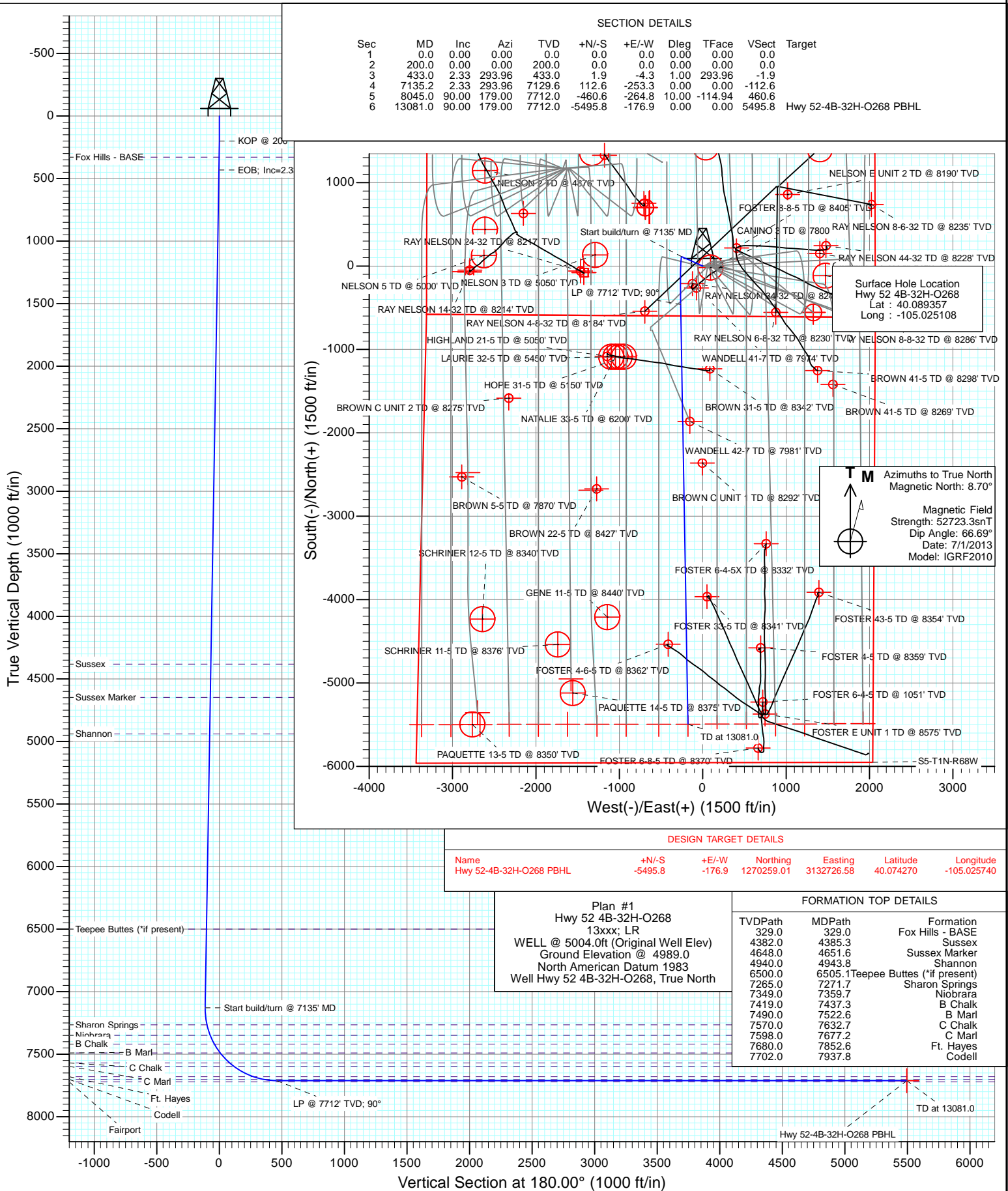




Project: DJ Wattenberg
Site: S32-T2N-R68W (File/Hwy 52)
Well: Hwy 52 4B-32H-O268
Wellbore: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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 4B-32H-O268					
Well Position	+N/-S	0.0 ft	Northing:	1,275,755.69 ft	Latitude:	40.089357
	+E/-W	0.0 ft	Easting:	3,132,874.09 ft	Longitude:	-105.025108
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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
433.0	2.33	293.96	433.0	1.9	-4.3	1.00	1.00	0.00	293.96	
7,135.2	2.33	293.96	7,129.6	112.6	-253.3	0.00	0.00	0.00	0.00	
8,045.0	90.00	179.00	7,712.0	-460.6	-264.8	10.00	9.64	-12.64	-114.94	
13,081.0	90.00	179.00	7,712.0	-5,495.8	-176.9	0.00	0.00	0.00	0.00	Hwy 52-4B-32H-O268

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: EnCana Oil & Gas (USA) Inc
Project: DJ Wattenberg
Site: S32-T2N-R68W (File/Hwy 52)
Well: Hwy 52 4B-32H-O268
Wellbore: Hz
Design: Plan #1

Local Co-ordinate Reference: Well Hwy 52 4B-32H-O268
TVD Reference: WELL @ 5004.0ft (Original Well Elev)
MD Reference: WELL @ 5004.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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	KOP @ 200'
300.0	1.00	293.96	300.0	0.4	-0.8	-0.4	1.00	1.00	
329.0	1.29	293.96	329.0	0.6	-1.3	-0.6	1.00	1.00	Fox Hills - BASE
400.0	2.00	293.96	400.0	1.4	-3.2	-1.4	1.00	1.00	
433.0	2.33	293.96	433.0	1.9	-4.3	-1.9	1.00	1.00	EOB; Inc=2.33°
500.0	2.33	293.96	499.9	3.0	-6.8	-3.0	0.00	0.00	
600.0	2.33	293.96	599.8	4.7	-10.5	-4.7	0.00	0.00	
700.0	2.33	293.96	699.7	6.3	-14.2	-6.3	0.00	0.00	
800.0	2.33	293.96	799.6	8.0	-18.0	-8.0	0.00	0.00	
900.0	2.33	293.96	899.5	9.6	-21.7	-9.6	0.00	0.00	
1,000.0	2.33	293.96	999.5	11.3	-25.4	-11.3	0.00	0.00	
1,100.0	2.33	293.96	1,099.4	12.9	-29.1	-12.9	0.00	0.00	
1,200.0	2.33	293.96	1,199.3	14.6	-32.8	-14.6	0.00	0.00	
1,300.0	2.33	293.96	1,299.2	16.2	-36.5	-16.2	0.00	0.00	
1,400.0	2.33	293.96	1,399.1	17.9	-40.3	-17.9	0.00	0.00	
1,500.0	2.33	293.96	1,499.1	19.5	-44.0	-19.5	0.00	0.00	
1,600.0	2.33	293.96	1,599.0	21.2	-47.7	-21.2	0.00	0.00	
1,700.0	2.33	293.96	1,698.9	22.8	-51.4	-22.8	0.00	0.00	
1,800.0	2.33	293.96	1,798.8	24.5	-55.1	-24.5	0.00	0.00	
1,900.0	2.33	293.96	1,898.7	26.1	-58.8	-26.1	0.00	0.00	
2,000.0	2.33	293.96	1,998.6	27.8	-62.6	-27.8	0.00	0.00	
2,100.0	2.33	293.96	2,098.6	29.4	-66.3	-29.4	0.00	0.00	
2,200.0	2.33	293.96	2,198.5	31.1	-70.0	-31.1	0.00	0.00	
2,300.0	2.33	293.96	2,298.4	32.7	-73.7	-32.7	0.00	0.00	
2,400.0	2.33	293.96	2,398.3	34.4	-77.4	-34.4	0.00	0.00	
2,500.0	2.33	293.96	2,498.2	36.1	-81.1	-36.1	0.00	0.00	
2,600.0	2.33	293.96	2,598.1	37.7	-84.8	-37.7	0.00	0.00	
2,700.0	2.33	293.96	2,698.1	39.4	-88.6	-39.4	0.00	0.00	
2,800.0	2.33	293.96	2,798.0	41.0	-92.3	-41.0	0.00	0.00	
2,900.0	2.33	293.96	2,897.9	42.7	-96.0	-42.7	0.00	0.00	
3,000.0	2.33	293.96	2,997.8	44.3	-99.7	-44.3	0.00	0.00	
3,100.0	2.33	293.96	3,097.7	46.0	-103.4	-46.0	0.00	0.00	
3,200.0	2.33	293.96	3,197.6	47.6	-107.1	-47.6	0.00	0.00	
3,300.0	2.33	293.96	3,297.6	49.3	-110.9	-49.3	0.00	0.00	
3,400.0	2.33	293.96	3,397.5	50.9	-114.6	-50.9	0.00	0.00	
3,500.0	2.33	293.96	3,497.4	52.6	-118.3	-52.6	0.00	0.00	
3,600.0	2.33	293.96	3,597.3	54.2	-122.0	-54.2	0.00	0.00	
3,700.0	2.33	293.96	3,697.2	55.9	-125.7	-55.9	0.00	0.00	
3,800.0	2.33	293.96	3,797.2	57.5	-129.4	-57.5	0.00	0.00	
3,900.0	2.33	293.96	3,897.1	59.2	-133.1	-59.2	0.00	0.00	
4,000.0	2.33	293.96	3,997.0	60.8	-136.9	-60.8	0.00	0.00	
4,100.0	2.33	293.96	4,096.9	62.5	-140.6	-62.5	0.00	0.00	
4,200.0	2.33	293.96	4,196.8	64.1	-144.3	-64.1	0.00	0.00	
4,300.0	2.33	293.96	4,296.7	65.8	-148.0	-65.8	0.00	0.00	
4,385.3	2.33	293.96	4,382.0	67.2	-151.2	-67.2	0.00	0.00	Sussex
4,400.0	2.33	293.96	4,396.7	67.4	-151.7	-67.4	0.00	0.00	
4,500.0	2.33	293.96	4,496.6	69.1	-155.4	-69.1	0.00	0.00	
4,600.0	2.33	293.96	4,596.5	70.7	-159.2	-70.7	0.00	0.00	
4,651.6	2.33	293.96	4,648.0	71.6	-161.1	-71.6	0.00	0.00	Sussex Marker
4,700.0	2.33	293.96	4,696.4	72.4	-162.9	-72.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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	2.33	293.96	4,796.3	74.0	-166.6	-74.0	0.00	0.00	
4,900.0	2.33	293.96	4,896.2	75.7	-170.3	-75.7	0.00	0.00	
4,943.8	2.33	293.96	4,940.0	76.4	-171.9	-76.4	0.00	0.00	Shannon
5,000.0	2.33	293.96	4,996.2	77.3	-174.0	-77.3	0.00	0.00	
5,100.0	2.33	293.96	5,096.1	79.0	-177.7	-79.0	0.00	0.00	
5,200.0	2.33	293.96	5,196.0	80.6	-181.4	-80.6	0.00	0.00	
5,300.0	2.33	293.96	5,295.9	82.3	-185.2	-82.3	0.00	0.00	
5,400.0	2.33	293.96	5,395.8	83.9	-188.9	-83.9	0.00	0.00	
5,500.0	2.33	293.96	5,495.7	85.6	-192.6	-85.6	0.00	0.00	
5,600.0	2.33	293.96	5,595.7	87.2	-196.3	-87.2	0.00	0.00	
5,700.0	2.33	293.96	5,695.6	88.9	-200.0	-88.9	0.00	0.00	
5,800.0	2.33	293.96	5,795.5	90.5	-203.7	-90.5	0.00	0.00	
5,900.0	2.33	293.96	5,895.4	92.2	-207.5	-92.2	0.00	0.00	
6,000.0	2.33	293.96	5,995.3	93.8	-211.2	-93.8	0.00	0.00	
6,100.0	2.33	293.96	6,095.2	95.5	-214.9	-95.5	0.00	0.00	
6,200.0	2.33	293.96	6,195.2	97.1	-218.6	-97.1	0.00	0.00	
6,300.0	2.33	293.96	6,295.1	98.8	-222.3	-98.8	0.00	0.00	
6,400.0	2.33	293.96	6,395.0	100.4	-226.0	-100.4	0.00	0.00	
6,500.0	2.33	293.96	6,494.9	102.1	-229.7	-102.1	0.00	0.00	
6,505.1	2.33	293.96	6,500.0	102.2	-229.9	-102.2	0.00	0.00	Teepee Buttes (*if present)
6,600.0	2.33	293.96	6,594.8	103.7	-233.5	-103.7	0.00	0.00	
6,700.0	2.33	293.96	6,694.8	105.4	-237.2	-105.4	0.00	0.00	
6,800.0	2.33	293.96	6,794.7	107.0	-240.9	-107.0	0.00	0.00	
6,900.0	2.33	293.96	6,894.6	108.7	-244.6	-108.7	0.00	0.00	
7,000.0	2.33	293.96	6,994.5	110.4	-248.3	-110.4	0.00	0.00	
7,100.0	2.33	293.96	7,094.4	112.0	-252.0	-112.0	0.00	0.00	
7,135.2	2.33	293.96	7,129.6	112.6	-253.3	-112.6	0.00	0.00	Start build/turn @ 7135' MD
7,200.0	5.89	199.97	7,194.3	110.0	-255.7	-110.0	10.00	5.49	
7,271.7	12.84	188.31	7,265.0	98.6	-258.1	-98.6	10.00	9.69	Sharon Springs
7,300.0	15.64	186.57	7,292.4	91.7	-259.0	-91.7	10.00	9.89	
7,359.7	21.57	184.35	7,349.0	72.8	-260.7	-72.8	10.00	9.93	Niobrara
7,400.0	25.58	183.42	7,385.9	56.7	-261.8	-56.7	10.00	9.96	
7,437.3	29.30	182.77	7,419.0	39.6	-262.8	-39.6	10.00	9.97	B Chalk
7,500.0	35.55	181.96	7,471.9	6.0	-264.1	-6.0	10.00	9.98	
7,522.6	37.80	181.73	7,490.0	-7.5	-264.6	7.5	10.00	9.98	B Marl
7,600.0	45.53	181.08	7,547.8	-58.9	-265.8	58.9	10.00	9.98	
7,632.7	48.80	180.85	7,570.0	-82.9	-266.2	82.9	10.00	9.99	C Chalk
7,677.2	53.24	180.58	7,598.0	-117.5	-266.6	117.5	10.00	9.99	C Marl
7,700.0	55.52	180.45	7,611.3	-136.0	-266.8	136.0	10.00	9.99	
7,800.0	65.51	179.96	7,660.4	-222.9	-267.1	222.9	10.00	9.99	
7,852.6	70.77	179.74	7,680.0	-271.7	-266.9	271.7	10.00	9.99	Ft. Hayes
7,900.0	75.51	179.55	7,693.8	-317.1	-266.7	317.1	10.00	9.99	
7,937.8	79.28	179.40	7,702.0	-354.0	-266.3	354.0	10.00	9.99	Codell
8,000.0	85.50	179.17	7,710.2	-415.6	-265.6	415.6	10.00	9.99	
8,045.0	90.00	179.00	7,712.0	-460.6	-264.8	460.6	10.00	9.99	LP @ 7712' TVD; 90°
8,100.0	90.00	179.00	7,712.0	-515.5	-263.9	515.5	0.00	0.00	
8,200.0	90.00	179.00	7,712.0	-615.5	-262.1	615.5	0.00	0.00	
8,300.0	90.00	179.00	7,712.0	-715.5	-260.4	715.5	0.00	0.00	
8,400.0	90.00	179.00	7,712.0	-815.5	-258.6	815.5	0.00	0.00	
8,500.0	90.00	179.00	7,712.0	-915.5	-256.9	915.5	0.00	0.00	
8,600.0	90.00	179.00	7,712.0	-1,015.4	-255.1	1,015.4	0.00	0.00	
8,700.0	90.00	179.00	7,712.0	-1,115.4	-253.4	1,115.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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	179.00	7,712.0	-1,215.4	-251.7	1,215.4	0.00	0.00	
8,900.0	90.00	179.00	7,712.0	-1,315.4	-249.9	1,315.4	0.00	0.00	
9,000.0	90.00	179.00	7,712.0	-1,415.4	-248.2	1,415.4	0.00	0.00	
9,100.0	90.00	179.00	7,712.0	-1,515.4	-246.4	1,515.4	0.00	0.00	
9,200.0	90.00	179.00	7,712.0	-1,615.4	-244.7	1,615.4	0.00	0.00	
9,300.0	90.00	179.00	7,712.0	-1,715.3	-242.9	1,715.3	0.00	0.00	
9,400.0	90.00	179.00	7,712.0	-1,815.3	-241.2	1,815.3	0.00	0.00	
9,500.0	90.00	179.00	7,712.0	-1,915.3	-239.4	1,915.3	0.00	0.00	
9,600.0	90.00	179.00	7,712.0	-2,015.3	-237.7	2,015.3	0.00	0.00	
9,700.0	90.00	179.00	7,712.0	-2,115.3	-236.0	2,115.3	0.00	0.00	
9,800.0	90.00	179.00	7,712.0	-2,215.3	-234.2	2,215.3	0.00	0.00	
9,900.0	90.00	179.00	7,712.0	-2,315.2	-232.5	2,315.2	0.00	0.00	
10,000.0	90.00	179.00	7,712.0	-2,415.2	-230.7	2,415.2	0.00	0.00	
10,100.0	90.00	179.00	7,712.0	-2,515.2	-229.0	2,515.2	0.00	0.00	
10,200.0	90.00	179.00	7,712.0	-2,615.2	-227.2	2,615.2	0.00	0.00	
10,300.0	90.00	179.00	7,712.0	-2,715.2	-225.5	2,715.2	0.00	0.00	
10,400.0	90.00	179.00	7,712.0	-2,815.2	-223.7	2,815.2	0.00	0.00	
10,500.0	90.00	179.00	7,712.0	-2,915.2	-222.0	2,915.2	0.00	0.00	
10,600.0	90.00	179.00	7,712.0	-3,015.1	-220.2	3,015.1	0.00	0.00	
10,700.0	90.00	179.00	7,712.0	-3,115.1	-218.5	3,115.1	0.00	0.00	
10,800.0	90.00	179.00	7,712.0	-3,215.1	-216.8	3,215.1	0.00	0.00	
10,900.0	90.00	179.00	7,712.0	-3,315.1	-215.0	3,315.1	0.00	0.00	
11,000.0	90.00	179.00	7,712.0	-3,415.1	-213.3	3,415.1	0.00	0.00	
11,100.0	90.00	179.00	7,712.0	-3,515.1	-211.5	3,515.1	0.00	0.00	
11,200.0	90.00	179.00	7,712.0	-3,615.1	-209.8	3,615.1	0.00	0.00	
11,300.0	90.00	179.00	7,712.0	-3,715.0	-208.0	3,715.0	0.00	0.00	
11,400.0	90.00	179.00	7,712.0	-3,815.0	-206.3	3,815.0	0.00	0.00	
11,500.0	90.00	179.00	7,712.0	-3,915.0	-204.5	3,915.0	0.00	0.00	
11,600.0	90.00	179.00	7,712.0	-4,015.0	-202.8	4,015.0	0.00	0.00	
11,700.0	90.00	179.00	7,712.0	-4,115.0	-201.0	4,115.0	0.00	0.00	
11,800.0	90.00	179.00	7,712.0	-4,215.0	-199.3	4,215.0	0.00	0.00	
11,900.0	90.00	179.00	7,712.0	-4,314.9	-197.6	4,314.9	0.00	0.00	
12,000.0	90.00	179.00	7,712.0	-4,414.9	-195.8	4,414.9	0.00	0.00	
12,100.0	90.00	179.00	7,712.0	-4,514.9	-194.1	4,514.9	0.00	0.00	
12,200.0	90.00	179.00	7,712.0	-4,614.9	-192.3	4,614.9	0.00	0.00	
12,300.0	90.00	179.00	7,712.0	-4,714.9	-190.6	4,714.9	0.00	0.00	
12,400.0	90.00	179.00	7,712.0	-4,814.9	-188.8	4,814.9	0.00	0.00	
12,500.0	90.00	179.00	7,712.0	-4,914.9	-187.1	4,914.9	0.00	0.00	
12,600.0	90.00	179.00	7,712.0	-5,014.8	-185.3	5,014.8	0.00	0.00	
12,700.0	90.00	179.00	7,712.0	-5,114.8	-183.6	5,114.8	0.00	0.00	
12,800.0	90.00	179.00	7,712.0	-5,214.8	-181.8	5,214.8	0.00	0.00	
12,900.0	90.00	179.00	7,712.0	-5,314.8	-180.1	5,314.8	0.00	0.00	
13,000.0	90.00	179.00	7,712.0	-5,414.8	-178.4	5,414.8	0.00	0.00	
13,081.0	90.00	179.00	7,712.0	-5,495.8	-176.9	5,495.8	0.00	0.00	TD at 13081.0 - Hwy 52-4B-32H-O268 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Hwy 52-4B-32H-O268 P	0.00	0.00	7,712.0	-5,495.8	-176.9	1,270,259.01	3,132,726.58	40.074270	-105.025740
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
329.0	329.0	Fox Hills - BASE				
4,385.3	4,382.0	Sussex				
4,651.6	4,648.0	Sussex Marker				
4,943.8	4,940.0	Shannon				
6,505.1	6,500.0	Teepee Buttes (*if present)				
7,271.7	7,265.0	Sharon Springs				
7,359.7	7,349.0	Niobrara				
7,437.3	7,419.0	B Chalk				
7,522.6	7,490.0	B Marl				
7,632.7	7,570.0	C Chalk				
7,677.2	7,598.0	C Marl				
7,852.6	7,680.0	Ft. Hayes				
7,937.8	7,702.0	Codell				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
433.0	433.0	1.9	-4.3	EOB; Inc=2.33°
7,135.2	7,129.6	112.6	-253.3	Start build/turn @ 7135' MD
8,045.0	7,712.0	-460.6	-264.8	LP @ 7712' TVD; 90°
13,081.0	7,712.0	-5,495.8	-176.9	TD at 13081.0

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S32-T2N-R68W (File/Hwy 52)

