

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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

Site		S32-T2N-R68W (File/Hwy 52)			
Site Position:		Northing:	1,275,973.93 ft	Latitude:	40.089950
From:	Lat/Long	Easting:	3,133,277.97 ft	Longitude:	-105.023660
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.31 °

Well	Hwy 52 4H-32H-O268					
Well Position	+N/-S	0.0 ft	Northing:	1,275,755.69 ft	Latitude:	40.089356
	+E/-W	0.0 ft	Easting:	3,132,914.09 ft	Longitude:	-105.024965
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,989.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/1/2013	8.70	66.69	52,723

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	180.00	

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	
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,354.4	16.54	87.15	2,331.5	11.8	236.9	1.00	1.00	0.00	87.15	
7,387.6	16.54	87.15	7,156.3	83.0	1,668.4	0.00	0.00	0.00	0.00	
8,294.3	90.00	179.50	7,712.0	-488.4	1,838.3	10.00	8.10	10.19	92.25	
13,294.3	90.00	179.50	7,712.0	-5,488.2	1,881.9	0.00	0.00	0.00	0.00	Hwy 52 4H-32H-O268

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Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
329.0	0.00	0.00	329.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
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	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	KOP @ 700'
800.0	1.00	87.15	800.0	0.0	0.9	0.0	1.00	1.00	
900.0	2.00	87.15	900.0	0.2	3.5	-0.2	1.00	1.00	
1,000.0	3.00	87.15	999.9	0.4	7.8	-0.4	1.00	1.00	
1,100.0	4.00	87.15	1,099.7	0.7	13.9	-0.7	1.00	1.00	
1,200.0	5.00	87.15	1,199.4	1.1	21.8	-1.1	1.00	1.00	
1,300.0	6.00	87.15	1,298.9	1.6	31.3	-1.6	1.00	1.00	
1,400.0	7.00	87.15	1,398.3	2.1	42.7	-2.1	1.00	1.00	
1,500.0	8.00	87.15	1,497.4	2.8	55.7	-2.8	1.00	1.00	
1,600.0	9.00	87.15	1,596.3	3.5	70.5	-3.5	1.00	1.00	
1,700.0	10.00	87.15	1,694.9	4.3	86.9	-4.3	1.00	1.00	
1,800.0	11.00	87.15	1,793.3	5.2	105.1	-5.2	1.00	1.00	
1,900.0	12.00	87.15	1,891.2	6.2	125.1	-6.2	1.00	1.00	
2,000.0	13.00	87.15	1,988.9	7.3	146.7	-7.3	1.00	1.00	
2,100.0	14.00	87.15	2,086.1	8.5	170.0	-8.5	1.00	1.00	
2,200.0	15.00	87.15	2,182.9	9.7	195.0	-9.7	1.00	1.00	
2,300.0	16.00	87.15	2,279.3	11.0	221.7	-11.0	1.00	1.00	
2,354.4	16.54	87.15	2,331.5	11.8	236.9	-11.8	1.00	1.00	EOB; Inc=16.54°
2,400.0	16.54	87.15	2,375.2	12.4	249.9	-12.4	0.00	0.00	
2,500.0	16.54	87.15	2,471.1	13.9	278.3	-13.9	0.00	0.00	
2,600.0	16.54	87.15	2,566.9	15.3	306.8	-15.3	0.00	0.00	
2,700.0	16.54	87.15	2,662.8	16.7	335.2	-16.7	0.00	0.00	
2,800.0	16.54	87.15	2,758.7	18.1	363.6	-18.1	0.00	0.00	
2,900.0	16.54	87.15	2,854.5	19.5	392.1	-19.5	0.00	0.00	
3,000.0	16.54	87.15	2,950.4	20.9	420.5	-20.9	0.00	0.00	
3,100.0	16.54	87.15	3,046.2	22.3	449.0	-22.3	0.00	0.00	
3,200.0	16.54	87.15	3,142.1	23.8	477.4	-23.8	0.00	0.00	
3,300.0	16.54	87.15	3,238.0	25.2	505.8	-25.2	0.00	0.00	
3,400.0	16.54	87.15	3,333.8	26.6	534.3	-26.6	0.00	0.00	
3,500.0	16.54	87.15	3,429.7	28.0	562.7	-28.0	0.00	0.00	
3,600.0	16.54	87.15	3,525.5	29.4	591.2	-29.4	0.00	0.00	
3,700.0	16.54	87.15	3,621.4	30.8	619.6	-30.8	0.00	0.00	
3,800.0	16.54	87.15	3,717.3	32.3	648.0	-32.3	0.00	0.00	
3,900.0	16.54	87.15	3,813.1	33.7	676.5	-33.7	0.00	0.00	
4,000.0	16.54	87.15	3,909.0	35.1	704.9	-35.1	0.00	0.00	
4,100.0	16.54	87.15	4,004.8	36.5	733.4	-36.5	0.00	0.00	
4,200.0	16.54	87.15	4,100.7	37.9	761.8	-37.9	0.00	0.00	
4,300.0	16.54	87.15	4,196.6	39.3	790.2	-39.3	0.00	0.00	
4,400.0	16.54	87.15	4,292.4	40.7	818.7	-40.7	0.00	0.00	
4,493.5	16.54	87.15	4,382.0	42.1	845.3	-42.1	0.00	0.00	Sussex
4,500.0	16.54	87.15	4,388.3	42.2	847.1	-42.2	0.00	0.00	
4,600.0	16.54	87.15	4,484.1	43.6	875.6	-43.6	0.00	0.00	
4,700.0	16.54	87.15	4,580.0	45.0	904.0	-45.0	0.00	0.00	
4,770.9	16.54	87.15	4,648.0	46.0	924.2	-46.0	0.00	0.00	Sussex Marker

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Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	16.54	87.15	4,675.9	46.4	932.4	-46.4	0.00	0.00	
4,900.0	16.54	87.15	4,771.7	47.8	960.9	-47.8	0.00	0.00	
5,000.0	16.54	87.15	4,867.6	49.2	989.3	-49.2	0.00	0.00	
5,075.5	16.54	87.15	4,940.0	50.3	1,010.8	-50.3	0.00	0.00	Shannon
5,100.0	16.54	87.15	4,963.4	50.7	1,017.8	-50.7	0.00	0.00	
5,200.0	16.54	87.15	5,059.3	52.1	1,046.2	-52.1	0.00	0.00	
5,300.0	16.54	87.15	5,155.2	53.5	1,074.6	-53.5	0.00	0.00	
5,400.0	16.54	87.15	5,251.0	54.9	1,103.1	-54.9	0.00	0.00	
5,500.0	16.54	87.15	5,346.9	56.3	1,131.5	-56.3	0.00	0.00	
5,600.0	16.54	87.15	5,442.7	57.7	1,160.0	-57.7	0.00	0.00	
5,700.0	16.54	87.15	5,538.6	59.1	1,188.4	-59.1	0.00	0.00	
5,800.0	16.54	87.15	5,634.5	60.6	1,216.8	-60.6	0.00	0.00	
5,900.0	16.54	87.15	5,730.3	62.0	1,245.3	-62.0	0.00	0.00	
6,000.0	16.54	87.15	5,826.2	63.4	1,273.7	-63.4	0.00	0.00	
6,100.0	16.54	87.15	5,922.0	64.8	1,302.2	-64.8	0.00	0.00	
6,200.0	16.54	87.15	6,017.9	66.2	1,330.6	-66.2	0.00	0.00	
6,300.0	16.54	87.15	6,113.8	67.6	1,359.0	-67.6	0.00	0.00	
6,400.0	16.54	87.15	6,209.6	69.0	1,387.5	-69.0	0.00	0.00	
6,500.0	16.54	87.15	6,305.5	70.5	1,415.9	-70.5	0.00	0.00	
6,600.0	16.54	87.15	6,401.3	71.9	1,444.4	-71.9	0.00	0.00	
6,700.0	16.54	87.15	6,497.2	73.3	1,472.8	-73.3	0.00	0.00	
6,702.9	16.54	87.15	6,500.0	73.3	1,473.6	-73.3	0.00	0.00	Teepee Buttes (*if present)
6,800.0	16.54	87.15	6,593.1	74.7	1,501.2	-74.7	0.00	0.00	
6,900.0	16.54	87.15	6,688.9	76.1	1,529.7	-76.1	0.00	0.00	
7,000.0	16.54	87.15	6,784.8	77.5	1,558.1	-77.5	0.00	0.00	
7,100.0	16.54	87.15	6,880.6	79.0	1,586.6	-79.0	0.00	0.00	
7,200.0	16.54	87.15	6,976.5	80.4	1,615.0	-80.4	0.00	0.00	
7,300.0	16.54	87.15	7,072.4	81.8	1,643.5	-81.8	0.00	0.00	
7,387.6	16.54	87.15	7,156.3	83.0	1,668.4	-83.0	0.00	0.00	Start build/turn @ 7387' MD
7,400.0	16.54	91.51	7,168.2	83.1	1,671.9	-83.1	10.00	-0.03	
7,500.0	19.54	122.77	7,263.5	73.6	1,700.3	-73.6	10.00	3.00	
7,501.6	19.63	123.17	7,265.0	73.3	1,700.7	-73.3	10.00	5.29	Sharon Springs
7,592.5	25.60	141.22	7,349.0	49.6	1,725.8	-49.6	10.00	6.57	Niobrara
7,600.0	26.17	142.34	7,355.7	47.0	1,727.9	-47.0	10.00	7.58	
7,672.4	32.01	151.16	7,419.0	17.6	1,746.9	-17.6	10.00	8.08	B Chalk
7,700.0	34.37	153.78	7,442.1	4.2	1,753.9	-4.2	10.00	8.54	
7,760.0	39.65	158.52	7,490.0	-28.9	1,768.4	28.9	10.00	8.81	B Marl
7,800.0	43.27	161.12	7,520.0	-53.7	1,777.5	53.7	10.00	9.03	
7,872.8	49.97	165.06	7,570.0	-104.4	1,792.8	104.4	10.00	9.20	C Chalk
7,900.0	52.49	166.33	7,587.0	-124.9	1,798.0	124.9	10.00	9.31	
7,918.4	54.22	167.15	7,598.0	-139.3	1,801.4	139.3	10.00	9.35	C Marl
8,000.0	61.90	170.38	7,641.1	-207.1	1,814.8	207.1	10.00	9.42	
8,097.7	71.19	173.70	7,680.0	-295.8	1,827.1	295.8	10.00	9.51	Ft. Hayes
8,100.0	71.41	173.77	7,680.7	-298.0	1,827.3	298.0	10.00	9.54	
8,184.8	79.51	176.35	7,702.0	-379.6	1,834.4	379.6	10.00	9.56	Codell
8,200.0	80.97	176.80	7,704.6	-394.6	1,835.3	394.6	10.00	9.57	
8,294.3	90.00	179.50	7,712.0	-488.4	1,838.3	488.4	10.00	9.58	LP @ 7712' TVD; 90°
8,300.0	90.00	179.50	7,712.0	-494.2	1,838.3	494.2	0.00	0.00	
8,400.0	90.00	179.50	7,712.0	-594.2	1,839.2	594.2	0.00	0.00	
8,500.0	90.00	179.50	7,712.0	-694.2	1,840.1	694.2	0.00	0.00	
8,600.0	90.00	179.50	7,712.0	-794.1	1,841.0	794.1	0.00	0.00	
8,700.0	90.00	179.50	7,712.0	-894.1	1,841.8	894.1	0.00	0.00	

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Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.00	179.50	7,712.0	-994.1	1,842.7	994.1	0.00	0.00	
8,900.0	90.00	179.50	7,712.0	-1,094.1	1,843.6	1,094.1	0.00	0.00	
9,000.0	90.00	179.50	7,712.0	-1,194.1	1,844.4	1,194.1	0.00	0.00	
9,100.0	90.00	179.50	7,712.0	-1,294.1	1,845.3	1,294.1	0.00	0.00	
9,200.0	90.00	179.50	7,712.0	-1,394.1	1,846.2	1,394.1	0.00	0.00	
9,300.0	90.00	179.50	7,712.0	-1,494.1	1,847.1	1,494.1	0.00	0.00	
9,400.0	90.00	179.50	7,712.0	-1,594.1	1,847.9	1,594.1	0.00	0.00	
9,500.0	90.00	179.50	7,712.0	-1,694.1	1,848.8	1,694.1	0.00	0.00	
9,600.0	90.00	179.50	7,712.0	-1,794.1	1,849.7	1,794.1	0.00	0.00	
9,700.0	90.00	179.50	7,712.0	-1,894.1	1,850.5	1,894.1	0.00	0.00	
9,800.0	90.00	179.50	7,712.0	-1,994.1	1,851.4	1,994.1	0.00	0.00	
9,900.0	90.00	179.50	7,712.0	-2,094.1	1,852.3	2,094.1	0.00	0.00	
10,000.0	90.00	179.50	7,712.0	-2,194.1	1,853.2	2,194.1	0.00	0.00	
10,100.0	90.00	179.50	7,712.0	-2,294.1	1,854.0	2,294.1	0.00	0.00	
10,200.0	90.00	179.50	7,712.0	-2,394.1	1,854.9	2,394.1	0.00	0.00	
10,300.0	90.00	179.50	7,712.0	-2,494.1	1,855.8	2,494.1	0.00	0.00	
10,400.0	90.00	179.50	7,712.0	-2,594.1	1,856.7	2,594.1	0.00	0.00	
10,500.0	90.00	179.50	7,712.0	-2,694.1	1,857.5	2,694.1	0.00	0.00	
10,600.0	90.00	179.50	7,712.0	-2,794.1	1,858.4	2,794.1	0.00	0.00	
10,700.0	90.00	179.50	7,712.0	-2,894.1	1,859.3	2,894.1	0.00	0.00	
10,800.0	90.00	179.50	7,712.0	-2,994.1	1,860.1	2,994.1	0.00	0.00	
10,900.0	90.00	179.50	7,712.0	-3,094.1	1,861.0	3,094.1	0.00	0.00	
11,000.0	90.00	179.50	7,712.0	-3,194.1	1,861.9	3,194.1	0.00	0.00	
11,100.0	90.00	179.50	7,712.0	-3,294.1	1,862.8	3,294.1	0.00	0.00	
11,200.0	90.00	179.50	7,712.0	-3,394.1	1,863.6	3,394.1	0.00	0.00	
11,300.0	90.00	179.50	7,712.0	-3,494.0	1,864.5	3,494.0	0.00	0.00	
11,400.0	90.00	179.50	7,712.0	-3,594.0	1,865.4	3,594.0	0.00	0.00	
11,500.0	90.00	179.50	7,712.0	-3,694.0	1,866.3	3,694.0	0.00	0.00	
11,600.0	90.00	179.50	7,712.0	-3,794.0	1,867.1	3,794.0	0.00	0.00	
11,700.0	90.00	179.50	7,712.0	-3,894.0	1,868.0	3,894.0	0.00	0.00	
11,800.0	90.00	179.50	7,712.0	-3,994.0	1,868.9	3,994.0	0.00	0.00	
11,900.0	90.00	179.50	7,712.0	-4,094.0	1,869.7	4,094.0	0.00	0.00	
12,000.0	90.00	179.50	7,712.0	-4,194.0	1,870.6	4,194.0	0.00	0.00	
12,100.0	90.00	179.50	7,712.0	-4,294.0	1,871.5	4,294.0	0.00	0.00	
12,200.0	90.00	179.50	7,712.0	-4,394.0	1,872.4	4,394.0	0.00	0.00	
12,300.0	90.00	179.50	7,712.0	-4,494.0	1,873.2	4,494.0	0.00	0.00	
12,400.0	90.00	179.50	7,712.0	-4,594.0	1,874.1	4,594.0	0.00	0.00	
12,500.0	90.00	179.50	7,712.0	-4,694.0	1,875.0	4,694.0	0.00	0.00	
12,600.0	90.00	179.50	7,712.0	-4,794.0	1,875.9	4,794.0	0.00	0.00	
12,700.0	90.00	179.50	7,712.0	-4,894.0	1,876.7	4,894.0	0.00	0.00	
12,800.0	90.00	179.50	7,712.0	-4,994.0	1,877.6	4,994.0	0.00	0.00	
12,900.0	90.00	179.50	7,712.0	-5,094.0	1,878.5	5,094.0	0.00	0.00	
13,000.0	90.00	179.50	7,712.0	-5,194.0	1,879.3	5,194.0	0.00	0.00	
13,100.0	90.00	179.50	7,712.0	-5,294.0	1,880.2	5,294.0	0.00	0.00	
13,200.0	90.00	179.50	7,712.0	-5,394.0	1,881.1	5,394.0	0.00	0.00	
13,294.3	90.00	179.50	7,712.0	-5,488.2	1,881.9	5,488.2	0.00	0.00	TD at 13294.3 - Hwy 52 4H-32H-O268 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Hwy 52 4H-32H-O268 P	0.00	0.00	7,712.0	-5,488.2	1,881.9	1,270,277.61	3,134,825.38	40.074290	-105.018240
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
329.0	329.0	Fox Hills - BASE				
4,493.5	4,382.0	Sussex				
4,770.9	4,648.0	Sussex Marker				
5,075.5	4,940.0	Shannon				
6,702.9	6,500.0	Teepee Buttes (*if present)				
7,501.6	7,265.0	Sharon Springs				
7,592.5	7,349.0	Niobrara				
7,672.4	7,419.0	B Chalk				
7,760.0	7,490.0	B Marl				
7,872.8	7,570.0	C Chalk				
7,918.4	7,598.0	C Marl				
8,097.7	7,680.0	Ft. Hayes				
8,184.8	7,702.0	Codell				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
700.0	700.0	0.0	0.0	KOP @ 700'
2,354.4	2,331.5	11.8	236.9	EOB; Inc=16.54°
7,387.6	7,156.3	83.0	1,668.4	Start build/turn @ 7387' MD
8,294.3	7,712.0	-488.4	1,838.3	LP @ 7712' TVD; 90°
13,294.3	7,712.0	-5,488.2	1,881.9	TD at 13294.3

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S32-T2N-R68W (File/Hwy 52)

Hwy 52 4H-32H-O268

Hz

Plan #1

Anticollision Report

05 July, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	7/5/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	13,294.3	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S32-T2N-R68W (File/Hwy 52)						
ANDERSON 21-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 22-32 (EXISTING) - KPK WELL - NO SURV						Out of range
ANDERSON 22-32 ENC (EXISTING) - ENCANA WELL -						Out of range
ANDERSON 31-32 (EXISTING) - ENCANA WELL - PLAN						Out of range
ANDERSON 32-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 32-7 (EXISTING) - KPK WELL - NO SURVE						Out of range
ANDERSON 41-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 42-32 (EXISTING) - BASIN EXP WELL - NO						Out of range
ANDERSON 4-2-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 6-4-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON TRUST 1 (EXISTING) - KPK WELL - NO S						Out of range
ANDERSON TRUST 1 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 2 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 32-2 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST 32-8 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C 1 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W						Out of range
BROWN 22-5 (EXISTING) - ENCANA WELL - NO SURV						Out of range
BROWN 31-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	1,305.0	1,274.0	363.5	357.5	60.331	CC, ES
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	2,600.0	2,485.1	493.0	481.8	43.829	SF
BROWN 5-3 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN 5-5 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN C UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
BROWN C UNIT 2 (EXISTING) - ENCANA WELL - NO S						Out of range
CANINO 1-X (EXISTING) - ENCANA WELL - NO SURVE	5,303.0	5,034.0	316.6	297.5	16.526	CC, ES, SF
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR	6,523.3	6,269.8	187.3	148.0	4.764	CC, ES
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR	6,600.0	6,343.3	188.6	148.9	4.749	SF
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	1,469.3	1,409.0	20.5	15.3	3.953	CC, ES
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	1,500.0	1,439.4	21.0	15.7	3.943	SF
FEDERAL NOAA 11-32 (EXISTING) - ENCANA WELL - N						Out of range
File 3A-32H-K268 - Hz - Plan #1						Out of range
File 3B-32H-K268 - Hz - Plan #1						Out of range
File 3C-32H-K268 - Hz - Plan #1						Out of range
File 3D-32H-K268 - Hz - Plan #1						Out of range
File 3E-32H-K268 - Hz - Plan #1						Out of range
File 3F-32H-K268 - Hz - Plan #1						Out of range
File 3G-32H-K268 - Hz - Plan #1						Out of range
File 3H-32H-K268 - Hz - Plan #1						Out of range
File 3I-32H-K268 - Hz - Plan #1						Out of range
File 3J-32H-K268 - Hz - Plan #1						Out of range
File 3K-32H-K268 - Hz - Plan #1						Out of range
File 3L-32H-K268 - Hz - Plan #1						Out of range
File 3M-32H-K268 - Hz - Plan #1						Out of range
File 3N-32H-K268 - Hz - Plan #1						Out of range
File 3O-32H-K268 - Hz - Plan #1						Out of range
File 3P-32H-K268 - Hz - Plan #1						Out of range
FOSTER 33-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 43-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 4-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
FOSTER 4-6-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5X (EXISTING) - ENCANA WELL - SURVE						Out of range

