

DESIGN TARGET DETAILS					
Name	+N/-S	+E/-W	Northing	Easting	Latitude
Kiyota 4E-35H-O367 PBHL	4424.3	-218.2	1311861.11	3180340.31	40.187701
					Longitude
					-104.854521

Plan #2
Kiyota 4E-35H-O367
14xxx; LR
13' KB @ 4848.0ft (Original Well Elev)
Ground Elevation @ 4835.0
North American Datum 1983
Well Kiyota 4E-35H-O367, True North

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
248.0	248.0	Fox Hills - BASE
4128.0	4136.1	Sussex
4418.0	4426.8	Shannon
4718.0	4727.5	Teepee Buttes (*if present)
6993.0	7024.3	Sharon Springs
7081.0	7131.0	Niobrara
7115.0	7175.7	B Chalk
7148.0	7221.7	C Marl
7178.0	7266.2	D Chalk
7220.0	7334.8	C Marl
7266.0	7422.7	D Chalk
7313.0	7541.9	Fort Hayes
7335.0	7626.3	Codell

Vertical Section at 0.00° (1000 ft/in)

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site:	S35-T3N-R67W (Kiyota)	North Reference:	True
Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

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

Site		S35-T3N-R67W (Kiyota)			
Site Position:		Northing:	1,309,242.22 ft	Latitude:	40.180460
From:	Lat/Long	Easting:	3,180,197.74 ft	Longitude:	-104.855100
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.42 °

Well	Kiyota 4E-35H-O367					
Well Position	+N/-S	0.0 ft	Northing:	1,307,458.56 ft	Latitude:	40.175556
	+E/-W	0.0 ft	Easting:	3,180,590.75 ft	Longitude:	-104.853740
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,835.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/15/2014	8.50	66.75	52,697

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

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,002.2	4.02	196.83	1,001.8	-13.5	-4.1	1.00	1.00	0.00	196.83	
6,600.3	4.02	196.83	6,586.2	-389.3	-117.7	0.00	0.00	0.00	0.00	
7,773.1	90.00	359.00	7,350.0	324.9	-146.6	8.00	7.33	13.83	162.13	
11,873.1	90.00	359.00	7,350.0	4,424.3	-218.2	0.00	0.00	0.00	0.00	Kiyota 4E-35H-O367

Planning Report

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Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site:	S35-T3N-R67W (Kiyota)	North Reference:	True
Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
248.0	0.00	0.00	248.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
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	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	KOP @ 600'
700.0	1.00	196.83	700.0	-0.8	-0.3	-0.8	1.00	1.00	
800.0	2.00	196.83	800.0	-3.3	-1.0	-3.3	1.00	1.00	
900.0	3.00	196.83	899.9	-7.5	-2.3	-7.5	1.00	1.00	
1,000.0	4.00	196.83	999.7	-13.4	-4.0	-13.4	1.00	1.00	
1,002.2	4.02	196.83	1,001.8	-13.5	-4.1	-13.5	1.00	1.00	EOB; Inc=4°
1,100.0	4.02	196.83	1,099.4	-20.1	-6.1	-20.1	0.00	0.00	
1,200.0	4.02	196.83	1,199.2	-26.8	-8.1	-26.8	0.00	0.00	
1,300.0	4.02	196.83	1,298.9	-33.5	-10.1	-33.5	0.00	0.00	
1,400.0	4.02	196.83	1,398.7	-40.2	-12.2	-40.2	0.00	0.00	
1,500.0	4.02	196.83	1,498.4	-46.9	-14.2	-46.9	0.00	0.00	
1,600.0	4.02	196.83	1,598.2	-53.6	-16.2	-53.6	0.00	0.00	
1,700.0	4.02	196.83	1,698.0	-60.4	-18.3	-60.4	0.00	0.00	
1,800.0	4.02	196.83	1,797.7	-67.1	-20.3	-67.1	0.00	0.00	
1,900.0	4.02	196.83	1,897.5	-73.8	-22.3	-73.8	0.00	0.00	
2,000.0	4.02	196.83	1,997.2	-80.5	-24.3	-80.5	0.00	0.00	
2,100.0	4.02	196.83	2,097.0	-87.2	-26.4	-87.2	0.00	0.00	
2,200.0	4.02	196.83	2,196.7	-93.9	-28.4	-93.9	0.00	0.00	
2,300.0	4.02	196.83	2,296.5	-100.6	-30.4	-100.6	0.00	0.00	
2,400.0	4.02	196.83	2,396.2	-107.3	-32.5	-107.3	0.00	0.00	
2,500.0	4.02	196.83	2,496.0	-114.1	-34.5	-114.1	0.00	0.00	
2,600.0	4.02	196.83	2,595.7	-120.8	-36.5	-120.8	0.00	0.00	
2,700.0	4.02	196.83	2,695.5	-127.5	-38.6	-127.5	0.00	0.00	
2,800.0	4.02	196.83	2,795.2	-134.2	-40.6	-134.2	0.00	0.00	
2,900.0	4.02	196.83	2,895.0	-140.9	-42.6	-140.9	0.00	0.00	
3,000.0	4.02	196.83	2,994.8	-147.6	-44.6	-147.6	0.00	0.00	
3,100.0	4.02	196.83	3,094.5	-154.3	-46.7	-154.3	0.00	0.00	
3,200.0	4.02	196.83	3,194.3	-161.1	-48.7	-161.1	0.00	0.00	
3,300.0	4.02	196.83	3,294.0	-167.8	-50.7	-167.8	0.00	0.00	
3,400.0	4.02	196.83	3,393.8	-174.5	-52.8	-174.5	0.00	0.00	
3,500.0	4.02	196.83	3,493.5	-181.2	-54.8	-181.2	0.00	0.00	
3,600.0	4.02	196.83	3,593.3	-187.9	-56.8	-187.9	0.00	0.00	
3,700.0	4.02	196.83	3,693.0	-194.6	-58.9	-194.6	0.00	0.00	
3,800.0	4.02	196.83	3,792.8	-201.3	-60.9	-201.3	0.00	0.00	
3,900.0	4.02	196.83	3,892.5	-208.0	-62.9	-208.0	0.00	0.00	
4,000.0	4.02	196.83	3,992.3	-214.8	-64.9	-214.8	0.00	0.00	
4,100.0	4.02	196.83	4,092.0	-221.5	-67.0	-221.5	0.00	0.00	
4,136.1	4.02	196.83	4,128.0	-223.9	-67.7	-223.9	0.00	0.00	Sussex
4,200.0	4.02	196.83	4,191.8	-228.2	-69.0	-228.2	0.00	0.00	
4,300.0	4.02	196.83	4,291.5	-234.9	-71.0	-234.9	0.00	0.00	
4,400.0	4.02	196.83	4,391.3	-241.6	-73.1	-241.6	0.00	0.00	
4,426.8	4.02	196.83	4,418.0	-243.4	-73.6	-243.4	0.00	0.00	Shannon
4,500.0	4.02	196.83	4,491.1	-248.3	-75.1	-248.3	0.00	0.00	
4,600.0	4.02	196.83	4,590.8	-255.0	-77.1	-255.0	0.00	0.00	
4,700.0	4.02	196.83	4,690.6	-261.7	-79.2	-261.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site:	S35-T3N-R67W (Kiyota)	North Reference:	True
Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,727.5	4.02	196.83	4,718.0	-263.6	-79.7	-263.6	0.00	0.00	Teepee Buttes (*if present)
4,800.0	4.02	196.83	4,790.3	-268.5	-81.2	-268.5	0.00	0.00	
4,900.0	4.02	196.83	4,890.1	-275.2	-83.2	-275.2	0.00	0.00	
5,000.0	4.02	196.83	4,989.8	-281.9	-85.2	-281.9	0.00	0.00	
5,100.0	4.02	196.83	5,089.6	-288.6	-87.3	-288.6	0.00	0.00	
5,200.0	4.02	196.83	5,189.3	-295.3	-89.3	-295.3	0.00	0.00	
5,300.0	4.02	196.83	5,289.1	-302.0	-91.3	-302.0	0.00	0.00	
5,400.0	4.02	196.83	5,388.8	-308.7	-93.4	-308.7	0.00	0.00	
5,500.0	4.02	196.83	5,488.6	-315.5	-95.4	-315.5	0.00	0.00	
5,600.0	4.02	196.83	5,588.3	-322.2	-97.4	-322.2	0.00	0.00	
5,700.0	4.02	196.83	5,688.1	-328.9	-99.5	-328.9	0.00	0.00	
5,800.0	4.02	196.83	5,787.9	-335.6	-101.5	-335.6	0.00	0.00	
5,900.0	4.02	196.83	5,887.6	-342.3	-103.5	-342.3	0.00	0.00	
6,000.0	4.02	196.83	5,987.4	-349.0	-105.5	-349.0	0.00	0.00	
6,100.0	4.02	196.83	6,087.1	-355.7	-107.6	-355.7	0.00	0.00	
6,200.0	4.02	196.83	6,186.9	-362.4	-109.6	-362.4	0.00	0.00	
6,300.0	4.02	196.83	6,286.6	-369.2	-111.6	-369.2	0.00	0.00	
6,400.0	4.02	196.83	6,386.4	-375.9	-113.7	-375.9	0.00	0.00	
6,500.0	4.02	196.83	6,486.1	-382.6	-115.7	-382.6	0.00	0.00	
6,600.0	4.02	196.83	6,585.9	-389.3	-117.7	-389.3	0.00	0.00	
6,600.3	4.02	196.83	6,586.2	-389.3	-117.7	-389.3	0.00	0.00	Start build/turn @ 6600' MD
6,700.0	4.33	342.48	6,685.8	-389.1	-119.9	-389.1	8.00	0.31	
6,800.0	12.21	353.29	6,784.7	-375.0	-122.3	-375.0	8.00	7.88	
6,900.0	20.18	355.64	6,880.6	-347.2	-124.8	-347.2	8.00	7.97	
7,000.0	28.17	356.70	6,971.8	-306.4	-127.5	-306.4	8.00	7.99	
7,024.3	30.12	356.87	6,993.0	-294.5	-128.1	-294.5	8.00	7.99	Sharon Springs
7,100.0	36.17	357.31	7,056.4	-253.2	-130.2	-253.2	8.00	7.99	
7,131.0	38.65	357.46	7,081.0	-234.4	-131.1	-234.4	8.00	7.99	Niobrara
7,175.7	42.22	357.64	7,115.0	-205.5	-132.3	-205.5	8.00	8.00	B Chalk
7,200.0	44.16	357.73	7,132.7	-188.9	-133.0	-188.9	8.00	8.00	
7,221.7	45.89	357.80	7,148.0	-173.6	-133.6	-173.6	8.00	8.00	B Marl
7,266.2	49.46	357.95	7,178.0	-140.6	-134.8	-140.6	8.00	8.00	C Chalk
7,300.0	52.16	358.04	7,199.4	-114.5	-135.7	-114.5	8.00	8.00	
7,334.8	54.94	358.13	7,220.0	-86.5	-136.7	-86.5	8.00	8.00	C Marl
7,400.0	60.16	358.29	7,255.0	-31.5	-138.4	-31.5	8.00	8.00	
7,422.7	61.98	358.34	7,266.0	-11.6	-139.0	-11.6	8.00	8.00	D Chalk
7,500.0	68.15	358.51	7,298.6	58.4	-140.9	58.4	8.00	8.00	
7,541.9	71.50	358.59	7,313.0	97.7	-141.9	97.7	8.00	8.00	Fort Hayes
7,600.0	76.15	358.70	7,329.2	153.5	-143.2	153.5	8.00	8.00	
7,626.3	78.25	358.74	7,335.0	179.1	-143.8	179.1	8.00	8.00	Codell
7,700.0	84.15	358.87	7,346.3	251.9	-145.3	251.9	8.00	8.00	
7,773.1	90.00	359.00	7,350.0	324.9	-146.6	324.9	8.00	8.00	LP @ 7350' TVD; 90°
7,800.0	90.00	359.00	7,350.0	351.7	-147.1	351.7	0.00	0.00	
7,900.0	90.00	359.00	7,350.0	451.7	-148.9	451.7	0.00	0.00	
8,000.0	90.00	359.00	7,350.0	551.7	-150.6	551.7	0.00	0.00	
8,100.0	90.00	359.00	7,350.0	651.7	-152.3	651.7	0.00	0.00	
8,200.0	90.00	359.00	7,350.0	751.7	-154.1	751.7	0.00	0.00	
8,300.0	90.00	359.00	7,350.0	851.7	-155.8	851.7	0.00	0.00	
8,400.0	90.00	359.00	7,350.0	951.6	-157.6	951.6	0.00	0.00	
8,500.0	90.00	359.00	7,350.0	1,051.6	-159.3	1,051.6	0.00	0.00	
8,600.0	90.00	359.00	7,350.0	1,151.6	-161.1	1,151.6	0.00	0.00	
8,700.0	90.00	359.00	7,350.0	1,251.6	-162.8	1,251.6	0.00	0.00	

Planning Report

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Site:	S35-T3N-R67W (Kiyota)	North Reference:	True
Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.00	359.00	7,350.0	1,351.6	-164.6	1,351.6	0.00	0.00	
8,900.0	90.00	359.00	7,350.0	1,451.6	-166.3	1,451.6	0.00	0.00	
9,000.0	90.00	359.00	7,350.0	1,551.5	-168.1	1,551.5	0.00	0.00	
9,100.0	90.00	359.00	7,350.0	1,651.5	-169.8	1,651.5	0.00	0.00	
9,200.0	90.00	359.00	7,350.0	1,751.5	-171.5	1,751.5	0.00	0.00	
9,300.0	90.00	359.00	7,350.0	1,851.5	-173.3	1,851.5	0.00	0.00	
9,400.0	90.00	359.00	7,350.0	1,951.5	-175.0	1,951.5	0.00	0.00	
9,500.0	90.00	359.00	7,350.0	2,051.5	-176.8	2,051.5	0.00	0.00	
9,600.0	90.00	359.00	7,350.0	2,151.5	-178.5	2,151.5	0.00	0.00	
9,700.0	90.00	359.00	7,350.0	2,251.4	-180.3	2,251.4	0.00	0.00	
9,800.0	90.00	359.00	7,350.0	2,351.4	-182.0	2,351.4	0.00	0.00	
9,900.0	90.00	359.00	7,350.0	2,451.4	-183.8	2,451.4	0.00	0.00	
10,000.0	90.00	359.00	7,350.0	2,551.4	-185.5	2,551.4	0.00	0.00	
10,100.0	90.00	359.00	7,350.0	2,651.4	-187.3	2,651.4	0.00	0.00	
10,200.0	90.00	359.00	7,350.0	2,751.4	-189.0	2,751.4	0.00	0.00	
10,300.0	90.00	359.00	7,350.0	2,851.4	-190.7	2,851.4	0.00	0.00	
10,400.0	90.00	359.00	7,350.0	2,951.3	-192.5	2,951.3	0.00	0.00	
10,500.0	90.00	359.00	7,350.0	3,051.3	-194.2	3,051.3	0.00	0.00	
10,600.0	90.00	359.00	7,350.0	3,151.3	-196.0	3,151.3	0.00	0.00	
10,700.0	90.00	359.00	7,350.0	3,251.3	-197.7	3,251.3	0.00	0.00	
10,800.0	90.00	359.00	7,350.0	3,351.3	-199.5	3,351.3	0.00	0.00	
10,900.0	90.00	359.00	7,350.0	3,451.3	-201.2	3,451.3	0.00	0.00	
11,000.0	90.00	359.00	7,350.0	3,551.2	-203.0	3,551.2	0.00	0.00	
11,100.0	90.00	359.00	7,350.0	3,651.2	-204.7	3,651.2	0.00	0.00	
11,200.0	90.00	359.00	7,350.0	3,751.2	-206.5	3,751.2	0.00	0.00	
11,300.0	90.00	359.00	7,350.0	3,851.2	-208.2	3,851.2	0.00	0.00	
11,400.0	90.00	359.00	7,350.0	3,951.2	-209.9	3,951.2	0.00	0.00	
11,500.0	90.00	359.00	7,350.0	4,051.2	-211.7	4,051.2	0.00	0.00	
11,600.0	90.00	359.00	7,350.0	4,151.2	-213.4	4,151.2	0.00	0.00	
11,700.0	90.00	359.00	7,350.0	4,251.1	-215.2	4,251.1	0.00	0.00	
11,800.0	90.00	359.00	7,350.0	4,351.1	-216.9	4,351.1	0.00	0.00	
11,873.1	90.00	359.00	7,350.0	4,424.3	-218.2	4,424.3	0.00	0.00	TD at 11873.1

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Kiyota 4E-35H-O367 TG - plan misses target center by 20.1ft at 11308.5ft MD (7350.0 TVD, 3859.6 N, -208.3 E) - Point	0.00	0.00	7,350.0	3,860.0	-188.2	1,311,317.09	3,180,374.42	40.186152	-104.854414
Kiyota 4E-35H-O367 PB - plan hits target center - Point	0.00	0.00	7,350.0	4,424.3	-218.2	1,311,881.11	3,180,340.31	40.187701	-104.854521

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site:	S35-T3N-R67W (Kiyota)	North Reference:	True
Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #2		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
248.0	248.0	Fox Hills - BASE				
4,136.1	4,128.0	Sussex				
4,426.8	4,418.0	Shannon				
4,727.5	4,718.0	Teepee Buttes (*if present)				
7,024.3	6,993.0	Sharon Springs				
7,131.0	7,081.0	Niobrara				
7,175.7	7,115.0	B Chalk				
7,221.7	7,148.0	B Marl				
7,266.2	7,178.0	C Chalk				
7,334.8	7,220.0	C Marl				
7,422.7	7,266.0	D Chalk				
7,541.9	7,313.0	Fort Hayes				
7,626.3	7,335.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
600.0	600.0	0.0	0.0	KOP @ 600'	
1,002.2	1,001.8	-13.5	-4.1	EOB; Inc=4°	
6,600.3	6,586.2	-389.3	-117.7	Start build/turn @ 6600' MD	
7,773.1	7,350.0	324.9	-146.6	LP @ 7350' TVD; 90°	
11,873.1	7,350.0	4,424.3	-218.2	TD at 11873.1	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S35-T3N-R67W (Kiyota)

Kiyota 4E-35H-O367

Hz

Plan #2

Anticollision Report

24 June, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	6/24/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,886.7	Plan #2 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation Factor	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S35-T3N-R67W (Kiyota)						
KAWAKAMI 1 (EXISTING) - ENCANA WELL - GYRO	11,023.6	7,324.5	377.7	299.4	4.825	CC, ES, SF
KAWAKAMI 31-35 (EXISTING) - ENCANA WELL - SURV	11,886.7	7,315.4	415.3	322.3	4.467	CC, ES, SF
KAWAKAMI 32-35 (EXISTING) - ENCANA WELL - GYRO	10,355.1	7,317.0	616.8	550.0	9.231	CC, ES
KAWAKAMI 32-35 (EXISTING) - ENCANA WELL - GYRO	10,500.0	7,316.2	633.5	564.3	9.144	SF
KAWAKAMI 4-0-35 (EXISTING) - ENCANA WELL - SUR						Out of range
KAWAKAMI 41-35 (EXISTING) - ENCANA WELL - GYRO	11,689.4	7,346.9	995.4	905.8	11.109	CC
KAWAKAMI 41-35 (EXISTING) - ENCANA WELL - GYRO	11,700.0	7,346.9	995.5	905.7	11.090	ES, SF
KAWAKAMI 42-35 (EXISTING) - ENCANA WELL - GYRO						Out of range
KAWAKAMI 4-2-35 (EXISTING) - ENCANA WELL - SUR	11,035.6	7,409.5	928.9	844.2	10.955	CC, ES
KAWAKAMI 4-2-35 (EXISTING) - ENCANA WELL - SUR	11,200.0	7,409.2	943.4	855.8	10.766	SF
KAWAKAMI 6-0-35 (EXISTING) - ENCANA WELL - SUR	11,886.7	7,403.7	543.4	448.0	5.696	CC, ES, SF
KIYOTA 33-35 (EXISTING) - ENCANA WELL - GYRO	9,214.0	7,335.6	569.4	521.6	11.927	CC, ES
KIYOTA 33-35 (EXISTING) - ENCANA WELL - GYRO	9,300.0	7,335.7	575.8	526.7	11.717	SF
KIYOTA 3-35 (EXISTING) - ENCANA WELL - GYRO	8,711.4	7,326.0	61.2	21.4	1.539	CC, ES, SF
KIYOTA 34-35 (EXISTING) - ENCANA WELL - GYRO	7,709.6	7,338.8	445.2	418.1	16.440	CC, ES
KIYOTA 34-35 (EXISTING) - ENCANA WELL - GYRO	7,800.0	7,342.6	454.5	426.6	16.335	SF
KIYOTA 43-35 (EXISTING) - ENCANA WELL - GYRO	9,149.0	7,166.1	629.0	588.6	15.595	CC, ES
KIYOTA 43-35 (EXISTING) - ENCANA WELL - GYRO	9,300.0	7,157.5	646.8	604.7	15.386	SF
KIYOTA 44-35 (EXISTING) - ENCANA WELL - GYRO	100.0	74.3	673.9	673.6	2,391.867	CC
KIYOTA 44-35 (EXISTING) - ENCANA WELL - GYRO	400.0	372.1	674.3	673.0	508.420	ES
KIYOTA 44-35 (EXISTING) - ENCANA WELL - GYRO	7,900.0	7,331.3	848.1	819.3	29.484	SF
KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - SURVEY	8,339.1	7,471.5	903.6	861.7	21.564	CC, ES
KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - SURVEY	8,600.0	7,473.1	940.5	894.8	20.579	SF
Kiyota 4A-35H-O367 - Hz - Plan #1	200.0	200.0	30.2	29.5	46.233	CC, ES
Kiyota 4A-35H-O367 - Hz - Plan #1	11,886.7	11,828.9	913.6	753.1	5.693	SF
Kiyota 4B-35H-O367 - Hz - Plan #1	300.0	300.0	22.6	21.6	22.593	CC, ES
Kiyota 4B-35H-O367 - Hz - Plan #1	11,886.7	11,919.4	675.8	514.0	4.176	SF
Kiyota 4C-35H-O367 - Hz - Plan #2	400.0	400.0	15.1	13.7	11.170	CC, ES
Kiyota 4C-35H-O367 - Hz - Plan #2	11,886.7	11,593.2	504.8	360.1	3.490	SF
Kiyota 4D-35H-O367 - Hz - Plan #1	500.0	500.0	7.5	5.8	4.438	CC, ES
Kiyota 4D-35H-O367 - Hz - Plan #1	11,886.7	11,733.9	270.5	135.6	2.005	SF
Kiyota 4F-35H-O367 - Hz - Plan #1	600.0	600.0	7.5	5.5	3.682	CC, ES
Kiyota 4F-35H-O367 - Hz - Plan #1	11,886.7	11,664.3	314.9	198.4	2.703	SF
Kiyota 4G-35H-O367 - Hz - Plan #2	600.0	600.0	14.8	12.8	7.228	CC
Kiyota 4G-35H-O367 - Hz - Plan #2	700.0	700.0	15.1	12.7	6.312	ES
Kiyota 4G-35H-O367 - Hz - Plan #2	11,886.7	11,640.3	474.8	323.5	3.139	SF
Kiyota 4H-35H-O367 - Hz - Plan #1	600.0	600.0	22.4	20.3	10.911	CC, ES
Kiyota 4H-35H-O367 - Hz - Plan #1	11,800.0	11,822.1	664.0	508.1	4.259	SF
Kiyota 4I-35H-O367 - Hz - Plan #1	500.0	500.0	29.9	28.2	17.589	CC, ES
Kiyota 4I-35H-O367 - Hz - Plan #1	11,886.7	11,695.8	927.4	773.8	6.036	SF
Kiyota 4J-35H-O367 - Hz - Plan #2	400.0	400.0	37.4	36.1	27.719	CC, ES
Kiyota 4J-35H-O367 - Hz - Plan #2	800.0	797.1	51.0	48.2	18.540	SF
Kiyota 4K-35H-O367 - Hz - Plan #1	300.0	300.0	45.0	44.0	44.908	CC, ES
Kiyota 4K-35H-O367 - Hz - Plan #1	800.0	795.2	66.2	63.5	24.097	SF
Kiyota 4L-35H-O367 - Hz - Plan #1	200.0	200.0	52.5	51.9	80.482	CC, ES
Kiyota 4L-35H-O367 - Hz - Plan #1	800.0	792.7	83.2	80.5	30.309	SF
KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEY	3,684.9	3,742.0	49.2	31.3	2.753	CC
KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEY	3,700.0	3,756.6	49.3	31.2	2.723	ES, SF
KIYOTA C-35-320-E (EXISTING) - ENCANA WELL - NO	9,504.7	7,318.0	150.9	98.4	2.874	CC, ES, SF

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 1 (EXISTING) - ENCANA WELL - GYRO											Offset Site Error:		0.0 ft
Survey Program: 100-Geolink MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
10,100.0	7,350.0	7,323.5	7,323.0	49.8	12.8	90.15	3,563.9	209.5	997.8	935.3	62.49	15.967	
10,200.0	7,350.0	7,323.6	7,323.1	51.5	12.8	90.17	3,563.9	209.5	906.0	841.8	64.19	14.116	
10,300.0	7,350.0	7,323.7	7,323.2	53.2	12.8	90.19	3,563.9	209.5	816.2	750.3	65.89	12.388	
10,400.0	7,350.0	7,323.8	7,323.4	54.9	12.8	90.20	3,563.9	209.5	729.0	661.4	67.59	10.786	
10,500.0	7,350.0	7,323.9	7,323.5	56.6	12.8	90.22	3,563.9	209.5	645.6	576.3	69.30	9.316	
10,600.0	7,350.0	7,324.0	7,323.6	58.3	12.8	90.24	3,563.9	209.5	567.5	496.5	71.01	7.992	
10,700.0	7,350.0	7,324.2	7,323.7	60.0	12.8	90.26	3,563.9	209.5	497.3	424.6	72.72	6.839	
10,800.0	7,350.0	7,324.3	7,323.8	61.7	12.8	90.28	3,563.9	209.5	438.9	364.5	74.43	5.897	
10,900.0	7,350.0	7,324.4	7,323.9	63.4	12.8	90.29	3,563.9	209.5	397.4	321.2	76.15	5.219	
11,000.0	7,350.0	7,324.5	7,324.1	65.2	12.8	90.31	3,563.9	209.5	378.4	300.6	77.87	4.860	
11,023.6	7,350.0	7,324.5	7,324.1	65.6	12.8	90.32	3,563.9	209.5	377.7	299.4	78.27	4.825 CC, ES, SF	
11,100.0	7,350.0	7,324.6	7,324.2	66.9	12.8	90.33	3,563.9	209.5	385.4	305.8	79.59	4.842	
11,200.0	7,350.0	7,324.8	7,324.3	68.6	12.8	90.35	3,563.9	209.5	416.9	335.6	81.31	5.127	
11,300.0	7,350.0	7,324.9	7,324.4	70.3	12.8	90.37	3,563.9	209.5	468.1	385.0	83.03	5.637	
11,400.0	7,350.0	7,325.0	7,324.5	72.0	12.8	90.39	3,563.9	209.5	534.1	449.2	84.81	6.297	
11,500.0	7,350.0	7,325.1	7,324.7	73.8	12.8	90.43	3,563.9	209.5	611.4	524.9	86.53	7.066	
11,600.0	7,350.0	7,325.3	7,324.8	75.5	12.8	90.49	3,563.9	209.5	696.4	608.2	88.17	7.898	
11,700.0	7,350.0	7,325.5	7,325.0	77.2	12.8	90.56	3,563.9	209.5	786.4	696.7	89.73	8.764	
11,800.0	7,350.0	7,325.7	7,325.2	78.9	12.8	90.59	3,563.9	209.5	879.2	787.7	91.46	9.613	
11,886.7	7,350.0	7,325.8	7,325.4	80.4	12.8	90.63	3,563.9	209.5	960.8	867.8	92.96	10.336	