Hwy 52 4B-32H-O268

Hz

Plan #1

Anticollision Report

03 July, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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	7/3/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	13,081.0	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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)	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	8,832.8	7,945.0	333.8	292.7	8.107	CC, ES
BROWN 31-5 (EXISTING) - ENCANA WELL - SURVEYS	8,900.0	7,943.7	340.5	298.3	8.067	SF
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	796.2	802.7	440.7	437.6	141.710	CC
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	800.0	806.0	440.7	437.6	140.897	ES
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	1,400.0	1,336.5	486.0	479.5	74.873	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	9,950.7	7,717.0	226.8	168.2	3.872	CC, ES, SF
BROWN C UNIT 2 (EXISTING) - ENCANA WELL - NO S						Out of range
CANINO 1-X (EXISTING) - ENCANA WELL - NO SURVE						Out of range
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR						Out of range
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	200.0	142.0	94.3	93.7	165.169	CC, ES
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	7,522.4	7,431.9	357.2	331.2	13.693	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	11,553.3	8,015.6	265.6	164.4	2.625	CC, ES, SF
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	12,122.0	7,964.5	230.1	127.0	2.233	CC, ES, SF
FOSTER 6-4-5 (EXISTING) - ENCANA WELL - SURVEY						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 4B-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 4B-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 Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S32-T2N-R68W (File/Hwy 52)						
FOSTER 6-4-5X (EXISTING) - ENCANA WELL - SURVE						Out of range
FOSTER 6-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 8-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
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	7.8	7.3	14.737	CC
Hwy 52 4A-32H-O268 - Hz - Plan #1	300.0	300.9	8.0	7.0	7.979	ES
Hwy 52 4A-32H-O268 - Hz - Plan #1	13,081.0	12,809.3	450.6	295.0	2.896	SF
Hwy 52 4C-32H-O268 - Hz - Plan #1	200.0	200.0	7.8	7.2	12.094	CC, ES
Hwy 52 4C-32H-O268 - Hz - Plan #1	13,081.0	12,758.7	450.0	294.2	2.888	SF
Hwy 52 4D-32H-O268 - Hz - Plan #1	200.0	200.0	10.0	9.4	15.485	CC, ES
Hwy 52 4D-32H-O268 - Hz - Plan #1	400.0	400.0	13.3	11.9	9.874	SF
Hwy 52 4E-32H-O268 - Hz - Plan #1	200.0	200.0	25.7	25.1	39.813	CC, ES
Hwy 52 4E-32H-O268 - Hz - Plan #1	700.0	699.1	41.9	39.5	17.547	SF
Hwy 52 4F-32H-O268 - Hz - Plan #1	200.0	200.0	30.0	29.4	46.456	CC, ES
Hwy 52 4F-32H-O268 - Hz - Plan #1	800.0	798.8	49.5	46.7	18.054	SF
Hwy 52 4G-32H-O268 - Hz - Plan #1	200.0	200.0	35.5	34.9	54.989	CC, ES
Hwy 52 4G-32H-O268 - Hz - Plan #1	1,000.0	997.4	66.1	62.6	19.233	SF
Hwy 52 4H-32H-O268 - Hz - Plan #1	200.0	200.0	40.0	39.4	61.941	CC, ES
Hwy 52 4H-32H-O268 - Hz - Plan #1	1,100.0	1,097.0	73.7	69.9	19.457	SF
Hwy 52 4I-32H-O268 - Hz - Plan #1	200.0	199.0	55.3	54.7	85.907	CC
Hwy 52 4I-32H-O268 - Hz - Plan #1	300.0	299.6	55.6	54.6	55.927	ES
Hwy 52 4I-32H-O268 - Hz - Plan #1	7,745.7	7,756.5	159.0	131.3	5.745	SF
Hwy 52 4J-32H-O268 - Hz - Plan #1	200.0	199.0	60.0	59.4	93.164	CC, ES
Hwy 52 4J-32H-O268 - Hz - Plan #1	7,441.3	7,821.0	204.7	178.0	7.675	SF
Hwy 52 4K-32H-O268 - Hz - Plan #1	200.0	199.0	65.3	64.6	101.357	CC, ES
Hwy 52 4K-32H-O268 - Hz - Plan #1	1,000.0	990.8	113.8	110.4	32.862	SF
Hwy 52 4L-32H-O268 - Hz - Plan #1	200.0	199.0	70.0	69.4	108.691	CC, ES
Hwy 52 4L-32H-O268 - Hz - Plan #1	1,000.0	991.2	112.8	109.4	32.772	SF
Hwy 52 4M-32H-O268 - Hz - Plan #1	200.0	199.0	91.7	91.1	142.426	CC, ES
Hwy 52 4M-32H-O268 - Hz - Plan #1	1,200.0	1,185.0	153.1	148.9	37.088	SF
Hwy 52 4N-32H-O268 - Hz - Plan #1	200.0	199.0	97.3	96.6	151.071	CC, ES
Hwy 52 4N-32H-O268 - Hz - Plan #1	1,200.0	1,186.8	150.6	146.5	36.515	SF
Hwy 52 4O-32H-O268 - Hz - Plan #1	200.0	199.0	100.1	99.5	155.454	CC, ES
Hwy 52 4O-32H-O268 - Hz - Plan #1	1,100.0	1,080.0	170.9	167.2	45.458	SF
Hwy 52 4P-32H-O268 - Hz - Plan #1	200.0	199.0	105.7	105.0	164.103	CC, ES
Hwy 52 4P-32H-O268 - Hz - Plan #1	1,100.0	1,071.0	203.5	199.8	54.380	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 4B-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 4B-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
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	260.1	253.8	439.8	438.9	508.744	CC
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	300.0	294.1	439.8	438.8	438.299	ES
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	1,600.0	1,546.6	490.2	484.5	85.307	SF
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	7,813.8	7,695.5	134.9	106.6	4.768	CC, ES, SF
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	139.6	130.0	443.8	443.4	1,058.299	CC, ES
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	700.0	625.6	492.6	490.3	215.739	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	4,635.8	4,858.2	78.4	40.4	2.064	CC, ES, SF
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL						Out of range
Ray Nelson 7-8-32 - DD - Plan #1	200.0	190.0	449.2	448.6	714.921	CC, ES
Ray Nelson 7-8-32 - DD - Plan #1	1,100.0	1,040.5	499.2	495.3	126.932	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	0.0	0.0	449.3			
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU	700.0	635.5	492.4	489.9	198.108	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	7,848.9	7,697.6	183.1	152.2	5.931	CC, ES, SF
WANDELL 42-7 (EXISTING) - ENCANA WELL - Plan #1	9,441.5	7,870.6	82.0	21.7	1.361	Level 3, CC, ES, SF
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 4B-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 4B-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 31-5 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 777-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,500.0	7,712.0	7,951.6	7,813.3	22.5	26.0	-90.73	-1,242.3	82.7	471.4	435.1	36.24	13.005		
8,600.0	7,712.0	7,949.6	7,811.3	23.9	26.0	-90.40	-1,242.3	82.7	407.0	369.3	37.68	10.801		
8,700.0	7,712.0	7,947.6	7,809.4	25.4	26.0	-90.06	-1,242.4	82.7	359.3	320.1	39.16	9.175		
8,800.0	7,712.0	7,945.7	7,807.4	26.9	26.0	-89.73	-1,242.4	82.7	335.4	294.8	40.67	8.247		
8,832.8	7,712.0	7,945.0	7,806.8	27.4	26.0	-89.62	-1,242.4	82.7	333.8	292.7	41.18	8.107 CC, ES		
8,900.0	7,712.0	7,943.7	7,805.4	28.4	26.0	-89.39	-1,242.4	82.7	340.5	298.3	42.21	8.067 SF		
9,000.0	7,712.0	7,941.7	7,803.5	29.9	26.0	-89.05	-1,242.5	82.7	373.3	329.6	43.77	8.529		
9,100.0	7,712.0	7,939.7	7,801.4	31.5	26.0	-88.70	-1,242.5	82.7	427.5	382.2	45.36	9.426		
9,200.0	7,712.0	7,937.7	7,799.4	33.1	26.0	-88.35	-1,242.6	82.6	496.2	449.2	46.95	10.568		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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 (°)	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	62.91	201.5	393.9	442.5					
100.0	100.0	86.5	86.5	0.1	0.1	62.95	201.4	394.4	442.9	442.6	0.27	1,620.365		
200.0	200.0	185.6	185.6	0.3	0.3	63.01	201.4	395.5	443.8	443.2	0.62	714.418		
300.0	300.0	287.4	287.4	0.5	0.5	129.22	201.1	396.6	445.2	444.2	0.97	457.009		
400.0	400.0	398.6	398.6	0.7	0.7	129.78	198.8	396.8	446.2	444.8	1.35	330.157		
500.0	499.9	505.7	505.4	0.9	0.9	130.94	192.4	396.6	445.9	444.2	1.74	256.363		
600.0	599.8	612.5	611.6	1.0	1.1	132.76	180.6	397.0	444.4	442.2	2.17	204.757		
700.0	699.7	714.9	712.6	1.2	1.5	135.16	164.1	398.0	441.9	439.3	2.65	166.597		
796.2	795.8	802.7	799.0	1.4	1.7	137.47	148.4	399.7	440.7	437.6	3.11	141.710 CC		
800.0	799.6	806.0	802.2	1.4	1.7	137.56	147.8	399.8	440.7	437.6	3.13	140.897 ES		
900.0	899.5	900.2	894.8	1.6	2.1	140.19	130.3	403.3	441.8	438.2	3.64	121.342		
1,000.0	999.5	996.5	989.0	1.8	2.5	143.04	111.1	407.7	444.5	440.3	4.20	105.795		
1,100.0	1,099.4	1,088.2	1,077.9	2.0	2.9	146.20	89.2	413.2	449.0	444.2	4.80	93.530		
1,200.0	1,199.3	1,172.9	1,159.2	2.2	3.3	149.37	66.8	420.1	456.9	451.6	5.38	84.936		
1,300.0	1,299.2	1,254.6	1,237.5	2.4	3.7	152.39	44.8	429.0	469.2	463.3	5.95	78.898		
1,400.0	1,399.1	1,336.5	1,315.4	2.5	4.1	155.32	22.5	440.1	486.0	479.5	6.49	74.873 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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 C UNIT 1 (EXISTING) - ENCANA WELL - NO SURVEYS			Offset Site Error:		0.0 ft
Survey Program:											8292-Geolink MWD			Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis					
9,600.0	7,712.0	7,717.0	7,717.0	39.5	13.5	-90.00	-2,361.9	-4.8	417.6	364.9	52.73	7.920				
9,700.0	7,712.0	7,717.0	7,717.0	41.2	13.5	-90.00	-2,361.9	-4.8	338.0	283.6	54.38	6.215				
9,800.0	7,712.0	7,717.0	7,717.0	42.8	13.5	-90.00	-2,361.9	-4.8	272.3	216.2	56.05	4.857				
9,900.0	7,712.0	7,717.0	7,717.0	44.5	13.5	-90.00	-2,361.9	-4.8	232.4	174.6	57.72	4.026				
9,950.7	7,712.0	7,717.0	7,717.0	45.4	13.5	-90.00	-2,361.9	-4.8	226.8	168.2	58.57	3.872	CC, ES, SF			
10,000.0	7,712.0	7,717.0	7,717.0	46.2	13.5	-90.00	-2,361.9	-4.8	232.1	172.7	59.40	3.907				
10,100.0	7,712.0	7,717.0	7,717.0	47.9	13.5	-90.00	-2,361.9	-4.8	271.5	210.5	61.08	4.445				
10,200.0	7,712.0	7,717.0	7,717.0	49.5	13.5	-90.00	-2,361.9	-4.8	337.0	274.3	62.77	5.369				
10,300.0	7,712.0	7,717.0	7,717.0	51.2	13.5	-90.00	-2,361.9	-4.8	416.5	352.0	64.47	6.461				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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		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	101.11	-18.2	92.5	110.7					
100.0	100.0	42.0	42.0	0.1	0.1	101.11	-18.2	92.5	94.3	94.1	0.22	425.043		
200.0	200.0	142.0	142.0	0.3	0.2	101.11	-18.2	92.5	94.3	93.7	0.57	165.169 CC, ES		
300.0	300.0	242.0	242.0	0.5	0.4	167.27	-18.2	92.5	95.1	94.2	0.92	103.430		
400.0	400.0	342.0	342.0	0.7	0.6	167.60	-18.2	92.5	97.7	96.4	1.27	77.001		
500.0	499.9	441.9	441.9	0.9	0.8	168.08	-18.2	92.5	101.6	100.0	1.62	62.785		
600.0	599.8	541.8	541.8	1.0	0.9	168.53	-18.2	92.5	105.6	103.6	1.97	53.662		
700.0	699.7	641.7	641.7	1.2	1.1	168.96	-18.2	92.5	109.6	107.2	2.32	47.293		
800.0	799.6	741.6	741.6	1.4	1.3	169.35	-18.2	92.5	113.5	110.9	2.67	42.596		
900.0	899.5	841.5	841.5	1.6	1.5	169.72	-18.2	92.5	117.5	114.5	3.01	38.989		
1,000.0	999.5	941.5	941.5	1.8	1.6	170.06	-18.2	92.5	121.5	118.2	3.36	36.132		
1,100.0	1,099.4	1,041.4	1,041.4	2.0	1.8	170.38	-18.2	92.5	125.6	121.8	3.71	33.814		
1,200.0	1,199.3	1,141.3	1,141.3	2.2	2.0	170.68	-18.2	92.5	129.6	125.5	4.06	31.896		
1,300.0	1,299.2	1,241.2	1,241.2	2.4	2.2	170.96	-18.2	92.5	133.6	129.2	4.41	30.282		
1,400.0	1,399.1	1,341.1	1,341.1	2.5	2.3	171.23	-18.2	92.5	137.6	132.8	4.76	28.906		
1,500.0	1,499.1	1,441.1	1,441.1	2.7	2.5	171.48	-18.2	92.5	141.6	136.5	5.11	27.718		
1,600.0	1,599.0	1,541.0	1,541.0	2.9	2.7	171.72	-18.2	92.5	145.6	140.2	5.46	26.683		
1,700.0	1,698.9	1,640.9	1,640.9	3.1	2.9	171.94	-18.2	92.5	149.7	143.9	5.81	25.772		
1,800.0	1,798.8	1,740.8	1,740.8	3.3	3.0	172.15	-18.2	92.5	153.7	147.5	6.16	24.966		
1,900.0	1,898.7	1,840.7	1,840.7	3.5	3.2	172.35	-18.2	92.5	157.7	151.2	6.51	24.246		
2,000.0	1,998.6	1,940.6	1,940.6	3.7	3.4	172.55	-18.2	92.5	161.8	154.9	6.85	23.600		
2,100.0	2,098.6	2,040.6	2,040.6	3.9	3.6	172.73	-18.2	92.5	165.8	158.6	7.20	23.016		
2,200.0	2,198.5	2,140.5	2,140.5	4.1	3.7	172.90	-18.2	92.5	169.8	162.3	7.55	22.487		
2,300.0	2,298.4	2,240.4	2,240.4	4.2	3.9	173.07	-18.2	92.5	173.9	166.0	7.90	22.005		
2,400.0	2,398.3	2,340.3	2,340.3	4.4	4.1	173.22	-18.2	92.5	177.9	169.6	8.25	21.563		
2,500.0	2,498.2	2,440.2	2,440.2	4.6	4.3	173.38	-18.2	92.5	181.9	173.3	8.60	21.158		
2,600.0	2,598.1	2,540.1	2,540.1	4.8	4.4	173.52	-18.2	92.5	186.0	177.0	8.95	20.785		
2,700.0	2,698.1	2,640.1	2,640.1	5.0	4.6	173.66	-18.2	92.5	190.0	180.7	9.30	20.439		
2,800.0	2,798.0	2,740.0	2,740.0	5.2	4.8	173.79	-18.2	92.5	194.0	184.4	9.65	20.119		
2,900.0	2,897.9	2,839.9	2,839.9	5.4	5.0	173.92	-18.2	92.5	198.1	188.1	9.99	19.821		
3,000.0	2,997.8	2,939.8	2,939.8	5.6	5.1	174.04	-18.2	92.5	202.1	191.8	10.34	19.544		
3,100.0	3,097.7	3,039.7	3,039.7	5.7	5.3	174.16	-18.2	92.5	206.2	195.5	10.69	19.284		
3,200.0	3,197.6	3,139.6	3,139.6	5.9	5.5	174.27	-18.2	92.5	210.2	199.2	11.04	19.041		
3,300.0	3,297.6	3,239.6	3,239.6	6.1	5.7	174.38	-18.2	92.5	214.3	202.9	11.39	18.813		
3,400.0	3,397.5	3,339.5	3,339.5	6.3	5.8	174.48	-18.2	92.5	218.3	206.6	11.74	18.599		
3,500.0	3,497.4	3,439.4	3,439.4	6.5	6.0	174.58	-18.2	92.5	222.4	210.3	12.09	18.397		
3,600.0	3,597.3	3,539.3	3,539.3	6.7	6.2	174.68	-18.2	92.5	226.4	214.0	12.44	18.206		
3,700.0	3,697.2	3,639.2	3,639.2	6.9	6.4	174.78	-18.2	92.5	230.5	217.7	12.78	18.026		
3,800.0	3,797.2	3,739.2	3,739.2	7.1	6.5	174.87	-18.2	92.5	234.5	221.4	13.13	17.856		
3,900.0	3,897.1	3,839.1	3,839.1	7.3	6.7	174.95	-18.2	92.5	238.6	225.1	13.48	17.694		
4,000.0	3,997.0	3,939.0	3,939.0	7.4	6.9	175.04	-18.2	92.5	242.6	228.8	13.83	17.541		
4,100.0	4,096.9	4,038.9	4,038.9	7.6	7.0	175.12	-18.2	92.5	246.7	232.5	14.18	17.395		
4,200.0	4,196.8	4,138.8	4,138.8	7.8	7.2	175.20	-18.2	92.5	250.7	236.2	14.53	17.256		
4,300.0	4,296.7	4,238.7	4,238.7	8.0	7.4	175.27	-18.2	92.5	254.8	239.9	14.88	17.124		
4,400.0	4,396.7	4,338.7	4,338.7	8.2	7.6	175.35	-18.2	92.5	258.8	243.6	15.23	16.998		
4,500.0	4,496.6	4,438.6	4,438.6	8.4	7.7	175.42	-18.2	92.5	262.9	247.3	15.58	16.877		
4,600.0	4,596.5	4,538.5	4,538.5	8.6	7.9	175.49	-18.2	92.5	266.9	251.0	15.92	16.762		
4,700.0	4,696.4	4,638.4	4,638.4	8.8	8.1	175.56	-18.2	92.5	271.0	254.7	16.27	16.652		
4,800.0	4,796.3	4,738.3	4,738.3	8.9	8.3	175.62	-18.2	92.5	275.0	258.4	16.62	16.546		
4,900.0	4,896.2	4,838.2	4,838.2	9.1	8.4	175.69	-18.2	92.5	279.1	262.1	16.97	16.445		
5,000.0	4,996.2	4,938.2	4,938.2	9.3	8.6	175.75	-18.2	92.5	283.1	265.8	17.32	16.348		
5,100.0	5,096.1	5,038.1	5,038.1	9.5	8.8	175.81	-18.2	92.5	287.2	269.5	17.67	16.255		

