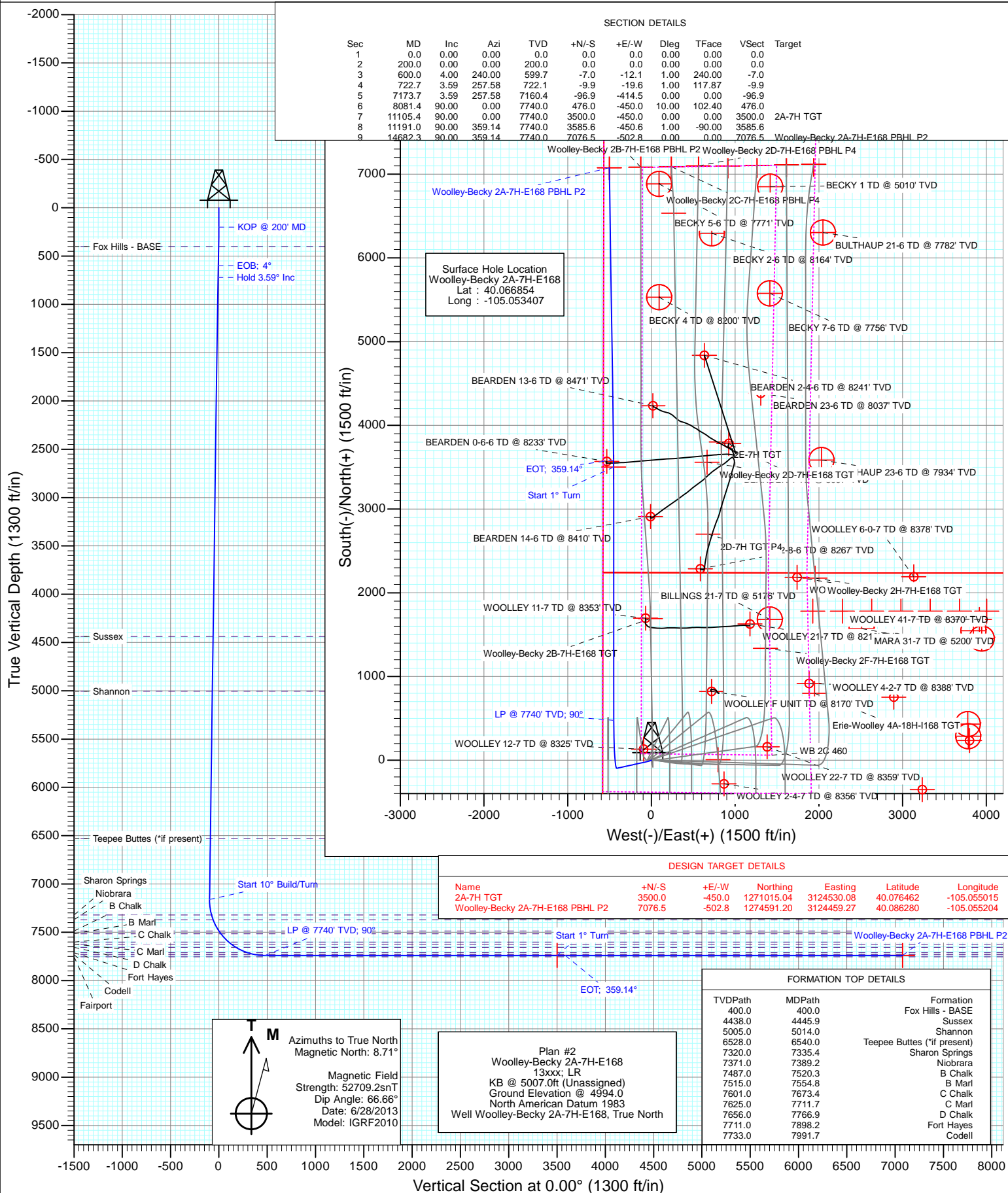




Project: DJ Wattenberg
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)
Well: Woolley-Becky 2A-7H-E168
Wellbore: Hz
Design: Plan #2



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Becky 2A-7H-E168	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	Woolley-Becky 2A-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,517.36 ft	Latitude:	40.066854
	+E/-W	0.0 ft	Easting:	3,124,997.70 ft	Longitude:	-105.053407
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,994.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/28/2013	8.71	66.66	52,709

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	4.00	240.00	599.7	-7.0	-12.1	1.00	1.00	0.00	240.00	
722.7	3.59	257.58	722.1	-9.9	-19.6	1.00	-0.33	14.33	117.87	
7,173.7	3.59	257.58	7,160.4	-96.9	-414.5	0.00	0.00	0.00	0.00	
8,081.4	90.00	0.00	7,740.0	476.0	-450.0	10.00	9.52	11.28	102.40	
11,105.4	90.00	0.00	7,740.0	3,500.0	-450.0	0.00	0.00	0.00	0.00	2A-7H TGT
11,191.0	90.00	359.14	7,740.0	3,585.6	-450.6	1.00	0.00	-1.00	-90.00	
14,682.3	90.00	359.14	7,740.0	7,076.5	-502.8	0.00	0.00	0.00	0.00	Woolley-Becky 2A-7H

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Becky 2A-7H-E168	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	KOP @ 200' MD
300.0	1.00	240.00	300.0	-0.4	-0.8	-0.4	1.00	1.00	
400.0	2.00	240.00	400.0	-1.7	-3.0	-1.7	1.00	1.00	Fox Hills - BASE
500.0	3.00	240.00	499.9	-3.9	-6.8	-3.9	1.00	1.00	
600.0	4.00	240.00	599.7	-7.0	-12.1	-7.0	1.00	1.00	EOB; 4°
700.0	3.64	254.06	699.5	-9.6	-18.2	-9.6	1.00	-0.36	
722.7	3.59	257.58	722.1	-9.9	-19.6	-9.9	1.00	-0.21	Hold 3.59° Inc
800.0	3.59	257.58	799.3	-11.0	-24.3	-11.0	0.00	0.00	
900.0	3.59	257.58	899.1	-12.3	-30.4	-12.3	0.00	0.00	
1,000.0	3.59	257.58	998.9	-13.7	-36.5	-13.7	0.00	0.00	
1,100.0	3.59	257.58	1,098.7	-15.0	-42.6	-15.0	0.00	0.00	
1,200.0	3.59	257.58	1,198.5	-16.4	-48.8	-16.4	0.00	0.00	
1,300.0	3.59	257.58	1,298.3	-17.7	-54.9	-17.7	0.00	0.00	
1,400.0	3.59	257.58	1,398.1	-19.1	-61.0	-19.1	0.00	0.00	
1,500.0	3.59	257.58	1,497.9	-20.4	-67.1	-20.4	0.00	0.00	
1,600.0	3.59	257.58	1,597.7	-21.8	-73.3	-21.8	0.00	0.00	
1,700.0	3.59	257.58	1,697.5	-23.1	-79.4	-23.1	0.00	0.00	
1,800.0	3.59	257.58	1,797.3	-24.5	-85.5	-24.5	0.00	0.00	
1,900.0	3.59	257.58	1,897.1	-25.8	-91.6	-25.8	0.00	0.00	
2,000.0	3.59	257.58	1,996.9	-27.2	-97.7	-27.2	0.00	0.00	
2,100.0	3.59	257.58	2,096.7	-28.5	-103.9	-28.5	0.00	0.00	
2,200.0	3.59	257.58	2,196.5	-29.9	-110.0	-29.9	0.00	0.00	
2,300.0	3.59	257.58	2,296.3	-31.2	-116.1	-31.2	0.00	0.00	
2,400.0	3.59	257.58	2,396.1	-32.6	-122.2	-32.6	0.00	0.00	
2,500.0	3.59	257.58	2,495.9	-33.9	-128.3	-33.9	0.00	0.00	
2,600.0	3.59	257.58	2,595.7	-35.3	-134.5	-35.3	0.00	0.00	
2,700.0	3.59	257.58	2,695.5	-36.6	-140.6	-36.6	0.00	0.00	
2,800.0	3.59	257.58	2,795.3	-37.9	-146.7	-37.9	0.00	0.00	
2,900.0	3.59	257.58	2,895.1	-39.3	-152.8	-39.3	0.00	0.00	
3,000.0	3.59	257.58	2,994.9	-40.6	-159.0	-40.6	0.00	0.00	
3,100.0	3.59	257.58	3,094.7	-42.0	-165.1	-42.0	0.00	0.00	
3,200.0	3.59	257.58	3,194.5	-43.3	-171.2	-43.3	0.00	0.00	
3,300.0	3.59	257.58	3,294.3	-44.7	-177.3	-44.7	0.00	0.00	
3,400.0	3.59	257.58	3,394.1	-46.0	-183.4	-46.0	0.00	0.00	
3,500.0	3.59	257.58	3,493.9	-47.4	-189.6	-47.4	0.00	0.00	
3,600.0	3.59	257.58	3,593.8	-48.7	-195.7	-48.7	0.00	0.00	
3,700.0	3.59	257.58	3,693.6	-50.1	-201.8	-50.1	0.00	0.00	
3,800.0	3.59	257.58	3,793.4	-51.4	-207.9	-51.4	0.00	0.00	
3,900.0	3.59	257.58	3,893.2	-52.8	-214.0	-52.8	0.00	0.00	
4,000.0	3.59	257.58	3,993.0	-54.1	-220.2	-54.1	0.00	0.00	
4,100.0	3.59	257.58	4,092.8	-55.5	-226.3	-55.5	0.00	0.00	
4,200.0	3.59	257.58	4,192.6	-56.8	-232.4	-56.8	0.00	0.00	
4,300.0	3.59	257.58	4,292.4	-58.2	-238.5	-58.2	0.00	0.00	
4,400.0	3.59	257.58	4,392.2	-59.5	-244.7	-59.5	0.00	0.00	
4,445.9	3.59	257.58	4,438.0	-60.1	-247.5	-60.1	0.00	0.00	Sussex
4,500.0	3.59	257.58	4,492.0	-60.9	-250.8	-60.9	0.00	0.00	
4,600.0	3.59	257.58	4,591.8	-62.2	-256.9	-62.2	0.00	0.00	
4,700.0	3.59	257.58	4,691.6	-63.6	-263.0	-63.6	0.00	0.00	
4,800.0	3.59	257.58	4,791.4	-64.9	-269.1	-64.9	0.00	0.00	
4,900.0	3.59	257.58	4,891.2	-66.3	-275.3	-66.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Becky 2A-7H-E168	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	3.59	257.58	4,991.0	-67.6	-281.4	-67.6	0.00	0.00	
5,014.0	3.59	257.58	5,005.0	-67.8	-282.2	-67.8	0.00	0.00	Shannon
5,100.0	3.59	257.58	5,090.8	-69.0	-287.5	-69.0	0.00	0.00	
5,200.0	3.59	257.58	5,190.6	-70.3	-293.6	-70.3	0.00	0.00	
5,300.0	3.59	257.58	5,290.4	-71.6	-299.8	-71.6	0.00	0.00	
5,400.0	3.59	257.58	5,390.2	-73.0	-305.9	-73.0	0.00	0.00	
5,500.0	3.59	257.58	5,490.0	-74.3	-312.0	-74.3	0.00	0.00	
5,600.0	3.59	257.58	5,589.8	-75.7	-318.1	-75.7	0.00	0.00	
5,700.0	3.59	257.58	5,689.6	-77.0	-324.2	-77.0	0.00	0.00	
5,800.0	3.59	257.58	5,789.4	-78.4	-330.4	-78.4	0.00	0.00	
5,900.0	3.59	257.58	5,889.2	-79.7	-336.5	-79.7	0.00	0.00	
6,000.0	3.59	257.58	5,989.0	-81.1	-342.6	-81.1	0.00	0.00	
6,100.0	3.59	257.58	6,088.8	-82.4	-348.7	-82.4	0.00	0.00	
6,200.0	3.59	257.58	6,188.6	-83.8	-354.8	-83.8	0.00	0.00	
6,300.0	3.59	257.58	6,288.4	-85.1	-361.0	-85.1	0.00	0.00	
6,400.0	3.59	257.58	6,388.2	-86.5	-367.1	-86.5	0.00	0.00	
6,500.0	3.59	257.58	6,488.0	-87.8	-373.2	-87.8	0.00	0.00	
6,540.0	3.59	257.58	6,528.0	-88.4	-375.7	-88.4	0.00	0.00	Teepee Buttes (*if present)
6,600.0	3.59	257.58	6,587.9	-89.2	-379.3	-89.2	0.00	0.00	
6,700.0	3.59	257.58	6,687.7	-90.5	-385.5	-90.5	0.00	0.00	
6,800.0	3.59	257.58	6,787.5	-91.9	-391.6	-91.9	0.00	0.00	
6,900.0	3.59	257.58	6,887.3	-93.2	-397.7	-93.2	0.00	0.00	
7,000.0	3.59	257.58	6,987.1	-94.6	-403.8	-94.6	0.00	0.00	
7,100.0	3.59	257.58	7,086.9	-95.9	-409.9	-95.9	0.00	0.00	
7,173.7	3.59	257.58	7,160.4	-96.9	-414.5	-96.9	0.00	0.00	Start 10° Build/Turn
7,200.0	3.97	297.93	7,186.7	-96.7	-416.1	-96.7	10.00	1.43	
7,250.0	7.70	333.03	7,236.4	-92.9	-419.1	-92.9	10.00	7.46	
7,300.0	12.36	343.75	7,285.6	-84.7	-422.1	-84.7	10.00	9.32	
7,335.4	15.79	347.47	7,320.0	-76.4	-424.2	-76.4	10.00	9.67	Sharon Springs
7,350.0	17.21	348.58	7,334.0	-72.3	-425.1	-72.3	10.00	9.76	
7,389.2	21.06	350.83	7,371.0	-59.7	-427.4	-59.7	10.00	9.82	Niobrara
7,400.0	22.13	351.32	7,381.0	-55.8	-428.0	-55.8	10.00	9.86	
7,450.0	27.07	353.11	7,426.5	-35.1	-430.8	-35.1	10.00	9.89	
7,500.0	32.03	354.37	7,470.0	-10.6	-433.4	-10.6	10.00	9.92	
7,520.3	34.05	354.79	7,487.0	0.4	-434.5	0.4	10.00	9.94	B Chalk
7,550.0	37.00	355.33	7,511.2	17.6	-436.0	17.6	10.00	9.94	
7,554.8	37.48	355.41	7,515.0	20.5	-436.2	20.5	10.00	9.95	B Marl
7,600.0	41.98	356.09	7,549.7	49.3	-438.3	49.3	10.00	9.95	
7,650.0	46.96	356.72	7,585.4	84.2	-440.5	84.2	10.00	9.96	
7,673.4	49.29	356.97	7,601.0	101.6	-441.5	101.6	10.00	9.97	C Chalk
7,700.0	51.94	357.25	7,617.9	122.1	-442.5	122.1	10.00	9.97	
7,711.7	53.11	357.36	7,625.0	131.4	-442.9	131.4	10.00	9.97	C Marl
7,750.0	56.93	357.71	7,647.0	162.8	-444.3	162.8	10.00	9.97	
7,766.9	58.62	357.86	7,656.0	177.1	-444.8	177.1	10.00	9.97	D Chalk
7,800.0	61.92	358.12	7,672.4	205.8	-445.9	205.8	10.00	9.98	
7,850.0	66.91	358.50	7,694.0	250.8	-447.2	250.8	10.00	9.98	
7,898.2	71.71	358.84	7,711.0	295.9	-448.2	295.9	10.00	9.98	Fort Hayes
7,900.0	71.89	358.85	7,711.6	297.6	-448.3	297.6	10.00	9.98	
7,950.0	76.88	359.18	7,725.0	345.7	-449.1	345.7	10.00	9.98	
7,991.7	81.04	359.45	7,733.0	386.6	-449.6	386.6	10.00	9.98	Codell
8,000.0	81.87	359.50	7,734.2	394.9	-449.6	394.9	10.00	9.98	
8,050.0	86.87	359.81	7,739.1	444.6	-449.9	444.6	10.00	9.98	

Cathedral Energy Services

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Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,081.4	90.00	0.00	7,740.0	476.0	-450.0	476.0	10.00	9.98	LP @ 7740' TVD; 90°
8,100.0	90.00	0.00	7,740.0	494.6	-450.0	494.6	0.00	0.00	
8,200.0	90.00	0.00	7,740.0	594.6	-450.0	594.6	0.00	0.00	
8,300.0	90.00	0.00	7,740.0	694.6	-450.0	694.6	0.00	0.00	
8,400.0	90.00	0.00	7,740.0	794.6	-450.0	794.6	0.00	0.00	
8,500.0	90.00	0.00	7,740.0	894.6	-450.0	894.6	0.00	0.00	
8,600.0	90.00	0.00	7,740.0	994.6	-450.0	994.6	0.00	0.00	
8,700.0	90.00	0.00	7,740.0	1,094.6	-450.0	1,094.6	0.00	0.00	
8,800.0	90.00	0.00	7,740.0	1,194.6	-450.0	1,194.6	0.00	0.00	
8,900.0	90.00	0.00	7,740.0	1,294.6	-450.0	1,294.6	0.00	0.00	
9,000.0	90.00	0.00	7,740.0	1,394.6	-450.0	1,394.6	0.00	0.00	
9,100.0	90.00	0.00	7,740.0	1,494.6	-450.0	1,494.6	0.00	0.00	
9,200.0	90.00	0.00	7,740.0	1,594.6	-450.0	1,594.6	0.00	0.00	
9,300.0	90.00	0.00	7,740.0	1,694.6	-450.0	1,694.6	0.00	0.00	
9,400.0	90.00	0.00	7,740.0	1,794.6	-450.0	1,794.6	0.00	0.00	
9,500.0	90.00	0.00	7,740.0	1,894.6	-450.0	1,894.6	0.00	0.00	
9,600.0	90.00	0.00	7,740.0	1,994.6	-450.0	1,994.6	0.00	0.00	
9,700.0	90.00	0.00	7,740.0	2,094.6	-450.0	2,094.6	0.00	0.00	
9,800.0	90.00	0.00	7,740.0	2,194.6	-450.0	2,194.6	0.00	0.00	
9,900.0	90.00	0.00	7,740.0	2,294.6	-450.0	2,294.6	0.00	0.00	
10,000.0	90.00	0.00	7,740.0	2,394.6	-450.0	2,394.6	0.00	0.00	
10,100.0	90.00	0.00	7,740.0	2,494.6	-450.0	2,494.6	0.00	0.00	
10,200.0	90.00	0.00	7,740.0	2,594.6	-450.0	2,594.6	0.00	0.00	
10,300.0	90.00	0.00	7,740.0	2,694.6	-450.0	2,694.6	0.00	0.00	
10,400.0	90.00	0.00	7,740.0	2,794.6	-450.0	2,794.6	0.00	0.00	
10,500.0	90.00	0.00	7,740.0	2,894.6	-450.0	2,894.6	0.00	0.00	
10,600.0	90.00	0.00	7,740.0	2,994.6	-450.0	2,994.6	0.00	0.00	
10,700.0	90.00	0.00	7,740.0	3,094.6	-450.0	3,094.6	0.00	0.00	
10,800.0	90.00	0.00	7,740.0	3,194.6	-450.0	3,194.6	0.00	0.00	
10,900.0	90.00	0.00	7,740.0	3,294.6	-450.0	3,294.6	0.00	0.00	
11,000.0	90.00	0.00	7,740.0	3,394.6	-450.0	3,394.6	0.00	0.00	
11,105.4	90.00	0.00	7,740.0	3,500.0	-450.0	3,500.0	0.00	0.00	Start 1° Turn
11,191.0	90.00	359.14	7,740.0	3,585.6	-450.6	3,585.6	1.00	0.00	EOT; 359.14°
11,200.0	90.00	359.14	7,740.0	3,594.6	-450.8	3,594.6	0.00	0.00	
11,300.0	90.00	359.14	7,740.0	3,694.6	-452.3	3,694.6	0.00	0.00	
11,400.0	90.00	359.14	7,740.0	3,794.6	-453.8	3,794.6	0.00	0.00	
11,500.0	90.00	359.14	7,740.0	3,894.6	-455.3	3,894.6	0.00	0.00	
11,600.0	90.00	359.14	7,740.0	3,994.5	-456.7	3,994.5	0.00	0.00	
11,700.0	90.00	359.14	7,740.0	4,094.5	-458.2	4,094.5	0.00	0.00	
11,800.0	90.00	359.14	7,740.0	4,194.5	-459.7	4,194.5	0.00	0.00	
11,900.0	90.00	359.14	7,740.0	4,294.5	-461.2	4,294.5	0.00	0.00	
12,000.0	90.00	359.14	7,740.0	4,394.5	-462.7	4,394.5	0.00	0.00	
12,100.0	90.00	359.14	7,740.0	4,494.5	-464.2	4,494.5	0.00	0.00	
12,200.0	90.00	359.14	7,740.0	4,594.5	-465.7	4,594.5	0.00	0.00	
12,300.0	90.00	359.14	7,740.0	4,694.5	-467.2	4,694.5	0.00	0.00	
12,400.0	90.00	359.14	7,740.0	4,794.5	-468.7	4,794.5	0.00	0.00	
12,500.0	90.00	359.14	7,740.0	4,894.4	-470.2	4,894.4	0.00	0.00	
12,600.0	90.00	359.14	7,740.0	4,994.4	-471.7	4,994.4	0.00	0.00	
12,700.0	90.00	359.14	7,740.0	5,094.4	-473.2	5,094.4	0.00	0.00	
12,800.0	90.00	359.14	7,740.0	5,194.4	-474.7	5,194.4	0.00	0.00	
12,900.0	90.00	359.14	7,740.0	5,294.4	-476.2	5,294.4	0.00	0.00	
13,000.0	90.00	359.14	7,740.0	5,394.4	-477.7	5,394.4	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
13,100.0	90.00	359.14	7,740.0	5,494.4	-479.2	5,494.4	0.00	0.00	
13,200.0	90.00	359.14	7,740.0	5,594.4	-480.7	5,594.4	0.00	0.00	
13,300.0	90.00	359.14	7,740.0	5,694.4	-482.1	5,694.4	0.00	0.00	
13,400.0	90.00	359.14	7,740.0	5,794.3	-483.6	5,794.3	0.00	0.00	
13,500.0	90.00	359.14	7,740.0	5,894.3	-485.1	5,894.3	0.00	0.00	
13,600.0	90.00	359.14	7,740.0	5,994.3	-486.6	5,994.3	0.00	0.00	
13,700.0	90.00	359.14	7,740.0	6,094.3	-488.1	6,094.3	0.00	0.00	
13,800.0	90.00	359.14	7,740.0	6,194.3	-489.6	6,194.3	0.00	0.00	
13,900.0	90.00	359.14	7,740.0	6,294.3	-491.1	6,294.3	0.00	0.00	
14,000.0	90.00	359.14	7,740.0	6,394.3	-492.6	6,394.3	0.00	0.00	
14,100.0	90.00	359.14	7,740.0	6,494.3	-494.1	6,494.3	0.00	0.00	
14,200.0	90.00	359.14	7,740.0	6,594.3	-495.6	6,594.3	0.00	0.00	
14,300.0	90.00	359.14	7,740.0	6,694.2	-497.1	6,694.2	0.00	0.00	
14,400.0	90.00	359.14	7,740.0	6,794.2	-498.6	6,794.2	0.00	0.00	
14,500.0	90.00	359.14	7,740.0	6,894.2	-500.1	6,894.2	0.00	0.00	
14,600.0	90.00	359.14	7,740.0	6,994.2	-501.6	6,994.2	0.00	0.00	
14,682.3	90.00	359.14	7,740.0	7,076.5	-502.8	7,076.5	0.00	0.00	TD at 14682.3

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
2A-7H TGT - plan hits target center - Point	0.00	0.00	7,740.0	3,500.0	-450.0	1,271,015.04	3,124,530.08	40.076462	-105.055015
Woolley-Becky 2A-7H-E - plan hits target center - Point	0.00	0.00	7,740.0	7,076.5	-502.8	1,274,591.20	3,124,459.27	40.086280	-105.055204
Woolley-Becky 2A-7H-E - plan misses target center by 64.0ft at 14682.3ft MD (7740.0 TVD, 7076.5 N, -502.8 E) - Point	0.00	0.00	7,804.0	7,076.5	-501.7	1,274,591.21	3,124,460.39	40.086280	-105.055200

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB @ 5007.0ft (Unassigned)
Project:	DJ Wattenberg	MD Reference:	KB @ 5007.0ft (Unassigned)
Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	North Reference:	True
Well:	Woolley-Becky 2A-7H-E168	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				
4,445.9	4,438.0	Sussex				
5,014.0	5,005.0	Shannon				
6,540.0	6,528.0	Teepee Buttes (*if present)				
7,335.4	7,320.0	Sharon Springs				
7,389.2	7,371.0	Niobrara				
7,520.3	7,487.0	B Chalk				
7,554.8	7,515.0	B Marl				
7,673.4	7,601.0	C Chalk				
7,711.7	7,625.0	C Marl				
7,766.9	7,656.0	D Chalk				
7,898.2	7,711.0	Fort Hayes				
7,991.7	7,733.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200' MD	
600.0	599.7	-7.0	-12.1	EOB; 4°	
722.7	722.1	-9.9	-19.6	Hold 3.59° Inc	
7,173.7	7,160.4	-96.9	-414.5	Start 10° Build/Turn	
8,081.4	7,740.0	476.0	-450.0	LP @ 7740' TVD; 90°	
11,105.4	7,740.0	3,500.0	-450.0	Start 1° Turn	
11,191.0	7,740.0	3,585.6	-450.6	EOT; 359.14°	
14,682.3	7,740.0	7,076.5	-502.8	TD at 14682.3	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Woolley-Becky 2A-7H-E168

Hz

Plan #2

Anticollision Report

10 December, 2014

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 5,280.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	12/9/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,682.3	Plan #2 (Hz)	Geolink MWD	Geolink MWD	

Cathedral Energy Services

Anticollision Report

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

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 0-6-6 (EXISTING) - ENCANA WELL - SURVE	11,167.2	7,969.0	85.1	5.7	1.071	Level 2, CC, ES, SF
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	11,361.5	7,699.8	1,375.3	1,292.6	16.647	CC
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	11,400.0	7,700.8	1,375.8	1,292.5	16.521	ES
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	11,800.0	7,711.7	1,443.4	1,353.2	16.002	SF
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	11,828.2	7,848.0	482.0	387.9	5.125	CC, ES
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE	11,900.0	7,847.9	487.3	392.0	5.114	SF
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE	10,508.8	7,889.8	437.6	364.5	5.991	CC, ES, SF
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	12,425.0	7,850.5	1,100.8	988.7	9.815	CC, ES
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	12,600.0	7,850.5	1,114.7	999.5	9.676	SF
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	9,884.5	7,919.5	1,037.6	966.9	14.666	CC
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	9,900.0	7,919.6	1,037.7	966.7	14.614	ES
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	10,100.0	7,921.7	1,059.8	985.4	14.250	SF
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,881.2	7,693.0	1,212.3	1,086.2	9.613	CC
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,900.0	7,693.0	1,212.5	1,086.0	9.589	ES
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	14,100.0	7,693.0	1,231.9	1,102.0	9.481	SF
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	13,127.9	7,697.0	571.7	458.7	5.059	CC, ES
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV	13,200.0	7,697.0	576.2	462.0	5.043	SF
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	14,480.3	7,688.0	591.3	454.8	4.331	CC
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU	14,500.0	7,688.0	591.7	454.8	4.322	ES, SF
Thomas 7-12 (Existing) - Existing - NO SURVEYS	5,016.2	4,995.2	936.9	918.1	49.712	CC
Thomas 7-12 (Existing) - Existing - NO SURVEYS	5,900.0	5,877.2	938.6	916.4	42.268	ES
Thomas 7-12 (Existing) - Existing - NO SURVEYS	7,200.0	7,174.7	947.4	920.3	34.972	SF
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	9,260.9	7,951.0	378.0	330.7	7.993	CC, ES
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE	9,300.0	7,953.6	380.0	332.0	7.927	SF
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SUR	1,389.3	1,475.4	154.0	148.8	29.389	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SUR	1,500.0	1,585.9	154.2	148.5	27.249	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SUR	7,700.0	7,705.9	349.2	322.0	12.864	SF
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	0.0	33.2	1,133.7			
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,428.8	7,757.5	1,163.9	1,129.6	33.864	ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	9,100.0	7,747.6	1,343.5	1,299.2	30.273	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #2	200.0	200.0	10.1	9.4	15.436	CC, ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #2	14,682.3	14,416.5	445.2	230.5	2.073	SF
Woolley-Becky 2C-7H-E168 - Hz - Plan #4	200.0	200.0	20.2	19.5	30.871	CC, ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #4	14,682.3	14,632.3	740.2	486.8	2.922	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #4	200.0	200.0	29.9	29.3	45.878	CC, ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #4	14,682.3	14,410.7	1,091.0	844.3	4.422	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	200.0	200.0	40.0	39.4	61.314	CC, ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #2	14,682.3	14,638.3	1,414.0	1,161.6	5.603	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #3	200.0	200.0	50.1	49.4	76.751	CC, ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #3	14,682.3	14,182.6	1,774.8	1,526.2	7.139	SF
Woolley-Becky 2G-7H-E168 - Hz - Plan #2	200.0	200.0	59.9	59.2	91.758	CC, ES
Woolley-Becky 2G-7H-E168 - Hz - Plan #2	14,682.3	14,821.3	2,115.2	1,862.1	8.359	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #3	200.0	200.0	70.0	69.3	107.193	CC, ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #3	14,682.3	14,400.0	2,416.9	2,170.6	9.814	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #2	7,803.4	7,803.6	72.1	43.9	2.559	CC, ES, SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #2	640.4	637.5	54.3	52.1	24.465	CC, ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #2	7,514.2	7,788.9	257.8	231.1	9.662	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #2	800.0	798.6	31.0	28.1	10.825	CC
Woolley-Sosa 2C-7H-E168 - HZ - Plan #2	800.0	798.7	31.0	28.1	10.824	ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #2	900.0	897.6	33.8	30.5	10.407	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #2	806.4	805.4	20.4	17.6	7.109	CC, ES, SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #3	850.6	849.8	11.9	8.9	3.944	CC, ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #3	900.0	899.1	12.3	9.1	3.858	SF

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Woolley-Sosa 2F-7H-E168 - HZ - Plan #2	564.3	564.2	9.3	7.3	4.715	CC, ES, SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #2	430.0	430.0	4.2	2.7	2.835	CC, ES, SF

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU													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		
0.0	0.0	0.0	0.0	0.0	0.0	15.24	3,634.0	989.8	3,766.5					
100.0	100.0	71.0	71.0	0.2	0.1	15.23	3,634.2	989.7	3,766.6	3,766.3	0.25	N/A		
200.0	200.0	157.3	157.3	0.3	0.3	15.23	3,634.8	989.3	3,767.1	3,766.5	0.58	6,513.759		
300.0	300.0	226.0	226.0	0.5	0.4	135.21	3,635.6	988.9	3,768.8	3,767.9	0.87	4,311.895		
400.0	400.0	320.9	320.9	0.7	0.5	135.19	3,637.5	987.9	3,772.3	3,771.0	1.22	3,094.761		
500.0	499.9	410.2	410.1	0.9	0.7	135.16	3,639.7	985.6	3,777.1	3,775.6	1.56	2,418.037		
600.0	599.7	520.5	520.2	1.1	0.9	135.09	3,643.5	980.0	3,783.5	3,781.5	1.97	1,925.195		
700.0	699.5	759.2	757.4	1.3	1.5	120.84	3,649.4	954.5	3,786.8	3,784.1	2.73	1,384.892		
722.7	722.1	782.6	780.6	1.3	1.6	117.30	3,649.8	951.5	3,787.1	3,784.2	2.84	1,333.519		
800.0	799.3	851.1	848.5	1.5	1.7	117.22	3,650.7	942.7	3,787.8	3,784.6	3.17	1,193.668		
900.0	899.1	931.8	928.5	1.7	2.0	117.13	3,652.4	932.1	3,789.3	3,785.7	3.59	1,054.130		
1,000.0	998.9	1,201.1	1,194.2	1.9	2.8	116.71	3,654.6	888.8	3,789.1	3,784.5	4.65	814.922		
1,100.0	1,098.7	1,310.6	1,301.8	2.1	3.2	116.50	3,653.4	868.2	3,786.2	3,780.9	5.24	723.228		
1,200.0	1,198.5	1,442.3	1,430.6	2.3	3.7	116.22	3,652.0	840.8	3,782.9	3,776.9	5.95	635.612		
1,300.0	1,298.3	1,623.9	1,606.1	2.5	4.6	115.69	3,649.5	794.5	3,778.2	3,771.2	7.01	539.244		
1,400.0	1,398.1	1,833.4	1,804.8	2.7	5.9	114.90	3,643.7	728.3	3,770.6	3,762.2	8.40	448.863		
1,500.0	1,497.9	1,919.6	1,885.5	2.9	6.4	114.54	3,640.9	698.2	3,762.2	3,753.0	9.14	411.548		
1,600.0	1,597.7	2,038.0	1,996.1	3.1	7.2	114.01	3,637.2	656.1	3,753.9	3,743.8	10.10	371.785		
1,700.0	1,697.5	2,132.0	2,083.8	3.3	7.8	113.60	3,634.0	622.4	3,745.5	3,734.6	10.91	343.288		
1,800.0	1,797.3	2,207.1	2,153.9	3.5	8.3	113.26	3,631.6	595.6	3,737.6	3,726.0	11.60	322.204		
1,900.0	1,897.1	2,305.7	2,246.1	3.7	8.9	112.83	3,628.6	560.8	3,730.1	3,717.6	12.44	299.834		
2,000.0	1,996.9	2,382.0	2,317.6	3.9	9.4	112.49	3,626.5	534.2	3,723.1	3,710.0	13.14	283.433		
2,100.0	2,096.7	2,493.3	2,421.9	4.1	10.2	112.01	3,623.2	495.4	3,716.3	3,702.2	14.06	264.277		
2,200.0	2,196.5	2,607.7	2,529.0	4.3	10.9	111.50	3,619.6	455.5	3,709.4	3,694.4	15.02	247.014		
2,300.0	2,296.3	2,726.5	2,640.3	4.5	11.7	110.98	3,614.9	413.9	3,702.0	3,686.0	15.99	231.453		
2,400.0	2,396.1	2,798.0	2,707.3	4.7	12.2	110.67	3,612.1	389.4	3,694.9	3,678.2	16.66	221.791		
2,500.0	2,495.9	2,851.0	2,757.1	4.9	12.5	110.44	3,610.5	371.3	3,688.9	3,671.7	17.21	214.395		
2,600.0	2,595.7	2,918.7	2,820.8	5.2	12.9	110.15	3,609.2	348.4	3,684.2	3,666.3	17.84	206.494		
2,700.0	2,695.5	3,083.9	2,976.2	5.4	14.0	109.44	3,604.8	292.4	3,679.0	3,659.9	19.13	192.291		
2,800.0	2,795.3	3,141.0	3,029.6	5.6	14.4	109.18	3,603.0	272.3	3,673.6	3,653.8	19.72	186.248		
2,900.0	2,895.1	3,227.0	3,109.9	5.8	15.0	108.78	3,601.2	241.6	3,669.1	3,648.6	20.52	178.792		
3,000.0	2,994.9	3,305.2	3,183.1	6.0	15.5	108.43	3,599.9	214.1	3,665.3	3,644.0	21.25	172.488		
3,100.0	3,094.7	3,401.8	3,273.7	6.2	16.2	107.99	3,598.3	180.5	3,661.8	3,639.7	22.10	165.658		
3,200.0	3,194.5	3,517.3	3,381.9	6.4	16.9	107.47	3,596.1	140.4	3,658.4	3,635.3	23.08	158.476		
3,300.0	3,294.3	3,671.0	3,525.9	6.6	17.9	106.78	3,591.3	86.8	3,653.9	3,629.6	24.33	150.176		
3,400.0	3,394.1	3,759.2	3,608.4	6.8	18.5	106.37	3,588.0	55.9	3,649.2	3,624.1	25.13	145.202		
3,500.0	3,493.9	3,848.3	3,691.9	7.0	19.1	105.97	3,584.7	25.0	3,644.7	3,618.8	25.93	140.534		
3,600.0	3,593.8	3,913.0	3,752.6	7.2	19.6	105.68	3,582.9	2.6	3,641.2	3,614.6	26.58	137.003		
3,700.0	3,693.6	4,009.0	3,842.5	7.4	20.2	105.24	3,580.6	-31.0	3,638.4	3,611.0	27.44	132.600		
3,800.0	3,793.4	4,119.3	3,945.7	7.6	20.9	104.73	3,577.4	-70.0	3,635.3	3,606.9	28.41	127.946		
3,900.0	3,893.2	4,208.3	4,028.4	7.8	21.6	104.30	3,574.9	-102.4	3,632.5	3,603.3	29.26	124.139		
4,000.0	3,993.0	4,302.7	4,115.9	8.0	22.3	103.83	3,572.3	-137.9	3,630.0	3,599.9	30.16	120.375		
4,100.0	4,092.8	4,443.9	4,247.4	8.2	23.2	103.15	3,567.7	-189.1	3,627.4	3,596.1	31.35	115.725		
4,200.0	4,192.6	4,534.1	4,331.8	8.4	23.8	102.73	3,564.1	-220.8	3,624.2	3,592.1	32.17	112.658		
4,300.0	4,292.4	4,599.0	4,392.4	8.7	24.3	102.42	3,561.8	-243.8	3,621.8	3,589.0	32.83	110.331		
4,400.0	4,392.2	4,684.0	4,471.9	8.9	24.8	102.02	3,559.3	-274.0	3,620.2	3,586.6	33.62	107.693		
4,500.0	4,492.0	4,766.5	4,549.4	9.1	25.4	101.65	3,557.3	-302.2	3,619.2	3,584.9	34.35	105.351		
4,593.5	4,585.3	4,835.0	4,614.0	9.3	25.8	101.36	3,555.8	-324.8	3,618.9	3,583.9	34.98	103.457		
4,600.0	4,591.8	4,839.7	4,618.5	9.3	25.8	101.34	3,555.7	-326.3	3,618.9	3,583.8	35.02	103.330		
4,700.0	4,691.6	4,924.4	4,698.7	9.5	26.3	100.99	3,554.5	-353.2	3,619.2	3,583.5	35.73	101.287		
4,800.0	4,791.4	5,018.7	4,788.9	9.7	26.8	100.64	3,553.2	-380.9	3,619.9	3,583.4	36.45	99.301		
4,900.0	4,891.2	5,105.3	4,872.3	9.9	27.3	100.36	3,552.3	-404.1	3,620.9	3,583.8	37.10	97.610		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU												Offset Site Error:	0.0 ft
Survey Program: 46-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,991.0	5,233.4	4,996.7	10.1	27.8	99.99	3,550.7	-434.8	3,621.6	3,583.7	37.87	95.637	
5,100.0	5,090.8	5,321.2	5,082.5	10.3	28.2	99.78	3,549.5	-453.3	3,622.3	3,583.8	38.42	94.279	
5,200.0	5,190.6	5,403.2	5,163.0	10.5	28.5	99.62	3,548.8	-468.9	3,623.3	3,584.4	38.92	93.092	
5,300.0	5,290.4	5,490.3	5,248.8	10.7	28.7	99.46	3,548.6	-483.8	3,625.0	3,585.6	39.41	91.990	
5,400.0	5,390.2	5,593.6	5,351.1	10.9	29.0	99.33	3,548.4	-498.4	3,626.6	3,586.7	39.90	90.900	
5,500.0	5,490.0	5,710.5	5,467.2	11.1	29.3	99.24	3,548.3	-511.9	3,628.2	3,587.8	40.37	89.883	
5,600.0	5,589.8	5,809.7	5,566.0	11.3	29.5	99.20	3,548.1	-520.2	3,629.4	3,588.6	40.75	89.065	
5,700.0	5,689.6	5,934.3	5,690.3	11.5	29.6	99.20	3,547.5	-528.0	3,630.3	3,589.2	41.13	88.255	
5,800.0	5,789.4	6,033.8	5,789.8	11.7	29.8	99.24	3,546.7	-531.9	3,630.7	3,589.3	41.45	87.586	
5,900.0	5,889.2	6,141.6	5,897.5	11.9	29.9	99.29	3,546.0	-534.9	3,631.2	3,589.5	41.76	86.958	
6,000.0	5,989.0	6,243.9	5,999.8	12.2	29.9	99.36	3,545.1	-536.9	3,631.4	3,589.4	42.05	86.353	
6,100.0	6,088.8	6,313.6	6,069.5	12.4	30.0	99.41	3,544.8	-537.9	3,632.1	3,589.8	42.31	85.837	
6,200.0	6,188.6	6,399.0	6,154.9	12.6	30.1	99.48	3,545.2	-539.0	3,633.7	3,591.1	42.59	85.324	
6,300.0	6,288.4	6,465.0	6,220.8	12.8	30.1	99.53	3,546.0	-539.6	3,635.9	3,593.1	42.84	84.872	
6,400.0	6,388.2	6,551.6	6,307.5	13.0	30.2	99.61	3,547.4	-540.3	3,638.6	3,595.5	43.11	84.408	
6,500.0	6,488.0	6,655.6	6,411.4	13.2	30.3	99.70	3,549.2	-540.9	3,641.4	3,598.0	43.39	83.925	
6,600.0	6,587.9	6,765.4	6,521.3	13.4	30.3	99.80	3,550.9	-541.6	3,644.0	3,600.3	43.67	83.437	
6,700.0	6,687.7	6,879.8	6,635.6	13.6	30.4	99.90	3,552.2	-542.0	3,646.3	3,602.3	43.96	82.952	
6,800.0	6,787.5	6,986.7	6,742.5	13.8	30.5	100.01	3,553.1	-542.1	3,648.2	3,604.0	44.24	82.473	
6,900.0	6,887.3	7,085.0	6,840.8	14.0	30.6	100.10	3,553.9	-542.2	3,650.1	3,605.6	44.51	82.007	
7,000.0	6,987.1	7,169.5	6,925.3	14.2	30.6	100.18	3,554.7	-542.4	3,652.2	3,607.4	44.78	81.557	
7,100.0	7,086.9	7,256.0	7,011.8	14.4	30.7	100.26	3,556.0	-542.9	3,654.8	3,609.7	45.05	81.122	
7,173.7	7,160.4	7,342.2	7,098.0	14.6	30.7	100.34	3,557.3	-543.0	3,656.8	3,611.5	45.24	80.823	
7,200.0	7,186.7	7,376.5	7,132.3	14.6	30.8	60.10	3,557.7	-542.7	3,656.8	3,611.5	45.29	80.750	
7,250.0	7,236.4	7,437.7	7,193.5	14.7	30.8	25.22	3,558.3	-542.0	3,653.3	3,608.2	45.13	80.953	
7,300.0	7,285.6	7,483.4	7,239.2	14.8	30.8	14.68	3,558.7	-541.2	3,645.5	3,600.8	44.66	81.621	
7,350.0	7,334.0	7,528.4	7,284.1	14.9	30.8	10.01	3,559.1	-540.4	3,633.4	3,589.5	43.90	82.759	
7,400.0	7,381.0	7,572.2	7,328.0	15.0	30.9	7.42	3,559.5	-539.6	3,617.2	3,574.4	42.86	84.399	
7,450.0	7,426.5	7,625.5	7,381.2	15.0	30.9	5.78	3,560.1	-538.6	3,597.0	3,555.4	41.55	86.567	
7,500.0	7,470.0	7,694.4	7,450.2	15.1	30.9	4.66	3,560.5	-537.6	3,572.6	3,532.6	40.00	89.309	
7,550.0	7,511.2	7,759.3	7,515.0	15.2	31.0	3.81	3,560.3	-537.0	3,544.3	3,506.0	38.22	92.744	
7,600.0	7,549.7	7,793.9	7,549.6	15.4	31.0	3.11	3,560.1	-536.8	3,512.3	3,476.1	36.20	97.034	
7,650.0	7,585.4	7,820.3	7,576.1	15.5	31.0	2.49	3,560.0	-536.6	3,477.2	3,443.2	33.99	102.297	
7,700.0	7,617.9	7,844.5	7,600.2	15.7	31.0	1.92	3,560.0	-536.5	3,439.2	3,407.5	31.64	108.697	
7,750.0	7,647.0	7,866.3	7,622.0	15.9	31.0	1.35	3,560.1	-536.3	3,398.6	3,369.4	29.19	116.433	
7,800.0	7,672.4	7,885.4	7,641.1	16.2	31.1	0.70	3,560.1	-536.1	3,355.6	3,328.9	26.70	125.692	
7,850.0	7,694.0	7,901.8	7,657.6	16.5	31.1	-0.10	3,560.2	-536.0	3,310.7	3,286.4	24.24	136.561	
7,900.0	7,711.6	7,915.3	7,671.1	16.8	31.1	-1.23	3,560.3	-535.9	3,264.0	3,242.1	21.94	148.757	
7,950.0	7,725.0	7,942.0	7,697.7	17.2	31.1	-3.14	3,560.6	-535.7	3,216.0	3,196.0	20.00	160.816	
8,000.0	7,734.2	7,942.0	7,697.7	17.6	31.1	-7.10	3,560.6	-535.7	3,166.9	3,148.2	18.79	168.555	
8,050.0	7,739.1	7,942.0	7,697.7	18.1	31.1	-21.02	3,560.6	-535.7	3,117.3	3,096.8	20.42	152.646	
8,081.4	7,740.0	7,942.0	7,697.7	18.3	31.1	-72.95	3,560.6	-535.7	3,085.9	3,055.8	30.08	102.586	
8,100.0	7,740.0	7,942.0	7,697.7	18.5	31.1	-72.95	3,560.6	-535.7	3,067.3	3,037.0	30.27	101.327	
8,200.0	7,740.0	7,942.0	7,697.7	19.6	31.1	-72.95	3,560.6	-535.7	2,967.3	2,936.0	31.36	94.636	
8,300.0	7,740.0	7,942.0	7,697.7	20.7	31.1	-72.95	3,560.6	-535.7	2,867.4	2,834.9	32.53	88.152	
8,400.0	7,740.0	7,942.0	7,697.7	21.9	31.1	-72.95	3,560.6	-535.7	2,767.4	2,733.7	33.77	81.943	
8,500.0	7,740.0	7,942.0	7,697.7	23.2	31.1	-72.95	3,560.6	-535.7	2,667.5	2,632.4	35.08	76.045	
8,600.0	7,740.0	7,942.0	7,697.7	24.6	31.1	-72.95	3,560.6	-535.7	2,567.5	2,531.1	36.43	70.475	
8,700.0	7,740.0	7,942.0	7,697.7	25.9	31.1	-72.95	3,560.6	-535.7	2,467.6	2,429.8	37.83	65.233	
8,800.0	7,740.0	7,942.0	7,697.7	27.4	31.1	-72.95	3,560.6	-535.7	2,367.7	2,328.4	39.26	60.312	
8,900.0	7,740.0	7,942.0	7,697.7	28.8	31.1	-72.95	3,560.6	-535.7	2,267.8	2,227.0	40.72	55.697	
9,000.0	7,740.0	7,942.0	7,697.7	30.3	31.1	-72.95	3,560.6	-535.7	2,167.8	2,125.6	42.20	51.372	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU												Offset Site Error:	0.0 ft
Survey Program: 46-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,100.0	7,740.0	7,942.0	7,697.7	31.9	31.1	-72.95	3,560.6	-535.7	2,067.9	2,024.2	43.70	47.318	
9,200.0	7,740.0	7,942.0	7,697.7	33.4	31.1	-72.95	3,560.6	-535.7	1,968.0	1,922.8	45.22	43.518	
9,300.0	7,740.0	7,949.1	7,704.8	35.0	31.1	-77.35	3,560.7	-535.6	1,868.1	1,820.7	47.39	39.422	
9,400.0	7,740.0	7,950.1	7,705.8	36.6	31.1	-77.98	3,560.7	-535.6	1,768.2	1,719.2	49.05	36.052	
9,500.0	7,740.0	7,951.1	7,706.8	38.2	31.1	-78.63	3,560.7	-535.6	1,668.4	1,617.6	50.72	32.893	
9,600.0	7,740.0	7,952.1	7,707.8	39.8	31.1	-79.28	3,560.7	-535.6	1,568.5	1,516.1	52.41	29.929	
9,700.0	7,740.0	7,953.1	7,708.8	41.4	31.1	-79.94	3,560.7	-535.6	1,468.7	1,414.6	54.11	27.144	
9,800.0	7,740.0	7,954.1	7,709.8	43.0	31.1	-80.60	3,560.7	-535.5	1,368.9	1,313.0	55.82	24.525	
9,900.0	7,740.0	7,955.2	7,710.9	44.7	31.1	-81.28	3,560.7	-535.5	1,269.1	1,211.5	57.53	22.058	
10,000.0	7,740.0	7,956.2	7,711.9	46.3	31.1	-81.96	3,560.7	-535.5	1,169.3	1,110.1	59.26	19.733	
10,100.0	7,740.0	7,957.2	7,713.0	48.0	31.1	-82.65	3,560.7	-535.5	1,069.6	1,008.6	60.98	17.539	
10,200.0	7,740.0	7,958.3	7,714.0	49.7	31.1	-83.35	3,560.8	-535.5	970.0	907.3	62.72	15.466	
10,300.0	7,740.0	7,959.4	7,715.1	51.3	31.1	-84.06	3,560.8	-535.5	870.4	806.0	64.45	13.506	
10,400.0	7,740.0	7,960.5	7,716.2	53.0	31.1	-84.78	3,560.8	-535.5	771.0	704.8	66.18	11.649	
10,500.0	7,740.0	7,961.5	7,717.3	54.7	31.1	-85.50	3,560.8	-535.5	671.7	603.8	67.92	9.890	
10,600.0	7,740.0	7,962.6	7,718.4	56.4	31.1	-86.23	3,560.8	-535.5	572.7	503.0	69.65	8.222	
10,700.0	7,740.0	7,963.8	7,719.5	58.1	31.1	-86.97	3,560.8	-535.5	474.0	402.6	71.37	6.641	
10,800.0	7,740.0	7,964.9	7,720.6	59.8	31.1	-87.72	3,560.8	-535.4	376.1	303.0	73.10	5.145	
10,900.0	7,740.0	7,966.0	7,721.7	61.5	31.1	-88.47	3,560.8	-535.4	279.6	204.8	74.81	3.738	
11,000.0	7,740.0	7,967.1	7,722.9	63.2	31.1	-89.23	3,560.9	-535.4	186.9	110.4	76.52	2.443	
11,105.4	7,740.0	7,968.3	7,724.1	65.0	31.1	-90.04	3,560.9	-535.4	104.9	26.6	78.31	1.339	Level 3
11,167.2	7,740.0	7,969.0	7,724.8	66.0	31.1	-90.52	3,560.9	-535.4	85.1	5.7	79.41	1.071	Level 2, CC, ES, SF
11,191.0	7,740.0	7,969.3	7,725.0	66.4	31.1	-90.70	3,560.9	-535.4	88.3	8.5	79.83	1.106	Level 2
11,200.0	7,740.0	7,969.4	7,725.1	66.6	31.1	-90.77	3,560.9	-535.4	91.1	11.1	79.98	1.139	Level 2
11,300.0	7,740.0	7,970.6	7,726.3	68.3	31.1	-91.55	3,560.9	-535.4	157.4	75.8	81.66	1.928	
11,400.0	7,740.0	7,971.7	7,727.5	70.0	31.1	-92.33	3,560.9	-535.4	247.5	164.2	83.32	2.971	
11,500.0	7,740.0	7,972.9	7,728.6	71.7	31.1	-93.12	3,560.9	-535.4	343.2	258.2	84.97	4.039	
11,600.0	7,740.0	7,974.1	7,729.8	73.4	31.1	-93.91	3,560.9	-535.4	440.7	354.1	86.60	5.089	
11,700.0	7,740.0	7,975.3	7,731.0	75.1	31.1	-94.71	3,560.9	-535.4	539.2	451.0	88.21	6.112	
11,800.0	7,740.0	7,976.5	7,732.2	76.9	31.1	-95.51	3,561.0	-535.3	638.1	548.3	89.81	7.105	
11,900.0	7,740.0	7,977.7	7,733.4	78.6	31.1	-96.33	3,561.0	-535.3	737.3	645.9	91.39	8.068	
12,000.0	7,740.0	7,978.9	7,734.7	80.3	31.1	-97.14	3,561.0	-535.3	836.7	743.8	92.94	9.003	
12,100.0	7,740.0	7,980.2	7,735.9	82.0	31.1	-97.96	3,561.0	-535.3	936.3	841.8	94.47	9.911	
12,200.0	7,740.0	7,981.4	7,737.1	83.8	31.1	-98.78	3,561.0	-535.3	1,035.9	939.9	95.98	10.793	
12,300.0	7,740.0	7,982.7	7,738.4	85.5	31.1	-99.61	3,561.0	-535.3	1,135.6	1,038.1	97.46	11.652	
12,400.0	7,740.0	7,983.9	7,739.7	87.2	31.1	-100.44	3,561.1	-535.3	1,235.3	1,136.4	98.91	12.489	
12,500.0	7,740.0	7,985.2	7,741.0	88.9	31.1	-101.28	3,561.1	-535.3	1,335.1	1,234.7	100.34	13.306	
12,600.0	7,740.0	7,986.5	7,742.2	90.7	31.1	-102.12	3,561.1	-535.3	1,434.9	1,333.1	101.73	14.104	
12,700.0	7,740.0	7,987.8	7,743.6	92.4	31.1	-102.96	3,561.1	-535.2	1,534.7	1,431.6	103.10	14.885	
12,800.0	7,740.0	7,989.1	7,744.9	94.1	31.1	-103.80	3,561.1	-535.2	1,634.5	1,530.1	104.43	15.651	
12,900.0	7,740.0	7,990.5	7,746.2	95.9	31.1	-104.65	3,561.1	-535.2	1,734.4	1,628.7	105.74	16.403	
13,000.0	7,740.0	7,991.8	7,747.5	97.6	31.1	-105.50	3,561.1	-535.2	1,834.3	1,727.3	107.00	17.142	
13,100.0	7,740.0	7,993.2	7,748.9	99.3	31.1	-106.35	3,561.2	-535.2	1,934.2	1,825.9	108.24	17.870	
13,200.0	7,740.0	7,994.6	7,750.3	101.1	31.1	-107.20	3,561.2	-535.2	2,034.1	1,924.6	109.43	18.587	
13,300.0	7,740.0	7,995.9	7,751.7	102.8	31.1	-108.05	3,561.2	-535.2	2,134.0	2,023.4	110.59	19.296	
13,400.0	7,740.0	7,997.3	7,753.1	104.5	31.1	-108.90	3,561.2	-535.2	2,233.9	2,122.2	111.72	19.996	
13,500.0	7,740.0	7,998.7	7,754.5	106.3	31.1	-109.75	3,561.2	-535.1	2,333.8	2,221.0	112.80	20.690	
13,600.0	7,740.0	8,000.2	7,755.9	108.0	31.1	-110.60	3,561.3	-535.1	2,433.8	2,319.9	113.85	21.377	
13,700.0	7,740.0	8,001.6	7,757.3	109.8	31.1	-111.44	3,561.3	-535.1	2,533.7	2,418.8	114.85	22.060	
13,800.0	7,740.0	8,003.1	7,758.8	111.5	31.1	-112.29	3,561.3	-535.1	2,633.6	2,517.8	115.82	22.739	
13,900.0	7,740.0	8,004.5	7,760.2	113.2	31.1	-113.14	3,561.3	-535.1	2,733.6	2,616.8	116.75	23.414	
14,000.0	7,740.0	8,006.0	7,761.7	115.0	31.1	-113.98	3,561.3	-535.1	2,833.5	2,715.9	117.63	24.087	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU		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						
14,100.0	7,740.0	8,007.5	7,763.2	116.7	31.1	-114.82	3,561.4	-535.1	2,933.5	2,815.0	118.48	24.759						
14,200.0	7,740.0	8,009.0	7,764.7	118.5	31.1	-115.66	3,561.4	-535.1	3,033.4	2,914.1	119.28	25.430						
14,300.0	7,740.0	8,010.5	7,766.3	120.2	31.1	-116.50	3,561.4	-535.0	3,133.4	3,013.3	120.05	26.101						
14,400.0	7,740.0	8,012.1	7,767.8	121.9	31.1	-117.33	3,561.4	-535.0	3,233.3	3,112.6	120.77	26.773						
14,500.0	7,740.0	8,013.6	7,769.3	123.7	31.1	-118.16	3,561.4	-535.0	3,333.3	3,211.8	121.45	27.446						
14,600.0	7,740.0	8,015.2	7,770.9	125.4	31.1	-118.98	3,561.5	-535.0	3,433.2	3,311.1	122.09	28.121						
14,682.3	7,740.0	8,016.5	7,772.2	126.8	31.1	-119.65	3,561.5	-535.0	3,515.5	3,392.9	122.58	28.678						

