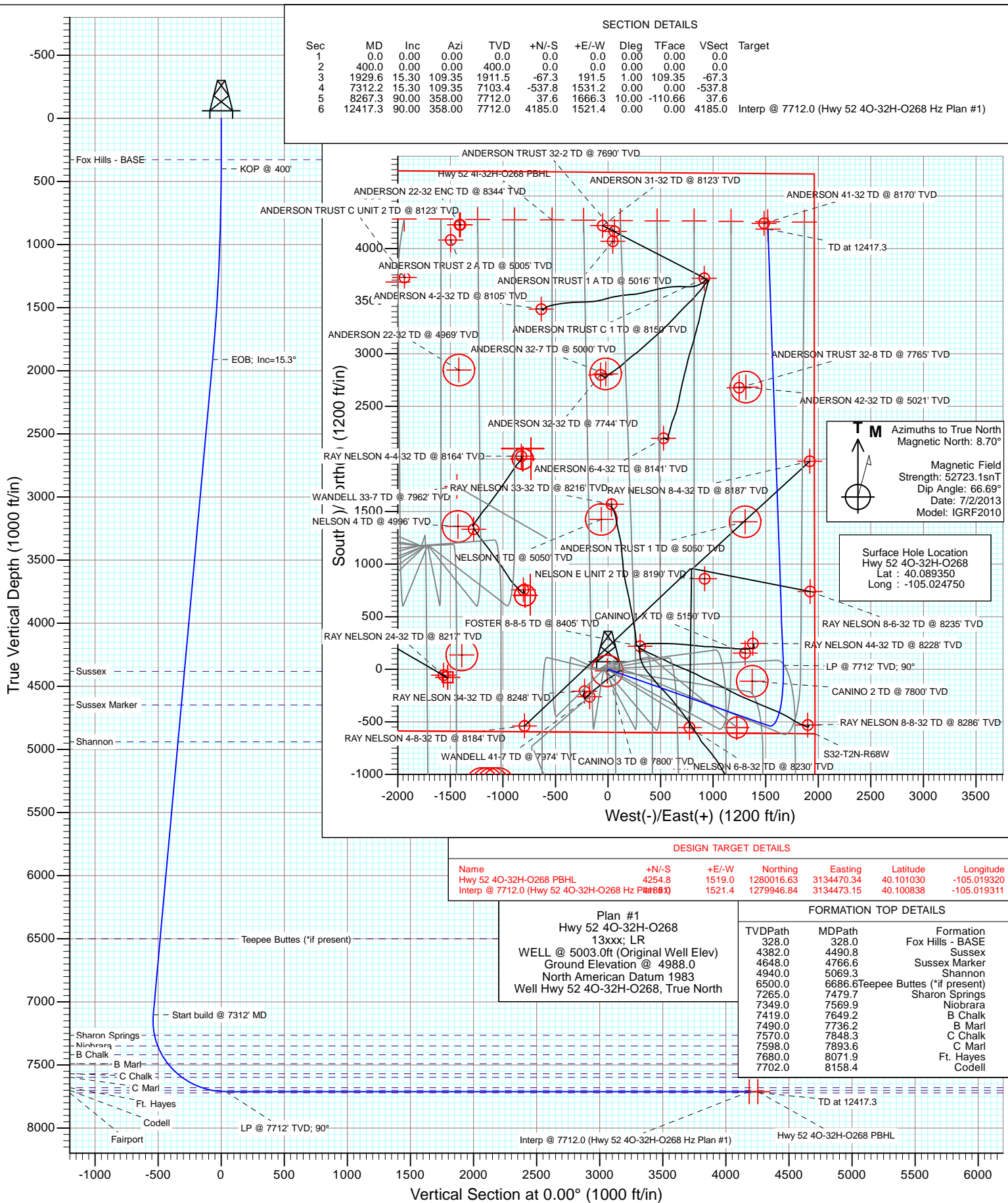




Project: DJ Wattenberg
Site: S32-T2N-R68W (File/Hwy 52)
Well: Hwy 52 40-32H-O268
Wellbore: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 40-32H-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 40-32H-O268					
Well Position	+N/-S	0.0 ft	Northing:	1,275,753.71 ft	Latitude:	40.089350
	+E/-W	0.0 ft	Easting:	3,132,974.18 ft	Longitude:	-105.024750
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,988.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/2/2013	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	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,929.6	15.30	109.35	1,911.5	-67.3	191.5	1.00	1.00	0.00	109.35	
7,312.2	15.30	109.35	7,103.4	-537.8	1,531.2	0.00	0.00	0.00	0.00	
8,267.3	90.00	358.00	7,712.0	37.6	1,666.3	10.00	7.82	-11.66	-110.66	
12,417.3	90.00	358.00	7,712.0	4,185.0	1,521.4	0.00	0.00	0.00	0.00	Interp @ 7712.0 (Hwy

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4O-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	
328.0	0.00	0.00	328.0	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	KOP @ 400'
500.0	1.00	109.35	500.0	-0.3	0.8	-0.3	1.00	1.00	
600.0	2.00	109.35	600.0	-1.2	3.3	-1.2	1.00	1.00	
700.0	3.00	109.35	699.9	-2.6	7.4	-2.6	1.00	1.00	
800.0	4.00	109.35	799.7	-4.6	13.2	-4.6	1.00	1.00	
900.0	5.00	109.35	899.4	-7.2	20.6	-7.2	1.00	1.00	
1,000.0	6.00	109.35	998.9	-10.4	29.6	-10.4	1.00	1.00	
1,100.0	7.00	109.35	1,098.3	-14.2	40.3	-14.2	1.00	1.00	
1,200.0	8.00	109.35	1,197.4	-18.5	52.6	-18.5	1.00	1.00	
1,300.0	9.00	109.35	1,296.3	-23.4	66.6	-23.4	1.00	1.00	
1,400.0	10.00	109.35	1,394.9	-28.8	82.1	-28.8	1.00	1.00	
1,500.0	11.00	109.35	1,493.3	-34.9	99.3	-34.9	1.00	1.00	
1,600.0	12.00	109.35	1,591.2	-41.5	118.1	-41.5	1.00	1.00	
1,700.0	13.00	109.35	1,688.9	-48.7	138.6	-48.7	1.00	1.00	
1,800.0	14.00	109.35	1,786.1	-56.4	160.6	-56.4	1.00	1.00	
1,900.0	15.00	109.35	1,882.9	-64.7	184.2	-64.7	1.00	1.00	
1,929.6	15.30	109.35	1,911.5	-67.3	191.5	-67.3	1.00	1.00	EOB; Inc=15.3°
2,000.0	15.30	109.35	1,979.4	-73.4	209.0	-73.4	0.00	0.00	
2,100.0	15.30	109.35	2,075.9	-82.2	233.9	-82.2	0.00	0.00	
2,200.0	15.30	109.35	2,172.3	-90.9	258.8	-90.9	0.00	0.00	
2,300.0	15.30	109.35	2,268.8	-99.6	283.7	-99.6	0.00	0.00	
2,400.0	15.30	109.35	2,365.2	-108.4	308.6	-108.4	0.00	0.00	
2,500.0	15.30	109.35	2,461.7	-117.1	333.5	-117.1	0.00	0.00	
2,600.0	15.30	109.35	2,558.1	-125.9	358.4	-125.9	0.00	0.00	
2,700.0	15.30	109.35	2,654.6	-134.6	383.3	-134.6	0.00	0.00	
2,800.0	15.30	109.35	2,751.1	-143.3	408.1	-143.3	0.00	0.00	
2,900.0	15.30	109.35	2,847.5	-152.1	433.0	-152.1	0.00	0.00	
3,000.0	15.30	109.35	2,944.0	-160.8	457.9	-160.8	0.00	0.00	
3,100.0	15.30	109.35	3,040.4	-169.6	482.8	-169.6	0.00	0.00	
3,200.0	15.30	109.35	3,136.9	-178.3	507.7	-178.3	0.00	0.00	
3,300.0	15.30	109.35	3,233.3	-187.1	532.6	-187.1	0.00	0.00	
3,400.0	15.30	109.35	3,329.8	-195.8	557.5	-195.8	0.00	0.00	
3,500.0	15.30	109.35	3,426.3	-204.5	582.4	-204.5	0.00	0.00	
3,600.0	15.30	109.35	3,522.7	-213.3	607.3	-213.3	0.00	0.00	
3,700.0	15.30	109.35	3,619.2	-222.0	632.2	-222.0	0.00	0.00	
3,800.0	15.30	109.35	3,715.6	-230.8	657.0	-230.8	0.00	0.00	
3,900.0	15.30	109.35	3,812.1	-239.5	681.9	-239.5	0.00	0.00	
4,000.0	15.30	109.35	3,908.6	-248.3	706.8	-248.3	0.00	0.00	
4,100.0	15.30	109.35	4,005.0	-257.0	731.7	-257.0	0.00	0.00	
4,200.0	15.30	109.35	4,101.5	-265.7	756.6	-265.7	0.00	0.00	
4,300.0	15.30	109.35	4,197.9	-274.5	781.5	-274.5	0.00	0.00	
4,400.0	15.30	109.35	4,294.4	-283.2	806.4	-283.2	0.00	0.00	
4,490.8	15.30	109.35	4,382.0	-291.2	829.0	-291.2	0.00	0.00	Sussex
4,500.0	15.30	109.35	4,390.8	-292.0	831.3	-292.0	0.00	0.00	
4,600.0	15.30	109.35	4,487.3	-300.7	856.2	-300.7	0.00	0.00	
4,700.0	15.30	109.35	4,583.8	-309.4	881.1	-309.4	0.00	0.00	
4,766.6	15.30	109.35	4,648.0	-315.3	897.6	-315.3	0.00	0.00	Sussex Marker

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4O-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	15.30	109.35	4,680.2	-318.2	905.9	-318.2	0.00	0.00	
4,900.0	15.30	109.35	4,776.7	-326.9	930.8	-326.9	0.00	0.00	
5,000.0	15.30	109.35	4,873.1	-335.7	955.7	-335.7	0.00	0.00	
5,069.3	15.30	109.35	4,940.0	-341.7	973.0	-341.7	0.00	0.00	Shannon
5,100.0	15.30	109.35	4,969.6	-344.4	980.6	-344.4	0.00	0.00	
5,200.0	15.30	109.35	5,066.0	-353.2	1,005.5	-353.2	0.00	0.00	
5,300.0	15.30	109.35	5,162.5	-361.9	1,030.4	-361.9	0.00	0.00	
5,400.0	15.30	109.35	5,259.0	-370.6	1,055.3	-370.6	0.00	0.00	
5,500.0	15.30	109.35	5,355.4	-379.4	1,080.2	-379.4	0.00	0.00	
5,600.0	15.30	109.35	5,451.9	-388.1	1,105.1	-388.1	0.00	0.00	
5,700.0	15.30	109.35	5,548.3	-396.9	1,130.0	-396.9	0.00	0.00	
5,800.0	15.30	109.35	5,644.8	-405.6	1,154.8	-405.6	0.00	0.00	
5,900.0	15.30	109.35	5,741.2	-414.4	1,179.7	-414.4	0.00	0.00	
6,000.0	15.30	109.35	5,837.7	-423.1	1,204.6	-423.1	0.00	0.00	
6,100.0	15.30	109.35	5,934.2	-431.8	1,229.5	-431.8	0.00	0.00	
6,200.0	15.30	109.35	6,030.6	-440.6	1,254.4	-440.6	0.00	0.00	
6,300.0	15.30	109.35	6,127.1	-449.3	1,279.3	-449.3	0.00	0.00	
6,400.0	15.30	109.35	6,223.5	-458.1	1,304.2	-458.1	0.00	0.00	
6,500.0	15.30	109.35	6,320.0	-466.8	1,329.1	-466.8	0.00	0.00	
6,600.0	15.30	109.35	6,416.4	-475.5	1,354.0	-475.5	0.00	0.00	
6,686.6	15.30	109.35	6,500.0	-483.1	1,375.5	-483.1	0.00	0.00	Teepee Buttes (*if present)
6,700.0	15.30	109.35	6,512.9	-484.3	1,378.9	-484.3	0.00	0.00	
6,800.0	15.30	109.35	6,609.4	-493.0	1,403.7	-493.0	0.00	0.00	
6,900.0	15.30	109.35	6,705.8	-501.8	1,428.6	-501.8	0.00	0.00	
7,000.0	15.30	109.35	6,802.3	-510.5	1,453.5	-510.5	0.00	0.00	
7,100.0	15.30	109.35	6,898.7	-519.3	1,478.4	-519.3	0.00	0.00	
7,200.0	15.30	109.35	6,995.2	-528.0	1,503.3	-528.0	0.00	0.00	
7,300.0	15.30	109.35	7,091.7	-536.7	1,528.2	-536.7	0.00	0.00	
7,312.2	15.30	109.35	7,103.4	-537.8	1,531.2	-537.8	0.00	0.00	Start build @ 7312' MD
7,400.0	14.65	74.98	7,188.4	-538.8	1,552.9	-538.8	10.00	-0.73	
7,479.7	18.11	49.16	7,265.0	-528.0	1,572.1	-528.0	10.00	4.34	Sharon Springs
7,500.0	19.40	44.31	7,284.2	-523.6	1,576.8	-523.6	10.00	6.40	
7,569.9	24.62	31.78	7,349.0	-502.9	1,592.6	-502.9	10.00	7.45	Niobrara
7,600.0	27.09	27.86	7,376.1	-491.5	1,599.1	-491.5	10.00	8.24	
7,649.2	31.33	22.73	7,419.0	-469.8	1,609.3	-469.8	10.00	8.62	B Chalk
7,700.0	35.88	18.62	7,461.3	-443.4	1,619.2	-443.4	10.00	8.94	
7,736.2	39.18	16.21	7,490.0	-422.4	1,625.7	-422.4	10.00	9.14	B Marl
7,800.0	45.12	12.70	7,537.3	-381.0	1,636.3	-381.0	10.00	9.30	
7,848.3	49.67	10.49	7,570.0	-346.1	1,643.5	-346.1	10.00	9.42	C Chalk
7,893.6	53.97	8.68	7,598.0	-311.0	1,649.4	-311.0	10.00	9.49	C Marl
7,900.0	54.58	8.44	7,601.7	-305.9	1,650.1	-305.9	10.00	9.53	
8,000.0	64.16	5.09	7,652.6	-220.6	1,660.1	-220.6	10.00	9.58	
8,071.9	71.08	3.01	7,680.0	-154.3	1,664.8	-154.3	10.00	9.64	Ft. Hayes
8,100.0	73.80	2.24	7,688.5	-127.5	1,666.0	-127.5	10.00	9.66	
8,158.4	79.45	0.72	7,702.0	-70.7	1,667.5	-70.7	10.00	9.67	Codell
8,200.0	83.48	359.67	7,708.2	-29.6	1,667.6	-29.6	10.00	9.68	
8,267.3	90.00	358.00	7,712.0	37.6	1,666.3	37.6	10.00	9.69	LP @ 7712' TVD; 90°
8,300.0	90.00	358.00	7,712.0	70.2	1,665.1	70.2	0.00	0.00	
8,400.0	90.00	358.00	7,712.0	170.1	1,661.6	170.1	0.00	0.00	
8,500.0	90.00	358.00	7,712.0	270.1	1,658.1	270.1	0.00	0.00	
8,600.0	90.00	358.00	7,712.0	370.0	1,654.6	370.0	0.00	0.00	
8,700.0	90.00	358.00	7,712.0	470.0	1,651.2	470.0	0.00	0.00	

Planning Report

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Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4O-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	358.00	7,712.0	569.9	1,647.7	569.9	0.00	0.00	
8,900.0	90.00	358.00	7,712.0	669.8	1,644.2	669.8	0.00	0.00	
9,000.0	90.00	358.00	7,712.0	769.8	1,640.7	769.8	0.00	0.00	
9,100.0	90.00	358.00	7,712.0	869.7	1,637.2	869.7	0.00	0.00	
9,200.0	90.00	358.00	7,712.0	969.7	1,633.7	969.7	0.00	0.00	
9,300.0	90.00	358.00	7,712.0	1,069.6	1,630.2	1,069.6	0.00	0.00	
9,400.0	90.00	358.00	7,712.0	1,169.5	1,626.7	1,169.5	0.00	0.00	
9,500.0	90.00	358.00	7,712.0	1,269.5	1,623.2	1,269.5	0.00	0.00	
9,600.0	90.00	358.00	7,712.0	1,369.4	1,619.7	1,369.4	0.00	0.00	
9,700.0	90.00	358.00	7,712.0	1,469.3	1,616.3	1,469.3	0.00	0.00	
9,800.0	90.00	358.00	7,712.0	1,569.3	1,612.8	1,569.3	0.00	0.00	
9,900.0	90.00	358.00	7,712.0	1,669.2	1,609.3	1,669.2	0.00	0.00	
10,000.0	90.00	358.00	7,712.0	1,769.2	1,605.8	1,769.2	0.00	0.00	
10,100.0	90.00	358.00	7,712.0	1,869.1	1,602.3	1,869.1	0.00	0.00	
10,200.0	90.00	358.00	7,712.0	1,969.0	1,598.8	1,969.0	0.00	0.00	
10,300.0	90.00	358.00	7,712.0	2,069.0	1,595.3	2,069.0	0.00	0.00	
10,400.0	90.00	358.00	7,712.0	2,168.9	1,591.8	2,168.9	0.00	0.00	
10,500.0	90.00	358.00	7,712.0	2,268.9	1,588.3	2,268.9	0.00	0.00	
10,600.0	90.00	358.00	7,712.0	2,368.8	1,584.8	2,368.8	0.00	0.00	
10,700.0	90.00	358.00	7,712.0	2,468.7	1,581.4	2,468.7	0.00	0.00	
10,800.0	90.00	358.00	7,712.0	2,568.7	1,577.9	2,568.7	0.00	0.00	
10,900.0	90.00	358.00	7,712.0	2,668.6	1,574.4	2,668.6	0.00	0.00	
11,000.0	90.00	358.00	7,712.0	2,768.6	1,570.9	2,768.6	0.00	0.00	
11,100.0	90.00	358.00	7,712.0	2,868.5	1,567.4	2,868.5	0.00	0.00	
11,200.0	90.00	358.00	7,712.0	2,968.4	1,563.9	2,968.4	0.00	0.00	
11,300.0	90.00	358.00	7,712.0	3,068.4	1,560.4	3,068.4	0.00	0.00	
11,400.0	90.00	358.00	7,712.0	3,168.3	1,556.9	3,168.3	0.00	0.00	
11,500.0	90.00	358.00	7,712.0	3,268.3	1,553.4	3,268.3	0.00	0.00	
11,600.0	90.00	358.00	7,712.0	3,368.2	1,549.9	3,368.2	0.00	0.00	
11,700.0	90.00	358.00	7,712.0	3,468.1	1,546.5	3,468.1	0.00	0.00	
11,800.0	90.00	358.00	7,712.0	3,568.1	1,543.0	3,568.1	0.00	0.00	
11,900.0	90.00	358.00	7,712.0	3,668.0	1,539.5	3,668.0	0.00	0.00	
12,000.0	90.00	358.00	7,712.0	3,767.9	1,536.0	3,767.9	0.00	0.00	
12,100.0	90.00	358.00	7,712.0	3,867.9	1,532.5	3,867.9	0.00	0.00	
12,200.0	90.00	358.00	7,712.0	3,967.8	1,529.0	3,967.8	0.00	0.00	
12,300.0	90.00	358.00	7,712.0	4,067.8	1,525.5	4,067.8	0.00	0.00	
12,400.0	90.00	358.00	7,712.0	4,167.7	1,522.0	4,167.7	0.00	0.00	
12,417.3	90.00	358.00	7,712.0	4,185.0	1,521.4	4,185.0	0.00	0.00	TD at 12417.3 - Interp @ 7712.0 (Hwy 52 4O-32H-O268)

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Interp @ 7712.0 (Hwy 52 4O-32H-O268 P)	0.00	0.00	7,712.0	4,185.0	1,521.4	1,279,946.84	3,134,473.15	40.100838	-105.019311
- plan hits target center									
- Point									
Hwy 52 4O-32H-O268 P	0.00	0.00	7,712.0	4,254.8	1,519.0	1,280,016.63	3,134,470.34	40.101030	-105.019320
- plan misses target center by 69.8ft at 12417.3ft MD (7712.0 TVD, 4185.0 N, 1521.4 E)									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site:	S32-T2N-R68W (File/Hwy 52)	North Reference:	True
Well:	Hwy 52 4O-32H-O268	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
328.0	328.0	Fox Hills - BASE				
4,490.8	4,382.0	Sussex				
4,766.6	4,648.0	Sussex Marker				
5,069.3	4,940.0	Shannon				
6,686.6	6,500.0	Teepee Buttes (*if present)				
7,479.7	7,265.0	Sharon Springs				
7,569.9	7,349.0	Niobrara				
7,649.2	7,419.0	B Chalk				
7,736.2	7,490.0	B Marl				
7,848.3	7,570.0	C Chalk				
7,893.6	7,598.0	C Marl				
8,071.9	7,680.0	Ft. Hayes				
8,158.4	7,702.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
400.0	400.0	0.0	0.0	KOP @ 400'	
1,929.6	1,911.5	-67.3	191.5	EOB; Inc=15.3°	
7,312.2	7,103.4	-537.8	1,531.2	Start build @ 7312' MD	
8,267.3	7,712.0	37.6	1,666.3	LP @ 7712' TVD; 90°	
12,417.3	7,712.0	4,185.0	1,521.4	TD at 12417.3	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S32-T2N-R68W (File/Hwy 52)

Hwy 52 4O-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 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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	12,417.3	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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		Separation Factor	Warning
Offset Well - Wellbore - Design			Between Centres (ft)	Between Ellipses (ft)		
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	12,417.3	7,604.0	66.4	-22.5	0.747	Level 1, CC, ES, SF
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	10,919.9	7,671.0	327.3	263.9	5.160	CC, ES, SF
ANDERSON TRUST C 1 (EXISTING) - ENCANA WELL						Out of range
ANDERSON TRUST C UNIT 2 (EXISTING) - ENCANA W						Out of range
BROWN 22-5 (EXISTING) - ENCANA WELL - NO SURV						Out of range
BROWN 31-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	1,532.6	1,497.1	267.9	260.3	35.231	CC
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	1,600.0	1,560.8	268.2	260.2	33.668	ES
BROWN 41-5 (EXISTING) - ENCANA WELL - ENCANA	4,400.0	4,369.8	492.6	468.3	20.214	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	6,400.0	6,166.5	350.7	312.7	9.244	SF
CANINO 2 (EXISTING) - HUGHES CW WELL - NO SUR	8,102.4	7,632.2	294.5	267.2	10.764	CC, ES
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	400.0	343.0	17.4	16.1	13.682	CC
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	500.0	443.0	17.5	15.9	10.803	ES
CANINO 3 (EXISTING) - HUGHES CW WELL - NO SUR	700.0	642.9	19.9	17.5	8.531	SF
FEDERAL NOAA 11-32 (EXISTING) - ENCANA WELL - N						Out of range
File 3A-32H-K268 - Hz - Plan #1						Out of range
File 3B-32H-K268 - Hz - Plan #1						Out of range
File 3C-32H-K268 - Hz - Plan #1						Out of range
File 3D-32H-K268 - Hz - Plan #1						Out of range
File 3E-32H-K268 - Hz - Plan #1						Out of range
File 3F-32H-K268 - Hz - Plan #1						Out of range
File 3G-32H-K268 - Hz - Plan #1						Out of range
File 3H-32H-K268 - Hz - Plan #1						Out of range
File 3I-32H-K268 - Hz - Plan #1						Out of range
File 3J-32H-K268 - Hz - Plan #1						Out of range
File 3K-32H-K268 - Hz - Plan #1						Out of range
File 3L-32H-K268 - Hz - Plan #1						Out of range
File 3M-32H-K268 - Hz - Plan #1						Out of range
File 3N-32H-K268 - Hz - Plan #1						Out of range
File 3O-32H-K268 - Hz - Plan #1						Out of range
File 3P-32H-K268 - Hz - Plan #1						Out of range
FOSTER 33-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 43-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 4-5 (EXISTING) - ENCANA WELL - SURVEYS						Out of range
FOSTER 4-6-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range

