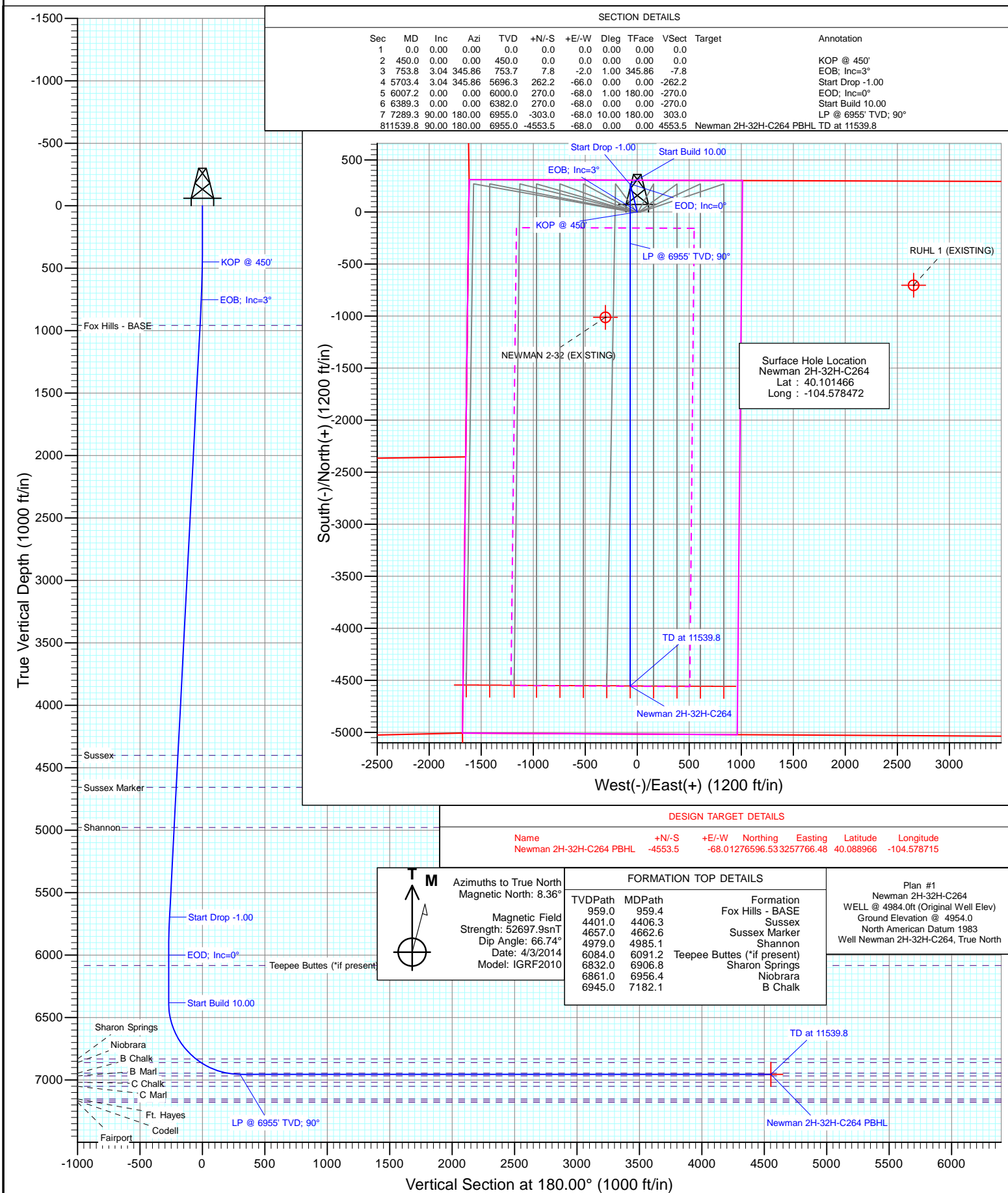




Project: DJ Wattenberg
Site: S32-T2N-R64W (Newman)
Well: Newman 2H-32H-C264
Wellbore: HZ
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2H-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 2H-32H-C264					
Well Position	+N/-S	0.0 ft	Northing:	1,281,150.47 ft	Latitude:	40.101466
	+E/-W	0.0 ft	Easting:	3,257,787.14 ft	Longitude:	-104.578472
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,954.0 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	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.00	0.00	
753.8	3.04	345.86	753.7	7.8	-2.0	1.00	1.00	0.00	345.86	
5,703.4	3.04	345.86	5,696.3	262.2	-66.0	0.00	0.00	0.00	0.00	
6,007.2	0.00	0.00	6,000.0	270.0	-68.0	1.00	-1.00	0.00	180.00	
6,389.3	0.00	0.00	6,382.0	270.0	-68.0	0.00	0.00	0.00	0.00	
7,289.3	90.00	180.00	6,955.0	-303.0	-68.0	10.00	10.00	0.00	180.00	
11,539.8	90.00	180.00	6,955.0	-4,553.5	-68.0	0.00	0.00	0.00	0.00	Newman 2H-32H-C264

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2H-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	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	KOP @ 450'
500.0	0.50	345.86	500.0	0.2	-0.1	-0.2	1.00	1.00	
600.0	1.50	345.86	600.0	1.9	-0.5	-1.9	1.00	1.00	
700.0	2.50	345.86	699.9	5.3	-1.3	-5.3	1.00	1.00	
753.8	3.04	345.86	753.7	7.8	-2.0	-7.8	1.00	1.00	EOB; Inc=3°
800.0	3.04	345.86	799.8	10.2	-2.6	-10.2	0.00	0.00	
900.0	3.04	345.86	899.7	15.3	-3.9	-15.3	0.00	0.00	
959.4	3.04	345.86	959.0	18.4	-4.6	-18.4	0.00	0.00	Fox Hills - BASE
1,000.0	3.04	345.86	999.5	20.5	-5.2	-20.5	0.00	0.00	
1,100.0	3.04	345.86	1,099.4	25.6	-6.4	-25.6	0.00	0.00	
1,200.0	3.04	345.86	1,199.2	30.7	-7.7	-30.7	0.00	0.00	
1,300.0	3.04	345.86	1,299.1	35.9	-9.0	-35.9	0.00	0.00	
1,400.0	3.04	345.86	1,398.9	41.0	-10.3	-41.0	0.00	0.00	
1,500.0	3.04	345.86	1,498.8	46.2	-11.6	-46.2	0.00	0.00	
1,600.0	3.04	345.86	1,598.7	51.3	-12.9	-51.3	0.00	0.00	
1,700.0	3.04	345.86	1,698.5	56.4	-14.2	-56.4	0.00	0.00	
1,800.0	3.04	345.86	1,798.4	61.6	-15.5	-61.6	0.00	0.00	
1,900.0	3.04	345.86	1,898.2	66.7	-16.8	-66.7	0.00	0.00	
2,000.0	3.04	345.86	1,998.1	71.9	-18.1	-71.9	0.00	0.00	
