

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>North Reference:</b>	True
<b>Well:</b>	Regnier 1L-19H-B268	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

<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		S19-T2N-R68W (Rasmussen/Regnier)			
Site Position:		Northing:	1,285,957.96 ft	Latitude:	40.117468
From:	Lat/Long	Easting:	3,125,548.08 ft	Longitude:	-105.051107
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Regnier 1L-19H-B268					
Well Position	+N/-S	0.0 ft	Northing:	1,290,975.15 ft	Latitude:	40.131209
	+E/-W	0.0 ft	Easting:	3,127,813.32 ft	Longitude:	-105.042915
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,965.0 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	10/2/2014	8.55	66.67	52,612

<b>Design</b>	Plan #2			
<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	180.00

<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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
907.9	14.16	87.77	900.7	3.4	86.9	2.00	2.00	0.00	87.77	
6,825.8	14.16	87.77	6,638.9	59.8	1,533.3	0.00	0.00	0.00	0.00	
7,957.7	90.00	180.00	7,340.0	-656.3	1,710.0	8.00	6.70	8.15	92.17	
9,957.7	90.00	180.00	7,340.0	-2,656.3	1,710.0	0.00	0.00	0.00	0.00	Regnier 1L TGT
11,107.7	90.00	180.00	7,340.0	-3,806.3	1,710.0	0.00	0.00	0.00	0.00	
11,201.8	90.00	180.94	7,340.0	-3,900.5	1,709.3	1.00	0.00	1.00	90.00	
12,065.8	90.00	180.94	7,340.0	-4,764.3	1,695.1	0.00	0.00	0.00	0.00	Regnier 1L PBHL

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<b>Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>North Reference:</b>	True
<b>Well:</b>	Regnier 1L-19H-B268	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	Start Build 2.00
250.0	1.00	87.77	250.0	0.0	0.4	0.0	2.00	2.00	Fox Hills - BASE
300.0	2.00	87.77	300.0	0.1	1.7	-0.1	2.00	2.00	
400.0	4.00	87.77	399.8	0.3	7.0	-0.3	2.00	2.00	
500.0	6.00	87.77	499.5	0.6	15.7	-0.6	2.00	2.00	
600.0	8.00	87.77	598.7	1.1	27.9	-1.1	2.00	2.00	
700.0	10.00	87.77	697.5	1.7	43.5	-1.7	2.00	2.00	
800.0	12.00	87.77	795.6	2.4	62.6	-2.4	2.00	2.00	
900.0	14.00	87.77	893.1	3.3	85.0	-3.3	2.00	2.00	
907.9	14.16	87.77	900.7	3.4	86.9	-3.4	2.00	2.00	Start 5918.0 hold at 907.9 MD
1,000.0	14.16	87.77	990.0	4.3	109.5	-4.3	0.00	0.00	
1,100.0	14.16	87.77	1,087.0	5.2	133.9	-5.2	0.00	0.00	
1,200.0	14.16	87.77	1,183.9	6.2	158.3	-6.2	0.00	0.00	
1,300.0	14.16	87.77	1,280.9	7.1	182.8	-7.1	0.00	0.00	
1,400.0	14.16	87.77	1,377.9	8.1	207.2	-8.1	0.00	0.00	
1,500.0	14.16	87.77	1,474.8	9.0	231.7	-9.0	0.00	0.00	
1,600.0	14.16	87.77	1,571.8	10.0	256.1	-10.0	0.00	0.00	
1,700.0	14.16	87.77	1,668.8	10.9	280.5	-10.9	0.00	0.00	
1,800.0	14.16	87.77	1,765.7	11.9	305.0	-11.9	0.00	0.00	
1,900.0	14.16	87.77	1,862.7	12.9	329.4	-12.9	0.00	0.00	
2,000.0	14.16	87.77	1,959.6	13.8	353.9	-13.8	0.00	0.00	
2,100.0	14.16	87.77	2,056.6	14.8	378.3	-14.8	0.00	0.00	
2,200.0	14.16	87.77	2,153.6	15.7	402.7	-15.7	0.00	0.00	
2,300.0	14.16	87.77	2,250.5	16.7	427.2	-16.7	0.00	0.00	
2,400.0	14.16	87.77	2,347.5	17.6	451.6	-17.6	0.00	0.00	
2,500.0	14.16	87.77	2,444.5	18.6	476.1	-18.6	0.00	0.00	
2,600.0	14.16	87.77	2,541.4	19.5	500.5	-19.5	0.00	0.00	
2,700.0	14.16	87.77	2,638.4	20.5	525.0	-20.5	0.00	0.00	
2,800.0	14.16	87.77	2,735.3	21.4	549.4	-21.4	0.00	0.00	
2,900.0	14.16	87.77	2,832.3	22.4	573.8	-22.4	0.00	0.00	
3,000.0	14.16	87.77	2,929.3	23.3	598.3	-23.3	0.00	0.00	
3,100.0	14.16	87.77	3,026.2	24.3	622.7	-24.3	0.00	0.00	
3,200.0	14.16	87.77	3,123.2	25.2	647.2	-25.2	0.00	0.00	
3,300.0	14.16	87.77	3,220.2	26.2	671.6	-26.2	0.00	0.00	
3,400.0	14.16	87.77	3,317.1	27.2	696.0	-27.2	0.00	0.00	
3,500.0	14.16	87.77	3,414.1	28.1	720.5	-28.1	0.00	0.00	
3,600.0	14.16	87.77	3,511.0	29.1	744.9	-29.1	0.00	0.00	
3,700.0	14.16	87.77	3,608.0	30.0	769.4	-30.0	0.00	0.00	
3,800.0	14.16	87.77	3,705.0	31.0	793.8	-31.0	0.00	0.00	
3,900.0	14.16	87.77	3,801.9	31.9	818.2	-31.9	0.00	0.00	
4,000.0	14.16	87.77	3,898.9	32.9	842.7	-32.9	0.00	0.00	
4,100.0	14.16	87.77	3,995.9	33.8	867.1	-33.8	0.00	0.00	
4,200.0	14.16	87.77	4,092.8	34.8	891.6	-34.8	0.00	0.00	
4,300.0	14.16	87.77	4,189.8	35.7	916.0	-35.7	0.00	0.00	
4,385.8	14.16	87.77	4,273.0	36.6	937.0	-36.6	0.00	0.00	Sussex
4,400.0	14.16	87.77	4,286.7	36.7	940.4	-36.7	0.00	0.00	
4,500.0	14.16	87.77	4,383.7	37.6	964.9	-37.6	0.00	0.00	
4,600.0	14.16	87.77	4,480.7	38.6	989.3	-38.6	0.00	0.00	
4,700.0	14.16	87.77	4,577.6	39.6	1,013.8	-39.6	0.00	0.00	
4,800.0	14.16	87.77	4,674.6	40.5	1,038.2	-40.5	0.00	0.00	

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<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>North Reference:</b>	True
<b>Well:</b>	Regnier 1L-19H-B268	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	14.16	87.77	4,771.6	41.5	1,062.6	-41.5	0.00	0.00	
4,945.8	14.16	87.77	4,816.0	41.9	1,073.8	-41.9	0.00	0.00	Shannon
5,000.0	14.16	87.77	4,868.5	42.4	1,087.1	-42.4	0.00	0.00	
5,100.0	14.16	87.77	4,965.5	43.4	1,111.5	-43.4	0.00	0.00	
5,200.0	14.16	87.77	5,062.5	44.3	1,136.0	-44.3	0.00	0.00	
5,300.0	14.16	87.77	5,159.4	45.3	1,160.4	-45.3	0.00	0.00	
5,400.0	14.16	87.77	5,256.4	46.2	1,184.8	-46.2	0.00	0.00	
5,500.0	14.16	87.77	5,353.3	47.2	1,209.3	-47.2	0.00	0.00	
5,600.0	14.16	87.77	5,450.3	48.1	1,233.7	-48.1	0.00	0.00	
5,700.0	14.16	87.77	5,547.3	49.1	1,258.2	-49.1	0.00	0.00	
5,800.0	14.16	87.77	5,644.2	50.0	1,282.6	-50.0	0.00	0.00	
5,900.0	14.16	87.77	5,741.2	51.0	1,307.0	-51.0	0.00	0.00	
6,000.0	14.16	87.77	5,838.2	51.9	1,331.5	-51.9	0.00	0.00	
6,100.0	14.16	87.77	5,935.1	52.9	1,355.9	-52.9	0.00	0.00	
6,200.0	14.16	87.77	6,032.1	53.9	1,380.4	-53.9	0.00	0.00	
6,300.0	14.16	87.77	6,129.0	54.8	1,404.8	-54.8	0.00	0.00	
6,400.0	14.16	87.77	6,226.0	55.8	1,429.3	-55.8	0.00	0.00	
6,500.0	14.16	87.77	6,323.0	56.7	1,453.7	-56.7	0.00	0.00	
6,600.0	14.16	87.77	6,419.9	57.7	1,478.1	-57.7	0.00	0.00	
6,700.0	14.16	87.77	6,516.9	58.6	1,502.6	-58.6	0.00	0.00	
6,798.1	14.16	87.77	6,612.0	59.6	1,526.5	-59.6	0.00	0.00	Teepee Buttes (*if present)
6,800.0	14.16	87.77	6,613.9	59.6	1,527.0	-59.6	0.00	0.00	
6,825.8	14.16	87.77	6,638.9	59.8	1,533.3	-59.8	0.00	0.00	Start DLS 8.00 TFO 92.17
6,900.0	15.12	111.10	6,710.7	56.7	1,551.4	-56.7	8.00	1.30	
7,000.0	19.38	134.24	6,806.3	40.4	1,575.5	-40.4	8.00	4.26	
7,100.0	25.46	148.03	6,898.8	10.5	1,598.8	-10.5	8.00	6.08	
7,200.0	32.34	156.54	6,986.3	-32.3	1,620.9	32.3	8.00	6.88	
7,300.0	39.61	162.26	7,067.2	-87.3	1,641.3	87.3	8.00	7.27	
7,400.0	47.08	166.44	7,139.9	-153.3	1,659.6	153.3	8.00	7.47	
7,441.0	50.18	167.87	7,167.0	-183.3	1,666.4	183.3	8.00	7.56	Sharon Springs
7,500.0	54.67	169.71	7,203.0	-229.2	1,675.5	229.2	8.00	7.61	
7,600.0	62.33	172.41	7,255.2	-313.4	1,688.7	313.4	8.00	7.66	
7,610.5	63.14	172.67	7,260.0	-322.6	1,689.9	322.6	8.00	7.69	Niobrara
7,700.0	70.04	174.75	7,295.5	-404.2	1,698.8	404.2	8.00	7.71	
7,800.0	77.78	176.87	7,323.2	-499.9	1,705.8	499.9	8.00	7.74	
7,836.0	80.56	177.60	7,330.0	-535.2	1,707.5	535.2	8.00	7.75	B Chalk
7,900.0	85.53	178.87	7,337.8	-598.7	1,709.5	598.7	8.00	7.75	
7,957.7	90.00	180.00	7,340.0	-656.3	1,710.0	656.3	8.00	7.76	Start 2000.0 hold at 7957.7 MD
8,000.0	90.00	180.00	7,340.0	-698.7	1,710.0	698.7	0.00	0.00	
8,100.0	90.00	180.00	7,340.0	-798.7	1,710.0	798.7	0.00	0.00	
8,200.0	90.00	180.00	7,340.0	-898.7	1,710.0	898.7	0.00	0.00	
8,300.0	90.00	180.00	7,340.0	-998.7	1,710.0	998.7	0.00	0.00	
8,400.0	90.00	180.00	7,340.0	-1,098.7	1,710.0	1,098.7	0.00	0.00	
8,500.0	90.00	180.00	7,340.0	-1,198.7	1,710.0	1,198.7	0.00	0.00	
8,600.0	90.00	180.00	7,340.0	-1,298.7	1,710.0	1,298.7	0.00	0.00	
8,700.0	90.00	180.00	7,340.0	-1,398.7	1,710.0	1,398.7	0.00	0.00	
8,800.0	90.00	180.00	7,340.0	-1,498.7	1,710.0	1,498.7	0.00	0.00	
8,900.0	90.00	180.00	7,340.0	-1,598.7	1,710.0	1,598.7	0.00	0.00	
9,000.0	90.00	180.00	7,340.0	-1,698.7	1,710.0	1,698.7	0.00	0.00	
9,100.0	90.00	180.00	7,340.0	-1,798.7	1,710.0	1,798.7	0.00	0.00	
9,200.0	90.00	180.00	7,340.0	-1,898.7	1,710.0	1,898.7	0.00	0.00	
9,300.0	90.00	180.00	7,340.0	-1,998.7	1,710.0	1,998.7	0.00	0.00	

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<b>Well:</b>	Regnier 1L-19H-B268	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,400.0	90.00	180.00	7,340.0	-2,098.7	1,710.0	2,098.7	0.00	0.00	
9,500.0	90.00	180.00	7,340.0	-2,198.7	1,710.0	2,198.7	0.00	0.00	
9,600.0	90.00	180.00	7,340.0	-2,298.7	1,710.0	2,298.7	0.00	0.00	
9,700.0	90.00	180.00	7,340.0	-2,398.7	1,710.0	2,398.7	0.00	0.00	
9,800.0	90.00	180.00	7,340.0	-2,498.7	1,710.0	2,498.7	0.00	0.00	
9,900.0	90.00	180.00	7,340.0	-2,598.7	1,710.0	2,598.7	0.00	0.00	
9,957.7	90.00	180.00	7,340.0	-2,656.3	1,710.0	2,656.3	0.00	0.00	Start 1150.0 hold at 9957.7 MD
10,000.0	90.00	180.00	7,340.0	-2,698.7	1,710.0	2,698.7	0.00	0.00	
10,100.0	90.00	180.00	7,340.0	-2,798.7	1,710.0	2,798.7	0.00	0.00	
10,200.0	90.00	180.00	7,340.0	-2,898.7	1,710.0	2,898.7	0.00	0.00	
10,300.0	90.00	180.00	7,340.0	-2,998.7	1,710.0	2,998.7	0.00	0.00	
10,400.0	90.00	180.00	7,340.0	-3,098.7	1,710.0	3,098.7	0.00	0.00	
10,500.0	90.00	180.00	7,340.0	-3,198.7	1,710.0	3,198.7	0.00	0.00	
10,600.0	90.00	180.00	7,340.0	-3,298.7	1,710.0	3,298.7	0.00	0.00	
10,700.0	90.00	180.00	7,340.0	-3,398.7	1,710.0	3,398.7	0.00	0.00	
10,800.0	90.00	180.00	7,340.0	-3,498.7	1,710.0	3,498.7	0.00	0.00	
10,900.0	90.00	180.00	7,340.0	-3,598.7	1,710.0	3,598.7	0.00	0.00	
11,000.0	90.00	180.00	7,340.0	-3,698.7	1,710.0	3,698.7	0.00	0.00	
11,100.0	90.00	180.00	7,340.0	-3,798.7	1,710.0	3,798.7	0.00	0.00	
11,107.7	90.00	180.00	7,340.0	-3,806.3	1,710.0	3,806.3	0.00	0.00	Start DLS 1.00 TFO 90.00
11,200.0	90.00	180.92	7,340.0	-3,898.7	1,709.3	3,898.7	1.00	0.00	
11,201.8	90.00	180.94	7,340.0	-3,900.5	1,709.3	3,900.5	1.00	0.00	Start 864.0 hold at 11201.8 MD
11,300.0	90.00	180.94	7,340.0	-3,998.7	1,707.7	3,998.7	0.00	0.00	
11,400.0	90.00	180.94	7,340.0	-4,098.6	1,706.0	4,098.6	0.00	0.00	
11,500.0	90.00	180.94	7,340.0	-4,198.6	1,704.4	4,198.6	0.00	0.00	
11,600.0	90.00	180.94	7,340.0	-4,298.6	1,702.7	4,298.6	0.00	0.00	
11,700.0	90.00	180.94	7,340.0	-4,398.6	1,701.1	4,398.6	0.00	0.00	
11,800.0	90.00	180.94	7,340.0	-4,498.6	1,699.4	4,498.6	0.00	0.00	
11,900.0	90.00	180.94	7,340.0	-4,598.6	1,697.8	4,598.6	0.00	0.00	
12,000.0	90.00	180.94	7,340.0	-4,698.6	1,696.2	4,698.6	0.00	0.00	
12,065.8	90.00	180.94	7,340.0	-4,764.3	1,695.1	4,764.3	0.00	0.00	TD at 12065.8

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Regnier 1L PBHL - hit/miss target - Shape	0.00	0.30	7,340.0	-4,764.3	1,695.1	1,286,219.61	3,129,532.93	40.118130	-105.036854
Regnier 1L TGT - plan hits target center - Point	0.00	0.00	7,340.0	-2,656.3	1,710.0	1,288,327.66	3,129,537.04	40.123917	-105.036800

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>North Reference:</b>	True
<b>Well:</b>	Regnier 1L-19H-B268	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
250.0	250.0	Fox Hills - BASE			
4,385.8	4,273.0	Sussex			
4,945.8	4,816.0	Shannon			
6,798.1	6,612.0	Teepee Buttes (*if present)			
7,441.0	7,167.0	Sharon Springs			
7,610.5	7,260.0	Niobrara			
7,836.0	7,330.0	B Chalk			

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	Start Build 2.00
907.9	900.7	3.4	86.9	Start 5918.0 hold at 907.9 MD
6,825.8	6,638.9	59.8	1,533.3	Start DLS 8.00 TFO 92.17
7,957.7	7,340.0	-656.3	1,710.0	Start 2000.0 hold at 7957.7 MD
9,957.7	7,340.0	-2,656.3	1,710.0	Start 1150.0 hold at 9957.7 MD
11,107.7	7,340.0	-3,806.3	1,710.0	Start DLS 1.00 TFO 90.00
11,201.8	7,340.0	-3,900.5	1,709.3	Start 864.0 hold at 11201.8 MD
12,065.8	7,340.0	-4,764.3	1,695.1	TD at 12065.8

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

**DJ Wattenberg**

**S19-T2N-R68W (Rasmussen/Regnier)**

**Regnier 1L-19H-B268**

**Hz**

**Plan #2**

## **Anticollision Report**

**10 December, 2014**

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	12/10/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,065.8	Plan #2 (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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

### Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance		Separation Factor	Warning
			Between Centres (ft)	Between Ellipses (ft)		
S19-T2N-R68W (Rasmussen/Regnier)						
HANKINS 1 - ENCANA - NO SURVEYS						Out of range
KENYON 34-19 - ENCANA - ENCANA						Out of range
KENYON 4-8-19 - ENCANA - ENCANA						Out of range
KENYON 8-4-19 - ENCANA - SURVEYS	9,954.8	7,744.7	120.6	38.8	1.474	Level 3, CC
KENYON 8-4-19 - ENCANA - SURVEYS	9,957.7	7,744.8	120.7	38.8	1.474	Level 3, ES, SF
KENYON 8-6-19 - ENCANA - SURVEYS	11,236.5	7,506.1	95.3	9.4	1.109	Level 2, CC, ES, SF
KENYON 8-8-19 - ENCANA - SURVEYS	12,065.8	7,568.4	393.8	288.3	3.731	CC, ES, SF
LABER 44-24 - ENCANA - NO SURVEYS						Out of range
MABLE M ROSS 1 - AMOCO WELL - NO SURVEYS						Out of range
RASMUSSEN 0-4-19 - ENCANA - SURVEYS						Out of range
RASMUSSEN 0-6-19 - ENCANA - SURVEYS						Out of range
RASMUSSEN 19-11 - ENCANA - GYRO						Out of range
RASMUSSEN 19-12 - ENCANA - NO SURVEYS						Out of range
RASMUSSEN 19-14 - ENCANA - GYRO						Out of range
RASMUSSEN 2-8-19 - ENCANA WELL - SURVEYS						Out of range
Rasmussen 3A-19H-M268 - HZ - Plan #1						Out of range
Rasmussen 3B-19H-M268 - HZ - Plan #1						Out of range
Rasmussen 3C-19H-M268 - HZ - Plan #1						Out of range
Rasmussen 3D-19H-M268 - HZ - Plan #2						Out of range
Rasmussen 3E-19H-M268 - HZ - Plan #1						Out of range
Rasmussen 3F-19H-M268 - HZ - Plan #1						Out of range
Rasmussen 3G-19H-M268 - HZ - Plan #2						Out of range
Rasmussen 3H-19H-M268 - HZ - Plan #1						Out of range
Rasmussen 3I-19H-M268 - HZ - Plan #2						Out of range
Rasmussen 3J-19H-M268 - HZ - Plan #2						Out of range
Rasmussen 3K-19H-M268 - HZ - Plan #1						Out of range
Rasmussen 3L-19H-M268 - HZ - Plan #2						Out of range
RASMUSSEN 4-6-19 - ENCANA - SURVEYS						Out of range
RASMUSSEN H UNIT 1 - ENCANA - GYRO						Out of range
Regnier 1A-19H-B268 - Hz - Plan #2	200.0	200.0	110.0	109.3	168.480	CC, ES
Regnier 1A-19H-B268 - Hz - Plan #2	700.0	681.2	186.9	184.5	79.785	SF
Regnier 1B-19H-B268 - Hz - Plan #2	200.0	200.0	99.9	99.2	153.027	CC, ES
Regnier 1B-19H-B268 - Hz - Plan #2	700.0	687.7	162.5	160.2	68.980	SF
Regnier 1C-19H-B2689 - Hz - Plan #3	200.0	200.0	90.1	89.4	138.024	CC, ES
Regnier 1C-19H-B2689 - Hz - Plan #3	600.0	592.1	124.4	122.3	61.406	SF
Regnier 1D-19H-B2688 - Hz - Plan #2	200.0	200.0	80.0	79.4	122.593	CC, ES
Regnier 1D-19H-B2688 - Hz - Plan #2	700.0	697.0	124.2	121.9	52.290	SF
Regnier 1E-19H-B2687 - Hz - Plan #2	200.0	200.0	70.0	69.3	107.162	CC, ES
Regnier 1E-19H-B2687 - Hz - Plan #2	700.0	697.5	113.5	111.1	47.740	SF
Regnier 1F-19H-B2686 - Hz - Plan #2	200.0	200.0	59.9	59.2	91.731	CC, ES
Regnier 1F-19H-B2686 - Hz - Plan #2	600.0	598.7	87.8	85.7	43.076	SF
Regnier 1G-19H-B2685 - Hz - Plan #2	200.0	200.0	50.1	49.4	76.728	CC, ES
Regnier 1G-19H-B2685 - Hz - Plan #2	600.0	598.7	78.0	75.9	38.269	SF
Regnier 1H-19H-B2684 - Hz - Plan #2	200.0	200.0	40.0	39.4	61.296	CC, ES
Regnier 1H-19H-B2684 - Hz - Plan #2	12,065.8	12,104.2	928.1	761.3	5.565	SF
Regnier 1I-19H-B2683 - Hz - Plan #2	200.0	200.0	29.9	29.3	45.865	CC, ES
Regnier 1I-19H-B2683 - Hz - Plan #2	12,065.8	11,917.5	675.2	503.5	3.933	SF
Regnier 1J-19H-B2682 - Hz - Plan #2	200.0	200.0	19.9	19.2	30.434	CC, ES
Regnier 1J-19H-B2682 - Hz - Plan #2	12,065.8	12,049.4	469.8	301.5	2.792	SF
Regnier 1K-19H-B2681 - Hz - Plan #2	200.0	200.0	10.1	9.4	15.431	CC, ES
Regnier 1K-19H-B2681 - Hz - Plan #2	12,065.8	12,223.9	319.0	194.6	2.564	SF
REGNIER FARMS 2 - ENCANA - GYRO						Out of range
REGNIER FARMS 31-19 - ENCANA - GYRO	0.0	0.0	834.0			