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 4B-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 4B-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							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	5,196.0	5,138.0	5,138.0	9.7	9.0	175.87	-18.2	92.5	291.2	273.2	18.02	16.165		
5,300.0	5,295.9	5,237.9	5,237.9	9.9	9.1	175.92	-18.2	92.5	295.3	276.9	18.37	16.079		
5,400.0	5,395.8	5,337.8	5,337.8	10.1	9.3	175.98	-18.2	92.5	299.4	280.6	18.71	15.996		
5,500.0	5,495.7	5,437.7	5,437.7	10.3	9.5	176.03	-18.2	92.5	303.4	284.4	19.06	15.916		
5,600.0	5,595.7	5,537.7	5,537.7	10.5	9.7	176.09	-18.2	92.5	307.5	288.1	19.41	15.839		
5,700.0	5,695.6	5,637.6	5,637.6	10.6	9.8	176.14	-18.2	92.5	311.5	291.8	19.76	15.764		
5,800.0	5,795.5	5,737.5	5,737.5	10.8	10.0	176.19	-18.2	92.5	315.6	295.5	20.11	15.693		
5,900.0	5,895.4	5,837.4	5,837.4	11.0	10.2	176.24	-18.2	92.5	319.6	299.2	20.46	15.623		
6,000.0	5,995.3	5,937.3	5,937.3	11.2	10.4	176.28	-18.2	92.5	323.7	302.9	20.81	15.557		
6,100.0	6,095.2	6,037.2	6,037.2	11.4	10.5	176.33	-18.2	92.5	327.8	306.6	21.16	15.492		
6,200.0	6,195.2	6,137.2	6,137.2	11.6	10.7	176.37	-18.2	92.5	331.8	310.3	21.51	15.429		
6,300.0	6,295.1	6,237.1	6,237.1	11.8	10.9	176.42	-18.2	92.5	335.9	314.0	21.85	15.369		
6,400.0	6,395.0	6,337.0	6,337.0	12.0	11.1	176.46	-18.2	92.5	339.9	317.7	22.20	15.310		
6,500.0	6,494.9	6,436.9	6,436.9	12.2	11.2	176.50	-18.2	92.5	344.0	321.4	22.55	15.253		
6,600.0	6,594.8	6,536.8	6,536.8	12.3	11.4	176.54	-18.2	92.5	348.0	325.1	22.90	15.198		
6,700.0	6,694.8	6,636.8	6,636.8	12.5	11.6	176.58	-18.2	92.5	352.1	328.9	23.25	15.144		
6,800.0	6,794.7	6,736.7	6,736.7	12.7	11.8	176.62	-18.2	92.5	356.2	332.6	23.60	15.093		
6,900.0	6,894.6	6,836.6	6,836.6	12.9	11.9	176.66	-18.2	92.5	360.2	336.3	23.95	15.042		
7,000.0	6,994.5	6,936.5	6,936.5	13.1	12.1	176.70	-18.2	92.5	364.3	340.0	24.30	14.993		
7,100.0	7,094.4	7,036.4	7,036.4	13.3	12.3	176.73	-18.2	92.5	368.3	343.7	24.65	14.946		
7,200.0	7,194.3	7,136.3	7,136.3	13.5	12.5	-89.76	-18.2	92.5	371.1	346.1	24.99	14.846		
7,300.0	7,294.2	7,234.4	7,234.4	13.6	12.6	-79.60	-18.2	92.5	368.3	343.0	25.30	14.556		
7,400.0	7,385.9	7,327.9	7,327.9	13.7	12.8	-82.31	-18.2	92.5	362.2	336.6	25.63	14.132		
7,500.0	7,471.9	7,413.9	7,413.9	13.9	12.9	-88.44	-18.2	92.5	357.5	331.5	26.00	13.749		
7,522.4	7,489.9	7,431.9	7,431.9	13.9	13.0	-90.00	-18.2	92.5	357.2	331.2	26.09	13.693 SF		
7,600.0	7,547.8	7,489.8	7,489.8	14.1	13.1	-95.31	-18.2	92.5	360.6	334.3	26.34	13.694		
7,700.0	7,611.3	7,553.3	7,553.3	14.5	13.2	-100.79	-18.2	92.5	378.1	351.5	26.61	14.209		
7,800.0	7,660.4	7,602.4	7,602.4	15.0	13.3	-103.26	-18.2	92.5	413.8	386.8	27.03	15.307		
7,900.0	7,693.8	7,635.8	7,635.8	15.7	13.3	-101.58	-18.2	92.5	467.3	439.4	27.89	16.753		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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 33-5 (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 (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
11,200.0	7,712.0	8,011.6	7,758.6	66.6	30.9	-91.00	-3,963.6	61.9	442.0	346.8	95.12	4.646		
11,300.0	7,712.0	8,012.7	7,759.7	68.3	30.9	-91.23	-3,963.6	61.9	367.0	270.2	96.84	3.790		
11,400.0	7,712.0	8,013.8	7,760.8	70.0	30.9	-91.47	-3,963.6	61.8	306.6	208.1	98.55	3.111		
11,500.0	7,712.0	8,015.0	7,762.0	71.7	30.9	-91.72	-3,963.7	61.8	270.9	170.6	100.27	2.701		
11,553.3	7,712.0	8,015.6	7,762.6	72.6	30.9	-91.85	-3,963.7	61.8	265.6	164.4	101.18	2.625 CC, ES, SF		
11,600.0	7,712.0	8,016.1	7,763.1	73.4	30.9	-91.96	-3,963.7	61.8	269.6	167.7	101.98	2.644		
11,700.0	7,712.0	8,017.3	7,764.2	75.2	30.9	-92.21	-3,963.7	61.7	303.4	199.7	103.69	2.926		
11,800.0	7,712.0	8,018.4	7,765.4	76.9	30.9	-92.46	-3,963.7	61.7	362.5	257.1	105.40	3.439		
11,900.0	7,712.0	8,019.6	7,766.6	78.6	30.9	-92.72	-3,963.7	61.7	436.7	329.6	107.11	4.077		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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 4-6-5 (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 (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
11,700.0	7,712.0	7,969.2	7,766.8	75.2	28.9	92.19	-4,540.9	-423.6	480.7	385.0	95.69	5.023		
11,800.0	7,712.0	7,968.1	7,765.7	76.9	28.9	91.91	-4,540.9	-423.6	395.8	298.3	97.44	4.062		
11,900.0	7,712.0	7,967.0	7,764.6	78.6	28.9	91.64	-4,540.9	-423.7	319.7	220.6	99.18	3.224		
12,000.0	7,712.0	7,965.9	7,763.4	80.3	28.9	91.35	-4,540.9	-423.7	260.4	159.5	100.93	2.580		
12,100.0	7,712.0	7,964.7	7,762.3	82.1	28.9	91.07	-4,541.0	-423.7	231.1	128.5	102.67	2.251		
12,122.0	7,712.0	7,964.5	7,762.1	82.4	28.9	91.01	-4,541.0	-423.7	230.1	127.0	103.06	2.233	CC, ES, SF	
12,200.0	7,712.0	7,963.6	7,761.2	83.8	28.9	90.79	-4,541.0	-423.7	242.9	138.5	104.41	2.327		
12,300.0	7,712.0	7,962.4	7,760.0	85.5	28.9	90.50	-4,541.0	-423.7	290.9	184.7	106.16	2.740		
12,400.0	7,712.0	7,961.2	7,758.8	87.2	28.9	90.20	-4,541.0	-423.8	360.8	252.9	107.90	3.344		
12,500.0	7,712.0	7,960.0	7,757.6	89.0	28.9	89.90	-4,541.0	-423.8	442.5	332.8	109.64	4.036		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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: 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	1.0	1.0	0.0	0.0	-139.89	-6.0	-5.0	7.8					
100.0	100.0	101.0	101.0	0.1	0.2	-139.89	-6.0	-5.0	7.8	7.5	0.30	26.169		
166.3	166.3	167.3	167.3	0.3	0.3	-139.89	-6.0	-5.0	7.8	7.3	0.53	14.737 CC		
200.0	200.0	201.0	201.0	0.3	0.3	-139.89	-6.0	-5.0	7.8	7.2	0.65	12.062		
300.0	300.0	300.9	300.9	0.5	0.5	-74.15	-5.8	-5.9	8.0	7.0	1.00	7.979 ES		
400.0	400.0	400.9	400.8	0.7	0.7	-75.20	-5.1	-8.5	8.4	7.1	1.36	6.202		
500.0	499.9	500.8	500.7	0.9	0.9	-74.43	-4.1	-12.7	9.3	7.5	1.72	5.368		
600.0	599.8	600.7	600.4	1.0	1.1	-66.09	-2.7	-18.6	11.0	8.9	2.10	5.226		
700.0	699.7	700.6	700.0	1.2	1.3	-55.63	-0.9	-25.9	13.8	11.3	2.46	5.600		
800.0	799.6	800.5	799.6	1.4	1.5	-48.61	0.9	-33.4	17.0	14.2	2.82	6.030		
900.0	899.5	900.4	899.3	1.6	1.7	-43.86	2.7	-40.8	20.4	17.2	3.17	6.422		
1,000.0	999.5	1,000.4	998.9	1.8	1.9	-40.48	4.5	-48.2	23.8	20.3	3.52	6.765		
1,100.0	1,099.4	1,100.3	1,098.5	2.0	2.1	-37.97	6.3	-55.6	27.4	23.5	3.88	7.063		
1,200.0	1,199.3	1,200.2	1,198.2	2.2	2.3	-36.03	8.1	-63.0	31.0	26.7	4.23	7.321		
1,300.0	1,299.2	1,300.2	1,297.8	2.4	2.6	-34.50	9.9	-70.4	34.6	30.0	4.58	7.545		
1,400.0	1,399.1	1,400.1	1,397.5	2.5	2.8	-33.26	11.7	-77.8	38.2	33.3	4.93	7.741		
1,500.0	1,499.1	1,500.0	1,497.1	2.7	3.0	-32.24	13.5	-85.3	41.8	36.6	5.29	7.914		
1,600.0	1,599.0	1,600.0	1,596.7	2.9	3.2	-31.37	15.3	-92.7	45.5	39.9	5.64	8.068		
1,700.0	1,698.9	1,699.9	1,696.4	3.1	3.4	-30.64	17.1	-100.1	49.2	43.2	5.99	8.204		
1,800.0	1,798.8	1,799.8	1,796.0	3.3	3.7	-30.01	18.9	-107.5	52.8	46.5	6.34	8.327		
1,900.0	1,898.7	1,899.8	1,895.6	3.5	3.9	-29.46	20.7	-114.9	56.5	49.8	6.70	8.437		
2,000.0	1,998.6	1,999.7	1,995.3	3.7	4.1	-28.98	22.5	-122.3	60.2	53.1	7.05	8.537		
2,100.0	2,098.6	2,099.6	2,094.9	3.9	4.3	-28.55	24.3	-129.8	63.9	56.5	7.40	8.629		
2,200.0	2,198.5	2,199.6	2,194.6	4.1	4.5	-28.17	26.1	-137.2	67.6	59.8	7.76	8.712		
2,300.0	2,298.4	2,299.5	2,294.2	4.2	4.7	-27.83	27.9	-144.6	71.3	63.1	8.11	8.788		
2,400.0	2,398.3	2,399.4	2,393.8	4.4	5.0	-27.53	29.7	-152.0	74.9	66.5	8.46	8.858		
2,500.0	2,498.2	2,499.3	2,493.5	4.6	5.2	-27.25	31.5	-159.4	78.6	69.8	8.81	8.923		
2,600.0	2,598.1	2,599.3	2,593.1	4.8	5.4	-27.00	33.3	-166.8	82.3	73.2	9.17	8.983		
2,700.0	2,698.1	2,699.2	2,692.8	5.0	5.6	-26.76	35.1	-174.3	86.0	76.5	9.52	9.038		
2,800.0	2,798.0	2,799.1	2,792.4	5.2	5.8	-26.55	36.9	-181.7	89.7	79.9	9.87	9.090		
2,900.0	2,897.9	2,899.1	2,892.0	5.4	6.1	-26.36	38.7	-189.1	93.4	83.2	10.22	9.138		
3,000.0	2,997.8	2,999.0	2,991.7	5.6	6.3	-26.18	40.5	-196.5	97.1	86.6	10.58	9.183		
3,100.0	3,097.7	3,098.9	3,091.3	5.7	6.5	-26.01	42.3	-203.9	100.8	89.9	10.93	9.226		
3,200.0	3,197.6	3,198.9	3,191.0	5.9	6.7	-25.85	44.1	-211.3	104.5	93.3	11.28	9.265		
3,300.0	3,297.6	3,298.8	3,290.6	6.1	6.9	-25.71	45.9	-218.7	108.2	96.6	11.64	9.303		
3,400.0	3,397.5	3,398.7	3,390.2	6.3	7.2	-25.57	47.7	-226.2	111.9	100.0	11.99	9.338		
3,500.0	3,497.4	3,498.7	3,489.9	6.5	7.4	-25.45	49.5	-233.6	115.7	103.3	12.34	9.371		
3,600.0	3,597.3	3,598.6	3,589.5	6.7	7.6	-25.33	51.3	-241.0	119.4	106.7	12.69	9.403		
3,700.0	3,697.2	3,698.5	3,689.2	6.9	7.8	-25.22	53.1	-248.4	123.1	110.0	13.05	9.432		
3,800.0	3,797.2	3,798.4	3,788.8	7.1	8.0	-25.11	54.9	-255.8	126.8	113.4	13.40	9.461		
3,900.0	3,897.1	3,898.4	3,888.4	7.3	8.3	-25.01	56.7	-263.2	130.5	116.7	13.75	9.487		
4,000.0	3,997.0	3,998.3	3,988.1	7.4	8.5	-24.92	58.4	-270.7	134.2	120.1	14.11	9.513		
4,100.0	4,096.9	4,098.2	4,087.7	7.6	8.7	-24.83	60.2	-278.1	137.9	123.4	14.46	9.537		
4,200.0	4,196.8	4,198.2	4,187.3	7.8	8.9	-24.75	62.0	-285.5	141.6	126.8	14.81	9.560		
4,300.0	4,296.7	4,298.1	4,287.0	8.0	9.1	-24.67	63.8	-292.9	145.3	130.1	15.16	9.582		
4,400.0	4,396.7	4,398.0	4,386.6	8.2	9.4	-24.59	65.6	-300.3	149.0	133.5	15.52	9.604		
4,500.0	4,496.6	4,498.0	4,486.3	8.4	9.6	-24.52	67.4	-307.7	152.7	136.9	15.87	9.624		
4,600.0	4,596.5	4,597.9	4,585.9	8.6	9.8	-24.45	69.2	-315.2	156.4	140.2	16.22	9.643		
4,700.0	4,696.4	4,697.8	4,685.5	8.8	10.0	-24.39	71.0	-322.6	160.1	143.6	16.58	9.661		
4,800.0	4,796.3	4,797.8	4,785.2	8.9	10.2	-24.32	72.8	-330.0	163.9	146.9	16.93	9.679		
4,900.0	4,896.2	4,897.7	4,884.8	9.1	10.5	-24.26	74.6	-337.4	167.6	150.3	17.28	9.696		
5,000.0	4,996.2	4,997.6	4,984.5	9.3	10.7	-24.21	76.4	-344.8	171.3	153.6	17.63	9.713		

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 4B-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 4B-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			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,096.1	5,097.5	5,084.1	9.5	10.9	-24.15	78.2	-352.2	175.0	157.0	17.99	9.728		
5,200.0	5,196.0	5,197.5	5,183.7	9.7	11.1	-24.10	80.0	-359.6	178.7	160.4	18.34	9.743		
5,300.0	5,295.9	5,297.4	5,283.4	9.9	11.3	-24.05	81.8	-367.1	182.4	163.7	18.69	9.758		
5,400.0	5,395.8	5,397.3	5,383.0	10.1	11.5	-24.00	83.6	-374.5	186.1	167.1	19.05	9.772		
5,500.0	5,495.7	5,497.3	5,482.7	10.3	11.8	-23.95	85.4	-381.9	189.8	170.4	19.40	9.785		
5,600.0	5,595.7	5,597.2	5,582.3	10.5	12.0	-23.91	87.2	-389.3	193.5	173.8	19.75	9.799		
5,700.0	5,695.6	5,697.1	5,681.9	10.6	12.2	-23.87	89.0	-396.7	197.2	177.1	20.10	9.811		
5,800.0	5,795.5	5,797.1	5,781.6	10.8	12.4	-23.83	90.8	-404.1	201.0	180.5	20.46	9.823		
5,900.0	5,895.4	5,897.0	5,881.2	11.0	12.6	-23.79	92.6	-411.6	204.7	183.9	20.81	9.835		
6,000.0	5,995.3	5,996.9	5,980.9	11.2	12.9	-23.75	94.4	-419.0	208.4	187.2	21.16	9.846		
6,100.0	6,095.2	6,096.9	6,080.5	11.4	13.1	-23.71	96.2	-426.4	212.1	190.6	21.52	9.857		
6,200.0	6,195.2	6,196.8	6,180.1	11.6	13.3	-23.67	98.0	-433.8	215.8	193.9	21.87	9.868		
6,300.0	6,295.1	6,296.7	6,279.8	11.8	13.5	-23.64	99.8	-441.2	219.5	197.3	22.22	9.878		
6,400.0	6,395.0	6,396.7	6,379.4	12.0	13.7	-23.61	101.6	-448.6	223.2	200.7	22.57	9.888		
6,500.0	6,494.9	6,496.6	6,479.1	12.2	14.0	-23.57	103.4	-456.1	226.9	204.0	22.93	9.898		
6,600.0	6,594.8	6,596.5	6,578.7	12.3	14.2	-23.54	105.2	-463.5	230.6	207.4	23.28	9.907		
6,700.0	6,694.8	6,696.4	6,678.3	12.5	14.4	-23.51	107.0	-470.9	234.4	210.7	23.63	9.916		
6,800.0	6,794.7	6,796.4	6,778.0	12.7	14.6	-23.48	108.8	-478.3	238.1	214.1	23.99	9.925		
6,900.0	6,894.6	6,896.4	6,877.7	12.9	14.8	-23.65	109.8	-485.7	241.8	217.4	24.34	9.933		
7,000.0	6,994.5	6,994.5	6,974.7	13.1	15.0	-26.78	98.0	-492.9	245.8	221.1	24.76	9.929		
7,100.0	7,094.4	7,085.6	7,061.8	13.3	15.2	-32.92	72.3	-499.4	252.8	227.5	25.25	10.011		
7,200.0	7,194.3	7,168.0	7,136.1	13.5	15.3	52.89	37.5	-505.0	266.3	240.5	25.79	10.326		
7,300.0	7,292.4	7,250.0	7,204.5	13.6	15.4	58.38	-7.5	-510.0	284.2	258.1	26.10	10.889		
7,400.0	7,385.9	7,321.7	7,258.4	13.7	15.6	55.40	-54.4	-514.1	304.1	278.1	26.01	11.692		
7,500.0	7,471.9	7,400.0	7,310.2	13.9	15.9	51.51	-113.0	-517.9	324.1	298.6	25.52	12.701		
7,600.0	7,547.8	7,466.6	7,347.6	14.1	16.2	48.54	-168.0	-520.7	342.6	317.8	24.80	13.816		
7,700.0	7,611.3	7,537.0	7,379.9	14.5	16.5	46.07	-230.4	-523.1	358.6	334.6	24.06	14.904		
7,800.0	7,660.4	7,600.0	7,402.2	15.0	16.9	44.38	-289.3	-524.8	371.5	347.9	23.63	15.724		
7,900.0	7,693.8	7,675.3	7,420.2	15.7	17.5	43.20	-362.4	-526.1	380.5	356.6	23.84	15.957		
8,000.0	7,710.2	7,750.0	7,428.4	16.6	18.1	42.70	-436.6	-526.7	385.5	360.6	24.92	15.469		
8,100.0	7,712.0	7,829.0	7,429.0	17.6	18.9	42.78	-515.5	-526.8	387.0	360.5	26.47	14.618		
8,200.0	7,712.0	7,929.0	7,429.0	18.7	19.9	42.97	-615.5	-526.8	388.2	360.1	28.09	13.820		
8,300.0	7,712.0	8,028.9	7,429.0	19.9	21.1	43.16	-715.5	-526.8	389.4	359.5	29.83	13.054		
8,400.0	7,712.0	8,128.9	7,429.0	21.2	22.3	43.35	-815.5	-526.8	390.6	358.9	31.67	12.331		
8,500.0	7,712.0	8,228.9	7,429.0	22.5	23.6	43.53	-915.5	-526.8	391.8	358.2	33.61	11.656		
8,600.0	7,712.0	8,328.9	7,429.0	23.9	24.9	43.72	-1,015.4	-526.8	393.0	357.3	35.63	11.029		
8,700.0	7,712.0	8,428.9	7,429.0	25.4	26.3	43.90	-1,115.4	-526.8	394.2	356.5	37.72	10.450		
8,800.0	7,712.0	8,528.9	7,429.0	26.9	27.7	44.08	-1,215.4	-526.8	395.4	355.5	39.87	9.917		
8,900.0	7,712.0	8,628.9	7,429.0	28.4	29.2	44.26	-1,315.4	-526.8	396.6	354.5	42.08	9.425		
9,000.0	7,712.0	8,728.8	7,429.0	29.9	30.7	44.44	-1,415.4	-526.8	397.8	353.5	44.34	8.973		
9,100.0	7,712.0	8,828.8	7,429.0	31.5	32.2	44.62	-1,515.4	-526.8	399.1	352.4	46.64	8.556		
9,200.0	7,712.0	8,928.8	7,429.0	33.1	33.7	44.80	-1,615.4	-526.8	400.3	351.3	48.98	8.172		
9,300.0	7,712.0	9,028.8	7,429.0	34.7	35.3	44.98	-1,715.3	-526.8	401.5	350.2	51.36	7.818		
9,400.0	7,712.0	9,128.8	7,429.0	36.3	36.9	45.15	-1,815.3	-526.8	402.7	349.0	53.77	7.490		
9,500.0	7,712.0	9,228.8	7,429.0	37.9	38.5	45.33	-1,915.3	-526.8	404.0	347.8	56.22	7.186		
9,600.0	7,712.0	9,328.8	7,429.0	39.5	40.1	45.50	-2,015.3	-526.8	405.2	346.5	58.69	6.905		
9,700.0	7,712.0	9,428.7	7,429.0	41.2	41.7	45.67	-2,115.3	-526.8	406.5	345.3	61.19	6.643		
9,800.0	7,712.0	9,528.7	7,429.0	42.8	43.3	45.85	-2,215.3	-526.8	407.7	344.0	63.71	6.399		
9,900.0	7,712.0	9,628.7	7,429.0	44.5	45.0	46.02	-2,315.2	-526.8	409.0	342.7	66.26	6.172		
10,000.0	7,712.0	9,728.7	7,429.0	46.2	46.6	46.18	-2,415.2	-526.8	410.2	341.4	68.84	5.960		
10,100.0	7,712.0	9,828.7	7,429.0	47.9	48.3	46.35	-2,515.2	-526.8	411.5	340.1	71.43	5.761		
10,200.0	7,712.0	9,928.7	7,429.0	49.5	49.9	46.52	-2,615.2	-526.8	412.8	338.7	74.04	5.575		

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 4B-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 4B-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			Distance					Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis		Separation Factor
10,300.0	7,712.0	10,028.6	7,429.0	51.2	51.6	46.69	-2,715.2	-526.8	414.0	337.4	76.68	5.400	
10,400.0	7,712.0	10,128.6	7,429.0	52.9	53.3	46.85	-2,815.2	-526.8	415.3	336.0	79.33	5.235	
10,500.0	7,712.0	10,228.6	7,429.0	54.6	55.0	47.02	-2,915.2	-526.8	416.6	334.6	82.00	5.080	
10,600.0	7,712.0	10,328.6	7,429.0	56.3	56.7	47.18	-3,015.1	-526.8	417.9	333.2	84.68	4.934	
10,700.0	7,712.0	10,428.6	7,429.0	58.0	58.3	47.34	-3,115.1	-526.8	419.1	331.8	87.39	4.796	
10,800.0	7,712.0	10,528.6	7,429.0	59.7	60.0	47.50	-3,215.1	-526.8	420.4	330.3	90.11	4.666	
10,900.0	7,712.0	10,628.6	7,429.0	61.4	61.7	47.66	-3,315.1	-526.8	421.7	328.9	92.84	4.542	
11,000.0	7,712.0	10,728.5	7,429.0	63.1	63.4	47.82	-3,415.1	-526.8	423.0	327.4	95.59	4.425	
11,100.0	7,712.0	10,828.5	7,429.0	64.8	65.1	47.98	-3,515.1	-526.8	424.3	325.9	98.36	4.314	
11,200.0	7,712.0	10,928.5	7,429.0	66.6	66.8	48.14	-3,615.1	-526.8	425.6	324.5	101.13	4.208	
11,300.0	7,712.0	11,028.5	7,429.0	68.3	68.5	48.29	-3,715.0	-526.8	426.9	323.0	103.93	4.108	
11,400.0	7,712.0	11,128.5	7,429.0	70.0	70.2	48.45	-3,815.0	-526.8	428.2	321.5	106.73	4.012	
11,500.0	7,712.0	11,228.5	7,429.0	71.7	72.0	48.60	-3,915.0	-526.8	429.5	320.0	109.55	3.921	
11,600.0	7,712.0	11,328.4	7,429.0	73.4	73.7	48.76	-4,015.0	-526.8	430.8	318.4	112.38	3.834	
11,700.0	7,712.0	11,428.4	7,429.0	75.2	75.4	48.91	-4,115.0	-526.8	432.1	316.9	115.22	3.750	
11,800.0	7,712.0	11,528.4	7,429.0	76.9	77.1	49.06	-4,215.0	-526.8	433.5	315.4	118.08	3.671	
11,900.0	7,712.0	11,628.4	7,429.0	78.6	78.8	49.21	-4,314.9	-526.8	434.8	313.8	120.95	3.595	
12,000.0	7,712.0	11,728.4	7,429.0	80.3	80.5	49.36	-4,414.9	-526.8	436.1	312.3	123.82	3.522	
12,100.0	7,712.0	11,828.4	7,429.0	82.1	82.3	49.51	-4,514.9	-526.8	437.4	310.7	126.71	3.452	
12,200.0	7,712.0	11,928.4	7,429.0	83.8	84.0	49.66	-4,614.9	-526.8	438.8	309.1	129.61	3.385	
12,300.0	7,712.0	12,028.3	7,429.0	85.5	85.7	49.81	-4,714.9	-526.8	440.1	307.6	132.53	3.321	
12,400.0	7,712.0	12,128.3	7,429.0	87.2	87.4	49.95	-4,814.9	-526.8	441.4	306.0	135.45	3.259	
12,500.0	7,712.0	12,228.3	7,429.0	89.0	89.2	50.10	-4,914.9	-526.8	442.8	304.4	138.38	3.200	
12,600.0	7,712.0	12,328.3	7,429.0	90.7	90.9	50.24	-5,014.8	-526.8	444.1	302.8	141.32	3.142	
12,700.0	7,712.0	12,428.3	7,429.0	92.4	92.6	50.38	-5,114.8	-526.8	445.4	301.2	144.27	3.087	
12,800.0	7,712.0	12,528.3	7,429.0	94.2	94.3	50.53	-5,214.8	-526.8	446.8	299.5	147.24	3.034	
12,900.0	7,712.0	12,628.2	7,429.0	95.9	96.1	50.67	-5,314.8	-526.8	448.1	297.9	150.21	2.983	
13,000.0	7,712.0	12,728.2	7,429.0	97.7	97.8	50.81	-5,414.8	-526.8	449.5	296.3	153.19	2.934	
13,081.0	7,712.0	12,809.3	7,429.0	99.1	99.2	50.92	-5,495.8	-526.8	450.6	295.0	155.61	2.896 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	140.50	-6.0	5.0	7.8					
100.0	100.0	100.0	100.0	0.1	0.1	140.50	-6.0	5.0	7.8	7.5	0.30	26.323		
200.0	200.0	200.0	200.0	0.3	0.3	140.50	-6.0	5.0	7.8	7.2	0.65	12.094 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-156.05	-6.0	5.0	8.6	7.6	0.99	8.644		
400.0	400.0	400.0	400.0	0.7	0.7	-161.57	-6.0	5.0	11.0	9.7	1.34	8.216		
500.0	499.9	499.8	499.8	0.9	0.8	-169.42	-5.6	5.7	15.2	13.5	1.69	8.993		
600.0	599.8	599.5	599.5	1.0	1.0	-177.71	-4.4	7.9	20.5	18.5	2.04	10.046		
700.0	699.7	699.3	699.3	1.2	1.2	176.93	-3.0	10.3	26.3	23.9	2.39	10.972		
800.0	799.6	799.1	799.0	1.4	1.4	173.52	-1.7	12.7	32.1	29.4	2.74	11.713		
900.0	899.5	898.9	898.8	1.6	1.6	171.16	-0.3	15.1	38.1	35.0	3.10	12.310		
1,000.0	999.5	998.8	998.6	1.8	1.7	169.45	1.0	17.5	44.1	40.7	3.45	12.798		
1,100.0	1,099.4	1,098.6	1,098.3	2.0	1.9	168.14	2.4	19.9	50.2	46.4	3.80	13.203		
1,200.0	1,199.3	1,198.4	1,198.1	2.2	2.1	167.12	3.8	22.3	56.2	52.1	4.15	13.544		
1,300.0	1,299.2	1,298.2	1,297.9	2.4	2.3	166.30	5.1	24.7	62.3	57.8	4.50	13.835		
1,400.0	1,399.1	1,398.0	1,397.7	2.5	2.5	165.62	6.5	27.2	68.4	63.5	4.85	14.085		
1,500.0	1,499.1	1,497.8	1,497.4	2.7	2.6	165.06	7.8	29.6	74.5	69.3	5.21	14.303		
1,600.0	1,599.0	1,597.6	1,597.2	2.9	2.8	164.58	9.2	32.0	80.6	75.0	5.56	14.495		
1,700.0	1,698.9	1,697.4	1,697.0	3.1	3.0	164.16	10.6	34.4	86.7	80.8	5.91	14.664		
1,800.0	1,798.8	1,797.3	1,796.8	3.3	3.2	163.80	11.9	36.8	92.8	86.5	6.26	14.815		
1,900.0	1,898.7	1,897.1	1,896.5	3.5	3.4	163.49	13.3	39.2	98.9	92.3	6.62	14.950		
2,000.0	1,998.6	1,996.9	1,996.3	3.7	3.5	163.21	14.6	41.6	105.0	98.1	6.97	15.072		
2,100.0	2,098.6	2,096.7	2,096.1	3.9	3.7	162.97	16.0	44.0	111.1	103.8	7.32	15.183		
2,200.0	2,198.5	2,196.5	2,195.8	4.1	3.9	162.74	17.4	46.4	117.3	109.6	7.67	15.283		
2,300.0	2,298.4	2,296.3	2,295.6	4.2	4.1	162.54	18.7	48.8	123.4	115.4	8.02	15.375		
2,400.0	2,398.3	2,396.1	2,395.4	4.4	4.3	162.36	20.1	51.3	129.5	121.1	8.38	15.459		
2,500.0	2,498.2	2,495.9	2,495.2	4.6	4.4	162.20	21.4	53.7	135.6	126.9	8.73	15.537		
2,600.0	2,598.1	2,595.7	2,594.9	4.8	4.6	162.05	22.8	56.1	141.7	132.7	9.08	15.609		
2,700.0	2,698.1	2,695.6	2,694.7	5.0	4.8	161.91	24.2	58.5	147.9	138.4	9.43	15.675		
2,800.0	2,798.0	2,795.4	2,794.5	5.2	5.0	161.79	25.5	60.9	154.0	144.2	9.79	15.737		
2,900.0	2,897.9	2,895.2	2,894.3	5.4	5.2	161.67	26.9	63.3	160.1	150.0	10.14	15.794		
3,000.0	2,997.8	2,995.0	2,994.0	5.6	5.3	161.56	28.2	65.7	166.2	155.8	10.49	15.848		
3,100.0	3,097.7	3,094.8	3,093.8	5.7	5.5	161.46	29.6	68.1	172.4	161.5	10.84	15.898		
3,200.0	3,197.6	3,194.6	3,193.6	5.9	5.7	161.37	30.9	70.5	178.5	167.3	11.19	15.945		
3,300.0	3,297.6	3,294.4	3,293.4	6.1	5.9	161.28	32.3	73.0	184.6	173.1	11.55	15.990		
3,400.0	3,397.5	3,394.2	3,393.1	6.3	6.1	161.20	33.7	75.4	190.8	178.9	11.90	16.031		
3,500.0	3,497.4	3,494.1	3,492.9	6.5	6.2	161.12	35.0	77.8	196.9	184.6	12.25	16.071		
3,600.0	3,597.3	3,593.9	3,592.7	6.7	6.4	161.05	36.4	80.2	203.0	190.4	12.60	16.108		
3,700.0	3,697.2	3,693.7	3,692.4	6.9	6.6	160.98	37.7	82.6	209.1	196.2	12.96	16.143		
3,800.0	3,797.2	3,793.5	3,792.2	7.1	6.8	160.92	39.1	85.0	215.3	202.0	13.31	16.176		
3,900.0	3,897.1	3,893.3	3,892.0	7.3	7.0	160.86	40.5	87.4	221.4	207.7	13.66	16.208		
4,000.0	3,997.0	3,993.1	3,991.8	7.4	7.2	160.80	41.8	89.8	227.5	213.5	14.01	16.238		
4,100.0	4,096.9	4,092.9	4,091.5	7.6	7.3	160.74	43.2	92.2	233.7	219.3	14.37	16.266		
4,200.0	4,196.8	4,192.7	4,191.3	7.8	7.5	160.69	44.5	94.6	239.8	225.1	14.72	16.294		
4,300.0	4,296.7	4,292.5	4,291.1	8.0	7.7	160.64	45.9	97.1	245.9	230.9	15.07	16.319		
4,400.0	4,396.7	4,392.4	4,390.9	8.2	7.9	160.60	47.3	99.5	252.1	236.6	15.42	16.344		
4,500.0	4,496.6	4,492.2	4,490.6	8.4	8.1	160.55	48.6	101.9	258.2	242.4	15.77	16.368		
4,600.0	4,596.5	4,592.0	4,590.4	8.6	8.2	160.51	50.0	104.3	264.3	248.2	16.13	16.391		
4,700.0	4,696.4	4,691.8	4,690.2	8.8	8.4	160.47	51.3	106.7	270.5	254.0	16.48	16.412		
4,800.0	4,796.3	4,791.6	4,790.0	8.9	8.6	160.43	52.7	109.1	276.6	259.8	16.83	16.433		
4,900.0	4,896.2	4,891.4	4,889.7	9.1	8.8	160.40	54.1	111.5	282.7	265.5	17.18	16.453		
5,000.0	4,996.2	4,991.2	4,989.5	9.3	9.0	160.36	55.4	113.9	288.9	271.3	17.54	16.472		
5,100.0	5,096.1	5,091.0	5,089.3	9.5	9.1	160.33	56.8	116.3	295.0	277.1	17.89	16.490		

