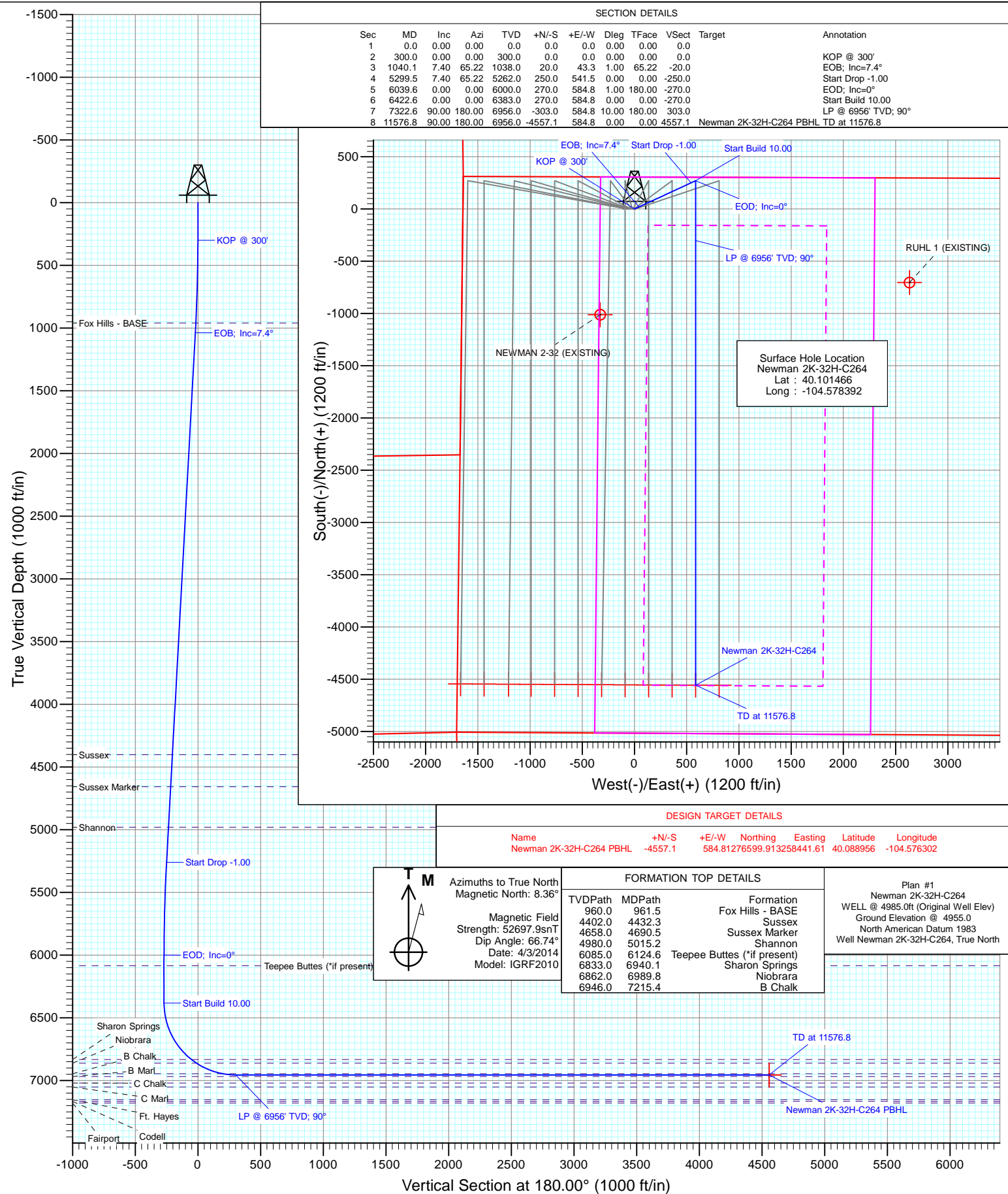




Project: DJ Wattenberg
Site: S32-T2N-R64W (Newman)
Well: Newman 2K-32H-C264
Wellbore: HZ
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2K-32H-C264	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-R64W (Newman)			
Site Position:		Northing:	1,281,150.66 ft	Latitude:	40.101468
From:	Lat/Long	Easting:	3,257,734.55 ft	Longitude:	-104.578660
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.60 °

Well	Newman 2K-32H-C264					
Well Position	+N/-S	0.0 ft	Northing:	1,281,150.66 ft	Latitude:	40.101466
	+E/-W	0.0 ft	Easting:	3,257,809.52 ft	Longitude:	-104.578392
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,955.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/3/2014	8.36	66.74	52,698

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

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,040.1	7.40	65.22	1,038.0	20.0	43.3	1.00	1.00	0.00	65.22	
5,299.5	7.40	65.22	5,262.0	250.0	541.5	0.00	0.00	0.00	0.00	
6,039.6	0.00	0.00	6,000.0	270.0	584.8	1.00	-1.00	0.00	180.00	
6,422.6	0.00	0.00	6,383.0	270.0	584.8	0.00	0.00	0.00	0.00	
7,322.6	90.00	180.00	6,956.0	-303.0	584.8	10.00	10.00	0.00	180.00	
11,576.8	90.00	180.00	6,956.0	-4,557.1	584.8	0.00	0.00	0.00	0.00	Newman 2K-32H-C264

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2K-32H-C264	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	KOP @ 300'
400.0	1.00	65.22	400.0	0.4	0.8	-0.4	1.00	1.00	
500.0	2.00	65.22	500.0	1.5	3.2	-1.5	1.00	1.00	
600.0	3.00	65.22	599.9	3.3	7.1	-3.3	1.00	1.00	
700.0	4.00	65.22	699.7	5.9	12.7	-5.9	1.00	1.00	
800.0	5.00	65.22	799.4	9.1	19.8	-9.1	1.00	1.00	
900.0	6.00	65.22	898.9	13.2	28.5	-13.2	1.00	1.00	
961.5	6.61	65.22	960.0	16.0	34.6	-16.0	1.00	1.00	Fox Hills - BASE
1,000.0	7.00	65.22	998.3	17.9	38.8	-17.9	1.00	1.00	
1,040.1	7.40	65.22	1,038.0	20.0	43.3	-20.0	1.00	1.00	EOB; Inc=7.4°
1,100.0	7.40	65.22	1,097.4	23.2	50.3	-23.2	0.00	0.00	
1,200.0	7.40	65.22	1,196.6	28.6	62.0	-28.6	0.00	0.00	
1,300.0	7.40	65.22	1,295.8	34.0	73.7	-34.0	0.00	0.00	
1,400.0	7.40	65.22	1,394.9	39.4	85.4	-39.4	0.00	0.00	
1,500.0	7.40	65.22	1,494.1	44.8	97.1	-44.8	0.00	0.00	
1,600.0	7.40	65.22	1,593.3	50.2	108.8	-50.2	0.00	0.00	
1,700.0	7.40	65.22	1,692.4	55.6	120.5	-55.6	0.00	0.00	
1,800.0	7.40	65.22	1,791.6	61.0	132.2	-61.0	0.00	0.00	
1,900.0	7.40	65.22	1,890.8	66.4	143.9	-66.4	0.00	0.00	
2,000.0	7.40	65.22	1,989.9	71.8	155.6	-71.8	0.00	0.00	
2,100.0	7.40	65.22	2,089.1	77.2	167.3	-77.2	0.00	0.00	
2,200.0	7.40	65.22	2,188.3	82.6	179.0	-82.6	0.00	0.00	
2,300.0	7.40	65.22	2,287.4	88.0	190.7	-88.0	0.00	0.00	
2,400.0	7.40	65.22	2,386.6	93.4	202.4	-93.4	0.00	0.00	
2,500.0	7.40	65.22	2,485.8	98.8	214.1	-98.8	0.00	0.00	
2,600.0	7.40	65.22	2,584.9	104.2	225.8	-104.2	0.00	0.00	
2,700.0	7.40	65.22	2,684.1	109.6	237.5	-109.6	0.00	0.00	
2,800.0	7.40	65.22	2,783.3	115.0	249.2	-115.0	0.00	0.00	
2,900.0	7.40	65.22	2,882.4	120.4	260.8	-120.4	0.00	0.00	
3,000.0	7.40	65.22	2,981.6	125.8	272.5	-125.8	0.00	0.00	
3,100.0	7.40	65.22	3,080.8	131.2	284.2	-131.2	0.00	0.00	
3,200.0	7.40	65.22	3,180.0	136.6	295.9	-136.6	0.00	0.00	
3,300.0	7.40	65.22	3,279.1	142.0	307.6	-142.0	0.00	0.00	
3,400.0	7.40	65.22	3,378.3	147.4	319.3	-147.4	0.00	0.00	
3,500.0	7.40	65.22	3,477.5	152.8	331.0	-152.8	0.00	0.00	
3,600.0	7.40	65.22	3,576.6	158.2	342.7	-158.2	0.00	0.00	
3,700.0	7.40	65.22	3,675.8	163.6	354.4	-163.6	0.00	0.00	
3,800.0	7.40	65.22	3,775.0	169.0	366.1	-169.0	0.00	0.00	
3,900.0	7.40	65.22	3,874.1	174.4	377.8	-174.4	0.00	0.00	
4,000.0	7.40	65.22	3,973.3	179.8	389.5	-179.8	0.00	0.00	
4,100.0	7.40	65.22	4,072.5	185.2	401.2	-185.2	0.00	0.00	
4,200.0	7.40	65.22	4,171.6	190.6	412.9	-190.6	0.00	0.00	
4,300.0	7.40	65.22	4,270.8	196.0	424.6	-196.0	0.00	0.00	
4,400.0	7.40	65.22	4,370.0	201.4	436.3	-201.4	0.00	0.00	
4,432.3	7.40	65.22	4,402.0	203.2	440.0	-203.2	0.00	0.00	Sussex
4,500.0	7.40	65.22	4,469.1	206.8	448.0	-206.8	0.00	0.00	
4,600.0	7.40	65.22	4,568.3	212.2	459.7	-212.2	0.00	0.00	
4,690.5	7.40	65.22	4,658.0	217.1	470.2	-217.1	0.00	0.00	Sussex Marker
4,700.0	7.40	65.22	4,667.5	217.6	471.4	-217.6	0.00	0.00	

Planning Report

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Project:	DJ Wattenberg	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2K-32H-C264	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	7.40	65.22	4,766.6	223.0	483.0	-223.0	0.00	0.00	
4,900.0	7.40	65.22	4,865.8	228.4	494.7	-228.4	0.00	0.00	
5,000.0	7.40	65.22	4,965.0	233.8	506.4	-233.8	0.00	0.00	
5,015.2	7.40	65.22	4,980.0	234.6	508.2	-234.6	0.00	0.00	Shannon
5,100.0	7.40	65.22	5,064.1	239.2	518.1	-239.2	0.00	0.00	
5,200.0	7.40	65.22	5,163.3	244.6	529.8	-244.6	0.00	0.00	
5,299.5	7.40	65.22	5,262.0	250.0	541.5	-250.0	0.00	0.00	Start Drop -1.00
5,300.0	7.40	65.22	5,262.5	250.0	541.5	-250.0	1.00	-1.00	
5,400.0	6.40	65.22	5,361.7	255.1	552.4	-255.1	1.00	-1.00	
5,500.0	5.40	65.22	5,461.2	259.4	561.7	-259.4	1.00	-1.00	
5,600.0	4.40	65.22	5,560.8	262.9	569.5	-262.9	1.00	-1.00	
5,700.0	3.40	65.22	5,660.6	265.8	575.7	-265.8	1.00	-1.00	
5,800.0	2.40	65.22	5,760.5	267.9	580.3	-267.9	1.00	-1.00	
5,900.0	1.40	65.22	5,860.4	269.3	583.3	-269.3	1.00	-1.00	
6,000.0	0.40	65.22	5,960.4	269.9	584.7	-269.9	1.00	-1.00	
6,039.6	0.00	0.00	6,000.0	270.0	584.8	-270.0	1.00	-1.00	EOD; Inc=0°
6,100.0	0.00	0.00	6,060.4	270.0	584.8	-270.0	0.00	0.00	
6,124.6	0.00	0.00	6,085.0	270.0	584.8	-270.0	0.00	0.00	Teepee Buttes (*if present)
6,200.0	0.00	0.00	6,160.4	270.0	584.8	-270.0	0.00	0.00	
6,300.0	0.00	0.00	6,260.4	270.0	584.8	-270.0	0.00	0.00	
6,400.0	0.00	0.00	6,360.4	270.0	584.8	-270.0	0.00	0.00	
6,422.6	0.00	0.00	6,383.0	270.0	584.8	-270.0	0.00	0.00	Start Build 10.00
6,500.0	7.74	180.00	6,460.2	264.8	584.8	-264.8	10.00	10.00	
6,600.0	17.74	180.00	6,557.6	242.8	584.8	-242.8	10.00	10.00	
6,700.0	27.74	180.00	6,649.7	204.2	584.8	-204.2	10.00	10.00	
6,800.0	37.74	180.00	6,733.7	150.2	584.8	-150.2	10.00	10.00	
6,900.0	47.74	180.00	6,807.1	82.4	584.8	-82.4	10.00	10.00	
6,940.1	51.75	180.00	6,833.0	51.8	584.8	-51.8	10.00	10.00	Sharon Springs
6,989.8	56.71	180.00	6,862.0	11.5	584.8	-11.5	10.00	10.00	Niobrara
7,000.0	57.74	180.00	6,867.5	2.9	584.8	-2.9	10.00	10.00	
7,100.0	67.74	180.00	6,913.3	-85.9	584.8	85.9	10.00	10.00	
7,200.0	77.74	180.00	6,942.9	-181.3	584.8	181.3	10.00	10.00	
7,215.4	79.28	180.00	6,946.0	-196.4	584.8	196.4	10.00	10.00	B Chalk
7,300.0	87.74	180.00	6,955.6	-280.3	584.8	280.3	10.00	10.00	
7,322.6	90.00	180.00	6,956.0	-303.0	584.8	303.0	10.00	10.00	LP @ 6956' TVD; 90°
7,400.0	90.00	180.00	6,956.0	-380.3	584.8	380.3	0.00	0.00	
7,500.0	90.00	180.00	6,956.0	-480.3	584.8	480.3	0.00	0.00	
7,600.0	90.00	180.00	6,956.0	-580.3	584.8	580.3	0.00	0.00	
7,700.0	90.00	180.00	6,956.0	-680.3	584.8	680.3	0.00	0.00	
7,800.0	90.00	180.00	6,956.0	-780.3	584.8	780.3	0.00	0.00	
7,900.0	90.00	180.00	6,956.0	-880.3	584.8	880.3	0.00	0.00	
8,000.0	90.00	180.00	6,956.0	-980.3	584.8	980.3	0.00	0.00	
8,100.0	90.00	180.00	6,956.0	-1,080.3	584.8	1,080.3	0.00	0.00	
8,200.0	90.00	180.00	6,956.0	-1,180.3	584.8	1,180.3	0.00	0.00	
8,300.0	90.00	180.00	6,956.0	-1,280.3	584.8	1,280.3	0.00	0.00	
8,400.0	90.00	180.00	6,956.0	-1,380.3	584.8	1,380.3	0.00	0.00	
8,500.0	90.00	180.00	6,956.0	-1,480.3	584.8	1,480.3	0.00	0.00	
8,600.0	90.00	180.00	6,956.0	-1,580.3	584.8	1,580.3	0.00	0.00	
8,700.0	90.00	180.00	6,956.0	-1,680.3	584.8	1,680.3	0.00	0.00	
8,800.0	90.00	180.00	6,956.0	-1,780.3	584.8	1,780.3	0.00	0.00	
8,900.0	90.00	180.00	6,956.0	-1,880.3	584.8	1,880.3	0.00	0.00	
9,000.0	90.00	180.00	6,956.0	-1,980.3	584.8	1,980.3	0.00	0.00	

Planning Report

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Project:	DJ Wattenberg	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2K-32H-C264	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
9,100.0	90.00	180.00	6,956.0	-2,080.3	584.8	2,080.3	0.00	0.00	
9,200.0	90.00	180.00	6,956.0	-2,180.3	584.8	2,180.3	0.00	0.00	
9,300.0	90.00	180.00	6,956.0	-2,280.3	584.8	2,280.3	0.00	0.00	
9,400.0	90.00	180.00	6,956.0	-2,380.3	584.8	2,380.3	0.00	0.00	
9,500.0	90.00	180.00	6,956.0	-2,480.3	584.8	2,480.3	0.00	0.00	
9,600.0	90.00	180.00	6,956.0	-2,580.3	584.8	2,580.3	0.00	0.00	
9,700.0	90.00	180.00	6,956.0	-2,680.3	584.8	2,680.3	0.00	0.00	
9,800.0	90.00	180.00	6,956.0	-2,780.3	584.8	2,780.3	0.00	0.00	
9,900.0	90.00	180.00	6,956.0	-2,880.3	584.8	2,880.3	0.00	0.00	
10,000.0	90.00	180.00	6,956.0	-2,980.3	584.8	2,980.3	0.00	0.00	
10,100.0	90.00	180.00	6,956.0	-3,080.3	584.8	3,080.3	0.00	0.00	
10,200.0	90.00	180.00	6,956.0	-3,180.3	584.8	3,180.3	0.00	0.00	
10,300.0	90.00	180.00	6,956.0	-3,280.3	584.8	3,280.3	0.00	0.00	
10,400.0	90.00	180.00	6,956.0	-3,380.3	584.8	3,380.3	0.00	0.00	
10,500.0	90.00	180.00	6,956.0	-3,480.3	584.8	3,480.3	0.00	0.00	
10,600.0	90.00	180.00	6,956.0	-3,580.3	584.8	3,580.3	0.00	0.00	
10,700.0	90.00	180.00	6,956.0	-3,680.3	584.8	3,680.3	0.00	0.00	
10,800.0	90.00	180.00	6,956.0	-3,780.3	584.8	3,780.3	0.00	0.00	
10,900.0	90.00	180.00	6,956.0	-3,880.3	584.8	3,880.3	0.00	0.00	
11,000.0	90.00	180.00	6,956.0	-3,980.3	584.8	3,980.3	0.00	0.00	
11,100.0	90.00	180.00	6,956.0	-4,080.3	584.8	4,080.3	0.00	0.00	
11,200.0	90.00	180.00	6,956.0	-4,180.3	584.8	4,180.3	0.00	0.00	
11,300.0	90.00	180.00	6,956.0	-4,280.3	584.8	4,280.3	0.00	0.00	
11,400.0	90.00	180.00	6,956.0	-4,380.3	584.8	4,380.3	0.00	0.00	
11,500.0	90.00	180.00	6,956.0	-4,480.3	584.8	4,480.3	0.00	0.00	
11,576.8	90.00	180.00	6,956.0	-4,557.1	584.8	4,557.1	0.00	0.00	TD at 11576.8