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S32-T2N-R68W (File/Hwy 52)						
FOSTER 6-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 8-8-5 (EXISTING) - ENCANA WELL - SURVEY	13,294.3	7,934.0	360.2	244.9	3.126	CC, ES, SF
FOSTER E UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
GENE 11-5 (EXISTING) - KERR-MCGEE WELL - NO SU						Out of range
HIGHLAND 21-5 (EXISTING) - KPK WELL - NO SURVE						Out of range
HOPE 31-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
Hwy 52 4A-32H-O268 - Hz - Plan #1	166.3	167.3	45.4	44.9	85.659	CC
Hwy 52 4A-32H-O268 - Hz - Plan #1	200.0	201.0	45.4	44.8	70.112	ES
Hwy 52 4A-32H-O268 - Hz - Plan #1	700.0	696.7	65.8	63.4	26.771	SF
Hwy 52 4B-32H-O268 - Hz - Plan #1	200.0	200.0	40.0	39.4	61.941	CC, ES
Hwy 52 4B-32H-O268 - Hz - Plan #1	900.0	897.8	65.8	62.8	21.323	SF
Hwy 52 4C-32H-O268 - Hz - Plan #1	845.9	846.7	30.5	27.6	10.492	CC, ES
Hwy 52 4C-32H-O268 - Hz - Plan #1	1,000.0	1,000.8	32.6	29.1	9.471	SF
Hwy 52 4D-32H-O268 - Hz - Plan #1	1,087.8	1,089.4	17.0	13.2	4.492	CC
Hwy 52 4D-32H-O268 - Hz - Plan #1	1,100.0	1,101.6	17.0	13.1	4.442	ES
Hwy 52 4D-32H-O268 - Hz - Plan #1	1,200.0	1,201.6	18.0	13.8	4.295	SF
Hwy 52 4E-32H-O268 - Hz - Plan #1	700.0	700.0	16.2	13.8	6.757	CC, ES
Hwy 52 4E-32H-O268 - Hz - Plan #1	800.0	800.0	17.0	14.2	6.199	SF
Hwy 52 4F-32H-O268 - Hz - Plan #1	707.9	708.1	6.5	4.0	2.658	CC, ES, SF
Hwy 52 4G-32H-O268 - Hz - Plan #1	1,023.6	1,023.9	7.0	3.4	1.956	CC, ES, SF
Hwy 52 4I-32H-O268 - Hz - Plan #1	469.5	468.6	14.9	13.3	9.387	CC
Hwy 52 4I-32H-O268 - Hz - Plan #1	500.0	499.1	15.0	13.3	8.840	ES
Hwy 52 4I-32H-O268 - Hz - Plan #1	600.0	598.8	16.7	14.7	8.146	SF
Hwy 52 4J-32H-O268 - Hz - Plan #1	494.4	493.4	19.7	18.1	11.804	CC
Hwy 52 4J-32H-O268 - Hz - Plan #1	500.0	499.0	19.7	18.0	11.667	ES
Hwy 52 4J-32H-O268 - Hz - Plan #1	700.0	698.6	22.4	20.0	9.341	SF
Hwy 52 4K-32H-O268 - Hz - Plan #1	400.0	399.0	25.7	24.4	19.156	CC, ES
Hwy 52 4K-32H-O268 - Hz - Plan #1	800.0	797.2	35.6	32.9	12.982	SF
Hwy 52 4L-32H-O268 - Hz - Plan #1	500.0	499.0	30.0	28.3	17.739	CC, ES
Hwy 52 4L-32H-O268 - Hz - Plan #1	1,100.0	1,095.4	43.8	40.0	11.549	SF
Hwy 52 4M-32H-O268 - Hz - Plan #1	600.0	599.0	51.7	49.7	25.361	CC, ES
Hwy 52 4M-32H-O268 - Hz - Plan #1	2,100.0	2,084.4	108.9	99.9	12.027	SF
Hwy 52 4N-32H-O268 - Hz - Plan #1	1,269.6	1,263.3	55.2	50.9	12.633	CC
Hwy 52 4N-32H-O268 - Hz - Plan #1	1,300.0	1,293.4	55.3	50.8	12.338	ES
Hwy 52 4N-32H-O268 - Hz - Plan #1	2,300.0	2,281.3	110.2	99.5	10.300	SF
Hwy 52 4O-32H-O268 - Hz - Plan #1	400.0	399.0	60.1	58.8	44.800	CC, ES
Hwy 52 4O-32H-O268 - Hz - Plan #1	8,000.0	8,000.0	95.9	65.6	3.162	SF
Hwy 52 4P-32H-O268 - Hz - Plan #1	200.0	199.0	65.7	65.1	102.006	CC, ES
Hwy 52 4P-32H-O268 - Hz - Plan #1	7,300.0	7,531.0	413.1	357.2	7.383	SF
LAURIE 32-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
NATALIE 33-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
NELSON 1 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 1 A (EXISTING) - TEXAS TEA WELL - NO SUR						Out of range
NELSON 2 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 3 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 4 (EXISTING) - TEXAS TEA WELL - NO SURV						Out of range
NELSON 5 (EXISTING) - VESSELS WELL - NO SURVE						Out of range
NELSON 5 TT (EXISTING) - TEXAS TEA WELL - NO SU						Out of range
NELSON 6 (EXISTING) - VESSELS WELL - NO SURVE						Out of range
NELSON E UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
NELSON E UNIT 2 (EXISTING) - ENCANA WELL - NO S						Out of range
PAQUETTE 13-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
PAQUETTE 14-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S32-T2N-R68W (File/Hwy 52)						
RAY NELSON 0-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 12-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 14-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 24-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 2-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	1,421.2	1,375.1	376.3	371.3	76.015	CC, ES
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	2,400.0	2,247.2	485.8	475.4	46.587	SF
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	2,127.6	2,104.0	17.2	8.6	1.994	CC, ES, SF
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	6,611.1	6,531.2	137.9	86.5	2.680	CC, ES, SF
RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PL	3,260.3	3,355.7	455.6	427.5	16.190	CC, ES
RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PL	3,400.0	3,466.8	463.4	434.0	15.732	SF
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	4,590.0	4,556.3	43.2	14.7	1.514	CC, ES, SF
Ray Nelson 7-8-32 - DD - Plan #1	3,479.5	3,390.0	320.5	305.7	21.663	CC
Ray Nelson 7-8-32 - DD - Plan #1	3,600.0	3,508.3	321.4	305.5	20.228	ES
Ray Nelson 7-8-32 - DD - Plan #1	5,400.0	5,275.2	486.7	448.9	12.874	SF
RAY NELSON 8-4-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 8-6-32 (EXISTING) - ENCANA WELL - PL						Out of range
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU	8,344.4	7,999.9	127.1	90.2	3.440	CC, ES, SF
SCHRINER 11-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
SCHRINER 12-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
WANDELL 33-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 41-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 42-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 43-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA WELL														Offset Site Error:	0.0 ft
Survey Program: 41-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	60.32	201.7	353.9	407.4						
100.0	100.0	86.8	86.8	0.1	0.1	60.36	201.7	354.4	407.8	0.27	1,487.642				
200.0	200.0	186.1	186.1	0.3	0.3	60.44	201.6	355.5	408.7	0.62	656.286				
300.0	300.0	287.8	287.8	0.5	0.5	60.55	201.4	356.6	409.5	0.98	419.947				
400.0	400.0	398.6	398.6	0.7	0.7	60.85	199.1	356.8	408.7	1.34	304.544				
500.0	500.0	506.1	505.9	0.8	0.9	61.64	192.5	356.6	405.6	1.71	237.779				
600.0	600.0	613.8	612.8	1.0	1.1	63.17	180.6	357.0	400.8	2.08	193.101				
700.0	700.0	717.0	714.7	1.2	1.5	65.40	163.9	358.0	394.5	2.44	161.681				
800.0	800.0	809.3	805.5	1.4	1.8	-19.48	147.4	359.9	388.4	3.10	125.092				
900.0	900.0	905.1	899.5	1.5	2.1	-16.95	129.6	363.5	382.7	3.62	105.731				
1,000.0	999.9	1,003.1	995.5	1.7	2.5	-14.08	109.9	368.1	376.6	4.19	89.900				
1,100.0	1,099.7	1,097.1	1,086.5	1.9	2.9	-10.67	87.1	373.8	370.2	4.81	77.022				
1,200.0	1,199.4	1,184.2	1,170.1	2.1	3.3	-7.07	64.0	381.2	365.4	5.40	67.620				
1,300.0	1,298.9	1,269.7	1,251.9	2.3	3.8	-3.38	40.9	390.9	363.5	6.00	60.626				
1,305.0	1,303.9	1,274.0	1,255.9	2.3	3.8	-3.19	39.7	391.4	363.5	6.03	60.331 CC, ES				
1,400.0	1,398.3	1,356.0	1,334.1	2.6	4.3	0.39	17.6	403.1	364.8	6.56	55.645				
1,500.0	1,497.4	1,441.3	1,415.1	2.8	4.7	3.95	-4.6	417.5	369.0	7.07	52.181				
1,600.0	1,596.3	1,531.8	1,500.7	3.1	5.2	7.65	-28.3	434.9	375.7	7.58	49.577				
1,700.0	1,694.9	1,623.4	1,587.1	3.4	5.8	11.27	-52.2	453.7	383.8	8.03	47.810				
1,800.0	1,793.3	1,710.9	1,669.4	3.7	6.3	14.53	-74.7	473.2	393.5	8.43	46.656				
1,900.0	1,891.2	1,798.2	1,750.7	4.1	6.8	17.81	-98.5	494.2	405.3	8.82	45.940				
2,000.0	1,988.9	1,897.2	1,842.3	4.4	7.5	21.72	-127.9	517.7	417.8	9.22	45.323				
2,100.0	2,086.1	1,992.1	1,930.3	4.9	8.1	25.23	-155.4	540.3	430.4	9.54	45.115				
2,200.0	2,182.9	2,091.9	2,023.4	5.3	8.8	28.47	-181.5	564.5	442.2	9.86	44.860				
2,300.0	2,279.3	2,183.4	2,108.6	5.8	9.4	31.45	-206.4	587.0	454.5	10.17	44.699				
2,400.0	2,375.2	2,283.4	2,201.8	6.3	10.0	34.52	-232.3	612.1	466.7	10.49	44.485				
2,500.0	2,471.1	2,379.2	2,291.4	6.8	10.6	37.28	-256.4	636.0	479.4	10.85	44.173				
2,600.0	2,566.9	2,485.1	2,390.4	7.3	11.3	40.33	-283.9	661.5	493.0	11.25	43.829 SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - CANINO 1-X (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 5034-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		
4,700.0	4,580.0	4,543.0	4,543.0	18.5	7.9	-10.57	151.1	1,363.9	472.0	455.5	16.46	28.682		
4,800.0	4,675.9	4,638.9	4,638.9	19.0	8.1	-11.25	151.1	1,363.9	444.0	427.1	16.89	26.288		
4,900.0	4,771.7	4,734.7	4,734.7	19.6	8.3	-12.01	151.1	1,363.9	416.0	398.7	17.34	23.989		
5,000.0	4,867.6	4,830.6	4,830.6	20.1	8.4	-12.88	151.1	1,363.9	388.2	370.3	17.82	21.781		
5,100.0	4,963.4	4,926.4	4,926.4	20.6	8.6	-13.89	151.1	1,363.9	360.4	342.1	18.33	19.658		
5,200.0	5,059.3	5,022.3	5,022.3	21.2	8.8	-15.06	151.1	1,363.9	332.8	313.9	18.89	17.616		
5,300.0	5,155.2	5,034.0	5,034.0	21.7	8.8	-15.22	151.1	1,363.9	316.7	297.5	19.15	16.532		
5,303.0	5,158.0	5,034.0	5,034.0	21.7	8.8	-15.22	151.1	1,363.9	316.6	297.5	19.16	16.526	CC, ES, SF	
5,400.0	5,251.0	5,034.0	5,034.0	22.3	8.8	-15.22	151.1	1,363.9	331.2	311.8	19.37	17.093		
5,500.0	5,346.9	5,034.0	5,034.0	22.8	8.8	-15.22	151.1	1,363.9	372.9	353.3	19.59	19.033		
5,600.0	5,442.7	5,034.0	5,034.0	23.4	8.8	-15.22	151.1	1,363.9	434.2	414.3	19.82	21.910		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - CANINO 2 (EXISTING) - HUGHES CW WELL - NO SURVEYS													Offset Site Error: 0.0 ft	
Survey Program: 7800-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
4,900.0	4,771.7	4,713.7	4,713.7	19.6	8.2	22.91	-116.3	1,431.9	498.8	479.8	18.99	26.268		
5,000.0	4,867.6	4,809.6	4,809.6	20.1	8.4	24.25	-116.3	1,431.9	472.5	452.8	19.67	24.026		
5,100.0	4,963.4	4,905.4	4,905.4	20.6	8.6	25.74	-116.3	1,431.9	446.5	426.1	20.40	21.891		
5,200.0	5,059.3	5,001.3	5,001.3	21.2	8.7	27.41	-116.3	1,431.9	420.8	399.6	21.19	19.860		
5,300.0	5,155.2	5,097.2	5,097.2	21.7	8.9	29.29	-116.3	1,431.9	395.5	373.5	22.06	17.933		
5,400.0	5,251.0	5,193.0	5,193.0	22.3	9.1	31.42	-116.3	1,431.9	370.7	347.7	23.01	16.112		
5,500.0	5,346.9	5,288.9	5,288.9	22.8	9.2	33.84	-116.3	1,431.9	346.4	322.4	24.06	14.399		
5,600.0	5,442.7	5,384.7	5,384.7	23.4	9.4	36.62	-116.3	1,431.9	322.8	297.6	25.22	12.799		
5,700.0	5,538.6	5,480.6	5,480.6	23.9	9.6	39.81	-116.3	1,431.9	300.1	273.6	26.52	11.317		
5,800.0	5,634.5	5,576.5	5,576.5	24.4	9.7	43.49	-116.3	1,431.9	278.4	250.5	27.95	9.961		
5,900.0	5,730.3	5,672.3	5,672.3	25.0	9.9	47.74	-116.3	1,431.9	258.1	228.5	29.53	8.740		
6,000.0	5,826.2	5,768.2	5,768.2	25.5	10.1	52.66	-116.3	1,431.9	239.4	208.1	31.24	7.663		
6,100.0	5,922.0	5,864.0	5,864.0	26.1	10.2	58.32	-116.3	1,431.9	222.7	189.7	33.04	6.742		
6,200.0	6,017.9	5,959.9	5,959.9	26.6	10.4	64.77	-116.3	1,431.9	208.7	173.8	34.86	5.987		
6,300.0	6,113.8	6,055.8	6,055.8	27.2	10.6	71.97	-116.3	1,431.9	197.8	161.2	36.59	5.406		
6,400.0	6,209.6	6,151.6	6,151.6	27.7	10.7	79.81	-116.3	1,431.9	190.6	152.5	38.06	5.007		
6,500.0	6,305.5	6,247.5	6,247.5	28.2	10.9	88.05	-116.3	1,431.9	187.4	148.3	39.13	4.789		
6,523.3	6,327.8	6,269.8	6,269.8	28.4	10.9	90.00	-116.3	1,431.9	187.3	148.0	39.31	4.764 CC, ES		
6,600.0	6,401.3	6,343.3	6,343.3	28.8	11.1	96.37	-116.3	1,431.9	188.6	148.9	39.70	4.749 SF		
6,700.0	6,497.2	6,439.2	6,439.2	29.3	11.2	104.43	-116.3	1,431.9	193.9	154.2	39.77	4.876		
6,800.0	6,593.1	6,535.1	6,535.1	29.9	11.4	111.96	-116.3	1,431.9	203.2	163.8	39.42	5.154		
6,900.0	6,688.9	6,630.9	6,630.9	30.4	11.6	118.76	-116.3	1,431.9	215.8	177.0	38.79	5.564		
7,000.0	6,784.8	6,726.8	6,726.8	31.0	11.7	124.78	-116.3	1,431.9	231.3	193.3	38.01	6.086		
7,100.0	6,880.6	6,822.6	6,822.6	31.5	11.9	130.04	-116.3	1,431.9	249.1	211.9	37.18	6.699		
7,200.0	6,976.5	6,918.5	6,918.5	32.0	12.1	134.60	-116.3	1,431.9	268.7	232.3	36.39	7.385		
7,300.0	7,072.4	7,014.4	7,014.4	32.6	12.2	138.54	-116.3	1,431.9	289.8	254.1	35.66	8.126		
7,400.0	7,168.2	7,110.2	7,110.2	33.1	12.4	137.57	-116.3	1,431.9	312.0	276.9	35.12	8.883		
7,500.0	7,263.5	7,205.5	7,205.5	33.7	12.6	110.80	-116.3	1,431.9	328.8	294.2	34.59	9.506		
7,600.0	7,355.7	7,297.7	7,297.7	34.2	12.7	97.89	-116.3	1,431.9	338.0	305.0	33.00	10.243		
7,700.0	7,442.1	7,384.1	7,384.1	34.7	12.9	94.72	-116.3	1,431.9	343.8	312.8	31.00	11.088		
7,800.0	7,520.0	7,462.0	7,462.0	35.1	13.0	96.30	-116.3	1,431.9	351.2	321.9	29.37	11.959		
7,900.0	7,587.0	7,529.0	7,529.0	35.6	13.1	99.28	-116.3	1,431.9	366.2	337.7	28.55	12.827		
8,000.0	7,641.1	7,583.1	7,583.1	36.0	13.2	101.29	-116.3	1,431.9	393.5	365.0	28.50	13.809		
8,100.0	7,680.7	7,622.7	7,622.7	36.5	13.3	100.81	-116.3	1,431.9	435.2	406.1	29.05	14.983		
8,200.0	7,704.6	7,646.6	7,646.6	37.0	13.3	96.95	-116.3	1,431.9	490.1	460.1	29.95	16.365		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - CANINO 3 (EXISTING) - HUGHES CW WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7800-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	108.87	-18.0	52.5	80.3					
100.0	100.0	42.0	42.0	0.1	0.1	108.87	-18.0	52.5	55.5	55.3	0.22	250.235		
200.0	200.0	142.0	142.0	0.3	0.2	108.87	-18.0	52.5	55.5	54.9	0.57	97.240		
300.0	300.0	242.0	242.0	0.5	0.4	108.87	-18.0	52.5	55.5	54.6	0.92	60.345		
400.0	400.0	342.0	342.0	0.7	0.6	108.87	-18.0	52.5	55.5	54.2	1.27	43.746		
500.0	500.0	442.0	442.0	0.8	0.8	108.87	-18.0	52.5	55.5	53.9	1.62	34.309		
600.0	600.0	542.0	542.0	1.0	0.9	108.87	-18.0	52.5	55.5	53.5	1.97	28.221		
700.0	700.0	642.0	642.0	1.2	1.1	108.87	-18.0	52.5	55.5	53.2	2.32	23.968		
800.0	800.0	742.0	742.0	1.4	1.3	22.06	-18.0	52.5	54.7	52.0	2.67	20.527		
900.0	900.0	842.0	842.0	1.5	1.5	23.15	-18.0	52.5	52.3	49.3	3.01	17.350		
1,000.0	999.9	941.9	941.9	1.7	1.6	25.20	-18.0	52.5	48.3	44.9	3.36	14.366		
1,100.0	1,099.7	1,041.7	1,041.7	1.9	1.8	28.70	-18.0	52.5	42.9	39.1	3.71	11.542		
1,200.0	1,199.4	1,141.4	1,141.4	2.1	2.0	34.71	-18.0	52.5	36.2	32.1	4.07	8.885		
1,300.0	1,298.9	1,240.9	1,240.9	2.3	2.2	45.66	-18.0	52.5	28.8	24.4	4.45	6.475		
1,400.0	1,398.3	1,340.3	1,340.3	2.6	2.3	66.82	-18.0	52.5	22.4	17.5	4.88	4.587		
1,469.3	1,467.0	1,409.0	1,409.0	2.7	2.5	90.00	-18.0	52.5	20.5	15.3	5.20	3.953 CC, ES		
1,500.0	1,497.4	1,439.4	1,439.4	2.8	2.5	101.41	-18.0	52.5	21.0	15.7	5.32	3.943 SF		
1,600.0	1,596.3	1,538.3	1,538.3	3.1	2.7	132.36	-18.0	52.5	28.0	22.3	5.62	4.978		
1,700.0	1,694.9	1,636.9	1,636.9	3.4	2.9	149.54	-18.0	52.5	41.0	35.1	5.89	6.963		
1,800.0	1,793.3	1,735.3	1,735.3	3.7	3.0	158.70	-18.0	52.5	57.5	51.3	6.18	9.299		
1,900.0	1,891.2	1,833.2	1,833.2	4.1	3.2	164.08	-18.0	52.5	76.4	70.0	6.49	11.775		
2,000.0	1,988.9	1,930.9	1,930.9	4.4	3.4	167.52	-18.0	52.5	97.5	90.7	6.81	14.316		
2,100.0	2,086.1	2,028.1	2,028.1	4.9	3.5	169.88	-18.0	52.5	120.4	113.3	7.13	16.893		
2,200.0	2,182.9	2,124.9	2,124.9	5.3	3.7	171.58	-18.0	52.5	145.1	137.7	7.44	19.493		
2,300.0	2,279.3	2,221.3	2,221.3	5.8	3.9	172.85	-18.0	52.5	171.6	163.9	7.76	22.111		
2,400.0	2,375.2	2,317.2	2,317.2	6.3	4.0	173.84	-18.0	52.5	199.7	191.6	8.09	24.691		
2,500.0	2,471.1	2,413.1	2,413.1	6.8	4.2	174.61	-18.0	52.5	228.0	219.6	8.42	27.068		
2,600.0	2,566.9	2,508.9	2,508.9	7.3	4.4	175.21	-18.0	52.5	256.4	247.6	8.76	29.263		
2,700.0	2,662.8	2,604.8	2,604.8	7.8	4.5	175.68	-18.0	52.5	284.8	275.7	9.10	31.297		
2,800.0	2,758.7	2,700.7	2,700.7	8.3	4.7	176.08	-18.0	52.5	313.2	303.7	9.44	33.185		
2,900.0	2,854.5	2,796.5	2,796.5	8.9	4.9	176.40	-18.0	52.5	341.6	331.8	9.78	34.943		
3,000.0	2,950.4	2,892.4	2,892.4	9.4	5.0	176.68	-18.0	52.5	370.0	359.9	10.11	36.584		
3,100.0	3,046.2	2,988.2	2,988.2	9.9	5.2	176.92	-18.0	52.5	398.5	388.0	10.45	38.118		
3,200.0	3,142.1	3,084.1	3,084.1	10.4	5.4	177.12	-18.0	52.5	426.9	416.1	10.79	39.557		
3,300.0	3,238.0	3,180.0	3,180.0	11.0	5.6	177.30	-18.0	52.5	455.4	444.2	11.13	40.908		
3,400.0	3,333.8	3,275.8	3,275.8	11.5	5.7	177.46	-18.0	52.5	483.8	472.3	11.47	42.180		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												S32-T2N-R68W (File/Hwy 52) - FOSTER 8-8-5 (EXISTING) - ENCANA WELL - SURVEYS		Offset Site Error:		0.0 ft	
Survey Program:												102-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)	(ft)						
13,200.0	7,712.0	7,933.4	7,753.8	102.9	28.0	-86.74	-5,842.8	1,945.1	453.4	339.8	113.54	3.993					
13,294.3	7,712.0	7,934.0	7,754.3	104.4	28.0	-87.24	-5,842.8	1,945.1	360.2	244.9	115.21	3.126	CC, ES, SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4A-32H-O268 - 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		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	1.0	1.0	0.0	0.0	-97.29	-5.8	-45.0	45.4					
100.0	100.0	101.0	101.0	0.1	0.2	-97.29	-5.8	-45.0	45.4	45.1	0.30	152.113		
166.3	166.3	167.3	167.3	0.3	0.3	-97.29	-5.8	-45.0	45.4	44.9	0.53	85.659 CC		
200.0	200.0	201.0	201.0	0.3	0.3	-97.29	-5.8	-45.0	45.4	44.8	0.65	70.112 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-96.90	-5.6	-45.9	46.2	45.2	1.00	46.426		
400.0	400.0	399.4	399.4	0.7	0.7	-95.83	-4.9	-48.4	48.7	47.3	1.35	36.099		
500.0	500.0	498.5	498.4	0.8	0.9	-94.27	-3.9	-52.6	52.8	51.1	1.71	30.905		
600.0	600.0	597.4	597.1	1.0	1.1	-92.46	-2.5	-58.4	58.6	56.5	2.08	28.187		
700.0	700.0	696.7	696.1	1.2	1.3	-90.66	-0.8	-65.7	65.8	63.4	2.46	26.771 SF		
800.0	800.0	796.4	795.5	1.4	1.5	-176.38	1.0	-73.0	74.1	71.4	2.74	27.068		
900.0	900.0	895.8	894.7	1.5	1.7	-175.33	2.8	-80.4	84.2	81.1	3.09	27.284		
1,000.0	999.9	995.1	993.7	1.7	1.9	-174.59	4.6	-87.8	96.0	92.6	3.43	27.976		
1,100.0	1,099.7	1,094.2	1,092.5	1.9	2.1	-174.11	6.4	-95.1	109.5	105.8	3.78	29.011		
1,200.0	1,199.4	1,193.0	1,191.0	2.1	2.3	-173.82	8.2	-102.5	124.8	120.7	4.12	30.301		
1,300.0	1,298.9	1,291.6	1,289.2	2.3	2.5	-173.67	9.9	-109.8	141.8	137.3	4.46	31.788		
1,400.0	1,398.3	1,389.8	1,387.2	2.6	2.8	-173.61	11.7	-117.1	160.5	155.7	4.80	33.430		
1,500.0	1,497.4	1,487.7	1,484.8	2.8	3.0	-173.62	13.5	-124.4	180.9	175.7	5.14	35.198		
1,600.0	1,596.3	1,585.2	1,582.1	3.1	3.2	-173.68	15.2	-131.6	203.0	197.5	5.47	37.070		
1,700.0	1,694.9	1,682.4	1,678.9	3.4	3.4	-173.77	17.0	-138.8	226.7	220.9	5.81	39.030		
1,800.0	1,793.3	1,779.1	1,775.3	3.7	3.6	-173.88	18.7	-146.0	252.2	246.0	6.14	41.067		
1,900.0	1,891.2	1,875.3	1,871.3	4.1	3.8	-174.00	20.5	-153.1	279.3	272.8	6.47	43.169		
2,000.0	1,988.9	1,971.1	1,966.8	4.4	4.0	-174.13	22.2	-160.2	308.1	301.3	6.80	45.331		
2,100.0	2,086.1	2,066.3	2,061.7	4.9	4.2	-174.26	23.9	-167.3	338.6	331.5	7.12	47.546		
2,200.0	2,182.9	2,161.0	2,156.2	5.3	4.4	-174.39	25.6	-174.3	370.7	363.2	7.44	49.810		
2,300.0	2,279.3	2,255.1	2,250.0	5.8	4.6	-174.52	27.3	-181.3	404.4	396.7	7.76	52.119		
2,400.0	2,375.2	2,348.7	2,343.3	6.3	4.9	-174.65	29.0	-188.2	439.7	431.6	8.09	54.371		
2,500.0	2,471.1	2,442.2	2,436.5	6.8	5.1	-174.79	30.7	-195.2	475.1	466.7	8.43	56.393		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4B-32H-O268 - 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		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	-89.69	0.2	-40.0	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.69	0.2	-40.0	40.0	39.7	0.30	134.813		
200.0	200.0	200.0	200.0	0.3	0.3	-89.69	0.2	-40.0	40.0	39.4	0.65	61.941 CC, ES		
300.0	300.0	299.4	299.3	0.5	0.5	-89.21	0.6	-40.8	40.8	39.8	0.99	41.020		
400.0	400.0	398.6	398.6	0.7	0.7	-87.86	1.6	-43.1	43.2	41.9	1.35	32.070		
500.0	500.0	498.3	498.2	0.8	0.9	-86.06	3.2	-46.8	46.9	45.2	1.70	27.523		
600.0	600.0	598.2	598.0	1.0	1.0	-84.49	4.9	-50.5	50.7	48.7	2.06	24.592		
700.0	700.0	698.2	697.9	1.2	1.2	-83.14	6.5	-54.2	54.6	52.2	2.42	22.534		
800.0	800.0	798.0	797.7	1.4	1.4	-169.27	8.2	-57.9	59.4	56.6	2.74	21.667		
900.0	900.0	897.8	897.4	1.5	1.6	-168.70	9.8	-61.6	65.8	62.8	3.09	21.323 SF		
1,000.0	999.9	997.5	997.0	1.7	1.8	-168.51	11.5	-65.3	74.0	70.6	3.44	21.551		
1,100.0	1,099.7	1,097.0	1,096.4	1.9	2.0	-168.58	13.1	-69.0	83.9	80.1	3.78	22.192		
1,200.0	1,199.4	1,196.3	1,195.6	2.1	2.2	-168.85	14.7	-72.7	95.5	91.4	4.13	23.142		
1,300.0	1,298.9	1,295.4	1,294.7	2.3	2.4	-169.22	16.4	-76.4	108.8	104.3	4.47	24.332		
1,400.0	1,398.3	1,394.3	1,393.4	2.6	2.5	-169.65	18.0	-80.0	123.8	119.0	4.82	25.712		
1,500.0	1,497.4	1,492.9	1,491.9	2.8	2.7	-170.10	19.6	-83.7	140.5	135.4	5.16	27.246		
1,600.0	1,596.3	1,591.2	1,590.1	3.1	2.9	-170.56	21.3	-87.4	158.9	153.4	5.50	28.907		
1,700.0	1,694.9	1,689.1	1,688.0	3.4	3.1	-171.00	22.9	-91.0	179.0	173.2	5.84	30.676		
1,800.0	1,793.3	1,786.7	1,785.5	3.7	3.3	-171.43	24.5	-94.6	200.8	194.7	6.17	32.537		
1,900.0	1,891.2	1,883.9	1,882.6	4.1	3.5	-171.82	26.1	-98.2	224.3	217.8	6.51	34.477		
2,000.0	1,988.9	1,980.6	1,979.3	4.4	3.6	-172.19	27.7	-101.8	249.5	242.7	6.84	36.488		
2,100.0	2,086.1	2,076.9	2,075.5	4.9	3.8	-172.54	29.3	-105.4	276.4	269.2	7.17	38.562		
2,200.0	2,182.9	2,172.8	2,171.3	5.3	4.0	-172.86	30.9	-109.0	304.9	297.4	7.49	40.693		
2,300.0	2,279.3	2,268.1	2,266.5	5.8	4.2	-173.15	32.4	-112.5	335.1	327.3	7.82	42.875		
2,400.0	2,375.2	2,362.9	2,361.3	6.3	4.4	-173.44	34.0	-116.0	366.8	358.7	8.15	45.025		
2,500.0	2,471.1	2,457.7	2,455.9	6.8	4.5	-173.70	35.6	-119.6	398.7	390.3	8.49	46.971		
2,600.0	2,566.9	2,552.4	2,550.6	7.3	4.7	-173.92	37.1	-123.1	430.7	421.9	8.83	48.768		
2,700.0	2,662.8	2,647.2	2,645.3	7.8	4.9	-174.12	38.7	-126.6	462.6	453.5	9.17	50.433		
2,800.0	2,758.7	2,741.9	2,739.9	8.3	5.1	-174.28	40.3	-130.1	494.6	485.1	9.52	51.979		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4C-32H-O268 - 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	-99.42	-5.8	-35.0	35.5					
100.0	100.0	100.0	100.0	0.1	0.1	-99.42	-5.8	-35.0	35.5	35.2	0.30	119.683		
200.0	200.0	200.0	200.0	0.3	0.3	-99.42	-5.8	-35.0	35.5	34.9	0.65	54.989		
300.0	300.0	300.0	300.0	0.5	0.5	-99.42	-5.8	-35.0	35.5	34.5	0.99	35.695		
400.0	400.0	400.0	400.0	0.7	0.7	-99.42	-5.8	-35.0	35.5	34.2	1.34	26.423		
500.0	500.0	500.0	500.0	0.8	0.8	-99.42	-5.8	-35.0	35.5	33.8	1.69	20.975		
600.0	600.0	600.6	600.6	1.0	1.0	-98.92	-5.4	-34.3	34.7	32.6	2.04	16.975		
700.0	700.0	700.9	700.8	1.2	1.2	-97.37	-4.1	-32.1	32.4	30.0	2.39	13.514		
800.0	800.0	800.9	800.8	1.4	1.4	177.59	-2.8	-29.6	30.6	27.9	2.74	11.174		
845.9	845.9	846.7	846.7	1.5	1.5	178.66	-2.1	-28.5	30.5	27.6	2.90	10.492 CC, ES		
900.0	900.0	900.8	900.7	1.5	1.6	179.95	-1.4	-27.2	30.7	27.6	3.09	9.935		
1,000.0	999.9	1,000.8	1,000.7	1.7	1.7	-177.83	0.0	-24.7	32.6	29.1	3.44	9.471 SF		
1,100.0	1,099.7	1,100.7	1,100.6	1.9	1.9	-176.06	1.4	-22.3	36.2	32.5	3.79	9.563		
1,200.0	1,199.4	1,200.6	1,200.4	2.1	2.1	-174.83	2.8	-19.8	41.7	37.5	4.14	10.068		
1,300.0	1,298.9	1,300.3	1,300.1	2.3	2.3	-174.10	4.1	-17.4	48.8	44.3	4.49	10.886		
1,400.0	1,398.3	1,399.9	1,399.6	2.6	2.5	-173.74	5.5	-15.0	57.7	52.9	4.83	11.948		
1,500.0	1,497.4	1,499.4	1,499.0	2.8	2.6	-173.65	6.9	-12.5	68.4	63.2	5.18	13.206		
1,600.0	1,596.3	1,598.6	1,598.2	3.1	2.8	-173.71	8.3	-10.1	80.7	75.2	5.52	14.622		
1,700.0	1,694.9	1,697.6	1,697.2	3.4	3.0	-173.87	9.6	-7.7	94.8	88.9	5.86	16.171		
1,800.0	1,793.3	1,796.4	1,795.9	3.7	3.2	-174.07	11.0	-5.2	110.6	104.4	6.20	17.832		
1,900.0	1,891.2	1,894.8	1,894.3	4.1	3.3	-174.30	12.4	-2.8	128.1	121.5	6.54	19.590		
2,000.0	1,988.9	1,992.9	1,992.4	4.4	3.5	-174.54	13.7	-0.4	147.3	140.4	6.87	21.430		
2,100.0	2,086.1	2,090.7	2,090.1	4.9	3.7	-174.77	15.1	2.0	168.2	161.0	7.20	23.344		
2,200.0	2,182.9	2,188.1	2,187.5	5.3	3.9	-174.99	16.4	4.4	190.8	183.3	7.53	25.324		
2,300.0	2,279.3	2,285.1	2,284.5	5.8	4.1	-175.20	17.8	6.7	215.1	207.2	7.86	27.363		
2,400.0	2,375.2	2,381.7	2,381.0	6.3	4.2	-175.40	19.1	9.1	240.9	232.7	8.20	29.398		
2,500.0	2,471.1	2,478.3	2,477.5	6.8	4.4	-175.58	20.4	11.5	267.0	258.5	8.54	31.263		
2,600.0	2,566.9	2,574.8	2,574.0	7.3	4.6	-175.73	21.8	13.8	293.1	284.2	8.89	32.984		
2,700.0	2,662.8	2,671.3	2,670.5	7.8	4.8	-175.85	23.1	16.2	319.1	309.9	9.23	34.576		
2,800.0	2,758.7	2,767.9	2,767.0	8.3	4.9	-175.96	24.5	18.6	345.2	335.6	9.58	36.054		
2,900.0	2,854.5	2,864.4	2,863.5	8.9	5.1	-176.05	25.8	20.9	371.3	361.4	9.92	37.429		
3,000.0	2,950.4	2,961.0	2,960.0	9.4	5.3	-176.12	27.1	23.3	397.4	387.1	10.26	38.712		
3,100.0	3,046.2	3,057.5	3,056.5	9.9	5.5	-176.19	28.5	25.7	423.5	412.8	10.61	39.912		
3,200.0	3,142.1	3,154.0	3,153.0	10.4	5.6	-176.25	29.8	28.0	449.5	438.6	10.95	41.037		
3,300.0	3,238.0	3,250.6	3,249.5	11.0	5.8	-176.31	31.1	30.4	475.6	464.3	11.30	42.093		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4D-32H-O268 - 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		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	-89.69	0.2	-30.0	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.69	0.2	-30.0	30.0	29.7	0.30	101.110		
200.0	200.0	200.0	200.0	0.3	0.3	-89.69	0.2	-30.0	30.0	29.4	0.65	46.456		
300.0	300.0	300.0	300.0	0.5	0.5	-89.69	0.2	-30.0	30.0	29.0	0.99	30.156		
400.0	400.0	400.0	400.0	0.7	0.7	-89.69	0.2	-30.0	30.0	28.7	1.34	22.323		
500.0	500.0	500.0	500.0	0.8	0.8	-89.69	0.2	-30.0	30.0	28.3	1.69	17.720		
600.0	600.0	600.5	600.5	1.0	1.0	-89.28	0.4	-29.1	29.1	27.1	2.04	14.266		
700.0	700.0	700.9	700.9	1.2	1.2	-87.87	1.0	-26.6	26.6	24.2	2.40	11.106		
800.0	800.0	801.3	801.2	1.4	1.4	-172.27	2.0	-22.3	23.3	20.5	2.74	8.488		
900.0	900.0	901.6	901.3	1.5	1.6	-167.73	3.5	-16.3	20.1	17.0	3.10	6.501		
1,000.0	999.9	1,001.6	1,001.0	1.7	1.8	-161.27	5.2	-9.1	17.6	14.2	3.45	5.109		
1,087.8	1,087.5	1,089.4	1,088.6	1.9	2.0	-156.00	6.8	-2.7	17.0	13.2	3.78	4.492 CC		
1,100.0	1,099.7	1,101.6	1,100.7	1.9	2.0	-155.38	7.0	-1.8	17.0	13.1	3.82	4.442 ES		
1,200.0	1,199.4	1,201.6	1,200.4	2.1	2.2	-151.93	8.8	5.5	18.0	13.8	4.19	4.295 SF		
1,300.0	1,298.9	1,301.6	1,300.1	2.3	2.4	-151.36	10.5	12.8	20.6	16.0	4.56	4.517		
1,400.0	1,398.3	1,401.5	1,399.7	2.6	2.6	-152.87	12.3	20.1	24.8	19.8	4.93	5.023		
1,500.0	1,497.4	1,501.3	1,499.3	2.8	2.8	-155.38	14.1	27.4	30.5	25.2	5.29	5.768		
1,600.0	1,596.3	1,601.0	1,598.7	3.1	3.0	-158.11	15.8	34.7	37.9	32.2	5.64	6.719		
1,700.0	1,694.9	1,700.6	1,698.0	3.4	3.2	-160.67	17.6	42.0	47.0	41.0	5.98	7.848		
1,800.0	1,793.3	1,800.0	1,797.1	3.7	3.5	-162.91	19.3	49.2	57.8	51.4	6.33	9.132		
1,900.0	1,891.2	1,899.2	1,896.0	4.1	3.7	-164.81	21.1	56.5	70.3	63.6	6.67	10.549		
2,000.0	1,988.9	1,998.1	1,994.7	4.4	3.9	-166.41	22.8	63.7	84.6	77.6	7.00	12.080		
2,100.0	2,086.1	2,096.8	2,093.1	4.9	4.1	-167.75	24.6	70.9	100.6	93.3	7.34	13.712		
2,200.0	2,182.9	2,195.2	2,191.2	5.3	4.3	-168.89	26.3	78.1	118.3	110.7	7.67	15.431		
2,300.0	2,279.3	2,293.2	2,289.0	5.8	4.5	-169.85	28.1	85.3	137.8	129.8	8.00	17.227		
2,400.0	2,375.2	2,391.0	2,386.4	6.3	4.7	-170.67	29.8	92.4	158.8	150.5	8.33	19.053		
2,500.0	2,471.1	2,488.7	2,483.9	6.8	4.9	-171.33	31.5	99.6	180.1	171.4	8.68	20.742		
2,600.0	2,566.9	2,586.4	2,581.3	7.3	5.1	-171.85	33.2	106.7	201.4	192.3	9.03	22.301		
2,700.0	2,662.8	2,684.1	2,678.7	7.8	5.4	-172.27	35.0	113.8	222.7	213.3	9.38	23.744		
2,800.0	2,758.7	2,781.8	2,776.1	8.3	5.6	-172.61	36.7	121.0	244.0	234.3	9.73	25.084		
2,900.0	2,854.5	2,879.4	2,873.5	8.9	5.8	-172.91	38.4	128.1	265.3	255.2	10.08	26.330		
3,000.0	2,950.4	2,977.1	2,970.9	9.4	6.0	-173.15	40.2	135.3	286.6	276.2	10.43	27.493		
3,100.0	3,046.2	3,074.8	3,068.4	9.9	6.2	-173.37	41.9	142.4	308.0	297.2	10.78	28.581		
3,200.0	3,142.1	3,172.5	3,165.8	10.4	6.4	-173.55	43.6	149.5	329.3	318.2	11.13	29.600		
3,300.0	3,238.0	3,270.2	3,263.2	11.0	6.6	-173.72	45.3	156.7	350.6	339.2	11.48	30.556		
3,400.0	3,333.8	3,367.9	3,360.6	11.5	6.8	-173.86	47.1	163.8	372.0	360.2	11.83	31.457		
3,500.0	3,429.7	3,465.6	3,458.0	12.0	7.1	-173.99	48.8	171.0	393.3	381.2	12.18	32.305		
3,600.0	3,525.5	3,563.3	3,555.4	12.6	7.3	-174.11	50.5	178.1	414.7	402.2	12.53	33.106		
3,700.0	3,621.4	3,661.0	3,652.8	13.1	7.5	-174.21	52.2	185.2	436.0	423.2	12.88	33.864		
3,800.0	3,717.3	3,758.7	3,750.3	13.6	7.7	-174.30	54.0	192.4	457.4	444.2	13.23	34.581		
3,900.0	3,813.1	3,856.4	3,847.7	14.2	7.9	-174.39	55.7	199.5	478.7	465.2	13.58	35.261		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4E-32H-O268 - 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		
0.0	0.0	0.0	0.0	0.0	0.0	-111.49	-5.9	-15.0	16.2					
100.0	100.0	100.0	100.0	0.1	0.1	-111.49	-5.9	-15.0	16.2	15.9	0.30	54.449		
200.0	200.0	200.0	200.0	0.3	0.3	-111.49	-5.9	-15.0	16.2	15.5	0.65	25.017		
300.0	300.0	300.0	300.0	0.5	0.5	-111.49	-5.9	-15.0	16.2	15.2	0.99	16.239		
400.0	400.0	400.0	400.0	0.7	0.7	-111.49	-5.9	-15.0	16.2	14.8	1.34	12.021		
500.0	500.0	500.0	500.0	0.8	0.8	-111.49	-5.9	-15.0	16.2	14.5	1.69	9.543		
600.0	600.0	600.0	600.0	1.0	1.0	-111.49	-5.9	-15.0	16.2	14.1	2.04	7.911		
700.0	700.0	700.0	700.0	1.2	1.2	-111.49	-5.9	-15.0	16.2	13.8	2.39	6.757 CC, ES		
800.0	800.0	800.0	800.0	1.4	1.4	162.29	-5.9	-15.0	17.0	14.2	2.74	6.199 SF		
900.0	900.0	900.0	900.0	1.5	1.5	164.63	-5.9	-15.0	19.5	16.4	3.09	6.312		
1,000.0	999.9	1,000.3	1,000.3	1.7	1.7	167.21	-5.8	-14.2	22.9	19.4	3.44	6.652		
1,100.0	1,099.7	1,100.6	1,100.6	1.9	1.9	169.58	-5.3	-11.6	26.2	22.4	3.78	6.930		
1,200.0	1,199.4	1,201.1	1,200.9	2.1	2.1	171.83	-4.6	-7.2	29.6	25.5	4.13	7.165		
1,300.0	1,298.9	1,301.5	1,301.2	2.3	2.3	173.98	-3.5	-1.2	33.0	28.5	4.48	7.369		
1,400.0	1,398.3	1,402.1	1,401.4	2.6	2.5	176.06	-2.2	6.6	36.4	31.6	4.82	7.551		
1,500.0	1,497.4	1,502.7	1,501.6	2.8	2.7	178.09	-0.5	16.2	39.9	34.7	5.17	7.715		
1,600.0	1,596.3	1,603.1	1,601.4	3.1	2.9	-179.94	1.4	27.3	43.5	37.9	5.51	7.882		
1,700.0	1,694.9	1,703.0	1,700.5	3.4	3.1	-178.26	3.4	38.9	48.4	42.5	5.86	8.261		
1,800.0	1,793.3	1,802.7	1,799.6	3.7	3.4	-176.99	5.4	50.4	55.1	48.9	6.20	8.883		
1,900.0	1,891.2	1,902.4	1,898.6	4.1	3.6	-176.11	7.4	61.9	63.6	57.0	6.55	9.708		
2,000.0	1,988.9	2,001.9	1,997.4	4.4	3.9	-175.53	9.4	73.4	73.8	66.9	6.89	10.705		
2,100.0	2,086.1	2,101.1	2,096.0	4.9	4.1	-175.20	11.4	84.9	85.7	78.5	7.23	11.849		
2,200.0	2,182.9	2,200.2	2,194.3	5.3	4.3	-175.02	13.3	96.3	99.4	91.8	7.58	13.121		
2,300.0	2,279.3	2,299.0	2,292.5	5.8	4.6	-174.97	15.3	107.7	114.8	106.9	7.91	14.505		
2,400.0	2,375.2	2,397.6	2,390.3	6.3	4.8	-174.99	17.3	119.1	131.7	123.5	8.26	15.950		
2,500.0	2,471.1	2,496.1	2,488.2	6.8	5.1	-175.02	19.2	130.5	148.9	140.3	8.61	17.287		
2,600.0	2,566.9	2,594.6	2,586.0	7.3	5.4	-175.05	21.2	141.9	166.1	157.1	8.97	18.518		
2,700.0	2,662.8	2,693.1	2,683.8	7.8	5.6	-175.07	23.2	153.3	183.3	173.9	9.32	19.655		
2,800.0	2,758.7	2,791.6	2,781.7	8.3	5.9	-175.08	25.1	164.6	200.5	190.8	9.68	20.708		
2,900.0	2,854.5	2,890.1	2,879.5	8.9	6.1	-175.10	27.1	176.0	217.6	207.6	10.04	21.687		
3,000.0	2,950.4	2,988.6	2,977.3	9.4	6.4	-175.11	29.1	187.4	234.8	224.4	10.39	22.599		
3,100.0	3,046.2	3,087.1	3,075.2	9.9	6.6	-175.12	31.0	198.8	252.0	241.3	10.75	23.450		
3,200.0	3,142.1	3,185.7	3,173.0	10.4	6.9	-175.13	33.0	210.1	269.2	258.1	11.10	24.246		
3,300.0	3,238.0	3,284.2	3,270.8	11.0	7.2	-175.13	35.0	221.5	286.4	274.9	11.46	24.993		
3,400.0	3,333.8	3,382.7	3,368.7	11.5	7.4	-175.14	36.9	232.9	303.6	291.7	11.81	25.694		
3,500.0	3,429.7	3,481.2	3,466.5	12.0	7.7	-175.15	38.9	244.3	320.7	308.6	12.17	26.355		
3,600.0	3,525.5	3,579.7	3,564.3	12.6	7.9	-175.15	40.9	255.7	337.9	325.4	12.53	26.978		
3,700.0	3,621.4	3,678.2	3,662.2	13.1	8.2	-175.16	42.8	267.0	355.1	342.2	12.88	27.567		
3,800.0	3,717.3	3,776.7	3,760.0	13.6	8.5	-175.16	44.8	278.4	372.3	359.1	13.24	28.123		
3,900.0	3,813.1	3,875.2	3,857.8	14.2	8.7	-175.17	46.8	289.8	389.5	375.9	13.59	28.651		
4,000.0	3,909.0	3,973.8	3,955.7	14.7	9.0	-175.17	48.8	301.2	406.7	392.7	13.95	29.151		
4,100.0	4,004.8	4,072.3	4,053.5	15.2	9.2	-175.17	50.7	312.6	423.8	409.5	14.31	29.627		
4,200.0	4,100.7	4,170.8	4,151.3	15.8	9.5	-175.18	52.7	323.9	441.0	426.4	14.66	30.079		
4,300.0	4,196.6	4,269.3	4,249.2	16.3	9.8	-175.18	54.7	335.3	458.2	443.2	15.02	30.510		
4,400.0	4,292.4	4,367.8	4,347.0	16.9	10.0	-175.18	56.6	346.7	475.4	460.0	15.37	30.921		
4,500.0	4,388.3	4,466.3	4,444.8	17.4	10.3	-175.19	58.6	358.1	492.6	476.8	15.73	31.314		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4F-32H-O268 - 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	-89.69	0.1	-10.0	10.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.69	0.1	-10.0	10.0	9.7	0.30	33.703		
200.0	200.0	200.0	200.0	0.3	0.3	-89.69	0.1	-10.0	10.0	9.4	0.65	15.485		
300.0	300.0	300.0	300.0	0.5	0.5	-89.69	0.1	-10.0	10.0	9.0	0.99	10.052		
400.0	400.0	400.0	400.0	0.7	0.7	-89.69	0.1	-10.0	10.0	8.7	1.34	7.441		
500.0	500.0	500.0	500.0	0.8	0.8	-89.69	0.1	-10.0	10.0	8.3	1.69	5.907		
600.0	600.0	600.2	600.2	1.0	1.0	-82.24	1.2	-8.7	8.7	6.7	2.04	4.277		
700.0	700.0	700.2	700.0	1.2	1.2	-45.59	4.5	-4.6	6.5	4.1	2.39	2.718		
707.9	707.9	708.1	707.9	1.2	1.2	-127.82	4.9	-4.2	6.5	4.0	2.44	2.658	CC, ES, SF	
800.0	800.0	799.8	799.2	1.4	1.4	-80.67	10.1	2.0	10.2	7.4	2.76	3.683		
900.0	900.0	898.8	897.5	1.5	1.7	-63.30	17.9	11.2	19.5	16.4	3.11	6.255		
1,000.0	999.9	998.4	996.1	1.7	1.9	-57.35	26.2	22.4	29.9	26.4	3.47	8.601		
1,100.0	1,099.7	1,098.1	1,094.8	1.9	2.2	-54.06	33.3	34.9	39.0	35.2	3.84	10.154		
1,200.0	1,199.4	1,197.9	1,193.5	2.1	2.5	-51.61	39.1	48.6	46.9	42.7	4.23	11.093		
1,300.0	1,298.9	1,297.8	1,292.1	2.3	2.8	-49.44	43.7	63.5	53.4	48.8	4.62	11.558		
1,400.0	1,398.3	1,397.7	1,390.7	2.6	3.1	-47.32	47.1	79.6	58.7	53.7	5.03	11.660		
1,500.0	1,497.4	1,497.7	1,489.2	2.8	3.4	-45.42	49.5	96.7	62.7	57.2	5.45	11.496		
1,600.0	1,596.3	1,597.6	1,587.6	3.1	3.7	-44.71	51.8	113.8	65.5	59.6	5.90	11.101		
1,700.0	1,694.9	1,697.6	1,686.1	3.4	4.1	-45.10	54.1	131.0	67.1	60.7	6.39	10.502		
1,800.0	1,793.3	1,797.6	1,784.6	3.7	4.4	-46.54	56.4	148.2	67.4	60.5	6.93	9.732		
1,900.0	1,891.2	1,897.6	1,883.0	4.1	4.7	-49.08	58.7	165.4	66.7	59.1	7.55	8.830		
2,000.0	1,988.9	1,997.5	1,981.4	4.4	5.1	-52.89	60.9	182.5	65.0	56.7	8.28	7.845		
2,100.0	2,086.1	2,097.2	2,079.7	4.9	5.4	-58.21	63.2	199.7	62.6	53.5	9.16	6.839		
2,200.0	2,182.9	2,196.9	2,177.8	5.3	5.8	-65.38	65.5	216.8	60.1	49.9	10.20	5.894		
2,300.0	2,279.3	2,296.4	2,275.8	5.8	6.1	-74.64	67.8	233.9	58.2	46.8	11.39	5.108		
2,374.9	2,351.2	2,370.9	2,349.1	6.2	6.4	-82.73	69.5	246.7	57.6	45.3	12.28	4.691		
2,400.0	2,375.2	2,395.8	2,373.7	6.3	6.4	-85.78	70.1	251.0	57.7	45.1	12.57	4.589		
2,500.0	2,471.1	2,495.1	2,471.5	6.8	6.8	-96.93	72.4	268.0	59.4	45.9	13.52	4.393		
2,600.0	2,566.9	2,594.5	2,569.3	7.3	7.1	-107.10	74.6	285.1	63.2	49.0	14.19	4.457		
2,700.0	2,662.8	2,693.8	2,667.2	7.8	7.5	-115.88	76.9	302.2	68.8	54.2	14.61	4.711		
2,800.0	2,758.7	2,793.1	2,765.0	8.3	7.8	-123.21	79.2	319.2	75.8	60.9	14.87	5.094		
2,900.0	2,854.5	2,892.4	2,862.8	8.9	8.2	-129.24	81.5	336.3	83.8	68.7	15.06	5.562		
3,000.0	2,950.4	2,991.8	2,960.6	9.4	8.5	-134.18	83.7	353.4	92.5	77.3	15.21	6.081		
3,100.0	3,046.2	3,091.1	3,058.5	9.9	8.9	-138.25	86.0	370.4	101.8	86.5	15.36	6.628		
3,200.0	3,142.1	3,190.4	3,156.3	10.4	9.2	-141.62	88.3	387.5	111.6	96.0	15.52	7.186		
3,300.0	3,238.0	3,289.7	3,254.1	11.0	9.6	-144.45	90.6	404.6	121.6	105.9	15.70	7.745		
3,400.0	3,333.8	3,389.1	3,351.9	11.5	9.9	-146.84	92.8	421.6	131.9	116.0	15.90	8.297		
3,500.0	3,429.7	3,488.4	3,449.8	12.0	10.2	-148.88	95.1	438.7	142.4	126.3	16.11	8.838		
3,600.0	3,525.5	3,587.7	3,547.6	12.6	10.6	-150.64	97.4	455.8	153.1	136.7	16.35	9.365		
3,700.0	3,621.4	3,687.1	3,645.4	13.1	10.9	-152.17	99.7	472.8	163.9	147.3	16.59	9.877		
3,800.0	3,717.3	3,786.4	3,743.2	13.6	11.3	-153.51	102.0	489.9	174.8	157.9	16.85	10.371		
3,900.0	3,813.1	3,885.7	3,841.0	14.2	11.6	-154.70	104.2	507.0	185.7	168.6	17.12	10.848		
4,000.0	3,909.0	3,985.0	3,938.9	14.7	12.0	-155.75	106.5	524.0	196.8	179.4	17.40	11.307		
4,100.0	4,004.8	4,084.4	4,036.7	15.2	12.3	-156.69	108.8	541.1	207.8	190.2	17.69	11.750		
4,200.0	4,100.7	4,183.7	4,134.5	15.8	12.7	-157.53	111.1	558.2	219.0	201.0	17.99	12.175		
4,300.0	4,196.6	4,283.0	4,232.3	16.3	13.0	-158.29	113.3	575.2	230.2	211.9	18.29	12.585		
4,400.0	4,292.4	4,382.4	4,330.2	16.9	13.4	-158.98	115.6	592.3	241.4	222.8	18.60	12.979		
4,500.0	4,388.3	4,481.7	4,428.0	17.4	13.7	-159.61	117.9	609.4	252.7	233.7	18.91	13.359		
4,600.0	4,484.1	4,581.0	4,525.8	17.9	14.1	-160.19	120.2	626.4	263.9	244.7	19.23	13.724		
4,700.0	4,580.0	4,680.3	4,623.6	18.5	14.4	-160.72	122.4	643.5	275.3	255.7	19.56	14.075		
4,800.0	4,675.9	4,779.7	4,721.5	19.0	14.8	-161.21	124.7	660.6	286.6	266.7	19.88	14.414		
4,900.0	4,771.7	4,879.0	4,819.3	19.6	15.1	-161.66	127.0	677.6	297.9	277.7	20.21	14.740		