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 31-35 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
11,100.0	7,350.0	7,317.6	7,316.3	66.9	12.9	-90.04	4,445.9	-632.9	929.9	850.4	79.58	11.686		
11,200.0	7,350.0	7,317.3	7,316.1	68.6	12.8	-90.01	4,445.9	-632.9	844.8	763.5	81.30	10.391		
11,300.0	7,350.0	7,317.0	7,315.8	70.3	12.8	-89.97	4,445.9	-632.9	763.3	680.3	83.02	9.194		
11,400.0	7,350.0	7,316.7	7,315.5	72.0	12.8	-89.93	4,445.9	-632.9	685.9	601.1	84.80	8.088		
11,500.0	7,350.0	7,316.4	7,315.2	73.8	12.8	-89.89	4,445.9	-632.9	612.6	526.0	86.52	7.080		
11,600.0	7,350.0	7,316.1	7,314.9	75.5	12.8	-89.85	4,445.9	-632.9	545.0	456.8	88.16	6.181		
11,700.0	7,350.0	7,315.9	7,314.6	77.2	12.8	-89.81	4,445.9	-632.9	485.6	395.9	89.72	5.413		
11,800.0	7,350.0	7,315.6	7,314.4	78.9	12.8	-89.77	4,445.9	-632.9	439.6	348.1	91.45	4.806		
11,886.7	7,350.0	7,315.4	7,314.1	80.4	12.8	-89.74	4,445.9	-632.9	415.3	322.3	92.95	4.467 CC, ES, SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 32-35 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,600.0	7,350.0	7,321.6	7,320.6	41.4	12.8	-90.61	2,895.5	-784.9	975.0	920.9	54.08	18.030		
9,700.0	7,350.0	7,321.0	7,320.0	43.1	12.8	-90.56	2,895.5	-784.9	899.8	844.0	55.74	16.141		
9,800.0	7,350.0	7,320.4	7,319.4	44.7	12.8	-90.50	2,895.5	-784.9	829.8	772.4	57.42	14.451		
9,900.0	7,350.0	7,319.8	7,318.8	46.4	12.8	-90.45	2,895.5	-785.0	766.5	707.4	59.10	12.969		
10,000.0	7,350.0	7,319.2	7,318.2	48.1	12.8	-90.39	2,895.5	-785.0	711.7	650.9	60.79	11.708		
10,100.0	7,350.0	7,318.6	7,317.6	49.8	12.8	-90.33	2,895.5	-785.0	667.5	605.0	62.48	10.683		
10,200.0	7,350.0	7,318.0	7,317.0	51.5	12.8	-90.28	2,895.5	-785.0	636.0	571.8	64.18	9.910		
10,300.0	7,350.0	7,317.4	7,316.4	53.2	12.8	-90.22	2,895.5	-785.0	619.2	553.3	65.87	9.400		
10,355.1	7,350.0	7,317.0	7,316.0	54.1	12.8	-90.19	2,895.5	-785.0	616.8	550.0	66.81	9.231 CC, ES		
10,400.0	7,350.0	7,316.8	7,315.8	54.9	12.8	-90.16	2,895.5	-785.0	618.4	550.8	67.58	9.151		
10,500.0	7,350.0	7,316.2	7,315.2	56.6	12.8	-90.11	2,895.5	-785.0	633.5	564.3	69.28	9.144 SF		
10,600.0	7,350.0	7,315.6	7,314.6	58.3	12.8	-90.05	2,895.5	-785.0	663.6	592.6	70.99	9.348		
10,700.0	7,350.0	7,315.0	7,314.0	60.0	12.8	-90.00	2,895.5	-785.0	706.6	633.9	72.70	9.720		
10,800.0	7,350.0	7,314.4	7,313.4	61.7	12.8	-89.94	2,895.5	-785.0	760.5	686.0	74.41	10.219		
10,900.0	7,350.0	7,313.8	7,312.8	63.4	12.8	-89.88	2,895.5	-785.0	823.0	746.8	76.13	10.810		
11,000.0	7,350.0	7,313.1	7,312.2	65.2	12.8	-89.83	2,895.5	-785.0	892.3	814.5	77.85	11.462		
11,100.0	7,350.0	7,312.5	7,311.5	66.9	12.8	-89.77	2,895.5	-785.0	967.1	887.5	79.57	12.154		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 41-35 (EXISTING) - ENCANA WELL - GYRO												Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
11,689.4	7,350.0	7,346.9	7,345.2	77.0	13.0	91.85	4,356.8	794.6	995.4	905.8	89.60	11.109 CC	
11,700.0	7,350.0	7,346.9	7,345.1	77.2	13.0	91.85	4,356.8	794.6	995.5	905.7	89.76	11.090 ES, SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 4-2-35 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 868-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,700.0	7,350.0	7,410.3	7,326.1	60.0	21.3	-89.67	3,576.0	-1,097.1	987.7	908.7	79.03	12.497		
10,800.0	7,350.0	7,410.1	7,325.9	61.7	21.3	-89.66	3,576.0	-1,097.1	958.4	877.6	80.75	11.868		
10,900.0	7,350.0	7,409.8	7,325.7	63.4	21.3	-89.65	3,576.0	-1,097.1	938.8	856.3	82.46	11.384		
11,000.0	7,350.0	7,409.6	7,325.4	65.2	21.3	-89.63	3,576.0	-1,097.1	929.6	845.4	84.18	11.043		
11,035.6	7,350.0	7,409.5	7,325.4	65.8	21.3	-89.63	3,576.0	-1,097.1	928.9	844.2	84.80	10.955 CC, ES		
11,100.0	7,350.0	7,409.4	7,325.2	66.9	21.3	-89.62	3,576.0	-1,097.1	931.2	845.3	85.90	10.840		
11,200.0	7,350.0	7,409.2	7,325.0	68.6	21.3	-89.60	3,576.0	-1,097.1	943.4	855.8	87.62	10.766 SF		
11,300.0	7,350.0	7,408.9	7,324.7	70.3	21.3	-89.59	3,576.0	-1,097.1	965.8	876.5	89.35	10.810		
11,400.0	7,350.0	7,408.7	7,324.5	72.0	21.3	-89.58	3,576.0	-1,097.1	996.8	905.9	90.93	10.963		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KAWAKAMI 6-0-35 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error: 0.0 ft			
Survey Program: 528-Geolink MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)						
11,400.0	7,350.0	7,401.8	7,336.4	72.0	19.5	90.83	4,821.6	152.5	938.2	851.6	86.59	10.835				
11,500.0	7,350.0	7,402.1	7,336.7	73.8	19.5	90.81	4,821.6	152.5	846.8	758.3	88.53	9.565				
11,600.0	7,350.0	7,402.4	7,337.1	75.5	19.5	90.81	4,821.6	152.5	759.3	668.9	90.39	8.401				
11,700.0	7,350.0	7,402.8	7,337.5	77.2	19.5	90.83	4,821.6	152.5	677.3	585.2	92.17	7.349				
11,800.0	7,350.0	7,403.3	7,337.9	78.9	19.5	90.89	4,821.6	152.5	602.1	508.2	93.90	6.413				
11,886.7	7,350.0	7,403.7	7,338.3	80.4	19.5	90.94	4,821.6	152.5	543.4	448.0	95.40	5.696 CC, ES, SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 33-35 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error: 0.0 ft	
Survey Program: 100-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,400.0	7,350.0	7,334.4	7,333.9	22.5	12.8	-89.69	1,754.3	-737.6	993.3	958.2	35.10	28.302		
8,500.0	7,350.0	7,334.5	7,334.0	23.9	12.8	-89.70	1,754.3	-737.6	913.2	876.6	36.55	24.984		
8,600.0	7,350.0	7,334.7	7,334.2	25.4	12.8	-89.72	1,754.3	-737.6	837.3	799.3	38.04	22.011		
8,700.0	7,350.0	7,334.8	7,334.3	26.9	12.8	-89.73	1,754.3	-737.6	767.0	727.5	39.57	19.386		
8,800.0	7,350.0	7,335.0	7,334.5	28.5	12.8	-89.75	1,754.3	-737.6	704.0	662.8	41.12	17.121		
8,900.0	7,350.0	7,335.1	7,334.6	30.0	12.8	-89.76	1,754.3	-737.6	650.2	607.5	42.69	15.231		
9,000.0	7,350.0	7,335.3	7,334.8	31.6	12.8	-89.78	1,754.3	-737.6	608.2	564.0	44.28	13.736		
9,100.0	7,350.0	7,335.4	7,334.9	33.2	12.8	-89.79	1,754.3	-737.6	580.7	534.8	45.89	12.654		
9,200.0	7,350.0	7,335.6	7,335.1	34.8	12.8	-89.81	1,754.3	-737.6	569.5	522.0	47.51	11.988		
9,214.0	7,350.0	7,335.6	7,335.1	35.1	12.8	-89.81	1,754.3	-737.6	569.4	521.6	47.74	11.927 CC, ES		
9,300.0	7,350.0	7,335.7	7,335.2	36.5	12.8	-89.82	1,754.3	-737.6	575.8	526.7	49.15	11.717 SF		
9,400.0	7,350.0	7,335.9	7,335.4	38.1	12.8	-89.84	1,754.3	-737.6	599.0	548.2	50.79	11.793		
9,500.0	7,350.0	7,336.0	7,335.5	39.7	12.8	-89.85	1,754.3	-737.6	637.2	584.7	52.45	12.149		
9,600.0	7,350.0	7,336.2	7,335.7	41.4	12.8	-89.87	1,754.3	-737.6	687.9	633.8	54.11	12.713		
9,700.0	7,350.0	7,336.3	7,335.8	43.1	12.8	-89.88	1,754.3	-737.6	748.6	692.8	55.78	13.421		
9,800.0	7,350.0	7,336.5	7,336.0	44.7	12.8	-89.90	1,754.3	-737.6	817.1	759.6	57.45	14.221		
9,900.0	7,350.0	7,336.6	7,336.1	46.4	12.8	-89.91	1,754.3	-737.6	891.5	832.4	59.14	15.075		
10,000.0	7,350.0	7,336.8	7,336.3	48.1	12.8	-89.93	1,754.3	-737.6	970.6	909.7	60.82	15.957		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 3-35 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance		Total 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)	
7,800.0	7,350.0	7,320.2	7,319.4	15.3	12.9	-83.79	1,251.7	-229.3	913.4	885.7	27.70	32.974		
7,900.0	7,350.0	7,320.9	7,320.0	16.2	12.9	-84.36	1,251.7	-229.3	813.7	785.0	28.68	28.370		
8,000.0	7,350.0	7,321.5	7,320.6	17.3	12.9	-84.95	1,251.7	-229.3	714.0	684.2	29.79	23.970		
8,100.0	7,350.0	7,322.1	7,321.2	18.5	12.9	-85.53	1,251.7	-229.3	614.4	583.4	31.00	19.823		
8,200.0	7,350.0	7,322.7	7,321.9	19.8	12.9	-86.12	1,251.7	-229.3	515.0	482.7	32.29	15.951		
8,300.0	7,350.0	7,323.4	7,322.5	21.1	12.9	-86.71	1,251.7	-229.3	415.9	382.3	33.65	12.360		
8,400.0	7,350.0	7,324.0	7,323.1	22.5	12.9	-87.31	1,251.7	-229.3	317.3	282.3	35.07	9.050		
8,500.0	7,350.0	7,324.7	7,323.8	23.9	12.9	-87.91	1,251.8	-229.3	220.1	183.5	36.53	6.024		
8,600.0	7,350.0	7,325.3	7,324.4	25.4	12.9	-88.51	1,251.8	-229.3	127.1	89.0	38.03	3.342		
8,700.0	7,350.0	7,325.9	7,325.1	26.9	12.9	-89.11	1,251.8	-229.3	62.2	22.7	39.55	1.573		
8,711.4	7,350.0	7,326.0	7,325.1	27.1	12.9	-89.18	1,251.8	-229.3	61.2	21.4	39.73	1.539 CC, ES, SF		
8,800.0	7,350.0	7,326.6	7,325.7	28.5	12.9	-89.72	1,251.8	-229.4	107.7	66.6	41.11	2.619		
8,900.0	7,350.0	7,327.2	7,326.4	30.0	12.9	-90.33	1,251.8	-229.4	198.3	155.6	42.68	4.646		
9,000.0	7,350.0	7,327.9	7,327.0	31.6	12.9	-90.95	1,251.8	-229.4	295.0	250.7	44.26	6.665		
9,100.0	7,350.0	7,328.6	7,327.7	33.2	12.9	-91.56	1,251.8	-229.4	393.4	347.5	45.86	8.577		
9,200.0	7,350.0	7,329.2	7,328.3	34.8	12.9	-92.18	1,251.8	-229.4	492.4	444.9	47.47	10.373		
9,300.0	7,350.0	7,329.9	7,329.0	36.5	12.9	-92.81	1,251.8	-229.4	591.8	542.7	49.08	12.056		
9,400.0	7,350.0	7,330.6	7,329.7	38.1	12.9	-93.43	1,251.8	-229.4	691.3	640.6	50.70	13.635		
9,500.0	7,350.0	7,331.2	7,330.3	39.7	12.9	-94.06	1,251.8	-229.4	791.0	738.6	52.32	15.117		
9,600.0	7,350.0	7,331.9	7,331.0	41.4	12.9	-94.68	1,251.8	-229.4	890.7	836.7	53.94	16.512		
9,700.0	7,350.0	7,332.6	7,331.7	43.1	12.9	-95.31	1,251.8	-229.4	990.5	934.9	55.56	17.827		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 34-35 (EXISTING) - ENCANA WELL - GYRO														Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-66.01	216.4	-486.2	532.4						
100.0	100.0	83.8	83.8	0.2	0.1	-66.03	216.3	-486.5	532.4	532.1	0.30	1,784.387			
200.0	200.0	182.3	182.3	0.3	0.3	-66.10	215.9	-487.2	532.9	532.3	0.64	826.375			
300.0	300.0	281.7	281.7	0.5	0.5	-66.18	215.6	-488.2	533.7	532.7	0.99	537.468			
400.0	400.0	382.9	382.9	0.7	0.7	-66.24	215.4	-489.1	534.4	533.1	1.34	397.594			
500.0	500.0	484.5	484.5	0.8	0.8	-66.28	215.1	-489.7	534.8	533.2	1.70	315.350			
600.0	600.0	584.7	584.7	1.0	1.0	-66.34	214.7	-490.1	535.1	533.1	2.05	261.586			
700.0	700.0	683.3	683.3	1.2	1.2	93.30	214.4	-490.6	535.5	533.1	2.39	223.690			
800.0	800.0	784.3	784.3	1.4	1.4	93.52	214.1	-491.3	536.1	533.4	2.75	195.109			
900.0	899.9	882.7	882.7	1.6	1.5	93.92	213.8	-491.8	536.8	533.7	3.10	173.060			
1,000.0	999.7	982.2	982.1	1.7	1.7	94.51	213.7	-492.6	537.9	534.4	3.47	155.198			
1,100.0	1,099.4	1,080.3	1,080.3	1.9	1.9	95.22	213.6	-493.5	539.3	535.5	3.83	140.662			
1,200.0	1,199.1	1,180.0	1,180.0	2.1	2.1	95.91	213.3	-494.7	541.0	536.8	4.21	128.540			
1,300.0	1,298.9	1,279.9	1,279.8	2.3	2.2	96.58	212.9	-496.0	542.7	538.1	4.59	118.332			
1,400.0	1,398.6	1,379.2	1,379.1	2.6	2.4	97.24	212.5	-497.3	544.6	539.6	4.97	109.669			
1,500.0	1,498.3	1,479.5	1,479.4	2.8	2.6	97.90	211.9	-498.6	546.5	541.2	5.35	102.196			
1,600.0	1,598.1	1,580.4	1,580.3	3.0	2.8	98.57	211.6	-499.8	548.4	542.7	5.73	95.670			
1,700.0	1,697.8	1,680.3	1,680.2	3.2	2.9	99.26	211.3	-500.7	550.2	544.1	6.11	89.975			
1,800.0	1,797.5	1,778.9	1,778.9	3.4	3.1	99.97	211.3	-501.5	552.1	545.6	6.50	85.003			
1,900.0	1,897.2	1,877.6	1,877.5	3.6	3.3	100.70	211.7	-502.3	554.4	547.5	6.88	80.620			
2,000.0	1,997.0	1,975.1	1,975.0	3.8	3.5	101.37	211.9	-503.6	557.0	549.8	7.26	76.761			
2,100.0	2,096.7	2,073.7	2,073.6	4.0	3.6	102.01	212.0	-505.4	560.1	552.5	7.64	73.318			
2,200.0	2,196.4	2,173.1	2,173.0	4.2	3.8	102.62	211.8	-507.4	563.3	555.3	8.02	70.209			
2,300.0	2,296.2	2,272.1	2,271.9	4.5	4.0	103.18	211.5	-509.7	566.7	558.3	8.41	67.403			
2,400.0	2,395.9	2,371.2	2,371.1	4.7	4.2	103.73	211.1	-512.2	570.3	561.5	8.79	64.861			
2,500.0	2,495.6	2,472.2	2,472.0	4.9	4.3	104.27	210.7	-514.7	573.9	564.7	9.18	62.513			
2,600.0	2,595.3	2,572.8	2,572.5	5.1	4.5	104.81	210.2	-517.0	577.3	567.8	9.57	60.344			
2,700.0	2,695.1	2,670.7	2,670.4	5.3	4.7	105.36	209.9	-519.1	580.9	570.9	9.95	58.386			
2,800.0	2,794.8	2,769.4	2,769.1	5.5	4.9	105.92	210.1	-521.4	584.8	574.5	10.33	56.607			
2,900.0	2,894.5	2,867.2	2,866.8	5.7	5.1	106.48	210.3	-523.8	589.0	578.3	10.71	54.986			
3,000.0	2,994.3	2,966.9	2,966.5	6.0	5.2	107.05	210.9	-526.4	593.6	582.5	11.10	53.494			
3,100.0	3,094.0	3,066.4	3,066.0	6.2	5.4	107.64	211.5	-528.8	598.0	586.6	11.48	52.106			
3,200.0	3,193.7	3,165.2	3,164.8	6.4	5.6	108.26	212.7	-530.9	602.7	590.9	11.86	50.836			
3,300.0	3,293.4	3,267.1	3,266.6	6.6	5.8	108.92	214.1	-532.8	607.5	595.2	12.24	49.629			
3,400.0	3,393.2	3,368.0	3,367.5	6.8	5.9	109.55	215.1	-534.5	611.8	599.2	12.62	48.473			
3,500.0	3,492.9	3,466.8	3,466.3	7.0	6.1	110.13	215.9	-536.4	616.3	603.3	13.00	47.403			
3,600.0	3,592.6	3,563.4	3,562.8	7.2	6.3	110.63	216.3	-538.9	621.1	607.7	13.38	46.427			
3,700.0	3,692.4	3,661.3	3,660.7	7.5	6.5	111.05	216.5	-542.3	626.5	612.7	13.76	45.534			
3,800.0	3,792.1	3,757.9	3,757.3	7.7	6.6	111.45	216.7	-546.0	632.1	618.0	14.14	44.716			
3,900.0	3,891.8	3,854.4	3,853.7	7.9	6.8	111.87	217.6	-549.9	638.5	623.9	14.51	43.991			
4,000.0	3,991.5	3,953.0	3,952.2	8.1	7.0	112.31	218.9	-553.9	645.1	630.2	14.89	43.317			
4,100.0	4,091.3	4,051.8	4,050.9	8.3	7.2	112.75	220.2	-558.0	651.9	636.6	15.27	42.687			
4,200.0	4,191.0	4,151.3	4,150.3	8.5	7.4	113.22	222.1	-561.9	658.9	643.2	15.65	42.102			
4,300.0	4,290.7	4,250.5	4,249.4	8.8	7.6	113.77	224.6	-565.0	665.9	649.8	16.02	41.553			
4,400.0	4,390.5	4,349.0	4,347.8	9.0	7.7	114.35	227.5	-567.9	673.1	656.7	16.40	41.051			
4,500.0	4,490.2	4,447.3	4,446.0	9.2	7.9	114.93	230.8	-570.6	680.5	663.7	16.77	40.586			
4,600.0	4,589.9	4,547.0	4,545.7	9.4	8.1	115.51	234.1	-573.6	688.1	671.0	17.14	40.149			
4,700.0	4,689.6	4,648.5	4,647.0	9.6	8.3	116.03	236.9	-576.9	695.6	678.0	17.52	39.707			
4,800.0	4,789.4	4,751.8	4,750.2	9.8	8.5	116.47	238.9	-580.8	702.8	684.9	17.90	39.260			
4,900.0	4,889.1	4,855.2	4,853.6	10.1	8.7	116.86	240.0	-584.5	709.3	691.0	18.29	38.789			
5,000.0	4,988.8	4,959.6	4,957.9	10.3	8.9	117.23	240.6	-588.2	715.5	696.8	18.67	38.316			
5,100.0	5,088.6	5,064.7	5,062.9	10.5	9.0	117.62	240.8	-591.0	720.8	701.7	19.06	37.818			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 34-35 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,188.3	5,165.0	5,163.3	10.7	9.2	117.98	240.5	-593.5	725.7	706.3	19.44	37.334		
5,300.0	5,288.0	5,265.9	5,264.1	10.9	9.4	118.32	240.2	-596.2	730.7	710.9	19.82	36.868		
5,400.0	5,387.7	5,367.5	5,365.6	11.1	9.6	118.65	239.6	-598.7	735.4	715.2	20.20	36.406		
5,500.0	5,487.5	5,469.6	5,467.7	11.3	9.8	119.01	239.0	-600.9	739.9	719.4	20.58	35.952		
5,600.0	5,587.2	5,570.9	5,569.0	11.6	9.9	119.39	238.5	-602.5	744.2	723.2	20.96	35.509		
5,700.0	5,686.9	5,669.7	5,667.9	11.8	10.1	119.80	238.3	-603.6	748.4	727.1	21.33	35.090		
5,800.0	5,786.7	5,768.2	5,766.3	12.0	10.3	120.22	238.4	-604.7	752.9	731.2	21.70	34.700		
5,900.0	5,886.4	5,868.0	5,866.1	12.2	10.5	120.68	238.9	-605.5	757.5	735.4	22.06	34.330		
6,000.0	5,986.1	5,968.3	5,966.4	12.4	10.6	121.16	239.5	-605.9	762.0	739.6	22.43	33.972		
6,100.0	6,085.8	6,068.7	6,066.8	12.6	10.8	121.64	240.1	-606.3	766.6	743.8	22.80	33.625		
6,200.0	6,185.6	6,168.7	6,166.8	12.9	11.0	122.09	240.5	-606.8	771.1	747.9	23.16	33.288		
6,300.0	6,285.3	6,266.6	6,264.6	13.1	11.1	122.52	240.9	-607.5	775.7	752.2	23.53	32.971		
6,400.0	6,385.0	6,366.6	6,364.7	13.3	11.3	122.96	241.4	-608.2	780.6	756.7	23.89	32.671		
6,500.0	6,484.8	6,466.2	6,464.2	13.5	11.5	123.38	241.8	-609.0	785.4	761.2	24.26	32.377		
6,600.0	6,584.5	6,565.6	6,563.7	13.7	11.7	123.79	242.3	-609.9	790.4	765.8	24.62	32.099		
6,700.0	6,684.4	6,665.0	6,663.1	13.9	11.8	-15.57	242.7	-610.7	789.7	764.8	24.90	31.719		
6,800.0	6,783.3	6,763.8	6,761.9	13.9	12.0	-29.68	243.3	-611.6	777.9	752.9	24.93	31.199		
6,900.0	6,879.3	6,860.2	6,858.3	13.8	12.2	-34.68	243.9	-612.2	755.2	730.4	24.76	30.494		
7,000.0	6,970.5	6,951.3	6,949.3	13.6	12.3	-39.49	244.6	-612.8	722.5	698.0	24.47	29.525		
7,100.0	7,055.2	7,035.3	7,033.4	13.4	12.5	-45.35	245.3	-613.3	681.6	657.4	24.20	28.170		
7,200.0	7,131.7	7,111.9	7,109.9	13.3	12.6	-52.72	246.0	-613.9	634.5	610.4	24.12	26.306		
7,300.0	7,198.5	7,181.6	7,179.6	13.2	12.7	-61.67	246.8	-614.1	584.0	559.6	24.40	23.933		
7,400.0	7,254.3	7,240.6	7,238.6	13.2	12.8	-71.36	247.5	-614.1	534.1	509.1	24.99	21.369		
7,500.0	7,298.0	7,287.2	7,285.3	13.4	12.9	-80.34	248.1	-613.8	490.0	464.4	25.68	19.082		
7,600.0	7,328.8	7,319.5	7,317.6	13.9	13.0	-86.95	248.4	-613.5	458.3	432.0	26.33	17.411		
7,700.0	7,346.1	7,337.7	7,335.8	14.5	13.0	-90.34	248.6	-613.3	445.3	418.3	27.00	16.492		
7,709.6	7,347.1	7,338.8	7,336.8	14.6	13.0	-90.48	248.7	-613.3	445.2	418.1	27.08	16.440 CC, ES		
7,800.0	7,350.0	7,342.6	7,340.7	15.3	13.0	-90.60	248.7	-613.3	454.5	426.6	27.82	16.335 SF		
7,900.0	7,350.0	7,343.7	7,341.7	16.2	13.0	-90.73	248.7	-613.3	484.6	455.8	28.79	16.834		
8,000.0	7,350.0	7,344.7	7,342.7	17.3	13.0	-90.87	248.7	-613.3	532.2	502.3	29.88	17.808		
8,100.0	7,350.0	7,345.7	7,343.8	18.5	13.0	-91.00	248.7	-613.3	592.9	561.8	31.08	19.076		
8,200.0	7,350.0	7,346.8	7,344.8	19.8	13.0	-91.13	248.7	-613.3	663.2	630.9	32.36	20.494		
8,300.0	7,350.0	7,347.8	7,345.8	21.1	13.0	-91.26	248.7	-613.2	740.4	706.7	33.71	21.962		
8,400.0	7,350.0	7,348.8	7,346.8	22.5	13.0	-91.39	248.8	-613.2	822.5	787.4	35.12	23.421		
8,500.0	7,350.0	7,349.8	7,347.8	23.9	13.0	-91.52	248.8	-613.2	908.2	871.6	36.57	24.835		
8,600.0	7,350.0	7,350.8	7,348.8	25.4	13.0	-91.65	248.8	-613.2	996.6	958.5	38.06	26.184		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 43-35 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
8,400.0	7,350.0	7,211.9	7,009.6	22.5	19.3	59.58	1,686.3	375.9	976.9	945.1	31.85	30.671		
8,500.0	7,350.0	7,204.4	7,003.5	23.9	19.3	58.91	1,686.8	371.6	902.8	869.9	32.93	27.417		
8,600.0	7,350.0	7,200.0	6,999.9	25.4	19.2	58.51	1,687.1	369.1	834.2	800.1	34.10	24.464		
8,700.0	7,350.0	7,191.8	6,993.2	26.9	19.1	57.77	1,687.6	364.4	772.3	737.1	35.18	21.952		
8,800.0	7,350.0	7,186.1	6,988.5	28.5	19.1	57.25	1,688.0	361.1	719.0	682.6	36.33	19.791		
8,900.0	7,350.0	7,180.4	6,983.9	30.0	19.0	56.73	1,688.4	357.8	676.3	638.8	37.48	18.044		
9,000.0	7,350.0	7,174.6	6,979.2	31.6	19.0	56.21	1,688.8	354.6	646.3	607.7	38.63	16.732		
9,100.0	7,350.0	7,168.9	6,974.5	33.2	18.9	55.69	1,689.2	351.3	630.9	591.1	39.77	15.862		
9,149.0	7,350.0	7,166.1	6,972.2	34.0	18.9	55.44	1,689.3	349.7	629.0	588.6	40.33	15.595 CC, ES		
9,200.0	7,350.0	7,163.2	6,969.8	34.8	18.9	55.17	1,689.5	348.1	631.0	590.1	40.91	15.425		
9,300.0	7,350.0	7,157.5	6,965.1	36.5	18.8	54.65	1,689.9	344.9	646.8	604.7	42.04	15.386 SF		
9,400.0	7,350.0	7,151.8	6,960.4	38.1	18.7	54.14	1,690.3	341.7	677.0	633.9	43.16	15.688		
9,500.0	7,350.0	7,146.1	6,955.7	39.7	18.7	53.62	1,690.7	338.5	720.0	675.7	44.26	16.266		
9,600.0	7,350.0	7,140.5	6,951.0	41.4	18.6	53.10	1,691.1	335.3	773.5	728.1	45.36	17.053		
9,700.0	7,350.0	7,134.8	6,946.3	43.1	18.6	52.59	1,691.5	332.1	835.5	789.1	46.44	17.992		
9,800.0	7,350.0	7,129.1	6,941.7	44.7	18.5	52.08	1,691.8	328.9	904.3	856.8	47.50	19.037		
9,900.0	7,350.0	7,123.5	6,937.0	46.4	18.5	51.56	1,692.2	325.8	978.5	929.9	48.55	20.154		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 44-35 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Offset Wellbore Centre +N/-S (ft)		+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	76.62	156.0	655.5	674.3					
100.0	100.0	74.3	74.3	0.2	0.1	76.61	156.1	655.5	673.9	673.6	0.28	2,391.867 CC		
200.0	200.0	173.7	173.7	0.3	0.3	76.56	156.6	655.6	674.0	673.4	0.63	1,070.129		
300.0	300.0	274.7	274.7	0.5	0.5	76.52	157.2	655.6	674.2	673.2	0.98	687.300		
400.0	400.0	372.1	372.1	0.7	0.7	76.44	158.1	655.5	674.3	673.0	1.33	508.420 ES		
500.0	500.0	468.0	468.0	0.8	0.8	76.31	159.8	655.9	675.1	673.4	1.67	404.465		
600.0	600.0	563.5	563.5	1.0	1.0	76.21	161.2	656.8	676.4	674.4	2.01	336.521		
700.0	700.0	659.2	659.2	1.2	1.2	-124.25	162.0	658.7	679.0	676.6	2.35	288.568		
800.0	800.0	758.4	758.3	1.4	1.3	-124.32	161.7	661.3	682.9	680.2	2.70	252.901		
900.0	899.9	860.3	860.2	1.6	1.5	-124.48	161.0	663.9	687.7	684.6	3.06	224.994		
1,000.0	999.7	961.0	960.8	1.7	1.7	-124.76	160.4	666.1	693.2	689.8	3.42	202.920		
1,100.0	1,099.4	1,060.9	1,060.7	1.9	1.9	-125.14	159.8	668.3	699.4	695.6	3.78	185.062		
1,200.0	1,199.1	1,163.3	1,163.1	2.1	2.0	-125.57	159.4	670.4	705.5	701.3	4.15	170.020		
1,300.0	1,298.9	1,264.8	1,264.6	2.3	2.2	-126.00	158.9	671.9	711.2	706.6	4.52	157.347		
1,400.0	1,398.6	1,364.6	1,364.3	2.6	2.4	-126.41	158.5	673.4	716.8	711.9	4.89	146.643		
1,500.0	1,498.3	1,470.9	1,470.7	2.8	2.6	-126.86	158.2	674.6	722.2	716.9	5.27	137.077		
1,600.0	1,598.1	1,576.3	1,576.1	3.0	2.8	-127.34	158.1	674.5	726.5	720.9	5.65	128.646		
1,700.0	1,697.8	1,675.6	1,675.4	3.2	2.9	-127.83	158.4	673.9	730.6	724.5	6.02	121.440		
1,800.0	1,797.5	1,773.5	1,773.3	3.4	3.1	-128.33	159.0	673.5	734.9	728.5	6.38	115.153		
1,900.0	1,897.2	1,870.9	1,870.7	3.6	3.3	-128.85	160.0	673.2	739.5	732.8	6.75	109.617		
2,000.0	1,997.0	1,966.4	1,966.1	3.8	3.4	-129.37	161.3	673.2	744.6	737.5	7.11	104.764		
2,100.0	2,096.7	2,063.1	2,062.8	4.0	3.6	-129.89	162.9	673.7	750.4	742.9	7.47	100.439		
2,200.0	2,196.4	2,160.5	2,160.2	4.2	3.8	-130.40	164.5	674.5	756.4	748.6	7.83	96.548		
2,300.0	2,296.2	2,258.9	2,258.6	4.5	4.0	-130.93	166.4	675.5	762.8	754.6	8.20	93.027		
2,400.0	2,395.9	2,361.4	2,361.1	4.7	4.1	-131.41	167.7	676.7	769.2	760.7	8.57	89.733		
2,500.0	2,495.6	2,463.4	2,463.0	4.9	4.3	-131.87	168.6	677.5	775.2	766.2	8.94	86.678		
2,600.0	2,595.3	2,563.0	2,562.7	5.1	4.5	-132.29	169.2	678.2	781.1	771.8	9.31	83.897		
2,700.0	2,695.1	2,663.3	2,663.0	5.3	4.7	-132.70	169.7	679.1	787.0	777.4	9.68	81.324		
2,800.0	2,794.8	2,763.5	2,763.1	5.5	4.8	-133.08	169.9	679.9	792.9	782.9	10.04	78.937		
2,900.0	2,894.5	2,868.3	2,868.0	5.7	5.0	-133.46	169.9	680.7	798.6	788.2	10.42	76.643		
3,000.0	2,994.3	2,975.8	2,975.4	6.0	5.2	-133.78	168.5	680.9	803.4	792.6	10.80	74.391		
3,100.0	3,094.0	3,080.6	3,080.2	6.2	5.4	-134.02	166.0	680.7	807.4	796.2	11.18	72.244		
3,200.0	3,193.7	3,180.8	3,180.4	6.4	5.6	-134.29	164.1	679.9	811.0	799.5	11.54	70.262		
3,300.0	3,293.4	3,281.1	3,280.7	6.6	5.7	-134.59	162.6	679.0	814.7	802.8	11.91	68.407		
3,400.0	3,393.2	3,377.1	3,376.7	6.8	5.9	-134.90	161.5	678.1	818.6	806.3	12.27	66.720		
3,500.0	3,492.9	3,474.4	3,474.0	7.0	6.1	-135.26	161.3	677.3	823.0	810.3	12.63	65.166		
3,600.0	3,592.6	3,574.8	3,574.4	7.2	6.3	-135.67	161.5	676.4	827.5	814.5	12.99	63.689		
3,700.0	3,692.4	3,675.7	3,675.3	7.5	6.4	-136.08	161.9	675.2	831.9	818.5	13.36	62.282		
3,800.0	3,792.1	3,780.3	3,779.8	7.7	6.6	-136.51	162.2	673.7	836.0	822.3	13.73	60.907		
3,900.0	3,891.8	3,884.2	3,883.7	7.9	6.8	-136.92	162.0	671.7	839.6	825.5	14.09	59.569		
4,000.0	3,991.5	3,986.5	3,986.0	8.1	7.0	-137.32	161.6	669.4	842.8	828.4	14.46	58.287		
4,100.0	4,091.3	4,087.6	4,087.1	8.3	7.1	-137.73	161.4	666.8	845.9	831.0	14.82	57.067		
4,200.0	4,191.0	4,189.4	4,188.8	8.5	7.3	-138.18	161.7	663.7	848.8	833.6	15.18	55.897		
4,300.0	4,290.7	4,288.7	4,288.1	8.8	7.5	-138.65	162.3	660.3	851.6	836.1	15.54	54.795		
4,400.0	4,390.5	4,384.3	4,383.5	9.0	7.7	-139.12	163.3	657.2	854.8	838.9	15.89	53.786		
4,500.0	4,490.2	4,480.1	4,479.3	9.2	7.8	-139.61	164.8	654.3	858.5	842.2	16.24	52.857		
4,600.0	4,589.9	4,573.4	4,572.5	9.4	8.0	-140.09	166.6	651.9	862.8	846.2	16.59	52.019		
4,700.0	4,689.6	4,669.7	4,668.9	9.6	8.2	-140.54	168.3	650.2	867.9	850.9	16.94	51.241		
4,800.0	4,789.4	4,771.5	4,770.6	9.8	8.3	-140.96	169.5	648.9	873.0	855.7	17.30	50.475		
4,900.0	4,889.1	4,871.1	4,870.3	10.1	8.5	-141.34	170.1	647.7	878.0	860.3	17.65	49.737		
5,000.0	4,988.8	4,974.0	4,973.1	10.3	8.7	-141.70	170.3	646.5	883.0	865.0	18.01	49.014		
5,100.0	5,088.6	5,074.7	5,073.8	10.5	8.9	-142.02	170.0	645.3	887.6	869.2	18.37	48.310		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 44-35 (EXISTING) - ENCANA WELL - GYRO													Offset Site Error:	0.0 ft
Survey Program: 100-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,188.3	5,175.7	5,174.8	10.7	9.0	-142.31	169.4	644.3	892.2	873.5	18.73	47.631		
5,300.0	5,288.0	5,275.5	5,274.6	10.9	9.2	-142.58	168.4	643.4	896.7	877.7	19.09	46.977		
5,400.0	5,387.7	5,373.9	5,373.0	11.1	9.4	-142.84	167.6	642.5	901.4	881.9	19.44	46.359		
5,500.0	5,487.5	5,471.7	5,470.8	11.3	9.6	-143.11	166.9	641.7	906.2	886.4	19.80	45.777		
5,600.0	5,587.2	5,568.6	5,567.7	11.6	9.7	-143.38	166.6	641.0	911.4	891.2	20.15	45.234		
5,700.0	5,686.9	5,663.1	5,662.2	11.8	9.9	-143.65	166.5	640.7	916.9	896.4	20.49	44.741		
5,800.0	5,786.7	5,754.9	5,754.0	12.0	10.0	-143.92	166.9	640.8	923.3	902.4	20.84	44.310		
5,900.0	5,886.4	5,850.6	5,849.6	12.2	10.2	-144.18	167.7	641.7	930.4	909.2	21.18	43.920		
6,000.0	5,986.1	5,954.6	5,953.6	12.4	10.4	-144.48	168.6	642.4	937.5	916.0	21.55	43.513		
6,100.0	6,085.8	6,058.3	6,057.3	12.6	10.6	-144.78	169.3	642.6	944.0	922.1	21.91	43.094		
6,200.0	6,185.6	6,157.6	6,156.7	12.9	10.8	-145.06	169.9	642.6	950.4	928.1	22.26	42.698		
6,300.0	6,285.3	6,256.6	6,255.7	13.1	10.9	-145.34	170.6	642.7	956.9	934.3	22.61	42.321		
6,400.0	6,385.0	6,358.6	6,357.6	13.3	11.1	-145.63	171.2	642.8	963.4	940.4	22.97	41.946		
6,500.0	6,484.8	6,460.5	6,459.6	13.5	11.3	-145.90	171.6	642.6	969.6	946.3	23.32	41.570		
6,600.0	6,584.5	6,559.5	6,558.6	13.7	11.5	-146.18	172.1	642.3	975.7	952.0	23.68	41.212		
6,700.0	6,684.4	6,661.0	6,660.1	13.9	11.6	74.29	172.6	642.0	977.8	953.9	23.99	40.766		
6,800.0	6,783.3	6,764.3	6,763.4	13.9	11.8	62.39	172.9	641.4	971.5	947.3	24.20	40.149		