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 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
S32-T2N-R68W (File/Hwy 52)						
FOSTER 6-4-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 6-4-5X (EXISTING) - ENCANA WELL - SURVE						Out of range
FOSTER 6-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER 8-8-5 (EXISTING) - ENCANA WELL - SURVEY						Out of range
FOSTER E UNIT 1 (EXISTING) - ENCANA WELL - NO S						Out of range
GENE 11-5 (EXISTING) - KERR-MCGEE WELL - NO SU						Out of range
HIGHLAND 21-5 (EXISTING) - KPK WELL - NO SURVE						Out of range
HOPE 31-5 (EXISTING) - KPK WELL - NO SURVEYS						Out of range
Hwy 52 4A-32H-O268 - Hz - Plan #1	166.0	168.0	105.2	104.6	198.242	CC
Hwy 52 4A-32H-O268 - Hz - Plan #1	200.0	202.0	105.2	104.5	162.001	ES
Hwy 52 4A-32H-O268 - Hz - Plan #1	1,000.0	988.9	178.4	175.0	52.218	SF
Hwy 52 4B-32H-O268 - Hz - Plan #1	166.3	167.3	100.1	99.6	188.903	CC
Hwy 52 4B-32H-O268 - Hz - Plan #1	200.0	201.0	100.1	99.5	154.621	ES
Hwy 52 4B-32H-O268 - Hz - Plan #1	1,100.0	1,093.1	171.9	168.1	45.620	SF
Hwy 52 4C-32H-O268 - Hz - Plan #1	400.0	401.0	95.2	93.8	70.733	CC, ES
Hwy 52 4C-32H-O268 - Hz - Plan #1	1,200.0	1,201.6	134.6	130.5	32.513	SF
Hwy 52 4D-32H-O268 - Hz - Plan #1	400.0	401.0	90.1	88.8	66.970	CC, ES
Hwy 52 4D-32H-O268 - Hz - Plan #1	1,300.0	1,306.4	119.4	114.8	26.416	SF
Hwy 52 4E-32H-O268 - Hz - Plan #1	400.0	401.0	75.2	73.9	55.887	CC, ES
Hwy 52 4E-32H-O268 - Hz - Plan #1	1,600.0	1,610.6	157.6	152.0	28.477	SF
Hwy 52 4F-32H-O268 - Hz - Plan #1	400.0	401.0	70.1	68.8	52.112	CC, ES
Hwy 52 4F-32H-O268 - Hz - Plan #1	1,700.0	1,710.6	124.3	116.9	16.710	SF
Hwy 52 4G-32H-O268 - Hz - Plan #1	400.0	401.0	65.2	63.9	48.468	CC, ES
Hwy 52 4G-32H-O268 - Hz - Plan #1	7,546.4	7,653.9	136.0	103.9	4.234	SF
Hwy 52 4H-32H-O268 - Hz - Plan #1	400.0	401.0	60.1	58.8	44.684	CC, ES
Hwy 52 4H-32H-O268 - Hz - Plan #1	8,019.3	7,994.5	95.2	65.7	3.221	SF
Hwy 52 4I-32H-O268 - Hz - Plan #1	200.0	200.0	45.3	44.6	70.111	CC, ES
Hwy 52 4I-32H-O268 - Hz - Plan #1	700.0	695.3	69.8	67.4	28.987	SF
Hwy 52 4J-32H-O268 - Hz - Plan #1	300.0	300.0	40.1	39.2	40.354	CC
Hwy 52 4J-32H-O268 - Hz - Plan #1	400.0	399.9	40.3	38.9	29.954	ES
Hwy 52 4J-32H-O268 - Hz - Plan #1	700.0	699.0	50.6	48.2	20.883	SF
Hwy 52 4K-32H-O268 - Hz - Plan #1	400.0	400.0	35.3	34.0	26.287	CC, ES
Hwy 52 4K-32H-O268 - Hz - Plan #1	1,000.0	1,000.4	54.6	51.0	15.167	SF
Hwy 52 4L-32H-O268 - Hz - Plan #1	400.0	400.0	30.2	28.8	22.443	CC, ES
Hwy 52 4L-32H-O268 - Hz - Plan #1	1,100.0	1,101.8	45.8	41.7	11.032	SF
Hwy 52 4M-32H-O268 - Hz - Plan #1	400.0	400.0	8.4	7.0	6.246	CC, ES
Hwy 52 4M-32H-O268 - Hz - Plan #1	500.0	500.0	9.2	7.5	5.447	SF
Hwy 52 4N-32H-O268 - Hz - Plan #1	400.0	400.0	4.6	3.2	3.418	CC, ES
Hwy 52 4N-32H-O268 - Hz - Plan #1	500.0	500.0	5.3	3.7	3.157	SF
Hwy 52 4P-32H-O268 - Hz - Plan #1	200.0	200.0	6.7	6.0	10.340	CC, ES
Hwy 52 4P-32H-O268 - Hz - Plan #1	12,417.3	11,967.2	448.4	328.5	3.740	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

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 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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)						
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
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	1,178.7	1,151.6	326.3	322.1	76.801	CC
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	1,200.0	1,170.2	326.4	322.1	75.247	ES
RAY NELSON 33-32 (EXISTING) - ENCANA WELL - EN	2,000.0	1,863.7	451.3	442.5	51.635	SF
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	1,581.0	1,564.8	29.5	23.2	4.690	CC, ES
RAY NELSON 34-32 (EXISTING) - ENCANA WELL - EN	1,600.0	1,583.2	29.8	23.4	4.674	SF
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	8,472.0	7,834.9	274.1	245.3	9.535	CC, ES
RAY NELSON 44-32 (EXISTING) - ENCANA WELL - EN	8,500.0	7,835.3	275.5	246.6	9.533	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						Out of range
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	5,066.9	5,105.6	341.2	313.0	12.114	CC
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	5,100.0	5,137.1	341.3	312.9	12.031	ES
RAY NELSON 6-8-32 (EXISTING) - ENCANA WELL - PL	5,300.0	5,327.6	348.5	318.9	11.790	SF
Ray Nelson 7-8-32 - DD - Plan #1	5,250.2	5,196.4	66.4	40.8	2.591	CC
Ray Nelson 7-8-32 - DD - Plan #1	5,500.0	5,445.1	70.5	35.9	2.041	ES
Ray Nelson 7-8-32 - DD - Plan #1	5,700.0	5,644.2	78.8	38.4	1.952	SF
RAY NELSON 8-4-32 (EXISTING) - ENCANA WELL - PL	10,197.7	7,869.7	320.3	260.1	5.315	CC
RAY NELSON 8-4-32 (EXISTING) - ENCANA WELL - PL	10,200.0	7,869.7	320.3	260.0	5.312	ES, SF
RAY NELSON 8-6-32 (EXISTING) - ENCANA WELL - PL	8,959.9	7,779.6	280.1	246.2	8.250	CC, ES
RAY NELSON 8-6-32 (EXISTING) - ENCANA WELL - PL	9,000.0	7,779.6	283.0	248.5	8.218	SF
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU	7,400.0	7,477.6	356.0	322.2	10.533	SF
RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SU	7,706.7	7,756.6	303.1	275.9	11.147	CC, ES
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 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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) - ANDERSON 41-32 (EXISTING) - ENCANA WELL - NO SURVEYS				Offset Site Error:		0.0 ft	
Survey Program: 8170-Geolink MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis						
12,000.0	7,712.0	7,604.0	7,604.0	74.5	13.3	-90.00	4,240.3	1,484.6	475.1	393.4	81.69	5.816					
12,100.0	7,712.0	7,604.0	7,604.0	76.1	13.3	-90.00	4,240.3	1,484.6	375.4	292.0	83.41	4.501					
12,200.0	7,712.0	7,604.0	7,604.0	77.7	13.3	-90.00	4,240.3	1,484.6	276.0	190.9	85.13	3.242					
12,300.0	7,712.0	7,604.0	7,604.0	79.3	13.3	-90.00	4,240.3	1,484.6	177.3	90.4	86.85	2.041					
12,400.0	7,712.0	7,604.0	7,604.0	80.9	13.3	-90.00	4,240.3	1,484.6	81.6	-6.9	88.57	0.922 Level 1					
12,417.3	7,712.0	7,604.0	7,604.0	81.1	13.3	-90.00	4,240.3	1,484.6	66.4	-22.5	88.87	0.747 Level 1, CC, ES, SF					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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) - ANDERSON TRUST 32-8 (EXISTING) - ENCANA WELL - NO SURVEY		Offset Site Error:		0.0 ft				
Survey Program:													7765-Geolink MWD		Offset Well Error:		0.0 ft				
Offset				Semi Major Axis			Distance														
Reference		Offset		Reference		Offset		Highside Toolface (°)		Offset Wellbore Centre		Between Centres		Between Ellipses		Total Uncertainty Axis		Separation Factor		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)				+N/-S (ft)	+E/-W (ft)											
10,600.0	7,712.0	7,671.0	7,671.0	53.6	13.4	-90.00			2,677.1	1,246.6	457.7	399.6	58.08	7.881							
10,700.0	7,712.0	7,671.0	7,671.0	55.0	13.4	-90.00			2,677.1	1,246.6	394.3	334.6	59.74	6.600							
10,800.0	7,712.0	7,671.0	7,671.0	56.4	13.4	-90.00			2,677.1	1,246.6	348.6	287.2	61.41	5.676							
10,900.0	7,712.0	7,671.0	7,671.0	57.8	13.4	-90.00			2,677.1	1,246.6	327.9	264.8	63.09	5.197							
10,919.9	7,712.0	7,671.0	7,671.0	58.1	13.4	-90.00			2,677.1	1,246.6	327.3	263.9	63.43	5.160	CC, ES, SF						
11,000.0	7,712.0	7,671.0	7,671.0	59.3	13.4	-90.00			2,677.1	1,246.6	336.9	272.2	64.78	5.201							
11,100.0	7,712.0	7,671.0	7,671.0	60.7	13.4	-90.00			2,677.1	1,246.6	373.5	307.1	66.46	5.620							
11,200.0	7,712.0	7,671.0	7,671.0	62.2	13.4	-90.00			2,677.1	1,246.6	430.8	362.6	68.16	6.320							