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4F-32H-O268 - 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		
5,000.0	4,867.6	4,978.3	4,917.1	20.1	15.5	-162.07	129.3	694.7	309.3	288.7	20.55	15.054		
5,100.0	4,963.4	5,077.6	5,014.9	20.6	15.8	-162.46	131.5	711.8	320.7	299.8	20.88	15.357		
5,200.0	5,059.3	5,177.0	5,112.8	21.2	16.2	-162.82	133.8	728.8	332.1	310.8	21.22	15.649		
5,300.0	5,155.2	5,276.3	5,210.6	21.7	16.5	-163.16	136.1	745.9	343.5	321.9	21.56	15.931		
5,400.0	5,251.0	5,375.6	5,308.4	22.3	16.9	-163.47	138.4	763.0	354.9	333.0	21.90	16.203		
5,500.0	5,346.9	5,475.0	5,406.2	22.8	17.2	-163.77	140.7	780.0	366.3	344.1	22.25	16.467		
5,600.0	5,442.7	5,574.3	5,504.1	23.4	17.6	-164.05	142.9	797.1	377.7	355.2	22.59	16.721		
5,700.0	5,538.6	5,673.6	5,601.9	23.9	17.9	-164.31	145.2	814.2	389.2	366.2	22.94	16.967		
5,800.0	5,634.5	5,772.9	5,699.7	24.4	18.3	-164.56	147.5	831.2	400.6	377.4	23.29	17.204		
5,900.0	5,730.3	5,872.3	5,797.5	25.0	18.6	-164.79	149.8	848.3	412.1	388.5	23.64	17.435		
6,000.0	5,826.2	5,971.6	5,895.4	25.5	19.0	-165.01	152.0	865.4	423.6	399.6	23.99	17.657		
6,100.0	5,922.0	6,070.9	5,993.2	26.1	19.3	-165.22	154.3	882.4	435.0	410.7	24.34	17.873		
6,200.0	6,017.9	6,170.3	6,091.0	26.6	19.7	-165.42	156.6	899.5	446.5	421.8	24.69	18.083		
6,300.0	6,113.8	6,269.6	6,188.8	27.2	20.0	-165.60	158.9	916.6	458.0	432.9	25.05	18.285		
6,400.0	6,209.6	6,368.9	6,286.7	27.7	20.4	-165.78	161.1	933.6	469.5	444.1	25.40	18.482		
6,500.0	6,305.5	6,468.2	6,384.5	28.2	20.7	-165.95	163.4	950.7	481.0	455.2	25.76	18.673		
6,600.0	6,401.3	6,567.6	6,482.3	28.8	21.1	-166.11	165.7	967.8	492.5	466.3	26.11	18.859		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4G-32H-O268 - 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	-139.89	-6.0	-5.0	7.8					
100.0	100.0	100.0	100.0	0.1	0.1	-139.89	-6.0	-5.0	7.8	7.5	0.30	26.323		
200.0	200.0	200.0	200.0	0.3	0.3	-139.89	-6.0	-5.0	7.8	7.2	0.65	12.094		
300.0	300.0	300.0	300.0	0.5	0.5	-139.89	-6.0	-5.0	7.8	6.8	0.99	7.851		
400.0	400.0	400.0	400.0	0.7	0.7	-139.89	-6.0	-5.0	7.8	6.5	1.34	5.812		
500.0	500.0	500.0	500.0	0.8	0.8	-139.89	-6.0	-5.0	7.8	6.1	1.69	4.613		
600.0	600.0	600.0	600.0	1.0	1.0	-139.89	-6.0	-5.0	7.8	5.8	2.04	3.825		
700.0	700.0	700.0	700.0	1.2	1.2	-139.89	-6.0	-5.0	7.8	5.4	2.39	3.266		
800.0	800.0	800.1	800.1	1.4	1.4	135.04	-6.0	-4.6	8.1	5.4	2.74	2.971		
900.0	900.0	900.3	900.2	1.5	1.5	128.97	-6.1	-1.1	7.8	4.7	3.09	2.515		
1,000.0	999.9	1,000.3	1,000.0	1.7	1.7	109.02	-6.4	5.9	7.0	3.6	3.47	2.026		
1,023.6	1,023.4	1,023.9	1,023.5	1.8	1.8	101.77	-6.4	8.0	7.0	3.4	3.56	1.956 CC, ES, SF		
1,100.0	1,099.7	1,100.2	1,099.3	1.9	2.0	74.81	-6.7	16.3	7.8	3.9	3.86	2.019		
1,200.0	1,199.4	1,199.9	1,198.1	2.1	2.2	48.03	-7.3	30.0	11.8	7.5	4.22	2.788		
1,300.0	1,298.9	1,299.5	1,296.4	2.3	2.5	37.33	-8.3	45.5	17.4	12.8	4.58	3.796		
1,400.0	1,398.3	1,398.9	1,394.4	2.6	2.8	33.34	-9.8	62.5	23.5	18.6	4.95	4.752		
1,500.0	1,497.4	1,498.3	1,491.9	2.8	3.1	32.11	-11.8	81.2	29.9	24.6	5.33	5.610		
1,600.0	1,596.3	1,597.5	1,589.0	3.1	3.4	32.21	-14.4	101.5	36.6	30.8	5.74	6.367		
1,700.0	1,694.9	1,696.6	1,685.6	3.4	3.8	33.03	-17.5	123.3	43.4	37.2	6.18	7.027		
1,800.0	1,793.3	1,795.8	1,782.1	3.7	4.2	34.30	-21.1	146.7	50.4	43.8	6.65	7.576		
1,900.0	1,891.2	1,895.7	1,878.9	4.1	4.7	36.20	-24.8	170.4	56.3	49.1	7.18	7.841		
2,000.0	1,988.9	1,995.5	1,975.9	4.4	5.1	38.74	-28.5	194.2	60.9	53.1	7.78	7.823		
2,100.0	2,086.1	2,095.4	2,072.8	4.9	5.5	41.95	-32.1	218.0	64.3	55.8	8.48	7.576		
2,200.0	2,182.9	2,195.3	2,169.7	5.3	6.0	45.89	-35.8	241.8	66.6	57.3	9.31	7.153		
2,300.0	2,279.3	2,295.1	2,266.6	5.8	6.4	50.66	-39.5	265.5	68.1	57.8	10.30	6.615		
2,400.0	2,375.2	2,394.9	2,363.4	6.3	6.9	56.25	-43.2	289.3	69.2	57.8	11.45	6.046		
2,500.0	2,471.1	2,494.6	2,460.2	6.8	7.3	61.82	-46.9	313.0	70.8	58.1	12.67	5.590		
2,600.0	2,566.9	2,594.4	2,557.1	7.3	7.8	67.08	-50.6	336.8	73.1	59.1	13.91	5.251		
2,700.0	2,662.8	2,694.1	2,653.9	7.8	8.2	72.00	-54.3	360.5	75.9	60.7	15.15	5.007		
2,800.0	2,758.7	2,793.9	2,750.7	8.3	8.7	76.54	-58.0	384.3	79.2	62.9	16.37	4.840		
2,900.0	2,854.5	2,893.6	2,847.5	8.9	9.1	80.68	-61.6	408.1	83.0	65.5	17.55	4.731		
3,000.0	2,950.4	2,993.4	2,944.3	9.4	9.6	84.45	-65.3	431.8	87.2	68.5	18.68	4.668		
3,100.0	3,046.2	3,093.1	3,041.1	9.9	10.1	87.86	-69.0	455.6	91.7	72.0	19.78	4.639		
3,200.0	3,142.1	3,192.9	3,138.0	10.4	10.5	90.94	-72.7	479.3	96.6	75.7	20.83	4.636		
3,300.0	3,238.0	3,292.7	3,234.8	11.0	11.0	93.72	-76.4	503.1	101.7	79.8	21.85	4.652		
3,400.0	3,333.8	3,392.4	3,331.6	11.5	11.4	96.23	-80.1	526.8	107.0	84.1	22.84	4.683		
3,500.0	3,429.7	3,492.2	3,428.4	12.0	11.9	98.50	-83.8	550.6	112.4	88.6	23.80	4.724		
3,600.0	3,525.5	3,591.9	3,525.2	12.6	12.3	100.55	-87.5	574.3	118.1	93.3	24.74	4.774		
3,700.0	3,621.4	3,691.7	3,622.0	13.1	12.8	102.42	-91.1	598.1	123.9	98.2	25.65	4.828		
3,800.0	3,717.3	3,791.4	3,718.8	13.6	13.3	104.12	-94.8	621.8	129.8	103.2	26.55	4.887		
3,900.0	3,813.1	3,891.2	3,815.7	14.2	13.7	105.67	-98.5	645.6	135.8	108.3	27.44	4.948		
4,000.0	3,909.0	3,990.9	3,912.5	14.7	14.2	107.09	-102.2	669.3	141.9	113.6	28.31	5.011		
4,100.0	4,004.8	4,090.7	4,009.3	15.2	14.7	108.39	-105.9	693.1	148.0	118.9	29.17	5.075		
4,200.0	4,100.7	4,190.5	4,106.1	15.8	15.1	109.58	-109.6	716.8	154.3	124.3	30.02	5.139		
4,300.0	4,196.6	4,290.2	4,202.9	16.3	15.6	110.68	-113.3	740.6	160.6	129.7	30.87	5.202		
4,400.0	4,292.4	4,390.0	4,299.7	16.9	16.0	111.70	-116.9	764.4	166.9	135.2	31.71	5.266		
4,500.0	4,388.3	4,489.7	4,396.6	17.4	16.5	112.65	-120.6	788.1	173.4	140.8	32.54	5.328		
4,600.0	4,484.1	4,589.5	4,493.4	17.9	17.0	113.52	-124.3	811.9	179.8	146.4	33.37	5.389		
4,700.0	4,580.0	4,689.2	4,590.2	18.5	17.4	114.34	-128.0	835.6	186.3	152.1	34.19	5.449		
4,800.0	4,675.9	4,789.0	4,687.0	19.0	17.9	115.10	-131.7	859.4	192.8	157.8	35.01	5.508		
4,900.0	4,771.7	4,888.7	4,783.8	19.6	18.4	115.81	-135.4	883.1	199.4	163.6	35.83	5.565		
5,000.0	4,867.6	4,988.5	4,880.6	20.1	18.8	116.48	-139.1	906.9	206.0	169.3	36.64	5.621		