6,900.0	6,879.3	6,863.1	6,862.2	13.8	12.0	62.03	172.8	640.6	957.3	933.0	24.33	39.342		
7,000.0	6,970.5	6,955.9	6,954.9	13.6	12.1	64.40	172.6	639.7	936.5	912.1	24.44	38.312		
7,100.0	7,055.2	7,040.8	7,039.8	13.4	12.3	68.29	172.5	638.8	910.9	886.3	24.59	37.045		
7,200.0	7,131.7	7,116.2	7,115.2	13.3	12.4	73.11	172.2	638.1	882.9	858.1	24.80	35.598		
7,300.0	7,198.5	7,181.4	7,180.4	13.2	12.5	78.27	172.0	637.5	855.3	830.2	25.08	34.101		
7,400.0	7,254.3	7,236.4	7,235.4	13.2	12.6	83.21	172.0	637.1	831.1	805.6	25.42	32.698		
7,500.0	7,298.0	7,279.8	7,278.8	13.4	12.7	87.28	172.1	636.7	813.3	787.5	25.81	31.508		
7,600.0	7,328.8	7,310.3	7,309.3	13.9	12.8	89.95	172.2	636.5	804.7	778.4	26.31	30.581		
7,627.6	7,335.0	7,316.3	7,315.3	14.0	12.8	90.39	172.2	636.5	804.3	777.8	26.50	30.351		
7,700.0	7,346.1	7,327.2	7,326.3	14.5	12.8	90.89	172.2	636.4	807.4	780.4	26.98	29.931		
7,800.0	7,350.0	7,331.1	7,330.2	15.3	12.8	90.37	172.2	636.4	822.0	794.2	27.80	29.570		
7,900.0	7,350.0	7,331.3	7,330.3	16.2	12.8	90.38	172.2	636.4	848.1	819.3	28.76	29.484 SF		
8,000.0	7,350.0	7,331.4	7,330.5	17.3	12.8	90.39	172.2	636.4	884.8	855.0	29.86	29.633		
8,100.0	7,350.0	7,331.6	7,330.6	18.5	12.8	90.40	172.2	636.4	930.9	899.8	31.06	29.974		
8,200.0	7,350.0	7,331.7	7,330.8	19.8	12.8	90.41	172.2	636.4	985.0	952.6	32.34	30.459		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 4-6-35 (EXISTING) - ENCANA WELL - SURVEYS												Offset Site Error: 0.0 ft	
Survey Program: 806-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
8,000.0	7,350.0	7,469.5	7,341.2	17.3	23.9	-89.69	879.4	-1,071.8	965.1	927.6	37.52	25.721	CC, ES
8,100.0	7,350.0	7,470.1	7,341.8	18.5	23.9	-89.73	879.4	-1,071.8	934.7	896.0	38.72	24.140	
8,200.0	7,350.0	7,470.7	7,342.4	19.8	23.9	-89.77	879.5	-1,071.8	914.2	874.2	40.00	22.855	
8,300.0	7,350.0	7,471.3	7,342.9	21.1	23.9	-89.81	879.5	-1,071.8	904.4	863.1	41.35	21.872	
8,339.1	7,350.0	7,471.5	7,343.2	21.6	23.9	-89.82	879.5	-1,071.8	903.6	861.7	41.90	21.564	
8,400.0	7,350.0	7,471.9	7,343.5	22.5	23.9	-89.84	879.5	-1,071.8	905.6	862.9	42.76	21.180	
8,500.0	7,350.0	7,472.5	7,344.1	23.9	23.9	-89.88	879.5	-1,071.8	917.8	873.6	44.21	20.759	SF
8,600.0	7,350.0	7,473.1	7,344.7	25.4	23.9	-89.92	879.5	-1,071.8	940.5	894.8	45.70	20.579	
8,700.0	7,350.0	7,473.7	7,345.3	26.9	23.9	-89.96	879.5	-1,071.8	973.0	925.8	47.23	20.603	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4A-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.94	0.0	-30.2	30.2					
100.0	100.0	100.0	100.0	0.2	0.2	-89.94	0.0	-30.2	30.2	29.9	0.30	99.374		
200.0	200.0	200.0	200.0	0.3	0.3	-89.94	0.0	-30.2	30.2	29.5	0.65	46.233	CC, ES	
300.0	300.0	299.5	299.5	0.5	0.5	-90.49	-0.3	-31.0	31.0	30.0	1.00	30.966		
400.0	400.0	398.9	398.9	0.7	0.7	-91.97	-1.2	-33.4	33.5	32.1	1.35	24.803		
500.0	500.0	498.3	498.1	0.8	0.9	-94.02	-2.6	-37.5	37.6	35.9	1.70	22.161		
600.0	600.0	597.4	597.1	1.0	1.1	-96.22	-4.7	-43.1	43.5	41.4	2.05	21.257		
700.0	700.0	696.3	695.7	1.2	1.3	62.11	-7.3	-50.4	50.7	48.3	2.40	21.142		
800.0	800.0	795.1	794.0	1.4	1.5	62.27	-10.6	-59.2	58.7	56.0	2.75	21.367		
900.0	899.9	893.6	891.9	1.6	1.8	63.34	-14.4	-69.6	67.7	64.6	3.11	21.777		
1,000.0	999.7	991.9	989.4	1.7	2.0	64.96	-18.7	-81.5	77.5	74.0	3.48	22.294		
1,100.0	1,099.4	1,089.9	1,086.3	1.9	2.3	66.66	-23.6	-95.0	88.6	84.7	3.86	22.952		
1,200.0	1,199.1	1,187.5	1,182.7	2.1	2.6	67.72	-29.1	-109.9	101.3	97.1	4.25	23.839		
1,300.0	1,298.9	1,284.8	1,278.3	2.3	3.0	68.26	-35.1	-126.3	115.6	111.0	4.64	24.902		
1,400.0	1,398.6	1,383.6	1,375.4	2.6	3.3	68.58	-41.5	-143.8	130.7	125.7	5.04	25.917		
1,500.0	1,498.3	1,482.5	1,472.5	2.8	3.7	68.82	-47.9	-161.2	145.9	140.4	5.45	26.768		
1,600.0	1,598.1	1,581.4	1,569.6	3.0	4.0	69.02	-54.2	-178.7	161.0	155.1	5.86	27.490		
1,700.0	1,697.8	1,680.2	1,666.7	3.2	4.4	69.19	-60.6	-196.1	176.1	169.8	6.26	28.109		
1,800.0	1,797.5	1,779.1	1,763.8	3.4	4.7	69.33	-67.0	-213.6	191.2	184.5	6.67	28.645		
1,900.0	1,897.2	1,877.9	1,860.9	3.6	5.1	69.45	-73.4	-231.0	206.3	199.2	7.09	29.113		
2,000.0	1,997.0	1,976.8	1,958.0	3.8	5.5	69.56	-79.7	-248.4	221.4	213.9	7.50	29.525		
2,100.0	2,096.7	2,075.6	2,055.1	4.0	5.8	69.65	-86.1	-265.9	236.5	228.6	7.91	29.891		
2,200.0	2,196.4	2,174.5	2,152.1	4.2	6.2	69.73	-92.5	-283.3	251.6	243.3	8.33	30.217		
2,300.0	2,296.2	2,273.3	2,249.2	4.5	6.6	69.80	-98.9	-300.8	266.8	258.0	8.74	30.509		
2,400.0	2,395.9	2,372.2	2,346.3	4.7	6.9	69.86	-105.2	-318.2	281.9	272.7	9.16	30.773		
2,500.0	2,495.6	2,471.0	2,443.4	4.9	7.3	69.92	-111.6	-335.7	297.0	287.4	9.58	31.012		
2,600.0	2,595.3	2,569.9	2,540.5	5.1	7.7	69.97	-118.0	-353.1	312.1	302.1	9.99	31.230		
2,700.0	2,695.1	2,668.7	2,637.6	5.3	8.0	70.01	-124.4	-370.5	327.2	316.8	10.41	31.429		
2,800.0	2,794.8	2,767.6	2,734.7	5.5	8.4	70.06	-130.7	-388.0	342.3	331.5	10.83	31.612		
2,900.0	2,894.5	2,866.4	2,831.8	5.7	8.8	70.09	-137.1	-405.4	357.5	346.2	11.25	31.780		
3,000.0	2,994.3	2,965.3	2,928.9	6.0	9.1	70.13	-143.5	-422.9	372.6	360.9	11.67	31.935		
3,100.0	3,094.0	3,064.1	3,026.0	6.2	9.5	70.16	-149.9	-440.3	387.7	375.6	12.09	32.079		
3,200.0	3,193.7	3,163.0	3,123.0	6.4	9.9	70.19	-156.2	-457.8	402.8	390.3	12.50	32.212		
3,300.0	3,293.4	3,261.8	3,220.1	6.6	10.3	70.22	-162.6	-475.2	417.9	405.0	12.92	32.337		
3,400.0	3,393.2	3,360.7	3,317.2	6.8	10.6	70.25	-169.0	-492.6	433.0	419.7	13.34	32.453		
3,500.0	3,492.9	3,459.5	3,414.3	7.0	11.0	70.27	-175.4	-510.1	448.2	434.4	13.76	32.561		
3,600.0	3,592.6	3,558.4	3,511.4	7.2	11.4	70.29	-181.7	-527.5	463.3	449.1	14.18	32.663		
3,700.0	3,692.4	3,657.2	3,608.5	7.5	11.7	70.32	-188.1	-545.0	478.4	463.8	14.60	32.759		
3,800.0	3,792.1	3,756.1	3,705.6	7.7	12.1	70.34	-194.5	-562.4	493.5	478.5	15.02	32.848		
3,900.0	3,891.8	3,854.9	3,802.7	7.9	12.5	70.35	-200.9	-579.8	508.6	493.2	15.44	32.933		
4,000.0	3,991.5	3,953.8	3,899.8	8.1	12.8	70.37	-207.2	-597.3	523.7	507.9	15.86	33.013		
4,100.0	4,091.3	4,052.6	3,996.9	8.3	13.2	70.39	-213.6	-614.7	538.9	522.6	16.29	33.089		
4,200.0	4,191.0	4,151.5	4,094.0	8.5	13.6	70.40	-220.0	-632.2	554.0	537.3	16.71	33.161		
4,300.0	4,290.7	4,250.3	4,191.0	8.8	14.0	70.42	-226.4	-649.6	569.1	552.0	17.13	33.229		
4,400.0	4,390.5	4,349.2	4,288.1	9.0	14.3	70.43	-232.7	-667.1	584.2	566.7	17.55	33.293		
4,500.0	4,490.2	4,448.0	4,385.2	9.2	14.7	70.45	-239.1	-684.5	599.3	581.4	17.97	33.354		
4,600.0	4,589.9	4,546.9	4,482.3	9.4	15.1	70.46	-245.5	-701.9	614.4	596.1	18.39	33.413		
4,700.0	4,689.6	4,645.7	4,579.4	9.6	15.4	70.47	-251.9	-719.4	629.6	610.8	18.81	33.469		
4,800.0	4,789.4	4,744.6	4,676.5	9.8	15.8	70.48	-258.2	-736.8	644.7	625.5	19.23	33.522		
4,900.0	4,889.1	4,843.4	4,773.6	10.1	16.2	70.50	-264.6	-754.3	659.8	640.1	19.65	33.572		
5,000.0	4,988.8	4,942.3	4,870.7	10.3	16.6	70.51	-271.0	-771.7	674.9	654.8	20.07	33.621		
5,100.0	5,088.6	5,041.1	4,967.8	10.5	16.9	70.52	-277.4	-789.2	690.0	669.5	20.50	33.667		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4A-35H-O367 - Hz - Plan #1												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
5,200.0	5,188.3	5,140.0	5,064.9	10.7	17.3	70.53	-283.7	-806.6	705.2	684.2	20.92	33.712	
5,300.0	5,288.0	5,238.8	5,161.9	10.9	17.7	70.54	-290.1	-824.0	720.3	698.9	21.34	33.755	
5,400.0	5,387.7	5,337.7	5,259.0	11.1	18.0	70.54	-296.5	-841.5	735.4	713.6	21.76	33.796	
5,500.0	5,487.5	5,436.5	5,356.1	11.3	18.4	70.55	-302.9	-858.9	750.5	728.3	22.18	33.835	
5,600.0	5,587.2	5,535.4	5,453.2	11.6	18.8	70.56	-309.2	-876.4	765.6	743.0	22.60	33.873	
5,700.0	5,686.9	5,634.2	5,550.3	11.8	19.1	70.57	-315.6	-893.8	780.7	757.7	23.02	33.909	
5,800.0	5,786.7	5,733.1	5,647.4	12.0	19.5	70.58	-322.0	-911.3	795.9	772.4	23.45	33.944	
5,900.0	5,886.4	5,831.9	5,744.5	12.2	19.9	70.58	-328.4	-928.7	811.0	787.1	23.87	33.978	
6,000.0	5,986.1	5,930.8	5,841.6	12.4	20.3	70.59	-334.7	-946.1	826.1	801.8	24.29	34.010	
6,100.0	6,085.8	6,029.6	5,938.7	12.6	20.6	70.60	-341.1	-963.6	841.2	816.5	24.71	34.042	
6,200.0	6,185.6	6,128.5	6,035.8	12.9	21.0	70.60	-347.5	-981.0	856.3	831.2	25.13	34.072	
6,300.0	6,285.3	6,227.3	6,132.9	13.1	21.4	70.61	-353.9	-998.5	871.5	845.9	25.55	34.101	
6,400.0	6,385.0	6,326.2	6,229.9	13.3	21.7	70.62	-360.2	-1,015.9	886.6	860.6	25.98	34.130	
6,500.0	6,484.8	6,425.0	6,327.0	13.5	22.1	70.62	-366.6	-1,033.3	901.7	875.3	26.40	34.157	
6,600.0	6,584.5	6,523.9	6,424.1	13.7	22.5	70.63	-373.0	-1,050.8	916.8	890.0	26.82	34.183	
6,700.0	6,684.4	6,620.2	6,518.9	13.9	22.8	-67.81	-375.8	-1,067.8	931.9	904.6	27.28	34.160	
6,800.0	6,783.3	6,716.1	6,612.7	13.9	23.1	-79.94	-366.1	-1,084.7	946.7	919.3	27.48	34.457	
6,900.0	6,879.3	6,812.6	6,705.0	13.8	23.3	-81.81	-343.7	-1,101.2	961.2	933.8	27.42	35.051	
7,000.0	6,970.5	6,909.8	6,794.1	13.6	23.4	-82.18	-308.5	-1,117.3	975.0	947.8	27.15	35.906	
7,100.0	7,055.2	7,007.9	6,878.5	13.4	23.6	-82.12	-261.0	-1,132.4	987.7	961.0	26.73	36.947	
7,200.0	7,131.7	7,106.9	6,956.3	13.3	23.7	-81.92	-201.5	-1,146.4	999.3	973.1	26.27	38.043	
11,500.0	7,350.0	11,517.8	7,200.0	73.8	77.8	-81.19	4,135.0	-1,149.3	991.4	843.0	148.45	6.678	
11,600.0	7,350.0	11,616.2	7,200.0	75.5	79.4	-80.97	4,232.9	-1,139.8	974.0	821.9	152.09	6.404	
11,700.0	7,350.0	11,713.9	7,200.0	77.2	81.0	-80.71	4,330.2	-1,130.3	953.2	797.7	155.50	6.130	
11,800.0	7,350.0	11,811.3	7,200.0	78.9	82.6	-80.48	4,427.1	-1,120.9	930.7	772.0	158.74	5.863	
11,886.7	7,350.0	11,828.9	7,200.0	80.4	82.9	-80.44	4,444.7	-1,119.2	913.6	753.1	160.49	5.693 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4B-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.94	0.0	-22.6	22.6					
100.0	100.0	100.0	100.0	0.2	0.2	-89.94	0.0	-22.6	22.6	22.3	0.30	74.530	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-89.94	0.0	-22.6	22.6	22.0	0.65	34.675		
300.0	300.0	300.0	300.0	0.5	0.5	-89.94	0.0	-22.6	22.6	21.6	1.00	22.593		
400.0	400.0	399.6	399.6	0.7	0.7	-90.88	-0.4	-23.4	23.4	22.1	1.35	17.342		
500.0	500.0	499.2	499.2	0.8	0.9	-93.37	-1.5	-25.7	25.8	24.1	1.70	15.185		
600.0	600.0	598.7	598.5	1.0	1.0	-96.62	-3.4	-29.6	29.8	27.8	2.05	14.579		
700.0	700.0	698.0	697.7	1.2	1.2	60.87	-6.1	-35.0	35.2	32.8	2.40	14.670		
800.0	800.0	797.2	796.5	1.4	1.4	60.70	-9.6	-41.9	41.4	38.6	2.75	15.029		
900.0	899.9	896.2	895.1	1.6	1.7	61.74	-13.8	-50.4	48.3	45.2	3.11	15.531		
1,000.0	999.7	995.0	993.3	1.7	1.9	63.48	-18.7	-60.3	56.1	52.6	3.48	16.115		
1,100.0	1,099.4	1,093.6	1,091.1	1.9	2.2	65.24	-24.4	-71.8	65.1	61.2	3.87	16.823		
1,200.0	1,199.1	1,192.6	1,189.1	2.1	2.5	66.19	-30.7	-84.5	75.3	71.1	4.26	17.687		
1,300.0	1,298.9	1,292.1	1,287.5	2.3	2.7	66.87	-37.1	-97.5	85.7	81.1	4.66	18.413		
1,400.0	1,398.6	1,391.5	1,385.9	2.6	3.0	67.41	-43.5	-110.4	96.2	91.1	5.06	19.011		
1,500.0	1,498.3	1,491.0	1,484.3	2.8	3.3	67.84	-49.9	-123.3	106.6	101.1	5.46	19.510		
1,600.0	1,598.1	1,590.4	1,582.7	3.0	3.6	68.20	-56.4	-136.2	117.0	111.2	5.87	19.932		
1,700.0	1,697.8	1,689.9	1,681.1	3.2	3.9	68.49	-62.8	-149.2	127.5	121.2	6.28	20.292		
1,800.0	1,797.5	1,789.4	1,779.5	3.4	4.2	68.75	-69.2	-162.1	137.9	131.2	6.69	20.604		
1,900.0	1,897.2	1,888.8	1,877.9	3.6	4.5	68.96	-75.6	-175.0	148.4	141.3	7.11	20.875		
2,000.0	1,997.0	1,988.3	1,976.3	3.8	4.8	69.15	-82.0	-188.0	158.8	151.3	7.52	21.113		
2,100.0	2,096.7	2,087.7	2,074.7	4.0	5.1	69.31	-88.4	-200.9	169.3	161.3	7.94	21.324		
2,200.0	2,196.4	2,187.2	2,173.1	4.2	5.4	69.46	-94.9	-213.8	179.7	171.4	8.35	21.511		
2,300.0	2,296.2	2,286.6	2,271.5	4.5	5.7	69.59	-101.3	-226.7	190.2	181.4	8.77	21.679		
2,400.0	2,395.9	2,386.1	2,369.9	4.7	6.0	69.71	-107.7	-239.7	200.6	191.4	9.19	21.830		
2,500.0	2,495.6	2,485.5	2,468.3	4.9	6.3	69.81	-114.1	-252.6	211.1	201.5	9.61	21.967		
2,600.0	2,595.3	2,585.0	2,566.7	5.1	6.6	69.90	-120.5	-265.5	221.5	211.5	10.03	22.091		
2,700.0	2,695.1	2,684.4	2,665.1	5.3	6.9	69.99	-126.9	-278.5	232.0	221.5	10.45	22.204		
2,800.0	2,794.8	2,783.9	2,763.5	5.5	7.2	70.07	-133.4	-291.4	242.4	231.6	10.87	22.308		
2,900.0	2,894.5	2,883.3	2,861.9	5.7	7.6	70.14	-139.8	-304.3	252.9	241.6	11.29	22.404		
3,000.0	2,994.3	2,982.8	2,960.3	6.0	7.9	70.21	-146.2	-317.3	263.3	251.6	11.71	22.492		
3,100.0	3,094.0	3,082.2	3,058.7	6.2	8.2	70.27	-152.6	-330.2	273.8	261.7	12.13	22.573		
3,200.0	3,193.7	3,181.7	3,157.0	6.4	8.5	70.33	-159.0	-343.1	284.3	271.7	12.55	22.648		
3,300.0	3,293.4	3,281.1	3,255.4	6.6	8.8	70.38	-165.4	-356.0	294.7	281.7	12.97	22.719		
3,400.0	3,393.2	3,380.6	3,353.8	6.8	9.1	70.43	-171.8	-369.0	305.2	291.8	13.39	22.784		
3,500.0	3,492.9	3,480.0	3,452.2	7.0	9.4	70.47	-178.3	-381.9	315.6	301.8	13.82	22.845		
3,600.0	3,592.6	3,579.5	3,550.6	7.2	9.7	70.52	-184.7	-394.8	326.1	311.8	14.24	22.903		
3,700.0	3,692.4	3,678.9	3,649.0	7.5	10.0	70.56	-191.1	-407.8	336.5	321.9	14.66	22.956		
3,800.0	3,792.1	3,778.4	3,747.4	7.7	10.3	70.60	-197.5	-420.7	347.0	331.9	15.08	23.007		
3,900.0	3,891.8	3,877.8	3,845.8	7.9	10.6	70.63	-203.9	-433.6	357.5	341.9	15.50	23.054		
4,000.0	3,991.5	3,977.3	3,944.2	8.1	10.9	70.66	-210.3	-446.5	367.9	352.0	15.93	23.099		
4,100.0	4,091.3	4,076.7	4,042.6	8.3	11.2	70.70	-216.8	-459.5	378.4	362.0	16.35	23.142		
4,200.0	4,191.0	4,176.2	4,141.0	8.5	11.5	70.73	-223.2	-472.4	388.8	372.1	16.77	23.182		
4,300.0	4,290.7	4,275.6	4,239.4	8.8	11.8	70.76	-229.6	-485.3	399.3	382.1	17.20	23.220		
4,400.0	4,390.5	4,375.1	4,337.8	9.0	12.1	70.78	-236.0	-498.3	409.7	392.1	17.62	23.256		
4,500.0	4,490.2	4,474.5	4,436.2	9.2	12.5	70.81	-242.4	-511.2	420.2	402.2	18.04	23.290		
4,600.0	4,589.9	4,574.0	4,534.6	9.4	12.8	70.83	-248.8	-524.1	430.7	412.2	18.47	23.323		
4,700.0	4,689.6	4,673.4	4,633.0	9.6	13.1	70.86	-255.3	-537.0	441.1	422.2	18.89	23.354		
4,800.0	4,789.4	4,772.9	4,731.4	9.8	13.4	70.88	-261.7	-550.0	451.6	432.3	19.31	23.383		
4,900.0	4,889.1	4,872.3	4,829.8	10.1	13.7	70.90	-268.1	-562.9	462.0	442.3	19.74	23.412		
5,000.0	4,988.8	4,971.8	4,928.2	10.3	14.0	70.92	-274.5	-575.8	472.5	452.3	20.16	23.439		
5,100.0	5,088.6	5,071.2	5,026.6	10.5	14.3	70.94	-280.9	-588.8	483.0	462.4	20.58	23.465		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4B-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,188.3	5,170.7	5,125.0	10.7	14.6	70.96	-287.3	-601.7	493.4	472.4	21.01	23.489		
5,300.0	5,288.0	5,270.2	5,223.4	10.9	14.9	70.98	-293.8	-614.6	503.9	482.4	21.43	23.513		
5,400.0	5,387.7	5,369.6	5,321.8	11.1	15.2	70.99	-300.2	-627.5	514.3	492.5	21.85	23.536		
5,500.0	5,487.5	5,469.1	5,420.2	11.3	15.5	71.01	-306.6	-640.5	524.8	502.5	22.28	23.558		
5,600.0	5,587.2	5,568.5	5,518.6	11.6	15.8	71.02	-313.0	-653.4	535.2	512.5	22.70	23.579		
5,700.0	5,686.9	5,668.0	5,617.0	11.8	16.1	71.04	-319.4	-666.3	545.7	522.6	23.12	23.599		
5,800.0	5,786.7	5,767.4	5,715.4	12.0	16.4	71.05	-325.8	-679.3	556.2	532.6	23.55	23.618		
5,900.0	5,886.4	5,866.9	5,813.8	12.2	16.8	71.07	-332.3	-692.2	566.6	542.6	23.97	23.637		
6,000.0	5,986.1	5,966.3	5,912.2	12.4	17.1	71.08	-338.7	-705.1	577.1	552.7	24.40	23.655		
6,100.0	6,085.8	6,065.8	6,010.6	12.6	17.4	71.09	-345.1	-718.0	587.5	562.7	24.82	23.673		
6,200.0	6,185.6	6,165.2	6,109.0	12.9	17.7	71.11	-351.5	-731.0	598.0	572.8	25.24	23.689		
6,300.0	6,285.3	6,264.7	6,207.4	13.1	18.0	71.12	-357.9	-743.9	608.5	582.8	25.67	23.705		
6,400.0	6,385.0	6,364.1	6,305.8	13.3	18.3	71.13	-364.3	-756.8	618.9	592.8	26.09	23.721		
6,500.0	6,484.8	6,463.6	6,404.2	13.5	18.6	71.14	-370.8	-769.8	629.4	602.9	26.52	23.736		
6,600.0	6,584.5	6,563.0	6,502.6	13.7	18.9	71.15	-377.2	-782.7	639.8	612.9	26.94	23.751		
6,700.0	6,684.4	6,662.0	6,600.6	13.9	19.2	-68.07	-383.5	-795.6	650.1	622.8	27.30	23.816		
6,800.0	6,783.3	6,759.4	6,697.0	13.9	19.4	-81.43	-382.3	-808.2	660.3	632.9	27.36	24.137		
6,900.0	6,879.3	6,858.5	6,794.1	13.8	19.6	-84.48	-367.5	-821.0	670.4	643.2	27.20	24.652		
7,000.0	6,970.5	6,959.5	6,890.0	13.6	19.7	-85.97	-338.7	-833.6	680.3	653.4	26.87	25.318		
7,100.0	7,055.2	7,062.5	6,982.6	13.4	19.7	-86.93	-295.7	-845.8	689.7	663.2	26.45	26.071		
7,200.0	7,131.7	7,167.6	7,069.9	13.3	19.7	-87.65	-238.4	-857.2	698.4	672.4	26.06	26.805		
7,300.0	7,198.5	7,274.8	7,149.4	13.2	19.8	-88.23	-167.3	-867.7	706.3	680.5	25.79	27.382		
7,400.0	7,254.3	7,384.0	7,218.6	13.2	19.9	-88.72	-83.5	-876.8	713.1	687.3	25.80	27.641		
7,500.0	7,298.0	7,495.1	7,275.2	13.4	20.1	-89.15	11.7	-884.2	718.6	692.4	26.18	27.451		
7,600.0	7,328.8	7,607.9	7,317.1	13.9	20.4	-89.51	116.1	-889.7	722.6	695.6	27.01	26.752		
7,700.0	7,346.1	7,721.9	7,342.4	14.5	20.9	-89.80	227.1	-893.0	725.1	696.8	28.31	25.609		
7,800.0	7,350.0	7,835.5	7,350.0	15.3	21.5	-90.00	340.4	-894.0	725.8	695.8	30.02	24.176		
7,900.0	7,350.0	7,935.5	7,350.0	16.2	22.2	-90.00	440.4	-894.0	725.8	693.9	31.97	22.706		
8,000.0	7,350.0	8,035.5	7,350.0	17.3	23.0	-90.00	540.4	-894.0	725.8	691.7	34.15	21.254		
8,100.0	7,350.0	8,135.5	7,350.0	18.5	23.9	-90.00	640.4	-894.0	725.8	689.3	36.54	19.863		
8,200.0	7,350.0	8,235.5	7,350.0	19.8	24.9	-90.00	740.4	-894.0	725.8	686.7	39.10	18.563		
8,300.0	7,350.0	8,335.5	7,350.0	21.1	25.9	-90.00	840.4	-894.0	725.8	684.0	41.80	17.365		
8,400.0	7,350.0	8,435.5	7,350.0	22.5	27.1	-90.00	940.4	-894.0	725.8	681.2	44.61	16.270		
8,500.0	7,350.0	8,535.5	7,350.0	23.9	28.3	-90.00	1,040.4	-894.0	725.8	678.3	47.51	15.276		
8,600.0	7,350.0	8,635.5	7,350.0	25.4	29.6	-90.00	1,140.4	-894.0	725.8	675.3	50.49	14.374		
8,700.0	7,350.0	8,735.5	7,350.0	26.9	30.9	-90.00	1,240.4	-894.0	725.8	672.3	53.54	13.557		
8,800.0	7,350.0	8,835.5	7,350.0	28.5	32.2	-90.00	1,340.4	-894.0	725.8	669.2	56.64	12.815		
8,900.0	7,350.0	8,935.5	7,350.0	30.0	33.6	-90.00	1,440.4	-894.0	725.8	666.0	59.78	12.141		
9,000.0	7,350.0	9,035.5	7,350.0	31.6	35.0	-90.00	1,540.4	-894.0	725.8	662.9	62.96	11.528		
9,100.0	7,350.0	9,135.5	7,350.0	33.2	36.5	-90.00	1,640.4	-894.0	725.8	659.6	66.18	10.968		
9,200.0	7,350.0	9,235.5	7,350.0	34.8	38.0	-90.00	1,740.4	-894.0	725.8	656.4	69.42	10.455		
9,300.0	7,350.0	9,335.5	7,350.0	36.5	39.5	-90.00	1,840.4	-894.0	725.8	653.1	72.69	9.985		
9,400.0	7,350.0	9,435.5	7,350.0	38.1	41.0	-90.00	1,940.4	-894.0	725.8	649.8	75.98	9.553		
9,500.0	7,350.0	9,535.5	7,350.0	39.7	42.5	-90.00	2,040.4	-894.0	725.8	646.5	79.29	9.154		
9,600.0	7,350.0	9,635.5	7,350.0	41.4	44.1	-90.00	2,140.4	-894.0	725.8	643.2	82.61	8.786		
9,700.0	7,350.0	9,735.5	7,350.0	43.1	45.6	-90.00	2,240.4	-894.0	725.8	639.9	85.95	8.444		
9,800.0	7,350.0	9,835.5	7,350.0	44.7	47.2	-90.00	2,340.4	-894.0	725.8	636.5	89.31	8.127		
9,900.0	7,350.0	9,935.5	7,350.0	46.4	48.8	-90.00	2,440.4	-894.0	725.8	633.2	92.67	7.832		
10,000.0	7,350.0	10,035.5	7,350.0	48.1	50.4	-90.00	2,540.4	-894.0	725.8	629.8	96.04	7.557		
10,100.0	7,350.0	10,135.5	7,350.0	49.8	52.0	-90.00	2,640.4	-894.0	725.8	626.4	99.43	7.300		
10,200.0	7,350.0	10,235.5	7,350.0	51.5	53.6	-90.00	2,740.4	-894.0	725.8	623.0	102.82	7.059		
10,300.0	7,350.0	10,335.5	7,350.0	53.2	55.3	-90.00	2,840.4	-894.0	725.8	619.6	106.22	6.833		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4B-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,400.0	7,350.0	10,435.5	7,350.0	54.9	56.9	-90.00	2,940.4	-894.0	725.8	616.2	109.62	6.621		
10,500.0	7,350.0	10,535.5	7,350.0	56.6	58.6	-90.00	3,040.4	-894.0	725.8	612.8	113.04	6.421		
10,600.0	7,350.0	10,635.5	7,350.0	58.3	60.2	-90.00	3,140.4	-894.0	725.8	609.4	116.46	6.233		
10,700.0	7,350.0	10,735.5	7,350.0	60.0	61.9	-90.00	3,240.4	-894.0	725.8	605.9	119.88	6.055		
10,800.0	7,350.0	10,835.5	7,350.0	61.7	63.5	-90.00	3,340.4	-894.0	725.8	602.5	123.31	5.886		
10,900.0	7,350.0	10,935.5	7,350.0	63.4	65.2	-90.00	3,440.4	-894.0	725.8	599.1	126.74	5.727		
11,000.0	7,350.0	11,035.5	7,350.0	65.2	66.9	-90.00	3,540.4	-894.0	725.8	595.7	130.18	5.576		
11,100.0	7,350.0	11,135.5	7,350.0	66.9	68.5	-90.00	3,640.4	-894.0	725.8	592.2	133.62	5.432		
11,200.0	7,350.0	11,235.5	7,350.0	68.6	70.2	-90.00	3,740.4	-894.0	725.8	588.8	137.06	5.296		
11,300.0	7,350.0	11,335.5	7,350.0	70.3	71.9	-90.00	3,840.4	-894.0	725.8	585.3	140.51	5.166		
11,400.0	7,350.0	11,435.5	7,350.0	72.0	73.6	-90.00	3,940.4	-894.0	724.7	580.3	144.40	5.019		
11,500.0	7,350.0	11,535.4	7,350.0	73.8	75.3	-90.00	4,040.3	-894.0	720.1	571.9	148.25	4.858		
11,600.0	7,350.0	11,635.1	7,350.0	75.5	77.0	-90.00	4,139.9	-894.0	712.1	560.2	151.93	4.687		
11,700.0	7,350.0	11,734.4	7,350.0	77.2	78.7	-90.00	4,239.3	-894.0	700.6	545.2	155.42	4.508		
11,800.0	7,350.0	11,833.5	7,350.0	78.9	80.3	-90.00	4,338.4	-894.0	687.3	528.5	158.85	4.327		
11,886.7	7,350.0	11,919.4	7,350.0	80.4	81.8	-90.00	4,424.3	-894.0	675.8	514.0	161.83	4.176 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4C-35H-O367 - Hz - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	-89.94	0.0	-15.1	15.1						
100.0	100.0	100.0	100.0	0.2	0.2	-89.94	0.0	-15.1	15.1	14.8	0.30	49.687			
200.0	200.0	200.0	200.0	0.3	0.3	-89.94	0.0	-15.1	15.1	14.4	0.65	23.117			
300.0	300.0	300.0	300.0	0.5	0.5	-89.94	0.0	-15.1	15.1	14.1	1.00	15.062			
400.0	400.0	400.0	400.0	0.7	0.7	-89.94	0.0	-15.1	15.1	13.7	1.35	11.170	CC, ES		
500.0	500.0	499.8	499.8	0.8	0.9	-91.98	-0.5	-15.8	15.8	14.1	1.70	9.274			
600.0	600.0	599.5	599.5	1.0	1.0	-97.16	-2.2	-17.7	17.9	15.8	2.05	8.732			
700.0	700.0	699.2	699.0	1.2	1.2	58.09	-5.0	-21.0	21.2	18.8	2.40	8.828			
800.0	800.0	798.7	798.4	1.4	1.4	56.44	-9.0	-25.7	25.2	22.4	2.75	9.133			
900.0	899.9	898.2	897.6	1.6	1.6	56.53	-14.0	-31.6	29.7	26.6	3.11	9.537			
1,000.0	999.7	997.6	996.5	1.7	1.8	57.66	-20.1	-38.8	34.8	31.4	3.49	9.994			
1,100.0	1,099.4	1,097.3	1,095.7	1.9	2.1	59.25	-27.0	-46.9	40.3	36.4	3.87	10.414			
1,200.0	1,199.1	1,197.2	1,195.0	2.1	2.3	60.51	-33.8	-55.0	45.8	41.5	4.26	10.743			
1,300.0	1,298.9	1,297.0	1,294.3	2.3	2.5	61.50	-40.7	-63.1	51.3	46.6	4.66	11.009			
1,400.0	1,398.6	1,396.9	1,393.5	2.6	2.8	62.30	-47.6	-71.2	56.8	51.7	5.06	11.225			
1,500.0	1,498.3	1,496.7	1,492.8	2.8	3.0	62.95	-54.4	-79.3	62.3	56.8	5.46	11.405			
1,600.0	1,598.1	1,596.6	1,592.1	3.0	3.3	63.50	-61.3	-87.4	67.8	61.9	5.87	11.555			
1,700.0	1,697.8	1,696.4	1,691.4	3.2	3.5	63.97	-68.2	-95.5	73.3	67.0	6.28	11.683			
1,800.0	1,797.5	1,796.3	1,790.7	3.4	3.8	64.37	-75.0	-103.6	78.8	72.2	6.69	11.793			
1,900.0	1,897.2	1,896.1	1,889.9	3.6	4.0	64.72	-81.9	-111.7	84.4	77.3	7.10	11.887			
2,000.0	1,997.0	1,996.0	1,989.2	3.8	4.3	65.03	-88.8	-119.8	89.9	82.4	7.51	11.970			
2,100.0	2,096.7	2,095.8	2,088.5	4.0	4.5	65.30	-95.6	-127.9	95.4	87.5	7.93	12.043			
2,200.0	2,196.4	2,195.6	2,187.8	4.2	4.8	65.54	-102.5	-136.0	101.0	92.6	8.34	12.107			
2,300.0	2,296.2	2,295.5	2,287.0	4.5	5.0	65.75	-109.4	-144.1	106.5	97.8	8.76	12.164			
2,400.0	2,395.9	2,395.3	2,386.3	4.7	5.3	65.95	-116.3	-152.2	112.1	102.9	9.17	12.215			
2,500.0	2,495.6	2,495.2	2,485.6	4.9	5.5	66.12	-123.1	-160.3	117.6	108.0	9.59	12.262			
2,600.0	2,595.3	2,595.0	2,584.9	5.1	5.8	66.28	-130.0	-168.4	123.2	113.1	10.01	12.303			
2,700.0	2,695.1	2,694.9	2,684.2	5.3	6.0	66.43	-136.9	-176.5	128.7	118.3	10.43	12.341			
2,800.0	2,794.8	2,794.7	2,783.4	5.5	6.3	66.56	-143.7	-184.6	134.2	123.4	10.85	12.376			
2,900.0	2,894.5	2,894.6	2,882.7	5.7	6.5	66.69	-150.6	-192.7	139.8	128.5	11.27	12.408			
3,000.0	2,994.3	2,994.4	2,982.0	6.0	6.8	66.80	-157.5	-200.8	145.3	133.7	11.69	12.437			
3,100.0	3,094.0	3,094.3	3,081.3	6.2	7.0	66.91	-164.3	-208.9	150.9	138.8	12.11	12.463			
3,200.0	3,193.7	3,194.1	3,180.6	6.4	7.3	67.01	-171.2	-217.0	156.4	143.9	12.53	12.488			
3,300.0	3,293.4	3,293.9	3,279.8	6.6	7.5	67.10	-178.1	-225.1	162.0	149.0	12.95	12.511			
3,400.0	3,393.2	3,393.8	3,379.1	6.8	7.8	67.18	-184.9	-233.2	167.5	154.2	13.37	12.533			
3,500.0	3,492.9	3,493.6	3,478.4	7.0	8.1	67.26	-191.8	-241.3	173.1	159.3	13.79	12.552			
3,600.0	3,592.6	3,593.5	3,577.7	7.2	8.3	67.34	-198.7	-249.4	178.6	164.4	14.21	12.571			
3,700.0	3,692.4	3,693.3	3,677.0	7.5	8.6	67.41	-205.5	-257.5	184.2	169.5	14.63	12.588			
3,800.0	3,792.1	3,793.2	3,776.2	7.7	8.8	67.47	-212.4	-265.6	189.7	174.7	15.05	12.605			
3,900.0	3,891.8	3,893.0	3,875.5	7.9	9.1	67.54	-219.3	-273.7	195.3	179.8	15.47	12.620			
4,000.0	3,991.5	3,992.9	3,974.8	8.1	9.3	67.60	-226.1	-281.8	200.8	184.9	15.89	12.634			
4,100.0	4,091.3	4,092.7	4,074.1	8.3	9.6	67.65	-233.0	-289.9	206.4	190.1	16.32	12.648			
4,200.0	4,191.0	4,192.6	4,173.4	8.5	9.8	67.71	-239.9	-298.0	211.9	195.2	16.74	12.661			
4,300.0	4,290.7	4,292.4	4,272.6	8.8	10.1	67.76	-246.7	-306.1	217.5	200.3	17.16	12.673			
4,400.0	4,390.5	4,392.3	4,371.9	9.0	10.3	67.80	-253.6	-314.2	223.0	205.4	17.58	12.684			
4,500.0	4,490.2	4,492.1	4,471.2	9.2	10.6	67.85	-260.5	-322.3	228.6	210.6	18.00	12.695			
4,600.0	4,589.9	4,591.9	4,570.5	9.4	10.8	67.89	-267.3	-330.4	234.1	215.7	18.43	12.706			
4,700.0	4,689.6	4,691.8	4,669.8	9.6	11.1	67.93	-274.2	-338.5	239.7	220.8	18.85	12.715			
4,800.0	4,789.4	4,791.6	4,769.0	9.8	11.4	67.97	-281.1	-346.6	245.2	226.0	19.27	12.725			
4,900.0	4,889.1	4,891.5	4,868.3	10.1	11.6	68.01	-287.9	-354.7	250.8	231.1	19.69	12.734			
5,000.0	4,988.8	4,991.3	4,967.6	10.3	11.9	68.05	-294.8	-362.8	256.3	236.2	20.12	12.742			
5,100.0	5,088.6	5,091.2	5,066.9	10.5	12.1	68.08	-301.7	-370.9	261.9	241.3	20.54	12.750			