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<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
Offset Well - Wellbore - Design						
S19-T2N-R68W (Rasmussen/Regnier)						
REGNIER FARMS 31-19 - ENCANA - GYRO	100.0	89.3	834.3	834.0	2,708.480	ES
REGNIER FARMS 31-19 - ENCANA - GYRO	1,500.0	1,457.4	994.1	987.5	151.426	SF
REGNIER FARMS 32-19 - ENCANA - GYRO						Out of range
REGNIER FARMS 33-19 - ENCANA - GYRO						Out of range
REGNIER FARMS 42-19 - ENCANA - GYRO	9,082.1	7,317.2	770.0	722.0	16.046	CC
REGNIER FARMS 42-19 - ENCANA - GYRO	9,100.0	7,317.1	770.2	721.9	15.953	ES
REGNIER FARMS 42-19 - ENCANA - GYRO	9,300.0	7,315.7	800.2	748.7	15.515	SF
REGNIER FARMS 43-19 - ENCANA - SURVEYS	10,570.0	7,580.4	635.8	561.8	8.592	CC, ES
REGNIER FARMS 43-19 - ENCANA - SURVEYS	10,700.0	7,580.0	649.0	572.7	8.513	SF
REGNIER FARMS B UNIT 1 - ENCANA - GYRO	3,360.8	3,279.2	941.1	921.4	47.931	CC
REGNIER FARMS B UNIT 1 - ENCANA - GYRO	3,500.0	3,422.0	941.1	920.6	45.876	ES
REGNIER FARMS B UNIT 1 - ENCANA - GYRO	4,600.0	4,490.2	992.1	965.7	37.627	SF
ROSS 0-2-19 - ENCANA - SURVEYS						Out of range
ROSS 11-19 - ENCANA - SURVEYS						Out of range
ROSS 12-19 - ENCANA - SURVEYS						Out of range
Ross 12-19 - ENCANA - SURVEYS						Out of range
ROSS 21-19 - ENCANA - GYRO						Out of range
ROSS 22-19 - ENCANA - NO SURVEYS						Out of range
ROSS 2-4-19 - ENCANA - SURVEYS						Out of range
ROSS 41-24 - ENCANA - NO SURVEYS						Out of range
ROSS 4-2-19 - ENCANA WELL - SURVEYS						Out of range
ROSS F 1 - ENCANA - GYRO						Out of range
STROMQUIST 43-24 - ENCANA - NO SURVEYS						Out of range