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 4B-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 4B-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)				
5,200.0	5,196.0	5,190.8	5,189.0	9.7	9.3	160.29	58.1	118.7	301.1	282.9	18.24	16.508		
5,300.0	5,295.9	5,290.7	5,288.8	9.9	9.5	160.26	59.5	121.2	307.3	288.7	18.59	16.525		
5,400.0	5,395.8	5,390.5	5,388.6	10.1	9.7	160.23	60.9	123.6	313.4	294.4	18.95	16.542		
5,500.0	5,495.7	5,490.3	5,488.4	10.3	9.9	160.20	62.2	126.0	319.5	300.2	19.30	16.557		
5,600.0	5,595.7	5,590.1	5,588.1	10.5	10.0	160.18	63.6	128.4	325.6	306.0	19.65	16.573		
5,700.0	5,695.6	5,689.9	5,687.9	10.6	10.2	160.15	64.9	130.8	331.8	311.8	20.00	16.587		
5,800.0	5,795.5	5,789.7	5,787.7	10.8	10.4	160.12	66.3	133.2	337.9	317.6	20.35	16.601		
5,900.0	5,895.4	5,889.5	5,887.5	11.0	10.6	160.10	67.6	135.6	344.0	323.3	20.71	16.615		
6,000.0	5,995.3	5,989.3	5,987.2	11.2	10.8	160.07	69.0	138.0	350.2	329.1	21.06	16.628		
6,100.0	6,095.2	6,089.2	6,087.0	11.4	10.9	160.05	70.4	140.4	356.3	334.9	21.41	16.641		
6,200.0	6,195.2	6,189.0	6,186.8	11.6	11.1	160.03	71.7	142.9	362.4	340.7	21.76	16.654		
6,300.0	6,295.1	6,288.8	6,286.6	11.8	11.3	160.01	73.1	145.3	368.6	346.5	22.12	16.666		
6,400.0	6,395.0	6,388.6	6,386.3	12.0	11.5	159.99	74.4	147.7	374.7	352.2	22.47	16.677		
6,500.0	6,494.9	6,488.4	6,486.1	12.2	11.7	159.97	75.8	150.1	380.8	358.0	22.82	16.689		
6,600.0	6,594.8	6,588.2	6,585.9	12.3	11.9	159.95	77.2	152.5	387.0	363.8	23.17	16.700		
6,700.0	6,694.8	6,688.0	6,685.6	12.5	12.0	159.93	78.5	154.9	393.1	369.6	23.53	16.710		
6,800.0	6,794.7	6,787.8	6,785.4	12.7	12.2	159.91	79.9	157.3	399.2	375.4	23.88	16.720		
6,900.0	6,894.6	6,885.9	6,883.5	12.9	12.4	160.04	80.1	159.7	405.5	381.2	24.22	16.741		
7,000.0	6,994.5	6,979.0	6,975.6	13.1	12.5	161.86	68.2	161.9	412.8	388.3	24.51	16.841		
7,100.0	7,094.4	7,065.6	7,058.6	13.3	12.6	165.29	43.8	163.9	423.0	398.3	24.77	17.075		
7,200.0	7,194.3	7,144.4	7,130.2	13.5	12.8	-95.84	11.0	165.6	437.5	412.5	25.02	17.484		
7,300.0	7,292.4	7,219.8	7,193.8	13.6	12.9	-77.69	-29.3	167.2	453.9	428.6	25.26	17.971		
7,400.0	7,385.9	7,292.8	7,249.9	13.7	13.1	-70.49	-76.0	168.5	470.4	445.0	25.43	18.499		
7,500.0	7,471.9	7,364.1	7,298.5	13.9	13.4	-65.71	-128.1	169.7	486.1	460.5	25.56	19.017		
7,600.0	7,547.8	7,434.0	7,339.5	14.1	13.7	-62.24	-184.6	170.7	499.7	474.0	25.67	19.464		
9,600.0	7,712.0	9,281.8	7,429.0	39.5	39.1	-55.42	-2,015.3	172.9	498.6	432.7	65.98	7.557		
9,700.0	7,712.0	9,381.8	7,429.0	41.2	40.8	-55.30	-2,115.3	172.9	497.2	428.6	68.63	7.245		
9,800.0	7,712.0	9,481.7	7,429.0	42.8	42.4	-55.19	-2,215.3	172.9	495.8	424.5	71.29	6.955		
9,900.0	7,712.0	9,581.7	7,429.0	44.5	44.1	-55.07	-2,315.2	172.9	494.3	420.4	73.94	6.686		
10,000.0	7,712.0	9,681.7	7,429.0	46.2	45.8	-54.96	-2,415.2	172.9	492.9	416.3	76.60	6.435		
10,100.0	7,712.0	9,781.7	7,429.0	47.9	47.5	-54.84	-2,515.2	172.9	491.5	412.2	79.26	6.201		
10,200.0	7,712.0	9,881.7	7,429.0	49.5	49.2	-54.72	-2,615.2	172.9	490.1	408.1	81.92	5.982		
10,300.0	7,712.0	9,981.7	7,429.0	51.2	50.9	-54.60	-2,715.2	172.9	488.6	404.1	84.58	5.777		
10,400.0	7,712.0	10,081.7	7,429.0	52.9	52.6	-54.49	-2,815.2	172.9	487.2	400.0	87.23	5.585		
10,500.0	7,712.0	10,181.6	7,429.0	54.6	54.3	-54.37	-2,915.2	172.9	485.8	395.9	89.89	5.405		
10,600.0	7,712.0	10,281.6	7,429.0	56.3	56.0	-54.25	-3,015.1	172.9	484.4	391.8	92.54	5.235		
10,700.0	7,712.0	10,381.6	7,429.0	58.0	57.7	-54.12	-3,115.1	172.9	483.0	387.8	95.18	5.074		
10,800.0	7,712.0	10,481.6	7,429.0	59.7	59.4	-54.00	-3,215.1	172.9	481.6	383.7	97.82	4.923		
10,900.0	7,712.0	10,581.6	7,429.0	61.4	61.1	-53.88	-3,315.1	172.9	480.1	379.7	100.45	4.780		
11,000.0	7,712.0	10,681.6	7,429.0	63.1	62.8	-53.76	-3,415.1	172.9	478.7	375.7	103.08	4.644		
11,100.0	7,712.0	10,781.6	7,429.0	64.8	64.5	-53.63	-3,515.1	172.9	477.3	371.6	105.70	4.516		
11,200.0	7,712.0	10,881.5	7,429.0	66.6	66.3	-53.51	-3,615.1	172.9	475.9	367.6	108.32	4.394		
11,300.0	7,712.0	10,981.5	7,429.0	68.3	68.0	-53.38	-3,715.0	172.9	474.5	363.6	110.92	4.278		
11,400.0	7,712.0	11,081.5	7,429.0	70.0	69.7	-53.26	-3,815.0	172.9	473.1	359.6	113.52	4.168		
11,500.0	7,712.0	11,181.5	7,429.0	71.7	71.4	-53.13	-3,915.0	172.9	471.7	355.6	116.12	4.062		
11,600.0	7,712.0	11,281.5	7,429.0	73.4	73.1	-53.00	-4,015.0	172.9	470.3	351.6	118.70	3.962		
11,700.0	7,712.0	11,381.5	7,429.0	75.2	74.9	-52.88	-4,115.0	172.9	468.9	347.7	121.28	3.867		
11,800.0	7,712.0	11,481.4	7,429.0	76.9	76.6	-52.75	-4,215.0	172.9	467.5	343.7	123.84	3.775		
11,900.0	7,712.0	11,581.4	7,429.0	78.6	78.3	-52.62	-4,314.9	172.9	466.2	339.8	126.40	3.688		
12,000.0	7,712.0	11,681.4	7,429.0	80.3	80.1	-52.49	-4,414.9	172.9	464.8	335.8	128.95	3.604		
12,100.0	7,712.0	11,781.4	7,429.0	82.1	81.8	-52.35	-4,514.9	172.9	463.4	331.9	131.49	3.524		
12,200.0	7,712.0	11,881.4	7,429.0	83.8	83.5	-52.22	-4,614.9	172.9	462.0	328.0	134.01	3.447		

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 4B-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 4B-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								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning				
12,300.0	7,712.0	11,981.4	7,429.0	85.5	85.3	-52.09	-4,714.9	172.9	460.6	324.1	136.53	3.374					
12,400.0	7,712.0	12,081.4	7,429.0	87.2	87.0	-51.96	-4,814.9	172.9	459.3	320.2	139.04	3.303					
12,500.0	7,712.0	12,181.3	7,429.0	89.0	88.7	-51.82	-4,914.9	172.9	457.9	316.3	141.54	3.235					
12,600.0	7,712.0	12,281.3	7,429.0	90.7	90.5	-51.69	-5,014.8	172.9	456.5	312.5	144.02	3.170					
12,700.0	7,712.0	12,381.3	7,429.0	92.4	92.2	-51.55	-5,114.8	172.9	455.1	308.6	146.50	3.107					
12,800.0	7,712.0	12,481.3	7,429.0	94.2	93.9	-51.41	-5,214.8	172.9	453.8	304.8	148.96	3.046					
12,900.0	7,712.0	12,581.3	7,429.0	95.9	95.7	-51.27	-5,314.8	172.9	452.4	301.0	151.42	2.988					
13,000.0	7,712.0	12,681.3	7,429.0	97.7	97.4	-51.14	-5,414.8	172.9	451.1	297.2	153.86	2.932					
13,081.0	7,712.0	12,758.7	7,429.0	99.1	98.8	-51.03	-5,492.2	172.9	450.0	294.2	155.79	2.888 SF					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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		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	90.31	-0.1	10.0	10.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.31	-0.1	10.0	10.0	9.7	0.30	33.703		
200.0	200.0	200.0	200.0	0.3	0.3	90.31	-0.1	10.0	10.0	9.4	0.65	15.485 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	158.20	-0.1	10.0	10.8	9.8	0.99	10.861		
400.0	400.0	400.0	400.0	0.7	0.7	162.39	-0.1	10.0	13.3	11.9	1.34	9.874 SF		
500.0	499.9	499.9	499.9	0.9	0.8	166.42	-0.1	10.0	17.1	15.4	1.69	10.099		
600.0	599.8	599.5	599.5	1.0	1.0	167.99	0.1	10.8	21.9	19.8	2.04	10.702		
700.0	699.7	698.9	698.8	1.2	1.2	167.43	0.8	13.4	28.2	25.8	2.39	11.784		
800.0	799.6	798.0	797.9	1.4	1.4	165.93	1.8	17.5	36.1	33.3	2.74	13.164		
900.0	899.5	896.9	896.6	1.6	1.6	164.14	3.2	23.4	45.6	42.5	3.09	14.748		
1,000.0	999.5	996.1	995.5	1.8	1.8	162.49	4.9	30.5	56.4	53.0	3.44	16.381		
1,100.0	1,099.4	1,095.5	1,094.6	2.0	2.0	161.33	6.7	37.8	67.3	63.5	3.80	17.743		
1,200.0	1,199.3	1,194.9	1,193.7	2.2	2.2	160.50	8.4	45.0	78.3	74.2	4.15	18.878		
1,300.0	1,299.2	1,294.3	1,292.8	2.4	2.4	159.87	10.2	52.3	89.3	84.8	4.50	19.838		
1,400.0	1,399.1	1,393.6	1,391.9	2.5	2.6	159.38	11.9	59.6	100.2	95.4	4.85	20.660		
1,500.0	1,499.1	1,493.0	1,491.0	2.7	2.8	158.98	13.7	66.8	111.2	106.0	5.20	21.372		
1,600.0	1,599.0	1,592.4	1,590.1	2.9	3.0	158.66	15.5	74.1	122.2	116.7	5.56	21.994		
1,700.0	1,698.9	1,691.8	1,689.3	3.1	3.2	158.39	17.2	81.3	133.2	127.3	5.91	22.543		
1,800.0	1,798.8	1,791.2	1,788.4	3.3	3.4	158.16	19.0	88.6	144.2	137.9	6.26	23.030		
1,900.0	1,898.7	1,890.6	1,887.5	3.5	3.6	157.97	20.7	95.9	155.2	148.6	6.61	23.466		
2,000.0	1,998.6	1,990.0	1,986.6	3.7	3.9	157.80	22.5	103.1	166.2	159.2	6.97	23.858		
2,100.0	2,098.6	2,089.4	2,085.7	3.9	4.1	157.65	24.2	110.4	177.2	169.9	7.32	24.212		
2,200.0	2,198.5	2,188.8	2,184.8	4.1	4.3	157.52	26.0	117.7	188.2	180.5	7.67	24.534		
2,300.0	2,298.4	2,288.2	2,283.9	4.2	4.5	157.40	27.8	124.9	199.2	191.2	8.02	24.828		
2,400.0	2,398.3	2,387.6	2,383.0	4.4	4.7	157.29	29.5	132.2	210.2	201.8	8.38	25.097		
2,500.0	2,498.2	2,487.0	2,482.1	4.6	4.9	157.20	31.3	139.4	221.2	212.5	8.73	25.344		
2,600.0	2,598.1	2,586.4	2,581.3	4.8	5.1	157.11	33.0	146.7	232.2	223.1	9.08	25.572		
2,700.0	2,698.1	2,685.7	2,680.4	5.0	5.4	157.04	34.8	154.0	243.2	233.8	9.43	25.784		
2,800.0	2,798.0	2,785.1	2,779.5	5.2	5.6	156.96	36.5	161.2	254.2	244.4	9.79	25.980		
2,900.0	2,897.9	2,884.5	2,878.6	5.4	5.8	156.90	38.3	168.5	265.2	255.1	10.14	26.162		
3,000.0	2,997.8	2,983.9	2,977.7	5.6	6.0	156.84	40.1	175.8	276.2	265.7	10.49	26.333		
3,100.0	3,097.7	3,083.3	3,076.8	5.7	6.2	156.78	41.8	183.0	287.2	276.4	10.84	26.492		
3,200.0	3,197.6	3,182.7	3,175.9	5.9	6.4	156.73	43.6	190.3	298.2	287.0	11.19	26.641		
3,300.0	3,297.6	3,282.1	3,275.0	6.1	6.7	156.69	45.3	197.5	309.2	297.7	11.55	26.781		
3,400.0	3,397.5	3,381.5	3,374.1	6.3	6.9	156.64	47.1	204.8	320.2	308.3	11.90	26.913		
3,500.0	3,497.4	3,480.9	3,473.3	6.5	7.1	156.60	48.8	212.1	331.3	319.0	12.25	27.037		
3,600.0	3,597.3	3,580.3	3,572.4	6.7	7.3	156.56	50.6	219.3	342.3	329.7	12.60	27.154		
3,700.0	3,697.2	3,679.7	3,671.5	6.9	7.5	156.52	52.4	226.6	353.3	340.3	12.96	27.265		
3,800.0	3,797.2	3,779.1	3,770.6	7.1	7.7	156.49	54.1	233.9	364.3	351.0	13.31	27.370		
3,900.0	3,897.1	3,878.4	3,869.7	7.3	8.0	156.46	55.9	241.1	375.3	361.6	13.66	27.470		
4,000.0	3,997.0	3,977.8	3,968.8	7.4	8.2	156.43	57.6	248.4	386.3	372.3	14.01	27.565		
4,100.0	4,096.9	4,077.2	4,067.9	7.6	8.4	156.40	59.4	255.6	397.3	382.9	14.37	27.655		
4,200.0	4,196.8	4,176.6	4,167.0	7.8	8.6	156.37	61.2	262.9	408.3	393.6	14.72	27.741		
4,300.0	4,296.7	4,276.0	4,266.1	8.0	8.8	156.35	62.9	270.2	419.3	404.2	15.07	27.822		
4,400.0	4,396.7	4,375.4	4,365.3	8.2	9.0	156.32	64.7	277.4	430.3	414.9	15.42	27.900		
4,500.0	4,496.6	4,474.8	4,464.4	8.4	9.3	156.30	66.4	284.7	441.3	425.5	15.78	27.975		
4,600.0	4,596.5	4,574.2	4,563.5	8.6	9.5	156.28	68.2	292.0	452.3	436.2	16.13	28.046		
4,700.0	4,696.4	4,673.6	4,662.6	8.8	9.7	156.26	69.9	299.2	463.3	446.9	16.48	28.114		
4,800.0	4,796.3	4,773.0	4,761.7	8.9	9.9	156.24	71.7	306.5	474.3	457.5	16.83	28.180		
4,900.0	4,896.2	4,872.4	4,860.8	9.1	10.1	156.22	73.5	313.7	485.3	468.2	17.19	28.242		
5,000.0	4,996.2	4,971.8	4,959.9	9.3	10.3	156.20	75.2	321.0	496.4	478.8	17.54	28.302		