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	55.22	204.0	293.8	357.8						
100.0	100.0	88.3	88.3	0.1	0.1	55.28	204.0	294.4	358.1	357.8	0.28	1,294.974			
200.0	200.0	187.8	187.8	0.3	0.3	55.38	203.9	295.4	359.0	358.3	0.63	574.314			
300.0	300.0	289.3	289.3	0.5	0.5	55.52	203.6	296.5	359.7	358.7	0.98	368.290			
400.0	400.0	399.7	399.7	0.7	0.7	55.85	201.3	296.8	358.7	357.4	1.35	266.639			
500.0	500.0	507.5	507.2	0.8	0.9	-52.80	194.7	296.5	354.6	352.8	1.73	204.700			
600.0	600.0	615.7	614.8	1.0	1.2	-51.52	182.6	297.0	347.2	345.1	2.16	160.964			
700.0	699.9	719.5	717.2	1.2	1.5	-49.67	165.8	297.9	336.8	334.2	2.63	127.991			
800.0	799.7	813.2	809.4	1.4	1.8	-47.77	149.0	299.9	325.8	322.7	3.11	104.738			
900.0	899.4	910.4	904.8	1.6	2.1	-45.63	130.9	303.7	315.3	311.7	3.64	86.609			
1,000.0	998.9	1,010.5	1,002.6	1.8	2.5	-43.13	110.5	308.4	304.1	299.9	4.24	71.781			
1,100.0	1,098.3	1,104.0	1,093.1	2.1	3.0	-40.00	87.6	314.3	292.3	287.4	4.88	59.859			
1,200.0	1,197.4	1,196.9	1,182.3	2.3	3.4	-36.30	62.9	322.4	281.9	276.3	5.55	50.779			
1,300.0	1,296.3	1,286.4	1,267.7	2.6	3.9	-32.43	38.6	333.0	274.2	268.0	6.21	44.156			
1,400.0	1,394.9	1,376.1	1,353.2	2.9	4.4	-28.48	14.6	346.2	269.6	262.8	6.83	39.457			
1,500.0	1,493.3	1,466.2	1,438.7	3.3	4.9	-24.64	-8.8	362.1	268.0	260.6	7.42	36.137			
1,532.6	1,525.2	1,497.1	1,467.9	3.4	5.0	-23.33	-16.8	368.0	267.9	260.3	7.60	35.231 CC			
1,600.0	1,591.2	1,560.8	1,528.0	3.7	5.4	-20.60	-33.7	380.6	268.2	260.2	7.97	33.668 ES			
1,700.0	1,688.9	1,654.4	1,616.3	4.1	5.9	-16.86	-57.8	400.3	269.5	261.1	8.44	31.937			
1,800.0	1,786.1	1,746.7	1,702.8	4.5	6.5	-13.24	-81.9	421.6	272.6	263.7	8.86	30.753			
1,900.0	1,882.9	1,843.3	1,792.4	4.9	7.2	-9.23	-109.3	445.1	276.9	267.7	9.24	29.975			
2,000.0	1,979.4	1,941.5	1,883.3	5.4	7.8	-4.93	-138.8	468.0	280.9	271.4	9.54	29.457			
2,100.0	2,075.9	2,041.6	1,976.4	5.9	8.4	-1.25	-166.3	492.3	286.4	276.6	9.79	29.265			
2,200.0	2,172.3	2,137.5	2,065.9	6.4	9.1	1.92	-191.5	515.6	292.5	282.4	10.03	29.159			
2,300.0	2,268.8	2,236.3	2,157.8	6.9	9.7	5.12	-218.0	540.1	300.3	290.1	10.23	29.354			
2,400.0	2,365.2	2,336.7	2,251.7	7.3	10.3	7.90	-243.3	565.3	308.3	297.9	10.44	29.541			
2,500.0	2,461.7	2,435.8	2,344.2	7.8	11.0	10.61	-268.8	589.9	317.1	306.4	10.66	29.752			
2,600.0	2,558.1	2,544.1	2,446.0	8.3	11.7	13.67	-296.8	614.1	324.4	313.5	10.89	29.790			
2,700.0	2,654.6	2,642.2	2,538.7	8.8	12.3	16.53	-322.2	634.0	330.9	319.8	11.14	29.716			
2,800.0	2,751.1	2,728.8	2,620.0	9.3	12.8	18.97	-345.6	652.7	340.0	328.6	11.42	29.774			
2,900.0	2,847.5	2,816.5	2,700.9	9.8	13.5	21.59	-372.7	672.9	353.7	342.0	11.73	30.142			
3,000.0	2,944.0	2,910.7	2,787.3	10.3	14.2	24.18	-402.6	695.7	369.9	357.8	12.10	30.569			
3,100.0	3,040.4	3,015.8	2,883.8	10.8	14.9	26.72	-435.3	721.3	386.3	373.8	12.54	30.812			
3,200.0	3,136.9	3,120.7	2,981.1	11.3	15.6	29.20	-466.8	744.6	401.1	388.1	13.05	30.739			
3,300.0	3,233.3	3,215.6	3,069.3	11.8	16.3	31.34	-495.1	765.0	415.9	402.3	13.60	30.581			
3,400.0	3,329.8	3,302.1	3,149.1	12.3	16.9	33.30	-522.8	783.6	433.1	418.9	14.19	30.513			
3,500.0	3,426.3	3,398.6	3,237.5	12.8	17.6	35.45	-555.6	804.5	452.6	437.7	14.89	30.399			
3,600.0	3,522.7	3,517.2	3,347.5	13.3	18.4	37.77	-592.5	829.0	469.7	453.9	15.74	29.847			
3,700.0	3,619.2	3,642.4	3,465.6	13.8	19.1	39.92	-626.2	853.0	482.8	466.1	16.67	28.965			
3,800.0	3,715.6	3,789.9	3,608.3	14.3	19.7	42.80	-658.0	872.2	488.4	470.5	17.88	27.316			
3,900.0	3,812.1	3,892.2	3,708.7	14.8	20.1	44.93	-675.2	881.5	488.5	469.5	18.94	25.790			
4,000.0	3,908.6	3,997.6	3,812.2	15.3	20.5	46.96	-692.2	892.2	488.9	468.9	20.07	24.363			
4,100.0	4,005.0	4,107.5	3,920.5	15.8	20.8	48.83	-706.5	904.5	487.4	466.2	21.23	22.958			
4,195.1	4,096.8	4,194.1	4,005.7	16.3	21.2	50.22	-717.3	914.7	486.2	464.0	22.23	21.873			
4,200.0	4,101.5	4,198.1	4,009.7	16.3	21.2	50.28	-717.8	915.2	486.2	463.9	22.28	21.825			
4,300.0	4,197.9	4,283.9	4,093.8	16.8	21.5	51.65	-730.8	926.2	488.1	464.8	23.32	20.930			
4,400.0	4,294.4	4,369.8	4,177.5	17.3	21.9	52.95	-745.4	938.3	492.6	468.3	24.37	20.214 SF			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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		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)						
4,900.0	4,776.7	4,719.7	4,719.7	19.8	8.2	-46.16	-114.0	1,371.8	489.7	466.1	23.63	20.722		
5,000.0	4,873.1	4,816.1	4,816.1	20.3	8.4	-48.43	-114.0	1,371.8	471.5	446.9	24.60	19.163		
5,100.0	4,969.6	4,912.6	4,912.6	20.8	8.6	-50.87	-114.0	1,371.8	454.0	428.4	25.61	17.727		
5,200.0	5,066.0	5,009.0	5,009.0	21.3	8.7	-53.49	-114.0	1,371.8	437.5	410.8	26.66	16.410		
5,300.0	5,162.5	5,105.5	5,105.5	21.9	8.9	-56.30	-114.0	1,371.8	421.9	394.2	27.74	15.212		
5,400.0	5,259.0	5,202.0	5,202.0	22.4	9.1	-59.31	-114.0	1,371.8	407.5	378.7	28.84	14.129		
5,500.0	5,355.4	5,298.4	5,298.4	22.9	9.2	-62.51	-114.0	1,371.8	394.3	364.4	29.96	13.162		
5,600.0	5,451.9	5,394.9	5,394.9	23.4	9.4	-65.92	-114.0	1,371.8	382.5	351.4	31.08	12.308		
5,700.0	5,548.3	5,491.3	5,491.3	23.9	9.6	-69.51	-114.0	1,371.8	372.2	340.0	32.18	11.564		
5,800.0	5,644.8	5,587.8	5,587.8	24.4	9.8	-73.28	-114.0	1,371.8	363.5	330.2	33.26	10.930		
5,900.0	5,741.2	5,684.2	5,684.2	24.9	9.9	-77.21	-114.0	1,371.8	356.5	322.3	34.27	10.402		
6,000.0	5,837.7	5,780.7	5,780.7	25.4	10.1	-81.26	-114.0	1,371.8	351.4	316.2	35.22	9.979		
6,100.0	5,934.2	5,877.2	5,877.2	25.9	10.3	-85.41	-114.0	1,371.8	348.3	312.2	36.07	9.655		
6,200.0	6,030.6	5,973.6	5,973.6	26.4	10.4	-89.60	-114.0	1,371.8	347.1	310.2	36.81	9.428		
6,209.6	6,039.9	5,982.9	5,982.9	26.4	10.4	-90.00	-114.0	1,371.8	347.1	310.2	36.88	9.411		
6,300.0	6,127.1	6,070.1	6,070.1	26.9	10.6	-93.79	-114.0	1,371.8	347.9	310.4	37.44	9.292		
6,400.0	6,223.5	6,166.5	6,166.5	27.4	10.8	-97.95	-114.0	1,371.8	350.7	312.7	37.93	9.244 SF		
6,500.0	6,320.0	6,263.0	6,263.0	27.9	10.9	-102.02	-114.0	1,371.8	355.4	317.1	38.31	9.277		
6,600.0	6,416.4	6,359.4	6,359.4	28.4	11.1	-105.97	-114.0	1,371.8	362.0	323.4	38.57	9.385		
6,700.0	6,512.9	6,455.9	6,455.9	28.9	11.3	-109.78	-114.0	1,371.8	370.4	331.6	38.73	9.563		
6,800.0	6,609.4	6,552.4	6,552.4	29.4	11.4	-113.41	-114.0	1,371.8	380.4	341.6	38.80	9.804		
6,900.0	6,705.8	6,648.8	6,648.8	29.9	11.6	-116.85	-114.0	1,371.8	391.9	353.1	38.79	10.103		
7,000.0	6,802.3	6,745.3	6,745.3	30.4	11.8	-120.09	-114.0	1,371.8	404.9	366.1	38.73	10.453		
7,100.0	6,898.7	6,841.7	6,841.7	30.9	11.9	-123.14	-114.0	1,371.8	419.1	380.4	38.63	10.848		
7,200.0	6,995.2	6,938.2	6,938.2	31.4	12.1	-125.99	-114.0	1,371.8	434.4	395.9	38.50	11.282		
7,300.0	7,091.7	7,034.7	7,034.7	31.9	12.3	-128.64	-114.0	1,371.8	450.8	412.4	38.36	11.752		
7,400.0	7,188.4	7,131.4	7,131.4	32.4	12.4	-97.82	-114.0	1,371.8	461.8	423.7	38.10	12.121		
7,500.0	7,284.2	7,227.2	7,227.2	32.7	12.6	-71.92	-114.0	1,371.8	458.0	421.3	36.70	12.479		
7,600.0	7,376.1	7,319.1	7,319.1	32.9	12.8	-61.78	-114.0	1,371.8	440.6	406.4	34.22	12.876		
7,700.0	7,461.3	7,404.3	7,404.3	33.1	12.9	-60.90	-114.0	1,371.8	412.0	381.0	31.03	13.278		
7,800.0	7,537.3	7,480.3	7,480.3	33.2	13.1	-65.74	-114.0	1,371.8	375.8	347.8	28.02	13.414		
7,900.0	7,601.7	7,544.7	7,544.7	33.2	13.2	-74.12	-114.0	1,371.8	338.1	311.6	26.53	12.742		
8,000.0	7,652.6	7,595.6	7,595.6	33.2	13.3	-83.25	-114.0	1,371.8	307.4	280.6	26.77	11.482		
8,100.0	7,688.5	7,631.5	7,631.5	33.2	13.3	-89.89	-114.0	1,371.8	294.5	267.2	27.35	10.770		
8,102.4	7,689.2	7,632.2	7,632.2	33.2	13.3	-90.00	-114.0	1,371.8	294.5	267.2	27.36	10.764 CC, ES		
8,200.0	7,708.2	7,651.2	7,651.2	33.2	13.4	-91.82	-114.0	1,371.8	307.6	280.0	27.63	11.134		
8,300.0	7,712.0	7,655.0	7,655.0	33.3	13.4	-90.00	-114.0	1,371.8	346.3	318.6	27.78	12.470		
8,400.0	7,712.0	7,655.0	7,655.0	33.4	13.4	-90.00	-114.0	1,371.8	405.9	377.7	28.12	14.434		
8,500.0	7,712.0	7,655.0	7,655.0	33.6	13.4	-90.00	-114.0	1,371.8	479.0	450.4	28.66	16.717		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - CANINO 3 (EXISTING) - HUGHES CW WELL - NO SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 7800-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-154.25	-15.7	-7.6	59.6					
100.0	100.0	43.0	43.0	0.1	0.1	-154.25	-15.7	-7.6	17.4	17.2	0.22	77.757		
200.0	200.0	143.0	143.0	0.3	0.2	-154.25	-15.7	-7.6	17.4	16.8	0.57	30.361		
300.0	300.0	243.0	243.0	0.5	0.4	-154.25	-15.7	-7.6	17.4	16.5	0.92	18.863		
400.0	400.0	343.0	343.0	0.7	0.6	-154.25	-15.7	-7.6	17.4	16.1	1.27	13.682 CC		
500.0	500.0	443.0	443.0	0.8	0.8	99.24	-15.7	-7.6	17.5	15.9	1.62	10.803 ES		
600.0	600.0	543.0	543.0	1.0	0.9	107.43	-15.7	-7.6	18.1	16.1	1.97	9.182		
700.0	699.9	642.9	642.9	1.2	1.1	119.50	-15.7	-7.6	19.9	17.5	2.33	8.531 SF		
800.0	799.7	742.7	742.7	1.4	1.3	132.54	-15.7	-7.6	23.5	20.8	2.68	8.750		
900.0	899.4	842.4	842.4	1.6	1.5	143.85	-15.7	-7.6	29.4	26.3	3.03	9.676		
1,000.0	998.9	941.9	941.9	1.8	1.6	152.47	-15.7	-7.6	37.5	34.2	3.38	11.101		
1,100.0	1,098.3	1,041.3	1,041.3	2.1	1.8	158.70	-15.7	-7.6	47.9	44.1	3.73	12.851		
1,200.0	1,197.4	1,140.4	1,140.4	2.3	2.0	163.17	-15.7	-7.6	60.2	56.2	4.07	14.812		
1,300.0	1,296.3	1,239.3	1,239.3	2.6	2.2	166.43	-15.7	-7.6	74.5	70.1	4.41	16.913		
1,400.0	1,394.9	1,337.9	1,337.9	2.9	2.3	168.85	-15.7	-7.6	90.6	85.9	4.74	19.112		
1,500.0	1,493.3	1,436.3	1,436.3	3.3	2.5	170.68	-15.7	-7.6	108.6	103.5	5.08	21.383		
1,600.0	1,591.2	1,534.2	1,534.2	3.7	2.7	172.09	-15.7	-7.6	128.3	122.9	5.41	23.710		
1,700.0	1,688.9	1,631.9	1,631.9	4.1	2.8	173.20	-15.7	-7.6	149.8	144.0	5.74	26.081		
1,800.0	1,786.1	1,729.1	1,729.1	4.5	3.0	174.09	-15.7	-7.6	173.0	166.9	6.07	28.490		
1,900.0	1,882.9	1,825.9	1,825.9	4.9	3.2	174.82	-15.7	-7.6	197.9	191.5	6.40	30.931		
2,000.0	1,979.4	1,922.4	1,922.4	5.4	3.4	175.42	-15.7	-7.6	224.1	217.4	6.73	33.283		
2,100.0	2,075.9	2,018.9	2,018.9	5.9	3.5	175.90	-15.7	-7.6	250.5	243.4	7.07	35.400		
2,200.0	2,172.3	2,115.3	2,115.3	6.4	3.7	176.29	-15.7	-7.6	276.8	269.4	7.42	37.325		
2,300.0	2,268.8	2,211.8	2,211.8	6.9	3.9	176.61	-15.7	-7.6	303.1	295.4	7.76	39.082		
2,400.0	2,365.2	2,308.2	2,308.2	7.3	4.0	176.88	-15.7	-7.6	329.5	321.4	8.10	40.692		
2,500.0	2,461.7	2,404.7	2,404.7	7.8	4.2	177.11	-15.7	-7.6	355.8	347.4	8.44	42.173		
2,600.0	2,558.1	2,501.1	2,501.1	8.3	4.4	177.31	-15.7	-7.6	382.2	373.4	8.78	43.539		
2,700.0	2,654.6	2,597.6	2,597.6	8.8	4.5	177.49	-15.7	-7.6	408.5	399.4	9.12	44.804		
2,800.0	2,751.1	2,694.1	2,694.1	9.3	4.7	177.64	-15.7	-7.6	434.9	425.4	9.46	45.978		
2,900.0	2,847.5	2,790.5	2,790.5	9.8	4.9	177.77	-15.7	-7.6	461.2	451.4	9.80	47.071		
3,000.0	2,944.0	2,887.0	2,887.0	10.3	5.0	177.89	-15.7	-7.6	487.6	477.4	10.14	48.090		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4A-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	2.0	2.0	0.0	0.0	-91.89	-3.5	-105.1	105.2					
100.0	100.0	102.0	102.0	0.1	0.2	-91.89	-3.5	-105.1	105.2	104.9	0.30	350.349		
166.0	166.0	168.0	168.0	0.3	0.3	-91.89	-3.5	-105.1	105.2	104.6	0.53	198.242	CC	
200.0	200.0	202.0	202.0	0.3	0.3	-91.89	-3.5	-105.1	105.2	104.5	0.65	162.001	ES	
300.0	300.0	300.0	300.0	0.5	0.5	-91.76	-3.3	-106.0	106.0	105.0	1.00	106.517		
400.0	400.0	398.4	398.4	0.7	0.7	-91.40	-2.7	-108.5	108.5	107.2	1.35	80.687		
500.0	500.0	496.4	496.3	0.8	0.9	159.94	-1.7	-112.6	113.5	111.9	1.69	67.275		
600.0	600.0	594.1	593.8	1.0	1.1	161.01	-0.3	-118.3	121.9	119.8	2.03	59.926		
700.0	699.9	692.5	691.9	1.2	1.3	162.31	1.5	-125.4	133.3	130.9	2.38	55.998		
800.0	799.7	791.5	790.7	1.4	1.5	163.61	3.2	-132.8	146.6	143.8	2.73	53.754		
900.0	899.4	890.3	889.2	1.6	1.7	164.85	5.0	-140.1	161.6	158.5	3.07	52.604		
1,000.0	998.9	988.9	987.4	1.8	1.9	166.01	6.8	-147.4	178.4	175.0	3.42	52.218	SF	
1,100.0	1,098.3	1,087.1	1,085.3	2.1	2.1	167.08	8.6	-154.7	196.9	193.1	3.76	52.390		
1,200.0	1,197.4	1,184.9	1,182.9	2.3	2.3	168.05	10.3	-162.0	217.1	213.0	4.10	52.981		
1,300.0	1,296.3	1,282.4	1,280.1	2.6	2.5	168.94	12.1	-169.2	239.1	234.7	4.44	53.896		
1,400.0	1,394.9	1,379.5	1,376.9	2.9	2.7	169.73	13.8	-176.4	262.8	258.0	4.77	55.068		
1,500.0	1,493.3	1,476.2	1,473.3	3.3	2.9	170.45	15.6	-183.6	288.2	283.1	5.11	56.448		
1,600.0	1,591.2	1,572.4	1,569.2	3.7	3.2	171.09	17.3	-190.7	315.3	309.9	5.44	58.000		
1,700.0	1,688.9	1,668.1	1,664.6	4.1	3.4	171.67	19.0	-197.8	344.1	338.4	5.76	59.696		
1,800.0	1,786.1	1,763.2	1,759.5	4.5	3.6	172.19	20.7	-204.9	374.6	368.5	6.09	61.515		
1,900.0	1,882.9	1,857.9	1,853.9	4.9	3.8	172.66	22.4	-211.9	406.8	400.3	6.41	63.440		
2,000.0	1,979.4	1,952.1	1,947.8	5.4	4.0	173.11	24.1	-218.9	440.2	433.4	6.74	65.274		
2,100.0	2,075.9	2,046.2	2,041.7	5.9	4.2	173.50	25.8	-225.9	473.7	466.6	7.08	66.905		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	1.0	1.0	0.0	0.0	-88.56	2.5	-100.1	100.1					
100.0	100.0	101.0	101.0	0.1	0.2	-88.56	2.5	-100.1	100.1	99.8	0.30	335.453		
166.3	166.3	167.3	167.3	0.3	0.3	-88.56	2.5	-100.1	100.1	99.6	0.53	188.903 CC		
200.0	200.0	201.0	201.0	0.3	0.3	-88.56	2.5	-100.1	100.1	99.5	0.65	154.621 ES		
300.0	300.0	300.0	300.0	0.5	0.5	-88.37	2.9	-100.9	100.9	99.9	1.00	101.399		
400.0	400.0	397.7	397.7	0.7	0.7	-87.84	3.9	-103.2	103.3	102.0	1.34	76.916		
500.0	500.0	497.0	496.9	0.8	0.9	163.71	5.5	-106.8	107.8	106.2	1.69	63.836		
600.0	600.0	596.8	596.6	1.0	1.0	164.79	7.1	-110.5	114.2	112.1	2.04	56.007		
700.0	699.9	696.4	696.2	1.2	1.2	165.95	8.8	-114.2	122.2	119.8	2.39	51.207		
800.0	799.7	795.9	795.6	1.4	1.4	167.13	10.4	-117.9	132.0	129.3	2.73	48.283		
900.0	899.4	895.2	894.8	1.6	1.6	168.29	12.1	-121.6	143.6	140.5	3.08	46.604		
1,000.0	998.9	994.3	993.7	1.8	1.8	169.39	13.7	-125.3	156.9	153.4	3.43	45.795		
1,100.0	1,098.3	1,093.1	1,092.5	2.1	2.0	170.42	15.3	-128.9	171.9	168.1	3.77	45.620 SF		
1,200.0	1,197.4	1,191.6	1,190.9	2.3	2.2	171.35	17.0	-132.6	188.7	184.6	4.11	45.921		
1,300.0	1,296.3	1,289.8	1,289.1	2.6	2.3	172.19	18.6	-136.2	207.3	202.8	4.45	46.590		
1,400.0	1,394.9	1,387.7	1,386.9	2.9	2.5	172.95	20.2	-139.9	227.5	222.8	4.79	47.549		
1,500.0	1,493.3	1,485.2	1,484.3	3.3	2.7	173.62	21.8	-143.5	249.6	244.4	5.12	48.743		
1,600.0	1,591.2	1,582.3	1,581.3	3.7	2.9	174.22	23.4	-147.1	273.3	267.8	5.45	50.130		
1,700.0	1,688.9	1,679.0	1,677.9	4.1	3.1	174.76	25.0	-150.7	298.7	293.0	5.78	51.677		
1,800.0	1,786.1	1,775.2	1,774.0	4.5	3.3	175.23	26.6	-154.3	325.9	319.8	6.11	53.361		
1,900.0	1,882.9	1,870.9	1,869.7	4.9	3.4	175.65	28.2	-157.8	354.7	348.3	6.43	55.161		
2,000.0	1,979.4	1,966.3	1,964.9	5.4	3.6	176.03	29.8	-161.4	384.8	378.0	6.76	56.895		
2,100.0	2,075.9	2,061.6	2,060.2	5.9	3.8	176.36	31.3	-164.9	415.0	407.9	7.10	58.439		
2,200.0	2,172.3	2,156.9	2,155.4	6.4	4.0	176.65	32.9	-168.5	445.2	437.8	7.44	59.846		
2,300.0	2,268.8	2,252.2	2,250.6	6.9	4.2	176.90	34.5	-172.0	475.4	467.6	7.78	61.132		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4C-32H-O268 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						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	1.0	1.0	0.0	0.0	-92.12	-3.5	-95.1	95.2					
100.0	100.0	101.0	101.0	0.1	0.2	-92.12	-3.5	-95.1	95.2	94.9	0.30	318.919		
200.0	200.0	201.0	201.0	0.3	0.3	-92.12	-3.5	-95.1	95.2	94.5	0.65	146.995		
300.0	300.0	301.0	301.0	0.5	0.5	-92.12	-3.5	-95.1	95.2	94.2	1.00	95.508		
400.0	400.0	401.0	401.0	0.7	0.7	-92.12	-3.5	-95.1	95.2	93.8	1.35	70.733 CC, ES		
500.0	500.0	501.0	501.0	0.8	0.8	158.72	-3.5	-95.1	96.0	94.3	1.69	56.645		
600.0	600.0	602.5	602.5	1.0	1.0	159.53	-3.1	-94.3	97.6	95.6	2.05	47.714		
700.0	699.9	703.3	703.3	1.2	1.2	161.10	-1.8	-92.1	99.6	97.2	2.40	41.521		
800.0	799.7	803.2	803.1	1.4	1.4	162.97	-0.4	-89.7	102.9	100.2	2.75	37.468		
900.0	899.4	903.0	902.9	1.6	1.6	164.96	0.9	-87.2	108.1	105.0	3.10	34.909		
1,000.0	998.9	1,002.7	1,002.5	1.8	1.7	166.96	2.3	-84.8	115.1	111.7	3.45	33.404		
1,100.0	1,098.3	1,102.2	1,102.0	2.1	1.9	168.88	3.7	-82.3	124.0	120.2	3.79	32.669		
1,200.0	1,197.4	1,201.6	1,201.3	2.3	2.1	170.67	5.1	-79.9	134.6	130.5	4.14	32.513 SF		
1,300.0	1,296.3	1,300.7	1,300.4	2.6	2.3	172.28	6.5	-77.5	147.1	142.6	4.48	32.802		
1,400.0	1,394.9	1,399.6	1,399.3	2.9	2.5	173.71	7.8	-75.0	161.4	156.6	4.83	33.441		
1,500.0	1,493.3	1,498.2	1,497.9	3.3	2.6	174.95	9.2	-72.6	177.5	172.4	5.17	34.357		
1,600.0	1,591.2	1,596.5	1,596.1	3.7	2.8	176.02	10.5	-70.2	195.4	189.9	5.51	35.498		
1,700.0	1,688.9	1,694.5	1,694.1	4.1	3.0	176.94	11.9	-67.8	215.1	209.3	5.84	36.823		
1,800.0	1,786.1	1,792.2	1,791.7	4.5	3.2	177.72	13.3	-65.4	236.5	230.4	6.18	38.302		
1,900.0	1,882.9	1,889.4	1,888.9	4.9	3.3	178.38	14.6	-63.0	259.7	253.2	6.51	39.910		
2,000.0	1,979.4	1,986.3	1,985.8	5.4	3.5	178.95	15.9	-60.7	284.2	277.3	6.85	41.495		
2,100.0	2,075.9	2,083.2	2,082.6	5.9	3.7	179.42	17.3	-58.3	308.7	301.5	7.19	42.913		
2,200.0	2,172.3	2,180.1	2,179.5	6.4	3.9	179.83	18.6	-55.9	333.3	325.7	7.54	44.202		
2,300.0	2,268.8	2,277.0	2,276.4	6.9	4.0	-179.82	20.0	-53.5	357.9	350.0	7.89	45.379		
2,400.0	2,365.2	2,374.0	2,373.3	7.3	4.2	-179.51	21.3	-51.2	382.5	374.2	8.23	46.456		
2,500.0	2,461.7	2,470.9	2,470.1	7.8	4.4	-179.25	22.6	-48.8	407.1	398.5	8.58	47.447		
2,600.0	2,558.1	2,567.8	2,567.0	8.3	4.6	-179.01	24.0	-46.4	431.7	422.8	8.93	48.360		
2,700.0	2,654.6	2,664.7	2,663.9	8.8	4.7	-178.80	25.3	-44.0	456.3	447.0	9.27	49.204		
2,800.0	2,751.1	2,761.6	2,760.7	9.3	4.9	-178.60	26.7	-41.7	480.9	471.3	9.62	49.987		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4D-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	1.0	1.0	0.0	0.0	-88.44	2.5	-90.1	90.1					
100.0	100.0	101.0	101.0	0.1	0.2	-88.44	2.5	-90.1	90.1	89.8	0.30	301.954		
200.0	200.0	201.0	201.0	0.3	0.3	-88.44	2.5	-90.1	90.1	89.5	0.65	139.175		
300.0	300.0	301.0	301.0	0.5	0.5	-88.44	2.5	-90.1	90.1	89.1	1.00	90.427		
400.0	400.0	401.0	401.0	0.7	0.7	-88.44	2.5	-90.1	90.1	88.8	1.35	66.970 CC, ES		
500.0	500.0	501.0	501.0	0.8	0.8	162.38	2.5	-90.1	90.9	89.3	1.69	53.669		
600.0	600.0	602.6	602.6	1.0	1.0	163.02	2.7	-89.2	92.6	90.5	2.05	45.243		
700.0	699.9	704.1	704.1	1.2	1.2	164.26	3.3	-86.6	94.2	91.8	2.40	39.281		
800.0	799.7	805.7	805.5	1.4	1.4	166.06	4.4	-82.2	95.9	93.1	2.75	34.857		
900.0	899.4	907.2	906.8	1.6	1.6	168.39	5.9	-76.0	97.7	94.6	3.10	31.473		
1,000.0	998.9	1,007.4	1,006.8	1.8	1.8	171.05	7.6	-68.8	100.2	96.8	3.46	29.000		
1,100.0	1,098.3	1,107.2	1,106.3	2.1	2.0	173.68	9.4	-61.5	104.7	100.9	3.81	27.479		
1,200.0	1,197.4	1,206.9	1,205.7	2.3	2.2	176.15	11.1	-54.2	111.1	106.9	4.16	26.675		
1,300.0	1,296.3	1,306.4	1,305.0	2.6	2.4	178.38	12.9	-46.9	119.4	114.8	4.52	26.416 SF		
1,400.0	1,394.9	1,405.8	1,404.1	2.9	2.6	-179.69	14.7	-39.6	129.6	124.7	4.88	26.575		
1,500.0	1,493.3	1,505.0	1,503.0	3.3	2.8	-178.06	16.4	-32.4	141.6	136.4	5.23	27.062		
1,600.0	1,591.2	1,604.0	1,601.7	3.7	3.0	-176.72	18.2	-25.2	155.5	149.9	5.59	27.807		
1,700.0	1,688.9	1,702.7	1,700.1	4.1	3.2	-175.64	19.9	-17.9	171.2	165.2	5.95	28.761		
1,800.0	1,786.1	1,801.1	1,798.3	4.5	3.5	-174.78	21.7	-10.8	188.6	182.3	6.31	29.886		
1,900.0	1,882.9	1,899.3	1,896.1	4.9	3.7	-174.11	23.4	-3.6	207.8	201.1	6.67	31.152		
2,000.0	1,979.4	1,997.1	1,993.7	5.4	3.9	-173.60	25.1	3.6	228.2	221.2	7.04	32.425		
2,100.0	2,075.9	2,095.0	2,091.3	5.9	4.1	-173.19	26.9	10.7	248.8	241.4	7.41	33.557		
2,200.0	2,172.3	2,192.8	2,188.9	6.4	4.3	-172.83	28.6	17.9	269.4	261.6	7.79	34.576		
2,300.0	2,268.8	2,290.7	2,286.4	6.9	4.5	-172.53	30.3	25.0	290.0	281.8	8.17	35.498		
2,400.0	2,365.2	2,388.5	2,384.0	7.3	4.7	-172.27	32.0	32.2	310.5	302.0	8.55	36.334		
2,500.0	2,461.7	2,486.4	2,481.6	7.8	4.9	-172.04	33.8	39.3	331.1	322.2	8.93	37.097		
2,600.0	2,558.1	2,584.2	2,579.1	8.3	5.1	-171.83	35.5	46.5	351.7	342.4	9.31	37.794		
2,700.0	2,654.6	2,682.1	2,676.7	8.8	5.4	-171.65	37.2	53.6	372.3	362.6	9.69	38.435		
2,800.0	2,751.1	2,779.9	2,774.3	9.3	5.6	-171.49	39.0	60.8	392.9	382.9	10.07	39.025		
2,900.0	2,847.5	2,877.8	2,871.9	9.8	5.8	-171.34	40.7	67.9	413.5	403.1	10.45	39.570		
3,000.0	2,944.0	2,975.6	2,969.4	10.3	6.0	-171.21	42.4	75.1	434.2	423.3	10.83	40.075		
3,100.0	3,040.4	3,073.5	3,067.0	10.8	6.2	-171.09	44.2	82.2	454.8	443.5	11.22	40.545		
3,200.0	3,136.9	3,171.3	3,164.6	11.3	6.4	-170.98	45.9	89.4	475.4	463.8	11.60	40.981		
3,300.0	3,233.3	3,269.2	3,262.1	11.8	6.6	-170.88	47.6	96.5	496.0	484.0	11.98	41.389		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4E-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	1.0	1.0	0.0	0.0	-92.76	-3.6	-75.1	75.2					
100.0	100.0	101.0	101.0	0.1	0.2	-92.76	-3.6	-75.1	75.2	74.9	0.30	251.982		
200.0	200.0	201.0	201.0	0.3	0.3	-92.76	-3.6	-75.1	75.2	74.6	0.65	116.143		
300.0	300.0	301.0	301.0	0.5	0.5	-92.76	-3.6	-75.1	75.2	74.2	1.00	75.462		
400.0	400.0	401.0	401.0	0.7	0.7	-92.76	-3.6	-75.1	75.2	73.9	1.35	55.887 CC, ES		
500.0	500.0	501.0	501.0	0.8	0.8	158.13	-3.6	-75.1	76.0	74.3	1.69	44.855		
600.0	600.0	601.0	601.0	1.0	1.0	158.84	-3.6	-75.1	78.4	76.4	2.04	38.387		
700.0	699.9	700.9	700.9	1.2	1.2	159.91	-3.6	-75.1	82.5	80.1	2.39	34.494		
800.0	799.7	800.7	800.7	1.4	1.4	161.26	-3.6	-75.1	88.3	85.5	2.74	32.203		
900.0	899.4	900.4	900.4	1.6	1.5	162.74	-3.6	-75.1	95.8	92.7	3.09	30.985		
1,000.0	998.9	1,001.7	1,001.7	1.8	1.7	164.41	-3.5	-74.2	104.1	100.6	3.44	30.247		
1,100.0	1,098.3	1,103.1	1,103.1	2.1	1.9	166.30	-3.0	-71.6	112.5	108.7	3.79	29.668		
1,200.0	1,197.4	1,204.7	1,204.5	2.3	2.1	168.34	-2.2	-67.1	121.0	116.9	4.14	29.226		
1,300.0	1,296.3	1,306.3	1,306.0	2.6	2.3	170.51	-1.2	-60.9	129.7	125.2	4.49	28.901		
1,400.0	1,394.9	1,408.0	1,407.3	2.9	2.5	172.78	0.2	-52.9	138.6	133.8	4.83	28.675		
1,500.0	1,493.3	1,509.7	1,508.6	3.3	2.7	175.12	1.9	-43.2	147.9	142.7	5.18	28.530		
1,600.0	1,591.2	1,610.6	1,608.8	3.7	2.9	177.47	3.9	-31.9	157.6	152.0	5.53	28.477 SF		
1,700.0	1,688.9	1,709.8	1,707.3	4.1	3.1	179.57	5.8	-20.4	168.9	163.1	5.89	28.702		
1,800.0	1,786.1	1,808.7	1,805.5	4.5	3.4	-178.60	7.8	-9.0	182.2	176.0	6.24	29.187		
1,900.0	1,882.9	1,907.4	1,903.6	4.9	3.6	-177.05	9.8	2.4	197.4	190.8	6.61	29.881		
2,000.0	1,979.4	2,005.9	2,001.4	5.4	3.9	-175.74	11.8	13.8	214.0	207.0	6.99	30.634		
2,100.0	2,075.9	2,104.4	2,099.2	5.9	4.1	-174.63	13.7	25.2	230.8	223.4	7.38	31.285		
2,200.0	2,172.3	2,202.9	2,197.0	6.4	4.4	-173.67	15.7	36.5	247.6	239.9	7.77	31.856		
2,300.0	2,268.8	2,301.4	2,294.8	6.9	4.6	-172.83	17.7	47.9	264.5	256.3	8.18	32.357		
2,400.0	2,365.2	2,399.9	2,392.7	7.3	4.9	-172.09	19.6	59.3	281.5	272.9	8.58	32.798		
2,500.0	2,461.7	2,498.4	2,490.5	7.8	5.1	-171.44	21.6	70.7	298.5	289.5	8.99	33.187		
2,600.0	2,558.1	2,596.9	2,588.3	8.3	5.4	-170.85	23.6	82.1	315.5	306.1	9.41	33.531		
2,700.0	2,654.6	2,695.4	2,686.1	8.8	5.6	-170.33	25.5	93.4	332.5	322.7	9.83	33.837		
2,800.0	2,751.1	2,793.9	2,783.9	9.3	5.9	-169.86	27.5	104.8	349.6	339.3	10.25	34.110		
2,900.0	2,847.5	2,892.4	2,881.7	9.8	6.1	-169.43	29.5	116.2	366.7	356.0	10.67	34.353		
3,000.0	2,944.0	2,990.9	2,979.5	10.3	6.4	-169.04	31.4	127.6	383.8	372.7	11.10	34.571		
3,100.0	3,040.4	3,089.3	3,077.3	10.8	6.6	-168.68	33.4	138.9	400.9	389.4	11.53	34.768		
3,200.0	3,136.9	3,187.8	3,175.2	11.3	6.9	-168.35	35.4	150.3	418.1	406.1	11.96	34.945		
3,300.0	3,233.3	3,286.3	3,273.0	11.8	7.2	-168.05	37.3	161.7	435.2	422.8	12.40	35.105		
3,400.0	3,329.8	3,384.8	3,370.8	12.3	7.4	-167.77	39.3	173.1	452.4	439.5	12.83	35.250		
3,500.0	3,426.3	3,483.3	3,468.6	12.8	7.7	-167.51	41.3	184.4	469.5	456.3	13.27	35.382		
3,600.0	3,522.7	3,581.8	3,566.4	13.3	7.9	-167.27	43.2	195.8	486.7	473.0	13.71	35.503		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4F-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	1.0	1.0	0.0	0.0	-88.08	2.4	-70.1	70.1					
100.0	100.0	101.0	101.0	0.1	0.2	-88.08	2.4	-70.1	70.1	69.8	0.30	234.962		
200.0	200.0	201.0	201.0	0.3	0.3	-88.08	2.4	-70.1	70.1	69.5	0.65	108.298		
300.0	300.0	301.0	301.0	0.5	0.5	-88.08	2.4	-70.1	70.1	69.1	1.00	70.365		
400.0	400.0	401.0	401.0	0.7	0.7	-88.08	2.4	-70.1	70.1	68.8	1.35	52.112 CC, ES		
500.0	500.0	501.0	501.0	0.8	0.8	162.78	2.4	-70.1	71.0	69.3	1.69	41.872		
600.0	600.0	602.9	602.8	1.0	1.0	164.39	3.5	-68.7	72.1	70.1	2.05	35.231		
700.0	699.9	704.5	704.4	1.2	1.2	168.30	7.0	-64.5	72.6	70.2	2.41	30.181		
800.0	799.7	805.9	805.3	1.4	1.4	174.52	12.8	-57.6	73.0	70.2	2.78	26.252		
900.0	899.4	906.7	905.3	1.6	1.7	-177.09	20.9	-48.0	74.3	71.1	3.19	23.275		
1,000.0	998.9	1,007.2	1,004.9	1.8	1.9	-168.51	29.2	-36.6	77.3	73.6	3.63	21.293		
1,100.0	1,098.3	1,108.0	1,104.6	2.1	2.2	-161.26	36.2	-23.9	81.8	77.7	4.09	19.969		
1,200.0	1,197.4	1,209.0	1,204.4	2.3	2.5	-155.34	42.0	-9.9	87.2	82.6	4.59	19.013		
1,300.0	1,296.3	1,310.1	1,304.3	2.6	2.8	-150.62	46.5	5.3	93.2	88.1	5.11	18.246		
1,400.0	1,394.9	1,411.4	1,404.2	2.9	3.1	-146.91	49.8	21.8	99.4	93.8	5.66	17.569		
1,500.0	1,493.3	1,511.5	1,502.8	3.3	3.5	-144.13	52.1	39.0	106.2	100.0	6.24	17.033		
1,600.0	1,591.2	1,611.1	1,600.8	3.7	3.8	-142.21	54.4	56.1	114.5	107.7	6.83	16.768		
1,700.0	1,688.9	1,710.6	1,698.8	4.1	4.1	-141.05	56.7	73.2	124.3	116.9	7.44	16.710 SF		
1,800.0	1,786.1	1,809.9	1,796.7	4.5	4.4	-140.52	58.9	90.2	135.4	127.4	8.05	16.815		
1,900.0	1,882.9	1,909.2	1,894.4	4.9	4.8	-140.48	61.2	107.3	147.9	139.3	8.67	17.055		
2,000.0	1,979.4	2,008.2	1,992.0	5.4	5.1	-140.79	63.5	124.3	161.4	152.1	9.29	17.369		
2,100.0	2,075.9	2,107.3	2,089.6	5.9	5.4	-141.09	65.8	141.3	175.0	165.0	9.92	17.642		
2,200.0	2,172.3	2,206.4	2,187.1	6.4	5.8	-141.35	68.0	158.3	188.5	178.0	10.54	17.879		
2,300.0	2,268.8	2,305.5	2,284.7	6.9	6.1	-141.57	70.3	175.4	202.1	190.9	11.17	18.087		
2,400.0	2,365.2	2,404.5	2,382.3	7.3	6.5	-141.76	72.6	192.4	215.6	203.8	11.80	18.271		
2,500.0	2,461.7	2,503.6	2,479.9	7.8	6.8	-141.93	74.8	209.4	229.2	216.8	12.43	18.434		
2,600.0	2,558.1	2,602.7	2,577.4	8.3	7.2	-142.09	77.1	226.4	242.8	229.7	13.07	18.580		
2,700.0	2,654.6	2,701.8	2,675.0	8.8	7.5	-142.22	79.4	243.5	256.3	242.6	13.70	18.711		
2,800.0	2,751.1	2,800.8	2,772.6	9.3	7.8	-142.35	81.7	260.5	269.9	255.6	14.33	18.829		
2,900.0	2,847.5	2,899.9	2,870.2	9.8	8.2	-142.46	83.9	277.5	283.5	268.5	14.97	18.937		
3,000.0	2,944.0	2,999.0	2,967.7	10.3	8.5	-142.56	86.2	294.5	297.1	281.4	15.61	19.036		
3,100.0	3,040.4	3,098.0	3,065.3	10.8	8.9	-142.65	88.5	311.6	310.6	294.4	16.24	19.126		
3,200.0	3,136.9	3,197.1	3,162.9	11.3	9.2	-142.73	90.7	328.6	324.2	307.3	16.88	19.208		
3,300.0	3,233.3	3,296.2	3,260.5	11.8	9.6	-142.81	93.0	345.6	337.8	320.3	17.51	19.285		
3,400.0	3,329.8	3,395.3	3,358.0	12.3	9.9	-142.88	95.3	362.6	351.3	333.2	18.15	19.355		
3,500.0	3,426.3	3,494.3	3,455.6	12.8	10.3	-142.95	97.6	379.6	364.9	346.1	18.79	19.421		
3,600.0	3,522.7	3,593.4	3,553.2	13.3	10.6	-143.01	99.8	396.7	378.5	359.1	19.43	19.482		
3,700.0	3,619.2	3,692.5	3,650.7	13.8	11.0	-143.07	102.1	413.7	392.1	372.0	20.07	19.539		
3,800.0	3,715.6	3,791.6	3,748.3	14.3	11.3	-143.12	104.4	430.7	405.6	384.9	20.70	19.592		
3,900.0	3,812.1	3,890.6	3,845.9	14.8	11.7	-143.17	106.6	447.7	419.2	397.9	21.34	19.642		
4,000.0	3,908.6	3,989.7	3,943.5	15.3	12.0	-143.21	108.9	464.8	432.8	410.8	21.98	19.688		
4,100.0	4,005.0	4,088.8	4,041.0	15.8	12.4	-143.26	111.2	481.8	446.4	423.7	22.62	19.732		
4,200.0	4,101.5	4,187.9	4,138.6	16.3	12.7	-143.30	113.5	498.8	459.9	436.7	23.26	19.774		
4,300.0	4,197.9	4,286.9	4,236.2	16.8	13.0	-143.34	115.7	515.8	473.5	449.6	23.90	19.813		
4,400.0	4,294.4	4,386.0	4,333.8	17.3	13.4	-143.38	118.0	532.8	487.1	462.6	24.54	19.850		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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	1.0	1.0	0.0	0.0	-93.23	-3.7	-65.1	65.2					
100.0	100.0	101.0	101.0	0.1	0.2	-93.23	-3.7	-65.1	65.2	64.9	0.30	218.531		
200.0	200.0	201.0	201.0	0.3	0.3	-93.23	-3.7	-65.1	65.2	64.6	0.65	100.725		
300.0	300.0	301.0	301.0	0.5	0.5	-93.23	-3.7	-65.1	65.2	64.2	1.00	65.445		
400.0	400.0	401.0	401.0	0.7	0.7	-93.23	-3.7	-65.1	65.2	63.9	1.35	48.468 CC, ES		
500.0	500.0	501.0	501.0	0.8	0.8	157.71	-3.7	-65.1	66.0	64.3	1.69	38.962		
600.0	600.0	601.0	601.0	1.0	1.0	158.53	-3.7	-65.1	68.5	66.4	2.04	33.498		
700.0	699.9	700.9	700.9	1.2	1.2	159.77	-3.7	-65.1	72.5	70.1	2.39	30.315		
800.0	799.7	802.1	802.1	1.4	1.4	161.32	-3.7	-64.6	77.8	75.1	2.74	28.362		
900.0	899.4	904.9	904.8	1.6	1.6	163.06	-3.8	-60.9	81.7	78.6	3.10	26.368		
1,000.0	998.9	1,007.8	1,007.4	1.8	1.8	165.06	-4.1	-53.5	83.7	80.3	3.45	24.253		
1,100.0	1,098.3	1,110.7	1,109.8	2.1	2.0	167.43	-4.5	-42.5	84.0	80.2	3.81	22.067		
1,200.0	1,197.4	1,212.7	1,210.7	2.3	2.2	170.19	-5.1	-28.2	82.9	78.7	4.16	19.936		
1,300.0	1,296.3	1,314.0	1,310.8	2.6	2.5	173.07	-6.2	-12.2	81.8	77.3	4.51	18.147		
1,400.0	1,394.9	1,415.4	1,410.6	2.9	2.8	176.06	-7.8	5.4	80.9	76.0	4.86	16.642		
1,500.0	1,493.3	1,516.7	1,510.0	3.3	3.2	179.13	-10.0	24.8	80.2	74.9	5.22	15.353		
1,600.0	1,591.2	1,618.0	1,609.1	3.7	3.5	-177.72	-12.7	45.8	79.7	74.1	5.60	14.226		
1,700.0	1,688.9	1,719.3	1,707.8	4.1	3.9	-174.51	-16.0	68.5	79.4	73.4	6.01	13.218		
1,738.0	1,725.8	1,757.8	1,745.1	4.2	4.1	-173.27	-17.4	77.5	79.3	73.2	6.17	12.858		
1,800.0	1,786.1	1,819.8	1,805.3	4.5	4.3	-171.32	-19.7	92.3	79.7	73.2	6.45	12.354		
1,900.0	1,882.9	1,919.6	1,902.2	4.9	4.8	-168.41	-23.4	116.0	81.8	74.9	6.93	11.800		
2,000.0	1,979.4	2,019.5	1,999.1	5.4	5.2	-165.88	-27.0	139.8	85.4	77.9	7.46	11.446		
2,100.0	2,075.9	2,119.4	2,096.1	5.9	5.6	-163.57	-30.7	163.6	89.2	81.2	8.03	11.108		
2,200.0	2,172.3	2,219.2	2,193.0	6.4	6.1	-161.45	-34.4	187.4	93.1	84.5	8.64	10.785		
2,300.0	2,268.8	2,319.1	2,289.9	6.9	6.5	-159.50	-38.1	211.2	97.2	87.9	9.28	10.478		
2,400.0	2,365.2	2,419.0	2,386.8	7.3	7.0	-157.72	-41.8	234.9	101.4	91.4	9.95	10.191		
2,500.0	2,461.7	2,518.8	2,483.8	7.8	7.4	-156.07	-45.5	258.7	105.6	95.0	10.64	9.925		
2,600.0	2,558.1	2,618.7	2,580.7	8.3	7.9	-154.56	-49.2	282.5	110.0	98.6	11.36	9.678		
2,700.0	2,654.6	2,718.6	2,677.6	8.8	8.3	-153.16	-52.9	306.3	114.4	102.3	12.10	9.451		
2,800.0	2,751.1	2,818.4	2,774.5	9.3	8.8	-151.86	-56.6	330.1	118.9	106.0	12.86	9.243		
2,900.0	2,847.5	2,918.3	2,871.4	9.8	9.3	-150.66	-60.3	353.8	123.4	109.8	13.63	9.052		
3,000.0	2,944.0	3,018.2	2,968.4	10.3	9.7	-149.55	-64.0	377.6	128.0	113.6	14.42	8.877		
3,100.0	3,040.4	3,118.0	3,065.3	10.8	10.2	-148.51	-67.6	401.4	132.6	117.4	15.21	8.717		
3,200.0	3,136.9	3,217.9	3,162.2	11.3	10.6	-147.54	-71.3	425.2	137.3	121.3	16.02	8.570		
3,300.0	3,233.3	3,317.8	3,259.1	11.8	11.1	-146.64	-75.0	449.0	142.0	125.2	16.83	8.435		
3,400.0	3,329.8	3,417.6	3,356.1	12.3	11.5	-145.80	-78.7	472.7	146.7	129.1	17.65	8.311		
3,500.0	3,426.3	3,517.5	3,453.0	12.8	12.0	-145.00	-82.4	496.5	151.5	133.0	18.48	8.197		
3,600.0	3,522.7	3,617.4	3,549.9	13.3	12.5	-144.26	-86.1	520.3	156.3	137.0	19.31	8.092		
3,700.0	3,619.2	3,717.2	3,646.8	13.8	12.9	-143.56	-89.8	544.1	161.1	141.0	20.15	7.995		
3,800.0	3,715.6	3,817.1	3,743.7	14.3	13.4	-142.90	-93.5	567.9	165.9	145.0	20.99	7.905		
3,900.0	3,812.1	3,916.9	3,840.7	14.8	13.8	-142.28	-97.2	591.6	170.8	149.0	21.84	7.822		
4,000.0	3,908.6	4,016.8	3,937.6	15.3	14.3	-141.69	-100.9	615.4	175.7	153.0	22.69	7.745		
4,100.0	4,005.0	4,116.7	4,034.5	15.8	14.8	-141.14	-104.6	639.2	180.6	157.1	23.54	7.673		
4,200.0	4,101.5	4,216.5	4,131.4	16.3	15.2	-140.61	-108.2	663.0	185.5	161.1	24.39	7.606		
4,300.0	4,197.9	4,316.4	4,228.4	16.8	15.7	-140.11	-111.9	686.8	190.4	165.2	25.25	7.543		
4,400.0	4,294.4	4,416.3	4,325.3	17.3	16.2	-139.64	-115.6	710.5	195.4	169.3	26.10	7.485		
4,500.0	4,390.8	4,516.1	4,422.2	17.8	16.6	-139.19	-119.3	734.3	200.3	173.4	26.96	7.430		
4,600.0	4,487.3	4,616.0	4,519.1	18.3	17.1	-138.76	-123.0	758.1	205.3	177.5	27.82	7.379		
4,700.0	4,583.8	4,715.9	4,616.0	18.8	17.5	-138.35	-126.7	781.9	210.3	181.6	28.69	7.330		
4,800.0	4,680.2	4,815.7	4,713.0	19.3	18.0	-137.96	-130.4	805.7	215.3	185.7	29.55	7.285		
4,900.0	4,776.7	4,915.6	4,809.9	19.8	18.5	-137.59	-134.1	829.4	220.3	189.8	30.41	7.242		
5,000.0	4,873.1	5,015.5	4,906.8	20.3	18.9	-137.24	-137.8	853.2	225.3	194.0	31.28	7.202		