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

Anticollision Report

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Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4C-35H-O367 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,188.3	5,191.0	5,166.1	10.7	12.4	68.11	-308.5	-379.0	267.4	246.5	20.96	12.758		
5,300.0	5,288.0	5,290.9	5,265.4	10.9	12.6	68.15	-315.4	-387.1	273.0	251.6	21.38	12.766		
5,400.0	5,387.7	5,390.7	5,364.7	11.1	12.9	68.18	-322.3	-395.2	278.5	256.7	21.81	12.773		
5,500.0	5,487.5	5,490.6	5,464.0	11.3	13.1	68.21	-329.2	-403.4	284.1	261.9	22.23	12.780		
5,600.0	5,587.2	5,590.4	5,563.3	11.6	13.4	68.23	-336.0	-411.5	289.6	267.0	22.65	12.786		
5,700.0	5,686.9	5,690.2	5,662.5	11.8	13.6	68.26	-342.9	-419.6	295.2	272.1	23.08	12.792		
5,800.0	5,786.7	5,790.1	5,761.8	12.0	13.9	68.29	-349.8	-427.7	300.7	277.2	23.50	12.798		
5,900.0	5,886.4	5,889.9	5,861.1	12.2	14.2	68.31	-356.6	-435.8	306.3	282.4	23.92	12.804		
6,000.0	5,986.1	5,989.8	5,960.4	12.4	14.4	68.34	-363.5	-443.9	311.8	287.5	24.34	12.810		
6,100.0	6,085.8	6,089.6	6,059.7	12.6	14.7	68.36	-370.4	-452.0	317.4	292.6	24.77	12.815		
6,200.0	6,185.6	6,189.5	6,158.9	12.9	14.9	68.38	-377.2	-460.1	323.0	297.8	25.19	12.820		
6,300.0	6,285.3	6,289.3	6,258.2	13.1	15.2	68.41	-384.1	-468.2	328.5	302.9	25.61	12.825		
6,400.0	6,385.0	6,389.2	6,357.5	13.3	15.4	68.43	-391.0	-476.3	334.1	308.0	26.04	12.830		
6,500.0	6,484.8	6,488.1	6,456.0	13.5	15.6	69.35	-392.4	-484.4	339.7	313.2	26.47	12.834		
6,600.0	6,584.5	6,583.8	6,550.5	13.7	15.7	72.34	-380.9	-492.6	346.3	319.3	26.98	12.835		
6,700.0	6,684.4	6,675.3	6,638.8	13.9	15.7	-62.80	-358.2	-500.6	354.9	327.5	27.40	12.953		
6,800.0	6,783.3	6,764.2	6,721.1	13.9	15.7	-71.90	-325.5	-508.3	365.0	337.5	27.51	13.267		
6,900.0	6,879.3	6,850.0	6,796.0	13.8	15.6	-71.09	-284.5	-515.6	376.3	348.9	27.34	13.761		
7,000.0	6,970.5	6,935.9	6,865.6	13.6	15.5	-69.09	-234.8	-522.7	388.0	361.0	26.92	14.414		
7,100.0	7,055.2	7,019.3	6,927.0	13.4	15.5	-67.01	-178.8	-529.3	399.6	373.3	26.31	15.188		
7,200.0	7,131.7	7,100.0	6,979.8	13.3	15.5	-65.15	-118.1	-535.3	410.7	385.1	25.63	16.025		
7,300.0	7,198.5	7,182.5	7,026.4	13.2	15.6	-63.55	-50.3	-541.0	420.9	395.9	24.99	16.840		
7,400.0	7,254.3	7,262.9	7,064.0	13.2	15.8	-62.29	20.5	-546.0	429.8	405.2	24.59	17.477		
7,500.0	7,298.0	7,342.6	7,093.3	13.4	16.0	-61.37	94.5	-550.3	437.3	412.7	24.54	17.817		
7,600.0	7,328.8	7,422.0	7,114.2	13.9	16.4	-60.80	171.0	-554.1	443.0	418.0	24.99	17.730		
7,700.0	7,346.1	7,500.0	7,126.3	14.5	16.9	-60.56	247.9	-557.1	446.9	420.9	25.96	17.213		
7,800.0	7,350.0	7,582.4	7,130.0	15.3	17.4	-60.66	330.1	-559.6	449.1	421.7	27.43	16.370		
7,900.0	7,350.0	7,682.4	7,130.0	16.2	18.3	-60.82	430.1	-562.2	451.4	422.2	29.14	15.489		
8,000.0	7,350.0	7,782.3	7,130.0	17.3	19.3	-60.98	530.0	-564.8	453.7	422.6	31.06	14.605		
8,100.0	7,350.0	7,882.3	7,130.0	18.5	20.3	-61.14	629.9	-567.4	455.9	422.8	33.16	13.748		
8,200.0	7,350.0	7,982.3	7,130.0	19.8	21.5	-61.30	729.8	-570.0	458.2	422.8	35.42	12.937		
8,300.0	7,350.0	8,082.2	7,130.0	21.1	22.7	-61.46	829.8	-572.7	460.5	422.7	37.80	12.182		
8,400.0	7,350.0	8,182.2	7,130.0	22.5	24.0	-61.61	929.7	-575.3	462.8	422.5	40.30	11.486		
8,500.0	7,350.0	8,282.1	7,130.0	23.9	25.4	-61.76	1,029.6	-577.9	465.1	422.3	42.88	10.848		
8,600.0	7,350.0	8,382.1	7,130.0	25.4	26.8	-61.92	1,129.6	-580.5	467.5	421.9	45.53	10.266		
8,700.0	7,350.0	8,482.1	7,130.0	26.9	28.2	-62.07	1,229.5	-583.1	469.8	421.5	48.26	9.735		
8,800.0	7,350.0	8,582.0	7,130.0	28.5	29.7	-62.22	1,329.4	-585.7	472.1	421.0	51.03	9.250		
8,900.0	7,350.0	8,682.0	7,130.0	30.0	31.2	-62.36	1,429.4	-588.4	474.4	420.5	53.86	8.808		
9,000.0	7,350.0	8,782.0	7,130.0	31.6	32.7	-62.51	1,529.3	-591.0	476.7	420.0	56.73	8.403		
9,100.0	7,350.0	8,881.9	7,130.0	33.2	34.3	-62.65	1,629.2	-593.6	479.0	419.4	59.64	8.033		
9,200.0	7,350.0	8,981.9	7,130.0	34.8	35.9	-62.80	1,729.2	-596.2	481.4	418.8	62.57	7.693		
9,300.0	7,350.0	9,081.9	7,130.0	36.5	37.4	-62.94	1,829.1	-598.8	483.7	418.2	65.54	7.380		
9,400.0	7,350.0	9,181.8	7,130.0	38.1	39.0	-63.08	1,929.0	-601.4	486.0	417.5	68.54	7.091		
9,500.0	7,350.0	9,281.8	7,130.0	39.7	40.7	-63.22	2,029.0	-604.1	488.4	416.8	71.56	6.825		
9,600.0	7,350.0	9,381.8	7,130.0	41.4	42.3	-63.36	2,128.9	-606.7	490.7	416.1	74.60	6.578		
9,700.0	7,350.0	9,481.7	7,130.0	43.1	43.9	-63.49	2,228.8	-609.3	493.0	415.4	77.66	6.349		
9,800.0	7,350.0	9,581.7	7,130.0	44.7	45.6	-63.63	2,328.8	-611.9	495.4	414.7	80.74	6.136		
9,900.0	7,350.0	9,681.7	7,130.0	46.4	47.2	-63.76	2,428.7	-614.5	497.7	413.9	83.83	5.937		
10,000.0	7,350.0	9,781.6	7,130.0	48.1	48.9	-63.89	2,528.6	-617.1	500.1	413.1	86.94	5.752		
10,100.0	7,350.0	9,881.6	7,130.0	49.8	50.5	-64.02	2,628.5	-619.8	502.4	412.4	90.07	5.578		
10,200.0	7,350.0	9,981.6	7,130.0	51.5	52.2	-64.15	2,728.5	-622.4	504.8	411.6	93.21	5.416		
10,300.0	7,350.0	10,081.5	7,130.0	53.2	53.9	-64.28	2,828.4	-625.0	507.1	410.8	96.36	5.263		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4C-35H-O367 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
10,400.0	7,350.0	10,181.5	7,130.0	54.9	55.6	-64.41	2,928.3	-627.6	509.5	410.0	99.52	5.119		
10,500.0	7,350.0	10,281.5	7,130.0	56.6	57.2	-64.54	3,028.3	-630.2	511.9	409.2	102.70	4.984		
10,600.0	7,350.0	10,381.4	7,130.0	58.3	58.9	-64.66	3,128.2	-632.8	514.2	408.4	105.88	4.857		
10,700.0	7,350.0	10,481.4	7,130.0	60.0	60.6	-64.79	3,228.1	-635.5	516.6	407.5	109.08	4.736		
10,800.0	7,350.0	10,581.4	7,130.0	61.7	62.3	-64.91	3,328.1	-638.1	519.0	406.7	112.28	4.622		
10,900.0	7,350.0	10,681.3	7,130.0	63.4	64.0	-65.03	3,428.0	-640.7	521.3	405.8	115.50	4.514		
11,000.0	7,350.0	10,781.3	7,130.0	65.2	65.7	-65.15	3,527.9	-643.3	523.7	405.0	118.72	4.411		
11,100.0	7,350.0	10,881.3	7,130.0	66.9	67.4	-65.27	3,627.9	-645.9	526.1	404.1	121.95	4.314		
11,200.0	7,350.0	10,981.2	7,130.0	68.6	69.1	-65.39	3,727.8	-648.5	528.5	403.3	125.19	4.221		
11,300.0	7,350.0	11,081.2	7,130.0	70.3	70.8	-65.51	3,827.7	-651.2	530.9	402.4	128.44	4.133		
11,400.0	7,350.0	11,181.2	7,130.0	72.0	72.6	-65.58	3,927.7	-653.8	532.2	400.3	131.93	4.034		
11,500.0	7,350.0	11,281.2	7,130.0	73.8	74.3	-65.48	4,027.6	-656.4	530.5	395.3	135.19	3.924		
11,600.0	7,350.0	11,381.0	7,130.0	75.5	76.0	-65.20	4,127.4	-659.0	525.5	387.4	138.10	3.805		
11,700.0	7,350.0	11,480.6	7,130.0	77.2	77.7	-64.71	4,227.0	-661.6	517.5	376.8	140.62	3.680		
11,800.0	7,350.0	11,580.0	7,130.0	78.9	79.4	-64.20	4,326.4	-664.2	507.8	364.7	143.16	3.547		
11,862.0	7,350.0	11,593.2	7,130.0	80.0	79.6	-64.13	4,339.6	-664.6	504.2	359.9	144.25	3.495		
11,886.7	7,350.0	11,593.2	7,130.0	80.4	79.6	-64.13	4,339.6	-664.6	504.8	360.1	144.64	3.490 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4D-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.94	0.0	-7.5	7.5					
100.0	100.0	100.0	100.0	0.2	0.2	-89.94	0.0	-7.5	7.5	7.2	0.30	24.844		
200.0	200.0	200.0	200.0	0.3	0.3	-89.94	0.0	-7.5	7.5	6.9	0.65	11.558		
300.0	300.0	300.0	300.0	0.5	0.5	-89.94	0.0	-7.5	7.5	6.5	1.00	7.531		
400.0	400.0	400.0	400.0	0.7	0.7	-89.94	0.0	-7.5	7.5	6.2	1.35	5.585		
500.0	500.0	500.0	500.0	0.8	0.8	-89.94	0.0	-7.5	7.5	5.8	1.70	4.438	CC, ES	
600.0	600.0	599.9	599.9	1.0	1.0	-94.53	-0.6	-8.1	8.1	6.1	2.05	3.977		
700.0	700.0	699.8	699.7	1.2	1.2	59.02	-2.6	-9.9	9.7	7.3	2.40	4.050		
800.0	800.0	799.6	799.5	1.4	1.4	56.91	-5.9	-12.7	11.8	9.1	2.75	4.293		
900.0	899.9	899.4	899.1	1.6	1.6	57.24	-10.4	-16.8	14.4	11.3	3.11	4.620		
1,000.0	999.7	999.1	998.5	1.7	1.8	58.90	-16.3	-21.9	17.4	13.9	3.49	4.997		
1,100.0	1,099.4	1,099.0	1,097.9	1.9	2.0	60.75	-23.1	-28.0	20.9	17.0	3.87	5.389		
1,200.0	1,199.1	1,198.9	1,197.5	2.1	2.2	62.08	-29.9	-34.1	24.3	20.1	4.26	5.711		
1,300.0	1,298.9	1,298.9	1,297.0	2.3	2.4	63.07	-36.8	-40.1	27.8	23.2	4.66	5.973		
1,400.0	1,398.6	1,398.8	1,396.5	2.6	2.7	63.84	-43.7	-46.2	31.3	26.3	5.06	6.191		
1,500.0	1,498.3	1,498.7	1,496.0	2.8	2.9	64.45	-50.6	-52.3	34.8	29.4	5.47	6.373		
1,600.0	1,598.1	1,598.7	1,595.5	3.0	3.1	64.95	-57.4	-58.4	38.3	32.5	5.87	6.528		
1,700.0	1,697.8	1,698.6	1,695.0	3.2	3.3	65.37	-64.3	-64.5	41.9	35.6	6.28	6.661		
1,800.0	1,797.5	1,798.5	1,794.5	3.4	3.6	65.72	-71.2	-70.5	45.4	38.7	6.69	6.776		
1,900.0	1,897.2	1,898.5	1,894.1	3.6	3.8	66.03	-78.0	-76.6	48.9	41.8	7.11	6.876		
2,000.0	1,997.0	1,998.4	1,993.6	3.8	4.0	66.29	-84.9	-82.7	52.4	44.9	7.52	6.965		
2,100.0	2,096.7	2,098.4	2,093.1	4.0	4.3	66.52	-91.8	-88.8	55.9	48.0	7.94	7.043		
2,200.0	2,196.4	2,198.3	2,192.6	4.2	4.5	66.72	-98.6	-94.9	59.4	51.1	8.35	7.113		
2,300.0	2,296.2	2,298.2	2,292.1	4.5	4.7	66.90	-105.5	-100.9	62.9	54.2	8.77	7.176		
2,400.0	2,395.9	2,398.2	2,391.6	4.7	5.0	67.06	-112.4	-107.0	66.5	57.3	9.19	7.232		
2,500.0	2,495.6	2,498.1	2,491.2	4.9	5.2	67.20	-119.2	-113.1	70.0	60.4	9.61	7.284		
2,600.0	2,595.3	2,598.1	2,590.7	5.1	5.4	67.33	-126.1	-119.2	73.5	63.5	10.03	7.330		
2,700.0	2,695.1	2,698.0	2,690.2	5.3	5.7	67.45	-133.0	-125.3	77.0	66.6	10.45	7.373		
2,800.0	2,794.8	2,797.9	2,789.7	5.5	5.9	67.56	-139.9	-131.4	80.5	69.7	10.87	7.412		
2,900.0	2,894.5	2,897.9	2,889.2	5.7	6.1	67.66	-146.7	-137.4	84.1	72.8	11.29	7.448		
3,000.0	2,994.3	2,997.8	2,988.7	6.0	6.4	67.75	-153.6	-143.5	87.6	75.9	11.71	7.481		
3,100.0	3,094.0	3,097.7	3,088.3	6.2	6.6	67.83	-160.5	-149.6	91.1	79.0	12.13	7.512		
3,200.0	3,193.7	3,197.7	3,187.8	6.4	6.8	67.91	-167.3	-155.7	94.6	82.1	12.55	7.541		
3,300.0	3,293.4	3,297.6	3,287.3	6.6	7.1	67.98	-174.2	-161.8	98.1	85.2	12.97	7.567		
3,400.0	3,393.2	3,397.6	3,386.8	6.8	7.3	68.05	-181.1	-167.8	101.7	88.3	13.39	7.592		
3,500.0	3,492.9	3,497.5	3,486.3	7.0	7.5	68.11	-187.9	-173.9	105.2	91.4	13.81	7.615		
3,600.0	3,592.6	3,597.4	3,585.8	7.2	7.8	68.17	-194.8	-180.0	108.7	94.5	14.23	7.637		
3,700.0	3,692.4	3,697.4	3,685.3	7.5	8.0	68.23	-201.7	-186.1	112.2	97.6	14.65	7.657		
3,800.0	3,792.1	3,797.3	3,784.9	7.7	8.3	68.28	-208.5	-192.2	115.7	100.7	15.08	7.677		
3,900.0	3,891.8	3,897.2	3,884.4	7.9	8.5	68.33	-215.4	-198.2	119.3	103.8	15.50	7.695		
4,000.0	3,991.5	3,997.2	3,983.9	8.1	8.7	68.37	-222.3	-204.3	122.8	106.9	15.92	7.712		
4,100.0	4,091.3	4,097.1	4,083.4	8.3	9.0	68.42	-229.2	-210.4	126.3	110.0	16.34	7.728		
4,200.0	4,191.0	4,197.1	4,182.9	8.5	9.2	68.46	-236.0	-216.5	129.8	113.1	16.77	7.743		
4,300.0	4,290.7	4,297.0	4,282.4	8.8	9.4	68.50	-242.9	-222.6	133.3	116.2	17.19	7.758		
4,400.0	4,390.5	4,396.9	4,382.0	9.0	9.7	68.53	-249.8	-228.7	136.9	119.2	17.61	7.771		
4,500.0	4,490.2	4,496.9	4,481.5	9.2	9.9	68.57	-256.6	-234.7	140.4	122.3	18.03	7.785		
4,600.0	4,589.9	4,596.8	4,581.0	9.4	10.1	68.60	-263.5	-240.8	143.9	125.4	18.46	7.797		
4,700.0	4,689.6	4,696.7	4,680.5	9.6	10.4	68.63	-270.4	-246.9	147.4	128.5	18.88	7.809		
4,800.0	4,789.4	4,796.7	4,780.0	9.8	10.6	68.66	-277.2	-253.0	150.9	131.6	19.30	7.820		
4,900.0	4,889.1	4,896.6	4,879.5	10.1	10.8	68.69	-284.1	-259.1	154.5	134.7	19.72	7.831		
5,000.0	4,988.8	4,996.6	4,979.1	10.3	11.1	68.72	-291.0	-265.1	158.0	137.8	20.15	7.841		
5,100.0	5,088.6	5,096.5	5,078.6	10.5	11.3	68.75	-297.9	-271.2	161.5	140.9	20.57	7.851		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4D-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,188.3	5,196.4	5,178.1	10.7	11.6	68.77	-304.7	-277.3	165.0	144.0	20.99	7.861		
5,300.0	5,288.0	5,296.4	5,277.6	10.9	11.8	68.80	-311.6	-283.4	168.6	147.1	21.42	7.870		
5,400.0	5,387.7	5,396.3	5,377.1	11.1	12.0	68.82	-318.5	-289.5	172.1	150.2	21.84	7.879		
5,500.0	5,487.5	5,496.3	5,476.6	11.3	12.3	68.84	-325.3	-295.5	175.6	153.3	22.26	7.887		
5,600.0	5,587.2	5,596.2	5,576.2	11.6	12.5	68.86	-332.2	-301.6	179.1	156.4	22.69	7.895		
5,700.0	5,686.9	5,696.1	5,675.7	11.8	12.7	68.88	-339.1	-307.7	182.6	159.5	23.11	7.903		
5,800.0	5,786.7	5,796.1	5,775.2	12.0	13.0	68.90	-345.9	-313.8	186.2	162.6	23.53	7.910		
5,900.0	5,886.4	5,896.0	5,874.7	12.2	13.2	68.92	-352.8	-319.9	189.7	165.7	23.96	7.917		
6,000.0	5,986.1	5,995.9	5,974.2	12.4	13.4	68.94	-359.7	-325.9	193.2	168.8	24.38	7.924		
6,100.0	6,085.8	6,095.9	6,073.7	12.6	13.7	68.96	-366.5	-332.0	196.7	171.9	24.80	7.931		
6,200.0	6,185.6	6,195.8	6,173.2	12.9	13.9	68.97	-373.4	-338.1	200.2	175.0	25.23	7.938		
6,300.0	6,285.3	6,295.8	6,272.8	13.1	14.2	68.99	-380.3	-344.2	203.8	178.1	25.65	7.944		
6,400.0	6,385.0	6,395.7	6,372.3	13.3	14.4	69.01	-387.2	-350.3	207.3	181.2	26.08	7.950		
6,500.0	6,484.8	6,495.6	6,471.8	13.5	14.6	69.26	-393.1	-356.4	210.8	184.3	26.50	7.955		
6,600.0	6,584.5	6,593.9	6,569.7	13.7	14.7	72.37	-388.3	-362.4	214.7	187.7	27.02	7.946		
6,700.0	6,684.4	6,689.2	6,663.1	13.9	14.7	-62.15	-370.8	-368.4	220.2	192.7	27.44	8.024		
6,800.0	6,783.3	6,782.3	6,751.4	13.9	14.7	-70.70	-341.9	-374.1	227.0	199.4	27.54	8.242		
6,900.0	6,879.3	6,873.6	6,833.6	13.8	14.6	-69.42	-302.7	-379.5	234.6	207.3	27.32	8.587		
7,000.0	6,970.5	6,963.2	6,908.7	13.6	14.5	-67.09	-254.2	-384.5	242.7	215.8	26.85	9.040		
7,100.0	7,055.2	7,050.0	6,975.2	13.4	14.4	-64.78	-198.7	-389.1	250.8	224.6	26.19	9.575		
7,200.0	7,131.7	7,138.5	7,035.6	13.3	14.3	-62.67	-134.3	-393.4	258.5	233.0	25.46	10.153		
7,300.0	7,198.5	7,224.6	7,086.4	13.2	14.4	-60.95	-64.9	-397.1	265.5	240.7	24.79	10.709		
7,400.0	7,254.3	7,309.9	7,128.1	13.2	14.5	-59.61	9.4	-400.4	271.5	247.1	24.35	11.148		
7,500.0	7,298.0	7,394.6	7,160.5	13.4	14.8	-58.64	87.6	-403.1	276.3	252.0	24.27	11.385		
7,600.0	7,328.8	7,479.0	7,183.3	13.9	15.2	-58.05	168.7	-405.2	279.8	255.1	24.68	11.336		
7,700.0	7,346.1	7,563.1	7,196.5	14.5	15.7	-57.83	251.8	-406.7	281.9	256.2	25.64	10.993		
7,800.0	7,350.0	7,649.8	7,200.0	15.3	16.3	-57.94	338.3	-407.7	282.6	255.5	27.08	10.435		
7,900.0	7,350.0	7,749.8	7,200.0	16.2	17.2	-58.03	438.3	-408.6	283.3	254.6	28.74	9.857		
8,000.0	7,350.0	7,849.8	7,200.0	17.3	18.2	-58.13	538.3	-409.4	284.1	253.5	30.60	9.283		
8,100.0	7,350.0	7,949.8	7,200.0	18.5	19.4	-58.22	638.3	-410.3	284.8	252.2	32.63	8.727		
8,200.0	7,350.0	8,049.7	7,200.0	19.8	20.6	-58.31	738.2	-411.2	285.6	250.7	34.81	8.202		
8,300.0	7,350.0	8,149.7	7,200.0	21.1	21.9	-58.40	838.2	-412.0	286.3	249.2	37.11	7.714		
8,400.0	7,350.0	8,249.7	7,200.0	22.5	23.2	-58.49	938.2	-412.9	287.0	247.5	39.51	7.265		
8,500.0	7,350.0	8,349.7	7,200.0	23.9	24.6	-58.58	1,038.2	-413.8	287.8	245.8	41.99	6.853		
8,600.0	7,350.0	8,449.7	7,200.0	25.4	26.1	-58.67	1,138.2	-414.7	288.5	244.0	44.55	6.476		
8,700.0	7,350.0	8,549.7	7,200.0	26.9	27.5	-58.76	1,238.2	-415.5	289.3	242.1	47.17	6.133		
8,800.0	7,350.0	8,649.7	7,200.0	28.5	29.0	-58.85	1,338.2	-416.4	290.0	240.2	49.84	5.819		
8,900.0	7,350.0	8,749.7	7,200.0	30.0	30.6	-58.94	1,438.2	-417.3	290.8	238.2	52.55	5.533		
9,000.0	7,350.0	8,849.7	7,200.0	31.6	32.1	-59.03	1,538.2	-418.2	291.5	236.2	55.30	5.271		
9,100.0	7,350.0	8,949.7	7,200.0	33.2	33.7	-59.12	1,638.2	-419.0	292.3	234.2	58.09	5.031		
9,200.0	7,350.0	9,049.7	7,200.0	34.8	35.3	-59.21	1,738.2	-419.9	293.0	232.1	60.91	4.810		
9,300.0	7,350.0	9,149.7	7,200.0	36.5	36.9	-59.29	1,838.2	-420.8	293.8	230.0	63.76	4.607		
9,400.0	7,350.0	9,249.7	7,200.0	38.1	38.5	-59.38	1,938.2	-421.6	294.5	227.9	66.63	4.420		
9,500.0	7,350.0	9,349.7	7,200.0	39.7	40.2	-59.47	2,038.2	-422.5	295.3	225.7	69.52	4.247		
9,600.0	7,350.0	9,449.7	7,200.0	41.4	41.8	-59.55	2,138.1	-423.4	296.0	223.6	72.43	4.087		
9,700.0	7,350.0	9,549.7	7,200.0	43.1	43.4	-59.64	2,238.1	-424.3	296.8	221.4	75.36	3.938		
9,800.0	7,350.0	9,649.7	7,200.0	44.7	45.1	-59.72	2,338.1	-425.1	297.5	219.2	78.31	3.799		
9,900.0	7,350.0	9,749.7	7,200.0	46.4	46.8	-59.81	2,438.1	-426.0	298.3	217.0	81.27	3.670		
10,000.0	7,350.0	9,849.7	7,200.0	48.1	48.4	-59.89	2,538.1	-426.9	299.0	214.8	84.25	3.549		
10,100.0	7,350.0	9,949.7	7,200.0	49.8	50.1	-59.98	2,638.1	-427.7	299.8	212.5	87.24	3.436		
10,200.0	7,350.0	10,049.7	7,200.0	51.5	51.8	-60.06	2,738.1	-428.6	300.5	210.3	90.24	3.331		
10,300.0	7,350.0	10,149.7	7,200.0	53.2	53.5	-60.14	2,838.1	-429.5	301.3	208.0	93.25	3.231		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4D-35H-O367 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,400.0	7,350.0	10,249.7	7,200.0	54.9	55.2	-60.22	2,938.1	-430.4	302.1	205.8	96.28	3.137		
10,500.0	7,350.0	10,349.7	7,200.0	56.6	56.9	-60.31	3,038.1	-431.2	302.8	203.5	99.31	3.049		
10,600.0	7,350.0	10,449.7	7,200.0	58.3	58.6	-60.39	3,138.1	-432.1	303.6	201.2	102.35	2.966		
10,700.0	7,350.0	10,549.7	7,200.0	60.0	60.3	-60.47	3,238.1	-433.0	304.3	198.9	105.41	2.887		
10,800.0	7,350.0	10,649.7	7,200.0	61.7	62.0	-60.55	3,338.1	-433.9	305.1	196.6	108.47	2.813		
10,900.0	7,350.0	10,749.6	7,200.0	63.4	63.7	-60.63	3,438.0	-434.7	305.8	194.3	111.54	2.742		
11,000.0	7,350.0	10,849.6	7,200.0	65.2	65.4	-60.71	3,538.0	-435.6	306.6	192.0	114.61	2.675		
11,100.0	7,350.0	10,949.6	7,200.0	66.9	67.1	-60.79	3,638.0	-436.5	307.4	189.7	117.70	2.611		
11,200.0	7,350.0	11,049.6	7,200.0	68.6	68.8	-60.87	3,738.0	-437.3	308.1	187.3	120.79	2.551		
11,300.0	7,350.0	11,149.6	7,200.0	70.3	70.5	-60.95	3,838.0	-438.2	308.9	185.0	123.89	2.493		
11,400.0	7,350.0	11,249.6	7,200.0	72.0	72.3	-60.92	3,938.0	-439.1	308.7	181.6	127.06	2.429		
11,500.0	7,350.0	11,349.6	7,200.0	73.8	74.0	-60.55	4,037.9	-440.0	305.5	175.7	129.74	2.354		
11,600.0	7,350.0	11,449.3	7,200.0	75.5	75.7	-59.82	4,137.7	-440.8	299.2	167.5	131.79	2.271		
11,700.0	7,350.0	11,548.7	7,200.0	77.2	77.4	-58.67	4,237.1	-441.7	290.1	157.0	133.07	2.180		
11,800.0	7,350.0	11,647.9	7,200.0	78.9	79.1	-57.35	4,336.3	-442.6	279.5	145.3	134.20	2.083		
11,886.7	7,350.0	11,733.9	7,200.0	80.4	80.6	-56.12	4,422.3	-443.3	270.5	135.6	134.94	2.005 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4F-35H-O367 - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	89.75	0.0	7.5	7.5						
100.0	100.0	100.0	100.0	0.2	0.2	89.75	0.0	7.5	7.5	7.2	0.30	24.844			
200.0	200.0	200.0	200.0	0.3	0.3	89.75	0.0	7.5	7.5	6.9	0.65	11.558			
300.0	300.0	300.0	300.0	0.5	0.5	89.75	0.0	7.5	7.5	6.5	1.00	7.531			
400.0	400.0	400.0	400.0	0.7	0.7	89.75	0.0	7.5	7.5	6.2	1.35	5.585			
500.0	500.0	500.0	500.0	0.8	0.8	89.75	0.0	7.5	7.5	5.8	1.70	4.438			
600.0	600.0	600.0	600.0	1.0	1.0	89.75	0.0	7.5	7.5	5.5	2.05	3.682 CC, ES			
700.0	700.0	700.0	700.0	1.2	1.2	-116.58	0.0	7.5	7.9	5.5	2.40	3.292			
800.0	800.0	800.0	800.0	1.4	1.4	-131.04	0.0	7.5	9.4	6.6	2.75	3.407			
900.0	899.9	899.9	899.9	1.6	1.5	-146.08	0.0	7.5	12.7	9.6	3.10	4.088			
1,000.0	999.7	999.7	999.7	1.7	1.7	-156.93	0.0	7.5	18.1	14.6	3.44	5.241			
1,100.0	1,099.4	1,099.4	1,099.4	1.9	1.9	-163.52	0.0	7.5	25.0	21.2	3.79	6.580			
1,200.0	1,199.1	1,199.1	1,199.1	2.1	2.1	-167.25	0.0	7.5	32.1	27.9	4.14	7.749			
1,300.0	1,298.9	1,298.9	1,298.9	2.3	2.2	-169.62	0.0	7.5	39.3	34.8	4.49	8.755			
1,400.0	1,398.6	1,398.6	1,398.6	2.6	2.4	-171.25	0.0	7.5	46.6	41.7	4.84	9.626			
1,500.0	1,498.3	1,498.3	1,498.3	2.8	2.6	-172.45	0.0	7.5	53.8	48.7	5.19	10.386			
1,600.0	1,598.1	1,598.1	1,598.1	3.0	2.8	-173.35	0.0	7.5	61.2	55.6	5.53	11.052			
1,700.0	1,697.8	1,697.8	1,697.8	3.2	2.9	-174.07	0.0	7.5	68.5	62.6	5.88	11.642			
1,800.0	1,797.5	1,797.5	1,797.5	3.4	3.1	-174.64	0.0	7.5	75.8	69.6	6.23	12.167			
1,900.0	1,897.2	1,897.2	1,897.2	3.6	3.3	-175.12	0.0	7.5	83.1	76.6	6.58	12.638			
2,000.0	1,997.0	1,998.3	1,998.3	3.8	3.5	-175.25	-0.8	7.6	89.7	82.8	6.93	12.952			
2,100.0	2,096.7	2,099.6	2,099.5	4.0	3.6	-174.83	-3.4	7.8	94.8	87.6	7.28	13.025			
2,200.0	2,196.4	2,201.0	2,200.8	4.2	3.8	-173.92	-7.8	8.2	98.4	90.8	7.64	12.890			
2,300.0	2,296.2	2,302.4	2,302.1	4.5	4.0	-172.53	-14.0	8.7	100.5	92.5	7.99	12.577			
2,400.0	2,395.9	2,403.9	2,403.2	4.7	4.2	-170.63	-22.0	9.4	101.2	92.9	8.36	12.115			
2,500.0	2,495.6	2,504.4	2,503.3	4.9	4.4	-168.26	-31.4	10.2	100.8	92.1	8.72	11.558			
2,600.0	2,595.3	2,604.3	2,602.8	5.1	4.6	-165.83	-41.0	11.0	100.5	91.4	9.10	11.042			
2,700.0	2,695.1	2,704.2	2,702.2	5.3	4.8	-163.39	-50.5	11.8	100.3	90.8	9.48	10.578			
2,751.6	2,746.6	2,755.8	2,753.6	5.4	4.9	-162.13	-55.4	12.2	100.3	90.6	9.68	10.356			
2,800.0	2,794.8	2,804.2	2,801.7	5.5	5.0	-160.94	-60.1	12.6	100.3	90.4	9.87	10.160			
2,900.0	2,894.5	2,904.1	2,901.1	5.7	5.2	-158.50	-69.6	13.4	100.5	90.2	10.27	9.783			
3,000.0	2,994.3	3,004.0	3,000.6	6.0	5.4	-156.07	-79.1	14.2	100.8	90.1	10.68	9.444			
3,100.0	3,094.0	3,103.9	3,100.0	6.2	5.6	-153.66	-88.7	15.0	101.4	90.3	11.09	9.139			
3,200.0	3,193.7	3,203.8	3,199.5	6.4	5.9	-151.28	-98.2	15.8	102.1	90.6	11.52	8.865			
3,300.0	3,293.4	3,303.7	3,298.9	6.6	6.1	-148.94	-107.7	16.6	103.0	91.0	11.95	8.619			
3,400.0	3,393.2	3,403.6	3,398.4	6.8	6.3	-146.65	-117.3	17.4	104.0	91.6	12.39	8.399			
3,500.0	3,492.9	3,503.5	3,497.8	7.0	6.5	-144.40	-126.8	18.2	105.3	92.4	12.83	8.202			
3,600.0	3,592.6	3,603.4	3,597.3	7.2	6.7	-142.21	-136.4	19.0	106.6	93.4	13.29	8.027			
3,700.0	3,692.4	3,703.3	3,696.7	7.5	7.0	-140.07	-145.9	19.8	108.2	94.4	13.74	7.871			
3,800.0	3,792.1	3,803.2	3,796.2	7.7	7.2	-138.00	-155.4	20.6	109.9	95.7	14.21	7.734			
3,900.0	3,891.8	3,903.1	3,895.6	7.9	7.4	-136.00	-165.0	21.4	111.7	97.0	14.67	7.612			
4,000.0	3,991.5	4,003.1	3,995.1	8.1	7.6	-134.06	-174.5	22.2	113.6	98.5	15.14	7.505			
4,100.0	4,091.3	4,103.0	4,094.5	8.3	7.9	-132.19	-184.0	23.0	115.7	100.1	15.61	7.412			
4,200.0	4,191.0	4,202.9	4,194.0	8.5	8.1	-130.38	-193.6	23.8	117.9	101.8	16.09	7.331			
4,300.0	4,290.7	4,302.8	4,293.4	8.8	8.3	-128.65	-203.1	24.6	120.2	103.7	16.56	7.260			
4,400.0	4,390.5	4,402.7	4,392.9	9.0	8.6	-126.98	-212.6	25.4	122.6	105.6	17.04	7.200			
4,500.0	4,490.2	4,502.6	4,492.3	9.2	8.8	-125.37	-222.2	26.3	125.2	107.7	17.51	7.148			
4,600.0	4,589.9	4,602.5	4,591.8	9.4	9.0	-123.84	-231.7	27.1	127.8	109.8	17.99	7.105			
4,700.0	4,689.6	4,702.4	4,691.2	9.6	9.2	-122.36	-241.3	27.9	130.5	112.0	18.46	7.068			
4,800.0	4,789.4	4,802.3	4,790.7	9.8	9.5	-120.94	-250.8	28.7	133.3	114.3	18.93	7.039			
4,900.0	4,889.1	4,902.2	4,890.1	10.1	9.7	-119.59	-260.3	29.5	136.1	116.7	19.41	7.015			
5,000.0	4,988.8	5,002.1	4,989.6	10.3	9.9	-118.28	-269.9	30.3	139.1	119.2	19.88	6.996			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4F-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,100.0	5,088.6	5,102.0	5,089.0	10.5	10.2	-117.04	-279.4	31.1	142.1	121.7	20.35	6.982		
5,200.0	5,188.3	5,202.0	5,188.5	10.7	10.4	-115.84	-288.9	31.9	145.1	124.3	20.82	6.972		
5,300.0	5,288.0	5,301.9	5,287.9	10.9	10.6	-114.70	-298.5	32.7	148.3	127.0	21.29	6.966		
5,400.0	5,387.7	5,401.8	5,387.3	11.1	10.9	-113.60	-308.0	33.5	151.4	129.7	21.75	6.963		
5,500.0	5,487.5	5,501.7	5,486.8	11.3	11.1	-112.55	-317.5	34.3	154.7	132.5	22.22	6.963		
5,600.0	5,587.2	5,601.6	5,586.2	11.6	11.4	-111.54	-327.1	35.1	158.0	135.3	22.68	6.965		
5,700.0	5,686.9	5,701.5	5,685.7	11.8	11.6	-110.58	-336.6	35.9	161.3	138.2	23.14	6.970		
5,800.0	5,786.7	5,801.4	5,785.1	12.0	11.8	-109.65	-346.2	36.7	164.7	141.1	23.60	6.977		
5,900.0	5,886.4	5,901.3	5,884.6	12.2	12.1	-108.76	-355.7	37.5	168.1	144.0	24.06	6.986		
6,000.0	5,986.1	6,001.2	5,984.0	12.4	12.3	-107.91	-365.2	38.3	171.6	147.1	24.52	6.997		
6,100.0	6,085.8	6,101.1	6,083.5	12.6	12.5	-107.09	-374.8	39.1	175.1	150.1	24.98	7.009		
6,200.0	6,185.6	6,201.0	6,182.9	12.9	12.8	-106.30	-384.3	39.9	178.6	153.2	25.43	7.022		
6,300.0	6,285.3	6,300.9	6,282.4	13.1	13.0	-105.54	-393.8	40.7	182.2	156.3	25.89	7.036		
6,400.0	6,385.0	6,401.7	6,382.8	13.3	13.2	-105.11	-402.5	41.5	185.7	159.3	26.32	7.053		
6,500.0	6,484.8	6,503.0	6,483.9	13.5	13.3	-108.16	-399.7	42.3	188.4	161.8	26.60	7.083		
6,600.0	6,584.5	6,600.0	6,579.5	13.7	13.3	-114.93	-383.7	43.1	192.3	165.7	26.65	7.218		
6,700.0	6,684.4	6,691.3	6,666.8	13.9	13.2	97.38	-357.0	43.8	200.2	173.8	26.38	7.589		
6,800.0	6,783.3	6,779.9	6,747.5	13.9	13.0	77.00	-320.7	44.5	211.5	185.5	25.93	8.156		
6,900.0	6,879.3	6,866.0	6,821.1	13.8	12.8	68.02	-276.1	45.1	224.8	199.4	25.36	8.863		
7,000.0	6,970.5	6,950.0	6,887.2	13.6	12.7	61.67	-224.4	45.6	239.1	214.4	24.75	9.663		
7,100.0	7,055.2	7,032.0	6,945.5	13.4	12.6	56.81	-166.8	46.1	253.4	229.3	24.11	10.511		
7,200.0	7,131.7	7,112.6	6,996.1	13.3	12.5	53.03	-104.0	46.5	267.0	243.5	23.50	11.363		
7,300.0	7,198.5	7,192.0	7,038.6	13.2	12.6	50.11	-37.0	46.8	279.2	256.3	22.96	12.160		
7,400.0	7,254.3	7,270.4	7,073.1	13.2	12.7	47.89	33.3	47.1	289.7	267.1	22.58	12.829		
7,500.0	7,298.0	7,350.0	7,100.1	13.4	13.0	46.25	108.1	47.3	298.0	275.5	22.42	13.290		
7,600.0	7,328.8	7,425.3	7,117.8	13.9	13.4	45.19	181.3	47.4	303.9	281.3	22.56	13.470		
7,700.0	7,346.1	7,500.0	7,127.7	14.5	14.0	44.59	255.3	47.5	307.3	284.3	23.04	13.339		
7,800.0	7,350.0	7,585.1	7,130.0	15.3	14.7	44.44	340.4	47.5	308.1	284.1	23.99	12.845		
7,900.0	7,350.0	7,685.1	7,130.0	16.2	15.7	44.44	440.4	47.5	308.1	282.8	25.38	12.142		
8,000.0	7,350.0	7,785.1	7,130.0	17.3	16.8	44.44	540.4	47.5	308.1	281.2	26.92	11.447		
8,100.0	7,350.0	7,885.1	7,130.0	18.5	18.0	44.44	640.4	47.5	308.1	279.5	28.59	10.778		
8,200.0	7,350.0	7,985.1	7,130.0	19.8	19.3	44.44	740.4	47.5	308.1	277.8	30.37	10.146		
8,300.0	7,350.0	8,085.1	7,130.0	21.1	20.6	44.44	840.4	47.5	308.1	275.9	32.24	9.557		
8,400.0	7,350.0	8,185.1	7,130.0	22.5	22.1	44.44	940.4	47.5	308.1	273.9	34.19	9.012		
8,500.0	7,350.0	8,285.1	7,130.0	23.9	23.5	44.44	1,040.4	47.5	308.1	271.9	36.20	8.511		
8,600.0	7,350.0	8,385.1	7,130.0	25.4	25.0	44.44	1,140.4	47.5	308.1	269.9	38.27	8.051		
8,700.0	7,350.0	8,485.1	7,130.0	26.9	26.5	44.44	1,240.4	47.5	308.1	267.7	40.38	7.630		
8,800.0	7,350.0	8,585.1	7,130.0	28.5	28.1	44.44	1,340.4	47.5	308.1	265.6	42.53	7.244		
8,900.0	7,350.0	8,685.1	7,130.0	30.0	29.7	44.44	1,440.4	47.5	308.1	263.4	44.72	6.891		
9,000.0	7,350.0	8,785.1	7,130.0	31.6	31.3	44.44	1,540.4	47.5	308.1	261.2	46.93	6.566		
9,100.0	7,350.0	8,885.1	7,130.0	33.2	32.9	44.44	1,640.4	47.5	308.1	259.0	49.17	6.267		
9,200.0	7,350.0	8,985.1	7,130.0	34.8	34.5	44.44	1,740.4	47.5	308.1	256.7	51.43	5.992		
9,300.0	7,350.0	9,085.1	7,130.0	36.5	36.2	44.44	1,840.4	47.5	308.1	254.4	53.71	5.737		
9,400.0	7,350.0	9,185.1	7,130.0	38.1	37.8	44.44	1,940.4	47.5	308.1	252.1	56.00	5.502		
9,500.0	7,350.0	9,285.1	7,130.0	39.7	39.5	44.44	2,040.4	47.5	308.1	249.8	58.31	5.285		
9,600.0	7,350.0	9,386.7	7,130.0	41.4	41.2	44.42	2,141.9	47.4	308.0	247.4	60.63	5.080		
9,700.0	7,350.0	9,489.0	7,130.0	43.1	42.9	44.22	2,244.2	45.9	307.0	244.2	62.80	4.888		
9,800.0	7,350.0	9,589.0	7,130.0	44.7	44.6	43.98	2,344.2	44.1	305.8	240.8	64.90	4.711		
9,900.0	7,350.0	9,688.9	7,130.0	46.4	46.2	43.74	2,444.1	42.3	304.5	237.5	66.99	4.546		
10,000.0	7,350.0	9,788.9	7,130.0	48.1	47.9	43.49	2,544.1	40.5	303.3	234.2	69.06	4.391		
10,100.0	7,350.0	9,888.9	7,130.0	49.8	49.6	43.25	2,644.1	38.7	302.0	230.9	71.12	4.247		
10,200.0	7,350.0	9,988.9	7,130.0	51.5	51.3	43.00	2,744.0	36.9	300.8	227.7	73.15	4.112		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4F-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	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	
10,300.0	7,350.0	10,088.9	7,130.0	53.2	53.0	42.75	2,844.0	35.2	299.6	224.4	75.17	3.986		
10,400.0	7,350.0	10,188.9	7,130.0	54.9	54.7	42.50	2,944.0	33.4	298.4	221.2	77.17	3.867		
10,500.0	7,350.0	10,288.8	7,130.0	56.6	56.4	42.24	3,043.9	31.6	297.2	218.0	79.15	3.755		
10,600.0	7,350.0	10,388.8	7,130.0	58.3	58.2	41.99	3,143.9	29.8	296.0	214.9	81.10	3.650		
10,700.0	7,350.0	10,488.8	7,130.0	60.0	59.9	41.73	3,243.9	28.0	294.8	211.8	83.04	3.550		
10,800.0	7,350.0	10,588.8	7,130.0	61.7	61.6	41.47	3,343.8	26.2	293.6	208.7	84.95	3.456		
10,900.0	7,350.0	10,688.8	7,130.0	63.4	63.3	41.20	3,443.8	24.4	292.4	205.6	86.83	3.368		
11,000.0	7,350.0	10,788.8	7,130.0	65.2	65.0	40.94	3,543.8	22.6	291.3	202.6	88.70	3.284		