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - KENYON 8-4-19 - ENCANA - SURVEYS												Offset Site Error:	0.0 ft
Survey Program: 92-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)			
9,000.0	7,340.0	7,732.2	7,354.6	45.6	35.8	83.65	-2,653.3	1,589.5	962.3	896.9	65.37	14.722	
9,100.0	7,340.0	7,733.5	7,355.9	46.9	35.8	84.26	-2,653.3	1,589.5	863.2	796.1	67.08	12.868	
9,200.0	7,340.0	7,734.8	7,357.2	48.1	35.8	84.88	-2,653.3	1,589.5	764.3	695.5	68.80	11.110	
9,300.0	7,340.0	7,736.1	7,358.5	49.4	35.8	85.49	-2,653.4	1,589.5	665.8	595.2	70.52	9.441	
9,400.0	7,340.0	7,737.4	7,359.8	50.7	35.8	86.11	-2,653.4	1,589.5	567.7	495.5	72.25	7.858	
9,500.0	7,340.0	7,738.8	7,361.1	52.0	35.8	86.74	-2,653.4	1,589.5	470.5	396.5	73.97	6.360	
9,600.0	7,340.0	7,740.1	7,362.4	53.4	35.8	87.36	-2,653.4	1,589.5	374.7	299.0	75.70	4.950	
9,700.0	7,340.0	7,741.4	7,363.7	54.8	35.8	87.98	-2,653.4	1,589.4	281.9	204.5	77.43	3.641	
9,800.0	7,340.0	7,742.7	7,365.1	56.2	35.8	88.61	-2,653.5	1,589.4	196.2	117.1	79.15	2.479	
9,900.0	7,340.0	7,744.0	7,366.4	57.6	35.8	89.23	-2,653.5	1,589.4	132.5	51.6	80.87	1.638	
9,954.8	7,340.0	7,744.7	7,367.1	58.4	35.8	89.57	-2,653.5	1,589.4	120.6	38.8	81.82	1.474	Level 3, CC
9,957.7	7,340.0	7,744.8	7,367.1	58.4	35.8	89.59	-2,653.5	1,589.4	120.7	38.8	81.86	1.474	Level 3, ES, SF
10,000.0	7,340.0	7,745.3	7,367.7	59.0	35.8	89.86	-2,653.5	1,589.4	128.8	46.2	82.59	1.560	
10,100.0	7,340.0	7,746.7	7,369.0	60.5	35.8	90.48	-2,653.5	1,589.4	188.8	104.5	84.30	2.239	
10,200.0	7,340.0	7,748.0	7,370.3	62.0	35.8	91.11	-2,653.5	1,589.4	273.3	187.3	86.01	3.177	
10,300.0	7,340.0	7,749.3	7,371.7	63.4	35.8	91.74	-2,653.5	1,589.4	365.7	277.9	87.70	4.169	
10,400.0	7,340.0	7,750.6	7,373.0	64.9	35.8	92.37	-2,653.6	1,589.4	461.2	371.8	89.39	5.160	
10,500.0	7,340.0	7,752.0	7,374.3	66.5	35.8	92.99	-2,653.6	1,589.4	558.3	467.3	91.07	6.131	
10,600.0	7,340.0	7,753.3	7,375.6	68.0	35.8	93.62	-2,653.6	1,589.4	656.3	563.6	92.74	7.077	
10,700.0	7,340.0	7,754.6	7,377.0	69.5	35.8	94.25	-2,653.6	1,589.3	754.8	660.5	94.39	7.997	
10,800.0	7,340.0	7,755.9	7,378.3	71.1	35.8	94.88	-2,653.6	1,589.3	853.7	757.7	96.04	8.889	
10,900.0	7,340.0	7,757.3	7,379.6	72.6	35.8	95.50	-2,653.6	1,589.3	952.8	855.1	97.67	9.755	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - KENYON 8-6-19 - ENCANA - SURVEYS											Offset Site Error:		0.0 ft	
Survey Program: 91-Geolink MWD											Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
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		
10,300.0	7,340.0	7,484.9	7,350.3	63.4	22.0	79.70	-3,933.2	1,612.7	939.7	870.8	68.94	13.631		
10,400.0	7,340.0	7,487.0	7,352.4	64.9	22.0	80.91	-3,933.2	1,612.8	840.3	769.4	70.88	11.855		
10,500.0	7,340.0	7,489.2	7,354.6	66.5	22.0	82.14	-3,933.3	1,612.9	741.1	668.3	72.82	10.178		
10,600.0	7,340.0	7,491.4	7,356.8	68.0	22.0	83.41	-3,933.3	1,612.9	642.1	567.4	74.74	8.591		
10,700.0	7,340.0	7,493.6	7,359.0	69.5	22.0	84.70	-3,933.4	1,613.0	543.5	466.8	76.64	7.091		
10,800.0	7,340.0	7,495.9	7,361.3	71.1	22.0	86.03	-3,933.4	1,613.1	445.5	366.9	78.52	5.673		
10,900.0	7,340.0	7,498.2	7,363.6	72.6	22.0	87.38	-3,933.5	1,613.2	348.5	268.2	80.38	4.336		
11,000.0	7,340.0	7,500.5	7,365.9	74.2	22.0	88.76	-3,933.5	1,613.2	254.0	171.8	82.20	3.090		
11,107.7	7,340.0	7,503.1	7,368.5	75.9	22.0	90.27	-3,933.6	1,613.3	159.8	75.7	84.11	1.900		
11,201.8	7,340.0	7,505.3	7,370.7	77.4	22.0	91.63	-3,933.6	1,613.4	101.5	16.1	85.38	1.188 Level 2		
11,236.5	7,340.0	7,506.1	7,371.5	77.9	22.0	92.13	-3,933.6	1,613.4	95.3	9.4	85.97	1.109 Level 2, CC, ES, SF		
11,300.0	7,340.0	7,507.7	7,373.1	78.9	22.1	93.05	-3,933.7	1,613.5	114.5	27.5	87.03	1.316 Level 3		
11,400.0	7,340.0	7,510.1	7,375.5	80.5	22.1	94.51	-3,933.7	1,613.6	189.2	100.5	88.66	2.134		
11,500.0	7,340.0	7,512.6	7,377.9	82.1	22.1	95.97	-3,933.8	1,613.7	280.1	189.9	90.23	3.105		
11,600.0	7,340.0	7,515.0	7,380.4	83.7	22.1	97.42	-3,933.9	1,613.8	375.7	283.9	91.74	4.095		
11,700.0	7,340.0	7,517.4	7,382.8	85.3	22.1	98.86	-3,933.9	1,613.9	473.0	379.9	93.19	5.076		
11,800.0	7,340.0	7,519.8	7,385.2	86.9	22.1	100.29	-3,934.0	1,614.0	571.3	476.7	94.57	6.041		
11,900.0	7,340.0	7,522.3	7,387.6	88.5	22.1	101.72	-3,934.0	1,614.1	670.1	574.2	95.89	6.988		
12,000.0	7,340.0	7,524.7	7,390.1	90.2	22.1	103.13	-3,934.1	1,614.2	769.2	672.0	97.14	7.919		
12,065.8	7,340.0	7,526.3	7,391.7	91.2	22.1	104.06	-3,934.1	1,614.2	834.5	736.6	97.92	8.522		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - KENYON 8-8-19 - ENCANA - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 92-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
11,500.0	7,340.0	7,570.6	7,373.2	82.1	26.4	94.65	-5,151.8	1,624.6	956.5	860.9	95.62	10.003		
11,600.0	7,340.0	7,570.2	7,372.8	83.7	26.4	94.29	-5,151.8	1,624.6	856.7	759.4	97.38	8.798		
11,700.0	7,340.0	7,569.8	7,372.4	85.3	26.4	93.93	-5,151.8	1,624.5	757.1	657.9	99.14	7.636		
11,800.0	7,340.0	7,569.4	7,372.0	86.9	26.4	93.57	-5,151.8	1,624.5	657.5	556.6	100.90	6.516		
11,900.0	7,340.0	7,569.0	7,371.6	88.5	26.4	93.22	-5,151.8	1,624.5	558.0	455.4	102.66	5.436		
12,000.0	7,340.0	7,568.6	7,371.2	90.2	26.4	92.88	-5,151.8	1,624.5	458.9	354.4	104.41	4.395		
12,065.8	7,340.0	7,568.4	7,371.0	91.2	26.4	92.65	-5,151.8	1,624.5	393.8	288.3	105.57	3.731	CC, ES, SF	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1A-19H-B268 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.28	-4.4	-109.9	110.0					
100.0	100.0	100.0	100.0	0.2	0.2	-92.28	-4.4	-109.9	110.0	109.7	0.30	362.134		
200.0	200.0	200.0	200.0	0.3	0.3	-92.28	-4.4	-109.9	110.0	109.3	0.65	168.480 CC, ES		
300.0	300.0	296.2	296.2	0.5	0.5	179.98	-4.4	-111.5	113.4	112.4	0.99	113.993		
400.0	399.8	391.7	391.6	0.7	0.7	-179.97	-4.5	-116.3	123.6	122.3	1.33	92.660		
500.0	499.5	486.7	486.2	0.9	0.9	-179.90	-4.6	-124.2	140.6	138.9	1.67	84.137		
600.0	598.7	584.4	583.5	1.2	1.1	-179.84	-4.7	-133.4	162.0	160.0	2.01	80.659		
700.0	697.5	681.2	679.9	1.5	1.3	-179.79	-4.9	-142.5	186.9	184.5	2.34	79.785 SF		
800.0	795.6	777.2	775.4	1.9	1.6	-179.76	-5.0	-151.5	215.1	212.4	2.67	80.540		
907.9	900.7	879.5	877.3	2.4	1.8	-179.73	-5.2	-161.1	249.3	246.3	3.02	82.582		
1,000.0	990.0	966.3	963.7	2.8	2.0	-179.72	-5.3	-169.3	280.1	276.8	3.33	84.183		
1,100.0	1,087.0	1,060.5	1,057.5	3.2	2.2	-179.71	-5.5	-178.1	313.6	309.9	3.66	85.620		
1,200.0	1,183.9	1,154.8	1,151.3	3.7	2.5	-179.71	-5.6	-187.0	347.0	343.1	4.00	86.819		
1,300.0	1,280.9	1,249.0	1,245.1	4.1	2.7	-179.70	-5.8	-195.8	380.5	376.2	4.33	87.835		
1,400.0	1,377.9	1,343.2	1,339.0	4.6	2.9	-179.69	-5.9	-204.7	414.0	409.3	4.67	88.707		
1,500.0	1,474.8	1,437.5	1,432.8	5.1	3.1	-179.69	-6.0	-213.5	447.4	442.4	5.00	89.463		
1,600.0	1,571.8	1,531.7	1,526.6	5.5	3.3	-179.69	-6.2	-222.4	480.9	475.6	5.34	90.125		
1,700.0	1,668.8	1,625.9	1,620.4	6.0	3.6	-179.68	-6.3	-231.3	514.4	508.7	5.67	90.710		
1,800.0	1,765.7	1,720.2	1,714.2	6.5	3.8	-179.68	-6.5	-240.1	547.8	541.8	6.01	91.230		
1,900.0	1,862.7	1,814.4	1,808.0	6.9	4.0	-179.68	-6.6	-249.0	581.3	575.0	6.34	91.695		
2,000.0	1,959.6	1,908.6	1,901.9	7.4	4.3	-179.67	-6.8	-257.8	614.8	608.1	6.67	92.115		
2,100.0	2,056.6	2,002.9	1,995.7	7.9	4.5	-179.67	-6.9	-266.7	648.2	641.2	7.01	92.494		
2,200.0	2,153.6	2,097.1	2,089.5	8.4	4.7	-179.67	-7.0	-275.5	681.7	674.4	7.34	92.840		
2,300.0	2,250.5	2,191.3	2,183.3	8.8	4.9	-179.67	-7.2	-284.4	715.2	707.5	7.68	93.155		
2,400.0	2,347.5	2,285.6	2,277.1	9.3	5.2	-179.67	-7.3	-293.3	748.6	740.6	8.01	93.444		
2,500.0	2,444.5	2,379.8	2,370.9	9.8	5.4	-179.66	-7.5	-302.1	782.1	773.7	8.35	93.711		
2,600.0	2,541.4	2,474.0	2,464.8	10.2	5.6	-179.66	-7.6	-311.0	815.6	806.9	8.68	93.956		
2,700.0	2,638.4	2,568.3	2,558.6	10.7	5.8	-179.66	-7.8	-319.8	849.0	840.0	9.01	94.184		
2,800.0	2,735.3	2,662.5	2,652.4	11.2	6.1	-179.66	-7.9	-328.7	882.5	873.1	9.35	94.396		
2,900.0	2,832.3	2,756.7	2,746.2	11.7	6.3	-179.66	-8.0	-337.6	915.9	906.3	9.68	94.593		
3,000.0	2,929.3	2,851.0	2,840.0	12.1	6.5	-179.66	-8.2	-346.4	949.4	939.4	10.02	94.776		
3,100.0	3,026.2	2,945.2	2,933.8	12.6	6.7	-179.66	-8.3	-355.3	982.9	972.5	10.35	94.948		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1B-19H-B268 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.09	-3.6	-99.8	99.9					
100.0	100.0	100.0	100.0	0.2	0.2	-92.09	-3.6	-99.8	99.9	99.6	0.30	328.920		
200.0	200.0	200.0	200.0	0.3	0.3	-92.09	-3.6	-99.8	99.9	99.2	0.65	153.027	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-179.86	-3.6	-99.8	101.6	100.6	1.00	101.490		
400.0	399.8	396.2	396.2	0.7	0.7	-179.84	-3.7	-101.4	108.5	107.2	1.34	80.853		
500.0	499.5	491.8	491.7	0.9	0.9	-179.81	-3.7	-106.2	122.2	120.5	1.68	72.731		
600.0	598.7	590.1	589.8	1.2	1.0	-179.77	-3.8	-112.5	140.7	138.7	2.02	69.623		
700.0	697.5	687.7	687.2	1.5	1.2	-179.74	-3.9	-118.6	162.5	160.2	2.36	68.980	SF	
800.0	795.6	784.5	783.7	1.9	1.4	-179.73	-4.0	-124.8	187.8	185.1	2.69	69.881		
907.9	900.7	887.8	886.8	2.4	1.6	-179.72	-4.1	-131.3	218.8	215.8	3.04	72.014		
1,000.0	990.0	975.5	974.4	2.8	1.8	-179.72	-4.2	-136.9	247.0	243.6	3.35	73.726		
1,100.0	1,087.0	1,070.7	1,069.4	3.2	2.0	-179.72	-4.3	-142.9	277.5	273.8	3.69	75.262		
1,200.0	1,183.9	1,165.9	1,164.4	3.7	2.2	-179.72	-4.4	-148.9	308.1	304.1	4.02	76.542		
1,300.0	1,280.9	1,261.1	1,259.5	4.1	2.4	-179.72	-4.5	-155.0	338.6	334.3	4.36	77.626		
1,400.0	1,377.9	1,356.4	1,354.5	4.6	2.6	-179.72	-4.5	-161.0	369.2	364.5	4.70	78.556		
1,500.0	1,474.8	1,451.6	1,449.5	5.1	2.8	-179.72	-4.6	-167.0	399.7	394.7	5.04	79.363		
1,600.0	1,571.8	1,546.8	1,544.5	5.5	3.0	-179.72	-4.7	-173.1	430.3	424.9	5.37	80.068		
1,700.0	1,668.8	1,642.0	1,639.6	6.0	3.2	-179.72	-4.8	-179.1	460.8	455.1	5.71	80.692		
1,800.0	1,765.7	1,737.2	1,734.6	6.5	3.4	-179.72	-4.9	-185.1	491.4	485.4	6.05	81.246		
1,900.0	1,862.7	1,832.4	1,829.6	6.9	3.6	-179.72	-5.0	-191.2	522.0	515.6	6.39	81.742		
2,000.0	1,959.6	1,927.7	1,924.6	7.4	3.8	-179.72	-5.1	-197.2	552.5	545.8	6.72	82.188		
2,100.0	2,056.6	2,022.9	2,019.7	7.9	4.0	-179.72	-5.2	-203.2	583.1	576.0	7.06	82.593		
2,200.0	2,153.6	2,118.1	2,114.7	8.4	4.2	-179.72	-5.3	-209.3	613.6	606.2	7.40	82.960		
2,300.0	2,250.5	2,213.3	2,209.7	8.8	4.4	-179.72	-5.4	-215.3	644.2	636.4	7.73	83.296		
2,400.0	2,347.5	2,308.5	2,304.7	9.3	4.6	-179.72	-5.4	-221.3	674.7	666.7	8.07	83.604		
2,500.0	2,444.5	2,403.8	2,399.8	9.8	4.8	-179.72	-5.5	-227.4	705.3	696.9	8.41	83.887		
2,600.0	2,541.4	2,499.0	2,494.8	10.2	5.0	-179.72	-5.6	-233.4	735.8	727.1	8.74	84.148		
2,700.0	2,638.4	2,594.2	2,589.8	10.7	5.1	-179.72	-5.7	-239.4	766.4	757.3	9.08	84.391		
2,800.0	2,735.3	2,689.4	2,684.9	11.2	5.3	-179.72	-5.8	-245.5	796.9	787.5	9.42	84.616		
2,900.0	2,832.3	2,784.6	2,779.9	11.7	5.5	-179.72	-5.9	-251.5	827.5	817.7	9.76	84.825		
3,000.0	2,929.3	2,879.8	2,874.9	12.1	5.7	-179.72	-6.0	-257.5	858.0	848.0	10.09	85.021		
3,100.0	3,026.2	2,975.1	2,969.9	12.6	5.9	-179.71	-6.1	-263.6	888.6	878.2	10.43	85.204		
3,200.0	3,123.2	3,070.3	3,065.0	13.1	6.1	-179.71	-6.2	-269.6	919.2	908.4	10.77	85.375		
3,300.0	3,220.2	3,165.5	3,160.0	13.5	6.3	-179.71	-6.2	-275.6	949.7	938.6	11.10	85.536		
3,400.0	3,317.1	3,260.7	3,255.0	14.0	6.5	-179.71	-6.3	-281.7	980.3	968.8	11.44	85.688		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1C-19H-B2689 - 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-92.08	-3.3	-90.0	90.1					
100.0	100.0	100.0	100.0	0.2	0.2	-92.08	-3.3	-90.0	90.1	89.8	0.30	296.672		
200.0	200.0	200.0	200.0	0.3	0.3	-92.08	-3.3	-90.0	90.1	89.4	0.65	138.024 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-179.85	-3.3	-90.0	91.8	90.8	1.00	91.710		
400.0	399.8	399.8	399.8	0.7	0.7	-179.86	-3.3	-90.0	97.1	95.7	1.35	71.968		
500.0	499.5	495.9	495.9	0.9	0.8	-179.84	-3.3	-91.6	107.5	105.8	1.69	63.654		
600.0	598.7	592.1	592.0	1.2	1.0	-179.78	-3.3	-96.2	124.4	122.3	2.03	61.406 SF		
700.0	697.5	689.9	689.6	1.5	1.2	-179.73	-3.3	-101.5	145.3	142.9	2.36	61.524		
800.0	795.6	786.9	786.5	1.9	1.4	-179.70	-3.3	-106.8	169.7	167.0	2.69	62.981		
907.9	900.7	890.5	889.9	2.4	1.6	-179.68	-3.3	-112.4	199.7	196.7	3.05	65.563		
1,000.0	990.0	978.5	977.8	2.8	1.8	-179.67	-3.3	-117.1	227.0	223.7	3.36	67.610		
1,100.0	1,087.0	1,074.0	1,073.1	3.2	1.9	-179.66	-3.3	-122.3	256.7	253.0	3.70	69.444		
1,200.0	1,183.9	1,169.5	1,168.5	3.7	2.1	-179.66	-3.3	-127.4	286.3	282.3	4.03	70.973		
1,300.0	1,280.9	1,265.0	1,263.8	4.1	2.3	-179.65	-3.3	-132.6	316.0	311.6	4.37	72.267		
1,400.0	1,377.9	1,360.5	1,359.2	4.6	2.5	-179.65	-3.4	-137.7	345.7	341.0	4.71	73.376		
1,500.0	1,474.8	1,456.0	1,454.6	5.1	2.7	-179.65	-3.4	-142.9	375.3	370.3	5.05	74.338		
1,600.0	1,571.8	1,551.5	1,549.9	5.5	2.9	-179.64	-3.4	-148.1	405.0	399.6	5.39	75.180		
1,700.0	1,668.8	1,647.0	1,645.3	6.0	3.1	-179.64	-3.4	-153.2	434.6	428.9	5.72	75.923		
1,800.0	1,765.7	1,742.5	1,740.6	6.5	3.3	-179.64	-3.4	-158.4	464.3	458.2	6.06	76.584		
1,900.0	1,862.7	1,838.0	1,836.0	6.9	3.4	-179.64	-3.4	-163.5	494.0	487.6	6.40	77.175		
2,000.0	1,959.6	1,933.5	1,931.4	7.4	3.6	-179.64	-3.4	-168.7	523.6	516.9	6.74	77.707		
2,100.0	2,056.6	2,029.0	2,026.7	7.9	3.8	-179.64	-3.4	-173.9	553.3	546.2	7.08	78.189		
2,200.0	2,153.6	2,124.5	2,122.1	8.4	4.0	-179.63	-3.4	-179.0	582.9	575.5	7.41	78.627		
2,300.0	2,250.5	2,220.0	2,217.5	8.8	4.2	-179.63	-3.4	-184.2	612.6	604.8	7.75	79.027		
2,400.0	2,347.5	2,315.5	2,312.8	9.3	4.4	-179.63	-3.4	-189.3	642.3	634.2	8.09	79.394		
2,500.0	2,444.5	2,411.0	2,408.2	9.8	4.6	-179.63	-3.5	-194.5	671.9	663.5	8.43	79.731		
2,600.0	2,541.4	2,506.5	2,503.5	10.2	4.8	-179.63	-3.5	-199.7	701.6	692.8	8.77	80.043		
2,700.0	2,638.4	2,602.0	2,598.9	10.7	5.0	-179.63	-3.5	-204.8	731.2	722.1	9.10	80.331		
2,800.0	2,735.3	2,697.5	2,694.3	11.2	5.1	-179.63	-3.5	-210.0	760.9	751.5	9.44	80.599		
2,900.0	2,832.3	2,793.0	2,789.6	11.7	5.3	-179.63	-3.5	-215.1	790.6	780.8	9.78	80.849		
3,000.0	2,929.3	2,888.5	2,885.0	12.1	5.5	-179.63	-3.5	-220.3	820.2	810.1	10.12	81.081		
3,100.0	3,026.2	2,984.0	2,980.3	12.6	5.7	-179.63	-3.5	-225.5	849.9	839.4	10.45	81.299		
3,200.0	3,123.2	3,079.5	3,075.7	13.1	5.9	-179.63	-3.5	-230.6	879.5	868.7	10.79	81.504		
3,300.0	3,220.2	3,175.0	3,171.1	13.5	6.1	-179.63	-3.5	-235.8	909.2	898.1	11.13	81.695		
3,400.0	3,317.1	3,270.5	3,266.4	14.0	6.3	-179.63	-3.5	-240.9	938.9	927.4	11.47	81.876		
3,500.0	3,414.1	3,366.0	3,361.8	14.5	6.5	-179.62	-3.5	-246.1	968.5	956.7	11.80	82.046		
3,600.0	3,511.0	3,461.5	3,457.1	15.0	6.7	-179.62	-3.5	-251.3	998.2	986.0	12.14	82.207		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1D-19H-B2688 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	-92.09	-2.9	-80.0	80.0					
100.0	100.0	100.0	100.0	0.2	0.2	-92.09	-2.9	-80.0	80.0	79.7	0.30	263.504		
200.0	200.0	200.0	200.0	0.3	0.3	-92.09	-2.9	-80.0	80.0	79.4	0.65	122.593 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-179.86	-2.9	-80.0	81.8	80.8	1.00	81.652		
400.0	399.8	399.8	399.8	0.7	0.7	-179.86	-2.9	-80.0	87.0	85.7	1.35	64.500		
500.0	499.5	499.5	499.5	0.9	0.8	-179.88	-2.9	-80.0	95.7	94.0	1.69	56.491		
600.0	598.7	598.3	598.3	1.2	1.0	-179.87	-2.9	-80.3	108.2	106.2	2.04	53.149		
700.0	697.5	697.0	697.0	1.5	1.2	-179.87	-2.9	-80.7	124.2	121.9	2.38	52.290 SF		
800.0	795.6	795.1	795.1	1.9	1.4	-179.87	-2.8	-81.0	143.7	141.0	2.71	52.989		
907.9	900.7	900.1	900.1	2.4	1.5	-179.87	-2.8	-81.4	168.5	165.4	3.07	54.909		
1,000.0	990.0	989.3	989.3	2.8	1.7	-179.88	-2.8	-81.7	191.3	187.9	3.38	56.546		
1,100.0	1,087.0	1,086.2	1,086.2	3.2	1.9	-179.88	-2.8	-82.1	216.1	212.4	3.73	58.013		
1,200.0	1,183.9	1,183.1	1,183.1	3.7	2.0	-179.88	-2.7	-82.4	240.9	236.9	4.07	59.234		
1,300.0	1,280.9	1,280.0	1,279.9	4.1	2.2	-179.89	-2.7	-82.8	265.8	261.3	4.41	60.268		
1,400.0	1,377.9	1,376.8	1,376.8	4.6	2.4	-179.89	-2.7	-83.1	290.6	285.8	4.75	61.153		
1,500.0	1,474.8	1,473.7	1,473.7	5.1	2.5	-179.89	-2.7	-83.5	315.4	310.3	5.09	61.921		
1,600.0	1,571.8	1,570.6	1,570.6	5.5	2.7	-179.89	-2.6	-83.8	340.2	334.7	5.43	62.592		
1,700.0	1,668.8	1,667.4	1,667.4	6.0	2.9	-179.89	-2.6	-84.2	365.0	359.2	5.78	63.185		
1,800.0	1,765.7	1,764.3	1,764.3	6.5	3.1	-179.89	-2.6	-84.5	389.8	383.7	6.12	63.712		
1,900.0	1,862.7	1,861.2	1,861.2	6.9	3.2	-179.89	-2.6	-84.9	414.6	408.2	6.46	64.183		
2,000.0	1,959.6	1,958.1	1,958.1	7.4	3.4	-179.90	-2.6	-85.2	439.4	432.6	6.80	64.607		
2,100.0	2,056.6	2,054.9	2,054.9	7.9	3.6	-179.90	-2.5	-85.6	464.2	457.1	7.14	64.991		
2,200.0	2,153.6	2,151.8	2,151.8	8.4	3.7	-179.90	-2.5	-86.0	489.0	481.6	7.48	65.340		
2,300.0	2,250.5	2,248.7	2,248.7	8.8	3.9	-179.90	-2.5	-86.3	513.9	506.0	7.83	65.659		
2,400.0	2,347.5	2,345.6	2,345.6	9.3	4.1	-179.90	-2.5	-86.7	538.7	530.5	8.17	65.951		
2,500.0	2,444.5	2,442.4	2,442.4	9.8	4.2	-179.90	-2.4	-87.0	563.5	555.0	8.51	66.219		
2,600.0	2,541.4	2,539.3	2,539.3	10.2	4.4	-179.90	-2.4	-87.4	588.3	579.4	8.85	66.467		
2,700.0	2,638.4	2,636.2	2,636.2	10.7	4.6	-179.90	-2.4	-87.7	613.1	603.9	9.19	66.697		
2,800.0	2,735.3	2,733.1	2,733.0	11.2	4.7	-179.90	-2.4	-88.1	637.9	628.4	9.53	66.911		
2,900.0	2,832.3	2,829.9	2,829.9	11.7	4.9	-179.90	-2.3	-88.4	662.7	652.8	9.88	67.109		
3,000.0	2,929.3	2,926.8	2,926.8	12.1	5.1	-179.90	-2.3	-88.8	687.5	677.3	10.22	67.294		
3,100.0	3,026.2	3,023.7	3,023.7	12.6	5.3	-179.90	-2.3	-89.1	712.3	701.8	10.56	67.468		
3,200.0	3,123.2	3,120.5	3,120.5	13.1	5.4	-179.90	-2.3	-89.5	737.1	726.2	10.90	67.631		
3,300.0	3,220.2	3,217.4	3,217.4	13.5	5.6	-179.90	-2.2	-89.8	762.0	750.7	11.24	67.783		
3,400.0	3,317.1	3,314.3	3,314.3	14.0	5.8	-179.90	-2.2	-90.2	786.8	775.2	11.58	67.927		
3,500.0	3,414.1	3,411.2	3,411.1	14.5	5.9	-179.90	-2.2	-90.5	811.6	799.6	11.92	68.063		
3,600.0	3,511.0	3,508.0	3,508.0	15.0	6.1	-179.90	-2.2	-90.9	836.4	824.1	12.27	68.191		
3,700.0	3,608.0	3,604.9	3,604.9	15.4	6.3	-179.90	-2.1	-91.2	861.2	848.6	12.61	68.312		
3,800.0	3,705.0	3,701.8	3,701.8	15.9	6.4	-179.90	-2.1	-91.6	886.0	873.1	12.95	68.426		
3,900.0	3,801.9	3,798.7	3,798.6	16.4	6.6	-179.90	-2.1	-91.9	910.8	897.5	13.29	68.535		
4,000.0	3,898.9	3,895.5	3,895.5	16.9	6.8	-179.90	-2.1	-92.3	935.6	922.0	13.63	68.639		
4,100.0	3,995.9	3,992.4	3,992.4	17.3	6.9	-179.90	-2.0	-92.6	960.4	946.5	13.97	68.737		
4,200.0	4,092.8	4,089.3	4,089.3	17.8	7.1	-179.90	-2.0	-93.0	985.2	970.9	14.31	68.831		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1E-19H-B2687 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		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	-92.09	-2.5	-69.9	70.0					
100.0	100.0	100.0	100.0	0.2	0.2	-92.09	-2.5	-69.9	70.0	69.6	0.30	230.336		
200.0	200.0	200.0	200.0	0.3	0.3	-92.09	-2.5	-69.9	70.0	69.3	0.65	107.162 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-179.86	-2.5	-69.9	71.7	70.7	1.00	71.594		
400.0	399.8	399.8	399.8	0.7	0.7	-179.87	-2.5	-69.9	76.9	75.6	1.35	57.033		
500.0	499.5	499.5	499.5	0.9	0.8	-179.88	-2.5	-69.9	85.6	83.9	1.69	50.546		
600.0	598.7	598.7	598.7	1.2	1.0	-179.90	-2.5	-69.9	97.8	95.8	2.04	48.020		
700.0	697.5	697.5	697.5	1.5	1.2	-179.91	-2.5	-69.9	113.5	111.1	2.38	47.740 SF		
800.0	795.6	795.6	795.6	1.9	1.4	-179.92	-2.5	-69.9	132.6	129.8	2.71	48.866		
907.9	900.7	900.7	900.7	2.4	1.5	-179.93	-2.5	-69.9	157.0	153.9	3.07	51.136		
1,000.0	990.0	990.0	990.0	2.8	1.7	-179.94	-2.5	-69.9	179.5	176.1	3.39	53.025		
1,100.0	1,087.0	1,087.0	1,087.0	3.2	1.9	-179.95	-2.5	-69.9	204.0	200.2	3.73	54.716		
1,200.0	1,183.9	1,183.9	1,183.9	3.7	2.0	-179.95	-2.5	-69.9	228.4	224.3	4.07	56.124		
1,300.0	1,280.9	1,280.9	1,280.9	4.1	2.2	-179.96	-2.5	-69.9	252.9	248.5	4.41	57.315		
1,400.0	1,377.9	1,377.9	1,377.9	4.6	2.4	-179.96	-2.5	-69.9	277.3	272.6	4.75	58.336		
1,500.0	1,474.8	1,474.8	1,474.8	5.1	2.6	-179.97	-2.5	-69.9	301.8	296.7	5.10	59.220		
1,600.0	1,571.8	1,571.8	1,571.8	5.5	2.7	-179.97	-2.5	-69.9	326.2	320.8	5.44	59.994		
1,700.0	1,668.8	1,668.8	1,668.8	6.0	2.9	-179.97	-2.5	-69.9	350.7	344.9	5.78	60.677		
1,800.0	1,765.7	1,765.7	1,765.7	6.5	3.1	-179.97	-2.5	-69.9	375.2	369.0	6.12	61.283		
1,900.0	1,862.7	1,862.7	1,862.7	6.9	3.2	-179.97	-2.5	-69.9	399.6	393.2	6.46	61.826		
2,000.0	1,959.6	1,959.6	1,959.6	7.4	3.4	-179.98	-2.5	-69.9	424.1	417.3	6.81	62.314		
2,100.0	2,056.6	2,056.6	2,056.6	7.9	3.6	-179.98	-2.5	-69.9	448.5	441.4	7.15	62.756		
2,200.0	2,153.6	2,153.6	2,153.6	8.4	3.7	-179.98	-2.5	-69.9	473.0	465.5	7.49	63.158		
2,300.0	2,250.5	2,250.5	2,250.5	8.8	3.9	-179.98	-2.5	-69.9	497.5	489.6	7.83	63.525		
2,400.0	2,347.5	2,347.5	2,347.5	9.3	4.1	-179.98	-2.5	-69.9	521.9	513.7	8.17	63.861		
2,500.0	2,444.5	2,444.5	2,444.5	9.8	4.2	-179.98	-2.5	-69.9	546.4	537.9	8.51	64.170		
2,600.0	2,541.4	2,541.4	2,541.4	10.2	4.4	-179.98	-2.5	-69.9	570.8	562.0	8.86	64.456		
2,700.0	2,638.4	2,638.4	2,638.4	10.7	4.6	-179.98	-2.5	-69.9	595.3	586.1	9.20	64.720		
2,800.0	2,735.3	2,735.3	2,735.3	11.2	4.8	-179.98	-2.5	-69.9	619.8	610.2	9.54	64.966		
2,900.0	2,832.3	2,832.3	2,832.3	11.7	4.9	-179.98	-2.5	-69.9	644.2	634.3	9.88	65.194		
3,000.0	2,929.3	2,929.3	2,929.3	12.1	5.1	-179.98	-2.5	-69.9	668.7	658.5	10.22	65.407		
3,100.0	3,026.2	3,026.2	3,026.2	12.6	5.3	-179.98	-2.5	-69.9	693.1	682.6	10.56	65.607		
3,200.0	3,123.2	3,123.2	3,123.2	13.1	5.4	-179.99	-2.5	-69.9	717.6	706.7	10.91	65.794		
3,300.0	3,220.2	3,220.2	3,220.2	13.5	5.6	-179.99	-2.5	-69.9	742.1	730.8	11.25	65.970		
3,400.0	3,317.1	3,317.1	3,317.1	14.0	5.8	-179.99	-2.5	-69.9	766.5	754.9	11.59	66.135		
3,500.0	3,414.1	3,414.1	3,414.1	14.5	5.9	-179.99	-2.5	-69.9	791.0	779.0	11.93	66.291		
3,600.0	3,511.0	3,511.0	3,511.0	15.0	6.1	-179.99	-2.5	-69.9	815.4	803.2	12.27	66.438		
3,700.0	3,608.0	3,608.0	3,608.0	15.4	6.3	-179.99	-2.5	-69.9	839.9	827.3	12.62	66.578		
3,800.0	3,705.0	3,705.0	3,705.0	15.9	6.4	-179.99	-2.5	-69.9	864.4	851.4	12.96	66.710		
3,900.0	3,801.9	3,801.9	3,801.9	16.4	6.6	-179.99	-2.5	-69.9	888.8	875.5	13.30	66.835		
4,000.0	3,898.9	3,898.9	3,898.9	16.9	6.8	-179.99	-2.5	-69.9	913.3	899.6	13.64	66.954		
4,100.0	3,995.9	3,995.9	3,995.9	17.3	7.0	-179.99	-2.5	-69.9	937.7	923.7	13.98	67.067		
4,200.0	4,092.8	4,139.7	4,139.6	17.8	7.2	-179.99	-2.4	-66.5	959.9	945.5	14.40	66.641		
4,300.0	4,189.8	4,243.2	4,243.0	18.3	7.4	-179.99	-2.2	-60.9	979.1	964.4	14.76	66.341		
4,400.0	4,286.7	4,341.3	4,341.0	18.7	7.6	-179.99	-2.1	-55.6	998.3	983.2	15.10	66.093		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1F-19H-B2686 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.10	-2.2	-59.8	59.9					
100.0	100.0	100.0	100.0	0.2	0.2	-92.10	-2.2	-59.8	59.9	59.6	0.30	197.169	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-92.10	-2.2	-59.8	59.9	59.2	0.65	91.731		
300.0	300.0	300.0	300.0	0.5	0.5	-179.87	-2.2	-59.8	61.6	60.6	1.00	61.535		
400.0	399.8	399.8	399.8	0.7	0.7	-179.88	-2.2	-59.8	66.9	65.5	1.35	49.565		
500.0	499.5	499.5	499.5	0.9	0.8	-179.89	-2.2	-59.8	75.6	73.9	1.69	44.601		
600.0	598.7	598.7	598.7	1.2	1.0	-179.90	-2.2	-59.8	87.8	85.7	2.04	43.076	SF	
700.0	697.5	697.5	697.5	1.5	1.2	-179.92	-2.2	-59.8	103.4	101.0	2.38	43.502		
800.0	795.6	795.6	795.6	1.9	1.4	-179.93	-2.2	-59.8	122.5	119.8	2.71	45.153		
907.9	900.7	900.7	900.7	2.4	1.5	-179.94	-2.2	-59.8	146.9	143.8	3.07	47.853		
1,000.0	990.0	995.6	995.6	2.8	1.7	-179.94	-2.1	-58.2	167.9	164.5	3.39	49.462		
1,100.0	1,087.0	1,099.1	1,098.9	3.2	1.9	-179.91	-1.8	-53.0	187.4	183.6	3.75	49.976		
1,200.0	1,183.9	1,197.4	1,197.0	3.7	2.1	-179.88	-1.4	-46.7	205.6	201.5	4.10	50.201		
1,300.0	1,280.9	1,295.7	1,295.2	4.1	2.3	-179.85	-1.0	-40.5	223.9	219.4	4.44	50.392		
1,400.0	1,377.9	1,394.1	1,393.3	4.6	2.5	-179.83	-0.6	-34.2	242.1	237.3	4.79	50.556		
1,500.0	1,474.8	1,492.4	1,491.4	5.1	2.7	-179.81	-0.2	-28.0	260.3	255.2	5.13	50.699		
1,600.0	1,571.8	1,590.7	1,589.5	5.5	2.8	-179.80	0.1	-21.7	278.6	273.1	5.48	50.825		
1,700.0	1,668.8	1,689.0	1,687.7	6.0	3.0	-179.78	0.5	-15.5	296.8	291.0	5.83	50.936		
1,800.0	1,765.7	1,787.3	1,785.8	6.5	3.2	-179.77	0.9	-9.2	315.0	308.8	6.17	51.034		
1,900.0	1,862.7	1,885.7	1,883.9	6.9	3.4	-179.76	1.3	-2.9	333.2	326.7	6.52	51.123		
2,000.0	1,959.6	1,984.0	1,982.0	7.4	3.6	-179.75	1.7	3.3	351.5	344.6	6.86	51.203		
2,100.0	2,056.6	2,082.3	2,080.2	7.9	3.8	-179.74	2.0	9.6	369.7	362.5	7.21	51.275		
2,200.0	2,153.6	2,180.6	2,178.3	8.4	4.0	-179.73	2.4	15.8	387.9	380.4	7.56	51.341		
2,300.0	2,250.5	2,279.0	2,276.4	8.8	4.2	-179.72	2.8	22.1	406.2	398.3	7.90	51.401		
2,400.0	2,347.5	2,377.3	2,374.5	9.3	4.4	-179.72	3.2	28.3	424.4	416.2	8.25	51.457		
2,500.0	2,444.5	2,475.6	2,472.7	9.8	4.6	-179.71	3.6	34.6	442.6	434.0	8.59	51.508		
2,600.0	2,541.4	2,573.9	2,570.8	10.2	4.8	-179.70	3.9	40.8	460.9	451.9	8.94	51.555		
2,700.0	2,638.4	2,672.3	2,668.9	10.7	5.0	-179.70	4.3	47.1	479.1	469.8	9.29	51.598		
2,800.0	2,735.3	2,770.6	2,767.0	11.2	5.2	-179.69	4.7	53.3	497.3	487.7	9.63	51.639		
2,900.0	2,832.3	2,868.9	2,865.2	11.7	5.4	-179.69	5.1	59.6	515.6	505.6	9.98	51.677		
3,000.0	2,929.3	2,967.2	2,963.3	12.1	5.6	-179.68	5.5	65.9	533.8	523.5	10.32	51.712		
3,100.0	3,026.2	3,065.6	3,061.4	12.6	5.8	-179.68	5.8	72.1	552.0	541.4	10.67	51.745		
3,200.0	3,123.2	3,163.9	3,159.5	13.1	6.0	-179.68	6.2	78.4	570.3	559.2	11.01	51.776		
3,300.0	3,220.2	3,262.2	3,257.7	13.5	6.2	-179.67	6.6	84.6	588.5	577.1	11.36	51.805		
3,400.0	3,317.1	3,360.5	3,355.8	14.0	6.4	-179.67	7.0	90.9	606.7	595.0	11.71	51.832		
3,500.0	3,414.1	3,458.9	3,453.9	14.5	6.6	-179.67	7.4	97.1	625.0	612.9	12.05	51.858		
3,600.0	3,511.0	3,557.2	3,552.0	15.0	6.8	-179.66	7.7	103.4	643.2	630.8	12.40	51.883		
3,700.0	3,608.0	3,655.5	3,650.1	15.4	7.0	-179.66	8.1	109.6	661.4	648.7	12.74	51.906		
3,800.0	3,705.0	3,753.8	3,748.3	15.9	7.2	-179.66	8.5	115.9	679.7	666.6	13.09	51.928		
3,900.0	3,801.9	3,852.2	3,846.4	16.4	7.4	-179.66	8.9	122.2	697.9	684.5	13.43	51.948		
4,000.0	3,898.9	3,950.5	3,944.5	16.9	7.6	-179.65	9.3	128.4	716.1	702.3	13.78	51.968		
4,100.0	3,995.9	4,048.8	4,042.6	17.3	7.8	-179.65	9.6	134.7	734.3	720.2	14.13	51.987		
4,200.0	4,092.8	4,147.1	4,140.8	17.8	8.0	-179.65	10.0	140.9	752.6	738.1	14.47	52.005		
4,300.0	4,189.8	4,245.4	4,238.9	18.3	8.3	-179.65	10.4	147.2	770.8	756.0	14.82	52.022		
4,400.0	4,286.7	4,343.8	4,337.0	18.7	8.5	-179.65	10.8	153.4	789.0	773.9	15.16	52.038		
4,500.0	4,383.7	4,442.1	4,435.1	19.2	8.7	-179.64	11.2	159.7	807.3	791.8	15.51	52.054		
4,600.0	4,480.7	4,540.4	4,533.3	19.7	8.9	-179.64	11.6	165.9	825.5	809.7	15.85	52.069		
4,700.0	4,577.6	4,638.7	4,631.4	20.2	9.1	-179.64	11.9	172.2	843.7	827.5	16.20	52.083		
4,800.0	4,674.6	4,737.1	4,729.5	20.6	9.3	-179.64	12.3	178.4	862.0	845.4	16.55	52.097		
4,900.0	4,771.6	4,835.4	4,827.6	21.1	9.5	-179.64	12.7	184.7	880.2	863.3	16.89	52.110		
5,000.0	4,868.5	4,933.7	4,925.8	21.6	9.7	-179.64	13.1	191.0	898.4	881.2	17.24	52.123		
5,100.0	4,965.5	5,032.0	5,023.9	22.0	9.9	-179.63	13.5	197.2	916.7	899.1	17.58	52.135		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1F-19H-B2686 - Hz - Plan #2													<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-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		
5,200.0	5,062.5	5,130.4	5,122.0	22.5	10.1	-179.63	13.8	203.5	934.9	917.0	17.93	52.146		
5,300.0	5,159.4	5,228.7	5,220.1	23.0	10.3	-179.63	14.2	209.7	953.1	934.9	18.27	52.158		
5,400.0	5,256.4	5,327.0	5,318.3	23.5	10.5	-179.63	14.6	216.0	971.4	952.7	18.62	52.168		
5,500.0	5,353.3	5,425.3	5,416.4	23.9	10.7	-179.63	15.0	222.2	989.6	970.6	18.97	52.179		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1G-19H-B2685 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.08	-1.8	-50.1	50.1					
100.0	100.0	100.0	100.0	0.2	0.2	-92.08	-1.8	-50.1	50.1	49.8	0.30	164.920		
200.0	200.0	200.0	200.0	0.3	0.3	-92.08	-1.8	-50.1	50.1	49.4	0.65	76.728 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-179.86	-1.8	-50.1	51.8	50.8	1.00	51.756		
400.0	399.8	399.8	399.8	0.7	0.7	-179.87	-1.8	-50.1	57.1	55.7	1.35	42.304		
500.0	499.5	499.5	499.5	0.9	0.8	-179.89	-1.8	-50.1	65.8	64.1	1.69	38.821		
600.0	598.7	598.7	598.7	1.2	1.0	-179.90	-1.8	-50.1	78.0	75.9	2.04	38.269 SF		
700.0	697.5	697.5	697.5	1.5	1.2	-179.92	-1.8	-50.1	93.6	91.2	2.38	39.382		
800.0	795.6	799.5	799.5	1.9	1.4	-179.93	-1.7	-48.3	111.0	108.3	2.72	40.826		
907.9	900.7	910.4	910.2	2.4	1.6	-179.93	-1.5	-42.3	129.7	126.6	3.09	42.011		
1,000.0	990.0	1,001.8	1,001.3	2.8	1.8	-179.93	-1.2	-35.3	145.3	141.9	3.41	42.618		
1,100.0	1,087.0	1,100.3	1,099.6	3.2	2.0	-179.93	-0.9	-27.6	162.1	158.4	3.76	43.167		
1,200.0	1,183.9	1,198.9	1,197.8	3.7	2.2	-179.92	-0.5	-20.0	179.0	174.9	4.10	43.625		
1,300.0	1,280.9	1,297.5	1,296.1	4.1	2.4	-179.92	-0.2	-12.4	195.9	191.4	4.45	44.012		
1,400.0	1,377.9	1,396.0	1,394.4	4.6	2.6	-179.92	0.1	-4.7	212.7	207.9	4.80	44.345		
1,500.0	1,474.8	1,494.6	1,492.6	5.1	2.8	-179.92	0.4	2.9	229.6	224.4	5.14	44.633		
1,600.0	1,571.8	1,593.2	1,590.9	5.5	3.0	-179.92	0.7	10.6	246.5	241.0	5.49	44.885		
1,700.0	1,668.8	1,691.7	1,689.2	6.0	3.2	-179.92	1.1	18.2	263.3	257.5	5.84	45.108		
1,800.0	1,765.7	1,790.3	1,787.5	6.5	3.4	-179.92	1.4	25.9	280.2	274.0	6.18	45.306		
1,900.0	1,862.7	1,888.9	1,885.7	6.9	3.6	-179.92	1.7	33.5	297.0	290.5	6.53	45.483		
2,000.0	1,959.6	1,987.4	1,984.0	7.4	3.8	-179.92	2.0	41.1	313.9	307.0	6.88	45.642		
2,100.0	2,056.6	2,086.0	2,082.3	7.9	4.0	-179.92	2.4	48.8	330.8	323.5	7.22	45.787		
2,200.0	2,153.6	2,184.6	2,180.5	8.4	4.3	-179.92	2.7	56.4	347.6	340.1	7.57	45.918		
2,300.0	2,250.5	2,283.1	2,278.8	8.8	4.5	-179.92	3.0	64.1	364.5	356.6	7.92	46.038		
2,400.0	2,347.5	2,381.7	2,377.1	9.3	4.7	-179.92	3.3	71.7	381.3	373.1	8.26	46.148		
2,500.0	2,444.5	2,480.3	2,475.4	9.8	4.9	-179.92	3.7	79.3	398.2	389.6	8.61	46.249		
2,600.0	2,541.4	2,578.8	2,573.6	10.2	5.1	-179.92	4.0	87.0	415.1	406.1	8.96	46.342		
2,700.0	2,638.4	2,677.4	2,671.9	10.7	5.3	-179.92	4.3	94.6	431.9	422.6	9.30	46.429		
2,800.0	2,735.3	2,776.0	2,770.2	11.2	5.5	-179.92	4.6	102.3	448.8	439.1	9.65	46.509		
2,900.0	2,832.3	2,874.6	2,868.4	11.7	5.8	-179.92	5.0	109.9	465.7	455.7	10.00	46.584		
3,000.0	2,929.3	2,973.1	2,966.7	12.1	6.0	-179.92	5.3	117.6	482.5	472.2	10.34	46.654		
3,100.0	3,026.2	3,071.7	3,065.0	12.6	6.2	-179.92	5.6	125.2	499.4	488.7	10.69	46.719		
3,200.0	3,123.2	3,170.3	3,163.3	13.1	6.4	-179.92	5.9	132.8	516.2	505.2	11.04	46.780		
3,300.0	3,220.2	3,268.8	3,261.5	13.5	6.6	-179.92	6.3	140.5	533.1	521.7	11.38	46.838		
3,400.0	3,317.1	3,367.4	3,359.8	14.0	6.8	-179.92	6.6	148.1	550.0	538.2	11.73	46.892		
3,500.0	3,414.1	3,466.0	3,458.1	14.5	7.1	-179.92	6.9	155.8	566.8	554.7	12.07	46.943		
3,600.0	3,511.0	3,564.5	3,556.3	15.0	7.3	-179.91	7.2	163.4	583.7	571.3	12.42	46.992		
3,700.0	3,608.0	3,663.1	3,654.6	15.4	7.5	-179.91	7.6	171.0	600.5	587.8	12.77	47.037		
3,800.0	3,705.0	3,761.7	3,752.9	15.9	7.7	-179.91	7.9	178.7	617.4	604.3	13.11	47.080		
3,900.0	3,801.9	3,860.2	3,851.2	16.4	7.9	-179.91	8.2	186.3	634.3	620.8	13.46	47.121		
4,000.0	3,898.9	3,958.8	3,949.4	16.9	8.1	-179.91	8.5	194.0	651.1	637.3	13.81	47.160		
4,100.0	3,995.9	4,057.4	4,047.7	17.3	8.4	-179.91	8.8	201.6	668.0	653.8	14.15	47.198		
4,200.0	4,092.8	4,155.9	4,146.0	17.8	8.6	-179.91	9.2	209.2	684.9	670.4	14.50	47.233		
4,300.0	4,189.8	4,254.5	4,244.2	18.3	8.8	-179.91	9.5	216.9	701.7	686.9	14.85	47.267		
4,400.0	4,286.7	4,353.1	4,342.5	18.7	9.0	-179.91	9.8	224.5	718.6	703.4	15.19	47.299		
4,500.0	4,383.7	4,451.6	4,440.8	19.2	9.2	-179.91	10.1	232.2	735.4	719.9	15.54	47.329		
4,600.0	4,480.7	4,550.2	4,539.0	19.7	9.4	-179.91	10.5	239.8	752.3	736.4	15.89	47.359		
4,700.0	4,577.6	4,648.8	4,637.3	20.2	9.7	-179.91	10.8	247.5	769.2	752.9	16.23	47.387		
4,800.0	4,674.6	4,747.3	4,735.6	20.6	9.9	-179.91	11.1	255.1	786.0	769.4	16.58	47.414		
4,900.0	4,771.6	4,845.9	4,833.9	21.1	10.1	-179.91	11.4	262.7	802.9	786.0	16.92	47.440		
5,000.0	4,868.5	4,944.5	4,932.1	21.6	10.3	-179.91	11.8	270.4	819.7	802.5	17.27	47.465		
5,100.0	4,965.5	5,043.1	5,030.4	22.0	10.5	-179.91	12.1	278.0	836.6	819.0	17.62	47.489		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1G-19H-B2685 - Hz - Plan #2		Offset Site Error:		0.0 ft
Survey Program:													0-Geolink MWD		Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
5,200.0	5,062.5	5,141.6	5,128.7	22.5	10.7	-179.91	12.4	285.7	853.5	835.5	17.96	47.512					
5,300.0	5,159.4	5,240.2	5,226.9	23.0	11.0	-179.91	12.7	293.3	870.3	852.0	18.31	47.534					
5,400.0	5,256.4	5,338.8	5,325.2	23.5	11.2	-179.91	13.1	300.9	887.2	868.5	18.66	47.555					
5,500.0	5,353.3	5,437.3	5,423.5	23.9	11.4	-179.91	13.4	308.6	904.1	885.1	19.00	47.575					
5,600.0	5,450.3	5,535.9	5,521.8	24.4	11.6	-179.91	13.7	316.2	920.9	901.6	19.35	47.595					
5,700.0	5,547.3	5,634.5	5,620.0	24.9	11.8	-179.91	14.0	323.9	937.8	918.1	19.70	47.614					
5,800.0	5,644.2	5,733.0	5,718.3	25.4	12.0	-179.91	14.4	331.5	954.6	934.6	20.04	47.633					
5,900.0	5,741.2	5,831.6	5,816.6	25.8	12.3	-179.91	14.7	339.2	971.5	951.1	20.39	47.651					
6,000.0	5,838.2	5,930.2	5,914.8	26.3	12.5	-179.91	15.0	346.8	988.4	967.6	20.73	47.668					