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 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4G-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
5,100.0	4,969.6	5,115.3	5,003.7	20.8	19.4	-136.90	-141.5	877.0	230.3	198.1	32.15	7.164		
5,200.0	5,066.0	5,215.2	5,100.7	21.3	19.9	-136.57	-145.1	900.8	235.3	202.3	33.01	7.128		
5,300.0	5,162.5	5,315.1	5,197.6	21.9	20.3	-136.26	-148.8	924.5	240.3	206.5	33.88	7.094		
5,400.0	5,259.0	5,414.9	5,294.5	22.4	20.8	-135.96	-152.5	948.3	245.4	210.6	34.75	7.061		
5,500.0	5,355.4	5,514.8	5,391.4	22.9	21.3	-135.68	-156.2	972.1	250.4	214.8	35.62	7.030		
5,600.0	5,451.9	5,614.7	5,488.3	23.4	21.7	-135.40	-159.9	995.9	255.5	219.0	36.49	7.001		
5,700.0	5,548.3	5,714.5	5,585.3	23.9	22.2	-135.14	-163.6	1,019.7	260.5	223.2	37.36	6.973		
5,800.0	5,644.8	5,814.4	5,682.2	24.4	22.6	-134.88	-167.3	1,043.4	265.6	227.3	38.23	6.947		
5,900.0	5,741.2	5,914.3	5,779.1	24.9	23.1	-134.64	-171.0	1,067.2	270.6	231.5	39.10	6.922		
6,000.0	5,837.7	6,014.1	5,876.0	25.4	23.6	-134.40	-174.7	1,091.0	275.7	235.7	39.97	6.898		
6,100.0	5,934.2	6,114.0	5,973.0	25.9	24.0	-134.17	-178.4	1,114.8	280.8	239.9	40.84	6.875		
6,200.0	6,030.6	6,213.8	6,069.9	26.4	24.5	-133.95	-182.1	1,138.6	285.9	244.1	41.72	6.853		
6,300.0	6,127.1	6,313.7	6,166.8	26.9	25.0	-133.74	-185.7	1,162.3	290.9	248.4	42.59	6.832		
6,400.0	6,223.5	6,413.6	6,263.7	27.4	25.4	-133.54	-189.4	1,186.1	296.0	252.6	43.46	6.811		
6,500.0	6,320.0	6,513.4	6,360.7	27.9	25.9	-133.34	-193.1	1,209.9	301.1	256.8	44.33	6.792		
6,600.0	6,416.4	6,613.3	6,457.6	28.4	26.4	-133.15	-196.8	1,233.7	306.2	261.0	45.21	6.774		
6,700.0	6,512.9	6,713.2	6,554.5	28.9	26.8	-132.96	-200.5	1,257.5	311.3	265.2	46.08	6.756		
6,800.0	6,609.4	6,813.0	6,651.4	29.4	27.3	-132.78	-204.2	1,281.2	316.4	269.5	46.95	6.739		
6,900.0	6,705.8	6,912.9	6,748.3	29.9	27.8	-132.61	-207.9	1,305.0	321.5	273.7	47.83	6.722		
7,000.0	6,802.3	7,012.8	6,845.3	30.4	28.2	-132.44	-211.6	1,328.8	326.6	277.9	48.70	6.707		
7,100.0	6,898.7	7,168.6	6,995.6	30.9	29.0	-132.88	-227.2	1,365.7	327.4	278.0	49.41	6.626		
7,200.0	6,995.2	7,359.1	7,165.9	31.4	30.0	-138.08	-299.1	1,407.5	300.6	253.4	47.21	6.368		
7,300.0	7,091.7	7,502.7	7,274.0	31.9	30.9	-149.15	-389.2	1,434.0	252.0	211.6	40.45	6.231		
7,400.0	7,188.4	7,595.8	7,331.1	32.4	31.5	-138.31	-461.4	1,448.0	192.6	164.7	27.88	6.907		
7,500.0	7,284.2	7,642.9	7,355.4	32.7	31.8	-130.77	-501.3	1,454.0	143.3	113.7	29.60	4.840		
7,546.4	7,327.5	7,653.9	7,360.7	32.8	31.9	-127.66	-510.9	1,455.3	136.0	103.9	32.12	4.234 SF		
7,600.0	7,376.1	7,660.4	7,363.7	32.9	31.9	-122.52	-516.6	1,456.0	145.9	113.0	32.95	4.429		
7,700.0	7,461.3	7,659.5	7,363.2	33.1	31.9	-106.77	-515.7	1,455.9	204.2	174.7	29.58	6.905		
7,800.0	7,537.3	7,650.0	7,358.8	33.2	31.8	-85.41	-507.4	1,454.8	284.9	258.3	26.60	10.710		
7,900.0	7,601.7	7,626.1	7,347.1	33.2	31.7	-62.64	-486.8	1,451.9	370.6	344.0	26.66	13.903		
8,000.0	7,652.6	7,600.0	7,333.4	33.2	31.5	-47.38	-464.8	1,448.6	455.0	430.1	24.86	18.300		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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							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	1.0	1.0	0.0	0.0	-87.81	2.3	-60.1	60.1					
100.0	100.0	101.0	101.0	0.1	0.2	-87.81	2.3	-60.1	60.1	59.8	0.30	201.471		
200.0	200.0	201.0	201.0	0.3	0.3	-87.81	2.3	-60.1	60.1	59.5	0.65	92.861		
300.0	300.0	301.0	301.0	0.5	0.5	-87.81	2.3	-60.1	60.1	59.1	1.00	60.335		
400.0	400.0	401.0	401.0	0.7	0.7	-87.81	2.3	-60.1	60.1	58.8	1.35	44.684 CC, ES		
500.0	500.0	501.0	501.0	0.8	0.8	163.08	2.3	-60.1	61.0	59.3	1.69	35.975		
600.0	600.0	601.0	601.0	1.0	1.0	163.76	2.3	-60.1	63.5	61.4	2.04	31.063		
700.0	699.9	700.9	700.9	1.2	1.2	164.78	2.3	-60.1	67.7	65.3	2.39	28.292		
800.0	799.7	802.0	802.0	1.4	1.4	166.13	2.3	-59.2	72.7	70.0	2.74	26.509		
900.0	899.4	903.1	903.1	1.6	1.6	167.82	2.5	-56.5	77.7	74.6	3.09	25.132		
1,000.0	998.9	1,004.3	1,004.2	1.8	1.7	169.77	2.7	-52.0	82.8	79.3	3.44	24.052		
1,100.0	1,098.3	1,105.6	1,105.3	2.1	1.9	171.94	3.0	-45.8	87.9	84.2	3.79	23.200		
1,200.0	1,197.4	1,207.0	1,206.3	2.3	2.1	174.29	3.4	-37.7	93.3	89.1	4.14	22.527		
1,300.0	1,296.3	1,308.4	1,307.2	2.6	2.4	176.77	3.9	-27.9	98.8	94.3	4.49	21.996		
1,400.0	1,394.9	1,409.8	1,408.0	2.9	2.6	179.37	4.5	-16.2	104.5	99.7	4.85	21.573		
1,500.0	1,493.3	1,511.2	1,508.5	3.3	2.8	-177.96	5.1	-2.8	110.6	105.4	5.21	21.229		
1,600.0	1,591.2	1,612.7	1,608.8	3.7	3.1	-175.25	5.9	12.4	117.1	111.5	5.59	20.934		
1,700.0	1,688.9	1,714.2	1,708.9	4.1	3.4	-172.52	6.7	29.3	123.9	117.9	6.00	20.660		
1,800.0	1,786.1	1,815.7	1,808.6	4.5	3.8	-169.80	7.7	48.1	131.3	124.8	6.44	20.381		
1,900.0	1,882.9	1,917.2	1,908.0	4.9	4.1	-167.11	8.7	68.6	139.1	132.1	6.93	20.079		
2,000.0	1,979.4	2,018.7	2,007.1	5.4	4.5	-164.43	9.8	90.8	147.0	139.5	7.48	19.656		
2,100.0	2,075.9	2,120.3	2,105.8	5.9	5.0	-161.62	11.0	114.8	153.9	145.8	8.11	18.984		
2,200.0	2,172.3	2,221.9	2,204.0	6.4	5.4	-158.63	12.3	140.6	159.9	151.1	8.83	18.113		
2,300.0	2,268.8	2,323.4	2,301.8	6.9	5.9	-155.41	13.7	168.1	165.0	155.3	9.65	17.100		
2,400.0	2,365.2	2,423.4	2,397.7	7.3	6.4	-152.10	15.1	196.5	169.7	159.1	10.56	16.069		
2,500.0	2,461.7	2,522.8	2,493.0	7.8	6.9	-148.98	16.5	224.7	174.9	163.4	11.53	15.166		
2,600.0	2,558.1	2,622.3	2,588.3	8.3	7.4	-146.04	17.9	253.0	180.6	168.0	12.55	14.387		
2,700.0	2,654.6	2,721.7	2,683.6	8.8	7.9	-143.28	19.3	281.3	186.7	173.1	13.61	13.719		
2,800.0	2,751.1	2,821.1	2,778.9	9.3	8.4	-140.71	20.7	309.6	193.3	178.6	14.70	13.149		
2,900.0	2,847.5	2,920.5	2,874.2	9.8	9.0	-138.31	22.1	337.8	200.2	184.4	15.80	12.665		
3,000.0	2,944.0	3,019.9	2,969.5	10.3	9.5	-136.07	23.5	366.1	207.4	190.5	16.93	12.253		
3,100.0	3,040.4	3,119.4	3,064.8	10.8	10.0	-133.98	24.9	394.4	214.9	196.9	18.06	11.903		
3,200.0	3,136.9	3,218.8	3,160.1	11.3	10.5	-132.04	26.3	422.7	222.7	203.5	19.19	11.605		
3,300.0	3,233.3	3,318.2	3,255.4	11.8	11.1	-130.23	27.7	450.9	230.8	210.4	20.33	11.350		
3,400.0	3,329.8	3,417.6	3,350.7	12.3	11.6	-128.54	29.1	479.2	239.0	217.5	21.47	11.133		
3,500.0	3,426.3	3,517.0	3,446.0	12.8	12.1	-126.96	30.5	507.5	247.4	224.8	22.60	10.946		
3,600.0	3,522.7	3,616.5	3,541.3	13.3	12.7	-125.49	31.9	535.8	256.1	232.3	23.74	10.786		
3,700.0	3,619.2	3,715.9	3,636.6	13.8	13.2	-124.12	33.4	564.0	264.8	240.0	24.87	10.649		
3,800.0	3,715.6	3,815.3	3,731.9	14.3	13.7	-122.83	34.8	592.3	273.7	247.7	25.99	10.531		
3,900.0	3,812.1	3,914.7	3,827.2	14.8	14.3	-121.63	36.2	620.6	282.8	255.7	27.12	10.429		
4,000.0	3,908.6	4,014.1	3,922.5	15.3	14.8	-120.50	37.6	648.9	291.9	263.7	28.23	10.340		
4,100.0	4,005.0	4,113.6	4,017.8	15.8	15.3	-119.44	39.0	677.1	301.2	271.9	29.35	10.264		
4,200.0	4,101.5	4,213.0	4,113.1	16.3	15.9	-118.44	40.4	705.4	310.6	280.1	30.45	10.198		
4,300.0	4,197.9	4,312.4	4,208.4	16.8	16.4	-117.50	41.8	733.7	320.0	288.5	31.56	10.141		
4,400.0	4,294.4	4,411.8	4,303.7	17.3	16.9	-116.62	43.2	762.0	329.5	296.9	32.66	10.091		
4,500.0	4,390.8	4,511.2	4,399.0	17.8	17.5	-115.78	44.6	790.2	339.1	305.4	33.75	10.048		
4,600.0	4,487.3	4,610.7	4,494.4	18.3	18.0	-115.00	46.0	818.5	348.8	314.0	34.84	10.011		
4,700.0	4,583.8	4,710.1	4,589.7	18.8	18.5	-114.25	47.4	846.8	358.6	322.6	35.93	9.979		
4,800.0	4,680.2	4,809.5	4,685.0	19.3	19.1	-113.54	48.8	875.1	368.3	331.3	37.01	9.952		
4,900.0	4,776.7	4,908.9	4,780.3	19.8	19.6	-112.87	50.2	903.3	378.2	340.1	38.09	9.928		
5,000.0	4,873.1	5,008.3	4,875.6	20.3	20.2	-112.24	51.6	931.6	388.1	348.9	39.17	9.907		
5,100.0	4,969.6	5,107.8	4,970.9	20.8	20.7	-111.63	53.1	959.9	398.0	357.8	40.24	9.890		

