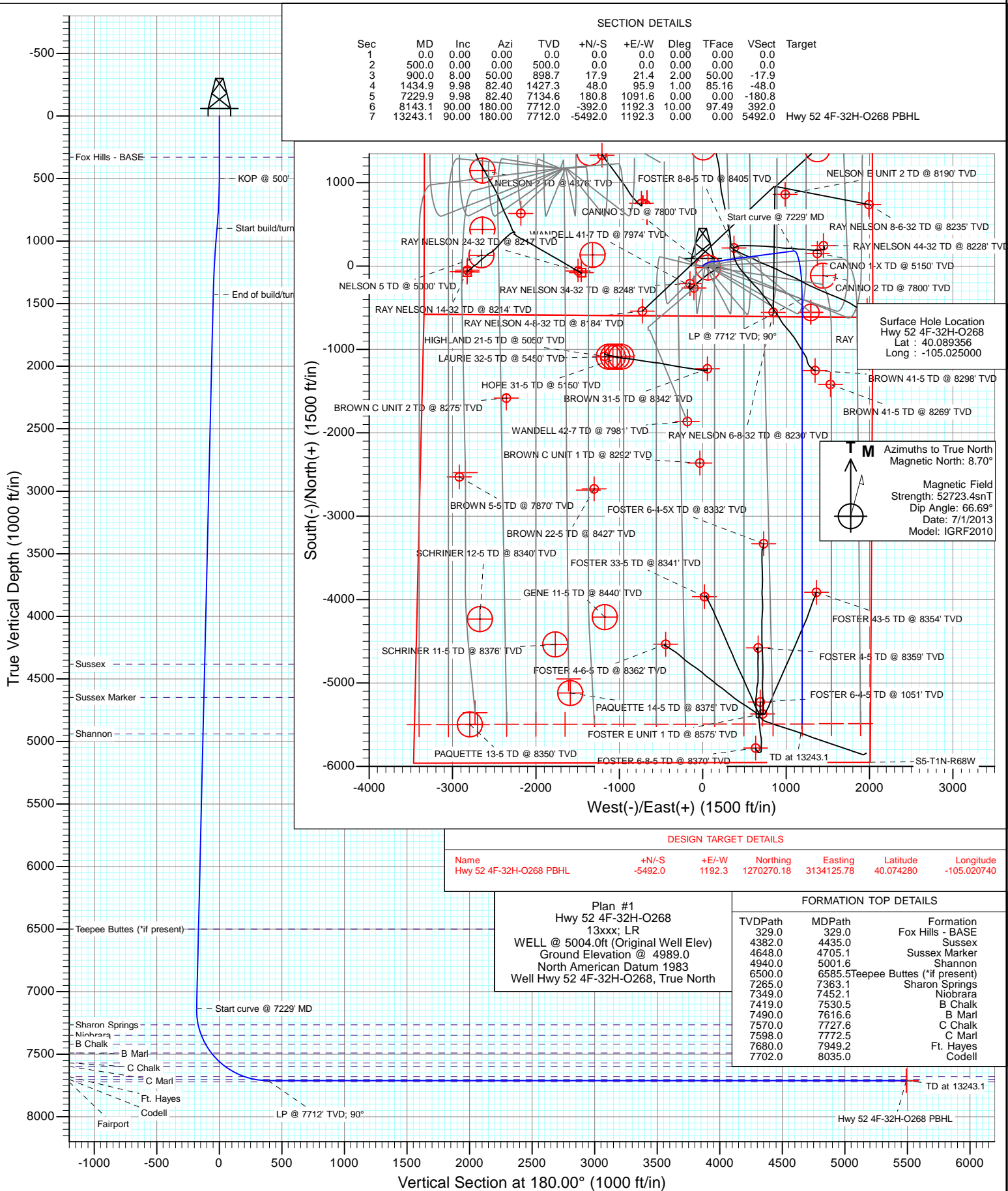




Project: DJ Wattenberg
Site: S32-T2N-R68W (File/Hwy 52)
Well: Hwy 52 4F-32H-O268
Wellbore: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 4F-32H-O268					
Well Position	+N/-S	0.0 ft	Northing:	1,275,755.69 ft	Latitude:	40.089356
	+E/-W	0.0 ft	Easting:	3,132,904.09 ft	Longitude:	-105.025000
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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	8.00	50.00	898.7	17.9	21.4	2.00	2.00	0.00	50.00	
1,434.9	9.98	82.40	1,427.3	48.0	95.9	1.00	0.37	6.06	85.16	
7,229.9	9.98	82.40	7,134.6	180.8	1,091.6	0.00	0.00	0.00	0.00	
8,143.1	90.00	180.00	7,712.0	-392.0	1,192.3	10.00	8.76	10.69	97.49	
13,243.1	90.00	180.00	7,712.0	-5,492.0	1,192.3	0.00	0.00	0.00	0.00	Hwy 52 4F-32H-O268

Planning Report

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

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
329.0	0.00	0.00	329.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	KOP @ 500'
600.0	2.00	50.00	600.0	1.1	1.3	-1.1	2.00	2.00	
700.0	4.00	50.00	699.8	4.5	5.3	-4.5	2.00	2.00	
800.0	6.00	50.00	799.5	10.1	12.0	-10.1	2.00	2.00	
900.0	8.00	50.00	898.7	17.9	21.4	-17.9	2.00	2.00	Start build/turn @ 900' MD
1,000.0	8.15	57.05	997.7	26.2	32.6	-26.2	1.00	0.15	
1,100.0	8.41	63.76	1,096.7	33.3	45.1	-33.3	1.00	0.26	
1,200.0	8.77	69.99	1,195.6	39.2	58.9	-39.2	1.00	0.37	
1,300.0	9.24	75.66	1,294.3	43.8	73.8	-43.8	1.00	0.46	
1,400.0	9.78	80.76	1,393.0	47.1	90.0	-47.1	1.00	0.54	
1,434.9	9.98	82.40	1,427.3	48.0	95.9	-48.0	1.00	0.59	End of build/turn @ 1434' MD
1,500.0	9.98	82.40	1,491.4	49.5	107.1	-49.5	0.00	0.00	
1,600.0	9.98	82.40	1,589.9	51.8	124.2	-51.8	0.00	0.00	
1,700.0	9.98	82.40	1,688.4	54.1	141.4	-54.1	0.00	0.00	
1,800.0	9.98	82.40	1,786.9	56.4	158.6	-56.4	0.00	0.00	
1,900.0	9.98	82.40	1,885.4	58.7	175.8	-58.7	0.00	0.00	
2,000.0	9.98	82.40	1,983.9	61.0	193.0	-61.0	0.00	0.00	
2,100.0	9.98	82.40	2,082.4	63.2	210.2	-63.2	0.00	0.00	
2,200.0	9.98	82.40	2,180.9	65.5	227.3	-65.5	0.00	0.00	
2,300.0	9.98	82.40	2,279.3	67.8	244.5	-67.8	0.00	0.00	
2,400.0	9.98	82.40	2,377.8	70.1	261.7	-70.1	0.00	0.00	
2,500.0	9.98	82.40	2,476.3	72.4	278.9	-72.4	0.00	0.00	
2,600.0	9.98	82.40	2,574.8	74.7	296.1	-74.7	0.00	0.00	
2,700.0	9.98	82.40	2,673.3	77.0	313.2	-77.0	0.00	0.00	
2,800.0	9.98	82.40	2,771.8	79.3	330.4	-79.3	0.00	0.00	
2,900.0	9.98	82.40	2,870.3	81.6	347.6	-81.6	0.00	0.00	
3,000.0	9.98	82.40	2,968.7	83.9	364.8	-83.9	0.00	0.00	
3,100.0	9.98	82.40	3,067.2	86.2	382.0	-86.2	0.00	0.00	
3,200.0	9.98	82.40	3,165.7	88.5	399.2	-88.5	0.00	0.00	
3,300.0	9.98	82.40	3,264.2	90.7	416.3	-90.7	0.00	0.00	
3,400.0	9.98	82.40	3,362.7	93.0	433.5	-93.0	0.00	0.00	
3,500.0	9.98	82.40	3,461.2	95.3	450.7	-95.3	0.00	0.00	
3,600.0	9.98	82.40	3,559.7	97.6	467.9	-97.6	0.00	0.00	
3,700.0	9.98	82.40	3,658.1	99.9	485.1	-99.9	0.00	0.00	
3,800.0	9.98	82.40	3,756.6	102.2	502.2	-102.2	0.00	0.00	
3,900.0	9.98	82.40	3,855.1	104.5	519.4	-104.5	0.00	0.00	
4,000.0	9.98	82.40	3,953.6	106.8	536.6	-106.8	0.00	0.00	
4,100.0	9.98	82.40	4,052.1	109.1	553.8	-109.1	0.00	0.00	
4,200.0	9.98	82.40	4,150.6	111.4	571.0	-111.4	0.00	0.00	
4,300.0	9.98	82.40	4,249.1	113.7	588.2	-113.7	0.00	0.00	
4,400.0	9.98	82.40	4,347.5	116.0	605.3	-116.0	0.00	0.00	
4,435.0	9.98	82.40	4,382.0	116.8	611.3	-116.8	0.00	0.00	Sussex
4,500.0	9.98	82.40	4,446.0	118.3	622.5	-118.3	0.00	0.00	
4,600.0	9.98	82.40	4,544.5	120.5	639.7	-120.5	0.00	0.00	
4,700.0	9.98	82.40	4,643.0	122.8	656.9	-122.8	0.00	0.00	
4,705.1	9.98	82.40	4,648.0	123.0	657.8	-123.0	0.00	0.00	Sussex Marker

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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	9.98	82.40	4,741.5	125.1	674.1	-125.1	0.00	0.00	
4,900.0	9.98	82.40	4,840.0	127.4	691.2	-127.4	0.00	0.00	
5,000.0	9.98	82.40	4,938.5	129.7	708.4	-129.7	0.00	0.00	
5,001.6	9.98	82.40	4,940.0	129.8	708.7	-129.8	0.00	0.00	Shannon
5,100.0	9.98	82.40	5,037.0	132.0	725.6	-132.0	0.00	0.00	
5,200.0	9.98	82.40	5,135.4	134.3	742.8	-134.3	0.00	0.00	
5,300.0	9.98	82.40	5,233.9	136.6	760.0	-136.6	0.00	0.00	
5,400.0	9.98	82.40	5,332.4	138.9	777.2	-138.9	0.00	0.00	
5,500.0	9.98	82.40	5,430.9	141.2	794.3	-141.2	0.00	0.00	
5,600.0	9.98	82.40	5,529.4	143.5	811.5	-143.5	0.00	0.00	
5,700.0	9.98	82.40	5,627.9	145.8	828.7	-145.8	0.00	0.00	
5,800.0	9.98	82.40	5,726.4	148.1	845.9	-148.1	0.00	0.00	
5,900.0	9.98	82.40	5,824.8	150.3	863.1	-150.3	0.00	0.00	
6,000.0	9.98	82.40	5,923.3	152.6	880.2	-152.6	0.00	0.00	
6,100.0	9.98	82.40	6,021.8	154.9	897.4	-154.9	0.00	0.00	
6,200.0	9.98	82.40	6,120.3	157.2	914.6	-157.2	0.00	0.00	
6,300.0	9.98	82.40	6,218.8	159.5	931.8	-159.5	0.00	0.00	
6,400.0	9.98	82.40	6,317.3	161.8	949.0	-161.8	0.00	0.00	
6,500.0	9.98	82.40	6,415.8	164.1	966.2	-164.1	0.00	0.00	
6,585.5	9.98	82.40	6,500.0	166.1	980.9	-166.1	0.00	0.00	Teepee Buttes (*if present)
6,600.0	9.98	82.40	6,514.2	166.4	983.3	-166.4	0.00	0.00	
6,700.0	9.98	82.40	6,612.7	168.7	1,000.5	-168.7	0.00	0.00	
6,800.0	9.98	82.40	6,711.2	171.0	1,017.7	-171.0	0.00	0.00	
6,900.0	9.98	82.40	6,809.7	173.3	1,034.9	-173.3	0.00	0.00	
7,000.0	9.98	82.40	6,908.2	175.6	1,052.1	-175.6	0.00	0.00	
7,100.0	9.98	82.40	7,006.7	177.9	1,069.2	-177.9	0.00	0.00	
7,200.0	9.98	82.40	7,105.2	180.1	1,086.4	-180.1	0.00	0.00	
7,229.9	9.98	82.40	7,134.6	180.8	1,091.6	-180.8	0.00	0.00	Start curve @ 7229' MD
7,300.0	11.40	120.12	7,203.6	178.2	1,103.6	-178.2	10.00	2.03	
7,363.1	15.51	141.06	7,265.0	168.4	1,114.3	-168.4	10.00	6.51	Sharon Springs
7,400.0	18.49	148.55	7,300.3	159.6	1,120.5	-159.6	10.00	8.07	
7,452.1	23.04	155.78	7,349.0	143.3	1,129.0	-143.3	10.00	8.73	Niobrara
7,500.0	27.41	160.34	7,392.3	124.3	1,136.5	-124.3	10.00	9.14	
7,530.5	30.26	162.60	7,419.0	110.4	1,141.2	-110.4	10.00	9.34	B Chalk
7,600.0	36.86	166.55	7,476.9	73.3	1,151.3	-73.3	10.00	9.50	
7,616.6	38.45	167.31	7,490.0	63.5	1,153.6	-63.5	10.00	9.60	B Marl
7,700.0	46.52	170.48	7,551.5	8.2	1,164.3	-8.2	10.00	9.67	
7,727.6	49.20	171.34	7,570.0	-12.0	1,167.5	12.0	10.00	9.73	C Chalk
7,772.5	53.58	172.61	7,598.0	-46.7	1,172.4	46.7	10.00	9.75	C Marl
7,800.0	56.27	173.31	7,613.8	-69.1	1,175.2	69.1	10.00	9.78	
7,900.0	66.08	175.56	7,662.0	-156.1	1,183.6	156.1	10.00	9.80	
7,949.2	70.91	176.54	7,680.0	-201.8	1,186.7	201.8	10.00	9.83	Ft. Hayes
8,000.0	75.91	177.49	7,694.5	-250.4	1,189.2	250.4	10.00	9.84	
8,035.0	79.36	178.12	7,702.0	-284.6	1,190.6	284.6	10.00	9.84	Codell
8,100.0	85.76	179.26	7,710.4	-349.0	1,192.0	349.0	10.00	9.85	
8,143.1	90.00	180.00	7,712.0	-392.0	1,192.3	392.0	10.00	9.85	LP @ 7712' TVD; 90°
8,200.0	90.00	180.00	7,712.0	-448.9	1,192.3	448.9	0.00	0.00	
8,300.0	90.00	180.00	7,712.0	-548.9	1,192.3	548.9	0.00	0.00	
8,400.0	90.00	180.00	7,712.0	-648.9	1,192.3	648.9	0.00	0.00	
8,500.0	90.00	180.00	7,712.0	-748.9	1,192.3	748.9	0.00	0.00	
8,600.0	90.00	180.00	7,712.0	-848.9	1,192.3	848.9	0.00	0.00	
8,700.0	90.00	180.00	7,712.0	-948.9	1,192.3	948.9	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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	180.00	7,712.0	-1,048.9	1,192.3	1,048.9	0.00	0.00	
8,900.0	90.00	180.00	7,712.0	-1,148.9	1,192.3	1,148.9	0.00	0.00	
9,000.0	90.00	180.00	7,712.0	-1,248.9	1,192.3	1,248.9	0.00	0.00	
9,100.0	90.00	180.00	7,712.0	-1,348.9	1,192.3	1,348.9	0.00	0.00	
9,200.0	90.00	180.00	7,712.0	-1,448.9	1,192.3	1,448.9	0.00	0.00	
9,300.0	90.00	180.00	7,712.0	-1,548.9	1,192.3	1,548.9	0.00	0.00	
9,400.0	90.00	180.00	7,712.0	-1,648.9	1,192.3	1,648.9	0.00	0.00	
9,500.0	90.00	180.00	7,712.0	-1,748.9	1,192.3	1,748.9	0.00	0.00	
9,600.0	90.00	180.00	7,712.0	-1,848.9	1,192.3	1,848.9	0.00	0.00	
9,700.0	90.00	180.00	7,712.0	-1,948.9	1,192.3	1,948.9	0.00	0.00	
9,800.0	90.00	180.00	7,712.0	-2,048.9	1,192.3	2,048.9	0.00	0.00	
9,900.0	90.00	180.00	7,712.0	-2,148.9	1,192.3	2,148.9	0.00	0.00	
10,000.0	90.00	180.00	7,712.0	-2,248.9	1,192.3	2,248.9	0.00	0.00	
10,100.0	90.00	180.00	7,712.0	-2,348.9	1,192.3	2,348.9	0.00	0.00	
10,200.0	90.00	180.00	7,712.0	-2,448.9	1,192.3	2,448.9	0.00	0.00	
10,300.0	90.00	180.00	7,712.0	-2,548.9	1,192.3	2,548.9	0.00	0.00	
10,400.0	90.00	180.00	7,712.0	-2,648.9	1,192.3	2,648.9	0.00	0.00	
10,500.0	90.00	180.00	7,712.0	-2,748.9	1,192.3	2,748.9	0.00	0.00	
10,600.0	90.00	180.00	7,712.0	-2,848.9	1,192.3	2,848.9	0.00	0.00	
10,700.0	90.00	180.00	7,712.0	-2,948.9	1,192.3	2,948.9	0.00	0.00	
10,800.0	90.00	180.00	7,712.0	-3,048.9	1,192.3	3,048.9	0.00	0.00	
10,900.0	90.00	180.00	7,712.0	-3,148.9	1,192.3	3,148.9	0.00	0.00	
11,000.0	90.00	180.00	7,712.0	-3,248.9	1,192.3	3,248.9	0.00	0.00	
11,100.0	90.00	180.00	7,712.0	-3,348.9	1,192.3	3,348.9	0.00	0.00	
11,200.0	90.00	180.00	7,712.0	-3,448.9	1,192.3	3,448.9	0.00	0.00	
11,300.0	90.00	180.00	7,712.0	-3,548.9	1,192.3	3,548.9	0.00	0.00	
11,400.0	90.00	180.00	7,712.0	-3,648.9	1,192.3	3,648.9	0.00	0.00	
11,500.0	90.00	180.00	7,712.0	-3,748.9	1,192.3	3,748.9	0.00	0.00	
11,600.0	90.00	180.00	7,712.0	-3,848.9	1,192.3	3,848.9	0.00	0.00	
11,700.0	90.00	180.00	7,712.0	-3,948.9	1,192.3	3,948.9	0.00	0.00	
11,800.0	90.00	180.00	7,712.0	-4,048.9	1,192.3	4,048.9	0.00	0.00	
11,900.0	90.00	180.00	7,712.0	-4,148.9	1,192.3	4,148.9	0.00	0.00	
12,000.0	90.00	180.00	7,712.0	-4,248.9	1,192.3	4,248.9	0.00	0.00	
12,100.0	90.00	180.00	7,712.0	-4,348.9	1,192.3	4,348.9	0.00	0.00	
12,200.0	90.00	180.00	7,712.0	-4,448.9	1,192.3	4,448.9	0.00	0.00	
12,300.0	90.00	180.00	7,712.0	-4,548.9	1,192.3	4,548.9	0.00	0.00	
12,400.0	90.00	180.00	7,712.0	-4,648.9	1,192.3	4,648.9	0.00	0.00	
12,500.0	90.00	180.00	7,712.0	-4,748.9	1,192.3	4,748.9	0.00	0.00	
12,600.0	90.00	180.00	7,712.0	-4,848.9	1,192.3	4,848.9	0.00	0.00	
12,700.0	90.00	180.00	7,712.0	-4,948.9	1,192.3	4,948.9	0.00	0.00	
12,800.0	90.00	180.00	7,712.0	-5,048.9	1,192.3	5,048.9	0.00	0.00	
12,900.0	90.00	180.00	7,712.0	-5,148.9	1,192.3	5,148.9	0.00	0.00	
13,000.0	90.00	180.00	7,712.0	-5,248.9	1,192.3	5,248.9	0.00	0.00	
13,100.0	90.00	180.00	7,712.0	-5,348.9	1,192.3	5,348.9	0.00	0.00	
13,200.0	90.00	180.00	7,712.0	-5,448.9	1,192.3	5,448.9	0.00	0.00	
13,243.1	90.00	180.00	7,712.0	-5,492.0	1,192.3	5,492.0	0.00	0.00	TD at 13243.1 - Hwy 52 4F-32H-O268 PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
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 4F-32H-O268 P1	0.00	0.00	7,712.0	-5,492.0	1,192.3	1,270,270.18	3,134,125.78	40.074280	-105.020740
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
329.0	329.0	Fox Hills - BASE				
4,435.0	4,382.0	Sussex				
4,705.1	4,648.0	Sussex Marker				
5,001.6	4,940.0	Shannon				
6,585.5	6,500.0	Teepee Buttes (*if present)				
7,363.1	7,265.0	Sharon Springs				
7,452.1	7,349.0	Niobrara				
7,530.5	7,419.0	B Chalk				
7,616.6	7,490.0	B Marl				
7,727.6	7,570.0	C Chalk				
7,772.5	7,598.0	C Marl				
7,949.2	7,680.0	Ft. Hayes				
8,035.0	7,702.0	Codell				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
500.0	500.0	0.0	0.0	KOP @ 500'
900.0	898.7	17.9	21.4	Start build/turn @ 900' MD
1,434.9	1,427.3	48.0	95.9	End of build/turn @ 1434' MD
7,229.9	7,134.6	180.8	1,091.6	Start curve @ 7229' MD
8,143.1	7,712.0	-392.0	1,192.3	LP @ 7712' TVD; 90°
13,243.1	7,712.0	-5,492.0	1,192.3	TD at 13243.1

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S32-T2N-R68W (File/Hwy 52)

