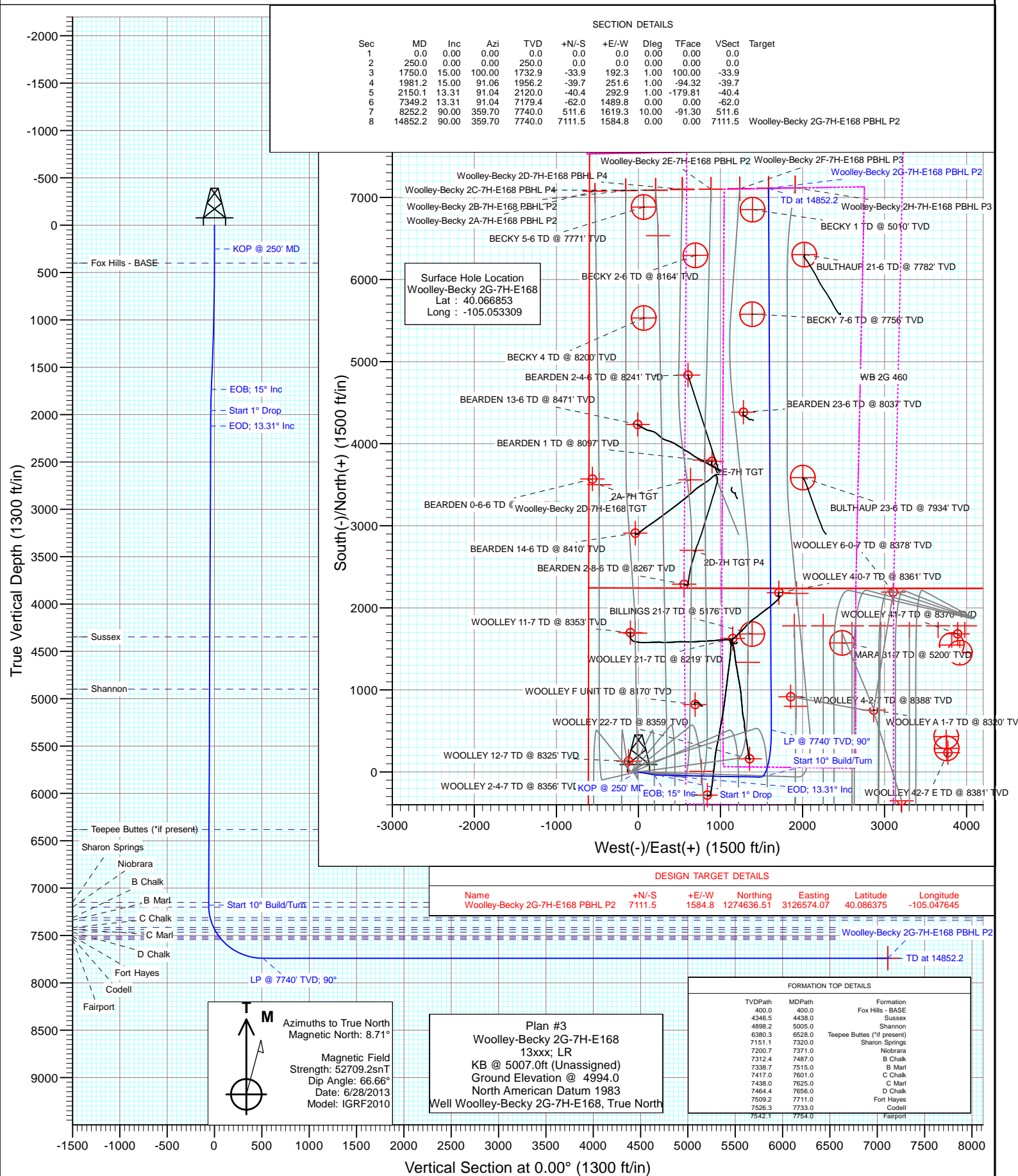




Project: DJ Wattenberg  
Site: S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)  
Well: Woolley-Becky 2G-7H-E168  
Wellbore: Hz  
Design: Plan #3



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #3		

<b>Project</b>	DJ Wattenberg		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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 2G-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,517.12 ft	Latitude:	40.066853
	+E/-W	0.0 ft	Easting:	3,125,025.13 ft	Longitude:	-105.053309
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,994.0 ft

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

<b>Design</b>	Plan #3			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	0.00

<b>Plan Sections</b>										
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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,750.0	15.00	100.00	1,732.9	-33.9	192.3	1.00	1.00	0.00	100.00	
1,981.2	15.00	91.06	1,956.2	-39.7	251.6	1.00	0.00	-3.87	-94.32	
2,150.1	13.31	91.04	2,120.0	-40.4	292.9	1.00	-1.00	-0.01	-179.81	
7,349.2	13.31	91.04	7,179.4	-62.0	1,489.8	0.00	0.00	0.00	0.00	
8,252.2	90.00	359.70	7,740.0	511.6	1,619.3	10.00	8.49	-10.11	-91.30	
14,852.2	90.00	359.70	7,740.0	7,111.5	1,584.8	0.00	0.00	0.00	0.00	Woolley-Becky 2G-7H-

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #3		

### 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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250' MD
300.0	0.50	100.00	300.0	0.0	0.2	0.0	1.00	1.00	
400.0	1.50	100.00	400.0	-0.3	1.9	-0.3	1.00	1.00	Fox Hills - BASE
500.0	2.50	100.00	499.9	-0.9	5.4	-0.9	1.00	1.00	
600.0	3.50	100.00	599.8	-1.9	10.5	-1.9	1.00	1.00	
700.0	4.50	100.00	699.5	-3.1	17.4	-3.1	1.00	1.00	
800.0	5.50	100.00	799.2	-4.6	26.0	-4.6	1.00	1.00	
900.0	6.50	100.00	898.6	-6.4	36.3	-6.4	1.00	1.00	
1,000.0	7.50	100.00	997.9	-8.5	48.3	-8.5	1.00	1.00	
1,100.0	8.50	100.00	1,096.9	-10.9	62.0	-10.9	1.00	1.00	
1,200.0	9.50	100.00	1,195.7	-13.6	77.4	-13.6	1.00	1.00	
1,300.0	10.50	100.00	1,294.1	-16.7	94.5	-16.7	1.00	1.00	
1,400.0	11.50	100.00	1,392.3	-20.0	113.3	-20.0	1.00	1.00	
1,500.0	12.50	100.00	1,490.1	-23.6	133.8	-23.6	1.00	1.00	
1,600.0	13.50	100.00	1,587.5	-27.5	155.9	-27.5	1.00	1.00	
1,700.0	14.50	100.00	1,684.6	-31.7	179.7	-31.7	1.00	1.00	
1,750.0	15.00	100.00	1,732.9	-33.9	192.3	-33.9	1.00	1.00	EOB; 15° Inc
1,800.0	14.97	98.07	1,781.2	-35.9	205.0	-35.9	1.00	-0.06	
1,900.0	14.96	94.20	1,877.8	-38.7	230.7	-38.7	1.00	-0.01	
1,981.2	15.00	91.06	1,956.2	-39.7	251.6	-39.7	1.00	0.05	Start 1° Drop
2,000.0	14.81	91.06	1,974.4	-39.7	256.5	-39.7	1.00	-1.00	
2,100.0	13.81	91.04	2,071.3	-40.2	281.2	-40.2	1.00	-1.00	
2,150.1	13.31	91.04	2,120.0	-40.4	292.9	-40.4	1.00	-1.00	EOD; 13.31° Inc
2,200.0	13.31	91.04	2,168.6	-40.6	304.4	-40.6	0.00	0.00	
2,300.0	13.31	91.04	2,265.9	-41.0	327.5	-41.0	0.00	0.00	
2,400.0	13.31	91.04	2,363.2	-41.4	350.5	-41.4	0.00	0.00	
2,500.0	13.31	91.04	2,460.5	-41.9	373.5	-41.9	0.00	0.00	
2,600.0	13.31	91.04	2,557.9	-42.3	396.5	-42.3	0.00	0.00	
2,700.0	13.31	91.04	2,655.2	-42.7	419.5	-42.7	0.00	0.00	
2,800.0	13.31	91.04	2,752.5	-43.1	442.6	-43.1	0.00	0.00	
2,900.0	13.31	91.04	2,849.8	-43.5	465.6	-43.5	0.00	0.00	
3,000.0	13.31	91.04	2,947.1	-43.9	488.6	-43.9	0.00	0.00	
3,100.0	13.31	91.04	3,044.4	-44.4	511.6	-44.4	0.00	0.00	
3,200.0	13.31	91.04	3,141.7	-44.8	534.6	-44.8	0.00	0.00	
3,300.0	13.31	91.04	3,239.1	-45.2	557.7	-45.2	0.00	0.00	
3,400.0	13.31	91.04	3,336.4	-45.6	580.7	-45.6	0.00	0.00	
3,500.0	13.31	91.04	3,433.7	-46.0	603.7	-46.0	0.00	0.00	
3,600.0	13.31	91.04	3,531.0	-46.4	626.7	-46.4	0.00	0.00	
3,700.0	13.31	91.04	3,628.3	-46.9	649.7	-46.9	0.00	0.00	
3,800.0	13.31	91.04	3,725.6	-47.3	672.7	-47.3	0.00	0.00	
3,900.0	13.31	91.04	3,822.9	-47.7	695.8	-47.7	0.00	0.00	
4,000.0	13.31	91.04	3,920.2	-48.1	718.8	-48.1	0.00	0.00	
4,100.0	13.31	91.04	4,017.6	-48.5	741.8	-48.5	0.00	0.00	
4,200.0	13.31	91.04	4,114.9	-48.9	764.8	-48.9	0.00	0.00	
4,300.0	13.31	91.04	4,212.2	-49.4	787.8	-49.4	0.00	0.00	
4,400.0	13.31	91.04	4,309.5	-49.8	810.9	-49.8	0.00	0.00	
4,438.0	13.31	91.04	4,346.5	-49.9	819.6	-49.9	0.00	0.00	Sussex
4,500.0	13.31	91.04	4,406.8	-50.2	833.9	-50.2	0.00	0.00	
4,600.0	13.31	91.04	4,504.1	-50.6	856.9	-50.6	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,700.0	13.31	91.04	4,601.4	-51.0	879.9	-51.0	0.00	0.00	
4,800.0	13.31	91.04	4,698.8	-51.4	902.9	-51.4	0.00	0.00	
4,900.0	13.31	91.04	4,796.1	-51.9	926.0	-51.9	0.00	0.00	
5,000.0	13.31	91.04	4,893.4	-52.3	949.0	-52.3	0.00	0.00	
5,005.0	13.31	91.04	4,898.2	-52.3	950.1	-52.3	0.00	0.00	Shannon
5,100.0	13.31	91.04	4,990.7	-52.7	972.0	-52.7	0.00	0.00	
5,200.0	13.31	91.04	5,088.0	-53.1	995.0	-53.1	0.00	0.00	
5,300.0	13.31	91.04	5,185.3	-53.5	1,018.0	-53.5	0.00	0.00	
5,400.0	13.31	91.04	5,282.6	-53.9	1,041.1	-53.9	0.00	0.00	
5,500.0	13.31	91.04	5,379.9	-54.3	1,064.1	-54.3	0.00	0.00	
5,600.0	13.31	91.04	5,477.3	-54.8	1,087.1	-54.8	0.00	0.00	
5,700.0	13.31	91.04	5,574.6	-55.2	1,110.1	-55.2	0.00	0.00	
5,800.0	13.31	91.04	5,671.9	-55.6	1,133.1	-55.6	0.00	0.00	
5,900.0	13.31	91.04	5,769.2	-56.0	1,156.2	-56.0	0.00	0.00	
6,000.0	13.31	91.04	5,866.5	-56.4	1,179.2	-56.4	0.00	0.00	
6,100.0	13.31	91.04	5,963.8	-56.8	1,202.2	-56.8	0.00	0.00	
6,200.0	13.31	91.04	6,061.1	-57.3	1,225.2	-57.3	0.00	0.00	
6,300.0	13.31	91.04	6,158.5	-57.7	1,248.2	-57.7	0.00	0.00	
6,400.0	13.31	91.04	6,255.8	-58.1	1,271.3	-58.1	0.00	0.00	
6,500.0	13.31	91.04	6,353.1	-58.5	1,294.3	-58.5	0.00	0.00	
6,528.0	13.31	91.04	6,380.3	-58.6	1,300.7	-58.6	0.00	0.00	Teepee Buttes (*if present)
6,600.0	13.31	91.04	6,450.4	-58.9	1,317.3	-58.9	0.00	0.00	
6,700.0	13.31	91.04	6,547.7	-59.3	1,340.3	-59.3	0.00	0.00	
6,800.0	13.31	91.04	6,645.0	-59.8	1,363.3	-59.8	0.00	0.00	
6,900.0	13.31	91.04	6,742.3	-60.2	1,386.4	-60.2	0.00	0.00	
7,000.0	13.31	91.04	6,839.7	-60.6	1,409.4	-60.6	0.00	0.00	
7,100.0	13.31	91.04	6,937.0	-61.0	1,432.4	-61.0	0.00	0.00	
7,200.0	13.31	91.04	7,034.3	-61.4	1,455.4	-61.4	0.00	0.00	
7,300.0	13.31	91.04	7,131.6	-61.8	1,478.4	-61.8	0.00	0.00	
7,320.0	13.31	91.04	7,151.1	-61.9	1,483.0	-61.9	0.00	0.00	Sharon Springs
7,349.2	13.31	91.04	7,179.4	-62.0	1,489.8	-62.0	0.00	0.00	Start 10° Build/Turn
7,371.0	13.44	81.60	7,200.7	-61.7	1,494.8	-61.7	10.00	0.58	Niobrara
7,400.0	14.12	69.75	7,228.9	-60.0	1,501.4	-60.0	10.00	2.37	
7,487.0	18.85	43.55	7,312.4	-46.1	1,521.1	-46.1	10.00	5.43	B Chalk
7,500.0	19.79	40.81	7,324.6	-42.9	1,524.0	-42.9	10.00	7.18	
7,515.0	20.91	37.95	7,338.7	-38.9	1,527.3	-38.9	10.00	7.49	B Marl
7,600.0	27.92	26.20	7,416.1	-9.0	1,545.5	-9.0	10.00	8.25	
7,601.0	28.01	26.10	7,417.0	-8.6	1,545.7	-8.6	10.00	8.71	C Chalk
7,625.0	30.12	23.76	7,438.0	2.0	1,550.6	2.0	10.00	8.80	C Marl
7,656.0	32.91	21.14	7,464.4	17.0	1,556.7	17.0	10.00	8.98	D Chalk
7,700.0	36.93	18.04	7,500.5	40.7	1,565.1	40.7	10.00	9.15	
7,711.0	37.95	17.35	7,509.2	47.1	1,567.2	47.1	10.00	9.26	Fort Hayes
7,733.0	40.00	16.07	7,526.3	60.3	1,571.2	60.3	10.00	9.31	Codell
7,754.0	41.97	14.95	7,542.1	73.6	1,574.8	73.6	10.00	9.36	Fairport
7,800.0	46.31	12.76	7,575.1	104.7	1,582.5	104.7	10.00	9.44	
7,900.0	55.86	8.93	7,637.9	181.0	1,596.9	181.0	10.00	9.55	
8,000.0	65.50	5.89	7,686.8	267.4	1,608.0	267.4	10.00	9.64	
8,100.0	75.19	3.28	7,720.4	361.1	1,615.5	361.1	10.00	9.70	
8,200.0	84.92	0.91	7,737.7	459.4	1,619.1	459.4	10.00	9.72	
8,252.2	90.00	359.70	7,740.0	511.6	1,619.3	511.6	10.00	9.73	LP @ 7740' TVD; 90°
8,300.0	90.00	359.70	7,740.0	559.4	1,619.1	559.4	0.00	0.00	
8,400.0	90.00	359.70	7,740.0	659.3	1,618.6	659.3	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #3		

### 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
8,500.0	90.00	359.70	7,740.0	759.3	1,618.0	759.3	0.00	0.00	
8,600.0	90.00	359.70	7,740.0	859.3	1,617.5	859.3	0.00	0.00	
8,700.0	90.00	359.70	7,740.0	959.3	1,617.0	959.3	0.00	0.00	
8,800.0	90.00	359.70	7,740.0	1,059.3	1,616.5	1,059.3	0.00	0.00	
8,900.0	90.00	359.70	7,740.0	1,159.3	1,615.9	1,159.3	0.00	0.00	
9,000.0	90.00	359.70	7,740.0	1,259.3	1,615.4	1,259.3	0.00	0.00	
9,100.0	90.00	359.70	7,740.0	1,359.3	1,614.9	1,359.3	0.00	0.00	
9,200.0	90.00	359.70	7,740.0	1,459.3	1,614.4	1,459.3	0.00	0.00	
9,300.0	90.00	359.70	7,740.0	1,559.3	1,613.9	1,559.3	0.00	0.00	
9,400.0	90.00	359.70	7,740.0	1,659.3	1,613.3	1,659.3	0.00	0.00	
9,500.0	90.00	359.70	7,740.0	1,759.3	1,612.8	1,759.3	0.00	0.00	
9,600.0	90.00	359.70	7,740.0	1,859.3	1,612.3	1,859.3	0.00	0.00	
9,700.0	90.00	359.70	7,740.0	1,959.3	1,611.8	1,959.3	0.00	0.00	
9,800.0	90.00	359.70	7,740.0	2,059.3	1,611.2	2,059.3	0.00	0.00	
9,900.0	90.00	359.70	7,740.0	2,159.3	1,610.7	2,159.3	0.00	0.00	
10,000.0	90.00	359.70	7,740.0	2,259.3	1,610.2	2,259.3	0.00	0.00	
10,100.0	90.00	359.70	7,740.0	2,359.3	1,609.7	2,359.3	0.00	0.00	
10,200.0	90.00	359.70	7,740.0	2,459.3	1,609.1	2,459.3	0.00	0.00	
10,300.0	90.00	359.70	7,740.0	2,559.3	1,608.6	2,559.3	0.00	0.00	
10,400.0	90.00	359.70	7,740.0	2,659.3	1,608.1	2,659.3	0.00	0.00	
10,500.0	90.00	359.70	7,740.0	2,759.3	1,607.6	2,759.3	0.00	0.00	
10,600.0	90.00	359.70	7,740.0	2,859.3	1,607.0	2,859.3	0.00	0.00	
10,700.0	90.00	359.70	7,740.0	2,959.3	1,606.5	2,959.3	0.00	0.00	
10,800.0	90.00	359.70	7,740.0	3,059.3	1,606.0	3,059.3	0.00	0.00	
10,900.0	90.00	359.70	7,740.0	3,159.3	1,605.5	3,159.3	0.00	0.00	
11,000.0	90.00	359.70	7,740.0	3,259.3	1,605.0	3,259.3	0.00	0.00	
11,100.0	90.00	359.70	7,740.0	3,359.3	1,604.4	3,359.3	0.00	0.00	
11,200.0	90.00	359.70	7,740.0	3,459.3	1,603.9	3,459.3	0.00	0.00	
11,300.0	90.00	359.70	7,740.0	3,559.3	1,603.4	3,559.3	0.00	0.00	
11,400.0	90.00	359.70	7,740.0	3,659.3	1,602.9	3,659.3	0.00	0.00	
11,500.0	90.00	359.70	7,740.0	3,759.3	1,602.3	3,759.3	0.00	0.00	
11,600.0	90.00	359.70	7,740.0	3,859.3	1,601.8	3,859.3	0.00	0.00	
11,700.0	90.00	359.70	7,740.0	3,959.3	1,601.3	3,959.3	0.00	0.00	
11,800.0	90.00	359.70	7,740.0	4,059.3	1,600.8	4,059.3	0.00	0.00	
11,900.0	90.00	359.70	7,740.0	4,159.3	1,600.2	4,159.3	0.00	0.00	
12,000.0	90.00	359.70	7,740.0	4,259.3	1,599.7	4,259.3	0.00	0.00	
12,100.0	90.00	359.70	7,740.0	4,359.3	1,599.2	4,359.3	0.00	0.00	
12,200.0	90.00	359.70	7,740.0	4,459.3	1,598.7	4,459.3	0.00	0.00	
12,300.0	90.00	359.70	7,740.0	4,559.3	1,598.1	4,559.3	0.00	0.00	
12,400.0	90.00	359.70	7,740.0	4,659.3	1,597.6	4,659.3	0.00	0.00	
12,500.0	90.00	359.70	7,740.0	4,759.3	1,597.1	4,759.3	0.00	0.00	
12,600.0	90.00	359.70	7,740.0	4,859.3	1,596.6	4,859.3	0.00	0.00	
12,700.0	90.00	359.70	7,740.0	4,959.3	1,596.1	4,959.3	0.00	0.00	
12,800.0	90.00	359.70	7,740.0	5,059.3	1,595.5	5,059.3	0.00	0.00	
12,900.0	90.00	359.70	7,740.0	5,159.3	1,595.0	5,159.3	0.00	0.00	
13,000.0	90.00	359.70	7,740.0	5,259.3	1,594.5	5,259.3	0.00	0.00	
13,100.0	90.00	359.70	7,740.0	5,359.3	1,594.0	5,359.3	0.00	0.00	
13,200.0	90.00	359.70	7,740.0	5,459.3	1,593.4	5,459.3	0.00	0.00	
13,300.0	90.00	359.70	7,740.0	5,559.3	1,592.9	5,559.3	0.00	0.00	
13,400.0	90.00	359.70	7,740.0	5,659.3	1,592.4	5,659.3	0.00	0.00	
13,500.0	90.00	359.70	7,740.0	5,759.3	1,591.9	5,759.3	0.00	0.00	
13,600.0	90.00	359.70	7,740.0	5,859.3	1,591.3	5,859.3	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
13,700.0	90.00	359.70	7,740.0	5,959.3	1,590.8	5,959.3	0.00	0.00	
13,800.0	90.00	359.70	7,740.0	6,059.3	1,590.3	6,059.3	0.00	0.00	
13,900.0	90.00	359.70	7,740.0	6,159.3	1,589.8	6,159.3	0.00	0.00	
14,000.0	90.00	359.70	7,740.0	6,259.3	1,589.2	6,259.3	0.00	0.00	
14,100.0	90.00	359.70	7,740.0	6,359.3	1,588.7	6,359.3	0.00	0.00	
14,200.0	90.00	359.70	7,740.0	6,459.3	1,588.2	6,459.3	0.00	0.00	
14,300.0	90.00	359.70	7,740.0	6,559.3	1,587.7	6,559.3	0.00	0.00	
14,400.0	90.00	359.70	7,740.0	6,659.3	1,587.2	6,659.3	0.00	0.00	
14,500.0	90.00	359.70	7,740.0	6,759.3	1,586.6	6,759.3	0.00	0.00	
14,600.0	90.00	359.70	7,740.0	6,859.3	1,586.1	6,859.3	0.00	0.00	
14,700.0	90.00	359.70	7,740.0	6,959.3	1,585.6	6,959.3	0.00	0.00	
14,800.0	90.00	359.70	7,740.0	7,059.3	1,585.1	7,059.3	0.00	0.00	
14,852.2	90.00	359.70	7,740.0	7,111.5	1,584.8	7,111.5	0.00	0.00	TD at 14852.2

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Woolley-Becky 2G-7H-E	0.00	0.00	7,740.0	7,111.5	1,584.8	1,274,636.51	3,126,574.07	40.086375	-105.047645
- plan hits target center									
- Point									
Woolley-Becky 2G-7H-E	0.00	0.00	7,788.0	7,113.3	1,586.2	1,274,638.34	3,126,575.46	40.086380	-105.047640
- plan misses target center by 48.1ft at 14852.2ft MD (7740.0 TVD, 7111.5 N, 1584.8 E)									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
400.0	400.0	Fox Hills - BASE				
4,438.0	4,346.5	Sussex				
5,005.0	4,898.2	Shannon				
6,528.0	6,380.3	Teepee Buttes (*if present)				
7,320.0	7,151.1	Sharon Springs				
7,371.0	7,200.7	Niobrara				
7,487.0	7,312.4	B Chalk				
7,515.0	7,338.7	B Marl				
7,601.0	7,417.0	C Chalk				
7,625.0	7,438.0	C Marl				
7,656.0	7,464.4	D Chalk				
7,711.0	7,509.2	Fort Hayes				
7,733.0	7,526.3	Codell				
7,754.0	7,542.1	Fairport				

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #3		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
250.0	250.0	0.0	0.0	KOP @ 250' MD
1,750.0	1,732.9	-33.9	192.3	EOB; 15° Inc
1,981.2	1,956.2	-39.7	251.6	Start 1° Drop
2,150.1	2,120.0	-40.4	292.9	EOD; 13.31° Inc
7,349.2	7,179.4	-62.0	1,489.8	Start 10° Build/Turn
8,252.2	7,740.0	511.6	1,619.3	LP @ 7740' TVD; 90°
14,852.2	7,740.0	7,111.5	1,584.8	TD at 14852.2

# **EnCana Oil & Gas (USA) Inc**

**DJ Wattenberg**

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

**Woolley-Becky 2G-7H-E168**

**Hz**

**Plan #3**

## **Anticollision Report**

**24 June, 2015**



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #3		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0ft	<b>Error Model:</b>	Systematic Ellipse
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum ellipse separation of 1,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b>	6/24/2015		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	14,852.2	Plan #3 (Hz)	Geolink MWD	Geolink MWD

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

### Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
S18-T1N-R68W (Erie Woolley)						
Erie-Woolley 4A-18H-I168 - Hz - Plan #2	7,788.8	13,811.5	341.5	219.0	2.788	CC, ES
Erie-Woolley 4A-18H-I168 - Hz - Plan #2	9,519.5	15,498.1	378.9	242.2	2.772	SF
Erie-Woolley 4B-18H-I168 - Hz - Plan #2	8,274.3	14,417.7	633.1	496.7	4.640	CC
Erie-Woolley 4B-18H-I168 - Hz - Plan #2	9,500.0	15,643.4	639.8	464.1	3.641	ES
Erie-Woolley 4B-18H-I168 - Hz - Plan #2	9,600.0	15,664.3	645.2	467.8	3.637	SF
Erie-Woolley 4C-18H-I168 - Hz - Plan #2	8,067.9	13,938.7	1,012.9	884.6	7.892	CC
Erie-Woolley 4C-18H-I168 - Hz - Plan #2	9,500.0	15,367.6	1,020.0	849.0	5.966	ES
Erie-Woolley 4C-18H-I168 - Hz - Plan #2	9,600.0	15,388.5	1,023.5	850.1	5.903	SF
Erie-Woolley 4D-18H-I168 - Hz - Plan #2						Out of range
Erie-Woolley 4E-18H-I168 - Hz - Plan #2						Out of range
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY						Out of range
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE						Out of range
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - NO SU	9,200.0	7,789.0	431.8	381.8	8.632	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - NO SU	9,300.0	7,789.0	415.3	368.7	8.906	ES
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - NO SU	9,319.8	7,789.0	414.8	369.0	9.060	CC
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	6,746.7	6,867.7	219.4	179.8	5.536	CC, ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	7,794.8	7,844.4	231.5	188.2	5.350	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	4,577.1	4,874.9	68.2	29.5	1.761	CC, ES, SF
WOOLLEY 31-7 (EXISTING) - ENCANA WELL - PLAN O	9,465.5	7,881.8	855.1	798.8	15.179	CC
WOOLLEY 31-7 (EXISTING) - ENCANA WELL - PLAN O	9,500.0	7,881.8	855.8	798.1	14.839	ES
WOOLLEY 31-7 (EXISTING) - ENCANA WELL - PLAN O	9,800.0	7,881.8	918.2	851.7	13.817	SF
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	9,913.1	7,871.9	98.2	39.5	1.671	CC, ES, SF
WOOLLEY 4-2-7 (EXISTING) - ENCANA WELL - PLAN	8,656.3	7,879.0	238.2	202.0	6.578	CC
WOOLLEY 4-2-7 (EXISTING) - ENCANA WELL - PLAN	8,700.0	7,879.0	242.2	201.9	6.004	ES
WOOLLEY 4-2-7 (EXISTING) - ENCANA WELL - PLAN	8,800.0	7,879.0	278.2	228.5	5.597	SF
WOOLLEY 6-0-7 (EXISTING) - ENCANA WELL - PLAN						Out of range
WOOLLEY 6-4-7 (EXISTING) - ENCANA WELL - PLAN						Out of range
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU						Out of range
S6-T1N-R68W (Bearden)						
Bearden #1 (Existing Well) - Existing - Existing	11,100.0	7,712.3	478.5	398.3	5.966	SF
Bearden #1 (Existing Well) - Existing - Existing	11,200.0	7,714.6	467.0	389.4	6.018	ES
Bearden #1 (Existing Well) - Existing - Existing	11,204.3	7,714.7	467.0	389.6	6.031	CC
Bearden 13-6 (Existing Well) - DD - DD						Out of range
Bearden 14-6(Existing Well) - DD - DD						Out of range
Bearden 24-6 - DD - Plan #1	10,600.0	7,797.8	385.8	312.1	5.235	SF
Bearden 24-6 - DD - Plan #1	10,634.0	7,797.8	384.3	311.9	5.308	CC, ES

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

### Summary

Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation Factor	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	11,400.0	7,713.5	718.1	633.6	8.496	SF
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	11,500.0	7,715.7	708.0	624.7	8.497	ES
BEARDEN 1 (EXISTING) - ENCANA WELL - SURVEYS	11,521.8	7,716.2	707.7	624.8	8.538	CC
BEARDEN 13-6 (EXISTING) - ENCANA WELL - SURVE						Out of range
BEARDEN 14-6 (EXISTING) - ENCANA WELL - SURVE						Out of range
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	12,100.0	7,706.1	323.5	229.9	3.453	ES, SF
BEARDEN 23-6 (EXISTING) - ENCANA WELL - GYRO	12,111.7	7,706.6	323.3	230.4	3.479	CC
BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - PLAN O	12,582.1	7,850.5	992.5	880.2	8.838	CC, ES, SF
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	9,900.0	7,911.9	1,057.3	985.2	14.663	SF
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	10,000.0	7,912.9	1,050.2	979.1	14.771	ES
BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - SURVE	10,025.6	7,913.2	1,049.9	979.1	14.838	CC
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	14,000.0	7,693.0	896.0	769.2	7.069	SF
BECKY 2-6 (EXISTING) - NOBLE WELL - NO SURVEYS	14,039.4	7,693.0	895.1	768.8	7.086	CC, ES
BECKY 4 (EXISTING) - MARTIN EXP WELL - NO SURV						Out of range
BECKY 5-6 (EXISTING) - FOUNDATION WELL - NO SU						Out of range
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,300.0	7,694.0	207.8	92.1	1.797	ES, SF
BECKY 7-6 (EXISTING) - NOBLE WELL - NO SURVEYS	13,319.3	7,694.0	206.9	93.1	1.818	CC
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	14,039.6	7,805.7	432.1	300.7	3.288	CC, ES
BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WELL - S	14,100.0	7,807.1	436.3	301.8	3.244	SF
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	11,321.8	7,848.3	399.4	315.5	4.757	CC, ES
BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WELL - S	11,400.0	7,849.7	407.0	318.3	4.589	SF
Morgan Hills 1A-7H-A168 - HZ - Plan #2	7,976.3	9,400.6	794.6	747.7	16.953	CC, ES
Morgan Hills 1A-7H-A168 - HZ - Plan #2	10,000.0	7,726.8	948.3	884.0	14.736	SF
Morgan Hills 1B-7H-A168 - HZ - Plan #2	8,275.7	9,294.3	1,010.9	964.9	21.972	CC, ES
Morgan Hills 1B-7H-A168 - HZ - Plan #2	9,700.0	8,000.0	1,046.1	989.9	18.625	SF
Morgan Hills 1C-7H-A168 - HZ - Plan #2						Out of range
Morgan Hills 1D-7H-A168 - HZ - Plan #2						Out of range
Morgan Hills 1E-7H-A168 - HZ - Plan #2						Out of range
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY						Out of range
Thomas 7-12 (Existing) - Existing - NO SURVEYS	1,106.7	1,091.5	986.3	982.1	235.573	CC
Thomas 7-12 (Existing) - Existing - NO SURVEYS	1,300.0	1,282.1	986.8	981.7	191.861	ES
Thomas 7-12 (Existing) - Existing - NO SURVEYS	1,900.0	1,865.8	1,002.8	994.1	115.599	SF
THOMAS E UNIT 1 (EXISTING) - Existing - NO SURVEY						Out of range
THOMAS K UNIT 1 (EXISTING) - EXISTING - NO SURV						Out of range
WOOLLEY 11-7 (EXISTING) - ENCANA WELL - SURVE						Out of range
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	200.0	288.0	178.9	178.1	215.760	CC
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	300.0	388.0	179.1	177.9	151.986	ES
WOOLLEY 12-7 (EXISTING) - ENCANA WELL - NO SU	1,500.0	1,578.1	298.4	292.8	54.122	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	9,200.0	7,800.0	494.9	444.0	9.723	SF
WOOLLEY 21-7 (EXISTING) - ENCANA WELL - GYRO	9,359.8	7,803.0	468.4	421.9	10.077	CC, ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	6,746.7	6,867.7	219.4	179.8	5.536	CC, ES
WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVE	7,794.8	7,844.4	231.5	188.2	5.350	SF
WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVE	4,577.1	4,874.9	68.2	29.5	1.761	CC, ES, SF
WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVE	9,913.1	7,871.9	98.2	39.5	1.671	CC, ES, SF
WOOLLEY A 1-7 (EXISTING) - ENCANA WELL - NO SU						Out of range
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	3,684.5	3,631.3	881.5	861.7	44.637	CC
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	3,700.0	3,645.4	881.5	861.6	44.425	ES
WOOLLEY F UNIT 1 (EXISTING) - ENCANA WELL - GY	8,400.0	7,802.1	945.9	910.1	26.394	SF
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	200.0	200.0	44.8	44.1	68.605	CC, ES
Woolley-Becky 2A-7H-E168 - Hz - Plan #3	600.0	595.9	67.4	65.4	32.905	SF
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	200.0	200.0	37.5	36.9	57.458	CC
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	300.0	300.0	37.7	36.7	37.652	ES
Woolley-Becky 2B-7H-E168 - Hz - Plan #3	600.0	598.0	53.2	51.1	25.884	SF

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

### Summary

Site Name Offset Well - Wellbore - Design	Reference Measured	Offset Measured	Distance		Separation Factor	Warning
	Depth (ft)	Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)						
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	200.0	200.0	29.9	29.3	45.881	CC
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	300.0	300.0	30.2	29.2	30.110	ES
Woolley-Becky 2C-7H-E168 - Hz - Plan #5	900.0	901.8	58.7	55.6	18.936	SF
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	200.0	200.0	22.4	21.7	34.306	CC
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	300.0	300.0	22.6	21.6	22.568	ES
Woolley-Becky 2D-7H-E168 - Hz - Plan #5	14,847.1	14,458.1	1,077.2	829.5	4.350	SF
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	200.0	200.0	14.8	14.2	22.732	CC
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	300.0	300.0	15.1	14.1	15.027	ES
Woolley-Becky 2E-7H-E168 - Hz - Plan #3	14,844.6	14,699.3	700.1	446.3	2.758	SF
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	200.0	200.0	7.3	6.6	11.148	CC
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	300.0	300.0	7.5	6.5	7.478	ES
Woolley-Becky 2F-7H-E168 - Hz - Plan #4	14,800.0	14,320.1	426.6	213.5	2.002	SF
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	200.0	200.0	7.6	6.9	11.577	CC, ES
Woolley-Becky 2H-7H-E168 - Hz - Plan #4	14,800.0	14,655.3	391.8	185.1	1.896	SF
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	200.0	200.0	97.4	96.7	149.215	CC, ES
Woolley-Sosa 2A-7H-E168 - Hz - Plan #3	900.0	887.4	163.7	160.5	52.142	SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	200.0	200.0	89.8	89.2	137.639	CC
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	300.0	300.0	90.1	89.1	89.896	ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #3	900.0	891.4	146.6	143.5	47.080	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	200.0	200.0	82.3	81.6	126.062	CC
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	300.0	300.0	82.5	81.5	82.353	ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #3	1,100.0	1,099.5	135.2	131.3	34.227	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	200.0	200.0	75.0	74.4	114.915	CC
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	300.0	300.0	75.2	74.2	75.090	ES
Woolley-Sosa 2D-7H-E168 - HZ - Plan #3	1,300.0	1,301.5	147.3	142.5	30.914	SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	200.0	200.0	67.5	66.8	103.339	CC
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	300.0	300.0	67.7	66.7	67.547	ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #4	7,100.0	7,045.6	1,014.6	975.7	26.078	SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	200.0	200.0	59.9	59.2	91.763	CC
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	300.0	300.0	60.1	59.1	60.005	ES
Woolley-Sosa 2F-7H-E168 - HZ - Plan #3	7,605.7	7,909.8	336.6	309.4	12.390	SF
Woolley-Sosa 2G-7H-E168 - HZ - Plan #3	7,951.4	7,995.0	50.4	21.4	1.738	CC, ES, SF