2,100.0	3.04	345.86	2,098.0	77.0	-19.4	-77.0	0.00	0.00	
2,200.0	3.04	345.86	2,197.8	82.1	-20.7	-82.1	0.00	0.00	
2,300.0	3.04	345.86	2,297.7	87.3	-22.0	-87.3	0.00	0.00	
2,400.0	3.04	345.86	2,397.5	92.4	-23.3	-92.4	0.00	0.00	
2,500.0	3.04	345.86	2,497.4	97.6	-24.6	-97.6	0.00	0.00	
2,600.0	3.04	345.86	2,597.3	102.7	-25.9	-102.7	0.00	0.00	
2,700.0	3.04	345.86	2,697.1	107.8	-27.2	-107.8	0.00	0.00	
2,800.0	3.04	345.86	2,797.0	113.0	-28.5	-113.0	0.00	0.00	
2,900.0	3.04	345.86	2,896.8	118.1	-29.7	-118.1	0.00	0.00	
3,000.0	3.04	345.86	2,996.7	123.3	-31.0	-123.3	0.00	0.00	
3,100.0	3.04	345.86	3,096.6	128.4	-32.3	-128.4	0.00	0.00	
3,200.0	3.04	345.86	3,196.4	133.5	-33.6	-133.5	0.00	0.00	
3,300.0	3.04	345.86	3,296.3	138.7	-34.9	-138.7	0.00	0.00	
3,400.0	3.04	345.86	3,396.1	143.8	-36.2	-143.8	0.00	0.00	
3,500.0	3.04	345.86	3,496.0	148.9	-37.5	-148.9	0.00	0.00	
3,600.0	3.04	345.86	3,595.9	154.1	-38.8	-154.1	0.00	0.00	
3,700.0	3.04	345.86	3,695.7	159.2	-40.1	-159.2	0.00	0.00	
3,800.0	3.04	345.86	3,795.6	164.4	-41.4	-164.4	0.00	0.00	
3,900.0	3.04	345.86	3,895.4	169.5	-42.7	-169.5	0.00	0.00	
4,000.0	3.04	345.86	3,995.3	174.6	-44.0	-174.6	0.00	0.00	
4,100.0	3.04	345.86	4,095.2	179.8	-45.3	-179.8	0.00	0.00	
4,200.0	3.04	345.86	4,195.0	184.9	-46.6	-184.9	0.00	0.00	
4,300.0	3.04	345.86	4,294.9	190.1	-47.9	-190.1	0.00	0.00	
4,400.0	3.04	345.86	4,394.7	195.2	-49.2	-195.2	0.00	0.00	
4,406.3	3.04	345.86	4,401.0	195.5	-49.2	-195.5	0.00	0.00	Sussex
4,500.0	3.04	345.86	4,494.6	200.3	-50.5	-200.3	0.00	0.00	
4,600.0	3.04	345.86	4,594.5	205.5	-51.8	-205.5	0.00	0.00	
4,662.6	3.04	345.86	4,657.0	208.7	-52.6	-208.7	0.00	0.00	Sussex Marker

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2H-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
4,700.0	3.04	345.86	4,694.3	210.6	-53.0	-210.6	0.00	0.00	
4,800.0	3.04	345.86	4,794.2	215.8	-54.3	-215.8	0.00	0.00	
4,900.0	3.04	345.86	4,894.0	220.9	-55.6	-220.9	0.00	0.00	
4,985.1	3.04	345.86	4,979.0	225.3	-56.7	-225.3	0.00	0.00	Shannon
5,000.0	3.04	345.86	4,993.9	226.0	-56.9	-226.0	0.00	0.00	
5,100.0	3.04	345.86	5,093.7	231.2	-58.2	-231.2	0.00	0.00	
5,200.0	3.04	345.86	5,193.6	236.3	-59.5	-236.3	0.00	0.00	
