.8	9,824.3	7,817.0	13.4	45.1	-125.09	245.1	-3,120.5	3,557.4	3,503.2	54.25	65.570		
6,700.0	6,686.6	9,830.0	7,817.0	13.6	45.2	-124.99	250.7	-3,120.6	3,527.3	3,472.8	54.58	64.631		
6,787.0	6,773.4	9,834.8	7,817.0	13.8	45.3	-124.91	255.6	-3,120.7	3,503.3	3,448.4	54.86	63.862		
6,800.0	6,786.4	9,835.5	7,817.0	13.8	45.3	-135.15	256.2	-3,120.7	3,499.8	3,444.9	54.98	63.653		
6,850.0	6,836.3	9,835.6	7,817.0	13.9	45.3	138.79	256.3	-3,120.8	3,487.0	3,431.6	55.38	62.967		
6,900.0	6,886.2	9,832.3	7,817.0	14.0	45.2	109.88	253.0	-3,120.7	3,474.8	3,419.1	55.64	62.450		
6,950.0	6,935.7	9,825.5	7,817.0	14.0	45.1	102.90	246.2	-3,120.5	3,463.2	3,407.5	55.77	62.096		
7,000.0	6,984.6	9,815.2	7,817.0	14.0	45.0	100.20	236.0	-3,120.2	3,452.4	3,396.6	55.78	61.898		
7,050.0	7,032.6	9,801.6	7,817.0	14.0	44.8	98.91	222.4	-3,119.9	3,442.3	3,386.6	55.66	61.849		
7,100.0	7,079.7	9,784.7	7,817.0	13.9	44.5	98.20	205.4	-3,119.4	3,432.9	3,377.5	55.42	61.939		
7,150.0	7,125.4	9,764.5	7,817.0	13.9	44.2	97.76	185.3	-3,118.9	3,424.3	3,369.2	55.09	62.160		
7,200.0	7,169.6	9,741.2	7,817.0	13.8	43.8	97.46	161.9	-3,118.3	3,416.5	3,361.8	54.66	62.502		
7,250.0	7,212.1	9,714.8	7,817.0	13.8	43.4	97.20	135.6	-3,117.6	3,409.3	3,355.2	54.16	62.953		
7,300.0	7,252.6	9,685.6	7,817.0	13.7	43.0	96.97	106.4	-3,116.9	3,402.9	3,349.3	53.59	63.502		
7,350.0	7,291.0	9,653.6	7,817.0	13.7	42.5	96.75	74.4	-3,116.0	3,397.2	3,344.2	52.97	64.133		
7,400.0	7,327.1	9,619.0	7,817.0	13.7	42.0	96.52	39.8	-3,115.1	3,392.0	3,339.7	52.32	64.835		
7,450.0	7,360.7	9,582.0	7,817.0	13.7	41.4	96.29	2.8	-3,114.2	3,387.5	3,335.8	51.65	65.589		
7,500.0	7,391.6	9,542.7	7,817.0	13.7	40.8	96.06	-36.5	-3,113.1	3,383.4	3,332.4	50.97	66.381		
7,550.0	7,419.7	9,501.3	7,817.0	13.8	40.2	95.83	-77.8	-3,112.1	3,379.8	3,329.5	50.30	67.196		
7,600.0	7,444.8	9,458.1	7,817.0	13.9	39.6	95.62	-121.0	-3,110.9	3,376.7	3,327.0	49.65	68.015		
7,650.0	7,466.9	9,413.3	7,817.0	14.1	38.9	95.43	-165.8	-3,109.8	3,373.8	3,324.8	49.02	68.828		
7,700.0	7,485.8	9,367.0	7,817.0	14.3	38.3	95.27	-212.1	-3,108.6	3,371.3	3,322.9	48.43	69.619		
7,750.0	7,501.5	9,319.5	7,817.0	14.6	37.6	95.15	-259.6	-3,107.3	3,369.1	3,321.2	47.87	70.381		
7,800.0	7,513.7	9,271.1	7,817.0	14.9	36.9	95.07	-308.0	-3,106.1	3,367.1	3,319.8	47.36	71.103		
7,850.0	7,522.6	9,221.9	7,817.0	15.2	36.2	95.04	-357.2	-3,104.8	3,365.3	3,318.5	46.88	71.783		
7,900.0	7,528.0	9,172.2	7,817.0	15.6	35.5	95.06	-406.8	-3,103.5	3,363.8	3,317.3	46.45	72.417		
7,952.9	7,530.0	9,119.3	7,817.0	16.1	34.8	95.14	-459.7	-3,102.1	3,362.3	3,316.3	46.03	73.039		
8,000.0	7,530.0	9,072.3	7,817.0	16.5	34.1	95.14	-506.7	-3,100.9	3,361.1	3,315.3	45.75	73.468		
8,100.0	7,530.0	8,972.3	7,817.0	17.5	32.8	95.14	-606.6	-3,098.3	3,358.5	3,313.2	45.25	74.224		
8,200.0	7,530.0	8,872.4	7,817.0	18.7	31.5	95.15	-706.6	-3,095.7	3,355.9	3,311.0	44.88	74.778		
8,300.0	7,530.0	8,772.4	7,817.0	19.9	30.2	95.15	-806.5	-3,093.1	3,353.3	3,308.7	44.62	75.145		
8,400.0	7,530.0	8,672.4	7,817.0	21.2	29.0	95.16	-906.4	-3,090.5	3,350.7	3,306.2	44.48	75.337		
8,500.0	7,530.0	8,572.5	7,817.0	22.6	27.9	95.16	-1,006.4	-3,087.9	3,348.1	3,303.7	44.43	75.362		
8,600.0	7,530.0	8,472.5	7,817.0	24.0	26.8	95.16	-1,106.3	-3,085.3	3,345.5	3,301.0	44.47	75.224		
8,700.0	7,530.0	8,372.5	7,817.0	25.4	25.8	95.17	-1,206.2	-3,082.7	3,342.9	3,298.3	44.62	74.919		
8,800.0	7,530.0	8,272.6	7,817.0	26.9	24.9	95.17	-1,306.2	-3,080.1	3,340.3	3,295.5	44.87	74.445		
8,900.0	7,530.0	8,180.6	7,816.3	28.4	24.2	95.16	-1,398.1	-3,077.8	3,337.8	3,292.5	45.32	73.651		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
9,000.0	7,530.0	8,100.0	7,806.6	30.0	23.6	95.00	-1,478.0	-3,077.1	3,335.8	3,289.8	46.01	72.506		
9,100.0	7,530.0	8,029.6	7,789.2	31.5	23.1	94.70	-1,546.2	-3,077.7	3,334.5	3,287.6	46.91	71.081		
9,174.9	7,530.0	7,978.1	7,771.3	32.7	22.8	94.39	-1,594.5	-3,078.9	3,334.2	3,286.6	47.66	69.955 CC		
9,200.0	7,530.0	7,961.6	7,764.6	33.1	22.7	94.28	-1,609.6	-3,079.4	3,334.3	3,286.3	47.93	69.565		
9,300.0	7,530.0	7,900.0	7,736.1	34.7	22.3	93.78	-1,664.0	-3,082.0	3,335.2	3,286.1	49.09	67.945 ES		
9,400.0	7,530.0	7,850.0	7,708.8	36.3	22.1	93.31	-1,705.8	-3,084.7	3,337.7	3,287.3	50.40	66.230		
9,500.0	7,530.0	7,800.0	7,678.0	38.0	21.9	92.78	-1,745.1	-3,087.9	3,341.9	3,290.2	51.76	64.568		
9,600.0	7,530.0	7,750.0	7,644.0	39.6	21.7	92.20	-1,781.5	-3,091.7	3,348.1	3,294.9	53.17	62.970		
9,700.0	7,530.0	7,719.5	7,621.7	41.3	21.6	91.81	-1,802.1	-3,094.2	3,356.4	3,301.7	54.70	61.357		
9,800.0	7,530.0	7,700.0	7,606.9	42.9	21.5	91.56	-1,814.7	-3,095.9	3,367.1	3,310.8	56.29	59.818		
9,900.0	7,530.0	7,650.0	7,567.1	44.6	21.3	90.87	-1,844.6	-3,100.6	3,380.1	3,322.3	57.79	58.493		
10,000.0	7,530.0	7,635.3	7,555.0	46.3	21.3	90.67	-1,852.7	-3,102.1	3,395.5	3,336.1	59.42	57.145		
10,100.0	7,530.0	7,600.0	7,524.9	47.9	21.2	90.15	-1,870.9	-3,105.8	3,413.5	3,352.5	60.99	55.965		
10,200.0	7,530.0	7,600.0	7,524.9	49.6	21.2	90.15	-1,870.9	-3,105.8	3,433.9	3,371.3	62.68	54.783		
10,300.0	7,530.0	7,577.4	7,505.1	51.3	21.1	89.81	-1,881.5	-3,108.2	3,456.9	3,392.6	64.31	53.751		
10,400.0	7,530.0	7,550.0	7,480.6	53.0	21.0	89.40	-1,893.4	-3,111.3	3,482.5	3,416.6	65.93	52.820		
10,500.0	7,530.0	7,550.0	7,480.6	54.7	21.0	89.40	-1,893.4	-3,111.3	3,510.4	3,442.8	67.63	51.904		
10,600.0	7,530.0	7,550.0	7,480.6	56.4	21.0	89.40	-1,893.4	-3,111.3	3,540.9	3,471.6	69.34	51.069		
10,700.0	7,530.0	7,524.7	7,457.5	58.1	20.9	89.00	-1,903.3	-3,114.3	3,573.7	3,502.7	70.98	50.351		
10,800.0	7,530.0	7,500.0	7,434.5	59.8	20.9	88.61	-1,911.9	-3,117.2	3,609.0	3,536.4	72.61	49.701		
10,900.0	7,530.0	7,500.0	7,434.5	61.5	20.9	88.61	-1,911.9	-3,117.2	3,646.4	3,572.1	74.33	49.059		
11,000.0	7,530.0	7,500.0	7,434.5	63.2	20.9	88.61	-1,911.9	-3,117.2	3,686.2	3,610.1	76.04	48.476		
11,100.0	7,530.0	7,500.0	7,434.5	64.9	20.9	88.61	-1,911.9	-3,117.2	3,728.2	3,650.4	77.76	47.947		
11,200.0	7,530.0	7,500.0	7,434.5	66.6	20.9	88.61	-1,911.9	-3,117.2	3,772.4	3,692.9	79.48	47.466		
11,300.0	7,530.0	7,474.6	7,410.6	68.4	20.8	88.21	-1,919.7	-3,120.3	3,818.3	3,737.2	81.12	47.068		
11,400.0	7,530.0	7,450.0	7,387.1	70.1	20.7	87.81	-1,926.3	-3,123.4	3,866.7	3,783.9	82.77	46.714		
11,500.0	7,530.0	7,450.0	7,387.1	71.8	20.7	87.81	-1,926.3	-3,123.4	3,916.6	3,832.1	84.50	46.353		
11,600.0	7,530.0	7,450.0	7,387.1	73.5	20.7	87.81	-1,926.3	-3,123.4	3,968.4	3,882.2	86.22	46.027		
11,700.0	7,530.0	7,450.0	7,387.1	75.2	20.7	87.81	-1,926.3	-3,123.4	4,022.1	3,934.1	87.94	45.734		
11,800.0	7,530.0	7,450.0	7,387.1	77.0	20.7	87.81	-1,926.3	-3,123.4	4,077.5	3,987.8	89.67	45.471		
11,900.0	7,530.0	7,450.0	7,387.1	78.7	20.7	87.81	-1,926.3	-3,123.4	4,134.5	4,043.1	91.40	45.236		
12,000.0	7,530.0	7,450.0	7,387.1	80.4	20.7	87.81	-1,926.3	-3,123.4	4,193.2	4,100.1	93.13	45.027		
12,100.0	7,530.0	7,450.0	7,387.1	82.2	20.7	87.81	-1,926.3	-3,123.4	4,253.4	4,158.6	94.86	44.840		
12,200.0	7,530.0	7,450.0	7,387.1	83.9	20.7	87.81	-1,926.3	-3,123.4	4,315.1	4,218.6	96.59	44.676		
12,300.0	7,530.0	7,427.7	7,365.5	85.6	20.7	87.44	-1,931.3	-3,126.3	4,377.9	4,279.7	98.25	44.559		
12,400.0	7,530.0	7,424.4	7,362.3	87.3	20.6	87.39	-1,932.0	-3,126.7	4,442.3	4,342.3	99.97	44.436		
12,500.0	7,530.0	7,421.2	7,359.3	89.1	20.6	87.34	-1,932.6	-3,127.1	4,507.9	4,406.2	101.69	44.329		
12,600.0	7,530.0	7,400.0	7,338.6	90.8	20.6	86.99	-1,936.4	-3,129.8	4,575.0	4,471.7	103.35	44.266		
12,700.0	7,530.0	7,400.0	7,338.6	92.5	20.6	86.99	-1,936.4	-3,129.8	4,643.0	4,537.9	105.09	44.182		
12,800.0	7,530.0	7,400.0	7,338.6	94.3	20.6	86.99	-1,936.4	-3,129.8	4,712.1	4,605.3	106.82	44.112		
12,900.0	7,530.0	7,400.0	7,338.6	96.0	20.6	86.99	-1,936.4	-3,129.8	4,782.3	4,673.8	108.56	44.054		
13,000.0	7,530.0	7,400.0	7,338.6	97.8	20.6	86.99	-1,936.4	-3,129.8	4,853.6	4,743.3	110.29	44.007		
13,100.0	7,530.0	7,400.0	7,338.6	99.5	20.6	86.99	-1,936.4	-3,129.8	4,925.8	4,813.8	112.03	43.970		
13,200.0	7,530.0	7,400.0	7,338.6	101.2	20.6	86.99	-1,936.4	-3,129.8	4,999.0	4,885.3	113.76	43.942		
13,300.0	7,530.0	7,400.0	7,338.6	103.0	20.6	86.99	-1,936.4	-3,129.8	5,073.2	4,957.7	115.50	43.923		
13,400.0	7,530.0	7,400.0	7,338.6	104.7	20.6	86.99	-1,936.4	-3,129.8	5,148.2	5,030.9	117.24	43.912		
13,500.0	7,530.0	7,400.0	7,338.6	106.4	20.6	86.99	-1,936.4	-3,129.8	5,224.0	5,105.0	118.98	43.908 SF		
13,600.0	7,530.0	7,400.0	7,338.6	108.2	20.6	86.99	-1,936.4	-3,129.8	5,300.7	5,179.9	120.72	43.910		
13,700.0	7,530.0	7,400.0	7,338.6	109.9	20.6	86.99	-1,936.4	-3,129.8	5,378.1	5,255.6	122.45	43.919		
13,800.0	7,530.0	7,400.0	7,338.6	111.7	20.6	86.99	-1,936.4	-3,129.8	5,456.2	5,332.0	124.19	43.933		
13,900.0	7,530.0	7,400.0	7,338.6	113.4	20.6	86.99	-1,936.4	-3,129.8	5,535.1	5,409.1	125.93	43.952		
14,000.0	7,530.0	7,400.0	7,338.6	115.1	20.6	86.99	-1,936.4	-3,129.8	5,614.6	5,486.9	127.67	43.976		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,400.0	7,338.6	116.9	20.6	86.99	-1,936.4	-3,129.8	5,694.8	5,565.3	129.41	44.004		
14,200.0	7,530.0	7,400.0	7,338.6	118.6	20.6	86.99	-1,936.4	-3,129.8	5,775.5	5,644.4	131.16	44.036		
14,300.0	7,530.0	7,400.0	7,338.6	120.4	20.6	86.99	-1,936.4	-3,129.8	5,856.9	5,724.0	132.90	44.071		
14,400.0	7,530.0	7,400.0	7,338.6	122.1	20.6	86.99	-1,936.4	-3,129.8	5,938.9	5,804.2	134.64	44.110		
14,500.0	7,530.0	7,400.0	7,338.6	123.9	20.6	86.99	-1,936.4	-3,129.8	6,021.4	5,885.0	136.38	44.152		
14,600.0	7,530.0	7,400.0	7,338.6	125.6	20.6	86.99	-1,936.4	-3,129.8	6,104.4	5,966.3	138.12	44.196		
14,700.0	7,530.0	7,400.0	7,338.6	127.3	20.6	86.99	-1,936.4	-3,129.8	6,187.9	6,048.0	139.86	44.242		
14,800.0	7,530.0	7,400.0	7,338.6	129.1	20.6	86.99	-1,936.4	-3,129.8	6,271.9	6,130.3	141.61	44.291		
14,900.0	7,530.0	7,376.6	7,315.6	130.8	20.5	86.61	-1,939.7	-3,132.9	6,355.9	6,212.7	143.25	44.369		
15,000.0	7,530.0	7,375.5	7,314.5	132.6	20.5	86.59	-1,939.9	-3,133.1	6,440.8	6,295.8	144.99	44.423		
15,100.0	7,530.0	7,374.4	7,313.5	134.3	20.5	86.57	-1,940.0	-3,133.2	6,526.1	6,379.3	146.73	44.478		
15,200.0	7,530.0	7,373.4	7,312.4	136.1	20.5	86.55	-1,940.1	-3,133.4	6,611.8	6,463.3	148.46	44.535		
15,300.0	7,530.0	7,350.0	7,289.4	137.8	20.4	86.17	-1,942.3	-3,136.5	6,698.3	6,548.2	150.10	44.626		
15,400.0	7,530.0	7,350.0	7,289.4	139.6	20.4	86.17	-1,942.3	-3,136.5	6,784.7	6,632.9	151.84	44.683		
15,500.0	7,530.0	7,350.0	7,289.4	141.3	20.4	86.17	-1,942.3	-3,136.5	6,871.5	6,717.9	153.58	44.741		
15,600.0	7,530.0	7,350.0	7,289.4	143.0	20.4	86.17	-1,942.3	-3,136.5	6,958.7	6,803.4	155.33	44.801		
15,700.0	7,530.0	7,350.0	7,289.4	144.8	20.4	86.17	-1,942.3	-3,136.5	7,046.2	6,889.1	157.07	44.861		
15,800.0	7,530.0	7,350.0	7,289.4	146.5	20.4	86.17	-1,942.3	-3,136.5	7,134.0	6,975.2	158.81	44.921		
15,900.0	7,530.0	7,350.0	7,289.4	148.3	20.4	86.17	-1,942.3	-3,136.5	7,222.2	7,061.6	160.56	44.982		
16,000.0	7,530.0	7,350.0	7,289.4	150.0	20.4	86.17	-1,942.3	-3,136.5	7,310.6	7,148.3	162.30	45.044		
16,100.0	7,530.0	7,350.0	7,289.4	151.8	20.4	86.17	-1,942.3	-3,136.5	7,399.4	7,235.3	164.04	45.107		
16,200.0	7,530.0	7,350.0	7,289.4	153.5	20.4	86.17	-1,942.3	-3,136.5	7,488.4	7,322.6	165.79	45.169		
16,300.0	7,530.0	7,350.0	7,289.4	155.3	20.4	86.17	-1,942.3	-3,136.5	7,577.7	7,410.2	167.53	45.232		
16,400.0	7,530.0	7,350.0	7,289.4	157.0	20.4	86.17	-1,942.3	-3,136.5	7,667.3	7,498.0	169.27	45.295		
16,500.0	7,530.0	7,350.0	7,289.4	158.8	20.4	86.17	-1,942.3	-3,136.5	7,757.1	7,586.1	171.02	45.358		
16,600.0	7,530.0	7,350.0	7,289.4	160.5	20.4	86.17	-1,942.3	-3,136.5	7,847.2	7,674.4	172.76	45.422		
16,700.0	7,530.0	7,350.0	7,289.4	162.3	20.4	86.17	-1,942.3	-3,136.5	7,937.5	7,763.0	174.51	45.485		
16,800.0	7,530.0	7,350.0	7,289.4	164.0	20.4	86.17	-1,942.3	-3,136.5	8,028.0	7,851.7	176.25	45.549		
16,900.0	7,530.0	7,350.0	7,289.4	165.8	20.4	86.17	-1,942.3	-3,136.5	8,118.8	7,940.8	178.00	45.612		
17,000.0	7,530.0	7,350.0	7,289.4	167.5	20.4	86.17	-1,942.3	-3,136.5	8,209.7	8,030.0	179.74	45.676		
17,100.0	7,530.0	7,350.0	7,289.4	169.3	20.4	86.17	-1,942.3	-3,136.5	8,300.9	8,119.4	181.49	45.739		
17,200.0	7,530.0	7,350.0	7,289.4	171.0	20.4	86.17	-1,942.3	-3,136.5	8,392.3	8,209.1	183.23	45.802		
17,300.0	7,530.0	7,350.0	7,289.4	172.8	20.4	86.17	-1,942.3	-3,136.5	8,483.9	8,298.9	184.98	45.865		
17,400.0	7,530.0	7,350.0	7,289.4	174.5	20.4	86.17	-1,942.3	-3,136.5	8,575.6	8,388.9	186.72	45.928		
17,420.9	7,530.0	7,350.0	7,289.4	174.9	20.4	86.17	-1,942.3	-3,136.5	8,594.9	8,407.8	187.09	45.941		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-115.57	-1,929.2	-4,032.0	4,469.8					
100.0	100.0	87.0	87.0	0.2	0.1	-115.57	-1,929.2	-4,032.0	4,469.7	4,469.5	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.57	-1,929.2	-4,032.0	4,469.7	4,469.1	0.61	7,338.040		
300.0	300.0	287.0	287.0	0.5	0.5	-115.57	-1,929.2	-4,032.0	4,469.7	4,468.8	0.96	4,664.803		
400.0	400.0	656.2	656.0	0.7	1.1	-115.61	-1,927.1	-4,021.1	4,467.1	4,465.3	1.79	2,491.801		
500.0	500.0	1,062.1	1,059.8	0.8	2.1	-115.73	-1,919.3	-3,982.3	4,457.7	4,454.9	2.80	1,589.703		
600.0	600.0	1,376.4	1,370.1	1.0	3.0	-115.90	-1,909.5	-3,933.2	4,441.8	4,438.0	3.77	1,177.304		
700.0	700.0	1,474.9	1,466.9	1.2	3.4	-148.52	-1,906.0	-3,915.6	4,424.9	4,421.1	3.79	1,166.761		
800.0	800.0	1,573.5	1,563.9	1.4	3.7	-148.68	-1,902.5	-3,898.0	4,409.4	4,405.3	4.16	1,060.983		
900.0	899.9	1,672.3	1,661.0	1.6	4.1	-148.85	-1,898.9	-3,880.4	4,395.5	4,391.0	4.52	972.007		
988.4	988.1	1,759.7	1,747.0	1.7	4.4	-148.99	-1,895.8	-3,864.8	4,384.4	4,379.6	4.85	904.337		
1,000.0	999.7	1,771.2	1,758.3	1.7	4.4	-149.01	-1,895.4	-3,862.7	4,383.0	4,378.2	4.89	896.131		
1,100.0	1,099.4	1,870.2	1,855.6	1.9	4.8	-149.11	-1,891.9	-3,845.0	4,371.2	4,365.9	5.26	830.772		
1,200.0	1,199.2	1,969.1	1,952.9	2.1	5.1	-149.22	-1,888.3	-3,827.4	4,359.3	4,353.7	5.63	773.802		
1,300.0	1,299.0	2,068.1	2,050.2	2.3	5.5	-149.33	-1,884.8	-3,809.7	4,347.5	4,341.5	6.01	723.737		
1,400.0	1,398.8	2,167.0	2,147.5	2.5	5.8	-149.44	-1,881.3	-3,792.1	4,335.7	4,329.3	6.38	679.413		
1,500.0	1,498.5	2,266.0	2,244.8	2.7	6.2	-149.55	-1,877.8	-3,774.4	4,323.9	4,317.2	6.76	639.910		
1,600.0	1,598.3	2,364.9	2,342.1	2.9	6.5	-149.66	-1,874.2	-3,756.7	4,312.1	4,305.0	7.13	604.493		
1,700.0	1,698.1	2,463.9	2,439.4	3.2	6.9	-149.77	-1,870.7	-3,739.1	4,300.4	4,292.9	7.51	572.564		
1,800.0	1,797.8	2,562.9	2,536.7	3.4	7.3	-149.88	-1,867.2	-3,721.4	4,288.6	4,280.7	7.89	543.638		
1,900.0	1,897.6	2,661.8	2,634.0	3.6	7.6	-149.99	-1,863.6	-3,703.8	4,276.9	4,268.6	8.27	517.312		
2,000.0	1,997.4	2,760.8	2,731.3	3.8	8.0	-150.11	-1,860.1	-3,686.1	4,265.2	4,256.5	8.65	493.255		
2,100.0	2,097.1	2,859.7	2,828.6	4.0	8.3	-150.22	-1,856.6	-3,668.4	4,253.5	4,244.4	9.03	471.187		
2,200.0	2,196.9	2,958.7	2,925.9	4.2	8.7	-150.34	-1,853.0	-3,650.8	4,241.8	4,232.4	9.41	450.873		
2,300.0	2,296.7	3,057.6	3,023.3	4.4	9.1	-150.45	-1,849.5	-3,633.1	4,230.1	4,220.3	9.79	432.112		
2,400.0	2,396.5	3,156.6	3,120.6	4.6	9.4	-150.57	-1,846.0	-3,615.5	4,218.5	4,208.3	10.17	414.734		
2,500.0	2,496.2	3,255.6	3,217.9	4.8	9.8	-150.68	-1,842.4	-3,597.8	4,206.8	4,196.3	10.55	398.592		
2,600.0	2,596.0	3,354.5	3,315.2	5.0	10.1	-150.80	-1,838.9	-3,580.2	4,195.2	4,184.3	10.94	383.559		
2,700.0	2,695.8	3,453.5	3,412.5	5.2	10.5	-150.91	-1,835.4	-3,562.5	4,183.6	4,172.3	11.32	369.526		
2,800.0	2,795.5	3,552.4	3,509.8	5.4	10.9	-151.03	-1,831.8	-3,544.8	4,172.0	4,160.3	11.71	356.396		
2,900.0	2,895.3	3,651.4	3,607.1	5.6	11.2	-151.15	-1,828.3	-3,527.2	4,160.5	4,148.4	12.09	344.085		
3,000.0	2,995.1	3,750.3	3,704.4	5.9	11.6	-151.27	-1,824.8	-3,509.5	4,148.9	4,136.5	12.48	332.520		
3,100.0	3,094.9	3,849.3	3,801.7	6.1	11.9	-151.39	-1,821.3	-3,491.9	4,137.4	4,124.5	12.86	321.633		
3,200.0	3,194.6	3,948.3	3,899.0	6.3	12.3	-151.51	-1,817.7	-3,474.2	4,125.9	4,112.7	13.25	311.369		
3,300.0	3,294.4	4,047.2	3,996.3	6.5	12.7	-151.63	-1,814.2	-3,456.5	4,114.4	4,100.8	13.64	301.674		
3,400.0	3,394.2	4,146.2	4,093.6	6.7	13.0	-151.75	-1,810.7	-3,438.9	4,102.9	4,088.9	14.03	292.504		
3,500.0	3,493.9	4,245.1	4,190.9	6.9	13.4	-151.88	-1,807.1	-3,421.2	4,091.5	4,077.1	14.42	283.816		
3,600.0	3,593.7	4,344.1	4,288.2	7.1	13.8	-152.00	-1,803.6	-3,403.6	4,080.1	4,065.2	14.81	275.574		
3,700.0	3,693.5	4,443.0	4,385.5	7.3	14.1	-152.12	-1,800.1	-3,385.9	4,068.6	4,053.4	15.20	267.744		
3,800.0	3,793.2	4,542.0	4,482.8	7.5	14.5	-152.25	-1,796.5	-3,368.2	4,057.2	4,041.7	15.59	260.296		
3,900.0	3,893.0	4,641.0	4,580.1	7.7	14.8	-152.37	-1,793.0	-3,350.6	4,045.9	4,029.9	15.98	253.204		
4,000.0	3,992.8	4,739.9	4,677.4	8.0	15.2	-152.50	-1,789.5	-3,332.9	4,034.5	4,018.1	16.37	246.442		
4,100.0	4,092.6	4,838.9	4,774.7	8.2	15.6	-152.63	-1,785.9	-3,315.3	4,023.2	4,006.4	16.76	239.988		
4,200.0	4,192.3	4,937.8	4,872.0	8.4	15.9	-152.75	-1,782.4	-3,297.6	4,011.8	3,994.7	17.16	233.821		
4,300.0	4,292.1	5,036.8	4,969.3	8.6	16.3	-152.88	-1,778.9	-3,279.9	4,000.5	3,983.0	17.55	227.923		
4,400.0	4,391.9	5,135.7	5,066.6	8.8	16.6	-153.01	-1,775.3	-3,262.3	3,989.3	3,971.3	17.95	222.277		
4,500.0	4,491.6	5,234.7	5,164.0	9.0	17.0	-153.14	-1,771.8	-3,244.6	3,978.0	3,959.7	18.34	216.866		
4,600.0	4,591.4	5,333.6	5,261.3	9.2	17.4	-153.27	-1,768.3	-3,227.0	3,966.8	3,948.0	18.74	211.677		
4,700.0	4,691.2	5,432.6	5,358.6	9.4	17.7	-153.40	-1,764.8	-3,209.3	3,955.6	3,936.4	19.14	206.696		
4,800.0	4,790.9	5,531.6	5,455.9	9.6	18.1	-153.53	-1,761.2	-3,191.6	3,944.4	3,924.8	19.54	201.911		
4,900.0	4,890.7	5,630.5	5,553.2	9.8	18.5	-153.66	-1,757.7	-3,174.0	3,933.2	3,913.2	19.93	197.310		
5,000.0	4,990.5	9,387.8	7,550.0	10.1	47.5	-124.69	266.5	-2,794.2	3,912.1	3,861.1	50.93	76.811		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,090.3	9,393.5	7,550.0	10.3	47.5	-124.59	272.3	-2,794.2	3,850.0	3,798.7	51.27	75.093		
5,200.0	5,190.0	9,399.3	7,550.0	10.5	47.6	-124.48	278.0	-2,794.1	3,789.4	3,737.8	51.61	73.428		
5,300.0	5,289.8	9,405.0	7,550.0	10.7	47.7	-124.37	283.8	-2,794.1	3,730.6	3,678.7	51.95	71.817		
5,400.0	5,389.6	9,410.8	7,550.0	10.9	47.8	-124.26	289.5	-2,794.0	3,673.6	3,621.3	52.28	70.261		
5,500.0	5,489.3	9,416.5	7,550.0	11.1	47.9	-124.15	295.3	-2,794.0	3,618.4	3,565.8	52.62	68.760		
5,600.0	5,589.1	9,422.3	7,550.0	11.3	48.0	-124.05	301.0	-2,793.9	3,565.1	3,512.2	52.96	67.315		
5,700.0	5,688.9	9,428.0	7,550.0	11.5	48.1	-123.94	306.8	-2,793.9	3,513.9	3,460.6	53.30	65.926		
5,800.0	5,788.7	9,433.7	7,550.0	11.7	48.1	-123.83	312.5	-2,793.8	3,464.8	3,411.2	53.64	64.595		
5,900.0	5,888.4	9,439.5	7,550.0	11.9	48.2	-123.72	318.3	-2,793.8	3,417.9	3,363.9	53.98	63.320		
6,000.0	5,988.2	9,445.2	7,550.0	12.2	48.3	-123.61	324.0	-2,793.7	3,373.3	3,319.0	54.32	62.104		
6,100.0	6,088.0	9,451.0	7,550.0	12.4	48.4	-123.50	329.8	-2,793.7	3,331.1	3,276.5	54.66	60.947		
6,200.0	6,187.7	9,456.7	7,550.0	12.6	48.5	-123.40	335.5	-2,793.6	3,291.4	3,236.4	54.99	59.850		
6,300.0	6,287.5	9,462.5	7,550.0	12.8	48.6	-123.29	341.2	-2,793.6	3,254.3	3,199.0	55.33	58.812		
6,400.0	6,387.3	9,468.2	7,550.0	13.0	48.7	-123.18	347.0	-2,793.5	3,219.8	3,164.2	55.67	57.835		
6,500.0	6,487.0	9,474.0	7,550.0	13.2	48.7	-123.07	352.7	-2,793.5	3,188.1	3,132.1	56.01	56.919		
6,600.0	6,586.8	9,479.7	7,550.0	13.4	48.8	-122.96	358.5	-2,793.4	3,159.3	3,102.9	56.35	56.065		
6,700.0	6,686.6	9,485.5	7,550.0	13.6	48.9	-122.86	364.2	-2,793.3	3,133.3	3,076.6	56.69	55.272		
6,787.0	6,773.4	9,490.5	7,550.0	13.8	49.0	-122.76	369.2	-2,793.3	3,113.2	3,056.2	56.98	54.632		
6,800.0	6,786.4	9,491.1	7,550.0	13.8	49.0	-133.05	369.9	-2,793.3	3,110.4	3,053.3	57.11	54.460		
6,850.0	6,836.3	9,491.3	7,550.0	13.9	49.0	140.67	370.1	-2,793.3	3,100.0	3,042.5	57.50	53.910		
6,900.0	6,886.2	9,488.1	7,550.0	14.0	49.0	111.52	366.8	-2,793.3	3,090.5	3,032.8	57.75	53.519		
6,950.0	6,935.7	9,481.3	7,550.0	14.0	48.9	104.28	360.1	-2,793.4	3,081.9	3,024.1	57.84	53.282		
7,000.0	6,984.6	9,471.1	7,550.0	14.0	48.7	101.30	349.9	-2,793.5	3,074.2	3,016.4	57.79	53.191		
7,050.0	7,032.6	9,457.6	7,550.0	14.0	48.5	99.71	336.3	-2,793.6	3,067.3	3,009.7	57.61	53.240		
7,100.0	7,079.7	9,440.7	7,550.0	13.9	48.2	98.69	319.4	-2,793.7	3,061.4	3,004.1	57.31	53.421		
7,150.0	7,125.4	9,420.6	7,550.0	13.9	47.9	97.93	299.3	-2,793.9	3,056.3	2,999.4	56.89	53.723		
7,200.0	7,169.6	9,397.3	7,550.0	13.8	47.6	97.28	276.0	-2,794.1	3,052.1	2,995.7	56.38	54.138		
7,250.0	7,212.1	9,371.0	7,550.0	13.8	47.2	96.69	249.7	-2,794.4	3,048.7	2,992.9	55.79	54.651		
7,300.0	7,252.6	9,341.8	7,550.0	13.7	46.8	96.11	220.5	-2,794.6	3,046.0	2,990.9	55.13	55.251		
7,350.0	7,291.0	9,309.8	7,550.0	13.7	46.3	95.54	188.6	-2,794.9	3,044.0	2,989.6	54.43	55.924		
7,400.0	7,327.1	9,275.3	7,550.0	13.7	45.8	94.96	154.0	-2,795.2	3,042.6	2,988.9	53.71	56.653		
7,450.0	7,360.7	9,238.3	7,550.0	13.7	45.2	94.38	117.0	-2,795.5	3,041.8	2,988.8	52.97	57.422 ES		
7,500.0	7,391.6	9,199.0	7,550.0	13.7	44.7	93.81	77.8	-2,795.9	3,041.3	2,989.1	52.24	58.215		
7,534.7	7,411.4	9,170.5	7,550.0	13.8	44.3	93.42	49.3	-2,796.1	3,041.3	2,989.5	51.75	58.763 CC		
7,550.0	7,419.7	9,157.7	7,550.0	13.8	44.1	93.26	36.5	-2,796.3	3,041.3	2,989.7	51.54	59.011		
7,600.0	7,444.8	9,114.5	7,550.0	13.9	43.5	92.73	-6.7	-2,796.6	3,041.5	2,990.6	50.86	59.799		
7,650.0	7,466.9	9,069.7	7,550.0	14.1	42.8	92.25	-51.5	-2,797.0	3,041.9	2,991.7	50.23	60.561		
7,700.0	7,485.8	9,023.4	7,550.0	14.3	42.2	91.81	-97.8	-2,797.5	3,042.5	2,992.8	49.64	61.286		
7,750.0	7,501.5	8,975.9	7,550.0	14.6	41.5	91.42	-145.3	-2,797.9	3,043.1	2,994.0	49.11	61.964		
7,800.0	7,513.7	8,927.5	7,550.0	14.9	40.8	91.11	-193.7	-2,798.3	3,043.8	2,995.1	48.63	62.589		
7,850.0	7,522.6	8,878.3	7,550.0	15.2	40.1	90.87	-242.9	-2,798.7	3,044.4	2,996.2	48.20	63.157		
7,900.0	7,528.0	8,828.6	7,550.0	15.6	39.5	90.70	-292.6	-2,799.2	3,045.0	2,997.1	47.83	63.668		
7,952.9	7,530.0	8,775.7	7,550.0	16.1	38.7	90.62	-345.5	-2,799.7	3,045.5	2,998.0	47.47	64.151		
8,000.0	7,530.0	8,728.7	7,550.0	16.5	38.1	90.62	-392.5	-2,800.1	3,045.9	2,998.7	47.17	64.572		
8,100.0	7,530.0	8,628.7	7,550.0	17.5	36.8	90.62	-492.5	-2,801.0	3,046.8	3,000.2	46.63	65.340		
8,200.0	7,530.0	8,528.7	7,550.0	18.7	35.5	90.62	-592.5	-2,801.9	3,047.7	3,001.5	46.22	65.946		
8,300.0	7,530.0	8,428.7	7,550.0	19.9	34.3	90.62	-692.5	-2,802.7	3,048.6	3,002.7	45.91	66.402		
8,400.0	7,530.0	8,328.7	7,550.0	21.2	33.2	90.62	-792.5	-2,803.6	3,049.5	3,003.8	45.71	66.721		
8,500.0	7,530.0	8,228.7	7,550.0	22.6	32.0	90.62	-892.5	-2,804.5	3,050.4	3,004.8	45.59	66.910		
8,600.0	7,530.0	8,128.7	7,550.0	24.0	31.0	90.62	-992.5	-2,805.4	3,051.2	3,005.7	45.56	66.974		
8,700.0	7,530.0	8,028.7	7,550.0	25.4	30.0	90.62	-1,092.5	-2,806.3	3,052.1	3,006.5	45.61	66.911		
8,800.0	7,530.0	7,950.0	7,548.8	26.9	29.2	90.60	-1,171.1	-2,807.2	3,053.3	3,007.3	46.04	66.321		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
8,900.0	7,530.0	7,900.0	7,543.4	28.4	28.8	90.49	-1,220.8	-2,808.6	3,055.9	3,009.0	46.91	65.144		
9,000.0	7,530.0	7,850.0	7,533.7	30.0	28.3	90.31	-1,269.8	-2,810.8	3,060.1	3,012.2	47.83	63.984		
9,100.0	7,530.0	7,800.0	7,519.9	31.5	27.9	90.06	-1,317.8	-2,813.7	3,065.9	3,017.1	48.79	62.842		
9,200.0	7,530.0	7,750.0	7,502.1	33.1	27.5	89.72	-1,364.3	-2,817.4	3,073.6	3,023.8	49.80	61.723		
9,300.0	7,530.0	7,715.4	7,487.4	34.7	27.2	89.45	-1,395.5	-2,820.3	3,083.1	3,032.1	51.03	60.423		
9,400.0	7,530.0	7,675.3	7,468.1	36.3	26.9	89.09	-1,430.5	-2,824.1	3,094.6	3,042.4	52.22	59.258		
9,500.0	7,530.0	7,650.0	7,454.8	38.0	26.7	88.84	-1,451.8	-2,826.7	3,108.3	3,054.7	53.60	57.994		
9,600.0	7,530.0	7,600.0	7,425.6	39.6	26.4	88.30	-1,492.0	-2,832.4	3,124.1	3,069.4	54.76	57.054		
9,700.0	7,530.0	7,573.4	7,408.8	41.3	26.2	87.99	-1,512.3	-2,835.6	3,142.3	3,086.1	56.18	55.938		
9,800.0	7,530.0	7,550.0	7,393.2	42.9	26.1	87.70	-1,529.5	-2,838.6	3,162.8	3,105.2	57.63	54.885		
9,900.0	7,530.0	7,519.4	7,371.8	44.6	25.9	87.31	-1,551.0	-2,842.7	3,185.7	3,126.7	59.04	53.958		
10,000.0	7,530.0	7,500.0	7,357.6	46.3	25.8	87.05	-1,564.0	-2,845.3	3,211.1	3,150.5	60.55	53.029		
10,100.0	7,530.0	7,474.4	7,338.3	47.9	25.6	86.69	-1,580.4	-2,849.0	3,238.9	3,176.8	62.04	52.209		
10,200.0	7,530.0	7,450.0	7,319.3	49.6	25.5	86.35	-1,595.2	-2,852.6	3,269.1	3,205.5	63.53	51.457		
10,300.0	7,530.0	7,450.0	7,319.3	51.3	25.5	86.35	-1,595.2	-2,852.6	3,301.8	3,236.6	65.22	50.625		
10,400.0	7,530.0	7,420.3	7,295.2	53.0	25.3	85.91	-1,612.1	-2,857.1	3,336.7	3,270.0	66.70	50.027		
10,500.0	7,530.0	7,400.0	7,278.3	54.7	25.2	85.61	-1,622.8	-2,860.2	3,374.1	3,305.8	68.24	49.442		
10,600.0	7,530.0	7,400.0	7,278.3	56.4	25.2	85.61	-1,622.8	-2,860.2	3,413.8	3,343.8	69.94	48.808		
10,700.0	7,530.0	7,378.3	7,259.9	58.1	25.1	85.27	-1,633.7	-2,863.7	3,455.6	3,384.1	71.50	48.333		
10,800.0	7,530.0	7,350.0	7,235.2	59.8	24.9	84.83	-1,646.8	-2,868.3	3,499.8	3,426.8	73.00	47.943		
10,900.0	7,530.0	7,350.0	7,235.2	61.5	24.9	84.83	-1,646.8	-2,868.3	3,545.9	3,471.2	74.71	47.465		
11,000.0	7,530.0	7,350.0	7,235.2	63.2	24.9	84.83	-1,646.8	-2,868.3	3,594.2	3,517.8	76.41	47.036		
11,100.0	7,530.0	7,350.0	7,235.2	64.9	24.9	84.83	-1,646.8	-2,868.3	3,644.5	3,566.4	78.12	46.651		
11,200.0	7,530.0	7,326.7	7,214.4	66.6	24.8	84.46	-1,656.6	-2,872.1	3,696.6	3,616.9	79.68	46.393		
11,300.0	7,530.0	7,300.0	7,190.2	68.4	24.7	84.02	-1,666.8	-2,876.6	3,750.8	3,669.6	81.21	46.188		
11,400.0	7,530.0	7,300.0	7,190.2	70.1	24.7	84.02	-1,666.8	-2,876.6	3,806.5	3,723.5	82.92	45.905		
11,500.0	7,530.0	7,300.0	7,190.2	71.8	24.7	84.02	-1,666.8	-2,876.6	3,863.9	3,779.3	84.63	45.654		
11,600.0	7,530.0	7,300.0	7,190.2	73.5	24.7	84.02	-1,666.8	-2,876.6	3,923.0	3,836.7	86.35	45.431		
11,700.0	7,530.0	7,300.0	7,190.2	75.2	24.7	84.02	-1,666.8	-2,876.6	3,983.8	3,895.7	88.07	45.236		
11,800.0	7,530.0	7,300.0	7,190.2	77.0	24.7	84.02	-1,666.8	-2,876.6	4,046.2	3,956.4	89.79	45.064		
11,900.0	7,530.0	7,278.2	7,170.0	78.7	24.6	83.67	-1,674.3	-2,880.3	4,109.6	4,018.3	91.36	44.983		
12,000.0	7,530.0	7,272.8	7,165.0	80.4	24.6	83.58	-1,676.0	-2,881.2	4,174.7	4,081.6	93.04	44.869		