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - Erie-Woolley 4A-18H-I168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
6,800.0	6,645.0	13,653.1	7,582.0	27.3	111.5	-0.88	-64.5	1,912.6	1,010.4	940.6	69.73	14.490		
6,900.0	6,742.3	13,652.8	7,582.0	27.8	111.5	-0.84	-64.7	1,912.6	916.8	843.8	73.03	12.554		
7,000.0	6,839.7	13,652.6	7,582.0	28.2	111.5	-0.81	-64.9	1,912.6	824.7	747.7	76.98	10.714		
7,100.0	6,937.0	13,652.4	7,582.0	28.7	111.4	-0.77	-65.1	1,912.6	734.7	653.0	81.75	8.988		
7,200.0	7,034.3	13,652.2	7,582.0	29.1	111.4	-0.73	-65.4	1,912.6	647.7	560.1	87.55	7.398		
7,300.0	7,131.6	13,652.0	7,582.0	29.5	111.4	-0.70	-65.6	1,912.6	564.9	470.4	94.58	5.973		
7,400.0	7,228.9	13,654.0	7,582.0	30.0	111.5	25.27	-63.5	1,912.7	488.8	385.9	102.88	4.751		
7,500.0	7,324.6	13,671.3	7,582.0	30.4	111.8	58.77	-46.3	1,912.8	423.7	311.7	111.97	3.784		
7,600.0	7,416.1	13,705.4	7,582.0	30.8	112.3	72.42	-12.2	1,913.1	375.6	255.8	119.86	3.134		
7,700.0	7,500.5	13,755.2	7,582.0	31.2	113.2	75.09	37.7	1,913.5	348.5	224.8	123.68	2.817		
7,788.8	7,567.3	13,811.5	7,582.0	31.6	114.1	72.16	94.0	1,914.0	341.5	219.0	122.51	2.788 CC, ES		
7,800.0	7,575.1	13,819.4	7,582.0	31.6	114.3	71.56	101.8	1,914.1	341.6	219.5	122.09	2.798		
7,900.0	7,637.9	13,895.8	7,582.0	32.0	115.6	65.07	178.3	1,914.7	349.3	232.3	116.97	2.986		
8,000.0	7,686.8	13,982.3	7,582.0	32.5	117.1	58.39	264.7	1,915.5	363.4	252.0	111.48	3.260		
8,100.0	7,720.4	14,076.1	7,582.0	32.9	118.6	53.34	358.5	1,916.3	377.1	269.3	107.79	3.498		
8,200.0	7,737.7	14,174.4	7,582.0	33.5	120.3	50.71	456.9	1,917.1	385.6	278.7	106.91	3.607		
8,300.0	7,740.0	14,274.3	7,582.0	34.0	122.0	50.43	556.8	1,918.0	387.8	278.9	108.82	3.563		
8,400.0	7,740.0	14,374.3	7,582.0	34.6	123.7	50.56	656.8	1,918.8	388.8	277.6	111.24	3.495		
8,500.0	7,740.0	14,474.3	7,582.0	35.3	125.4	50.69	756.8	1,919.7	389.9	276.2	113.72	3.428		
8,600.0	7,740.0	14,577.5	7,582.0	36.1	127.2	50.79	859.9	1,920.3	390.7	274.4	116.32	3.359		
8,700.0	7,740.0	14,683.0	7,582.0	36.9	129.0	50.73	965.5	1,919.1	390.3	271.5	118.77	3.286		
8,800.0	7,740.0	14,784.0	7,582.0	37.8	130.8	50.56	1,066.4	1,916.8	388.9	267.9	120.95	3.215		
8,900.0	7,740.0	14,884.0	7,582.0	38.7	132.5	50.39	1,166.4	1,914.4	387.5	264.4	123.12	3.147		
9,000.0	7,740.0	14,984.0	7,582.0	39.7	134.2	50.22	1,266.3	1,912.1	386.1	260.8	125.30	3.081		
9,100.0	7,740.0	15,084.0	7,582.0	40.8	135.9	50.05	1,366.3	1,909.7	384.7	257.2	127.50	3.017		
9,200.0	7,740.0	15,183.9	7,582.0	41.9	137.7	49.87	1,466.2	1,907.4	383.3	253.6	129.70	2.955		
9,300.0	7,740.0	15,283.9	7,582.0	43.0	139.4	49.69	1,566.2	1,905.0	381.9	250.0	131.90	2.895		
9,400.0	7,740.0	15,383.9	7,582.0	44.2	141.1	49.52	1,666.1	1,902.7	380.5	246.4	134.11	2.837		
9,500.0	7,740.0	15,483.9	7,582.0	45.5	142.8	49.34	1,766.1	1,900.3	379.1	242.8	136.31	2.781		
9,519.5	7,740.0	15,498.1	7,582.0	45.7	143.1	49.31	1,780.3	1,900.0	378.9	242.2	136.68	2.772 SF		
9,600.0	7,740.0	15,498.1	7,582.0	46.7	143.1	49.31	1,780.3	1,900.0	387.3	252.3	135.04	2.868		
9,700.0	7,740.0	15,498.1	7,582.0	48.0	143.1	49.31	1,780.3	1,900.0	419.7	292.4	127.25	3.298		
9,800.0	7,740.0	15,498.1	7,582.0	49.3	143.1	49.31	1,780.3	1,900.0	471.4	355.0	116.45	4.048		
9,900.0	7,740.0	15,498.1	7,582.0	50.7	143.1	49.31	1,780.3	1,900.0	537.0	431.3	105.67	5.082		
10,000.0	7,740.0	15,498.1	7,582.0	52.0	143.1	49.31	1,780.3	1,900.0	611.9	515.6	96.32	6.353		
10,100.0	7,740.0	15,498.1	7,582.0	53.4	143.1	49.31	1,780.3	1,900.0	693.2	604.5	88.73	7.812		
10,200.0	7,740.0	15,498.1	7,582.0	54.9	143.1	49.31	1,780.3	1,900.0	778.9	696.1	82.79	9.408		
10,300.0	7,740.0	15,498.1	7,582.0	56.3	143.1	49.31	1,780.3	1,900.0	867.6	789.4	78.23	11.091		
10,400.0	7,740.0	15,498.1	7,582.0	57.7	143.1	49.31	1,780.3	1,900.0	958.6	883.8	74.79	12.817		
10,500.0	7,740.0	15,498.1	7,582.0	59.2	143.1	49.31	1,780.3	1,900.0	1,051.2	978.9	72.24	14.551		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - Erie-Woolley 4B-18H-I168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
7,200.0	7,034.3	13,822.6	7,823.0	29.1	110.3	-1.35	-61.3	2,252.8	1,060.9	968.2	92.74	11.440		
7,300.0	7,131.6	13,822.2	7,823.0	29.5	110.3	-1.31	-61.7	2,252.8	981.1	884.1	97.05	10.109		
7,400.0	7,228.9	13,824.0	7,823.0	30.0	110.3	24.89	-59.9	2,252.8	905.4	803.7	101.76	8.897		
7,500.0	7,324.6	13,841.1	7,823.0	30.4	110.6	60.69	-42.8	2,252.8	835.9	729.0	106.90	7.820		
7,600.0	7,416.1	13,875.0	7,823.0	30.8	111.2	78.67	-8.9	2,252.8	775.5	663.3	112.20	6.912		
7,700.0	7,500.5	13,924.7	7,823.0	31.2	112.1	87.38	40.8	2,252.8	726.3	609.0	117.28	6.193		
7,800.0	7,575.1	13,988.7	7,823.0	31.6	113.2	91.10	104.8	2,252.8	688.9	567.1	121.80	5.656		
7,900.0	7,637.9	14,065.0	7,823.0	32.0	114.5	91.97	181.1	2,252.8	662.9	537.3	125.61	5.277		
8,000.0	7,686.8	14,151.4	7,823.0	32.5	116.0	91.38	267.4	2,252.8	646.5	517.7	128.78	5.020		
8,100.0	7,720.4	14,245.1	7,823.0	32.9	117.6	90.34	361.2	2,252.8	637.4	505.8	131.60	4.843		
8,200.0	7,737.7	14,343.5	7,823.0	33.5	119.3	89.59	459.5	2,252.8	633.7	499.4	134.36	4.717		
8,274.3	7,741.8	14,417.7	7,823.0	33.8	120.5	89.29	533.7	2,252.8	633.1	496.7	136.47	4.640 CC		
8,300.0	7,740.0	14,443.4	7,823.0	34.0	121.0	89.46	559.4	2,252.8	633.7	496.5	137.20	4.619		
8,400.0	7,740.0	14,543.4	7,823.0	34.6	122.7	89.46	659.4	2,252.7	634.2	494.1	140.14	4.525		
8,500.0	7,740.0	14,643.4	7,823.0	35.3	124.4	89.46	759.4	2,252.7	634.7	491.5	143.16	4.433		
8,600.0	7,740.0	14,743.4	7,823.0	36.1	126.2	89.46	859.4	2,252.7	635.2	489.0	146.25	4.343		
8,700.0	7,740.0	14,843.4	7,823.0	36.9	127.9	89.46	959.4	2,252.7	635.7	486.3	149.40	4.255		
8,800.0	7,740.0	14,943.4	7,823.0	37.8	129.6	89.46	1,059.4	2,252.7	636.2	483.6	152.59	4.170		
8,900.0	7,740.0	15,043.4	7,823.0	38.7	131.3	89.46	1,159.4	2,252.7	636.8	480.9	155.82	4.086		
9,000.0	7,740.0	15,143.4	7,823.0	39.7	133.1	89.46	1,259.4	2,252.7	637.3	478.2	159.09	4.006		
9,100.0	7,740.0	15,243.4	7,823.0	40.8	134.8	89.46	1,359.4	2,252.6	637.8	475.4	162.38	3.928		
9,200.0	7,740.0	15,343.4	7,823.0	41.9	136.5	89.46	1,459.4	2,252.6	638.3	472.6	165.69	3.852		
9,300.0	7,740.0	15,443.4	7,823.0	43.0	138.3	89.46	1,559.4	2,252.6	638.8	469.8	169.02	3.779		
9,400.0	7,740.0	15,543.4	7,823.0	44.2	140.0	89.46	1,659.4	2,252.6	639.3	466.9	172.37	3.709		
9,500.0	7,740.0	15,643.4	7,823.0	45.5	141.7	89.46	1,759.4	2,252.6	639.8	464.1	175.73	3.641 ES		
9,600.0	7,740.0	15,664.3	7,823.0	46.7	142.1	89.46	1,780.3	2,252.6	645.2	467.8	177.41	3.637 SF		
9,700.0	7,740.0	15,664.3	7,823.0	48.0	142.1	89.46	1,780.3	2,252.6	665.4	490.0	175.33	3.795		
9,800.0	7,740.0	15,664.3	7,823.0	49.3	142.1	89.46	1,780.3	2,252.6	699.4	529.2	170.24	4.109		
9,900.0	7,740.0	15,664.3	7,823.0	50.7	142.1	89.46	1,780.3	2,252.6	745.4	582.2	163.19	4.568		
10,000.0	7,740.0	15,664.3	7,823.0	52.0	142.1	89.46	1,780.3	2,252.6	801.3	646.1	155.22	5.163		
10,100.0	7,740.0	15,664.3	7,823.0	53.4	142.1	89.46	1,780.3	2,252.6	865.2	718.1	147.08	5.883		
10,200.0	7,740.0	15,664.3	7,823.0	54.9	142.1	89.46	1,780.3	2,252.6	935.5	796.2	139.26	6.717		
10,300.0	7,740.0	15,664.3	7,823.0	56.3	142.1	89.46	1,780.3	2,252.6	1,010.7	878.7	132.01	7.656		
10,400.0	7,740.0	15,664.3	7,823.0	57.7	142.1	89.46	1,780.3	2,252.6	1,090.0	964.5	125.43	8.690		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - Erie-Woolley 4C-18H-I168 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
7,500.0	7,324.6	13,565.4	7,582.0	30.4	109.8	53.39	-42.8	2,602.7	1,091.7	971.3	120.44	9.064		
7,600.0	7,416.1	13,599.3	7,582.0	30.8	110.4	68.34	-8.9	2,602.7	1,060.0	937.6	122.38	8.662		
7,700.0	7,500.5	13,649.0	7,582.0	31.2	111.2	75.16	40.8	2,602.6	1,037.5	913.6	123.88	8.375		
7,800.0	7,575.1	13,713.0	7,582.0	31.6	112.3	77.80	104.8	2,602.6	1,023.5	898.4	125.06	8.184		
7,900.0	7,637.9	13,789.3	7,582.0	32.0	113.7	78.20	181.1	2,602.6	1,016.1	890.0	126.12	8.057		
8,000.0	7,686.8	13,875.7	7,582.0	32.5	115.2	77.53	267.5	2,602.6	1,013.3	886.0	127.31	7.959		
8,067.9	7,711.4	13,938.7	7,582.0	32.8	116.2	76.90	330.5	2,602.6	1,012.9	884.6	128.35	7.892 CC		
8,100.0	7,720.4	13,969.4	7,582.0	32.9	116.8	76.62	361.2	2,602.6	1,013.0	884.1	128.89	7.859		
8,200.0	7,737.7	14,067.7	7,582.0	33.5	118.5	76.00	459.6	2,602.6	1,013.5	882.5	131.01	7.736		
8,300.0	7,740.0	14,167.6	7,582.0	34.0	120.2	75.90	559.5	2,602.6	1,014.0	880.4	133.68	7.586		
8,400.0	7,740.0	14,267.6	7,582.0	34.6	122.0	75.91	659.5	2,602.6	1,014.5	878.0	136.51	7.432		
8,500.0	7,740.0	14,367.6	7,582.0	35.3	123.7	75.92	759.5	2,602.5	1,015.0	875.6	139.43	7.280		
8,600.0	7,740.0	14,467.6	7,582.0	36.1	125.4	75.92	859.5	2,602.5	1,015.5	873.1	142.42	7.131		
8,700.0	7,740.0	14,567.6	7,582.0	36.9	127.2	75.93	959.5	2,602.5	1,016.0	870.6	145.46	6.985		
8,800.0	7,740.0	14,667.6	7,582.0	37.8	128.9	75.94	1,059.5	2,602.5	1,016.5	868.0	148.54	6.843		
8,900.0	7,740.0	14,767.6	7,582.0	38.7	130.6	75.94	1,159.5	2,602.5	1,017.0	865.3	151.67	6.705		
9,000.0	7,740.0	14,867.6	7,582.0	39.7	132.4	75.95	1,259.5	2,602.5	1,017.5	862.7	154.82	6.572		
9,100.0	7,740.0	14,967.6	7,582.0	40.8	134.1	75.96	1,359.5	2,602.5	1,018.0	860.0	158.01	6.443		
9,200.0	7,740.0	15,067.6	7,582.0	41.9	135.8	75.96	1,459.5	2,602.5	1,018.5	857.3	161.22	6.317		
9,300.0	7,740.0	15,167.6	7,582.0	43.0	137.6	75.97	1,559.5	2,602.4	1,019.0	854.5	164.44	6.196		
9,400.0	7,740.0	15,267.6	7,582.0	44.2	139.3	75.98	1,659.5	2,602.4	1,019.5	851.8	167.69	6.079		
9,500.0	7,740.0	15,367.6	7,582.0	45.5	141.1	75.99	1,759.5	2,602.4	1,020.0	849.0	170.95	5.966 ES		
9,600.0	7,740.0	15,388.5	7,582.0	46.7	141.4	75.99	1,780.4	2,602.4	1,023.5	850.1	173.40	5.903 SF		
9,700.0	7,740.0	15,388.5	7,582.0	48.0	141.4	75.99	1,780.4	2,602.4	1,036.5	862.2	174.32	5.946		
9,800.0	7,740.0	15,388.5	7,582.0	49.3	141.4	75.99	1,780.4	2,602.4	1,058.9	885.1	173.82	6.092		
9,900.0	7,740.0	15,388.5	7,582.0	50.7	141.4	75.99	1,780.4	2,602.4	1,090.0	917.9	172.08	6.334		
10,000.0	7,740.0	15,388.5	7,582.0	52.0	141.4	75.99	1,780.4	2,602.4	1,129.1	959.8	169.33	6.668		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 8512-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,400.0	7,740.0	7,789.0	7,789.0	34.6	13.6	-90.00	1,577.0	1,198.9	1,009.0	960.9	48.18	20.944		
8,500.0	7,740.0	7,789.0	7,789.0	35.3	13.6	-90.00	1,577.0	1,198.9	918.8	869.9	48.88	18.799		
8,600.0	7,740.0	7,789.0	7,789.0	36.1	13.6	-90.00	1,577.0	1,198.9	830.8	781.2	49.63	16.740		
8,700.0	7,740.0	7,789.0	7,789.0	36.9	13.6	-90.00	1,577.0	1,198.9	745.8	695.4	50.43	14.791		
8,800.0	7,740.0	7,789.0	7,789.0	37.8	13.6	-90.00	1,577.0	1,198.9	665.1	613.9	51.21	12.986		
8,900.0	7,740.0	7,789.0	7,789.0	38.7	13.6	-90.00	1,577.0	1,198.9	590.2	538.3	51.88	11.377		
9,000.0	7,740.0	7,789.0	7,789.0	39.7	13.6	-90.00	1,577.0	1,198.9	523.8	471.6	52.20	10.036		
9,100.0	7,740.0	7,789.0	7,789.0	40.8	13.6	-90.00	1,577.0	1,198.9	469.5	417.7	51.76	9.071		
9,200.0	7,740.0	7,789.0	7,789.0	41.9	13.6	-90.00	1,577.0	1,198.9	431.8	381.8	50.02	8.632 SF		
9,300.0	7,740.0	7,789.0	7,789.0	43.0	13.6	-90.00	1,577.0	1,198.9	415.3	368.7	46.63	8.906 ES		
9,319.8	7,740.0	7,789.0	7,789.0	43.3	13.6	-90.00	1,577.0	1,198.9	414.8	369.0	45.79	9.060 CC		
9,400.0	7,740.0	7,789.0	7,789.0	44.2	13.6	-90.00	1,577.0	1,198.9	422.5	380.5	41.99	10.061		
9,500.0	7,740.0	7,789.0	7,789.0	45.5	13.6	-90.00	1,577.0	1,198.9	452.3	415.0	37.28	12.130		
9,600.0	7,740.0	7,789.0	7,789.0	46.7	13.6	-90.00	1,577.0	1,198.9	500.6	466.9	33.67	14.866		
9,700.0	7,740.0	7,789.0	7,789.0	48.0	13.6	-90.00	1,577.0	1,198.9	562.7	531.1	31.63	17.790		
9,800.0	7,740.0	7,789.0	7,789.0	49.3	13.6	-90.00	1,577.0	1,198.9	634.5	603.6	30.93	20.518		
9,900.0	7,740.0	7,789.0	7,789.0	50.7	13.6	-90.00	1,577.0	1,198.9	713.2	682.1	31.07	22.958		
10,000.0	7,740.0	7,789.0	7,789.0	52.0	13.6	-90.00	1,577.0	1,198.9	796.7	765.1	31.62	25.195		
10,100.0	7,740.0	7,789.0	7,789.0	53.4	13.6	-90.00	1,577.0	1,198.9	883.6	851.3	32.34	27.326		
10,200.0	7,740.0	7,789.0	7,789.0	54.9	13.6	-90.00	1,577.0	1,198.9	973.0	939.9	33.08	29.414		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
3,400.0	3,336.4	3,702.0	3,548.3	12.1	18.2	-48.08	646.8	1,281.5	998.1	973.3	24.78	40.283		
3,500.0	3,433.7	3,783.0	3,625.9	12.6	18.6	-47.71	624.2	1,287.0	967.3	941.8	25.53	37.889		
3,600.0	3,531.0	3,891.4	3,730.9	13.0	19.1	-47.48	597.3	1,291.2	936.9	910.7	26.24	35.709		
3,700.0	3,628.3	4,026.8	3,861.3	13.5	19.8	-47.25	561.3	1,292.3	903.1	876.1	26.95	33.513		
3,800.0	3,725.6	4,105.0	3,936.0	13.9	20.2	-46.94	538.1	1,293.7	868.0	840.2	27.72	31.309		
3,900.0	3,822.9	4,199.8	4,026.2	14.4	20.7	-46.35	509.3	1,298.4	834.5	805.9	28.55	29.230		
4,000.0	3,920.2	4,317.7	4,137.2	14.8	21.5	-45.31	469.9	1,304.5	799.1	769.7	29.41	27.174		
4,100.0	4,017.6	4,414.6	4,227.8	15.3	22.1	-44.32	435.9	1,308.5	762.1	731.8	30.27	25.178		
4,200.0	4,114.9	4,497.8	4,305.6	15.7	22.6	-43.36	406.6	1,312.3	725.6	694.5	31.15	23.294		
4,300.0	4,212.2	4,575.3	4,378.6	16.1	23.1	-42.49	381.0	1,316.2	691.0	659.0	32.01	21.588		
4,400.0	4,309.5	4,656.0	4,455.5	16.6	23.5	-41.66	356.7	1,320.6	658.7	625.9	32.83	20.061		
4,500.0	4,406.8	4,748.3	4,543.8	17.0	24.0	-40.72	330.3	1,325.7	627.6	594.0	33.63	18.660		
4,600.0	4,504.1	4,844.2	4,635.8	17.5	24.5	-39.78	303.9	1,330.3	596.7	562.3	34.39	17.352		
4,700.0	4,601.4	4,942.1	4,730.1	17.9	25.0	-38.90	277.8	1,333.2	565.2	530.1	35.10	16.100		
4,800.0	4,698.8	5,026.2	4,811.6	18.4	25.4	-38.20	256.8	1,335.6	534.7	498.9	35.84	14.920		
4,900.0	4,796.1	5,111.5	4,894.6	18.8	25.7	-37.60	237.8	1,338.7	506.3	469.8	36.53	13.860		
5,000.0	4,893.4	5,201.9	4,983.3	19.3	26.0	-37.22	220.4	1,341.5	479.4	442.3	37.16	12.902		
5,100.0	4,990.7	5,293.5	5,073.7	19.7	26.3	-37.12	205.5	1,343.8	453.7	415.9	37.75	12.019		
5,200.0	5,088.0	5,387.6	5,166.8	20.2	26.6	-37.24	192.0	1,345.8	428.8	390.4	38.31	11.192		
5,300.0	5,185.3	5,481.8	5,260.2	20.6	26.8	-37.66	180.4	1,347.1	404.4	365.5	38.84	10.412		
5,400.0	5,282.6	5,575.2	5,353.2	21.1	27.0	-38.47	171.1	1,347.7	380.9	341.5	39.34	9.681		
5,500.0	5,379.9	5,667.3	5,445.0	21.5	27.2	-39.72	164.3	1,347.9	358.5	318.7	39.82	9.001		
5,600.0	5,477.3	5,755.5	5,533.1	21.9	27.3	-41.27	159.7	1,348.6	338.2	297.9	40.28	8.397		
5,700.0	5,574.6	5,852.1	5,629.7	22.4	27.3	-43.62	158.1	1,349.4	320.5	279.9	40.66	7.885		
5,800.0	5,671.9	5,948.5	5,726.0	22.8	27.4	-46.71	158.0	1,348.0	303.0	262.0	40.99	7.392		
5,900.0	5,769.2	6,043.4	5,820.9	23.3	27.5	-49.90	157.8	1,347.9	287.2	245.9	41.28	6.957		
6,000.0	5,866.5	6,139.6	5,917.2	23.7	27.5	-53.36	157.6	1,348.6	273.0	231.5	41.49	6.579		
6,100.0	5,963.8	6,236.0	6,013.6	24.2	27.6	-57.26	158.0	1,349.2	260.3	218.7	41.60	6.258		
6,200.0	6,061.1	6,333.3	6,110.8	24.6	27.7	-61.53	158.5	1,350.0	249.3	207.7	41.59	5.994		
6,300.0	6,158.5	6,430.9	6,208.4	25.1	27.7	-66.08	158.9	1,351.2	239.8	198.4	41.45	5.785		
6,400.0	6,255.8	6,528.8	6,306.4	25.5	27.8	-71.01	159.2	1,352.2	231.9	190.8	41.16	5.634		
6,500.0	6,353.1	6,626.6	6,404.1	26.0	27.9	-76.30	159.5	1,352.9	225.8	185.1	40.73	5.544		
6,600.0	6,450.4	6,724.3	6,501.8	26.4	27.9	-81.82	159.8	1,353.5	221.7	181.4	40.24	5.509		
6,700.0	6,547.7	6,822.1	6,599.6	26.9	28.0	-87.47	159.8	1,354.2	219.6	179.8	39.79	5.520		
6,746.7	6,593.1	6,867.7	6,645.2	27.1	28.0	-90.12	159.8	1,354.6	219.4	179.8	39.63	5.536 CC, ES		
6,800.0	6,645.0	6,919.9	6,697.4	27.3	28.1	-93.15	159.8	1,355.0	219.7	180.2	39.52	5.559		
6,900.0	6,742.3	7,017.6	6,795.1	27.8	28.2	-98.74	159.6	1,355.9	221.9	182.4	39.53	5.613		
7,000.0	6,839.7	7,115.6	6,893.1	28.2	28.2	-104.18	159.3	1,356.8	226.1	186.3	39.83	5.677		
7,100.0	6,937.0	7,215.0	6,992.5	28.7	28.4	-109.43	158.6	1,358.1	231.9	191.5	40.37	5.744		
7,200.0	7,034.3	7,313.1	7,090.6	29.1	28.4	-114.34	157.2	1,359.6	238.8	197.8	41.00	5.823		
7,300.0	7,131.6	7,408.7	7,186.2	29.5	28.5	-118.91	156.2	1,360.5	247.9	206.2	41.65	5.951		
7,400.0	7,228.9	7,503.9	7,281.4	30.0	28.6	-102.55	155.5	1,360.6	257.5	215.1	42.32	6.084		
7,500.0	7,324.6	7,597.2	7,374.7	30.4	28.7	-80.89	155.2	1,359.7	257.4	214.3	43.07	5.975		
7,600.0	7,416.1	7,688.2	7,465.6	30.8	28.8	-76.42	154.9	1,358.1	248.9	205.2	43.76	5.688		
7,700.0	7,500.5	7,773.1	7,550.6	31.2	28.8	-81.14	154.8	1,357.1	237.3	193.3	43.97	5.397		
7,794.8	7,571.6	7,844.4	7,621.9	31.6	28.9	-89.41	154.7	1,356.5	231.5	188.2	43.27	5.350 SF		
7,800.0	7,575.1	7,848.0	7,625.4	31.6	28.9	-89.89	154.7	1,356.4	231.5	188.3	43.21	5.358		
7,900.0	7,637.9	7,911.1	7,688.5	32.0	28.9	-98.36	154.8	1,356.0	242.3	199.8	42.56	5.695		
8,000.0	7,686.8	7,960.7	7,738.1	32.5	29.0	-103.25	155.0	1,355.7	276.2	232.5	43.69	6.322		
8,100.0	7,720.4	7,995.0	7,772.4	32.9	29.0	-102.80	155.1	1,355.6	331.6	286.7	44.99	7.372		
8,200.0	7,737.7	8,012.9	7,790.3	33.5	29.0	-96.15	155.2	1,355.5	402.5	357.0	45.51	8.844		
8,300.0	7,740.0	8,015.7	7,793.2	34.0	29.0	-90.25	155.3	1,355.5	482.5	436.9	45.52	10.598		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											S18-T1N-R68W (Erie Woolley) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - SURVEYS			Offset Site Error:		0.0 ft
Survey Program:											71-Geolink MWD			Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	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					
8,400.0	7,740.0	8,016.3	7,793.7	34.6	29.0	-90.37	155.3	1,355.5	568.6	523.3	45.36	12.535				
8,500.0	7,740.0	8,016.9	7,794.3	35.3	29.0	-90.49	155.3	1,355.5	658.7	613.5	45.17	14.582				
8,600.0	7,740.0	8,017.4	7,794.8	36.1	29.0	-90.61	155.3	1,355.5	751.3	706.3	45.00	16.693				
8,700.0	7,740.0	8,018.0	7,795.4	36.9	29.0	-90.73	155.3	1,355.5	845.5	800.7	44.87	18.844				
8,800.0	7,740.0	8,018.5	7,795.9	37.8	29.0	-90.85	155.3	1,355.5	941.0	896.2	44.77	21.017				
8,900.0	7,740.0	8,019.1	7,796.5	38.7	29.0	-90.97	155.3	1,355.5	1,037.3	992.6	44.71	23.203				

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 41-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
2,600.0	2,557.9	3,174.1	2,991.3	8.6	17.8	-54.20	645.2	1,017.0	1,001.6	984.3	17.32	57.818		
2,700.0	2,655.2	3,274.8	3,081.5	9.0	18.6	-54.01	601.4	1,008.4	949.6	931.6	18.02	52.686		
2,800.0	2,752.5	3,347.5	3,146.6	9.5	19.2	-53.79	569.3	1,003.0	897.9	879.1	18.76	47.865		
2,900.0	2,849.8	3,446.7	3,235.2	9.9	20.0	-53.47	525.5	995.2	845.8	826.4	19.47	43.438		
3,000.0	2,947.1	3,523.0	3,303.4	10.4	20.6	-53.17	491.6	989.4	793.8	773.6	20.23	39.232		
3,100.0	3,044.4	3,605.6	3,377.2	10.8	21.3	-52.73	454.8	984.1	742.5	721.4	21.02	35.318		
3,200.0	3,141.7	3,697.1	3,458.9	11.2	22.0	-52.22	414.3	977.8	691.0	669.2	21.78	31.722		
3,300.0	3,239.1	3,780.8	3,534.0	11.7	22.6	-51.81	377.9	970.8	639.3	616.7	22.53	28.369		
3,400.0	3,336.4	3,858.3	3,604.0	12.1	23.2	-51.54	345.5	963.6	588.3	565.0	23.28	25.269		
3,500.0	3,433.7	3,940.7	3,679.0	12.6	23.8	-51.33	312.3	955.8	538.3	514.3	24.01	22.422		
3,600.0	3,531.0	4,023.6	3,754.6	13.0	24.4	-50.99	278.8	948.8	488.9	464.1	24.78	19.730		
3,700.0	3,628.3	4,113.3	3,836.1	13.5	25.1	-50.35	242.1	942.3	439.7	414.2	25.57	17.200		
3,800.0	3,725.6	4,195.7	3,910.7	13.9	25.8	-49.42	207.4	937.2	390.5	364.0	26.52	14.726		
3,900.0	3,822.9	4,281.8	3,988.5	14.4	26.4	-47.82	170.7	933.9	342.4	314.9	27.58	12.415		
4,000.0	3,920.2	4,366.8	4,065.3	14.8	27.1	-45.79	134.6	930.6	294.8	266.0	28.76	10.252		
4,100.0	4,017.6	4,461.7	4,150.9	15.3	27.8	-42.51	93.8	927.0	247.3	217.3	29.97	8.251		
4,200.0	4,114.9	4,552.6	4,231.3	15.7	28.6	-37.07	51.5	922.4	197.6	166.1	31.55	6.263		
4,300.0	4,212.2	4,636.8	4,305.4	16.1	29.3	-28.80	11.8	917.3	148.9	115.3	33.67	4.424		
4,400.0	4,309.5	4,719.2	4,378.6	16.6	29.9	-15.22	-25.8	912.8	106.1	69.8	36.22	2.928		
4,500.0	4,406.8	4,805.6	4,456.8	17.0	30.6	8.17	-62.2	909.1	76.2	37.7	38.50	1.980		
4,577.1	4,481.9	4,874.9	4,520.7	17.4	31.0	33.23	-88.9	906.5	68.2	29.5	38.73	1.761 CC, ES, SF		
4,600.0	4,504.1	4,895.8	4,540.1	17.5	31.2	40.96	-96.6	905.7	68.9	31.0	37.88	1.819		
4,700.0	4,601.4	4,988.9	4,627.3	17.9	31.7	69.79	-128.9	901.7	85.0	53.9	31.04	2.738		
4,800.0	4,698.8	5,081.9	4,715.4	18.4	32.3	87.77	-158.6	896.9	113.0	86.2	26.85	4.210		
4,900.0	4,796.1	5,180.0	4,809.1	18.8	32.8	98.80	-187.1	892.7	144.6	117.1	27.56	5.248		
5,000.0	4,893.4	5,279.4	4,905.2	19.3	33.2	106.12	-211.9	888.8	175.3	145.7	29.58	5.926		
5,100.0	4,990.7	5,383.2	5,006.8	19.7	33.6	111.76	-233.1	885.6	203.2	171.6	31.66	6.419		
5,200.0	5,088.0	5,482.8	5,104.9	20.2	33.9	116.10	-250.0	883.0	229.2	195.8	33.46	6.852		
5,300.0	5,185.3	5,586.4	5,207.3	20.6	34.2	119.99	-265.2	880.1	254.4	219.3	35.11	7.247		
5,400.0	5,282.6	5,688.4	5,308.8	21.1	34.4	123.64	-275.8	877.2	277.0	240.4	36.62	7.564		
5,500.0	5,379.9	5,794.2	5,414.2	21.5	34.6	127.18	-283.9	874.2	298.4	260.4	38.01	7.850		
5,600.0	5,477.3	5,898.4	5,518.3	21.9	34.7	130.42	-288.6	872.3	317.7	278.4	39.24	8.096		
5,700.0	5,574.6	5,999.7	5,619.6	22.4	34.8	133.45	-290.8	870.6	336.1	295.8	40.32	8.336		
5,800.0	5,671.9	6,099.6	5,719.4	22.8	34.8	136.39	-291.0	868.7	354.1	312.8	41.29	8.576		
5,900.0	5,769.2	6,196.5	5,816.3	23.3	34.9	138.99	-290.9	867.0	372.6	330.4	42.13	8.844		
6,000.0	5,866.5	6,293.0	5,912.8	23.7	34.9	141.32	-290.9	865.3	391.8	349.0	42.86	9.143		
6,100.0	5,963.8	6,390.1	6,009.9	24.2	35.0	143.43	-291.1	863.7	411.7	368.2	43.50	9.465		
6,200.0	6,061.1	6,487.4	6,107.1	24.6	35.1	145.34	-291.2	862.1	432.0	387.9	44.07	9.803		
6,300.0	6,158.5	6,587.7	6,207.5	25.1	35.1	147.14	-291.1	860.8	452.3	407.7	44.58	10.145		
6,400.0	6,255.8	6,687.2	6,307.0	25.5	35.2	148.78	-290.5	860.1	472.3	427.3	45.05	10.484		
6,500.0	6,353.1	6,783.3	6,403.1	26.0	35.2	150.22	-290.1	859.6	492.6	447.1	45.48	10.831		
6,600.0	6,450.4	6,879.5	6,499.3	26.4	35.3	151.53	-289.9	858.9	513.3	467.4	45.87	11.190		
6,700.0	6,547.7	6,975.9	6,595.6	26.9	35.3	152.73	-289.9	858.2	534.5	488.2	46.24	11.559		
6,800.0	6,645.0	7,071.7	6,691.4	27.3	35.4	153.83	-290.0	857.3	556.0	509.4	46.58	11.935		
6,900.0	6,742.3	7,167.0	6,786.8	27.8	35.5	154.84	-290.2	856.2	578.0	531.1	46.91	12.321		
7,000.0	6,839.7	7,263.2	6,883.0	28.2	35.5	155.79	-290.5	854.8	600.4	553.1	47.22	12.713		
7,100.0	6,937.0	7,359.6	6,979.4	28.7	35.6	156.68	-290.8	853.4	623.0	575.5	47.52	13.109		
7,200.0	7,034.3	7,455.7	7,075.4	29.1	35.7	157.51	-291.0	851.8	645.9	598.1	47.81	13.509		
7,300.0	7,131.6	7,551.8	7,171.5	29.5	35.7	158.30	-291.1	850.0	669.0	620.9	48.09	13.912		
7,400.0	7,228.9	7,648.8	7,268.5	30.0	35.8	-179.20	-291.0	848.2	693.0	644.7	48.31	14.344		
7,500.0	7,324.6	7,744.6	7,364.2	30.4	35.9	-149.23	-290.9	846.4	721.7	673.3	48.38	14.917		
7,600.0	7,416.1	7,836.3	7,456.0	30.8	35.9	-134.22	-290.5	844.6	755.4	707.1	48.28	15.645		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											S18-T1N-R68W (Erie Woolley) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - SURVEYS		Offset Site Error:		0.0 ft	
Survey Program:											41-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth	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)	Centres (ft)	Ellipses (ft)	Axis					
7,700.0	7,500.5	7,923.2	7,542.9	31.2	36.0	-125.98	-289.9	842.9	794.4	746.3	48.02	16.541				
7,800.0	7,575.1	8,003.1	7,622.7	31.6	36.0	-120.56	-289.3	841.8	838.9	791.3	47.59	17.630				
7,900.0	7,637.9	8,070.3	7,689.9	32.0	36.0	-115.84	-288.6	841.2	889.7	842.7	46.97	18.942				
8,000.0	7,686.8	8,121.0	7,740.6	32.5	36.1	-110.46	-288.1	841.0	947.1	900.9	46.20	20.498				
8,100.0	7,720.4	8,156.2	7,775.8	32.9	36.1	-103.75	-287.7	840.8	1,010.5	965.2	45.34	22.288				

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 31-7 (EXISTING) - ENCANA WELL - PLAN ONLY													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	7,881.8	7,793.0	38.7	22.9	90.00	1,729.3	2,468.1	1,025.2	987.0	38.19	26.843		
9,000.0	7,740.0	7,881.8	7,793.0	39.7	22.9	90.00	1,729.3	2,468.1	973.6	934.1	39.51	24.644		
9,100.0	7,740.0	7,881.8	7,793.0	40.8	22.9	90.00	1,729.3	2,468.1	929.9	887.9	42.01	22.134		
9,200.0	7,740.0	7,881.8	7,793.0	41.9	22.9	90.00	1,729.3	2,468.1	895.4	849.9	45.47	19.691		
9,300.0	7,740.0	7,881.8	7,793.0	43.0	22.9	90.00	1,729.3	2,468.1	871.0	821.5	49.49	17.598		
9,400.0	7,740.0	7,881.8	7,793.0	44.2	22.9	90.00	1,729.3	2,468.1	857.6	803.9	53.68	15.977		
9,465.5	7,740.0	7,881.8	7,793.0	45.0	22.9	90.00	1,729.3	2,468.1	855.1	798.8	56.33	15.179 CC		
9,500.0	7,740.0	7,881.8	7,793.0	45.5	22.9	90.00	1,729.3	2,468.1	855.8	798.1	57.67	14.839 ES		
9,600.0	7,740.0	7,881.8	7,793.0	46.7	22.9	90.00	1,729.3	2,468.1	865.6	804.4	61.22	14.140		
9,700.0	7,740.0	7,881.8	7,793.0	48.0	22.9	90.00	1,729.3	2,468.1	886.7	822.5	64.16	13.820		
9,800.0	7,740.0	7,881.8	7,793.0	49.3	22.9	90.00	1,729.3	2,468.1	918.2	851.7	66.46	13.817 SF		
9,900.0	7,740.0	7,881.8	7,793.0	50.7	22.9	90.00	1,729.3	2,468.1	959.2	891.0	68.15	14.075		
10,000.0	7,740.0	7,881.8	7,793.0	52.0	22.9	90.00	1,729.3	2,468.1	1,008.4	939.1	69.32	14.547		
10,100.0	7,740.0	7,881.8	7,793.0	53.4	22.9	90.00	1,729.3	2,468.1	1,064.8	994.7	70.08	15.193		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,740.0	7,847.3	7,766.1	38.7	19.6	75.18	2,172.4	1,708.5	1,017.6	970.1	47.52	21.412		
9,000.0	7,740.0	7,849.8	7,768.6	39.7	19.6	76.54	2,172.5	1,708.6	918.1	871.0	47.18	19.461		
9,100.0	7,740.0	7,852.3	7,771.0	40.8	19.6	77.92	2,172.5	1,708.6	818.8	772.1	46.73	17.522		
9,200.0	7,740.0	7,854.7	7,773.5	41.9	19.6	79.30	2,172.6	1,708.6	719.7	673.5	46.14	15.599		
9,300.0	7,740.0	7,857.2	7,775.9	43.0	19.6	80.69	2,172.6	1,708.7	620.8	575.5	45.33	13.696		
9,400.0	7,740.0	7,859.6	7,778.4	44.2	19.6	82.08	2,172.7	1,708.7	522.3	478.1	44.18	11.822		
9,500.0	7,740.0	7,862.0	7,780.8	45.5	19.6	83.47	2,172.7	1,708.7	424.5	382.1	42.49	9.991		
9,600.0	7,740.0	7,864.4	7,783.2	46.7	19.6	84.87	2,172.8	1,708.8	328.1	288.3	39.83	8.239		
9,700.0	7,740.0	7,866.8	7,785.6	48.0	19.6	86.26	2,172.9	1,708.8	234.6	199.2	35.43	6.622		
9,800.0	7,740.0	7,869.2	7,788.0	49.3	19.7	87.66	2,172.9	1,708.8	149.8	118.6	31.18	4.804		
9,900.0	7,740.0	7,871.6	7,790.4	50.7	19.7	89.04	2,173.0	1,708.9	99.1	45.1	54.04	1.834		
9,913.1	7,740.0	7,871.9	7,790.7	50.9	19.7	89.23	2,173.0	1,708.9	98.2	39.5	58.77	1.671	CC, ES, SF	
10,000.0	7,740.0	7,874.0	7,792.7	52.0	19.7	90.43	2,173.0	1,708.9	131.1	59.6	71.47	1.835		
10,100.0	7,740.0	7,876.3	7,795.1	53.4	19.7	91.80	2,173.1	1,708.9	211.1	143.7	67.40	3.131		
10,200.0	7,740.0	7,878.7	7,797.4	54.9	19.7	93.17	2,173.1	1,709.0	303.1	239.5	63.68	4.761		
10,300.0	7,740.0	7,881.0	7,799.8	56.3	19.7	94.53	2,173.2	1,709.0	399.0	337.7	61.32	6.507		
10,400.0	7,740.0	7,883.4	7,802.1	57.7	19.7	95.87	2,173.3	1,709.0	496.5	436.7	59.79	8.305		
10,500.0	7,740.0	7,885.7	7,804.4	59.2	19.7	97.21	2,173.3	1,709.1	594.9	536.1	58.74	10.127		
10,600.0	7,740.0	7,888.0	7,806.8	60.7	19.7	98.52	2,173.4	1,709.1	693.7	635.7	57.99	11.962		
10,700.0	7,740.0	7,890.3	7,809.1	62.2	19.7	99.83	2,173.4	1,709.1	792.8	735.3	57.43	13.803		
10,800.0	7,740.0	7,892.6	7,811.4	63.7	19.7	101.11	2,173.5	1,709.1	892.0	835.0	57.01	15.647		
10,900.0	7,740.0	7,894.9	7,813.6	65.2	19.7	102.38	2,173.5	1,709.2	991.5	934.8	56.68	17.491		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S18-T1N-R68W (Erie Woolley) - WOOLLEY 4-2-7 (EXISTING) - ENCANA WELL - PLAN ONLY													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		
7,300.0	7,131.6	7,277.3	7,191.3	29.5	22.2	-70.46	916.6	1,857.1	1,049.2	999.0	50.18	20.910		
7,400.0	7,228.9	7,368.2	7,282.2	30.0	22.3	-50.70	916.9	1,855.5	1,039.1	988.2	50.90	20.415		
7,500.0	7,324.6	7,463.6	7,377.6	30.4	22.4	-22.98	916.9	1,855.5	1,015.4	964.0	51.44	19.738		
7,600.0	7,416.1	7,555.1	7,469.1	30.8	22.5	-8.69	916.9	1,855.5	976.4	924.6	51.83	18.838		
7,700.0	7,500.5	7,639.4	7,553.5	31.2	22.6	0.37	916.9	1,855.5	923.0	871.0	52.05	17.733		
7,800.0	7,575.1	7,714.1	7,628.1	31.6	22.6	8.39	916.9	1,855.5	856.9	804.8	52.07	16.455		
7,900.0	7,637.9	7,776.9	7,690.9	32.0	22.7	18.15	916.9	1,855.5	780.0	728.1	51.84	15.045		
8,000.0	7,686.8	7,825.8	7,739.8	32.5	22.8	32.80	916.9	1,855.5	695.0	643.8	51.27	13.558		
8,100.0	7,720.4	7,859.4	7,773.4	32.9	22.8	55.03	916.9	1,855.5	605.4	555.2	50.18	12.063		
8,200.0	7,737.7	7,876.7	7,790.7	33.5	22.8	79.89	916.9	1,855.5	514.9	466.6	48.30	10.661		
8,300.0	7,740.0	7,879.0	7,793.0	34.0	22.8	90.00	916.9	1,855.5	428.6	383.4	45.17	9.488		
8,400.0	7,740.0	7,879.0	7,793.0	34.6	22.8	90.00	916.9	1,855.5	349.9	309.6	40.35	8.673		
8,500.0	7,740.0	7,879.0	7,793.0	35.3	22.8	90.00	916.9	1,855.5	284.9	250.8	34.11	8.352		
8,600.0	7,740.0	7,879.0	7,793.0	36.1	22.8	90.00	916.9	1,855.5	244.8	212.2	32.57	7.515		
8,656.3	7,740.0	7,879.0	7,793.0	36.5	22.8	90.00	916.9	1,855.5	238.2	202.0	36.22	6.578 CC		
8,700.0	7,740.0	7,879.0	7,793.0	36.9	22.8	90.00	916.9	1,855.5	242.2	201.9	40.34	6.004 ES		
8,800.0	7,740.0	7,879.0	7,793.0	37.8	22.8	90.00	916.9	1,855.5	278.2	228.5	49.71	5.597 SF		
8,900.0	7,740.0	7,879.0	7,793.0	38.7	22.8	90.00	916.9	1,855.5	340.8	285.2	55.57	6.133		
9,000.0	7,740.0	7,879.0	7,793.0	39.7	22.8	90.00	916.9	1,855.5	418.2	359.7	58.48	7.151		
9,100.0	7,740.0	7,879.0	7,793.0	40.8	22.8	90.00	916.9	1,855.5	503.6	443.8	59.88	8.411		
9,200.0	7,740.0	7,879.0	7,793.0	41.9	22.8	90.00	916.9	1,855.5	593.6	533.1	60.57	9.801		
9,300.0	7,740.0	7,879.0	7,793.0	43.0	22.8	90.00	916.9	1,855.5	686.4	625.5	60.92	11.267		
9,400.0	7,740.0	7,879.0	7,793.0	44.2	22.8	90.00	916.9	1,855.5	780.9	719.8	61.10	12.781		
9,500.0	7,740.0	7,879.0	7,793.0	45.5	22.8	90.00	916.9	1,855.5	876.7	815.5	61.20	14.326		
9,600.0	7,740.0	7,879.0	7,793.0	46.7	22.8	90.00	916.9	1,855.5	973.3	912.1	61.25	15.891		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S6-T1N-R68W (Bearden) - Bearden #1 (Existing Well) - Existing - Existing													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
10,300.0	7,740.0	7,700.0	7,697.5	56.3	13.7	-88.59	3,460.8	1,136.8	1,017.6	954.6	63.02	16.146		
10,400.0	7,740.0	7,700.0	7,697.5	57.7	13.7	-88.59	3,460.8	1,136.8	929.9	864.8	65.07	14.291		
10,500.0	7,740.0	7,700.0	7,697.5	59.2	13.7	-88.59	3,460.8	1,136.8	844.9	777.5	67.39	12.538		
10,600.0	7,740.0	7,700.0	7,697.5	60.7	13.7	-88.59	3,460.8	1,136.8	763.6	693.6	69.99	10.910		
10,700.0	7,740.0	7,703.3	7,700.8	62.2	13.7	-89.00	3,460.9	1,136.8	687.2	614.4	72.83	9.436		
10,800.0	7,740.0	7,705.6	7,703.1	63.7	13.7	-89.27	3,461.0	1,136.8	617.6	541.9	75.77	8.151		
10,900.0	7,740.0	7,707.9	7,705.3	65.2	13.7	-89.55	3,461.0	1,136.9	557.3	478.9	78.45	7.105		
11,000.0	7,740.0	7,710.1	7,707.6	66.8	13.7	-89.83	3,461.1	1,136.9	509.7	429.5	80.23	6.353		
11,100.0	7,740.0	7,712.3	7,709.8	68.3	13.7	-90.10	3,461.1	1,136.9	478.5	398.3	80.20	5.966 SF		
11,200.0	7,740.0	7,714.6	7,712.0	69.9	13.7	-90.37	3,461.2	1,136.9	467.0	389.4	77.60	6.018 ES		
11,204.3	7,740.0	7,714.7	7,712.1	69.9	13.7	-90.39	3,461.2	1,136.9	467.0	389.6	77.43	6.031 CC		
11,300.0	7,740.0	7,716.8	7,714.3	71.4	13.7	-90.64	3,461.2	1,136.9	476.7	404.2	72.45	6.580		
11,400.0	7,740.0	7,719.0	7,716.5	73.0	13.7	-90.91	3,461.3	1,136.9	506.3	440.6	65.72	7.704		
11,500.0	7,740.0	7,721.2	7,718.6	74.6	13.7	-91.18	3,461.3	1,137.0	552.7	494.0	58.73	9.411		
11,600.0	7,740.0	7,723.3	7,720.8	76.2	13.7	-91.45	3,461.4	1,137.0	612.0	559.6	52.43	11.672		
11,700.0	7,740.0	7,725.5	7,723.0	77.8	13.7	-91.71	3,461.4	1,137.0	680.9	633.7	47.25	14.411		
11,800.0	7,740.0	7,727.6	7,725.1	79.4	13.7	-91.98	3,461.5	1,137.0	756.8	713.6	43.23	17.506		
11,900.0	7,740.0	7,729.8	7,727.3	81.0	13.7	-92.24	3,461.5	1,137.0	837.7	797.5	40.26	20.808		
12,000.0	7,740.0	7,731.9	7,729.4	82.6	13.7	-92.50	3,461.6	1,137.0	922.4	884.3	38.16	24.172		
12,100.0	7,740.0	7,734.0	7,731.5	84.2	13.7	-92.76	3,461.6	1,137.0	1,009.9	973.2	36.75	27.480		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S6-T1N-R68W (Bearden) - Bearden 24-6 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,700.0	7,740.0	7,797.8	7,725.0	48.0	19.0	-90.00	2,891.3	1,222.6	1,010.0	953.1	56.82	17.773		
9,800.0	7,740.0	7,797.8	7,725.0	49.3	19.0	-90.00	2,891.3	1,222.6	918.3	859.9	58.33	15.742		
9,900.0	7,740.0	7,797.8	7,725.0	50.7	19.0	-90.00	2,891.3	1,222.6	828.5	768.4	60.10	13.784		
10,000.0	7,740.0	7,797.8	7,725.0	52.0	19.0	-90.00	2,891.3	1,222.6	741.4	679.2	62.20	11.919		
10,100.0	7,740.0	7,797.8	7,725.0	53.4	19.0	-90.00	2,891.3	1,222.6	657.9	593.2	64.67	10.173		
10,200.0	7,740.0	7,797.8	7,725.0	54.9	19.0	-90.00	2,891.3	1,222.6	579.7	512.1	67.51	8.586		
10,300.0	7,740.0	7,797.8	7,725.0	56.3	19.0	-90.00	2,891.3	1,222.6	509.1	438.5	70.61	7.210		
10,400.0	7,740.0	7,797.8	7,725.0	57.7	19.0	-90.00	2,891.3	1,222.6	449.9	376.4	73.47	6.124		
10,500.0	7,740.0	7,797.8	7,725.0	59.2	19.0	-90.00	2,891.3	1,222.6	406.9	331.9	75.01	5.425		
10,600.0	7,740.0	7,797.8	7,725.0	60.7	19.0	-90.00	2,891.3	1,222.6	385.8	312.1	73.69	5.235 SF		
10,634.0	7,740.0	7,797.8	7,725.0	61.2	19.0	-90.00	2,891.3	1,222.6	384.3	311.9	72.40	5.308 CC, ES		
10,700.0	7,740.0	7,797.8	7,725.0	62.2	19.0	-90.00	2,891.3	1,222.6	389.9	321.1	68.73	5.673		
10,800.0	7,740.0	7,797.8	7,725.0	63.7	19.0	-90.00	2,891.3	1,222.6	418.6	357.3	61.32	6.826		
10,900.0	7,740.0	7,797.8	7,725.0	65.2	19.0	-90.00	2,891.3	1,222.6	467.3	413.7	53.65	8.711		
11,000.0	7,740.0	7,797.8	7,725.0	66.8	19.0	-90.00	2,891.3	1,222.6	530.7	483.4	47.24	11.232		
11,100.0	7,740.0	7,797.8	7,725.0	68.3	19.0	-90.00	2,891.3	1,222.6	604.0	561.4	42.59	14.182		
11,200.0	7,740.0	7,797.8	7,725.0	69.9	19.0	-90.00	2,891.3	1,222.6	684.1	644.6	39.55	17.296		
11,300.0	7,740.0	7,797.8	7,725.0	71.4	19.0	-90.00	2,891.3	1,222.6	768.9	731.1	37.77	20.355		
11,400.0	7,740.0	7,797.8	7,725.0	73.0	19.0	-90.00	2,891.3	1,222.6	857.0	820.1	36.87	23.244		
11,500.0	7,740.0	7,797.8	7,725.0	74.6	19.0	-90.00	2,891.3	1,222.6	947.4	910.9	36.52	25.939		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 1 (EXISTING) - ENCANA WELL - SUR													Offset Site Error:	0.0 ft
Survey Program: 100-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,800.0	7,740.0	7,700.0	7,697.5	63.7	13.7	-89.07	3,777.0	894.4	1,010.7	936.2	74.52	13.563		
10,900.0	7,740.0	7,700.0	7,697.5	65.2	13.7	-89.07	3,777.0	894.4	941.9	865.0	76.96	12.239		
11,000.0	7,740.0	7,704.7	7,702.2	66.8	13.7	-89.45	3,777.1	894.5	879.2	799.8	79.38	11.075		
11,100.0	7,740.0	7,707.0	7,704.4	68.3	13.7	-89.63	3,777.2	894.5	823.8	742.2	81.61	10.094		
11,200.0	7,740.0	7,709.2	7,706.6	69.9	13.7	-89.81	3,777.2	894.5	777.4	694.0	83.41	9.320		
11,300.0	7,740.0	7,711.3	7,708.8	71.4	13.7	-89.99	3,777.3	894.5	741.6	657.1	84.48	8.779		
11,400.0	7,740.0	7,713.5	7,711.0	73.0	13.7	-90.16	3,777.3	894.5	718.1	633.6	84.52	8.496 SF		
11,500.0	7,740.0	7,715.7	7,713.2	74.6	13.7	-90.34	3,777.4	894.6	708.0	624.7	83.32	8.497 ES		
11,521.8	7,740.0	7,716.2	7,713.6	74.9	13.7	-90.38	3,777.4	894.6	707.7	624.8	82.89	8.538 CC		
11,600.0	7,740.0	7,717.8	7,715.3	76.2	13.7	-90.51	3,777.4	894.6	712.0	631.1	80.86	8.806		
11,700.0	7,740.0	7,720.0	7,717.5	77.8	13.7	-90.69	3,777.5	894.6	729.8	652.4	77.32	9.438		
11,800.0	7,740.0	7,722.1	7,719.6	79.4	13.7	-90.86	3,777.5	894.6	760.4	687.3	73.08	10.405		
11,900.0	7,740.0	7,724.2	7,721.7	81.0	13.7	-91.03	3,777.6	894.6	802.4	733.8	68.52	11.709		
12,000.0	7,740.0	7,726.4	7,723.8	82.6	13.7	-91.20	3,777.6	894.6	854.0	790.0	64.01	13.343		
12,100.0	7,740.0	7,728.5	7,725.9	84.2	13.7	-91.37	3,777.7	894.6	913.8	854.0	59.76	15.290		
12,200.0	7,740.0	7,730.5	7,728.0	85.9	13.7	-91.54	3,777.7	894.6	980.1	924.2	55.92	17.525		
12,300.0	7,740.0	7,732.6	7,730.1	87.5	13.7	-91.71	3,777.8	894.7	1,051.7	999.2	52.54	20.016		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 23-6 (EXISTING) - ENCANA WELL - G													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
11,100.0	7,740.0	7,660.0	7,657.6	68.3	13.6	-82.19	4,367.2	1,275.5	1,061.2	998.4	62.73	16.916		
11,200.0	7,740.0	7,664.9	7,662.6	69.9	13.6	-83.06	4,367.5	1,275.5	966.5	901.8	64.68	14.943		
11,300.0	7,740.0	7,669.8	7,667.5	71.4	13.7	-83.91	4,367.7	1,275.6	873.0	806.0	66.98	13.033		
11,400.0	7,740.0	7,674.7	7,672.3	73.0	13.7	-84.76	4,367.9	1,275.6	781.1	711.3	69.75	11.199		
11,500.0	7,740.0	7,679.4	7,677.0	74.6	13.7	-85.58	4,368.1	1,275.6	691.4	618.3	73.08	9.461		
11,600.0	7,740.0	7,684.0	7,681.7	76.2	13.7	-86.40	4,368.3	1,275.7	604.9	527.8	77.12	7.844		
11,700.0	7,740.0	7,688.6	7,686.2	77.8	13.7	-87.20	4,368.5	1,275.7	523.2	441.2	81.94	6.385		
11,800.0	7,740.0	7,693.1	7,690.7	79.4	13.7	-88.00	4,368.7	1,275.7	448.9	361.5	87.44	5.134		
11,900.0	7,740.0	7,697.5	7,695.1	81.0	13.7	-88.77	4,368.9	1,275.8	386.4	293.5	92.85	4.161		
12,000.0	7,740.0	7,701.8	7,699.4	82.6	13.7	-89.54	4,369.1	1,275.8	342.1	246.0	96.03	3.562		
12,100.0	7,740.0	7,706.1	7,703.7	84.2	13.7	-90.30	4,369.3	1,275.8	323.5	229.9	93.69	3.453 ES, SF		
12,111.7	7,740.0	7,706.6	7,704.2	84.4	13.7	-90.39	4,369.3	1,275.8	323.3	230.4	92.95	3.479 CC		
12,200.0	7,740.0	7,710.4	7,708.0	85.9	13.7	-91.07	4,369.5	1,275.8	335.1	250.5	84.66	3.959		
12,300.0	7,740.0	7,714.7	7,712.4	87.5	13.7	-91.83	4,369.7	1,275.9	374.1	301.8	72.31	5.173		
12,400.0	7,740.0	7,719.1	7,716.7	89.1	13.7	-92.60	4,369.9	1,275.9	433.0	372.2	60.76	7.126		
12,500.0	7,740.0	7,723.4	7,721.0	90.8	13.7	-93.36	4,370.0	1,275.9	505.0	453.2	51.79	9.751		
12,600.0	7,740.0	7,727.7	7,725.3	92.4	13.8	-94.13	4,370.2	1,276.0	585.3	539.8	45.45	12.878		
12,700.0	7,740.0	7,732.0	7,729.6	94.1	13.8	-94.89	4,370.4	1,276.0	670.8	629.6	41.25	16.264		
12,800.0	7,740.0	7,736.4	7,734.0	95.7	13.8	-95.65	4,370.6	1,276.0	759.9	721.2	38.64	19.666		
12,900.0	7,740.0	7,740.7	7,738.3	97.4	13.8	-96.41	4,370.8	1,276.0	851.3	814.2	37.15	22.916		
13,000.0	7,740.0	7,745.0	7,742.6	99.0	13.8	-97.17	4,371.0	1,276.1	944.5	908.1	36.41	25.939		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-4-6 (EXISTING) - ENCANA WELL - P													Offset Site Error: 0.0 ft
Survey Program: 775-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
12,100.0	7,740.0	7,850.5	7,724.0	84.2	25.6	-90.00	4,836.2	604.2	1,103.4	998.7	104.69	10.539	
12,200.0	7,740.0	7,850.5	7,724.0	85.9	25.6	-90.00	4,836.2	604.2	1,063.5	955.9	107.58	9.886	
12,300.0	7,740.0	7,850.5	7,724.0	87.5	25.6	-90.00	4,836.2	604.2	1,031.8	921.8	109.95	9.385	
12,400.0	7,740.0	7,850.5	7,724.0	89.1	25.6	-90.00	4,836.2	604.2	1,009.0	897.4	111.60	9.042	
12,500.0	7,740.0	7,850.5	7,724.0	90.8	25.6	-90.00	4,836.2	604.2	995.9	883.5	112.38	8.861	
12,582.1	7,740.0	7,850.5	7,724.0	92.1	25.6	-90.00	4,836.2	604.2	992.5	880.2	112.29	8.838 CC, ES, SF	
12,600.0	7,740.0	7,850.5	7,724.0	92.4	25.6	-90.00	4,836.2	604.2	992.6	880.4	112.19	8.848	
12,700.0	7,740.0	7,850.5	7,724.0	94.1	25.6	-90.00	4,836.2	604.2	999.4	888.4	111.00	9.004	
12,800.0	7,740.0	7,850.5	7,724.0	95.7	25.6	-90.00	4,836.2	604.2	1,016.1	907.2	108.90	9.331	
12,900.0	7,740.0	7,850.5	7,724.0	97.4	25.6	-90.00	4,836.2	604.2	1,042.1	936.1	106.03	9.829	
13,000.0	7,740.0	7,850.5	7,724.0	99.0	25.6	-90.00	4,836.2	604.2	1,076.8	974.2	102.59	10.497	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BEARDEN 2-8-6 (EXISTING) - ENCANA WELL - S			Offset Site Error:		0.0 ft	
Survey Program: 76-Geolink MWD													Offset Well Error:		0.0 ft				
Reference		Offset		Semi Major Axis			Distance							Warning					
Measured Depth	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								
9,900.0	7,740.0	7,911.9	7,719.5	50.7	27.9	-89.76	2,279.4	560.2	1,057.3	985.2	72.11	14.663 SF							
10,000.0	7,740.0	7,912.9	7,720.6	52.0	27.9	-89.81	2,279.4	560.2	1,050.2	979.1	71.10	14.771 ES							
10,025.6	7,740.0	7,913.2	7,720.8	52.4	27.9	-89.83	2,279.4	560.2	1,049.9	979.1	70.75	14.838 CC							
10,100.0	7,740.0	7,914.0	7,721.6	53.4	27.9	-89.87	2,279.4	560.2	1,052.5	982.9	69.57	15.128							
10,200.0	7,740.0	7,915.1	7,722.7	54.9	27.9	-89.93	2,279.4	560.2	1,064.2	996.7	67.60	15.744							

