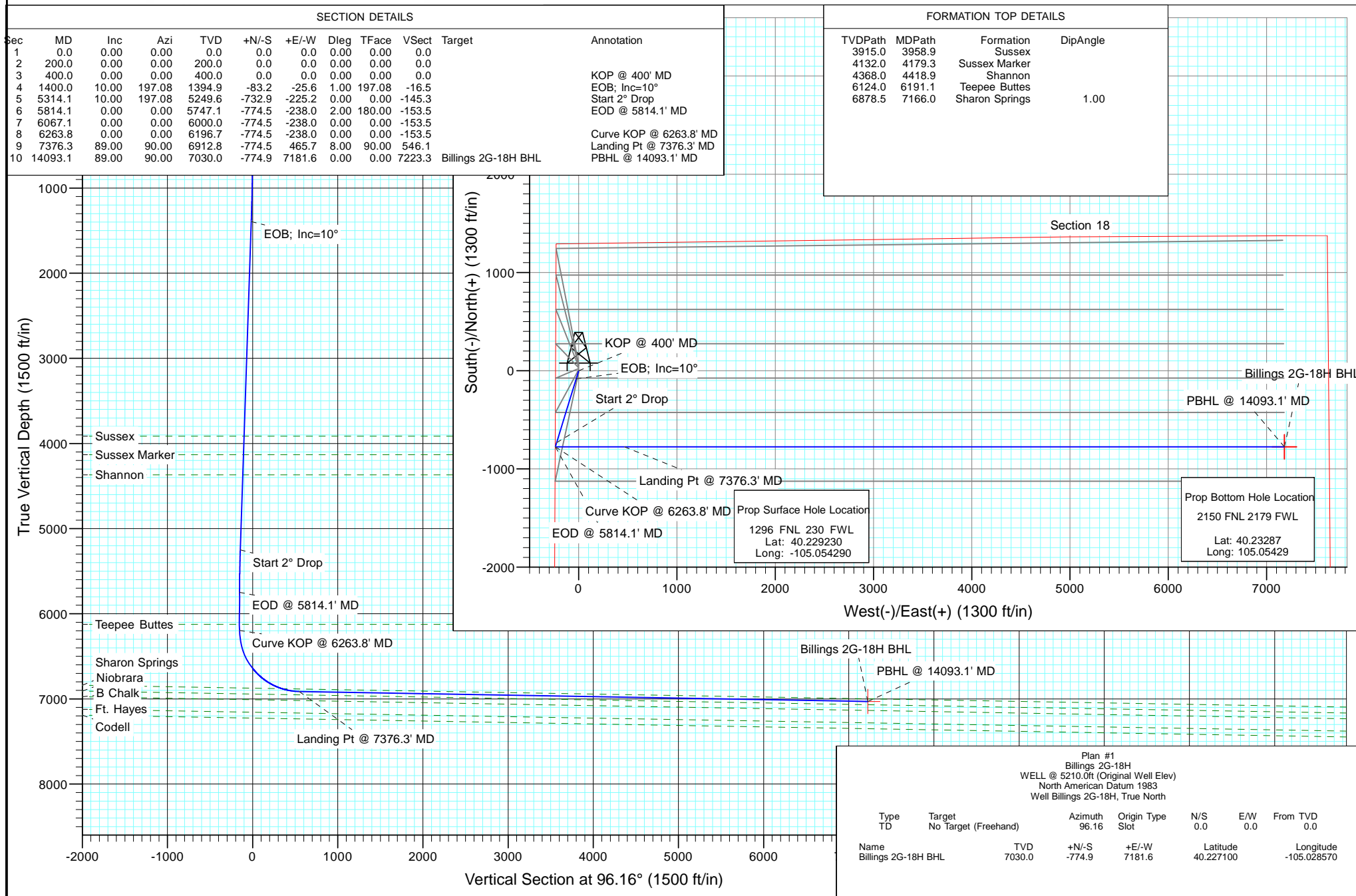




Project: DJ Wattenberg
Site: S18-T3N-R68W (Billings)
Well: Billings 2G-18H
Wellbore: Hz
Design: Plan #1



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Billings 2G-18H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site:	S18-T3N-R68W (Billings)	North Reference:	True
Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S18-T3N-R68W (Billings)			
Site Position:		Northing:	1,326,724.18 ft	Latitude:	40.229390
From:	Lat/Long	Easting:	3,124,452.97 ft	Longitude:	-105.054290
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Billings 2G-18H					
Well Position	+N/-S	0.0 ft	Northing:	1,326,665.88 ft	Latitude:	40.229230
	+E/-W	0.0 ft	Easting:	3,124,453.26 ft	Longitude:	-105.054290
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,197.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/28/2012	8.81	66.82	52,854

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	96.16

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	10.00	197.08	1,394.9	-83.2	-25.6	1.00	1.00	0.00	197.08	
5,314.1	10.00	197.08	5,249.6	-732.9	-225.2	0.00	0.00	0.00	0.00	
5,814.1	0.00	0.00	5,747.1	-774.5	-238.0	2.00	-2.00	0.00	180.00	
6,067.1	0.00	0.00	6,000.0	-774.5	-238.0	0.00	0.00	0.00	0.00	
6,263.8	0.00	0.00	6,196.7	-774.5	-238.0	0.00	0.00	0.00	0.00	
7,376.3	89.00	90.00	6,912.8	-774.5	465.7	8.00	8.00	0.00	90.00	
14,093.1	89.00	90.00	7,030.0	-774.9	7,181.6	0.00	0.00	0.00	0.00	Billings 2G-18H BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Billings 2G-18H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site:	S18-T3N-R68W (Billings)	North Reference:	True
Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400' MD
500.0	1.00	197.08	500.0	-0.8	-0.3	-0.2	1.00	1.00	
600.0	2.00	197.08	600.0	-3.3	-1.0	-0.7	1.00	1.00	
700.0	3.00	197.08	699.9	-7.5	-2.3	-1.5	1.00	1.00	
800.0	4.00	197.08	799.7	-13.3	-4.1	-2.6	1.00	1.00	
900.0	5.00	197.08	899.4	-20.8	-6.4	-4.1	1.00	1.00	
1,000.0	6.00	197.08	998.9	-30.0	-9.2	-5.9	1.00	1.00	
1,100.0	7.00	197.08	1,098.3	-40.8	-12.5	-8.1	1.00	1.00	
1,200.0	8.00	197.08	1,197.4	-53.3	-16.4	-10.6	1.00	1.00	
1,300.0	9.00	197.08	1,296.3	-67.4	-20.7	-13.4	1.00	1.00	
1,400.0	10.00	197.08	1,394.9	-83.2	-25.6	-16.5	1.00	1.00	EOB; Inc=10°
1,500.0	10.00	197.08	1,493.4	-99.8	-30.7	-19.8	0.00	0.00	
1,600.0	10.00	197.08	1,591.9	-116.4	-35.8	-23.1	0.00	0.00	
1,700.0	10.00	197.08	1,690.4	-133.0	-40.9	-26.4	0.00	0.00	
1,800.0	10.00	197.08	1,788.9	-149.6	-46.0	-29.7	0.00	0.00	
1,900.0	10.00	197.08	1,887.3	-166.2	-51.1	-32.9	0.00	0.00	
2,000.0	10.00	197.08	1,985.8	-182.8	-56.2	-36.2	0.00	0.00	
2,100.0	10.00	197.08	2,084.3	-199.4	-61.3	-39.5	0.00	0.00	
2,200.0	10.00	197.08	2,182.8	-216.0	-66.4	-42.8	0.00	0.00	
2,300.0	10.00	197.08	2,281.3	-232.6	-71.5	-46.1	0.00	0.00	
2,400.0	10.00	197.08	2,379.7	-249.2	-76.6	-49.4	0.00	0.00	
2,500.0	10.00	197.08	2,478.2	-265.8	-81.7	-52.7	0.00	0.00	
2,600.0	10.00	197.08	2,576.7	-282.4	-86.8	-56.0	0.00	0.00	
2,700.0	10.00	197.08	2,675.2	-299.0	-91.9	-59.3	0.00	0.00	
2,800.0	10.00	197.08	2,773.7	-315.6	-97.0	-62.6	0.00	0.00	
2,900.0	10.00	197.08	2,872.1	-332.2	-102.1	-65.9	0.00	0.00	
3,000.0	10.00	197.08	2,970.6	-348.8	-107.2	-69.1	0.00	0.00	
3,100.0	10.00	197.08	3,069.1	-365.4	-112.3	-72.4	0.00	0.00	
3,200.0	10.00	197.08	3,167.6	-382.0	-117.4	-75.7	0.00	0.00	
3,300.0	10.00	197.08	3,266.1	-398.6	-122.5	-79.0	0.00	0.00	
3,400.0	10.00	197.08	3,364.5	-415.2	-127.6	-82.3	0.00	0.00	
3,500.0	10.00	197.08	3,463.0	-431.8	-132.7	-85.6	0.00	0.00	
3,600.0	10.00	197.08	3,561.5	-448.4	-137.8	-88.9	0.00	0.00	
3,700.0	10.00	197.08	3,660.0	-465.0	-142.9	-92.2	0.00	0.00	
3,800.0	10.00	197.08	3,758.5	-481.6	-148.0	-95.5	0.00	0.00	
3,900.0	10.00	197.08	3,857.0	-498.2	-153.1	-98.8	0.00	0.00	
3,958.9	10.00	197.08	3,915.0	-508.0	-156.1	-100.7	0.00	0.00	Sussex
4,000.0	10.00	197.08	3,955.4	-514.8	-158.2	-102.1	0.00	0.00	
4,100.0	10.00	197.08	4,053.9	-531.4	-163.3	-105.3	0.00	0.00	
4,179.3	10.00	197.08	4,132.0	-544.5	-167.3	-108.0	0.00	0.00	Sussex Marker
4,200.0	10.00	197.08	4,152.4	-548.0	-168.4	-108.6	0.00	0.00	
4,300.0	10.00	197.08	4,250.9	-564.6	-173.5	-111.9	0.00	0.00	
4,400.0	10.00	197.08	4,349.4	-581.2	-178.6	-115.2	0.00	0.00	
4,418.9	10.00	197.08	4,368.0	-584.3	-179.6	-115.8	0.00	0.00	Shannon
4,500.0	10.00	197.08	4,447.8	-597.8	-183.7	-118.5	0.00	0.00	
4,600.0	10.00	197.08	4,546.3	-614.4	-188.8	-121.8	0.00	0.00	
4,700.0	10.00	197.08	4,644.8	-631.0	-193.9	-125.1	0.00	0.00	
4,800.0	10.00	197.08	4,743.3	-647.6	-199.0	-128.4	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Billings 2G-18H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site:	S18-T3N-R68W (Billings)	North Reference:	True
Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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	10.00	197.08	4,841.8	-664.2	-204.1	-131.7	0.00	0.00	
5,000.0	10.00	197.08	4,940.2	-680.8	-209.2	-135.0	0.00	0.00	
5,100.0	10.00	197.08	5,038.7	-697.4	-214.3	-138.2	0.00	0.00	
5,200.0	10.00	197.08	5,137.2	-714.0	-219.4	-141.5	0.00	0.00	
5,300.0	10.00	197.08	5,235.7	-730.6	-224.5	-144.8	0.00	0.00	
5,314.1	10.00	197.08	5,249.6	-732.9	-225.2	-145.3	0.00	0.00	Start 2° Drop
5,400.0	8.28	197.08	5,334.4	-745.9	-229.2	-147.9	2.00	-2.00	
5,500.0	6.28	197.08	5,433.6	-758.1	-232.9	-150.3	2.00	-2.00	
5,600.0	4.28	197.08	5,533.1	-766.9	-235.7	-152.0	2.00	-2.00	
5,700.0	2.28	197.08	5,633.0	-772.3	-237.3	-153.1	2.00	-2.00	
5,800.0	0.28	197.08	5,732.9	-774.5	-238.0	-153.5	2.00	-2.00	
5,814.1	0.00	197.08	5,747.0	-774.5	-238.0	-153.5	2.00	-2.00	EOD @ 5814.1' MD
5,900.0	0.00	0.00	5,832.9	-774.5	-238.0	-153.5	0.00	0.00	
6,000.0	0.00	0.00	5,932.9	-774.5	-238.0	-153.5	0.00	0.00	
6,067.1	0.00	0.00	6,000.0	-774.5	-238.0	-153.5	0.00	0.00	
6,100.0	0.00	0.00	6,032.9	-774.5	-238.0	-153.5	0.00	0.00	
6,191.1	0.00	0.00	6,124.0	-774.5	-238.0	-153.5	0.00	0.00	Teepee Buttes
6,200.0	0.00	0.00	6,132.9	-774.5	-238.0	-153.5	0.00	0.00	
6,263.8	0.00	0.00	6,196.7	-774.5	-238.0	-153.5	0.00	0.00	Curve KOP @ 6263.8' MD
6,300.0	2.90	90.00	6,232.9	-774.5	-237.1	-152.6	8.01	8.01	
6,400.0	10.90	90.00	6,332.1	-774.5	-225.1	-140.7	8.00	8.00	
6,500.0	18.90	90.00	6,428.7	-774.5	-199.4	-115.2	8.00	8.00	
6,600.0	26.90	90.00	6,520.7	-774.5	-160.5	-76.5	8.00	8.00	
6,700.0	34.90	90.00	6,606.5	-774.5	-109.2	-25.5	8.00	8.00	
6,800.0	42.90	90.00	6,684.2	-774.5	-46.5	36.9	8.00	8.00	
6,900.0	50.90	90.00	6,752.5	-774.5	26.5	109.4	8.00	8.00	
7,000.0	58.90	90.00	6,809.9	-774.5	108.3	190.7	8.00	8.00	
7,100.0	66.90	90.00	6,855.5	-774.5	197.2	279.2	8.00	8.00	
7,166.0	72.18	90.00	6,878.5	-774.5	259.0	340.6	8.00	8.00	Sharon Springs
7,200.0	74.90	90.00	6,888.2	-774.5	291.6	373.0	8.00	8.00	
7,300.0	82.90	90.00	6,907.4	-774.5	389.7	470.5	8.00	8.00	
7,376.3	89.00	90.00	6,912.8	-774.5	465.7	546.1	8.00	8.00	Landing Pt @ 7376.3' MD
7,400.0	89.00	90.00	6,913.2	-774.5	489.4	569.7	0.00	0.00	
7,500.0	89.00	90.00	6,914.9	-774.5	589.4	669.1	0.00	0.00	
7,600.0	89.00	90.00	6,916.7	-774.6	689.4	768.5	0.00	0.00	
7,700.0	89.00	90.00	6,918.4	-774.6	789.4	867.9	0.00	0.00	
7,800.0	89.00	90.00	6,920.2	-774.6	889.4	967.3	0.00	0.00	
7,900.0	89.00	90.00	6,921.9	-774.6	989.4	1,066.7	0.00	0.00	
8,000.0	89.00	90.00	6,923.7	-774.6	1,089.3	1,166.2	0.00	0.00	
8,100.0	89.00	90.00	6,925.4	-774.6	1,189.3	1,265.6	0.00	0.00	
8,200.0	89.00	90.00	6,927.2	-774.6	1,289.3	1,365.0	0.00	0.00	
8,300.0	89.00	90.00	6,928.9	-774.6	1,389.3	1,464.4	0.00	0.00	
8,400.0	89.00	90.00	6,930.6	-774.6	1,489.3	1,563.8	0.00	0.00	
8,500.0	89.00	90.00	6,932.4	-774.6	1,589.3	1,663.2	0.00	0.00	
8,600.0	89.00	90.00	6,934.1	-774.6	1,689.3	1,762.6	0.00	0.00	
8,700.0	89.00	90.00	6,935.9	-774.6	1,789.2	1,862.0	0.00	0.00	
8,800.0	89.00	90.00	6,937.6	-774.6	1,889.2	1,961.4	0.00	0.00	
8,900.0	89.00	90.00	6,939.4	-774.6	1,989.2	2,060.8	0.00	0.00	
9,000.0	89.00	90.00	6,941.1	-774.6	2,089.2	2,160.2	0.00	0.00	
9,100.0	89.00	90.00	6,942.9	-774.6	2,189.2	2,259.6	0.00	0.00	
9,200.0	89.00	90.00	6,944.6	-774.6	2,289.2	2,359.1	0.00	0.00	
9,300.0	89.00	90.00	6,946.3	-774.6	2,389.2	2,458.5	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Billings 2G-18H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site:	S18-T3N-R68W (Billings)	North Reference:	True
Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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	89.00	90.00	6,948.1	-774.6	2,489.1	2,557.9	0.00	0.00	
9,500.0	89.00	90.00	6,949.8	-774.6	2,589.1	2,657.3	0.00	0.00	
9,600.0	89.00	90.00	6,951.6	-774.7	2,689.1	2,756.7	0.00	0.00	
9,700.0	89.00	90.00	6,953.3	-774.7	2,789.1	2,856.1	0.00	0.00	
9,800.0	89.00	90.00	6,955.1	-774.7	2,889.1	2,955.5	0.00	0.00	
9,900.0	89.00	90.00	6,956.8	-774.7	2,989.1	3,054.9	0.00	0.00	
10,000.0	89.00	90.00	6,958.6	-774.7	3,089.0	3,154.3	0.00	0.00	
10,100.0	89.00	90.00	6,960.3	-774.7	3,189.0	3,253.7	0.00	0.00	
10,200.0	89.00	90.00	6,962.1	-774.7	3,289.0	3,353.1	0.00	0.00	
10,300.0	89.00	90.00	6,963.8	-774.7	3,389.0	3,452.5	0.00	0.00	
10,400.0	89.00	90.00	6,965.5	-774.7	3,489.0	3,552.0	0.00	0.00	
10,500.0	89.00	90.00	6,967.3	-774.7	3,589.0	3,651.4	0.00	0.00	
10,600.0	89.00	90.00	6,969.0	-774.7	3,689.0	3,750.8	0.00	0.00	
10,700.0	89.00	90.00	6,970.8	-774.7	3,788.9	3,850.2	0.00	0.00	
10,800.0	89.00	90.00	6,972.5	-774.7	3,888.9	3,949.6	0.00	0.00	
10,900.0	89.00	90.00	6,974.3	-774.7	3,988.9	4,049.0	0.00	0.00	
11,000.0	89.00	90.00	6,976.0	-774.7	4,088.9	4,148.4	0.00	0.00	
11,100.0	89.00	90.00	6,977.8	-774.7	4,188.9	4,247.8	0.00	0.00	
11,200.0	89.00	90.00	6,979.5	-774.7	4,288.9	4,347.2	0.00	0.00	
11,300.0	89.00	90.00	6,981.3	-774.7	4,388.8	4,446.6	0.00	0.00	
11,400.0	89.00	90.00	6,983.0	-774.7	4,488.8	4,546.0	0.00	0.00	
11,500.0	89.00	90.00	6,984.7	-774.7	4,588.8	4,645.4	0.00	0.00	
11,600.0	89.00	90.00	6,986.5	-774.8	4,688.8	4,744.9	0.00	0.00	
11,700.0	89.00	90.00	6,988.2	-774.8	4,788.8	4,844.3	0.00	0.00	
11,800.0	89.00	90.00	6,990.0	-774.8	4,888.8	4,943.7	0.00	0.00	
11,900.0	89.00	90.00	6,991.7	-774.8	4,988.8	5,043.1	0.00	0.00	
12,000.0	89.00	90.00	6,993.5	-774.8	5,088.7	5,142.5	0.00	0.00	
12,100.0	89.00	90.00	6,995.2	-774.8	5,188.7	5,241.9	0.00	0.00	
12,200.0	89.00	90.00	6,997.0	-774.8	5,288.7	5,341.3	0.00	0.00	
12,300.0	89.00	90.00	6,998.7	-774.8	5,388.7	5,440.7	0.00	0.00	
12,400.0	89.00	90.00	7,000.5	-774.8	5,488.7	5,540.1	0.00	0.00	
12,500.0	89.00	90.00	7,002.2	-774.8	5,588.7	5,639.5	0.00	0.00	
12,600.0	89.00	90.00	7,003.9	-774.8	5,688.6	5,738.9	0.00	0.00	
12,700.0	89.00	90.00	7,005.7	-774.8	5,788.6	5,838.3	0.00	0.00	
12,800.0	89.00	90.00	7,007.4	-774.8	5,888.6	5,937.8	0.00	0.00	
12,900.0	89.00	90.00	7,009.2	-774.8	5,988.6	6,037.2	0.00	0.00	
13,000.0	89.00	90.00	7,010.9	-774.8	6,088.6	6,136.6	0.00	0.00	
13,100.0	89.00	90.00	7,012.7	-774.8	6,188.6	6,236.0	0.00	0.00	
13,200.0	89.00	90.00	7,014.4	-774.8	6,288.6	6,335.4	0.00	0.00	
13,300.0	89.00	90.00	7,016.2	-774.8	6,388.5	6,434.8	0.00	0.00	
13,400.0	89.00	90.00	7,017.9	-774.8	6,488.5	6,534.2	0.00	0.00	
13,500.0	89.00	90.00	7,019.6	-774.8	6,588.5	6,633.6	0.00	0.00	
13,600.0	89.00	90.00	7,021.4	-774.9	6,688.5	6,733.0	0.00	0.00	
13,700.0	89.00	90.00	7,023.1	-774.9	6,788.5	6,832.4	0.00	0.00	
13,800.0	89.00	90.00	7,024.9	-774.9	6,888.5	6,931.8	0.00	0.00	
13,900.0	89.00	90.00	7,026.6	-774.9	6,988.5	7,031.2	0.00	0.00	
14,000.0	89.00	90.00	7,028.4	-774.9	7,088.4	7,130.7	0.00	0.00	