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1H-19H-B2684 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis				Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.08	-1.5	-40.0	40.0					
100.0	100.0	100.0	100.0	0.2	0.2	-92.08	-1.5	-40.0	40.0	39.7	0.30	131.752		
200.0	200.0	200.0	200.0	0.3	0.3	-92.08	-1.5	-40.0	40.0	39.4	0.65	61.296 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-179.85	-1.5	-40.0	41.8	40.8	1.00	41.697		
400.0	399.8	399.8	399.8	0.7	0.7	-179.87	-1.5	-40.0	47.0	45.6	1.35	34.837		
500.0	499.5	499.5	499.5	0.9	0.8	-179.89	-1.5	-40.0	55.7	54.0	1.69	32.876		
600.0	598.7	598.7	598.7	1.2	1.0	-179.91	-1.5	-40.0	67.9	65.9	2.04	33.324		
700.0	697.5	700.4	700.3	1.5	1.2	-179.92	-1.4	-38.2	81.8	79.4	2.38	34.351		
800.0	795.6	802.6	802.4	1.9	1.4	-179.91	-1.1	-32.8	95.7	93.0	2.73	35.107		
907.9	900.7	913.4	912.8	2.4	1.6	-179.90	-0.7	-22.9	110.6	107.5	3.10	35.718		
1,000.0	990.0	1,006.7	1,005.4	2.8	1.8	-179.88	-0.2	-11.5	122.1	118.6	3.42	35.682		
1,100.0	1,087.0	1,106.0	1,103.9	3.2	2.1	-179.87	0.4	0.9	134.1	130.4	3.77	35.572		
1,200.0	1,183.9	1,205.2	1,202.3	3.7	2.3	-179.85	0.9	13.4	146.2	142.1	4.12	35.483		
1,300.0	1,280.9	1,304.5	1,300.8	4.1	2.6	-179.84	1.4	25.9	158.3	153.8	4.47	35.409		
1,400.0	1,377.9	1,403.8	1,399.3	4.6	2.8	-179.83	2.0	38.4	170.3	165.5	4.82	35.346		
1,500.0	1,474.8	1,503.0	1,497.8	5.1	3.1	-179.82	2.5	50.8	182.4	177.2	5.17	35.293		
1,600.0	1,571.8	1,602.3	1,596.3	5.5	3.4	-179.81	3.1	63.3	194.5	188.9	5.52	35.246		
1,700.0	1,668.8	1,701.6	1,694.7	6.0	3.6	-179.81	3.6	75.8	206.5	200.7	5.87	35.206		
1,800.0	1,765.7	1,800.9	1,793.2	6.5	3.9	-179.80	4.2	88.3	218.6	212.4	6.22	35.170		
1,900.0	1,862.7	1,900.1	1,891.7	6.9	4.2	-179.80	4.7	100.7	230.7	224.1	6.56	35.139		
2,000.0	1,959.6	1,999.4	1,990.2	7.4	4.5	-179.79	5.3	113.2	242.7	235.8	6.91	35.111		
2,100.0	2,056.6	2,098.7	2,088.7	7.9	4.7	-179.79	5.8	125.7	254.8	247.5	7.26	35.085		
2,200.0	2,153.6	2,197.9	2,187.1	8.4	5.0	-179.78	6.4	138.2	266.9	259.2	7.61	35.062		
2,300.0	2,250.5	2,297.2	2,285.6	8.8	5.3	-179.78	6.9	150.7	278.9	271.0	7.96	35.042		
2,400.0	2,347.5	2,396.5	2,384.1	9.3	5.6	-179.78	7.5	163.1	291.0	282.7	8.31	35.023		
2,500.0	2,444.5	2,495.7	2,482.6	9.8	5.8	-179.77	8.0	175.6	303.1	294.4	8.66	35.005		
2,600.0	2,541.4	2,595.0	2,581.1	10.2	6.1	-179.77	8.6	188.1	315.1	306.1	9.01	34.989		
2,700.0	2,638.4	2,694.3	2,679.5	10.7	6.4	-179.77	9.1	200.6	327.2	317.8	9.35	34.975		
2,800.0	2,735.3	2,793.5	2,778.0	11.2	6.7	-179.76	9.7	213.0	339.2	329.5	9.70	34.961		
2,900.0	2,832.3	2,892.8	2,876.5	11.7	6.9	-179.76	10.2	225.5	351.3	341.3	10.05	34.948		
3,000.0	2,929.3	2,992.1	2,975.0	12.1	7.2	-179.76	10.8	238.0	363.4	353.0	10.40	34.937		
3,100.0	3,026.2	3,091.4	3,073.5	12.6	7.5	-179.76	11.3	250.5	375.4	364.7	10.75	34.926		
3,200.0	3,123.2	3,190.6	3,172.0	13.1	7.8	-179.76	11.9	263.0	387.5	376.4	11.10	34.915		
3,300.0	3,220.2	3,289.9	3,270.4	13.5	8.0	-179.75	12.4	275.4	399.6	388.1	11.45	34.906		
3,400.0	3,317.1	3,389.2	3,368.9	14.0	8.3	-179.75	13.0	287.9	411.6	399.8	11.80	34.897		
3,500.0	3,414.1	3,488.4	3,467.4	14.5	8.6	-179.75	13.5	300.4	423.7	411.6	12.14	34.888		
3,600.0	3,511.0	3,587.7	3,565.9	15.0	8.9	-179.75	14.1	312.9	435.8	423.3	12.49	34.880		
3,700.0	3,608.0	3,687.0	3,664.4	15.4	9.2	-179.75	14.6	325.3	447.8	435.0	12.84	34.873		
3,800.0	3,705.0	3,786.2	3,762.8	15.9	9.4	-179.75	15.2	337.8	459.9	446.7	13.19	34.866		
3,900.0	3,801.9	3,885.5	3,861.3	16.4	9.7	-179.75	15.7	350.3	472.0	458.4	13.54	34.859		
4,000.0	3,898.9	3,984.8	3,959.8	16.9	10.0	-179.74	16.3	362.8	484.0	470.2	13.89	34.853		
4,100.0	3,995.9	4,084.0	4,058.3	17.3	10.3	-179.74	16.8	375.2	496.1	481.9	14.24	34.846		
4,200.0	4,092.8	4,183.3	4,156.8	17.8	10.5	-179.74	17.4	387.7	508.2	493.6	14.59	34.841		
4,300.0	4,189.8	4,282.6	4,255.2	18.3	10.8	-179.74	17.9	400.2	520.2	505.3	14.93	34.835		
4,400.0	4,286.7	4,381.9	4,353.7	18.7	11.1	-179.74	18.5	412.7	532.3	517.0	15.28	34.830		
4,500.0	4,383.7	4,481.1	4,452.2	19.2	11.4	-179.74	19.0	425.2	544.4	528.7	15.63	34.825		
4,600.0	4,480.7	4,580.4	4,550.7	19.7	11.7	-179.74	19.6	437.6	556.4	540.5	15.98	34.820		
4,700.0	4,577.6	4,679.7	4,649.2	20.2	11.9	-179.74	20.1	450.1	568.5	552.2	16.33	34.816		
4,800.0	4,674.6	4,778.9	4,747.6	20.6	12.2	-179.74	20.7	462.6	580.6	563.9	16.68	34.811		
4,900.0	4,771.6	4,878.2	4,846.1	21.1	12.5	-179.74	21.2	475.1	592.6	575.6	17.03	34.807		
5,000.0	4,868.5	4,977.5	4,944.6	21.6	12.8	-179.74	21.8	487.5	604.7	587.3	17.37	34.803		
5,100.0	4,965.5	5,076.7	5,043.1	22.0	13.1	-179.73	22.3	500.0	616.8	599.0	17.72	34.799		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1H-19H-B2684 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,062.5	5,176.0	5,141.6	22.5	13.3	-179.73	22.9	512.5	628.8	610.8	18.07	34.795		
5,300.0	5,159.4	5,275.3	5,240.0	23.0	13.6	-179.73	23.4	525.0	640.9	622.5	18.42	34.792		
5,400.0	5,256.4	5,374.5	5,338.5	23.5	13.9	-179.73	24.0	537.5	653.0	634.2	18.77	34.788		
5,500.0	5,353.3	5,473.8	5,437.0	23.9	14.2	-179.73	24.5	549.9	665.0	645.9	19.12	34.785		
5,600.0	5,450.3	5,573.1	5,535.5	24.4	14.5	-179.73	25.1	562.4	677.1	657.6	19.47	34.782		
5,700.0	5,547.3	5,672.4	5,634.0	24.9	14.7	-179.73	25.6	574.9	689.2	669.3	19.82	34.779		
5,800.0	5,644.2	5,771.6	5,732.4	25.4	15.0	-179.73	26.2	587.4	701.2	681.1	20.16	34.776		
5,900.0	5,741.2	5,870.9	5,830.9	25.8	15.3	-179.73	26.7	599.8	713.3	692.8	20.51	34.773		
6,000.0	5,838.2	5,970.2	5,929.4	26.3	15.6	-179.73	27.3	612.3	725.4	704.5	20.86	34.770		
6,100.0	5,935.1	6,069.4	6,027.9	26.8	15.8	-179.73	27.8	624.8	737.4	716.2	21.21	34.768		
6,200.0	6,032.1	6,168.7	6,126.4	27.2	16.1	-179.73	28.4	637.3	749.5	727.9	21.56	34.765		
6,300.0	6,129.0	6,268.0	6,224.8	27.7	16.4	-179.73	28.9	649.7	761.6	739.6	21.91	34.763		
6,400.0	6,226.0	6,367.2	6,323.3	28.2	16.7	-179.73	29.5	662.2	773.6	751.4	22.26	34.760		
6,500.0	6,323.0	6,466.5	6,421.8	28.7	17.0	-179.73	30.0	674.7	785.7	763.1	22.60	34.758		
6,600.0	6,419.9	6,565.8	6,520.3	29.1	17.2	-179.73	30.6	687.2	797.8	774.8	22.95	34.756		
6,700.0	6,516.9	6,665.1	6,618.8	29.6	17.5	-179.73	31.1	699.7	809.8	786.5	23.30	34.753		
6,800.0	6,613.9	6,764.3	6,717.3	30.1	17.8	-179.73	31.7	712.1	821.9	798.2	23.65	34.751		
6,825.8	6,638.9	6,790.0	6,742.7	30.2	17.9	-179.73	31.8	715.4	825.0	801.3	23.74	34.751		
6,850.0	6,662.3	6,814.0	6,766.5	30.3	17.9	172.42	32.0	718.4	827.9	804.1	23.83	34.749		
6,900.0	6,710.7	6,863.5	6,815.6	30.5	18.1	157.24	32.2	724.6	833.8	809.8	24.00	34.737		
6,950.0	6,758.8	6,912.2	6,864.0	30.8	18.2	144.75	32.4	730.7	839.6	815.4	24.18	34.720		
7,000.0	6,806.3	6,960.1	6,911.4	31.0	18.3	135.13	30.2	736.7	845.4	821.1	24.36	34.701		
7,050.0	6,853.0	7,008.4	6,959.0	31.2	18.5	127.89	24.7	742.7	851.2	826.7	24.55	34.673		
7,100.0	6,898.8	7,057.2	7,006.7	31.4	18.6	122.46	15.9	748.7	857.0	832.2	24.75	34.629		
7,150.0	6,943.3	7,106.6	7,054.2	31.7	18.7	118.33	3.7	754.7	862.6	837.7	24.96	34.566		
7,200.0	6,986.3	7,156.6	7,101.2	31.9	18.9	115.15	-11.9	760.5	868.2	843.0	25.19	34.469		
7,250.0	7,027.7	7,207.1	7,147.6	32.1	19.0	112.66	-31.1	766.3	873.7	848.2	25.45	34.332		
7,300.0	7,067.2	7,258.3	7,193.1	32.3	19.2	110.69	-53.8	772.0	879.0	853.3	25.74	34.146		
7,350.0	7,104.7	7,310.1	7,237.4	32.5	19.3	109.12	-80.1	777.4	884.2	858.1	26.08	33.901		
7,400.0	7,139.9	7,362.6	7,280.3	32.8	19.5	107.87	-109.9	782.7	889.1	862.6	26.47	33.589		
7,450.0	7,172.7	7,415.7	7,321.3	33.0	19.7	106.86	-143.2	787.7	893.8	866.9	26.92	33.203		
7,500.0	7,203.0	7,469.5	7,360.2	33.2	19.9	106.06	-180.0	792.5	898.3	870.8	27.44	32.739		
7,550.0	7,230.5	7,524.0	7,396.8	33.5	20.2	105.42	-220.2	796.9	902.4	874.4	28.03	32.195		
7,600.0	7,255.2	7,579.1	7,430.6	33.7	20.5	104.92	-263.5	801.0	906.2	877.5	28.70	31.572		
7,650.0	7,276.9	7,634.9	7,461.3	34.0	20.8	104.55	-309.9	804.6	909.7	880.2	29.46	30.875		
7,700.0	7,295.5	7,691.3	7,488.6	34.3	21.2	104.27	-359.1	807.8	912.8	882.5	30.31	30.112		
7,750.0	7,311.0	7,748.2	7,512.2	34.5	21.6	104.09	-410.9	810.6	915.5	884.3	31.25	29.294		
7,800.0	7,323.2	7,805.8	7,531.9	34.8	22.0	103.99	-464.9	812.8	917.8	885.5	32.28	28.429		
7,850.0	7,332.2	7,863.8	7,547.3	35.1	22.5	103.96	-520.8	814.4	919.6	886.2	33.40	27.533		
7,900.0	7,337.8	7,922.3	7,558.2	35.4	23.0	104.00	-578.2	815.5	921.0	886.4	34.59	26.623		
7,950.0	7,340.0	7,981.2	7,564.4	35.7	23.5	104.10	-636.7	816.0	921.9	886.0	35.86	25.710		
7,957.7	7,340.0	7,990.2	7,565.0	35.8	23.6	104.12	-645.8	816.0	922.0	885.9	36.05	25.571		
8,000.0	7,340.0	8,038.5	7,566.0	36.1	24.1	104.18	-694.1	815.9	922.3	885.1	37.16	24.818		
8,100.0	7,340.0	8,138.5	7,566.0	36.8	25.1	104.18	-794.1	815.4	922.8	883.1	39.72	23.232		
8,200.0	7,340.0	8,238.5	7,566.0	37.5	26.3	104.17	-894.1	814.9	923.3	880.9	42.39	21.780		
8,300.0	7,340.0	8,338.5	7,566.0	38.3	27.4	104.16	-994.1	814.4	923.8	878.6	45.16	20.455		
8,400.0	7,340.0	8,438.5	7,566.0	39.2	28.7	104.15	-1,094.1	813.8	924.3	876.3	48.01	19.250		
8,500.0	7,340.0	8,538.5	7,566.0	40.2	30.0	104.15	-1,194.1	813.3	924.8	873.8	50.94	18.156		
8,600.0	7,340.0	8,638.5	7,566.0	41.2	31.3	104.14	-1,294.1	812.8	925.3	871.4	53.91	17.162		
8,700.0	7,340.0	8,738.5	7,566.0	42.2	32.7	104.13	-1,394.1	812.3	925.8	868.8	56.94	16.259		
8,800.0	7,340.0	8,838.5	7,566.0	43.3	34.1	104.12	-1,494.1	811.8	926.3	866.3	60.01	15.436		
8,900.0	7,340.0	8,938.5	7,566.0	44.5	35.6	104.11	-1,594.1	811.3	926.8	863.7	63.11	14.686		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1H-19H-B2684 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,340.0	9,038.5	7,566.0	45.6	37.0	104.11	-1,694.0	810.7	927.3	861.0	66.24	13.999		
9,100.0	7,340.0	9,138.5	7,566.0	46.9	38.5	104.10	-1,794.0	810.2	927.8	858.4	69.40	13.369		
9,200.0	7,340.0	9,238.5	7,566.0	48.1	40.0	104.09	-1,894.0	809.7	928.3	855.7	72.58	12.790		
9,300.0	7,340.0	9,338.5	7,566.0	49.4	41.6	104.08	-1,994.0	809.2	928.8	853.0	75.78	12.257		
9,400.0	7,340.0	9,438.5	7,566.0	50.7	43.1	104.08	-2,094.0	808.7	929.3	850.3	78.99	11.764		
9,500.0	7,340.0	9,538.5	7,566.0	52.0	44.7	104.07	-2,194.0	808.2	929.8	847.6	82.23	11.307		
9,600.0	7,340.0	9,638.5	7,566.0	53.4	46.3	104.06	-2,294.0	807.6	930.3	844.8	85.47	10.884		
9,700.0	7,340.0	9,738.5	7,566.0	54.8	47.9	104.05	-2,394.0	807.1	930.8	842.0	88.73	10.490		
9,800.0	7,340.0	9,838.5	7,566.0	56.2	49.5	104.04	-2,494.0	806.6	931.3	839.3	92.00	10.122		
9,900.0	7,340.0	9,938.5	7,566.0	57.6	51.1	104.04	-2,594.0	806.1	931.8	836.5	95.28	9.779		
9,957.7	7,340.0	9,996.2	7,566.0	58.4	52.0	104.03	-2,651.7	805.8	932.1	834.9	97.18	9.591		
10,000.0	7,340.0	10,038.5	7,566.0	59.0	52.7	104.03	-2,694.0	805.6	932.3	833.7	98.57	9.458		
10,100.0	7,340.0	10,138.5	7,566.0	60.5	54.3	104.02	-2,794.0	805.1	932.8	830.9	101.87	9.157		
10,200.0	7,340.0	10,238.5	7,566.0	62.0	56.0	104.01	-2,894.0	804.6	933.3	828.1	105.17	8.874		
10,300.0	7,340.0	10,338.5	7,566.0	63.4	57.6	104.01	-2,994.0	804.0	933.8	825.3	108.48	8.608		
10,400.0	7,340.0	10,438.5	7,566.0	64.9	59.3	104.00	-3,094.0	803.5	934.3	822.5	111.80	8.357		
10,500.0	7,340.0	10,538.5	7,566.0	66.5	60.9	103.99	-3,194.0	803.0	934.8	819.7	115.12	8.120		
10,600.0	7,340.0	10,638.5	7,566.0	68.0	62.6	103.98	-3,294.0	802.5	935.3	816.8	118.45	7.896		
10,700.0	7,340.0	10,738.5	7,566.0	69.5	64.2	103.98	-3,394.0	802.0	935.8	814.0	121.78	7.684		
10,800.0	7,340.0	10,838.5	7,566.0	71.1	65.9	103.97	-3,494.0	801.5	936.3	811.2	125.12	7.483		
10,900.0	7,340.0	10,938.5	7,566.0	72.6	67.6	103.96	-3,594.0	800.9	936.8	808.3	128.46	7.293		
11,000.0	7,340.0	11,038.5	7,566.0	74.2	69.3	103.95	-3,694.0	800.4	937.3	805.5	131.80	7.111		
11,107.7	7,340.0	11,146.2	7,566.0	75.9	71.1	103.94	-3,801.7	799.9	937.8	802.4	135.41	6.926		
11,201.8	7,340.0	11,240.3	7,566.0	77.4	72.7	103.95	-3,895.8	799.4	937.5	799.7	137.86	6.801		
11,300.0	7,340.0	11,338.5	7,566.0	78.9	74.3	103.97	-3,994.0	798.9	936.5	795.3	141.13	6.635		
11,400.0	7,340.0	11,438.5	7,566.0	80.5	76.0	103.98	-4,094.0	798.4	935.4	790.9	144.48	6.474		
11,500.0	7,340.0	11,538.5	7,566.0	82.1	77.7	104.00	-4,194.0	797.8	934.3	786.5	147.82	6.320		
11,600.0	7,340.0	11,638.5	7,566.0	83.7	79.4	104.02	-4,294.0	797.3	933.2	782.0	151.16	6.173		
11,700.0	7,340.0	11,738.5	7,566.0	85.3	81.1	104.03	-4,394.0	796.8	932.1	777.6	154.51	6.033		
11,800.0	7,340.0	11,838.4	7,566.0	86.9	82.8	104.05	-4,493.9	796.3	931.0	773.1	157.86	5.898		
11,900.0	7,340.0	11,938.4	7,566.0	88.5	84.5	104.07	-4,593.9	795.8	929.9	768.7	161.21	5.768		
12,000.0	7,340.0	12,038.4	7,566.0	90.2	86.2	104.08	-4,693.9	795.3	928.8	764.3	164.56	5.644		
12,065.8	7,340.0	12,104.2	7,566.0	91.2	87.3	104.09	-4,759.7	794.9	928.1	761.3	166.77	5.565 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1L-19H-B2683 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.09	-1.1	-29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	-92.09	-1.1	-29.9	29.9	29.6	0.30	98.584	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-92.09	-1.1	-29.9	29.9	29.3	0.65	45.865		
300.0	300.0	300.0	300.0	0.5	0.5	-179.87	-1.1	-29.9	31.7	30.7	1.00	31.639		
400.0	399.8	399.8	399.8	0.7	0.7	-179.88	-1.1	-29.9	36.9	35.6	1.35	27.369		
500.0	499.5	499.5	499.5	0.9	0.8	-179.91	-1.1	-29.9	45.6	43.9	1.69	26.932		
600.0	598.7	600.7	600.7	1.2	1.0	-179.91	-1.0	-28.2	56.1	54.0	2.04	27.480		
700.0	697.5	702.3	702.2	1.5	1.2	-179.90	-0.8	-22.8	66.5	64.1	2.39	27.860		
800.0	795.6	804.3	803.8	1.9	1.4	-179.88	-0.4	-13.8	76.8	74.1	2.73	28.131		
907.9	900.7	914.8	913.4	2.4	1.7	-179.85	0.2	0.0	87.9	84.8	3.10	28.341		
1,000.0	990.0	1,006.5	1,004.1	2.8	1.9	-179.83	0.8	13.2	97.3	93.9	3.42	28.416		
1,100.0	1,087.0	1,105.9	1,102.5	3.2	2.2	-179.81	1.4	27.6	107.5	103.7	3.77	28.484		
1,200.0	1,183.9	1,205.4	1,200.9	3.7	2.5	-179.79	2.1	41.9	117.7	113.6	4.13	28.543		
1,300.0	1,280.9	1,304.9	1,299.4	4.1	2.8	-179.77	2.7	56.2	128.0	123.5	4.48	28.593		
1,400.0	1,377.9	1,404.4	1,397.8	4.6	3.1	-179.76	3.3	70.6	138.2	133.4	4.83	28.636		
1,500.0	1,474.8	1,503.8	1,496.2	5.1	3.4	-179.75	4.0	84.9	148.4	143.2	5.18	28.675		
1,600.0	1,571.8	1,603.3	1,594.7	5.5	3.7	-179.74	4.6	99.2	158.6	153.1	5.53	28.708		
1,700.0	1,668.8	1,702.8	1,693.1	6.0	4.0	-179.73	5.2	113.6	168.8	163.0	5.87	28.738		
1,800.0	1,765.7	1,802.3	1,791.5	6.5	4.3	-179.72	5.9	127.9	179.1	172.8	6.22	28.765		
1,900.0	1,862.7	1,901.7	1,890.0	6.9	4.6	-179.71	6.5	142.2	189.3	182.7	6.57	28.790		
2,000.0	1,959.6	2,001.2	1,988.4	7.4	4.9	-179.71	7.1	156.6	199.5	192.6	6.92	28.812		
2,100.0	2,056.6	2,100.7	2,086.9	7.9	5.2	-179.70	7.8	170.9	209.7	202.4	7.27	28.831		
2,200.0	2,153.6	2,200.2	2,185.3	8.4	5.5	-179.70	8.4	185.2	219.9	212.3	7.62	28.850		
2,300.0	2,250.5	2,299.7	2,283.7	8.8	5.8	-179.69	9.0	199.6	230.1	222.2	7.97	28.866		
2,400.0	2,347.5	2,399.1	2,382.2	9.3	6.1	-179.69	9.6	213.9	240.4	232.0	8.32	28.882		
2,500.0	2,444.5	2,498.6	2,480.6	9.8	6.4	-179.68	10.3	228.2	250.6	241.9	8.67	28.896		
2,600.0	2,541.4	2,598.1	2,579.0	10.2	6.7	-179.68	10.9	242.6	260.8	251.8	9.02	28.909		
2,700.0	2,638.4	2,697.6	2,677.5	10.7	7.0	-179.68	11.5	256.9	271.0	261.6	9.37	28.921		
2,800.0	2,735.3	2,797.0	2,775.9	11.2	7.3	-179.67	12.2	271.2	281.2	271.5	9.72	28.933		
2,900.0	2,832.3	2,896.5	2,874.3	11.7	7.6	-179.67	12.8	285.6	291.5	281.4	10.07	28.943		
3,000.0	2,929.3	2,996.0	2,972.8	12.1	7.9	-179.67	13.4	299.9	301.7	291.3	10.42	28.953		
3,100.0	3,026.2	3,095.5	3,071.2	12.6	8.2	-179.67	14.1	314.3	311.9	301.1	10.77	28.962		
3,200.0	3,123.2	3,194.9	3,169.7	13.1	8.5	-179.66	14.7	328.6	322.1	311.0	11.12	28.971		
3,300.0	3,220.2	3,294.4	3,268.1	13.5	8.8	-179.66	15.3	342.9	332.3	320.9	11.47	28.979		
3,400.0	3,317.1	3,393.9	3,366.5	14.0	9.1	-179.66	16.0	357.3	342.5	330.7	11.82	28.987		
3,500.0	3,414.1	3,493.4	3,465.0	14.5	9.4	-179.66	16.6	371.6	352.8	340.6	12.17	28.994		
3,600.0	3,511.0	3,592.9	3,563.4	15.0	9.7	-179.66	17.2	385.9	363.0	350.5	12.52	29.001		
3,700.0	3,608.0	3,692.3	3,661.8	15.4	10.0	-179.65	17.9	400.3	373.2	360.3	12.87	29.008		
3,800.0	3,705.0	3,791.8	3,760.3	15.9	10.3	-179.65	18.5	414.6	383.4	370.2	13.21	29.014		
3,900.0	3,801.9	3,891.3	3,858.7	16.4	10.6	-179.65	19.1	428.9	393.6	380.1	13.56	29.020		
4,000.0	3,898.9	3,990.8	3,957.1	16.9	11.0	-179.65	19.7	443.3	403.9	389.9	13.91	29.026		
4,100.0	3,995.9	4,090.2	4,055.6	17.3	11.3	-179.65	20.4	457.6	414.1	399.8	14.26	29.031		
4,200.0	4,092.8	4,189.7	4,154.0	17.8	11.6	-179.65	21.0	471.9	424.3	409.7	14.61	29.036		
4,300.0	4,189.8	4,289.2	4,252.5	18.3	11.9	-179.65	21.6	486.3	434.5	419.6	14.96	29.041		
4,400.0	4,286.7	4,388.7	4,350.9	18.7	12.2	-179.65	22.3	500.6	444.7	429.4	15.31	29.046		
4,500.0	4,383.7	4,488.1	4,449.3	19.2	12.5	-179.64	22.9	514.9	455.0	439.3	15.66	29.050		
4,600.0	4,480.7	4,587.6	4,547.8	19.7	12.8	-179.64	23.5	529.3	465.2	449.2	16.01	29.054		
4,700.0	4,577.6	4,687.1	4,646.2	20.2	13.1	-179.64	24.2	543.6	475.4	459.0	16.36	29.059		
4,800.0	4,674.6	4,786.6	4,744.6	20.6	13.4	-179.64	24.8	557.9	485.6	468.9	16.71	29.062		
4,900.0	4,771.6	4,886.0	4,843.1	21.1	13.7	-179.64	25.4	572.3	495.8	478.8	17.06	29.066		
5,000.0	4,868.5	4,985.5	4,941.5	21.6	14.0	-179.64	26.1	586.6	506.0	488.6	17.41	29.070		
5,100.0	4,965.5	5,085.0	5,039.9	22.0	14.3	-179.64	26.7	600.9	516.3	498.5	17.76	29.073		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1L-19H-B2683 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,062.5	5,184.5	5,138.4	22.5	14.6	-179.64	27.3	615.3	526.5	508.4	18.11	29.077		
5,300.0	5,159.4	5,284.0	5,236.8	23.0	14.9	-179.64	28.0	629.6	536.7	518.2	18.46	29.080		
5,400.0	5,256.4	5,383.4	5,335.3	23.5	15.2	-179.64	28.6	643.9	546.9	528.1	18.81	29.083		
5,500.0	5,353.3	5,482.9	5,433.7	23.9	15.5	-179.63	29.2	658.3	557.1	538.0	19.15	29.086		
5,600.0	5,450.3	5,582.4	5,532.1	24.4	15.9	-179.63	29.8	672.6	567.4	547.9	19.50	29.089		
5,700.0	5,547.3	5,681.9	5,630.6	24.9	16.2	-179.63	30.5	686.9	577.6	557.7	19.85	29.092		
5,800.0	5,644.2	5,781.3	5,729.0	25.4	16.5	-179.63	31.1	701.3	587.8	567.6	20.20	29.094		
5,900.0	5,741.2	5,880.8	5,827.4	25.8	16.8	-179.63	31.7	715.6	598.0	577.5	20.55	29.097		
6,000.0	5,838.2	5,980.3	5,925.9	26.3	17.1	-179.63	32.4	729.9	608.2	587.3	20.90	29.100		
6,100.0	5,935.1	6,079.8	6,024.3	26.8	17.4	-179.63	33.0	744.3	618.4	597.2	21.25	29.102		
6,200.0	6,032.1	6,179.2	6,122.7	27.2	17.7	-179.63	33.6	758.6	628.7	607.1	21.60	29.104		
6,300.0	6,129.0	6,278.7	6,221.2	27.7	18.0	-179.63	34.3	772.9	638.9	616.9	21.95	29.107		
6,400.0	6,226.0	6,378.2	6,319.6	28.2	18.3	-179.63	34.9	787.3	649.1	626.8	22.30	29.109		
6,500.0	6,323.0	6,477.7	6,418.1	28.7	18.6	-179.63	35.5	801.6	659.3	636.7	22.65	29.111		
6,600.0	6,419.9	6,577.1	6,516.5	29.1	18.9	-179.63	36.2	815.9	669.5	646.5	23.00	29.113		
6,700.0	6,516.9	6,676.6	6,614.9	29.6	19.2	-179.63	36.8	830.3	679.8	656.4	23.35	29.115		
6,800.0	6,613.9	6,774.5	6,711.6	30.1	19.5	179.96	32.5	844.4	690.1	666.4	23.69	29.127		
6,825.8	6,638.9	6,800.0	6,736.6	30.2	19.6	179.68	29.2	848.1	692.8	669.0	23.78	29.129		
6,850.0	6,662.3	6,822.5	6,758.6	30.3	19.7	171.54	25.6	851.4	695.4	671.5	23.88	29.119		
6,900.0	6,710.7	6,869.9	6,804.4	30.5	19.8	155.60	15.6	858.3	700.7	676.6	24.12	29.053		
6,950.0	6,758.8	6,917.0	6,849.2	30.8	19.9	142.16	2.8	865.0	706.0	681.6	24.40	28.937		
7,000.0	6,806.3	6,963.6	6,892.6	31.0	20.1	131.57	-12.9	871.6	711.2	686.4	24.75	28.737		
7,050.0	6,853.0	7,009.8	6,934.5	31.2	20.2	123.39	-31.2	878.0	716.3	691.2	25.15	28.479		
7,100.0	6,898.8	7,055.7	6,975.0	31.4	20.4	117.05	-52.1	884.3	721.3	695.7	25.61	28.164		
7,150.0	6,943.3	7,100.0	7,012.6	31.7	20.5	112.05	-74.6	890.2	726.1	700.0	26.11	27.809		
7,200.0	6,986.3	7,146.6	7,050.6	31.9	20.7	108.01	-100.8	896.2	730.8	704.1	26.68	27.396		
7,250.0	7,027.7	7,191.6	7,085.7	32.1	20.9	104.72	-128.5	901.8	735.2	708.0	27.27	26.964		
7,300.0	7,067.2	7,236.4	7,118.8	32.3	21.1	102.00	-158.2	907.1	739.4	711.5	27.89	26.514		
7,350.0	7,104.7	7,280.9	7,149.8	32.5	21.3	99.71	-189.7	912.2	743.3	714.8	28.53	26.056		
7,400.0	7,139.9	7,325.2	7,178.7	32.8	21.5	97.78	-223.0	917.0	746.9	717.7	29.18	25.597		
7,450.0	7,172.7	7,369.4	7,205.4	33.0	21.8	96.15	-257.8	921.5	750.2	720.4	29.84	25.142		
7,500.0	7,203.0	7,413.3	7,229.8	33.2	22.0	94.76	-294.1	925.7	753.1	722.6	30.50	24.695		
7,550.0	7,230.5	7,457.2	7,251.9	33.5	22.3	93.59	-331.8	929.5	755.7	724.6	31.16	24.257		
7,600.0	7,255.2	7,500.0	7,271.2	33.7	22.6	92.62	-369.8	933.0	757.9	726.1	31.80	23.837		
7,650.0	7,276.9	7,544.5	7,288.9	34.0	22.9	91.81	-410.5	936.3	759.8	727.3	32.46	23.409		
7,700.0	7,295.5	7,588.0	7,303.7	34.3	23.2	91.16	-451.3	939.2	761.2	728.1	33.10	22.996		
7,750.0	7,311.0	7,631.4	7,316.0	34.5	23.5	90.66	-492.8	941.7	762.2	728.4	33.74	22.591		
7,800.0	7,323.2	7,674.8	7,325.8	34.8	23.9	90.30	-535.0	943.9	762.8	728.4	34.38	22.190		
7,850.0	7,332.2	7,718.1	7,333.1	35.1	24.3	90.06	-577.7	945.7	763.0	727.9	35.01	21.791		
7,900.0	7,337.8	7,761.5	7,337.8	35.4	24.7	89.96	-620.8	947.1	762.7	727.1	35.65	21.393		
7,950.0	7,340.0	7,804.8	7,339.9	35.7	25.1	89.98	-664.0	948.2	762.0	725.7	36.30	20.992		
7,957.7	7,340.0	7,811.4	7,340.0	35.8	25.1	90.00	-670.7	948.3	761.9	725.5	36.40	20.930		
8,000.0	7,340.0	7,852.7	7,340.0	36.1	25.5	90.00	-712.0	949.0	761.2	723.7	37.49	20.301		