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SURV										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	0.0	0.0	0.0	0.0	15.20	3,647.9	990.9	3,780.2				
100.0	100.0	72.4	72.4	0.2	0.1	15.20	3,647.8	991.0	3,780.1	3,779.8	0.28	N/A	
171.5	171.5	140.4	140.4	0.3	0.2	15.20	3,647.7	991.2	3,780.0	3,779.5	0.52	7,244.402	
200.0	200.0	166.0	166.0	0.3	0.3	15.20	3,647.7	991.2	3,780.0	3,779.4	0.62	6,135.916	
300.0	300.0	262.4	262.4	0.5	0.5	135.20	3,648.0	990.7	3,780.8	3,779.8	0.96	3,940.249	
400.0	400.0	375.3	375.2	0.7	0.7	135.19	3,648.5	989.3	3,782.7	3,781.4	1.33	2,834.150	
500.0	499.9	463.7	463.7	0.9	0.8	135.19	3,648.8	987.9	3,785.7	3,784.0	1.67	2,264.464	
600.0	599.7	536.1	536.1	1.1	0.9	135.18	3,649.5	986.5	3,790.5	3,788.5	1.99	1,908.319	
700.0	699.5	600.0	599.9	1.3	1.1	121.17	3,650.6	985.7	3,795.9	3,793.6	2.29	1,656.601	
722.7	722.1	600.0	599.9	1.3	1.1	117.65	3,650.6	985.7	3,797.1	3,794.8	2.34	1,625.835	
800.0	799.3	667.5	667.4	1.5	1.2	117.69	3,652.3	984.8	3,801.1	3,798.5	2.61	1,458.541	
900.0	899.1	736.2	736.1	1.7	1.3	117.72	3,654.8	983.7	3,807.1	3,804.2	2.92	1,301.593	
1,000.0	998.9	812.9	812.6	1.9	1.4	117.75	3,658.3	982.2	3,813.8	3,810.6	3.26	1,170.004	
1,100.0	1,098.7	922.1	921.7	2.1	1.7	117.78	3,663.4	979.8	3,820.7	3,817.0	3.66	1,045.263	
1,200.0	1,198.5	1,024.0	1,023.5	2.3	1.8	117.82	3,668.1	977.5	3,827.4	3,823.4	4.04	947.875	
1,300.0	1,298.3	1,129.0	1,128.4	2.5	2.0	117.86	3,672.6	975.6	3,834.0	3,829.6	4.42	866.460	
1,400.0	1,398.1	1,227.3	1,226.5	2.7	2.2	117.90	3,676.8	974.0	3,840.6	3,835.8	4.80	800.140	
1,500.0	1,497.9	1,342.4	1,341.5	2.9	2.4	117.95	3,681.5	972.1	3,847.0	3,841.8	5.21	739.099	
1,600.0	1,597.7	1,449.9	1,449.0	3.1	2.6	118.00	3,685.4	970.3	3,853.1	3,847.5	5.60	688.272	
1,700.0	1,697.5	1,542.3	1,541.3	3.3	2.8	118.03	3,689.0	968.3	3,859.1	3,853.2	5.96	647.135	
1,800.0	1,797.3	1,639.4	1,638.3	3.5	3.0	118.08	3,692.7	967.1	3,865.5	3,859.1	6.33	610.236	
1,900.0	1,897.1	1,744.8	1,743.7	3.7	3.2	118.13	3,696.5	966.0	3,871.6	3,864.9	6.72	576.095	
2,000.0	1,996.9	1,837.7	1,836.5	3.9	3.4	118.18	3,699.9	965.0	3,877.8	3,870.7	7.08	547.427	
2,100.0	2,096.7	1,941.3	1,940.0	4.1	3.6	118.24	3,703.7	964.5	3,884.2	3,876.7	7.46	520.454	
2,200.0	2,196.5	2,063.8	2,062.4	4.3	3.8	118.33	3,707.4	964.5	3,890.0	3,882.2	7.87	494.073	
2,300.0	2,296.3	2,200.0	2,198.6	4.5	4.0	118.43	3,710.4	964.7	3,895.1	3,886.8	8.31	468.940	
2,400.0	2,396.1	2,290.4	2,289.0	4.7	4.2	118.50	3,711.9	964.8	3,899.8	3,891.2	8.66	450.279	
2,500.0	2,495.9	2,436.8	2,435.4	4.9	4.4	118.62	3,713.7	965.6	3,904.1	3,895.0	9.11	428.640	
2,600.0	2,595.7	2,532.0	2,530.6	5.2	4.6	118.71	3,714.2	966.3	3,907.9	3,898.4	9.47	412.683	
2,700.0	2,695.5	2,621.5	2,620.1	5.4	4.7	118.78	3,715.1	966.4	3,911.9	3,902.1	9.82	398.239	
2,800.0	2,795.3	2,731.3	2,729.9	5.6	4.9	118.85	3,716.5	966.2	3,916.1	3,905.8	10.21	383.445	
2,900.0	2,895.1	2,877.2	2,875.7	5.8	5.2	118.94	3,717.4	964.5	3,919.4	3,908.7	10.67	367.388	
3,000.0	2,994.9	2,991.3	2,989.8	6.0	5.4	119.01	3,717.3	962.7	3,921.9	3,910.8	11.07	354.351	
3,100.0	3,094.7	3,072.7	3,071.2	6.2	5.5	119.06	3,717.3	961.6	3,924.5	3,913.0	11.41	343.986	
3,200.0	3,194.5	3,169.3	3,167.8	6.4	5.7	119.12	3,717.5	960.6	3,927.4	3,915.7	11.78	333.502	
3,300.0	3,294.3	3,277.5	3,276.0	6.6	5.9	119.19	3,717.6	959.3	3,930.3	3,918.1	12.17	323.075	
3,400.0	3,394.1	3,405.3	3,403.8	6.8	6.1	119.26	3,717.4	957.2	3,932.7	3,920.1	12.59	312.407	
3,500.0	3,493.9	3,500.0	3,498.5	7.0	6.3	119.33	3,716.8	956.0	3,934.8	3,921.8	12.95	303.802	
3,600.0	3,593.8	3,588.0	3,586.5	7.2	6.4	119.38	3,716.4	955.0	3,937.1	3,923.8	13.30	295.925	
3,700.0	3,693.6	3,663.8	3,662.2	7.4	6.5	119.43	3,716.4	954.0	3,939.8	3,926.2	13.64	288.914	
3,800.0	3,793.4	3,780.8	3,779.3	7.6	6.7	119.49	3,717.1	951.7	3,943.0	3,928.9	14.04	280.762	
3,900.0	3,893.2	3,872.7	3,871.1	7.8	6.9	119.53	3,717.4	949.5	3,945.7	3,931.2	14.41	273.891	
4,000.0	3,993.0	3,966.3	3,964.7	8.0	7.1	119.57	3,718.0	947.4	3,948.6	3,933.9	14.77	267.300	
4,100.0	4,092.8	4,076.7	4,075.0	8.2	7.3	119.61	3,718.7	944.4	3,951.6	3,936.4	15.17	260.503	
4,200.0	4,192.6	4,169.1	4,167.4	8.4	7.4	119.65	3,719.2	941.9	3,954.4	3,938.9	15.53	254.567	
4,300.0	4,292.4	4,255.0	4,253.3	8.7	7.6	119.69	3,719.9	939.8	3,957.5	3,941.6	15.88	249.137	
4,400.0	4,392.2	4,358.7	4,357.0	8.9	7.8	119.74	3,720.7	938.1	3,960.9	3,944.7	16.27	243.509	
4,500.0	4,492.0	4,449.4	4,447.6	9.1	7.9	119.79	3,721.2	936.8	3,964.1	3,947.5	16.62	238.447	
4,600.0	4,591.8	4,537.0	4,535.3	9.3	8.1	119.83	3,722.2	935.2	3,967.8	3,950.9	16.98	233.700	
4,700.0	4,691.6	4,641.2	4,639.4	9.5	8.3	119.89	3,723.3	933.7	3,971.5	3,954.1	17.36	228.771	
4,800.0	4,791.4	4,738.0	4,736.2	9.7	8.4	119.94	3,724.3	932.4	3,975.2	3,957.5	17.73	224.225	
4,900.0	4,891.2	4,831.7	4,829.9	9.9	8.6	120.00	3,725.2	931.2	3,978.9	3,960.8	18.09	219.933	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SURV												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
5,000.0	4,991.0	4,904.2	4,902.4	10.1	8.7	120.04	3,726.3	930.5	3,983.2	3,964.8	18.42	216.279	
5,100.0	5,090.8	5,003.8	5,002.0	10.3	8.9	120.10	3,728.1	929.7	3,987.8	3,969.0	18.79	212.236	
5,200.0	5,190.6	5,100.9	5,099.0	10.5	9.1	120.16	3,729.8	929.0	3,992.4	3,973.3	19.16	208.403	
5,300.0	5,290.4	5,213.0	5,211.1	10.7	9.3	120.22	3,731.9	927.6	3,996.9	3,977.4	19.55	204.406	
5,400.0	5,390.2	5,320.4	5,318.5	10.9	9.5	120.27	3,733.6	926.0	4,001.2	3,981.3	19.94	200.642	
5,500.0	5,490.0	5,419.5	5,417.5	11.1	9.7	120.32	3,735.1	924.5	4,005.4	3,985.1	20.32	197.162	
5,600.0	5,589.8	5,508.6	5,506.6	11.3	9.8	120.37	3,736.6	923.5	4,009.7	3,989.0	20.67	193.992	
5,700.0	5,689.6	5,607.3	5,605.3	11.5	10.0	120.42	3,738.4	922.2	4,014.2	3,993.2	21.04	190.762	
5,800.0	5,789.4	5,715.5	5,713.4	11.7	10.2	120.48	3,740.2	920.7	4,018.6	3,997.2	21.43	187.513	
5,900.0	5,889.2	5,806.3	5,804.3	11.9	10.3	120.52	3,741.8	919.7	4,023.0	4,001.2	21.79	184.632	
6,000.0	5,989.0	5,911.9	5,909.9	12.2	10.5	120.57	3,743.7	917.9	4,027.5	4,005.3	22.18	181.615	
6,100.0	6,088.8	6,000.0	5,997.9	12.4	10.7	120.61	3,745.5	916.1	4,031.9	4,009.4	22.53	178.940	
6,200.0	6,188.6	6,084.8	6,082.7	12.6	10.8	120.65	3,747.3	914.7	4,036.7	4,013.8	22.88	176.434	
6,300.0	6,288.4	6,215.3	6,213.1	12.8	11.1	120.72	3,749.6	913.7	4,041.3	4,018.0	23.30	173.420	
6,400.0	6,388.2	6,300.0	6,297.8	13.0	11.2	120.78	3,751.0	913.8	4,046.0	4,022.4	23.65	171.110	
6,500.0	6,488.0	6,350.5	6,348.3	13.2	11.3	120.82	3,752.0	914.4	4,051.4	4,027.5	23.93	169.317	
6,600.0	6,587.9	6,436.8	6,434.5	13.4	11.5	120.90	3,754.3	916.1	4,057.7	4,033.5	24.27	167.186	
6,700.0	6,687.7	6,542.7	6,540.4	13.6	11.7	120.99	3,756.8	917.5	4,063.6	4,039.0	24.65	164.864	
6,800.0	6,787.5	6,631.5	6,629.2	13.8	11.8	121.06	3,759.5	918.4	4,070.0	4,045.0	25.00	162.813	
6,900.0	6,887.3	6,745.3	6,743.0	14.0	12.0	121.14	3,762.6	918.9	4,076.0	4,050.6	25.39	160.521	
7,000.0	6,987.1	6,834.2	6,831.8	14.2	12.2	121.19	3,765.3	919.2	4,082.2	4,056.5	25.74	158.573	
7,100.0	7,086.9	7,006.6	7,004.1	14.4	12.5	121.31	3,769.4	919.7	4,087.9	4,061.7	26.24	155.811	
7,173.7	7,160.4	7,084.2	7,081.8	14.6	12.6	121.38	3,770.2	920.3	4,091.2	4,064.7	26.51	154.311	
7,200.0	7,186.7	7,110.4	7,108.0	14.6	12.7	81.11	3,770.4	920.6	4,091.8	4,065.2	26.61	153.759	
7,250.0	7,236.4	7,156.2	7,153.8	14.7	12.7	46.29	3,770.8	921.1	4,089.9	4,063.2	26.70	153.168	
7,300.0	7,285.6	7,203.0	7,200.5	14.8	12.8	36.00	3,771.4	921.4	4,083.8	4,057.1	26.67	153.119	
7,350.0	7,334.0	7,283.7	7,281.2	14.9	13.0	31.84	3,772.1	921.5	4,073.5	4,047.0	26.58	153.254	
7,400.0	7,381.0	7,334.7	7,332.2	15.0	13.0	29.90	3,772.4	921.4	4,059.1	4,032.7	26.33	154.138	
7,450.0	7,426.5	7,377.1	7,374.6	15.0	13.1	29.11	3,772.7	921.2	4,040.8	4,014.8	25.98	155.520	
7,500.0	7,470.0	7,417.7	7,415.3	15.1	13.2	29.07	3,773.0	921.0	4,018.8	3,993.3	25.56	157.239	
7,550.0	7,511.2	7,456.4	7,453.9	15.2	13.3	29.61	3,773.3	920.7	3,993.4	3,968.3	25.09	159.155	
7,600.0	7,549.7	7,492.6	7,490.1	15.4	13.3	30.69	3,773.7	920.6	3,964.7	3,940.1	24.62	161.049	
7,650.0	7,585.4	7,521.2	7,518.7	15.5	13.4	32.26	3,774.0	920.4	3,932.9	3,908.7	24.18	162.669	
7,700.0	7,617.9	7,546.0	7,543.5	15.7	13.4	34.42	3,774.2	920.5	3,898.4	3,874.5	23.84	163.531	
7,750.0	7,647.0	7,568.2	7,565.7	15.9	13.4	37.27	3,774.5	920.6	3,861.3	3,837.6	23.68	163.059	
7,800.0	7,672.4	7,600.0	7,597.5	16.2	13.5	41.15	3,774.8	920.9	3,822.1	3,798.2	23.83	160.367	
7,850.0	7,694.0	7,600.0	7,597.5	16.5	13.5	45.63	3,774.8	920.9	3,780.8	3,756.6	24.24	156.004	
7,900.0	7,711.6	7,617.9	7,615.4	16.8	13.5	51.76	3,775.1	921.1	3,737.9	3,712.8	25.14	148.706	
7,950.0	7,725.0	7,628.4	7,625.9	17.2	13.6	59.38	3,775.2	921.2	3,693.7	3,667.3	26.42	139.803	
8,000.0	7,734.2	7,635.9	7,633.4	17.6	13.6	68.73	3,775.4	921.3	3,648.6	3,620.6	27.95	130.547	
8,050.0	7,739.1	7,640.2	7,637.7	18.1	13.6	79.66	3,775.4	921.3	3,602.7	3,573.4	29.37	122.651	
8,081.4	7,740.0	7,641.2	7,638.7	18.3	13.6	87.07	3,775.4	921.3	3,573.8	3,543.7	30.03	119.024	
8,100.0	7,740.0	7,641.5	7,639.0	18.5	13.6	87.08	3,775.5	921.3	3,556.6	3,526.4	30.23	117.664	
8,200.0	7,740.0	7,642.8	7,640.3	19.6	13.6	87.13	3,775.5	921.3	3,464.6	3,433.2	31.37	110.434	
8,300.0	7,740.0	7,644.1	7,641.6	20.7	13.6	87.19	3,775.5	921.4	3,373.0	3,340.4	32.61	103.432	
8,400.0	7,740.0	7,645.4	7,642.9	21.9	13.6	87.24	3,775.5	921.4	3,281.9	3,248.0	33.93	96.740	
8,500.0	7,740.0	7,646.8	7,644.3	23.2	13.6	87.30	3,775.5	921.4	3,191.4	3,156.1	35.30	90.402	
8,600.0	7,740.0	7,648.2	7,645.7	24.6	13.6	87.36	3,775.6	921.4	3,101.4	3,064.6	36.73	84.438	
8,700.0	7,740.0	7,649.6	7,647.1	25.9	13.6	87.42	3,775.6	921.4	3,012.0	2,973.8	38.20	78.849	
8,800.0	7,740.0	7,651.0	7,648.5	27.4	13.6	87.48	3,775.6	921.4	2,923.4	2,883.7	39.71	73.626	
8,900.0	7,740.0	7,652.5	7,650.0	28.8	13.6	87.54	3,775.6	921.4	2,835.5	2,794.2	41.24	68.753	
9,000.0	7,740.0	7,654.0	7,651.5	30.3	13.6	87.60	3,775.7	921.5	2,748.4	2,705.6	42.80	64.212	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SURV												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
9,100.0	7,740.0	7,655.5	7,653.0	31.9	13.6	87.66	3,775.7	921.5	2,662.2	2,617.9	44.38	59.982	
9,200.0	7,740.0	7,657.1	7,654.6	33.4	13.6	87.73	3,775.7	921.5	2,577.1	2,531.1	45.98	56.043	
9,300.0	7,740.0	7,658.7	7,656.2	35.0	13.6	87.79	3,775.8	921.5	2,493.0	2,445.4	47.60	52.375	
9,400.0	7,740.0	7,660.3	7,657.8	36.6	13.6	87.86	3,775.8	921.5	2,410.1	2,360.9	49.23	48.959	
9,500.0	7,740.0	7,661.9	7,659.4	38.2	13.6	87.93	3,775.8	921.5	2,328.6	2,277.8	50.87	45.777	
9,600.0	7,740.0	7,663.6	7,661.1	39.8	13.6	88.00	3,775.9	921.5	2,248.6	2,196.1	52.52	42.814	
9,700.0	7,740.0	7,665.3	7,662.8	41.4	13.6	88.07	3,775.9	921.6	2,170.3	2,116.1	54.18	40.056	
9,800.0	7,740.0	7,667.1	7,664.6	43.0	13.6	88.14	3,775.9	921.6	2,093.8	2,037.9	55.85	37.489	
9,900.0	7,740.0	7,668.8	7,666.3	44.7	13.6	88.22	3,776.0	921.6	2,019.3	1,961.8	57.53	35.103	
10,000.0	7,740.0	7,670.7	7,668.2	46.3	13.6	88.29	3,776.0	921.6	1,947.1	1,887.9	59.21	32.887	
10,100.0	7,740.0	7,672.5	7,670.0	48.0	13.6	88.37	3,776.0	921.6	1,877.5	1,816.6	60.89	30.832	
10,200.0	7,740.0	7,674.4	7,671.9	49.7	13.6	88.45	3,776.1	921.6	1,810.7	1,748.1	62.59	28.931	
10,300.0	7,740.0	7,676.4	7,673.9	51.3	13.6	88.53	3,776.1	921.7	1,747.1	1,682.8	64.29	27.177	
10,400.0	7,740.0	7,678.3	7,675.8	53.0	13.6	88.62	3,776.2	921.7	1,687.0	1,621.0	65.99	25.566	
10,500.0	7,740.0	7,680.4	7,677.9	54.7	13.6	88.70	3,776.2	921.7	1,630.9	1,563.2	67.69	24.093	
10,600.0	7,740.0	7,682.4	7,679.9	56.4	13.7	88.79	3,776.2	921.7	1,579.1	1,509.7	69.40	22.753	
10,700.0	7,740.0	7,684.6	7,682.0	58.1	13.7	88.87	3,776.3	921.7	1,532.0	1,460.9	71.11	21.543	
10,800.0	7,740.0	7,686.7	7,684.2	59.8	13.7	88.96	3,776.3	921.8	1,490.2	1,417.4	72.83	20.462	
10,900.0	7,740.0	7,688.9	7,686.4	61.5	13.7	89.06	3,776.4	921.8	1,454.1	1,379.6	74.55	19.506	
11,000.0	7,740.0	7,691.2	7,688.7	63.2	13.7	89.15	3,776.4	921.8	1,424.1	1,347.8	76.27	18.673	
11,105.4	7,740.0	7,693.6	7,691.1	65.0	13.7	89.25	3,776.5	921.8	1,399.5	1,321.4	78.08	17.924	
11,191.0	7,740.0	7,695.7	7,693.1	66.4	13.7	89.34	3,776.5	921.8	1,385.8	1,306.1	79.67	17.395	
11,200.0	7,740.0	7,695.9	7,693.4	66.6	13.7	89.35	3,776.5	921.8	1,384.7	1,304.9	79.82	17.347	
11,300.0	7,740.0	7,698.3	7,695.8	68.3	13.7	89.45	3,776.6	921.9	1,376.6	1,295.1	81.55	16.881	
11,361.5	7,740.0	7,699.8	7,697.3	69.3	13.7	89.51	3,776.6	921.9	1,375.3	1,292.6	82.61	16.647 CC	
11,400.0	7,740.0	7,700.8	7,698.3	70.0	13.7	89.56	3,776.7	921.9	1,375.8	1,292.5	83.28	16.521 ES	
11,500.0	7,740.0	7,703.6	7,701.1	71.7	13.7	89.67	3,776.7	921.9	1,382.2	1,297.2	85.01	16.260	
11,600.0	7,740.0	7,706.3	7,703.8	73.4	13.7	89.78	3,776.8	921.9	1,395.8	1,309.0	86.74	16.092	
11,700.0	7,740.0	7,709.0	7,706.5	75.1	13.7	89.90	3,776.9	921.9	1,416.3	1,327.8	88.47	16.009	
11,800.0	7,740.0	7,711.7	7,709.2	76.9	13.7	90.01	3,776.9	922.0	1,443.4	1,353.2	90.20	16.002 SF	
11,900.0	7,740.0	7,714.4	7,711.9	78.6	13.7	90.12	3,777.0	922.0	1,476.9	1,384.9	91.93	16.064	
12,000.0	7,740.0	7,717.1	7,714.6	80.3	13.7	90.23	3,777.0	922.0	1,516.2	1,422.5	93.67	16.186	
12,100.0	7,740.0	7,719.7	7,717.2	82.0	13.7	90.34	3,777.1	922.0	1,560.9	1,465.5	95.40	16.361	
12,200.0	7,740.0	7,722.4	7,719.8	83.8	13.7	90.45	3,777.2	922.0	1,610.6	1,513.4	97.14	16.580	
12,300.0	7,740.0	7,725.0	7,722.5	85.5	13.7	90.56	3,777.2	922.0	1,664.8	1,565.9	98.88	16.837	
12,400.0	7,740.0	7,727.6	7,725.1	87.2	13.7	90.67	3,777.3	922.1	1,723.1	1,622.5	100.61	17.126	
12,500.0	7,740.0	7,730.2	7,727.7	88.9	13.7	90.78	3,777.3	922.1	1,785.1	1,682.8	102.35	17.441	
12,600.0	7,740.0	7,732.7	7,730.2	90.7	13.7	90.88	3,777.4	922.1	1,850.5	1,746.4	104.09	17.778	
12,700.0	7,740.0	7,735.3	7,732.8	92.4	13.7	90.99	3,777.5	922.1	1,918.8	1,813.0	105.82	18.132	
12,800.0	7,740.0	7,737.8	7,735.3	94.1	13.7	91.10	3,777.5	922.1	1,989.8	1,882.2	107.56	18.499	
12,900.0	7,740.0	7,740.4	7,737.8	95.9	13.8	91.20	3,777.6	922.1	2,063.2	1,953.9	109.30	18.876	
13,000.0	7,740.0	7,742.9	7,740.3	97.6	13.8	91.31	3,777.6	922.1	2,138.8	2,027.7	111.04	19.261	
13,100.0	7,740.0	7,745.4	7,742.8	99.3	13.8	91.41	3,777.7	922.1	2,216.2	2,103.5	112.78	19.652	
13,200.0	7,740.0	7,747.8	7,745.3	101.1	13.8	91.51	3,777.7	922.1	2,295.5	2,181.0	114.52	20.045	
13,300.0	7,740.0	7,750.3	7,747.8	102.8	13.8	91.61	3,777.8	922.1	2,376.3	2,260.0	116.25	20.441	
13,400.0	7,740.0	7,752.8	7,750.2	104.5	13.8	91.72	3,777.9	922.1	2,458.5	2,340.5	117.99	20.836	
13,500.0	7,740.0	7,755.2	7,752.7	106.3	13.8	91.82	3,777.9	922.2	2,542.0	2,422.2	119.73	21.231	
13,600.0	7,740.0	7,757.6	7,755.1	108.0	13.8	91.92	3,778.0	922.2	2,626.6	2,505.1	121.47	21.624	
13,700.0	7,740.0	7,760.0	7,757.5	109.8	13.8	92.02	3,778.0	922.2	2,712.3	2,589.1	123.21	22.014	
13,800.0	7,740.0	7,762.4	7,759.9	111.5	13.8	92.12	3,778.1	922.2	2,798.9	2,674.0	124.94	22.401	
13,900.0	7,740.0	7,764.8	7,762.3	113.2	13.8	92.22	3,778.1	922.2	2,886.4	2,759.7	126.68	22.785	
14,000.0	7,740.0	7,767.2	7,764.6	115.0	13.8	92.32	3,778.2	922.2	2,974.7	2,846.3	128.42	23.164	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SURV													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		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
							+N/-S (ft)	+E/-W (ft)						
14,100.0	7,740.0	7,769.5	7,767.0	116.7	13.8	92.41	3,778.2	922.2	3,063.7	2,933.5	130.16	23.538		
14,200.0	7,740.0	7,771.8	7,769.3	118.5	13.8	92.51	3,778.3	922.2	3,153.3	3,021.4	131.89	23.908		
14,300.0	7,740.0	7,774.2	7,771.6	120.2	13.8	92.61	3,778.3	922.2	3,243.6	3,110.0	133.63	24.273		
14,400.0	7,740.0	7,776.5	7,773.9	121.9	13.8	92.70	3,778.4	922.2	3,334.4	3,199.0	135.37	24.632		
14,500.0	7,740.0	7,778.8	7,776.2	123.7	13.8	92.80	3,778.4	922.2	3,425.7	3,288.6	137.10	24.986		
14,600.0	7,740.0	7,781.1	7,778.5	125.4	13.8	92.89	3,778.5	922.2	3,517.5	3,378.7	138.84	25.335		
14,682.3	7,740.0	7,782.9	7,780.4	126.8	13.8	92.97	3,778.5	922.2	3,593.4	3,453.1	140.27	25.618		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU													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	15.50	3,670.5	1,017.8	3,809.0					
100.0	100.0	85.0	85.0	0.2	0.1	15.50	3,670.5	1,017.8	3,809.0	3,808.7	0.30	N/A		
200.0	200.0	185.0	185.0	0.3	0.3	15.50	3,670.5	1,017.8	3,809.0	3,808.3	0.64	5,928.113		
300.0	300.0	285.0	285.0	0.5	0.5	135.50	3,670.5	1,017.8	3,809.6	3,808.6	0.99	3,854.525		
400.0	400.0	385.0	385.0	0.7	0.7	135.52	3,670.5	1,017.8	3,811.5	3,810.1	1.34	2,852.677		
500.0	499.9	484.9	484.9	0.9	0.8	135.54	3,670.5	1,017.8	3,814.6	3,812.9	1.69	2,260.418		
600.0	599.7	584.7	584.7	1.1	1.0	135.57	3,670.5	1,017.8	3,818.9	3,816.9	2.04	1,867.975		
700.0	699.5	684.5	684.5	1.3	1.2	121.61	3,670.5	1,017.8	3,823.1	3,820.7	2.41	1,588.277		
722.7	722.1	707.1	707.1	1.3	1.2	118.11	3,670.5	1,017.8	3,823.8	3,821.3	2.49	1,535.768		
800.0	799.3	780.5	780.5	1.5	1.3	118.17	3,670.5	1,017.8	3,826.1	3,823.3	2.77	1,383.404		
900.0	899.1	874.3	874.3	1.7	1.5	118.24	3,670.8	1,017.4	3,829.3	3,826.2	3.12	1,225.558		
1,000.0	998.9	980.1	980.1	1.9	1.7	118.32	3,671.0	1,016.6	3,832.2	3,828.7	3.51	1,093.263		
1,100.0	1,098.7	1,036.9	1,036.9	2.1	1.8	118.35	3,671.6	1,015.7	3,835.8	3,832.0	3.80	1,008.928		
1,200.0	1,198.5	1,074.0	1,074.0	2.3	1.8	118.36	3,672.6	1,014.6	3,840.7	3,836.6	4.06	944.867		
1,300.0	1,298.3	1,137.0	1,136.8	2.5	2.0	118.36	3,675.4	1,011.8	3,846.9	3,842.5	4.38	878.945		
1,400.0	1,398.1	1,263.0	1,262.2	2.7	2.2	118.29	3,682.9	1,002.1	3,853.5	3,848.6	4.82	799.243		
1,500.0	1,497.9	1,348.0	1,346.5	2.9	2.4	118.21	3,688.3	993.0	3,859.7	3,854.5	5.21	741.473		
1,600.0	1,597.7	1,464.5	1,461.7	3.1	2.7	118.05	3,696.8	977.7	3,866.1	3,860.4	5.69	679.604		
1,700.0	1,697.5	1,574.0	1,569.7	3.3	3.0	117.87	3,705.0	961.1	3,872.2	3,866.0	6.18	626.122		
1,800.0	1,797.3	1,636.0	1,630.8	3.5	3.2	117.77	3,709.8	951.9	3,878.7	3,872.1	6.56	591.560		
1,900.0	1,897.1	1,725.5	1,718.9	3.7	3.4	117.62	3,717.5	938.2	3,885.8	3,878.8	7.03	553.118		
2,000.0	1,996.9	1,811.6	1,803.3	3.9	3.7	117.45	3,725.4	923.4	3,893.1	3,885.6	7.50	518.796		
2,100.0	2,096.7	1,887.0	1,877.1	4.1	4.0	117.29	3,732.9	910.0	3,901.0	3,893.1	7.96	490.084		
2,200.0	2,196.5	1,938.7	1,927.7	4.3	4.2	117.18	3,738.7	900.6	3,909.9	3,901.6	8.34	468.713		
2,300.0	2,296.3	2,042.1	2,028.7	4.5	4.6	116.95	3,750.3	881.6	3,919.1	3,910.2	8.92	439.413		
2,400.0	2,396.1	2,115.8	2,100.2	4.7	4.9	116.76	3,759.4	866.7	3,928.8	3,919.4	9.41	417.500		
2,500.0	2,495.9	2,206.7	2,188.5	4.9	5.3	116.53	3,770.9	848.0	3,939.0	3,929.0	9.97	394.985		
2,600.0	2,595.7	2,404.8	2,380.3	5.2	6.1	115.98	3,793.0	804.0	3,946.7	3,935.7	11.02	358.130		
2,700.0	2,695.5	2,467.8	2,441.3	5.4	6.4	115.81	3,800.0	789.9	3,955.1	3,943.6	11.49	344.162		
2,800.0	2,795.3	2,539.9	2,511.1	5.6	6.7	115.62	3,808.4	774.1	3,964.2	3,952.2	12.00	330.275		
2,900.0	2,895.1	2,605.1	2,574.3	5.8	7.0	115.44	3,816.5	760.0	3,974.1	3,961.7	12.48	318.320		
3,000.0	2,994.9	2,745.3	2,710.2	6.0	7.7	115.08	3,834.1	730.3	3,984.6	3,971.3	13.28	300.046		
3,100.0	3,094.7	2,820.0	2,782.8	6.2	8.0	114.90	3,842.9	715.0	3,994.4	3,980.6	13.79	289.641		
3,200.0	3,194.5	2,883.0	2,844.0	6.4	8.3	114.75	3,850.9	702.5	4,005.1	3,990.9	14.25	281.076		
3,300.0	3,294.3	2,965.0	2,923.7	6.6	8.6	114.55	3,861.6	686.4	4,016.4	4,001.6	14.78	271.666		
3,400.0	3,394.1	3,047.7	3,004.1	6.8	9.0	114.37	3,872.6	670.7	4,028.2	4,012.9	15.32	263.000		
3,500.0	3,493.9	3,217.4	3,169.2	7.0	9.7	113.99	3,895.0	638.4	4,040.2	4,024.0	16.20	249.433		
3,600.0	3,593.8	3,360.0	3,308.3	7.2	10.3	113.67	3,910.1	610.7	4,049.1	4,032.2	16.97	238.556		
3,700.0	3,693.6	3,411.8	3,358.8	7.4	10.5	113.55	3,915.9	600.5	4,059.0	4,041.6	17.38	233.583		
3,800.0	3,793.4	3,506.1	3,450.9	7.6	10.9	113.37	3,927.1	583.8	4,069.7	4,051.8	17.93	226.972		
3,900.0	3,893.2	3,595.3	3,538.2	7.8	11.3	113.20	3,937.4	568.7	4,080.4	4,061.9	18.45	221.111		
4,000.0	3,993.0	3,749.7	3,689.8	8.0	11.8	112.95	3,954.3	544.8	4,090.9	4,071.7	19.18	213.317		
4,100.0	4,092.8	3,911.0	3,848.5	8.2	12.4	112.70	3,967.9	519.9	4,098.4	4,078.4	19.93	205.642		
4,200.0	4,192.6	3,944.0	3,880.9	8.4	12.5	112.64	3,971.0	514.4	4,107.2	4,086.9	20.25	202.828		
4,300.0	4,292.4	4,006.0	3,941.6	8.7	12.8	112.53	3,977.9	503.9	4,117.5	4,096.8	20.68	199.129		
4,400.0	4,392.2	4,069.0	4,003.0	8.9	13.1	112.40	3,985.7	492.2	4,128.7	4,107.6	21.14	195.287		
4,500.0	4,492.0	4,318.0	4,244.5	9.1	14.2	111.80	4,014.4	438.8	4,139.8	4,117.3	22.41	184.723		
4,600.0	4,591.8	4,417.3	4,341.1	9.3	14.7	111.57	4,023.7	417.7	4,147.9	4,124.9	23.02	180.173		
4,700.0	4,691.6	4,629.0	4,547.3	9.5	15.6	111.08	4,038.6	372.4	4,153.1	4,129.0	24.11	172.269		
4,800.0	4,791.4	4,691.0	4,607.8	9.7	15.8	110.95	4,042.6	359.5	4,158.8	4,134.2	24.55	169.388		
4,900.0	4,891.2	4,752.0	4,667.5	9.9	16.1	110.82	4,047.3	347.7	4,165.7	4,140.7	24.99	166.705		
5,000.0	4,991.0	4,784.6	4,699.4	10.1	16.2	110.76	4,050.2	341.5	4,173.9	4,148.5	25.31	164.893		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU													Offset Site Error:	0.0 ft
Survey Program: 765-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.8	4,814.0	4,728.1	10.3	16.3	110.70	4,053.1	336.1	4,183.4	4,157.8	25.62	163.256		
5,200.0	5,190.6	4,876.0	4,788.7	10.5	16.6	110.59	4,060.0	325.0	4,194.3	4,168.2	26.06	160.967		
5,300.0	5,290.4	4,917.8	4,829.5	10.7	16.7	110.51	4,065.4	317.6	4,206.6	4,180.1	26.41	159.262		
5,400.0	5,390.2	4,990.6	4,900.5	10.9	17.1	110.37	4,075.2	304.8	4,219.7	4,192.8	26.89	156.931		
5,500.0	5,490.0	5,074.1	4,981.9	11.1	17.4	110.22	4,086.9	290.0	4,233.4	4,206.0	27.40	154.526		
5,600.0	5,589.8	5,149.9	5,055.8	11.3	17.7	110.09	4,097.6	277.5	4,247.5	4,219.6	27.86	152.441		
5,700.0	5,689.6	5,685.0	5,579.9	11.5	19.8	109.20	4,152.0	186.7	4,260.8	4,230.9	29.95	142.285		
5,800.0	5,789.4	5,726.7	5,620.9	11.7	19.9	109.13	4,154.1	179.6	4,265.9	4,235.6	30.29	140.838		
5,900.0	5,889.2	5,892.8	5,784.3	11.9	20.5	108.86	4,161.5	150.2	4,270.0	4,238.9	31.08	137.393		
6,000.0	5,989.0	5,936.0	5,826.8	12.2	20.7	108.79	4,163.5	142.6	4,274.7	4,243.3	31.43	136.004		
6,100.0	6,088.8	5,998.0	5,887.8	12.4	20.9	108.69	4,166.8	132.2	4,280.4	4,248.6	31.84	134.441		
6,200.0	6,188.6	6,060.0	5,948.9	12.6	21.1	108.60	4,170.6	122.2	4,287.0	4,254.7	32.24	132.951		
6,300.0	6,288.4	6,126.0	6,013.8	12.8	21.4	108.51	4,175.4	111.7	4,294.5	4,261.8	32.66	131.473		
6,400.0	6,388.2	6,248.0	6,134.2	13.0	21.8	108.35	4,184.2	93.6	4,302.1	4,268.8	33.24	129.435		
6,500.0	6,488.0	6,330.1	6,215.4	13.2	22.0	108.27	4,190.0	83.1	4,309.8	4,276.2	33.67	128.003		
6,600.0	6,587.9	6,440.3	6,324.5	13.4	22.3	108.17	4,197.9	69.6	4,317.6	4,283.5	34.17	126.356		
6,700.0	6,687.7	6,592.4	6,475.5	13.6	22.7	108.07	4,207.4	54.5	4,324.8	4,290.1	34.73	124.529		
6,800.0	6,787.5	6,938.0	6,820.1	13.8	23.4	108.02	4,217.1	30.9	4,329.9	4,294.3	35.59	121.661		
6,900.0	6,887.3	7,002.0	6,884.0	14.0	23.5	108.05	4,216.9	28.9	4,331.2	4,295.3	35.87	120.731		
7,000.0	6,987.1	7,050.2	6,932.2	14.2	23.5	108.07	4,217.2	28.1	4,333.5	4,297.3	36.14	119.918		
7,100.0	7,086.9	7,112.0	6,994.0	14.4	23.6	108.11	4,218.1	27.2	4,336.8	4,300.4	36.42	119.090		
7,173.7	7,160.4	7,241.2	7,123.2	14.6	23.7	108.19	4,219.9	25.5	4,339.3	4,302.5	36.73	118.154		
7,200.0	7,186.7	7,267.5	7,149.5	14.6	23.8	67.93	4,220.1	25.2	4,339.3	4,302.5	36.83	117.824		
7,250.0	7,236.4	7,302.6	7,184.6	14.7	23.8	33.05	4,220.4	24.9	4,336.2	4,299.3	36.84	117.705		
7,300.0	7,285.6	7,339.1	7,221.1	14.8	23.8	22.60	4,220.7	24.7	4,328.9	4,292.3	36.63	118.170		
7,350.0	7,334.0	7,380.0	7,262.0	14.9	23.9	18.09	4,221.3	24.5	4,317.5	4,281.3	36.22	119.209		
7,400.0	7,381.0	7,413.4	7,295.4	15.0	23.9	15.72	4,221.8	24.3	4,302.0	4,266.4	35.59	120.879		
7,450.0	7,426.5	7,449.6	7,331.6	15.0	24.0	14.39	4,222.5	24.1	4,282.6	4,247.9	34.77	123.171		
7,500.0	7,470.0	7,484.4	7,366.4	15.1	24.0	13.66	4,223.2	23.8	4,259.4	4,225.6	33.77	126.139		
7,550.0	7,511.2	7,505.0	7,387.0	15.2	24.0	13.31	4,223.7	23.7	4,232.6	4,200.0	32.59	129.888		
7,600.0	7,549.7	7,547.8	7,429.7	15.4	24.1	13.34	4,224.7	23.5	4,202.2	4,170.9	31.29	134.292		
7,650.0	7,585.4	7,576.2	7,458.1	15.5	24.1	13.64	4,225.5	23.5	4,168.7	4,138.8	29.88	139.524		
7,700.0	7,617.9	7,602.2	7,484.1	15.7	24.1	14.26	4,226.2	23.6	4,132.1	4,103.7	28.40	145.500		
7,750.0	7,647.0	7,631.0	7,512.9	15.9	24.2	15.28	4,227.0	23.8	4,092.8	4,065.9	26.92	152.042		
7,800.0	7,672.4	7,693.4	7,575.3	16.2	24.3	17.07	4,228.6	23.8	4,051.0	4,025.4	25.59	158.309		
7,850.0	7,694.0	7,780.6	7,662.5	16.5	24.4	20.06	4,229.9	22.6	4,006.7	3,982.1	24.56	163.143		
7,900.0	7,711.6	7,827.6	7,709.5	16.8	24.4	24.46	4,229.9	21.9	3,960.3	3,936.4	23.95	165.357		
7,950.0	7,725.0	7,839.2	7,721.1	17.2	24.4	31.20	4,229.9	21.8	3,912.6	3,888.4	24.16	161.913		
8,000.0	7,734.2	7,847.2	7,729.0	17.6	24.4	43.52	4,229.9	21.7	3,863.9	3,837.6	26.25	147.175		
8,050.0	7,739.1	7,851.4	7,733.2	18.1	24.4	67.78	4,229.9	21.7	3,814.5	3,783.4	31.11	122.634		
8,081.4	7,740.0	7,852.1	7,734.0	18.3	24.4	91.09	4,229.9	21.7	3,783.4	3,750.0	33.43	113.181		
8,100.0	7,740.0	7,852.1	7,733.9	18.5	24.4	91.08	4,229.9	21.7	3,765.0	3,731.3	33.63	111.959		
8,200.0	7,740.0	7,852.0	7,733.8	19.6	24.4	91.07	4,229.9	21.7	3,665.8	3,631.0	34.77	105.432		
8,300.0	7,740.0	7,851.9	7,733.7	20.7	24.4	91.06	4,229.9	21.7	3,566.6	3,530.6	36.00	99.065		
8,400.0	7,740.0	7,851.8	7,733.6	21.9	24.4	91.05	4,229.9	21.7	3,467.5	3,430.2	37.31	92.932		
8,500.0	7,740.0	7,851.7	7,733.5	23.2	24.4	91.03	4,229.9	21.7	3,368.5	3,329.8	38.68	87.075		
8,600.0	7,740.0	7,851.6	7,733.4	24.6	24.4	91.02	4,229.9	21.7	3,269.5	3,229.4	40.11	81.516		
8,700.0	7,740.0	7,851.5	7,733.3	25.9	24.4	91.01	4,229.9	21.7	3,170.6	3,129.0	41.57	76.262		
8,800.0	7,740.0	7,851.3	7,733.2	27.4	24.4	91.00	4,229.9	21.7	3,071.7	3,028.6	43.08	71.310		
8,900.0	7,740.0	7,851.2	7,733.1	28.8	24.4	90.98	4,229.9	21.7	2,973.0	2,928.3	44.61	66.648		
9,000.0	7,740.0	7,851.1	7,733.0	30.3	24.4	90.97	4,229.9	21.7	2,874.3	2,828.1	46.16	62.263		
9,100.0	7,740.0	7,851.0	7,732.9	31.9	24.4	90.96	4,229.9	21.7	2,775.7	2,727.9	47.74	58.141		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU													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		
9,200.0	7,740.0	7,850.9	7,732.8	33.4	24.4	90.94	4,229.9	21.7	2,677.2	2,627.8	49.34	54.265		
9,300.0	7,740.0	7,850.8	7,732.7	35.0	24.4	90.93	4,229.9	21.7	2,578.8	2,527.9	50.95	50.618		
9,400.0	7,740.0	7,850.7	7,732.6	36.6	24.4	90.92	4,229.9	21.7	2,480.6	2,428.0	52.57	47.185		
9,500.0	7,740.0	7,850.6	7,732.5	38.2	24.4	90.90	4,229.9	21.7	2,382.5	2,328.3	54.21	43.951		
9,600.0	7,740.0	7,850.5	7,732.3	39.8	24.4	90.89	4,229.9	21.7	2,284.5	2,228.7	55.85	40.903		
9,700.0	7,740.0	7,850.4	7,732.2	41.4	24.4	90.88	4,229.9	21.7	2,186.8	2,129.3	57.51	38.026		
9,800.0	7,740.0	7,850.3	7,732.1	43.0	24.4	90.86	4,229.9	21.7	2,089.2	2,030.1	59.17	35.308		
9,900.0	7,740.0	7,850.1	7,732.0	44.7	24.4	90.85	4,229.9	21.7	1,992.0	1,931.1	60.84	32.740		
10,000.0	7,740.0	7,850.0	7,731.9	46.3	24.4	90.84	4,229.9	21.7	1,894.9	1,832.4	62.52	30.310		
10,100.0	7,740.0	7,849.9	7,731.8	48.0	24.4	90.82	4,229.9	21.7	1,798.3	1,734.1	64.20	28.010		
10,200.0	7,740.0	7,849.8	7,731.7	49.7	24.4	90.81	4,229.9	21.7	1,702.0	1,636.1	65.89	25.832		
10,300.0	7,740.0	7,849.7	7,731.6	51.3	24.4	90.80	4,229.9	21.7	1,606.1	1,538.5	67.58	23.767		
10,400.0	7,740.0	7,849.6	7,731.4	53.0	24.4	90.78	4,229.9	21.7	1,510.8	1,441.6	69.27	21.809		
10,500.0	7,740.0	7,849.5	7,731.3	54.7	24.4	90.77	4,229.9	21.7	1,416.2	1,345.2	70.97	19.953		
10,600.0	7,740.0	7,849.3	7,731.2	56.4	24.4	90.75	4,229.9	21.7	1,322.3	1,249.6	72.68	18.194		
10,700.0	7,740.0	7,849.2	7,731.1	58.1	24.4	90.74	4,229.9	21.7	1,229.4	1,155.0	74.38	16.528		
10,800.0	7,740.0	7,849.1	7,731.0	59.8	24.4	90.72	4,229.9	21.7	1,137.7	1,061.6	76.09	14.952		
10,900.0	7,740.0	7,849.0	7,730.9	61.5	24.4	90.71	4,229.9	21.7	1,047.5	969.7	77.80	13.464		
11,000.0	7,740.0	7,848.9	7,730.7	63.2	24.4	90.70	4,229.9	21.7	959.3	879.8	79.52	12.064		
11,105.4	7,740.0	7,848.7	7,730.6	65.0	24.4	90.68	4,229.9	21.7	869.1	787.7	81.32	10.686		
11,191.0	7,740.0	7,848.6	7,730.5	66.4	24.4	90.65	4,229.9	21.7	798.9	715.8	83.06	9.619		
11,200.0	7,740.0	7,848.6	7,730.5	66.6	24.4	90.65	4,229.9	21.7	791.8	708.5	83.21	9.515		
11,300.0	7,740.0	7,848.5	7,730.4	68.3	24.4	90.64	4,229.9	21.7	715.0	630.1	84.93	8.419		
11,400.0	7,740.0	7,848.4	7,730.3	70.0	24.4	90.63	4,229.9	21.7	644.7	558.0	86.65	7.440		
11,500.0	7,740.0	7,848.3	7,730.2	71.7	24.4	90.62	4,229.9	21.7	583.1	494.7	88.38	6.598		
11,600.0	7,740.0	7,848.2	7,730.1	73.4	24.4	90.60	4,229.9	21.7	533.2	443.1	90.10	5.918		
11,700.0	7,740.0	7,848.1	7,730.0	75.1	24.4	90.59	4,229.9	21.7	498.7	406.9	91.83	5.431		
11,800.0	7,740.0	7,848.0	7,729.9	76.9	24.4	90.58	4,229.9	21.7	482.8	389.2	93.55	5.160		
11,828.2	7,740.0	7,848.0	7,729.8	77.4	24.4	90.57	4,229.9	21.7	482.0	387.9	94.04	5.125 CC, ES		
11,900.0	7,740.0	7,847.9	7,729.7	78.6	24.4	90.56	4,229.9	21.7	487.3	392.0	95.28	5.114 SF		
12,000.0	7,740.0	7,847.8	7,729.6	80.3	24.4	90.55	4,229.9	21.7	511.7	414.7	97.01	5.274		
12,100.0	7,740.0	7,847.7	7,729.5	82.0	24.4	90.54	4,229.9	21.7	553.3	454.6	98.74	5.604		
12,200.0	7,740.0	7,847.5	7,729.4	83.8	24.4	90.52	4,229.9	21.7	608.7	508.3	100.47	6.059		
12,300.0	7,740.0	7,847.4	7,729.3	85.5	24.4	90.51	4,229.9	21.7	674.5	572.3	102.21	6.599		
12,400.0	7,740.0	7,847.3	7,729.2	87.2	24.4	90.50	4,229.9	21.7	747.9	643.9	103.94	7.195		
12,500.0	7,740.0	7,847.2	7,729.1	88.9	24.4	90.48	4,229.9	21.7	826.8	721.2	105.67	7.824		
12,600.0	7,740.0	7,847.1	7,729.0	90.7	24.4	90.47	4,229.9	21.7	910.0	802.5	107.41	8.472		
12,700.0	7,740.0	7,847.0	7,728.8	92.4	24.4	90.46	4,229.9	21.7	996.2	887.0	109.15	9.127		
12,800.0	7,740.0	7,846.9	7,728.7	94.1	24.4	90.44	4,229.9	21.7	1,084.8	973.9	110.88	9.783		
12,900.0	7,740.0	7,846.7	7,728.6	95.9	24.4	90.43	4,229.9	21.7	1,175.2	1,062.6	112.62	10.435		
13,000.0	7,740.0	7,846.6	7,728.5	97.6	24.4	90.41	4,229.9	21.7	1,267.1	1,152.7	114.36	11.080		
13,100.0	7,740.0	7,846.5	7,728.4	99.3	24.4	90.40	4,229.9	21.7	1,360.1	1,244.0	116.09	11.715		
13,200.0	7,740.0	7,846.4	7,728.2	101.1	24.4	90.38	4,229.9	21.7	1,454.0	1,336.2	117.83	12.340		
13,300.0	7,740.0	7,846.3	7,728.1	102.8	24.4	90.37	4,229.9	21.7	1,548.7	1,429.2	119.57	12.952		
13,400.0	7,740.0	7,846.1	7,728.0	104.5	24.4	90.36	4,229.9	21.7	1,644.1	1,522.8	121.31	13.552		
13,500.0	7,740.0	7,846.0	7,727.9	106.3	24.4	90.34	4,229.9	21.7	1,739.9	1,616.9	123.05	14.140		
13,600.0	7,740.0	7,845.9	7,727.8	108.0	24.4	90.33	4,229.9	21.7	1,836.2	1,711.4	124.79	14.714		
13,700.0	7,740.0	7,845.8	7,727.6	109.8	24.4	90.31	4,229.9	21.7	1,932.9	1,806.4	126.53	15.276		
13,800.0	7,740.0	7,845.7	7,727.5	111.5	24.4	90.30	4,229.9	21.7	2,029.9	1,901.6	128.28	15.824		
13,900.0	7,740.0	7,845.5	7,727.4	113.2	24.4	90.28	4,229.9	21.7	2,127.2	1,997.1	130.02	16.361		
14,000.0	7,740.0	7,845.4	7,727.3	115.0	24.4	90.27	4,229.9	21.8	2,224.7	2,092.9	131.76	16.884		
14,100.0	7,740.0	7,845.3	7,727.1	116.7	24.4	90.25	4,229.9	21.8	2,322.4	2,188.9	133.50	17.396		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU		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 +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)										
14,200.0	7,740.0	7,845.1	7,727.0	118.5	24.4	90.24	4,229.9	21.8	2,420.3	2,285.1	135.24	17.896				
14,300.0	7,740.0	7,845.0	7,726.9	120.2	24.4	90.22	4,229.9	21.8	2,518.4	2,381.4	136.99	18.384				
14,400.0	7,740.0	7,844.9	7,726.8	121.9	24.4	90.21	4,229.9	21.8	2,616.6	2,477.9	138.73	18.861				
14,500.0	7,740.0	7,844.8	7,726.6	123.7	24.4	90.19	4,229.9	21.8	2,715.0	2,574.5	140.48	19.327				
14,600.0	7,740.0	7,844.6	7,726.5	125.4	24.4	90.18	4,229.9	21.8	2,813.4	2,671.2	142.22	19.782				
14,682.3	7,740.0	7,844.5	7,726.4	126.8	24.4	90.16	4,229.9	21.8	2,894.5	2,750.9	143.65	20.149				

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU													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	15.16	3,623.1	981.4	3,753.7					
100.0	100.0	86.6	86.6	0.2	0.1	15.16	3,623.1	981.4	3,753.7	3,753.4	0.30	N/A		
200.0	200.0	188.4	188.4	0.3	0.3	15.15	3,623.1	981.2	3,753.6	3,752.9	0.65	5,779.554		
207.6	207.6	196.2	196.2	0.3	0.3	135.15	3,623.1	981.2	3,753.6	3,752.9	0.68	5,550.331		
300.0	300.0	290.2	290.2	0.5	0.5	135.16	3,623.0	980.9	3,754.1	3,753.1	1.00	3,756.917		
400.0	400.0	392.1	392.1	0.7	0.7	135.17	3,623.0	980.6	3,755.8	3,754.4	1.35	2,780.281		
500.0	499.9	493.8	493.8	0.9	0.8	135.19	3,622.9	980.1	3,758.7	3,757.0	1.71	2,202.889		
600.0	599.7	595.5	595.5	1.1	1.0	135.22	3,622.7	979.5	3,762.7	3,760.7	2.07	1,820.264		
700.0	699.5	697.2	697.2	1.3	1.2	121.25	3,622.6	978.8	3,766.6	3,764.1	2.43	1,547.554		
722.7	722.1	720.3	720.3	1.3	1.2	117.75	3,622.6	978.6	3,767.2	3,764.7	2.52	1,496.355		
800.0	799.3	798.8	798.8	1.5	1.4	117.81	3,622.5	978.0	3,769.2	3,766.4	2.80	1,344.974		
900.0	899.1	896.9	896.9	1.7	1.5	117.88	3,622.3	977.1	3,771.7	3,768.6	3.17	1,189.962		
1,000.0	998.9	1,003.3	1,003.3	1.9	1.7	117.95	3,622.3	975.9	3,774.3	3,770.8	3.55	1,062.350		
1,100.0	1,098.7	1,762.5	1,755.5	2.1	3.6	117.73	3,568.7	902.8	3,766.8	3,761.5	5.31	709.268		
1,200.0	1,198.5	1,873.6	1,863.8	2.3	4.0	117.60	3,553.3	883.5	3,751.6	3,745.8	5.79	647.474		
1,300.0	1,298.3	2,019.5	2,005.5	2.5	4.6	117.38	3,533.1	855.1	3,736.0	3,729.6	6.42	582.093		
1,400.0	1,398.1	2,278.0	2,252.9	2.7	5.9	116.80	3,492.8	792.2	3,717.2	3,709.7	7.50	495.411		
1,500.0	1,497.9	2,350.6	2,322.2	2.9	6.3	116.65	3,480.0	774.8	3,696.8	3,688.8	7.96	464.173		
1,600.0	1,597.7	2,428.8	2,396.9	3.1	6.7	116.47	3,467.0	755.6	3,677.1	3,668.7	8.45	435.072		
1,700.0	1,697.5	2,653.0	2,610.3	3.3	7.9	115.99	3,424.5	701.7	3,654.7	3,645.3	9.45	386.601		
1,800.0	1,797.3	2,721.1	2,675.2	3.5	8.2	115.86	3,411.0	686.3	3,632.6	3,622.7	9.88	367.509		
1,900.0	1,897.1	2,818.2	2,768.0	3.7	8.8	115.68	3,391.7	665.0	3,610.7	3,600.3	10.42	346.419		
2,000.0	1,996.9	2,909.6	2,855.3	3.9	9.2	115.51	3,373.6	644.9	3,588.8	3,577.9	10.93	328.222		
2,100.0	2,096.7	3,005.2	2,946.8	4.1	9.8	115.34	3,354.6	624.4	3,567.1	3,555.7	11.47	310.898		
2,200.0	2,196.5	3,081.7	3,019.8	4.3	10.2	115.18	3,339.9	606.9	3,545.7	3,533.7	11.97	296.264		
2,300.0	2,296.3	3,151.3	3,086.1	4.5	10.6	115.02	3,327.2	590.3	3,525.0	3,512.6	12.44	283.368		
2,400.0	2,396.1	3,220.0	3,151.8	4.7	10.9	114.87	3,315.1	574.3	3,505.1	3,492.2	12.90	271.686		
2,500.0	2,495.9	3,296.7	3,225.5	4.9	11.3	114.71	3,301.8	557.5	3,486.0	3,472.6	13.38	260.613		
2,600.0	2,595.7	3,383.7	3,309.1	5.2	11.8	114.53	3,287.3	538.5	3,467.3	3,453.4	13.92	249.006		
2,700.0	2,695.5	3,485.5	3,406.7	5.4	12.3	114.29	3,270.7	514.7	3,448.9	3,434.3	14.52	237.486		
2,800.0	2,795.3	3,688.2	3,600.7	5.6	13.4	113.85	3,233.6	469.1	3,428.5	3,413.0	15.51	220.998		
2,900.0	2,895.1	3,756.3	3,665.7	5.8	13.8	113.70	3,220.5	453.5	3,407.5	3,391.5	15.99	213.091		
3,000.0	2,994.9	3,830.2	3,736.2	6.0	14.2	113.52	3,207.0	436.3	3,387.2	3,370.7	16.50	205.258		
3,100.0	3,094.7	3,913.7	3,816.0	6.2	14.7	113.31	3,192.3	416.1	3,367.6	3,350.5	17.06	197.355		
3,200.0	3,194.5	4,017.3	3,914.9	6.4	15.2	113.04	3,174.3	391.2	3,348.2	3,330.5	17.72	188.989		
3,300.0	3,294.3	4,115.2	4,008.2	6.6	15.8	112.78	3,157.0	367.2	3,328.4	3,310.1	18.35	181.365		
3,400.0	3,394.1	4,286.5	4,171.0	6.8	16.8	112.30	3,125.4	324.3	3,308.0	3,288.6	19.34	171.044		
3,500.0	3,493.9	4,353.0	4,234.2	7.0	17.2	112.11	3,112.6	308.0	3,286.9	3,267.0	19.84	165.711		
3,600.0	3,593.8	4,414.7	4,293.1	7.2	17.5	111.96	3,101.2	293.7	3,266.8	3,246.5	20.29	160.971		
3,700.0	3,693.6	4,506.9	4,381.3	7.4	18.0	111.73	3,084.8	272.6	3,247.5	3,226.6	20.91	155.284		
3,800.0	3,793.4	4,578.7	4,449.7	7.6	18.4	111.52	3,072.2	254.7	3,228.3	3,206.9	21.46	150.451		
3,900.0	3,893.2	4,635.0	4,503.5	7.8	18.7	111.35	3,063.1	240.7	3,210.4	3,188.5	21.93	146.408		
4,000.0	3,993.0	4,797.7	4,658.2	8.0	19.7	110.83	3,035.7	198.5	3,191.4	3,168.4	22.96	138.996		
4,100.0	4,092.8	4,902.2	4,757.5	8.2	20.3	110.50	3,017.4	171.5	3,172.2	3,148.5	23.68	133.976		
4,200.0	4,192.6	4,968.8	4,821.1	8.4	20.6	110.30	3,005.7	155.5	3,153.3	3,129.1	24.18	130.387		
4,300.0	4,292.4	5,031.2	4,880.9	8.7	20.9	110.14	2,995.3	141.4	3,135.6	3,111.0	24.66	127.152		
4,400.0	4,392.2	5,105.0	4,952.1	8.9	21.3	109.96	2,983.6	125.7	3,119.0	3,093.8	25.17	123.901		
4,500.0	4,492.0	5,171.7	5,016.6	9.1	21.6	109.80	2,973.4	112.3	3,103.2	3,077.6	25.64	121.021		
4,600.0	4,591.8	5,243.5	5,086.3	9.3	21.9	109.65	2,963.0	98.7	3,088.3	3,062.2	26.12	118.246		
4,700.0	4,691.6	5,293.0	5,134.6	9.5	22.1	109.56	2,956.1	89.8	3,074.5	3,048.0	26.50	116.006		
4,800.0	4,791.4	5,355.0	5,195.2	9.7	22.4	109.45	2,948.2	79.5	3,061.9	3,035.0	26.91	113.770		
4,900.0	4,891.2	5,407.6	5,246.8	9.9	22.6	109.37	2,942.4	71.4	3,051.1	3,023.8	27.29	111.821		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU												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	
5,000.0	4,991.0	5,483.0	5,321.1	10.1	22.8	109.27	2,935.0	60.8	3,041.7	3,013.9	27.72	109.744	
5,100.0	5,090.8	5,544.2	5,381.5	10.3	23.0	109.21	2,929.5	53.0	3,033.2	3,005.1	28.09	107.991	
5,200.0	5,190.6	5,623.1	5,459.7	10.5	23.2	109.14	2,922.9	43.9	3,025.5	2,997.0	28.49	106.199	
5,300.0	5,290.4	5,703.9	5,539.8	10.7	23.4	109.10	2,916.4	36.1	3,018.4	2,989.6	28.86	104.576	
5,400.0	5,390.2	5,768.0	5,603.6	10.9	23.6	109.09	2,911.5	31.3	3,012.1	2,982.9	29.18	103.221	
5,500.0	5,490.0	5,836.0	5,671.3	11.1	23.7	109.10	2,906.9	27.1	3,006.9	2,977.4	29.50	101.944	
5,600.0	5,589.8	5,903.3	5,738.3	11.3	23.8	109.11	2,903.3	23.6	3,003.0	2,973.2	29.79	100.802	
5,700.0	5,689.6	5,957.0	5,792.0	11.5	23.9	109.14	2,900.8	21.6	3,000.1	2,970.1	30.06	99.813	
5,800.0	5,789.4	6,024.2	5,859.1	11.7	24.0	109.19	2,898.4	19.7	2,998.5	2,968.2	30.34	98.835	
5,850.7	5,840.1	6,052.0	5,886.9	11.8	24.0	109.21	2,897.8	19.0	2,998.3	2,967.9	30.47	98.390	
5,900.0	5,889.2	6,085.8	5,920.7	11.9	24.0	109.23	2,897.3	18.1	2,998.5	2,967.9	30.61	97.951	
6,000.0	5,989.0	6,162.8	5,997.6	12.2	24.1	109.28	2,896.7	16.3	2,999.4	2,968.5	30.90	97.066	
6,100.0	6,088.8	6,263.2	6,098.0	12.4	24.2	109.36	2,896.2	14.1	3,000.7	2,969.5	31.22	96.129	
6,200.0	6,188.6	6,361.9	6,196.7	12.6	24.3	109.43	2,895.6	12.2	3,002.0	2,970.4	31.52	95.227	
6,300.0	6,288.4	6,452.1	6,286.9	12.8	24.4	109.50	2,895.2	10.6	3,003.5	2,971.6	31.83	94.371	
6,400.0	6,388.2	6,547.6	6,382.3	13.0	24.5	109.58	2,895.1	8.7	3,005.2	2,973.1	32.14	93.507	
6,500.0	6,488.0	6,647.6	6,482.3	13.2	24.7	109.65	2,895.1	6.4	3,007.0	2,974.6	32.46	92.632	
6,600.0	6,587.9	6,759.6	6,594.3	13.4	24.8	109.72	2,894.9	3.4	3,008.6	2,975.8	32.81	91.693	
6,700.0	6,687.7	6,870.6	6,705.3	13.6	24.9	109.78	2,894.3	0.2	3,009.8	2,976.7	33.15	90.803	
6,800.0	6,787.5	6,980.7	6,815.3	13.8	25.0	109.87	2,893.2	-2.0	3,010.7	2,977.3	33.47	89.964	
6,900.0	6,887.3	7,071.8	6,906.4	14.0	25.1	109.95	2,892.2	-3.3	3,011.5	2,977.8	33.76	89.196	
7,000.0	6,987.1	7,159.9	6,994.5	14.2	25.2	110.02	2,891.5	-4.5	3,012.7	2,978.7	34.06	88.460	
7,100.0	7,086.9	7,234.9	7,069.5	14.4	25.3	110.09	2,891.3	-5.5	3,014.5	2,980.1	34.34	87.773	
7,173.7	7,160.4	7,285.8	7,120.4	14.6	25.4	110.13	2,891.7	-6.3	3,016.4	2,981.9	34.55	87.297	
7,200.0	7,186.7	7,304.0	7,138.6	14.6	25.4	69.87	2,891.9	-6.6	3,016.6	2,982.1	34.56	87.298	
7,250.0	7,236.4	7,338.5	7,173.1	14.7	25.4	35.00	2,892.4	-7.1	3,014.0	2,979.6	34.38	87.657	
7,300.0	7,285.6	7,376.0	7,210.6	14.8	25.4	24.58	2,893.2	-7.8	3,007.2	2,973.3	33.98	88.489	
7,350.0	7,334.0	7,420.4	7,254.9	14.9	25.5	20.12	2,894.3	-8.5	2,996.4	2,963.1	33.37	89.798	
7,400.0	7,381.0	7,468.3	7,302.8	15.0	25.5	17.85	2,895.4	-9.4	2,981.4	2,948.9	32.54	91.628	
7,450.0	7,426.5	7,515.4	7,349.9	15.0	25.6	16.64	2,896.6	-10.2	2,962.4	2,930.9	31.50	94.044	
7,500.0	7,470.0	7,562.1	7,396.6	15.1	25.6	16.07	2,897.6	-10.9	2,939.4	2,909.1	30.27	97.121	
7,550.0	7,511.2	7,606.4	7,440.9	15.2	25.6	15.96	2,898.6	-11.5	2,912.6	2,883.8	28.86	100.912	
7,600.0	7,549.7	7,648.0	7,482.4	15.4	25.7	16.24	2,899.4	-11.9	2,882.4	2,855.0	27.32	105.486	
7,650.0	7,585.4	7,686.4	7,520.9	15.5	25.7	16.90	2,900.2	-12.2	2,848.8	2,823.1	25.69	110.877	
7,700.0	7,617.9	7,721.5	7,555.9	15.7	25.7	17.98	2,900.8	-12.4	2,812.1	2,788.1	24.03	117.005	
7,750.0	7,647.0	7,752.9	7,587.3	15.9	25.7	19.57	2,901.3	-12.5	2,772.8	2,750.3	22.45	123.488	
7,800.0	7,672.4	7,780.4	7,614.9	16.2	25.8	21.86	2,901.8	-12.5	2,730.9	2,709.8	21.13	129.234	
7,850.0	7,694.0	7,803.6	7,638.1	16.5	25.8	25.16	2,902.1	-12.5	2,687.0	2,666.6	20.38	131.828	
7,900.0	7,711.6	7,822.6	7,657.0	16.8	25.8	30.03	2,902.4	-12.5	2,641.3	2,620.6	20.71	127.565	
7,950.0	7,725.0	7,837.3	7,671.7	17.2	25.8	37.52	2,902.6	-12.5	2,594.2	2,571.5	22.72	114.178	
8,000.0	7,734.2	7,847.6	7,682.0	17.6	25.8	49.59	2,902.8	-12.5	2,546.0	2,519.1	26.90	94.653	
8,050.0	7,739.1	7,853.4	7,687.8	18.1	25.8	69.05	2,902.9	-12.5	2,497.2	2,464.6	32.56	76.697	
8,081.4	7,740.0	7,854.7	7,689.2	18.3	25.8	85.32	2,902.9	-12.5	2,466.3	2,431.2	35.09	70.278	
8,100.0	7,740.0	7,855.0	7,689.4	18.5	25.8	85.35	2,902.9	-12.5	2,448.0	2,412.7	35.30	69.356	
8,200.0	7,740.0	7,856.5	7,690.9	19.6	25.8	85.55	2,902.9	-12.5	2,349.7	2,313.2	36.45	64.463	
8,300.0	7,740.0	7,858.0	7,692.4	20.7	25.8	85.74	2,903.0	-12.5	2,251.5	2,213.8	37.70	59.728	
8,400.0	7,740.0	7,859.5	7,693.9	21.9	25.8	85.94	2,903.0	-12.5	2,153.5	2,114.5	39.02	55.192	
8,500.0	7,740.0	7,861.0	7,695.4	23.2	25.8	86.13	2,903.0	-12.5	2,055.7	2,015.3	40.40	50.881	
8,600.0	7,740.0	7,862.5	7,696.9	24.6	25.8	86.32	2,903.0	-12.5	1,958.1	1,916.3	41.84	46.802	
8,700.0	7,740.0	7,863.9	7,698.4	25.9	25.8	86.52	2,903.0	-12.5	1,860.8	1,817.5	43.32	42.959	
8,800.0	7,740.0	7,865.4	7,699.8	27.4	25.8	86.71	2,903.1	-12.5	1,763.8	1,719.0	44.83	39.344	
8,900.0	7,740.0	7,866.9	7,701.3	28.8	25.8	86.90	2,903.1	-12.5	1,667.1	1,620.7	46.37	35.951	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU												Offset Site Error:	0.0 ft
Survey Program: 797-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,000.0	7,740.0	7,868.3	7,702.8	30.3	25.8	87.09	2,903.1	-12.5	1,570.8	1,522.9	47.94	32.767	
9,100.0	7,740.0	7,869.8	7,704.2	31.9	25.8	87.28	2,903.1	-12.4	1,475.1	1,425.5	49.53	29.782	
9,200.0	7,740.0	7,871.2	7,705.7	33.4	25.8	87.47	2,903.1	-12.4	1,379.9	1,328.8	51.13	26.986	
9,300.0	7,740.0	7,872.7	7,707.1	35.0	25.8	87.66	2,903.2	-12.4	1,285.5	1,232.7	52.76	24.366	
9,400.0	7,740.0	7,874.1	7,708.6	36.6	25.8	87.85	2,903.2	-12.4	1,191.9	1,137.5	54.39	21.914	
9,500.0	7,740.0	7,875.6	7,710.0	38.2	25.8	88.03	2,903.2	-12.4	1,099.5	1,043.5	56.04	19.621	
9,600.0	7,740.0	7,877.0	7,711.4	39.8	25.8	88.22	2,903.2	-12.4	1,008.6	950.9	57.69	17.481	
9,700.0	7,740.0	7,878.4	7,712.8	41.4	25.8	88.41	2,903.2	-12.4	919.5	860.2	59.36	15.491	
9,800.0	7,740.0	7,879.8	7,714.3	43.0	25.8	88.59	2,903.3	-12.4	832.9	771.9	61.03	13.647	
9,900.0	7,740.0	7,881.3	7,715.7	44.7	25.8	88.78	2,903.3	-12.4	749.7	687.0	62.71	11.955	
10,000.0	7,740.0	7,882.7	7,717.1	46.3	25.8	88.96	2,903.3	-12.4	671.1	606.7	64.40	10.421	
10,100.0	7,740.0	7,884.1	7,718.5	48.0	25.8	89.15	2,903.3	-12.4	598.8	532.7	66.09	9.061	
10,200.0	7,740.0	7,885.5	7,719.9	49.7	25.8	89.33	2,903.3	-12.4	535.6	467.8	67.78	7.901	
10,300.0	7,740.0	7,886.9	7,721.3	51.3	25.8	89.51	2,903.4	-12.4	484.8	415.4	69.48	6.978	
10,400.0	7,740.0	7,888.3	7,722.7	53.0	25.8	89.70	2,903.4	-12.4	450.9	379.7	71.18	6.334	
10,500.0	7,740.0	7,889.7	7,724.1	54.7	25.8	89.88	2,903.4	-12.4	437.7	364.8	72.89	6.005	
10,508.8	7,740.0	7,889.8	7,724.2	54.8	25.8	89.89	2,903.4	-12.4	437.6	364.5	73.04	5.991	CC, ES, SF
10,600.0	7,740.0	7,891.1	7,725.5	56.4	25.8	90.06	2,903.4	-12.4	447.0	372.4	74.60	5.992	
10,700.0	7,740.0	7,892.4	7,726.8	58.1	25.8	90.24	2,903.4	-12.4	477.5	401.2	76.31	6.258	
10,800.0	7,740.0	7,893.8	7,728.2	59.8	25.8	90.42	2,903.5	-12.4	525.6	447.6	78.02	6.737	
10,900.0	7,740.0	7,895.2	7,729.6	61.5	25.8	90.60	2,903.5	-12.4	586.9	507.2	79.73	7.361	
11,000.0	7,740.0	7,896.5	7,731.0	63.2	25.8	90.78	2,903.5	-12.4	657.8	576.3	81.45	8.076	
11,105.4	7,740.0	7,898.0	7,732.4	65.0	25.8	90.97	2,903.5	-12.4	739.8	656.6	83.26	8.886	
11,191.0	7,740.0	7,899.1	7,733.6	66.4	25.8	91.14	2,903.5	-12.4	810.8	726.1	84.66	9.577	
11,200.0	7,740.0	7,899.3	7,733.7	66.6	25.8	91.16	2,903.5	-12.4	818.4	733.6	84.81	9.650	
11,300.0	7,740.0	7,900.6	7,735.0	68.3	25.9	91.34	2,903.6	-12.4	905.2	818.6	86.53	10.461	
11,400.0	7,740.0	7,902.0	7,736.4	70.0	25.9	91.52	2,903.6	-12.4	994.4	906.1	88.25	11.268	
11,500.0	7,740.0	7,903.3	7,737.7	71.7	25.9	91.70	2,903.6	-12.4	1,085.5	995.5	89.97	12.065	
11,600.0	7,740.0	7,904.6	7,739.0	73.4	25.9	91.88	2,903.6	-12.4	1,178.0	1,086.4	91.69	12.848	
11,700.0	7,740.0	7,906.0	7,740.4	75.1	25.9	92.06	2,903.6	-12.4	1,271.7	1,178.3	93.41	13.614	
11,800.0	7,740.0	7,907.3	7,741.7	76.9	25.9	92.23	2,903.6	-12.4	1,366.3	1,271.2	95.13	14.362	
11,900.0	7,740.0	7,908.6	7,743.0	78.6	25.9	92.41	2,903.7	-12.4	1,461.6	1,364.7	96.85	15.091	
12,000.0	7,740.0	7,909.9	7,744.3	80.3	25.9	92.59	2,903.7	-12.4	1,557.5	1,458.9	98.57	15.800	
12,100.0	7,740.0	7,911.2	7,745.7	82.0	25.9	92.76	2,903.7	-12.4	1,653.8	1,553.6	100.29	16.490	
12,200.0	7,740.0	7,912.6	7,747.0	83.8	25.9	92.94	2,903.7	-12.4	1,750.6	1,648.6	102.01	17.161	
12,300.0	7,740.0	7,913.9	7,748.3	85.5	25.9	93.11	2,903.7	-12.4	1,847.7	1,744.0	103.73	17.813	
12,400.0	7,740.0	7,915.2	7,749.6	87.2	25.9	93.29	2,903.8	-12.4	1,945.1	1,839.7	105.45	18.446	
12,500.0	7,740.0	7,916.5	7,750.9	88.9	25.9	93.46	2,903.8	-12.4	2,042.8	1,935.6	107.17	19.062	
12,600.0	7,740.0	7,917.8	7,752.2	90.7	25.9	93.63	2,903.8	-12.4	2,140.7	2,031.8	108.89	19.660	
12,700.0	7,740.0	7,919.0	7,753.5	92.4	25.9	93.80	2,903.8	-12.4	2,238.7	2,128.1	110.60	20.241	
12,800.0	7,740.0	7,920.3	7,754.7	94.1	25.9	93.97	2,903.8	-12.4	2,337.0	2,224.6	112.32	20.807	
12,900.0	7,740.0	7,921.6	7,756.0	95.9	25.9	94.14	2,903.8	-12.3	2,435.3	2,321.3	114.03	21.356	
13,000.0	7,740.0	7,922.9	7,757.3	97.6	25.9	94.31	2,903.9	-12.3	2,533.8	2,418.1	115.75	21.891	
13,100.0	7,740.0	7,924.2	7,758.6	99.3	25.9	94.48	2,903.9	-12.3	2,632.4	2,515.0	117.46	22.411	
13,200.0	7,740.0	7,925.4	7,759.8	101.1	25.9	94.65	2,903.9	-12.3	2,731.2	2,612.0	119.17	22.918	
13,300.0	7,740.0	7,926.7	7,761.1	102.8	25.9	94.82	2,903.9	-12.3	2,829.9	2,709.1	120.88	23.411	
13,400.0	7,740.0	7,928.0	7,762.4	104.5	25.9	94.99	2,903.9	-12.3	2,928.8	2,806.2	122.59	23.891	
13,500.0	7,740.0	7,929.2	7,763.6	106.3	25.9	95.15	2,903.9	-12.3	3,027.8	2,903.5	124.30	24.359	
13,600.0	7,740.0	7,930.5	7,764.9	108.0	25.9	95.32	2,904.0	-12.3	3,126.8	3,000.8	126.01	24.815	
13,700.0	7,740.0	7,931.7	7,766.1	109.8	25.9	95.49	2,904.0	-12.3	3,225.9	3,098.2	127.71	25.259	
13,800.0	7,740.0	7,933.0	7,767.4	111.5	25.9	95.65	2,904.0	-12.3	3,325.0	3,195.6	129.42	25.693	
13,900.0	7,740.0	7,934.2	7,768.6	113.2	25.9	95.82	2,904.0	-12.3	3,424.2	3,293.1	131.12	26.115	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU		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				
14,000.0	7,740.0	7,935.4	7,769.8	115.0	25.9	95.98	2,904.0	-12.3	3,523.4	3,390.6	132.82	26.528				
14,100.0	7,740.0	7,936.7	7,771.1	116.7	25.9	96.14	2,904.0	-12.3	3,622.7	3,488.2	134.52	26.931				
14,200.0	7,740.0	7,937.9	7,772.3	118.5	25.9	96.30	2,904.1	-12.3	3,722.0	3,585.8	136.22	27.324				
14,300.0	7,740.0	7,939.1	7,773.5	120.2	25.9	96.47	2,904.1	-12.3	3,821.4	3,683.4	137.91	27.709				
14,400.0	7,740.0	7,940.3	7,774.8	121.9	25.9	96.63	2,904.1	-12.3	3,920.7	3,781.1	139.61	28.084				
14,500.0	7,740.0	7,941.6	7,776.0	123.7	25.9	96.79	2,904.1	-12.3	4,020.1	3,878.8	141.30	28.451				
14,600.0	7,740.0	7,942.8	7,777.2	125.4	25.9	96.95	2,904.1	-12.3	4,119.6	3,976.6	142.99	28.810				
14,682.3	7,740.0	7,943.8	7,778.2	126.8	25.9	97.08	2,904.1	-12.3	4,201.4	4,057.0	144.38	29.100				

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - PL													Offset Site Error:	0.0 ft
Survey Program: 775-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	15.42	3,659.5	1,009.4	3,796.2					
100.0	100.0	84.0	84.0	0.2	0.1	15.42	3,659.5	1,009.4	3,796.2	3,795.9	0.30	N/A		
200.0	200.0	184.0	184.0	0.3	0.3	15.42	3,659.5	1,009.4	3,796.2	3,795.5	0.64	5,911.862		
300.0	300.0	284.0	284.0	0.5	0.5	135.42	3,659.5	1,009.4	3,796.8	3,795.8	0.99	3,840.316		
400.0	400.0	384.0	384.0	0.7	0.7	135.44	3,659.5	1,009.4	3,798.7	3,797.3	1.34	2,840.858		
500.0	499.9	483.9	483.9	0.9	0.8	135.46	3,659.5	1,009.4	3,801.8	3,800.1	1.69	2,250.441		
600.0	599.7	583.7	583.7	1.1	1.0	135.50	3,659.5	1,009.4	3,806.1	3,804.1	2.05	1,859.394		
700.0	699.5	683.5	683.5	1.3	1.2	121.53	3,659.5	1,009.4	3,810.3	3,807.9	2.41	1,580.786		
722.7	722.1	706.1	706.1	1.3	1.2	118.04	3,659.5	1,009.4	3,811.0	3,808.5	2.49	1,528.490		
800.0	799.3	775.0	775.0	1.5	1.3	118.09	3,659.5	1,009.4	3,813.3	3,810.5	2.76	1,380.903		
900.0	899.1	775.0	775.0	1.7	1.3	118.09	3,659.5	1,009.4	3,817.8	3,814.8	2.96	1,291.192		
1,000.0	998.9	775.0	775.0	1.9	1.3	118.09	3,659.5	1,009.4	3,824.9	3,821.7	3.15	1,213.077		
1,100.0	1,098.7	775.0	775.0	2.1	1.3	118.09	3,659.5	1,009.4	3,834.6	3,831.2	3.35	1,144.670		
1,200.0	1,198.5	968.0	967.8	2.3	1.9	118.20	3,665.7	1,007.4	3,836.6	3,832.6	3.95	970.298		
1,300.0	1,298.3	1,015.0	1,014.8	2.5	2.1	118.21	3,669.1	1,006.3	3,845.8	3,841.6	4.26	903.611		
1,400.0	1,398.1	1,062.0	1,061.5	2.7	2.2	118.21	3,673.2	1,005.0	3,856.4	3,851.9	4.56	845.811		
1,500.0	1,497.9	1,108.8	1,108.1	2.9	2.4	118.21	3,678.0	1,003.4	3,868.4	3,863.5	4.86	795.338		
1,600.0	1,597.7	1,155.5	1,154.4	3.1	2.5	118.20	3,683.6	1,001.7	3,881.7	3,876.5	5.17	750.966		
1,700.0	1,697.5	1,201.9	1,200.3	3.3	2.7	118.18	3,689.8	999.7	3,896.3	3,890.8	5.47	711.724		
1,800.0	1,797.3	1,380.6	1,376.1	3.5	3.3	118.06	3,720.2	989.9	3,917.1	3,911.0	6.09	643.223		
1,900.0	1,897.1	1,380.6	1,376.1	3.7	3.3	118.06	3,720.2	989.9	3,931.6	3,925.3	6.29	625.205		
2,000.0	1,996.9	1,380.6	1,376.1	3.9	3.3	118.06	3,720.2	989.9	3,948.6	3,942.2	6.49	608.666		
2,100.0	2,096.7	1,390.9	1,386.2	4.1	3.3	118.06	3,722.3	989.2	3,968.1	3,961.4	6.71	591.160		
2,200.0	2,196.5	1,488.6	1,481.7	4.3	3.7	117.97	3,741.8	983.0	3,988.5	3,981.4	7.16	557.057		
2,300.0	2,296.3	1,586.3	1,577.2	4.5	4.1	117.88	3,761.3	976.7	4,009.0	4,001.4	7.61	526.911		
2,400.0	2,396.1	1,684.0	1,672.7	4.7	4.5	117.79	3,780.8	970.4	4,029.4	4,021.4	8.06	500.089		
2,500.0	2,495.9	1,781.7	1,768.3	4.9	4.9	117.71	3,800.4	964.2	4,049.9	4,041.4	8.51	476.081		
2,600.0	2,595.7	1,879.4	1,863.8	5.2	5.3	117.62	3,819.9	957.9	4,070.4	4,061.4	8.96	454.475		
2,700.0	2,695.5	1,977.1	1,959.3	5.4	5.7	117.54	3,839.4	951.6	4,090.8	4,081.4	9.41	434.934		
2,800.0	2,795.3	2,074.8	2,054.9	5.6	6.0	117.46	3,858.9	945.4	4,111.3	4,101.5	9.86	417.178		
2,900.0	2,895.1	2,172.5	2,150.4	5.8	6.4	117.37	3,878.4	939.1	4,131.8	4,121.5	10.30	400.978		
3,000.0	2,994.9	2,270.2	2,245.9	6.0	6.8	117.29	3,897.9	932.8	4,152.3	4,141.6	10.75	386.138		
3,100.0	3,094.7	2,367.9	2,341.5	6.2	7.2	117.21	3,917.5	926.6	4,172.8	4,161.6	11.20	372.497		
3,200.0	3,194.5	2,465.6	2,437.0	6.4	7.6	117.13	3,937.0	920.3	4,193.3	4,181.7	11.65	359.916		
3,300.0	3,294.3	2,563.4	2,532.5	6.6	8.0	117.05	3,956.5	914.0	4,213.9	4,201.8	12.10	348.277		
3,400.0	3,394.1	2,661.1	2,628.1	6.8	8.4	116.98	3,976.0	907.8	4,234.4	4,221.9	12.55	337.478		
3,500.0	3,493.9	2,758.8	2,723.6	7.0	8.8	116.90	3,995.5	901.5	4,254.9	4,241.9	12.99	327.433		
3,600.0	3,593.8	2,856.5	2,819.1	7.2	9.2	116.82	4,015.0	895.2	4,275.5	4,262.0	13.44	318.066		
3,700.0	3,693.6	2,954.2	2,914.7	7.4	9.6	116.75	4,034.6	889.0	4,296.0	4,282.2	13.89	309.311		
3,800.0	3,793.4	3,051.9	3,010.2	7.6	10.0	116.67	4,054.1	882.7	4,316.6	4,302.3	14.34	301.110		
3,900.0	3,893.2	3,149.6	3,105.7	7.8	10.4	116.60	4,073.6	876.4	4,337.2	4,322.4	14.78	293.412		
4,000.0	3,993.0	3,247.3	3,201.3	8.0	10.8	116.52	4,093.1	870.2	4,357.8	4,342.5	15.23	286.172		
4,100.0	4,092.8	3,345.0	3,296.8	8.2	11.2	116.45	4,112.6	863.9	4,378.3	4,362.7	15.67	279.352		
4,200.0	4,192.6	3,442.7	3,392.3	8.4	11.6	116.38	4,132.1	857.6	4,398.9	4,382.8	16.12	272.916		
4,300.0	4,292.4	3,540.4	3,487.8	8.7	11.9	116.30	4,151.7	851.4	4,419.5	4,403.0	16.56	266.832		
4,400.0	4,392.2	3,638.1	3,583.4	8.9	12.3	116.23	4,171.2	845.1	4,440.1	4,423.1	17.01	261.072		
4,500.0	4,492.0	3,735.8	3,678.9	9.1	12.7	116.16	4,190.7	838.8	4,460.7	4,443.3	17.45	255.612		
4,600.0	4,591.8	3,833.5	3,774.4	9.3	13.1	116.09	4,210.2	832.6	4,481.4	4,463.5	17.89	250.428		
4,700.0	4,691.6	3,931.2	3,870.0	9.5	13.5	116.02	4,229.7	826.3	4,502.0	4,483.6	18.34	245.500		
4,800.0	4,791.4	4,028.9	3,965.5	9.7	13.9	115.95	4,249.2	820.0	4,522.6	4,503.8	18.78	240.810		
4,900.0	4,891.2	4,126.6	4,061.0	9.9	14.3	115.89	4,268.7	813.8	4,543.2	4,524.0	19.22	236.341		
5,000.0	4,991.0	4,224.3	4,156.6	10.1	14.7	115.82	4,288.3	807.5	4,563.9	4,544.2	19.67	232.078		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - PL											Offset Site Error:		0.0 ft
Survey Program: 775-Geolink MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.8	4,322.1	4,252.1	10.3	15.1	115.75	4,307.8	801.2	4,584.5	4,564.4	20.11	228.007	
5,200.0	5,190.6	4,419.8	4,347.6	10.5	15.5	115.69	4,327.3	795.0	4,605.2	4,584.6	20.55	224.115	
5,300.0	5,290.4	4,517.5	4,443.2	10.7	15.9	115.62	4,346.8	788.7	4,625.8	4,604.9	20.99	220.391	
5,400.0	5,390.2	4,615.2	4,538.7	10.9	16.3	115.56	4,366.3	782.4	4,646.5	4,625.1	21.43	216.824	
5,500.0	5,490.0	4,712.9	4,634.2	11.1	16.7	115.49	4,385.8	776.2	4,667.2	4,645.3	21.87	213.405	
5,600.0	5,589.8	4,810.6	4,729.8	11.3	17.1	115.43	4,405.4	769.9	4,687.9	4,665.5	22.31	210.124	
5,700.0	5,689.6	4,908.3	4,825.3	11.5	17.5	115.36	4,424.9	763.6	4,708.5	4,685.8	22.75	206.973	
5,800.0	5,789.4	5,006.0	4,920.8	11.7	17.8	115.30	4,444.4	757.4	4,729.2	4,706.0	23.19	203.945	
5,900.0	5,889.2	5,103.7	5,016.4	11.9	18.2	115.24	4,463.9	751.1	4,749.9	4,726.3	23.63	201.033	
6,000.0	5,989.0	5,201.4	5,111.9	12.2	18.6	115.18	4,483.4	744.8	4,770.6	4,746.6	24.07	198.230	
6,100.0	6,088.8	5,299.1	5,207.4	12.4	19.0	115.12	4,502.9	738.6	4,791.3	4,766.8	24.50	195.530	
6,200.0	6,188.6	5,396.8	5,302.9	12.6	19.4	115.06	4,522.5	732.3	4,812.0	4,787.1	24.94	192.928	
6,300.0	6,288.4	5,494.5	5,398.5	12.8	19.8	115.00	4,542.0	726.0	4,832.7	4,807.4	25.38	190.419	
6,400.0	6,388.2	5,592.2	5,494.0	13.0	20.2	114.94	4,561.5	719.7	4,853.5	4,827.6	25.82	187.997	
6,500.0	6,488.0	5,689.9	5,589.5	13.2	20.6	114.88	4,581.0	713.5	4,874.2	4,847.9	26.25	185.658	
6,600.0	6,587.9	5,787.6	5,685.1	13.4	21.0	114.82	4,600.5	707.2	4,894.9	4,868.2	26.69	183.398	
6,700.0	6,687.7	5,885.3	5,780.6	13.6	21.4	114.76	4,620.0	700.9	4,915.7	4,888.5	27.13	181.213	
6,800.0	6,787.5	5,983.1	5,876.1	13.8	21.8	114.70	4,639.6	694.7	4,936.4	4,908.8	27.56	179.099	
6,900.0	6,887.3	6,080.8	5,971.7	14.0	22.2	114.65	4,659.1	688.4	4,957.1	4,929.1	28.00	177.054	
7,000.0	6,987.1	6,178.5	6,067.2	14.2	22.6	114.59	4,678.6	682.1	4,977.9	4,949.4	28.43	175.073	
7,100.0	7,086.9	6,276.2	6,162.7	14.4	23.0	114.53	4,698.1	675.9	4,998.6	4,969.8	28.87	173.154	
7,173.7	7,160.4	6,348.2	6,233.1	14.6	23.3	114.49	4,712.5	671.3	5,013.9	4,984.7	29.19	171.778	
7,200.0	7,186.7	6,374.0	6,258.4	14.6	23.4	74.10	4,717.6	669.6	5,018.8	4,989.5	29.35	171.015	
7,250.0	7,236.4	6,423.6	6,306.9	14.7	23.6	39.02	4,727.5	666.4	5,024.9	4,995.3	29.56	170.002	
7,300.0	7,285.6	6,473.5	6,355.7	14.8	23.8	28.41	4,737.5	663.2	5,026.7	4,997.0	29.64	169.568	
7,350.0	7,334.0	7,444.5	7,318.0	14.9	25.2	24.55	4,835.9	631.6	5,020.7	4,989.6	31.12	161.357	
7,400.0	7,381.0	7,491.6	7,365.0	15.0	25.2	22.40	4,835.9	631.6	5,005.1	4,974.1	30.94	161.784	
7,450.0	7,426.5	7,537.0	7,410.5	15.0	25.3	21.36	4,835.9	631.6	4,985.5	4,954.9	30.65	162.665	
7,500.0	7,470.0	7,580.5	7,454.0	15.1	25.3	20.99	4,835.9	631.6	4,962.2	4,931.9	30.27	163.928	
7,550.0	7,511.2	7,621.7	7,495.2	15.2	25.4	21.14	4,835.9	631.6	4,935.2	4,905.3	29.83	165.455	
7,600.0	7,549.7	7,660.3	7,533.7	15.4	25.4	21.74	4,835.9	631.6	4,904.7	4,875.4	29.36	167.068	
7,650.0	7,585.4	7,695.9	7,569.4	15.5	25.4	22.79	4,835.9	631.6	4,871.1	4,842.2	28.91	168.490	
7,700.0	7,617.9	7,728.4	7,601.9	15.7	25.5	24.35	4,835.9	631.6	4,834.6	4,806.0	28.56	169.302	
7,750.0	7,647.0	7,757.5	7,631.0	15.9	25.5	26.56	4,835.9	631.6	4,795.4	4,767.0	28.39	168.900	
7,800.0	7,672.4	7,782.9	7,656.4	16.2	25.5	29.61	4,835.9	631.6	4,753.8	4,725.3	28.56	166.475	
7,850.0	7,694.0	7,804.5	7,678.0	16.5	25.5	33.85	4,835.9	631.6	4,710.2	4,681.0	29.24	161.081	
7,900.0	7,711.6	7,822.1	7,695.6	16.8	25.6	39.84	4,835.9	631.6	4,665.0	4,634.3	30.70	151.942	
7,950.0	7,725.0	7,835.6	7,709.0	17.2	25.6	48.43	4,835.9	631.6	4,618.4	4,585.2	33.20	139.119	
8,000.0	7,734.2	7,844.8	7,718.2	17.6	25.6	60.79	4,835.9	631.6	4,570.7	4,534.0	36.70	124.544	
8,050.0	7,739.1	7,849.7	7,723.1	18.1	25.6	77.66	4,835.9	631.6	4,522.5	4,482.3	40.16	112.623	
8,081.4	7,740.0	7,850.5	7,724.0	18.3	25.6	90.00	4,835.9	631.6	4,492.0	4,450.8	41.26	108.859	
8,100.0	7,740.0	7,850.5	7,724.0	18.5	25.6	90.00	4,835.9	631.6	4,474.0	4,432.5	41.47	107.898	
8,200.0	7,740.0	7,850.5	7,724.0	19.6	25.6	90.00	4,835.9	631.6	4,377.0	4,334.4	42.61	102.730	
8,300.0	7,740.0	7,850.5	7,724.0	20.7	25.6	90.00	4,835.9	631.6	4,280.2	4,236.4	43.84	97.628	
8,400.0	7,740.0	7,850.5	7,724.0	21.9	25.6	90.00	4,835.9	631.6	4,183.5	4,138.4	45.15	92.653	
8,500.0	7,740.0	7,850.5	7,724.0	23.2	25.6	90.00	4,835.9	631.6	4,087.0	4,040.5	46.53	87.844	
8,600.0	7,740.0	7,850.5	7,724.0	24.6	25.6	90.00	4,835.9	631.6	3,990.7	3,942.7	47.95	83.225	
8,700.0	7,740.0	7,850.5	7,724.0	25.9	25.6	90.00	4,835.9	631.6	3,894.5	3,845.1	49.42	78.808	
8,800.0	7,740.0	7,850.5	7,724.0	27.4	25.6	90.00	4,835.9	631.6	3,798.5	3,747.6	50.92	74.599	
8,900.0	7,740.0	7,850.5	7,724.0	28.8	25.6	90.00	4,835.9	631.6	3,702.8	3,650.3	52.45	70.595	
9,000.0	7,740.0	7,850.5	7,724.0	30.3	25.6	90.00	4,835.9	631.6	3,607.3	3,553.3	54.01	66.791	
9,100.0	7,740.0	7,850.5	7,724.0	31.9	25.6	90.00	4,835.9	631.6	3,512.0	3,456.4	55.59	63.181	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - PL											Offset Site Error: 0.0 ft		
Survey Program: 775-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,200.0	7,740.0	7,850.5	7,724.0	33.4	25.6	90.00	4,835.9	631.6	3,417.0	3,359.8	57.18	59.757	
9,300.0	7,740.0	7,850.5	7,724.0	35.0	25.6	90.00	4,835.9	631.6	3,322.3	3,263.5	58.79	56.508	
9,400.0	7,740.0	7,850.5	7,724.0	36.6	25.6	90.00	4,835.9	631.6	3,227.9	3,167.5	60.42	53.426	
9,500.0	7,740.0	7,850.5	7,724.0	38.2	25.6	90.00	4,835.9	631.6	3,133.9	3,071.8	62.05	50.501	
9,600.0	7,740.0	7,850.5	7,724.0	39.8	25.6	90.00	4,835.9	631.6	3,040.2	2,976.5	63.70	47.726	
9,700.0	7,740.0	7,850.5	7,724.0	41.4	25.6	90.00	4,835.9	631.6	2,947.0	2,881.6	65.36	45.090	
9,800.0	7,740.0	7,850.5	7,724.0	43.0	25.6	90.00	4,835.9	631.6	2,854.2	2,787.2	67.02	42.586	
9,900.0	7,740.0	7,850.5	7,724.0	44.7	25.6	90.00	4,835.9	631.6	2,761.9	2,693.2	68.69	40.207	
10,000.0	7,740.0	7,850.5	7,724.0	46.3	25.6	90.00	4,835.9	631.6	2,670.2	2,599.8	70.37	37.945	
10,100.0	7,740.0	7,850.5	7,724.0	48.0	25.6	90.00	4,835.9	631.6	2,579.1	2,507.0	72.05	35.795	
10,200.0	7,740.0	7,850.5	7,724.0	49.7	25.6	90.00	4,835.9	631.6	2,488.6	2,414.9	73.74	33.749	
10,300.0	7,740.0	7,850.5	7,724.0	51.3	25.6	90.00	4,835.9	631.6	2,399.0	2,323.5	75.43	31.803	
10,400.0	7,740.0	7,850.5	7,724.0	53.0	25.6	90.00	4,835.9	631.6	2,310.1	2,233.0	77.13	29.952	
10,500.0	7,740.0	7,850.5	7,724.0	54.7	25.6	90.00	4,835.9	631.6	2,222.3	2,143.4	78.83	28.192	
10,600.0	7,740.0	7,850.5	7,724.0	56.4	25.6	90.00	4,835.9	631.6	2,135.5	2,054.9	80.53	26.518	
10,700.0	7,740.0	7,850.5	7,724.0	58.1	25.6	90.00	4,835.9	631.6	2,049.9	1,967.6	82.24	24.927	
10,800.0	7,740.0	7,850.5	7,724.0	59.8	25.6	90.00	4,835.9	631.6	1,965.6	1,881.7	83.95	23.416	
10,900.0	7,740.0	7,850.5	7,724.0	61.5	25.6	90.00	4,835.9	631.6	1,882.9	1,797.3	85.66	21.982	
11,000.0	7,740.0	7,850.5	7,724.0	63.2	25.6	90.00	4,835.9	631.6	1,802.0	1,714.6	87.37	20.625	
11,105.4	7,740.0	7,850.5	7,724.0	65.0	25.6	90.00	4,835.9	631.6	1,718.9	1,629.7	89.18	19.274	
11,191.0	7,740.0	7,850.5	7,724.0	66.4	25.6	90.00	4,835.9	631.6	1,653.6	1,562.8	90.84	18.204	
11,200.0	7,740.0	7,850.5	7,724.0	66.6	25.6	90.00	4,835.9	631.6	1,646.9	1,555.9	90.99	18.100	
11,300.0	7,740.0	7,850.5	7,724.0	68.3	25.6	90.00	4,835.9	631.6	1,574.0	1,481.3	92.71	16.977	
11,400.0	7,740.0	7,850.5	7,724.0	70.0	25.6	90.00	4,835.9	631.6	1,504.1	1,409.7	94.43	15.928	
11,500.0	7,740.0	7,850.5	7,724.0	71.7	25.6	90.00	4,835.9	631.6	1,437.9	1,341.7	96.16	14.953	
11,600.0	7,740.0	7,850.5	7,724.0	73.4	25.6	90.00	4,835.9	631.6	1,375.7	1,277.8	97.88	14.054	
11,700.0	7,740.0	7,850.5	7,724.0	75.1	25.6	90.00	4,835.9	631.6	1,318.1	1,218.5	99.61	13.233	
11,800.0	7,740.0	7,850.5	7,724.0	76.9	25.6	90.00	4,835.9	631.6	1,265.9	1,164.5	101.34	12.492	
11,900.0	7,740.0	7,850.5	7,724.0	78.6	25.6	90.00	4,835.9	631.6	1,219.6	1,116.5	103.07	11.833	
12,000.0	7,740.0	7,850.5	7,724.0	80.3	25.6	90.00	4,835.9	631.6	1,180.0	1,075.2	104.80	11.260	
12,100.0	7,740.0	7,850.5	7,724.0	82.0	25.6	90.00	4,835.9	631.6	1,147.8	1,041.3	106.53	10.775	
12,200.0	7,740.0	7,850.5	7,724.0	83.8	25.6	90.00	4,835.9	631.6	1,123.6	1,015.3	108.26	10.379	
12,300.0	7,740.0	7,850.5	7,724.0	85.5	25.6	90.00	4,835.9	631.6	1,107.9	997.9	109.99	10.073	
12,400.0	7,740.0	7,850.5	7,724.0	87.2	25.6	90.00	4,835.9	631.6	1,101.1	989.4	111.72	9.856	
12,425.0	7,740.0	7,850.5	7,724.0	87.6	25.6	90.00	4,835.9	631.6	1,100.8	988.7	112.16	9.815 CC, ES	
12,500.0	7,740.0	7,850.5	7,724.0	88.9	25.6	90.00	4,835.9	631.6	1,103.4	989.9	113.46	9.725	
12,600.0	7,740.0	7,850.5	7,724.0	90.7	25.6	90.00	4,835.9	631.6	1,114.7	999.5	115.19	9.676 SF	
12,700.0	7,740.0	7,850.5	7,724.0	92.4	25.6	90.00	4,835.9	631.6	1,134.7	1,017.7	116.93	9.704	
12,800.0	7,740.0	7,850.5	7,724.0	94.1	25.6	90.00	4,835.9	631.6	1,163.0	1,044.3	118.67	9.800	
12,900.0	7,740.0	7,850.5	7,724.0	95.9	25.6	90.00	4,835.9	631.6	1,199.0	1,078.6	120.40	9.958	
13,000.0	7,740.0	7,850.5	7,724.0	97.6	25.6	90.00	4,835.9	631.6	1,242.0	1,119.8	122.14	10.168	
13,100.0	7,740.0	7,850.5	7,724.0	99.3	25.6	90.00	4,835.9	631.6	1,291.3	1,167.4	123.88	10.424	
13,200.0	7,740.0	7,850.5	7,724.0	101.1	25.6	90.00	4,835.9	631.6	1,346.3	1,220.7	125.62	10.717	
13,300.0	7,740.0	7,850.5	7,724.0	102.8	25.6	90.00	4,835.9	631.6	1,406.2	1,278.9	127.36	11.042	
13,400.0	7,740.0	7,850.5	7,724.0	104.5	25.6	90.00	4,835.9	631.6	1,470.6	1,341.5	129.10	11.391	
13,500.0	7,740.0	7,850.5	7,724.0	106.3	25.6	90.00	4,835.9	631.6	1,538.7	1,407.8	130.84	11.760	
13,600.0	7,740.0	7,850.5	7,724.0	108.0	25.6	90.00	4,835.9	631.6	1,610.1	1,477.6	132.58	12.145	
13,700.0	7,740.0	7,850.5	7,724.0	109.8	25.6	90.00	4,835.9	631.6	1,684.5	1,550.2	134.32	12.541	
13,800.0	7,740.0	7,850.5	7,724.0	111.5	25.6	90.00	4,835.9	631.6	1,761.4	1,625.3	136.06	12.945	
13,900.0	7,740.0	7,850.5	7,724.0	113.2	25.6	90.00	4,835.9	631.6	1,840.5	1,702.7	137.81	13.356	
14,000.0	7,740.0	7,850.5	7,724.0	115.0	25.6	90.00	4,835.9	631.6	1,921.6	1,782.1	139.55	13.770	
14,100.0	7,740.0	7,850.5	7,724.0	116.7	25.6	90.00	4,835.9	631.6	2,004.4	1,863.1	141.29	14.186	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - PL				Offset Site Error:		0.0 ft
Survey Program:										775-Geolink MWD				Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)						
14,200.0	7,740.0	7,850.5	7,724.0	118.5	25.6	90.00	4,835.9	631.6	2,088.7	1,945.6	143.03	14.603				
14,300.0	7,740.0	7,850.5	7,724.0	120.2	25.6	90.00	4,835.9	631.6	2,174.3	2,029.5	144.78	15.018				
14,400.0	7,740.0	7,850.5	7,724.0	121.9	25.6	90.00	4,835.9	631.6	2,261.1	2,114.6	146.52	15.432				
14,500.0	7,740.0	7,850.5	7,724.0	123.7	25.6	90.00	4,835.9	631.6	2,349.0	2,200.7	148.27	15.843				
14,600.0	7,740.0	7,850.5	7,724.0	125.4	25.6	90.00	4,835.9	631.6	2,437.7	2,287.7	150.01	16.251				
14,682.3	7,740.0	7,850.5	7,724.0	126.8	25.6	90.00	4,835.9	631.6	2,511.4	2,360.0	151.45	16.583				