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 2-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error: 0.0 ft
Survey Program: 8164-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
13,400.0	7,740.0	7,693.0	7,693.0	105.7	13.4	-90.00	6,294.0	693.9	1,100.0	986.7	113.38	9.702	
13,500.0	7,740.0	7,693.0	7,693.0	107.4	13.4	-90.00	6,294.0	693.9	1,045.1	927.9	117.20	8.917	
13,600.0	7,740.0	7,693.0	7,693.0	109.1	13.4	-90.00	6,294.0	693.9	997.2	876.5	120.71	8.261	
13,700.0	7,740.0	7,693.0	7,693.0	110.7	13.4	-90.00	6,294.0	693.9	957.3	833.6	123.69	7.740	
13,800.0	7,740.0	7,693.0	7,693.0	112.4	13.4	-90.00	6,294.0	693.9	926.6	800.7	125.85	7.363	
13,900.0	7,740.0	7,693.0	7,693.0	114.1	13.4	-90.00	6,294.0	693.9	905.9	779.0	126.94	7.137	
14,000.0	7,740.0	7,693.0	7,693.0	115.8	13.4	-90.00	6,294.0	693.9	896.0	769.2	126.76	7.069 SF	
14,039.4	7,740.0	7,693.0	7,693.0	116.5	13.4	-90.00	6,294.0	693.9	895.1	768.8	126.32	7.086 CC, ES	
14,100.0	7,740.0	7,693.0	7,693.0	117.5	13.4	-90.00	6,294.0	693.9	897.2	771.9	125.23	7.164	
14,200.0	7,740.0	7,693.0	7,693.0	119.2	13.4	-90.00	6,294.0	693.9	909.4	787.0	122.43	7.428	
14,300.0	7,740.0	7,693.0	7,693.0	120.9	13.4	-90.00	6,294.0	693.9	932.3	813.7	118.57	7.863	
14,400.0	7,740.0	7,693.0	7,693.0	122.6	13.4	-90.00	6,294.0	693.9	965.0	851.1	113.91	8.472	
14,500.0	7,740.0	7,693.0	7,693.0	124.3	13.4	-90.00	6,294.0	693.9	1,006.7	897.9	108.78	9.254	
14,600.0	7,740.0	7,693.0	7,693.0	125.9	13.4	-90.00	6,294.0	693.9	1,056.2	952.7	103.46	10.209	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BECKY 7-6 (EXISTING) - NOBLE WELL - NO SUR													Offset Site Error:	0.0 ft
Survey Program: 7756-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
12,300.0	7,740.0	7,694.0	7,694.0	87.5	13.4	-90.00	5,577.5	1,385.9	1,040.1	977.9	62.19	16.725		
12,400.0	7,740.0	7,694.0	7,694.0	89.1	13.4	-90.00	5,577.5	1,385.9	942.3	878.3	63.97	14.730		
12,500.0	7,740.0	7,694.0	7,694.0	90.8	13.4	-90.00	5,577.5	1,385.9	845.0	778.9	66.14	12.776		
12,600.0	7,740.0	7,694.0	7,694.0	92.4	13.4	-90.00	5,577.5	1,385.9	748.5	679.6	68.83	10.874		
12,700.0	7,740.0	7,694.0	7,694.0	94.1	13.4	-90.00	5,577.5	1,385.9	652.9	580.7	72.25	9.037		
12,800.0	7,740.0	7,694.0	7,694.0	95.7	13.4	-90.00	5,577.5	1,385.9	559.0	482.3	76.71	7.287		
12,900.0	7,740.0	7,694.0	7,694.0	97.4	13.4	-90.00	5,577.5	1,385.9	467.6	384.9	82.68	5.655		
13,000.0	7,740.0	7,694.0	7,694.0	99.0	13.4	-90.00	5,577.5	1,385.9	380.5	289.7	90.80	4.190		
13,100.0	7,740.0	7,694.0	7,694.0	100.7	13.4	-90.00	5,577.5	1,385.9	301.5	199.9	101.56	2.968		
13,200.0	7,740.0	7,694.0	7,694.0	102.4	13.4	-90.00	5,577.5	1,385.9	238.8	125.6	113.17	2.110		
13,300.0	7,740.0	7,694.0	7,694.0	104.0	13.4	-90.00	5,577.5	1,385.9	207.8	92.1	115.63	1.797 ES, SF		
13,319.3	7,740.0	7,694.0	7,694.0	104.4	13.4	-90.00	5,577.5	1,385.9	206.9	93.1	113.78	1.818 CC		
13,400.0	7,740.0	7,694.0	7,694.0	105.7	13.4	-90.00	5,577.5	1,385.9	222.1	123.5	98.51	2.254		
13,500.0	7,740.0	7,694.0	7,694.0	107.4	13.4	-90.00	5,577.5	1,385.9	274.7	199.7	74.98	3.663		
13,600.0	7,740.0	7,694.0	7,694.0	109.1	13.4	-90.00	5,577.5	1,385.9	348.7	291.0	57.67	6.046		
13,700.0	7,740.0	7,694.0	7,694.0	110.7	13.4	-90.00	5,577.5	1,385.9	433.3	386.1	47.17	9.186		
13,800.0	7,740.0	7,694.0	7,694.0	112.4	13.4	-90.00	5,577.5	1,385.9	523.3	482.0	41.33	12.661		
13,900.0	7,740.0	7,694.0	7,694.0	114.1	13.4	-90.00	5,577.5	1,385.9	616.4	578.0	38.41	16.049		
14,000.0	7,740.0	7,694.0	7,694.0	115.8	13.4	-90.00	5,577.5	1,385.9	711.4	674.3	37.19	19.132		
14,100.0	7,740.0	7,694.0	7,694.0	117.5	13.4	-90.00	5,577.5	1,385.9	807.6	770.7	36.90	21.890		
14,200.0	7,740.0	7,694.0	7,694.0	119.2	13.4	-90.00	5,577.5	1,385.9	904.7	867.6	37.09	24.393		
14,300.0	7,740.0	7,694.0	7,694.0	120.9	13.4	-90.00	5,577.5	1,385.9	1,002.3	964.8	37.51	26.717		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 21-6 (EXISTING) - KERR-MCGEE WE													Offset Site Error:	0.0 ft
Survey Program: 40-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
13,100.0	7,740.0	7,784.8	7,688.4	100.7	20.0	87.81	6,300.6	2,021.3	1,034.0	989.8	44.13	23.429		
13,200.0	7,740.0	7,787.0	7,690.6	102.4	20.0	88.09	6,300.7	2,021.3	944.1	896.6	47.43	19.906		
13,300.0	7,740.0	7,789.1	7,692.7	104.0	20.0	88.37	6,300.7	2,021.3	856.4	804.4	52.00	16.468		
13,400.0	7,740.0	7,791.3	7,694.9	105.7	20.0	88.66	6,300.8	2,021.3	771.7	713.6	58.13	13.275		
13,500.0	7,740.0	7,793.5	7,697.1	107.4	20.0	88.95	6,300.8	2,021.3	691.2	625.1	66.11	10.456		
13,600.0	7,740.0	7,795.7	7,699.3	109.1	20.0	89.24	6,300.9	2,021.2	616.3	540.1	76.18	8.091		
13,700.0	7,740.0	7,797.9	7,701.5	110.7	20.0	89.54	6,300.9	2,021.2	549.5	461.1	88.43	6.215		
13,800.0	7,740.0	7,800.0	7,703.6	112.4	20.0	89.81	6,301.0	2,021.2	494.1	391.7	102.39	4.825		
13,900.0	7,740.0	7,802.5	7,706.1	114.1	20.0	90.14	6,301.0	2,021.2	454.1	337.5	116.55	3.896		
14,000.0	7,740.0	7,804.8	7,708.4	115.8	20.0	90.44	6,301.1	2,021.1	433.9	305.8	128.16	3.386		
14,039.6	7,740.0	7,805.7	7,709.3	116.5	20.0	90.57	6,301.1	2,021.1	432.1	300.7	131.40	3.288 CC, ES		
14,100.0	7,740.0	7,807.1	7,710.7	117.5	20.0	90.75	6,301.2	2,021.1	436.3	301.8	134.50	3.244 SF		
14,200.0	7,740.0	7,809.4	7,713.0	119.2	20.1	91.06	6,301.2	2,021.1	460.9	326.0	134.87	3.417		
14,300.0	7,740.0	7,811.8	7,715.4	120.9	20.1	91.37	6,301.3	2,021.1	504.5	373.5	130.94	3.853		
14,400.0	7,740.0	7,814.1	7,717.7	122.6	20.1	91.69	6,301.3	2,021.0	562.6	437.6	125.00	4.501		
14,500.0	7,740.0	7,816.5	7,720.1	124.3	20.1	92.00	6,301.4	2,021.0	631.3	512.6	118.69	5.319		
14,600.0	7,740.0	7,818.9	7,722.5	125.9	20.1	92.32	6,301.4	2,021.0	707.5	594.7	112.79	6.273		
14,700.0	7,740.0	7,821.3	7,724.9	127.6	20.1	92.64	6,301.5	2,021.0	789.1	681.5	107.56	7.336		
14,800.0	7,740.0	7,823.8	7,727.3	129.3	20.1	92.96	6,301.6	2,021.0	874.4	771.4	103.05	8.485		
14,852.2	7,740.0	7,825.0	7,728.6	130.2	20.1	93.13	6,301.6	2,020.9	920.2	819.2	100.95	9.115		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - BULTHAUP 23-6 (EXISTING) - KERR-MCGEE WE														Offset Site Error: 0.0 ft	
Survey Program: 771-Geolink MWD														Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
10,400.0	7,740.0	7,831.5	7,760.1	57.7	18.8	87.44	3,582.9	2,002.7	1,004.5	968.1	36.45	27.559			
10,500.0	7,740.0	7,833.4	7,762.0	59.2	18.8	87.70	3,583.0	2,002.7	913.7	877.8	35.81	25.516			
10,600.0	7,740.0	7,835.2	7,763.8	60.7	18.8	87.97	3,583.0	2,002.7	824.9	789.2	35.66	23.135			
10,700.0	7,740.0	7,837.1	7,765.7	62.2	18.8	88.23	3,583.0	2,002.7	739.0	702.5	36.49	20.251			
10,800.0	7,740.0	7,838.9	7,767.5	63.7	18.8	88.49	3,583.1	2,002.7	657.1	618.1	38.99	16.851			
10,900.0	7,740.0	7,840.7	7,769.3	65.2	18.8	88.76	3,583.1	2,002.7	580.9	537.1	43.79	13.265			
11,000.0	7,740.0	7,842.5	7,771.1	66.8	18.8	89.02	3,583.1	2,002.7	512.9	461.7	51.21	10.016			
11,100.0	7,740.0	7,844.4	7,772.9	68.3	18.9	89.27	3,583.2	2,002.7	456.9	395.9	61.04	7.485			
11,200.0	7,740.0	7,846.1	7,774.7	69.9	18.9	89.53	3,583.2	2,002.7	417.6	345.5	72.14	5.789			
11,300.0	7,740.0	7,847.9	7,776.5	71.4	18.9	89.79	3,583.2	2,002.7	400.0	317.8	82.19	4.867			
11,321.8	7,740.0	7,848.3	7,776.9	71.8	18.9	89.84	3,583.2	2,002.7	399.4	315.5	83.98	4.757 CC, ES			
11,400.0	7,740.0	7,849.7	7,778.3	73.0	18.9	90.04	3,583.3	2,002.7	407.0	318.3	88.70	4.589 SF			
11,500.0	7,740.0	7,851.5	7,780.1	74.6	18.9	90.30	3,583.3	2,002.7	437.4	346.4	90.92	4.810			
11,600.0	7,740.0	7,853.2	7,781.8	76.2	18.9	90.55	3,583.3	2,002.7	486.7	396.7	90.03	5.406			
11,700.0	7,740.0	7,855.0	7,783.6	77.8	18.9	90.80	3,583.4	2,002.7	550.0	462.4	87.66	6.275			
11,800.0	7,740.0	7,856.7	7,785.3	79.4	18.9	91.05	3,583.4	2,002.7	623.0	538.1	84.87	7.341			
11,900.0	7,740.0	7,858.5	7,787.1	81.0	18.9	91.30	3,583.4	2,002.7	702.6	620.5	82.17	8.552			
12,000.0	7,740.0	7,860.2	7,788.8	82.6	18.9	91.55	3,583.5	2,002.7	787.0	707.2	79.74	9.869			
12,100.0	7,740.0	7,861.9	7,790.5	84.2	18.9	91.79	3,583.5	2,002.7	874.6	796.9	77.63	11.266			
12,200.0	7,740.0	7,863.6	7,792.2	85.9	18.9	92.04	3,583.5	2,002.7	964.6	888.8	75.82	12.723			
12,300.0	7,740.0	7,865.3	7,793.9	87.5	18.9	92.28	3,583.5	2,002.7	1,056.4	982.2	74.26	14.227			

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1A-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
7,200.0	7,034.3	9,708.1	7,530.0	29.1	48.3	-1.22	-61.3	2,380.7	1,036.3	990.6	45.70	22.675		
7,300.0	7,131.6	9,708.5	7,530.0	29.5	48.3	-1.19	-61.7	2,380.7	974.9	927.7	47.25	20.633		
7,400.0	7,228.9	9,706.7	7,530.0	30.0	48.3	22.52	-59.9	2,380.7	920.4	871.7	48.68	18.907		
7,500.0	7,324.6	9,689.6	7,530.0	30.4	48.1	54.22	-42.8	2,380.7	874.7	825.0	49.64	17.620		
7,600.0	7,416.1	9,655.7	7,530.0	30.8	47.6	69.09	-8.9	2,380.7	839.5	789.6	49.98	16.797		
7,700.0	7,500.5	9,606.0	7,530.0	31.2	47.0	75.42	40.8	2,380.7	815.5	765.8	49.69	16.412		
7,800.0	7,575.1	9,542.0	7,530.0	31.6	46.2	77.30	104.8	2,380.7	801.6	752.7	48.88	16.399		
7,900.0	7,637.9	9,465.7	7,530.0	32.0	45.3	76.79	181.1	2,380.6	795.6	747.8	47.77	16.656		
7,976.3	7,676.6	9,400.6	7,530.0	32.4	44.5	75.67	246.2	2,380.6	794.6	747.7	46.87	16.953 CC, ES		
8,000.0	7,686.8	9,379.3	7,530.0	32.5	44.3	75.27	267.5	2,380.6	794.6	748.0	46.58	17.061		
8,100.0	7,720.4	9,285.6	7,530.0	32.9	43.2	73.70	361.2	2,380.6	796.0	750.5	45.51	17.489		
8,200.0	7,737.7	9,187.3	7,530.0	33.5	42.1	72.72	459.5	2,380.6	797.5	752.8	44.71	17.837		
8,300.0	7,740.0	9,087.3	7,530.0	34.0	41.0	72.58	559.5	2,380.6	798.1	753.9	44.21	18.054		
8,400.0	7,740.0	8,987.3	7,530.0	34.6	40.0	72.59	659.5	2,380.6	798.6	754.8	43.85	18.211		
8,500.0	7,740.0	8,887.3	7,530.0	35.3	39.1	72.60	759.5	2,380.6	799.1	755.5	43.60	18.326		
8,600.0	7,740.0	8,787.3	7,530.0	36.1	38.1	72.61	859.5	2,380.5	799.6	756.1	43.45	18.402		
8,700.0	7,740.0	8,687.3	7,530.0	36.9	37.3	72.62	959.5	2,380.5	800.1	756.7	43.39	18.438		
8,800.0	7,740.0	8,587.3	7,530.0	37.8	36.5	72.63	1,059.5	2,380.5	800.5	757.1	43.42	18.436		
8,900.0	7,740.0	8,487.3	7,530.0	38.7	35.8	72.64	1,159.5	2,380.5	801.0	757.5	43.55	18.394		
9,000.0	7,740.0	8,387.3	7,530.0	39.7	35.2	72.65	1,259.5	2,380.5	801.5	757.7	43.77	18.310		
9,100.0	7,740.0	8,287.3	7,530.0	40.8	34.6	72.66	1,359.5	2,380.5	802.0	757.9	44.11	18.181		
9,200.0	7,740.0	8,187.4	7,530.0	41.9	34.1	72.67	1,459.5	2,380.4	802.5	757.9	44.57	18.005		
9,300.0	7,740.0	8,110.5	7,529.0	43.0	33.8	72.62	1,536.3	2,380.7	803.9	757.4	46.42	17.316		
9,400.0	7,740.0	8,050.0	7,523.3	44.2	33.6	72.27	1,596.5	2,382.1	809.5	760.4	49.15	16.473		
9,500.0	7,740.0	7,987.3	7,512.2	45.5	33.4	71.59	1,658.2	2,384.9	820.0	768.3	51.64	15.878		
9,600.0	7,740.0	7,928.7	7,497.2	46.7	33.2	70.69	1,714.6	2,388.7	835.3	781.0	54.24	15.400		
9,700.0	7,740.0	7,873.1	7,478.9	48.0	33.0	69.61	1,766.9	2,393.4	855.6	798.8	56.82	15.059		
9,800.0	7,740.0	7,820.8	7,458.1	49.3	32.8	68.42	1,814.6	2,398.6	881.2	821.9	59.37	14.844		
9,900.0	7,740.0	7,772.0	7,435.7	50.7	32.7	67.18	1,857.5	2,404.3	912.1	850.3	61.83	14.752		
10,000.0	7,740.0	7,726.8	7,412.4	52.0	32.6	65.93	1,895.9	2,410.2	948.3	884.0	64.35	14.736 SF		
10,100.0	7,740.0	7,685.1	7,389.0	53.4	32.4	64.71	1,929.8	2,416.2	989.6	923.1	66.53	14.874		
10,200.0	7,740.0	7,650.0	7,367.8	54.9	32.4	63.64	1,957.2	2,421.5	1,035.9	967.2	68.73	15.071		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Morgan Hills 1B-7H-A168 - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
7,900.0	7,637.9	9,648.2	7,770.0	32.0	42.6	89.73	181.2	2,630.7	1,038.9	990.8	48.05	21.619		
8,000.0	7,686.8	9,561.8	7,770.0	32.5	41.5	90.32	267.5	2,630.6	1,024.0	976.5	47.49	21.562		
8,100.0	7,720.4	9,468.1	7,770.0	32.9	40.4	90.28	361.3	2,630.6	1,015.3	968.4	46.90	21.651		
8,200.0	7,737.7	9,369.8	7,770.0	33.5	39.2	90.11	459.6	2,630.6	1,011.6	965.2	46.35	21.825		
8,275.7	7,741.9	9,294.3	7,770.0	33.8	38.3	89.95	535.1	2,630.6	1,010.9	964.9	46.01	21.972 CC, ES		
8,300.0	7,740.0	9,269.9	7,770.0	34.0	38.1	90.06	559.5	2,630.6	1,011.5	965.6	45.90	22.035		
8,400.0	7,740.0	9,169.9	7,770.0	34.6	36.9	90.06	659.5	2,630.6	1,012.0	966.4	45.58	22.202		
8,500.0	7,740.0	9,069.9	7,770.0	35.3	35.9	90.06	759.5	2,630.6	1,012.5	967.1	45.37	22.316		
8,600.0	7,740.0	8,969.9	7,770.0	36.1	34.9	90.06	859.5	2,630.5	1,013.0	967.8	45.26	22.381		
8,700.0	7,740.0	8,869.9	7,770.0	36.9	34.0	90.06	959.5	2,630.5	1,013.5	968.3	45.25	22.397		
8,800.0	7,740.0	8,769.9	7,770.0	37.8	33.1	90.06	1,059.5	2,630.5	1,014.0	968.7	45.34	22.365		
8,900.0	7,740.0	8,669.9	7,770.0	38.7	32.3	90.06	1,159.5	2,630.5	1,014.5	969.0	45.53	22.284		
9,000.0	7,740.0	8,569.9	7,770.0	39.7	31.6	90.06	1,259.5	2,630.5	1,015.1	969.2	45.82	22.152		
9,100.0	7,740.0	8,469.9	7,770.0	40.8	30.9	90.06	1,359.5	2,630.5	1,015.6	969.3	46.23	21.966		
9,200.0	7,740.0	8,369.9	7,770.0	41.9	30.4	90.06	1,459.5	2,630.4	1,016.1	969.3	46.77	21.724		
9,300.0	7,740.0	8,283.6	7,768.5	43.0	30.0	89.97	1,545.8	2,630.8	1,017.0	968.9	48.04	21.169		
9,400.0	7,740.0	8,207.1	7,759.5	44.2	29.7	89.47	1,621.7	2,632.6	1,020.0	970.2	49.81	20.479		
9,500.0	7,740.0	8,133.3	7,743.5	45.5	29.4	88.57	1,693.6	2,635.9	1,025.5	973.8	51.74	19.820		
9,600.0	7,740.0	8,063.6	7,721.7	46.7	29.1	87.37	1,759.6	2,640.4	1,034.0	980.2	53.86	19.201		
9,700.0	7,740.0	8,000.0	7,696.5	48.0	29.0	85.98	1,817.7	2,645.7	1,046.1	989.9	56.16	18.625 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Thomas 7-12 (Existing) - Existing - NO SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 7894-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-173.71	-982.4	-108.3	988.5						
100.0	100.0	88.0	88.0	0.2	0.2	-173.71	-982.4	-108.3	988.4	988.1	0.31	3,233.956			
200.0	200.0	188.0	188.0	0.3	0.3	-173.71	-982.4	-108.3	988.4	987.7	0.65	1,509.707			
300.0	300.0	288.0	288.0	0.5	0.5	86.30	-982.4	-108.3	988.4	987.4	1.00	984.627			
400.0	400.0	388.0	388.0	0.7	0.7	86.41	-982.4	-108.3	988.3	986.9	1.35	729.414			
500.0	499.9	487.9	487.9	0.9	0.9	86.61	-982.4	-108.3	988.1	986.3	1.71	577.298			
600.0	599.8	587.8	587.8	1.1	1.0	86.92	-982.4	-108.3	987.8	985.7	2.08	475.486			
700.0	699.5	687.5	687.5	1.3	1.2	87.32	-982.4	-108.3	987.4	985.0	2.46	402.054			
800.0	799.2	787.2	787.2	1.5	1.4	87.83	-982.4	-108.3	987.0	984.2	2.85	346.289			
900.0	898.6	886.6	886.6	1.7	1.5	88.44	-982.4	-108.3	986.7	983.4	3.26	302.351			
1,000.0	997.9	985.9	985.9	2.0	1.7	89.14	-982.4	-108.3	986.4	982.7	3.70	266.781			
1,100.0	1,096.9	1,084.9	1,084.9	2.3	1.9	89.94	-982.4	-108.3	986.3	982.2	4.15	237.401			
1,106.7	1,103.5	1,091.5	1,091.5	2.3	1.9	90.00	-982.4	-108.3	986.3	982.1	4.19	235.573 CC			
1,200.0	1,195.7	1,183.7	1,183.7	2.6	2.1	90.84	-982.4	-108.3	986.4	981.8	4.64	212.762			
1,300.0	1,294.1	1,282.1	1,282.1	2.9	2.2	91.83	-982.4	-108.3	986.8	981.7	5.14	191.861 ES			
1,400.0	1,392.3	1,380.3	1,380.3	3.3	2.4	92.91	-982.4	-108.3	987.6	982.0	5.68	173.973			
1,500.0	1,490.1	1,478.1	1,478.1	3.7	2.6	94.07	-982.4	-108.3	988.9	982.7	6.24	158.561			
1,600.0	1,587.5	1,575.5	1,575.5	4.1	2.8	95.32	-982.4	-108.3	990.8	984.0	6.82	145.213			
1,700.0	1,684.6	1,672.6	1,672.6	4.5	2.9	96.64	-982.4	-108.3	993.4	986.0	7.44	133.607			
1,800.0	1,781.2	1,769.2	1,769.2	5.0	3.1	99.91	-982.4	-108.3	997.0	989.0	8.06	123.715			
1,900.0	1,877.8	1,865.8	1,865.8	5.5	3.3	105.06	-982.4	-108.3	1,002.8	994.1	8.67	115.599 SF			

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 12-7 (EXISTING) - ENCANA WELL - N													Offset Site Error:	0.0 ft
Survey Program: 8325-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	88.0	88.0	0.0	0.2	-42.52	131.9	-120.9	178.9					
100.0	100.0	188.0	188.0	0.2	0.3	-42.52	131.9	-120.9	178.9	178.4	0.48	372.612		
200.0	200.0	288.0	288.0	0.3	0.5	-42.52	131.9	-120.9	178.9	178.1	0.83	215.760		
200.0	200.0	288.0	288.0	0.3	0.5	-42.52	131.9	-120.9	178.9	178.1	0.83	215.760 CC		
300.0	300.0	388.0	388.0	0.5	0.7	-142.56	131.9	-120.9	179.1	177.9	1.18	151.986 ES		
400.0	400.0	488.0	488.0	0.7	0.9	-142.89	131.9	-120.9	180.5	178.9	1.53	118.105		
500.0	499.9	587.9	587.9	0.9	1.0	-143.53	131.9	-120.9	183.3	181.4	1.88	97.497		
600.0	599.8	687.8	687.8	1.1	1.2	-144.45	131.9	-120.9	187.5	185.3	2.23	83.924		
700.0	699.5	787.5	787.5	1.3	1.4	-145.62	131.9	-120.9	193.2	190.6	2.59	74.547		
800.0	799.2	887.2	887.2	1.5	1.5	-146.99	131.9	-120.9	200.5	197.5	2.95	67.890		
900.0	898.6	986.6	986.6	1.7	1.7	-148.50	131.9	-120.9	209.3	206.0	3.32	63.109		
1,000.0	997.9	1,085.9	1,085.9	2.0	1.9	-150.10	131.9	-120.9	219.8	216.2	3.68	59.687		
1,100.0	1,096.9	1,184.9	1,184.9	2.3	2.1	-151.75	131.9	-120.9	232.0	228.0	4.05	57.285		
1,200.0	1,195.7	1,283.7	1,283.7	2.6	2.2	-153.41	131.9	-120.9	246.0	241.5	4.42	55.673		
1,300.0	1,294.1	1,382.1	1,382.1	2.9	2.4	-155.04	131.9	-120.9	261.6	256.9	4.78	54.684		
1,400.0	1,392.3	1,480.3	1,480.3	3.3	2.6	-156.62	131.9	-120.9	279.1	274.0	5.15	54.198		
1,500.0	1,490.1	1,578.1	1,578.1	3.7	2.8	-158.13	131.9	-120.9	298.4	292.8	5.51	54.122 SF		
1,600.0	1,587.5	1,675.5	1,675.5	4.1	2.9	-159.55	131.9	-120.9	319.4	313.5	5.87	54.384		
1,700.0	1,684.6	1,772.6	1,772.6	4.5	3.1	-160.88	131.9	-120.9	342.3	336.0	6.23	54.928		
1,800.0	1,781.2	1,869.2	1,869.2	5.0	3.3	-160.21	131.9	-120.9	366.6	360.0	6.59	55.661		
1,900.0	1,877.8	1,965.8	1,965.8	5.5	3.4	-157.63	131.9	-120.9	390.8	383.8	6.95	56.264		
2,000.0	1,974.4	2,062.4	2,062.4	6.0	3.6	-155.89	131.9	-120.9	414.6	407.3	7.30	56.760		
2,100.0	2,071.3	2,159.3	2,159.3	6.4	3.8	-157.28	131.9	-120.9	437.4	429.7	7.65	57.138		
2,200.0	2,168.6	2,256.6	2,256.6	6.8	3.9	-158.43	131.9	-120.9	459.0	451.0	8.00	57.343		
2,300.0	2,265.9	2,353.9	2,353.9	7.3	4.1	-159.44	131.9	-120.9	480.5	472.2	8.35	57.534		
2,400.0	2,363.2	2,451.2	2,451.2	7.7	4.3	-160.36	131.9	-120.9	502.2	493.5	8.70	57.734		
2,500.0	2,460.5	2,548.5	2,548.5	8.2	4.4	-161.20	131.9	-120.9	524.0	515.0	9.04	57.940		
2,600.0	2,557.9	2,645.9	2,645.9	8.6	4.6	-161.98	131.9	-120.9	545.9	536.6	9.39	58.148		
2,700.0	2,655.2	2,743.2	2,743.2	9.0	4.8	-162.70	131.9	-120.9	567.9	558.2	9.73	58.355		
2,800.0	2,752.5	2,840.5	2,840.5	9.5	5.0	-163.36	131.9	-120.9	590.0	579.9	10.08	58.560		
2,900.0	2,849.8	2,937.8	2,937.8	9.9	5.1	-163.98	131.9	-120.9	612.1	601.7	10.42	58.762		
3,000.0	2,947.1	3,035.1	3,035.1	10.4	5.3	-164.55	131.9	-120.9	634.4	623.6	10.76	58.960		
3,100.0	3,044.4	3,132.4	3,132.4	10.8	5.5	-165.08	131.9	-120.9	656.6	645.5	11.10	59.153		
3,200.0	3,141.7	3,229.7	3,229.7	11.2	5.6	-165.58	131.9	-120.9	678.9	667.5	11.44	59.340		
3,300.0	3,239.1	3,327.1	3,327.1	11.7	5.8	-166.05	131.9	-120.9	701.3	689.5	11.78	59.522		
3,400.0	3,336.4	3,424.4	3,424.4	12.1	6.0	-166.49	131.9	-120.9	723.7	711.6	12.12	59.699		
3,500.0	3,433.7	3,521.7	3,521.7	12.6	6.1	-166.90	131.9	-120.9	746.1	733.7	12.46	59.870		
3,600.0	3,531.0	3,619.0	3,619.0	13.0	6.3	-167.29	131.9	-120.9	768.6	755.8	12.80	60.035		
3,700.0	3,628.3	3,716.3	3,716.3	13.5	6.5	-167.66	131.9	-120.9	791.1	778.0	13.14	60.194		
3,800.0	3,725.6	3,813.6	3,813.6	13.9	6.7	-168.00	131.9	-120.9	813.6	800.1	13.48	60.348		
3,900.0	3,822.9	3,910.9	3,910.9	14.4	6.8	-168.33	131.9	-120.9	836.2	822.4	13.82	60.497		
4,000.0	3,920.2	4,008.2	4,008.2	14.8	7.0	-168.64	131.9	-120.9	858.8	844.6	14.16	60.641		
4,100.0	4,017.6	4,105.6	4,105.6	15.3	7.2	-168.93	131.9	-120.9	881.4	866.9	14.50	60.779		
4,200.0	4,114.9	4,202.9	4,202.9	15.7	7.3	-169.21	131.9	-120.9	904.0	889.2	14.84	60.913		
4,300.0	4,212.2	4,300.2	4,300.2	16.1	7.5	-169.48	131.9	-120.9	926.6	911.5	15.18	61.042		
4,400.0	4,309.5	4,397.5	4,397.5	16.6	7.7	-169.73	131.9	-120.9	949.3	933.8	15.52	61.167		
4,500.0	4,406.8	4,494.8	4,494.8	17.0	7.8	-169.98	131.9	-120.9	972.0	956.1	15.86	61.287		
4,600.0	4,504.1	4,592.1	4,592.1	17.5	8.0	-170.21	131.9	-120.9	994.7	978.5	16.20	61.404		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 21-7 (EXISTING) - ENCANA WELL - G													Offset Site Error: 0.0 ft
Survey Program: 100-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
8,500.0	7,740.0	7,782.1	7,779.2	35.3	13.6	-88.81	1,616.2	1,144.8	978.9	930.0	48.82	20.049	
8,600.0	7,740.0	7,784.5	7,781.7	36.1	13.6	-89.10	1,616.2	1,144.9	892.4	842.8	49.58	18.000	
8,700.0	7,740.0	7,787.0	7,784.1	36.9	13.6	-89.40	1,616.3	1,144.9	809.0	758.6	50.36	16.064	
8,800.0	7,740.0	7,789.4	7,786.5	37.8	13.6	-89.70	1,616.3	1,145.0	729.8	678.6	51.13	14.273	
8,900.0	7,740.0	7,791.8	7,789.0	38.7	13.6	-90.00	1,616.4	1,145.0	656.2	604.4	51.80	12.670	
9,000.0	7,740.0	7,794.3	7,791.4	39.7	13.7	-90.30	1,616.5	1,145.1	590.5	538.4	52.19	11.316	
9,100.0	7,740.0	7,796.7	7,793.8	40.8	13.7	-90.59	1,616.5	1,145.2	535.6	483.5	52.01	10.297	
9,200.0	7,740.0	7,800.0	7,797.1	41.9	13.7	-91.00	1,616.6	1,145.2	494.9	444.0	50.90	9.723 SF	
9,300.0	7,740.0	7,801.6	7,798.7	43.0	13.7	-91.19	1,616.6	1,145.3	472.2	423.7	48.51	9.734	
9,359.8	7,740.0	7,803.0	7,800.2	43.7	13.7	-91.37	1,616.7	1,145.3	468.4	421.9	46.48	10.077 CC, ES	
9,400.0	7,740.0	7,804.0	7,801.2	44.2	13.7	-91.49	1,616.7	1,145.3	470.1	425.2	44.91	10.466	
9,500.0	7,740.0	7,806.5	7,803.7	45.5	13.7	-91.80	1,616.8	1,145.4	488.9	448.2	40.74	12.001	
9,600.0	7,740.0	7,809.1	7,806.2	46.7	13.7	-92.10	1,616.8	1,145.5	526.3	489.5	36.86	14.278	
9,700.0	7,740.0	7,811.6	7,808.7	48.0	13.7	-92.41	1,616.9	1,145.5	578.8	544.9	33.95	17.049	
9,800.0	7,740.0	7,814.2	7,811.3	49.3	13.7	-92.73	1,617.0	1,145.6	642.7	610.5	32.20	19.959	
9,900.0	7,740.0	7,816.8	7,813.9	50.7	13.7	-93.05	1,617.0	1,145.6	714.8	683.4	31.44	22.737	
10,000.0	7,740.0	7,819.4	7,816.5	52.0	13.7	-93.37	1,617.1	1,145.7	793.1	761.7	31.36	25.289	
10,100.0	7,740.0	7,822.1	7,819.2	53.4	13.7	-93.69	1,617.2	1,145.8	875.7	844.1	31.67	27.650	
10,200.0	7,740.0	7,824.8	7,821.9	54.9	13.7	-94.02	1,617.2	1,145.8	961.7	929.5	32.18	29.885	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													Offset Site Error: 0.0 ft	
Survey Program: 71-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
3,400.0	3,336.4	3,702.0	3,548.3	12.1	18.2	-48.08	646.8	1,281.5	998.1	973.3	24.78	40.282		
3,500.0	3,433.7	3,783.0	3,625.9	12.6	18.6	-47.71	624.2	1,287.0	967.3	941.8	25.53	37.889		
3,600.0	3,531.0	3,891.4	3,730.9	13.0	19.1	-47.48	597.3	1,291.2	936.9	910.7	26.24	35.709		
3,700.0	3,628.3	4,026.8	3,861.3	13.5	19.8	-47.25	561.3	1,292.3	903.1	876.1	26.95	33.513		
3,800.0	3,725.6	4,105.0	3,936.0	13.9	20.2	-46.94	538.1	1,293.7	868.0	840.2	27.72	31.309		
3,900.0	3,822.9	4,199.8	4,026.2	14.4	20.7	-46.35	509.3	1,298.4	834.5	805.9	28.55	29.230		
4,000.0	3,920.2	4,317.7	4,137.2	14.8	21.5	-45.31	469.9	1,304.5	799.1	769.7	29.41	27.174		
4,100.0	4,017.6	4,414.6	4,227.8	15.3	22.1	-44.32	435.8	1,308.5	762.1	731.8	30.27	25.178		
4,200.0	4,114.9	4,497.8	4,305.6	15.7	22.6	-43.36	406.6	1,312.3	725.6	694.5	31.15	23.294		
4,300.0	4,212.2	4,575.3	4,378.6	16.1	23.1	-42.49	381.0	1,316.2	691.0	659.0	32.01	21.588		
4,400.0	4,309.5	4,656.0	4,455.5	16.6	23.5	-41.66	356.7	1,320.6	658.7	625.8	32.83	20.061		
4,500.0	4,406.8	4,748.3	4,543.8	17.0	24.0	-40.72	330.3	1,325.7	627.6	594.0	33.63	18.660		
4,600.0	4,504.1	4,844.2	4,635.8	17.5	24.5	-39.78	303.9	1,330.3	596.7	562.3	34.39	17.352		
4,700.0	4,601.4	4,942.1	4,730.1	17.9	25.0	-38.90	277.8	1,333.2	565.2	530.1	35.10	16.100		
4,800.0	4,698.8	5,026.2	4,811.5	18.4	25.4	-38.20	256.8	1,335.6	534.7	498.9	35.84	14.920		
4,900.0	4,796.1	5,111.5	4,894.6	18.8	25.7	-37.60	237.8	1,338.7	506.3	469.8	36.53	13.860		
5,000.0	4,893.4	5,201.9	4,983.3	19.3	26.0	-37.22	220.4	1,341.5	479.4	442.3	37.16	12.902		
5,100.0	4,990.7	5,293.5	5,073.7	19.7	26.3	-37.12	205.5	1,343.8	453.7	415.9	37.75	12.019		
5,200.0	5,088.0	5,387.6	5,166.8	20.2	26.6	-37.24	192.0	1,345.8	428.7	390.4	38.31	11.192		
5,300.0	5,185.3	5,481.8	5,260.2	20.6	26.8	-37.66	180.4	1,347.1	404.4	365.5	38.84	10.412		
5,400.0	5,282.6	5,575.2	5,353.2	21.1	27.0	-38.47	171.1	1,347.7	380.8	341.5	39.34	9.681		
5,500.0	5,379.9	5,667.3	5,445.0	21.5	27.2	-39.72	164.3	1,347.9	358.5	318.7	39.82	9.001		
5,600.0	5,477.3	5,755.5	5,533.1	21.9	27.3	-41.27	159.7	1,348.6	338.2	297.9	40.28	8.397		
5,700.0	5,574.6	5,852.1	5,629.7	22.4	27.3	-43.62	158.1	1,349.4	320.5	279.9	40.66	7.884		
5,800.0	5,671.9	5,948.5	5,726.0	22.8	27.4	-46.71	158.0	1,348.0	303.0	262.0	40.99	7.392		
5,900.0	5,769.2	6,043.4	5,820.9	23.3	27.5	-49.90	157.7	1,347.9	287.2	245.9	41.28	6.957		
6,000.0	5,866.5	6,139.6	5,917.2	23.7	27.5	-53.36	157.6	1,348.6	273.0	231.5	41.49	6.579		
6,100.0	5,963.8	6,236.0	6,013.6	24.2	27.6	-57.26	158.0	1,349.2	260.3	218.7	41.60	6.258		
6,200.0	6,061.1	6,333.3	6,110.8	24.6	27.7	-61.53	158.5	1,350.0	249.3	207.7	41.59	5.994		
6,300.0	6,158.5	6,430.9	6,208.4	25.1	27.7	-66.08	158.9	1,351.2	239.8	198.4	41.45	5.785		
6,400.0	6,255.8	6,528.8	6,306.4	25.5	27.8	-71.01	159.2	1,352.2	231.9	190.8	41.16	5.634		
6,500.0	6,353.1	6,626.6	6,404.1	26.0	27.9	-76.30	159.5	1,352.9	225.8	185.1	40.73	5.544		
6,600.0	6,450.4	6,724.3	6,501.8	26.4	27.9	-81.82	159.8	1,353.5	221.7	181.4	40.24	5.509		
6,700.0	6,547.7	6,822.1	6,599.6	26.9	28.0	-87.47	159.8	1,354.2	219.6	179.8	39.79	5.520		
6,746.7	6,593.1	6,867.7	6,645.2	27.1	28.0	-90.12	159.8	1,354.6	219.4	179.8	39.63	5.536 CC, ES		
6,800.0	6,645.0	6,919.9	6,697.4	27.3	28.1	-93.15	159.8	1,355.0	219.7	180.2	39.52	5.559		
6,900.0	6,742.3	7,017.6	6,795.1	27.8	28.2	-98.74	159.6	1,355.9	221.9	182.3	39.53	5.613		
7,000.0	6,839.7	7,115.6	6,893.1	28.2	28.2	-104.18	159.3	1,356.8	226.1	186.3	39.83	5.677		
7,100.0	6,937.0	7,215.0	6,992.5	28.7	28.4	-109.43	158.6	1,358.1	231.9	191.5	40.37	5.744		
7,200.0	7,034.3	7,313.1	7,090.6	29.1	28.4	-114.34	157.2	1,359.6	238.8	197.8	41.00	5.823		
7,300.0	7,131.6	7,408.7	7,186.2	29.5	28.5	-118.91	156.2	1,360.5	247.9	206.2	41.65	5.951		
7,400.0	7,228.9	7,503.9	7,281.4	30.0	28.6	-102.55	155.5	1,360.6	257.5	215.1	42.32	6.084		
7,500.0	7,324.6	7,597.2	7,374.7	30.4	28.7	-80.89	155.2	1,359.7	257.4	214.3	43.07	5.975		
7,600.0	7,416.1	7,688.2	7,465.6	30.8	28.8	-76.42	154.9	1,358.1	248.9	205.2	43.76	5.688		
7,700.0	7,500.5	7,773.1	7,550.6	31.2	28.8	-81.14	154.8	1,357.1	237.3	193.3	43.97	5.397		
7,794.8	7,571.6	7,844.4	7,621.8	31.6	28.9	-89.41	154.7	1,356.5	231.5	188.2	43.27	5.350 SF		
7,800.0	7,575.1	7,848.0	7,625.4	31.6	28.9	-89.89	154.7	1,356.4	231.5	188.3	43.21	5.358		
7,900.0	7,637.9	7,911.1	7,688.5	32.0	28.9	-98.36	154.8	1,356.0	242.3	199.8	42.56	5.695		
8,000.0	7,686.8	7,960.7	7,738.1	32.5	29.0	-103.25	155.0	1,355.7	276.2	232.5	43.69	6.322		
8,100.0	7,720.4	7,995.0	7,772.4	32.9	29.0	-102.80	155.1	1,355.6	331.6	286.7	44.99	7.372		
8,200.0	7,737.7	8,012.9	7,790.3	33.5	29.0	-96.15	155.2	1,355.5	402.5	357.0	45.51	8.844		
8,300.0	7,740.0	8,015.7	7,793.2	34.0	29.0	-90.25	155.3	1,355.5	482.5	437.0	45.52	10.598		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 22-7 (EXISTING) - ENCANA WELL - S													<b>Offset Site Error:</b> 0.0 ft
Survey Program: 71-Geolink MWD													<b>Offset Well Error:</b> 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
8,400.0	7,740.0	8,016.3	7,793.7	34.6	29.0	-90.37	155.3	1,355.5	568.6	523.3	45.36	12.535	
8,500.0	7,740.0	8,016.9	7,794.3	35.3	29.0	-90.49	155.3	1,355.5	658.7	613.5	45.17	14.582	
8,600.0	7,740.0	8,017.4	7,794.8	36.1	29.0	-90.61	155.3	1,355.5	751.3	706.3	45.00	16.694	
8,700.0	7,740.0	8,018.0	7,795.4	36.9	29.0	-90.73	155.3	1,355.5	845.5	800.7	44.87	18.844	
8,800.0	7,740.0	8,018.5	7,795.9	37.8	29.0	-90.85	155.3	1,355.5	941.0	896.2	44.77	21.017	
8,900.0	7,740.0	8,019.1	7,796.5	38.7	29.0	-90.97	155.3	1,355.5	1,037.3	992.6	44.71	23.203	