8,100.0	7,340.0	7,952.7	7,340.0	36.8	26.6	90.00	-811.9	950.8	759.4	719.2	40.19	18.896		
8,200.0	7,340.0	8,052.7	7,340.0	37.5	27.7	90.00	-911.9	952.5	757.7	714.7	43.00	17.620		
8,300.0	7,340.0	8,152.7	7,340.0	38.3	28.8	90.00	-1,011.9	954.2	755.9	710.0	45.91	16.466		
8,400.0	7,340.0	8,252.7	7,340.0	39.2	30.1	90.00	-1,111.8	956.0	754.2	705.3	48.89	15.425		
8,500.0	7,340.0	8,352.7	7,340.0	40.2	31.3	90.00	-1,211.8	957.7	752.4	700.5	51.95	14.485		
8,600.0	7,340.0	8,452.6	7,340.0	41.2	32.7	90.00	-1,311.8	959.5	750.7	695.6	55.05	13.636		
8,700.0	7,340.0	8,552.6	7,340.0	42.2	34.0	90.00	-1,411.8	961.2	748.9	690.7	58.20	12.868		
8,800.0	7,340.0	8,652.6	7,340.0	43.3	35.4	90.00	-1,511.7	963.0	747.2	685.8	61.39	12.171		
8,900.0	7,340.0	8,752.6	7,340.0	44.5	36.8	90.00	-1,611.7	964.7	745.4	680.8	64.62	11.537		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1L-19H-B2683 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,340.0	8,852.6	7,340.0	45.6	38.3	90.00	-1,711.7	966.5	743.7	675.8	67.87	10.958		
9,100.0	7,340.0	8,952.6	7,340.0	46.9	39.8	90.00	-1,811.6	968.2	742.0	670.8	71.14	10.429		
9,200.0	7,340.0	9,052.6	7,340.0	48.1	41.3	90.00	-1,911.6	969.9	740.2	665.8	74.44	9.944		
9,300.0	7,340.0	9,152.5	7,340.0	49.4	42.8	90.00	-2,011.6	971.7	738.5	660.7	77.76	9.497		
9,400.0	7,340.0	9,252.5	7,340.0	50.7	44.3	90.00	-2,111.5	973.4	736.7	655.6	81.09	9.086		
9,500.0	7,340.0	9,352.5	7,340.0	52.0	45.9	90.00	-2,211.5	975.2	735.0	650.5	84.43	8.705		
9,600.0	7,340.0	9,452.5	7,340.0	53.4	47.4	90.00	-2,311.5	976.9	733.2	645.4	87.79	8.352		
9,700.0	7,340.0	9,552.5	7,340.0	54.8	49.0	90.00	-2,411.5	978.7	731.5	640.3	91.16	8.024		
9,800.0	7,340.0	9,652.5	7,340.0	56.2	50.6	90.00	-2,511.4	980.4	729.7	635.2	94.54	7.719		
9,900.0	7,340.0	9,752.4	7,340.0	57.6	52.2	90.00	-2,611.4	982.2	728.0	630.1	97.93	7.434		
9,957.7	7,340.0	9,810.1	7,340.0	58.4	53.1	90.00	-2,669.0	983.2	727.0	627.1	99.89	7.278		
10,000.0	7,340.0	9,852.4	7,340.0	59.0	53.8	90.00	-2,711.4	983.9	726.3	624.9	101.33	7.167		
10,100.0	7,340.0	9,952.4	7,340.0	60.5	55.4	90.00	-2,811.3	985.6	724.5	619.8	104.73	6.918		
10,200.0	7,340.0	10,052.4	7,340.0	62.0	57.0	90.00	-2,911.3	987.4	722.8	614.6	108.14	6.683		
10,300.0	7,340.0	10,152.4	7,340.0	63.4	58.7	90.00	-3,011.3	989.1	721.0	609.5	111.56	6.463		
10,400.0	7,340.0	10,252.4	7,340.0	64.9	60.3	90.00	-3,111.2	990.9	719.3	604.3	114.98	6.256		
10,500.0	7,340.0	10,352.4	7,340.0	66.5	62.0	90.00	-3,211.2	992.6	717.5	599.1	118.41	6.060		
10,600.0	7,340.0	10,452.3	7,340.0	68.0	63.6	90.00	-3,311.2	994.4	715.8	593.9	121.84	5.875		
10,700.0	7,340.0	10,552.3	7,340.0	69.5	65.3	90.00	-3,411.1	996.1	714.0	588.8	125.28	5.700		
10,800.0	7,340.0	10,652.3	7,340.0	71.1	66.9	90.00	-3,511.1	997.9	712.3	583.6	128.72	5.534		
10,900.0	7,340.0	10,752.3	7,340.0	72.6	68.6	90.00	-3,611.1	999.6	710.5	578.4	132.16	5.376		
11,000.0	7,340.0	10,852.3	7,340.0	74.2	70.3	90.00	-3,711.1	1,001.4	708.8	573.2	135.61	5.227		
11,107.7	7,340.0	10,959.9	7,340.0	75.9	72.1	90.00	-3,818.7	1,003.2	706.9	567.6	139.32	5.074		
11,201.8	7,340.0	11,054.1	7,340.0	77.4	73.7	90.00	-3,912.8	1,004.9	704.5	562.7	141.79	4.969		
11,300.0	7,340.0	11,152.2	7,340.0	78.9	75.3	90.00	-4,010.9	1,006.6	701.2	556.0	145.18	4.830		
11,400.0	7,340.0	11,252.1	7,340.0	80.5	77.0	90.00	-4,110.8	1,008.3	697.8	549.2	148.63	4.695		
11,500.0	7,340.0	11,352.1	7,340.0	82.1	78.7	90.00	-4,210.8	1,010.1	694.4	542.3	152.09	4.566		
11,600.0	7,340.0	11,452.0	7,340.0	83.7	80.4	90.00	-4,310.7	1,011.8	691.0	535.5	155.55	4.442		
11,700.0	7,340.0	11,551.9	7,340.0	85.3	82.1	90.00	-4,410.6	1,013.6	687.6	528.6	159.02	4.324		
11,800.0	7,340.0	11,651.9	7,340.0	86.9	83.8	90.00	-4,510.5	1,015.3	684.2	521.8	162.48	4.211		
11,900.0	7,340.0	11,751.8	7,340.0	88.5	85.5	90.00	-4,610.5	1,017.1	680.9	514.9	165.95	4.103		
12,000.0	7,340.0	11,851.8	7,340.0	90.2	87.2	90.00	-4,710.4	1,018.8	677.5	508.0	169.42	3.999		
12,065.8	7,340.0	11,917.5	7,340.0	91.2	88.3	90.00	-4,776.1	1,019.9	675.2	503.5	171.70	3.933 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1J-19H-B2682 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.10	-0.7	-19.9	19.9					
100.0	100.0	100.0	100.0	0.2	0.2	-92.10	-0.7	-19.9	19.9	19.6	0.30	65.416	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-92.10	-0.7	-19.9	19.9	19.2	0.65	30.434		
300.0	300.0	300.0	300.0	0.5	0.5	-179.88	-0.7	-19.9	21.6	20.6	1.00	21.580		
400.0	399.8	399.8	399.8	0.7	0.7	-179.90	-0.7	-19.9	26.8	25.5	1.35	19.902		
500.0	499.5	500.7	500.6	0.9	0.9	-179.92	-0.7	-18.1	33.8	32.1	1.70	19.929		
600.0	598.7	601.7	601.6	1.2	1.0	-179.93	-0.4	-12.8	40.7	38.7	2.04	19.940		
700.0	697.5	703.1	702.5	1.5	1.3	-179.94	-0.1	-3.8	47.6	45.3	2.39	19.939		
800.0	795.6	804.6	803.3	1.9	1.5	-179.94	0.4	8.7	54.5	51.7	2.73	19.927		
907.9	900.7	914.5	911.7	2.4	1.8	-179.94	1.1	26.2	61.8	58.7	3.10	19.904		
1,000.0	990.0	1,006.7	1,002.4	2.8	2.1	-179.95	1.7	43.0	67.7	64.3	3.43	19.735		
1,100.0	1,087.0	1,106.5	1,100.5	3.2	2.5	-179.95	2.5	61.1	74.1	70.3	3.78	19.583		
1,200.0	1,183.9	1,206.3	1,198.6	3.7	2.8	-179.95	3.2	79.3	80.4	76.3	4.13	19.458		
1,300.0	1,280.9	1,306.1	1,296.7	4.1	3.2	-179.95	3.9	97.5	86.8	82.3	4.48	19.353		
1,400.0	1,377.9	1,405.9	1,394.9	4.6	3.5	-179.95	4.6	115.7	93.2	88.3	4.84	19.264		
1,500.0	1,474.8	1,505.7	1,493.0	5.1	3.9	-179.95	5.3	133.9	99.5	94.3	5.19	19.187		
1,600.0	1,571.8	1,605.4	1,591.1	5.5	4.2	-179.95	6.0	152.1	105.9	100.4	5.54	19.121		
1,700.0	1,668.8	1,705.2	1,689.2	6.0	4.6	-179.95	6.7	170.2	112.3	106.4	5.89	19.062		
1,800.0	1,765.7	1,805.0	1,787.4	6.5	5.0	-179.95	7.5	188.4	118.6	112.4	6.24	19.011		
1,900.0	1,862.7	1,904.8	1,885.5	6.9	5.3	-179.95	8.2	206.6	125.0	118.4	6.59	18.965		
2,000.0	1,959.6	2,004.6	1,983.6	7.4	5.7	-179.95	8.9	224.8	131.4	124.4	6.94	18.923		
2,100.0	2,056.6	2,104.4	2,081.7	7.9	6.0	-179.95	9.6	243.0	137.7	130.4	7.29	18.886		
2,200.0	2,153.6	2,204.2	2,179.8	8.4	6.4	-179.95	10.3	261.2	144.1	136.5	7.64	18.853		
2,300.0	2,250.5	2,304.0	2,278.0	8.8	6.8	-179.95	11.0	279.4	150.5	142.5	7.99	18.822		
2,400.0	2,347.5	2,403.8	2,376.1	9.3	7.1	-179.95	11.7	297.5	156.8	148.5	8.35	18.794		
2,500.0	2,444.5	2,503.6	2,474.2	9.8	7.5	-179.95	12.5	315.7	163.2	154.5	8.70	18.768		
2,600.0	2,541.4	2,603.4	2,572.3	10.2	7.9	-179.95	13.2	333.9	169.6	160.5	9.05	18.745		
2,700.0	2,638.4	2,703.2	2,670.5	10.7	8.2	-179.95	13.9	352.1	175.9	166.5	9.40	18.723		
2,800.0	2,735.3	2,803.0	2,768.6	11.2	8.6	-179.95	14.6	370.3	182.3	172.6	9.75	18.702		
2,900.0	2,832.3	2,902.8	2,866.7	11.7	9.0	-179.95	15.3	388.5	188.7	178.6	10.10	18.684		
3,000.0	2,929.3	3,002.6	2,964.8	12.1	9.3	-179.95	16.0	406.6	195.0	184.6	10.45	18.666		
3,100.0	3,026.2	3,102.4	3,063.0	12.6	9.7	-179.95	16.7	424.8	201.4	190.6	10.80	18.650		
3,200.0	3,123.2	3,202.2	3,161.1	13.1	10.0	-179.95	17.5	443.0	207.8	196.6	11.15	18.634		
3,300.0	3,220.2	3,302.0	3,259.2	13.5	10.4	-179.95	18.2	461.2	214.1	202.6	11.50	18.620		
3,400.0	3,317.1	3,401.8	3,357.3	14.0	10.8	-179.95	18.9	479.4	220.5	208.7	11.85	18.606		
3,500.0	3,414.1	3,501.6	3,455.5	14.5	11.1	-179.95	19.6	497.6	226.9	214.7	12.20	18.593		
3,600.0	3,511.0	3,601.4	3,553.6	15.0	11.5	-179.95	20.3	515.7	233.3	220.7	12.55	18.581		
3,700.0	3,608.0	3,701.2	3,651.7	15.4	11.9	-179.95	21.0	533.9	239.6	226.7	12.90	18.570		
3,800.0	3,705.0	3,801.0	3,749.8	15.9	12.2	-179.95	21.8	552.1	246.0	232.7	13.25	18.559		
3,900.0	3,801.9	3,900.8	3,848.0	16.4	12.6	-179.95	22.5	570.3	252.4	238.8	13.60	18.549		
4,000.0	3,898.9	4,000.6	3,946.1	16.9	13.0	-179.95	23.2	588.5	258.7	244.8	13.96	18.539		
4,100.0	3,995.9	4,100.4	4,044.2	17.3	13.3	-179.95	23.9	606.7	265.1	250.8	14.31	18.530		
4,200.0	4,092.8	4,200.2	4,142.3	17.8	13.7	-179.95	24.6	624.8	271.5	256.8	14.66	18.522		
4,300.0	4,189.8	4,300.0	4,240.4	18.3	14.1	-179.95	25.3	643.0	277.8	262.8	15.01	18.513		
4,400.0	4,286.7	4,399.8	4,338.6	18.7	14.4	-179.95	26.0	661.2	284.2	268.8	15.36	18.505		
4,500.0	4,383.7	4,499.6	4,436.7	19.2	14.8	-179.95	26.8	679.4	290.6	274.9	15.71	18.498		
4,600.0	4,480.7	4,599.4	4,534.8	19.7	15.2	-179.95	27.5	697.6	296.9	280.9	16.06	18.490		
4,700.0	4,577.6	4,699.2	4,632.9	20.2	15.5	-179.95	28.2	715.8	303.3	286.9	16.41	18.483		
4,800.0	4,674.6	4,799.0	4,731.1	20.6	15.9	-179.95	28.9	733.9	309.7	292.9	16.76	18.477		
4,900.0	4,771.6	4,898.7	4,829.2	21.1	16.3	-179.95	29.6	752.1	316.0	298.9	17.11	18.470		
5,000.0	4,868.5	4,998.5	4,927.3	21.6	16.6	-179.95	30.3	770.3	322.4	304.9	17.46	18.464		
5,100.0	4,965.5	5,098.3	5,025.4	22.0	17.0	-179.95	31.0	788.5	328.8	311.0	17.81	18.458		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1J-19H-B2682 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,062.5	5,198.1	5,123.6	22.5	17.4	-179.95	31.8	806.7	335.1	317.0	18.16	18.453		
5,300.0	5,159.4	5,297.9	5,221.7	23.0	17.7	-179.95	32.5	824.9	341.5	323.0	18.51	18.447		
5,400.0	5,256.4	5,397.7	5,319.8	23.5	18.1	-179.95	33.2	843.0	347.9	329.0	18.86	18.442		
5,500.0	5,353.3	5,497.5	5,417.9	23.9	18.5	-179.95	33.9	861.2	354.2	335.0	19.21	18.437		
5,600.0	5,450.3	5,597.3	5,516.1	24.4	18.8	-179.95	34.6	879.4	360.6	341.1	19.56	18.432		
5,700.0	5,547.3	5,697.1	5,614.2	24.9	19.2	-179.95	35.3	897.6	367.0	347.1	19.91	18.428		
5,800.0	5,644.2	5,796.9	5,712.3	25.4	19.6	-179.95	36.0	915.8	373.4	353.1	20.27	18.423		
5,900.0	5,741.2	5,896.7	5,810.4	25.8	19.9	-179.95	36.8	934.0	379.7	359.1	20.62	18.419		
6,000.0	5,838.2	5,996.5	5,908.6	26.3	20.3	-179.95	37.5	952.1	386.1	365.1	20.97	18.414		
6,100.0	5,935.1	6,096.3	6,006.7	26.8	20.7	-179.95	38.2	970.3	392.5	371.1	21.32	18.410		
6,200.0	6,032.1	6,196.1	6,104.8	27.2	21.0	-179.95	38.9	988.5	398.8	377.2	21.67	18.406		
6,300.0	6,129.0	6,295.9	6,202.9	27.7	21.4	-179.95	39.6	1,006.7	405.2	383.2	22.02	18.403		
6,400.0	6,226.0	6,395.7	6,301.0	28.2	21.8	-179.95	40.3	1,024.9	411.6	389.2	22.37	18.399		
6,500.0	6,323.0	6,495.5	6,399.2	28.7	22.1	-179.95	41.0	1,043.1	417.9	395.2	22.72	18.395		
6,600.0	6,419.9	6,595.3	6,497.3	29.1	22.5	-179.95	41.8	1,061.3	424.3	401.2	23.07	18.392		
6,700.0	6,516.9	6,695.1	6,595.4	29.6	22.9	-179.95	42.5	1,079.4	430.7	407.2	23.42	18.389		
6,800.0	6,613.9	6,794.9	6,693.5	30.1	23.2	-179.95	43.2	1,097.6	437.0	413.3	23.77	18.385		
6,825.8	6,638.9	6,820.7	6,718.9	30.2	23.3	-179.95	43.4	1,102.3	438.7	414.8	23.86	18.384		
6,850.0	6,662.3	6,844.4	6,742.2	30.3	23.4	172.30	43.4	1,106.6	440.2	416.3	23.95	18.383		
6,900.0	6,710.7	6,893.2	6,790.1	30.5	23.6	157.18	40.9	1,115.5	443.4	419.2	24.12	18.378		
6,950.0	6,758.8	6,942.0	6,837.8	30.8	23.8	144.53	35.1	1,124.4	446.5	422.2	24.31	18.367		
7,000.0	6,806.3	6,990.9	6,885.0	31.0	23.9	134.71	26.1	1,133.1	449.6	425.1	24.51	18.345		
7,050.0	6,853.0	7,039.8	6,931.6	31.2	24.1	127.28	13.7	1,141.7	452.6	427.9	24.72	18.309		
7,100.0	6,898.8	7,088.8	6,977.2	31.4	24.3	121.66	-1.8	1,150.2	455.6	430.7	24.95	18.260		
7,150.0	6,943.3	7,137.8	7,021.8	31.7	24.4	117.34	-20.6	1,158.4	458.5	433.3	25.22	18.181		
7,200.0	6,986.3	7,186.9	7,065.0	31.9	24.6	113.98	-42.4	1,166.5	461.3	435.8	25.52	18.079		
7,250.0	7,027.7	7,236.1	7,106.7	32.1	24.8	111.31	-67.2	1,174.2	464.0	438.2	25.85	17.949		
7,300.0	7,067.2	7,285.4	7,146.8	32.3	25.0	109.18	-94.9	1,181.6	466.6	440.3	26.23	17.787		
7,350.0	7,104.7	7,334.7	7,184.9	32.5	25.2	107.44	-125.3	1,188.7	469.0	442.4	26.66	17.593		
7,400.0	7,139.9	7,384.1	7,220.9	32.8	25.4	106.03	-158.5	1,195.3	471.3	444.2	27.14	17.366		
7,450.0	7,172.7	7,433.6	7,254.6	33.0	25.6	104.88	-194.1	1,201.6	473.4	445.8	27.67	17.108		
7,500.0	7,203.0	7,483.1	7,285.9	33.2	25.8	103.94	-232.1	1,207.4	475.4	447.1	28.27	16.818		
7,550.0	7,230.5	7,532.8	7,314.6	33.5	26.1	103.17	-272.3	1,212.7	477.2	448.3	28.92	16.501		
7,600.0	7,255.2	7,582.6	7,340.6	33.7	26.4	102.55	-314.5	1,217.5	478.8	449.2	29.63	16.158		
7,650.0	7,276.9	7,632.4	7,363.6	34.0	26.7	102.07	-358.5	1,221.8	480.2	449.8	30.41	15.795		
7,700.0	7,295.5	7,682.4	7,383.6	34.3	27.0	101.70	-404.1	1,225.5	481.5	450.2	31.24	15.414		
7,750.0	7,311.0	7,732.4	7,400.4	34.5	27.3	101.43	-451.1	1,228.6	482.5	450.4	32.12	15.019		
7,800.0	7,323.2	7,782.5	7,414.0	34.8	27.6	101.26	-499.3	1,231.1	483.3	450.2	33.07	14.616		
7,850.0	7,332.2	7,832.8	7,424.3	35.1	28.0	101.18	-548.4	1,233.0	483.9	449.8	34.06	14.207		
7,900.0	7,337.8	7,883.1	7,431.2	35.4	28.4	101.18	-598.2	1,234.3	484.3	449.2	35.10	13.796		
7,950.0	7,340.0	7,933.5	7,434.6	35.7	28.8	101.27	-648.5	1,234.9	484.4	448.2	36.18	13.387		
7,957.7	7,340.0	7,941.2	7,434.8	35.8	28.8	101.29	-656.2	1,235.0	484.4	448.1	36.35	13.325		
8,000.0	7,340.0	7,983.7	7,435.0	36.1	29.2	101.31	-698.7	1,235.0	484.4	447.0	37.41	12.949		
8,100.0	7,340.0	8,083.7	7,435.0	36.8	30.0	101.31	-798.7	1,235.0	484.4	444.4	40.01	12.109		
8,200.0	7,340.0	8,183.7	7,435.0	37.5	31.0	101.31	-898.7	1,235.0	484.4	441.7	42.72	11.340		
8,300.0	7,340.0	8,283.7	7,435.0	38.3	32.0	101.31	-998.7	1,235.0	484.4	438.9	45.53	10.640		
8,400.0	7,340.0	8,383.7	7,435.0	39.2	33.1	101.31	-1,098.7	1,235.0	484.4	436.0	48.42	10.004		
8,500.0	7,340.0	8,483.7	7,435.0	40.2	34.2	101.31	-1,198.7	1,235.0	484.4	433.0	51.38	9.428		
8,600.0	7,340.0	8,583.7	7,435.0	41.2	35.4	101.31	-1,298.7	1,235.0	484.4	430.0	54.40	8.905		
8,700.0	7,340.0	8,683.7	7,435.0	42.2	36.6	101.31	-1,398.7	1,235.0	484.4	427.0	57.46	8.430		
8,800.0	7,340.0	8,783.7	7,435.0	43.3	37.9	101.31	-1,498.7	1,235.0	484.4	423.9	60.57	7.998		
8,900.0	7,340.0	8,883.7	7,435.0	44.5	39.2	101.31	-1,598.7	1,235.0	484.4	420.7	63.71	7.604		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1J-19H-B2682 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,340.0	8,983.7	7,435.0	45.6	40.5	101.31	-1,698.7	1,235.0	484.4	417.6	66.88	7.244		
9,100.0	7,340.0	9,083.7	7,435.0	46.9	41.9	101.31	-1,798.7	1,235.0	484.4	414.4	70.07	6.913		
9,200.0	7,340.0	9,183.7	7,435.0	48.1	43.3	101.31	-1,898.7	1,235.0	484.4	411.1	73.29	6.610		
9,300.0	7,340.0	9,283.7	7,435.0	49.4	44.7	101.31	-1,998.7	1,235.0	484.4	407.9	76.53	6.330		
9,400.0	7,340.0	9,383.7	7,435.0	50.7	46.2	101.31	-2,098.7	1,235.0	484.4	404.7	79.78	6.072		
9,500.0	7,340.0	9,483.7	7,435.0	52.0	47.6	101.31	-2,198.7	1,235.0	484.4	401.4	83.05	5.833		
9,600.0	7,340.0	9,583.7	7,435.0	53.4	49.1	101.31	-2,298.7	1,235.0	484.4	398.1	86.33	5.611		
9,700.0	7,340.0	9,683.7	7,435.0	54.8	50.6	101.31	-2,398.7	1,235.0	484.4	394.8	89.62	5.405		
9,800.0	7,340.0	9,783.7	7,435.0	56.2	52.1	101.31	-2,498.7	1,235.0	484.4	391.5	92.93	5.213		
9,900.0	7,340.0	9,883.7	7,435.0	57.6	53.7	101.31	-2,598.7	1,235.0	484.4	388.2	96.24	5.033		
9,957.7	7,340.0	9,941.4	7,435.0	58.4	54.6	101.31	-2,656.4	1,235.0	484.4	386.3	98.16	4.935		
10,000.0	7,340.0	9,983.7	7,435.0	59.0	55.2	101.31	-2,698.7	1,235.0	484.4	384.9	99.57	4.865		
10,100.0	7,340.0	10,083.7	7,435.0	60.5	56.8	101.31	-2,798.7	1,235.0	484.4	381.5	102.90	4.708		
10,200.0	7,340.0	10,183.7	7,435.0	62.0	58.4	101.31	-2,898.7	1,235.0	484.4	378.2	106.23	4.560		
10,300.0	7,340.0	10,283.7	7,435.0	63.4	59.9	101.31	-2,998.7	1,235.0	484.4	374.9	109.58	4.421		
10,400.0	7,340.0	10,383.7	7,435.0	64.9	61.5	101.31	-3,098.7	1,235.0	484.4	371.5	112.93	4.290		
10,500.0	7,340.0	10,483.7	7,435.0	66.5	63.1	101.31	-3,198.7	1,235.0	484.4	368.2	116.28	4.166		
10,600.0	7,340.0	10,583.7	7,435.0	68.0	64.7	101.31	-3,298.7	1,235.0	484.4	364.8	119.64	4.049		
10,700.0	7,340.0	10,683.7	7,435.0	69.5	66.4	101.31	-3,398.7	1,235.0	484.4	361.4	123.01	3.938		
10,800.0	7,340.0	10,783.7	7,435.0	71.1	68.0	101.31	-3,498.7	1,235.0	484.4	358.1	126.38	3.833		
10,900.0	7,340.0	10,883.7	7,435.0	72.6	69.6	101.31	-3,598.7	1,235.0	484.4	354.7	129.75	3.734		
11,000.0	7,340.0	10,983.7	7,435.0	74.2	71.2	101.31	-3,698.7	1,235.0	484.4	351.3	133.12	3.639		
11,107.7	7,340.0	11,091.4	7,435.0	75.9	73.0	101.31	-3,806.4	1,235.0	484.4	347.7	136.76	3.542		
11,201.8	7,340.0	11,185.5	7,435.0	77.4	74.6	101.33	-3,900.5	1,235.0	483.7	344.6	139.12	3.477		
11,300.0	7,340.0	11,283.7	7,435.0	78.9	76.2	101.37	-3,998.7	1,235.0	482.1	339.7	142.42	3.385		
11,400.0	7,340.0	11,383.7	7,435.0	80.5	77.8	101.41	-4,098.7	1,235.0	480.5	334.7	145.79	3.296		
11,500.0	7,340.0	11,483.7	7,435.0	82.1	79.5	101.44	-4,198.6	1,235.0	478.9	329.7	149.16	3.211		
11,600.0	7,340.0	11,583.7	7,435.0	83.7	81.2	101.48	-4,298.6	1,235.0	477.3	324.7	152.53	3.129		
11,700.0	7,340.0	11,683.6	7,435.0	85.3	82.8	101.52	-4,398.6	1,235.0	475.6	319.8	155.90	3.051		
11,800.0	7,340.0	11,783.6	7,435.0	86.9	84.5	101.56	-4,498.6	1,235.0	474.0	314.8	159.27	2.976		
11,900.0	7,340.0	11,883.6	7,435.0	88.5	86.2	101.60	-4,598.6	1,235.0	472.4	309.8	162.64	2.905		
12,000.0	7,340.0	11,983.6	7,435.0	90.2	87.8	101.64	-4,698.6	1,235.0	470.8	304.8	166.02	2.836		
12,065.8	7,340.0	12,049.4	7,435.0	91.2	88.9	101.67	-4,764.3	1,235.0	469.8	301.5	168.24	2.792 SF		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1K-19H-B2681 - Hz - Plan #2													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-92.07	-0.4	-10.1	10.1					
100.0	100.0	100.0	100.0	0.2	0.2	-92.07	-0.4	-10.1	10.1	9.8	0.30	33.168	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-92.07	-0.4	-10.1	10.1	9.4	0.65	15.431		
300.0	300.0	300.0	300.0	0.5	0.5	-179.86	-0.4	-10.1	11.8	10.8	1.00	11.801		
400.0	399.8	400.4	400.4	0.7	0.7	-179.91	-0.3	-8.3	15.3	14.0	1.35	11.335		
500.0	499.5	500.9	500.8	0.9	0.9	-179.98	-0.1	-3.0	18.8	17.1	1.70	11.056		
600.0	598.7	601.6	601.0	1.2	1.1	179.95	0.2	5.8	22.2	20.2	2.04	10.866		
700.0	697.5	702.4	701.1	1.5	1.4	179.87	0.6	18.1	25.6	23.2	2.39	10.725		
800.0	795.6	803.3	800.7	1.9	1.7	179.79	1.2	34.0	29.0	26.3	2.74	10.613		
907.9	900.7	912.1	907.5	2.4	2.1	179.70	2.0	55.0	32.7	29.6	3.11	10.522		
1,000.0	990.0	1,004.2	997.5	2.8	2.4	179.64	2.7	74.2	36.1	32.7	3.43	10.534		
1,100.0	1,087.0	1,104.1	1,095.3	3.2	2.8	179.58	3.4	94.9	39.9	36.1	3.78	10.545		
1,200.0	1,183.9	1,204.1	1,193.0	3.7	3.2	179.53	4.2	115.7	43.7	39.5	4.14	10.555		
1,300.0	1,280.9	1,304.0	1,290.8	4.1	3.6	179.49	4.9	136.5	47.4	42.9	4.49	10.564		
1,400.0	1,377.9	1,403.9	1,388.5	4.6	4.0	179.46	5.6	157.2	51.2	46.3	4.84	10.572		
1,500.0	1,474.8	1,503.8	1,486.3	5.1	4.4	179.43	6.4	178.0	54.9	49.7	5.19	10.579		
1,600.0	1,571.8	1,603.8	1,584.0	5.5	4.8	179.40	7.1	198.8	58.7	53.1	5.54	10.586		
1,700.0	1,668.8	1,703.7	1,681.7	6.0	5.2	179.38	7.9	219.5	62.4	56.5	5.90	10.591		
1,800.0	1,765.7	1,803.6	1,779.5	6.5	5.6	179.36	8.6	240.3	66.2	60.0	6.25	10.596		
1,900.0	1,862.7	1,903.6	1,877.2	6.9	6.0	179.34	9.4	261.1	70.0	63.4	6.60	10.601		
2,000.0	1,959.6	2,003.5	1,975.0	7.4	6.4	179.33	10.1	281.9	73.7	66.8	6.95	10.605		
2,100.0	2,056.6	2,103.4	2,072.7	7.9	6.8	179.31	10.9	302.6	77.5	70.2	7.30	10.609		
2,200.0	2,153.6	2,203.3	2,170.5	8.4	7.2	179.30	11.6	323.4	81.2	73.6	7.65	10.613		
2,300.0	2,250.5	2,303.3	2,268.2	8.8	7.6	179.29	12.4	344.2	85.0	77.0	8.01	10.616		
2,400.0	2,347.5	2,403.2	2,366.0	9.3	8.0	179.28	13.1	364.9	88.7	80.4	8.36	10.619		
2,500.0	2,444.5	2,503.1	2,463.7	9.8	8.4	179.27	13.9	385.7	92.5	83.8	8.71	10.622		
2,600.0	2,541.4	2,603.1	2,561.4	10.2	8.8	179.26	14.6	406.5	96.3	87.2	9.06	10.624		
2,700.0	2,638.4	2,703.0	2,659.2	10.7	9.3	179.25	15.4	427.3	100.0	90.6	9.41	10.627		
2,800.0	2,735.3	2,802.9	2,756.9	11.2	9.7	179.24	16.1	448.0	103.8	94.0	9.76	10.629		
2,900.0	2,832.3	2,902.8	2,854.7	11.7	10.1	179.23	16.8	468.8	107.5	97.4	10.12	10.631		
3,000.0	2,929.3	3,002.8	2,952.4	12.1	10.5	179.23	17.6	489.6	111.3	100.8	10.47	10.633		
3,100.0	3,026.2	3,102.7	3,050.2	12.6	10.9	179.22	18.3	510.3	115.1	104.2	10.82	10.635		
3,200.0	3,123.2	3,202.6	3,147.9	13.1	11.3	179.21	19.1	531.1	118.8	107.6	11.17	10.637		
3,300.0	3,220.2	3,302.6	3,245.7	13.5	11.7	179.21	19.8	551.9	122.6	111.0	11.52	10.638		
3,400.0	3,317.1	3,402.5	3,343.4	14.0	12.1	179.20	20.6	572.6	126.3	114.5	11.87	10.640		
3,500.0	3,414.1	3,502.4	3,441.1	14.5	12.5	179.20	21.3	593.4	130.1	117.9	12.22	10.641		
3,600.0	3,511.0	3,602.4	3,538.9	15.0	12.9	179.19	22.1	614.2	133.8	121.3	12.58	10.643		
3,700.0	3,608.0	3,702.3	3,636.6	15.4	13.3	179.19	22.8	635.0	137.6	124.7	12.93	10.644		
3,800.0	3,705.0	3,802.2	3,734.4	15.9	13.7	179.19	23.6	655.7	141.4	128.1	13.28	10.645		
3,900.0	3,801.9	3,902.1	3,832.1	16.4	14.2	179.18	24.3	676.5	145.1	131.5	13.63	10.647		
4,000.0	3,898.9	4,002.1	3,929.9	16.9	14.6	179.18	25.1	697.3	148.9	134.9	13.98	10.648		
4,100.0	3,995.9	4,102.0	4,027.6	17.3	15.0	179.17	25.8	718.0	152.6	138.3	14.33	10.649		
4,200.0	4,092.8	4,201.9	4,125.3	17.8	15.4	179.17	26.6	738.8	156.4	141.7	14.68	10.650		
4,300.0	4,189.8	4,301.9	4,223.1	18.3	15.8	179.17	27.3	759.6	160.1	145.1	15.04	10.651		
4,400.0	4,286.7	4,401.8	4,320.8	18.7	16.2	179.16	28.0	780.3	163.9	148.5	15.39	10.652		
4,500.0	4,383.7	4,501.7	4,418.6	19.2	16.6	179.16	28.8	801.1	167.7	151.9	15.74	10.653		
4,600.0	4,480.7	4,601.6	4,516.3	19.7	17.0	179.16	29.5	821.9	171.4	155.3	16.09	10.654		
4,700.0	4,577.6	4,701.6	4,614.1	20.2	17.4	179.16	30.3	842.7	175.2	158.7	16.44	10.654		
4,800.0	4,674.6	4,801.5	4,711.8	20.6	17.8	179.15	31.0	863.4	178.9	162.1	16.79	10.655		
4,900.0	4,771.6	4,901.4	4,809.6	21.1	18.2	179.15	31.8	884.2	182.7	165.6	17.15	10.656		
5,000.0	4,868.5	5,001.4	4,907.3	21.6	18.6	179.15	32.5	905.0	186.5	169.0	17.50	10.657		
5,100.0	4,965.5	5,101.3	5,005.0	22.0	19.1	179.15	33.3	925.7	190.2	172.4	17.85	10.657		