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU										Offset Site Error:		0.0 ft	
Survey Program: 76-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	15.08	3,612.2	973.0	3,741.0				
100.0	100.0	653.6	650.3	0.2	1.5	15.57	3,559.3	991.8	3,738.1	3,736.7	1.37	2,737.540	
200.0	200.0	785.0	780.1	0.3	1.9	15.61	3,538.8	988.6	3,722.3	3,720.4	1.89	1,970.470	
300.0	300.0	1,200.0	1,186.5	0.5	3.5	135.79	3,459.1	966.6	3,703.9	3,701.2	2.66	1,393.579	
400.0	400.0	1,286.5	1,270.5	0.7	3.9	135.99	3,438.7	961.6	3,681.4	3,678.4	2.98	1,233.305	
500.0	499.9	1,423.0	1,402.7	0.9	4.5	136.22	3,406.2	952.8	3,659.8	3,656.4	3.40	1,076.231	
600.0	599.7	1,531.1	1,507.4	1.1	5.0	136.42	3,380.3	944.2	3,638.8	3,635.1	3.77	965.872	
700.0	699.5	1,826.5	1,790.1	1.3	6.6	122.69	3,298.7	919.0	3,612.2	3,607.7	4.46	809.665	
722.7	722.1	1,844.2	1,806.9	1.3	6.7	119.21	3,293.5	917.6	3,605.9	3,601.4	4.54	794.922	
800.0	799.3	1,896.0	1,856.3	1.5	6.9	119.27	3,278.3	913.7	3,584.7	3,579.9	4.78	750.319	
900.0	899.1	1,941.1	1,899.4	1.7	7.2	119.32	3,265.4	910.4	3,558.3	3,553.3	5.05	704.577	
1,000.0	998.9	1,982.0	1,938.7	1.9	7.4	119.36	3,254.4	907.4	3,533.4	3,528.1	5.32	664.647	
1,100.0	1,098.7	2,112.9	2,064.7	2.1	8.0	119.45	3,220.9	895.4	3,509.3	3,503.6	5.73	612.454	
1,200.0	1,198.5	2,238.0	2,184.5	2.3	8.7	119.56	3,186.6	885.0	3,483.5	3,477.3	6.14	567.022	
1,300.0	1,298.3	2,410.0	2,348.5	2.5	9.7	119.70	3,137.5	868.6	3,456.2	3,449.6	6.63	521.319	
1,400.0	1,398.1	2,495.0	2,429.4	2.7	10.1	119.76	3,112.8	859.9	3,428.4	3,421.4	6.97	491.824	
1,500.0	1,497.9	2,559.8	2,491.2	2.9	10.5	119.81	3,094.3	853.7	3,401.2	3,393.9	7.28	467.273	
1,600.0	1,597.7	2,751.4	2,673.4	3.1	11.6	120.02	3,037.3	837.8	3,373.4	3,365.6	7.82	431.639	
1,700.0	1,697.5	2,863.5	2,779.3	3.3	12.2	120.14	3,001.8	827.6	3,343.3	3,335.1	8.21	407.351	
1,800.0	1,797.3	2,923.0	2,835.6	3.5	12.6	120.20	2,983.5	821.9	3,314.1	3,305.5	8.51	389.543	
1,900.0	1,897.1	2,987.7	2,897.0	3.7	12.9	120.27	2,964.2	816.2	3,285.7	3,276.9	8.82	372.511	
2,000.0	1,996.9	3,087.1	2,991.6	3.9	13.5	120.38	2,934.7	807.7	3,257.9	3,248.7	9.19	354.489	
2,100.0	2,096.7	3,195.2	3,094.2	4.1	14.1	120.47	2,902.8	796.4	3,229.6	3,220.0	9.57	337.416	
2,200.0	2,196.5	3,276.1	3,171.1	4.3	14.6	120.54	2,879.0	788.4	3,201.5	3,191.6	9.91	323.093	
2,300.0	2,296.3	3,395.6	3,284.4	4.5	15.3	120.63	2,843.2	775.2	3,172.5	3,162.2	10.31	307.777	
2,400.0	2,396.1	3,483.2	3,367.6	4.7	15.8	120.70	2,817.5	765.8	3,144.3	3,133.7	10.65	295.115	
2,500.0	2,495.9	3,569.4	3,449.4	4.9	16.3	120.76	2,792.0	756.2	3,115.8	3,104.8	11.00	283.306	
2,600.0	2,595.7	3,638.0	3,514.6	5.2	16.7	120.81	2,772.4	748.7	3,088.2	3,076.9	11.31	273.015	
2,700.0	2,695.5	3,724.0	3,596.7	5.4	17.1	120.87	2,748.3	739.2	3,061.2	3,049.6	11.65	262.658	
2,800.0	2,795.3	3,850.3	3,717.0	5.6	17.8	120.99	2,712.1	726.5	3,033.9	3,021.9	12.07	251.303	
2,900.0	2,895.1	3,919.7	3,783.1	5.8	18.2	121.08	2,691.6	720.8	3,006.4	2,994.0	12.40	242.543	
3,000.0	2,994.9	3,982.6	3,843.2	6.0	18.6	121.17	2,673.6	716.2	2,979.9	2,967.2	12.71	234.511	
3,100.0	3,094.7	4,062.8	3,920.0	6.2	19.0	121.30	2,651.3	710.9	2,954.5	2,941.4	13.05	226.385	
3,200.0	3,194.5	4,182.2	4,034.3	6.4	19.6	121.47	2,617.8	701.8	2,928.5	2,915.1	13.46	217.521	
3,300.0	3,294.3	4,346.0	4,189.9	6.6	20.6	121.67	2,569.1	686.7	2,899.9	2,886.0	13.95	207.838	
3,400.0	3,394.1	4,401.5	4,242.7	6.8	20.9	121.75	2,552.8	681.9	2,872.3	2,858.0	14.25	201.564	
3,500.0	3,493.9	4,464.0	4,302.4	7.0	21.2	121.83	2,535.1	676.6	2,845.9	2,831.3	14.56	195.462	
3,600.0	3,593.8	4,540.0	4,375.3	7.2	21.6	121.94	2,514.2	670.5	2,820.5	2,805.6	14.90	189.344	
3,700.0	3,693.6	4,660.2	4,490.3	7.4	22.3	122.14	2,480.5	661.7	2,794.7	2,779.4	15.32	182.423	
3,800.0	3,793.4	4,721.0	4,548.5	7.6	22.6	122.26	2,463.3	658.6	2,769.3	2,753.7	15.64	177.078	
3,900.0	3,893.2	4,806.0	4,630.1	7.8	23.0	122.46	2,439.6	655.3	2,744.9	2,728.9	16.01	171.450	
4,000.0	3,993.0	4,865.2	4,687.1	8.0	23.3	122.60	2,423.7	652.8	2,721.4	2,705.1	16.33	166.697	
4,100.0	4,092.8	4,921.9	4,741.9	8.2	23.6	122.71	2,409.3	650.2	2,699.2	2,682.6	16.64	162.255	
4,200.0	4,192.6	4,978.0	4,796.3	8.4	23.8	122.83	2,396.1	647.8	2,678.7	2,661.8	16.94	158.087	
4,300.0	4,292.4	5,041.6	4,858.2	8.7	24.1	122.96	2,381.8	645.4	2,659.6	2,642.3	17.27	153.991	
4,400.0	4,392.2	5,110.6	4,925.6	8.9	24.4	123.11	2,366.9	643.3	2,641.6	2,624.0	17.61	150.010	
4,500.0	4,492.0	5,181.4	4,994.9	9.1	24.6	123.26	2,352.4	641.1	2,624.6	2,606.7	17.95	146.213	
4,600.0	4,591.8	5,234.0	5,046.4	9.3	24.8	123.36	2,342.2	639.5	2,608.8	2,590.6	18.25	142.914	
4,700.0	4,691.6	5,320.0	5,131.0	9.5	25.1	123.54	2,326.6	637.2	2,594.3	2,575.7	18.63	139.274	
4,800.0	4,791.4	5,362.1	5,172.5	9.7	25.2	123.63	2,319.7	636.3	2,581.4	2,562.5	18.91	136.508	
4,900.0	4,891.2	5,406.0	5,215.9	9.9	25.4	123.71	2,313.1	635.6	2,570.4	2,551.2	19.20	133.896	
5,000.0	4,991.0	5,469.9	5,279.2	10.1	25.5	123.84	2,304.6	634.6	2,561.1	2,541.5	19.52	131.195	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU												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
5,100.0	5,090.8	5,526.7	5,335.7	10.3	25.7	123.94	2,298.3	633.7	2,553.5	2,533.7	19.83	128.775	
5,200.0	5,190.6	5,577.0	5,385.7	10.5	25.8	124.02	2,293.4	633.0	2,547.6	2,527.5	20.12	126.600	
5,300.0	5,290.4	5,662.0	5,470.4	10.7	25.9	124.14	2,286.8	631.5	2,543.2	2,522.8	20.48	124.200	
5,400.0	5,390.2	5,714.1	5,522.5	10.9	26.0	124.21	2,283.7	630.5	2,540.2	2,519.5	20.77	122.322	
5,500.0	5,490.0	5,783.4	5,591.6	11.1	26.1	124.28	2,280.4	628.9	2,538.5	2,517.4	21.08	120.399	
5,593.6	5,583.4	5,849.0	5,657.2	11.3	26.1	124.35	2,278.1	627.5	2,538.0	2,516.6	21.38	118.709	
5,600.0	5,589.8	5,853.5	5,661.7	11.3	26.2	124.35	2,278.0	627.4	2,538.0	2,516.6	21.40	118.597	
5,700.0	5,689.6	5,919.0	5,727.1	11.5	26.2	124.41	2,276.5	625.9	2,538.7	2,517.0	21.71	116.949	
5,800.0	5,789.4	6,008.9	5,817.0	11.7	26.3	124.48	2,275.4	623.7	2,540.2	2,518.2	22.05	115.200	
5,900.0	5,889.2	6,094.0	5,902.1	11.9	26.4	124.53	2,275.1	621.3	2,542.3	2,520.0	22.38	113.577	
6,000.0	5,989.0	6,199.5	6,007.5	12.2	26.5	124.60	2,274.8	618.6	2,544.7	2,521.9	22.76	111.820	
6,100.0	6,088.8	6,298.0	6,106.1	12.4	26.5	124.69	2,274.0	616.8	2,546.8	2,523.7	23.12	110.142	
6,200.0	6,188.6	6,387.0	6,195.0	12.6	26.6	124.77	2,273.4	615.7	2,549.3	2,525.8	23.48	108.596	
6,300.0	6,288.4	6,476.1	6,284.1	12.8	26.7	124.86	2,273.1	614.9	2,552.2	2,528.4	23.83	107.116	
6,400.0	6,388.2	6,565.5	6,373.5	13.0	26.7	124.95	2,273.2	614.1	2,555.6	2,531.4	24.18	105.703	
6,500.0	6,488.0	6,662.9	6,470.9	13.2	26.8	125.03	2,273.7	613.0	2,559.2	2,534.7	24.54	104.291	
6,600.0	6,587.9	6,766.3	6,574.3	13.4	26.9	125.12	2,274.3	611.6	2,562.8	2,537.9	24.91	102.879	
6,700.0	6,687.7	6,859.4	6,667.4	13.6	27.0	125.19	2,274.9	610.1	2,566.4	2,541.2	25.26	101.595	
6,800.0	6,787.5	6,946.0	6,753.9	13.8	27.0	125.24	2,275.9	608.5	2,570.4	2,544.8	25.60	100.406	
6,900.0	6,887.3	7,041.8	6,849.7	14.0	27.1	125.30	2,277.5	606.4	2,574.7	2,548.7	25.95	99.212	
7,000.0	6,987.1	7,149.4	6,957.3	14.2	27.1	125.35	2,279.7	603.9	2,579.2	2,552.9	26.32	97.995	
7,100.0	7,086.9	7,319.8	7,127.5	14.4	27.3	125.42	2,280.1	598.2	2,581.6	2,554.9	26.79	96.359	
7,173.7	7,160.4	7,394.3	7,202.0	14.6	27.4	125.46	2,279.3	595.7	2,582.7	2,555.6	27.06	95.443	
7,200.0	7,186.7	7,420.9	7,228.6	14.6	27.4	85.22	2,279.1	594.9	2,582.5	2,555.4	27.10	95.281	
7,250.0	7,236.4	7,460.0	7,267.7	14.7	27.5	50.46	2,278.6	593.7	2,579.1	2,552.0	27.11	95.140	
7,300.0	7,285.6	7,508.7	7,316.4	14.8	27.5	40.30	2,278.1	592.4	2,571.8	2,544.8	27.06	95.037	
7,350.0	7,334.0	7,547.7	7,355.3	14.9	27.6	36.20	2,277.8	591.5	2,560.8	2,533.9	26.95	95.023	
7,400.0	7,381.0	7,585.7	7,393.3	15.0	27.6	34.41	2,277.6	590.7	2,546.2	2,519.4	26.82	94.933	
7,450.0	7,426.5	7,622.5	7,430.1	15.0	27.6	33.83	2,277.5	590.0	2,528.0	2,501.3	26.72	94.621	
7,500.0	7,470.0	7,659.2	7,466.9	15.1	27.7	34.05	2,277.5	589.5	2,506.4	2,479.7	26.70	93.886	
7,550.0	7,511.2	7,694.6	7,502.2	15.2	27.7	34.90	2,277.5	589.0	2,481.5	2,454.7	26.82	92.535	
7,600.0	7,549.7	7,727.8	7,535.4	15.4	27.7	36.34	2,277.6	588.6	2,453.6	2,426.5	27.15	90.381	
7,650.0	7,585.4	7,758.6	7,566.2	15.5	27.7	38.36	2,277.8	588.4	2,422.9	2,395.1	27.76	87.285	
7,700.0	7,617.9	7,786.7	7,594.3	15.7	27.8	41.01	2,277.9	588.2	2,389.5	2,360.8	28.71	83.216	
7,750.0	7,647.0	7,812.8	7,620.4	15.9	27.8	44.40	2,278.1	588.0	2,353.8	2,323.8	30.07	78.266	
7,800.0	7,672.4	7,836.6	7,644.3	16.2	27.8	48.62	2,278.3	587.9	2,316.1	2,284.2	31.86	72.684	
7,850.0	7,694.0	7,857.0	7,664.6	16.5	27.8	53.78	2,278.5	587.8	2,276.6	2,242.5	34.05	66.867	
7,900.0	7,711.6	7,873.7	7,681.4	16.8	27.8	59.94	2,278.6	587.8	2,235.6	2,199.1	36.51	61.241	
7,950.0	7,725.0	7,886.7	7,694.3	17.2	27.8	67.10	2,278.7	587.7	2,193.6	2,154.5	39.02	56.214	
8,000.0	7,734.2	7,895.7	7,703.3	17.6	27.8	75.13	2,278.8	587.7	2,150.7	2,109.5	41.28	52.107	
8,050.0	7,739.1	7,900.7	7,708.3	18.1	27.8	83.72	2,278.9	587.7	2,107.5	2,064.5	42.93	49.090	
8,081.4	7,740.0	7,901.8	7,709.4	18.3	27.8	89.20	2,278.9	587.7	2,080.2	2,036.7	43.56	47.760	
8,100.0	7,740.0	7,902.0	7,709.6	18.5	27.8	89.21	2,278.9	587.7	2,064.1	2,020.4	43.76	47.173	
8,200.0	7,740.0	7,902.9	7,710.5	19.6	27.9	89.26	2,278.9	587.7	1,978.3	1,933.4	44.90	44.060	
8,300.0	7,740.0	7,903.9	7,711.5	20.7	27.9	89.31	2,278.9	587.7	1,893.9	1,847.8	46.14	41.050	
8,400.0	7,740.0	7,904.8	7,712.4	21.9	27.9	89.36	2,278.9	587.7	1,811.1	1,763.7	47.45	38.169	
8,500.0	7,740.0	7,905.8	7,713.4	23.2	27.9	89.41	2,278.9	587.7	1,730.1	1,681.3	48.83	35.435	
8,600.0	7,740.0	7,906.7	7,714.3	24.6	27.9	89.47	2,278.9	587.7	1,651.2	1,600.9	50.25	32.858	
8,700.0	7,740.0	7,907.7	7,715.3	25.9	27.9	89.52	2,278.9	587.7	1,574.6	1,522.9	51.72	30.446	
8,800.0	7,740.0	7,908.6	7,716.3	27.4	27.9	89.57	2,279.0	587.7	1,500.9	1,447.7	53.22	28.199	
8,900.0	7,740.0	7,909.6	7,717.2	28.8	27.9	89.63	2,279.0	587.7	1,430.3	1,375.5	54.76	26.121	
9,000.0	7,740.0	7,910.6	7,718.2	30.3	27.9	89.68	2,279.0	587.7	1,363.4	1,307.1	56.32	24.210	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU												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
9,100.0	7,740.0	7,911.6	7,719.2	31.9	27.9	89.73	2,279.0	587.6	1,300.8	1,242.9	57.89	22.468	
9,200.0	7,740.0	7,912.6	7,720.2	33.4	27.9	89.79	2,279.0	587.6	1,243.0	1,183.5	59.49	20.894	
9,300.0	7,740.0	7,913.6	7,721.2	35.0	27.9	89.84	2,279.0	587.6	1,190.9	1,129.8	61.10	19.490	
9,400.0	7,740.0	7,914.5	7,722.2	36.6	27.9	89.90	2,279.0	587.6	1,145.2	1,082.4	62.73	18.255	
9,500.0	7,740.0	7,915.6	7,723.2	38.2	27.9	89.95	2,279.0	587.6	1,106.6	1,042.2	64.37	17.191	
9,600.0	7,740.0	7,916.6	7,724.2	39.8	27.9	90.01	2,279.0	587.6	1,075.9	1,009.9	66.02	16.298	
9,700.0	7,740.0	7,917.6	7,725.2	41.4	27.9	90.07	2,279.1	587.6	1,053.9	986.2	67.67	15.573	
9,800.0	7,740.0	7,918.6	7,726.2	43.0	27.9	90.12	2,279.1	587.6	1,041.1	971.7	69.34	15.014	
9,884.5	7,740.0	7,919.5	7,727.1	44.4	27.9	90.17	2,279.1	587.6	1,037.6	966.9	70.75	14.666 CC	
9,900.0	7,740.0	7,919.6	7,727.2	44.7	27.9	90.18	2,279.1	587.6	1,037.7	966.7	71.01	14.614 ES	
10,000.0	7,740.0	7,920.7	7,728.3	46.3	27.9	90.24	2,279.1	587.6	1,044.0	971.4	72.69	14.363	
10,100.0	7,740.0	7,921.7	7,729.3	48.0	27.9	90.29	2,279.1	587.6	1,059.8	985.4	74.37	14.250 SF	
10,200.0	7,740.0	7,922.7	7,730.3	49.7	27.9	90.35	2,279.1	587.6	1,084.5	1,008.5	76.06	14.259	
10,300.0	7,740.0	7,923.8	7,731.4	51.3	27.9	90.41	2,279.1	587.6	1,117.7	1,040.0	77.75	14.375	
10,400.0	7,740.0	7,924.8	7,732.5	53.0	27.9	90.47	2,279.1	587.6	1,158.6	1,079.2	79.45	14.583	
10,500.0	7,740.0	7,925.9	7,733.5	54.7	27.9	90.53	2,279.1	587.6	1,206.4	1,125.3	81.15	14.867	
10,600.0	7,740.0	7,927.0	7,734.6	56.4	27.9	90.58	2,279.2	587.6	1,260.4	1,177.5	82.85	15.212	
10,700.0	7,740.0	7,928.1	7,735.7	58.1	27.9	90.64	2,279.2	587.6	1,319.7	1,235.2	84.56	15.607	
10,800.0	7,740.0	7,929.1	7,736.7	59.8	27.9	90.70	2,279.2	587.6	1,383.7	1,297.5	86.27	16.040	
10,900.0	7,740.0	7,930.2	7,737.8	61.5	27.9	90.76	2,279.2	587.6	1,451.8	1,363.9	87.98	16.502	
11,000.0	7,740.0	7,931.3	7,738.9	63.2	27.9	90.82	2,279.2	587.6	1,523.5	1,433.8	89.69	16.985	
11,105.4	7,740.0	7,932.5	7,740.1	65.0	27.9	90.89	2,279.2	587.6	1,602.2	1,510.7	91.50	17.510	
11,191.0	7,740.0	7,933.4	7,741.0	66.4	27.9	90.96	2,279.2	587.6	1,668.8	1,575.8	92.99	17.946	
11,200.0	7,740.0	7,933.5	7,741.1	66.6	27.9	90.96	2,279.2	587.6	1,675.9	1,582.8	93.14	17.993	
11,300.0	7,740.0	7,934.6	7,742.3	68.3	27.9	91.03	2,279.2	587.6	1,756.4	1,661.5	94.86	18.515	
11,400.0	7,740.0	7,935.8	7,743.4	70.0	27.9	91.09	2,279.2	587.6	1,838.7	1,742.2	96.58	19.038	
11,500.0	7,740.0	7,936.9	7,744.5	71.7	27.9	91.15	2,279.3	587.6	1,922.8	1,824.5	98.31	19.559	
11,600.0	7,740.0	7,938.0	7,745.6	73.4	27.9	91.22	2,279.3	587.6	2,008.3	1,908.3	100.03	20.077	
11,700.0	7,740.0	7,939.2	7,746.8	75.1	27.9	91.28	2,279.3	587.6	2,095.1	1,993.3	101.75	20.590	
11,800.0	7,740.0	7,940.3	7,747.9	76.9	27.9	91.35	2,279.3	587.6	2,183.0	2,079.5	103.48	21.096	
11,900.0	7,740.0	7,941.5	7,749.1	78.6	27.9	91.41	2,279.3	587.6	2,271.9	2,166.7	105.21	21.595	
12,000.0	7,740.0	7,942.6	7,750.3	80.3	27.9	91.48	2,279.3	587.6	2,361.7	2,254.8	106.93	22.086	
12,100.0	7,740.0	7,943.8	7,751.4	82.0	27.9	91.54	2,279.3	587.6	2,452.3	2,343.7	108.66	22.568	
12,200.0	7,740.0	7,945.0	7,752.6	83.8	27.9	91.61	2,279.3	587.6	2,543.6	2,433.2	110.39	23.042	
12,300.0	7,740.0	7,946.2	7,753.8	85.5	27.9	91.68	2,279.4	587.6	2,635.6	2,523.4	112.12	23.506	
12,400.0	7,740.0	7,947.4	7,755.0	87.2	27.9	91.74	2,279.4	587.6	2,728.0	2,614.2	113.85	23.961	
12,500.0	7,740.0	7,948.6	7,756.2	88.9	27.9	91.81	2,279.4	587.5	2,821.1	2,705.5	115.58	24.407	
12,600.0	7,740.0	7,949.8	7,757.4	90.7	27.9	91.88	2,279.4	587.5	2,914.5	2,797.2	117.31	24.844	
12,700.0	7,740.0	7,951.0	7,758.6	92.4	27.9	91.95	2,279.4	587.5	3,008.4	2,889.4	119.05	25.271	
12,800.0	7,740.0	7,952.2	7,759.8	94.1	27.9	92.01	2,279.4	587.5	3,102.7	2,981.9	120.78	25.689	
12,900.0	7,740.0	7,953.5	7,761.1	95.9	27.9	92.08	2,279.4	587.5	3,197.3	3,074.8	122.51	26.098	
13,000.0	7,740.0	7,954.7	7,762.3	97.6	27.9	92.15	2,279.5	587.5	3,292.2	3,168.0	124.24	26.498	
13,100.0	7,740.0	7,955.9	7,763.5	99.3	27.9	92.22	2,279.5	587.5	3,387.5	3,261.5	125.98	26.890	
13,200.0	7,740.0	7,957.2	7,764.8	101.1	27.9	92.29	2,279.5	587.5	3,483.0	3,355.3	127.71	27.273	
13,300.0	7,740.0	7,958.4	7,766.1	102.8	27.9	92.36	2,279.5	587.5	3,578.7	3,449.3	129.44	27.647	
13,400.0	7,740.0	7,959.7	7,767.3	104.5	27.9	92.44	2,279.5	587.5	3,674.7	3,543.5	131.18	28.013	
13,500.0	7,740.0	7,961.0	7,768.6	106.3	27.9	92.51	2,279.5	587.5	3,770.9	3,637.9	132.91	28.372	
13,600.0	7,740.0	7,962.3	7,769.9	108.0	27.9	92.58	2,279.5	587.5	3,867.2	3,732.6	134.64	28.722	
13,700.0	7,740.0	7,963.6	7,771.2	109.8	27.9	92.65	2,279.6	587.5	3,963.8	3,827.4	136.38	29.065	
13,800.0	7,740.0	7,964.9	7,772.5	111.5	27.9	92.72	2,279.6	587.5	4,060.5	3,922.4	138.11	29.401	
13,900.0	7,740.0	7,966.2	7,773.8	113.2	27.9	92.80	2,279.6	587.5	4,157.4	4,017.5	139.84	29.729	
14,000.0	7,740.0	7,967.5	7,775.1	115.0	27.9	92.87	2,279.6	587.5	4,254.4	4,112.8	141.58	30.050	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - SU		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				
14,100.0	7,740.0	7,968.8	7,776.4	116.7	27.9	92.95	2,279.6	587.5	4,351.5	4,208.2	143.31	30.365					
14,200.0	7,740.0	7,970.2	7,777.8	118.5	27.9	93.02	2,279.6	587.5	4,448.8	4,303.8	145.04	30.673					
14,300.0	7,740.0	7,971.5	7,779.1	120.2	27.9	93.10	2,279.7	587.5	4,546.2	4,399.4	146.77	30.974					
14,400.0	7,740.0	7,972.8	7,780.4	121.9	27.9	93.17	2,279.7	587.5	4,643.7	4,495.2	148.51	31.269					
14,500.0	7,740.0	7,974.2	7,781.8	123.7	27.9	93.25	2,279.7	587.5	4,741.3	4,591.1	150.24	31.558					
14,600.0	7,740.0	7,975.5	7,783.1	125.4	27.9	93.32	2,279.7	587.5	4,839.0	4,687.0	151.97	31.842					
14,682.3	7,740.0	7,976.6	7,784.3	126.8	27.9	93.39	2,279.7	587.5	4,919.5	4,766.1	153.40	32.070					

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 SURV													Offset Site Error:	0.0 ft
Survey Program: 8164-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,800.0	7,740.0	7,693.0	7,693.0	27.4	13.4	90.00	6,293.6	721.3	5,231.8	5,192.2	39.64	131.990		
8,900.0	7,740.0	7,693.0	7,693.0	28.8	13.4	90.00	6,293.6	721.3	5,134.4	5,093.3	41.17	124.713		
9,000.0	7,740.0	7,693.0	7,693.0	30.3	13.4	90.00	6,293.6	721.3	5,037.1	4,994.4	42.73	117.892		
9,100.0	7,740.0	7,693.0	7,693.0	31.9	13.4	90.00	6,293.6	721.3	4,939.9	4,895.6	44.30	111.499		
9,200.0	7,740.0	7,693.0	7,693.0	33.4	13.4	90.00	6,293.6	721.3	4,842.8	4,796.9	45.90	105.507		
9,300.0	7,740.0	7,693.0	7,693.0	35.0	13.4	90.00	6,293.6	721.3	4,745.9	4,698.3	47.51	99.888		
9,400.0	7,740.0	7,693.0	7,693.0	36.6	13.4	90.00	6,293.6	721.3	4,649.0	4,599.9	49.14	94.614		
9,500.0	7,740.0	7,693.0	7,693.0	38.2	13.4	90.00	6,293.6	721.3	4,552.3	4,501.5	50.77	89.659		
9,600.0	7,740.0	7,693.0	7,693.0	39.8	13.4	90.00	6,293.6	721.3	4,455.8	4,403.3	52.42	85.001		
9,700.0	7,740.0	7,693.0	7,693.0	41.4	13.4	90.00	6,293.6	721.3	4,359.4	4,305.3	54.08	80.615		
9,800.0	7,740.0	7,693.0	7,693.0	43.0	13.4	90.00	6,293.6	721.3	4,263.1	4,207.4	55.74	76.482		
9,900.0	7,740.0	7,693.0	7,693.0	44.7	13.4	90.00	6,293.6	721.3	4,167.1	4,109.6	57.41	72.583		
10,000.0	7,740.0	7,693.0	7,693.0	46.3	13.4	90.00	6,293.6	721.3	4,071.2	4,012.1	59.09	68.901		
10,100.0	7,740.0	7,693.0	7,693.0	48.0	13.4	90.00	6,293.6	721.3	3,975.5	3,914.7	60.77	65.419		
10,200.0	7,740.0	7,693.0	7,693.0	49.7	13.4	90.00	6,293.6	721.3	3,880.1	3,817.6	62.46	62.123		
10,300.0	7,740.0	7,693.0	7,693.0	51.3	13.4	90.00	6,293.6	721.3	3,784.9	3,720.7	64.15	59.000		
10,400.0	7,740.0	7,693.0	7,693.0	53.0	13.4	90.00	6,293.6	721.3	3,689.9	3,624.0	65.85	56.038		
10,500.0	7,740.0	7,693.0	7,693.0	54.7	13.4	90.00	6,293.6	721.3	3,595.2	3,527.7	67.55	53.226		
10,600.0	7,740.0	7,693.0	7,693.0	56.4	13.4	90.00	6,293.6	721.3	3,500.8	3,431.6	69.25	50.554		
10,700.0	7,740.0	7,693.0	7,693.0	58.1	13.4	90.00	6,293.6	721.3	3,406.7	3,335.8	70.96	48.012		
10,800.0	7,740.0	7,693.0	7,693.0	59.8	13.4	90.00	6,293.6	721.3	3,313.0	3,240.3	72.66	45.593		
10,900.0	7,740.0	7,693.0	7,693.0	61.5	13.4	90.00	6,293.6	721.3	3,219.7	3,145.3	74.38	43.289		
11,000.0	7,740.0	7,693.0	7,693.0	63.2	13.4	90.00	6,293.6	721.3	3,126.7	3,050.6	76.09	41.093		
11,105.4	7,740.0	7,693.0	7,693.0	65.0	13.4	90.00	6,293.6	721.3	3,029.3	2,951.4	77.90	38.887		
11,191.0	7,740.0	7,693.0	7,693.0	66.4	13.4	90.00	6,293.6	721.3	2,950.8	2,871.3	79.48	37.127		
11,200.0	7,740.0	7,693.0	7,693.0	66.6	13.4	90.00	6,293.6	721.3	2,942.6	2,862.9	79.63	36.953		
11,300.0	7,740.0	7,693.0	7,693.0	68.3	13.4	90.00	6,293.6	721.3	2,851.7	2,770.4	81.35	35.055		
11,400.0	7,740.0	7,693.0	7,693.0	70.0	13.4	90.00	6,293.6	721.3	2,761.6	2,678.5	83.07	33.243		
11,500.0	7,740.0	7,693.0	7,693.0	71.7	13.4	90.00	6,293.6	721.3	2,672.1	2,587.3	84.80	31.512		
11,600.0	7,740.0	7,693.0	7,693.0	73.4	13.4	90.00	6,293.6	721.3	2,583.3	2,496.8	86.52	29.858		
11,700.0	7,740.0	7,693.0	7,693.0	75.1	13.4	90.00	6,293.6	721.3	2,495.5	2,407.2	88.25	28.278		
11,800.0	7,740.0	7,693.0	7,693.0	76.9	13.4	90.00	6,293.6	721.3	2,408.6	2,318.6	89.98	26.769		
11,900.0	7,740.0	7,693.0	7,693.0	78.6	13.4	90.00	6,293.6	721.3	2,322.7	2,231.0	91.70	25.328		
12,000.0	7,740.0	7,693.0	7,693.0	80.3	13.4	90.00	6,293.6	721.3	2,238.0	2,144.6	93.43	23.953		
12,100.0	7,740.0	7,693.0	7,693.0	82.0	13.4	90.00	6,293.6	721.3	2,154.6	2,059.5	95.16	22.641		
12,200.0	7,740.0	7,693.0	7,693.0	83.8	13.4	90.00	6,293.6	721.3	2,072.7	1,975.8	96.90	21.391		
12,300.0	7,740.0	7,693.0	7,693.0	85.5	13.4	90.00	6,293.6	721.3	1,992.5	1,893.9	98.63	20.202		
12,400.0	7,740.0	7,693.0	7,693.0	87.2	13.4	90.00	6,293.6	721.3	1,914.1	1,813.7	100.36	19.072		
12,500.0	7,740.0	7,693.0	7,693.0	88.9	13.4	90.00	6,293.6	721.3	1,837.8	1,735.7	102.10	18.000		
12,600.0	7,740.0	7,693.0	7,693.0	90.7	13.4	90.00	6,293.6	721.3	1,763.9	1,660.0	103.83	16.988		
12,700.0	7,740.0	7,693.0	7,693.0	92.4	13.4	90.00	6,293.6	721.3	1,692.6	1,587.1	105.57	16.033		
12,800.0	7,740.0	7,693.0	7,693.0	94.1	13.4	90.00	6,293.6	721.3	1,624.4	1,517.1	107.31	15.138		
12,900.0	7,740.0	7,693.0	7,693.0	95.9	13.4	90.00	6,293.6	721.3	1,559.6	1,450.6	109.04	14.303		
13,000.0	7,740.0	7,693.0	7,693.0	97.6	13.4	90.00	6,293.6	721.3	1,498.8	1,388.0	110.78	13.529		
13,100.0	7,740.0	7,693.0	7,693.0	99.3	13.4	90.00	6,293.6	721.3	1,442.2	1,329.7	112.52	12.818		
13,200.0	7,740.0	7,693.0	7,693.0	101.1	13.4	90.00	6,293.6	721.3	1,390.6	1,276.3	114.26	12.171		
13,300.0	7,740.0	7,693.0	7,693.0	102.8	13.4	90.00	6,293.6	721.3	1,344.4	1,228.4	116.00	11.590		
13,400.0	7,740.0	7,693.0	7,693.0	104.5	13.4	90.00	6,293.6	721.3	1,304.3	1,186.6	117.74	11.078		
13,500.0	7,740.0	7,693.0	7,693.0	106.3	13.4	90.00	6,293.6	721.3	1,270.8	1,151.4	119.48	10.637		
13,600.0	7,740.0	7,693.0	7,693.0	108.0	13.4	90.00	6,293.6	721.3	1,244.5	1,123.3	121.22	10.267		
13,700.0	7,740.0	7,693.0	7,693.0	109.8	13.4	90.00	6,293.6	721.3	1,225.8	1,102.8	122.96	9.969		
13,800.0	7,740.0	7,693.0	7,693.0	111.5	13.4	90.00	6,293.6	721.3	1,215.0	1,090.3	124.70	9.744		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 SURV		Offset Site Error:		0.0 ft	
Survey Program:													8164-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor						
13,881.2	7,740.0	7,693.0	7,693.0	112.9	13.4	90.00	6,293.6	721.3	1,212.3	1,086.2	126.12	9.613	CC					
13,900.0	7,740.0	7,693.0	7,693.0	113.2	13.4	90.00	6,293.6	721.3	1,212.5	1,086.0	126.44	9.589	ES					
14,000.0	7,740.0	7,693.0	7,693.0	115.0	13.4	90.00	6,293.6	721.3	1,218.1	1,089.9	128.19	9.503						
14,100.0	7,740.0	7,693.0	7,693.0	116.7	13.4	90.00	6,293.6	721.3	1,231.9	1,102.0	129.93	9.481	SF					
14,200.0	7,740.0	7,693.0	7,693.0	118.5	13.4	90.00	6,293.6	721.3	1,253.5	1,121.9	131.67	9.520						
14,300.0	7,740.0	7,693.0	7,693.0	120.2	13.4	90.00	6,293.6	721.3	1,282.6	1,149.2	133.42	9.614						
14,400.0	7,740.0	7,693.0	7,693.0	121.9	13.4	90.00	6,293.6	721.3	1,318.6	1,183.5	135.16	9.756						
14,500.0	7,740.0	7,693.0	7,693.0	123.7	13.4	90.00	6,293.6	721.3	1,361.1	1,224.2	136.90	9.942						
14,600.0	7,740.0	7,693.0	7,693.0	125.4	13.4	90.00	6,293.6	721.3	1,409.4	1,270.7	138.65	10.165						
14,682.3	7,740.0	7,693.0	7,693.0	126.8	13.4	90.00	6,293.6	721.3	1,453.1	1,313.0	140.08	10.373						

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 S													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		
7,900.0	7,711.6	7,668.6	7,668.6	16.8	13.4	21.68	5,530.8	92.1	5,261.0	5,241.2	19.80	265.764		
7,950.0	7,725.0	7,682.0	7,682.0	17.2	13.4	27.64	5,530.8	92.1	5,213.2	5,192.9	20.37	255.955		
8,000.0	7,734.2	7,691.2	7,691.2	17.6	13.4	38.97	5,530.8	92.1	5,164.4	5,141.9	22.51	229.469		
8,050.0	7,739.1	7,696.1	7,696.1	18.1	13.4	63.56	5,530.8	92.1	5,115.0	5,087.6	27.46	186.275		
8,081.4	7,740.0	7,697.0	7,697.0	18.3	13.4	90.00	5,530.8	92.1	5,083.8	5,053.8	29.99	169.515		
8,100.0	7,740.0	7,697.0	7,697.0	18.5	13.4	90.00	5,530.8	92.1	5,065.3	5,035.1	30.19	167.777		
8,200.0	7,740.0	7,697.0	7,697.0	19.6	13.4	90.00	5,530.8	92.1	4,965.9	4,934.6	31.33	158.490		
8,300.0	7,740.0	7,697.0	7,697.0	20.7	13.4	90.00	5,530.8	92.1	4,866.5	4,833.9	32.57	149.429		
8,400.0	7,740.0	7,697.0	7,697.0	21.9	13.4	90.00	5,530.8	92.1	4,767.1	4,733.3	33.88	140.714		
8,500.0	7,740.0	7,697.0	7,697.0	23.2	13.4	90.00	5,530.8	92.1	4,667.8	4,632.6	35.25	132.415		
8,600.0	7,740.0	7,697.0	7,697.0	24.6	13.4	90.00	5,530.8	92.1	4,568.5	4,531.8	36.68	124.564		
8,700.0	7,740.0	7,697.0	7,697.0	25.9	13.4	90.00	5,530.8	92.1	4,469.2	4,431.1	38.14	117.171		
8,800.0	7,740.0	7,697.0	7,697.0	27.4	13.4	90.00	5,530.8	92.1	4,370.0	4,330.3	39.65	110.228		
8,900.0	7,740.0	7,697.0	7,697.0	28.8	13.4	90.00	5,530.8	92.1	4,270.8	4,229.6	41.18	103.718		
9,000.0	7,740.0	7,697.0	7,697.0	30.3	13.4	90.00	5,530.8	92.1	4,171.6	4,128.9	42.73	97.619		
9,100.0	7,740.0	7,697.0	7,697.0	31.9	13.4	90.00	5,530.8	92.1	4,072.5	4,028.2	44.31	91.906		
9,200.0	7,740.0	7,697.0	7,697.0	33.4	13.4	90.00	5,530.8	92.1	3,973.4	3,927.5	45.91	86.552		
9,300.0	7,740.0	7,697.0	7,697.0	35.0	13.4	90.00	5,530.8	92.1	3,874.3	3,826.8	47.52	81.533		
9,400.0	7,740.0	7,697.0	7,697.0	36.6	13.4	90.00	5,530.8	92.1	3,775.3	3,726.2	49.14	76.822		
9,500.0	7,740.0	7,697.0	7,697.0	38.2	13.4	90.00	5,530.8	92.1	3,676.4	3,625.6	50.78	72.398		
9,600.0	7,740.0	7,697.0	7,697.0	39.8	13.4	90.00	5,530.8	92.1	3,577.5	3,525.1	52.43	68.238		
9,700.0	7,740.0	7,697.0	7,697.0	41.4	13.4	90.00	5,530.8	92.1	3,478.7	3,424.6	54.08	64.322		
9,800.0	7,740.0	7,697.0	7,697.0	43.0	13.4	90.00	5,530.8	92.1	3,380.0	3,324.2	55.75	60.631		
9,900.0	7,740.0	7,697.0	7,697.0	44.7	13.4	90.00	5,530.8	92.1	3,281.3	3,223.9	57.42	57.148		
10,000.0	7,740.0	7,697.0	7,697.0	46.3	13.4	90.00	5,530.8	92.1	3,182.7	3,123.6	59.09	53.858		
10,100.0	7,740.0	7,697.0	7,697.0	48.0	13.4	90.00	5,530.8	92.1	3,084.2	3,023.5	60.78	50.747		
10,200.0	7,740.0	7,697.0	7,697.0	49.7	13.4	90.00	5,530.8	92.1	2,985.8	2,923.4	62.46	47.801		
10,300.0	7,740.0	7,697.0	7,697.0	51.3	13.4	90.00	5,530.8	92.1	2,887.6	2,823.4	64.16	45.008		
10,400.0	7,740.0	7,697.0	7,697.0	53.0	13.4	90.00	5,530.8	92.1	2,789.4	2,723.6	65.85	42.358		
10,500.0	7,740.0	7,697.0	7,697.0	54.7	13.4	90.00	5,530.8	92.1	2,691.4	2,623.8	67.55	39.841		
10,600.0	7,740.0	7,697.0	7,697.0	56.4	13.4	90.00	5,530.8	92.1	2,593.5	2,524.3	69.26	37.448		
10,700.0	7,740.0	7,697.0	7,697.0	58.1	13.4	90.00	5,530.8	92.1	2,495.8	2,424.8	70.96	35.171		
10,800.0	7,740.0	7,697.0	7,697.0	59.8	13.4	90.00	5,530.8	92.1	2,398.3	2,325.6	72.67	33.002		
10,900.0	7,740.0	7,697.0	7,697.0	61.5	13.4	90.00	5,530.8	92.1	2,301.0	2,226.6	74.38	30.934		
11,000.0	7,740.0	7,697.0	7,697.0	63.2	13.4	90.00	5,530.8	92.1	2,203.9	2,127.8	76.10	28.962		
11,105.4	7,740.0	7,697.0	7,697.0	65.0	13.4	90.00	5,530.8	92.1	2,101.9	2,024.0	77.91	26.980		
11,191.0	7,740.0	7,697.0	7,697.0	66.4	13.4	90.00	5,530.8	92.1	2,019.5	1,940.0	79.48	25.408		
11,200.0	7,740.0	7,697.0	7,697.0	66.6	13.4	90.00	5,530.8	92.1	2,010.9	1,931.2	79.64	25.250		
11,300.0	7,740.0	7,697.0	7,697.0	68.3	13.4	90.00	5,530.8	92.1	1,915.2	1,833.9	81.36	23.541		
11,400.0	7,740.0	7,697.0	7,697.0	70.0	13.4	90.00	5,530.8	92.1	1,820.0	1,736.9	83.08	21.907		
11,500.0	7,740.0	7,697.0	7,697.0	71.7	13.4	90.00	5,530.8	92.1	1,725.4	1,640.6	84.80	20.346		
11,600.0	7,740.0	7,697.0	7,697.0	73.4	13.4	90.00	5,530.8	92.1	1,631.4	1,544.8	86.53	18.854		
11,700.0	7,740.0	7,697.0	7,697.0	75.1	13.4	90.00	5,530.8	92.1	1,538.1	1,449.8	88.25	17.428		
11,800.0	7,740.0	7,697.0	7,697.0	76.9	13.4	90.00	5,530.8	92.1	1,445.7	1,355.8	89.98	16.067		
11,900.0	7,740.0	7,697.0	7,697.0	78.6	13.4	90.00	5,530.8	92.1	1,354.5	1,262.8	91.71	14.769		
12,000.0	7,740.0	7,697.0	7,697.0	80.3	13.4	90.00	5,530.8	92.1	1,264.5	1,171.1	93.44	13.533		
12,100.0	7,740.0	7,697.0	7,697.0	82.0	13.4	90.00	5,530.8	92.1	1,176.2	1,081.0	95.17	12.359		
12,200.0	7,740.0	7,697.0	7,697.0	83.8	13.4	90.00	5,530.8	92.1	1,089.9	993.0	96.90	11.247		
12,300.0	7,740.0	7,697.0	7,697.0	85.5	13.4	90.00	5,530.8	92.1	1,006.1	907.5	98.64	10.200		
12,400.0	7,740.0	7,697.0	7,697.0	87.2	13.4	90.00	5,530.8	92.1	925.6	825.2	100.37	9.222		
12,500.0	7,740.0	7,697.0	7,697.0	88.9	13.4	90.00	5,530.8	92.1	849.2	747.1	102.10	8.317		
12,600.0	7,740.0	7,697.0	7,697.0	90.7	13.4	90.00	5,530.8	92.1	778.2	674.3	103.84	7.494		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 S										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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
12,700.0	7,740.0	7,697.0	7,697.0	92.4	13.4	90.00	5,530.8	92.1	714.1	608.5	105.58	6.764		
12,800.0	7,740.0	7,697.0	7,697.0	94.1	13.4	90.00	5,530.8	92.1	659.1	551.8	107.31	6.142		
12,900.0	7,740.0	7,697.0	7,697.0	95.9	13.4	90.00	5,530.8	92.1	615.5	506.4	109.05	5.644		
13,000.0	7,740.0	7,697.0	7,697.0	97.6	13.4	90.00	5,530.8	92.1	585.8	475.0	110.79	5.288		
13,100.0	7,740.0	7,697.0	7,697.0	99.3	13.4	90.00	5,530.8	92.1	572.4	459.9	112.53	5.087		
13,127.9	7,740.0	7,697.0	7,697.0	99.8	13.4	90.00	5,530.8	92.1	571.7	458.7	113.01	5.059 CC, ES		
13,200.0	7,740.0	7,697.0	7,697.0	101.1	13.4	90.00	5,530.8	92.1	576.2	462.0	114.26	5.043 SF		
13,300.0	7,740.0	7,697.0	7,697.0	102.8	13.4	90.00	5,530.8	92.1	597.0	481.0	116.00	5.147		
13,400.0	7,740.0	7,697.0	7,697.0	104.5	13.4	90.00	5,530.8	92.1	633.1	515.4	117.74	5.377		
13,500.0	7,740.0	7,697.0	7,697.0	106.3	13.4	90.00	5,530.8	92.1	682.1	562.6	119.48	5.709		
13,600.0	7,740.0	7,697.0	7,697.0	108.0	13.4	90.00	5,530.8	92.1	741.4	620.2	121.23	6.116		
13,700.0	7,740.0	7,697.0	7,697.0	109.8	13.4	90.00	5,530.8	92.1	808.8	685.8	122.97	6.577		
13,800.0	7,740.0	7,697.0	7,697.0	111.5	13.4	90.00	5,530.8	92.1	882.4	757.6	124.71	7.075		
13,900.0	7,740.0	7,697.0	7,697.0	113.2	13.4	90.00	5,530.8	92.1	960.7	834.3	126.45	7.598		
14,000.0	7,740.0	7,697.0	7,697.0	115.0	13.4	90.00	5,530.8	92.1	1,042.8	914.6	128.19	8.134		
14,100.0	7,740.0	7,697.0	7,697.0	116.7	13.4	90.00	5,530.8	92.1	1,127.7	997.8	129.94	8.679		
14,200.0	7,740.0	7,697.0	7,697.0	118.5	13.4	90.00	5,530.8	92.1	1,215.0	1,083.3	131.68	9.227		
14,300.0	7,740.0	7,697.0	7,697.0	120.2	13.4	90.00	5,530.8	92.1	1,304.1	1,170.7	133.42	9.774		
14,400.0	7,740.0	7,697.0	7,697.0	121.9	13.4	90.00	5,530.8	92.1	1,394.7	1,259.5	135.17	10.318		
14,500.0	7,740.0	7,697.0	7,697.0	123.7	13.4	90.00	5,530.8	92.1	1,486.4	1,349.5	136.91	10.857		
14,600.0	7,740.0	7,697.0	7,697.0	125.4	13.4	90.00	5,530.8	92.1	1,579.2	1,440.6	138.66	11.389		
14,682.3	7,740.0	7,697.0	7,697.0	126.8	13.4	90.00	5,530.8	92.1	1,656.2	1,516.1	140.09	11.822		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - NO													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		
9,300.0	7,740.0	7,688.0	7,688.0	35.0	13.4	90.00	6,883.4	91.5	5,217.0	5,169.5	47.50	109.824		
9,400.0	7,740.0	7,688.0	7,688.0	36.6	13.4	90.00	6,883.4	91.5	5,117.5	5,068.4	49.13	104.167		
9,500.0	7,740.0	7,688.0	7,688.0	38.2	13.4	90.00	6,883.4	91.5	5,018.1	4,967.3	50.76	98.850		
9,600.0	7,740.0	7,688.0	7,688.0	39.8	13.4	90.00	6,883.4	91.5	4,918.7	4,866.3	52.41	93.847		
9,700.0	7,740.0	7,688.0	7,688.0	41.4	13.4	90.00	6,883.4	91.5	4,819.3	4,765.2	54.07	89.135		
9,800.0	7,740.0	7,688.0	7,688.0	43.0	13.4	90.00	6,883.4	91.5	4,720.0	4,664.2	55.73	84.692		
9,900.0	7,740.0	7,688.0	7,688.0	44.7	13.4	90.00	6,883.4	91.5	4,620.6	4,563.2	57.40	80.496		
10,000.0	7,740.0	7,688.0	7,688.0	46.3	13.4	90.00	6,883.4	91.5	4,521.3	4,462.3	59.08	76.531		
10,100.0	7,740.0	7,688.0	7,688.0	48.0	13.4	90.00	6,883.4	91.5	4,422.1	4,361.3	60.76	72.778		
10,200.0	7,740.0	7,688.0	7,688.0	49.7	13.4	90.00	6,883.4	91.5	4,322.8	4,260.4	62.45	69.222		
10,300.0	7,740.0	7,688.0	7,688.0	51.3	13.4	90.00	6,883.4	91.5	4,223.6	4,159.5	64.14	65.849		
10,400.0	7,740.0	7,688.0	7,688.0	53.0	13.4	90.00	6,883.4	91.5	4,124.5	4,058.7	65.84	62.647		
10,500.0	7,740.0	7,688.0	7,688.0	54.7	13.4	90.00	6,883.4	91.5	4,025.4	3,957.8	67.54	59.603		
10,600.0	7,740.0	7,688.0	7,688.0	56.4	13.4	90.00	6,883.4	91.5	3,926.3	3,857.1	69.24	56.706		
10,700.0	7,740.0	7,688.0	7,688.0	58.1	13.4	90.00	6,883.4	91.5	3,827.3	3,756.3	70.95	53.946		
10,800.0	7,740.0	7,688.0	7,688.0	59.8	13.4	90.00	6,883.4	91.5	3,728.3	3,655.7	72.66	51.315		
10,900.0	7,740.0	7,688.0	7,688.0	61.5	13.4	90.00	6,883.4	91.5	3,629.4	3,555.0	74.37	48.804		
11,000.0	7,740.0	7,688.0	7,688.0	63.2	13.4	90.00	6,883.4	91.5	3,530.6	3,454.5	76.08	46.405		
11,105.4	7,740.0	7,688.0	7,688.0	65.0	13.4	90.00	6,883.4	91.5	3,426.4	3,348.6	77.89	43.991		
11,191.0	7,740.0	7,688.0	7,688.0	66.4	13.4	90.00	6,883.4	91.5	3,342.0	3,262.6	79.47	42.056		
11,200.0	7,740.0	7,688.0	7,688.0	66.6	13.4	90.00	6,883.4	91.5	3,333.2	3,253.6	79.62	41.863		
11,300.0	7,740.0	7,688.0	7,688.0	68.3	13.4	90.00	6,883.4	91.5	3,234.8	3,153.5	81.34	39.768		
11,400.0	7,740.0	7,688.0	7,688.0	70.0	13.4	90.00	6,883.4	91.5	3,136.6	3,053.5	83.06	37.761		
11,500.0	7,740.0	7,688.0	7,688.0	71.7	13.4	90.00	6,883.4	91.5	3,038.4	2,953.6	84.79	35.836		
11,600.0	7,740.0	7,688.0	7,688.0	73.4	13.4	90.00	6,883.4	91.5	2,940.4	2,853.9	86.51	33.988		
11,700.0	7,740.0	7,688.0	7,688.0	75.1	13.4	90.00	6,883.4	91.5	2,842.5	2,754.3	88.24	32.214		
11,800.0	7,740.0	7,688.0	7,688.0	76.9	13.4	90.00	6,883.4	91.5	2,744.8	2,654.8	89.97	30.509		
11,900.0	7,740.0	7,688.0	7,688.0	78.6	13.4	90.00	6,883.4	91.5	2,647.2	2,555.5	91.70	28.870		
12,000.0	7,740.0	7,688.0	7,688.0	80.3	13.4	90.00	6,883.4	91.5	2,549.8	2,456.4	93.42	27.293		
12,100.0	7,740.0	7,688.0	7,688.0	82.0	13.4	90.00	6,883.4	91.5	2,452.7	2,357.5	95.16	25.775		
12,200.0	7,740.0	7,688.0	7,688.0	83.8	13.4	90.00	6,883.4	91.5	2,355.8	2,258.9	96.89	24.314		
12,300.0	7,740.0	7,688.0	7,688.0	85.5	13.4	90.00	6,883.4	91.5	2,259.1	2,160.5	98.62	22.907		
12,400.0	7,740.0	7,688.0	7,688.0	87.2	13.4	90.00	6,883.4	91.5	2,162.7	2,062.4	100.35	21.551		
12,500.0	7,740.0	7,688.0	7,688.0	88.9	13.4	90.00	6,883.4	91.5	2,066.7	1,964.6	102.09	20.245		
12,600.0	7,740.0	7,688.0	7,688.0	90.7	13.4	90.00	6,883.4	91.5	1,971.1	1,867.3	103.82	18.985		
12,700.0	7,740.0	7,688.0	7,688.0	92.4	13.4	90.00	6,883.4	91.5	1,876.0	1,770.4	105.56	17.772		
12,800.0	7,740.0	7,688.0	7,688.0	94.1	13.4	90.00	6,883.4	91.5	1,781.3	1,674.0	107.30	16.602		
12,900.0	7,740.0	7,688.0	7,688.0	95.9	13.4	90.00	6,883.4	91.5	1,687.3	1,578.3	109.03	15.475		
13,000.0	7,740.0	7,688.0	7,688.0	97.6	13.4	90.00	6,883.4	91.5	1,594.1	1,483.3	110.77	14.391		
13,100.0	7,740.0	7,688.0	7,688.0	99.3	13.4	90.00	6,883.4	91.5	1,501.7	1,389.2	112.51	13.347		
13,200.0	7,740.0	7,688.0	7,688.0	101.1	13.4	90.00	6,883.4	91.5	1,410.3	1,296.0	114.25	12.344		
13,300.0	7,740.0	7,688.0	7,688.0	102.8	13.4	90.00	6,883.4	91.5	1,320.2	1,204.2	115.99	11.382		
13,400.0	7,740.0	7,688.0	7,688.0	104.5	13.4	90.00	6,883.4	91.5	1,231.6	1,113.9	117.73	10.461		
13,500.0	7,740.0	7,688.0	7,688.0	106.3	13.4	90.00	6,883.4	91.5	1,144.9	1,025.4	119.47	9.583		
13,600.0	7,740.0	7,688.0	7,688.0	108.0	13.4	90.00	6,883.4	91.5	1,060.5	939.3	121.21	8.749		
13,700.0	7,740.0	7,688.0	7,688.0	109.8	13.4	90.00	6,883.4	91.5	979.1	856.1	122.95	7.963		
13,800.0	7,740.0	7,688.0	7,688.0	111.5	13.4	90.00	6,883.4	91.5	901.4	776.7	124.69	7.229		
13,900.0	7,740.0	7,688.0	7,688.0	113.2	13.4	90.00	6,883.4	91.5	828.5	702.1	126.44	6.553		
14,000.0	7,740.0	7,688.0	7,688.0	115.0	13.4	90.00	6,883.4	91.5	761.8	633.7	128.18	5.944		
14,100.0	7,740.0	7,688.0	7,688.0	116.7	13.4	90.00	6,883.4	91.5	703.1	573.2	129.92	5.412		
14,200.0	7,740.0	7,688.0	7,688.0	118.5	13.4	90.00	6,883.4	91.5	654.4	522.8	131.66	4.970		
14,300.0	7,740.0	7,688.0	7,688.0	120.2	13.4	90.00	6,883.4	91.5	618.2	484.8	133.41	4.634		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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 - NO			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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation								
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor							
14,400.0	7,740.0	7,688.0	7,688.0	121.9	13.4	90.00	6,883.4	91.5	596.8	461.6	135.15	4.416							
14,480.3	7,740.0	7,688.0	7,688.0	123.3	13.4	90.00	6,883.4	91.5	591.3	454.8	136.55	4.331	CC						
14,500.0	7,740.0	7,688.0	7,688.0	123.7	13.4	90.00	6,883.4	91.5	591.7	454.8	136.89	4.322	ES, SF						
14,600.0	7,740.0	7,688.0	7,688.0	125.4	13.4	90.00	6,883.4	91.5	603.3	464.7	138.64	4.352							
14,682.3	7,740.0	7,688.0	7,688.0	126.8	13.4	90.00	6,883.4	91.5	624.9	484.8	140.07	4.461							

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA 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					Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-175.30	-982.8	-80.9	986.2					
100.0	100.0	88.0	88.0	0.2	0.2	-175.30	-982.8	-80.9	986.1	985.8	0.31	3,226.584		
200.0	200.0	188.0	188.0	0.3	0.3	-175.30	-982.8	-80.9	986.1	985.5	0.65	1,506.265		
300.0	300.0	288.0	288.0	0.5	0.5	-55.34	-982.8	-80.9	985.6	984.6	1.00	981.382		
400.0	400.0	388.0	388.0	0.7	0.7	-55.48	-982.8	-80.9	984.2	982.8	1.36	725.356		
500.0	499.9	487.9	487.9	0.9	0.9	-55.71	-982.8	-80.9	981.7	980.0	1.71	572.551		
600.0	599.7	587.7	587.7	1.1	1.0	-56.03	-982.8	-80.9	978.3	976.2	2.08	470.237		
700.0	699.5	687.5	687.5	1.3	1.2	-70.41	-982.8	-80.9	975.2	972.8	2.45	397.846		
722.7	722.1	710.1	710.1	1.3	1.2	-74.00	-982.8	-80.9	974.8	972.3	2.54	384.396		
800.0	799.3	787.3	787.3	1.5	1.4	-74.28	-982.8	-80.9	973.5	970.7	2.82	344.680		
900.0	899.1	887.1	887.1	1.7	1.5	-74.63	-982.8	-80.9	971.8	968.6	3.20	303.802		
1,000.0	998.9	986.9	986.9	1.9	1.7	-74.99	-982.8	-80.9	970.2	966.6	3.57	271.419		
1,100.0	1,098.7	1,086.7	1,086.7	2.1	1.9	-75.35	-982.8	-80.9	968.5	964.6	3.95	245.152		
1,200.0	1,198.5	1,186.5	1,186.5	2.3	2.1	-75.70	-982.8	-80.9	967.0	962.6	4.33	223.430		
1,300.0	1,298.3	1,286.3	1,286.3	2.5	2.2	-76.06	-982.8	-80.9	965.4	960.7	4.71	205.175		
1,400.0	1,398.1	1,386.1	1,386.1	2.7	2.4	-76.43	-982.8	-80.9	963.9	958.9	5.08	189.623		
1,500.0	1,497.9	1,485.9	1,485.9	2.9	2.6	-76.79	-982.8	-80.9	962.5	957.0	5.46	176.219		
1,600.0	1,597.7	1,585.7	1,585.7	3.1	2.8	-77.15	-982.8	-80.9	961.1	955.2	5.84	164.549		
1,700.0	1,697.5	1,685.5	1,685.5	3.3	2.9	-77.51	-982.8	-80.9	959.7	953.5	6.22	154.300		
1,800.0	1,797.3	1,785.3	1,785.3	3.5	3.1	-77.88	-982.8	-80.9	958.4	951.8	6.60	145.229		
1,900.0	1,897.1	1,885.1	1,885.1	3.7	3.3	-78.25	-982.8	-80.9	957.1	950.1	6.98	137.144		
2,000.0	1,996.9	1,984.9	1,984.9	3.9	3.5	-78.61	-982.8	-80.9	955.8	948.4	7.36	129.896		
2,100.0	2,096.7	2,084.7	2,084.7	4.1	3.6	-78.98	-982.8	-80.9	954.6	946.8	7.74	123.360		
2,200.0	2,196.5	2,184.5	2,184.5	4.3	3.8	-79.35	-982.8	-80.9	953.4	945.3	8.12	117.439		
2,300.0	2,296.3	2,284.3	2,284.3	4.5	4.0	-79.72	-982.8	-80.9	952.3	943.8	8.50	112.051		
2,400.0	2,396.1	2,384.1	2,384.1	4.7	4.2	-80.09	-982.8	-80.9	951.2	942.3	8.88	107.126		
2,500.0	2,495.9	2,483.9	2,483.9	4.9	4.3	-80.46	-982.8	-80.9	950.1	940.8	9.26	102.609		
2,600.0	2,595.7	2,583.7	2,583.7	5.2	4.5	-80.84	-982.8	-80.9	949.1	939.4	9.64	98.452		
2,700.0	2,695.5	2,683.5	2,683.5	5.4	4.7	-81.21	-982.8	-80.9	948.1	938.1	10.02	94.613		
2,800.0	2,795.3	2,783.3	2,783.3	5.6	4.9	-81.58	-982.8	-80.9	947.2	936.8	10.40	91.059		
2,900.0	2,895.1	2,883.1	2,883.1	5.8	5.0	-81.96	-982.8	-80.9	946.3	935.5	10.78	87.758		
3,000.0	2,994.9	2,982.9	2,982.9	6.0	5.2	-82.33	-982.8	-80.9	945.4	934.2	11.16	84.686		
3,100.0	3,094.7	3,082.7	3,082.7	6.2	5.4	-82.71	-982.8	-80.9	944.6	933.0	11.54	81.820		
3,200.0	3,194.5	3,182.5	3,182.5	6.4	5.6	-83.09	-982.8	-80.9	943.8	931.9	11.93	79.140		
3,300.0	3,294.3	3,282.3	3,282.3	6.6	5.7	-83.46	-982.8	-80.9	943.1	930.8	12.31	76.629		
3,400.0	3,394.1	3,382.1	3,382.1	6.8	5.9	-83.84	-982.8	-80.9	942.4	929.7	12.69	74.272		
3,500.0	3,493.9	3,481.9	3,481.9	7.0	6.1	-84.22	-982.8	-80.9	941.7	928.7	13.07	72.056		
3,600.0	3,593.8	3,581.8	3,581.8	7.2	6.3	-84.60	-982.8	-80.9	941.1	927.7	13.45	69.968		
3,700.0	3,693.6	3,681.6	3,681.6	7.4	6.4	-84.98	-982.8	-80.9	940.5	926.7	13.83	67.998		
3,800.0	3,793.4	3,781.4	3,781.4	7.6	6.6	-85.36	-982.8	-80.9	940.0	925.8	14.21	66.137		
3,900.0	3,893.2	3,881.2	3,881.2	7.8	6.8	-85.74	-982.8	-80.9	939.5	924.9	14.59	64.375		
4,000.0	3,993.0	3,981.0	3,981.0	8.0	6.9	-86.12	-982.8	-80.9	939.1	924.1	14.98	62.707		
4,100.0	4,092.8	4,080.8	4,080.8	8.2	7.1	-86.50	-982.8	-80.9	938.7	923.3	15.36	61.124		
4,200.0	4,192.6	4,180.6	4,180.6	8.4	7.3	-86.88	-982.8	-80.9	938.3	922.6	15.74	59.620		
4,300.0	4,292.4	4,280.4	4,280.4	8.7	7.5	-87.26	-982.8	-80.9	938.0	921.9	16.12	58.191		
4,400.0	4,392.2	4,380.2	4,380.2	8.9	7.6	-87.64	-982.8	-80.9	937.7	921.2	16.50	56.830		
4,500.0	4,492.0	4,480.0	4,480.0	9.1	7.8	-88.03	-982.8	-80.9	937.5	920.6	16.88	55.533		
4,600.0	4,591.8	4,579.8	4,579.8	9.3	8.0	-88.41	-982.8	-80.9	937.3	920.0	17.26	54.296		
4,700.0	4,691.6	4,679.6	4,679.6	9.5	8.2	-88.79	-982.8	-80.9	937.1	919.5	17.64	53.115		
4,800.0	4,791.4	4,779.4	4,779.4	9.7	8.3	-89.17	-982.8	-80.9	937.0	919.0	18.02	51.987		
4,900.0	4,891.2	4,879.2	4,879.2	9.9	8.5	-89.56	-982.8	-80.9	936.9	918.5	18.40	50.908		
5,000.0	4,991.0	4,979.0	4,979.0	10.1	8.7	-89.94	-982.8	-80.9	936.9	918.1	18.79	49.875		

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

Cathedral Energy Services

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 7894-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,016.2	5,007.2	4,995.2	4,995.2	10.1	8.7	-90.00	-982.8	-80.9	936.9	918.1	18.85	49.712 CC		
5,100.0	5,090.8	5,078.8	5,078.8	10.3	8.9	-90.32	-982.8	-80.9	936.9	917.8	19.17	48.886		
5,200.0	5,190.6	5,178.6	5,178.6	10.5	9.0	-90.70	-982.8	-80.9	937.0	917.4	19.55	47.937		
5,300.0	5,290.4	5,278.4	5,278.4	10.7	9.2	-91.09	-982.8	-80.9	937.1	917.2	19.93	47.027		
5,400.0	5,390.2	5,378.2	5,378.2	10.9	9.4	-91.47	-982.8	-80.9	937.2	916.9	20.31	46.154		
5,500.0	5,490.0	5,478.0	5,478.0	11.1	9.6	-91.85	-982.8	-80.9	937.4	916.7	20.69	45.315		
5,600.0	5,589.8	5,577.8	5,577.8	11.3	9.7	-92.23	-982.8	-80.9	937.6	916.6	21.07	44.509		
5,700.0	5,689.6	5,677.6	5,677.6	11.5	9.9	-92.61	-982.8	-80.9	937.9	916.5	21.45	43.733		
5,800.0	5,789.4	5,777.4	5,777.4	11.7	10.1	-93.00	-982.8	-80.9	938.2	916.4	21.83	42.987		
5,900.0	5,889.2	5,877.2	5,877.2	11.9	10.3	-93.38	-982.8	-80.9	938.6	916.4	22.20	42.268 ES		
6,000.0	5,989.0	5,977.0	5,977.0	12.2	10.4	-93.76	-982.8	-80.9	938.9	916.4	22.58	41.576		
6,100.0	6,088.8	6,076.8	6,076.8	12.4	10.6	-94.14	-982.8	-80.9	939.4	916.4	22.96	40.909		
6,200.0	6,188.6	6,176.6	6,176.6	12.6	10.8	-94.52	-982.8	-80.9	939.9	916.5	23.34	40.265		
6,300.0	6,288.4	6,276.4	6,276.4	12.8	11.0	-94.90	-982.8	-80.9	940.4	916.6	23.72	39.644		
6,400.0	6,388.2	6,376.2	6,376.2	13.0	11.1	-95.28	-982.8	-80.9	940.9	916.8	24.10	39.045		
6,500.0	6,488.0	6,476.0	6,476.0	13.2	11.3	-95.66	-982.8	-80.9	941.5	917.0	24.48	38.466		
6,600.0	6,587.9	6,575.9	6,575.9	13.4	11.5	-96.04	-982.8	-80.9	942.2	917.3	24.85	37.907		
6,700.0	6,687.7	6,675.7	6,675.7	13.6	11.7	-96.41	-982.8	-80.9	942.8	917.6	25.23	37.367		
6,800.0	6,787.5	6,775.5	6,775.5	13.8	11.8	-96.79	-982.8	-80.9	943.6	918.0	25.61	36.844		
6,900.0	6,887.3	6,875.3	6,875.3	14.0	12.0	-97.17	-982.8	-80.9	944.3	918.3	25.99	36.339		
7,000.0	6,987.1	6,975.1	6,975.1	14.2	12.2	-97.55	-982.8	-80.9	945.1	918.8	26.36	35.850		
7,100.0	7,086.9	7,074.9	7,074.9	14.4	12.3	-97.92	-982.8	-80.9	946.0	919.2	26.74	35.376		
7,173.7	7,160.4	7,148.4	7,148.4	14.6	12.5	-98.20	-982.8	-80.9	946.6	919.6	27.02	35.037		
7,200.0	7,186.7	7,174.7	7,174.7	14.6	12.5	-138.58	-982.8	-80.9	947.4	920.3	27.09	34.972 SF		
7,250.0	7,236.4	7,224.4	7,224.4	14.7	12.6	-173.78	-982.8	-80.9	952.1	924.9	27.12	35.111		
7,300.0	7,285.6	7,273.6	7,273.6	14.8	12.7	175.34	-982.8	-80.9	960.7	933.7	27.00	35.588		
7,350.0	7,334.0	7,322.0	7,322.0	14.9	12.8	170.28	-982.8	-80.9	973.4	946.6	26.74	36.407		
7,400.0	7,381.0	7,369.0	7,369.0	15.0	12.9	167.24	-982.8	-80.9	989.9	963.6	26.34	37.577		
7,450.0	7,426.5	7,414.5	7,414.5	15.0	12.9	165.05	-982.8	-80.9	1,010.2	984.4	25.83	39.111		
7,500.0	7,470.0	7,458.0	7,458.0	15.1	13.0	163.26	-982.8	-80.9	1,034.1	1,008.9	25.21	41.021		
7,550.0	7,511.2	7,499.2	7,499.2	15.2	13.1	161.61	-982.8	-80.9	1,061.5	1,037.0	24.51	43.311		
7,600.0	7,549.7	7,537.7	7,537.7	15.4	13.2	159.93	-982.8	-80.9	1,092.2	1,068.5	23.76	45.969		
7,650.0	7,585.4	7,573.4	7,573.4	15.5	13.2	158.10	-982.8	-80.9	1,126.0	1,103.0	23.01	48.942		
7,700.0	7,617.9	7,605.9	7,605.9	15.7	13.3	155.97	-982.8	-80.9	1,162.6	1,140.3	22.31	52.104		
7,750.0	7,647.0	7,635.0	7,635.0	15.9	13.3	153.36	-982.8	-80.9	1,201.8	1,180.1	21.77	55.206		
7,800.0	7,672.4	7,660.4	7,660.4	16.2	13.4	150.02	-982.8	-80.9	1,243.4	1,221.9	21.51	57.816		
7,850.0	7,694.0	7,682.0	7,682.0	16.5	13.4	145.59	-982.8	-80.9	1,286.9	1,265.2	21.70	59.315		
7,900.0	7,711.6	7,699.6	7,699.6	16.8	13.4	139.51	-982.8	-80.9	1,332.1	1,309.5	22.56	59.046		
7,950.0	7,725.0	7,713.0	7,713.0	17.2	13.5	130.92	-982.8	-80.9	1,378.6	1,354.3	24.30	56.741		
8,000.0	7,734.2	7,722.2	7,722.2	17.6	13.5	118.69	-982.8	-80.9	1,426.2	1,399.3	26.84	53.136		
8,050.0	7,739.1	7,727.1	7,727.1	18.1	13.5	102.11	-982.8	-80.9	1,474.4	1,445.0	29.32	50.290		
8,081.4	7,740.0	7,728.0	7,728.0	18.3	13.5	90.00	-982.8	-80.9	1,504.8	1,474.7	30.04	50.086		
8,100.0	7,740.0	7,728.0	7,728.0	18.5	13.5	90.00	-982.8	-80.9	1,522.8	1,492.6	30.24	50.350		
8,200.0	7,740.0	7,728.0	7,728.0	19.6	13.5	90.00	-982.8	-80.9	1,620.0	1,588.6	31.39	51.615		
8,300.0	7,740.0	7,728.0	7,728.0	20.7	13.5	90.00	-982.8	-80.9	1,717.5	1,684.9	32.62	52.651		
8,400.0	7,740.0	7,728.0	7,728.0	21.9	13.5	90.00	-982.8	-80.9	1,815.3	1,781.4	33.93	53.499		
8,500.0	7,740.0	7,728.0	7,728.0	23.2	13.5	90.00	-982.8	-80.9	1,913.4	1,878.0	35.31	54.194		
8,600.0	7,740.0	7,728.0	7,728.0	24.6	13.5	90.00	-982.8	-80.9	2,011.6	1,974.8	36.73	54.766		
8,700.0	7,740.0	7,728.0	7,728.0	25.9	13.5	90.00	-982.8	-80.9	2,109.9	2,071.8	38.20	55.239		
8,800.0	7,740.0	7,728.0	7,728.0	27.4	13.5	90.00	-982.8	-80.9	2,208.5	2,168.8	39.70	55.630		
8,900.0	7,740.0	7,728.0	7,728.0	28.8	13.5	90.00	-982.8	-80.9	2,307.1	2,265.9	41.23	55.956		
9,000.0	7,740.0	7,728.0	7,728.0	30.3	13.5	90.00	-982.8	-80.9	2,405.9	2,363.1	42.79	56.229		