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 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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		
5,200.0	5,066.0	5,207.2	5,066.2	21.3	21.2	-111.06	54.5	988.2	408.0	366.7	41.32	9.875		
5,300.0	5,162.5	5,306.6	5,161.5	21.9	21.8	-110.51	55.9	1,016.4	418.0	375.6	42.38	9.863		
5,400.0	5,259.0	5,406.0	5,256.8	22.4	22.3	-109.99	57.3	1,044.7	428.1	384.6	43.45	9.852		
5,500.0	5,355.4	5,505.4	5,352.1	22.9	22.8	-109.49	58.7	1,073.0	438.1	393.6	44.51	9.843		
5,600.0	5,451.9	5,604.8	5,447.4	23.4	23.4	-109.01	60.1	1,101.3	448.3	402.7	45.57	9.836		
5,700.0	5,548.3	5,704.3	5,542.7	23.9	23.9	-108.56	61.5	1,129.5	458.4	411.8	46.63	9.831		
5,800.0	5,644.8	5,803.7	5,638.0	24.4	24.5	-108.12	62.9	1,157.8	468.6	420.9	47.69	9.826		
5,900.0	5,741.2	5,903.1	5,733.3	24.9	25.0	-107.71	64.3	1,186.1	478.8	430.0	48.74	9.823		
6,000.0	5,837.7	6,002.5	5,828.6	25.4	25.5	-107.31	65.7	1,214.4	489.0	439.2	49.80	9.821		
6,100.0	5,934.2	6,101.9	5,923.9	25.9	26.1	-106.93	67.1	1,242.6	499.3	448.4	50.85	9.819		
7,500.0	7,284.2	8,329.9	7,712.0	32.7	37.6	93.08	-521.8	1,778.5	472.1	429.5	42.54	11.099		
7,600.0	7,376.1	8,298.0	7,712.0	32.9	37.4	115.97	-489.9	1,778.2	379.8	334.5	45.33	8.378		
7,700.0	7,461.3	8,207.4	7,705.7	33.1	37.0	117.04	-399.6	1,775.6	292.6	254.0	38.58	7.583		
7,800.0	7,537.3	8,132.3	7,690.2	33.2	36.7	112.54	-326.4	1,770.3	209.8	178.0	31.80	6.596		
7,900.0	7,601.7	8,066.7	7,669.2	33.2	36.3	101.11	-264.6	1,763.6	137.8	110.4	27.39	5.031		
8,000.0	7,652.6	8,005.8	7,643.9	33.2	36.1	79.69	-209.9	1,755.6	96.5	67.6	28.93	3.336		
8,019.3	7,660.8	7,994.5	7,638.5	33.2	36.0	74.50	-200.0	1,753.9	95.2	65.7	29.56	3.221 SF		
8,100.0	7,688.5	7,950.0	7,615.8	33.2	35.8	52.98	-162.5	1,746.8	114.8	85.1	29.73	3.861		
8,200.0	7,708.2	7,891.5	7,581.8	33.2	35.5	30.31	-116.1	1,736.3	168.6	144.3	24.30	6.939		
8,300.0	7,712.0	7,836.9	7,546.1	33.3	35.3	18.27	-76.3	1,725.4	230.1	209.4	20.73	11.099		
8,400.0	7,712.0	7,789.6	7,512.3	33.4	35.1	12.89	-44.7	1,715.1	298.8	278.9	19.89	15.021		
8,500.0	7,712.0	7,750.0	7,482.3	33.6	34.9	9.26	-20.7	1,705.9	374.3	354.8	19.48	19.217		
8,600.0	7,712.0	7,716.8	7,455.8	34.0	34.7	6.72	-2.3	1,697.9	454.5	435.2	19.29	23.557		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4I-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	-94.79	-3.8	-45.1	45.3					
100.0	100.0	100.0	100.0	0.1	0.1	-94.79	-3.8	-45.1	45.3	45.0	0.30	152.595		
200.0	200.0	200.0	200.0	0.3	0.3	-94.79	-3.8	-45.1	45.3	44.6	0.65	70.111	CC, ES	
300.0	300.0	299.4	299.4	0.5	0.5	-95.48	-4.4	-45.7	45.9	44.9	0.99	46.192		
400.0	400.0	398.7	398.7	0.7	0.7	-97.45	-6.2	-47.6	48.0	46.6	1.35	35.614		
500.0	500.0	497.9	497.8	0.8	0.9	150.73	-9.3	-50.6	52.2	50.5	1.70	30.810		
600.0	600.0	596.8	596.5	1.0	1.1	148.59	-13.5	-54.8	59.5	57.5	2.05	29.039		
700.0	699.9	695.3	694.7	1.2	1.3	146.95	-18.9	-60.3	69.8	67.4	2.41	28.987	SF	
800.0	799.7	794.0	792.9	1.4	1.5	145.85	-25.4	-66.7	82.8	80.0	2.77	29.891		
900.0	899.4	892.9	891.4	1.6	1.7	145.56	-32.0	-73.3	97.4	94.3	3.14	31.040		
1,000.0	998.9	991.6	989.7	1.8	1.9	145.81	-38.6	-79.9	113.5	110.0	3.51	32.301		
1,100.0	1,098.3	1,090.0	1,087.7	2.1	2.2	146.41	-45.1	-86.5	131.0	127.1	3.89	33.635		
1,200.0	1,197.4	1,188.2	1,185.4	2.3	2.4	147.20	-51.7	-93.1	149.9	145.6	4.28	35.024		
1,300.0	1,296.3	1,286.0	1,282.8	2.6	2.6	148.11	-58.2	-99.6	170.3	165.7	4.67	36.458		
1,400.0	1,394.9	1,383.6	1,379.9	2.9	2.9	149.07	-64.7	-106.1	192.3	187.2	5.07	37.932		
1,500.0	1,493.3	1,480.7	1,476.6	3.3	3.1	150.04	-71.2	-112.6	215.7	210.2	5.47	39.442		
1,600.0	1,591.2	1,577.4	1,572.9	3.7	3.3	150.99	-77.7	-119.1	240.7	234.8	5.87	40.987		
1,700.0	1,688.9	1,673.7	1,668.8	4.1	3.6	151.93	-84.1	-125.6	267.2	261.0	6.28	42.563		
1,800.0	1,786.1	1,769.6	1,764.2	4.5	3.8	152.82	-90.5	-132.0	295.3	288.7	6.69	44.170		
1,900.0	1,882.9	1,864.9	1,859.1	4.9	4.0	153.68	-96.9	-138.3	325.0	317.9	7.10	45.806		
2,000.0	1,979.4	1,959.9	1,953.6	5.4	4.2	154.56	-103.2	-144.7	355.9	348.4	7.51	47.374		
2,100.0	2,075.9	2,054.8	2,048.2	5.9	4.5	155.34	-109.6	-151.0	386.9	379.0	7.93	48.773		
2,200.0	2,172.3	2,149.8	2,142.7	6.4	4.7	156.01	-115.9	-157.4	418.0	409.6	8.35	50.043		
2,300.0	2,268.8	2,244.7	2,237.2	6.9	4.9	156.58	-122.3	-163.7	449.1	440.3	8.77	51.200		
2,400.0	2,365.2	2,339.7	2,331.7	7.3	5.1	157.08	-128.6	-170.1	480.3	471.1	9.19	52.259		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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	-86.87	2.2	-40.1	40.1					
100.0	100.0	100.0	100.0	0.1	0.1	-86.87	2.2	-40.1	40.1	39.8	0.30	135.304		
200.0	200.0	200.0	200.0	0.3	0.3	-86.87	2.2	-40.1	40.1	39.5	0.65	62.167		
300.0	300.0	300.0	300.0	0.5	0.5	-86.87	2.2	-40.1	40.1	39.2	0.99	40.354 CC		
400.0	400.0	399.9	399.9	0.7	0.7	-88.10	1.3	-40.2	40.3	38.9	1.34	29.954 ES		
500.0	500.0	499.8	499.7	0.8	0.9	159.33	-1.2	-40.7	41.5	39.8	1.70	24.457		
600.0	600.0	599.5	599.3	1.0	1.0	155.05	-5.5	-41.4	44.9	42.9	2.06	21.843		
700.0	699.9	699.0	698.7	1.2	1.2	150.46	-11.5	-42.4	50.6	48.2	2.42	20.883 SF		
800.0	799.7	798.2	797.6	1.4	1.4	146.19	-19.1	-43.7	58.8	56.0	2.81	20.943		
900.0	899.4	897.5	896.4	1.6	1.7	142.85	-28.1	-45.3	69.1	65.9	3.20	21.615		
1,000.0	998.9	996.8	995.3	1.8	1.9	141.10	-37.1	-46.8	81.0	77.4	3.60	22.510		
1,100.0	1,098.3	1,095.9	1,094.0	2.1	2.1	140.45	-46.0	-48.3	94.3	90.3	4.01	23.510		
1,200.0	1,197.4	1,194.8	1,192.5	2.3	2.3	140.53	-55.0	-49.9	108.9	104.5	4.43	24.570		
1,300.0	1,296.3	1,293.5	1,290.8	2.6	2.6	141.08	-63.9	-51.4	124.8	120.0	4.86	25.673		
1,400.0	1,394.9	1,392.0	1,388.8	2.9	2.8	141.91	-72.8	-52.9	142.2	136.9	5.30	26.814		
1,500.0	1,493.3	1,490.2	1,486.6	3.3	3.0	142.92	-81.7	-54.4	160.9	155.1	5.75	27.991		
1,600.0	1,591.2	1,588.0	1,584.1	3.7	3.2	144.01	-90.6	-55.9	181.0	174.8	6.20	29.206		
1,700.0	1,688.9	1,685.6	1,681.2	4.1	3.5	145.15	-99.4	-57.5	202.6	196.0	6.65	30.459		
1,800.0	1,786.1	1,782.8	1,778.0	4.5	3.7	146.29	-108.2	-59.0	225.7	218.6	7.11	31.750		
1,900.0	1,882.9	1,879.6	1,874.4	4.9	3.9	147.41	-117.0	-60.5	250.3	242.8	7.57	33.078		
2,000.0	1,979.4	1,976.0	1,970.4	5.4	4.1	148.55	-125.7	-62.0	276.1	268.1	8.03	34.382		
2,100.0	2,075.9	2,072.5	2,066.5	5.9	4.4	149.53	-134.5	-63.4	302.1	293.6	8.50	35.553		
2,200.0	2,172.3	2,168.9	2,162.5	6.4	4.6	150.36	-143.2	-64.9	328.1	319.1	8.96	36.613		
2,300.0	2,268.8	2,265.4	2,258.6	6.9	4.8	151.07	-151.9	-66.4	354.2	344.7	9.42	37.578		
2,400.0	2,365.2	2,361.9	2,354.6	7.3	5.1	151.68	-160.7	-67.9	380.3	370.4	9.89	38.459		
2,500.0	2,461.7	2,458.3	2,450.7	7.8	5.3	152.22	-169.4	-69.4	406.4	396.1	10.35	39.266		
2,600.0	2,558.1	2,554.8	2,546.7	8.3	5.5	152.69	-178.1	-70.9	432.6	421.8	10.81	40.008		
2,700.0	2,654.6	2,651.2	2,642.8	8.8	5.7	153.10	-186.9	-72.4	458.8	447.5	11.27	40.692		
2,800.0	2,751.1	2,747.7	2,738.8	9.3	6.0	153.47	-195.6	-73.9	485.0	473.3	11.74	41.325		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4K-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-96.23	-3.8	-35.1	35.3					
100.0	100.0	100.0	100.0	0.1	0.1	-96.23	-3.8	-35.1	35.3	0.30	119.063			
200.0	200.0	200.0	200.0	0.3	0.3	-96.23	-3.8	-35.1	35.3	0.65	54.705			
300.0	300.0	300.0	300.0	0.5	0.5	-96.23	-3.8	-35.1	35.3	0.99	35.510			
400.0	400.0	400.0	400.0	0.7	0.7	-96.23	-3.8	-35.1	35.3	1.34	26.287 CC, ES			
500.0	500.0	500.2	500.2	0.8	0.8	153.71	-4.6	-34.7	35.8	1.69	21.136			
600.0	600.0	600.4	600.4	1.0	1.0	151.70	-6.9	-33.5	37.2	2.05	18.198			
700.0	699.9	700.6	700.4	1.2	1.2	148.69	-10.8	-31.5	39.8	2.41	16.513			
800.0	799.7	800.6	800.3	1.4	1.4	145.07	-16.3	-28.7	43.4	2.78	15.606			
900.0	899.4	900.6	900.0	1.6	1.6	141.25	-23.2	-25.0	48.3	3.18	15.210			
1,000.0	998.9	1,000.4	999.3	1.8	1.8	137.61	-31.7	-20.7	54.6	3.60	15.167 SF			
1,100.0	1,098.3	1,100.1	1,098.5	2.1	2.1	135.46	-40.4	-16.1	62.2	4.04	15.415			
1,200.0	1,197.4	1,199.7	1,197.6	2.3	2.3	134.78	-49.2	-11.5	71.1	4.49	15.853			
1,300.0	1,296.3	1,299.2	1,296.6	2.6	2.5	135.11	-58.0	-7.0	81.3	4.95	16.425			
1,400.0	1,394.9	1,398.5	1,395.5	2.9	2.8	136.11	-66.7	-2.4	92.7	5.42	17.108			
1,500.0	1,493.3	1,497.7	1,494.1	3.3	3.0	137.52	-75.5	2.1	105.3	5.89	17.891			
1,600.0	1,591.2	1,596.6	1,592.6	3.7	3.2	139.15	-84.2	6.6	119.4	6.36	18.768			
1,700.0	1,688.9	1,695.3	1,690.8	4.1	3.5	140.89	-92.9	11.2	134.9	6.83	19.735			
1,800.0	1,786.1	1,793.8	1,788.8	4.5	3.7	142.65	-101.6	15.7	151.8	7.30	20.788			
1,900.0	1,882.9	1,891.9	1,886.4	4.9	3.9	144.38	-110.2	20.2	170.3	7.77	21.922			
2,000.0	1,979.4	1,989.8	1,983.9	5.4	4.2	146.05	-118.8	24.7	189.9	8.23	23.083			
2,100.0	2,075.9	2,087.7	2,081.3	5.9	4.4	147.45	-127.5	29.1	209.8	8.69	24.142			
2,200.0	2,172.3	2,185.6	2,178.7	6.4	4.6	148.60	-136.1	33.6	229.8	9.15	25.107			
2,300.0	2,268.8	2,283.5	2,276.1	6.9	4.9	149.58	-144.7	38.1	249.8	9.61	25.988			
2,400.0	2,365.2	2,381.4	2,373.5	7.3	5.1	150.40	-153.4	42.6	269.9	10.07	26.796			
2,500.0	2,461.7	2,479.3	2,470.9	7.8	5.4	151.11	-162.0	47.1	290.0	10.53	27.538			
2,600.0	2,558.1	2,577.2	2,568.3	8.3	5.6	151.73	-170.6	51.6	310.2	10.99	28.223			
2,700.0	2,654.6	2,675.1	2,665.7	8.8	5.8	152.28	-179.2	56.0	330.4	11.45	28.855			
2,800.0	2,751.1	2,773.0	2,763.1	9.3	6.1	152.76	-187.9	60.5	350.7	11.91	29.440			
2,900.0	2,847.5	2,870.9	2,860.5	9.8	6.3	153.19	-196.5	65.0	370.9	12.37	29.984			
3,000.0	2,944.0	2,968.8	2,957.9	10.3	6.6	153.57	-205.1	69.5	391.2	12.83	30.491			
3,100.0	3,040.4	3,066.6	3,055.3	10.8	6.8	153.92	-213.7	74.0	411.5	13.29	30.963			
3,200.0	3,136.9	3,164.5	3,152.7	11.3	7.0	154.23	-222.4	78.5	431.8	13.75	31.406			
3,300.0	3,233.3	3,262.4	3,250.2	11.8	7.3	154.52	-231.0	82.9	452.1	14.21	31.820			
3,400.0	3,329.8	3,360.3	3,347.6	12.3	7.5	154.78	-239.6	87.4	472.4	14.67	32.209			
3,500.0	3,426.3	3,458.2	3,445.0	12.8	7.8	155.02	-248.3	91.9	492.8	15.13	32.575			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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	-85.94	2.1	-30.1	30.2					
100.0	100.0	100.0	100.0	0.1	0.1	-85.94	2.1	-30.1	30.2	29.9	0.30	101.655		
200.0	200.0	200.0	200.0	0.3	0.3	-85.94	2.1	-30.1	30.2	29.5	0.65	46.706		
300.0	300.0	300.0	300.0	0.5	0.5	-85.94	2.1	-30.1	30.2	29.2	0.99	30.318		
400.0	400.0	400.0	400.0	0.7	0.7	-85.94	2.1	-30.1	30.2	28.8	1.34	22.443 CC, ES		
500.0	500.0	500.0	500.0	0.8	0.8	165.14	2.1	-30.1	31.0	29.3	1.69	18.315		
600.0	600.0	600.7	600.7	1.0	1.0	163.91	0.7	-29.1	32.4	30.4	2.04	15.863		
700.0	699.9	701.3	701.2	1.2	1.2	158.86	-3.7	-26.0	33.5	31.1	2.40	13.928		
800.0	799.7	801.8	801.2	1.4	1.4	150.31	-10.9	-21.0	34.7	32.0	2.79	12.455		
900.0	899.4	902.1	900.8	1.6	1.7	139.76	-20.4	-14.0	37.0	33.8	3.22	11.510		
1,000.0	998.9	1,002.0	999.9	1.8	1.9	132.05	-29.8	-6.1	40.6	36.9	3.67	11.054		
1,100.0	1,098.3	1,101.8	1,099.0	2.1	2.2	127.44	-39.2	1.9	45.8	41.7	4.16	11.032 SF		
1,200.0	1,197.4	1,201.5	1,198.0	2.3	2.4	125.36	-48.5	9.8	52.3	47.6	4.65	11.233		
1,300.0	1,296.3	1,301.2	1,297.0	2.6	2.7	125.11	-57.9	17.8	59.8	54.6	5.17	11.565		
1,400.0	1,394.9	1,400.9	1,395.8	2.9	2.9	126.09	-67.2	25.7	68.2	62.6	5.69	11.995		
1,500.0	1,493.3	1,500.4	1,494.6	3.3	3.2	127.87	-76.6	33.6	77.8	71.6	6.22	12.518		
1,600.0	1,591.2	1,599.8	1,593.2	3.7	3.5	130.11	-85.9	41.6	88.5	81.8	6.74	13.137		
1,700.0	1,688.9	1,698.9	1,691.6	4.1	3.7	132.59	-95.2	49.5	100.6	93.3	7.26	13.854		
1,800.0	1,786.1	1,797.9	1,789.8	4.5	4.0	135.13	-104.5	57.3	114.0	106.2	7.77	14.672		
1,900.0	1,882.9	1,896.7	1,887.8	4.9	4.3	137.64	-113.8	65.2	128.8	120.5	8.26	15.589		
2,000.0	1,979.4	1,995.2	1,985.6	5.4	4.5	140.02	-123.0	73.1	144.9	136.1	8.75	16.563		
2,100.0	2,075.9	2,093.7	2,083.4	5.9	4.8	141.96	-132.3	80.9	161.2	151.9	9.23	17.465		
2,200.0	2,172.3	2,192.2	2,181.2	6.4	5.1	143.55	-141.5	88.7	177.6	167.9	9.71	18.296		
2,300.0	2,268.8	2,290.8	2,279.0	6.9	5.3	144.87	-150.7	96.6	194.2	184.0	10.19	19.061		
2,400.0	2,365.2	2,389.3	2,376.7	7.3	5.6	145.98	-160.0	104.4	210.9	200.2	10.67	19.766		
2,500.0	2,461.7	2,487.8	2,474.5	7.8	5.9	146.92	-169.2	112.3	227.6	216.4	11.15	20.416		
2,600.0	2,558.1	2,586.4	2,572.3	8.3	6.2	147.74	-178.5	120.1	244.4	232.7	11.63	21.017		
2,700.0	2,654.6	2,684.9	2,670.1	8.8	6.4	148.45	-187.7	128.0	261.2	249.1	12.11	21.574		
2,800.0	2,751.1	2,783.4	2,767.8	9.3	6.7	149.08	-197.0	135.8	278.0	265.5	12.59	22.091		
2,900.0	2,847.5	2,881.9	2,865.6	9.8	7.0	149.63	-206.2	143.7	294.9	281.9	13.07	22.572		
3,000.0	2,944.0	2,980.5	2,963.4	10.3	7.2	150.13	-215.5	151.5	311.8	298.3	13.55	23.020		
3,100.0	3,040.4	3,079.0	3,061.2	10.8	7.5	150.57	-224.7	159.4	328.8	314.7	14.03	23.440		
3,200.0	3,136.9	3,177.5	3,159.0	11.3	7.8	150.97	-233.9	167.2	345.7	331.2	14.51	23.832		
3,300.0	3,233.3	3,276.0	3,256.7	11.8	8.1	151.34	-243.2	175.1	362.7	347.7	14.99	24.200		
3,400.0	3,329.8	3,374.6	3,354.5	12.3	8.3	151.67	-252.4	182.9	379.6	364.2	15.47	24.546		
3,500.0	3,426.3	3,473.1	3,452.3	12.8	8.6	151.97	-261.7	190.8	396.6	380.7	15.95	24.872		
3,600.0	3,522.7	3,571.6	3,550.1	13.3	8.9	152.25	-270.9	198.6	413.6	397.2	16.43	25.179		
3,700.0	3,619.2	3,670.2	3,647.8	13.8	9.1	152.50	-280.2	206.5	430.6	413.7	16.91	25.469		
3,800.0	3,715.6	3,768.7	3,745.6	14.3	9.4	152.74	-289.4	214.3	447.6	430.2	17.39	25.744		
3,900.0	3,812.1	3,867.2	3,843.4	14.8	9.7	152.96	-298.7	222.2	464.6	446.8	17.87	26.004		
4,000.0	3,908.6	3,965.7	3,941.2	15.3	10.0	153.16	-307.9	230.0	481.6	463.3	18.35	26.250		
4,100.0	4,005.0	4,064.3	4,039.0	15.8	10.2	153.35	-317.1	237.8	498.7	479.8	18.83	26.484		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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 (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-90.06	0.0	-8.4	8.4						
100.0	100.0	100.0	100.0	0.1	0.1	-90.06	0.0	-8.4	8.4	8.1	0.30	28.289			
200.0	200.0	200.0	200.0	0.3	0.3	-90.06	0.0	-8.4	8.4	7.7	0.65	12.998			
300.0	300.0	300.0	300.0	0.5	0.5	-90.06	0.0	-8.4	8.4	7.4	0.99	8.437			
400.0	400.0	400.0	400.0	0.7	0.7	-90.06	0.0	-8.4	8.4	7.0	1.34	6.246 CC, ES			
500.0	500.0	500.0	500.0	0.8	0.8	162.39	0.0	-8.4	9.2	7.5	1.69	5.447 SF			
600.0	600.0	600.0	600.0	1.0	1.0	166.25	0.0	-8.4	11.7	9.7	2.04	5.752			
700.0	699.9	700.1	700.1	1.2	1.2	168.69	-0.5	-7.7	15.2	12.8	2.39	6.365			
800.0	799.7	800.3	800.3	1.4	1.4	169.08	-1.9	-5.4	18.8	16.1	2.74	6.866			
900.0	899.4	900.6	900.4	1.6	1.6	168.40	-4.2	-1.7	22.5	19.4	3.09	7.287			
1,000.0	998.9	1,000.9	1,000.6	1.8	1.7	167.11	-7.4	3.5	26.3	22.9	3.44	7.651			
1,100.0	1,098.3	1,101.3	1,100.6	2.1	2.0	165.45	-11.6	10.2	30.3	26.5	3.80	7.971			
1,200.0	1,197.4	1,201.7	1,200.6	2.3	2.2	163.57	-16.8	18.4	34.4	30.3	4.17	8.255			
1,300.0	1,296.3	1,302.1	1,300.4	2.6	2.4	161.57	-22.8	28.0	38.8	34.2	4.56	8.504			
1,400.0	1,394.9	1,402.6	1,400.0	2.9	2.7	159.50	-29.8	39.2	43.3	38.3	4.96	8.718			
1,500.0	1,493.3	1,502.6	1,499.0	3.3	2.9	157.73	-37.4	51.4	48.4	43.0	5.39	8.980			
1,600.0	1,591.2	1,602.4	1,597.7	3.7	3.2	156.99	-45.1	63.6	55.1	49.3	5.81	9.472			
1,700.0	1,688.9	1,702.1	1,696.3	4.1	3.5	157.03	-52.7	75.8	63.4	57.1	6.23	10.163			
1,800.0	1,786.1	1,801.6	1,794.8	4.5	3.8	157.57	-60.3	87.9	73.3	66.6	6.65	11.021			
1,900.0	1,882.9	1,900.9	1,893.1	4.9	4.1	158.42	-68.0	100.1	84.8	77.7	7.05	12.025			
2,000.0	1,979.4	2,000.1	1,991.2	5.4	4.3	159.36	-75.6	112.2	97.5	90.1	7.45	13.090			
2,100.0	2,075.9	2,099.2	2,089.3	5.9	4.6	160.11	-83.1	124.4	110.4	102.5	7.86	14.050			
2,200.0	2,172.3	2,198.4	2,187.5	6.4	4.9	160.70	-90.7	136.5	123.2	115.0	8.26	14.915			
2,300.0	2,268.8	2,297.6	2,285.6	6.9	5.2	161.18	-98.3	148.6	136.1	127.4	8.67	15.697			
2,400.0	2,365.2	2,396.7	2,383.7	7.3	5.5	161.58	-105.9	160.8	149.0	139.9	9.08	16.409			
2,500.0	2,461.7	2,495.9	2,481.8	7.8	5.8	161.91	-113.5	172.9	161.9	152.4	9.49	17.057			
2,600.0	2,558.1	2,595.1	2,579.9	8.3	6.1	162.20	-121.1	185.0	174.8	164.9	9.90	17.652			
2,700.0	2,654.6	2,694.2	2,678.1	8.8	6.4	162.44	-128.7	197.2	187.7	177.3	10.31	18.198			
2,800.0	2,751.1	2,793.4	2,776.2	9.3	6.7	162.66	-136.3	209.3	200.6	189.8	10.72	18.702			
2,900.0	2,847.5	2,892.5	2,874.3	9.8	7.0	162.84	-143.9	221.4	213.5	202.3	11.14	19.168			
3,000.0	2,944.0	2,991.7	2,972.4	10.3	7.3	163.01	-151.5	233.6	226.4	214.8	11.55	19.601			
3,100.0	3,040.4	3,090.9	3,070.6	10.8	7.6	163.16	-159.1	245.7	239.3	227.3	11.96	20.003			
3,200.0	3,136.9	3,190.0	3,168.7	11.3	7.9	163.29	-166.7	257.8	252.2	239.8	12.37	20.378			
3,300.0	3,233.3	3,289.2	3,266.8	11.8	8.2	163.41	-174.3	270.0	265.1	252.3	12.79	20.728			
3,400.0	3,329.8	3,388.4	3,364.9	12.3	8.5	163.52	-181.9	282.1	278.0	264.8	13.20	21.056			
3,500.0	3,426.3	3,487.5	3,463.1	12.8	8.8	163.62	-189.5	294.2	290.9	277.3	13.62	21.364			
3,600.0	3,522.7	3,586.7	3,561.2	13.3	9.1	163.71	-197.1	306.4	303.8	289.8	14.03	21.654			
3,700.0	3,619.2	3,685.8	3,659.3	13.8	9.4	163.80	-204.7	318.5	316.7	302.2	14.44	21.926			
3,800.0	3,715.6	3,785.0	3,757.4	14.3	9.7	163.87	-212.3	330.6	329.6	314.7	14.86	22.183			
3,900.0	3,812.1	3,884.2	3,855.6	14.8	10.0	163.95	-219.9	342.8	342.5	327.2	15.27	22.427			
4,000.0	3,908.6	3,983.3	3,953.7	15.3	10.3	164.01	-227.5	354.9	355.4	339.7	15.69	22.657			
4,100.0	4,005.0	4,082.5	4,051.8	15.8	10.6	164.07	-235.1	367.0	368.3	352.2	16.10	22.875			
4,200.0	4,101.5	4,181.7	4,149.9	16.3	10.9	164.13	-242.7	379.2	381.2	364.7	16.52	23.082			
4,300.0	4,197.9	4,280.8	4,248.0	16.8	11.2	164.18	-250.3	391.3	394.1	377.2	16.93	23.279			
4,400.0	4,294.4	4,380.0	4,346.2	17.3	11.5	164.23	-257.9	403.4	407.1	389.7	17.35	23.466			
4,500.0	4,390.8	4,479.1	4,444.3	17.8	11.8	164.28	-265.5	415.6	420.0	402.2	17.76	23.645			
4,600.0	4,487.3	4,578.3	4,542.4	18.3	12.1	164.33	-273.1	427.7	432.9	414.7	18.18	23.815			
4,700.0	4,583.8	4,677.5	4,640.5	18.8	12.4	164.37	-280.7	439.8	445.8	427.2	18.59	23.977			
4,800.0	4,680.2	4,776.6	4,738.7	19.3	12.8	164.41	-288.3	452.0	458.7	439.7	19.01	24.133			
4,900.0	4,776.7	4,875.8	4,836.8	19.8	13.1	164.44	-295.9	464.1	471.6	452.2	19.42	24.281			
5,000.0	4,873.1	4,975.0	4,934.9	20.3	13.4	164.48	-303.5	476.2	484.5	464.7	19.84	24.423			
5,100.0	4,969.6	5,074.1	5,033.0	20.8	13.7	164.51	-311.1	488.4	497.4	477.2	20.25	24.560			