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1K-19H-B2681 - Hz - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
5,200.0	5,062.5	5,201.2	5,102.8	22.5	19.5	179.14	34.0	946.5	194.0	175.8	18.20	10.658	
5,300.0	5,159.4	5,301.2	5,200.5	23.0	19.9	179.14	34.8	967.3	197.7	179.2	18.55	10.659	
5,400.0	5,256.4	5,401.1	5,298.3	23.5	20.3	179.14	35.5	988.1	201.5	182.6	18.90	10.659	
5,500.0	5,353.3	5,501.0	5,396.0	23.9	20.7	179.14	36.3	1,008.8	205.2	186.0	19.25	10.660	
5,600.0	5,450.3	5,600.9	5,493.8	24.4	21.1	179.13	37.0	1,029.6	209.0	189.4	19.61	10.661	
5,700.0	5,547.3	5,700.9	5,591.5	24.9	21.5	179.13	37.8	1,050.4	212.8	192.8	19.96	10.661	
5,800.0	5,644.2	5,800.8	5,689.3	25.4	21.9	179.13	38.5	1,071.1	216.5	196.2	20.31	10.662	
5,900.0	5,741.2	5,900.7	5,787.0	25.8	22.3	179.13	39.2	1,091.9	220.3	199.6	20.66	10.662	
6,000.0	5,838.2	6,000.7	5,884.7	26.3	22.7	179.13	40.0	1,112.7	224.0	203.0	21.01	10.663	
6,100.0	5,935.1	6,100.6	5,982.5	26.8	23.2	179.13	40.7	1,133.4	227.8	206.4	21.36	10.663	
6,200.0	6,032.1	6,200.5	6,080.2	27.2	23.6	179.12	41.5	1,154.2	231.6	209.8	21.71	10.664	
6,300.0	6,129.0	6,300.4	6,178.0	27.7	24.0	179.12	42.2	1,175.0	235.3	213.2	22.07	10.664	
6,400.0	6,226.0	6,400.4	6,275.7	28.2	24.4	179.12	43.0	1,195.8	239.1	216.7	22.42	10.665	
6,500.0	6,323.0	6,500.3	6,373.5	28.7	24.8	179.12	43.7	1,216.5	242.8	220.1	22.77	10.665	
6,600.0	6,419.9	6,600.2	6,471.2	29.1	25.2	179.12	44.5	1,237.3	246.6	223.5	23.12	10.666	
6,700.0	6,516.9	6,700.2	6,568.9	29.6	25.6	179.12	45.2	1,258.1	250.3	226.9	23.47	10.666	
6,800.0	6,613.9	6,800.1	6,666.7	30.1	26.0	179.12	46.0	1,278.8	254.1	230.3	23.82	10.666	
6,825.8	6,638.9	6,825.9	6,691.9	30.2	26.1	179.12	46.2	1,284.2	255.1	231.2	23.91	10.666	
6,850.0	6,662.3	6,850.1	6,715.6	30.3	26.2	171.48	46.3	1,289.2	256.0	232.0	24.00	10.665	
6,900.0	6,710.7	6,899.9	6,764.3	30.5	26.4	157.16	46.7	1,299.6	257.7	233.5	24.16	10.664	
6,950.0	6,758.8	6,949.4	6,812.7	30.8	26.6	146.05	47.1	1,309.9	259.4	235.0	24.35	10.654	
7,000.0	6,806.3	6,998.3	6,860.6	31.0	26.8	138.44	47.4	1,320.0	261.3	236.7	24.62	10.614	
7,050.0	6,853.0	7,047.7	6,908.9	31.2	27.0	133.52	46.1	1,330.3	263.7	238.7	25.00	10.545	
7,100.0	6,898.8	7,098.0	6,957.8	31.4	27.2	130.36	41.2	1,340.7	266.6	241.1	25.45	10.474	
7,150.0	6,943.3	7,149.2	7,007.1	31.7	27.4	128.43	32.7	1,351.2	269.9	244.0	25.89	10.424	
7,200.0	6,986.3	7,201.3	7,056.6	31.9	27.6	127.36	20.3	1,361.7	273.7	247.4	26.28	10.414	
7,250.0	7,027.7	7,254.4	7,106.0	32.1	27.8	126.90	3.9	1,372.2	277.8	251.2	26.58	10.451	
7,300.0	7,067.2	7,308.5	7,155.0	32.3	28.0	126.86	-16.6	1,382.6	282.2	255.4	26.75	10.550	
7,350.0	7,104.7	7,363.6	7,203.2	32.5	28.3	127.10	-41.3	1,392.8	286.8	260.0	26.78	10.710	
7,400.0	7,139.9	7,419.8	7,250.3	32.8	28.5	127.54	-70.3	1,402.9	291.6	264.9	26.68	10.929	
7,450.0	7,172.7	7,477.1	7,295.8	33.0	28.7	128.09	-103.6	1,412.5	296.4	269.9	26.46	11.200	
7,500.0	7,203.0	7,535.5	7,339.4	33.2	29.0	128.72	-141.3	1,421.8	301.2	275.0	26.17	11.509	
7,550.0	7,230.5	7,594.9	7,380.6	33.5	29.2	129.37	-183.3	1,430.5	305.9	280.0	25.85	11.831	
7,600.0	7,255.2	7,655.4	7,418.8	33.7	29.5	130.03	-229.5	1,438.7	310.3	284.7	25.58	12.131	
7,650.0	7,276.9	7,716.9	7,453.6	34.0	29.8	130.66	-279.6	1,446.1	314.5	289.1	25.43	12.366	
7,700.0	7,295.5	7,779.3	7,484.5	34.3	30.1	131.25	-333.4	1,452.6	318.3	292.8	25.49	12.489	
7,750.0	7,311.0	7,842.6	7,511.0	34.5	30.5	131.79	-390.6	1,458.3	321.7	295.9	25.82	12.458	
7,800.0	7,323.2	7,906.6	7,532.7	34.8	30.9	132.26	-450.6	1,462.9	324.6	298.1	26.50	12.247	
7,850.0	7,332.2	7,971.3	7,549.2	35.1	31.3	132.66	-513.0	1,466.4	326.9	299.3	27.56	11.860	
7,900.0	7,337.8	8,036.4	7,560.2	35.4	31.7	132.97	-577.1	1,468.7	328.5	299.5	29.00	11.331	
7,950.0	7,340.0	8,102.0	7,565.5	35.7	32.2	133.21	-642.4	1,469.8	329.6	298.8	30.79	10.705	
7,957.7	7,340.0	8,112.0	7,565.8	35.8	32.2	133.24	-652.5	1,469.9	329.7	298.6	31.09	10.603	
8,000.0	7,340.0	8,158.2	7,566.0	36.1	32.6	133.27	-698.7	1,469.9	329.7	297.9	31.87	10.348	
8,100.0	7,340.0	8,258.2	7,566.0	36.8	33.3	133.27	-798.7	1,469.9	329.7	296.0	33.70	9.783	
8,200.0	7,340.0	8,358.2	7,566.0	37.5	34.2	133.27	-898.7	1,469.9	329.7	294.1	35.63	9.254	
8,300.0	7,340.0	8,458.2	7,566.0	38.3	35.1	133.27	-998.7	1,469.9	329.7	292.1	37.63	8.762	
8,400.0	7,340.0	8,558.2	7,566.0	39.2	36.1	133.27	-1,098.7	1,469.9	329.7	290.0	39.70	8.305	
8,500.0	7,340.0	8,658.2	7,566.0	40.2	37.1	133.27	-1,198.7	1,469.9	329.7	287.9	41.82	7.884	
8,600.0	7,340.0	8,758.2	7,566.0	41.2	38.2	133.27	-1,298.7	1,469.9	329.7	285.7	44.00	7.495	
8,700.0	7,340.0	8,858.2	7,566.0	42.2	39.3	133.27	-1,398.7	1,469.9	329.7	283.5	46.21	7.136	
8,800.0	7,340.0	8,958.2	7,566.0	43.3	40.5	133.27	-1,498.7	1,469.9	329.7	281.3	48.46	6.805	
8,900.0	7,340.0	9,058.2	7,566.0	44.5	41.7	133.27	-1,598.7	1,469.9	329.7	279.0	50.73	6.499	