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 4B-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 4B-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		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	103.80	-6.1	25.0	25.7					
100.0	100.0	100.0	100.0	0.1	0.1	103.80	-6.1	25.0	25.7	25.4	0.30	86.651		
200.0	200.0	200.0	200.0	0.3	0.3	103.80	-6.1	25.0	25.7	25.1	0.65	39.813 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	170.17	-6.1	25.0	26.6	25.6	0.99	26.709		
400.0	400.0	400.0	400.0	0.7	0.7	171.05	-6.1	25.0	29.2	27.8	1.34	21.698		
500.0	499.9	499.9	499.9	0.9	0.8	172.12	-6.1	25.0	33.1	31.4	1.69	19.546		
600.0	599.8	599.8	599.8	1.0	1.0	172.98	-6.1	25.0	37.1	35.1	2.04	18.179		
700.0	699.7	699.1	699.1	1.2	1.2	173.15	-6.0	25.8	41.9	39.5	2.39	17.547 SF		
800.0	799.6	798.2	798.1	1.4	1.4	172.40	-5.6	28.4	48.3	45.6	2.74	17.644		
900.0	899.5	897.0	896.9	1.6	1.5	171.10	-5.0	32.6	56.3	53.2	3.09	18.229		
1,000.0	999.5	995.6	995.3	1.8	1.7	169.56	-4.1	38.5	65.8	62.4	3.44	19.161		
1,100.0	1,099.4	1,093.8	1,093.2	2.0	1.9	167.95	-3.0	46.0	77.0	73.2	3.79	20.349		
1,200.0	1,199.3	1,191.6	1,190.5	2.2	2.1	166.40	-1.6	55.1	89.9	85.7	4.14	21.734		
1,300.0	1,299.2	1,288.9	1,287.3	2.4	2.4	164.96	0.0	65.9	104.4	99.9	4.49	23.273		
1,400.0	1,399.1	1,386.3	1,383.9	2.5	2.6	163.65	1.9	78.2	120.5	115.6	4.84	24.916		
1,500.0	1,499.1	1,484.9	1,481.6	2.7	2.9	162.60	3.8	91.0	137.0	131.8	5.19	26.413		
1,600.0	1,599.0	1,583.5	1,579.4	2.9	3.1	161.77	5.7	103.9	153.6	148.1	5.54	27.727		
1,700.0	1,698.9	1,682.1	1,677.1	3.1	3.4	161.10	7.6	116.7	170.2	164.3	5.89	28.890		
1,800.0	1,798.8	1,780.7	1,774.8	3.3	3.7	160.55	9.6	129.5	186.8	180.6	6.24	29.925		
1,900.0	1,898.7	1,879.3	1,872.6	3.5	3.9	160.09	11.5	142.4	203.4	196.8	6.59	30.853		
2,000.0	1,998.6	1,977.9	1,970.3	3.7	4.2	159.70	13.4	155.2	220.1	213.1	6.95	31.689		
2,100.0	2,098.6	2,076.5	2,068.0	3.9	4.5	159.36	15.4	168.1	236.7	229.4	7.30	32.446		
2,200.0	2,198.5	2,175.1	2,165.8	4.1	4.7	159.07	17.3	180.9	253.4	245.7	7.65	33.135		
2,300.0	2,298.4	2,273.7	2,263.5	4.2	5.0	158.81	19.2	193.8	270.1	262.1	8.00	33.764		
2,400.0	2,398.3	2,372.3	2,361.3	4.4	5.3	158.59	21.1	206.6	286.7	278.4	8.35	34.341		
2,500.0	2,498.2	2,470.9	2,459.0	4.6	5.6	158.39	23.1	219.4	303.4	294.7	8.70	34.872		
2,600.0	2,598.1	2,569.5	2,556.7	4.8	5.9	158.21	25.0	232.3	320.1	311.0	9.05	35.363		
2,700.0	2,698.1	2,668.1	2,654.5	5.0	6.1	158.04	26.9	245.1	336.7	327.3	9.40	35.817		
2,800.0	2,798.0	2,766.7	2,752.2	5.2	6.4	157.90	28.9	258.0	353.4	343.7	9.75	36.239		
2,900.0	2,897.9	2,865.3	2,849.9	5.4	6.7	157.76	30.8	270.8	370.1	360.0	10.10	36.632		
3,000.0	2,997.8	2,963.9	2,947.7	5.6	7.0	157.64	32.7	283.6	386.8	376.3	10.45	36.999		
3,100.0	3,097.7	3,062.5	3,045.4	5.7	7.3	157.53	34.6	296.5	403.5	392.7	10.80	37.342		
3,200.0	3,197.6	3,161.1	3,143.1	5.9	7.5	157.43	36.6	309.3	420.2	409.0	11.16	37.664		
3,300.0	3,297.6	3,259.7	3,240.9	6.1	7.8	157.33	38.5	322.2	436.9	425.3	11.51	37.967		
3,400.0	3,397.5	3,358.3	3,338.6	6.3	8.1	157.24	40.4	335.0	453.5	441.7	11.86	38.251		
3,500.0	3,497.4	3,456.8	3,436.4	6.5	8.4	157.16	42.3	347.9	470.2	458.0	12.21	38.520		
3,600.0	3,597.3	3,555.4	3,534.1	6.7	8.7	157.08	44.3	360.7	486.9	474.4	12.56	38.773		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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		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	90.31	-0.2	30.0	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.31	-0.2	30.0	30.0	29.7	0.30	101.110		
200.0	200.0	200.0	200.0	0.3	0.3	90.31	-0.2	30.0	30.0	29.4	0.65	46.456 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	157.00	-0.2	30.0	30.8	29.8	0.99	30.959		
400.0	400.0	400.0	400.0	0.7	0.7	158.75	-0.2	30.0	33.2	31.9	1.34	24.717		
500.0	499.9	499.9	499.9	0.9	0.8	160.98	-0.2	30.0	37.0	35.3	1.69	21.818		
600.0	599.8	599.8	599.8	1.0	1.0	162.84	-0.2	30.0	40.8	38.8	2.04	19.977		
700.0	699.7	699.7	699.7	1.2	1.2	164.38	-0.2	30.0	44.7	42.3	2.39	18.691		
800.0	799.6	798.8	798.8	1.4	1.4	165.39	-0.1	30.8	49.5	46.7	2.74	18.054 SF		
900.0	899.5	897.7	897.7	1.6	1.5	165.74	0.2	33.4	55.9	52.8	3.09	18.102		
1,000.0	999.5	996.4	996.3	1.8	1.7	165.59	0.6	37.6	64.0	60.6	3.44	18.621		
1,100.0	1,099.4	1,094.8	1,094.5	2.0	1.9	165.12	1.3	43.5	73.7	69.9	3.78	19.482		
1,200.0	1,199.3	1,192.8	1,192.2	2.2	2.1	164.48	2.0	51.1	85.1	81.0	4.13	20.597		
1,300.0	1,299.2	1,290.5	1,289.4	2.4	2.3	163.75	3.0	60.2	98.2	93.7	4.48	21.908		
1,400.0	1,399.1	1,387.6	1,386.0	2.5	2.5	163.00	4.1	71.0	112.9	108.0	4.83	23.374		
1,500.0	1,499.1	1,484.3	1,481.8	2.7	2.8	162.26	5.4	83.3	129.2	124.0	5.18	24.963		
1,600.0	1,599.0	1,580.4	1,576.9	2.9	3.0	161.56	6.9	97.1	147.2	141.7	5.52	26.653		
1,700.0	1,698.9	1,675.8	1,671.1	3.1	3.3	160.91	8.5	112.4	166.8	160.9	5.87	28.425		
1,800.0	1,798.8	1,771.4	1,765.2	3.3	3.6	160.30	10.2	129.3	188.0	181.8	6.21	30.251		
1,900.0	1,898.7	1,869.0	1,861.2	3.5	3.9	159.79	12.1	146.9	209.6	203.1	6.56	31.940		
2,000.0	1,998.6	1,966.6	1,957.2	3.7	4.3	159.37	13.9	164.6	231.3	224.4	6.91	33.460		
2,100.0	2,098.6	2,064.3	2,053.2	3.9	4.6	159.02	15.8	182.2	253.0	245.7	7.26	34.837		
2,200.0	2,198.5	2,161.9	2,149.1	4.1	4.9	158.73	17.6	199.9	274.6	267.0	7.61	36.089		
2,300.0	2,298.4	2,259.5	2,245.1	4.2	5.2	158.48	19.5	217.5	296.3	288.4	7.96	37.232		
2,400.0	2,398.3	2,357.1	2,341.1	4.4	5.6	158.26	21.3	235.1	318.0	309.7	8.31	38.281		
2,500.0	2,498.2	2,454.7	2,437.1	4.6	5.9	158.07	23.2	252.8	339.7	331.0	8.66	39.245		
2,600.0	2,598.1	2,552.3	2,533.1	4.8	6.3	157.91	25.0	270.4	361.4	352.4	9.00	40.136		
2,700.0	2,698.1	2,649.9	2,629.1	5.0	6.6	157.76	26.9	288.1	383.1	373.7	9.35	40.961		
2,800.0	2,798.0	2,747.5	2,725.1	5.2	7.0	157.63	28.7	305.7	404.8	395.1	9.70	41.727		
2,900.0	2,897.9	2,845.2	2,821.1	5.4	7.3	157.51	30.6	323.4	426.5	416.4	10.05	42.440		
3,000.0	2,997.8	2,942.8	2,917.0	5.6	7.6	157.40	32.4	341.0	448.2	437.8	10.40	43.106		
3,100.0	3,097.7	3,040.4	3,013.0	5.7	8.0	157.31	34.3	358.6	469.9	459.2	10.75	43.729		
3,200.0	3,197.6	3,138.0	3,109.0	5.9	8.3	157.22	36.1	376.3	491.6	480.5	11.09	44.313		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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		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	100.03	-6.2	35.0	35.5					
100.0	100.0	100.0	100.0	0.1	0.1	100.03	-6.2	35.0	35.5					
200.0	200.0	200.0	200.0	0.3	0.3	100.03	-6.2	35.0	35.5	34.9	0.65	54.989 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	166.40	-6.2	35.0	36.4	35.4	0.99	36.548		
400.0	400.0	400.0	400.0	0.7	0.7	167.30	-6.2	35.0	38.9	37.6	1.34	28.955		
500.0	499.9	499.9	499.9	0.9	0.8	168.47	-6.2	35.0	42.8	41.1	1.69	25.278		
600.0	599.8	599.8	599.8	1.0	1.0	169.47	-6.2	35.0	46.8	44.7	2.04	22.910		
700.0	699.7	699.7	699.7	1.2	1.2	170.30	-6.2	35.0	50.8	48.4	2.39	21.240		
800.0	799.6	799.6	799.6	1.4	1.4	171.02	-6.2	35.0	54.8	52.1	2.74	19.998		
900.0	899.5	898.6	898.6	1.6	1.5	171.35	-6.1	35.8	59.6	56.5	3.09	19.310		
1,000.0	999.5	997.4	997.3	1.8	1.7	171.11	-5.9	38.4	66.1	62.6	3.43	19.233 SF		
1,100.0	1,099.4	1,095.9	1,095.8	2.0	1.9	170.47	-5.5	42.6	74.1	70.3	3.78	19.597		
1,200.0	1,199.3	1,194.1	1,193.8	2.2	2.1	169.59	-5.1	48.5	83.8	79.7	4.13	20.293		
1,300.0	1,299.2	1,292.0	1,291.4	2.4	2.3	168.58	-4.4	56.0	95.1	90.7	4.48	21.246		
1,400.0	1,399.1	1,389.5	1,388.5	2.5	2.5	167.53	-3.7	65.2	108.1	103.3	4.83	22.403		
1,500.0	1,499.1	1,486.5	1,484.9	2.7	2.7	166.50	-2.8	75.9	122.8	117.6	5.17	23.724		
1,600.0	1,599.0	1,583.0	1,580.6	2.9	2.9	165.52	-1.7	88.2	139.0	133.5	5.52	25.178		
1,700.0	1,698.9	1,679.0	1,675.5	3.1	3.2	164.61	-0.6	102.0	156.9	151.1	5.87	26.743		
1,800.0	1,798.8	1,774.3	1,769.6	3.3	3.5	163.77	0.7	117.3	176.5	170.3	6.21	28.400		
1,900.0	1,898.7	1,869.0	1,862.8	3.5	3.8	163.00	2.1	134.1	197.7	191.1	6.56	30.134		
2,000.0	1,998.6	1,963.0	1,955.0	3.7	4.1	162.30	3.6	152.2	220.4	213.5	6.90	31.932		
2,100.0	2,098.6	2,056.2	2,046.2	3.9	4.4	161.67	5.3	171.7	244.8	237.6	7.25	33.786		
2,200.0	2,198.5	2,148.7	2,136.2	4.1	4.8	161.09	7.0	192.4	270.7	263.2	7.59	35.686		
2,300.0	2,298.4	2,240.3	2,225.2	4.2	5.2	160.57	8.9	214.4	298.2	290.3	7.93	37.626		
2,400.0	2,398.3	2,334.7	2,316.5	4.4	5.6	160.09	10.9	238.2	326.9	318.6	8.27	39.525		
2,500.0	2,498.2	2,430.4	2,409.1	4.6	6.0	159.67	12.9	262.3	355.6	347.0	8.62	41.273		
2,600.0	2,598.1	2,526.2	2,501.8	4.8	6.4	159.32	14.9	286.5	384.3	375.4	8.96	42.889		
2,700.0	2,698.1	2,621.9	2,594.4	5.0	6.9	159.02	16.9	310.7	413.1	403.8	9.31	44.387		
2,800.0	2,798.0	2,717.7	2,687.0	5.2	7.3	158.76	19.0	334.9	441.9	432.2	9.65	45.780		
2,900.0	2,897.9	2,813.4	2,779.7	5.4	7.8	158.53	21.0	359.0	470.6	460.6	10.00	47.079		
3,000.0	2,997.8	2,909.2	2,872.3	5.6	8.2	158.32	23.0	383.2	499.4	489.1	10.34	48.292		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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 4H-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	40.0	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.31	-0.2	40.0	40.0	39.7	0.30	134.813		
200.0	200.0	200.0	200.0	0.3	0.3	90.31	-0.2	40.0	40.0	39.4	0.65	61.941 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	156.84	-0.2	40.0	40.8	39.8	0.99	41.010		
400.0	400.0	400.0	400.0	0.7	0.7	158.19	-0.2	40.0	43.2	41.9	1.34	32.150		
500.0	499.9	499.9	499.9	0.9	0.8	159.99	-0.2	40.0	46.9	45.2	1.69	27.703		
600.0	599.8	599.8	599.8	1.0	1.0	161.56	-0.2	40.0	50.8	48.7	2.04	24.841		
700.0	699.7	699.7	699.7	1.2	1.2	162.91	-0.2	40.0	54.6	52.2	2.39	22.831		
800.0	799.6	799.6	799.6	1.4	1.4	164.08	-0.2	40.0	58.5	55.8	2.74	21.344		
900.0	899.5	899.5	899.5	1.6	1.5	165.10	-0.2	40.0	62.5	59.4	3.09	20.201		
1,000.0	999.5	998.4	998.3	1.8	1.7	165.82	-0.2	40.8	67.2	63.8	3.44	19.547		
1,100.0	1,099.4	1,097.0	1,096.9	2.0	1.9	166.12	0.0	43.4	73.7	69.9	3.79	19.457 SF		
1,200.0	1,199.3	1,195.3	1,195.2	2.2	2.1	166.08	0.3	47.6	81.8	77.6	4.13	19.785		
1,300.0	1,299.2	1,293.4	1,293.1	2.4	2.3	165.80	0.7	53.5	91.6	87.1	4.48	20.432		
1,400.0	1,399.1	1,391.2	1,390.6	2.5	2.4	165.35	1.2	61.0	103.0	98.1	4.83	21.330		
1,500.0	1,499.1	1,488.5	1,487.4	2.7	2.6	164.81	1.8	70.1	116.1	110.9	5.17	22.427		
1,600.0	1,599.0	1,585.3	1,583.7	2.9	2.9	164.22	2.5	80.8	130.8	125.3	5.52	23.687		
1,700.0	1,698.9	1,681.7	1,679.3	3.1	3.1	163.63	3.3	93.1	147.2	141.3	5.87	25.080		
1,800.0	1,798.8	1,777.5	1,774.1	3.3	3.3	163.05	4.2	106.9	165.2	158.9	6.21	26.584		
1,900.0	1,898.7	1,872.7	1,868.0	3.5	3.6	162.49	5.3	122.2	184.8	178.2	6.56	28.180		
2,000.0	1,998.6	1,967.2	1,961.0	3.7	3.9	161.96	6.4	138.9	206.0	199.1	6.90	29.855		
2,100.0	2,098.6	2,061.0	2,053.1	3.9	4.2	161.47	7.6	157.0	228.9	221.6	7.24	31.597		
2,200.0	2,198.5	2,154.1	2,144.1	4.1	4.6	161.01	8.9	176.4	253.3	245.7	7.58	33.395		
2,300.0	2,298.4	2,246.4	2,234.1	4.2	4.9	160.59	10.3	197.1	279.3	271.3	7.92	35.243		
2,400.0	2,398.3	2,337.9	2,322.9	4.4	5.3	160.20	11.7	219.1	306.8	298.5	8.26	37.131		
2,500.0	2,498.2	2,428.5	2,410.5	4.6	5.7	159.84	13.3	242.2	335.8	327.2	8.60	39.056		
2,600.0	2,598.1	2,518.3	2,496.8	4.8	6.1	159.51	14.9	266.5	366.4	357.4	8.93	41.012		
2,700.0	2,698.1	2,607.1	2,582.0	5.0	6.6	159.20	16.6	291.9	398.4	389.1	9.27	42.994		
2,800.0	2,798.0	2,697.1	2,667.8	5.2	7.0	158.91	18.4	318.8	431.8	422.2	9.60	44.975		
2,900.0	2,897.9	2,791.2	2,757.5	5.4	7.5	158.65	20.3	347.3	465.6	455.6	9.94	46.824		
3,000.0	2,997.8	2,885.3	2,847.2	5.6	8.0	158.42	22.2	375.8	499.3	489.0	10.28	48.551		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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: 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	96.53	-6.3	55.0	55.3					
100.0	100.0	99.0	99.0	0.1	0.1	96.53	-6.3	55.0	55.3	55.0	0.30	187.405		
200.0	200.0	199.0	199.0	0.3	0.3	96.53	-6.3	55.0	55.3	54.7	0.64	85.907 CC		
300.0	300.0	299.6	299.6	0.5	0.5	163.54	-6.9	54.4	55.6	54.6	0.99	55.927 ES		
400.0	400.0	400.1	400.1	0.7	0.7	166.40	-8.8	52.5	56.6	55.3	1.35	41.992		
500.0	499.9	500.6	500.4	0.9	0.9	170.88	-11.9	49.4	58.2	56.5	1.71	34.046		
600.0	599.8	600.8	600.5	1.0	1.1	176.63	-16.2	45.1	59.4	57.3	2.08	28.553		
700.0	699.7	700.9	700.3	1.2	1.3	-176.36	-21.8	39.5	60.7	58.2	2.47	24.558		
800.0	799.6	800.7	799.6	1.4	1.5	-168.45	-28.3	32.9	62.5	59.6	2.87	21.748		
900.0	899.5	900.3	898.8	1.6	1.7	-161.01	-35.0	26.3	65.5	62.2	3.28	19.934		
1,000.0	999.5	999.9	997.9	1.8	2.0	-154.31	-41.6	19.6	69.5	65.8	3.70	18.789		
1,100.0	1,099.4	1,099.5	1,097.1	2.0	2.2	-148.40	-48.3	12.9	74.3	70.2	4.11	18.090		
1,200.0	1,199.3	1,199.1	1,196.3	2.2	2.4	-143.26	-54.9	6.3	79.8	75.3	4.51	17.686		
1,300.0	1,299.2	1,298.7	1,295.4	2.4	2.7	-138.80	-61.6	-0.4	85.9	80.9	4.91	17.478		
1,400.0	1,399.1	1,398.3	1,394.6	2.5	2.9	-134.96	-68.2	-7.0	92.4	87.1	5.31	17.400		
1,500.0	1,499.1	1,497.9	1,493.8	2.7	3.1	-131.63	-74.9	-13.7	99.3	93.6	5.70	17.408		
1,600.0	1,599.0	1,597.6	1,592.9	2.9	3.4	-128.74	-81.5	-20.4	106.4	100.3	6.09	17.471		
1,700.0	1,698.9	1,697.2	1,692.1	3.1	3.6	-126.22	-88.2	-27.0	113.8	107.4	6.48	17.570		
1,800.0	1,798.8	1,796.8	1,791.2	3.3	3.9	-124.01	-94.9	-33.7	121.4	114.6	6.86	17.691		
1,900.0	1,898.7	1,896.4	1,890.4	3.5	4.1	-122.06	-101.5	-40.4	129.2	121.9	7.25	17.825		
2,000.0	1,998.6	1,996.0	1,989.6	3.7	4.3	-120.34	-108.2	-47.0	137.1	129.4	7.63	17.967		
2,100.0	2,098.6	2,095.6	2,088.7	3.9	4.6	-118.80	-114.8	-53.7	145.1	137.1	8.01	18.111		
2,200.0	2,198.5	2,195.2	2,187.9	4.1	4.8	-117.43	-121.5	-60.3	153.2	144.8	8.39	18.255		
2,300.0	2,298.4	2,294.8	2,287.0	4.2	5.0	-116.19	-128.1	-67.0	161.3	152.6	8.77	18.397		
2,400.0	2,398.3	2,394.4	2,386.2	4.4	5.3	-115.07	-134.8	-73.7	169.6	160.4	9.15	18.536		
2,500.0	2,498.2	2,494.0	2,485.4	4.6	5.5	-114.06	-141.4	-80.3	177.9	168.3	9.53	18.671		
2,600.0	2,598.1	2,593.6	2,584.5	4.8	5.8	-113.14	-148.1	-87.0	186.2	176.3	9.90	18.801		
2,700.0	2,698.1	2,693.2	2,683.7	5.0	6.0	-112.29	-154.7	-93.6	194.6	184.3	10.28	18.927		
2,800.0	2,798.0	2,792.8	2,782.9	5.2	6.2	-111.52	-161.4	-100.3	203.0	192.4	10.66	19.048		
2,900.0	2,897.9	2,892.5	2,882.0	5.4	6.5	-110.81	-168.0	-107.0	211.5	200.5	11.04	19.164		
3,000.0	2,997.8	2,992.1	2,981.2	5.6	6.7	-110.15	-174.7	-113.6	220.0	208.6	11.41	19.275		
3,100.0	3,097.7	3,091.7	3,080.3	5.7	6.9	-109.54	-181.3	-120.3	228.5	216.7	11.79	19.382		
3,200.0	3,197.6	3,191.3	3,179.5	5.9	7.2	-108.98	-188.0	-127.0	237.1	224.9	12.17	19.485		
3,300.0	3,297.6	3,290.9	3,278.7	6.1	7.4	-108.45	-194.7	-133.6	245.6	233.1	12.54	19.583		
3,400.0	3,397.5	3,390.5	3,377.8	6.3	7.7	-107.96	-201.3	-140.3	254.2	241.3	12.92	19.677		
3,500.0	3,497.4	3,490.1	3,477.0	6.5	7.9	-107.50	-208.0	-146.9	262.8	249.5	13.30	19.767		
3,600.0	3,597.3	3,589.7	3,576.2	6.7	8.1	-107.08	-214.6	-153.6	271.4	257.8	13.67	19.853		
3,700.0	3,697.2	3,689.3	3,675.3	6.9	8.4	-106.67	-221.3	-160.3	280.1	266.0	14.05	19.936		
3,800.0	3,797.2	3,788.9	3,774.5	7.1	8.6	-106.30	-227.9	-166.9	288.7	274.3	14.42	20.016		
3,900.0	3,897.1	3,888.5	3,873.6	7.3	8.9	-105.94	-234.6	-173.6	297.4	282.6	14.80	20.092		
4,000.0	3,997.0	3,988.1	3,972.8	7.4	9.1	-105.60	-241.2	-180.2	306.0	290.8	15.18	20.166		
4,100.0	4,096.9	4,087.8	4,072.0	7.6	9.3	-105.29	-247.9	-186.9	314.7	299.1	15.55	20.236		
4,200.0	4,196.8	4,187.4	4,171.1	7.8	9.6	-104.99	-254.5	-193.6	323.4	307.5	15.93	20.304		
4,300.0	4,296.7	4,287.0	4,270.3	8.0	9.8	-104.70	-261.2	-200.2	332.1	315.8	16.30	20.369		
4,400.0	4,396.7	4,386.6	4,369.5	8.2	10.1	-104.43	-267.8	-206.9	340.8	324.1	16.68	20.432		
4,500.0	4,496.6	4,486.2	4,468.6	8.4	10.3	-104.17	-274.5	-213.5	349.5	332.4	17.05	20.492		
4,600.0	4,596.5	4,585.8	4,567.8	8.6	10.5	-103.93	-281.1	-220.2	358.2	340.8	17.43	20.551		
4,700.0	4,696.4	4,685.4	4,666.9	8.8	10.8	-103.70	-287.8	-226.9	366.9	349.1	17.81	20.607		
4,800.0	4,796.3	4,785.0	4,766.1	8.9	11.0	-103.47	-294.5	-233.5	375.6	357.5	18.18	20.661		
4,900.0	4,896.2	4,884.6	4,865.3	9.1	11.3	-103.26	-301.1	-240.2	384.4	365.8	18.56	20.713		
5,000.0	4,996.2	4,984.2	4,964.4	9.3	11.5	-103.06	-307.8	-246.9	393.1	374.2	18.93	20.764		
5,100.0	5,096.1	5,083.8	5,063.6	9.5	11.7	-102.87	-314.4	-253.5	401.9	382.6	19.31	20.813		