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 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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									
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	-37.53	3.6	-2.8	4.6						
100.0	100.0	100.0	100.0	0.1	0.1	-37.53	3.6	-2.8	4.6	4.3	0.30	15.481			
200.0	200.0	200.0	200.0	0.3	0.3	-37.53	3.6	-2.8	4.6	3.9	0.65	7.113			
300.0	300.0	300.0	300.0	0.5	0.5	-37.53	3.6	-2.8	4.6	3.6	0.99	4.617			
400.0	400.0	400.0	400.0	0.7	0.7	-37.53	3.6	-2.8	4.6	3.2	1.34	3.418 CC, ES			
500.0	500.0	500.0	500.0	0.8	0.8	-151.99	3.6	-2.8	5.3	3.7	1.69	3.157 SF			
600.0	600.0	600.0	600.0	1.0	1.0	-160.83	3.5	-2.6	7.5	5.5	2.04	3.693			
700.0	699.9	700.1	700.1	1.2	1.2	-167.28	2.7	-1.1	10.0	7.6	2.39	4.186			
800.0	799.7	800.3	800.2	1.4	1.4	-172.41	1.0	2.0	12.5	9.8	2.74	4.575			
900.0	899.4	900.5	900.3	1.6	1.6	-176.84	-1.4	6.6	15.1	12.0	3.09	4.899			
1,000.0	998.9	1,000.7	1,000.3	1.8	1.8	179.15	-4.8	12.8	17.8	14.4	3.43	5.181			
1,100.0	1,098.3	1,101.0	1,100.2	2.1	2.0	175.43	-8.9	20.5	20.6	16.8	3.78	5.433			
1,200.0	1,197.4	1,201.3	1,199.9	2.3	2.2	171.95	-13.9	29.7	23.4	19.3	4.14	5.661			
1,300.0	1,296.3	1,301.7	1,299.6	2.6	2.4	168.67	-19.7	40.5	26.5	22.0	4.51	5.867			
1,400.0	1,394.9	1,402.1	1,399.0	2.9	2.7	165.55	-26.4	52.9	29.6	24.7	4.90	6.048			
1,500.0	1,493.3	1,502.5	1,498.1	3.3	3.0	162.60	-33.9	66.7	33.0	27.7	5.32	6.201			
1,600.0	1,591.2	1,603.0	1,597.1	3.7	3.3	159.79	-42.2	82.1	36.5	30.7	5.77	6.324			
1,700.0	1,688.9	1,703.5	1,695.7	4.1	3.7	157.13	-51.3	99.0	40.2	33.9	6.27	6.414			
1,800.0	1,786.1	1,803.7	1,793.7	4.5	4.0	154.81	-61.1	117.2	44.3	37.5	6.80	6.514			
1,900.0	1,882.9	1,903.5	1,891.4	4.9	4.4	153.68	-71.0	135.4	49.9	42.6	7.33	6.806			
2,000.0	1,979.4	2,003.3	1,989.0	5.4	4.8	153.40	-80.8	153.6	56.7	48.8	7.85	7.220			
2,100.0	2,075.9	2,103.0	2,086.6	5.9	5.2	153.22	-90.6	171.9	63.5	55.2	8.38	7.584			
2,200.0	2,172.3	2,202.8	2,184.2	6.4	5.6	153.07	-100.5	190.1	70.4	61.5	8.91	7.901			
2,300.0	2,268.8	2,302.6	2,281.8	6.9	5.9	152.95	-110.3	208.3	77.2	67.8	9.44	8.179			
2,400.0	2,365.2	2,402.3	2,379.4	7.3	6.3	152.84	-120.1	226.5	84.1	74.1	9.98	8.424			
2,500.0	2,461.7	2,502.1	2,477.0	7.8	6.7	152.76	-130.0	244.7	90.9	80.4	10.52	8.642			
2,600.0	2,558.1	2,601.9	2,574.6	8.3	7.1	152.68	-139.8	263.0	97.8	86.7	11.07	8.836			
2,700.0	2,654.6	2,701.6	2,672.1	8.8	7.5	152.62	-149.7	281.2	104.7	93.0	11.61	9.011			
2,800.0	2,751.1	2,801.4	2,769.7	9.3	7.9	152.56	-159.5	299.4	111.5	99.3	12.16	9.168			
2,900.0	2,847.5	2,901.2	2,867.3	9.8	8.3	152.51	-169.3	317.6	118.4	105.6	12.71	9.310			
3,000.0	2,944.0	3,000.9	2,964.9	10.3	8.7	152.47	-179.2	335.8	125.2	111.9	13.26	9.440			
3,100.0	3,040.4	3,100.7	3,062.5	10.8	9.1	152.43	-189.0	354.1	132.1	118.2	13.82	9.558			
3,200.0	3,136.9	3,200.4	3,160.1	11.3	9.5	152.39	-198.8	372.3	138.9	124.5	14.37	9.667			
3,300.0	3,233.3	3,300.2	3,257.7	11.8	9.9	152.36	-208.7	390.5	145.8	130.8	14.92	9.767			
3,400.0	3,329.8	3,400.0	3,355.3	12.3	10.3	152.33	-218.5	408.7	152.6	137.1	15.48	9.859			
3,500.0	3,426.3	3,499.7	3,452.9	12.8	10.7	152.30	-228.3	426.9	159.5	143.4	16.04	9.944			
3,600.0	3,522.7	3,599.5	3,550.5	13.3	11.1	152.27	-238.2	445.2	166.3	149.7	16.59	10.024			
3,700.0	3,619.2	3,699.3	3,648.1	13.8	11.5	152.25	-248.0	463.4	173.2	156.0	17.15	10.097			
3,800.0	3,715.6	3,799.0	3,745.7	14.3	11.9	152.23	-257.8	481.6	180.0	162.3	17.71	10.166			
3,900.0	3,812.1	3,898.8	3,843.3	14.8	12.3	152.21	-267.7	499.8	186.9	168.6	18.27	10.230			
4,000.0	3,908.6	3,998.6	3,940.8	15.3	12.7	152.19	-277.5	518.1	193.7	174.9	18.83	10.290			
4,100.0	4,005.0	4,098.3	4,038.4	15.8	13.1	152.18	-287.4	536.3	200.6	181.2	19.39	10.346			
4,200.0	4,101.5	4,198.1	4,136.0	16.3	13.5	152.16	-297.2	554.5	207.4	187.5	19.95	10.399			
4,300.0	4,197.9	4,297.9	4,233.6	16.8	13.9	152.14	-307.0	572.7	214.3	193.8	20.51	10.449			
4,400.0	4,294.4	4,397.6	4,331.2	17.3	14.3	152.13	-316.9	590.9	221.1	200.1	21.07	10.496			
4,500.0	4,390.8	4,497.4	4,428.8	17.8	14.7	152.12	-326.7	609.2	228.0	206.4	21.63	10.541			
4,600.0	4,487.3	4,597.2	4,526.4	18.3	15.1	152.10	-336.5	627.4	234.8	212.7	22.19	10.583			
4,700.0	4,583.8	4,696.9	4,624.0	18.8	15.5	152.09	-346.4	645.6	241.7	218.9	22.75	10.623			
4,800.0	4,680.2	4,796.7	4,721.6	19.3	16.0	152.08	-356.2	663.8	248.6	225.2	23.32	10.661			
4,900.0	4,776.7	4,896.4	4,819.2	19.8	16.4	152.07	-366.0	682.0	255.4	231.5	23.88	10.697			
5,000.0	4,873.1	4,996.2	4,916.8	20.3	16.8	152.06	-375.9	700.3	262.3	237.8	24.44	10.731			
5,100.0	4,969.6	5,096.0	5,014.4	20.8	17.2	152.05	-385.7	718.5	269.1	244.1	25.00	10.764			

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 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4N-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,066.0	5,195.7	5,112.0	21.3	17.6	152.04	-395.5	736.7	276.0	250.4	25.57	10.795		
5,300.0	5,162.5	5,295.5	5,209.5	21.9	18.0	152.03	-405.4	754.9	282.8	256.7	26.13	10.824		
5,400.0	5,259.0	5,395.3	5,307.1	22.4	18.4	152.03	-415.2	773.1	289.7	263.0	26.69	10.853		
5,500.0	5,355.4	5,495.0	5,404.7	22.9	18.8	152.02	-425.1	791.4	296.5	269.3	27.25	10.880		
5,600.0	5,451.9	5,594.8	5,502.3	23.4	19.2	152.01	-434.9	809.6	303.4	275.6	27.82	10.906		
5,700.0	5,548.3	5,694.6	5,599.9	23.9	19.6	152.00	-444.7	827.8	310.2	281.8	28.38	10.931		
5,800.0	5,644.8	5,794.3	5,697.5	24.4	20.0	152.00	-454.6	846.0	317.1	288.1	28.95	10.954		
5,900.0	5,741.2	5,894.1	5,795.1	24.9	20.4	151.99	-464.4	864.3	323.9	294.4	29.51	10.977		
6,000.0	5,837.7	5,993.9	5,892.7	25.4	20.8	151.99	-474.2	882.5	330.8	300.7	30.07	10.999		
6,100.0	5,934.2	6,093.6	5,990.3	25.9	21.2	151.98	-484.1	900.7	337.6	307.0	30.64	11.020		
6,200.0	6,030.6	6,193.4	6,087.9	26.4	21.6	151.97	-493.9	918.9	344.5	313.3	31.20	11.041		
6,300.0	6,127.1	6,293.2	6,185.5	26.9	22.0	151.97	-503.7	937.1	351.3	319.6	31.77	11.060		
6,400.0	6,223.5	6,392.9	6,283.1	27.4	22.4	151.96	-513.6	955.4	358.2	325.9	32.33	11.079		
6,500.0	6,320.0	6,492.7	6,380.7	27.9	22.8	151.96	-523.4	973.6	365.1	332.2	32.90	11.097		
6,600.0	6,416.4	6,592.5	6,478.3	28.4	23.2	151.95	-533.3	991.8	371.9	338.4	33.46	11.115		
6,700.0	6,512.9	6,692.2	6,575.8	28.9	23.6	151.95	-543.1	1,010.0	378.8	344.7	34.02	11.132		
6,800.0	6,609.4	6,792.0	6,673.4	29.4	24.1	151.94	-552.9	1,028.2	385.6	351.0	34.59	11.148		
6,900.0	6,705.8	6,891.7	6,771.0	29.9	24.5	151.94	-562.8	1,046.5	392.5	357.3	35.15	11.164		
7,000.0	6,802.3	6,998.5	6,875.7	30.4	24.8	152.49	-569.4	1,066.0	398.8	363.4	35.72	11.176		
7,100.0	6,898.7	7,105.6	6,980.2	30.9	25.1	155.61	-577.6	1,085.5	403.1	369.1	36.29	11.187		
7,200.0	6,995.2	7,202.0	7,070.9	31.4	25.2	160.65	-530.2	1,102.4	407.9	376.5	36.86	12.989		
7,300.0	7,091.7	7,284.7	7,144.2	31.9	25.2	166.47	-494.6	1,116.1	417.5	388.8	37.43	14.510		
7,400.0	7,188.4	7,357.2	7,203.8	32.4	25.2	-153.31	-454.8	1,127.3	434.1	407.5	38.00	16.293		
7,500.0	7,284.2	7,426.4	7,255.6	32.7	25.1	-117.35	-410.1	1,136.9	455.2	429.1	38.57	17.432		
7,600.0	7,376.1	7,493.2	7,300.2	32.9	25.1	-96.39	-361.2	1,145.3	478.2	451.5	39.14	17.920		
10,700.0	7,712.0	10,353.7	7,429.0	55.0	51.3	-55.50	2,468.7	1,169.3	499.9	422.2	77.63	6.439		
10,800.0	7,712.0	10,453.6	7,429.0	56.4	52.9	-55.27	2,568.7	1,169.3	497.0	416.8	80.21	6.196		
10,900.0	7,712.0	10,553.6	7,429.0	57.8	54.4	-55.04	2,668.6	1,169.3	494.1	411.4	82.77	5.970		
11,000.0	7,712.0	10,653.5	7,429.0	59.3	56.0	-54.81	2,768.6	1,169.3	491.3	405.9	85.33	5.757		
11,100.0	7,712.0	10,753.5	7,429.0	60.7	57.6	-54.57	2,868.5	1,169.3	488.4	400.6	87.87	5.558		
11,200.0	7,712.0	10,853.4	7,429.0	62.2	59.1	-54.34	2,968.4	1,169.3	485.6	395.2	90.40	5.372		
11,300.0	7,712.0	10,953.3	7,429.0	63.7	60.7	-54.09	3,068.4	1,169.3	482.8	389.8	92.91	5.196		
11,400.0	7,712.0	11,053.3	7,429.0	65.2	62.3	-53.85	3,168.3	1,169.3	479.9	384.5	95.41	5.030		
11,500.0	7,712.0	11,153.2	7,429.0	66.7	64.0	-53.60	3,268.3	1,169.3	477.1	379.2	97.89	4.874		
11,600.0	7,712.0	11,253.2	7,429.0	68.3	65.6	-53.35	3,368.2	1,169.3	474.3	374.0	100.36	4.726		
11,700.0	7,712.0	11,353.1	7,429.0	69.8	67.2	-53.10	3,468.1	1,169.3	471.5	368.7	102.80	4.587		
11,800.0	7,712.0	11,453.0	7,429.0	71.4	68.8	-52.84	3,568.1	1,169.3	468.7	363.5	105.23	4.455		
11,900.0	7,712.0	11,553.0	7,429.0	72.9	70.5	-52.58	3,668.0	1,169.3	466.0	358.3	107.63	4.329		
12,000.0	7,712.0	11,652.9	7,429.0	74.5	72.1	-52.32	3,767.9	1,169.3	463.2	353.2	110.01	4.210		
12,100.0	7,712.0	11,752.8	7,429.0	76.1	73.8	-52.06	3,867.9	1,169.3	460.4	348.1	112.37	4.097		
12,200.0	7,712.0	11,852.8	7,429.0	77.7	75.4	-51.79	3,967.8	1,169.3	457.7	343.0	114.71	3.990		
12,300.0	7,712.0	11,952.7	7,429.0	79.3	77.1	-51.52	4,067.8	1,169.3	454.9	337.9	117.02	3.888		
12,400.0	7,712.0	12,052.7	7,429.0	80.9	78.7	-51.24	4,167.7	1,169.3	452.2	332.9	119.31	3.790		
12,417.3	7,712.0	12,070.0	7,429.0	81.1	79.0	-51.19	4,185.0	1,169.3	451.7	332.0	119.71	3.774		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4P-32H-O268 - Hz - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	56.94	3.6	5.6	6.7					
100.0	100.0	100.0	100.0	0.1	0.1	56.94	3.6	5.6	6.7	6.4	0.30	22.504		
200.0	200.0	200.0	200.0	0.3	0.3	56.94	3.6	5.6	6.7	6.0	0.65	10.340	CC, ES	
300.0	300.0	299.9	299.9	0.5	0.5	61.65	3.5	6.5	7.3	6.3	0.99	7.369		
400.0	400.0	399.8	399.7	0.7	0.7	71.61	3.0	9.0	9.5	8.2	1.35	7.062		
500.0	500.0	499.5	499.4	0.8	0.9	-30.60	2.2	13.3	12.7	11.0	1.69	7.507		
600.0	600.0	599.2	598.9	1.0	1.1	-27.25	1.1	19.3	16.2	14.1	2.05	7.896		
700.0	699.9	698.9	698.2	1.2	1.3	-25.79	-0.4	26.9	19.7	17.3	2.40	8.217		
800.0	799.7	798.4	797.3	1.4	1.5	-25.38	-2.1	36.3	23.4	20.6	2.75	8.480		
900.0	899.4	897.9	896.2	1.6	1.8	-25.61	-4.2	47.3	27.1	24.0	3.12	8.696		
1,000.0	998.9	997.4	994.8	1.8	2.0	-26.23	-6.6	60.0	30.9	27.4	3.49	8.873		
1,100.0	1,098.3	1,096.8	1,093.1	2.1	2.3	-27.11	-9.3	74.4	34.9	31.0	3.87	9.013		
1,200.0	1,197.4	1,196.1	1,191.1	2.3	2.7	-28.17	-12.3	90.5	38.9	34.6	4.26	9.118		
1,300.0	1,296.3	1,295.3	1,288.7	2.6	3.0	-29.35	-15.7	108.2	43.0	38.3	4.68	9.189		
1,400.0	1,394.9	1,394.5	1,385.9	2.9	3.4	-30.60	-19.3	127.5	47.3	42.1	5.12	9.224		
1,500.0	1,493.3	1,493.6	1,482.6	3.3	3.8	-31.90	-23.3	148.5	51.6	46.0	5.60	9.224		
1,600.0	1,591.2	1,592.7	1,579.0	3.7	4.2	-33.23	-27.5	171.1	56.1	50.0	6.11	9.189		
1,700.0	1,688.9	1,691.6	1,674.8	4.1	4.7	-34.57	-32.1	195.3	60.8	54.1	6.66	9.122		
1,800.0	1,786.1	1,790.5	1,770.2	4.5	5.2	-35.91	-36.9	221.2	65.6	58.3	7.27	9.023		
1,900.0	1,882.9	1,889.4	1,865.0	4.9	5.7	-37.24	-42.1	248.6	70.5	62.6	7.93	8.900		
2,000.0	1,979.4	1,989.2	1,960.5	5.4	6.2	-38.73	-47.5	277.1	75.2	66.6	8.65	8.704		
2,100.0	2,075.9	2,089.1	2,056.1	5.9	6.8	-40.08	-52.9	305.6	79.9	70.5	9.39	8.509		
2,200.0	2,172.3	2,189.0	2,151.7	6.4	7.3	-41.28	-58.2	334.1	84.7	74.5	10.16	8.330		
2,300.0	2,268.8	2,288.8	2,247.2	6.9	7.8	-42.35	-63.6	362.6	89.4	78.5	10.95	8.165		
2,400.0	2,365.2	2,388.7	2,342.8	7.3	8.4	-43.32	-69.0	391.2	94.2	82.5	11.75	8.015		
2,500.0	2,461.7	2,488.6	2,438.4	7.8	8.9	-44.19	-74.3	419.7	99.0	86.5	12.57	7.879		
2,600.0	2,558.1	2,588.5	2,533.9	8.3	9.5	-44.98	-79.7	448.2	103.9	90.5	13.39	7.754		
2,700.0	2,654.6	2,688.3	2,629.5	8.8	10.0	-45.70	-85.1	476.7	108.7	94.5	14.23	7.641		
2,800.0	2,751.1	2,788.2	2,725.1	9.3	10.6	-46.35	-90.4	505.2	113.6	98.5	15.07	7.538		
2,900.0	2,847.5	2,888.1	2,820.6	9.8	11.1	-46.96	-95.8	533.7	118.5	102.5	15.92	7.443		
3,000.0	2,944.0	2,988.0	2,916.2	10.3	11.7	-47.51	-101.2	562.3	123.4	106.6	16.77	7.356		
3,100.0	3,040.4	3,087.8	3,011.8	10.8	12.2	-48.03	-106.6	590.8	128.3	110.6	17.63	7.277		
3,200.0	3,136.9	3,187.7	3,107.3	11.3	12.8	-48.50	-111.9	619.3	133.2	114.7	18.49	7.203		
3,300.0	3,233.3	3,287.6	3,202.9	11.8	13.3	-48.94	-117.3	647.8	138.1	118.7	19.35	7.136		
3,400.0	3,329.8	3,387.5	3,298.5	12.3	13.9	-49.36	-122.7	676.3	143.0	122.8	20.22	7.073		
3,500.0	3,426.3	3,487.3	3,394.0	12.8	14.4	-49.74	-128.0	704.8	148.0	126.9	21.09	7.015		
3,600.0	3,522.7	3,587.2	3,489.6	13.3	15.0	-50.10	-133.4	733.4	152.9	130.9	21.96	6.961		
3,700.0	3,619.2	3,687.1	3,585.2	13.8	15.5	-50.44	-138.8	761.9	157.8	135.0	22.84	6.911		
3,800.0	3,715.6	3,786.9	3,680.7	14.3	16.1	-50.75	-144.1	790.4	162.8	139.1	23.72	6.864		
3,900.0	3,812.1	3,886.8	3,776.3	14.8	16.6	-51.05	-149.5	818.9	167.8	143.2	24.60	6.820		
4,000.0	3,908.6	3,986.7	3,871.8	15.3	17.2	-51.33	-154.9	847.4	172.7	147.2	25.48	6.779		
4,100.0	4,005.0	4,086.6	3,967.4	15.8	17.7	-51.59	-160.3	875.9	177.7	151.3	26.36	6.741		
4,200.0	4,101.5	4,186.4	4,063.0	16.3	18.3	-51.84	-165.6	904.4	182.7	155.4	27.24	6.705		
4,300.0	4,197.9	4,286.3	4,158.5	16.8	18.8	-52.08	-171.0	933.0	187.6	159.5	28.13	6.671		
4,400.0	4,294.4	4,386.2	4,254.1	17.3	19.4	-52.31	-176.4	961.5	192.6	163.6	29.01	6.639		
4,500.0	4,390.8	4,486.1	4,349.7	17.8	19.9	-52.52	-181.7	990.0	197.6	167.7	29.90	6.608		
4,600.0	4,487.3	4,585.9	4,445.2	18.3	20.5	-52.72	-187.1	1,018.5	202.6	171.8	30.79	6.580		
4,700.0	4,583.8	4,685.8	4,540.8	18.8	21.0	-52.92	-192.5	1,047.0	207.5	175.9	31.67	6.553		
4,800.0	4,680.2	4,785.7	4,636.4	19.3	21.6	-53.10	-197.8	1,075.5	212.5	180.0	32.56	6.527		
4,900.0	4,776.7	4,885.6	4,731.9	19.8	22.1	-53.28	-203.2	1,104.1	217.5	184.1	33.45	6.502		
5,000.0	4,873.1	4,985.4	4,827.5	20.3	22.7	-53.44	-208.6	1,132.6	222.5	188.2	34.34	6.479		
5,100.0	4,969.6	5,085.3	4,923.1	20.8	23.2	-53.60	-214.0	1,161.1	227.5	192.3	35.23	6.457		