Hwy 52 4F-32H-O268

Hz

Plan #1

Anticollision Report

05 July, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program		Date	7/5/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	13,243.1	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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)		Separation Factor	Warning
Offset Well - Wellbore - Design						
S32-T2N-R68W (File/Hwy 52)						
ANDERSON 21-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 22-32 (EXISTING) - KPK WELL - NO SURV						Out of range
ANDERSON 22-32 ENC (EXISTING) - ENCANA WELL -						Out of range
ANDERSON 31-32 (EXISTING) - ENCANA WELL - PLAN						Out of range
ANDERSON 32-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 32-7 (EXISTING) - KPK WELL - NO SURVE						Out of range
ANDERSON 41-32 (EXISTING) - ENCANA WELL - NO S						Out of range
ANDERSON 42-32 (EXISTING) - BASIN EXP WELL - NO						Out of range
ANDERSON 4-2-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON 6-4-32 (EXISTING) - ENCANA WELL - SUR						Out of range
ANDERSON TRUST 1 (EXISTING) - KPK WELL - NO S						Out of range
ANDERSON TRUST 1 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 2 A (EXISTING) - ENCANA WELL -						Out of range
ANDERSON TRUST 32-2 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST 32-8 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C 1 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W						Out of range
BROWN 22-5 (EXISTING) - ENCANA WELL - NO SURV						Out of range
BROWN 31-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	9,003.9	7,966.6	147.2	90.8	2.610	CC, ES, SF
BROWN 5-3 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN 5-5 (EXISTING) - ENCANA WELL - NO SURVE						Out of range
BROWN C UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
BROWN C UNIT 2 (EXISTING) - ENCANA WELL - NO S						Out of range
CANINO 1-X (EXISTING) - ENCANA WELL - NO SURVE						Out of range
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR	7,880.3	7,595.7	260.7	233.0	9.422	CC, ES
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR	7,900.0	7,604.0	261.4	233.6	9.401	SF
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	1,013.1	952.7	53.4	49.8	14.759	CC, ES
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	1,200.0	1,137.6	57.3	52.9	13.086	SF
FEDERAL NOAA 11-32 (EXISTING) - ENCANA WELL - N						Out of range
File 3A-32H-K268 - Hz - Plan #1						Out of range
File 3B-32H-K268 - Hz - Plan #1						Out of range
File 3C-32H-K268 - Hz - Plan #1						Out of range
File 3D-32H-K268 - Hz - Plan #1						Out of range
File 3E-32H-K268 - Hz - Plan #1						Out of range
File 3F-32H-K268 - Hz - Plan #1						Out of range
File 3G-32H-K268 - Hz - Plan #1						Out of range
File 3H-32H-K268 - Hz - Plan #1						Out of range
File 3I-32H-K268 - Hz - Plan #1						Out of range
File 3J-32H-K268 - Hz - Plan #1						Out of range
File 3K-32H-K268 - Hz - Plan #1						Out of range
File 3L-32H-K268 - Hz - Plan #1						Out of range
File 3M-32H-K268 - Hz - Plan #1						Out of range
File 3N-32H-K268 - Hz - Plan #1						Out of range
File 3O-32H-K268 - Hz - Plan #1						Out of range
File 3P-32H-K268 - Hz - Plan #1						Out of range
FOSTER 33-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 43-5 (EXISTING) - ENCANA WELL - SURVEY	11,667.5	8,010.1	160.5	59.7	1.593	CC, ES, SF
FOSTER 4-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
FOSTER 4-6-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5X (EXISTING) - ENCANA WELL - SURVE	11,103.7	8,146.2	466.9	367.0	4.677	CC, ES, SF
FOSTER 6-8-5 (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 4F-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 4F-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)						
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	35.5	35.0	67.003	CC
Hwy 52 4A-32H-O268 - Hz - Plan #1	200.0	201.0	35.5	34.9	54.841	ES
Hwy 52 4A-32H-O268 - Hz - Plan #1	600.0	598.0	50.0	48.0	24.501	SF
Hwy 52 4B-32H-O268 - Hz - Plan #1	200.0	200.0	30.0	29.4	46.456	CC, ES
Hwy 52 4B-32H-O268 - Hz - Plan #1	600.0	598.6	42.0	40.0	20.569	SF
Hwy 52 4C-32H-O268 - Hz - Plan #1	500.0	500.0	25.7	24.0	15.186	CC, ES
Hwy 52 4C-32H-O268 - Hz - Plan #1	700.0	700.7	28.8	26.4	12.038	SF
Hwy 52 4D-32H-O268 - Hz - Plan #1	500.0	500.0	20.0	18.3	11.814	CC, ES
Hwy 52 4D-32H-O268 - Hz - Plan #1	700.0	700.7	22.2	19.8	9.288	SF
Hwy 52 4E-32H-O268 - Hz - Plan #1	500.0	500.0	7.8	6.1	4.613	CC, ES
Hwy 52 4E-32H-O268 - Hz - Plan #1	13,243.1	12,827.2	450.0	294.3	2.891	SF
Hwy 52 4G-32H-O268 - Hz - Plan #1	500.0	500.0	7.8	6.1	4.613	CC
Hwy 52 4G-32H-O268 - Hz - Plan #1	600.0	600.0	8.0	6.0	3.923	ES
Hwy 52 4G-32H-O268 - Hz - Plan #1	13,243.1	12,972.4	450.0	293.7	2.880	SF
Hwy 52 4H-32H-O268 - Hz - Plan #1	709.1	708.9	6.5	4.0	2.652	CC, ES, SF
Hwy 52 4I-32H-O268 - Hz - Plan #1	582.6	581.8	21.9	19.9	10.831	CC, ES
Hwy 52 4I-32H-O268 - Hz - Plan #1	600.0	599.1	22.0	19.9	10.524	SF
Hwy 52 4J-32H-O268 - Hz - Plan #1	654.2	652.8	28.4	26.2	12.576	CC, ES
Hwy 52 4J-32H-O268 - Hz - Plan #1	700.0	698.2	28.9	26.4	11.880	SF
Hwy 52 4K-32H-O268 - Hz - Plan #1	400.0	399.0	35.5	34.2	26.458	CC, ES
Hwy 52 4K-32H-O268 - Hz - Plan #1	800.0	796.1	40.9	38.1	14.681	SF
Hwy 52 4L-32H-O268 - Hz - Plan #1	786.1	783.1	36.7	34.0	13.495	CC
Hwy 52 4L-32H-O268 - Hz - Plan #1	800.0	796.8	36.8	34.0	13.245	ES
Hwy 52 4L-32H-O268 - Hz - Plan #1	900.0	895.3	39.7	36.5	12.418	SF
Hwy 52 4M-32H-O268 - Hz - Plan #1	903.5	898.6	52.7	49.5	16.498	CC, ES
Hwy 52 4M-32H-O268 - Hz - Plan #1	8,000.0	7,887.6	307.3	277.9	10.464	SF
Hwy 52 4N-32H-O268 - Hz - Plan #1	1,010.9	1,005.0	50.3	46.6	13.729	CC, ES
Hwy 52 4N-32H-O268 - Hz - Plan #1	7,562.6	7,984.8	94.9	67.4	3.459	SF
Hwy 52 4O-32H-O268 - Hz - Plan #1	400.0	399.0	70.1	68.8	52.248	CC, ES
Hwy 52 4O-32H-O268 - Hz - Plan #1	1,700.0	1,677.0	121.7	114.4	16.508	SF
Hwy 52 4P-32H-O268 - Hz - Plan #1	200.0	199.0	75.7	75.0	117.529	CC, ES
Hwy 52 4P-32H-O268 - Hz - Plan #1	1,800.0	1,765.7	162.4	154.8	21.608	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
RAY NELSON 0-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 12-32 (EXISTING) - ENCANA WELL - NO						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 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S32-T2N-R68W (File/Hwy 52)						
RAY NELSON 13-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 14-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 23-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 24-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 2-4-32 (EXISTING) - ENCANA WELL - NO						Out of range
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	1,583.6	1,526.9	313.6	307.9	55.071	CC
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	1,600.0	1,542.3	313.6	307.8	54.270	ES
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	2,200.0	2,088.0	382.1	372.8	41.168	SF
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	1,962.5	1,939.4	70.3	62.1	8.550	CC, ES
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	2,000.0	1,976.1	70.7	62.3	8.477	SF
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	7,513.1	7,525.9	335.0	306.8	11.862	CC, ES
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	7,600.0	7,597.8	340.8	311.5	11.601	SF
RAY NELSON 4-4-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 4-6-32 (EXISTING) - ENCANA WELL - SU						Out of range
RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PL	3,424.9	3,528.1	344.2	314.8	11.698	CC, ES
RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PL	3,500.0	3,592.0	346.5	316.4	11.520	SF
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	4,782.3	4,776.2	213.7	184.5	7.319	CC, ES
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	4,800.0	4,792.9	213.7	184.5	7.302	SF
Ray Nelson 7-8-32 - DD - Plan #1	8,307.1	7,829.1	103.3	66.7	2.821	CC, ES, 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	422.5			
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU	1,300.0	1,160.2	488.8	483.7	96.213	SF
SCHRINER 11-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
SCHRINER 12-5 (EXISTING) - KERR-MCGEE WELL - N						Out of range
WANDELL 33-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 41-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 42-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range
WANDELL 43-7 (EXISTING) - ENCANA WELL - Plan #1						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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		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	61.01	201.6	363.9	416.1						
100.0	100.0	86.8	86.8	0.1	0.1	61.05	201.6	364.4	416.5	416.2	0.27	1,519.844			
200.0	200.0	186.0	186.0	0.3	0.3	61.12	201.6	365.5	417.4	416.8	0.62	670.079			
300.0	300.0	287.7	287.7	0.5	0.5	61.23	201.3	366.6	418.2	417.2	0.98	428.585			
400.0	400.0	398.6	398.6	0.7	0.7	61.52	199.0	366.8	417.4	416.1	1.34	310.543			
500.0	500.0	506.1	505.9	0.8	0.9	62.30	192.5	366.6	414.4	412.6	1.71	242.534			
600.0	600.0	613.5	612.6	1.0	1.1	13.90	180.6	367.0	408.0	405.8	2.16	189.262			
700.0	699.8	716.0	713.7	1.2	1.5	16.35	164.0	368.0	396.9	394.3	2.63	151.007			
800.0	799.5	807.2	803.4	1.4	1.8	19.13	147.7	369.8	383.6	380.5	3.10	123.852			
900.0	898.7	900.9	895.4	1.7	2.1	22.54	130.3	373.4	369.6	366.0	3.61	102.332			
1,000.0	997.7	996.1	988.6	1.9	2.5	19.28	111.4	377.7	355.4	351.3	4.18	84.966			
1,100.0	1,096.7	1,087.7	1,077.4	2.2	2.9	16.90	89.5	383.2	342.8	338.0	4.80	71.381			
1,200.0	1,195.6	1,174.1	1,160.4	2.5	3.3	15.27	66.6	390.2	333.5	328.0	5.41	61.617			
1,300.0	1,294.3	1,259.2	1,241.8	2.8	3.7	14.22	43.7	399.5	328.5	322.5	6.01	54.661			
1,362.2	1,355.7	1,312.7	1,292.8	3.0	4.0	13.91	29.1	406.7	327.7	321.3	6.36	51.490			
1,400.0	1,393.0	1,345.8	1,324.3	3.1	4.2	13.80	20.2	411.5	328.0	321.4	6.57	49.889			
1,500.0	1,491.4	1,432.2	1,406.5	3.4	4.7	16.42	-2.4	425.9	331.6	324.5	7.10	46.688			
1,600.0	1,589.9	1,522.1	1,491.5	3.7	5.2	20.62	-25.8	443.0	339.8	332.1	7.62	44.601			
1,700.0	1,688.4	1,614.4	1,578.6	4.1	5.7	24.69	-50.0	461.8	351.3	343.3	8.09	43.434			
1,800.0	1,786.9	1,702.5	1,661.5	4.4	6.2	28.18	-72.6	481.3	366.1	357.6	8.52	42.970			
1,900.0	1,885.4	1,788.9	1,742.1	4.7	6.8	31.43	-95.9	501.9	384.7	375.8	8.94	43.056			
2,000.0	1,983.9	1,884.3	1,830.4	5.1	7.4	34.98	-124.0	524.8	406.0	396.7	9.36	43.360			
2,100.0	2,082.4	1,979.9	1,918.9	5.4	8.1	38.21	-152.0	547.3	428.5	418.7	9.73	44.020			
2,200.0	2,180.9	2,081.8	2,014.0	5.8	8.7	40.94	-179.0	572.1	450.8	440.7	10.09	44.671			
2,300.0	2,279.3	2,170.6	2,096.7	6.1	9.3	43.14	-202.9	593.8	474.5	464.0	10.44	45.437			
2,400.0	2,377.8	2,271.2	2,190.4	6.5	9.9	45.29	-229.3	619.0	498.8	488.0	10.79	46.234			
8,600.0	7,712.0	7,964.0	7,697.3	30.0	33.9	-88.17	-1,252.8	1,339.4	429.8	379.3	50.53	8.507			
8,700.0	7,712.0	7,964.6	7,698.0	31.0	33.9	-88.43	-1,252.8	1,339.5	337.6	285.7	51.92	6.503			
8,800.0	7,712.0	7,965.3	7,698.6	32.1	33.9	-88.68	-1,252.8	1,339.5	251.4	198.1	53.36	4.712			
8,900.0	7,712.0	7,965.9	7,699.2	33.2	33.9	-88.92	-1,252.8	1,339.5	180.2	125.3	54.84	3.285			
9,000.0	7,712.0	7,966.5	7,699.9	34.4	33.9	-89.17	-1,252.8	1,339.5	147.3	90.9	56.35	2.613			
9,003.9	7,712.0	7,966.6	7,699.9	34.4	33.9	-89.18	-1,252.8	1,339.5	147.2	90.8	56.41	2.610	CC, ES, SF		
9,100.0	7,712.0	7,967.2	7,700.5	35.6	33.9	-89.42	-1,252.8	1,339.5	175.8	117.9	57.89	3.037			
9,200.0	7,712.0	7,967.8	7,701.1	36.9	33.9	-89.66	-1,252.8	1,339.5	245.2	185.8	59.45	4.125			
9,300.0	7,712.0	7,968.4	7,701.8	38.2	33.9	-89.90	-1,252.8	1,339.5	330.7	269.7	61.03	5.419			
9,400.0	7,712.0	7,969.0	7,702.4	39.5	33.9	-90.15	-1,252.8	1,339.5	422.6	360.0	62.63	6.748			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - CANINO 2 (EXISTING) - HUGHES CW WELL - NO SURVEYS											Offset Site Error:		0.0 ft
Survey Program: 7800-Geolink MWD											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						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	6,809.7	6,751.7	6,751.7	22.2	11.8	43.47	-116.3	1,441.9	499.5	469.9	29.66	16.839	
7,000.0	6,908.2	6,850.2	6,850.2	22.6	12.0	44.86	-116.3	1,441.9	487.0	456.6	30.35	16.045	
7,100.0	7,006.7	6,948.7	6,948.7	22.9	12.1	46.32	-116.3	1,441.9	474.8	443.7	31.05	15.288	
7,200.0	7,105.2	7,047.2	7,047.2	23.3	12.3	47.86	-116.3	1,441.9	462.9	431.1	31.78	14.567	
7,300.0	7,203.6	7,145.6	7,145.6	23.6	12.5	11.13	-116.3	1,441.9	448.5	416.5	32.02	14.005	
7,400.0	7,300.3	7,242.3	7,242.3	23.9	12.6	-18.81	-116.3	1,441.9	423.6	392.5	31.15	13.599	
7,500.0	7,392.3	7,334.3	7,334.3	24.2	12.8	-35.25	-116.3	1,441.9	388.8	359.4	29.37	13.238	
7,600.0	7,476.9	7,418.9	7,418.9	24.4	12.9	-49.78	-116.3	1,441.9	347.0	319.7	27.31	12.708	
7,700.0	7,551.5	7,493.5	7,493.5	24.7	13.1	-65.36	-116.3	1,441.9	304.3	278.0	26.27	11.583	
7,800.0	7,613.8	7,555.8	7,555.8	25.0	13.2	-80.52	-116.3	1,441.9	270.9	244.0	26.88	10.077	
7,880.3	7,653.7	7,595.7	7,595.7	25.3	13.3	-90.00	-116.3	1,441.9	260.7	233.0	27.67	9.422 CC, ES	
7,900.0	7,662.0	7,604.0	7,604.0	25.3	13.3	-91.76	-116.3	1,441.9	261.4	233.6	27.80	9.401 SF	
8,000.0	7,694.5	7,636.5	7,636.5	25.8	13.3	-96.61	-116.3	1,441.9	286.0	257.7	28.30	10.108	
8,100.0	7,710.4	7,652.4	7,652.4	26.2	13.4	-93.84	-116.3	1,441.9	341.4	312.5	28.87	11.825	
8,200.0	7,712.0	7,654.0	7,654.0	26.8	13.4	-90.00	-116.3	1,441.9	415.8	386.0	29.80	13.955	
8,300.0	7,712.0	7,654.0	7,654.0	27.5	13.4	-90.00	-116.3	1,441.9	499.4	468.6	30.88	16.172	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - CANINO 3 (EXISTING) - HUGHES CW WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7800-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	106.07	-18.0	62.5	87.2					
100.0	100.0	42.0	42.0	0.1	0.1	106.07	-18.0	62.5	65.1	64.9	0.22	293.314		
200.0	200.0	142.0	142.0	0.3	0.2	106.07	-18.0	62.5	65.1	64.5	0.57	113.980		
300.0	300.0	242.0	242.0	0.5	0.4	106.07	-18.0	62.5	65.1	64.2	0.92	70.733		
400.0	400.0	342.0	342.0	0.7	0.6	106.07	-18.0	62.5	65.1	63.8	1.27	51.278		
500.0	500.0	442.0	442.0	0.8	0.8	106.07	-18.0	62.5	65.1	63.5	1.62	40.216		
600.0	600.0	542.0	542.0	1.0	0.9	57.38	-18.0	62.5	64.1	62.1	1.97	32.576		
700.0	699.8	641.8	641.8	1.2	1.1	61.53	-18.0	62.5	61.5	59.1	2.33	26.420		
800.0	799.5	741.5	741.5	1.4	1.3	69.19	-18.0	62.5	57.8	55.1	2.71	21.365		
900.0	898.7	840.7	840.7	1.7	1.5	81.20	-18.0	62.5	54.6	51.5	3.13	17.486		
1,000.0	997.7	939.7	939.7	1.9	1.6	88.92	-18.0	62.5	53.4	49.9	3.56	15.001		
1,013.1	1,010.7	952.7	952.7	2.0	1.7	90.00	-18.0	62.5	53.4	49.8	3.62	14.759 CC, ES		
1,100.0	1,096.7	1,038.7	1,038.7	2.2	1.8	97.44	-18.0	62.5	54.2	50.2	3.99	13.602		
1,200.0	1,195.6	1,137.6	1,137.6	2.5	2.0	106.15	-18.0	62.5	57.3	52.9	4.38	13.086 SF		
1,300.0	1,294.3	1,236.3	1,236.3	2.8	2.2	114.39	-18.0	62.5	62.8	58.1	4.73	13.266		
1,400.0	1,393.0	1,335.0	1,335.0	3.1	2.3	121.70	-18.0	62.5	70.7	65.6	5.06	13.972		
1,500.0	1,491.4	1,433.4	1,433.4	3.4	2.5	130.58	-18.0	62.5	80.9	75.5	5.36	15.091		
1,600.0	1,589.9	1,531.9	1,531.9	3.7	2.7	138.65	-18.0	62.5	93.2	87.5	5.66	16.469		
1,700.0	1,688.4	1,630.4	1,630.4	4.1	2.8	144.77	-18.0	62.5	106.9	100.9	5.96	17.924		
1,800.0	1,786.9	1,728.9	1,728.9	4.4	3.0	149.47	-18.0	62.5	121.5	115.2	6.28	19.361		
1,900.0	1,885.4	1,827.4	1,827.4	4.7	3.2	153.15	-18.0	62.5	136.8	130.2	6.60	20.736		
2,000.0	1,983.9	1,925.9	1,925.9	5.1	3.4	156.09	-18.0	62.5	152.5	145.6	6.92	22.031		
2,100.0	2,082.4	2,024.4	2,024.4	5.4	3.5	158.47	-18.0	62.5	168.5	161.3	7.25	23.240		
2,200.0	2,180.9	2,122.9	2,122.9	5.8	3.7	160.44	-18.0	62.5	184.8	177.2	7.58	24.366		
2,300.0	2,279.3	2,221.3	2,221.3	6.1	3.9	162.09	-18.0	62.5	201.2	193.3	7.92	25.412		
2,400.0	2,377.8	2,319.8	2,319.8	6.5	4.0	163.49	-18.0	62.5	217.8	209.5	8.25	26.384		
2,500.0	2,476.3	2,418.3	2,418.3	6.8	4.2	164.70	-18.0	62.5	234.5	225.9	8.59	27.289		
2,600.0	2,574.8	2,516.8	2,516.8	7.1	4.4	165.74	-18.0	62.5	251.3	242.3	8.93	28.131		
2,700.0	2,673.3	2,615.3	2,615.3	7.5	4.6	166.65	-18.0	62.5	268.1	258.8	9.27	28.916		
2,800.0	2,771.8	2,713.8	2,713.8	7.8	4.7	167.45	-18.0	62.5	285.0	275.4	9.61	29.650		
2,900.0	2,870.3	2,812.3	2,812.3	8.2	4.9	168.17	-18.0	62.5	302.0	292.0	9.95	30.336		
3,000.0	2,968.7	2,910.7	2,910.7	8.5	5.1	168.81	-18.0	62.5	319.0	308.7	10.30	30.980		
3,100.0	3,067.2	3,009.2	3,009.2	8.9	5.3	169.38	-18.0	62.5	336.0	325.4	10.64	31.584		
3,200.0	3,165.7	3,107.7	3,107.7	9.2	5.4	169.90	-18.0	62.5	353.1	342.1	10.98	32.152		
3,300.0	3,264.2	3,206.2	3,206.2	9.6	5.6	170.37	-18.0	62.5	370.1	358.8	11.32	32.687		
3,400.0	3,362.7	3,304.7	3,304.7	9.9	5.8	170.80	-18.0	62.5	387.3	375.6	11.67	33.192		
3,500.0	3,461.2	3,403.2	3,403.2	10.3	5.9	171.19	-18.0	62.5	404.4	392.4	12.01	33.669		
3,600.0	3,559.7	3,501.7	3,501.7	10.6	6.1	171.55	-18.0	62.5	421.5	409.2	12.35	34.120		
3,700.0	3,658.1	3,600.1	3,600.1	11.0	6.3	171.88	-18.0	62.5	438.7	426.0	12.70	34.548		
3,800.0	3,756.6	3,698.6	3,698.6	11.3	6.5	172.19	-18.0	62.5	455.9	442.8	13.04	34.954		
3,900.0	3,855.1	3,797.1	3,797.1	11.7	6.6	172.48	-18.0	62.5	473.0	459.7	13.39	35.339		
4,000.0	3,953.6	3,895.6	3,895.6	12.0	6.8	172.74	-18.0	62.5	490.2	476.5	13.73	35.706		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 43-5 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 105-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		
11,200.0	7,712.0	8,015.4	7,755.4	67.0	31.2	-90.51	-3,916.4	1,352.8	494.2	401.5	92.72	5.330		
11,300.0	7,712.0	8,014.2	7,754.3	68.7	31.2	-90.11	-3,916.4	1,352.8	401.0	306.5	94.45	4.246		
11,400.0	7,712.0	8,013.1	7,753.2	70.3	31.2	-89.71	-3,916.4	1,352.8	311.9	215.7	96.17	3.244		
11,500.0	7,712.0	8,012.0	7,752.1	71.9	31.2	-89.30	-3,916.4	1,352.7	231.9	134.1	97.88	2.370		
11,600.0	7,712.0	8,010.9	7,750.9	73.6	31.2	-88.90	-3,916.4	1,352.7	174.1	74.5	99.60	1.748		
11,667.5	7,712.0	8,010.1	7,750.1	74.7	31.2	-88.62	-3,916.4	1,352.7	160.5	59.7	100.75	1.593 CC, ES, SF		
11,700.0	7,712.0	8,009.7	7,749.8	75.2	31.2	-88.49	-3,916.4	1,352.7	163.7	62.4	101.31	1.616		
11,800.0	7,712.0	8,008.6	7,748.6	76.9	31.2	-88.08	-3,916.4	1,352.7	208.1	105.1	103.02	2.020		
11,900.0	7,712.0	8,007.4	7,747.5	78.6	31.2	-87.67	-3,916.5	1,352.6	282.5	177.8	104.72	2.698		
12,000.0	7,712.0	8,006.3	7,746.3	80.2	31.2	-87.26	-3,916.5	1,352.6	369.2	262.8	106.42	3.469		
12,100.0	7,712.0	8,005.1	7,745.2	81.9	31.2	-86.84	-3,916.5	1,352.6	461.3	353.2	108.11	4.267		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 6-4-5X (EXISTING) - ENCANA WELL - SURVEYS												Offset Site Error:		0.0 ft	
Survey Program:												42-Geolink MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis				Distance																			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty	Separation Factor																
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Axis	Factor	Warning														
11,000.0	7,712.0	8,151.4	7,767.1	63.8	37.8	91.11	-3,352.3	725.5	478.2	380.2	98.06	4.877															
11,100.0	7,712.0	8,146.4	7,762.1	65.4	37.8	90.50	-3,352.6	725.4	466.9	367.1	99.77	4.680															
11,103.7	7,712.0	8,146.2	7,761.9	65.5	37.8	90.48	-3,352.6	725.4	466.9	367.0	99.83	4.677	CC, ES, SF														
11,200.0	7,712.0	8,141.4	7,757.1	67.0	37.8	89.89	-3,352.8	725.4	476.7	375.2	101.48	4.697															