11,100.0	7,350.0	10,888.7	7,130.0	66.9	66.7	40.67	3,643.8	20.9	290.1	199.6	90.53	3.204		
11,200.0	7,350.0	10,988.7	7,130.0	68.6	68.5	40.40	3,743.7	19.1	288.9	196.6	92.34	3.129		
11,300.0	7,350.0	11,088.7	7,130.0	70.3	70.2	40.13	3,843.7	17.3	287.8	193.6	94.12	3.057		
11,374.8	7,350.0	11,163.5	7,130.0	71.6	71.5	40.05	3,918.5	15.9	287.4	191.7	95.70	3.003		
11,400.0	7,350.0	11,188.7	7,130.0	72.0	71.9	40.04	3,943.7	15.5	287.3	191.1	96.23	2.986		
11,500.0	7,350.0	11,288.7	7,130.0	73.8	73.6	40.43	4,043.6	13.7	289.1	190.0	99.13	2.917		
11,600.0	7,350.0	11,388.5	7,130.0	75.5	75.4	41.29	4,143.4	11.9	293.2	190.4	102.81	2.852		
11,700.0	7,350.0	11,488.0	7,130.0	77.2	77.1	42.59	4,242.9	10.1	299.7	192.5	107.20	2.796		
11,800.0	7,350.0	11,587.3	7,130.0	78.9	78.8	44.16	4,342.2	8.4	307.7	195.3	112.40	2.737		
11,886.7	7,350.0	11,664.3	7,130.0	80.4	80.1	45.33	4,419.2	7.0	314.9	198.4	116.50	2.703 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4G-35H-O367 - Hz - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	89.90	0.0	14.8	14.8						
100.0	100.0	100.0	100.0	0.2	0.2	89.90	0.0	14.8	14.8	14.5	0.30	48.767			
200.0	200.0	200.0	200.0	0.3	0.3	89.90	0.0	14.8	14.8	14.2	0.65	22.688			
300.0	300.0	300.0	300.0	0.5	0.5	89.90	0.0	14.8	14.8	13.8	1.00	14.783			
400.0	400.0	400.0	400.0	0.7	0.7	89.90	0.0	14.8	14.8	13.5	1.35	10.963			
500.0	500.0	500.0	500.0	0.8	0.8	89.90	0.0	14.8	14.8	13.1	1.70	8.712			
600.0	600.0	600.0	600.0	1.0	1.0	89.90	0.0	14.8	14.8	12.8	2.05	7.228 CC			
700.0	700.0	700.0	700.0	1.2	1.2	-113.58	0.0	14.8	15.1	12.7	2.40	6.312 ES			
800.0	800.0	799.8	799.8	1.4	1.4	-119.32	-0.7	15.3	16.8	14.0	2.75	6.099			
900.0	899.9	899.6	899.6	1.6	1.6	-123.60	-2.7	17.0	20.2	17.1	3.10	6.517			
1,000.0	999.7	999.3	999.2	1.7	1.7	-126.11	-6.1	19.6	25.5	22.0	3.47	7.341			
1,100.0	1,099.4	1,098.9	1,098.6	1.9	1.9	-126.59	-10.9	23.4	32.1	28.2	3.84	8.349			
1,200.0	1,199.1	1,198.6	1,198.0	2.1	2.1	-125.47	-16.6	27.8	39.1	34.9	4.23	9.263			
1,300.0	1,298.9	1,298.4	1,297.5	2.3	2.3	-124.67	-22.2	32.2	46.2	41.6	4.61	10.018			
1,400.0	1,398.6	1,398.1	1,397.0	2.6	2.5	-124.08	-27.9	36.6	53.3	48.3	5.01	10.648			
1,500.0	1,498.3	1,497.9	1,496.5	2.8	2.7	-123.63	-33.5	41.1	60.4	55.0	5.40	11.181			
1,600.0	1,598.1	1,597.6	1,596.0	3.0	2.9	-123.28	-39.2	45.5	67.5	61.7	5.80	11.637			
1,700.0	1,697.8	1,697.4	1,695.5	3.2	3.1	-122.99	-44.9	49.9	74.6	68.4	6.20	12.031			
1,800.0	1,797.5	1,797.1	1,795.0	3.4	3.3	-122.75	-50.5	54.3	81.7	75.1	6.60	12.374			
1,900.0	1,897.2	1,896.9	1,894.5	3.6	3.5	-122.55	-56.2	58.8	88.8	81.8	7.00	12.676			
2,000.0	1,997.0	1,996.6	1,993.9	3.8	3.7	-122.38	-61.8	63.2	95.9	88.5	7.41	12.943			
2,100.0	2,096.7	2,096.3	2,093.4	4.0	4.0	-122.24	-67.5	67.6	103.0	95.2	7.81	13.181			
2,200.0	2,196.4	2,196.1	2,192.9	4.2	4.2	-122.11	-73.2	72.0	110.1	101.9	8.22	13.395			
2,300.0	2,296.2	2,295.8	2,292.4	4.5	4.4	-122.00	-78.8	76.5	117.2	108.6	8.63	13.587			
2,400.0	2,395.9	2,395.6	2,391.9	4.7	4.6	-121.90	-84.5	80.9	124.3	115.3	9.03	13.761			
2,500.0	2,495.6	2,495.3	2,491.4	4.9	4.8	-121.81	-90.1	85.3	131.4	122.0	9.44	13.919			
2,600.0	2,595.3	2,595.1	2,590.9	5.1	5.0	-121.73	-95.8	89.7	138.5	128.7	9.85	14.064			
2,700.0	2,695.1	2,694.8	2,690.4	5.3	5.2	-121.66	-101.5	94.2	145.6	135.3	10.26	14.197			
2,800.0	2,794.8	2,794.6	2,789.9	5.5	5.4	-121.59	-107.1	98.6	152.7	142.0	10.66	14.319			
2,900.0	2,894.5	2,894.3	2,889.3	5.7	5.6	-121.53	-112.8	103.0	159.8	148.7	11.07	14.431			
3,000.0	2,994.3	2,994.1	2,988.8	6.0	5.9	-121.48	-118.4	107.4	166.9	155.4	11.48	14.536			
3,100.0	3,094.0	3,093.8	3,088.3	6.2	6.1	-121.43	-124.1	111.9	174.0	162.1	11.89	14.632			
3,200.0	3,193.7	3,193.6	3,187.8	6.4	6.3	-121.38	-129.8	116.3	181.1	168.8	12.30	14.722			
3,300.0	3,293.4	3,293.3	3,287.3	6.6	6.5	-121.34	-135.4	120.7	188.2	175.5	12.71	14.807			
3,400.0	3,393.2	3,393.1	3,386.8	6.8	6.7	-121.30	-141.1	125.2	195.3	182.2	13.12	14.885			
3,500.0	3,492.9	3,492.8	3,486.3	7.0	6.9	-121.27	-146.7	129.6	202.4	188.9	13.53	14.959			
3,600.0	3,592.6	3,592.6	3,585.8	7.2	7.1	-121.23	-152.4	134.0	209.5	195.6	13.94	15.028			
3,700.0	3,692.4	3,692.3	3,685.2	7.5	7.3	-121.20	-158.1	138.4	216.6	202.3	14.35	15.093			
3,800.0	3,792.1	3,792.1	3,784.7	7.7	7.6	-121.17	-163.7	142.9	223.7	209.0	14.76	15.154			
3,900.0	3,891.8	3,891.8	3,884.2	7.9	7.8	-121.14	-169.4	147.3	230.8	215.7	15.18	15.212			
4,000.0	3,991.5	3,991.5	3,983.7	8.1	8.0	-121.12	-175.0	151.7	237.9	222.4	15.59	15.267			
4,100.0	4,091.3	4,091.3	4,083.2	8.3	8.2	-121.09	-180.7	156.1	245.1	229.1	16.00	15.319			
4,200.0	4,191.0	4,191.0	4,182.7	8.5	8.4	-121.07	-186.4	160.6	252.2	235.7	16.41	15.368			
4,300.0	4,290.7	4,290.8	4,282.2	8.8	8.6	-121.05	-192.0	165.0	259.3	242.4	16.82	15.415			
4,400.0	4,390.5	4,390.5	4,381.7	9.0	8.8	-121.02	-197.7	169.4	266.4	249.1	17.23	15.459			
4,500.0	4,490.2	4,490.3	4,481.1	9.2	9.1	-121.00	-203.3	173.8	273.5	255.8	17.64	15.501			
4,600.0	4,589.9	4,590.0	4,580.6	9.4	9.3	-120.99	-209.0	178.3	280.6	262.5	18.05	15.541			
4,700.0	4,689.6	4,689.8	4,680.1	9.6	9.5	-120.97	-214.7	182.7	287.7	269.2	18.46	15.580			
4,800.0	4,789.4	4,789.5	4,779.6	9.8	9.7	-120.95	-220.3	187.1	294.8	275.9	18.88	15.617			
4,900.0	4,889.1	4,889.3	4,879.1	10.1	9.9	-120.93	-226.0	191.5	301.9	282.6	19.29	15.652			
5,000.0	4,988.8	4,989.0	4,978.6	10.3	10.1	-120.92	-231.6	196.0	309.0	289.3	19.70	15.685			
5,100.0	5,088.6	5,088.8	5,078.1	10.5	10.3	-120.90	-237.3	200.4	316.1	296.0	20.11	15.717			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4G-35H-O367 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,188.3	5,188.5	5,177.6	10.7	10.5	-120.89	-243.0	204.8	323.2	302.7	20.52	15.748		
5,300.0	5,288.0	5,288.3	5,277.1	10.9	10.8	-120.88	-248.6	209.3	330.3	309.4	20.93	15.778		
5,400.0	5,387.7	5,388.0	5,376.5	11.1	11.0	-120.86	-254.3	213.7	337.4	316.1	21.35	15.806		
5,500.0	5,487.5	5,487.8	5,476.0	11.3	11.2	-120.85	-260.0	218.1	344.5	322.8	21.76	15.833		
5,600.0	5,587.2	5,587.5	5,575.5	11.6	11.4	-120.84	-265.6	222.5	351.6	329.4	22.17	15.860		
5,700.0	5,686.9	5,687.2	5,675.0	11.8	11.6	-120.83	-271.3	227.0	358.7	336.1	22.58	15.885		
5,800.0	5,786.7	5,787.0	5,774.5	12.0	11.8	-120.82	-276.9	231.4	365.8	342.8	22.99	15.909		
5,900.0	5,886.4	5,886.7	5,874.0	12.2	12.0	-120.81	-282.6	235.8	372.9	349.5	23.41	15.933		
6,000.0	5,986.1	5,986.5	5,973.5	12.4	12.3	-120.80	-288.3	240.2	380.0	356.2	23.82	15.956		
6,100.0	6,085.8	6,086.2	6,073.0	12.6	12.5	-120.79	-293.9	244.7	387.1	362.9	24.23	15.977		
6,200.0	6,185.6	6,186.0	6,172.4	12.9	12.7	-120.78	-299.6	249.1	394.2	369.6	24.64	15.999		
6,300.0	6,285.3	6,285.7	6,271.9	13.1	12.9	-120.77	-305.2	253.5	401.4	376.3	25.05	16.019		
6,400.0	6,385.0	6,385.5	6,371.4	13.3	13.1	-120.76	-310.9	257.9	408.5	383.0	25.47	16.039		
6,500.0	6,484.8	6,482.6	6,468.3	13.5	13.3	-120.81	-316.0	262.3	415.6	389.8	25.86	16.072		
6,600.0	6,584.5	6,571.6	6,557.1	13.7	13.4	-121.94	-312.5	266.2	424.6	398.5	26.15	16.239		
6,700.0	6,684.4	6,658.5	6,642.7	13.9	13.5	96.14	-298.4	270.0	435.0	408.8	26.27	16.561		
6,800.0	6,783.3	6,744.0	6,724.7	13.9	13.4	80.93	-274.6	273.7	445.3	419.1	26.19	17.000		
6,900.0	6,879.3	6,828.5	6,802.3	13.8	13.4	76.38	-241.6	277.1	455.1	429.1	25.96	17.529		
7,000.0	6,970.5	6,912.0	6,874.8	13.6	13.3	73.75	-200.2	280.3	464.1	438.5	25.62	18.113		
7,100.0	7,055.2	6,995.0	6,941.5	13.4	13.3	71.98	-151.1	283.3	472.0	446.8	25.24	18.699		
7,200.0	7,131.7	7,077.5	7,001.7	13.3	13.3	70.78	-94.9	286.0	478.7	453.8	24.91	19.216		
7,300.0	7,198.5	7,159.7	7,054.9	13.2	13.4	70.05	-32.3	288.4	484.0	459.2	24.72	19.578		
7,400.0	7,254.3	7,241.8	7,100.6	13.2	13.5	69.71	35.9	290.4	487.7	462.9	24.79	19.673		
7,500.0	7,298.0	7,324.1	7,138.3	13.4	13.8	69.75	109.0	292.1	489.9	464.7	25.19	19.448		
7,600.0	7,328.8	7,406.7	7,167.4	13.9	14.3	70.14	186.2	293.4	490.5	464.5	25.98	18.880		
7,700.0	7,346.1	7,489.7	7,187.5	14.5	14.8	70.87	266.6	294.3	489.5	462.3	27.18	18.009		
7,800.0	7,350.0	7,573.4	7,198.2	15.3	15.5	71.85	349.6	294.7	487.3	458.5	28.75	16.946		
7,881.9	7,350.0	7,646.1	7,200.0	16.1	16.2	72.05	422.2	294.8	486.7	456.5	30.21	16.112		
7,900.0	7,350.0	7,664.2	7,200.0	16.2	16.4	72.05	440.4	294.8	486.7	456.1	30.56	15.928		
8,000.0	7,350.0	7,764.2	7,200.0	17.3	17.4	72.05	540.4	294.8	486.7	454.0	32.65	14.905		
8,100.0	7,350.0	7,864.2	7,200.0	18.5	18.6	72.05	640.4	294.8	486.7	451.8	34.94	13.930		
8,200.0	7,350.0	7,964.2	7,200.0	19.8	19.9	72.05	740.4	294.8	486.7	449.3	37.39	13.018		
8,300.0	7,350.0	8,064.2	7,200.0	21.1	21.2	72.05	840.4	294.8	486.7	446.7	39.96	12.179		
8,400.0	7,350.0	8,164.2	7,200.0	22.5	22.6	72.05	940.4	294.8	486.7	444.1	42.64	11.414		
8,500.0	7,350.0	8,264.2	7,200.0	23.9	24.0	72.05	1,040.4	294.8	486.7	441.3	45.41	10.718		
8,600.0	7,350.0	8,364.2	7,200.0	25.4	25.5	72.05	1,140.4	294.8	486.7	438.4	48.25	10.086		
8,700.0	7,350.0	8,464.2	7,200.0	26.9	27.0	72.05	1,240.4	294.8	486.7	435.5	51.15	9.514		
8,800.0	7,350.0	8,564.2	7,200.0	28.5	28.5	72.05	1,340.4	294.8	486.7	432.6	54.11	8.995		
8,900.0	7,350.0	8,664.2	7,200.0	30.0	30.1	72.05	1,440.4	294.8	486.7	429.6	57.10	8.523		
9,000.0	7,350.0	8,764.2	7,200.0	31.6	31.7	72.05	1,540.4	294.8	486.7	426.6	60.13	8.094		
9,100.0	7,350.0	8,864.2	7,200.0	33.2	33.3	72.05	1,640.4	294.8	486.7	423.5	63.20	7.702		
9,200.0	7,350.0	8,964.2	7,200.0	34.8	34.9	72.05	1,740.4	294.8	486.7	420.4	66.28	7.343		
9,300.0	7,350.0	9,064.2	7,200.0	36.5	36.5	72.05	1,840.4	294.8	486.7	417.3	69.40	7.013		
9,400.0	7,350.0	9,164.2	7,200.0	38.1	38.1	72.05	1,940.4	294.8	486.7	414.2	72.53	6.710		
9,500.0	7,350.0	9,264.2	7,200.0	39.7	39.8	72.05	2,040.4	294.8	486.7	411.0	75.68	6.431		
9,600.0	7,350.0	9,364.2	7,200.0	41.4	41.4	72.05	2,140.4	294.8	486.7	407.9	78.85	6.173		
9,700.0	7,350.0	9,464.2	7,200.0	43.1	43.1	72.05	2,240.4	294.8	486.7	404.7	82.03	5.934		
9,800.0	7,350.0	9,564.2	7,200.0	44.7	44.8	72.05	2,340.4	294.8	486.7	401.5	85.22	5.711		
9,900.0	7,350.0	9,664.2	7,200.0	46.4	46.4	72.05	2,440.4	294.8	486.7	398.3	88.42	5.504		
10,000.0	7,350.0	9,764.2	7,200.0	48.1	48.1	72.05	2,540.4	294.8	486.7	395.1	91.63	5.311		
10,100.0	7,350.0	9,864.2	7,200.0	49.8	49.8	72.05	2,640.4	294.8	486.7	391.8	94.85	5.131		
10,200.0	7,350.0	9,964.2	7,200.0	51.5	51.5	72.05	2,740.4	294.8	486.7	388.6	98.08	4.962		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4G-35H-O367 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,300.0	7,350.0	10,064.2	7,200.0	53.2	53.2	72.05	2,840.4	294.8	486.7	385.4	101.32	4.804		
10,400.0	7,350.0	10,164.2	7,200.0	54.9	54.9	72.05	2,940.4	294.8	486.7	382.1	104.56	4.655		
10,500.0	7,350.0	10,264.2	7,200.0	56.6	56.6	72.05	3,040.4	294.8	486.7	378.9	107.81	4.514		
10,600.0	7,350.0	10,364.2	7,200.0	58.3	58.3	72.05	3,140.4	294.8	486.7	375.6	111.07	4.382		
10,700.0	7,350.0	10,464.2	7,200.0	60.0	60.0	72.05	3,240.4	294.8	486.7	372.4	114.32	4.257		
10,800.0	7,350.0	10,564.2	7,200.0	61.7	61.7	72.05	3,340.4	294.8	486.7	369.1	117.59	4.139		
10,900.0	7,350.0	10,664.2	7,200.0	63.4	63.4	72.05	3,440.4	294.8	486.7	365.8	120.86	4.027		
11,000.0	7,350.0	10,769.6	7,200.0	65.2	65.2	72.04	3,545.8	294.5	486.5	362.3	124.21	3.917		
11,100.0	7,350.0	10,882.8	7,200.0	66.9	67.2	71.93	3,659.0	291.6	484.0	356.4	127.63	3.792		
11,200.0	7,350.0	10,995.8	7,200.0	68.6	69.1	71.70	3,771.8	285.4	478.8	347.8	130.95	3.656		
11,300.0	7,350.0	11,101.9	7,200.0	70.3	70.9	71.38	3,877.5	277.0	471.2	337.1	134.08	3.514		
11,400.0	7,350.0	11,201.6	7,200.0	72.0	72.6	71.13	3,976.9	268.7	464.4	327.3	137.08	3.388		
11,500.0	7,350.0	11,301.6	7,200.0	73.8	74.3	71.00	4,076.5	260.3	460.8	320.8	140.02	3.291		
11,558.2	7,350.0	11,359.8	7,200.0	74.8	75.3	70.98	4,134.5	255.5	460.3	318.6	141.71	3.248		
11,600.0	7,350.0	11,401.6	7,200.0	75.5	76.1	70.99	4,176.2	252.0	460.6	317.7	142.90	3.223		
11,700.0	7,350.0	11,501.5	7,200.0	77.2	77.8	71.10	4,275.7	243.7	463.6	317.9	145.72	3.181		
11,800.0	7,350.0	11,601.4	7,200.0	78.9	79.5	71.30	4,375.3	235.4	468.3	319.2	149.15	3.140		
11,886.7	7,350.0	11,640.3	7,200.0	80.4	80.2	71.37	4,414.1	232.2	474.8	323.5	151.27	3.139 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4H-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.85	-0.3	22.4	22.4					
100.0	100.0	100.0	100.0	0.2	0.2	90.85	-0.3	22.4	22.4	22.1	0.30	73.619		
200.0	200.0	200.0	200.0	0.3	0.3	90.85	-0.3	22.4	22.4	21.7	0.65	34.250		
300.0	300.0	300.0	300.0	0.5	0.5	90.85	-0.3	22.4	22.4	21.4	1.00	22.316		
400.0	400.0	400.0	400.0	0.7	0.7	90.85	-0.3	22.4	22.4	21.0	1.35	16.550		
500.0	500.0	500.0	500.0	0.8	0.8	90.85	-0.3	22.4	22.4	20.7	1.70	13.152		
600.0	600.0	600.0	600.0	1.0	1.0	90.85	-0.3	22.4	22.4	20.3	2.05	10.911 CC, ES		
700.0	700.0	699.7	699.7	1.2	1.2	-110.02	-1.0	22.9	23.3	20.9	2.40	9.697		
800.0	800.0	799.4	799.4	1.4	1.4	-111.24	-2.9	24.7	26.0	23.2	2.75	9.436		
900.0	899.9	899.0	898.8	1.6	1.6	-112.78	-6.0	27.7	30.5	27.4	3.11	9.798		
1,000.0	999.7	998.4	998.1	1.7	1.7	-114.30	-10.4	31.8	36.8	33.3	3.48	10.577		
1,100.0	1,099.4	1,097.6	1,097.0	1.9	1.9	-115.05	-16.1	37.1	44.7	40.9	3.86	11.587		
1,200.0	1,199.1	1,196.9	1,195.8	2.1	2.2	-114.27	-22.9	43.5	53.7	49.5	4.25	12.628		
1,300.0	1,298.9	1,296.5	1,294.9	2.3	2.4	-113.45	-30.1	50.2	62.9	58.3	4.65	13.527		
1,400.0	1,398.6	1,396.0	1,394.0	2.6	2.6	-112.84	-37.2	56.8	72.2	67.1	5.06	14.274		
1,500.0	1,498.3	1,495.6	1,493.1	2.8	2.8	-112.36	-44.3	63.5	81.4	75.9	5.46	14.903		
1,600.0	1,598.1	1,595.2	1,592.2	3.0	3.1	-111.99	-51.4	70.2	90.6	84.8	5.87	15.439		
1,700.0	1,697.8	1,694.7	1,691.3	3.2	3.3	-111.68	-58.6	76.8	99.9	93.6	6.28	15.900		
1,800.0	1,797.5	1,794.3	1,790.4	3.4	3.5	-111.43	-65.7	83.5	109.1	102.4	6.69	16.301		
1,900.0	1,897.2	1,893.9	1,889.5	3.6	3.8	-111.21	-72.8	90.1	118.4	111.3	7.11	16.652		
2,000.0	1,997.0	1,993.5	1,988.6	3.8	4.0	-111.03	-79.9	96.8	127.6	120.1	7.52	16.963		
2,100.0	2,096.7	2,093.0	2,087.6	4.0	4.2	-110.87	-87.1	103.5	136.9	128.9	7.94	17.238		
2,200.0	2,196.4	2,192.6	2,186.7	4.2	4.5	-110.73	-94.2	110.1	146.1	137.7	8.36	17.485		
2,300.0	2,296.2	2,292.2	2,285.8	4.5	4.7	-110.61	-101.3	116.8	155.3	146.6	8.77	17.707		
2,400.0	2,395.9	2,391.7	2,384.9	4.7	4.9	-110.50	-108.4	123.5	164.6	155.4	9.19	17.908		
2,500.0	2,495.6	2,491.3	2,484.0	4.9	5.2	-110.40	-115.6	130.1	173.8	164.2	9.61	18.090		
2,600.0	2,595.3	2,590.9	2,583.1	5.1	5.4	-110.31	-122.7	136.8	183.1	173.1	10.03	18.256		
2,700.0	2,695.1	2,690.5	2,682.2	5.3	5.7	-110.23	-129.8	143.5	192.3	181.9	10.45	18.408		
2,800.0	2,794.8	2,790.0	2,781.3	5.5	5.9	-110.16	-136.9	150.1	201.6	190.7	10.87	18.548		
2,900.0	2,894.5	2,889.6	2,880.4	5.7	6.1	-110.10	-144.1	156.8	210.8	199.6	11.29	18.677		
3,000.0	2,994.3	2,989.2	2,979.5	6.0	6.4	-110.04	-151.2	163.4	220.1	208.4	11.71	18.796		
3,100.0	3,094.0	3,088.7	3,078.6	6.2	6.6	-109.98	-158.3	170.1	229.4	217.2	12.13	18.907		
3,200.0	3,193.7	3,188.3	3,177.7	6.4	6.9	-109.93	-165.4	176.8	238.6	226.1	12.55	19.010		
3,300.0	3,293.4	3,287.9	3,276.7	6.6	7.1	-109.89	-172.6	183.4	247.9	234.9	12.97	19.105		
3,400.0	3,393.2	3,387.4	3,375.8	6.8	7.3	-109.84	-179.7	190.1	257.1	243.7	13.39	19.195		
3,500.0	3,492.9	3,487.0	3,474.9	7.0	7.6	-109.80	-186.8	196.8	266.4	252.5	13.82	19.279		
3,600.0	3,592.6	3,586.6	3,574.0	7.2	7.8	-109.76	-194.0	203.4	275.6	261.4	14.24	19.358		
3,700.0	3,692.4	3,686.2	3,673.1	7.5	8.1	-109.73	-201.1	210.1	284.9	270.2	14.66	19.432		
3,800.0	3,792.1	3,785.7	3,772.2	7.7	8.3	-109.69	-208.2	216.8	294.1	279.0	15.08	19.501		
3,900.0	3,891.8	3,885.3	3,871.3	7.9	8.5	-109.66	-215.3	223.4	303.4	287.9	15.50	19.567		
4,000.0	3,991.5	3,984.9	3,970.4	8.1	8.8	-109.63	-222.5	230.1	312.6	296.7	15.93	19.629		
4,100.0	4,091.3	4,084.4	4,069.5	8.3	9.0	-109.61	-229.6	236.7	321.9	305.5	16.35	19.688		
4,200.0	4,191.0	4,184.0	4,168.6	8.5	9.3	-109.58	-236.7	243.4	331.1	314.4	16.77	19.744		
4,300.0	4,290.7	4,283.6	4,267.7	8.8	9.5	-109.56	-243.8	250.1	340.4	323.2	17.19	19.797		
4,400.0	4,390.5	4,383.2	4,366.8	9.0	9.8	-109.53	-251.0	256.7	349.6	332.0	17.62	19.847		
4,500.0	4,490.2	4,482.7	4,465.9	9.2	10.0	-109.51	-258.1	263.4	358.9	340.8	18.04	19.895		
4,600.0	4,589.9	4,582.3	4,564.9	9.4	10.2	-109.49	-265.2	270.1	368.1	349.7	18.46	19.940		
4,700.0	4,689.6	4,681.9	4,664.0	9.6	10.5	-109.47	-272.3	276.7	377.4	358.5	18.88	19.984		
4,800.0	4,789.4	4,781.4	4,763.1	9.8	10.7	-109.45	-279.5	283.4	386.6	367.3	19.31	20.025		
4,900.0	4,889.1	4,881.0	4,862.2	10.1	11.0	-109.43	-286.6	290.1	395.9	376.2	19.73	20.065		
5,000.0	4,988.8	4,980.6	4,961.3	10.3	11.2	-109.42	-293.7	296.7	405.1	385.0	20.15	20.103		
5,100.0	5,088.6	5,080.2	5,060.4	10.5	11.5	-109.40	-300.8	303.4	414.4	393.8	20.58	20.139		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4H-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,188.3	5,179.7	5,159.5	10.7	11.7	-109.38	-308.0	310.0	423.7	402.7	21.00	20.174		
5,300.0	5,288.0	5,279.3	5,258.6	10.9	11.9	-109.37	-315.1	316.7	432.9	411.5	21.42	20.208		
5,400.0	5,387.7	5,378.9	5,357.7	11.1	12.2	-109.35	-322.2	323.4	442.2	420.3	21.85	20.240		
5,500.0	5,487.5	5,478.4	5,456.8	11.3	12.4	-109.34	-329.3	330.0	451.4	429.1	22.27	20.271		
5,600.0	5,587.2	5,578.0	5,555.9	11.6	12.7	-109.33	-336.5	336.7	460.7	438.0	22.69	20.300		
5,700.0	5,686.9	5,677.6	5,655.0	11.8	12.9	-109.31	-343.6	343.4	469.9	446.8	23.12	20.329		
5,800.0	5,786.7	5,777.2	5,754.0	12.0	13.2	-109.30	-350.7	350.0	479.2	455.6	23.54	20.356		
5,900.0	5,886.4	5,876.7	5,853.1	12.2	13.4	-109.29	-357.8	356.7	488.4	464.5	23.96	20.383		
6,000.0	5,986.1	5,976.3	5,952.2	12.4	13.6	-109.28	-365.0	363.4	497.7	473.3	24.39	20.408		
6,100.0	6,085.8	6,075.9	6,051.3	12.6	13.9	-109.27	-372.1	370.0	506.9	482.1	24.81	20.433		
6,200.0	6,185.6	6,175.4	6,150.4	12.9	14.1	-109.26	-379.2	376.7	516.2	490.9	25.23	20.457		
6,300.0	6,285.3	6,275.0	6,249.5	13.1	14.4	-109.25	-386.3	383.3	525.4	499.8	25.66	20.480		
6,400.0	6,385.0	6,374.6	6,348.6	13.3	14.6	-109.24	-393.5	390.0	534.7	508.6	26.08	20.502		
6,500.0	6,484.8	6,474.1	6,447.7	13.5	14.9	-109.23	-400.6	396.7	543.9	517.4	26.50	20.524		
6,600.0	6,584.5	6,573.7	6,546.8	13.7	15.1	-109.22	-407.7	403.3	553.2	526.3	26.93	20.544		
6,700.0	6,684.4	6,674.1	6,646.8	13.9	15.3	111.03	-412.2	410.1	562.5	535.3	27.22	20.665		
6,800.0	6,783.3	6,775.8	6,747.8	13.9	15.4	97.74	-403.3	416.9	571.9	544.6	27.27	20.971		
6,900.0	6,879.3	6,878.2	6,847.2	13.8	15.4	94.77	-380.1	423.5	580.9	553.8	27.10	21.435		
7,000.0	6,970.5	6,981.4	6,943.0	13.6	15.3	93.36	-342.5	430.0	589.6	562.8	26.78	22.019		
7,100.0	7,055.2	7,085.4	7,033.1	13.4	15.1	92.48	-291.1	436.0	597.7	571.3	26.37	22.661		
7,200.0	7,131.7	7,190.1	7,115.3	13.3	15.0	91.84	-226.7	441.6	605.0	579.0	26.00	23.271		
7,300.0	7,198.5	7,295.4	7,187.7	13.2	14.9	91.35	-150.5	446.4	611.3	585.6	25.77	23.727		
7,400.0	7,254.3	7,401.2	7,248.5	13.2	15.0	90.94	-64.1	450.5	616.7	590.9	25.80	23.897		
7,500.0	7,298.0	7,507.4	7,296.0	13.4	15.1	90.61	30.7	453.7	620.8	594.6	26.22	23.675		
7,600.0	7,328.8	7,613.7	7,329.0	13.9	15.5	90.34	131.7	455.9	623.7	596.6	27.07	23.036		
7,700.0	7,346.1	7,720.1	7,346.8	14.5	16.1	90.12	236.5	457.1	625.3	596.9	28.37	22.041		
7,800.0	7,350.0	7,824.1	7,350.0	15.3	16.9	90.00	340.4	457.4	625.6	595.5	30.04	20.825		
7,900.0	7,350.0	7,924.1	7,350.0	16.2	17.7	90.00	440.4	457.4	625.6	593.6	31.97	19.566		
8,000.0	7,350.0	8,024.1	7,350.0	17.3	18.7	90.00	540.4	457.4	625.6	591.4	34.16	18.315		
8,100.0	7,350.0	8,124.1	7,350.0	18.5	19.8	90.00	640.4	457.4	625.6	589.0	36.55	17.117		
8,200.0	7,350.0	8,224.1	7,350.0	19.8	21.0	90.00	740.4	457.4	625.6	586.4	39.11	15.996		
8,300.0	7,350.0	8,324.1	7,350.0	21.1	22.3	90.00	840.4	457.4	625.6	583.7	41.80	14.964		
8,400.0	7,350.0	8,424.1	7,350.0	22.5	23.6	90.00	940.4	457.4	625.6	580.9	44.61	14.021		
8,500.0	7,350.0	8,524.1	7,350.0	23.9	25.0	90.00	1,040.4	457.4	625.6	578.0	47.52	13.165		
8,600.0	7,350.0	8,624.1	7,350.0	25.4	26.4	90.00	1,140.4	457.4	625.6	575.1	50.50	12.388		
8,700.0	7,350.0	8,724.1	7,350.0	26.9	27.9	90.00	1,240.4	457.4	625.6	572.0	53.54	11.683		
8,800.0	7,350.0	8,824.1	7,350.0	28.5	29.3	90.00	1,340.4	457.4	625.6	568.9	56.64	11.044		
8,900.0	7,350.0	8,924.1	7,350.0	30.0	30.9	90.00	1,440.4	457.4	625.6	565.8	59.79	10.463		
9,000.0	7,350.0	9,024.1	7,350.0	31.6	32.4	90.00	1,540.4	457.4	625.6	562.6	62.97	9.935		
9,100.0	7,350.0	9,124.1	7,350.0	33.2	34.0	90.00	1,640.4	457.4	625.6	559.4	66.18	9.452		
9,200.0	7,350.0	9,224.1	7,350.0	34.8	35.6	90.00	1,740.4	457.4	625.6	556.1	69.43	9.010		
9,300.0	7,350.0	9,324.1	7,350.0	36.5	37.1	90.00	1,840.4	457.4	625.6	552.9	72.69	8.605		
9,400.0	7,350.0	9,424.1	7,350.0	38.1	38.8	90.00	1,940.4	457.4	625.6	549.6	75.98	8.233		
9,500.0	7,350.0	9,524.1	7,350.0	39.7	40.4	90.00	2,040.4	457.4	625.6	546.3	79.29	7.889		
9,600.0	7,350.0	9,624.1	7,350.0	41.4	42.0	90.00	2,140.4	457.4	625.6	542.9	82.62	7.572		
9,700.0	7,350.0	9,724.1	7,350.0	43.1	43.7	90.00	2,240.4	457.4	625.6	539.6	85.96	7.278		
9,800.0	7,350.0	9,824.1	7,350.0	44.7	45.3	90.00	2,340.4	457.4	625.6	536.2	89.31	7.004		
9,900.0	7,350.0	9,924.1	7,350.0	46.4	47.0	90.00	2,440.4	457.4	625.6	532.9	92.67	6.750		
10,000.0	7,350.0	10,024.1	7,350.0	48.1	48.6	90.00	2,540.4	457.4	625.6	529.5	96.05	6.513		
10,100.0	7,350.0	10,124.1	7,350.0	49.8	50.3	90.00	2,640.4	457.4	625.6	526.1	99.43	6.291		
10,200.0	7,350.0	10,224.1	7,350.0	51.5	52.0	90.00	2,740.4	457.4	625.6	522.7	102.82	6.084		
10,300.0	7,350.0	10,324.1	7,350.0	53.2	53.7	90.00	2,840.4	457.4	625.6	519.3	106.22	5.889		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4H-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	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		
10,400.0	7,350.0	10,424.1	7,350.0	54.9	55.3	90.00	2,940.4	457.4	625.6	515.9	109.63	5.706		
10,500.0	7,350.0	10,524.1	7,350.0	56.6	57.0	90.00	3,040.4	457.4	625.6	512.5	113.04	5.534		
10,600.0	7,350.0	10,624.1	7,350.0	58.3	58.7	90.00	3,140.4	457.4	625.6	509.1	116.46	5.372		
10,700.0	7,350.0	10,724.1	7,350.0	60.0	60.4	90.00	3,240.4	457.4	625.6	505.7	119.88	5.218		
10,800.0	7,350.0	10,824.1	7,350.0	61.7	62.1	90.00	3,340.4	457.4	625.6	502.2	123.31	5.073		
10,900.0	7,350.0	10,924.1	7,350.0	63.4	63.8	90.00	3,440.4	457.4	625.6	498.8	126.74	4.936		
11,000.0	7,350.0	11,024.1	7,350.0	65.2	65.5	90.00	3,540.4	457.4	625.6	495.4	130.18	4.805		
11,100.0	7,350.0	11,124.1	7,350.0	66.9	67.2	90.00	3,640.4	457.4	625.6	491.9	133.62	4.682		
11,200.0	7,350.0	11,224.1	7,350.0	68.6	69.0	90.00	3,740.4	457.4	625.6	488.5	137.06	4.564		
11,300.0	7,350.0	11,324.1	7,350.0	70.3	70.7	90.00	3,840.4	457.4	625.6	485.0	140.51	4.452		
11,300.0	7,350.0	11,324.1	7,350.0	70.3	70.7	90.00	3,840.4	457.4	625.6	485.0	140.51	4.452		
11,400.0	7,350.0	11,424.1	7,350.0	72.0	72.4	90.00	3,940.4	457.4	626.7	482.9	143.78	4.359		
11,500.0	7,350.0	11,524.0	7,350.0	73.8	74.1	90.00	4,040.3	457.4	631.2	484.4	146.86	4.298		
11,600.0	7,350.0	11,623.7	7,350.0	75.5	75.8	90.00	4,139.9	457.4	639.3	489.5	149.76	4.269		
11,700.0	7,350.0	11,723.0	7,350.0	77.2	77.5	90.00	4,239.3	457.4	650.8	498.3	152.48	4.268		
11,800.0	7,350.0	11,822.1	7,350.0	78.9	79.2	90.00	4,338.4	457.4	664.0	508.1	155.90	4.259 SF		
11,886.7	7,350.0	11,892.7	7,350.0	80.4	80.4	90.00	4,409.0	457.4	675.7	517.1	158.61	4.260		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4I-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.65	-0.3	29.9	29.9					
100.0	100.0	100.0	100.0	0.2	0.2	90.65	-0.3	29.9	29.9	29.6	0.30	98.461		
200.0	200.0	200.0	200.0	0.3	0.3	90.65	-0.3	29.9	29.9	29.2	0.65	45.808		
300.0	300.0	300.0	300.0	0.5	0.5	90.65	-0.3	29.9	29.9	28.9	1.00	29.847		
400.0	400.0	400.0	400.0	0.7	0.7	90.65	-0.3	29.9	29.9	28.6	1.35	22.135		
500.0	500.0	500.0	500.0	0.8	0.8	90.65	-0.3	29.9	29.9	28.2	1.70	17.589	CC, ES	
600.0	600.0	599.6	599.6	1.0	1.0	91.54	-0.8	30.6	30.6	28.6	2.05	14.952		
700.0	700.0	699.1	699.0	1.2	1.2	-107.83	-2.3	32.8	33.1	30.7	2.40	13.809		
800.0	800.0	798.4	798.3	1.4	1.4	-108.11	-4.7	36.3	37.6	34.9	2.75	13.673		
900.0	899.9	897.6	897.3	1.6	1.6	-109.25	-8.1	41.3	44.1	41.0	3.11	14.188		
1,000.0	999.7	996.6	995.9	1.7	1.8	-110.80	-12.4	47.7	52.7	49.2	3.48	15.137		
1,100.0	1,099.4	1,095.2	1,094.1	1.9	2.0	-112.05	-17.7	55.4	63.1	59.3	3.86	16.343		
1,200.0	1,199.1	1,193.5	1,191.8	2.1	2.2	-112.21	-23.9	64.6	75.0	70.7	4.25	17.628		
1,300.0	1,298.9	1,291.8	1,289.3	2.3	2.5	-111.70	-31.0	75.0	88.1	83.5	4.65	18.955		
1,400.0	1,398.6	1,390.9	1,387.5	2.6	2.7	-111.16	-38.4	86.0	101.7	96.7	5.05	20.128		
1,500.0	1,498.3	1,490.0	1,485.7	2.8	3.0	-110.75	-45.9	96.9	115.3	109.8	5.46	21.116		
1,600.0	1,598.1	1,589.0	1,583.9	3.0	3.3	-110.42	-53.3	107.8	128.8	123.0	5.87	21.959		
1,700.0	1,697.8	1,688.1	1,682.1	3.2	3.5	-110.16	-60.7	118.7	142.4	136.1	6.28	22.686		
1,800.0	1,797.5	1,787.2	1,780.3	3.4	3.8	-109.94	-68.1	129.7	156.0	149.3	6.69	23.318		
1,900.0	1,897.2	1,886.3	1,878.4	3.6	4.1	-109.76	-75.6	140.6	169.6	162.5	7.10	23.872		
2,000.0	1,997.0	1,985.3	1,976.6	3.8	4.4	-109.60	-83.0	151.5	183.2	175.7	7.52	24.362		
2,100.0	2,096.7	2,084.4	2,074.8	4.0	4.7	-109.47	-90.4	162.5	196.8	188.8	7.93	24.798		
2,200.0	2,196.4	2,183.5	2,173.0	4.2	4.9	-109.35	-97.8	173.4	210.3	202.0	8.35	25.189		
2,300.0	2,296.2	2,282.6	2,271.2	4.5	5.2	-109.25	-105.3	184.3	223.9	215.2	8.77	25.540		
2,400.0	2,395.9	2,381.6	2,369.4	4.7	5.5	-109.16	-112.7	195.2	237.5	228.3	9.19	25.858		
2,500.0	2,495.6	2,480.7	2,467.6	4.9	5.8	-109.08	-120.1	206.2	251.1	241.5	9.60	26.146		
2,600.0	2,595.3	2,579.8	2,565.8	5.1	6.1	-109.00	-127.6	217.1	264.7	254.7	10.02	26.410		
2,700.0	2,695.1	2,678.8	2,663.9	5.3	6.3	-108.94	-135.0	228.0	278.3	267.8	10.44	26.651		
2,800.0	2,794.8	2,777.9	2,762.1	5.5	6.6	-108.88	-142.4	239.0	291.9	281.0	10.86	26.873		
2,900.0	2,894.5	2,877.0	2,860.3	5.7	6.9	-108.82	-149.8	249.9	305.5	294.2	11.28	27.078		
3,000.0	2,994.3	2,976.1	2,958.5	6.0	7.2	-108.77	-157.3	260.8	319.0	307.3	11.70	27.267		
3,100.0	3,094.0	3,075.1	3,056.7	6.2	7.5	-108.73	-164.7	271.7	332.6	320.5	12.12	27.443		
3,200.0	3,193.7	3,174.2	3,154.9	6.4	7.8	-108.69	-172.1	282.7	346.2	333.7	12.54	27.606		
3,300.0	3,293.4	3,273.3	3,253.1	6.6	8.1	-108.65	-179.5	293.6	359.8	346.8	12.96	27.759		
3,400.0	3,393.2	3,372.3	3,351.3	6.8	8.3	-108.61	-187.0	304.5	373.4	360.0	13.38	27.901		
3,500.0	3,492.9	3,471.4	3,449.4	7.0	8.6	-108.58	-194.4	315.5	387.0	373.2	13.80	28.035		
3,600.0	3,592.6	3,570.5	3,547.6	7.2	8.9	-108.55	-201.8	326.4	400.6	386.4	14.22	28.160		
3,700.0	3,692.4	3,669.6	3,645.8	7.5	9.2	-108.52	-209.2	337.3	414.2	399.5	14.65	28.278		
3,800.0	3,792.1	3,768.6	3,744.0	7.7	9.5	-108.49	-216.7	348.2	427.8	412.7	15.07	28.389		
3,900.0	3,891.8	3,867.7	3,842.2	7.9	9.8	-108.46	-224.1	359.2	441.3	425.9	15.49	28.494		
4,000.0	3,991.5	3,966.8	3,940.4	8.1	10.1	-108.44	-231.5	370.1	454.9	439.0	15.91	28.593		
4,100.0	4,091.3	4,065.9	4,038.6	8.3	10.4	-108.42	-238.9	381.0	468.5	452.2	16.33	28.686		
4,200.0	4,191.0	4,164.9	4,136.7	8.5	10.6	-108.40	-246.4	392.0	482.1	465.4	16.75	28.775		
4,300.0	4,290.7	4,264.0	4,234.9	8.8	10.9	-108.38	-253.8	402.9	495.7	478.5	17.18	28.859		
4,400.0	4,390.5	4,363.1	4,333.1	9.0	11.2	-108.36	-261.2	413.8	509.3	491.7	17.60	28.940		
4,500.0	4,490.2	4,462.1	4,431.3	9.2	11.5	-108.34	-268.6	424.7	522.9	504.9	18.02	29.016		
4,600.0	4,589.9	4,561.2	4,529.5	9.4	11.8	-108.32	-276.1	435.7	536.5	518.0	18.44	29.089		
4,700.0	4,689.6	4,660.3	4,627.7	9.6	12.1	-108.30	-283.5	446.6	550.1	531.2	18.86	29.158		
4,800.0	4,789.4	4,759.4	4,725.9	9.8	12.4	-108.29	-290.9	457.5	563.7	544.4	19.29	29.224		
4,900.0	4,889.1	4,858.4	4,824.1	10.1	12.7	-108.27	-298.4	468.4	577.2	557.5	19.71	29.288		
5,000.0	4,988.8	4,957.5	4,922.2	10.3	12.9	-108.26	-305.8	479.4	590.8	570.7	20.13	29.348		