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4G-32H-O268 - 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		
5,100.0	4,963.4	5,088.2	4,977.5	20.6	19.3	117.10	-142.8	930.6	212.6	175.1	37.46	5.676		
5,200.0	5,059.3	5,188.0	5,074.3	21.2	19.7	117.69	-146.4	954.4	219.2	181.0	38.27	5.729		
5,300.0	5,155.2	5,287.8	5,171.1	21.7	20.2	118.24	-150.1	978.1	225.9	186.8	39.07	5.781		
5,400.0	5,251.0	5,387.5	5,267.9	22.3	20.7	118.76	-153.8	1,001.9	232.6	192.7	39.88	5.831		
5,500.0	5,346.9	5,487.3	5,364.7	22.8	21.1	119.25	-157.5	1,025.6	239.3	198.6	40.69	5.880		
5,600.0	5,442.7	5,587.0	5,461.5	23.4	21.6	119.71	-161.2	1,049.4	246.0	204.5	41.49	5.928		
5,700.0	5,538.6	5,686.8	5,558.3	23.9	22.1	120.15	-164.9	1,073.1	252.7	210.4	42.29	5.975		
5,800.0	5,634.5	5,786.5	5,655.2	24.4	22.5	120.57	-168.6	1,096.9	259.4	216.3	43.10	6.020		
5,900.0	5,730.3	5,886.3	5,752.0	25.0	23.0	120.97	-172.2	1,120.7	266.2	222.3	43.90	6.064		
6,000.0	5,826.2	5,986.0	5,848.8	25.5	23.4	121.34	-175.9	1,144.4	273.0	228.3	44.70	6.107		
6,100.0	5,922.0	6,085.8	5,945.6	26.1	23.9	121.70	-179.6	1,168.2	279.7	234.2	45.50	6.148		
6,200.0	6,017.9	6,185.6	6,042.4	26.6	24.4	122.04	-183.3	1,191.9	286.5	240.2	46.30	6.189		
6,300.0	6,113.8	6,285.3	6,139.2	27.2	24.8	122.37	-187.0	1,215.7	293.3	246.2	47.10	6.228		
6,400.0	6,209.6	6,385.1	6,236.1	27.7	25.3	122.68	-190.7	1,239.4	300.1	252.2	47.90	6.266		
6,500.0	6,305.5	6,484.8	6,332.9	28.2	25.8	122.97	-194.4	1,263.2	307.0	258.3	48.70	6.303		
6,600.0	6,401.3	6,584.6	6,429.7	28.8	26.2	123.26	-198.1	1,286.9	313.8	264.3	49.49	6.340		
6,700.0	6,497.2	6,684.3	6,526.5	29.3	26.7	123.53	-201.7	1,310.7	320.6	270.3	50.29	6.375		
6,800.0	6,593.1	6,784.1	6,623.3	29.9	27.2	123.79	-205.4	1,334.4	327.4	276.4	51.09	6.409		
6,900.0	6,688.9	6,883.8	6,720.1	30.4	27.6	124.04	-209.1	1,358.2	334.3	282.4	51.88	6.443		
7,000.0	6,784.8	6,983.6	6,817.0	31.0	28.1	124.28	-212.8	1,381.9	341.1	288.5	52.68	6.475		
7,100.0	6,880.6	7,076.1	6,906.7	31.5	28.5	124.48	-216.4	1,404.0	348.2	294.7	53.47	6.513		
7,200.0	6,976.5	7,140.9	6,969.2	32.0	28.8	124.17	-224.0	1,419.3	362.0	307.6	54.39	6.655		
7,300.0	7,072.4	7,200.0	7,025.1	32.6	29.1	123.40	-237.3	1,433.0	385.1	329.6	55.52	6.936		
7,400.0	7,168.2	7,261.4	7,081.5	33.1	29.5	117.78	-257.2	1,446.8	417.1	360.1	57.00	7.318		
7,500.0	7,263.5	7,317.8	7,131.1	33.7	29.8	85.47	-280.9	1,459.0	448.8	390.5	58.26	7.703		
7,600.0	7,355.7	7,373.8	7,178.0	34.2	30.1	65.68	-309.3	1,470.5	474.2	416.4	57.73	8.213		
7,700.0	7,442.1	7,429.5	7,221.7	34.7	30.4	54.70	-342.1	1,481.2	492.8	437.2	55.53	8.874		
8,100.0	7,680.7	7,650.0	7,358.8	36.5	31.8	42.71	-509.7	1,514.9	496.1	460.9	35.22	14.087		
8,200.0	7,704.6	7,700.0	7,380.5	37.0	32.2	43.38	-554.4	1,520.2	479.4	449.8	29.54	13.484		
8,300.0	7,712.0	7,763.7	7,402.6	37.4	32.6	45.40	-613.9	1,525.6	455.9	430.2	25.72	17.728		
8,400.0	7,712.0	7,821.9	7,417.0	38.0	33.1	46.49	-670.1	1,529.2	434.6	407.1	27.49	15.813		
8,500.0	7,712.0	7,882.6	7,426.1	38.6	33.5	47.22	-730.0	1,531.4	422.3	393.0	29.29	14.416		
8,591.4	7,712.0	7,940.9	7,429.0	39.2	34.0	47.49	-788.3	1,532.1	418.9	387.9	30.91	13.549		
8,600.0	7,712.0	7,946.8	7,429.0	39.2	34.0	47.50	-794.1	1,532.1	418.9	387.8	31.07	13.484		
8,700.0	7,712.0	8,046.8	7,429.0	39.9	34.8	47.58	-894.1	1,532.1	419.5	386.3	33.23	12.625		
8,800.0	7,712.0	8,146.8	7,429.0	40.7	35.7	47.66	-994.1	1,532.1	420.2	384.7	35.46	11.850		
8,900.0	7,712.0	8,246.8	7,429.0	41.6	36.7	47.74	-1,094.1	1,532.1	420.8	383.1	37.75	11.149		
9,000.0	7,712.0	8,346.8	7,429.0	42.5	37.7	47.82	-1,194.1	1,532.1	421.5	381.4	40.08	10.516		
9,100.0	7,712.0	8,446.8	7,429.0	43.4	38.8	47.90	-1,294.1	1,532.1	422.1	379.7	42.46	9.942		
9,200.0	7,712.0	8,546.8	7,429.0	44.4	39.9	47.98	-1,394.1	1,532.1	422.8	377.9	44.87	9.422		
9,300.0	7,712.0	8,646.7	7,429.0	45.5	41.0	48.06	-1,494.1	1,532.1	423.4	376.1	47.32	8.949		
9,400.0	7,712.0	8,746.7	7,429.0	46.6	42.2	48.14	-1,594.1	1,532.1	424.1	374.3	49.79	8.517		
9,500.0	7,712.0	8,846.7	7,429.0	47.7	43.4	48.22	-1,694.1	1,532.1	424.7	372.4	52.29	8.123		
9,600.0	7,712.0	8,946.7	7,429.0	48.9	44.7	48.29	-1,794.1	1,532.1	425.4	370.6	54.81	7.761		
9,700.0	7,712.0	9,046.7	7,429.0	50.1	46.0	48.37	-1,894.1	1,532.1	426.0	368.7	57.35	7.428		
9,800.0	7,712.0	9,146.7	7,429.0	51.3	47.3	48.45	-1,994.1	1,532.1	426.7	366.8	59.91	7.122		
9,900.0	7,712.0	9,246.7	7,429.0	52.6	48.7	48.53	-2,094.1	1,532.1	427.3	364.8	62.49	6.839		
10,000.0	7,712.0	9,346.7	7,429.0	53.9	50.1	48.60	-2,194.1	1,532.1	428.0	362.9	65.08	6.576		
10,100.0	7,712.0	9,446.7	7,429.0	55.2	51.5	48.68	-2,294.1	1,532.1	428.6	361.0	67.69	6.333		
10,200.0	7,712.0	9,546.7	7,429.0	56.5	52.9	48.76	-2,394.1	1,532.1	429.3	359.0	70.31	6.106		
10,300.0	7,712.0	9,646.7	7,429.0	57.9	54.4	48.84	-2,494.1	1,532.1	430.0	357.0	72.94	5.895		
10,400.0	7,712.0	9,746.7	7,429.0	59.3	55.8	48.91	-2,594.1	1,532.1	430.6	355.0	75.58	5.697		