14,093.1	89.00	90.00	7,030.0	-774.9	7,181.5	7,223.2	0.00	0.00	PBHL @ 14093.1' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Billings 2G-18H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site:	S18-T3N-R68W (Billings)	North Reference:	True
Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Billings 2G-18H BHL	0.00	0.00	7,030.0	-774.9	7,181.6	1,325,927.11	3,131,638.64	40.227100	-105.028570
- plan hits target center									
- Point									
Interp @ 6197.2 (Billings)	0.00	0.00	6,000.0	-774.5	-238.0	1,325,890.19	3,124,219.16	40.227104	-105.055142
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,958.9	3,915.0	Sussex				
4,179.3	4,132.0	Sussex Marker				
4,418.9	4,368.0	Shannon				
6,191.1	6,124.0	Teepee Buttes				
7,166.0	6,874.0	Sharon Springs		1.00	90.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
400.0	400.0	0.0	0.0	KOP @ 400' MD	
1,400.0	1,394.9	-83.2	-25.6	EOB; Inc=10°	
5,314.1	5,249.6	-732.9	-225.2	Start 2° Drop	
5,814.1	5,747.0	-774.5	-238.0	EOD @ 5814.1' MD	
6,263.8	6,196.7	-774.5	-238.0	Curve KOP @ 6263.8' MD	
7,376.3	6,912.8	-774.5	465.7	Landing Pt @ 7376.3' MD	
14,093.1	7,030.0	-774.9	7,181.5	PBHL @ 14093.1' MD	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S18-T3N-R68W (Billings)

Billings 2G-18H

Hz

Plan #1

Anticollision Report

29 November, 2012

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,626.7ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	11/29/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	14,093.1	Plan #1 (Hz)	MWD	Geolink MWD	

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						
S18-T3N-R68W (Billings)						
Billings 2A-18H - Hz - Plan #1	166.3	167.3	58.3	57.8	108.554	CC
Billings 2A-18H - Hz - Plan #1	200.0	201.0	58.3	57.6	89.063	ES
Billings 2A-18H - Hz - Plan #1	700.0	694.1	87.0	84.6	36.433	SF
Billings 2B-18H - HZ - Plan #1	300.0	300.0	51.0	50.0	50.903	CC, ES
Billings 2B-18H - HZ - Plan #1	700.0	695.4	71.9	69.5	30.071	SF
Billings 2C-18H - HZ - Plan #1	400.0	400.0	40.1	38.7	29.663	CC, ES
Billings 2C-18H - HZ - Plan #1	14,093.1	14,068.8	1,398.9	1,038.4	3.881	SF
Billings 2D-18H - Hz - Plan #1	200.0	200.0	29.1	28.5	44.646	CC, ES
Billings 2D-18H - Hz - Plan #1	14,093.1	14,244.8	1,068.1	713.9	3.016	SF
Billings 2E-18H - HZ - Plan #1	400.0	400.0	21.9	20.5	16.180	CC, ES
Billings 2E-18H - HZ - Plan #1	14,093.1	14,030.7	699.5	338.9	1.940	SF
Billings 2F-18H - HZ - Plan #1	687.4	687.9	7.5	5.1	3.152	CC
Billings 2F-18H - HZ - Plan #1	700.0	700.4	7.5	5.1	3.092	ES
Billings 2F-18H - HZ - Plan #1	14,093.1	14,354.8	460.8	185.3	1.673	SF
Billings 2H-18H - Hz - Plan #1	200.0	200.0	10.9	10.3	16.742	CC, ES
Billings 2H-18H - Hz - Plan #1	14,093.1	14,377.8	411.0	102.8	1.334	Level 3, SF

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2A-18H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	1.0	1.0	0.0	0.0	0.00	58.3	0.0	58.3					
100.0	100.0	101.0	101.0	0.2	0.2	0.00	58.3	0.0	58.3	58.0	0.31	190.843		
166.3	166.3	167.3	167.3	0.3	0.3	0.00	58.3	0.0	58.3	57.8	0.54	108.554 CC		
200.0	200.0	201.0	201.0	0.3	0.3	0.00	58.3	0.0	58.3	57.6	0.65	89.063 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-0.16	59.1	-0.2	59.2	58.2	1.00	59.047		
400.0	400.0	398.9	398.9	0.7	0.7	-0.61	61.7	-0.7	61.7	60.4	1.35	45.748		
500.0	500.0	497.7	497.6	0.9	0.9	161.86	65.9	-1.5	66.8	65.1	1.70	39.388		
600.0	600.0	596.2	595.8	1.0	1.1	161.66	71.7	-2.6	75.3	73.2	2.04	36.840		
700.0	699.9	694.1	693.5	1.2	1.3	161.66	79.2	-4.1	87.0	84.6	2.39	36.433 SF		
800.0	799.7	791.4	790.3	1.4	1.5	161.79	88.2	-5.8	102.1	99.4	2.73	37.346		
900.0	899.4	887.8	886.2	1.6	1.7	161.98	98.8	-7.9	120.5	117.4	3.08	39.128		
1,000.0	998.9	983.3	980.9	1.8	2.0	162.19	110.8	-10.2	142.1	138.6	3.42	41.506		
1,100.0	1,098.3	1,077.7	1,074.2	2.1	2.3	162.40	124.2	-12.8	166.9	163.1	3.77	44.310		
1,200.0	1,197.4	1,170.8	1,166.2	2.3	2.6	162.58	138.8	-15.6	194.8	190.7	4.11	47.424		
1,300.0	1,296.3	1,262.5	1,256.5	2.6	2.9	162.75	154.7	-18.7	225.9	221.4	4.45	50.767		
1,400.0	1,394.9	1,352.8	1,345.0	2.9	3.2	162.89	171.8	-22.0	260.0	255.2	4.79	54.283		
1,500.0	1,493.4	1,441.7	1,432.0	3.3	3.6	163.07	189.9	-25.5	296.4	291.2	5.14	57.672		
1,600.0	1,591.9	1,529.6	1,517.7	3.6	3.9	163.16	209.1	-29.2	334.1	328.6	5.49	60.888		
1,700.0	1,690.4	1,616.4	1,602.0	3.9	4.3	163.19	229.3	-33.2	373.2	367.4	5.84	63.960		
1,800.0	1,788.9	1,700.0	1,682.9	4.2	4.7	163.17	249.9	-37.2	413.7	407.5	6.18	66.952		
1,900.0	1,887.3	1,786.6	1,766.4	4.6	5.1	163.11	272.6	-41.6	455.5	449.0	6.53	69.754		
2,000.0	1,985.8	1,870.1	1,846.5	4.9	5.5	163.04	295.5	-46.0	498.6	491.7	6.88	72.506		
2,100.0	2,084.3	1,956.5	1,929.2	5.3	6.0	162.95	320.4	-50.8	542.8	535.6	7.23	75.081		
2,200.0	2,182.8	2,046.2	2,014.9	5.6	6.4	162.87	346.2	-55.8	587.1	579.5	7.59	77.369		
2,300.0	2,281.3	2,135.8	2,100.6	5.9	6.9	162.79	372.0	-60.8	631.4	623.5	7.95	79.445		
2,400.0	2,379.7	2,225.5	2,186.3	6.3	7.4	162.73	397.9	-65.9	675.7	667.4	8.31	81.337		
2,500.0	2,478.2	2,315.1	2,272.0	6.6	7.9	162.68	423.7	-70.9	720.0	711.4	8.67	83.069		
2,600.0	2,576.7	2,404.8	2,357.7	7.0	8.3	162.63	449.5	-75.9	764.4	755.3	9.03	84.659		
2,700.0	2,675.2	2,494.4	2,443.4	7.3	8.8	162.59	475.4	-80.9	808.7	799.3	9.39	86.124		
2,800.0	2,773.7	2,584.0	2,529.1	7.7	9.3	162.55	501.2	-85.9	853.0	843.2	9.75	87.478		
2,900.0	2,872.1	2,673.7	2,614.8	8.0	9.8	162.51	527.0	-90.9	897.3	887.2	10.11	88.733		
3,000.0	2,970.6	2,763.3	2,700.5	8.4	10.3	162.48	552.9	-95.9	941.6	931.1	10.47	89.900		
3,100.0	3,069.1	2,853.0	2,786.1	8.7	10.7	162.45	578.7	-100.9	985.9	975.1	10.84	90.987		
3,200.0	3,167.6	2,942.6	2,871.8	9.0	11.2	162.43	604.5	-105.9	1,030.2	1,019.0	11.20	92.002		
3,300.0	3,266.1	3,032.3	2,957.5	9.4	11.7	162.40	630.4	-110.9	1,074.6	1,063.0	11.56	92.953		
3,400.0	3,364.5	3,121.9	3,043.2	9.7	12.2	162.38	656.2	-116.0	1,118.9	1,107.0	11.92	93.844		
3,500.0	3,463.0	3,211.5	3,128.9	10.1	12.7	162.36	682.0	-121.0	1,163.2	1,150.9	12.29	94.682		
3,600.0	3,561.5	3,301.2	3,214.6	10.4	13.1	162.34	707.9	-126.0	1,207.5	1,194.9	12.65	95.472		
3,700.0	3,660.0	3,390.8	3,300.3	10.8	13.6	162.32	733.7	-131.0	1,251.8	1,238.8	13.01	96.216		
3,800.0	3,758.5	3,480.5	3,386.0	11.1	14.1	162.31	759.5	-136.0	1,296.1	1,282.8	13.37	96.919		
3,900.0	3,857.0	3,570.1	3,471.7	11.5	14.6	162.29	785.4	-141.0	1,340.5	1,326.7	13.74	97.584		
4,000.0	3,955.4	3,659.8	3,557.4	11.8	15.1	162.28	811.2	-146.0	1,384.8	1,370.7	14.10	98.215		
4,100.0	4,053.9	3,749.4	3,643.1	12.2	15.6	162.27	837.0	-151.0	1,429.1	1,414.6	14.46	98.813		
4,200.0	4,152.4	3,839.0	3,728.8	12.5	16.0	162.25	862.9	-156.0	1,473.4	1,458.6	14.83	99.381		
4,300.0	4,250.9	3,928.7	3,814.5	12.9	16.5	162.24	888.7	-161.0	1,517.7	1,502.5	15.19	99.922		
4,400.0	4,349.4	4,018.3	3,900.2	13.2	17.0	162.23	914.6	-166.1	1,562.1	1,546.5	15.55	100.437		
4,500.0	4,447.8	4,108.0	3,985.9	13.6	17.5	162.22	940.4	-171.1	1,606.4	1,590.5	15.92	100.929		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2B-18H - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.00	51.0	0.0	51.0					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	51.0	0.0	51.0	50.7	0.30	167.922		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	51.0	0.0	51.0	50.3	0.65	78.124		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	51.0	0.0	51.0	50.0	1.00	50.903 CC, ES		
400.0	400.0	399.1	399.1	0.7	0.7	-0.23	51.8	-0.2	51.8	50.5	1.35	38.414		
500.0	500.0	498.2	498.1	0.9	0.9	162.31	54.3	-0.8	55.2	53.5	1.70	32.523		
600.0	600.0	597.0	596.8	1.0	1.0	162.10	58.5	-1.9	61.9	59.8	2.04	30.274		
700.0	699.9	695.4	695.0	1.2	1.2	162.03	64.2	-3.3	71.9	69.5	2.39	30.071 SF		
800.0	799.7	793.2	792.5	1.4	1.4	162.07	71.6	-5.1	85.2	82.5	2.74	31.130		
900.0	899.4	890.2	889.2	1.6	1.7	162.15	80.5	-7.4	101.8	98.7	3.08	33.016		
1,000.0	998.9	986.4	984.8	1.8	1.9	162.26	90.8	-10.0	121.7	118.2	3.43	35.470		
1,100.0	1,098.3	1,081.6	1,079.1	2.1	2.1	162.36	102.6	-12.9	144.7	140.9	3.78	38.326		
1,200.0	1,197.4	1,175.6	1,172.1	2.3	2.4	162.46	115.8	-16.2	170.9	166.8	4.12	41.473		
1,300.0	1,296.3	1,268.2	1,263.6	2.6	2.7	162.53	130.2	-19.8	200.3	195.8	4.47	44.834		
1,400.0	1,394.9	1,359.5	1,353.5	2.9	3.0	162.59	145.8	-23.7	232.7	227.9	4.81	48.351		
1,500.0	1,493.4	1,449.5	1,441.8	3.3	3.3	162.69	162.5	-27.9	267.3	262.2	5.17	51.745		
1,600.0	1,591.9	1,538.5	1,528.9	3.6	3.7	162.70	180.3	-32.4	303.4	297.9	5.52	54.955		
1,700.0	1,690.4	1,626.4	1,614.6	3.9	4.0	162.64	199.3	-37.1	340.8	335.0	5.88	58.011		
1,800.0	1,788.9	1,713.3	1,699.0	4.2	4.4	162.54	219.2	-42.1	379.6	373.4	6.23	60.938		
1,900.0	1,887.3	1,800.0	1,782.9	4.6	4.8	162.41	240.4	-47.4	419.8	413.2	6.59	63.737		
2,000.0	1,985.8	1,883.7	1,863.6	4.9	5.2	162.27	262.0	-52.8	461.3	454.3	6.94	66.471		
2,100.0	2,084.3	1,967.3	1,943.9	5.3	5.6	162.11	284.7	-58.5	504.0	496.7	7.29	69.104		
2,200.0	2,182.8	2,049.7	2,022.6	5.6	6.1	161.94	308.2	-64.4	548.1	540.4	7.65	71.665		
2,300.0	2,281.3	2,131.0	2,100.0	5.9	6.5	161.76	332.4	-70.4	593.4	585.4	8.00	74.162		
2,400.0	2,379.7	2,211.1	2,175.9	6.3	7.0	161.59	357.3	-76.7	639.9	631.5	8.35	76.602		
2,500.0	2,478.2	2,290.1	2,250.3	6.6	7.4	161.42	382.9	-83.1	687.6	678.9	8.70	78.989		
2,600.0	2,576.7	2,373.4	2,328.5	7.0	7.9	161.23	410.8	-90.0	736.3	727.2	9.07	81.221		
2,700.0	2,675.2	2,460.6	2,410.4	7.3	8.5	161.07	440.1	-97.4	785.1	775.6	9.43	83.223		
2,800.0	2,773.7	2,547.9	2,492.2	7.7	9.0	160.92	469.3	-104.7	833.9	824.1	9.80	85.073		
2,900.0	2,872.1	2,635.2	2,574.1	8.0	9.5	160.78	498.6	-112.0	882.7	872.5	10.17	86.788		
3,000.0	2,970.6	2,722.4	2,656.0	8.4	10.1	160.67	527.9	-119.4	931.5	921.0	10.54	88.380		
3,100.0	3,069.1	2,809.7	2,737.9	8.7	10.6	160.56	557.2	-126.7	980.3	969.4	10.91	89.864		
3,200.0	3,167.6	2,896.9	2,819.7	9.0	11.2	160.46	586.5	-134.0	1,029.2	1,017.9	11.28	91.249		
3,300.0	3,266.1	2,984.2	2,901.6	9.4	11.7	160.37	615.7	-141.3	1,078.0	1,066.3	11.65	92.545		
3,400.0	3,364.5	3,071.5	2,983.5	9.7	12.2	160.29	645.0	-148.7	1,126.8	1,114.8	12.02	93.759		
3,500.0	3,463.0	3,158.7	3,065.3	10.1	12.8	160.22	674.3	-156.0	1,175.6	1,163.2	12.39	94.901		
3,600.0	3,561.5	3,246.0	3,147.2	10.4	13.3	160.15	703.6	-163.3	1,224.5	1,211.7	12.76	95.975		
3,700.0	3,660.0	3,333.2	3,229.1	10.8	13.9	160.09	732.9	-170.7	1,273.3	1,260.2	13.13	96.988		
3,800.0	3,758.5	3,420.5	3,311.0	11.1	14.4	160.03	762.2	-178.0	1,322.1	1,308.6	13.50	97.945		
3,900.0	3,857.0	3,507.7	3,392.8	11.5	15.0	159.98	791.4	-185.3	1,371.0	1,357.1	13.87	98.850		
4,000.0	3,955.4	3,646.3	3,523.5	11.8	15.8	159.92	836.1	-196.5	1,418.8	1,404.5	14.33	98.979		
4,100.0	4,053.9	3,824.2	3,694.1	12.2	16.6	159.93	884.7	-208.6	1,461.8	1,446.9	14.87	98.323		
4,200.0	4,152.4	4,012.0	3,877.3	12.5	17.4	160.05	924.7	-218.7	1,499.0	1,483.6	15.41	97.273		
4,300.0	4,250.9	4,208.8	4,071.8	12.9	18.0	160.26	954.0	-226.0	1,530.0	1,514.1	15.96	95.862		
4,400.0	4,349.4	4,413.5	4,275.7	13.2	18.3	160.58	970.7	-230.2	1,554.5	1,538.0	16.51	94.131		
4,500.0	4,447.8	4,585.7	4,447.8	13.6	18.5	160.92	974.0	-231.0	1,572.5	1,555.5	17.00	92.477		
4,600.0	4,546.3	4,684.2	4,546.3	13.9	18.5	161.13	974.0	-231.0	1,588.9	1,571.6	17.37	91.479		
4,700.0	4,644.8	4,782.6	4,644.8	14.3	18.6	161.33	974.0	-231.0	1,605.4	1,587.7	17.73	90.530		
4,800.0	4,743.3	4,881.1	4,743.3	14.6	18.7	161.53	974.0	-231.0	1,621.9	1,603.8	18.10	89.624		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2C-18H - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.00	40.1	0.0	40.1					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	40.1	0.0	40.1	39.8	0.30	131.949		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	40.1	0.0	40.1	39.4	0.65	61.388		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	40.1	0.0	40.1	39.1	1.00	39.999		