5,300.0	3.04	345.86	5,293.5	241.5	-60.8	-241.5	0.00	0.00	
5,400.0	3.04	345.86	5,393.3	246.6	-62.1	-246.6	0.00	0.00	
5,500.0	3.04	345.86	5,493.2	251.7	-63.4	-251.7	0.00	0.00	
5,600.0	3.04	345.86	5,593.0	256.9	-64.7	-256.9	0.00	0.00	
5,700.0	3.04	345.86	5,692.9	262.0	-66.0	-262.0	0.00	0.00	
5,703.4	3.04	345.86	5,696.3	262.2	-66.0	-262.2	0.00	0.00	Start Drop -1.00
5,800.0	2.07	345.86	5,792.8	266.4	-67.1	-266.4	1.00	-1.00	
5,900.0	1.07	345.86	5,892.8	269.0	-67.8	-269.0	1.00	-1.00	
6,000.0	0.07	345.86	5,992.8	270.0	-68.0	-270.0	1.00	-1.00	
6,007.2	0.00	0.00	6,000.0	270.0	-68.0	-270.0	1.00	-1.00	EOD; Inc=0°
6,091.2	0.00	0.00	6,084.0	270.0	-68.0	-270.0	0.00	0.00	Teepee Buttes (*if present)
6,100.0	0.00	0.00	6,092.8	270.0	-68.0	-270.0	0.00	0.00	
6,200.0	0.00	0.00	6,192.8	270.0	-68.0	-270.0	0.00	0.00	
6,300.0	0.00	0.00	6,292.8	270.0	-68.0	-270.0	0.00	0.00	
6,389.3	0.00	0.00	6,382.0	270.0	-68.0	-270.0	0.00	0.00	Start Build 10.00
6,400.0	1.07	180.00	6,392.8	269.9	-68.0	-269.9	10.00	10.00	
6,500.0	11.07	180.00	6,492.1	259.3	-68.0	-259.3	10.00	10.00	
6,600.0	21.07	180.00	6,588.0	231.7	-68.0	-231.7	10.00	10.00	
6,700.0	31.07	180.00	6,677.8	187.8	-68.0	-187.8	10.00	10.00	
6,800.0	41.07	180.00	6,758.5	129.0	-68.0	-129.0	10.00	10.00	
6,900.0	51.07	180.00	6,827.8	57.1	-68.0	-57.1	10.00	10.00	
6,906.8	51.75	180.00	6,832.0	51.8	-68.0	-51.8	10.00	10.00	Sharon Springs
6,956.4	56.71	180.00	6,861.0	11.5	-68.0	-11.5	10.00	10.00	Niobrara
7,000.0	61.07	180.00	6,883.5	-25.8	-68.0	25.8	10.00	10.00	
7,100.0	71.07	180.00	6,924.0	-117.1	-68.0	117.1	10.00	10.00	
7,182.1	79.28	180.00	6,945.0	-196.4	-68.0	196.4	10.00	10.00	B Chalk
7,200.0	81.07	180.00	6,948.1	-214.0	-68.0	214.0	10.00	10.00	
7,289.3	90.00	180.00	6,955.0	-303.0	-68.0	303.0	10.00	10.00	LP @ 6955' TVD; 90°
7,300.0	90.00	180.00	6,955.0	-313.7	-68.0	313.7	0.00	0.00	
7,400.0	90.00	180.00	6,955.0	-413.7	-68.0	413.7	0.00	0.00	
7,500.0	90.00	180.00	6,955.0	-513.7	-68.0	513.7	0.00	0.00	
7,600.0	90.00	180.00	6,955.0	-613.7	-68.0	613.7	0.00	0.00	
7,700.0	90.00	180.00	6,955.0	-713.7	-68.0	713.7	0.00	0.00	
7,800.0	90.00	180.00	6,955.0	-813.7	-68.0	813.7	0.00	0.00	
7,900.0	90.00	180.00	6,955.0	-913.7	-68.0	913.7	0.00	0.00	