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S											Offset Site Error: 0.0 ft		
Survey Program: 41-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
2,600.0	2,557.9	3,174.1	2,991.3	8.6	17.8	-54.20	645.2	1,017.0	1,001.6	984.3	17.32	57.817	
2,700.0	2,655.2	3,274.8	3,081.5	9.0	18.6	-54.01	601.4	1,008.4	949.6	931.6	18.02	52.686	
2,800.0	2,752.5	3,347.5	3,146.6	9.5	19.2	-53.79	569.3	1,003.0	897.9	879.1	18.76	47.865	
2,900.0	2,849.8	3,446.7	3,235.2	9.9	20.0	-53.47	525.4	995.2	845.8	826.4	19.47	43.438	
3,000.0	2,947.1	3,523.0	3,303.4	10.4	20.6	-53.17	491.6	989.4	793.8	773.6	20.23	39.232	
3,100.0	3,044.4	3,605.6	3,377.2	10.8	21.3	-52.73	454.8	984.1	742.5	721.4	21.02	35.318	
3,200.0	3,141.7	3,697.1	3,458.9	11.2	22.0	-52.22	414.3	977.8	691.0	669.2	21.78	31.722	
3,300.0	3,239.1	3,780.8	3,534.0	11.7	22.6	-51.81	377.9	970.8	639.3	616.7	22.53	28.369	
3,400.0	3,336.4	3,858.3	3,604.0	12.1	23.2	-51.54	345.5	963.6	588.3	565.0	23.28	25.269	
3,500.0	3,433.7	3,940.7	3,679.0	12.6	23.8	-51.33	312.3	955.8	538.3	514.3	24.01	22.422	
3,600.0	3,531.0	4,023.6	3,754.6	13.0	24.4	-50.99	278.8	948.8	488.9	464.1	24.78	19.729	
3,700.0	3,628.3	4,113.3	3,836.1	13.5	25.1	-50.35	242.0	942.3	439.7	414.2	25.57	17.200	
3,800.0	3,725.6	4,195.7	3,910.7	13.9	25.8	-49.42	207.4	937.2	390.5	364.0	26.52	14.726	
3,900.0	3,822.9	4,281.8	3,988.5	14.4	26.4	-47.82	170.6	933.9	342.4	314.9	27.58	12.415	
4,000.0	3,920.2	4,366.8	4,065.3	14.8	27.1	-45.79	134.6	930.6	294.8	266.0	28.76	10.252	
4,100.0	4,017.6	4,461.7	4,150.9	15.3	27.8	-42.51	93.8	927.0	247.3	217.3	29.97	8.251	
4,200.0	4,114.9	4,552.6	4,231.3	15.7	28.6	-37.07	51.5	922.4	197.6	166.1	31.55	6.263	
4,300.0	4,212.2	4,636.8	4,305.4	16.1	29.3	-28.80	11.7	917.3	148.9	115.3	33.67	4.424	
4,400.0	4,309.5	4,719.2	4,378.6	16.6	29.9	-15.21	-25.8	912.8	106.1	69.8	36.22	2.928	
4,500.0	4,406.8	4,805.6	4,456.8	17.0	30.6	8.18	-62.2	909.1	76.2	37.7	38.50	1.980	
4,577.1	4,481.8	4,874.9	4,520.7	17.4	31.0	33.23	-88.9	906.5	68.2	29.5	38.73	1.761 CC, ES, SF	
4,600.0	4,504.1	4,895.8	4,540.1	17.5	31.2	40.96	-96.6	905.7	68.9	31.0	37.88	1.819	
4,700.0	4,601.4	4,988.9	4,627.3	17.9	31.7	69.79	-128.9	901.7	85.0	53.9	31.04	2.738	
4,800.0	4,698.8	5,081.9	4,715.4	18.4	32.3	87.77	-158.6	896.9	113.0	86.2	26.85	4.210	
4,900.0	4,796.1	5,180.0	4,809.1	18.8	32.8	98.80	-187.1	892.7	144.6	117.1	27.56	5.248	
5,000.0	4,893.4	5,279.4	4,905.2	19.3	33.2	106.12	-211.9	888.8	175.3	145.7	29.58	5.926	
5,100.0	4,990.7	5,383.2	5,006.8	19.7	33.6	111.76	-233.1	885.6	203.2	171.6	31.66	6.419	
5,200.0	5,088.0	5,482.8	5,104.9	20.2	33.9	116.10	-250.0	883.0	229.3	195.8	33.46	6.852	
5,300.0	5,185.3	5,586.4	5,207.3	20.6	34.2	119.99	-265.2	880.1	254.4	219.3	35.11	7.247	
5,400.0	5,282.6	5,688.4	5,308.8	21.1	34.4	123.64	-275.8	877.2	277.0	240.4	36.62	7.564	
5,500.0	5,379.9	5,794.2	5,414.2	21.5	34.6	127.18	-283.9	874.2	298.4	260.4	38.01	7.850	
5,600.0	5,477.3	5,898.4	5,518.3	21.9	34.7	130.42	-288.6	872.3	317.7	278.4	39.24	8.096	
5,700.0	5,574.6	5,999.7	5,619.6	22.4	34.8	133.45	-290.8	870.6	336.1	295.8	40.32	8.336	
5,800.0	5,671.9	6,099.6	5,719.4	22.8	34.8	136.39	-291.0	868.7	354.1	312.8	41.29	8.576	
5,900.0	5,769.2	6,196.5	5,816.3	23.3	34.9	138.99	-290.9	867.0	372.6	330.4	42.13	8.844	
6,000.0	5,866.5	6,293.0	5,912.8	23.7	34.9	141.32	-290.9	865.3	391.8	349.0	42.86	9.143	
6,100.0	5,963.8	6,390.1	6,009.9	24.2	35.0	143.43	-291.1	863.7	411.7	368.2	43.50	9.465	
6,200.0	6,061.1	6,487.4	6,107.1	24.6	35.1	145.34	-291.2	862.1	432.0	387.9	44.07	9.803	
6,300.0	6,158.5	6,587.7	6,207.5	25.1	35.1	147.14	-291.1	860.8	452.3	407.7	44.58	10.145	
6,400.0	6,255.8	6,687.2	6,307.0	25.5	35.2	148.78	-290.6	860.1	472.3	427.3	45.05	10.484	
6,500.0	6,353.1	6,783.3	6,403.1	26.0	35.2	150.22	-290.1	859.6	492.6	447.1	45.48	10.831	
6,600.0	6,450.4	6,879.5	6,499.3	26.4	35.3	151.53	-289.9	858.9	513.3	467.4	45.87	11.191	
6,700.0	6,547.7	6,975.9	6,595.6	26.9	35.3	152.73	-289.9	858.2	534.5	488.2	46.24	11.559	
6,800.0	6,645.0	7,071.7	6,691.4	27.3	35.4	153.83	-290.0	857.3	556.0	509.4	46.58	11.935	
6,900.0	6,742.3	7,167.0	6,786.8	27.8	35.5	154.84	-290.2	856.2	578.0	531.1	46.91	12.321	
7,000.0	6,839.7	7,263.2	6,883.0	28.2	35.5	155.79	-290.5	854.8	600.4	553.1	47.22	12.714	
7,100.0	6,937.0	7,359.6	6,979.4	28.7	35.6	156.68	-290.8	853.4	623.0	575.5	47.52	13.109	
7,200.0	7,034.3	7,455.7	7,075.4	29.1	35.7	157.51	-291.0	851.8	645.9	598.1	47.81	13.509	
7,300.0	7,131.6	7,551.8	7,171.5	29.5	35.7	158.30	-291.1	850.0	669.0	620.9	48.09	13.912	
7,400.0	7,228.9	7,648.8	7,268.5	30.0	35.8	-179.20	-291.1	848.2	693.0	644.7	48.31	14.344	
7,500.0	7,324.6	7,744.6	7,364.2	30.4	35.9	-149.23	-290.9	846.4	721.7	673.3	48.38	14.917	
7,600.0	7,416.1	7,836.3	7,456.0	30.8	35.9	-134.22	-290.5	844.6	755.4	707.1	48.28	15.645	

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b>												<b>Offset Site Error:</b>	0.0 ft
S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 2-4-7 (EXISTING) - ENCANA WELL - S												<b>Offset Well Error:</b>	0.0 ft
Survey Program: 41-Geolink MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)			
7,700.0	7,500.5	7,923.2	7,542.9	31.2	36.0	-125.98	-289.9	842.9	794.4	746.3	48.02	16.541	
7,800.0	7,575.1	8,003.1	7,622.7	31.6	36.0	-120.57	-289.3	841.8	838.9	791.3	47.59	17.630	
7,900.0	7,637.9	8,070.3	7,689.9	32.0	36.0	-115.84	-288.6	841.2	889.7	842.7	46.97	18.942	
8,000.0	7,686.8	8,121.0	7,740.6	32.5	36.1	-110.46	-288.1	841.0	947.1	900.9	46.20	20.498	
8,100.0	7,720.4	8,156.2	7,775.8	32.9	36.1	-103.75	-287.7	840.8	1,010.5	965.2	45.34	22.288	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY 4-0-7 (EXISTING) - ENCANA WELL - S													Offset Site Error:	0.0 ft
Survey Program: 71-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,900.0	7,740.0	7,847.3	7,766.1	38.7	19.6	75.18	2,172.4	1,708.5	1,017.6	970.1	47.52	21.412		
9,000.0	7,740.0	7,849.8	7,768.6	39.7	19.6	76.54	2,172.4	1,708.6	918.1	871.0	47.18	19.461		
9,100.0	7,740.0	7,852.3	7,771.0	40.8	19.6	77.92	2,172.5	1,708.6	818.8	772.1	46.73	17.522		
9,200.0	7,740.0	7,854.7	7,773.5	41.9	19.6	79.30	2,172.6	1,708.6	719.7	673.5	46.13	15.599		
9,300.0	7,740.0	7,857.2	7,775.9	43.0	19.6	80.69	2,172.6	1,708.7	620.8	575.5	45.33	13.696		
9,400.0	7,740.0	7,859.6	7,778.4	44.2	19.6	82.08	2,172.7	1,708.7	522.3	478.1	44.18	11.822		
9,500.0	7,740.0	7,862.0	7,780.8	45.5	19.6	83.47	2,172.7	1,708.7	424.5	382.0	42.49	9.991		
9,600.0	7,740.0	7,864.4	7,783.2	46.7	19.6	84.87	2,172.8	1,708.8	328.1	288.3	39.83	8.238		
9,700.0	7,740.0	7,866.8	7,785.6	48.0	19.6	86.26	2,172.9	1,708.8	234.6	199.2	35.43	6.622		
9,800.0	7,740.0	7,869.2	7,788.0	49.3	19.7	87.66	2,172.9	1,708.8	149.8	118.6	31.18	4.804		
9,900.0	7,740.0	7,871.6	7,790.4	50.7	19.7	89.04	2,173.0	1,708.9	99.1	45.1	54.04	1.834		
9,913.1	7,740.0	7,871.9	7,790.7	50.9	19.7	89.23	2,173.0	1,708.9	98.2	39.5	58.77	1.671 CC, ES, SF		
10,000.0	7,740.0	7,874.0	7,792.7	52.0	19.7	90.43	2,173.0	1,708.9	131.1	59.7	71.47	1.835		
10,100.0	7,740.0	7,876.3	7,795.1	53.4	19.7	91.80	2,173.1	1,708.9	211.1	143.7	67.40	3.132		
10,200.0	7,740.0	7,878.7	7,797.4	54.9	19.7	93.17	2,173.1	1,709.0	303.1	239.5	63.67	4.761		
10,300.0	7,740.0	7,881.0	7,799.8	56.3	19.7	94.53	2,173.2	1,709.0	399.0	337.7	61.32	6.507		
10,400.0	7,740.0	7,883.4	7,802.1	57.7	19.7	95.87	2,173.2	1,709.0	496.5	436.8	59.79	8.305		
10,500.0	7,740.0	7,885.7	7,804.4	59.2	19.7	97.21	2,173.3	1,709.1	594.9	536.1	58.74	10.127		
10,600.0	7,740.0	7,888.0	7,806.8	60.7	19.7	98.52	2,173.4	1,709.1	693.7	635.7	57.99	11.962		
10,700.0	7,740.0	7,890.3	7,809.1	62.2	19.7	99.83	2,173.4	1,709.1	792.8	735.3	57.43	13.804		
10,800.0	7,740.0	7,892.6	7,811.4	63.7	19.7	101.11	2,173.5	1,709.1	892.0	835.0	57.01	15.647		
10,900.0	7,740.0	7,894.9	7,813.6	65.2	19.7	102.38	2,173.5	1,709.2	991.5	934.8	56.68	17.491		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL											Offset Site Error: 0.0 ft		
Survey Program: 100-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
1,900.0	1,877.8	1,914.4	1,914.2	5.5	3.4	-62.83	805.7	761.6	997.4	988.8	8.55	116.588	
2,000.0	1,974.4	2,006.3	2,006.1	6.0	3.5	-61.05	806.9	760.2	985.2	976.0	9.17	107.395	
2,100.0	2,071.3	2,096.2	2,096.0	6.4	3.7	-62.18	808.5	759.3	974.2	964.4	9.77	99.701	
2,200.0	2,168.6	2,189.1	2,188.9	6.8	3.8	-63.35	810.5	758.7	964.9	954.6	10.37	93.069	
2,300.0	2,265.9	2,285.1	2,284.8	7.3	4.0	-64.62	812.8	758.4	956.6	945.6	10.98	87.148	
2,400.0	2,363.2	2,386.6	2,386.3	7.7	4.2	-65.97	815.0	758.2	948.6	937.0	11.60	81.769	
2,500.0	2,460.5	2,489.5	2,489.2	8.2	4.4	-67.35	816.5	757.9	940.6	928.4	12.23	76.893	
2,600.0	2,557.9	2,588.4	2,588.0	8.6	4.5	-68.68	817.6	757.7	932.7	919.8	12.86	72.520	
2,700.0	2,655.2	2,688.0	2,687.7	9.0	4.7	-70.05	818.5	757.4	925.1	911.6	13.50	68.548	
2,800.0	2,752.5	2,784.6	2,784.3	9.5	4.9	-71.40	819.3	757.0	917.9	903.8	14.13	64.971	
2,900.0	2,849.8	2,883.5	2,883.2	9.9	5.1	-72.79	820.1	756.6	911.3	896.5	14.77	61.707	
3,000.0	2,947.1	2,980.0	2,979.6	10.4	5.2	-74.21	820.9	755.7	905.1	889.7	15.41	58.745	
3,100.0	3,044.4	3,078.1	3,077.8	10.8	5.4	-75.68	821.8	754.5	899.6	883.6	16.05	56.042	
3,200.0	3,141.7	3,177.0	3,176.6	11.2	5.6	-77.18	822.6	753.3	894.5	877.8	16.70	53.569	
3,300.0	3,239.1	3,273.0	3,272.6	11.7	5.7	-78.68	823.3	751.8	890.0	872.6	17.34	51.328	
3,400.0	3,336.4	3,366.7	3,366.3	12.1	5.9	-80.15	824.3	750.3	886.3	868.4	17.97	49.314	
3,500.0	3,433.7	3,461.8	3,461.4	12.6	6.1	-81.64	825.6	749.0	883.7	865.1	18.61	47.495	
3,600.0	3,531.0	3,554.6	3,554.2	13.0	6.2	-83.06	826.9	748.5	881.9	862.7	19.23	45.865	
3,684.5	3,613.2	3,631.3	3,630.8	13.4	6.4	-84.23	828.5	748.3	881.5	861.7	19.75	44.637 CC	
3,700.0	3,628.3	3,645.4	3,644.9	13.5	6.4	-84.44	828.8	748.3	881.5	861.6	19.84	44.425 ES	
3,800.0	3,725.6	3,740.6	3,740.2	13.9	6.6	-85.87	831.4	748.4	882.2	861.8	20.46	43.123	
3,900.0	3,822.9	3,845.2	3,844.7	14.4	6.8	-87.47	833.9	747.9	883.3	862.2	21.09	41.882	
4,000.0	3,920.2	3,949.6	3,949.1	14.8	6.9	-89.07	835.3	747.3	883.9	862.2	21.71	40.710	
4,100.0	4,017.6	4,052.6	4,052.0	15.3	7.1	-90.68	836.1	746.2	884.7	862.3	22.32	39.630	
4,200.0	4,114.9	4,150.6	4,150.1	15.7	7.3	-92.25	836.3	744.4	885.4	862.5	22.92	38.638	
4,300.0	4,212.2	4,247.5	4,246.9	16.1	7.5	-93.82	836.7	742.3	887.2	863.7	23.50	37.759	
4,400.0	4,309.5	4,347.4	4,346.8	16.6	7.6	-95.40	836.7	740.7	889.2	865.2	24.07	36.942	
4,500.0	4,406.8	4,440.9	4,440.3	17.0	7.8	-96.86	836.8	739.4	892.0	867.4	24.62	36.225	
4,600.0	4,504.1	4,530.0	4,529.4	17.5	8.0	-98.30	837.3	737.2	896.1	870.9	25.15	35.625	
4,700.0	4,601.4	4,621.6	4,621.0	17.9	8.1	-99.75	838.8	734.9	901.7	876.0	25.67	35.124	
4,800.0	4,698.8	4,726.5	4,725.8	18.4	8.3	-101.38	840.0	732.8	907.6	881.4	26.21	34.630	
4,900.0	4,796.1	4,827.0	4,826.3	18.8	8.5	-102.92	840.8	730.7	913.8	887.0	26.72	34.195	
5,000.0	4,893.4	4,932.9	4,932.2	19.3	8.7	-104.48	840.7	729.4	919.6	892.4	27.23	33.766	
5,100.0	4,990.7	5,028.2	5,027.4	19.7	8.8	-105.87	840.4	728.2	925.7	898.0	27.71	33.403	
5,200.0	5,088.0	5,119.1	5,118.4	20.2	9.0	-107.19	840.5	726.9	933.0	904.8	28.17	33.117	
5,300.0	5,185.3	5,213.3	5,212.6	20.6	9.2	-108.55	840.9	725.1	941.2	912.6	28.62	32.885	
5,400.0	5,282.6	5,311.8	5,311.0	21.1	9.3	-109.96	841.3	723.1	950.1	921.0	29.07	32.688	
5,500.0	5,379.9	5,408.6	5,407.8	21.5	9.5	-111.28	841.9	721.7	959.5	930.0	29.50	32.527	
5,600.0	5,477.3	5,509.3	5,508.5	21.9	9.7	-112.61	842.4	720.6	969.1	939.2	29.93	32.381	
5,700.0	5,574.6	5,603.4	5,602.6	22.4	9.9	-113.84	842.8	719.5	979.3	949.0	30.34	32.283	
5,800.0	5,671.9	5,697.1	5,696.3	22.8	10.0	-115.05	843.4	718.1	990.3	959.5	30.73	32.228	
5,900.0	5,769.2	5,795.2	5,794.4	23.3	10.2	-116.32	843.8	716.0	1,001.8	970.7	31.11	32.198	
6,000.0	5,866.5	5,890.7	5,889.8	23.7	10.4	-117.54	844.3	714.0	1,013.8	982.4	31.48	32.201	
6,100.0	5,963.8	5,988.8	5,987.9	24.2	10.5	-118.74	844.8	712.0	1,026.4	994.5	31.85	32.223	
8,200.0	7,737.7	7,800.0	7,797.9	33.5	13.7	-89.46	823.3	687.2	1,000.7	963.8	36.91	27.113	
8,300.0	7,740.0	7,803.1	7,801.0	34.0	13.7	-91.42	823.2	687.2	968.8	932.3	36.45	26.581	
8,400.0	7,740.0	7,802.1	7,800.0	34.6	13.7	-91.35	823.2	687.2	945.9	910.1	35.84	26.394 SF	
8,500.0	7,740.0	7,800.0	7,797.9	35.3	13.7	-91.22	823.3	687.2	933.3	898.2	35.10	26.587	
8,568.8	7,740.0	7,800.0	7,797.9	35.8	13.7	-91.22	823.3	687.2	930.8	896.2	34.55	26.936	
8,600.0	7,740.0	7,800.0	7,797.9	36.1	13.7	-91.22	823.3	687.2	931.3	897.0	34.29	27.161	
8,700.0	7,740.0	7,798.9	7,796.7	36.9	13.7	-91.15	823.3	687.1	940.0	906.5	33.44	28.111	
8,800.0	7,740.0	7,797.7	7,795.5	37.8	13.7	-91.08	823.3	687.1	959.0	926.4	32.62	29.400	

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - WOOLLEY F UNIT 1 (EXISTING) - ENCANA WEL										Offset Site Error:		0.0 ft
Survey Program:		100-Geolink MWD										Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)						
8,900.0	7,740.0	7,796.5	7,794.3	38.7	13.7	-91.00	823.3	687.1	987.9	956.0	31.89	30.976		
9,000.0	7,740.0	7,795.2	7,793.1	39.7	13.7	-90.93	823.3	687.1	1,025.8	994.5	31.30	32.775		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2A-7H-E168 - Hz - Plan #3														Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-89.53	0.4	-44.8	44.8						
100.0	100.0	100.0	100.0	0.2	0.2	-89.53	0.4	-44.8	44.8	44.5	0.30	147.462			
200.0	200.0	200.0	200.0	0.3	0.3	-89.53	0.4	-44.8	44.8	44.1	0.65	68.605 CC, ES			
300.0	300.0	299.3	299.3	0.5	0.5	169.97	-0.1	-45.5	45.7	44.7	1.00	45.710			
400.0	400.0	398.5	398.5	0.7	0.7	168.82	-1.4	-47.8	49.7	48.4	1.35	36.850			
500.0	499.9	497.4	497.3	0.9	0.9	167.40	-3.5	-51.5	57.0	55.3	1.70	33.524			
600.0	599.8	595.9	595.6	1.1	1.1	165.99	-6.5	-56.6	67.4	65.4	2.05	32.905 SF			
700.0	699.5	695.2	694.7	1.3	1.3	165.54	-9.1	-62.6	80.3	77.9	2.40	33.469			
800.0	799.2	794.2	793.5	1.5	1.5	166.24	-10.5	-68.4	94.7	92.0	2.75	34.436			
900.0	898.6	892.9	892.0	1.7	1.7	166.99	-11.9	-74.2	110.8	107.7	3.10	35.727			
1,000.0	997.9	991.3	990.2	2.0	1.9	167.71	-13.2	-80.0	128.6	125.1	3.45	37.247			
1,100.0	1,096.9	1,089.4	1,088.1	2.3	2.0	168.38	-14.5	-85.7	148.0	144.2	3.80	38.935			
1,200.0	1,195.7	1,187.1	1,185.7	2.6	2.2	169.00	-15.8	-91.5	169.2	165.0	4.15	40.749			
1,300.0	1,294.1	1,284.4	1,282.8	2.9	2.4	169.57	-17.2	-97.2	192.0	187.5	4.50	42.662			
1,400.0	1,392.3	1,381.4	1,379.6	3.3	2.6	170.09	-18.5	-102.9	216.5	211.7	4.85	44.652			
1,500.0	1,490.1	1,477.8	1,475.9	3.7	2.8	170.56	-19.8	-108.6	242.8	237.6	5.20	46.706			
1,600.0	1,587.5	1,573.9	1,571.7	4.1	3.0	171.00	-21.1	-114.2	270.7	265.1	5.54	48.812			
1,700.0	1,684.6	1,669.4	1,667.1	4.5	3.2	171.39	-22.3	-119.8	300.2	294.3	5.89	50.961			
1,800.0	1,781.2	1,764.4	1,761.9	5.0	3.4	173.76	-23.6	-125.4	331.2	325.0	6.23	53.127			
1,900.0	1,877.8	1,859.4	1,856.7	5.5	3.6	177.88	-24.9	-131.0	362.6	356.0	6.57	55.155			
2,000.0	1,974.4	1,954.3	1,951.5	6.0	3.8	-179.04	-26.2	-136.6	394.0	387.1	6.91	57.011			
2,100.0	2,071.3	2,049.6	2,046.6	6.4	4.0	-179.29	-27.5	-142.2	424.3	417.0	7.25	58.534			
2,200.0	2,168.6	2,145.3	2,142.1	6.8	4.2	-179.51	-28.8	-147.8	453.2	445.6	7.59	59.719			
2,300.0	2,265.9	2,241.1	2,237.7	7.3	4.4	-179.72	-30.0	-153.4	481.8	473.9	7.93	60.776			
2,400.0	2,363.2	2,336.9	2,333.4	7.7	4.6	-179.90	-31.3	-159.1	510.5	502.2	8.27	61.745			
2,500.0	2,460.5	2,432.7	2,429.0	8.2	4.8	179.94	-32.6	-164.7	539.2	530.6	8.61	62.639			
2,600.0	2,557.9	2,528.5	2,524.6	8.6	5.0	179.80	-33.9	-170.3	567.9	558.9	8.95	63.464			
2,700.0	2,655.2	2,624.2	2,620.2	9.0	5.2	179.67	-35.2	-176.0	596.6	587.3	9.29	64.229			
2,800.0	2,752.5	2,720.0	2,715.8	9.5	5.4	179.55	-36.5	-181.6	625.2	615.6	9.63	64.940			
2,900.0	2,849.8	2,815.8	2,811.4	9.9	5.6	179.44	-37.8	-187.2	653.9	644.0	9.97	65.603			
3,000.0	2,947.1	2,911.6	2,907.0	10.4	5.7	179.35	-39.1	-192.8	682.6	672.3	10.31	66.222			
3,100.0	3,044.4	3,007.4	3,002.7	10.8	5.9	179.26	-40.4	-198.5	711.3	700.7	10.65	66.801			
3,200.0	3,141.7	3,103.2	3,098.3	11.2	6.1	179.17	-41.7	-204.1	740.0	729.0	10.99	67.345			
3,300.0	3,239.1	3,199.0	3,193.9	11.7	6.3	179.09	-43.0	-209.7	768.7	757.4	11.33	67.856			
3,400.0	3,336.4	3,294.8	3,289.5	12.1	6.5	179.02	-44.3	-215.4	797.4	785.7	11.67	68.337			
3,500.0	3,433.7	3,390.6	3,385.1	12.6	6.7	178.96	-45.5	-221.0	826.1	814.1	12.01	68.791			
3,600.0	3,531.0	3,486.3	3,480.7	13.0	6.9	178.89	-46.8	-226.6	854.8	842.5	12.35	69.220			
3,700.0	3,628.3	3,582.1	3,576.4	13.5	7.1	178.83	-48.1	-232.3	883.5	870.8	12.69	69.626			
3,800.0	3,725.6	3,677.9	3,672.0	13.9	7.3	178.78	-49.4	-237.9	912.2	899.2	13.03	70.011			
3,900.0	3,822.9	3,773.7	3,767.6	14.4	7.5	178.73	-50.7	-243.5	940.9	927.5	13.37	70.376			
4,000.0	3,920.2	3,869.5	3,863.2	14.8	7.7	178.68	-52.0	-249.1	969.6	955.9	13.71	70.723			
4,100.0	4,017.6	3,965.3	3,958.8	15.3	7.9	178.63	-53.3	-254.8	998.3	984.3	14.05	71.054			

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.44	0.4	-37.5	37.5					
100.0	100.0	100.0	100.0	0.2	0.2	-89.44	0.4	-37.5	37.5	37.2	0.30	123.501		
200.0	200.0	200.0	200.0	0.3	0.3	-89.44	0.4	-37.5	37.5	36.9	0.65	57.458 CC		
200.0	200.0	200.0	200.0	0.3	0.3	-89.44	0.4	-37.5	37.5	36.9	0.65	57.457		
300.0	300.0	300.0	300.0	0.5	0.5	170.62	0.4	-37.5	37.7	36.7	1.00	37.652 ES		
400.0	400.0	399.5	399.5	0.7	0.7	170.06	-0.3	-38.1	40.0	38.6	1.35	29.616		
500.0	499.9	498.9	498.9	0.9	0.9	168.29	-2.3	-39.7	45.1	43.4	1.70	26.532		
600.0	599.8	598.0	597.9	1.1	1.0	165.94	-5.6	-42.5	53.2	51.1	2.05	25.884 SF		
700.0	699.5	698.4	698.1	1.3	1.2	164.43	-9.1	-45.2	62.9	60.5	2.41	26.075		
800.0	799.2	798.9	798.6	1.5	1.4	164.40	-11.6	-46.5	72.8	70.0	2.77	26.290		
900.0	898.6	899.3	899.0	1.7	1.6	165.32	-13.0	-46.3	82.9	79.8	3.12	26.539		
1,000.0	997.9	998.6	998.3	2.0	1.7	166.46	-14.2	-45.8	94.2	90.8	3.48	27.108		
1,100.0	1,096.9	1,097.7	1,097.4	2.3	1.9	167.56	-15.3	-45.2	107.3	103.5	3.83	28.026		
1,200.0	1,195.7	1,196.6	1,196.3	2.6	2.1	168.57	-16.4	-44.7	122.1	117.9	4.18	29.209		
1,300.0	1,294.1	1,295.2	1,294.9	2.9	2.3	169.49	-17.5	-44.1	138.6	134.1	4.53	30.594		
1,400.0	1,392.3	1,393.5	1,393.2	3.3	2.4	170.32	-18.6	-43.6	156.8	152.0	4.88	32.141		
1,500.0	1,490.1	1,491.5	1,491.2	3.7	2.6	171.06	-19.7	-43.0	176.8	171.6	5.23	33.816		
1,600.0	1,587.5	1,589.1	1,588.7	4.1	2.8	171.72	-20.8	-42.4	198.5	192.9	5.58	35.596		
1,700.0	1,684.6	1,686.3	1,685.9	4.5	2.9	172.30	-21.9	-41.9	221.8	215.9	5.92	37.463		
1,800.0	1,781.2	1,783.1	1,782.8	5.0	3.1	174.77	-23.0	-41.3	246.7	240.5	6.27	39.375		
1,900.0	1,877.8	1,879.9	1,879.5	5.5	3.3	178.85	-24.1	-40.8	271.9	265.3	6.61	41.148		
2,000.0	1,974.4	1,976.7	1,976.3	6.0	3.5	-178.19	-25.2	-40.2	297.1	290.1	6.95	42.752		
2,100.0	2,071.3	2,073.7	2,073.3	6.4	3.6	-178.51	-26.2	-39.7	321.2	313.9	7.29	44.042		
2,200.0	2,168.6	2,171.1	2,170.7	6.8	3.8	-178.79	-27.3	-39.1	343.8	336.2	7.64	45.018		
2,300.0	2,265.9	2,268.5	2,268.1	7.3	4.0	-179.04	-28.4	-38.6	366.3	358.3	7.98	45.884		
2,400.0	2,363.2	2,366.0	2,365.6	7.7	4.1	-179.26	-29.5	-38.0	388.7	380.4	8.33	46.677		
2,500.0	2,460.5	2,463.4	2,463.0	8.2	4.3	-179.46	-30.6	-37.5	411.1	402.5	8.67	47.409		
2,600.0	2,557.9	2,560.8	2,560.4	8.6	4.5	-179.63	-31.7	-36.9	433.6	424.6	9.02	48.084		
2,700.0	2,655.2	2,658.3	2,657.9	9.0	4.7	-179.79	-32.8	-36.4	456.0	446.7	9.36	48.710		
2,800.0	2,752.5	2,755.7	2,755.3	9.5	4.8	-179.93	-33.9	-35.8	478.5	468.8	9.71	49.292		
2,900.0	2,849.8	2,853.2	2,852.7	9.9	5.0	179.94	-35.0	-35.3	500.9	490.9	10.05	49.834		
3,000.0	2,947.1	2,950.6	2,950.2	10.4	5.2	179.82	-36.1	-34.7	523.4	513.0	10.40	50.341		
3,100.0	3,044.4	3,048.1	3,047.6	10.8	5.3	179.71	-37.2	-34.2	545.8	535.1	10.74	50.815		
3,200.0	3,141.7	3,145.5	3,145.0	11.2	5.5	179.61	-38.3	-33.6	568.3	557.2	11.09	51.259		
3,300.0	3,239.1	3,242.9	3,242.5	11.7	5.7	179.51	-39.4	-33.1	590.8	579.3	11.43	51.677		
3,400.0	3,336.4	3,340.4	3,339.9	12.1	5.9	179.43	-40.5	-32.5	613.2	601.5	11.78	52.071		
3,500.0	3,433.7	3,437.8	3,437.3	12.6	6.0	179.35	-41.6	-32.0	635.7	623.6	12.12	52.442		
3,600.0	3,531.0	3,535.3	3,534.8	13.0	6.2	179.27	-42.7	-31.4	658.2	645.7	12.47	52.793		
3,700.0	3,628.3	3,632.7	3,632.2	13.5	6.4	179.20	-43.8	-30.9	680.6	667.8	12.81	53.124		
3,800.0	3,725.6	3,730.1	3,729.6	13.9	6.5	179.14	-44.9	-30.3	703.1	689.9	13.16	53.439		
3,900.0	3,822.9	3,827.6	3,827.1	14.4	6.7	179.08	-46.0	-29.8	725.5	712.0	13.50	53.738		
4,000.0	3,920.2	3,925.0	3,924.5	14.8	6.9	179.02	-47.1	-29.2	748.0	734.2	13.85	54.021		
4,100.0	4,017.6	4,022.5	4,021.9	15.3	7.1	178.96	-48.2	-28.7	770.5	756.3	14.19	54.291		
4,200.0	4,114.9	4,119.9	4,119.4	15.7	7.2	178.91	-49.3	-28.1	793.0	778.4	14.54	54.549		
4,300.0	4,212.2	4,217.3	4,216.8	16.1	7.4	178.87	-50.3	-27.6	815.4	800.5	14.88	54.794		
4,400.0	4,309.5	4,314.8	4,314.2	16.6	7.6	178.82	-51.4	-27.0	837.9	822.7	15.23	55.028		
4,500.0	4,406.8	4,412.2	4,411.7	17.0	7.7	178.78	-52.5	-26.5	860.4	844.8	15.57	55.252		
4,600.0	4,504.1	4,509.7	4,509.1	17.5	7.9	178.74	-53.6	-25.9	882.8	866.9	15.92	55.466		
4,700.0	4,601.4	4,607.1	4,606.5	17.9	8.1	178.70	-54.7	-25.4	905.3	889.0	16.26	55.671		
4,800.0	4,698.8	4,704.5	4,704.0	18.4	8.3	178.66	-55.8	-24.8	927.8	911.2	16.61	55.868		
4,900.0	4,796.1	4,802.0	4,801.4	18.8	8.4	178.62	-56.9	-24.2	950.2	933.3	16.95	56.057		
5,000.0	4,893.4	4,899.4	4,898.8	19.3	8.6	178.59	-58.0	-23.7	972.7	955.4	17.30	56.238		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2B-7H-E168 - Hz - Plan #3			Offset Site Error:		0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
5,100.0	4,990.7	4,996.9	4,996.3	19.7	8.8	178.56	-59.1	-23.1	995.2	977.5	17.64	56.412					
5,200.0	5,088.0	5,094.3	5,093.7	20.2	8.9	178.53	-60.2	-22.6	1,017.7	999.7	17.99	56.579					