5,100.0	5,088.6	5,056.6	5,020.4	10.5	13.2	-108.25	-313.2	490.3	604.4	583.9	20.55	29.406		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4I-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,200.0	5,188.3	5,155.6	5,118.6	10.7	13.5	-108.23	-320.6	501.2	618.0	597.0	20.98	29.462		
5,300.0	5,288.0	5,254.7	5,216.8	10.9	13.8	-108.22	-328.1	512.2	631.6	610.2	21.40	29.515		
5,400.0	5,387.7	5,353.8	5,315.0	11.1	14.1	-108.21	-335.5	523.1	645.2	623.4	21.82	29.567		
5,500.0	5,487.5	5,452.9	5,413.2	11.3	14.4	-108.20	-342.9	534.0	658.8	636.5	22.24	29.616		
5,600.0	5,587.2	5,551.9	5,511.4	11.6	14.7	-108.19	-350.3	544.9	672.4	649.7	22.67	29.663		
5,700.0	5,686.9	5,651.0	5,609.6	11.8	15.0	-108.18	-357.8	555.9	686.0	662.9	23.09	29.709		
5,800.0	5,786.7	5,750.1	5,707.7	12.0	15.3	-108.17	-365.2	566.8	699.6	676.1	23.51	29.753		
5,900.0	5,886.4	5,849.1	5,805.9	12.2	15.5	-108.16	-372.6	577.7	713.2	689.2	23.94	29.795		
6,000.0	5,986.1	5,948.2	5,904.1	12.4	15.8	-108.15	-380.0	588.7	726.7	702.4	24.36	29.836		
6,100.0	6,085.8	6,047.3	6,002.3	12.6	16.1	-108.14	-387.5	599.6	740.3	715.6	24.78	29.875		
6,200.0	6,185.6	6,146.4	6,100.5	12.9	16.4	-108.13	-394.9	610.5	753.9	728.7	25.20	29.913		
6,300.0	6,285.3	6,245.4	6,198.7	13.1	16.7	-108.12	-402.3	621.4	767.5	741.9	25.63	29.950		
6,400.0	6,385.0	6,344.5	6,296.9	13.3	17.0	-108.11	-409.7	632.4	781.1	755.1	26.05	29.986		
6,500.0	6,484.8	6,445.0	6,396.5	13.5	17.3	-108.16	-416.5	643.5	794.7	768.2	26.46	30.029		
6,600.0	6,584.5	6,547.2	6,497.9	13.7	17.4	-109.00	-412.3	654.6	807.9	781.1	26.82	30.122		
6,700.0	6,684.4	6,646.2	6,594.6	13.9	17.5	109.20	-394.3	665.2	821.2	794.1	27.07	30.332		
6,800.0	6,783.3	6,742.8	6,685.8	13.9	17.5	93.87	-364.0	675.0	834.6	807.5	27.09	30.806		
6,900.0	6,879.3	6,837.5	6,770.4	13.8	17.5	88.99	-322.7	684.0	847.8	820.9	26.91	31.509		
7,000.0	6,970.5	6,930.3	6,847.4	13.6	17.4	85.84	-271.6	692.1	860.6	834.0	26.57	32.386		
7,100.0	7,055.2	7,021.6	6,916.1	13.4	17.4	83.41	-212.0	699.1	872.5	846.4	26.16	33.355		
7,200.0	7,131.7	7,111.5	6,975.8	13.3	17.3	81.42	-145.2	705.2	883.3	857.6	25.76	34.293		
7,300.0	7,198.5	7,200.0	7,026.1	13.2	17.4	79.79	-72.6	710.1	892.8	867.3	25.49	35.032		
7,400.0	7,254.3	7,288.1	7,067.0	13.2	17.5	78.46	5.3	713.9	900.7	875.2	25.48	35.346		
7,500.0	7,298.0	7,375.1	7,097.7	13.4	17.8	77.43	86.6	716.6	906.8	881.0	25.79	35.159		
7,600.0	7,328.8	7,461.5	7,118.3	13.9	18.1	76.68	170.4	718.2	911.0	884.4	26.53	34.335		
7,700.0	7,346.1	7,550.0	7,128.8	14.5	18.5	76.20	258.2	718.6	913.1	885.4	27.73	32.930		
7,800.0	7,350.0	7,639.9	7,130.0	15.3	19.1	76.06	348.1	717.9	913.1	883.7	29.34	31.119		
7,900.0	7,350.0	7,739.9	7,130.0	16.2	19.9	76.04	448.1	717.1	912.2	881.0	31.23	29.208		
8,000.0	7,350.0	7,839.9	7,130.0	17.3	20.8	76.03	548.1	716.2	911.4	878.0	33.36	27.316		
8,100.0	7,350.0	7,939.9	7,130.0	18.5	21.8	76.02	648.1	715.3	910.5	874.8	35.69	25.509		
8,200.0	7,350.0	8,039.9	7,130.0	19.8	22.8	76.00	748.1	714.4	909.7	871.5	38.19	23.823		
8,300.0	7,350.0	8,139.9	7,130.0	21.1	24.0	75.99	848.1	713.6	908.8	868.0	40.81	22.270		
8,400.0	7,350.0	8,239.9	7,130.0	22.5	25.2	75.98	948.1	712.7	908.0	864.4	43.54	20.854		
8,500.0	7,350.0	8,339.9	7,130.0	23.9	26.5	75.96	1,048.1	711.8	907.1	860.8	46.36	19.567		
8,600.0	7,350.0	8,439.9	7,130.0	25.4	27.9	75.95	1,148.0	711.0	906.3	857.0	49.25	18.400		
8,700.0	7,350.0	8,539.9	7,130.0	26.9	29.3	75.94	1,248.0	710.1	905.4	853.2	52.21	17.343		
8,800.0	7,350.0	8,639.8	7,130.0	28.5	30.7	75.92	1,348.0	709.2	904.6	849.4	55.21	16.383		
8,900.0	7,350.0	8,739.8	7,130.0	30.0	32.1	75.91	1,448.0	708.3	903.8	845.5	58.26	15.511		
9,000.0	7,350.0	8,839.8	7,130.0	31.6	33.6	75.90	1,548.0	707.5	902.9	841.6	61.35	14.717		
9,100.0	7,350.0	8,939.8	7,130.0	33.2	35.1	75.88	1,648.0	706.6	902.1	837.6	64.47	13.993		
9,200.0	7,350.0	9,039.8	7,130.0	34.8	36.7	75.87	1,748.0	705.7	901.2	833.6	67.61	13.329		
9,300.0	7,350.0	9,139.8	7,130.0	36.5	38.2	75.86	1,848.0	704.8	900.4	829.6	70.78	12.721		
9,400.0	7,350.0	9,239.8	7,130.0	38.1	39.8	75.84	1,948.0	704.0	899.5	825.6	73.97	12.161		
9,500.0	7,350.0	9,339.8	7,130.0	39.7	41.4	75.83	2,048.0	703.1	898.7	821.5	77.17	11.645		
9,600.0	7,350.0	9,439.8	7,130.0	41.4	43.0	75.82	2,148.0	702.2	897.8	817.4	80.39	11.168		
9,700.0	7,350.0	9,539.8	7,130.0	43.1	44.6	75.80	2,248.0	701.4	897.0	813.4	83.63	10.726		
9,800.0	7,350.0	9,639.8	7,130.0	44.7	46.2	75.79	2,348.0	700.5	896.1	809.3	86.87	10.315		
9,900.0	7,350.0	9,739.8	7,130.0	46.4	47.8	75.77	2,447.9	699.6	895.3	805.2	90.13	9.933		
10,000.0	7,350.0	9,839.8	7,130.0	48.1	49.5	75.76	2,547.9	698.7	894.4	801.0	93.40	9.577		
10,100.0	7,350.0	9,939.8	7,130.0	49.8	51.1	75.75	2,647.9	697.9	893.6	796.9	96.67	9.244		
10,200.0	7,350.0	10,039.8	7,130.0	51.5	52.7	75.73	2,747.9	697.0	892.8	792.8	99.96	8.931		
10,300.0	7,350.0	10,139.8	7,130.0	53.2	54.4	75.72	2,847.9	696.1	891.9	788.7	103.25	8.639		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4I-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
10,400.0	7,350.0	10,239.8	7,130.0	54.9	56.1	75.71	2,947.9	695.2	891.1	784.5	106.54	8.363		
10,500.0	7,350.0	10,339.8	7,130.0	56.6	57.7	75.69	3,047.9	694.4	890.2	780.4	109.84	8.104		
10,600.0	7,350.0	10,439.8	7,130.0	58.3	59.4	75.68	3,147.9	693.5	889.4	776.2	113.15	7.860		
10,700.0	7,350.0	10,539.8	7,130.0	60.0	61.1	75.66	3,247.9	692.6	888.5	772.1	116.46	7.629		
10,800.0	7,350.0	10,639.8	7,130.0	61.7	62.8	75.65	3,347.9	691.8	887.7	767.9	119.78	7.411		
10,900.0	7,350.0	10,739.8	7,130.0	63.4	64.5	75.64	3,447.9	690.9	886.8	763.7	123.10	7.204		
11,000.0	7,350.0	10,839.8	7,130.0	65.2	66.1	75.62	3,547.9	690.0	886.0	759.6	126.42	7.008		
11,100.0	7,350.0	10,939.8	7,130.0	66.9	67.8	75.61	3,647.9	689.1	885.1	755.4	129.75	6.822		
11,200.0	7,350.0	11,039.8	7,130.0	68.6	69.5	75.59	3,747.8	688.3	884.3	751.2	133.07	6.645		
11,300.0	7,350.0	11,139.8	7,130.0	70.3	71.2	75.58	3,847.8	687.4	883.5	747.0	136.41	6.477		
11,340.2	7,350.0	11,179.9	7,130.0	71.0	71.9	75.58	3,888.0	687.0	883.3	745.7	137.65	6.417		
11,400.0	7,350.0	11,239.7	7,130.0	72.0	72.9	75.58	3,947.8	686.5	883.7	744.2	139.49	6.335		
11,500.0	7,350.0	11,339.7	7,130.0	73.8	74.6	75.62	4,047.8	685.6	887.3	744.9	142.38	6.232		
11,600.0	7,350.0	11,439.4	7,130.0	75.5	76.3	75.70	4,147.5	684.8	894.2	749.1	145.13	6.161		
11,700.0	7,350.0	11,538.8	7,130.0	77.2	78.0	75.82	4,246.9	683.9	904.5	756.8	147.73	6.123		
11,800.0	7,350.0	11,638.1	7,130.0	78.9	79.7	76.01	4,346.1	683.0	916.6	765.4	151.17	6.063		
11,886.7	7,350.0	11,695.8	7,130.0	80.4	80.7	76.12	4,403.9	682.5	927.4	773.8	153.65	6.036 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4J-35H-O367 - Hz - Plan #2														Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	90.53	-0.3	37.4	37.4						
100.0	100.0	100.0	100.0	0.2	0.2	90.53	-0.3	37.4	37.4	37.1	0.30	123.303			
200.0	200.0	200.0	200.0	0.3	0.3	90.53	-0.3	37.4	37.4	36.8	0.65	57.366			
300.0	300.0	300.0	300.0	0.5	0.5	90.53	-0.3	37.4	37.4	36.4	1.00	37.378			
400.0	400.0	400.0	400.0	0.7	0.7	90.53	-0.3	37.4	37.4	36.1	1.35	27.719 CC, ES			
500.0	500.0	499.4	499.4	0.8	0.8	91.14	-0.8	38.2	38.2	36.5	1.70	22.489			
600.0	600.0	598.8	598.7	1.0	1.0	92.81	-2.0	40.5	40.5	38.5	2.05	19.788			
700.0	700.0	698.0	697.9	1.2	1.2	-106.22	-4.0	44.3	44.7	42.3	2.40	18.659			
800.0	800.0	797.1	796.7	1.4	1.4	-106.18	-6.9	49.5	51.0	48.2	2.75	18.540 SF			
900.0	899.9	895.8	895.2	1.6	1.6	-107.06	-10.5	56.3	59.3	56.2	3.11	19.070			
1,000.0	999.7	994.3	993.2	1.7	1.8	-108.42	-15.0	64.5	69.7	66.2	3.48	20.029			
1,100.0	1,099.4	1,092.4	1,090.7	1.9	2.1	-109.72	-20.2	74.2	82.1	78.2	3.86	21.250			
1,200.0	1,199.1	1,190.1	1,187.5	2.1	2.3	-110.24	-26.2	85.3	96.0	91.7	4.25	22.572			
1,300.0	1,298.9	1,287.4	1,283.8	2.3	2.6	-110.20	-33.0	97.8	111.3	106.7	4.65	23.961			
1,400.0	1,398.6	1,386.1	1,381.3	2.6	2.9	-110.01	-40.2	111.1	127.4	122.4	5.05	25.238			
1,500.0	1,498.3	1,484.8	1,478.9	2.8	3.2	-109.85	-47.4	124.5	143.5	138.0	5.45	26.313			
1,600.0	1,598.1	1,583.5	1,576.4	3.0	3.5	-109.73	-54.6	137.8	159.5	153.7	5.86	27.228			
1,700.0	1,697.8	1,682.2	1,673.9	3.2	3.8	-109.63	-61.9	151.2	175.6	169.3	6.27	28.016			
1,800.0	1,797.5	1,780.9	1,771.4	3.4	4.1	-109.55	-69.1	164.5	191.7	185.0	6.68	28.700			
1,900.0	1,897.2	1,879.6	1,869.0	3.6	4.4	-109.48	-76.3	177.9	207.7	200.7	7.09	29.300			
2,000.0	1,997.0	1,978.3	1,966.5	3.8	4.7	-109.42	-83.5	191.2	223.8	216.3	7.50	29.830			
2,100.0	2,096.7	2,077.0	2,064.0	4.0	5.0	-109.36	-90.7	204.6	239.9	232.0	7.92	30.300			
2,200.0	2,196.4	2,175.7	2,161.6	4.2	5.3	-109.32	-98.0	217.9	256.0	247.6	8.33	30.721			
2,300.0	2,296.2	2,274.4	2,259.1	4.5	5.6	-109.28	-105.2	231.3	272.0	263.3	8.75	31.100			
2,400.0	2,395.9	2,373.1	2,356.6	4.7	5.9	-109.24	-112.4	244.6	288.1	278.9	9.16	31.443			
2,500.0	2,495.6	2,471.8	2,454.1	4.9	6.2	-109.21	-119.6	258.0	304.2	294.6	9.58	31.754			
2,600.0	2,595.3	2,570.5	2,551.7	5.1	6.6	-109.18	-126.8	271.3	320.2	310.3	10.00	32.037			
2,700.0	2,695.1	2,669.2	2,649.2	5.3	6.9	-109.16	-134.1	284.7	336.3	325.9	10.41	32.297			
2,800.0	2,794.8	2,767.9	2,746.7	5.5	7.2	-109.13	-141.3	298.0	352.4	341.6	10.83	32.536			
2,900.0	2,894.5	2,866.6	2,844.2	5.7	7.5	-109.11	-148.5	311.4	368.5	357.2	11.25	32.756			
3,000.0	2,994.3	2,965.3	2,941.8	6.0	7.8	-109.09	-155.7	324.8	384.5	372.9	11.67	32.959			
3,100.0	3,094.0	3,064.0	3,039.3	6.2	8.1	-109.07	-162.9	338.1	400.6	388.5	12.09	33.148			
3,200.0	3,193.7	3,162.7	3,136.8	6.4	8.4	-109.06	-170.2	351.5	416.7	404.2	12.50	33.324			
3,300.0	3,293.4	3,261.4	3,234.3	6.6	8.8	-109.04	-177.4	364.8	432.8	419.8	12.92	33.487			
3,400.0	3,393.2	3,360.1	3,331.9	6.8	9.1	-109.03	-184.6	378.2	448.8	435.5	13.34	33.640			
3,500.0	3,492.9	3,458.8	3,429.4	7.0	9.4	-109.01	-191.8	391.5	464.9	451.1	13.76	33.784			
3,600.0	3,592.6	3,557.5	3,526.9	7.2	9.7	-109.00	-199.0	404.9	481.0	466.8	14.18	33.918			
3,700.0	3,692.4	3,656.2	3,624.4	7.5	10.0	-108.99	-206.3	418.2	497.0	482.4	14.60	34.044			
3,800.0	3,792.1	3,754.9	3,722.0	7.7	10.3	-108.98	-213.5	431.6	513.1	498.1	15.02	34.163			
3,900.0	3,891.8	3,853.6	3,819.5	7.9	10.7	-108.97	-220.7	444.9	529.2	513.7	15.44	34.276			
4,000.0	3,991.5	3,952.3	3,917.0	8.1	11.0	-108.96	-227.9	458.3	545.3	529.4	15.86	34.382			
4,100.0	4,091.3	4,051.0	4,014.5	8.3	11.3	-108.95	-235.2	471.6	561.3	545.0	16.28	34.482			
4,200.0	4,191.0	4,149.7	4,112.1	8.5	11.6	-108.94	-242.4	485.0	577.4	560.7	16.70	34.577			
4,300.0	4,290.7	4,248.4	4,209.6	8.8	11.9	-108.93	-249.6	498.3	593.5	576.4	17.12	34.668			
4,400.0	4,390.5	4,347.1	4,307.1	9.0	12.2	-108.92	-256.8	511.7	609.5	592.0	17.54	34.754			
4,500.0	4,490.2	4,445.8	4,404.6	9.2	12.6	-108.92	-264.0	525.0	625.6	607.7	17.96	34.835			
4,600.0	4,589.9	4,544.5	4,502.2	9.4	12.9	-108.91	-271.3	538.4	641.7	623.3	18.38	34.913			
4,700.0	4,689.6	4,643.2	4,599.7	9.6	13.2	-108.90	-278.5	551.7	657.8	639.0	18.80	34.988			
4,800.0	4,789.4	4,741.9	4,697.2	9.8	13.5	-108.90	-285.7	565.1	673.8	654.6	19.22	35.058			
4,900.0	4,889.1	4,840.6	4,794.7	10.1	13.8	-108.89	-292.9	578.4	689.9	670.3	19.64	35.126			
5,000.0	4,988.8	4,939.3	4,892.3	10.3	14.1	-108.89	-300.1	591.8	706.0	685.9	20.06	35.191			
5,100.0	5,088.6	5,038.0	4,989.8	10.5	14.5	-108.88	-307.4	605.1	722.0	701.6	20.48	35.253			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4J-35H-O367 - Hz - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,188.3	5,136.7	5,087.3	10.7	14.8	-108.87	-314.6	618.5	738.1	717.2	20.90	35.313		
5,300.0	5,288.0	5,235.4	5,184.8	10.9	15.1	-108.87	-321.8	631.9	754.2	732.9	21.32	35.370		
5,400.0	5,387.7	5,334.1	5,282.4	11.1	15.4	-108.86	-329.0	645.2	770.3	748.5	21.74	35.425		
5,500.0	5,487.5	5,432.8	5,379.9	11.3	15.7	-108.86	-336.2	658.6	786.3	764.2	22.16	35.477		
5,600.0	5,587.2	5,531.5	5,477.4	11.6	16.0	-108.86	-343.5	671.9	802.4	779.8	22.59	35.528		
5,700.0	5,686.9	5,630.2	5,574.9	11.8	16.4	-108.85	-350.7	685.3	818.5	795.5	23.01	35.577		
5,800.0	5,786.7	5,728.9	5,672.5	12.0	16.7	-108.85	-357.9	698.6	834.6	811.1	23.43	35.624		
5,900.0	5,886.4	5,827.6	5,770.0	12.2	17.0	-108.84	-365.1	712.0	850.6	826.8	23.85	35.669		
6,000.0	5,986.1	5,926.3	5,867.5	12.4	17.3	-108.84	-372.3	725.3	866.7	842.4	24.27	35.713		
6,100.0	6,085.8	6,025.0	5,965.1	12.6	17.6	-108.84	-379.6	738.7	882.8	858.1	24.69	35.755		
6,200.0	6,185.6	6,123.7	6,062.6	12.9	17.9	-108.83	-386.8	752.0	898.8	873.7	25.11	35.795		
6,300.0	6,285.3	6,222.4	6,160.1	13.1	18.3	-108.83	-394.0	765.4	914.9	889.4	25.53	35.835		
6,400.0	6,385.0	6,321.1	6,257.6	13.3	18.6	-108.83	-401.2	778.7	931.0	905.0	25.95	35.873		
6,500.0	6,484.8	6,419.8	6,355.2	13.5	18.9	-108.82	-408.5	792.1	947.1	920.7	26.37	35.910		
6,600.0	6,584.5	6,518.8	6,453.0	13.7	19.2	-108.83	-415.5	805.5	963.1	936.3	26.79	35.954		
6,700.0	6,684.4	6,619.6	6,552.8	13.9	19.5	110.30	-413.8	819.1	979.2	952.0	27.15	36.066		
6,800.0	6,783.3	6,720.2	6,651.2	13.9	19.6	95.83	-397.9	832.6	995.1	967.8	27.27	36.493		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4K-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.45	-0.4	45.0	45.0					
100.0	100.0	100.0	100.0	0.2	0.2	90.45	-0.4	45.0	45.0	44.7	0.30	148.146		
200.0	200.0	200.0	200.0	0.3	0.3	90.45	-0.4	45.0	45.0	44.3	0.65	68.924		
300.0	300.0	300.0	300.0	0.5	0.5	90.45	-0.4	45.0	45.0	44.0	1.00	44.908 CC, ES		
400.0	400.0	399.3	399.3	0.7	0.7	90.88	-0.7	45.8	45.8	44.4	1.35	33.918		
500.0	500.0	498.5	498.4	0.8	0.9	92.07	-1.7	48.1	48.2	46.5	1.70	28.356		
600.0	600.0	597.6	597.5	1.0	1.0	93.82	-3.5	52.1	52.2	50.2	2.05	25.462		
700.0	700.0	696.5	696.2	1.2	1.2	-105.31	-5.9	57.5	58.2	55.8	2.40	24.283		
800.0	800.0	795.2	794.5	1.4	1.4	-105.26	-9.0	64.6	66.2	63.5	2.75	24.097 SF		
900.0	899.9	893.5	892.4	1.6	1.7	-106.02	-12.8	73.1	76.4	73.3	3.11	24.573		
1,000.0	999.7	991.4	989.7	1.7	1.9	-107.26	-17.2	83.1	88.6	85.2	3.48	25.480		
1,100.0	1,099.4	1,088.8	1,086.3	1.9	2.2	-108.54	-22.2	94.6	102.9	99.0	3.86	26.658		
1,200.0	1,199.1	1,185.8	1,182.3	2.1	2.4	-109.24	-27.9	107.5	118.7	114.5	4.25	27.956		
1,300.0	1,298.9	1,282.3	1,277.5	2.3	2.7	-109.49	-34.3	121.8	136.1	131.4	4.64	29.335		
1,400.0	1,398.6	1,379.5	1,373.1	2.6	3.1	-109.47	-41.2	137.6	154.8	149.8	5.04	30.736		
1,500.0	1,498.3	1,477.7	1,469.7	2.8	3.4	-109.43	-48.3	153.7	173.7	168.3	5.44	31.937		
1,600.0	1,598.1	1,575.9	1,566.3	3.0	3.7	-109.39	-55.4	169.7	192.6	186.8	5.84	32.959		
1,700.0	1,697.8	1,674.0	1,662.9	3.2	4.1	-109.36	-62.5	185.8	211.5	205.3	6.25	33.838		
1,800.0	1,797.5	1,772.2	1,759.6	3.4	4.4	-109.34	-69.6	201.9	230.4	223.8	6.66	34.601		
1,900.0	1,897.2	1,870.4	1,856.2	3.6	4.8	-109.32	-76.7	218.0	249.4	242.3	7.07	35.270		
2,000.0	1,997.0	1,968.6	1,952.8	3.8	5.1	-109.30	-83.8	234.1	268.3	260.8	7.48	35.860		
2,100.0	2,096.7	2,066.8	2,049.4	4.0	5.5	-109.29	-90.9	250.2	287.2	279.3	7.89	36.384		
2,200.0	2,196.4	2,165.0	2,146.0	4.2	5.8	-109.27	-98.0	266.3	306.1	297.8	8.31	36.853		
2,300.0	2,296.2	2,263.2	2,242.6	4.5	6.1	-109.26	-105.1	282.4	325.0	316.3	8.72	37.275		
2,400.0	2,395.9	2,361.4	2,339.2	4.7	6.5	-109.25	-112.2	298.5	343.9	334.8	9.13	37.655		
2,500.0	2,495.6	2,459.6	2,435.8	4.9	6.8	-109.24	-119.3	314.5	362.8	353.3	9.55	38.001		
2,600.0	2,595.3	2,557.8	2,532.4	5.1	7.2	-109.23	-126.4	330.6	381.8	371.8	9.96	38.317		
2,700.0	2,695.1	2,656.0	2,629.0	5.3	7.5	-109.23	-133.5	346.7	400.7	390.3	10.38	38.605		
2,800.0	2,794.8	2,754.2	2,725.6	5.5	7.9	-109.22	-140.6	362.8	419.6	408.8	10.79	38.871		
2,900.0	2,894.5	2,852.4	2,822.2	5.7	8.3	-109.21	-147.7	378.9	438.5	427.3	11.21	39.115		
3,000.0	2,994.3	2,950.6	2,918.9	6.0	8.6	-109.21	-154.8	395.0	457.4	445.8	11.63	39.341		
3,100.0	3,094.0	3,048.8	3,015.5	6.2	9.0	-109.20	-161.9	411.1	476.3	464.3	12.04	39.551		
3,200.0	3,193.7	3,147.0	3,112.1	6.4	9.3	-109.20	-169.0	427.2	495.2	482.8	12.46	39.746		
3,300.0	3,293.4	3,245.2	3,208.7	6.6	9.7	-109.19	-176.1	443.2	514.2	501.3	12.88	39.927		
3,400.0	3,393.2	3,343.4	3,305.3	6.8	10.0	-109.19	-183.1	459.3	533.1	519.8	13.29	40.097		
3,500.0	3,492.9	3,441.6	3,401.9	7.0	10.4	-109.18	-190.2	475.4	552.0	538.3	13.71	40.256		
3,600.0	3,592.6	3,539.8	3,498.5	7.2	10.7	-109.18	-197.3	491.5	570.9	556.8	14.13	40.405		
3,700.0	3,692.4	3,638.0	3,595.1	7.5	11.1	-109.18	-204.4	507.6	589.8	575.3	14.55	40.545		
3,800.0	3,792.1	3,736.1	3,691.7	7.7	11.4	-109.17	-211.5	523.7	608.7	593.8	14.96	40.677		
3,900.0	3,891.8	3,834.3	3,788.3	7.9	11.8	-109.17	-218.6	539.8	627.6	612.3	15.38	40.802		
4,000.0	3,991.5	3,932.5	3,884.9	8.1	12.1	-109.17	-225.7	555.9	646.5	630.7	15.80	40.920		
4,100.0	4,091.3	4,030.7	3,981.5	8.3	12.5	-109.16	-232.8	572.0	665.5	649.2	16.22	41.031		
4,200.0	4,191.0	4,128.9	4,078.1	8.5	12.8	-109.16	-239.9	588.0	684.4	667.7	16.64	41.136		
4,300.0	4,290.7	4,227.1	4,174.8	8.8	13.2	-109.16	-247.0	604.1	703.3	686.2	17.05	41.237		
4,400.0	4,390.5	4,325.3	4,271.4	9.0	13.5	-109.16	-254.1	620.2	722.2	704.7	17.47	41.332		
4,500.0	4,490.2	4,423.5	4,368.0	9.2	13.9	-109.15	-261.2	636.3	741.1	723.2	17.89	41.422		
4,600.0	4,589.9	4,521.7	4,464.6	9.4	14.3	-109.15	-268.3	652.4	760.0	741.7	18.31	41.509		
4,700.0	4,689.6	4,619.9	4,561.2	9.6	14.6	-109.15	-275.4	668.5	778.9	760.2	18.73	41.591		
4,800.0	4,789.4	4,718.1	4,657.8	9.8	15.0	-109.15	-282.5	684.6	797.9	778.7	19.15	41.669		
4,900.0	4,889.1	4,816.3	4,754.4	10.1	15.3	-109.15	-289.6	700.7	816.8	797.2	19.57	41.745		
5,000.0	4,988.8	4,914.5	4,851.0	10.3	15.7	-109.15	-296.7	716.7	835.7	815.7	19.98	41.816		
5,100.0	5,088.6	5,012.7	4,947.6	10.5	16.0	-109.14	-303.8	732.8	854.6	834.2	20.40	41.885		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design													S35-T3N-R67W (Kiyota) - Kiyota 4K-35H-O367 - Hz - Plan #1		Offset Site Error:		0.0 ft	
Survey Program:													0-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)								
5,200.0	5,188.3	5,110.9	5,044.2	10.7	16.4	-109.14	-310.9	748.9	873.5	852.7	20.82	41.951						
5,300.0	5,288.0	5,209.1	5,140.8	10.9	16.7	-109.14	-318.0	765.0	892.4	871.2	21.24	42.014						
5,400.0	5,387.7	5,307.3	5,237.4	11.1	17.1	-109.14	-325.1	781.1	911.3	889.7	21.66	42.075						
5,500.0	5,487.5	5,405.5	5,334.0	11.3	17.4	-109.14	-332.2	797.2	930.3	908.2	22.08	42.133						
5,600.0	5,587.2	5,503.7	5,430.7	11.6	17.8	-109.14	-339.3	813.3	949.2	926.7	22.50	42.189						
5,700.0	5,686.9	5,601.9	5,527.3	11.8	18.1	-109.14	-346.4	829.4	968.1	945.2	22.92	42.243						
5,800.0	5,786.7	5,700.0	5,623.9	12.0	18.5	-109.13	-353.5	845.5	987.0	963.7	23.34	42.295						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - Kiyota 4L-35H-O367 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.40	-0.4	52.5	52.5					
100.0	100.0	100.0	100.0	0.2	0.2	90.40	-0.4	52.5	52.5	52.2	0.30	172.989		
200.0	200.0	200.0	200.0	0.3	0.3	90.40	-0.4	52.5	52.5	51.9	0.65	80.482 CC, ES		
300.0	300.0	299.1	299.1	0.5	0.5	90.71	-0.7	53.3	53.3	52.3	1.00	53.311		
400.0	400.0	398.2	398.2	0.7	0.7	91.60	-1.6	55.7	55.8	54.4	1.35	41.326		
500.0	500.0	497.2	497.0	0.8	0.9	92.93	-3.1	59.8	59.9	58.2	1.70	35.192		
600.0	600.0	596.0	595.6	1.0	1.1	94.50	-5.1	65.3	65.7	63.6	2.06	31.932		
700.0	700.0	694.5	693.9	1.2	1.3	-104.83	-7.8	72.5	73.4	71.0	2.39	30.662		
800.0	800.0	792.7	791.7	1.4	1.5	-104.80	-11.1	81.2	83.2	80.5	2.75	30.309 SF		
900.0	899.9	890.5	888.9	1.6	1.7	-105.48	-14.9	91.5	95.2	92.0	3.10	30.649		
1,000.0	999.7	987.8	985.4	1.7	2.0	-106.59	-19.2	103.2	109.2	105.7	3.47	31.434		
1,100.0	1,099.4	1,084.6	1,081.1	1.9	2.3	-107.80	-24.2	116.4	125.2	121.4	3.85	32.505		
1,200.0	1,199.1	1,180.9	1,176.1	2.1	2.6	-108.57	-29.6	131.0	142.9	138.7	4.24	33.718		
1,300.0	1,298.9	1,276.6	1,270.3	2.3	2.9	-108.97	-35.6	147.0	162.1	157.5	4.63	35.033		
1,400.0	1,398.6	1,371.7	1,363.6	2.6	3.3	-109.12	-42.0	164.4	182.9	177.9	5.02	36.423		
1,500.0	1,498.3	1,466.9	1,456.6	2.8	3.7	-109.09	-49.0	183.2	205.2	199.8	5.42	37.866		
1,600.0	1,598.1	1,564.3	1,551.7	3.0	4.1	-109.02	-56.4	202.9	227.9	222.1	5.82	39.147		
1,700.0	1,697.8	1,661.6	1,646.8	3.2	4.4	-108.96	-63.7	222.6	250.7	244.4	6.23	40.250		
1,800.0	1,797.5	1,759.0	1,741.8	3.4	4.8	-108.91	-71.0	242.3	273.4	266.8	6.63	41.208		
1,900.0	1,897.2	1,856.4	1,836.9	3.6	5.2	-108.87	-78.4	262.0	296.2	289.1	7.04	42.048		
2,000.0	1,997.0	1,953.8	1,932.0	3.8	5.6	-108.84	-85.7	281.7	318.9	311.4	7.45	42.790		
2,100.0	2,096.7	2,051.2	2,027.1	4.0	6.0	-108.81	-93.1	301.4	341.6	333.8	7.86	43.449		
2,200.0	2,196.4	2,148.5	2,122.2	4.2	6.4	-108.78	-100.4	321.1	364.4	356.1	8.27	44.039		
2,300.0	2,296.2	2,245.9	2,217.3	4.5	6.9	-108.76	-107.7	340.8	387.1	378.4	8.69	44.570		
2,400.0	2,395.9	2,343.3	2,312.4	4.7	7.3	-108.74	-115.1	360.5	409.9	400.8	9.10	45.049		
2,500.0	2,495.6	2,440.7	2,407.4	4.9	7.7	-108.72	-122.4	380.2	432.6	423.1	9.51	45.485		
2,600.0	2,595.3	2,538.1	2,502.5	5.1	8.1	-108.70	-129.7	399.9	455.4	445.4	9.92	45.882		
2,700.0	2,695.1	2,635.4	2,597.6	5.3	8.5	-108.69	-137.1	419.6	478.1	467.8	10.34	46.246		
2,800.0	2,794.8	2,732.8	2,692.7	5.5	8.9	-108.68	-144.4	439.3	500.8	490.1	10.75	46.581		
2,900.0	2,894.5	2,830.2	2,787.8	5.7	9.3	-108.66	-151.7	458.9	523.6	512.4	11.17	46.889		
3,000.0	2,994.3	2,927.6	2,882.9	6.0	9.7	-108.65	-159.1	478.6	546.3	534.8	11.58	47.174		
3,100.0	3,094.0	3,025.0	2,977.9	6.2	10.1	-108.64	-166.4	498.3	569.1	557.1	12.00	47.439		
3,200.0	3,193.7	3,122.3	3,073.0	6.4	10.5	-108.63	-173.8	518.0	591.8	579.4	12.41	47.685		
3,300.0	3,293.4	3,219.7	3,168.1	6.6	10.9	-108.62	-181.1	537.7	614.6	601.7	12.83	47.914		
3,400.0	3,393.2	3,317.1	3,263.2	6.8	11.3	-108.61	-188.4	557.4	637.3	624.1	13.24	48.129		
3,500.0	3,492.9	3,414.5	3,358.3	7.0	11.7	-108.61	-195.8	577.1	660.1	646.4	13.66	48.329		
3,600.0	3,592.6	3,511.8	3,453.4	7.2	12.1	-108.60	-203.1	596.8	682.8	668.7	14.07	48.518		
3,700.0	3,692.4	3,609.2	3,548.4	7.5	12.6	-108.59	-210.4	616.5	705.5	691.1	14.49	48.695		
3,800.0	3,792.1	3,706.6	3,643.5	7.7	13.0	-108.59	-217.8	636.2	728.3	713.4	14.91	48.862		
3,900.0	3,891.8	3,804.0	3,738.6	7.9	13.4	-108.58	-225.1	655.9	751.0	735.7	15.32	49.019		
4,000.0	3,991.5	3,901.4	3,833.7	8.1	13.8	-108.57	-232.4	675.6	773.8	758.0	15.74	49.168		
4,100.0	4,091.3	3,998.7	3,928.8	8.3	14.2	-108.57	-239.8	695.3	796.5	780.4	16.15	49.309		
4,200.0	4,191.0	4,096.1	4,023.9	8.5	14.6	-108.56	-247.1	715.0	819.3	802.7	16.57	49.442		
4,300.0	4,290.7	4,193.5	4,119.0	8.8	15.0	-108.56	-254.5	734.7	842.0	825.0	16.99	49.569		
4,400.0	4,390.5	4,290.9	4,214.0	9.0	15.4	-108.55	-261.8	754.4	864.8	847.3	17.40	49.689		
4,500.0	4,490.2	4,388.3	4,309.1	9.2	15.8	-108.55	-269.1	774.1	887.5	869.7	17.82	49.804		
4,600.0	4,589.9	4,485.6	4,404.2	9.4	16.2	-108.55	-276.5	793.8	910.2	892.0	18.24	49.913		
4,700.0	4,689.6	4,583.0	4,499.3	9.6	16.7	-108.54	-283.8	813.5	933.0	914.3	18.65	50.017		
4,800.0	4,789.4	4,680.4	4,594.4	9.8	17.1	-108.54	-291.1	833.2	955.7	936.7	19.07	50.116		
4,900.0	4,889.1	4,777.8	4,689.5	10.1	17.5	-108.54	-298.5	852.9	978.5	959.0	19.49	50.211		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEYS														Offset Site Error:	0.0 ft
Survey Program: 843-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0.0	0.0	1.1	1.1	0.0	0.0	-68.63	192.0	-490.7	526.9						
100.0	100.0	101.3	101.3	0.2	0.2	-68.62	192.1	-490.6	526.9	526.6	0.33	1,609.174			
200.0	200.0	201.5	201.5	0.3	0.4	-68.60	192.2	-490.5	526.8	526.2	0.68	779.734			
300.0	300.0	301.7	301.7	0.5	0.5	-68.56	192.5	-490.3	526.7	525.7	1.02	514.446			
400.0	400.0	401.9	401.9	0.7	0.7	-68.51	192.9	-490.0	526.6	525.2	1.37	383.784			
500.0	500.0	502.1	502.1	0.8	0.9	-68.44	193.5	-489.6	526.4	524.7	1.72	305.995			
600.0	600.0	602.3	602.3	1.0	1.0	-68.35	194.1	-489.1	526.2	524.1	2.07	254.378			
700.0	700.0	702.5	702.5	1.2	1.2	91.45	194.9	-488.5	526.0	523.5	2.42	217.377			
800.0	800.0	802.7	802.6	1.4	1.4	91.85	195.7	-487.9	525.8	523.0	2.77	189.753			
900.0	899.9	913.1	913.1	1.6	1.6	92.54	196.6	-486.3	525.0	521.8	3.15	166.852			
1,000.0	999.7	1,024.2	1,024.1	1.7	1.8	93.29	194.9	-482.9	521.9	518.4	3.53	147.924			
1,100.0	1,099.4	1,140.0	1,139.6	1.9	2.0	94.06	190.5	-476.9	515.9	512.0	3.92	131.517			
1,200.0	1,199.1	1,252.8	1,251.9	2.1	2.2	94.64	183.6	-469.2	507.7	503.4	4.32	117.601			
1,300.0	1,298.9	1,363.2	1,361.5	2.3	2.5	95.00	173.7	-459.9	496.9	492.2	4.71	105.472			
1,400.0	1,398.6	1,468.1	1,465.5	2.6	2.7	95.35	163.7	-449.7	484.7	479.6	5.10	95.028			
1,500.0	1,498.3	1,573.1	1,569.3	2.8	3.0	95.85	154.0	-437.7	471.1	465.6	5.49	85.771			
1,600.0	1,598.1	1,686.7	1,681.4	3.0	3.3	96.36	142.1	-423.1	455.7	449.8	5.90	77.217			
1,700.0	1,697.8	1,790.5	1,783.1	3.2	3.7	96.77	129.2	-407.4	437.4	431.1	6.30	69.473			
1,800.0	1,797.5	1,898.3	1,888.6	3.4	4.1	97.15	114.7	-390.1	417.9	411.2	6.70	62.372			
1,900.0	1,897.2	1,996.5	1,984.3	3.6	4.4	97.50	100.7	-373.2	396.9	389.8	7.09	56.002			
2,000.0	1,997.0	2,099.7	2,084.8	3.8	4.8	97.94	86.0	-355.1	375.7	368.2	7.48	50.206			
2,100.0	2,096.7	2,200.5	2,182.6	4.0	5.3	98.39	70.7	-336.3	353.0	345.1	7.87	44.831			
2,200.0	2,196.4	2,294.4	2,273.7	4.2	5.6	98.91	56.7	-318.6	330.4	322.1	8.25	40.046			
2,300.0	2,296.2	2,390.4	2,367.2	4.5	6.0	99.61	43.3	-301.0	308.7	300.0	8.63	35.782			
2,400.0	2,395.9	2,487.0	2,461.2	4.7	6.4	100.45	30.0	-283.5	287.3	278.3	9.00	31.926			
2,500.0	2,495.6	2,589.0	2,560.4	4.9	6.9	101.38	15.4	-264.8	265.6	256.2	9.38	28.303			
2,600.0	2,595.3	2,688.2	2,656.6	5.1	7.3	102.27	-0.2	-245.9	242.6	232.8	9.76	24.848			
2,700.0	2,695.1	2,781.3	2,747.0	5.3	7.7	103.23	-14.6	-228.9	220.4	210.2	10.13	21.760			
2,800.0	2,794.8	2,879.1	2,842.1	5.5	8.2	104.43	-29.4	-211.7	199.0	188.5	10.50	18.956			
2,900.0	2,894.5	2,977.0	2,937.3	5.7	8.6	106.24	-43.6	-193.6	177.3	166.4	10.86	16.328			
3,000.0	2,994.3	3,074.0	3,031.6	6.0	9.0	108.44	-57.7	-175.9	156.1	144.9	11.22	13.907			
3,100.0	3,094.0	3,171.5	3,126.4	6.2	9.4	111.34	-71.9	-158.2	135.2	123.6	11.60	11.652			
3,200.0	3,193.7	3,268.2	3,220.6	6.4	9.8	115.31	-85.6	-140.8	115.2	103.2	12.02	9.580			
3,300.0	3,293.4	3,365.8	3,315.6	6.6	10.3	120.80	-99.1	-123.9	96.6	84.0	12.54	7.699			
3,400.0	3,393.2	3,463.8	3,411.2	6.8	10.7	128.84	-113.0	-106.5	78.8	65.5	13.29	5.927			
3,500.0	3,492.9	3,561.3	3,506.1	7.0	11.1	140.94	-126.8	-89.3	63.3	48.8	14.47	4.375			
3,600.0	3,592.6	3,659.0	3,601.3	7.2	11.5	159.33	-140.3	-71.9	52.7	36.5	16.25	3.245			
3,684.9	3,677.3	3,742.0	3,682.0	7.4	11.9	179.73	-152.2	-56.8	49.2	31.3	17.88	2.753 CC			
3,700.0	3,692.4	3,756.6	3,696.3	7.5	11.9	-176.45	-154.3	-54.1	49.3	31.2	18.12	2.723 ES, SF			
3,800.0	3,792.1	3,853.6	3,790.4	7.7	12.4	-153.10	-168.1	-35.6	56.1	37.0	19.09	2.940			
3,900.0	3,891.8	3,951.4	3,885.2	7.9	12.8	-136.03	-182.3	-16.2	70.6	51.4	19.20	3.679			
4,000.0	3,991.5	4,048.1	3,979.0	8.1	13.3	-125.18	-196.8	2.5	88.5	69.4	19.11	4.629			
4,100.0	4,091.3	4,146.5	4,074.2	8.3	13.8	-117.81	-211.8	22.0	108.9	89.9	19.05	5.717			
4,200.0	4,191.0	4,243.9	4,169.0	8.5	14.2	-113.36	-225.6	40.0	129.3	110.1	19.14	6.754			
4,300.0	4,290.7	4,341.4	4,263.9	8.8	14.6	-110.35	-238.8	58.1	150.3	130.9	19.32	7.777			
4,400.0	4,390.5	4,442.8	4,362.8	9.0	15.0	-108.29	-251.7	76.1	170.6	151.0	19.58	8.714			
4,500.0	4,490.2	4,542.0	4,460.1	9.2	15.4	-106.85	-263.7	91.7	189.1	169.2	19.89	9.509			
4,600.0	4,589.9	4,641.4	4,557.5	9.4	15.8	-105.65	-275.9	107.2	207.6	187.4	20.21	10.273			
4,700.0	4,689.6	4,743.5	4,657.8	9.6	16.2	-104.69	-288.0	121.8	224.9	204.3	20.56	10.935			
4,800.0	4,789.4	4,840.9	4,753.5	9.8	16.5	-103.95	-299.3	135.5	241.9	220.9	20.92	11.559			
4,900.0	4,889.1	4,943.4	4,854.5	10.1	16.9	-103.37	-310.7	149.1	258.1	236.8	21.31	12.113			
5,000.0	4,988.8	5,044.8	4,954.6	10.3	17.2	-102.92	-321.6	161.3	273.0	251.3	21.69	12.585			