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 E UNIT 1 (EXISTING) - ENCANA WELL - NO SURVEYS		Offset Site Error:		0.0 ft
Survey Program:													8575-Geolink MWD		Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)							
13,000.0	7,712.0	7,756.0	7,756.0	97.1	13.5	90.00	-5,371.4	716.5	491.3	383.0	108.28	4.537					
13,100.0	7,712.0	7,756.0	7,756.0	98.8	13.5	90.00	-5,371.4	716.5	476.3	366.3	110.01	4.329					
13,122.5	7,712.0	7,756.0	7,756.0	99.1	13.5	90.00	-5,371.4	716.5	475.7	365.3	110.40	4.309	CC, ES, SF				
13,200.0	7,712.0	7,756.0	7,756.0	100.4	13.5	90.00	-5,371.4	716.5	482.0	370.3	111.75	4.313					
13,243.1	7,712.0	7,756.0	7,756.0	101.2	13.5	90.00	-5,371.4	716.5	490.8	378.3	112.50	4.363					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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				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	1.0	1.0	0.0	0.0	-99.42	-5.8	-35.0	35.5					
100.0	100.0	101.0	101.0	0.1	0.2	-99.42	-5.8	-35.0	35.5	35.2	0.30	118.983		
166.3	166.3	167.3	167.3	0.3	0.3	-99.42	-5.8	-35.0	35.5	35.0	0.53	67.003 CC		
200.0	200.0	201.0	201.0	0.3	0.3	-99.42	-5.8	-35.0	35.5	34.9	0.65	54.841 ES		
300.0	300.0	300.4	300.4	0.5	0.5	-98.88	-5.6	-35.9	36.3	35.3	1.00	36.457		
400.0	400.0	400.0	400.0	0.7	0.7	-97.40	-5.0	-38.4	38.8	37.4	1.35	28.723		
500.0	500.0	499.0	498.9	0.8	0.9	-95.33	-4.0	-42.6	42.8	41.1	1.71	25.085		
600.0	600.0	598.0	597.7	1.0	1.1	-144.13	-2.6	-48.5	50.0	48.0	2.04	24.501 SF		
700.0	699.8	697.0	696.4	1.2	1.3	-144.72	-0.8	-55.7	61.4	59.0	2.39	25.644		
800.0	799.5	795.9	795.0	1.4	1.5	-146.54	1.0	-63.0	75.8	73.0	2.75	27.528		
900.0	898.7	894.3	893.2	1.7	1.7	-148.86	2.7	-70.3	93.2	90.0	3.12	29.883		
1,000.0	997.7	992.4	990.9	1.9	1.9	-157.79	4.5	-77.6	112.6	109.1	3.48	32.351		
1,100.0	1,096.7	1,090.2	1,088.5	2.2	2.1	-165.22	6.3	-84.9	133.1	129.3	3.84	34.667		
1,200.0	1,195.6	1,187.9	1,185.9	2.5	2.3	-171.46	8.0	-92.1	154.5	150.3	4.19	36.868		
1,300.0	1,294.3	1,285.4	1,283.1	2.8	2.5	-176.69	9.8	-99.3	176.9	172.3	4.54	38.985		
1,400.0	1,393.0	1,382.6	1,380.0	3.1	2.7	-178.95	11.5	-106.5	200.2	195.3	4.88	41.048		
1,500.0	1,491.4	1,479.6	1,476.7	3.4	3.0	-178.24	13.3	-113.7	224.3	219.1	5.22	42.978		
1,600.0	1,589.9	1,576.5	1,573.3	3.7	3.2	-179.05	15.0	-120.9	248.5	243.0	5.56	44.667		
1,700.0	1,688.4	1,673.5	1,670.0	4.1	3.4	-179.71	16.8	-128.1	272.8	266.9	5.91	46.162		
1,800.0	1,786.9	1,770.4	1,766.7	4.4	3.6	-179.73	18.5	-135.3	297.1	290.9	6.26	47.494		
1,900.0	1,885.4	1,867.4	1,863.4	4.7	3.8	-179.26	20.3	-142.5	321.5	314.8	6.60	48.688		
2,000.0	1,983.9	1,964.4	1,960.1	5.1	4.0	-178.85	22.0	-149.7	345.8	338.8	6.95	49.763		
2,100.0	2,082.4	2,061.3	2,056.8	5.4	4.2	-178.50	23.7	-156.9	370.1	362.9	7.30	50.738		
2,200.0	2,180.9	2,158.3	2,153.4	5.8	4.4	-178.19	25.5	-164.1	394.5	386.9	7.64	51.624		
2,300.0	2,279.3	2,255.3	2,250.1	6.1	4.7	-177.92	27.2	-171.3	418.9	410.9	7.99	52.434		
2,400.0	2,377.8	2,352.2	2,346.8	6.5	4.9	-177.68	29.0	-178.5	443.3	434.9	8.34	53.177		
2,500.0	2,476.3	2,449.2	2,443.5	6.8	5.1	-177.46	30.7	-185.7	467.7	459.0	8.68	53.861		
2,600.0	2,574.8	2,546.2	2,540.2	7.1	5.3	-177.26	32.5	-192.9	492.1	483.0	9.03	54.493		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4B-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.69	0.2	-30.0	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.69	0.2	-30.0	30.0	29.7	0.30	101.110		
200.0	200.0	200.0	200.0	0.3	0.3	-89.69	0.2	-30.0	30.0	29.4	0.65	46.456 CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	-89.05	0.5	-30.8	30.8	29.8	0.99	30.957		
400.0	400.0	399.0	398.9	0.7	0.7	-87.30	1.6	-33.2	33.2	31.9	1.35	24.644		
500.0	500.0	498.7	498.6	0.8	0.9	-85.07	3.2	-36.8	36.9	35.2	1.70	21.673		
600.0	600.0	598.6	598.4	1.0	1.0	-134.88	4.8	-40.5	42.0	40.0	2.04	20.569 SF		
700.0	699.8	698.2	698.0	1.2	1.2	-137.54	6.5	-44.2	49.6	47.2	2.40	20.696		
800.0	799.5	797.6	797.3	1.4	1.4	-141.61	8.1	-47.9	60.0	57.2	2.76	21.751		
900.0	898.7	896.6	896.1	1.7	1.6	-145.99	9.7	-51.6	73.4	70.3	3.12	23.513		
1,000.0	997.7	995.2	994.7	1.9	1.8	-156.34	11.4	-55.2	89.2	85.7	3.48	25.597		
1,100.0	1,096.7	1,093.8	1,093.1	2.2	2.0	-164.59	13.0	-58.9	106.0	102.2	3.84	27.633		
1,200.0	1,195.6	1,192.1	1,191.4	2.5	2.2	-171.28	14.6	-62.5	123.9	119.7	4.19	29.598		
1,300.0	1,294.3	1,290.3	1,289.6	2.8	2.3	-176.73	16.2	-66.2	142.7	138.2	4.53	31.500		
1,400.0	1,393.0	1,388.3	1,387.5	3.1	2.5	178.84	17.9	-69.8	162.5	157.7	4.87	33.357		
1,500.0	1,491.4	1,486.2	1,485.2	3.4	2.7	178.12	19.5	-73.5	183.1	177.9	5.22	35.100		
1,600.0	1,589.9	1,584.0	1,583.0	3.7	2.9	178.91	21.1	-77.1	203.8	198.2	5.56	36.628		
1,700.0	1,688.4	1,681.8	1,680.7	4.1	3.1	179.55	22.7	-80.7	224.5	218.6	5.91	37.979		
1,800.0	1,786.9	1,779.6	1,778.4	4.4	3.3	-179.91	24.3	-84.4	245.2	239.0	6.26	39.182		
1,900.0	1,885.4	1,877.4	1,876.1	4.7	3.4	-179.46	25.9	-88.0	266.0	259.4	6.61	40.259		
2,000.0	1,983.9	1,975.2	1,973.8	5.1	3.6	-179.08	27.5	-91.6	286.7	279.8	6.95	41.230		
2,100.0	2,082.4	2,073.0	2,071.6	5.4	3.8	-178.74	29.2	-95.3	307.5	300.2	7.30	42.109		
2,200.0	2,180.9	2,170.8	2,169.3	5.8	4.0	-178.45	30.8	-98.9	328.3	320.6	7.65	42.909		
2,300.0	2,279.3	2,268.6	2,267.0	6.1	4.2	-178.19	32.4	-102.5	349.1	341.1	8.00	43.640		
2,400.0	2,377.8	2,366.4	2,364.7	6.5	4.4	-177.96	34.0	-106.2	369.9	361.5	8.35	44.310		
2,500.0	2,476.3	2,464.2	2,462.5	6.8	4.5	-177.76	35.6	-109.8	390.7	382.0	8.70	44.926		
2,600.0	2,574.8	2,562.0	2,560.2	7.1	4.7	-177.58	37.2	-113.4	411.5	402.4	9.04	45.496		
2,700.0	2,673.3	2,659.8	2,657.9	7.5	4.9	-177.41	38.9	-117.1	432.3	422.9	9.39	46.023		
2,800.0	2,771.8	2,757.6	2,755.6	7.8	5.1	-177.26	40.5	-120.7	453.1	443.3	9.74	46.513		
2,900.0	2,870.3	2,855.4	2,853.4	8.2	5.3	-177.12	42.1	-124.3	473.9	463.8	10.09	46.969		
3,000.0	2,968.7	2,953.2	2,951.1	8.5	5.5	-177.00	43.7	-128.0	494.7	484.3	10.44	47.395		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-103.19	-5.9	-25.0	25.7					
100.0	100.0	100.0	100.0	0.1	0.1	-103.19	-5.9	-25.0	25.7	25.4	0.30	86.651		
200.0	200.0	200.0	200.0	0.3	0.3	-103.19	-5.9	-25.0	25.7	25.1	0.65	39.813		
300.0	300.0	300.0	300.0	0.5	0.5	-103.19	-5.9	-25.0	25.7	24.7	0.99	25.843		
400.0	400.0	400.0	400.0	0.7	0.7	-103.19	-5.9	-25.0	25.7	24.4	1.34	19.131		
500.0	500.0	500.0	500.0	0.8	0.8	-103.19	-5.9	-25.0	25.7	24.0	1.69	15.186 CC, ES		
600.0	600.0	600.4	600.4	1.0	1.0	-154.36	-5.4	-24.3	26.4	24.4	2.04	12.941		
700.0	699.8	700.7	700.6	1.2	1.2	-157.57	-4.2	-22.1	28.8	26.4	2.39	12.038 SF		
800.0	799.5	800.5	800.4	1.4	1.4	-162.14	-2.8	-19.6	34.2	31.5	2.74	12.492		
900.0	898.7	900.0	899.9	1.7	1.6	-166.59	-1.4	-17.2	43.2	40.1	3.08	14.008		
1,000.0	997.7	999.4	999.2	1.9	1.7	-176.07	-0.1	-14.8	54.2	50.8	3.43	15.827		
1,100.0	1,096.7	1,098.7	1,098.5	2.2	1.9	177.09	1.3	-12.3	65.8	62.0	3.77	17.448		
1,200.0	1,195.6	1,198.0	1,197.7	2.5	2.1	171.99	2.7	-9.9	77.9	73.8	4.12	18.915		
1,300.0	1,294.3	1,297.1	1,296.9	2.8	2.3	168.19	4.0	-7.5	90.5	86.0	4.46	20.282		
1,400.0	1,393.0	1,396.2	1,395.9	3.1	2.4	165.41	5.4	-5.0	103.8	99.0	4.81	21.596		
1,500.0	1,491.4	1,495.1	1,494.7	3.4	2.6	166.19	6.8	-2.6	117.8	112.6	5.15	22.855		
1,600.0	1,589.9	1,594.0	1,593.6	3.7	2.8	168.16	8.2	-0.2	131.9	126.4	5.50	23.988		
1,700.0	1,688.4	1,692.9	1,692.5	4.1	3.0	169.75	9.5	2.2	146.2	140.4	5.85	25.006		
1,800.0	1,786.9	1,791.8	1,791.3	4.4	3.2	171.05	10.9	4.6	160.6	154.4	6.19	25.924		
1,900.0	1,885.4	1,890.7	1,890.2	4.7	3.3	172.14	12.3	7.1	175.0	168.5	6.54	26.754		
2,000.0	1,983.9	1,989.6	1,989.0	5.1	3.5	173.07	13.6	9.5	189.6	182.7	6.89	27.507		
2,100.0	2,082.4	2,088.5	2,087.9	5.4	3.7	173.86	15.0	11.9	204.1	196.9	7.24	28.193		
2,200.0	2,180.9	2,187.4	2,186.8	5.8	3.9	174.54	16.4	14.3	218.7	211.1	7.59	28.820		
2,300.0	2,279.3	2,286.3	2,285.6	6.1	4.1	175.14	17.7	16.8	233.3	225.3	7.94	29.396		
2,400.0	2,377.8	2,385.2	2,384.5	6.5	4.2	175.67	19.1	19.2	247.9	239.6	8.28	29.925		
2,500.0	2,476.3	2,484.1	2,483.3	6.8	4.4	176.14	20.5	21.6	262.6	253.9	8.63	30.413		
2,600.0	2,574.8	2,583.0	2,582.2	7.1	4.6	176.57	21.8	24.0	277.2	268.2	8.98	30.865		
2,700.0	2,673.3	2,681.9	2,681.1	7.5	4.8	176.94	23.2	26.5	291.9	282.6	9.33	31.285		
2,800.0	2,771.8	2,780.8	2,779.9	7.8	5.0	177.29	24.6	28.9	306.6	296.9	9.68	31.675		
2,900.0	2,870.3	2,879.7	2,878.8	8.2	5.1	177.60	25.9	31.3	321.3	311.2	10.03	32.039		
3,000.0	2,968.7	2,978.6	2,977.6	8.5	5.3	177.88	27.3	33.7	336.0	325.6	10.38	32.379		
3,100.0	3,067.2	3,077.5	3,076.5	8.9	5.5	178.14	28.7	36.2	350.7	340.0	10.72	32.698		
3,200.0	3,165.7	3,176.4	3,175.4	9.2	5.7	178.38	30.1	38.6	365.4	354.3	11.07	32.997		
3,300.0	3,264.2	3,275.3	3,274.2	9.6	5.8	178.60	31.4	41.0	380.1	368.7	11.42	33.278		
3,400.0	3,362.7	3,374.2	3,373.1	9.9	6.0	178.81	32.8	43.4	394.9	383.1	11.77	33.543		
3,500.0	3,461.2	3,473.1	3,471.9	10.3	6.2	179.00	34.2	45.9	409.6	397.5	12.12	33.794		
3,600.0	3,559.7	3,572.0	3,570.8	10.6	6.4	179.17	35.5	48.3	424.3	411.9	12.47	34.030		
3,700.0	3,658.1	3,670.9	3,669.7	11.0	6.6	179.34	36.9	50.7	439.1	426.2	12.82	34.254		
3,800.0	3,756.6	3,769.8	3,768.5	11.3	6.7	179.49	38.3	53.1	453.8	440.6	13.17	34.466		
3,900.0	3,855.1	3,868.7	3,867.4	11.7	6.9	179.63	39.6	55.5	468.6	455.0	13.52	34.667		
4,000.0	3,953.6	3,967.6	3,966.2	12.0	7.1	179.77	41.0	58.0	483.3	469.4	13.86	34.859		
4,100.0	4,052.1	4,066.5	4,065.1	12.4	7.3	179.90	42.4	60.4	498.1	483.8	14.21	35.041		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.69	0.1	-20.0	20.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.69	0.1	-20.0	20.0	19.7	0.30	67.407		
200.0	200.0	200.0	200.0	0.3	0.3	-89.69	0.1	-20.0	20.0	19.4	0.65	30.971		
300.0	300.0	300.0	300.0	0.5	0.5	-89.69	0.1	-20.0	20.0	19.0	0.99	20.104		
400.0	400.0	400.0	400.0	0.7	0.7	-89.69	0.1	-20.0	20.0	18.7	1.34	14.882		
500.0	500.0	500.0	500.0	0.8	0.8	-89.69	0.1	-20.0	20.0	18.3	1.69	11.814	CC, ES	
600.0	600.0	600.3	600.3	1.0	1.0	-142.26	0.3	-19.1	20.5	18.5	2.04	10.036		
700.0	699.8	700.7	700.6	1.2	1.2	-149.21	0.9	-16.6	22.2	19.8	2.39	9.288	SF	
800.0	799.5	800.9	800.8	1.4	1.4	-158.46	2.0	-12.3	25.7	23.0	2.74	9.372		
900.0	898.7	901.2	900.8	1.7	1.6	-167.64	3.4	-6.4	31.4	28.3	3.08	10.164		
1,000.0	997.7	1,001.0	1,000.4	1.9	1.8	179.37	5.2	0.9	38.2	34.8	3.43	11.134		
1,100.0	1,096.7	1,100.7	1,099.9	2.2	2.0	170.70	6.9	8.2	45.6	41.8	3.79	12.032		
1,200.0	1,195.6	1,200.4	1,199.3	2.5	2.2	164.92	8.7	15.4	53.2	49.0	4.14	12.848		
1,300.0	1,294.3	1,300.1	1,298.7	2.8	2.4	161.20	10.4	22.7	61.1	56.7	4.49	13.615		
1,400.0	1,393.0	1,399.7	1,398.0	3.1	2.6	159.00	12.2	30.0	69.6	64.7	4.84	14.380		
1,500.0	1,491.4	1,499.2	1,497.2	3.4	2.8	160.59	14.0	37.3	78.5	73.3	5.18	15.157		
1,600.0	1,589.9	1,598.7	1,596.4	3.7	3.0	163.23	15.7	44.5	87.7	82.2	5.53	15.877		
1,700.0	1,688.4	1,698.2	1,695.6	4.1	3.2	165.36	17.5	51.8	97.1	91.2	5.87	16.536		
1,800.0	1,786.9	1,797.7	1,794.9	4.4	3.4	167.12	19.2	59.1	106.5	100.3	6.22	17.138		
1,900.0	1,885.4	1,897.2	1,894.1	4.7	3.7	168.59	21.0	66.4	116.1	109.5	6.56	17.688		
2,000.0	1,983.9	1,996.7	1,993.3	5.1	3.9	169.84	22.8	73.6	125.7	118.8	6.91	18.190		
2,100.0	2,082.4	2,096.2	2,092.5	5.4	4.1	170.91	24.5	80.9	135.3	128.1	7.26	18.650		
2,200.0	2,180.9	2,195.7	2,191.7	5.8	4.3	171.83	26.3	88.2	145.0	137.4	7.60	19.072		
2,300.0	2,279.3	2,295.2	2,291.0	6.1	4.5	172.64	28.0	95.4	154.7	146.8	7.95	19.461		
2,400.0	2,377.8	2,394.7	2,390.2	6.5	4.7	173.36	29.8	102.7	164.5	156.2	8.30	19.819		
2,500.0	2,476.3	2,494.2	2,489.4	6.8	4.9	173.99	31.6	110.0	174.3	165.6	8.65	20.151		
2,600.0	2,574.8	2,593.7	2,588.6	7.1	5.2	174.56	33.3	117.2	184.1	175.1	9.00	20.458		
2,700.0	2,673.3	2,693.2	2,687.9	7.5	5.4	175.07	35.1	124.5	193.9	184.5	9.35	20.744		
2,800.0	2,771.8	2,792.8	2,787.1	7.8	5.6	175.53	36.8	131.8	203.7	194.0	9.70	21.010		
2,900.0	2,870.3	2,892.3	2,886.3	8.2	5.8	175.95	38.6	139.1	213.5	203.5	10.04	21.258		
3,000.0	2,968.7	2,991.8	2,985.5	8.5	6.0	176.33	40.4	146.3	223.4	213.0	10.39	21.491		
3,100.0	3,067.2	3,091.3	3,084.7	8.9	6.2	176.68	42.1	153.6	233.2	222.5	10.74	21.708		
3,200.0	3,165.7	3,190.8	3,184.0	9.2	6.5	177.00	43.9	160.9	243.1	232.0	11.09	21.913		
3,300.0	3,264.2	3,290.3	3,283.2	9.6	6.7	177.29	45.6	168.1	253.0	241.5	11.44	22.105		
3,400.0	3,362.7	3,389.8	3,382.4	9.9	6.9	177.57	47.4	175.4	262.9	251.1	11.79	22.287		
3,500.0	3,461.2	3,489.3	3,481.6	10.3	7.1	177.82	49.2	182.7	272.7	260.6	12.14	22.458		
3,600.0	3,559.7	3,588.8	3,580.9	10.6	7.3	178.05	50.9	190.0	282.6	270.1	12.49	22.620		
3,700.0	3,658.1	3,688.3	3,680.1	11.0	7.5	178.27	52.7	197.2	292.5	279.7	12.84	22.773		
3,800.0	3,756.6	3,787.8	3,779.3	11.3	7.8	178.48	54.4	204.5	302.4	289.2	13.20	22.918		
3,900.0	3,855.1	3,887.3	3,878.5	11.7	8.0	178.67	56.2	211.8	312.3	298.8	13.55	23.056		
4,000.0	3,953.6	3,986.8	3,977.7	12.0	8.2	178.85	58.0	219.0	322.2	308.3	13.90	23.187		
4,100.0	4,052.1	4,086.3	4,077.0	12.4	8.4	179.02	59.7	226.3	332.1	317.9	14.25	23.312		
4,200.0	4,150.6	4,185.8	4,176.2	12.7	8.6	179.18	61.5	233.6	342.0	327.4	14.60	23.430		
4,300.0	4,249.1	4,285.3	4,275.4	13.1	8.8	179.33	63.2	240.8	351.9	337.0	14.95	23.544		
4,400.0	4,347.5	4,384.8	4,374.6	13.4	9.1	179.48	65.0	248.1	361.8	346.5	15.30	23.652		
4,500.0	4,446.0	4,484.3	4,473.9	13.8	9.3	179.61	66.8	255.4	371.8	356.1	15.65	23.755		
4,600.0	4,544.5	4,583.8	4,573.1	14.1	9.5	179.74	68.5	262.7	381.7	365.7	16.00	23.854		
4,700.0	4,643.0	4,683.3	4,672.3	14.5	9.7	179.86	70.3	269.9	391.6	375.2	16.35	23.949		
4,800.0	4,741.5	4,782.8	4,771.5	14.8	9.9	179.98	72.0	277.2	401.5	384.8	16.70	24.040		
4,900.0	4,840.0	4,882.3	4,870.7	15.2	10.1	-179.91	73.8	284.5	411.4	394.4	17.05	24.127		
5,000.0	4,938.5	4,981.8	4,970.0	15.6	10.4	-179.81	75.6	291.7	421.4	404.0	17.40	24.211		
5,100.0	5,037.0	5,081.3	5,069.2	15.9	10.6	-179.71	77.3	299.0	431.3	413.5	17.76	24.291		

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 4F-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 4F-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							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S	+E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)							
5,200.0	5,135.4	5,180.8	5,168.4	16.3	10.8	-179.61	79.1	306.3	441.2	423.1	18.11	24.368					
5,300.0	5,233.9	5,280.3	5,267.6	16.6	11.0	-179.52	80.8	313.6	451.1	432.7	18.46	24.443					
5,400.0	5,332.4	5,379.8	5,366.8	17.0	11.2	-179.43	82.6	320.8	461.1	442.3	18.81	24.514					
5,500.0	5,430.9	5,479.3	5,466.1	17.3	11.4	-179.35	84.3	328.1	471.0	451.8	19.16	24.583					
5,600.0	5,529.4	5,578.9	5,565.3	17.7	11.7	-179.27	86.1	335.4	480.9	461.4	19.51	24.650					
5,700.0	5,627.9	5,678.4	5,664.5	18.0	11.9	-179.19	87.9	342.6	490.9	471.0	19.86	24.714					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-139.89	-6.0	-5.0	7.8					
100.0	100.0	100.0	100.0	0.1	0.1	-139.89	-6.0	-5.0	7.8	7.5	0.30	26.323		
200.0	200.0	200.0	200.0	0.3	0.3	-139.89	-6.0	-5.0	7.8	7.2	0.65	12.094		
300.0	300.0	300.0	300.0	0.5	0.5	-139.89	-6.0	-5.0	7.8	6.8	0.99	7.851		
400.0	400.0	400.0	400.0	0.7	0.7	-139.89	-6.0	-5.0	7.8	6.5	1.34	5.812		
500.0	500.0	500.0	500.0	0.8	0.8	-139.89	-6.0	-5.0	7.8	6.1	1.69	4.613 CC, ES		
600.0	600.0	600.0	600.0	1.0	1.0	171.91	-6.0	-5.0	9.5	7.5	2.04	4.671		
700.0	699.8	699.8	699.8	1.2	1.2	174.76	-6.0	-5.0	14.7	12.3	2.39	6.171		
800.0	799.5	799.5	799.5	1.4	1.4	176.70	-6.0	-5.0	23.4	20.7	2.73	8.578		
900.0	898.7	898.7	898.7	1.7	1.5	177.82	-6.0	-5.0	35.6	32.5	3.07	11.592		
1,000.0	997.7	998.4	998.4	1.9	1.7	171.83	-5.8	-4.2	48.8	45.4	3.42	14.284		
1,100.0	1,096.7	1,098.5	1,098.5	2.2	1.9	166.54	-5.4	-1.6	60.8	57.0	3.77	16.114		
1,200.0	1,195.6	1,199.0	1,198.8	2.5	2.1	162.00	-4.6	2.7	71.3	67.2	4.12	17.303		
1,300.0	1,294.3	1,299.7	1,299.4	2.8	2.3	158.25	-3.6	8.7	80.7	76.2	4.48	18.010		
1,400.0	1,393.0	1,400.7	1,400.0	3.1	2.5	155.34	-2.2	16.5	88.8	83.9	4.84	18.352		
1,500.0	1,491.4	1,501.9	1,500.8	3.4	2.7	155.94	-0.6	26.1	95.7	90.5	5.20	18.408		
1,600.0	1,589.9	1,602.8	1,601.1	3.7	2.9	157.59	1.3	37.3	101.1	95.6	5.56	18.193		
1,700.0	1,688.4	1,702.6	1,700.2	4.1	3.1	158.98	3.3	48.8	106.2	100.3	5.92	17.953		
1,800.0	1,786.9	1,802.5	1,799.4	4.4	3.4	160.25	5.3	60.4	111.4	105.1	6.27	17.755		
1,900.0	1,885.4	1,902.3	1,898.5	4.7	3.6	161.40	7.3	71.9	116.6	110.0	6.63	17.589		
2,000.0	1,983.9	2,002.2	1,997.7	5.1	3.9	162.45	9.3	83.4	121.9	114.9	6.98	17.449		
2,100.0	2,082.4	2,102.0	2,096.8	5.4	4.1	163.42	11.3	95.0	127.2	119.8	7.34	17.331		
2,200.0	2,180.9	2,201.8	2,196.0	5.8	4.3	164.31	13.3	106.5	132.5	124.8	7.69	17.231		
2,300.0	2,279.3	2,301.7	2,295.1	6.1	4.6	165.13	15.3	118.0	137.9	129.8	8.04	17.146		
2,400.0	2,377.8	2,401.5	2,394.3	6.5	4.9	165.88	17.3	129.6	143.2	134.9	8.39	17.072		
2,500.0	2,476.3	2,501.4	2,493.4	6.8	5.1	166.59	19.3	141.1	148.6	139.9	8.74	17.009		
2,600.0	2,574.8	2,601.2	2,592.6	7.1	5.4	167.24	21.3	152.6	154.1	145.0	9.09	16.954		
2,700.0	2,673.3	2,701.0	2,691.7	7.5	5.6	167.85	23.3	164.2	159.5	150.1	9.44	16.905		
2,800.0	2,771.8	2,800.9	2,790.9	7.8	5.9	168.42	25.3	175.7	165.0	155.2	9.78	16.863		
2,900.0	2,870.3	2,900.7	2,890.0	8.2	6.1	168.95	27.3	187.2	170.5	160.3	10.13	16.825		
3,000.0	2,968.7	3,000.5	2,989.2	8.5	6.4	169.45	29.3	198.8	176.0	165.5	10.48	16.792		
3,100.0	3,067.2	3,100.4	3,088.3	8.9	6.7	169.92	31.3	210.3	181.5	170.6	10.83	16.762		
3,200.0	3,165.7	3,200.2	3,187.4	9.2	6.9	170.36	33.3	221.8	187.0	175.8	11.17	16.735		
3,300.0	3,264.2	3,300.1	3,286.6	9.6	7.2	170.77	35.2	233.4	192.5	181.0	11.52	16.711		
3,400.0	3,362.7	3,399.9	3,385.7	9.9	7.5	171.17	37.2	244.9	198.1	186.2	11.87	16.689		
3,500.0	3,461.2	3,499.7	3,484.9	10.3	7.7	171.54	39.2	256.4	203.6	191.4	12.21	16.670		
3,600.0	3,559.7	3,599.6	3,584.0	10.6	8.0	171.89	41.2	268.0	209.2	196.6	12.56	16.652		
3,700.0	3,658.1	3,699.4	3,683.2	11.0	8.3	172.22	43.2	279.5	214.7	201.8	12.91	16.635		
3,800.0	3,756.6	3,799.2	3,782.3	11.3	8.5	172.54	45.2	291.0	220.3	207.0	13.25	16.620		
3,900.0	3,855.1	3,899.1	3,881.5	11.7	8.8	172.84	47.2	302.6	225.9	212.3	13.60	16.606		
4,000.0	3,953.6	3,998.9	3,980.6	12.0	9.0	173.12	49.2	314.1	231.4	217.5	13.95	16.593		
4,100.0	4,052.1	4,098.8	4,079.8	12.4	9.3	173.40	51.2	325.6	237.0	222.7	14.29	16.581		
4,200.0	4,150.6	4,198.6	4,178.9	12.7	9.6	173.66	53.2	337.1	242.6	228.0	14.64	16.570		
4,300.0	4,249.1	4,298.4	4,278.1	13.1	9.8	173.91	55.2	348.7	248.2	233.2	14.99	16.560		
4,400.0	4,347.5	4,398.3	4,377.2	13.4	10.1	174.14	57.2	360.2	253.8	238.5	15.34	16.550		
4,500.0	4,446.0	4,498.1	4,476.4	13.8	10.4	174.37	59.2	371.7	259.4	243.7	15.68	16.541		
4,600.0	4,544.5	4,597.9	4,575.5	14.1	10.6	174.59	61.2	383.3	265.0	249.0	16.03	16.532		
4,700.0	4,643.0	4,697.8	4,674.7	14.5	10.9	174.80	63.2	394.8	270.6	254.3	16.38	16.524		
4,800.0	4,741.5	4,797.6	4,773.8	14.8	11.2	175.00	65.2	406.3	276.3	259.5	16.73	16.517		
4,900.0	4,840.0	4,897.5	4,873.0	15.2	11.4	175.19	67.1	417.9	281.9	264.8	17.07	16.509		
5,000.0	4,938.5	4,997.3	4,972.1	15.6	11.7	175.37	69.1	429.4	287.5	270.1	17.42	16.502		
5,100.0	5,037.0	5,097.1	5,071.3	15.9	12.0	175.55	71.1	440.9	293.1	275.4	17.77	16.496		