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5													Offset Site Error:	0.0 ft
Survey Program: 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	-89.31	0.4	-29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	-89.31	0.4	-29.9	29.9	29.6	0.30	98.619		
200.0	200.0	200.0	200.0	0.3	0.3	-89.31	0.4	-29.9	29.9	29.3	0.65	45.881		
200.0	200.0	200.0	200.0	0.3	0.3	-89.31	0.4	-29.9	29.9	29.3	0.65	45.881	CC	
300.0	300.0	300.0	300.0	0.5	0.5	170.76	0.4	-29.9	30.2	29.2	1.00	30.110	ES	
400.0	400.0	400.0	400.0	0.7	0.7	171.26	0.4	-29.9	31.9	30.5	1.35	23.605		
500.0	499.9	499.9	499.9	0.9	0.8	172.11	0.4	-29.9	35.3	33.6	1.70	20.789		
600.0	599.8	599.8	599.8	1.1	1.0	173.12	0.4	-29.9	40.5	38.5	2.05	19.781		
700.0	699.5	700.4	700.4	1.3	1.2	174.09	0.3	-29.1	46.6	44.2	2.40	19.419		
800.0	799.2	801.0	801.0	1.5	1.4	174.96	0.0	-26.4	52.6	49.9	2.75	19.148		
900.0	898.6	901.8	901.7	1.7	1.6	175.76	-0.5	-22.0	58.7	55.6	3.10	18.936	SF	
1,000.0	997.9	1,001.8	1,001.5	2.0	1.7	176.50	-1.1	-16.6	65.4	61.9	3.45	18.955		
1,100.0	1,096.9	1,101.4	1,101.0	2.3	1.9	177.17	-1.7	-11.1	73.8	70.0	3.80	19.427		
1,200.0	1,195.7	1,200.9	1,200.3	2.6	2.1	177.75	-2.3	-5.7	83.9	79.8	4.15	20.243		
1,300.0	1,294.1	1,300.2	1,299.4	2.9	2.3	178.23	-2.9	-0.2	95.8	91.3	4.49	21.321		
1,400.0	1,392.3	1,399.2	1,398.3	3.3	2.5	178.64	-3.5	5.2	109.5	104.6	4.84	22.604		
1,500.0	1,490.1	1,498.0	1,497.0	3.7	2.7	178.96	-4.1	10.6	124.8	119.6	5.19	24.051		
1,600.0	1,587.5	1,596.6	1,595.4	4.1	2.9	179.23	-4.7	16.1	141.9	136.4	5.54	25.631		
1,700.0	1,684.6	1,694.8	1,693.4	4.5	3.1	179.44	-5.3	21.4	160.7	154.8	5.88	27.320		
1,800.0	1,781.2	1,792.7	1,791.2	5.0	3.3	-178.49	-5.9	26.8	181.0	174.8	6.23	29.062		
1,900.0	1,877.8	1,890.6	1,888.9	5.5	3.5	-174.90	-6.5	32.2	201.4	194.8	6.57	30.640		
2,000.0	1,974.4	1,988.5	1,986.7	6.0	3.7	-172.44	-7.1	37.6	221.7	214.8	6.92	32.044		
2,100.0	2,071.3	2,086.6	2,084.6	6.4	3.9	-173.18	-7.7	42.9	240.8	233.6	7.26	33.157		
2,200.0	2,168.6	2,185.0	2,182.9	6.8	4.0	-173.76	-8.3	48.3	258.5	250.9	7.61	33.974		
2,300.0	2,265.9	2,283.4	2,281.2	7.3	4.2	-174.27	-8.9	53.7	276.0	268.1	7.96	34.695		
2,400.0	2,363.2	2,381.8	2,379.4	7.7	4.4	-174.71	-9.5	59.1	293.5	285.2	8.30	35.358		
2,500.0	2,460.5	2,480.3	2,477.7	8.2	4.6	-175.10	-10.1	64.5	311.0	302.4	8.65	35.970		
2,600.0	2,557.9	2,578.7	2,576.0	8.6	4.8	-175.45	-10.7	69.9	328.6	319.6	8.99	36.536		
2,700.0	2,655.2	2,677.1	2,674.3	9.0	5.0	-175.77	-11.3	75.3	346.1	336.8	9.34	37.061		
2,800.0	2,752.5	2,775.6	2,772.6	9.5	5.2	-176.05	-11.9	80.7	363.7	354.0	9.69	37.550		
2,900.0	2,849.8	2,874.0	2,870.8	9.9	5.4	-176.31	-12.5	86.2	381.3	371.2	10.03	38.005		
3,000.0	2,947.1	2,972.4	2,969.1	10.4	5.6	-176.55	-13.1	91.6	398.8	388.5	10.38	38.431		
3,100.0	3,044.4	3,070.8	3,067.4	10.8	5.8	-176.76	-13.7	97.0	416.4	405.7	10.72	38.830		
3,200.0	3,141.7	3,169.3	3,165.7	11.2	6.0	-176.96	-14.3	102.4	434.0	422.9	11.07	39.204		
3,300.0	3,239.1	3,267.7	3,264.0	11.7	6.2	-177.15	-14.9	107.8	451.6	440.2	11.42	39.556		
3,400.0	3,336.4	3,366.1	3,362.2	12.1	6.4	-177.31	-15.5	113.2	469.2	457.4	11.76	39.887		
3,500.0	3,433.7	3,464.6	3,460.5	12.6	6.6	-177.47	-16.1	118.6	486.8	474.7	12.11	40.200		
3,600.0	3,531.0	3,563.0	3,558.8	13.0	6.8	-177.62	-16.7	124.0	504.4	491.9	12.46	40.496		
3,700.0	3,628.3	3,661.4	3,657.1	13.5	7.0	-177.75	-17.3	129.4	522.0	509.2	12.80	40.775		
3,800.0	3,725.6	3,759.9	3,755.4	13.9	7.2	-177.88	-17.9	134.8	539.6	526.5	13.15	41.041		
3,900.0	3,822.9	3,858.3	3,853.6	14.4	7.4	-178.00	-18.5	140.2	557.2	543.7	13.49	41.293		
4,000.0	3,920.2	3,956.7	3,951.9	14.8	7.6	-178.11	-19.1	145.6	574.8	561.0	13.84	41.532		
4,100.0	4,017.6	4,055.2	4,050.2	15.3	7.8	-178.22	-19.7	151.0	592.4	578.3	14.19	41.760		
4,200.0	4,114.9	4,153.6	4,148.5	15.7	8.0	-178.32	-20.3	156.4	610.1	595.5	14.53	41.977		
4,300.0	4,212.2	4,252.0	4,246.8	16.1	8.1	-178.41	-20.9	161.8	627.7	612.8	14.88	42.184		
4,400.0	4,309.5	4,350.4	4,345.0	16.6	8.3	-178.50	-21.5	167.2	645.3	630.1	15.23	42.381		
4,500.0	4,406.8	4,448.9	4,443.3	17.0	8.5	-178.58	-22.1	172.6	662.9	647.3	15.57	42.570		
4,600.0	4,504.1	4,547.3	4,541.6	17.5	8.7	-178.66	-22.7	178.0	680.5	664.6	15.92	42.751		
4,700.0	4,601.4	4,645.7	4,639.9	17.9	8.9	-178.74	-23.3	183.4	698.2	681.9	16.26	42.924		
4,800.0	4,698.8	4,744.2	4,738.2	18.4	9.1	-178.81	-23.9	188.8	715.8	699.2	16.61	43.090		
4,900.0	4,796.1	4,842.6	4,836.4	18.8	9.3	-178.88	-24.5	194.2	733.4	716.5	16.96	43.250		
5,000.0	4,893.4	4,941.0	4,934.7	19.3	9.5	-178.94	-25.1	199.6	751.0	733.7	17.30	43.403		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design										S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2C-7H-E168 - Hz - Plan #5				Offset Site Error:		0.0 ft			
Survey Program: 0-Geolink MWD																Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance												
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)									
5,100.0	4,990.7	5,039.5	5,033.0	19.7	9.7	-179.01	-25.7	205.0	768.7	751.0	17.65	43.550							
5,200.0	5,088.0	5,137.9	5,131.3	20.2	9.9	-179.07	-26.3	210.4	786.3	768.3	18.00	43.691							
5,300.0	5,185.3	5,236.3	5,229.6	20.6	10.1	-179.12	-26.9	215.8	803.9	785.6	18.34	43.827							
5,400.0	5,282.6	5,334.8	5,327.9	21.1	10.3	-179.18	-27.5	221.2	821.6	802.9	18.69	43.958							
5,500.0	5,379.9	5,433.2	5,426.1	21.5	10.5	-179.23	-28.1	226.6	839.2	820.1	19.04	44.085							
5,600.0	5,477.3	5,531.6	5,524.4	21.9	10.7	-179.28	-28.7	232.0	856.8	837.4	19.38	44.206							
5,700.0	5,574.6	5,630.0	5,622.7	22.4	10.9	-179.33	-29.3	237.4	874.4	854.7	19.73	44.324							
5,800.0	5,671.9	5,728.5	5,721.0	22.8	11.1	-179.37	-29.9	242.8	892.1	872.0	20.07	44.438							
5,900.0	5,769.2	5,826.9	5,819.3	23.3	11.3	-179.42	-30.5	248.2	909.7	889.3	20.42	44.547							
6,000.0	5,866.5	5,925.3	5,917.5	23.7	11.5	-179.46	-31.1	253.6	927.3	906.6	20.77	44.653							
6,100.0	5,963.8	6,023.8	6,015.8	24.2	11.7	-179.50	-31.7	259.0	945.0	923.9	21.11	44.756							
6,200.0	6,061.1	6,122.2	6,114.1	24.6	11.9	-179.54	-32.3	264.4	962.6	941.2	21.46	44.855							
6,300.0	6,158.5	6,220.6	6,212.4	25.1	12.1	-179.58	-32.9	269.8	980.2	958.4	21.81	44.951							
6,400.0	6,255.8	6,319.1	6,310.7	25.5	12.3	-179.62	-33.5	275.2	997.9	975.7	22.15	45.045							
6,500.0	6,353.1	6,417.5	6,408.9	26.0	12.5	-179.65	-34.1	280.6	1,015.5	993.0	22.50	45.135							

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.08	0.4	-22.4	22.4					
100.0	100.0	100.0	100.0	0.2	0.2	-89.08	0.4	-22.4	22.4	22.1	0.30	73.738		
200.0	200.0	200.0	200.0	0.3	0.3	-89.08	0.4	-22.4	22.4	21.7	0.65	34.306		
200.0	200.0	200.0	200.0	0.3	0.3	-89.08	0.4	-22.4	22.4	21.7	0.65	34.306 CC		
300.0	300.0	300.0	300.0	0.5	0.5	171.01	0.4	-22.4	22.6	21.6	1.00	22.568 ES		
400.0	400.0	400.0	400.0	0.7	0.7	171.65	0.4	-22.4	24.3	23.0	1.35	18.013		
500.0	499.9	499.9	499.9	0.9	0.8	172.69	0.4	-22.4	27.8	26.1	1.70	16.348		
600.0	599.8	600.3	600.3	1.1	1.0	173.78	0.3	-21.5	32.1	30.1	2.05	15.667		
700.0	699.5	700.9	700.8	1.3	1.2	174.80	0.0	-18.9	36.4	34.0	2.40	15.183		
800.0	799.2	801.4	801.3	1.5	1.4	175.77	-0.5	-14.5	40.7	38.0	2.75	14.821		
900.0	898.6	902.1	901.8	1.7	1.6	176.71	-1.1	-8.4	45.1	42.0	3.10	14.540		
1,000.0	997.9	1,002.8	1,002.2	2.0	1.8	177.62	-2.0	-0.5	49.4	45.9	3.45	14.316		
1,100.0	1,096.9	1,103.1	1,102.0	2.3	2.0	178.49	-3.0	8.9	53.9	50.1	3.80	14.202		
1,200.0	1,195.7	1,202.9	1,201.4	2.6	2.2	179.26	-4.0	18.4	60.1	55.9	4.15	14.485		
1,300.0	1,294.1	1,302.6	1,300.6	2.9	2.4	179.88	-5.0	27.8	68.0	63.5	4.50	15.113		
1,400.0	1,392.3	1,402.1	1,399.7	3.3	2.7	-179.63	-6.1	37.3	77.6	72.8	4.85	16.010		
1,500.0	1,490.1	1,501.5	1,498.6	3.7	2.9	-179.26	-7.1	46.7	89.0	83.8	5.20	17.121		
1,600.0	1,587.5	1,600.6	1,597.3	4.1	3.1	-178.99	-8.1	56.1	102.1	96.5	5.55	18.406		
1,700.0	1,684.6	1,699.5	1,695.7	4.5	3.4	-178.80	-9.1	65.5	116.9	111.0	5.90	19.833		
1,800.0	1,781.2	1,798.2	1,793.9	5.0	3.6	-176.82	-10.1	74.9	133.3	127.0	6.24	21.340		
1,900.0	1,877.8	1,896.8	1,892.1	5.5	3.8	-173.48	-11.1	84.3	149.7	143.1	6.59	22.703		
2,000.0	1,974.4	1,995.4	1,990.3	6.0	4.1	-171.36	-12.1	93.6	165.9	159.0	6.94	23.914		
2,100.0	2,071.3	2,094.2	2,088.6	6.4	4.3	-172.37	-13.1	103.0	181.0	173.8	7.28	24.854		
2,200.0	2,168.6	2,193.3	2,187.2	6.8	4.5	-173.16	-14.2	112.4	194.7	187.1	7.63	25.514		
2,300.0	2,265.9	2,292.3	2,285.8	7.3	4.8	-173.84	-15.2	121.8	208.2	200.2	7.98	26.092		
2,400.0	2,363.2	2,391.4	2,384.4	7.7	5.0	-174.44	-16.2	131.3	221.7	213.4	8.33	26.624		
2,500.0	2,460.5	2,490.4	2,483.0	8.2	5.2	-174.96	-17.2	140.7	235.2	226.5	8.67	27.115		
2,600.0	2,557.9	2,589.5	2,581.6	8.6	5.5	-175.44	-18.2	150.1	248.8	239.7	9.02	27.569		
2,700.0	2,655.2	2,688.6	2,680.2	9.0	5.7	-175.86	-19.2	159.5	262.3	252.9	9.37	27.990		
2,800.0	2,752.5	2,787.6	2,778.8	9.5	5.9	-176.24	-20.2	168.9	275.9	266.2	9.72	28.382		
2,900.0	2,849.8	2,886.7	2,877.4	9.9	6.2	-176.59	-21.2	178.3	289.5	279.4	10.07	28.748		
3,000.0	2,947.1	2,985.7	2,976.0	10.4	6.4	-176.90	-22.3	187.7	303.0	292.6	10.42	29.089		
3,100.0	3,044.4	3,084.8	3,074.7	10.8	6.7	-177.19	-23.3	197.1	316.6	305.9	10.77	29.409		
3,200.0	3,141.7	3,183.9	3,173.3	11.2	6.9	-177.45	-24.3	206.5	330.2	319.1	11.12	29.708		
3,300.0	3,239.1	3,282.9	3,271.9	11.7	7.1	-177.69	-25.3	215.9	343.9	332.4	11.47	29.990		
3,400.0	3,336.4	3,382.0	3,370.5	12.1	7.4	-177.92	-26.3	225.4	357.5	345.7	11.82	30.255		
3,500.0	3,433.7	3,481.0	3,469.1	12.6	7.6	-178.13	-27.3	234.8	371.1	358.9	12.16	30.506		
3,600.0	3,531.0	3,580.1	3,567.7	13.0	7.8	-178.32	-28.3	244.2	384.7	372.2	12.51	30.742		
3,700.0	3,628.3	3,679.2	3,666.3	13.5	8.1	-178.50	-29.4	253.6	398.4	385.5	12.86	30.966		
3,800.0	3,725.6	3,778.2	3,764.9	13.9	8.3	-178.67	-30.4	263.0	412.0	398.8	13.21	31.178		
3,900.0	3,822.9	3,877.3	3,863.5	14.4	8.6	-178.82	-31.4	272.4	425.6	412.1	13.56	31.379		
4,000.0	3,920.2	3,976.3	3,962.1	14.8	8.8	-178.97	-32.4	281.8	439.3	425.3	13.91	31.569		
4,100.0	4,017.6	4,075.4	4,060.7	15.3	9.0	-179.11	-33.4	291.2	452.9	438.6	14.26	31.751		
4,200.0	4,114.9	4,174.5	4,159.3	15.7	9.3	-179.24	-34.4	300.6	466.5	451.9	14.61	31.924		
4,300.0	4,212.2	4,273.5	4,257.9	16.1	9.5	-179.36	-35.4	310.0	480.2	465.2	14.96	32.089		
4,400.0	4,309.5	4,372.6	4,356.5	16.6	9.8	-179.48	-36.4	319.4	493.8	478.5	15.31	32.246		
4,500.0	4,406.8	4,471.6	4,455.1	17.0	10.0	-179.59	-37.5	328.9	507.5	491.8	15.67	32.397		
4,600.0	4,504.1	4,570.7	4,553.7	17.5	10.2	-179.69	-38.5	338.3	521.1	505.1	16.02	32.541		
4,700.0	4,601.4	4,669.8	4,652.3	17.9	10.5	-179.79	-39.5	347.7	534.8	518.4	16.37	32.678		
4,800.0	4,698.8	4,768.8	4,751.0	18.4	10.7	-179.89	-40.5	357.1	548.5	531.7	16.72	32.810		
4,900.0	4,796.1	4,867.9	4,849.6	18.8	11.0	-179.98	-41.5	366.5	562.1	545.1	17.07	32.937		
5,000.0	4,893.4	4,966.9	4,948.2	19.3	11.2	179.94	-42.5	375.9	575.8	558.4	17.42	33.058		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5											Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	4,990.7	5,066.0	5,046.8	19.7	11.4	179.86	-43.5	385.3	589.4	571.7	17.77	33.175		
5,200.0	5,088.0	5,165.0	5,145.4	20.2	11.7	179.78	-44.6	394.7	603.1	585.0	18.12	33.287		
5,300.0	5,185.3	5,264.1	5,244.0	20.6	11.9	179.70	-45.6	404.1	616.8	598.3	18.47	33.395		
5,400.0	5,282.6	5,363.2	5,342.6	21.1	12.1	179.63	-46.6	413.5	630.4	611.6	18.82	33.499		
5,500.0	5,379.9	5,462.2	5,441.2	21.5	12.4	179.57	-47.6	423.0	644.1	624.9	19.17	33.599		
5,600.0	5,477.3	5,561.3	5,539.8	21.9	12.6	179.50	-48.6	432.4	657.7	638.2	19.52	33.696		
5,700.0	5,574.6	5,660.3	5,638.4	22.4	12.9	179.44	-49.6	441.8	671.4	651.5	19.87	33.789		
5,800.0	5,671.9	5,759.4	5,737.0	22.8	13.1	179.38	-50.6	451.2	685.1	664.9	20.22	33.879		
5,900.0	5,769.2	5,858.5	5,835.6	23.3	13.3	179.32	-51.6	460.6	698.7	678.2	20.57	33.965		
6,000.0	5,866.5	5,957.5	5,934.2	23.7	13.6	179.27	-52.7	470.0	712.4	691.5	20.92	34.049		
6,100.0	5,963.8	6,056.6	6,032.8	24.2	13.8	179.21	-53.7	479.4	726.1	704.8	21.27	34.130		
6,200.0	6,061.1	6,155.6	6,131.4	24.6	14.1	179.16	-54.7	488.8	739.8	718.1	21.62	34.209		
6,300.0	6,158.5	6,254.7	6,230.0	25.1	14.3	179.11	-55.7	498.2	753.4	731.4	21.98	34.285		
6,400.0	6,255.8	6,353.8	6,328.7	25.5	14.5	179.06	-56.7	507.6	767.1	744.8	22.33	34.358		
6,500.0	6,353.1	6,452.8	6,427.3	26.0	14.8	179.02	-57.7	517.0	780.8	758.1	22.68	34.430		
6,600.0	6,450.4	6,551.9	6,525.9	26.4	15.0	178.97	-58.7	526.5	794.4	771.4	23.03	34.499		
6,700.0	6,547.7	6,650.9	6,624.5	26.9	15.3	178.93	-59.7	535.9	808.1	784.7	23.38	34.566		
6,800.0	6,645.0	6,750.0	6,723.1	27.3	15.5	178.89	-60.8	545.3	821.8	798.0	23.73	34.631		
6,900.0	6,742.3	6,849.1	6,821.7	27.8	15.7	178.85	-61.8	554.7	835.4	811.4	24.08	34.694		
7,000.0	6,839.7	6,948.1	6,920.3	28.2	16.0	178.81	-62.8	564.1	849.1	824.7	24.43	34.756		
7,100.0	6,937.0	7,048.3	7,019.6	28.7	16.2	179.31	-55.8	573.7	862.7	838.0	24.74	34.873		
7,200.0	7,034.3	7,143.2	7,111.2	29.1	16.4	-179.18	-33.2	582.6	876.6	851.6	25.01	35.049		
7,300.0	7,131.6	7,228.6	7,189.5	29.5	16.6	-177.03	-0.2	590.5	892.0	866.6	25.36	35.180		
7,400.0	7,228.9	7,300.0	7,250.6	30.0	16.8	-153.13	36.2	596.7	910.1	884.3	25.82	35.246		
7,500.0	7,324.6	7,374.9	7,309.3	30.4	17.0	-121.23	82.2	602.8	929.8	903.3	26.49	35.104		
7,600.0	7,416.1	7,450.0	7,361.7	30.8	17.3	-104.00	135.6	608.3	949.8	922.5	27.31	34.776		
7,700.0	7,500.5	7,510.7	7,398.7	31.2	17.6	-93.98	183.6	612.4	968.8	940.8	27.96	34.643		
7,800.0	7,575.1	7,576.4	7,432.7	31.6	17.9	-87.26	239.7	616.2	986.0	957.2	28.76	34.287		
7,900.0	7,637.9	7,641.3	7,459.9	32.0	18.3	-82.63	298.4	619.4	1,000.5	970.9	29.56	33.842		
8,000.0	7,686.8	7,700.0	7,478.6	32.5	18.8	-79.51	354.0	621.8	1,011.7	981.5	30.23	33.470		
8,100.0	7,720.4	7,769.0	7,493.2	32.9	19.3	-77.48	421.4	623.9	1,019.1	987.8	31.25	32.605		
8,200.0	7,737.7	7,832.4	7,499.5	33.5	19.9	-76.53	484.4	625.2	1,022.4	990.2	32.16	31.790		
8,300.0	7,740.0	7,917.8	7,500.0	34.0	20.7	-76.41	569.8	626.1	1,021.6	987.7	33.91	30.131		
8,400.0	7,740.0	8,017.8	7,500.0	34.6	21.7	-76.39	669.7	627.2	1,020.1	983.8	36.32	28.089		
8,500.0	7,740.0	8,117.7	7,500.0	35.3	22.9	-76.37	769.7	628.2	1,018.6	979.7	38.88	26.199		
8,600.0	7,740.0	8,217.7	7,500.0	36.1	24.1	-76.35	869.7	629.2	1,017.1	975.5	41.56	24.472		
8,700.0	7,740.0	8,317.7	7,500.0	36.9	25.4	-76.33	969.7	630.3	1,015.5	971.2	44.34	22.902		
8,800.0	7,740.0	8,417.7	7,500.0	37.8	26.7	-76.31	1,069.7	631.3	1,014.0	966.8	47.20	21.481		
8,900.0	7,740.0	8,517.7	7,500.0	38.7	28.1	-76.29	1,169.6	632.4	1,012.5	962.3	50.14	20.195		
9,000.0	7,740.0	8,617.7	7,500.0	39.7	29.5	-76.27	1,269.6	633.4	1,010.9	957.8	53.12	19.031		
9,100.0	7,740.0	8,717.7	7,500.0	40.8	30.9	-76.24	1,369.6	634.5	1,009.4	953.3	56.16	17.975		
9,200.0	7,740.0	8,817.7	7,500.0	41.9	32.4	-76.22	1,469.6	635.5	1,007.9	948.7	59.23	17.017		
9,300.0	7,740.0	8,917.6	7,500.0	43.0	33.9	-76.20	1,569.6	636.6	1,006.4	944.0	62.34	16.144		
9,400.0	7,740.0	9,017.6	7,500.0	44.2	35.4	-76.18	1,669.6	637.6	1,004.8	939.4	65.47	15.347		
9,500.0	7,740.0	9,117.6	7,500.0	45.5	37.0	-76.16	1,769.5	638.7	1,003.3	934.7	68.63	14.618		
9,600.0	7,740.0	9,217.6	7,500.0	46.7	38.5	-76.14	1,869.5	639.7	1,001.8	930.0	71.82	13.949		
9,700.0	7,740.0	9,317.6	7,500.0	48.0	40.1	-76.12	1,969.5	640.8	1,000.3	925.3	75.02	13.334		
9,800.0	7,740.0	9,417.6	7,500.0	49.3	41.7	-76.09	2,069.5	641.8	998.7	920.5	78.24	12.766		
9,900.0	7,740.0	9,517.6	7,500.0	50.7	43.3	-76.07	2,169.5	642.9	997.2	915.8	81.47	12.241		
10,000.0	7,740.0	9,617.6	7,500.0	52.0	45.0	-76.05	2,269.4	643.9	995.7	911.0	84.71	11.754		
10,100.0	7,740.0	9,717.5	7,500.0	53.4	46.6	-76.03	2,369.4	645.0	994.2	906.2	87.97	11.302		
10,200.0	7,740.0	9,817.5	7,500.0	54.9	48.2	-76.01	2,469.4	646.0	992.6	901.4	91.23	10.881		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2D-7H-E168 - Hz - Plan #5											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
10,300.0	7,740.0	9,917.5	7,500.0	56.3	49.9	-75.98	2,569.4	647.0	991.1	896.6	94.50	10.488	
10,400.0	7,740.0	10,017.5	7,500.0	57.7	51.5	-75.96	2,669.4	648.1	989.6	891.8	97.79	10.120	
10,500.0	7,740.0	10,107.6	7,500.0	59.2	53.0	-75.95	2,759.5	648.7	988.4	887.9	100.54	9.832	
10,536.1	7,740.0	10,138.5	7,500.0	59.7	53.5	-75.95	2,790.4	648.7	988.3	886.9	101.44	9.743	
10,600.0	7,740.0	10,200.0	7,500.0	60.7	54.5	-75.95	2,851.9	648.0	988.6	885.2	103.42	9.560	
10,700.0	7,740.0	10,278.9	7,500.0	62.2	55.8	-75.97	2,930.8	646.2	990.3	884.7	105.53	9.384	
10,800.0	7,740.0	10,364.5	7,500.0	63.7	57.3	-76.01	3,016.3	643.0	993.4	885.4	108.02	9.196	
10,900.0	7,740.0	10,450.0	7,500.0	65.2	58.7	-76.06	3,101.6	638.6	997.9	887.4	110.49	9.032	
11,000.0	7,740.0	10,535.3	7,500.0	66.8	60.1	-76.14	3,186.8	632.8	1,003.9	891.0	112.95	8.888	
11,100.0	7,740.0	10,620.5	7,500.0	68.3	61.5	-76.23	3,271.6	625.9	1,011.4	896.0	115.40	8.764	
11,200.0	7,740.0	10,700.0	7,500.0	69.9	62.8	-76.32	3,350.8	618.2	1,020.3	902.8	117.48	8.685	
11,300.0	7,740.0	10,790.1	7,500.0	71.4	64.3	-76.45	3,440.4	608.2	1,030.6	910.3	120.24	8.571	
11,400.0	7,740.0	10,874.5	7,500.0	73.0	65.7	-76.58	3,524.1	597.6	1,042.3	919.7	122.64	8.499	
11,500.0	7,740.0	10,967.6	7,500.0	74.6	67.2	-76.74	3,616.3	584.7	1,055.2	929.6	125.63	8.400	
11,600.0	7,740.0	11,066.7	7,500.0	76.2	68.8	-76.90	3,714.4	571.0	1,068.3	939.3	129.04	8.279	
11,700.0	7,740.0	11,165.8	7,500.0	77.8	70.5	-77.06	3,812.6	557.2	1,081.4	948.9	132.45	8.164	
11,800.0	7,740.0	11,266.4	7,500.0	79.4	72.2	-77.22	3,912.1	543.2	1,094.4	958.5	135.97	8.049	
11,900.0	7,740.0	11,388.5	7,500.0	81.0	74.2	-77.39	4,033.3	527.6	1,106.3	965.4	140.90	7.852	
12,000.0	7,740.0	11,511.2	7,500.0	82.6	76.3	-77.53	4,155.3	514.6	1,116.2	970.4	145.78	7.656	
12,100.0	7,740.0	11,634.5	7,500.0	84.2	78.4	-77.64	4,278.1	504.2	1,123.9	973.3	150.62	7.462	
12,200.0	7,740.0	11,758.0	7,500.0	85.9	80.5	-77.72	4,401.4	496.4	1,129.6	974.2	155.40	7.269	
12,300.0	7,740.0	11,881.9	7,500.0	87.5	82.6	-77.77	4,525.2	491.2	1,133.2	973.0	160.12	7.077	
12,400.0	7,740.0	12,005.8	7,500.0	89.1	84.8	-77.79	4,649.1	488.7	1,134.6	969.8	164.76	6.886	
12,500.0	7,740.0	12,129.8	7,500.0	90.8	86.9	-77.78	4,773.1	488.9	1,133.9	964.6	169.31	6.697	
12,600.0	7,740.0	12,237.9	7,500.0	92.4	88.8	-77.75	4,881.1	490.9	1,131.6	958.5	173.07	6.539	
12,700.0	7,740.0	12,337.8	7,500.0	94.1	90.5	-77.72	4,981.0	492.9	1,129.2	952.7	176.44	6.400	
12,800.0	7,740.0	12,437.8	7,500.0	95.7	92.2	-77.70	5,081.0	494.9	1,126.7	946.9	179.82	6.266	
12,900.0	7,740.0	12,537.8	7,500.0	97.4	94.0	-77.67	5,180.9	496.8	1,124.3	941.1	183.20	6.137	
13,000.0	7,740.0	12,637.7	7,500.0	99.0	95.7	-77.64	5,280.9	498.8	1,121.9	935.3	186.57	6.013	
13,100.0	7,740.0	12,737.7	7,500.0	100.7	97.4	-77.62	5,380.8	500.8	1,119.4	929.5	189.95	5.893	
13,200.0	7,740.0	12,837.7	7,500.0	102.4	99.2	-77.59	5,480.8	502.8	1,117.0	923.7	193.33	5.778	
13,300.0	7,740.0	12,937.6	7,500.0	104.0	100.9	-77.56	5,580.7	504.7	1,114.5	917.8	196.71	5.666	
13,400.0	7,740.0	13,037.6	7,500.0	105.7	102.6	-77.53	5,680.7	506.7	1,112.1	912.0	200.08	5.558	
13,500.0	7,740.0	13,137.6	7,500.0	107.4	104.4	-77.51	5,780.6	508.7	1,109.7	906.2	203.46	5.454	
13,600.0	7,740.0	13,237.5	7,500.0	109.1	106.1	-77.48	5,880.6	510.6	1,107.2	900.4	206.84	5.353	
13,700.0	7,740.0	13,337.5	7,500.0	110.7	107.8	-77.45	5,980.5	512.6	1,104.8	894.6	210.22	5.255	
13,800.0	7,740.0	13,437.5	7,500.0	112.4	109.6	-77.42	6,080.5	514.6	1,102.4	888.8	213.60	5.161	
13,900.0	7,740.0	13,537.4	7,500.0	114.1	111.3	-77.39	6,180.4	516.6	1,099.9	883.0	216.97	5.069	
14,000.0	7,740.0	13,637.4	7,500.0	115.8	113.1	-77.36	6,280.4	518.5	1,097.5	877.1	220.35	4.981	
14,100.0	7,740.0	13,737.4	7,500.0	117.5	114.8	-77.34	6,380.3	520.5	1,095.1	871.3	223.73	4.895	
14,200.0	7,740.0	13,837.4	7,500.0	119.2	116.5	-77.31	6,480.3	522.5	1,092.6	865.5	227.11	4.811	
14,300.0	7,740.0	13,937.3	7,500.0	120.9	118.3	-77.28	6,580.2	524.4	1,090.2	859.7	230.48	4.730	
14,400.0	7,740.0	14,037.3	7,500.0	122.6	120.0	-77.25	6,680.2	526.4	1,087.8	853.9	233.86	4.651	
14,500.0	7,740.0	14,137.3	7,500.0	124.3	121.7	-77.22	6,780.1	528.4	1,085.3	848.1	237.24	4.575	
14,600.0	7,740.0	14,237.2	7,500.0	125.9	123.5	-77.19	6,880.1	530.4	1,082.9	842.3	240.61	4.501	
14,700.0	7,740.0	14,337.2	7,500.0	127.6	125.2	-77.16	6,980.0	532.3	1,080.5	836.5	243.99	4.428	
14,800.0	7,740.0	14,437.2	7,500.0	129.3	127.0	-77.13	7,080.0	534.3	1,078.0	830.7	247.36	4.358	
14,847.1	7,740.0	14,458.1	7,500.0	130.1	127.3	-77.13	7,100.9	534.7	1,077.2	829.5	247.64	4.350 SF	
14,852.2	7,740.0	14,458.1	7,500.0	130.2	127.3	-77.13	7,100.9	534.7	1,077.2	829.7	247.54	4.352	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-88.58	0.4	-14.8	14.8				
100.0	100.0	100.0	100.0	0.2	0.2	-88.58	0.4	-14.8	14.8	14.5	0.30	48.860	
200.0	200.0	200.0	200.0	0.3	0.3	-88.58	0.4	-14.8	14.8	14.2	0.65	22.732	
200.0	200.0	200.0	200.0	0.3	0.3	-88.58	0.4	-14.8	14.8	14.2	0.65	22.732	CC
300.0	300.0	300.0	300.0	0.5	0.5	171.55	0.4	-14.8	15.1	14.1	1.00	15.027	ES
400.0	400.0	400.0	400.0	0.7	0.7	172.42	0.4	-14.8	16.8	15.4	1.35	12.423	
500.0	499.9	500.3	500.3	0.9	0.9	173.72	0.3	-14.0	19.4	17.7	1.70	11.393	
600.0	599.8	600.6	600.6	1.1	1.0	175.19	0.1	-11.3	22.0	19.9	2.05	10.712	
700.0	699.5	701.0	700.8	1.3	1.2	176.80	-0.2	-6.9	24.5	22.1	2.40	10.233	
800.0	799.2	801.4	801.1	1.5	1.4	178.49	-0.6	-0.8	27.2	24.4	2.75	9.880	
900.0	898.6	901.8	901.2	1.7	1.6	-179.76	-1.1	7.1	29.8	26.7	3.10	9.613	
1,000.0	997.9	1,002.3	1,001.2	2.0	1.8	-177.96	-1.8	16.7	32.4	29.0	3.45	9.407	
1,100.0	1,096.9	1,102.9	1,101.1	2.3	2.1	-176.13	-2.6	28.1	35.1	31.3	3.80	9.242	
1,200.0	1,195.7	1,202.8	1,200.3	2.6	2.3	-174.57	-3.4	40.3	38.8	34.6	4.16	9.323	
1,300.0	1,294.1	1,302.6	1,299.4	2.9	2.6	-173.54	-4.2	52.4	44.2	39.7	4.52	9.775	
1,400.0	1,392.3	1,402.4	1,398.4	3.3	2.9	-172.98	-5.0	64.5	51.3	46.5	4.88	10.515	
1,500.0	1,490.1	1,502.0	1,497.2	3.7	3.1	-172.76	-5.8	76.6	60.2	55.0	5.24	11.483	
1,600.0	1,587.5	1,601.4	1,595.9	4.1	3.4	-172.78	-6.7	88.7	70.8	65.2	5.60	12.638	
1,700.0	1,684.6	1,700.7	1,694.4	4.5	3.6	-172.94	-7.5	100.8	83.1	77.2	5.96	13.944	
1,800.0	1,781.2	1,799.7	1,792.7	5.0	3.9	-171.37	-8.3	112.8	96.9	90.6	6.32	15.340	
1,900.0	1,877.8	1,898.7	1,891.0	5.5	4.2	-168.56	-9.1	124.9	110.7	104.0	6.67	16.600	
2,000.0	1,974.4	1,997.8	1,989.3	6.0	4.4	-167.05	-9.9	136.9	124.1	117.1	7.00	17.722	
2,100.0	2,071.3	2,096.9	2,087.8	6.4	4.7	-168.50	-10.8	149.0	136.5	129.1	7.34	18.589	
2,200.0	2,168.6	2,196.3	2,186.4	6.8	5.0	-169.61	-11.6	161.1	147.4	139.7	7.68	19.185	
2,300.0	2,265.9	2,295.7	2,285.1	7.3	5.2	-170.54	-12.4	173.1	158.1	150.1	8.02	19.705	
2,400.0	2,363.2	2,395.1	2,383.7	7.7	5.5	-171.36	-13.2	185.2	168.9	160.5	8.37	20.186	
2,500.0	2,460.5	2,494.5	2,482.4	8.2	5.8	-172.08	-14.0	197.3	179.7	171.0	8.71	20.630	
2,600.0	2,557.9	2,593.9	2,581.0	8.6	6.1	-172.71	-14.9	209.4	190.5	181.5	9.06	21.041	
2,700.0	2,655.2	2,693.3	2,679.7	9.0	6.3	-173.28	-15.7	221.5	201.4	192.0	9.40	21.423	
2,800.0	2,752.5	2,792.7	2,778.3	9.5	6.6	-173.79	-16.5	233.5	212.3	202.5	9.75	21.779	
2,900.0	2,849.8	2,892.0	2,877.0	9.9	6.9	-174.25	-17.3	245.6	223.2	213.1	10.09	22.111	
3,000.0	2,947.1	2,991.4	2,975.6	10.4	7.1	-174.67	-18.1	257.7	234.1	223.6	10.44	22.421	
3,100.0	3,044.4	3,090.8	3,074.3	10.8	7.4	-175.05	-19.0	269.8	245.0	234.2	10.79	22.711	
3,200.0	3,141.7	3,190.2	3,172.9	11.2	7.7	-175.40	-19.8	281.9	255.9	244.8	11.13	22.984	
3,300.0	3,239.1	3,289.6	3,271.6	11.7	8.0	-175.72	-20.6	294.0	266.8	255.3	11.48	23.240	
3,400.0	3,336.4	3,389.0	3,370.2	12.1	8.2	-176.01	-21.4	306.0	277.8	265.9	11.83	23.481	
3,500.0	3,433.7	3,488.4	3,468.9	12.6	8.5	-176.28	-22.3	318.1	288.7	276.5	12.18	23.709	
3,600.0	3,531.0	3,587.8	3,567.5	13.0	8.8	-176.54	-23.1	330.2	299.7	287.1	12.53	23.924	
3,700.0	3,628.3	3,687.2	3,666.2	13.5	9.1	-176.77	-23.9	342.3	310.6	297.7	12.87	24.127	
3,800.0	3,725.6	3,786.6	3,764.8	13.9	9.3	-176.99	-24.7	354.4	321.6	308.3	13.22	24.320	
3,900.0	3,822.9	3,885.9	3,863.4	14.4	9.6	-177.19	-25.5	366.5	332.5	319.0	13.57	24.503	
4,000.0	3,920.2	3,985.3	3,962.1	14.8	9.9	-177.38	-26.4	378.5	343.5	329.6	13.92	24.676	
4,100.0	4,017.6	4,084.7	4,060.7	15.3	10.2	-177.56	-27.2	390.6	354.5	340.2	14.27	24.841	
4,200.0	4,114.9	4,184.1	4,159.4	15.7	10.4	-177.73	-28.0	402.7	365.4	350.8	14.62	24.999	
4,300.0	4,212.2	4,283.5	4,258.0	16.1	10.7	-177.89	-28.8	414.8	376.4	361.5	14.97	25.149	
4,400.0	4,309.5	4,382.9	4,356.7	16.6	11.0	-178.04	-29.6	426.9	387.4	372.1	15.32	25.292	
4,500.0	4,406.8	4,482.3	4,455.3	17.0	11.2	-178.18	-30.5	439.0	398.4	382.7	15.67	25.428	
4,600.0	4,504.1	4,581.7	4,554.0	17.5	11.5	-178.31	-31.3	451.0	409.4	393.4	16.02	25.559	
4,700.0	4,601.4	4,681.1	4,652.6	17.9	11.8	-178.44	-32.1	463.1	420.4	404.0	16.37	25.684	
4,800.0	4,698.8	4,780.5	4,751.3	18.4	12.1	-178.56	-32.9	475.2	431.4	414.6	16.72	25.804	
4,900.0	4,796.1	4,879.9	4,849.9	18.8	12.3	-178.67	-33.7	487.3	442.3	425.3	17.07	25.919	
5,000.0	4,893.4	4,979.2	4,948.6	19.3	12.6	-178.78	-34.6	499.4	453.3	435.9	17.42	26.029	

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	4,990.7	5,078.6	5,047.2	19.7	12.9	-178.89	-35.4	511.4	464.3	446.6	17.77	26.135	
5,200.0	5,088.0	5,178.0	5,145.9	20.2	13.2	-178.99	-36.2	523.5	475.3	457.2	18.12	26.237	
5,300.0	5,185.3	5,277.4	5,244.5	20.6	13.4	-179.08	-37.0	535.6	486.3	467.9	18.47	26.335	
5,400.0	5,282.6	5,376.8	5,343.2	21.1	13.7	-179.17	-37.9	547.7	497.3	478.5	18.82	26.430	
5,500.0	5,379.9	5,476.2	5,441.8	21.5	14.0	-179.26	-38.7	559.8	508.3	489.2	19.17	26.520	
5,600.0	5,477.3	5,575.6	5,540.5	21.9	14.3	-179.34	-39.5	571.9	519.3	499.8	19.52	26.608	
5,700.0	5,574.6	5,675.0	5,639.1	22.4	14.5	-179.42	-40.3	583.9	530.3	510.5	19.87	26.692	
5,800.0	5,671.9	5,774.4	5,737.8	22.8	14.8	-179.49	-41.1	596.0	541.3	521.1	20.22	26.774	
5,900.0	5,769.2	5,873.8	5,836.4	23.3	15.1	-179.57	-42.0	608.1	552.3	531.8	20.57	26.853	
6,000.0	5,866.5	5,973.1	5,935.1	23.7	15.4	-179.64	-42.8	620.2	563.3	542.4	20.92	26.929	
6,100.0	5,963.8	6,072.5	6,033.7	24.2	15.6	-179.70	-43.6	632.3	574.3	553.1	21.27	27.002	
6,200.0	6,061.1	6,171.9	6,132.4	24.6	15.9	-179.77	-44.4	644.4	585.4	563.7	21.62	27.074	
6,300.0	6,158.5	6,271.3	6,231.0	25.1	16.2	-179.83	-45.2	656.4	596.4	574.4	21.97	27.143	
6,400.0	6,255.8	6,370.7	6,329.7	25.5	16.5	-179.89	-46.1	668.5	607.4	585.0	22.32	27.209	
6,500.0	6,353.1	6,470.1	6,428.3	26.0	16.7	-179.95	-46.9	680.6	618.4	595.7	22.67	27.274	
6,600.0	6,450.4	6,569.5	6,527.0	26.4	17.0	179.99	-47.7	692.7	629.4	606.4	23.02	27.337	
6,700.0	6,547.7	6,668.9	6,625.6	26.9	17.3	179.94	-48.5	704.8	640.4	617.0	23.37	27.397	
6,800.0	6,645.0	6,768.3	6,724.3	27.3	17.5	179.89	-49.3	716.9	651.4	627.7	23.73	27.456	
6,900.0	6,742.3	6,867.7	6,822.9	27.8	17.8	179.84	-50.2	728.9	662.4	638.3	24.08	27.514	
7,000.0	6,839.7	6,967.0	6,921.6	28.2	18.1	179.79	-51.0	741.0	673.4	649.0	24.43	27.569	
7,100.0	6,937.0	7,066.4	7,020.2	28.7	18.4	179.74	-51.8	753.1	684.4	659.7	24.78	27.623	
7,200.0	7,034.3	7,165.8	7,118.9	29.1	18.6	179.69	-52.6	765.2	695.5	670.3	25.13	27.676	
7,300.0	7,131.6	7,263.8	7,216.1	29.5	18.9	179.83	-51.2	777.1	706.5	681.1	25.46	27.746	
7,400.0	7,228.9	7,358.3	7,308.5	30.0	19.2	-157.80	-36.0	788.3	718.0	692.3	25.76	27.870	
7,500.0	7,324.6	7,450.0	7,394.8	30.4	19.4	-127.79	-6.7	798.6	729.7	703.6	26.12	27.934	
7,600.0	7,416.1	7,540.4	7,474.2	30.8	19.6	-112.33	35.3	807.9	741.2	714.5	26.61	27.852	
7,700.0	7,500.5	7,629.0	7,544.7	31.2	19.9	-103.60	88.2	816.1	751.9	724.6	27.25	27.590	
7,800.0	7,575.1	7,716.5	7,605.6	31.6	20.2	-98.11	150.5	823.0	761.5	733.4	28.06	27.134	
7,900.0	7,637.9	7,800.0	7,654.3	32.0	20.6	-94.49	218.0	828.4	769.6	740.7	28.97	26.568	
8,000.0	7,686.8	7,889.1	7,695.0	32.5	21.1	-92.08	297.0	832.7	776.0	745.8	30.20	25.691	
8,100.0	7,720.4	7,974.8	7,722.2	32.9	21.6	-90.64	378.2	835.3	780.4	748.9	31.52	24.757	
8,200.0	7,737.7	8,060.4	7,737.1	33.5	22.2	-90.02	462.4	836.4	782.7	749.7	32.98	23.730	
8,300.0	7,740.0	8,150.6	7,740.0	34.0	23.0	-90.00	552.5	835.9	783.2	748.4	34.78	22.517	
8,400.0	7,740.0	8,250.6	7,740.0	34.6	23.9	-90.00	652.5	835.1	783.5	746.4	37.16	21.084	
8,500.0	7,740.0	8,350.6	7,740.0	35.3	24.9	-90.00	752.5	834.2	783.9	744.2	39.71	19.742	
8,600.0	7,740.0	8,450.6	7,740.0	36.1	26.0	-90.00	852.5	833.3	784.2	741.8	42.39	18.501	
8,700.0	7,740.0	8,550.6	7,740.0	36.9	27.1	-90.00	952.5	832.4	784.6	739.4	45.18	17.364	
8,800.0	7,740.0	8,650.6	7,740.0	37.8	28.3	-90.00	1,052.5	831.6	784.9	736.9	48.07	16.328	
8,900.0	7,740.0	8,750.6	7,740.0	38.7	29.6	-90.00	1,152.5	830.7	785.3	734.2	51.04	15.385	
9,000.0	7,740.0	8,850.6	7,740.0	39.7	30.9	-90.00	1,252.5	829.8	785.6	731.6	54.07	14.529	
9,100.0	7,740.0	8,950.6	7,740.0	40.8	32.3	-90.00	1,352.5	829.0	786.0	728.8	57.16	13.751	
9,200.0	7,740.0	9,050.6	7,740.0	41.9	33.7	-90.00	1,452.5	828.1	786.3	726.0	60.29	13.042	
9,300.0	7,740.0	9,150.6	7,740.0	43.0	35.1	-90.00	1,552.5	827.2	786.7	723.2	63.46	12.396	
9,400.0	7,740.0	9,250.6	7,740.0	44.2	36.5	-90.00	1,652.5	826.3	787.0	720.4	66.67	11.805	
9,500.0	7,740.0	9,350.6	7,740.0	45.5	38.0	-90.00	1,752.5	825.5	787.4	717.5	69.90	11.264	
9,600.0	7,740.0	9,450.6	7,740.0	46.7	39.5	-90.00	1,852.5	824.6	787.7	714.6	73.16	10.767	
9,700.0	7,740.0	9,550.6	7,740.0	48.0	41.0	-90.00	1,952.5	823.7	788.1	711.6	76.45	10.309	
9,800.0	7,740.0	9,650.6	7,740.0	49.3	42.6	-90.00	2,052.5	822.8	788.4	708.7	79.75	9.887	
9,900.0	7,740.0	9,750.6	7,740.0	50.7	44.1	-90.00	2,152.4	822.0	788.8	705.7	83.07	9.496	
10,000.0	7,740.0	9,850.6	7,740.0	52.0	45.7	-90.00	2,252.4	821.1	789.1	702.7	86.40	9.133	
10,100.0	7,740.0	9,950.6	7,740.0	53.4	47.3	-90.00	2,352.4	820.2	789.5	699.7	89.75	8.797	
10,200.0	7,740.0	10,050.6	7,740.0	54.9	48.9	-90.00	2,452.4	819.4	789.8	696.7	93.10	8.483	