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									
Newman 2K-32H-C264 I	0.00	0.00	6,956.0	-4,557.1	584.8	1,276,599.91	3,258,441.61	40.088956	-104.576302
- plan hits target center									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
961.5	960.0	Fox Hills - BASE			
4,432.3	4,402.0	Sussex			
4,690.5	4,658.0	Sussex Marker			
5,015.2	4,980.0	Shannon			
6,124.6	6,085.0	Teepee Buttes (*if present)			
6,940.1	6,833.0	Sharon Springs			
6,989.8	6,862.0	Niobrara			
7,215.4	6,946.0	B Chalk			

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2K-32H-C264	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	KOP @ 300'
1,040.1	1,038.0	20.0	43.3	EOB; Inc=7.4°
5,299.5	5,262.0	250.0	541.5	Start Drop -1.00
6,039.6	6,000.0	270.0	584.8	EOD; Inc=0°
6,422.6	6,383.0	270.0	584.8	Start Build 10.00
7,322.6	6,956.0	-303.0	584.8	LP @ 6956' TVD; 90°
11,576.8	6,956.0	-4,557.1	584.8	TD at 11576.8

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S32-T2N-R64W (Newman)

Newman 2K-32H-C264

HZ

Plan #1

Anticollision Report

04 April, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	4/4/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,576.7	Plan #1 (HZ)	Geolink MWD	Geolink MWD	

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-R64W (Newman)						
NEWMAN 2-32 (EXISTING) - EXISTING - ENCANA WE	8,031.6	6,904.0	913.2	878.3	26.169	CC, ES
NEWMAN 2-32 (EXISTING) - EXISTING - ENCANA WE	8,400.0	6,904.0	984.7	944.1	24.265	SF
Newman 2A-32H-C264 - HZ - Plan #1	200.0	197.0	75.0	74.4	127.468	CC, ES
Newman 2A-32H-C264 - HZ - Plan #1	600.0	583.7	108.3	106.4	55.100	SF
Newman 2B-32H-C264 - HZ - Plan #1	235.9	233.9	67.4	66.7	94.263	CC, ES
Newman 2B-32H-C264 - HZ - Plan #1	600.0	587.7	94.7	92.7	48.010	SF
Newman 2C-32H-C264 - HZ - Plan #1	300.0	298.0	59.9	58.9	63.755	CC, ES
Newman 2C-32H-C264 - HZ - Plan #1	600.0	590.3	81.7	79.7	41.323	SF
Newman 2D-32H-C264 - HZ - Plan #1	300.0	298.0	52.3	51.4	55.711	CC, ES
Newman 2D-32H-C264 - HZ - Plan #1	600.0	592.5	69.5	67.5	35.109	SF
Newman 2E-32H-C264 - HZ - Plan #1	300.0	298.0	44.8	43.8	47.668	CC, ES
Newman 2E-32H-C264 - HZ - Plan #1	700.0	694.7	64.7	62.3	27.697	SF
Newman 2F-32H-C264 - HZ - Plan #1	300.0	299.0	37.5	36.5	39.848	CC, ES
Newman 2F-32H-C264 - HZ - Plan #1	600.0	597.9	46.4	44.4	23.322	SF
Newman 2G-32H-C264 - HZ - Plan #1	300.0	299.0	29.9	29.0	31.820	CC, ES
Newman 2G-32H-C264 - HZ - Plan #1	11,576.8	11,623.1	904.6	740.7	5.520	SF
Newman 2H-32H-C264 - HZ - Plan #1	300.0	299.0	22.4	21.4	23.789	CC, ES
Newman 2H-32H-C264 - HZ - Plan #1	11,576.8	11,540.4	675.1	510.3	4.095	SF
Newman 2I-32H-C264 - HZ - Plan #1	300.0	300.0	14.8	13.9	15.731	CC, ES
Newman 2I-32H-C264 - HZ - Plan #1	11,576.8	11,764.5	501.3	352.3	3.364	SF
Newman 2J-32H-C264 - HZ - Plan #1	300.0	300.0	7.3	6.3	7.717	CC, ES
Newman 2J-32H-C264 - HZ - Plan #1	11,576.8	11,646.6	242.7	89.1	1.580	SF
Newman 2L-32H-C264 - HZ - Plan #1	233.5	233.5	7.6	6.8	10.645	CC
Newman 2L-32H-C264 - HZ - Plan #1	300.0	299.9	7.8	6.8	8.238	ES
Newman 2L-32H-C264 - HZ - Plan #1	11,576.8	11,827.6	315.3	195.1	2.623	SF
RUHL 1 (EXISTING) - EXISTING - ENCANA WELL						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - NEWMAN 2-32 (EXISTING) - EXISTING - ENCANA WELL		Offset Site Error:		0.0 ft
Survey Program:													7893-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				
7,700.0	6,956.0	6,904.0	6,904.0	20.9	12.0	90.00	-1,011.9	-328.4	971.6	941.3	30.22	32.149					
7,800.0	6,956.0	6,904.0	6,904.0	22.0	12.0	90.00	-1,011.9	-328.4	942.1	910.6	31.57	29.847					
7,900.0	6,956.0	6,904.0	6,904.0	23.3	12.0	90.00	-1,011.9	-328.4	922.6	889.7	32.97	27.984					
8,000.0	6,956.0	6,904.0	6,904.0	24.6	12.0	90.00	-1,011.9	-328.4	913.8	879.3	34.42	26.544					
8,031.6	6,956.0	6,904.0	6,904.0	25.0	12.0	90.00	-1,011.9	-328.4	913.2	878.3	34.90	26.169	CC, ES				
8,100.0	6,956.0	6,904.0	6,904.0	26.0	12.0	90.00	-1,011.9	-328.4	915.8	879.9	35.92	25.495					
8,200.0	6,956.0	6,904.0	6,904.0	27.4	12.0	90.00	-1,011.9	-328.4	928.6	891.2	37.45	24.798					
8,300.0	6,956.0	6,904.0	6,904.0	28.8	12.0	90.00	-1,011.9	-328.4	951.8	912.8	39.00	24.404					
8,400.0	6,956.0	6,904.0	6,904.0	30.3	12.0	90.00	-1,011.9	-328.4	984.7	944.1	40.58	24.265	SF				