400.0	400.0	400.0	400.0	0.7	0.7	0.00	40.1	0.0	40.1	38.7	1.35	29.663 CC, ES		
500.0	500.0	499.3	499.3	0.9	0.8	162.83	40.9	-0.3	41.7	40.0	1.70	24.554		
600.0	600.0	598.5	598.5	1.0	1.0	162.59	43.3	-1.3	46.6	44.6	2.05	22.783		
700.0	699.9	697.3	697.2	1.2	1.2	162.28	47.2	-2.9	54.8	52.4	2.39	22.890		
800.0	799.7	795.7	795.4	1.4	1.4	161.97	52.8	-5.1	66.2	63.5	2.74	24.152		
900.0	899.4	893.5	892.9	1.6	1.6	161.70	59.8	-7.9	80.9	77.8	3.09	26.169		
1,000.0	998.9	990.4	989.4	1.8	1.8	161.46	68.3	-11.2	98.8	95.4	3.44	28.699		
1,100.0	1,098.3	1,086.5	1,084.8	2.1	2.0	161.26	78.2	-15.2	119.8	116.0	3.79	31.587		
1,200.0	1,197.4	1,181.4	1,179.0	2.3	2.3	161.09	89.5	-19.7	144.0	139.9	4.15	34.728		
1,300.0	1,296.3	1,275.2	1,271.8	2.6	2.6	160.94	102.1	-24.7	171.3	166.8	4.50	38.049		
1,400.0	1,394.9	1,367.7	1,363.1	2.9	2.8	160.80	115.8	-30.2	201.6	196.7	4.86	41.494		
1,500.0	1,493.4	1,459.0	1,453.0	3.3	3.1	160.72	130.7	-36.1	234.1	228.9	5.23	44.807		
1,600.0	1,591.9	1,549.4	1,541.7	3.6	3.5	160.55	146.8	-42.5	268.1	262.5	5.59	47.920		
1,700.0	1,690.4	1,641.3	1,631.6	3.9	3.8	160.33	164.3	-49.4	303.1	297.2	5.97	50.793		
1,800.0	1,788.9	1,734.8	1,723.2	4.2	4.1	160.14	182.2	-56.6	338.4	332.0	6.35	53.307		
1,900.0	1,887.3	1,828.4	1,814.8	4.6	4.5	159.99	200.1	-63.7	373.6	366.9	6.73	55.525		
2,000.0	1,985.8	1,922.0	1,906.4	4.9	4.9	159.86	218.0	-70.8	408.8	401.7	7.11	57.495		
2,100.0	2,084.3	2,015.6	1,998.0	5.3	5.2	159.76	235.9	-77.9	444.0	436.5	7.49	59.257		
2,200.0	2,182.8	2,109.2	2,089.5	5.6	5.6	159.67	253.7	-85.1	479.3	471.4	7.88	60.840		
2,300.0	2,281.3	2,202.8	2,181.1	5.9	5.9	159.59	271.6	-92.2	514.5	506.2	8.26	62.270		
2,400.0	2,379.7	2,296.4	2,272.7	6.3	6.3	159.52	289.5	-99.3	549.7	541.1	8.65	63.569		
2,500.0	2,478.2	2,390.0	2,364.3	6.6	6.7	159.46	307.4	-106.4	585.0	575.9	9.03	64.752		
2,600.0	2,576.7	2,483.5	2,455.9	7.0	7.0	159.41	325.3	-113.6	620.2	610.8	9.42	65.835		
2,700.0	2,675.2	2,577.1	2,547.5	7.3	7.4	159.36	343.2	-120.7	655.4	645.6	9.81	66.829		
2,800.0	2,773.7	2,670.7	2,639.0	7.7	7.8	159.32	361.1	-127.8	690.7	680.5	10.19	67.745		
2,900.0	2,872.1	2,764.3	2,730.6	8.0	8.1	159.28	379.0	-134.9	725.9	715.3	10.58	68.592		
3,000.0	2,970.6	2,857.9	2,822.2	8.4	8.5	159.25	396.9	-142.1	761.1	750.1	10.97	69.378		
3,100.0	3,069.1	2,951.5	2,913.8	8.7	8.9	159.22	414.8	-149.2	796.3	785.0	11.36	70.107		
3,200.0	3,167.6	3,045.1	3,005.4	9.0	9.2	159.19	432.7	-156.3	831.6	819.8	11.75	70.787		
3,300.0	3,266.1	3,138.6	3,097.0	9.4	9.6	159.16	450.6	-163.4	866.8	854.7	12.14	71.422		
3,400.0	3,364.5	3,232.2	3,188.5	9.7	10.0	159.14	468.5	-170.6	902.0	889.5	12.53	72.017		
3,500.0	3,463.0	3,325.8	3,280.1	10.1	10.3	159.11	486.4	-177.7	937.3	924.4	12.91	72.575		
3,600.0	3,561.5	3,419.4	3,371.7	10.4	10.7	159.09	504.3	-184.8	972.5	959.2	13.30	73.099		
3,700.0	3,660.0	3,513.0	3,463.3	10.8	11.1	159.07	522.2	-191.9	1,007.7	994.0	13.69	73.592		
3,800.0	3,758.5	3,606.6	3,554.9	11.1	11.5	159.06	540.1	-199.1	1,043.0	1,028.9	14.08	74.057		
3,900.0	3,857.0	3,700.2	3,646.5	11.5	11.8	159.04	558.0	-206.2	1,078.2	1,063.7	14.47	74.497		
4,000.0	3,955.4	3,820.5	3,764.4	11.8	12.3	159.03	580.1	-215.0	1,112.9	1,098.0	14.91	74.632		
4,100.0	4,053.9	3,972.4	3,914.5	12.2	12.7	159.14	602.0	-223.7	1,143.5	1,128.1	15.40	74.273		
4,200.0	4,152.4	4,128.9	4,070.1	12.5	13.1	159.38	616.7	-229.6	1,169.2	1,153.3	15.87	73.664		
4,300.0	4,250.9	4,289.2	4,230.2	12.9	13.3	159.74	623.6	-232.3	1,189.8	1,173.5	16.34	72.829		
4,400.0	4,349.4	4,408.3	4,349.4	13.2	13.4	160.08	624.1	-232.5	1,206.4	1,189.7	16.73	72.120		
4,500.0	4,447.8	4,506.8	4,447.8	13.6	13.5	160.35	624.1	-232.5	1,222.8	1,205.7	17.09	71.571		
4,600.0	4,546.3	4,605.3	4,546.3	13.9	13.6	160.62	624.1	-232.5	1,239.2	1,221.8	17.44	71.050		
4,700.0	4,644.8	4,703.8	4,644.8	14.3	13.7	160.89	624.1	-232.5	1,255.6	1,237.8	17.80	70.555		
4,800.0	4,743.3	4,802.3	4,743.3	14.6	13.8	161.14	624.1	-232.5	1,272.1	1,253.9	18.15	70.085		
4,900.0	4,841.8	4,900.7	4,841.8	15.0	13.9	161.39	624.1	-232.5	1,288.5	1,270.0	18.50	69.637		
5,000.0	4,940.2	4,999.2	4,940.2	15.3	14.0	161.63	624.1	-232.5	1,305.0	1,286.2	18.86	69.211		
5,100.0	5,038.7	5,097.7	5,038.7	15.7	14.1	161.87	624.1	-232.5	1,321.6	1,302.3	19.21	68.804		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2C-18H - HZ - Plan #1												Offset Site Error:	0.0 ft
Survey Program: O-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,200.0	5,137.2	5,196.2	5,137.2	16.0	14.2	162.10	624.1	-232.5	1,338.1	1,318.5	19.56	68.416	
5,300.0	5,235.7	5,294.7	5,235.7	16.4	14.4	162.33	624.1	-232.5	1,354.7	1,334.7	19.91	68.044	
5,400.0	5,334.4	5,393.3	5,334.4	16.7	14.5	162.61	624.1	-232.5	1,370.0	1,349.7	20.31	67.462	
5,500.0	5,433.6	5,492.5	5,433.6	16.9	14.6	162.84	624.1	-232.5	1,382.1	1,361.4	20.70	66.780	
5,600.0	5,533.1	5,592.1	5,533.1	17.1	14.7	163.00	624.1	-232.5	1,390.9	1,369.9	21.07	66.030	
5,700.0	5,633.0	5,691.9	5,633.0	17.3	14.8	163.10	624.1	-232.5	1,396.4	1,375.0	21.41	65.213	
5,800.0	5,732.9	5,791.9	5,732.9	17.4	14.9	163.14	624.1	-232.5	1,398.6	1,376.8	21.74	64.330	
5,900.0	5,832.9	5,891.9	5,832.9	17.5	15.0	0.23	624.1	-232.5	1,398.6	1,367.1	31.48	44.424	
6,000.0	5,932.9	5,991.9	5,932.9	17.6	15.2	0.23	624.1	-232.5	1,398.6	1,366.9	31.71	44.101	
6,100.0	6,032.9	6,091.9	6,032.9	17.7	15.3	0.23	624.1	-232.5	1,398.6	1,366.6	31.95	43.781	
6,200.0	6,132.9	6,191.9	6,132.9	17.8	15.4	0.23	624.1	-232.5	1,398.6	1,366.4	32.18	43.462	
6,300.0	6,232.9	6,291.6	6,232.6	17.9	15.5	-89.78	624.1	-231.6	1,398.6	1,375.2	23.34	59.912	
6,400.0	6,332.1	6,390.9	6,331.1	18.0	15.6	-89.78	624.1	-219.8	1,398.6	1,375.1	23.49	59.538	
6,400.8	6,332.9	6,391.6	6,331.8	18.0	15.6	-89.78	624.1	-219.7	1,398.6	1,375.1	23.49	59.536	
6,500.0	6,428.7	6,490.2	6,427.0	18.0	15.6	-89.79	624.1	-194.5	1,398.6	1,375.1	23.52	59.472	
6,600.0	6,520.7	6,589.5	6,518.6	18.0	15.6	-89.81	624.1	-156.2	1,398.6	1,375.1	23.50	59.522	
6,700.0	6,606.5	6,688.8	6,604.0	18.0	15.6	-89.82	624.1	-105.6	1,398.6	1,375.0	23.55	59.389	
6,800.0	6,684.2	6,788.3	6,681.6	18.0	15.6	-89.84	624.1	-43.6	1,398.6	1,374.8	23.84	58.674	
6,900.0	6,752.5	6,887.8	6,750.0	18.1	15.8	-89.87	624.1	28.6	1,398.6	1,374.0	24.54	56.987	
7,000.0	6,809.9	6,987.4	6,807.7	18.4	16.1	-89.89	624.1	109.6	1,398.6	1,372.8	25.83	54.139	
7,100.0	6,855.5	7,087.1	6,853.7	18.9	16.7	-89.92	624.1	198.0	1,398.6	1,370.8	27.81	50.294	
7,200.0	6,888.2	7,186.8	6,887.0	19.6	17.6	-89.95	624.1	291.9	1,398.6	1,368.1	30.46	45.909	
7,300.0	6,907.4	7,286.7	6,907.0	20.6	18.8	-89.98	624.1	389.7	1,398.6	1,364.9	33.70	41.497	
7,400.0	6,913.2	7,386.7	6,913.4	21.9	20.4	-90.01	624.1	489.5	1,398.6	1,361.2	37.36	37.434	
7,500.0	6,914.9	7,486.7	6,915.1	23.4	22.1	-90.01	624.1	589.4	1,398.6	1,357.3	41.30	33.864	
7,600.0	6,916.7	7,586.7	6,916.9	25.2	24.0	-90.01	624.1	689.4	1,398.6	1,353.2	45.43	30.785	
7,700.0	6,918.4	7,686.7	6,918.6	27.1	26.0	-90.01	624.1	789.4	1,398.6	1,348.9	49.71	28.134	
7,800.0	6,920.2	7,786.7	6,920.4	29.1	28.1	-90.01	624.1	889.4	1,398.6	1,344.5	54.11	25.849	
7,900.0	6,921.9	7,886.7	6,922.1	31.1	30.3	-90.01	624.1	989.4	1,398.6	1,340.0	58.59	23.871	
8,000.0	6,923.7	7,986.7	6,923.9	33.3	32.5	-90.01	624.1	1,089.4	1,398.6	1,335.5	63.14	22.150	
8,100.0	6,925.4	8,086.7	6,925.6	35.4	34.7	-90.01	624.1	1,189.3	1,398.6	1,330.9	67.75	20.643	
8,200.0	6,927.2	8,186.7	6,927.4	37.7	37.0	-90.01	624.1	1,289.3	1,398.6	1,326.2	72.41	19.317	
8,300.0	6,928.9	8,286.7	6,929.1	39.9	39.3	-90.01	624.1	1,389.3	1,398.6	1,321.5	77.10	18.142	
8,400.0	6,930.6	8,386.7	6,930.8	42.2	41.6	-90.01	624.0	1,489.3	1,398.6	1,316.8	81.82	17.095	
8,500.0	6,932.4	8,486.7	6,932.6	44.5	43.9	-90.01	624.0	1,589.3	1,398.6	1,312.1	86.56	16.158	
8,600.0	6,934.1	8,586.7	6,934.3	46.8	46.3	-90.01	624.0	1,689.3	1,398.6	1,307.3	91.33	15.315	
8,700.0	6,935.9	8,686.7	6,936.1	49.2	48.6	-90.01	624.0	1,789.3	1,398.7	1,302.5	96.11	14.552	
8,800.0	6,937.6	8,786.7	6,937.8	51.5	51.0	-90.01	624.0	1,889.2	1,398.7	1,297.7	100.91	13.860	
8,900.0	6,939.4	8,886.7	6,939.6	53.9	53.4	-90.01	624.0	1,989.2	1,398.7	1,292.9	105.73	13.229	
9,000.0	6,941.1	8,986.7	6,941.3	56.2	55.8	-90.01	624.0	2,089.2	1,398.7	1,288.1	110.56	12.651	
9,100.0	6,942.9	9,086.7	6,943.1	58.6	58.1	-90.01	624.0	2,189.2	1,398.7	1,283.3	115.39	12.121	
9,200.0	6,944.6	9,186.7	6,944.8	61.0	60.5	-90.01	624.0	2,289.2	1,398.7	1,278.4	120.24	11.633	
9,300.0	6,946.3	9,286.7	6,946.6	63.4	63.0	-90.01	624.0	2,389.2	1,398.7	1,273.6	125.09	11.181	
9,400.0	6,948.1	9,386.7	6,948.3	65.8	65.4	-90.01	624.0	2,489.2	1,398.7	1,268.7	129.95	10.763	
9,500.0	6,949.8	9,486.7	6,950.0	68.2	67.8	-90.01	624.0	2,589.1	1,398.7	1,263.9	134.82	10.375	
9,600.0	6,951.6	9,586.7	6,951.8	70.6	70.2	-90.01	624.0	2,689.1	1,398.7	1,259.0	139.69	10.013	
9,700.0	6,953.3	9,686.7	6,953.5	73.0	72.6	-90.01	624.0	2,789.1	1,398.7	1,254.1	144.57	9.675	
9,800.0	6,955.1	9,786.7	6,955.3	75.5	75.1	-90.01	624.0	2,889.1	1,398.7	1,249.2	149.45	9.359	
9,900.0	6,956.8	9,886.7	6,957.0	77.9	77.5	-90.01	624.0	2,989.1	1,398.7	1,244.4	154.34	9.063	
10,000.0	6,958.6	9,986.7	6,958.8	80.3	79.9	-90.01	624.0	3,089.1	1,398.7	1,239.5	159.23	8.784	
10,100.0	6,960.3	10,086.7	6,960.5	82.7	82.4	-90.01	624.0	3,189.0	1,398.7	1,234.6	164.12	8.522	
10,200.0	6,962.1	10,186.7	6,962.3	85.2	84.8	-90.01	624.0	3,289.0	1,398.7	1,229.7	169.02	8.275	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2C-18H - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,300.0	6,963.8	10,286.7	6,964.0	87.6	87.2	-90.01	624.0	3,389.0	1,398.7	1,224.8	173.92	8.042		
10,400.0	6,965.5	10,386.7	6,965.7	90.0	89.7	-90.01	624.0	3,489.0	1,398.7	1,219.9	178.82	7.822		
10,500.0	6,967.3	10,486.7	6,967.5	92.5	92.1	-90.01	624.0	3,589.0	1,398.7	1,215.0	183.73	7.613		
10,600.0	6,969.0	10,586.7	6,969.2	94.9	94.6	-90.01	624.0	3,689.0	1,398.7	1,210.1	188.63	7.415		
10,700.0	6,970.8	10,686.7	6,971.0	97.4	97.0	-90.01	624.0	3,789.0	1,398.7	1,205.2	193.54	7.227		
10,800.0	6,972.5	10,786.7	6,972.7	99.8	99.5	-90.01	624.0	3,888.9	1,398.7	1,200.3	198.45	7.048		
10,900.0	6,974.3	10,886.7	6,974.5	102.2	101.9	-90.01	624.0	3,988.9	1,398.7	1,195.4	203.37	6.878		
11,000.0	6,976.0	10,986.7	6,976.2	104.7	104.4	-90.01	624.0	4,088.9	1,398.7	1,190.5	208.28	6.716		
11,100.0	6,977.8	11,086.7	6,978.0	107.1	106.8	-90.01	624.0	4,188.9	1,398.7	1,185.5	213.20	6.561		
11,200.0	6,979.5	11,186.7	6,979.7	109.6	109.3	-90.01	624.0	4,288.9	1,398.7	1,180.6	218.12	6.413		
11,300.0	6,981.3	11,286.7	6,981.5	112.0	111.7	-90.01	624.0	4,388.9	1,398.7	1,175.7	223.03	6.271		
11,400.0	6,983.0	11,386.7	6,983.2	114.5	114.2	-90.01	624.0	4,488.8	1,398.8	1,170.8	227.95	6.136		
11,500.0	6,984.7	11,486.7	6,984.9	116.9	116.6	-90.01	624.0	4,588.8	1,398.8	1,165.9	232.88	6.006		
11,600.0	6,986.5	11,586.7	6,986.7	119.4	119.1	-90.01	624.0	4,688.8	1,398.8	1,161.0	237.80	5.882		
11,700.0	6,988.2	11,686.7	6,988.4	121.8	121.5	-90.01	624.0	4,788.8	1,398.8	1,156.0	242.72	5.763		
11,800.0	6,990.0	11,786.7	6,990.2	124.3	124.0	-90.01	624.0	4,888.8	1,398.8	1,151.1	247.65	5.648		
11,900.0	6,991.7	11,886.7	6,991.9	126.7	126.5	-90.01	624.0	4,988.8	1,398.8	1,146.2	252.57	5.538		
12,000.0	6,993.5	11,986.7	6,993.7	129.2	128.9	-90.01	624.0	5,088.8	1,398.8	1,141.3	257.50	5.432		