12,100.0	7,530.0	7,250.0	7,143.6	82.2	24.5	83.20	-1,682.8	-2,885.2	4,241.3	4,146.7	94.60	44.834		
12,200.0	7,530.0	7,250.0	7,143.6	83.9	24.5	83.20	-1,682.8	-2,885.2	4,308.8	4,212.5	96.32	44.735		
12,300.0	7,530.0	7,250.0	7,143.6	85.6	24.5	83.20	-1,682.8	-2,885.2	4,377.6	4,279.5	98.04	44.651		
12,400.0	7,530.0	7,250.0	7,143.6	87.3	24.5	83.20	-1,682.8	-2,885.2	4,447.5	4,347.8	99.76	44.581		
12,500.0	7,530.0	7,250.0	7,143.6	89.1	24.5	83.20	-1,682.8	-2,885.2	4,518.6	4,417.1	101.48	44.525		
12,600.0	7,530.0	7,250.0	7,143.6	90.8	24.5	83.20	-1,682.8	-2,885.2	4,590.8	4,487.6	103.21	44.481		
12,700.0	7,530.0	7,250.0	7,143.6	92.5	24.5	83.20	-1,682.8	-2,885.2	4,664.0	4,559.1	104.93	44.448		
12,800.0	7,530.0	7,250.0	7,143.6	94.3	24.5	83.20	-1,682.8	-2,885.2	4,738.2	4,631.5	106.66	44.424		
12,900.0	7,530.0	7,250.0	7,143.6	96.0	24.5	83.20	-1,682.8	-2,885.2	4,813.3	4,704.9	108.38	44.410		
13,000.0	7,530.0	7,250.0	7,143.6	97.8	24.5	83.20	-1,682.8	-2,885.2	4,889.3	4,779.2	110.11	44.404 SF		
13,100.0	7,530.0	7,250.0	7,143.6	99.5	24.5	83.20	-1,682.8	-2,885.2	4,966.1	4,854.3	111.83	44.406		
13,200.0	7,530.0	7,225.5	7,120.3	101.2	24.3	82.79	-1,689.1	-2,889.5	5,043.3	4,929.9	113.38	44.481		
13,300.0	7,530.0	7,222.6	7,117.5	103.0	24.3	82.74	-1,689.7	-2,890.0	5,121.6	5,006.5	115.08	44.503		
13,400.0	7,530.0	7,200.0	7,095.8	104.7	24.2	82.36	-1,694.5	-2,893.9	5,201.0	5,084.3	116.63	44.592		
13,500.0	7,530.0	7,200.0	7,095.8	106.4	24.2	82.36	-1,694.5	-2,893.9	5,280.6	5,162.3	118.36	44.615		
13,600.0	7,530.0	7,200.0	7,095.8	108.2	24.2	82.36	-1,694.5	-2,893.9	5,361.0	5,240.9	120.09	44.643		
13,700.0	7,530.0	7,200.0	7,095.8	109.9	24.2	82.36	-1,694.5	-2,893.9	5,442.0	5,320.2	121.81	44.675		
13,800.0	7,530.0	7,200.0	7,095.8	111.7	24.2	82.36	-1,694.5	-2,893.9	5,523.6	5,400.1	123.54	44.712		
13,900.0	7,530.0	7,200.0	7,095.8	113.4	24.2	82.36	-1,694.5	-2,893.9	5,605.8	5,480.5	125.26	44.752		
14,000.0	7,530.0	7,200.0	7,095.8	115.1	24.2	82.36	-1,694.5	-2,893.9	5,688.6	5,561.6	126.99	44.795		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,200.0	7,095.8	116.9	24.2	82.36	-1,694.5	-2,893.9	5,771.9	5,643.2	128.72	44.841		
14,200.0	7,530.0	7,200.0	7,095.8	118.6	24.2	82.36	-1,694.5	-2,893.9	5,855.8	5,725.3	130.45	44.890		
14,300.0	7,530.0	7,200.0	7,095.8	120.4	24.2	82.36	-1,694.5	-2,893.9	5,940.1	5,808.0	132.18	44.941		
14,400.0	7,530.0	7,200.0	7,095.8	122.1	24.2	82.36	-1,694.5	-2,893.9	6,025.0	5,891.1	133.90	44.995		
14,500.0	7,530.0	7,200.0	7,095.8	123.9	24.2	82.36	-1,694.5	-2,893.9	6,110.3	5,974.6	135.63	45.050		
14,600.0	7,530.0	7,200.0	7,095.8	125.6	24.2	82.36	-1,694.5	-2,893.9	6,196.0	6,058.6	137.36	45.107		
14,700.0	7,530.0	7,200.0	7,095.8	127.3	24.2	82.36	-1,694.5	-2,893.9	6,282.1	6,143.0	139.09	45.166		
14,800.0	7,530.0	7,200.0	7,095.8	129.1	24.2	82.36	-1,694.5	-2,893.9	6,368.7	6,227.9	140.82	45.226		
14,900.0	7,530.0	7,200.0	7,095.8	130.8	24.2	82.36	-1,694.5	-2,893.9	6,455.6	6,313.1	142.55	45.287		
15,000.0	7,530.0	7,200.0	7,095.8	132.6	24.2	82.36	-1,694.5	-2,893.9	6,543.0	6,398.7	144.28	45.349		
15,100.0	7,530.0	7,200.0	7,095.8	134.3	24.2	82.36	-1,694.5	-2,893.9	6,630.6	6,484.6	146.01	45.412		
15,200.0	7,530.0	7,200.0	7,095.8	136.1	24.2	82.36	-1,694.5	-2,893.9	6,718.7	6,570.9	147.74	45.476		
15,300.0	7,530.0	7,200.0	7,095.8	137.8	24.2	82.36	-1,694.5	-2,893.9	6,807.0	6,657.5	149.47	45.540		
15,400.0	7,530.0	7,200.0	7,095.8	139.6	24.2	82.36	-1,694.5	-2,893.9	6,895.7	6,744.5	151.20	45.606		
15,500.0	7,530.0	7,200.0	7,095.8	141.3	24.2	82.36	-1,694.5	-2,893.9	6,984.7	6,831.7	152.93	45.671		
15,600.0	7,530.0	7,200.0	7,095.8	143.0	24.2	82.36	-1,694.5	-2,893.9	7,073.9	6,919.3	154.66	45.737		
15,700.0	7,530.0	7,200.0	7,095.8	144.8	24.2	82.36	-1,694.5	-2,893.9	7,163.5	7,007.1	156.40	45.803		
15,800.0	7,530.0	7,176.2	7,072.7	146.5	24.1	81.96	-1,698.6	-2,898.2	7,252.8	7,094.9	157.91	45.930		
15,900.0	7,530.0	7,175.0	7,071.5	148.3	24.1	81.94	-1,698.8	-2,898.4	7,342.9	7,183.2	159.63	46.000		
16,000.0	7,530.0	7,173.8	7,070.4	150.0	24.1	81.92	-1,699.0	-2,898.6	7,433.1	7,271.8	161.35	46.069		
16,100.0	7,530.0	7,150.0	7,047.2	151.8	24.0	81.51	-1,702.0	-2,902.8	7,524.1	7,361.3	162.85	46.204		
16,200.0	7,530.0	7,150.0	7,047.2	153.5	24.0	81.51	-1,702.0	-2,902.8	7,614.9	7,450.3	164.58	46.270		
16,300.0	7,530.0	7,150.0	7,047.2	155.3	24.0	81.51	-1,702.0	-2,902.8	7,705.8	7,539.5	166.30	46.335		
16,400.0	7,530.0	7,150.0	7,047.2	157.0	24.0	81.51	-1,702.0	-2,902.8	7,797.0	7,629.0	168.03	46.401		
16,500.0	7,530.0	7,150.0	7,047.2	158.8	24.0	81.51	-1,702.0	-2,902.8	7,888.4	7,718.6	169.76	46.467		
16,600.0	7,530.0	7,150.0	7,047.2	160.5	24.0	81.51	-1,702.0	-2,902.8	7,980.0	7,808.5	171.49	46.533		
16,700.0	7,530.0	7,150.0	7,047.2	162.3	24.0	81.51	-1,702.0	-2,902.8	8,071.8	7,898.6	173.22	46.598		
16,800.0	7,530.0	7,150.0	7,047.2	164.0	24.0	81.51	-1,702.0	-2,902.8	8,163.8	7,988.8	174.95	46.663		
16,900.0	7,530.0	7,150.0	7,047.2	165.8	24.0	81.51	-1,702.0	-2,902.8	8,255.9	8,079.3	176.68	46.728		
17,000.0	7,530.0	7,150.0	7,047.2	167.5	24.0	81.51	-1,702.0	-2,902.8	8,348.3	8,169.9	178.41	46.793		
17,100.0	7,530.0	7,150.0	7,047.2	169.3	24.0	81.51	-1,702.0	-2,902.8	8,440.8	8,260.7	180.14	46.857		
17,200.0	7,530.0	7,150.0	7,047.2	171.0	24.0	81.51	-1,702.0	-2,902.8	8,533.5	8,351.7	181.87	46.921		
17,300.0	7,530.0	7,150.0	7,047.2	172.8	24.0	81.51	-1,702.0	-2,902.8	8,626.4	8,442.8	183.60	46.985		
17,400.0	7,530.0	7,150.0	7,047.2	174.5	24.0	81.51	-1,702.0	-2,902.8	8,719.4	8,534.1	185.33	47.048		
17,420.9	7,530.0	7,150.0	7,047.2	174.9	24.0	81.51	-1,702.0	-2,902.8	8,738.9	8,553.2	185.69	47.061		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.69	-1,936.5	-4,026.4	4,467.9					
100.0	100.0	87.0	87.0	0.2	0.1	-115.69	-1,936.5	-4,026.4	4,467.9	4,467.6	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.69	-1,936.5	-4,026.4	4,467.9	4,467.2	0.61	7,334.931		
300.0	300.0	350.9	350.9	0.5	0.6	-115.69	-1,936.7	-4,025.5	4,467.6	4,466.5	1.07	4,172.895		
400.0	400.0	623.1	622.8	0.7	1.1	-115.78	-1,938.6	-4,014.4	4,464.2	4,462.5	1.75	2,552.535		
500.0	500.0	893.6	892.2	0.8	1.7	-115.96	-1,942.8	-3,990.8	4,457.0	4,454.5	2.51	1,775.634		
600.0	600.0	1,161.2	1,157.4	1.0	2.4	-116.23	-1,949.1	-3,955.2	4,446.1	4,442.7	3.40	1,306.489		
700.0	700.0	1,425.1	1,416.9	1.2	3.4	-149.17	-1,957.4	-3,908.1	4,432.2	4,428.2	4.00	1,107.835		
800.0	800.0	1,684.5	1,669.5	1.4	4.5	-149.75	-1,967.6	-3,850.4	4,416.1	4,411.2	4.92	897.590		
900.0	899.9	1,905.7	1,882.8	1.6	5.5	-150.38	-1,977.5	-3,792.6	4,398.3	4,392.5	5.82	756.242		
988.4	988.1	2,046.4	2,018.2	1.7	6.2	-150.79	-1,981.2	-3,754.2	4,382.3	4,375.9	6.41	683.467		
1,000.0	999.7	2,064.9	2,036.0	1.7	6.3	-150.83	-1,981.4	-3,749.1	4,380.2	4,373.7	6.49	675.077		
1,100.0	1,099.4	2,207.2	2,172.7	1.9	7.1	-151.14	-1,981.2	-3,710.0	4,361.4	4,354.3	7.08	615.661		
1,200.0	1,199.2	2,304.2	2,265.9	2.1	7.5	-151.34	-1,980.3	-3,683.3	4,342.3	4,334.7	7.55	575.336		
1,300.0	1,299.0	2,401.1	2,359.1	2.3	8.0	-151.55	-1,979.3	-3,656.6	4,323.2	4,315.2	8.01	539.469		
1,400.0	1,398.8	2,498.1	2,452.4	2.5	8.5	-151.75	-1,978.4	-3,629.9	4,304.2	4,295.8	8.48	507.374		
1,500.0	1,498.5	2,595.0	2,545.6	2.7	9.0	-151.96	-1,977.5	-3,603.2	4,285.3	4,276.3	8.96	478.495		
1,600.0	1,598.3	2,692.0	2,638.8	2.9	9.5	-152.17	-1,976.5	-3,576.5	4,266.4	4,257.0	9.43	452.378		
1,700.0	1,698.1	2,789.0	2,732.0	3.2	10.0	-152.38	-1,975.6	-3,549.8	4,247.6	4,237.7	9.91	428.650		
1,800.0	1,797.8	2,885.9	2,825.2	3.4	10.5	-152.60	-1,974.7	-3,523.1	4,228.8	4,218.4	10.39	407.002		
1,900.0	1,897.6	2,982.9	2,918.4	3.6	11.0	-152.81	-1,973.8	-3,496.3	4,210.1	4,199.2	10.87	387.175		
2,000.0	1,997.4	3,079.9	3,011.6	3.8	11.6	-153.03	-1,972.8	-3,469.6	4,191.5	4,180.1	11.36	368.952		
2,100.0	2,097.1	3,176.8	3,104.8	4.0	12.1	-153.25	-1,971.9	-3,442.9	4,172.9	4,161.0	11.85	352.146		
2,200.0	2,196.9	3,245.7	3,171.1	4.2	12.4	-153.40	-1,971.1	-3,424.3	4,154.7	4,142.4	12.24	339.437		
2,300.0	2,296.7	3,300.0	3,223.5	4.4	12.7	-153.51	-1,970.2	-3,410.1	4,137.2	4,124.7	12.58	328.806		
2,400.0	2,396.5	3,382.5	3,303.4	4.6	13.1	-153.68	-1,968.5	-3,389.4	4,120.5	4,107.5	12.99	317.137		
2,500.0	2,496.2	3,451.5	3,370.3	4.8	13.4	-153.80	-1,966.6	-3,372.9	4,104.5	4,091.1	13.35	307.335		
2,600.0	2,596.0	3,520.7	3,437.7	5.0	13.7	-153.92	-1,964.5	-3,357.1	4,089.2	4,075.5	13.71	298.246		
2,700.0	2,695.8	3,600.0	3,515.0	5.2	14.0	-154.05	-1,961.6	-3,340.0	4,074.6	4,060.5	14.08	289.376		
2,800.0	2,795.5	3,660.2	3,573.8	5.4	14.2	-154.13	-1,959.1	-3,327.6	4,060.8	4,046.4	14.39	282.152		
2,900.0	2,895.3	3,741.9	3,653.9	5.6	14.5	-154.24	-1,955.3	-3,311.5	4,047.6	4,032.8	14.75	274.403		
3,000.0	2,995.1	3,840.6	3,750.6	5.9	14.9	-154.37	-1,950.7	-3,292.3	4,034.6	4,019.4	15.15	266.372		
3,100.0	3,094.9	3,939.3	3,847.4	6.1	15.3	-154.50	-1,946.1	-3,273.1	4,021.6	4,006.0	15.54	258.740		
3,200.0	3,194.6	4,038.1	3,944.1	6.3	15.7	-154.63	-1,941.5	-3,253.9	4,008.6	3,992.6	15.93	251.665		
3,300.0	3,294.4	4,136.8	4,040.8	6.5	16.1	-154.77	-1,936.8	-3,234.7	3,995.6	3,979.2	16.35	244.371		
3,400.0	3,394.2	4,235.5	4,137.6	6.7	16.4	-154.90	-1,932.2	-3,215.5	3,982.6	3,965.9	16.75	237.820		
3,500.0	3,493.9	4,334.3	4,234.3	6.9	16.8	-155.03	-1,927.6	-3,196.3	3,969.7	3,952.6	17.15	231.498		
3,600.0	3,593.7	4,433.0	4,331.0	7.1	17.2	-155.17	-1,923.0	-3,177.1	3,956.8	3,939.2	17.55	225.447		
3,700.0	3,693.5	4,531.7	4,427.8	7.3	17.6	-155.30	-1,918.4	-3,157.9	3,943.9	3,926.0	17.96	219.652		
3,800.0	3,793.2	4,630.4	4,524.5	7.5	18.0	-155.44	-1,913.8	-3,138.7	3,931.1	3,912.7	18.36	214.099		
3,900.0	3,893.0	4,729.2	4,621.2	7.7	18.4	-155.58	-1,909.2	-3,119.5	3,918.2	3,899.4	18.77	208.774		
4,000.0	3,992.8	4,827.9	4,718.0	8.0	18.7	-155.72	-1,904.6	-3,100.3	3,905.4	3,886.2	19.18	203.663		
4,100.0	4,092.6	4,926.6	4,814.7	8.2	19.1	-155.85	-1,899.9	-3,081.1	3,892.6	3,873.0	19.58	198.755		
4,200.0	4,192.3	5,025.3	4,911.4	8.4	19.5	-155.99	-1,895.3	-3,061.9	3,879.8	3,859.8	20.00	194.037		
4,300.0	4,292.1	5,124.1	5,008.2	8.6	19.9	-156.14	-1,890.7	-3,042.7	3,867.1	3,846.7	20.41	189.499		
4,400.0	4,391.9	5,222.8	5,104.9	8.8	20.3	-156.28	-1,886.1	-3,023.5	3,854.3	3,833.5	20.82	185.131		
4,500.0	4,491.6	5,321.5	5,201.6	9.0	20.7	-156.42	-1,881.5	-3,004.3	3,841.6	3,820.4	21.23	180.923		
4,600.0	4,591.4	5,420.3	5,298.4	9.2	21.1	-156.56	-1,876.9	-2,985.1	3,829.0	3,807.3	21.65	176.868		
4,700.0	4,691.2	5,519.0	5,395.1	9.4	21.4	-156.71	-1,872.3	-2,965.9	3,816.3	3,794.2	22.07	172.957		
4,800.0	4,790.9	5,617.7	5,491.8	9.6	21.8	-156.85	-1,867.6	-2,946.7	3,803.7	3,781.2	22.48	169.183		
4,900.0	4,890.7	5,716.4	5,588.5	9.8	22.2	-157.00	-1,863.0	-2,927.5	3,791.1	3,768.2	22.90	165.539		
5,000.0	4,990.5	5,815.2	5,685.3	10.1	22.6	-157.15	-1,858.4	-2,908.3	3,778.5	3,755.2	23.32	162.019		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,100.0	5,090.3	5,913.9	5,782.0	10.3	23.0	-157.30	-1,853.8	-2,889.1	3,765.9	3,742.2	23.74	158.616	
5,200.0	5,190.0	9,741.8	7,803.0	10.5	49.8	-126.00	228.9	-2,504.9	3,741.6	3,691.3	50.28	74.413	
5,300.0	5,289.8	9,747.5	7,803.0	10.7	49.9	-125.88	234.6	-2,505.0	3,674.9	3,624.3	50.63	72.582	
5,400.0	5,389.6	9,753.2	7,803.0	10.9	50.0	-125.77	240.3	-2,505.0	3,609.8	3,558.8	50.98	70.807	
5,500.0	5,489.3	9,758.8	7,803.0	11.1	50.0	-125.65	246.0	-2,505.1	3,546.3	3,494.9	51.33	69.086	
5,600.0	5,589.1	9,764.5	7,803.0	11.3	50.1	-125.53	251.7	-2,505.1	3,484.4	3,432.8	51.68	67.422	
5,700.0	5,688.9	9,770.2	7,803.0	11.5	50.2	-125.41	257.4	-2,505.2	3,424.4	3,372.4	52.03	65.815	
5,800.0	5,788.7	9,775.9	7,803.0	11.7	50.3	-125.30	263.0	-2,505.2	3,366.3	3,313.9	52.38	64.266	
5,900.0	5,888.4	9,781.6	7,803.0	11.9	50.4	-125.18	268.7	-2,505.2	3,310.2	3,257.4	52.73	62.774	
6,000.0	5,988.2	9,787.3	7,803.0	12.2	50.4	-125.06	274.4	-2,505.3	3,256.1	3,203.1	53.08	61.342	
6,100.0	6,088.0	9,792.9	7,803.0	12.4	50.5	-124.94	280.1	-2,505.3	3,204.3	3,150.9	53.43	59.969	
6,200.0	6,187.7	9,798.6	7,803.0	12.6	50.6	-124.83	285.8	-2,505.4	3,154.8	3,101.0	53.78	58.658	
6,300.0	6,287.5	9,804.3	7,803.0	12.8	50.7	-124.71	291.5	-2,505.4	3,107.7	3,053.5	54.13	57.407	
6,400.0	6,387.3	9,810.0	7,803.0	13.0	50.8	-124.59	297.1	-2,505.5	3,063.1	3,008.6	54.48	56.219	
6,500.0	6,487.0	9,815.7	7,803.0	13.2	50.8	-124.47	302.8	-2,505.5	3,021.1	2,966.3	54.84	55.095	
6,600.0	6,586.8	9,821.4	7,803.0	13.4	50.9	-124.36	308.5	-2,505.6	2,982.0	2,926.8	55.19	54.034	
6,700.0	6,686.6	9,827.0	7,803.0	13.6	51.0	-124.24	314.2	-2,505.6	2,945.6	2,890.1	55.54	53.038	
6,787.0	6,773.4	9,832.0	7,803.0	13.8	51.1	-124.14	319.1	-2,505.7	2,916.5	2,860.6	55.84	52.226	
6,800.0	6,786.4	9,832.6	7,803.0	13.8	51.1	-134.30	319.8	-2,505.7	2,912.3	2,856.2	56.05	51.957	
6,850.0	6,836.3	9,832.8	7,803.0	13.9	51.1	139.89	319.9	-2,505.7	2,896.7	2,840.0	56.74	51.055	
6,900.0	6,886.2	9,829.5	7,803.0	14.0	51.0	111.19	316.6	-2,505.7	2,881.9	2,824.7	57.25	50.340	
6,950.0	6,935.7	9,822.7	7,803.0	14.0	50.9	104.40	309.9	-2,505.6	2,868.0	2,810.4	57.58	49.806	
7,000.0	6,984.6	9,812.5	7,803.0	14.0	50.8	101.85	299.7	-2,505.5	2,855.0	2,797.3	57.74	49.443	
7,050.0	7,032.6	9,798.9	7,803.0	14.0	50.6	100.67	286.1	-2,505.4	2,843.0	2,785.2	57.74	49.240	
7,100.0	7,079.7	9,782.0	7,803.0	13.9	50.4	100.05	269.2	-2,505.3	2,831.9	2,774.3	57.57	49.187	
7,150.0	7,125.4	9,761.8	7,803.0	13.9	50.1	99.67	249.0	-2,505.1	2,821.8	2,764.5	57.27	49.274	
7,200.0	7,169.6	9,738.5	7,803.0	13.8	49.8	99.39	225.7	-2,504.9	2,812.7	2,755.8	56.83	49.488	
7,250.0	7,212.1	9,712.2	7,803.0	13.8	49.4	99.15	199.4	-2,504.7	2,804.5	2,748.2	56.29	49.819	
7,300.0	7,252.6	9,683.0	7,803.0	13.7	49.0	98.90	170.1	-2,504.4	2,797.3	2,741.6	55.66	50.252	
7,350.0	7,291.0	9,651.0	7,803.0	13.7	48.6	98.63	138.2	-2,504.1	2,790.9	2,735.9	54.97	50.774	
7,400.0	7,327.1	9,616.4	7,803.0	13.7	48.1	98.34	103.6	-2,503.8	2,785.3	2,731.1	54.22	51.370	
7,450.0	7,360.7	9,579.4	7,803.0	13.7	47.6	98.04	66.6	-2,503.5	2,780.5	2,727.1	53.45	52.024	
7,500.0	7,391.6	9,540.1	7,803.0	13.7	47.1	97.72	27.3	-2,503.2	2,776.4	2,723.7	52.66	52.720	
7,550.0	7,419.7	9,498.8	7,803.0	13.8	46.5	97.40	-14.1	-2,502.8	2,772.9	2,721.0	51.89	53.443	
7,600.0	7,444.8	9,455.6	7,803.0	13.9	45.9	97.09	-57.2	-2,502.5	2,770.0	2,718.8	51.13	54.175	
7,650.0	7,466.9	9,410.7	7,803.0	14.1	45.4	96.80	-102.1	-2,502.1	2,767.5	2,717.1	50.41	54.905	
7,700.0	7,485.8	9,364.5	7,803.0	14.3	44.8	96.53	-148.4	-2,501.7	2,765.5	2,715.8	49.72	55.619	
7,750.0	7,501.5	9,317.0	7,803.0	14.6	44.2	96.31	-195.8	-2,501.3	2,763.8	2,714.7	49.08	56.308	
7,800.0	7,513.7	9,268.5	7,803.0	14.9	43.6	96.13	-244.3	-2,500.9	2,762.5	2,714.0	48.49	56.965	
7,850.0	7,522.6	9,219.3	7,803.0	15.2	42.9	96.01	-293.5	-2,500.4	2,761.4	2,713.5	47.95	57.587	
7,900.0	7,528.0	9,169.6	7,803.0	15.6	42.3	95.95	-343.2	-2,500.0	2,760.6	2,713.2	47.46	58.171	
7,952.9	7,530.0	9,116.7	7,803.0	16.1	41.7	95.95	-396.1	-2,499.6	2,760.0	2,713.1	46.98	58.752	
8,000.0	7,530.0	9,069.7	7,803.0	16.5	41.1	95.95	-443.1	-2,499.2	2,759.6	2,713.0	46.69	59.110	
8,100.0	7,530.0	8,969.7	7,803.0	17.5	40.0	95.95	-543.1	-2,498.3	2,758.8	2,712.6	46.17	59.751	
8,200.0	7,530.0	8,869.7	7,803.0	18.7	38.9	95.95	-643.1	-2,497.4	2,757.9	2,712.2	45.79	60.236	
8,300.0	7,530.0	8,769.7	7,803.0	19.9	37.8	95.95	-743.1	-2,496.6	2,757.1	2,711.6	45.51	60.579	
8,400.0	7,530.0	8,669.7	7,803.0	21.2	36.8	95.96	-843.1	-2,495.7	2,756.2	2,710.9	45.34	60.789	
8,500.0	7,530.0	8,569.7	7,803.0	22.6	35.9	95.96	-943.1	-2,494.9	2,755.4	2,710.1	45.26	60.874	
8,600.0	7,530.0	8,469.7	7,803.0	24.0	35.0	95.96	-1,043.1	-2,494.0	2,754.5	2,709.3	45.28	60.836	
8,700.0	7,530.0	8,369.7	7,803.0	25.4	34.2	95.96	-1,143.1	-2,493.2	2,753.7	2,708.3	45.38	60.675	
8,800.0	7,530.0	8,280.0	7,802.5	26.9	33.5	95.95	-1,232.8	-2,492.5	2,752.9	2,707.2	45.71	60.224	
8,843.1	7,530.0	8,250.0	7,800.6	27.6	33.3	95.91	-1,262.7	-2,492.6	2,752.8	2,706.8	45.99	59.855 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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
8,900.0	7,530.0	8,211.4	7,795.8	28.4	33.0	95.81	-1,301.0	-2,493.2	2,753.0	2,706.6	46.39	59.341 ES		
9,000.0	7,530.0	8,150.0	7,783.1	30.0	32.6	95.54	-1,361.0	-2,495.3	2,754.3	2,707.1	47.23	58.316		
9,100.0	7,530.0	8,083.3	7,762.2	31.5	32.2	95.11	-1,424.2	-2,498.9	2,757.0	2,708.9	48.09	57.327		
9,200.0	7,530.0	8,026.2	7,738.7	33.1	31.8	94.61	-1,476.0	-2,503.1	2,761.3	2,712.2	49.12	56.210		
9,300.0	7,530.0	7,974.5	7,713.1	34.7	31.5	94.07	-1,520.7	-2,507.8	2,767.5	2,717.2	50.27	55.053		
9,400.0	7,530.0	7,928.1	7,686.9	36.3	31.3	93.53	-1,558.7	-2,512.7	2,775.7	2,724.2	51.51	53.885		
9,500.0	7,530.0	7,886.9	7,661.2	38.0	31.0	92.99	-1,590.5	-2,517.5	2,786.3	2,733.5	52.84	52.736		
9,600.0	7,530.0	7,850.0	7,636.3	39.6	30.8	92.47	-1,617.3	-2,522.3	2,799.4	2,745.2	54.22	51.629		
9,700.0	7,530.0	7,817.8	7,613.3	41.3	30.7	91.99	-1,639.3	-2,526.7	2,815.1	2,759.5	55.67	50.564		
9,800.0	7,530.0	7,800.0	7,600.0	42.9	30.6	91.71	-1,650.9	-2,529.2	2,833.6	2,776.4	57.22	49.517		
9,900.0	7,530.0	7,750.0	7,560.9	44.6	30.3	90.90	-1,681.2	-2,536.7	2,854.9	2,796.3	58.61	48.711		
10,000.0	7,530.0	7,750.0	7,560.9	46.3	30.3	90.90	-1,681.2	-2,536.7	2,878.9	2,818.6	60.29	47.753		
10,100.0	7,530.0	7,720.4	7,536.6	47.9	30.2	90.40	-1,697.5	-2,541.4	2,905.7	2,843.9	61.82	47.006		
10,200.0	7,530.0	7,700.0	7,519.4	49.6	30.1	90.05	-1,707.9	-2,544.7	2,935.4	2,872.0	63.40	46.303		
10,300.0	7,530.0	7,700.0	7,519.4	51.3	30.1	90.05	-1,707.9	-2,544.7	2,968.0	2,902.9	65.09	45.599		
10,400.0	7,530.0	7,670.7	7,494.2	53.0	30.0	89.53	-1,721.8	-2,549.6	3,003.1	2,936.5	66.65	45.061		
10,500.0	7,530.0	7,650.0	7,475.8	54.7	29.9	89.16	-1,730.8	-2,553.2	3,041.0	2,972.8	68.24	44.562		
10,600.0	7,530.0	7,650.0	7,475.8	56.4	29.9	89.16	-1,730.8	-2,553.2	3,081.5	3,011.5	69.95	44.055		
10,700.0	7,530.0	7,650.0	7,475.8	58.1	29.9	89.16	-1,730.8	-2,553.2	3,124.6	3,053.0	71.65	43.607		
10,800.0	7,530.0	7,623.5	7,452.0	59.8	29.8	88.67	-1,741.4	-2,557.9	3,169.9	3,096.7	73.24	43.281		
10,900.0	7,530.0	7,600.0	7,430.4	61.5	29.6	88.23	-1,749.8	-2,562.1	3,217.8	3,143.0	74.84	42.996		
11,000.0	7,530.0	7,600.0	7,430.4	63.2	29.6	88.23	-1,749.8	-2,562.1	3,267.8	3,191.2	76.55	42.686		
11,100.0	7,530.0	7,600.0	7,430.4	64.9	29.6	88.23	-1,749.8	-2,562.1	3,320.0	3,241.7	78.27	42.417		
11,200.0	7,530.0	7,600.0	7,430.4	66.6	29.6	88.23	-1,749.8	-2,562.1	3,374.4	3,294.4	79.99	42.186		
11,300.0	7,530.0	7,600.0	7,430.4	68.4	29.6	88.23	-1,749.8	-2,562.1	3,430.8	3,349.1	81.71	41.988		
11,400.0	7,530.0	7,576.5	7,408.5	70.1	29.5	87.79	-1,757.3	-2,566.4	3,488.8	3,405.5	83.32	41.871		
11,500.0	7,530.0	7,570.5	7,402.9	71.8	29.5	87.68	-1,759.1	-2,567.5	3,548.8	3,463.8	85.02	41.743		
11,600.0	7,530.0	7,550.0	7,383.6	73.5	29.4	87.29	-1,764.7	-2,571.3	3,610.7	3,524.0	86.64	41.674		
11,700.0	7,530.0	7,550.0	7,383.6	75.2	29.4	87.29	-1,764.7	-2,571.3	3,674.0	3,585.6	88.37	41.577		
11,800.0	7,530.0	7,550.0	7,383.6	77.0	29.4	87.29	-1,764.7	-2,571.3	3,738.9	3,648.8	90.09	41.501		
11,900.0	7,530.0	7,550.0	7,383.6	78.7	29.4	87.29	-1,764.7	-2,571.3	3,805.3	3,713.4	91.82	41.443		
12,000.0	7,530.0	7,550.0	7,383.6	80.4	29.4	87.29	-1,764.7	-2,571.3	3,873.1	3,779.6	93.55	41.403		
12,100.0	7,530.0	7,550.0	7,383.6	82.2	29.4	87.29	-1,764.7	-2,571.3	3,942.3	3,847.1	95.28	41.378		
12,200.0	7,530.0	7,550.0	7,383.6	83.9	29.4	87.29	-1,764.7	-2,571.3	4,012.9	3,915.8	97.01	41.367 SF		
12,300.0	7,530.0	7,550.0	7,383.6	85.6	29.4	87.29	-1,764.7	-2,571.3	4,084.6	3,985.9	98.74	41.369		
12,400.0	7,530.0	7,550.0	7,383.6	87.3	29.4	87.29	-1,764.7	-2,571.3	4,157.5	4,057.1	100.47	41.381		
12,500.0	7,530.0	7,527.0	7,361.7	89.1	29.3	86.85	-1,770.1	-2,575.6	4,231.1	4,129.0	102.09	41.446		
12,600.0	7,530.0	7,523.8	7,358.6	90.8	29.3	86.79	-1,770.7	-2,576.2	4,306.1	4,202.3	103.81	41.482		
12,700.0	7,530.0	7,500.0	7,335.7	92.5	29.2	86.33	-1,775.3	-2,580.7	4,382.4	4,276.9	105.41	41.573		
12,800.0	7,530.0	7,500.0	7,335.7	94.3	29.2	86.33	-1,775.3	-2,580.7	4,459.1	4,352.0	107.15	41.617		
12,900.0	7,530.0	7,500.0	7,335.7	96.0	29.2	86.33	-1,775.3	-2,580.7	4,536.8	4,427.9	108.88	41.668		
13,000.0	7,530.0	7,500.0	7,335.7	97.8	29.2	86.33	-1,775.3	-2,580.7	4,615.4	4,504.8	110.62	41.725		
13,100.0	7,530.0	7,500.0	7,335.7	99.5	29.2	86.33	-1,775.3	-2,580.7	4,694.7	4,582.4	112.35	41.787		
13,200.0	7,530.0	7,500.0	7,335.7	101.2	29.2	86.33	-1,775.3	-2,580.7	4,774.9	4,660.8	114.09	41.853		
13,300.0	7,530.0	7,500.0	7,335.7	103.0	29.2	86.33	-1,775.3	-2,580.7	4,855.7	4,739.9	115.82	41.924		
13,400.0	7,530.0	7,500.0	7,335.7	104.7	29.2	86.33	-1,775.3	-2,580.7	4,937.3	4,819.8	117.56	41.999		
13,500.0	7,530.0	7,500.0	7,335.7	106.4	29.2	86.33	-1,775.3	-2,580.7	5,019.6	4,900.3	119.30	42.077		
13,600.0	7,530.0	7,500.0	7,335.7	108.2	29.2	86.33	-1,775.3	-2,580.7	5,102.4	4,981.4	121.03	42.158		
13,700.0	7,530.0	7,500.0	7,335.7	109.9	29.2	86.33	-1,775.3	-2,580.7	5,185.9	5,063.1	122.77	42.241		
13,800.0	7,530.0	7,500.0	7,335.7	111.7	29.2	86.33	-1,775.3	-2,580.7	5,270.0	5,145.5	124.51	42.326		
13,900.0	7,530.0	7,500.0	7,335.7	113.4	29.2	86.33	-1,775.3	-2,580.7	5,354.6	5,228.3	126.25	42.413		
14,000.0	7,530.0	7,500.0	7,335.7	115.1	29.2	86.33	-1,775.3	-2,580.7	5,439.7	5,311.7	127.99	42.502		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2G-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	7,500.0	7,335.7	116.9	29.2	86.33	-1,775.3	-2,580.7	5,525.3	5,395.6	129.73	42.592		
14,200.0	7,530.0	7,500.0	7,335.7	118.6	29.2	86.33	-1,775.3	-2,580.7	5,611.4	5,480.0	131.46	42.684		
14,300.0	7,530.0	7,500.0	7,335.7	120.4	29.2	86.33	-1,775.3	-2,580.7	5,698.0	5,564.8	133.20	42.776		
14,400.0	7,530.0	7,500.0	7,335.7	122.1	29.2	86.33	-1,775.3	-2,580.7	5,785.0	5,650.0	134.95	42.869		
14,500.0	7,530.0	7,500.0	7,335.7	123.9	29.2	86.33	-1,775.3	-2,580.7	5,872.4	5,735.7	136.69	42.963		
14,600.0	7,530.0	7,500.0	7,335.7	125.6	29.2	86.33	-1,775.3	-2,580.7	5,960.2	5,821.7	138.43	43.057		
14,700.0	7,530.0	7,500.0	7,335.7	127.3	29.2	86.33	-1,775.3	-2,580.7	6,048.3	5,908.2	140.17	43.151		
14,800.0	7,530.0	7,500.0	7,335.7	129.1	29.2	86.33	-1,775.3	-2,580.7	6,136.9	5,995.0	141.91	43.245		
14,900.0	7,530.0	7,500.0	7,335.7	130.8	29.2	86.33	-1,775.3	-2,580.7	6,225.8	6,082.1	143.65	43.340		
15,000.0	7,530.0	7,500.0	7,335.7	132.6	29.2	86.33	-1,775.3	-2,580.7	6,315.0	6,169.6	145.39	43.434		
15,100.0	7,530.0	7,476.5	7,312.9	134.3	29.1	85.88	-1,778.8	-2,585.2	6,404.0	6,257.0	146.99	43.567		
15,200.0	7,530.0	7,475.3	7,311.8	136.1	29.1	85.85	-1,779.0	-2,585.4	6,493.8	6,345.1	148.73	43.663		
15,300.0	7,530.0	7,474.2	7,310.7	137.8	29.1	85.83	-1,779.1	-2,585.6	6,583.9	6,433.5	150.46	43.759		
15,400.0	7,530.0	7,473.2	7,309.6	139.6	29.1	85.81	-1,779.2	-2,585.8	6,674.3	6,522.1	152.19	43.854		
15,500.0	7,530.0	7,450.0	7,287.0	141.3	29.0	85.36	-1,781.6	-2,590.3	6,765.3	6,611.6	153.78	43.993		
15,600.0	7,530.0	7,450.0	7,287.0	143.0	29.0	85.36	-1,781.6	-2,590.3	6,856.2	6,700.7	155.52	44.085		
15,700.0	7,530.0	7,450.0	7,287.0	144.8	29.0	85.36	-1,781.6	-2,590.3	6,947.3	6,790.0	157.26	44.176		
15,800.0	7,530.0	7,450.0	7,287.0	146.5	29.0	85.36	-1,781.6	-2,590.3	7,038.7	6,879.7	159.01	44.267		
15,900.0	7,530.0	7,450.0	7,287.0	148.3	29.0	85.36	-1,781.6	-2,590.3	7,130.2	6,969.5	160.75	44.357		
16,000.0	7,530.0	7,450.0	7,287.0	150.0	29.0	85.36	-1,781.6	-2,590.3	7,222.0	7,059.6	162.49	44.446		
16,100.0	7,530.0	7,450.0	7,287.0	151.8	29.0	85.36	-1,781.6	-2,590.3	7,314.1	7,149.8	164.23	44.535		
16,200.0	7,530.0	7,450.0	7,287.0	153.5	29.0	85.36	-1,781.6	-2,590.3	7,406.3	7,240.3	165.97	44.624		
16,300.0	7,530.0	7,450.0	7,287.0	155.3	29.0	85.36	-1,781.6	-2,590.3	7,498.7	7,331.0	167.71	44.711		
16,400.0	7,530.0	7,450.0	7,287.0	157.0	29.0	85.36	-1,781.6	-2,590.3	7,591.3	7,421.9	169.46	44.798		
16,500.0	7,530.0	7,450.0	7,287.0	158.8	29.0	85.36	-1,781.6	-2,590.3	7,684.1	7,512.9	171.20	44.884		
16,600.0	7,530.0	7,450.0	7,287.0	160.5	29.0	85.36	-1,781.6	-2,590.3	7,777.1	7,604.2	172.94	44.970		
16,700.0	7,530.0	7,450.0	7,287.0	162.3	29.0	85.36	-1,781.6	-2,590.3	7,870.3	7,695.6	174.68	45.054		
16,800.0	7,530.0	7,450.0	7,287.0	164.0	29.0	85.36	-1,781.6	-2,590.3	7,963.6	7,787.2	176.43	45.138		
16,900.0	7,530.0	7,450.0	7,287.0	165.8	29.0	85.36	-1,781.6	-2,590.3	8,057.1	7,878.9	178.17	45.221		
17,000.0	7,530.0	7,450.0	7,287.0	167.5	29.0	85.36	-1,781.6	-2,590.3	8,150.7	7,970.8	179.91	45.304		
17,100.0	7,530.0	7,450.0	7,287.0	169.3	29.0	85.36	-1,781.6	-2,590.3	8,244.5	8,062.8	181.66	45.385		
17,200.0	7,530.0	7,450.0	7,287.0	171.0	29.0	85.36	-1,781.6	-2,590.3	8,338.4	8,155.0	183.40	45.466		
17,300.0	7,530.0	7,450.0	7,287.0	172.8	29.0	85.36	-1,781.6	-2,590.3	8,432.5	8,247.3	185.14	45.546		
17,400.0	7,530.0	7,450.0	7,287.0	174.5	29.0	85.36	-1,781.6	-2,590.3	8,526.7	8,339.8	186.89	45.625		
17,420.9	7,530.0	7,450.0	7,287.0	174.9	29.0	85.36	-1,781.6	-2,590.3	8,546.4	8,359.2	187.25	45.642		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.63	-1,929.3	-4,020.8	4,459.7					
100.0	100.0	87.0	87.0	0.2	0.1	-115.63	-1,929.3	-4,020.8	4,459.7	4,459.4	0.27	N/A		
200.0	200.0	187.0	187.0	0.3	0.3	-115.63	-1,929.3	-4,020.8	4,459.7	4,459.0	0.61	7,321.467		
300.0	300.0	491.4	491.3	0.5	0.8	-115.67	-1,929.3	-4,013.4	4,457.7	4,456.3	1.33	3,355.383		
400.0	400.0	824.4	823.2	0.7	1.6	-115.82	-1,929.3	-3,986.8	4,450.5	4,448.3	2.19	2,031.618		
500.0	500.0	1,153.2	1,148.8	0.8	2.5	-116.08	-1,929.3	-3,941.6	4,438.1	4,434.9	3.22	1,379.477		
600.0	600.0	1,475.8	1,465.3	1.0	3.7	-116.44	-1,929.3	-3,879.3	4,420.7	4,416.2	4.45	993.248		
700.0	700.0	1,790.8	1,770.5	1.2	5.2	-149.51	-1,929.3	-3,801.3	4,399.2	4,394.3	4.81	915.057		
800.0	800.0	1,989.0	1,960.1	1.4	6.2	-150.02	-1,929.3	-3,743.9	4,375.0	4,369.5	5.56	787.138		
900.0	899.9	2,085.0	2,051.8	1.6	6.8	-150.35	-1,929.3	-3,715.2	4,351.9	4,345.9	6.03	721.948		
988.4	988.1	2,170.1	2,133.0	1.7	7.2	-150.64	-1,929.3	-3,689.8	4,332.7	4,326.3	6.45	671.793		
1,000.0	999.7	2,181.3	2,143.6	1.7	7.3	-150.67	-1,929.3	-3,686.5	4,330.3	4,323.8	6.50	665.721		