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2A-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.41	0.8	-75.0	75.0					
100.0	100.0	97.0	97.0	0.1	0.1	-89.41	0.8	-75.0	75.0	74.7	0.24	311.505		
200.0	200.0	197.0	197.0	0.3	0.3	-89.41	0.8	-75.0	75.0	74.4	0.59	127.468 CC, ES		
300.0	300.0	294.5	294.5	0.5	0.5	-89.22	1.0	-76.5	76.6	75.6	0.94	81.756		
400.0	400.0	391.7	391.6	0.6	0.7	-154.12	1.9	-81.3	82.3	81.0	1.28	64.391		
500.0	500.0	488.2	487.7	0.8	0.9	-153.98	3.3	-89.2	92.9	91.3	1.62	57.264		
600.0	599.9	583.7	582.6	1.0	1.1	-153.96	5.3	-100.2	108.3	106.4	1.97	55.100 SF		
700.0	699.7	677.8	675.6	1.2	1.4	-154.03	7.7	-114.1	128.5	126.2	2.31	55.644		
800.0	799.4	770.2	766.4	1.4	1.7	-154.12	10.7	-130.7	153.4	150.8	2.65	57.802		
900.0	898.9	860.5	854.7	1.6	2.1	-154.21	14.0	-149.6	182.8	179.8	3.00	60.977		
1,000.0	998.3	948.6	940.1	1.9	2.5	-154.29	17.8	-170.7	216.6	213.3	3.34	64.813		
1,100.0	1,097.4	1,034.2	1,022.5	2.2	3.0	-154.42	21.9	-193.7	254.5	250.8	3.69	68.975		
1,200.0	1,196.6	1,122.5	1,106.8	2.4	3.5	-154.50	26.4	-219.5	294.6	290.6	4.04	72.842		
1,300.0	1,295.8	1,214.0	1,194.0	2.7	4.0	-154.56	31.2	-246.5	335.1	330.7	4.41	76.012		
1,400.0	1,394.9	1,305.4	1,281.3	3.0	4.5	-154.60	36.0	-273.4	375.5	370.8	4.77	78.676		
1,500.0	1,494.1	1,396.9	1,368.6	3.2	5.0	-154.64	40.8	-300.4	416.0	410.8	5.14	80.944		
1,600.0	1,593.3	1,488.3	1,455.8	3.5	5.5	-154.67	45.6	-327.3	456.4	450.9	5.51	82.897		
1,700.0	1,692.4	1,579.8	1,543.1	3.8	6.0	-154.69	50.4	-354.3	496.9	491.0	5.87	84.595		
1,800.0	1,791.6	1,671.2	1,630.4	4.1	6.5	-154.72	55.2	-381.2	537.3	531.1	6.24	86.085		
1,900.0	1,890.8	1,762.7	1,717.6	4.4	7.0	-154.73	59.9	-408.2	577.7	571.1	6.61	87.403		
2,000.0	1,989.9	1,854.2	1,804.9	4.6	7.6	-154.75	64.7	-435.1	618.2	611.2	6.98	88.576		
2,100.0	2,089.1	1,945.6	1,892.2	4.9	8.1	-154.76	69.5	-462.1	658.6	651.3	7.35	89.627		
2,200.0	2,188.3	2,037.1	1,979.4	5.2	8.6	-154.78	74.3	-489.0	699.1	691.3	7.72	90.574		
2,300.0	2,287.4	2,128.5	2,066.7	5.5	9.1	-154.79	79.1	-516.0	739.5	731.4	8.09	91.432		
2,400.0	2,386.6	2,220.0	2,154.0	5.8	9.6	-154.80	83.9	-542.9	779.9	771.5	8.46	92.211		
2,500.0	2,485.8	2,311.4	2,241.2	6.1	10.2	-154.81	88.7	-569.9	820.4	811.6	8.83	92.924		
2,600.0	2,584.9	2,402.9	2,328.5	6.3	10.7	-154.82	93.4	-596.8	860.8	851.6	9.20	93.577		
2,700.0	2,684.1	2,494.4	2,415.7	6.6	11.2	-154.82	98.2	-623.8	901.3	891.7	9.57	94.178		
2,800.0	2,783.3	2,585.8	2,503.0	6.9	11.7	-154.83	103.0	-650.7	941.7	931.8	9.94	94.733		
2,900.0	2,882.4	2,677.3	2,590.3	7.2	12.2	-154.84	107.8	-677.7	982.2	971.8	10.31	95.246		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2B-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.36	0.8	-67.4	67.5					
100.0	100.0	98.0	98.0	0.1	0.1	-89.36	0.8	-67.4	67.4	67.2	0.24	278.711		
200.0	200.0	198.0	198.0	0.3	0.3	-89.36	0.8	-67.4	67.4	66.8	0.59	114.288		
235.9	235.9	233.9	233.9	0.4	0.4	-89.36	0.8	-67.4	67.4	66.7	0.72	94.263 CC, ES		
300.0	300.0	296.9	296.9	0.5	0.5	-89.30	0.8	-67.8	67.8	66.9	0.94	72.343		
400.0	400.0	394.5	394.4	0.6	0.6	-154.32	1.5	-71.0	71.9	70.6	1.28	56.060		
500.0	500.0	491.5	491.3	0.8	0.8	-154.24	2.7	-77.4	80.9	79.2	1.63	49.690		
600.0	599.9	587.7	586.9	1.0	1.1	-154.24	4.6	-86.9	94.7	92.7	1.97	48.010 SF		
700.0	699.7	682.6	680.9	1.2	1.3	-154.29	7.0	-99.4	113.3	111.0	2.32	48.890		
800.0	799.4	775.8	772.8	1.4	1.6	-154.35	10.0	-114.6	136.6	134.0	2.66	51.297		
900.0	898.9	867.1	862.3	1.6	2.0	-154.41	13.5	-132.4	164.5	161.5	3.01	54.662		
1,000.0	998.3	956.2	949.1	1.9	2.4	-154.44	17.5	-152.4	196.9	193.5	3.36	58.646		
1,100.0	1,097.4	1,043.3	1,033.2	2.2	2.8	-154.52	21.8	-174.5	233.3	229.6	3.71	62.930		
1,200.0	1,196.6	1,135.9	1,122.4	2.4	3.3	-154.59	26.7	-199.2	271.0	267.0	4.07	66.565		
1,300.0	1,295.8	1,228.6	1,211.5	2.7	3.7	-154.64	31.5	-223.9	308.8	304.4	4.44	69.576		
1,400.0	1,394.9	1,321.2	1,300.6	3.0	4.2	-154.68	36.4	-248.6	346.5	341.7	4.81	72.106		
1,500.0	1,494.1	1,413.8	1,389.7	3.2	4.7	-154.72	41.2	-273.2	384.3	379.1	5.17	74.261		
1,600.0	1,593.3	1,506.4	1,478.8	3.5	5.1	-154.75	46.1	-297.9	422.0	416.5	5.54	76.116		
1,700.0	1,692.4	1,599.0	1,568.0	3.8	5.6	-154.77	50.9	-322.6	459.8	453.8	5.91	77.729		
1,800.0	1,791.6	1,691.6	1,657.1	4.1	6.1	-154.79	55.8	-347.3	497.5	491.2	6.29	79.145		
1,900.0	1,890.8	1,784.2	1,746.2	4.4	6.6	-154.81	60.7	-372.0	535.3	528.6	6.66	80.396		
2,000.0	1,989.9	1,876.8	1,835.3	4.6	7.0	-154.82	65.5	-396.7	573.0	566.0	7.03	81.511		
2,100.0	2,089.1	1,969.4	1,924.5	4.9	7.5	-154.83	70.4	-421.3	610.7	603.3	7.40	82.509		
2,200.0	2,188.3	2,062.0	2,013.6	5.2	8.0	-154.85	75.2	-446.0	648.5	640.7	7.77	83.408		
2,300.0	2,287.4	2,154.6	2,102.7	5.5	8.5	-154.86	80.1	-470.7	686.2	678.1	8.15	84.223		
2,400.0	2,386.6	2,247.2	2,191.8	5.8	8.9	-154.87	84.9	-495.4	724.0	715.5	8.52	84.963		
2,500.0	2,485.8	2,339.8	2,280.9	6.1	9.4	-154.87	89.8	-520.1	761.7	752.8	8.89	85.640		
2,600.0	2,584.9	2,432.4	2,370.1	6.3	9.9	-154.88	94.6	-544.8	799.5	790.2	9.27	86.260		
2,700.0	2,684.1	2,525.0	2,459.2	6.6	10.4	-154.89	99.5	-569.5	837.2	827.6	9.64	86.831		
2,800.0	2,783.3	2,617.6	2,548.3	6.9	10.9	-154.89	104.3	-594.1	874.9	864.9	10.02	87.358		
2,900.0	2,882.4	2,710.2	2,637.4	7.2	11.3	-154.90	109.2	-618.8	912.7	902.3	10.39	87.846		
3,000.0	2,981.6	2,802.8	2,726.5	7.5	11.8	-154.90	114.1	-643.5	950.4	939.7	10.76	88.300		
3,100.0	3,080.8	2,895.4	2,815.7	7.8	12.3	-154.91	118.9	-668.2	988.2	977.0	11.14	88.722		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2C-32H-C264 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.62	0.4	-59.9	59.9					
100.0	100.0	98.0	98.0	0.1	0.1	-89.62	0.4	-59.9	59.9	59.6	0.24	247.476		
200.0	200.0	198.0	198.0	0.3	0.3	-89.62	0.4	-59.9	59.9	59.3	0.59	101.480		
300.0	300.0	298.0	298.0	0.5	0.5	-89.62	0.4	-59.9	59.9	58.9	0.94	63.755	CC, ES	
400.0	400.0	396.0	396.0	0.6	0.6	-154.83	0.8	-61.4	62.3	61.0	1.28	48.459		
500.0	500.0	493.5	493.4	0.8	0.8	-154.79	1.9	-66.2	69.5	67.9	1.63	42.650		
600.0	599.9	590.3	589.8	1.0	1.0	-154.72	3.8	-74.2	81.7	79.7	1.98	41.323	SF	
700.0	699.7	685.9	684.8	1.2	1.3	-154.64	6.4	-85.1	98.6	96.3	2.32	42.440		
800.0	799.4	780.0	777.8	1.4	1.6	-154.55	9.6	-98.9	120.3	117.6	2.67	45.012		
900.0	898.9	872.3	868.5	1.6	1.9	-154.46	13.5	-115.3	146.6	143.6	3.02	48.494		
1,000.0	998.3	962.8	957.0	1.9	2.2	-154.36	17.9	-134.2	177.4	174.0	3.37	52.562		
1,100.0	1,097.4	1,057.2	1,048.8	2.2	2.6	-154.42	22.8	-155.0	210.6	206.9	3.74	56.333		
1,200.0	1,196.6	1,151.4	1,140.6	2.4	3.0	-154.52	27.8	-175.9	244.0	239.9	4.11	59.402		
1,300.0	1,295.8	1,245.7	1,232.4	2.7	3.4	-154.60	32.7	-196.8	277.4	272.9	4.48	61.939		
1,400.0	1,394.9	1,339.9	1,324.2	3.0	3.8	-154.67	37.6	-217.6	310.8	305.9	4.85	64.070		
1,500.0	1,494.1	1,434.2	1,416.0	3.2	4.2	-154.72	42.5	-238.5	344.2	338.9	5.22	65.883		
1,600.0	1,593.3	1,528.5	1,507.8	3.5	4.6	-154.76	47.4	-259.4	377.5	371.9	5.60	67.444		
1,700.0	1,692.4	1,622.7	1,599.5	3.8	5.1	-154.79	52.3	-280.2	410.9	404.9	5.97	68.801		
1,800.0	1,791.6	1,717.0	1,691.3	4.1	5.5	-154.82	57.3	-301.1	444.3	438.0	6.35	69.991		
1,900.0	1,890.8	1,811.3	1,783.1	4.4	5.9	-154.85	62.2	-321.9	477.7	471.0	6.72	71.043		
2,000.0	1,989.9	1,905.5	1,874.9	4.6	6.3	-154.87	67.1	-342.8	511.1	504.0	7.10	71.980		
2,100.0	2,089.1	1,999.8	1,966.7	4.9	6.7	-154.89	72.0	-363.7	544.5	537.0	7.48	72.818		
2,200.0	2,188.3	2,094.0	2,058.5	5.2	7.1	-154.90	76.9	-384.5	577.9	570.0	7.85	73.574		
2,300.0	2,287.4	2,188.3	2,150.3	5.5	7.5	-154.92	81.8	-405.4	611.2	603.0	8.23	74.258		
2,400.0	2,386.6	2,282.6	2,242.1	5.8	7.9	-154.93	86.8	-426.3	644.6	636.0	8.61	74.880		
2,500.0	2,485.8	2,376.8	2,333.9	6.1	8.4	-154.94	91.7	-447.1	678.0	669.0	8.99	75.448		
2,600.0	2,584.9	2,471.1	2,425.7	6.3	8.8	-154.96	96.6	-468.0	711.4	702.0	9.36	75.968		
2,700.0	2,684.1	2,565.4	2,517.5	6.6	9.2	-154.97	101.5	-488.8	744.8	735.0	9.74	76.448		
2,800.0	2,783.3	2,659.6	2,609.3	6.9	9.6	-154.97	106.4	-509.7	778.2	768.0	10.12	76.890		
2,900.0	2,882.4	2,753.9	2,701.1	7.2	10.0	-154.98	111.4	-530.6	811.6	801.1	10.50	77.300		
3,000.0	2,981.6	2,848.1	2,792.8	7.5	10.4	-154.99	116.3	-551.4	844.9	834.1	10.88	77.680		
3,100.0	3,080.8	2,942.4	2,884.6	7.8	10.9	-155.00	121.2	-572.3	878.3	867.1	11.26	78.034		
3,200.0	3,180.0	3,036.7	2,976.4	8.0	11.3	-155.00	126.1	-593.2	911.7	900.1	11.63	78.365		
3,300.0	3,279.1	3,130.9	3,068.2	8.3	11.7	-155.01	131.0	-614.0	945.1	933.1	12.01	78.674		
3,400.0	3,378.3	3,225.2	3,160.0	8.6	12.1	-155.02	135.9	-634.9	978.5	966.1	12.39	78.964		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2D-32H-C264 - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.57	0.4	-52.3	52.4					
100.0	100.0	98.0	98.0	0.1	0.1	-89.57	0.4	-52.3	52.3	52.1	0.24	216.253		
200.0	200.0	198.0	198.0	0.3	0.3	-89.57	0.4	-52.3	52.3	51.7	0.59	88.677		
300.0	300.0	298.0	298.0	0.5	0.5	-89.57	0.4	-52.3	52.3	51.4	0.94	55.711	CC, ES	
400.0	400.0	397.2	397.1	0.6	0.6	-155.07	0.5	-52.7	53.5	52.2	1.29	41.569		
500.0	500.0	495.1	495.1	0.8	0.8	-155.22	1.4	-55.8	59.1	57.4	1.63	36.180		
600.0	599.9	592.5	592.2	1.0	1.0	-155.14	3.2	-62.2	69.5	67.5	1.98	35.109	SF	
700.0	699.7	688.8	688.1	1.2	1.2	-154.92	5.9	-71.5	84.8	82.4	2.33	36.391		
800.0	799.4	783.8	782.2	1.4	1.5	-154.64	9.5	-83.8	104.7	102.0	2.68	39.070		
900.0	898.9	877.1	874.1	1.6	1.8	-154.36	13.8	-98.8	129.3	126.3	3.03	42.622		
1,000.0	998.3	972.5	967.8	1.9	2.1	-154.19	18.7	-115.9	157.3	153.9	3.40	46.337		
1,100.0	1,097.4	1,068.1	1,061.7	2.2	2.4	-154.31	23.7	-133.2	186.6	182.8	3.76	49.588		
1,200.0	1,196.6	1,163.7	1,155.6	2.4	2.8	-154.45	28.6	-150.4	216.0	211.9	4.14	52.236		
1,300.0	1,295.8	1,259.2	1,249.5	2.7	3.1	-154.55	33.6	-167.7	245.4	240.9	4.51	54.424		
1,400.0	1,394.9	1,354.8	1,343.3	3.0	3.5	-154.64	38.6	-184.9	274.8	270.0	4.89	56.261		
1,500.0	1,494.1	1,450.4	1,437.2	3.2	3.8	-154.71	43.5	-202.1	304.3	299.0	5.26	57.824		
1,600.0	1,593.3	1,546.0	1,531.1	3.5	4.2	-154.76	48.5	-219.4	333.7	328.0	5.64	59.170		
1,700.0	1,692.4	1,641.5	1,625.0	3.8	4.5	-154.81	53.5	-236.6	363.1	357.1	6.02	60.339		
1,800.0	1,791.6	1,737.1	1,718.9	4.1	4.9	-154.85	58.4	-253.9	392.5	386.1	6.40	61.365		
1,900.0	1,890.8	1,832.7	1,812.7	4.4	5.2	-154.88	63.4	-271.1	421.9	415.1	6.78	62.271		
2,000.0	1,989.9	1,928.3	1,906.6	4.6	5.6	-154.91	68.3	-288.3	451.3	444.2	7.16	63.078		
2,100.0	2,089.1	2,023.8	2,000.5	4.9	5.9	-154.94	73.3	-305.6	480.8	473.2	7.54	63.800		
2,200.0	2,188.3	2,119.4	2,094.4	5.2	6.3	-154.96	78.3	-322.8	510.2	502.3	7.92	64.451		
2,300.0	2,287.4	2,215.0	2,188.2	5.5	6.7	-154.98	83.2	-340.1	539.6	531.3	8.30	65.040		
2,400.0	2,386.6	2,310.6	2,282.1	5.8	7.0	-155.00	88.2	-357.3	569.0	560.3	8.68	65.576		
2,500.0	2,485.8	2,406.1	2,376.0	6.1	7.4	-155.02	93.2	-374.5	598.4	589.4	9.06	66.065		
2,600.0	2,584.9	2,501.7	2,469.9	6.3	7.7	-155.03	98.1	-391.8	627.8	618.4	9.44	66.514		
2,700.0	2,684.1	2,597.3	2,563.7	6.6	8.1	-155.04	103.1	-409.0	657.3	647.4	9.82	66.926		
2,800.0	2,783.3	2,692.9	2,657.6	6.9	8.4	-155.06	108.0	-426.3	686.7	676.5	10.20	67.307		
2,900.0	2,882.4	2,788.4	2,751.5	7.2	8.8	-155.07	113.0	-443.5	716.1	705.5	10.58	67.660		
3,000.0	2,981.6	2,884.0	2,845.4	7.5	9.2	-155.08	118.0	-460.7	745.5	734.5	10.97	67.988		
3,100.0	3,080.8	2,979.6	2,939.3	7.8	9.5	-155.09	122.9	-478.0	774.9	763.6	11.35	68.293		
3,200.0	3,180.0	3,075.2	3,033.1	8.0	9.9	-155.10	127.9	-495.2	804.3	792.6	11.73	68.577		
3,300.0	3,279.1	3,170.7	3,127.0	8.3	10.2	-155.11	132.9	-512.4	833.7	821.6	12.11	68.844		
3,400.0	3,378.3	3,266.3	3,220.9	8.6	10.6	-155.11	137.8	-529.7	863.2	850.7	12.49	69.093		
3,500.0	3,477.5	3,361.9	3,314.8	8.9	10.9	-155.12	142.8	-546.9	892.6	879.7	12.87	69.328		
3,600.0	3,576.6	3,457.5	3,408.6	9.2	11.3	-155.13	147.7	-564.2	922.0	908.7	13.26	69.548		
3,700.0	3,675.8	3,553.0	3,502.5	9.5	11.7	-155.14	152.7	-581.4	951.4	937.8	13.64	69.756		
3,800.0	3,775.0	3,648.6	3,596.4	9.7	12.0	-155.14	157.7	-598.6	980.8	966.8	14.02	69.953		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2E-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.52	0.4	-44.8	44.8					
100.0	100.0	98.0	98.0	0.1	0.1	-89.52	0.4	-44.8	44.8	44.5	0.24	185.031		
200.0	200.0	198.0	198.0	0.3	0.3	-89.52	0.4	-44.8	44.8	44.2	0.59	75.874		
300.0	300.0	298.0	298.0	0.5	0.5	-89.52	0.4	-44.8	44.8	43.8	0.94	47.668 CC, ES		
400.0	400.0	398.0	398.0	0.6	0.6	-155.20	0.4	-44.8	45.6	44.3	1.29	35.363		
500.0	500.0	497.2	497.2	0.8	0.8	-156.13	0.7	-45.5	48.7	47.1	1.64	29.772		
600.0	599.9	596.2	596.1	1.0	1.0	-156.96	1.6	-47.9	55.1	53.1	1.98	27.754		
700.0	699.7	694.7	694.6	1.2	1.2	-157.59	3.0	-51.9	64.7	62.3	2.33	27.697 SF		
800.0	799.4	792.8	792.5	1.4	1.4	-158.02	5.1	-57.4	77.4	74.7	2.69	28.822		
900.0	898.9	890.2	889.6	1.6	1.6	-158.28	7.7	-64.4	93.3	90.3	3.04	30.701		
1,000.0	998.3	986.8	985.8	1.9	1.8	-158.41	10.9	-72.9	112.4	109.0	3.40	33.080		
1,100.0	1,097.4	1,082.5	1,080.9	2.2	2.0	-158.46	14.6	-82.8	134.2	130.4	3.76	35.706		
1,200.0	1,196.6	1,177.5	1,175.1	2.4	2.3	-158.30	18.9	-94.1	157.6	153.5	4.13	38.214		
1,300.0	1,295.8	1,271.8	1,268.4	2.7	2.5	-157.97	23.6	-106.7	182.5	178.1	4.50	40.608		
1,400.0	1,394.9	1,366.2	1,361.7	3.0	2.8	-157.55	28.9	-120.8	208.9	204.0	4.87	42.893		
1,500.0	1,494.1	1,462.6	1,456.8	3.2	3.1	-157.19	34.4	-135.5	235.5	230.3	5.25	44.873		
1,600.0	1,593.3	1,559.0	1,551.8	3.5	3.4	-156.89	39.9	-150.2	262.2	256.6	5.63	46.576		
1,700.0	1,692.4	1,655.3	1,646.9	3.8	3.7	-156.65	45.4	-164.9	288.9	282.9	6.01	48.057		
1,800.0	1,791.6	1,751.7	1,742.0	4.1	4.0	-156.45	50.9	-179.6	315.6	309.2	6.39	49.354		
1,900.0	1,890.8	1,848.1	1,837.1	4.4	4.3	-156.28	56.4	-194.3	342.3	335.5	6.78	50.500		
2,000.0	1,989.9	1,944.4	1,932.2	4.6	4.6	-156.14	61.9	-209.0	369.0	361.8	7.16	51.519		
2,100.0	2,089.1	2,040.8	2,027.2	4.9	5.0	-156.02	67.4	-223.7	395.7	388.1	7.55	52.432		
2,200.0	2,188.3	2,137.2	2,122.3	5.2	5.3	-155.91	72.9	-238.4	422.4	414.4	7.93	53.253		
2,300.0	2,287.4	2,233.5	2,217.4	5.5	5.6	-155.81	78.5	-253.1	449.1	440.7	8.32	53.996		
2,400.0	2,386.6	2,329.9	2,312.5	5.8	5.9	-155.73	84.0	-267.8	475.8	467.1	8.70	54.671		
2,500.0	2,485.8	2,426.3	2,407.6	6.1	6.2	-155.65	89.5	-282.5	502.5	493.4	9.09	55.288		
2,600.0	2,584.9	2,522.6	2,502.6	6.3	6.5	-155.58	95.0	-297.2	529.2	519.7	9.47	55.853		
2,700.0	2,684.1	2,619.0	2,597.7	6.6	6.9	-155.52	100.5	-311.9	555.9	546.0	9.86	56.372		
2,800.0	2,783.3	2,715.4	2,692.8	6.9	7.2	-155.46	106.0	-326.6	582.6	572.3	10.25	56.852		
2,900.0	2,882.4	2,811.7	2,787.9	7.2	7.5	-155.41	111.5	-341.3	609.3	598.6	10.63	57.295		
3,000.0	2,981.6	2,908.1	2,883.0	7.5	7.8	-155.37	117.0	-356.0	636.0	625.0	11.02	57.707		
3,100.0	3,080.8	3,004.5	2,978.0	7.8	8.1	-155.32	122.5	-370.7	662.7	651.3	11.41	58.090		
3,200.0	3,180.0	3,100.8	3,073.1	8.0	8.5	-155.28	128.0	-385.4	689.4	677.6	11.80	58.447		
3,300.0	3,279.1	3,197.2	3,168.2	8.3	8.8	-155.25	133.5	-400.1	716.1	703.9	12.18	58.782		
3,400.0	3,378.3	3,293.6	3,263.3	8.6	9.1	-155.21	139.0	-414.8	742.8	730.2	12.57	59.095		
3,500.0	3,477.5	3,389.9	3,358.4	8.9	9.4	-155.18	144.6	-429.5	769.5	756.6	12.96	59.389		
3,600.0	3,576.6	3,486.3	3,453.4	9.2	9.8	-155.15	150.1	-444.2	796.2	782.9	13.34	59.665		
3,700.0	3,675.8	3,582.7	3,548.5	9.5	10.1	-155.12	155.6	-458.9	822.9	809.2	13.73	59.926		
3,800.0	3,775.0	3,679.0	3,643.6	9.7	10.4	-155.10	161.1	-473.6	849.6	835.5	14.12	60.172		
3,900.0	3,874.1	3,775.4	3,738.7	10.0	10.7	-155.07	166.6	-488.3	876.3	861.8	14.51	60.405		
4,000.0	3,973.3	3,871.8	3,833.8	10.3	11.0	-155.05	172.1	-503.0	903.0	888.1	14.90	60.625		
4,100.0	4,072.5	3,968.2	3,928.8	10.6	11.4	-155.03	177.6	-517.7	929.8	914.5	15.28	60.834		
4,200.0	4,171.6	4,064.5	4,023.9	10.9	11.7	-155.01	183.1	-532.4	956.5	940.8	15.67	61.033		
4,300.0	4,270.8	4,160.9	4,119.0	11.2	12.0	-154.99	188.6	-547.1	983.2	967.1	16.06	61.221		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2F-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.44	0.4	-37.5	37.5					
100.0	100.0	99.0	99.0	0.1	0.1	-89.44	0.4	-37.5	37.5	37.2	0.24	154.187		
200.0	200.0	199.0	199.0	0.3	0.3	-89.44	0.4	-37.5	37.5	36.9	0.59	63.358		
300.0	300.0	299.0	299.0	0.5	0.5	-89.44	0.4	-37.5	37.5	36.5	0.94	39.848	CC, ES	
400.0	400.0	399.0	399.0	0.6	0.6	-155.22	0.4	-37.5	38.3	37.0	1.29	29.676		
500.0	500.0	498.7	498.7	0.8	0.8	-156.60	0.5	-37.7	40.8	39.2	1.64	24.929		
600.0	599.9	597.9	597.8	1.0	1.0	-157.67	1.3	-39.2	46.4	44.4	1.99	23.322	SF	
700.0	699.7	696.7	696.7	1.2	1.2	-158.22	2.9	-42.2	55.0	52.6	2.34	23.508		
800.0	799.4	795.2	794.9	1.4	1.4	-158.37	5.3	-46.6	66.6	63.9	2.69	24.769		
900.0	898.9	893.0	892.5	1.6	1.5	-158.28	8.5	-52.6	81.4	78.3	3.05	26.710		
1,000.0	998.3	990.1	989.3	1.9	1.8	-158.05	12.4	-59.9	99.1	95.7	3.41	29.097		
1,100.0	1,097.4	1,086.4	1,085.1	2.2	2.0	-157.76	17.1	-68.6	119.6	115.9	3.78	31.690		
1,200.0	1,196.6	1,183.4	1,181.5	2.4	2.2	-157.32	22.4	-78.4	141.3	137.2	4.15	34.055		
1,300.0	1,295.8	1,281.0	1,278.4	2.7	2.4	-156.99	27.7	-88.4	163.1	158.6	4.53	36.016		
1,400.0	1,394.9	1,378.6	1,375.4	3.0	2.7	-156.73	33.1	-98.4	184.9	180.0	4.91	37.660		