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4G-32H-O268 - 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)				
10,500.0	7,712.0	9,846.7	7,429.0	60.7	57.3	48.99	-2,694.1	1,532.1	431.3	353.0	78.24	5.512		
10,600.0	7,712.0	9,946.7	7,429.0	62.1	58.8	49.06	-2,794.1	1,532.1	431.9	351.0	80.91	5.338		
10,700.0	7,712.0	10,046.7	7,429.0	63.6	60.3	49.14	-2,894.1	1,532.1	432.6	349.0	83.59	5.175		
10,800.0	7,712.0	10,146.7	7,429.0	65.0	61.8	49.21	-2,994.1	1,532.1	433.2	347.0	86.27	5.022		
10,900.0	7,712.0	10,246.7	7,429.0	66.5	63.4	49.29	-3,094.1	1,532.1	433.9	344.9	88.97	4.877		
11,000.0	7,712.0	10,346.7	7,429.0	68.0	64.9	49.37	-3,194.1	1,532.1	434.6	342.9	91.67	4.740		
11,100.0	7,712.0	10,446.7	7,429.0	69.5	66.5	49.44	-3,294.1	1,532.1	435.2	340.8	94.39	4.611		
11,200.0	7,712.0	10,546.7	7,429.0	71.0	68.1	49.51	-3,394.1	1,532.1	435.9	338.8	97.11	4.489		
11,300.0	7,712.0	10,646.7	7,429.0	72.5	69.6	49.59	-3,494.0	1,532.1	436.6	336.7	99.84	4.373		
11,400.0	7,712.0	10,746.7	7,429.0	74.0	71.2	49.66	-3,594.0	1,532.1	437.2	334.6	102.58	4.262		
11,500.0	7,712.0	10,846.7	7,429.0	75.6	72.8	49.74	-3,694.0	1,532.1	437.9	332.6	105.33	4.157		
11,600.0	7,712.0	10,946.7	7,429.0	77.1	74.4	49.81	-3,794.0	1,532.1	438.6	330.5	108.08	4.058		
11,700.0	7,712.0	11,046.7	7,429.0	78.7	76.0	49.88	-3,894.0	1,532.1	439.2	328.4	110.84	3.963		
11,800.0	7,712.0	11,146.7	7,429.0	80.3	77.6	49.96	-3,994.0	1,532.1	439.9	326.3	113.61	3.872		
11,900.0	7,712.0	11,246.6	7,429.0	81.8	79.2	50.03	-4,094.0	1,532.1	440.6	324.2	116.38	3.785		
12,000.0	7,712.0	11,346.6	7,429.0	83.4	80.9	50.10	-4,194.0	1,532.1	441.2	322.1	119.16	3.703		
12,100.0	7,712.0	11,446.6	7,429.0	85.0	82.5	50.18	-4,294.0	1,532.1	441.9	319.9	121.95	3.624		
12,200.0	7,712.0	11,546.6	7,429.0	86.6	84.1	50.25	-4,394.0	1,532.1	442.6	317.8	124.75	3.548		
12,300.0	7,712.0	11,646.6	7,429.0	88.2	85.8	50.32	-4,494.0	1,532.1	443.2	315.7	127.55	3.475		
12,400.0	7,712.0	11,746.6	7,429.0	89.8	87.4	50.39	-4,594.0	1,532.1	443.9	313.6	130.35	3.405		
12,500.0	7,712.0	11,846.6	7,429.0	91.4	89.1	50.46	-4,694.0	1,532.1	444.6	311.4	133.17	3.339		
12,600.0	7,712.0	11,946.6	7,429.0	93.0	90.7	50.54	-4,794.0	1,532.1	445.3	309.3	135.99	3.274		
12,700.0	7,712.0	12,046.6	7,429.0	94.7	92.4	50.61	-4,894.0	1,532.1	445.9	307.1	138.81	3.212		
12,800.0	7,712.0	12,146.6	7,429.0	96.3	94.0	50.68	-4,994.0	1,532.1	446.6	305.0	141.64	3.153		
12,900.0	7,712.0	12,246.6	7,429.0	97.9	95.7	50.75	-5,094.0	1,532.1	447.3	302.8	144.48	3.096		
13,000.0	7,712.0	12,346.6	7,429.0	99.6	97.4	50.82	-5,194.0	1,532.1	448.0	300.6	147.32	3.041		
13,100.0	7,712.0	12,446.6	7,429.0	101.2	99.0	50.89	-5,294.0	1,532.1	448.6	298.5	150.17	2.988		
13,200.0	7,712.0	12,546.6	7,429.0	102.9	100.7	50.96	-5,394.0	1,532.1	449.3	296.3	153.02	2.936		
13,294.3	7,712.0	12,640.9	7,429.0	104.4	102.3	51.03	-5,488.2	1,532.1	450.0	294.2	155.72	2.890		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4I-32H-O268 - 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	112.11	-6.1	15.0	16.2					
100.0	100.0	99.0	99.0	0.1	0.1	112.11	-6.1	15.0	16.2	15.9	0.30	54.723		
200.0	200.0	199.0	199.0	0.3	0.3	112.11	-6.1	15.0	16.2	15.5	0.64	25.085		
300.0	300.0	299.1	299.1	0.5	0.5	114.96	-6.7	14.4	15.8	14.8	0.99	15.948		
400.0	400.0	399.1	399.1	0.7	0.7	124.25	-8.5	12.5	15.1	13.8	1.34	11.282		
469.5	469.5	468.6	468.5	0.8	0.8	135.03	-10.5	10.5	14.9	13.3	1.59	9.387 CC		
500.0	500.0	499.1	498.9	0.8	0.9	140.83	-11.6	9.4	15.0	13.3	1.69	8.840 ES		
600.0	600.0	598.8	598.5	1.0	1.1	162.03	-15.9	5.2	16.7	14.7	2.05	8.146 SF		
700.0	700.0	698.3	697.7	1.2	1.3	-179.05	-21.4	-0.4	21.4	19.0	2.44	8.796		
800.0	800.0	797.7	796.6	1.4	1.5	108.27	-27.9	-6.9	29.1	26.3	2.77	10.505		
900.0	900.0	897.0	895.5	1.5	1.7	118.78	-34.5	-13.5	38.8	35.7	3.11	12.495		
1,000.0	999.9	996.1	994.2	1.7	2.0	126.56	-41.2	-20.2	50.3	46.9	3.44	14.607		
1,100.0	1,099.7	1,095.1	1,092.7	1.9	2.2	132.53	-47.8	-26.8	63.6	59.8	3.79	16.780		
1,200.0	1,199.4	1,193.8	1,190.9	2.1	2.4	137.26	-54.4	-33.4	78.5	74.4	4.14	18.982		
1,300.0	1,298.9	1,292.2	1,288.9	2.3	2.7	141.10	-60.9	-40.0	95.2	90.7	4.49	21.198		
1,400.0	1,398.3	1,390.3	1,386.6	2.6	2.9	144.28	-67.5	-46.5	113.6	108.8	4.85	23.421		
1,500.0	1,497.4	1,488.1	1,483.9	2.8	3.1	146.96	-74.0	-53.1	133.7	128.5	5.21	25.648		
1,600.0	1,596.3	1,585.5	1,580.9	3.1	3.3	149.24	-80.5	-59.6	155.5	149.9	5.58	27.878		
1,700.0	1,694.9	1,682.5	1,677.5	3.4	3.6	151.20	-87.0	-66.1	178.9	173.0	5.94	30.110		
1,800.0	1,793.3	1,779.2	1,773.7	3.7	3.8	152.91	-93.5	-72.5	204.1	197.8	6.31	32.345		
1,900.0	1,891.2	1,875.3	1,869.4	4.1	4.0	154.41	-99.9	-78.9	230.9	224.2	6.68	34.584		
2,000.0	1,988.9	1,971.0	1,964.7	4.4	4.3	155.74	-106.3	-85.3	259.4	252.3	7.04	36.827		
2,100.0	2,086.1	2,066.1	2,059.4	4.9	4.5	156.92	-112.6	-91.7	289.5	282.1	7.41	39.077		
2,200.0	2,182.9	2,160.8	2,153.6	5.3	4.7	157.97	-118.9	-98.0	321.3	313.5	7.77	41.333		
2,300.0	2,279.3	2,254.8	2,247.2	5.8	4.9	158.91	-125.2	-104.3	354.7	346.6	8.14	43.595		
2,400.0	2,375.2	2,348.3	2,340.3	6.3	5.2	159.82	-131.5	-110.6	389.6	381.1	8.51	45.801		
2,500.0	2,471.1	2,441.8	2,433.4	6.8	5.4	160.65	-137.7	-116.8	424.8	415.9	8.89	47.803		
2,600.0	2,566.9	2,535.2	2,526.4	7.3	5.6	161.35	-144.0	-123.1	460.1	450.8	9.27	49.653		
2,700.0	2,662.8	2,628.7	2,619.4	7.8	5.8	161.95	-150.2	-129.3	495.4	485.8	9.64	51.367		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4J-32H-O268 - 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	90.31	-0.1	20.0	20.0					
100.0	100.0	99.0	99.0	0.1	0.1	90.31	-0.1	20.0	20.0	19.7	0.30	67.745		
200.0	200.0	199.0	199.0	0.3	0.3	90.31	-0.1	20.0	20.0	19.4	0.64	31.055		
300.0	300.0	299.0	299.0	0.5	0.5	90.31	-0.1	20.0	20.0	19.0	0.99	20.139		
400.0	400.0	399.0	399.0	0.7	0.7	92.74	-1.0	19.9	19.9	18.5	1.34	14.810		
494.4	494.4	493.4	493.4	0.8	0.8	99.70	-3.3	19.4	19.7	18.1	1.67	11.804 CC		
500.0	500.0	499.0	499.0	0.8	0.8	100.26	-3.5	19.4	19.7	18.0	1.69	11.667 ES		
600.0	600.0	598.9	598.8	1.0	1.0	112.63	-7.8	18.7	20.2	18.2	2.04	9.918		
700.0	700.0	698.6	698.3	1.2	1.2	127.93	-13.8	17.7	22.4	20.0	2.40	9.341 SF		
800.0	800.0	798.0	797.4	1.4	1.4	57.00	-21.4	16.4	26.5	23.7	2.77	9.558		
900.0	900.0	897.4	896.4	1.5	1.7	72.32	-30.4	14.8	32.7	29.6	3.12	10.479		
1,000.0	999.9	996.8	995.3	1.7	1.9	84.79	-39.4	13.3	40.3	36.8	3.46	11.646		
1,100.0	1,099.7	1,096.1	1,094.2	1.9	2.1	95.02	-48.3	11.8	49.3	45.5	3.81	12.946		
1,200.0	1,199.4	1,195.2	1,192.9	2.1	2.3	103.54	-57.3	10.2	59.8	55.6	4.17	14.329		
1,300.0	1,298.9	1,294.1	1,291.4	2.3	2.6	110.70	-66.3	8.7	71.8	67.3	4.56	15.766		
1,400.0	1,398.3	1,392.8	1,389.7	2.6	2.8	116.77	-75.2	7.2	85.4	80.5	4.95	17.245		
1,500.0	1,497.4	1,491.3	1,487.7	2.8	3.0	121.95	-84.1	5.6	100.7	95.3	5.37	18.757		
1,600.0	1,596.3	1,589.5	1,585.5	3.1	3.2	126.40	-93.0	4.1	117.5	111.7	5.79	20.301		
1,700.0	1,694.9	1,687.3	1,683.0	3.4	3.5	130.25	-101.9	2.6	136.1	129.8	6.22	21.874		
1,800.0	1,793.3	1,784.9	1,780.1	3.7	3.7	133.60	-110.7	1.1	156.3	149.6	6.66	23.475		
1,900.0	1,891.2	1,882.1	1,876.9	4.1	3.9	136.53	-119.5	-0.4	178.1	171.0	7.10	25.102		
2,000.0	1,988.9	1,978.8	1,973.2	4.4	4.2	139.11	-128.3	-1.9	201.7	194.1	7.54	26.755		
2,100.0	2,086.1	2,075.2	2,069.2	4.9	4.4	141.40	-137.0	-3.4	226.9	218.9	7.98	28.431		
2,200.0	2,182.9	2,171.1	2,164.7	5.3	4.6	143.43	-145.7	-4.9	253.8	245.3	8.42	30.130		
2,300.0	2,279.3	2,266.5	2,259.7	5.8	4.8	145.25	-154.3	-6.4	282.3	273.4	8.86	31.850		
2,400.0	2,375.2	2,361.5	2,354.3	6.3	5.1	146.94	-162.9	-7.8	312.4	303.0	9.31	33.558		
2,500.0	2,471.1	2,456.4	2,448.7	6.8	5.3	148.44	-171.5	-9.3	342.8	333.1	9.76	35.139		
2,600.0	2,566.9	2,551.3	2,543.2	7.3	5.5	149.69	-180.1	-10.8	373.5	363.3	10.20	36.608		
2,700.0	2,662.8	2,646.2	2,637.7	7.8	5.7	150.76	-188.7	-12.2	404.3	393.7	10.65	37.973		
2,800.0	2,758.7	2,741.0	2,732.2	8.3	5.9	151.67	-197.3	-13.7	435.2	424.2	11.09	39.245		
2,900.0	2,854.5	2,835.9	2,826.7	8.9	6.2	152.47	-205.9	-15.2	466.2	454.7	11.53	40.431		
3,000.0	2,950.4	2,930.8	2,921.2	9.4	6.4	153.16	-214.5	-16.6	497.3	485.3	11.97	41.539		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4K-32H-O268 - 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		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	103.80	-6.1	25.0	25.7					
100.0	100.0	99.0	99.0	0.1	0.1	103.80	-6.1	25.0	25.7	25.4	0.30	87.087		
200.0	200.0	199.0	199.0	0.3	0.3	103.80	-6.1	25.0	25.7	25.1	0.64	39.921		
300.0	300.0	299.0	299.0	0.5	0.5	103.80	-6.1	25.0	25.7	24.7	0.99	25.889		
400.0	400.0	399.0	399.0	0.7	0.7	103.80	-6.1	25.0	25.7	24.4	1.34	19.156 CC, ES		
500.0	500.0	498.7	498.7	0.8	0.8	105.20	-6.9	25.4	26.3	24.6	1.69	15.541		
600.0	600.0	598.3	598.3	1.0	1.0	109.07	-9.2	26.6	28.1	26.1	2.04	13.765		
700.0	700.0	697.8	697.7	1.2	1.2	114.49	-13.0	28.5	31.4	29.0	2.40	13.096		
800.0	800.0	797.2	796.9	1.4	1.4	33.95	-18.3	31.3	35.6	32.9	2.74	12.982 SF		
900.0	900.0	896.4	895.7	1.5	1.6	41.71	-25.2	34.9	40.5	37.4	3.09	13.084		
1,000.0	999.9	995.5	994.4	1.7	1.8	49.91	-33.5	39.2	46.4	43.0	3.44	13.472		
1,100.0	1,099.7	1,095.1	1,093.5	1.9	2.0	57.83	-42.3	43.8	52.6	48.8	3.80	13.838		
1,200.0	1,199.4	1,194.6	1,192.5	2.1	2.3	65.50	-51.1	48.3	58.8	54.6	4.17	14.107		
1,300.0	1,298.9	1,294.0	1,291.5	2.3	2.5	73.05	-59.8	52.9	65.4	60.8	4.56	14.326		
1,400.0	1,398.3	1,393.4	1,390.3	2.6	2.7	80.46	-68.6	57.4	72.6	67.6	4.99	14.541		
1,500.0	1,497.4	1,492.5	1,489.0	2.8	3.0	87.65	-77.3	62.0	80.7	75.2	5.45	14.792		
1,600.0	1,596.3	1,591.6	1,587.6	3.1	3.2	94.54	-86.0	66.5	90.0	84.0	5.95	15.116		
1,700.0	1,694.9	1,690.4	1,685.9	3.4	3.4	101.01	-94.8	71.0	100.7	94.2	6.48	15.541		
1,800.0	1,793.3	1,789.0	1,784.0	3.7	3.7	107.00	-103.4	75.5	112.9	105.9	7.02	16.085		
1,900.0	1,891.2	1,887.3	1,881.8	4.1	3.9	112.48	-112.1	80.0	126.9	119.3	7.57	16.754		
2,000.0	1,988.9	1,985.4	1,979.4	4.4	4.2	117.42	-120.8	84.5	142.6	134.5	8.13	17.546		
2,100.0	2,086.1	2,083.1	2,076.6	4.9	4.4	121.87	-129.4	89.0	160.1	151.4	8.67	18.453		
2,200.0	2,182.9	2,180.4	2,173.5	5.3	4.6	125.84	-137.9	93.5	179.4	170.2	9.22	19.464		
2,300.0	2,279.3	2,277.4	2,270.0	5.8	4.9	129.38	-146.5	97.9	200.5	190.8	9.75	20.568		
2,400.0	2,375.2	2,374.1	2,366.2	6.3	5.1	132.58	-155.0	102.3	223.3	213.0	10.27	21.746		
2,500.0	2,471.1	2,470.6	2,462.3	6.8	5.3	135.31	-163.5	106.8	246.9	236.1	10.78	22.898		
2,600.0	2,566.9	2,567.2	2,558.4	7.3	5.6	137.57	-172.0	111.2	270.9	259.6	11.29	24.002		
2,700.0	2,662.8	2,663.8	2,654.4	7.8	5.8	139.46	-180.5	115.6	295.2	283.5	11.79	25.051		
2,800.0	2,758.7	2,760.3	2,750.5	8.3	6.0	141.06	-189.0	120.0	319.8	307.6	12.28	26.045		
2,900.0	2,854.5	2,856.9	2,846.6	8.9	6.3	142.44	-197.6	124.5	344.7	331.9	12.77	26.985		
3,000.0	2,950.4	2,953.4	2,942.7	9.4	6.5	143.63	-206.1	128.9	369.6	356.4	13.26	27.871		
3,100.0	3,046.2	3,050.0	3,038.8	9.9	6.8	144.67	-214.6	133.3	394.7	381.0	13.75	28.708		
3,200.0	3,142.1	3,146.6	3,134.9	10.4	7.0	145.58	-223.1	137.7	419.9	405.7	14.24	29.498		
3,300.0	3,238.0	3,243.1	3,231.0	11.0	7.2	146.40	-231.6	142.1	445.2	430.5	14.72	30.243		
3,400.0	3,333.8	3,339.7	3,327.0	11.5	7.5	147.12	-240.1	146.6	470.6	455.4	15.21	30.947		
3,500.0	3,429.7	3,436.3	3,423.1	12.0	7.7	147.77	-248.6	151.0	496.1	480.4	15.69	31.613		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4L-32H-O268 - 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	90.31	-0.2	30.0	30.0					
100.0	100.0	99.0	99.0	0.1	0.1	90.31	-0.2	30.0	30.0	29.7	0.30	101.618		
200.0	200.0	199.0	199.0	0.3	0.3	90.31	-0.2	30.0	30.0	29.4	0.64	46.582		
300.0	300.0	299.0	299.0	0.5	0.5	90.31	-0.2	30.0	30.0	29.0	0.99	30.209		
400.0	400.0	399.0	399.0	0.7	0.7	90.31	-0.2	30.0	30.0	28.7	1.34	22.352		
500.0	500.0	499.0	499.0	0.8	0.8	90.31	-0.2	30.0	30.0	28.3	1.69	17.739 CC, ES		
600.0	600.0	598.7	598.6	1.0	1.0	91.51	-0.8	30.6	30.6	28.5	2.04	14.984		
700.0	700.0	698.2	698.2	1.2	1.2	94.90	-2.8	32.2	32.4	30.0	2.39	13.541		
800.0	800.0	797.7	797.6	1.4	1.4	12.92	-6.0	35.0	34.7	32.0	2.74	12.671		
900.0	900.0	897.1	896.8	1.5	1.6	19.71	-10.6	39.0	37.1	34.0	3.09	12.010		
1,000.0	999.9	996.3	995.7	1.7	1.8	27.75	-16.5	44.0	40.0	36.6	3.44	11.622		
1,100.0	1,099.7	1,095.4	1,094.3	1.9	2.0	36.55	-23.6	50.1	43.8	40.0	3.79	11.549 SF		
1,200.0	1,199.4	1,194.2	1,192.5	2.1	2.2	45.45	-32.0	57.4	49.0	44.8	4.15	11.791		
1,300.0	1,298.9	1,293.5	1,291.0	2.3	2.5	53.96	-41.4	65.4	55.3	50.7	4.53	12.196		
1,400.0	1,398.3	1,392.9	1,389.7	2.6	2.7	62.01	-50.8	73.5	61.8	56.8	4.95	12.489		
1,500.0	1,497.4	1,492.3	1,488.2	2.8	3.0	69.76	-60.3	81.6	68.7	63.3	5.41	12.698		
1,600.0	1,596.3	1,591.5	1,586.7	3.1	3.2	77.24	-69.7	89.7	76.2	70.3	5.92	12.867		
1,700.0	1,694.9	1,690.6	1,685.1	3.4	3.5	84.44	-79.1	97.8	84.6	78.1	6.49	13.046		
1,800.0	1,793.3	1,789.6	1,783.2	3.7	3.8	91.30	-88.5	105.9	94.2	87.1	7.09	13.280		
1,900.0	1,891.2	1,888.3	1,881.2	4.1	4.0	97.73	-97.9	113.9	105.1	97.4	7.73	13.602		
2,000.0	1,988.9	1,986.9	1,978.9	4.4	4.3	103.69	-107.2	122.0	117.5	109.1	8.37	14.032		
2,100.0	2,086.1	2,085.1	2,076.4	4.9	4.6	109.16	-116.6	130.0	131.5	122.5	9.02	14.578		
2,200.0	2,182.9	2,183.1	2,173.6	5.3	4.8	114.13	-125.9	138.0	147.3	137.6	9.67	15.238		
2,300.0	2,279.3	2,280.8	2,270.5	5.8	5.1	118.61	-135.1	145.9	164.8	154.5	10.30	16.006		
2,400.0	2,375.2	2,378.1	2,367.1	6.3	5.4	122.67	-144.4	153.9	184.0	173.1	10.91	16.870		
2,500.0	2,471.1	2,475.4	2,463.6	6.8	5.6	126.09	-153.6	161.8	204.1	192.6	11.50	17.751		
2,600.0	2,566.9	2,572.7	2,560.2	7.3	5.9	128.90	-162.8	169.7	224.8	212.7	12.07	18.616		
2,700.0	2,662.8	2,670.0	2,656.7	7.8	6.2	131.23	-172.1	177.7	245.9	233.3	12.64	19.451		
2,800.0	2,758.7	2,767.3	2,753.2	8.3	6.4	133.19	-181.3	185.6	267.3	254.1	13.20	20.250		
2,900.0	2,854.5	2,864.6	2,849.7	8.9	6.7	134.87	-190.5	193.5	289.1	275.3	13.76	21.011		
3,000.0	2,950.4	2,961.9	2,946.3	9.4	7.0	136.31	-199.8	201.5	311.0	296.7	14.31	21.731		
3,100.0	3,046.2	3,059.1	3,042.8	9.9	7.2	137.56	-209.0	209.4	333.0	318.2	14.86	22.413		
3,200.0	3,142.1	3,156.4	3,139.3	10.4	7.5	138.65	-218.2	217.3	355.2	339.8	15.41	23.057		
3,300.0	3,238.0	3,253.7	3,235.8	11.0	7.8	139.62	-227.5	225.3	377.6	361.6	15.95	23.666		
3,400.0	3,333.8	3,351.0	3,332.4	11.5	8.1	140.48	-236.7	233.2	400.0	383.5	16.50	24.242		
3,500.0	3,429.7	3,448.3	3,428.9	12.0	8.3	141.25	-246.0	241.1	422.5	405.4	17.04	24.787		
3,600.0	3,525.5	3,545.6	3,525.4	12.6	8.6	141.94	-255.2	249.1	445.0	427.4	17.59	25.302		
3,700.0	3,621.4	3,642.9	3,621.9	13.1	8.9	142.56	-264.4	257.0	467.6	449.5	18.13	25.790		
3,800.0	3,717.3	3,740.2	3,718.5	13.6	9.1	143.13	-273.7	264.9	490.3	471.6	18.67	26.252		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4M-32H-O268 - 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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	92.56	-2.3	51.7	51.8					
100.0	100.0	99.0	99.0	0.1	0.1	92.56	-2.3	51.7	51.7	51.4	0.30	175.268		
200.0	200.0	199.0	199.0	0.3	0.3	92.56	-2.3	51.7	51.7	51.1	0.64	80.343		
300.0	300.0	299.0	299.0	0.5	0.5	92.56	-2.3	51.7	51.7	50.8	0.99	52.103		
400.0	400.0	399.0	399.0	0.7	0.7	92.56	-2.3	51.7	51.7	50.4	1.34	38.552		
500.0	500.0	499.0	499.0	0.8	0.8	92.56	-2.3	51.7	51.7	50.1	1.69	30.595		
600.0	600.0	599.0	599.0	1.0	1.0	92.56	-2.3	51.7	51.7	49.7	2.04	25.361	CC, ES	
700.0	700.0	698.3	698.3	1.2	1.2	93.08	-2.8	52.4	52.4	50.1	2.39	21.958		
800.0	800.0	797.5	797.4	1.4	1.4	7.55	-4.4	54.4	53.7	51.0	2.74	19.637		
900.0	900.0	896.6	896.5	1.5	1.5	10.31	-7.0	57.8	54.8	51.8	3.09	17.775		
1,000.0	999.9	995.7	995.4	1.7	1.7	14.15	-10.6	62.6	55.9	52.5	3.43	16.282		
1,100.0	1,099.7	1,094.7	1,094.1	1.9	1.9	18.99	-15.2	68.7	57.2	53.4	3.78	15.114		
1,200.0	1,199.4	1,193.5	1,192.5	2.1	2.2	24.72	-20.9	76.2	58.9	54.8	4.14	14.251		
1,300.0	1,298.9	1,292.3	1,290.6	2.3	2.4	31.14	-27.6	85.0	61.4	57.0	4.49	13.672		
1,400.0	1,398.3	1,390.8	1,388.3	2.6	2.6	37.95	-35.3	95.1	65.0	60.1	4.87	13.352		
1,500.0	1,497.4	1,489.2	1,485.7	2.8	2.9	44.84	-44.0	106.5	69.9	64.6	5.28	13.248		
1,600.0	1,596.3	1,588.7	1,584.0	3.1	3.2	51.72	-53.2	118.7	75.4	69.6	5.73	13.148		
1,700.0	1,694.9	1,688.1	1,682.2	3.4	3.5	58.62	-62.5	130.9	80.9	74.6	6.25	12.934		
1,800.0	1,793.3	1,787.4	1,780.3	3.7	3.8	65.58	-71.8	143.1	86.7	79.8	6.85	12.656		
1,900.0	1,891.2	1,886.6	1,878.3	4.1	4.1	72.59	-81.0	155.3	93.1	85.6	7.52	12.374		
2,000.0	1,988.9	1,985.6	1,976.1	4.4	4.4	79.56	-90.2	167.4	100.4	92.1	8.26	12.149		
2,100.0	2,086.1	2,084.4	2,073.7	4.9	4.7	86.39	-99.4	179.6	108.9	99.9	9.06	12.027	SF	
2,200.0	2,182.9	2,183.0	2,171.2	5.3	5.0	92.97	-108.6	191.7	118.9	109.0	9.87	12.042		
2,300.0	2,279.3	2,281.4	2,268.4	5.8	5.3	99.18	-117.8	203.7	130.5	119.8	10.69	12.206		
2,400.0	2,375.2	2,379.5	2,365.3	6.3	5.6	104.97	-126.9	215.8	143.8	132.3	11.48	12.527		
2,500.0	2,471.1	2,477.6	2,462.2	6.8	5.9	109.89	-136.1	227.8	158.4	146.2	12.22	12.961		
2,600.0	2,566.9	2,575.6	2,559.1	7.3	6.2	113.97	-145.2	239.8	174.0	161.1	12.93	13.457		
2,700.0	2,662.8	2,673.7	2,656.0	7.8	6.5	117.37	-154.4	251.9	190.4	176.7	13.62	13.981		
2,800.0	2,758.7	2,771.8	2,752.9	8.3	6.8	120.23	-163.5	263.9	207.2	193.0	14.28	14.514		
2,900.0	2,854.5	2,869.9	2,849.8	8.9	7.1	122.65	-172.6	275.9	224.6	209.6	14.93	15.043		
3,000.0	2,950.4	2,967.9	2,946.7	9.4	7.4	124.73	-181.8	288.0	242.2	226.7	15.57	15.559		
3,100.0	3,046.2	3,066.0	3,043.6	9.9	7.7	126.53	-190.9	300.0	260.1	243.9	16.20	16.059		
3,200.0	3,142.1	3,164.1	3,140.5	10.4	8.0	128.10	-200.1	312.0	278.3	261.5	16.83	16.539		
3,300.0	3,238.0	3,262.2	3,237.4	11.0	8.4	129.47	-209.2	324.1	296.6	279.2	17.45	16.999		
3,400.0	3,333.8	3,360.2	3,334.3	11.5	8.7	130.68	-218.4	336.1	315.1	297.0	18.07	17.439		
3,500.0	3,429.7	3,458.3	3,431.2	12.0	9.0	131.76	-227.5	348.1	333.7	315.0	18.68	17.858		
3,600.0	3,525.5	3,556.4	3,528.1	12.6	9.3	132.73	-236.6	360.2	352.4	333.1	19.30	18.257		
3,700.0	3,621.4	3,654.5	3,625.0	13.1	9.6	133.60	-245.8	372.2	371.1	351.2	19.91	18.637		
3,800.0	3,717.3	3,752.5	3,721.9	13.6	9.9	134.38	-254.9	384.2	390.0	369.5	20.53	18.999		
3,900.0	3,813.1	3,850.6	3,818.8	14.2	10.2	135.10	-264.1	396.3	408.9	387.8	21.14	19.343		
4,000.0	3,909.0	3,948.7	3,915.7	14.7	10.5	135.75	-273.2	408.3	427.9	406.1	21.75	19.671		
4,100.0	4,004.8	4,046.7	4,012.6	15.2	10.9	136.34	-282.3	420.3	446.9	424.5	22.36	19.984		
4,200.0	4,100.7	4,144.8	4,109.5	15.8	11.2	136.89	-291.5	432.4	466.0	443.0	22.97	20.283		
4,300.0	4,196.6	4,242.9	4,206.4	16.3	11.5	137.39	-300.6	444.4	485.1	461.5	23.58	20.567		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4N-32H-O268 - 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	88.66	1.3	57.3	57.3					
100.0	100.0	99.0	99.0	0.1	0.1	88.66	1.3	57.3	57.3	57.0	0.30	194.102		
200.0	200.0	199.0	199.0	0.3	0.3	88.66	1.3	57.3	57.3	56.7	0.64	88.977		
300.0	300.0	299.0	299.0	0.5	0.5	88.66	1.3	57.3	57.3	56.3	0.99	57.702		
400.0	400.0	399.0	399.0	0.7	0.7	88.66	1.3	57.3	57.3	56.0	1.34	42.695		
500.0	500.0	499.0	499.0	0.8	0.8	88.66	1.3	57.3	57.3	55.6	1.69	33.883		
600.0	600.0	599.0	599.0	1.0	1.0	88.66	1.3	57.3	57.3	55.3	2.04	28.086		
700.0	700.0	699.0	699.0	1.2	1.2	88.66	1.3	57.3	57.3	54.9	2.39	23.983		
800.0	800.0	798.1	798.1	1.4	1.4	1.95	0.9	58.0	57.2	54.4	2.74	20.889		
900.0	900.0	897.3	897.2	1.5	1.5	3.30	-0.3	60.3	56.8	53.7	3.08	18.423		
1,000.0	999.9	996.4	996.2	1.7	1.7	5.59	-2.3	64.0	56.3	52.9	3.43	16.410		
1,100.0	1,099.7	1,095.4	1,095.1	1.9	1.9	8.86	-5.1	69.3	55.8	52.0	3.78	14.755		
1,200.0	1,199.4	1,194.4	1,193.8	2.1	2.1	13.13	-8.8	76.0	55.3	51.2	4.13	13.407		
1,269.6	1,268.7	1,263.3	1,262.4	2.3	2.3	16.70	-11.8	81.6	55.2	50.9	4.37	12.633 CC		
1,300.0	1,298.9	1,293.4	1,292.3	2.3	2.3	18.40	-13.3	84.3	55.3	50.8	4.48	12.338 ES		
1,400.0	1,398.3	1,392.3	1,390.6	2.6	2.5	24.57	-18.5	94.0	55.8	50.9	4.84	11.526		
1,500.0	1,497.4	1,491.0	1,488.5	2.8	2.8	31.45	-24.6	105.2	57.2	51.9	5.22	10.950		
1,600.0	1,596.3	1,589.7	1,586.2	3.1	3.1	38.71	-31.5	117.9	59.7	54.0	5.64	10.580		
1,700.0	1,694.9	1,688.3	1,683.4	3.4	3.4	46.00	-39.1	132.1	63.5	57.4	6.12	10.377		
1,800.0	1,793.3	1,786.8	1,780.3	3.7	3.7	52.96	-47.6	147.7	68.8	62.2	6.68	10.306		
1,900.0	1,891.2	1,885.1	1,876.6	4.1	4.0	59.34	-56.8	164.7	75.7	68.4	7.32	10.335		
2,000.0	1,988.9	1,983.9	1,973.2	4.4	4.4	65.13	-66.7	183.0	83.8	75.7	8.05	10.412		
2,100.0	2,086.1	2,083.1	2,070.2	4.9	4.7	70.82	-76.8	201.6	92.2	83.3	8.86	10.403		
2,200.0	2,182.9	2,182.3	2,167.1	5.3	5.1	76.45	-86.9	220.2	100.9	91.2	9.75	10.349		
2,300.0	2,279.3	2,281.3	2,263.8	5.8	5.5	82.01	-96.9	238.8	110.2	99.5	10.70	10.300 SF		
2,400.0	2,375.2	2,380.2	2,360.4	6.3	5.9	87.43	-106.9	257.3	120.4	108.7	11.68	10.304		
2,500.0	2,471.1	2,479.0	2,457.0	6.8	6.3	92.14	-117.0	275.8	131.5	118.8	12.65	10.397		
2,600.0	2,566.9	2,577.9	2,553.5	7.3	6.7	96.11	-127.0	294.3	143.3	129.7	13.59	10.549		
2,700.0	2,662.8	2,676.7	2,650.1	7.8	7.1	99.45	-137.0	312.9	155.7	141.2	14.50	10.739		
2,800.0	2,758.7	2,775.5	2,746.7	8.3	7.5	102.30	-147.0	331.4	168.6	153.2	15.40	10.948		
2,900.0	2,854.5	2,874.4	2,843.3	8.9	7.9	104.75	-157.1	349.9	181.8	165.6	16.28	11.166		
3,000.0	2,950.4	2,973.2	2,939.8	9.4	8.3	106.86	-167.1	368.4	195.3	178.2	17.15	11.387		
3,100.0	3,046.2	3,072.1	3,036.4	9.9	8.7	108.69	-177.1	387.0	209.1	191.1	18.02	11.605		
3,200.0	3,142.1	3,170.9	3,133.0	10.4	9.1	110.30	-187.2	405.5	223.0	204.1	18.87	11.818		
3,300.0	3,238.0	3,269.8	3,229.6	11.0	9.5	111.72	-197.2	424.0	237.1	217.3	19.71	12.025		
3,400.0	3,333.8	3,368.6	3,326.1	11.5	9.9	112.98	-207.2	442.5	251.2	230.7	20.55	12.223		
3,500.0	3,429.7	3,467.5	3,422.7	12.0	10.3	114.11	-217.2	461.0	265.5	244.2	21.39	12.414		
3,600.0	3,525.5	3,566.3	3,519.3	12.6	10.7	115.12	-227.3	479.6	279.9	257.7	22.23	12.596		
3,700.0	3,621.4	3,665.1	3,615.9	13.1	11.1	116.03	-237.3	498.1	294.4	271.4	23.06	12.769		
3,800.0	3,717.3	3,764.0	3,712.4	13.6	11.5	116.85	-247.3	516.6	308.9	285.1	23.88	12.935		
3,900.0	3,813.1	3,862.8	3,809.0	14.2	11.9	117.61	-257.3	535.1	323.5	298.8	24.71	13.093		
4,000.0	3,909.0	3,961.7	3,905.6	14.7	12.3	118.29	-267.4	553.6	338.2	312.6	25.53	13.244		
4,100.0	4,004.8	4,060.5	4,002.2	15.2	12.7	118.92	-277.4	572.2	352.9	326.5	26.36	13.387		
4,200.0	4,100.7	4,159.4	4,098.7	15.8	13.1	119.50	-287.4	590.7	367.6	340.4	27.18	13.524		
4,300.0	4,196.6	4,258.2	4,195.3	16.3	13.5	120.04	-297.4	609.2	382.3	354.3	28.00	13.654		
4,400.0	4,292.4	4,357.0	4,291.9	16.9	13.9	120.53	-307.5	627.7	397.1	368.3	28.82	13.779		
4,500.0	4,388.3	4,455.9	4,388.5	17.4	14.3	120.99	-317.5	646.3	412.0	382.3	29.64	13.898		
4,600.0	4,484.1	4,554.7	4,485.0	17.9	14.7	121.42	-327.5	664.8	426.8	396.3	30.46	14.011		
4,700.0	4,580.0	4,653.6	4,581.6	18.5	15.1	121.82	-337.6	683.3	441.7	410.4	31.28	14.120		
4,800.0	4,675.9	4,752.4	4,678.2	19.0	15.6	122.19	-347.6	701.8	456.5	424.4	32.10	14.223		
4,900.0	4,771.7	4,851.3	4,774.8	19.6	16.0	122.54	-357.6	720.3	471.4	438.5	32.91	14.323		
5,000.0	4,867.6	4,950.1	4,871.3	20.1	16.4	122.87	-367.6	738.9	486.3	452.6	33.73	14.418		