1,100.0	1,099.4	2,277.6	2,235.5	1.9	7.8	-150.89	-1,929.3	-3,657.7	4,309.3	4,302.4	6.98	617.081		
1,200.0	1,199.2	2,373.9	2,327.4	2.1	8.4	-151.12	-1,929.3	-3,628.9	4,288.5	4,281.0	7.47	574.288		
1,300.0	1,299.0	2,470.2	2,419.3	2.3	8.9	-151.35	-1,929.3	-3,600.1	4,267.6	4,259.7	7.96	536.387		
1,400.0	1,398.8	2,566.5	2,511.2	2.5	9.4	-151.59	-1,929.3	-3,571.3	4,246.9	4,238.4	8.45	502.608		
1,500.0	1,498.5	2,662.8	2,603.1	2.7	10.0	-151.82	-1,929.3	-3,542.5	4,226.2	4,217.2	8.95	472.333		
1,600.0	1,598.3	2,759.1	2,695.0	2.9	10.5	-152.06	-1,929.3	-3,513.8	4,205.6	4,196.1	9.45	445.056		
1,700.0	1,698.1	2,855.3	2,786.9	3.2	11.1	-152.30	-1,929.3	-3,485.0	4,185.0	4,175.1	9.96	420.365		
1,800.0	1,797.8	2,951.6	2,878.8	3.4	11.6	-152.54	-1,929.3	-3,456.2	4,164.6	4,154.1	10.47	397.915		
1,900.0	1,897.6	3,047.9	2,970.7	3.6	12.2	-152.78	-1,929.4	-3,427.4	4,144.2	4,133.2	10.98	377.423		
2,000.0	1,997.4	3,144.2	3,062.6	3.8	12.7	-153.03	-1,929.4	-3,398.6	4,123.9	4,112.4	11.50	358.647		
2,100.0	2,097.1	3,240.5	3,154.4	4.0	13.3	-153.28	-1,929.4	-3,369.8	4,103.6	4,091.6	12.02	341.386		
2,200.0	2,196.9	3,336.8	3,246.3	4.2	13.8	-153.53	-1,929.4	-3,341.1	4,083.4	4,070.9	12.55	325.466		
2,300.0	2,296.7	3,433.1	3,338.2	4.4	14.3	-153.79	-1,929.4	-3,312.3	4,063.4	4,050.3	13.08	310.741		
2,400.0	2,396.5	3,529.4	3,430.1	4.6	14.9	-154.04	-1,929.4	-3,283.5	4,043.4	4,029.7	13.61	297.084		
2,500.0	2,496.2	3,625.7	3,522.0	4.8	15.4	-154.30	-1,929.4	-3,254.7	4,023.4	4,009.3	14.15	284.385		
2,600.0	2,596.0	3,722.0	3,613.9	5.0	16.0	-154.56	-1,929.4	-3,225.9	4,003.6	3,988.9	14.69	272.548		
2,700.0	2,695.8	3,818.3	3,705.8	5.2	16.5	-154.83	-1,929.4	-3,197.1	3,983.8	3,968.6	15.24	261.492		
2,800.0	2,795.5	3,914.6	3,797.7	5.4	17.1	-155.09	-1,929.4	-3,168.3	3,964.2	3,948.4	15.78	251.142		
2,900.0	2,895.3	4,010.9	3,889.6	5.6	17.6	-155.36	-1,929.4	-3,139.6	3,944.6	3,928.2	16.34	241.436		
3,000.0	2,995.1	4,107.2	3,981.5	5.9	18.2	-155.63	-1,929.4	-3,110.8	3,925.1	3,908.2	16.90	232.316		
3,100.0	3,094.9	4,203.5	4,073.4	6.1	18.7	-155.91	-1,929.4	-3,082.0	3,905.7	3,888.2	17.46	223.731		
3,200.0	3,194.6	4,299.8	4,165.3	6.3	19.3	-156.18	-1,929.4	-3,053.2	3,886.4	3,868.3	18.02	215.639		
3,300.0	3,294.4	4,396.1	4,257.2	6.5	19.8	-156.46	-1,929.4	-3,024.4	3,867.1	3,848.5	18.59	207.998		
3,400.0	3,394.2	4,492.4	4,349.1	6.7	20.4	-156.75	-1,929.4	-2,995.6	3,848.0	3,828.8	19.17	200.773		
3,500.0	3,493.9	4,588.7	4,441.0	6.9	20.9	-157.03	-1,929.4	-2,966.9	3,828.9	3,809.2	19.74	193.932		
3,600.0	3,593.7	4,685.0	4,532.8	7.1	21.5	-157.32	-1,929.4	-2,938.1	3,810.0	3,789.7	20.33	187.447		
3,700.0	3,693.5	4,781.3	4,624.7	7.3	22.0	-157.61	-1,929.4	-2,909.3	3,791.2	3,770.2	20.91	181.290		
3,800.0	3,793.2	4,877.6	4,716.6	7.5	22.6	-157.90	-1,929.4	-2,880.5	3,772.4	3,750.9	21.50	175.440		
3,900.0	3,893.0	4,973.9	4,808.5	7.7	23.1	-158.20	-1,929.4	-2,851.7	3,753.8	3,731.7	22.10	169.873		
4,000.0	3,992.8	5,070.2	4,900.4	8.0	23.7	-158.50	-1,929.5	-2,822.9	3,735.2	3,712.5	22.70	164.572		
4,100.0	4,092.6	5,166.4	4,992.3	8.2	24.2	-158.80	-1,929.5	-2,794.2	3,716.8	3,693.5	23.30	159.518		
4,200.0	4,192.3	5,262.7	5,084.2	8.4	24.8	-159.10	-1,929.5	-2,765.4	3,698.4	3,674.5	23.91	154.695		
4,300.0	4,292.1	5,359.0	5,176.1	8.6	25.3	-159.41	-1,929.5	-2,736.6	3,680.2	3,655.7	24.52	150.089		
4,400.0	4,391.9	5,455.3	5,268.0	8.8	25.9	-159.72	-1,929.5	-2,707.8	3,662.1	3,636.9	25.14	145.686		
4,500.0	4,491.6	5,551.6	5,359.9	9.0	26.4	-160.03	-1,929.5	-2,679.0	3,644.0	3,618.3	25.76	141.473		
4,600.0	4,591.4	5,647.9	5,451.8	9.2	27.0	-160.35	-1,929.5	-2,650.2	3,626.1	3,599.8	26.38	137.439		
4,700.0	4,691.2	5,744.2	5,543.7	9.4	27.5	-160.67	-1,929.5	-2,621.5	3,608.3	3,581.3	27.01	133.574		
4,800.0	4,790.9	5,840.5	5,635.6	9.6	28.1	-160.99	-1,929.5	-2,592.7	3,590.7	3,563.0	27.65	129.867		
4,900.0	4,890.7	5,933.2	5,750.0	9.8	50.7	-131.24	10.8	-2,179.5	3,551.7	3,509.0	42.71	83.162		
5,000.0	4,990.5	9,538.5	7,550.0	10.1	50.8	-131.11	16.1	-2,180.1	3,480.1	3,437.0	43.06	80.812		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.3	9,543.8	7,550.0	10.3	50.8	-130.99	21.4	-2,180.6	3,409.9	3,366.5	43.42	78.532		
5,200.0	5,190.0	9,549.2	7,550.0	10.5	50.9	-130.87	26.7	-2,181.1	3,341.2	3,297.4	43.78	76.324		
5,300.0	5,289.8	9,554.5	7,550.0	10.7	50.9	-130.74	32.0	-2,181.6	3,274.1	3,229.9	44.13	74.187		
5,400.0	5,389.6	9,559.9	7,550.0	10.9	51.0	-130.62	37.3	-2,182.1	3,208.7	3,164.2	44.49	72.122		
5,500.0	5,489.3	9,565.2	7,550.0	11.1	51.1	-130.49	42.7	-2,182.6	3,145.1	3,100.2	44.85	70.131		
5,600.0	5,589.1	9,570.5	7,550.0	11.3	51.1	-130.37	48.0	-2,183.1	3,083.4	3,038.2	45.20	68.212		
5,700.0	5,688.9	9,575.9	7,550.0	11.5	51.2	-130.24	53.3	-2,183.6	3,023.8	2,978.2	45.56	66.369		
5,800.0	5,788.7	9,581.2	7,550.0	11.7	51.3	-130.12	58.6	-2,184.1	2,966.3	2,920.4	45.92	64.601		
5,900.0	5,888.4	9,586.6	7,550.0	11.9	51.3	-129.99	63.9	-2,184.6	2,911.1	2,864.9	46.27	62.910		
6,000.0	5,988.2	9,591.9	7,550.0	12.2	51.4	-129.87	69.2	-2,185.2	2,858.4	2,811.7	46.63	61.296		
6,100.0	6,088.0	9,597.2	7,550.0	12.4	51.4	-129.74	74.6	-2,185.7	2,808.2	2,761.2	46.99	59.761		
6,200.0	6,187.7	9,602.6	7,550.0	12.6	51.5	-129.62	79.9	-2,186.2	2,760.7	2,713.4	47.35	58.306		
6,300.0	6,287.5	9,607.9	7,550.0	12.8	51.6	-129.50	85.2	-2,186.7	2,716.1	2,668.4	47.71	56.932		
6,400.0	6,387.3	9,613.3	7,550.0	13.0	51.6	-129.37	90.5	-2,187.2	2,674.4	2,626.3	48.07	55.639		
6,500.0	6,487.0	9,618.6	7,550.0	13.2	51.7	-129.25	95.8	-2,187.7	2,635.9	2,587.4	48.43	54.431		
6,600.0	6,586.8	9,623.9	7,550.0	13.4	51.7	-129.12	101.1	-2,188.2	2,600.6	2,551.8	48.79	53.307		
6,700.0	6,686.6	9,629.3	7,550.0	13.6	51.8	-129.00	106.4	-2,188.7	2,568.7	2,519.6	49.14	52.269		
6,787.0	6,773.4	9,633.9	7,550.0	13.8	51.9	-128.89	111.1	-2,189.2	2,543.9	2,494.4	49.46	51.435		
6,800.0	6,786.4	9,634.5	7,550.0	13.8	51.9	-139.11	111.6	-2,189.2	2,540.4	2,490.7	49.67	51.145		
6,850.0	6,836.3	9,634.5	7,550.0	13.9	51.9	134.84	111.7	-2,189.2	2,527.3	2,476.9	50.38	50.162		
6,900.0	6,886.2	9,631.1	7,550.0	14.0	51.8	105.92	108.3	-2,188.9	2,514.9	2,463.9	50.93	49.375		
6,950.0	6,935.7	9,624.2	7,550.0	14.0	51.7	98.91	101.4	-2,188.3	2,503.1	2,451.8	51.32	48.774		
7,000.0	6,984.6	9,613.9	7,550.0	14.0	51.6	96.15	91.1	-2,187.3	2,492.1	2,440.6	51.54	48.350		
7,050.0	7,032.6	9,600.2	7,550.0	14.0	51.5	94.79	77.5	-2,186.0	2,481.8	2,430.2	51.61	48.091		
7,100.0	7,079.7	9,583.2	7,550.0	13.9	51.3	93.99	60.6	-2,184.3	2,472.3	2,420.8	51.52	47.985		
7,150.0	7,125.4	9,563.0	7,550.0	13.9	51.0	93.45	40.5	-2,182.4	2,463.5	2,412.2	51.30	48.019		
7,200.0	7,169.6	9,539.7	7,550.0	13.8	50.8	93.02	17.2	-2,180.2	2,455.4	2,404.4	50.96	48.179		
7,250.0	7,212.1	9,513.3	7,550.0	13.8	50.5	92.65	-9.0	-2,177.6	2,448.0	2,397.5	50.53	48.448		
7,300.0	7,252.6	9,484.1	7,550.0	13.7	50.2	92.29	-38.1	-2,174.8	2,441.2	2,391.2	50.02	48.808		
7,350.0	7,291.0	9,452.1	7,550.0	13.7	49.8	91.95	-69.9	-2,171.8	2,435.0	2,385.5	49.45	49.241		
7,400.0	7,327.1	9,417.6	7,550.0	13.7	49.4	91.60	-104.3	-2,168.5	2,429.2	2,380.3	48.85	49.731		
7,450.0	7,360.7	9,380.6	7,550.0	13.7	49.0	91.27	-141.1	-2,164.9	2,423.8	2,375.6	48.23	50.254		
7,500.0	7,391.6	9,341.4	7,550.0	13.7	48.6	90.95	-180.1	-2,161.2	2,418.8	2,371.2	47.62	50.792		
7,550.0	7,419.7	9,300.2	7,550.0	13.8	48.2	90.66	-221.1	-2,157.2	2,414.1	2,367.0	47.03	51.330		
7,600.0	7,444.8	9,257.1	7,550.0	13.9	47.8	90.42	-264.0	-2,153.1	2,409.5	2,363.0	46.47	51.845		
7,650.0	7,466.9	9,212.4	7,550.0	14.1	47.3	90.22	-308.5	-2,148.8	2,405.0	2,359.1	45.96	52.330		
7,700.0	7,485.8	9,166.3	7,550.0	14.3	46.9	90.10	-354.4	-2,144.4	2,400.6	2,355.1	45.49	52.770		
7,750.0	7,501.5	9,119.0	7,550.0	14.6	46.4	90.05	-401.5	-2,139.9	2,396.2	2,351.1	45.07	53.163		
7,800.0	7,513.7	9,070.7	7,550.0	14.9	45.9	90.09	-449.6	-2,135.3	2,391.7	2,347.0	44.70	53.506		
7,850.0	7,522.6	9,021.7	7,550.0	15.2	45.5	90.22	-498.4	-2,130.6	2,387.2	2,342.8	44.37	53.803		
7,900.0	7,528.0	8,972.2	7,550.0	15.6	45.1	90.45	-547.6	-2,125.9	2,382.5	2,338.4	44.07	54.059		
7,952.9	7,530.0	8,919.5	7,550.0	16.1	44.6	90.80	-600.0	-2,120.8	2,377.5	2,333.7	43.78	54.299		
8,000.0	7,530.0	8,872.7	7,550.0	16.5	44.2	90.80	-646.7	-2,116.3	2,373.0	2,329.5	43.51	54.536		
8,100.0	7,530.0	8,773.2	7,550.0	17.5	43.4	90.80	-745.7	-2,106.8	2,363.4	2,320.4	43.04	54.910		
8,200.0	7,530.0	8,673.6	7,550.0	18.7	42.7	90.81	-844.8	-2,097.3	2,353.9	2,311.2	42.71	55.114		
8,300.0	7,530.0	8,574.1	7,550.0	19.9	42.0	90.81	-943.9	-2,087.8	2,344.3	2,301.8	42.50	55.161		
8,400.0	7,530.0	8,474.5	7,550.0	21.2	41.4	90.81	-1,043.0	-2,078.2	2,334.7	2,292.3	42.40	55.061		
8,500.0	7,530.0	8,375.0	7,550.0	22.6	40.9	90.82	-1,142.1	-2,068.7	2,325.2	2,282.7	42.42	54.818		
8,600.0	7,530.0	8,275.5	7,550.0	24.0	40.4	90.82	-1,241.2	-2,059.2	2,315.6	2,273.0	42.54	54.434		
8,700.0	7,530.0	8,175.9	7,550.0	25.4	40.0	90.82	-1,340.3	-2,049.7	2,306.0	2,263.3	42.77	53.917		
8,800.0	7,530.0	8,128.1	7,548.3	26.9	39.8	90.78	-1,387.8	-2,045.6	2,297.5	2,253.8	43.72	52.553		
8,900.0	7,530.0	8,082.1	7,543.1	28.4	39.7	90.65	-1,433.5	-2,042.9	2,291.4	2,246.7	44.73	51.222		

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,000.0	7,530.0	8,050.0	7,537.3	30.0	39.5	90.51	-1,465.0	-2,041.6	2,287.7	2,241.8	45.94	49.794		
9,093.8	7,530.0	8,000.0	7,525.1	31.4	39.4	90.20	-1,513.5	-2,040.8	2,286.4	2,239.5	46.91	48.739 CC		
9,100.0	7,530.0	8,000.0	7,525.1	31.5	39.4	90.20	-1,513.5	-2,040.8	2,286.4	2,239.4	47.01	48.638 ES		
9,200.0	7,530.0	7,950.0	7,508.9	33.1	39.2	89.80	-1,560.8	-2,041.3	2,287.6	2,239.5	48.12	47.537		
9,300.0	7,530.0	7,900.0	7,488.9	34.7	39.0	89.30	-1,606.5	-2,043.2	2,291.7	2,242.4	49.29	46.495		
9,400.0	7,530.0	7,874.5	7,477.2	36.3	38.9	89.01	-1,629.1	-2,044.7	2,298.5	2,247.8	50.71	45.328		
9,500.0	7,530.0	7,850.0	7,465.1	38.0	38.8	88.70	-1,650.4	-2,046.4	2,308.3	2,256.2	52.14	44.269		
9,600.0	7,530.0	7,800.0	7,437.9	39.6	38.6	88.03	-1,692.0	-2,051.0	2,321.1	2,267.7	53.41	43.458		
9,700.0	7,530.0	7,777.2	7,424.3	41.3	38.6	87.69	-1,710.2	-2,053.5	2,337.0	2,282.1	54.91	42.562		
9,800.0	7,530.0	7,750.0	7,407.3	42.9	38.5	87.27	-1,731.1	-2,056.8	2,356.1	2,299.8	56.38	41.790		
9,900.0	7,530.0	7,723.8	7,390.0	44.6	38.3	86.85	-1,750.5	-2,060.3	2,378.5	2,320.6	57.88	41.092		
10,000.0	7,530.0	7,700.0	7,373.6	46.3	38.3	86.45	-1,767.4	-2,063.9	2,404.0	2,344.6	59.40	40.471		
10,100.0	7,530.0	7,678.4	7,358.2	47.9	38.2	86.07	-1,782.1	-2,067.3	2,432.7	2,371.8	60.95	39.913		
10,200.0	7,530.0	7,650.0	7,337.2	49.6	38.1	85.56	-1,800.6	-2,072.1	2,464.7	2,402.2	62.46	39.462		
10,300.0	7,530.0	7,650.0	7,337.2	51.3	38.1	85.56	-1,800.6	-2,072.1	2,499.7	2,435.5	64.15	38.969		
10,400.0	7,530.0	7,622.6	7,316.1	53.0	37.9	85.06	-1,817.3	-2,077.1	2,537.6	2,471.9	65.68	38.638		
10,500.0	7,530.0	7,600.0	7,298.1	54.7	37.8	84.63	-1,830.4	-2,081.4	2,578.6	2,511.4	67.23	38.354		
10,600.0	7,530.0	7,600.0	7,298.1	56.4	37.8	84.63	-1,830.4	-2,081.4	2,622.4	2,553.5	68.93	38.045		
10,700.0	7,530.0	7,578.4	7,280.6	58.1	37.7	84.21	-1,842.2	-2,085.8	2,668.9	2,598.4	70.50	37.855		
10,800.0	7,530.0	7,550.0	7,256.9	59.8	37.6	83.65	-1,856.6	-2,091.8	2,718.2	2,646.2	72.03	37.738		
10,900.0	7,530.0	7,550.0	7,256.9	61.5	37.6	83.65	-1,856.6	-2,091.8	2,769.7	2,696.0	73.73	37.565		
11,000.0	7,530.0	7,550.0	7,256.9	63.2	37.6	83.65	-1,856.6	-2,091.8	2,823.8	2,748.4	75.44	37.434		
11,100.0	7,530.0	7,550.0	7,256.9	64.9	37.6	83.65	-1,856.6	-2,091.8	2,880.4	2,803.2	77.14	37.339 SF		
11,200.0	7,530.0	7,523.0	7,233.7	66.6	37.5	83.11	-1,869.2	-2,097.9	2,938.7	2,860.0	78.68	37.348		
11,300.0	7,530.0	7,500.0	7,213.7	68.4	37.4	82.64	-1,879.0	-2,103.2	2,999.4	2,919.2	80.24	37.380		
11,400.0	7,530.0	7,500.0	7,213.7	70.1	37.4	82.64	-1,879.0	-2,103.2	3,061.8	2,979.8	81.95	37.362		
11,500.0	7,530.0	7,500.0	7,213.7	71.8	37.4	82.64	-1,879.0	-2,103.2	3,126.1	3,042.5	83.66	37.367		
11,600.0	7,530.0	7,500.0	7,213.7	73.5	37.4	82.64	-1,879.0	-2,103.2	3,192.3	3,106.9	85.37	37.394		
11,700.0	7,530.0	7,500.0	7,213.7	75.2	37.4	82.64	-1,879.0	-2,103.2	3,260.2	3,173.1	87.08	37.438		
11,800.0	7,530.0	7,476.3	7,192.6	77.0	37.3	82.16	-1,888.3	-2,108.9	3,329.2	3,240.6	88.63	37.561		
11,900.0	7,530.0	7,450.0	7,168.9	78.7	37.2	81.61	-1,897.5	-2,115.5	3,400.3	3,310.2	90.16	37.715		
12,000.0	7,530.0	7,450.0	7,168.9	80.4	37.2	81.61	-1,897.5	-2,115.5	3,472.3	3,380.4	91.87	37.795		
12,100.0	7,530.0	7,450.0	7,168.9	82.2	37.2	81.61	-1,897.5	-2,115.5	3,545.6	3,452.0	93.58	37.887		
12,200.0	7,530.0	7,450.0	7,168.9	83.9	37.2	81.61	-1,897.5	-2,115.5	3,620.1	3,524.8	95.30	37.988		
12,300.0	7,530.0	7,450.0	7,168.9	85.6	37.2	81.61	-1,897.5	-2,115.5	3,695.9	3,598.9	97.01	38.098		
12,400.0	7,530.0	7,450.0	7,168.9	87.3	37.2	81.61	-1,897.5	-2,115.5	3,772.8	3,674.1	98.73	38.215		
12,500.0	7,530.0	7,450.0	7,168.9	89.1	37.2	81.61	-1,897.5	-2,115.5	3,850.8	3,750.4	100.44	38.338		
12,600.0	7,530.0	7,450.0	7,168.9	90.8	37.2	81.61	-1,897.5	-2,115.5	3,929.8	3,827.6	102.16	38.467		
12,700.0	7,530.0	7,450.0	7,168.9	92.5	37.2	81.61	-1,897.5	-2,115.5	4,009.7	3,905.8	103.88	38.600		
12,800.0	7,530.0	7,425.8	7,146.8	94.3	37.0	81.11	-1,905.0	-2,121.7	4,089.9	3,984.5	105.40	38.804		
12,900.0	7,530.0	7,422.0	7,143.2	96.0	37.0	81.03	-1,906.1	-2,122.7	4,171.4	4,064.3	107.09	38.954		
13,000.0	7,530.0	7,400.0	7,122.8	97.8	36.9	80.57	-1,911.9	-2,128.5	4,253.9	4,145.3	108.61	39.166		
13,100.0	7,530.0	7,400.0	7,122.8	99.5	36.9	80.57	-1,911.9	-2,128.5	4,336.7	4,226.4	110.33	39.307		
13,200.0	7,530.0	7,400.0	7,122.8	101.2	36.9	80.57	-1,911.9	-2,128.5	4,420.3	4,308.2	112.04	39.451		
13,300.0	7,530.0	7,400.0	7,122.8	103.0	36.9	80.57	-1,911.9	-2,128.5	4,504.5	4,390.7	113.76	39.596		
13,400.0	7,530.0	7,400.0	7,122.8	104.7	36.9	80.57	-1,911.9	-2,128.5	4,589.3	4,473.8	115.48	39.742		
13,500.0	7,530.0	7,400.0	7,122.8	106.4	36.9	80.57	-1,911.9	-2,128.5	4,674.8	4,557.6	117.19	39.889		
13,600.0	7,530.0	7,400.0	7,122.8	108.2	36.9	80.57	-1,911.9	-2,128.5	4,760.8	4,641.8	118.91	40.036		
13,700.0	7,530.0	7,400.0	7,122.8	109.9	36.9	80.57	-1,911.9	-2,128.5	4,847.3	4,726.7	120.63	40.183		
13,800.0	7,530.0	7,400.0	7,122.8	111.7	36.9	80.57	-1,911.9	-2,128.5	4,934.4	4,812.0	122.35	40.330		
13,900.0	7,530.0	7,400.0	7,122.8	113.4	36.9	80.57	-1,911.9	-2,128.5	5,021.9	4,897.8	124.07	40.477		
14,000.0	7,530.0	7,400.0	7,122.8	115.1	36.9	80.57	-1,911.9	-2,128.5	5,109.9	4,984.1	125.79	40.623		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)	
14,100.0	7,530.0	7,400.0	7,122.8	116.9	36.9	80.57	-1,911.9	-2,128.5	5,198.3	5,070.8	127.51	40.769		
14,200.0	7,530.0	7,400.0	7,122.8	118.6	36.9	80.57	-1,911.9	-2,128.5	5,287.2	5,157.9	129.23	40.914		
14,300.0	7,530.0	7,400.0	7,122.8	120.4	36.9	80.57	-1,911.9	-2,128.5	5,376.4	5,245.5	130.95	41.058		
14,400.0	7,530.0	7,400.0	7,122.8	122.1	36.9	80.57	-1,911.9	-2,128.5	5,466.0	5,333.3	132.67	41.201		
14,500.0	7,530.0	7,400.0	7,122.8	123.9	36.9	80.57	-1,911.9	-2,128.5	5,556.0	5,421.6	134.39	41.343		
14,600.0	7,530.0	7,375.8	7,100.2	125.6	36.8	80.07	-1,917.4	-2,135.1	5,645.7	5,509.9	135.86	41.557		
14,700.0	7,530.0	7,373.9	7,098.4	127.3	36.8	80.03	-1,917.8	-2,135.6	5,736.3	5,598.7	137.55	41.702		
14,800.0	7,530.0	7,350.0	7,075.9	129.1	36.7	79.53	-1,922.1	-2,142.3	5,827.5	5,688.5	139.01	41.922		
14,900.0	7,530.0	7,350.0	7,075.9	130.8	36.7	79.53	-1,922.1	-2,142.3	5,918.6	5,777.9	140.73	42.058		
15,000.0	7,530.0	7,350.0	7,075.9	132.6	36.7	79.53	-1,922.1	-2,142.3	6,009.9	5,867.5	142.44	42.192		
15,100.0	7,530.0	7,350.0	7,075.9	134.3	36.7	79.53	-1,922.1	-2,142.3	6,101.5	5,957.4	144.16	42.325		
15,200.0	7,530.0	7,350.0	7,075.9	136.1	36.7	79.53	-1,922.1	-2,142.3	6,193.4	6,047.5	145.88	42.457		
15,300.0	7,530.0	7,350.0	7,075.9	137.8	36.7	79.53	-1,922.1	-2,142.3	6,285.5	6,137.9	147.59	42.587		
15,400.0	7,530.0	7,350.0	7,075.9	139.6	36.7	79.53	-1,922.1	-2,142.3	6,377.9	6,228.6	149.31	42.715		
15,500.0	7,530.0	7,350.0	7,075.9	141.3	36.7	79.53	-1,922.1	-2,142.3	6,470.4	6,319.4	151.03	42.843		
15,600.0	7,530.0	7,350.0	7,075.9	143.0	36.7	79.53	-1,922.1	-2,142.3	6,563.2	6,410.5	152.75	42.968		
15,700.0	7,530.0	7,350.0	7,075.9	144.8	36.7	79.53	-1,922.1	-2,142.3	6,656.3	6,501.8	154.46	43.092		
15,800.0	7,530.0	7,350.0	7,075.9	146.5	36.7	79.53	-1,922.1	-2,142.3	6,749.5	6,593.3	156.18	43.215		
15,900.0	7,530.0	7,350.0	7,075.9	148.3	36.7	79.53	-1,922.1	-2,142.3	6,842.9	6,685.0	157.90	43.336		
16,000.0	7,530.0	7,350.0	7,075.9	150.0	36.7	79.53	-1,922.1	-2,142.3	6,936.4	6,776.8	159.62	43.456		
16,100.0	7,530.0	7,350.0	7,075.9	151.8	36.7	79.53	-1,922.1	-2,142.3	7,030.2	6,868.9	161.34	43.574		
16,200.0	7,530.0	7,350.0	7,075.9	153.5	36.7	79.53	-1,922.1	-2,142.3	7,124.1	6,961.1	163.06	43.691		
16,300.0	7,530.0	7,350.0	7,075.9	155.3	36.7	79.53	-1,922.1	-2,142.3	7,218.2	7,053.4	164.78	43.806		
16,400.0	7,530.0	7,350.0	7,075.9	157.0	36.7	79.53	-1,922.1	-2,142.3	7,312.5	7,146.0	166.50	43.920		
16,500.0	7,530.0	7,350.0	7,075.9	158.8	36.7	79.53	-1,922.1	-2,142.3	7,406.9	7,238.7	168.21	44.032		
16,600.0	7,530.0	7,350.0	7,075.9	160.5	36.7	79.53	-1,922.1	-2,142.3	7,501.4	7,331.5	169.93	44.143		
16,700.0	7,530.0	7,350.0	7,075.9	162.3	36.7	79.53	-1,922.1	-2,142.3	7,596.1	7,424.5	171.65	44.253		
16,800.0	7,530.0	7,350.0	7,075.9	164.0	36.7	79.53	-1,922.1	-2,142.3	7,690.9	7,517.6	173.37	44.361		
16,900.0	7,530.0	7,350.0	7,075.9	165.8	36.7	79.53	-1,922.1	-2,142.3	7,785.9	7,610.8	175.09	44.467		
17,000.0	7,530.0	7,350.0	7,075.9	167.5	36.7	79.53	-1,922.1	-2,142.3	7,880.9	7,704.1	176.81	44.572		
17,100.0	7,530.0	7,350.0	7,075.9	169.3	36.7	79.53	-1,922.1	-2,142.3	7,976.1	7,797.6	178.53	44.676		
17,200.0	7,530.0	7,350.0	7,075.9	171.0	36.7	79.53	-1,922.1	-2,142.3	8,071.5	7,891.2	180.25	44.779		
17,300.0	7,530.0	7,350.0	7,075.9	172.8	36.7	79.53	-1,922.1	-2,142.3	8,166.9	7,984.9	181.97	44.880		
17,400.0	7,530.0	7,350.0	7,075.9	174.5	36.7	79.53	-1,922.1	-2,142.3	8,262.4	8,078.7	183.69	44.979		
17,420.9	7,530.0	7,350.0	7,075.9	174.9	36.7	79.53	-1,922.1	-2,142.3	8,282.4	8,098.4	184.05	45.000		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.12	-1,937.1	-4,132.3	4,563.8					
100.0	100.0	84.0	84.0	0.2	0.1	-115.12	-1,937.1	-4,132.3	4,563.8	4,563.5	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.12	-1,937.1	-4,132.3	4,563.8	4,563.2	0.60	7,557.426 CC		
300.0	300.0	268.9	268.9	0.5	0.4	-115.11	-1,936.8	-4,132.6	4,563.9	4,563.0	0.93	4,922.858 ES		
400.0	400.0	350.8	350.8	0.7	0.6	-115.09	-1,935.6	-4,133.6	4,564.5	4,563.2	1.25	3,659.294		
500.0	500.0	432.7	432.7	0.8	0.7	-115.06	-1,933.5	-4,135.4	4,565.4	4,563.8	1.57	2,905.464		
600.0	600.0	514.5	514.4	1.0	0.9	-115.01	-1,930.6	-4,138.0	4,566.7	4,564.8	1.90	2,402.904		
700.0	700.0	600.0	599.7	1.2	1.0	-147.41	-1,926.6	-4,141.5	4,569.2	4,566.9	2.24	2,035.932		
800.0	800.0	677.8	677.2	1.4	1.2	-147.33	-1,922.1	-4,145.4	4,573.5	4,570.9	2.58	1,770.320		
900.0	899.9	759.1	758.2	1.6	1.4	-147.23	-1,916.6	-4,150.2	4,579.7	4,576.8	2.94	1,557.216		
988.4	988.1	830.9	829.6	1.7	1.6	-147.14	-1,911.0	-4,155.1	4,586.8	4,583.5	3.27	1,404.758		
1,000.0	999.7	840.3	838.9	1.7	1.6	-147.13	-1,910.2	-4,155.8	4,587.8	4,584.5	3.31	1,386.630		
1,100.0	1,099.4	935.4	933.4	1.9	1.8	-147.04	-1,902.0	-4,163.0	4,596.7	4,593.0	3.72	1,235.561		
1,200.0	1,199.2	1,034.7	1,032.1	2.1	2.1	-146.95	-1,893.4	-4,170.5	4,605.7	4,601.5	4.15	1,110.650		
1,300.0	1,299.0	1,134.1	1,130.8	2.3	2.3	-146.86	-1,884.8	-4,178.0	4,614.6	4,610.1	4.58	1,008.287		
1,400.0	1,398.8	1,233.4	1,229.5	2.5	2.6	-146.77	-1,876.2	-4,185.5	4,623.6	4,618.6	5.01	923.052		
1,500.0	1,498.5	1,332.7	1,328.1	2.7	2.9	-146.68	-1,867.6	-4,192.9	4,632.6	4,627.2	5.44	851.080		
1,600.0	1,598.3	1,432.1	1,426.8	2.9	3.1	-146.59	-1,859.0	-4,200.4	4,641.6	4,635.7	5.88	789.557		
1,700.0	1,698.1	1,531.4	1,525.5	3.2	3.4	-146.50	-1,850.5	-4,207.9	4,650.6	4,644.3	6.32	736.397		
1,800.0	1,797.8	1,630.7	1,624.2	3.4	3.6	-146.41	-1,841.9	-4,215.4	4,659.6	4,652.9	6.75	690.028		
1,900.0	1,897.6	1,730.0	1,722.8	3.6	3.9	-146.32	-1,833.3	-4,222.9	4,668.6	4,661.5	7.19	649.240		
2,000.0	1,997.4	1,829.4	1,821.5	3.8	4.2	-146.23	-1,824.7	-4,230.4	4,677.7	4,670.1	7.63	613.094		
2,100.0	2,097.1	1,928.7	1,920.2	4.0	4.4	-146.15	-1,816.1	-4,237.9	4,686.7	4,678.7	8.07	580.848		
2,200.0	2,196.9	2,028.0	2,018.9	4.2	4.7	-146.06	-1,807.5	-4,245.4	4,695.8	4,687.3	8.51	551.907		
2,300.0	2,296.7	2,127.4	2,117.5	4.4	4.9	-145.97	-1,799.0	-4,252.9	4,704.9	4,695.9	8.95	525.793		
2,400.0	2,396.5	2,226.7	2,216.2	4.6	5.2	-145.88	-1,790.4	-4,260.4	4,714.0	4,704.6	9.39	502.112		
2,500.0	2,496.2	2,326.0	2,314.9	4.8	5.5	-145.80	-1,781.8	-4,267.9	4,723.1	4,713.2	9.83	480.543		
2,600.0	2,596.0	2,425.4	2,413.6	5.0	5.7	-145.71	-1,773.2	-4,275.4	4,732.2	4,721.9	10.27	460.815		
2,700.0	2,695.8	2,524.7	2,512.2	5.2	6.0	-145.63	-1,764.6	-4,282.9	4,741.3	4,730.6	10.71	442.705		
2,800.0	2,795.5	2,624.0	2,610.9	5.4	6.3	-145.54	-1,756.0	-4,290.4	4,750.4	4,739.3	11.15	426.022		
2,900.0	2,895.3	2,723.4	2,709.6	5.6	6.5	-145.46	-1,747.4	-4,297.9	4,759.5	4,748.0	11.59	410.605		
3,000.0	2,995.1	2,822.7	2,808.3	5.9	6.8	-145.37	-1,738.9	-4,305.4	4,768.7	4,756.7	12.03	396.316		
3,100.0	3,094.9	2,922.0	2,906.9	6.1	7.0	-145.29	-1,730.3	-4,312.9	4,777.8	4,765.4	12.47	383.035		
3,200.0	3,194.6	3,021.3	3,005.6	6.3	7.3	-145.20	-1,721.7	-4,320.3	4,787.0	4,774.1	12.91	370.660		
3,300.0	3,294.4	3,120.7	3,104.3	6.5	7.6	-145.12	-1,713.1	-4,327.8	4,796.2	4,782.8	13.36	359.102		
3,400.0	3,394.2	3,220.0	3,203.0	6.7	7.8	-145.03	-1,704.5	-4,335.3	4,805.4	4,791.6	13.80	348.283		
3,500.0	3,493.9	3,319.3	3,301.6	6.9	8.1	-144.95	-1,695.9	-4,342.8	4,814.6	4,800.3	14.24	338.134		
3,600.0	3,593.7	3,418.7	3,400.3	7.1	8.4	-144.87	-1,687.3	-4,350.3	4,823.8	4,809.1	14.68	328.595		
3,700.0	3,693.5	3,518.0	3,499.0	7.3	8.6	-144.78	-1,678.8	-4,357.8	4,833.0	4,817.9	15.12	319.613		
3,800.0	3,793.2	3,617.3	3,597.7	7.5	8.9	-144.70	-1,670.2	-4,365.3	4,842.2	4,826.7	15.56	311.141		
3,900.0	3,893.0	3,716.7	3,696.3	7.7	9.1	-144.62	-1,661.6	-4,372.8	4,851.5	4,835.5	16.00	303.137		
4,000.0	3,992.8	3,816.0	3,795.0	8.0	9.4	-144.54	-1,653.0	-4,380.3	4,860.7	4,844.3	16.45	295.562		
4,100.0	4,092.6	3,915.3	3,893.7	8.2	9.7	-144.46	-1,644.4	-4,387.8	4,870.0	4,853.1	16.89	288.384		
4,200.0	4,192.3	4,014.7	3,992.4	8.4	9.9	-144.38	-1,635.8	-4,395.3	4,879.3	4,861.9	17.33	281.573		
4,300.0	4,292.1	4,114.0	4,091.0	8.6	10.2	-144.30	-1,627.3	-4,402.8	4,888.5	4,870.8	17.77	275.100		
4,400.0	4,391.9	4,213.3	4,189.7	8.8	10.5	-144.22	-1,618.7	-4,410.3	4,897.8	4,879.6	18.21	268.942		
4,500.0	4,491.6	4,312.7	4,288.4	9.0	10.7	-144.13	-1,610.1	-4,417.8	4,907.1	4,888.5	18.65	263.076		
4,600.0	4,591.4	4,412.0	4,387.1	9.2	11.0	-144.06	-1,601.5	-4,425.3	4,916.4	4,897.3	19.09	257.482		
4,700.0	4,691.2	4,511.3	4,485.7	9.4	11.3	-143.98	-1,592.9	-4,432.8	4,925.7	4,906.2	19.54	252.141		
4,800.0	4,790.9	4,610.6	4,584.4	9.6	11.5	-143.90	-1,584.3	-4,440.2	4,935.1	4,915.1	19.98	247.037		
4,900.0	4,890.7	4,710.0	4,683.1	9.8	11.8	-143.82	-1,575.7	-4,447.7	4,944.4	4,924.0	20.42	242.154		
5,000.0	4,990.5	4,809.3	4,781.8	10.1	12.1	-143.74	-1,567.2	-4,455.2	4,953.8	4,932.9	20.86	237.479		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,090.3	4,908.6	4,880.4	10.3	12.3	-143.66	-1,558.6	-4,462.7	4,963.1	4,941.8	21.30	232.998		
5,200.0	5,190.0	5,008.0	4,979.1	10.5	12.6	-143.58	-1,550.0	-4,470.2	4,972.5	4,950.7	21.74	228.699		
5,300.0	5,289.8	5,107.3	5,077.8	10.7	12.8	-143.50	-1,541.4	-4,477.7	4,981.8	4,959.7	22.18	224.573		
5,400.0	5,389.6	5,206.6	5,176.5	10.9	13.1	-143.43	-1,532.8	-4,485.2	4,991.2	4,968.6	22.62	220.608		
5,500.0	5,489.3	5,306.0	5,275.2	11.1	13.4	-143.35	-1,524.2	-4,492.7	5,000.6	4,977.6	23.07	216.795		
5,600.0	5,589.1	5,405.3	5,373.8	11.3	13.6	-143.27	-1,515.6	-4,500.2	5,010.0	4,986.5	23.51	213.126		
5,700.0	5,688.9	5,504.6	5,472.5	11.5	13.9	-143.20	-1,507.1	-4,507.7	5,019.4	4,995.5	23.95	209.593		
5,800.0	5,788.7	5,604.0	5,571.2	11.7	14.2	-143.12	-1,498.5	-4,515.2	5,028.8	5,004.5	24.39	206.188		
5,900.0	5,888.4	5,703.3	5,669.9	11.9	14.4	-143.04	-1,489.9	-4,522.7	5,038.3	5,013.4	24.83	202.905		
6,000.0	5,988.2	5,802.6	5,768.5	12.2	14.7	-142.97	-1,481.3	-4,530.2	5,047.7	5,022.4	25.27	199.737		
6,100.0	6,088.0	5,902.0	5,867.2	12.4	15.0	-142.89	-1,472.7	-4,537.7	5,057.2	5,031.4	25.71	196.678		
6,200.0	6,187.7	6,001.3	5,965.9	12.6	15.2	-142.82	-1,464.1	-4,545.2	5,066.6	5,040.5	26.15	193.724		
6,300.0	6,287.5	6,100.6	6,064.6	12.8	15.5	-142.74	-1,455.5	-4,552.7	5,076.1	5,049.5	26.59	190.867		
6,400.0	6,387.3	6,199.9	6,163.2	13.0	15.7	-142.67	-1,447.0	-4,560.2	5,085.5	5,058.5	27.04	188.105		
6,500.0	6,487.0	6,299.3	6,261.9	13.2	16.0	-142.59	-1,438.4	-4,567.6	5,095.0	5,067.5	27.48	185.432		
6,600.0	6,586.8	6,398.6	6,360.6	13.4	16.3	-142.52	-1,429.8	-4,575.1	5,104.5	5,076.6	27.92	182.843		
6,700.0	6,686.6	6,497.9	6,459.3	13.6	16.5	-142.44	-1,421.2	-4,582.6	5,114.0	5,085.6	28.36	180.336		
6,787.0	6,773.4	6,584.3	6,545.1	13.8	16.8	-142.38	-1,413.7	-4,589.2	5,122.3	5,093.5	28.74	178.218		
6,800.0	6,786.4	6,597.3	6,557.9	13.8	16.8	-152.99	-1,412.6	-4,590.1	5,123.5	5,094.7	28.81	177.862		
6,850.0	6,836.3	6,646.8	6,607.1	13.9	16.9	119.66	-1,408.3	-4,593.9	5,127.3	5,098.3	29.02	176.669		
6,900.0	6,886.2	6,695.9	6,655.9	14.0	17.1	89.69	-1,404.1	-4,597.6	5,130.0	5,100.8	29.20	175.676		
6,950.0	6,935.7	6,744.3	6,704.0	14.0	17.2	81.90	-1,399.9	-4,601.2	5,131.5	5,102.1	29.34	174.874		
7,000.0	6,984.6	6,791.9	6,751.3	14.0	17.3	78.62	-1,395.8	-4,604.8	5,131.8	5,102.3	29.45	174.248		
7,050.0	7,032.6	6,838.3	6,797.4	14.0	17.4	76.97	-1,391.8	-4,608.3	5,130.9	5,101.4	29.53	173.781		
7,100.0	7,079.7	6,883.5	6,842.2	13.9	17.6	76.14	-1,387.9	-4,611.7	5,129.0	5,099.4	29.57	173.447		
7,150.0	7,125.4	6,927.0	6,885.5	13.9	17.7	75.78	-1,384.1	-4,615.0	5,126.0	5,096.4	29.59	173.221		
7,200.0	7,169.6	6,968.8	6,927.0	13.8	17.8	75.75	-1,380.5	-4,618.2	5,122.0	5,092.4	29.60	173.069		