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



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2E-7H-E168 - Hz - Plan #3										Offset Site Error: 0.0 ft			
Survey Program: 0-Geolink MWD										Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
10,300.0	7,740.0	10,150.6	7,740.0	56.3	50.5	-90.00	2,552.4	818.5	790.2	693.7	96.47	8.191	
10,400.0	7,740.0	10,250.6	7,740.0	57.7	52.1	-90.00	2,652.4	817.6	790.5	690.7	99.85	7.917	
10,500.0	7,740.0	10,350.6	7,740.0	59.2	53.7	-90.00	2,752.4	816.7	790.9	687.6	103.24	7.661	
10,600.0	7,740.0	10,450.6	7,740.0	60.7	55.4	-90.00	2,852.4	815.9	791.2	684.6	106.63	7.420	
10,700.0	7,740.0	10,550.6	7,740.0	62.2	57.0	-90.00	2,952.4	815.0	791.6	681.5	110.04	7.194	
10,800.0	7,740.0	10,650.6	7,740.0	63.7	58.6	-90.00	3,052.4	814.1	791.9	678.5	113.44	6.981	
10,900.0	7,740.0	10,750.6	7,740.0	65.2	60.3	-90.00	3,152.4	813.2	792.3	675.4	116.86	6.780	
11,000.0	7,740.0	10,850.6	7,740.0	66.8	62.0	-90.00	3,252.4	812.4	792.6	672.3	120.28	6.590	
11,100.0	7,740.0	10,950.6	7,740.0	68.3	63.6	-90.00	3,352.4	811.5	793.0	669.3	123.70	6.410	
11,200.0	7,740.0	11,050.6	7,740.0	69.9	65.3	-90.00	3,452.4	810.6	793.3	666.2	127.13	6.240	
11,300.0	7,740.0	11,150.6	7,740.0	71.4	67.0	-90.00	3,552.4	809.8	793.7	663.1	130.57	6.079	
11,400.0	7,740.0	11,250.6	7,740.0	73.0	68.6	-90.00	3,652.4	808.9	794.0	660.0	134.00	5.925	
11,500.0	7,740.0	11,350.6	7,740.0	74.6	70.3	-90.00	3,752.4	808.0	794.4	656.9	137.45	5.779	
11,600.0	7,740.0	11,459.0	7,740.0	76.2	72.1	-90.00	3,860.7	807.4	794.4	653.0	141.47	5.615	
11,700.0	7,740.0	11,575.0	7,740.0	77.8	74.1	-90.00	3,976.8	808.8	792.7	646.7	146.00	5.430	
11,800.0	7,740.0	11,676.8	7,740.0	79.4	75.8	-90.00	4,078.5	811.2	789.8	640.2	149.57	5.280	
11,900.0	7,740.0	11,776.7	7,740.0	81.0	77.5	-90.00	4,178.4	813.7	786.8	633.8	153.02	5.142	
12,000.0	7,740.0	11,876.7	7,740.0	82.6	79.3	-90.00	4,278.4	816.1	783.9	627.4	156.48	5.009	
12,100.0	7,740.0	11,976.7	7,740.0	84.2	81.0	-90.00	4,378.3	818.5	780.9	621.0	159.93	4.883	
12,200.0	7,740.0	12,076.6	7,740.0	85.9	82.7	-90.00	4,478.2	821.0	777.9	614.6	163.40	4.761	
12,300.0	7,740.0	12,176.6	7,740.0	87.5	84.4	-90.00	4,578.1	823.4	775.0	608.1	166.86	4.645	
12,400.0	7,740.0	12,276.5	7,740.0	89.1	86.1	-90.00	4,678.1	825.8	772.0	601.7	170.32	4.533	
12,500.0	7,740.0	12,376.5	7,740.0	90.8	87.8	-90.00	4,778.0	828.2	769.1	595.3	173.79	4.425	
12,600.0	7,740.0	12,476.4	7,740.0	92.4	89.5	-90.00	4,877.9	830.7	766.1	588.9	177.25	4.322	
12,700.0	7,740.0	12,576.4	7,740.0	94.1	91.2	-90.00	4,977.8	833.1	763.2	582.5	180.72	4.223	
12,800.0	7,740.0	12,676.4	7,740.0	95.7	93.0	-90.00	5,077.8	835.5	760.2	576.0	184.19	4.127	
12,900.0	7,740.0	12,776.3	7,740.0	97.4	94.7	-90.00	5,177.7	838.0	757.3	569.6	187.67	4.035	
13,000.0	7,740.0	12,876.3	7,740.0	99.0	96.4	-90.00	5,277.6	840.4	754.3	563.2	191.14	3.946	
13,100.0	7,740.0	12,976.2	7,740.0	100.7	98.1	-90.00	5,377.6	842.8	751.4	556.7	194.61	3.861	
13,200.0	7,740.0	13,076.2	7,740.0	102.4	99.8	-90.00	5,477.5	845.3	748.4	550.3	198.09	3.778	
13,300.0	7,740.0	13,176.1	7,740.0	104.0	101.6	-90.00	5,577.4	847.7	745.4	543.9	201.57	3.698	
13,400.0	7,740.0	13,276.1	7,740.0	105.7	103.3	-90.00	5,677.3	850.1	742.5	537.4	205.04	3.621	
13,500.0	7,740.0	13,376.0	7,740.0	107.4	105.0	-90.00	5,777.3	852.5	739.5	531.0	208.52	3.547	
13,600.0	7,740.0	13,476.0	7,740.0	109.1	106.8	-90.00	5,877.2	855.0	736.6	524.6	212.00	3.474	
13,700.0	7,740.0	13,576.0	7,740.0	110.7	108.5	-90.00	5,977.1	857.4	733.6	518.1	215.48	3.405	
13,800.0	7,740.0	13,675.9	7,740.0	112.4	110.2	-90.00	6,077.0	859.8	730.7	511.7	218.96	3.337	
13,900.0	7,740.0	13,775.9	7,740.0	114.1	111.9	-90.00	6,177.0	862.3	727.7	505.3	222.44	3.271	
14,000.0	7,740.0	13,875.8	7,740.0	115.8	113.7	-90.00	6,276.9	864.7	724.8	498.8	225.93	3.208	
14,100.0	7,740.0	13,975.8	7,740.0	117.5	115.4	-90.00	6,376.8	867.1	721.8	492.4	229.41	3.146	
14,200.0	7,740.0	14,075.7	7,740.0	119.2	117.1	-90.00	6,476.7	869.6	718.8	486.0	232.90	3.087	
14,300.0	7,740.0	14,175.7	7,740.0	120.9	118.9	-90.00	6,576.7	872.0	715.9	479.5	236.38	3.029	
14,400.0	7,740.0	14,275.7	7,740.0	122.6	120.6	-90.00	6,676.6	874.4	712.9	473.1	239.87	2.972	
14,500.0	7,740.0	14,375.6	7,740.0	124.3	122.3	-90.00	6,776.5	876.9	710.0	466.6	243.35	2.918	
14,600.0	7,740.0	14,475.6	7,740.0	125.9	124.1	-90.00	6,876.5	879.3	707.0	460.2	246.84	2.864	
14,700.0	7,740.0	14,575.5	7,740.0	127.6	125.8	-90.00	6,976.4	881.7	704.1	453.7	250.33	2.813	
14,800.0	7,740.0	14,675.5	7,740.0	129.3	127.5	-90.00	7,076.3	884.1	701.1	447.3	253.81	2.762	
14,844.6	7,740.0	14,699.3	7,740.0	130.1	128.0	-90.00	7,100.2	884.7	700.1	446.3	253.81	2.758 SF	
14,852.2	7,740.0	14,699.3	7,740.0	130.2	128.0	-90.00	7,100.2	884.7	700.1	446.7	253.44	2.763	

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



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-89.97	0.0	-7.3	7.3				
100.0	100.0	100.0	100.0	0.2	0.2	-89.97	0.0	-7.3	7.3	7.0	0.30	23.962	
200.0	200.0	200.0	200.0	0.3	0.3	-89.97	0.0	-7.3	7.3	6.6	0.65	11.148	CC
200.0	200.0	200.0	200.0	0.3	0.3	-89.97	0.0	-7.3	7.3	6.6	0.65	11.148	
300.0	300.0	300.0	300.0	0.5	0.5	170.32	0.0	-7.3	7.5	6.5	1.00	7.478	ES
400.0	400.0	400.1	400.1	0.7	0.7	173.17	0.1	-6.4	8.4	7.0	1.35	6.186	
500.0	499.9	500.3	500.2	0.9	0.9	178.79	0.5	-3.8	9.3	7.6	1.70	5.465	
600.0	599.8	600.4	600.3	1.1	1.0	-173.75	1.1	0.5	10.4	8.4	2.05	5.081	
700.0	699.5	700.6	700.2	1.3	1.2	-165.42	1.9	6.6	11.9	9.5	2.41	4.932	
800.0	799.2	800.7	800.1	1.5	1.4	-157.08	2.9	14.4	13.8	11.0	2.80	4.951	
900.0	898.6	900.8	899.7	1.7	1.7	-149.40	4.2	23.9	16.3	13.1	3.21	5.081	
1,000.0	997.9	1,001.0	999.2	2.0	1.9	-142.69	5.7	35.2	19.4	15.7	3.68	5.275	
1,100.0	1,096.9	1,101.1	1,098.5	2.3	2.2	-137.02	7.5	48.1	23.1	18.9	4.20	5.499	
1,200.0	1,195.7	1,201.2	1,197.5	2.6	2.5	-132.30	9.5	62.8	27.4	22.6	4.78	5.732	
1,300.0	1,294.1	1,301.2	1,296.1	2.9	2.8	-128.38	11.7	79.2	32.3	26.9	5.42	5.960	
1,400.0	1,392.3	1,401.3	1,394.5	3.3	3.2	-125.12	14.1	97.3	37.7	31.6	6.11	6.176	
1,500.0	1,490.1	1,501.1	1,492.4	3.7	3.5	-122.74	16.8	116.8	43.8	37.0	6.85	6.404	
1,600.0	1,587.5	1,600.9	1,590.2	4.1	3.9	-122.42	19.4	136.4	50.9	43.3	7.57	6.718	
1,700.0	1,684.6	1,700.6	1,687.9	4.5	4.3	-123.60	22.1	156.0	58.9	50.6	8.28	7.107	
1,800.0	1,781.2	1,800.2	1,785.5	5.0	4.6	-123.79	24.7	175.6	67.5	58.6	8.96	7.540	
1,900.0	1,877.8	1,899.8	1,883.2	5.5	5.0	-122.40	27.4	195.3	75.2	65.5	9.61	7.818	
2,000.0	1,974.4	1,999.6	1,980.9	6.0	5.4	-121.99	30.0	214.9	81.5	71.2	10.24	7.961	
2,100.0	2,071.3	2,099.4	2,078.7	6.4	5.8	-123.87	32.7	234.6	86.9	76.0	10.85	8.002	
2,200.0	2,168.6	2,199.3	2,176.6	6.8	6.2	-124.74	35.4	254.2	91.4	79.9	11.51	7.940	
2,300.0	2,265.9	2,299.2	2,274.5	7.3	6.6	-125.41	38.0	273.9	95.9	83.7	12.18	7.870	
2,400.0	2,363.2	2,399.1	2,372.4	7.7	6.9	-126.02	40.7	293.6	100.3	87.5	12.85	7.810	
2,500.0	2,460.5	2,499.0	2,470.3	8.2	7.3	-126.58	43.3	313.2	104.8	91.3	13.51	7.757	
2,600.0	2,557.9	2,598.8	2,568.2	8.6	7.7	-127.09	46.0	332.9	109.3	95.1	14.18	7.710	
2,700.0	2,655.2	2,698.7	2,666.1	9.0	8.1	-127.56	48.6	352.6	113.8	99.0	14.84	7.669	
2,800.0	2,752.5	2,798.6	2,764.0	9.5	8.5	-128.00	51.3	372.2	118.3	102.8	15.50	7.632	
2,900.0	2,849.8	2,898.5	2,862.0	9.9	8.9	-128.40	54.0	391.9	122.8	106.6	16.16	7.600	
3,000.0	2,947.1	2,998.4	2,959.9	10.4	9.3	-128.78	56.6	411.6	127.3	110.5	16.82	7.570	
3,100.0	3,044.4	3,098.3	3,057.8	10.8	9.7	-129.13	59.3	431.2	131.8	114.4	17.48	7.544	
3,200.0	3,141.7	3,198.2	3,155.7	11.2	10.1	-129.45	61.9	450.9	136.4	118.2	18.13	7.520	
3,300.0	3,239.1	3,298.1	3,253.6	11.7	10.4	-129.76	64.6	470.6	140.9	122.1	18.79	7.498	
3,400.0	3,336.4	3,398.0	3,351.5	12.1	10.8	-130.05	67.3	490.2	145.4	126.0	19.45	7.478	
3,500.0	3,433.7	3,497.9	3,449.4	12.6	11.2	-130.32	69.9	509.9	150.0	129.9	20.10	7.460	
3,600.0	3,531.0	3,597.8	3,547.3	13.0	11.6	-130.57	72.6	529.6	154.5	133.7	20.76	7.443	
3,700.0	3,628.3	3,697.7	3,645.2	13.5	12.0	-130.81	75.2	549.2	159.0	137.6	21.41	7.428	
3,800.0	3,725.6	3,797.6	3,743.1	13.9	12.4	-131.03	77.9	568.9	163.6	141.5	22.06	7.414	
3,900.0	3,822.9	3,897.5	3,841.0	14.4	12.8	-131.25	80.5	588.6	168.1	145.4	22.72	7.401	
4,000.0	3,920.2	3,997.4	3,938.9	14.8	13.2	-131.45	83.2	608.2	172.7	149.3	23.37	7.389	
4,100.0	4,017.6	4,097.3	4,036.8	15.3	13.6	-131.64	85.9	627.9	177.2	153.2	24.02	7.377	
4,200.0	4,114.9	4,197.2	4,134.7	15.7	14.0	-131.82	88.5	647.6	181.8	157.1	24.67	7.367	
4,300.0	4,212.2	4,297.1	4,232.6	16.1	14.4	-132.00	91.2	667.2	186.3	161.0	25.33	7.357	
4,400.0	4,309.5	4,397.0	4,330.5	16.6	14.7	-132.16	93.8	686.9	190.9	164.9	25.98	7.348	
4,500.0	4,406.8	4,496.8	4,428.4	17.0	15.1	-132.32	96.5	706.6	195.4	168.8	26.63	7.340	
4,600.0	4,504.1	4,596.7	4,526.3	17.5	15.5	-132.47	99.2	726.2	200.0	172.7	27.28	7.332	
4,700.0	4,601.4	4,696.6	4,624.2	17.9	15.9	-132.61	101.8	745.9	204.6	176.6	27.93	7.324	
4,800.0	4,698.8	4,796.5	4,722.1	18.4	16.3	-132.75	104.5	765.6	209.1	180.5	28.58	7.317	
4,900.0	4,796.1	4,896.4	4,820.0	18.8	16.7	-132.88	107.1	785.2	213.7	184.5	29.23	7.311	
5,000.0	4,893.4	4,996.3	4,917.9	19.3	17.1	-133.01	109.8	804.9	218.2	188.4	29.88	7.305	

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4												Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor	
5,100.0	4,990.7	5,096.2	5,015.8	19.7	17.5	-133.13	112.4	824.6	222.8	192.3	30.53	7.299	
5,200.0	5,088.0	5,196.1	5,113.7	20.2	17.9	-133.24	115.1	844.2	227.4	196.2	31.17	7.293	
5,300.0	5,185.3	5,296.0	5,211.6	20.6	18.3	-133.35	117.8	863.9	231.9	200.1	31.82	7.288	
5,400.0	5,282.6	5,395.9	5,309.5	21.1	18.7	-133.46	120.4	883.6	236.5	204.0	32.47	7.283	
5,500.0	5,379.9	5,495.8	5,407.4	21.5	19.1	-133.56	123.1	903.2	241.1	207.9	33.12	7.279	
5,600.0	5,477.3	5,595.7	5,505.3	21.9	19.5	-133.66	125.7	922.9	245.6	211.9	33.77	7.274	
5,700.0	5,574.6	5,695.6	5,603.3	22.4	19.9	-133.76	128.4	942.6	250.2	215.8	34.42	7.270	
5,800.0	5,671.9	5,795.5	5,701.2	22.8	20.2	-133.85	131.1	962.2	254.8	219.7	35.06	7.266	
5,900.0	5,769.2	5,895.4	5,799.1	23.3	20.6	-133.94	133.7	981.9	259.3	223.6	35.71	7.262	
6,000.0	5,866.5	5,995.3	5,897.0	23.7	21.0	-134.03	136.4	1,001.6	263.9	227.6	36.36	7.258	
6,100.0	5,963.8	6,095.2	5,994.9	24.2	21.4	-134.11	139.0	1,021.2	268.5	231.5	37.01	7.255	
6,200.0	6,061.1	6,195.1	6,092.8	24.6	21.8	-134.19	141.7	1,040.9	273.1	235.4	37.65	7.252	
6,300.0	6,158.5	6,294.9	6,190.7	25.1	22.2	-134.27	144.4	1,060.6	277.6	239.3	38.30	7.249	
6,400.0	6,255.8	6,394.8	6,288.6	25.5	22.6	-134.34	147.0	1,080.2	282.2	243.3	38.95	7.246	
6,500.0	6,353.1	6,494.7	6,386.5	26.0	23.0	-134.41	149.7	1,099.9	286.8	247.2	39.60	7.243	
6,600.0	6,450.4	6,594.6	6,484.4	26.4	23.4	-134.48	152.3	1,119.6	291.4	251.1	40.24	7.240	
6,700.0	6,547.7	6,694.5	6,582.3	26.9	23.8	-134.55	155.0	1,139.2	295.9	255.0	40.89	7.237	
6,800.0	6,645.0	6,794.4	6,680.2	27.3	24.2	-134.62	157.6	1,158.9	300.5	259.0	41.54	7.235	
6,900.0	6,742.3	6,894.3	6,778.1	27.8	24.6	-134.68	160.3	1,178.6	305.1	262.9	42.18	7.232	
7,000.0	6,839.7	6,994.2	6,876.0	28.2	25.0	-134.74	163.0	1,198.2	309.6	266.8	42.83	7.230	
7,100.0	6,937.0	7,088.4	6,968.3	28.7	25.3	-134.78	165.6	1,216.8	314.4	271.0	43.45	7.236	
7,200.0	7,034.3	7,159.2	7,037.2	29.1	25.6	-134.05	173.7	1,230.7	325.3	281.1	44.14	7.369	
7,300.0	7,131.6	7,227.0	7,101.8	29.5	25.9	-132.45	189.4	1,243.8	345.1	300.2	44.92	7.682	
7,400.0	7,228.9	7,290.7	7,160.4	30.0	26.2	-108.84	211.2	1,255.7	372.3	326.8	45.49	8.185	
7,500.0	7,324.6	7,350.0	7,212.5	30.4	26.5	-78.18	237.3	1,266.4	396.8	351.6	45.19	8.781	
7,600.0	7,416.1	7,414.8	7,266.1	30.8	26.9	-62.66	272.0	1,277.4	416.3	371.6	44.73	9.307	
7,700.0	7,500.5	7,476.0	7,312.9	31.2	27.2	-54.42	310.2	1,287.2	430.3	386.7	43.60	9.868	
7,800.0	7,575.1	7,536.9	7,355.2	31.6	27.5	-49.77	353.1	1,296.0	438.4	396.2	42.12	10.407	
7,900.0	7,637.9	7,600.0	7,394.0	32.0	27.9	-47.26	402.1	1,304.2	440.5	399.9	40.61	10.846	
8,000.0	7,686.8	7,650.0	7,420.9	32.5	28.3	-46.16	443.8	1,310.0	436.7	399.0	37.65	11.597	
8,100.0	7,720.4	7,719.7	7,452.2	32.9	28.8	-46.40	505.7	1,316.8	426.7	390.0	36.69	11.629	
8,200.0	7,737.7	7,781.2	7,473.5	33.5	29.2	-47.73	563.1	1,321.6	411.1	376.1	34.98	11.753	
8,300.0	7,740.0	7,850.0	7,490.1	34.0	29.7	-49.56	629.8	1,325.5	391.9	357.6	34.29	11.430	
8,400.0	7,740.0	7,900.0	7,497.2	34.6	30.1	-50.16	679.2	1,327.4	379.7	348.5	31.23	12.157	
8,500.0	7,740.0	7,982.8	7,500.0	35.3	30.8	-50.33	761.9	1,328.7	376.0	344.4	31.56	11.912	
8,600.0	7,740.0	8,082.8	7,500.0	36.1	31.7	-50.19	861.9	1,329.5	374.9	341.2	33.70	11.126	
8,700.0	7,740.0	8,182.7	7,500.0	36.9	32.7	-50.06	961.8	1,330.4	373.8	337.9	35.89	10.416	
8,800.0	7,740.0	8,282.7	7,500.0	37.8	33.7	-49.92	1,061.8	1,331.3	372.8	334.6	38.13	9.775	
8,900.0	7,740.0	8,382.7	7,500.0	38.7	34.8	-49.78	1,161.8	1,332.1	371.7	331.3	40.42	9.196	
9,000.0	7,740.0	8,482.7	7,500.0	39.7	36.0	-49.64	1,261.8	1,333.0	370.6	327.9	42.73	8.673	
9,100.0	7,740.0	8,582.7	7,500.0	40.8	37.1	-49.50	1,361.8	1,333.9	369.6	324.5	45.07	8.200	
9,200.0	7,740.0	8,682.7	7,500.0	41.9	38.4	-49.36	1,461.8	1,334.8	368.5	321.1	47.42	7.770	
9,300.0	7,740.0	8,782.7	7,500.0	43.0	39.6	-49.22	1,561.8	1,335.6	367.4	317.6	49.79	7.379	
9,400.0	7,740.0	8,882.7	7,500.0	44.2	41.0	-49.07	1,661.8	1,336.5	366.4	314.2	52.17	7.022	
9,500.0	7,740.0	8,982.7	7,500.0	45.5	42.3	-48.93	1,761.7	1,337.4	365.3	310.8	54.56	6.696	
9,600.0	7,740.0	9,082.7	7,500.0	46.7	43.7	-48.79	1,861.7	1,338.3	364.3	307.3	56.95	6.396	
9,700.0	7,740.0	9,182.6	7,500.0	48.0	45.1	-48.64	1,961.7	1,339.1	363.2	303.9	59.34	6.121	
9,800.0	7,740.0	9,282.6	7,500.0	49.3	46.5	-48.50	2,061.7	1,340.0	362.2	300.4	61.74	5.866	
9,900.0	7,740.0	9,382.6	7,500.0	50.7	47.9	-48.35	2,161.7	1,340.9	361.1	297.0	64.13	5.631	
10,000.0	7,740.0	9,482.6	7,500.0	52.0	49.4	-48.20	2,261.7	1,341.7	360.1	293.6	66.52	5.414	
10,100.0	7,740.0	9,581.5	7,500.0	53.4	50.9	-48.06	2,360.5	1,342.6	359.1	290.4	68.74	5.224	
10,158.8	7,740.0	9,637.7	7,500.0	54.3	51.7	-48.03	2,416.8	1,342.5	358.9	289.1	69.81	5.141	

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2F-7H-E168 - Hz - Plan #4													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,200.0	7,740.0	9,677.0	7,500.0	54.9	52.3	-48.04	2,456.1	1,342.2	359.0	288.4	70.59	5.086		
10,300.0	7,740.0	9,772.6	7,500.0	56.3	53.7	-48.20	2,551.6	1,340.2	360.1	287.5	72.59	4.961		
10,400.0	7,740.0	9,868.0	7,500.0	57.7	55.1	-48.52	2,647.0	1,336.7	362.5	287.7	74.77	4.848		
10,500.0	7,740.0	9,963.4	7,500.0	59.2	56.5	-49.00	2,742.2	1,331.6	366.1	289.0	77.11	4.748		
10,600.0	7,740.0	10,058.5	7,500.0	60.7	58.0	-49.63	2,837.1	1,324.9	371.1	291.5	79.63	4.660		
10,700.0	7,740.0	10,153.4	7,500.0	62.2	59.4	-50.39	2,931.6	1,316.6	377.4	295.1	82.30	4.585		
10,800.0	7,740.0	10,250.2	7,500.0	63.7	60.8	-51.28	3,027.9	1,306.8	384.9	299.4	85.45	4.504		
10,900.0	7,740.0	10,349.7	7,500.0	65.2	62.3	-52.19	3,126.8	1,296.4	392.7	303.6	89.11	4.407		
11,000.0	7,740.0	10,449.2	7,500.0	66.8	63.9	-53.06	3,225.8	1,286.0	400.6	307.8	92.78	4.317		
11,100.0	7,740.0	10,548.7	7,500.0	68.3	65.4	-53.89	3,324.8	1,275.6	408.6	312.1	96.46	4.235		
11,200.0	7,740.0	10,648.2	7,500.0	69.9	66.9	-54.69	3,423.7	1,265.2	416.6	316.5	100.15	4.160		
11,300.0	7,740.0	10,747.7	7,500.0	71.4	68.5	-55.47	3,522.7	1,254.8	424.8	321.0	103.85	4.091		
11,400.0	7,740.0	10,847.2	7,500.0	73.0	70.1	-56.21	3,621.6	1,244.4	433.0	325.5	107.55	4.026		
11,500.0	7,740.0	10,946.7	7,500.0	74.6	71.6	-56.93	3,720.6	1,234.0	441.3	330.1	111.26	3.967		
11,600.0	7,740.0	11,046.2	7,500.0	76.2	73.2	-57.62	3,819.6	1,223.6	449.7	334.7	114.97	3.912		
11,700.0	7,740.0	11,145.7	7,500.0	77.8	74.8	-58.28	3,918.5	1,213.2	458.1	339.5	118.68	3.860		
11,800.0	7,740.0	11,245.2	7,500.0	79.4	76.4	-58.92	4,017.5	1,202.8	466.6	344.2	122.39	3.813		
11,900.0	7,740.0	11,344.7	7,500.0	81.0	78.0	-59.54	4,116.4	1,192.4	475.2	349.1	126.10	3.768		
12,000.0	7,740.0	11,444.2	7,500.0	82.6	79.6	-60.13	4,215.4	1,182.0	483.8	354.0	129.81	3.727		
12,100.0	7,740.0	11,543.7	7,500.0	84.2	81.2	-60.71	4,314.4	1,171.6	492.4	358.9	133.52	3.688		
12,200.0	7,740.0	11,643.2	7,500.0	85.9	82.8	-61.26	4,413.3	1,161.2	501.1	363.9	137.22	3.652		
12,300.0	7,740.0	11,742.7	7,500.0	87.5	84.5	-61.80	4,512.3	1,150.8	509.9	368.9	140.93	3.618		
12,400.0	7,740.0	11,842.3	7,500.0	89.1	86.2	-62.33	4,611.2	1,140.2	518.5	373.5	145.04	3.575		
12,500.0	7,740.0	11,941.8	7,500.0	90.8	87.9	-62.79	4,710.2	1,130.6	525.9	376.1	149.82	3.511		
12,600.0	7,740.0	12,041.3	7,500.0	92.4	89.8	-63.13	4,809.1	1,120.0	531.7	377.2	154.45	3.442		
12,700.0	7,740.0	12,140.8	7,500.0	94.1	91.6	-63.37	4,908.0	1,117.5	535.8	376.8	158.93	3.371		
12,800.0	7,740.0	12,240.3	7,500.0	95.7	93.4	-63.51	5,006.9	1,114.0	538.1	374.9	163.25	3.296		
12,900.0	7,740.0	12,339.8	7,500.0	97.4	95.3	-63.55	5,105.8	1,112.6	538.8	371.4	167.41	3.218		
13,000.0	7,740.0	12,439.3	7,500.0	99.0	97.1	-63.49	5,204.7	1,113.3	537.7	366.4	171.38	3.138		
13,100.0	7,740.0	12,538.8	7,500.0	100.7	99.0	-63.33	5,303.6	1,116.1	535.0	359.9	175.15	3.054		
13,200.0	7,740.0	12,638.3	7,500.0	102.4	100.9	-63.07	5,402.5	1,120.9	530.6	351.9	178.72	2.969		
13,300.0	7,740.0	12,737.8	7,500.0	104.0	102.7	-62.70	5,501.4	1,127.7	524.5	342.5	181.96	2.882		
13,400.0	7,740.0	12,837.3	7,500.0	105.7	104.5	-62.32	5,600.3	1,134.8	517.8	333.3	184.44	2.807		
13,500.0	7,740.0	12,936.8	7,500.0	107.4	106.2	-61.92	5,699.2	1,141.8	511.0	324.2	186.88	2.735		
13,600.0	7,740.0	13,036.3	7,500.0	109.1	107.9	-61.52	5,798.1	1,148.8	504.4	315.1	189.27	2.665		
13,700.0	7,740.0	13,135.8	7,500.0	110.7	109.7	-61.10	5,897.0	1,155.9	497.7	306.1	191.61	2.598		
13,800.0	7,740.0	13,235.3	7,500.0	112.4	111.4	-60.67	5,995.9	1,162.9	491.1	297.2	193.90	2.533		
13,900.0	7,740.0	13,334.8	7,500.0	114.1	113.1	-60.24	6,094.8	1,169.9	484.5	288.4	196.13	2.470		
14,000.0	7,740.0	13,434.3	7,500.0	115.8	114.8	-59.79	6,193.7	1,177.0	477.9	279.6	198.31	2.410		
14,100.0	7,740.0	13,533.8	7,500.0	117.5	116.6	-59.32	6,292.6	1,184.0	471.4	271.0	200.42	2.352		
14,200.0	7,740.0	13,633.3	7,500.0	119.2	118.3	-58.85	6,391.5	1,191.0	464.9	262.4	202.46	2.296		
14,300.0	7,740.0	13,732.8	7,500.0	120.9	120.0	-58.36	6,490.4	1,198.1	458.4	254.0	204.44	2.242		
14,400.0	7,740.0	13,832.3	7,500.0	122.6	121.8	-57.85	6,589.3	1,205.1	452.0	245.7	206.34	2.191		
14,500.0	7,740.0	13,931.8	7,500.0	124.3	123.5	-57.34	6,688.2	1,212.1	445.6	237.4	208.16	2.141		
14,600.0	7,740.0	14,031.3	7,500.0	125.9	125.2	-56.80	6,787.1	1,219.2	439.2	229.3	209.90	2.093		
14,700.0	7,740.0	14,130.8	7,500.0	127.6	127.0	-56.25	6,886.0	1,226.2	432.9	221.3	211.55	2.046		
14,800.0	7,740.0	14,230.3	7,500.0	129.3	128.7	-55.69	6,984.9	1,233.2	426.6	213.5	213.11	2.002 SF		
14,848.2	7,740.0	14,329.8	7,500.0	130.2	129.1	-55.57	7,083.8	1,234.8	424.4	213.4	211.00	2.012		
14,852.2	7,740.0	14,329.8	7,500.0	130.2	129.1	-55.57	7,083.8	1,234.8	424.4	213.9	210.56	2.016		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.97	0.0	7.6	7.6					
100.0	100.0	100.0	100.0	0.2	0.2	89.97	0.0	7.6	7.6	7.3	0.30	24.883	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	89.97	0.0	7.6	7.6	6.9	0.65	11.577		
300.0	300.0	299.9	299.9	0.5	0.5	-10.10	0.0	8.4	8.2	7.2	1.00	8.201		
400.0	400.0	399.7	399.7	0.7	0.7	-11.49	-0.1	11.0	9.1	7.8	1.35	6.748		
500.0	499.9	499.5	499.4	0.9	0.9	-14.03	-0.2	15.4	10.0	8.3	1.70	5.914		
600.0	599.8	599.3	599.0	1.1	1.1	-17.40	-0.4	21.5	11.1	9.0	2.05	5.394		
700.0	699.5	699.1	698.5	1.3	1.3	-21.33	-0.7	29.3	12.2	9.8	2.41	5.055		
800.0	799.2	798.9	797.8	1.5	1.5	-25.59	-1.0	38.8	13.4	10.6	2.77	4.831		
900.0	898.6	898.7	896.9	1.7	1.8	-29.99	-1.3	50.1	14.8	11.6	3.16	4.680		
1,000.0	997.9	998.4	995.8	2.0	2.0	-34.36	-1.7	63.1	16.4	12.8	3.59	4.573		
1,100.0	1,096.9	1,098.1	1,094.4	2.3	2.3	-38.59	-2.2	77.8	18.2	14.2	4.06	4.492		
1,200.0	1,195.7	1,197.8	1,192.8	2.6	2.7	-42.60	-2.7	94.2	20.3	15.7	4.58	4.424		
1,300.0	1,294.1	1,297.5	1,290.8	2.9	3.0	-46.32	-3.2	112.3	22.5	17.4	5.17	4.363		
1,400.0	1,392.3	1,397.1	1,388.4	3.3	3.4	-49.75	-3.9	132.1	25.1	19.3	5.82	4.307		
1,500.0	1,490.1	1,496.7	1,485.7	3.7	3.8	-52.88	-4.5	153.6	27.9	21.3	6.55	4.255		
1,600.0	1,587.5	1,596.3	1,582.5	4.1	4.2	-55.72	-5.2	176.8	30.9	23.6	7.35	4.206		
1,700.0	1,684.6	1,695.9	1,678.9	4.5	4.7	-58.28	-6.0	201.6	34.2	26.0	8.22	4.162		
1,800.0	1,781.2	1,795.4	1,774.9	5.0	5.2	-58.29	-6.8	228.1	37.7	28.6	9.12	4.132		
1,900.0	1,877.8	1,894.9	1,870.3	5.5	5.7	-53.29	-7.7	256.3	40.9	31.0	9.85	4.151		
2,000.0	1,974.4	1,994.4	1,965.2	6.0	6.3	-46.10	-8.6	286.1	43.9	33.6	10.33	4.254		
2,100.0	2,071.3	2,093.8	2,059.5	6.4	6.9	-39.84	-9.6	317.4	48.9	38.4	10.47	4.664		
2,200.0	2,168.6	2,193.4	2,153.9	6.8	7.4	-33.65	-10.6	349.1	55.8	45.3	10.46	5.331		
2,300.0	2,265.9	2,292.9	2,248.3	7.3	8.0	-28.76	-11.6	380.8	63.4	52.9	10.47	6.052		
2,400.0	2,363.2	2,392.5	2,342.7	7.7	8.6	-24.94	-12.6	412.4	71.4	60.8	10.53	6.776		
2,500.0	2,460.5	2,492.1	2,437.1	8.2	9.2	-21.90	-13.5	444.1	79.6	69.0	10.64	7.484		
2,600.0	2,557.9	2,591.7	2,531.5	8.6	9.8	-19.43	-14.5	475.8	88.0	77.2	10.78	8.166		
2,700.0	2,655.2	2,691.3	2,625.9	9.0	10.4	-17.40	-15.5	507.5	96.6	85.6	10.95	8.817		
2,800.0	2,752.5	2,790.8	2,720.3	9.5	11.0	-15.70	-16.5	539.1	105.2	94.1	11.15	9.435		
2,900.0	2,849.8	2,890.4	2,814.8	9.9	11.6	-14.25	-17.5	570.8	113.9	102.6	11.37	10.020		
3,000.0	2,947.1	2,990.0	2,909.2	10.4	12.2	-13.02	-18.5	602.5	122.7	111.1	11.61	10.572		
3,100.0	3,044.4	3,089.6	3,003.6	10.8	12.8	-11.95	-19.4	634.2	131.6	119.7	11.86	11.093		
3,200.0	3,141.7	3,189.2	3,098.0	11.2	13.4	-11.01	-20.4	665.8	140.5	128.3	12.12	11.584		
3,300.0	3,239.1	3,288.7	3,192.4	11.7	14.0	-10.19	-21.4	697.5	149.4	137.0	12.40	12.047		
3,400.0	3,336.4	3,388.3	3,286.8	12.1	14.6	-9.45	-22.4	729.2	158.3	145.6	12.68	12.484		
3,500.0	3,433.7	3,487.9	3,381.2	12.6	15.2	-8.80	-23.4	760.9	167.3	154.3	12.97	12.897		
3,600.0	3,531.0	3,587.5	3,475.6	13.0	15.8	-8.21	-24.4	792.5	176.2	163.0	13.26	13.287		
3,700.0	3,628.3	3,687.1	3,570.0	13.5	16.4	-7.68	-25.3	824.2	185.2	171.7	13.56	13.656		
3,800.0	3,725.6	3,786.6	3,664.4	13.9	17.0	-7.20	-26.3	855.9	194.2	180.4	13.87	14.005		
3,900.0	3,822.9	3,886.2	3,758.8	14.4	17.6	-6.77	-27.3	887.6	203.3	189.1	14.18	14.336		
4,000.0	3,920.2	3,985.8	3,853.2	14.8	18.2	-6.36	-28.3	919.2	212.3	197.8	14.49	14.650		
4,100.0	4,017.6	4,085.4	3,947.6	15.3	18.8	-6.00	-29.3	950.9	221.3	206.5	14.81	14.948		
4,200.0	4,114.9	4,185.0	4,042.0	15.7	19.4	-5.66	-30.3	982.6	230.4	215.3	15.13	15.232		
4,300.0	4,212.2	4,284.6	4,136.4	16.1	20.0	-5.34	-31.2	1,014.3	239.5	224.0	15.45	15.501		
4,400.0	4,309.5	4,384.1	4,230.8	16.6	20.6	-5.05	-32.2	1,045.9	248.5	232.8	15.77	15.758		
4,500.0	4,406.8	4,483.7	4,325.2	17.0	21.2	-4.78	-33.2	1,077.6	257.6	241.5	16.10	16.003		
4,600.0	4,504.1	4,583.3	4,419.6	17.5	21.8	-4.53	-34.2	1,109.3	266.7	250.2	16.42	16.237		
4,700.0	4,601.4	4,682.9	4,514.0	17.9	22.4	-4.29	-35.2	1,141.0	275.8	259.0	16.75	16.461		
4,800.0	4,698.8	4,782.5	4,608.4	18.4	23.0	-4.07	-36.2	1,172.7	284.8	267.8	17.08	16.674		
4,900.0	4,796.1	4,882.0	4,702.8	18.8	23.6	-3.87	-37.1	1,204.3	293.9	276.5	17.41	16.879		
5,000.0	4,893.4	4,981.6	4,797.2	19.3	24.2	-3.67	-38.1	1,236.0	303.0	285.3	17.75	17.074		
5,100.0	4,990.7	5,081.2	4,891.6	19.7	24.8	-3.49	-39.1	1,267.7	312.1	294.0	18.08	17.262		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,088.0	5,180.8	4,986.0	20.2	25.5	-3.32	-40.1	1,299.4	321.2	302.8	18.42	17.442	
5,300.0	5,185.3	5,280.4	5,080.4	20.6	26.1	-3.15	-41.1	1,331.0	330.3	311.6	18.75	17.615	
5,400.0	5,282.6	5,379.9	5,174.8	21.1	26.7	-3.00	-42.1	1,362.7	339.4	320.3	19.09	17.781	
5,500.0	5,379.9	5,479.5	5,269.2	21.5	27.3	-2.85	-43.0	1,394.4	348.5	329.1	19.43	17.941	
5,600.0	5,477.3	5,579.1	5,363.6	21.9	27.9	-2.72	-44.0	1,426.1	357.6	337.9	19.77	18.094	
5,700.0	5,574.6	5,678.7	5,458.0	22.4	28.5	-2.58	-45.0	1,457.7	366.8	346.7	20.10	18.242	
5,800.0	5,671.9	5,778.3	5,552.5	22.8	29.1	-2.46	-46.0	1,489.4	375.9	355.4	20.44	18.385	
5,900.0	5,769.2	5,877.8	5,646.9	23.3	29.7	-2.34	-47.0	1,521.1	385.0	364.2	20.78	18.522	
6,000.0	5,866.5	5,977.4	5,741.3	23.7	30.3	-2.22	-47.9	1,552.8	394.1	373.0	21.13	18.655	
6,100.0	5,963.8	6,077.0	5,835.7	24.2	30.9	-2.12	-48.9	1,584.4	403.2	381.8	21.47	18.783	
6,200.0	6,061.1	6,176.6	5,930.1	24.6	31.5	-2.01	-49.9	1,616.1	412.3	390.5	21.81	18.906	
6,300.0	6,158.5	6,276.2	6,024.5	25.1	32.1	-1.91	-50.9	1,647.8	421.5	399.3	22.15	19.026	
6,400.0	6,255.8	6,375.7	6,118.9	25.5	32.7	-1.82	-51.9	1,679.5	430.6	408.1	22.49	19.141	
6,500.0	6,353.1	6,475.3	6,213.3	26.0	33.3	-1.73	-52.9	1,711.1	439.7	416.9	22.84	19.253	
6,600.0	6,450.4	6,574.9	6,307.7	26.4	33.9	-1.64	-53.8	1,742.8	448.8	425.6	23.18	19.361	
6,700.0	6,547.7	6,674.5	6,402.1	26.9	34.5	-1.55	-54.8	1,774.5	458.0	434.4	23.53	19.466	
6,800.0	6,645.0	6,774.1	6,496.5	27.3	35.1	-1.47	-55.8	1,806.2	467.1	443.2	23.87	19.567	
6,900.0	6,742.3	6,873.6	6,590.9	27.8	35.7	-1.39	-56.8	1,837.8	476.2	452.0	24.22	19.666	
7,000.0	6,839.7	6,973.2	6,685.3	28.2	36.3	-1.32	-57.8	1,869.5	485.3	460.8	24.56	19.761	
7,100.0	6,937.0	7,072.8	6,779.7	28.7	36.9	-1.25	-58.8	1,901.2	494.5	469.6	24.91	19.854	
7,200.0	7,034.3	7,172.4	6,874.1	29.1	37.5	-1.18	-59.7	1,932.9	503.6	478.3	25.25	19.943	
7,300.0	7,131.6	7,275.0	6,971.4	29.5	38.2	-1.26	-59.4	1,965.4	512.6	487.0	25.62	20.008	
7,400.0	7,228.9	7,381.0	7,071.1	30.0	38.7	17.52	-43.6	1,997.2	520.5	494.4	26.14	19.912	
7,500.0	7,324.6	7,483.9	7,164.2	30.4	39.3	42.85	-10.2	2,025.1	527.2	500.6	26.65	19.786	
7,600.0	7,416.1	7,584.1	7,248.4	30.8	39.7	54.02	38.5	2,048.6	532.5	505.5	27.04	19.695	
7,700.0	7,500.5	7,681.7	7,321.9	31.2	40.1	58.95	99.7	2,067.3	536.2	509.0	27.26	19.668	
7,800.0	7,575.1	7,776.9	7,383.5	31.6	40.4	61.19	170.9	2,081.0	538.2	510.9	27.38	19.660	
7,900.0	7,637.9	7,870.0	7,432.2	32.0	40.8	62.19	249.6	2,089.8	538.4	510.9	27.51	19.576	
8,000.0	7,686.8	7,961.2	7,467.9	32.5	41.0	62.58	333.3	2,093.6	536.7	508.9	27.84	19.281	
8,100.0	7,720.4	8,050.0	7,490.2	32.9	41.3	62.68	419.2	2,092.8	533.1	504.5	28.60	18.644	
8,200.0	7,737.7	8,138.8	7,499.7	33.5	41.6	62.64	507.3	2,087.5	527.6	497.7	29.91	17.639	
8,300.0	7,740.0	8,235.6	7,500.0	34.0	41.9	62.42	603.6	2,078.4	520.1	488.6	31.46	16.533	
8,400.0	7,740.0	8,335.2	7,500.0	34.6	42.3	61.95	702.7	2,068.8	512.1	478.9	33.12	15.460	
8,500.0	7,740.0	8,434.7	7,500.0	35.3	42.7	61.47	801.8	2,059.3	504.1	469.1	34.95	14.421	
8,600.0	7,740.0	8,534.3	7,500.0	36.1	43.2	60.97	901.0	2,049.7	496.1	459.2	36.92	13.438	
8,700.0	7,740.0	8,633.9	7,500.0	36.9	43.8	60.45	1,000.1	2,040.2	488.2	449.2	38.99	12.521	
8,800.0	7,740.0	8,733.5	7,500.0	37.8	44.5	59.92	1,099.2	2,030.6	480.3	439.2	41.14	11.675	
8,900.0	7,740.0	8,833.1	7,500.0	38.7	45.2	59.37	1,198.4	2,021.1	472.5	429.2	43.35	10.899	
9,000.0	7,740.0	8,932.7	7,500.0	39.7	45.9	58.80	1,297.5	2,011.5	464.7	419.1	45.60	10.191	
9,100.0	7,740.0	9,032.3	7,500.0	40.8	46.7	58.21	1,396.6	2,002.0	457.0	409.1	47.88	9.545	
9,200.0	7,740.0	9,131.9	7,500.0	41.9	47.6	57.61	1,495.7	1,992.5	449.3	399.1	50.16	8.957	
9,300.0	7,740.0	9,231.5	7,500.0	43.0	48.5	56.98	1,594.9	1,982.9	441.7	389.2	52.44	8.422	
9,400.0	7,740.0	9,331.0	7,500.0	44.2	49.5	56.33	1,694.0	1,973.4	434.1	379.4	54.71	7.934	
9,500.0	7,740.0	9,430.6	7,500.0	45.5	50.5	55.65	1,793.1	1,963.8	426.6	369.6	56.96	7.489	
9,600.0	7,740.0	9,530.2	7,500.0	46.7	51.5	54.95	1,892.3	1,954.3	419.1	359.9	59.18	7.082	
9,700.0	7,740.0	9,629.8	7,500.0	48.0	52.6	54.23	1,991.4	1,944.7	411.7	350.4	61.35	6.711	
9,800.0	7,740.0	9,729.4	7,500.0	49.3	53.7	53.48	2,090.5	1,935.2	404.4	340.9	63.47	6.371	
9,900.0	7,740.0	9,829.0	7,500.0	50.7	54.9	52.70	2,189.7	1,925.6	397.1	331.6	65.54	6.059	
10,000.0	7,740.0	9,928.6	7,500.0	52.0	56.0	51.90	2,288.8	1,916.1	389.9	322.4	67.54	5.774	
10,100.0	7,740.0	10,028.2	7,500.0	53.4	57.3	51.06	2,387.9	1,906.6	382.8	313.4	69.46	5.512	
10,200.0	7,740.0	10,127.8	7,500.0	54.9	58.5	50.19	2,487.0	1,897.0	375.8	304.5	71.30	5.271	
10,300.0	7,740.0	10,227.3	7,500.0	56.3	59.8	49.30	2,586.2	1,887.5	368.9	295.8	73.04	5.050	