12,100.0	6,995.2	12,086.7	6,995.4	131.7	131.4	-90.01	624.0	5,188.7	1,398.8	1,136.4	262.42	5.330		
12,200.0	6,997.0	12,186.7	6,997.2	134.1	133.8	-90.01	624.0	5,288.7	1,398.8	1,131.4	267.35	5.232		
12,300.0	6,998.7	12,286.7	6,998.9	136.6	136.3	-90.01	624.0	5,388.7	1,398.8	1,126.5	272.28	5.137		
12,400.0	7,000.5	12,386.7	7,000.7	139.0	138.8	-90.01	624.0	5,488.7	1,398.8	1,121.6	277.21	5.046		
12,500.0	7,002.2	12,486.7	7,002.4	141.5	141.2	-90.01	624.0	5,588.7	1,398.8	1,116.7	282.14	4.958		
12,600.0	7,003.9	12,586.7	7,004.1	143.9	143.7	-90.01	624.0	5,688.7	1,398.8	1,111.7	287.07	4.873		
12,700.0	7,005.7	12,686.7	7,005.9	146.4	146.1	-90.01	624.0	5,788.6	1,398.8	1,106.8	292.00	4.790		
12,800.0	7,007.4	12,786.7	7,007.6	148.9	148.6	-90.01	624.0	5,888.6	1,398.8	1,101.9	296.93	4.711		
12,900.0	7,009.2	12,886.7	7,009.4	151.3	151.1	-90.01	624.0	5,988.6	1,398.8	1,096.9	301.86	4.634		
13,000.0	7,010.9	12,986.7	7,011.1	153.8	153.5	-90.01	624.0	6,088.6	1,398.8	1,092.0	306.80	4.559		
13,100.0	7,012.7	13,086.7	7,012.9	156.3	156.0	-90.01	624.0	6,188.6	1,398.8	1,087.1	311.73	4.487		
13,200.0	7,014.4	13,186.7	7,014.6	158.7	158.5	-90.01	624.0	6,288.6	1,398.8	1,082.2	316.66	4.417		
13,300.0	7,016.2	13,286.7	7,016.4	161.2	160.9	-90.01	624.0	6,388.6	1,398.8	1,077.2	321.60	4.350		
13,400.0	7,017.9	13,386.7	7,018.1	163.6	163.4	-90.01	624.0	6,488.5	1,398.8	1,072.3	326.53	4.284		
13,500.0	7,019.6	13,486.7	7,019.9	166.1	165.9	-90.01	624.0	6,588.5	1,398.8	1,067.4	331.47	4.220		
13,600.0	7,021.4	13,586.7	7,021.6	168.6	168.3	-90.01	624.0	6,688.5	1,398.8	1,062.4	336.40	4.158		
13,700.0	7,023.1	13,686.7	7,023.3	171.0	170.8	-90.01	624.0	6,788.5	1,398.8	1,057.5	341.34	4.098		
13,800.0	7,024.9	13,786.7	7,025.1	173.5	173.2	-90.01	624.0	6,888.5	1,398.8	1,052.6	346.27	4.040		
13,900.0	7,026.6	13,886.7	7,026.8	176.0	175.7	-90.01	624.0	6,988.5	1,398.8	1,047.6	351.21	3.983		
14,000.0	7,028.4	13,986.7	7,028.6	178.4	178.2	-90.01	624.0	7,088.4	1,398.8	1,042.7	356.15	3.928		
14,052.1	7,029.3	14,038.8	7,029.5	179.7	179.5	-90.01	624.0	7,140.5	1,398.9	1,040.1	358.72	3.900		
14,093.1	7,030.0	14,068.8	7,030.0	180.7	180.2	-90.01	624.0	7,170.5	1,398.9	1,038.4	360.47	3.881 SF		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2D-18H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	0.00	29.1	0.0	29.1					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	29.1	0.0	29.1	28.8	0.30	95.963		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.65	44.646 CC, ES		
300.0	300.0	299.6	299.6	0.5	0.5	-1.15	29.8	-0.6	29.8	28.8	1.00	29.738		
400.0	400.0	399.2	399.1	0.7	0.7	-4.32	31.6	-2.4	31.7	30.4	1.35	23.510		
500.0	500.0	498.6	498.5	0.9	0.9	154.71	34.8	-5.4	36.0	34.3	1.70	21.126		
600.0	600.0	597.7	597.4	1.0	1.1	151.51	39.1	-9.5	43.4	41.3	2.06	21.077		
700.0	699.9	696.5	695.8	1.2	1.3	149.25	44.7	-14.9	53.8	51.4	2.41	22.291		
800.0	799.7	794.6	793.6	1.4	1.5	147.78	51.4	-21.3	67.3	64.5	2.78	24.242		
900.0	899.4	892.1	890.4	1.6	1.7	146.88	59.3	-28.9	83.7	80.6	3.14	26.636		
1,000.0	998.9	988.8	986.4	1.8	2.0	146.33	68.3	-37.5	103.1	99.6	3.52	29.297		
1,100.0	1,098.3	1,084.6	1,081.1	2.1	2.3	146.01	78.4	-47.1	125.3	121.4	3.90	32.113		
1,200.0	1,197.4	1,179.4	1,174.7	2.3	2.6	145.83	89.5	-57.7	150.4	146.1	4.30	35.009		
1,300.0	1,296.3	1,273.1	1,266.8	2.6	2.9	145.72	101.6	-69.2	178.3	173.6	4.70	37.930		
1,400.0	1,394.9	1,365.5	1,357.5	2.9	3.3	145.65	114.5	-81.6	208.9	203.8	5.12	40.841		
1,500.0	1,493.4	1,456.8	1,446.8	3.3	3.6	145.68	128.4	-94.9	241.6	236.0	5.55	43.561		
1,600.0	1,591.9	1,547.2	1,534.8	3.6	4.0	145.56	143.1	-109.0	275.6	269.6	5.98	46.063		
1,700.0	1,690.4	1,637.4	1,622.4	3.9	4.4	145.34	158.8	-123.9	310.9	304.5	6.42	48.389		
1,800.0	1,788.9	1,730.8	1,712.9	4.2	4.8	145.12	175.3	-139.8	346.6	339.8	6.88	50.394		
1,900.0	1,887.3	1,824.1	1,803.4	4.6	5.2	144.93	191.9	-155.7	382.4	375.1	7.34	52.134		
2,000.0	1,985.8	1,917.5	1,893.9	4.9	5.7	144.78	208.5	-171.5	418.2	410.4	7.79	53.654		
2,100.0	2,084.3	2,024.6	1,998.1	5.3	6.1	144.73	226.4	-188.6	452.7	444.4	8.28	54.697		
2,200.0	2,182.8	2,135.8	2,107.2	5.6	6.5	144.93	242.0	-203.5	484.0	475.2	8.76	55.278		
2,300.0	2,281.3	2,249.4	2,219.4	5.9	6.8	145.33	254.7	-215.7	512.0	502.7	9.23	55.485		
2,400.0	2,379.7	2,365.1	2,334.3	6.3	7.1	145.92	264.4	-224.9	536.5	526.8	9.69	55.386		
2,500.0	2,478.2	2,482.5	2,451.3	6.6	7.3	146.70	270.7	-231.0	557.6	547.5	10.13	55.035		
2,600.0	2,576.7	2,601.3	2,570.0	7.0	7.5	147.65	273.7	-233.8	575.2	564.6	10.56	54.483		
2,700.0	2,675.2	2,706.4	2,675.2	7.3	7.6	148.60	273.8	-234.0	590.2	579.2	10.95	53.899		
2,800.0	2,773.7	2,804.9	2,773.7	7.7	7.7	149.45	273.8	-234.0	605.1	593.8	11.33	53.422		
2,900.0	2,872.1	2,903.4	2,872.1	8.0	7.8	150.26	273.8	-234.0	620.2	608.5	11.70	53.006		
3,000.0	2,970.6	3,001.8	2,970.6	8.4	7.9	151.04	273.8	-234.0	635.4	623.3	12.07	52.644		
3,100.0	3,069.1	3,100.3	3,069.1	8.7	8.0	151.77	273.8	-234.0	650.7	638.3	12.44	52.327		
3,200.0	3,167.6	3,198.8	3,167.6	9.0	8.2	152.48	273.8	-234.0	666.1	653.3	12.80	52.049		
3,300.0	3,266.1	3,297.3	3,266.1	9.4	8.3	153.15	273.8	-234.0	681.6	668.5	13.16	51.806		
3,400.0	3,364.5	3,395.8	3,364.5	9.7	8.4	153.79	273.8	-234.0	697.2	683.7	13.51	51.593		
3,500.0	3,463.0	3,494.2	3,463.0	10.1	8.5	154.41	273.8	-234.0	712.9	699.0	13.87	51.406		
3,600.0	3,561.5	3,592.7	3,561.5	10.4	8.6	155.00	273.8	-234.0	728.6	714.4	14.22	51.241		
3,700.0	3,660.0	3,691.2	3,660.0	10.8	8.8	155.56	273.8	-234.0	744.4	729.8	14.57	51.096		
3,800.0	3,758.5	3,789.7	3,758.5	11.1	8.9	156.10	273.8	-234.0	760.3	745.4	14.92	50.969		
3,900.0	3,857.0	3,888.2	3,857.0	11.5	9.0	156.62	273.8	-234.0	776.2	761.0	15.26	50.858		
4,000.0	3,955.4	3,986.7	3,955.4	11.8	9.1	157.11	273.8	-234.0	792.3	776.6	15.61	50.760		
4,100.0	4,053.9	4,085.1	4,053.9	12.2	9.3	157.59	273.8	-234.0	808.3	792.4	15.95	50.673		
4,200.0	4,152.4	4,183.6	4,152.4	12.5	9.4	158.05	273.8	-234.0	824.4	808.1	16.29	50.598		
4,300.0	4,250.9	4,282.1	4,250.9	12.9	9.5	158.49	273.8	-234.0	840.6	824.0	16.64	50.531		
4,400.0	4,349.4	4,380.6	4,349.4	13.2	9.7	158.92	273.8	-234.0	856.8	839.8	16.98	50.473		
4,500.0	4,447.8	4,479.1	4,447.8	13.6	9.8	159.33	273.8	-234.0	873.1	855.7	17.31	50.422		
4,600.0	4,546.3	4,577.5	4,546.3	13.9	10.0	159.72	273.8	-234.0	889.4	871.7	17.65	50.378		
4,700.0	4,644.8	4,676.0	4,644.8	14.3	10.1	160.10	273.8	-234.0	905.7	887.7	17.99	50.340		
4,800.0	4,743.3	4,774.5	4,743.3	14.6	10.2	160.47	273.8	-234.0	922.1	903.7	18.33	50.306		
4,900.0	4,841.8	4,873.0	4,841.8	15.0	10.4	160.82	273.8	-234.0	938.5	919.8	18.67	50.277		
5,000.0	4,940.2	4,971.5	4,940.2	15.3	10.5	161.16	273.8	-234.0	954.9	935.9	19.00	50.253		
5,100.0	5,038.7	5,069.9	5,038.7	15.7	10.7	161.49	273.8	-234.0	971.4	952.1	19.34	50.231		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2D-18H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,137.2	5,168.4	5,137.2	16.0	10.8	161.81	273.8	-234.0	987.9	968.2	19.67	50.213		
5,300.0	5,235.7	5,266.9	5,235.7	16.4	10.9	162.12	273.8	-234.0	1,004.4	984.4	20.01	50.198		
5,400.0	5,334.4	5,365.6	5,334.4	16.7	11.1	162.48	273.8	-234.0	1,019.8	999.4	20.38	50.040		
5,500.0	5,433.6	5,464.8	5,433.6	16.9	11.2	162.76	273.8	-234.0	1,031.9	1,011.2	20.74	49.754		
5,600.0	5,533.1	5,564.4	5,533.1	17.1	11.4	162.96	273.8	-234.0	1,040.7	1,019.6	21.08	49.358		
5,700.0	5,633.0	5,664.2	5,633.0	17.3	11.5	163.09	273.8	-234.0	1,046.2	1,024.8	21.41	48.856		
5,800.0	5,732.9	5,764.2	5,732.9	17.4	11.7	163.14	273.8	-234.0	1,048.3	1,026.6	21.73	48.254		
5,900.0	5,832.9	5,864.2	5,832.9	17.5	11.8	0.22	273.8	-234.0	1,048.4	1,020.3	28.08	37.329		
6,000.0	5,932.9	5,964.2	5,932.9	17.6	12.0	0.22	273.8	-234.0	1,048.4	1,020.0	28.35	36.978		
6,100.0	6,032.9	6,064.2	6,032.9	17.7	12.1	0.22	273.8	-234.0	1,048.4	1,019.7	28.62	36.631		
6,200.0	6,132.9	6,164.2	6,132.9	17.8	12.3	0.22	273.8	-234.0	1,048.4	1,019.5	28.89	36.288		
6,300.0	6,232.9	6,264.1	6,232.9	17.9	12.4	-89.83	273.8	-234.0	1,048.4	1,025.0	23.34	44.914		
6,339.0	6,271.8	6,303.0	6,271.8	17.9	12.5	-90.00	273.8	-234.0	1,048.3	1,024.9	23.44	44.720		
6,400.0	6,332.1	6,363.3	6,332.1	18.0	12.6	-90.48	273.8	-234.0	1,048.4	1,024.8	23.61	44.403		
6,500.0	6,428.7	6,461.5	6,430.2	18.0	12.7	-91.78	273.8	-233.2	1,048.9	1,025.1	23.83	44.023		
6,600.0	6,520.7	6,564.4	6,532.4	18.0	12.8	-93.24	273.8	-221.1	1,050.2	1,026.2	23.92	43.902		
6,700.0	6,606.5	6,672.0	6,636.1	18.0	12.8	-94.67	273.8	-192.9	1,052.1	1,028.2	23.94	43.948		
6,800.0	6,684.2	6,784.6	6,738.9	18.0	12.8	-96.04	273.8	-147.1	1,054.6	1,030.6	24.00	43.934		
6,900.0	6,752.5	6,902.6	6,837.5	18.1	12.8	-97.32	273.8	-82.5	1,057.4	1,033.1	24.31	43.504		
7,000.0	6,809.9	7,026.1	6,927.8	18.4	13.0	-98.47	273.9	1.5	1,060.4	1,035.3	25.12	42.214		
7,100.0	6,855.5	7,154.8	7,005.2	18.9	13.6	-99.44	273.9	104.1	1,063.1	1,036.4	26.71	39.806		
7,200.0	6,888.2	7,288.0	7,064.6	19.6	14.8	-100.18	273.9	223.1	1,065.3	1,036.1	29.27	36.391		
7,300.0	6,907.4	7,424.6	7,101.6	20.6	16.7	-100.65	273.9	354.4	1,066.8	1,034.0	32.80	32.521		
7,400.0	6,913.2	7,556.8	7,113.3	21.9	19.0	-100.81	273.9	485.9	1,067.4	1,030.4	36.94	28.898		
7,500.0	6,914.9	7,656.8	7,115.0	23.4	20.9	-100.81	273.9	585.9	1,067.4	1,026.6	40.77	26.183		
7,600.0	6,916.7	7,756.8	7,116.8	25.2	22.9	-100.81	273.9	685.9	1,067.4	1,022.6	44.79	23.832		
7,700.0	6,918.4	7,856.8	7,118.5	27.1	25.0	-100.81	273.9	785.8	1,067.4	1,018.4	48.96	21.801		
7,800.0	6,920.2	7,956.8	7,120.3	29.1	27.2	-100.81	273.9	885.8	1,067.4	1,014.1	53.25	20.044		
7,900.0	6,921.9	8,056.8	7,122.0	31.1	29.4	-100.81	273.9	985.8	1,067.4	1,009.8	57.63	18.520		
8,000.0	6,923.7	8,156.8	7,123.7	33.3	31.6	-100.81	273.9	1,085.8	1,067.4	1,005.3	62.09	17.192		
8,100.0	6,925.4	8,256.8	7,125.5	35.4	33.9	-100.81	273.9	1,185.8	1,067.4	1,000.8	66.60	16.028		
8,200.0	6,927.2	8,356.8	7,127.2	37.7	36.2	-100.81	273.9	1,285.8	1,067.4	996.3	71.15	15.002		
8,300.0	6,928.9	8,456.8	7,129.0	39.9	38.5	-100.81	273.9	1,385.8	1,067.4	991.7	75.75	14.092		
8,400.0	6,930.6	8,556.8	7,130.7	42.2	40.9	-100.81	273.9	1,485.7	1,067.5	987.1	80.37	13.281		
8,500.0	6,932.4	8,656.8	7,132.5	44.5	43.2	-100.81	273.9	1,585.7	1,067.5	982.4	85.03	12.555		
8,600.0	6,934.1	8,756.8	7,134.2	46.8	45.6	-100.81	273.9	1,685.7	1,067.5	977.8	89.70	11.901		
8,700.0	6,935.9	8,856.8	7,136.0	49.2	48.0	-100.81	274.0	1,785.7	1,067.5	973.1	94.39	11.309		
8,800.0	6,937.6	8,956.8	7,137.7	51.5	50.4	-100.81	274.0	1,885.7	1,067.5	968.4	99.10	10.772		
8,900.0	6,939.4	9,056.8	7,139.5	53.9	52.8	-100.80	274.0	1,985.7	1,067.5	963.7	103.83	10.282		
9,000.0	6,941.1	9,156.8	7,141.2	56.2	55.2	-100.80	274.0	2,085.6	1,067.5	959.0	108.56	9.833		
9,100.0	6,942.9	9,256.8	7,142.9	58.6	57.6	-100.80	274.0	2,185.6	1,067.5	954.2	113.31	9.422		
9,200.0	6,944.6	9,356.8	7,144.7	61.0	60.0	-100.80	274.0	2,285.6	1,067.5	949.5	118.06	9.042		
9,300.0	6,946.3	9,456.8	7,146.4	63.4	62.4	-100.80	274.0	2,385.6	1,067.6	944.7	122.83	8.692		
9,400.0	6,948.1	9,556.8	7,148.2	65.8	64.8	-100.80	274.0	2,485.6	1,067.6	940.0	127.60	8.367		
9,500.0	6,949.8	9,656.8	7,149.9	68.2	67.3	-100.80	274.0	2,585.6	1,067.6	935.2	132.37	8.065		
9,600.0	6,951.6	9,756.8	7,151.7	70.6	69.7	-100.80	274.0	2,685.6	1,067.6	930.4	137.16	7.784		
9,700.0	6,953.3	9,856.8	7,153.4	73.0	72.1	-100.80	274.0	2,785.5	1,067.6	925.6	141.95	7.521		
9,800.0	6,955.1	9,956.8	7,155.2	75.5	74.6	-100.80	274.0	2,885.5	1,067.6	920.9	146.74	7.276		