7,250.0	7,212.1	7,008.6	6,966.5	13.8	17.9	75.94	-1,377.1	-4,621.2	5,117.1	5,087.5	29.59	172.956		
7,300.0	7,252.6	7,046.2	7,003.9	13.7	18.0	76.32	-1,373.8	-4,624.0	5,111.3	5,081.7	29.57	172.844		
7,350.0	7,291.0	7,081.5	7,039.0	13.7	18.1	76.84	-1,370.8	-4,626.7	5,104.7	5,075.1	29.56	172.693		
7,400.0	7,327.1	7,114.3	7,071.5	13.7	18.2	77.47	-1,367.9	-4,629.1	5,097.3	5,067.8	29.56	172.461		
7,450.0	7,360.7	7,144.3	7,101.4	13.7	18.3	78.18	-1,365.3	-4,631.4	5,089.4	5,059.8	29.57	172.109		
7,500.0	7,391.6	7,171.6	7,128.4	13.7	18.3	78.97	-1,363.0	-4,633.5	5,080.9	5,051.3	29.61	171.600		
7,550.0	7,419.7	7,181.5	7,138.3	13.8	18.4	79.65	-1,362.1	-4,634.2	5,071.9	5,042.3	29.64	171.099		
7,600.0	7,444.8	7,192.2	7,148.9	13.9	18.4	80.40	-1,361.3	-4,635.0	5,062.6	5,032.9	29.72	170.356		
7,650.0	7,466.9	7,200.0	7,156.7	14.1	18.4	81.17	-1,360.8	-4,635.6	5,053.1	5,023.3	29.83	169.371		
7,700.0	7,485.8	7,200.0	7,156.7	14.3	18.4	81.88	-1,360.8	-4,635.6	5,043.4	5,013.4	29.99	168.192		
7,750.0	7,501.5	7,200.0	7,156.7	14.6	18.4	82.62	-1,360.8	-4,635.6	5,033.5	5,003.3	30.19	166.732		
7,800.0	7,513.7	7,200.0	7,156.7	14.9	18.4	83.39	-1,360.8	-4,635.6	5,023.5	4,993.1	30.45	165.001		
7,850.0	7,522.6	7,200.0	7,156.7	15.2	18.4	84.17	-1,360.8	-4,635.6	5,013.5	4,982.8	30.75	163.020		
7,900.0	7,528.0	7,200.0	7,156.7	15.6	18.4	84.97	-1,360.8	-4,635.6	5,003.5	4,972.4	31.11	160.820		
7,952.9	7,530.0	7,200.0	7,156.7	16.1	18.4	85.81	-1,360.8	-4,635.6	4,993.0	4,961.4	31.54	158.290		
8,000.0	7,530.0	7,200.0	7,156.7	16.5	18.4	85.81	-1,360.8	-4,635.6	4,983.9	4,951.9	32.00	155.758		
8,100.0	7,530.0	7,200.0	7,156.7	17.5	18.4	85.81	-1,360.8	-4,635.6	4,966.0	4,932.9	33.06	150.229		
8,200.0	7,530.0	7,200.0	7,156.7	18.7	18.4	85.81	-1,360.8	-4,635.6	4,950.0	4,915.8	34.22	144.645		
8,300.0	7,530.0	7,200.0	7,156.7	19.9	18.4	85.81	-1,360.8	-4,635.6	4,936.0	4,900.5	35.48	139.139		
8,400.0	7,530.0	7,200.0	7,156.7	21.2	18.4	85.81	-1,360.8	-4,635.6	4,924.0	4,887.2	36.80	133.800		
8,500.0	7,530.0	7,200.0	7,156.7	22.6	18.4	85.81	-1,360.8	-4,635.6	4,914.0	4,875.9	38.19	128.686		
8,600.0	7,530.0	7,200.0	7,156.7	24.0	18.4	85.81	-1,360.8	-4,635.6	4,906.1	4,866.5	39.62	123.829		
8,700.0	7,530.0	7,200.0	7,156.7	25.4	18.4	85.81	-1,360.8	-4,635.6	4,900.1	4,859.0	41.09	119.243		
8,800.0	7,530.0	7,195.4	7,152.1	26.9	18.4	85.76	-1,361.1	-4,635.3	4,896.2	4,853.6	42.59	114.962		
8,900.0	7,530.0	7,189.6	7,146.4	28.4	18.4	85.69	-1,361.5	-4,634.8	4,894.4	4,850.2	44.11	110.955		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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		
8,942.1	7,530.0	7,186.6	7,143.4	29.1	18.4	85.66	-1,361.7	-4,634.6	4,894.2	4,849.4	44.76	109.343		
9,000.0	7,530.0	7,181.6	7,138.4	30.0	18.4	85.60	-1,362.1	-4,634.2	4,894.5	4,848.9	45.65	107.217		
9,100.0	7,530.0	7,173.0	7,129.8	31.5	18.3	85.50	-1,362.9	-4,633.6	4,896.7	4,849.5	47.20	103.733		
9,200.0	7,530.0	7,164.3	7,121.2	33.1	18.3	85.40	-1,363.6	-4,632.9	4,900.9	4,852.1	48.78	100.479		
9,300.0	7,530.0	7,155.7	7,112.6	34.7	18.3	85.30	-1,364.4	-4,632.3	4,907.2	4,856.8	50.36	97.439		
9,400.0	7,530.0	7,147.0	7,104.1	36.3	18.3	85.20	-1,365.1	-4,631.6	4,915.4	4,863.4	51.96	94.602		
9,500.0	7,530.0	7,138.4	7,095.5	38.0	18.2	85.09	-1,365.9	-4,631.0	4,925.6	4,872.1	53.57	91.953		
9,600.0	7,530.0	8,217.0	7,759.0	39.6	17.3	92.85	-2,018.8	-4,681.5	4,933.1	4,879.4	53.72	91.831		
9,700.0	7,530.0	8,317.0	7,759.0	41.3	17.7	92.85	-2,118.8	-4,681.5	4,933.1	4,877.2	55.87	88.303		
9,800.0	7,530.0	8,417.0	7,759.0	42.9	18.3	92.85	-2,218.8	-4,681.5	4,933.1	4,874.9	58.20	84.758		
9,900.0	7,530.0	8,517.0	7,759.0	44.6	19.0	92.85	-2,318.8	-4,681.5	4,933.1	4,872.4	60.71	81.261		
10,000.0	7,530.0	8,617.0	7,759.0	46.3	19.9	92.85	-2,418.8	-4,681.5	4,933.2	4,869.8	63.35	77.865		
10,100.0	7,530.0	8,717.0	7,759.0	47.9	20.8	92.85	-2,518.8	-4,681.5	4,933.2	4,867.0	66.12	74.605		
10,200.0	7,530.0	8,817.0	7,759.0	49.6	21.9	92.85	-2,618.8	-4,681.6	4,933.2	4,864.2	68.99	71.501		
10,300.0	7,530.0	8,917.0	7,759.0	51.3	23.0	92.85	-2,718.8	-4,681.6	4,933.2	4,861.3	71.95	68.565		
10,400.0	7,530.0	9,017.0	7,759.0	53.0	24.2	92.85	-2,818.8	-4,681.6	4,933.2	4,858.2	74.97	65.798		
10,500.0	7,530.0	9,117.0	7,759.0	54.7	25.5	92.85	-2,918.8	-4,681.6	4,933.2	4,855.2	78.06	63.199		
10,600.0	7,530.0	9,217.0	7,759.0	56.4	26.9	92.85	-3,018.8	-4,681.6	4,933.3	4,852.1	81.19	60.760		
10,700.0	7,530.0	9,317.0	7,759.0	58.1	28.2	92.85	-3,118.8	-4,681.6	4,933.3	4,848.9	84.37	58.473		
10,800.0	7,530.0	9,417.0	7,759.0	59.8	29.7	92.85	-3,218.8	-4,681.7	4,933.3	4,845.7	87.58	56.330		
10,900.0	7,530.0	9,517.0	7,759.0	61.5	31.1	92.85	-3,318.8	-4,681.7	4,933.3	4,842.5	90.82	54.321		
11,000.0	7,530.0	9,617.0	7,759.0	63.2	32.6	92.85	-3,418.8	-4,681.7	4,933.3	4,839.2	94.08	52.435		
11,100.0	7,530.0	9,717.0	7,759.0	64.9	34.1	92.85	-3,518.8	-4,681.7	4,933.3	4,836.0	97.37	50.665		
11,200.0	7,530.0	9,817.0	7,759.0	66.6	35.6	92.85	-3,618.8	-4,681.7	4,933.4	4,832.7	100.68	49.000		
11,300.0	7,530.0	9,917.0	7,759.0	68.4	37.2	92.85	-3,718.8	-4,681.7	4,933.4	4,829.4	104.00	47.434		
11,400.0	7,530.0	10,017.0	7,759.0	70.1	38.7	92.85	-3,818.8	-4,681.8	4,933.4	4,826.0	107.34	45.959		
11,500.0	7,530.0	10,117.0	7,759.0	71.8	40.3	92.85	-3,918.8	-4,681.8	4,933.4	4,822.7	110.70	44.567		
11,600.0	7,530.0	10,217.0	7,759.0	73.5	41.9	92.85	-4,018.8	-4,681.8	4,933.4	4,819.4	114.06	43.253		
11,700.0	7,530.0	10,317.0	7,759.0	75.2	43.5	92.85	-4,118.8	-4,681.8	4,933.4	4,816.0	117.43	42.011		
11,800.0	7,530.0	10,417.0	7,759.0	77.0	45.2	92.85	-4,218.8	-4,681.8	4,933.5	4,812.6	120.82	40.834		
11,900.0	7,530.0	10,517.0	7,759.0	78.7	46.8	92.85	-4,318.8	-4,681.8	4,933.5	4,809.3	124.21	39.720		
12,000.0	7,530.0	10,617.0	7,759.0	80.4	48.4	92.85	-4,418.8	-4,681.9	4,933.5	4,805.9	127.61	38.662		
12,100.0	7,530.0	10,717.0	7,759.0	82.2	50.1	92.85	-4,518.8	-4,681.9	4,933.5	4,802.5	131.01	37.657		
12,200.0	7,530.0	10,817.0	7,759.0	83.9	51.7	92.85	-4,618.8	-4,681.9	4,933.5	4,799.1	134.42	36.702		
12,300.0	7,530.0	10,917.0	7,759.0	85.6	53.4	92.85	-4,718.8	-4,681.9	4,933.5	4,795.7	137.84	35.792		
12,400.0	7,530.0	11,017.0	7,759.0	87.3	55.0	92.85	-4,818.8	-4,681.9	4,933.6	4,792.3	141.26	34.925		
12,500.0	7,530.0	11,117.0	7,759.0	89.1	56.7	92.85	-4,918.8	-4,681.9	4,933.6	4,788.9	144.69	34.098		
12,600.0	7,530.0	11,217.0	7,759.0	90.8	58.4	92.85	-5,018.8	-4,682.0	4,933.6	4,785.5	148.12	33.308		
12,700.0	7,530.0	11,317.0	7,759.0	92.5	60.1	92.85	-5,118.8	-4,682.0	4,933.6	4,782.0	151.55	32.554		
12,800.0	7,530.0	11,417.0	7,759.0	94.3	61.8	92.85	-5,218.8	-4,682.0	4,933.6	4,778.6	154.99	31.832		
12,900.0	7,530.0	11,517.0	7,759.0	96.0	63.4	92.85	-5,318.8	-4,682.0	4,933.6	4,775.2	158.43	31.140		
13,000.0	7,530.0	11,617.0	7,759.0	97.8	65.1	92.85	-5,418.8	-4,682.0	4,933.7	4,771.8	161.88	30.478		
13,100.0	7,530.0	11,717.0	7,759.0	99.5	66.8	92.85	-5,518.8	-4,682.0	4,933.7	4,768.3	165.32	29.842		
13,200.0	7,530.0	11,817.0	7,759.0	101.2	68.5	92.85	-5,618.8	-4,682.1	4,933.7	4,764.9	168.77	29.232		
13,300.0	7,530.0	11,917.0	7,759.0	103.0	70.2	92.85	-5,718.8	-4,682.1	4,933.7	4,761.5	172.23	28.647		
13,400.0	7,530.0	12,017.0	7,759.0	104.7	71.9	92.85	-5,818.8	-4,682.1	4,933.7	4,758.0	175.68	28.083		
13,500.0	7,530.0	12,117.0	7,759.0	106.4	73.6	92.85	-5,918.8	-4,682.1	4,933.7	4,754.6	179.14	27.541		
13,600.0	7,530.0	12,217.0	7,759.0	108.2	75.3	92.85	-6,018.8	-4,682.1	4,933.8	4,751.2	182.60	27.020		
13,700.0	7,530.0	12,317.0	7,759.0	109.9	77.0	92.85	-6,118.8	-4,682.1	4,933.8	4,747.7	186.06	26.517		
13,800.0	7,530.0	12,417.0	7,759.0	111.7	78.8	92.85	-6,218.8	-4,682.2	4,933.8	4,744.3	189.52	26.033		
13,900.0	7,530.0	12,517.0	7,759.0	113.4	80.5	92.85	-6,318.8	-4,682.2	4,933.8	4,740.8	192.98	25.566		
14,000.0	7,530.0	12,617.0	7,759.0	115.1	82.2	92.85	-6,418.8	-4,682.2	4,933.8	4,737.4	196.45	25.115		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	12,717.0	7,759.0	116.9	83.9	92.85	-6,518.8	-4,682.2	4,933.8	4,733.9	199.92	24.679		
14,200.0	7,530.0	12,817.0	7,759.0	118.6	85.6	92.85	-6,618.8	-4,682.2	4,933.9	4,730.5	203.39	24.259		
14,300.0	7,530.0	12,917.0	7,759.0	120.4	87.3	92.85	-6,718.8	-4,682.2	4,933.9	4,727.0	206.86	23.852		
14,400.0	7,530.0	13,017.0	7,759.0	122.1	89.1	92.85	-6,818.8	-4,682.3	4,933.9	4,723.6	210.33	23.458		
14,500.0	7,530.0	13,117.0	7,759.0	123.9	90.8	92.85	-6,918.8	-4,682.3	4,933.9	4,720.1	213.80	23.077		
14,600.0	7,530.0	13,217.0	7,759.0	125.6	92.5	92.85	-7,018.8	-4,682.3	4,933.9	4,716.6	217.27	22.709		
14,700.0	7,530.0	13,317.0	7,759.0	127.3	94.2	92.85	-7,118.8	-4,682.3	4,933.9	4,713.2	220.75	22.351		
14,800.0	7,530.0	13,417.0	7,759.0	129.1	96.0	92.85	-7,218.8	-4,682.3	4,934.0	4,709.7	224.22	22.005		
14,900.0	7,530.0	13,517.0	7,759.0	130.8	97.7	92.85	-7,318.8	-4,682.3	4,934.0	4,706.3	227.70	21.669		
15,000.0	7,530.0	13,617.0	7,759.0	132.6	99.4	92.85	-7,418.8	-4,682.4	4,934.0	4,702.8	231.17	21.343		
15,100.0	7,530.0	13,717.0	7,759.0	134.3	101.1	92.85	-7,518.8	-4,682.4	4,934.0	4,699.3	234.65	21.027		
15,200.0	7,530.0	13,817.0	7,759.0	136.1	102.9	92.85	-7,618.8	-4,682.4	4,934.0	4,695.9	238.13	20.720		
15,300.0	7,530.0	13,917.0	7,759.0	137.8	104.6	92.85	-7,718.8	-4,682.4	4,934.0	4,692.4	241.61	20.421		
15,400.0	7,530.0	14,017.0	7,759.0	139.6	106.3	92.85	-7,818.8	-4,682.4	4,934.1	4,689.0	245.09	20.132		
15,500.0	7,530.0	14,117.0	7,759.0	141.3	108.1	92.85	-7,918.8	-4,682.4	4,934.1	4,685.5	248.57	19.850		
15,600.0	7,530.0	14,217.0	7,759.0	143.0	109.8	92.85	-8,018.8	-4,682.5	4,934.1	4,682.0	252.05	19.576		
15,700.0	7,530.0	14,317.0	7,759.0	144.8	111.5	92.85	-8,118.8	-4,682.5	4,934.1	4,678.6	255.54	19.309		
15,800.0	7,530.0	14,417.0	7,759.0	146.5	113.3	92.85	-8,218.8	-4,682.5	4,934.1	4,675.1	259.02	19.049		
15,900.0	7,530.0	14,517.0	7,759.0	148.3	115.0	92.85	-8,318.8	-4,682.5	4,934.1	4,671.6	262.50	18.797		
16,000.0	7,530.0	14,617.0	7,759.0	150.0	116.7	92.85	-8,418.8	-4,682.5	4,934.1	4,668.2	265.99	18.550		
16,100.0	7,530.0	14,717.0	7,759.0	151.8	118.5	92.85	-8,518.8	-4,682.5	4,934.2	4,664.7	269.47	18.311		
16,200.0	7,530.0	14,817.0	7,759.0	153.5	120.2	92.85	-8,618.8	-4,682.6	4,934.2	4,661.2	272.96	18.077		
16,300.0	7,530.0	14,917.0	7,759.0	155.3	121.9	92.85	-8,718.8	-4,682.6	4,934.2	4,657.8	276.44	17.849		
16,400.0	7,530.0	15,017.0	7,759.0	157.0	123.7	92.85	-8,818.8	-4,682.6	4,934.2	4,654.3	279.93	17.627		
16,500.0	7,530.0	15,117.0	7,759.0	158.8	125.4	92.85	-8,918.8	-4,682.6	4,934.2	4,650.8	283.41	17.410		
16,600.0	7,530.0	15,217.0	7,759.0	160.5	127.2	92.85	-9,018.8	-4,682.6	4,934.2	4,647.3	286.90	17.198		
16,700.0	7,530.0	15,317.0	7,759.0	162.3	128.9	92.85	-9,118.8	-4,682.6	4,934.3	4,643.9	290.39	16.992		
16,800.0	7,530.0	15,417.0	7,759.0	164.0	130.6	92.85	-9,218.8	-4,682.7	4,934.3	4,640.4	293.88	16.790		
16,900.0	7,530.0	15,517.0	7,759.0	165.8	132.4	92.85	-9,318.8	-4,682.7	4,934.3	4,636.9	297.36	16.593		
17,000.0	7,530.0	15,617.0	7,759.0	167.5	134.1	92.85	-9,418.8	-4,682.7	4,934.3	4,633.5	300.85	16.401		
17,100.0	7,530.0	15,717.0	7,759.0	169.3	135.9	92.85	-9,518.8	-4,682.7	4,934.3	4,630.0	304.34	16.213		
17,200.0	7,530.0	15,817.0	7,759.0	171.0	137.6	92.85	-9,618.8	-4,682.7	4,934.3	4,626.5	307.83	16.029		
17,300.0	7,530.0	15,917.0	7,759.0	172.8	139.3	92.85	-9,718.8	-4,682.7	4,934.4	4,623.0	311.32	15.850		
17,339.8	7,530.0	15,956.8	7,759.0	173.4	140.0	92.85	-9,758.7	-4,682.8	4,934.4	4,621.7	312.71	15.779		
17,400.0	7,530.0	15,981.1	7,759.0	174.5	140.4	92.85	-9,782.9	-4,682.8	4,934.5	4,620.3	314.19	15.706		
17,420.9	7,530.0	15,981.1	7,759.0	174.9	140.4	92.85	-9,782.9	-4,682.8	4,934.7	4,620.2	314.55	15.688 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-115.07	-1,931.1	-4,127.3	4,556.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.07	-1,931.1	-4,127.3	4,556.7	4,556.5	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.07	-1,931.1	-4,127.3	4,556.7	4,556.1	0.60	7,545.685		
300.0	300.0	284.0	284.0	0.5	0.5	-115.07	-1,931.1	-4,127.3	4,556.7	4,555.8	0.95	4,781.699		
400.0	400.0	396.1	396.1	0.7	0.6	-115.06	-1,930.3	-4,127.5	4,556.6	4,555.3	1.32	3,442.680		
500.0	500.0	510.5	510.4	0.8	0.9	-115.03	-1,927.4	-4,128.3	4,556.2	4,554.5	1.70	2,678.903		
600.0	600.0	624.7	624.5	1.0	1.1	-114.96	-1,922.3	-4,129.8	4,555.4	4,553.4	2.08	2,186.517		
676.2	676.2	711.6	711.2	1.2	1.2	-147.37	-1,916.9	-4,131.3	4,555.1	4,552.7	2.40	1,899.824		
700.0	700.0	738.7	738.3	1.2	1.3	-147.35	-1,915.0	-4,131.9	4,555.1	4,552.6	2.50	1,825.005		
800.0	800.0	848.1	847.3	1.4	1.5	-147.25	-1,906.0	-4,134.5	4,556.0	4,553.1	2.90	1,568.910		
900.0	899.9	947.8	946.6	1.6	1.8	-147.15	-1,897.4	-4,136.9	4,558.3	4,555.0	3.30	1,381.830		
988.4	988.1	1,036.0	1,034.5	1.7	1.9	-147.07	-1,889.7	-4,139.1	4,561.6	4,557.9	3.65	1,249.093		
1,000.0	999.7	1,047.6	1,046.0	1.7	2.0	-147.06	-1,888.7	-4,139.4	4,562.1	4,558.4	3.70	1,233.426		
1,100.0	1,099.4	1,147.4	1,145.3	1.9	2.2	-147.00	-1,880.1	-4,141.9	4,566.4	4,562.3	4.10	1,112.758		
1,200.0	1,199.2	1,247.2	1,244.7	2.1	2.4	-146.93	-1,871.4	-4,144.3	4,570.7	4,566.2	4.51	1,013.161		
1,300.0	1,299.0	1,346.9	1,344.1	2.3	2.7	-146.87	-1,862.8	-4,146.8	4,575.1	4,570.1	4.92	929.686		
1,400.0	1,398.8	1,446.7	1,443.4	2.5	2.9	-146.80	-1,854.1	-4,149.3	4,579.4	4,574.1	5.33	858.786		
1,500.0	1,498.5	1,546.5	1,542.8	2.7	3.1	-146.74	-1,845.5	-4,151.7	4,583.7	4,578.0	5.75	797.864		
1,600.0	1,598.3	1,646.2	1,642.2	2.9	3.3	-146.67	-1,836.9	-4,154.2	4,588.1	4,581.9	6.16	744.982		
1,700.0	1,698.1	1,746.0	1,741.5	3.2	3.6	-146.61	-1,828.2	-4,156.7	4,592.5	4,585.9	6.57	698.665		
1,800.0	1,797.8	1,845.8	1,840.9	3.4	3.8	-146.54	-1,819.6	-4,159.1	4,596.8	4,589.8	6.99	657.776		
1,900.0	1,897.6	1,945.5	1,940.3	3.6	4.0	-146.48	-1,810.9	-4,161.6	4,601.2	4,593.8	7.40	621.421		
2,000.0	1,997.4	2,045.3	2,039.6	3.8	4.3	-146.41	-1,802.3	-4,164.1	4,605.6	4,597.8	7.82	588.894		
2,100.0	2,097.1	2,145.1	2,139.0	4.0	4.5	-146.35	-1,793.6	-4,166.5	4,610.0	4,601.7	8.24	559.623		
2,200.0	2,196.9	2,244.9	2,238.3	4.2	4.7	-146.29	-1,785.0	-4,169.0	4,614.4	4,605.7	8.65	533.147		
2,300.0	2,296.7	2,344.6	2,337.7	4.4	5.0	-146.22	-1,776.3	-4,171.5	4,618.8	4,609.7	9.07	509.087		
2,400.0	2,396.5	2,444.4	2,437.1	4.6	5.2	-146.16	-1,767.7	-4,174.0	4,623.2	4,613.7	9.49	487.127		
2,500.0	2,496.2	2,544.2	2,536.4	4.8	5.4	-146.09	-1,759.1	-4,176.4	4,627.6	4,617.7	9.91	467.006		
2,600.0	2,596.0	2,643.9	2,635.8	5.0	5.7	-146.03	-1,750.4	-4,178.9	4,632.0	4,621.7	10.33	448.504		
2,700.0	2,695.8	2,743.7	2,735.2	5.2	5.9	-145.97	-1,741.8	-4,181.4	4,636.4	4,625.7	10.75	431.433		
2,800.0	2,795.5	2,843.5	2,834.5	5.4	6.1	-145.90	-1,733.1	-4,183.8	4,640.8	4,629.7	11.17	415.634		
2,900.0	2,895.3	2,943.2	2,933.9	5.6	6.4	-145.84	-1,724.5	-4,186.3	4,645.3	4,633.7	11.59	400.971		
3,000.0	2,995.1	3,043.0	3,033.3	5.9	6.6	-145.78	-1,715.8	-4,188.8	4,649.7	4,637.7	12.00	387.326		
3,100.0	3,094.9	3,142.8	3,132.6	6.1	6.8	-145.71	-1,707.2	-4,191.2	4,654.2	4,641.7	12.42	374.597		
3,200.0	3,194.6	3,242.6	3,232.0	6.3	7.1	-145.65	-1,698.5	-4,193.7	4,658.6	4,645.8	12.84	362.695		
3,300.0	3,294.4	3,342.3	3,331.3	6.5	7.3	-145.59	-1,689.9	-4,196.2	4,663.1	4,649.8	13.26	351.543		
3,400.0	3,394.2	3,442.1	3,430.7	6.7	7.5	-145.52	-1,681.3	-4,198.6	4,667.5	4,653.8	13.68	341.071		
3,500.0	3,493.9	3,541.9	3,530.1	6.9	7.8	-145.46	-1,672.6	-4,201.1	4,672.0	4,657.9	14.11	331.219		
3,600.0	3,593.7	3,641.6	3,629.4	7.1	8.0	-145.40	-1,664.0	-4,203.6	4,676.5	4,661.9	14.53	321.935		
3,700.0	3,693.5	3,741.4	3,728.8	7.3	8.2	-145.34	-1,655.3	-4,206.1	4,680.9	4,666.0	14.95	313.171		
3,800.0	3,793.2	3,841.2	3,828.2	7.5	8.5	-145.27	-1,646.7	-4,208.5	4,685.4	4,670.0	15.37	304.884		
3,900.0	3,893.0	3,940.9	3,927.5	7.7	8.7	-145.21	-1,638.0	-4,211.0	4,689.9	4,674.1	15.79	297.037		
4,000.0	3,992.8	4,040.7	4,026.9	8.0	8.9	-145.15	-1,629.4	-4,213.5	4,694.4	4,678.2	16.21	289.595		
4,100.0	4,092.6	4,140.5	4,126.3	8.2	9.2	-145.09	-1,620.7	-4,215.9	4,698.9	4,682.3	16.63	282.528		
4,200.0	4,192.3	4,240.2	4,225.6	8.4	9.4	-145.03	-1,612.1	-4,218.4	4,703.4	4,686.3	17.05	275.808		
4,300.0	4,292.1	4,340.0	4,325.0	8.6	9.6	-144.96	-1,603.5	-4,220.9	4,707.9	4,690.4	17.47	269.411		
4,400.0	4,391.9	4,439.8	4,424.3	8.8	9.9	-144.90	-1,594.8	-4,223.3	4,712.4	4,694.5	17.90	263.314		
4,500.0	4,491.6	4,539.6	4,523.7	9.0	10.1	-144.84	-1,586.2	-4,225.8	4,716.9	4,698.6	18.32	257.496		
4,600.0	4,591.4	4,639.3	4,623.1	9.2	10.3	-144.78	-1,577.5	-4,228.3	4,721.5	4,702.7	18.74	251.939		
4,700.0	4,691.2	4,739.1	4,722.4	9.4	10.6	-144.72	-1,568.9	-4,230.7	4,726.0	4,706.8	19.16	246.625		
4,800.0	4,790.9	4,838.9	4,821.8	9.6	10.8	-144.66	-1,560.2	-4,233.2	4,730.5	4,711.0	19.58	241.539		
4,900.0	4,890.7	4,938.6	4,921.2	9.8	11.0	-144.60	-1,551.6	-4,235.7	4,735.1	4,715.1	20.01	236.667		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	
5,000.0	4,990.5	5,038.4	5,020.5	10.1	11.3	-144.54	-1,542.9	-4,238.1	4,739.6	4,719.2	20.43	231.995	
5,100.0	5,090.3	5,138.2	5,119.9	10.3	11.5	-144.48	-1,534.3	-4,240.6	4,744.2	4,723.3	20.85	227.512	
5,200.0	5,190.0	5,237.9	5,219.3	10.5	11.8	-144.41	-1,525.7	-4,243.1	4,748.7	4,727.5	21.28	223.206	
5,300.0	5,289.8	5,337.7	5,318.6	10.7	12.0	-144.35	-1,517.0	-4,245.6	4,753.3	4,731.6	21.70	219.067	
5,400.0	5,389.6	5,437.5	5,418.0	10.9	12.2	-144.29	-1,508.4	-4,248.0	4,757.9	4,735.7	22.12	215.085	
5,500.0	5,489.3	5,537.3	5,517.3	11.1	12.5	-144.23	-1,499.7	-4,250.5	4,762.4	4,739.9	22.54	211.252	
5,600.0	5,589.1	5,637.0	5,616.7	11.3	12.7	-144.17	-1,491.1	-4,253.0	4,767.0	4,744.1	22.97	207.559	
5,700.0	5,688.9	5,736.8	5,716.1	11.5	12.9	-144.11	-1,482.4	-4,255.4	4,771.6	4,748.2	23.39	203.999	
5,800.0	5,788.7	5,836.6	5,815.4	11.7	13.2	-144.05	-1,473.8	-4,257.9	4,776.2	4,752.4	23.81	200.566	
5,900.0	5,888.4	5,936.3	5,914.8	11.9	13.4	-143.99	-1,465.1	-4,260.4	4,780.8	4,756.6	24.24	197.251	
6,000.0	5,988.2	6,036.1	6,014.2	12.2	13.6	-143.93	-1,456.5	-4,262.8	4,785.4	4,760.7	24.66	194.050	
6,100.0	6,088.0	6,135.9	6,113.5	12.4	13.9	-143.87	-1,447.9	-4,265.3	4,790.0	4,764.9	25.08	190.956	
6,200.0	6,187.7	6,235.6	6,212.9	12.6	14.1	-143.81	-1,439.2	-4,267.8	4,794.6	4,769.1	25.51	187.965	
6,300.0	6,287.5	6,335.4	6,312.3	12.8	14.3	-143.76	-1,430.6	-4,270.2	4,799.2	4,773.3	25.93	185.071	
6,400.0	6,387.3	6,435.2	6,411.6	13.0	14.6	-143.70	-1,421.9	-4,272.7	4,803.8	4,777.5	26.36	182.270	
6,500.0	6,487.0	6,534.9	6,511.0	13.2	14.8	-143.64	-1,413.3	-4,275.2	4,808.5	4,781.7	26.78	179.556	
6,600.0	6,586.8	6,634.7	6,610.3	13.4	15.0	-143.58	-1,404.6	-4,277.6	4,813.1	4,785.9	27.20	176.927	
6,700.0	6,686.6	6,734.5	6,709.7	13.6	15.3	-143.52	-1,396.0	-4,280.1	4,817.7	4,790.1	27.63	174.379	
6,787.0	6,773.4	6,821.3	6,796.2	13.8	15.5	-143.47	-1,388.5	-4,282.3	4,821.8	4,793.8	28.00	172.224	
6,800.0	6,786.4	6,834.3	6,809.1	13.8	15.5	-154.03	-1,387.3	-4,282.6	4,822.3	4,794.3	28.05	171.900	
6,850.0	6,836.3	6,884.0	6,858.6	13.9	15.6	118.80	-1,383.0	-4,283.8	4,823.7	4,795.5	28.25	170.768	
6,900.0	6,886.2	6,933.3	6,907.7	14.0	15.7	89.02	-1,378.8	-4,285.0	4,823.9	4,795.4	28.42	169.745	
6,950.0	6,935.7	6,982.0	6,956.2	14.0	15.8	81.42	-1,374.5	-4,286.2	4,822.8	4,794.2	28.57	168.823	
7,000.0	6,984.6	7,029.7	7,003.8	14.0	16.0	78.33	-1,370.4	-4,287.4	4,820.5	4,791.8	28.70	167.990	
7,050.0	7,032.6	7,076.4	7,050.2	14.0	16.1	76.89	-1,366.4	-4,288.6	4,817.0	4,788.2	28.80	167.230	
7,100.0	7,079.7	7,121.7	7,095.4	13.9	16.2	76.26	-1,362.4	-4,289.7	4,812.5	4,783.6	28.90	166.526	
7,150.0	7,125.4	7,163.1	7,136.6	13.9	16.3	76.10	-1,358.8	-4,290.7	4,806.9	4,777.9	28.98	165.892	
7,200.0	7,169.6	7,163.1	7,136.6	13.8	16.3	76.00	-1,358.8	-4,290.7	4,800.5	4,771.5	28.94	165.872	
7,250.0	7,212.1	7,185.5	7,158.9	13.8	16.3	76.25	-1,357.3	-4,291.3	4,793.3	4,764.4	28.95	165.572	
7,300.0	7,252.6	7,200.0	7,173.4	13.7	16.3	76.60	-1,356.8	-4,291.6	4,785.6	4,756.7	28.95	165.302	
7,350.0	7,291.0	7,200.0	7,173.4	13.7	16.3	76.97	-1,356.8	-4,291.6	4,777.3	4,748.4	28.94	165.102	
7,400.0	7,327.1	7,200.0	7,173.4	13.7	16.3	77.44	-1,356.8	-4,291.6	4,768.6	4,739.7	28.94	164.781	
7,450.0	7,360.7	7,225.8	7,199.2	13.7	16.4	78.21	-1,356.8	-4,292.3	4,759.2	4,730.2	28.99	164.141	
7,500.0	7,391.6	7,250.0	7,223.4	13.7	16.4	79.06	-1,357.9	-4,292.9	4,749.6	4,720.5	29.08	163.333	
7,550.0	7,419.7	7,250.0	7,223.4	13.8	16.4	79.75	-1,357.9	-4,292.9	4,739.5	4,710.3	29.17	162.457	
7,600.0	7,444.8	7,250.0	7,223.4	13.9	16.4	80.48	-1,357.9	-4,292.9	4,729.1	4,699.8	29.31	161.359	
7,650.0	7,466.9	7,250.0	7,223.4	14.1	16.4	81.24	-1,357.9	-4,292.9	4,718.6	4,689.1	29.49	160.029	
7,700.0	7,485.8	7,250.0	7,223.4	14.3	16.4	82.04	-1,357.9	-4,292.9	4,707.8	4,678.1	29.71	158.467	
7,750.0	7,501.5	7,273.3	7,246.6	14.6	16.4	83.14	-1,359.9	-4,293.5	4,696.8	4,666.9	29.98	156.659	
7,800.0	7,513.7	7,279.1	7,252.3	14.9	16.4	84.05	-1,360.5	-4,293.6	4,685.9	4,655.6	30.30	154.660	
7,850.0	7,522.6	7,300.0	7,273.0	15.2	16.4	85.17	-1,363.3	-4,294.1	4,675.0	4,644.4	30.66	152.476	
7,900.0	7,528.0	7,300.0	7,273.0	15.6	16.4	86.04	-1,363.3	-4,294.1	4,664.1	4,633.1	31.06	150.142	
7,952.9	7,530.0	7,300.0	7,273.0	16.1	16.4	86.96	-1,363.3	-4,294.1	4,652.7	4,621.2	31.54	147.541	
8,000.0	7,530.0	7,300.0	7,273.0	16.5	16.4	86.96	-1,363.3	-4,294.1	4,643.0	4,611.0	31.99	145.137	
8,100.0	7,530.0	7,300.0	7,273.0	17.5	16.4	86.96	-1,363.3	-4,294.1	4,623.7	4,590.6	33.05	139.901	
8,200.0	7,530.0	7,300.0	7,273.0	18.7	16.4	86.96	-1,363.3	-4,294.1	4,606.5	4,572.3	34.22	134.627	
8,300.0	7,530.0	7,313.5	7,286.3	19.9	16.3	87.13	-1,365.5	-4,294.4	4,591.3	4,555.9	35.46	129.477	
8,400.0	7,530.0	7,322.3	7,295.0	21.2	16.3	87.24	-1,367.1	-4,294.7	4,578.3	4,541.5	36.78	124.475	
8,500.0	7,530.0	7,332.8	7,305.3	22.6	16.3	87.37	-1,369.2	-4,294.9	4,567.4	4,529.3	38.16	119.694	
8,600.0	7,530.0	7,350.0	7,322.1	24.0	16.3	87.58	-1,373.0	-4,295.3	4,558.6	4,519.1	39.58	115.174	
8,700.0	7,530.0	7,361.3	7,333.0	25.4	16.3	87.72	-1,375.8	-4,295.6	4,552.0	4,510.9	41.04	110.920	
8,800.0	7,530.0	7,381.0	7,352.0	26.9	16.3	87.96	-1,381.2	-4,296.1	4,547.4	4,504.9	42.52	106.958	

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 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,530.0	7,406.7	7,376.3	28.4	16.2	88.26	-1,389.2	-4,296.7	4,544.8	4,500.8	44.01	103.278		
8,978.8	7,530.0	7,432.8	7,400.8	29.6	16.1	88.57	-1,398.4	-4,297.3	4,544.2	4,499.1	45.17	100.597 CC		
9,000.0	7,530.0	7,441.0	7,408.4	30.0	16.1	88.67	-1,401.5	-4,297.5	4,544.3	4,498.8	45.48	99.910		
9,100.0	7,530.0	7,489.0	7,451.7	31.5	16.0	89.21	-1,422.0	-4,298.6	4,545.6	4,498.7	46.92	96.875		
9,200.0	7,530.0	7,559.5	7,512.0	33.1	15.7	89.97	-1,458.4	-4,300.1	4,548.5	4,500.2	48.26	94.243		
9,300.0	7,530.0	7,668.4	7,595.1	34.7	15.3	91.02	-1,528.4	-4,302.2	4,552.4	4,503.0	49.41	92.133		
9,400.0	7,530.0	7,840.1	7,695.3	36.3	14.6	92.28	-1,667.1	-4,304.7	4,556.4	4,506.0	50.35	90.496		
9,500.0	7,530.0	8,084.1	7,758.3	38.0	14.4	93.07	-1,900.9	-4,306.3	4,558.4	4,506.7	51.74	88.106		
9,600.0	7,530.0	8,202.0	7,759.0	39.6	14.7	93.08	-2,018.9	-4,306.3	4,558.4	4,504.7	53.71	84.865		
9,700.0	7,530.0	8,302.0	7,759.0	41.3	15.2	93.08	-2,118.9	-4,306.3	4,558.4	4,502.6	55.87	81.586		
9,800.0	7,530.0	8,402.0	7,759.0	42.9	15.9	93.08	-2,218.9	-4,306.3	4,558.5	4,500.2	58.22	78.296		
9,900.0	7,530.0	8,502.0	7,759.0	44.6	16.7	93.08	-2,318.9	-4,306.4	4,558.5	4,497.7	60.74	75.055		
10,000.0	7,530.0	8,602.0	7,759.0	46.3	17.7	93.08	-2,418.9	-4,306.4	4,558.5	4,495.1	63.39	71.910		
10,100.0	7,530.0	8,702.0	7,759.0	47.9	18.8	93.08	-2,518.9	-4,306.4	4,558.5	4,492.3	66.17	68.893		
10,200.0	7,530.0	8,802.0	7,759.0	49.6	20.0	93.08	-2,618.9	-4,306.4	4,558.5	4,489.5	69.04	66.023		
10,300.0	7,530.0	8,902.0	7,759.0	51.3	21.2	93.08	-2,718.9	-4,306.4	4,558.5	4,486.5	72.00	63.310		
10,400.0	7,530.0	9,002.0	7,759.0	53.0	22.5	93.08	-2,818.9	-4,306.4	4,558.6	4,483.5	75.03	60.754		
10,500.0	7,530.0	9,102.0	7,759.0	54.7	23.9	93.08	-2,918.9	-4,306.5	4,558.6	4,480.5	78.12	58.353		
10,600.0	7,530.0	9,202.0	7,759.0	56.4	25.3	93.08	-3,018.9	-4,306.5	4,558.6	4,477.3	81.26	56.102		
10,700.0	7,530.0	9,302.0	7,759.0	58.1	26.8	93.08	-3,118.9	-4,306.5	4,558.6	4,474.2	84.43	53.991		
10,800.0	7,530.0	9,402.0	7,759.0	59.8	28.3	93.08	-3,218.9	-4,306.5	4,558.6	4,471.0	87.64	52.012		
10,900.0	7,530.0	9,502.0	7,759.0	61.5	29.8	93.08	-3,318.9	-4,306.5	4,558.6	4,467.8	90.89	50.158		
11,000.0	7,530.0	9,602.0	7,759.0	63.2	31.4	93.08	-3,418.9	-4,306.5	4,558.7	4,464.5	94.15	48.417		
11,100.0	7,530.0	9,702.0	7,759.0	64.9	32.9	93.08	-3,518.9	-4,306.6	4,558.7	4,461.2	97.44	46.783		
11,200.0	7,530.0	9,802.0	7,759.0	66.6	34.5	93.08	-3,618.9	-4,306.6	4,558.7	4,457.9	100.75	45.247		
11,300.0	7,530.0	9,902.0	7,759.0	68.4	36.1	93.08	-3,718.9	-4,306.6	4,558.7	4,454.6	104.07	43.802		
11,400.0	7,530.0	10,002.0	7,759.0	70.1	37.7	93.08	-3,818.9	-4,306.6	4,558.7	4,451.3	107.41	42.441		
11,500.0	7,530.0	10,102.0	7,759.0	71.8	39.4	93.08	-3,918.9	-4,306.6	4,558.7	4,448.0	110.77	41.156		
11,600.0	7,530.0	10,202.0	7,759.0	73.5	41.0	93.08	-4,018.9	-4,306.6	4,558.8	4,444.6	114.13	39.944		
11,700.0	7,530.0	10,302.0	7,759.0	75.2	42.7	93.08	-4,118.9	-4,306.7	4,558.8	4,441.3	117.50	38.797		
11,800.0	7,530.0	10,402.0	7,759.0	77.0	44.3	93.08	-4,218.9	-4,306.7	4,558.8	4,437.9	120.89	37.711		
11,900.0	7,530.0	10,502.0	7,759.0	78.7	46.0	93.08	-4,318.9	-4,306.7	4,558.8	4,434.5	124.28	36.682		
12,000.0	7,530.0	10,602.0	7,759.0	80.4	47.6	93.08	-4,418.9	-4,306.7	4,558.8	4,431.2	127.68	35.706		
12,100.0	7,530.0	10,702.0	7,759.0	82.2	49.3	93.08	-4,518.9	-4,306.7	4,558.8	4,427.8	131.08	34.779		
12,200.0	7,530.0	10,802.0	7,759.0	83.9	51.0	93.08	-4,618.9	-4,306.7	4,558.9	4,424.4	134.49	33.897		
12,300.0	7,530.0	10,902.0	7,759.0	85.6	52.7	93.08	-4,718.9	-4,306.8	4,558.9	4,421.0	137.91	33.057		
12,400.0	7,530.0	11,002.0	7,759.0	87.3	54.4	93.08	-4,818.9	-4,306.8	4,558.9	4,417.6	141.33	32.257		
12,500.0	7,530.0	11,102.0	7,759.0	89.1	56.1	93.08	-4,918.9	-4,306.8	4,558.9	4,414.2	144.76	31.494		