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Becky 2H-7H-E168 - Hz - Plan #4												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,400.0	7,740.0	10,326.9	7,500.0	57.7	61.1	48.36	2,685.3	1,877.9	362.0	287.4	74.68	4.848	
10,500.0	7,740.0	10,426.5	7,500.0	59.2	62.4	47.39	2,784.4	1,868.4	355.3	279.1	76.20	4.663	
10,600.0	7,740.0	10,526.1	7,500.0	60.7	63.7	46.39	2,883.6	1,858.8	348.7	271.1	77.60	4.493	
10,700.0	7,740.0	10,625.7	7,500.0	62.2	65.1	45.34	2,982.7	1,849.3	342.2	263.3	78.87	4.338	
10,800.0	7,740.0	10,724.8	7,500.0	63.7	66.4	44.26	3,081.4	1,839.8	335.8	255.7	80.07	4.194	
10,900.0	7,740.0	10,820.7	7,500.0	65.2	67.8	43.30	3,176.9	1,831.6	330.2	248.3	81.85	4.034	
11,000.0	7,740.0	10,916.7	7,500.0	66.8	69.2	42.52	3,272.7	1,825.0	325.9	242.1	83.74	3.891	
11,100.0	7,740.0	11,012.9	7,500.0	68.3	70.6	41.93	3,368.8	1,819.9	322.7	236.9	85.80	3.761	
11,200.0	7,740.0	11,109.3	7,500.0	69.9	72.0	41.54	3,465.1	1,816.5	320.7	232.6	88.09	3.640	
11,300.0	7,740.0	11,205.7	7,500.0	71.4	73.5	41.37	3,561.5	1,814.7	319.8	229.1	90.66	3.527	
11,329.5	7,740.0	11,234.2	7,500.0	71.9	73.9	41.36	3,589.9	1,814.5	319.7	228.3	91.48	3.495	
11,400.0	7,740.0	11,303.6	7,500.0	73.0	75.0	41.40	3,659.3	1,814.4	319.9	226.6	93.31	3.429	
11,500.0	7,740.0	11,403.6	7,500.0	74.6	76.5	41.47	3,759.3	1,814.4	320.3	224.6	95.68	3.347	
11,600.0	7,740.0	11,503.6	7,500.0	76.2	78.1	41.54	3,859.3	1,814.4	320.6	222.6	98.07	3.269	
11,700.0	7,740.0	11,603.6	7,500.0	77.8	79.6	41.61	3,959.3	1,814.4	321.0	220.5	100.47	3.195	
11,800.0	7,740.0	11,703.6	7,500.0	79.4	81.2	41.68	4,059.3	1,814.4	321.3	218.5	102.87	3.123	
11,900.0	7,740.0	11,803.6	7,500.0	81.0	82.8	41.75	4,159.3	1,814.4	321.7	216.4	105.29	3.055	
12,000.0	7,740.0	11,903.6	7,500.0	82.6	84.3	41.82	4,259.3	1,814.4	322.0	214.3	107.71	2.990	
12,100.0	7,740.0	12,003.6	7,500.0	84.2	85.9	41.88	4,359.3	1,814.4	322.4	212.2	110.14	2.927	
12,200.0	7,740.0	12,103.5	7,500.0	85.9	87.5	41.95	4,459.3	1,814.4	322.7	210.1	112.58	2.867	
12,300.0	7,740.0	12,203.5	7,500.0	87.5	89.1	42.02	4,559.3	1,814.4	323.1	208.0	115.03	2.809	
12,400.0	7,740.0	12,303.5	7,500.0	89.1	90.7	42.09	4,659.3	1,814.4	323.4	205.9	117.48	2.753	
12,500.0	7,740.0	12,403.5	7,500.0	90.8	92.3	42.16	4,759.3	1,814.4	323.8	203.8	119.94	2.699	
12,600.0	7,740.0	12,503.5	7,500.0	92.4	93.9	42.23	4,859.3	1,814.4	324.1	201.7	122.41	2.648	
12,700.0	7,740.0	12,603.5	7,500.0	94.1	95.6	42.30	4,959.3	1,814.4	324.5	199.6	124.89	2.598	
12,800.0	7,740.0	12,703.5	7,500.0	95.7	97.2	42.37	5,059.3	1,814.4	324.8	197.5	127.38	2.550	
12,900.0	7,740.0	12,803.5	7,500.0	97.4	98.8	42.43	5,159.3	1,814.4	325.2	195.3	129.87	2.504	
13,000.0	7,740.0	12,903.5	7,500.0	99.0	100.5	42.50	5,259.3	1,814.4	325.5	193.2	132.37	2.459	
13,100.0	7,740.0	13,003.5	7,500.0	100.7	102.1	42.57	5,359.3	1,814.4	325.9	191.0	134.87	2.416	
13,200.0	7,740.0	13,103.5	7,500.0	102.4	103.7	42.64	5,459.3	1,814.4	326.2	188.9	137.38	2.375	
13,300.0	7,740.0	13,203.5	7,500.0	104.0	105.4	42.71	5,559.3	1,814.4	326.6	186.7	139.90	2.334	
13,400.0	7,740.0	13,303.5	7,500.0	105.7	107.0	42.77	5,659.3	1,814.4	327.0	184.5	142.43	2.296	
13,500.0	7,740.0	13,403.5	7,500.0	107.4	108.7	42.84	5,759.3	1,814.4	327.3	182.3	144.96	2.258	
13,600.0	7,740.0	13,503.5	7,500.0	109.1	110.3	42.91	5,859.3	1,814.4	327.7	180.2	147.50	2.221	
13,700.0	7,740.0	13,603.5	7,500.0	110.7	112.0	42.97	5,959.3	1,814.4	328.0	178.0	150.05	2.186	
13,800.0	7,740.0	13,703.5	7,500.0	112.4	113.7	43.04	6,059.3	1,814.4	328.4	175.8	152.60	2.152	
13,900.0	7,740.0	13,800.0	7,500.0	114.1	115.3	43.12	6,155.7	1,814.5	328.8	173.1	155.74	2.111	
14,000.0	7,740.0	13,897.7	7,500.0	115.8	116.9	43.39	6,253.5	1,816.1	330.3	171.1	159.19	2.075	
14,100.0	7,740.0	13,993.5	7,500.0	117.5	118.5	43.86	6,349.1	1,819.5	333.1	169.6	163.51	2.037	
14,200.0	7,740.0	14,089.0	7,500.0	119.2	120.2	44.55	6,444.6	1,824.5	337.1	168.7	168.42	2.002	
14,300.0	7,740.0	14,184.3	7,500.0	120.9	121.8	45.42	6,539.6	1,831.3	342.5	168.7	173.87	1.970	
14,400.0	7,740.0	14,279.4	7,500.0	122.6	123.5	46.46	6,634.3	1,839.8	349.4	169.6	179.80	1.943	
14,500.0	7,740.0	14,374.0	7,500.0	124.3	125.1	47.64	6,728.4	1,850.0	357.6	171.5	186.14	1.921	
14,600.0	7,740.0	14,468.3	7,500.0	125.9	126.7	48.94	6,821.9	1,861.8	367.4	174.6	192.80	1.906	
14,700.0	7,740.0	14,562.0	7,500.0	127.6	128.4	50.33	6,914.7	1,875.2	378.8	179.1	199.68	1.897	
14,800.0	7,740.0	14,655.3	7,500.0	129.3	130.0	51.79	7,006.7	1,890.2	391.8	185.1	206.68	1.896 SF	
14,852.2	7,740.0	14,704.3	7,500.0	130.2	130.9	52.58	7,055.0	1,898.8	399.2	188.9	210.34	1.898	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.57	0.7	-97.4	97.4					
100.0	100.0	100.0	100.0	0.2	0.2	-89.57	0.7	-97.4	97.4	97.1	0.30	320.727		
200.0	200.0	200.0	200.0	0.3	0.3	-89.57	0.7	-97.4	97.4	96.7	0.65	149.215 CC, ES		
300.0	300.0	298.9	298.9	0.5	0.5	170.83	1.4	-97.9	98.2	97.2	1.00	98.123		
400.0	400.0	397.7	397.7	0.7	0.7	172.09	3.4	-99.5	101.6	100.2	1.35	75.228		
500.0	499.9	496.2	496.1	0.9	0.9	174.04	6.7	-102.2	107.9	106.2	1.70	63.372		
600.0	599.8	594.3	594.0	1.1	1.1	176.42	11.3	-105.9	117.3	115.3	2.06	56.987		
700.0	699.5	691.9	691.3	1.3	1.3	178.96	17.1	-110.7	129.9	127.5	2.42	53.740		
800.0	799.2	789.2	788.2	1.5	1.5	-178.55	24.2	-116.4	145.7	142.9	2.78	52.452		
900.0	898.6	887.4	885.9	1.7	1.7	-176.45	31.7	-122.4	163.7	160.5	3.14	52.142 SF		
1,000.0	997.9	985.3	983.3	2.0	1.9	-174.82	39.1	-128.4	183.6	180.1	3.50	52.443		
1,100.0	1,096.9	1,082.8	1,080.4	2.3	2.2	-173.55	46.5	-134.4	205.3	201.4	3.86	53.158		
1,200.0	1,195.7	1,179.9	1,177.0	2.6	2.4	-172.57	53.9	-140.4	228.8	224.6	4.22	54.162		
1,300.0	1,294.1	1,276.7	1,273.3	2.9	2.6	-171.81	61.3	-146.3	254.0	249.4	4.59	55.377		
1,400.0	1,392.3	1,373.0	1,369.1	3.3	2.9	-171.24	68.6	-152.3	280.9	275.9	4.95	56.748		
1,500.0	1,490.1	1,468.8	1,464.5	3.7	3.1	-170.81	75.9	-158.1	309.4	304.1	5.31	58.237		
1,600.0	1,587.5	1,564.1	1,559.3	4.1	3.3	-170.49	83.1	-164.0	339.7	334.0	5.68	59.819		
1,700.0	1,684.6	1,658.9	1,653.7	4.5	3.6	-170.25	90.3	-169.8	371.5	365.5	6.04	61.474		
1,800.0	1,781.2	1,753.2	1,747.5	5.0	3.8	-168.11	97.5	-175.6	404.8	398.3	6.41	63.139		
1,900.0	1,877.8	1,847.5	1,841.4	5.5	4.0	-164.17	104.7	-181.4	437.8	431.1	6.79	64.517		
2,000.0	1,974.4	1,942.0	1,935.5	6.0	4.2	-161.22	111.8	-187.2	470.5	463.3	7.17	65.632		
2,100.0	2,071.3	2,036.9	2,029.9	6.4	4.5	-161.63	119.0	-193.1	502.0	494.4	7.55	66.486		
2,200.0	2,168.6	2,132.2	2,124.8	6.8	4.7	-161.90	126.3	-198.9	532.1	524.2	7.93	67.075		
2,300.0	2,265.9	2,227.6	2,219.7	7.3	4.9	-162.09	133.5	-204.8	562.0	553.7	8.32	67.580		
2,400.0	2,363.2	2,323.0	2,314.7	7.7	5.2	-162.26	140.8	-210.6	592.0	583.3	8.70	68.036		
2,500.0	2,460.5	2,418.4	2,409.6	8.2	5.4	-162.42	148.0	-216.5	621.9	612.8	9.09	68.451		
2,600.0	2,557.9	2,513.8	2,504.6	8.6	5.6	-162.56	155.3	-222.4	651.8	642.4	9.47	68.829		
2,700.0	2,655.2	2,609.2	2,599.5	9.0	5.9	-162.69	162.5	-228.2	681.8	671.9	9.86	69.176		
2,800.0	2,752.5	2,704.6	2,694.4	9.5	6.1	-162.81	169.8	-234.1	711.7	701.5	10.24	69.495		
2,900.0	2,849.8	2,800.0	2,789.4	9.9	6.3	-162.92	177.0	-239.9	741.7	731.0	10.63	69.789		
3,000.0	2,947.1	2,895.4	2,884.3	10.4	6.6	-163.03	184.3	-245.8	771.6	760.6	11.01	70.061		
3,100.0	3,044.4	2,990.8	2,979.3	10.8	6.8	-163.12	191.6	-251.7	801.6	790.2	11.40	70.314		
3,200.0	3,141.7	3,086.3	3,074.2	11.2	7.0	-163.21	198.8	-257.5	831.5	819.7	11.79	70.550		
3,300.0	3,239.1	3,181.7	3,169.2	11.7	7.3	-163.29	206.1	-263.4	861.5	849.3	12.17	70.769		
3,400.0	3,336.4	3,277.1	3,264.1	12.1	7.5	-163.36	213.3	-269.3	891.4	878.9	12.56	70.974		
3,500.0	3,433.7	3,372.5	3,359.1	12.6	7.7	-163.43	220.6	-275.1	921.4	908.4	12.95	71.167		
3,600.0	3,531.0	3,467.9	3,454.0	13.0	8.0	-163.50	227.8	-281.0	951.3	938.0	13.33	71.348		
3,700.0	3,628.3	3,563.3	3,548.9	13.5	8.2	-163.56	235.1	-286.8	981.3	967.6	13.72	71.518		
3,800.0	3,725.6	3,658.7	3,643.9	13.9	8.4	-163.62	242.3	-292.7	1,011.3	997.2	14.11	71.678		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2B-7H-E168 - HZ - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-89.53	0.7	-89.8	89.8				
100.0	100.0	100.0	100.0	0.2	0.2	-89.53	0.7	-89.8	89.8	89.5	0.30	295.844	
200.0	200.0	200.0	200.0	0.3	0.3	-89.53	0.7	-89.8	89.8	89.2	0.65	137.639	
200.0	200.0	200.0	200.0	0.3	0.3	-89.53	0.7	-89.8	89.8	89.2	0.65	137.639	CC
300.0	300.0	300.0	300.0	0.5	0.5	170.49	0.7	-89.8	90.1	89.1	1.00	89.896	ES
400.0	400.0	398.9	398.9	0.7	0.7	171.07	1.4	-90.4	92.3	91.0	1.35	68.435	
500.0	499.9	497.7	497.6	0.9	0.9	172.51	3.3	-92.0	97.5	95.8	1.70	57.424	
600.0	599.8	596.1	595.9	1.1	1.0	174.57	6.6	-94.8	105.7	103.6	2.05	51.574	
700.0	699.5	694.0	693.7	1.3	1.2	176.95	11.1	-98.5	116.9	114.5	2.40	48.679	
800.0	799.2	792.8	792.2	1.5	1.4	179.23	16.4	-103.0	130.8	128.1	2.76	47.431	
900.0	898.6	891.4	890.6	1.7	1.6	-178.94	21.7	-107.4	146.6	143.5	3.11	47.080	SF
1,000.0	997.9	989.8	988.8	2.0	1.8	-177.48	26.9	-111.8	164.2	160.7	3.47	47.338	
1,100.0	1,096.9	1,087.8	1,086.6	2.3	2.0	-176.34	32.1	-116.2	183.6	179.8	3.82	48.021	
1,200.0	1,195.7	1,185.5	1,184.0	2.6	2.2	-175.44	37.4	-120.6	204.8	200.6	4.18	49.010	
1,300.0	1,294.1	1,284.6	1,282.9	2.9	2.4	-174.60	43.1	-124.6	227.3	222.8	4.54	50.040	
1,400.0	1,392.3	1,383.9	1,381.9	3.3	2.7	-173.61	50.0	-127.3	250.8	245.9	4.92	50.999	
1,500.0	1,490.1	1,482.4	1,480.0	3.7	2.9	-172.53	57.9	-128.8	275.1	269.8	5.30	51.947	
1,600.0	1,587.5	1,578.8	1,576.1	4.1	3.1	-171.60	66.0	-130.1	301.1	295.4	5.68	53.044	
1,700.0	1,684.6	1,674.9	1,671.8	4.5	3.3	-170.86	74.0	-131.3	328.7	322.6	6.06	54.260	
1,800.0	1,781.2	1,770.5	1,767.1	5.0	3.5	-168.31	81.9	-132.4	357.7	351.3	6.44	55.522	
1,900.0	1,877.8	1,866.2	1,862.5	5.5	3.7	-164.08	89.9	-133.6	386.7	379.8	6.84	56.539	
2,000.0	1,974.4	1,962.1	1,958.0	6.0	3.9	-160.90	97.9	-134.8	415.2	407.9	7.24	57.326	
2,100.0	2,071.3	2,058.3	2,053.9	6.4	4.1	-161.06	105.9	-136.0	442.4	434.8	7.65	57.869	
2,200.0	2,168.6	2,154.9	2,150.1	6.8	4.3	-161.10	114.0	-137.2	468.3	460.3	8.05	58.166	
2,300.0	2,265.9	2,251.5	2,246.4	7.3	4.6	-161.10	122.0	-138.5	494.0	485.5	8.46	58.395	
2,400.0	2,363.2	2,348.2	2,342.7	7.7	4.8	-161.10	130.1	-139.7	519.7	510.8	8.87	58.592	
2,500.0	2,460.5	2,444.8	2,439.0	8.2	5.0	-161.10	138.2	-140.9	545.4	536.1	9.28	58.764	
2,600.0	2,557.9	2,541.5	2,535.3	8.6	5.2	-161.11	146.2	-142.1	571.1	561.4	9.69	58.913	
2,700.0	2,655.2	2,638.1	2,631.6	9.0	5.4	-161.11	154.3	-143.3	596.8	586.6	10.11	59.044	
2,800.0	2,752.5	2,734.8	2,727.9	9.5	5.6	-161.11	162.3	-144.5	622.4	611.9	10.52	59.160	
2,900.0	2,849.8	2,831.4	2,824.2	9.9	5.9	-161.11	170.4	-145.7	648.1	637.2	10.94	59.262	
3,000.0	2,947.1	2,928.0	2,920.5	10.4	6.1	-161.11	178.4	-146.9	673.8	662.5	11.35	59.353	
3,100.0	3,044.4	3,024.7	3,016.8	10.8	6.3	-161.11	186.5	-148.1	699.5	687.7	11.77	59.435	
3,200.0	3,141.7	3,121.3	3,113.1	11.2	6.5	-161.11	194.6	-149.3	725.2	713.0	12.19	59.508	
3,300.0	3,239.1	3,218.0	3,209.4	11.7	6.7	-161.11	202.6	-150.5	750.9	738.3	12.60	59.573	
3,400.0	3,336.4	3,314.6	3,305.7	12.1	7.0	-161.11	210.7	-151.7	776.6	763.5	13.02	59.632	
3,500.0	3,433.7	3,411.3	3,402.0	12.6	7.2	-161.11	218.7	-152.9	802.2	788.8	13.44	59.686	
3,600.0	3,531.0	3,507.9	3,498.3	13.0	7.4	-161.11	226.8	-154.2	827.9	814.1	13.86	59.735	
3,700.0	3,628.3	3,604.6	3,594.6	13.5	7.6	-161.11	234.9	-155.4	853.6	839.3	14.28	59.779	
3,800.0	3,725.6	3,701.2	3,690.9	13.9	7.8	-161.11	242.9	-156.6	879.3	864.6	14.70	59.819	
3,900.0	3,822.9	3,797.8	3,787.2	14.4	8.0	-161.11	251.0	-157.8	905.0	889.9	15.12	59.856	
4,000.0	3,920.2	3,894.5	3,883.5	14.8	8.3	-161.11	259.0	-159.0	930.7	915.1	15.54	59.890	
4,100.0	4,017.6	3,991.1	3,979.8	15.3	8.5	-161.11	267.1	-160.2	956.4	940.4	15.96	59.922	
4,200.0	4,114.9	4,087.8	4,076.1	15.7	8.7	-161.11	275.1	-161.4	982.0	965.7	16.38	59.950	
4,300.0	4,212.2	4,184.4	4,172.4	16.1	8.9	-161.11	283.2	-162.6	1,007.7	990.9	16.80	59.977	



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: O-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	-89.49	0.7	-82.3	82.3					
100.0	100.0	100.0	100.0	0.2	0.2	-89.49	0.7	-82.3	82.3	82.0	0.30	270.962		
200.0	200.0	200.0	200.0	0.3	0.3	-89.49	0.7	-82.3	82.3	81.6	0.65	126.063		
200.0	200.0	200.0	200.0	0.3	0.3	-89.49	0.7	-82.3	82.3	81.6	0.65	126.062 CC		
300.0	300.0	300.0	300.0	0.5	0.5	170.53	0.7	-82.3	82.5	81.5	1.00	82.353 ES		
400.0	400.0	400.0	400.0	0.7	0.7	170.73	0.7	-82.3	84.2	82.9	1.35	62.347		
500.0	499.9	500.6	500.6	0.9	0.9	171.62	1.5	-81.9	87.3	85.6	1.70	51.304		
600.0	599.8	601.1	601.0	1.1	1.0	173.60	3.9	-80.7	91.4	89.4	2.05	44.498		
700.0	699.5	701.4	701.3	1.3	1.2	176.46	7.8	-78.8	96.8	94.4	2.41	40.108		
800.0	799.2	801.5	801.2	1.5	1.4	179.96	13.3	-76.0	103.6	100.8	2.78	37.252		
900.0	898.6	901.4	900.7	1.7	1.6	-176.16	20.4	-72.6	112.1	108.9	3.16	35.439		
1,000.0	997.9	1,000.5	999.5	2.0	1.8	-172.56	28.1	-68.7	122.6	119.1	3.55	34.508		
1,100.0	1,096.9	1,099.5	1,098.1	2.3	2.0	-169.66	35.9	-64.9	135.2	131.3	3.95	34.227 SF		
1,200.0	1,195.7	1,198.3	1,196.5	2.6	2.3	-167.39	43.6	-61.1	149.8	145.5	4.36	34.391		
1,300.0	1,294.1	1,296.8	1,294.7	2.9	2.5	-165.67	51.3	-57.3	166.3	161.5	4.77	34.868		
1,400.0	1,392.3	1,395.1	1,392.6	3.3	2.7	-164.38	58.9	-53.5	184.5	179.3	5.19	35.571		
1,500.0	1,490.1	1,493.1	1,490.2	3.7	2.9	-163.45	66.6	-49.7	204.4	198.8	5.61	36.439		
1,600.0	1,587.5	1,590.7	1,587.4	4.1	3.1	-162.80	74.2	-45.9	226.0	219.9	6.04	37.434		
1,700.0	1,684.6	1,687.9	1,684.3	4.5	3.4	-162.38	81.8	-42.1	249.2	242.7	6.47	38.529		
1,800.0	1,781.2	1,784.9	1,780.9	5.0	3.6	-160.20	89.4	-38.4	273.8	266.9	6.90	39.660		
1,900.0	1,877.8	1,881.9	1,877.5	5.5	3.8	-156.40	96.9	-34.6	298.0	290.6	7.35	40.559		
2,000.0	1,974.4	1,979.0	1,974.3	6.0	4.0	-153.63	104.5	-30.9	321.6	313.8	7.79	41.254		
2,100.0	2,071.3	2,076.5	2,071.4	6.4	4.2	-154.10	112.1	-27.1	343.9	335.7	8.24	41.747		
2,200.0	2,168.6	2,174.2	2,168.8	6.8	4.5	-154.36	119.8	-23.3	364.9	356.2	8.68	42.021		
2,300.0	2,265.9	2,272.0	2,266.2	7.3	4.7	-154.55	127.4	-19.6	385.7	376.6	9.13	42.239		
2,400.0	2,363.2	2,369.8	2,363.6	7.7	4.9	-154.71	135.1	-15.8	406.6	397.0	9.58	42.433		
2,500.0	2,460.5	2,467.6	2,461.0	8.2	5.1	-154.86	142.7	-12.0	427.4	417.4	10.03	42.607		
2,600.0	2,557.9	2,565.4	2,558.5	8.6	5.4	-155.00	150.3	-8.2	448.2	437.7	10.48	42.763		
2,700.0	2,655.2	2,663.2	2,655.9	9.0	5.6	-155.13	158.0	-4.4	469.0	458.1	10.93	42.904		
2,800.0	2,752.5	2,761.0	2,753.3	9.5	5.8	-155.24	165.6	-0.6	489.9	478.5	11.38	43.033		
2,900.0	2,849.8	2,858.8	2,850.8	9.9	6.0	-155.35	173.2	3.1	510.7	498.9	11.84	43.150		
3,000.0	2,947.1	2,956.6	2,948.2	10.4	6.3	-155.44	180.9	6.9	531.6	519.3	12.29	43.257		
3,100.0	3,044.4	3,054.4	3,045.6	10.8	6.5	-155.53	188.5	10.7	552.4	539.7	12.74	43.356		
3,200.0	3,141.7	3,152.2	3,143.0	11.2	6.7	-155.61	196.2	14.5	573.2	560.0	13.19	43.447		
3,300.0	3,239.1	3,250.0	3,240.5	11.7	6.9	-155.69	203.8	18.3	594.1	580.4	13.65	43.531		
3,400.0	3,336.4	3,347.8	3,337.9	12.1	7.2	-155.76	211.4	22.0	614.9	600.8	14.10	43.609		
3,500.0	3,433.7	3,445.6	3,435.3	12.6	7.4	-155.83	219.1	25.8	635.8	621.2	14.55	43.682		
3,600.0	3,531.0	3,543.4	3,532.8	13.0	7.6	-155.89	226.7	29.6	656.6	641.6	15.01	43.749		
3,700.0	3,628.3	3,641.2	3,630.2	13.5	7.8	-155.95	234.3	33.4	677.5	662.0	15.46	43.813		
3,800.0	3,725.6	3,739.0	3,727.6	13.9	8.1	-156.01	242.0	37.2	698.3	682.4	15.92	43.872		
3,900.0	3,822.9	3,836.9	3,825.0	14.4	8.3	-156.06	249.6	41.0	719.1	702.8	16.37	43.928		
4,000.0	3,920.2	3,934.7	3,922.5	14.8	8.5	-156.11	257.2	44.7	740.0	723.2	16.83	43.980		
4,100.0	4,017.6	4,032.5	4,019.9	15.3	8.7	-156.15	264.9	48.5	760.8	743.6	17.28	44.029		
4,200.0	4,114.9	4,130.3	4,117.3	15.7	9.0	-156.20	272.5	52.3	781.7	764.0	17.74	44.076		
4,300.0	4,212.2	4,228.1	4,214.8	16.1	9.2	-156.24	280.2	56.1	802.5	784.3	18.19	44.119		
4,400.0	4,309.5	4,325.9	4,312.2	16.6	9.4	-156.28	287.8	59.9	823.4	804.7	18.65	44.161		
4,500.0	4,406.8	4,423.7	4,409.6	17.0	9.7	-156.32	295.4	63.6	844.2	825.1	19.10	44.200		
4,600.0	4,504.1	4,521.5	4,507.0	17.5	9.9	-156.35	303.1	67.4	865.1	845.5	19.56	44.238		
4,700.0	4,601.4	4,619.3	4,604.5	17.9	10.1	-156.39	310.7	71.2	885.9	865.9	20.01	44.273		
4,800.0	4,698.8	4,717.1	4,701.9	18.4	10.3	-156.42	318.3	75.0	906.8	886.3	20.47	44.307		
4,900.0	4,796.1	4,814.9	4,799.3	18.8	10.6	-156.45	326.0	78.8	927.6	906.7	20.92	44.339		
5,000.0	4,893.4	4,912.7	4,896.8	19.3	10.8	-156.48	333.6	82.6	948.5	927.1	21.38	44.370		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #3		Offset Site Error:		0.0 ft	
Survey Program:													0-Geolink MWD		Offset Well Error:		0.0 ft	
Reference				Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)		(ft)	(ft)							
5,100.0	4,990.7	5,010.5	4,994.2	19.7	11.0	-156.51	341.3	86.3	969.3	947.5	21.83	44.400						
5,200.0	5,088.0	5,108.3	5,091.6	20.2	11.2	-156.54	348.9	90.1	990.2	967.9	22.29	44.428						
5,300.0	5,185.3	5,206.1	5,189.0	20.6	11.5	-156.56	356.5	93.9	1,011.0	988.3	22.74	44.454						

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #3													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.44	0.7	-75.0	75.0					
100.0	100.0	100.0	100.0	0.2	0.2	-89.44	0.7	-75.0	75.0	74.7	0.30	247.001		
200.0	200.0	200.0	200.0	0.3	0.3	-89.44	0.7	-75.0	75.0	74.4	0.65	114.915		
200.0	200.0	200.0	200.0	0.3	0.3	-89.44	0.7	-75.0	75.0	74.4	0.65	114.915 CC		
300.0	300.0	300.0	300.0	0.5	0.5	170.59	0.7	-75.0	75.2	74.2	1.00	75.090 ES		
400.0	400.0	400.0	400.0	0.7	0.7	170.80	0.7	-75.0	76.9	75.6	1.35	56.961		
500.0	499.9	499.9	499.9	0.9	0.8	171.19	0.7	-75.0	80.4	78.7	1.70	47.290		
600.0	599.8	600.7	600.7	1.1	1.0	172.20	1.4	-74.4	85.0	83.0	2.05	41.460		
700.0	699.5	701.4	701.4	1.3	1.2	174.14	3.5	-72.8	90.4	88.0	2.40	37.613		
800.0	799.2	802.0	801.9	1.5	1.4	176.81	6.9	-69.9	96.6	93.9	2.76	35.018		
900.0	898.6	902.5	902.2	1.7	1.6	-180.00	11.6	-66.0	103.9	100.8	3.12	33.271		
1,000.0	997.9	1,002.8	1,002.2	2.0	1.8	-176.47	17.8	-61.0	112.5	109.0	3.50	32.124		
1,100.0	1,096.9	1,102.9	1,101.8	2.3	2.0	-172.78	25.2	-54.9	122.4	118.5	3.90	31.402		
1,200.0	1,195.7	1,202.7	1,200.9	2.6	2.2	-169.08	33.9	-47.6	133.9	129.6	4.32	30.979		
1,300.0	1,294.1	1,301.5	1,299.0	2.9	2.5	-165.84	43.3	-40.0	147.3	142.5	4.76	30.914 SF		
1,400.0	1,392.3	1,400.0	1,396.8	3.3	2.7	-163.30	52.5	-32.3	162.7	157.5	5.22	31.155		
1,500.0	1,490.1	1,498.4	1,494.4	3.7	3.0	-161.36	61.8	-24.7	180.0	174.4	5.70	31.612		
1,600.0	1,587.5	1,596.4	1,591.7	4.1	3.2	-159.92	71.1	-17.1	199.1	193.0	6.18	32.228		
1,700.0	1,684.6	1,694.2	1,688.7	4.5	3.5	-158.87	80.3	-9.5	219.9	213.2	6.67	32.963		
1,800.0	1,781.2	1,791.7	1,785.5	5.0	3.8	-156.24	89.5	-1.9	242.0	234.8	7.17	33.750		
1,900.0	1,877.8	1,889.3	1,882.4	5.5	4.0	-152.11	98.7	5.6	263.7	256.0	7.68	34.325		
2,000.0	1,974.4	1,987.1	1,979.5	6.0	4.3	-149.09	107.9	13.2	284.6	276.4	8.20	34.714		
2,100.0	2,071.3	2,085.1	2,076.8	6.4	4.5	-149.30	117.1	20.9	304.2	295.5	8.71	34.929		
2,200.0	2,168.6	2,183.4	2,174.3	6.8	4.8	-149.30	126.4	28.5	322.6	313.4	9.23	34.956		
2,300.0	2,265.9	2,281.8	2,271.9	7.3	5.1	-149.24	135.6	36.1	340.8	331.0	9.75	34.947		
2,400.0	2,363.2	2,380.1	2,369.5	7.7	5.3	-149.19	144.9	43.7	359.0	348.7	10.28	34.932		
2,500.0	2,460.5	2,478.4	2,467.1	8.2	5.6	-149.15	154.2	51.4	377.1	366.3	10.80	34.911		
2,600.0	2,557.9	2,576.8	2,564.7	8.6	5.9	-149.11	163.4	59.0	395.3	384.0	11.33	34.887		
2,700.0	2,655.2	2,675.1	2,662.3	9.0	6.1	-149.07	172.7	66.6	413.5	401.6	11.86	34.861		
2,800.0	2,752.5	2,773.4	2,759.9	9.5	6.4	-149.04	182.0	74.3	431.7	419.3	12.39	34.834		
2,900.0	2,849.8	2,871.8	2,857.5	9.9	6.7	-149.00	191.2	81.9	449.9	436.9	12.93	34.805		
3,000.0	2,947.1	2,970.1	2,955.1	10.4	6.9	-148.98	200.5	89.5	468.0	454.6	13.46	34.777		
3,100.0	3,044.4	3,068.4	3,052.7	10.8	7.2	-148.95	209.8	97.2	486.2	472.2	13.99	34.748		
3,200.0	3,141.7	3,166.8	3,150.3	11.2	7.5	-148.93	219.0	104.8	504.4	489.9	14.53	34.720		
3,300.0	3,239.1	3,265.1	3,247.9	11.7	7.7	-148.90	228.3	112.4	522.6	507.5	15.06	34.692		
3,400.0	3,336.4	3,363.4	3,345.5	12.1	8.0	-148.88	237.6	120.1	540.8	525.2	15.60	34.664		
3,500.0	3,433.7	3,461.8	3,443.1	12.6	8.3	-148.86	246.9	127.7	558.9	542.8	16.14	34.637		
3,600.0	3,531.0	3,560.1	3,540.7	13.0	8.6	-148.84	256.1	135.3	577.1	560.5	16.67	34.611		
3,700.0	3,628.3	3,658.4	3,638.3	13.5	8.8	-148.82	265.4	143.0	595.3	578.1	17.21	34.586		
3,800.0	3,725.6	3,756.8	3,735.9	13.9	9.1	-148.81	274.7	150.6	613.5	595.7	17.75	34.561		
3,900.0	3,822.9	3,855.1	3,833.5	14.4	9.4	-148.79	283.9	158.2	631.7	613.4	18.29	34.537		
4,000.0	3,920.2	3,953.4	3,931.1	14.8	9.6	-148.78	293.2	165.9	649.9	631.0	18.83	34.514		
4,100.0	4,017.6	4,051.8	4,028.7	15.3	9.9	-148.76	302.5	173.5	668.0	648.7	19.37	34.491		
4,200.0	4,114.9	4,150.1	4,126.3	15.7	10.2	-148.75	311.7	181.1	686.2	666.3	19.91	34.469		
4,300.0	4,212.2	4,248.4	4,223.9	16.1	10.4	-148.74	321.0	188.8	704.4	684.0	20.45	34.448		
4,400.0	4,309.5	4,346.8	4,321.5	16.6	10.7	-148.73	330.3	196.4	722.6	701.6	20.99	34.428		
4,500.0	4,406.8	4,445.1	4,419.1	17.0	11.0	-148.72	339.5	204.0	740.8	719.2	21.53	34.408		
4,600.0	4,504.1	4,543.4	4,516.7	17.5	11.2	-148.70	348.8	211.7	758.9	736.9	22.07	34.389		
4,700.0	4,601.4	4,641.8	4,614.3	17.9	11.5	-148.69	358.1	219.3	777.1	754.5	22.61	34.370		
4,800.0	4,698.8	4,740.1	4,711.9	18.4	11.8	-148.68	367.3	226.9	795.3	772.2	23.15	34.352		
4,900.0	4,796.1	4,838.4	4,809.5	18.8	12.1	-148.68	376.6	234.6	813.5	789.8	23.69	34.335		
5,000.0	4,893.4	4,936.8	4,907.1	19.3	12.3	-148.67	385.9	242.2	831.7	807.4	24.23	34.318		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2D-7H-E168 - HZ - Plan #3		Offset Site Error:		0.0 ft	
Survey Program:													0-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
5,100.0	4,990.7	5,035.1	5,004.7	19.7	12.6	-148.66	395.1	249.8	849.9	825.1	24.78	34.302						
5,200.0	5,088.0	5,133.4	5,102.3	20.2	12.9	-148.65	404.4	257.5	868.0	842.7	25.32	34.286						
5,300.0	5,185.3	5,231.8	5,199.8	20.6	13.1	-148.64	413.7	265.1	886.2	860.4	25.86	34.271						
5,400.0	5,282.6	5,330.1	5,297.4	21.1	13.4	-148.63	422.9	272.7	904.4	878.0	26.40	34.256						
5,500.0	5,379.9	5,428.4	5,395.0	21.5	13.7	-148.63	432.2	280.4	922.6	895.6	26.94	34.241						
5,600.0	5,477.3	5,526.8	5,492.6	21.9	14.0	-148.62	441.5	288.0	940.8	913.3	27.49	34.227						
5,700.0	5,574.6	5,625.1	5,590.2	22.4	14.2	-148.61	450.7	295.6	958.9	930.9	28.03	34.214						
5,800.0	5,671.9	5,723.4	5,687.8	22.8	14.5	-148.61	460.0	303.3	977.1	948.6	28.57	34.201						
5,900.0	5,769.2	5,821.7	5,785.4	23.3	14.8	-148.60	469.3	310.9	995.3	966.2	29.11	34.188						
6,000.0	5,866.5	5,920.1	5,883.0	23.7	15.0	-148.59	478.5	318.5	1,013.5	983.8	29.66	34.175						