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 4F-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 4F-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 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	5,135.4	5,197.0	5,170.4	16.3	12.2	175.72	73.1	452.5	298.8	280.6	18.12	16.490		
5,300.0	5,233.9	5,296.8	5,269.6	16.6	12.5	175.89	75.1	464.0	304.4	285.9	18.47	16.484		
5,400.0	5,332.4	5,396.6	5,368.7	17.0	12.8	176.05	77.1	475.5	310.0	291.2	18.81	16.478		
5,500.0	5,430.9	5,496.5	5,467.9	17.3	13.0	176.20	79.1	487.1	315.7	296.5	19.16	16.473		
5,600.0	5,529.4	5,596.3	5,567.0	17.7	13.3	176.35	81.1	498.6	321.3	301.8	19.51	16.467		
5,700.0	5,627.9	5,696.2	5,666.2	18.0	13.6	176.49	83.1	510.1	326.9	307.1	19.86	16.462		
5,800.0	5,726.4	5,796.0	5,765.3	18.4	13.9	176.63	85.1	521.7	332.6	312.4	20.21	16.458		
5,900.0	5,824.8	5,895.8	5,864.5	18.7	14.1	176.76	87.1	533.2	338.2	317.7	20.56	16.453		
6,000.0	5,923.3	5,995.7	5,963.6	19.1	14.4	176.89	89.1	544.7	343.9	323.0	20.90	16.449		
6,100.0	6,021.8	6,095.5	6,062.8	19.4	14.7	177.01	91.1	556.3	349.5	328.2	21.25	16.444		
6,200.0	6,120.3	6,195.3	6,161.9	19.8	14.9	177.13	93.1	567.8	355.2	333.5	21.60	16.440		
6,300.0	6,218.8	6,295.2	6,261.1	20.1	15.2	177.25	95.1	579.3	360.8	338.8	21.95	16.436		
6,400.0	6,317.3	6,395.0	6,360.2	20.5	15.5	177.36	97.1	590.9	366.5	344.2	22.30	16.432		
6,500.0	6,415.8	6,494.9	6,459.4	20.8	15.7	177.47	99.0	602.4	372.1	349.5	22.65	16.429		
6,600.0	6,514.2	6,594.7	6,558.5	21.2	16.0	177.58	101.0	613.9	377.8	354.8	23.00	16.425		
6,700.0	6,612.7	6,694.5	6,657.7	21.5	16.3	177.68	103.0	625.5	383.4	360.1	23.35	16.422		
6,800.0	6,711.2	6,794.4	6,756.8	21.9	16.5	177.78	105.0	637.0	389.1	365.4	23.70	16.418		
6,900.0	6,809.7	6,893.7	6,855.4	22.2	16.8	177.88	107.0	648.5	394.7	370.7	24.05	16.416		
7,000.0	6,908.2	6,983.5	6,944.3	22.6	17.0	176.85	100.9	659.0	401.7	377.4	24.39	16.470		
7,100.0	7,006.7	7,068.8	7,026.9	22.9	17.2	174.12	82.2	669.0	412.0	387.1	24.86	16.573		
7,200.0	7,105.2	7,150.0	7,102.1	23.3	17.4	170.16	53.2	678.5	427.3	401.6	25.62	16.674		
7,300.0	7,203.6	7,217.0	7,160.5	23.6	17.5	127.87	21.4	686.0	448.1	421.2	26.94	16.632		
7,400.0	7,300.3	7,284.9	7,215.5	23.9	17.7	95.14	-17.7	693.3	470.2	441.8	28.41	16.552		
7,500.0	7,392.3	7,350.0	7,263.6	24.2	17.9	79.96	-61.0	699.9	491.4	461.8	29.63	16.586		
10,500.0	7,712.0	10,092.7	7,429.0	55.8	53.4	55.51	-2,758.3	780.4	499.8	413.5	86.32	5.790		
10,600.0	7,712.0	10,192.7	7,429.0	57.4	55.0	55.36	-2,858.2	782.7	497.9	408.9	88.98	5.596		
10,700.0	7,712.0	10,292.7	7,429.0	59.0	56.7	55.21	-2,958.2	785.0	496.1	404.4	91.64	5.413		
10,800.0	7,712.0	10,392.7	7,429.0	60.6	58.4	55.06	-3,058.1	787.3	494.2	399.9	94.30	5.241		
10,900.0	7,712.0	10,492.6	7,429.0	62.2	60.0	54.91	-3,158.1	789.5	492.3	395.4	96.95	5.079		
11,000.0	7,712.0	10,592.6	7,429.0	63.8	61.7	54.75	-3,258.0	791.8	490.5	390.9	99.58	4.925		
11,100.0	7,712.0	10,692.6	7,429.0	65.4	63.4	54.60	-3,358.0	794.1	488.6	386.4	102.21	4.780		
11,200.0	7,712.0	10,792.6	7,429.0	67.0	65.1	54.45	-3,457.9	796.3	486.8	382.0	104.84	4.643		
11,300.0	7,712.0	10,892.5	7,429.0	68.7	66.8	54.29	-3,557.9	798.6	484.9	377.5	107.45	4.513		
11,400.0	7,712.0	10,992.5	7,429.0	70.3	68.5	54.13	-3,657.8	800.9	483.1	373.1	110.05	4.390		
11,500.0	7,712.0	11,092.5	7,429.0	71.9	70.2	53.98	-3,757.8	803.1	481.3	368.6	112.64	4.273		
11,600.0	7,712.0	11,192.5	7,429.0	73.6	71.8	53.82	-3,857.7	805.4	479.4	364.2	115.22	4.161		
11,700.0	7,712.0	11,292.4	7,429.0	75.2	73.5	53.66	-3,957.7	807.7	477.6	359.8	117.79	4.055		
11,800.0	7,712.0	11,392.4	7,429.0	76.9	75.3	53.49	-4,057.6	809.9	475.8	355.4	120.35	3.953		
11,900.0	7,712.0	11,492.4	7,429.0	78.6	77.0	53.33	-4,157.5	812.2	474.0	351.1	122.89	3.857		
12,000.0	7,712.0	11,592.4	7,429.0	80.2	78.7	53.17	-4,257.5	814.5	472.1	346.7	125.43	3.764		
12,100.0	7,712.0	11,692.3	7,429.0	81.9	80.4	53.00	-4,357.4	816.7	470.3	342.4	127.95	3.676		
12,200.0	7,712.0	11,792.3	7,429.0	83.6	82.1	52.83	-4,457.4	819.0	468.5	338.1	130.45	3.591		
12,300.0	7,712.0	11,892.3	7,429.0	85.2	83.8	52.67	-4,557.3	821.3	466.7	333.8	132.95	3.511		
12,400.0	7,712.0	11,992.2	7,429.0	86.9	85.5	52.50	-4,657.3	823.5	464.9	329.5	135.43	3.433		
12,500.0	7,712.0	12,092.2	7,429.0	88.6	87.2	52.32	-4,757.2	825.8	463.1	325.2	137.89	3.359		
12,600.0	7,712.0	12,192.2	7,429.0	90.3	88.9	52.15	-4,857.2	828.1	461.3	321.0	140.34	3.287		
12,700.0	7,712.0	12,292.2	7,429.0	92.0	90.7	51.98	-4,957.1	830.3	459.5	316.7	142.78	3.219		
12,800.0	7,712.0	12,392.1	7,429.0	93.7	92.4	51.80	-5,057.1	832.6	457.7	312.5	145.20	3.153		
12,900.0	7,712.0	12,492.1	7,429.0	95.4	94.1	51.63	-5,157.0	834.9	456.0	308.4	147.60	3.089		
13,000.0	7,712.0	12,592.1	7,429.0	97.1	95.8	51.45	-5,257.0	837.2	454.2	304.2	149.99	3.028		
13,100.0	7,712.0	12,692.1	7,429.0	98.8	97.5	51.27	-5,356.9	839.4	452.4	300.0	152.36	2.969		
13,200.0	7,712.0	12,792.0	7,429.0	100.4	99.3	51.09	-5,456.9	841.7	450.6	295.9	154.72	2.913		

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 4F-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 4F-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					
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
13,243.1	7,712.0	12,827.2	7,429.0	101.2	99.9	51.03	-5,492.0	842.5	450.0	294.3	155.65	2.891 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	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		
300.0	300.0	300.0	300.0	0.5	0.5	140.50	-6.0	5.0	7.8	6.8	0.99	7.851		
400.0	400.0	400.0	400.0	0.7	0.7	140.50	-6.0	5.0	7.8	6.5	1.34	5.812		
500.0	500.0	500.0	500.0	0.8	0.8	140.50	-6.0	5.0	7.8	6.1	1.69	4.613 CC		
524.2	524.2	524.2	524.2	0.9	0.9	91.25	-6.0	5.0	7.8	6.0	1.78	4.394		
600.0	600.0	600.0	600.0	1.0	1.0	103.06	-6.0	5.0	8.0	6.0	2.04	3.923 ES		
700.0	699.8	699.8	699.8	1.2	1.2	131.99	-6.0	5.0	10.5	8.1	2.40	4.389		
800.0	799.5	799.5	799.5	1.4	1.4	153.52	-6.0	5.0	17.6	14.8	2.74	6.415		
900.0	898.7	899.0	899.0	1.7	1.5	162.92	-6.0	5.8	28.5	25.4	3.08	9.239		
1,000.0	997.7	998.7	998.6	1.9	1.7	159.98	-5.7	8.4	40.1	36.7	3.44	11.678		
1,100.0	1,096.7	1,098.7	1,098.5	2.2	1.9	156.08	-5.4	12.7	50.5	46.7	3.80	13.307		
1,200.0	1,195.6	1,198.9	1,198.6	2.5	2.1	152.23	-4.9	18.8	59.6	55.4	4.16	14.319		
1,300.0	1,294.3	1,299.4	1,298.8	2.8	2.3	148.83	-4.2	26.6	67.4	62.9	4.54	14.860		
1,400.0	1,393.0	1,400.1	1,399.0	3.1	2.5	146.05	-3.4	36.3	74.0	69.1	4.92	15.040		
1,500.0	1,491.4	1,501.0	1,499.3	3.4	2.7	146.58	-2.4	47.6	79.3	74.0	5.30	14.950		
1,600.0	1,589.9	1,602.1	1,599.5	3.7	3.0	147.87	-1.3	60.8	83.3	77.6	5.70	14.604		
1,700.0	1,688.4	1,703.3	1,699.5	4.1	3.3	148.37	-0.1	75.8	85.8	79.7	6.12	14.028		
1,800.0	1,786.9	1,804.5	1,799.4	4.4	3.6	148.19	1.3	92.5	86.9	80.4	6.56	13.253		
1,900.0	1,885.4	1,905.8	1,898.9	4.7	3.9	147.34	2.9	111.0	86.6	79.6	7.04	12.307		
2,000.0	1,983.9	2,007.0	1,998.1	5.1	4.2	145.76	4.6	131.2	84.8	77.3	7.56	11.219		
2,100.0	2,082.4	2,108.0	2,096.7	5.4	4.6	143.34	6.4	153.1	81.8	73.6	8.16	10.019		
2,200.0	2,180.9	2,208.9	2,194.7	5.8	5.0	139.87	8.4	176.7	77.6	68.7	8.88	8.743		
2,300.0	2,279.3	2,309.1	2,291.8	6.1	5.5	135.12	10.5	201.7	72.6	62.9	9.73	7.461		
2,400.0	2,377.8	2,408.8	2,388.2	6.5	5.9	129.54	12.6	226.9	68.0	57.3	10.72	6.347		
2,500.0	2,476.3	2,508.4	2,484.6	6.8	6.4	123.24	14.7	252.0	64.2	52.4	11.82	5.431		
2,600.0	2,574.8	2,608.1	2,581.0	7.1	6.8	116.22	16.8	277.2	61.2	48.2	13.00	4.710		
2,700.0	2,673.3	2,707.7	2,677.4	7.5	7.3	108.63	18.9	302.3	59.2	45.0	14.19	4.174		
2,800.0	2,771.8	2,807.4	2,773.8	7.8	7.7	100.66	21.0	327.5	58.4	43.0	15.33	3.808		
2,824.9	2,796.3	2,832.3	2,797.9	7.9	7.8	98.65	21.6	333.8	58.3	42.7	15.59	3.741		
2,900.0	2,870.3	2,907.1	2,870.2	8.2	8.2	92.62	23.1	352.7	58.7	42.3	16.33	3.593		
3,000.0	2,968.7	3,006.7	2,966.6	8.5	8.7	84.81	25.2	377.8	60.1	43.0	17.14	3.507		
3,100.0	3,067.2	3,106.4	3,063.0	8.9	9.1	77.48	27.4	403.0	62.6	44.8	17.75	3.526		
3,200.0	3,165.7	3,206.0	3,159.4	9.2	9.6	70.82	29.5	428.1	66.0	47.8	18.19	3.630		
3,300.0	3,264.2	3,305.7	3,255.9	9.6	10.1	64.88	31.6	453.3	70.3	51.8	18.49	3.800		
3,400.0	3,362.7	3,405.4	3,352.3	9.9	10.5	59.66	33.7	478.4	75.2	56.5	18.70	4.019		
3,500.0	3,461.2	3,505.0	3,448.7	10.3	11.0	55.11	35.8	503.6	80.6	61.8	18.85	4.275		
3,600.0	3,559.7	3,604.7	3,545.1	10.6	11.5	51.15	37.9	528.7	86.5	67.5	18.98	4.557		
3,700.0	3,658.1	3,704.3	3,641.5	11.0	12.0	47.72	40.0	553.9	92.7	73.6	19.10	4.856		
3,800.0	3,756.6	3,804.0	3,737.9	11.3	12.4	44.72	42.1	579.0	99.3	80.1	19.22	5.166		
3,900.0	3,855.1	3,903.7	3,834.3	11.7	12.9	42.10	44.2	604.2	106.1	86.7	19.35	5.481		
4,000.0	3,953.6	4,003.3	3,930.7	12.0	13.4	39.80	46.3	629.4	113.0	93.5	19.50	5.798		
4,100.0	4,052.1	4,103.0	4,027.1	12.4	13.9	37.77	48.5	654.5	120.2	100.5	19.65	6.115		
4,200.0	4,150.6	4,202.6	4,123.5	12.7	14.3	35.97	50.6	679.7	127.4	107.6	19.83	6.428		
4,300.0	4,249.1	4,302.3	4,220.0	13.1	14.8	34.36	52.7	704.8	134.8	114.8	20.01	6.736		
4,400.0	4,347.5	4,402.0	4,316.4	13.4	15.3	32.92	54.8	730.0	142.3	122.1	20.22	7.039		
4,500.0	4,446.0	4,501.6	4,412.8	13.8	15.8	31.63	56.9	755.1	149.9	129.4	20.43	7.335		
4,600.0	4,544.5	4,601.3	4,509.2	14.1	16.3	30.46	59.0	780.3	157.5	136.8	20.65	7.624		
4,700.0	4,643.0	4,700.9	4,605.6	14.5	16.8	29.40	61.1	805.4	165.2	144.3	20.89	7.906		
4,800.0	4,741.5	4,800.6	4,702.0	14.8	17.2	28.43	63.2	830.6	172.9	151.8	21.14	8.180		
4,900.0	4,840.0	4,900.3	4,798.4	15.2	17.7	27.55	65.3	855.7	180.7	159.3	21.39	8.447		

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 4F-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 4F-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: 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			
5,000.0	4,938.5	4,999.9	4,894.8	15.6	18.2	26.73	67.4	880.9	188.5	166.8	21.65	8.705		
5,100.0	5,037.0	5,099.6	4,991.2	15.9	18.7	25.99	69.6	906.1	196.3	174.4	21.92	8.956		
5,200.0	5,135.4	5,199.2	5,087.6	16.3	19.2	25.30	71.7	931.2	204.2	182.0	22.20	9.200		
5,300.0	5,233.9	5,298.9	5,184.1	16.6	19.6	24.66	73.8	956.4	212.1	189.7	22.48	9.437		
5,400.0	5,332.4	5,398.6	5,280.5	17.0	20.1	24.07	75.9	981.5	220.1	197.3	22.77	9.666		
5,500.0	5,430.9	5,498.2	5,376.9	17.3	20.6	23.52	78.0	1,006.7	228.0	205.0	23.06	9.889		
5,600.0	5,529.4	5,597.9	5,473.3	17.7	21.1	23.01	80.1	1,031.8	236.0	212.7	23.36	10.105		
5,700.0	5,627.9	5,697.5	5,569.7	18.0	21.6	22.53	82.2	1,057.0	244.0	220.3	23.66	10.314		
5,800.0	5,726.4	5,797.2	5,666.1	18.4	22.1	22.08	84.3	1,082.1	252.0	228.0	23.96	10.517		
5,900.0	5,824.8	5,896.9	5,762.5	18.7	22.5	21.66	86.4	1,107.3	260.0	235.8	24.27	10.714		
6,000.0	5,923.3	5,996.5	5,858.9	19.1	23.0	21.26	88.5	1,132.4	268.1	243.5	24.58	10.906		
6,100.0	6,021.8	6,096.2	5,955.3	19.4	23.5	20.89	90.7	1,157.6	276.1	251.2	24.89	11.092		
6,200.0	6,120.3	6,195.8	6,051.7	19.8	24.0	20.53	92.8	1,182.8	284.2	259.0	25.21	11.272		
6,300.0	6,218.8	6,295.5	6,148.2	20.1	24.5	20.20	94.9	1,207.9	292.3	266.7	25.53	11.447		
6,400.0	6,317.3	6,395.2	6,244.6	20.5	25.0	19.89	97.0	1,233.1	300.3	274.5	25.85	11.617		
6,500.0	6,415.8	6,494.8	6,341.0	20.8	25.4	19.59	99.1	1,258.2	308.4	282.2	26.18	11.783		
6,600.0	6,514.2	6,594.5	6,437.4	21.2	25.9	19.30	101.2	1,283.4	316.5	290.0	26.50	11.944		
6,700.0	6,612.7	6,694.1	6,533.8	21.5	26.4	19.04	103.3	1,308.5	324.6	297.8	26.83	12.100		
6,800.0	6,711.2	6,793.8	6,630.2	21.9	26.9	18.78	105.4	1,333.7	332.7	305.6	27.16	12.252		
6,900.0	6,809.7	6,893.5	6,726.6	22.2	27.4	18.54	107.5	1,358.8	340.8	313.4	27.49	12.400		
7,000.0	6,908.2	6,993.1	6,823.0	22.6	27.9	18.30	109.6	1,384.0	349.0	321.1	27.82	12.544		
7,100.0	7,006.7	7,086.6	6,913.4	22.9	28.3	18.47	109.2	1,407.6	357.6	329.4	28.24	12.663		
7,200.0	7,105.2	7,173.3	6,996.3	23.3	28.7	20.50	96.7	1,429.2	369.2	340.0	29.22	12.636		
7,300.0	7,203.6	7,255.1	7,072.1	23.6	29.1	-12.54	73.1	1,449.0	384.2	353.3	30.87	12.445		
7,400.0	7,300.3	7,334.4	7,141.7	23.9	29.4	-36.19	39.8	1,467.1	399.6	367.7	31.94	12.510		
7,500.0	7,392.3	7,412.0	7,204.8	24.2	29.7	-43.88	-2.1	1,483.6	414.2	382.2	32.05	12.927		
7,600.0	7,476.9	7,488.3	7,261.0	24.4	30.0	-46.65	-51.5	1,498.3	427.3	396.2	31.06	13.755		
7,700.0	7,551.5	7,563.6	7,309.8	24.7	30.3	-47.74	-107.3	1,511.0	438.2	408.8	29.34	14.934		
7,800.0	7,613.8	7,638.2	7,350.7	25.0	30.6	-48.31	-168.8	1,521.7	446.4	419.0	27.35	16.319		
7,900.0	7,662.0	7,712.5	7,383.4	25.3	30.9	-48.79	-234.9	1,530.2	451.6	425.8	25.83	17.483		
8,000.0	7,694.5	7,786.8	7,407.6	25.8	31.3	-49.42	-304.7	1,536.5	453.7	428.1	25.59	17.727		
8,100.0	7,710.4	7,861.3	7,422.9	26.2	31.6	-50.28	-377.5	1,540.5	452.7	425.5	27.15	16.676		
8,200.0	7,712.0	7,936.3	7,428.9	26.8	32.0	-51.02	-452.2	1,542.1	450.0	420.9	29.14	15.442		
8,232.9	7,712.0	7,966.0	7,429.0	27.0	32.2	-51.03	-481.9	1,542.1	450.0	420.3	29.64	15.180		
8,300.0	7,712.0	8,033.0	7,429.0	27.5	32.5	-51.03	-548.9	1,542.1	450.0	419.2	30.74	14.636		
8,400.0	7,712.0	8,133.0	7,429.0	28.3	33.2	-51.03	-648.9	1,542.1	450.0	417.4	32.51	13.841		
8,500.0	7,712.0	8,233.0	7,429.0	29.1	33.9	-51.03	-748.9	1,542.1	450.0	415.5	34.40	13.079		
8,600.0	7,712.0	8,333.0	7,429.0	30.0	34.6	-51.03	-848.9	1,542.1	450.0	413.5	36.41	12.359		
8,700.0	7,712.0	8,433.0	7,429.0	31.0	35.5	-51.03	-948.9	1,542.1	450.0	411.5	38.50	11.687		
8,800.0	7,712.0	8,533.0	7,429.0	32.1	36.4	-51.03	-1,048.9	1,542.1	450.0	409.3	40.67	11.064		
8,900.0	7,712.0	8,633.0	7,429.0	33.2	37.4	-51.03	-1,148.9	1,542.1	450.0	407.0	42.90	10.487		
9,000.0	7,712.0	8,733.0	7,429.0	34.4	38.4	-51.03	-1,248.9	1,542.1	450.0	404.8	45.20	9.956		
9,100.0	7,712.0	8,833.0	7,429.0	35.6	39.5	-51.03	-1,348.9	1,542.1	450.0	402.4	47.53	9.466		
9,200.0	7,712.0	8,933.0	7,429.0	36.9	40.6	-51.03	-1,448.9	1,542.1	450.0	400.0	49.91	9.015		
9,300.0	7,712.0	9,033.0	7,429.0	38.2	41.8	-51.03	-1,548.9	1,542.1	450.0	397.6	52.33	8.599		
9,400.0	7,712.0	9,133.0	7,429.0	39.5	43.0	-51.03	-1,648.9	1,542.1	450.0	395.2	54.77	8.215		
9,500.0	7,712.0	9,233.0	7,429.0	40.9	44.3	-51.03	-1,748.9	1,542.1	450.0	392.7	57.24	7.861		
9,600.0	7,712.0	9,333.0	7,429.0	42.3	45.5	-51.03	-1,848.9	1,542.1	450.0	390.2	59.74	7.532		
9,700.0	7,712.0	9,433.0	7,429.0	43.7	46.9	-51.03	-1,948.9	1,542.1	450.0	387.7	62.25	7.228		
9,800.0	7,712.0	9,533.0	7,429.0	45.2	48.2	-51.03	-2,048.9	1,542.1	450.0	385.2	64.78	6.945		
9,900.0	7,712.0	9,633.0	7,429.0	46.6	49.6	-51.03	-2,148.9	1,542.1	450.0	382.6	67.33	6.682		
10,000.0	7,712.0	9,733.0	7,429.0	48.1	51.0	-51.03	-2,248.9	1,542.1	450.0	380.1	69.90	6.437		