12,600.0	7,530.0	11,202.0	7,759.0	90.8	57.8	93.08	-5,018.9	-4,306.8	4,558.9	4,410.7	148.19	30.765		
12,700.0	7,530.0	11,302.0	7,759.0	92.5	59.5	93.08	-5,118.9	-4,306.8	4,558.9	4,407.3	151.62	30.068		
12,800.0	7,530.0	11,402.0	7,759.0	94.3	61.2	93.08	-5,218.9	-4,306.8	4,559.0	4,403.9	155.06	29.402		
12,900.0	7,530.0	11,502.0	7,759.0	96.0	62.9	93.08	-5,318.9	-4,306.9	4,559.0	4,400.5	158.50	28.763		
13,000.0	7,530.0	11,602.0	7,759.0	97.8	64.6	93.08	-5,418.9	-4,306.9	4,559.0	4,397.1	161.94	28.152		
13,100.0	7,530.0	11,702.0	7,759.0	99.5	66.3	93.08	-5,518.9	-4,306.9	4,559.0	4,393.6	165.39	27.565		
13,200.0	7,530.0	11,802.0	7,759.0	101.2	68.0	93.08	-5,618.9	-4,306.9	4,559.0	4,390.2	168.84	27.002		
13,300.0	7,530.0	11,902.0	7,759.0	103.0	69.7	93.08	-5,718.9	-4,306.9	4,559.0	4,386.8	172.29	26.461		
13,400.0	7,530.0	12,002.0	7,759.0	104.7	71.4	93.08	-5,818.9	-4,306.9	4,559.1	4,383.3	175.75	25.941		
13,500.0	7,530.0	12,102.0	7,759.0	106.4	73.2	93.08	-5,918.9	-4,307.0	4,559.1	4,379.9	179.20	25.441		
13,600.0	7,530.0	12,202.0	7,759.0	108.2	74.9	93.08	-6,018.9	-4,307.0	4,559.1	4,376.4	182.66	24.960		
13,700.0	7,530.0	12,302.0	7,759.0	109.9	76.6	93.08	-6,118.9	-4,307.0	4,559.1	4,373.0	186.12	24.496		
13,800.0	7,530.0	12,402.0	7,759.0	111.7	78.3	93.08	-6,218.9	-4,307.0	4,559.1	4,369.5	189.58	24.048		
13,900.0	7,530.0	12,502.0	7,759.0	113.4	80.1	93.08	-6,318.9	-4,307.0	4,559.1	4,366.1	193.04	23.617		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,000.0	7,530.0	12,602.0	7,759.0	115.1	81.8	93.08	-6,418.9	-4,307.0	4,559.2	4,362.7	196.51	23.201		
14,100.0	7,530.0	12,702.0	7,759.0	116.9	83.5	93.08	-6,518.9	-4,307.1	4,559.2	4,359.2	199.98	22.799		
14,200.0	7,530.0	12,802.0	7,759.0	118.6	85.2	93.08	-6,618.9	-4,307.1	4,559.2	4,355.7	203.44	22.410		
14,300.0	7,530.0	12,902.0	7,759.0	120.4	87.0	93.08	-6,718.9	-4,307.1	4,559.2	4,352.3	206.91	22.034		
14,400.0	7,530.0	13,002.0	7,759.0	122.1	88.7	93.08	-6,818.9	-4,307.1	4,559.2	4,348.8	210.38	21.671		
14,500.0	7,530.0	13,102.0	7,759.0	123.9	90.4	93.08	-6,918.9	-4,307.1	4,559.2	4,345.4	213.86	21.319		
14,600.0	7,530.0	13,202.0	7,759.0	125.6	92.2	93.08	-7,018.9	-4,307.1	4,559.3	4,341.9	217.33	20.979		
14,700.0	7,530.0	13,302.0	7,759.0	127.3	93.9	93.08	-7,118.9	-4,307.2	4,559.3	4,338.5	220.80	20.649		
14,800.0	7,530.0	13,402.0	7,759.0	129.1	95.6	93.08	-7,218.9	-4,307.2	4,559.3	4,335.0	224.28	20.329		
14,900.0	7,530.0	13,502.0	7,759.0	130.8	97.4	93.08	-7,318.9	-4,307.2	4,559.3	4,331.6	227.75	20.019		
15,000.0	7,530.0	13,602.0	7,759.0	132.6	99.1	93.08	-7,418.9	-4,307.2	4,559.3	4,328.1	231.23	19.718		
15,100.0	7,530.0	13,702.0	7,759.0	134.3	100.8	93.08	-7,518.9	-4,307.2	4,559.3	4,324.6	234.71	19.426		
15,200.0	7,530.0	13,802.0	7,759.0	136.1	102.6	93.08	-7,618.9	-4,307.2	4,559.4	4,321.2	238.18	19.142		
15,300.0	7,530.0	13,902.0	7,759.0	137.8	104.3	93.08	-7,718.9	-4,307.3	4,559.4	4,317.7	241.66	18.867		
15,400.0	7,530.0	14,002.0	7,759.0	139.6	106.0	93.08	-7,818.9	-4,307.3	4,559.4	4,314.3	245.14	18.599		
15,500.0	7,530.0	14,102.0	7,759.0	141.3	107.8	93.08	-7,918.9	-4,307.3	4,559.4	4,310.8	248.62	18.339		
15,600.0	7,530.0	14,202.0	7,759.0	143.0	109.5	93.08	-8,018.9	-4,307.3	4,559.4	4,307.3	252.10	18.086		
15,700.0	7,530.0	14,302.0	7,759.0	144.8	111.3	93.08	-8,118.9	-4,307.3	4,559.4	4,303.9	255.58	17.839		
15,800.0	7,530.0	14,402.0	7,759.0	146.5	113.0	93.08	-8,218.9	-4,307.3	4,559.5	4,300.4	259.07	17.600		
15,900.0	7,530.0	14,502.0	7,759.0	148.3	114.7	93.08	-8,318.9	-4,307.4	4,559.5	4,296.9	262.55	17.366		
16,000.0	7,530.0	14,602.0	7,759.0	150.0	116.5	93.08	-8,418.9	-4,307.4	4,559.5	4,293.5	266.03	17.139		
16,100.0	7,530.0	14,702.0	7,759.0	151.8	118.2	93.08	-8,518.9	-4,307.4	4,559.5	4,290.0	269.52	16.917		
16,200.0	7,530.0	14,802.0	7,759.0	153.5	120.0	93.08	-8,618.9	-4,307.4	4,559.5	4,286.5	273.00	16.701		
16,300.0	7,530.0	14,902.0	7,759.0	155.3	121.7	93.08	-8,718.9	-4,307.4	4,559.5	4,283.1	276.49	16.491		
16,400.0	7,530.0	15,002.0	7,759.0	157.0	123.4	93.08	-8,818.9	-4,307.4	4,559.6	4,279.6	279.97	16.286		
16,500.0	7,530.0	15,102.0	7,759.0	158.8	125.2	93.08	-8,918.9	-4,307.5	4,559.6	4,276.1	283.46	16.086		
16,600.0	7,530.0	15,202.0	7,759.0	160.5	126.9	93.08	-9,018.9	-4,307.5	4,559.6	4,272.6	286.94	15.890		
16,700.0	7,530.0	15,302.0	7,759.0	162.3	128.7	93.08	-9,118.9	-4,307.5	4,559.6	4,269.2	290.43	15.699		
16,800.0	7,530.0	15,402.0	7,759.0	164.0	130.4	93.08	-9,218.9	-4,307.5	4,559.6	4,265.7	293.92	15.513		
16,900.0	7,530.0	15,502.0	7,759.0	165.8	132.2	93.08	-9,318.9	-4,307.5	4,559.6	4,262.2	297.40	15.331		
17,000.0	7,530.0	15,602.0	7,759.0	167.5	133.9	93.08	-9,418.9	-4,307.5	4,559.7	4,258.8	300.89	15.154		
17,100.0	7,530.0	15,702.0	7,759.0	169.3	135.6	93.08	-9,518.9	-4,307.6	4,559.7	4,255.3	304.38	14.980		
17,200.0	7,530.0	15,802.0	7,759.0	171.0	137.4	93.08	-9,618.9	-4,307.6	4,559.7	4,251.8	307.87	14.810		
17,300.0	7,530.0	15,902.0	7,759.0	172.8	139.1	93.08	-9,718.9	-4,307.6	4,559.7	4,248.4	311.36	14.645		
17,342.9	7,530.0	15,944.9	7,759.0	173.5	139.9	93.08	-9,761.7	-4,307.6	4,559.7	4,246.9	312.85	14.575		
17,400.0	7,530.0	15,969.8	7,759.0	174.5	140.3	93.08	-9,786.6	-4,307.6	4,559.8	4,245.6	314.29	14.509		
17,420.9	7,530.0	15,969.8	7,759.0	174.9	140.3	93.08	-9,786.6	-4,307.6	4,560.0	4,245.4	314.65	14.492 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.17	-1,937.1	-4,122.3	4,554.8					
100.0	100.0	84.0	84.0	0.2	0.1	-115.17	-1,937.1	-4,122.3	4,554.8	4,554.5	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.17	-1,937.1	-4,122.3	4,554.8	4,554.2	0.60	7,542.472		
300.0	300.0	284.0	284.0	0.5	0.5	-115.17	-1,937.1	-4,122.3	4,554.8	4,553.8	0.95	4,779.663		
400.0	400.0	384.0	384.0	0.7	0.6	-115.17	-1,937.1	-4,122.3	4,554.8	4,553.5	1.30	3,498.252		
500.0	500.0	576.0	575.9	0.8	1.0	-115.14	-1,934.6	-4,121.6	4,553.9	4,552.1	1.81	2,513.353		
600.0	600.0	785.0	784.7	1.0	1.4	-115.05	-1,924.7	-4,118.8	4,550.7	4,548.4	2.35	1,933.598		
700.0	700.0	959.2	958.3	1.2	1.7	-147.42	-1,911.0	-4,114.8	4,546.0	4,543.1	2.88	1,577.178		
800.0	800.0	1,058.9	1,057.6	1.4	1.9	-147.37	-1,902.2	-4,112.3	4,542.1	4,538.9	3.26	1,394.233		
900.0	899.9	1,158.8	1,157.1	1.6	2.2	-147.32	-1,893.4	-4,109.8	4,539.8	4,536.2	3.64	1,248.287		
988.4	988.1	1,247.1	1,245.0	1.7	2.4	-147.29	-1,885.5	-4,107.6	4,538.9	4,535.0	3.98	1,141.850		
1,000.0	999.7	1,258.7	1,256.6	1.7	2.4	-147.28	-1,884.5	-4,107.3	4,538.9	4,534.9	4.02	1,129.138		
1,100.0	1,099.4	1,358.7	1,356.1	1.9	2.6	-147.24	-1,875.7	-4,104.8	4,538.6	4,534.2	4.41	1,029.942		
1,200.0	1,199.2	1,458.6	1,455.6	2.1	2.8	-147.20	-1,866.8	-4,102.2	4,538.3	4,533.5	4.80	946.347		
1,300.0	1,299.0	1,558.6	1,555.1	2.3	3.1	-147.16	-1,858.0	-4,099.7	4,538.0	4,532.8	5.19	875.017		
1,400.0	1,398.8	1,658.5	1,654.7	2.5	3.3	-147.12	-1,849.2	-4,097.2	4,537.7	4,532.1	5.58	813.487		
1,500.0	1,498.5	1,758.4	1,754.2	2.7	3.5	-147.07	-1,840.3	-4,094.6	4,537.4	4,531.4	5.97	759.896		
1,600.0	1,598.3	1,858.4	1,853.7	2.9	3.8	-147.03	-1,831.5	-4,092.1	4,537.1	4,530.7	6.36	712.822		
1,700.0	1,698.1	1,958.3	1,953.2	3.2	4.0	-146.99	-1,822.6	-4,089.6	4,536.8	4,530.0	6.76	671.158		
1,800.0	1,797.8	2,058.3	2,052.7	3.4	4.2	-146.95	-1,813.8	-4,087.1	4,536.5	4,529.3	7.15	634.031		
1,900.0	1,897.6	2,158.2	2,152.3	3.6	4.5	-146.91	-1,805.0	-4,084.5	4,536.2	4,528.6	7.55	600.747		
2,000.0	1,997.4	2,258.2	2,251.8	3.8	4.7	-146.86	-1,796.1	-4,082.0	4,535.9	4,527.9	7.95	570.742		
2,100.0	2,097.1	2,358.1	2,351.3	4.0	4.9	-146.82	-1,787.3	-4,079.5	4,535.6	4,527.3	8.34	543.558		
2,200.0	2,196.9	2,458.1	2,450.8	4.2	5.2	-146.78	-1,778.4	-4,077.0	4,535.3	4,526.6	8.74	518.818		
2,300.0	2,296.7	2,558.0	2,550.3	4.4	5.4	-146.74	-1,769.6	-4,074.4	4,535.0	4,525.9	9.14	496.209		
2,400.0	2,396.5	2,657.9	2,649.9	4.6	5.6	-146.70	-1,760.8	-4,071.9	4,534.7	4,525.2	9.54	475.469		
2,500.0	2,496.2	2,757.9	2,749.4	4.8	5.9	-146.66	-1,751.9	-4,069.4	4,534.5	4,524.5	9.94	456.375		
2,600.0	2,596.0	2,857.8	2,848.9	5.0	6.1	-146.61	-1,743.1	-4,066.9	4,534.2	4,523.9	10.33	438.741		
2,700.0	2,695.8	2,957.8	2,948.4	5.2	6.4	-146.57	-1,734.2	-4,064.3	4,533.9	4,523.2	10.73	422.406		
2,800.0	2,795.5	3,057.7	3,047.9	5.4	6.6	-146.53	-1,725.4	-4,061.8	4,533.6	4,522.5	11.13	407.232		
2,900.0	2,895.3	3,157.7	3,147.5	5.6	6.8	-146.49	-1,716.5	-4,059.3	4,533.4	4,521.8	11.53	393.101		
3,000.0	2,995.1	3,257.6	3,247.0	5.9	7.1	-146.45	-1,707.7	-4,056.8	4,533.1	4,521.2	11.93	379.908		
3,100.0	3,094.9	3,357.6	3,346.5	6.1	7.3	-146.40	-1,698.9	-4,054.2	4,532.8	4,520.5	12.33	367.564		
3,200.0	3,194.6	3,457.5	3,446.0	6.3	7.5	-146.36	-1,690.0	-4,051.7	4,532.6	4,519.8	12.73	355.989		
3,300.0	3,294.4	3,557.4	3,545.5	6.5	7.8	-146.32	-1,681.2	-4,049.2	4,532.3	4,519.2	13.13	345.114		
3,400.0	3,394.2	3,657.4	3,645.1	6.7	8.0	-146.28	-1,672.3	-4,046.7	4,532.1	4,518.5	13.53	334.878		
3,500.0	3,493.9	3,757.3	3,744.6	6.9	8.2	-146.24	-1,663.5	-4,044.1	4,531.8	4,517.9	13.93	325.226		
3,600.0	3,593.7	3,857.3	3,844.1	7.1	8.5	-146.19	-1,654.7	-4,041.6	4,531.6	4,517.2	14.34	316.110		
3,700.0	3,693.5	3,957.2	3,943.6	7.3	8.7	-146.15	-1,645.8	-4,039.1	4,531.3	4,516.6	14.74	307.486		
3,800.0	3,793.2	4,057.2	4,043.2	7.5	8.9	-146.11	-1,637.0	-4,036.5	4,531.1	4,515.9	15.14	299.315		
3,900.0	3,893.0	4,157.1	4,142.7	7.7	9.2	-146.07	-1,628.1	-4,034.0	4,530.8	4,515.3	15.54	291.563		
4,000.0	3,992.8	4,257.1	4,242.2	8.0	9.4	-146.03	-1,619.3	-4,031.5	4,530.6	4,514.6	15.94	284.199		
4,100.0	4,092.6	4,357.0	4,341.7	8.2	9.7	-145.99	-1,610.5	-4,029.0	4,530.3	4,514.0	16.34	277.194		
4,200.0	4,192.3	4,456.9	4,441.2	8.4	9.9	-145.94	-1,601.6	-4,026.4	4,530.1	4,513.3	16.75	270.523		
4,300.0	4,292.1	4,556.9	4,540.8	8.6	10.1	-145.90	-1,592.8	-4,023.9	4,529.9	4,512.7	17.15	264.162		
4,400.0	4,391.9	4,656.8	4,640.3	8.8	10.4	-145.86	-1,583.9	-4,021.4	4,529.6	4,512.1	17.55	258.090		
4,500.0	4,491.6	4,756.8	4,739.8	9.0	10.6	-145.82	-1,575.1	-4,018.9	4,529.4	4,511.4	17.95	252.289		
4,600.0	4,591.4	4,856.7	4,839.3	9.2	10.8	-145.78	-1,566.3	-4,016.3	4,529.2	4,510.8	18.36	246.740		
4,700.0	4,691.2	4,956.7	4,938.8	9.4	11.1	-145.73	-1,557.4	-4,013.8	4,528.9	4,510.2	18.76	241.427		
4,800.0	4,790.9	5,056.6	5,038.4	9.6	11.3	-145.69	-1,548.6	-4,011.3	4,528.7	4,509.6	19.16	236.336		
4,900.0	4,890.7	5,156.6	5,137.9	9.8	11.6	-145.65	-1,539.7	-4,008.8	4,528.5	4,508.9	19.57	231.453		
5,000.0	4,990.5	5,256.5	5,237.4	10.1	11.8	-145.61	-1,530.9	-4,006.2	4,528.3	4,508.3	19.97	226.765		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
5,100.0	5,090.3	5,356.4	5,336.9	10.3	12.0	-145.57	-1,522.1	-4,003.7	4,528.1	4,507.7	20.37	222.261			
5,200.0	5,190.0	5,456.4	5,436.4	10.5	12.3	-145.52	-1,513.2	-4,001.2	4,527.9	4,507.1	20.78	217.931			
5,300.0	5,289.8	5,556.3	5,536.0	10.7	12.5	-145.48	-1,504.4	-3,998.7	4,527.6	4,506.5	21.18	213.765			
5,400.0	5,389.6	5,656.3	5,635.5	10.9	12.7	-145.44	-1,495.5	-3,996.1	4,527.4	4,505.8	21.58	209.753			
5,500.0	5,489.3	5,756.2	5,735.0	11.1	13.0	-145.40	-1,486.7	-3,993.6	4,527.2	4,505.2	21.99	205.887			
5,600.0	5,589.1	5,856.2	5,834.5	11.3	13.2	-145.36	-1,477.9	-3,991.1	4,527.0	4,504.6	22.39	202.160			
5,700.0	5,688.9	5,956.1	5,934.0	11.5	13.4	-145.31	-1,469.0	-3,988.6	4,526.8	4,504.0	22.80	198.564			
5,800.0	5,788.7	6,056.1	6,033.6	11.7	13.7	-145.27	-1,460.2	-3,986.0	4,526.6	4,503.4	23.20	195.092			
5,900.0	5,888.4	6,156.0	6,133.1	11.9	13.9	-145.23	-1,451.3	-3,983.5	4,526.4	4,502.8	23.61	191.737			
6,000.0	5,988.2	6,255.9	6,232.6	12.2	14.2	-145.19	-1,442.5	-3,981.0	4,526.2	4,502.2	24.01	188.495			
6,100.0	6,088.0	6,355.9	6,332.1	12.4	14.4	-145.15	-1,433.6	-3,978.4	4,526.0	4,501.6	24.42	185.360			
6,200.0	6,187.7	6,455.8	6,431.7	12.6	14.6	-145.10	-1,424.8	-3,975.9	4,525.9	4,501.0	24.82	182.326			
6,300.0	6,287.5	6,555.8	6,531.2	12.8	14.9	-145.06	-1,416.0	-3,973.4	4,525.7	4,500.4	25.23	179.388			
6,400.0	6,387.3	6,655.7	6,630.7	13.0	15.1	-145.02	-1,407.1	-3,970.9	4,525.5	4,499.8	25.63	176.542			
6,500.0	6,487.0	6,755.7	6,730.2	13.2	15.3	-144.98	-1,398.3	-3,968.3	4,525.3	4,499.3	26.04	173.784			
6,600.0	6,586.8	6,855.6	6,829.7	13.4	15.6	-144.94	-1,389.4	-3,965.8	4,525.1	4,498.7	26.45	171.110			
6,700.0	6,686.6	6,955.6	6,929.3	13.6	15.8	-144.89	-1,380.6	-3,963.3	4,524.9	4,498.1	26.85	168.516			
6,787.0	6,773.4	7,042.5	7,015.8	13.8	16.0	-144.86	-1,372.9	-3,961.1	4,524.8	4,497.6	27.21	166.322			
6,800.0	6,786.4	7,055.5	7,028.8	13.8	16.0	-155.37	-1,371.8	-3,960.8	4,524.7	4,497.5	27.26	165.994			
6,850.0	6,836.3	7,105.3	7,078.4	13.9	16.2	117.63	-1,367.4	-3,959.5	4,523.6	4,496.2	27.45	164.797			
6,900.0	6,886.2	7,154.7	7,127.6	14.0	16.3	88.04	-1,363.0	-3,958.3	4,521.2	4,493.6	27.63	163.627			
6,950.0	6,935.7	7,162.7	7,135.6	14.0	16.3	80.50	-1,362.3	-3,958.1	4,517.7	4,490.0	27.70	163.072			
7,000.0	6,984.6	7,185.2	7,158.0	14.0	16.3	77.48	-1,360.7	-3,957.5	4,513.3	4,485.5	27.79	162.420			
7,050.0	7,032.6	7,200.0	7,172.7	14.0	16.4	76.03	-1,360.2	-3,957.1	4,508.0	4,480.2	27.85	161.875			
7,100.0	7,079.7	7,200.0	7,172.7	13.9	16.4	75.29	-1,360.2	-3,957.1	4,502.0	4,474.1	27.88	161.503			
7,150.0	7,125.4	7,221.1	7,193.9	13.9	16.4	75.09	-1,360.1	-3,956.6	4,495.1	4,467.2	27.93	160.962			
7,200.0	7,169.6	7,250.0	7,222.7	13.8	16.4	75.23	-1,361.2	-3,955.8	4,487.7	4,459.7	27.99	160.323			
7,250.0	7,212.1	7,250.0	7,222.7	13.8	16.4	75.43	-1,361.2	-3,955.8	4,479.3	4,451.3	28.03	159.817			
7,300.0	7,252.6	7,250.0	7,222.7	13.7	16.4	75.77	-1,361.2	-3,955.8	4,470.4	4,442.3	28.08	159.227			
7,350.0	7,291.0	7,250.0	7,222.7	13.7	16.4	76.23	-1,361.2	-3,955.8	4,461.0	4,432.8	28.14	158.526			
7,400.0	7,327.1	7,277.5	7,250.1	13.7	16.4	77.01	-1,363.6	-3,955.2	4,450.8	4,422.5	28.24	157.589			
7,450.0	7,360.7	7,300.0	7,272.4	13.7	16.4	77.86	-1,366.5	-3,954.6	4,440.3	4,411.9	28.37	156.517			
7,500.0	7,391.6	7,300.0	7,272.4	13.7	16.4	78.59	-1,366.5	-3,954.6	4,429.2	4,400.7	28.51	155.336			
7,550.0	7,419.7	7,300.0	7,272.4	13.8	16.4	79.37	-1,366.5	-3,954.6	4,417.9	4,389.2	28.69	153.973			
7,600.0	7,444.8	7,300.0	7,272.4	13.9	16.4	80.20	-1,366.5	-3,954.6	4,406.3	4,377.4	28.91	152.422			
7,650.0	7,466.9	7,326.6	7,298.6	14.1	16.4	81.36	-1,371.2	-3,953.9	4,394.3	4,365.2	29.15	150.724			
7,700.0	7,485.8	7,350.0	7,321.4	14.3	16.3	82.53	-1,376.2	-3,953.3	4,382.4	4,352.9	29.44	148.860			
7,750.0	7,501.5	7,350.0	7,321.4	14.6	16.3	83.48	-1,376.2	-3,953.3	4,370.1	4,340.4	29.77	146.782			
7,800.0	7,513.7	7,350.0	7,321.4	14.9	16.3	84.43	-1,376.2	-3,953.3	4,357.9	4,327.8	30.15	144.562			
7,850.0	7,522.6	7,350.0	7,321.4	15.2	16.3	85.40	-1,376.2	-3,953.3	4,345.8	4,315.3	30.56	142.227			
7,900.0	7,528.0	7,350.0	7,321.4	15.6	16.3	86.36	-1,376.2	-3,953.3	4,333.9	4,302.9	31.00	139.803			
7,952.9	7,530.0	7,368.9	7,339.7	16.1	16.3	87.62	-1,381.0	-3,952.9	4,321.3	4,289.9	31.47	137.301			
8,000.0	7,530.0	7,373.5	7,344.1	16.5	16.3	87.68	-1,382.2	-3,952.8	4,310.6	4,278.7	31.92	135.040			
8,100.0	7,530.0	7,384.2	7,354.4	17.5	16.3	87.82	-1,385.3	-3,952.5	4,289.3	4,256.4	32.96	130.125			
8,200.0	7,530.0	7,400.0	7,369.4	18.7	16.2	88.03	-1,390.1	-3,952.1	4,270.2	4,236.1	34.10	125.209			
8,300.0	7,530.0	7,400.0	7,369.4	19.9	16.2	88.03	-1,390.1	-3,952.1	4,253.3	4,218.0	35.36	120.284			
8,400.0	7,530.0	7,426.4	7,394.2	21.2	16.2	88.37	-1,399.1	-3,951.5	4,238.5	4,201.9	36.63	115.726			
8,500.0	7,530.0	7,450.0	7,416.0	22.6	16.1	88.66	-1,408.2	-3,950.9	4,226.0	4,188.0	37.96	111.337			
8,600.0	7,530.0	7,467.6	7,432.0	24.0	16.1	88.88	-1,415.5	-3,950.5	4,215.5	4,176.2	39.34	107.158			
8,700.0	7,530.0	7,500.0	7,460.9	25.4	16.0	89.27	-1,430.2	-3,949.8	4,207.2	4,166.4	40.72	103.330			
8,800.0	7,530.0	7,526.5	7,483.8	26.9	15.9	89.59	-1,443.4	-3,949.2	4,200.8	4,158.7	42.13	99.712			
8,900.0	7,530.0	7,566.2	7,516.9	28.4	15.7	90.04	-1,465.2	-3,948.4	4,196.5	4,152.9	43.52	96.432			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
9,000.0	7,530.0	7,615.4	7,555.8	30.0	15.5	90.57	-1,495.3	-3,947.4	4,193.8	4,149.0	44.88	93.455		
9,100.0	7,530.0	7,677.1	7,600.8	31.5	15.3	91.19	-1,537.6	-3,946.3	4,192.8	4,146.6	46.19	90.774		
9,138.6	7,530.0	7,705.0	7,619.5	32.2	15.1	91.44	-1,558.3	-3,945.8	4,192.7	4,146.0	46.68	89.809 CC		
9,200.0	7,530.0	7,754.7	7,650.3	33.1	14.9	91.86	-1,597.2	-3,945.0	4,192.8	4,145.4	47.45	88.355		
9,300.0	7,530.0	7,851.1	7,700.0	34.7	14.6	92.54	-1,679.7	-3,943.8	4,193.6	4,144.9	48.71	86.088		
9,400.0	7,530.0	7,966.3	7,740.2	36.3	14.4	93.09	-1,787.4	-3,942.8	4,194.5	4,144.5	50.09	83.733		
9,500.0	7,530.0	8,094.9	7,758.7	38.0	14.4	93.34	-1,914.4	-3,942.3	4,195.0	4,143.3	51.76	81.040		
9,600.0	7,530.0	8,199.4	7,759.0	39.6	14.7	93.35	-2,018.9	-3,942.4	4,195.0	4,141.3	53.71	78.111		
9,700.0	7,530.0	8,299.4	7,759.0	41.3	15.2	93.35	-2,118.9	-3,942.4	4,195.1	4,139.2	55.85	75.110		
9,800.0	7,530.0	8,399.4	7,759.0	42.9	15.9	93.35	-2,218.9	-3,942.4	4,195.1	4,136.9	58.19	72.094		
9,900.0	7,530.0	8,499.4	7,759.0	44.6	16.7	93.35	-2,318.9	-3,942.4	4,195.1	4,134.4	60.69	69.120		
10,000.0	7,530.0	8,599.4	7,759.0	46.3	17.6	93.35	-2,418.9	-3,942.4	4,195.1	4,131.8	63.34	66.232		
10,100.0	7,530.0	8,699.4	7,759.0	47.9	18.7	93.35	-2,518.9	-3,942.4	4,195.1	4,129.0	66.11	63.459		
10,200.0	7,530.0	8,799.4	7,759.0	49.6	19.9	93.35	-2,618.9	-3,942.4	4,195.1	4,126.2	68.98	60.820		
10,300.0	7,530.0	8,899.4	7,759.0	51.3	21.1	93.35	-2,718.9	-3,942.5	4,195.2	4,123.2	71.93	58.323		
10,400.0	7,530.0	8,999.4	7,759.0	53.0	22.5	93.35	-2,818.9	-3,942.5	4,195.2	4,120.2	74.95	55.970		
10,500.0	7,530.0	9,099.4	7,759.0	54.7	23.8	93.35	-2,918.9	-3,942.5	4,195.2	4,117.2	78.04	53.760		
10,600.0	7,530.0	9,199.4	7,759.0	56.4	25.3	93.35	-3,018.9	-3,942.5	4,195.2	4,114.0	81.17	51.686		
10,700.0	7,530.0	9,299.4	7,759.0	58.1	26.7	93.35	-3,118.9	-3,942.5	4,195.2	4,110.9	84.34	49.741		
10,800.0	7,530.0	9,399.4	7,759.0	59.8	28.2	93.35	-3,218.9	-3,942.5	4,195.2	4,107.7	87.55	47.919		
10,900.0	7,530.0	9,499.4	7,759.0	61.5	29.7	93.35	-3,318.9	-3,942.6	4,195.3	4,104.5	90.79	46.210		
11,000.0	7,530.0	9,599.4	7,759.0	63.2	31.3	93.35	-3,418.9	-3,942.6	4,195.3	4,101.2	94.05	44.606		
11,100.0	7,530.0	9,699.4	7,759.0	64.9	32.8	93.35	-3,518.9	-3,942.6	4,195.3	4,098.0	97.34	43.100		
11,200.0	7,530.0	9,799.4	7,759.0	66.6	34.4	93.35	-3,618.9	-3,942.6	4,195.3	4,094.7	100.64	41.685		
11,300.0	7,530.0	9,899.4	7,759.0	68.4	36.0	93.35	-3,718.9	-3,942.6	4,195.3	4,091.4	103.97	40.353		
11,400.0	7,530.0	9,999.4	7,759.0	70.1	37.6	93.35	-3,818.9	-3,942.6	4,195.3	4,088.0	107.30	39.098		
11,500.0	7,530.0	10,099.4	7,759.0	71.8	39.3	93.35	-3,918.9	-3,942.7	4,195.4	4,084.7	110.65	37.914		
11,600.0	7,530.0	10,199.4	7,759.0	73.5	40.9	93.35	-4,018.9	-3,942.7	4,195.4	4,081.4	114.02	36.797		
11,700.0	7,530.0	10,299.4	7,759.0	75.2	42.6	93.35	-4,118.9	-3,942.7	4,195.4	4,078.0	117.39	35.740		
11,800.0	7,530.0	10,399.4	7,759.0	77.0	44.2	93.35	-4,218.9	-3,942.7	4,195.4	4,074.6	120.77	34.739		
11,900.0	7,530.0	10,499.4	7,759.0	78.7	45.9	93.35	-4,318.9	-3,942.7	4,195.4	4,071.3	124.16	33.791		
12,000.0	7,530.0	10,599.4	7,759.0	80.4	47.5	93.35	-4,418.9	-3,942.7	4,195.4	4,067.9	127.55	32.891		
12,100.0	7,530.0	10,699.4	7,759.0	82.2	49.2	93.35	-4,518.9	-3,942.8	4,195.5	4,064.5	130.96	32.037		
12,200.0	7,530.0	10,799.4	7,759.0	83.9	50.9	93.35	-4,618.9	-3,942.8	4,195.5	4,061.1	134.37	31.224		
12,300.0	7,530.0	10,899.4	7,759.0	85.6	52.6	93.35	-4,718.9	-3,942.8	4,195.5	4,057.7	137.78	30.450		
12,400.0	7,530.0	10,999.4	7,759.0	87.3	54.3	93.35	-4,818.9	-3,942.8	4,195.5	4,054.3	141.20	29.713		
12,500.0	7,530.0	11,099.4	7,759.0	89.1	56.0	93.35	-4,918.9	-3,942.8	4,195.5	4,050.9	144.63	29.009		
12,600.0	7,530.0	11,199.4	7,759.0	90.8	57.7	93.35	-5,018.9	-3,942.8	4,195.5	4,047.5	148.06	28.337		
12,700.0	7,530.0	11,299.4	7,759.0	92.5	59.4	93.35	-5,118.9	-3,942.9	4,195.6	4,044.1	151.49	27.695		
12,800.0	7,530.0	11,399.4	7,759.0	94.3	61.1	93.35	-5,218.9	-3,942.9	4,195.6	4,040.6	154.93	27.081		
12,900.0	7,530.0	11,499.4	7,759.0	96.0	62.8	93.35	-5,318.9	-3,942.9	4,195.6	4,037.2	158.37	26.493		
13,000.0	7,530.0	11,599.4	7,759.0	97.8	64.5	93.35	-5,418.9	-3,942.9	4,195.6	4,033.8	161.81	25.929		
13,100.0	7,530.0	11,699.4	7,759.0	99.5	66.2	93.35	-5,518.9	-3,942.9	4,195.6	4,030.4	165.25	25.389		
13,200.0	7,530.0	11,799.4	7,759.0	101.2	67.9	93.35	-5,618.9	-3,942.9	4,195.6	4,026.9	168.70	24.870		
13,300.0	7,530.0	11,899.4	7,759.0	103.0	69.6	93.35	-5,718.9	-3,943.0	4,195.7	4,023.5	172.15	24.372		
13,400.0	7,530.0	11,999.4	7,759.0	104.7	71.3	93.35	-5,818.9	-3,943.0	4,195.7	4,020.1	175.61	23.893		
13,500.0	7,530.0	12,099.4	7,759.0	106.4	73.1	93.35	-5,918.9	-3,943.0	4,195.7	4,016.6	179.06	23.432		
13,600.0	7,530.0	12,199.4	7,759.0	108.2	74.8	93.35	-6,018.9	-3,943.0	4,195.7	4,013.2	182.52	22.988		
13,700.0	7,530.0	12,299.4	7,759.0	109.9	76.5	93.35	-6,118.9	-3,943.0	4,195.7	4,009.7	185.98	22.560		
13,800.0	7,530.0	12,399.4	7,759.0	111.7	78.2	93.35	-6,218.9	-3,943.0	4,195.7	4,006.3	189.44	22.148		
13,900.0	7,530.0	12,499.4	7,759.0	113.4	79.9	93.35	-6,318.9	-3,943.1	4,195.8	4,002.9	192.90	21.751		
14,000.0	7,530.0	12,599.4	7,759.0	115.1	81.7	93.35	-6,418.9	-3,943.1	4,195.8	3,999.4	196.36	21.367		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)				
14,100.0	7,530.0	12,699.4	7,759.0	116.9	83.4	93.35	-6,518.9	-3,943.1	4,195.8	3,996.0	199.83	20.997		
14,200.0	7,530.0	12,799.4	7,759.0	118.6	85.1	93.35	-6,618.9	-3,943.1	4,195.8	3,992.5	203.30	20.639		
14,300.0	7,530.0	12,899.4	7,759.0	120.4	86.9	93.35	-6,718.9	-3,943.1	4,195.8	3,989.1	206.76	20.293		
14,400.0	7,530.0	12,999.4	7,759.0	122.1	88.6	93.35	-6,818.9	-3,943.1	4,195.8	3,985.6	210.23	19.958		
14,500.0	7,530.0	13,099.4	7,759.0	123.9	90.3	93.35	-6,918.9	-3,943.2	4,195.9	3,982.2	213.70	19.634		
14,600.0	7,530.0	13,199.4	7,759.0	125.6	92.1	93.35	-7,018.9	-3,943.2	4,195.9	3,978.7	217.18	19.320		
14,700.0	7,530.0	13,299.4	7,759.0	127.3	93.8	93.35	-7,118.9	-3,943.2	4,195.9	3,975.2	220.65	19.016		
14,800.0	7,530.0	13,399.4	7,759.0	129.1	95.5	93.35	-7,218.9	-3,943.2	4,195.9	3,971.8	224.12	18.722		
14,900.0	7,530.0	13,499.4	7,759.0	130.8	97.3	93.35	-7,318.9	-3,943.2	4,195.9	3,968.3	227.60	18.436		
15,000.0	7,530.0	13,599.4	7,759.0	132.6	99.0	93.35	-7,418.9	-3,943.2	4,195.9	3,964.9	231.07	18.159		
15,100.0	7,530.0	13,699.4	7,759.0	134.3	100.7	93.35	-7,518.9	-3,943.3	4,196.0	3,961.4	234.55	17.890		
15,200.0	7,530.0	13,799.4	7,759.0	136.1	102.5	93.35	-7,618.9	-3,943.3	4,196.0	3,957.9	238.02	17.628		
15,300.0	7,530.0	13,899.4	7,759.0	137.8	104.2	93.35	-7,718.9	-3,943.3	4,196.0	3,954.5	241.50	17.375		
15,400.0	7,530.0	13,999.4	7,759.0	139.6	105.9	93.35	-7,818.9	-3,943.3	4,196.0	3,951.0	244.98	17.128		
15,500.0	7,530.0	14,099.4	7,759.0	141.3	107.7	93.35	-7,918.9	-3,943.3	4,196.0	3,947.6	248.46	16.888		
15,600.0	7,530.0	14,199.4	7,759.0	143.0	109.4	93.35	-8,018.9	-3,943.3	4,196.0	3,944.1	251.94	16.655		
15,700.0	7,530.0	14,299.4	7,759.0	144.8	111.2	93.35	-8,118.9	-3,943.4	4,196.1	3,940.6	255.42	16.428		
15,800.0	7,530.0	14,399.4	7,759.0	146.5	112.9	93.35	-8,218.9	-3,943.4	4,196.1	3,937.2	258.90	16.207		
15,900.0	7,530.0	14,499.4	7,759.0	148.3	114.6	93.35	-8,318.9	-3,943.4	4,196.1	3,933.7	262.38	15.992		
16,000.0	7,530.0	14,599.4	7,759.0	150.0	116.4	93.35	-8,418.9	-3,943.4	4,196.1	3,930.2	265.87	15.783		
16,100.0	7,530.0	14,699.4	7,759.0	151.8	118.1	93.35	-8,518.9	-3,943.4	4,196.1	3,926.8	269.35	15.579		
16,200.0	7,530.0	14,799.4	7,759.0	153.5	119.9	93.35	-8,618.9	-3,943.4	4,196.1	3,923.3	272.83	15.380		
16,300.0	7,530.0	14,899.4	7,759.0	155.3	121.6	93.35	-8,718.9	-3,943.5	4,196.2	3,919.8	276.32	15.186		
16,400.0	7,530.0	14,999.4	7,759.0	157.0	123.3	93.35	-8,818.9	-3,943.5	4,196.2	3,916.4	279.80	14.997		
16,500.0	7,530.0	15,099.4	7,759.0	158.8	125.1	93.35	-8,918.9	-3,943.5	4,196.2	3,912.9	283.29	14.813		
16,600.0	7,530.0	15,199.4	7,759.0	160.5	126.8	93.35	-9,018.9	-3,943.5	4,196.2	3,909.4	286.77	14.633		
16,700.0	7,530.0	15,299.4	7,759.0	162.3	128.6	93.35	-9,118.9	-3,943.5	4,196.2	3,906.0	290.26	14.457		
16,800.0	7,530.0	15,399.4	7,759.0	164.0	130.3	93.35	-9,218.9	-3,943.5	4,196.2	3,902.5	293.74	14.285		
16,900.0	7,530.0	15,499.4	7,759.0	165.8	132.1	93.35	-9,318.9	-3,943.6	4,196.3	3,899.0	297.23	14.118		
17,000.0	7,530.0	15,599.4	7,759.0	167.5	133.8	93.35	-9,418.9	-3,943.6	4,196.3	3,895.6	300.72	13.954		
17,100.0	7,530.0	15,699.4	7,759.0	169.3	135.5	93.35	-9,518.9	-3,943.6	4,196.3	3,892.1	304.20	13.794		
17,200.0	7,530.0	15,799.4	7,759.0	171.0	137.3	93.35	-9,618.9	-3,943.6	4,196.3	3,888.6	307.69	13.638		
17,300.0	7,530.0	15,899.4	7,759.0	172.8	139.0	93.35	-9,718.9	-3,943.6	4,196.3	3,885.1	311.18	13.485		
17,347.7	7,530.0	15,947.1	7,759.0	173.6	139.9	93.35	-9,766.6	-3,943.6	4,196.3	3,883.5	312.84	13.413		
17,400.0	7,530.0	15,974.5	7,759.0	174.5	140.3	93.35	-9,794.0	-3,943.6	4,196.4	3,882.2	314.23	13.354		
17,420.9	7,530.0	15,974.5	7,759.0	174.9	140.3	93.35	-9,794.0	-3,943.6	4,196.6	3,882.0	314.60	13.339 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-115.13	-1,931.2	-4,117.3	4,547.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.13	-1,931.2	-4,117.3	4,547.7	4,547.4	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.13	-1,931.2	-4,117.3	4,547.7	4,547.1	0.60	7,530.727		
300.0	300.0	284.0	284.0	0.5	0.5	-115.13	-1,931.2	-4,117.3	4,547.7	4,546.7	0.95	4,772.220		
400.0	400.0	384.0	384.0	0.7	0.6	-115.13	-1,931.2	-4,117.3	4,547.7	4,546.4	1.30	3,492.805		
500.0	500.0	484.0	484.0	0.8	0.8	-115.13	-1,931.2	-4,117.3	4,547.7	4,546.0	1.65	2,754.368		
600.0	600.0	791.4	791.3	1.0	1.3	-115.09	-1,925.4	-4,112.7	4,545.8	4,543.4	2.36	1,924.258		
700.0	700.0	1,136.6	1,135.3	1.2	2.1	-147.46	-1,903.6	-4,095.2	4,539.2	4,536.1	3.17	1,434.075		
800.0	800.0	1,254.8	1,252.7	1.4	2.3	-147.45	-1,893.0	-4,086.7	4,531.1	4,527.6	3.56	1,271.825		
900.0	899.9	1,354.5	1,351.7	1.6	2.6	-147.45	-1,884.0	-4,079.6	4,524.4	4,520.5	3.93	1,151.891		
988.4	988.1	1,442.8	1,439.4	1.7	2.8	-147.45	-1,876.0	-4,073.2	4,519.8	4,515.5	4.25	1,062.641		