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												S32-T2N-R68W (File/Hwy 52) - Hwy 52 4N-32H-O268 - 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		Vertical		Measured		Vertical		Reference		Offset		Highside		Offset Wellbore Centre		Between		Between						Total		Separation	
Depth		Depth		Depth		Depth		(ft)		(ft)		Toolface		+N/-S		+E/-W		Centres						Ellipses		Uncertainty	
(ft)		(ft)		(ft)		(ft)						(°)		(ft)		(ft)		(ft)		(ft)		Axis					
7,500.0		7,263.5		7,964.2		7,429.0		33.7		25.1		149.28		73.6		1,229.4		499.4		472.2		27.22		18.351			
7,525.2		7,287.1		7,959.1		7,429.0		33.8		25.1		143.14		68.5		1,229.4		498.8		471.6		27.19		18.346			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4O-32H-O268 - 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		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	92.19	-2.3	60.1	60.1					
100.0	100.0	99.0	99.0	0.1	0.1	92.19	-2.3	60.1	60.1	59.8	0.30	203.674		
200.0	200.0	199.0	199.0	0.3	0.3	92.19	-2.3	60.1	60.1	59.5	0.64	93.365		
300.0	300.0	299.0	299.0	0.5	0.5	92.19	-2.3	60.1	60.1	59.1	0.99	60.548		
400.0	400.0	399.0	399.0	0.7	0.7	92.19	-2.3	60.1	60.1	58.8	1.34	44.800 CC, ES		
500.0	500.0	498.0	498.0	0.8	0.8	92.42	-2.6	60.9	60.9	59.3	1.69	36.060		
600.0	600.0	596.9	596.9	1.0	1.0	93.07	-3.4	63.3	63.4	61.4	2.04	31.078		
700.0	700.0	695.8	695.6	1.2	1.2	94.05	-4.8	67.3	67.6	65.2	2.40	28.190		
800.0	800.0	794.5	794.1	1.4	1.4	8.17	-6.7	72.9	72.5	69.8	2.73	26.548		
900.0	900.0	893.0	892.4	1.5	1.6	9.75	-9.1	80.2	77.5	74.4	3.08	25.167		
1,000.0	999.9	991.5	990.5	1.7	1.8	11.59	-12.1	89.0	82.5	79.1	3.43	24.081		
1,100.0	1,099.7	1,089.9	1,088.3	1.9	2.1	13.63	-15.7	99.4	87.6	83.8	3.77	23.218		
1,200.0	1,199.4	1,188.2	1,185.7	2.1	2.3	15.83	-19.8	111.3	92.8	88.7	4.12	22.531		
1,300.0	1,298.9	1,286.3	1,282.8	2.3	2.6	18.16	-24.4	124.8	98.2	93.7	4.47	21.982		
1,400.0	1,398.3	1,384.3	1,379.5	2.6	2.9	20.59	-29.5	139.9	103.8	99.0	4.82	21.541		
1,500.0	1,497.4	1,482.2	1,475.8	2.8	3.2	23.08	-35.2	156.5	109.7	104.5	5.18	21.178		
1,600.0	1,596.3	1,580.0	1,571.7	3.1	3.6	25.61	-41.4	174.7	115.9	110.4	5.56	20.865		
1,700.0	1,694.9	1,677.6	1,667.0	3.4	4.0	28.16	-48.1	194.3	122.5	116.5	5.95	20.577		
1,800.0	1,793.3	1,775.1	1,761.9	3.7	4.4	30.70	-55.3	215.5	129.5	123.1	6.38	20.292		
1,900.0	1,891.2	1,872.4	1,856.2	4.1	4.8	33.22	-63.0	238.2	136.9	130.1	6.85	19.988		
2,000.0	1,988.9	1,970.7	1,951.1	4.4	5.3	35.73	-71.3	262.4	144.6	137.3	7.37	19.623		
2,100.0	2,086.1	2,070.2	2,047.1	4.9	5.7	38.40	-79.7	287.2	151.5	143.5	7.96	19.026		
2,200.0	2,182.9	2,169.7	2,143.2	5.3	6.2	41.24	-88.2	311.9	157.3	148.7	8.64	18.219		
2,300.0	2,279.3	2,269.2	2,239.2	5.8	6.7	44.30	-96.6	336.7	162.3	152.9	9.41	17.250		
2,400.0	2,375.2	2,368.7	2,335.1	6.3	7.2	47.57	-105.0	361.4	166.6	156.4	10.29	16.200		
2,500.0	2,471.1	2,468.1	2,431.1	6.8	7.7	50.75	-113.5	386.2	171.4	160.1	11.24	15.249		
2,600.0	2,566.9	2,567.6	2,527.0	7.3	8.2	53.75	-121.9	410.9	176.6	164.3	12.24	14.424		
2,700.0	2,662.8	2,667.0	2,623.0	7.8	8.6	56.58	-130.4	435.6	182.2	169.0	13.29	13.715		
2,800.0	2,758.7	2,766.5	2,718.9	8.3	9.1	59.23	-138.8	460.4	188.3	174.0	14.37	13.109		
2,900.0	2,854.5	2,865.9	2,814.9	8.9	9.6	61.71	-147.2	485.1	194.8	179.3	15.47	12.593		
3,000.0	2,950.4	2,965.3	2,910.8	9.4	10.1	64.02	-155.7	509.8	201.6	185.0	16.59	12.153		
3,100.0	3,046.2	3,064.8	3,006.8	9.9	10.6	66.19	-164.1	534.6	208.7	191.0	17.72	11.780		
3,200.0	3,142.1	3,164.2	3,102.7	10.4	11.1	68.21	-172.5	559.3	216.1	197.3	18.86	11.462		
3,300.0	3,238.0	3,263.7	3,198.7	11.0	11.6	70.09	-181.0	584.1	223.8	203.8	20.00	11.190		
3,400.0	3,333.8	3,363.1	3,294.6	11.5	12.1	71.85	-189.4	608.8	231.7	210.5	21.14	10.958		
3,500.0	3,429.7	3,462.6	3,390.6	12.0	12.6	73.49	-197.8	633.5	239.7	217.5	22.28	10.760		
3,600.0	3,525.5	3,562.0	3,486.5	12.6	13.1	75.02	-206.3	658.3	248.0	224.6	23.42	10.590		
3,700.0	3,621.4	3,661.5	3,582.5	13.1	13.6	76.46	-214.7	683.0	256.4	231.9	24.55	10.444		
3,800.0	3,717.3	3,760.9	3,678.4	13.6	14.1	77.80	-223.1	707.8	265.0	239.3	25.68	10.318		
3,900.0	3,813.1	3,860.3	3,774.4	14.2	14.6	79.06	-231.6	732.5	273.7	246.9	26.81	10.210		
4,000.0	3,909.0	3,959.8	3,870.3	14.7	15.1	80.24	-240.0	757.2	282.6	254.6	27.93	10.116		
4,100.0	4,004.8	4,059.2	3,966.3	15.2	15.6	81.35	-248.5	782.0	291.5	262.5	29.05	10.035		
4,200.0	4,100.7	4,158.7	4,062.2	15.8	16.1	82.39	-256.9	806.7	300.6	270.4	30.16	9.965		
4,300.0	4,196.6	4,258.1	4,158.1	16.3	16.6	83.37	-265.3	831.4	309.7	278.4	31.27	9.905		
4,400.0	4,292.4	4,357.6	4,254.1	16.9	17.1	84.30	-273.8	856.2	318.9	286.6	32.37	9.853		
4,500.0	4,388.3	4,457.0	4,350.0	17.4	17.6	85.17	-282.2	880.9	328.2	294.8	33.47	9.808		
4,600.0	4,484.1	4,556.5	4,446.0	17.9	18.1	86.00	-290.6	905.7	337.6	303.0	34.56	9.769		
4,700.0	4,580.0	4,655.9	4,541.9	18.5	18.6	86.78	-299.1	930.4	347.1	311.4	35.65	9.735		
4,800.0	4,675.9	4,755.3	4,637.9	19.0	19.1	87.51	-307.5	955.1	356.6	319.8	36.74	9.706		
4,900.0	4,771.7	4,854.8	4,733.8	19.6	19.6	88.21	-315.9	979.9	366.1	328.3	37.82	9.681		
5,000.0	4,867.6	4,954.2	4,829.8	20.1	20.1	88.88	-324.4	1,004.6	375.7	336.8	38.90	9.660		
5,100.0	4,963.4	5,053.7	4,925.7	20.6	20.6	89.51	-332.8	1,029.4	385.4	345.4	39.97	9.642		