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

Cathedral Energy Services

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 7894-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,100.0	7,740.0	7,728.0	7,728.0	31.9	13.5	90.00	-982.8	-80.9	2,504.8	2,460.4	44.37	56.457		
9,200.0	7,740.0	7,728.0	7,728.0	33.4	13.5	90.00	-982.8	-80.9	2,603.7	2,557.7	45.96	56.650		
9,300.0	7,740.0	7,728.0	7,728.0	35.0	13.5	90.00	-982.8	-80.9	2,702.7	2,655.2	47.57	56.812		
9,400.0	7,740.0	7,728.0	7,728.0	36.6	13.5	90.00	-982.8	-80.9	2,801.8	2,752.6	49.20	56.950		
9,500.0	7,740.0	7,728.0	7,728.0	38.2	13.5	90.00	-982.8	-80.9	2,901.0	2,850.2	50.83	57.067		
9,600.0	7,740.0	7,728.0	7,728.0	39.8	13.5	90.00	-982.8	-80.9	3,000.2	2,947.7	52.48	57.167		
9,700.0	7,740.0	7,728.0	7,728.0	41.4	13.5	90.00	-982.8	-80.9	3,099.5	3,045.3	54.14	57.252		
9,800.0	7,740.0	7,728.0	7,728.0	43.0	13.5	90.00	-982.8	-80.9	3,198.8	3,143.0	55.80	57.325		
9,900.0	7,740.0	7,728.0	7,728.0	44.7	13.5	90.00	-982.8	-80.9	3,298.1	3,240.7	57.47	57.387		
10,000.0	7,740.0	7,728.0	7,728.0	46.3	13.5	90.00	-982.8	-80.9	3,397.5	3,338.4	59.15	57.440		
10,100.0	7,740.0	7,728.0	7,728.0	48.0	13.5	90.00	-982.8	-80.9	3,496.9	3,436.1	60.83	57.486		
10,200.0	7,740.0	7,728.0	7,728.0	49.7	13.5	90.00	-982.8	-80.9	3,596.4	3,533.9	62.52	57.525		
10,300.0	7,740.0	7,728.0	7,728.0	51.3	13.5	90.00	-982.8	-80.9	3,695.9	3,631.7	64.21	57.559		
10,400.0	7,740.0	7,728.0	7,728.0	53.0	13.5	90.00	-982.8	-80.9	3,795.4	3,729.5	65.91	57.587		
10,500.0	7,740.0	7,728.0	7,728.0	54.7	13.5	90.00	-982.8	-80.9	3,894.9	3,827.3	67.61	57.612		
10,600.0	7,740.0	7,728.0	7,728.0	56.4	13.5	90.00	-982.8	-80.9	3,994.5	3,925.2	69.31	57.632		
10,700.0	7,740.0	7,728.0	7,728.0	58.1	13.5	90.00	-982.8	-80.9	4,094.1	4,023.1	71.02	57.650		
10,800.0	7,740.0	7,728.0	7,728.0	59.8	13.5	90.00	-982.8	-80.9	4,193.7	4,121.0	72.73	57.665		
10,900.0	7,740.0	7,728.0	7,728.0	61.5	13.5	90.00	-982.8	-80.9	4,293.3	4,218.9	74.44	57.677		
11,000.0	7,740.0	7,728.0	7,728.0	63.2	13.5	90.00	-982.8	-80.9	4,392.9	4,316.8	76.15	57.687		
11,105.4	7,740.0	7,728.0	7,728.0	65.0	13.5	90.00	-982.8	-80.9	4,498.0	4,420.0	77.96	57.696		
11,191.0	7,740.0	7,728.0	7,728.0	66.4	13.5	90.00	-982.8	-80.9	4,583.4	4,503.8	79.54	57.625		
11,200.0	7,740.0	7,728.0	7,728.0	66.6	13.5	90.00	-982.8	-80.9	4,592.3	4,512.6	79.69	57.626		
11,300.0	7,740.0	7,728.0	7,728.0	68.3	13.5	90.00	-982.8	-80.9	4,692.1	4,610.7	81.41	57.634		
11,400.0	7,740.0	7,728.0	7,728.0	70.0	13.5	90.00	-982.8	-80.9	4,791.9	4,708.8	83.13	57.641		
11,500.0	7,740.0	7,728.0	7,728.0	71.7	13.5	90.00	-982.8	-80.9	4,891.7	4,806.9	84.86	57.646		
11,600.0	7,740.0	7,728.0	7,728.0	73.4	13.5	90.00	-982.8	-80.9	4,991.5	4,905.0	86.58	57.651		
11,700.0	7,740.0	7,728.0	7,728.0	75.1	13.5	90.00	-982.8	-80.9	5,091.4	5,003.0	88.31	57.654		
11,800.0	7,740.0	7,728.0	7,728.0	76.9	13.5	90.00	-982.8	-80.9	5,191.2	5,101.1	90.04	57.657		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 - SU											Offset Site Error: 0.0 ft		
Survey Program: 132-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
0.0	0.0	64.7	64.7	0.0	0.1	36.09	1,607.2	1,171.5	1,988.9				
100.0	100.0	190.5	190.5	0.2	0.3	36.04	1,606.8	1,169.2	1,987.6	1,987.1	0.49	4,038.525	
200.0	200.0	326.7	326.6	0.3	0.6	35.96	1,605.4	1,164.6	1,984.8	1,983.9	0.92	2,152.587	
300.0	300.0	435.4	435.1	0.5	0.8	155.85	1,604.3	1,158.3	1,981.3	1,980.0	1.29	1,533.802	
400.0	400.0	525.0	524.4	0.7	1.0	155.71	1,605.4	1,151.3	1,980.1	1,978.4	1.66	1,191.178	
500.0	499.9	793.3	788.8	0.9	1.9	154.73	1,611.2	1,107.7	1,976.6	1,973.9	2.63	750.502	
600.0	599.7	914.2	906.9	1.1	2.4	154.23	1,610.7	1,081.5	1,969.2	1,966.0	3.22	611.213	
700.0	699.5	1,043.7	1,033.4	1.3	2.9	139.73	1,609.0	1,053.5	1,961.5	1,957.7	3.86	508.643	
722.7	722.1	1,073.9	1,062.7	1.3	3.1	136.11	1,608.4	1,046.5	1,959.3	1,955.3	4.01	488.614	
800.0	799.3	1,191.5	1,176.6	1.5	3.6	135.58	1,605.8	1,017.5	1,950.7	1,946.1	4.62	421.836	
900.0	899.1	1,287.1	1,268.7	1.7	4.1	135.10	1,603.8	991.8	1,938.4	1,933.2	5.23	370.961	
1,000.0	998.9	1,409.2	1,386.1	1.9	4.7	134.45	1,600.9	958.2	1,925.8	1,919.9	5.94	324.070	
1,100.0	1,098.7	1,501.2	1,474.4	2.1	5.2	133.96	1,598.4	932.6	1,912.8	1,906.3	6.55	291.997	
1,200.0	1,198.5	1,581.2	1,551.1	2.3	5.6	133.50	1,597.0	910.1	1,900.7	1,893.6	7.11	267.224	
1,300.0	1,298.3	1,671.9	1,638.4	2.5	6.1	133.00	1,595.9	885.4	1,889.6	1,881.9	7.72	244.810	
1,400.0	1,398.1	1,780.5	1,742.8	2.7	6.7	132.39	1,593.9	855.7	1,878.2	1,869.8	8.43	222.763	
1,500.0	1,497.9	1,889.3	1,846.9	2.9	7.3	131.71	1,592.9	823.9	1,866.8	1,857.6	9.19	203.243	
1,600.0	1,597.7	1,984.9	1,938.1	3.1	7.8	131.08	1,591.8	795.4	1,855.1	1,845.2	9.88	187.763	
1,700.0	1,697.5	2,097.4	2,045.8	3.3	8.4	130.40	1,589.1	763.0	1,843.0	1,832.4	10.62	173.513	
1,800.0	1,797.3	2,168.0	2,113.7	3.5	8.8	129.99	1,587.5	743.8	1,832.0	1,820.8	11.16	164.191	
1,900.0	1,897.1	2,308.5	2,248.0	3.7	9.6	129.07	1,585.3	702.6	1,820.9	1,808.8	12.12	150.202	
2,000.0	1,996.9	2,391.3	2,326.7	3.9	10.1	128.50	1,583.1	677.1	1,808.5	1,795.7	12.79	141.432	
2,100.0	2,096.7	2,456.1	2,388.4	4.1	10.5	128.03	1,582.7	657.2	1,798.0	1,784.6	13.36	134.620	
2,200.0	2,196.5	2,527.6	2,456.7	4.3	10.8	127.51	1,583.3	635.8	1,789.4	1,775.4	13.96	128.158	
2,300.0	2,296.3	2,623.4	2,548.3	4.5	11.4	126.83	1,584.3	608.0	1,781.7	1,767.0	14.70	121.205	
2,400.0	2,396.1	2,715.0	2,636.0	4.7	11.9	126.18	1,585.6	581.6	1,774.6	1,759.2	15.42	115.061	
2,500.0	2,495.9	2,830.4	2,746.4	4.9	12.5	125.35	1,586.7	548.1	1,767.3	1,751.0	16.28	108.548	
2,600.0	2,595.7	2,947.7	2,859.0	5.2	13.1	124.56	1,586.0	515.1	1,759.3	1,742.2	17.11	102.794	
2,700.0	2,695.5	3,035.5	2,943.5	5.4	13.6	124.00	1,584.8	491.3	1,751.1	1,733.4	17.78	98.500	
2,800.0	2,795.3	3,165.7	3,068.7	5.6	14.3	123.16	1,581.3	455.6	1,741.8	1,723.1	18.68	93.243	
2,900.0	2,895.1	3,246.7	3,146.3	5.8	14.7	122.60	1,579.9	432.6	1,733.3	1,714.0	19.34	89.625	
3,000.0	2,994.9	3,338.4	3,234.2	6.0	15.2	121.95	1,578.5	406.4	1,725.2	1,705.1	20.06	85.983	
3,100.0	3,094.7	3,423.2	3,315.6	6.2	15.7	121.35	1,578.0	382.5	1,718.4	1,697.6	20.74	82.839	
3,200.0	3,194.5	3,516.0	3,404.9	6.4	16.1	120.72	1,577.0	357.4	1,711.8	1,690.3	21.44	79.821	
3,300.0	3,294.3	3,588.9	3,475.2	6.6	16.5	120.25	1,576.9	338.4	1,706.5	1,684.5	22.05	77.405	
3,400.0	3,394.1	3,663.2	3,546.7	6.8	16.9	119.71	1,578.3	318.1	1,703.0	1,680.3	22.69	75.054	
3,500.0	3,493.9	3,792.7	3,670.9	7.0	17.6	118.73	1,581.3	281.4	1,700.1	1,676.4	23.66	71.853	
3,600.0	3,593.8	3,914.0	3,787.4	7.2	18.3	117.86	1,580.8	247.8	1,694.7	1,670.1	24.56	68.997	
3,700.0	3,693.6	4,001.0	3,870.9	7.4	18.7	117.22	1,580.5	223.3	1,689.7	1,664.5	25.28	66.842	
3,800.0	3,793.4	4,123.3	3,987.7	7.6	19.4	116.26	1,580.0	187.3	1,684.7	1,658.5	26.24	64.205	
3,900.0	3,893.2	4,252.3	4,111.1	7.8	20.1	115.28	1,577.2	149.6	1,678.3	1,651.0	27.21	61.681	
4,000.0	3,993.0	4,315.6	4,171.7	8.0	20.5	114.80	1,575.6	131.4	1,672.0	1,644.2	27.79	60.156	
4,100.0	4,092.8	4,384.6	4,237.8	8.2	20.9	114.26	1,575.5	111.6	1,668.2	1,639.8	28.40	58.735	
4,200.0	4,192.6	4,467.0	4,317.2	8.4	21.3	113.68	1,575.8	89.6	1,665.7	1,636.7	29.04	57.349	
4,300.0	4,292.4	4,543.5	4,391.6	8.7	21.6	113.23	1,576.6	71.9	1,664.6	1,635.0	29.60	56.233	
4,329.6	4,321.9	4,567.2	4,414.8	8.7	21.7	113.10	1,576.9	67.0	1,664.6	1,634.8	29.76	55.931	
4,400.0	4,392.2	4,625.5	4,472.0	8.9	21.9	112.83	1,577.8	55.6	1,664.9	1,634.7	30.14	55.239	
4,500.0	4,492.0	4,717.1	4,562.2	9.1	22.2	112.46	1,579.4	39.8	1,665.9	1,635.2	30.67	54.312	
4,600.0	4,591.8	4,810.6	4,654.6	9.3	22.4	112.16	1,581.1	25.7	1,667.4	1,636.2	31.18	53.482	
4,700.0	4,691.6	4,902.6	4,745.7	9.5	22.7	111.91	1,582.8	13.3	1,669.4	1,637.7	31.65	52.742	
4,800.0	4,791.4	4,996.1	4,838.6	9.7	22.9	111.71	1,584.8	2.2	1,671.9	1,639.8	32.10	52.081	
4,900.0	4,891.2	5,102.6	4,944.5	9.9	23.2	111.54	1,586.7	-8.9	1,674.3	1,641.8	32.56	51.422	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 - SU											Offset Site Error: 0.0 ft		
Survey Program: 132-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,000.0	4,991.0	5,201.4	5,042.8	10.1	23.4	111.41	1,588.1	-18.1	1,676.5	1,643.5	32.98	50.837	
5,100.0	5,090.8	5,286.2	5,127.4	10.3	23.5	111.35	1,589.5	-24.7	1,679.2	1,645.9	33.34	50.371	
5,200.0	5,190.6	5,380.1	5,221.1	10.5	23.7	111.34	1,591.5	-30.4	1,682.7	1,649.0	33.69	49.944	
5,300.0	5,290.4	5,483.3	5,324.1	10.7	23.8	111.37	1,593.6	-35.3	1,686.2	1,652.1	34.03	49.544	
5,400.0	5,390.2	5,583.5	5,424.2	10.9	23.9	111.43	1,595.2	-39.0	1,689.5	1,655.2	34.36	49.175	
5,500.0	5,490.0	5,680.8	5,521.5	11.1	24.0	111.51	1,596.8	-42.3	1,692.9	1,658.2	34.68	48.821	
5,600.0	5,589.8	5,769.1	5,609.7	11.3	24.1	111.58	1,598.6	-44.9	1,696.8	1,661.8	34.98	48.510	
5,700.0	5,689.6	5,861.4	5,701.9	11.5	24.2	111.67	1,601.1	-47.4	1,701.3	1,666.0	35.28	48.219	
5,800.0	5,789.4	5,965.1	5,805.6	11.7	24.4	111.77	1,603.9	-49.9	1,705.8	1,670.2	35.60	47.921	
5,900.0	5,889.2	6,068.3	5,908.7	11.9	24.5	111.89	1,606.3	-52.1	1,710.2	1,674.3	35.89	47.645	
6,000.0	5,989.0	6,171.0	6,011.3	12.2	24.5	112.04	1,608.4	-53.3	1,714.3	1,678.2	36.18	47.389	
6,100.0	6,088.8	6,273.1	6,113.5	12.4	24.6	112.20	1,610.3	-54.1	1,718.4	1,681.9	36.47	47.118	
6,200.0	6,188.6	6,374.4	6,214.7	12.6	24.7	112.34	1,612.1	-55.4	1,722.3	1,685.5	36.77	46.842	
6,300.0	6,288.4	6,471.2	6,311.5	12.8	24.8	112.47	1,613.9	-57.0	1,726.3	1,689.2	37.07	46.565	
6,400.0	6,388.2	6,570.7	6,411.0	13.0	25.0	112.58	1,616.0	-59.0	1,730.4	1,693.0	37.38	46.288	
6,500.0	6,488.0	6,675.0	6,515.3	13.2	25.1	112.69	1,618.1	-61.4	1,734.4	1,696.7	37.71	45.998	
6,600.0	6,587.9	6,772.0	6,612.1	13.4	25.2	112.79	1,620.0	-63.8	1,738.3	1,700.2	38.02	45.724	
6,700.0	6,687.7	6,865.6	6,705.7	13.6	25.3	112.89	1,622.0	-65.8	1,742.5	1,704.1	38.32	45.470	
6,800.0	6,787.5	6,961.5	6,801.6	13.8	25.4	112.99	1,624.4	-67.7	1,747.0	1,708.4	38.62	45.229	
6,900.0	6,887.3	7,057.0	6,897.0	14.0	25.5	113.11	1,626.9	-69.3	1,751.7	1,712.8	38.93	44.999	
7,000.0	6,987.1	7,155.5	6,995.5	14.2	25.6	113.23	1,629.6	-70.7	1,756.6	1,717.4	39.22	44.783	
7,100.0	7,086.9	7,254.5	7,094.5	14.4	25.7	113.37	1,632.4	-71.7	1,761.6	1,722.1	39.52	44.575	
7,173.7	7,160.4	7,331.5	7,171.5	14.6	25.8	113.48	1,634.4	-72.4	1,765.2	1,725.5	39.74	44.419	
7,200.0	7,186.7	7,359.1	7,199.0	14.6	25.8	73.24	1,635.1	-72.6	1,765.9	1,726.1	39.80	44.371	
7,250.0	7,236.4	7,406.0	7,245.9	14.7	25.9	38.43	1,636.2	-73.0	1,763.9	1,724.2	39.71	44.420	
7,300.0	7,285.6	7,457.1	7,296.9	14.8	25.9	28.12	1,637.4	-73.3	1,757.6	1,718.2	39.36	44.652	
7,350.0	7,334.0	7,502.7	7,342.6	14.9	25.9	23.82	1,638.6	-73.5	1,747.2	1,708.4	38.76	45.076	
7,400.0	7,381.0	7,547.3	7,387.1	15.0	26.0	21.74	1,639.7	-73.5	1,732.8	1,694.9	37.92	45.694	
7,450.0	7,426.5	7,590.7	7,430.5	15.0	26.0	20.78	1,640.9	-73.4	1,714.4	1,677.6	36.86	46.517	
7,500.0	7,470.0	7,633.4	7,473.2	15.1	26.0	20.52	1,642.1	-73.3	1,692.3	1,656.7	35.58	47.557	
7,550.0	7,511.2	7,674.0	7,513.8	15.2	26.1	20.80	1,643.3	-73.1	1,666.5	1,632.4	34.13	48.827	
7,600.0	7,549.7	7,712.2	7,551.9	15.4	26.1	21.56	1,644.5	-73.0	1,637.3	1,604.7	32.53	50.332	
7,650.0	7,585.4	7,747.7	7,587.5	15.5	26.1	22.80	1,645.6	-72.8	1,604.8	1,574.0	30.83	52.061	
7,700.0	7,617.9	7,775.2	7,615.0	15.7	26.2	24.51	1,646.5	-72.7	1,569.5	1,540.4	29.08	53.967	
7,750.0	7,647.0	7,799.0	7,638.8	15.9	26.2	26.82	1,647.3	-72.6	1,531.6	1,504.2	27.38	55.929	
7,800.0	7,672.4	7,820.3	7,660.0	16.2	26.2	29.94	1,648.2	-72.5	1,491.4	1,465.5	25.86	57.671	
7,850.0	7,694.0	7,838.9	7,678.6	16.5	26.2	34.14	1,649.1	-72.5	1,449.1	1,424.4	24.70	58.673	
7,900.0	7,711.6	7,854.6	7,694.3	16.8	26.2	39.80	1,649.8	-72.4	1,405.2	1,381.0	24.17	58.142	
7,950.0	7,725.0	7,867.3	7,707.0	17.2	26.3	47.44	1,650.5	-72.4	1,359.8	1,335.3	24.58	55.329	
8,000.0	7,734.2	7,876.8	7,716.5	17.6	26.3	57.63	1,651.0	-72.3	1,313.4	1,287.4	26.08	50.371	
8,050.0	7,739.1	7,883.0	7,722.7	18.1	26.3	70.62	1,651.3	-72.3	1,266.3	1,238.0	28.29	44.759	
8,081.4	7,740.0	7,885.2	7,724.8	18.3	26.3	79.91	1,651.5	-72.3	1,236.5	1,206.9	29.62	41.748	
8,100.0	7,740.0	7,886.0	7,725.6	18.5	26.3	80.03	1,651.5	-72.3	1,218.8	1,189.0	29.83	40.860	
8,200.0	7,740.0	7,890.7	7,730.3	19.6	26.3	80.72	1,651.8	-72.3	1,124.3	1,093.3	31.03	36.230	
8,300.0	7,740.0	7,895.5	7,735.1	20.7	26.3	81.44	1,652.0	-72.2	1,030.8	998.5	32.33	31.883	
8,400.0	7,740.0	7,900.5	7,740.1	21.9	26.3	82.18	1,652.3	-72.2	938.7	905.0	33.71	27.847	
8,500.0	7,740.0	7,905.6	7,745.2	23.2	26.3	82.94	1,652.6	-72.2	848.3	813.1	35.15	24.133	
8,600.0	7,740.0	7,910.9	7,750.5	24.6	26.3	83.74	1,653.0	-72.2	760.2	723.6	36.64	20.745	
8,700.0	7,740.0	7,916.4	7,756.0	25.9	26.3	84.56	1,653.3	-72.2	675.4	637.2	38.18	17.689	
8,800.0	7,740.0	7,922.1	7,761.7	27.4	26.3	85.42	1,653.6	-72.2	595.3	555.6	39.76	14.975	
8,900.0	7,740.0	7,930.0	7,769.5	28.8	26.3	86.60	1,654.1	-72.1	522.1	480.7	41.38	12.617	
9,000.0	7,740.0	7,930.0	7,769.5	30.3	26.3	86.60	1,654.1	-72.1	459.0	416.0	42.93	10.690	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 - SU												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
9,100.0	7,740.0	7,940.4	7,779.9	31.9	26.3	88.17	1,654.8	-72.1	410.7	366.0	44.62	9.203	
9,200.0	7,740.0	7,946.9	7,786.4	33.4	26.3	89.15	1,655.3	-72.1	382.8	336.5	46.27	8.273	
9,260.9	7,740.0	7,951.0	7,790.5	34.4	26.3	89.77	1,655.5	-72.0	378.0	330.7	47.28	7.993 CC, ES	
9,300.0	7,740.0	7,953.6	7,793.1	35.0	26.3	90.17	1,655.7	-72.0	380.0	332.0	47.93	7.927 SF	
9,400.0	7,740.0	7,960.6	7,800.1	36.6	26.3	91.23	1,656.2	-72.0	402.6	353.0	49.59	8.119	
9,500.0	7,740.0	7,967.8	7,807.3	38.2	26.3	92.32	1,656.7	-72.0	446.9	395.7	51.25	8.721	
9,600.0	7,740.0	7,975.3	7,814.8	39.8	26.3	93.45	1,657.3	-71.9	507.2	454.3	52.89	9.589	
9,700.0	7,740.0	7,983.1	7,822.6	41.4	26.4	94.62	1,657.8	-71.9	578.5	524.0	54.53	10.609	
9,800.0	7,740.0	7,991.2	7,830.6	43.0	26.4	95.83	1,658.4	-71.9	657.2	601.1	56.15	11.706	
9,900.0	7,740.0	7,999.7	7,839.0	44.7	26.4	97.09	1,659.1	-71.8	741.0	683.3	57.74	12.834	
10,000.0	7,740.0	8,008.4	7,847.8	46.3	26.4	98.39	1,659.8	-71.8	828.3	769.0	59.30	13.969	
10,100.0	7,740.0	8,017.5	7,856.9	48.0	26.4	99.73	1,660.5	-71.7	918.2	857.4	60.82	15.096	
10,200.0	7,740.0	8,027.1	7,866.3	49.7	26.4	101.12	1,661.2	-71.7	1,009.8	947.5	62.30	16.208	
10,300.0	7,740.0	8,037.0	7,876.2	51.3	26.4	102.55	1,662.1	-71.6	1,102.9	1,039.2	63.74	17.304	
10,400.0	7,740.0	8,047.4	7,886.6	53.0	26.4	104.03	1,662.9	-71.5	1,197.0	1,131.9	65.11	18.385	
10,500.0	7,740.0	8,058.2	7,897.4	54.7	26.4	105.56	1,663.9	-71.5	1,291.9	1,225.5	66.41	19.452	
10,600.0	7,740.0	8,069.5	7,908.7	56.4	26.4	107.13	1,664.9	-71.4	1,387.5	1,319.8	67.65	20.510	
10,700.0	7,740.0	8,081.4	7,920.5	58.1	26.4	108.74	1,666.0	-71.3	1,483.5	1,414.8	68.80	21.564	
10,800.0	7,740.0	8,093.9	7,932.9	59.8	26.5	110.40	1,667.1	-71.2	1,580.0	1,510.2	69.86	22.618	
10,900.0	7,740.0	8,104.0	7,943.0	61.5	26.5	111.73	1,668.1	-71.1	1,676.9	1,605.9	70.96	23.630	
11,000.0	7,740.0	8,104.0	7,943.0	63.2	26.5	111.73	1,668.1	-71.1	1,774.0	1,701.5	72.56	24.451	
11,105.4	7,740.0	8,104.0	7,943.0	65.0	26.5	111.73	1,668.1	-71.1	1,876.8	1,802.5	74.24	25.281	
11,191.0	7,740.0	8,127.2	7,966.1	66.4	26.5	116.38	1,670.2	-71.0	1,960.4	1,886.8	75.53	26.661	
11,200.0	7,740.0	8,127.9	7,966.7	66.6	26.5	116.46	1,670.3	-71.0	1,969.2	1,895.6	75.63	26.745	
11,300.0	7,740.0	8,134.9	7,973.7	68.3	26.5	117.37	1,670.9	-70.9	2,067.3	1,992.6	76.68	27.681	
11,400.0	7,740.0	8,141.7	7,980.6	70.0	26.5	118.24	1,671.6	-70.9	2,165.5	2,089.8	77.72	28.600	
11,500.0	7,740.0	8,148.4	7,987.2	71.7	26.5	119.07	1,672.2	-70.8	2,263.8	2,187.1	78.74	29.502	
11,600.0	7,740.0	8,155.0	7,993.8	73.4	26.5	119.87	1,672.7	-70.8	2,362.3	2,284.6	79.74	30.388	
11,700.0	7,740.0	8,161.4	8,000.1	75.1	26.5	120.65	1,673.3	-70.8	2,460.9	2,382.1	80.73	31.259	
11,800.0	7,740.0	8,167.6	8,006.4	76.9	26.5	121.39	1,673.8	-70.7	2,559.5	2,479.8	81.70	32.115	
11,900.0	7,740.0	8,173.7	8,012.4	78.6	26.5	122.10	1,674.3	-70.7	2,658.3	2,577.6	82.66	32.957	
12,000.0	7,740.0	8,179.7	8,018.4	80.3	26.5	122.79	1,674.9	-70.7	2,757.1	2,675.5	83.61	33.785	
12,100.0	7,740.0	8,185.6	8,024.2	82.0	26.5	123.46	1,675.3	-70.6	2,855.9	2,773.4	84.54	34.600	
12,200.0	7,740.0	8,191.3	8,029.9	83.8	26.5	124.10	1,675.8	-70.6	2,954.9	2,871.4	85.47	35.401	
12,300.0	7,740.0	8,196.9	8,035.5	85.5	26.6	124.71	1,676.3	-70.6	3,053.9	2,969.5	86.38	36.190	
12,400.0	7,740.0	8,202.3	8,040.9	87.2	26.6	125.31	1,676.7	-70.6	3,152.9	3,067.6	87.29	36.967	
12,500.0	7,740.0	8,207.7	8,046.3	88.9	26.6	125.88	1,677.1	-70.5	3,252.0	3,165.8	88.19	37.731	
12,600.0	7,740.0	8,213.0	8,051.5	90.7	26.6	126.43	1,677.5	-70.5	3,351.1	3,264.0	89.08	38.484	
12,700.0	7,740.0	8,218.1	8,056.6	92.4	26.6	126.97	1,677.9	-70.5	3,450.3	3,362.3	89.96	39.225	
12,800.0	7,740.0	8,223.1	8,061.7	94.1	26.6	127.49	1,678.3	-70.5	3,549.5	3,460.7	90.84	39.955	
12,900.0	7,740.0	8,228.1	8,066.6	95.9	26.6	127.99	1,678.7	-70.5	3,648.7	3,559.0	91.71	40.675	
13,000.0	7,740.0	8,232.9	8,071.4	97.6	26.6	128.47	1,679.1	-70.5	3,748.0	3,657.4	92.57	41.383	
13,100.0	7,740.0	8,237.6	8,076.1	99.3	26.6	128.94	1,679.4	-70.5	3,847.3	3,755.9	93.42	42.081	
13,200.0	7,740.0	8,242.3	8,080.8	101.1	26.6	129.39	1,679.8	-70.5	3,946.6	3,854.3	94.28	42.769	
13,300.0	7,740.0	8,279.0	8,117.4	102.8	26.6	132.77	1,682.4	-70.4	4,046.2	3,956.5	95.13	43.434	
13,400.0	7,740.0	8,279.0	8,117.4	104.5	26.6	132.77	1,682.4	-70.4	4,145.5	4,054.5	96.03	44.090	
13,500.0	7,740.0	8,279.0	8,117.4	106.3	26.6	132.77	1,682.4	-70.4	4,244.8	4,152.6	96.93	44.746	
13,600.0	7,740.0	8,279.0	8,117.4	108.0	26.6	132.77	1,682.4	-70.4	4,344.2	4,250.7	97.83	45.402	
13,700.0	7,740.0	8,279.0	8,117.4	109.8	26.6	132.77	1,682.4	-70.4	4,443.6	4,348.8	98.73	46.058	
13,800.0	7,740.0	8,279.0	8,117.4	111.5	26.6	132.77	1,682.4	-70.4	4,543.0	4,447.0	99.63	46.714	
13,900.0	7,740.0	8,279.0	8,117.4	113.2	26.6	132.77	1,682.4	-70.4	4,642.5	4,545.1	100.53	47.370	
14,000.0	7,740.0	8,279.0	8,117.4	115.0	26.6	132.77	1,682.4	-70.4	4,742.0	4,643.3	101.43	48.026	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 - SU				Offset Site Error:		0.0 ft	
Survey Program:										132-Geolink MWD				Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor						
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis						
14,100.0	7,740.0	8,279.0	8,117.4	116.7	26.6	132.77	1,682.4	-70.4	4,841.5	4,741.5	99.91	48.458					
14,200.0	7,740.0	8,279.0	8,117.4	118.5	26.6	132.77	1,682.4	-70.4	4,941.0	4,839.8	101.19	48.827					
14,300.0	7,740.0	8,279.0	8,117.4	120.2	26.6	132.77	1,682.4	-70.4	5,040.5	4,938.0	102.48	49.186					
14,400.0	7,740.0	8,279.0	8,117.4	121.9	26.6	132.77	1,682.4	-70.4	5,140.1	5,036.3	103.76	49.537					
14,500.0	7,740.0	8,279.0	8,117.4	123.7	26.6	132.77	1,682.4	-70.4	5,239.6	5,134.6	105.05	49.878					

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 - NO											Offset Site Error: 0.0 ft		
Survey Program: 8325-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	88.0	88.0	0.0	0.2	-35.41	131.5	-93.5	161.3				
100.0	100.0	188.0	188.0	0.2	0.3	-35.41	131.5	-93.5	161.3	160.9	0.48	336.012	
200.0	200.0	288.0	288.0	0.3	0.5	-35.41	131.5	-93.5	161.3	160.5	0.83	194.567	
300.0	300.0	388.0	388.0	0.5	0.7	84.90	131.5	-93.5	161.3	160.1	1.18	136.754	
400.0	400.0	488.0	488.0	0.7	0.9	85.83	131.5	-93.5	161.0	159.5	1.53	105.027	
500.0	499.9	587.9	587.9	0.9	1.0	87.38	131.5	-93.5	160.8	158.9	1.90	84.824	
600.0	599.7	687.7	687.7	1.1	1.2	89.56	131.5	-93.5	160.6	158.4	2.27	70.783	
700.0	699.5	787.5	787.5	1.3	1.4	77.87	131.5	-93.5	159.9	157.3	2.64	60.523	
722.7	722.1	810.1	810.1	1.3	1.4	74.85	131.5	-93.5	159.6	156.9	2.73	58.516	
800.0	799.3	887.3	887.3	1.5	1.5	76.54	131.5	-93.5	158.4	155.4	3.02	52.499	
900.0	899.1	987.1	987.1	1.7	1.7	78.76	131.5	-93.5	157.1	153.7	3.39	46.284	
1,000.0	998.9	1,086.9	1,086.9	1.9	1.9	81.02	131.5	-93.5	156.0	152.2	3.77	41.362	
1,100.0	1,098.7	1,186.7	1,186.7	2.1	2.1	83.30	131.5	-93.5	155.1	151.0	4.15	37.388	
1,200.0	1,198.5	1,286.5	1,286.5	2.3	2.2	85.60	131.5	-93.5	154.5	150.0	4.53	34.132	
1,300.0	1,298.3	1,386.3	1,386.3	2.5	2.4	87.92	131.5	-93.5	154.1	149.2	4.90	31.429	
1,389.3	1,387.4	1,475.4	1,475.4	2.7	2.6	90.00	131.5	-93.5	154.0	148.8	5.24	29.389 CC	
1,400.0	1,398.1	1,486.1	1,486.1	2.7	2.6	90.25	131.5	-93.5	154.0	148.8	5.28	29.164	
1,500.0	1,497.9	1,585.9	1,585.9	2.9	2.8	92.58	131.5	-93.5	154.2	148.5	5.66	27.249 ES	
1,600.0	1,597.7	1,685.7	1,685.7	3.1	2.9	94.89	131.5	-93.5	154.6	148.6	6.03	25.620	
1,700.0	1,697.5	1,785.5	1,785.5	3.3	3.1	97.19	131.5	-93.5	155.3	148.9	6.41	24.226	
1,800.0	1,797.3	1,885.3	1,885.3	3.5	3.3	99.47	131.5	-93.5	156.2	149.4	6.78	23.028	
1,900.0	1,897.1	1,985.1	1,985.1	3.7	3.5	101.72	131.5	-93.5	157.3	150.2	7.15	21.994	
2,000.0	1,996.9	2,084.9	2,084.9	3.9	3.6	103.93	131.5	-93.5	158.7	151.2	7.52	21.099	
2,100.0	2,096.7	2,184.7	2,184.7	4.1	3.8	106.10	131.5	-93.5	160.3	152.5	7.89	20.322	
2,200.0	2,196.5	2,284.5	2,284.5	4.3	4.0	108.23	131.5	-93.5	162.2	153.9	8.26	19.646	
2,300.0	2,296.3	2,384.3	2,384.3	4.5	4.2	110.30	131.5	-93.5	164.3	155.7	8.62	19.058	
2,400.0	2,396.1	2,484.1	2,484.1	4.7	4.3	112.32	131.5	-93.5	166.6	157.6	8.98	18.544	
2,500.0	2,495.9	2,583.9	2,583.9	4.9	4.5	114.28	131.5	-93.5	169.0	159.7	9.34	18.096	
2,600.0	2,595.7	2,683.7	2,683.7	5.2	4.7	116.18	131.5	-93.5	171.7	162.0	9.70	17.704	
2,700.0	2,695.5	2,783.5	2,783.5	5.4	4.9	118.03	131.5	-93.5	174.6	164.5	10.06	17.361	
2,800.0	2,795.3	2,883.3	2,883.3	5.6	5.0	119.81	131.5	-93.5	177.6	167.2	10.41	17.061	
2,900.0	2,895.1	2,983.1	2,983.1	5.8	5.2	121.53	131.5	-93.5	180.8	170.1	10.76	16.799	
3,000.0	2,994.9	3,082.9	3,082.9	6.0	5.4	123.19	131.5	-93.5	184.2	173.1	11.11	16.570	
3,100.0	3,094.7	3,182.7	3,182.7	6.2	5.6	124.79	131.5	-93.5	187.7	176.2	11.47	16.370	
3,200.0	3,194.5	3,282.5	3,282.5	6.4	5.7	126.33	131.5	-93.5	191.3	179.5	11.81	16.195	
3,300.0	3,294.3	3,382.3	3,382.3	6.6	5.9	127.81	131.5	-93.5	195.1	183.0	12.16	16.043	
3,400.0	3,394.1	3,482.1	3,482.1	6.8	6.1	129.24	131.5	-93.5	199.0	186.5	12.51	15.910	
3,500.0	3,493.9	3,581.9	3,581.9	7.0	6.3	130.60	131.5	-93.5	203.1	190.2	12.86	15.795	
3,600.0	3,593.8	3,681.8	3,681.8	7.2	6.4	131.92	131.5	-93.5	207.2	194.0	13.20	15.695	
3,700.0	3,693.6	3,781.6	3,781.6	7.4	6.6	133.18	131.5	-93.5	211.4	197.9	13.55	15.609	
3,800.0	3,793.4	3,881.4	3,881.4	7.6	6.8	134.39	131.5	-93.5	215.8	201.9	13.89	15.534	
3,900.0	3,893.2	3,981.2	3,981.2	7.8	6.9	135.56	131.5	-93.5	220.2	206.0	14.23	15.471	
4,000.0	3,993.0	4,081.0	4,081.0	8.0	7.1	136.68	131.5	-93.5	224.7	210.2	14.58	15.416	
4,100.0	4,092.8	4,180.8	4,180.8	8.2	7.3	137.75	131.5	-93.5	229.3	214.4	14.92	15.370	
4,200.0	4,192.6	4,280.6	4,280.6	8.4	7.5	138.78	131.5	-93.5	234.0	218.8	15.26	15.332	
4,300.0	4,292.4	4,380.4	4,380.4	8.7	7.6	139.77	131.5	-93.5	238.8	223.2	15.61	15.300	
4,400.0	4,392.2	4,480.2	4,480.2	8.9	7.8	140.72	131.5	-93.5	243.6	227.7	15.95	15.274	
4,500.0	4,492.0	4,580.0	4,580.0	9.1	8.0	141.64	131.5	-93.5	248.5	232.2	16.29	15.253	
4,600.0	4,591.8	4,679.8	4,679.8	9.3	8.2	142.52	131.5	-93.5	253.4	236.8	16.63	15.236	
4,700.0	4,691.6	4,779.6	4,779.6	9.5	8.3	143.36	131.5	-93.5	258.4	241.5	16.98	15.224	
4,800.0	4,791.4	4,879.4	4,879.4	9.7	8.5	144.17	131.5	-93.5	263.5	246.2	17.32	15.216	
4,900.0	4,891.2	4,979.2	4,979.2	9.9	8.7	144.96	131.5	-93.5	268.6	251.0	17.66	15.210	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 - NO												Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,991.0	5,079.0	5,079.0	10.1	8.9	145.71	131.5	-93.5	273.8	255.8	18.00	15.208	
5,100.0	5,090.8	5,178.8	5,178.8	10.3	9.0	146.43	131.5	-93.5	279.0	260.6	18.34	15.208	
5,200.0	5,190.6	5,278.6	5,278.6	10.5	9.2	147.13	131.5	-93.5	284.2	265.5	18.69	15.210	
5,300.0	5,290.4	5,378.4	5,378.4	10.7	9.4	147.81	131.5	-93.5	289.5	270.5	19.03	15.214	
5,400.0	5,390.2	5,478.2	5,478.2	10.9	9.6	148.45	131.5	-93.5	294.8	275.5	19.37	15.220	
5,500.0	5,490.0	5,578.0	5,578.0	11.1	9.7	149.08	131.5	-93.5	300.2	280.5	19.71	15.228	
5,600.0	5,589.8	5,677.8	5,677.8	11.3	9.9	149.68	131.5	-93.5	305.6	285.5	20.06	15.237	
5,700.0	5,689.6	5,777.6	5,777.6	11.5	10.1	150.27	131.5	-93.5	311.0	290.6	20.40	15.247	
5,800.0	5,789.4	5,877.4	5,877.4	11.7	10.3	150.83	131.5	-93.5	316.5	295.7	20.74	15.259	
5,900.0	5,889.2	5,977.2	5,977.2	11.9	10.4	151.37	131.5	-93.5	322.0	300.9	21.08	15.271	
6,000.0	5,989.0	6,077.0	6,077.0	12.2	10.6	151.90	131.5	-93.5	327.5	306.1	21.43	15.284	
6,100.0	6,088.8	6,176.8	6,176.8	12.4	10.8	152.40	131.5	-93.5	333.0	311.3	21.77	15.298	
6,200.0	6,188.6	6,276.6	6,276.6	12.6	11.0	152.90	131.5	-93.5	338.6	316.5	22.11	15.313	
6,300.0	6,288.4	6,376.4	6,376.4	12.8	11.1	153.37	131.5	-93.5	344.2	321.7	22.46	15.328	
6,400.0	6,388.2	6,476.2	6,476.2	13.0	11.3	153.83	131.5	-93.5	349.8	327.0	22.80	15.343	
6,500.0	6,488.0	6,576.0	6,576.0	13.2	11.5	154.28	131.5	-93.5	355.5	332.3	23.14	15.359	
6,600.0	6,587.9	6,675.9	6,675.9	13.4	11.7	154.71	131.5	-93.5	361.1	337.6	23.49	15.376	
6,700.0	6,687.7	6,775.7	6,775.7	13.6	11.8	155.13	131.5	-93.5	366.8	343.0	23.83	15.392	
6,800.0	6,787.5	6,875.5	6,875.5	13.8	12.0	155.53	131.5	-93.5	372.5	348.3	24.17	15.409	
6,900.0	6,887.3	6,975.3	6,975.3	14.0	12.2	155.92	131.5	-93.5	378.2	353.7	24.52	15.426	
7,000.0	6,987.1	7,075.1	7,075.1	14.2	12.3	156.31	131.5	-93.5	383.9	359.1	24.86	15.443	
7,100.0	7,086.9	7,174.9	7,174.9	14.4	12.5	156.68	131.5	-93.5	389.7	364.5	25.21	15.461	
7,173.7	7,160.4	7,248.4	7,248.4	14.6	12.7	156.94	131.5	-93.5	393.9	368.5	25.46	15.474	
7,200.0	7,186.7	7,274.7	7,274.7	14.6	12.7	116.74	131.5	-93.5	395.1	369.6	25.56	15.458	
7,250.0	7,236.4	7,324.4	7,324.4	14.7	12.8	82.47	131.5	-93.5	395.4	369.7	25.72	15.377	
7,300.0	7,285.6	7,373.6	7,373.6	14.8	12.9	73.29	131.5	-93.5	393.4	367.6	25.83	15.233	
7,350.0	7,334.0	7,422.0	7,422.0	14.9	13.0	70.68	131.5	-93.5	389.3	363.3	25.91	15.023	
7,400.0	7,381.0	7,469.0	7,469.0	15.0	13.0	70.84	131.5	-93.5	383.4	357.4	25.99	14.750	
7,450.0	7,426.5	7,514.5	7,514.5	15.0	13.1	72.59	131.5	-93.5	376.2	350.1	26.10	14.417	
7,500.0	7,470.0	7,558.0	7,558.0	15.1	13.2	75.41	131.5	-93.5	368.5	342.2	26.24	14.041	
7,550.0	7,511.2	7,599.2	7,599.2	15.2	13.3	78.96	131.5	-93.5	360.9	334.5	26.44	13.652	
7,600.0	7,549.7	7,637.7	7,637.7	15.4	13.3	82.91	131.5	-93.5	354.5	327.9	26.67	13.294	
7,650.0	7,585.4	7,673.4	7,673.4	15.5	13.4	86.94	131.5	-93.5	350.2	323.3	26.91	13.015	
7,689.7	7,611.5	7,699.5	7,699.5	15.7	13.4	90.00	131.5	-93.5	349.1	322.0	27.10	12.881	
7,700.0	7,617.9	7,705.9	7,705.9	15.7	13.4	90.75	131.5	-93.5	349.2	322.0	27.14	12.864 SF	
7,750.0	7,647.0	7,735.0	7,735.0	15.9	13.5	94.04	131.5	-93.5	352.2	324.8	27.37	12.870	
7,800.0	7,672.4	7,760.4	7,760.4	16.2	13.5	96.58	131.5	-93.5	360.1	332.5	27.60	13.048	
7,850.0	7,694.0	7,782.0	7,782.0	16.5	13.6	98.19	131.5	-93.5	373.3	345.4	27.88	13.388	
7,900.0	7,711.6	7,799.6	7,799.6	16.8	13.6	98.71	131.5	-93.5	391.7	363.5	28.25	13.867	
7,950.0	7,725.0	7,813.0	7,813.0	17.2	13.6	98.04	131.5	-93.5	415.2	386.4	28.73	14.452	
8,000.0	7,734.2	7,822.2	7,822.2	17.6	13.7	96.08	131.5	-93.5	443.0	413.7	29.29	15.121	
8,050.0	7,739.1	7,827.1	7,827.1	18.1	13.7	92.77	131.5	-93.5	474.5	444.6	29.89	15.874	
8,081.4	7,740.0	7,828.0	7,828.0	18.3	13.7	90.00	131.5	-93.5	495.8	465.6	30.22	16.406	
8,100.0	7,740.0	7,828.0	7,828.0	18.5	13.7	90.00	131.5	-93.5	508.9	478.4	30.42	16.728	
8,200.0	7,740.0	7,828.0	7,828.0	19.6	13.7	90.00	131.5	-93.5	584.4	552.9	31.56	18.517	
8,300.0	7,740.0	7,828.0	7,828.0	20.7	13.7	90.00	131.5	-93.5	666.5	633.7	32.80	20.322	
8,400.0	7,740.0	7,828.0	7,828.0	21.9	13.7	90.00	131.5	-93.5	752.9	718.8	34.11	22.074	
8,500.0	7,740.0	7,828.0	7,828.0	23.2	13.7	90.00	131.5	-93.5	842.3	806.8	35.48	23.739	
8,600.0	7,740.0	7,828.0	7,828.0	24.6	13.7	90.00	131.5	-93.5	933.8	896.9	36.90	25.304	
8,700.0	7,740.0	7,828.0	7,828.0	25.9	13.7	90.00	131.5	-93.5	1,027.0	988.6	38.37	26.764	
8,800.0	7,740.0	7,828.0	7,828.0	27.4	13.7	90.00	131.5	-93.5	1,121.3	1,081.4	39.87	28.121	
8,900.0	7,740.0	7,828.0	7,828.0	28.8	13.7	90.00	131.5	-93.5	1,216.5	1,175.1	41.41	29.380	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 - NO													Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
9,000.0	7,740.0	7,828.0	7,828.0	30.3	13.7	90.00	131.5	-93.5	1,312.4	1,269.5	42.96	30.549		
9,100.0	7,740.0	7,828.0	7,828.0	31.9	13.7	90.00	131.5	-93.5	1,408.9	1,364.4	44.54	31.633		
9,200.0	7,740.0	7,828.0	7,828.0	33.4	13.7	90.00	131.5	-93.5	1,505.9	1,459.8	46.14	32.641		
9,300.0	7,740.0	7,828.0	7,828.0	35.0	13.7	90.00	131.5	-93.5	1,603.2	1,555.5	47.75	33.577		
9,400.0	7,740.0	7,828.0	7,828.0	36.6	13.7	90.00	131.5	-93.5	1,700.9	1,651.5	49.37	34.450		
9,500.0	7,740.0	7,828.0	7,828.0	38.2	13.7	90.00	131.5	-93.5	1,798.8	1,747.8	51.01	35.264		
9,600.0	7,740.0	7,828.0	7,828.0	39.8	13.7	90.00	131.5	-93.5	1,896.9	1,844.2	52.66	36.024		
9,700.0	7,740.0	7,828.0	7,828.0	41.4	13.7	90.00	131.5	-93.5	1,995.2	1,940.9	54.31	36.736		
9,800.0	7,740.0	7,828.0	7,828.0	43.0	13.7	90.00	131.5	-93.5	2,093.7	2,037.7	55.98	37.403		
9,900.0	7,740.0	7,828.0	7,828.0	44.7	13.7	90.00	131.5	-93.5	2,192.3	2,134.6	57.65	38.030		
10,000.0	7,740.0	7,828.0	7,828.0	46.3	13.7	90.00	131.5	-93.5	2,291.0	2,231.7	59.32	38.619		
10,100.0	7,740.0	7,828.0	7,828.0	48.0	13.7	90.00	131.5	-93.5	2,389.8	2,328.8	61.01	39.174		
10,200.0	7,740.0	7,828.0	7,828.0	49.7	13.7	90.00	131.5	-93.5	2,488.8	2,426.1	62.69	39.697		
10,300.0	7,740.0	7,828.0	7,828.0	51.3	13.7	90.00	131.5	-93.5	2,587.8	2,523.4	64.39	40.192		
10,400.0	7,740.0	7,828.0	7,828.0	53.0	13.7	90.00	131.5	-93.5	2,686.9	2,620.8	66.08	40.660		
10,500.0	7,740.0	7,828.0	7,828.0	54.7	13.7	90.00	131.5	-93.5	2,786.0	2,718.2	67.78	41.103		
10,600.0	7,740.0	7,828.0	7,828.0	56.4	13.7	90.00	131.5	-93.5	2,885.2	2,815.7	69.48	41.523		
10,700.0	7,740.0	7,828.0	7,828.0	58.1	13.7	90.00	131.5	-93.5	2,984.5	2,913.3	71.19	41.922		
10,800.0	7,740.0	7,828.0	7,828.0	59.8	13.7	90.00	131.5	-93.5	3,083.8	3,010.9	72.90	42.301		
10,900.0	7,740.0	7,828.0	7,828.0	61.5	13.7	90.00	131.5	-93.5	3,183.1	3,108.5	74.61	42.663		
11,000.0	7,740.0	7,828.0	7,828.0	63.2	13.7	90.00	131.5	-93.5	3,282.5	3,206.2	76.33	43.007		
11,105.4	7,740.0	7,828.0	7,828.0	65.0	13.7	90.00	131.5	-93.5	3,387.3	3,309.2	78.13	43.352		
11,191.0	7,740.0	7,828.0	7,828.0	66.4	13.7	90.00	131.5	-93.5	3,472.5	3,392.8	79.71	43.563		
11,200.0	7,740.0	7,828.0	7,828.0	66.6	13.7	90.00	131.5	-93.5	3,481.5	3,401.6	79.87	43.591		
11,300.0	7,740.0	7,828.0	7,828.0	68.3	13.7	90.00	131.5	-93.5	3,581.1	3,499.5	81.59	43.893		
11,400.0	7,740.0	7,828.0	7,828.0	70.0	13.7	90.00	131.5	-93.5	3,680.7	3,597.4	83.31	44.182		
11,500.0	7,740.0	7,828.0	7,828.0	71.7	13.7	90.00	131.5	-93.5	3,780.4	3,695.4	85.03	44.459		
11,600.0	7,740.0	7,828.0	7,828.0	73.4	13.7	90.00	131.5	-93.5	3,880.1	3,793.3	86.76	44.724		
11,700.0	7,740.0	7,828.0	7,828.0	75.1	13.7	90.00	131.5	-93.5	3,979.8	3,891.3	88.48	44.978		
11,800.0	7,740.0	7,828.0	7,828.0	76.9	13.7	90.00	131.5	-93.5	4,079.5	3,989.3	90.21	45.222		
11,900.0	7,740.0	7,828.0	7,828.0	78.6	13.7	90.00	131.5	-93.5	4,179.2	4,087.3	91.94	45.456		
12,000.0	7,740.0	7,828.0	7,828.0	80.3	13.7	90.00	131.5	-93.5	4,279.0	4,185.3	93.67	45.682		
12,100.0	7,740.0	7,828.0	7,828.0	82.0	13.7	90.00	131.5	-93.5	4,378.7	4,283.3	95.40	45.898		
12,200.0	7,740.0	7,828.0	7,828.0	83.8	13.7	90.00	131.5	-93.5	4,478.5	4,381.3	97.13	46.107		
12,300.0	7,740.0	7,828.0	7,828.0	85.5	13.7	90.00	131.5	-93.5	4,578.2	4,479.4	98.86	46.308		
12,400.0	7,740.0	7,828.0	7,828.0	87.2	13.7	90.00	131.5	-93.5	4,678.0	4,577.4	100.60	46.502		
12,500.0	7,740.0	7,828.0	7,828.0	88.9	13.7	90.00	131.5	-93.5	4,777.8	4,675.5	102.33	46.689		
12,600.0	7,740.0	7,828.0	7,828.0	90.7	13.7	90.00	131.5	-93.5	4,877.6	4,773.5	104.07	46.869		
12,700.0	7,740.0	7,828.0	7,828.0	92.4	13.7	90.00	131.5	-93.5	4,977.4	4,871.6	105.80	47.044		
12,800.0	7,740.0	7,828.0	7,828.0	94.1	13.7	90.00	131.5	-93.5	5,077.2	4,969.7	107.54	47.212		
12,900.0	7,740.0	7,828.0	7,828.0	95.9	13.7	90.00	131.5	-93.5	5,177.1	5,067.8	109.28	47.375		
13,000.0	7,740.0	7,828.0	7,828.0	97.6	13.7	90.00	131.5	-93.5	5,276.9	5,165.9	111.02	47.533		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 WELL										Offset Site Error:		0.0 ft	
Survey Program: 100-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	33.2	33.2	0.0	0.1	45.02	801.4	801.9	1,133.7				
100.0	100.0	122.3	122.3	0.2	0.2	45.05	801.6	802.9	1,134.7	1,134.3	0.37	3,081.906	
200.0	200.0	220.6	220.6	0.3	0.4	45.11	801.9	804.9	1,136.3	1,135.6	0.72	1,583.864	
300.0	300.0	332.9	332.9	0.5	0.6	165.15	802.1	806.2	1,138.1	1,137.0	1.08	1,050.104	
400.0	400.0	436.2	436.2	0.7	0.8	165.18	802.2	806.4	1,140.8	1,139.4	1.44	793.378	
500.0	499.9	535.7	535.7	0.9	0.9	165.21	802.6	806.3	1,145.3	1,143.5	1.79	641.379	
600.0	599.7	639.3	639.3	1.1	1.1	165.27	802.7	806.2	1,151.1	1,149.0	2.14	537.608	
700.0	699.5	744.1	744.0	1.3	1.3	151.31	802.7	805.9	1,157.1	1,154.6	2.50	462.209	
722.7	722.1	769.6	769.6	1.3	1.3	147.83	802.6	805.7	1,158.2	1,155.6	2.59	447.357	
800.0	799.3	848.2	848.1	1.5	1.5	147.92	802.5	804.6	1,161.5	1,158.6	2.87	405.381	
900.0	899.1	948.2	948.1	1.7	1.7	148.04	802.7	803.3	1,166.0	1,162.7	3.22	362.032	
1,000.0	998.9	1,050.0	1,050.0	1.9	1.8	148.17	802.4	802.0	1,170.2	1,166.6	3.58	326.883	
1,100.0	1,098.7	1,151.6	1,151.6	2.1	2.0	148.30	802.0	800.8	1,174.4	1,170.4	3.94	298.143	
1,200.0	1,198.5	1,253.8	1,253.7	2.3	2.2	148.42	801.7	799.1	1,178.3	1,174.0	4.30	274.056	
1,300.0	1,298.3	1,349.9	1,349.8	2.5	2.4	148.52	801.6	797.3	1,182.3	1,177.6	4.65	254.256	
1,400.0	1,398.1	1,445.1	1,445.0	2.7	2.5	148.61	801.9	795.9	1,186.7	1,181.7	5.00	237.393	
1,500.0	1,497.9	1,546.2	1,546.1	2.9	2.7	148.70	802.5	794.3	1,191.4	1,186.0	5.36	222.327	
1,600.0	1,597.7	1,644.7	1,644.5	3.1	2.9	148.78	802.8	792.7	1,195.8	1,190.1	5.71	209.283	
1,700.0	1,697.5	1,739.5	1,739.4	3.3	3.0	148.86	803.6	791.4	1,200.7	1,194.6	6.06	198.045	
1,800.0	1,797.3	1,839.2	1,839.1	3.5	3.2	148.94	804.5	790.1	1,205.8	1,199.3	6.42	187.800	
1,900.0	1,897.1	1,937.9	1,937.7	3.7	3.4	149.01	805.6	788.6	1,210.8	1,204.0	6.78	178.668	
2,000.0	1,996.9	2,031.6	2,031.4	3.9	3.6	149.06	806.9	787.3	1,216.2	1,209.1	7.12	170.698	
2,100.0	2,096.7	2,123.2	2,123.0	4.1	3.7	149.12	808.7	786.5	1,222.2	1,214.8	7.47	163.636	
2,200.0	2,196.5	2,218.5	2,218.3	4.3	3.9	149.17	810.8	786.0	1,228.8	1,220.9	7.82	157.130	
2,300.0	2,296.3	2,317.3	2,317.0	4.5	4.1	149.23	813.2	785.7	1,235.6	1,227.4	8.18	151.106	
2,400.0	2,396.1	2,422.8	2,422.6	4.7	4.2	149.31	815.2	785.5	1,242.1	1,233.6	8.54	145.368	
2,500.0	2,495.9	2,526.8	2,526.5	4.9	4.4	149.41	816.6	785.3	1,248.2	1,239.3	8.91	140.116	
2,600.0	2,595.7	2,629.2	2,628.9	5.2	4.6	149.52	817.6	785.0	1,254.1	1,244.9	9.27	135.294	
2,700.0	2,695.5	2,731.0	2,730.6	5.4	4.8	149.62	818.5	784.6	1,259.8	1,250.2	9.63	130.822	
2,800.0	2,795.3	2,830.3	2,830.0	5.6	5.0	149.73	819.3	784.3	1,265.5	1,255.5	9.99	126.735	
2,900.0	2,895.1	2,934.7	2,934.3	5.8	5.1	149.83	820.1	783.6	1,271.0	1,260.7	10.35	122.797	
3,000.0	2,994.9	3,036.7	3,036.4	6.0	5.3	149.90	821.1	782.4	1,276.2	1,265.5	10.71	119.136	
3,100.0	3,094.7	3,138.5	3,138.2	6.2	5.5	149.98	821.9	781.2	1,281.3	1,270.3	11.07	115.715	
3,200.0	3,194.5	3,241.1	3,240.7	6.4	5.7	150.06	822.7	779.7	1,286.2	1,274.8	11.44	112.469	
3,300.0	3,294.3	3,338.2	3,337.8	6.6	5.9	150.11	823.6	778.1	1,291.1	1,279.3	11.79	109.507	
3,400.0	3,394.1	3,432.0	3,431.6	6.8	6.0	150.16	824.8	776.8	1,296.3	1,284.2	12.14	106.801	
3,500.0	3,493.9	3,524.3	3,523.9	7.0	6.2	150.23	826.0	776.0	1,302.0	1,289.6	12.48	104.314	
3,600.0	3,593.8	3,614.2	3,613.7	7.2	6.3	150.29	827.7	775.7	1,308.5	1,295.7	12.82	102.046	
3,700.0	3,693.6	3,705.0	3,704.5	7.4	6.5	150.34	830.0	775.8	1,315.7	1,302.5	13.16	99.938	
3,800.0	3,793.4	3,818.5	3,818.0	7.6	6.7	150.39	833.0	775.5	1,322.6	1,309.1	13.55	97.626	
3,900.0	3,893.2	3,927.5	3,927.0	7.8	6.9	150.46	834.7	774.9	1,328.7	1,314.8	13.92	95.449	
4,000.0	3,993.0	4,040.4	4,039.9	8.0	7.1	150.55	835.7	773.8	1,334.1	1,319.8	14.30	93.292	
4,100.0	4,092.8	4,150.0	4,149.4	8.2	7.3	150.63	835.9	771.9	1,338.3	1,323.7	14.68	91.198	
4,200.0	4,192.6	4,247.9	4,247.4	8.4	7.5	150.69	836.3	769.8	1,342.5	1,327.5	15.03	89.325	
4,300.0	4,292.4	4,345.5	4,344.9	8.7	7.6	150.77	836.3	768.2	1,346.8	1,331.4	15.38	87.560	
4,400.0	4,392.2	4,447.4	4,446.8	8.9	7.8	150.86	836.4	766.7	1,351.2	1,335.5	15.74	85.835	
4,500.0	4,492.0	4,545.6	4,545.0	9.1	8.0	150.89	837.1	764.3	1,355.3	1,339.2	16.10	84.186	
4,600.0	4,591.8	4,639.5	4,638.8	9.3	8.2	150.90	838.7	762.0	1,360.1	1,343.6	16.45	82.682	
4,700.0	4,691.6	4,743.2	4,742.5	9.5	8.3	150.94	839.8	759.9	1,364.8	1,347.9	16.81	81.165	
4,800.0	4,791.4	4,844.2	4,843.5	9.7	8.5	150.99	840.5	757.9	1,369.2	1,352.0	17.17	79.725	
4,900.0	4,891.2	4,944.8	4,944.0	9.9	8.7	151.09	840.3	756.7	1,373.7	1,356.2	17.53	78.367	
5,000.0	4,991.0	5,045.5	5,044.8	10.1	8.9	151.19	839.9	755.4	1,378.0	1,360.1	17.89	77.043	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 WELL											Offset Site Error: 0.0 ft		
Survey Program: 100-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.8	5,143.3	5,142.6	10.3	9.0	151.27	840.2	753.9	1,382.5	1,364.2	18.24	75.798	
5,200.0	5,190.6	5,247.3	5,246.6	10.5	9.2	151.33	840.7	751.9	1,386.8	1,368.2	18.60	74.547	
5,300.0	5,290.4	5,342.0	5,341.3	10.7	9.4	151.38	841.1	749.9	1,391.0	1,372.1	18.95	73.400	
5,400.0	5,390.2	5,433.5	5,432.7	10.9	9.6	151.44	841.7	748.9	1,396.1	1,376.8	19.29	72.364	
5,500.0	5,490.0	5,537.6	5,536.8	11.1	9.7	151.53	842.1	747.7	1,401.1	1,381.4	19.66	71.281	
5,600.0	5,589.8	5,639.0	5,638.2	11.3	9.9	151.60	842.6	746.5	1,406.0	1,386.0	20.01	70.248	
5,700.0	5,689.6	5,745.9	5,745.1	11.5	10.1	151.66	843.3	744.5	1,410.5	1,390.1	20.38	69.195	
5,800.0	5,789.4	5,847.5	5,846.6	11.7	10.3	151.71	843.7	742.3	1,414.6	1,393.9	20.74	68.193	
5,900.0	5,889.2	5,944.4	5,943.5	11.9	10.5	151.76	844.2	740.3	1,418.9	1,397.8	21.10	67.257	
6,000.0	5,989.0	6,049.6	6,048.7	12.2	10.6	151.82	844.7	738.2	1,423.3	1,401.8	21.46	66.312	
6,100.0	6,088.8	6,156.6	6,155.7	12.4	10.8	151.88	844.6	735.6	1,426.9	1,405.0	21.83	65.356	
6,200.0	6,188.6	6,254.6	6,253.6	12.6	11.0	151.94	844.4	733.2	1,430.4	1,408.2	22.19	64.476	
6,300.0	6,288.4	6,349.5	6,348.5	12.8	11.2	151.99	844.4	731.1	1,434.2	1,411.7	22.53	63.651	
6,400.0	6,388.2	6,442.9	6,441.9	13.0	11.3	152.05	844.5	729.3	1,438.5	1,415.6	22.88	62.874	
6,500.0	6,488.0	6,536.9	6,535.9	13.2	11.5	152.09	845.5	727.4	1,443.1	1,419.9	23.23	62.134	
6,600.0	6,587.9	6,634.2	6,633.2	13.4	11.7	152.15	846.2	726.2	1,448.1	1,424.6	23.58	61.421	
6,700.0	6,687.7	6,736.6	6,735.5	13.6	11.9	152.21	846.9	724.7	1,453.1	1,429.1	23.94	60.703	
6,800.0	6,787.5	6,841.7	6,840.7	13.8	12.0	152.29	847.2	723.4	1,457.8	1,433.5	24.30	59.991	
6,900.0	6,887.3	6,948.0	6,946.9	14.0	12.2	152.35	847.4	721.4	1,462.0	1,437.4	24.67	59.267	
7,000.0	6,987.1	7,046.5	7,045.4	14.2	12.4	152.39	847.8	719.2	1,466.1	1,441.1	25.02	58.592	
7,100.0	7,086.9	7,152.5	7,151.4	14.4	12.6	152.48	847.6	717.4	1,470.3	1,444.9	25.39	57.913	
7,173.7	7,160.4	7,239.9	7,238.7	14.6	12.8	152.53	847.2	715.1	1,472.7	1,447.0	25.67	57.362	
7,200.0	7,186.7	7,271.1	7,270.0	14.6	12.8	112.27	846.9	714.2	1,473.0	1,447.2	25.79	57.126	
7,250.0	7,236.4	7,349.4	7,348.2	14.7	12.9	77.76	845.6	711.3	1,471.1	1,445.1	25.98	56.615	
7,300.0	7,285.6	7,420.0	7,418.6	14.8	13.1	68.12	842.5	708.4	1,465.2	1,439.1	26.11	56.119	
7,350.0	7,334.0	7,461.3	7,459.8	14.9	13.1	64.57	839.5	707.4	1,456.7	1,430.5	26.15	55.713	
7,400.0	7,381.0	7,500.0	7,498.4	15.0	13.2	63.45	835.9	707.4	1,445.9	1,419.7	26.16	55.276	
7,450.0	7,426.5	7,524.9	7,523.1	15.0	13.2	63.35	833.5	707.8	1,433.3	1,407.2	26.15	54.809	
7,500.0	7,470.0	7,548.5	7,546.6	15.1	13.3	63.98	831.5	708.3	1,419.3	1,393.1	26.16	54.257	
7,550.0	7,511.2	7,571.0	7,569.0	15.2	13.3	65.11	829.9	708.9	1,403.9	1,377.7	26.20	53.587	
7,600.0	7,549.7	7,600.0	7,598.0	15.4	13.4	66.85	828.1	709.9	1,387.5	1,361.2	26.31	52.742	
7,650.0	7,585.4	7,620.6	7,618.6	15.5	13.4	68.70	827.1	710.7	1,370.1	1,343.6	26.46	51.773	
7,700.0	7,617.9	7,652.2	7,650.1	15.7	13.5	71.21	825.8	711.7	1,351.8	1,325.0	26.73	50.578	
7,750.0	7,647.0	7,681.0	7,678.9	15.9	13.5	73.91	824.9	712.3	1,332.8	1,305.7	27.06	49.258	
7,800.0	7,672.4	7,705.6	7,703.5	16.2	13.5	76.67	824.3	712.8	1,313.4	1,286.0	27.44	47.865	
7,850.0	7,694.0	7,724.1	7,722.0	16.5	13.6	79.30	824.0	713.1	1,294.2	1,266.3	27.86	46.458	
7,900.0	7,711.6	7,739.1	7,736.9	16.8	13.6	81.83	823.7	713.4	1,275.3	1,247.0	28.30	45.057	
7,950.0	7,725.0	7,750.4	7,748.3	17.2	13.6	84.19	823.5	713.6	1,257.1	1,228.3	28.77	43.688	
8,000.0	7,734.2	7,758.1	7,755.9	17.6	13.6	86.31	823.4	713.7	1,239.9	1,210.6	29.26	42.370	
8,050.0	7,739.1	7,761.9	7,759.7	18.1	13.6	88.14	823.4	713.8	1,224.0	1,194.2	29.77	41.113	
8,081.4	7,740.0	7,762.2	7,760.1	18.3	13.6	89.12	823.4	713.8	1,214.7	1,184.6	30.10	40.357	
8,100.0	7,740.0	7,762.0	7,759.8	18.5	13.6	89.11	823.4	713.8	1,209.5	1,179.2	30.30	39.920	
8,200.0	7,740.0	7,760.7	7,758.5	19.6	13.6	89.04	823.4	713.8	1,186.2	1,154.8	31.44	37.733	
8,300.0	7,740.0	7,759.3	7,757.2	20.7	13.6	88.97	823.4	713.7	1,171.0	1,138.4	32.67	35.846	
8,400.0	7,740.0	7,757.9	7,755.8	21.9	13.6	88.91	823.4	713.7	1,164.3	1,130.3	33.98	34.268	
8,428.8	7,740.0	7,757.5	7,755.4	22.3	13.6	88.89	823.4	713.7	1,163.9	1,129.6	34.37	33.864 ES	
8,500.0	7,740.0	7,756.5	7,754.4	23.2	13.6	88.84	823.5	713.7	1,166.1	1,130.8	35.35	32.991	
8,600.0	7,740.0	7,755.1	7,753.0	24.6	13.6	88.77	823.5	713.7	1,176.4	1,139.7	36.77	31.998	
8,700.0	7,740.0	7,753.7	7,751.5	25.9	13.6	88.70	823.5	713.6	1,195.1	1,156.9	38.23	31.261	
8,800.0	7,740.0	7,752.2	7,750.1	27.4	13.6	88.62	823.5	713.6	1,221.7	1,181.9	39.73	30.751	
8,900.0	7,740.0	7,750.7	7,748.6	28.8	13.6	88.55	823.5	713.6	1,255.7	1,214.4	41.26	30.436	
9,000.0	7,740.0	7,749.1	7,747.0	30.3	13.6	88.47	823.6	713.5	1,296.5	1,253.7	42.81	30.286	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 WELL										Offset Site Error:		0.0 ft	
Survey Program: 100-Geolink MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
9,100.0	7,740.0	7,747.6	7,745.5	31.9	13.6	88.40	823.6	713.5	1,343.5	1,299.2	44.38	30.273 SF	
9,200.0	7,740.0	7,746.0	7,743.9	33.4	13.6	88.32	823.6	713.5	1,396.2	1,350.2	45.97	30.370	
9,300.0	7,740.0	7,744.4	7,742.2	35.0	13.6	88.24	823.6	713.5	1,453.8	1,406.2	47.58	30.556	
9,400.0	7,740.0	7,742.7	7,740.6	36.6	13.6	88.16	823.7	713.4	1,515.8	1,466.6	49.20	30.811	
9,500.0	7,740.0	7,741.0	7,738.9	38.2	13.6	88.08	823.7	713.4	1,581.7	1,530.9	50.83	31.119	
9,600.0	7,740.0	7,739.3	7,737.2	39.8	13.6	87.99	823.7	713.4	1,651.1	1,598.6	52.47	31.468	
9,700.0	7,740.0	7,737.5	7,735.4	41.4	13.6	87.90	823.8	713.3	1,723.4	1,669.3	54.12	31.846	
9,800.0	7,740.0	7,735.8	7,733.6	43.0	13.6	87.82	823.8	713.3	1,798.4	1,742.7	55.77	32.245	
9,900.0	7,740.0	7,733.9	7,731.8	44.7	13.6	87.73	823.8	713.3	1,875.8	1,818.3	57.44	32.658	
10,000.0	7,740.0	7,732.1	7,729.9	46.3	13.6	87.63	823.8	713.2	1,955.2	1,896.1	59.11	33.079	
10,100.0	7,740.0	7,730.1	7,728.0	48.0	13.6	87.54	823.9	713.2	2,036.4	1,975.6	60.78	33.504	
10,200.0	7,740.0	7,728.2	7,726.1	49.7	13.6	87.44	823.9	713.2	2,119.2	2,056.7	62.46	33.930	
10,300.0	7,740.0	7,726.2	7,724.1	51.3	13.6	87.35	823.9	713.1	2,203.4	2,139.3	64.14	34.353	
10,400.0	7,740.0	7,724.2	7,722.1	53.0	13.6	87.25	824.0	713.1	2,288.9	2,223.1	65.83	34.772	
10,500.0	7,740.0	7,722.1	7,720.0	54.7	13.6	87.14	824.0	713.1	2,375.6	2,308.1	67.52	35.186	
10,600.0	7,740.0	7,720.0	7,717.9	56.4	13.6	87.04	824.1	713.0	2,463.2	2,394.0	69.21	35.592	
10,700.0	7,740.0	7,717.8	7,715.7	58.1	13.6	86.93	824.1	713.0	2,551.8	2,480.9	70.90	35.991	
10,800.0	7,740.0	7,715.6	7,713.5	59.8	13.6	86.82	824.1	712.9	2,641.1	2,568.5	72.60	36.381	
10,900.0	7,740.0	7,713.3	7,711.2	61.5	13.6	86.71	824.2	712.9	2,731.2	2,657.0	74.29	36.763	
11,000.0	7,740.0	7,711.0	7,708.9	63.2	13.6	86.60	824.2	712.9	2,822.0	2,746.0	75.99	37.135	
11,105.4	7,740.0	7,500.0	7,498.4	65.0	13.2	76.42	835.9	707.4	2,918.1	2,842.5	75.58	38.608	
11,191.0	7,740.0	7,500.0	7,498.4	66.4	13.2	75.94	835.9	707.4	2,996.7	2,919.7	76.98	38.928	
11,200.0	7,740.0	7,500.0	7,498.4	66.6	13.2	75.94	835.9	707.4	3,005.0	2,927.8	77.13	38.960	
11,300.0	7,740.0	7,500.0	7,498.4	68.3	13.2	75.94	835.9	707.4	3,097.6	3,018.8	78.80	39.310	
11,400.0	7,740.0	7,500.0	7,498.4	70.0	13.2	75.94	835.9	707.4	3,190.6	3,110.2	80.47	39.650	
11,500.0	7,740.0	7,500.0	7,498.4	71.7	13.2	75.94	835.9	707.4	3,284.1	3,201.9	82.14	39.981	
11,600.0	7,740.0	7,500.0	7,498.4	73.4	13.2	75.94	835.9	707.4	3,377.9	3,294.1	83.82	40.302	
11,700.0	7,740.0	7,500.0	7,498.4	75.1	13.2	75.94	835.9	707.4	3,472.1	3,386.6	85.49	40.613	
11,800.0	7,740.0	7,500.0	7,498.4	76.9	13.2	75.94	835.9	707.4	3,566.6	3,479.4	87.17	40.916	
11,900.0	7,740.0	7,500.0	7,498.4	78.6	13.2	75.94	835.9	707.4	3,661.4	3,572.5	88.85	41.211	
12,000.0	7,740.0	7,500.0	7,498.4	80.3	13.2	75.94	835.9	707.4	3,756.4	3,665.9	90.52	41.496	
12,100.0	7,740.0	7,500.0	7,498.4	82.0	13.2	75.94	835.9	707.4	3,851.8	3,759.6	92.20	41.774	
12,200.0	7,740.0	7,500.0	7,498.4	83.8	13.2	75.94	835.9	707.4	3,947.3	3,853.4	93.89	42.044	
12,300.0	7,740.0	7,500.0	7,498.4	85.5	13.2	75.94	835.9	707.4	4,043.1	3,947.5	95.57	42.306	
12,400.0	7,740.0	7,461.9	7,460.4	87.2	13.1	74.13	839.5	707.4	4,138.3	4,041.9	96.44	42.913	
12,500.0	7,740.0	7,459.8	7,458.3	88.9	13.1	74.03	839.7	707.5	4,234.4	4,136.4	98.06	43.184	
12,600.0	7,740.0	7,457.7	7,456.2	90.7	13.1	73.93	839.8	707.5	4,330.7	4,231.0	99.68	43.447	
12,700.0	7,740.0	7,455.7	7,454.2	92.4	13.1	73.83	840.0	707.5	4,427.1	4,325.8	101.30	43.704	
12,800.0	7,740.0	7,453.7	7,452.2	94.1	13.1	73.74	840.2	707.5	4,523.6	4,420.7	102.92	43.954	
12,900.0	7,740.0	7,451.8	7,450.3	95.9	13.1	73.65	840.3	707.6	4,620.3	4,515.8	104.54	44.197	
13,000.0	7,740.0	7,449.9	7,448.4	97.6	13.1	73.56	840.4	707.6	4,717.2	4,611.0	106.16	44.434	
13,100.0	7,740.0	7,448.1	7,446.6	99.3	13.1	73.48	840.6	707.6	4,814.1	4,706.4	107.78	44.666	
13,200.0	7,740.0	7,446.3	7,444.9	101.1	13.1	73.40	840.7	707.7	4,911.2	4,801.8	109.40	44.891	
13,300.0	7,740.0	7,444.6	7,443.1	102.8	13.1	73.31	840.8	707.7	5,008.4	4,897.4	111.03	45.111	
13,400.0	7,740.0	7,442.9	7,441.5	104.5	13.1	73.24	841.0	707.7	5,105.7	4,993.1	112.65	45.325	
13,500.0	7,740.0	7,441.2	7,439.8	106.3	13.1	73.16	841.1	707.8	5,203.1	5,088.9	114.27	45.534	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2														Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	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	33.178			
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	10.1	10.1	9.4	0.65	15.436 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	-152.30	0.0	10.1	10.8	9.8	1.00	10.819			
400.0	400.0	400.1	400.1	0.7	0.7	-154.90	-0.7	9.5	12.6	11.2	1.35	9.306			
500.0	499.9	500.3	500.2	0.9	0.9	-154.87	-2.7	7.8	14.7	13.0	1.71	8.609			
600.0	599.7	600.4	600.3	1.1	1.0	-153.18	-6.0	5.0	17.1	15.1	2.07	8.295			
700.0	699.5	700.0	699.8	1.3	1.2	-164.36	-9.5	2.3	20.5	18.1	2.43	8.457			
722.7	722.1	722.7	722.5	1.3	1.3	-167.11	-10.1	1.9	21.5	19.0	2.51	8.570			
800.0	799.3	799.7	799.4	1.5	1.4	-165.59	-11.9	1.0	25.3	22.5	2.78	9.105			
900.0	899.1	899.3	899.0	1.7	1.6	-165.94	-13.2	1.0	31.4	28.3	3.13	10.029			
1,000.0	998.9	999.0	998.8	1.9	1.7	-166.56	-14.3	1.3	37.8	34.3	3.48	10.852			
1,100.0	1,098.7	1,098.8	1,098.5	2.1	1.9	-166.99	-15.5	1.5	44.2	40.3	3.83	11.525			
1,200.0	1,198.5	1,198.6	1,198.3	2.3	2.1	-167.31	-16.6	1.8	50.6	46.4	4.18	12.086			
1,300.0	1,298.3	1,298.4	1,298.1	2.5	2.3	-167.57	-17.7	2.1	56.9	52.4	4.53	12.560			
1,400.0	1,398.1	1,398.2	1,397.9	2.7	2.4	-167.77	-18.8	2.3	63.3	58.4	4.88	12.966			
1,500.0	1,497.9	1,498.0	1,497.7	2.9	2.6	-167.93	-20.0	2.6	69.7	64.5	5.24	13.318			
1,600.0	1,597.7	1,597.8	1,597.5	3.1	2.8	-168.07	-21.1	2.8	76.1	70.5	5.59	13.625			
1,700.0	1,697.5	1,697.6	1,697.3	3.3	3.0	-168.18	-22.2	3.1	82.5	76.6	5.94	13.896			
1,800.0	1,797.3	1,797.4	1,797.1	3.5	3.1	-168.28	-23.3	3.4	88.9	82.6	6.29	14.137			
1,900.0	1,897.1	1,897.2	1,896.9	3.7	3.3	-168.37	-24.5	3.6	95.3	88.6	6.64	14.353			
2,000.0	1,996.9	1,997.0	1,996.6	3.9	3.5	-168.44	-25.6	3.9	101.7	94.7	6.99	14.547			
2,100.0	2,096.7	2,096.8	2,096.4	4.1	3.7	-168.51	-26.7	4.2	108.0	100.7	7.34	14.722			
2,200.0	2,196.5	2,196.6	2,196.2	4.3	3.8	-168.57	-27.8	4.4	114.4	106.7	7.69	14.881			
2,300.0	2,296.3	2,296.4	2,296.0	4.5	4.0	-168.62	-29.0	4.7	120.8	112.8	8.04	15.027			
2,400.0	2,396.1	2,396.2	2,395.8	4.7	4.2	-168.67	-30.1	5.0	127.2	118.8	8.39	15.160			
2,500.0	2,495.9	2,496.0	2,495.6	4.9	4.4	-168.71	-31.2	5.2	133.6	124.9	8.74	15.283			
2,600.0	2,595.7	2,595.8	2,595.4	5.2	4.5	-168.75	-32.3	5.5	140.0	130.9	9.09	15.396			
2,700.0	2,695.5	2,695.6	2,695.2	5.4	4.7	-168.79	-33.5	5.8	146.4	136.9	9.44	15.500			
2,800.0	2,795.3	2,795.4	2,795.0	5.6	4.9	-168.82	-34.6	6.0	152.8	143.0	9.79	15.598			
2,900.0	2,895.1	2,895.2	2,894.7	5.8	5.1	-168.85	-35.7	6.3	159.2	149.0	10.14	15.688			
3,000.0	2,994.9	2,995.0	2,994.5	6.0	5.2	-168.88	-36.8	6.5	165.5	155.0	10.50	15.773			
3,100.0	3,094.7	3,094.8	3,094.3	6.2	5.4	-168.90	-38.0	6.8	171.9	161.1	10.85	15.851			
3,200.0	3,194.5	3,194.6	3,194.1	6.4	5.6	-168.92	-39.1	7.1	178.3	167.1	11.20	15.926			
3,300.0	3,294.3	3,294.3	3,293.9	6.6	5.8	-168.95	-40.2	7.3	184.7	173.2	11.55	15.995			
3,400.0	3,394.1	3,394.1	3,393.7	6.8	5.9	-168.97	-41.3	7.6	191.1	179.2	11.90	16.061			
3,500.0	3,493.9	3,493.9	3,493.5	7.0	6.1	-168.99	-42.5	7.9	197.5	185.2	12.25	16.122			
3,600.0	3,593.8	3,593.7	3,593.3	7.2	6.3	-169.00	-43.6	8.1	203.9	191.3	12.60	16.180			
3,700.0	3,693.6	3,693.5	3,693.1	7.4	6.5	-169.02	-44.7	8.4	210.3	197.3	12.95	16.236			
3,800.0	3,793.4	3,793.3	3,792.8	7.6	6.6	-169.04	-45.8	8.7	216.7	203.4	13.30	16.288			
3,900.0	3,893.2	3,893.1	3,892.6	7.8	6.8	-169.05	-47.0	8.9	223.0	209.4	13.65	16.337			
4,000.0	3,993.0	3,992.9	3,992.4	8.0	7.0	-169.07	-48.1	9.2	229.4	215.4	14.00	16.384			
4,100.0	4,092.8	4,092.7	4,092.2	8.2	7.2	-169.08	-49.2	9.4	235.8	221.5	14.35	16.429			
4,200.0	4,192.6	4,192.5	4,192.0	8.4	7.3	-169.09	-50.3	9.7	242.2	227.5	14.70	16.472			
4,300.0	4,292.4	4,292.3	4,291.8	8.7	7.5	-169.10	-51.5	10.0	248.6	233.5	15.06	16.512			
4,400.0	4,392.2	4,392.1	4,391.6	8.9	7.7	-169.12	-52.6	10.2	255.0	239.6	15.41	16.551			
4,500.0	4,492.0	4,491.9	4,491.4	9.1	7.9	-169.13	-53.7	10.5	261.4	245.6	15.76	16.588			
4,600.0	4,591.8	4,591.7	4,591.2	9.3	8.0	-169.14	-54.8	10.8	267.8	251.7	16.11	16.623			
4,700.0	4,691.6	4,691.5	4,690.9	9.5	8.2	-169.15	-56.0	11.0	274.2	257.7	16.46	16.657			
4,800.0	4,791.4	4,791.3	4,790.7	9.7	8.4	-169.16	-57.1	11.3	280.6	263.7	16.81	16.690			
4,900.0	4,891.2	4,891.1	4,890.5	9.9	8.6	-169.17	-58.2	11.6	286.9	269.8	17.16	16.721			
5,000.0	4,991.0	4,990.9	4,990.3	10.1	8.8	-169.17	-59.3	11.8	293.3	275.8	17.51	16.751			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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			
5,100.0	5,090.8	5,090.7	5,090.1	10.3	8.9	-169.18	-60.5	12.1	299.7	281.9	17.86	16.780		
5,200.0	5,190.6	5,190.5	5,189.9	10.5	9.1	-169.19	-61.6	12.4	306.1	287.9	18.21	16.807		
5,300.0	5,290.4	5,290.3	5,289.7	10.7	9.3	-169.20	-62.7	12.6	312.5	293.9	18.56	16.834		
5,400.0	5,390.2	5,390.1	5,389.5	10.9	9.5	-169.21	-63.8	12.9	318.9	300.0	18.91	16.860		
5,500.0	5,490.0	5,489.9	5,489.3	11.1	9.6	-169.21	-65.0	13.1	325.3	306.0	19.27	16.884		
5,600.0	5,589.8	5,589.6	5,589.0	11.3	9.8	-169.22	-66.1	13.4	331.7	312.0	19.62	16.908		
5,700.0	5,689.6	5,689.4	5,688.8	11.5	10.0	-169.23	-67.2	13.7	338.1	318.1	19.97	16.931		
5,800.0	5,789.4	5,789.2	5,788.6	11.7	10.2	-169.23	-68.3	13.9	344.4	324.1	20.32	16.953		
5,900.0	5,889.2	5,889.0	5,888.4	11.9	10.3	-169.24	-69.5	14.2	350.8	330.2	20.67	16.974		
6,000.0	5,989.0	5,988.8	5,988.2	12.2	10.5	-169.24	-70.6	14.5	357.2	336.2	21.02	16.995		
6,100.0	6,088.8	6,088.6	6,088.0	12.4	10.7	-169.25	-71.7	14.7	363.6	342.2	21.37	17.015		
6,200.0	6,188.6	6,188.4	6,187.8	12.6	10.9	-169.25	-72.8	15.0	370.0	348.3	21.72	17.035		
6,300.0	6,288.4	6,288.2	6,287.6	12.8	11.0	-169.26	-74.0	15.3	376.4	354.3	22.07	17.053		
6,400.0	6,388.2	6,388.0	6,387.4	13.0	11.2	-169.26	-75.1	15.5	382.8	360.4	22.42	17.071		
6,500.0	6,488.0	6,487.8	6,487.2	13.2	11.4	-169.27	-76.2	15.8	389.2	366.4	22.77	17.089		
6,600.0	6,587.9	6,587.6	6,586.9	13.4	11.6	-169.27	-77.3	16.0	395.6	372.4	23.12	17.106		
6,700.0	6,687.7	6,687.4	6,686.7	13.6	11.7	-169.28	-78.5	16.3	401.9	378.5	23.47	17.123		
6,800.0	6,787.5	6,787.2	6,786.5	13.8	11.9	-169.28	-79.6	16.6	408.3	384.5	23.83	17.139		
6,900.0	6,887.3	6,887.0	6,886.3	14.0	12.1	-169.29	-80.7	16.8	414.7	390.6	24.18	17.154		
7,000.0	6,987.1	6,986.9	6,986.1	14.2	12.2	-169.29	-81.8	17.0	421.2	396.7	24.51	17.167		
7,100.0	7,086.9	7,086.8	7,086.1	14.4	12.4	-172.26	-82.9	17.0	427.6	402.7	24.78	17.189		
7,173.7	7,160.4	7,145.6	7,139.7	14.6	12.5	-175.05	-84.0	16.8	435.4	410.4	24.97	17.437		
7,200.0	7,186.7	7,167.7	7,160.0	14.6	12.5	143.31	-31.6	16.7	438.4	413.3	25.04	17.505		
7,250.0	7,236.4	7,208.9	7,197.0	14.7	12.6	105.85	-13.5	16.4	444.5	419.3	25.19	17.644		
7,300.0	7,285.6	7,250.0	7,232.6	14.8	12.6	92.86	7.1	16.2	450.9	425.6	25.35	17.787		
7,350.0	7,334.0	7,288.8	7,264.7	14.9	12.7	85.97	28.9	15.9	457.7	432.2	25.53	17.928		
7,400.0	7,381.0	7,327.7	7,295.3	15.0	12.8	81.27	52.9	15.5	464.6	438.9	25.72	18.063		
7,450.0	7,426.5	7,366.0	7,323.8	15.0	12.9	77.70	78.5	15.1	471.5	445.6	25.91	18.193		
7,500.0	7,470.0	7,400.0	7,347.6	15.1	13.1	74.91	102.7	14.8	478.2	452.1	26.10	18.326		
7,550.0	7,511.2	7,441.2	7,374.5	15.2	13.2	72.37	133.9	14.3	484.7	458.4	26.31	18.421		
7,600.0	7,549.7	7,478.1	7,396.6	15.4	13.4	70.31	163.5	13.8	490.9	464.3	26.52	18.510		
7,650.0	7,585.4	7,514.7	7,416.6	15.5	13.6	68.55	194.1	13.3	496.6	469.8	26.73	18.578		
7,700.0	7,617.9	7,550.0	7,434.0	15.7	13.8	67.06	224.8	12.9	501.7	474.8	26.94	18.622		
7,750.0	7,647.0	7,587.1	7,450.2	15.9	14.1	65.78	258.1	12.3	506.3	479.1	27.19	18.618		
7,800.0	7,672.4	7,622.9	7,463.8	16.2	14.4	64.73	291.3	11.8	510.1	482.7	27.46	18.575		
7,850.0	7,694.0	7,658.5	7,475.2	16.5	14.7	63.88	325.1	11.2	513.3	485.5	27.77	18.483		
7,900.0	7,711.6	7,700.0	7,485.8	16.8	15.0	63.17	365.1	10.5	515.8	487.6	28.17	18.309		
7,950.0	7,725.0	7,729.5	7,491.6	17.2	15.3	62.75	394.0	10.0	517.3	488.8	28.55	18.122		
8,000.0	7,734.2	7,764.8	7,496.5	17.6	15.7	62.46	429.0	9.4	518.1	489.1	29.03	17.849		
8,050.0	7,739.1	7,800.0	7,499.3	18.1	16.0	62.35	464.0	8.8	518.0	488.5	29.57	17.517		
8,081.4	7,740.0	7,822.3	7,500.0	18.3	16.3	62.37	486.3	8.4	517.6	487.6	29.96	17.277		
8,100.0	7,740.0	7,838.6	7,500.0	18.5	16.5	62.35	502.6	8.2	517.3	487.0	30.30	17.073		
8,200.0	7,740.0	7,938.5	7,500.0	19.6	17.6	62.26	602.6	6.4	515.7	483.4	32.34	15.946		
8,300.0	7,740.0	8,038.5	7,500.0	20.7	18.9	62.17	702.5	4.7	514.2	479.7	34.53	14.890		
8,400.0	7,740.0	8,138.5	7,500.0	21.9	20.2	62.08	802.5	2.9	512.6	475.8	36.85	13.912		
8,500.0	7,740.0	8,238.5	7,500.0	23.2	21.6	61.99	902.5	1.2	511.1	471.8	39.27	13.016		
8,600.0	7,740.0	8,338.5	7,500.0	24.6	23.1	61.90	1,002.4	-0.6	509.6	467.8	41.77	12.199		
8,700.0	7,740.0	8,438.5	7,500.0	25.9	24.6	61.81	1,102.4	-2.3	508.0	463.7	44.34	11.457		
8,800.0	7,740.0	8,538.5	7,500.0	27.4	26.1	61.71	1,202.4	-4.1	506.5	459.5	46.97	10.784		
8,900.0	7,740.0	8,638.4	7,500.0	28.8	27.6	61.62	1,302.3	-5.8	505.0	455.3	49.64	10.173		
9,000.0	7,740.0	8,738.4	7,500.0	30.3	29.2	61.52	1,402.3	-7.5	503.4	451.1	52.35	9.617		
9,100.0	7,740.0	8,838.4	7,500.0	31.9	30.8	61.43	1,502.3	-9.3	501.9	446.8	55.09	9.111		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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)			
9,200.0	7,740.0	8,938.4	7,500.0	33.4	32.4	61.33	1,602.3	-11.0	500.4	442.5	57.85	8.649	
9,300.0	7,740.0	9,038.4	7,500.0	35.0	34.0	61.24	1,702.2	-12.8	498.8	438.2	60.64	8.226	
9,400.0	7,740.0	9,139.2	7,500.0	36.6	35.6	61.14	1,803.1	-14.5	497.3	433.8	63.45	7.837	
9,500.0	7,740.0	9,247.4	7,500.0	38.2	37.4	60.96	1,911.2	-17.7	494.8	428.4	66.35	7.457	
9,600.0	7,740.0	9,355.4	7,500.0	39.8	39.2	60.67	2,019.0	-22.8	490.6	421.4	69.17	7.092	
9,700.0	7,740.0	9,460.5	7,500.0	41.4	41.0	60.27	2,124.0	-29.7	484.9	413.0	71.89	6.745	
9,800.0	7,740.0	9,560.3	7,500.0	43.0	42.6	59.86	2,223.5	-36.7	478.8	404.3	74.51	6.427	
9,900.0	7,740.0	9,660.1	7,500.0	44.7	44.3	59.43	2,323.0	-43.6	472.8	395.7	77.10	6.132	
10,000.0	7,740.0	9,759.8	7,500.0	46.3	46.0	59.00	2,422.5	-50.6	466.8	387.1	79.67	5.859	
10,100.0	7,740.0	9,859.6	7,500.0	48.0	47.7	58.55	2,522.0	-57.5	460.8	378.6	82.21	5.606	
10,200.0	7,740.0	9,959.3	7,500.0	49.7	49.4	58.09	2,621.5	-64.5	454.9	370.2	84.71	5.370	
10,300.0	7,740.0	10,059.1	7,500.0	51.3	51.1	57.62	2,721.1	-71.5	449.0	361.8	87.18	5.150	
10,400.0	7,740.0	10,158.8	7,500.0	53.0	52.8	57.14	2,820.6	-78.4	443.1	353.5	89.61	4.945	
10,500.0	7,740.0	10,258.6	7,500.0	54.7	54.5	56.65	2,920.1	-85.4	437.3	345.3	92.00	4.753	
10,600.0	7,740.0	10,358.4	7,500.0	56.4	56.2	56.14	3,019.6	-92.3	431.4	337.1	94.34	4.573	
10,700.0	7,740.0	10,458.1	7,500.0	58.1	57.9	55.61	3,119.1	-99.3	425.7	329.0	96.63	4.405	
10,800.0	7,740.0	10,557.9	7,500.0	59.8	59.6	55.08	3,218.6	-106.3	419.9	321.1	98.87	4.247	
10,900.0	7,740.0	10,656.0	7,500.0	61.5	61.3	54.54	3,316.5	-113.0	414.3	313.2	101.05	4.100	
11,000.0	7,740.0	10,750.3	7,500.0	63.2	62.9	54.11	3,410.7	-118.4	409.7	306.4	103.25	3.968	
11,105.4	7,740.0	10,849.9	7,500.0	65.0	64.6	53.78	3,510.2	-122.3	406.3	300.6	105.71	3.843	
11,191.0	7,740.0	10,930.8	7,500.0	66.4	66.0	53.67	3,591.1	-124.3	405.2	297.1	108.01	3.751	
11,200.0	7,740.0	10,939.4	7,500.0	66.6	66.1	53.67	3,599.6	-124.4	405.1	296.9	108.25	3.743	
11,202.9	7,740.0	10,942.1	7,500.0	66.6	66.2	53.67	3,602.4	-124.4	405.1	296.8	108.33	3.740	
11,300.0	7,740.0	11,034.6	7,500.0	68.3	67.8	53.74	3,694.8	-125.1	405.8	294.7	111.05	3.654	
11,400.0	7,740.0	11,134.6	7,500.0	70.0	69.5	53.85	3,794.8	-125.2	406.9	292.9	113.98	3.570	
11,500.0	7,740.0	11,234.6	7,500.0	71.7	71.2	53.97	3,894.8	-125.3	408.0	291.1	116.93	3.490	
11,600.0	7,740.0	11,334.5	7,500.0	73.4	72.9	54.09	3,994.8	-125.3	409.2	289.3	119.89	3.413	
11,700.0	7,740.0	11,434.5	7,500.0	75.1	74.7	54.20	4,094.8	-125.4	410.3	287.5	122.86	3.340	
11,800.0	7,740.0	11,534.5	7,500.0	76.9	76.4	54.32	4,194.8	-125.5	411.5	285.6	125.84	3.270	
11,900.0	7,740.0	11,634.5	7,500.0	78.6	78.1	54.43	4,294.8	-125.6	412.6	283.8	128.82	3.203	
12,000.0	7,740.0	11,734.5	7,500.0	80.3	79.9	54.54	4,394.8	-125.7	413.8	282.0	131.81	3.139	
12,100.0	7,740.0	11,834.5	7,500.0	82.0	81.6	54.66	4,494.8	-125.7	414.9	280.1	134.82	3.078	
12,200.0	7,740.0	11,934.5	7,500.0	83.8	83.3	54.77	4,594.8	-125.8	416.1	278.3	137.82	3.019	
12,300.0	7,740.0	12,034.5	7,500.0	85.5	85.1	54.88	4,694.7	-125.9	417.2	276.4	140.84	2.962	
12,400.0	7,740.0	12,134.5	7,500.0	87.2	86.8	54.99	4,794.7	-126.0	418.4	274.5	143.87	2.908	
12,500.0	7,740.0	12,234.5	7,500.0	88.9	88.5	55.10	4,894.7	-126.1	419.5	272.6	146.90	2.856	
12,600.0	7,740.0	12,334.4	7,500.0	90.7	90.3	55.21	4,994.7	-126.2	420.7	270.8	149.94	2.806	
12,700.0	7,740.0	12,434.4	7,500.0	92.4	92.0	55.32	5,094.7	-126.2	421.9	268.9	152.99	2.758	
12,800.0	7,740.0	12,534.4	7,500.0	94.1	93.7	55.43	5,194.7	-126.3	423.0	267.0	156.04	2.711	
12,900.0	7,740.0	12,634.4	7,500.0	95.9	95.5	55.54	5,294.7	-126.4	424.2	265.1	159.10	2.666	
13,000.0	7,740.0	12,734.4	7,500.0	97.6	97.2	55.65	5,394.7	-126.5	425.4	263.2	162.17	2.623	
13,100.0	7,740.0	12,834.4	7,500.0	99.3	98.9	55.76	5,494.7	-126.6	426.5	261.3	165.25	2.581	
13,200.0	7,740.0	12,934.4	7,500.0	101.1	100.7	55.86	5,594.7	-126.6	427.7	259.4	168.33	2.541	
13,300.0	7,740.0	13,034.4	7,500.0	102.8	102.4	55.97	5,694.6	-126.7	428.9	257.4	171.41	2.502	
13,400.0	7,740.0	13,134.4	7,500.0	104.5	104.2	56.07	5,794.6	-126.8	430.0	255.5	174.51	2.464	
13,500.0	7,740.0	13,234.4	7,500.0	106.3	105.9	56.18	5,894.6	-126.9	431.2	253.6	177.61	2.428	
13,600.0	7,740.0	13,334.3	7,500.0	108.0	107.6	56.28	5,994.6	-127.0	432.4	251.7	180.72	2.393	
13,700.0	7,740.0	13,434.3	7,500.0	109.8	109.4	56.39	6,094.6	-127.1	433.6	249.7	183.83	2.358	
13,800.0	7,740.0	13,534.3	7,500.0	111.5	111.1	56.49	6,194.6	-127.1	434.7	247.8	186.95	2.325	
13,900.0	7,740.0	13,634.3	7,500.0	113.2	112.9	56.59	6,294.6	-127.2	435.9	245.8	190.07	2.293	
14,000.0	7,740.0	13,734.3	7,500.0	115.0	114.6	56.69	6,394.6	-127.3	437.1	243.9	193.20	2.262	
14,100.0	7,740.0	13,834.3	7,500.0	116.7	116.3	56.79	6,494.6	-127.4	438.3	241.9	196.34	2.232	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	7,740.0	13,934.3	7,500.0	118.5	118.1	56.90	6,594.6	-127.5	439.5	240.0	199.48	2.203	
14,300.0	7,740.0	14,034.3	7,500.0	120.2	119.8	57.00	6,694.5	-127.6	440.6	238.0	202.62	2.175	
14,400.0	7,740.0	14,134.3	7,500.0	121.9	121.6	57.10	6,794.5	-127.6	441.8	236.0	205.77	2.147	
14,500.0	7,740.0	14,234.3	7,500.0	123.7	123.3	57.19	6,894.5	-127.7	443.0	234.1	208.93	2.120	
14,600.0	7,740.0	14,334.2	7,500.0	125.4	125.1	57.29	6,994.5	-127.8	444.2	232.1	212.09	2.094	
14,682.3	7,740.0	14,416.5	7,500.0	126.8	126.5	57.37	7,076.8	-127.9	445.2	230.5	214.70	2.073 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4												Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	20.2	20.2					
100.0	100.0	100.0	100.0	0.2	0.2	90.00	0.0	20.2	20.2	19.8	0.30	66.355		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	20.2	20.2	19.5	0.65	30.871	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-151.19	0.0	20.2	20.9	19.9	1.00	20.871		
400.0	400.0	400.0	400.0	0.7	0.7	-154.29	0.0	20.2	23.2	21.9	1.35	17.194		
500.0	499.9	499.9	499.9	0.9	0.8	-158.26	0.0	20.2	27.2	25.5	1.70	16.008		
600.0	599.7	599.7	599.7	1.1	1.0	-162.17	0.0	20.2	33.0	30.9	2.05	16.086		
700.0	699.5	698.8	698.8	1.3	1.2	-177.68	-0.1	21.0	40.3	37.9	2.40	16.809		
722.7	722.1	721.3	721.3	1.3	1.2	178.97	-0.2	21.4	42.1	39.7	2.48	17.017		
800.0	799.3	797.7	797.7	1.5	1.4	179.93	-0.4	23.5	49.0	46.3	2.74	17.854		
900.0	899.1	896.3	896.1	1.7	1.6	-178.70	-0.9	27.8	59.3	56.3	3.09	19.192		
1,000.0	998.9	995.6	995.4	1.9	1.7	-177.53	-1.5	32.9	70.6	67.1	3.44	20.503		
1,100.0	1,098.7	1,095.0	1,094.6	2.1	1.9	-176.67	-2.1	38.0	81.8	78.0	3.79	21.577		
1,200.0	1,198.5	1,194.3	1,193.8	2.3	2.1	-176.02	-2.7	43.1	93.0	88.9	4.14	22.474		
1,300.0	1,298.3	1,293.7	1,293.0	2.5	2.3	-175.52	-3.3	48.3	104.3	99.8	4.49	23.233		
1,400.0	1,398.1	1,393.1	1,392.3	2.7	2.5	-175.11	-3.9	53.4	115.5	110.7	4.84	23.884		
1,500.0	1,497.9	1,492.4	1,491.5	2.9	2.7	-174.77	-4.5	58.5	126.8	121.6	5.19	24.449		
1,600.0	1,597.7	1,591.8	1,590.7	3.1	2.9	-174.49	-5.1	63.6	138.1	132.5	5.54	24.943		
1,700.0	1,697.5	1,691.1	1,689.9	3.3	3.1	-174.25	-5.7	68.7	149.3	143.4	5.88	25.379		
1,800.0	1,797.3	1,790.5	1,789.2	3.5	3.3	-174.04	-6.3	73.9	160.6	154.4	6.23	25.766		
1,900.0	1,897.1	1,889.9	1,888.4	3.7	3.4	-173.87	-6.9	79.0	171.9	165.3	6.58	26.113		
2,000.0	1,996.9	1,989.2	1,987.6	3.9	3.6	-173.71	-7.5	84.1	183.2	176.2	6.93	26.425		
2,100.0	2,096.7	2,088.6	2,086.9	4.1	3.8	-173.57	-8.1	89.2	194.4	187.1	7.28	26.707		
2,200.0	2,196.5	2,188.0	2,186.1	4.3	4.0	-173.45	-8.7	94.4	205.7	198.1	7.63	26.964		
2,300.0	2,296.3	2,287.3	2,285.3	4.5	4.2	-173.34	-9.3	99.5	217.0	209.0	7.98	27.198		
2,400.0	2,396.1	2,386.7	2,384.5	4.7	4.4	-173.24	-10.0	104.6	228.3	219.9	8.33	27.413		
2,500.0	2,495.9	2,486.0	2,483.8	4.9	4.6	-173.15	-10.6	109.7	239.5	230.9	8.68	27.610		
2,600.0	2,595.7	2,585.4	2,583.0	5.2	4.8	-173.06	-11.2	114.9	250.8	241.8	9.02	27.793		
2,700.0	2,695.5	2,684.8	2,682.2	5.4	5.0	-172.99	-11.8	120.0	262.1	252.7	9.37	27.962		
2,800.0	2,795.3	2,784.1	2,781.4	5.6	5.2	-172.92	-12.4	125.1	273.4	263.7	9.72	28.118		
2,900.0	2,895.1	2,883.5	2,880.7	5.8	5.4	-172.86	-13.0	130.2	284.7	274.6	10.07	28.264		
3,000.0	2,994.9	2,982.8	2,979.9	6.0	5.6	-172.80	-13.6	135.4	295.9	285.5	10.42	28.400		
3,100.0	3,094.7	3,082.2	3,079.1	6.2	5.8	-172.75	-14.2	140.5	307.2	296.5	10.77	28.528		
3,200.0	3,194.5	3,181.6	3,178.4	6.4	6.0	-172.69	-14.8	145.6	318.5	307.4	11.12	28.647		
3,300.0	3,294.3	3,280.9	3,277.6	6.6	6.2	-172.65	-15.4	150.7	329.8	318.3	11.47	28.759		
3,400.0	3,394.1	3,380.3	3,376.8	6.8	6.4	-172.60	-16.0	155.9	341.1	329.3	11.82	28.865		
3,500.0	3,493.9	3,479.7	3,476.0	7.0	6.6	-172.56	-16.6	161.0	352.4	340.2	12.16	28.965		
3,600.0	3,593.8	3,579.0	3,575.3	7.2	6.8	-172.52	-17.2	166.1	363.6	351.1	12.51	29.059		
3,700.0	3,693.6	3,678.4	3,674.5	7.4	6.9	-172.49	-17.8	171.2	374.9	362.1	12.86	29.147		
3,800.0	3,793.4	3,777.7	3,773.7	7.6	7.1	-172.45	-18.4	176.4	386.2	373.0	13.21	29.232		
3,900.0	3,893.2	3,877.1	3,872.9	7.8	7.3	-172.42	-19.0	181.5	397.5	383.9	13.56	29.312		
4,000.0	3,993.0	3,976.5	3,972.2	8.0	7.5	-172.39	-19.6	186.6	408.8	394.9	13.91	29.388		
4,100.0	4,092.8	4,075.8	4,071.4	8.2	7.7	-172.36	-20.2	191.7	420.0	405.8	14.26	29.460		
4,200.0	4,192.6	4,175.2	4,170.6	8.4	7.9	-172.34	-20.8	196.9	431.3	416.7	14.61	29.528		
4,300.0	4,292.4	4,274.5	4,269.9	8.7	8.1	-172.31	-21.4	202.0	442.6	427.7	14.96	29.594		
4,400.0	4,392.2	4,373.9	4,369.1	8.9	8.3	-172.29	-22.0	207.1	453.9	438.6	15.31	29.657		
4,500.0	4,492.0	4,473.3	4,468.3	9.1	8.5	-172.26	-22.6	212.2	465.2	449.5	15.65	29.716		
4,600.0	4,591.8	4,572.6	4,567.5	9.3	8.7	-172.24	-23.2	217.3	476.5	460.5	16.00	29.774		
4,700.0	4,691.6	4,672.0	4,666.8	9.5	8.9	-172.22	-23.8	222.5	487.7	471.4	16.35	29.828		
4,800.0	4,791.4	4,771.3	4,766.0	9.7	9.1	-172.20	-24.4	227.6	499.0	482.3	16.70	29.881		
4,900.0	4,891.2	4,870.7	4,865.2	9.9	9.3	-172.18	-25.0	232.7	510.3	493.3	17.05	29.931		
5,000.0	4,991.0	4,970.1	4,964.4	10.1	9.5	-172.16	-25.6	237.8	521.6	504.2	17.40	29.979		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.8	5,069.4	5,063.7	10.3	9.7	-172.14	-26.3	243.0	532.9	515.1	17.75	30.026		
5,200.0	5,190.6	5,168.8	5,162.9	10.5	9.9	-172.13	-26.9	248.1	544.2	526.1	18.10	30.071		
5,300.0	5,290.4	5,268.2	5,262.1	10.7	10.1	-172.11	-27.5	253.2	555.5	537.0	18.45	30.113		
5,400.0	5,390.2	5,367.5	5,361.3	10.9	10.3	-172.09	-28.1	258.3	566.7	547.9	18.79	30.155		
5,500.0	5,490.0	5,466.9	5,460.6	11.1	10.5	-172.08	-28.7	263.5	578.0	558.9	19.14	30.195		
5,600.0	5,589.8	5,566.2	5,559.8	11.3	10.7	-172.06	-29.3	268.6	589.3	569.8	19.49	30.233		
5,700.0	5,689.6	5,665.6	5,659.0	11.5	10.8	-172.05	-29.9	273.7	600.6	580.7	19.84	30.270		
5,800.0	5,789.4	5,765.0	5,758.3	11.7	11.0	-172.04	-30.5	278.8	611.9	591.7	20.19	30.306		
5,900.0	5,889.2	5,864.3	5,857.5	11.9	11.2	-172.02	-31.1	284.0	623.2	602.6	20.54	30.341		
6,000.0	5,989.0	5,963.7	5,956.7	12.2	11.4	-172.01	-31.7	289.1	634.4	613.6	20.89	30.374		
6,100.0	6,088.8	6,063.0	6,055.9	12.4	11.6	-172.00	-32.3	294.2	645.7	624.5	21.24	30.406		
6,200.0	6,188.6	6,162.4	6,155.2	12.6	11.8	-171.99	-32.9	299.3	657.0	635.4	21.59	30.438		
6,300.0	6,288.4	6,261.8	6,254.4	12.8	12.0	-171.98	-33.5	304.5	668.3	646.4	21.93	30.468		
6,400.0	6,388.2	6,361.1	6,353.6	13.0	12.2	-171.97	-34.1	309.6	679.6	657.3	22.28	30.497		
6,500.0	6,488.0	6,460.5	6,452.8	13.2	12.4	-171.96	-34.7	314.7	690.9	668.2	22.63	30.526		
6,600.0	6,587.9	6,559.8	6,552.1	13.4	12.6	-171.95	-35.3	319.8	702.1	679.2	22.98	30.553		
6,700.0	6,687.7	6,659.2	6,651.3	13.6	12.8	-171.94	-35.9	325.0	713.4	690.1	23.33	30.580		
6,800.0	6,787.5	6,758.6	6,750.5	13.8	13.0	-171.93	-36.5	330.1	724.7	701.0	23.68	30.606		
6,900.0	6,887.3	6,857.9	6,849.8	14.0	13.2	-171.92	-37.1	335.2	736.0	712.0	24.03	30.631		
7,000.0	6,987.1	6,957.3	6,949.0	14.2	13.4	-171.91	-37.7	340.3	747.3	722.9	24.38	30.656		
7,100.0	7,086.9	7,056.7	7,048.2	14.4	13.6	-171.90	-38.3	345.5	758.6	733.8	24.73	30.680		
7,173.7	7,160.4	7,129.9	7,121.3	14.6	13.7	-171.89	-38.8	349.2	766.9	741.9	24.98	30.697		
7,200.0	7,186.7	7,156.0	7,147.4	14.6	13.8	147.59	-38.9	350.6	769.8	744.7	25.08	30.700		
7,250.0	7,236.4	7,203.3	7,194.7	14.7	13.9	112.37	-38.4	353.0	775.2	749.9	25.24	30.713		
7,300.0	7,285.6	7,250.0	7,241.1	14.8	14.0	101.57	-34.3	355.3	780.4	755.0	25.39	30.734		
7,350.0	7,334.0	7,296.4	7,286.8	14.9	14.0	96.69	-26.4	357.5	785.4	759.9	25.54	30.754		
7,400.0	7,381.0	7,343.4	7,332.2	15.0	14.1	93.94	-14.7	359.7	790.2	764.5	25.69	30.764		
7,450.0	7,426.5	7,390.8	7,376.9	15.0	14.2	92.20	0.8	361.7	794.8	769.0	25.85	30.747		
7,500.0	7,470.0	7,438.6	7,420.6	15.1	14.3	91.01	20.1	363.6	799.2	773.1	26.03	30.701		
7,550.0	7,511.2	7,486.8	7,462.8	15.2	14.4	90.18	43.2	365.4	803.2	777.0	26.25	30.604		
7,600.0	7,549.7	7,535.4	7,503.3	15.4	14.5	89.60	70.1	367.0	806.9	780.4	26.51	30.444		
7,650.0	7,585.4	7,584.5	7,541.8	15.5	14.7	89.19	100.6	368.5	810.3	783.5	26.82	30.210		
7,700.0	7,617.9	7,634.1	7,577.8	15.7	14.9	88.93	134.6	369.7	813.3	786.1	27.21	29.890		
7,750.0	7,647.0	7,684.2	7,611.1	15.9	15.1	88.78	172.0	370.8	815.9	788.2	27.68	29.478		
7,800.0	7,672.4	7,734.8	7,641.3	16.2	15.4	88.73	212.6	371.6	818.1	789.9	28.24	28.973		
7,850.0	7,694.0	7,785.9	7,668.0	16.5	15.7	88.77	256.1	372.3	819.9	791.0	28.89	28.379		
7,900.0	7,711.6	7,837.5	7,691.0	16.8	16.0	88.89	302.3	372.6	821.2	791.5	29.64	27.703		
7,950.0	7,725.0	7,889.7	7,709.9	17.2	16.4	89.08	350.9	372.8	822.0	791.5	30.49	26.959		
8,000.0	7,734.2	7,942.3	7,724.4	17.6	16.9	89.33	401.5	372.6	822.4	790.9	31.43	26.163		
8,050.0	7,739.1	7,995.4	7,734.3	18.1	17.4	89.64	453.6	372.2	822.2	789.8	32.46	25.331		
8,081.4	7,740.0	8,029.0	7,738.0	18.3	17.7	89.86	487.0	371.8	821.9	788.8	33.15	24.797		
8,100.0	7,740.0	8,049.0	7,739.3	18.5	17.9	89.95	506.9	371.6	821.6	788.1	33.56	24.481		
8,200.0	7,740.0	8,151.0	7,740.0	19.6	19.0	90.00	608.9	369.8	819.9	784.0	35.90	22.840		
8,300.0	7,740.0	8,251.0	7,740.0	20.7	20.2	90.00	708.9	368.1	818.2	779.8	38.38	21.316		
8,400.0	7,740.0	8,350.9	7,740.0	21.9	21.4	90.00	808.8	366.3	816.4	775.4	41.02	19.905		
8,500.0	7,740.0	8,450.9	7,740.0	23.2	22.8	90.00	908.8	364.6	814.7	770.9	43.77	18.611		
8,600.0	7,740.0	8,550.9	7,740.0	24.6	24.2	90.00	1,008.8	362.8	812.9	766.3	46.63	17.433		
8,700.0	7,740.0	8,650.9	7,740.0	25.9	25.6	90.00	1,108.8	361.1	811.2	761.6	49.57	16.363		
8,800.0	7,740.0	8,750.9	7,740.0	27.4	27.0	90.00	1,208.7	359.3	809.5	756.9	52.59	15.393		
8,900.0	7,740.0	8,850.9	7,740.0	28.8	28.5	90.00	1,308.7	357.6	807.7	752.1	55.66	14.513		
9,000.0	7,740.0	8,950.9	7,740.0	30.3	30.1	90.00	1,408.7	355.8	806.0	747.2	58.77	13.713		
9,100.0	7,740.0	9,050.8	7,740.0	31.9	31.6	90.00	1,508.6	354.1	804.2	742.3	61.93	12.985		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,200.0	7,740.0	9,150.8	7,740.0	33.4	33.2	90.00	1,608.6	352.4	802.5	737.3	65.13	12.321	
9,300.0	7,740.0	9,250.8	7,740.0	35.0	34.8	90.00	1,708.6	350.6	800.7	732.4	68.36	11.714	
9,400.0	7,740.0	9,350.8	7,740.0	36.6	36.4	90.00	1,808.5	348.9	799.0	727.4	71.61	11.158	
9,500.0	7,740.0	9,450.8	7,740.0	38.2	38.0	90.00	1,908.5	347.1	797.2	722.4	74.89	10.646	
9,600.0	7,740.0	9,550.8	7,740.0	39.8	39.6	90.00	2,008.5	345.4	795.5	717.3	78.18	10.175	
9,700.0	7,740.0	9,650.7	7,740.0	41.4	41.2	90.00	2,108.4	343.6	793.7	712.3	81.50	9.740	
9,800.0	7,740.0	9,750.7	7,740.0	43.0	42.9	90.00	2,208.4	341.9	792.0	707.2	84.83	9.337	
9,900.0	7,740.0	9,850.7	7,740.0	44.7	44.5	90.00	2,308.4	340.1	790.3	702.1	88.17	8.963	
10,000.0	7,740.0	9,950.7	7,740.0	46.3	46.2	90.00	2,408.4	338.4	788.5	697.0	91.52	8.615	
10,100.0	7,740.0	10,050.7	7,740.0	48.0	47.9	90.00	2,508.3	336.6	786.8	691.9	94.89	8.291	
10,200.0	7,740.0	10,150.7	7,740.0	49.7	49.5	90.00	2,608.3	334.9	785.0	686.8	98.27	7.989	
10,300.0	7,740.0	10,250.7	7,740.0	51.3	51.2	90.00	2,708.3	333.2	783.3	681.6	101.65	7.705	
10,400.0	7,740.0	10,350.6	7,740.0	53.0	52.9	90.00	2,808.2	331.4	781.5	676.5	105.05	7.440	
10,500.0	7,740.0	10,450.6	7,740.0	54.7	54.6	90.00	2,908.2	329.7	779.8	671.3	108.45	7.191	
10,600.0	7,740.0	10,550.6	7,740.0	56.4	56.3	90.00	3,008.2	327.9	778.0	666.2	111.85	6.956	
10,700.0	7,740.0	10,650.6	7,740.0	58.1	58.0	90.00	3,108.1	326.2	776.3	661.0	115.27	6.735	
10,800.0	7,740.0	10,750.6	7,740.0	59.8	59.7	90.00	3,208.1	324.4	774.6	655.9	118.69	6.526	
10,900.0	7,740.0	10,850.6	7,740.0	61.5	61.4	90.00	3,308.1	322.7	772.8	650.7	122.11	6.329	
11,000.0	7,740.0	10,950.5	7,740.0	63.2	63.1	90.00	3,408.0	320.9	771.1	645.5	125.54	6.142	
11,105.4	7,740.0	11,055.9	7,740.0	65.0	64.9	90.00	3,513.4	319.1	769.2	640.1	129.16	5.956	
11,191.0	7,740.0	11,141.5	7,740.0	66.4	66.4	90.00	3,599.0	317.6	768.4	636.2	132.12	5.815	
11,200.0	7,740.0	11,150.5	7,740.0	66.6	66.5	90.00	3,608.0	317.5	768.3	635.9	132.43	5.802	
11,300.0	7,740.0	11,250.5	7,740.0	68.3	68.2	90.00	3,708.0	315.7	768.1	632.2	135.87	5.653	
11,400.0	7,740.0	11,350.5	7,740.0	70.0	69.9	90.00	3,808.0	314.0	767.8	628.5	139.32	5.511	
11,500.0	7,740.0	11,450.5	7,740.0	71.7	71.7	90.00	3,908.0	312.2	767.6	624.8	142.77	5.377	
11,600.0	7,740.0	11,550.5	7,740.0	73.4	73.4	90.00	4,007.9	310.5	767.3	621.1	146.22	5.248	
11,700.0	7,740.0	11,650.5	7,740.0	75.1	75.1	90.00	4,107.9	308.7	767.1	617.4	149.67	5.125	
11,800.0	7,740.0	11,750.5	7,740.0	76.9	76.8	90.00	4,207.9	307.0	766.8	613.7	153.13	5.008	
11,900.0	7,740.0	11,850.5	7,740.0	78.6	78.5	90.00	4,307.9	305.2	766.6	610.0	156.58	4.896	
12,000.0	7,740.0	11,950.5	7,740.0	80.3	80.3	90.00	4,407.9	303.5	766.3	606.3	160.04	4.788	
12,100.0	7,740.0	12,050.5	7,740.0	82.0	82.0	90.00	4,507.9	301.7	766.1	602.6	163.51	4.685	
12,200.0	7,740.0	12,150.5	7,740.0	83.8	83.7	90.00	4,607.8	300.0	765.8	598.9	166.97	4.587	
12,300.0	7,740.0	12,250.5	7,740.0	85.5	85.5	90.00	4,707.8	298.3	765.6	595.1	170.44	4.492	
12,400.0	7,740.0	12,350.5	7,740.0	87.2	87.2	90.00	4,807.8	296.5	765.3	591.4	173.90	4.401	
12,500.0	7,740.0	12,450.5	7,740.0	88.9	88.9	90.00	4,907.8	294.8	765.1	587.7	177.37	4.313	
12,600.0	7,740.0	12,550.5	7,740.0	90.7	90.6	90.00	5,007.8	293.0	764.8	584.0	180.84	4.229	
12,700.0	7,740.0	12,650.5	7,740.0	92.4	92.4	90.00	5,107.8	291.3	764.6	580.3	184.32	4.148	
12,800.0	7,740.0	12,750.5	7,740.0	94.1	94.1	90.00	5,207.7	289.5	764.3	576.5	187.79	4.070	
12,900.0	7,740.0	12,850.5	7,740.0	95.9	95.8	90.00	5,307.7	287.8	764.1	572.8	191.26	3.995	
13,000.0	7,740.0	12,950.5	7,740.0	97.6	97.6	90.00	5,407.7	286.0	763.8	569.1	194.74	3.922	
13,100.0	7,740.0	13,050.5	7,740.0	99.3	99.3	90.00	5,507.7	284.3	763.6	565.4	198.22	3.852	
13,200.0	7,740.0	13,150.5	7,740.0	101.1	101.0	90.00	5,607.7	282.5	763.3	561.6	201.70	3.784	
13,300.0	7,740.0	13,250.5	7,740.0	102.8	102.8	90.00	5,707.7	280.8	763.1	557.9	205.18	3.719	
13,400.0	7,740.0	13,350.5	7,740.0	104.5	104.5	90.00	5,807.7	279.1	762.8	554.2	208.66	3.656	
13,500.0	7,740.0	13,450.5	7,740.0	106.3	106.3	90.00	5,907.6	277.3	762.6	550.4	212.14	3.595	
13,600.0	7,740.0	13,550.5	7,740.0	108.0	108.0	90.00	6,007.6	275.6	762.3	546.7	215.62	3.535	
13,700.0	7,740.0	13,650.5	7,740.0	109.8	109.7	90.00	6,107.6	273.8	762.1	543.0	219.10	3.478	
13,800.0	7,740.0	13,750.5	7,740.0	111.5	111.5	90.00	6,207.6	272.1	761.8	539.2	222.59	3.423	
13,900.0	7,740.0	13,850.5	7,740.0	113.2	113.2	90.00	6,307.6	270.3	761.6	535.5	226.07	3.369	
14,000.0	7,740.0	13,950.5	7,740.0	115.0	115.0	90.00	6,407.6	268.6	761.3	531.8	229.56	3.316	
14,100.0	7,740.0	14,050.5	7,740.0	116.7	116.7	90.00	6,507.5	266.8	761.1	528.0	233.04	3.266	
14,200.0	7,740.0	14,161.9	7,740.0	118.5	118.6	90.00	6,618.9	264.3	760.3	523.5	236.73	3.212	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4				Offset Site Error:		0.0 ft	
Survey Program: 0-Geolink MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation	Warning				
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor					
14,300.0	7,740.0	14,277.1	7,740.0	120.2	120.6	90.00	6,734.0	259.4	757.5	517.0	240.48	3.150					
14,400.0	7,740.0	14,385.1	7,740.0	121.9	122.5	90.00	6,841.8	252.9	753.0	508.9	244.11	3.085					
14,500.0	7,740.0	14,485.0	7,740.0	123.7	124.2	90.00	6,941.5	246.6	748.1	500.6	247.59	3.022					
14,600.0	7,740.0	14,584.8	7,740.0	125.4	126.0	90.00	7,041.1	240.3	743.3	492.2	251.08	2.961					
14,682.3	7,740.0	14,632.3	7,740.0	126.8	126.8	90.00	7,088.5	237.3	740.2	486.8	253.34	2.922 SF					