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 Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - Regnier 1K-19H-B2681 - Hz - Plan #2												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
9,000.0	7,340.0	9,158.2	7,566.0	45.6	43.0	133.27	-1,698.7	1,469.9	329.7	276.7	53.04	6.217	
9,100.0	7,340.0	9,258.2	7,566.0	46.9	44.3	133.27	-1,798.7	1,469.9	329.7	274.4	55.36	5.956	
9,200.0	7,340.0	9,358.2	7,566.0	48.1	45.6	133.27	-1,898.7	1,469.9	329.7	272.0	57.71	5.713	
9,300.0	7,340.0	9,458.2	7,566.0	49.4	47.0	133.27	-1,998.7	1,469.9	329.7	269.7	60.08	5.488	
9,400.0	7,340.0	9,558.2	7,566.0	50.7	48.4	133.27	-2,098.7	1,469.9	329.7	267.3	62.46	5.279	
9,500.0	7,340.0	9,658.2	7,566.0	52.0	49.8	133.27	-2,198.7	1,469.9	329.7	264.9	64.86	5.084	
9,600.0	7,340.0	9,758.2	7,566.0	53.4	51.2	133.27	-2,298.7	1,469.9	329.7	262.5	67.27	4.902	
9,700.0	7,340.0	9,858.2	7,566.0	54.8	52.6	133.27	-2,398.7	1,469.9	329.7	260.1	69.69	4.732	
9,800.0	7,340.0	9,958.2	7,566.0	56.2	54.1	133.27	-2,498.7	1,469.9	329.7	257.6	72.12	4.572	
9,900.0	7,340.0	10,058.2	7,566.0	57.6	55.6	133.27	-2,598.7	1,469.9	329.7	255.2	74.56	4.423	
9,957.7	7,340.0	10,115.9	7,566.0	58.4	56.4	133.27	-2,656.4	1,469.9	329.7	253.8	75.97	4.340	
10,000.0	7,340.0	10,158.2	7,566.0	59.0	57.1	133.27	-2,698.7	1,469.9	329.7	252.7	77.01	4.282	
10,100.0	7,340.0	10,258.2	7,566.0	60.5	58.6	133.27	-2,798.7	1,469.9	329.7	250.3	79.46	4.150	
10,200.0	7,340.0	10,358.2	7,566.0	62.0	60.1	133.27	-2,898.7	1,469.9	329.7	247.8	81.92	4.025	
10,300.0	7,340.0	10,458.2	7,566.0	63.4	61.6	133.27	-2,998.7	1,469.9	329.7	245.3	84.39	3.907	
10,400.0	7,340.0	10,558.2	7,566.0	64.9	63.2	133.27	-3,098.7	1,469.9	329.7	242.9	86.87	3.796	
10,500.0	7,340.0	10,658.2	7,566.0	66.5	64.7	133.27	-3,198.7	1,469.9	329.7	240.4	89.35	3.690	
10,600.0	7,340.0	10,758.2	7,566.0	68.0	66.3	133.27	-3,298.7	1,469.9	329.7	237.9	91.83	3.591	
10,700.0	7,340.0	10,858.2	7,566.0	69.5	67.9	133.27	-3,398.7	1,469.9	329.7	235.4	94.32	3.496	
10,800.0	7,340.0	10,958.2	7,566.0	71.1	69.5	133.27	-3,498.7	1,469.9	329.7	232.9	96.82	3.406	
10,900.0	7,340.0	11,058.2	7,566.0	72.6	71.1	133.27	-3,598.7	1,469.9	329.7	230.4	99.31	3.320	
11,000.0	7,340.0	11,158.2	7,566.0	74.2	72.7	133.27	-3,698.7	1,469.9	329.7	227.9	101.81	3.239	
11,107.7	7,340.0	11,265.9	7,566.0	75.9	74.4	133.27	-3,806.4	1,469.9	329.7	225.2	104.51	3.155	
11,201.8	7,340.0	11,360.1	7,566.0	77.4	75.9	133.36	-3,900.5	1,469.9	329.2	223.1	106.10	3.103	
11,300.0	7,340.0	11,458.2	7,566.0	78.9	77.5	133.56	-3,998.7	1,469.9	328.0	219.8	108.25	3.030	
11,400.0	7,340.0	11,558.2	7,566.0	80.5	79.1	133.75	-4,098.7	1,469.9	326.8	216.4	110.42	2.960	
11,500.0	7,340.0	11,658.2	7,566.0	82.1	80.8	133.95	-4,198.6	1,469.9	325.6	213.0	112.58	2.892	
11,600.0	7,340.0	11,758.2	7,566.0	83.7	82.4	134.16	-4,298.6	1,469.9	324.4	209.7	114.72	2.828	
11,700.0	7,340.0	11,858.2	7,566.0	85.3	84.1	134.36	-4,398.6	1,469.9	323.3	206.4	116.84	2.767	
11,800.0	7,340.0	11,958.2	7,566.0	86.9	85.7	134.56	-4,498.6	1,469.9	322.1	203.2	118.94	2.708	
11,900.0	7,340.0	12,058.1	7,566.0	88.5	87.4	134.77	-4,598.6	1,469.9	320.9	199.9	121.02	2.652	
12,000.0	7,340.0	12,158.1	7,566.0	90.2	89.0	134.98	-4,698.6	1,469.9	319.8	196.7	123.08	2.598	
12,065.8	7,340.0	12,223.9	7,566.0	91.2	90.1	135.11	-4,764.4	1,469.9	319.0	194.6	124.43	2.564 SF	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - REGNIER FARMS 31-19 - ENCANA - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-148.35	-710.0	-437.6	834.0					
100.0	100.0	89.3	89.3	0.2	0.2	-148.38	-710.4	-437.4	834.3	834.0	0.31	2,708.480 ES		
200.0	200.0	187.0	187.0	0.3	0.3	-148.45	-711.5	-436.9	835.0	834.3	0.65	1,277.490		
300.0	300.0	287.2	287.1	0.5	0.5	123.80	-712.7	-436.6	836.8	835.8	1.01	831.331		
400.0	399.8	390.7	390.7	0.7	0.7	124.02	-713.5	-436.6	840.3	839.0	1.38	611.077		
500.0	499.5	490.5	490.5	0.9	0.9	124.41	-713.8	-436.7	845.6	843.8	1.76	480.977		
600.0	598.7	591.8	591.8	1.2	1.0	124.98	-714.0	-436.8	852.8	850.6	2.17	392.812		
700.0	697.5	686.7	686.6	1.5	1.2	125.66	-714.0	-437.3	862.2	859.6	2.61	330.933		
800.0	795.6	784.7	784.7	1.9	1.4	126.52	-714.1	-438.2	874.2	871.1	3.08	283.808		
907.9	900.7	888.8	888.8	2.4	1.6	127.57	-714.0	-439.4	889.8	886.2	3.63	245.076		
1,000.0	990.0	975.6	975.5	2.8	1.7	128.72	-713.9	-440.8	904.7	900.6	4.10	220.728		
1,100.0	1,087.0	1,070.6	1,070.6	3.2	1.9	129.97	-713.7	-442.6	921.6	917.0	4.60	200.146		
1,200.0	1,183.9	1,165.3	1,165.2	3.7	2.0	131.18	-713.4	-444.8	939.0	933.9	5.10	183.994		
1,300.0	1,280.9	1,262.0	1,261.8	4.1	2.2	132.40	-713.0	-447.4	957.0	951.4	5.60	170.959		
1,400.0	1,377.9	1,357.8	1,357.7	4.6	2.4	133.58	-712.3	-450.1	975.3	969.2	6.08	160.337		
1,500.0	1,474.8	1,457.4	1,457.2	5.1	2.6	134.77	-711.6	-453.0	994.1	987.5	6.56	151.426 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - REGNIER FARMS 42-19 - ENCANA - GYRO													Offset Site Error: 0.0 ft	
Survey Program: 100-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,500.0	7,340.0	7,321.1	7,318.8	40.2	13.0	89.98	-1,780.8	940.0	965.3	926.6	38.71	24.937		
8,600.0	7,340.0	7,320.4	7,318.1	41.2	13.0	89.93	-1,780.8	940.0	908.5	868.3	40.26	22.568		
8,700.0	7,340.0	7,319.8	7,317.5	42.2	13.0	89.89	-1,780.8	940.0	859.6	817.8	41.83	20.552		
8,800.0	7,340.0	7,319.1	7,316.8	43.3	13.0	89.84	-1,780.8	940.0	820.1	776.7	43.42	18.888		
8,900.0	7,340.0	7,318.5	7,316.2	44.5	13.0	89.79	-1,780.8	940.0	791.3	746.2	45.02	17.574		
9,000.0	7,340.0	7,317.8	7,315.5	45.6	13.0	89.74	-1,780.8	940.0	774.4	727.7	46.65	16.601		
9,082.1	7,340.0	7,317.2	7,314.9	46.6	13.0	89.70	-1,780.8	940.0	770.0	722.0	47.99	16.046	CC	
9,100.0	7,340.0	7,317.1	7,314.8	46.9	13.0	89.69	-1,780.8	940.0	770.2	721.9	48.28	15.953	ES	
9,200.0	7,340.0	7,316.4	7,314.1	48.1	13.0	89.63	-1,780.8	940.0	779.0	729.1	49.92	15.603		
9,300.0	7,340.0	7,315.7	7,313.4	49.4	13.0	89.58	-1,780.8	940.0	800.2	748.7	51.58	15.515	SF	
9,400.0	7,340.0	7,314.9	7,312.6	50.7	13.0	89.53	-1,780.9	940.0	833.0	779.8	53.24	15.647		
9,500.0	7,340.0	7,314.2	7,311.9	52.0	13.0	89.47	-1,780.9	940.1	876.1	821.2	54.91	15.955		
9,600.0	7,340.0	7,313.5	7,311.1	53.4	13.0	89.42	-1,780.9	940.1	927.9	871.4	56.59	16.399		
9,700.0	7,340.0	7,312.7	7,310.4	54.8	13.0	89.36	-1,780.9	940.1	987.2	929.0	58.27	16.943		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - REGNIER FARMS 43-19 - ENCANA - SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 771-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
9,800.0	7,340.0	7,582.7	7,338.4	56.2	28.8	90.49	-3,268.7	1,074.2	998.6	937.7	60.88	16.401	
9,900.0	7,340.0	7,582.4	7,338.1	57.6	28.8	90.46	-3,268.7	1,074.2	923.7	861.1	62.58	14.761	
9,957.7	7,340.0	7,582.2	7,338.0	58.4	28.8	90.45	-3,268.7	1,074.2	882.8	819.2	63.55	13.890	
10,000.0	7,340.0	7,582.1	7,337.8	59.0	28.8	90.43	-3,268.7	1,074.2	853.9	789.7	64.27	13.286	
10,100.0	7,340.0	7,581.8	7,337.5	60.5	28.8	90.41	-3,268.7	1,074.2	790.7	724.7	65.97	11.985	
10,200.0	7,340.0	7,581.5	7,337.2	62.0	28.8	90.38	-3,268.7	1,074.2	735.7	668.0	67.68	10.870	
10,300.0	7,340.0	7,581.2	7,336.9	63.4	28.8	90.35	-3,268.7	1,074.2	690.8	621.4	69.38	9.956	
10,400.0	7,340.0	7,580.9	7,336.6	64.9	28.8	90.32	-3,268.7	1,074.2	658.2	587.1	71.09	9.258	
10,500.0	7,340.0	7,580.6	7,336.3	66.5	28.8	90.30	-3,268.7	1,074.2	639.7	566.9	72.80	8.786	
10,570.0	7,340.0	7,580.4	7,336.1	67.5	28.8	90.28	-3,268.7	1,074.2	635.8	561.8	74.00	8.592 CC, ES	
10,600.0	7,340.0	7,580.3	7,336.0	68.0	28.8	90.27	-3,268.7	1,074.2	636.5	562.0	74.52	8.542	
10,700.0	7,340.0	7,580.0	7,335.7	69.5	28.8	90.24	-3,268.7	1,074.2	649.0	572.7	76.23	8.513 SF	
10,800.0	7,340.0	7,579.6	7,335.3	71.1	28.8	90.21	-3,268.7	1,074.2	676.1	598.2	77.95	8.674	
10,900.0	7,340.0	7,579.3	7,335.0	72.6	28.8	90.18	-3,268.7	1,074.2	716.3	636.7	79.67	8.991	
11,000.0	7,340.0	7,579.0	7,334.7	74.2	28.8	90.16	-3,268.7	1,074.2	767.6	686.2	81.39	9.430	
11,107.7	7,340.0	7,578.7	7,334.4	75.9	28.8	90.13	-3,268.7	1,074.2	832.7	749.4	83.25	10.002	
11,201.8	7,340.0	7,578.4	7,334.1	77.4	28.8	90.10	-3,268.7	1,074.2	895.8	811.5	84.27	10.629	
11,300.0	7,340.0	7,578.1	7,333.8	78.9	28.8	90.07	-3,268.7	1,074.2	966.5	880.5	85.97	11.242	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S19-T2N-R68W (Rasmussen/Regnier) - REGNIER FARMS B UNIT 1 - ENCANA - GYRO										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
2,000.0	1,959.6	1,963.4	1,963.1	7.4	3.4	72.37	-920.5	705.7	998.6	988.0	10.58	94.388	
2,100.0	2,056.6	2,057.3	2,057.0	7.9	3.6	73.72	-919.5	703.9	989.5	978.2	11.24	88.039	
2,200.0	2,153.6	2,150.4	2,150.1	8.4	3.8	75.07	-918.7	702.2	981.3	969.4	11.90	82.457	
2,300.0	2,250.5	2,242.4	2,242.1	8.8	3.9	76.44	-918.3	700.5	974.1	961.6	12.56	77.541	
2,400.0	2,347.5	2,336.1	2,335.8	9.3	4.1	77.88	-918.4	698.5	968.1	954.8	13.23	73.167	
2,500.0	2,444.5	2,433.7	2,433.4	9.8	4.3	79.39	-918.6	696.4	962.7	948.8	13.91	69.216	
2,600.0	2,541.4	2,530.0	2,529.6	10.2	4.5	80.91	-918.7	694.0	958.0	943.4	14.58	65.688	
2,700.0	2,638.4	2,626.5	2,626.1	10.7	4.6	82.47	-919.0	691.3	954.1	938.8	15.26	62.527	
2,800.0	2,735.3	2,728.2	2,727.7	11.2	4.8	84.12	-918.9	688.5	950.6	934.7	15.94	59.631	
2,900.0	2,832.3	2,828.4	2,827.9	11.7	5.0	85.76	-918.3	685.5	947.4	930.8	16.62	57.013	
3,000.0	2,929.3	2,925.3	2,924.8	12.1	5.2	87.37	-917.5	682.4	944.7	927.4	17.28	54.665	
3,100.0	3,026.2	3,020.9	3,020.3	12.6	5.3	88.99	-916.8	678.8	942.8	924.9	17.94	52.561	
3,200.0	3,123.2	3,120.0	3,119.3	13.1	5.5	90.71	-915.9	674.6	941.7	923.1	18.60	50.639	
3,300.0	3,220.2	3,217.8	3,217.0	13.5	5.7	92.44	-914.8	670.0	941.1	921.9	19.24	48.910	
3,360.8	3,279.2	3,279.2	3,278.3	13.8	5.8	93.53	-914.0	666.9	941.1	921.4	19.63	47.931 CC	
3,400.0	3,317.1	3,319.5	3,318.6	14.0	5.9	94.25	-913.3	664.9	941.1	921.2	19.88	47.327	
3,500.0	3,414.1	3,422.0	3,420.9	14.5	6.1	96.07	-910.8	659.9	941.1	920.6	20.52	45.876 ES	
3,600.0	3,511.0	3,516.4	3,515.1	15.0	6.3	97.75	-908.4	655.2	941.9	920.8	21.12	44.597	
3,700.0	3,608.0	3,609.8	3,608.4	15.4	6.5	99.43	-906.1	650.3	943.8	922.1	21.71	43.465	
3,800.0	3,705.0	3,700.0	3,698.4	15.9	6.6	101.05	-904.5	645.1	947.3	925.0	22.29	42.500	
3,900.0	3,801.9	3,804.2	3,802.5	16.4	6.8	102.92	-902.5	639.2	951.5	928.7	22.86	41.618	
4,000.0	3,898.9	3,904.4	3,902.4	16.9	7.0	104.69	-899.5	633.8	955.7	932.3	23.42	40.813	
4,100.0	3,995.9	3,997.8	3,995.6	17.3	7.2	106.32	-896.7	628.9	960.6	936.7	23.95	40.116	
4,200.0	4,092.8	4,096.0	4,093.7	17.8	7.4	108.00	-893.8	624.2	966.4	942.0	24.46	39.507	
4,300.0	4,189.8	4,205.1	4,202.7	18.3	7.6	109.77	-890.0	620.2	972.2	947.3	24.96	38.945	
4,400.0	4,286.7	4,304.8	4,302.3	18.7	7.8	111.33	-886.0	617.6	978.0	952.5	25.45	38.432	
4,500.0	4,383.7	4,396.1	4,393.5	19.2	8.0	112.72	-882.5	615.5	984.5	958.6	25.91	37.992	
4,600.0	4,480.7	4,490.2	4,487.5	19.7	8.1	114.13	-879.3	613.4	992.1	965.7	26.37	37.627 SF	