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4O-32H-O268 - 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		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			
5,200.0	5,059.3	5,153.1	5,021.7	21.2	21.1	90.11	-341.2	1,054.1	395.1	354.1	41.04	9.626		
5,300.0	5,155.2	5,252.6	5,117.6	21.7	21.6	90.68	-349.7	1,078.8	404.8	362.7	42.11	9.613		
5,400.0	5,251.0	5,352.0	5,213.6	22.3	22.1	91.23	-358.1	1,103.6	414.6	371.4	43.18	9.602		
5,500.0	5,346.9	5,451.5	5,309.5	22.8	22.6	91.75	-366.6	1,128.3	424.4	380.2	44.24	9.594		
5,600.0	5,442.7	5,550.9	5,405.5	23.4	23.1	92.24	-375.0	1,153.1	434.3	389.0	45.30	9.586		
5,700.0	5,538.6	5,650.3	5,501.4	23.9	23.6	92.72	-383.4	1,177.8	444.2	397.8	46.36	9.581		
5,800.0	5,634.5	5,749.8	5,597.4	24.4	24.1	93.17	-391.9	1,202.5	454.1	406.7	47.42	9.576		
5,900.0	5,730.3	5,849.2	5,693.3	25.0	24.6	93.60	-400.3	1,227.3	464.0	415.5	48.47	9.573		
6,000.0	5,826.2	5,948.7	5,789.3	25.5	25.1	94.02	-408.7	1,252.0	474.0	424.5	49.52	9.571		
6,100.0	5,922.0	6,048.1	5,885.2	26.1	25.6	94.42	-417.2	1,276.7	484.0	433.4	50.58	9.569		
6,200.0	6,017.9	6,147.6	5,981.2	26.6	26.1	94.80	-425.6	1,301.5	494.0	442.4	51.62	9.569		
7,500.0	7,263.5	8,289.2	7,712.0	33.7	33.3	-173.87	74.5	1,725.0	450.2	403.0	47.15	9.548		
7,600.0	7,355.7	8,255.4	7,711.9	34.2	33.2	178.05	40.7	1,726.1	357.2	306.3	50.95	7.011		
7,700.0	7,442.1	8,179.9	7,705.8	34.7	33.2	162.55	-34.5	1,727.2	268.8	224.7	44.09	6.097		
7,800.0	7,520.0	8,115.8	7,693.1	35.1	33.2	148.29	-97.3	1,726.1	186.7	151.0	35.68	5.232		
7,900.0	7,587.0	8,056.8	7,675.5	35.6	33.2	129.32	-153.5	1,723.6	119.8	91.6	28.26	4.239		
7,986.2	7,634.5	8,008.2	7,656.8	36.0	33.2	106.33	-198.3	1,720.4	95.2	65.8	29.45	3.233		
8,000.0	7,641.1	8,000.0	7,653.3	36.0	33.2	101.95	-205.7	1,719.8	95.9	65.6	30.33	3.162 SF		
8,100.0	7,680.7	7,945.7	7,627.6	36.5	33.2	73.66	-253.2	1,714.9	131.8	97.9	33.85	3.894		
8,200.0	7,704.6	7,892.0	7,597.9	37.0	33.1	53.91	-297.6	1,708.9	191.2	161.8	29.37	6.509		
8,300.0	7,712.0	7,839.0	7,564.9	37.4	33.1	42.75	-338.4	1,701.9	253.4	230.4	22.98	11.028		
8,400.0	7,712.0	7,790.8	7,531.8	38.0	33.1	38.51	-372.7	1,694.7	319.4	296.7	22.75	14.043		
8,500.0	7,712.0	7,750.0	7,501.8	38.6	33.1	35.55	-399.4	1,688.0	392.2	369.4	22.78	17.216		
8,600.0	7,712.0	7,715.3	7,474.8	39.2	33.0	33.42	-420.4	1,681.8	469.9	446.9	22.98	20.447		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4P-32H-O268 - 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	88.83	1.3	65.7	65.7					
100.0	100.0	99.0	99.0	0.1	0.1	88.83	1.3	65.7	65.7	65.4	0.30	222.526		
200.0	200.0	199.0	199.0	0.3	0.3	88.83	1.3	65.7	65.7	65.1	0.64	102.006 CC, ES		
300.0	300.0	297.9	297.9	0.5	0.5	88.98	1.2	66.5	66.5	65.5	0.99	67.056		
400.0	400.0	396.7	396.7	0.7	0.7	89.40	0.7	69.0	69.0	67.7	1.34	51.369		
500.0	500.0	495.4	495.3	0.8	0.9	90.05	-0.1	73.2	73.3	71.6	1.70	43.003		
600.0	600.0	594.0	593.6	1.0	1.1	90.84	-1.2	79.0	79.2	77.1	2.07	38.178		
700.0	700.0	692.2	691.6	1.2	1.3	91.70	-2.6	86.4	86.8	84.3	2.46	35.311		
800.0	800.0	790.3	789.3	1.4	1.5	5.45	-4.3	95.5	95.3	92.5	2.73	34.944		
900.0	900.0	888.3	886.6	1.5	1.7	6.43	-6.3	106.3	103.7	100.6	3.07	33.758		
1,000.0	999.9	986.1	983.6	1.7	2.0	7.46	-8.6	118.6	112.2	108.7	3.42	32.817		
1,100.0	1,099.7	1,083.7	1,080.2	1.9	2.3	8.53	-11.2	132.5	120.6	116.8	3.76	32.057		
1,200.0	1,199.4	1,181.2	1,176.4	2.1	2.6	9.63	-14.2	148.0	129.1	125.0	4.11	31.433		
1,300.0	1,298.9	1,278.5	1,272.2	2.3	2.9	10.75	-17.4	165.1	137.6	133.1	4.45	30.911		
1,400.0	1,398.3	1,375.7	1,367.5	2.6	3.3	11.90	-20.9	183.8	146.1	141.3	4.79	30.468		
1,500.0	1,497.4	1,472.8	1,462.3	2.8	3.7	13.06	-24.7	204.0	154.7	149.5	5.14	30.081		
1,600.0	1,596.3	1,569.6	1,556.6	3.1	4.1	14.23	-28.8	225.8	163.3	157.8	5.49	29.735		
1,700.0	1,694.9	1,666.4	1,650.4	3.4	4.6	15.41	-33.2	249.1	172.0	166.2	5.85	29.411		
1,800.0	1,793.3	1,762.9	1,743.6	3.7	5.0	16.59	-37.9	273.9	180.8	174.6	6.21	29.097		
1,900.0	1,891.2	1,859.4	1,836.3	4.1	5.5	17.77	-42.8	300.2	189.7	183.1	6.59	28.778		
2,000.0	1,988.9	1,957.9	1,930.6	4.4	6.1	19.00	-48.1	328.2	198.3	191.3	6.99	28.365		
2,100.0	2,086.1	2,057.5	2,025.9	4.9	6.6	20.30	-53.5	356.7	205.4	198.0	7.41	27.703		
2,200.0	2,182.9	2,157.3	2,121.3	5.3	7.1	21.69	-58.8	385.2	211.0	203.2	7.87	26.814		
2,300.0	2,279.3	2,257.0	2,216.8	5.8	7.7	23.19	-64.2	413.6	215.1	206.8	8.37	25.717		
2,400.0	2,375.2	2,356.8	2,312.2	6.3	8.2	24.81	-69.5	442.1	218.0	209.1	8.91	24.454		
2,500.0	2,471.1	2,456.5	2,407.7	6.8	8.7	26.42	-74.9	470.6	220.8	211.3	9.51	23.215		
2,600.0	2,566.9	2,556.3	2,503.2	7.3	9.3	28.00	-80.3	499.1	223.7	213.6	10.15	22.050		
2,700.0	2,662.8	2,656.1	2,598.6	7.8	9.8	29.53	-85.6	527.6	226.9	216.0	10.82	20.960		
2,800.0	2,758.7	2,755.9	2,694.1	8.3	10.4	31.02	-91.0	556.1	230.2	218.6	11.54	19.944		
2,900.0	2,854.5	2,855.6	2,789.6	8.9	10.9	32.46	-96.4	584.6	233.6	221.3	12.29	19.001		
3,000.0	2,950.4	2,955.4	2,885.0	9.4	11.5	33.87	-101.7	613.0	237.2	224.1	13.08	18.129		
3,100.0	3,046.2	3,055.2	2,980.5	9.9	12.0	35.23	-107.1	641.5	240.9	227.0	13.90	17.325		
3,200.0	3,142.1	3,154.9	3,076.0	10.4	12.6	36.54	-112.5	670.0	244.7	230.0	14.76	16.584		
3,300.0	3,238.0	3,254.7	3,171.4	11.0	13.1	37.82	-117.8	698.5	248.7	233.1	15.64	15.903		
3,400.0	3,333.8	3,354.5	3,266.9	11.5	13.7	39.06	-123.2	727.0	252.8	236.3	16.55	15.277		
3,500.0	3,429.7	3,454.2	3,362.4	12.0	14.2	40.26	-128.6	755.5	257.0	239.5	17.48	14.703		
3,600.0	3,525.5	3,554.0	3,457.8	12.6	14.8	41.41	-133.9	784.0	261.3	242.9	18.44	14.175		
3,700.0	3,621.4	3,653.8	3,553.3	13.1	15.3	42.53	-139.3	812.4	265.8	246.4	19.41	13.691		
3,800.0	3,717.3	3,753.5	3,648.8	13.6	15.9	43.62	-144.6	840.9	270.3	249.9	20.40	13.246		
3,900.0	3,813.1	3,853.3	3,744.2	14.2	16.4	44.66	-150.0	869.4	274.9	253.5	21.41	12.837		
4,000.0	3,909.0	3,953.1	3,839.7	14.7	17.0	45.68	-155.4	897.9	279.6	257.2	22.44	12.461		
4,100.0	4,004.8	4,052.9	3,935.2	15.2	17.5	46.66	-160.7	926.4	284.4	260.9	23.48	12.114		
4,200.0	4,100.7	4,152.6	4,030.6	15.8	18.1	47.60	-166.1	954.9	289.3	264.7	24.53	11.793		
4,300.0	4,196.6	4,252.4	4,126.1	16.3	18.6	48.52	-171.5	983.4	294.2	268.6	25.59	11.498		
4,400.0	4,292.4	4,352.2	4,221.6	16.9	19.2	49.40	-176.8	1,011.9	299.2	272.6	26.66	11.224		
4,500.0	4,388.3	4,451.9	4,317.0	17.4	19.7	50.26	-182.2	1,040.3	304.3	276.6	27.74	10.971		
4,600.0	4,484.1	4,551.7	4,412.5	17.9	20.3	51.08	-187.6	1,068.8	309.5	280.6	28.82	10.736		
4,700.0	4,580.0	4,651.5	4,507.9	18.5	20.8	51.88	-192.9	1,097.3	314.7	284.8	29.92	10.518		
4,800.0	4,675.9	4,751.2	4,603.4	19.0	21.4	52.66	-198.3	1,125.8	319.9	288.9	31.02	10.315		
4,900.0	4,771.7	4,851.0	4,698.9	19.6	21.9	53.40	-203.6	1,154.3	325.3	293.1	32.12	10.126		
5,000.0	4,867.6	4,950.8	4,794.3	20.1	22.5	54.13	-209.0	1,182.8	330.7	297.4	33.23	9.950		
5,100.0	4,963.4	5,050.5	4,889.8	20.6	23.1	54.83	-214.4	1,211.3	336.1	301.7	34.35	9.785		

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4P-32H-O268 - 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	5,059.3	5,150.3	4,985.3	21.2	23.6	55.51	-219.7	1,239.7	341.6	306.1	35.46	9.631		
5,300.0	5,155.2	5,250.1	5,080.7	21.7	24.2	56.16	-225.1	1,268.2	347.1	310.5	36.59	9.487		
5,400.0	5,251.0	5,349.9	5,176.2	22.3	24.7	56.80	-230.5	1,296.7	352.7	315.0	37.71	9.352		
5,500.0	5,346.9	5,449.6	5,271.7	22.8	25.3	57.42	-235.8	1,325.2	358.3	319.4	38.84	9.226		
5,600.0	5,442.7	5,549.4	5,367.1	23.4	25.8	58.01	-241.2	1,353.7	363.9	324.0	39.96	9.107		
5,700.0	5,538.6	5,649.2	5,462.6	23.9	26.4	58.59	-246.6	1,382.2	369.6	328.5	41.09	8.995		
5,800.0	5,634.5	5,748.9	5,558.1	24.4	26.9	59.15	-251.9	1,410.7	375.4	333.1	42.22	8.890		
5,900.0	5,730.3	5,848.7	5,653.5	25.0	27.5	59.70	-257.3	1,439.1	381.1	337.8	43.36	8.790		
6,000.0	5,826.2	5,948.5	5,749.0	25.5	28.0	60.23	-262.7	1,467.6	386.9	342.4	44.49	8.697		
6,100.0	5,922.0	6,048.2	5,844.5	26.1	28.6	60.74	-268.0	1,496.1	392.8	347.1	45.63	8.608		
6,200.0	6,017.9	6,148.0	5,939.9	26.6	29.1	61.24	-273.4	1,524.6	398.6	351.9	46.76	8.524		
6,300.0	6,113.8	6,247.8	6,035.4	27.2	29.7	61.72	-278.7	1,553.1	404.5	356.6	47.90	8.445		
6,400.0	6,209.6	6,347.5	6,130.9	27.7	30.2	62.19	-284.1	1,581.6	410.4	361.4	49.03	8.370		
6,500.0	6,305.5	6,447.3	6,226.3	28.2	30.8	62.65	-289.5	1,610.1	416.4	366.2	50.17	8.299		
6,600.0	6,401.3	6,547.1	6,321.8	28.8	31.4	63.09	-294.8	1,638.6	422.3	371.0	51.31	8.231		
6,700.0	6,497.2	6,646.9	6,417.3	29.3	31.9	63.52	-300.2	1,667.0	428.3	375.9	52.45	8.167		
6,800.0	6,593.1	6,746.6	6,512.7	29.9	32.5	63.94	-305.6	1,695.5	434.3	380.8	53.58	8.106		
6,900.0	6,688.9	6,846.4	6,608.2	30.4	33.0	64.35	-310.9	1,724.0	440.4	385.7	54.72	8.048		
7,000.0	6,784.8	6,946.2	6,703.6	31.0	33.6	64.74	-316.3	1,752.5	446.4	390.6	55.86	7.993		
7,100.0	6,880.6	7,045.9	6,799.1	31.5	34.1	65.13	-321.7	1,781.0	452.5	395.5	56.99	7.940		
7,200.0	6,976.5	7,260.8	7,003.8	32.0	35.2	64.61	-310.2	1,841.9	452.6	394.1	58.40	7.749		
7,300.0	7,072.4	7,531.0	7,233.4	32.6	36.2	55.53	-189.9	1,909.2	413.1	357.2	55.96	7.383 SF		
7,400.0	7,168.2	7,685.9	7,332.8	33.1	36.6	35.53	-75.2	1,937.8	350.9	303.7	47.21	7.434		
7,500.0	7,263.5	7,758.9	7,368.5	33.7	36.8	-16.77	-12.4	1,947.9	282.8	251.1	31.73	8.912		
7,600.0	7,355.7	7,782.9	7,378.6	34.2	36.8	-47.88	9.2	1,950.7	227.3	200.2	27.08	8.394		
7,695.1	7,438.0	7,781.9	7,378.2	34.6	36.8	-59.34	8.3	1,950.6	206.5	179.4	27.16	7.606		
7,700.0	7,442.1	7,781.5	7,378.0	34.7	36.8	-59.58	7.9	1,950.6	206.6	179.4	27.16	7.606		
7,800.0	7,520.0	7,765.8	7,371.5	35.1	36.8	-58.49	-6.3	1,948.8	230.9	203.4	27.57	8.375		
7,900.0	7,587.0	7,741.5	7,360.7	35.6	36.7	-49.41	-27.9	1,945.7	286.4	257.3	29.06	9.853		
8,000.0	7,641.1	7,711.6	7,346.2	36.0	36.7	-37.28	-53.6	1,941.6	355.0	325.8	29.23	12.144		
8,100.0	7,680.7	7,678.0	7,328.4	36.5	36.6	-26.22	-81.7	1,936.6	426.7	400.6	26.15	16.317		
8,200.0	7,704.6	7,650.0	7,312.4	37.0	36.5	-18.28	-104.2	1,932.0	496.7	475.0	21.71	22.880		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 33-32 (EXISTING) - ENCANA WELL - ENCANA WELL													Offset Site Error:	0.0 ft
Survey Program: 926-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	56.58	223.9	339.3	406.6					
100.0	100.0	91.9	91.9	0.1	0.2	56.58	223.9	339.2	406.4	406.1	0.31	1,310.947		
200.0	200.0	192.9	192.9	0.3	0.3	56.59	223.6	339.0	406.1	405.4	0.66	613.214		
300.0	300.0	293.9	293.9	0.5	0.5	56.60	223.2	338.5	405.5	404.5	1.01	399.733		
400.0	400.0	394.9	394.9	0.7	0.7	56.62	222.7	337.9	404.7	403.3	1.37	296.107		
500.0	500.0	495.9	495.9	0.8	0.9	56.64	221.9	337.1	403.6	401.9	1.72	234.807		
600.0	600.0	596.8	596.8	1.0	1.1	56.67	221.0	336.0	402.3	400.2	2.07	194.238		
700.0	700.0	697.8	697.8	1.2	1.2	56.70	220.0	334.8	400.7	398.3	2.42	165.362		
800.0	800.0	798.8	798.7	1.4	1.4	-30.49	218.7	333.5	398.1	395.4	2.74	145.165		
900.0	900.0	899.6	899.6	1.5	1.6	-30.67	217.4	331.9	393.8	390.7	3.09	127.425		
1,000.0	999.9	998.1	998.0	1.7	1.8	-31.13	216.8	329.8	388.0	384.5	3.44	112.905		
1,100.0	1,099.7	1,085.6	1,085.4	1.9	1.9	-32.08	219.4	327.5	382.3	378.6	3.77	101.473		
1,200.0	1,199.4	1,173.5	1,173.1	2.1	2.1	-33.48	225.4	326.5	378.8	374.6	4.11	92.114		
1,300.0	1,298.9	1,262.2	1,261.3	2.3	2.2	-35.34	234.5	326.3	376.9	372.5	4.47	84.333		
1,400.0	1,398.3	1,355.9	1,354.2	2.6	2.4	-37.69	246.6	326.6	376.3	371.5	4.86	77.384		
1,421.2	1,419.3	1,375.1	1,373.2	2.6	2.4	-38.24	249.5	326.5	376.3	371.3	4.95	76.015 CC, ES		
1,500.0	1,497.4	1,444.7	1,441.8	2.8	2.6	-40.41	260.9	326.5	377.0	371.7	5.28	71.459		
1,600.0	1,596.3	1,537.0	1,532.6	3.1	2.9	-43.61	277.9	326.3	379.1	373.4	5.73	66.211		
1,700.0	1,694.9	1,628.8	1,622.4	3.4	3.1	-47.23	297.1	325.1	382.7	376.5	6.22	61.540		
1,800.0	1,793.3	1,718.4	1,709.4	3.7	3.5	-51.16	318.5	323.0	388.9	382.1	6.74	57.670		
1,900.0	1,891.2	1,810.7	1,798.6	4.1	3.8	-55.41	341.9	320.4	397.2	389.9	7.30	54.380		
2,000.0	1,988.9	1,896.3	1,880.9	4.4	4.2	-59.46	365.1	317.5	408.6	400.8	7.88	51.873		
2,100.0	2,086.1	1,987.6	1,968.4	4.9	4.6	-63.83	391.1	314.0	423.1	414.6	8.49	49.822		
2,200.0	2,182.9	2,075.9	2,052.6	5.3	5.1	-68.16	417.1	308.9	440.1	430.9	9.13	48.193		
2,300.0	2,279.3	2,156.3	2,128.6	5.8	5.5	-72.15	442.4	302.7	461.2	451.4	9.77	47.187		
2,400.0	2,375.2	2,247.2	2,214.6	6.3	6.0	-76.51	471.6	296.3	485.8	475.4	10.43	46.587 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 34-32 (EXISTING) - ENCANA WELL - ENCANA WELL													Offset Site Error:	0.0 ft
Survey Program: 103-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	94.38	-14.3	186.8	187.6					
100.0	100.0	89.9	89.9	0.1	0.1	94.37	-14.3	187.1	187.6	187.4	0.28	663.823		
200.0	200.0	189.1	189.1	0.3	0.3	94.36	-14.3	187.9	188.5	187.8	0.63	300.160		
300.0	300.0	289.4	289.4	0.5	0.5	94.48	-14.8	188.8	189.4	188.4	0.98	193.639		
400.0	400.0	389.7	389.7	0.7	0.7	94.69	-15.6	189.5	190.2	188.8	1.33	143.177		
500.0	500.0	489.9	489.9	0.8	0.8	94.91	-16.3	190.1	190.8	189.1	1.68	113.706		
600.0	600.0	590.0	590.0	1.0	1.0	95.05	-16.8	190.6	191.4	189.3	2.03	94.385		
700.0	700.0	690.5	690.5	1.2	1.2	95.15	-17.2	191.0	191.7	189.4	2.38	80.656		
800.0	800.0	790.8	790.8	1.4	1.4	8.09	-17.4	191.1	191.0	188.3	2.72	70.109		
900.0	900.0	891.6	891.5	1.5	1.5	8.22	-17.4	191.0	188.4	185.3	3.07	61.276		
1,000.0	999.9	991.8	991.7	1.7	1.7	8.39	-17.3	190.6	183.6	180.2	3.42	53.651		
1,100.0	1,099.7	1,091.9	1,091.9	1.9	1.9	8.74	-17.4	190.0	177.0	173.3	3.77	46.962		
1,200.0	1,199.4	1,192.4	1,192.4	2.1	2.1	9.16	-17.3	189.1	168.4	164.2	4.12	40.892		
1,300.0	1,298.9	1,291.7	1,291.7	2.3	2.2	9.62	-16.9	188.0	157.7	153.3	4.46	35.356		
1,400.0	1,398.3	1,391.1	1,391.0	2.6	2.4	10.15	-16.2	187.0	145.5	140.7	4.81	30.275		
1,500.0	1,497.4	1,490.7	1,490.6	2.8	2.6	10.88	-15.3	185.6	131.2	126.0	5.15	25.470		
1,600.0	1,596.3	1,589.7	1,589.6	3.1	2.7	12.06	-14.5	183.9	114.9	109.4	5.50	20.899		
1,700.0	1,694.9	1,687.7	1,687.6	3.4	2.9	13.91	-13.9	182.1	96.9	91.0	5.85	16.569		
1,800.0	1,793.3	1,785.5	1,785.4	3.7	3.1	16.52	-12.7	180.8	77.8	71.6	6.21	12.530		
1,900.0	1,891.2	1,883.5	1,883.3	4.1	3.3	21.02	-11.2	179.6	57.2	50.6	6.60	8.674		
2,000.0	1,988.9	1,980.6	1,980.4	4.4	3.4	31.40	-9.5	178.4	35.9	28.8	7.13	5.042		
2,100.0	2,086.1	2,077.4	2,077.2	4.9	3.6	69.25	-8.5	177.6	18.6	10.3	8.32	2.236		
2,127.6	2,112.8	2,104.0	2,103.9	5.0	3.7	90.37	-8.4	177.5	17.2	8.6	8.64	1.994 CC, ES, SF		
2,200.0	2,182.9	2,174.0	2,173.8	5.3	3.8	135.93	-8.6	177.2	25.5	17.2	8.31	3.069		
2,300.0	2,279.3	2,270.2	2,270.0	5.8	3.9	157.70	-9.2	177.0	49.0	40.9	8.11	6.047		
2,400.0	2,375.2	2,366.0	2,365.8	6.3	4.1	165.44	-9.7	176.6	76.6	68.3	8.29	9.242		
2,500.0	2,471.1	2,460.8	2,460.7	6.8	4.3	168.73	-10.9	176.2	105.1	96.5	8.57	12.256		
2,600.0	2,566.9	2,552.7	2,552.4	7.3	4.4	170.41	-12.7	174.3	135.5	126.7	8.89	15.254		
2,700.0	2,662.8	2,643.8	2,643.4	7.8	4.6	171.56	-14.9	169.7	168.8	159.6	9.20	18.339		
2,800.0	2,758.7	2,736.9	2,736.3	8.3	4.8	171.83	-18.9	164.3	203.2	193.6	9.54	21.294		
2,900.0	2,854.5	2,826.3	2,825.3	8.9	4.9	171.76	-24.0	158.6	238.3	228.4	9.88	24.113		
3,000.0	2,950.4	2,917.5	2,916.1	9.4	5.1	171.50	-30.3	151.4	275.1	264.9	10.23	26.884		
3,100.0	3,046.2	3,005.3	3,003.3	9.9	5.3	171.34	-36.3	143.8	312.6	302.0	10.58	29.555		
3,200.0	3,142.1	3,086.3	3,083.6	10.4	5.5	171.01	-43.5	135.0	352.4	341.5	10.92	32.273		
3,300.0	3,238.0	3,175.1	3,171.1	11.0	5.7	170.55	-52.7	123.5	394.5	383.2	11.28	34.960		
3,400.0	3,333.8	3,268.7	3,263.5	11.5	5.9	170.20	-62.1	111.7	436.1	424.4	11.66	37.416		
3,500.0	3,429.7	3,355.2	3,348.9	12.0	6.1	170.09	-69.6	100.6	477.7	465.7	12.00	39.798		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 44-32 (EXISTING) - ENCANA WELL - ENCANA WELL														Offset Site Error:	0.0 ft
Survey Program: 134-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	58.93	211.2	350.5	409.3						
100.0	100.0	90.4	90.4	0.1	0.1	58.98	210.8	350.7	409.2	408.9	0.29	1,418.407			
144.4	144.4	134.0	134.0	0.2	0.2	59.05	210.4	350.8	409.1	408.7	0.43	943.448			
200.0	200.0	184.2	184.2	0.3	0.3	59.10	210.2	351.3	409.5	408.9	0.62	660.785			
300.0	300.0	272.0	271.9	0.5	0.5	59.09	211.6	353.4	412.3	411.4	0.95	432.449			
400.0	400.0	362.9	362.7	0.7	0.6	59.06	214.4	357.7	417.9	416.6	1.31	319.600			
500.0	500.0	451.2	450.7	0.8	0.8	59.08	217.8	363.6	425.7	424.0	1.68	253.758			
600.0	600.0	541.0	540.0	1.0	1.1	59.16	222.1	372.0	436.1	434.1	2.07	210.423			
700.0	700.0	631.5	629.8	1.2	1.3	59.31	226.9	382.3	448.6	446.1	2.49	179.887			
800.0	800.0	719.2	716.5	1.4	1.6	-27.61	232.0	394.1	462.4	459.8	2.60	177.637			
900.0	900.0	810.1	806.1	1.5	1.9	-27.30	237.1	408.9	476.9	474.0	2.94	162.124			
1,000.0	999.9	913.7	908.1	1.7	2.2	-26.83	241.2	427.0	490.3	487.0	3.31	148.033			
4,500.0	4,388.3	4,393.3	4,272.4	17.4	19.0	-14.70	190.8	1,308.1	495.8	477.5	18.25	27.161			
4,600.0	4,484.1	4,504.5	4,381.1	17.9	19.4	-14.75	190.2	1,331.6	488.0	469.3	18.72	26.075			
4,700.0	4,580.0	4,608.4	4,482.9	18.5	19.8	-14.91	190.1	1,351.9	478.8	459.6	19.19	24.949			
4,800.0	4,675.9	4,712.1	4,584.8	19.0	20.2	-15.16	190.3	1,371.2	468.8	449.1	19.69	23.815			
4,900.0	4,771.7	4,819.4	4,690.6	19.6	20.6	-15.65	191.8	1,389.4	457.6	437.4	20.26	22.594			
5,000.0	4,867.6	4,930.1	4,800.1	20.1	20.9	-16.30	193.4	1,405.5	444.2	423.3	20.89	21.269			
5,100.0	4,963.4	5,037.7	4,906.9	20.6	21.1	-17.11	195.1	1,418.6	428.6	407.0	21.57	19.868			
5,200.0	5,059.3	5,150.8	5,019.5	21.2	21.4	-18.20	196.7	1,428.6	410.0	387.6	22.37	18.329			
5,300.0	5,155.2	5,256.4	5,124.9	21.7	21.5	-19.45	197.9	1,435.2	389.0	365.7	23.23	16.744			
5,400.0	5,251.0	5,359.2	5,227.6	22.3	21.6	-20.89	198.9	1,439.7	366.3	342.1	24.19	15.145			
5,500.0	5,346.9	5,460.1	5,328.5	22.8	21.7	-22.54	199.5	1,442.8	342.7	317.5	25.26	13.568			
5,600.0	5,442.7	5,557.7	5,426.0	23.4	21.8	-24.43	200.0	1,445.0	318.6	292.2	26.45	12.044			
5,700.0	5,538.6	5,654.8	5,523.1	23.9	21.9	-26.68	200.7	1,446.8	294.7	266.8	27.84	10.583			
5,800.0	5,634.5	5,751.9	5,620.2	24.4	22.0	-29.38	201.5	1,448.3	271.0	241.5	29.48	9.193			
5,900.0	5,730.3	5,849.2	5,717.5	25.0	22.1	-32.64	202.3	1,449.4	247.7	216.3	31.41	7.887			
6,000.0	5,826.2	5,946.9	5,815.2	25.5	22.2	-36.66	203.0	1,449.8	224.7	191.0	33.71	6.665			
6,100.0	5,922.0	6,043.1	5,911.3	26.1	22.3	-41.58	203.6	1,449.6	202.5	166.1	36.43	5.559			
6,200.0	6,017.9	6,138.2	6,006.5	26.6	22.4	-47.54	204.4	1,449.6	182.3	142.8	39.53	4.613			
6,300.0	6,113.8	6,233.8	6,102.0	27.2	22.4	-54.82	205.4	1,449.7	164.9	122.0	42.95	3.841			
6,400.0	6,209.6	6,329.5	6,197.7	27.7	22.5	-63.59	206.7	1,449.8	151.0	104.6	46.43	3.253			
6,500.0	6,305.5	6,425.1	6,293.3	28.2	22.6	-73.79	208.1	1,449.7	141.7	92.3	49.44	2.866			
6,600.0	6,401.3	6,520.6	6,388.8	28.8	22.7	-85.00	209.7	1,449.3	138.0	86.6	51.35	2.687			
6,611.1	6,412.0	6,531.2	6,399.4	28.8	22.7	-86.28	209.9	1,449.3	137.9	86.5	51.47	2.680 CC, ES, SF			
6,700.0	6,497.2	6,616.3	6,484.5	29.3	22.8	-96.35	211.5	1,448.9	140.3	88.6	51.72	2.713			
6,800.0	6,593.1	6,712.2	6,580.3	29.9	22.8	-106.89	213.4	1,448.8	148.3	97.6	50.66	2.926			
6,900.0	6,688.9	6,807.9	6,676.1	30.4	22.9	-116.15	215.2	1,448.6	161.0	112.3	48.70	3.306			
7,000.0	6,784.8	6,904.4	6,772.6	31.0	23.0	-124.07	216.9	1,448.4	177.4	131.1	46.35	3.828			
7,100.0	6,880.6	7,000.7	6,868.9	31.5	23.1	-130.79	217.7	1,448.0	196.1	152.1	43.96	4.461			
7,200.0	6,976.5	7,096.6	6,964.8	32.0	23.2	-136.25	218.8	1,447.7	217.1	175.3	41.84	5.189			
7,300.0	7,072.4	7,191.9	7,060.1	32.6	23.3	-140.66	219.9	1,447.7	239.6	199.5	40.09	5.978			
7,400.0	7,168.2	7,286.6	7,154.8	33.1	23.3	-148.65	221.6	1,447.5	263.8	225.2	38.54	6.843			
7,500.0	7,263.5	7,380.9	7,249.0	33.7	23.4	-177.67	223.3	1,446.9	294.3	258.0	36.29	8.110			
7,600.0	7,355.7	7,473.0	7,341.1	34.2	23.5	-157.71	224.9	1,446.3	333.1	298.6	34.43	9.674			
7,700.0	7,442.1	7,559.2	7,427.2	34.7	23.6	-146.95	226.2	1,445.8	379.8	347.2	32.57	11.662			
7,800.0	7,520.0	7,636.9	7,505.0	35.1	23.7	-140.27	227.4	1,445.5	435.1	404.7	30.39	14.316			
7,900.0	7,587.0	7,703.6	7,571.7	35.6	23.7	-134.58	228.3	1,445.4	499.2	471.0	28.13	17.748			