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4												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	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	98.612	
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	29.9	29.9	29.3	0.65	45.878	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	-150.81	0.0	29.9	30.7	29.7	1.00	30.646	
400.0	400.0	400.0	400.0	0.7	0.7	-153.02	0.0	29.9	33.0	31.7	1.35	24.425	
500.0	499.9	499.9	499.9	0.9	0.8	-156.07	0.0	29.9	37.0	35.3	1.70	21.714	
600.0	599.7	599.0	599.0	1.1	1.0	-159.05	-0.1	30.8	43.4	41.4	2.05	21.180	
700.0	699.5	697.8	697.7	1.3	1.2	-174.18	-0.4	33.3	52.3	49.9	2.40	21.831	
722.7	722.1	720.2	720.1	1.3	1.2	-177.58	-0.5	34.2	54.6	52.1	2.48	22.033	
800.0	799.3	796.3	796.1	1.5	1.4	-176.87	-0.9	37.6	62.7	60.0	2.74	22.858	
900.0	899.1	894.4	894.1	1.7	1.6	-175.90	-1.5	43.4	74.8	71.7	3.09	24.189	
1,000.0	998.9	992.1	991.5	1.9	1.8	-174.93	-2.4	50.9	88.5	85.1	3.44	25.735	
1,100.0	1,098.7	1,090.4	1,089.4	2.1	2.0	-174.04	-3.3	59.8	103.5	99.7	3.79	27.337	
1,200.0	1,198.5	1,189.3	1,187.8	2.3	2.2	-173.37	-4.4	68.8	118.7	114.5	4.14	28.693	
1,300.0	1,298.3	1,288.1	1,286.2	2.5	2.4	-172.85	-5.4	77.8	133.8	129.3	4.48	29.840	
1,400.0	1,398.1	1,386.9	1,384.7	2.7	2.6	-172.43	-6.4	86.8	149.0	144.2	4.83	30.825	
1,500.0	1,497.9	1,485.8	1,483.1	2.9	2.9	-172.09	-7.4	95.9	164.2	159.0	5.18	31.678	
1,600.0	1,597.7	1,584.6	1,581.5	3.1	3.1	-171.81	-8.4	104.9	179.3	173.8	5.53	32.424	
1,700.0	1,697.5	1,683.4	1,679.9	3.3	3.3	-171.58	-9.4	113.9	194.5	188.7	5.88	33.083	
1,800.0	1,797.3	1,782.3	1,778.4	3.5	3.5	-171.37	-10.4	122.9	209.7	203.5	6.23	33.669	
1,900.0	1,897.1	1,881.1	1,876.8	3.7	3.8	-171.20	-11.4	131.9	224.9	218.3	6.58	34.193	
2,000.0	1,996.9	1,980.0	1,975.2	3.9	4.0	-171.04	-12.4	140.9	240.1	233.2	6.93	34.664	
2,100.0	2,096.7	2,078.8	2,073.6	4.1	4.2	-170.91	-13.4	149.9	255.3	248.0	7.27	35.091	
2,200.0	2,196.5	2,177.6	2,172.0	4.3	4.4	-170.79	-14.5	158.9	270.5	262.8	7.62	35.479	
2,300.0	2,296.3	2,276.5	2,270.5	4.5	4.7	-170.68	-15.5	168.0	285.7	277.7	7.97	35.833	
2,400.0	2,396.1	2,375.3	2,368.9	4.7	4.9	-170.59	-16.5	177.0	300.9	292.5	8.32	36.158	
2,500.0	2,495.9	2,474.1	2,467.3	4.9	5.1	-170.50	-17.5	186.0	316.1	307.4	8.67	36.456	
2,600.0	2,595.7	2,573.0	2,565.7	5.2	5.4	-170.42	-18.5	195.0	331.2	322.2	9.02	36.732	
2,700.0	2,695.5	2,671.8	2,664.1	5.4	5.6	-170.35	-19.5	204.0	346.4	337.1	9.37	36.987	
2,800.0	2,795.3	2,770.7	2,762.6	5.6	5.8	-170.28	-20.5	213.0	361.6	351.9	9.72	37.224	
2,900.0	2,895.1	2,869.5	2,861.0	5.8	6.1	-170.22	-21.5	222.0	376.8	366.8	10.06	37.445	
3,000.0	2,994.9	2,968.3	2,959.4	6.0	6.3	-170.16	-22.5	231.0	392.0	381.6	10.41	37.651	
3,100.0	3,094.7	3,067.2	3,057.8	6.2	6.5	-170.11	-23.5	240.1	407.2	396.5	10.76	37.843	
3,200.0	3,194.5	3,166.0	3,156.2	6.4	6.8	-170.06	-24.6	249.1	422.4	411.3	11.11	38.024	
3,300.0	3,294.3	3,264.8	3,254.7	6.6	7.0	-170.02	-25.6	258.1	437.6	426.2	11.46	38.193	
3,400.0	3,394.1	3,363.7	3,353.1	6.8	7.2	-169.98	-26.6	267.1	452.8	441.0	11.81	38.353	
3,500.0	3,493.9	3,462.5	3,451.5	7.0	7.5	-169.94	-27.6	276.1	468.0	455.9	12.16	38.504	
3,600.0	3,593.8	3,561.4	3,549.9	7.2	7.7	-169.90	-28.6	285.1	483.2	470.7	12.50	38.646	
3,700.0	3,693.6	3,660.2	3,648.3	7.4	7.9	-169.87	-29.6	294.1	498.4	485.6	12.85	38.780	
3,800.0	3,793.4	3,759.0	3,746.8	7.6	8.2	-169.84	-30.6	303.1	513.6	500.4	13.20	38.907	
3,900.0	3,893.2	3,857.9	3,845.2	7.8	8.4	-169.81	-31.6	312.2	528.8	515.3	13.55	39.028	
4,000.0	3,993.0	3,956.7	3,943.6	8.0	8.6	-169.78	-32.6	321.2	544.0	530.1	13.90	39.143	
4,100.0	4,092.8	4,055.6	4,042.0	8.2	8.9	-169.75	-33.6	330.2	559.2	545.0	14.25	39.252	
4,200.0	4,192.6	4,154.4	4,140.5	8.4	9.1	-169.72	-34.7	339.2	574.4	559.8	14.60	39.356	
4,300.0	4,292.4	4,253.2	4,238.9	8.7	9.3	-169.70	-35.7	348.2	589.6	574.7	14.94	39.455	
4,400.0	4,392.2	4,352.1	4,337.3	8.9	9.6	-169.68	-36.7	357.2	604.8	589.5	15.29	39.550	
4,500.0	4,492.0	4,450.9	4,435.7	9.1	9.8	-169.65	-37.7	366.2	620.0	604.4	15.64	39.640	
4,600.0	4,591.8	4,549.7	4,534.1	9.3	10.0	-169.63	-38.7	375.2	635.2	619.2	15.99	39.727	
4,700.0	4,691.6	4,648.6	4,632.6	9.5	10.3	-169.61	-39.7	384.3	650.4	634.1	16.34	39.810	
4,800.0	4,791.4	4,747.4	4,731.0	9.7	10.5	-169.59	-40.7	393.3	665.6	648.9	16.69	39.889	
4,900.0	4,891.2	4,846.3	4,829.4	9.9	10.7	-169.58	-41.7	402.3	680.8	663.8	17.03	39.965	
5,000.0	4,991.0	4,945.1	4,927.8	10.1	11.0	-169.56	-42.7	411.3	696.0	678.6	17.38	40.038	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	5,090.8	5,043.9	5,026.2	10.3	11.2	-169.54	-43.7	420.3	711.2	693.5	17.73	40.109	
5,200.0	5,190.6	5,142.8	5,124.7	10.5	11.4	-169.52	-44.8	429.3	726.4	708.3	18.08	40.176	
5,300.0	5,290.4	5,241.6	5,223.1	10.7	11.7	-169.51	-45.8	438.3	741.6	723.2	18.43	40.241	
5,400.0	5,390.2	5,340.4	5,321.5	10.9	11.9	-169.49	-46.8	447.4	756.8	738.0	18.78	40.304	
5,500.0	5,490.0	5,439.3	5,419.9	11.1	12.1	-169.48	-47.8	456.4	772.0	752.9	19.13	40.364	
5,600.0	5,589.8	5,538.1	5,518.3	11.3	12.4	-169.47	-48.8	465.4	787.2	767.7	19.47	40.422	
5,700.0	5,689.6	5,637.0	5,616.8	11.5	12.6	-169.45	-49.8	474.4	802.4	782.6	19.82	40.478	
5,800.0	5,789.4	5,735.8	5,715.2	11.7	12.8	-169.44	-50.8	483.4	817.6	797.4	20.17	40.532	
5,900.0	5,889.2	5,834.6	5,813.6	11.9	13.1	-169.43	-51.8	492.4	832.8	812.3	20.52	40.584	
6,000.0	5,989.0	5,933.5	5,912.0	12.2	13.3	-169.42	-52.8	501.4	848.0	827.1	20.87	40.635	
6,100.0	6,088.8	6,032.3	6,010.5	12.4	13.5	-169.41	-53.9	510.4	863.2	842.0	21.22	40.684	
6,200.0	6,188.6	6,131.1	6,108.9	12.6	13.8	-169.40	-54.9	519.5	878.4	856.8	21.57	40.731	
6,300.0	6,288.4	6,230.0	6,207.3	12.8	14.0	-169.38	-55.9	528.5	893.6	871.7	21.91	40.777	
6,400.0	6,388.2	6,328.8	6,305.7	13.0	14.2	-169.37	-56.9	537.5	908.8	886.5	22.26	40.821	
6,500.0	6,488.0	6,427.7	6,404.1	13.2	14.5	-169.36	-57.9	546.5	924.0	901.4	22.61	40.864	
6,600.0	6,587.9	6,526.5	6,502.6	13.4	14.7	-169.35	-58.9	555.5	939.2	916.2	22.96	40.906	
6,700.0	6,687.7	6,625.3	6,601.0	13.6	15.0	-169.35	-59.9	564.5	954.4	931.1	23.31	40.947	
6,800.0	6,787.5	6,724.2	6,699.4	13.8	15.2	-169.34	-60.9	573.5	969.6	946.0	23.66	40.986	
6,900.0	6,887.3	6,823.0	6,797.8	14.0	15.4	-169.33	-61.9	582.5	984.8	960.8	24.01	41.024	
7,000.0	6,987.1	6,921.9	6,896.2	14.2	15.7	-169.32	-62.9	591.6	1,000.0	975.7	24.35	41.061	
7,100.0	7,086.9	7,015.5	6,989.4	14.4	15.9	-169.53	-60.1	600.1	1,015.4	990.7	24.68	41.141	
7,173.7	7,160.4	7,081.2	7,053.9	14.6	16.0	-170.15	-49.6	606.2	1,027.2	1,002.3	24.90	41.251	
7,200.0	7,186.7	7,104.0	7,076.0	14.6	16.1	148.85	-44.2	608.2	1,031.6	1,006.6	24.98	41.295	
7,250.0	7,236.4	7,146.9	7,116.8	14.7	16.2	112.57	-31.7	612.1	1,039.9	1,014.8	25.12	41.391	
7,300.0	7,285.6	7,189.3	7,156.1	14.8	16.2	100.70	-16.3	615.9	1,048.3	1,023.0	25.26	41.492	
7,350.0	7,334.0	7,231.1	7,193.7	14.9	16.3	94.78	1.7	619.5	1,056.6	1,031.1	25.42	41.557	
7,400.0	7,381.0	7,272.6	7,229.6	15.0	16.4	91.01	22.1	623.0	1,064.7	1,039.1	25.57	41.645	
7,450.0	7,426.5	7,313.6	7,263.5	15.0	16.6	88.27	44.9	626.4	1,072.6	1,046.9	25.73	41.690	
7,500.0	7,470.0	7,354.4	7,295.6	15.1	16.7	86.13	69.9	629.6	1,080.2	1,054.3	25.91	41.695	
7,550.0	7,511.2	7,394.9	7,325.6	15.2	16.8	84.38	96.9	632.6	1,087.5	1,061.3	26.12	41.639	
7,600.0	7,549.7	7,435.1	7,353.4	15.4	17.0	82.92	125.9	635.5	1,094.3	1,067.9	26.36	41.508	
7,650.0	7,585.4	7,475.2	7,379.1	15.5	17.1	81.69	156.6	638.1	1,100.6	1,073.9	26.65	41.293	
7,700.0	7,617.9	7,515.2	7,402.5	15.7	17.3	80.65	188.9	640.6	1,106.3	1,079.4	27.00	40.982	
7,750.0	7,647.0	7,555.1	7,423.5	15.9	17.6	79.78	222.6	642.9	1,111.5	1,084.1	27.40	40.562	
7,800.0	7,672.4	7,594.9	7,442.1	16.2	17.8	79.07	257.7	645.0	1,116.1	1,088.2	27.89	40.020	
7,850.0	7,694.0	7,634.6	7,458.3	16.5	18.0	78.51	294.0	646.8	1,119.9	1,091.5	28.46	39.356	
7,900.0	7,711.6	7,674.4	7,471.8	16.8	18.3	78.08	331.4	648.5	1,123.1	1,094.0	29.11	38.582	
7,950.0	7,725.0	7,714.2	7,482.8	17.2	18.6	77.80	369.6	649.9	1,125.6	1,095.7	29.85	37.708	
8,000.0	7,734.2	7,750.0	7,490.4	17.6	18.9	77.63	404.5	650.9	1,127.3	1,096.7	30.63	36.799	
8,050.0	7,739.1	7,794.1	7,496.8	18.1	19.3	77.61	448.1	652.0	1,128.3	1,096.7	31.58	35.723	
8,081.4	7,740.0	7,819.3	7,498.9	18.3	19.5	77.66	473.2	652.4	1,128.5	1,096.3	32.19	35.052	
8,100.0	7,740.0	7,834.2	7,499.6	18.5	19.7	77.70	488.1	652.6	1,128.6	1,096.0	32.55	34.668	
8,200.0	7,740.0	7,929.1	7,500.0	19.6	20.6	77.73	583.0	653.7	1,129.5	1,094.8	34.75	32.508	
8,300.0	7,740.0	8,029.1	7,500.0	20.7	21.7	77.74	683.0	654.7	1,130.6	1,093.4	37.17	30.419	
8,400.0	7,740.0	8,129.1	7,500.0	21.9	22.8	77.75	783.0	655.8	1,131.6	1,091.8	39.74	28.477	
8,500.0	7,740.0	8,229.1	7,500.0	23.2	24.0	77.77	883.0	656.8	1,132.6	1,090.2	42.43	26.695	
8,600.0	7,740.0	8,329.1	7,500.0	24.6	25.3	77.78	983.0	657.9	1,133.6	1,088.4	45.22	25.069	
8,700.0	7,740.0	8,429.1	7,500.0	25.9	26.7	77.79	1,083.0	658.9	1,134.6	1,086.6	48.09	23.592	
8,800.0	7,740.0	8,529.1	7,500.0	27.4	28.1	77.80	1,183.0	660.0	1,135.7	1,084.6	51.04	22.251	
8,900.0	7,740.0	8,629.1	7,500.0	28.8	29.5	77.81	1,283.0	661.0	1,136.7	1,082.7	54.04	21.034	
9,000.0	7,740.0	8,729.1	7,500.0	30.3	31.0	77.82	1,382.9	662.1	1,137.7	1,080.6	57.09	19.928	
9,100.0	7,740.0	8,829.1	7,500.0	31.9	32.5	77.83	1,482.9	663.1	1,138.7	1,078.6	60.18	18.921	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
9,200.0	7,740.0	8,929.1	7,500.0	33.4	34.0	77.84	1,582.9	664.1	1,139.8	1,076.5	63.31	18.003	
9,300.0	7,740.0	9,029.0	7,500.0	35.0	35.5	77.85	1,682.9	665.2	1,140.8	1,074.3	66.47	17.163	
9,400.0	7,740.0	9,129.0	7,500.0	36.6	37.1	77.87	1,782.9	666.2	1,141.8	1,072.2	69.65	16.393	
9,500.0	7,740.0	9,229.0	7,500.0	38.2	38.6	77.88	1,882.9	667.3	1,142.8	1,070.0	72.86	15.685	
9,600.0	7,740.0	9,329.0	7,500.0	39.8	40.2	77.89	1,982.9	668.3	1,143.9	1,067.8	76.09	15.034	
9,700.0	7,740.0	9,429.0	7,500.0	41.4	41.8	77.90	2,082.9	669.4	1,144.9	1,065.6	79.33	14.432	
9,800.0	7,740.0	9,529.0	7,500.0	43.0	43.4	77.91	2,182.9	670.4	1,145.9	1,063.3	82.59	13.874	
9,900.0	7,740.0	9,629.0	7,500.0	44.7	45.1	77.92	2,282.8	671.5	1,146.9	1,061.1	85.86	13.357	
10,000.0	7,740.0	9,729.0	7,500.0	46.3	46.7	77.93	2,382.8	672.5	1,148.0	1,058.8	89.15	12.877	
10,100.0	7,740.0	9,829.0	7,500.0	48.0	48.3	77.94	2,482.8	673.6	1,149.0	1,056.5	92.45	12.428	
10,200.0	7,740.0	9,929.0	7,500.0	49.7	50.0	77.95	2,582.8	674.6	1,150.0	1,054.2	95.76	12.010	
10,300.0	7,740.0	10,029.0	7,500.0	51.3	51.6	77.96	2,682.8	675.7	1,151.0	1,052.0	99.07	11.618	
10,400.0	7,740.0	10,149.2	7,500.0	53.0	53.6	77.97	2,803.1	676.0	1,151.3	1,048.6	102.73	11.207	
10,500.0	7,740.0	10,273.7	7,500.0	54.7	55.7	77.94	2,927.4	673.7	1,149.5	1,043.1	106.46	10.798	
10,600.0	7,740.0	10,397.9	7,500.0	56.4	57.8	77.89	3,051.6	668.7	1,145.6	1,035.4	110.18	10.398	
10,700.0	7,740.0	10,521.9	7,500.0	58.1	59.8	77.81	3,175.4	661.1	1,139.6	1,025.7	113.88	10.006	
10,800.0	7,740.0	10,645.5	7,500.0	59.8	61.9	77.70	3,298.5	650.8	1,131.4	1,013.9	117.57	9.623	
10,900.0	7,740.0	10,768.6	7,500.0	61.5	63.9	77.56	3,420.9	637.9	1,121.2	1,000.0	121.24	9.248	
11,000.0	7,740.0	10,891.1	7,500.0	63.2	65.9	77.39	3,542.4	622.5	1,108.9	984.0	124.88	8.880	
11,105.4	7,740.0	10,998.3	7,500.0	65.0	67.7	77.21	3,648.6	607.6	1,094.6	966.2	128.36	8.528	
11,191.0	7,740.0	11,083.2	7,500.0	66.4	69.1	77.11	3,732.7	595.8	1,083.6	952.5	131.12	8.264	
11,200.0	7,740.0	11,092.1	7,500.0	66.6	69.2	77.09	3,741.5	594.5	1,082.5	951.1	131.41	8.237	
11,300.0	7,740.0	11,191.3	7,500.0	68.3	70.9	76.95	3,839.8	580.7	1,070.4	935.7	134.68	7.948	
11,400.0	7,740.0	11,285.3	7,500.0	70.0	72.5	76.80	3,932.8	567.7	1,058.4	920.5	137.86	7.677	
11,500.0	7,740.0	11,369.6	7,500.0	71.7	73.9	76.68	4,016.4	557.0	1,047.4	906.6	140.88	7.435	
11,600.0	7,740.0	11,454.1	7,500.0	73.4	75.3	76.58	4,100.5	547.5	1,038.0	894.0	143.92	7.212	
11,700.0	7,740.0	11,538.9	7,500.0	75.1	76.8	76.49	4,184.8	539.3	1,029.9	883.0	146.98	7.007	
11,800.0	7,740.0	11,623.9	7,500.0	76.9	78.2	76.41	4,269.5	532.2	1,023.3	873.3	150.04	6.820	
11,900.0	7,740.0	11,709.0	7,500.0	78.6	79.7	76.35	4,354.4	526.4	1,018.2	865.1	153.12	6.650	
12,000.0	7,740.0	11,800.0	7,500.0	80.3	81.2	76.31	4,445.3	521.7	1,014.5	858.2	156.30	6.490	
12,100.0	7,740.0	11,879.6	7,500.0	82.0	82.6	76.28	4,524.8	518.6	1,012.2	852.9	159.31	6.354	
12,200.0	7,740.0	11,964.9	7,500.0	83.8	84.0	76.27	4,610.1	516.7	1,011.4	849.0	162.42	6.227	
12,206.6	7,740.0	11,970.6	7,500.0	83.9	84.1	76.27	4,615.8	516.6	1,011.4	848.7	162.63	6.219	
12,300.0	7,740.0	12,050.3	7,500.0	85.5	85.5	76.28	4,695.5	515.9	1,012.0	846.5	165.55	6.113	
12,400.0	7,740.0	12,135.6	7,500.0	87.2	87.0	76.30	4,780.8	516.5	1,014.1	845.4	168.69	6.012	
12,500.0	7,740.0	12,229.8	7,500.0	88.9	88.6	76.35	4,874.9	518.2	1,017.3	845.3	171.99	5.915	
12,600.0	7,740.0	12,329.7	7,500.0	90.7	90.4	76.39	4,974.9	520.2	1,020.7	845.3	175.39	5.820	
12,700.0	7,740.0	12,429.6	7,500.0	92.4	92.1	76.44	5,074.8	522.2	1,024.1	845.3	178.80	5.727	
12,800.0	7,740.0	12,529.6	7,500.0	94.1	93.8	76.48	5,174.7	524.1	1,027.4	845.2	182.21	5.639	
12,900.0	7,740.0	12,629.5	7,500.0	95.9	95.5	76.53	5,274.6	526.1	1,030.8	845.2	185.62	5.553	
13,000.0	7,740.0	12,729.5	7,500.0	97.6	97.3	76.57	5,374.5	528.1	1,034.2	845.2	189.03	5.471	
13,100.0	7,740.0	12,829.4	7,500.0	99.3	99.0	76.62	5,474.5	530.1	1,037.6	845.1	192.45	5.391	
13,200.0	7,740.0	12,929.3	7,500.0	101.1	100.7	76.66	5,574.4	532.0	1,040.9	845.1	195.86	5.315	
13,300.0	7,740.0	13,029.3	7,500.0	102.8	102.5	76.71	5,674.3	534.0	1,044.3	845.0	199.28	5.240	
13,400.0	7,740.0	13,129.2	7,500.0	104.5	104.2	76.75	5,774.2	536.0	1,047.7	845.0	202.70	5.168	
13,500.0	7,740.0	13,229.2	7,500.0	106.3	106.0	76.79	5,874.2	537.9	1,051.0	844.9	206.13	5.099	
13,600.0	7,740.0	13,329.1	7,500.0	108.0	107.7	76.84	5,974.1	539.9	1,054.4	844.9	209.55	5.032	
13,700.0	7,740.0	13,429.0	7,500.0	109.8	109.4	76.88	6,074.0	541.9	1,057.8	844.8	212.98	4.967	
13,800.0	7,740.0	13,529.0	7,500.0	111.5	111.2	76.92	6,173.9	543.9	1,061.2	844.8	216.41	4.904	
13,900.0	7,740.0	13,628.9	7,500.0	113.2	112.9	76.96	6,273.8	545.8	1,064.5	844.7	219.83	4.842	
14,000.0	7,740.0	13,728.9	7,500.0	115.0	114.6	77.01	6,373.8	547.8	1,067.9	844.7	223.27	4.783	
14,100.0	7,740.0	13,828.8	7,500.0	116.7	116.4	77.05	6,473.7	549.8	1,071.3	844.6	226.70	4.726	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #4		Offset Site Error:		0.0 ft	
Survey Program:												0-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis						
14,200.0	7,740.0	13,928.7	7,500.0	118.5	118.1	77.09	6,573.6	551.7	1,074.7	844.5	230.13	4.670					
14,300.0	7,740.0	14,028.7	7,500.0	120.2	119.9	77.13	6,673.5	553.7	1,078.1	844.5	233.57	4.616					
14,400.0	7,740.0	14,128.6	7,500.0	121.9	121.6	77.17	6,773.4	555.7	1,081.4	844.4	237.00	4.563					
14,500.0	7,740.0	14,228.6	7,500.0	123.7	123.3	77.21	6,873.4	557.7	1,084.8	844.4	240.44	4.512					
14,600.0	7,740.0	14,328.5	7,500.0	125.4	125.1	77.25	6,973.3	559.6	1,088.2	844.3	243.88	4.462					
14,682.3	7,740.0	14,410.7	7,500.0	126.8	126.5	77.28	7,055.5	561.2	1,091.0	844.3	246.71	4.422 SF					

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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		
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	131.789		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	40.0	40.0	39.4	0.65	61.314 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-150.61	0.0	40.0	40.8	39.8	1.00	40.701		
400.0	400.0	400.0	400.0	0.7	0.7	-152.31	0.0	40.0	43.1	41.7	1.35	31.869		
500.0	499.9	499.1	499.0	0.9	0.8	-154.58	-0.1	40.9	47.8	46.1	1.70	28.126		
600.0	599.7	597.8	597.8	1.1	1.0	-156.82	-0.2	43.4	56.0	53.9	2.05	27.293		
700.0	699.5	696.2	696.1	1.3	1.2	-171.85	-0.5	47.7	66.5	64.1	2.40	27.757		
722.7	722.1	718.5	718.4	1.3	1.2	-175.32	-0.6	48.9	69.1	66.7	2.48	27.930		
800.0	799.3	794.3	794.0	1.5	1.4	-174.90	-0.9	53.5	78.7	75.9	2.74	28.675		
900.0	899.1	891.9	891.3	1.7	1.6	-174.31	-1.5	61.1	92.4	89.4	3.09	29.928		
1,000.0	998.9	989.0	988.0	1.9	1.8	-173.71	-2.1	70.2	107.9	104.5	3.43	31.417		
1,100.0	1,098.7	1,085.8	1,084.1	2.1	2.0	-173.14	-2.9	80.9	125.0	121.2	3.78	33.073		
1,200.0	1,198.5	1,184.2	1,181.9	2.3	2.3	-172.65	-3.7	92.5	142.8	138.7	4.13	34.595		
1,300.0	1,298.3	1,282.6	1,279.6	2.5	2.5	-172.27	-4.5	104.0	160.6	156.1	4.47	35.883		
1,400.0	1,398.1	1,381.0	1,377.3	2.7	2.8	-171.97	-5.3	115.6	178.4	173.5	4.82	36.987		
1,500.0	1,497.9	1,479.4	1,475.0	2.9	3.0	-171.72	-6.1	127.2	196.2	191.0	5.17	37.944		
1,600.0	1,597.7	1,577.8	1,572.7	3.1	3.3	-171.51	-6.9	138.7	214.0	208.5	5.52	38.781		
1,700.0	1,697.5	1,676.2	1,670.4	3.3	3.5	-171.33	-7.7	150.3	231.8	225.9	5.86	39.520		
1,800.0	1,797.3	1,774.6	1,768.1	3.5	3.8	-171.18	-8.5	161.9	249.6	243.4	6.21	40.176		
1,900.0	1,897.1	1,873.0	1,865.9	3.7	4.1	-171.05	-9.4	173.4	267.4	260.8	6.56	40.763		
2,000.0	1,996.9	1,971.4	1,963.6	3.9	4.3	-170.94	-10.2	185.0	285.2	278.3	6.91	41.292		
2,100.0	2,096.7	2,069.8	2,061.3	4.1	4.6	-170.84	-11.0	196.6	303.0	295.8	7.25	41.770		
2,200.0	2,196.5	2,168.2	2,159.0	4.3	4.8	-170.75	-11.8	208.1	320.8	313.2	7.60	42.204		
2,300.0	2,296.3	2,266.6	2,256.7	4.5	5.1	-170.67	-12.6	219.7	338.6	330.7	7.95	42.601		
2,400.0	2,396.1	2,365.0	2,354.4	4.7	5.4	-170.59	-13.4	231.3	356.4	348.2	8.30	42.965		
2,500.0	2,495.9	2,463.4	2,452.1	4.9	5.6	-170.53	-14.2	242.8	374.3	365.6	8.64	43.299		
2,600.0	2,595.7	2,561.8	2,549.9	5.2	5.9	-170.47	-15.0	254.4	392.1	383.1	8.99	43.608		
2,700.0	2,695.5	2,660.2	2,647.6	5.4	6.2	-170.41	-15.9	266.0	409.9	400.5	9.34	43.894		
2,800.0	2,795.3	2,758.6	2,745.3	5.6	6.4	-170.36	-16.7	277.5	427.7	418.0	9.69	44.160		
2,900.0	2,895.1	2,857.0	2,843.0	5.8	6.7	-170.32	-17.5	289.1	445.5	435.5	10.03	44.407		
3,000.0	2,994.9	2,955.4	2,940.7	6.0	7.0	-170.28	-18.3	300.7	463.3	453.0	10.38	44.638		
3,100.0	3,094.7	3,053.8	3,038.4	6.2	7.2	-170.24	-19.1	312.2	481.1	470.4	10.73	44.853		
3,200.0	3,194.5	3,152.2	3,136.1	6.4	7.5	-170.20	-19.9	323.8	499.0	487.9	11.07	45.056		
3,300.0	3,294.3	3,250.6	3,233.9	6.6	7.7	-170.17	-20.7	335.3	516.8	505.4	11.42	45.246		
3,400.0	3,394.1	3,349.0	3,331.6	6.8	8.0	-170.13	-21.5	346.9	534.6	522.8	11.77	45.425		
3,500.0	3,493.9	3,447.4	3,429.3	7.0	8.3	-170.11	-22.3	358.5	552.4	540.3	12.12	45.593		
3,600.0	3,593.8	3,545.8	3,527.0	7.2	8.5	-170.08	-23.2	370.0	570.2	557.8	12.46	45.753		
3,700.0	3,693.6	3,644.2	3,624.7	7.4	8.8	-170.05	-24.0	381.6	588.0	575.2	12.81	45.903		
3,800.0	3,793.4	3,742.6	3,722.4	7.6	9.1	-170.03	-24.8	393.2	605.9	592.7	13.16	46.046		
3,900.0	3,893.2	3,841.0	3,820.1	7.8	9.3	-170.00	-25.6	404.7	623.7	610.2	13.50	46.181		
4,000.0	3,993.0	3,939.4	3,917.9	8.0	9.6	-169.98	-26.4	416.3	641.5	627.6	13.85	46.310		
4,100.0	4,092.8	4,037.8	4,015.6	8.2	9.9	-169.96	-27.2	427.9	659.3	645.1	14.20	46.432		
4,200.0	4,192.6	4,136.2	4,113.3	8.4	10.1	-169.94	-28.0	439.4	677.1	662.6	14.55	46.549		
4,300.0	4,292.4	4,234.6	4,211.0	8.7	10.4	-169.92	-28.8	451.0	694.9	680.0	14.89	46.660		
4,400.0	4,392.2	4,333.0	4,308.7	8.9	10.7	-169.91	-29.6	462.6	712.8	697.5	15.24	46.766		
4,500.0	4,492.0	4,431.4	4,406.4	9.1	10.9	-169.89	-30.5	474.1	730.6	715.0	15.59	46.867		
4,600.0	4,591.8	4,529.8	4,504.1	9.3	11.2	-169.87	-31.3	485.7	748.4	732.5	15.94	46.964		
4,700.0	4,691.6	4,628.2	4,601.9	9.5	11.5	-169.86	-32.1	497.3	766.2	749.9	16.28	47.057		
4,800.0	4,791.4	4,726.6	4,699.6	9.7	11.7	-169.84	-32.9	508.8	784.0	767.4	16.63	47.146		
4,900.0	4,891.2	4,825.0	4,797.3	9.9	12.0	-169.83	-33.7	520.4	801.8	784.9	16.98	47.231		
5,000.0	4,991.0	4,923.4	4,895.0	10.1	12.3	-169.82	-34.5	532.0	819.7	802.3	17.32	47.313		

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

Cathedral Energy Services

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,090.8	5,021.8	4,992.7	10.3	12.5	-169.80	-35.3	543.5	837.5	819.8	17.67	47.392		
5,200.0	5,190.6	5,120.2	5,090.4	10.5	12.8	-169.79	-36.1	555.1	855.3	837.3	18.02	47.467		
5,300.0	5,290.4	5,218.6	5,188.1	10.7	13.1	-169.78	-37.0	566.7	873.1	854.7	18.37	47.540		
5,400.0	5,390.2	5,317.0	5,285.9	10.9	13.3	-169.77	-37.8	578.2	890.9	872.2	18.71	47.610		
5,500.0	5,490.0	5,415.4	5,383.6	11.1	13.6	-169.76	-38.6	589.8	908.7	889.7	19.06	47.678		
5,600.0	5,589.8	5,513.8	5,481.3	11.3	13.9	-169.75	-39.4	601.4	926.6	907.2	19.41	47.743		
5,700.0	5,689.6	5,612.2	5,579.0	11.5	14.1	-169.74	-40.2	612.9	944.4	924.6	19.75	47.806		
5,800.0	5,789.4	5,710.6	5,676.7	11.7	14.4	-169.73	-41.0	624.5	962.2	942.1	20.10	47.866		
5,900.0	5,889.2	5,809.0	5,774.4	11.9	14.7	-169.72	-41.8	636.0	980.0	959.6	20.45	47.925		
6,000.0	5,989.0	5,907.4	5,872.1	12.2	14.9	-169.71	-42.6	647.6	997.8	977.0	20.80	47.982		
6,100.0	6,088.8	6,005.8	5,969.9	12.4	15.2	-169.70	-43.4	659.2	1,015.6	994.5	21.14	48.037		
6,200.0	6,188.6	6,104.2	6,067.6	12.6	15.4	-169.69	-44.3	670.7	1,033.5	1,012.0	21.49	48.090		
6,300.0	6,288.4	6,202.6	6,165.3	12.8	15.7	-169.68	-45.1	682.3	1,051.3	1,029.4	21.84	48.141		
6,400.0	6,388.2	6,301.0	6,263.0	13.0	16.0	-169.68	-45.9	693.9	1,069.1	1,046.9	22.18	48.191		
6,500.0	6,488.0	6,399.4	6,360.7	13.2	16.2	-169.67	-46.7	705.4	1,086.9	1,064.4	22.53	48.239		
6,600.0	6,587.9	6,497.8	6,458.4	13.4	16.5	-169.66	-47.5	717.0	1,104.7	1,081.9	22.88	48.286		
6,700.0	6,687.7	6,596.2	6,556.2	13.6	16.8	-169.65	-48.3	728.6	1,122.6	1,099.3	23.23	48.331		
6,800.0	6,787.5	6,694.6	6,653.9	13.8	17.0	-169.65	-49.1	740.1	1,140.4	1,116.8	23.57	48.375		
6,900.0	6,887.3	6,793.0	6,751.6	14.0	17.3	-169.64	-49.9	751.7	1,158.2	1,134.3	23.92	48.418		
7,000.0	6,987.1	6,891.4	6,849.3	14.2	17.6	-169.64	-50.7	763.3	1,176.0	1,151.7	24.27	48.459		
7,100.0	7,086.9	6,989.8	6,947.0	14.4	17.8	-169.63	-51.6	774.8	1,193.8	1,169.2	24.62	48.500		
7,173.7	7,160.4	7,062.3	7,019.0	14.6	18.0	-169.62	-52.2	783.4	1,207.0	1,182.1	24.87	48.529		
7,200.0	7,186.7	7,088.2	7,044.7	14.6	18.1	149.66	-52.4	786.4	1,211.6	1,186.7	24.97	48.527		
7,250.0	7,236.4	7,137.2	7,093.4	14.7	18.2	114.05	-52.8	792.2	1,220.3	1,195.2	25.15	48.528		
7,300.0	7,285.6	7,185.6	7,141.5	14.8	18.4	103.03	-53.2	797.9	1,228.9	1,203.6	25.32	48.533		
7,350.0	7,334.0	7,232.8	7,188.4	14.9	18.5	98.07	-53.1	803.4	1,237.2	1,211.8	25.48	48.553		
7,400.0	7,381.0	7,280.2	7,235.3	15.0	18.6	95.25	-49.7	808.9	1,245.5	1,219.8	25.64	48.583		
7,450.0	7,426.5	7,328.7	7,282.8	15.0	18.7	93.42	-42.1	814.5	1,253.5	1,227.7	25.79	48.606		
7,500.0	7,470.0	7,378.4	7,330.7	15.1	18.9	92.15	-30.2	820.0	1,261.3	1,235.4	25.95	48.605		
7,550.0	7,511.2	7,429.4	7,378.7	15.2	19.0	91.24	-13.7	825.6	1,268.9	1,242.7	26.13	48.566		
7,600.0	7,549.7	7,481.8	7,426.2	15.4	19.1	90.57	7.7	831.0	1,276.0	1,249.7	26.35	48.433		
7,650.0	7,585.4	7,535.9	7,473.0	15.5	19.3	90.08	34.2	836.3	1,282.7	1,256.1	26.60	48.219		
7,700.0	7,617.9	7,591.5	7,518.3	15.7	19.4	89.74	66.1	841.4	1,289.0	1,262.0	26.92	47.874		
7,750.0	7,647.0	7,648.9	7,561.6	15.9	19.6	89.51	103.3	846.2	1,294.7	1,267.3	27.33	47.375		
7,800.0	7,672.4	7,708.0	7,602.1	16.2	19.8	89.38	146.1	850.6	1,299.7	1,271.9	27.84	46.689		
7,850.0	7,694.0	7,768.8	7,639.1	16.5	20.1	89.34	194.2	854.6	1,304.1	1,275.6	28.47	45.812		
7,900.0	7,711.6	7,831.4	7,671.5	16.8	20.4	89.37	247.6	857.9	1,307.8	1,278.5	29.22	44.750		
7,950.0	7,725.0	7,895.6	7,698.7	17.2	20.8	89.46	305.7	860.6	1,310.6	1,280.5	30.11	43.521		
8,000.0	7,734.2	7,961.2	7,719.5	17.6	21.2	89.60	367.9	862.6	1,312.6	1,281.4	31.15	42.142		
8,050.0	7,739.1	8,028.2	7,733.4	18.1	21.7	89.79	433.3	863.6	1,313.6	1,281.3	32.30	40.665		
8,081.4	7,740.0	8,070.7	7,738.3	18.3	22.0	89.92	475.6	863.8	1,313.8	1,280.7	33.09	39.709		
8,100.0	7,740.0	8,096.1	7,739.7	18.5	22.2	89.99	500.9	863.8	1,313.8	1,280.2	33.56	39.149		
8,200.0	7,740.0	8,201.3	7,740.0	19.6	23.1	90.00	606.1	862.9	1,312.9	1,277.0	35.91	36.559		
8,300.0	7,740.0	8,301.3	7,740.0	20.7	24.1	90.00	706.0	862.0	1,312.1	1,273.7	38.39	34.173		
8,400.0	7,740.0	8,401.3	7,740.0	21.9	25.2	90.00	806.0	861.1	1,311.2	1,270.2	41.03	31.960		
8,500.0	7,740.0	8,501.3	7,740.0	23.2	26.3	90.00	906.0	860.3	1,310.3	1,266.5	43.78	29.929		
8,600.0	7,740.0	8,601.3	7,740.0	24.6	27.5	90.00	1,006.0	859.4	1,309.5	1,262.8	46.64	28.078		
8,700.0	7,740.0	8,701.2	7,740.0	25.9	28.7	90.00	1,106.0	858.5	1,308.6	1,259.0	49.58	26.395		
8,800.0	7,740.0	8,801.2	7,740.0	27.4	30.1	90.00	1,206.0	857.7	1,307.7	1,255.1	52.59	24.868		
8,900.0	7,740.0	8,901.2	7,740.0	28.8	31.4	90.00	1,306.0	856.8	1,306.8	1,251.2	55.65	23.482		
9,000.0	7,740.0	9,001.2	7,740.0	30.3	32.8	90.00	1,406.0	855.9	1,306.0	1,247.2	58.77	22.221		
9,100.0	7,740.0	9,101.2	7,740.0	31.9	34.2	90.00	1,506.0	855.0	1,305.1	1,243.2	61.93	21.074		