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 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4G-32H-O268 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,100.0	7,712.0	9,833.0	7,429.0	49.6	52.4	-51.03	-2,348.9	1,542.1	450.0	377.5	72.47	6.209		
10,200.0	7,712.0	9,933.0	7,429.0	51.2	53.8	-51.03	-2,448.9	1,542.1	450.0	374.9	75.06	5.994		
10,300.0	7,712.0	10,033.0	7,429.0	52.7	55.3	-51.03	-2,548.9	1,542.1	450.0	372.3	77.66	5.794		
10,400.0	7,712.0	10,133.0	7,429.0	54.3	56.7	-51.03	-2,648.9	1,542.1	450.0	369.7	80.27	5.606		
10,500.0	7,712.0	10,233.0	7,429.0	55.8	58.2	-51.03	-2,748.9	1,542.1	450.0	367.1	82.88	5.429		
10,600.0	7,712.0	10,333.0	7,429.0	57.4	59.7	-51.03	-2,848.9	1,542.1	450.0	364.4	85.51	5.262		
10,700.0	7,712.0	10,433.0	7,429.0	59.0	61.2	-51.03	-2,948.9	1,542.1	450.0	361.8	88.14	5.105		
10,800.0	7,712.0	10,533.0	7,429.0	60.6	62.8	-51.03	-3,048.9	1,542.1	450.0	359.2	90.77	4.957		
10,900.0	7,712.0	10,633.0	7,429.0	62.2	64.3	-51.03	-3,148.9	1,542.1	450.0	356.5	93.42	4.817		
11,000.0	7,712.0	10,733.0	7,429.0	63.8	65.9	-51.03	-3,248.9	1,542.1	450.0	353.9	96.06	4.684		
11,100.0	7,712.0	10,833.0	7,429.0	65.4	67.4	-51.03	-3,348.9	1,542.1	450.0	351.2	98.72	4.558		
11,200.0	7,712.0	10,933.0	7,429.0	67.0	69.0	-51.03	-3,448.9	1,542.1	450.0	348.6	101.37	4.439		
11,300.0	7,712.0	11,033.0	7,429.0	68.7	70.6	-51.03	-3,548.9	1,542.1	450.0	345.9	104.04	4.325		
11,400.0	7,712.0	11,133.0	7,429.0	70.3	72.2	-51.03	-3,648.9	1,542.1	450.0	343.2	106.70	4.217		
11,500.0	7,712.0	11,233.0	7,429.0	71.9	73.8	-51.03	-3,748.9	1,542.1	450.0	340.6	109.37	4.114		
11,600.0	7,712.0	11,333.0	7,429.0	73.6	75.4	-51.03	-3,848.9	1,542.1	450.0	337.9	112.04	4.016		
11,700.0	7,712.0	11,433.0	7,429.0	75.2	77.0	-51.03	-3,948.9	1,542.1	450.0	335.2	114.72	3.922		
11,800.0	7,712.0	11,533.0	7,429.0	76.9	78.6	-51.03	-4,048.9	1,542.1	450.0	332.6	117.40	3.833		
11,900.0	7,712.0	11,633.0	7,429.0	78.6	80.2	-51.03	-4,148.9	1,542.1	450.0	329.9	120.08	3.747		
12,000.0	7,712.0	11,733.0	7,429.0	80.2	81.8	-51.03	-4,248.9	1,542.1	450.0	327.2	122.76	3.665		
12,100.0	7,712.0	11,833.0	7,429.0	81.9	83.5	-51.03	-4,348.9	1,542.1	450.0	324.5	125.45	3.587		
12,200.0	7,712.0	11,933.0	7,429.0	83.6	85.1	-51.03	-4,448.9	1,542.1	450.0	321.8	128.14	3.511		
12,300.0	7,712.0	12,033.0	7,429.0	85.2	86.8	-51.03	-4,548.9	1,542.1	450.0	319.1	130.83	3.439		
12,400.0	7,712.0	12,133.0	7,429.0	86.9	88.4	-51.03	-4,648.9	1,542.1	450.0	316.4	133.52	3.370		
12,500.0	7,712.0	12,233.0	7,429.0	88.6	90.1	-51.03	-4,748.9	1,542.1	450.0	313.7	136.21	3.303		
12,600.0	7,712.0	12,333.0	7,429.0	90.3	91.7	-51.03	-4,848.9	1,542.1	450.0	311.0	138.91	3.239		
12,700.0	7,712.0	12,433.0	7,429.0	92.0	93.4	-51.03	-4,948.9	1,542.1	450.0	308.3	141.61	3.177		
12,800.0	7,712.0	12,533.0	7,429.0	93.7	95.0	-51.03	-5,048.9	1,542.1	450.0	305.6	144.31	3.118		
12,900.0	7,712.0	12,633.0	7,429.0	95.4	96.7	-51.03	-5,148.9	1,542.1	450.0	302.9	147.01	3.061		
13,000.0	7,712.0	12,733.0	7,429.0	97.1	98.4	-51.03	-5,248.9	1,542.1	450.0	300.2	149.71	3.006		
13,100.0	7,712.0	12,833.0	7,429.0	98.8	100.0	-51.03	-5,348.9	1,542.1	450.0	297.5	152.41	2.952		
13,200.0	7,712.0	12,933.0	7,429.0	100.4	101.7	-51.03	-5,448.9	1,542.1	450.0	294.8	155.12	2.901		
13,221.8	7,712.0	12,954.9	7,429.0	100.8	102.1	-51.03	-5,470.7	1,542.1	450.0	294.2	155.71	2.890		
13,243.1	7,712.0	12,972.4	7,429.0	101.2	102.4	-51.03	-5,488.3	1,542.1	450.0	293.7	156.23	2.880 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	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		
300.0	300.0	300.0	300.0	0.5	0.5	90.31	-0.1	10.0	10.0	9.0	0.99	10.052		
400.0	400.0	400.0	400.0	0.7	0.7	90.31	-0.1	10.0	10.0	8.7	1.34	7.441		
500.0	500.0	500.0	500.0	0.8	0.8	90.31	-0.1	10.0	10.0	8.3	1.69	5.907		
600.0	600.0	600.0	600.0	1.0	1.0	47.74	-0.1	10.0	8.7	6.7	2.04	4.280		
700.0	699.8	699.8	699.8	1.2	1.2	84.30	-0.1	10.0	6.5	4.1	2.40	2.704		
709.1	708.9	708.9	708.9	1.2	1.2	90.00	-0.1	10.0	6.5	4.0	2.44	2.652 CC, ES, SF		
800.0	799.5	799.5	799.5	1.4	1.4	141.12	-0.1	10.0	10.3	7.6	2.75	3.756		
900.0	898.7	898.7	898.7	1.7	1.5	162.12	-0.1	10.0	21.3	18.2	3.08	6.895		
1,000.0	997.7	998.1	998.1	1.9	1.7	162.52	0.0	10.8	34.1	30.7	3.43	9.947		
1,100.0	1,096.7	1,097.9	1,097.8	2.2	1.9	159.85	0.2	13.4	45.9	42.1	3.78	12.141		
1,200.0	1,195.6	1,198.0	1,197.8	2.5	2.1	156.64	0.5	17.7	56.5	52.4	4.14	13.666		
1,300.0	1,294.3	1,298.3	1,298.0	2.8	2.3	153.63	0.9	23.8	66.0	61.5	4.50	14.673		
1,400.0	1,393.0	1,398.9	1,398.3	3.1	2.5	151.11	1.4	31.7	74.3	69.4	4.86	15.280		
1,500.0	1,491.4	1,499.8	1,498.7	3.4	2.7	151.84	2.0	41.3	81.4	76.2	5.23	15.572		
1,600.0	1,589.9	1,600.9	1,599.1	3.7	2.9	153.32	2.8	52.7	87.2	81.6	5.60	15.555		
1,700.0	1,688.4	1,702.1	1,699.5	4.1	3.1	154.06	3.7	65.9	91.4	85.5	5.99	15.264		
1,800.0	1,786.9	1,803.5	1,799.8	4.4	3.4	154.21	4.7	80.9	94.2	87.8	6.39	14.735		
1,900.0	1,885.4	1,905.0	1,899.8	4.7	3.7	153.82	5.8	97.7	95.4	88.6	6.81	14.001		
2,000.0	1,983.9	2,006.4	1,999.5	5.1	4.0	152.90	7.0	116.3	95.1	87.8	7.26	13.090		
2,100.0	2,082.4	2,107.8	2,098.9	5.4	4.4	151.39	8.4	136.5	93.3	85.5	7.76	12.028		
2,200.0	2,180.9	2,209.0	2,197.7	5.8	4.8	149.19	9.8	158.6	90.1	81.8	8.31	10.841		
2,300.0	2,279.3	2,310.1	2,295.9	6.1	5.2	146.12	11.4	182.3	85.6	76.7	8.96	9.558		
2,400.0	2,377.8	2,410.9	2,393.4	6.5	5.6	141.89	13.1	207.6	80.1	70.4	9.75	8.219		
2,500.0	2,476.3	2,511.3	2,490.2	6.8	6.1	136.09	14.9	234.6	73.9	63.2	10.74	6.879		
2,600.0	2,574.8	2,611.4	2,586.1	7.1	6.6	128.14	16.8	263.1	67.5	55.5	12.01	5.623		
2,700.0	2,673.3	2,710.9	2,680.9	7.5	7.1	117.52	18.8	293.0	62.1	48.5	13.54	4.585		
2,800.0	2,771.8	2,810.0	2,775.4	7.8	7.6	105.19	20.8	323.0	59.1	44.0	15.08	3.917		
2,851.1	2,822.1	2,860.6	2,823.6	8.0	7.9	98.57	21.8	338.3	58.7	42.9	15.76	3.721		
2,900.0	2,870.3	2,909.1	2,869.8	8.2	8.2	92.22	22.8	353.0	59.0	42.7	16.31	3.618		
3,000.0	2,968.7	3,008.2	2,964.2	8.5	8.7	79.86	24.8	383.0	62.0	44.9	17.07	3.632		
3,100.0	3,067.2	3,107.3	3,058.6	8.9	9.3	69.06	26.8	413.0	67.6	50.2	17.38	3.888		
3,200.0	3,165.7	3,206.3	3,153.0	9.2	9.8	60.14	28.8	443.0	75.1	57.7	17.42	4.314		
3,300.0	3,264.2	3,305.4	3,247.4	9.6	10.4	52.98	30.8	473.0	84.2	66.9	17.35	4.854		
3,400.0	3,362.7	3,404.5	3,341.9	9.9	10.9	47.27	32.8	503.1	94.3	77.1	17.27	5.464		
3,500.0	3,461.2	3,503.6	3,436.3	10.3	11.5	42.70	34.8	533.1	105.2	88.0	17.21	6.112		
3,600.0	3,559.7	3,602.7	3,530.7	10.6	12.0	38.99	36.8	563.1	116.6	99.4	17.21	6.777		
3,700.0	3,658.1	3,701.8	3,625.1	11.0	12.6	35.96	38.8	593.1	128.4	111.2	17.25	7.445		
3,800.0	3,756.6	3,800.9	3,719.5	11.3	13.1	33.44	40.8	623.1	140.5	123.2	17.34	8.106		
3,900.0	3,855.1	3,900.0	3,813.9	11.7	13.7	31.32	42.8	653.1	152.9	135.4	17.46	8.755		
4,000.0	3,953.6	3,999.1	3,908.4	12.0	14.3	29.51	44.8	683.1	165.4	147.8	17.62	9.388		
4,100.0	4,052.1	4,098.2	4,002.8	12.4	14.8	27.97	46.8	713.1	178.0	160.2	17.80	10.002		
4,200.0	4,150.6	4,197.2	4,097.2	12.7	15.4	26.63	48.8	743.1	190.8	172.8	18.00	10.597		
4,300.0	4,249.1	4,296.3	4,191.6	13.1	15.9	25.45	50.8	773.1	203.6	185.4	18.23	11.171		
4,400.0	4,347.5	4,395.4	4,286.0	13.4	16.5	24.42	52.8	803.1	216.5	198.1	18.47	11.726		
4,500.0	4,446.0	4,494.5	4,380.4	13.8	17.1	23.50	54.8	833.1	229.5	210.8	18.72	12.261		
4,600.0	4,544.5	4,593.6	4,474.9	14.1	17.6	22.68	56.8	863.1	242.6	223.6	18.99	12.776		
4,700.0	4,643.0	4,692.7	4,569.3	14.5	18.2	21.95	58.8	893.1	255.6	236.4	19.26	13.273		
4,800.0	4,741.5	4,791.8	4,663.7	14.8	18.8	21.28	60.8	923.1	268.8	249.2	19.54	13.751		
4,900.0	4,840.0	4,890.9	4,758.1	15.2	19.4	20.68	62.8	953.1	281.9	262.1	19.84	14.212		