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S35-T3N-R67W (Kiyota) - KIYOTA 6-8-35 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 843-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,088.6	5,145.9	5,054.6	10.5	17.5	-102.88	-330.6	173.1	287.4	265.3	22.11	12.998		
5,200.0	5,188.3	5,248.2	5,156.0	10.7	17.8	-103.13	-338.1	184.1	300.7	278.1	22.56	13.326		
5,300.0	5,288.0	5,350.0	5,257.0	10.9	18.1	-103.31	-345.7	194.2	313.1	290.1	23.01	13.606		
5,400.0	5,387.7	5,450.8	5,357.2	11.1	18.3	-103.52	-352.9	203.3	324.6	301.2	23.45	13.841		
5,500.0	5,487.5	5,555.5	5,461.3	11.3	18.6	-103.83	-359.7	212.3	335.7	311.7	23.91	14.038		
5,600.0	5,587.2	5,653.3	5,558.6	11.6	18.8	-104.15	-365.6	219.9	345.8	321.5	24.36	14.199		
5,700.0	5,686.9	5,755.2	5,660.0	11.8	19.1	-104.60	-370.9	227.7	355.9	331.0	24.82	14.338		
5,800.0	5,786.7	5,858.1	5,762.6	12.0	19.3	-105.07	-376.1	235.0	365.3	340.0	25.28	14.450		
5,900.0	5,886.4	5,963.6	5,867.8	12.2	19.5	-105.76	-379.6	241.2	373.3	347.6	25.75	14.498		
6,000.0	5,986.1	6,069.1	5,973.1	12.4	19.6	-106.62	-381.7	245.8	379.9	353.6	26.25	14.470		
6,100.0	6,085.8	6,171.8	6,075.8	12.6	19.8	-107.34	-384.4	249.0	385.4	358.6	26.72	14.419		
6,200.0	6,185.6	6,280.3	6,184.3	12.9	19.9	-108.13	-386.7	250.7	389.2	362.0	27.21	14.304		
6,300.0	6,285.3	6,382.5	6,286.5	13.1	20.0	-109.12	-387.2	250.8	391.7	364.0	27.69	14.147		
6,400.0	6,385.0	6,482.0	6,386.0	13.3	20.1	-110.12	-387.2	250.8	394.2	366.1	28.16	13.999		
6,500.0	6,484.8	6,581.8	6,485.7	13.5	20.2	-111.15	-387.0	250.8	396.8	368.2	28.63	13.858		
6,600.0	6,584.5	6,682.1	6,586.0	13.7	20.3	-112.16	-386.8	250.9	399.6	370.5	29.10	13.732		
6,700.0	6,684.4	6,782.4	6,686.4	13.9	20.4	108.15	-386.3	250.6	401.9	372.5	29.37	13.681		
6,800.0	6,783.3	6,882.4	6,786.4	13.9	20.5	96.86	-386.0	250.3	403.9	374.7	29.28	13.797		
6,900.0	6,879.3	6,978.6	6,882.6	13.8	20.6	97.61	-385.9	249.7	406.8	377.9	28.86	14.096		
7,000.0	6,970.5	7,069.0	6,973.0	13.6	20.7	100.99	-385.8	249.3	413.5	385.3	28.22	14.651		
7,100.0	7,055.2	7,153.0	7,056.9	13.4	20.8	105.22	-385.6	249.2	427.4	399.9	27.49	15.545		
7,200.0	7,131.7	7,228.9	7,132.9	13.3	20.8	109.16	-385.5	249.1	451.6	424.8	26.81	16.842		
7,300.0	7,198.5	7,295.6	7,199.5	13.2	20.9	111.98	-385.3	249.3	488.3	462.0	26.36	18.527		
7,400.0	7,254.3	7,351.5	7,255.5	13.2	21.0	113.00	-385.1	249.4	538.1	511.7	26.33	20.434		
7,500.0	7,298.0	7,395.6	7,299.6	13.4	21.0	111.65	-384.8	249.6	600.0	573.0	26.95	22.259		
7,600.0	7,328.8	7,427.0	7,331.0	13.9	21.0	107.28	-384.6	249.8	672.1	643.8	28.32	23.735		
7,700.0	7,346.1	7,445.0	7,349.0	14.5	21.1	99.12	-384.5	249.9	751.9	721.8	30.12	24.961		
7,800.0	7,350.0	7,449.7	7,353.6	15.3	21.1	90.34	-384.5	249.9	836.8	805.4	31.42	26.630		
7,900.0	7,350.0	7,450.4	7,354.3	16.2	21.1	90.44	-384.5	249.9	924.8	892.4	32.39	28.551		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