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 4B-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 4B-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				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		
5,200.0	5,196.0	5,183.4	5,162.8	9.7	12.0	-102.68	-321.1	-260.2	410.6	390.9	19.68	20.860		
5,300.0	5,295.9	5,283.1	5,261.9	9.9	12.2	-102.50	-327.7	-266.8	419.4	399.3	20.06	20.905		
5,400.0	5,395.8	5,382.7	5,361.1	10.1	12.4	-102.33	-334.4	-273.5	428.1	407.7	20.44	20.949		
5,500.0	5,495.7	5,482.3	5,460.2	10.3	12.7	-102.17	-341.0	-280.2	436.9	416.1	20.81	20.992		
5,600.0	5,595.7	5,581.9	5,559.4	10.5	12.9	-102.01	-347.7	-286.8	445.6	424.4	21.19	21.033		
5,700.0	5,695.6	5,681.5	5,658.6	10.6	13.2	-101.86	-354.3	-293.5	454.4	432.8	21.56	21.074		
5,800.0	5,795.5	5,781.1	5,757.7	10.8	13.4	-101.72	-361.0	-300.1	463.2	441.2	21.94	21.112		
5,900.0	5,895.4	5,880.7	5,856.9	11.0	13.6	-101.58	-367.6	-306.8	471.9	449.6	22.31	21.150		
6,000.0	5,995.3	5,980.3	5,956.1	11.2	13.9	-101.44	-374.3	-313.5	480.7	458.0	22.69	21.187		
6,100.0	6,095.2	6,079.9	6,055.2	11.4	14.1	-101.31	-380.9	-320.1	489.5	466.4	23.06	21.222		
6,200.0	6,195.2	6,179.5	6,154.4	11.6	14.4	-101.19	-387.6	-326.8	498.3	474.8	23.44	21.256		
7,300.0	7,292.4	7,955.2	7,700.6	13.6	16.3	93.52	6.6	-430.7	451.8	425.2	26.59	16.990		
7,400.0	7,385.9	7,918.2	7,692.1	13.7	16.2	105.77	-29.4	-430.1	360.7	334.0	26.72	13.502		
7,500.0	7,471.9	7,873.6	7,678.8	13.9	16.2	108.07	-71.9	-429.2	276.7	249.9	26.78	10.332		
7,600.0	7,547.8	7,826.7	7,661.3	14.1	16.1	103.94	-115.4	-428.0	206.5	179.5	26.99	7.650		
7,700.0	7,611.3	7,778.7	7,639.7	14.5	16.1	93.92	-158.3	-426.6	164.0	136.5	27.46	5.972		
7,745.7	7,635.6	7,756.5	7,628.6	14.7	16.2	87.51	-177.5	-425.8	159.0	131.3	27.67	5.745 SF		
7,800.0	7,660.4	7,730.0	7,614.4	15.0	16.2	78.76	-199.8	-424.9	165.7	138.1	27.65	5.994		
7,900.0	7,693.8	7,681.1	7,585.4	15.7	16.2	61.60	-239.1	-422.9	205.0	178.4	26.62	7.702		
8,000.0	7,710.2	7,631.9	7,553.0	16.6	16.3	46.63	-276.1	-420.7	260.7	236.0	24.74	10.539		
8,100.0	7,712.0	7,583.9	7,518.4	17.6	16.4	38.08	-309.3	-418.4	321.7	298.1	23.62	13.621		
8,200.0	7,712.0	7,550.0	7,492.4	18.7	16.5	34.38	-330.9	-416.7	390.7	367.4	23.35	16.732		
8,300.0	7,712.0	7,500.0	7,451.8	19.9	16.6	29.61	-360.0	-413.9	466.0	443.3	22.68	20.543		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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: 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	90.31	-0.3	60.0	60.0					
100.0	100.0	99.0	99.0	0.1	0.1	90.31	-0.3	60.0	60.0	59.7	0.30	203.236		
200.0	200.0	199.0	199.0	0.3	0.3	90.31	-0.3	60.0	60.0	59.4	0.64	93.164 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	156.67	-0.3	60.0	60.8	59.8	0.99	61.219		
400.0	400.0	399.1	399.1	0.7	0.7	158.38	-1.2	59.9	63.1	61.8	1.34	46.965		
500.0	499.9	499.1	499.0	0.9	0.8	161.86	-3.7	59.4	66.6	64.9	1.70	39.230		
600.0	599.8	598.9	598.8	1.0	1.0	166.41	-8.0	58.7	70.4	68.3	2.06	34.211		
700.0	699.7	698.5	698.2	1.2	1.2	171.80	-14.0	57.7	74.7	72.3	2.43	30.805		
800.0	799.6	797.8	797.2	1.4	1.4	177.76	-21.6	56.4	80.0	77.2	2.81	28.520		
900.0	899.5	897.1	896.1	1.6	1.7	-176.25	-30.5	54.8	86.5	83.3	3.19	27.105		
1,000.0	999.5	996.5	995.1	1.8	1.9	-171.08	-39.5	53.3	93.7	90.2	3.57	26.232		
1,100.0	1,099.4	1,095.9	1,094.0	2.0	2.1	-166.68	-48.5	51.8	101.7	97.7	3.96	25.704		
1,200.0	1,199.3	1,195.3	1,193.0	2.2	2.3	-162.93	-57.5	50.2	110.1	105.8	4.34	25.400		
1,300.0	1,299.2	1,294.7	1,292.0	2.4	2.6	-159.73	-66.6	48.7	119.0	114.3	4.71	25.241		
1,400.0	1,399.1	1,394.1	1,391.0	2.5	2.8	-156.98	-75.6	47.1	128.1	123.1	5.09	25.178		
1,500.0	1,499.1	1,493.5	1,490.0	2.7	3.0	-154.59	-84.6	45.6	137.6	132.1	5.46	25.177		
1,600.0	1,599.0	1,592.9	1,589.0	2.9	3.3	-152.52	-93.6	44.1	147.2	141.4	5.84	25.218		
1,700.0	1,698.9	1,692.3	1,687.9	3.1	3.5	-150.70	-102.6	42.5	157.0	150.8	6.21	25.285		
1,800.0	1,798.8	1,791.7	1,786.9	3.3	3.7	-149.10	-111.6	41.0	166.9	160.3	6.58	25.369		
1,900.0	1,898.7	1,891.2	1,885.9	3.5	3.9	-147.67	-120.6	39.4	177.0	170.0	6.95	25.464		
2,000.0	1,998.6	1,990.6	1,984.9	3.7	4.2	-146.40	-129.6	37.9	187.1	179.8	7.32	25.564		
2,100.0	2,098.6	2,090.0	2,083.9	3.9	4.4	-145.27	-138.6	36.4	197.4	189.7	7.69	25.667		
2,200.0	2,198.5	2,189.4	2,182.9	4.1	4.6	-144.24	-147.6	34.8	207.7	199.6	8.06	25.770		
2,300.0	2,298.4	2,288.8	2,281.8	4.2	4.9	-143.31	-156.6	33.3	218.0	209.6	8.43	25.873		
2,400.0	2,398.3	2,388.2	2,380.8	4.4	5.1	-142.46	-165.6	31.8	228.4	219.6	8.79	25.974		
2,500.0	2,498.2	2,487.6	2,479.8	4.6	5.4	-141.69	-174.6	30.2	238.9	229.7	9.16	26.072		
2,600.0	2,598.1	2,587.0	2,578.8	4.8	5.6	-140.99	-183.6	28.7	249.4	239.8	9.53	26.168		
2,700.0	2,698.1	2,686.4	2,677.8	5.0	5.8	-140.34	-192.6	27.1	259.9	250.0	9.90	26.260		
2,800.0	2,798.0	2,785.8	2,776.8	5.2	6.1	-139.74	-201.6	25.6	270.5	260.2	10.26	26.349		
2,900.0	2,897.9	2,885.2	2,875.7	5.4	6.3	-139.19	-210.6	24.1	281.0	270.4	10.63	26.435		
3,000.0	2,997.8	2,984.6	2,974.7	5.6	6.5	-138.67	-219.6	22.5	291.7	280.7	11.00	26.518		
3,100.0	3,097.7	3,084.0	3,073.7	5.7	6.8	-138.19	-228.6	21.0	302.3	290.9	11.37	26.597		
3,200.0	3,197.6	3,183.4	3,172.7	5.9	7.0	-137.75	-237.6	19.4	312.9	301.2	11.73	26.673		
3,300.0	3,297.6	3,282.8	3,271.7	6.1	7.2	-137.33	-246.6	17.9	323.6	311.5	12.10	26.747		
3,400.0	3,397.5	3,382.2	3,370.6	6.3	7.5	-136.94	-255.6	16.4	334.3	321.8	12.47	26.817		
3,500.0	3,497.4	3,481.6	3,469.6	6.5	7.7	-136.58	-264.6	14.8	345.0	332.2	12.83	26.884		
3,600.0	3,597.3	3,581.0	3,568.6	6.7	7.9	-136.24	-273.6	13.3	355.7	342.5	13.20	26.949		
3,700.0	3,697.2	3,680.4	3,667.6	6.9	8.2	-135.91	-282.6	11.7	366.4	352.9	13.57	27.012		
3,800.0	3,797.2	3,779.8	3,766.6	7.1	8.4	-135.61	-291.6	10.2	377.2	363.2	13.93	27.072		
3,900.0	3,897.1	3,879.2	3,865.6	7.3	8.6	-135.32	-300.6	8.7	387.9	373.6	14.30	27.129		
4,000.0	3,997.0	3,978.6	3,964.5	7.4	8.9	-135.05	-309.6	7.1	398.7	384.0	14.66	27.185		
4,100.0	4,096.9	4,078.0	4,063.5	7.6	9.1	-134.79	-318.6	5.6	409.4	394.4	15.03	27.238		
4,200.0	4,196.8	4,177.4	4,162.5	7.8	9.3	-134.55	-327.6	4.1	420.2	404.8	15.40	27.289		
4,300.0	4,296.7	4,276.8	4,261.5	8.0	9.6	-134.31	-336.6	2.5	431.0	415.2	15.76	27.339		
4,400.0	4,396.7	4,376.2	4,360.5	8.2	9.8	-134.09	-345.6	1.0	441.7	425.6	16.13	27.386		
4,500.0	4,496.6	4,475.6	4,459.5	8.4	10.0	-133.88	-354.6	-0.6	452.5	436.0	16.50	27.432		
4,600.0	4,596.5	4,575.0	4,558.4	8.6	10.3	-133.68	-363.6	-2.1	463.3	446.5	16.86	27.477		
4,700.0	4,696.4	4,674.4	4,657.4	8.8	10.5	-133.49	-372.6	-3.6	474.1	456.9	17.23	27.520		
4,800.0	4,796.3	4,773.8	4,756.4	8.9	10.8	-133.31	-381.6	-5.2	484.9	467.3	17.60	27.561		
4,900.0	4,896.2	4,873.2	4,855.4	9.1	11.0	-133.13	-390.6	-6.7	495.8	477.8	17.96	27.601		
7,000.0	6,994.5	7,893.5	7,429.0	13.1	14.1	157.11	113.6	-59.6	474.6	448.4	26.29	18.056		
7,100.0	7,094.4	7,895.2	7,429.0	13.3	14.1	156.63	115.4	-59.6	386.8	360.4	26.48	14.610		