1,500.0	1,494.1	1,476.2	1,472.3	3.2	2.9	-156.53	38.4	-108.4	206.7	201.4	5.29	39.058		
1,600.0	1,593.3	1,573.8	1,569.2	3.5	3.2	-156.36	43.8	-118.4	228.4	222.8	5.67	40.259		
1,700.0	1,692.4	1,671.4	1,666.2	3.8	3.4	-156.23	49.2	-128.4	250.2	244.2	6.06	41.301		
1,800.0	1,791.6	1,769.0	1,763.1	4.1	3.7	-156.12	54.5	-138.3	272.0	265.6	6.44	42.215		
1,900.0	1,890.8	1,866.6	1,860.0	4.4	3.9	-156.02	59.9	-148.3	293.8	287.0	6.83	43.021		
2,000.0	1,989.9	1,964.2	1,957.0	4.6	4.2	-155.94	65.2	-158.3	315.6	308.4	7.22	43.738		
2,100.0	2,089.1	2,061.8	2,053.9	4.9	4.5	-155.86	70.6	-168.3	337.4	329.8	7.60	44.379		
2,200.0	2,188.3	2,159.4	2,150.9	5.2	4.7	-155.80	76.0	-178.3	359.2	351.2	7.99	44.956		
2,300.0	2,287.4	2,257.0	2,247.8	5.5	5.0	-155.74	81.3	-188.3	381.0	372.6	8.38	45.478		
2,400.0	2,386.6	2,354.6	2,344.7	5.8	5.2	-155.69	86.7	-198.2	402.7	394.0	8.76	45.952		
2,500.0	2,485.8	2,452.2	2,441.7	6.1	5.5	-155.65	92.0	-208.2	424.5	415.4	9.15	46.384		
2,600.0	2,584.9	2,549.8	2,538.6	6.3	5.7	-155.61	97.4	-218.2	446.3	436.8	9.54	46.781		
2,700.0	2,684.1	2,647.4	2,635.5	6.6	6.0	-155.57	102.8	-228.2	468.1	458.2	9.93	47.145		
2,800.0	2,783.3	2,745.0	2,732.5	6.9	6.3	-155.54	108.1	-238.2	489.9	479.6	10.32	47.481		
2,900.0	2,882.4	2,842.6	2,829.4	7.2	6.5	-155.51	113.5	-248.1	511.7	501.0	10.71	47.793		
3,000.0	2,981.6	2,940.2	2,926.4	7.5	6.8	-155.48	118.8	-258.1	533.5	522.4	11.10	48.081		
3,100.0	3,080.8	3,037.8	3,023.3	7.8	7.0	-155.45	124.2	-268.1	555.3	543.8	11.48	48.350		
3,200.0	3,180.0	3,135.4	3,120.2	8.0	7.3	-155.43	129.6	-278.1	577.1	565.2	11.87	48.600		
3,300.0	3,279.1	3,233.0	3,217.2	8.3	7.6	-155.40	134.9	-288.1	598.9	586.6	12.26	48.835		
3,400.0	3,378.3	3,330.6	3,314.1	8.6	7.8	-155.38	140.3	-298.1	620.6	608.0	12.65	49.054		
3,500.0	3,477.5	3,428.2	3,411.0	8.9	8.1	-155.36	145.7	-308.0	642.4	629.4	13.04	49.260		
3,600.0	3,576.6	3,525.8	3,508.0	9.2	8.3	-155.35	151.0	-318.0	664.2	650.8	13.43	49.454		
3,700.0	3,675.8	3,623.4	3,604.9	9.5	8.6	-155.33	156.4	-328.0	686.0	672.2	13.82	49.636		
3,800.0	3,775.0	3,721.0	3,701.8	9.7	8.9	-155.31	161.7	-338.0	707.8	693.6	14.21	49.809		
3,900.0	3,874.1	3,818.6	3,798.8	10.0	9.1	-155.30	167.1	-348.0	729.6	715.0	14.60	49.972		
4,000.0	3,973.3	3,916.2	3,895.7	10.3	9.4	-155.28	172.5	-358.0	751.4	736.4	14.99	50.126		
4,100.0	4,072.5	4,013.8	3,992.7	10.6	9.6	-155.27	177.8	-367.9	773.2	757.8	15.38	50.272		
4,200.0	4,171.6	4,111.3	4,089.6	10.9	9.9	-155.26	183.2	-377.9	795.0	779.2	15.77	50.411		
4,300.0	4,270.8	4,208.9	4,186.5	11.2	10.2	-155.25	188.5	-387.9	816.8	800.6	16.16	50.543		
4,400.0	4,370.0	4,306.5	4,283.5	11.5	10.4	-155.24	193.9	-397.9	838.6	822.0	16.55	50.669		
4,500.0	4,469.1	4,404.1	4,380.4	11.7	10.7	-155.22	199.3	-407.9	860.3	843.4	16.94	50.789		
4,600.0	4,568.3	4,501.7	4,477.3	12.0	10.9	-155.21	204.6	-417.8	882.1	864.8	17.33	50.903		
4,700.0	4,667.5	4,599.3	4,574.3	12.3	11.2	-155.20	210.0	-427.8	903.9	886.2	17.72	51.012		
4,800.0	4,766.6	4,696.9	4,671.2	12.6	11.5	-155.20	215.3	-437.8	925.7	907.6	18.11	51.117		
4,900.0	4,865.8	4,794.5	4,768.2	12.9	11.7	-155.19	220.7	-447.8	947.5	929.0	18.50	51.217		
5,000.0	4,965.0	4,892.1	4,865.1	13.2	12.0	-155.18	226.1	-457.8	969.3	950.4	18.89	51.313		
5,100.0	5,064.1	4,989.7	4,962.0	13.5	12.2	-155.17	231.4	-467.8	991.1	971.8	19.28	51.404		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2G-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.33	0.4	-29.9	30.0					
100.0	100.0	99.0	99.0	0.1	0.1	-89.33	0.4	-29.9	29.9	29.7	0.24	123.122		
200.0	200.0	199.0	199.0	0.3	0.3	-89.33	0.4	-29.9	29.9	29.3	0.59	50.593		
300.0	300.0	299.0	299.0	0.5	0.5	-89.33	0.4	-29.9	29.9	29.0	0.94	31.820	CC, ES	
400.0	400.0	399.0	399.0	0.6	0.6	-155.24	0.4	-29.9	30.7	29.4	1.29	23.821		
500.0	500.0	499.0	499.0	0.8	0.8	-157.13	0.4	-29.9	33.1	31.5	1.64	20.206		
600.0	599.9	598.5	598.5	1.0	1.0	-158.62	1.0	-30.4	37.6	35.6	1.99	18.928		
700.0	699.7	697.9	697.8	1.2	1.2	-158.67	3.1	-32.0	44.7	42.4	2.34	19.115		
800.0	799.4	796.9	796.8	1.4	1.4	-157.84	6.5	-34.5	54.4	51.7	2.70	20.168		
900.0	898.9	895.7	895.4	1.6	1.5	-156.62	11.3	-38.1	66.6	63.6	3.06	21.759		
1,000.0	998.3	994.7	994.2	1.9	1.7	-155.95	16.5	-41.9	80.8	77.3	3.43	23.528		
1,100.0	1,097.4	1,093.5	1,092.8	2.2	1.9	-155.85	21.7	-45.8	96.2	92.4	3.81	25.260		
1,200.0	1,196.6	1,192.3	1,191.3	2.4	2.1	-155.83	26.9	-49.6	111.8	107.6	4.19	26.685		
1,300.0	1,295.8	1,291.1	1,289.9	2.7	2.3	-155.81	32.1	-53.5	127.3	122.8	4.57	27.861		
1,400.0	1,394.9	1,389.8	1,388.5	3.0	2.5	-155.79	37.3	-57.3	142.9	137.9	4.95	28.847		
1,500.0	1,494.1	1,488.6	1,487.0	3.2	2.7	-155.78	42.5	-61.2	158.4	153.1	5.34	29.685		
1,600.0	1,593.3	1,587.4	1,585.6	3.5	2.9	-155.77	47.7	-65.0	174.0	168.3	5.72	30.405		
1,700.0	1,692.4	1,686.2	1,684.2	3.8	3.1	-155.77	52.9	-68.9	189.6	183.5	6.11	31.030		
1,800.0	1,791.6	1,785.0	1,782.8	4.1	3.3	-155.76	58.0	-72.8	205.1	198.6	6.50	31.578		
1,900.0	1,890.8	1,883.8	1,881.3	4.4	3.5	-155.75	63.2	-76.6	220.7	213.8	6.88	32.061		
2,000.0	1,989.9	1,982.5	1,979.9	4.6	3.7	-155.75	68.4	-80.5	236.3	229.0	7.27	32.491		
2,100.0	2,089.1	2,081.3	2,078.5	4.9	3.9	-155.74	73.6	-84.3	251.8	244.2	7.66	32.876		
2,200.0	2,188.3	2,180.1	2,177.0	5.2	4.1	-155.74	78.8	-88.2	267.4	259.3	8.05	33.223		
2,300.0	2,287.4	2,278.9	2,275.6	5.5	4.3	-155.74	84.0	-92.0	282.9	274.5	8.44	33.536		
2,400.0	2,386.6	2,377.7	2,374.2	5.8	4.6	-155.73	89.2	-95.9	298.5	289.7	8.83	33.821		
2,500.0	2,485.8	2,476.4	2,472.7	6.1	4.8	-155.73	94.4	-99.7	314.1	304.9	9.22	34.081		
2,600.0	2,584.9	2,575.2	2,571.3	6.3	5.0	-155.73	99.6	-103.6	329.6	320.0	9.60	34.319		
2,700.0	2,684.1	2,674.0	2,669.9	6.6	5.2	-155.73	104.8	-107.4	345.2	335.2	9.99	34.538		
2,800.0	2,783.3	2,772.8	2,768.5	6.9	5.4	-155.72	110.0	-111.3	360.8	350.4	10.38	34.740		
2,900.0	2,882.4	2,871.6	2,867.0	7.2	5.6	-155.72	115.2	-115.2	376.3	365.5	10.77	34.928		
3,000.0	2,981.6	2,970.4	2,965.6	7.5	5.8	-155.72	120.4	-119.0	391.9	380.7	11.16	35.101		
3,100.0	3,080.8	3,069.1	3,064.2	7.8	6.0	-155.72	125.6	-122.9	407.4	395.9	11.55	35.263		
3,200.0	3,180.0	3,167.9	3,162.7	8.0	6.2	-155.72	130.8	-126.7	423.0	411.1	11.94	35.414		
3,300.0	3,279.1	3,266.7	3,261.3	8.3	6.4	-155.72	135.9	-130.6	438.6	426.2	12.33	35.555		
3,400.0	3,378.3	3,365.5	3,359.9	8.6	6.6	-155.72	141.1	-134.4	454.1	441.4	12.73	35.687		
3,500.0	3,477.5	3,464.3	3,458.4	8.9	6.8	-155.71	146.3	-138.3	469.7	456.6	13.12	35.811		
3,600.0	3,576.6	3,563.0	3,557.0	9.2	7.0	-155.71	151.5	-142.1	485.3	471.7	13.51	35.928		
3,700.0	3,675.8	3,661.8	3,655.6	9.5	7.2	-155.71	156.7	-146.0	500.8	486.9	13.90	36.038		
3,800.0	3,775.0	3,760.6	3,754.1	9.7	7.4	-155.71	161.9	-149.8	516.4	502.1	14.29	36.142		
3,900.0	3,874.1	3,859.4	3,852.7	10.0	7.6	-155.71	167.1	-153.7	531.9	517.3	14.68	36.240		
4,000.0	3,973.3	3,958.2	3,951.3	10.3	7.8	-155.71	172.3	-157.6	547.5	532.4	15.07	36.333		
4,100.0	4,072.5	4,057.0	4,049.9	10.6	8.0	-155.71	177.5	-161.4	563.1	547.6	15.46	36.421		
4,200.0	4,171.6	4,155.7	4,148.4	10.9	8.2	-155.71	182.7	-165.3	578.6	562.8	15.85	36.505		
4,300.0	4,270.8	4,254.5	4,247.0	11.2	8.5	-155.71	187.9	-169.1	594.2	577.9	16.24	36.585		
4,400.0	4,370.0	4,353.3	4,345.6	11.5	8.7	-155.71	193.1	-173.0	609.8	593.1	16.63	36.660		
4,500.0	4,469.1	4,452.1	4,444.1	11.7	8.9	-155.71	198.3	-176.8	625.3	608.3	17.02	36.733		
4,600.0	4,568.3	4,550.9	4,542.7	12.0	9.1	-155.71	203.5	-180.7	640.9	623.5	17.41	36.802		
4,700.0	4,667.5	4,649.6	4,641.3	12.3	9.3	-155.70	208.7	-184.5	656.4	638.6	17.81	36.868		
4,800.0	4,766.6	4,748.4	4,739.8	12.6	9.5	-155.70	213.8	-188.4	672.0	653.8	18.20	36.931		
4,900.0	4,865.8	4,847.2	4,838.4	12.9	9.7	-155.70	219.0	-192.2	687.6	669.0	18.59	36.991		
5,000.0	4,965.0	4,946.0	4,937.0	13.2	9.9	-155.70	224.2	-196.1	703.1	684.1	18.98	37.049		
5,100.0	5,064.1	5,044.8	5,035.6	13.5	10.1	-155.70	229.4	-200.0	718.7	699.3	19.37	37.104		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2G-32H-C264 - 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		
5,200.0	5,163.3	5,143.6	5,134.1	13.7	10.3	-155.70	234.6	-203.8	734.2	714.5	19.76	37.157		
5,300.0	5,262.5	5,242.3	5,232.7	14.0	10.5	-155.70	239.8	-207.7	749.8	729.7	20.15	37.208		
5,400.0	5,361.7	5,341.2	5,331.4	14.3	10.7	-155.74	245.0	-211.5	764.6	744.0	20.55	37.199		
5,500.0	5,461.2	5,440.4	5,430.3	14.5	10.9	-155.71	250.2	-215.4	777.8	756.8	20.95	37.124		
5,600.0	5,560.8	5,539.7	5,529.4	14.7	11.1	-155.63	255.4	-219.3	789.4	768.0	21.34	36.987		
5,700.0	5,660.6	5,639.5	5,629.0	14.9	11.3	-155.49	260.7	-223.2	799.4	777.7	21.73	36.791		
5,800.0	5,760.5	5,748.2	5,737.5	15.1	11.5	-155.34	265.5	-226.7	807.3	785.2	22.11	36.508		
5,900.0	5,860.4	5,857.2	5,846.4	15.3	11.7	-155.24	268.7	-229.1	812.5	790.0	22.47	36.150		
6,000.0	5,960.4	5,966.4	5,955.6	15.4	11.9	-155.20	270.2	-230.2	814.9	792.1	22.81	35.721		
6,100.0	6,060.4	6,070.2	6,059.4	15.5	12.1	-89.98	270.4	-230.3	815.1	792.0	23.14	35.232		
6,200.0	6,160.4	6,170.2	6,159.4	15.6	12.2	-89.98	270.4	-230.3	815.1	791.7	23.46	34.752		
6,300.0	6,260.4	6,270.2	6,259.4	15.7	12.4	-89.98	270.4	-230.3	815.1	791.4	23.78	34.284		
6,400.0	6,360.4	6,370.2	6,359.4	15.9	12.5	-89.98	270.4	-230.3	815.1	791.0	24.10	33.828		
6,437.8	6,398.2	6,408.0	6,397.2	15.9	12.6	90.09	270.4	-230.3	815.1	790.9	24.20	33.682		
6,500.0	6,460.2	6,469.9	6,459.2	15.9	12.7	90.39	270.4	-230.3	815.2	790.8	24.38	33.434		
6,600.0	6,557.6	6,568.7	6,557.6	15.9	12.8	91.45	264.1	-230.4	815.5	791.0	24.51	33.267		
6,700.0	6,649.7	6,670.1	6,656.0	15.9	12.8	92.49	240.3	-230.9	816.5	792.0	24.47	33.373		
6,800.0	6,733.7	6,774.5	6,751.4	15.8	12.7	93.46	198.2	-231.6	818.0	793.7	24.32	33.634		
6,900.0	6,807.1	6,882.0	6,840.0	15.8	12.7	94.35	137.5	-232.7	820.0	795.8	24.21	33.866		
7,000.0	6,867.5	6,992.7	6,917.6	15.9	12.7	95.10	58.9	-234.1	822.4	798.0	24.31	33.822		
7,100.0	6,913.3	7,106.2	6,980.1	16.2	12.9	95.69	-35.7	-235.7	824.8	800.0	24.80	33.258		
7,200.0	6,942.9	7,222.3	7,023.4	16.6	13.4	96.09	-143.2	-237.6	827.3	801.5	25.81	32.055		
7,300.0	6,955.6	7,340.2	7,044.3	17.1	14.2	96.27	-258.9	-239.7	829.6	802.2	27.36	30.325		
7,400.0	6,956.0	7,447.0	7,046.0	17.9	15.1	96.28	-365.8	-241.5	831.5	802.2	29.23	28.446		
7,500.0	6,956.0	7,547.0	7,046.0	18.8	16.1	96.27	-465.7	-243.3	833.2	801.9	31.31	26.615		
7,600.0	6,956.0	7,647.0	7,046.0	19.8	17.2	96.26	-565.7	-245.1	835.0	801.3	33.62	24.837		
7,700.0	6,956.0	7,747.0	7,046.0	20.9	18.5	96.24	-665.7	-246.8	836.7	800.6	36.12	23.166		
7,800.0	6,956.0	7,847.0	7,046.0	22.0	19.8	96.23	-765.6	-248.6	838.5	799.7	38.77	21.625		
7,900.0	6,956.0	7,947.0	7,046.0	23.3	21.2	96.22	-865.6	-250.4	840.2	798.7	41.55	20.222		
8,000.0	6,956.0	8,046.9	7,046.0	24.6	22.6	96.21	-965.6	-252.1	842.0	797.5	44.43	18.951		
8,100.0	6,956.0	8,146.9	7,046.0	26.0	24.0	96.19	-1,065.5	-253.9	843.7	796.3	47.39	17.804		
8,200.0	6,956.0	8,246.9	7,046.0	27.4	25.6	96.18	-1,165.5	-255.6	845.5	795.1	50.42	16.769		
8,300.0	6,956.0	8,346.9	7,046.0	28.8	27.1	96.17	-1,265.5	-257.4	847.2	793.7	53.50	15.835		
8,400.0	6,956.0	8,446.9	7,046.0	30.3	28.6	96.15	-1,365.4	-259.2	849.0	792.3	56.63	14.991		
8,500.0	6,956.0	8,546.9	7,046.0	31.8	30.2	96.14	-1,465.4	-260.9	850.7	790.9	59.80	14.225		
8,600.0	6,956.0	8,646.9	7,046.0	33.4	31.8	96.13	-1,565.4	-262.7	852.5	789.5	63.01	13.529		
8,700.0	6,956.0	8,746.8	7,046.0	34.9	33.4	96.12	-1,665.4	-264.4	854.2	788.0	66.24	12.895		
8,800.0	6,956.0	8,846.8	7,046.0	36.5	35.1	96.10	-1,765.3	-266.2	856.0	786.5	69.50	12.316		
8,900.0	6,956.0	8,946.8	7,046.0	38.1	36.7	96.09	-1,865.3	-268.0	857.7	784.9	72.78	11.785		
9,000.0	6,956.0	9,046.8	7,046.0	39.7	38.4	96.08	-1,965.3	-269.7	859.5	783.4	76.08	11.297		
9,100.0	6,956.0	9,146.8	7,046.0	41.3	40.0	96.07	-2,065.2	-271.5	861.2	781.8	79.40	10.847		
9,200.0	6,956.0	9,246.8	7,046.0	42.9	41.7	96.05	-2,165.2	-273.3	863.0	780.3	82.73	10.431		
9,300.0	6,956.0	9,346.7	7,046.0	44.5	43.4	96.04	-2,265.2	-275.0	864.7	778.7	86.07	10.047		
9,400.0	6,956.0	9,446.7	7,046.0	46.2	45.0	96.03	-2,365.1	-276.8	866.5	777.1	89.43	9.689		
9,500.0	6,956.0	9,546.7	7,046.0	47.8	46.7	96.02	-2,465.1	-278.5	868.2	775.4	92.79	9.357		
9,600.0	6,956.0	9,646.7	7,046.0	49.5	48.4	96.01	-2,565.1	-280.3	870.0	773.8	96.16	9.047		
9,700.0	6,956.0	9,746.7	7,046.0	51.2	50.1	95.99	-2,665.0	-282.1	871.7	772.2	99.55	8.757		
9,800.0	6,956.0	9,846.7	7,046.0	52.8	51.8	95.98	-2,765.0	-283.8	873.5	770.6	102.94	8.486		
9,900.0	6,956.0	9,946.7	7,046.0	54.5	53.5	95.97	-2,865.0	-285.6	875.2	768.9	106.33	8.231		
10,000.0	6,956.0	10,046.6	7,046.0	56.2	55.2	95.96	-2,964.9	-287.4	877.0	767.3	109.73	7.992		
10,100.0	6,956.0	10,146.6	7,046.0	57.9	56.9	95.94	-3,064.9	-289.1	878.7	765.6	113.14	7.767		
10,200.0	6,956.0	10,246.6	7,046.0	59.6	58.6	95.93	-3,164.9	-290.9	880.5	763.9	116.55	7.554		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2G-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,300.0	6,956.0	10,346.6	7,046.0	61.3	60.3	95.92	-3,264.9	-292.6	882.2	762.3	119.97	7.354		
10,400.0	6,956.0	10,446.6	7,046.0	62.9	62.1	95.91	-3,364.8	-294.4	884.0	760.6	123.39	7.164		
10,500.0	6,956.0	10,546.6	7,046.0	64.6	63.8	95.90	-3,464.8	-296.2	885.8	758.9	126.82	6.984		
10,600.0	6,956.0	10,646.5	7,046.0	66.4	65.5	95.89	-3,564.8	-297.9	887.5	757.3	130.25	6.814		
10,700.0	6,956.0	10,746.5	7,046.0	68.1	67.2	95.87	-3,664.7	-299.7	889.3	755.6	133.68	6.652		
10,800.0	6,956.0	10,846.5	7,046.0	69.8	68.9	95.86	-3,764.7	-301.4	891.0	753.9	137.12	6.498		
10,900.0	6,956.0	10,946.5	7,046.0	71.5	70.7	95.85	-3,864.7	-303.2	892.8	752.2	140.56	6.352		
11,000.0	6,956.0	11,046.5	7,046.0	73.2	72.4	95.84	-3,964.6	-305.0	894.5	750.5	144.00	6.212		
11,100.0	6,956.0	11,146.5	7,046.0	74.9	74.1	95.83	-4,064.6	-306.7	896.3	748.8	147.44	6.079		
11,200.0	6,956.0	11,246.5	7,046.0	76.6	75.9	95.82	-4,164.6	-308.5	898.0	747.1	150.89	5.952		
11,300.0	6,956.0	11,346.4	7,046.0	78.3	77.6	95.81	-4,264.5	-310.3	899.8	745.4	154.34	5.830		
11,400.0	6,956.0	11,446.4	7,046.0	80.0	79.3	95.79	-4,364.5	-312.0	901.5	743.7	157.79	5.714		
11,500.0	6,956.0	11,546.4	7,046.0	81.8	81.0	95.78	-4,464.5	-313.8	903.3	742.0	161.24	5.602		
11,576.8	6,956.0	11,623.1	7,046.0	83.1	82.4	95.77	-4,541.2	-315.1	904.6	740.7	163.89	5.520 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2H-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.90	0.0	-22.4	22.4					
100.0	100.0	99.0	99.0	0.1	0.1	-89.90	0.0	-22.4	22.4	22.1	0.24	92.047		
200.0	200.0	199.0	199.0	0.3	0.3	-89.90	0.0	-22.4	22.4	21.8	0.59	37.824		
300.0	300.0	299.0	299.0	0.5	0.5	-89.90	0.0	-22.4	22.4	21.4	0.94	23.789 CC, ES		
400.0	400.0	399.0	399.0	0.6	0.6	-156.03	0.0	-22.4	23.2	21.9	1.29	17.967		
500.0	500.0	498.9	498.9	0.8	0.8	-157.94	0.2	-22.4	25.6	24.0	1.64	15.636		
600.0	599.9	598.7	598.7	1.0	1.0	-157.82	1.9	-22.9	30.0	28.0	1.99	15.082		
700.0	699.7	698.4	698.3	1.2	1.2	-156.08	5.3	-23.7	36.4	34.0	2.35	15.499		
800.0	799.4	797.9	797.7	1.4	1.4	-153.85	10.1	-24.9	44.7	42.0	2.71	16.494		
900.0	898.9	897.4	897.1	1.6	1.5	-152.88	15.2	-26.2	54.7	51.7	3.08	17.759		
1,000.0	998.3	996.8	996.3	1.9	1.7	-152.90	20.3	-27.5	66.3	62.9	3.46	19.177		
1,100.0	1,097.4	1,095.9	1,095.3	2.2	1.9	-153.40	25.4	-28.8	79.2	75.3	3.84	20.628		
1,200.0	1,196.6	1,195.1	1,194.3	2.4	2.1	-153.81	30.5	-30.1	92.1	87.9	4.22	21.832		
1,300.0	1,295.8	1,294.2	1,293.3	2.7	2.3	-154.12	35.6	-31.3	105.1	100.5	4.60	22.830		
1,400.0	1,394.9	1,393.4	1,392.3	3.0	2.5	-154.37	40.7	-32.6	118.1	113.1	4.99	23.670		
1,500.0	1,494.1	1,492.5	1,491.4	3.2	2.7	-154.56	45.8	-33.9	131.0	125.7	5.37	24.386		
1,600.0	1,593.3	1,591.7	1,590.4	3.5	2.9	-154.72	50.9	-35.2	144.0	138.3	5.76	25.003		
1,700.0	1,692.4	1,690.9	1,689.4	3.8	3.1	-154.86	56.0	-36.5	157.0	150.9	6.15	25.541		
1,800.0	1,791.6	1,790.0	1,788.4	4.1	3.3	-154.97	61.1	-37.8	170.0	163.4	6.53	26.013		
1,900.0	1,890.8	1,889.2	1,887.4	4.4	3.5	-155.07	66.2	-39.0	183.0	176.0	6.92	26.432		
2,000.0	1,989.9	1,988.3	1,986.4	4.6	3.7	-155.15	71.3	-40.3	195.9	188.6	7.31	26.804		
2,100.0	2,089.1	2,087.5	2,085.4	4.9	3.9	-155.23	76.4	-41.6	208.9	201.2	7.70	27.139		
2,200.0	2,188.3	2,186.6	2,184.5	5.2	4.1	-155.29	81.5	-42.9	221.9	213.8	8.09	27.440		
2,300.0	2,287.4	2,285.8	2,283.5	5.5	4.2	-155.35	86.6	-44.2	234.9	226.4	8.48	27.713		
2,400.0	2,386.6	2,384.9	2,382.5	5.8	4.4	-155.40	91.7	-45.5	247.9	239.0	8.86	27.962		
2,500.0	2,485.8	2,484.1	2,481.5	6.1	4.6	-155.45	96.8	-46.7	260.8	251.6	9.25	28.189		
2,600.0	2,584.9	2,583.2	2,580.5	6.3	4.8	-155.49	101.9	-48.0	273.8	264.2	9.64	28.398		
2,700.0	2,684.1	2,682.4	2,679.5	6.6	5.0	-155.53	107.0	-49.3	286.8	276.8	10.03	28.590		
2,800.0	2,783.3	2,781.5	2,778.6	6.9	5.2	-155.57	112.1	-50.6	299.8	289.4	10.42	28.768		
2,900.0	2,882.4	2,880.7	2,877.6	7.2	5.4	-155.60	117.2	-51.9	312.8	302.0	10.81	28.932		
3,000.0	2,981.6	2,979.8	2,976.6	7.5	5.6	-155.63	122.3	-53.2	325.7	314.5	11.20	29.085		
3,100.0	3,080.8	3,079.0	3,075.6	7.8	5.8	-155.66	127.3	-54.4	338.7	327.1	11.59	29.227		
3,200.0	3,180.0	3,178.2	3,174.6	8.0	6.0	-155.68	132.4	-55.7	351.7	339.7	11.98	29.360		
3,300.0	3,279.1	3,277.3	3,273.6	8.3	6.2	-155.71	137.5	-57.0	364.7	352.3	12.37	29.485		