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

Cathedral Energy Services

Anticollision Report

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

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #2												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,200.0	7,740.0	9,201.2	7,740.0	33.4	35.7	90.00	1,606.0	854.2	1,304.2	1,239.1	65.12	20.027	
9,300.0	7,740.0	9,301.2	7,740.0	35.0	37.1	90.00	1,706.0	853.3	1,303.3	1,235.0	68.35	19.069	
9,400.0	7,740.0	9,401.2	7,740.0	36.6	38.6	90.00	1,806.0	852.4	1,302.5	1,230.9	71.60	18.190	
9,500.0	7,740.0	9,501.2	7,740.0	38.2	40.2	90.00	1,906.0	851.5	1,301.6	1,226.7	74.88	17.383	
9,600.0	7,740.0	9,601.2	7,740.0	39.8	41.7	90.00	2,005.9	850.7	1,300.7	1,222.6	78.17	16.639	
9,700.0	7,740.0	9,701.2	7,740.0	41.4	43.3	90.00	2,105.9	849.8	1,299.9	1,218.4	81.49	15.952	
9,800.0	7,740.0	9,801.2	7,740.0	43.0	44.8	90.00	2,205.9	848.9	1,299.0	1,214.2	84.81	15.316	
9,900.0	7,740.0	9,901.2	7,740.0	44.7	46.4	90.00	2,305.9	848.1	1,298.1	1,210.0	88.16	14.725	
10,000.0	7,740.0	10,001.2	7,740.0	46.3	48.0	90.00	2,405.9	847.2	1,297.2	1,205.7	91.51	14.176	
10,100.0	7,740.0	10,101.2	7,740.0	48.0	49.6	90.00	2,505.9	846.3	1,296.4	1,201.5	94.88	13.663	
10,200.0	7,740.0	10,201.2	7,740.0	49.7	51.2	90.00	2,605.9	845.4	1,295.5	1,197.2	98.25	13.185	
10,300.0	7,740.0	10,301.2	7,740.0	51.3	52.8	90.00	2,705.9	844.6	1,294.6	1,193.0	101.64	12.737	
10,400.0	7,740.0	10,401.2	7,740.0	53.0	54.5	90.00	2,805.9	843.7	1,293.7	1,188.7	105.03	12.318	
10,500.0	7,740.0	10,501.2	7,740.0	54.7	56.1	90.00	2,905.9	842.8	1,292.9	1,184.4	108.43	11.923	
10,600.0	7,740.0	10,601.2	7,740.0	56.4	57.8	90.00	3,005.9	841.9	1,292.0	1,180.2	111.84	11.552	
10,700.0	7,740.0	10,701.2	7,740.0	58.1	59.4	90.00	3,105.9	841.1	1,291.1	1,175.9	115.25	11.203	
10,800.0	7,740.0	10,801.2	7,740.0	59.8	61.1	90.00	3,205.9	840.2	1,290.3	1,171.6	118.67	10.873	
10,900.0	7,740.0	10,901.2	7,740.0	61.5	62.7	90.00	3,305.8	839.3	1,289.4	1,167.3	122.09	10.560	
11,000.0	7,740.0	11,001.2	7,740.0	63.2	64.4	90.00	3,405.8	838.5	1,288.5	1,163.0	125.52	10.265	
11,105.4	7,740.0	11,106.6	7,740.0	65.0	66.2	90.00	3,511.2	837.5	1,287.6	1,158.4	129.14	9.970	
11,155.4	7,740.0	11,156.6	7,740.0	65.8	67.0	90.00	3,561.2	837.1	1,287.4	1,156.6	130.80	9.842	
11,191.0	7,740.0	11,192.2	7,740.0	66.4	67.6	90.00	3,596.8	836.8	1,287.5	1,155.5	131.98	9.755	
11,200.0	7,740.0	11,201.2	7,740.0	66.6	67.8	90.00	3,605.8	836.7	1,287.5	1,155.2	132.29	9.733	
11,300.0	7,740.0	11,301.2	7,740.0	68.3	69.4	90.00	3,705.8	835.8	1,288.2	1,152.4	135.73	9.490	
11,400.0	7,740.0	11,400.0	7,740.0	70.0	71.1	90.00	3,804.7	835.0	1,288.8	1,149.6	139.16	9.261	
11,500.0	7,740.0	11,481.7	7,740.0	71.7	72.5	90.00	3,886.4	834.9	1,290.2	1,147.9	142.29	9.068	
11,600.0	7,740.0	11,563.3	7,740.0	73.4	73.9	90.00	3,967.9	836.0	1,293.0	1,147.6	145.42	8.892	
11,700.0	7,740.0	11,658.4	7,740.0	75.1	75.5	90.00	4,063.0	838.3	1,296.9	1,148.1	148.78	8.717	
11,800.0	7,740.0	11,758.3	7,740.0	76.9	77.2	90.00	4,162.9	840.7	1,300.8	1,148.6	152.24	8.545	
11,900.0	7,740.0	11,858.2	7,740.0	78.6	78.9	90.00	4,262.8	843.1	1,304.8	1,149.1	155.69	8.380	
12,000.0	7,740.0	11,958.1	7,740.0	80.3	80.6	90.00	4,362.7	845.6	1,308.7	1,149.5	159.15	8.223	
12,100.0	7,740.0	12,058.1	7,740.0	82.0	82.3	90.00	4,462.6	848.0	1,312.6	1,150.0	162.61	8.072	
12,200.0	7,740.0	12,158.0	7,740.0	83.8	84.0	90.00	4,562.5	850.4	1,316.5	1,150.5	166.07	7.928	
12,300.0	7,740.0	12,257.9	7,740.0	85.5	85.7	90.00	4,662.4	852.9	1,320.5	1,150.9	169.53	7.789	
12,400.0	7,740.0	12,357.8	7,740.0	87.2	87.5	90.00	4,762.3	855.3	1,324.4	1,151.4	172.99	7.656	
12,500.0	7,740.0	12,457.8	7,740.0	88.9	89.2	90.00	4,862.1	857.7	1,328.3	1,151.8	176.46	7.528	
12,600.0	7,740.0	12,557.7	7,740.0	90.7	90.9	90.00	4,962.0	860.2	1,332.2	1,152.3	179.93	7.404	
12,700.0	7,740.0	12,657.6	7,740.0	92.4	92.6	90.00	5,061.9	862.6	1,336.2	1,152.8	183.40	7.286	
12,800.0	7,740.0	12,757.5	7,740.0	94.1	94.3	90.00	5,161.8	865.0	1,340.1	1,153.2	186.87	7.171	
12,900.0	7,740.0	12,857.4	7,740.0	95.9	96.1	90.00	5,261.7	867.4	1,344.0	1,153.7	190.34	7.061	
13,000.0	7,740.0	12,957.4	7,740.0	97.6	97.8	90.00	5,361.6	869.9	1,347.9	1,154.1	193.81	6.955	
13,100.0	7,740.0	13,057.3	7,740.0	99.3	99.5	90.00	5,461.5	872.3	1,351.9	1,154.6	197.29	6.852	
13,200.0	7,740.0	13,157.2	7,740.0	101.1	101.2	90.00	5,561.4	874.7	1,355.8	1,155.0	200.76	6.753	
13,300.0	7,740.0	13,257.1	7,740.0	102.8	103.0	90.00	5,661.3	877.2	1,359.7	1,155.5	204.24	6.657	
13,400.0	7,740.0	13,357.1	7,740.0	104.5	104.7	90.00	5,761.2	879.6	1,363.6	1,155.9	207.72	6.565	
13,500.0	7,740.0	13,457.0	7,740.0	106.3	106.4	90.00	5,861.1	882.0	1,367.6	1,156.4	211.19	6.475	
13,600.0	7,740.0	13,556.9	7,740.0	108.0	108.1	90.00	5,961.0	884.4	1,371.5	1,156.8	214.67	6.389	
13,700.0	7,740.0	13,656.8	7,740.0	109.8	109.9	90.00	6,060.9	886.9	1,375.4	1,157.3	218.15	6.305	
13,800.0	7,740.0	13,756.8	7,740.0	111.5	111.6	90.00	6,160.8	889.3	1,379.3	1,157.7	221.63	6.223	
13,900.0	7,740.0	13,856.7	7,740.0	113.2	113.3	90.00	6,260.7	891.7	1,383.3	1,158.1	225.12	6.145	
14,000.0	7,740.0	13,956.6	7,740.0	115.0	115.1	90.00	6,360.5	894.2	1,387.2	1,158.6	228.60	6.068	
14,100.0	7,740.0	14,056.5	7,740.0	116.7	116.8	90.00	6,460.4	896.6	1,391.1	1,159.0	232.08	5.994	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,200.0	7,740.0	14,156.4	7,740.0	118.5	118.5	90.00	6,560.3	899.0	1,395.0	1,159.5	235.57	5.922	
14,300.0	7,740.0	14,256.4	7,740.0	120.2	120.3	90.00	6,660.2	901.5	1,399.0	1,159.9	239.05	5.852	
14,400.0	7,740.0	14,356.3	7,740.0	121.9	122.0	90.00	6,760.1	903.9	1,402.9	1,160.3	242.54	5.784	
14,500.0	7,740.0	14,456.2	7,740.0	123.7	123.7	90.00	6,860.0	906.3	1,406.8	1,160.8	246.02	5.718	
14,600.0	7,740.0	14,556.1	7,740.0	125.4	125.5	90.00	6,959.9	908.7	1,410.7	1,161.2	249.51	5.654	
14,682.3	7,740.0	14,638.3	7,740.0	126.8	126.9	90.00	7,042.1	910.7	1,414.0	1,161.6	252.38	5.603 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.42	-0.4	50.1	50.1						
100.0	100.0	100.0	100.0	0.2	0.2	90.42	-0.4	50.1	50.1	49.8	0.30	164.971			
200.0	200.0	200.0	200.0	0.3	0.3	90.42	-0.4	50.1	50.1	49.4	0.65	76.751	CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-150.08	-0.4	50.1	50.9	49.9	1.00	50.754			
400.0	400.0	399.0	399.0	0.7	0.7	-151.56	-0.2	50.9	54.0	52.6	1.35	39.991			
500.0	499.9	497.8	497.8	0.9	0.9	-153.75	0.1	53.5	60.5	58.8	1.70	35.582			
600.0	599.7	596.2	596.0	1.1	1.0	-156.13	0.7	57.7	70.3	68.2	2.05	34.328			
700.0	699.5	694.1	693.8	1.3	1.2	-171.74	1.5	63.5	82.6	80.2	2.39	34.540			
722.7	722.1	716.3	715.9	1.3	1.3	-175.39	1.7	65.1	85.6	83.2	2.47	34.671			
800.0	799.3	791.6	791.0	1.5	1.4	-175.62	2.5	71.0	96.6	93.8	2.74	35.296			
900.0	899.1	888.6	887.6	1.7	1.6	-175.85	3.8	80.0	112.2	109.1	3.08	36.439			
1,000.0	998.9	985.1	983.4	1.9	1.9	-176.01	5.2	90.6	129.5	126.0	3.42	37.852			
1,100.0	1,098.7	1,080.9	1,078.5	2.1	2.1	-176.12	6.9	102.7	148.4	144.6	3.76	39.460			
1,200.0	1,198.5	1,176.1	1,172.7	2.3	2.4	-176.21	8.8	116.3	169.0	164.9	4.10	41.212			
1,300.0	1,298.3	1,270.7	1,266.0	2.5	2.7	-176.26	10.9	131.4	191.2	186.7	4.44	43.074			
1,400.0	1,398.1	1,364.5	1,358.4	2.7	3.0	-176.30	13.1	147.8	214.9	210.2	4.77	45.021			
1,500.0	1,497.9	1,459.1	1,451.3	2.9	3.4	-176.33	15.6	165.7	240.2	235.1	5.11	46.983			
1,600.0	1,597.7	1,555.8	1,546.1	3.1	3.7	-176.35	18.2	184.3	265.7	260.2	5.45	48.721			
1,700.0	1,697.5	1,652.5	1,641.0	3.3	4.1	-176.37	20.8	202.9	291.2	285.4	5.79	50.255			
1,800.0	1,797.3	1,749.2	1,735.8	3.5	4.4	-176.38	23.3	221.5	316.7	310.6	6.14	51.619			
1,900.0	1,897.1	1,845.9	1,830.7	3.7	4.8	-176.39	25.9	240.1	342.2	335.7	6.48	52.840			
2,000.0	1,996.9	1,942.6	1,925.6	3.9	5.1	-176.40	28.5	258.7	367.7	360.9	6.82	53.938			
2,100.0	2,096.7	2,039.3	2,020.4	4.1	5.5	-176.41	31.0	277.2	393.2	386.0	7.16	54.933			
2,200.0	2,196.5	2,136.0	2,115.3	4.3	5.9	-176.42	33.6	295.8	418.7	411.2	7.50	55.837			
2,300.0	2,296.3	2,232.7	2,210.1	4.5	6.2	-176.43	36.2	314.4	444.2	436.4	7.84	56.662			
2,400.0	2,396.1	2,329.4	2,305.0	4.7	6.6	-176.43	38.7	333.0	469.7	461.5	8.18	57.419			
2,500.0	2,495.9	2,426.1	2,399.8	4.9	7.0	-176.44	41.3	351.6	495.2	486.7	8.52	58.115			
2,600.0	2,595.7	2,522.8	2,494.7	5.2	7.3	-176.44	43.9	370.2	520.7	511.8	8.86	58.758			
2,700.0	2,695.5	2,619.5	2,589.5	5.4	7.7	-176.45	46.5	388.8	546.2	537.0	9.20	59.353			
2,800.0	2,795.3	2,716.2	2,684.4	5.6	8.1	-176.45	49.0	407.4	571.7	562.2	9.54	59.906			
2,900.0	2,895.1	2,812.8	2,779.3	5.8	8.4	-176.46	51.6	425.9	597.2	587.3	9.88	60.421			
3,000.0	2,994.9	2,909.5	2,874.1	6.0	8.8	-176.46	54.2	444.5	622.7	612.5	10.23	60.901			
3,100.0	3,094.7	3,006.2	2,969.0	6.2	9.2	-176.46	56.7	463.1	648.2	637.7	10.57	61.351			
3,200.0	3,194.5	3,102.9	3,063.8	6.4	9.6	-176.47	59.3	481.7	673.7	662.8	10.91	61.772			
3,300.0	3,294.3	3,199.6	3,158.7	6.6	9.9	-176.47	61.9	500.3	699.2	688.0	11.25	62.168			
3,400.0	3,394.1	3,296.3	3,253.5	6.8	10.3	-176.47	64.4	518.9	724.7	713.1	11.59	62.541			
3,500.0	3,493.9	3,393.0	3,348.4	7.0	10.7	-176.47	67.0	537.5	750.2	738.3	11.93	62.893			
3,600.0	3,593.8	3,489.7	3,443.2	7.2	11.0	-176.48	69.6	556.1	775.7	763.5	12.27	63.225			
3,700.0	3,693.6	3,586.4	3,538.1	7.4	11.4	-176.48	72.2	574.6	801.2	788.6	12.61	63.539			
3,800.0	3,793.4	3,683.1	3,632.9	7.6	11.8	-176.48	74.7	593.2	826.7	813.8	12.95	63.836			
3,900.0	3,893.2	3,779.8	3,727.8	7.8	12.2	-176.48	77.3	611.8	852.2	838.9	13.29	64.118			
4,000.0	3,993.0	3,876.5	3,822.7	8.0	12.5	-176.48	79.9	630.4	877.7	864.1	13.63	64.387			
4,100.0	4,092.8	3,973.2	3,917.5	8.2	12.9	-176.48	82.4	649.0	903.2	889.3	13.97	64.642			
4,200.0	4,192.6	4,069.9	4,012.4	8.4	13.3	-176.49	85.0	667.6	928.7	914.4	14.31	64.885			
4,300.0	4,292.4	4,166.6	4,107.2	8.7	13.6	-176.49	87.6	686.2	954.2	939.6	14.65	65.117			
4,400.0	4,392.2	4,263.3	4,202.1	8.9	14.0	-176.49	90.1	704.8	979.8	964.8	15.00	65.338			
4,500.0	4,492.0	4,359.9	4,296.9	9.1	14.4	-176.49	92.7	723.3	1,005.3	989.9	15.34	65.549			
4,600.0	4,591.8	4,456.6	4,391.8	9.3	14.8	-176.49	95.3	741.9	1,030.8	1,015.1	15.68	65.751			
4,700.0	4,691.6	4,553.3	4,486.6	9.5	15.1	-176.49	97.9	760.5	1,056.3	1,040.2	16.02	65.945			
4,800.0	4,791.4	4,650.0	4,581.5	9.7	15.5	-176.49	100.4	779.1	1,081.8	1,065.4	16.36	66.130			
4,900.0	4,891.2	4,746.7	4,676.4	9.9	15.9	-176.49	103.0	797.7	1,107.3	1,090.6	16.70	66.308			
5,000.0	4,991.0	4,843.4	4,771.2	10.1	16.3	-176.50	105.6	816.3	1,132.8	1,115.7	17.04	66.479			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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
5,100.0	5,090.8	4,940.1	4,866.1	10.3	16.6	-176.50	108.1	834.9	1,158.3	1,140.9	17.38	66.643	
5,200.0	5,190.6	5,036.8	4,960.9	10.5	17.0	-176.50	110.7	853.5	1,183.8	1,166.0	17.72	66.801	
5,300.0	5,290.4	5,133.5	5,055.8	10.7	17.4	-176.50	113.3	872.0	1,209.3	1,191.2	18.06	66.953	
5,400.0	5,390.2	5,230.2	5,150.6	10.9	17.7	-176.50	115.8	890.6	1,234.8	1,216.4	18.40	67.100	
5,500.0	5,490.0	5,326.9	5,245.5	11.1	18.1	-176.50	118.4	909.2	1,260.3	1,241.5	18.74	67.241	
5,600.0	5,589.8	5,423.6	5,340.3	11.3	18.5	-176.50	121.0	927.8	1,285.8	1,266.7	19.08	67.377	
5,700.0	5,689.6	5,520.3	5,435.2	11.5	18.9	-176.50	123.5	946.4	1,311.3	1,291.9	19.42	67.508	
5,800.0	5,789.4	5,617.0	5,530.1	11.7	19.2	-176.50	126.1	965.0	1,336.8	1,317.0	19.76	67.634	
5,900.0	5,889.2	5,713.7	5,624.9	11.9	19.6	-176.50	128.7	983.6	1,362.3	1,342.2	20.11	67.757	
6,000.0	5,989.0	5,810.3	5,719.8	12.2	20.0	-176.50	131.3	1,002.2	1,387.8	1,367.3	20.45	67.875	
6,100.0	6,088.8	5,907.0	5,814.6	12.4	20.4	-176.50	133.8	1,020.7	1,413.3	1,392.5	20.79	67.990	
6,200.0	6,188.6	6,003.7	5,909.5	12.6	20.7	-176.51	136.4	1,039.3	1,438.8	1,417.7	21.13	68.100	
6,300.0	6,288.4	6,100.4	6,004.3	12.8	21.1	-176.51	139.0	1,057.9	1,464.3	1,442.8	21.47	68.207	
6,400.0	6,388.2	6,197.1	6,099.2	13.0	21.5	-176.51	141.5	1,076.5	1,489.8	1,468.0	21.81	68.311	
6,500.0	6,488.0	6,293.8	6,194.0	13.2	21.8	-176.51	144.1	1,095.1	1,515.3	1,493.2	22.15	68.412	
6,600.0	6,587.9	6,390.5	6,288.9	13.4	22.2	-176.51	146.7	1,113.7	1,540.8	1,518.3	22.49	68.510	
6,700.0	6,687.7	6,487.2	6,383.8	13.6	22.6	-176.51	149.2	1,132.3	1,566.3	1,543.5	22.83	68.604	
6,800.0	6,787.5	6,583.9	6,478.6	13.8	23.0	-176.51	151.8	1,150.9	1,591.8	1,568.6	23.17	68.696	
6,900.0	6,887.3	6,680.6	6,573.5	14.0	23.3	-176.51	154.4	1,169.4	1,617.3	1,593.8	23.51	68.786	
7,000.0	6,987.1	6,777.3	6,668.3	14.2	23.7	-176.51	157.0	1,188.0	1,642.8	1,619.0	23.85	68.872	
7,100.0	7,086.9	6,874.0	6,763.2	14.4	24.1	-176.51	159.5	1,206.6	1,668.3	1,644.1	24.19	68.957	
7,173.7	7,160.4	6,945.2	6,833.1	14.6	24.4	-176.51	161.4	1,220.3	1,687.1	1,662.7	24.44	69.017	
7,200.0	7,186.7	6,970.7	6,858.0	14.6	24.5	142.56	162.1	1,225.2	1,693.7	1,669.2	24.55	68.979	
7,250.0	7,236.4	7,019.0	6,905.4	14.7	24.6	106.55	163.4	1,234.5	1,705.8	1,681.0	24.77	68.860	
7,300.0	7,285.6	7,066.9	6,952.5	14.8	24.8	95.14	164.7	1,243.7	1,717.0	1,692.0	24.99	68.710	
7,350.0	7,334.0	7,100.0	6,984.9	14.9	25.0	89.66	166.4	1,250.1	1,727.7	1,702.5	25.18	68.615	
7,400.0	7,381.0	7,132.9	7,016.9	15.0	25.1	86.34	170.1	1,256.4	1,738.0	1,712.6	25.36	68.528	
7,450.0	7,426.5	7,166.1	7,049.0	15.0	25.2	84.07	175.6	1,262.7	1,747.8	1,722.3	25.54	68.439	
7,500.0	7,470.0	7,200.0	7,081.4	15.1	25.4	82.41	183.3	1,269.1	1,757.1	1,731.3	25.71	68.338	
7,550.0	7,511.2	7,233.5	7,113.0	15.2	25.5	81.15	192.7	1,275.4	1,765.8	1,739.9	25.89	68.206	
7,600.0	7,549.7	7,267.9	7,144.7	15.4	25.7	80.18	204.4	1,281.7	1,773.8	1,747.8	26.08	68.007	
7,650.0	7,585.4	7,300.0	7,173.7	15.5	25.8	79.41	217.0	1,287.5	1,781.3	1,755.0	26.30	67.725	
7,700.0	7,617.9	7,338.5	7,207.4	15.7	26.0	78.92	234.2	1,294.2	1,788.1	1,761.5	26.58	67.266	
7,750.0	7,647.0	7,374.8	7,238.1	15.9	26.2	78.56	252.6	1,300.4	1,794.2	1,767.3	26.93	66.636	
7,800.0	7,672.4	7,411.9	7,268.2	16.2	26.4	78.36	273.3	1,306.5	1,799.6	1,772.2	27.35	65.793	
7,850.0	7,694.0	7,450.0	7,297.7	16.5	26.6	78.30	296.7	1,312.4	1,804.3	1,776.4	27.88	64.715	
7,900.0	7,711.6	7,489.2	7,326.4	16.8	26.8	78.39	322.7	1,318.3	1,808.2	1,779.7	28.53	63.380	
7,950.0	7,725.0	7,529.6	7,354.1	17.2	27.1	78.62	351.6	1,323.9	1,811.4	1,782.1	29.30	61.820	
8,000.0	7,734.2	7,571.5	7,380.5	17.6	27.3	78.98	383.6	1,329.4	1,813.9	1,783.7	30.20	60.066	
8,050.0	7,739.1	7,615.0	7,405.5	18.1	27.6	79.48	418.8	1,334.6	1,815.6	1,784.4	31.22	58.162	
8,081.4	7,740.0	7,643.2	7,420.4	18.3	27.8	79.86	442.6	1,337.7	1,816.4	1,784.5	31.91	56.913	
8,100.0	7,740.0	7,660.5	7,428.8	18.5	27.9	80.14	457.6	1,339.5	1,816.7	1,784.4	32.29	56.257	
8,200.0	7,740.0	7,763.5	7,469.9	19.6	28.7	81.46	551.5	1,348.4	1,819.0	1,784.5	34.57	52.611	
8,300.0	7,740.0	7,880.8	7,495.7	20.7	29.6	82.29	665.5	1,354.4	1,821.1	1,783.8	37.25	48.890	
8,400.0	7,740.0	7,994.3	7,500.0	21.9	30.6	82.43	778.8	1,356.2	1,822.2	1,782.1	40.04	45.513	
8,500.0	7,740.0	8,094.3	7,500.0	23.2	31.5	82.43	878.8	1,357.1	1,823.0	1,780.3	42.77	42.623	
8,600.0	7,740.0	8,194.3	7,500.0	24.6	32.5	82.44	978.8	1,358.0	1,823.9	1,778.3	45.61	39.992	
8,700.0	7,740.0	8,294.3	7,500.0	25.9	33.5	82.44	1,078.8	1,358.8	1,824.8	1,776.2	48.53	37.604	
8,800.0	7,740.0	8,394.3	7,500.0	27.4	34.6	82.45	1,178.8	1,359.7	1,825.6	1,774.1	51.52	35.439	
8,900.0	7,740.0	8,494.3	7,500.0	28.8	35.8	82.45	1,278.8	1,360.6	1,826.5	1,771.9	54.56	33.476	
9,000.0	7,740.0	8,594.3	7,500.0	30.3	37.0	82.45	1,378.8	1,361.5	1,827.4	1,769.7	57.66	31.693	
9,100.0	7,740.0	8,694.2	7,500.0	31.9	38.3	82.46	1,478.8	1,362.3	1,828.2	1,767.4	60.80	30.072	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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
9,200.0	7,740.0	8,794.2	7,500.0	33.4	39.5	82.46	1,578.8	1,363.2	1,829.1	1,765.1	63.97	28.594	
9,300.0	7,740.0	8,894.2	7,500.0	35.0	40.9	82.46	1,678.8	1,364.1	1,830.0	1,762.8	67.17	27.243	
9,400.0	7,740.0	8,994.2	7,500.0	36.6	42.2	82.47	1,778.8	1,365.0	1,830.8	1,760.4	70.40	26.006	
9,500.0	7,740.0	9,094.2	7,500.0	38.2	43.6	82.47	1,878.7	1,365.8	1,831.7	1,758.0	73.65	24.870	
9,600.0	7,740.0	9,194.2	7,500.0	39.8	45.0	82.47	1,978.7	1,366.7	1,832.6	1,755.6	76.92	23.823	
9,700.0	7,740.0	9,294.2	7,500.0	41.4	46.5	82.48	2,078.7	1,367.6	1,833.4	1,753.2	80.21	22.857	
9,800.0	7,740.0	9,394.2	7,500.0	43.0	47.9	82.48	2,178.7	1,368.4	1,834.3	1,750.8	83.52	21.963	
9,900.0	7,740.0	9,494.2	7,500.0	44.7	49.4	82.49	2,278.7	1,369.3	1,835.1	1,748.3	86.84	21.134	
10,000.0	7,740.0	9,613.9	7,500.0	46.3	51.2	82.49	2,398.4	1,370.0	1,835.8	1,745.3	90.50	20.286	
10,100.0	7,740.0	9,760.4	7,500.0	48.0	53.4	82.48	2,544.9	1,367.8	1,834.3	1,739.7	94.62	19.387	
10,200.0	7,740.0	9,906.7	7,500.0	49.7	55.5	82.45	2,691.1	1,361.9	1,830.3	1,731.6	98.74	18.536	
10,300.0	7,740.0	10,052.6	7,500.0	51.3	57.7	82.42	2,836.7	1,352.3	1,823.8	1,720.9	102.87	17.728	
10,400.0	7,740.0	10,198.0	7,500.0	53.0	59.9	82.36	2,981.4	1,339.1	1,814.7	1,707.7	107.00	16.961	
10,500.0	7,740.0	10,298.7	7,500.0	54.7	61.4	82.31	3,081.5	1,328.5	1,804.4	1,694.0	110.38	16.348	
10,600.0	7,740.0	10,398.1	7,500.0	56.4	63.0	82.27	3,180.4	1,318.1	1,794.0	1,680.3	113.74	15.773	
10,700.0	7,740.0	10,497.6	7,500.0	58.1	64.5	82.22	3,279.3	1,307.7	1,783.6	1,666.5	117.11	15.231	
10,800.0	7,740.0	10,597.0	7,500.0	59.8	66.0	82.18	3,378.2	1,297.3	1,773.3	1,652.8	120.48	14.719	
10,900.0	7,740.0	10,696.5	7,500.0	61.5	67.6	82.13	3,477.2	1,287.0	1,762.9	1,639.1	123.85	14.234	
11,000.0	7,740.0	10,795.9	7,500.0	63.2	69.2	82.09	3,576.1	1,276.6	1,752.6	1,625.3	127.23	13.775	
11,105.4	7,740.0	10,900.7	7,500.0	65.0	70.8	82.04	3,680.3	1,265.6	1,741.7	1,610.9	130.79	13.316	
11,191.0	7,740.0	10,985.9	7,500.0	66.4	72.2	82.01	3,765.1	1,256.7	1,733.4	1,599.9	133.49	12.985	
11,200.0	7,740.0	10,994.9	7,500.0	66.6	72.3	82.01	3,774.0	1,255.8	1,732.6	1,598.8	133.80	12.950	
11,300.0	7,740.0	11,094.5	7,500.0	68.3	73.9	81.96	3,873.0	1,245.3	1,723.8	1,586.6	137.19	12.565	
11,400.0	7,740.0	11,194.1	7,500.0	70.0	75.5	81.92	3,972.1	1,234.9	1,714.9	1,574.3	140.59	12.198	
11,500.0	7,740.0	11,293.7	7,500.0	71.7	77.1	81.88	4,071.1	1,224.5	1,706.0	1,562.0	143.98	11.849	
11,600.0	7,740.0	11,393.3	7,500.0	73.4	78.7	81.84	4,170.2	1,214.1	1,697.1	1,549.7	147.38	11.515	
11,700.0	7,740.0	11,492.9	7,500.0	75.1	80.3	81.79	4,269.2	1,203.7	1,688.2	1,537.5	150.78	11.196	
11,800.0	7,740.0	11,592.5	7,500.0	76.9	82.0	81.75	4,368.3	1,193.3	1,679.4	1,525.2	154.19	10.892	
11,900.0	7,740.0	11,692.1	7,500.0	78.6	83.6	81.71	4,467.3	1,182.9	1,670.5	1,512.9	157.59	10.600	
12,000.0	7,740.0	11,791.7	7,500.0	80.3	85.2	81.66	4,566.4	1,172.5	1,661.6	1,500.6	160.99	10.321	
12,100.0	7,740.0	11,871.4	7,500.0	82.0	86.6	81.63	4,645.7	1,164.6	1,653.3	1,489.2	164.06	10.077	
12,200.0	7,740.0	11,949.1	7,500.0	83.8	87.8	81.60	4,723.1	1,157.9	1,646.3	1,479.2	167.10	9.852	
12,300.0	7,740.0	12,026.8	7,500.0	85.5	89.1	81.58	4,800.6	1,152.3	1,640.6	1,470.5	170.14	9.643	
12,400.0	7,740.0	12,100.0	7,500.0	87.2	90.4	81.56	4,873.7	1,148.0	1,636.3	1,463.2	173.10	9.453	
12,500.0	7,740.0	12,182.7	7,500.0	88.9	91.8	81.55	4,956.3	1,144.2	1,633.3	1,457.1	176.23	9.268	
12,600.0	7,740.0	12,260.7	7,500.0	90.7	93.1	81.54	5,034.2	1,141.8	1,631.7	1,452.4	179.29	9.101	
12,671.3	7,740.0	12,316.3	7,500.0	91.9	94.0	81.54	5,089.8	1,140.7	1,631.3	1,449.9	181.47	8.990	
12,700.0	7,740.0	12,338.7	7,500.0	92.4	94.4	81.54	5,112.2	1,140.4	1,631.4	1,449.1	182.34	8.947	
12,800.0	7,740.0	12,416.7	7,500.0	94.1	95.7	81.54	5,190.2	1,140.0	1,632.5	1,447.1	185.40	8.805	
12,900.0	7,740.0	12,500.0	7,500.0	95.9	97.1	81.56	5,273.5	1,140.9	1,634.9	1,446.3	188.55	8.671	
13,000.0	7,740.0	12,572.6	7,500.0	97.6	98.4	81.57	5,346.1	1,142.6	1,638.6	1,447.1	191.53	8.555	
13,100.0	7,740.0	12,650.4	7,500.0	99.3	99.7	81.59	5,423.9	1,145.4	1,643.7	1,449.1	194.60	8.447	
13,200.0	7,740.0	12,728.1	7,500.0	101.1	101.1	81.62	5,501.5	1,149.3	1,650.1	1,452.5	197.66	8.348	
13,300.0	7,740.0	12,806.4	7,500.0	102.8	102.4	81.65	5,579.6	1,154.3	1,657.9	1,457.2	200.75	8.259	
13,400.0	7,740.0	12,905.1	7,500.0	104.5	104.1	81.69	5,678.0	1,161.2	1,666.4	1,462.2	204.19	8.161	
13,500.0	7,740.0	13,004.7	7,500.0	106.3	105.9	81.73	5,777.4	1,168.3	1,674.8	1,467.2	207.64	8.066	
13,600.0	7,740.0	13,104.3	7,500.0	108.0	107.6	81.77	5,876.8	1,175.3	1,683.3	1,472.2	211.10	7.974	
13,700.0	7,740.0	13,204.0	7,500.0	109.8	109.3	81.81	5,976.2	1,182.3	1,691.7	1,477.2	214.56	7.885	
13,800.0	7,740.0	13,303.6	7,500.0	111.5	111.0	81.86	6,075.6	1,189.4	1,700.2	1,482.2	218.03	7.798	
13,900.0	7,740.0	13,403.2	7,500.0	113.2	112.8	81.90	6,175.0	1,196.4	1,708.7	1,487.2	221.49	7.714	
14,000.0	7,740.0	13,502.9	7,500.0	115.0	114.5	81.94	6,274.3	1,203.4	1,717.1	1,492.2	224.95	7.633	
14,100.0	7,740.0	13,602.5	7,500.0	116.7	116.2	81.98	6,373.7	1,210.4	1,725.6	1,497.2	228.42	7.554	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3				Offset Site Error:		0.0 ft
Survey Program: 0-Geolink MWD															Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)							
14,200.0	7,740.0	13,702.1	7,500.0	118.5	118.0	82.02	6,473.1	1,217.5	1,734.0	1,502.1	231.88	7.478					
14,300.0	7,740.0	13,801.8	7,500.0	120.2	119.7	82.05	6,572.5	1,224.5	1,742.5	1,507.1	235.35	7.404					
14,400.0	7,740.0	13,901.4	7,500.0	121.9	121.4	82.09	6,671.9	1,231.5	1,751.0	1,512.1	238.82	7.332					
14,500.0	7,740.0	14,001.0	7,500.0	123.7	123.2	82.13	6,771.3	1,238.6	1,759.4	1,517.1	242.29	7.262					
14,600.0	7,740.0	14,100.7	7,500.0	125.4	124.9	82.17	6,870.7	1,245.6	1,767.9	1,522.1	245.76	7.194					
14,682.3	7,740.0	14,182.6	7,500.0	126.8	126.3	82.20	6,952.4	1,251.4	1,774.8	1,526.2	248.61	7.139 SF					

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.35	-0.4	59.9	59.9				
100.0	100.0	100.0	100.0	0.2	0.2	90.35	-0.4	59.9	59.9	59.6	0.30	197.227	
200.0	200.0	200.0	200.0	0.3	0.3	90.35	-0.4	59.9	59.9	59.2	0.65	91.758 CC, ES	
300.0	300.0	299.5	299.5	0.5	0.5	-150.02	-0.4	60.1	60.9	59.9	1.00	60.797	
400.0	400.0	398.3	398.3	0.7	0.7	-150.88	-0.7	61.8	64.8	63.5	1.35	48.059	
500.0	499.9	496.9	496.8	0.9	0.9	-152.01	-1.3	65.1	72.0	70.3	1.70	42.425	
600.0	599.7	595.1	594.8	1.1	1.0	-153.18	-2.2	70.1	82.5	80.4	2.05	40.272	
700.0	699.5	692.7	692.3	1.3	1.2	-167.75	-3.3	76.7	95.4	93.0	2.40	39.805	
722.7	722.1	714.9	714.4	1.3	1.3	-171.20	-3.6	78.5	98.5	96.0	2.47	39.809	
800.0	799.3	790.0	789.2	1.5	1.5	-170.76	-4.8	84.9	109.9	107.1	2.74	40.052	
900.0	899.1	886.7	885.4	1.7	1.7	-170.16	-6.5	94.7	126.0	122.9	3.09	40.776	
1,000.0	998.9	982.9	980.9	1.9	1.9	-169.56	-8.5	106.0	143.7	140.3	3.44	41.835	
1,100.0	1,098.7	1,078.5	1,075.6	2.1	2.2	-168.98	-10.8	118.8	163.1	159.3	3.78	43.136	
1,200.0	1,198.5	1,173.4	1,169.5	2.3	2.5	-168.43	-13.3	133.0	184.1	180.0	4.13	44.619	
1,300.0	1,298.3	1,267.7	1,262.3	2.5	2.8	-167.91	-16.0	148.7	206.7	202.2	4.47	46.241	
1,400.0	1,398.1	1,361.2	1,354.2	2.7	3.1	-167.42	-19.0	165.7	230.9	226.1	4.81	47.971	
1,500.0	1,497.9	1,453.9	1,445.1	2.9	3.5	-166.97	-22.3	184.0	256.6	251.5	5.15	49.787	
1,600.0	1,597.7	1,545.8	1,534.8	3.1	3.9	-166.55	-25.7	203.6	283.9	278.4	5.49	51.673	
1,700.0	1,697.5	1,636.9	1,623.4	3.3	4.2	-166.17	-29.4	224.4	312.7	306.9	5.83	53.615	
1,800.0	1,797.3	1,727.0	1,710.7	3.5	4.7	-165.81	-33.2	246.3	343.1	336.9	6.17	55.604	
1,900.0	1,897.1	1,820.3	1,800.8	3.7	5.1	-165.54	-37.0	270.1	374.5	368.0	6.51	57.534	
2,000.0	1,996.9	1,914.8	1,892.1	3.9	5.5	-165.54	-39.3	294.4	406.1	399.2	6.85	59.307	
2,100.0	2,096.7	2,011.6	1,985.7	4.1	6.0	-165.75	-40.2	319.3	437.7	430.5	7.19	60.895	
2,200.0	2,196.5	2,115.1	2,086.0	4.3	6.5	-165.99	-40.6	344.7	468.0	460.5	7.54	62.074	
2,300.0	2,296.3	2,216.4	2,184.6	4.5	6.9	-166.19	-41.1	367.8	496.8	488.9	7.89	62.969	
2,400.0	2,396.1	2,312.2	2,278.0	4.7	7.3	-166.36	-41.5	389.4	525.1	516.9	8.23	63.815	
2,500.0	2,495.9	2,408.1	2,371.4	4.9	7.7	-166.52	-41.9	410.9	553.5	545.0	8.57	64.595	
2,600.0	2,595.7	2,504.0	2,464.9	5.2	8.1	-166.66	-42.3	432.5	581.9	573.0	8.91	65.314	
2,700.0	2,695.5	2,599.9	2,558.3	5.4	8.5	-166.78	-42.7	454.1	610.3	601.1	9.25	65.981	
2,800.0	2,795.3	2,695.7	2,651.7	5.6	9.0	-166.90	-43.1	475.6	638.7	629.1	9.59	66.601	
2,900.0	2,895.1	2,791.6	2,745.1	5.8	9.4	-167.00	-43.5	497.2	667.1	657.2	9.93	67.178	
3,000.0	2,994.9	2,887.5	2,838.5	6.0	9.8	-167.10	-43.9	518.7	695.5	685.2	10.27	67.717	
3,100.0	3,094.7	2,983.4	2,932.0	6.2	10.2	-167.19	-44.3	540.3	723.9	713.3	10.61	68.221	
3,200.0	3,194.5	3,079.3	3,025.4	6.4	10.6	-167.27	-44.7	561.8	752.3	741.4	10.95	68.694	
3,300.0	3,294.3	3,175.1	3,118.8	6.6	11.0	-167.35	-45.1	583.4	780.7	769.4	11.29	69.138	
3,400.0	3,394.1	3,271.0	3,212.2	6.8	11.5	-167.42	-45.5	605.0	809.1	797.5	11.63	69.557	
3,500.0	3,493.9	3,366.9	3,305.6	7.0	11.9	-167.49	-45.9	626.5	837.5	825.6	11.97	69.951	
3,600.0	3,593.8	3,462.8	3,399.1	7.2	12.3	-167.55	-46.3	648.1	865.9	853.6	12.31	70.324	
3,700.0	3,693.6	3,558.6	3,492.5	7.4	12.7	-167.61	-46.6	669.6	894.3	881.7	12.65	70.677	
3,800.0	3,793.4	3,654.5	3,585.9	7.6	13.1	-167.66	-47.0	691.2	922.8	909.8	12.99	71.011	
3,900.0	3,893.2	3,750.4	3,679.3	7.8	13.6	-167.71	-47.4	712.7	951.2	937.8	13.33	71.329	
4,000.0	3,993.0	3,846.3	3,772.7	8.0	14.0	-167.76	-47.8	734.3	979.6	965.9	13.68	71.630	
4,100.0	4,092.8	3,942.1	3,866.2	8.2	14.4	-167.80	-48.2	755.9	1,008.0	994.0	14.02	71.917	
4,200.0	4,192.6	4,038.0	3,959.6	8.4	14.8	-167.85	-48.6	777.4	1,036.4	1,022.0	14.36	72.190	
4,300.0	4,292.4	4,133.9	4,053.0	8.7	15.2	-167.89	-49.0	799.0	1,064.8	1,050.1	14.70	72.451	
4,400.0	4,392.2	4,229.8	4,146.4	8.9	15.6	-167.93	-49.4	820.5	1,093.2	1,078.2	15.04	72.699	
4,500.0	4,492.0	4,325.6	4,239.8	9.1	16.1	-167.96	-49.8	842.1	1,121.6	1,106.3	15.38	72.937	
4,600.0	4,591.8	4,421.5	4,333.3	9.3	16.5	-168.00	-50.2	863.7	1,150.1	1,134.3	15.72	73.165	
4,700.0	4,691.6	4,517.4	4,426.7	9.5	16.9	-168.03	-50.6	885.2	1,178.5	1,162.4	16.06	73.382	
4,800.0	4,791.4	4,613.3	4,520.1	9.7	17.3	-168.06	-51.0	906.8	1,206.9	1,190.5	16.40	73.591	
4,900.0	4,891.2	4,709.1	4,613.5	9.9	17.7	-168.09	-51.4	928.3	1,235.3	1,218.6	16.74	73.792	
5,000.0	4,991.0	4,805.0	4,706.9	10.1	18.2	-168.12	-51.8	949.9	1,263.7	1,246.6	17.08	73.984	

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

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Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	5,090.8	4,900.9	4,800.4	10.3	18.6	-168.15	-52.2	971.4	1,292.1	1,274.7	17.42	74.169	
5,200.0	5,190.6	4,996.8	4,893.8	10.5	19.0	-168.18	-52.6	993.0	1,320.5	1,302.8	17.76	74.346	
5,300.0	5,290.4	5,092.6	4,987.2	10.7	19.4	-168.20	-53.0	1,014.6	1,349.0	1,330.9	18.10	74.517	
5,400.0	5,390.2	5,188.5	5,080.6	10.9	19.8	-168.22	-53.4	1,036.1	1,377.4	1,358.9	18.44	74.682	
5,500.0	5,490.0	5,284.4	5,174.0	11.1	20.3	-168.25	-53.8	1,057.7	1,405.8	1,387.0	18.78	74.841	
5,600.0	5,589.8	5,380.3	5,267.5	11.3	20.7	-168.27	-54.2	1,079.2	1,434.2	1,415.1	19.12	74.994	
5,700.0	5,689.6	5,476.2	5,360.9	11.5	21.1	-168.29	-54.6	1,100.8	1,462.6	1,443.2	19.46	75.142	
5,800.0	5,789.4	5,572.0	5,454.3	11.7	21.5	-168.31	-55.0	1,122.3	1,491.0	1,471.2	19.81	75.284	
5,900.0	5,889.2	5,667.9	5,547.7	11.9	21.9	-168.33	-55.4	1,143.9	1,519.5	1,499.3	20.15	75.422	
6,000.0	5,989.0	5,763.8	5,641.1	12.2	22.4	-168.35	-55.8	1,165.5	1,547.9	1,527.4	20.49	75.555	
6,100.0	6,088.8	5,859.7	5,734.6	12.4	22.8	-168.37	-56.2	1,187.0	1,576.3	1,555.5	20.83	75.684	
6,200.0	6,188.6	5,955.5	5,828.0	12.6	23.2	-168.39	-56.6	1,208.6	1,604.7	1,583.5	21.17	75.809	
6,300.0	6,288.4	6,051.4	5,921.4	12.8	23.6	-168.40	-57.0	1,230.1	1,633.1	1,611.6	21.51	75.930	
6,400.0	6,388.2	6,147.3	6,014.8	13.0	24.0	-168.42	-57.4	1,251.7	1,661.5	1,639.7	21.85	76.047	
6,500.0	6,488.0	6,243.2	6,108.2	13.2	24.4	-168.44	-57.8	1,273.2	1,690.0	1,667.8	22.19	76.160	
6,600.0	6,587.9	6,339.0	6,201.7	13.4	24.9	-168.45	-58.2	1,294.8	1,718.4	1,695.9	22.53	76.271	
6,700.0	6,687.7	6,434.9	6,295.1	13.6	25.3	-168.47	-58.6	1,316.4	1,746.8	1,723.9	22.87	76.377	
6,800.0	6,787.5	6,530.8	6,388.5	13.8	25.7	-168.48	-59.0	1,337.9	1,775.2	1,752.0	23.21	76.481	
6,900.0	6,887.3	6,626.7	6,481.9	14.0	26.1	-168.50	-59.4	1,359.5	1,803.6	1,780.1	23.55	76.582	
7,000.0	6,987.1	6,722.5	6,575.3	14.2	26.5	-168.51	-59.8	1,381.0	1,832.1	1,808.2	23.89	76.679	
7,100.0	7,086.9	6,818.4	6,668.8	14.4	27.0	-168.52	-60.2	1,402.6	1,860.5	1,836.2	24.23	76.774	
7,173.7	7,160.4	6,889.1	6,737.6	14.6	27.3	-168.53	-60.5	1,418.5	1,881.4	1,856.9	24.48	76.843	
7,200.0	7,186.7	6,914.3	6,762.2	14.6	27.4	150.43	-60.6	1,424.2	1,888.9	1,864.3	24.61	76.763	
7,250.0	7,236.4	6,962.1	6,808.7	14.7	27.6	114.16	-60.8	1,434.9	1,903.0	1,878.1	24.86	76.560	
7,300.0	7,285.6	7,009.3	6,854.8	14.8	27.8	102.41	-61.0	1,445.5	1,916.9	1,891.7	25.12	76.312	
7,350.0	7,334.0	7,055.7	6,900.0	14.9	28.0	96.70	-61.2	1,455.9	1,930.5	1,905.1	25.38	76.051	
7,400.0	7,381.0	7,100.8	6,943.9	15.0	28.2	93.22	-61.4	1,466.1	1,943.9	1,918.2	25.64	75.802	
7,450.0	7,426.5	7,144.4	6,986.4	15.0	28.4	90.81	-61.6	1,475.9	1,957.0	1,931.1	25.89	75.576	
7,500.0	7,470.0	7,186.1	7,027.0	15.1	28.6	89.03	-61.8	1,485.3	1,969.8	1,943.7	26.13	75.372	
7,550.0	7,511.2	7,225.5	7,065.4	15.2	28.8	87.62	-61.9	1,494.1	1,982.5	1,956.1	26.37	75.184	
7,600.0	7,549.7	7,262.4	7,101.4	15.4	28.9	86.47	-62.1	1,502.4	1,995.0	1,968.4	26.60	74.999	
7,650.0	7,585.4	7,296.6	7,134.7	15.5	29.1	85.48	-62.2	1,510.1	2,007.4	1,980.5	26.84	74.803	
7,700.0	7,617.9	7,327.6	7,164.9	15.7	29.2	84.57	-62.3	1,517.1	2,019.7	1,992.6	27.08	74.585	
7,750.0	7,647.0	7,364.8	7,201.2	15.9	29.4	83.94	-62.0	1,525.5	2,032.0	2,004.7	27.33	74.363	
7,800.0	7,672.4	7,415.0	7,249.9	16.2	29.6	83.69	-58.0	1,536.7	2,044.1	2,016.6	27.58	74.120	
7,850.0	7,694.0	7,473.7	7,306.2	16.5	29.8	83.71	-47.8	1,549.6	2,055.9	2,028.0	27.86	73.801	
7,900.0	7,711.6	7,545.5	7,373.2	16.8	30.1	84.08	-27.4	1,565.0	2,067.2	2,039.0	28.19	73.329	
7,950.0	7,725.0	7,638.6	7,455.6	17.2	30.5	84.93	11.6	1,583.8	2,077.7	2,049.0	28.63	72.560	
8,000.0	7,734.2	7,767.9	7,557.5	17.6	31.0	86.41	87.2	1,606.9	2,086.9	2,057.6	29.33	71.155	
8,050.0	7,739.1	7,955.6	7,670.3	18.1	31.8	88.44	234.0	1,632.2	2,093.9	2,063.2	30.70	68.208	
8,081.4	7,740.0	8,110.6	7,724.7	18.3	32.5	89.58	378.2	1,644.0	2,096.3	2,064.0	32.26	64.978	
8,100.0	7,740.0	8,213.1	7,739.1	18.5	33.0	89.98	479.4	1,646.7	2,096.8	2,063.3	33.48	62.631	
8,200.0	7,740.0	8,339.2	7,740.0	19.6	33.7	90.00	605.6	1,646.3	2,096.3	2,060.3	36.06	58.133	
8,300.0	7,740.0	8,439.2	7,740.0	20.7	34.4	90.00	705.6	1,645.8	2,095.8	2,057.3	38.53	54.389	
8,400.0	7,740.0	8,539.2	7,740.0	21.9	35.1	90.00	805.6	1,645.2	2,095.3	2,054.1	41.16	50.910	
8,500.0	7,740.0	8,639.2	7,740.0	23.2	35.9	90.00	905.6	1,644.7	2,094.7	2,050.8	43.90	47.712	
8,600.0	7,740.0	8,739.2	7,740.0	24.6	36.8	90.00	1,005.6	1,644.2	2,094.2	2,047.5	46.75	44.793	
8,700.0	7,740.0	8,839.2	7,740.0	25.9	37.8	90.00	1,105.6	1,643.7	2,093.7	2,044.0	49.69	42.138	
8,800.0	7,740.0	8,939.2	7,740.0	27.4	38.7	90.00	1,205.6	1,643.1	2,093.2	2,040.5	52.69	39.725	
8,900.0	7,740.0	9,039.2	7,740.0	28.8	39.8	90.00	1,305.6	1,642.6	2,092.6	2,036.9	55.75	37.533	
9,000.0	7,740.0	9,139.2	7,740.0	30.3	40.9	90.00	1,405.6	1,642.1	2,092.1	2,033.3	58.87	35.540	
9,100.0	7,740.0	9,239.2	7,740.0	31.9	42.0	90.00	1,505.5	1,641.6	2,091.6	2,029.6	62.02	33.723	

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

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Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
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Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,200.0	7,740.0	9,339.2	7,740.0	33.4	43.2	90.00	1,605.5	1,641.0	2,091.1	2,025.9	65.21	32.065	
9,300.0	7,740.0	9,439.2	7,740.0	35.0	44.4	90.00	1,705.5	1,640.5	2,090.5	2,022.1	68.44	30.548	
9,400.0	7,740.0	9,539.2	7,740.0	36.6	45.7	90.00	1,805.5	1,640.0	2,090.0	2,018.3	71.68	29.156	
9,500.0	7,740.0	9,639.2	7,740.0	38.2	46.9	90.00	1,905.5	1,639.5	2,089.5	2,014.5	74.96	27.876	
9,600.0	7,740.0	9,739.2	7,740.0	39.8	48.3	90.00	2,005.5	1,638.9	2,089.0	2,010.7	78.25	26.696	
9,700.0	7,740.0	9,839.2	7,740.0	41.4	49.6	90.00	2,105.5	1,638.4	2,088.5	2,006.9	81.56	25.606	
9,800.0	7,740.0	9,939.2	7,740.0	43.0	51.0	90.00	2,205.5	1,637.9	2,087.9	2,003.0	84.89	24.596	
9,900.0	7,740.0	10,039.2	7,740.0	44.7	52.4	90.00	2,305.5	1,637.4	2,087.4	1,999.2	88.23	23.659	
10,000.0	7,740.0	10,139.2	7,740.0	46.3	53.8	90.00	2,405.5	1,636.9	2,086.9	1,995.3	91.58	22.787	
10,100.0	7,740.0	10,239.2	7,740.0	48.0	55.2	90.00	2,505.5	1,636.3	2,086.4	1,991.4	94.95	21.974	
10,200.0	7,740.0	10,339.2	7,740.0	49.7	56.7	90.00	2,605.5	1,635.8	2,085.8	1,987.5	98.32	21.215	
10,300.0	7,740.0	10,439.2	7,740.0	51.3	58.1	90.00	2,705.5	1,635.3	2,085.3	1,983.6	101.70	20.504	
10,400.0	7,740.0	10,539.2	7,740.0	53.0	59.6	90.00	2,805.5	1,634.8	2,084.8	1,979.7	105.10	19.837	
10,500.0	7,740.0	10,639.2	7,740.0	54.7	61.1	90.00	2,905.5	1,634.2	2,084.3	1,975.8	108.49	19.211	
10,600.0	7,740.0	10,739.2	7,740.0	56.4	62.6	90.00	3,005.5	1,633.7	2,083.7	1,971.8	111.90	18.621	
10,700.0	7,740.0	10,839.2	7,740.0	58.1	64.1	90.00	3,105.5	1,633.2	2,083.2	1,967.9	115.31	18.066	
10,800.0	7,740.0	10,939.2	7,740.0	59.8	65.7	90.00	3,205.5	1,632.7	2,082.7	1,964.0	118.73	17.541	
10,900.0	7,740.0	11,039.2	7,740.0	61.5	67.2	90.00	3,305.5	1,632.1	2,082.2	1,960.0	122.15	17.046	
11,000.0	7,740.0	11,139.2	7,740.0	63.2	68.8	90.00	3,405.5	1,631.6	2,081.6	1,956.1	125.58	16.576	
11,105.4	7,740.0	11,244.6	7,740.0	65.0	70.4	90.00	3,510.9	1,631.1	2,081.1	1,951.9	129.20	16.108	
11,135.4	7,740.0	11,274.6	7,740.0	65.5	70.9	90.00	3,540.9	1,630.9	2,081.0	1,950.9	130.13	15.992	
11,191.0	7,740.0	11,330.2	7,740.0	66.4	71.8	90.00	3,596.5	1,630.6	2,081.3	1,949.4	131.84	15.786	
11,200.0	7,740.0	11,339.2	7,740.0	66.6	71.9	90.00	3,605.5	1,630.6	2,081.4	1,949.2	132.15	15.750	
11,300.0	7,740.0	11,439.2	7,740.0	68.3	73.5	90.00	3,705.5	1,630.0	2,082.3	1,946.8	135.59	15.358	
11,400.0	7,740.0	11,539.2	7,740.0	70.0	75.1	90.00	3,805.5	1,629.5	2,083.3	1,944.3	139.03	14.984	
11,500.0	7,740.0	11,639.2	7,740.0	71.7	76.7	90.00	3,905.5	1,629.0	2,084.3	1,941.8	142.48	14.629	
11,600.0	7,740.0	11,739.2	7,740.0	73.4	78.3	90.00	4,005.5	1,628.5	2,085.3	1,939.3	145.93	14.290	
11,700.0	7,740.0	11,839.1	7,740.0	75.1	79.9	90.00	4,105.5	1,627.9	2,086.2	1,936.8	149.38	13.966	
11,800.0	7,740.0	11,939.1	7,740.0	76.9	81.5	90.00	4,205.5	1,627.4	2,087.2	1,934.4	152.83	13.657	
11,900.0	7,740.0	12,039.1	7,740.0	78.6	83.2	90.00	4,305.4	1,626.9	2,088.2	1,931.9	156.29	13.361	
12,000.0	7,740.0	12,139.1	7,740.0	80.3	84.8	90.00	4,405.4	1,626.4	2,089.1	1,929.4	159.75	13.078	
12,100.0	7,740.0	12,239.1	7,740.0	82.0	86.4	90.00	4,505.4	1,625.9	2,090.1	1,926.9	163.21	12.806	
12,200.0	7,740.0	12,339.1	7,740.0	83.8	88.1	90.00	4,605.4	1,625.3	2,091.1	1,924.4	166.67	12.546	
12,300.0	7,740.0	12,439.1	7,740.0	85.5	89.7	90.00	4,705.4	1,624.8	2,092.0	1,921.9	170.13	12.296	
12,400.0	7,740.0	12,539.1	7,740.0	87.2	91.4	90.00	4,805.4	1,624.3	2,093.0	1,919.4	173.60	12.056	
12,500.0	7,740.0	12,639.1	7,740.0	88.9	93.0	90.00	4,905.4	1,623.8	2,094.0	1,916.9	177.07	11.826	
12,600.0	7,740.0	12,739.1	7,740.0	90.7	94.7	90.00	5,005.4	1,623.2	2,095.0	1,914.4	180.54	11.604	
12,700.0	7,740.0	12,839.1	7,740.0	92.4	96.3	90.00	5,105.4	1,622.7	2,095.9	1,911.9	184.01	11.390	
12,800.0	7,740.0	12,939.1	7,740.0	94.1	98.0	90.00	5,205.4	1,622.2	2,096.9	1,909.4	187.48	11.184	
12,900.0	7,740.0	13,039.1	7,740.0	95.9	99.6	90.00	5,305.4	1,621.7	2,097.9	1,906.9	190.96	10.986	
13,000.0	7,740.0	13,139.1	7,740.0	97.6	101.3	90.00	5,405.4	1,621.1	2,098.8	1,904.4	194.43	10.795	
13,100.0	7,740.0	13,239.1	7,740.0	99.3	103.0	90.00	5,505.4	1,620.6	2,099.8	1,901.9	197.91	10.610	
13,200.0	7,740.0	13,339.1	7,740.0	101.1	104.7	90.00	5,605.4	1,620.1	2,100.8	1,899.4	201.38	10.432	
13,300.0	7,740.0	13,439.1	7,740.0	102.8	106.3	90.00	5,705.4	1,619.6	2,101.7	1,896.9	204.86	10.259	
13,400.0	7,740.0	13,539.1	7,740.0	104.5	108.0	90.00	5,805.4	1,619.0	2,102.7	1,894.4	208.34	10.093	
13,500.0	7,740.0	13,639.1	7,740.0	106.3	109.7	90.00	5,905.4	1,618.5	2,103.7	1,891.9	211.82	9.931	
13,600.0	7,740.0	13,739.1	7,740.0	108.0	111.4	90.00	6,005.3	1,618.0	2,104.7	1,889.4	215.30	9.775	
13,700.0	7,740.0	13,839.1	7,740.0	109.8	113.1	90.00	6,105.3	1,617.5	2,105.6	1,886.8	218.78	9.624	
13,800.0	7,740.0	13,939.0	7,740.0	111.5	114.7	90.00	6,205.3	1,616.9	2,106.6	1,884.3	222.27	9.478	
13,900.0	7,740.0	14,039.0	7,740.0	113.2	116.4	90.00	6,305.3	1,616.4	2,107.6	1,881.8	225.75	9.336	
14,000.0	7,740.0	14,139.0	7,740.0	115.0	118.1	90.00	6,405.3	1,615.9	2,108.5	1,879.3	229.24	9.198	
14,100.0	7,740.0	14,239.0	7,740.0	116.7	119.8	90.00	6,505.3	1,615.4	2,109.5	1,876.8	232.72	9.065	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2			Offset Site Error:		0.0 ft
Survey Program:											0-Geolink MWD			Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)						
14,200.0	7,740.0	14,339.0	7,740.0	118.5	121.5	90.00	6,605.3	1,614.9	2,110.5	1,874.3	236.21	8.935				
14,300.0	7,740.0	14,439.0	7,740.0	120.2	123.2	90.00	6,705.3	1,614.3	2,111.4	1,871.8	239.69	8.809				
14,400.0	7,740.0	14,539.0	7,740.0	121.9	124.9	90.00	6,805.3	1,613.8	2,112.4	1,869.2	243.18	8.687				
14,500.0	7,740.0	14,639.0	7,740.0	123.7	126.6	90.00	6,905.3	1,613.3	2,113.4	1,866.7	246.67	8.568				
14,600.0	7,740.0	14,739.0	7,740.0	125.4	128.3	90.00	7,005.3	1,612.8	2,114.4	1,864.2	250.16	8.452				
14,682.3	7,740.0	14,821.3	7,740.0	126.8	129.7	90.00	7,087.5	1,612.3	2,115.2	1,862.1	253.03	8.359 SF				