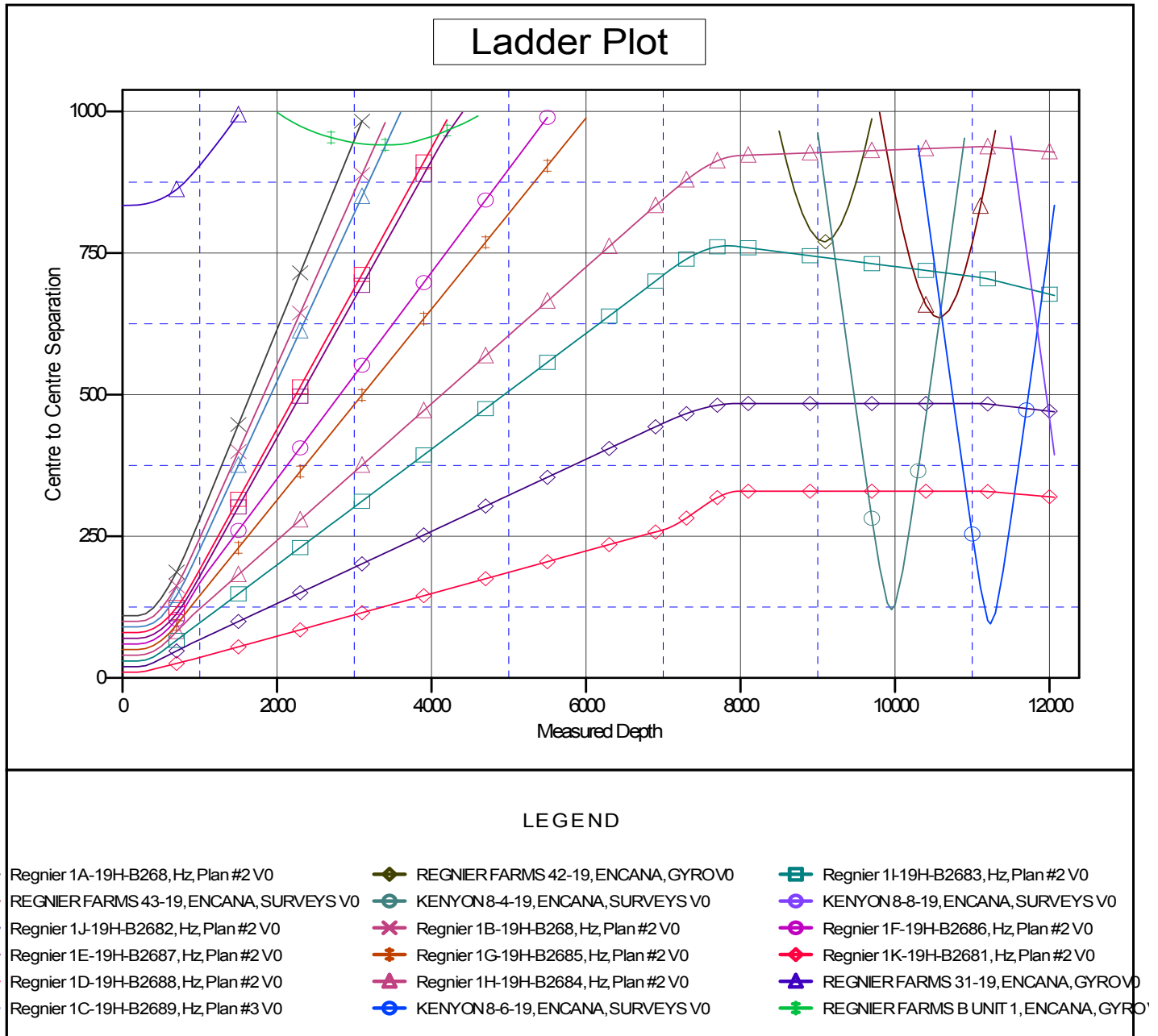
# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Regnier 1L-19H-B268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	13' KB @ 4978.0ft
<b>Reference Site:</b>	S19-T2N-R68W (Rasmussen/Regnier)	<b>MD Reference:</b>	13' KB @ 4978.0ft
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Regnier 1L-19H-B268	<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 #2	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to 13' KB @ 4978.0ft  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Regnier 1L-19H-B268  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.30°



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