3,400.0	3,378.3	3,376.5	3,372.6	8.6	6.4	-155.73	142.6	-58.3	377.7	364.9	12.76	29.602		
3,500.0	3,477.5	3,475.6	3,471.7	8.9	6.6	-155.75	147.7	-59.6	390.7	377.5	13.15	29.711		
3,600.0	3,576.6	3,574.8	3,570.7	9.2	6.8	-155.77	152.8	-60.9	403.6	390.1	13.54	29.815		
3,700.0	3,675.8	3,673.9	3,669.7	9.5	7.0	-155.79	157.9	-62.1	416.6	402.7	13.93	29.912		
3,800.0	3,775.0	3,773.1	3,768.7	9.7	7.2	-155.80	163.0	-63.4	429.6	415.3	14.32	30.004		
3,900.0	3,874.1	3,872.2	3,867.7	10.0	7.4	-155.82	168.1	-64.7	442.6	427.9	14.71	30.091		
4,000.0	3,973.3	3,971.4	3,966.7	10.3	7.6	-155.83	173.2	-66.0	455.6	440.5	15.10	30.174		
4,100.0	4,072.5	4,070.5	4,065.7	10.6	7.8	-155.85	178.3	-67.3	468.5	453.1	15.49	30.252		
4,200.0	4,171.6	4,169.7	4,164.8	10.9	8.0	-155.86	183.4	-68.6	481.5	465.7	15.88	30.326		
4,300.0	4,270.8	4,268.8	4,263.8	11.2	8.2	-155.87	188.5	-69.8	494.5	478.2	16.27	30.397		
4,400.0	4,370.0	4,368.0	4,362.8	11.5	8.4	-155.89	193.6	-71.1	507.5	490.8	16.66	30.465		
4,500.0	4,469.1	4,467.2	4,461.8	11.7	8.5	-155.90	198.7	-72.4	520.5	503.4	17.05	30.529		
4,600.0	4,568.3	4,566.3	4,560.8	12.0	8.7	-155.91	203.8	-73.7	533.5	516.0	17.44	30.590		
4,700.0	4,667.5	4,665.5	4,659.8	12.3	8.9	-155.92	208.9	-75.0	546.4	528.6	17.83	30.649		
4,800.0	4,766.6	4,764.6	4,758.8	12.6	9.1	-155.93	214.0	-76.3	559.4	541.2	18.22	30.705		
4,900.0	4,865.8	4,863.8	4,857.9	12.9	9.3	-155.94	219.1	-77.5	572.4	553.8	18.61	30.759		
5,000.0	4,965.0	4,962.9	4,956.9	13.2	9.5	-155.95	224.2	-78.8	585.4	566.4	19.00	30.811		
5,100.0	5,064.1	5,062.1	5,055.9	13.5	9.7	-155.96	229.3	-80.1	598.4	579.0	19.39	30.860		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2H-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,163.3	5,161.2	5,154.9	13.7	9.9	-155.96	234.4	-81.4	611.4	591.6	19.78	30.908		
5,300.0	5,262.5	5,260.4	5,253.9	14.0	10.1	-155.97	239.5	-82.7	624.3	604.2	20.17	30.953		
5,400.0	5,361.7	5,359.6	5,353.0	14.3	10.3	-156.00	244.6	-84.0	636.5	615.9	20.57	30.945		
5,500.0	5,461.2	5,459.1	5,452.3	14.5	10.5	-155.95	249.7	-85.2	647.1	626.2	20.96	30.867		
5,600.0	5,560.8	5,558.6	5,551.8	14.7	10.7	-155.84	254.8	-86.5	656.1	634.8	21.36	30.723		
5,700.0	5,660.6	5,658.3	5,651.3	14.9	10.9	-155.67	259.9	-87.8	663.6	641.8	21.74	30.516		
5,800.0	5,760.5	5,759.7	5,752.5	15.1	11.1	-155.45	264.9	-89.1	669.4	647.2	22.12	30.255		
5,900.0	5,860.4	5,862.5	5,855.3	15.3	11.3	-155.29	268.3	-89.9	673.2	650.7	22.48	29.947		
6,000.0	5,960.4	5,965.4	5,958.2	15.4	11.4	-155.22	269.9	-90.3	675.0	652.2	22.81	29.595		
6,100.0	6,060.4	6,066.6	6,059.4	15.5	11.6	-90.00	270.0	-90.4	675.2	652.1	23.13	29.195		
6,200.0	6,160.4	6,166.6	6,159.4	15.6	11.8	-90.00	270.0	-90.4	675.2	651.7	23.45	28.798		
6,300.0	6,260.4	6,266.6	6,259.4	15.7	11.9	-90.00	270.0	-90.4	675.2	651.4	23.77	28.410		
6,400.0	6,360.4	6,366.6	6,359.4	15.9	12.1	-90.00	270.0	-90.4	675.2	651.1	24.09	28.031		
6,500.0	6,460.2	6,466.6	6,459.2	15.9	12.2	90.00	264.8	-90.4	675.2	650.9	24.30	27.788		
6,600.0	6,557.6	6,566.7	6,556.6	15.9	12.2	90.00	242.8	-90.4	675.2	650.9	24.30	27.788		
6,700.0	6,649.7	6,666.7	6,648.7	15.9	12.1	90.00	204.2	-90.4	675.2	651.0	24.17	27.931		
6,800.0	6,733.7	6,766.7	6,732.7	15.8	12.1	90.00	150.2	-90.4	675.2	651.1	24.04	28.090		
6,900.0	6,807.1	6,866.7	6,806.1	15.8	12.0	90.00	82.4	-90.4	675.2	651.2	24.02	28.104		
7,000.0	6,867.5	6,966.7	6,866.6	15.9	12.2	90.00	2.9	-90.4	675.2	650.9	24.28	27.810		
7,100.0	6,913.3	7,066.7	6,912.3	16.2	12.5	90.00	-85.9	-90.4	675.2	650.3	24.91	27.104		
7,200.0	6,942.9	7,166.7	6,941.9	16.6	13.0	90.00	-181.3	-90.4	675.2	649.2	25.98	25.992		
7,300.0	6,955.6	7,266.7	6,954.6	17.1	13.8	90.00	-280.3	-90.4	675.2	647.7	27.46	24.588		
7,400.0	6,956.0	7,366.7	6,955.0	17.9	14.7	90.00	-380.3	-90.4	675.2	645.9	29.31	23.036		
7,500.0	6,956.0	7,466.7	6,955.0	18.8	15.7	90.00	-480.3	-90.4	675.2	643.7	31.43	21.482		
7,600.0	6,956.0	7,566.7	6,955.0	19.8	16.9	90.00	-580.3	-90.4	675.2	641.4	33.78	19.987		
7,700.0	6,956.0	7,666.7	6,955.0	20.9	18.2	90.00	-680.3	-90.4	675.2	638.8	36.32	18.589		
7,800.0	6,956.0	7,766.7	6,955.0	22.0	19.5	90.00	-780.3	-90.4	675.2	636.2	39.01	17.308		
7,900.0	6,956.0	7,866.7	6,955.0	23.3	20.9	90.00	-880.3	-90.4	675.2	633.3	41.82	16.144		
8,000.0	6,956.0	7,966.7	6,955.0	24.6	22.4	90.00	-980.3	-90.4	675.2	630.4	44.73	15.094		
8,100.0	6,956.0	8,066.7	6,955.0	26.0	23.9	90.00	-1,080.3	-90.4	675.2	627.4	47.72	14.148		
8,200.0	6,956.0	8,166.7	6,955.0	27.4	25.4	90.00	-1,180.3	-90.4	675.2	624.4	50.78	13.296		
8,300.0	6,956.0	8,266.7	6,955.0	28.8	27.0	90.00	-1,280.3	-90.4	675.2	621.3	53.89	12.528		
8,400.0	6,956.0	8,366.7	6,955.0	30.3	28.5	90.00	-1,380.3	-90.4	675.2	618.1	57.05	11.835		
8,500.0	6,956.0	8,466.7	6,955.0	31.8	30.1	90.00	-1,480.3	-90.4	675.2	614.9	60.25	11.207		
8,600.0	6,956.0	8,566.7	6,955.0	33.4	31.8	90.00	-1,580.3	-90.4	675.2	611.7	63.48	10.637		
8,700.0	6,956.0	8,666.7	6,955.0	34.9	33.4	90.00	-1,680.3	-90.4	675.2	608.4	66.73	10.117		
8,800.0	6,956.0	8,766.7	6,955.0	36.5	35.0	90.00	-1,780.3	-90.4	675.2	605.1	70.02	9.643		
8,900.0	6,956.0	8,866.7	6,955.0	38.1	36.7	90.00	-1,880.3	-90.4	675.2	601.8	73.32	9.209		
9,000.0	6,956.0	8,966.7	6,955.0	39.7	38.3	90.00	-1,980.3	-90.4	675.2	598.5	76.64	8.810		
9,100.0	6,956.0	9,066.7	6,955.0	41.3	40.0	90.00	-2,080.3	-90.4	675.2	595.2	79.98	8.442		
9,200.0	6,956.0	9,166.7	6,955.0	42.9	41.7	90.00	-2,180.3	-90.4	675.2	591.8	83.33	8.102		
9,300.0	6,956.0	9,266.7	6,955.0	44.5	43.4	90.00	-2,280.3	-90.4	675.2	588.5	86.69	7.788		
9,400.0	6,956.0	9,366.7	6,955.0	46.2	45.0	90.00	-2,380.3	-90.4	675.2	585.1	90.07	7.496		
9,500.0	6,956.0	9,466.7	6,955.0	47.8	46.7	90.00	-2,480.3	-90.4	675.2	581.7	93.45	7.225		
9,600.0	6,956.0	9,566.7	6,955.0	49.5	48.4	90.00	-2,580.3	-90.4	675.2	578.3	96.84	6.972		
9,700.0	6,956.0	9,666.7	6,955.0	51.2	50.1	90.00	-2,680.3	-90.4	675.1	574.9	100.25	6.735		
9,800.0	6,956.0	9,766.7	6,955.0	52.8	51.8	90.00	-2,780.3	-90.4	675.1	571.5	103.65	6.514		
9,900.0	6,956.0	9,866.7	6,955.0	54.5	53.5	90.00	-2,880.3	-90.4	675.1	568.1	107.07	6.306		
10,000.0	6,956.0	9,966.7	6,955.0	56.2	55.3	90.00	-2,980.3	-90.4	675.1	564.7	110.49	6.111		
10,100.0	6,956.0	10,066.7	6,955.0	57.9	57.0	90.00	-3,080.3	-90.4	675.1	561.2	113.91	5.927		
10,200.0	6,956.0	10,166.7	6,955.0	59.6	58.7	90.00	-3,180.3	-90.4	675.1	557.8	117.35	5.753		
10,300.0	6,956.0	10,266.7	6,955.0	61.3	60.4	90.00	-3,280.3	-90.4	675.1	554.4	120.78	5.590		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2H-32H-C264 - HZ - Plan #1												Offset Site Error: 0.0 ft	
Survey Program: 0-Geolink MWD												Offset Well Error: 0.0 ft	
Reference				Offset		Semi Major Axis			Distance				Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
10,400.0	6,956.0	10,366.7	6,955.0	62.9	62.1	90.00	-3,380.3	-90.4	675.1	550.9	124.22	5.435	
10,500.0	6,956.0	10,466.7	6,955.0	64.6	63.8	90.00	-3,480.3	-90.4	675.1	547.5	127.66	5.288	
10,600.0	6,956.0	10,566.7	6,955.0	66.4	65.6	90.00	-3,580.3	-90.4	675.1	544.0	131.11	5.149	
10,700.0	6,956.0	10,666.7	6,955.0	68.1	67.3	90.00	-3,680.3	-90.4	675.1	540.6	134.56	5.017	
10,800.0	6,956.0	10,766.7	6,955.0	69.8	69.0	90.00	-3,780.3	-90.4	675.1	537.1	138.01	4.892	
10,900.0	6,956.0	10,866.7	6,955.0	71.5	70.7	90.00	-3,880.3	-90.4	675.1	533.7	141.47	4.772	
11,000.0	6,956.0	10,966.7	6,955.0	73.2	72.5	90.00	-3,980.3	-90.4	675.1	530.2	144.93	4.659	
11,100.0	6,956.0	11,066.7	6,955.0	74.9	74.2	90.00	-4,080.3	-90.4	675.1	526.7	148.39	4.550	
11,200.0	6,956.0	11,166.7	6,955.0	76.6	75.9	90.00	-4,180.3	-90.4	675.1	523.3	151.85	4.446	
11,300.0	6,956.0	11,266.7	6,955.0	78.3	77.7	90.00	-4,280.3	-90.4	675.1	519.8	155.31	4.347	
11,400.0	6,956.0	11,366.7	6,955.0	80.0	79.4	90.00	-4,380.3	-90.4	675.1	516.4	158.78	4.252	
11,500.0	6,956.0	11,466.7	6,955.0	81.8	81.1	90.00	-4,480.3	-90.4	675.1	512.9	162.25	4.161	
11,555.2	6,956.0	11,521.9	6,955.0	82.7	82.1	90.00	-4,535.5	-90.4	675.1	511.0	164.16	4.113	
11,576.8	6,956.0	11,540.4	6,955.0	83.1	82.4	90.00	-4,554.1	-90.4	675.1	510.3	164.86	4.095 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2I-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.90	0.0	-14.8	14.8					
100.0	100.0	100.0	100.0	0.1	0.1	-89.90	0.0	-14.8	14.8	14.6	0.24	60.677		
200.0	200.0	200.0	200.0	0.3	0.3	-89.90	0.0	-14.8	14.8	14.2	0.59	24.984		
300.0	300.0	300.0	300.0	0.5	0.5	-89.90	0.0	-14.8	14.8	13.9	0.94	15.731	CC, ES	
400.0	400.0	400.0	400.0	0.6	0.6	-156.46	0.0	-14.8	15.6	14.3	1.29	12.096		
500.0	500.0	500.1	500.1	0.8	0.8	-157.40	0.8	-14.4	17.6	15.9	1.64	10.712		
600.0	599.9	600.3	600.2	1.0	1.0	-155.79	3.1	-13.1	20.3	18.3	2.00	10.157		
700.0	699.7	700.4	700.2	1.2	1.2	-152.64	6.9	-11.0	23.7	21.4	2.36	10.059		
800.0	799.4	800.3	800.0	1.4	1.4	-149.49	11.9	-8.2	28.2	25.4	2.73	10.316		
900.0	898.9	900.1	899.7	1.6	1.6	-148.61	17.0	-5.4	34.1	31.0	3.11	10.971		
1,000.0	998.3	999.9	999.2	1.9	1.8	-149.25	22.1	-2.6	41.6	38.1	3.49	11.901		
1,100.0	1,097.4	1,099.5	1,098.7	2.2	2.0	-150.53	27.2	0.3	50.2	46.4	3.88	12.966		
1,200.0	1,196.6	1,199.1	1,198.1	2.4	2.2	-151.51	32.3	3.1	59.1	54.8	4.26	13.867		
1,300.0	1,295.8	1,298.7	1,297.5	2.7	2.4	-152.23	37.4	5.9	67.9	63.3	4.65	14.619		
1,400.0	1,394.9	1,398.3	1,397.0	3.0	2.6	-152.79	42.5	8.8	76.8	71.7	5.03	15.255		
1,500.0	1,494.1	1,497.9	1,496.4	3.2	2.7	-153.23	47.6	11.6	85.6	80.2	5.42	15.800		
1,600.0	1,593.3	1,597.5	1,595.8	3.5	2.9	-153.59	52.7	14.4	94.5	88.7	5.81	16.272		
1,700.0	1,692.4	1,697.1	1,695.3	3.8	3.1	-153.89	57.8	17.2	103.3	97.1	6.19	16.685		
1,800.0	1,791.6	1,796.7	1,794.7	4.1	3.3	-154.14	62.9	20.1	112.2	105.6	6.58	17.048		
1,900.0	1,890.8	1,896.3	1,894.1	4.4	3.5	-154.36	68.0	22.9	121.1	114.1	6.97	17.371		
2,000.0	1,989.9	1,995.9	1,993.6	4.6	3.7	-154.54	73.1	25.7	129.9	122.6	7.36	17.660		
2,100.0	2,089.1	2,095.5	2,093.0	4.9	3.9	-154.70	78.2	28.5	138.8	131.1	7.75	17.919		
2,200.0	2,188.3	2,195.1	2,192.4	5.2	4.1	-154.85	83.3	31.4	147.7	139.5	8.13	18.154		
2,300.0	2,287.4	2,294.7	2,291.9	5.5	4.3	-154.97	88.4	34.2	156.5	148.0	8.52	18.367		
2,400.0	2,386.6	2,394.3	2,391.3	5.8	4.5	-155.08	93.5	37.0	165.4	156.5	8.91	18.561		
2,500.0	2,485.8	2,494.0	2,490.7	6.1	4.7	-155.19	98.6	39.9	174.3	165.0	9.30	18.739		
2,600.0	2,584.9	2,593.6	2,590.2	6.3	5.0	-155.28	103.7	42.7	183.2	173.5	9.69	18.902		
2,700.0	2,684.1	2,693.2	2,689.6	6.6	5.2	-155.36	108.8	45.5	192.0	181.9	10.08	19.053		
2,800.0	2,783.3	2,792.8	2,789.0	6.9	5.4	-155.43	113.9	48.3	200.9	190.4	10.47	19.192		
2,900.0	2,882.4	2,892.4	2,888.5	7.2	5.6	-155.50	119.0	51.2	209.8	198.9	10.86	19.322		
3,000.0	2,981.6	2,992.0	2,987.9	7.5	5.8	-155.57	124.1	54.0	218.6	207.4	11.25	19.442		
3,100.0	3,080.8	3,091.6	3,087.4	7.8	6.0	-155.63	129.2	56.8	227.5	215.9	11.64	19.555		
3,200.0	3,180.0	3,191.2	3,186.8	8.0	6.2	-155.68	134.3	59.6	236.4	224.4	12.02	19.660		
3,300.0	3,279.1	3,290.8	3,286.2	8.3	6.4	-155.73	139.4	62.5	245.3	232.9	12.41	19.758		
3,400.0	3,378.3	3,390.4	3,385.7	8.6	6.6	-155.78	144.5	65.3	254.1	241.3	12.80	19.850		
3,500.0	3,477.5	3,490.0	3,485.1	8.9	6.8	-155.82	149.6	68.1	263.0	249.8	13.19	19.937		
3,600.0	3,576.6	3,589.6	3,584.5	9.2	7.0	-155.86	154.7	71.0	271.9	258.3	13.58	20.019		
3,700.0	3,675.8	3,689.2	3,684.0	9.5	7.2	-155.90	159.8	73.8	280.8	266.8	13.97	20.096		
3,800.0	3,775.0	3,788.8	3,783.4	9.7	7.4	-155.93	164.9	76.6	289.6	275.3	14.36	20.169		
3,900.0	3,874.1	3,888.4	3,882.8	10.0	7.6	-155.97	170.0	79.4	298.5	283.8	14.75	20.239		
4,000.0	3,973.3	3,988.0	3,982.3	10.3	7.8	-156.00	175.1	82.3	307.4	292.2	15.14	20.304		
4,100.0	4,072.5	4,087.6	4,081.7	10.6	8.0	-156.03	180.2	85.1	316.3	300.7	15.53	20.366		
4,200.0	4,171.6	4,187.2	4,181.1	10.9	8.2	-156.06	185.3	87.9	325.1	309.2	15.92	20.426		
4,300.0	4,270.8	4,286.8	4,280.6	11.2	8.4	-156.09	190.4	90.8	334.0	317.7	16.31	20.482		
4,400.0	4,370.0	4,386.5	4,380.0	11.5	8.6	-156.11	195.5	93.6	342.9	326.2	16.70	20.536		
4,500.0	4,469.1	4,486.1	4,479.4	11.7	8.8	-156.13	200.6	96.4	351.8	334.7	17.09	20.587		
4,600.0	4,568.3	4,585.7	4,578.9	12.0	9.0	-156.16	205.7	99.2	360.6	343.2	17.48	20.636		
4,700.0	4,667.5	4,685.3	4,678.3	12.3	9.2	-156.18	210.8	102.1	369.5	351.6	17.87	20.683		
4,800.0	4,766.6	4,784.9	4,777.7	12.6	9.4	-156.20	215.9	104.9	378.4	360.1	18.26	20.728		
4,900.0	4,865.8	4,884.5	4,877.2	12.9	9.6	-156.22	221.0	107.7	387.3	368.6	18.64	20.771		
5,000.0	4,965.0	4,984.1	4,976.6	13.2	9.8	-156.24	226.1	110.5	396.1	377.1	19.03	20.812		
5,100.0	5,064.1	5,083.7	5,076.0	13.5	10.0	-156.26	231.2	113.4	405.0	385.6	19.42	20.851		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2I-32H-C264 - 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		
5,200.0	5,163.3	5,183.3	5,175.5	13.7	10.2	-156.27	236.3	116.2	413.9	394.1	19.81	20.889		
5,300.0	5,262.5	5,282.9	5,274.9	14.0	10.4	-156.29	241.4	119.0	422.8	402.6	20.20	20.926		
5,400.0	5,361.7	5,382.6	5,374.4	14.3	10.6	-156.29	246.5	121.9	430.8	410.2	20.60	20.915		
5,500.0	5,461.2	5,482.4	5,474.0	14.5	10.8	-156.20	251.7	124.7	437.3	416.3	21.00	20.828		
5,600.0	5,560.8	5,582.2	5,573.7	14.7	11.0	-156.01	256.8	127.5	442.2	420.8	21.40	20.668		
5,700.0	5,660.6	5,681.8	5,673.1	14.9	11.2	-155.72	261.9	130.3	445.5	423.7	21.79	20.443		
5,800.0	5,760.5	5,778.1	5,769.3	15.1	11.4	-155.47	266.0	132.6	447.7	425.6	22.16	20.201		
5,900.0	5,860.4	5,874.4	5,865.5	15.3	11.5	-155.30	268.6	134.1	449.2	426.7	22.51	19.959		
6,000.0	5,960.4	5,970.7	5,961.9	15.4	11.7	-155.22	269.9	134.8	449.9	427.0	22.82	19.713		
6,100.0	6,060.4	6,069.3	6,060.4	15.5	11.8	-90.00	270.0	134.9	449.9	426.8	23.13	19.450		
6,200.0	6,160.4	6,169.3	6,160.4	15.6	12.0	-90.00	270.0	134.9	449.9	426.5	23.45	19.185		
6,300.0	6,260.4	6,269.3	6,260.4	15.7	12.1	-90.00	270.0	134.9	449.9	426.2	23.77	18.927		
6,400.0	6,360.4	6,369.3	6,360.4	15.9	12.3	-90.00	270.0	134.9	449.9	425.8	24.09	18.674		
6,439.9	6,400.3	6,409.1	6,400.3	15.9	12.4	90.14	270.0	134.9	449.9	425.7	24.21	18.583		
6,500.0	6,460.2	6,469.0	6,460.2	15.9	12.5	90.66	270.0	134.9	450.0	425.5	24.42	18.427		
6,600.0	6,557.6	6,566.4	6,557.6	15.9	12.6	93.30	270.0	134.9	450.8	426.0	24.78	18.188		
6,700.0	6,649.7	6,664.3	6,655.4	15.9	12.7	97.46	267.7	134.9	454.4	429.4	25.08	18.122		
6,800.0	6,733.7	6,772.6	6,761.7	15.8	12.8	101.85	247.9	134.9	461.3	436.2	25.06	18.408		
6,900.0	6,807.1	6,890.7	6,871.1	15.8	12.7	106.02	204.0	134.9	470.4	445.7	24.73	19.024		
7,000.0	6,867.5	7,020.4	6,978.0	15.9	12.6	109.79	131.1	134.9	480.7	456.4	24.27	19.810		
7,100.0	6,913.3	7,162.2	7,073.0	16.2	12.7	112.93	26.2	134.9	490.4	466.4	24.03	20.405		
7,200.0	6,942.9	7,315.4	7,143.3	16.6	13.2	115.13	-109.3	134.9	497.7	473.2	24.52	20.296		
7,300.0	6,955.6	7,476.1	7,175.8	17.1	14.2	116.12	-266.2	134.9	501.1	475.0	26.10	19.200		
7,400.0	6,956.0	7,590.3	7,177.0	17.9	15.2	116.16	-380.3	134.9	501.3	473.4	27.89	17.971		
7,500.0	6,956.0	7,690.3	7,177.0	18.8	16.2	116.16	-480.3	134.9	501.3	471.5	29.76	16.842		
7,600.0	6,956.0	7,790.3	7,177.0	19.8	17.4	116.16	-580.3	134.9	501.3	469.4	31.83	15.747		
7,700.0	6,956.0	7,890.3	7,177.0	20.9	18.6	116.16	-680.3	134.9	501.3	467.2	34.07	14.713		
7,800.0	6,956.0	7,990.3	7,177.0	22.0	19.9	116.16	-780.3	134.9	501.3	464.8	36.44	13.754		
7,900.0	6,956.0	8,090.3	7,177.0	23.3	21.3	116.16	-880.3	134.9	501.3	462.3	38.93	12.877		
8,000.0	6,956.0	8,190.3	7,177.0	24.6	22.7	116.16	-980.3	134.9	501.3	459.8	41.50	12.078		
8,100.0	6,956.0	8,290.3	7,177.0	26.0	24.2	116.16	-1,080.3	134.9	501.3	457.1	44.15	11.353		
8,200.0	6,956.0	8,390.3	7,177.0	27.4	25.7	116.16	-1,180.3	134.9	501.3	454.4	46.87	10.696		
8,300.0	6,956.0	8,490.3	7,177.0	28.8	27.3	116.16	-1,280.3	134.9	501.3	451.6	49.63	10.100		
8,400.0	6,956.0	8,590.3	7,177.0	30.3	28.8	116.16	-1,380.3	134.9	501.3	448.8	52.44	9.559		
8,500.0	6,956.0	8,690.3	7,177.0	31.8	30.4	116.16	-1,480.3	134.9	501.3	446.0	55.29	9.067		
8,600.0	6,956.0	8,790.3	7,177.0	33.4	32.0	116.16	-1,580.3	134.9	501.3	443.1	58.16	8.618		
8,700.0	6,956.0	8,890.3	7,177.0	34.9	33.6	116.16	-1,680.3	134.9	501.3	440.2	61.07	8.208		
8,800.0	6,956.0	8,990.3	7,177.0	36.5	35.3	116.16	-1,780.3	134.9	501.3	437.3	64.00	7.833		
8,900.0	6,956.0	9,090.3	7,177.0	38.1	36.9	116.16	-1,880.3	134.9	501.3	434.3	66.95	7.488		
9,000.0	6,956.0	9,190.3	7,177.0	39.7	38.6	116.16	-1,980.3	134.9	501.3	431.3	69.91	7.170		
9,100.0	6,956.0	9,290.3	7,177.0	41.3	40.2	116.16	-2,080.3	134.9	501.3	428.4	72.90	6.876		
9,200.0	6,956.0	9,390.3	7,177.0	42.9	41.9	116.16	-2,180.3	134.9	501.3	425.4	75.89	6.605		
9,300.0	6,956.0	9,490.3	7,177.0	44.5	43.6	116.16	-2,280.3	134.9	501.3	422.4	78.90	6.353		
9,400.0	6,956.0	9,590.3	7,177.0	46.2	45.2	116.16	-2,380.3	134.9	501.3	419.3	81.92	6.119		
9,500.0	6,956.0	9,690.3	7,177.0	47.8	46.9	116.16	-2,480.3	134.9	501.3	416.3	84.95	5.901		
9,600.0	6,956.0	9,790.3	7,177.0	49.5	48.6	116.16	-2,580.3	134.9	501.3	413.3	87.99	5.697		
9,700.0	6,956.0	9,890.3	7,177.0	51.2	50.3	116.16	-2,680.3	134.9	501.3	410.2	91.03	5.506		
9,800.0	6,956.0	9,990.3	7,177.0	52.8	52.0	116.16	-2,780.3	134.9	501.3	407.2	94.09	5.328		