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3											Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.30	-0.4	70.0	70.0					
100.0	100.0	100.0	100.0	0.2	0.2	90.30	-0.4	70.0	70.0	69.7	0.30	230.404		
200.0	200.0	200.0	200.0	0.3	0.3	90.30	-0.4	70.0	70.0	69.3	0.65	107.193 CC, ES		
300.0	300.0	298.8	298.8	0.5	0.5	-150.02	-0.4	70.8	71.6	70.6	1.00	71.600		
400.0	400.0	397.4	397.3	0.7	0.7	-150.91	-0.5	73.4	76.4	75.1	1.35	56.738		
500.0	499.9	495.6	495.5	0.9	0.9	-152.15	-0.6	77.6	84.6	82.9	1.70	49.880		
600.0	599.7	593.4	593.1	1.1	1.1	-153.53	-0.8	83.5	96.0	93.9	2.04	46.953		
700.0	699.5	690.7	690.1	1.3	1.3	-168.47	-1.0	91.0	109.9	107.5	2.39	45.979		
722.7	722.1	712.8	712.1	1.3	1.3	-172.03	-1.1	92.9	113.2	110.8	2.47	45.891		
800.0	799.3	787.5	786.5	1.5	1.5	-171.97	-1.3	100.1	125.4	122.6	2.73	45.866		
900.0	899.1	883.8	882.2	1.7	1.7	-171.84	-1.6	110.7	142.5	139.4	3.08	46.328		
1,000.0	998.9	979.5	977.1	1.9	2.0	-171.68	-2.0	122.9	161.3	157.9	3.42	47.189		
1,100.0	1,098.7	1,074.6	1,071.2	2.1	2.3	-171.50	-2.5	136.6	181.7	178.0	3.76	48.339		
1,200.0	1,198.5	1,168.9	1,164.3	2.3	2.6	-171.31	-2.9	151.7	203.8	199.7	4.10	49.705		
1,300.0	1,298.3	1,262.6	1,256.5	2.5	2.9	-171.12	-3.4	168.2	227.4	222.9	4.44	51.236		
1,400.0	1,398.1	1,355.5	1,347.7	2.7	3.2	-170.94	-4.0	186.0	252.6	247.8	4.78	52.895		
1,500.0	1,497.9	1,447.6	1,437.8	2.9	3.6	-170.76	-4.6	205.2	279.3	274.2	5.11	54.655		
1,600.0	1,597.7	1,538.9	1,526.7	3.1	4.0	-170.59	-5.2	225.6	307.6	302.2	5.44	56.496		
1,700.0	1,697.5	1,629.2	1,614.5	3.3	4.4	-170.42	-5.9	247.2	337.4	331.6	5.78	58.404		
1,800.0	1,797.3	1,718.7	1,701.0	3.5	4.8	-170.27	-6.6	270.0	368.7	362.6	6.11	60.365		
1,900.0	1,897.1	1,807.3	1,786.3	3.7	5.3	-170.12	-7.4	293.8	401.5	395.0	6.44	62.371		
2,000.0	1,996.9	1,894.8	1,870.2	3.9	5.7	-169.98	-8.2	318.7	435.7	428.9	6.76	64.414		
2,100.0	2,096.7	1,981.4	1,952.9	4.1	6.2	-169.85	-9.0	344.6	471.3	464.2	7.09	66.487		
2,200.0	2,196.5	2,070.9	2,037.9	4.3	6.7	-169.73	-9.9	372.4	508.2	500.7	7.42	68.499		
2,300.0	2,296.3	2,163.8	2,126.2	4.5	7.3	-169.61	-10.8	401.4	545.2	537.4	7.75	70.310		
2,400.0	2,396.1	2,256.7	2,214.4	4.7	7.8	-169.51	-11.7	430.5	582.2	574.1	8.09	71.973		
2,500.0	2,495.9	2,349.6	2,302.6	4.9	8.3	-169.42	-12.6	459.5	619.2	610.8	8.42	73.504		
2,600.0	2,595.7	2,442.5	2,390.9	5.2	8.9	-169.34	-13.5	488.6	656.2	647.4	8.76	74.920		
2,700.0	2,695.5	2,535.4	2,479.1	5.4	9.4	-169.27	-14.4	517.6	693.2	684.1	9.09	76.232		
2,800.0	2,795.3	2,628.3	2,567.3	5.6	10.0	-169.21	-15.3	546.6	730.2	720.8	9.43	77.451		
2,900.0	2,895.1	2,721.2	2,655.6	5.8	10.5	-169.15	-16.2	575.7	767.2	757.5	9.76	78.588		
3,000.0	2,994.9	2,814.1	2,743.8	6.0	11.1	-169.10	-17.2	604.7	804.3	794.2	10.10	79.650		
3,100.0	3,094.7	2,907.0	2,832.0	6.2	11.6	-169.05	-18.1	633.8	841.3	830.8	10.43	80.644		
3,200.0	3,194.5	2,999.9	2,920.3	6.4	12.2	-169.01	-19.0	662.8	878.3	867.5	10.77	81.577		
3,300.0	3,294.3	3,092.8	3,008.5	6.6	12.7	-168.97	-19.9	691.9	915.3	904.2	11.10	82.454		
3,400.0	3,394.1	3,185.7	3,096.7	6.8	13.3	-168.93	-20.8	720.9	952.3	940.9	11.44	83.280		
3,500.0	3,493.9	3,278.6	3,185.0	7.0	13.8	-168.90	-21.7	749.9	989.3	977.6	11.77	84.059		
3,600.0	3,593.8	3,371.5	3,273.2	7.2	14.4	-168.87	-22.6	779.0	1,026.4	1,014.3	12.10	84.796		
3,700.0	3,693.6	3,464.4	3,361.4	7.4	14.9	-168.84	-23.5	808.0	1,063.4	1,050.9	12.44	85.494		
3,800.0	3,793.4	3,557.3	3,449.7	7.6	15.5	-168.81	-24.4	837.1	1,100.4	1,087.6	12.77	86.155		
3,900.0	3,893.2	3,650.2	3,537.9	7.8	16.0	-168.78	-25.4	866.1	1,137.4	1,124.3	13.11	86.782		
4,000.0	3,993.0	3,743.0	3,626.1	8.0	16.6	-168.76	-26.3	895.2	1,174.4	1,161.0	13.44	87.379		
4,100.0	4,092.8	3,835.9	3,714.4	8.2	17.1	-168.74	-27.2	924.2	1,211.5	1,197.7	13.77	87.947		
4,200.0	4,192.6	3,928.8	3,802.6	8.4	17.7	-168.72	-28.1	953.2	1,248.5	1,234.4	14.11	88.488		
4,300.0	4,292.4	4,021.7	3,890.8	8.7	18.2	-168.70	-29.0	982.3	1,285.5	1,271.0	14.44	89.004		
4,400.0	4,392.2	4,114.6	3,979.1	8.9	18.8	-168.68	-29.9	1,011.3	1,322.5	1,307.7	14.78	89.497		
4,500.0	4,492.0	4,207.5	4,067.3	9.1	19.3	-168.66	-30.8	1,040.4	1,359.5	1,344.4	15.11	89.968		
4,600.0	4,591.8	4,300.4	4,155.5	9.3	19.9	-168.64	-31.7	1,069.4	1,396.5	1,381.1	15.45	90.419		
4,700.0	4,691.6	4,393.3	4,243.8	9.5	20.4	-168.63	-32.6	1,098.5	1,433.6	1,417.8	15.78	90.851		
4,800.0	4,791.4	4,486.2	4,332.0	9.7	21.0	-168.61	-33.6	1,127.5	1,470.6	1,454.5	16.11	91.265		
4,900.0	4,891.2	4,579.1	4,420.2	9.9	21.5	-168.60	-34.5	1,156.5	1,507.6	1,491.2	16.45	91.662		
5,000.0	4,991.0	4,672.0	4,508.5	10.1	22.1	-168.58	-35.4	1,185.6	1,544.6	1,527.8	16.78	92.044		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,100.0	5,090.8	4,764.9	4,596.7	10.3	22.6	-168.57	-36.3	1,214.6	1,581.6	1,564.5	17.12	92.411	
5,200.0	5,190.6	4,857.8	4,684.9	10.5	23.2	-168.56	-37.2	1,243.7	1,618.7	1,601.2	17.45	92.763	
5,300.0	5,290.4	4,950.7	4,773.2	10.7	23.8	-168.55	-38.1	1,272.7	1,655.7	1,637.9	17.78	93.103	
5,400.0	5,390.2	5,043.6	4,861.4	10.9	24.3	-168.53	-39.0	1,301.8	1,692.7	1,674.6	18.12	93.430	
5,500.0	5,490.0	5,136.5	4,949.6	11.1	24.9	-168.52	-39.9	1,330.8	1,729.7	1,711.3	18.45	93.746	
5,600.0	5,589.8	5,229.4	5,037.9	11.3	25.4	-168.51	-40.9	1,359.8	1,766.7	1,748.0	18.79	94.050	
5,700.0	5,689.6	5,322.3	5,126.1	11.5	26.0	-168.50	-41.8	1,388.9	1,803.8	1,784.6	19.12	94.343	
5,800.0	5,789.4	5,415.2	5,214.3	11.7	26.5	-168.49	-42.7	1,417.9	1,840.8	1,821.3	19.45	94.627	
5,900.0	5,889.2	5,508.0	5,302.6	11.9	27.1	-168.48	-43.6	1,447.0	1,877.8	1,858.0	19.79	94.901	
6,000.0	5,989.0	5,600.9	5,390.8	12.2	27.6	-168.48	-44.5	1,476.0	1,914.8	1,894.7	20.12	95.166	
6,100.0	6,088.8	5,693.8	5,479.0	12.4	28.2	-168.47	-45.4	1,505.1	1,951.8	1,931.4	20.45	95.422	
6,200.0	6,188.6	5,786.7	5,567.3	12.6	28.7	-168.46	-46.3	1,534.1	1,988.9	1,968.1	20.79	95.671	
6,300.0	6,288.4	5,879.6	5,655.5	12.8	29.3	-168.45	-47.2	1,563.1	2,025.9	2,004.8	21.12	95.911	
6,400.0	6,388.2	5,972.5	5,743.7	13.0	29.9	-168.44	-48.1	1,592.2	2,062.9	2,041.5	21.46	96.144	
6,500.0	6,488.0	6,065.4	5,832.0	13.2	30.4	-168.44	-49.1	1,621.2	2,099.9	2,078.1	21.79	96.370	
6,600.0	6,587.9	6,158.3	5,920.2	13.4	31.0	-168.43	-50.0	1,650.3	2,136.9	2,114.8	22.12	96.589	
6,700.0	6,687.7	6,251.2	6,008.4	13.6	31.5	-168.42	-50.9	1,679.3	2,174.0	2,151.5	22.46	96.801	
6,800.0	6,787.5	6,344.1	6,096.7	13.8	32.1	-168.42	-51.8	1,708.3	2,211.0	2,188.2	22.79	97.007	
6,900.0	6,887.3	6,437.0	6,184.9	14.0	32.6	-168.41	-52.7	1,737.4	2,248.0	2,224.9	23.13	97.208	
7,000.0	6,987.1	6,529.9	6,273.1	14.2	33.2	-168.40	-53.6	1,766.4	2,285.0	2,261.6	23.46	97.403	
7,100.0	7,086.9	6,622.8	6,361.4	14.4	33.7	-168.40	-54.5	1,795.5	2,322.0	2,298.3	23.79	97.592	
7,173.7	7,160.4	6,691.2	6,426.4	14.6	34.1	-168.39	-55.2	1,816.9	2,349.3	2,325.3	24.04	97.728	
7,200.0	7,186.7	6,715.7	6,449.6	14.6	34.3	150.31	-55.4	1,824.5	2,359.1	2,334.9	24.20	97.483	
7,250.0	7,236.4	6,761.9	6,493.5	14.7	34.6	113.51	-55.9	1,839.0	2,377.4	2,352.9	24.57	96.745	
7,300.0	7,285.6	6,807.7	6,537.0	14.8	34.8	101.23	-56.3	1,853.3	2,395.6	2,370.6	25.01	95.769	
7,350.0	7,334.0	6,852.5	6,579.6	14.9	35.1	94.97	-56.8	1,867.3	2,413.4	2,387.9	25.48	94.707	
7,400.0	7,381.0	6,896.2	6,621.0	15.0	35.4	90.95	-57.2	1,880.9	2,430.8	2,404.8	25.95	93.683	
7,450.0	7,426.5	6,938.3	6,661.0	15.0	35.6	88.01	-57.6	1,894.1	2,447.8	2,421.4	26.38	92.778	
7,500.0	7,470.0	6,978.5	6,699.2	15.1	35.9	85.71	-58.0	1,906.7	2,464.2	2,437.5	26.77	92.041	
7,550.0	7,511.2	7,016.5	6,735.4	15.2	36.1	83.82	-58.4	1,918.6	2,480.2	2,453.1	27.11	91.488	
7,600.0	7,549.7	7,052.1	6,769.2	15.4	36.3	82.22	-58.7	1,929.7	2,495.7	2,468.3	27.39	91.118	
7,650.0	7,585.4	7,085.0	6,800.4	15.5	36.5	80.81	-59.1	1,940.0	2,510.7	2,483.1	27.62	90.917	
7,700.0	7,617.9	7,114.8	6,828.7	15.7	36.7	79.55	-59.4	1,949.3	2,525.2	2,497.4	27.79	90.863	
7,750.0	7,647.0	7,141.5	6,854.1	15.9	36.8	78.40	-59.6	1,957.6	2,539.2	2,511.3	27.92	90.929	
7,800.0	7,672.4	7,164.7	6,876.1	16.2	37.0	77.31	-59.8	1,964.9	2,552.7	2,524.7	28.02	91.087	
7,850.0	7,694.0	7,184.4	6,894.8	16.5	37.1	76.28	-60.0	1,971.1	2,565.8	2,537.7	28.10	91.305	
7,900.0	7,711.6	7,200.3	6,909.9	16.8	37.2	75.26	-60.2	1,976.0	2,578.3	2,550.2	28.16	91.546	
7,950.0	7,725.0	8,213.1	7,500.0	17.2	41.2	84.05	591.9	2,106.9	2,577.6	2,545.2	32.40	79.568	
8,000.0	7,734.2	8,262.1	7,500.0	17.6	41.4	84.11	640.6	2,102.2	2,574.3	2,540.6	33.68	76.428	
8,050.0	7,739.1	8,311.6	7,500.0	18.1	41.6	84.36	689.9	2,097.4	2,570.3	2,535.3	35.06	73.316	
8,081.4	7,740.0	8,342.9	7,500.0	18.3	41.7	84.61	721.0	2,094.4	2,567.5	2,531.5	35.97	71.384	
8,100.0	7,740.0	8,361.4	7,500.0	18.5	41.8	84.61	739.4	2,092.7	2,565.7	2,529.3	36.41	70.473	
8,200.0	7,740.0	8,460.9	7,500.0	19.6	42.3	84.59	838.5	2,083.1	2,556.1	2,517.3	38.87	65.756	
8,300.0	7,740.0	8,560.5	7,500.0	20.7	42.8	84.57	937.6	2,073.6	2,546.6	2,505.1	41.49	61.381	
8,400.0	7,740.0	8,660.0	7,500.0	21.9	43.5	84.55	1,036.7	2,064.1	2,537.1	2,492.8	44.23	57.367	
8,500.0	7,740.0	8,759.6	7,500.0	23.2	44.1	84.53	1,135.8	2,054.5	2,527.5	2,480.5	47.06	53.706	
8,600.0	7,740.0	8,859.1	7,500.0	24.6	44.9	84.51	1,234.8	2,045.0	2,518.0	2,468.0	49.98	50.378	
8,700.0	7,740.0	8,958.6	7,500.0	25.9	45.7	84.48	1,333.9	2,035.4	2,508.4	2,455.5	52.97	47.356	
8,800.0	7,740.0	9,058.2	7,500.0	27.4	46.5	84.46	1,433.0	2,025.9	2,498.9	2,442.9	56.02	44.610	
8,900.0	7,740.0	9,157.7	7,500.0	28.8	47.4	84.44	1,532.1	2,016.3	2,489.4	2,430.2	59.11	42.113	
9,000.0	7,740.0	9,257.3	7,500.0	30.3	48.4	84.42	1,631.2	2,006.8	2,479.8	2,417.6	62.25	39.838	
9,100.0	7,740.0	9,356.8	7,500.0	31.9	49.3	84.40	1,730.2	1,997.3	2,470.3	2,404.9	65.42	37.761	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,200.0	7,740.0	9,456.3	7,500.0	33.4	50.4	84.38	1,829.3	1,987.7	2,460.7	2,392.1	68.62	35.861		
9,300.0	7,740.0	9,555.9	7,500.0	35.0	51.4	84.36	1,928.4	1,978.2	2,451.2	2,379.3	71.85	34.117		
9,400.0	7,740.0	9,655.4	7,500.0	36.6	52.5	84.33	2,027.5	1,968.6	2,441.7	2,366.6	75.10	32.514		
9,500.0	7,740.0	9,755.0	7,500.0	38.2	53.7	84.31	2,126.6	1,959.1	2,432.1	2,353.8	78.37	31.035		
9,600.0	7,740.0	9,854.5	7,500.0	39.8	54.9	84.29	2,225.7	1,949.6	2,422.6	2,340.9	81.65	29.669		
9,700.0	7,740.0	9,954.0	7,500.0	41.4	56.1	84.27	2,324.7	1,940.0	2,413.0	2,328.1	84.96	28.404		
9,800.0	7,740.0	10,053.6	7,500.0	43.0	57.3	84.24	2,423.8	1,930.5	2,403.5	2,315.2	88.27	27.229		
9,900.0	7,740.0	10,153.1	7,500.0	44.7	58.6	84.22	2,522.9	1,920.9	2,394.0	2,302.4	91.60	26.136		
10,000.0	7,740.0	10,252.7	7,500.0	46.3	59.8	84.20	2,622.0	1,911.4	2,384.4	2,289.5	94.94	25.116		
10,100.0	7,740.0	10,352.2	7,500.0	48.0	61.2	84.17	2,721.1	1,901.9	2,374.9	2,276.6	98.28	24.164		
10,200.0	7,740.0	10,451.7	7,500.0	49.7	62.5	84.15	2,820.1	1,892.3	2,365.4	2,263.7	101.64	23.272		
10,300.0	7,740.0	10,551.3	7,500.0	51.3	63.8	84.13	2,919.2	1,882.8	2,355.8	2,250.8	105.00	22.436		
10,400.0	7,740.0	10,650.8	7,500.0	53.0	65.2	84.10	3,018.3	1,873.2	2,346.3	2,237.9	108.37	21.650		
10,500.0	7,740.0	10,736.7	7,500.0	54.7	66.4	84.08	3,103.8	1,865.1	2,336.9	2,225.4	111.52	20.955		
10,600.0	7,740.0	10,800.0	7,500.0	56.4	67.3	84.07	3,166.9	1,859.8	2,328.6	2,214.3	114.29	20.375		
10,700.0	7,740.0	10,878.7	7,500.0	58.1	68.5	84.05	3,245.4	1,854.1	2,321.4	2,204.1	117.32	19.787		
10,800.0	7,740.0	10,949.9	7,500.0	59.8	69.5	84.04	3,316.4	1,849.9	2,315.6	2,195.3	120.23	19.259		
10,900.0	7,740.0	11,021.2	7,500.0	61.5	70.6	84.03	3,387.6	1,846.5	2,310.9	2,187.8	123.14	18.766		
11,000.0	7,740.0	11,100.0	7,500.0	63.2	71.7	84.03	3,466.4	1,843.9	2,307.5	2,181.3	126.19	18.286		
11,105.4	7,740.0	11,167.8	7,500.0	65.0	72.8	84.02	3,534.2	1,842.5	2,305.3	2,176.1	129.14	17.850		
11,152.8	7,740.0	11,200.0	7,500.0	65.8	73.3	84.02	3,566.4	1,842.1	2,304.9	2,174.6	130.31	17.688		
11,191.0	7,740.0	11,228.9	7,500.0	66.4	73.7	84.02	3,595.3	1,841.9	2,305.1	2,173.8	131.29	17.557		
11,200.0	7,740.0	11,235.3	7,500.0	66.6	73.8	84.02	3,601.7	1,841.9	2,305.2	2,173.6	131.56	17.522		
11,300.0	7,740.0	11,328.2	7,500.0	68.3	75.2	84.03	3,694.6	1,841.8	2,306.6	2,171.8	134.85	17.105		
11,400.0	7,740.0	11,428.2	7,500.0	70.0	76.8	84.03	3,794.6	1,841.8	2,308.1	2,169.8	138.27	16.693		
11,500.0	7,740.0	11,528.2	7,500.0	71.7	78.3	84.03	3,894.6	1,841.8	2,309.6	2,167.9	141.69	16.300		
11,600.0	7,740.0	11,628.1	7,500.0	73.4	79.9	84.04	3,994.6	1,841.8	2,311.1	2,166.0	145.12	15.925		
11,700.0	7,740.0	11,728.1	7,500.0	75.1	81.5	84.04	4,094.5	1,841.8	2,312.6	2,164.0	148.55	15.568		
11,800.0	7,740.0	11,828.1	7,500.0	76.9	83.1	84.05	4,194.5	1,841.8	2,314.1	2,162.1	151.98	15.226		
11,900.0	7,740.0	11,928.1	7,500.0	78.6	84.6	84.05	4,294.5	1,841.8	2,315.5	2,160.1	155.41	14.899		
12,000.0	7,740.0	12,028.1	7,500.0	80.3	86.2	84.05	4,394.5	1,841.8	2,317.0	2,158.2	158.85	14.586		
12,100.0	7,740.0	12,128.1	7,500.0	82.0	87.8	84.06	4,494.5	1,841.8	2,318.5	2,156.2	162.29	14.286		
12,200.0	7,740.0	12,228.1	7,500.0	83.8	89.4	84.06	4,594.5	1,841.8	2,320.0	2,154.3	165.73	13.999		
12,300.0	7,740.0	12,328.1	7,500.0	85.5	91.1	84.07	4,694.5	1,841.8	2,321.5	2,152.3	169.17	13.722		
12,400.0	7,740.0	12,428.1	7,500.0	87.2	92.7	84.07	4,794.5	1,841.8	2,323.0	2,150.4	172.62	13.457		
12,500.0	7,740.0	12,528.0	7,500.0	88.9	94.3	84.07	4,894.4	1,841.8	2,324.5	2,148.4	176.07	13.202		
12,600.0	7,740.0	12,628.0	7,500.0	90.7	95.9	84.08	4,994.4	1,841.8	2,325.9	2,146.4	179.52	12.957		
12,700.0	7,740.0	12,728.0	7,500.0	92.4	97.6	84.08	5,094.4	1,841.8	2,327.4	2,144.5	182.97	12.721		
12,800.0	7,740.0	12,828.0	7,500.0	94.1	99.2	84.08	5,194.4	1,841.8	2,328.9	2,142.5	186.42	12.493		
12,900.0	7,740.0	12,928.0	7,500.0	95.9	100.8	84.09	5,294.4	1,841.8	2,330.4	2,140.5	189.87	12.274		
13,000.0	7,740.0	13,028.0	7,500.0	97.6	102.5	84.09	5,394.4	1,841.8	2,331.9	2,138.6	193.33	12.062		
13,100.0	7,740.0	13,128.0	7,500.0	99.3	104.1	84.10	5,494.4	1,841.8	2,333.4	2,136.6	196.78	11.858		
13,200.0	7,740.0	13,228.0	7,500.0	101.1	105.8	84.10	5,594.4	1,841.8	2,334.9	2,134.6	200.24	11.660		
13,300.0	7,740.0	13,328.0	7,500.0	102.8	107.4	84.10	5,694.4	1,841.8	2,336.3	2,132.6	203.70	11.470		
13,400.0	7,740.0	13,427.9	7,500.0	104.5	109.1	84.11	5,794.3	1,841.8	2,337.8	2,130.7	207.16	11.285		
13,500.0	7,740.0	13,527.9	7,500.0	106.3	110.7	84.11	5,894.3	1,841.8	2,339.3	2,128.7	210.62	11.107		
13,600.0	7,740.0	13,627.9	7,500.0	108.0	112.4	84.11	5,994.3	1,841.8	2,340.8	2,126.7	214.08	10.934		
13,700.0	7,740.0	13,727.9	7,500.0	109.8	114.1	84.12	6,094.3	1,841.8	2,342.3	2,124.7	217.54	10.767		
13,800.0	7,740.0	13,800.0	7,500.0	111.5	115.3	84.12	6,166.4	1,842.0	2,344.2	2,123.6	220.53	10.630		
13,900.0	7,740.0	13,873.9	7,500.0	113.2	116.5	84.13	6,240.3	1,843.2	2,347.3	2,123.7	223.54	10.500		
14,000.0	7,740.0	13,943.0	7,500.0	115.0	117.7	84.13	6,309.3	1,845.3	2,351.7	2,125.2	226.47	10.384		
14,100.0	7,740.0	14,000.0	7,500.0	116.7	118.7	84.14	6,366.3	1,847.7	2,357.5	2,128.3	229.20	10.286		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
14,200.0	7,740.0	14,080.7	7,500.0	118.5	120.0	84.16	6,446.9	1,852.1	2,364.5	2,132.2	232.33	10.177	
14,300.0	7,740.0	14,149.4	7,500.0	120.2	121.2	84.17	6,515.4	1,856.9	2,372.9	2,137.6	235.26	10.086	
14,400.0	7,740.0	14,217.9	7,500.0	121.9	122.4	84.19	6,583.7	1,862.5	2,382.6	2,144.4	238.19	10.003	
14,500.0	7,740.0	14,300.0	7,500.0	123.7	123.8	84.21	6,665.4	1,870.4	2,393.6	2,152.2	241.35	9.917	
14,600.0	7,740.0	14,354.3	7,500.0	125.4	124.8	84.23	6,719.4	1,876.4	2,405.8	2,161.7	244.03	9.858	
14,682.3	7,740.0	14,400.0	7,500.0	126.8	125.6	84.24	6,764.8	1,881.8	2,416.9	2,170.6	246.25	9.814 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.96	0.4	-518.1	518.1					
100.0	100.0	100.0	100.0	0.2	0.2	-89.96	0.4	-518.1	518.1	517.8	0.30	1,705.888		
200.0	200.0	200.0	200.0	0.3	0.3	-89.96	0.4	-518.1	518.1	517.4	0.65	793.649		
300.0	300.0	300.0	300.0	0.5	0.5	30.19	1.2	-518.1	517.3	516.3	1.00	515.829		
400.0	400.0	399.8	399.8	0.7	0.7	30.64	3.8	-518.1	515.1	513.7	1.36	379.292		
500.0	499.9	499.4	499.2	0.9	0.9	31.39	8.2	-518.1	511.4	509.7	1.72	296.873		
600.0	599.7	598.5	598.2	1.1	1.1	32.46	14.2	-518.1	506.4	504.3	2.10	240.979		
700.0	699.5	697.7	697.1	1.3	1.3	19.54	21.6	-518.1	500.9	498.4	2.49	201.524		
722.7	722.1	720.3	719.6	1.3	1.3	16.26	23.3	-518.1	499.6	497.0	2.57	194.158		
800.0	799.3	797.1	796.2	1.5	1.5	17.09	29.1	-518.1	495.4	492.5	2.87	172.460		
900.0	899.1	896.5	895.4	1.7	1.7	18.17	36.6	-518.1	490.1	486.9	3.26	150.234		
1,000.0	998.9	995.9	994.5	1.9	1.9	19.29	44.1	-518.1	485.0	481.4	3.65	132.734		
1,100.0	1,098.7	1,095.4	1,093.6	2.1	2.1	20.42	51.6	-518.1	480.1	476.0	4.05	118.627		
1,200.0	1,198.5	1,194.8	1,192.8	2.3	2.3	21.58	59.1	-518.1	475.4	470.9	4.44	107.035		
1,300.0	1,298.3	1,294.2	1,291.9	2.5	2.5	22.76	66.6	-518.1	470.8	466.0	4.84	97.356		
1,400.0	1,398.1	1,393.6	1,391.0	2.7	2.8	23.96	74.1	-518.1	466.5	461.3	5.23	89.165		
1,500.0	1,497.9	1,493.0	1,490.2	2.9	3.0	25.18	81.6	-518.1	462.4	456.8	5.63	82.154		
1,600.0	1,597.7	1,592.4	1,589.3	3.1	3.2	26.43	89.1	-518.1	458.5	452.5	6.03	76.096		
1,700.0	1,697.5	1,691.9	1,688.4	3.3	3.4	27.70	96.6	-518.1	454.8	448.4	6.42	70.817		
1,800.0	1,797.3	1,791.3	1,787.6	3.5	3.6	28.98	104.1	-518.1	451.4	444.5	6.82	66.184		
1,900.0	1,897.1	1,890.7	1,886.7	3.7	3.8	30.29	111.6	-518.1	448.1	440.9	7.22	62.092		
2,000.0	1,996.9	1,990.1	1,985.8	3.9	4.1	31.61	119.1	-518.1	445.2	437.6	7.62	58.458		
2,100.0	2,096.7	2,089.5	2,085.0	4.1	4.3	32.95	126.6	-518.1	442.4	434.4	8.01	55.215		
2,200.0	2,196.5	2,188.9	2,184.1	4.3	4.5	34.30	134.1	-518.1	440.0	431.5	8.41	52.309		
2,300.0	2,296.3	2,288.4	2,283.2	4.5	4.7	35.67	141.6	-518.1	437.7	428.9	8.81	49.695		
2,400.0	2,396.1	2,387.8	2,382.4	4.7	4.9	37.06	149.1	-518.1	435.7	426.5	9.21	47.337		
2,500.0	2,495.9	2,487.2	2,481.5	4.9	5.1	38.45	156.6	-518.1	434.0	424.4	9.60	45.202		
2,600.0	2,595.7	2,586.6	2,580.6	5.2	5.4	39.85	164.1	-518.1	432.6	422.6	10.00	43.265		
2,700.0	2,695.5	2,686.0	2,679.8	5.4	5.6	41.27	171.6	-518.1	431.4	421.0	10.39	41.504		
2,800.0	2,795.3	2,785.5	2,778.9	5.6	5.8	42.69	179.1	-518.1	430.4	419.6	10.79	39.900		
2,900.0	2,895.1	2,884.9	2,878.0	5.8	6.0	44.11	186.6	-518.1	429.8	418.6	11.18	38.436		
3,000.0	2,994.9	2,984.3	2,977.2	6.0	6.2	45.54	194.1	-518.1	429.4	417.8	11.57	37.098		
3,094.3	3,089.1	3,078.0	3,070.7	6.2	6.4	46.89	201.2	-518.1	429.3	417.3	11.94	35.940		
3,100.0	3,094.7	3,083.7	3,076.3	6.2	6.4	46.97	201.6	-518.1	429.3	417.3	11.97	35.874		
3,200.0	3,194.5	3,183.1	3,175.4	6.4	6.7	48.40	209.1	-518.1	429.4	417.1	12.36	34.752		
3,300.0	3,294.3	3,282.5	3,274.6	6.6	6.9	49.83	216.6	-518.1	429.8	417.1	12.75	33.723		
3,400.0	3,394.1	3,382.0	3,373.7	6.8	7.1	51.25	224.1	-518.1	430.5	417.4	13.13	32.779		
3,500.0	3,493.9	3,481.4	3,472.8	7.0	7.3	52.67	231.6	-518.1	431.5	418.0	13.52	31.912		
3,600.0	3,593.8	3,580.8	3,572.0	7.2	7.5	54.09	239.1	-518.1	432.7	418.8	13.91	31.116		
3,700.0	3,693.6	3,680.2	3,671.1	7.4	7.7	55.49	246.6	-518.1	434.2	419.9	14.29	30.384		
3,800.0	3,793.4	3,779.6	3,770.2	7.6	8.0	56.88	254.1	-518.1	435.9	421.3	14.67	29.711		
3,900.0	3,893.2	3,879.0	3,869.4	7.8	8.2	58.26	261.6	-518.1	438.0	422.9	15.05	29.092		
4,000.0	3,993.0	3,978.5	3,968.5	8.0	8.4	59.63	269.1	-518.1	440.2	424.8	15.43	28.523		
4,100.0	4,092.8	4,077.9	4,067.6	8.2	8.6	60.98	276.6	-518.1	442.7	426.9	15.81	28.000		
4,200.0	4,192.6	4,177.3	4,166.8	8.4	8.8	62.32	284.1	-518.1	445.5	429.3	16.19	27.518		
4,300.0	4,292.4	4,276.7	4,265.9	8.7	9.0	63.64	291.6	-518.1	448.5	431.9	16.56	27.076		
4,400.0	4,392.2	4,376.1	4,365.1	8.9	9.3	64.94	299.1	-518.1	451.7	434.8	16.94	26.669		
4,500.0	4,492.0	4,475.5	4,464.2	9.1	9.5	66.23	306.6	-518.1	455.2	437.9	17.31	26.294		
4,600.0	4,591.8	4,575.0	4,563.3	9.3	9.7	67.49	314.1	-518.1	458.9	441.2	17.68	25.951		
4,700.0	4,691.6	4,674.4	4,662.5	9.5	9.9	68.73	321.6	-518.1	462.8	444.8	18.06	25.635		
4,800.0	4,791.4	4,773.8	4,761.6	9.7	10.1	69.96	329.1	-518.1	467.0	448.6	18.43	25.345		
4,900.0	4,891.2	4,873.2	4,860.7	9.9	10.4	71.16	336.6	-518.0	471.3	452.5	18.79	25.078		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	4,991.0	4,972.6	4,959.9	10.1	10.6	72.33	344.1	-518.0	475.9	456.7	19.16	24.834	
5,100.0	5,090.8	5,072.0	5,059.0	10.3	10.8	73.49	351.6	-518.0	480.6	461.1	19.53	24.611	
5,200.0	5,190.6	5,171.5	5,158.1	10.5	11.0	74.62	359.1	-518.0	485.6	465.7	19.90	24.406	
5,300.0	5,290.4	5,270.9	5,257.3	10.7	11.2	75.73	366.6	-518.0	490.7	470.4	20.26	24.218	
5,400.0	5,390.2	5,370.3	5,356.4	10.9	11.4	76.82	374.1	-518.0	496.0	475.4	20.63	24.047	
5,500.0	5,490.0	5,469.7	5,455.5	11.1	11.7	77.88	381.6	-518.0	501.5	480.5	20.99	23.890	
5,600.0	5,589.8	5,569.1	5,554.7	11.3	11.9	78.92	389.1	-518.0	507.2	485.8	21.36	23.748	
5,700.0	5,689.6	5,668.6	5,653.8	11.5	12.1	79.94	396.6	-518.0	513.0	491.3	21.72	23.618	
5,800.0	5,789.4	5,768.0	5,752.9	11.7	12.3	80.93	404.1	-518.0	519.0	496.9	22.08	23.499	
5,900.0	5,889.2	5,867.4	5,852.1	11.9	12.5	81.90	411.6	-518.0	525.1	502.7	22.45	23.392	
6,000.0	5,989.0	5,966.8	5,951.2	12.2	12.7	82.85	419.1	-518.0	531.4	508.6	22.81	23.295	
6,100.0	6,088.8	6,066.2	6,050.3	12.4	13.0	83.77	426.6	-518.0	537.8	514.6	23.17	23.207	
6,200.0	6,188.6	6,165.6	6,149.5	12.6	13.2	84.68	434.1	-518.0	544.4	520.8	23.54	23.127	
6,300.0	6,288.4	6,265.1	6,248.6	12.8	13.4	85.56	441.6	-518.0	551.1	527.2	23.90	23.056	
6,400.0	6,388.2	6,364.5	6,347.7	13.0	13.6	86.42	449.1	-518.0	557.9	533.6	24.26	22.992	
6,500.0	6,488.0	6,463.9	6,446.9	13.2	13.8	87.26	456.6	-518.0	564.8	540.2	24.63	22.935	
6,600.0	6,587.9	6,563.3	6,546.0	13.4	14.0	88.08	464.1	-518.0	571.9	546.9	24.99	22.884	
6,700.0	6,687.7	6,662.7	6,645.1	13.6	14.3	88.88	471.6	-518.0	579.1	553.7	25.35	22.840	
6,800.0	6,787.5	6,762.1	6,744.3	13.8	14.5	89.66	479.1	-518.0	586.4	560.7	25.72	22.800	
6,900.0	6,887.3	6,861.6	6,843.4	14.0	14.7	90.42	486.6	-518.0	593.8	567.7	26.08	22.766	
7,000.0	6,987.1	6,961.0	6,942.5	14.2	14.9	91.17	494.1	-518.0	601.3	574.8	26.45	22.736	
7,100.0	7,086.9	7,060.4	7,041.7	14.4	15.1	91.89	501.6	-518.0	608.9	582.1	26.81	22.711	
7,173.7	7,160.4	8,119.4	7,740.0	14.6	14.3	19.02	-96.9	-518.1	588.8	561.7	27.06	21.761	
7,200.0	7,186.7	8,119.2	7,740.0	14.6	14.3	-42.81	-96.7	-518.1	562.7	535.8	26.85	20.958	
7,250.0	7,236.4	8,115.4	7,740.0	14.7	14.3	-104.62	-92.9	-518.1	513.2	485.9	27.36	18.759	
7,300.0	7,285.6	8,107.2	7,740.0	14.8	14.3	-127.64	-84.7	-518.1	464.4	436.7	27.67	16.785	
7,350.0	7,334.0	8,094.8	7,740.0	14.9	14.2	-138.38	-72.3	-518.1	416.5	388.9	27.63	15.074	
7,400.0	7,381.0	8,065.2	7,739.6	15.0	14.1	-141.77	-42.7	-518.1	369.9	342.6	27.34	13.534	
7,450.0	7,426.5	8,023.6	7,736.6	15.0	14.0	-140.95	-1.2	-518.1	323.9	297.0	26.93	12.030	
7,500.0	7,470.0	7,987.0	7,731.5	15.1	13.9	-139.43	35.0	-518.1	278.6	252.1	26.55	10.495	
7,550.0	7,511.2	7,953.4	7,724.7	15.2	13.9	-136.92	67.9	-518.1	234.3	208.0	26.23	8.932	
7,600.0	7,549.7	7,921.8	7,716.6	15.4	13.9	-133.02	98.5	-518.1	191.4	165.3	26.07	7.341	
7,650.0	7,585.4	7,891.5	7,707.3	15.5	13.9	-127.12	127.3	-518.1	150.7	124.5	26.19	5.755	
7,700.0	7,617.9	7,862.2	7,696.8	15.7	13.9	-118.36	154.7	-518.1	114.0	87.3	26.73	4.265	
7,750.0	7,647.0	7,833.6	7,685.3	15.9	13.9	-105.79	180.8	-518.1	85.1	57.5	27.60	3.082	
7,800.0	7,672.4	7,805.5	7,672.7	16.2	14.0	-89.26	205.9	-518.1	72.2	44.0	28.19	2.561	
7,803.4	7,674.0	7,803.6	7,671.8	16.2	14.0	-88.03	207.6	-518.1	72.1	43.9	28.20	2.559 CC, ES, SF	
7,850.0	7,694.0	7,777.8	7,659.1	16.5	14.0	-70.94	230.0	-518.1	81.7	54.2	27.54	2.967	
7,900.0	7,711.6	7,750.0	7,644.2	16.8	14.1	-54.32	253.6	-518.1	106.5	80.9	25.59	4.163	
7,950.0	7,725.0	7,723.4	7,629.0	17.2	14.2	-41.99	275.3	-518.1	137.6	114.2	23.42	5.874	
8,000.0	7,734.2	7,700.0	7,614.8	17.6	14.3	-33.65	294.0	-518.1	170.7	148.9	21.73	7.853	
8,050.0	7,739.1	7,669.9	7,595.4	18.1	14.4	-26.65	317.0	-518.1	203.9	183.6	20.32	10.035	
8,081.4	7,740.0	7,650.0	7,581.9	18.3	14.4	-23.29	331.6	-518.1	224.6	204.9	19.73	11.388	
8,100.0	7,740.0	7,650.0	7,581.9	18.5	14.4	-23.29	331.6	-518.1	237.0	217.2	19.81	11.963	
8,200.0	7,740.0	7,600.0	7,545.9	19.6	14.6	-19.32	366.3	-518.0	307.3	288.0	19.33	15.899	
8,300.0	7,740.0	7,550.0	7,507.0	20.7	14.8	-16.28	397.7	-518.0	383.5	364.5	19.03	20.152	
8,400.0	7,740.0	7,523.3	7,485.2	21.9	14.9	-14.95	413.0	-518.0	463.9	444.8	19.11	24.269	
8,500.0	7,740.0	7,500.0	7,465.5	23.2	14.9	-13.92	425.5	-518.0	547.7	528.5	19.25	28.452	
8,600.0	7,740.0	7,470.4	7,439.9	24.6	15.0	-12.77	440.3	-518.0	634.0	614.7	19.34	32.786	
8,700.0	7,740.0	7,450.0	7,421.8	25.9	15.1	-12.07	449.7	-518.0	722.4	702.8	19.52	37.003	
8,800.0	7,740.0	7,430.9	7,404.5	27.4	15.1	-11.47	457.9	-518.0	812.3	792.6	19.72	41.195	
8,900.0	7,740.0	7,400.0	7,376.1	28.8	15.2	-10.59	469.9	-518.0	904.0	884.1	19.83	45.594	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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		
9,000.0	7,740.0	7,400.0	7,376.1	30.3	15.2	-10.59	469.9	-518.0	996.0	975.9	20.17	49.372		
9,100.0	7,740.0	7,400.0	7,376.1	31.9	15.2	-10.59	469.9	-518.0	1,089.5	1,069.0	20.52	53.085		
9,200.0	7,740.0	7,376.7	7,354.2	33.4	15.3	-10.00	478.0	-518.0	1,183.3	1,162.7	20.68	57.222		
9,300.0	7,740.0	7,350.0	7,328.8	35.0	15.3	-9.40	486.1	-518.0	1,278.3	1,257.5	20.81	61.414		
9,400.0	7,740.0	7,350.0	7,328.8	36.6	15.3	-9.40	486.1	-518.0	1,373.3	1,352.1	21.15	64.937		
9,500.0	7,740.0	7,350.0	7,328.8	38.2	15.3	-9.40	486.1	-518.0	1,468.9	1,447.4	21.48	68.381		
9,600.0	7,740.0	7,350.0	7,328.8	39.8	15.3	-9.40	486.1	-518.0	1,565.0	1,543.2	21.81	71.742		
9,700.0	7,740.0	7,350.0	7,328.8	41.4	15.3	-9.40	486.1	-518.0	1,661.6	1,639.5	22.15	75.021		
9,800.0	7,740.0	7,328.4	7,308.0	43.0	15.3	-8.95	491.8	-518.0	1,758.0	1,735.7	22.30	78.850		
9,900.0	7,740.0	7,322.6	7,302.3	44.7	15.3	-8.84	493.2	-518.0	1,855.0	1,832.5	22.57	82.175		
10,000.0	7,740.0	7,300.0	7,280.2	46.3	15.4	-8.42	498.1	-518.0	1,952.6	1,929.9	22.71	85.966		
10,100.0	7,740.0	7,300.0	7,280.2	48.0	15.4	-8.42	498.1	-518.0	2,049.9	2,026.8	23.03	89.002		
10,200.0	7,740.0	7,300.0	7,280.2	49.7	15.4	-8.42	498.1	-518.0	2,147.4	2,124.0	23.35	91.966		
10,300.0	7,740.0	7,300.0	7,280.2	51.3	15.4	-8.42	498.1	-518.0	2,245.1	2,221.4	23.67	94.860		
10,400.0	7,740.0	7,300.0	7,280.2	53.0	15.4	-8.42	498.1	-518.0	2,343.0	2,319.0	23.99	97.684		
10,500.0	7,740.0	7,300.0	7,280.2	54.7	15.4	-8.42	498.1	-518.0	2,441.1	2,416.8	24.30	100.440		
10,600.0	7,740.0	7,300.0	7,280.2	56.4	15.4	-8.42	498.1	-518.0	2,539.4	2,514.7	24.62	103.131		
10,700.0	7,740.0	7,300.0	7,280.2	58.1	15.4	-8.42	498.1	-518.0	2,637.7	2,612.8	24.94	105.758		
10,800.0	7,740.0	7,300.0	7,280.2	59.8	15.4	-8.42	498.1	-518.0	2,736.2	2,711.0	25.26	108.322		
10,900.0	7,740.0	7,300.0	7,280.2	61.5	15.4	-8.42	498.1	-518.0	2,834.8	2,809.2	25.58	110.827		
11,000.0	7,740.0	7,300.0	7,280.2	63.2	15.4	-8.42	498.1	-518.0	2,933.5	2,907.6	25.90	113.273		
11,105.4	7,740.0	7,277.4	7,258.0	65.0	15.4	-8.04	502.2	-518.0	3,037.1	3,011.1	25.99	116.867		
11,191.0	7,740.0	7,275.3	7,255.9	66.4	15.4	-13.19	502.5	-518.0	3,121.6	3,091.7	29.94	104.270		
11,200.0	7,740.0	7,275.1	7,255.7	66.6	15.4	-13.19	502.5	-518.0	3,130.5	3,100.5	29.97	104.449		
11,300.0	7,740.0	7,272.7	7,253.4	68.3	15.4	-13.12	502.9	-518.0	3,229.3	3,198.9	30.35	106.414		
11,400.0	7,740.0	7,250.0	7,230.9	70.0	15.4	-12.56	505.9	-518.0	3,328.5	3,298.2	30.27	109.967		
11,500.0	7,740.0	7,250.0	7,230.9	71.7	15.4	-12.56	505.9	-518.0	3,427.3	3,396.6	30.68	111.706		
11,600.0	7,740.0	7,250.0	7,230.9	73.4	15.4	-12.56	505.9	-518.0	3,526.2	3,495.1	31.10	113.399		
11,700.0	7,740.0	7,250.0	7,230.9	75.1	15.4	-12.56	505.9	-518.0	3,625.1	3,593.6	31.51	115.048		
11,800.0	7,740.0	7,250.0	7,230.9	76.9	15.4	-12.56	505.9	-518.0	3,724.1	3,692.2	31.92	116.654		
11,900.0	7,740.0	7,250.0	7,230.9	78.6	15.4	-12.56	505.9	-518.0	3,823.1	3,790.8	32.34	118.220		
12,000.0	7,740.0	7,250.0	7,230.9	80.3	15.4	-12.56	505.9	-518.0	3,922.2	3,889.5	32.75	119.745		
12,100.0	7,740.0	7,250.0	7,230.9	82.0	15.4	-12.56	505.9	-518.0	4,021.4	3,988.2	33.17	121.233		
12,200.0	7,740.0	7,250.0	7,230.9	83.8	15.4	-12.56	505.9	-518.0	4,120.5	4,086.9	33.59	122.684		
12,300.0	7,740.0	7,250.0	7,230.9	85.5	15.4	-12.56	505.9	-518.0	4,219.7	4,185.7	34.00	124.099		
12,400.0	7,740.0	7,250.0	7,230.9	87.2	15.4	-12.56	505.9	-518.0	4,319.0	4,284.6	34.42	125.480		
12,500.0	7,740.0	7,250.0	7,230.9	88.9	15.4	-12.56	505.9	-518.0	4,418.3	4,383.4	34.84	126.827		
12,600.0	7,740.0	7,250.0	7,230.9	90.7	15.4	-12.56	505.9	-518.0	4,517.6	4,482.3	35.25	128.143		
12,700.0	7,740.0	7,250.0	7,230.9	92.4	15.4	-12.56	505.9	-518.0	4,616.9	4,581.3	35.67	129.428		
12,800.0	7,740.0	7,250.0	7,230.9	94.1	15.4	-12.56	505.9	-518.0	4,716.3	4,680.2	36.09	130.683		
12,900.0	7,740.0	7,250.0	7,230.9	95.9	15.4	-12.56	505.9	-518.0	4,815.7	4,779.2	36.51	131.909		
13,000.0	7,740.0	7,250.0	7,230.9	97.6	15.4	-12.56	505.9	-518.0	4,915.1	4,878.2	36.93	133.106		
13,100.0	7,740.0	7,250.0	7,230.9	99.3	15.4	-12.56	505.9	-518.0	5,014.6	4,977.2	37.34	134.277		
13,200.0	7,740.0	7,250.0	7,230.9	101.1	15.4	-12.56	505.9	-518.0	5,114.1	5,076.3	37.76	135.422		
13,300.0	7,740.0	7,250.0	7,230.9	102.8	15.4	-12.56	505.9	-518.0	5,213.5	5,175.4	38.18	136.542		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	-89.65	0.4	-59.9	59.9					
100.0	100.0	100.0	100.0	0.2	0.2	-89.65	0.4	-59.9	59.9	59.6	0.30	197.227		
200.0	200.0	200.0	200.0	0.3	0.3	-89.65	0.4	-59.9	59.9	59.2	0.65	91.758		
300.0	300.0	300.0	300.0	0.5	0.5	30.78	0.4	-59.9	59.1	58.1	1.00	59.027		
400.0	400.0	399.3	399.3	0.7	0.7	32.76	1.0	-60.4	57.5	56.1	1.35	42.541		
500.0	499.9	498.5	498.4	0.9	0.9	37.13	3.0	-62.1	55.8	54.0	1.71	32.680		
600.0	599.7	597.5	597.4	1.1	1.0	44.06	6.3	-64.9	54.5	52.4	2.07	26.297		
640.4	640.0	637.5	637.3	1.1	1.1	41.98	8.0	-66.3	54.3	52.1	2.22	24.465	CC, ES	
700.0	699.5	696.4	696.1	1.3	1.2	37.90	10.9	-68.7	54.6	52.2	2.44	22.405		
722.7	722.1	719.1	718.7	1.3	1.3	36.04	12.1	-69.7	54.9	52.4	2.52	21.764		
800.0	799.3	796.2	795.6	1.5	1.4	41.39	16.2	-73.2	56.1	53.3	2.81	19.960		
900.0	899.1	895.9	895.1	1.7	1.6	47.92	21.5	-77.7	58.3	55.1	3.18	18.309		
1,000.0	998.9	995.7	994.6	1.9	1.8	53.91	26.9	-82.1	61.2	57.6	3.56	17.186		
1,100.0	1,098.7	1,095.5	1,094.2	2.1	2.0	59.31	32.2	-86.6	64.7	60.7	3.94	16.419		
1,200.0	1,198.5	1,195.2	1,193.7	2.3	2.3	64.11	37.5	-91.1	68.7	64.4	4.32	15.893		
1,300.0	1,298.3	1,294.8	1,293.0	2.5	2.5	68.96	43.4	-95.0	73.3	68.6	4.71	15.562		
1,400.0	1,398.1	1,394.1	1,392.0	2.7	2.7	74.41	50.4	-97.6	78.7	73.7	5.10	15.451		
1,500.0	1,497.9	1,493.3	1,490.9	2.9	2.9	80.10	58.5	-99.1	85.4	79.9	5.49	15.568		
1,600.0	1,597.7	1,592.7	1,589.9	3.1	3.1	85.11	66.8	-100.4	92.9	87.0	5.87	15.816		
1,700.0	1,697.5	1,692.1	1,689.0	3.3	3.3	89.34	75.0	-101.6	101.0	94.8	6.26	16.132		
1,800.0	1,797.3	1,791.5	1,788.0	3.5	3.5	92.93	83.3	-102.9	109.6	102.9	6.65	16.485		
1,900.0	1,897.1	1,890.9	1,887.1	3.7	3.8	95.99	91.6	-104.2	118.5	111.5	7.03	16.852		
2,000.0	1,996.9	1,990.3	1,986.2	3.9	4.0	98.61	99.9	-105.5	127.8	120.3	7.42	17.221		
2,100.0	2,096.7	2,089.8	2,085.2	4.1	4.2	100.88	108.2	-106.8	137.2	129.4	7.80	17.584		
2,200.0	2,196.5	2,189.2	2,184.3	4.3	4.4	102.86	116.5	-108.1	146.9	138.7	8.19	17.935		
2,300.0	2,296.3	2,288.6	2,283.3	4.5	4.6	104.59	124.8	-109.3	156.7	148.1	8.57	18.273		
2,400.0	2,396.1	2,388.0	2,382.4	4.7	4.9	106.11	133.1	-110.6	166.6	157.6	8.96	18.596		
2,500.0	2,495.9	2,487.4	2,481.5	4.9	5.1	107.46	141.4	-111.9	176.6	167.3	9.34	18.904		
2,600.0	2,595.7	2,586.8	2,580.5	5.2	5.3	108.67	149.6	-113.2	186.7	177.0	9.73	19.196		
2,700.0	2,695.5	2,686.2	2,679.6	5.4	5.5	109.76	157.9	-114.5	196.9	186.8	10.11	19.473		
2,800.0	2,795.3	2,785.7	2,778.6	5.6	5.8	110.73	166.2	-115.8	207.2	196.7	10.50	19.735		
2,900.0	2,895.1	2,885.1	2,877.7	5.8	6.0	111.62	174.5	-117.0	217.5	206.6	10.88	19.984		
3,000.0	2,994.9	2,984.5	2,976.8	6.0	6.2	112.42	182.8	-118.3	227.8	216.6	11.27	20.220		
3,100.0	3,094.7	3,083.9	3,075.8	6.2	6.4	113.15	191.1	-119.6	238.2	226.6	11.65	20.443		
3,200.0	3,194.5	3,183.3	3,174.9	6.4	6.7	113.83	199.4	-120.9	248.7	236.6	12.04	20.655		
3,300.0	3,294.3	3,282.7	3,273.9	6.6	6.9	114.45	207.7	-122.2	259.1	246.7	12.42	20.856		
3,400.0	3,394.1	3,382.1	3,373.0	6.8	7.1	115.02	216.0	-123.4	269.6	256.8	12.81	21.048		
3,500.0	3,493.9	3,481.6	3,472.1	7.0	7.3	115.54	224.2	-124.7	280.1	266.9	13.19	21.229		
3,600.0	3,593.8	3,581.0	3,571.1	7.2	7.6	116.03	232.5	-126.0	290.6	277.1	13.58	21.402		
3,700.0	3,693.6	3,680.4	3,670.2	7.4	7.8	116.49	240.8	-127.3	301.2	287.2	13.97	21.567		
3,800.0	3,793.4	3,779.8	3,769.2	7.6	8.0	116.91	249.1	-128.6	311.8	297.4	14.35	21.724		
3,900.0	3,893.2	3,879.2	3,868.3	7.8	8.2	117.31	257.4	-129.9	322.4	307.6	14.74	21.874		
4,000.0	3,993.0	3,978.6	3,967.4	8.0	8.5	117.68	265.7	-131.1	333.0	317.8	15.12	22.017		
4,100.0	4,092.8	4,078.0	4,066.4	8.2	8.7	118.03	274.0	-132.4	343.6	328.1	15.51	22.154		
4,200.0	4,192.6	4,177.5	4,165.5	8.4	8.9	118.36	282.3	-133.7	354.2	338.3	15.89	22.284		
4,300.0	4,292.4	4,276.9	4,264.5	8.7	9.1	118.67	290.5	-135.0	364.8	348.5	16.28	22.410		
4,400.0	4,392.2	4,376.3	4,363.6	8.9	9.4	118.96	298.8	-136.3	375.5	358.8	16.67	22.530		
4,500.0	4,492.0	4,475.7	4,462.7	9.1	9.6	119.23	307.1	-137.6	386.1	369.1	17.05	22.645		
4,600.0	4,591.8	4,575.1	4,561.7	9.3	9.8	119.49	315.4	-138.8	396.8	379.4	17.44	22.755		
4,700.0	4,691.6	4,674.5	4,660.8	9.5	10.0	119.74	323.7	-140.1	407.5	389.6	17.82	22.861		
4,800.0	4,791.4	4,773.9	4,759.8	9.7	10.3	119.97	332.0	-141.4	418.1	399.9	18.21	22.963		
4,900.0	4,891.2	4,873.4	4,858.9	9.9	10.5	120.20	340.3	-142.7	428.8	410.2	18.60	23.061		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	4,991.0	4,972.8	4,958.0	10.1	10.7	120.41	348.6	-144.0	439.5	420.5	18.98	23.155	
5,100.0	5,090.8	5,072.2	5,057.0	10.3	10.9	120.61	356.9	-145.3	450.2	430.8	19.37	23.245	
5,200.0	5,190.6	5,171.6	5,156.1	10.5	11.2	120.80	365.1	-146.5	460.9	441.2	19.75	23.333	
5,300.0	5,290.4	5,271.0	5,255.1	10.7	11.4	120.99	373.4	-147.8	471.6	451.5	20.14	23.417	
5,400.0	5,390.2	5,370.4	5,354.2	10.9	11.6	121.16	381.7	-149.1	482.3	461.8	20.53	23.498	
5,500.0	5,490.0	5,469.8	5,453.3	11.1	11.9	121.33	390.0	-150.4	493.0	472.1	20.91	23.577	
5,600.0	5,589.8	5,569.3	5,552.3	11.3	12.1	121.49	398.3	-151.7	503.8	482.5	21.30	23.653	
5,700.0	5,689.6	5,668.7	5,651.4	11.5	12.3	121.64	406.6	-153.0	514.5	492.8	21.68	23.726	
5,800.0	5,789.4	5,768.1	5,750.4	11.7	12.5	121.79	414.9	-154.2	525.2	503.1	22.07	23.797	
5,900.0	5,889.2	5,867.5	5,849.5	11.9	12.8	121.93	423.2	-155.5	535.9	513.5	22.46	23.865	
6,000.0	5,989.0	5,966.9	5,948.6	12.2	13.0	122.07	431.4	-156.8	546.7	523.8	22.84	23.932	
6,100.0	6,088.8	6,066.3	6,047.6	12.4	13.2	122.20	439.7	-158.1	557.4	534.2	23.23	23.996	
6,200.0	6,188.6	6,165.7	6,146.7	12.6	13.4	122.32	448.0	-159.4	568.1	544.5	23.62	24.058	
6,300.0	6,288.4	6,265.2	6,245.7	12.8	13.7	122.45	456.3	-160.7	578.9	554.9	24.00	24.118	
6,400.0	6,388.2	6,364.6	6,344.8	13.0	13.9	122.56	464.6	-161.9	589.6	565.2	24.39	24.177	
6,500.0	6,488.0	6,464.0	6,443.9	13.2	14.1	122.68	472.9	-163.2	600.4	575.6	24.77	24.234	
6,600.0	6,587.9	6,563.4	6,542.9	13.4	14.3	122.78	481.2	-164.5	611.1	586.0	25.16	24.289	
6,700.0	6,687.7	6,662.8	6,642.0	13.6	14.6	122.89	489.5	-165.8	621.9	596.3	25.55	24.342	
6,800.0	6,787.5	6,762.2	6,741.0	13.8	14.8	122.99	497.8	-167.1	632.6	606.7	25.93	24.394	
6,900.0	6,887.3	6,861.6	6,840.1	14.0	15.0	123.09	506.0	-168.3	643.4	617.1	26.32	24.445	
7,000.0	6,987.1	7,881.8	7,500.0	14.2	14.0	-169.10	-94.6	-176.9	560.9	534.7	26.17	21.436	
7,100.0	7,086.9	7,883.1	7,500.0	14.4	14.0	-168.80	-95.9	-176.9	474.3	448.0	26.35	17.999	
7,173.7	7,160.4	7,884.1	7,500.0	14.6	14.0	-168.58	-96.9	-176.9	414.4	387.9	26.49	15.644	
7,200.0	7,186.7	7,883.9	7,500.0	14.6	14.0	154.27	-96.7	-176.9	394.2	367.6	26.60	14.816	
7,250.0	7,236.4	7,880.1	7,500.0	14.7	14.0	123.74	-92.9	-176.9	358.0	331.2	26.77	13.374	
7,300.0	7,285.6	7,871.9	7,500.0	14.8	14.0	115.63	-84.7	-176.9	325.7	298.9	26.83	12.138	
7,350.0	7,334.0	7,859.5	7,500.0	14.9	13.9	111.55	-72.3	-176.9	298.6	271.8	26.81	11.138	
7,400.0	7,381.0	7,841.5	7,500.0	15.0	13.9	107.54	-54.3	-176.9	277.8	251.1	26.73	10.394	
7,450.0	7,426.5	7,818.7	7,499.2	15.0	13.8	102.72	-31.5	-176.9	264.1	237.5	26.66	9.906	
7,500.0	7,470.0	7,795.5	7,497.5	15.1	13.7	97.58	-8.4	-176.9	258.1	231.4	26.66	9.680	
7,514.2	7,481.9	7,788.9	7,496.9	15.2	13.7	96.05	-1.8	-176.9	257.8	231.1	26.68	9.662 SF	
7,550.0	7,511.2	7,772.1	7,494.9	15.2	13.7	92.03	14.9	-176.8	259.7	232.9	26.74	9.711	
7,600.0	7,549.7	7,750.0	7,491.5	15.4	13.7	86.40	36.7	-176.8	268.2	241.4	26.85	9.989	
7,650.0	7,585.4	7,724.5	7,486.6	15.5	13.6	79.92	61.7	-176.7	282.6	255.6	26.96	10.482	
7,700.0	7,617.9	7,700.0	7,480.8	15.7	13.6	73.62	85.5	-176.6	301.4	274.4	26.96	11.178	
7,750.0	7,647.0	7,676.5	7,474.3	15.9	13.6	67.65	108.1	-176.6	323.3	296.4	26.82	12.054	
7,800.0	7,672.4	7,650.0	7,465.8	16.2	13.6	61.66	133.2	-176.5	347.1	320.7	26.45	13.126	
7,850.0	7,694.0	7,628.1	7,458.0	16.5	13.6	56.69	153.7	-176.3	372.1	346.2	25.95	14.339	
7,900.0	7,711.6	7,600.0	7,446.8	16.8	13.7	51.66	179.5	-176.2	397.6	372.3	25.24	15.754	
7,950.0	7,725.0	7,579.4	7,437.8	17.2	13.7	47.83	198.0	-176.1	422.9	398.4	24.54	17.231	
8,000.0	7,734.2	7,550.0	7,423.8	17.6	13.8	43.91	223.8	-175.9	447.8	424.1	23.72	18.881	
8,050.0	7,739.1	7,530.6	7,413.9	18.1	13.8	41.09	240.5	-175.8	471.8	448.8	23.06	20.461	
8,081.4	7,740.0	7,515.2	7,405.6	18.3	13.9	39.36	253.5	-175.7	486.4	463.8	22.65	21.473	
8,100.0	7,740.0	7,500.0	7,397.1	18.5	13.9	38.67	266.0	-175.6	495.1	472.5	22.62	21.885	
8,200.0	7,740.0	7,450.0	7,366.7	19.6	14.1	36.36	305.8	-175.2	546.2	523.4	22.79	23.964	
8,300.0	7,740.0	7,420.8	7,347.4	20.7	14.2	35.02	327.7	-174.9	603.7	580.5	23.18	26.039	
8,400.0	7,740.0	7,385.2	7,322.5	21.9	14.3	33.41	353.0	-174.6	667.2	643.7	23.48	28.411	
8,500.0	7,740.0	7,350.0	7,296.2	23.2	14.4	31.86	376.5	-174.3	735.8	712.0	23.77	30.957	
8,600.0	7,740.0	7,325.9	7,277.5	24.6	14.5	30.82	391.7	-174.0	808.5	784.3	24.18	33.433	
8,700.0	7,740.0	7,300.0	7,256.7	25.9	14.6	29.75	407.0	-173.7	884.7	860.1	24.56	36.029	
8,800.0	7,740.0	7,279.1	7,239.3	27.4	14.7	28.91	418.8	-173.5	963.9	938.9	24.98	38.581	
8,900.0	7,740.0	7,250.0	7,214.6	28.8	14.8	27.78	434.0	-173.2	1,045.6	1,020.4	25.27	41.376	

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Well Error:	0.0ft	Output errors are at	2.00 sigma
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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 #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,740.0	7,250.0	7,214.6	30.3	14.8	27.78	434.0	-173.2	1,129.4	1,103.4	26.00	43.441		
9,100.0	7,740.0	7,225.7	7,193.3	31.9	14.8	26.88	445.7	-172.9	1,214.8	1,188.5	26.33	46.144		
9,200.0	7,740.0	7,200.0	7,170.3	33.4	14.9	25.96	457.1	-172.6	1,302.0	1,275.4	26.62	48.921		
9,300.0	7,740.0	7,200.0	7,170.3	35.0	14.9	25.96	457.1	-172.6	1,390.3	1,362.9	27.32	50.882		
9,400.0	7,740.0	7,200.0	7,170.3	36.6	14.9	25.96	457.1	-172.6	1,480.0	1,451.9	28.04	52.785		
9,500.0	7,740.0	7,175.4	7,147.8	38.2	15.0	25.12	467.1	-172.3	1,570.2	1,541.9	28.29	55.494		
9,600.0	7,740.0	7,150.0	7,124.1	39.8	15.0	24.29	476.4	-172.0	1,661.8	1,633.3	28.52	58.260		
9,700.0	7,740.0	7,150.0	7,124.1	41.4	15.0	24.29	476.4	-172.0	1,753.6	1,724.4	29.21	60.033		
9,800.0	7,740.0	7,150.0	7,124.1	43.0	15.0	24.29	476.4	-172.0	1,846.3	1,816.4	29.90	61.746		
9,900.0	7,740.0	7,150.0	7,124.1	44.7	15.0	24.29	476.4	-172.0	1,939.7	1,909.1	30.60	63.397		
10,000.0	7,740.0	7,150.0	7,124.1	46.3	15.0	24.29	476.4	-172.0	2,033.8	2,002.5	31.29	64.989		
10,100.0	7,740.0	7,126.0	7,101.4	48.0	15.1	23.55	484.2	-171.7	2,127.7	2,096.2	31.47	67.615		
10,200.0	7,740.0	7,100.0	7,076.5	49.7	15.1	22.78	491.5	-171.4	2,222.8	2,191.2	31.59	70.360		
10,300.0	7,740.0	7,100.0	7,076.5	51.3	15.1	22.78	491.5	-171.4	2,317.6	2,285.4	32.26	71.848		
10,400.0	7,740.0	7,100.0	7,076.5	53.0	15.1	22.78	491.5	-171.4	2,412.9	2,380.0	32.93	73.283		
10,500.0	7,740.0	7,100.0	7,076.5	54.7	15.1	22.78	491.5	-171.4	2,508.5	2,474.9	33.60	74.668		
10,600.0	7,740.0	7,100.0	7,076.5	56.4	15.1	22.78	491.5	-171.4	2,604.5	2,570.2	34.27	76.005		
10,700.0	7,740.0	7,100.0	7,076.5	58.1	15.1	22.78	491.5	-171.4	2,700.7	2,665.8	34.94	77.295		
10,800.0	7,740.0	7,100.0	7,076.5	59.8	15.1	22.78	491.5	-171.4	2,797.2	2,761.6	35.62	78.540		
10,900.0	7,740.0	7,100.0	7,076.5	61.5	15.1	22.78	491.5	-171.4	2,894.0	2,857.7	36.29	79.743		
11,000.0	7,740.0	7,100.0	7,076.5	63.2	15.1	22.78	491.5	-171.4	2,991.0	2,954.0	36.97	80.904		
11,105.4	7,740.0	7,078.0	7,055.1	65.0	15.2	22.15	496.8	-171.1	3,092.9	3,055.8	37.08	83.406		
11,191.0	7,740.0	7,075.0	7,052.2	66.4	15.2	18.74	497.5	-171.1	3,176.1	3,141.7	34.43	92.250		
11,200.0	7,740.0	7,074.7	7,052.0	66.6	15.2	18.74	497.5	-171.1	3,184.9	3,150.4	34.47	92.385		
11,300.0	7,740.0	7,071.5	7,048.8	68.3	15.2	18.66	498.2	-171.0	3,282.3	3,247.3	34.97	93.855		
11,400.0	7,740.0	7,050.0	7,027.7	70.0	15.2	18.17	502.4	-170.8	3,380.2	3,345.1	35.05	96.447		
11,500.0	7,740.0	7,050.0	7,027.7	71.7	15.2	18.17	502.4	-170.8	3,477.8	3,442.2	35.61	97.671		
11,600.0	7,740.0	7,050.0	7,027.7	73.4	15.2	18.17	502.4	-170.8	3,575.5	3,539.3	36.17	98.858		
11,700.0	7,740.0	7,050.0	7,027.7	75.1	15.2	18.17	502.4	-170.8	3,673.3	3,636.6	36.73	100.011		
11,800.0	7,740.0	7,050.0	7,027.7	76.9	15.2	18.17	502.4	-170.8	3,771.3	3,734.0	37.29	101.130		
11,900.0	7,740.0	7,050.0	7,027.7	78.6	15.2	18.17	502.4	-170.8	3,869.3	3,831.5	37.85	102.217		
12,000.0	7,740.0	7,050.0	7,027.7	80.3	15.2	18.17	502.4	-170.8	3,967.5	3,929.1	38.42	103.273		
12,100.0	7,740.0	7,050.0	7,027.7	82.0	15.2	18.17	502.4	-170.8	4,065.7	4,026.7	38.98	104.300		
12,200.0	7,740.0	7,050.0	7,027.7	83.8	15.2	18.17	502.4	-170.8	4,164.0	4,124.5	39.55	105.298		
12,300.0	7,740.0	7,050.0	7,027.7	85.5	15.2	18.17	502.4	-170.8	4,262.5	4,222.3	40.11	106.269		
12,400.0	7,740.0	7,050.0	7,027.7	87.2	15.2	18.17	502.4	-170.8	4,360.9	4,320.3	40.68	107.213		
12,500.0	7,740.0	7,050.0	7,027.7	88.9	15.2	18.17	502.4	-170.8	4,459.5	4,418.2	41.24	108.133		
12,600.0	7,740.0	7,050.0	7,027.7	90.7	15.2	18.17	502.4	-170.8	4,558.1	4,516.3	41.81	109.027		
12,700.0	7,740.0	7,050.0	7,027.7	92.4	15.2	18.17	502.4	-170.8	4,656.7	4,614.4	42.37	109.898		
12,800.0	7,740.0	7,050.0	7,027.7	94.1	15.2	18.17	502.4	-170.8	4,755.5	4,712.5	42.94	110.747		
12,900.0	7,740.0	7,050.0	7,027.7	95.9	15.2	18.17	502.4	-170.8	4,854.2	4,810.7	43.51	111.574		
13,000.0	7,740.0	7,050.0	7,027.7	97.6	15.2	18.17	502.4	-170.8	4,953.1	4,909.0	44.07	112.379		
13,100.0	7,740.0	7,050.0	7,027.7	99.3	15.2	18.17	502.4	-170.8	5,051.9	5,007.3	44.64	113.165		
13,200.0	7,740.0	7,050.0	7,027.7	101.1	15.2	18.17	502.4	-170.8	5,150.9	5,105.6	45.21	113.931		
13,300.0	7,740.0	7,050.0	7,027.7	102.8	15.2	18.17	502.4	-170.8	5,249.8	5,204.0	45.78	114.678		

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Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
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Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