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 4F-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 4F-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						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		
5,000.0	4,938.5	4,990.0	4,852.5	15.6	19.9	20.13	64.8	983.2	295.1	275.0	20.13	14.657		
5,100.0	5,037.0	5,089.1	4,946.9	15.9	20.5	19.63	66.8	1,013.2	308.3	287.9	20.44	15.086		
5,200.0	5,135.4	5,188.2	5,041.4	16.3	21.1	19.17	68.8	1,043.2	321.5	300.8	20.74	15.499		
5,300.0	5,233.9	5,287.2	5,135.8	16.6	21.6	18.75	70.8	1,073.2	334.7	313.7	21.06	15.898		
5,400.0	5,332.4	5,386.3	5,230.2	17.0	22.2	18.36	72.8	1,103.2	348.0	326.6	21.37	16.284		
5,500.0	5,430.9	5,485.4	5,324.6	17.3	22.8	17.99	74.8	1,133.2	361.3	339.6	21.69	16.656		
5,600.0	5,529.4	5,584.5	5,419.0	17.7	23.3	17.66	76.8	1,163.2	374.6	352.6	22.01	17.016		
5,700.0	5,627.9	5,683.6	5,513.4	18.0	23.9	17.34	78.8	1,193.2	387.9	365.5	22.34	17.363		
5,800.0	5,726.4	5,782.7	5,607.9	18.4	24.5	17.05	80.8	1,223.2	401.2	378.5	22.67	17.699		
5,900.0	5,824.8	5,881.8	5,702.3	18.7	25.1	16.77	82.8	1,253.2	414.5	391.5	23.00	18.025		
6,000.0	5,923.3	5,980.9	5,796.7	19.1	25.6	16.52	84.8	1,283.2	427.8	404.5	23.33	18.340		
6,100.0	6,021.8	6,080.0	5,891.1	19.4	26.2	16.28	86.8	1,313.2	441.1	417.5	23.66	18.644		
6,200.0	6,120.3	6,179.1	5,985.5	19.8	26.8	16.05	88.8	1,343.2	454.5	430.5	24.00	18.940		
6,300.0	6,218.8	6,278.1	6,079.9	20.1	27.3	15.83	90.8	1,373.2	467.8	443.5	24.33	19.226		
6,400.0	6,317.3	6,377.2	6,174.4	20.5	27.9	15.63	92.8	1,403.2	481.2	456.5	24.67	19.504		
6,500.0	6,415.8	6,476.3	6,268.8	20.8	28.5	15.44	94.8	1,433.2	494.6	469.5	25.01	19.773		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4I-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	103.80	-6.1	25.0	25.7					
100.0	100.0	99.0	99.0	0.1	0.1	103.80	-6.1	25.0	25.7	25.4	0.30	87.087		
200.0	200.0	199.0	199.0	0.3	0.3	103.80	-6.1	25.0	25.7	25.1	0.64	39.921		
300.0	300.0	299.2	299.2	0.5	0.5	105.47	-6.7	24.4	25.3	24.3	0.99	25.441		
400.0	400.0	399.4	399.3	0.7	0.7	110.87	-8.6	22.5	24.1	22.8	1.34	17.939		
500.0	500.0	499.4	499.3	0.8	0.9	120.97	-11.7	19.4	22.7	21.0	1.70	13.366		
582.6	582.6	581.8	581.5	1.0	1.0	86.53	-15.1	16.0	21.9	19.9	2.02	10.831 CC, ES		
600.0	600.0	599.1	598.8	1.0	1.1	91.05	-16.0	15.1	22.0	19.9	2.09	10.524 SF		
700.0	699.8	698.1	697.5	1.2	1.3	120.32	-21.4	9.7	26.3	23.8	2.45	10.721		
800.0	799.5	796.4	795.3	1.4	1.5	142.63	-27.9	3.2	39.1	36.3	2.78	14.044		
900.0	898.7	894.0	892.5	1.7	1.7	154.74	-34.4	-3.3	58.1	55.0	3.11	18.698		
1,000.0	997.7	991.3	989.4	1.9	1.9	154.72	-40.9	-9.8	79.8	76.3	3.44	23.180		
1,100.0	1,096.7	1,088.5	1,086.1	2.2	2.2	152.92	-47.4	-16.3	101.9	98.1	3.78	26.942		
1,200.0	1,195.6	1,185.6	1,182.8	2.5	2.4	150.59	-53.9	-22.8	124.4	120.2	4.13	30.134		
1,300.0	1,294.3	1,282.6	1,279.4	2.8	2.6	148.26	-60.3	-29.3	147.2	142.7	4.48	32.883		
1,400.0	1,393.0	1,379.5	1,375.9	3.1	2.9	146.16	-66.8	-35.8	170.5	165.6	4.83	35.284		
1,500.0	1,491.4	1,476.3	1,472.2	3.4	3.1	147.27	-73.3	-42.3	194.2	189.0	5.19	37.441		
1,600.0	1,589.9	1,573.0	1,568.5	3.7	3.3	149.49	-79.7	-48.7	218.3	212.7	5.54	39.373		
1,700.0	1,688.4	1,669.8	1,664.8	4.1	3.5	151.28	-86.2	-55.2	242.6	236.7	5.90	41.101		
1,800.0	1,786.9	1,766.5	1,761.1	4.4	3.8	152.74	-92.7	-61.7	267.1	260.9	6.26	42.651		
1,900.0	1,885.4	1,863.2	1,857.4	4.7	4.0	153.95	-99.1	-68.1	291.8	285.1	6.62	44.046		
2,000.0	1,983.9	1,960.0	1,953.7	5.1	4.2	154.98	-105.6	-74.6	316.5	309.5	6.99	45.308		
2,100.0	2,082.4	2,056.7	2,050.0	5.4	4.5	155.85	-112.1	-81.1	341.4	334.0	7.35	46.452		
2,200.0	2,180.9	2,153.5	2,146.4	5.8	4.7	156.61	-118.5	-87.5	366.3	358.6	7.71	47.495		
2,300.0	2,279.3	2,250.2	2,242.7	6.1	4.9	157.27	-125.0	-94.0	391.2	383.1	8.08	48.448		
2,400.0	2,377.8	2,347.0	2,339.0	6.5	5.2	157.86	-131.4	-100.5	416.2	407.8	8.44	49.322		
2,500.0	2,476.3	2,443.7	2,435.3	6.8	5.4	158.37	-137.9	-107.0	441.3	432.5	8.80	50.127		
2,600.0	2,574.8	2,540.4	2,531.6	7.1	5.6	158.83	-144.4	-113.4	466.3	457.2	9.17	50.870		
2,700.0	2,673.3	2,637.2	2,627.9	7.5	5.9	159.25	-150.8	-119.9	491.4	481.9	9.53	51.558		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4J-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.31	-0.2	30.0	30.0					
100.0	100.0	99.0	99.0	0.1	0.1	90.31	-0.2	30.0	30.0	29.7	0.30	101.618		
200.0	200.0	199.0	199.0	0.3	0.3	90.31	-0.2	30.0	30.0	29.4	0.64	46.582		
300.0	300.0	299.0	299.0	0.5	0.5	90.31	-0.2	30.0	30.0	29.0	0.99	30.209		
400.0	400.0	399.1	399.1	0.7	0.7	91.93	-1.0	29.9	29.9	28.5	1.34	22.251		
500.0	500.0	499.1	499.0	0.8	0.8	96.92	-3.6	29.4	29.6	27.9	1.69	17.501		
600.0	600.0	598.9	598.8	1.0	1.0	58.15	-7.8	28.7	28.8	26.7	2.06	13.993		
654.2	654.2	652.8	652.6	1.1	1.1	68.41	-10.9	28.2	28.4	26.2	2.26	12.576 CC, ES		
700.0	699.8	698.2	697.8	1.2	1.2	79.20	-13.8	27.7	28.9	26.4	2.43	11.880 SF		
800.0	799.5	796.6	796.0	1.4	1.4	104.97	-21.4	26.4	34.7	31.9	2.80	12.368		
900.0	898.7	894.4	893.4	1.7	1.7	124.96	-30.1	24.9	48.4	45.2	3.16	15.318		
1,000.0	997.7	992.1	990.6	1.9	1.9	130.18	-39.0	23.4	66.2	62.6	3.52	18.812		
1,100.0	1,096.7	1,089.8	1,087.9	2.2	2.1	131.36	-47.8	21.9	84.8	80.9	3.89	21.816		
1,200.0	1,195.6	1,187.5	1,185.2	2.5	2.3	130.97	-56.7	20.3	103.7	99.5	4.27	24.307		
1,300.0	1,294.3	1,285.2	1,282.5	2.8	2.5	130.04	-65.5	18.8	122.8	118.2	4.66	26.362		
1,400.0	1,393.0	1,382.9	1,379.8	3.1	2.8	129.05	-74.4	17.3	142.1	137.0	5.06	28.065		
1,500.0	1,491.4	1,480.5	1,477.0	3.4	3.0	131.05	-83.2	15.8	161.6	156.1	5.47	29.556		
1,600.0	1,589.9	1,578.1	1,574.1	3.7	3.2	133.97	-92.0	14.3	181.6	175.8	5.88	30.916		
1,700.0	1,688.4	1,675.7	1,671.3	4.1	3.4	136.31	-100.9	12.8	202.0	195.8	6.29	32.147		
1,800.0	1,786.9	1,773.3	1,768.5	4.4	3.7	138.22	-109.7	11.3	222.7	216.0	6.70	33.259		
1,900.0	1,885.4	1,870.9	1,865.7	4.7	3.9	139.80	-118.6	9.8	243.6	236.5	7.11	34.265		
2,000.0	1,983.9	1,968.4	1,962.9	5.1	4.1	141.14	-127.4	8.2	264.6	257.1	7.52	35.177		
2,100.0	2,082.4	2,066.0	2,060.1	5.4	4.4	142.28	-136.2	6.7	285.7	277.8	7.93	36.006		
2,200.0	2,180.9	2,163.6	2,157.2	5.8	4.6	143.26	-145.1	5.2	306.9	298.6	8.35	36.762		
2,300.0	2,279.3	2,261.2	2,254.4	6.1	4.8	144.12	-153.9	3.7	328.2	319.5	8.76	37.453		
2,400.0	2,377.8	2,358.8	2,351.6	6.5	5.0	144.87	-162.8	2.2	349.6	340.4	9.18	38.086		
2,500.0	2,476.3	2,456.4	2,448.8	6.8	5.3	145.53	-171.6	0.7	371.0	361.4	9.59	38.669		
2,600.0	2,574.8	2,554.0	2,546.0	7.1	5.5	146.13	-180.4	-0.8	392.4	382.4	10.01	39.206		
2,700.0	2,673.3	2,651.6	2,643.2	7.5	5.7	146.66	-189.3	-2.3	413.9	403.5	10.43	39.704		
2,800.0	2,771.8	2,749.2	2,740.3	7.8	6.0	147.13	-198.1	-3.8	435.4	424.6	10.84	40.165		
2,900.0	2,870.3	2,846.8	2,837.5	8.2	6.2	147.57	-206.9	-5.3	457.0	445.7	11.26	40.594		
3,000.0	2,968.7	2,944.4	2,934.7	8.5	6.4	147.96	-215.8	-6.9	478.5	466.9	11.67	40.994		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	100.03	-6.2	35.0	35.5					
100.0	100.0	99.0	99.0	0.1	0.1	100.03	-6.2	35.0	35.5	35.2	0.30	120.284		
200.0	200.0	199.0	199.0	0.3	0.3	100.03	-6.2	35.0	35.5	34.9	0.64	55.138		
300.0	300.0	299.0	299.0	0.5	0.5	100.03	-6.2	35.0	35.5	34.5	0.99	35.758		
400.0	400.0	399.0	399.0	0.7	0.7	100.03	-6.2	35.0	35.5	34.2	1.34	26.458 CC, ES		
500.0	500.0	498.6	498.6	0.8	0.8	101.11	-6.9	35.4	36.0	34.3	1.69	21.309		
600.0	600.0	598.1	598.1	1.0	1.0	56.36	-9.2	36.5	36.7	34.7	2.04	17.978		
700.0	699.8	697.4	697.2	1.2	1.2	67.73	-13.0	38.5	37.6	35.2	2.40	15.631		
800.0	799.5	796.1	795.8	1.4	1.4	83.81	-18.3	41.3	40.9	38.1	2.78	14.681 SF		
900.0	898.7	894.1	893.5	1.7	1.6	100.63	-25.1	44.8	49.2	46.0	3.19	15.407		
1,000.0	997.7	991.7	990.7	1.9	1.8	106.62	-33.2	49.0	62.0	58.4	3.60	17.216		
1,100.0	1,096.7	1,090.2	1,088.6	2.2	2.0	108.93	-41.9	53.5	76.0	72.0	4.02	18.893		
1,200.0	1,195.6	1,188.7	1,186.6	2.5	2.3	109.58	-50.6	58.0	90.1	85.7	4.46	20.193		
1,300.0	1,294.3	1,287.2	1,284.7	2.8	2.5	109.60	-59.3	62.6	104.0	99.1	4.92	21.155		
1,400.0	1,393.0	1,385.8	1,382.8	3.1	2.7	109.50	-68.0	67.1	117.7	112.3	5.39	21.849		
1,500.0	1,491.4	1,484.4	1,480.9	3.4	3.0	112.32	-76.7	71.6	131.4	125.5	5.86	22.414		
1,600.0	1,589.9	1,583.0	1,579.0	3.7	3.2	115.98	-85.3	76.1	145.7	139.3	6.34	22.984		
1,700.0	1,688.4	1,681.6	1,677.1	4.1	3.4	118.98	-94.0	80.6	160.4	153.6	6.82	23.540		
1,800.0	1,786.9	1,780.1	1,775.2	4.4	3.7	121.47	-102.7	85.1	175.6	168.3	7.29	24.069		
1,900.0	1,885.4	1,878.7	1,873.3	4.7	3.9	123.57	-111.4	89.7	191.0	183.2	7.77	24.568		
2,000.0	1,983.9	1,977.3	1,971.4	5.1	4.1	125.35	-120.1	94.2	206.6	198.3	8.25	25.033		
2,100.0	2,082.4	2,075.9	2,069.5	5.4	4.4	126.88	-128.8	98.7	222.4	213.6	8.73	25.466		
2,200.0	2,180.9	2,174.5	2,167.6	5.8	4.6	128.21	-137.5	103.2	238.3	229.1	9.21	25.868		
2,300.0	2,279.3	2,273.1	2,265.7	6.1	4.9	129.37	-146.2	107.7	254.3	244.6	9.69	26.241		
2,400.0	2,377.8	2,371.6	2,363.8	6.5	5.1	130.40	-154.8	112.2	270.4	260.2	10.17	26.587		
2,500.0	2,476.3	2,470.2	2,461.9	6.8	5.3	131.31	-163.5	116.7	286.6	276.0	10.65	26.909		
2,600.0	2,574.8	2,568.8	2,560.0	7.1	5.6	132.12	-172.2	121.3	302.9	291.7	11.13	27.209		
2,700.0	2,673.3	2,667.4	2,658.1	7.5	5.8	132.85	-180.9	125.8	319.2	307.6	11.61	27.489		
2,800.0	2,771.8	2,766.0	2,756.2	7.8	6.1	133.51	-189.6	130.3	335.5	323.4	12.09	27.749		
2,900.0	2,870.3	2,864.6	2,854.3	8.2	6.3	134.10	-198.3	134.8	351.9	339.3	12.57	27.993		
3,000.0	2,968.7	2,963.2	2,952.4	8.5	6.5	134.65	-207.0	139.3	368.3	355.3	13.05	28.222		
3,100.0	3,067.2	3,061.7	3,050.5	8.9	6.8	135.15	-215.7	143.8	384.8	371.3	13.53	28.436		
3,200.0	3,165.7	3,160.3	3,148.6	9.2	7.0	135.60	-224.4	148.4	401.3	387.3	14.01	28.637		
3,300.0	3,264.2	3,258.9	3,246.7	9.6	7.3	136.02	-233.0	152.9	417.8	403.3	14.49	28.827		
3,400.0	3,362.7	3,357.5	3,344.7	9.9	7.5	136.41	-241.7	157.4	434.3	419.3	14.97	29.005		
3,500.0	3,461.2	3,456.1	3,442.8	10.3	7.7	136.77	-250.4	161.9	450.8	435.4	15.45	29.174		
3,600.0	3,559.7	3,554.7	3,540.9	10.6	8.0	137.11	-259.1	166.4	467.4	451.5	15.93	29.333		
3,700.0	3,658.1	3,653.2	3,639.0	11.0	8.2	137.42	-267.8	170.9	484.0	467.5	16.41	29.484		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4L-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	90.31	-0.2	40.0	40.0					
100.0	100.0	99.0	99.0	0.1	0.1	90.31	-0.2	40.0	40.0	39.7	0.30	135.491		
200.0	200.0	199.0	199.0	0.3	0.3	90.31	-0.2	40.0	40.0	39.4	0.64	62.109		
300.0	300.0	299.0	299.0	0.5	0.5	90.31	-0.2	40.0	40.0	39.0	0.99	40.278		
400.0	400.0	399.0	399.0	0.7	0.7	90.31	-0.2	40.0	40.0	38.7	1.34	29.803		
500.0	500.0	499.0	499.0	0.8	0.8	90.31	-0.2	40.0	40.0	38.3	1.69	23.652		
600.0	600.0	598.5	598.5	1.0	1.0	42.89	-0.9	40.6	39.3	37.2	2.04	19.248		
700.0	699.8	697.9	697.8	1.2	1.2	51.17	-2.8	42.2	37.6	35.2	2.40	15.697		
786.1	785.6	783.1	783.0	1.4	1.4	63.49	-5.5	44.6	36.7	34.0	2.72	13.495 CC		
800.0	799.5	796.8	796.7	1.4	1.4	65.92	-6.0	45.0	36.8	34.0	2.78	13.245 ES		
900.0	898.7	895.3	895.0	1.7	1.6	85.46	-10.6	48.9	39.7	36.5	3.20	12.418 SF		
1,000.0	997.7	993.3	992.7	1.9	1.8	95.73	-16.3	53.8	47.7	44.1	3.62	13.164		
1,100.0	1,096.7	1,091.3	1,090.2	2.2	2.0	100.78	-23.3	59.9	58.8	54.7	4.06	14.488		
1,200.0	1,195.6	1,189.1	1,187.4	2.5	2.2	102.47	-31.6	67.0	71.6	67.1	4.51	15.872		
1,300.0	1,294.3	1,287.6	1,285.1	2.8	2.5	102.52	-40.9	74.9	85.1	80.1	4.99	17.053		
1,400.0	1,393.0	1,386.4	1,383.2	3.1	2.7	102.28	-50.3	83.0	98.0	92.6	5.49	17.859		
1,500.0	1,491.4	1,485.3	1,481.3	3.4	3.0	104.91	-59.7	91.1	110.7	104.7	6.00	18.441		
1,600.0	1,589.9	1,584.2	1,579.4	3.7	3.2	108.34	-69.1	99.1	123.8	117.3	6.52	18.976		
1,700.0	1,688.4	1,683.1	1,677.6	4.1	3.5	111.11	-78.4	107.2	137.2	130.2	7.05	19.468		
1,800.0	1,786.9	1,782.0	1,775.7	4.4	3.7	113.38	-87.8	115.3	150.9	143.3	7.58	19.914		
1,900.0	1,885.4	1,880.9	1,873.8	4.7	4.0	115.27	-97.2	123.3	164.8	156.7	8.11	20.319		
2,000.0	1,983.9	1,979.8	1,971.9	5.1	4.3	116.87	-106.6	131.4	178.9	170.2	8.65	20.685		
2,100.0	2,082.4	2,078.7	2,070.0	5.4	4.5	118.24	-116.0	139.5	193.0	183.8	9.18	21.016		
2,200.0	2,180.9	2,177.6	2,168.1	5.8	4.8	119.42	-125.4	147.5	207.3	197.5	9.72	21.317		
2,300.0	2,279.3	2,276.5	2,266.3	6.1	5.1	120.44	-134.8	155.6	221.6	211.3	10.26	21.591		
2,400.0	2,377.8	2,375.4	2,364.4	6.5	5.4	121.34	-144.2	163.7	236.0	225.2	10.80	21.841		
2,500.0	2,476.3	2,474.3	2,462.5	6.8	5.6	122.14	-153.5	171.7	250.4	239.1	11.35	22.070		
2,600.0	2,574.8	2,573.1	2,560.6	7.1	5.9	122.85	-162.9	179.8	264.9	253.0	11.89	22.281		
2,700.0	2,673.3	2,672.0	2,658.7	7.5	6.2	123.49	-172.3	187.8	279.4	267.0	12.43	22.474		
2,800.0	2,771.8	2,770.9	2,756.9	7.8	6.4	124.07	-181.7	195.9	294.0	281.0	12.98	22.653		
2,900.0	2,870.3	2,869.8	2,855.0	8.2	6.7	124.59	-191.1	204.0	308.5	295.0	13.52	22.818		
3,000.0	2,968.7	2,968.7	2,953.1	8.5	7.0	125.06	-200.5	212.0	323.1	309.1	14.07	22.972		
3,100.0	3,067.2	3,067.6	3,051.2	8.9	7.3	125.49	-209.9	220.1	337.7	323.1	14.61	23.115		
3,200.0	3,165.7	3,166.5	3,149.3	9.2	7.5	125.89	-219.3	228.2	352.4	337.2	15.16	23.248		
3,300.0	3,264.2	3,265.4	3,247.4	9.6	7.8	126.25	-228.6	236.2	367.0	351.3	15.70	23.372		
3,400.0	3,362.7	3,364.3	3,345.6	9.9	8.1	126.59	-238.0	244.3	381.7	365.4	16.25	23.489		
3,500.0	3,461.2	3,463.2	3,443.7	10.3	8.4	126.90	-247.4	252.4	396.4	379.6	16.80	23.598		
3,600.0	3,559.7	3,562.1	3,541.8	10.6	8.6	127.19	-256.8	260.4	411.0	393.7	17.34	23.701		
3,700.0	3,658.1	3,661.0	3,639.9	11.0	8.9	127.46	-266.2	268.5	425.7	407.8	17.89	23.798		
3,800.0	3,756.6	3,759.9	3,738.0	11.3	9.2	127.71	-275.6	276.5	440.4	422.0	18.44	23.889		
3,900.0	3,855.1	3,858.8	3,836.2	11.7	9.5	127.95	-285.0	284.6	455.1	436.2	18.98	23.975		
4,000.0	3,953.6	3,957.7	3,934.3	12.0	9.7	128.17	-294.4	292.7	469.9	450.3	19.53	24.056		
4,100.0	4,052.1	4,056.6	4,032.4	12.4	10.0	128.38	-303.8	300.7	484.6	464.5	20.08	24.134		
4,200.0	4,150.6	4,155.5	4,130.5	12.7	10.3	128.57	-313.1	308.8	499.3	478.7	20.63	24.207		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	92.19	-2.4	61.7	61.7					
100.0	100.0	99.0	99.0	0.1	0.1	92.19	-2.4	61.7	61.7	61.4	0.30	209.119		
200.0	200.0	199.0	199.0	0.3	0.3	92.19	-2.4	61.7	61.7	61.1	0.64	95.861		
300.0	300.0	299.0	299.0	0.5	0.5	92.19	-2.4	61.7	61.7	60.7	0.99	62.166		
400.0	400.0	399.0	399.0	0.7	0.7	92.19	-2.4	61.7	61.7	60.4	1.34	45.998		
500.0	500.0	499.0	499.0	0.8	0.8	92.19	-2.4	61.7	61.7	60.0	1.69	36.504		
600.0	600.0	599.0	599.0	1.0	1.0	43.32	-2.4	61.7	60.5	58.4	2.04	29.625		
700.0	699.8	698.0	698.0	1.2	1.2	47.37	-2.9	62.4	57.5	55.1	2.39	24.018		
800.0	799.5	796.8	796.7	1.4	1.4	55.46	-4.4	64.4	54.4	51.6	2.77	19.657		
900.0	898.7	895.2	895.0	1.7	1.5	68.02	-7.0	67.7	52.7	49.5	3.18	16.576		
903.5	902.1	898.6	898.4	1.7	1.6	68.28	-7.1	67.9	52.7	49.5	3.19	16.498 CC, ES		
1,000.0	997.7	993.3	993.0	1.9	1.7	75.28	-10.5	72.4	54.3	50.7	3.62	14.993		
1,100.0	1,096.7	1,091.5	1,090.9	2.2	1.9	81.12	-15.1	78.5	59.0	54.9	4.08	14.463		
1,200.0	1,195.6	1,189.6	1,188.6	2.5	2.1	85.02	-20.7	85.8	65.9	61.4	4.55	14.504		
1,300.0	1,294.3	1,287.8	1,286.1	2.8	2.4	87.21	-27.3	94.5	74.4	69.3	5.03	14.781		
1,400.0	1,393.0	1,386.0	1,383.5	3.1	2.6	88.18	-34.9	104.6	83.8	78.2	5.55	15.102		
1,500.0	1,491.4	1,484.1	1,480.6	3.4	2.9	91.09	-43.5	115.9	94.0	87.9	6.09	15.439		
1,600.0	1,589.9	1,583.3	1,578.6	3.7	3.2	94.44	-52.8	128.1	105.1	98.5	6.65	15.819		
1,700.0	1,688.4	1,682.5	1,676.6	4.1	3.5	97.14	-62.0	140.2	116.6	109.4	7.22	16.153		
1,800.0	1,786.9	1,781.7	1,774.6	4.4	3.7	99.36	-71.3	152.4	128.3	120.5	7.80	16.445		
1,900.0	1,885.4	1,880.9	1,872.7	4.7	4.0	101.20	-80.5	164.6	140.1	131.7	8.39	16.700		
2,000.0	1,983.9	1,980.1	1,970.7	5.1	4.3	102.76	-89.8	176.8	152.1	143.1	8.99	16.924		
2,100.0	2,082.4	2,079.3	2,068.7	5.4	4.6	104.09	-99.0	188.9	164.1	154.5	9.59	17.122		
2,200.0	2,180.9	2,178.5	2,166.7	5.8	5.0	105.23	-108.3	201.1	176.3	166.1	10.19	17.297		
2,300.0	2,279.3	2,277.7	2,264.7	6.1	5.3	106.23	-117.5	213.3	188.4	177.6	10.80	17.454		
2,400.0	2,377.8	2,376.9	2,362.8	6.5	5.6	107.11	-126.8	225.4	200.7	189.3	11.41	17.594		
2,500.0	2,476.3	2,476.1	2,460.8	6.8	5.9	107.89	-136.0	237.6	213.0	200.9	12.02	17.720		
2,600.0	2,574.8	2,575.3	2,558.8	7.1	6.2	108.58	-145.2	249.8	225.3	212.6	12.63	17.834		
2,700.0	2,673.3	2,674.5	2,656.8	7.5	6.5	109.20	-154.5	262.0	237.6	224.4	13.25	17.938		
2,800.0	2,771.8	2,773.7	2,754.8	7.8	6.8	109.76	-163.7	274.1	250.0	236.1	13.86	18.033		
2,900.0	2,870.3	2,872.9	2,852.9	8.2	7.1	110.26	-173.0	286.3	262.4	247.9	14.48	18.119		
3,000.0	2,968.7	2,972.1	2,950.9	8.5	7.4	110.72	-182.2	298.5	274.8	259.7	15.10	18.199		
3,100.0	3,067.2	3,071.4	3,048.9	8.9	7.8	111.14	-191.5	310.7	287.2	271.5	15.72	18.272		
3,200.0	3,165.7	3,170.6	3,146.9	9.2	8.1	111.53	-200.7	322.8	299.6	283.3	16.34	18.340		
3,300.0	3,264.2	3,269.8	3,244.9	9.6	8.4	111.88	-210.0	335.0	312.1	295.1	16.96	18.403		
3,400.0	3,362.7	3,369.0	3,343.0	9.9	8.7	112.21	-219.2	347.2	324.5	306.9	17.58	18.462		
3,500.0	3,461.2	3,468.2	3,441.0	10.3	9.0	112.51	-228.5	359.3	337.0	318.8	18.20	18.516		
3,600.0	3,559.7	3,567.4	3,539.0	10.6	9.3	112.80	-237.7	371.5	349.5	330.6	18.82	18.567		
3,700.0	3,658.1	3,666.6	3,637.0	11.0	9.6	113.06	-247.0	383.7	361.9	342.5	19.44	18.614		
3,800.0	3,756.6	3,765.8	3,735.0	11.3	10.0	113.30	-256.2	395.9	374.4	354.4	20.07	18.659		
3,900.0	3,855.1	3,865.0	3,833.1	11.7	10.3	113.53	-265.5	408.0	386.9	366.2	20.69	18.701		
4,000.0	3,953.6	3,964.2	3,931.1	12.0	10.6	113.75	-274.7	420.2	399.4	378.1	21.31	18.741		
4,100.0	4,052.1	4,063.4	4,029.1	12.4	10.9	113.95	-283.9	432.4	411.9	390.0	21.94	18.778		
4,200.0	4,150.6	4,162.6	4,127.1	12.7	11.2	114.14	-293.2	444.5	424.5	401.9	22.56	18.813		
4,300.0	4,249.1	4,261.8	4,225.1	13.1	11.5	114.32	-302.4	456.7	437.0	413.8	23.19	18.846		
4,400.0	4,347.5	4,361.0	4,323.2	13.4	11.9	114.49	-311.7	468.9	449.5	425.7	23.81	18.878		
4,500.0	4,446.0	4,460.2	4,421.2	13.8	12.2	114.65	-320.9	481.1	462.0	437.6	24.44	18.908		
4,600.0	4,544.5	4,559.4	4,519.2	14.1	12.5	114.80	-330.2	493.2	474.5	449.5	25.06	18.936		
4,700.0	4,643.0	4,658.6	4,617.2	14.5	12.8	114.94	-339.4	505.4	487.1	461.4	25.69	18.963		
4,800.0	4,741.5	4,757.8	4,715.2	14.8	13.1	115.08	-348.7	517.6	499.6	473.3	26.31	18.989		
7,400.0	7,300.3	8,277.1	7,712.0	23.9	20.8	141.23	159.6	889.7	472.9	441.3	31.59	14.969		
7,500.0	7,392.3	8,241.8	7,712.0	24.2	20.6	133.60	124.3	889.7	404.7	373.3	31.37	12.900		

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 4F-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 4F-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			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
7,600.0	7,476.9	8,190.8	7,712.0	24.4	20.5	126.80	73.3	889.7	352.4	322.6	29.72	11.856					
7,700.0	7,551.5	8,125.7	7,712.0	24.7	20.3	118.73	8.2	889.7	318.6	290.5	28.01	11.372					
7,800.0	7,613.8	8,040.5	7,707.2	25.0	20.3	108.03	-76.7	889.1	301.3	273.8	27.52	10.948					
7,874.2	7,651.0	7,981.0	7,696.5	25.2	20.2	100.06	-135.2	887.8	297.5	269.4	28.14	10.572					
7,900.0	7,662.0	7,961.2	7,691.6	25.3	20.3	97.32	-154.5	887.2	298.0	269.5	28.42	10.486					
8,000.0	7,694.5	7,887.6	7,667.7	25.8	20.3	87.12	-223.9	884.2	307.3	277.9	29.36	10.464	SF				
8,100.0	7,710.4	7,818.1	7,637.3	26.2	20.4	77.83	-286.2	880.4	325.9	296.6	29.36	11.102					
8,200.0	7,712.0	7,750.0	7,600.4	26.8	20.5	70.73	-343.2	875.9	351.5	322.3	29.19	12.041					
8,300.0	7,712.0	7,700.0	7,569.1	27.5	20.6	66.11	-382.1	872.0	388.0	358.4	29.62	13.099					
8,400.0	7,712.0	7,650.0	7,534.7	28.3	20.8	61.49	-418.0	867.7	435.6	405.7	29.95	14.547					
8,500.0	7,712.0	7,600.0	7,497.2	29.1	20.9	57.00	-450.8	863.0	492.9	462.8	30.15	16.347					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4N-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	88.90	1.3	67.3	67.3					
100.0	100.0	99.0	99.0	0.1	0.1	88.90	1.3	67.3	67.3	67.0	0.30	227.963		
200.0	200.0	199.0	199.0	0.3	0.3	88.90	1.3	67.3	67.3	66.7	0.64	104.498		
300.0	300.0	299.0	299.0	0.5	0.5	88.90	1.3	67.3	67.3	66.3	0.99	67.768		
400.0	400.0	399.0	399.0	0.7	0.7	88.90	1.3	67.3	67.3	66.0	1.34	50.143		
500.0	500.0	499.0	499.0	0.8	0.8	88.90	1.3	67.3	67.3	65.6	1.69	39.794		
600.0	600.0	599.0	599.0	1.0	1.0	39.87	1.3	67.3	66.0	63.9	2.04	32.320		
700.0	699.8	698.8	698.8	1.2	1.2	43.02	1.3	67.3	62.0	59.6	2.39	25.911		
800.0	799.5	797.5	797.5	1.4	1.4	49.40	0.9	68.0	56.8	54.0	2.76	20.560		
900.0	898.7	896.0	895.9	1.7	1.5	60.45	-0.3	70.2	52.2	49.0	3.17	16.480		
1,000.0	997.7	994.3	994.1	1.9	1.7	67.43	-2.3	73.9	50.3	46.7	3.61	13.924		
1,010.9	1,008.5	1,005.0	1,004.9	2.0	1.7	68.22	-2.6	74.4	50.3	46.6	3.66	13.729 CC, ES		
1,100.0	1,096.7	1,092.7	1,092.4	2.2	1.9	74.40	-5.1	79.1	51.4	47.3	4.07	12.621		
1,200.0	1,195.6	1,191.2	1,190.6	2.5	2.1	80.14	-8.7	85.8	55.1	50.6	4.55	12.119		
1,300.0	1,294.3	1,289.7	1,288.7	2.8	2.3	84.20	-13.1	94.0	60.6	55.5	5.03	12.038		
1,400.0	1,393.0	1,388.4	1,386.7	3.1	2.5	86.74	-18.4	103.6	67.1	61.6	5.54	12.123		
1,500.0	1,491.4	1,487.1	1,484.6	3.4	2.8	90.85	-24.4	114.8	74.5	68.5	6.06	12.288		
1,600.0	1,589.9	1,585.9	1,582.3	3.7	3.0	94.56	-31.2	127.4	83.4	76.7	6.62	12.589		
1,700.0	1,688.4	1,684.6	1,679.7	4.1	3.3	96.63	-38.9	141.5	93.3	86.1	7.21	12.943		
1,800.0	1,786.9	1,783.2	1,776.7	4.4	3.7	97.46	-47.3	157.1	104.1	96.3	7.82	13.307		
1,900.0	1,885.4	1,881.6	1,873.2	4.7	4.0	97.38	-56.5	174.1	115.7	107.3	8.47	13.667		
2,000.0	1,983.9	1,980.3	1,969.8	5.1	4.4	96.73	-66.4	192.4	128.1	118.9	9.13	14.028		
2,100.0	2,082.4	2,079.6	2,066.7	5.4	4.7	96.12	-76.5	211.0	140.5	130.7	9.80	14.340		
2,200.0	2,180.9	2,178.8	2,163.6	5.8	5.1	95.61	-86.6	229.6	153.0	142.5	10.47	14.607		
2,300.0	2,279.3	2,278.0	2,260.6	6.1	5.5	95.17	-96.6	248.2	165.4	154.3	11.15	14.837		
2,400.0	2,377.8	2,377.2	2,357.5	6.5	5.9	94.79	-106.7	266.7	177.9	166.1	11.83	15.038		
2,500.0	2,476.3	2,476.4	2,454.4	6.8	6.3	94.47	-116.8	285.3	190.4	177.9	12.52	15.215		
2,600.0	2,574.8	2,575.6	2,551.4	7.1	6.7	94.18	-126.8	303.9	202.9	189.7	13.20	15.371		
2,700.0	2,673.3	2,674.8	2,648.3	7.5	7.1	93.93	-136.9	322.5	215.4	201.5	13.89	15.511		
2,800.0	2,771.8	2,774.0	2,745.2	7.8	7.5	93.71	-146.9	341.1	227.9	213.3	14.58	15.636		
2,900.0	2,870.3	2,873.3	2,842.2	8.2	7.9	93.50	-157.0	359.7	240.4	225.2	15.27	15.748		
3,000.0	2,968.7	2,972.5	2,939.1	8.5	8.3	93.32	-167.1	378.3	252.9	237.0	15.96	15.850		
3,100.0	3,067.2	3,071.7	3,036.0	8.9	8.7	93.16	-177.1	396.9	265.4	248.8	16.65	15.943		
3,200.0	3,165.7	3,170.9	3,133.0	9.2	9.1	93.01	-187.2	415.5	278.0	260.6	17.34	16.027		
3,300.0	3,264.2	3,270.1	3,229.9	9.6	9.5	92.87	-197.3	434.1	290.5	272.4	18.04	16.105		
3,400.0	3,362.7	3,369.3	3,326.8	9.9	9.9	92.75	-207.3	452.6	303.0	284.3	18.73	16.176		
3,500.0	3,461.2	3,468.5	3,423.8	10.3	10.3	92.63	-217.4	471.2	315.5	296.1	19.43	16.242		
3,600.0	3,559.7	3,567.7	3,520.7	10.6	10.7	92.52	-227.5	489.8	328.0	307.9	20.12	16.303		
3,700.0	3,658.1	3,666.9	3,617.6	11.0	11.1	92.42	-237.5	508.4	340.5	319.7	20.82	16.360		
3,800.0	3,756.6	3,766.2	3,714.6	11.3	11.5	92.33	-247.6	527.0	353.1	331.6	21.51	16.412		
3,900.0	3,855.1	3,865.4	3,811.5	11.7	11.9	92.25	-257.7	545.6	365.6	343.4	22.21	16.461		
4,000.0	3,953.6	3,964.6	3,908.4	12.0	12.3	92.17	-267.7	564.2	378.1	355.2	22.91	16.507		
4,100.0	4,052.1	4,063.8	4,005.4	12.4	12.7	92.09	-277.8	582.8	390.6	367.0	23.60	16.550		
4,200.0	4,150.6	4,163.0	4,102.3	12.7	13.1	92.02	-287.8	601.4	403.2	378.9	24.30	16.591		
4,300.0	4,249.1	4,262.2	4,199.2	13.1	13.5	91.96	-297.9	620.0	415.7	390.7	25.00	16.629		
4,400.0	4,347.5	4,361.4	4,296.2	13.4	13.9	91.89	-308.0	638.6	428.2	402.5	25.70	16.665		
4,500.0	4,446.0	4,460.6	4,393.1	13.8	14.3	91.84	-318.0	657.1	440.7	414.3	26.39	16.698		
4,600.0	4,544.5	4,559.8	4,490.0	14.1	14.8	91.78	-328.1	675.7	453.3	426.2	27.09	16.730		
4,700.0	4,643.0	4,659.1	4,587.0	14.5	15.2	91.73	-338.2	694.3	465.8	438.0	27.79	16.760		
4,800.0	4,741.5	4,758.3	4,683.9	14.8	15.6	91.68	-348.2	712.9	478.3	449.8	28.49	16.789		
4,900.0	4,840.0	4,857.5	4,780.8	15.2	16.0	91.63	-358.3	731.5	490.8	461.7	29.19	16.816		
7,100.0	7,006.7	8,068.5	7,429.0	22.9	25.4	13.64	177.9	1,239.4	456.2	427.6	28.61	15.947		