9,900.0	6,956.0	10,090.3	7,177.0	54.5	53.7	116.16	-2,880.3	134.9	501.3	404.1	97.14	5.160		
10,000.0	6,956.0	10,190.3	7,177.0	56.2	55.4	116.16	-2,980.3	134.9	501.3	401.0	100.21	5.002		
10,100.0	6,956.0	10,290.3	7,177.0	57.9	57.1	116.16	-3,080.3	134.9	501.3	398.0	103.28	4.853		
10,200.0	6,956.0	10,390.3	7,177.0	59.6	58.8	116.16	-3,180.3	134.9	501.3	394.9	106.36	4.713		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2I-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,300.0	6,956.0	10,490.3	7,177.0	61.3	60.6	116.16	-3,280.3	134.9	501.3	391.8	109.44	4.580		
10,400.0	6,956.0	10,590.3	7,177.0	62.9	62.3	116.16	-3,380.3	134.9	501.3	388.7	112.52	4.455		
10,500.0	6,956.0	10,690.3	7,177.0	64.6	64.0	116.16	-3,480.3	134.9	501.3	385.6	115.61	4.336		
10,600.0	6,956.0	10,790.3	7,177.0	66.4	65.7	116.16	-3,580.3	134.9	501.3	382.6	118.70	4.223		
10,700.0	6,956.0	10,890.3	7,177.0	68.1	67.4	116.16	-3,680.3	134.9	501.3	379.5	121.79	4.116		
10,800.0	6,956.0	10,990.3	7,177.0	69.8	69.2	116.16	-3,780.3	134.9	501.3	376.4	124.89	4.014		
10,900.0	6,956.0	11,090.3	7,177.0	71.5	70.9	116.16	-3,880.3	134.9	501.3	373.3	127.99	3.916		
11,000.0	6,956.0	11,190.3	7,177.0	73.2	72.6	116.16	-3,980.3	134.9	501.3	370.2	131.09	3.824		
11,100.0	6,956.0	11,290.3	7,177.0	74.9	74.3	116.16	-4,080.3	134.9	501.3	367.1	134.20	3.735		
11,200.0	6,956.0	11,390.3	7,177.0	76.6	76.1	116.16	-4,180.3	134.9	501.3	363.9	137.30	3.651		
11,300.0	6,956.0	11,490.3	7,177.0	78.3	77.8	116.16	-4,280.3	134.9	501.3	360.8	140.41	3.570		
11,400.0	6,956.0	11,590.3	7,177.0	80.0	79.5	116.16	-4,380.3	134.9	501.3	357.7	143.52	3.492		
11,500.0	6,956.0	11,690.3	7,177.0	81.8	81.3	116.16	-4,480.3	134.9	501.3	354.6	146.64	3.418		
11,555.3	6,956.0	11,745.6	7,177.0	82.7	82.2	116.16	-4,535.6	134.9	501.2	352.9	148.36	3.379		
11,576.8	6,956.0	11,764.5	7,177.0	83.1	82.5	116.16	-4,554.5	134.9	501.3	352.3	148.99	3.364 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2J-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.90	0.0	-7.3	7.3					
100.0	100.0	100.0	100.0	0.1	0.1	-89.90	0.0	-7.3	7.3	7.0	0.24	29.766		
200.0	200.0	200.0	200.0	0.3	0.3	-89.90	0.0	-7.3	7.3	6.7	0.59	12.257		
300.0	300.0	300.0	300.0	0.5	0.5	-89.90	0.0	-7.3	7.3	6.3	0.94	7.717 CC, ES		
400.0	400.0	400.1	400.1	0.6	0.6	-156.84	0.1	-7.1	7.9	6.6	1.29	6.111		
500.0	500.0	500.2	500.2	0.8	0.8	-157.06	1.2	-5.7	8.9	7.2	1.64	5.399		
600.0	599.9	600.3	600.2	1.0	1.0	-155.46	3.3	-2.9	10.0	8.0	2.00	5.015		
700.0	699.7	700.4	700.2	1.2	1.2	-152.67	6.4	1.4	11.3	9.0	2.36	4.814		
800.0	799.4	800.6	800.1	1.4	1.4	-149.18	10.5	7.0	12.9	10.2	2.73	4.725		
900.0	898.9	900.7	899.8	1.6	1.6	-145.87	15.6	13.9	14.8	11.7	3.12	4.751		
1,000.0	998.3	1,000.6	999.4	1.9	1.8	-145.99	20.8	21.0	18.0	14.5	3.52	5.133		
1,100.0	1,097.4	1,100.5	1,098.9	2.2	2.0	-148.12	26.0	28.1	22.5	18.6	3.90	5.758		
1,200.0	1,196.6	1,200.4	1,198.4	2.4	2.3	-149.70	31.3	35.2	27.0	22.7	4.29	6.304		
1,300.0	1,295.8	1,300.3	1,297.9	2.7	2.5	-150.83	36.5	42.3	31.6	26.9	4.67	6.761		
1,400.0	1,394.9	1,400.2	1,397.4	3.0	2.7	-151.67	41.7	49.4	36.2	31.1	5.06	7.150		
1,500.0	1,494.1	1,500.1	1,496.9	3.2	2.9	-152.32	46.9	56.5	40.8	35.3	5.45	7.484		
1,600.0	1,593.3	1,600.0	1,596.4	3.5	3.2	-152.84	52.1	63.6	45.4	39.5	5.83	7.774		
1,700.0	1,692.4	1,699.9	1,695.9	3.8	3.4	-153.27	57.4	70.7	50.0	43.7	6.22	8.029		
1,800.0	1,791.6	1,799.8	1,795.4	4.1	3.6	-153.62	62.6	77.8	54.5	47.9	6.61	8.253		
1,900.0	1,890.8	1,899.6	1,894.9	4.4	3.9	-153.92	67.8	84.9	59.1	52.2	7.00	8.452		
2,000.0	1,989.9	1,999.5	1,994.4	4.6	4.1	-154.17	73.0	92.0	63.7	56.4	7.39	8.631		
2,100.0	2,089.1	2,099.4	2,093.9	4.9	4.3	-154.40	78.3	99.1	68.4	60.6	7.77	8.791		
2,200.0	2,188.3	2,199.3	2,193.4	5.2	4.6	-154.59	83.5	106.2	73.0	64.8	8.16	8.937		
2,300.0	2,287.4	2,299.2	2,292.9	5.5	4.8	-154.76	88.7	113.3	77.6	69.0	8.55	9.069		
2,400.0	2,386.6	2,399.1	2,392.4	5.8	5.0	-154.91	93.9	120.4	82.2	73.2	8.94	9.189		
2,500.0	2,485.8	2,499.0	2,491.9	6.1	5.2	-155.04	99.2	127.5	86.8	77.4	9.33	9.300		
2,600.0	2,584.9	2,598.9	2,591.4	6.3	5.5	-155.17	104.4	134.6	91.4	81.7	9.72	9.402		
2,700.0	2,684.1	2,698.8	2,690.9	6.6	5.7	-155.28	109.6	141.7	96.0	85.9	10.11	9.495		
2,800.0	2,783.3	2,798.7	2,790.5	6.9	5.9	-155.37	114.8	148.8	100.6	90.1	10.50	9.582		
2,900.0	2,882.4	2,898.6	2,890.0	7.2	6.2	-155.47	120.0	155.9	105.2	94.3	10.89	9.663		
3,000.0	2,981.6	2,998.5	2,989.5	7.5	6.4	-155.55	125.3	163.0	109.8	98.5	11.27	9.738		
3,100.0	3,080.8	3,098.4	3,089.0	7.8	6.6	-155.63	130.5	170.1	114.4	102.7	11.66	9.808		
3,200.0	3,180.0	3,198.3	3,188.5	8.0	6.9	-155.70	135.7	177.2	119.0	106.9	12.05	9.873		
3,300.0	3,279.1	3,298.2	3,288.0	8.3	7.1	-155.76	140.9	184.3	123.6	111.2	12.44	9.935		
3,400.0	3,378.3	3,398.1	3,387.5	8.6	7.3	-155.82	146.2	191.4	128.2	115.4	12.83	9.992		
3,500.0	3,477.5	3,497.9	3,487.0	8.9	7.6	-155.88	151.4	198.5	132.8	119.6	13.22	10.047		
3,600.0	3,576.6	3,597.8	3,586.5	9.2	7.8	-155.93	156.6	205.6	137.4	123.8	13.61	10.098		
3,700.0	3,675.8	3,697.7	3,686.0	9.5	8.0	-155.98	161.8	212.7	142.0	128.0	14.00	10.146		
3,800.0	3,775.0	3,797.6	3,785.5	9.7	8.3	-156.03	167.1	219.9	146.6	132.3	14.39	10.192		
3,900.0	3,874.1	3,897.5	3,885.0	10.0	8.5	-156.07	172.3	227.0	151.3	136.5	14.78	10.235		
4,000.0	3,973.3	3,997.4	3,984.5	10.3	8.7	-156.11	177.5	234.1	155.9	140.7	15.17	10.276		
4,100.0	4,072.5	4,097.3	4,084.0	10.6	9.0	-156.15	182.7	241.2	160.5	144.9	15.56	10.315		
4,200.0	4,171.6	4,197.2	4,183.5	10.9	9.2	-156.19	188.0	248.3	165.1	149.1	15.95	10.352		
4,300.0	4,270.8	4,297.1	4,283.0	11.2	9.4	-156.22	193.2	255.4	169.7	153.3	16.34	10.387		
4,400.0	4,370.0	4,397.0	4,382.5	11.5	9.7	-156.25	198.4	262.5	174.3	157.6	16.73	10.421		
4,500.0	4,469.1	4,496.9	4,482.0	11.7	9.9	-156.28	203.6	269.6	178.9	161.8	17.11	10.453		
4,600.0	4,568.3	4,596.8	4,581.5	12.0	10.1	-156.31	208.8	276.7	183.5	166.0	17.50	10.483		
4,700.0	4,667.5	4,696.7	4,681.0	12.3	10.4	-156.34	214.1	283.8	188.1	170.2	17.89	10.513		
4,800.0	4,766.6	4,796.6	4,780.5	12.6	10.6	-156.37	219.3	290.9	192.7	174.4	18.28	10.541		
4,900.0	4,865.8	4,896.5	4,880.0	12.9	10.8	-156.39	224.5	298.0	197.3	178.7	18.67	10.568		
5,000.0	4,965.0	4,996.4	4,979.5	13.2	11.0	-156.42	229.7	305.1	201.9	182.9	19.06	10.593		
5,100.0	5,064.1	5,096.2	5,079.0	13.5	11.3	-156.44	235.0	312.2	206.5	187.1	19.45	10.618		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2J-32H-C264 - 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	
5,200.0	5,163.3	5,196.1	5,178.5	13.7	11.5	-156.46	240.2	319.3	211.1	191.3	19.84	10.642		
5,300.0	5,262.5	5,296.0	5,278.1	14.0	11.7	-156.48	245.4	326.4	215.8	195.5	20.23	10.665		
5,400.0	5,361.7	5,396.0	5,377.6	14.3	12.0	-156.43	250.6	333.5	219.6	198.9	20.63	10.643		
5,500.0	5,461.2	5,495.9	5,477.2	14.5	12.2	-156.19	255.9	340.6	221.8	200.7	21.04	10.538		
5,600.0	5,560.8	5,593.4	5,574.3	14.7	12.4	-155.86	260.6	347.1	222.8	201.4	21.45	10.389		
5,700.0	5,660.6	5,690.3	5,671.0	14.9	12.6	-155.60	264.4	352.2	223.7	201.9	21.83	10.247		
5,800.0	5,760.5	5,787.2	5,767.8	15.1	12.8	-155.40	267.2	356.0	224.3	202.1	22.19	10.110		
5,900.0	5,860.4	5,884.2	5,864.7	15.3	13.0	-155.28	269.1	358.5	224.8	202.2	22.52	9.978		
6,000.0	5,960.4	5,981.1	5,961.6	15.4	13.1	-155.22	269.9	359.7	225.0	202.1	22.84	9.851		
6,100.0	6,060.4	6,079.9	6,060.4	15.5	13.2	-90.00	270.0	359.8	225.0	201.8	23.15	9.719		
6,200.0	6,160.4	6,179.9	6,160.4	15.6	13.4	-90.00	270.0	359.8	225.0	201.5	23.47	9.587		
6,300.0	6,260.4	6,279.9	6,260.4	15.7	13.5	-90.00	270.0	359.8	225.0	201.2	23.79	9.458		
6,400.0	6,360.4	6,379.9	6,360.4	15.9	13.7	-90.00	270.0	359.8	225.0	200.9	24.11	9.332		
6,440.0	6,400.3	6,419.8	6,400.3	15.9	13.7	90.28	270.0	359.8	225.0	200.7	24.25	9.279		
6,500.0	6,460.2	6,479.7	6,460.2	15.9	13.8	91.32	270.0	359.8	225.0	200.5	24.53	9.175		
6,600.0	6,557.6	6,580.6	6,560.7	15.9	13.9	95.24	263.4	359.8	225.9	200.9	25.03	9.028		
6,700.0	6,649.7	6,684.6	6,661.6	15.9	13.9	99.06	238.5	359.8	227.9	202.7	25.20	9.044		
6,800.0	6,733.7	6,791.7	6,758.9	15.8	13.8	102.59	194.2	359.8	230.6	205.6	25.02	9.216		
6,900.0	6,807.1	6,901.9	6,848.7	15.8	13.8	105.69	130.6	359.8	233.8	209.2	24.63	9.494		
7,000.0	6,867.5	7,015.0	6,926.4	15.9	13.8	108.26	48.7	359.8	237.0	212.8	24.25	9.772		
7,100.0	6,913.3	7,130.6	6,987.7	16.2	14.0	110.21	-49.1	359.8	239.8	215.5	24.27	9.879		
7,200.0	6,942.9	7,248.0	7,028.6	16.6	14.5	111.47	-159.0	359.8	241.8	216.8	24.97	9.681		
7,300.0	6,955.6	7,366.6	7,046.4	17.1	15.2	112.00	-276.1	359.8	242.6	216.1	26.54	9.142		
7,400.0	6,956.0	7,470.9	7,047.0	17.9	16.1	112.02	-380.3	359.8	242.7	214.3	28.35	8.561		
7,500.0	6,956.0	7,570.9	7,047.0	18.8	17.1	112.02	-480.3	359.8	242.7	212.4	30.28	8.014		
7,600.0	6,956.0	7,670.9	7,047.0	19.8	18.2	112.02	-580.3	359.8	242.7	210.2	32.43	7.483		
7,700.0	6,956.0	7,770.9	7,047.0	20.9	19.4	112.02	-680.3	359.8	242.7	207.9	34.75	6.984		
7,800.0	6,956.0	7,870.9	7,047.0	22.0	20.6	112.02	-780.3	359.8	242.7	205.5	37.21	6.522		
7,900.0	6,956.0	7,970.9	7,047.0	23.3	22.0	112.02	-880.3	359.8	242.7	202.9	39.78	6.100		
8,000.0	6,956.0	8,070.9	7,047.0	24.6	23.4	112.02	-980.3	359.8	242.7	200.2	42.45	5.716		
8,100.0	6,956.0	8,170.9	7,047.0	26.0	24.8	112.02	-1,080.3	359.8	242.7	197.5	45.20	5.369		
8,200.0	6,956.0	8,270.9	7,047.0	27.4	26.3	112.02	-1,180.3	359.8	242.7	194.7	48.01	5.055		
8,300.0	6,956.0	8,370.9	7,047.0	28.8	27.8	112.02	-1,280.3	359.8	242.7	191.8	50.87	4.770		
8,400.0	6,956.0	8,470.9	7,047.0	30.3	29.3	112.02	-1,380.3	359.8	242.7	188.9	53.78	4.512		
8,500.0	6,956.0	8,570.9	7,047.0	31.8	30.9	112.02	-1,480.3	359.8	242.7	185.9	56.72	4.278		
8,600.0	6,956.0	8,670.9	7,047.0	33.4	32.5	112.02	-1,580.3	359.8	242.7	183.0	59.70	4.065		
8,700.0	6,956.0	8,770.9	7,047.0	34.9	34.0	112.02	-1,680.3	359.8	242.7	180.0	62.71	3.870		
8,800.0	6,956.0	8,870.9	7,047.0	36.5	35.7	112.02	-1,780.3	359.8	242.7	176.9	65.74	3.692		
8,900.0	6,956.0	8,970.9	7,047.0	38.1	37.3	112.02	-1,880.3	359.8	242.7	173.9	68.79	3.528		
9,000.0	6,956.0	9,070.9	7,047.0	39.7	38.9	112.02	-1,980.3	359.8	242.7	170.8	71.85	3.377		
9,100.0	6,956.0	9,170.9	7,047.0	41.3	40.6	112.02	-2,080.3	359.8	242.7	167.7	74.94	3.238		
9,200.0	6,956.0	9,270.9	7,047.0	42.9	42.2	112.02	-2,180.3	359.8	242.7	164.6	78.03	3.110		
9,300.0	6,956.0	9,370.9	7,047.0	44.5	43.9	112.02	-2,280.3	359.8	242.7	161.5	81.14	2.991		
9,400.0	6,956.0	9,470.9	7,047.0	46.2	45.5	112.02	-2,380.3	359.8	242.7	158.4	84.26	2.880		
9,500.0	6,956.0	9,570.9	7,047.0	47.8	47.2	112.02	-2,480.3	359.8	242.7	155.3	87.40	2.777		
9,600.0	6,956.0	9,670.9	7,047.0	49.5	48.9	112.02	-2,580.3	359.8	242.7	152.1	90.54	2.680		
9,700.0	6,956.0	9,770.9	7,047.0	51.2	50.6	112.02	-2,680.3	359.8	242.7	149.0	93.68	2.590		
9,800.0	6,956.0	9,870.9	7,047.0	52.8	52.3	112.02	-2,780.3	359.8	242.7	145.8	96.84	2.506		
9,900.0	6,956.0	9,970.9	7,047.0	54.5	54.0	112.02	-2,880.3	359.8	242.7	142.7	100.00	2.427		
10,000.0	6,956.0	10,070.9	7,047.0	56.2	55.7	112.02	-2,980.3	359.8	242.7	139.5	103.16	2.352		
10,100.0	6,956.0	10,170.9	7,047.0	57.9	57.4	112.02	-3,080.3	359.8	242.7	136.3	106.34	2.282		
10,200.0	6,956.0	10,270.9	7,047.0	59.6	59.1	112.02	-3,180.3	359.8	242.7	133.2	109.51	2.216		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2J-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,300.0	6,956.0	10,370.9	7,047.0	61.3	60.8	112.02	-3,280.3	359.8	242.7	130.0	112.70	2.153		
10,400.0	6,956.0	10,470.9	7,047.0	62.9	62.5	112.02	-3,380.3	359.8	242.7	126.8	115.88	2.094		
10,500.0	6,956.0	10,570.9	7,047.0	64.6	64.2	112.02	-3,480.3	359.8	242.7	123.6	119.07	2.038		
10,600.0	6,956.0	10,670.9	7,047.0	66.4	65.9	112.02	-3,580.3	359.8	242.7	120.4	122.26	1.985		
10,700.0	6,956.0	10,770.9	7,047.0	68.1	67.6	112.02	-3,680.3	359.8	242.7	117.2	125.46	1.934		
10,800.0	6,956.0	10,870.9	7,047.0	69.8	69.3	112.02	-3,780.3	359.8	242.7	114.0	128.66	1.886		
10,900.0	6,956.0	10,970.9	7,047.0	71.5	71.1	112.02	-3,880.3	359.8	242.7	110.8	131.86	1.840		
11,000.0	6,956.0	11,070.9	7,047.0	73.2	72.8	112.02	-3,980.3	359.8	242.7	107.6	135.07	1.797		
11,100.0	6,956.0	11,170.9	7,047.0	74.9	74.5	112.02	-4,080.3	359.8	242.7	104.4	138.27	1.755		
11,200.0	6,956.0	11,270.9	7,047.0	76.6	76.2	112.02	-4,180.3	359.8	242.7	101.2	141.48	1.715		
11,300.0	6,956.0	11,370.9	7,047.0	78.3	78.0	112.02	-4,280.3	359.8	242.7	98.0	144.69	1.677		
11,400.0	6,956.0	11,470.9	7,047.0	80.0	79.7	112.02	-4,380.3	359.8	242.7	94.8	147.90	1.641		
11,500.0	6,956.0	11,570.9	7,047.0	81.8	81.4	112.02	-4,480.3	359.8	242.7	91.5	151.12	1.606		
11,555.8	6,956.0	11,626.7	7,047.0	82.7	82.4	112.03	-4,536.2	359.8	242.7	89.7	152.92	1.587		
11,576.8	6,956.0	11,646.6	7,047.0	83.1	82.7	112.03	-4,556.0	359.8	242.7	89.1	153.57	1.580 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2L-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	92.48	-0.3	7.6	7.6					
100.0	100.0	100.0	100.0	0.1	0.1	92.48	-0.3	7.6	7.6	7.3	0.24	30.940		
200.0	200.0	200.0	200.0	0.3	0.3	92.48	-0.3	7.6	7.6	7.0	0.59	12.740		
233.5	233.5	233.5	233.5	0.4	0.4	92.48	-0.3	7.6	7.6	6.8	0.71	10.645 CC		
300.0	300.0	299.9	299.9	0.5	0.5	91.90	-0.3	7.8	7.8	6.8	0.94	8.238 ES		
400.0	400.0	399.8	399.8	0.6	0.6	25.23	0.3	9.4	8.6	7.3	1.29	6.674		
500.0	500.0	499.6	499.6	0.8	0.8	25.09	1.4	12.7	9.5	7.9	1.64	5.815		
600.0	599.9	599.5	599.3	1.0	1.0	25.93	3.1	17.7	10.5	8.5	1.99	5.285		
700.0	699.7	699.3	698.8	1.2	1.2	27.48	5.3	24.2	11.6	9.3	2.35	4.936		
800.0	799.4	799.1	798.2	1.4	1.4	29.53	8.1	32.5	12.8	10.0	2.72	4.695		
900.0	898.9	898.9	897.5	1.6	1.7	31.91	11.4	42.3	14.0	10.9	3.10	4.520		
1,000.0	998.3	998.6	996.5	1.9	1.9	34.50	15.3	53.8	15.4	11.9	3.51	4.388		
1,100.0	1,097.4	1,098.4	1,095.3	2.2	2.2	36.57	19.7	67.0	17.1	13.2	3.94	4.354		
1,200.0	1,196.6	1,198.0	1,193.7	2.4	2.5	35.89	24.6	81.7	20.3	15.9	4.35	4.663		
1,300.0	1,295.8	1,297.7	1,291.9	2.7	2.9	33.55	30.1	98.0	24.9	20.1	4.74	5.251		
1,400.0	1,394.9	1,397.6	1,390.2	3.0	3.2	31.63	35.7	114.7	29.8	24.7	5.12	5.828		
1,500.0	1,494.1	1,497.4	1,488.5	3.2	3.5	30.25	41.3	131.3	34.8	29.3	5.50	6.328		
1,600.0	1,593.3	1,597.3	1,586.8	3.5	3.9	29.22	46.9	148.0	39.8	33.9	5.89	6.763		
1,700.0	1,692.4	1,697.2	1,685.1	3.8	4.2	28.41	52.5	164.6	44.8	38.6	6.27	7.147		
1,800.0	1,791.6	1,797.1	1,783.5	4.1	4.6	27.77	58.2	181.3	49.9	43.2	6.66	7.486		
1,900.0	1,890.8	1,896.9	1,881.8	4.4	4.9	27.25	63.8	198.0	54.9	47.8	7.05	7.788		
2,000.0	1,989.9	1,996.8	1,980.1	4.6	5.3	26.81	69.4	214.6	59.9	52.5	7.43	8.059		
2,100.0	2,089.1	2,096.7	2,078.4	4.9	5.6	26.45	75.0	231.3	64.9	57.1	7.82	8.303		
2,200.0	2,188.3	2,196.6	2,176.7	5.2	6.0	26.13	80.6	247.9	70.0	61.7	8.21	8.524		
2,300.0	2,287.4	2,296.4	2,275.0	5.5	6.3	25.86	86.2	264.6	75.0	66.4	8.59	8.725		
2,400.0	2,386.6	2,396.3	2,373.3	5.8	6.7	25.62	91.8	281.3	80.0	71.0	8.98	8.909		
2,500.0	2,485.8	2,496.2	2,471.7	6.1	7.0	25.41	97.4	297.9	85.1	75.7	9.37	9.078		
2,600.0	2,584.9	2,596.0	2,570.0	6.3	7.4	25.22	103.0	314.6	90.1	80.3	9.76	9.233		
2,700.0	2,684.1	2,695.9	2,668.3	6.6	7.7	25.06	108.6	331.3	95.1	85.0	10.15	9.377		
2,800.0	2,783.3	2,795.8	2,766.6	6.9	8.1	24.91	114.2	347.9	100.2	89.6	10.53	9.509		
2,900.0	2,882.4	2,895.7	2,864.9	7.2	8.4	24.77	119.8	364.6	105.2	94.3	10.92	9.633		
3,000.0	2,981.6	2,995.5	2,963.2	7.5	8.8	24.65	125.4	381.2	110.2	98.9	11.31	9.748		
3,100.0	3,080.8	3,095.4	3,061.5	7.8	9.1	24.53	131.1	397.9	115.3	103.6	11.70	9.855		
3,200.0	3,180.0	3,195.3	3,159.8	8.0	9.5	24.43	136.7	414.6	120.3	108.2	12.09	9.955		
3,300.0	3,279.1	3,295.2	3,258.2	8.3	9.9	24.33	142.3	431.2	125.4	112.9	12.47	10.049		
3,400.0	3,378.3	3,395.0	3,356.5	8.6	10.2	24.25	147.9	447.9	130.4	117.5	12.86	10.138		
3,500.0	3,477.5	3,494.9	3,454.8	8.9	10.6	24.17	153.5	464.5	135.4	122.2	13.25	10.221		
3,600.0	3,576.6	3,594.8	3,553.1	9.2	10.9	24.09	159.1	481.2	140.5	126.8	13.64	10.300		
3,700.0	3,675.8	3,694.6	3,651.4	9.5	11.3	24.02	164.7	497.9	145.5	131.5	14.03	10.374		
3,800.0	3,775.0	3,794.5	3,749.7	9.7	11.6	23.96	170.3	514.5	150.6	136.1	14.42	10.444		
3,900.0	3,874.1	3,894.4	3,848.0	10.0	12.0	23.89	175.9	531.2	155.6	140.8	14.80	10.510		
4,000.0	3,973.3	3,994.3	3,946.4	10.3	12.3	23.84	181.5	547.8	160.6	145.4	15.19	10.573		
4,100.0	4,072.5	4,094.1	4,044.7	10.6	12.7	23.78	187.1	564.5	165.7	150.1	15.58	10.633		
4,200.0	4,171.6	4,194.0	4,143.0	10.9	13.1	23.73	192.7	581.2	170.7	154.8	15.97	10.690		
4,300.0	4,270.8	4,293.9	4,241.3	11.2	13.4	23.69	198.3	597.8	175.8	159.4	16.36	10.744		
4,400.0	4,370.0	4,393.8	4,339.6	11.5	13.8	23.64	204.0	614.5	180.8	164.1	16.75	10.796		
4,500.0	4,469.1	4,493.6	4,437.9	11.7	14.1	23.60	209.6	631.2	185.9	168.7	17.14	10.845		
4,600.0	4,568.3	4,593.5	4,536.2	12.0	14.5	23.56	215.2	647.8	190.9	173.4	17.53	10.893		
4,700.0	4,667.5	4,693.4	4,634.5	12.3	14.8	23.52	220.8	664.5	195.9	178.0	17.91	10.938		
4,800.0	4,766.6	4,793.2	4,732.9	12.6	15.2	23.48	226.4	681.1	201.0	182.7	18.30	10.981		
4,900.0	4,865.8	4,893.1	4,831.2	12.9	15.5	23.45	232.0	697.8	206.0	187.3	18.69	11.022		
5,000.0	4,965.0	4,993.0	4,929.5	13.2	15.9	23.41	237.6	714.5	211.1	192.0	19.08	11.062		