1,000.0	999.7	1,454.3	1,450.9	1.7	2.8	-147.45	-1,875.0	-4,072.4	4,519.2	4,514.9	4.30	1,051.879		
1,100.0	1,099.4	1,554.2	1,550.1	1.9	3.1	-147.43	-1,866.0	-4,065.2	4,514.6	4,509.9	4.67	967.133		
1,200.0	1,199.2	1,654.1	1,649.3	2.1	3.3	-147.41	-1,857.0	-4,058.0	4,509.9	4,504.9	5.04	894.590		
1,300.0	1,299.0	1,754.0	1,748.6	2.3	3.6	-147.39	-1,848.0	-4,050.8	4,505.3	4,499.9	5.42	831.846		
1,400.0	1,398.8	1,853.9	1,847.8	2.5	3.9	-147.37	-1,839.0	-4,043.6	4,500.6	4,494.8	5.79	777.077		
1,500.0	1,498.5	1,953.7	1,947.0	2.7	4.1	-147.35	-1,830.0	-4,036.4	4,496.0	4,489.8	6.17	728.877		
1,600.0	1,598.3	2,053.6	2,046.2	2.9	4.4	-147.34	-1,821.0	-4,029.2	4,491.3	4,484.8	6.55	686.146		
1,700.0	1,698.1	2,153.5	2,145.4	3.2	4.6	-147.32	-1,812.0	-4,022.0	4,486.7	4,479.8	6.92	648.014		
1,800.0	1,797.8	2,253.4	2,244.6	3.4	4.9	-147.30	-1,803.0	-4,014.8	4,482.1	4,474.8	7.30	613.785		
1,900.0	1,897.6	2,353.3	2,343.8	3.6	5.2	-147.28	-1,794.0	-4,007.6	4,477.4	4,469.7	7.68	582.894		
2,000.0	1,997.4	2,453.2	2,443.1	3.8	5.4	-147.26	-1,784.9	-4,000.4	4,472.8	4,464.7	8.06	554.879		
2,100.0	2,097.1	2,553.0	2,542.3	4.0	5.7	-147.24	-1,775.9	-3,993.2	4,468.1	4,459.7	8.44	529.360		
2,200.0	2,196.9	2,652.9	2,641.5	4.2	5.9	-147.22	-1,766.9	-3,986.0	4,463.5	4,454.7	8.82	506.019		
2,300.0	2,296.7	2,752.8	2,740.7	4.4	6.2	-147.20	-1,757.9	-3,978.8	4,458.9	4,449.7	9.20	484.591		
2,400.0	2,396.5	2,852.7	2,839.9	4.6	6.5	-147.18	-1,748.9	-3,971.6	4,454.2	4,444.6	9.58	464.851		
2,500.0	2,496.2	2,952.6	2,939.1	4.8	6.7	-147.16	-1,739.9	-3,964.4	4,449.6	4,439.6	9.96	446.609		
2,600.0	2,596.0	3,052.4	3,038.3	5.0	7.0	-147.14	-1,730.9	-3,957.2	4,444.9	4,434.6	10.34	429.701		
2,700.0	2,695.8	3,152.3	3,137.5	5.2	7.3	-147.12	-1,721.9	-3,950.0	4,440.3	4,429.6	10.73	413.986		
2,800.0	2,795.5	3,252.2	3,236.8	5.4	7.5	-147.10	-1,712.9	-3,942.8	4,435.7	4,424.6	11.11	399.343		
2,900.0	2,895.3	3,352.1	3,336.0	5.6	7.8	-147.08	-1,703.9	-3,935.6	4,431.0	4,419.5	11.49	385.667		
3,000.0	2,995.1	3,452.0	3,435.2	5.9	8.1	-147.06	-1,694.9	-3,928.4	4,426.4	4,414.5	11.87	372.865		
3,100.0	3,094.9	3,551.8	3,534.4	6.1	8.3	-147.04	-1,685.9	-3,921.2	4,421.8	4,409.5	12.25	360.856		
3,200.0	3,194.6	3,651.7	3,633.6	6.3	8.6	-147.02	-1,676.9	-3,914.0	4,417.1	4,404.5	12.64	349.569		
3,300.0	3,294.4	3,751.6	3,732.8	6.5	8.8	-147.00	-1,667.9	-3,906.8	4,412.5	4,399.5	13.02	338.941		
3,400.0	3,394.2	3,851.5	3,832.0	6.7	9.1	-146.98	-1,658.9	-3,899.6	4,407.8	4,394.4	13.40	328.916		
3,500.0	3,493.9	3,951.4	3,931.3	6.9	9.4	-146.96	-1,649.9	-3,892.4	4,403.2	4,389.4	13.78	319.444		
3,600.0	3,593.7	4,051.2	4,030.5	7.1	9.6	-146.94	-1,640.9	-3,885.2	4,398.6	4,384.4	14.17	310.482		
3,700.0	3,693.5	4,151.1	4,129.7	7.3	9.9	-146.92	-1,631.9	-3,878.0	4,393.9	4,379.4	14.55	301.988		
3,800.0	3,793.2	4,251.0	4,228.9	7.5	10.2	-146.90	-1,622.9	-3,870.8	4,389.3	4,374.4	14.93	293.927		
3,900.0	3,893.0	4,350.9	4,328.1	7.7	10.4	-146.88	-1,613.9	-3,863.6	4,384.7	4,369.4	15.32	286.267		
4,000.0	3,992.8	4,450.8	4,427.3	8.0	10.7	-146.86	-1,604.9	-3,856.4	4,380.1	4,364.4	15.70	278.980		
4,100.0	4,092.6	4,550.7	4,526.5	8.2	11.0	-146.84	-1,595.9	-3,849.2	4,375.4	4,359.3	16.08	272.037		
4,200.0	4,192.3	4,650.5	4,625.7	8.4	11.2	-146.82	-1,586.9	-3,842.0	4,370.8	4,354.3	16.47	265.416		
4,300.0	4,292.1	4,750.4	4,725.0	8.6	11.5	-146.80	-1,577.9	-3,834.8	4,366.2	4,349.3	16.85	259.095		
4,400.0	4,391.9	4,850.3	4,824.2	8.8	11.8	-146.78	-1,568.9	-3,827.6	4,361.5	4,344.3	17.24	253.054		
4,500.0	4,491.6	4,950.2	4,923.4	9.0	12.0	-146.76	-1,559.9	-3,820.4	4,356.9	4,339.3	17.62	247.275		
4,600.0	4,591.4	5,050.1	5,022.6	9.2	12.3	-146.74	-1,550.8	-3,813.2	4,352.3	4,334.3	18.00	241.740		
4,700.0	4,691.2	5,149.9	5,121.8	9.4	12.6	-146.72	-1,541.8	-3,806.0	4,347.7	4,329.3	18.39	236.436		
4,800.0	4,790.9	5,249.8	5,221.0	9.6	12.8	-146.70	-1,532.8	-3,798.8	4,343.0	4,324.3	18.77	231.347		
4,900.0	4,890.7	5,349.7	5,320.2	9.8	13.1	-146.68	-1,523.8	-3,791.6	4,338.4	4,319.2	19.16	226.461		
5,000.0	4,990.5	5,449.6	5,419.5	10.1	13.4	-146.66	-1,514.8	-3,784.4	4,333.8	4,314.2	19.54	221.766		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	
5,100.0	5,090.3	5,549.5	5,518.7	10.3	13.6	-146.64	-1,505.8	-3,777.2	4,329.1	4,309.2	19.93	217.252		
5,200.0	5,190.0	5,649.3	5,617.9	10.5	13.9	-146.62	-1,496.8	-3,770.0	4,324.5	4,304.2	20.31	212.907		
5,300.0	5,289.8	5,749.2	5,717.1	10.7	14.2	-146.60	-1,487.8	-3,762.8	4,319.9	4,299.2	20.70	208.723		
5,400.0	5,389.6	5,849.1	5,816.3	10.9	14.4	-146.58	-1,478.8	-3,755.6	4,315.3	4,294.2	21.08	204.691		
5,500.0	5,489.3	5,949.0	5,915.5	11.1	14.7	-146.56	-1,469.8	-3,748.4	4,310.7	4,289.2	21.47	200.802		
5,600.0	5,589.1	6,048.9	6,014.7	11.3	15.0	-146.54	-1,460.8	-3,741.2	4,306.0	4,284.2	21.85	197.050		
5,700.0	5,688.9	6,148.7	6,113.9	11.5	15.2	-146.51	-1,451.8	-3,734.0	4,301.4	4,279.2	22.24	193.427		
5,800.0	5,788.7	6,248.6	6,213.2	11.7	15.5	-146.49	-1,442.8	-3,726.8	4,296.8	4,274.2	22.62	189.926		
5,900.0	5,888.4	6,348.5	6,312.4	11.9	15.8	-146.47	-1,433.8	-3,719.6	4,292.2	4,269.2	23.01	186.542		
6,000.0	5,988.2	6,448.4	6,411.6	12.2	16.0	-146.45	-1,424.8	-3,712.4	4,287.5	4,264.2	23.39	183.268		
6,100.0	6,088.0	6,548.3	6,510.8	12.4	16.3	-146.43	-1,415.8	-3,705.2	4,282.9	4,259.1	23.78	180.100		
6,200.0	6,187.7	6,648.1	6,610.0	12.6	16.6	-146.41	-1,406.8	-3,698.0	4,278.3	4,254.1	24.17	177.033		
6,300.0	6,287.5	6,748.0	6,709.2	12.8	16.8	-146.39	-1,397.8	-3,690.8	4,273.7	4,249.1	24.55	174.061		
6,400.0	6,387.3	6,847.9	6,808.4	13.0	17.1	-146.37	-1,388.8	-3,683.6	4,269.1	4,244.1	24.94	171.180		
6,500.0	6,487.0	6,947.8	6,907.7	13.2	17.3	-146.35	-1,379.8	-3,676.4	4,264.5	4,239.1	25.33	168.387		
6,600.0	6,586.8	7,047.7	7,006.9	13.4	17.6	-146.32	-1,370.8	-3,669.2	4,259.8	4,234.1	25.71	165.677		
6,700.0	6,686.6	7,147.6	7,106.1	13.6	17.9	-146.30	-1,361.8	-3,662.0	4,255.2	4,229.1	26.10	163.047		
6,787.0	6,773.4	7,200.0	7,158.2	13.8	18.0	-146.30	-1,357.5	-3,658.3	4,251.5	4,225.2	26.36	161.294		
6,800.0	6,786.4	7,200.0	7,158.2	13.8	18.0	-156.79	-1,357.5	-3,658.3	4,251.0	4,224.6	26.38	161.117		
6,850.0	6,836.3	7,200.0	7,158.2	13.9	18.0	116.27	-1,357.5	-3,658.3	4,248.5	4,222.0	26.47	160.510		
6,900.0	6,886.2	7,220.3	7,178.5	14.0	18.0	86.68	-1,356.8	-3,656.8	4,245.0	4,218.4	26.57	159.784		
6,950.0	6,935.7	7,250.0	7,208.1	14.0	18.1	79.24	-1,357.1	-3,654.6	4,240.7	4,214.0	26.67	159.005		
7,000.0	6,984.6	7,250.0	7,208.1	14.0	18.1	76.23	-1,357.1	-3,654.6	4,235.2	4,208.5	26.73	158.442		
7,050.0	7,032.6	7,250.0	7,208.1	14.0	18.1	74.79	-1,357.1	-3,654.6	4,229.0	4,202.2	26.79	157.875		
7,100.0	7,079.7	7,270.0	7,227.9	13.9	18.1	74.19	-1,358.2	-3,653.2	4,221.9	4,195.0	26.86	157.169		
7,150.0	7,125.4	7,300.0	7,257.8	13.9	18.1	74.09	-1,361.1	-3,651.0	4,214.1	4,187.2	26.95	156.353		
7,200.0	7,169.6	7,300.0	7,257.8	13.8	18.1	74.17	-1,361.1	-3,651.0	4,205.3	4,178.3	27.03	155.593		
7,250.0	7,212.1	7,300.0	7,257.8	13.8	18.1	74.44	-1,361.1	-3,651.0	4,195.9	4,168.8	27.12	154.736		
7,300.0	7,252.6	7,300.0	7,257.8	13.7	18.1	74.87	-1,361.1	-3,651.0	4,185.9	4,158.7	27.22	153.761		
7,350.0	7,291.0	7,329.4	7,286.8	13.7	18.1	75.62	-1,365.4	-3,648.9	4,175.1	4,147.7	27.37	152.565		
7,400.0	7,327.1	7,350.0	7,306.9	13.7	18.1	76.44	-1,369.4	-3,647.5	4,163.8	4,136.3	27.53	151.238		
7,450.0	7,360.7	7,350.0	7,306.9	13.7	18.1	77.20	-1,369.4	-3,647.5	4,152.0	4,124.2	27.72	149.784		
7,500.0	7,391.6	7,350.0	7,306.9	13.7	18.1	78.02	-1,369.4	-3,647.5	4,139.8	4,111.8	27.94	148.164		
7,550.0	7,419.7	7,373.3	7,329.5	13.8	18.1	79.12	-1,374.7	-3,645.8	4,127.1	4,098.9	28.19	146.418		
7,600.0	7,444.8	7,400.0	7,355.2	13.9	18.1	80.33	-1,381.9	-3,644.0	4,114.3	4,085.8	28.46	144.542		
7,650.0	7,466.9	7,400.0	7,355.2	14.1	18.1	81.33	-1,381.9	-3,644.0	4,101.0	4,072.2	28.79	142.449		
7,700.0	7,485.8	7,400.0	7,355.2	14.3	18.1	82.36	-1,381.9	-3,644.0	4,087.7	4,058.5	29.15	140.230		
7,750.0	7,501.5	7,400.0	7,355.2	14.6	18.1	83.40	-1,381.9	-3,644.0	4,074.3	4,044.8	29.54	137.907		
7,800.0	7,513.7	7,420.3	7,374.4	14.9	18.0	84.70	-1,388.2	-3,642.6	4,060.9	4,031.0	29.94	135.648		
7,850.0	7,522.6	7,428.3	7,381.9	15.2	18.0	85.87	-1,390.9	-3,642.0	4,047.6	4,017.2	30.38	133.253		
7,900.0	7,528.0	7,450.0	7,402.1	15.6	18.0	87.23	-1,398.7	-3,640.6	4,034.5	4,003.7	30.81	130.951		
7,952.9	7,530.0	7,450.0	7,402.1	16.1	18.0	88.35	-1,398.7	-3,640.6	4,020.8	3,989.5	31.33	128.320		
8,000.0	7,530.0	7,450.0	7,402.1	16.5	18.0	88.35	-1,398.7	-3,640.6	4,009.1	3,977.3	31.79	126.113		
8,100.0	7,530.0	7,450.0	7,402.1	17.5	18.0	88.35	-1,398.7	-3,640.6	3,985.9	3,953.0	32.85	121.336		
8,200.0	7,530.0	7,478.2	7,428.0	18.7	17.9	88.73	-1,409.9	-3,638.7	3,964.7	3,930.8	33.94	116.820		
8,300.0	7,530.0	7,500.0	7,447.5	19.9	17.9	89.02	-1,419.4	-3,637.3	3,945.9	3,910.8	35.13	112.312		
8,400.0	7,530.0	7,516.3	7,461.9	21.2	17.8	89.23	-1,427.1	-3,636.2	3,929.4	3,893.0	36.41	107.929		
8,500.0	7,530.0	7,550.0	7,490.9	22.6	17.7	89.66	-1,444.1	-3,634.1	3,915.0	3,877.4	37.68	103.903		
8,600.0	7,530.0	7,566.6	7,504.8	24.0	17.7	89.86	-1,453.1	-3,633.1	3,902.8	3,863.8	39.05	99.938		
8,700.0	7,530.0	7,600.0	7,531.9	25.4	17.6	90.26	-1,472.4	-3,631.2	3,892.8	3,852.4	40.40	96.356		
8,800.0	7,530.0	7,634.8	7,559.0	26.9	17.5	90.67	-1,494.3	-3,629.2	3,884.7	3,843.0	41.77	93.014		
8,900.0	7,530.0	7,678.1	7,590.7	28.4	17.3	91.13	-1,523.6	-3,626.9	3,878.6	3,835.5	43.12	89.951		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,729.1	7,625.1	30.0	17.2	91.64	-1,561.1	-3,624.4	3,874.1	3,829.7	44.46	87.133		
9,100.0	7,530.0	7,789.0	7,661.1	31.5	17.0	92.18	-1,608.9	-3,621.8	3,871.2	3,825.4	45.80	84.527		
9,200.0	7,530.0	7,858.7	7,696.4	33.1	16.8	92.70	-1,668.9	-3,619.3	3,869.4	3,822.3	47.15	82.068		
9,300.0	7,530.0	7,938.3	7,727.5	34.7	16.6	93.16	-1,742.0	-3,617.0	3,868.5	3,820.0	48.56	79.666		
9,400.0	7,530.0	8,026.2	7,749.8	36.3	16.6	93.49	-1,827.0	-3,615.4	3,868.2	3,818.1	50.10	77.214		
9,499.6	7,530.0	8,118.9	7,758.9	38.0	16.7	93.63	-1,919.2	-3,614.8	3,868.1	3,816.3	51.81	74.664		
9,500.0	7,530.0	8,119.3	7,758.9	38.0	16.7	93.63	-1,919.6	-3,614.8	3,868.1	3,816.3	51.81	74.653		
9,600.0	7,530.0	8,218.7	7,759.0	39.6	16.9	93.63	-2,019.0	-3,614.8	3,868.1	3,814.3	53.77	71.935		
9,700.0	7,530.0	8,318.7	7,759.0	41.3	17.3	93.63	-2,119.0	-3,614.8	3,868.1	3,812.2	55.93	69.164		
9,800.0	7,530.0	8,418.7	7,759.0	42.9	17.9	93.63	-2,219.0	-3,614.8	3,868.1	3,809.9	58.27	66.384		
9,900.0	7,530.0	8,518.7	7,759.0	44.6	18.7	93.63	-2,319.0	-3,614.8	3,868.1	3,807.4	60.78	63.645		
10,000.0	7,530.0	8,618.7	7,759.0	46.3	19.5	93.63	-2,419.0	-3,614.9	3,868.2	3,804.7	63.43	60.986		
10,100.0	7,530.0	8,718.7	7,759.0	47.9	20.5	93.63	-2,519.0	-3,614.9	3,868.2	3,802.0	66.20	58.434		
10,200.0	7,530.0	8,818.7	7,759.0	49.6	21.6	93.63	-2,619.0	-3,614.9	3,868.2	3,799.1	69.07	56.006		
10,300.0	7,530.0	8,918.7	7,759.0	51.3	22.8	93.63	-2,719.0	-3,614.9	3,868.2	3,796.2	72.02	53.709		
10,400.0	7,530.0	9,018.7	7,759.0	53.0	24.0	93.63	-2,819.0	-3,614.9	3,868.2	3,793.2	75.05	51.545		
10,500.0	7,530.0	9,118.7	7,759.0	54.7	25.3	93.63	-2,919.0	-3,614.9	3,868.2	3,790.1	78.13	49.512		
10,600.0	7,530.0	9,218.7	7,759.0	56.4	26.7	93.63	-3,019.0	-3,615.0	3,868.3	3,787.0	81.26	47.604		
10,700.0	7,530.0	9,318.7	7,759.0	58.1	28.0	93.63	-3,119.0	-3,615.0	3,868.3	3,783.8	84.43	45.815		
10,800.0	7,530.0	9,418.7	7,759.0	59.8	29.5	93.63	-3,219.0	-3,615.0	3,868.3	3,780.6	87.64	44.139		
10,900.0	7,530.0	9,518.7	7,759.0	61.5	30.9	93.63	-3,319.0	-3,615.0	3,868.3	3,777.4	90.88	42.566		
11,000.0	7,530.0	9,618.7	7,759.0	63.2	32.4	93.63	-3,419.0	-3,615.0	3,868.3	3,774.2	94.14	41.091		
11,100.0	7,530.0	9,718.7	7,759.0	64.9	34.0	93.63	-3,519.0	-3,615.0	3,868.3	3,770.9	97.43	39.706		
11,200.0	7,530.0	9,818.7	7,759.0	66.6	35.5	93.63	-3,619.0	-3,615.1	3,868.4	3,767.6	100.73	38.403		
11,300.0	7,530.0	9,918.7	7,759.0	68.4	37.1	93.63	-3,719.0	-3,615.1	3,868.4	3,764.3	104.05	37.178		
11,400.0	7,530.0	10,018.7	7,759.0	70.1	38.6	93.63	-3,819.0	-3,615.1	3,868.4	3,761.0	107.39	36.023		
11,500.0	7,530.0	10,118.7	7,759.0	71.8	40.2	93.63	-3,919.0	-3,615.1	3,868.4	3,757.7	110.74	34.933		
11,600.0	7,530.0	10,218.7	7,759.0	73.5	41.8	93.63	-4,019.0	-3,615.1	3,868.4	3,754.3	114.10	33.905		
11,700.0	7,530.0	10,318.7	7,759.0	75.2	43.5	93.63	-4,119.0	-3,615.1	3,868.4	3,751.0	117.47	32.932		
11,800.0	7,530.0	10,418.7	7,759.0	77.0	45.1	93.63	-4,219.0	-3,615.2	3,868.5	3,747.6	120.85	32.011		
11,900.0	7,530.0	10,518.7	7,759.0	78.7	46.7	93.63	-4,319.0	-3,615.2	3,868.5	3,744.2	124.24	31.138		
12,000.0	7,530.0	10,618.7	7,759.0	80.4	48.4	93.63	-4,419.0	-3,615.2	3,868.5	3,740.9	127.63	30.310		
12,100.0	7,530.0	10,718.7	7,759.0	82.2	50.0	93.63	-4,519.0	-3,615.2	3,868.5	3,737.5	131.03	29.523		
12,200.0	7,530.0	10,818.7	7,759.0	83.9	51.7	93.63	-4,619.0	-3,615.2	3,868.5	3,734.1	134.44	28.774		
12,300.0	7,530.0	10,918.7	7,759.0	85.6	53.3	93.63	-4,719.0	-3,615.2	3,868.5	3,730.7	137.86	28.062		
12,400.0	7,530.0	11,018.7	7,759.0	87.3	55.0	93.63	-4,819.0	-3,615.3	3,868.6	3,727.3	141.28	27.383		
12,500.0	7,530.0	11,118.7	7,759.0	89.1	56.7	93.63	-4,919.0	-3,615.3	3,868.6	3,723.9	144.70	26.735		
12,600.0	7,530.0	11,218.7	7,759.0	90.8	58.4	93.63	-5,019.0	-3,615.3	3,868.6	3,720.5	148.13	26.117		
12,700.0	7,530.0	11,318.7	7,759.0	92.5	60.0	93.63	-5,119.0	-3,615.3	3,868.6	3,717.0	151.56	25.525		
12,800.0	7,530.0	11,418.7	7,759.0	94.3	61.7	93.63	-5,219.0	-3,615.3	3,868.6	3,713.6	154.99	24.960		
12,900.0	7,530.0	11,518.2	7,759.0	96.0	68.0	93.64	-5,588.0	-3,602.3	3,864.9	3,701.9	163.03	23.707		
13,000.0	7,530.0	11,887.9	7,759.0	97.8	69.7	93.65	-5,687.6	-3,595.3	3,858.0	3,691.5	166.46	23.176		
13,100.0	7,530.0	11,987.7	7,759.0	99.5	71.4	93.66	-5,787.1	-3,588.4	3,851.0	3,681.1	169.90	22.666		
13,200.0	7,530.0	12,087.4	7,759.0	101.2	73.2	93.66	-5,886.6	-3,581.4	3,844.1	3,670.7	173.35	22.176		
13,300.0	7,530.0	12,187.2	7,759.0	103.0	74.9	93.67	-5,986.1	-3,574.5	3,837.1	3,660.3	176.79	21.704		
13,400.0	7,530.0	12,286.9	7,759.0	104.7	76.6	93.68	-6,085.6	-3,567.5	3,830.2	3,649.9	180.24	21.251		
13,500.0	7,530.0	12,386.7	7,759.0	106.4	78.3	93.68	-6,185.1	-3,560.6	3,823.2	3,639.6	183.69	20.814		
13,600.0	7,530.0	12,465.7	7,759.0	108.2	79.7	93.69	-6,263.9	-3,555.1	3,816.4	3,629.6	186.78	20.432		
13,700.0	7,530.0	12,500.0	7,759.0	109.9	80.3	93.69	-6,298.2	-3,553.1	3,810.8	3,621.7	189.11	20.151		
13,800.0	7,530.0	12,551.5	7,759.0	111.7	81.1	93.69	-6,349.6	-3,550.9	3,806.6	3,614.8	191.73	19.853		
13,900.0	7,530.0	12,600.0	7,759.0	113.4	82.0	93.69	-6,398.1	-3,549.7	3,803.9	3,609.6	194.31	19.577		
14,000.0	7,530.0	12,637.5	7,759.0	115.1	82.6	93.69	-6,435.6	-3,549.3	3,802.7	3,606.0	196.69	19.333		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,016.0	7,530.0	12,644.4	7,759.0	115.4	82.7	93.69	-6,442.5	-3,549.3	3,802.7	3,605.6	197.09	19.294	CC	
14,100.0	7,530.0	12,707.2	7,759.0	116.9	83.8	93.69	-6,505.3	-3,549.8	3,803.3	3,603.7	199.64	19.051		
14,200.0	7,530.0	12,745.1	7,759.0	118.6	84.5	93.69	-6,543.2	-3,550.6	3,804.8	3,602.8	202.03	18.833		
14,300.0	7,530.0	12,845.1	7,759.0	120.4	86.2	93.69	-6,643.2	-3,552.6	3,806.8	3,601.3	205.50	18.525		
14,400.0	7,530.0	12,945.1	7,759.0	122.1	87.9	93.69	-6,743.2	-3,554.6	3,808.8	3,599.8	208.96	18.227		
14,500.0	7,530.0	13,045.1	7,759.0	123.9	89.6	93.69	-6,843.1	-3,556.6	3,810.8	3,598.4	212.43	17.939		
14,600.0	7,530.0	13,145.0	7,759.0	125.6	91.3	93.68	-6,943.1	-3,558.6	3,812.8	3,596.9	215.90	17.660		
14,700.0	7,530.0	13,245.0	7,759.0	127.3	93.0	93.68	-7,043.0	-3,560.6	3,814.8	3,595.5	219.37	17.390		
14,800.0	7,530.0	13,345.0	7,759.0	129.1	94.8	93.68	-7,143.0	-3,562.7	3,816.8	3,594.0	222.84	17.128		
14,900.0	7,530.0	13,445.0	7,759.0	130.8	96.5	93.68	-7,243.0	-3,564.7	3,818.8	3,592.5	226.32	16.874		
15,000.0	7,530.0	13,545.0	7,759.0	132.6	98.2	93.68	-7,342.9	-3,566.7	3,820.9	3,591.1	229.79	16.628		
15,100.0	7,530.0	13,644.9	7,759.0	134.3	99.9	93.68	-7,442.9	-3,568.7	3,822.9	3,589.6	233.27	16.388		
15,200.0	7,530.0	13,744.9	7,759.0	136.1	101.7	93.67	-7,542.8	-3,570.7	3,824.9	3,588.1	236.74	16.156		
15,300.0	7,530.0	13,844.9	7,759.0	137.8	103.4	93.67	-7,642.8	-3,572.7	3,826.9	3,586.7	240.22	15.931		
15,400.0	7,530.0	13,944.9	7,759.0	139.6	105.1	93.67	-7,742.8	-3,574.7	3,828.9	3,585.2	243.69	15.712		
15,500.0	7,530.0	14,044.9	7,759.0	141.3	106.8	93.67	-7,842.7	-3,576.7	3,830.9	3,583.7	247.17	15.499		
15,600.0	7,530.0	14,144.8	7,759.0	143.0	108.6	93.67	-7,942.7	-3,578.8	3,832.9	3,582.2	250.65	15.292		
15,700.0	7,530.0	14,244.8	7,759.0	144.8	110.3	93.66	-8,042.6	-3,580.8	3,834.9	3,580.8	254.13	15.090		
15,800.0	7,530.0	14,344.8	7,759.0	146.5	112.0	93.66	-8,142.6	-3,582.8	3,836.9	3,579.3	257.61	14.894		
15,900.0	7,530.0	14,444.8	7,759.0	148.3	113.8	93.66	-8,242.5	-3,584.8	3,838.9	3,577.8	261.09	14.703		
16,000.0	7,530.0	14,544.8	7,759.0	150.0	115.5	93.66	-8,342.5	-3,586.8	3,840.9	3,576.4	264.57	14.518		
16,100.0	7,530.0	14,644.7	7,759.0	151.8	117.2	93.66	-8,442.5	-3,588.8	3,842.9	3,574.9	268.05	14.337		
16,200.0	7,530.0	14,744.7	7,759.0	153.5	119.0	93.65	-8,542.4	-3,590.8	3,844.9	3,573.4	271.53	14.160		
16,300.0	7,530.0	14,844.7	7,759.0	155.3	120.7	93.65	-8,642.4	-3,592.8	3,847.0	3,571.9	275.02	13.988		
16,400.0	7,530.0	14,944.7	7,759.0	157.0	122.4	93.65	-8,742.3	-3,594.8	3,849.0	3,570.5	278.50	13.820		
16,500.0	7,530.0	15,044.7	7,759.0	158.8	124.2	93.65	-8,842.3	-3,596.9	3,851.0	3,569.0	281.98	13.657		
16,600.0	7,530.0	15,144.6	7,759.0	160.5	125.9	93.65	-8,942.3	-3,598.9	3,853.0	3,567.5	285.47	13.497		
16,700.0	7,530.0	15,244.6	7,759.0	162.3	127.6	93.64	-9,042.2	-3,600.9	3,855.0	3,566.0	288.95	13.341		
16,800.0	7,530.0	15,344.6	7,759.0	164.0	129.4	93.64	-9,142.2	-3,602.9	3,857.0	3,564.6	292.44	13.189		
16,900.0	7,530.0	15,444.6	7,759.0	165.8	131.1	93.64	-9,242.1	-3,604.9	3,859.0	3,563.1	295.92	13.041		
17,000.0	7,530.0	15,544.6	7,759.0	167.5	132.8	93.64	-9,342.1	-3,606.9	3,861.0	3,561.6	299.41	12.895		
17,100.0	7,530.0	15,644.5	7,759.0	169.3	134.6	93.64	-9,442.1	-3,608.9	3,863.0	3,560.1	302.89	12.754		
17,200.0	7,530.0	15,744.5	7,759.0	171.0	136.3	93.64	-9,542.0	-3,610.9	3,865.0	3,558.6	306.38	12.615		
17,300.0	7,530.0	15,844.5	7,759.0	172.8	138.1	93.63	-9,642.0	-3,612.9	3,867.0	3,557.2	309.87	12.480		
17,400.0	7,530.0	15,944.5	7,759.0	174.5	139.8	93.63	-9,741.9	-3,615.0	3,869.0	3,555.7	313.36	12.347		
17,420.9	7,530.0	15,965.4	7,759.0	174.9	140.2	93.63	-9,762.9	-3,615.4	3,869.5	3,555.4	314.09	12.320	ES, SF	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
0.0	0.0	0.0	0.0	0.0	0.0	-115.28	-1,937.3	-4,102.3	4,536.8					
100.0	100.0	84.0	84.0	0.2	0.1	-115.28	-1,937.3	-4,102.3	4,536.7	4,536.5	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.28	-1,937.3	-4,102.3	4,536.7	4,536.1	0.60	7,512.585		
300.0	300.0	284.0	284.0	0.5	0.5	-115.28	-1,937.3	-4,102.3	4,536.7	4,535.8	0.95	4,760.723		
400.0	400.0	384.0	384.0	0.7	0.6	-115.28	-1,937.3	-4,102.3	4,536.7	4,535.4	1.30	3,484.390		
500.0	500.0	484.0	484.0	0.8	0.8	-115.28	-1,937.3	-4,102.3	4,536.7	4,535.1	1.65	2,747.733		
600.0	600.0	584.0	584.0	1.0	1.0	-115.28	-1,937.3	-4,102.3	4,536.7	4,534.7	2.00	2,268.198		
700.0	700.0	684.0	684.0	1.2	1.2	-147.75	-1,937.3	-4,102.3	4,537.5	4,535.1	2.35	1,931.537		
800.0	800.0	784.0	784.0	1.4	1.3	-147.76	-1,937.3	-4,102.3	4,539.7	4,537.0	2.70	1,682.384		
900.0	899.9	883.9	883.9	1.6	1.5	-147.77	-1,937.3	-4,102.3	4,543.4	4,540.3	3.05	1,490.385		
988.4	988.1	972.1	972.1	1.7	1.7	-147.78	-1,937.3	-4,102.3	4,547.9	4,544.5	3.36	1,353.846		
1,000.0	999.7	983.7	983.7	1.7	1.7	-147.79	-1,937.3	-4,102.3	4,548.5	4,545.1	3.40	1,337.706		
1,100.0	1,099.4	1,371.7	1,371.4	1.9	2.4	-147.93	-1,929.8	-4,092.8	4,551.6	4,547.4	4.26	1,068.818		
1,200.0	1,199.2	1,815.8	1,813.0	2.1	3.3	-148.01	-1,901.6	-4,056.6	4,547.3	4,542.0	5.23	870.196		
1,300.0	1,299.0	2,000.7	1,995.7	2.3	3.8	-148.01	-1,883.9	-4,034.0	4,537.5	4,531.7	5.74	790.556		
1,400.0	1,398.8	2,100.2	2,093.9	2.5	4.1	-148.01	-1,874.0	-4,021.4	4,527.5	4,521.4	6.10	741.994		
1,500.0	1,498.5	2,199.6	2,192.1	2.7	4.4	-148.01	-1,864.2	-4,008.8	4,517.4	4,511.0	6.46	698.783		
1,600.0	1,598.3	2,299.1	2,290.3	2.9	4.7	-148.01	-1,854.3	-3,996.1	4,507.4	4,500.6	6.83	660.098		
1,700.0	1,698.1	2,398.6	2,388.5	3.2	5.0	-148.01	-1,844.5	-3,983.5	4,497.4	4,490.2	7.19	625.276		
1,800.0	1,797.8	2,498.1	2,486.7	3.4	5.3	-148.02	-1,834.6	-3,970.9	4,487.4	4,479.9	7.56	593.772		
1,900.0	1,897.6	2,597.6	2,584.9	3.6	5.6	-148.02	-1,824.8	-3,958.3	4,477.4	4,469.5	7.92	565.138		
2,000.0	1,997.4	2,697.1	2,683.1	3.8	5.9	-148.02	-1,814.9	-3,945.7	4,467.4	4,459.1	8.29	539.004		
2,100.0	2,097.1	2,796.6	2,781.3	4.0	6.2	-148.02	-1,805.1	-3,933.1	4,457.4	4,448.7	8.65	515.058		
2,200.0	2,196.9	2,896.1	2,879.5	4.2	6.5	-148.02	-1,795.2	-3,920.4	4,447.4	4,438.3	9.02	493.040		
2,300.0	2,296.7	2,995.6	2,977.7	4.4	6.8	-148.02	-1,785.4	-3,907.8	4,437.3	4,428.0	9.39	472.727		
2,400.0	2,396.5	3,095.1	3,075.9	4.6	7.2	-148.02	-1,775.5	-3,895.2	4,427.3	4,417.6	9.75	453.931		
2,500.0	2,496.2	3,194.6	3,174.1	4.8	7.5	-148.02	-1,765.6	-3,882.6	4,417.3	4,407.2	10.12	436.487		
2,600.0	2,596.0	3,294.1	3,272.3	5.0	7.8	-148.03	-1,755.8	-3,870.0	4,407.3	4,396.8	10.49	420.257		
2,700.0	2,695.8	3,393.6	3,370.5	5.2	8.1	-148.03	-1,745.9	-3,857.3	4,397.3	4,386.4	10.85	405.119		
2,800.0	2,795.5	3,493.1	3,468.7	5.4	8.4	-148.03	-1,736.1	-3,844.7	4,387.3	4,376.1	11.22	390.967		
2,900.0	2,895.3	3,592.6	3,566.9	5.6	8.8	-148.03	-1,726.2	-3,832.1	4,377.3	4,365.7	11.59	377.707		
3,000.0	2,995.1	3,692.1	3,665.1	5.9	9.1	-148.03	-1,716.4	-3,819.5	4,367.3	4,355.3	11.96	365.259		
3,100.0	3,094.9	3,791.6	3,763.3	6.1	9.4	-148.03	-1,706.5	-3,806.9	4,357.2	4,344.9	12.32	353.550		
3,200.0	3,194.6	3,891.1	3,861.5	6.3	9.7	-148.03	-1,696.7	-3,794.3	4,347.2	4,334.5	12.69	342.517		
3,300.0	3,294.4	3,990.6	3,959.7	6.5	10.1	-148.03	-1,686.8	-3,781.6	4,337.2	4,324.2	13.06	332.104		
3,400.0	3,394.2	4,090.1	4,057.9	6.7	10.4	-148.04	-1,676.9	-3,769.0	4,327.2	4,313.8	13.43	322.258		
3,500.0	3,493.9	4,189.6	4,156.1	6.9	10.7	-148.04	-1,667.1	-3,756.4	4,317.2	4,303.4	13.80	312.937		
3,600.0	3,593.7	4,289.1	4,254.3	7.1	11.0	-148.04	-1,657.2	-3,743.8	4,307.2	4,293.0	14.16	304.098		
3,700.0	3,693.5	4,388.6	4,352.5	7.3	11.4	-148.04	-1,647.4	-3,731.2	4,297.2	4,282.6	14.53	295.706		
3,800.0	3,793.2	4,488.1	4,450.7	7.5	11.7	-148.04	-1,637.5	-3,718.5	4,287.1	4,272.2	14.90	287.727		
3,900.0	3,893.0	4,587.6	4,548.9	7.7	12.0	-148.04	-1,627.7	-3,705.9	4,277.1	4,261.9	15.27	280.132		
4,000.0	3,992.8	4,687.1	4,647.1	8.0	12.3	-148.04	-1,617.8	-3,693.3	4,267.1	4,251.5	15.64	272.894		
4,100.0	4,092.6	4,786.6	4,745.3	8.2	12.7	-148.04	-1,608.0	-3,680.7	4,257.1	4,241.1	16.00	265.989		
4,200.0	4,192.3	4,886.1	4,843.5	8.4	13.0	-148.05	-1,598.1	-3,668.1	4,247.1	4,230.7	16.37	259.393		
4,300.0	4,292.1	4,985.6	4,941.7	8.6	13.3	-148.05	-1,588.2	-3,655.5	4,237.1	4,220.3	16.74	253.087		
4,400.0	4,391.9	5,085.1	5,039.9	8.8	13.6	-148.05	-1,578.4	-3,642.8	4,227.1	4,210.0	17.11	247.052		
4,500.0	4,491.6	5,184.6	5,138.1	9.0	14.0	-148.05	-1,568.5	-3,630.2	4,217.1	4,199.6	17.48	241.271		
4,600.0	4,591.4	5,284.1	5,236.3	9.2	14.3	-148.05	-1,558.7	-3,617.6	4,207.0	4,189.2	17.85	235.729		
4,700.0	4,691.2	5,383.6	5,334.5	9.4	14.6	-148.05	-1,548.8	-3,605.0	4,197.0	4,178.8	18.22	230.410		
4,800.0	4,790.9	5,483.1	5,432.7	9.6	14.9	-148.05	-1,539.0	-3,592.4	4,187.0	4,168.4	18.58	225.302		
4,900.0	4,890.7	5,582.6	5,530.9	9.8	15.3	-148.05	-1,529.1	-3,579.7	4,177.0	4,158.0	18.95	220.392		
5,000.0	4,990.5	5,682.1	5,629.1	10.1	15.6	-148.06	-1,519.3	-3,567.1	4,167.0	4,147.7	19.32	215.670		

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

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,100.0	5,090.3	5,781.6	5,727.3	10.3	15.9	-148.06	-1,509.4	-3,554.5	4,157.0	4,137.3	19.69	211.124		
5,200.0	5,190.0	5,881.1	5,825.5	10.5	16.3	-148.06	-1,499.6	-3,541.9	4,147.0	4,126.9	20.06	206.744		
5,300.0	5,289.8	5,980.5	5,923.7	10.7	16.6	-148.06	-1,489.7	-3,529.3	4,136.9	4,116.5	20.43	202.523		
5,400.0	5,389.6	6,080.0	6,021.9	10.9	16.9	-148.06	-1,479.8	-3,516.7	4,126.9	4,106.1	20.80	198.451		
5,500.0	5,489.3	6,179.5	6,120.1	11.1	17.2	-148.06	-1,470.0	-3,504.0	4,116.9	4,095.8	21.16	194.521		
5,600.0	5,589.1	6,279.0	6,218.3	11.3	17.6	-148.06	-1,460.1	-3,491.4	4,106.9	4,085.4	21.53	190.726		
5,700.0	5,688.9	6,378.5	6,316.5	11.5	17.9	-148.07	-1,450.3	-3,478.8	4,096.9	4,075.0	21.90	187.058		
5,800.0	5,788.7	6,478.0	6,414.7	11.7	18.2	-148.07	-1,440.4	-3,466.2	4,086.9	4,064.6	22.27	183.511		
5,900.0	5,888.4	6,577.5	6,512.9	11.9	18.6	-148.07	-1,430.6	-3,453.6	4,076.9	4,054.2	22.64	180.080		
6,000.0	5,988.2	6,677.0	6,611.1	12.2	18.9	-148.07	-1,420.7	-3,440.9	4,066.9	4,043.9	23.01	176.759		
6,100.0	6,088.0	6,776.5	6,709.3	12.4	19.2	-148.07	-1,410.9	-3,428.3	4,056.8	4,033.5	23.38	173.542		
6,200.0	6,187.7	6,876.0	6,807.5	12.6	19.5	-148.07	-1,401.0	-3,415.7	4,046.8	4,023.1	23.75	170.426		
6,300.0	6,287.5	6,975.5	6,905.7	12.8	19.9	-148.07	-1,391.1	-3,403.1	4,036.8	4,012.7	24.11	167.404		
6,400.0	6,387.3	7,075.0	7,003.9	13.0	20.2	-148.08	-1,381.3	-3,390.5	4,026.8	4,002.3	24.48	164.474		
6,500.0	6,487.0	7,174.5	7,102.1	13.2	20.5	-148.08	-1,371.4	-3,377.9	4,016.8	3,991.9	24.85	161.630		
6,600.0	6,586.8	7,230.3	7,157.2	13.4	20.7	-148.08	-1,366.2	-3,370.8	4,007.1	3,982.0	25.13	159.426		
6,700.0	6,686.6	7,250.0	7,176.7	13.6	20.8	-148.09	-1,365.2	-3,368.2	3,999.1	3,973.8	25.35	157.760		
6,787.0	6,773.4	7,300.0	7,226.2	13.8	20.9	-148.17	-1,365.6	-3,361.4	3,993.7	3,968.1	25.56	156.233		
6,800.0	6,786.4	7,300.0	7,226.2	13.8	20.9	-158.64	-1,365.6	-3,361.4	3,992.9	3,967.3	25.59	156.053		
6,850.0	6,836.3	7,300.0	7,226.2	13.9	20.9	114.50	-1,365.6	-3,361.4	3,989.2	3,963.5	25.66	155.434		
6,900.0	6,886.2	7,300.0	7,226.2	14.0	20.9	84.97	-1,365.6	-3,361.4	3,984.6	3,958.9	25.73	154.856		
6,950.0	6,935.7	7,328.7	7,254.5	14.0	20.9	77.56	-1,367.8	-3,357.5	3,978.9	3,953.1	25.81	154.147		