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-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		
0.0	0.0	0.0	0.0	0.0	0.0	-89.37	0.7	-67.5	67.5					
100.0	100.0	100.0	100.0	0.2	0.2	-89.37	0.7	-67.5	67.5	67.2	0.30	222.120		
200.0	200.0	200.0	200.0	0.3	0.3	-89.37	0.7	-67.5	67.5	66.8	0.65	103.339 CC		
200.0	200.0	200.0	200.0	0.3	0.3	-89.37	0.7	-67.5	67.5	66.8	0.65	103.339		
300.0	300.0	300.0	300.0	0.5	0.5	170.66	0.7	-67.5	67.7	66.7	1.00	67.547 ES		
400.0	400.0	400.0	400.0	0.7	0.7	170.89	0.7	-67.5	69.4	68.0	1.35	51.368		
500.0	499.9	499.9	499.9	0.9	0.8	171.32	0.7	-67.5	72.8	71.1	1.70	42.847		
600.0	599.8	599.8	599.8	1.1	1.0	171.89	0.7	-67.5	78.0	76.0	2.05	38.073		
700.0	699.5	699.5	699.5	1.3	1.2	172.55	0.7	-67.5	84.9	82.5	2.40	35.414		
800.0	799.2	799.2	799.2	1.5	1.4	173.23	0.7	-67.5	93.6	90.8	2.75	34.066		
900.0	898.6	898.6	898.6	1.7	1.5	173.90	0.7	-67.5	104.0	100.9	3.10	33.587		
1,000.0	997.9	997.9	997.9	2.0	1.7	174.52	0.7	-67.5	116.1	112.6	3.44	33.714		
1,100.0	1,096.9	1,098.5	1,098.5	2.3	1.9	175.37	1.3	-66.8	129.4	125.6	3.79	34.093		
1,200.0	1,195.7	1,199.2	1,199.2	2.6	2.1	176.61	2.9	-64.7	143.1	139.0	4.14	34.532		
1,300.0	1,294.1	1,299.9	1,299.8	2.9	2.3	178.13	5.6	-61.3	157.5	153.0	4.50	35.020		
1,400.0	1,392.3	1,400.6	1,400.3	3.3	2.4	179.84	9.5	-56.5	172.5	167.7	4.85	35.541		
1,500.0	1,490.1	1,501.3	1,500.6	3.7	2.6	-178.32	14.4	-50.3	188.3	183.0	5.22	36.076		
1,600.0	1,587.5	1,601.9	1,600.8	4.1	2.8	-176.39	20.4	-42.8	204.8	199.2	5.60	36.599		
1,700.0	1,684.6	1,702.3	1,700.6	4.5	3.1	-174.42	27.6	-33.9	222.2	216.2	5.99	37.083		
1,800.0	1,781.2	1,802.7	1,800.1	5.0	3.3	-170.53	35.8	-23.6	240.3	233.9	6.42	37.458		
1,900.0	1,877.8	1,903.4	1,899.7	5.5	3.6	-164.99	45.1	-11.9	257.6	250.7	6.87	37.467		
2,000.0	1,974.4	2,002.2	1,997.2	6.0	3.8	-160.59	54.9	0.4	274.0	266.6	7.36	37.249		
2,100.0	2,071.3	2,100.9	2,094.6	6.4	4.1	-159.56	64.7	12.6	289.2	281.4	7.85	36.842		
2,200.0	2,168.6	2,199.7	2,192.2	6.8	4.4	-158.50	74.5	24.9	303.2	294.8	8.37	36.243		
2,300.0	2,265.9	2,298.6	2,289.9	7.3	4.7	-157.51	84.3	37.2	317.0	308.1	8.90	35.638		
2,400.0	2,363.2	2,397.5	2,387.5	7.7	5.0	-156.61	94.1	49.5	331.0	321.5	9.44	35.061		
2,500.0	2,460.5	2,496.4	2,485.1	8.2	5.3	-155.77	104.0	61.8	345.0	335.0	9.99	34.515		
2,600.0	2,557.9	2,595.3	2,582.8	8.6	5.6	-155.00	113.8	74.1	359.0	348.5	10.56	34.000		
2,700.0	2,655.2	2,694.2	2,680.4	9.0	5.9	-154.29	123.6	86.4	373.1	362.0	11.13	33.517		
2,800.0	2,752.5	2,793.1	2,778.0	9.5	6.2	-153.63	133.4	98.7	387.3	375.6	11.71	33.064		
2,900.0	2,849.8	2,892.0	2,875.7	9.9	6.5	-153.02	143.2	111.0	401.5	389.2	12.30	32.640		
3,000.0	2,947.1	2,990.9	2,973.3	10.4	6.8	-152.45	153.1	123.3	415.8	402.9	12.90	32.243		
3,100.0	3,044.4	3,089.8	3,070.9	10.8	7.1	-151.92	162.9	135.6	430.1	416.6	13.50	31.872		
3,200.0	3,141.7	3,188.7	3,168.6	11.2	7.5	-151.42	172.7	147.9	444.5	430.4	14.10	31.524		
3,300.0	3,239.1	3,287.6	3,266.2	11.7	7.8	-150.95	182.5	160.2	458.8	444.1	14.71	31.199		
3,400.0	3,336.4	3,386.5	3,363.9	12.1	8.1	-150.51	192.3	172.5	473.2	457.9	15.32	30.893		
3,500.0	3,433.7	3,485.4	3,461.5	12.6	8.4	-150.10	202.1	184.8	487.6	471.7	15.93	30.607		
3,600.0	3,531.0	3,584.3	3,559.1	13.0	8.7	-149.71	212.0	197.1	502.1	485.5	16.55	30.338		
3,700.0	3,628.3	3,683.2	3,656.8	13.5	9.0	-149.34	221.8	209.4	516.6	499.4	17.17	30.085		
3,800.0	3,725.6	3,782.1	3,754.4	13.9	9.3	-148.99	231.6	221.7	531.0	513.2	17.79	29.847		
3,900.0	3,822.9	3,881.0	3,852.0	14.4	9.7	-148.66	241.4	234.0	545.5	527.1	18.42	29.622		
4,000.0	3,920.2	3,979.9	3,949.7	14.8	10.0	-148.35	251.2	246.3	560.1	541.0	19.04	29.410		
4,100.0	4,017.6	4,078.8	4,047.3	15.3	10.3	-148.05	261.1	258.6	574.6	554.9	19.67	29.210		
4,200.0	4,114.9	4,177.6	4,144.9	15.7	10.6	-147.77	270.9	270.9	589.2	568.9	20.30	29.021		
4,300.0	4,212.2	4,276.5	4,242.6	16.1	10.9	-147.50	280.7	283.2	603.7	582.8	20.93	28.841		
4,400.0	4,309.5	4,375.4	4,340.2	16.6	11.3	-147.25	290.5	295.5	618.3	596.7	21.57	28.671		
4,500.0	4,406.8	4,474.3	4,437.8	17.0	11.6	-147.00	300.3	307.9	632.9	610.7	22.20	28.510		
4,600.0	4,504.1	4,573.2	4,535.5	17.5	11.9	-146.77	310.2	320.2	647.5	624.7	22.83	28.357		
4,700.0	4,601.4	4,672.1	4,633.1	17.9	12.2	-146.55	320.0	332.5	662.1	638.6	23.47	28.211		
4,800.0	4,698.8	4,771.0	4,730.7	18.4	12.5	-146.34	329.8	344.8	676.7	652.6	24.11	28.072		
4,900.0	4,796.1	4,869.9	4,828.4	18.8	12.9	-146.13	339.6	357.1	691.3	666.6	24.74	27.940		
5,000.0	4,893.4	4,968.8	4,926.0	19.3	13.2	-145.94	349.4	369.4	706.0	680.6	25.38	27.813		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2E-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	4,990.7	5,067.7	5,023.6	19.7	13.5	-145.75	359.3	381.7	720.6	694.6	26.02	27.693		
5,200.0	5,088.0	5,166.6	5,121.3	20.2	13.8	-145.57	369.1	394.0	735.3	708.6	26.66	27.578		
5,300.0	5,185.3	5,265.5	5,218.9	20.6	14.2	-145.40	378.9	406.3	749.9	722.6	27.30	27.467		
5,400.0	5,282.6	5,364.4	5,316.5	21.1	14.5	-145.23	388.7	418.6	764.6	736.7	27.94	27.362		
5,500.0	5,379.9	5,463.3	5,414.2	21.5	14.8	-145.07	398.5	430.9	779.3	750.7	28.59	27.261		
5,600.0	5,477.3	5,562.2	5,511.8	21.9	15.1	-144.92	408.4	443.2	793.9	764.7	29.23	27.164		
5,700.0	5,574.6	5,661.1	5,609.4	22.4	15.5	-144.77	418.2	455.5	808.6	778.8	29.87	27.071		
5,800.0	5,671.9	5,760.0	5,707.1	22.8	15.8	-144.62	428.0	467.8	823.3	792.8	30.51	26.981		
5,900.0	5,769.2	5,858.9	5,804.7	23.3	16.1	-144.49	437.8	480.1	838.0	806.8	31.16	26.896		
6,000.0	5,866.5	5,957.8	5,902.3	23.7	16.4	-144.35	447.6	492.4	852.7	820.9	31.80	26.813		
6,100.0	5,963.8	6,056.7	6,000.0	24.2	16.7	-144.22	457.5	504.7	867.4	835.0	32.45	26.733		
6,200.0	6,061.1	6,155.6	6,097.6	24.6	17.1	-144.10	467.3	517.0	882.1	849.0	33.09	26.657		
6,300.0	6,158.5	6,254.4	6,195.3	25.1	17.4	-143.98	477.1	529.3	896.8	863.1	33.74	26.583		
6,400.0	6,255.8	6,353.3	6,292.9	25.5	17.7	-143.86	486.9	541.6	911.5	877.1	34.38	26.512		
6,500.0	6,353.1	6,452.2	6,390.5	26.0	18.0	-143.75	496.7	553.9	926.2	891.2	35.03	26.443		
6,600.0	6,450.4	6,551.1	6,488.2	26.4	18.4	-143.64	506.5	566.2	941.0	905.3	35.67	26.377		
6,700.0	6,547.7	6,650.0	6,585.8	26.9	18.7	-143.53	516.4	578.5	955.7	919.4	36.32	26.313		
6,800.0	6,645.0	6,748.9	6,683.4	27.3	19.0	-143.43	526.2	590.8	970.4	933.4	36.97	26.251		
6,900.0	6,742.3	6,847.8	6,781.1	27.8	19.3	-143.33	536.0	603.1	985.1	947.5	37.61	26.191		
7,000.0	6,839.7	6,946.7	6,878.7	28.2	19.7	-143.23	545.8	615.4	999.9	961.6	38.26	26.134		
7,100.0	6,937.0	7,045.6	6,976.3	28.7	20.0	-143.14	555.6	627.7	1,014.6	975.7	38.91	26.078 SF		
7,200.0	7,034.3	8,259.6	7,740.0	29.1	20.8	175.84	-109.0	775.7	981.0	956.9	24.12	40.675		
7,300.0	7,131.6	8,261.6	7,740.0	29.5	20.9	175.70	-111.0	775.9	930.7	905.5	25.15	37.000		
7,400.0	7,228.9	8,261.4	7,740.0	30.0	20.8	-165.76	-110.7	775.8	889.0	862.9	26.16	33.986		
7,500.0	7,324.6	8,245.9	7,740.0	30.4	20.8	-140.16	-95.3	774.8	858.3	831.3	26.95	31.842		
7,600.0	7,416.1	8,213.6	7,740.0	30.8	20.7	-126.53	-63.1	772.5	839.8	812.4	27.45	30.590		
7,700.0	7,500.5	8,165.4	7,740.0	31.2	20.5	-117.39	-15.0	769.1	833.1	805.4	27.69	30.091		
7,714.5	7,512.0	8,157.1	7,740.0	31.3	20.5	-116.22	-6.8	768.6	833.0	805.3	27.71	30.058		
7,800.0	7,575.1	8,098.5	7,738.2	31.6	20.4	-109.50	51.7	764.2	836.0	808.2	27.77	30.102		
7,900.0	7,637.9	8,030.9	7,729.0	32.0	20.3	-102.62	118.3	758.4	845.8	817.9	27.90	30.318		
8,000.0	7,686.8	7,967.1	7,713.3	32.5	20.3	-96.54	179.8	752.0	861.0	833.0	27.98	30.775		
8,100.0	7,720.4	7,905.8	7,691.8	32.9	20.3	-91.11	236.7	745.1	879.7	851.7	27.98	31.439		
8,200.0	7,737.7	7,850.0	7,667.0	33.5	20.3	-86.49	286.3	738.4	900.3	872.4	27.92	32.246		
8,300.0	7,740.0	7,788.7	7,634.4	34.0	20.4	-83.23	337.6	730.4	922.0	894.1	27.89	33.056		
8,400.0	7,740.0	7,737.8	7,603.3	34.6	20.5	-81.33	377.3	723.5	948.3	920.6	27.77	34.151		
8,500.0	7,740.0	7,700.0	7,578.0	35.3	20.5	-79.82	404.8	718.2	980.6	953.0	27.61	35.509		
8,600.0	7,740.0	7,650.0	7,541.9	36.1	20.6	-77.70	438.6	711.1	1,018.8	991.3	27.48	37.080		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-89.29	0.7	-59.9	59.9				
100.0	100.0	100.0	100.0	0.2	0.2	-89.29	0.7	-59.9	59.9	59.6	0.30	197.238	
200.0	200.0	200.0	200.0	0.3	0.3	-89.29	0.7	-59.9	59.9	59.2	0.65	91.763 CC	
200.0	200.0	200.0	200.0	0.3	0.3	-89.29	0.7	-59.9	59.9	59.2	0.65	91.763	
300.0	300.0	300.0	300.0	0.5	0.5	170.74	0.7	-59.9	60.1	59.1	1.00	60.005 ES	
400.0	400.0	401.0	401.0	0.7	0.7	171.35	1.1	-59.1	61.0	59.7	1.35	45.124	
500.0	499.9	501.9	501.9	0.9	0.9	172.88	2.2	-56.6	62.1	60.4	1.70	36.448	
600.0	599.8	602.9	602.7	1.1	1.0	175.26	3.9	-52.6	63.4	61.4	2.06	30.825	
700.0	699.5	703.8	703.4	1.3	1.2	178.42	6.4	-46.9	65.1	62.7	2.41	26.949	
800.0	799.2	804.6	804.0	1.5	1.5	-177.76	9.6	-39.6	67.2	64.4	2.78	24.178	
900.0	898.6	905.4	904.3	1.7	1.7	-173.42	13.5	-30.6	70.0	66.9	3.16	22.150	
1,000.0	997.9	1,006.1	1,004.3	2.0	1.9	-168.72	18.2	-20.1	73.7	70.1	3.57	20.638	
1,100.0	1,096.9	1,106.7	1,104.0	2.3	2.2	-163.86	23.5	-8.0	78.3	74.2	4.02	19.489	
1,200.0	1,195.7	1,207.2	1,203.4	2.6	2.5	-159.00	29.5	5.8	84.0	79.4	4.51	18.600	
1,300.0	1,294.1	1,307.5	1,302.3	2.9	2.8	-154.31	36.2	21.0	90.8	85.8	5.07	17.900	
1,400.0	1,392.3	1,407.7	1,400.8	3.3	3.2	-149.88	43.5	37.9	98.9	93.2	5.70	17.346	
1,500.0	1,490.1	1,507.7	1,498.8	3.7	3.6	-145.80	51.6	56.3	108.3	101.9	6.40	16.918	
1,600.0	1,587.5	1,606.9	1,595.8	4.1	3.9	-142.60	59.8	75.1	119.3	112.1	7.13	16.726	
1,700.0	1,684.6	1,706.0	1,692.8	4.5	4.3	-140.40	68.0	93.9	131.8	124.0	7.87	16.746	
1,800.0	1,781.2	1,805.0	1,789.6	5.0	4.7	-137.16	76.2	112.6	145.6	136.9	8.62	16.883	
1,900.0	1,877.8	1,904.1	1,886.6	5.5	5.1	-132.70	84.5	131.4	158.4	149.0	9.38	16.891	
2,000.0	1,974.4	2,003.5	1,983.8	6.0	5.5	-129.47	92.7	150.3	170.0	159.9	10.13	16.777	
2,100.0	2,071.3	2,102.9	2,081.1	6.4	5.9	-129.25	100.9	169.1	180.5	169.6	10.89	16.578	
2,200.0	2,168.6	2,202.4	2,178.5	6.8	6.3	-128.67	109.2	188.0	190.0	178.3	11.66	16.293	
2,300.0	2,265.9	2,302.0	2,275.8	7.3	6.7	-128.07	117.5	206.9	199.4	187.0	12.44	16.025	
2,400.0	2,363.2	2,401.5	2,373.2	7.7	7.1	-127.52	125.7	225.7	208.8	195.6	13.23	15.784	
2,500.0	2,460.5	2,501.0	2,470.6	8.2	7.5	-127.02	134.0	244.6	218.3	204.2	14.02	15.568	
2,600.0	2,557.9	2,600.6	2,568.0	8.6	7.9	-126.56	142.2	263.5	227.7	212.9	14.81	15.373	
2,700.0	2,655.2	2,700.1	2,665.4	9.0	8.3	-126.14	150.5	282.4	237.2	221.6	15.61	15.197	
2,800.0	2,752.5	2,799.6	2,762.8	9.5	8.7	-125.74	158.8	301.2	246.6	230.2	16.40	15.036	
2,900.0	2,849.8	2,899.2	2,860.1	9.9	9.1	-125.38	167.0	320.1	256.1	238.9	17.20	14.890	
3,000.0	2,947.1	2,998.7	2,957.5	10.4	9.5	-125.05	175.3	339.0	265.6	247.6	18.00	14.755	
3,100.0	3,044.4	3,098.3	3,054.9	10.8	9.9	-124.73	183.5	357.8	275.1	256.3	18.80	14.632	
3,200.0	3,141.7	3,197.8	3,152.3	11.2	10.3	-124.44	191.8	376.7	284.6	265.0	19.60	14.518	
3,300.0	3,239.1	3,297.3	3,249.7	11.7	10.7	-124.17	200.0	395.6	294.1	273.7	20.41	14.413	
3,400.0	3,336.4	3,396.9	3,347.0	12.1	11.1	-123.91	208.3	414.5	303.7	282.5	21.21	14.316	
3,500.0	3,433.7	3,496.4	3,444.4	12.6	11.5	-123.67	216.6	433.3	313.2	291.2	22.02	14.225	
3,600.0	3,531.0	3,595.9	3,541.8	13.0	11.9	-123.45	224.8	452.2	322.7	299.9	22.82	14.141	
3,700.0	3,628.3	3,695.5	3,639.2	13.5	12.3	-123.23	233.1	471.1	332.3	308.6	23.63	14.062	
3,800.0	3,725.6	3,795.0	3,736.6	13.9	12.7	-123.03	241.3	489.9	341.8	317.4	24.43	13.989	
3,900.0	3,822.9	3,894.5	3,834.0	14.4	13.1	-122.84	249.6	508.8	351.3	326.1	25.24	13.919	
4,000.0	3,920.2	3,994.1	3,931.3	14.8	13.5	-122.66	257.8	527.7	360.9	334.9	26.05	13.855	
4,100.0	4,017.6	4,093.6	4,028.7	15.3	13.9	-122.49	266.1	546.6	370.5	343.6	26.86	13.794	
4,200.0	4,114.9	4,193.2	4,126.1	15.7	14.3	-122.33	274.4	565.4	380.0	352.3	27.66	13.736	
4,300.0	4,212.2	4,292.7	4,223.5	16.1	14.7	-122.17	282.6	584.3	389.6	361.1	28.47	13.682	
4,400.0	4,309.5	4,392.2	4,320.9	16.6	15.1	-122.03	290.9	603.2	399.1	369.8	29.28	13.630	
4,500.0	4,406.8	4,491.8	4,418.2	17.0	15.5	-121.88	299.1	622.1	408.7	378.6	30.09	13.582	
4,600.0	4,504.1	4,591.3	4,515.6	17.5	15.9	-121.75	307.4	640.9	418.3	387.4	30.90	13.536	
4,700.0	4,601.4	4,690.8	4,613.0	17.9	16.3	-121.62	315.7	659.8	427.8	396.1	31.71	13.492	
4,800.0	4,698.8	4,790.4	4,710.4	18.4	16.7	-121.50	323.9	678.7	437.4	404.9	32.52	13.450	
4,900.0	4,796.1	4,889.9	4,807.8	18.8	17.1	-121.38	332.2	697.5	447.0	413.6	33.33	13.411	
5,000.0	4,893.4	4,989.5	4,905.2	19.3	17.5	-121.27	340.4	716.4	456.5	422.4	34.14	13.373	

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	4,990.7	5,089.0	5,002.5	19.7	17.9	-121.16	348.7	735.3	466.1	431.2	34.95	13.337		
5,200.0	5,088.0	5,188.5	5,099.9	20.2	18.3	-121.06	356.9	754.2	475.7	439.9	35.76	13.303		
5,300.0	5,185.3	5,288.1	5,197.3	20.6	18.7	-120.96	365.2	773.0	485.3	448.7	36.57	13.270		
5,400.0	5,282.6	5,387.6	5,294.7	21.1	19.1	-120.87	373.5	791.9	494.9	457.5	37.38	13.239		
5,500.0	5,379.9	5,487.1	5,392.1	21.5	19.5	-120.78	381.7	810.8	504.4	466.3	38.19	13.208		
5,600.0	5,477.3	5,586.7	5,489.4	21.9	19.9	-120.69	390.0	829.6	514.0	475.0	39.00	13.180		
5,700.0	5,574.6	5,686.2	5,586.8	22.4	20.3	-120.60	398.2	848.5	523.6	483.8	39.81	13.152		
5,800.0	5,671.9	5,785.7	5,684.2	22.8	20.7	-120.52	406.5	867.4	533.2	492.6	40.62	13.125		
5,900.0	5,769.2	5,885.3	5,781.6	23.3	21.2	-120.44	414.7	886.3	542.8	501.3	41.43	13.100		
6,000.0	5,866.5	5,984.8	5,879.0	23.7	21.6	-120.37	423.0	905.1	552.4	510.1	42.25	13.075		
6,100.0	5,963.8	6,084.4	5,976.4	24.2	22.0	-120.29	431.3	924.0	562.0	518.9	43.06	13.052		
6,200.0	6,061.1	6,183.9	6,073.7	24.6	22.4	-120.22	439.5	942.9	571.5	527.7	43.87	13.029		
6,300.0	6,158.5	6,283.4	6,171.1	25.1	22.8	-120.15	447.8	961.8	581.1	536.5	44.68	13.007		
6,400.0	6,255.8	6,383.0	6,268.5	25.5	23.2	-120.08	456.0	980.6	590.7	545.2	45.49	12.986		
6,500.0	6,353.1	6,482.5	6,365.9	26.0	23.6	-120.02	464.3	999.5	600.3	554.0	46.30	12.965		
6,600.0	6,450.4	6,582.0	6,463.3	26.4	24.0	-119.96	472.5	1,018.4	609.9	562.8	47.11	12.946		
6,700.0	6,547.7	6,681.6	6,560.6	26.9	24.4	-119.90	480.8	1,037.2	619.5	571.6	47.92	12.927		
6,800.0	6,645.0	6,781.1	6,658.0	27.3	24.8	-119.84	489.1	1,056.1	629.1	580.4	48.74	12.908		
6,900.0	6,742.3	6,880.6	6,755.4	27.8	25.2	-119.78	497.3	1,075.0	638.7	589.1	49.55	12.890		
7,000.0	6,839.7	6,980.2	6,852.8	28.2	25.6	-119.73	505.6	1,093.9	648.3	597.9	50.36	12.873		
7,100.0	6,937.0	7,037.5	6,909.9	28.7	26.0	-119.68	513.9	1,112.8	657.9	606.9	51.17	12.856		
7,200.0	7,034.3	7,134.8	7,007.3	29.1	26.4	-119.63	522.2	1,131.7	667.4	616.4	51.98	12.839		
7,300.0	7,131.6	7,232.1	7,104.6	29.5	26.7	-119.58	530.5	1,150.6	676.9	625.9	52.79	12.822		
7,400.0	7,228.9	7,329.4	7,201.9	30.0	27.0	-119.53	538.8	1,169.5	686.4	635.4	53.60	12.805		
7,500.0	7,326.2	7,426.7	7,299.2	30.4	27.3	-119.48	547.1	1,188.4	695.9	644.9	54.41	12.788		
7,600.0	7,423.5	7,524.0	7,396.5	30.8	27.6	-119.43	555.4	1,207.3	705.4	654.4	55.22	12.771		
7,605.7	7,421.1	7,509.8	7,497.2	30.8	26.6	-118.37	-5.4	1,218.7	336.6	309.4	27.17	12.390 SF		
7,700.0	7,500.5	7,601.0	7,492.9	31.2	26.6	-105.47	28.9	1,217.9	347.5	320.6	26.91	12.915		
7,800.0	7,575.1	7,675.6	7,485.3	31.6	26.5	-92.57	67.9	1,216.4	378.7	352.8	25.88	14.630		
7,900.0	7,637.9	7,738.4	7,476.4	32.0	26.5	-81.18	102.2	1,214.7	422.4	397.2	25.16	16.791		
8,000.0	7,686.8	7,787.3	7,460.3	32.5	26.5	-69.80	149.4	1,211.6	471.6	447.0	24.59	19.178		
8,100.0	7,720.4	7,820.9	7,440.2	32.9	26.5	-60.76	195.0	1,207.7	522.0	497.3	24.68	21.154		
8,200.0	7,737.7	7,838.2	7,416.3	33.5	26.5	-53.97	238.6	1,203.1	570.2	544.9	25.36	22.487		
8,300.0	7,740.0	7,840.5	7,397.8	34.0	26.5	-50.90	267.2	1,199.5	615.3	587.9	27.34	22.507		
8,400.0	7,740.0	7,840.5	7,373.4	34.6	26.5	-49.26	300.0	1,194.7	665.7	636.8	28.94	23.007		
8,500.0	7,740.0	7,840.5	7,357.7	35.3	26.5	-48.27	318.7	1,191.7	722.5	691.3	31.24	23.127		
8,600.0	7,740.0	7,840.5	7,323.5	36.1	26.5	-46.25	354.6	1,185.1	784.4	752.3	32.03	24.488		
8,700.0	7,740.0	7,840.5	7,305.6	36.9	26.5	-45.27	371.0	1,181.6	851.1	817.2	33.86	25.138		
8,800.0	7,740.0	7,840.5	7,286.4	37.8	26.5	-44.26	387.3	1,177.9	921.9	886.5	35.36	26.072		
8,900.0	7,740.0	7,840.5	7,267.3	38.7	26.5	-43.32	402.0	1,174.2	996.1	959.4	36.67	27.160		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-89.59	0.4	-52.3	52.3					
100.0	100.0	100.0	100.0	0.2	0.2	-89.59	0.4	-52.3	52.3	52.0	0.30	172.344		
109.4	109.4	109.4	109.4	0.2	0.2	-89.59	0.4	-52.3	52.3	52.0	0.34	155.485		
200.0	200.0	200.0	200.0	0.3	0.3	-88.88	1.0	-52.3	52.3	51.7	0.65	80.102		
300.0	300.0	299.9	299.7	0.5	0.5	176.75	6.2	-52.3	52.9	51.9	1.02	51.770		
400.0	400.0	400.5	400.1	0.7	0.7	-175.65	13.2	-51.1	54.8	53.4	1.40	39.039		
500.0	499.9	501.1	500.4	0.9	0.9	-168.32	20.3	-48.2	57.6	55.9	1.79	32.154		
600.0	599.8	601.8	600.7	1.1	1.2	-161.47	27.5	-43.5	61.5	59.3	2.19	28.035		
700.0	699.5	702.3	700.8	1.3	1.4	-155.22	34.7	-37.0	66.3	63.6	2.61	25.387		
800.0	799.2	802.9	800.8	1.5	1.7	-149.62	41.9	-28.8	71.9	68.8	3.05	23.576		
900.0	898.6	903.4	900.5	1.7	1.9	-144.66	49.2	-18.8	78.3	74.8	3.52	22.255		
1,000.0	997.9	1,003.9	1,000.1	2.0	2.2	-140.30	56.5	-7.1	85.4	81.4	4.02	21.230		
1,100.0	1,096.9	1,104.4	1,099.4	2.3	2.5	-136.47	63.9	6.4	93.2	88.7	4.57	20.386		
1,200.0	1,195.7	1,204.8	1,198.4	2.6	2.8	-133.11	71.3	21.6	101.6	96.5	5.17	19.658		
1,300.0	1,294.1	1,305.2	1,297.1	2.9	3.2	-130.15	78.7	38.5	110.6	104.8	5.82	19.006		
1,400.0	1,392.3	1,405.6	1,395.4	3.3	3.6	-127.54	86.1	57.2	120.1	113.5	6.52	18.409		
1,500.0	1,490.1	1,505.9	1,493.3	3.7	4.0	-125.23	93.6	77.6	130.0	122.7	7.28	17.854		
1,600.0	1,587.5	1,606.2	1,590.9	4.1	4.4	-123.17	101.1	99.6	140.4	132.3	8.10	17.336		
1,700.0	1,684.6	1,705.7	1,687.4	4.5	4.8	-121.54	108.5	122.7	151.4	142.5	8.95	16.918		
1,800.0	1,781.2	1,805.0	1,783.7	5.0	5.3	-118.77	116.0	145.7	163.1	153.3	9.82	16.610		
1,900.0	1,877.8	1,904.5	1,880.1	5.5	5.7	-114.54	123.4	168.7	173.5	162.8	10.71	16.208		
2,000.0	1,974.4	2,004.1	1,976.7	6.0	6.2	-111.33	130.9	191.8	182.5	170.8	11.61	15.719		
2,100.0	2,071.3	2,103.7	2,073.4	6.4	6.6	-110.98	138.3	214.9	190.4	177.9	12.49	15.242		
2,200.0	2,168.6	2,203.4	2,170.1	6.8	7.1	-110.23	145.8	238.0	197.9	184.5	13.38	14.785		
2,300.0	2,265.9	2,303.1	2,266.8	7.3	7.5	-109.44	153.2	261.1	205.3	191.0	14.28	14.378		
2,400.0	2,363.2	2,402.8	2,363.5	7.7	8.0	-108.71	160.7	284.3	212.7	197.5	15.18	14.018		
2,500.0	2,460.5	2,502.5	2,460.1	8.2	8.5	-108.03	168.2	307.4	220.2	204.1	16.07	13.699		
2,600.0	2,557.9	2,602.2	2,556.8	8.6	8.9	-107.39	175.6	330.5	227.7	210.7	16.97	13.414		
2,700.0	2,655.2	2,701.8	2,653.5	9.0	9.4	-106.79	183.1	353.6	235.2	217.4	17.88	13.159		
2,800.0	2,752.5	2,801.5	2,750.2	9.5	9.8	-106.23	190.6	376.7	242.8	224.0	18.78	12.929		
2,900.0	2,849.8	2,901.2	2,846.9	9.9	10.3	-105.71	198.0	399.8	250.4	230.7	19.68	12.720		
3,000.0	2,947.1	3,000.9	2,943.6	10.4	10.8	-105.21	205.5	422.9	258.0	237.4	20.59	12.531		
3,100.0	3,044.4	3,100.6	3,040.2	10.8	11.2	-104.75	212.9	446.0	265.6	244.1	21.49	12.358		
3,200.0	3,141.7	3,200.3	3,136.9	11.2	11.7	-104.31	220.4	469.1	273.2	250.8	22.39	12.200		
3,300.0	3,239.1	3,300.0	3,233.6	11.7	12.2	-103.89	227.9	492.2	280.8	257.5	23.30	12.055		
3,400.0	3,336.4	3,399.7	3,330.3	12.1	12.6	-103.49	235.3	515.3	288.5	264.3	24.20	11.921		
3,500.0	3,433.7	3,499.3	3,427.0	12.6	13.1	-103.12	242.8	538.4	296.2	271.1	25.11	11.797		
3,600.0	3,531.0	3,599.0	3,523.7	13.0	13.6	-102.77	250.3	561.5	303.9	277.8	26.01	11.682		
3,700.0	3,628.3	3,698.7	3,620.4	13.5	14.0	-102.43	257.7	584.6	311.6	284.6	26.91	11.576		
3,800.0	3,725.6	3,798.4	3,717.0	13.9	14.5	-102.11	265.2	607.8	319.3	291.4	27.82	11.477		
3,900.0	3,822.9	3,898.1	3,813.7	14.4	15.0	-101.80	272.6	630.9	327.0	298.3	28.72	11.384		
4,000.0	3,920.2	3,997.8	3,910.4	14.8	15.4	-101.51	280.1	654.0	334.7	305.1	29.63	11.298		
4,100.0	4,017.6	4,097.5	4,007.1	15.3	15.9	-101.23	287.6	677.1	342.4	311.9	30.53	11.217		
4,200.0	4,114.9	4,197.2	4,103.8	15.7	16.3	-100.96	295.0	700.2	350.2	318.7	31.43	11.141		
4,300.0	4,212.2	4,296.8	4,200.5	16.1	16.8	-100.71	302.5	723.3	357.9	325.6	32.33	11.069		
4,400.0	4,309.5	4,396.5	4,297.1	16.6	17.3	-100.46	310.0	746.4	365.7	332.4	33.24	11.002		
4,500.0	4,406.8	4,496.2	4,393.8	17.0	17.7	-100.23	317.4	769.5	373.4	339.3	34.14	10.938		
4,600.0	4,504.1	4,595.9	4,490.5	17.5	18.2	-100.00	324.9	792.6	381.2	346.1	35.04	10.878		
4,700.0	4,601.4	4,695.6	4,587.2	17.9	18.7	-99.79	332.3	815.7	389.0	353.0	35.94	10.821		
4,800.0	4,698.8	4,795.3	4,683.9	18.4	19.1	-99.58	339.8	838.8	396.7	359.9	36.85	10.767		
4,900.0	4,796.1	4,895.0	4,780.6	18.8	19.6	-99.38	347.3	861.9	404.5	366.8	37.75	10.716		
5,000.0	4,893.4	4,994.7	4,877.2	19.3	20.1	-99.19	354.7	885.0	412.3	373.7	38.65	10.668		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills) - Woolley-Sosa 2G-7H-E168 - HZ - Plan #3											Offset Site Error: 0.0 ft		
Survey Program: 0-Geolink MWD											Offset Well Error: 0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,100.0	4,990.7	5,094.3	4,973.9	19.7	20.5	-99.01	362.2	908.2	420.1	380.5	39.55	10.622	
5,200.0	5,088.0	5,194.0	5,070.6	20.2	21.0	-98.83	369.7	931.3	427.9	387.4	40.45	10.578	
5,300.0	5,185.3	5,293.7	5,167.3	20.6	21.5	-98.66	377.1	954.4	435.7	394.3	41.35	10.536	
5,400.0	5,282.6	5,393.4	5,264.0	21.1	22.0	-98.49	384.6	977.5	443.5	401.2	42.25	10.496	
5,500.0	5,379.9	5,493.1	5,360.7	21.5	22.4	-98.33	392.0	1,000.6	451.3	408.1	43.15	10.458	
5,600.0	5,477.3	5,592.8	5,457.4	21.9	22.9	-98.18	399.5	1,023.7	459.1	415.1	44.05	10.421	
5,700.0	5,574.6	5,692.5	5,554.0	22.4	23.4	-98.03	407.0	1,046.8	466.9	422.0	44.95	10.387	
5,800.0	5,671.9	5,792.1	5,650.7	22.8	23.8	-97.88	414.4	1,069.9	474.7	428.9	45.85	10.353	
5,900.0	5,769.2	5,891.8	5,747.4	23.3	24.3	-97.74	421.9	1,093.0	482.6	435.8	46.75	10.321	
6,000.0	5,866.5	5,991.5	5,844.1	23.7	24.8	-97.61	429.4	1,116.1	490.4	442.7	47.65	10.290	
6,100.0	5,963.8	6,091.2	5,940.8	24.2	25.2	-97.48	436.8	1,139.2	498.2	449.6	48.55	10.261	
6,200.0	6,061.1	6,190.9	6,037.5	24.6	25.7	-97.35	444.3	1,162.3	506.0	456.6	49.45	10.233	
6,300.0	6,158.5	6,290.6	6,134.1	25.1	26.2	-97.23	451.7	1,185.4	513.9	463.5	50.35	10.205	
6,400.0	6,255.8	6,390.3	6,230.8	25.5	26.6	-97.11	459.2	1,208.6	521.7	470.4	51.25	10.179	
6,500.0	6,353.1	6,490.0	6,327.5	26.0	27.1	-96.99	466.7	1,231.7	529.5	477.4	52.15	10.154	
6,600.0	6,450.4	6,589.6	6,424.2	26.4	27.6	-96.88	474.1	1,254.8	537.4	484.3	53.05	10.130	
6,700.0	6,547.7	6,689.3	6,520.9	26.9	28.0	-96.77	481.6	1,277.9	545.2	491.2	53.95	10.106	
6,800.0	6,645.0	6,789.0	6,617.6	27.3	28.5	-96.67	489.1	1,301.0	553.0	498.2	54.85	10.083	
6,900.0	6,742.3	6,888.7	6,714.3	27.8	29.0	-96.56	496.5	1,324.1	560.9	505.1	55.74	10.062	
7,000.0	6,839.7	6,988.4	6,810.9	28.2	29.4	-96.46	504.0	1,347.2	568.7	512.1	56.64	10.040	
7,100.0	6,937.0	7,088.1	6,907.6	28.7	29.9	-96.37	511.4	1,370.3	576.6	519.0	57.54	10.020	
7,200.0	7,034.3	7,187.8	7,004.3	29.1	30.4	-96.27	518.9	1,393.4	584.4	526.0	58.44	10.000	
7,300.0	7,131.6	7,287.5	7,101.0	29.5	30.8	-96.18	526.4	1,416.5	592.2	532.9	59.34	9.981	
7,400.0	7,228.9	7,389.8	7,240.0	30.0	32.5	-159.58	-60.0	1,569.2	515.6	499.1	16.51	31.230	
7,500.0	7,324.6	7,487.2	7,240.0	30.4	32.5	-163.11	-42.9	1,569.2	417.8	401.2	16.62	25.134	
7,600.0	7,416.1	7,597.5	7,235.3	30.8	32.4	-178.84	32.1	1,568.1	322.7	304.3	18.37	17.563	
7,700.0	7,500.5	7,684.8	7,224.2	31.2	32.3	-170.28	93.7	1,565.5	229.9	207.9	22.04	10.433	
7,800.0	7,575.1	7,767.4	7,208.3	31.6	32.3	-156.75	148.6	1,561.7	141.7	115.1	26.64	5.321	
7,900.0	7,637.9	7,822.6	7,268.2	32.0	32.3	-129.44	199.4	1,556.9	66.9	35.6	31.28	2.137	
7,951.4	7,664.9	7,995.0	7,276.3	32.2	32.3	-105.06	224.1	1,554.0	50.4	21.4	28.98	1.738 CC, ES, SF	
8,000.0	7,686.8	7,969.2	7,264.1	32.5	32.2	-79.86	246.8	1,551.1	64.7	37.4	27.26	2.372	
8,100.0	7,720.4	7,916.5	7,236.3	32.9	32.2	-47.00	290.9	1,544.5	130.5	97.4	33.13	3.941	
8,200.0	7,737.7	7,864.4	7,205.0	33.5	32.2	-33.55	331.9	1,537.0	201.5	163.5	37.96	5.307	
8,300.0	7,740.0	7,813.6	7,212.0	34.0	32.2	-28.38	368.9	1,528.9	270.0	228.1	41.94	6.438	
8,400.0	7,740.0	7,769.7	7,239.5	34.6	32.1	-26.19	398.2	1,521.3	343.3	298.2	45.11	7.610	
8,500.0	7,740.0	7,732.7	7,211.1	35.3	32.1	-24.70	421.0	1,514.5	421.4	373.8	47.59	8.854	
8,600.0	7,740.0	7,700.0	7,248.9	36.1	32.1	-23.60	439.5	1,508.3	503.3	453.8	49.47	10.173	
8,700.0	7,740.0	7,674.2	7,243.5	36.9	32.0	-22.85	453.0	1,503.2	588.0	536.9	51.13	11.500	
8,800.0	7,740.0	7,650.0	7,242.9	37.8	32.0	-22.22	464.8	1,498.2	675.1	622.7	52.35	12.895	
8,900.0	7,740.0	7,630.9	7,226.3	38.7	31.9	-21.77	473.4	1,494.3	764.0	710.5	53.45	14.292	
9,000.0	7,740.0	7,600.0	7,299.0	39.7	31.9	-21.12	486.2	1,487.7	854.6	800.8	53.79	15.887	
9,100.0	7,740.0	7,600.0	7,299.0	40.8	31.9	-21.12	486.2	1,487.7	946.0	890.9	55.14	17.157	
9,200.0	7,740.0	7,600.0	7,299.0	41.9	31.9	-21.12	486.2	1,487.7	1,038.9	982.8	56.18	18.492	

# Cathedral Energy Services

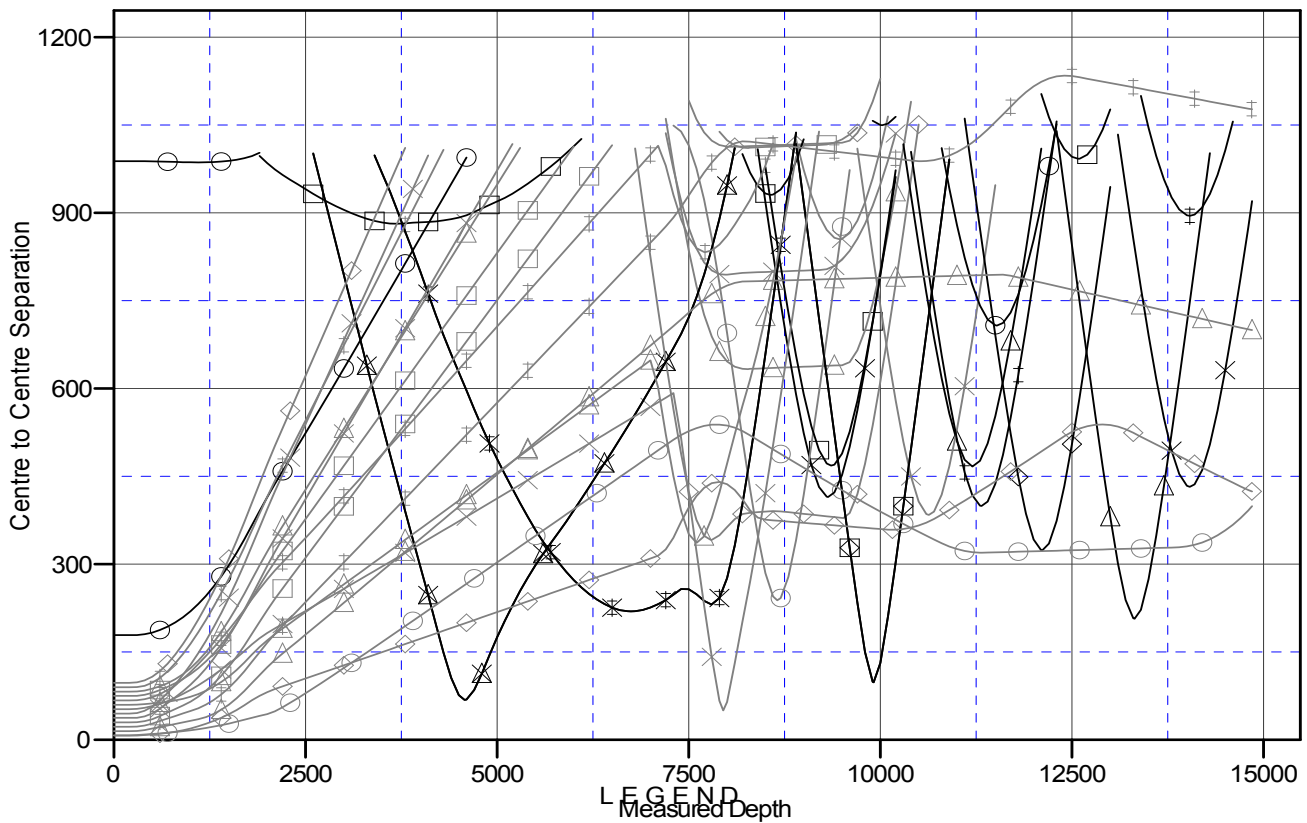
## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Becky 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa/Becky/Morgan Hills)	<b>MD Reference:</b>	KB @ 5007.0ft (Unassigned)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Becky 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	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 2G-7H-E168  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 0.29°

### Ladder Plot



8, Hz, Plan#2 V0	BEARDEN 2-8-6 (EXISTING), ENCANAL WELL, SURVEYS V0	Woolley-Becky 2A-7H-E168, Hz, Plan#
8, Hz, Plan#2 V0	BECKY 2-6 (EXISTING), NOBLE WELL, NO SURVEYS V0	Woolley-Becky 2B-7H-E168, Hz, Plan#
8, Hz, Plan#2 V0	BECKY 7-6 (EXISTING), NOBLE WELL, NO SURVEYS V0	Woolley-Becky 2C-7H-E168, Hz, Plan#
NG), ENCANAL WELL, NO SURVEYS V0	BULTHAUP 21-6 (EXISTING), KERR-MCGEE WELL, SURVEYS V0	Woolley-Becky 2D-7H-E168, Hz, Plan#
NG), ENCANAL WELL, SURVEYS V0	BULTHAUP 23-6 (EXISTING), KERR-MCGEE WELL, SURVEYS V0	Woolley-Becky 2E-7H-E168, Hz, Plan#
ING), ENCANAL WELL, SURVEYS V0	Morgan Hills 1A-7H-A168, Hz, Plan#2 V0	Woolley-Becky 2F-7H-E168, Hz, Plan#
NG), ENCANAL WELL, PLAN ONLY V0	Morgan Hills 1B-7H-A168, Hz, Plan#2 V0	Woolley-Becky 2H-7H-E168, Hz, Plan#
ING), ENCANAL WELL, SURVEYS V0	Thomas 7-12 (Existing), Existing, NO SURVEYS V0	Woolley-Sosa 2A-7H-E168, Hz, Plan#
ING), ENCANAL WELL, PLAN ONLY V0	WOOLLEY 12-7 (EXISTING), ENCANAL WELL, NO SURVEYS V0	Woolley-Sosa 2B-7H-E168, Hz, Plan#
) Existing, Existing V0	WOOLLEY 21-7 (EXISTING), ENCANAL WELL, GYRO V0	Woolley-Sosa 2C-7H-E168, Hz, Plan#
:1 V0	WOOLLEY 22-7 (EXISTING), ENCANAL WELL, SURVEYS V0	Woolley-Sosa 2D-7H-E168, Hz, Plan#

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