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2L-32H-C264 - 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
5,100.0	5,064.1	5,094.2	5,029.2	13.5	16.3	23.39	243.2	731.2	216.0	196.5	19.47	11.092	
5,200.0	5,163.3	5,197.9	5,131.5	13.7	16.6	23.49	248.6	747.0	219.5	199.6	19.88	11.041	
5,300.0	5,262.5	5,301.7	5,234.3	14.0	16.9	23.73	253.3	761.0	221.3	201.0	20.32	10.895	
5,400.0	5,361.7	5,405.6	5,337.3	14.3	17.2	24.02	257.4	773.3	222.2	201.5	20.75	10.713	
5,500.0	5,461.2	5,509.4	5,440.5	14.5	17.4	24.26	260.9	783.8	223.0	201.9	21.16	10.542	
5,600.0	5,560.8	5,613.2	5,543.9	14.7	17.6	24.47	263.9	792.5	223.7	202.1	21.55	10.380	
5,700.0	5,660.6	5,717.1	5,647.5	14.9	17.8	24.63	266.2	799.5	224.2	202.3	21.92	10.227	
5,800.0	5,760.5	5,820.9	5,751.2	15.1	18.0	24.75	268.0	804.6	224.6	202.3	22.27	10.083	
5,900.0	5,860.4	5,924.8	5,855.0	15.3	18.1	24.83	269.1	808.0	224.8	202.2	22.61	9.945	
6,000.0	5,960.4	6,028.6	5,958.9	15.4	18.3	24.86	269.6	809.6	224.9	202.0	22.92	9.814	
6,100.0	6,060.4	6,130.2	6,060.4	15.5	18.4	90.08	269.7	809.8	225.0	201.7	23.23	9.683	
6,200.0	6,160.4	6,230.2	6,160.4	15.6	18.5	90.08	269.7	809.8	225.0	201.4	23.55	9.551	
6,300.0	6,260.4	6,330.2	6,260.4	15.7	18.6	90.08	269.7	809.8	225.0	201.1	23.87	9.423	
6,400.0	6,360.4	6,430.2	6,360.4	15.9	18.7	90.08	269.7	809.8	225.0	200.8	24.19	9.298	
6,442.2	6,402.6	6,472.4	6,402.6	15.9	18.7	-90.22	269.7	809.8	225.0	200.7	24.26	9.274	
6,500.0	6,460.2	6,529.9	6,460.2	15.9	18.8	-91.23	269.7	809.8	225.0	200.8	24.25	9.280	
6,600.0	6,557.6	6,627.4	6,557.6	15.9	18.9	-96.50	269.7	809.8	226.6	202.9	23.69	9.564	
6,700.0	6,649.7	6,725.2	6,655.4	15.9	19.0	-104.60	267.4	809.8	233.7	210.6	23.09	10.124	
6,800.0	6,733.7	6,833.4	6,761.6	15.8	19.0	-112.70	247.6	809.8	246.7	223.9	22.84	10.802	
6,900.0	6,807.1	6,951.4	6,870.9	15.8	18.9	-119.81	203.7	809.8	263.4	240.7	22.73	11.589	
7,000.0	6,867.5	7,081.0	6,977.8	15.9	18.9	-125.69	131.0	809.8	281.4	258.8	22.53	12.487	
7,100.0	6,913.3	7,222.7	7,072.8	16.2	18.9	-130.19	26.2	809.8	297.7	275.4	22.26	13.373	
7,200.0	6,942.9	7,375.8	7,143.1	16.6	19.2	-133.16	-109.2	809.7	309.6	287.6	21.99	14.081	
7,300.0	6,955.6	7,536.4	7,175.8	17.1	19.9	-134.44	-265.9	809.7	315.1	293.0	22.15	14.226	
7,400.0	6,956.0	7,650.9	7,177.0	17.9	20.6	-134.49	-380.3	809.7	315.3	292.0	23.36	13.502	
7,500.0	6,956.0	7,750.9	7,177.0	18.8	21.4	-134.49	-480.3	809.7	315.3	290.4	24.90	12.663	
7,600.0	6,956.0	7,850.9	7,177.0	19.8	22.3	-134.49	-580.3	809.7	315.3	288.7	26.60	11.856	
7,700.0	6,956.0	7,950.9	7,177.0	20.9	23.2	-134.49	-680.3	809.7	315.3	286.9	28.42	11.097	
7,800.0	6,956.0	8,050.9	7,177.0	22.0	24.3	-134.49	-780.3	809.7	315.3	285.0	30.33	10.396	
7,900.0	6,956.0	8,150.9	7,177.0	23.3	25.4	-134.49	-880.3	809.7	315.3	283.0	32.34	9.752	
8,000.0	6,956.0	8,250.9	7,177.0	24.6	26.6	-134.49	-980.3	809.7	315.3	280.9	34.40	9.166	
8,100.0	6,956.0	8,350.9	7,177.0	26.0	27.9	-134.49	-1,080.3	809.7	315.3	278.8	36.53	8.633	
8,200.0	6,956.0	8,450.9	7,177.0	27.4	29.2	-134.49	-1,180.3	809.7	315.3	276.6	38.70	8.148	
8,300.0	6,956.0	8,550.9	7,177.0	28.8	30.6	-134.49	-1,280.3	809.7	315.3	274.4	40.91	7.708	
8,400.0	6,956.0	8,650.9	7,177.0	30.3	32.0	-134.49	-1,380.3	809.7	315.3	272.2	43.16	7.307	
8,500.0	6,956.0	8,750.9	7,177.0	31.8	33.4	-134.49	-1,480.3	809.7	315.3	269.9	45.43	6.941	
8,600.0	6,956.0	8,850.9	7,177.0	33.4	34.9	-134.49	-1,580.3	809.7	315.3	267.6	47.73	6.607	
8,700.0	6,956.0	8,950.9	7,177.0	34.9	36.4	-134.49	-1,680.3	809.7	315.3	265.3	50.05	6.301	
8,800.0	6,956.0	9,050.9	7,177.0	36.5	37.9	-134.49	-1,780.3	809.7	315.3	263.0	52.39	6.019	
8,900.0	6,956.0	9,150.9	7,177.0	38.1	39.4	-134.49	-1,880.3	809.7	315.3	260.6	54.74	5.761	
9,000.0	6,956.0	9,250.9	7,177.0	39.7	41.0	-134.49	-1,980.3	809.7	315.3	258.2	57.11	5.522	
9,100.0	6,956.0	9,350.9	7,177.0	41.3	42.5	-134.49	-2,080.3	809.7	315.3	255.9	59.49	5.301	
9,200.0	6,956.0	9,450.9	7,177.0	42.9	44.1	-134.49	-2,180.3	809.7	315.3	253.5	61.88	5.096	
9,300.0	6,956.0	9,550.9	7,177.0	44.5	45.7	-134.49	-2,280.3	809.7	315.3	251.1	64.28	4.906	
9,400.0	6,956.0	9,650.9	7,177.0	46.2	47.3	-134.49	-2,380.3	809.7	315.3	248.7	66.69	4.729	
9,500.0	6,956.0	9,750.9	7,177.0	47.8	48.9	-134.49	-2,480.3	809.7	315.3	246.2	69.11	4.563	
9,600.0	6,956.0	9,850.9	7,177.0	49.5	50.6	-134.49	-2,580.3	809.7	315.3	243.8	71.53	4.409	
9,700.0	6,956.0	9,950.9	7,177.0	51.2	52.2	-134.49	-2,680.3	809.7	315.3	241.4	73.96	4.264	
9,800.0	6,956.0	10,050.9	7,177.0	52.8	53.8	-134.49	-2,780.3	809.7	315.3	239.0	76.40	4.128	
9,900.0	6,956.0	10,150.9	7,177.0	54.5	55.5	-134.49	-2,880.3	809.7	315.3	236.5	78.84	4.000	
10,000.0	6,956.0	10,250.9	7,177.0	56.2	57.1	-134.49	-2,980.3	809.7	315.3	234.1	81.28	3.880	
10,100.0	6,956.0	10,350.9	7,177.0	57.9	58.8	-134.49	-3,080.3	809.7	315.3	231.6	83.73	3.766	