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PLAN ONLY													Offset Site Error: 0.0 ft
Survey Program: 850-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
3,000.0	2,950.4	3,148.7	3,024.7	9.4	17.4	-99.67	483.8	348.6	482.2	457.7	24.42	19.742	
3,100.0	3,046.2	3,228.2	3,097.8	9.9	18.0	-105.44	462.2	325.8	465.9	439.9	26.01	17.913	
3,200.0	3,142.1	3,307.7	3,170.8	10.4	18.6	-111.41	440.6	303.0	457.1	429.7	27.41	16.676	
3,260.3	3,199.9	3,355.7	3,214.9	10.8	18.9	-115.07	427.6	289.2	455.6	427.5	28.14	16.190 CC, ES	
3,300.0	3,238.0	3,387.3	3,243.9	11.0	19.2	-117.47	419.0	280.2	456.2	427.7	28.57	15.969	
3,400.0	3,333.8	3,466.8	3,316.9	11.5	19.7	-123.48	397.5	257.4	463.4	434.0	29.46	15.732 SF	
3,500.0	3,429.7	3,546.3	3,390.0	12.0	20.3	-129.30	375.9	234.6	478.2	448.2	30.06	15.907	
3,600.0	3,525.5	3,625.8	3,463.1	12.6	20.9	-134.84	354.3	211.7	500.0	469.6	30.41	16.440	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PLAN ONLY													Offset Site Error: 0.0 ft	
Survey Program: 850-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
3,400.0	3,333.8	3,461.6	3,387.0	11.5	13.5	-47.96	363.0	847.1	468.7	450.1	18.70	25.073		
3,500.0	3,429.7	3,553.6	3,475.7	12.0	14.0	-48.49	338.8	846.7	429.7	410.3	19.38	22.173		
3,600.0	3,525.5	3,645.6	3,564.5	12.6	14.4	-49.11	314.5	846.4	390.7	370.6	20.06	19.475		
3,700.0	3,621.4	3,737.6	3,653.2	13.1	14.9	-49.88	290.2	846.1	351.8	331.0	20.74	16.960		
3,800.0	3,717.3	3,829.6	3,741.9	13.6	15.3	-50.84	265.9	845.8	312.9	291.5	21.41	14.611		
3,900.0	3,813.1	3,921.6	3,830.6	14.2	15.8	-52.06	241.6	845.5	274.1	252.0	22.08	12.415		
4,000.0	3,909.0	4,013.5	3,919.4	14.7	16.2	-53.69	217.3	845.2	235.4	212.7	22.72	10.361		
4,100.0	4,004.8	4,105.5	4,008.1	15.2	16.7	-55.95	193.0	844.9	197.0	173.7	23.34	8.442		
4,200.0	4,100.7	4,197.5	4,096.8	15.8	17.1	-59.29	168.8	844.6	159.0	135.1	23.89	6.655		
4,300.0	4,196.6	4,289.5	4,185.5	16.3	17.6	-64.66	144.5	844.2	121.7	97.4	24.32	5.004		
4,400.0	4,292.4	4,381.5	4,274.3	16.9	18.0	-74.44	120.2	843.9	86.2	61.6	24.55	3.510		
4,500.0	4,388.3	4,473.5	4,363.0	17.4	18.5	-95.28	95.9	843.6	55.8	30.3	25.52	2.187		
4,590.0	4,474.6	4,556.3	4,442.8	17.9	18.9	-132.19	74.0	843.3	43.2	14.7	28.54	1.514	CC, ES, SF	
4,600.0	4,484.1	4,565.5	4,451.7	17.9	18.9	-136.96	71.6	843.3	43.4	14.8	28.61	1.517		
4,700.0	4,580.0	4,657.5	4,540.4	18.5	19.4	-174.76	47.3	843.0	61.1	34.1	26.97	2.263		
4,800.0	4,675.9	4,749.4	4,629.1	19.0	19.8	167.50	23.0	842.7	93.0	65.4	27.57	3.373		
4,900.0	4,771.7	4,841.4	4,717.9	19.6	20.3	158.92	-1.3	842.4	129.0	100.4	28.63	4.506		
5,000.0	4,867.6	4,933.4	4,806.6	20.1	20.7	154.08	-25.5	842.1	166.5	136.9	29.55	5.635		
5,100.0	4,963.4	5,025.4	4,895.3	20.6	21.2	151.01	-49.8	841.7	204.6	174.2	30.37	6.737		
5,200.0	5,059.3	5,117.4	4,984.0	21.2	21.6	148.90	-74.1	841.4	243.1	211.9	31.15	7.804		
5,300.0	5,155.2	5,209.4	5,072.8	21.7	22.1	147.36	-98.4	841.1	281.8	249.9	31.90	8.833		
5,400.0	5,251.0	5,301.4	5,161.5	22.3	22.5	146.20	-122.7	840.8	320.6	288.0	32.64	9.823		
5,500.0	5,346.9	5,393.4	5,250.2	22.8	23.0	145.29	-147.0	840.5	359.5	326.1	33.36	10.775		
5,600.0	5,442.7	5,485.3	5,338.9	23.4	23.4	144.55	-171.3	840.2	398.5	364.4	34.08	11.691		
5,700.0	5,538.6	5,577.3	5,427.7	23.9	23.9	143.95	-195.5	839.9	437.5	402.7	34.80	12.571		
5,800.0	5,634.5	5,669.3	5,516.4	24.4	24.3	143.44	-219.8	839.6	476.5	441.0	35.51	13.418		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Ray Nelson 7-8-32 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	61.96	194.4	365.1	413.7					
100.0	100.0	90.0	90.0	0.1	0.1	61.96	194.4	365.1	413.6	413.3	0.28	1,467.311		
200.0	200.0	190.0	190.0	0.3	0.3	61.96	194.4	365.1	413.6	413.0	0.63	658.252		
300.0	300.0	290.0	290.0	0.5	0.5	61.96	194.4	365.1	413.6	412.6	0.98	423.162		
400.0	400.0	390.0	390.0	0.7	0.7	61.96	194.4	365.1	413.6	412.3	1.33	311.804		
500.0	500.0	490.0	490.0	0.8	0.8	61.96	194.4	365.1	413.6	411.9	1.68	246.845		
600.0	600.0	585.2	585.2	1.0	1.0	62.12	193.6	366.0	414.1	412.1	2.02	205.352		
700.0	700.0	679.7	679.6	1.2	1.2	62.68	190.9	369.4	415.9	413.6	2.36	176.377		
800.0	800.0	773.9	773.4	1.4	1.4	-23.57	186.1	375.2	418.4	415.6	2.73	153.446		
900.0	900.0	867.6	866.6	1.5	1.6	-22.40	179.5	383.3	420.7	417.6	3.11	135.332		
1,000.0	999.9	960.8	958.8	1.7	1.8	-20.96	171.0	393.7	423.1	419.5	3.52	120.308		
1,100.0	1,099.7	1,053.4	1,050.0	1.9	2.1	-19.26	160.7	406.4	425.7	421.7	3.95	107.699		
1,200.0	1,199.4	1,146.0	1,140.5	2.1	2.5	-17.31	148.6	421.2	428.6	424.2	4.41	97.260		
1,300.0	1,298.9	1,244.6	1,236.8	2.3	2.8	-15.19	134.9	438.1	431.2	426.3	4.89	88.210		
1,400.0	1,398.3	1,343.4	1,333.1	2.6	3.2	-13.14	121.1	454.9	432.7	427.3	5.36	80.647		
1,500.0	1,497.4	1,442.2	1,429.5	2.8	3.6	-11.16	107.4	471.8	433.0	427.1	5.83	74.224		
1,600.0	1,596.3	1,541.1	1,526.0	3.1	4.0	-9.22	93.6	488.7	432.1	425.8	6.29	68.690		
1,700.0	1,694.9	1,640.0	1,622.5	3.4	4.4	-7.30	79.9	505.6	430.0	423.2	6.73	63.855		
1,800.0	1,793.3	1,738.9	1,718.9	3.7	4.8	-5.39	66.1	522.4	426.6	419.4	7.16	59.575		
1,900.0	1,891.2	1,837.8	1,815.3	4.1	5.2	-3.47	52.4	539.3	422.0	414.4	7.57	55.740		
2,000.0	1,988.9	1,936.6	1,911.7	4.4	5.6	-1.51	38.6	556.2	416.2	408.2	7.96	52.264		
2,100.0	2,086.1	2,035.2	2,007.9	4.9	6.1	0.51	24.9	573.0	409.1	400.8	8.34	49.077		
2,200.0	2,182.9	2,133.8	2,104.1	5.3	6.5	2.61	11.2	589.8	400.8	392.1	8.69	46.124		
2,300.0	2,279.3	2,232.1	2,200.0	5.8	6.9	4.81	-2.5	606.6	391.4	382.3	9.03	43.355		
2,400.0	2,375.2	2,330.3	2,295.8	6.3	7.3	7.14	-16.2	623.4	381.0	371.6	9.36	40.688		
2,500.0	2,471.1	2,428.5	2,391.5	6.8	7.7	9.60	-29.8	640.1	371.0	361.3	9.71	38.210		
2,600.0	2,566.9	2,526.6	2,487.3	7.3	8.1	12.19	-43.5	656.9	361.8	351.7	10.06	35.965		
2,700.0	2,662.8	2,624.8	2,583.1	7.8	8.5	14.90	-57.1	673.6	353.3	342.9	10.42	33.909		
2,800.0	2,758.7	2,723.0	2,678.8	8.3	9.0	17.73	-70.8	690.4	345.8	335.0	10.80	32.005		
2,900.0	2,854.5	2,821.1	2,774.6	8.9	9.4	20.68	-84.4	707.1	339.1	327.9	11.22	30.226		
3,000.0	2,950.4	2,919.3	2,870.3	9.4	9.8	23.73	-98.1	723.9	333.3	321.7	11.68	28.551		
3,100.0	3,046.2	3,017.5	2,966.1	9.9	10.2	26.88	-111.8	740.6	328.6	316.4	12.19	26.965		
3,200.0	3,142.1	3,115.6	3,061.8	10.4	10.6	30.10	-125.4	757.4	325.0	312.2	12.76	25.460		
3,300.0	3,238.0	3,213.8	3,157.6	11.0	11.0	33.39	-139.1	774.2	322.4	309.0	13.41	24.031		
3,400.0	3,333.8	3,312.0	3,253.3	11.5	11.5	36.72	-152.7	790.9	320.9	306.8	14.15	22.680		
3,479.5	3,410.1	3,390.0	3,329.5	11.9	11.8	39.38	-163.6	804.2	320.5	305.7	14.80	21.663 CC		
3,500.0	3,429.7	3,410.1	3,349.1	12.0	11.9	40.06	-166.4	807.7	320.6	305.6	14.97	21.410		
3,600.0	3,525.5	3,508.3	3,444.9	12.6	12.3	43.40	-180.0	824.4	321.4	305.5	15.89	20.228 ES		
3,700.0	3,621.4	3,606.5	3,540.6	13.1	12.7	46.71	-193.7	841.2	323.3	306.4	16.89	19.140		
3,800.0	3,717.3	3,704.6	3,636.4	13.6	13.1	49.98	-207.3	857.9	326.3	308.3	17.98	18.153		
3,900.0	3,813.1	3,802.8	3,732.1	14.2	13.5	53.17	-221.0	874.7	330.4	311.3	19.13	17.270		
4,000.0	3,909.0	3,900.9	3,827.9	14.7	14.0	56.29	-234.7	891.4	335.6	315.2	20.35	16.492		
4,100.0	4,004.8	3,999.1	3,923.6	15.2	14.4	59.30	-248.3	908.2	341.7	320.1	21.60	15.815		
4,200.0	4,100.7	4,097.3	4,019.4	15.8	14.8	62.20	-262.0	924.9	348.8	325.9	22.89	15.235		
4,300.0	4,196.6	4,195.4	4,115.1	16.3	15.2	64.98	-275.6	941.7	356.7	332.5	24.20	14.741		
4,400.0	4,292.4	4,293.6	4,210.9	16.9	15.6	67.64	-289.3	958.4	365.5	340.0	25.51	14.328		
4,500.0	4,388.3	4,391.8	4,306.7	17.4	16.0	70.17	-302.9	975.2	375.0	348.2	26.82	13.984		
4,600.0	4,484.1	4,489.9	4,402.4	17.9	16.5	72.58	-316.6	991.9	385.2	357.1	28.11	13.703		
4,700.0	4,580.0	4,588.1	4,498.2	18.5	16.9	74.86	-330.3	1,008.7	396.1	366.7	29.40	13.475		
4,800.0	4,675.9	4,686.3	4,593.9	19.0	17.3	77.02	-343.9	1,025.5	407.6	377.0	30.66	13.294		
4,900.0	4,771.7	4,784.4	4,689.7	19.6	17.7	79.06	-357.6	1,042.2	419.7	387.8	31.91	13.153		
5,000.0	4,867.6	4,882.6	4,785.4	20.1	18.1	80.98	-371.2	1,059.0	432.3	399.1	33.13	13.046		

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 Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S32-T2N-R68W (File/Hwy 52) - Ray Nelson 7-8-32 - DD - Plan #1		Offset Site Error:		0.0 ft	
Survey Program: 0-MWD															Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)								
5,100.0	4,963.4	4,980.8	4,881.2	20.6	18.6	82.80	-384.9	1,075.7	445.3	410.9	34.33	12.969						
5,200.0	5,059.3	5,078.9	4,976.9	21.2	19.0	84.52	-398.5	1,092.5	458.7	423.2	35.51	12.917						
5,300.0	5,155.2	5,177.1	5,072.7	21.7	19.4	86.13	-412.2	1,109.2	472.5	435.9	36.67	12.886						
5,400.0	5,251.0	5,275.2	5,168.4	22.3	19.8	87.66	-425.9	1,126.0	486.7	448.9	37.81	12.874 SF						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5004.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 70-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)				
0.0	0.0	0.0	0.0	0.0	0.0	61.96	194.4	365.1	413.7					
100.0	100.0	86.3	86.3	0.1	0.1	61.97	194.6	365.5	414.1	413.8	0.27	1,515.345		
200.0	200.0	182.1	182.0	0.3	0.3	62.03	194.7	366.7	415.3	414.7	0.62	673.045		
300.0	300.0	278.1	278.0	0.5	0.5	62.38	193.5	369.8	417.6	416.6	0.97	432.575		
400.0	400.0	368.7	368.4	0.7	0.7	63.04	190.8	375.3	421.6	420.2	1.31	320.710		
500.0	500.0	462.0	461.3	0.8	0.9	64.04	186.8	383.7	427.7	426.0	1.68	254.437		
600.0	600.0	555.0	553.5	1.0	1.2	65.33	180.9	393.9	435.0	432.9	2.06	210.761		
700.0	700.0	643.7	641.0	1.2	1.4	66.81	174.1	406.3	444.7	442.2	2.47	180.343		
800.0	800.0	731.9	727.6	1.4	1.8	-18.61	165.7	421.4	456.2	453.3	2.94	155.189		
900.0	900.0	818.8	812.4	1.5	2.1	-16.94	157.4	438.4	468.9	465.6	3.37	139.182		
1,000.0	999.9	908.7	899.8	1.7	2.5	-15.33	149.3	457.8	482.5	478.7	3.81	126.654		
1,100.0	1,099.7	998.2	986.2	1.9	3.0	-13.63	139.7	478.9	496.2	491.9	4.27	116.250		
7,900.0	7,587.0	7,877.8	7,581.0	35.6	34.8	-14.02	-538.4	1,966.9	446.6	411.3	35.36	12.631		
8,000.0	7,641.1	7,931.8	7,635.0	36.0	34.9	-30.16	-538.0	1,966.4	364.0	336.9	27.03	13.467		
8,100.0	7,680.7	7,970.8	7,674.0	36.5	34.9	-55.24	-537.6	1,966.1	277.0	247.3	29.68	9.332		
8,200.0	7,704.6	7,993.8	7,696.9	37.0	34.9	-80.17	-537.5	1,965.9	193.6	157.3	36.29	5.334		
8,300.0	7,712.0	8,000.3	7,703.5	37.4	34.9	-90.67	-537.4	1,965.8	134.6	98.2	36.44	3.695		
8,344.4	7,712.0	7,999.9	7,703.1	37.7	34.9	-90.50	-537.4	1,965.8	127.1	90.2	36.96	3.440	CC, ES, SF	
8,400.0	7,712.0	7,999.5	7,702.6	38.0	34.9	-90.29	-537.4	1,965.9	138.8	101.2	37.61	3.690		
8,500.0	7,712.0	7,998.6	7,701.8	38.6	34.9	-89.91	-537.4	1,965.9	201.0	162.1	38.87	5.170		
8,600.0	7,712.0	7,997.8	7,700.9	39.2	34.9	-89.53	-537.4	1,965.9	285.5	245.3	40.20	7.102		
8,700.0	7,712.0	7,996.9	7,700.1	39.9	34.9	-89.14	-537.4	1,965.9	377.7	336.1	41.59	9.081		
8,800.0	7,712.0	7,996.1	7,699.2	40.7	34.9	-88.76	-537.4	1,965.9	473.0	430.0	43.03	10.994		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4H-32H-O268
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Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5004.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4H-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5004.0ft (Original Well Elev)

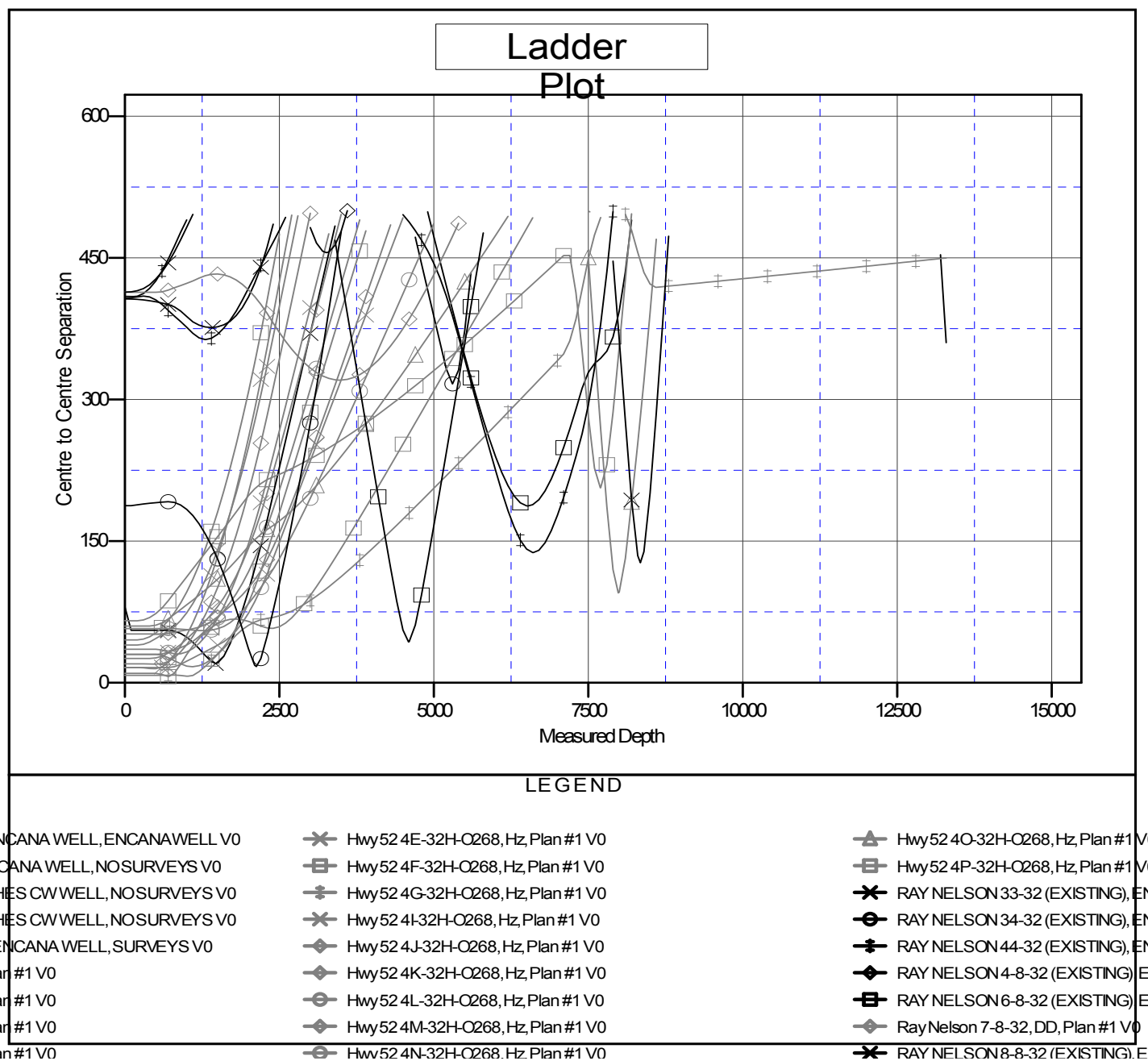
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Hwy 52 4H-32H-O268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°



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