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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	-89.58	0.4	-50.1	50.1					
100.0	100.0	100.0	100.0	0.2	0.2	-89.58	0.4	-50.1	50.1	49.8	0.30	164.971		
200.0	200.0	200.0	200.0	0.3	0.3	-89.58	0.4	-50.1	50.1	49.4	0.65	76.751		
300.0	300.0	300.0	300.0	0.5	0.5	30.93	0.4	-50.1	49.3	48.3	1.00	49.251		
400.0	400.0	400.0	400.0	0.7	0.7	32.58	0.4	-50.1	47.1	45.8	1.35	34.847		
500.0	499.9	500.1	500.1	0.9	0.9	36.79	1.2	-49.7	43.2	41.5	1.71	25.318		
600.0	599.7	599.9	599.9	1.1	1.0	46.11	3.5	-48.6	38.0	35.9	2.07	18.294		
700.0	699.5	699.4	699.3	1.3	1.2	46.78	7.4	-46.7	33.2	30.7	2.46	13.499		
722.7	722.1	722.0	721.9	1.3	1.3	47.20	8.5	-46.1	32.4	29.8	2.55	12.693		
800.0	799.2	798.6	798.3	1.5	1.4	62.70	12.8	-44.0	31.0	28.1	2.86	10.825 CC		
800.0	799.3	798.7	798.4	1.5	1.4	62.71	12.8	-44.0	31.0	28.1	2.86	10.824 ES		
900.0	899.1	897.6	896.9	1.7	1.6	84.51	19.8	-40.7	33.8	30.5	3.25	10.407 SF		
1,000.0	998.9	996.6	995.6	1.9	1.8	101.62	27.5	-36.9	41.3	37.7	3.60	11.495		
1,100.0	1,098.7	1,095.7	1,094.4	2.1	2.0	112.83	35.3	-33.1	51.4	47.4	3.93	13.056		
1,200.0	1,198.5	1,194.8	1,193.1	2.3	2.3	120.21	43.0	-29.4	62.7	58.4	4.27	14.667		
1,300.0	1,298.3	1,293.9	1,291.8	2.5	2.5	125.28	50.7	-25.6	74.7	70.1	4.62	16.179		
1,400.0	1,398.1	1,393.0	1,390.5	2.7	2.7	128.93	58.5	-21.8	87.2	82.2	4.97	17.552		
1,500.0	1,497.9	1,492.1	1,489.2	2.9	2.9	131.66	66.2	-18.1	99.9	94.6	5.32	18.783		
1,600.0	1,597.7	1,591.2	1,587.9	3.1	3.1	133.77	73.9	-14.3	112.8	107.2	5.67	19.885		
1,700.0	1,697.5	1,690.3	1,686.6	3.3	3.4	135.45	81.7	-10.5	125.9	119.8	6.03	20.871		
1,800.0	1,797.3	1,789.4	1,785.4	3.5	3.6	136.81	89.4	-6.8	139.0	132.6	6.39	21.757		
1,900.0	1,897.1	1,888.4	1,884.1	3.7	3.8	137.94	97.1	-3.0	152.1	145.4	6.74	22.555		
2,000.0	1,996.9	1,987.5	1,982.8	3.9	4.0	138.88	104.9	0.8	165.3	158.2	7.10	23.277		
2,100.0	2,096.7	2,086.6	2,081.5	4.1	4.3	139.69	112.6	4.5	178.6	171.1	7.46	23.933		
2,200.0	2,196.5	2,185.7	2,180.2	4.3	4.5	140.38	120.4	8.3	191.9	184.1	7.82	24.530		
2,300.0	2,296.3	2,284.8	2,278.9	4.5	4.7	140.99	128.1	12.1	205.2	197.0	8.18	25.077		
2,400.0	2,396.1	2,383.9	2,377.6	4.7	4.9	141.52	135.8	15.8	218.5	210.0	8.54	25.579		
2,500.0	2,495.9	2,483.0	2,476.4	4.9	5.2	141.99	143.6	19.6	231.9	223.0	8.90	26.041		
2,600.0	2,595.7	2,582.1	2,575.1	5.2	5.4	142.41	151.3	23.4	245.2	236.0	9.27	26.468		
2,700.0	2,695.5	2,681.2	2,673.8	5.4	5.6	142.79	159.0	27.1	258.6	249.0	9.63	26.864		
2,800.0	2,795.3	2,780.2	2,772.5	5.6	5.9	143.12	166.8	30.9	272.0	262.0	9.99	27.231		
2,900.0	2,895.1	2,879.3	2,871.2	5.8	6.1	143.43	174.5	34.7	285.4	275.0	10.35	27.573		
3,000.0	2,994.9	2,978.4	2,969.9	6.0	6.3	143.71	182.3	38.4	298.8	288.1	10.71	27.892		
3,100.0	3,094.7	3,077.5	3,068.6	6.2	6.5	143.97	190.0	42.2	312.2	301.1	11.07	28.191		
3,200.0	3,194.5	3,176.6	3,167.4	6.4	6.8	144.20	197.7	45.9	325.6	314.1	11.44	28.471		
3,300.0	3,294.3	3,275.7	3,266.1	6.6	7.0	144.42	205.5	49.7	339.0	327.2	11.80	28.734		
3,400.0	3,394.1	3,374.8	3,364.8	6.8	7.2	144.62	213.2	53.5	352.4	340.3	12.16	28.981		
3,500.0	3,493.9	3,473.9	3,463.5	7.0	7.4	144.80	220.9	57.2	365.8	353.3	12.52	29.214		
3,600.0	3,593.8	3,572.9	3,562.2	7.2	7.7	144.97	228.7	61.0	379.3	366.4	12.89	29.434		
3,700.0	3,693.6	3,672.0	3,660.9	7.4	7.9	145.13	236.4	64.8	392.7	379.4	13.25	29.642		
3,800.0	3,793.4	3,771.1	3,759.6	7.6	8.1	145.28	244.1	68.5	406.1	392.5	13.61	29.840		
3,900.0	3,893.2	3,870.2	3,858.4	7.8	8.4	145.42	251.9	72.3	419.6	405.6	13.97	30.027		
4,000.0	3,993.0	3,969.3	3,957.1	8.0	8.6	145.55	259.6	76.1	433.0	418.7	14.34	30.204		
4,100.0	4,092.8	4,068.4	4,055.8	8.2	8.8	145.68	267.4	79.8	446.4	431.7	14.70	30.373		
4,200.0	4,192.6	4,167.5	4,154.5	8.4	9.0	145.79	275.1	83.6	459.9	444.8	15.06	30.534		
4,300.0	4,292.4	4,266.6	4,253.2	8.7	9.3	145.90	282.8	87.4	473.3	457.9	15.42	30.687		
4,400.0	4,392.2	4,365.7	4,351.9	8.9	9.5	146.01	290.6	91.1	486.8	471.0	15.79	30.833		
4,500.0	4,492.0	4,464.7	4,450.6	9.1	9.7	146.10	298.3	94.9	500.2	484.1	16.15	30.973		
4,600.0	4,591.8	4,563.8	4,549.4	9.3	10.0	146.20	306.0	98.7	513.6	497.1	16.51	31.107		
4,700.0	4,691.6	4,662.9	4,648.1	9.5	10.2	146.28	313.8	102.4	527.1	510.2	16.88	31.234		
4,800.0	4,791.4	4,762.0	4,746.8	9.7	10.4	146.37	321.5	106.2	540.5	523.3	17.24	31.357		
4,900.0	4,891.2	4,861.1	4,845.5	9.9	10.6	146.45	329.3	110.0	554.0	536.4	17.60	31.474		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	4,991.0	4,960.2	4,944.2	10.1	10.9	146.52	337.0	113.7	567.4	549.5	17.96	31.587	
5,100.0	5,090.8	5,059.3	5,042.9	10.3	11.1	146.60	344.7	117.5	580.9	562.6	18.33	31.695	
5,200.0	5,190.6	5,158.4	5,141.6	10.5	11.3	146.66	352.5	121.2	594.4	575.7	18.69	31.799	
5,300.0	5,290.4	5,257.5	5,240.4	10.7	11.6	146.73	360.2	125.0	607.8	588.8	19.05	31.899	
5,400.0	5,390.2	5,356.5	5,339.1	10.9	11.8	146.79	367.9	128.8	621.3	601.8	19.42	31.996	
5,500.0	5,490.0	5,455.6	5,437.8	11.1	12.0	146.85	375.7	132.5	634.7	614.9	19.78	32.089	
5,600.0	5,589.8	5,554.7	5,536.5	11.3	12.2	146.91	383.4	136.3	648.2	628.0	20.14	32.178	
5,700.0	5,689.6	5,653.8	5,635.2	11.5	12.5	146.97	391.2	140.1	661.6	641.1	20.51	32.264	
5,800.0	5,789.4	5,752.9	5,733.9	11.7	12.7	147.02	398.9	143.8	675.1	654.2	20.87	32.348	
5,900.0	5,889.2	5,852.0	5,832.6	11.9	12.9	147.07	406.6	147.6	688.5	667.3	21.23	32.428	
6,000.0	5,989.0	5,951.1	5,931.4	12.2	13.2	147.12	414.4	151.4	702.0	680.4	21.60	32.506	
6,100.0	6,088.8	6,050.2	6,030.1	12.4	13.4	147.17	422.1	155.1	715.5	693.5	21.96	32.581	
6,200.0	6,188.6	6,149.3	6,128.8	12.6	13.6	147.21	429.8	158.9	728.9	706.6	22.32	32.654	
6,300.0	6,288.4	6,248.3	6,227.5	12.8	13.9	147.26	437.6	162.7	742.4	719.7	22.69	32.724	
6,400.0	6,388.2	6,347.4	6,326.2	13.0	14.1	147.30	445.3	166.4	755.8	732.8	23.05	32.793	
6,500.0	6,488.0	6,446.5	6,424.9	13.2	14.3	147.34	453.0	170.2	769.3	745.9	23.41	32.859	
6,600.0	6,587.9	6,545.6	6,523.6	13.4	14.5	147.38	460.8	174.0	782.8	759.0	23.78	32.923	
6,700.0	6,687.7	6,644.7	6,622.4	13.6	14.8	147.42	468.5	177.7	796.2	772.1	24.14	32.985	
6,800.0	6,787.5	6,743.8	6,721.1	13.8	15.0	147.46	476.3	181.5	809.7	785.2	24.50	33.045	
6,900.0	6,887.3	6,842.9	6,819.8	14.0	15.2	147.49	484.0	185.3	823.1	798.3	24.87	33.104	
7,000.0	6,987.1	6,942.0	6,918.5	14.2	15.5	147.53	491.7	189.0	836.6	811.4	25.23	33.161	
7,100.0	7,086.9	7,041.0	7,017.2	14.4	15.7	147.56	499.5	192.8	850.1	824.5	25.59	33.216	
7,173.7	7,160.4	8,125.2	7,740.0	14.6	15.1	-168.23	-96.9	220.4	859.6	832.7	26.91	31.945	
7,200.0	7,186.7	8,125.0	7,740.0	14.6	15.1	153.55	-96.7	220.4	843.3	816.4	26.96	31.278	
7,250.0	7,236.4	8,121.2	7,740.0	14.7	15.1	121.91	-92.9	220.4	813.9	786.9	27.04	30.104	
7,300.0	7,285.6	8,113.0	7,740.0	14.8	15.0	113.87	-84.7	220.4	786.9	759.8	27.07	29.067	
7,350.0	7,334.0	8,100.6	7,740.0	14.9	15.0	110.95	-72.3	220.4	762.5	735.5	27.06	28.180	
7,400.0	7,381.0	8,068.5	7,739.5	15.0	14.9	108.19	-40.2	220.3	741.0	714.0	26.99	27.453	
7,450.0	7,426.5	8,023.0	7,735.9	15.0	14.8	105.03	5.1	220.2	721.9	694.9	26.93	26.804	
7,500.0	7,470.0	7,984.3	7,730.0	15.1	14.7	102.60	43.4	220.0	705.3	678.4	26.91	26.205	
7,550.0	7,511.2	7,949.4	7,722.4	15.2	14.7	100.50	77.5	219.7	691.4	664.5	26.97	25.638	
7,600.0	7,549.7	7,916.9	7,713.5	15.4	14.7	98.51	108.7	219.3	680.4	653.3	27.09	25.111	
7,650.0	7,585.4	7,886.0	7,703.5	15.5	14.7	96.51	137.9	219.0	672.1	644.8	27.28	24.638	
7,700.0	7,617.9	7,856.2	7,692.3	15.7	14.7	94.44	165.5	218.5	666.6	639.1	27.53	24.216	
7,750.0	7,647.0	7,827.2	7,680.1	15.9	14.7	92.28	191.8	218.1	663.8	636.0	27.84	23.843	
7,780.8	7,663.1	7,809.7	7,672.0	16.1	14.8	90.89	207.3	217.8	663.4	635.3	28.06	23.639	
7,800.0	7,672.4	7,798.9	7,666.8	16.2	14.8	90.01	216.8	217.6	663.5	635.3	28.20	23.532	
7,850.0	7,694.0	7,771.0	7,652.6	16.5	14.8	87.64	240.8	217.0	665.6	637.0	28.59	23.276	
7,900.0	7,711.6	7,743.5	7,637.5	16.8	14.9	85.20	263.7	216.4	669.7	640.7	29.00	23.093	
7,950.0	7,725.0	7,716.3	7,621.4	17.2	15.0	82.70	285.7	215.8	675.6	646.2	29.40	22.977	
8,000.0	7,734.2	7,689.4	7,604.5	17.6	15.1	80.17	306.6	215.2	683.1	653.3	29.78	22.935	
8,050.0	7,739.1	7,662.7	7,586.8	18.1	15.1	77.64	326.6	214.5	691.8	661.7	30.13	22.960	
8,081.4	7,740.0	7,650.0	7,578.1	18.3	15.2	76.30	335.8	214.2	697.9	667.5	30.34	23.003	
8,100.0	7,740.0	7,636.2	7,568.4	18.5	15.2	75.50	345.6	213.8	701.6	671.1	30.50	23.004	
8,200.0	7,740.0	7,589.3	7,533.6	19.6	15.4	72.70	377.0	212.5	727.2	695.8	31.44	23.129	
8,300.0	7,740.0	7,550.0	7,502.6	20.7	15.5	70.25	401.1	211.3	761.5	729.1	32.41	23.498	
8,400.0	7,740.0	7,517.1	7,475.4	21.9	15.6	68.16	419.6	210.3	804.1	770.7	33.39	24.079	
8,500.0	7,740.0	7,500.0	7,460.8	23.2	15.6	67.06	428.6	209.7	854.6	820.1	34.52	24.758	
8,600.0	7,740.0	7,465.3	7,430.5	24.6	15.7	64.83	445.4	208.5	911.6	876.2	35.45	25.715	
8,700.0	7,740.0	7,450.0	7,416.9	25.9	15.8	63.85	452.3	208.0	974.7	938.1	36.59	26.640	
8,800.0	7,740.0	7,426.9	7,395.9	27.4	15.8	62.36	461.9	207.2	1,042.7	1,005.1	37.60	27.729	
8,900.0	7,740.0	7,400.0	7,371.0	28.8	15.9	60.65	472.1	206.3	1,115.1	1,076.6	38.53	28.943	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,740.0	7,400.0	7,371.0	30.3	15.9	60.65	472.1	206.3	1,190.8	1,150.9	39.89	29.854		
9,100.0	7,740.0	7,400.0	7,371.0	31.9	15.9	60.65	472.1	206.3	1,269.8	1,228.6	41.26	30.774		
9,200.0	7,740.0	7,374.5	7,347.0	33.4	15.9	59.05	480.6	205.4	1,350.9	1,308.8	42.14	32.054		
9,300.0	7,740.0	7,350.0	7,323.6	35.0	16.0	57.53	487.8	204.5	1,434.6	1,391.6	43.00	33.365		
9,400.0	7,740.0	7,350.0	7,323.6	36.6	16.0	57.53	487.8	204.5	1,519.7	1,475.3	44.37	34.251		
9,500.0	7,740.0	7,350.0	7,323.6	38.2	16.0	57.53	487.8	204.5	1,606.5	1,560.8	45.75	35.113		
9,600.0	7,740.0	7,350.0	7,323.6	39.8	16.0	57.53	487.8	204.5	1,694.8	1,647.6	47.14	35.949		
9,700.0	7,740.0	7,350.0	7,323.6	41.4	16.0	57.53	487.8	204.5	1,784.3	1,735.7	48.54	36.757		
9,800.0	7,740.0	7,328.0	7,302.3	43.0	16.0	56.20	493.4	203.7	1,874.3	1,825.0	49.34	37.985		
9,900.0	7,740.0	7,322.5	7,296.9	44.7	16.0	55.86	494.6	203.5	1,965.5	1,914.9	50.57	38.865		
10,000.0	7,740.0	7,300.0	7,275.0	46.3	16.0	54.53	499.3	202.6	2,057.7	2,006.5	51.29	40.121		
10,100.0	7,740.0	7,300.0	7,275.0	48.0	16.0	54.53	499.3	202.6	2,150.2	2,097.5	52.66	40.831		
10,200.0	7,740.0	7,300.0	7,275.0	49.7	16.0	54.53	499.3	202.6	2,243.3	2,189.3	54.04	41.514		
10,300.0	7,740.0	7,300.0	7,275.0	51.3	16.0	54.53	499.3	202.6	2,337.0	2,281.6	55.42	42.171		
10,400.0	7,740.0	7,300.0	7,275.0	53.0	16.0	54.53	499.3	202.6	2,431.2	2,374.4	56.80	42.802		
10,500.0	7,740.0	7,300.0	7,275.0	54.7	16.0	54.53	499.3	202.6	2,525.8	2,467.6	58.19	43.408		
10,600.0	7,740.0	7,300.0	7,275.0	56.4	16.0	54.53	499.3	202.6	2,620.8	2,561.2	59.58	43.991		
10,700.0	7,740.0	7,300.0	7,275.0	58.1	16.0	54.53	499.3	202.6	2,716.2	2,655.2	60.97	44.551		
10,800.0	7,740.0	7,300.0	7,275.0	59.8	16.0	54.53	499.3	202.6	2,811.9	2,749.5	62.36	45.089		
10,900.0	7,740.0	7,300.0	7,275.0	61.5	16.0	54.53	499.3	202.6	2,907.9	2,844.1	63.76	45.607		
11,000.0	7,740.0	7,300.0	7,275.0	63.2	16.0	54.53	499.3	202.6	3,004.1	2,939.0	65.16	46.106		
11,105.4	7,740.0	7,300.0	7,275.0	65.0	16.0	54.53	499.3	202.6	3,105.9	3,039.2	66.63	46.611		
11,191.0	7,740.0	7,277.1	7,252.4	66.4	16.0	51.19	503.2	201.8	3,188.2	3,122.9	68.37	47.769		
11,200.0	7,740.0	7,276.9	7,252.2	66.6	16.0	51.18	503.2	201.7	3,197.0	3,131.5	68.49	48.820		
11,300.0	7,740.0	7,274.6	7,250.0	68.3	16.0	51.05	503.5	201.7	3,294.0	3,227.3	69.72	49.369		
11,400.0	7,740.0	7,272.5	7,247.9	70.0	16.0	50.92	503.8	201.6	3,391.3	3,323.3	70.96	49.898		
11,500.0	7,740.0	7,250.0	7,225.5	71.7	16.0	49.64	506.5	200.7	3,489.1	3,420.9	72.20	51.159		
11,600.0	7,740.0	7,250.0	7,225.5	73.4	16.0	49.64	506.5	200.7	3,586.5	3,517.0	73.52	51.591		
11,700.0	7,740.0	7,250.0	7,225.5	75.1	16.0	49.64	506.5	200.7	3,684.1	3,613.3	74.84	52.008		
11,800.0	7,740.0	7,250.0	7,225.5	76.9	16.0	49.64	506.5	200.7	3,781.8	3,709.7	76.16	52.410		
11,900.0	7,740.0	7,250.0	7,225.5	78.6	16.0	49.64	506.5	200.7	3,879.6	3,806.2	77.48	52.799		
12,000.0	7,740.0	7,250.0	7,225.5	80.3	16.0	49.64	506.5	200.7	3,977.6	3,902.8	78.80	53.175		
12,100.0	7,740.0	7,250.0	7,225.5	82.0	16.0	49.64	506.5	200.7	4,075.6	3,999.5	79.12	53.539		
12,200.0	7,740.0	7,250.0	7,225.5	83.8	16.0	49.64	506.5	200.7	4,173.7	4,096.3	80.45	53.891		
12,300.0	7,740.0	7,250.0	7,225.5	85.5	16.0	49.64	506.5	200.7	4,272.0	4,193.2	81.77	54.231		
12,400.0	7,740.0	7,250.0	7,225.5	87.2	16.0	49.64	506.5	200.7	4,370.2	4,290.1	83.10	54.561		
12,500.0	7,740.0	7,250.0	7,225.5	88.9	16.0	49.64	506.5	200.7	4,468.6	4,387.2	84.42	54.881		
12,600.0	7,740.0	7,250.0	7,225.5	90.7	16.0	49.64	506.5	200.7	4,567.1	4,484.3	85.75	55.190		
12,700.0	7,740.0	7,250.0	7,225.5	92.4	16.0	49.64	506.5	200.7	4,665.6	4,581.5	87.08	55.491		
12,800.0	7,740.0	7,250.0	7,225.5	94.1	16.0	49.64	506.5	200.7	4,764.1	4,678.7	88.41	55.782		
12,900.0	7,740.0	7,250.0	7,225.5	95.9	16.0	49.64	506.5	200.7	4,862.8	4,776.0	89.73	56.065		
13,000.0	7,740.0	7,250.0	7,225.5	97.6	16.0	49.64	506.5	200.7	4,961.5	4,873.4	91.06	56.340		
13,100.0	7,740.0	7,250.0	7,225.5	99.3	16.0	49.64	506.5	200.7	5,060.2	4,970.8	92.39	56.606		
13,200.0	7,740.0	7,250.0	7,225.5	101.1	16.0	49.64	506.5	200.7	5,159.0	5,068.2	93.72	56.866		
13,300.0	7,740.0	7,250.0	7,225.5	102.8	16.0	49.64	506.5	200.7	5,257.8	5,165.7	95.05	57.118		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	-89.48	0.4	-40.0	40.0					
100.0	100.0	100.0	100.0	0.2	0.2	-89.48	0.4	-40.0	40.0	39.7	0.30	131.795		
200.0	200.0	200.0	200.0	0.3	0.3	-89.48	0.4	-40.0	40.0	39.4	0.65	61.316		
300.0	300.0	300.0	300.0	0.5	0.5	31.17	0.4	-40.0	39.3	38.3	1.00	39.197		
400.0	400.0	400.0	400.0	0.7	0.7	33.28	0.4	-40.0	37.1	35.7	1.35	27.404		
500.0	499.9	499.9	499.9	0.9	0.8	37.40	0.4	-40.0	33.5	31.8	1.71	19.633		
600.0	599.7	599.9	599.9	1.1	1.0	46.40	1.0	-39.5	28.5	26.5	2.07	13.773		
700.0	699.5	699.6	699.6	1.3	1.2	48.76	3.0	-37.8	23.4	20.9	2.45	9.533		
722.7	722.1	722.2	722.2	1.3	1.2	50.04	3.7	-37.3	22.4	19.8	2.54	8.804		
800.0	799.3	799.1	798.9	1.5	1.4	70.58	6.4	-35.1	20.5	17.6	2.85	7.177		
806.4	805.7	805.4	805.3	1.5	1.4	72.53	6.6	-34.8	20.4	17.6	2.87	7.109 CC, ES, SF		
900.0	899.1	898.2	897.8	1.7	1.6	100.19	11.0	-31.2	23.4	20.2	3.22	7.283		
1,000.0	998.9	996.9	996.2	1.9	1.8	120.50	17.0	-26.3	32.4	28.9	3.54	9.155		
1,100.0	1,098.7	1,095.1	1,094.0	2.1	2.0	131.65	24.2	-20.4	45.3	41.5	3.87	11.721		
1,200.0	1,198.5	1,192.8	1,191.1	2.3	2.2	137.85	32.7	-13.4	60.9	56.7	4.20	14.485		
1,300.0	1,298.3	1,291.2	1,288.8	2.5	2.5	141.55	41.9	-5.8	77.8	73.3	4.55	17.122		
1,400.0	1,398.1	1,389.6	1,386.5	2.7	2.7	143.92	51.2	1.9	95.0	90.1	4.89	19.415		
1,500.0	1,497.9	1,488.1	1,484.2	2.9	3.0	145.56	60.5	9.5	112.3	107.0	5.24	21.416		
1,600.0	1,597.7	1,586.6	1,581.9	3.1	3.2	146.77	69.8	17.1	129.6	124.0	5.59	23.172		
1,700.0	1,697.5	1,685.0	1,679.6	3.3	3.5	147.69	79.0	24.8	147.0	141.0	5.94	24.724		
1,800.0	1,797.3	1,783.5	1,777.4	3.5	3.7	148.41	88.3	32.4	164.4	158.1	6.30	26.104		
1,900.0	1,897.1	1,881.9	1,875.1	3.7	4.0	149.00	97.6	40.1	181.8	175.2	6.65	27.337		
2,000.0	1,996.9	1,980.4	1,972.8	3.9	4.3	149.48	106.9	47.7	199.3	192.2	7.00	28.446		
2,100.0	2,096.7	2,078.8	2,070.5	4.1	4.5	149.89	116.2	55.3	216.7	209.3	7.36	29.449		
2,200.0	2,196.5	2,177.3	2,168.2	4.3	4.8	150.24	125.4	63.0	234.2	226.5	7.71	30.359		
2,300.0	2,296.3	2,275.7	2,265.9	4.5	5.1	150.53	134.7	70.6	251.6	243.6	8.07	31.190		
2,400.0	2,396.1	2,374.2	2,363.7	4.7	5.3	150.79	144.0	78.3	269.1	260.7	8.42	31.950		
2,500.0	2,495.9	2,472.6	2,461.4	4.9	5.6	151.02	153.3	85.9	286.6	277.8	8.78	32.648		
2,600.0	2,595.7	2,571.1	2,559.1	5.2	5.9	151.22	162.5	93.6	304.1	294.9	9.13	33.292		
2,700.0	2,695.5	2,669.6	2,656.8	5.4	6.1	151.40	171.8	101.2	321.6	312.1	9.49	33.887		
2,800.0	2,795.3	2,768.0	2,754.5	5.6	6.4	151.56	181.1	108.8	339.1	329.2	9.84	34.439		
2,900.0	2,895.1	2,866.5	2,852.3	5.8	6.7	151.71	190.4	116.5	356.5	346.3	10.20	34.953		
3,000.0	2,994.9	2,964.9	2,950.0	6.0	6.9	151.84	199.7	124.1	374.0	363.5	10.56	35.431		
3,100.0	3,094.7	3,063.4	3,047.7	6.2	7.2	151.96	208.9	131.8	391.5	380.6	10.91	35.879		
3,200.0	3,194.5	3,161.8	3,145.4	6.4	7.5	152.07	218.2	139.4	409.0	397.8	11.27	36.297		
3,300.0	3,294.3	3,260.3	3,243.1	6.6	7.7	152.17	227.5	147.1	426.5	414.9	11.62	36.691		
3,400.0	3,394.1	3,358.7	3,340.8	6.8	8.0	152.26	236.8	154.7	444.0	432.0	11.98	37.060		
3,500.0	3,493.9	3,457.2	3,438.6	7.0	8.3	152.35	246.1	162.3	461.5	449.2	12.34	37.408		
3,600.0	3,593.8	3,555.6	3,536.3	7.2	8.5	152.43	255.3	170.0	479.0	466.3	12.69	37.737		
3,700.0	3,693.6	3,654.1	3,634.0	7.4	8.8	152.50	264.6	177.6	496.5	483.5	13.05	38.047		
3,800.0	3,793.4	3,752.6	3,731.7	7.6	9.1	152.57	273.9	185.3	514.0	500.6	13.41	38.341		
3,900.0	3,893.2	3,851.0	3,829.4	7.8	9.3	152.63	283.2	192.9	531.5	517.8	13.76	38.620		
4,000.0	3,993.0	3,949.5	3,927.2	8.0	9.6	152.69	292.4	200.6	549.0	534.9	14.12	38.885		
4,100.0	4,092.8	4,047.9	4,024.9	8.2	9.9	152.75	301.7	208.2	566.5	552.1	14.48	39.136		
4,200.0	4,192.6	4,146.4	4,122.6	8.4	10.2	152.80	311.0	215.8	584.1	569.2	14.83	39.375		
4,300.0	4,292.4	4,244.8	4,220.3	8.7	10.4	152.85	320.3	223.5	601.6	586.4	15.19	39.603		
4,400.0	4,392.2	4,343.3	4,318.0	8.9	10.7	152.90	329.6	231.1	619.1	603.5	15.55	39.821		
4,500.0	4,492.0	4,441.7	4,415.7	9.1	11.0	152.94	338.8	238.8	636.6	620.7	15.90	40.028		
4,600.0	4,591.8	4,540.2	4,513.5	9.3	11.2	152.99	348.1	246.4	654.1	637.8	16.26	40.227		
4,700.0	4,691.6	4,638.6	4,611.2	9.5	11.5	153.03	357.4	254.0	671.6	655.0	16.62	40.417		
4,800.0	4,791.4	4,737.1	4,708.9	9.7	11.8	153.06	366.7	261.7	689.1	672.1	16.97	40.599		
4,900.0	4,891.2	4,835.6	4,806.6	9.9	12.1	153.10	376.0	269.3	706.6	689.3	17.33	40.773		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,000.0	4,991.0	4,934.0	4,904.3	10.1	12.3	153.14	385.2	277.0	724.1	706.4	17.69	40.940	
5,100.0	5,090.8	5,032.5	5,002.0	10.3	12.6	153.17	394.5	284.6	741.6	723.6	18.04	41.101	
5,200.0	5,190.6	5,130.9	5,099.8	10.5	12.9	153.20	403.8	292.3	759.1	740.7	18.40	41.256	
5,300.0	5,290.4	5,229.4	5,197.5	10.7	13.1	153.23	413.1	299.9	776.6	757.9	18.76	41.404	
5,400.0	5,390.2	5,327.8	5,295.2	10.9	13.4	153.26	422.3	307.5	794.1	775.0	19.11	41.547	
5,500.0	5,490.0	5,426.3	5,392.9	11.1	13.7	153.28	431.6	315.2	811.7	792.2	19.47	41.685	
5,600.0	5,589.8	5,524.7	5,490.6	11.3	13.9	153.31	440.9	322.8	829.2	809.3	19.83	41.818	
5,700.0	5,689.6	5,623.2	5,588.4	11.5	14.2	153.34	450.2	330.5	846.7	826.5	20.19	41.946	
5,800.0	5,789.4	5,721.6	5,686.1	11.7	14.5	153.36	459.5	338.1	864.2	843.6	20.54	42.069	
5,900.0	5,889.2	5,820.1	5,783.8	11.9	14.8	153.38	468.7	345.8	881.7	860.8	20.90	42.189	
6,000.0	5,989.0	5,918.6	5,881.5	12.2	15.0	153.40	478.0	353.4	899.2	878.0	21.26	42.304	
6,100.0	6,088.8	6,017.0	5,979.2	12.4	15.3	153.43	487.3	361.0	916.7	895.1	21.61	42.415	
6,200.0	6,188.6	6,115.5	6,076.9	12.6	15.6	153.45	496.6	368.7	934.2	912.3	21.97	42.523	
6,300.0	6,288.4	6,213.9	6,174.7	12.8	15.8	153.47	505.9	376.3	951.7	929.4	22.33	42.628	
6,400.0	6,388.2	6,312.4	6,272.4	13.0	16.1	153.49	515.1	384.0	969.2	946.6	22.68	42.729	
6,500.0	6,488.0	6,410.8	6,370.1	13.2	16.4	153.50	524.4	391.6	986.8	963.7	23.04	42.827	
6,600.0	6,587.9	6,509.3	6,467.8	13.4	16.7	153.52	533.7	399.3	1,004.3	980.9	23.40	42.921	
6,700.0	6,687.7	6,607.7	6,565.5	13.6	16.9	153.54	543.0	406.9	1,021.8	998.0	23.75	43.014	
6,800.0	6,787.5	6,706.2	6,663.3	13.8	17.2	153.56	552.2	414.5	1,039.3	1,015.2	24.11	43.103	
6,900.0	6,887.3	6,804.6	6,761.0	14.0	17.5	153.57	561.5	422.2	1,056.8	1,032.3	24.47	43.190	
7,000.0	6,987.1	7,970.1	7,500.0	14.2	16.7	-167.99	-94.6	480.0	1,021.9	995.5	26.31	38.834	
7,100.0	7,086.9	7,971.4	7,500.0	14.4	16.7	-167.91	-95.9	480.0	981.1	954.6	26.49	37.032	
7,173.7	7,160.4	7,972.4	7,500.0	14.6	16.7	-167.85	-96.9	480.0	956.7	930.1	26.63	35.929	
7,200.0	7,186.7	7,972.2	7,500.0	14.6	16.7	152.65	-96.7	480.0	949.2	922.6	26.67	35.597	
7,250.0	7,236.4	7,968.4	7,500.0	14.7	16.7	118.74	-92.9	480.0	936.9	910.2	26.72	35.066	
7,300.0	7,285.6	7,960.2	7,500.0	14.8	16.7	108.66	-84.7	480.0	927.2	900.5	26.75	34.665	
7,350.0	7,334.0	7,947.8	7,500.0	14.9	16.7	103.95	-72.3	480.0	920.2	893.4	26.76	34.388	
7,400.0	7,381.0	7,931.3	7,500.0	15.0	16.6	100.83	-55.8	480.0	915.7	889.0	26.76	34.222	
7,450.0	7,426.5	7,910.6	7,500.0	15.0	16.6	98.23	-35.1	480.0	913.7	887.0	26.76	34.149	
7,469.9	7,444.1	7,901.3	7,500.0	15.1	16.5	97.24	-25.8	480.0	913.5	886.8	26.76	34.139	
7,500.0	7,470.0	7,886.1	7,500.0	15.1	16.5	95.77	-10.6	480.0	913.9	887.1	26.78	34.124	
7,550.0	7,511.2	7,856.1	7,499.7	15.2	16.5	93.21	19.4	480.0	916.0	889.1	26.85	34.121	
7,600.0	7,549.7	7,824.5	7,497.9	15.4	16.4	90.66	51.0	479.8	919.6	892.6	26.96	34.106	
7,650.0	7,585.4	7,793.7	7,494.5	15.5	16.4	88.21	81.6	479.5	924.5	897.4	27.11	34.108	
7,700.0	7,617.9	7,763.6	7,489.5	15.7	16.4	85.83	111.2	479.2	930.6	903.3	27.30	34.091	
7,750.0	7,647.0	7,734.1	7,483.2	15.9	16.4	83.51	140.1	478.7	937.7	910.1	27.52	34.074	
7,800.0	7,672.4	7,705.0	7,475.5	16.2	16.4	81.26	168.1	478.1	945.4	917.7	27.76	34.060	
7,850.0	7,694.0	7,676.3	7,466.5	16.5	16.5	79.08	195.3	477.4	953.7	925.7	28.02	34.034	
7,900.0	7,711.6	7,650.0	7,457.1	16.8	16.5	77.07	219.9	476.6	962.4	934.1	28.29	34.015	
7,950.0	7,725.0	7,619.8	7,444.9	17.2	16.6	74.99	247.5	475.7	971.2	942.6	28.59	33.975	
8,000.0	7,734.2	7,592.0	7,432.4	17.6	16.6	73.11	272.3	474.7	980.1	951.2	28.89	33.923	
8,050.0	7,739.1	7,564.3	7,418.8	18.1	16.7	71.35	296.4	473.6	988.7	959.5	29.22	33.839	
8,081.4	7,740.0	7,550.0	7,411.3	18.3	16.7	70.40	308.6	473.0	994.0	964.6	29.44	33.769	
8,100.0	7,740.0	7,536.9	7,404.2	18.5	16.8	70.00	319.5	472.5	997.2	967.6	29.62	33.664	
8,200.0	7,740.0	7,486.5	7,374.6	19.6	16.9	68.34	360.2	470.2	1,017.4	986.8	30.65	33.195	
8,300.0	7,740.0	7,450.0	7,350.9	20.7	17.1	67.04	388.0	468.3	1,043.4	1,011.7	31.73	32.882	
8,400.0	7,740.0	7,400.0	7,315.7	21.9	17.2	65.14	423.4	465.6	1,075.2	1,042.4	32.79	32.792	
8,500.0	7,740.0	7,370.0	7,293.3	23.2	17.3	63.95	443.1	463.8	1,112.9	1,079.0	33.90	32.824	
8,600.0	7,740.0	7,350.0	7,277.7	24.6	17.4	63.13	455.6	462.6	1,156.3	1,121.2	35.08	32.966	
8,700.0	7,740.0	7,314.5	7,249.0	25.9	17.5	61.66	476.4	460.3	1,205.0	1,168.8	36.14	33.339	
8,800.0	7,740.0	7,300.0	7,236.9	27.4	17.5	61.05	484.4	459.4	1,258.8	1,221.4	37.35	33.702	
8,900.0	7,740.0	7,271.4	7,212.5	28.8	17.6	59.83	499.2	457.5	1,317.0	1,278.5	38.42	34.276	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	
9,000.0	7,740.0	7,250.0	7,193.8	30.3	17.7	58.92	509.5	456.0	1,379.4	1,339.8	39.54	34.882		
9,100.0	7,740.0	7,250.0	7,193.8	31.9	17.7	58.92	509.5	456.0	1,445.6	1,404.7	40.90	35.347		
9,200.0	7,740.0	7,222.7	7,169.4	33.4	17.7	57.74	521.6	454.1	1,514.7	1,472.8	41.91	36.139		
9,300.0	7,740.0	7,200.0	7,148.7	35.0	17.8	56.77	530.7	452.5	1,587.0	1,544.1	42.96	36.943		
9,400.0	7,740.0	7,200.0	7,148.7	36.6	17.8	56.77	530.7	452.5	1,661.8	1,617.5	44.32	37.496		
9,500.0	7,740.0	7,200.0	7,148.7	38.2	17.8	56.77	530.7	452.5	1,739.0	1,693.4	45.69	38.062		
9,600.0	7,740.0	7,177.2	7,127.6	39.8	17.8	55.79	539.1	450.9	1,818.0	1,771.3	46.68	38.946		
9,700.0	7,740.0	7,150.0	7,101.9	41.4	17.9	54.63	547.9	448.8	1,899.3	1,851.7	47.55	39.939		
9,800.0	7,740.0	7,150.0	7,101.9	43.0	17.9	54.63	547.9	448.8	1,981.5	1,932.6	48.91	40.513		
9,900.0	7,740.0	7,150.0	7,101.9	44.7	17.9	54.63	547.9	448.8	2,065.4	2,015.1	50.28	41.081		
10,000.0	7,740.0	7,150.0	7,101.9	46.3	17.9	54.63	547.9	448.8	2,150.6	2,099.0	51.65	41.642		
10,100.0	7,740.0	7,150.0	7,101.9	48.0	17.9	54.63	547.9	448.8	2,237.1	2,184.1	53.02	42.194		
10,200.0	7,740.0	7,150.0	7,101.9	49.7	17.9	54.63	547.9	448.8	2,324.6	2,270.2	54.40	42.734		
10,300.0	7,740.0	7,127.2	7,080.1	51.3	17.9	53.66	554.4	447.1	2,412.6	2,357.4	55.24	43.674		
10,400.0	7,740.0	7,121.9	7,075.0	53.0	17.9	53.44	555.8	446.7	2,501.7	2,445.2	56.48	44.294		
10,500.0	7,740.0	7,100.0	7,053.8	54.7	17.9	52.53	561.0	445.1	2,591.8	2,534.6	57.29	45.241		
10,600.0	7,740.0	7,100.0	7,053.8	56.4	17.9	52.53	561.0	445.1	2,682.2	2,623.6	58.64	45.738		
10,700.0	7,740.0	7,100.0	7,053.8	58.1	17.9	52.53	561.0	445.1	2,773.3	2,713.3	60.00	46.221		
10,800.0	7,740.0	7,100.0	7,053.8	59.8	17.9	52.53	561.0	445.1	2,864.9	2,803.6	61.36	46.691		
10,900.0	7,740.0	7,100.0	7,053.8	61.5	17.9	52.53	561.0	445.1	2,957.1	2,894.4	62.72	47.147		
11,000.0	7,740.0	7,100.0	7,053.8	63.2	17.9	52.53	561.0	445.1	3,049.8	2,985.7	64.08	47.591		
11,105.4	7,740.0	7,100.0	7,053.8	65.0	17.9	52.53	561.0	445.1	3,148.0	3,082.4	65.52	48.044		
11,191.0	7,740.0	7,100.0	7,053.8	66.4	17.9	51.10	561.0	445.1	3,228.2	3,162.6	65.62	49.196		
11,200.0	7,740.0	7,100.0	7,053.8	66.6	17.9	51.10	561.0	445.1	3,236.7	3,170.9	65.74	49.234		
11,300.0	7,740.0	7,100.0	7,053.8	68.3	17.9	51.10	561.0	445.1	3,331.0	3,263.9	67.08	49.655		
11,400.0	7,740.0	7,100.0	7,053.8	70.0	17.9	51.10	561.0	445.1	3,425.6	3,357.2	68.43	50.063		
11,500.0	7,740.0	7,100.0	7,053.8	71.7	17.9	51.10	561.0	445.1	3,520.5	3,450.7	69.77	50.459		
11,600.0	7,740.0	7,078.5	7,032.8	73.4	17.9	50.20	565.3	443.4	3,615.3	3,544.9	70.34	51.399		
11,700.0	7,740.0	7,075.9	7,030.3	75.1	17.9	50.10	565.8	443.2	3,710.6	3,639.0	71.57	51.843		
11,800.0	7,740.0	7,073.5	7,027.9	76.9	17.9	50.00	566.2	443.1	3,806.2	3,733.3	72.81	52.274		
11,900.0	7,740.0	7,050.0	7,004.8	78.6	17.9	49.03	569.8	441.2	3,902.4	3,829.1	73.23	53.290		
12,000.0	7,740.0	7,050.0	7,004.8	80.3	17.9	49.03	569.8	441.2	3,998.3	3,923.7	74.54	53.639		
12,100.0	7,740.0	7,050.0	7,004.8	82.0	17.9	49.03	569.8	441.2	4,094.3	4,018.5	75.85	53.979		
12,200.0	7,740.0	7,050.0	7,004.8	83.8	17.9	49.03	569.8	441.2	4,190.6	4,113.4	77.16	54.309		
12,300.0	7,740.0	7,050.0	7,004.8	85.5	17.9	49.03	569.8	441.2	4,287.0	4,208.6	78.48	54.629		
12,400.0	7,740.0	7,050.0	7,004.8	87.2	17.9	49.03	569.8	441.2	4,383.6	4,303.8	79.79	54.940		
12,500.0	7,740.0	7,050.0	7,004.8	88.9	17.9	49.03	569.8	441.2	4,480.4	4,399.3	81.10	55.243		
12,600.0	7,740.0	7,050.0	7,004.8	90.7	17.9	49.03	569.8	441.2	4,577.3	4,494.8	82.42	55.537		
12,700.0	7,740.0	7,050.0	7,004.8	92.4	17.9	49.03	569.8	441.2	4,674.3	4,590.5	83.73	55.824		
12,800.0	7,740.0	7,050.0	7,004.8	94.1	17.9	49.03	569.8	441.2	4,771.4	4,686.4	85.05	56.102		
12,900.0	7,740.0	7,050.0	7,004.8	95.9	17.9	49.03	569.8	441.2	4,868.7	4,782.3	86.37	56.373		
13,000.0	7,740.0	7,050.0	7,004.8	97.6	17.9	49.03	569.8	441.2	4,966.0	4,878.4	87.68	56.637		
13,100.0	7,740.0	7,050.0	7,004.8	99.3	17.9	49.03	569.8	441.2	5,063.5	4,974.5	89.00	56.893		
13,200.0	7,740.0	7,050.0	7,004.8	101.1	17.9	49.03	569.8	441.2	5,161.1	5,070.8	90.32	57.143		
13,300.0	7,740.0	7,050.0	7,004.8	102.8	17.9	49.03	569.8	441.2	5,258.7	5,167.1	91.64	57.387		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.01	0.0	-29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	-90.01	0.0	-29.9	29.9	29.6	0.30	98.612		
200.0	200.0	200.0	200.0	0.3	0.3	-90.01	0.0	-29.9	29.9	29.3	0.65	45.878		
300.0	300.0	300.0	300.0	0.5	0.5	30.85	0.0	-29.9	29.2	28.2	1.00	29.137		
400.0	400.0	400.0	400.0	0.7	0.7	33.72	0.0	-29.9	27.0	25.6	1.35	19.950		
500.0	499.9	499.9	499.9	0.9	0.8	39.66	0.0	-29.9	23.5	21.8	1.71	13.753		
600.0	599.7	599.7	599.7	1.1	1.0	51.40	0.0	-29.9	19.2	17.1	2.07	9.241		
700.0	699.5	699.5	699.5	1.3	1.2	55.13	0.0	-29.9	15.2	12.7	2.45	6.192		
722.7	722.1	722.1	722.1	1.3	1.2	56.19	0.0	-29.9	14.4	11.8	2.54	5.660		
800.0	799.3	799.3	799.3	1.5	1.4	75.16	0.0	-29.9	12.4	9.5	2.84	4.351		
850.6	849.8	849.8	849.8	1.6	1.5	90.00	0.0	-29.9	11.9	8.9	3.03	3.944 CC, ES		
900.0	899.1	899.1	899.1	1.7	1.5	104.51	0.0	-29.9	12.3	9.1	3.20	3.858 SF		
1,000.0	998.9	998.9	998.9	1.9	1.7	128.04	0.0	-29.9	15.2	11.7	3.52	4.315		
1,100.0	1,098.7	1,098.3	1,098.3	2.1	1.9	142.97	0.5	-29.3	20.5	16.7	3.84	5.344		
1,200.0	1,198.5	1,197.5	1,197.5	2.3	2.1	151.53	2.1	-27.3	28.4	24.2	4.17	6.804		
1,300.0	1,298.3	1,296.4	1,296.3	2.5	2.2	156.19	4.8	-24.0	38.3	33.8	4.51	8.495		
1,400.0	1,398.1	1,395.0	1,394.6	2.7	2.4	158.72	8.6	-19.4	50.1	45.2	4.85	10.323		
1,500.0	1,497.9	1,493.1	1,492.5	2.9	2.6	160.11	13.3	-13.5	63.6	58.4	5.20	12.242		
1,600.0	1,597.7	1,590.7	1,589.6	3.1	2.8	160.84	19.1	-6.3	78.9	73.3	5.54	14.227		
1,700.0	1,697.5	1,687.8	1,686.1	3.3	3.0	161.20	25.9	2.1	95.8	89.9	5.89	16.262		
1,800.0	1,797.3	1,784.3	1,781.8	3.5	3.3	161.33	33.7	11.7	114.3	108.1	6.24	18.336		
1,900.0	1,897.1	1,880.2	1,876.7	3.7	3.5	161.33	42.4	22.5	134.5	127.9	6.58	20.441		
2,000.0	1,996.9	1,977.2	1,972.5	3.9	3.8	161.26	52.0	34.4	155.9	149.0	6.93	22.506		
2,100.0	2,096.7	2,074.8	2,069.0	4.1	4.1	161.20	61.7	46.3	177.4	170.1	7.28	24.378		
2,200.0	2,196.5	2,172.5	2,165.4	4.3	4.3	161.16	71.4	58.3	198.9	191.3	7.63	26.079		
2,300.0	2,296.3	2,270.2	2,261.8	4.5	4.6	161.13	81.1	70.3	220.4	212.4	7.98	27.631		
2,400.0	2,396.1	2,367.8	2,358.3	4.7	4.9	161.10	90.8	82.3	241.8	233.5	8.32	29.052		
2,500.0	2,495.9	2,465.5	2,454.7	4.9	5.2	161.08	100.5	94.3	263.3	254.7	8.67	30.359		
2,600.0	2,595.7	2,563.2	2,551.2	5.2	5.5	161.06	110.2	106.3	284.8	275.8	9.02	31.565		
2,700.0	2,695.5	2,660.8	2,647.6	5.4	5.8	161.04	119.9	118.3	306.3	296.9	9.37	32.680		
2,800.0	2,795.3	2,758.5	2,744.0	5.6	6.1	161.02	129.6	130.3	327.8	318.0	9.72	33.715		
2,900.0	2,895.1	2,856.2	2,840.5	5.8	6.4	161.01	139.3	142.3	349.2	339.2	10.07	34.678		
3,000.0	2,994.9	2,953.8	2,936.9	6.0	6.7	161.00	149.0	154.2	370.7	360.3	10.42	35.576		
3,100.0	3,094.7	3,051.5	3,033.4	6.2	7.0	160.99	158.7	166.2	392.2	381.4	10.77	36.416		
3,200.0	3,194.5	3,149.2	3,129.8	6.4	7.3	160.98	168.4	178.2	413.7	402.6	11.12	37.203		
3,300.0	3,294.3	3,246.8	3,226.2	6.6	7.6	160.97	178.1	190.2	435.2	423.7	11.47	37.942		
3,400.0	3,394.1	3,344.5	3,322.7	6.8	7.9	160.96	187.8	202.2	456.6	444.8	11.82	38.637		
3,500.0	3,493.9	3,442.2	3,419.1	7.0	8.2	160.96	197.5	214.2	478.1	465.9	12.17	39.292		
3,600.0	3,593.8	3,539.8	3,515.6	7.2	8.5	160.95	207.2	226.2	499.6	487.1	12.52	39.910		
3,700.0	3,693.6	3,637.5	3,612.0	7.4	8.9	160.94	216.9	238.2	521.1	508.2	12.87	40.495		
3,800.0	3,793.4	3,735.2	3,708.4	7.6	9.2	160.94	226.6	250.1	542.6	529.3	13.22	41.048		
3,900.0	3,893.2	3,832.8	3,804.9	7.8	9.5	160.93	236.3	262.1	564.0	550.5	13.57	41.573		
4,000.0	3,993.0	3,930.5	3,901.3	8.0	9.8	160.93	246.0	274.1	585.5	571.6	13.92	42.072		
4,100.0	4,092.8	4,028.2	3,997.8	8.2	10.1	160.92	255.7	286.1	607.0	592.7	14.27	42.546		
4,200.0	4,192.6	4,125.8	4,094.2	8.4	10.4	160.92	265.4	298.1	628.5	613.9	14.62	42.997		
4,300.0	4,292.4	4,223.5	4,190.7	8.7	10.7	160.92	275.1	310.1	649.9	635.0	14.97	43.428		
4,400.0	4,392.2	4,321.2	4,287.1	8.9	11.0	160.91	284.8	322.1	671.4	656.1	15.32	43.838		
4,500.0	4,492.0	4,418.8	4,383.5	9.1	11.4	160.91	294.5	334.1	692.9	677.2	15.67	44.230		
4,600.0	4,591.8	4,516.5	4,480.0	9.3	11.7	160.91	304.2	346.0	714.4	698.4	16.02	44.605		
4,700.0	4,691.6	4,614.2	4,576.4	9.5	12.0	160.90	313.9	358.0	735.9	719.5	16.37	44.964		
4,800.0	4,791.4	4,711.8	4,672.9	9.7	12.3	160.90	323.6	370.0	757.3	740.6	16.72	45.308		
4,900.0	4,891.2	4,809.5	4,769.3	9.9	12.6	160.90	333.4	382.0	778.8	761.8	17.07	45.638		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,000.0	4,991.0	4,907.2	4,865.7	10.1	12.9	160.90	343.1	394.0	800.3	782.9	17.42	45.954	
5,100.0	5,090.8	5,004.8	4,962.2	10.3	13.3	160.89	352.8	406.0	821.8	804.0	17.77	46.258	
5,200.0	5,190.6	5,102.5	5,058.6	10.5	13.6	160.89	362.5	418.0	843.3	825.1	18.11	46.550	
5,300.0	5,290.4	5,200.2	5,155.1	10.7	13.9	160.89	372.2	430.0	864.7	846.3	18.46	46.832	
5,400.0	5,390.2	5,297.8	5,251.5	10.9	14.2	160.89	381.9	442.0	886.2	867.4	18.81	47.102	
5,500.0	5,490.0	5,395.5	5,347.9	11.1	14.5	160.89	391.6	453.9	907.7	888.5	19.16	47.363	
5,600.0	5,589.8	5,493.2	5,444.4	11.3	14.8	160.88	401.3	465.9	929.2	909.7	19.51	47.614	
5,700.0	5,689.6	5,590.8	5,540.8	11.5	15.2	160.88	411.0	477.9	950.7	930.8	19.86	47.857	
5,800.0	5,789.4	5,688.5	5,637.3	11.7	15.5	160.88	420.7	489.9	972.1	951.9	20.21	48.091	
5,900.0	5,889.2	5,786.2	5,733.7	11.9	15.8	160.88	430.4	501.9	993.6	973.0	20.56	48.317	
6,000.0	5,989.0	5,883.8	5,830.1	12.2	16.1	160.88	440.1	513.9	1,015.1	994.2	20.91	48.535	
6,100.0	6,088.8	5,981.5	5,926.6	12.4	16.4	160.88	449.8	525.9	1,036.6	1,015.3	21.26	48.747	
6,200.0	6,188.6	6,079.1	6,023.0	12.6	16.7	160.88	459.5	537.9	1,058.0	1,036.4	21.61	48.951	
6,300.0	6,288.4	6,176.8	6,119.5	12.8	17.1	160.87	469.2	549.8	1,079.5	1,057.6	21.96	49.149	
6,400.0	6,388.2	6,274.5	6,215.9	13.0	17.4	160.87	478.9	561.8	1,101.0	1,078.7	22.31	49.341	
6,500.0	6,488.0	6,372.1	6,312.4	13.2	17.7	160.87	488.6	573.8	1,122.5	1,099.8	22.66	49.527	
6,600.0	6,587.9	6,469.8	6,408.8	13.4	18.0	160.87	498.3	585.8	1,144.0	1,120.9	23.01	49.707	
6,700.0	6,687.7	6,567.5	6,505.2	13.6	18.3	160.87	508.0	597.8	1,165.4	1,142.1	23.36	49.882	
6,800.0	6,787.5	6,665.1	6,601.7	13.8	18.7	160.87	517.7	609.8	1,186.9	1,163.2	23.71	50.051	
6,900.0	6,887.3	6,762.8	6,698.1	14.0	19.0	160.87	527.4	621.8	1,208.4	1,184.3	24.06	50.216	
7,000.0	6,987.1	6,860.5	6,794.6	14.2	19.3	160.87	537.1	633.8	1,229.9	1,205.5	24.41	50.376	
7,100.0	7,086.9	6,958.1	6,891.0	14.4	19.6	160.87	546.8	645.8	1,251.4	1,226.6	24.76	50.531	
7,173.7	7,160.4	7,030.1	6,962.1	14.6	19.8	160.86	553.9	654.6	1,267.2	1,242.2	25.02	50.643	
7,200.0	7,186.7	7,055.9	6,987.5	14.6	19.9	120.15	556.5	657.7	1,272.5	1,247.4	25.14	50.612	
7,250.0	7,236.4	7,105.0	7,036.0	14.7	20.1	84.66	561.4	663.8	1,280.9	1,255.6	25.37	50.494	
7,300.0	7,285.6	7,154.0	7,084.4	14.8	20.3	73.91	566.2	669.8	1,287.1	1,261.5	25.58	50.316	
7,350.0	7,334.0	7,850.0	7,667.6	14.9	20.2	89.52	284.9	766.1	1,287.5	1,261.0	26.55	48.494	
7,400.0	7,381.0	7,922.7	7,698.7	15.0	20.1	91.64	219.9	774.7	1,274.1	1,247.3	26.76	47.606	
7,450.0	7,426.5	7,910.1	7,693.9	15.0	20.2	90.69	231.4	773.3	1,261.8	1,234.9	26.89	46.919	
7,500.0	7,470.0	7,890.0	7,685.7	15.1	20.2	89.76	249.6	770.9	1,250.9	1,223.8	27.04	46.256	
7,550.0	7,511.2	7,867.6	7,675.9	15.2	20.2	88.91	269.5	768.2	1,241.2	1,214.0	27.22	45.598	
7,600.0	7,549.7	7,844.2	7,664.8	15.4	20.2	88.09	289.9	765.3	1,232.9	1,205.4	27.43	44.948	
7,650.0	7,585.4	7,820.4	7,652.6	15.5	20.2	87.27	310.1	762.3	1,225.7	1,198.0	27.68	44.281	
7,700.0	7,617.9	7,796.4	7,639.5	15.7	20.3	86.43	330.0	759.2	1,219.8	1,191.8	27.97	43.610	
7,750.0	7,647.0	7,772.2	7,625.4	15.9	20.3	85.56	349.5	756.0	1,214.9	1,186.6	28.31	42.916	
7,800.0	7,672.4	7,747.9	7,610.5	16.2	20.3	84.65	368.3	752.7	1,211.1	1,182.5	28.69	42.213	
7,850.0	7,694.0	7,723.6	7,594.8	16.5	20.4	83.71	386.6	749.4	1,208.3	1,179.2	29.12	41.492	
7,900.0	7,711.6	7,699.2	7,578.3	16.8	20.4	82.74	404.2	746.0	1,206.4	1,176.8	29.59	40.765	
7,950.0	7,725.0	7,674.8	7,561.0	17.2	20.4	81.75	421.1	742.5	1,205.2	1,175.1	30.11	40.033	
8,000.0	7,734.2	7,650.0	7,542.8	17.6	20.5	80.73	437.5	739.0	1,204.7	1,174.1	30.65	39.301	
8,017.3	7,736.4	7,642.0	7,536.7	17.8	20.5	80.40	442.6	737.8	1,204.7	1,173.8	30.85	39.046	
8,050.0	7,739.1	7,626.0	7,524.4	18.1	20.5	79.74	452.5	735.5	1,204.8	1,173.6	31.23	38.578	
8,081.4	7,740.0	7,610.7	7,512.4	18.3	20.5	79.11	461.7	733.3	1,205.1	1,173.5	31.61	38.127	
8,100.0	7,740.0	7,600.0	7,503.8	18.5	20.5	78.70	468.0	731.8	1,205.4	1,173.6	31.82	37.886	
8,200.0	7,740.0	7,560.0	7,470.9	19.6	20.6	77.11	489.9	725.9	1,210.8	1,177.9	32.95	36.743	
8,300.0	7,740.0	7,526.3	7,441.9	20.7	20.6	75.72	506.4	720.9	1,222.8	1,188.7	34.13	35.825	
8,400.0	7,740.0	7,500.0	7,418.7	21.9	20.7	74.61	518.2	717.1	1,241.6	1,206.3	35.36	35.113	
8,500.0	7,740.0	7,475.8	7,396.9	23.2	20.7	73.57	528.0	713.5	1,267.2	1,230.6	36.61	34.611	
8,600.0	7,740.0	7,450.0	7,373.2	24.6	20.7	72.45	537.4	709.7	1,299.4	1,261.6	37.88	34.304	
8,700.0	7,740.0	7,450.0	7,373.2	25.9	20.7	72.45	537.4	709.7	1,337.9	1,298.6	39.28	34.058	
8,800.0	7,740.0	7,426.1	7,350.9	27.4	20.7	71.40	545.2	706.3	1,382.1	1,341.5	40.58	34.060	
8,900.0	7,740.0	7,400.0	7,326.1	28.8	20.7	70.25	552.6	702.5	1,431.8	1,390.0	41.85	34.210	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,740.0	7,400.0	7,326.1	30.3	20.7	70.25	552.6	702.5	1,486.1	1,442.8	43.32	34.304		
9,100.0	7,740.0	7,400.0	7,326.1	31.9	20.7	70.25	552.6	702.5	1,544.9	1,500.1	44.81	34.479		
9,200.0	7,740.0	7,400.0	7,326.1	33.4	20.7	70.25	552.6	702.5	1,607.9	1,561.6	46.31	34.718		
9,300.0	7,740.0	7,378.0	7,305.0	35.0	20.7	69.27	558.0	699.3	1,674.0	1,626.3	47.61	35.156		
9,400.0	7,740.0	7,371.3	7,298.5	36.6	20.7	68.97	559.4	698.4	1,743.4	1,694.3	49.06	35.532		
9,500.0	7,740.0	7,350.0	7,277.9	38.2	20.7	68.03	563.6	695.4	1,815.8	1,765.4	50.35	36.062		
9,600.0	7,740.0	7,350.0	7,277.9	39.8	20.7	68.03	563.6	695.4	1,890.3	1,838.4	51.88	36.436		
9,700.0	7,740.0	7,350.0	7,277.9	41.4	20.7	68.03	563.6	695.4	1,967.1	1,913.7	53.42	36.825		
9,800.0	7,740.0	7,350.0	7,277.9	43.0	20.7	68.03	563.6	695.4	2,045.9	1,990.9	54.96	37.224		
9,900.0	7,740.0	7,350.0	7,277.9	44.7	20.7	68.03	563.6	695.4	2,126.5	2,069.9	56.51	37.628		
10,000.0	7,740.0	7,350.0	7,277.9	46.3	20.7	68.03	563.6	695.4	2,208.6	2,150.6	58.07	38.035		
10,100.0	7,740.0	7,350.0	7,277.9	48.0	20.7	68.03	563.6	695.4	2,292.2	2,232.6	59.63	38.440		
10,200.0	7,740.0	7,350.0	7,277.9	49.7	20.7	68.03	563.6	695.4	2,377.1	2,315.9	61.20	38.843		
10,300.0	7,740.0	7,350.0	7,277.9	51.3	20.7	68.03	563.6	695.4	2,463.0	2,400.3	62.77	39.241		
10,400.0	7,740.0	7,329.1	7,257.4	53.0	20.6	67.10	566.9	692.5	2,549.6	2,485.6	63.98	39.849		
10,500.0	7,740.0	7,326.4	7,254.8	54.7	20.6	66.98	567.3	692.1	2,637.4	2,571.9	65.50	40.265		
10,600.0	7,740.0	7,323.9	7,252.3	56.4	20.6	66.87	567.6	691.7	2,726.1	2,659.1	67.02	40.674		
10,700.0	7,740.0	7,321.5	7,250.0	58.1	20.6	66.77	568.0	691.4	2,815.5	2,746.9	68.55	41.073		
10,800.0	7,740.0	7,300.0	7,228.8	59.8	20.6	65.82	570.3	688.5	2,905.9	2,836.2	69.69	41.699		
10,900.0	7,740.0	7,300.0	7,228.8	61.5	20.6	65.82	570.3	688.5	2,996.5	2,925.3	71.25	42.056		
11,000.0	7,740.0	7,300.0	7,228.8	63.2	20.6	65.82	570.3	688.5	3,087.7	3,014.9	72.82	42.404		
11,105.4	7,740.0	7,300.0	7,228.8	65.0	20.6	65.82	570.3	688.5	3,184.4	3,110.0	74.47	42.762		
11,191.0	7,740.0	7,300.0	7,228.8	66.4	20.6	64.96	570.3	688.5	3,263.6	3,188.2	75.35	43.310		
11,200.0	7,740.0	7,300.0	7,228.8	66.6	20.6	64.96	570.3	688.5	3,271.9	3,196.4	75.49	43.340		
11,300.0	7,740.0	7,300.0	7,228.8	68.3	20.6	64.96	570.3	688.5	3,365.1	3,288.0	77.05	43.671		
11,400.0	7,740.0	7,300.0	7,228.8	70.0	20.6	64.96	570.3	688.5	3,458.6	3,380.0	78.62	43.994		
11,500.0	7,740.0	7,300.0	7,228.8	71.7	20.6	64.96	570.3	688.5	3,552.5	3,472.3	80.18	44.307		
11,600.0	7,740.0	7,300.0	7,228.8	73.4	20.6	64.96	570.3	688.5	3,646.7	3,564.9	81.74	44.611		
11,700.0	7,740.0	7,300.0	7,228.8	75.1	20.6	64.96	570.3	688.5	3,741.2	3,657.9	83.31	44.907		
11,800.0	7,740.0	7,300.0	7,228.8	76.9	20.6	64.96	570.3	688.5	3,836.0	3,751.1	84.88	45.195		
11,900.0	7,740.0	7,300.0	7,228.8	78.6	20.6	64.96	570.3	688.5	3,931.0	3,844.6	86.44	45.475		
12,000.0	7,740.0	7,300.0	7,228.8	80.3	20.6	64.96	570.3	688.5	4,026.3	3,938.3	88.01	45.747		
12,100.0	7,740.0	7,300.0	7,228.8	82.0	20.6	64.96	570.3	688.5	4,121.8	4,032.2	89.58	46.011		
12,200.0	7,740.0	7,300.0	7,228.8	83.8	20.6	64.96	570.3	688.5	4,217.5	4,126.4	91.15	46.268		
12,300.0	7,740.0	7,300.0	7,228.8	85.5	20.6	64.96	570.3	688.5	4,313.4	4,220.7	92.73	46.518		
12,400.0	7,740.0	7,300.0	7,228.8	87.2	20.6	64.96	570.3	688.5	4,409.5	4,315.2	94.30	46.762		
12,500.0	7,740.0	7,300.0	7,228.8	88.9	20.6	64.96	570.3	688.5	4,505.8	4,409.9	95.87	46.998		
12,600.0	7,740.0	7,300.0	7,228.8	90.7	20.6	64.96	570.3	688.5	4,602.2	4,504.7	97.44	47.229		
12,700.0	7,740.0	7,300.0	7,228.8	92.4	20.6	64.96	570.3	688.5	4,698.8	4,599.7	99.02	47.453		
12,800.0	7,740.0	7,300.0	7,228.8	94.1	20.6	64.96	570.3	688.5	4,795.5	4,694.9	100.59	47.671		
12,900.0	7,740.0	7,300.0	7,228.8	95.9	20.6	64.96	570.3	688.5	4,892.3	4,790.1	102.17	47.884		
13,000.0	7,740.0	7,300.0	7,228.8	97.6	20.6	64.96	570.3	688.5	4,989.3	4,885.5	103.75	48.091		
13,100.0	7,740.0	7,300.0	7,228.8	99.3	20.6	64.96	570.3	688.5	5,086.4	4,981.0	105.32	48.293		
13,200.0	7,740.0	7,300.0	7,228.8	101.1	20.6	64.96	570.3	688.5	5,183.6	5,076.7	106.90	48.490		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2												Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-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	65.434		
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-19.9	19.9	19.2	0.65	30.442		
300.0	300.0	300.0	300.0	0.5	0.5	31.31	0.0	-19.9	19.1	18.1	1.00	19.083		
400.0	400.0	400.2	400.2	0.7	0.7	37.49	0.4	-19.1	16.2	14.8	1.35	11.959		
500.0	499.9	500.1	500.1	0.9	0.9	58.49	1.4	-16.7	11.2	9.5	1.72	6.539		
564.3	564.0	564.2	564.1	1.0	1.0	92.60	2.5	-14.3	9.3	7.3	1.97	4.715	CC, ES, SF	
600.0	599.7	599.6	599.5	1.1	1.0	116.38	3.2	-12.7	10.2	8.1	2.10	4.846		
700.0	699.5	698.6	698.3	1.3	1.2	141.56	5.6	-7.2	18.8	16.4	2.42	7.761		
722.7	722.1	721.1	720.7	1.3	1.3	142.69	6.3	-5.7	21.3	18.9	2.49	8.556		
800.0	799.3	797.3	796.6	1.5	1.4	153.00	8.7	-0.1	31.3	28.5	2.75	11.359		
900.0	899.1	895.4	894.3	1.7	1.7	159.63	12.5	8.4	46.3	43.2	3.09	14.975		
1,000.0	998.9	992.9	991.3	1.9	1.9	163.13	16.9	18.4	63.3	59.9	3.43	18.446		
1,100.0	1,098.7	1,089.9	1,087.4	2.1	2.2	165.21	22.0	29.8	82.2	78.4	3.78	21.766		
1,200.0	1,198.5	1,186.2	1,182.7	2.3	2.4	166.55	27.7	42.7	102.7	98.6	4.12	24.958		
1,300.0	1,298.3	1,281.8	1,277.0	2.5	2.7	167.45	33.9	56.9	124.9	120.5	4.46	28.044		
1,400.0	1,398.1	1,376.6	1,370.3	2.7	3.1	168.08	40.8	72.4	148.8	144.0	4.79	31.042		
1,500.0	1,497.9	1,470.6	1,462.5	2.9	3.4	168.54	48.2	89.1	174.3	169.2	5.13	33.969		
1,600.0	1,597.7	1,566.7	1,556.5	3.1	3.8	168.89	56.2	107.1	200.8	195.3	5.47	36.697		
1,700.0	1,697.5	1,663.1	1,650.9	3.3	4.1	169.15	64.2	125.2	227.3	221.5	5.81	39.105		
1,800.0	1,797.3	1,759.5	1,745.2	3.5	4.5	169.36	72.2	143.3	253.8	247.6	6.15	41.246		
1,900.0	1,897.1	1,855.9	1,839.6	3.7	4.9	169.54	80.2	161.4	280.3	273.8	6.49	43.162		
2,000.0	1,996.9	1,952.3	1,934.0	3.9	5.3	169.68	88.2	179.5	306.8	300.0	6.83	44.888		
2,100.0	2,096.7	2,048.8	2,028.3	4.1	5.6	169.80	96.2	197.6	333.3	326.1	7.18	46.449		
2,200.0	2,196.5	2,145.2	2,122.7	4.3	6.0	169.90	104.2	215.7	359.8	352.3	7.52	47.869		
2,300.0	2,296.3	2,241.6	2,217.1	4.5	6.4	169.99	112.2	233.8	386.3	378.5	7.86	49.165		
2,400.0	2,396.1	2,338.0	2,311.4	4.7	6.8	170.06	120.2	251.9	412.9	404.7	8.20	50.354		
2,500.0	2,495.9	2,434.4	2,405.8	4.9	7.2	170.13	128.2	270.0	439.4	430.8	8.54	51.447		
2,600.0	2,595.7	2,530.9	2,500.2	5.2	7.5	170.19	136.2	288.1	465.9	457.0	8.88	52.457		
2,700.0	2,695.5	2,627.3	2,594.5	5.4	7.9	170.24	144.2	306.2	492.4	483.2	9.22	53.392		
2,800.0	2,795.3	2,723.7	2,688.9	5.6	8.3	170.29	152.2	324.2	518.9	509.4	9.56	54.260		
2,900.0	2,895.1	2,820.1	2,783.3	5.8	8.7	170.33	160.2	342.3	545.4	535.5	9.90	55.068		
3,000.0	2,994.9	2,916.5	2,877.6	6.0	9.1	170.37	168.2	360.4	572.0	561.7	10.25	55.823		
3,100.0	3,094.7	3,012.9	2,972.0	6.2	9.5	170.41	176.2	378.5	598.5	587.9	10.59	56.528		
3,200.0	3,194.5	3,109.4	3,066.4	6.4	9.9	170.44	184.2	396.6	625.0	614.1	10.93	57.190		
3,300.0	3,294.3	3,205.8	3,160.7	6.6	10.2	170.47	192.2	414.7	651.5	640.2	11.27	57.812		
3,400.0	3,394.1	3,302.2	3,255.1	6.8	10.6	170.50	200.2	432.8	678.0	666.4	11.61	58.397		
3,500.0	3,493.9	3,398.6	3,349.5	7.0	11.0	170.52	208.2	450.9	704.5	692.6	11.95	58.949		
3,600.0	3,593.8	3,495.0	3,443.8	7.2	11.4	170.55	216.2	469.0	731.1	718.8	12.29	59.470		
3,700.0	3,693.6	3,591.5	3,538.2	7.4	11.8	170.57	224.2	487.1	757.6	745.0	12.63	59.962		
3,800.0	3,793.4	3,687.9	3,632.6	7.6	12.2	170.59	232.2	505.2	784.1	771.1	12.98	60.429		
3,900.0	3,893.2	3,784.3	3,726.9	7.8	12.6	170.61	240.2	523.3	810.6	797.3	13.32	60.872		
4,000.0	3,993.0	3,880.7	3,821.3	8.0	13.0	170.63	248.2	541.4	837.1	823.5	13.66	61.293		
4,100.0	4,092.8	3,977.1	3,915.7	8.2	13.3	170.64	256.2	559.5	863.7	849.7	14.00	61.693		
4,200.0	4,192.6	4,073.6	4,010.1	8.4	13.7	170.66	264.2	577.6	890.2	875.8	14.34	62.075		
4,300.0	4,292.4	4,170.0	4,104.4	8.7	14.1	170.67	272.2	595.7	916.7	902.0	14.68	62.438		
4,400.0	4,392.2	4,266.4	4,198.8	8.9	14.5	170.69	280.2	613.7	943.2	928.2	15.02	62.785		
4,500.0	4,492.0	4,362.8	4,293.2	9.1	14.9	170.70	288.2	631.8	969.7	954.4	15.36	63.117		
4,600.0	4,591.8	4,459.2	4,387.5	9.3	15.3	170.71	296.2	649.9	996.3	980.6	15.71	63.434		
4,700.0	4,691.6	4,555.7	4,481.9	9.5	15.7	170.73	304.2	668.0	1,022.8	1,006.7	16.05	63.738		
4,800.0	4,791.4	4,652.1	4,576.3	9.7	16.1	170.74	312.2	686.1	1,049.3	1,032.9	16.39	64.029		
4,900.0	4,891.2	4,748.5	4,670.6	9.9	16.4	170.75	320.2	704.2	1,075.8	1,059.1	16.73	64.308		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,000.0	4,991.0	4,844.9	4,765.0	10.1	16.8	170.76	328.2	722.3	1,102.3	1,085.3	17.07	64.576	
5,100.0	5,090.8	4,941.3	4,859.4	10.3	17.2	170.77	336.2	740.4	1,128.9	1,111.4	17.41	64.833	
5,200.0	5,190.6	5,037.8	4,953.7	10.5	17.6	170.78	344.2	758.5	1,155.4	1,137.6	17.75	65.081	
5,300.0	5,290.4	5,134.2	5,048.1	10.7	18.0	170.79	352.2	776.6	1,181.9	1,163.8	18.09	65.319	
5,400.0	5,390.2	5,230.6	5,142.5	10.9	18.4	170.79	360.2	794.7	1,208.4	1,190.0	18.44	65.549	
5,500.0	5,490.0	5,327.0	5,236.8	11.1	18.8	170.80	368.2	812.8	1,234.9	1,216.2	18.78	65.770	
5,600.0	5,589.8	5,423.4	5,331.2	11.3	19.2	170.81	376.2	830.9	1,261.5	1,242.3	19.12	65.983	
5,700.0	5,689.6	5,519.8	5,425.6	11.5	19.6	170.82	384.2	849.0	1,288.0	1,268.5	19.46	66.189	
5,800.0	5,789.4	5,616.3	5,519.9	11.7	19.9	170.83	392.2	867.1	1,314.5	1,294.7	19.80	66.387	
5,900.0	5,889.2	5,712.7	5,614.3	11.9	20.3	170.83	400.2	885.2	1,341.0	1,320.9	20.14	66.579	
6,000.0	5,989.0	5,809.1	5,708.7	12.2	20.7	170.84	408.2	903.2	1,367.5	1,347.1	20.48	66.765	
6,100.0	6,088.8	5,905.5	5,803.0	12.4	21.1	170.85	416.2	921.3	1,394.1	1,373.2	20.82	66.944	
6,200.0	6,188.6	6,001.9	5,897.4	12.6	21.5	170.85	424.2	939.4	1,420.6	1,399.4	21.17	67.118	
6,300.0	6,288.4	6,098.4	5,991.8	12.8	21.9	170.86	432.2	957.5	1,447.1	1,425.6	21.51	67.286	
6,400.0	6,388.2	6,194.8	6,086.1	13.0	22.3	170.86	440.2	975.6	1,473.6	1,451.8	21.85	67.449	
6,500.0	6,488.0	6,291.2	6,180.5	13.2	22.7	170.87	448.2	993.7	1,500.1	1,477.9	22.19	67.606	
6,600.0	6,587.9	6,387.6	6,274.9	13.4	23.1	170.87	456.2	1,011.8	1,526.7	1,504.1	22.53	67.759	
6,700.0	6,687.7	6,484.0	6,369.2	13.6	23.4	170.88	464.2	1,029.9	1,553.2	1,530.3	22.87	67.908	
6,800.0	6,787.5	6,580.5	6,463.6	13.8	23.8	170.88	472.2	1,048.0	1,579.7	1,556.5	23.21	68.052	
6,900.0	6,887.3	6,676.9	6,558.0	14.0	24.2	170.89	480.2	1,066.1	1,606.2	1,582.7	23.55	68.192	
7,000.0	6,987.1	6,773.3	6,652.3	14.2	24.6	170.89	488.2	1,084.2	1,632.7	1,608.8	23.90	68.328	
7,100.0	7,086.9	6,869.7	6,746.7	14.4	25.0	170.90	496.2	1,102.3	1,659.3	1,635.0	24.24	68.460	
7,173.7	7,160.4	6,940.8	6,816.2	14.6	25.3	170.90	502.1	1,115.6	1,678.8	1,654.3	24.49	68.555	
7,200.0	7,186.7	6,966.2	6,841.1	14.6	25.4	130.00	504.2	1,120.4	1,685.6	1,661.0	24.60	68.509	
7,250.0	7,236.4	7,994.6	7,500.0	14.7	26.6	117.84	-92.9	1,246.7	1,686.5	1,659.9	26.62	63.345	
7,300.0	7,285.6	7,986.5	7,500.0	14.8	26.5	107.40	-84.7	1,246.7	1,682.6	1,655.9	26.65	63.127	
7,350.0	7,334.0	7,974.1	7,500.0	14.9	26.5	102.57	-72.3	1,246.7	1,680.0	1,653.4	26.67	62.990	
7,400.0	7,381.0	7,936.7	7,499.3	15.0	26.5	98.89	-35.0	1,246.6	1,678.9	1,652.2	26.64	63.010	
7,439.6	7,417.2	7,890.5	7,495.3	15.0	26.4	96.09	11.1	1,245.8	1,678.6	1,652.0	26.61	63.085	
7,450.0	7,426.5	7,880.0	7,493.9	15.0	26.4	95.46	21.5	1,245.5	1,678.6	1,652.0	26.62	63.070	
7,500.0	7,470.0	7,835.6	7,485.9	15.1	26.3	92.86	65.1	1,244.0	1,679.2	1,652.6	26.64	63.042	
7,550.0	7,511.2	7,797.3	7,476.3	15.2	26.3	90.71	102.1	1,242.2	1,680.6	1,653.9	26.70	62.938	
7,600.0	7,549.7	7,762.7	7,465.5	15.4	26.3	88.81	135.0	1,240.1	1,682.7	1,655.9	26.83	62.728	
7,650.0	7,585.4	7,730.3	7,453.7	15.5	26.3	87.08	165.0	1,237.8	1,685.4	1,658.5	26.99	62.454	
7,700.0	7,617.9	7,699.5	7,440.9	15.7	26.3	85.46	193.0	1,235.4	1,688.7	1,661.5	27.18	62.120	
7,750.0	7,647.0	7,669.7	7,427.2	15.9	26.3	83.93	219.2	1,232.8	1,692.3	1,664.9	27.44	61.674	
7,800.0	7,672.4	7,640.8	7,412.6	16.2	26.3	82.48	244.1	1,230.0	1,696.3	1,668.5	27.73	61.163	
7,850.0	7,694.0	7,612.5	7,397.2	16.5	26.3	81.09	267.6	1,227.0	1,700.4	1,672.3	28.08	60.554	
7,900.0	7,711.6	7,584.7	7,380.9	16.8	26.3	79.78	289.9	1,223.9	1,704.5	1,676.1	28.48	59.851	
7,950.0	7,725.0	7,557.3	7,363.9	17.2	26.3	78.54	311.1	1,220.6	1,708.7	1,679.7	28.94	59.050	
8,000.0	7,734.2	7,530.2	7,346.1	17.6	26.3	77.38	331.2	1,217.2	1,712.6	1,683.2	29.46	58.141	
8,050.0	7,739.1	7,500.0	7,325.1	18.1	26.3	76.21	352.6	1,213.2	1,716.4	1,686.3	30.04	57.127	
8,081.4	7,740.0	7,486.8	7,315.6	18.3	26.3	75.67	361.6	1,211.4	1,718.5	1,688.1	30.44	56.452	
8,100.0	7,740.0	7,477.2	7,308.6	18.5	26.3	75.43	368.0	1,210.0	1,719.8	1,689.2	30.65	56.111	
8,200.0	7,740.0	7,431.0	7,273.3	19.6	26.3	74.24	397.1	1,203.2	1,729.2	1,697.4	31.80	54.369	
8,300.0	7,740.0	7,400.0	7,248.4	20.7	26.3	73.40	414.9	1,198.5	1,742.8	1,709.8	33.01	52.799	
8,400.0	7,740.0	7,361.5	7,216.2	21.9	26.3	72.31	435.1	1,192.3	1,760.9	1,726.6	34.25	51.411	
8,500.0	7,740.0	7,335.0	7,193.4	23.2	26.3	71.54	447.6	1,187.9	1,783.6	1,748.1	35.53	50.200	
8,600.0	7,740.0	7,300.0	7,162.3	24.6	26.2	70.51	462.6	1,182.0	1,811.1	1,774.3	36.81	49.196	
8,700.0	7,740.0	7,300.0	7,162.3	25.9	26.2	70.51	462.6	1,182.0	1,842.9	1,804.7	38.20	48.245	
8,800.0	7,740.0	7,276.9	7,141.3	27.4	26.2	69.81	471.4	1,177.9	1,879.2	1,839.7	39.54	47.528	
8,900.0	7,740.0	7,250.0	7,116.5	28.8	26.2	68.99	480.6	1,173.2	1,919.9	1,879.0	40.87	46.975	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,740.0	7,250.0	7,116.5	30.3	26.2	68.99	480.6	1,173.2	1,964.4	1,922.1	42.33	46.411		
9,100.0	7,740.0	7,250.0	7,116.5	31.9	26.2	68.99	480.6	1,173.2	2,012.9	1,969.1	43.80	45.955		
9,200.0	7,740.0	7,228.8	7,096.6	33.4	26.1	68.33	487.0	1,169.4	2,064.7	2,019.6	45.17	45.712		
9,300.0	7,740.0	7,219.9	7,088.2	35.0	26.1	68.06	489.4	1,167.8	2,120.0	2,073.4	46.61	45.484		
9,400.0	7,740.0	7,200.0	7,069.3	36.6	26.1	67.44	494.4	1,164.1	2,178.5	2,130.5	47.98	45.403		
9,500.0	7,740.0	7,200.0	7,069.3	38.2	26.1	67.44	494.4	1,164.1	2,239.6	2,190.1	49.49	45.250		
9,600.0	7,740.0	7,200.0	7,069.3	39.8	26.1	67.44	494.4	1,164.1	2,303.4	2,252.4	51.02	45.151		
9,700.0	7,740.0	7,200.0	7,069.3	41.4	26.1	67.44	494.4	1,164.1	2,369.8	2,317.2	52.55	45.099		
9,800.0	7,740.0	7,200.0	7,069.3	43.0	26.1	67.44	494.4	1,164.1	2,438.4	2,384.3	54.08	45.085		
9,900.0	7,740.0	7,200.0	7,069.3	44.7	26.1	67.44	494.4	1,164.1	2,509.2	2,453.5	55.63	45.106		
10,000.0	7,740.0	7,176.9	7,047.2	46.3	26.1	66.71	499.4	1,159.9	2,581.4	2,524.4	56.95	45.331		
10,100.0	7,740.0	7,172.6	7,043.0	48.0	26.0	66.58	500.2	1,159.1	2,655.7	2,597.2	58.45	45.437		
10,200.0	7,740.0	7,150.0	7,021.1	49.7	26.0	65.87	504.0	1,154.9	2,731.8	2,672.1	59.74	45.727		
10,300.0	7,740.0	7,150.0	7,021.1	51.3	26.0	65.87	504.0	1,154.9	2,809.1	2,747.8	61.29	45.835		
10,400.0	7,740.0	7,150.0	7,021.1	53.0	26.0	65.87	504.0	1,154.9	2,887.8	2,824.9	62.84	45.956		
10,500.0	7,740.0	7,150.0	7,021.1	54.7	26.0	65.87	504.0	1,154.9	2,967.7	2,903.3	64.39	46.089		
10,600.0	7,740.0	7,150.0	7,021.1	56.4	26.0	65.87	504.0	1,154.9	3,048.8	2,982.9	65.95	46.232		
10,700.0	7,740.0	7,150.0	7,021.1	58.1	26.0	65.87	504.0	1,154.9	3,131.1	3,063.6	67.51	46.383		
10,800.0	7,740.0	7,150.0	7,021.1	59.8	26.0	65.87	504.0	1,154.9	3,214.3	3,145.2	69.07	46.539		
10,900.0	7,740.0	7,150.0	7,021.1	61.5	26.0	65.87	504.0	1,154.9	3,298.5	3,227.8	70.63	46.700		
11,000.0	7,740.0	7,150.0	7,021.1	63.2	26.0	65.87	504.0	1,154.9	3,383.5	3,311.3	72.20	46.865		
11,105.4	7,740.0	7,150.0	7,021.1	65.0	26.0	65.87	504.0	1,154.9	3,474.0	3,400.1	73.85	47.042		
11,191.0	7,740.0	7,150.0	7,021.1	66.4	26.0	65.25	504.0	1,154.9	3,548.3	3,473.5	74.82	47.424		
11,200.0	7,740.0	7,150.0	7,021.1	66.6	26.0	65.25	504.0	1,154.9	3,556.2	3,481.2	74.96	47.440		
11,300.0	7,740.0	7,150.0	7,021.1	68.3	26.0	65.25	504.0	1,154.9	3,644.1	3,567.6	76.53	47.619		
11,400.0	7,740.0	7,150.0	7,021.1	70.0	26.0	65.25	504.0	1,154.9	3,732.6	3,654.5	78.09	47.798		
11,500.0	7,740.0	7,150.0	7,021.1	71.7	26.0	65.25	504.0	1,154.9	3,821.7	3,742.0	79.66	47.976		
11,600.0	7,740.0	7,150.0	7,021.1	73.4	26.0	65.25	504.0	1,154.9	3,911.3	3,830.0	81.23	48.153		
11,700.0	7,740.0	7,150.0	7,021.1	75.1	26.0	65.25	504.0	1,154.9	4,001.4	3,918.6	82.80	48.328		
11,800.0	7,740.0	7,150.0	7,021.1	76.9	26.0	65.25	504.0	1,154.9	4,091.9	4,007.5	84.37	48.502		
11,900.0	7,740.0	7,128.1	6,999.8	78.6	25.9	64.55	506.9	1,150.8	4,182.4	4,096.9	85.50	48.915		
12,000.0	7,740.0	7,126.7	6,998.4	80.3	25.9	64.50	507.0	1,150.5	4,273.8	4,186.7	87.04	49.102		
12,100.0	7,740.0	7,125.3	6,997.0	82.0	25.9	64.46	507.2	1,150.3	4,365.5	4,276.9	88.57	49.286		
12,200.0	7,740.0	7,123.9	6,995.7	83.8	25.9	64.42	507.3	1,150.0	4,457.5	4,367.4	90.11	49.468		
12,300.0	7,740.0	7,122.7	6,994.5	85.5	25.9	64.37	507.4	1,149.8	4,549.9	4,458.3	91.65	49.646		
12,400.0	7,740.0	7,100.0	6,972.3	87.2	25.9	63.65	509.3	1,145.5	4,643.0	4,550.3	92.70	50.085		
12,500.0	7,740.0	7,100.0	6,972.3	88.9	25.9	63.65	509.3	1,145.5	4,736.0	4,641.7	94.26	50.245		
12,600.0	7,740.0	7,100.0	6,972.3	90.7	25.9	63.65	509.3	1,145.5	4,829.2	4,733.4	95.82	50.401		
12,700.0	7,740.0	7,100.0	6,972.3	92.4	25.9	63.65	509.3	1,145.5	4,922.7	4,825.3	97.37	50.555		
12,800.0	7,740.0	7,100.0	6,972.3	94.1	25.9	63.65	509.3	1,145.5	5,016.4	4,917.5	98.93	50.706		
12,900.0	7,740.0	7,100.0	6,972.3	95.9	25.9	63.65	509.3	1,145.5	5,110.4	5,009.9	100.49	50.855		
13,000.0	7,740.0	7,100.0	6,972.3	97.6	25.9	63.65	509.3	1,145.5	5,204.6	5,102.6	102.05	51.001		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2												Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-10.1	10.1					
100.0	100.0	100.0	100.0	0.2	0.2	-89.98	0.0	-10.1	10.1	9.8	0.30	33.178		
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-10.1	10.1	9.4	0.65	15.436		
202.5	202.5	202.5	202.5	0.3	0.3	30.03	0.0	-10.1	10.1	9.4	0.66	15.233		
300.0	300.0	300.1	300.1	0.5	0.5	34.90	0.3	-9.2	8.5	7.5	1.00	8.504		
400.0	400.0	400.1	400.1	0.7	0.7	67.64	1.1	-6.8	4.7	3.4	1.36	3.479		
430.0	430.0	430.0	430.0	0.7	0.7	95.84	1.5	-5.7	4.2	2.7	1.48	2.835 CC, ES, SF		
500.0	499.9	499.7	499.5	0.9	0.9	152.43	2.6	-2.7	7.7	6.0	1.71	4.500		
600.0	599.7	598.7	598.4	1.1	1.1	172.70	4.5	3.0	19.0	17.0	2.05	9.295		
700.0	699.5	697.3	696.6	1.3	1.3	165.56	7.0	10.3	33.1	30.7	2.39	13.824		
722.7	722.1	719.6	718.9	1.3	1.3	163.25	7.7	12.2	36.4	34.0	2.47	14.741		
800.0	799.3	795.3	794.3	1.5	1.5	166.43	10.1	19.1	48.5	45.8	2.74	17.724		
900.0	899.1	892.8	891.2	1.7	1.8	168.87	13.6	29.5	65.7	62.7	3.08	21.346		
1,000.0	998.9	989.7	987.2	1.9	2.0	170.35	17.7	41.3	84.7	81.3	3.42	24.756		
1,100.0	1,098.7	1,086.0	1,082.4	2.1	2.3	171.32	22.3	54.6	105.4	101.6	3.76	28.004		
1,200.0	1,198.5	1,181.5	1,176.7	2.3	2.6	171.99	27.3	69.2	127.7	123.6	4.10	31.125		
1,300.0	1,298.3	1,276.3	1,270.0	2.5	2.9	172.47	32.8	85.2	151.6	147.2	4.44	34.147		
1,400.0	1,398.1	1,370.3	1,362.1	2.7	3.3	172.82	38.8	102.5	177.2	172.4	4.78	37.089		
1,500.0	1,497.9	1,463.4	1,453.2	2.9	3.7	173.09	45.2	121.1	204.3	199.2	5.11	39.966		
1,600.0	1,597.7	1,555.7	1,543.1	3.1	4.1	173.29	52.0	140.9	233.0	227.5	5.44	42.788		
1,700.0	1,697.5	1,649.4	1,634.1	3.3	4.5	173.45	59.3	162.1	262.9	257.1	5.78	45.492		
1,800.0	1,797.3	1,744.8	1,726.6	3.5	4.9	173.58	66.8	183.8	293.0	286.9	6.12	47.902		
1,900.0	1,897.1	1,840.1	1,819.2	3.7	5.3	173.69	74.3	205.6	323.2	316.7	6.46	50.061		
2,000.0	1,996.9	1,935.5	1,911.7	3.9	5.7	173.78	81.8	227.3	353.3	346.5	6.79	52.005		
2,100.0	2,096.7	2,030.9	2,004.2	4.1	6.2	173.85	89.3	249.1	383.4	376.3	7.13	53.765		
2,200.0	2,196.5	2,126.2	2,096.8	4.3	6.6	173.92	96.8	270.8	413.5	406.0	7.47	55.366		
2,300.0	2,296.3	2,221.6	2,189.3	4.5	7.0	173.97	104.3	292.6	443.6	435.8	7.81	56.829		
2,400.0	2,396.1	2,316.9	2,281.9	4.7	7.5	174.02	111.8	314.3	473.7	465.6	8.14	58.170		
2,500.0	2,495.9	2,412.3	2,374.4	4.9	7.9	174.06	119.3	336.0	503.9	495.4	8.48	59.405		
2,600.0	2,595.7	2,507.6	2,467.0	5.2	8.4	174.10	126.8	357.8	534.0	525.2	8.82	60.545		
2,700.0	2,695.5	2,603.0	2,559.5	5.4	8.8	174.13	134.2	379.5	564.1	554.9	9.16	61.601		
2,800.0	2,795.3	2,698.3	2,652.0	5.6	9.2	174.16	141.7	401.3	594.2	584.7	9.50	62.583		
2,900.0	2,895.1	2,793.7	2,744.6	5.8	9.7	174.19	149.2	423.0	624.3	614.5	9.83	63.496		
3,000.0	2,994.9	2,889.1	2,837.1	6.0	10.1	174.21	156.7	444.8	654.5	644.3	10.17	64.349		
3,100.0	3,094.7	2,984.4	2,929.7	6.2	10.6	174.24	164.2	466.5	684.6	674.1	10.51	65.148		
3,200.0	3,194.5	3,079.8	3,022.2	6.4	11.0	174.26	171.7	488.2	714.7	703.9	10.85	65.897		
3,300.0	3,294.3	3,175.1	3,114.7	6.6	11.4	174.28	179.2	510.0	744.8	733.6	11.18	66.600		
3,400.0	3,394.1	3,270.5	3,207.3	6.8	11.9	174.29	186.7	531.7	774.9	763.4	11.52	67.263		
3,500.0	3,493.9	3,365.8	3,299.8	7.0	12.3	174.31	194.2	553.5	805.1	793.2	11.86	67.887		
3,600.0	3,593.8	3,461.2	3,392.4	7.2	12.8	174.32	201.7	575.2	835.2	823.0	12.20	68.477		
3,700.0	3,693.6	3,556.5	3,484.9	7.4	13.2	174.34	209.2	596.9	865.3	852.8	12.53	69.036		
3,800.0	3,793.4	3,651.9	3,577.4	7.6	13.6	174.35	216.6	618.7	895.4	882.5	12.87	69.565		
3,900.0	3,893.2	3,747.3	3,670.0	7.8	14.1	174.36	224.1	640.4	925.5	912.3	13.21	70.067		
4,000.0	3,993.0	3,842.6	3,762.5	8.0	14.5	174.38	231.6	662.2	955.7	942.1	13.55	70.544		
4,100.0	4,092.8	3,938.0	3,855.1	8.2	15.0	174.39	239.1	683.9	985.8	971.9	13.88	70.998		
4,200.0	4,192.6	4,033.3	3,947.6	8.4	15.4	174.40	246.6	705.7	1,015.9	1,001.7	14.22	71.430		
4,300.0	4,292.4	4,128.7	4,040.2	8.7	15.9	174.41	254.1	727.4	1,046.0	1,031.5	14.56	71.842		
4,400.0	4,392.2	4,224.0	4,132.7	8.9	16.3	174.41	261.6	749.1	1,076.1	1,061.2	14.90	72.236		
4,500.0	4,492.0	4,319.4	4,225.2	9.1	16.7	174.42	269.1	770.9	1,106.3	1,091.0	15.24	72.612		
4,600.0	4,591.8	4,414.7	4,317.8	9.3	17.2	174.43	276.6	792.6	1,136.4	1,120.8	15.57	72.972		
4,700.0	4,691.6	4,510.1	4,410.3	9.5	17.6	174.44	284.1	814.4	1,166.5	1,150.6	15.91	73.317		
4,800.0	4,791.4	4,605.5	4,502.9	9.7	18.1	174.45	291.6	836.1	1,196.6	1,180.4	16.25	73.647		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
4,900.0	4,891.2	4,700.8	4,595.4	9.9	18.5	174.45	299.1	857.9	1,226.7	1,210.2	16.59	73.964		
5,000.0	4,991.0	4,796.2	4,687.9	10.1	19.0	174.46	306.5	879.6	1,256.9	1,239.9	16.92	74.268		
5,100.0	5,090.8	4,891.5	4,780.5	10.3	19.4	174.47	314.0	901.3	1,287.0	1,269.7	17.26	74.560		
5,200.0	5,190.6	4,986.9	4,873.0	10.5	19.8	174.47	321.5	923.1	1,317.1	1,299.5	17.60	74.841		
5,300.0	5,290.4	5,082.2	4,965.6	10.7	20.3	174.48	329.0	944.8	1,347.2	1,329.3	17.94	75.112		
5,400.0	5,390.2	5,177.6	5,058.1	10.9	20.7	174.48	336.5	966.6	1,377.3	1,359.1	18.27	75.373		
5,500.0	5,490.0	5,272.9	5,150.6	11.1	21.2	174.49	344.0	988.3	1,407.5	1,388.9	18.61	75.624		
5,600.0	5,589.8	5,368.3	5,243.2	11.3	21.6	174.49	351.5	1,010.0	1,437.6	1,418.6	18.95	75.866		
5,700.0	5,689.6	5,463.7	5,335.7	11.5	22.1	174.50	359.0	1,031.8	1,467.7	1,448.4	19.29	76.100		
5,800.0	5,789.4	5,559.0	5,428.3	11.7	22.5	174.50	366.5	1,053.5	1,497.8	1,478.2	19.62	76.325		
5,900.0	5,889.2	5,654.4	5,520.8	11.9	22.9	174.51	374.0	1,075.3	1,528.0	1,508.0	19.96	76.543		
6,000.0	5,989.0	5,749.7	5,613.4	12.2	23.4	174.51	381.5	1,097.0	1,558.1	1,537.8	20.30	76.754		
6,100.0	6,088.8	5,845.1	5,705.9	12.4	23.8	174.51	389.0	1,118.8	1,588.2	1,567.6	20.64	76.958		
6,200.0	6,188.6	5,940.4	5,798.4	12.6	24.3	174.52	396.4	1,140.5	1,618.3	1,597.3	20.97	77.155		
6,300.0	6,288.4	6,035.8	5,891.0	12.8	24.7	174.52	403.9	1,162.2	1,648.4	1,627.1	21.31	77.346		
6,400.0	6,388.2	6,131.2	5,983.5	13.0	25.2	174.53	411.4	1,184.0	1,678.6	1,656.9	21.65	77.531		
6,500.0	6,488.0	6,226.5	6,076.1	13.2	25.6	174.53	418.9	1,205.7	1,708.7	1,686.7	21.99	77.711		
6,600.0	6,587.9	6,321.9	6,168.6	13.4	26.0	174.53	426.4	1,227.5	1,738.8	1,716.5	22.33	77.885		
6,700.0	6,687.7	6,417.2	6,261.1	13.6	26.5	174.54	433.9	1,249.2	1,768.9	1,746.3	22.66	78.054		
6,800.0	6,787.5	6,512.6	6,353.7	13.8	26.9	174.54	441.4	1,271.0	1,799.0	1,776.0	23.00	78.218		
6,900.0	6,887.3	6,607.9	6,446.2	14.0	27.4	174.54	448.9	1,292.7	1,829.2	1,805.8	23.34	78.377		
7,000.0	6,987.1	6,703.3	6,538.8	14.2	27.8	174.55	456.4	1,314.4	1,859.3	1,835.6	23.68	78.531		
7,100.0	7,086.9	6,798.6	6,631.3	14.4	28.3	174.55	463.9	1,336.2	1,889.4	1,865.4	24.01	78.682		
7,173.7	7,160.4	6,868.9	6,699.5	14.6	28.6	174.55	469.4	1,352.2	1,911.6	1,887.3	24.26	78.790		
7,200.0	7,166.7	6,894.0	6,723.9	14.6	28.7	133.53	471.4	1,357.9	1,919.3	1,895.0	24.38	78.733		
7,250.0	7,236.4	6,941.9	6,770.4	14.7	28.9	97.37	475.1	1,368.9	1,933.0	1,908.4	24.62	78.517		
7,300.0	7,285.6	6,989.6	6,816.7	14.8	29.1	85.87	478.9	1,379.7	1,945.3	1,920.5	24.86	78.241		
7,350.0	7,334.0	7,036.9	6,862.5	14.9	29.4	80.52	482.6	1,390.5	1,956.2	1,931.1	25.09	77.964		
7,400.0	7,381.0	7,083.2	6,907.4	15.0	29.6	77.50	486.2	1,401.1	1,965.6	1,940.3	25.30	77.700		
7,450.0	7,426.5	7,128.3	6,951.2	15.0	29.8	75.66	489.8	1,411.3	1,973.5	1,948.0	25.49	77.430		
7,500.0	7,470.0	7,171.8	6,993.4	15.1	30.0	74.55	493.2	1,421.3	1,980.1	1,954.4	25.68	77.110		
7,550.0	7,511.2	7,213.4	7,033.8	15.2	30.2	73.93	496.4	1,430.8	1,985.4	1,959.5	25.89	76.682		
7,600.0	7,549.7	7,252.8	7,072.0	15.4	30.4	73.66	499.5	1,439.7	1,989.5	1,963.3	26.15	76.092		
7,650.0	7,585.4	7,289.6	7,107.8	15.5	30.5	73.65	502.4	1,448.1	1,992.5	1,966.0	26.46	75.296		
7,700.0	7,617.9	7,328.9	7,145.9	15.7	30.7	73.94	505.5	1,457.1	1,994.5	1,967.7	26.87	74.228		
7,750.0	7,647.0	7,405.2	7,220.1	15.9	31.0	75.41	505.4	1,474.5	1,995.4	1,967.9	27.50	72.568		
7,800.0	7,672.4	7,449.8	7,263.3	16.2	31.2	76.38	500.6	1,484.7	1,995.3	1,967.2	28.09	71.038		
7,850.0	7,694.0	7,474.6	7,287.1	16.5	31.3	76.94	496.5	1,490.3	1,994.9	1,966.2	28.67	69.579		
7,900.0	7,711.6	7,486.6	7,298.5	16.8	31.3	77.21	494.1	1,492.9	1,994.4	1,965.1	29.28	68.121		
7,950.0	7,725.0	7,490.1	7,301.9	17.2	31.3	77.27	493.4	1,493.7	1,993.8	1,963.9	29.92	66.645		
8,000.0	7,734.2	7,487.8	7,299.7	17.6	31.3	77.19	493.8	1,493.2	1,993.3	1,962.7	30.60	65.144		
8,050.0	7,739.1	7,481.3	7,293.5	18.1	31.3	77.03	495.2	1,491.8	1,992.8	1,961.5	31.32	63.621		
8,081.4	7,740.0	7,475.7	7,288.1	18.3	31.3	76.89	496.3	1,490.5	1,992.5	1,960.7	31.80	62.655		
8,100.0	7,740.0	7,472.1	7,284.7	18.5	31.3	76.79	496.9	1,489.7	1,992.4	1,960.4	31.99	62.277		
8,102.4	7,740.0	7,471.7	7,284.3	18.6	31.3	76.78	497.0	1,489.6	1,992.4	1,960.4	32.02	62.225		
8,200.0	7,740.0	7,456.4	7,269.6	19.6	31.2	76.35	499.6	1,486.2	1,994.7	1,961.7	33.08	60.293		
8,300.0	7,740.0	7,450.0	7,263.5	20.7	31.2	76.16	500.6	1,484.7	2,002.0	1,967.7	34.28	58.405		
8,400.0	7,740.0	7,435.7	7,249.7	21.9	31.1	75.76	502.5	1,481.5	2,014.0	1,978.5	35.51	56.712		
8,500.0	7,740.0	7,428.5	7,242.7	23.2	31.1	75.55	503.3	1,479.8	2,030.9	1,994.1	36.83	55.150		
8,600.0	7,740.0	7,422.7	7,237.1	24.6	31.1	75.38	503.9	1,478.5	2,052.5	2,014.3	38.19	53.747		
8,700.0	7,740.0	7,417.8	7,232.4	25.9	31.1	75.25	504.4	1,477.4	2,078.7	2,039.1	39.59	52.500		
8,800.0	7,740.0	7,413.8	7,228.5	27.4	31.1	75.13	504.7	1,476.5	2,109.3	2,068.2	41.03	51.403		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 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 #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	7,740.0	7,400.0	7,215.1	28.8	31.0	74.73	505.7	1,473.3	2,144.1	2,101.6	42.46	50.496	
9,000.0	7,740.0	7,400.0	7,215.1	30.3	31.0	74.73	505.7	1,473.3	2,182.9	2,138.9	43.96	49.651	
9,100.0	7,740.0	7,400.0	7,215.1	31.9	31.0	74.73	505.7	1,473.3	2,225.5	2,180.0	45.49	48.923	
9,200.0	7,740.0	7,400.0	7,215.1	33.4	31.0	74.73	505.7	1,473.3	2,271.7	2,224.6	47.03	48.302	
9,300.0	7,740.0	7,400.0	7,215.1	35.0	31.0	74.73	505.7	1,473.3	2,321.3	2,272.7	48.59	47.776	
9,400.0	7,740.0	7,400.0	7,215.1	36.6	31.0	74.73	505.7	1,473.3	2,374.0	2,323.9	50.16	47.333	
9,500.0	7,740.0	7,400.0	7,215.1	38.2	31.0	74.73	505.7	1,473.3	2,429.8	2,378.0	51.74	46.965	
9,600.0	7,740.0	7,400.0	7,215.1	39.8	31.0	74.73	505.7	1,473.3	2,488.3	2,435.0	53.33	46.661	
9,700.0	7,740.0	7,400.0	7,215.1	41.4	31.0	74.73	505.7	1,473.3	2,549.4	2,494.5	54.93	46.416	
9,800.0	7,740.0	7,400.0	7,215.1	43.0	31.0	74.73	505.7	1,473.3	2,612.9	2,556.4	56.53	46.220	
9,900.0	7,740.0	7,400.0	7,215.1	44.7	31.0	74.73	505.7	1,473.3	2,678.6	2,620.5	58.14	46.068	
10,000.0	7,740.0	7,400.0	7,215.1	46.3	31.0	74.73	505.7	1,473.3	2,746.4	2,686.6	59.76	45.954	
10,100.0	7,740.0	7,400.0	7,215.1	48.0	31.0	74.73	505.7	1,473.3	2,816.1	2,754.7	61.39	45.874	
10,200.0	7,740.0	7,400.0	7,215.1	49.7	31.0	74.73	505.7	1,473.3	2,887.6	2,824.6	63.02	45.823	
10,300.0	7,740.0	7,400.0	7,215.1	51.3	31.0	74.73	505.7	1,473.3	2,960.8	2,896.1	64.65	45.796	
10,400.0	7,740.0	7,400.0	7,215.1	53.0	31.0	74.73	505.7	1,473.3	3,035.4	2,969.1	66.29	45.792	
10,500.0	7,740.0	7,400.0	7,215.1	54.7	31.0	74.73	505.7	1,473.3	3,111.5	3,043.6	67.93	45.806	
10,600.0	7,740.0	7,400.0	7,215.1	56.4	31.0	74.73	505.7	1,473.3	3,188.9	3,119.4	69.57	45.836	
10,700.0	7,740.0	7,400.0	7,215.1	58.1	31.0	74.73	505.7	1,473.3	3,267.6	3,196.4	71.22	45.880	
10,800.0	7,740.0	7,400.0	7,215.1	59.8	31.0	74.73	505.7	1,473.3	3,347.4	3,274.5	72.87	45.936	
10,900.0	7,740.0	7,400.0	7,215.1	61.5	31.0	74.73	505.7	1,473.3	3,428.2	3,353.7	74.52	46.003	
11,000.0	7,740.0	7,400.0	7,215.1	63.2	31.0	74.73	505.7	1,473.3	3,510.1	3,433.9	76.18	46.078	
11,105.4	7,740.0	7,400.0	7,215.1	65.0	31.0	74.73	505.7	1,473.3	3,597.3	3,519.4	77.92	46.165	
11,191.0	7,740.0	7,400.0	7,215.1	66.4	31.0	74.38	505.7	1,473.3	3,669.2	3,590.1	79.12	46.373	
11,200.0	7,740.0	7,400.0	7,215.1	66.6	31.0	74.38	505.7	1,473.3	3,676.8	3,597.6	79.27	46.382	
11,300.0	7,740.0	7,400.0	7,215.1	68.3	31.0	74.38	505.7	1,473.3	3,762.0	3,681.0	80.93	46.484	
11,400.0	7,740.0	7,400.0	7,215.1	70.0	31.0	74.38	505.7	1,473.3	3,847.8	3,765.3	82.59	46.590	
11,500.0	7,740.0	7,400.0	7,215.1	71.7	31.0	74.38	505.7	1,473.3	3,934.4	3,850.1	84.25	46.699	
11,600.0	7,740.0	7,400.0	7,215.1	73.4	31.0	74.38	505.7	1,473.3	4,021.6	3,935.6	85.91	46.810	
11,700.0	7,740.0	7,400.0	7,215.1	75.1	31.0	74.38	505.7	1,473.3	4,109.3	4,021.7	87.58	46.923	
11,800.0	7,740.0	7,400.0	7,215.1	76.9	31.0	74.38	505.7	1,473.3	4,197.6	4,108.4	89.24	47.037	
11,900.0	7,740.0	7,400.0	7,215.1	78.6	31.0	74.38	505.7	1,473.3	4,286.4	4,195.5	90.91	47.152	
12,000.0	7,740.0	7,400.0	7,215.1	80.3	31.0	74.38	505.7	1,473.3	4,375.7	4,283.1	92.57	47.267	
12,100.0	7,740.0	7,400.0	7,215.1	82.0	31.0	74.38	505.7	1,473.3	4,465.4	4,371.2	94.24	47.383	
12,200.0	7,740.0	7,400.0	7,215.1	83.8	31.0	74.38	505.7	1,473.3	4,555.6	4,459.7	95.91	47.499	
12,300.0	7,740.0	7,400.0	7,215.1	85.5	31.0	74.38	505.7	1,473.3	4,646.2	4,548.6	97.58	47.614	
12,400.0	7,740.0	7,400.0	7,215.1	87.2	31.0	74.38	505.7	1,473.3	4,737.1	4,637.9	99.25	47.729	
12,500.0	7,740.0	7,377.8	7,193.5	88.9	30.9	73.73	506.6	1,468.3	4,828.0	4,727.4	100.62	47.984	
12,600.0	7,740.0	7,377.5	7,193.2	90.7	30.9	73.72	506.6	1,468.2	4,919.7	4,817.4	102.28	48.100	
12,700.0	7,740.0	7,377.3	7,193.0	92.4	30.9	73.72	506.6	1,468.1	5,011.6	4,907.7	103.94	48.215	
12,800.0	7,740.0	7,377.0	7,192.7	94.1	30.9	73.71	506.6	1,468.1	5,103.9	4,998.3	105.61	48.329	
12,900.0	7,740.0	7,376.8	7,192.5	95.9	30.9	73.70	506.6	1,468.0	5,196.4	5,089.2	107.27	48.442	

Cathedral Energy Services

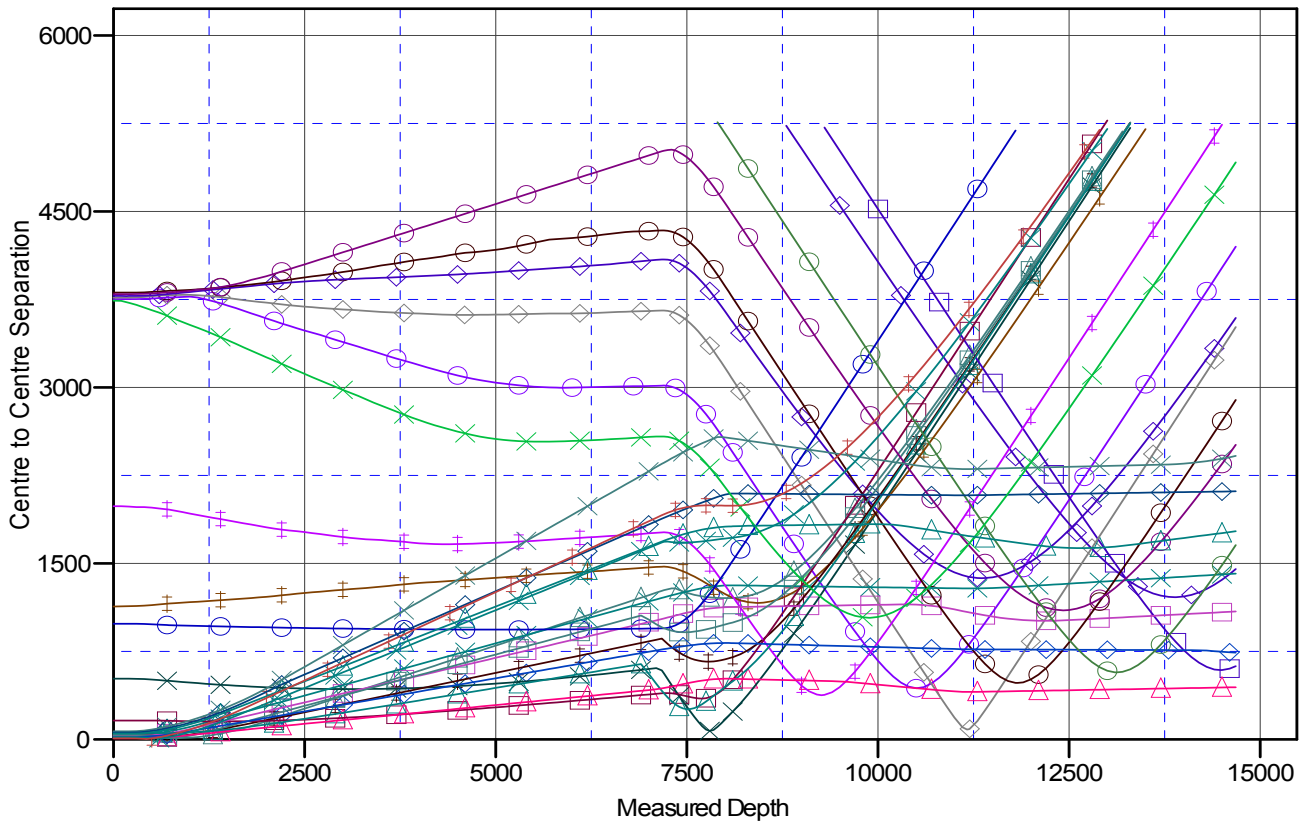
Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Woolley-Becky 2A-7H-E168
Project:	DJ Wattenberg	TVD Reference:	KB @ 5007.0ft (Unassigned)
Reference Site:	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	MD Reference:	KB @ 5007.0ft (Unassigned)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Woolley-Becky 2A-7H-E168	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors 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 KB @ 5007.0ft (Unassigned)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Woolley-Becky 2A-7H-E168
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.29°

Ladder Plot



LEGEND

3TING), ENCANA WELL, SURVEYS V0	Woolley-Sosa 2C-7H-E168, HZ, Plan #2 V0	Woolley-Becky 2C-7H-E168, HZ, Plan #2
3), NOBLE WELL, NO SURVEYS V0	WOOLLEY 11-7 (EXISTING), ENCANA WELL, SURVEYS V0	Woolley-Becky 2H-7H-E168, HZ, Plan #2
E 168, HZ, Plan #2 V0	WOOLLEY 12-7 (EXISTING), ENCANA WELL, NO SURVEYS V0	Woolley-Becky 2B-7H-E168, HZ, Plan #2
E 168, HZ, Plan #3 V0	Woolley-Becky 2D-7H-E168, HZ, Plan #4 V0	BECKY 4 (EXISTING), MARTIN EXP V
EXISTING), ENCANA WELL, GYRO V0	BEARDEN 13-6 (EXISTING), ENCANA WELL, SURVEYS V0	Woolley-Becky 2G-7H-E168, HZ, Plan #2
G), FOUNDATION WELL, NO SURVEYS V0	Thomas 7-12 (Existing), Existing, NO SURVEYS V0	Woolley-Sosa 2F-7H-E168, HZ, Plan #2
STING), ENCANA WELL, SURVEYS V0	Woolley-Sosa 2D-7H-E168, HZ, Plan #2 V0	BEARDEN 2-8-6 (EXISTING), ENCANA
VG), ENCANA WELL, SURVEYS V0	Woolley-Sosa 2B-7H-E168, HZ, Plan #2 V0	Woolley-Becky 2F-7H-E168, HZ, Plan #2
E 168, HZ, Plan #2 V0	BEARDEN 2-4-6 (EXISTING), ENCANA WELL, PLAN ONLY V0	Woolley-Sosa 2G-7H-E168, HZ, Plan #2

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