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 4B-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 4B-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							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
7,200.0	7,194.3	7,893.3	7,429.0	13.5	14.1	-117.17	113.4	-59.6	306.6	279.9	26.77	11.454		
7,300.0	7,292.4	7,875.1	7,429.0	13.6	14.0	-107.50	95.2	-59.3	242.5	215.7	26.83	9.039		
7,400.0	7,385.9	7,840.1	7,429.0	13.7	13.9	-99.30	60.3	-58.7	207.9	181.2	26.71	7.785		
7,441.3	7,422.5	7,821.0	7,429.0	13.8	13.8	-94.27	41.2	-58.3	204.7	178.0	26.67	7.675 SF		
7,500.0	7,471.9	7,789.4	7,429.0	13.9	13.7	-85.65	9.6	-57.8	210.6	184.0	26.61	7.913		
7,600.0	7,547.8	7,734.8	7,427.0	14.1	13.6	-70.72	-45.0	-56.8	241.3	214.9	26.39	9.142		
7,700.0	7,611.3	7,681.5	7,420.1	14.5	13.6	-57.51	-97.8	-55.8	286.6	261.0	25.58	11.201		
7,800.0	7,660.4	7,628.7	7,408.5	15.0	13.6	-47.04	-149.3	-54.7	336.9	312.7	24.21	13.917		
7,900.0	7,693.8	7,576.3	7,392.4	15.7	13.7	-39.28	-199.1	-53.5	386.8	364.1	22.64	17.085		
8,000.0	7,710.2	7,524.2	7,371.9	16.6	13.8	-33.70	-246.9	-52.3	433.3	412.0	21.29	20.349		
8,100.0	7,712.0	7,473.1	7,347.6	17.6	14.0	-30.80	-291.9	-51.1	476.8	455.9	20.95	22.758		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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	95.58	-6.3	65.0	65.3					
100.0	100.0	99.0	99.0	0.1	0.1	95.58	-6.3	65.0	65.3	65.0	0.30	221.109		
200.0	200.0	199.0	199.0	0.3	0.3	95.58	-6.3	65.0	65.3	64.6	0.64	101.357 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	161.86	-6.3	65.0	66.1	65.1	0.99	66.565		
400.0	400.0	399.0	399.0	0.7	0.7	162.53	-6.3	65.0	68.6	67.3	1.34	51.106		
500.0	499.9	498.2	498.2	0.9	0.8	164.01	-7.1	65.4	72.9	71.2	1.69	43.108		
600.0	599.8	597.2	597.1	1.0	1.0	166.34	-9.4	66.5	78.4	76.3	2.04	38.400		
700.0	699.7	696.0	695.8	1.2	1.2	169.25	-13.1	68.5	85.0	82.7	2.39	35.550		
800.0	799.6	794.5	794.2	1.4	1.4	172.49	-18.4	71.2	93.1	90.4	2.75	33.895		
900.0	899.5	892.7	892.1	1.6	1.6	175.86	-25.1	74.7	102.7	99.6	3.10	33.073		
1,000.0	999.5	990.8	989.7	1.8	1.8	179.17	-33.3	79.0	113.8	110.4	3.46	32.862 SF		
1,100.0	1,099.4	1,089.9	1,088.3	2.0	2.0	-177.93	-42.0	83.5	125.7	121.9	3.82	32.875		
1,200.0	1,199.3	1,189.0	1,186.9	2.2	2.3	-175.54	-50.8	88.1	137.9	133.7	4.18	32.958		
1,300.0	1,299.2	1,288.1	1,285.6	2.4	2.5	-173.54	-59.5	92.6	150.3	145.7	4.54	33.080		
1,400.0	1,399.1	1,387.2	1,384.2	2.5	2.7	-171.84	-68.3	97.1	162.8	157.9	4.90	33.221		
1,500.0	1,499.1	1,486.3	1,482.8	2.7	3.0	-170.38	-77.0	101.7	175.4	170.1	5.26	33.371		
1,600.0	1,599.0	1,585.4	1,581.4	2.9	3.2	-169.13	-85.7	106.2	188.1	182.5	5.61	33.523		
1,700.0	1,698.9	1,684.5	1,680.0	3.1	3.4	-168.03	-94.5	110.8	200.9	195.0	5.97	33.673		
1,800.0	1,798.8	1,783.6	1,778.7	3.3	3.7	-167.06	-103.2	115.3	213.8	207.5	6.32	33.818		
1,900.0	1,898.7	1,882.7	1,877.3	3.5	3.9	-166.20	-111.9	119.8	226.7	220.0	6.68	33.957		
2,000.0	1,998.6	1,981.8	1,975.9	3.7	4.2	-165.44	-120.7	124.4	239.7	232.7	7.03	34.090		
2,100.0	2,098.6	2,080.9	2,074.5	3.9	4.4	-164.75	-129.4	128.9	252.7	245.3	7.39	34.217		
2,200.0	2,198.5	2,180.0	2,173.1	4.1	4.6	-164.13	-138.1	133.5	265.7	258.0	7.74	34.337		
2,300.0	2,298.4	2,279.2	2,271.7	4.2	4.9	-163.57	-146.9	138.0	278.8	270.7	8.09	34.450		
2,400.0	2,398.3	2,378.3	2,370.4	4.4	5.1	-163.06	-155.6	142.5	291.9	283.4	8.45	34.558		
2,500.0	2,498.2	2,477.4	2,469.0	4.6	5.4	-162.60	-164.3	147.1	305.0	296.2	8.80	34.659		
2,600.0	2,598.1	2,576.5	2,567.6	4.8	5.6	-162.17	-173.1	151.6	318.1	309.0	9.15	34.755		
2,700.0	2,698.1	2,675.6	2,666.2	5.0	5.8	-161.77	-181.8	156.1	331.3	321.8	9.51	34.846		
2,800.0	2,798.0	2,774.7	2,764.8	5.2	6.1	-161.41	-190.5	160.7	344.4	334.6	9.86	34.932		
2,900.0	2,897.9	2,873.8	2,863.4	5.4	6.3	-161.07	-199.3	165.2	357.6	347.4	10.21	35.014		
3,000.0	2,997.8	2,972.9	2,962.1	5.6	6.6	-160.76	-208.0	169.8	370.8	360.2	10.57	35.091		
3,100.0	3,097.7	3,072.0	3,060.7	5.7	6.8	-160.47	-216.7	174.3	384.0	373.1	10.92	35.165		
3,200.0	3,197.6	3,171.1	3,159.3	5.9	7.0	-160.19	-225.5	178.8	397.2	385.9	11.27	35.234		
3,300.0	3,297.6	3,270.2	3,257.9	6.1	7.3	-159.94	-234.2	183.4	410.4	398.8	11.63	35.301		
3,400.0	3,397.5	3,369.3	3,356.5	6.3	7.5	-159.70	-242.9	187.9	423.6	411.6	11.98	35.364		
3,500.0	3,497.4	3,468.4	3,455.2	6.5	7.8	-159.47	-251.7	192.5	436.8	424.5	12.33	35.424		
3,600.0	3,597.3	3,567.6	3,553.8	6.7	8.0	-159.26	-260.4	197.0	450.1	437.4	12.68	35.481		
3,700.0	3,697.2	3,666.7	3,652.4	6.9	8.3	-159.06	-269.1	201.5	463.3	450.3	13.04	35.536		
3,800.0	3,797.2	3,765.8	3,751.0	7.1	8.5	-158.87	-277.9	206.1	476.5	463.1	13.39	35.588		
3,900.0	3,897.1	3,864.9	3,849.6	7.3	8.7	-158.70	-286.6	210.6	489.8	476.0	13.74	35.638		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.31	-0.4	70.0	70.0					
100.0	100.0	99.0	99.0	0.1	0.1	90.31	-0.4	70.0	70.0	69.7	0.30	237.109		
200.0	200.0	199.0	199.0	0.3	0.3	90.31	-0.4	70.0	70.0	69.4	0.64	108.691 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	156.63	-0.4	70.0	70.8	69.8	0.99	71.288		
400.0	400.0	399.0	399.0	0.7	0.7	157.43	-0.4	70.0	73.2	71.9	1.34	54.528		
500.0	499.9	498.9	498.9	0.9	0.8	158.56	-0.4	70.0	76.9	75.2	1.69	45.430		
600.0	599.8	597.8	597.8	1.0	1.0	160.03	-1.0	70.5	81.3	79.2	2.04	39.825		
700.0	699.7	696.6	696.5	1.2	1.2	162.13	-2.9	72.2	87.0	84.6	2.39	36.394		
800.0	799.6	795.1	795.0	1.4	1.4	164.65	-6.1	74.9	94.1	91.3	2.74	34.335		
900.0	899.5	893.3	893.0	1.6	1.6	167.40	-10.6	78.8	102.6	99.6	3.09	33.214		
1,000.0	999.5	991.2	990.6	1.8	1.8	170.21	-16.3	83.7	112.8	109.4	3.44	32.772 SF		
1,100.0	1,099.4	1,088.6	1,087.6	2.0	2.0	172.97	-23.3	89.7	124.7	120.9	3.80	32.840		
1,200.0	1,199.3	1,185.6	1,184.0	2.2	2.2	175.59	-31.5	96.7	138.2	134.1	4.15	33.304		
1,300.0	1,299.2	1,283.6	1,281.2	2.4	2.4	177.99	-40.7	104.6	153.2	148.7	4.50	34.002		
1,400.0	1,399.1	1,382.2	1,379.1	2.5	2.7	179.99	-50.0	112.7	168.4	163.6	4.86	34.661		
1,500.0	1,499.1	1,480.9	1,477.0	2.7	3.0	-178.34	-59.4	120.7	183.8	178.6	5.21	35.270		
1,600.0	1,599.0	1,579.6	1,574.9	2.9	3.2	-176.93	-68.8	128.8	199.4	193.8	5.57	35.831		
1,700.0	1,698.9	1,678.3	1,672.8	3.1	3.5	-175.72	-78.1	136.8	215.1	209.1	5.92	36.346		
1,800.0	1,798.8	1,776.9	1,770.7	3.3	3.7	-174.68	-87.5	144.9	230.8	224.5	6.27	36.820		
1,900.0	1,898.7	1,875.6	1,868.5	3.5	4.0	-173.77	-96.9	152.9	246.6	240.0	6.62	37.256		
2,000.0	1,998.6	1,974.3	1,966.4	3.7	4.3	-172.97	-106.2	160.9	262.5	255.5	6.97	37.657		
2,100.0	2,098.6	2,072.9	2,064.3	3.9	4.5	-172.26	-115.6	169.0	278.4	271.1	7.32	38.028		
2,200.0	2,198.5	2,171.6	2,162.2	4.1	4.8	-171.63	-125.0	177.0	294.3	286.6	7.67	38.372		
2,300.0	2,298.4	2,270.3	2,260.1	4.2	5.1	-171.06	-134.3	185.1	310.3	302.3	8.02	38.690		
2,400.0	2,398.3	2,369.0	2,358.0	4.4	5.3	-170.55	-143.7	193.1	326.3	317.9	8.37	38.985		
2,500.0	2,498.2	2,467.6	2,455.9	4.6	5.6	-170.08	-153.1	201.2	342.3	333.6	8.72	39.260		
2,600.0	2,598.1	2,566.3	2,553.8	4.8	5.9	-169.66	-162.4	209.2	358.3	349.3	9.07	39.517		
2,700.0	2,698.1	2,665.0	2,651.7	5.0	6.2	-169.27	-171.8	217.3	374.4	365.0	9.42	39.757		
2,800.0	2,798.0	2,763.6	2,749.6	5.2	6.4	-168.92	-181.2	225.3	390.5	380.7	9.77	39.982		
2,900.0	2,897.9	2,862.3	2,847.5	5.4	6.7	-168.59	-190.5	233.4	406.6	396.4	10.12	40.192		
3,000.0	2,997.8	2,961.0	2,945.4	5.6	7.0	-168.29	-199.9	241.4	422.7	412.2	10.46	40.391		
3,100.0	3,097.7	3,059.7	3,043.3	5.7	7.2	-168.01	-209.3	249.5	438.8	428.0	10.81	40.577		
3,200.0	3,197.6	3,158.3	3,141.2	5.9	7.5	-167.75	-218.6	257.5	454.9	443.7	11.16	40.753		
3,300.0	3,297.6	3,257.0	3,239.1	6.1	7.8	-167.51	-228.0	265.5	471.0	459.5	11.51	40.919		
3,400.0	3,397.5	3,355.7	3,337.0	6.3	8.1	-167.28	-237.4	273.6	487.1	475.3	11.86	41.076		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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	91.58	-2.5	91.7	91.7					
100.0	100.0	99.0	99.0	0.1	0.1	91.58	-2.5	91.7	91.7	91.4	0.30	310.700		
200.0	200.0	199.0	199.0	0.3	0.3	91.58	-2.5	91.7	91.7	91.1	0.64	142.426 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	157.82	-2.5	91.7	92.5	91.5	0.99	93.172		
400.0	400.0	399.0	399.0	0.7	0.7	158.41	-2.5	91.7	95.0	93.6	1.34	70.733		
500.0	499.9	498.9	498.9	0.9	0.8	159.25	-2.5	91.7	98.7	97.0	1.69	58.299		
600.0	599.8	598.8	598.8	1.0	1.0	160.06	-2.5	91.7	102.5	100.4	2.04	50.174		
700.0	699.7	697.2	697.2	1.2	1.2	161.03	-3.0	92.3	107.0	104.6	2.39	44.782		
800.0	799.6	795.4	795.3	1.4	1.4	162.37	-4.5	94.3	113.1	110.3	2.74	41.308		
900.0	899.5	893.3	893.2	1.6	1.5	163.96	-7.1	97.7	120.6	117.5	3.08	39.116		
1,000.0	999.5	990.9	990.6	1.8	1.7	165.71	-10.6	102.3	129.8	126.4	3.43	37.827		
1,100.0	1,099.4	1,088.2	1,087.6	2.0	1.9	167.53	-15.1	108.2	140.6	136.8	3.78	37.204		
1,200.0	1,199.3	1,185.0	1,184.0	2.2	2.1	169.33	-20.6	115.5	153.1	148.9	4.13	37.088 SF		
1,300.0	1,299.2	1,281.4	1,279.8	2.4	2.4	171.08	-27.0	123.9	167.2	162.7	4.47	37.366		
1,400.0	1,399.1	1,377.3	1,374.9	2.5	2.6	172.72	-34.4	133.6	183.0	178.2	4.82	37.959		
1,500.0	1,499.1	1,472.6	1,469.2	2.7	2.9	174.26	-42.6	144.5	200.5	195.4	5.17	38.808		
1,600.0	1,599.0	1,570.3	1,565.7	2.9	3.1	175.67	-51.7	156.5	219.2	213.7	5.52	39.727		
1,700.0	1,698.9	1,668.4	1,662.7	3.1	3.4	176.86	-60.9	168.5	237.9	232.1	5.87	40.560		
1,800.0	1,798.8	1,766.5	1,759.6	3.3	3.7	177.88	-70.0	180.5	256.8	250.6	6.21	41.317		
1,900.0	1,898.7	1,864.6	1,856.6	3.5	4.0	178.76	-79.2	192.6	275.7	269.1	6.56	42.008		
2,000.0	1,998.6	1,962.7	1,953.5	3.7	4.3	179.53	-88.3	204.6	294.6	287.7	6.91	42.640		
2,100.0	2,098.6	2,060.8	2,050.5	3.9	4.6	-179.80	-97.5	216.7	313.6	306.4	7.26	43.220		
2,200.0	2,198.5	2,159.0	2,147.4	4.1	4.9	-179.20	-106.6	228.7	332.7	325.1	7.60	43.754		
2,300.0	2,298.4	2,257.1	2,244.3	4.2	5.2	-178.67	-115.7	240.7	351.8	343.8	7.95	44.247		
2,400.0	2,398.3	2,355.2	2,341.3	4.4	5.5	-178.19	-124.9	252.8	370.9	362.6	8.30	44.703		
2,500.0	2,498.2	2,453.3	2,438.2	4.6	5.8	-177.76	-134.0	264.8	390.0	381.3	8.64	45.126		
2,600.0	2,598.1	2,551.4	2,535.2	4.8	6.1	-177.37	-143.2	276.9	409.1	400.1	8.99	45.520		
2,700.0	2,698.1	2,649.5	2,632.1	5.0	6.4	-177.02	-152.3	288.9	428.3	419.0	9.33	45.887		
2,800.0	2,798.0	2,747.6	2,729.0	5.2	6.7	-176.69	-161.5	300.9	447.5	437.8	9.68	46.229		
2,900.0	2,897.9	2,845.8	2,826.0	5.4	7.0	-176.39	-170.6	313.0	466.6	456.6	10.02	46.550		
3,000.0	2,997.8	2,943.9	2,922.9	5.6	7.3	-176.12	-179.8	325.0	485.8	475.5	10.37	46.851		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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 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	89.33	1.1	97.3	97.3					
100.0	100.0	99.0	99.0	0.1	0.1	89.33	1.1	97.3	97.3	97.0	0.30	329.560		
200.0	200.0	199.0	199.0	0.3	0.3	89.33	1.1	97.3	97.3	96.6	0.64	151.071	CC, ES	
300.0	300.0	299.0	299.0	0.5	0.5	155.58	1.1	97.3	98.1	97.1	0.99	98.762		
400.0	400.0	399.0	399.0	0.7	0.7	156.19	1.1	97.3	100.5	99.1	1.34	74.830		
500.0	499.9	498.9	498.9	0.9	0.8	157.07	1.1	97.3	104.1	102.4	1.69	61.508		
600.0	599.8	598.8	598.8	1.0	1.0	157.91	1.1	97.3	107.9	105.8	2.04	52.801		
700.0	699.7	698.7	698.7	1.2	1.2	158.69	1.1	97.3	111.7	109.3	2.39	46.653		
800.0	799.6	796.9	796.8	1.4	1.4	159.59	0.7	98.0	116.2	113.5	2.74	42.408		
900.0	899.5	894.8	894.7	1.6	1.5	160.73	-0.4	100.2	122.4	119.3	3.09	39.639		
1,000.0	999.5	992.5	992.3	1.8	1.7	162.05	-2.4	103.8	130.1	126.7	3.43	37.903		
1,100.0	1,099.4	1,089.8	1,089.5	2.0	1.9	163.46	-5.2	108.9	139.5	135.7	3.78	36.924		
1,200.0	1,199.3	1,186.8	1,186.2	2.2	2.1	164.91	-8.7	115.5	150.6	146.5	4.12	36.515	SF	
1,300.0	1,299.2	1,283.4	1,282.4	2.4	2.3	166.34	-13.0	123.4	163.3	158.9	4.47	36.549		
1,400.0	1,399.1	1,379.6	1,378.0	2.5	2.5	167.71	-18.0	132.7	177.8	173.0	4.81	36.933		
1,500.0	1,499.1	1,475.2	1,472.8	2.7	2.8	169.00	-23.8	143.3	193.9	188.7	5.16	37.598		
1,600.0	1,599.0	1,570.2	1,566.9	2.9	3.0	170.20	-30.3	155.3	211.7	206.2	5.50	38.492		
1,700.0	1,698.9	1,664.7	1,660.1	3.1	3.3	171.30	-37.4	168.5	231.2	225.3	5.84	39.575		
1,800.0	1,798.8	1,758.5	1,752.5	3.3	3.6	172.31	-45.3	183.0	252.3	246.1	6.18	40.813		
1,900.0	1,898.7	1,851.6	1,843.8	3.5	3.9	173.22	-53.8	198.7	275.0	268.5	6.52	42.183		
2,000.0	1,998.6	1,944.6	1,934.9	3.7	4.2	174.05	-63.0	215.7	299.3	292.5	6.86	43.656		
2,100.0	2,098.6	2,041.4	2,029.4	3.9	4.6	174.80	-72.8	233.8	324.3	317.1	7.20	45.037		
2,200.0	2,198.5	2,138.1	2,123.9	4.1	5.0	175.45	-82.6	251.9	349.2	341.7	7.54	46.302		
2,300.0	2,298.4	2,234.9	2,218.5	4.2	5.3	176.01	-92.4	270.1	374.3	366.4	7.89	47.464		
2,400.0	2,398.3	2,331.7	2,313.0	4.4	5.7	176.50	-102.2	288.2	399.3	391.1	8.23	48.535		
2,500.0	2,498.2	2,428.4	2,407.5	4.6	6.1	176.93	-112.0	306.3	424.4	415.8	8.57	49.524		
2,600.0	2,598.1	2,525.2	2,502.1	4.8	6.5	177.31	-121.9	324.5	449.5	440.6	8.91	50.441		
2,700.0	2,698.1	2,621.9	2,596.6	5.0	6.8	177.65	-131.7	342.6	474.6	465.3	9.25	51.293		
2,800.0	2,798.0	2,718.7	2,691.1	5.2	7.2	177.96	-141.5	360.7	499.7	490.1	9.59	52.086		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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						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	91.44	-2.5	100.1	100.1					
100.0	100.0	99.0	99.0	0.1	0.1	91.44	-2.5	100.1	100.1	99.8	0.30	339.121		
200.0	200.0	199.0	199.0	0.3	0.3	91.44	-2.5	100.1	100.1	99.5	0.64	155.454	CC, ES	
300.0	300.0	299.0	299.0	0.5	0.5	157.67	-2.5	100.1	100.9	99.9	0.99	101.620		
400.0	400.0	399.0	399.0	0.7	0.7	158.21	-2.5	100.1	103.3	102.0	1.34	76.979		
500.0	499.9	497.1	497.1	0.9	0.8	159.10	-2.8	100.9	107.9	106.2	1.69	63.841		
600.0	599.8	595.1	595.0	1.0	1.0	160.15	-3.6	103.2	114.1	112.1	2.04	56.051		
700.0	699.7	692.8	692.7	1.2	1.2	161.29	-4.9	107.2	122.1	119.7	2.38	51.246		
800.0	799.6	790.2	789.9	1.4	1.4	162.44	-6.8	112.7	131.7	129.0	2.73	48.294		
900.0	899.5	887.2	886.6	1.6	1.6	163.56	-9.2	119.7	143.1	140.0	3.07	46.570		
1,000.0	999.5	983.8	982.8	1.8	1.8	164.62	-12.1	128.2	156.2	152.7	3.42	45.703		
1,100.0	1,099.4	1,080.0	1,078.4	2.0	2.0	165.61	-15.5	138.2	170.9	167.2	3.76	45.458	SF	
1,200.0	1,199.3	1,175.6	1,173.3	2.2	2.3	166.51	-19.4	149.7	187.3	183.2	4.10	45.676		
1,300.0	1,299.2	1,270.7	1,267.4	2.4	2.5	167.33	-23.8	162.6	205.4	201.0	4.44	46.249		
1,400.0	1,399.1	1,365.2	1,360.6	2.5	2.8	168.06	-28.7	176.8	225.2	220.4	4.78	47.099		
1,500.0	1,499.1	1,459.0	1,453.0	2.7	3.1	168.71	-34.0	192.5	246.6	241.4	5.12	48.168		
1,600.0	1,599.0	1,552.1	1,544.4	2.9	3.5	169.29	-39.8	209.4	269.6	264.1	5.45	49.415		
1,700.0	1,698.9	1,644.5	1,634.7	3.1	3.8	169.80	-46.0	227.5	294.1	288.3	5.79	50.806		
1,800.0	1,798.8	1,736.1	1,724.0	3.3	4.2	170.25	-52.6	246.9	320.3	314.2	6.12	52.315		
1,900.0	1,898.7	1,826.9	1,812.2	3.5	4.6	170.66	-59.6	267.4	348.0	341.5	6.45	53.924		
2,000.0	1,998.6	1,916.8	1,899.1	3.7	5.0	171.02	-66.9	289.0	377.2	370.4	6.78	55.616		
2,100.0	2,098.6	2,011.7	1,990.7	3.9	5.5	171.35	-75.0	312.6	407.3	400.2	7.12	57.207		
2,200.0	2,198.5	2,107.0	2,082.7	4.1	5.9	171.64	-83.1	336.3	437.4	429.9	7.46	58.652		
2,300.0	2,298.4	2,202.4	2,174.7	4.2	6.4	171.89	-91.2	360.0	467.5	459.7	7.79	59.974		
2,400.0	2,398.3	2,297.7	2,266.7	4.4	6.8	172.11	-99.2	383.8	497.6	489.5	8.13	61.187		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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		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	89.39	1.1	105.7	105.7					
100.0	100.0	99.0	99.0	0.1	0.1	89.39	1.1	105.7	105.7	105.4	0.30	357.989		
200.0	200.0	199.0	199.0	0.3	0.3	89.39	1.1	105.7	105.7	105.0	0.64	164.103 CC, ES		
300.0	300.0	297.2	297.2	0.5	0.5	155.70	1.0	106.5	107.3	106.3	0.99	108.380		
400.0	400.0	395.2	395.2	0.7	0.7	156.46	0.5	108.9	112.2	110.9	1.34	83.966		
500.0	499.9	492.9	492.8	0.9	0.9	157.55	-0.3	113.0	120.1	118.4	1.68	71.351		
600.0	599.8	590.4	590.1	1.0	1.0	158.63	-1.3	118.7	129.7	127.7	2.03	63.945		
700.0	699.7	687.4	686.8	1.2	1.3	159.64	-2.7	126.0	141.1	138.7	2.37	59.441		
800.0	799.6	784.0	783.0	1.4	1.5	160.57	-4.4	134.9	154.2	151.4	2.72	56.729		
900.0	899.5	880.2	878.6	1.6	1.7	161.40	-6.3	145.3	168.9	165.9	3.06	55.201		
1,000.0	999.5	975.9	973.5	1.8	2.0	162.14	-8.6	157.2	185.4	182.0	3.40	54.494		
1,100.0	1,099.4	1,071.0	1,067.6	2.0	2.3	162.78	-11.1	170.6	203.5	199.8	3.74	54.380 SF		
1,200.0	1,199.3	1,165.5	1,160.9	2.2	2.6	163.35	-13.9	185.4	223.3	219.2	4.08	54.706		
1,300.0	1,299.2	1,259.3	1,253.3	2.4	2.9	163.84	-16.9	201.6	244.6	240.2	4.42	55.367		
1,400.0	1,399.1	1,352.5	1,344.7	2.5	3.2	164.26	-20.2	219.2	267.6	262.9	4.75	56.290		
1,500.0	1,499.1	1,444.9	1,435.1	2.7	3.6	164.63	-23.8	238.1	292.2	287.1	5.09	57.420		
1,600.0	1,599.0	1,536.5	1,524.4	2.9	4.0	164.95	-27.6	258.2	318.3	312.9	5.42	58.716		
1,700.0	1,698.9	1,627.3	1,612.6	3.1	4.4	165.22	-31.6	279.5	346.0	340.3	5.75	60.148		
1,800.0	1,798.8	1,717.3	1,699.6	3.3	4.8	165.46	-35.8	302.0	375.2	369.1	6.08	61.690		
1,900.0	1,898.7	1,806.4	1,785.4	3.5	5.3	165.67	-40.3	325.5	405.9	399.5	6.41	63.325		
2,000.0	1,998.6	1,895.0	1,870.4	3.7	5.7	165.85	-44.9	350.3	438.1	431.3	6.74	65.030		
2,100.0	2,098.6	1,989.4	1,960.8	3.9	6.2	166.02	-50.0	377.2	470.9	463.8	7.07	66.576		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
							+N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	59.47	223.7	379.3	440.5					
100.0	100.0	92.0	92.0	0.1	0.2	59.47	223.6	379.2	440.3	440.0	0.31	1,419.775		
200.0	200.0	193.0	193.0	0.3	0.3	59.48	223.4	379.0	439.9	439.3	0.66	664.169		
260.1	260.1	253.8	253.8	0.4	0.4	125.56	223.2	378.7	439.8	438.9	0.86	508.744 CC		
300.0	300.0	294.1	294.1	0.5	0.5	125.63	223.0	378.5	439.8	438.8	1.00	438.299 ES		
400.0	400.0	395.1	395.1	0.7	0.7	125.93	222.4	377.9	440.5	439.2	1.36	325.118		
500.0	499.9	496.1	496.1	0.9	0.9	126.37	221.7	377.1	441.8	440.1	1.71	258.508		
600.0	599.8	597.2	597.1	1.0	1.1	126.83	220.8	376.0	442.9	440.9	2.06	214.576		
700.0	699.7	698.2	698.1	1.2	1.2	127.30	219.7	374.8	443.8	441.4	2.42	183.419		
800.0	799.6	799.2	799.1	1.4	1.4	127.78	218.5	373.4	444.5	441.8	2.78	160.158		
900.0	899.5	900.2	900.1	1.6	1.6	128.26	217.1	371.9	445.0	441.9	3.13	142.112		
1,000.0	999.5	1,000.0	999.9	1.8	1.8	128.59	216.6	369.7	445.4	441.9	3.49	127.775		
1,100.0	1,099.4	1,087.0	1,086.8	2.0	1.9	128.52	219.3	367.5	447.1	443.3	3.82	117.032		
1,200.0	1,199.3	1,175.2	1,174.8	2.2	2.1	128.13	225.3	366.5	451.8	447.6	4.16	108.485		
1,300.0	1,299.2	1,263.5	1,262.6	2.4	2.2	127.46	234.5	366.3	459.0	454.4	4.52	101.605		
1,400.0	1,399.1	1,359.2	1,357.5	2.5	2.4	126.51	246.9	366.6	468.0	463.1	4.91	95.408		
1,500.0	1,499.1	1,450.0	1,447.1	2.7	2.6	125.32	261.6	366.5	478.5	473.1	5.31	90.160		
1,600.0	1,599.0	1,546.6	1,542.0	2.9	2.9	123.86	279.5	366.2	490.2	484.5	5.75	85.307 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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			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	93.66	-14.5	226.8	227.5					
100.0	100.0	89.6	89.6	0.1	0.1	93.65	-14.5	227.1	227.6	227.3	0.28	806.063		
200.0	200.0	188.7	188.7	0.3	0.3	93.65	-14.6	227.9	228.4	227.8	0.63	364.248		
300.0	300.0	289.1	289.1	0.5	0.5	159.86	-15.0	228.8	230.1	229.2	0.98	235.818		
400.0	400.0	389.4	389.4	0.7	0.7	160.25	-15.8	229.5	233.4	232.0	1.33	175.965		
500.0	499.9	489.5	489.5	0.9	0.8	160.74	-16.5	230.1	237.7	236.0	1.68	141.795		
600.0	599.8	589.6	589.6	1.0	1.0	161.17	-17.0	230.6	242.1	240.1	2.03	119.465		
700.0	699.7	690.1	690.1	1.2	1.2	161.56	-17.4	231.0	246.4	244.0	2.38	103.610		
800.0	799.6	790.4	790.3	1.4	1.4	161.89	-17.6	231.1	250.4	247.7	2.73	91.773		
900.0	899.5	891.3	891.3	1.6	1.5	162.19	-17.6	231.0	254.2	251.1	3.08	82.532		
1,000.0	999.5	991.7	991.7	1.8	1.7	162.45	-17.5	230.6	257.6	254.2	3.43	75.092		
1,100.0	1,099.4	1,092.1	1,092.1	2.0	1.9	162.75	-17.6	230.0	260.9	257.2	3.78	69.010		
1,200.0	1,199.3	1,193.5	1,193.5	2.2	2.1	163.02	-17.5	229.1	263.9	259.8	4.13	63.842		
1,300.0	1,299.2	1,293.2	1,293.2	2.4	2.2	163.21	-17.1	228.0	266.6	262.1	4.48	59.476		
1,400.0	1,399.1	1,393.5	1,393.4	2.5	2.4	163.34	-16.3	227.0	269.4	264.6	4.83	55.743		
1,500.0	1,499.1	1,494.7	1,494.7	2.7	2.6	163.43	-15.4	225.6	271.8	266.6	5.19	52.422		
1,600.0	1,599.0	1,595.5	1,595.4	2.9	2.8	163.57	-14.7	223.8	273.9	268.3	5.54	49.464		
1,700.0	1,698.9	1,694.4	1,694.3	3.1	2.9	163.71	-14.0	222.0	275.9	270.0	5.88	46.877		
1,800.0	1,798.8	1,793.5	1,793.4	3.3	3.1	163.74	-12.8	220.7	278.4	272.1	6.23	44.655		
1,900.0	1,898.7	1,894.5	1,894.3	3.5	3.3	163.67	-11.1	219.4	280.8	274.2	6.59	42.636		
2,000.0	1,998.6	1,992.8	1,992.6	3.7	3.5	163.60	-9.5	218.3	283.4	276.4	6.93	40.869		
2,100.0	2,098.6	2,091.6	2,091.5	3.9	3.6	163.68	-8.6	217.5	286.3	279.1	7.28	39.324		
2,200.0	2,198.5	2,190.1	2,189.9	4.1	3.8	163.96	-8.9	217.2	290.0	282.3	7.63	38.011		
2,300.0	2,298.4	2,290.6	2,290.4	4.2	4.0	164.30	-9.5	216.9	293.7	285.7	7.98	36.809		
2,400.0	2,398.3	2,389.7	2,389.5	4.4	4.1	164.65	-10.1	216.5	297.3	288.9	8.33	35.705		
2,500.0	2,498.2	2,493.1	2,492.9	4.6	4.3	165.18	-11.7	215.8	300.8	292.1	8.68	34.650		
2,600.0	2,598.1	2,603.9	2,603.6	4.8	4.5	165.93	-13.9	211.9	301.5	292.5	9.05	33.328		
2,700.0	2,698.1	2,704.2	2,703.7	5.0	4.7	166.99	-17.6	206.2	300.6	291.2	9.40	31.984		
2,800.0	2,798.0	2,806.0	2,805.1	5.2	4.9	168.38	-22.9	200.1	299.7	289.9	9.75	30.725		
2,900.0	2,897.9	2,908.9	2,907.5	5.4	5.1	170.20	-30.0	192.1	297.7	287.6	10.12	29.423		
3,000.0	2,997.8	3,011.9	3,009.9	5.6	5.3	172.11	-37.1	183.1	295.1	284.6	10.49	28.129		
3,100.0	3,097.7	3,118.9	3,115.7	5.7	5.6	174.79	-47.0	170.8	290.8	279.9	10.89	26.705		
3,200.0	3,197.6	3,216.2	3,211.6	5.9	5.8	177.59	-57.2	158.3	286.3	275.0	11.28	25.371		
3,300.0	3,297.6	3,317.8	3,312.0	6.1	6.0	-179.63	-66.7	145.6	282.4	270.7	11.70	24.146		
3,400.0	3,397.5	3,423.0	3,415.8	6.3	6.3	-176.71	-75.5	130.7	277.3	265.2	12.14	22.844		
3,500.0	3,497.4	3,523.4	3,514.2	6.5	6.6	-173.22	-85.6	113.9	271.4	258.8	12.60	21.537		
3,600.0	3,597.3	3,623.9	3,612.6	6.7	6.9	-169.42	-96.2	96.3	266.2	253.1	13.10	20.318		
3,700.0	3,697.2	3,715.6	3,702.1	6.9	7.2	-165.47	-107.5	79.6	262.7	249.1	13.61	19.308		
3,765.9	3,763.0	3,779.5	3,764.2	7.0	7.4	-162.51	-116.6	68.3	262.3	248.4	13.98	18.771		
3,800.0	3,797.2	3,812.6	3,796.4	7.1	7.6	-160.90	-121.6	62.2	262.5	248.3	14.17	18.521		
3,900.0	3,897.1	3,905.9	3,886.9	7.3	7.9	-156.33	-136.6	45.5	265.0	250.3	14.74	17.984		
4,000.0	3,997.0	4,007.8	3,985.7	7.4	8.3	-151.29	-153.2	26.5	269.2	253.9	15.36	17.533		
4,100.0	4,096.9	4,107.1	4,082.0	7.6	8.7	-146.58	-168.2	7.4	274.1	258.2	15.95	17.187		
4,200.0	4,196.8	4,203.8	4,175.9	7.8	9.0	-142.34	-182.3	-10.7	280.6	264.1	16.51	16.997		
4,300.0	4,296.7	4,303.1	4,272.9	8.0	9.4	-138.62	-196.0	-27.2	288.7	271.6	17.04	16.943		
4,400.0	4,396.7	4,399.7	4,367.5	8.2	9.7	-135.47	-208.3	-42.3	297.3	279.8	17.53	16.963		
4,500.0	4,496.6	4,496.8	4,462.8	8.4	10.1	-132.77	-220.9	-55.7	307.7	289.7	18.00	17.091		
4,600.0	4,596.5	4,594.0	4,558.2	8.6	10.4	-130.18	-234.0	-69.4	319.0	300.5	18.47	17.267		
4,700.0	4,696.4	4,696.2	4,658.6	8.8	10.7	-127.80	-247.2	-83.0	330.6	311.7	18.92	17.478		
4,800.0	4,796.3	4,801.8	4,762.8	8.9	11.0	-125.93	-258.6	-95.1	341.1	321.8	19.34	17.634		
4,900.0	4,896.2	4,908.3	4,868.6	9.1	11.3	-124.77	-267.1	-104.1	349.6	329.9	19.74	17.707		
5,000.0	4,996.2	5,013.6	4,973.6	9.3	11.5	-124.11	-273.2	-110.7	356.5	336.4	20.13	17.708		