7,000.0	6,984.6	7,350.0	7,275.5	14.0	20.9	74.64	-1,370.4	-3,354.4	3,972.3	3,946.4	25.88	153.462		
7,050.0	7,032.6	7,350.0	7,275.5	14.0	20.9	73.31	-1,370.4	-3,354.4	3,964.7	3,938.7	25.94	152.832		
7,100.0	7,079.7	7,370.5	7,295.5	13.9	21.0	72.79	-1,373.6	-3,351.5	3,956.1	3,930.1	26.01	152.078		
7,150.0	7,125.4	7,400.0	7,324.1	13.9	21.0	72.75	-1,379.5	-3,347.2	3,946.8	3,920.7	26.10	151.211		
7,200.0	7,169.6	7,400.0	7,324.1	13.8	21.0	72.94	-1,379.5	-3,347.2	3,936.4	3,910.2	26.20	150.266		
7,250.0	7,212.1	7,400.0	7,324.1	13.8	21.0	73.34	-1,379.5	-3,347.2	3,925.4	3,899.0	26.31	149.170		
7,300.0	7,252.6	7,425.4	7,348.4	13.7	21.0	74.02	-1,385.7	-3,343.5	3,913.5	3,887.0	26.46	147.901		
7,350.0	7,291.0	7,450.0	7,371.7	13.7	21.0	74.85	-1,392.8	-3,339.8	3,901.0	3,874.4	26.64	146.458		
7,400.0	7,327.1	7,450.0	7,371.7	13.7	21.0	75.67	-1,392.8	-3,339.8	3,887.9	3,861.0	26.85	144.791		
7,450.0	7,360.7	7,450.0	7,371.7	13.7	21.0	76.57	-1,392.8	-3,339.8	3,874.3	3,847.2	27.10	142.938		
7,500.0	7,391.6	7,478.1	7,397.9	13.7	21.0	77.77	-1,402.1	-3,335.6	3,860.1	3,832.7	27.37	141.019		
7,550.0	7,419.7	7,500.0	7,417.9	13.8	21.0	79.00	-1,410.3	-3,332.4	3,845.6	3,817.9	27.68	138.935		
7,600.0	7,444.8	7,500.0	7,417.9	13.9	21.0	80.12	-1,410.3	-3,332.4	3,830.7	3,802.6	28.04	136.608		
7,650.0	7,466.9	7,500.0	7,417.9	14.1	21.0	81.27	-1,410.3	-3,332.4	3,815.7	3,787.2	28.44	134.178		
7,700.0	7,485.8	7,527.6	7,442.7	14.3	21.0	82.74	-1,421.6	-3,328.2	3,800.3	3,771.5	28.81	131.903		
7,750.0	7,501.5	7,550.0	7,462.4	14.6	21.0	84.21	-1,431.7	-3,324.8	3,785.1	3,755.8	29.21	129.567		
7,800.0	7,513.7	7,550.0	7,462.4	14.9	21.0	85.45	-1,431.7	-3,324.8	3,769.7	3,740.1	29.68	127.006		
7,850.0	7,522.6	7,550.0	7,462.4	15.2	21.0	86.68	-1,431.7	-3,324.8	3,754.6	3,724.5	30.17	124.456		
7,900.0	7,528.0	7,571.7	7,481.1	15.6	20.9	88.19	-1,442.3	-3,321.6	3,739.6	3,709.0	30.60	122.214		
7,952.9	7,530.0	7,582.2	7,490.0	16.1	20.9	89.61	-1,447.6	-3,320.0	3,724.1	3,693.0	31.10	119.750		
8,000.0	7,530.0	7,600.0	7,504.9	16.5	20.9	89.85	-1,457.0	-3,317.3	3,710.8	3,679.3	31.49	117.832		
8,100.0	7,530.0	7,600.0	7,504.9	17.5	20.9	89.85	-1,457.0	-3,317.3	3,684.1	3,651.6	32.55	113.174		
8,200.0	7,530.0	7,650.0	7,544.9	18.7	20.8	90.50	-1,486.0	-3,309.9	3,659.6	3,626.0	33.53	109.157		
8,300.0	7,530.0	7,664.1	7,555.8	19.9	20.8	90.67	-1,494.8	-3,307.8	3,637.1	3,602.4	34.72	104.746		
8,400.0	7,530.0	7,700.0	7,582.3	21.2	20.8	91.10	-1,518.4	-3,302.5	3,616.9	3,581.0	35.90	100.744		
8,500.0	7,530.0	7,729.5	7,603.0	22.6	20.7	91.44	-1,539.0	-3,298.3	3,598.7	3,561.5	37.16	96.833		
8,600.0	7,530.0	7,768.9	7,628.8	24.0	20.7	91.86	-1,568.1	-3,292.8	3,582.4	3,544.0	38.43	93.211		
8,700.0	7,530.0	7,813.4	7,655.6	25.4	20.6	92.29	-1,603.1	-3,286.7	3,568.0	3,528.3	39.73	89.812		
8,800.0	7,530.0	7,863.4	7,682.3	26.9	20.6	92.73	-1,644.9	-3,280.2	3,555.2	3,514.2	41.05	86.611		
8,900.0	7,530.0	7,919.2	7,707.7	28.4	20.5	93.15	-1,694.1	-3,273.3	3,544.0	3,501.6	42.41	83.569		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-7H-E168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,980.5	7,729.9	30.0	20.5	93.52	-1,750.8	-3,266.3	3,534.0	3,490.2	43.82	80.640		
9,100.0	7,530.0	8,050.0	7,747.6	31.5	20.5	93.81	-1,817.6	-3,259.3	3,525.2	3,479.9	45.32	77.785		
9,200.0	7,530.0	8,116.5	7,757.0	33.1	20.6	93.97	-1,883.1	-3,253.4	3,517.3	3,470.3	46.94	74.931		
9,300.0	7,530.0	8,197.0	7,759.0	34.7	20.8	94.01	-1,963.3	-3,247.6	3,510.1	3,461.4	48.70	72.079		
9,400.0	7,530.0	8,296.7	7,759.0	36.3	21.1	94.02	-2,062.8	-3,240.6	3,503.2	3,452.5	50.70	69.096		
9,500.0	7,530.0	8,396.5	7,759.0	38.0	21.6	94.03	-2,162.3	-3,233.7	3,496.3	3,443.4	52.90	66.088		
9,600.0	7,530.0	8,484.3	7,759.0	39.6	22.2	94.03	-2,249.9	-3,227.6	3,489.4	3,434.2	55.19	63.225		
9,700.0	7,530.0	8,546.4	7,759.0	41.3	22.6	94.04	-2,311.9	-3,223.8	3,483.3	3,425.9	57.38	60.701		
9,800.0	7,530.0	8,600.0	7,759.0	42.9	23.0	94.04	-2,365.5	-3,221.1	3,478.4	3,418.8	59.53	58.434		
9,900.0	7,530.0	8,670.8	7,759.0	44.6	23.5	94.05	-2,436.3	-3,218.3	3,474.4	3,412.5	61.92	56.113		
10,000.0	7,530.0	8,733.1	7,759.0	46.3	24.1	94.05	-2,498.5	-3,216.5	3,471.6	3,407.4	64.26	54.021		
10,100.0	7,530.0	8,800.0	7,759.0	47.9	24.7	94.05	-2,565.4	-3,215.4	3,469.9	3,403.2	66.70	52.024		
10,200.0	7,530.0	8,864.6	7,759.0	49.6	25.3	94.05	-2,630.0	-3,215.0	3,469.3	3,400.1	69.16	50.164		
10,228.9	7,530.0	8,882.6	7,759.0	50.1	25.4	94.05	-2,647.9	-3,215.1	3,469.2	3,399.4	69.87	49.653 CC		
10,300.0	7,530.0	8,953.7	7,759.0	51.3	26.1	94.05	-2,719.1	-3,215.1	3,469.3	3,397.3	71.98	48.198		
10,400.0	7,530.0	9,053.7	7,759.0	53.0	27.2	94.05	-2,819.1	-3,215.1	3,469.3	3,394.3	74.99	46.261		
10,500.0	7,530.0	9,153.7	7,759.0	54.7	28.4	94.05	-2,919.1	-3,215.1	3,469.3	3,391.2	78.07	44.439		
10,600.0	7,530.0	9,253.7	7,759.0	56.4	29.6	94.05	-3,019.1	-3,215.1	3,469.3	3,388.1	81.19	42.730		
10,700.0	7,530.0	9,353.7	7,759.0	58.1	30.8	94.05	-3,119.1	-3,215.1	3,469.3	3,385.0	84.35	41.128		
10,800.0	7,530.0	9,427.7	7,759.0	59.8	31.8	94.05	-3,193.1	-3,215.5	3,469.7	3,382.6	87.17	39.806		
10,900.0	7,530.0	9,527.7	7,759.0	61.5	33.1	94.05	-3,293.1	-3,216.2	3,470.5	3,380.1	90.39	38.393		
11,000.0	7,530.0	9,627.7	7,759.0	63.2	34.5	94.05	-3,393.1	-3,217.0	3,471.3	3,377.6	93.65	37.068		
11,100.0	7,530.0	9,727.7	7,759.0	64.9	35.9	94.05	-3,493.1	-3,217.8	3,472.0	3,375.1	96.92	35.823		
11,200.0	7,530.0	9,827.7	7,759.0	66.6	37.3	94.04	-3,593.1	-3,218.5	3,472.8	3,372.6	100.22	34.653		
11,300.0	7,530.0	9,927.7	7,759.0	68.4	38.8	94.04	-3,693.1	-3,219.3	3,473.6	3,370.0	103.53	33.551		
11,400.0	7,530.0	10,027.7	7,759.0	70.1	40.2	94.04	-3,793.1	-3,220.1	3,474.3	3,367.5	106.86	32.513		
11,500.0	7,530.0	10,127.7	7,759.0	71.8	41.7	94.04	-3,893.0	-3,220.8	3,475.1	3,364.9	110.20	31.533		
11,600.0	7,530.0	10,227.7	7,759.0	73.5	43.3	94.04	-3,993.0	-3,221.6	3,475.9	3,362.3	113.56	30.609		
11,700.0	7,530.0	10,327.7	7,759.0	75.2	44.8	94.04	-4,093.0	-3,222.4	3,476.6	3,359.7	116.92	29.734		
11,800.0	7,530.0	10,427.7	7,759.0	77.0	46.4	94.04	-4,193.0	-3,223.1	3,477.4	3,357.1	120.30	28.906		
11,900.0	7,530.0	10,527.7	7,759.0	78.7	47.9	94.04	-4,293.0	-3,223.9	3,478.2	3,354.5	123.68	28.122		
12,000.0	7,530.0	10,627.7	7,759.0	80.4	49.5	94.04	-4,393.0	-3,224.7	3,478.9	3,351.8	127.07	27.377		
12,100.0	7,530.0	10,727.7	7,759.0	82.2	51.1	94.04	-4,493.0	-3,225.4	3,479.7	3,349.2	130.47	26.670		
12,200.0	7,530.0	10,827.7	7,759.0	83.9	52.7	94.04	-4,593.0	-3,226.2	3,480.5	3,346.6	133.88	25.998		
12,300.0	7,530.0	10,927.7	7,759.0	85.6	54.3	94.04	-4,693.0	-3,227.0	3,481.2	3,343.9	137.29	25.357		
12,400.0	7,530.0	11,027.7	7,759.0	87.3	55.9	94.03	-4,793.0	-3,227.7	3,482.0	3,341.3	140.70	24.747		
12,500.0	7,530.0	11,127.7	7,759.0	89.1	57.5	94.03	-4,893.0	-3,228.5	3,482.7	3,338.6	144.12	24.165		
12,600.0	7,530.0	11,227.7	7,759.0	90.8	59.2	94.03	-4,993.0	-3,229.3	3,483.5	3,336.0	147.55	23.610		
12,700.0	7,530.0	11,327.7	7,759.0	92.5	60.8	94.03	-5,093.0	-3,230.0	3,484.3	3,333.3	150.98	23.078		
12,800.0	7,530.0	11,427.6	7,759.0	94.3	62.5	94.03	-5,193.0	-3,230.8	3,485.0	3,330.6	154.41	22.570		
12,900.0	7,530.0	11,527.6	7,759.0	96.0	64.1	94.03	-5,293.0	-3,231.6	3,485.8	3,328.0	157.84	22.084		
13,000.0	7,530.0	11,627.6	7,759.0	97.8	65.8	94.03	-5,393.0	-3,232.3	3,486.6	3,325.3	161.28	21.618		
13,100.0	7,530.0	11,727.6	7,759.0	99.5	67.4	94.03	-5,493.0	-3,233.1	3,487.3	3,322.6	164.72	21.171		
13,200.0	7,530.0	11,827.6	7,759.0	101.2	69.1	94.03	-5,592.9	-3,233.9	3,488.1	3,319.9	168.17	20.742		
13,300.0	7,530.0	11,927.6	7,759.0	103.0	70.8	94.03	-5,692.9	-3,234.6	3,488.9	3,317.3	171.62	20.330		
13,400.0	7,530.0	12,027.6	7,759.0	104.7	72.5	94.03	-5,792.9	-3,235.4	3,489.6	3,314.6	175.07	19.933		
13,500.0	7,530.0	12,127.6	7,759.0	106.4	74.1	94.02	-5,892.9	-3,236.2	3,490.4	3,311.9	178.52	19.552		
13,600.0	7,530.0	12,227.6	7,759.0	108.2	75.8	94.02	-5,992.9	-3,236.9	3,491.2	3,309.2	181.97	19.185		
13,700.0	7,530.0	12,327.6	7,759.0	109.9	77.5	94.02	-6,092.9	-3,237.7	3,491.9	3,306.5	185.43	18.832		
13,800.0	7,530.0	12,427.6	7,759.0	111.7	79.2	94.02	-6,192.9	-3,238.5	3,492.7	3,303.8	188.88	18.491		
13,900.0	7,530.0	12,527.6	7,759.0	113.4	80.9	94.02	-6,292.9	-3,239.2	3,493.5	3,301.1	192.34	18.163		
14,000.0	7,530.0	12,627.6	7,759.0	115.1	82.6	94.02	-6,392.9	-3,240.0	3,494.2	3,298.4	195.80	17.846		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
14,100.0	7,530.0	12,727.6	7,759.0	116.9	84.3	94.02	-6,492.9	-3,240.8	3,495.0	3,295.7	199.27	17.539		
14,200.0	7,530.0	12,827.6	7,759.0	118.6	86.0	94.02	-6,592.9	-3,241.5	3,495.7	3,293.0	202.73	17.243		
14,300.0	7,530.0	12,927.6	7,759.0	120.4	87.7	94.02	-6,692.9	-3,242.3	3,496.5	3,290.3	206.19	16.957		
14,400.0	7,530.0	13,027.6	7,759.0	122.1	89.4	94.02	-6,792.9	-3,243.1	3,497.3	3,287.6	209.66	16.681		
14,500.0	7,530.0	13,127.6	7,759.0	123.9	91.1	94.02	-6,892.9	-3,243.8	3,498.0	3,284.9	213.13	16.413		
14,600.0	7,530.0	13,227.6	7,759.0	125.6	92.8	94.02	-6,992.9	-3,244.6	3,498.8	3,282.2	216.60	16.154		
14,700.0	7,530.0	13,327.6	7,759.0	127.3	94.5	94.01	-7,092.9	-3,245.4	3,499.6	3,279.5	220.07	15.902		
14,800.0	7,530.0	13,427.6	7,759.0	129.1	96.2	94.01	-7,192.9	-3,246.1	3,500.3	3,276.8	223.54	15.659		
14,900.0	7,530.0	13,527.6	7,759.0	130.8	97.9	94.01	-7,292.8	-3,246.9	3,501.1	3,274.1	227.01	15.423		
15,000.0	7,530.0	13,627.6	7,759.0	132.6	99.6	94.01	-7,392.8	-3,247.7	3,501.9	3,271.4	230.48	15.194		
15,100.0	7,530.0	13,727.6	7,759.0	134.3	101.4	94.01	-7,492.8	-3,248.4	3,502.6	3,268.7	233.95	14.971		
15,200.0	7,530.0	13,827.6	7,759.0	136.1	103.1	94.01	-7,592.8	-3,249.2	3,503.4	3,266.0	237.43	14.756		
15,300.0	7,530.0	13,927.6	7,759.0	137.8	104.8	94.01	-7,692.8	-3,250.0	3,504.2	3,263.3	240.90	14.546		
15,400.0	7,530.0	14,027.6	7,759.0	139.6	106.5	94.01	-7,792.8	-3,250.7	3,504.9	3,260.5	244.38	14.342		
15,500.0	7,530.0	14,127.6	7,759.0	141.3	108.2	94.01	-7,892.8	-3,251.5	3,505.7	3,257.8	247.86	14.144		
15,600.0	7,530.0	14,227.6	7,759.0	143.0	110.0	94.01	-7,992.8	-3,252.3	3,506.5	3,255.1	251.33	13.951		
15,700.0	7,530.0	14,327.6	7,759.0	144.8	111.7	94.01	-8,092.8	-3,253.0	3,507.2	3,252.4	254.81	13.764		
15,800.0	7,530.0	14,427.6	7,759.0	146.5	113.4	94.00	-8,192.8	-3,253.8	3,508.0	3,249.7	258.29	13.582		
15,900.0	7,530.0	14,527.6	7,759.0	148.3	115.1	94.00	-8,292.8	-3,254.6	3,508.8	3,247.0	261.77	13.404		
16,000.0	7,530.0	14,627.6	7,759.0	150.0	116.8	94.00	-8,392.8	-3,255.3	3,509.5	3,244.3	265.25	13.231		
16,100.0	7,530.0	14,727.6	7,759.0	151.8	118.6	94.00	-8,492.8	-3,256.1	3,510.3	3,241.6	268.73	13.063		
16,200.0	7,530.0	14,827.5	7,759.0	153.5	120.3	94.00	-8,592.8	-3,256.9	3,511.0	3,238.8	272.21	12.898		
16,300.0	7,530.0	14,927.5	7,759.0	155.3	122.0	94.00	-8,692.8	-3,257.6	3,511.8	3,236.1	275.69	12.738		
16,400.0	7,530.0	15,027.5	7,759.0	157.0	123.8	94.00	-8,792.8	-3,258.4	3,512.6	3,233.4	279.17	12.582		
16,500.0	7,530.0	15,127.5	7,759.0	158.8	125.5	94.00	-8,892.8	-3,259.2	3,513.3	3,230.7	282.65	12.430		
16,600.0	7,530.0	15,227.5	7,759.0	160.5	127.2	94.00	-8,992.7	-3,259.9	3,514.1	3,228.0	286.14	12.281		
16,700.0	7,530.0	15,327.5	7,759.0	162.3	128.9	94.00	-9,092.7	-3,260.7	3,514.9	3,225.2	289.62	12.136		
16,800.0	7,530.0	15,427.5	7,759.0	164.0	130.7	94.00	-9,192.7	-3,261.5	3,515.6	3,222.5	293.10	11.994		
16,900.0	7,530.0	15,527.5	7,759.0	165.8	132.4	94.00	-9,292.7	-3,262.2	3,516.4	3,219.8	296.59	11.856		
17,000.0	7,530.0	15,627.5	7,759.0	167.5	134.1	93.99	-9,392.7	-3,263.0	3,517.2	3,217.1	300.07	11.721		
17,100.0	7,530.0	15,727.5	7,759.0	169.3	135.9	93.99	-9,492.7	-3,263.8	3,517.9	3,214.4	303.56	11.589		
17,200.0	7,530.0	15,827.5	7,759.0	171.0	137.6	93.99	-9,592.7	-3,264.5	3,518.7	3,211.7	307.04	11.460		
17,300.0	7,530.0	15,927.5	7,759.0	172.8	139.3	93.99	-9,692.7	-3,265.3	3,519.5	3,208.9	310.53	11.334		
17,400.0	7,530.0	16,027.5	7,759.0	174.5	141.1	93.99	-9,792.7	-3,266.1	3,520.2	3,206.2	314.01	11.210		
17,420.9	7,530.0	16,036.2	7,759.0	174.9	141.2	93.99	-9,801.4	-3,266.1	3,520.4	3,205.9	314.53	11.193 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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	-115.24	-1,931.3	-4,097.3	4,529.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.24	-1,931.3	-4,097.3	4,529.6	4,529.4	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.24	-1,931.3	-4,097.3	4,529.6	4,529.0	0.60	7,500.829		
300.0	300.0	284.0	284.0	0.5	0.5	-115.24	-1,931.3	-4,097.3	4,529.6	4,528.7	0.95	4,753.274		
400.0	400.0	698.7	698.4	0.7	1.2	-115.23	-1,924.8	-4,085.0	4,526.7	4,524.9	1.86	2,432.573		
500.0	500.0	1,168.1	1,164.8	0.8	2.4	-115.20	-1,900.5	-4,039.3	4,515.7	4,512.7	2.94	1,533.723		
600.0	600.0	1,446.4	1,438.8	1.0	3.3	-115.17	-1,877.8	-3,996.5	4,497.6	4,493.9	3.73	1,206.798		
700.0	700.0	1,544.7	1,535.3	1.2	3.6	-147.73	-1,869.0	-3,980.0	4,479.4	4,475.5	3.85	1,162.570		
800.0	800.0	1,643.3	1,632.1	1.4	4.0	-147.83	-1,860.2	-3,963.4	4,462.5	4,458.3	4.20	1,062.084		
900.0	899.9	1,742.1	1,729.1	1.6	4.4	-147.93	-1,851.4	-3,946.8	4,447.2	4,442.6	4.55	976.947		
988.4	988.1	1,829.6	1,815.0	1.7	4.7	-148.02	-1,843.5	-3,932.1	4,434.8	4,429.9	4.86	911.792		
1,000.0	999.7	1,841.1	1,826.3	1.7	4.7	-148.03	-1,842.5	-3,930.2	4,433.3	4,428.4	4.90	903.859		
1,100.0	1,099.4	1,940.1	1,923.5	1.9	5.1	-148.06	-1,833.7	-3,913.6	4,419.9	4,414.7	5.26	840.549		
1,200.0	1,199.2	2,039.2	2,020.8	2.1	5.5	-148.10	-1,824.8	-3,896.9	4,406.6	4,401.0	5.61	785.098		
1,300.0	1,299.0	2,138.3	2,118.0	2.3	5.8	-148.14	-1,816.0	-3,880.3	4,393.2	4,387.3	5.97	736.157		
1,400.0	1,398.8	2,237.3	2,215.3	2.5	6.2	-148.17	-1,807.1	-3,863.6	4,379.9	4,373.6	6.32	692.661		
1,500.0	1,498.5	2,336.4	2,312.6	2.7	6.6	-148.21	-1,798.3	-3,847.0	4,366.6	4,359.9	6.68	653.761		
1,600.0	1,598.3	2,435.5	2,409.8	2.9	6.9	-148.24	-1,789.5	-3,830.3	4,353.2	4,346.2	7.04	618.772		
1,700.0	1,698.1	2,534.5	2,507.1	3.2	7.3	-148.28	-1,780.6	-3,813.7	4,339.9	4,332.5	7.39	587.139		
1,800.0	1,797.8	2,633.6	2,604.3	3.4	7.7	-148.32	-1,771.8	-3,797.0	4,326.6	4,318.8	7.75	558.405		
1,900.0	1,897.6	2,732.7	2,701.6	3.6	8.0	-148.36	-1,762.9	-3,780.4	4,313.2	4,305.1	8.10	532.190		
2,000.0	1,997.4	2,831.7	2,798.8	3.8	8.4	-148.39	-1,754.1	-3,763.7	4,299.9	4,291.5	8.46	508.180		
2,100.0	2,097.1	2,930.8	2,896.1	4.0	8.8	-148.43	-1,745.2	-3,747.1	4,286.6	4,277.8	8.82	486.109		
2,200.0	2,196.9	3,029.9	2,993.4	4.2	9.2	-148.47	-1,736.4	-3,730.4	4,273.3	4,264.1	9.17	465.753		
2,300.0	2,296.7	3,129.0	3,090.6	4.4	9.5	-148.51	-1,727.6	-3,713.8	4,260.0	4,250.4	9.53	446.919		
2,400.0	2,296.5	3,228.0	3,187.9	4.6	9.9	-148.55	-1,718.7	-3,697.1	4,246.6	4,236.8	9.89	429.444		
2,500.0	2,496.2	3,327.1	3,285.1	4.8	10.3	-148.58	-1,709.9	-3,680.5	4,233.3	4,223.1	10.25	413.186		
2,600.0	2,596.0	3,426.2	3,382.4	5.0	10.6	-148.62	-1,701.0	-3,663.9	4,220.0	4,209.4	10.60	398.023		
2,700.0	2,695.8	3,525.2	3,479.7	5.2	11.0	-148.66	-1,692.2	-3,647.2	4,206.7	4,195.7	10.96	383.847		
2,800.0	2,795.5	3,624.3	3,576.9	5.4	11.4	-148.70	-1,683.3	-3,630.6	4,193.4	4,182.1	11.32	370.567		
2,900.0	2,895.3	3,723.4	3,674.2	5.6	11.8	-148.74	-1,674.5	-3,613.9	4,180.1	4,168.4	11.67	358.100		
3,000.0	2,995.1	3,822.4	3,771.4	5.9	12.1	-148.78	-1,665.7	-3,597.3	4,166.8	4,154.7	12.03	346.373		
3,100.0	3,094.9	3,921.5	3,868.7	6.1	12.5	-148.82	-1,656.8	-3,580.6	4,153.5	4,141.1	12.39	335.322		
3,200.0	3,194.6	4,020.6	3,966.0	6.3	12.9	-148.86	-1,648.0	-3,564.0	4,140.2	4,127.4	12.74	324.892		
3,300.0	3,294.4	4,119.6	4,063.2	6.5	13.3	-148.90	-1,639.1	-3,547.3	4,126.9	4,113.8	13.10	315.030		
3,400.0	3,394.2	4,218.7	4,160.5	6.7	13.6	-148.94	-1,630.3	-3,530.7	4,113.6	4,100.1	13.46	305.693		
3,500.0	3,493.9	4,317.8	4,257.7	6.9	14.0	-148.98	-1,621.4	-3,514.0	4,100.3	4,086.5	13.81	296.838		
3,600.0	3,593.7	4,416.9	4,355.0	7.1	14.4	-149.03	-1,612.6	-3,497.4	4,087.0	4,072.8	14.17	288.430		
3,700.0	3,693.5	4,515.9	4,452.3	7.3	14.8	-149.07	-1,603.8	-3,480.7	4,073.7	4,059.2	14.53	280.436		
3,800.0	3,793.2	4,615.0	4,549.5	7.5	15.1	-149.11	-1,594.9	-3,464.1	4,060.4	4,045.5	14.88	272.826		
3,900.0	3,893.0	4,714.1	4,646.8	7.7	15.5	-149.15	-1,586.1	-3,447.4	4,047.1	4,031.9	15.24	265.574		
4,000.0	3,992.8	4,813.1	4,744.0	8.0	15.9	-149.19	-1,577.2	-3,430.8	4,033.8	4,018.2	15.60	258.653		
4,100.0	4,092.6	4,912.2	4,841.3	8.2	16.3	-149.24	-1,568.4	-3,414.2	4,020.5	4,004.6	15.95	252.043		
4,200.0	4,192.3	5,011.3	4,938.5	8.4	16.6	-149.28	-1,559.5	-3,397.5	4,007.3	3,991.0	16.31	245.722		
4,300.0	4,292.1	5,110.3	5,035.8	8.6	17.0	-149.32	-1,550.7	-3,380.9	3,994.0	3,977.3	16.66	239.673		
4,400.0	4,391.9	5,209.4	5,133.1	8.8	17.4	-149.37	-1,541.8	-3,364.2	3,980.7	3,963.7	17.02	233.877		
4,500.0	4,491.6	5,308.5	5,230.3	9.0	17.8	-149.41	-1,533.0	-3,347.6	3,967.4	3,950.1	17.38	228.320		
4,600.0	4,591.4	5,407.5	5,327.6	9.2	18.1	-149.46	-1,524.2	-3,330.9	3,954.2	3,936.4	17.73	222.987		
4,700.0	4,691.2	5,506.6	5,424.8	9.4	18.5	-149.50	-1,515.3	-3,314.3	3,940.9	3,922.8	18.09	217.865		
4,800.0	4,790.9	5,605.7	5,522.1	9.6	18.9	-149.55	-1,506.5	-3,297.6	3,927.6	3,909.2	18.44	212.941		
4,900.0	4,890.7	5,704.7	5,619.4	9.8	19.3	-149.59	-1,497.6	-3,281.0	3,914.4	3,895.6	18.80	208.204		
5,000.0	4,990.5	5,803.8	5,716.6	10.1	19.6	-149.64	-1,488.8	-3,264.3	3,901.1	3,881.9	19.16	203.644		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.3	5,902.9	5,813.9	10.3	20.0	-149.68	-1,479.9	-3,247.7	3,887.8	3,868.3	19.51	199.251	
5,200.0	5,190.0	6,002.0	5,911.1	10.5	20.4	-149.73	-1,471.1	-3,231.0	3,874.6	3,854.7	19.87	195.015	
5,300.0	5,289.8	6,101.0	6,008.4	10.7	20.8	-149.77	-1,462.3	-3,214.4	3,861.3	3,841.1	20.22	190.930	
5,400.0	5,389.6	6,200.1	6,105.7	10.9	21.1	-149.82	-1,453.4	-3,197.7	3,848.1	3,827.5	20.58	186.986	
5,500.0	5,489.3	6,299.2	6,202.9	11.1	21.5	-149.87	-1,444.6	-3,181.1	3,834.8	3,813.9	20.94	183.177	
5,600.0	5,589.1	6,398.2	6,300.2	11.3	21.9	-149.92	-1,435.7	-3,164.4	3,821.6	3,800.3	21.29	179.495	
5,700.0	5,688.9	6,497.3	6,397.4	11.5	22.3	-149.96	-1,426.9	-3,147.8	3,808.3	3,786.7	21.65	175.935	
5,800.0	5,788.7	6,596.4	6,494.7	11.7	22.6	-150.01	-1,418.0	-3,131.2	3,795.1	3,773.1	22.00	172.491	
5,900.0	5,888.4	6,695.4	6,591.9	11.9	23.0	-150.06	-1,409.2	-3,114.5	3,781.8	3,759.5	22.36	169.156	
6,000.0	5,988.2	6,794.5	6,689.2	12.2	23.4	-150.11	-1,400.4	-3,097.9	3,768.6	3,745.9	22.71	165.927	
6,100.0	6,088.0	6,893.6	6,786.5	12.4	23.8	-150.16	-1,391.5	-3,081.2	3,755.4	3,732.3	23.07	162.797	
6,200.0	6,187.7	6,992.6	6,883.7	12.6	24.1	-150.21	-1,382.7	-3,064.6	3,742.1	3,718.7	23.42	159.762	
6,300.0	6,287.5	7,091.7	6,981.0	12.8	24.5	-150.26	-1,373.8	-3,047.9	3,728.9	3,705.1	23.78	156.819	
6,400.0	6,387.3	7,190.8	7,078.2	13.0	24.9	-150.31	-1,365.0	-3,031.3	3,715.7	3,691.6	24.13	153.963	
6,500.0	6,487.0	7,257.6	7,143.8	13.2	25.1	-150.34	-1,359.0	-3,020.0	3,702.6	3,678.2	24.43	151.540	
6,600.0	6,586.8	7,300.0	7,185.6	13.4	25.3	-150.38	-1,356.8	-3,012.9	3,691.0	3,666.3	24.69	149.498	
6,700.0	6,686.6	7,300.0	7,185.6	13.6	25.3	-150.38	-1,356.8	-3,012.9	3,681.5	3,656.7	24.87	148.010	
6,787.0	6,773.4	7,350.0	7,234.8	13.8	25.4	-150.49	-1,358.2	-3,004.5	3,674.8	3,649.7	25.12	146.298	
6,800.0	6,786.4	7,350.0	7,234.8	13.8	25.4	-160.95	-1,358.2	-3,004.5	3,673.9	3,648.7	25.14	146.163	
6,850.0	6,836.3	7,350.0	7,234.8	13.9	25.4	112.23	-1,358.2	-3,004.5	3,669.6	3,644.4	25.18	145.753	
6,900.0	6,886.2	7,350.0	7,234.8	14.0	25.4	82.73	-1,358.2	-3,004.5	3,664.4	3,639.2	25.19	145.444	
6,950.0	6,935.7	7,378.1	7,262.4	14.0	25.5	75.36	-1,360.9	-2,999.8	3,657.8	3,632.6	25.24	144.920	
7,000.0	6,984.6	7,400.0	7,283.8	14.0	25.5	72.49	-1,364.0	-2,996.1	3,650.4	3,625.1	25.26	144.499	
7,050.0	7,032.6	7,400.0	7,283.8	14.0	25.5	71.21	-1,364.0	-2,996.1	3,641.8	3,616.6	25.25	144.239	
7,100.0	7,079.7	7,400.0	7,283.8	13.9	25.5	70.71	-1,364.0	-2,996.1	3,632.4	3,607.2	25.24	143.890	
7,150.0	7,125.4	7,427.6	7,310.5	13.9	25.6	70.72	-1,369.0	-2,991.5	3,621.9	3,596.6	25.30	143.180	
7,200.0	7,169.6	7,450.0	7,332.0	13.8	25.6	71.05	-1,374.0	-2,987.8	3,610.6	3,585.2	25.37	142.335	
7,250.0	7,212.1	7,450.0	7,332.0	13.8	25.6	71.53	-1,374.0	-2,987.8	3,598.4	3,572.9	25.45	141.374	
7,300.0	7,252.6	7,450.0	7,332.0	13.7	25.6	72.17	-1,374.0	-2,987.8	3,585.5	3,559.9	25.59	140.125	
7,350.0	7,291.0	7,475.8	7,356.5	13.7	25.6	73.10	-1,380.9	-2,983.6	3,571.8	3,546.0	25.80	138.466	
7,400.0	7,327.1	7,500.0	7,379.2	13.7	25.6	74.16	-1,388.3	-2,979.8	3,557.5	3,531.5	26.05	136.548	
7,450.0	7,360.7	7,500.0	7,379.2	13.7	25.6	75.18	-1,388.3	-2,979.8	3,542.5	3,516.2	26.36	134.405	
7,500.0	7,391.6	7,500.0	7,379.2	13.7	25.6	76.27	-1,388.3	-2,979.8	3,527.2	3,500.5	26.72	132.018	
7,550.0	7,419.7	7,521.5	7,399.1	13.8	25.6	77.62	-1,395.8	-2,976.4	3,511.3	3,484.2	27.12	129.453	
7,600.0	7,444.8	7,550.0	7,425.0	13.9	25.6	79.12	-1,406.8	-2,971.9	3,495.3	3,467.8	27.56	126.804	
7,650.0	7,466.9	7,550.0	7,425.0	14.1	25.6	80.41	-1,406.8	-2,971.9	3,478.8	3,450.7	28.05	124.001	
7,700.0	7,485.8	7,550.0	7,425.0	14.3	25.6	81.73	-1,406.8	-2,971.9	3,462.2	3,433.6	28.57	121.167	
7,750.0	7,501.5	7,550.0	7,425.0	14.6	25.6	83.05	-1,406.8	-2,971.9	3,445.7	3,416.6	29.12	118.347	
7,800.0	7,513.7	7,572.8	7,445.3	14.9	25.6	84.70	-1,416.5	-2,968.5	3,429.0	3,399.4	29.63	115.744	
7,850.0	7,522.6	7,581.9	7,453.4	15.2	25.6	86.18	-1,420.6	-2,967.1	3,412.6	3,382.5	30.16	113.147	
7,900.0	7,528.0	7,600.0	7,469.1	15.6	25.6	87.79	-1,429.2	-2,964.4	3,396.5	3,365.8	30.67	110.754	
7,952.9	7,530.0	7,600.0	7,469.1	16.1	25.6	89.20	-1,429.2	-2,964.4	3,379.6	3,348.4	31.24	108.179	
8,000.0	7,530.0	7,600.0	7,469.1	16.5	25.6	89.20	-1,429.2	-2,964.4	3,365.2	3,333.5	31.70	106.171	
8,100.0	7,530.0	7,623.9	7,489.4	17.5	25.6	89.56	-1,441.2	-2,960.9	3,336.4	3,303.7	32.67	102.110	
8,200.0	7,530.0	7,650.0	7,511.0	18.7	25.6	89.95	-1,455.4	-2,957.2	3,310.0	3,276.2	33.75	98.072	
8,300.0	7,530.0	7,650.0	7,511.0	19.9	25.6	89.95	-1,455.4	-2,957.2	3,286.2	3,251.2	35.01	93.872	
8,400.0	7,530.0	7,700.0	7,550.6	21.2	25.6	90.66	-1,485.2	-2,950.5	3,264.8	3,228.6	36.14	90.336	
8,500.0	7,530.0	7,714.3	7,561.4	22.6	25.6	90.85	-1,494.3	-2,948.6	3,245.8	3,208.3	37.47	86.625	
8,600.0	7,530.0	7,750.0	7,587.4	24.0	25.5	91.32	-1,518.4	-2,944.2	3,229.3	3,190.5	38.76	83.323	
8,700.0	7,530.0	7,777.3	7,606.2	25.4	25.5	91.66	-1,537.8	-2,940.9	3,215.1	3,175.0	40.12	80.142	
8,800.0	7,530.0	7,814.6	7,630.5	26.9	25.5	92.10	-1,565.9	-2,936.8	3,203.2	3,161.7	41.47	77.241	
8,900.0	7,530.0	7,850.0	7,651.8	28.4	25.4	92.48	-1,593.9	-2,933.1	3,193.5	3,150.6	42.86	74.505	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
9,000.0	7,530.0	7,900.0	7,678.9	30.0	25.4	92.97	-1,635.6	-2,928.5	3,185.7	3,141.4	44.23	72.020		
9,100.0	7,530.0	7,950.0	7,702.4	31.5	25.4	93.40	-1,679.6	-2,924.5	3,179.7	3,134.0	45.65	69.655		
9,200.0	7,530.0	8,011.2	7,725.7	33.1	25.3	93.83	-1,736.0	-2,920.5	3,175.3	3,128.2	47.10	67.421		
9,300.0	7,530.0	8,071.9	7,743.0	34.7	25.3	94.14	-1,794.1	-2,917.6	3,172.3	3,123.6	48.62	65.242		
9,400.0	7,530.0	8,135.9	7,754.4	36.3	25.3	94.35	-1,857.0	-2,915.6	3,170.5	3,120.3	50.24	63.112		
9,500.0	7,530.0	8,201.8	7,759.0	38.0	25.4	94.43	-1,922.7	-2,914.9	3,169.9	3,117.9	51.95	61.018		
9,524.0	7,530.0	8,222.2	7,759.0	38.4	25.4	94.43	-1,943.1	-2,914.9	3,169.9	3,117.5	52.40	60.492 CC		
9,600.0	7,530.0	8,298.2	7,759.0	39.6	25.5	94.43	-2,019.1	-2,914.9	3,169.9	3,116.0	53.89	58.824		
9,700.0	7,530.0	8,398.2	7,759.0	41.3	25.8	94.43	-2,119.1	-2,914.9	3,169.9	3,113.9	56.04	56.567		
9,800.0	7,530.0	8,498.2	7,759.0	42.9	26.2	94.43	-2,219.1	-2,914.9	3,169.9	3,111.5	58.37	54.303		
9,900.0	7,530.0	8,598.2	7,759.0	44.6	26.7	94.43	-2,319.1	-2,914.9	3,169.9	3,109.1	60.88	52.073		
10,000.0	7,530.0	8,698.2	7,759.0	46.3	27.3	94.43	-2,419.1	-2,914.9	3,170.0	3,106.4	63.52	49.907		
10,100.0	7,530.0	8,798.2	7,759.0	47.9	28.0	94.43	-2,519.1	-2,915.0	3,170.0	3,103.7	66.28	47.828		
10,200.0	7,530.0	8,898.2	7,759.0	49.6	28.8	94.43	-2,619.1	-2,915.0	3,170.0	3,100.8	69.14	45.849		
10,300.0	7,530.0	8,998.2	7,759.0	51.3	29.7	94.43	-2,719.1	-2,915.0	3,170.0	3,097.9	72.09	43.976		
10,400.0	7,530.0	9,098.2	7,759.0	53.0	30.6	94.43	-2,819.1	-2,915.0	3,170.0	3,094.9	75.10	42.210		
10,500.0	7,530.0	9,198.2	7,759.0	54.7	31.6	94.43	-2,919.1	-2,915.0	3,170.0	3,091.9	78.17	40.551		
10,600.0	7,530.0	9,298.2	7,759.0	56.4	32.7	94.43	-3,019.1	-2,915.0	3,170.1	3,088.8	81.30	38.993		
10,700.0	7,530.0	9,398.2	7,759.0	58.1	33.9	94.43	-3,119.1	-2,915.1	3,170.1	3,085.6	84.46	37.532		
10,800.0	7,530.0	9,498.2	7,759.0	59.8	35.0	94.43	-3,219.1	-2,915.1	3,170.1	3,082.4	87.66	36.162		
10,900.0	7,530.0	9,598.2	7,759.0	61.5	36.3	94.43	-3,319.1	-2,915.1	3,170.1	3,079.2	90.89	34.877		
11,000.0	7,530.0	9,698.2	7,759.0	63.2	37.6	94.43	-3,419.1	-2,915.1	3,170.1	3,076.0	94.15	33.671		
11,100.0	7,530.0	9,798.2	7,759.0	64.9	38.9	94.43	-3,519.1	-2,915.1	3,170.1	3,072.7	97.43	32.538		
11,200.0	7,530.0	9,898.2	7,759.0	66.6	40.2	94.43	-3,619.1	-2,915.1	3,170.2	3,069.4	100.73	31.473		
11,300.0	7,530.0	9,998.2	7,759.0	68.4	41.6	94.43	-3,719.1	-2,915.2	3,170.2	3,066.1	104.04	30.470		
11,400.0	7,530.0	10,098.2	7,759.0	70.1	43.0	94.43	-3,819.1	-2,915.2	3,170.2	3,062.8	107.37	29.525		
11,500.0	7,530.0	10,198.2	7,759.0	71.8	44.5	94.43	-3,919.1	-2,915.2	3,170.2	3,059.5	110.71	28.634		
11,600.0	7,530.0	10,298.2	7,759.0	73.5	45.9	94.43	-4,019.1	-2,915.2	3,170.2	3,056.1	114.07	27.792		
11,700.0	7,530.0	10,398.2	7,759.0	75.2	47.4	94.43	-4,119.1	-2,915.2	3,170.2	3,052.8	117.43	26.996		
11,800.0	7,530.0	10,498.2	7,759.0	77.0	48.9	94.43	-4,219.1	-2,915.2	3,170.2	3,049.4	120.81	26.242		
11,900.0	7,530.0	10,598.2	7,759.0	78.7	50.4	94.43	-4,319.1	-2,915.3	3,170.3	3,046.1	124.19	25.527		
12,000.0	7,530.0	10,698.2	7,759.0	80.4	51.9	94.43	-4,419.1	-2,915.3	3,170.3	3,042.7	127.58	24.849		
12,100.0	7,530.0	10,798.2	7,759.0	82.2	53.5	94.43	-4,519.1	-2,915.3	3,170.3	3,039.3	130.98	24.204		
12,200.0	7,530.0	10,898.2	7,759.0	83.9	55.0	94.43	-4,619.1	-2,915.3	3,170.3	3,035.9	134.38	23.592		