9,900.0	6,956.8	10,056.8	7,156.9	77.9	77.0	-100.80	274.0	2,985.5	1,067.6	916.1	151.54	7.045		
10,000.0	6,958.6	10,156.8	7,158.7	80.3	79.5	-100.80	274.0	3,085.5	1,067.6	911.3	156.34	6.829		
10,100.0	6,960.3	10,256.8	7,160.4	82.7	81.9	-100.80	274.0	3,185.5	1,067.6	906.5	161.14	6.625		
10,200.0	6,962.1	10,356.8	7,162.1	85.2	84.3	-100.80	274.0	3,285.5	1,067.6	901.7	165.95	6.434		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2D-18H - Hz - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,300.0	6,963.8	10,456.8	7,163.9	87.6	86.8	-100.80	274.0	3,385.4	1,067.7	896.9	170.76	6.252	
10,400.0	6,965.5	10,556.8	7,165.6	90.0	89.2	-100.80	274.1	3,485.4	1,067.7	892.1	175.58	6.081	
10,500.0	6,967.3	10,656.8	7,167.4	92.5	91.7	-100.80	274.1	3,585.4	1,067.7	887.3	180.39	5.919	
10,600.0	6,969.0	10,756.8	7,169.1	94.9	94.1	-100.80	274.1	3,685.4	1,067.7	882.5	185.21	5.765	
10,700.0	6,970.8	10,856.8	7,170.9	97.4	96.6	-100.80	274.1	3,785.4	1,067.7	877.7	190.03	5.619	
10,800.0	6,972.5	10,956.8	7,172.6	99.8	99.0	-100.80	274.1	3,885.4	1,067.7	872.9	194.86	5.480	
10,900.0	6,974.3	11,056.8	7,174.4	102.2	101.5	-100.80	274.1	3,985.4	1,067.7	868.0	199.68	5.347	
11,000.0	6,976.0	11,156.8	7,176.1	104.7	104.0	-100.80	274.1	4,085.3	1,067.7	863.2	204.51	5.221	
11,100.0	6,977.8	11,256.8	7,177.9	107.1	106.4	-100.80	274.1	4,185.3	1,067.7	858.4	209.33	5.101	
11,200.0	6,979.5	11,356.8	7,179.6	109.6	108.9	-100.80	274.1	4,285.3	1,067.8	853.6	214.16	4.986	
11,300.0	6,981.3	11,456.8	7,181.3	112.0	111.3	-100.80	274.1	4,385.3	1,067.8	848.8	218.99	4.876	
11,400.0	6,983.0	11,556.8	7,183.1	114.5	113.8	-100.80	274.1	4,485.3	1,067.8	843.9	223.83	4.771	
11,500.0	6,984.7	11,656.8	7,184.8	116.9	116.2	-100.80	274.1	4,585.3	1,067.8	839.1	228.66	4.670	
11,600.0	6,986.5	11,756.8	7,186.6	119.4	118.7	-100.80	274.1	4,685.2	1,067.8	834.3	233.49	4.573	
11,700.0	6,988.2	11,856.8	7,188.3	121.8	121.2	-100.80	274.1	4,785.2	1,067.8	829.5	238.33	4.480	
11,800.0	6,990.0	11,956.8	7,190.1	124.3	123.6	-100.80	274.1	4,885.2	1,067.8	824.6	243.17	4.391	
11,900.0	6,991.7	12,056.8	7,191.8	126.7	126.1	-100.80	274.1	4,985.2	1,067.8	819.8	248.00	4.306	
12,000.0	6,993.5	12,156.8	7,193.6	129.2	128.5	-100.80	274.1	5,085.2	1,067.8	815.0	252.84	4.223	
12,100.0	6,995.2	12,256.8	7,195.3	131.7	131.0	-100.80	274.1	5,185.2	1,067.8	810.2	257.68	4.144	
12,200.0	6,997.0	12,356.8	7,197.0	134.1	133.5	-100.80	274.2	5,285.2	1,067.9	805.3	262.52	4.068	
12,300.0	6,998.7	12,456.8	7,198.8	136.6	135.9	-100.80	274.2	5,385.1	1,067.9	800.5	267.36	3.994	
12,400.0	7,000.5	12,556.8	7,200.5	139.0	138.4	-100.80	274.2	5,485.1	1,067.9	795.7	272.20	3.923	
12,500.0	7,002.2	12,656.8	7,202.3	141.5	140.9	-100.80	274.2	5,585.1	1,067.9	790.8	277.05	3.855	
12,600.0	7,003.9	12,756.8	7,204.0	143.9	143.3	-100.80	274.2	5,685.1	1,067.9	786.0	281.89	3.788	
12,700.0	7,005.7	12,856.8	7,205.8	146.4	145.8	-100.80	274.2	5,785.1	1,067.9	781.2	286.73	3.724	
12,800.0	7,007.4	12,956.8	7,207.5	148.9	148.2	-100.80	274.2	5,885.1	1,067.9	776.3	291.58	3.663	
12,900.0	7,009.2	13,056.8	7,209.3	151.3	150.7	-100.80	274.2	5,985.1	1,067.9	771.5	296.42	3.603	
13,000.0	7,010.9	13,156.8	7,211.0	153.8	153.2	-100.80	274.2	6,085.0	1,067.9	766.7	301.27	3.545	
13,100.0	7,012.7	13,256.8	7,212.8	156.3	155.6	-100.80	274.2	6,185.0	1,068.0	761.8	306.11	3.489	
13,200.0	7,014.4	13,356.8	7,214.5	158.7	158.1	-100.80	274.2	6,285.0	1,068.0	757.0	310.96	3.434	
13,300.0	7,016.2	13,456.8	7,216.2	161.2	160.6	-100.80	274.2	6,385.0	1,068.0	752.2	315.81	3.382	
13,400.0	7,017.9	13,556.8	7,218.0	163.6	163.0	-100.80	274.2	6,485.0	1,068.0	747.3	320.65	3.331	
13,500.0	7,019.6	13,656.8	7,219.7	166.1	165.5	-100.80	274.2	6,585.0	1,068.0	742.5	325.50	3.281	
13,600.0	7,021.4	13,756.8	7,221.5	168.6	168.0	-100.80	274.2	6,684.9	1,068.0	737.7	330.35	3.233	
13,700.0	7,023.1	13,856.8	7,223.2	171.0	170.4	-100.80	274.2	6,784.9	1,068.0	732.8	335.20	3.186	
13,800.0	7,024.9	13,956.8	7,225.0	173.5	172.9	-100.80	274.2	6,884.9	1,068.0	728.0	340.04	3.141	
13,900.0	7,026.6	14,056.8	7,226.7	176.0	175.4	-100.80	274.3	6,984.9	1,068.0	723.1	344.89	3.097	
14,000.0	7,028.4	14,156.8	7,228.5	178.4	177.8	-100.80	274.3	7,084.9	1,068.0	718.3	349.74	3.054	
14,053.6	7,029.3	14,210.4	7,229.4	179.7	179.2	-100.80	274.3	7,138.5	1,068.1	715.7	352.34	3.031	
14,093.1	7,030.0	14,244.8	7,230.0	180.7	180.0	-100.80	274.3	7,172.9	1,068.1	713.9	354.14	3.016 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2E-18H - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	0.00	21.9	0.0	21.9					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	21.9	0.0	21.9	21.6	0.30	71.972		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	21.9	0.0	21.9	21.2	0.65	33.485		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	21.9	0.0	21.9	20.9	1.00	21.817		
400.0	400.0	400.0	400.0	0.7	0.7	0.00	21.9	0.0	21.9	20.5	1.35	16.180 CC, ES		
500.0	500.0	500.1	500.1	0.9	0.9	161.50	21.5	-0.8	22.4	20.7	1.70	13.150		
600.0	600.0	600.2	600.2	1.0	1.0	157.63	20.5	-3.2	24.0	21.9	2.05	11.667		
700.0	699.9	700.3	700.2	1.2	1.2	152.24	18.8	-7.3	26.8	24.4	2.41	11.108		
800.0	799.7	800.2	799.9	1.4	1.4	146.43	16.5	-12.9	31.1	28.3	2.79	11.157		
900.0	899.4	900.0	899.4	1.6	1.6	141.01	13.5	-20.1	37.0	33.8	3.19	11.610		
1,000.0	998.9	999.7	998.6	1.8	1.8	136.37	9.8	-29.0	44.5	40.8	3.61	12.317		
1,100.0	1,098.3	1,099.2	1,097.5	2.1	2.1	132.76	5.6	-39.2	53.5	49.5	4.06	13.180		
1,200.0	1,197.4	1,198.6	1,196.3	2.3	2.3	131.13	1.2	-49.7	63.9	59.4	4.53	14.110		
1,300.0	1,296.3	1,298.0	1,295.0	2.6	2.6	130.95	-3.1	-60.1	75.4	70.4	5.01	15.054		
1,400.0	1,394.9	1,397.2	1,393.5	2.9	2.8	131.65	-7.5	-70.6	88.1	82.6	5.51	16.005		
1,500.0	1,493.4	1,496.3	1,492.0	3.3	3.1	132.61	-11.8	-81.0	101.4	95.4	6.01	16.883		
1,600.0	1,591.9	1,595.4	1,590.4	3.6	3.3	133.35	-16.1	-91.4	114.7	108.2	6.51	17.618		
1,700.0	1,690.4	1,694.5	1,688.9	3.9	3.6	133.94	-20.5	-101.9	128.0	121.0	7.02	18.241		
1,800.0	1,788.9	1,793.6	1,787.3	4.2	3.8	134.41	-24.8	-112.3	141.4	133.8	7.53	18.775		
1,900.0	1,887.3	1,892.7	1,885.8	4.6	4.1	134.80	-29.1	-122.7	154.7	146.6	8.04	19.237		
2,000.0	1,985.8	1,991.8	1,984.2	4.9	4.3	135.14	-33.5	-133.2	168.0	159.5	8.56	19.640		
2,100.0	2,084.3	2,090.9	2,082.7	5.3	4.6	135.42	-37.8	-143.6	181.4	172.3	9.07	19.996		
2,200.0	2,182.8	2,190.0	2,181.1	5.6	4.9	135.66	-42.1	-154.0	194.7	185.1	9.59	20.311		
2,300.0	2,281.3	2,289.1	2,279.6	5.9	5.1	135.87	-46.5	-164.5	208.1	198.0	10.11	20.592		
2,400.0	2,379.7	2,388.2	2,378.0	6.3	5.4	136.06	-50.8	-174.9	221.4	210.8	10.62	20.844		
2,500.0	2,478.2	2,487.3	2,476.5	6.6	5.6	136.22	-55.1	-185.4	234.8	223.7	11.14	21.071		
2,600.0	2,576.7	2,586.4	2,575.0	7.0	5.9	136.37	-59.5	-195.8	248.2	236.5	11.66	21.278		
2,700.0	2,675.2	2,685.5	2,673.4	7.3	6.2	136.50	-63.8	-206.2	261.5	249.3	12.18	21.466		
2,800.0	2,773.7	2,784.6	2,771.9	7.7	6.4	136.62	-68.1	-216.7	274.9	262.2	12.70	21.637		
2,900.0	2,872.1	2,884.2	2,871.0	8.0	6.6	137.03	-71.9	-225.8	288.2	275.0	13.18	21.871		
3,000.0	2,970.6	2,983.6	2,970.2	8.4	6.8	138.05	-74.4	-231.7	301.3	287.8	13.57	22.201		
3,100.0	3,069.1	3,082.5	3,069.1	8.7	7.0	139.62	-75.6	-234.5	314.6	300.7	13.89	22.639		
3,200.0	3,167.6	3,181.1	3,167.6	9.0	7.1	141.53	-75.6	-234.7	328.1	313.9	14.17	23.149		
3,300.0	3,266.1	3,279.5	3,266.1	9.4	7.2	143.33	-75.6	-234.7	341.9	327.5	14.44	23.675		
3,400.0	3,364.5	3,378.0	3,364.5	9.7	7.4	144.99	-75.6	-234.7	356.0	341.3	14.71	24.205		
3,500.0	3,463.0	3,476.5	3,463.0	10.1	7.5	146.53	-75.6	-234.7	370.5	355.5	14.98	24.735		
3,600.0	3,561.5	3,575.0	3,561.5	10.4	7.7	147.94	-75.6	-234.7	385.1	369.9	15.25	25.261		
3,700.0	3,660.0	3,673.5	3,660.0	10.8	7.8	149.26	-75.6	-234.7	400.0	384.5	15.52	25.781		
3,800.0	3,758.5	3,771.9	3,758.5	11.1	7.9	150.48	-75.6	-234.7	415.1	399.3	15.79	26.292		
3,900.0	3,857.0	3,870.4	3,857.0	11.5	8.1	151.62	-75.6	-234.7	430.3	414.3	16.06	26.794		
4,000.0	3,955.4	3,968.9	3,955.4	11.8	8.2	152.67	-75.6	-234.7	445.8	429.4	16.34	27.285		
4,100.0	4,053.9	4,067.4	4,053.9	12.2	8.4	153.66	-75.6	-234.7	461.3	444.7	16.62	27.764		
4,200.0	4,152.4	4,165.9	4,152.4	12.5	8.5	154.58	-75.6	-234.7	477.0	460.1	16.90	28.230		
4,300.0	4,250.9	4,264.3	4,250.9	12.9	8.7	155.45	-75.6	-234.7	492.7	475.6	17.18	28.685		
4,400.0	4,349.4	4,362.8	4,349.4	13.2	8.8	156.26	-75.6	-234.7	508.6	491.2	17.46	29.126		
4,500.0	4,447.8	4,461.3	4,447.8	13.6	9.0	157.02	-75.6	-234.7	524.6	506.9	17.75	29.555		
4,600.0	4,546.3	4,559.8	4,546.3	13.9	9.1	157.74	-75.6	-234.7	540.7	522.6	18.04	29.971		
4,700.0	4,644.8	4,658.3	4,644.8	14.3	9.3	158.41	-75.6	-234.7	556.8	538.5	18.33	30.374		
4,800.0	4,743.3	4,756.7	4,743.3	14.6	9.4	159.05	-75.6	-234.7	573.0	554.4	18.63	30.766		
4,900.0	4,841.8	4,855.2	4,841.8	15.0	9.6	159.65	-75.6	-234.7	589.3	570.4	18.92	31.145		
5,000.0	4,940.2	4,953.7	4,940.2	15.3	9.7	160.22	-75.6	-234.7	605.7	586.4	19.22	31.512		
5,100.0	5,038.7	5,052.2	5,038.7	15.7	9.9	160.76	-75.6	-234.7	622.1	602.5	19.52	31.868		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2E-18H - HZ - Plan #1												Offset Site Error:	0.0 ft
Survey Program: O-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
5,200.0	5,137.2	5,150.7	5,137.2	16.0	10.0	161.28	-75.6	-234.7	638.5	618.7	19.82	32.213	
5,300.0	5,235.7	5,249.1	5,235.7	16.4	10.2	161.76	-75.6	-234.7	655.0	634.9	20.12	32.547	
5,400.0	5,334.4	5,347.8	5,334.4	16.7	10.3	162.27	-75.6	-234.7	670.3	649.9	20.45	32.779	
5,500.0	5,433.6	5,447.0	5,433.6	16.9	10.5	162.67	-75.6	-234.7	682.4	661.6	20.77	32.853	
5,600.0	5,533.1	5,546.6	5,533.1	17.1	10.6	162.95	-75.6	-234.7	691.2	670.1	21.09	32.781	
5,700.0	5,633.0	5,646.4	5,633.0	17.3	10.8	163.12	-75.6	-234.7	696.7	675.3	21.39	32.570	
5,800.0	5,732.9	5,746.4	5,732.9	17.4	11.0	163.18	-75.6	-234.7	698.8	677.2	21.69	32.225	
5,900.0	5,832.9	5,846.4	5,832.9	17.5	11.1	0.27	-75.6	-234.7	698.9	671.5	27.33	25.568	
6,000.0	5,932.9	5,946.4	5,932.9	17.6	11.3	0.27	-75.6	-234.7	698.9	671.3	27.61	25.310	
6,100.0	6,032.9	6,046.4	6,032.9	17.7	11.4	0.27	-75.6	-234.7	698.9	671.0	27.89	25.057	
6,200.0	6,132.9	6,146.4	6,132.9	17.8	11.6	0.27	-75.6	-234.7	698.9	670.7	28.17	24.807	
6,265.9	6,198.8	6,212.3	6,198.8	17.9	11.7	-89.83	-75.6	-234.7	698.9	675.7	23.20	30.126	
6,300.0	6,232.9	6,246.2	6,232.8	17.9	11.7	-89.74	-75.6	-233.8	698.9	675.6	23.29	30.013	
6,400.0	6,332.1	6,345.8	6,331.5	18.0	11.8	-89.74	-75.6	-222.0	698.9	675.4	23.43	29.826	
6,500.0	6,428.7	6,445.4	6,427.7	18.0	11.8	-89.75	-75.6	-196.5	698.9	675.4	23.46	29.795	
6,600.0	6,520.7	6,544.9	6,519.4	18.0	11.8	-89.77	-75.6	-158.0	698.9	675.4	23.43	29.825	
6,700.0	6,606.5	6,644.6	6,605.0	18.0	11.8	-89.79	-75.6	-107.1	698.9	675.4	23.48	29.764	
6,800.0	6,684.2	6,744.2	6,682.7	18.0	11.9	-89.81	-75.6	-44.8	698.9	675.1	23.76	29.412	
6,900.0	6,752.5	6,843.9	6,751.0	18.1	12.2	-89.84	-75.6	27.7	698.9	674.4	24.46	28.571	
7,000.0	6,809.9	6,943.7	6,808.6	18.4	12.9	-89.87	-75.6	109.0	698.9	673.1	25.75	27.143	
7,100.0	6,855.5	7,043.5	6,854.4	18.9	13.8	-89.91	-75.6	197.6	698.9	671.2	27.72	25.212	
7,200.0	6,888.2	7,143.4	6,887.5	19.6	15.2	-89.94	-75.6	291.8	698.9	668.5	30.38	23.008	
7,300.0	6,907.4	7,243.3	6,907.1	20.6	16.8	-89.98	-75.6	389.7	698.9	665.3	33.62	20.791	
7,400.0	6,913.2	7,343.3	6,913.3	21.9	18.6	-90.01	-75.6	489.4	698.9	661.6	37.28	18.747	
7,500.0	6,914.9	7,443.3	6,915.0	23.4	20.6	-90.01	-75.6	589.4	698.9	657.7	41.22	16.955	