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 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4P-32H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,066.0	5,185.2	5,018.6	21.3	23.8	-53.76	-219.3	1,189.6	232.5	196.4	36.13	6.436		
5,300.0	5,162.5	5,285.0	5,114.2	21.9	24.4	-53.91	-224.7	1,218.1	237.5	200.5	37.02	6.416		
5,400.0	5,259.0	5,384.9	5,209.8	22.4	24.9	-54.05	-230.1	1,246.6	242.5	204.6	37.91	6.397		
5,500.0	5,355.4	5,484.8	5,305.3	22.9	25.5	-54.18	-235.4	1,275.2	247.5	208.7	38.80	6.378		
5,600.0	5,451.9	5,584.7	5,400.9	23.4	26.0	-54.31	-240.8	1,303.7	252.5	212.8	39.70	6.361		
5,700.0	5,548.3	5,684.5	5,496.5	23.9	26.6	-54.44	-246.2	1,332.2	257.5	216.9	40.59	6.344		
5,800.0	5,644.8	5,784.4	5,592.0	24.4	27.1	-54.56	-251.5	1,360.7	262.5	221.0	41.48	6.328		
5,900.0	5,741.2	5,884.3	5,687.6	24.9	27.7	-54.67	-256.9	1,389.2	267.5	225.1	42.38	6.312		
6,000.0	5,837.7	5,984.2	5,783.1	25.4	28.2	-54.78	-262.3	1,417.7	272.5	229.2	43.27	6.297		
6,100.0	5,934.2	6,084.0	5,878.7	25.9	28.8	-54.89	-267.6	1,446.3	277.5	233.3	44.17	6.283		
6,200.0	6,030.6	6,183.9	5,974.3	26.4	29.3	-55.00	-273.0	1,474.8	282.5	237.4	45.06	6.269		
6,300.0	6,127.1	6,283.8	6,069.8	26.9	29.9	-55.10	-278.4	1,503.3	287.5	241.6	45.96	6.256		
6,400.0	6,223.5	6,383.7	6,165.4	27.4	30.4	-55.19	-283.8	1,531.8	292.5	245.7	46.85	6.244		
6,500.0	6,320.0	6,483.5	6,261.0	27.9	31.0	-55.29	-289.1	1,560.3	297.5	249.8	47.75	6.231		
6,600.0	6,416.4	6,583.4	6,356.5	28.4	31.6	-55.38	-294.5	1,588.8	302.5	253.9	48.64	6.220		
6,700.0	6,512.9	6,683.3	6,452.1	28.9	32.1	-55.46	-299.9	1,617.4	307.6	258.0	49.54	6.208		
6,800.0	6,609.4	6,783.1	6,547.7	29.4	32.7	-55.55	-305.2	1,645.9	312.6	262.1	50.44	6.197		
6,900.0	6,705.8	6,883.0	6,643.2	29.9	33.2	-55.63	-310.6	1,674.4	317.6	266.2	51.33	6.187		
7,000.0	6,802.3	6,982.9	6,738.8	30.4	33.8	-55.71	-316.0	1,702.9	322.6	270.4	52.23	6.176		
7,100.0	6,898.7	7,082.8	6,834.4	30.9	34.3	-55.79	-321.3	1,731.4	327.6	274.5	53.13	6.167		
7,200.0	6,995.2	7,160.6	6,908.9	31.4	34.7	-56.31	-322.1	1,753.6	335.4	281.3	54.11	6.198		
7,300.0	7,091.7	7,231.8	6,976.7	31.9	35.1	-57.97	-313.8	1,773.7	351.0	295.4	55.62	6.312		
7,400.0	7,188.4	7,300.0	7,040.1	32.4	35.4	-27.96	-297.6	1,792.5	370.8	313.4	57.48	6.452		
7,500.0	7,284.2	7,367.3	7,100.6	32.7	35.6	-1.08	-274.1	1,810.3	387.9	330.5	57.39	6.758		
7,600.0	7,376.1	7,433.9	7,157.4	32.9	35.9	12.41	-243.7	1,827.0	401.4	346.1	55.32	7.256		
7,700.0	7,461.3	7,500.0	7,210.1	33.1	36.1	19.38	-207.0	1,842.4	410.9	359.4	51.47	7.983		
7,800.0	7,537.3	7,565.8	7,258.2	33.2	36.3	23.67	-164.3	1,856.3	416.2	370.0	46.16	9.016		
7,900.0	7,601.7	7,631.7	7,301.4	33.2	36.5	26.85	-116.2	1,868.8	417.1	377.2	39.90	10.455		
8,000.0	7,652.6	7,700.0	7,340.3	33.2	36.6	29.70	-61.2	1,879.9	413.8	380.4	33.40	12.390		
8,100.0	7,688.5	7,764.4	7,370.9	33.2	36.8	32.50	-5.2	1,888.5	406.6	378.7	27.87	14.589		
8,200.0	7,708.2	7,831.8	7,396.4	33.2	37.0	35.57	56.7	1,895.5	395.8	371.0	24.75	15.993		
8,300.0	7,712.0	7,900.0	7,414.9	33.3	37.1	38.58	122.1	1,900.5	382.6	357.7	24.92	15.356		
8,400.0	7,712.0	7,972.0	7,426.2	33.4	37.3	40.28	193.2	1,903.2	375.0	349.3	25.71	14.582		
8,454.6	7,712.0	8,012.2	7,428.7	33.5	37.4	40.75	233.2	1,903.6	373.9	347.8	26.15	14.301		
8,500.0	7,712.0	8,051.2	7,429.0	33.6	37.5	40.90	272.2	1,903.4	374.5	348.0	26.51	14.128		
8,600.0	7,712.0	8,151.1	7,429.0	34.0	37.8	41.20	372.2	1,902.5	376.2	348.7	27.50	13.679		
8,700.0	7,712.0	8,251.1	7,429.0	34.3	38.2	41.50	472.1	1,901.6	377.9	349.3	28.66	13.187		
8,800.0	7,712.0	8,351.1	7,429.0	34.8	38.6	41.80	572.1	1,900.8	379.7	349.7	29.97	12.667		
8,900.0	7,712.0	8,451.0	7,429.0	35.4	39.2	42.09	672.1	1,899.9	381.4	350.0	31.43	12.135		
9,000.0	7,712.0	8,551.0	7,429.0	36.0	39.8	42.38	772.0	1,899.0	383.2	350.2	33.02	11.606		
9,100.0	7,712.0	8,651.0	7,429.0	36.7	40.4	42.67	872.0	1,898.1	385.0	350.2	34.72	11.088		
9,200.0	7,712.0	8,750.9	7,429.0	37.5	41.1	42.96	972.0	1,897.3	386.7	350.2	36.52	10.589		
9,300.0	7,712.0	8,850.9	7,429.0	38.3	41.9	43.24	1,071.9	1,896.4	388.5	350.1	38.42	10.112		
9,400.0	7,712.0	8,950.9	7,429.0	39.3	42.8	43.52	1,171.9	1,895.5	390.3	349.9	40.41	9.660		
9,500.0	7,712.0	9,050.8	7,429.0	40.2	43.7	43.80	1,271.8	1,894.7	392.1	349.7	42.47	9.233		
9,600.0	7,712.0	9,150.8	7,429.0	41.2	44.6	44.07	1,371.8	1,893.8	393.9	349.3	44.60	8.833		
9,700.0	7,712.0	9,250.8	7,429.0	42.3	45.6	44.34	1,471.8	1,892.9	395.8	349.0	46.80	8.458		
9,800.0	7,712.0	9,350.7	7,429.0	43.4	46.7	44.61	1,571.7	1,892.0	397.6	348.6	49.05	8.106		
9,900.0	7,712.0	9,450.7	7,429.0	44.6	47.7	44.88	1,671.7	1,891.2	399.4	348.1	51.35	7.778		
10,000.0	7,712.0	9,550.7	7,429.0	45.8	48.9	45.14	1,771.6	1,890.3	401.3	347.6	53.71	7.472		
10,100.0	7,712.0	9,650.6	7,429.0	47.0	50.0	45.41	1,871.6	1,889.4	403.2	347.1	56.11	7.185		
10,200.0	7,712.0	9,750.6	7,429.0	48.2	51.2	45.67	1,971.6	1,888.6	405.0	346.5	58.55	6.917		

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 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Hwy 52 4P-32H-O268 - Hz - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,300.0	7,712.0	9,850.5	7,429.0	49.5	52.5	45.92	2,071.5	1,887.7	406.9	345.9	61.03	6.667	
10,400.0	7,712.0	9,950.5	7,429.0	50.9	53.7	46.18	2,171.5	1,886.8	408.8	345.2	63.55	6.432	
10,500.0	7,712.0	10,050.5	7,429.0	52.2	55.0	46.43	2,271.5	1,885.9	410.7	344.6	66.11	6.212	
10,600.0	7,712.0	10,150.4	7,429.0	53.6	56.3	46.68	2,371.4	1,885.1	412.6	343.9	68.69	6.006	
10,700.0	7,712.0	10,250.4	7,429.0	55.0	57.7	46.93	2,471.4	1,884.2	414.5	343.2	71.31	5.812	
10,800.0	7,712.0	10,350.4	7,429.0	56.4	59.0	47.18	2,571.3	1,883.3	416.4	342.5	73.96	5.630	
10,900.0	7,712.0	10,450.3	7,429.0	57.8	60.4	47.42	2,671.3	1,882.4	418.3	341.7	76.63	5.459	
11,000.0	7,712.0	10,550.3	7,429.0	59.3	61.8	47.66	2,771.3	1,881.6	420.3	340.9	79.33	5.298	
11,100.0	7,712.0	10,650.3	7,429.0	60.7	63.2	47.90	2,871.2	1,880.7	422.2	340.1	82.06	5.145	
11,200.0	7,712.0	10,750.2	7,429.0	62.2	64.7	48.14	2,971.2	1,879.8	424.2	339.3	84.81	5.001	
11,300.0	7,712.0	10,850.2	7,429.0	63.7	66.1	48.37	3,071.2	1,879.0	426.1	338.5	87.58	4.865	
11,400.0	7,712.0	10,950.2	7,429.0	65.2	67.6	48.61	3,171.1	1,878.1	428.1	337.7	90.38	4.737	
11,500.0	7,712.0	11,050.1	7,429.0	66.7	69.1	48.84	3,271.1	1,877.2	430.0	336.8	93.19	4.615	
11,600.0	7,712.0	11,150.1	7,429.0	68.3	70.5	49.06	3,371.0	1,876.3	432.0	336.0	96.03	4.499	
11,700.0	7,712.0	11,250.1	7,429.0	69.8	72.0	49.29	3,471.0	1,875.5	434.0	335.1	98.88	4.389	
11,800.0	7,712.0	11,350.0	7,429.0	71.4	73.6	49.52	3,571.0	1,874.6	436.0	334.2	101.76	4.284	
11,900.0	7,712.0	11,450.0	7,429.0	72.9	75.1	49.74	3,670.9	1,873.7	438.0	333.3	104.65	4.185	
12,000.0	7,712.0	11,550.0	7,429.0	74.5	76.6	49.96	3,770.9	1,872.8	440.0	332.4	107.56	4.090	
12,100.0	7,712.0	11,649.9	7,429.0	76.1	78.2	50.18	3,870.8	1,872.0	442.0	331.5	110.49	4.000	
12,200.0	7,712.0	11,749.9	7,429.0	77.7	79.7	50.39	3,970.8	1,871.1	444.0	330.6	113.43	3.914	
12,300.0	7,712.0	11,849.9	7,429.0	79.3	81.3	50.61	4,070.8	1,870.2	446.0	329.6	116.39	3.832	
12,400.0	7,712.0	11,949.8	7,429.0	80.9	82.9	50.82	4,170.7	1,869.4	448.0	328.7	119.37	3.753	
12,417.3	7,712.0	11,967.2	7,429.0	81.1	83.1	50.86	4,188.1	1,869.2	448.4	328.5	119.88	3.740 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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							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	50.99	226.2	279.2	359.5					
100.0	100.0	92.8	92.8	0.1	0.2	50.99	226.1	279.1	359.3	358.9	0.31	1,153.537		
200.0	200.0	193.7	193.7	0.3	0.3	50.99	225.9	278.9	358.9	358.2	0.66	541.142		
300.0	300.0	294.6	294.6	0.5	0.5	50.99	225.5	278.4	358.3	357.3	1.02	353.002		
400.0	400.0	395.5	395.5	0.7	0.7	51.00	224.9	277.8	357.5	356.1	1.37	261.529		
500.0	500.0	496.3	496.3	0.8	0.9	-58.48	224.2	277.0	355.9	354.2	1.70	209.450		
600.0	600.0	597.1	597.1	1.0	1.1	-58.86	223.3	276.0	353.2	351.2	2.05	172.345		
700.0	699.9	697.9	697.8	1.2	1.2	-59.50	222.3	274.8	349.4	347.0	2.40	145.330		
800.0	799.7	798.5	798.4	1.4	1.4	-60.41	221.0	273.4	344.5	341.7	2.77	124.538		
900.0	899.4	898.9	898.8	1.6	1.6	-61.62	219.7	271.8	338.6	335.5	3.14	107.870		
1,000.0	998.9	995.6	995.5	1.8	1.8	-63.26	219.1	269.7	332.2	328.7	3.52	94.286		
1,100.0	1,098.3	1,083.2	1,083.1	2.1	1.9	-65.44	221.6	267.5	327.5	323.6	3.92	83.634		
1,178.7	1,176.3	1,151.6	1,151.3	2.3	2.0	-67.48	225.9	266.6	326.3	322.1	4.25	76.801 CC		
1,200.0	1,197.4	1,170.2	1,169.8	2.3	2.0	-68.09	227.4	266.4	326.4	322.1	4.34	75.247 ES		
1,300.0	1,296.3	1,258.4	1,257.6	2.6	2.2	-71.23	236.4	266.2	329.0	324.3	4.79	68.663		
1,400.0	1,394.9	1,349.1	1,347.5	2.9	2.4	-74.75	248.0	266.5	334.9	329.6	5.29	63.290		
1,500.0	1,493.3	1,435.6	1,433.0	3.3	2.6	-78.48	261.6	266.4	344.3	338.5	5.82	59.182		
1,600.0	1,591.2	1,526.6	1,522.4	3.7	2.8	-82.58	278.2	266.2	357.6	351.2	6.38	56.030		
1,700.0	1,688.9	1,611.2	1,605.2	4.1	3.1	-86.50	295.5	265.3	374.4	367.5	6.96	53.806		
1,800.0	1,786.1	1,695.3	1,686.9	4.5	3.4	-90.47	315.1	263.5	396.1	388.6	7.55	52.447		
1,900.0	1,882.9	1,782.9	1,771.7	4.9	3.7	-94.49	337.0	261.1	421.9	413.7	8.16	51.705		
2,000.0	1,979.4	1,863.7	1,849.6	5.4	4.1	-98.17	358.3	258.5	451.3	442.5	8.74	51.635 SF		
2,100.0	2,075.9	1,948.1	1,930.6	5.9	4.4	-101.75	382.1	255.5	484.6	475.3	9.30	52.102		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-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	95.42	-12.0	126.7	127.6					
100.0	100.0	91.2	91.2	0.1	0.1	95.39	-12.0	127.0	127.6	127.3	0.28	448.146		
200.0	200.0	190.7	190.7	0.3	0.3	95.38	-12.0	127.8	128.4	127.8	0.63	203.652		
300.0	300.0	290.9	290.9	0.5	0.5	95.54	-12.5	128.8	129.4	128.4	0.98	131.963		
400.0	400.0	391.1	391.1	0.7	0.7	95.85	-13.3	129.5	130.1	128.8	1.33	97.858		
500.0	500.0	491.2	491.2	0.8	0.8	-13.28	-14.0	130.0	129.9	128.2	1.68	77.409		
600.0	600.0	591.3	591.3	1.0	1.0	-13.35	-14.5	130.5	127.9	125.9	2.03	63.108		
700.0	699.9	691.6	691.5	1.2	1.2	-13.67	-14.9	130.9	124.1	121.7	2.38	52.212		
800.0	799.7	791.6	791.5	1.4	1.4	-14.30	-15.1	131.0	118.3	115.6	2.73	43.412		
900.0	899.4	891.7	891.7	1.6	1.5	-15.31	-15.1	131.0	110.7	107.6	3.08	35.987		
1,000.0	998.9	991.4	991.4	1.8	1.7	-16.83	-15.0	130.5	101.0	97.6	3.43	29.482		
1,100.0	1,098.3	1,090.9	1,090.9	2.1	1.9	-18.89	-15.1	130.0	89.7	85.9	3.78	23.718		
1,200.0	1,197.4	1,190.3	1,190.3	2.3	2.1	-22.19	-15.0	129.0	76.5	72.4	4.15	18.459		
1,300.0	1,296.3	1,288.9	1,288.9	2.6	2.2	-27.85	-14.6	127.9	62.0	57.5	4.54	13.669		
1,400.0	1,394.9	1,387.3	1,387.3	2.9	2.4	-38.29	-13.9	126.9	47.2	42.2	5.01	9.435		
1,500.0	1,493.3	1,485.5	1,485.5	3.3	2.6	-59.65	-13.0	125.6	34.2	28.5	5.68	6.024		
1,581.0	1,572.7	1,564.8	1,564.7	3.6	2.7	-89.90	-12.4	124.3	29.5	23.2	6.29	4.690 CC, ES		
1,600.0	1,591.2	1,583.2	1,583.2	3.7	2.7	-97.95	-12.3	123.9	29.8	23.4	6.38	4.674 SF		
1,700.0	1,688.9	1,680.4	1,680.3	4.1	2.9	-132.43	-11.6	122.1	40.5	34.1	6.47	6.268		
1,800.0	1,786.1	1,777.2	1,777.1	4.5	3.1	-149.39	-10.5	120.8	60.7	54.2	6.54	9.289		
1,900.0	1,882.9	1,873.1	1,873.0	4.9	3.2	-157.78	-9.0	119.6	85.3	78.5	6.73	12.662		
2,000.0	1,979.4	1,969.7	1,969.5	5.4	3.4	-162.57	-7.3	118.5	112.1	105.1	7.00	16.023		
2,100.0	2,075.9	2,066.6	2,066.4	5.9	3.6	-165.69	-6.3	117.6	138.9	131.6	7.29	19.037		
2,200.0	2,172.3	2,164.6	2,164.5	6.4	3.8	-168.08	-6.3	117.2	165.0	157.4	7.60	21.700		
2,300.0	2,268.8	2,261.0	2,260.8	6.9	3.9	-169.90	-6.8	116.9	190.8	182.9	7.92	24.102		
2,400.0	2,365.2	2,357.4	2,357.2	7.3	4.1	-171.30	-7.3	116.5	217.0	208.8	8.24	26.339		
2,500.0	2,461.7	2,453.9	2,453.7	7.8	4.3	-172.52	-8.5	116.2	242.9	234.4	8.56	28.370		
2,600.0	2,558.1	2,544.3	2,544.1	8.3	4.4	-173.74	-10.3	114.5	270.0	261.1	8.88	30.415		
2,700.0	2,654.6	2,635.7	2,635.4	8.8	4.6	-175.01	-12.3	110.1	299.5	290.3	9.19	32.594		
2,800.0	2,751.1	2,732.2	2,731.6	9.3	4.8	-176.51	-16.4	104.5	329.3	319.8	9.51	34.618		
2,900.0	2,847.5	2,824.6	2,823.7	9.8	4.9	-177.93	-21.6	98.7	359.3	349.4	9.84	36.515		
3,000.0	2,944.0	2,916.2	2,914.8	10.3	5.1	-179.39	-27.9	91.4	390.4	380.3	10.17	38.379		
3,100.0	3,040.4	3,006.6	3,004.6	10.8	5.3	179.35	-34.1	83.6	422.5	412.0	10.52	40.171		
3,200.0	3,136.9	3,090.7	3,087.8	11.3	5.5	178.04	-41.6	74.4	456.2	445.4	10.87	41.975		
3,300.0	3,233.3	3,183.1	3,179.0	11.8	5.7	176.55	-51.3	62.4	491.6	480.4	11.25	43.684		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 44-32 (EXISTING) - ENCANA WELL - ENCANA WELL														Offset Site Error:	0.0 ft
Survey Program: 134-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor			
0.0	0.0	0.0	0.0	0.0	0.0	53.68	213.5	290.4	360.5						
100.0	100.0	91.6	91.6	0.1	0.1	53.74	213.1	290.6	360.4	360.1	0.29	1,239.832			
150.7	150.7	141.7	141.7	0.2	0.2	53.82	212.7	290.8	360.3	359.8	0.46	785.599			
200.0	200.0	185.9	185.8	0.3	0.3	53.88	212.5	291.3	360.6	360.0	0.62	579.699			
300.0	300.0	274.7	274.6	0.5	0.5	53.90	214.0	293.4	363.5	362.6	0.96	380.295			
400.0	400.0	366.8	366.6	0.7	0.6	53.94	216.8	297.8	369.2	367.9	1.31	282.142			
500.0	500.0	456.4	455.9	0.8	0.8	-55.33	220.3	304.0	376.6	375.0	1.62	232.512			
600.0	600.0	547.8	546.8	1.0	1.1	-55.32	224.7	312.6	385.6	383.6	1.96	196.908			
700.0	699.9	639.7	637.9	1.2	1.3	-55.39	229.6	323.2	395.5	393.2	2.30	171.703			
800.0	799.7	729.1	726.3	1.4	1.6	-55.50	234.9	335.5	406.7	404.0	2.66	153.144			
900.0	899.4	823.6	819.4	1.6	1.9	-55.54	240.0	351.1	418.9	415.8	3.03	138.011			
1,000.0	998.9	928.5	922.6	1.8	2.3	-55.52	243.9	369.5	429.8	426.4	3.46	124.268			
1,100.0	1,098.3	1,026.1	1,018.5	2.1	2.6	-55.40	245.4	387.5	439.2	435.3	3.90	112.585			
1,200.0	1,197.4	1,112.4	1,102.7	2.3	3.0	-55.08	245.5	406.2	449.5	445.2	4.36	103.194			
1,300.0	1,296.3	1,201.1	1,188.7	2.6	3.4	-54.70	245.6	428.4	461.5	456.6	4.85	95.219			
1,400.0	1,394.9	1,293.1	1,277.2	2.9	3.9	-54.34	245.8	453.3	474.4	469.0	5.38	88.193			
1,500.0	1,493.3	1,391.7	1,371.8	3.3	4.4	-54.06	245.9	481.1	487.1	481.1	5.96	81.659			
1,600.0	1,591.2	1,495.3	1,471.0	3.7	4.9	-53.82	244.8	510.8	498.6	492.0	6.60	75.504			
8,100.0	7,688.5	7,805.8	7,673.8	33.2	23.8	-70.79	232.1	1,385.2	456.3	430.2	26.10	17.479			
8,200.0	7,708.2	7,826.8	7,694.8	33.2	23.8	-83.04	232.4	1,385.2	385.3	358.0	27.28	14.123			
8,300.0	7,712.0	7,832.2	7,700.2	33.3	23.9	-89.41	232.5	1,385.2	323.6	295.6	27.97	11.567			
8,400.0	7,712.0	7,833.7	7,701.8	33.4	23.9	-89.74	232.5	1,385.2	283.4	255.0	28.34	9.999			
8,472.0	7,712.0	7,834.9	7,702.9	33.6	23.9	-89.98	232.6	1,385.2	274.1	245.3	28.74	9.535 CC, ES			
8,500.0	7,712.0	7,835.3	7,703.3	33.6	23.9	-90.07	232.6	1,385.2	275.5	246.6	28.90	9.533 SF			
8,600.0	7,712.0	7,836.9	7,704.9	34.0	23.9	-90.40	232.6	1,385.2	302.5	272.8	29.63	10.207			
8,700.0	7,712.0	7,838.5	7,706.5	34.3	23.9	-90.74	232.6	1,385.2	356.5	325.9	30.52	11.681			
8,800.0	7,712.0	7,840.1	7,708.1	34.8	23.9	-91.07	232.6	1,385.2	427.4	395.8	31.53	13.554			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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		
3,900.0	3,812.1	3,994.0	3,900.5	14.8	16.1	-100.56	224.8	785.2	492.4	470.5	21.89	22.493		
4,000.0	3,908.6	4,089.3	3,992.4	15.3	16.6	-103.13	199.6	784.8	470.9	448.6	22.29	21.124		
4,100.0	4,005.0	4,184.6	4,084.3	15.8	17.1	-105.91	174.5	784.5	450.5	427.8	22.69	19.855		
4,200.0	4,101.5	4,279.8	4,176.2	16.3	17.5	-108.95	149.3	784.2	431.2	408.1	23.09	18.676		
4,300.0	4,197.9	4,375.1	4,268.1	16.8	18.0	-112.23	124.2	783.9	413.3	389.8	23.52	17.576		
4,400.0	4,294.4	4,470.3	4,359.9	17.3	18.5	-115.78	99.0	783.5	396.9	373.0	23.99	16.549		
4,500.0	4,390.8	4,565.6	4,451.8	17.8	18.9	-119.60	73.9	783.2	382.3	357.8	24.51	15.598		
4,600.0	4,487.3	4,660.8	4,543.7	18.3	19.4	-123.68	48.7	782.9	369.6	344.5	25.09	14.729		
4,700.0	4,583.8	4,756.1	4,635.6	18.8	19.9	-128.01	23.6	782.6	359.0	333.2	25.72	13.954		
4,800.0	4,680.2	4,851.4	4,727.4	19.3	20.3	-132.54	-1.6	782.2	350.7	324.3	26.39	13.288		
4,900.0	4,776.7	4,946.6	4,819.3	19.8	20.8	-137.25	-26.7	781.9	344.9	317.8	27.07	12.742		
5,000.0	4,873.1	5,041.9	4,911.2	20.3	21.3	-142.07	-51.9	781.6	341.8	314.0	27.73	12.323		
5,066.9	4,937.6	5,105.6	4,972.6	20.7	21.6	-145.32	-68.7	781.4	341.2	313.0	28.16	12.114 CC		
5,100.0	4,969.6	5,137.1	5,003.1	20.8	21.7	-146.93	-77.0	781.3	341.3	312.9	28.37	12.031 ES		
5,200.0	5,066.0	5,232.4	5,095.0	21.3	22.2	-151.77	-102.2	781.0	343.6	314.6	28.97	11.857		
5,300.0	5,162.5	5,327.6	5,186.8	21.9	22.7	-156.52	-127.3	780.6	348.5	318.9	29.55	11.790 SF		
5,400.0	5,259.0	5,422.9	5,278.7	22.4	23.1	-161.12	-152.5	780.3	355.9	325.8	30.14	11.810		
5,500.0	5,355.4	5,518.2	5,370.6	22.9	23.6	-165.52	-177.6	780.0	365.7	335.0	30.74	11.896		
5,600.0	5,451.9	5,613.4	5,462.5	23.4	24.1	-169.69	-202.8	779.7	377.8	346.3	31.42	12.024		
5,700.0	5,548.3	5,708.7	5,554.3	23.9	24.5	-173.60	-227.9	779.3	391.8	359.6	32.17	12.177		
5,800.0	5,644.8	5,803.9	5,646.2	24.4	25.0	-177.24	-253.1	779.0	407.6	374.6	33.03	12.340		
5,900.0	5,741.2	5,899.2	5,738.1	24.9	25.5	179.39	-278.2	778.7	425.0	391.1	33.99	12.506		
6,000.0	5,837.7	5,994.5	5,830.0	25.4	25.9	176.27	-303.4	778.4	443.9	408.8	35.03	12.673		
6,100.0	5,934.2	6,089.7	5,921.8	25.9	26.4	173.40	-328.5	778.0	463.9	427.8	36.12	12.843		
6,200.0	6,030.6	6,185.0	6,013.7	26.4	26.9	170.77	-353.7	777.7	485.1	447.8	37.26	13.018		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Ray Nelson 7-8-32 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total 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	57.18	196.7	305.0	363.0					
100.0	100.0	91.0	91.0	0.1	0.1	57.18	196.7	305.0	362.9	362.6	0.28	1,280.743		
200.0	200.0	191.0	191.0	0.3	0.3	57.18	196.7	305.0	362.9	362.3	0.63	575.980		
300.0	300.0	291.0	291.0	0.5	0.5	57.18	196.7	305.0	362.9	361.9	0.98	370.640		
400.0	400.0	391.0	391.0	0.7	0.7	57.18	196.7	305.0	362.9	361.6	1.33	273.231		
500.0	500.0	491.0	491.0	0.8	0.8	-52.29	196.7	305.0	362.4	360.7	1.68	216.013		
600.0	600.0	587.6	587.6	1.0	1.0	-52.41	195.9	306.0	361.2	359.2	2.02	178.450		
700.0	699.9	683.9	683.8	1.2	1.2	-52.26	193.0	309.5	360.0	357.6	2.38	151.149		
800.0	799.7	780.1	779.6	1.4	1.4	-51.83	188.1	315.6	358.7	356.0	2.76	129.900		
900.0	899.4	876.1	875.0	1.6	1.6	-51.12	181.1	324.1	357.5	354.4	3.17	112.615		
1,000.0	998.9	971.9	969.7	1.8	1.9	-50.12	172.2	335.0	356.4	352.8	3.63	98.209		
1,100.0	1,098.3	1,067.3	1,063.6	2.1	2.2	-48.85	161.3	348.4	355.5	351.3	4.13	86.094		
1,200.0	1,197.4	1,163.6	1,157.7	2.3	2.5	-47.30	148.5	364.2	354.8	350.1	4.66	76.057		
1,300.0	1,296.3	1,263.1	1,254.8	2.6	2.9	-45.77	134.6	381.2	353.5	348.3	5.23	67.563		
1,400.0	1,394.9	1,362.7	1,352.0	2.9	3.3	-44.44	120.7	398.2	351.3	345.5	5.81	60.424		
1,500.0	1,493.3	1,462.4	1,449.2	3.3	3.7	-43.29	106.9	415.2	348.0	341.6	6.41	54.312		
1,600.0	1,591.2	1,562.1	1,546.5	3.7	4.1	-42.32	93.0	432.2	343.5	336.5	7.01	48.989		
1,700.0	1,688.9	1,661.9	1,643.7	4.1	4.5	-41.52	79.1	449.2	337.9	330.2	7.63	44.278		
1,800.0	1,786.1	1,761.5	1,741.0	4.5	4.9	-40.90	65.3	466.2	330.9	322.7	8.26	40.049		
1,900.0	1,882.9	1,861.2	1,838.2	4.9	5.3	-40.46	51.4	483.2	322.8	313.8	8.91	36.204		
2,000.0	1,979.4	1,960.7	1,935.3	5.4	5.7	-40.11	37.6	500.2	313.6	304.0	9.58	32.731		
2,100.0	2,075.9	2,060.3	2,032.4	5.9	6.2	-39.74	23.7	517.2	304.4	294.1	10.25	29.704		
2,200.0	2,172.3	2,159.8	2,129.5	6.4	6.6	-39.34	9.9	534.2	295.2	284.3	10.91	27.058		
2,300.0	2,268.8	2,259.4	2,226.6	6.9	7.0	-38.91	-4.0	551.2	286.0	274.4	11.57	24.729		
2,400.0	2,365.2	2,358.9	2,323.7	7.3	7.4	-38.45	-17.8	568.2	276.8	264.6	12.21	22.664		
2,500.0	2,461.7	2,458.5	2,420.8	7.8	7.8	-37.97	-31.7	585.2	267.7	254.8	12.86	20.825		
2,600.0	2,558.1	2,558.1	2,517.9	8.3	8.3	-37.45	-45.5	602.2	258.6	245.1	13.48	19.176		
2,700.0	2,654.6	2,657.6	2,615.1	8.8	8.7	-36.89	-59.4	619.1	249.5	235.4	14.10	17.692		
2,800.0	2,751.1	2,757.2	2,712.2	9.3	9.1	-36.29	-73.2	636.1	240.4	225.7	14.70	16.350		
2,900.0	2,847.5	2,856.7	2,809.3	9.8	9.5	-35.64	-87.1	653.1	231.4	216.1	15.29	15.133		
3,000.0	2,944.0	2,956.3	2,906.4	10.3	9.9	-34.94	-100.9	670.1	222.3	206.5	15.85	14.024		
3,100.0	3,040.4	3,055.8	3,003.5	10.8	10.4	-34.18	-114.8	687.1	213.4	197.0	16.40	13.011		
3,200.0	3,136.9	3,155.4	3,100.6	11.3	10.8	-33.36	-128.6	704.1	204.4	187.5	16.92	12.085		
3,300.0	3,233.3	3,254.9	3,197.7	11.8	11.2	-32.46	-142.5	721.1	195.5	178.1	17.40	11.234		
3,400.0	3,329.8	3,354.5	3,294.8	12.3	11.6	-31.47	-156.3	738.1	186.7	168.8	17.86	10.454		
3,500.0	3,426.3	3,454.0	3,391.9	12.8	12.1	-30.39	-170.2	755.1	177.9	159.6	18.27	9.736		
3,600.0	3,522.7	3,553.6	3,489.1	13.3	12.5	-29.19	-184.0	772.1	169.2	150.5	18.64	9.075		
3,700.0	3,619.2	3,653.2	3,586.2	13.8	12.9	-27.87	-197.9	789.1	160.6	141.6	18.96	8.468		
3,800.0	3,715.6	3,752.7	3,683.3	14.3	13.3	-26.39	-211.7	806.0	152.0	132.8	19.22	7.911		
3,900.0	3,812.1	3,852.3	3,780.4	14.8	13.8	-24.74	-225.6	823.0	143.6	124.2	19.40	7.402		
4,000.0	3,908.6	3,951.8	3,877.5	15.3	14.2	-22.89	-239.4	840.0	135.3	115.8	19.51	6.937		
4,100.0	4,005.0	4,051.4	3,974.6	15.8	14.6	-20.80	-253.3	857.0	127.2	107.7	19.52	6.516		
4,200.0	4,101.5	4,150.9	4,071.7	16.3	15.0	-18.43	-267.1	874.0	119.2	99.8	19.43	6.137		
4,300.0	4,197.9	4,250.5	4,168.8	16.8	15.4	-15.73	-281.0	891.0	111.5	92.3	19.23	5.800		
4,400.0	4,294.4	4,350.0	4,265.9	17.3	15.9	-12.63	-294.8	908.0	104.1	85.2	18.92	5.502		
4,500.0	4,390.8	4,449.6	4,363.1	17.8	16.3	-9.08	-308.7	925.0	97.0	78.5	18.52	5.238		
4,600.0	4,487.3	4,549.1	4,460.2	18.3	16.7	-4.98	-322.5	942.0	90.4	72.3	18.09	4.996		
4,700.0	4,583.8	4,648.7	4,557.3	18.8	17.1	-0.27	-336.4	959.0	84.3	66.5	17.73	4.754		
4,800.0	4,680.2	4,748.3	4,654.4	19.3	17.6	5.13	-350.2	976.0	78.8	61.2	17.61	4.476		
4,900.0	4,776.7	4,847.8	4,751.5	19.8	18.0	11.27	-364.1	992.9	74.2	56.2	17.97	4.126		
5,000.0	4,873.1	4,947.4	4,848.6	20.3	18.4	18.13	-377.9	1,009.9	70.5	51.4	19.08	3.694		
5,100.0	4,969.6	5,046.9	4,945.7	20.8	18.8	25.62	-391.8	1,026.9	67.9	46.8	21.08	3.221		