12,300.0	7,530.0	10,998.2	7,759.0	85.6	56.6	94.43	-4,719.1	-2,915.3	3,170.3	3,032.5	137.79	23.008		
12,400.0	7,530.0	11,098.2	7,759.0	87.3	58.2	94.43	-4,819.1	-2,915.3	3,170.3	3,029.1	141.21	22.452		
12,500.0	7,530.0	11,198.2	7,759.0	89.1	59.7	94.43	-4,919.1	-2,915.4	3,170.4	3,025.7	144.63	21.921		
12,600.0	7,530.0	11,298.2	7,759.0	90.8	61.3	94.43	-5,019.1	-2,915.4	3,170.4	3,022.3	148.05	21.414		
12,700.0	7,530.0	11,398.2	7,759.0	92.5	62.9	94.43	-5,119.1	-2,915.4	3,170.4	3,018.9	151.48	20.930		
12,800.0	7,530.0	11,498.2	7,759.0	94.3	64.6	94.43	-5,219.1	-2,915.4	3,170.4	3,015.5	154.91	20.467		
12,900.0	7,530.0	11,598.2	7,759.0	96.0	66.2	94.43	-5,319.1	-2,915.4	3,170.4	3,012.1	158.34	20.023		
13,000.0	7,530.0	11,698.2	7,759.0	97.8	67.8	94.43	-5,419.1	-2,915.4	3,170.4	3,008.7	161.78	19.598		
13,100.0	7,530.0	11,798.2	7,759.0	99.5	69.4	94.43	-5,519.1	-2,915.4	3,170.5	3,005.2	165.22	19.190		
13,200.0	7,530.0	11,898.2	7,759.0	101.2	71.1	94.43	-5,619.1	-2,915.5	3,170.5	3,001.8	168.66	18.798		
13,300.0	7,530.0	11,998.2	7,759.0	103.0	72.7	94.43	-5,719.1	-2,915.5	3,170.5	2,998.4	172.11	18.422		
13,400.0	7,530.0	12,098.2	7,759.0	104.7	74.4	94.43	-5,819.1	-2,915.5	3,170.5	2,995.0	175.55	18.060		
13,500.0	7,530.0	12,198.2	7,759.0	106.4	76.0	94.43	-5,919.1	-2,915.5	3,170.5	2,991.5	179.00	17.712		
13,600.0	7,530.0	12,298.2	7,759.0	108.2	77.7	94.43	-6,019.1	-2,915.5	3,170.5	2,988.1	182.46	17.377		
13,700.0	7,530.0	12,398.2	7,759.0	109.9	79.3	94.43	-6,119.1	-2,915.5	3,170.6	2,984.7	185.91	17.054		
13,800.0	7,530.0	12,498.2	7,759.0	111.7	81.0	94.43	-6,219.1	-2,915.6	3,170.6	2,981.2	189.36	16.743		
13,900.0	7,530.0	12,598.2	7,759.0	113.4	82.7	94.43	-6,319.1	-2,915.6	3,170.6	2,977.8	192.82	16.443		
14,000.0	7,530.0	12,698.2	7,759.0	115.1	84.3	94.43	-6,419.1	-2,915.6	3,170.6	2,974.3	196.28	16.153		

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	12,798.2	7,759.0	116.9	86.0	94.43	-6,519.1	-2,915.6	3,170.6	2,970.9	199.74	15.874		
14,200.0	7,530.0	12,898.2	7,759.0	118.6	87.7	94.43	-6,619.1	-2,915.6	3,170.6	2,967.4	203.20	15.603		
14,300.0	7,530.0	12,998.2	7,759.0	120.4	89.4	94.43	-6,719.1	-2,915.6	3,170.7	2,964.0	206.67	15.342		
14,400.0	7,530.0	13,098.2	7,759.0	122.1	91.1	94.43	-6,819.1	-2,915.7	3,170.7	2,960.5	210.13	15.089		
14,500.0	7,530.0	13,198.2	7,759.0	123.9	92.8	94.43	-6,919.1	-2,915.7	3,170.7	2,957.1	213.60	14.844		
14,600.0	7,530.0	13,298.2	7,759.0	125.6	94.4	94.43	-7,019.1	-2,915.7	3,170.7	2,953.6	217.06	14.607		
14,700.0	7,530.0	13,398.2	7,759.0	127.3	96.1	94.43	-7,119.1	-2,915.7	3,170.7	2,950.2	220.53	14.378		
14,800.0	7,530.0	13,498.2	7,759.0	129.1	97.8	94.43	-7,219.1	-2,915.7	3,170.7	2,946.7	224.00	14.155		
14,900.0	7,530.0	13,598.2	7,759.0	130.8	99.5	94.43	-7,319.1	-2,915.7	3,170.8	2,943.3	227.47	13.939		
15,000.0	7,530.0	13,698.2	7,759.0	132.6	101.2	94.43	-7,419.1	-2,915.8	3,170.8	2,939.8	230.94	13.730		
15,100.0	7,530.0	13,798.2	7,759.0	134.3	102.9	94.43	-7,519.1	-2,915.8	3,170.8	2,936.4	234.41	13.527		
15,200.0	7,530.0	13,898.2	7,759.0	136.1	104.6	94.43	-7,619.1	-2,915.8	3,170.8	2,932.9	237.88	13.329		
15,300.0	7,530.0	13,998.2	7,759.0	137.8	106.3	94.43	-7,719.1	-2,915.8	3,170.8	2,929.5	241.35	13.138		
15,400.0	7,530.0	14,098.2	7,759.0	139.6	108.0	94.43	-7,819.1	-2,915.8	3,170.8	2,926.0	244.83	12.951		
15,500.0	7,530.0	14,198.2	7,759.0	141.3	109.7	94.43	-7,919.1	-2,915.8	3,170.9	2,922.6	248.30	12.770		
15,600.0	7,530.0	14,298.2	7,759.0	143.0	111.5	94.43	-8,019.1	-2,915.9	3,170.9	2,919.1	251.78	12.594		
15,700.0	7,530.0	14,398.2	7,759.0	144.8	113.2	94.43	-8,119.1	-2,915.9	3,170.9	2,915.6	255.25	12.423		
15,800.0	7,530.0	14,498.2	7,759.0	146.5	114.9	94.43	-8,219.1	-2,915.9	3,170.9	2,912.2	258.73	12.256		
15,900.0	7,530.0	14,598.2	7,759.0	148.3	116.6	94.43	-8,319.1	-2,915.9	3,170.9	2,908.7	262.21	12.093		
16,000.0	7,530.0	14,698.2	7,759.0	150.0	118.3	94.43	-8,419.1	-2,915.9	3,170.9	2,905.3	265.68	11.935		
16,100.0	7,530.0	14,798.2	7,759.0	151.8	120.0	94.43	-8,519.1	-2,915.9	3,171.0	2,901.8	269.16	11.781		
16,200.0	7,530.0	14,898.2	7,759.0	153.5	121.7	94.43	-8,619.1	-2,916.0	3,171.0	2,898.3	272.64	11.631		
16,300.0	7,530.0	14,998.2	7,759.0	155.3	123.4	94.43	-8,719.1	-2,916.0	3,171.0	2,894.9	276.12	11.484		
16,400.0	7,530.0	15,098.2	7,759.0	157.0	125.2	94.43	-8,819.1	-2,916.0	3,171.0	2,891.4	279.60	11.341		
16,500.0	7,530.0	15,198.2	7,759.0	158.8	126.9	94.43	-8,919.1	-2,916.0	3,171.0	2,887.9	283.08	11.202		
16,600.0	7,530.0	15,298.2	7,759.0	160.5	128.6	94.43	-9,019.1	-2,916.0	3,171.0	2,884.5	286.56	11.066		
16,700.0	7,530.0	15,398.2	7,759.0	162.3	130.3	94.43	-9,119.1	-2,916.0	3,171.1	2,881.0	290.04	10.933		
16,800.0	7,530.0	15,498.2	7,759.0	164.0	132.0	94.43	-9,219.1	-2,916.1	3,171.1	2,877.5	293.52	10.803		
16,900.0	7,530.0	15,598.2	7,759.0	165.8	133.8	94.43	-9,319.1	-2,916.1	3,171.1	2,874.1	297.00	10.677		
17,000.0	7,530.0	15,698.2	7,759.0	167.5	135.5	94.43	-9,419.1	-2,916.1	3,171.1	2,870.6	300.49	10.553		
17,100.0	7,530.0	15,798.2	7,759.0	169.3	137.2	94.43	-9,519.1	-2,916.1	3,171.1	2,867.2	303.97	10.432		
17,200.0	7,530.0	15,898.2	7,759.0	171.0	138.9	94.43	-9,619.1	-2,916.1	3,171.1	2,863.7	307.45	10.314		
17,300.0	7,530.0	15,998.2	7,759.0	172.8	140.7	94.43	-9,719.1	-2,916.1	3,171.2	2,860.2	310.94	10.199		
17,354.1	7,530.0	16,052.3	7,759.0	173.7	141.6	94.43	-9,773.2	-2,916.2	3,171.2	2,858.3	312.82	10.137		
17,400.0	7,530.0	16,087.8	7,759.0	174.5	142.2	94.43	-9,808.7	-2,916.2	3,171.2	2,856.9	314.24	10.092		
17,420.9	7,530.0	16,087.8	7,759.0	174.9	142.2	94.43	-9,808.7	-2,916.2	3,171.3	2,856.7	314.60	10.080 ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-115.33	-1,937.3	-4,092.3	4,527.7					
100.0	100.0	84.0	84.0	0.2	0.1	-115.33	-1,937.3	-4,092.3	4,527.7	4,527.5	0.26	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	-115.33	-1,937.3	-4,092.3	4,527.7	4,527.1	0.60	7,497.652		
300.0	300.0	597.7	597.4	0.5	1.0	-115.34	-1,932.1	-4,079.5	4,524.8	4,523.3	1.52	2,985.083		
400.0	400.0	1,066.0	1,062.7	0.7	2.2	-115.38	-1,912.5	-4,031.9	4,513.8	4,511.2	2.64	1,710.528		
500.0	500.0	1,522.9	1,511.1	0.8	3.9	-115.44	-1,879.6	-3,951.7	4,494.8	4,490.9	3.95	1,136.855		
600.0	600.0	1,640.9	1,625.9	1.0	4.4	-115.46	-1,869.1	-3,926.2	4,471.5	4,467.1	4.46	1,002.969		
700.0	700.0	1,738.3	1,720.6	1.2	4.8	-148.08	-1,860.5	-3,905.2	4,449.0	4,444.8	4.19	1,061.059		
800.0	800.0	1,836.0	1,815.6	1.4	5.2	-148.23	-1,851.8	-3,884.1	4,427.8	4,423.3	4.54	974.759		
900.0	899.9	1,934.0	1,910.9	1.6	5.7	-148.38	-1,843.2	-3,863.0	4,408.1	4,403.3	4.89	900.694		
988.4	988.1	2,020.8	1,995.3	1.7	6.1	-148.52	-1,835.5	-3,844.2	4,392.0	4,386.8	5.21	843.423		
1,000.0	999.7	2,032.2	2,006.4	1.7	6.1	-148.52	-1,834.4	-3,841.8	4,389.9	4,384.7	5.25	836.447		
1,100.0	1,099.4	2,130.5	2,102.0	1.9	6.5	-148.59	-1,825.7	-3,820.6	4,372.3	4,366.7	5.60	780.494		
1,200.0	1,199.2	2,228.8	2,197.6	2.1	7.0	-148.66	-1,817.0	-3,799.3	4,354.6	4,348.7	5.96	731.067		
1,300.0	1,299.0	2,327.1	2,293.2	2.3	7.4	-148.72	-1,808.3	-3,778.1	4,337.0	4,330.7	6.31	687.111		
1,400.0	1,398.8	2,425.4	2,388.8	2.5	7.9	-148.79	-1,799.6	-3,756.9	4,319.4	4,312.7	6.67	647.783		
1,500.0	1,498.5	2,523.7	2,484.4	2.7	8.3	-148.86	-1,790.9	-3,735.7	4,301.7	4,294.7	7.02	612.397		
1,600.0	1,598.3	2,622.0	2,580.0	2.9	8.7	-148.92	-1,782.2	-3,714.5	4,284.1	4,276.7	7.38	580.397		
1,700.0	1,698.1	2,720.3	2,675.6	3.2	9.2	-148.99	-1,773.5	-3,693.2	4,266.5	4,258.8	7.74	551.322		
1,800.0	1,797.8	2,818.6	2,771.2	3.4	9.6	-149.06	-1,764.7	-3,672.0	4,248.9	4,240.8	8.10	524.793		
1,900.0	1,897.6	2,917.0	2,866.8	3.6	10.0	-149.13	-1,756.0	-3,650.8	4,231.3	4,222.8	8.45	500.491		
2,000.0	1,997.4	3,015.3	2,962.4	3.8	10.5	-149.20	-1,747.3	-3,629.6	4,213.7	4,204.9	8.81	478.149		
2,100.0	2,097.1	3,113.6	3,058.0	4.0	10.9	-149.27	-1,738.6	-3,608.4	4,196.1	4,186.9	9.17	457.540		
2,200.0	2,196.9	3,211.9	3,153.5	4.2	11.4	-149.34	-1,729.9	-3,587.1	4,178.5	4,169.0	9.53	438.471		
2,300.0	2,296.7	3,310.2	3,249.1	4.4	11.8	-149.41	-1,721.2	-3,565.9	4,160.9	4,151.0	9.89	420.775		
2,400.0	2,396.5	3,408.5	3,344.7	4.6	12.3	-149.49	-1,712.5	-3,544.7	4,143.4	4,133.1	10.25	404.311		
2,500.0	2,496.2	3,506.8	3,440.3	4.8	12.7	-149.56	-1,703.8	-3,523.5	4,125.8	4,115.2	10.61	388.955		
2,600.0	2,596.0	3,605.1	3,535.9	5.0	13.1	-149.63	-1,695.1	-3,502.3	4,108.2	4,097.3	10.97	374.598		
2,700.0	2,695.8	3,703.4	3,631.5	5.2	13.6	-149.71	-1,686.3	-3,481.0	4,090.7	4,079.4	11.33	361.145		
2,800.0	2,795.5	3,801.7	3,727.1	5.4	14.0	-149.78	-1,677.6	-3,459.8	4,073.1	4,061.5	11.69	348.516		
2,900.0	2,895.3	3,900.0	3,822.7	5.6	14.5	-149.86	-1,668.9	-3,438.6	4,055.6	4,043.6	12.05	336.635		
3,000.0	2,995.1	3,998.3	3,918.3	5.9	14.9	-149.94	-1,660.2	-3,417.4	4,038.1	4,025.7	12.41	325.439		
3,100.0	3,094.9	4,096.6	4,013.9	6.1	15.3	-150.01	-1,651.5	-3,396.2	4,020.5	4,007.8	12.77	314.870		
3,200.0	3,194.6	4,195.0	4,109.5	6.3	15.8	-150.09	-1,642.8	-3,374.9	4,003.0	3,989.9	13.13	304.877		
3,300.0	3,294.4	4,293.3	4,205.1	6.5	16.2	-150.17	-1,634.1	-3,353.7	3,985.5	3,972.0	13.49	295.414		
3,400.0	3,394.2	4,391.6	4,300.7	6.7	16.7	-150.25	-1,625.4	-3,332.5	3,968.0	3,954.2	13.85	286.440		
3,500.0	3,493.9	4,489.9	4,396.3	6.9	17.1	-150.33	-1,616.6	-3,311.3	3,950.5	3,936.3	14.21	277.918		
3,600.0	3,593.7	4,588.2	4,491.9	7.1	17.6	-150.41	-1,607.9	-3,290.1	3,933.0	3,918.5	14.58	269.815		
3,700.0	3,693.5	4,686.5	4,587.5	7.3	18.0	-150.49	-1,599.2	-3,268.8	3,915.6	3,900.6	14.94	262.100		
3,800.0	3,793.2	4,784.8	4,683.0	7.5	18.4	-150.57	-1,590.5	-3,247.6	3,898.1	3,882.8	15.30	254.746		
3,900.0	3,893.0	4,883.1	4,778.6	7.7	18.9	-150.65	-1,581.8	-3,226.4	3,880.6	3,865.0	15.66	247.729		
4,000.0	3,992.8	4,981.4	4,874.2	8.0	19.3	-150.74	-1,573.1	-3,205.2	3,863.2	3,847.1	16.03	241.026		
4,100.0	4,092.6	5,079.7	4,969.8	8.2	19.8	-150.82	-1,564.4	-3,184.0	3,845.7	3,829.3	16.39	234.616		
4,200.0	4,192.3	5,178.0	5,065.4	8.4	20.2	-150.91	-1,555.7	-3,162.7	3,828.3	3,811.5	16.76	228.480		
4,300.0	4,292.1	5,276.3	5,161.0	8.6	20.7	-150.99	-1,546.9	-3,141.5	3,810.8	3,793.7	17.12	222.601		
4,400.0	4,391.9	5,374.6	5,256.6	8.8	21.1	-151.08	-1,538.2	-3,120.3	3,793.4	3,775.9	17.48	216.963		
4,500.0	4,491.6	5,473.0	5,352.2	9.0	21.5	-151.17	-1,529.5	-3,099.1	3,776.0	3,758.2	17.85	211.552		
4,600.0	4,591.4	5,571.3	5,447.8	9.2	22.0	-151.25	-1,520.8	-3,077.8	3,758.6	3,740.4	18.21	206.354		
4,700.0	4,691.2	5,669.6	5,543.4	9.4	22.4	-151.34	-1,512.1	-3,056.6	3,741.2	3,722.6	18.58	201.357		
4,800.0	4,790.9	5,767.9	5,639.0	9.6	22.9	-151.43	-1,503.4	-3,035.4	3,723.8	3,704.9	18.95	196.550		
4,900.0	4,890.7	5,866.2	5,734.6	9.8	23.3	-151.52	-1,494.7	-3,014.2	3,706.4	3,687.1	19.31	191.921		
5,000.0	4,990.5	5,964.5	5,830.2	10.1	23.8	-151.61	-1,486.0	-2,993.0	3,689.1	3,669.4	19.68	187.461		

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 1I-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 1I-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA 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		
5,100.0	5,090.3	6,062.8	5,925.8	10.3	24.2	-151.71	-1,477.2	-2,971.7	3,671.7	3,651.7	20.05	183.161		
5,200.0	5,190.0	6,161.1	6,021.4	10.5	24.6	-151.80	-1,468.5	-2,950.5	3,654.3	3,633.9	20.41	179.012		
5,300.0	5,289.8	6,259.4	6,117.0	10.7	25.1	-151.89	-1,459.8	-2,929.3	3,637.0	3,616.2	20.78	175.007		
5,400.0	5,389.6	6,357.7	6,212.5	10.9	25.5	-151.99	-1,451.1	-2,908.1	3,619.7	3,598.5	21.15	171.138		
5,500.0	5,489.3	6,456.0	6,308.1	11.1	26.0	-152.08	-1,442.4	-2,886.9	3,602.3	3,580.8	21.52	167.398		
5,600.0	5,589.1	6,554.3	6,403.7	11.3	26.4	-152.18	-1,433.7	-2,865.6	3,585.0	3,563.1	21.89	163.781		
5,700.0	5,688.9	6,652.6	6,499.3	11.5	26.9	-152.28	-1,425.0	-2,844.4	3,567.7	3,545.5	22.26	160.281		
5,800.0	5,788.7	6,751.0	6,594.9	11.7	27.3	-152.38	-1,416.3	-2,823.2	3,550.4	3,527.8	22.63	156.892		
5,900.0	5,888.4	6,849.3	6,690.5	11.9	27.8	-152.48	-1,407.5	-2,802.0	3,533.2	3,510.2	23.00	153.609		
6,000.0	5,988.2	6,947.6	6,786.1	12.2	28.2	-152.58	-1,398.8	-2,780.8	3,515.9	3,492.5	23.37	150.427		
6,100.0	6,088.0	7,045.9	6,881.7	12.4	28.6	-152.68	-1,390.1	-2,759.5	3,498.6	3,474.9	23.74	147.342		
6,200.0	6,187.7	7,144.2	6,977.3	12.6	29.1	-152.78	-1,381.4	-2,738.3	3,481.4	3,457.2	24.12	144.349		
6,300.0	6,287.5	7,242.5	7,072.9	12.8	29.5	-152.89	-1,372.7	-2,717.1	3,464.1	3,439.6	24.49	141.444		
6,400.0	6,387.3	7,321.9	7,150.1	13.0	29.9	-152.97	-1,365.7	-2,700.0	3,447.0	3,422.1	24.83	138.831		
6,500.0	6,487.0	7,350.0	7,177.5	13.2	30.0	-153.01	-1,363.9	-2,693.9	3,431.2	3,406.1	25.07	136.847		
6,600.0	6,586.8	7,376.4	7,203.2	13.4	30.1	-153.07	-1,363.4	-2,688.2	3,417.6	3,392.2	25.33	134.939		
6,700.0	6,686.6	7,400.0	7,226.3	13.6	30.2	-153.13	-1,364.1	-2,683.1	3,406.1	3,380.5	25.57	133.183		
6,787.0	6,773.4	7,422.4	7,248.1	13.8	30.3	-153.21	-1,365.6	-2,678.2	3,397.9	3,372.1	25.81	131.667		
6,800.0	6,786.4	7,425.6	7,251.2	13.8	30.3	-163.67	-1,365.8	-2,677.5	3,396.8	3,371.0	25.82	131.545		
6,850.0	6,836.3	7,450.0	7,274.9	13.9	30.3	109.49	-1,368.6	-2,672.3	3,391.7	3,365.9	25.88	131.070		
6,900.0	6,886.2	7,450.0	7,274.9	14.0	30.3	80.07	-1,368.6	-2,672.3	3,385.3	3,359.5	25.80	131.225		
6,950.0	6,935.7	7,450.0	7,274.9	14.0	30.3	72.78	-1,368.6	-2,672.3	3,377.9	3,352.2	25.67	131.565		
7,000.0	6,984.6	7,474.6	7,298.5	14.0	30.4	69.95	-1,372.4	-2,667.0	3,369.1	3,343.5	25.59	131.645		
7,050.0	7,032.6	7,500.0	7,322.9	14.0	30.5	68.75	-1,377.5	-2,661.6	3,359.5	3,334.0	25.48	131.826		
7,100.0	7,079.7	7,500.0	7,322.9	13.9	30.5	68.34	-1,377.5	-2,661.6	3,348.5	3,323.2	25.30	132.345		
7,150.0	7,125.4	7,500.0	7,322.9	13.9	30.5	68.39	-1,377.5	-2,661.6	3,336.7	3,311.6	25.14	132.723		
7,200.0	7,169.6	7,523.3	7,345.0	13.8	30.5	68.80	-1,383.1	-2,656.7	3,323.8	3,298.7	25.07	132.572		
7,250.0	7,212.1	7,550.0	7,370.0	13.8	30.6	69.48	-1,390.6	-2,651.2	3,310.2	3,285.1	25.06	132.110		
7,300.0	7,252.6	7,550.0	7,370.0	13.7	30.6	70.26	-1,390.6	-2,651.2	3,295.4	3,270.4	25.06	131.479		
7,350.0	7,291.0	7,550.0	7,370.0	13.7	30.6	71.18	-1,390.6	-2,651.2	3,280.1	3,254.9	25.16	130.348		
7,400.0	7,327.1	7,570.7	7,389.1	13.7	30.6	72.35	-1,397.3	-2,646.9	3,263.9	3,238.5	25.39	128.576		
7,450.0	7,360.7	7,600.0	7,415.8	13.7	30.7	73.71	-1,407.9	-2,641.0	3,247.4	3,221.7	25.70	126.354		
7,500.0	7,391.6	7,600.0	7,415.8	13.7	30.7	74.98	-1,407.9	-2,641.0	3,229.9	3,203.8	26.08	123.838		
7,550.0	7,419.7	7,600.0	7,415.8	13.8	30.7	76.31	-1,407.9	-2,641.0	3,212.2	3,185.6	26.55	121.002		
7,600.0	7,444.8	7,600.0	7,415.8	13.9	30.7	77.70	-1,407.9	-2,641.0	3,194.2	3,167.1	27.08	117.953		
7,650.0	7,466.9	7,626.3	7,439.2	14.1	30.7	79.44	-1,418.6	-2,635.8	3,175.6	3,148.0	27.66	114.828		
7,700.0	7,485.8	7,650.0	7,459.9	14.3	30.7	81.22	-1,429.2	-2,631.2	3,157.2	3,128.9	28.25	111.749		
7,750.0	7,501.5	7,650.0	7,459.9	14.6	30.7	82.76	-1,429.2	-2,631.2	3,138.5	3,109.6	28.88	108.666		
7,800.0	7,513.7	7,650.0	7,459.9	14.9	30.7	84.30	-1,429.2	-2,631.2	3,119.9	3,090.4	29.52	105.704		
7,850.0	7,522.6	7,650.0	7,459.9	15.2	30.7	85.83	-1,429.2	-2,631.2	3,101.6	3,071.5	30.14	102.900		
7,900.0	7,528.0	7,674.6	7,480.9	15.6	30.7	87.74	-1,441.1	-2,626.5	3,083.3	3,052.7	30.68	100.489		
7,952.9	7,530.0	7,700.0	7,502.1	16.1	30.8	89.76	-1,454.4	-2,621.9	3,064.7	3,033.5	31.21	98.201		
8,000.0	7,530.0	7,700.0	7,502.1	16.5	30.8	89.76	-1,454.4	-2,621.9	3,048.4	3,016.7	31.66	96.275		
8,100.0	7,530.0	7,700.0	7,502.1	17.5	30.8	89.76	-1,454.4	-2,621.9	3,015.9	2,983.2	32.72	92.163		
8,200.0	7,530.0	7,728.6	7,525.2	18.7	30.8	90.22	-1,470.5	-2,616.7	2,986.1	2,952.3	33.79	88.382		
8,300.0	7,530.0	7,750.0	7,541.9	19.9	30.8	90.56	-1,483.2	-2,613.0	2,958.9	2,923.9	34.96	84.632		
8,400.0	7,530.0	7,774.3	7,560.4	21.2	30.8	90.93	-1,498.5	-2,608.9	2,934.4	2,898.2	36.19	81.078		
8,500.0	7,530.0	7,800.0	7,579.2	22.6	30.8	91.31	-1,515.5	-2,604.7	2,912.6	2,875.1	37.48	77.720		
8,600.0	7,530.0	7,830.6	7,600.6	24.0	30.8	91.74	-1,536.8	-2,600.0	2,893.5	2,854.7	38.78	74.604		
8,700.0	7,530.0	7,850.0	7,613.5	25.4	30.8	92.01	-1,551.0	-2,597.1	2,876.9	2,836.7	40.18	71.603		
8,800.0	7,530.0	7,900.0	7,644.8	26.9	30.8	92.64	-1,589.4	-2,590.2	2,862.7	2,821.2	41.48	69.013		
8,900.0	7,530.0	7,950.0	7,672.6	28.4	30.8	93.21	-1,630.5	-2,584.0	2,851.0	2,808.2	42.82	66.576		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9,000.0	7,530.0	7,985.2	7,690.0	30.0	30.8	93.57	-1,660.8	-2,580.2	2,841.4	2,797.2	44.26	64.195		
9,100.0	7,530.0	8,034.0	7,711.1	31.5	30.8	94.00	-1,704.5	-2,575.5	2,833.9	2,788.2	45.70	62.017		
9,200.0	7,530.0	8,086.7	7,729.8	33.1	30.8	94.38	-1,753.7	-2,571.4	2,828.3	2,781.1	47.17	59.955		
9,300.0	7,530.0	8,150.0	7,746.2	34.7	30.8	94.72	-1,814.6	-2,567.7	2,824.4	2,775.7	48.71	57.990		
9,400.0	7,530.0	8,200.0	7,754.5	36.3	30.8	94.89	-1,863.9	-2,565.9	2,822.0	2,771.7	50.33	56.073		
9,500.0	7,530.0	8,262.3	7,758.9	38.0	30.9	94.98	-1,925.9	-2,564.9	2,821.1	2,769.1	52.04	54.209		
9,530.4	7,530.0	8,285.9	7,759.0	38.5	30.9	94.98	-1,949.6	-2,564.9	2,821.1	2,768.5	52.59	53.640 CC		
9,600.0	7,530.0	8,355.5	7,759.0	39.6	31.0	94.98	-2,019.2	-2,564.9	2,821.1	2,767.1	53.98	52.263		
9,700.0	7,530.0	8,455.5	7,759.0	41.3	31.2	94.98	-2,119.2	-2,564.9	2,821.1	2,765.0	56.11	50.277		
9,800.0	7,530.0	8,555.5	7,759.0	42.9	31.5	94.98	-2,219.2	-2,564.9	2,821.1	2,762.7	58.43	48.283		
9,900.0	7,530.0	8,655.5	7,759.0	44.6	31.9	94.98	-2,319.2	-2,565.0	2,821.2	2,760.2	60.91	46.315		
10,000.0	7,530.0	8,755.5	7,759.0	46.3	32.4	94.98	-2,419.2	-2,565.0	2,821.2	2,757.6	63.54	44.402		
10,100.0	7,530.0	8,855.5	7,759.0	47.9	33.0	94.98	-2,519.2	-2,565.0	2,821.2	2,754.9	66.28	42.564		
10,200.0	7,530.0	8,955.5	7,759.0	49.6	33.6	94.98	-2,619.2	-2,565.0	2,821.2	2,752.1	69.13	40.811		
10,300.0	7,530.0	9,055.5	7,759.0	51.3	34.4	94.98	-2,719.2	-2,565.0	2,821.2	2,749.2	72.06	39.151		
10,400.0	7,530.0	9,155.5	7,759.0	53.0	35.2	94.98	-2,819.2	-2,565.0	2,821.2	2,746.2	75.06	37.585		
10,500.0	7,530.0	9,255.5	7,759.0	54.7	36.0	94.98	-2,919.2	-2,565.1	2,821.3	2,743.1	78.13	36.111		
10,600.0	7,530.0	9,355.5	7,759.0	56.4	37.0	94.98	-3,019.2	-2,565.1	2,821.3	2,740.0	81.24	34.728		
10,700.0	7,530.0	9,455.5	7,759.0	58.1	38.0	94.98	-3,119.2	-2,565.1	2,821.3	2,736.9	84.40	33.429		
10,800.0	7,530.0	9,555.5	7,759.0	59.8	39.0	94.98	-3,219.2	-2,565.1	2,821.3	2,733.7	87.59	32.211		
10,900.0	7,530.0	9,655.5	7,759.0	61.5	40.1	94.98	-3,319.2	-2,565.1	2,821.3	2,730.5	90.81	31.069		
11,000.0	7,530.0	9,755.5	7,759.0	63.2	41.3	94.98	-3,419.2	-2,565.1	2,821.3	2,727.3	94.06	29.996		
11,100.0	7,530.0	9,855.5	7,759.0	64.9	42.5	94.98	-3,519.2	-2,565.2	2,821.3	2,724.0	97.33	28.987		
11,200.0	7,530.0	9,955.5	7,759.0	66.6	43.7	94.98	-3,619.2	-2,565.2	2,821.4	2,720.7	100.62	28.039		
11,300.0	7,530.0	10,055.5	7,759.0	68.4	45.0	94.98	-3,719.2	-2,565.2	2,821.4	2,717.5	103.93	27.147		
11,400.0	7,530.0	10,155.5	7,759.0	70.1	46.3	94.98	-3,819.2	-2,565.2	2,821.4	2,714.1	107.26	26.305		
11,500.0	7,530.0	10,255.5	7,759.0	71.8	47.6	94.98	-3,919.2	-2,565.2	2,821.4	2,710.8	110.59	25.512		
11,600.0	7,530.0	10,355.5	7,759.0	73.5	48.9	94.98	-4,019.2	-2,565.2	2,821.4	2,707.5	113.94	24.762		
11,700.0	7,530.0	10,455.5	7,759.0	75.2	50.3	94.98	-4,119.2	-2,565.3	2,821.4	2,704.1	117.30	24.053		
11,800.0	7,530.0	10,555.5	7,759.0	77.0	51.7	94.98	-4,219.2	-2,565.3	2,821.5	2,700.8	120.67	23.381		
11,900.0	7,530.0	10,655.5	7,759.0	78.7	53.2	94.98	-4,319.2	-2,565.3	2,821.5	2,697.4	124.05	22.744		
12,000.0	7,530.0	10,755.5	7,759.0	80.4	54.6	94.98	-4,419.2	-2,565.3	2,821.5	2,694.1	127.44	22.140		
12,100.0	7,530.0	10,855.5	7,759.0	82.2	56.1	94.98	-4,519.2	-2,565.3	2,821.5	2,690.7	130.83	21.566		
12,200.0	7,530.0	10,955.5	7,759.0	83.9	57.5	94.98	-4,619.2	-2,565.3	2,821.5	2,687.3	134.23	21.020		
12,300.0	7,530.0	11,055.5	7,759.0	85.6	59.0	94.98	-4,719.2	-2,565.4	2,821.5	2,683.9	137.63	20.500		
12,400.0	7,530.0	11,155.5	7,759.0	87.3	60.5	94.98	-4,819.2	-2,565.4	2,821.6	2,680.5	141.04	20.005		
12,500.0	7,530.0	11,255.5	7,759.0	89.1	62.1	94.98	-4,919.2	-2,565.4	2,821.6	2,677.1	144.46	19.532		
12,600.0	7,530.0	11,355.5	7,759.0	90.8	63.6	94.98	-5,019.2	-2,565.4	2,821.6	2,673.7	147.88	19.080		
12,700.0	7,530.0	11,455.5	7,759.0	92.5	65.1	94.98	-5,119.2	-2,565.4	2,821.6	2,670.3	151.30	18.649		
12,800.0	7,530.0	11,555.5	7,759.0	94.3	66.7	94.98	-5,219.2	-2,565.4	2,821.6	2,666.9	154.73	18.236		
12,900.0	7,530.0	11,655.5	7,759.0	96.0	68.3	94.98	-5,319.2	-2,565.5	2,821.6	2,663.5	158.16	17.840		
13,000.0	7,530.0	11,755.5	7,759.0	97.8	69.8	94.98	-5,419.2	-2,565.5	2,821.7	2,660.1	161.59	17.461		
13,100.0	7,530.0	11,855.5	7,759.0	99.5	71.4	94.98	-5,519.2	-2,565.5	2,821.7	2,656.6	165.03	17.098		
13,200.0	7,530.0	11,955.5	7,759.0	101.2	73.0	94.98	-5,619.2	-2,565.5	2,821.7	2,653.2	168.47	16.749		
13,300.0	7,530.0	12,055.5	7,759.0	103.0	74.6	94.98	-5,719.2	-2,565.5	2,821.7	2,649.8	171.91	16.414		
13,400.0	7,530.0	12,155.5	7,759.0	104.7	76.2	94.98	-5,819.2	-2,565.5	2,821.7	2,646.4	175.36	16.092		
13,500.0	7,530.0	12,255.5	7,759.0	106.4	77.8	94.98	-5,919.2	-2,565.6	2,821.7	2,642.9	178.80	15.781		
13,600.0	7,530.0	12,355.5	7,759.0	108.2	79.4	94.98	-6,019.2	-2,565.6	2,821.8	2,639.5	182.25	15.483		
13,700.0	7,530.0	12,455.5	7,759.0	109.9	81.1	94.98	-6,119.2	-2,565.6	2,821.8	2,636.1	185.70	15.195		
13,800.0	7,530.0	12,555.5	7,759.0	111.7	82.7	94.98	-6,219.2	-2,565.6	2,821.8	2,632.6	189.15	14.918		
13,900.0	7,530.0	12,655.5	7,759.0	113.4	84.3	94.98	-6,319.2	-2,565.6	2,821.8	2,629.2	192.61	14.651		
14,000.0	7,530.0	12,755.5	7,759.0	115.1	86.0	94.98	-6,419.2	-2,565.6	2,821.8	2,625.8	196.06	14.393		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
14,100.0	7,530.0	12,855.5	7,759.0	116.9	87.6	94.98	-6,519.2	-2,565.7	2,821.8	2,622.3	199.52	14.143		
14,200.0	7,530.0	12,955.5	7,759.0	118.6	89.3	94.98	-6,619.2	-2,565.7	2,821.9	2,618.9	202.98	13.902		
14,300.0	7,530.0	13,055.5	7,759.0	120.4	90.9	94.98	-6,719.2	-2,565.7	2,821.9	2,615.4	206.44	13.669		
14,400.0	7,530.0	13,155.5	7,759.0	122.1	92.6	94.98	-6,819.2	-2,565.7	2,821.9	2,612.0	209.90	13.444		
14,500.0	7,530.0	13,255.5	7,759.0	123.9	94.2	94.98	-6,919.2	-2,565.7	2,821.9	2,608.5	213.36	13.226		
14,600.0	7,530.0	13,355.5	7,759.0	125.6	95.9	94.98	-7,019.2	-2,565.7	2,821.9	2,605.1	216.82	13.015		
14,700.0	7,530.0	13,455.5	7,759.0	127.3	97.5	94.98	-7,119.2	-2,565.8	2,821.9	2,601.7	220.29	12.810		
14,800.0	7,530.0	13,555.5	7,759.0	129.1	99.2	94.98	-7,219.2	-2,565.8	2,822.0	2,598.2	223.75	12.612		
14,900.0	7,530.0	13,655.5	7,759.0	130.8	100.9	94.98	-7,319.2	-2,565.8	2,822.0	2,594.8	227.22	12.420		
15,000.0	7,530.0	13,755.5	7,759.0	132.6	102.6	94.98	-7,419.2	-2,565.8	2,822.0	2,591.3	230.69	12.233		
15,100.0	7,530.0	13,855.5	7,759.0	134.3	104.2	94.98	-7,519.2	-2,565.8	2,822.0	2,587.9	234.16	12.052		
15,200.0	7,530.0	13,955.5	7,759.0	136.1	105.9	94.98	-7,619.2	-2,565.8	2,822.0	2,584.4	237.62	11.876		
15,300.0	7,530.0	14,055.5	7,759.0	137.8	107.6	94.98	-7,719.2	-2,565.9	2,822.0	2,580.9	241.09	11.705		
15,400.0	7,530.0	14,155.5	7,759.0	139.6	109.3	94.98	-7,819.2	-2,565.9	2,822.1	2,577.5	244.57	11.539		
15,500.0	7,530.0	14,255.5	7,759.0	141.3	111.0	94.98	-7,919.2	-2,565.9	2,822.1	2,574.0	248.04	11.378		
15,600.0	7,530.0	14,355.5	7,759.0	143.0	112.7	94.98	-8,019.2	-2,565.9	2,822.1	2,570.6	251.51	11.221		
15,700.0	7,530.0	14,455.5	7,759.0	144.8	114.3	94.98	-8,119.2	-2,565.9	2,822.1	2,567.1	254.98	11.068		
15,800.0	7,530.0	14,555.5	7,759.0	146.5	116.0	94.98	-8,219.2	-2,565.9	2,822.1	2,563.7	258.46	10.919		
15,900.0	7,530.0	14,655.5	7,759.0	148.3	117.7	94.98	-8,319.2	-2,566.0	2,822.1	2,560.2	261.93	10.774		
16,000.0	7,530.0	14,755.5	7,759.0	150.0	119.4	94.98	-8,419.2	-2,566.0	2,822.2	2,556.8	265.40	10.633		
16,100.0	7,530.0	14,855.5	7,759.0	151.8	121.1	94.98	-8,519.2	-2,566.0	2,822.2	2,553.3	268.88	10.496		
16,200.0	7,530.0	14,955.5	7,759.0	153.5	122.8	94.98	-8,619.2	-2,566.0	2,822.2	2,549.8	272.35	10.362		
16,300.0	7,530.0	15,055.5	7,759.0	155.3	124.5	94.98	-8,719.2	-2,566.0	2,822.2	2,546.4	275.83	10.232		
16,400.0	7,530.0	15,155.5	7,759.0	157.0	126.2	94.98	-8,819.2	-2,566.0	2,822.2	2,542.9	279.31	10.104		
16,500.0	7,530.0	15,255.5	7,759.0	158.8	127.9	94.98	-8,919.2	-2,566.0	2,822.2	2,539.5	282.78	9.980		
16,600.0	7,530.0	15,355.5	7,759.0	160.5	129.6	94.98	-9,019.2	-2,566.1	2,822.3	2,536.0	286.26	9.859		
16,700.0	7,530.0	15,455.5	7,759.0	162.3	131.3	94.98	-9,119.2	-2,566.1	2,822.3	2,532.5	289.74	9.741		
16,800.0	7,530.0	15,555.5	7,759.0	164.0	133.0	94.98	-9,219.2	-2,566.1	2,822.3	2,529.1	293.22	9.625		
16,900.0	7,530.0	15,655.5	7,759.0	165.8	134.8	94.98	-9,319.2	-2,566.1	2,822.3	2,525.6	296.70	9.512		
17,000.0	7,530.0	15,755.5	7,759.0	167.5	136.5	94.98	-9,419.2	-2,566.1	2,822.3	2,522.1	300.18	9.402		
17,100.0	7,530.0	15,855.5	7,759.0	169.3	138.2	94.98	-9,519.2	-2,566.1	2,822.3	2,518.7	303.66	9.294		
17,200.0	7,530.0	15,955.5	7,759.0	171.0	139.9	94.98	-9,619.2	-2,566.2	2,822.4	2,515.2	307.14	9.189		
17,300.0	7,530.0	16,055.5	7,759.0	172.8	141.6	94.98	-9,719.2	-2,566.2	2,822.4	2,511.8	310.62	9.086		
17,354.6	7,530.0	16,110.1	7,759.0	173.7	142.5	94.98	-9,773.8	-2,566.2	2,822.4	2,509.9	312.52	9.031		
17,400.0	7,530.0	16,148.7	7,759.0	174.5	143.2	94.98	-9,812.4	-2,566.2	2,822.4	2,508.4	313.98	8.989		
17,420.9	7,530.0	16,148.7	7,759.0	174.9	143.2	94.98	-9,812.4	-2,566.2	2,822.5	2,508.2	314.35	8.979 ES, SF		

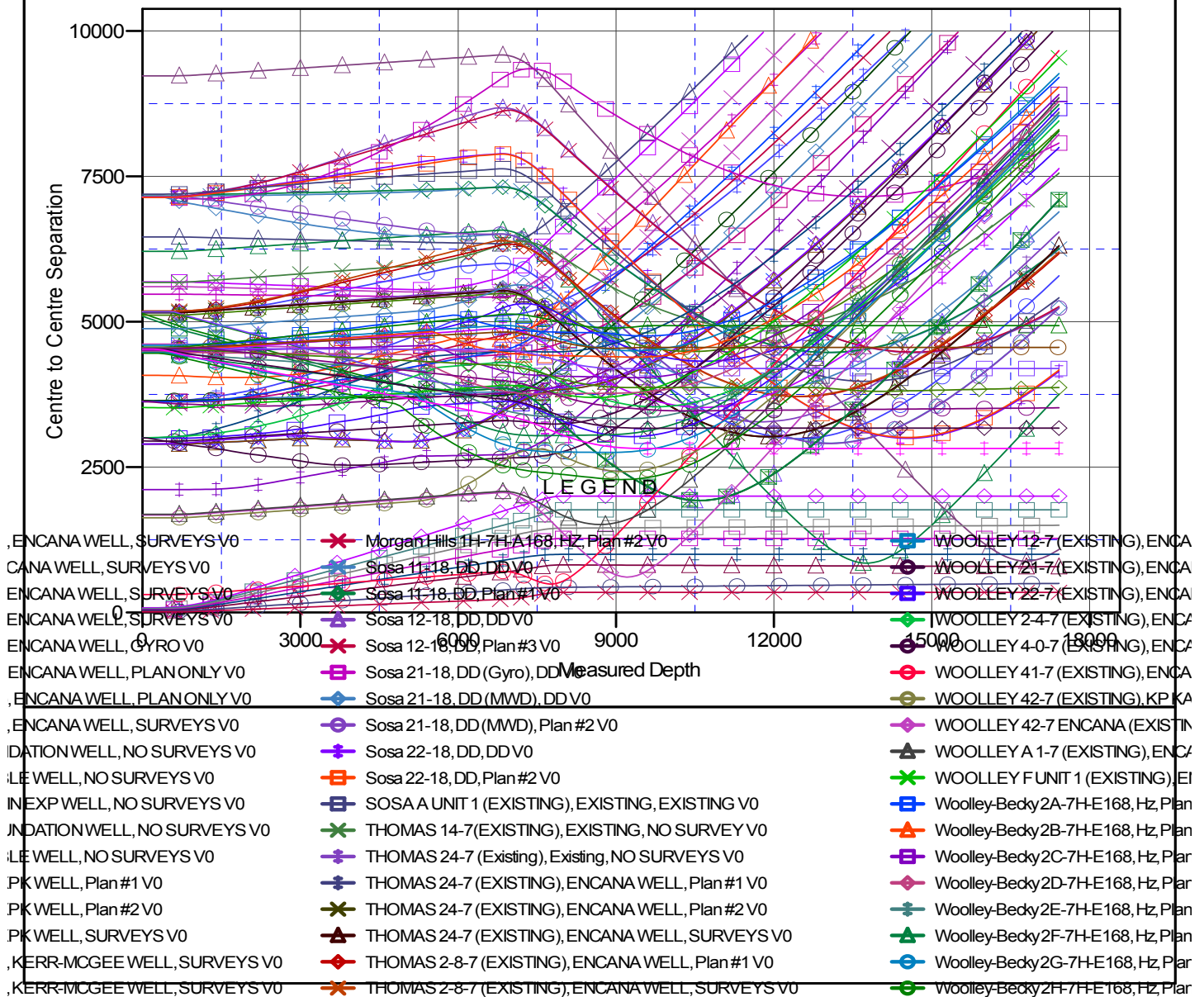
Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Morgan Hills 11-7H-A168
Project:	DJ Wattenberg	TVD Reference:	HZ @ 5035.0ft
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	HZ @ 5035.0ft
Site Error:	0.0ft	North Reference:	True
Reference Well:	Morgan Hills 11-7H-A168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 Depths are relative to HZ @ 5035.0ft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Morgan Hills 11-7H-A168
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.30°

Ladder Plot



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