7,600.0	6,916.7	7,543.3	6,916.8	25.2	22.6	-90.01	-75.6	689.4	698.9	653.6	45.35	15.411	
7,700.0	6,918.4	7,643.3	6,918.5	27.1	24.8	-90.01	-75.6	789.4	698.9	649.3	49.63	14.082	
7,800.0	6,920.2	7,743.3	6,920.3	29.1	26.9	-90.01	-75.6	889.4	698.9	644.9	54.03	12.937	
7,900.0	6,921.9	7,843.3	6,922.0	31.1	29.2	-90.01	-75.6	989.3	699.0	640.4	58.51	11.945	
8,000.0	6,923.7	7,943.3	6,923.8	33.3	31.5	-90.01	-75.6	1,089.3	699.0	635.9	63.07	11.083	
8,100.0	6,925.4	8,043.3	6,925.5	35.4	33.8	-90.01	-75.6	1,189.3	699.0	631.3	67.67	10.329	
8,200.0	6,927.2	8,143.3	6,927.3	37.7	36.1	-90.01	-75.6	1,289.3	699.0	626.7	72.33	9.664	
8,300.0	6,928.9	8,243.3	6,929.0	39.9	38.4	-90.01	-75.6	1,389.3	699.0	622.0	77.02	9.076	
8,400.0	6,930.6	8,343.3	6,930.7	42.2	40.8	-90.01	-75.6	1,489.3	699.0	617.3	81.74	8.552	
8,500.0	6,932.4	8,443.3	6,932.5	44.5	43.2	-90.01	-75.6	1,589.3	699.0	612.5	86.48	8.082	
8,600.0	6,934.1	8,543.3	6,934.2	46.8	45.5	-90.01	-75.6	1,689.2	699.0	607.8	91.25	7.660	
8,700.0	6,935.9	8,643.3	6,936.0	49.2	47.9	-90.01	-75.6	1,789.2	699.0	603.0	96.04	7.279	
8,800.0	6,937.6	8,743.3	6,937.7	51.5	50.3	-90.01	-75.6	1,889.2	699.0	598.2	100.84	6.932	
8,900.0	6,939.4	8,843.3	6,939.5	53.9	52.7	-90.01	-75.6	1,989.2	699.0	593.4	105.65	6.616	
9,000.0	6,941.1	8,943.3	6,941.2	56.2	55.2	-90.01	-75.6	2,089.2	699.0	588.6	110.48	6.327	
9,100.0	6,942.9	9,043.3	6,943.0	58.6	57.6	-90.01	-75.6	2,189.2	699.0	583.7	115.32	6.062	
9,200.0	6,944.6	9,143.3	6,944.7	61.0	60.0	-90.01	-75.6	2,289.1	699.1	578.9	120.16	5.818	
9,300.0	6,946.3	9,243.3	6,946.4	63.4	62.4	-90.01	-75.6	2,389.1	699.1	574.0	125.02	5.592	
9,400.0	6,948.1	9,343.3	6,948.2	65.8	64.9	-90.01	-75.6	2,489.1	699.1	569.2	129.88	5.382	
9,500.0	6,949.8	9,443.3	6,949.9	68.2	67.3	-90.01	-75.6	2,589.1	699.1	564.3	134.75	5.188	
9,600.0	6,951.6	9,543.3	6,951.7	70.6	69.7	-90.01	-75.6	2,689.1	699.1	559.5	139.62	5.007	
9,700.0	6,953.3	9,643.3	6,953.4	73.0	72.2	-90.01	-75.6	2,789.1	699.1	554.6	144.50	4.838	
9,800.0	6,955.1	9,743.3	6,955.2	75.5	74.6	-90.01	-75.6	2,889.1	699.1	549.7	149.38	4.680	
9,900.0	6,956.8	9,843.3	6,956.9	77.9	77.0	-90.01	-75.6	2,989.0	699.1	544.8	154.27	4.532	
10,000.0	6,958.6	9,943.3	6,958.7	80.3	79.5	-90.01	-75.6	3,089.0	699.1	540.0	159.16	4.393	
10,100.0	6,960.3	10,043.3	6,960.4	82.7	81.9	-90.01	-75.6	3,189.0	699.1	535.1	164.05	4.262	
10,200.0	6,962.1	10,143.3	6,962.2	85.2	84.4	-90.01	-75.6	3,289.0	699.1	530.2	168.95	4.138	

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2E-18H - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis			
10,300.0	6,963.8	10,243.3	6,963.9	87.6	86.8	-90.01	-75.5	3,389.0	699.1	525.3	173.85	4.022		
10,400.0	6,965.5	10,343.3	6,965.6	90.0	89.3	-90.01	-75.5	3,489.0	699.1	520.4	178.75	3.911		
10,500.0	6,967.3	10,443.3	6,967.4	92.5	91.7	-90.01	-75.5	3,588.9	699.2	515.5	183.66	3.807		
10,600.0	6,969.0	10,543.3	6,969.1	94.9	94.2	-90.01	-75.5	3,688.9	699.2	510.6	188.56	3.708		
10,700.0	6,970.8	10,643.3	6,970.9	97.4	96.6	-90.01	-75.5	3,788.9	699.2	505.7	193.47	3.614		
10,800.0	6,972.5	10,743.3	6,972.6	99.8	99.1	-90.01	-75.5	3,888.9	699.2	500.8	198.38	3.524		
10,900.0	6,974.3	10,843.3	6,974.4	102.2	101.6	-90.01	-75.5	3,988.9	699.2	495.9	203.30	3.439		
11,000.0	6,976.0	10,943.3	6,976.1	104.7	104.0	-90.01	-75.5	4,088.9	699.2	491.0	208.21	3.358		
11,100.0	6,977.8	11,043.3	6,977.9	107.1	106.5	-90.01	-75.5	4,188.9	699.2	486.1	213.13	3.281		
11,200.0	6,979.5	11,143.3	6,979.6	109.6	108.9	-90.01	-75.5	4,288.8	699.2	481.2	218.05	3.207		
11,300.0	6,981.3	11,243.3	6,981.4	112.0	111.4	-90.01	-75.5	4,388.8	699.2	476.2	222.97	3.136		
11,400.0	6,983.0	11,343.3	6,983.1	114.5	113.9	-90.01	-75.5	4,488.8	699.2	471.3	227.89	3.068		
11,500.0	6,984.7	11,443.3	6,984.8	116.9	116.3	-90.01	-75.5	4,588.8	699.2	466.4	232.81	3.003		
11,600.0	6,986.5	11,543.3	6,986.6	119.4	118.8	-90.01	-75.5	4,688.8	699.2	461.5	237.73	2.941		
11,700.0	6,988.2	11,643.3	6,988.3	121.8	121.2	-90.01	-75.5	4,788.8	699.2	456.6	242.65	2.882		
11,800.0	6,990.0	11,743.3	6,990.1	124.3	123.7	-90.01	-75.5	4,888.8	699.3	451.7	247.58	2.824		
11,900.0	6,991.7	11,843.3	6,991.8	126.7	126.2	-90.01	-75.5	4,988.7	699.3	446.8	252.50	2.769		
12,000.0	6,993.5	11,943.3	6,993.6	129.2	128.6	-90.01	-75.5	5,088.7	699.3	441.8	257.43	2.716		
12,100.0	6,995.2	12,043.3	6,995.3	131.7	131.1	-90.01	-75.5	5,188.7	699.3	436.9	262.36	2.665		
12,200.0	6,997.0	12,143.3	6,997.1	134.1	133.6	-90.01	-75.5	5,288.7	699.3	432.0	267.28	2.616		
12,300.0	6,998.7	12,243.3	6,998.8	136.6	136.0	-90.01	-75.5	5,388.7	699.3	427.1	272.21	2.569		
12,400.0	7,000.5	12,343.3	7,000.6	139.0	138.5	-90.01	-75.5	5,488.7	699.3	422.2	277.14	2.523		
12,500.0	7,002.2	12,443.3	7,002.3	141.5	140.9	-90.01	-75.5	5,588.6	699.3	417.2	282.07	2.479		
12,600.0	7,003.9	12,543.3	7,004.0	143.9	143.4	-90.01	-75.5	5,688.6	699.3	412.3	287.00	2.437		
12,700.0	7,005.7	12,643.3	7,005.8	146.4	145.9	-90.01	-75.5	5,788.6	699.3	407.4	291.93	2.395		
12,800.0	7,007.4	12,743.3	7,007.5	148.9	148.3	-90.01	-75.5	5,888.6	699.3	402.5	296.86	2.356		
12,900.0	7,009.2	12,843.3	7,009.3	151.3	150.8	-90.01	-75.5	5,988.6	699.3	397.5	301.80	2.317		
13,000.0	7,010.9	12,943.3	7,011.0	153.8	153.3	-90.01	-75.5	6,088.6	699.3	392.6	306.73	2.280		
13,100.0	7,012.7	13,043.3	7,012.8	156.3	155.7	-90.01	-75.5	6,188.6	699.4	387.7	311.66	2.244		
13,200.0	7,014.4	13,143.3	7,014.5	158.7	158.2	-90.01	-75.5	6,288.5	699.4	382.8	316.60	2.209		
13,300.0	7,016.2	13,243.3	7,016.3	161.2	160.7	-90.01	-75.5	6,388.5	699.4	377.8	321.53	2.175		
13,400.0	7,017.9	13,343.3	7,018.0	163.6	163.1	-90.01	-75.5	6,488.5	699.4	372.9	326.46	2.142		
13,500.0	7,019.6	13,443.3	7,019.7	166.1	165.6	-90.01	-75.5	6,588.5	699.4	368.0	331.40	2.110		
13,600.0	7,021.4	13,543.3	7,021.5	168.6	168.1	-90.01	-75.5	6,688.5	699.4	363.1	336.33	2.079		
13,700.0	7,023.1	13,643.3	7,023.2	171.0	170.5	-90.01	-75.5	6,788.5	699.4	358.1	341.27	2.049		
13,800.0	7,024.9	13,743.3	7,025.0	173.5	173.0	-90.01	-75.5	6,888.4	699.4	353.2	346.21	2.020		
13,900.0	7,026.6	13,843.3	7,026.7	176.0	175.5	-90.01	-75.5	6,988.4	699.4	348.3	351.14	1.992		
14,000.0	7,028.4	13,943.3	7,028.5	178.4	177.9	-90.01	-75.5	7,088.4	699.4	343.3	356.08	1.964		
14,054.0	7,029.3	13,997.3	7,029.4	179.7	179.3	-90.01	-75.5	7,142.4	699.4	340.7	358.75	1.950		
14,093.1	7,030.0	14,030.7	7,030.0	180.7	180.1	-90.01	-75.5	7,175.8	699.5	338.9	360.53	1.940 SF		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2F-18H - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	0.00	10.9	0.0	10.9					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	10.9	0.0	10.9	10.6	0.30	35.986		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	10.9	0.0	10.9	10.3	0.65	16.742		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	10.9	0.0	10.9	9.9	1.00	10.909		
400.0	400.0	400.2	400.2	0.7	0.7	-2.35	10.2	-0.4	10.2	8.8	1.35	7.524		
500.0	500.0	500.3	500.2	0.9	0.9	153.69	7.9	-1.7	8.8	7.1	1.70	5.172		
600.0	600.0	600.4	600.2	1.0	1.0	142.56	4.0	-3.8	7.8	5.8	2.06	3.807		
687.4	687.3	687.9	687.6	1.2	1.2	129.57	-0.6	-6.3	7.5	5.1	2.39	3.152 CC		
700.0	699.9	700.4	700.1	1.2	1.2	127.55	-1.4	-6.7	7.5	5.1	2.44	3.092 ES		
800.0	799.7	800.4	799.8	1.4	1.4	111.69	-8.3	-10.4	8.1	5.3	2.85	2.845		
900.0	899.4	900.4	899.3	1.6	1.7	98.62	-16.7	-15.0	9.5	6.2	3.29	2.900		
1,000.0	998.9	1,000.4	998.6	1.8	1.9	89.50	-26.6	-20.4	11.7	7.9	3.75	3.110		
1,100.0	1,098.3	1,100.3	1,097.7	2.1	2.2	83.59	-38.1	-26.6	14.3	10.1	4.24	3.380		
1,200.0	1,197.4	1,200.1	1,196.4	2.3	2.5	80.08	-51.0	-33.6	17.4	12.7	4.77	3.656		
1,300.0	1,296.3	1,300.1	1,295.2	2.6	2.8	81.25	-64.4	-40.9	20.4	15.1	5.34	3.821		
1,400.0	1,394.9	1,400.0	1,394.0	2.9	3.1	86.39	-77.7	-48.1	23.2	17.2	5.97	3.885		
1,500.0	1,493.4	1,500.0	1,492.8	3.3	3.4	92.33	-91.0	-55.3	26.2	19.6	6.62	3.956		
1,600.0	1,591.9	1,599.9	1,591.6	3.6	3.7	97.01	-104.3	-62.5	29.4	22.1	7.25	4.052		
1,700.0	1,690.4	1,699.8	1,690.3	3.9	4.0	100.76	-117.6	-69.8	32.7	24.9	7.87	4.159		
1,800.0	1,788.9	1,799.7	1,789.1	4.2	4.3	103.80	-130.9	-77.0	36.2	27.7	8.48	4.268		
1,900.0	1,887.3	1,899.6	1,887.9	4.6	4.6	106.30	-144.3	-84.2	39.8	30.7	9.09	4.374		
2,000.0	1,985.8	1,999.6	1,986.6	4.9	4.9	108.39	-157.6	-91.5	43.4	33.7	9.69	4.477		
2,100.0	2,084.3	2,099.5	2,085.4	5.3	5.2	110.16	-170.9	-98.7	47.0	36.8	10.29	4.573		
2,200.0	2,182.8	2,199.4	2,184.2	5.6	5.5	111.67	-184.2	-105.9	50.7	39.9	10.88	4.664		
2,300.0	2,281.3	2,299.3	2,282.9	5.9	5.9	112.97	-197.5	-113.1	54.5	43.0	11.47	4.749		
2,400.0	2,379.7	2,399.3	2,381.7	6.3	6.2	114.11	-210.9	-120.4	58.2	46.2	12.06	4.829		
2,500.0	2,478.2	2,499.2	2,480.5	6.6	6.5	115.10	-224.2	-127.6	62.0	49.4	12.65	4.903		
2,600.0	2,576.7	2,599.1	2,579.2	7.0	6.8	115.99	-237.5	-134.8	65.8	52.6	13.24	4.972		
2,700.0	2,675.2	2,699.0	2,678.0	7.3	7.1	116.77	-250.8	-142.0	69.6	55.8	13.82	5.037		
2,800.0	2,773.7	2,799.0	2,776.8	7.7	7.4	117.48	-264.1	-149.3	73.4	59.0	14.41	5.097		
2,900.0	2,872.1	2,898.9	2,875.5	8.0	7.7	118.11	-277.4	-156.5	77.3	62.3	14.99	5.154		
3,000.0	2,970.6	2,998.8	2,974.3	8.4	8.0	118.69	-290.8	-163.7	81.1	65.5	15.58	5.207		
3,100.0	3,069.1	3,098.7	3,073.1	8.7	8.4	119.21	-304.1	-171.0	85.0	68.8	16.16	5.257		
3,200.0	3,167.6	3,198.6	3,171.8	9.0	8.7	119.69	-317.4	-178.2	88.8	72.1	16.74	5.304		
3,300.0	3,266.1	3,298.6	3,270.6	9.4	9.0	120.12	-330.7	-185.4	92.7	75.3	17.33	5.348		
3,400.0	3,364.5	3,398.5	3,369.4	9.7	9.3	120.53	-344.0	-192.6	96.5	78.6	17.91	5.390		
3,500.0	3,463.0	3,498.4	3,468.1	10.1	9.6	120.90	-357.4	-199.9	100.4	81.9	18.49	5.429		
3,600.0	3,561.5	3,598.3	3,566.9	10.4	9.9	121.24	-370.7	-207.1	104.3	85.2	19.07	5.467		
3,700.0	3,660.0	3,698.3	3,665.7	10.8	10.3	121.56	-384.0	-214.3	108.1	88.5	19.66	5.502		
3,800.0	3,758.5	3,798.0	3,764.3	11.1	10.6	121.87	-397.3	-221.5	112.0	91.8	20.24	5.536		
3,900.0	3,857.0	3,896.5	3,861.9	11.5	10.8	123.08	-408.6	-227.7	116.7	96.0	20.67	5.645		
4,000.0	3,955.4	3,994.6	3,959.5	11.8	11.0	125.64	-417.0	-232.2	122.7	101.8	20.89	5.875		
4,100.0	4,053.9	4,092.0	4,056.8	12.2	11.2	129.25	-422.4	-235.2	130.6	109.7	20.90	6.248		
4,200.0	4,152.4	4,188.6	4,153.3	12.5	11.3	133.57	-424.9	-236.5	140.7	120.0	20.72	6.791		
4,300.0	4,250.9	4,286.2	4,250.9	12.9	11.4	138.13	-425.1	-236.6	153.1	132.7	20.43	7.495		
4,400.0	4,349.4	4,384.7	4,349.4	13.2	11.6	142.10	-425.1	-236.6	166.5	146.3	20.19	8.249		
4,500.0	4,447.8	4,483.1	4,447.8	13.6	11.7	145.47	-425.1	-236.6	180.6	160.6	20.02	9.023		
4,600.0	4,546.3	4,581.6	4,546.3	13.9	11.8	148.35	-425.1	-236.6	195.2	175.3	19.92	9.803		
4,700.0	4,644.8	4,680.1	4,644.8	14.3	11.9	150.82	-425.1	-236.6	210.3	190.4	19.87	10.581		
4,800.0	4,743.3	4,778.6	4,743.3	14.6	12.0	152.97	-425.1	-236.6	225.7	205.8	19.88	11.349		
4,900.0	4,841.8	4,877.1	4,841.8	15.0	12.1	154.83	-425.1	-236.6	241.3	221.4	19.94	12.102		
5,000.0	4,940.2	4,975.5	4,940.2	15.3	12.3	156.48	-425.1	-236.6	257.2	237.1	20.03	12.837		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2F-18H - HZ - Plan #1													Offset Site Error: 0.0 ft			
Survey Program: 0-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning			
5,100.0	5,038.7	5,074.0	5,038.7	15.7	12.4	157.93	-425.1	-236.6	273.2	253.0	20.16	13.553				
5,200.0	5,137.2	5,172.5	5,137.2	16.0	12.5	159.22	-425.1	-236.6	289.4	269.1	20.31	14.248				
5,300.0	5,235.7	5,271.0	5,235.7	16.4	12.6	160.37	-425.1	-236.6	305.7	285.2	20.49	14.922				
5,400.0	5,334.4	5,369.7	5,334.4	16.7	12.8	161.42	-425.1	-236.6	321.0	300.3	20.69	15.510				