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 4B-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 4B-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			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		
5,100.0	5,096.1	5,118.5	5,078.2	9.5	11.7	-123.71	-277.5	-116.0	361.9	341.4	20.50	17.648		
5,200.0	5,196.0	5,225.6	5,185.3	9.7	11.9	-123.61	-279.6	-120.0	365.4	344.6	20.87	17.508		
5,300.0	5,295.9	5,328.5	5,288.1	9.9	12.1	-123.73	-280.2	-122.6	367.8	346.6	21.22	17.331		
5,400.0	5,395.8	5,432.1	5,391.6	10.1	12.2	-124.17	-279.5	-123.5	369.3	347.7	21.57	17.121		
5,500.0	5,495.7	5,536.0	5,495.6	10.3	12.4	-124.63	-277.7	-124.3	369.8	347.8	21.92	16.872		
5,559.8	5,555.5	5,595.5	5,555.0	10.4	12.4	-124.91	-276.3	-124.8	369.7	347.6	22.12	16.715		
5,600.0	5,595.7	5,634.6	5,594.1	10.5	12.5	-125.11	-275.5	-124.9	369.7	347.5	22.25	16.619		
5,700.0	5,695.6	5,731.9	5,691.4	10.6	12.6	-125.65	-273.8	-125.0	370.4	347.9	22.58	16.408		
5,800.0	5,795.5	5,833.2	5,792.7	10.8	12.7	-126.21	-272.3	-125.0	371.3	348.4	22.92	16.202		
5,900.0	5,895.4	5,933.0	5,892.5	11.0	12.9	-126.69	-270.6	-125.6	372.0	348.7	23.26	15.992		
6,000.0	5,995.3	6,029.4	5,988.8	11.2	13.0	-127.06	-269.7	-126.5	373.3	349.7	23.60	15.815		
6,100.0	6,095.2	6,129.4	6,088.9	11.4	13.2	-127.37	-269.5	-127.8	375.3	351.4	23.95	15.672		
6,200.0	6,195.2	6,233.4	6,192.8	11.6	13.3	-127.72	-268.5	-129.1	376.5	352.2	24.29	15.500		
6,300.0	6,295.1	6,332.5	6,291.9	11.8	13.5	-128.10	-267.0	-130.2	377.3	352.6	24.63	15.314		
6,400.0	6,395.0	6,430.4	6,389.9	12.0	13.6	-128.44	-266.0	-131.4	378.5	353.5	24.97	15.156		
6,500.0	6,494.9	6,532.9	6,492.3	12.2	13.8	-128.79	-264.9	-132.6	379.7	354.4	25.32	14.996		
6,600.0	6,594.8	6,634.8	6,594.2	12.3	13.9	-129.16	-263.1	-133.9	380.3	354.6	25.66	14.820		
6,700.0	6,694.8	6,735.4	6,694.7	12.5	14.0	-129.65	-260.9	-134.4	380.6	354.6	25.99	14.645		
6,800.0	6,794.7	6,836.4	6,795.8	12.7	14.2	-130.25	-258.3	-134.3	380.7	354.4	26.32	14.464		
6,900.0	6,894.6	6,938.0	6,897.3	12.9	14.3	-130.76	-255.4	-134.9	380.5	353.8	26.66	14.272		
7,000.0	6,994.5	7,039.2	6,998.4	13.1	14.4	-131.21	-252.3	-135.9	379.9	352.9	26.99	14.073		
7,100.0	7,094.4	7,139.3	7,098.5	13.3	14.6	-131.69	-248.9	-136.9	379.1	351.7	27.33	13.871		
7,200.0	7,194.3	7,233.1	7,192.3	13.5	14.7	-38.51	-246.5	-137.6	375.6	348.0	27.59	13.613		
7,300.0	7,292.4	7,327.2	7,286.3	13.6	14.9	-27.25	-245.5	-137.9	358.3	330.9	27.40	13.077		
7,400.0	7,385.9	7,421.5	7,380.6	13.7	15.0	-28.45	-244.2	-137.3	325.7	298.9	26.79	12.161		
7,500.0	7,471.9	7,507.5	7,466.6	13.9	15.1	-34.90	-242.3	-135.7	279.6	253.5	26.07	10.726		
7,600.0	7,547.8	7,582.7	7,541.8	14.1	15.2	-47.62	-240.2	-134.2	224.1	198.1	25.95	8.635		
7,700.0	7,611.3	7,644.4	7,603.4	14.5	15.2	-67.27	-238.3	-133.1	168.3	141.3	27.06	6.221		
7,800.0	7,660.4	7,690.4	7,649.4	15.0	15.3	-86.77	-236.7	-132.3	135.5	107.3	28.19	4.807		
7,813.8	7,666.0	7,695.5	7,654.4	15.1	15.3	-88.81	-236.5	-132.2	134.9	106.6	28.30	4.768 CC, ES, SF		
7,900.0	7,693.8	7,719.9	7,678.9	15.7	15.3	-96.09	-235.6	-131.7	157.8	129.0	28.82	5.476		
8,000.0	7,710.2	7,732.5	7,691.4	16.6	15.3	-91.77	-235.1	-131.4	225.1	195.2	29.85	7.540		
8,100.0	7,712.0	7,730.5	7,689.4	17.6	15.3	-84.34	-235.2	-131.5	310.4	279.6	30.71	10.105		
8,200.0	7,712.0	7,726.7	7,685.7	18.7	15.3	-82.80	-235.3	-131.6	402.4	370.6	31.78	12.663		
8,300.0	7,712.0	7,723.1	7,682.0	19.9	15.3	-81.29	-235.4	-131.6	497.5	464.6	32.91	15.117		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	61.62	211.0	390.5	444.0						
100.0	100.0	90.3	90.3	0.1	0.1	61.67	210.6	390.7	443.8	443.5	0.29	1,538.507			
139.6	139.6	130.0	130.0	0.2	0.2	61.72	210.3	390.8	443.8	443.4	0.42	1,058.299	CC, ES		
200.0	200.0	183.7	183.7	0.3	0.3	61.78	210.0	391.3	444.2	443.5	0.62	718.330			
300.0	300.0	270.7	270.7	0.5	0.5	127.84	211.4	393.4	447.5	446.6	0.94	473.680			
400.0	400.0	360.7	360.5	0.7	0.6	127.96	214.1	397.5	454.6	453.4	1.28	355.410			
500.0	499.9	447.9	447.5	0.9	0.8	128.25	217.5	403.4	464.8	463.2	1.61	288.423			
600.0	599.8	536.3	535.3	1.0	1.0	128.60	221.6	411.5	477.7	475.7	1.95	245.420			
700.0	699.7	625.6	623.9	1.2	1.3	128.99	226.3	421.5	492.6	490.3	2.28	215.739	SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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		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)						
3,400.0	3,397.5	3,716.2	3,546.1	6.3	21.6	117.60	329.5	225.8	478.6	465.6	13.02	36.756		
3,500.0	3,497.4	3,808.6	3,631.0	6.5	22.3	118.48	304.5	199.3	441.0	427.5	13.46	32.760		
3,600.0	3,597.3	3,901.0	3,715.9	6.7	22.9	119.52	279.4	172.8	403.4	389.5	13.94	28.939		
3,700.0	3,697.2	3,993.4	3,800.8	6.9	23.6	120.77	254.3	146.3	366.0	351.5	14.48	25.276		
3,800.0	3,797.2	4,085.8	3,885.7	7.1	24.3	122.29	229.2	119.8	328.8	313.7	15.11	21.761		
3,900.0	3,897.1	4,178.3	3,970.6	7.3	25.0	124.21	204.1	93.3	291.8	276.0	15.87	18.386		
4,000.0	3,997.0	4,270.7	4,055.5	7.4	25.7	126.67	179.0	66.8	255.2	238.4	16.84	15.154		
4,100.0	4,096.9	4,363.1	4,140.4	7.6	26.3	129.92	153.9	40.3	219.2	201.1	18.14	12.086		
4,200.0	4,196.8	4,455.5	4,225.3	7.8	27.0	134.41	128.9	13.8	184.0	164.1	19.94	9.227		
4,300.0	4,296.7	4,547.9	4,310.2	8.0	27.7	140.89	103.8	-12.7	150.3	127.8	22.56	6.663		
4,400.0	4,396.7	4,640.3	4,395.1	8.2	28.4	150.69	78.7	-39.2	119.4	93.0	26.41	4.521		
4,500.0	4,496.6	4,732.7	4,480.0	8.4	29.1	165.96	53.6	-65.7	94.0	62.3	31.68	2.967		
4,600.0	4,596.5	4,825.2	4,564.9	8.6	29.7	-171.74	28.5	-92.3	79.6	42.7	36.88	2.157		
4,635.8	4,632.3	4,858.2	4,595.3	8.6	30.0	-162.58	19.5	-101.7	78.4	40.4	37.97	2.064	CC, ES, SF	
4,700.0	4,696.4	4,917.6	4,649.8	8.8	30.4	-146.44	3.4	-118.8	82.1	43.9	38.25	2.147		
4,800.0	4,796.3	5,010.0	4,734.7	8.9	31.1	-126.08	-21.7	-145.3	100.4	64.7	35.69	2.813		
4,900.0	4,896.2	5,102.4	4,819.6	9.1	31.8	-112.61	-46.7	-171.8	127.8	95.3	32.44	3.939		
5,000.0	4,996.2	5,194.8	4,904.5	9.3	32.5	-103.94	-71.8	-198.3	159.7	129.8	29.93	5.336		
5,100.0	5,096.1	5,287.2	4,989.4	9.5	33.1	-98.13	-96.9	-224.8	193.9	165.7	28.18	6.880		
5,200.0	5,196.0	5,379.6	5,074.3	9.7	33.8	-94.05	-122.0	-251.3	229.4	202.4	27.01	8.492		
5,300.0	5,295.9	5,472.1	5,159.2	9.9	34.5	-91.05	-147.1	-277.8	265.6	239.4	26.23	10.124		
5,400.0	5,395.8	5,564.5	5,244.1	10.1	35.2	-88.77	-172.2	-304.3	302.3	276.6	25.73	11.749		
5,500.0	5,495.7	5,656.9	5,329.0	10.3	35.9	-86.98	-197.3	-330.8	339.3	313.9	25.42	13.350		
5,600.0	5,595.7	5,749.3	5,413.9	10.5	36.5	-85.54	-222.3	-357.3	376.6	351.4	25.24	14.919		
5,700.0	5,695.6	5,841.7	5,498.8	10.6	37.2	-84.36	-247.4	-383.8	414.1	388.9	25.17	16.450		
5,800.0	5,795.5	5,934.1	5,583.7	10.8	37.9	-83.37	-272.5	-410.3	451.6	426.5	25.17	17.940		
5,900.0	5,895.4	6,026.5	5,668.6	11.0	38.6	-82.53	-297.6	-436.8	489.3	464.1	25.24	19.389		
7,900.0	7,693.8	8,068.5	7,653.8	15.7	41.8	82.66	-541.6	-694.6	483.3	439.1	44.18	10.940		
8,000.0	7,710.2	8,084.9	7,670.2	16.6	41.8	88.75	-541.6	-694.6	447.2	401.3	45.92	9.739		
8,100.0	7,712.0	8,086.7	7,672.0	17.6	41.8	90.00	-541.6	-694.6	431.5	384.6	46.92	9.197		
8,118.5	7,712.0	8,086.7	7,672.0	17.8	41.8	90.00	-541.6	-694.6	431.1	384.0	47.13	9.147		
8,200.0	7,712.0	8,086.7	7,672.0	18.7	41.8	90.00	-541.6	-694.6	438.8	390.7	48.08	9.126		
8,300.0	7,712.0	8,086.7	7,672.0	19.9	41.8	90.00	-541.6	-694.6	467.8	418.5	49.33	9.483		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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						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)			
0.0	0.0	0.0	0.0	0.0	0.0	64.38	194.2	405.0	449.3				
100.0	100.0	90.0	90.0	0.1	0.1	64.38	194.2	405.0	449.2	448.9	0.28	1,593.630	
200.0	200.0	190.0	190.0	0.3	0.3	64.38	194.2	405.0	449.2	448.6	0.63	714.921	CC, ES
300.0	300.0	290.0	290.0	0.5	0.5	130.51	194.2	405.0	449.8	448.8	0.98	459.939	
400.0	400.0	390.0	390.0	0.7	0.7	130.75	194.2	405.0	451.5	450.1	1.33	339.513	
500.0	499.9	489.9	489.9	0.9	0.8	131.12	194.2	405.0	454.1	452.4	1.68	269.665	
600.0	599.8	583.8	583.8	1.0	1.0	131.62	193.4	406.0	457.3	455.3	2.03	225.347	
700.0	699.7	676.7	676.6	1.2	1.2	132.44	190.8	409.3	462.1	459.7	2.38	194.204	
800.0	799.6	769.0	768.6	1.4	1.4	133.56	186.2	414.8	468.5	465.8	2.74	170.940	
900.0	899.5	860.5	859.6	1.6	1.6	134.95	179.9	422.6	476.7	473.6	3.12	152.866	
1,000.0	999.5	951.1	949.2	1.8	1.8	136.57	171.8	432.5	486.9	483.4	3.52	138.488	
1,100.0	1,099.4	1,040.5	1,037.3	2.0	2.1	138.37	162.1	444.5	499.2	495.3	3.93	126.932	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	64.38	194.2	405.0	449.3						
100.0	100.0	85.9	85.9	0.1	0.1	64.39	194.4	405.5	449.7	449.4	0.27	1,650.085			
200.0	200.0	181.3	181.2	0.3	0.3	64.44	194.5	406.7	450.9	450.3	0.61	733.672			
300.0	300.0	276.4	276.3	0.5	0.5	130.83	193.4	409.8	453.9	452.9	0.96	472.706			
400.0	400.0	365.7	365.4	0.7	0.7	131.59	190.7	415.0	459.7	458.4	1.31	350.703			
500.0	499.9	457.2	456.4	0.9	0.9	132.75	186.8	423.2	468.8	467.2	1.68	278.269			
600.0	599.8	549.0	547.5	1.0	1.1	134.18	181.1	433.2	479.4	477.3	2.08	230.441			
700.0	699.7	635.5	633.0	1.2	1.4	135.71	174.6	445.0	492.4	489.9	2.49	198.108 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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) - WANDELL 41-7 (EXISTING) - ENCANA WELL - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
6,900.0	6,894.6	7,000.0	6,890.1	12.9	16.4	-120.02	-368.3	-197.1	488.1	460.4	27.67	17.637		
7,000.0	6,994.5	7,089.7	6,975.3	13.1	16.8	-123.24	-349.9	-175.5	472.3	443.9	28.39	16.633		
7,100.0	7,094.4	7,177.6	7,059.5	13.3	17.2	-126.29	-333.6	-156.5	459.8	430.8	29.08	15.811		
7,200.0	7,194.3	7,266.6	7,145.4	13.5	17.6	-35.68	-318.8	-139.1	446.9	417.2	29.66	15.066		
7,300.0	7,292.4	7,353.5	7,230.1	13.6	17.9	-26.72	-306.1	-124.2	421.4	391.6	29.75	14.162		
7,400.0	7,385.9	7,436.3	7,311.3	13.7	18.2	-29.67	-295.4	-111.8	383.4	353.9	29.46	13.014		
7,500.0	7,471.9	7,512.6	7,386.5	13.9	18.4	-37.11	-287.0	-101.9	335.1	306.0	29.12	11.507		
7,600.0	7,547.8	7,580.5	7,453.6	14.1	18.6	-49.16	-280.6	-94.4	280.2	251.0	29.22	9.589		
7,700.0	7,611.3	7,637.5	7,510.2	14.5	18.8	-65.20	-276.0	-89.1	226.3	196.4	29.94	7.559		
7,800.0	7,660.4	7,681.5	7,554.0	15.0	18.9	-80.53	-273.0	-85.5	188.6	158.0	30.61	6.162		
7,848.9	7,678.8	7,697.6	7,570.1	15.3	18.9	-85.77	-272.0	-84.3	183.1	152.2	30.87	5.931	CC, ES, SF	
7,900.0	7,693.8	7,710.4	7,582.7	15.7	18.9	-88.93	-271.2	-83.4	189.5	158.3	31.15	6.083		
8,000.0	7,710.2	7,722.2	7,594.5	16.6	19.0	-87.37	-270.6	-82.7	234.2	202.2	32.01	7.316		
8,100.0	7,712.0	7,718.2	7,590.5	17.6	18.9	-82.16	-270.8	-82.9	305.4	272.6	32.83	9.304		
8,200.0	7,712.0	7,711.9	7,584.3	18.7	18.9	-80.26	-271.2	-83.3	389.3	355.4	33.85	11.502		
8,300.0	7,712.0	7,705.4	7,577.7	19.9	18.9	-78.27	-271.5	-83.8	479.3	444.4	34.90	13.732		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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) - WANDELL 42-7 (EXISTING) - ENCANA WELL - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
9,000.0	7,712.0	7,831.7	7,574.9	29.9	24.8	-63.01	-1,852.3	-159.8	447.7	399.5	48.22	9.283		
9,100.0	7,712.0	7,841.6	7,584.7	31.5	24.8	-68.91	-1,853.2	-159.4	350.2	298.6	51.61	6.786		
9,200.0	7,712.0	7,850.8	7,593.9	33.1	24.8	-74.81	-1,853.9	-159.1	254.4	199.7	54.67	4.654		
9,300.0	7,712.0	7,859.4	7,602.4	34.7	24.8	-80.58	-1,854.6	-158.8	163.3	105.9	57.32	2.848		
9,400.0	7,712.0	7,867.4	7,610.4	36.3	24.8	-86.11	-1,855.2	-158.6	91.9	32.4	59.51	1.544		
9,441.5	7,712.0	7,870.6	7,613.6	37.0	24.8	-88.32	-1,855.5	-158.5	82.0	21.7	60.29	1.361	Level 3, CC, ES, SF	
9,500.0	7,712.0	7,874.9	7,617.9	37.9	24.9	-91.32	-1,855.8	-158.3	100.6	39.4	61.26	1.643		
9,600.0	7,712.0	7,881.9	7,624.9	39.5	24.9	-96.17	-1,856.3	-158.1	178.0	115.4	62.60	2.844		
9,700.0	7,712.0	7,888.5	7,631.5	41.2	24.9	-100.63	-1,856.7	-157.9	270.5	206.9	63.59	4.254		
9,800.0	7,712.0	7,894.8	7,637.7	42.8	24.9	-104.70	-1,857.1	-157.8	366.8	302.5	64.31	5.704		
9,900.0	7,712.0	7,900.0	7,642.9	44.5	24.9	-108.01	-1,857.5	-157.6	464.6	399.7	64.94	7.155		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4B-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 4B-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)

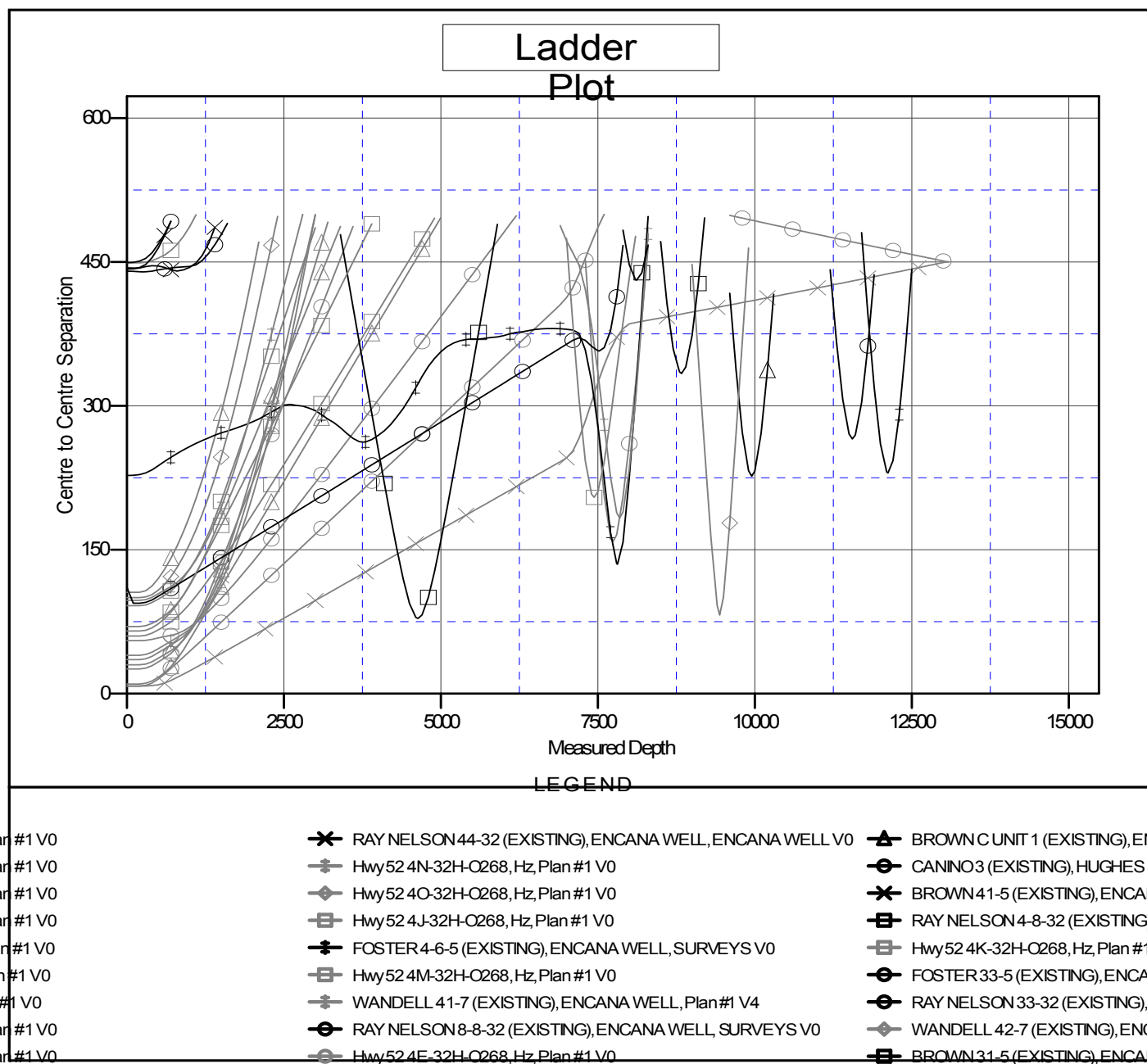
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Hwy 52 4B-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