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 4F-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 4F-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		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		
7,200.0	7,105.2	8,070.8	7,429.0	23.3	25.4	12.27	180.1	1,239.4	359.1	330.6	28.48	12.606		
7,300.0	7,203.6	8,068.8	7,429.0	23.6	25.4	-44.08	178.2	1,239.4	264.0	236.8	27.24	9.693		
7,400.0	7,300.3	8,050.3	7,429.0	23.9	25.3	-80.10	159.6	1,239.4	176.0	147.2	28.83	6.105		
7,500.0	7,392.3	8,015.0	7,429.0	24.2	25.2	-82.15	124.3	1,239.4	109.6	82.0	27.52	3.981		
7,562.6	7,446.3	7,984.8	7,429.0	24.3	25.1	-71.76	94.1	1,239.4	94.9	67.4	27.42	3.459 SF		
7,600.0	7,476.9	7,964.0	7,429.0	24.4	25.1	-62.54	73.3	1,239.4	99.8	71.4	28.45	3.509		
7,700.0	7,551.5	7,898.9	7,429.0	24.7	25.0	-37.45	8.2	1,239.4	142.8	111.5	31.29	4.564		
7,800.0	7,613.8	7,837.7	7,426.5	25.0	24.9	-23.47	-52.9	1,238.9	197.6	168.3	29.27	6.749		
7,900.0	7,662.0	7,779.2	7,418.2	25.3	24.9	-15.55	-110.7	1,237.3	252.8	227.8	25.04	10.097		
8,000.0	7,694.5	7,721.9	7,404.4	25.8	24.9	-10.67	-166.3	1,234.7	304.5	283.7	20.71	14.701		
8,100.0	7,710.4	7,665.4	7,385.6	26.2	24.9	-7.41	-219.4	1,231.1	350.9	332.9	18.01	19.483		
8,200.0	7,712.0	7,610.3	7,362.4	26.8	25.0	-5.63	-269.2	1,226.6	393.7	375.9	17.77	22.154		
8,300.0	7,712.0	7,550.0	7,331.8	27.5	25.0	-4.29	-320.8	1,220.8	443.4	425.7	17.77	24.954		
8,400.0	7,712.0	7,514.8	7,311.5	28.3	25.0	-3.52	-349.3	1,216.9	500.0	482.1	17.89	27.942		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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		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	91.92	-2.4	70.1	70.1					
100.0	100.0	99.0	99.0	0.1	0.1	91.92	-2.4	70.1	70.1	69.8	0.30	237.531		
200.0	200.0	199.0	199.0	0.3	0.3	91.92	-2.4	70.1	70.1	69.5	0.64	108.885		
300.0	300.0	299.0	299.0	0.5	0.5	91.92	-2.4	70.1	70.1	69.1	0.99	70.612		
400.0	400.0	399.0	399.0	0.7	0.7	91.92	-2.4	70.1	70.1	68.8	1.34	52.248 CC, ES		
500.0	500.0	497.8	497.8	0.8	0.8	92.12	-2.6	70.9	70.9	69.2	1.69	41.981		
600.0	600.0	596.6	596.6	1.0	1.0	43.60	-3.4	73.3	72.1	70.1	2.04	35.409		
700.0	699.8	695.3	695.2	1.2	1.2	47.28	-4.8	77.3	72.6	70.2	2.39	30.393		
800.0	799.5	793.8	793.5	1.4	1.4	53.16	-6.7	82.9	73.0	70.2	2.76	26.465		
900.0	898.7	892.0	891.4	1.7	1.6	61.15	-9.2	90.1	74.1	71.0	3.16	23.436		
1,000.0	997.7	990.0	989.0	1.9	1.8	62.57	-12.1	98.8	76.9	73.3	3.60	21.379		
1,100.0	1,096.7	1,088.1	1,086.5	2.2	2.0	63.06	-15.7	109.1	81.1	77.1	4.06	19.999		
1,200.0	1,195.6	1,186.3	1,183.8	2.5	2.3	62.74	-19.7	121.1	86.3	81.8	4.54	19.003		
1,300.0	1,294.3	1,284.5	1,281.0	2.8	2.6	61.80	-24.3	134.6	92.1	87.1	5.06	18.211		
1,400.0	1,393.0	1,382.7	1,377.9	3.1	2.9	60.43	-29.5	149.7	98.1	92.5	5.60	17.519		
1,500.0	1,491.4	1,480.9	1,474.5	3.4	3.2	61.62	-35.2	166.3	104.5	98.4	6.17	16.934		
1,600.0	1,589.9	1,579.1	1,570.8	3.7	3.6	63.57	-41.4	184.5	112.4	105.7	6.77	16.613		
1,700.0	1,688.4	1,677.0	1,666.5	4.1	4.0	64.77	-48.1	204.2	121.7	114.4	7.37	16.508 SF		
1,800.0	1,786.9	1,774.8	1,761.6	4.4	4.4	65.33	-55.3	225.4	132.4	124.4	7.99	16.571		
1,900.0	1,885.4	1,872.2	1,856.1	4.7	4.8	65.38	-63.1	248.1	144.4	135.8	8.61	16.770		
2,000.0	1,983.9	1,970.3	1,950.8	5.1	5.3	65.08	-71.3	272.3	157.5	148.3	9.23	17.074		
2,100.0	2,082.4	2,069.4	2,046.4	5.4	5.7	64.77	-79.7	297.0	170.9	161.0	9.85	17.350		
2,200.0	2,180.9	2,168.5	2,142.0	5.8	6.2	64.50	-88.1	321.6	184.2	173.7	10.47	17.590		
2,300.0	2,279.3	2,267.6	2,237.7	6.1	6.7	64.27	-96.5	346.3	197.5	186.4	11.10	17.800		
2,400.0	2,377.8	2,366.7	2,333.3	6.5	7.2	64.07	-104.9	370.9	210.9	199.2	11.73	17.986		
2,500.0	2,476.3	2,465.8	2,428.9	6.8	7.7	63.89	-113.3	395.6	224.2	211.9	12.35	18.150		
2,600.0	2,574.8	2,564.9	2,524.5	7.1	8.1	63.74	-121.8	420.2	237.6	224.6	12.98	18.298		
2,700.0	2,673.3	2,664.1	2,620.1	7.5	8.6	63.60	-130.2	444.9	250.9	237.3	13.62	18.430		
2,800.0	2,771.8	2,763.2	2,715.7	7.8	9.1	63.47	-138.6	469.5	264.3	250.0	14.25	18.550		
2,900.0	2,870.3	2,862.3	2,811.4	8.2	9.6	63.36	-147.0	494.2	277.6	262.7	14.88	18.659		
3,000.0	2,968.7	2,961.4	2,907.0	8.5	10.1	63.26	-155.4	518.9	291.0	275.5	15.51	18.758		
3,100.0	3,067.2	3,060.5	3,002.6	8.9	10.6	63.16	-163.8	543.5	304.3	288.2	16.15	18.849		
3,200.0	3,165.7	3,159.6	3,098.2	9.2	11.1	63.07	-172.2	568.2	317.7	300.9	16.78	18.933		
3,300.0	3,264.2	3,258.7	3,193.8	9.6	11.6	63.00	-180.6	592.8	331.0	313.6	17.41	19.010		
3,400.0	3,362.7	3,357.8	3,289.5	9.9	12.1	62.92	-189.0	617.5	344.4	326.3	18.05	19.081		
3,500.0	3,461.2	3,456.9	3,385.1	10.3	12.6	62.85	-197.4	642.1	357.7	339.1	18.68	19.147		
3,600.0	3,559.7	3,556.0	3,480.7	10.6	13.1	62.79	-205.8	666.8	371.1	351.8	19.32	19.208		
3,700.0	3,658.1	3,655.1	3,576.3	11.0	13.6	62.73	-214.2	691.4	384.5	364.5	19.96	19.266		
3,800.0	3,756.6	3,754.2	3,671.9	11.3	14.1	62.68	-222.6	716.1	397.8	377.2	20.59	19.319		
3,900.0	3,855.1	3,853.3	3,767.6	11.7	14.5	62.63	-231.0	740.7	411.2	389.9	21.23	19.369		
4,000.0	3,953.6	3,952.4	3,863.2	12.0	15.0	62.58	-239.4	765.4	424.5	402.7	21.86	19.416		
4,100.0	4,052.1	4,051.5	3,958.8	12.4	15.5	62.53	-247.9	790.0	437.9	415.4	22.50	19.461		
4,200.0	4,150.6	4,150.6	4,054.4	12.7	16.0	62.49	-256.3	814.7	451.2	428.1	23.14	19.502		
4,300.0	4,249.1	4,249.7	4,150.0	13.1	16.5	62.45	-264.7	839.4	464.6	440.8	23.77	19.542		
4,400.0	4,347.5	4,348.8	4,245.7	13.4	17.0	62.41	-273.1	864.0	478.0	453.5	24.41	19.579		
4,500.0	4,446.0	4,447.9	4,341.3	13.8	17.5	62.38	-281.5	888.7	491.3	466.3	25.05	19.614		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.02	1.3	75.7	75.7					
100.0	100.0	99.0	99.0	0.1	0.1	89.02	1.3	75.7	75.7	75.4	0.30	256.389		
200.0	200.0	199.0	199.0	0.3	0.3	89.02	1.3	75.7	75.7	75.0	0.64	117.529 CC, ES		
300.0	300.0	297.7	297.7	0.5	0.5	89.15	1.1	76.5	76.5	75.5	0.99	77.170		
400.0	400.0	396.4	396.3	0.7	0.7	89.52	0.7	79.0	79.0	77.7	1.34	58.886		
500.0	500.0	494.9	494.8	0.8	0.9	90.08	-0.1	83.1	83.2	81.5	1.70	49.013		
600.0	600.0	593.3	593.0	1.0	1.1	41.45	-1.2	88.9	87.8	85.8	2.03	43.224		
700.0	699.8	691.6	691.0	1.2	1.3	44.29	-2.6	96.4	91.7	89.3	2.38	38.455		
800.0	799.5	789.7	788.7	1.4	1.5	48.46	-4.3	105.5	95.1	92.3	2.75	34.595		
900.0	898.7	887.6	885.9	1.7	1.7	53.84	-6.3	116.2	98.6	95.4	3.14	31.367		
1,000.0	997.7	985.3	982.8	1.9	2.0	52.36	-8.7	128.5	102.9	99.4	3.56	28.885		
1,100.0	1,096.7	1,083.0	1,079.5	2.2	2.3	50.20	-11.3	142.4	108.2	104.2	4.01	27.007		
1,200.0	1,195.6	1,180.8	1,176.0	2.5	2.6	47.58	-14.2	158.0	114.1	109.6	4.47	25.520		
1,300.0	1,294.3	1,278.6	1,272.2	2.8	2.9	44.68	-17.4	175.1	120.3	115.3	4.95	24.294		
1,400.0	1,393.0	1,376.3	1,368.1	3.1	3.3	41.63	-21.0	193.9	126.6	121.1	5.44	23.252		
1,500.0	1,491.4	1,474.0	1,463.5	3.4	3.7	41.38	-24.8	214.3	133.2	127.3	5.95	22.390		
1,600.0	1,589.9	1,571.5	1,558.4	3.7	4.1	42.33	-28.9	236.2	141.4	134.9	6.47	21.860		
1,700.0	1,688.4	1,668.8	1,652.7	4.1	4.6	42.91	-33.4	259.7	151.1	144.1	6.99	21.616		
1,800.0	1,786.9	1,765.7	1,746.3	4.4	5.0	43.16	-38.1	284.6	162.4	154.8	7.51	21.608 SF		
1,900.0	1,885.4	1,862.3	1,839.1	4.7	5.5	43.15	-43.0	311.0	175.1	167.1	8.03	21.799		
2,000.0	1,983.9	1,960.6	1,933.2	5.1	6.1	42.98	-48.3	339.0	189.0	180.5	8.55	22.101		
2,100.0	2,082.4	2,059.6	2,027.9	5.4	6.6	42.82	-53.6	367.3	203.0	193.9	9.08	22.367		
2,200.0	2,180.9	2,158.7	2,122.7	5.8	7.1	42.68	-58.9	395.6	216.9	207.3	9.60	22.602		
2,300.0	2,279.3	2,257.7	2,217.4	6.1	7.7	42.56	-64.3	423.8	230.9	220.8	10.12	22.811		
2,400.0	2,377.8	2,356.7	2,312.2	6.5	8.2	42.46	-69.6	452.1	244.9	234.2	10.65	22.998		
2,500.0	2,476.3	2,455.7	2,406.9	6.8	8.7	42.36	-74.9	480.4	258.8	247.6	11.17	23.165		
2,600.0	2,574.8	2,554.7	2,501.7	7.1	9.3	42.28	-80.2	508.6	272.8	261.1	11.70	23.317		
2,700.0	2,673.3	2,653.8	2,596.4	7.5	9.8	42.20	-85.6	536.9	286.7	274.5	12.22	23.454		
2,800.0	2,771.8	2,752.8	2,691.2	7.8	10.4	42.13	-90.9	565.2	300.7	287.9	12.75	23.580		
2,900.0	2,870.3	2,851.8	2,785.9	8.2	10.9	42.07	-96.2	593.5	314.6	301.4	13.28	23.695		
3,000.0	2,968.7	2,950.8	2,880.7	8.5	11.5	42.01	-101.5	621.7	328.6	314.8	13.81	23.800		
3,100.0	3,067.2	3,049.8	2,975.4	8.9	12.0	41.95	-106.9	650.0	342.6	328.2	14.33	23.897		
3,200.0	3,165.7	3,148.9	3,070.2	9.2	12.5	41.90	-112.2	678.3	356.5	341.7	14.86	23.987		
3,300.0	3,264.2	3,247.9	3,164.9	9.6	13.1	41.86	-117.5	706.6	370.5	355.1	15.39	24.071		
3,400.0	3,362.7	3,346.9	3,259.6	9.9	13.6	41.82	-122.8	734.8	384.4	368.5	15.92	24.148		
3,500.0	3,461.2	3,445.9	3,354.4	10.3	14.2	41.78	-128.2	763.1	398.4	382.0	16.45	24.221		
3,600.0	3,559.7	3,544.9	3,449.1	10.6	14.7	41.74	-133.5	791.4	412.4	395.4	16.98	24.289		
3,700.0	3,658.1	3,644.0	3,543.9	11.0	15.3	41.71	-138.8	819.6	426.3	408.8	17.51	24.352		
3,800.0	3,756.6	3,743.0	3,638.6	11.3	15.8	41.67	-144.1	847.9	440.3	422.3	18.04	24.411		
3,900.0	3,855.1	3,842.0	3,733.4	11.7	16.4	41.64	-149.5	876.2	454.3	435.7	18.57	24.467		
4,000.0	3,953.6	3,941.0	3,828.1	12.0	16.9	41.62	-154.8	904.5	468.2	449.1	19.10	24.520		
4,100.0	4,052.1	4,040.0	3,922.9	12.4	17.5	41.59	-160.1	932.7	482.2	462.6	19.62	24.570		
4,200.0	4,150.6	4,139.1	4,017.6	12.7	18.0	41.56	-165.4	961.0	496.1	476.0	20.15	24.617		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 +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	57.34	223.9	349.3	415.0						
100.0	100.0	91.9	91.9	0.1	0.2	57.35	223.8	349.2	414.8	414.5	0.31	1,346.919			
200.0	200.0	192.9	192.9	0.3	0.3	57.35	223.6	349.0	414.4	413.8	0.66	629.979			
300.0	300.0	293.9	293.9	0.5	0.5	57.37	223.2	348.5	413.9	412.8	1.01	410.661			
400.0	400.0	395.0	394.9	0.7	0.7	57.39	222.6	347.9	413.0	411.7	1.36	304.211			
500.0	500.0	496.0	495.9	0.8	0.9	57.41	221.9	347.1	411.9	410.2	1.71	241.246			
600.0	600.0	596.9	596.9	1.0	1.1	7.48	221.0	346.0	408.9	406.8	2.05	199.824			
700.0	699.8	697.7	697.6	1.2	1.2	7.63	219.9	344.8	402.1	399.7	2.39	168.127			
800.0	799.5	798.1	798.0	1.4	1.4	7.87	218.7	343.5	391.7	389.0	2.74	143.208			
900.0	898.7	898.0	897.9	1.7	1.6	8.22	217.3	341.9	377.6	374.5	3.08	122.759			
1,000.0	997.7	995.8	995.7	1.9	1.8	1.16	216.8	339.8	361.5	358.1	3.42	105.769			
1,100.0	1,096.7	1,084.0	1,083.8	2.2	1.9	-6.27	219.3	337.5	346.5	342.8	3.74	92.548			
1,200.0	1,195.6	1,172.9	1,172.5	2.5	2.1	-13.90	225.3	336.5	334.5	330.4	4.08	81.959			
1,300.0	1,294.3	1,262.6	1,261.8	2.8	2.2	-21.68	234.5	336.3	325.3	320.9	4.44	73.325			
1,400.0	1,393.0	1,357.0	1,355.4	3.1	2.4	-29.67	246.7	336.6	318.6	313.7	4.84	65.824			
1,500.0	1,491.4	1,450.0	1,447.1	3.4	2.6	-34.94	261.8	336.5	314.6	309.3	5.29	59.487			
1,583.6	1,573.8	1,526.9	1,522.7	3.7	2.8	-38.24	275.9	336.3	313.6	307.9	5.69	55.071 CC			
1,600.0	1,589.9	1,542.3	1,537.8	3.7	2.9	-38.93	278.9	336.2	313.6	307.8	5.78	54.270 ES			
1,700.0	1,688.4	1,632.7	1,626.2	4.1	3.2	-43.23	297.9	335.0	315.9	309.5	6.32	50.016			
1,800.0	1,786.9	1,723.9	1,714.6	4.4	3.5	-47.87	319.8	332.9	322.1	315.3	6.89	46.744			
1,900.0	1,885.4	1,816.9	1,804.5	4.7	3.9	-52.59	343.4	330.2	331.8	324.3	7.49	44.285			
2,000.0	1,983.9	1,905.3	1,889.5	5.1	4.2	-57.02	367.6	327.1	345.4	337.3	8.08	42.729			
2,100.0	2,082.4	1,998.4	1,978.7	5.4	4.7	-61.48	394.2	323.5	362.4	353.7	8.69	41.714			
2,200.0	2,180.9	2,088.0	2,064.1	5.8	5.1	-65.72	420.7	318.0	382.1	372.8	9.28	41.168 SF			
2,300.0	2,279.3	2,174.2	2,145.5	6.1	5.6	-69.68	448.2	311.3	405.8	396.0	9.85	41.208			
2,400.0	2,377.8	2,267.2	2,233.4	6.5	6.1	-73.37	477.9	305.1	431.9	421.5	10.39	41.552			
2,500.0	2,476.3	2,359.3	2,320.6	6.8	6.6	-76.38	507.6	301.1	459.8	448.9	10.92	42.123			
2,600.0	2,574.8	2,453.8	2,410.0	7.1	7.1	-79.26	537.7	295.8	488.6	477.1	11.43	42.728			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 34-32 (EXISTING) - ENCANA WELL - ENCANA WELL													Offset Site Error:	0.0 ft
Survey Program: 103-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	94.18	-14.4	196.8	197.6					
100.0	100.0	89.8	89.8	0.1	0.1	94.16	-14.3	197.1	197.6	0.28	699.762			
200.0	200.0	189.0	189.0	0.3	0.3	94.16	-14.4	197.9	198.4	0.63	316.357			
300.0	300.0	289.3	289.3	0.5	0.5	94.27	-14.8	198.8	199.4	0.98	203.919			
400.0	400.0	389.7	389.7	0.7	0.7	94.47	-15.6	199.5	200.1	1.33	150.676			
500.0	500.0	489.9	489.8	0.8	0.8	94.68	-16.4	200.1	200.8	1.68	119.619			
600.0	600.0	590.0	590.0	1.0	1.0	45.17	-16.9	200.6	200.1	2.03	98.761			
700.0	699.8	690.4	690.3	1.2	1.2	46.41	-17.3	201.0	196.8	2.38	82.665			
800.0	799.5	790.2	790.2	1.4	1.4	48.44	-17.5	201.1	191.1	2.75	69.544			
900.0	898.7	890.3	890.3	1.7	1.5	51.44	-17.5	201.0	183.1	3.14	58.344			
1,000.0	997.7	989.5	989.5	1.9	1.7	47.82	-17.4	200.6	173.5	3.54	48.973			
1,100.0	1,096.7	1,088.7	1,088.7	2.2	1.9	44.74	-17.5	200.1	163.0	3.96	41.180			
1,200.0	1,195.6	1,188.4	1,188.3	2.5	2.0	42.36	-17.3	199.2	151.3	4.39	34.486			
1,300.0	1,294.3	1,287.0	1,287.0	2.8	2.2	40.82	-16.9	198.0	138.3	4.82	28.662			
1,400.0	1,393.0	1,385.7	1,385.6	3.1	2.4	40.36	-16.2	197.0	124.4	5.28	23.562			
1,500.0	1,491.4	1,484.5	1,484.4	3.4	2.6	44.35	-15.4	195.7	109.9	5.78	19.023			
1,600.0	1,589.9	1,582.8	1,582.7	3.7	2.7	51.75	-14.6	194.0	96.3	6.31	15.254			
1,700.0	1,688.4	1,680.9	1,680.8	4.1	2.9	61.40	-14.0	192.2	84.9	6.89	12.315			
1,800.0	1,786.9	1,779.3	1,779.2	4.4	3.1	73.01	-12.8	190.9	76.4	7.47	10.222			
1,900.0	1,885.4	1,878.0	1,877.9	4.7	3.3	86.65	-11.3	189.7	71.3	7.98	8.942			
1,962.5	1,947.0	1,939.4	1,939.2	5.0	3.4	95.79	-10.2	188.9	70.3	8.22	8.550 CC, ES			
2,000.0	1,983.9	1,976.1	1,975.9	5.1	3.4	101.21	-9.6	188.5	70.7	8.34	8.477 SF			
2,100.0	2,082.4	2,073.7	2,073.6	5.4	3.6	114.69	-8.6	187.7	75.2	8.55	8.805			
2,200.0	2,180.9	2,171.5	2,171.4	5.8	3.8	125.53	-8.6	187.2	84.3	8.69	9.700			
2,300.0	2,279.3	2,269.9	2,269.7	6.1	3.9	133.86	-9.2	187.0	96.2	8.85	10.869			
2,400.0	2,377.8	2,368.1	2,367.9	6.5	4.1	140.36	-9.8	186.6	109.7	9.03	12.151			
2,500.0	2,476.3	2,465.0	2,464.8	6.8	4.3	145.10	-11.0	186.2	124.7	9.25	13.488			
2,600.0	2,574.8	2,559.8	2,559.6	7.1	4.4	148.97	-12.9	184.0	142.4	9.49	15.010			
2,700.0	2,673.3	2,653.6	2,653.2	7.5	4.6	152.39	-15.3	179.2	163.1	9.73	16.760			
2,800.0	2,771.8	2,749.4	2,748.8	7.8	4.8	154.71	-19.6	173.6	185.9	10.02	18.559			
2,900.0	2,870.3	2,840.7	2,839.7	8.2	5.0	156.23	-25.0	167.6	210.4	10.32	20.376			
3,000.0	2,968.7	2,937.0	2,935.5	8.5	5.2	157.50	-31.6	159.8	236.5	10.64	22.223			
3,100.0	3,067.2	3,024.0	3,021.9	8.9	5.3	158.46	-37.9	152.0	263.9	10.96	24.084			
3,200.0	3,165.7	3,112.0	3,108.9	9.2	5.5	159.12	-46.1	141.7	294.4	11.28	26.101			
3,300.0	3,264.2	3,207.8	3,203.4	9.6	5.8	159.65	-56.2	129.3	326.6	11.62	28.100			
3,400.0	3,362.7	3,304.7	3,299.0	9.9	6.0	160.19	-65.4	117.3	357.9	11.96	29.919			
3,500.0	3,461.2	3,393.2	3,386.5	10.3	6.2	160.83	-72.7	105.3	389.7	12.28	31.726			
3,600.0	3,559.7	3,474.9	3,466.6	10.6	6.5	161.33	-80.5	92.2	424.2	12.60	33.673			
3,700.0	3,658.1	3,566.8	3,556.7	11.0	6.7	161.78	-89.9	76.5	459.9	12.93	35.567			
3,800.0	3,756.6	3,651.9	3,639.9	11.3	7.0	162.13	-99.2	61.1	496.8	13.26	37.480			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 44-32 (EXISTING) - ENCANA WELL - ENCANA WELL													Offset Site Error: 0.0 ft	
Survey Program: 134-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
0.0	0.0	0.0	0.0	0.0	0.0	59.65	211.1	360.5	417.9					
100.0	100.0	90.4	90.4	0.1	0.1	59.70	210.8	360.7	417.7	417.4	0.29	1,446.788		
143.3	143.3	133.8	133.8	0.2	0.2	59.76	210.4	360.8	417.7	417.3	0.43	967.208		
200.0	200.0	184.1	184.1	0.3	0.3	59.81	210.2	361.3	418.1	417.4	0.62	674.648		
300.0	300.0	271.6	271.6	0.5	0.5	59.80	211.5	363.4	420.9	419.9	0.95	442.326		
400.0	400.0	362.3	362.2	0.7	0.6	59.76	214.3	367.6	426.5	425.2	1.30	328.708		
500.0	500.0	450.5	450.0	0.8	0.8	59.76	217.7	373.6	434.2	432.6	1.65	262.798		
600.0	600.0	540.2	539.2	1.0	1.0	9.84	222.0	381.9	443.0	441.0	1.94	228.492		
700.0	699.8	631.1	629.4	1.2	1.3	10.04	226.8	392.2	450.3	448.0	2.27	198.200		
800.0	799.5	719.4	716.7	1.4	1.6	10.38	231.9	404.1	456.3	453.7	2.60	175.452		
900.0	898.7	811.0	807.0	1.7	1.9	10.97	237.0	419.0	461.3	458.4	2.94	157.015		
1,000.0	997.7	915.0	909.3	1.9	2.2	4.90	241.2	437.3	464.8	461.5	3.31	140.592		
1,100.0	1,096.7	1,013.0	1,005.6	2.2	2.6	-0.84	243.0	455.0	467.5	463.8	3.67	127.472		
1,200.0	1,195.6	1,096.8	1,087.6	2.5	2.9	-6.11	243.2	472.6	471.6	467.6	4.01	117.589		
1,300.0	1,294.3	1,184.0	1,172.2	2.8	3.3	-10.77	243.2	494.0	478.4	474.1	4.36	109.624		
1,400.0	1,393.0	1,273.8	1,258.7	3.1	3.8	-14.94	243.4	518.0	487.0	482.3	4.73	102.988		
1,500.0	1,491.4	1,371.2	1,352.2	3.4	4.3	-15.78	243.6	545.4	496.5	491.4	5.12	97.022		
6,500.0	6,415.8	6,538.9	6,407.2	20.8	22.7	2.31	210.0	1,459.2	495.2	472.2	22.99	21.538		
6,600.0	6,514.2	6,636.2	6,504.4	21.2	22.8	2.17	211.9	1,458.9	477.7	454.4	23.33	20.475		
6,700.0	6,612.7	6,734.3	6,602.5	21.5	22.9	2.02	213.7	1,458.8	460.5	436.8	23.68	19.448		
6,800.0	6,711.2	6,833.3	6,701.5	21.9	22.9	1.85	215.6	1,458.6	443.1	419.1	24.02	18.448		
6,900.0	6,809.7	6,932.6	6,800.8	22.2	23.0	1.71	217.2	1,458.3	425.7	401.3	24.37	17.469		
7,000.0	6,908.2	7,031.2	6,899.3	22.6	23.1	1.66	218.0	1,457.9	408.0	383.3	24.71	16.515		
7,100.0	7,006.7	7,128.1	6,996.3	22.9	23.2	1.57	219.0	1,457.7	390.6	365.6	25.05	15.594		
7,200.0	7,105.2	7,226.9	7,095.0	23.3	23.3	1.42	220.5	1,457.6	373.4	348.0	25.39	14.704		
7,300.0	7,203.6	7,326.6	7,194.7	23.6	23.4	-37.81	222.3	1,457.3	356.4	330.6	25.82	13.806		
7,400.0	7,300.3	7,423.4	7,291.5	23.9	23.5	-70.43	224.0	1,456.6	342.3	315.6	26.64	12.848		
7,500.0	7,392.3	7,514.4	7,382.5	24.2	23.5	-88.16	225.5	1,456.0	335.2	307.1	28.03	11.958		
7,513.1	7,403.9	7,525.9	7,393.9	24.2	23.6	-90.02	225.7	1,456.0	335.0	306.8	28.24	11.862 CC, ES		
7,600.0	7,476.9	7,597.8	7,465.8	24.4	23.6	-100.60	226.8	1,455.6	340.8	311.5	29.38	11.601 SF		
7,700.0	7,551.5	7,670.8	7,538.9	24.7	23.7	-109.41	227.8	1,455.4	364.7	334.9	29.80	12.239		
7,800.0	7,613.8	7,731.6	7,599.7	25.0	23.8	-114.50	228.7	1,455.4	408.9	379.8	29.08	14.059		
7,900.0	7,662.0	7,778.3	7,646.4	25.3	23.8	-115.30	229.4	1,455.3	471.7	443.8	27.92	16.893		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 4-8-32 (EXISTING) - ENCANA WELL - PLAN ONLY													Offset Site Error:	0.0 ft
Survey Program: 850-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
2,800.0	2,771.8	2,997.4	2,885.7	7.8	16.3	-76.82	524.8	402.0	476.8	457.7	19.02	25.067		
2,900.0	2,870.3	3,082.4	2,963.8	8.2	16.9	-81.61	501.7	377.6	441.9	421.1	20.77	21.280		
3,000.0	2,968.7	3,167.3	3,041.8	8.5	17.5	-87.00	478.7	353.3	410.8	388.2	22.60	18.178		
3,100.0	3,067.2	3,252.2	3,119.8	8.9	18.2	-93.03	455.6	328.9	384.6	360.1	24.46	15.721		
3,200.0	3,165.7	3,337.2	3,197.9	9.2	18.8	-99.64	432.6	304.5	364.1	337.9	26.25	13.869		
3,300.0	3,264.2	3,422.1	3,275.9	9.6	19.4	-106.73	409.5	280.2	350.5	322.6	27.86	12.581		
3,400.0	3,362.7	3,507.0	3,353.9	9.9	20.0	-114.11	386.5	255.8	344.5	315.3	29.16	11.813		
3,424.9	3,387.2	3,528.1	3,373.3	10.0	20.2	-115.96	380.7	249.8	344.2	314.8	29.43	11.698 CC, ES		
3,500.0	3,461.2	3,592.0	3,431.9	10.3	20.7	-121.55	363.4	231.5	346.5	316.4	30.08	11.520 SF		
3,600.0	3,559.7	3,676.9	3,510.0	10.6	21.3	-128.81	340.4	207.1	356.4	325.8	30.59	11.653		
3,700.0	3,658.1	3,761.8	3,588.0	11.0	21.9	-135.68	317.3	182.7	373.6	342.9	30.73	12.158		
3,800.0	3,756.6	3,846.7	3,666.0	11.3	22.5	-142.00	294.3	158.4	397.1	366.5	30.58	12.984		
3,900.0	3,855.1	3,931.7	3,744.0	11.7	23.2	-147.72	271.2	134.0	425.9	395.6	30.25	14.079		
4,000.0	3,953.6	4,016.6	3,822.1	12.0	23.8	-152.80	248.2	109.7	459.0	429.1	29.82	15.393		
4,100.0	4,052.1	4,101.5	3,900.1	12.4	24.4	-157.29	225.1	85.3	495.5	466.1	29.35	16.881		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PLAN ONLY													Offset Site Error: 0.0 ft	
Survey Program: 850-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
3,500.0	3,461.2	3,566.6	3,488.3	10.3	14.1	-23.88	335.3	856.7	476.4	457.5	18.85	25.276		
3,600.0	3,559.7	3,660.9	3,579.3	10.6	14.5	-21.91	310.4	856.4	446.9	427.4	19.54	22.876		
3,700.0	3,658.1	3,755.3	3,670.2	11.0	15.0	-19.67	285.5	856.1	418.1	397.8	20.24	20.655		
3,800.0	3,756.6	3,849.6	3,761.2	11.3	15.4	-17.11	260.6	855.7	389.9	368.9	20.96	18.601		
3,900.0	3,855.1	3,943.9	3,852.2	11.7	15.9	-14.18	235.7	855.4	362.6	340.9	21.70	16.708		
4,000.0	3,953.6	4,038.2	3,943.2	12.0	16.4	-10.80	210.8	855.1	336.3	313.9	22.47	14.970		
4,100.0	4,052.1	4,132.6	4,034.2	12.4	16.8	-6.90	185.8	854.8	311.4	288.1	23.27	13.385		
4,200.0	4,150.6	4,226.9	4,125.1	12.7	17.3	-2.38	160.9	854.5	288.2	264.0	24.11	11.952		
4,300.0	4,249.1	4,321.2	4,216.1	13.1	17.7	2.85	136.0	854.1	267.0	242.0	25.01	10.677		
4,400.0	4,347.5	4,415.6	4,307.1	13.4	18.2	8.84	111.1	853.8	248.5	222.6	25.96	9.573		
4,500.0	4,446.0	4,509.9	4,398.1	13.8	18.7	15.63	86.2	853.5	233.3	206.4	26.95	8.658		
4,600.0	4,544.5	4,604.2	4,489.1	14.1	19.1	23.14	61.3	853.2	222.1	194.2	27.90	7.959		
4,700.0	4,643.0	4,698.5	4,580.0	14.5	19.6	31.23	36.4	852.9	215.4	186.7	28.71	7.502		
4,782.3	4,724.1	4,776.2	4,654.9	14.8	20.0	38.11	15.9	852.6	213.7	184.5	29.19	7.319 CC, ES		
4,800.0	4,741.5	4,792.9	4,671.0	14.8	20.1	39.59	11.5	852.5	213.7	184.5	29.27	7.302 SF		
4,900.0	4,840.0	4,887.2	4,762.0	15.2	20.5	47.89	-13.4	852.2	217.2	187.7	29.51	7.360		
5,000.0	4,938.5	4,981.5	4,853.0	15.6	21.0	55.80	-38.3	851.9	225.6	196.1	29.46	7.657		
5,100.0	5,037.0	5,075.8	4,944.0	15.9	21.4	63.08	-63.2	851.6	238.3	209.1	29.19	8.164		
5,200.0	5,135.4	5,170.2	5,034.9	16.3	21.9	69.58	-88.1	851.2	254.7	225.9	28.82	8.839		
5,300.0	5,233.9	5,264.5	5,125.9	16.6	22.4	75.30	-113.0	850.9	274.2	245.8	28.46	9.637		
5,400.0	5,332.4	5,358.8	5,216.9	17.0	22.8	80.26	-137.9	850.6	296.2	268.0	28.17	10.511		
5,500.0	5,430.9	5,453.2	5,307.9	17.3	23.3	84.56	-162.8	850.3	320.0	292.0	28.02	11.423		
5,600.0	5,529.4	5,547.5	5,398.9	17.7	23.7	88.27	-187.7	850.0	345.5	317.5	28.00	12.340		
5,700.0	5,627.9	5,641.8	5,489.8	18.0	24.2	91.48	-212.6	849.6	372.1	344.0	28.11	13.239		
5,800.0	5,726.4	5,736.1	5,580.8	18.4	24.7	94.27	-237.5	849.3	399.8	371.4	28.33	14.109		
5,900.0	5,824.8	5,830.5	5,671.8	18.7	25.1	96.71	-262.4	849.0	428.2	399.5	28.66	14.943		
6,000.0	5,923.3	5,924.8	5,762.8	19.1	25.6	98.85	-287.3	848.7	457.3	428.2	29.05	15.741		
6,100.0	6,021.8	6,019.1	5,853.8	19.4	26.1	100.73	-312.2	848.4	486.9	457.4	29.50	16.504		
8,000.0	7,694.5	7,848.1	7,654.5	25.8	29.7	78.80	-556.2	845.2	460.3	416.2	44.05	10.448		
8,100.0	7,710.4	7,864.0	7,670.4	26.2	29.7	87.54	-556.2	845.2	404.0	358.8	45.21	8.936		
8,200.0	7,712.0	7,865.6	7,672.0	26.8	29.7	90.00	-556.2	845.2	363.3	317.1	46.12	7.876		
8,300.0	7,712.0	7,865.6	7,672.0	27.5	29.7	90.00	-556.2	845.2	347.2	299.9	47.21	7.354		
8,307.3	7,712.0	7,865.6	7,672.0	27.5	29.7	90.00	-556.2	845.2	347.1	299.8	47.29	7.339		
8,400.0	7,712.0	7,865.6	7,672.0	28.3	29.7	90.00	-556.2	845.2	359.3	310.9	48.39	7.424		
8,500.0	7,712.0	7,865.6	7,672.0	29.1	29.7	90.00	-556.2	845.2	397.0	347.3	49.66	7.994		
8,600.0	7,712.0	7,865.6	7,672.0	30.0	29.7	90.00	-556.2	845.2	454.0	403.0	51.00	8.902		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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:		O-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	62.61	194.4	375.1	422.5					
100.0	100.0	90.0	90.0	0.1	0.1	62.61	194.4	375.1	422.4	422.1	0.28	1,498.629		
200.0	200.0	190.0	190.0	0.3	0.3	62.61	194.4	375.1	422.4	421.8	0.63	672.302		
300.0	300.0	290.0	290.0	0.5	0.5	62.61	194.4	375.1	422.4	421.4	0.98	432.194		
400.0	400.0	390.0	390.0	0.7	0.7	62.61	194.4	375.1	422.4	421.1	1.33	318.459		
500.0	500.0	490.0	490.0	0.8	0.8	62.61	194.4	375.1	422.4	420.7	1.68	252.113		
600.0	600.0	585.0	585.0	1.0	1.0	12.82	193.6	376.0	421.3	419.2	2.02	208.912		
700.0	699.8	679.2	679.1	1.2	1.2	13.53	190.8	379.4	418.0	415.7	2.36	177.013		
800.0	799.5	772.9	772.5	1.4	1.4	14.75	186.2	385.1	412.9	410.2	2.72	151.825		
900.0	898.7	865.8	864.8	1.7	1.6	16.51	179.6	393.1	406.1	403.0	3.10	131.088		
1,000.0	997.7	958.1	956.1	1.9	1.8	11.57	171.3	403.4	399.4	395.8	3.51	113.933		
1,100.0	1,096.7	1,049.9	1,046.5	2.2	2.1	7.19	161.1	415.8	394.2	390.2	3.94	100.149		
1,200.0	1,195.6	1,141.6	1,136.2	2.5	2.4	3.50	149.2	430.5	390.7	386.3	4.38	89.192		
1,300.0	1,294.3	1,239.8	1,232.1	2.8	2.8	0.53	135.5	447.3	388.1	383.3	4.85	80.040		
1,400.0	1,393.0	1,338.3	1,328.1	3.1	3.2	-2.03	121.8	464.1	385.4	380.1	5.31	72.596		
1,500.0	1,491.4	1,437.0	1,424.4	3.4	3.6	-1.29	108.1	480.9	382.7	376.9	5.77	66.377		
1,600.0	1,589.9	1,535.7	1,520.7	3.7	4.0	1.09	94.3	497.8	380.6	374.4	6.22	61.229		
1,700.0	1,688.4	1,634.4	1,616.9	4.1	4.4	3.49	80.6	514.6	379.1	372.5	6.66	56.954		
1,800.0	1,786.9	1,733.0	1,713.2	4.4	4.8	5.90	66.9	531.4	378.4	371.3	7.09	53.373		
1,858.6	1,844.6	1,790.9	1,769.6	4.6	5.0	7.31	58.8	541.3	378.3	370.9	7.34	51.542		
1,900.0	1,885.4	1,831.7	1,809.4	4.7	5.2	8.32	53.2	548.3	378.3	370.8	7.51	50.349		
2,000.0	1,983.9	1,930.4	1,905.7	5.1	5.6	10.73	39.4	565.1	379.0	371.0	7.93	47.778		
2,100.0	2,082.4	2,029.1	2,002.0	5.4	6.0	13.13	25.7	582.0	380.3	371.9	8.34	45.575		
2,200.0	2,180.9	2,127.8	2,098.2	5.8	6.4	15.51	12.0	598.8	382.3	373.5	8.75	43.676		
2,300.0	2,279.3	2,226.5	2,194.5	6.1	6.9	17.87	-1.8	615.7	384.9	375.8	9.16	42.028		
2,400.0	2,377.8	2,325.1	2,290.7	6.5	7.3	20.19	-15.5	632.5	388.3	378.7	9.57	40.589		
2,500.0	2,476.3	2,423.8	2,387.0	6.8	7.7	22.46	-29.2	649.3	392.2	382.3	9.97	39.324		
2,600.0	2,574.8	2,522.5	2,483.3	7.1	8.1	24.69	-42.9	666.2	396.8	386.4	10.39	38.204		
2,700.0	2,673.3	2,621.2	2,579.5	7.5	8.5	26.87	-56.7	683.0	402.0	391.2	10.81	37.205		
2,800.0	2,771.8	2,719.9	2,675.8	7.8	8.9	28.98	-70.4	699.9	407.8	396.5	11.23	36.309		
2,900.0	2,870.3	2,818.5	2,772.0	8.2	9.4	31.04	-84.1	716.7	414.1	402.4	11.67	35.498		
3,000.0	2,968.7	2,917.2	2,868.3	8.5	9.8	33.04	-97.9	733.5	420.9	408.8	12.11	34.759		
3,100.0	3,067.2	3,015.9	2,964.6	8.9	10.2	34.97	-111.6	750.4	428.3	415.7	12.57	34.079		
3,200.0	3,165.7	3,114.6	3,060.8	9.2	10.6	36.83	-125.3	767.2	436.1	423.1	13.04	33.451		
3,300.0	3,264.2	3,213.3	3,157.1	9.6	11.0	38.63	-139.0	784.1	444.4	430.8	13.52	32.866		
3,400.0	3,362.7	3,312.0	3,253.3	9.9	11.5	40.36	-152.8	800.9	453.1	439.0	14.02	32.318		
3,500.0	3,461.2	3,410.6	3,349.6	10.3	11.9	42.03	-166.5	817.8	462.2	447.6	14.53	31.803		
3,600.0	3,559.7	3,509.3	3,445.9	10.6	12.3	43.63	-180.2	834.6	471.7	456.6	15.06	31.317		
3,700.0	3,658.1	3,608.0	3,542.1	11.0	12.7	45.17	-194.0	851.4	481.5	465.9	15.60	30.857		
3,800.0	3,756.6	3,706.7	3,638.4	11.3	13.1	46.65	-207.7	868.3	491.7	475.5	16.16	30.420		
7,900.0	7,662.0	7,779.1	7,652.0	25.3	25.0	-26.05	-556.0	1,295.6	415.3	391.9	23.40	17.747		
8,000.0	7,694.5	7,811.6	7,684.5	25.8	25.0	-50.90	-556.0	1,295.6	323.6	295.6	28.01	11.552		
8,100.0	7,710.4	7,827.5	7,700.4	26.2	25.0	-81.31	-556.0	1,295.6	231.5	197.0	34.52	6.707		
8,200.0	7,712.0	7,829.1	7,702.0	26.8	25.0	-90.00	-556.0	1,295.6	148.8	113.3	35.44	4.198		
8,300.0	7,712.0	7,829.1	7,702.0	27.5	25.0	-90.00	-556.0	1,295.6	103.5	67.0	36.53	2.834		
8,307.1	7,712.0	7,829.1	7,702.0	27.5	25.0	-90.00	-556.0	1,295.6	103.3	66.7	36.61	2.821 CC, ES, SF		
8,400.0	7,712.0	7,829.1	7,702.0	28.3	25.0	-90.00	-556.0	1,295.6	138.9	101.2	37.71	3.684		
8,500.0	7,712.0	7,829.1	7,702.0	29.1	25.0	-90.00	-556.0	1,295.6	218.8	179.8	38.98	5.613		
8,600.0	7,712.0	7,829.1	7,702.0	30.0	25.0	-90.00	-556.0	1,295.6	310.6	270.3	40.32	7.703		
8,700.0	7,712.0	7,829.1	7,702.0	31.0	25.0	-90.00	-556.0	1,295.6	406.3	364.5	41.72	9.739		