5,500.0	5,433.6	5,468.9	5,433.6	16.9	12.9	162.19	-425.1	-236.6	333.0	312.1	20.93	15.913				
5,600.0	5,533.1	5,568.4	5,533.1	17.1	13.0	162.71	-425.1	-236.6	341.8	320.6	21.18	16.138				
5,700.0	5,633.0	5,668.3	5,633.0	17.3	13.1	163.02	-425.1	-236.6	347.3	325.8	21.44	16.194				
5,800.0	5,732.9	5,768.2	5,732.9	17.4	13.3	163.14	-425.1	-236.6	349.4	327.7	21.72	16.090				
5,900.0	5,832.9	5,868.2	5,832.9	17.5	13.4	0.23	-425.1	-236.6	349.4	319.7	29.77	11.738				
6,000.0	5,932.9	5,968.2	5,932.9	17.6	13.5	0.23	-425.1	-236.6	349.4	319.4	30.02	11.642				
6,100.0	6,032.9	6,068.2	6,032.9	17.7	13.7	0.23	-425.1	-236.6	349.4	319.2	30.26	11.546				
6,200.0	6,132.9	6,168.2	6,132.9	17.8	13.8	0.23	-425.1	-236.6	349.4	318.9	30.51	11.452				
6,300.0	6,232.9	6,268.2	6,232.9	17.9	13.9	-89.93	-425.1	-236.6	349.4	326.1	23.35	14.967				
6,311.1	6,244.0	6,279.3	6,244.0	17.9	14.0	-90.03	-425.1	-236.6	349.4	326.0	23.39	14.942				
6,400.0	6,332.1	6,367.4	6,332.1	18.0	14.1	-91.86	-425.1	-236.6	349.6	325.8	23.83	14.669				
6,500.0	6,428.7	6,464.0	6,428.7	18.0	14.2	-95.76	-425.1	-236.6	351.4	326.9	24.48	14.356				
6,600.0	6,520.7	6,558.9	6,523.5	18.0	14.3	-101.13	-425.1	-236.1	357.5	332.4	25.13	14.228				
6,700.0	6,606.5	6,664.0	6,627.9	18.0	14.4	-107.01	-425.1	-224.5	368.6	343.1	25.46	14.476				
6,800.0	6,684.2	6,777.2	6,737.2	18.0	14.4	-112.53	-425.1	-195.1	383.4	358.1	25.32	15.145				
6,900.0	6,752.5	6,900.1	6,848.8	18.1	14.4	-117.56	-425.1	-144.1	400.6	375.8	24.80	16.158				
7,000.0	6,809.9	7,033.9	6,958.5	18.4	14.5	-121.98	-425.1	-67.9	418.6	394.4	24.20	17.294				
7,100.0	6,855.5	7,179.4	7,059.5	18.9	14.7	-125.66	-425.1	36.6	435.4	411.3	24.06	18.095				
7,200.0	6,888.2	7,336.4	7,142.4	19.6	15.5	-128.43	-425.1	169.5	449.1	424.1	24.97	17.981				
7,300.0	6,907.4	7,502.7	7,196.4	20.6	17.3	-130.13	-425.1	326.4	457.9	430.4	27.42	16.697				
7,400.0	6,913.2	7,661.7	7,213.1	21.9	19.8	-130.65	-425.1	484.2	460.6	429.5	31.06	14.827				
7,500.0	6,914.9	7,761.7	7,214.9	23.4	21.6	-130.64	-425.1	584.2	460.6	426.7	33.91	13.581				
7,600.0	6,916.7	7,861.7	7,216.6	25.2	23.6	-130.64	-425.1	684.2	460.6	423.7	36.92	12.475				
7,700.0	6,918.4	7,961.7	7,218.4	27.1	25.7	-130.64	-425.1	784.2	460.6	420.5	40.06	11.498				
7,800.0	6,920.2	8,061.7	7,220.1	29.1	27.8	-130.64	-425.1	884.1	460.6	417.3	43.29	10.639				
7,900.0	6,921.9	8,161.7	7,221.9	31.1	30.0	-130.64	-425.1	984.1	460.6	414.0	46.61	9.883				
8,000.0	6,923.7	8,261.7	7,223.6	33.3	32.2	-130.64	-425.1	1,084.1	460.6	410.6	49.98	9.215				
8,100.0	6,925.4	8,361.7	7,225.4	35.4	34.4	-130.64	-425.1	1,184.1	460.6	407.2	53.41	8.623				
8,200.0	6,927.2	8,461.7	7,227.1	37.7	36.7	-130.64	-425.1	1,284.1	460.6	403.7	56.89	8.097				
8,300.0	6,928.9	8,561.7	7,228.9	39.9	39.0	-130.64	-425.1	1,384.1	460.6	400.2	60.39	7.627				
8,400.0	6,930.6	8,661.7	7,230.6	42.2	41.3	-130.64	-425.1	1,484.1	460.6	396.7	63.93	7.205				
8,500.0	6,932.4	8,761.7	7,232.3	44.5	43.7	-130.64	-425.1	1,584.0	460.6	393.1	67.49	6.825				
8,600.0	6,934.1	8,861.7	7,234.1	46.8	46.0	-130.64	-425.1	1,684.0	460.6	389.5	71.07	6.481				
8,700.0	6,935.9	8,961.7	7,235.8	49.2	48.4	-130.64	-425.1	1,784.0	460.6	385.9	74.67	6.168				
8,800.0	6,937.6	9,061.7	7,237.6	51.5	50.8	-130.64	-425.1	1,884.0	460.6	382.3	78.29	5.884				
8,900.0	6,939.4	9,161.7	7,239.3	53.9	53.2	-130.64	-425.1	1,984.0	460.6	378.7	81.92	5.623				
9,000.0	6,941.1	9,261.7	7,241.1	56.2	55.6	-130.64	-425.1	2,084.0	460.6	375.1	85.56	5.384				
9,100.0	6,942.9	9,361.7	7,242.8	58.6	58.0	-130.64	-425.1	2,183.9	460.6	371.4	89.21	5.163				
9,200.0	6,944.6	9,461.7	7,244.6	61.0	60.4	-130.64	-425.1	2,283.9	460.6	367.8	92.87	4.960				
9,300.0	6,946.3	9,561.7	7,246.3	63.4	62.8	-130.64	-425.1	2,383.9	460.6	364.1	96.53	4.772				
9,400.0	6,948.1	9,661.7	7,248.1	65.8	65.2	-130.64	-425.1	2,483.9	460.6	360.4	100.21	4.597				
9,500.0	6,949.8	9,761.7	7,249.8	68.2	67.6	-130.64	-425.1	2,583.9	460.6	356.7	103.89	4.434				
9,600.0	6,951.6	9,861.7	7,251.5	70.6	70.1	-130.64	-425.1	2,683.9	460.6	353.1	107.58	4.282				
9,700.0	6,953.3	9,961.7	7,253.3	73.0	72.5	-130.64	-425.1	2,783.9	460.6	349.4	111.27	4.140				
9,800.0	6,955.1	10,061.7	7,255.0	75.5	74.9	-130.64	-425.1	2,883.8	460.6	345.7	114.97	4.007				
9,900.0	6,956.8	10,161.7	7,256.8	77.9	77.4	-130.64	-425.1	2,983.8	460.6	342.0	118.67	3.882				
10,000.0	6,958.6	10,261.7	7,258.5	80.3	79.8	-130.64	-425.1	3,083.8	460.6	338.3	122.37	3.764				
10,100.0	6,960.3	10,361.7	7,260.3	82.7	82.2	-130.64	-425.1	3,183.8	460.6	334.6	126.08	3.654				

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2F-18H - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
10,200.0	6,962.1	10,461.7	7,262.0	85.2	84.7	-130.64	-425.1	3,283.8	460.7	330.9	129.79	3.549		
10,300.0	6,963.8	10,561.7	7,263.8	87.6	87.1	-130.64	-425.1	3,383.8	460.7	327.1	133.51	3.450		
10,400.0	6,965.5	10,661.7	7,265.5	90.0	89.6	-130.64	-425.1	3,483.8	460.7	323.4	137.22	3.357		
10,500.0	6,967.3	10,761.7	7,267.3	92.5	92.0	-130.64	-425.1	3,583.7	460.7	319.7	140.94	3.268		
10,600.0	6,969.0	10,861.7	7,269.0	94.9	94.4	-130.64	-425.1	3,683.7	460.7	316.0	144.66	3.184		
10,700.0	6,970.8	10,961.7	7,270.7	97.4	96.9	-130.64	-425.1	3,783.7	460.7	312.3	148.39	3.104		
10,800.0	6,972.5	11,061.7	7,272.5	99.8	99.3	-130.63	-425.1	3,883.7	460.7	308.6	152.11	3.028		
10,900.0	6,974.3	11,161.7	7,274.2	102.2	101.8	-130.63	-425.1	3,983.7	460.7	304.8	155.84	2.956		
11,000.0	6,976.0	11,261.7	7,276.0	104.7	104.2	-130.63	-425.1	4,083.7	460.7	301.1	159.57	2.887		
11,100.0	6,977.8	11,361.7	7,277.7	107.1	106.7	-130.63	-425.1	4,183.6	460.7	297.4	163.30	2.821		
11,200.0	6,979.5	11,461.7	7,279.5	109.6	109.2	-130.63	-425.1	4,283.6	460.7	293.6	167.04	2.758		
11,300.0	6,981.3	11,561.7	7,281.2	112.0	111.6	-130.63	-425.1	4,383.6	460.7	289.9	170.77	2.698		
11,400.0	6,983.0	11,661.7	7,283.0	114.5	114.1	-130.63	-425.1	4,483.6	460.7	286.2	174.51	2.640		
11,500.0	6,984.7	11,761.7	7,284.7	116.9	116.5	-130.63	-425.1	4,583.6	460.7	282.4	178.24	2.585		
11,600.0	6,986.5	11,861.7	7,286.4	119.4	119.0	-130.63	-425.1	4,683.6	460.7	278.7	181.98	2.532		
11,700.0	6,988.2	11,961.7	7,288.2	121.8	121.4	-130.63	-425.1	4,783.6	460.7	275.0	185.72	2.481		
11,800.0	6,990.0	12,061.7	7,289.9	124.3	123.9	-130.63	-425.1	4,883.5	460.7	271.2	189.46	2.432		
11,900.0	6,991.7	12,161.7	7,291.7	126.7	126.4	-130.63	-425.1	4,983.5	460.7	267.5	193.20	2.385		
12,000.0	6,993.5	12,261.7	7,293.4	129.2	128.8	-130.63	-425.1	5,083.5	460.7	263.8	196.94	2.339		
12,100.0	6,995.2	12,361.7	7,295.2	131.7	131.3	-130.63	-425.1	5,183.5	460.7	260.0	200.69	2.296		
12,200.0	6,997.0	12,461.7	7,296.9	134.1	133.7	-130.63	-425.1	5,283.5	460.7	256.3	204.43	2.254		
12,300.0	6,998.7	12,561.7	7,298.7	136.6	136.2	-130.63	-425.1	5,383.5	460.7	252.5	208.17	2.213		
12,400.0	7,000.5	12,661.7	7,300.4	139.0	138.7	-130.63	-425.1	5,483.4	460.7	248.8	211.92	2.174		
12,500.0	7,002.2	12,761.7	7,302.2	141.5	141.1	-130.63	-425.1	5,583.4	460.7	245.1	215.67	2.136		
12,600.0	7,003.9	12,861.7	7,303.9	143.9	143.6	-130.63	-425.1	5,683.4	460.7	241.3	219.41	2.100		
12,700.0	7,005.7	12,961.7	7,305.6	146.4	146.0	-130.63	-425.1	5,783.4	460.7	237.6	223.16	2.065		
12,800.0	7,007.4	13,061.7	7,307.4	148.9	148.5	-130.63	-425.1	5,883.4	460.7	233.8	226.91	2.030		
12,900.0	7,009.2	13,161.7	7,309.1	151.3	151.0	-130.63	-425.2	5,983.4	460.7	230.1	230.66	1.997		
13,000.0	7,010.9	13,261.7	7,310.9	153.8	153.4	-130.63	-425.2	6,083.4	460.7	226.3	234.40	1.966		
13,100.0	7,012.7	13,361.7	7,312.6	156.3	155.9	-130.63	-425.2	6,183.3	460.7	222.6	238.15	1.935		
13,200.0	7,014.4	13,461.7	7,314.4	158.7	158.4	-130.63	-425.2	6,283.3	460.7	218.8	241.90	1.905		
13,300.0	7,016.2	13,561.7	7,316.1	161.2	160.8	-130.63	-425.2	6,383.3	460.7	215.1	245.65	1.876		
13,400.0	7,017.9	13,661.7	7,317.9	163.6	163.3	-130.63	-425.2	6,483.3	460.7	211.3	249.41	1.847		
13,500.0	7,019.6	13,761.7	7,319.6	166.1	165.8	-130.63	-425.2	6,583.3	460.7	207.6	253.16	1.820		
13,600.0	7,021.4	13,861.7	7,321.4	168.6	168.2	-130.63	-425.2	6,683.3	460.7	203.8	256.91	1.793		
13,700.0	7,023.1	13,961.7	7,323.1	171.0	170.7	-130.63	-425.2	6,783.2	460.8	200.1	260.66	1.768		
13,800.0	7,024.9	14,061.7	7,324.8	173.5	173.2	-130.63	-425.2	6,883.2	460.8	196.3	264.41	1.743		
13,900.0	7,026.6	14,161.7	7,326.6	176.0	175.6	-130.63	-425.2	6,983.2	460.8	192.6	268.17	1.718		
14,000.0	7,028.4	14,261.7	7,328.3	178.4	178.1	-130.63	-425.2	7,083.2	460.8	188.8	271.92	1.694		
14,093.1	7,030.0	14,354.8	7,330.0	180.7	180.4	-130.62	-425.2	7,176.3	460.8	185.3	275.42	1.673 SF		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2H-18H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-10.9	0.0	10.9					
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-10.9	0.0	10.9	10.6	0.30	35.986		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-10.9	0.0	10.9	10.3	0.65	16.742 CC, ES		
300.0	300.0	299.8	299.8	0.5	0.5	-179.11	-11.8	-0.2	11.8	10.8	1.00	11.762		
400.0	400.0	399.5	399.5	0.7	0.7	-177.07	-14.3	-0.7	14.4	13.0	1.35	10.621		
500.0	500.0	499.2	499.1	0.9	0.9	-12.59	-18.6	-1.6	17.8	16.1	1.70	10.482		
600.0	600.0	598.8	598.5	1.0	1.1	-11.93	-24.5	-2.9	21.3	19.2	2.05	10.398		
700.0	699.9	698.4	697.7	1.2	1.3	-11.80	-32.1	-4.6	24.8	22.4	2.40	10.346		
800.0	799.7	797.8	796.7	1.4	1.5	-12.00	-41.4	-6.6	28.3	25.6	2.75	10.310		
900.0	899.4	897.3	895.5	1.6	1.8	-12.42	-52.4	-8.9	31.8	28.7	3.10	10.284		
1,000.0	998.9	996.6	994.0	1.8	2.0	-12.99	-65.0	-11.6	35.4	31.9	3.45	10.263		
1,100.0	1,098.3	1,095.9	1,092.3	2.1	2.3	-13.68	-79.3	-14.7	39.0	35.2	3.80	10.242		
1,200.0	1,197.4	1,195.1	1,190.2	2.3	2.6	-14.44	-95.2	-18.2	42.6	38.4	4.16	10.219		
1,300.0	1,296.3	1,294.3	1,287.7	2.6	3.0	-15.26	-112.8	-21.9	46.2	41.6	4.53	10.191		
1,400.0	1,394.9	1,393.4	1,384.8	2.9	3.4	-16.13	-132.0	-26.1	49.8	44.9	4.91	10.155		
1,500.0	1,493.4	1,492.5	1,481.5	3.3	3.8	-16.78	-152.8	-30.6	54.3	49.0	5.29	10.269		
1,600.0	1,591.9	1,591.3	1,577.7	3.6	4.2	-16.97	-175.2	-35.4	60.5	54.9	5.68	10.668		
1,700.0	1,690.4	1,689.9	1,673.2	3.9	4.6	-16.83	-199.2	-40.6	68.4	62.4	6.05	11.302		
1,800.0	1,788.9	1,789.3	1,769.2	4.2	5.1	-16.54	-224.5	-46.0	77.4	71.0	6.43	12.035		
1,900.0	1,887.3	1,888.9	1,865.3	4.6	5.6	-16.31	-249.7	-51.5	86.4	79.6	6.81	12.689		
2,000.0	1,985.8	1,988.5	1,961.5	4.9	6.0	-16.12	-275.0	-56.9	95.4	88.2	7.19	13.274		
2,100.0	2,084.3	2,088.1	2,057.7	5.3	6.5	-15.97	-300.3	-62.4	104.4	96.8	7.56	13.800		
2,200.0	2,182.8	2,187.7	2,153.9	5.6	7.0	-15.84	-325.6	-67.8	113.4	105.4	7.94	14.275		
2,300.0	2,281.3	2,287.3	2,250.0	5.9	7.4	-15.73	-350.9	-73.3	122.4	114.1	8.32	14.707		
2,400.0	2,379.7	2,386.9	2,346.2	6.3	7.9	-15.63	-376.2	-78.7	131.4	122.7	8.70	15.101		
2,500.0	2,478.2	2,486.5	2,442.4	6.6	8.4	-15.55	-401.5	-84.2	140.4	131.3	9.08	15.462		
2,600.0	2,576.7	2,586.1	2,538.6	7.0	8.9	-15.48	-426.8	-89.6	149.4	139.9	9.46	15.794		
2,700.0	2,675.2	2,685.7	2,634.7	7.3	9.4	-15.41	-452.1	-95.1	158.4	148.5	9.84	16.100		
2,800.0	2,773.7	2,785.3	2,730.9	7.7	9.8	-15.35	-477.4	-100.5	167.4	157.1	10.22	16.383		
2,900.0	2,872.1	2,884.8	2,827.1	8.0	10.3	-15.30	-502.7	-106.0	176.4	165.8	10.59	16.646		
3,000.0	2,970.6	2,984.4	2,923.3	8.4	10.8	-15.26	-527.9	-111.4	185.4	174.4	10.97	16.891		
3,100.0	3,069.1	3,084.0	3,019.4	8.7	11.3	-15.21	-553.2	-116.9	194.4	183.0	11.35	17.119		
3,200.0	3,167.6	3,183.6	3,115.6	9.0	11.8	-15.17	-578.5	-122.3	203.4	191.6	11.73	17.332		