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 Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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-R64W (Newman) - Newman 2L-32H-C264 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,200.0	6,956.0	10,450.9	7,177.0	59.6	60.5	-134.49	-3,180.3	809.7	315.3	229.2	86.19	3.659		
10,300.0	6,956.0	10,550.9	7,177.0	61.3	62.1	-134.49	-3,280.3	809.7	315.3	226.7	88.64	3.557		
10,400.0	6,956.0	10,650.9	7,177.0	62.9	63.8	-134.49	-3,380.3	809.7	315.3	224.2	91.10	3.461		
10,500.0	6,956.0	10,750.9	7,177.0	64.6	65.5	-134.49	-3,480.3	809.7	315.3	221.8	93.57	3.370		
10,600.0	6,956.0	10,850.9	7,177.0	66.4	67.2	-134.49	-3,580.3	809.7	315.3	219.3	96.03	3.284		
10,700.0	6,956.0	10,950.9	7,177.0	68.1	68.8	-134.49	-3,680.3	809.7	315.3	216.8	98.50	3.201		
10,800.0	6,956.0	11,050.9	7,177.0	69.8	70.5	-134.49	-3,780.3	809.7	315.3	214.4	100.97	3.123		
10,900.0	6,956.0	11,150.9	7,177.0	71.5	72.2	-134.49	-3,880.3	809.7	315.3	211.9	103.45	3.048		
11,000.0	6,956.0	11,250.9	7,177.0	73.2	73.9	-134.49	-3,980.3	809.7	315.3	209.4	105.92	2.977		
11,100.0	6,956.0	11,350.9	7,177.0	74.9	75.6	-134.49	-4,080.3	809.7	315.3	206.9	108.40	2.909		
11,200.0	6,956.0	11,450.9	7,177.0	76.6	77.3	-134.49	-4,180.3	809.7	315.3	204.5	110.88	2.844		
11,300.0	6,956.0	11,550.9	7,177.0	78.3	79.0	-134.49	-4,280.3	809.7	315.3	202.0	113.36	2.782		
11,400.0	6,956.0	11,650.9	7,177.0	80.0	80.7	-134.49	-4,380.3	809.7	315.3	199.5	115.84	2.722		
11,500.0	6,956.0	11,750.9	7,177.0	81.8	82.4	-134.49	-4,480.3	809.7	315.3	197.0	118.33	2.665		
11,576.8	6,956.0	11,827.6	7,177.0	83.1	83.7	-134.49	-4,557.1	809.7	315.3	195.1	120.23	2.623 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2K-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4985.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4985.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2K-32H-C264	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 @ 4985.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Newman 2K-32H-C264

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.60°