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 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - Ray Nelson 7-8-32 - DD - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,066.0	5,146.5	5,042.8	21.3	19.3	33.55	-405.6	1,043.9	66.6	42.6	23.95	2.780		
5,250.2	5,114.4	5,196.4	5,091.6	21.6	19.5	37.61	-412.6	1,052.4	66.4	40.8	25.63	2.591 CC		
5,300.0	5,162.5	5,246.0	5,139.9	21.9	19.7	41.64	-419.5	1,060.9	66.6	39.2	27.40	2.430		
5,400.0	5,259.0	5,345.6	5,237.1	22.4	20.1	49.57	-433.3	1,077.9	67.9	36.9	31.04	2.187		
5,500.0	5,355.4	5,445.1	5,334.2	22.9	20.5	57.06	-447.2	1,094.9	70.5	35.9	34.53	2.041 ES		
5,600.0	5,451.9	5,544.7	5,431.3	23.4	21.0	63.92	-461.0	1,111.9	74.1	36.5	37.66	1.969		
5,700.0	5,548.3	5,644.2	5,528.4	23.9	21.4	70.06	-474.9	1,128.9	78.8	38.4	40.36	1.952 SF		
5,800.0	5,644.8	5,743.8	5,625.5	24.4	21.8	75.47	-488.7	1,145.9	84.2	41.6	42.65	1.975		
5,900.0	5,741.2	5,843.4	5,722.6	24.9	22.2	80.18	-502.6	1,162.8	90.4	45.8	44.58	2.027		
6,000.0	5,837.7	5,943.6	5,820.6	25.4	22.6	84.57	-516.2	1,179.6	96.8	50.6	46.25	2.093		
6,100.0	5,934.2	6,044.3	5,919.5	25.9	23.0	90.03	-528.0	1,194.0	102.7	54.9	47.79	2.148		
6,200.0	6,030.6	6,144.4	6,018.5	26.4	23.3	96.62	-537.5	1,205.7	108.5	59.5	48.99	2.215		
6,300.0	6,127.1	6,243.7	6,117.1	26.9	23.5	104.12	-544.8	1,214.6	115.3	65.8	49.56	2.327		
6,400.0	6,223.5	6,342.0	6,215.0	27.4	23.7	112.19	-549.9	1,220.9	124.0	74.7	49.28	2.516		
6,500.0	6,320.0	6,438.9	6,311.8	27.9	23.8	120.40	-552.8	1,224.4	135.4	87.3	48.10	2.816		
6,600.0	6,416.4	6,534.6	6,407.4	28.4	23.9	128.34	-553.7	1,225.5	150.4	104.2	46.19	3.255		
6,700.0	6,512.9	6,631.0	6,503.9	28.9	24.0	135.28	-553.7	1,225.5	168.3	124.3	44.02	3.824		
6,800.0	6,609.4	6,727.5	6,600.4	29.4	24.1	140.85	-553.7	1,225.5	188.3	146.2	42.03	4.480		
6,900.0	6,705.8	6,823.9	6,696.8	29.9	24.1	145.36	-553.7	1,225.5	209.7	169.3	40.33	5.199		
7,000.0	6,802.3	6,920.4	6,793.3	30.4	24.2	149.03	-553.7	1,225.5	232.1	193.2	38.92	5.964		
7,100.0	6,898.7	7,016.9	6,889.7	30.9	24.3	152.05	-553.7	1,225.5	255.3	217.5	37.77	6.758		
7,200.0	6,995.2	7,113.3	6,986.2	31.4	24.4	154.58	-553.7	1,225.5	279.0	242.1	36.85	7.571		
7,300.0	7,091.7	7,209.8	7,082.7	31.9	24.5	156.71	-553.7	1,225.5	303.2	267.1	36.12	8.393		
7,400.0	7,188.4	7,306.5	7,179.4	32.4	24.6	-167.18	-553.7	1,225.5	327.8	292.9	34.92	9.387		
7,500.0	7,284.2	7,402.3	7,275.2	32.7	24.6	-137.55	-553.7	1,225.5	352.6	317.7	34.87	10.111		
7,600.0	7,376.1	7,494.2	7,367.1	32.9	24.7	-124.16	-553.7	1,225.5	378.8	343.2	35.52	10.665		
7,700.0	7,461.3	7,579.4	7,452.3	33.1	24.8	-118.89	-553.7	1,225.5	408.8	372.7	36.11	11.322		
7,800.0	7,537.3	7,655.4	7,528.3	33.2	24.9	-116.71	-553.7	1,225.5	445.7	409.6	36.08	12.353		
7,900.0	7,601.7	7,719.9	7,592.7	33.2	24.9	-114.91	-553.7	1,225.5	491.6	456.3	35.32	13.918		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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 8-4-32 (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					
9,900.0	7,712.0	7,869.7	7,673.0	44.6	30.2	90.00	1,977.9	1,919.0	437.3	381.8	55.49	7.881					
10,000.0	7,712.0	7,869.7	7,673.0	45.8	30.2	90.00	1,977.9	1,919.0	376.4	319.3	57.08	6.594					
10,100.0	7,712.0	7,869.7	7,673.0	47.0	30.2	90.00	1,977.9	1,919.0	334.9	276.2	58.69	5.706					
10,197.7	7,712.0	7,869.7	7,673.0	48.2	30.2	90.00	1,977.9	1,919.0	320.3	260.1	60.27	5.315 CC					
10,200.0	7,712.0	7,869.7	7,673.0	48.2	30.2	90.00	1,977.9	1,919.0	320.3	260.0	60.31	5.312 ES, SF					
10,300.0	7,712.0	7,869.7	7,673.0	49.5	30.2	90.00	1,977.9	1,919.0	336.3	274.3	61.94	5.429					
10,400.0	7,712.0	7,869.7	7,673.0	50.9	30.2	90.00	1,977.9	1,919.0	378.9	315.3	63.59	5.959					
10,500.0	7,712.0	7,869.7	7,673.0	52.2	30.2	90.00	1,977.9	1,919.0	440.5	375.2	65.24	6.752					

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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 8-6-32 (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	
8,600.0	7,712.0	7,779.6	7,673.0	34.0	24.2	90.00	739.5	1,922.0	456.1	425.8	30.26	15.072	
8,700.0	7,712.0	7,779.6	7,673.0	34.3	24.2	90.00	739.5	1,922.0	382.1	351.0	31.13	12.276	
8,800.0	7,712.0	7,779.6	7,673.0	34.8	24.2	90.00	739.5	1,922.0	322.6	290.4	32.13	10.041	
8,900.0	7,712.0	7,779.6	7,673.0	35.4	24.2	90.00	739.5	1,922.0	286.5	253.2	33.23	8.620	
8,959.9	7,712.0	7,779.6	7,673.0	35.7	24.2	90.00	739.5	1,922.0	280.1	246.2	33.95	8.250 CC, ES	
9,000.0	7,712.0	7,779.6	7,673.0	36.0	24.2	90.00	739.5	1,922.0	283.0	248.5	34.43	8.218 SF	
9,100.0	7,712.0	7,779.6	7,673.0	36.7	24.2	90.00	739.5	1,922.0	313.2	277.5	35.71	8.770	
9,200.0	7,712.0	7,779.6	7,673.0	37.5	24.2	90.00	739.5	1,922.0	368.9	331.9	37.05	9.957	
9,300.0	7,712.0	7,779.6	7,673.0	38.3	24.2	90.00	739.5	1,922.0	440.6	402.1	38.44	11.461	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 40-32H-O268
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5003.0ft (Original Well Elev)
Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 40-32H-O268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S32-T2N-R68W (File/Hwy 52) - RAY NELSON 8-8-32 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 70-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	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)				
0.0	0.0	0.0	0.0	0.0	0.0	57.18	196.7	305.0	363.0					
100.0	100.0	87.8	87.8	0.1	0.1	57.19	196.9	305.4	363.4	363.1	0.28	1,317.871		
200.0	200.0	184.2	184.2	0.3	0.3	57.28	197.0	306.7	364.6	364.0	0.62	588.322		
300.0	300.0	281.6	281.5	0.5	0.5	57.72	195.8	309.9	366.7	365.7	0.97	379.855		
400.0	400.0	373.9	373.6	0.7	0.7	58.56	193.0	315.6	370.3	369.0	1.30	283.938		
500.0	500.0	469.2	468.4	0.8	0.9	-49.61	188.7	324.3	375.3	373.6	1.72	218.394		
600.0	600.0	563.3	561.7	1.0	1.2	-48.26	182.6	334.9	380.2	378.1	2.13	178.389		
700.0	699.9	654.6	651.7	1.2	1.5	-46.77	175.4	347.9	386.2	383.6	2.57	150.102		
800.0	799.7	745.3	740.7	1.4	1.8	-45.10	166.7	363.8	393.4	390.4	3.04	129.532		
900.0	899.4	834.7	827.9	1.6	2.2	-43.55	158.3	381.6	402.1	398.6	3.51	114.634		
1,000.0	998.9	927.7	918.2	1.8	2.6	-42.06	149.7	402.1	411.7	407.7	4.01	102.775		
1,100.0	1,098.3	1,018.5	1,005.7	2.1	3.1	-40.48	139.6	423.9	421.7	417.1	4.53	93.062		
1,200.0	1,197.4	1,103.8	1,086.9	2.3	3.6	-38.81	128.3	447.5	433.4	428.3	5.06	85.661		
1,300.0	1,296.3	1,189.0	1,167.0	2.6	4.2	-37.10	116.3	474.0	447.2	441.6	5.60	79.923		
1,400.0	1,394.9	1,276.8	1,248.6	2.9	4.8	-35.36	103.3	503.7	462.7	456.5	6.15	75.218		
1,500.0	1,493.3	1,369.5	1,333.7	3.3	5.5	-33.50	87.9	537.0	478.8	472.1	6.73	71.142		
1,600.0	1,591.2	1,467.0	1,422.6	3.7	6.2	-31.53	69.8	572.7	494.5	487.1	7.32	67.572		
6,900.0	6,705.8	6,992.7	6,695.9	29.9	34.4	-14.75	-544.6	1,908.9	482.2	451.8	30.41	15.855		
7,000.0	6,802.3	7,089.5	6,792.7	30.4	34.4	-15.73	-543.6	1,909.2	456.8	425.5	31.32	14.586		
7,100.0	6,898.7	7,186.3	6,889.5	30.9	34.5	-16.83	-542.5	1,909.3	431.5	399.2	32.32	13.352		
7,200.0	6,995.2	7,283.2	6,986.4	31.4	34.5	-18.08	-541.3	1,909.4	406.3	372.8	33.43	12.152		
7,300.0	7,091.7	7,380.3	7,083.5	31.9	34.6	-19.49	-540.2	1,909.3	381.1	346.4	34.69	10.986		
7,400.0	7,188.4	7,477.6	7,180.8	32.4	34.6	15.56	-539.0	1,909.0	356.0	322.2	33.80	10.533 SF		
7,500.0	7,284.2	7,573.8	7,277.0	32.7	34.7	49.92	-538.0	1,908.5	332.0	300.8	31.20	10.642		
7,600.0	7,376.1	7,665.9	7,369.1	32.9	34.7	72.73	-537.3	1,908.0	312.3	283.8	28.47	10.969		
7,700.0	7,461.3	7,751.2	7,454.4	33.1	34.8	89.67	-536.7	1,907.6	303.1	275.9	27.21	11.139		
7,706.7	7,466.8	7,756.6	7,459.8	33.1	34.8	90.66	-536.7	1,907.5	303.1	275.9	27.19	11.147 CC, ES		
7,800.0	7,537.3	7,827.7	7,530.9	33.2	34.8	102.63	-536.4	1,907.1	312.2	285.2	27.03	11.549		
7,900.0	7,601.7	7,893.1	7,596.3	33.2	34.8	111.45	-536.0	1,906.7	344.6	318.0	26.61	12.952		
8,000.0	7,652.6	7,945.2	7,648.3	33.2	34.9	115.72	-535.6	1,906.2	399.8	373.6	26.14	15.293		
8,100.0	7,688.5	7,981.9	7,685.1	33.2	34.9	114.48	-535.3	1,905.9	473.1	445.8	27.31	17.322		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Hwy 52 4O-32H-O268
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Reference Site:	S32-T2N-R68W (File/Hwy 52)	MD Reference:	WELL @ 5003.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Hwy 52 4O-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 @ 5003.0ft (Original Well Elev)

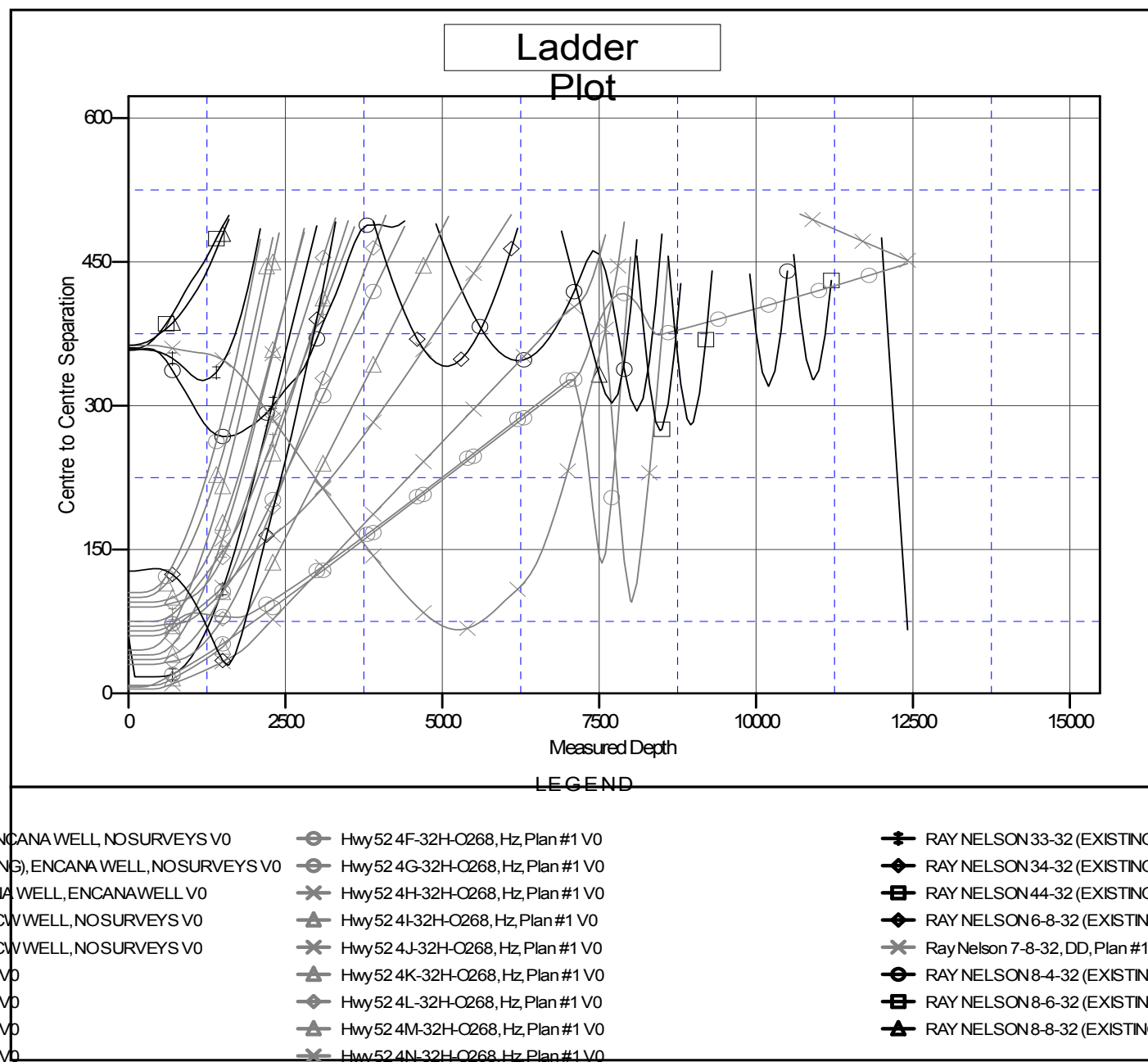
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°



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