3,300.0	3,266.1	3,283.2	3,211.8	9.4	12.2	-15.14	-603.8	-127.8	212.4	200.2	12.11	17.532		
3,400.0	3,364.5	3,382.8	3,308.0	9.7	12.7	-15.11	-629.1	-133.2	221.4	208.9	12.49	17.719		
3,500.0	3,463.0	3,482.4	3,404.1	10.1	13.2	-15.08	-654.4	-138.7	230.4	217.5	12.87	17.896		
3,600.0	3,561.5	3,582.0	3,500.3	10.4	13.7	-15.05	-679.7	-144.1	239.4	226.1	13.25	18.062		
3,700.0	3,660.0	3,681.6	3,596.5	10.8	14.2	-15.02	-705.0	-149.6	248.4	234.7	13.63	18.219		
3,800.0	3,758.5	3,781.2	3,692.7	11.1	14.6	-15.00	-730.3	-155.0	257.4	243.3	14.01	18.367		
3,900.0	3,857.0	3,880.8	3,788.8	11.5	15.1	-14.98	-755.6	-160.5	266.4	252.0	14.39	18.508		
4,000.0	3,955.4	3,980.4	3,885.0	11.8	15.6	-14.95	-780.9	-165.9	275.3	260.6	14.77	18.641		
4,100.0	4,053.9	4,080.0	3,981.2	12.2	16.1	-14.94	-806.1	-171.4	284.3	269.2	15.15	18.767		
4,200.0	4,152.4	4,179.6	4,077.4	12.5	16.6	-14.92	-831.4	-176.8	293.3	277.8	15.53	18.887		
4,300.0	4,250.9	4,279.2	4,173.5	12.9	17.1	-14.90	-856.7	-182.3	302.3	286.4	15.91	19.002		
4,400.0	4,349.4	4,378.8	4,269.7	13.2	17.5	-14.88	-882.0	-187.7	311.3	295.1	16.29	19.111		
4,500.0	4,447.8	4,478.4	4,365.9	13.6	18.0	-14.87	-907.3	-193.2	320.3	303.7	16.67	19.215		
4,600.0	4,546.3	4,577.9	4,462.1	13.9	18.5	-14.85	-932.6	-198.6	329.3	312.3	17.05	19.315		
4,700.0	4,644.8	4,677.5	4,558.2	14.3	19.0	-14.84	-957.9	-204.1	338.3	320.9	17.43	19.410		
4,800.0	4,743.3	4,777.1	4,654.4	14.6	19.5	-14.83	-983.2	-209.5	347.3	329.5	17.81	19.501		
4,900.0	4,841.8	4,876.7	4,750.6	15.0	20.0	-14.81	-1,008.5	-215.0	356.3	338.2	18.19	19.588		
5,000.0	4,940.2	4,979.1	4,849.5	15.3	20.4	-14.80	-1,034.4	-220.6	365.3	346.7	18.58	19.662		
5,100.0	5,038.7	5,093.4	4,960.6	15.7	20.9	-14.88	-1,060.4	-226.2	371.5	352.5	19.00	19.559		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2H-18H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,137.2	5,208.1	5,073.1	16.0	21.3	-15.07	-1,082.1	-230.8	373.9	354.5	19.43	19.238		
5,300.0	5,235.7	5,322.7	5,186.4	16.4	21.7	-15.39	-1,099.4	-234.6	372.3	352.4	19.89	18.713		
5,400.0	5,334.4	5,437.2	5,300.1	16.7	21.9	-15.76	-1,112.3	-237.3	368.0	347.7	20.35	18.086		
5,500.0	5,433.6	5,551.3	5,413.9	16.9	22.1	-16.10	-1,120.7	-239.1	363.2	342.4	20.77	17.483		
5,600.0	5,533.1	5,665.2	5,527.7	17.1	22.2	-16.41	-1,124.6	-240.0	357.8	336.6	21.17	16.902		
5,700.0	5,633.0	5,770.5	5,633.0	17.3	22.3	-16.65	-1,124.9	-240.1	352.6	331.1	21.51	16.390		
5,800.0	5,732.9	5,870.4	5,732.9	17.4	22.4	-16.74	-1,124.9	-240.1	350.5	328.7	21.80	16.077		
5,843.8	5,776.8	5,914.3	5,776.8	17.4	22.4	-16.75	-1,124.9	-240.1	350.3	328.4	21.94	15.967		
5,900.0	5,832.9	5,970.4	5,832.9	17.5	22.5	-179.66	-1,124.9	-240.1	350.4	311.3	39.11	8.960		
6,000.0	5,932.9	6,070.4	5,932.9	17.6	22.6	-179.66	-1,124.9	-240.1	350.4	311.1	39.30	8.917		
6,100.0	6,032.9	6,170.4	6,032.9	17.7	22.6	-179.66	-1,124.9	-240.1	350.4	310.9	39.49	8.874		
6,200.0	6,132.9	6,270.4	6,132.9	17.8	22.7	-179.66	-1,124.9	-240.1	350.4	310.7	39.68	8.831		
6,246.4	6,179.3	6,316.8	6,179.3	17.9	22.8	90.42	-1,124.9	-240.1	350.4	327.2	23.23	15.088		
6,300.0	6,232.9	6,370.4	6,232.9	17.9	22.8	90.48	-1,124.9	-240.1	350.4	327.1	23.38	14.986		
6,400.0	6,332.1	6,469.6	6,332.1	18.0	22.9	92.40	-1,124.9	-240.1	350.7	327.5	23.27	15.073		
6,500.0	6,428.7	6,567.1	6,429.6	18.0	23.0	96.28	-1,124.9	-239.9	352.8	329.8	22.92	15.388		
6,600.0	6,520.7	6,670.6	6,532.5	18.0	23.0	100.86	-1,124.9	-230.0	357.4	334.6	22.79	15.686		
6,700.0	6,606.5	6,779.2	6,637.8	18.0	23.0	105.24	-1,124.9	-203.7	364.3	341.3	23.01	15.829		
6,800.0	6,684.2	6,893.4	6,742.9	18.0	23.0	109.29	-1,124.9	-159.4	372.8	349.2	23.55	15.829		
6,900.0	6,752.5	7,013.7	6,844.5	18.1	23.0	112.92	-1,124.9	-95.2	382.2	357.8	24.32	15.712		
7,000.0	6,809.9	7,140.2	6,938.1	18.4	23.1	116.02	-1,124.9	-10.4	391.5	366.3	25.25	15.506		
7,100.0	6,855.5	7,272.6	7,018.6	18.9	23.3	118.52	-1,124.9	94.5	399.9	373.5	26.49	15.100		
7,200.0	6,888.2	7,410.1	7,080.3	19.6	23.8	120.32	-1,124.9	217.1	406.5	378.5	28.04	14.495		
7,300.0	6,907.4	7,551.2	7,118.1	20.6	24.7	121.37	-1,124.9	352.9	410.5	380.4	30.06	13.654		
7,400.0	6,913.2	7,684.7	7,129.1	21.9	25.9	121.64	-1,124.9	485.7	411.5	378.8	32.73	12.572		
7,500.0	6,914.9	7,784.7	7,130.8	23.4	27.0	121.65	-1,124.9	585.7	411.5	375.4	36.11	11.398		
7,600.0	6,916.7	7,884.7	7,132.6	25.2	28.4	121.65	-1,124.9	685.7	411.5	371.9	39.63	10.383		
7,700.0	6,918.4	7,984.7	7,134.3	27.1	29.9	121.65	-1,124.9	785.6	411.5	368.2	43.29	9.507		
7,800.0	6,920.2	8,084.7	7,136.1	29.1	31.6	121.65	-1,124.9	885.6	411.5	364.5	47.03	8.749		
7,900.0	6,921.9	8,184.7	7,137.8	31.1	33.4	121.65	-1,124.9	985.6	411.5	360.6	50.85	8.092		
8,000.0	6,923.7	8,284.7	7,139.5	33.3	35.4	121.65	-1,124.9	1,085.6	411.5	356.8	54.73	7.518		
8,100.0	6,925.4	8,384.7	7,141.3	35.4	37.4	121.65	-1,124.9	1,185.6	411.5	352.8	58.66	7.015		
8,200.0	6,927.2	8,484.7	7,143.0	37.7	39.4	121.65	-1,124.9	1,285.6	411.5	348.9	62.62	6.571		
8,300.0	6,928.9	8,584.7	7,144.8	39.9	41.6	121.65	-1,124.9	1,385.6	411.5	344.9	66.62	6.177		
8,400.0	6,930.6	8,684.7	7,146.5	42.2	43.7	121.65	-1,124.9	1,485.5	411.5	340.8	70.64	5.825		
8,500.0	6,932.4	8,784.7	7,148.3	44.5	45.9	121.65	-1,124.8	1,585.5	411.5	336.8	74.68	5.510		
8,600.0	6,934.1	8,884.7	7,150.0	46.8	48.2	121.65	-1,124.8	1,685.5	411.4	332.7	78.74	5.226		
8,700.0	6,935.9	8,984.7	7,151.8	49.2	50.4	121.65	-1,124.8	1,785.5	411.4	328.6	82.81	4.968		
8,800.0	6,937.6	9,084.7	7,153.5	51.5	52.7	121.65	-1,124.8	1,885.5	411.4	324.5	86.90	4.734		
8,900.0	6,939.4	9,184.7	7,155.3	53.9	55.0	121.66	-1,124.8	1,985.5	411.4	320.4	91.00	4.521		
9,000.0	6,941.1	9,284.7	7,157.0	56.2	57.3	121.66	-1,124.8	2,085.4	411.4	316.3	95.11	4.326		
9,100.0	6,942.9	9,384.7	7,158.7	58.6	59.7	121.66	-1,124.8	2,185.4	411.4	312.2	99.23	4.146		
9,200.0	6,944.6	9,484.7	7,160.5	61.0	62.0	121.66	-1,124.8	2,285.4	411.4	308.0	103.36	3.980		
9,300.0	6,946.3	9,584.7	7,162.2	63.4	64.4	121.66	-1,124.8	2,385.4	411.4	303.9	107.49	3.827		
9,400.0	6,948.1	9,684.7	7,164.0	65.8	66.7	121.66	-1,124.8	2,485.4	411.4	299.7	111.63	3.685		
9,500.0	6,949.8	9,784.7	7,165.7	68.2	69.1	121.66	-1,124.8	2,585.4	411.4	295.6	115.78	3.553		
9,600.0	6,951.6	9,884.7	7,167.5	70.6	71.5	121.66	-1,124.8	2,685.4	411.4	291.4	119.93	3.430		
9,700.0	6,953.3	9,984.7	7,169.2	73.0	73.8	121.66	-1,124.8	2,785.3	411.4	287.3	124.08	3.315		
9,800.0	6,955.1	10,084.7	7,171.0	75.5	76.2	121.66	-1,124.8	2,885.3	411.3	283.1	128.24	3.208		
9,900.0	6,956.8	10,184.7	7,172.7	77.9	78.6	121.66	-1,124.8	2,985.3	411.3	278.9	132.40	3.107		
10,000.0	6,958.6	10,284.7	7,174.4	80.3	81.0	121.66	-1,124.8	3,085.3	411.3	274.8	136.57	3.012		
10,100.0	6,960.3	10,384.7	7,176.2	82.7	83.4	121.66	-1,124.8	3,185.3	411.3	270.6	140.74	2.923		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S18-T3N-R68W (Billings) - Billings 2H-18H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
10,200.0	6,962.1	10,484.7	7,177.9	85.2	85.8	121.66	-1,124.8	3,285.3	411.3	266.4	144.91	2.838		
10,300.0	6,963.8	10,584.7	7,179.7	87.6	88.3	121.67	-1,124.8	3,385.2	411.3	262.2	149.08	2.759		
10,400.0	6,965.5	10,684.7	7,181.4	90.0	90.7	121.67	-1,124.8	3,485.2	411.3	258.0	153.26	2.684		
10,500.0	6,967.3	10,784.7	7,183.2	92.5	93.1	121.67	-1,124.8	3,585.2	411.3	253.9	157.43	2.612		
10,600.0	6,969.0	10,884.7	7,184.9	94.9	95.5	121.67	-1,124.8	3,685.2	411.3	249.7	161.61	2.545		
10,700.0	6,970.8	10,984.7	7,186.7	97.4	97.9	121.67	-1,124.7	3,785.2	411.3	245.5	165.79	2.481		
10,800.0	6,972.5	11,084.7	7,188.4	99.8	100.4	121.67	-1,124.7	3,885.2	411.3	241.3	169.98	2.420		
10,900.0	6,974.3	11,184.7	7,190.2	102.2	102.8	121.67	-1,124.7	3,985.2	411.3	237.1	174.16	2.361		
11,000.0	6,976.0	11,284.7	7,191.9	104.7	105.2	121.67	-1,124.7	4,085.1	411.2	232.9	178.35	2.306		
11,100.0	6,977.8	11,384.7	7,193.6	107.1	107.7	121.67	-1,124.7	4,185.1	411.2	228.7	182.53	2.253		
11,200.0	6,979.5	11,484.7	7,195.4	109.6	110.1	121.67	-1,124.7	4,285.1	411.2	224.5	186.72	2.202		
11,300.0	6,981.3	11,584.7	7,197.1	112.0	112.5	121.67	-1,124.7	4,385.1	411.2	220.3	190.91	2.154		
11,400.0	6,983.0	11,684.7	7,198.9	114.5	115.0	121.67	-1,124.7	4,485.1	411.2	216.1	195.10	2.108		
11,500.0	6,984.7	11,784.7	7,200.6	116.9	117.4	121.67	-1,124.7	4,585.1	411.2	211.9	199.29	2.063		
11,600.0	6,986.5	11,884.7	7,202.4	119.4	119.9	121.67	-1,124.7	4,685.0	411.2	207.7	203.48	2.021		
11,700.0	6,988.2	11,984.7	7,204.1	121.8	122.3	121.67	-1,124.7	4,785.0	411.2	203.5	207.68	1.980		
11,800.0	6,990.0	12,084.7	7,205.9	124.3	124.7	121.68	-1,124.7	4,885.0	411.2	199.3	211.87	1.941		
11,900.0	6,991.7	12,184.7	7,207.6	126.7	127.2	121.68	-1,124.7	4,985.0	411.2	195.1	216.06	1.903		
12,000.0	6,993.5	12,284.7	7,209.4	129.2	129.6	121.68	-1,124.7	5,085.0	411.2	190.9	220.26	1.867		
12,100.0	6,995.2	12,384.7	7,211.1	131.7	132.1	121.68	-1,124.7	5,185.0	411.2	186.7	224.45	1.832		
12,200.0	6,997.0	12,484.7	7,212.8	134.1	134.5	121.68	-1,124.7	5,285.0	411.2	182.5	228.65	1.798		
12,300.0	6,998.7	12,584.7	7,214.6	136.6	137.0	121.68	-1,124.7	5,384.9	411.1	178.3	232.85	1.766		
12,400.0	7,000.5	12,684.7	7,216.3	139.0	139.4	121.68	-1,124.7	5,484.9	411.1	174.1	237.05	1.734		
12,500.0	7,002.2	12,784.7	7,218.1	141.5	141.9	121.68	-1,124.7	5,584.9	411.1	169.9	241.24	1.704		
12,600.0	7,003.9	12,884.7	7,219.8	143.9	144.3	121.68	-1,124.7	5,684.9	411.1	165.7	245.44	1.675		
12,700.0	7,005.7	12,984.7	7,221.6	146.4	146.8	121.68	-1,124.7	5,784.9	411.1	161.5	249.64	1.647		
12,800.0	7,007.4	13,084.7	7,223.3	148.9	149.2	121.68	-1,124.7	5,884.9	411.1	157.3	253.84	1.620		
12,900.0	7,009.2	13,184.7	7,225.1	151.3	151.7	121.68	-1,124.6	5,984.8	411.1	153.1	258.04	1.593		
13,000.0	7,010.9	13,284.7	7,226.8	153.8	154.1	121.68	-1,124.6	6,084.8	411.1	148.8	262.24	1.568		
13,100.0	7,012.7	13,384.7	7,228.6	156.3	156.6	121.68	-1,124.6	6,184.8	411.1	144.6	266.44	1.543		
13,200.0	7,014.4	13,484.7	7,230.3	158.7	159.1	121.69	-1,124.6	6,284.8	411.1	140.4	270.64	1.519		
13,300.0	7,016.2	13,584.7	7,232.0	161.2	161.5	121.69	-1,124.6	6,384.8	411.1	136.2	274.84	1.496 Level 3		
13,400.0	7,017.9	13,684.7	7,233.8	163.6	164.0	121.69	-1,124.6	6,484.8	411.1	132.0	279.04	1.473 Level 3		
13,500.0	7,019.6	13,784.7	7,235.5	166.1	166.4	121.69	-1,124.6	6,584.8	411.0	127.8	283.25	1.451 Level 3		
13,600.0	7,021.4	13,884.7	7,237.3	168.6	168.9	121.69	-1,124.6	6,684.7	411.0	123.6	287.45	1.430 Level 3		
13,700.0	7,023.1	13,984.7	7,239.0	171.0	171.3	121.69	-1,124.6	6,784.7	411.0	119.4	291.65	1.409 Level 3		
13,800.0	7,024.9	14,084.7	7,240.8	173.5	173.8	121.69	-1,124.6	6,884.7	411.0	115.2	295.85	1.389 Level 3		
13,900.0	7,026.6	14,184.7	7,242.5	176.0	176.3	121.69	-1,124.6	6,984.7	411.0	111.0	300.05	1.370 Level 3		
14,000.0	7,028.4	14,284.7	7,244.3	178.4	178.7	121.69	-1,124.6	7,084.7	411.0	106.7	304.26	1.351 Level 3		
14,093.1	7,030.0	14,377.8	7,245.9	180.7	181.0	121.69	-1,124.6	7,177.8	411.0	102.8	308.17	1.334 Level 3, SF		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Billings 2G-18H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5210.0ft (Original Well Elev)
Reference Site:	S18-T3N-R68W (Billings)	MD Reference:	WELL @ 5210.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Billings 2G-18H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5210.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Billings 2G-18H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.29°