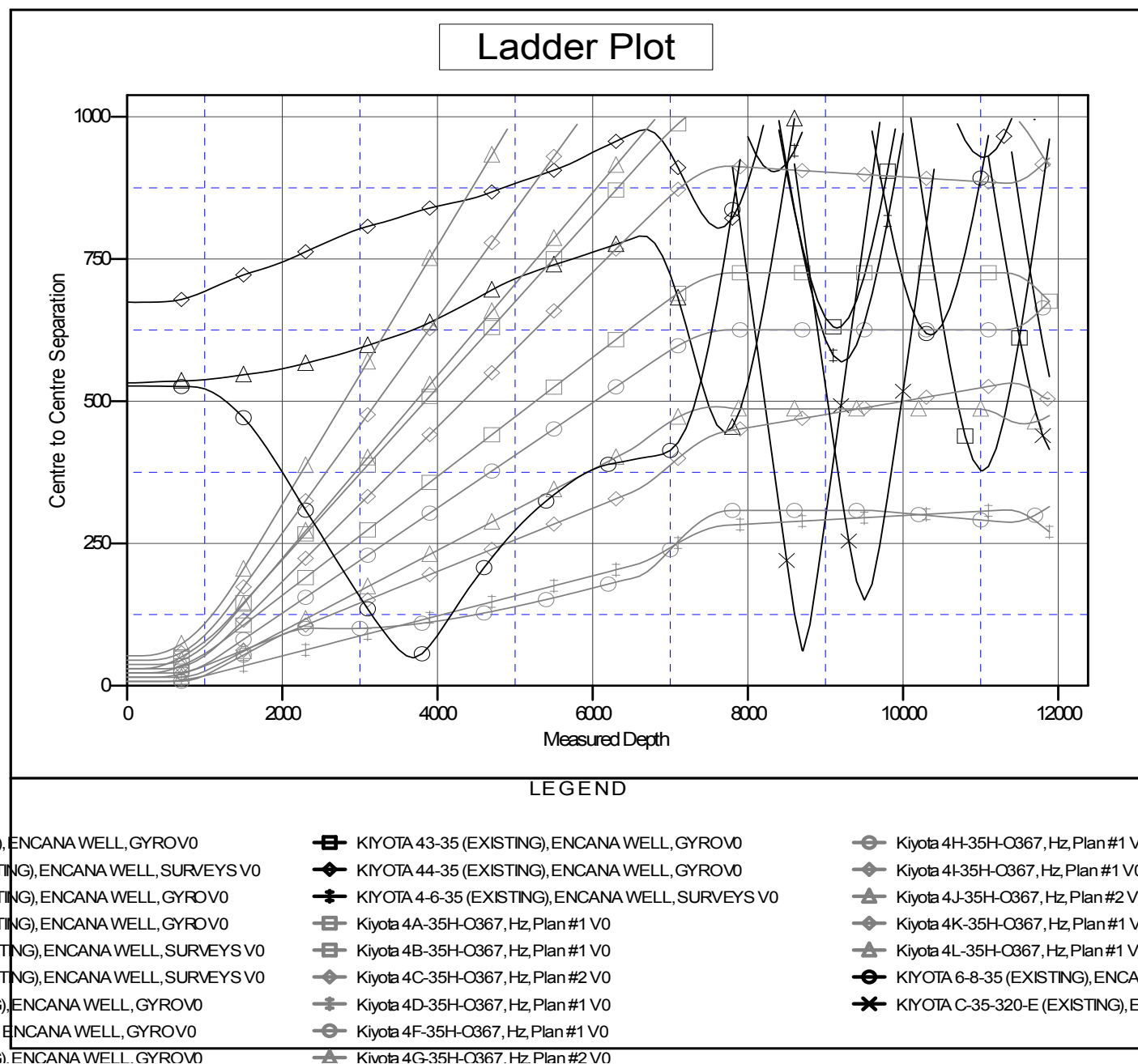
Offset Design S35-T3N-R67W (Kiyota) - KIYOTA C-35-320-E (EXISTING) - ENCANA WELL - NO SURVEYS												Offset Site Error: 0.0 ft	
Survey Program: 7915-Geolink MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
8,600.0	7,350.0	7,318.0	7,318.0	25.4	12.8	90.00	2,045.1	-17.3	917.2	879.2	38.01	24.131	
8,700.0	7,350.0	7,318.0	7,318.0	26.9	12.8	90.00	2,045.1	-17.3	818.8	779.2	39.53	20.711	
8,800.0	7,350.0	7,318.0	7,318.0	28.5	12.8	90.00	2,045.1	-17.3	720.7	679.6	41.08	17.543	
8,900.0	7,350.0	7,318.0	7,318.0	30.0	12.8	90.00	2,045.1	-17.3	623.3	580.6	42.66	14.612	
9,000.0	7,350.0	7,318.0	7,318.0	31.6	12.8	90.00	2,045.1	-17.3	526.8	482.6	44.25	11.906	
9,100.0	7,350.0	7,318.0	7,318.0	33.2	12.8	90.00	2,045.1	-17.3	431.9	386.1	45.85	9.420	
9,200.0	7,350.0	7,318.0	7,318.0	34.8	12.8	90.00	2,045.1	-17.3	340.0	292.6	47.48	7.162	
9,300.0	7,350.0	7,318.0	7,318.0	36.5	12.8	90.00	2,045.1	-17.3	254.3	205.2	49.11	5.179	
9,400.0	7,350.0	7,318.0	7,318.0	38.1	12.8	90.00	2,045.1	-17.3	183.7	132.9	50.76	3.619	
9,500.0	7,350.0	7,318.0	7,318.0	39.7	12.8	90.00	2,045.1	-17.3	151.0	98.5	52.41	2.880	
9,504.7	7,350.0	7,318.0	7,318.0	39.8	12.8	90.00	2,045.1	-17.3	150.9	98.4	52.49	2.874 CC, ES, SF	
9,600.0	7,350.0	7,318.0	7,318.0	41.4	12.8	90.00	2,045.1	-17.3	178.4	124.4	54.07	3.300	
9,700.0	7,350.0	7,318.0	7,318.0	43.1	12.8	90.00	2,045.1	-17.3	246.8	191.0	55.74	4.427	
9,800.0	7,350.0	7,318.0	7,318.0	44.7	12.8	90.00	2,045.1	-17.3	331.6	274.2	57.42	5.775	
9,900.0	7,350.0	7,318.0	7,318.0	46.4	12.8	90.00	2,045.1	-17.3	423.1	364.0	59.10	7.158	
10,000.0	7,350.0	7,318.0	7,318.0	48.1	12.8	90.00	2,045.1	-17.3	517.7	456.9	60.79	8.517	
10,100.0	7,350.0	7,318.0	7,318.0	49.8	12.8	90.00	2,045.1	-17.3	614.1	551.6	62.48	9.828	
10,200.0	7,350.0	7,318.0	7,318.0	51.5	12.8	90.00	2,045.1	-17.3	711.4	647.3	64.18	11.086	
10,300.0	7,350.0	7,318.0	7,318.0	53.2	12.8	90.00	2,045.1	-17.3	809.4	743.6	65.88	12.287	
10,400.0	7,350.0	7,318.0	7,318.0	54.9	12.8	90.00	2,045.1	-17.3	907.9	840.3	67.58	13.434	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Kiyota 4E-35H-O367
Project:	DJ Wattenberg	TVD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Reference Site:	S35-T3N-R67W (Kiyota)	MD Reference:	13' KB @ 4848.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Kiyota 4E-35H-O367	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 13' KB @ 4848.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Kiyota 4E-35H-O367
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.42°



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