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 4F-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 4F-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						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	62.61	194.4	375.1	422.5					
100.0	100.0	86.2	86.2	0.1	0.1	62.61	194.5	375.5	422.9	422.6	0.27	1,549.230		
200.0	200.0	181.9	181.8	0.3	0.3	62.67	194.7	376.7	424.1	423.5	0.62	687.780		
300.0	300.0	277.7	277.6	0.5	0.5	63.00	193.5	379.8	426.4	425.5	0.97	439.497		
400.0	400.0	368.0	367.8	0.7	0.7	63.65	190.8	385.2	430.5	429.1	1.34	322.383		
500.0	500.0	461.0	460.3	0.8	0.9	64.61	186.8	393.6	436.7	434.9	1.73	252.008		
600.0	600.0	553.9	552.5	1.0	1.1	15.88	181.0	403.8	442.4	440.3	2.09	211.883		
700.0	699.8	642.6	639.9	1.2	1.4	17.47	174.1	416.1	447.2	444.7	2.50	178.862		
800.0	799.5	730.8	726.4	1.4	1.8	19.44	165.8	431.2	451.5	448.6	2.93	154.255		
900.0	898.7	817.7	811.3	1.7	2.1	21.58	157.5	448.2	455.7	452.3	3.35	135.989		
1,000.0	997.7	907.6	898.7	1.9	2.5	16.85	149.3	467.6	460.7	456.9	3.78	121.737		
1,100.0	1,096.7	997.0	985.0	2.2	3.0	12.46	139.8	488.6	467.2	463.0	4.23	110.449		
1,200.0	1,195.6	1,079.0	1,063.4	2.5	3.4	8.47	129.4	510.4	476.4	471.8	4.66	102.229		
1,300.0	1,294.3	1,160.2	1,140.0	2.8	4.0	4.99	118.1	534.8	488.8	483.7	5.08	96.213 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4F-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 4F-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 4F-32H-O268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°