8,000.0	90.00	180.00	6,955.0	-1,013.7	-68.0	1,013.7	0.00	0.00	
8,100.0	90.00	180.00	6,955.0	-1,113.7	-68.0	1,113.7	0.00	0.00	
8,200.0	90.00	180.00	6,955.0	-1,213.7	-68.0	1,213.7	0.00	0.00	
8,300.0	90.00	180.00	6,955.0	-1,313.7	-68.0	1,313.7	0.00	0.00	
8,400.0	90.00	180.00	6,955.0	-1,413.7	-68.0	1,413.7	0.00	0.00	
8,500.0	90.00	180.00	6,955.0	-1,513.7	-68.0	1,513.7	0.00	0.00	
8,600.0	90.00	180.00	6,955.0	-1,613.7	-68.0	1,613.7	0.00	0.00	
8,700.0	90.00	180.00	6,955.0	-1,713.7	-68.0	1,713.7	0.00	0.00	
8,800.0	90.00	180.00	6,955.0	-1,813.7	-68.0	1,813.7	0.00	0.00	
8,900.0	90.00	180.00	6,955.0	-1,913.7	-68.0	1,913.7	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2H-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
9,000.0	90.00	180.00	6,955.0	-2,013.7	-68.0	2,013.7	0.00	0.00	
9,100.0	90.00	180.00	6,955.0	-2,113.7	-68.0	2,113.7	0.00	0.00	
9,200.0	90.00	180.00	6,955.0	-2,213.7	-68.0	2,213.7	0.00	0.00	
9,300.0	90.00	180.00	6,955.0	-2,313.7	-68.0	2,313.7	0.00	0.00	
9,400.0	90.00	180.00	6,955.0	-2,413.7	-68.0	2,413.7	0.00	0.00	
9,500.0	90.00	180.00	6,955.0	-2,513.7	-68.0	2,513.7	0.00	0.00	
9,600.0	90.00	180.00	6,955.0	-2,613.7	-68.0	2,613.7	0.00	0.00	
9,700.0	90.00	180.00	6,955.0	-2,713.7	-68.0	2,713.7	0.00	0.00	
9,800.0	90.00	180.00	6,955.0	-2,813.7	-68.0	2,813.7	0.00	0.00	
9,900.0	90.00	180.00	6,955.0	-2,913.7	-68.0	2,913.7	0.00	0.00	
10,000.0	90.00	180.00	6,955.0	-3,013.7	-68.0	3,013.7	0.00	0.00	
10,100.0	90.00	180.00	6,955.0	-3,113.7	-68.0	3,113.7	0.00	0.00	
10,200.0	90.00	180.00	6,955.0	-3,213.7	-68.0	3,213.7	0.00	0.00	
10,300.0	90.00	180.00	6,955.0	-3,313.7	-68.0	3,313.7	0.00	0.00	
10,400.0	90.00	180.00	6,955.0	-3,413.7	-68.0	3,413.7	0.00	0.00	
10,500.0	90.00	180.00	6,955.0	-3,513.7	-68.0	3,513.7	0.00	0.00	
10,600.0	90.00	180.00	6,955.0	-3,613.7	-68.0	3,613.7	0.00	0.00	
10,700.0	90.00	180.00	6,955.0	-3,713.7	-68.0	3,713.7	0.00	0.00	
10,800.0	90.00	180.00	6,955.0	-3,813.7	-68.0	3,813.7	0.00	0.00	
10,900.0	90.00	180.00	6,955.0	-3,913.7	-68.0	3,913.7	0.00	0.00	
11,000.0	90.00	180.00	6,955.0	-4,013.7	-68.0	4,013.7	0.00	0.00	
11,100.0	90.00	180.00	6,955.0	-4,113.7	-68.0	4,113.7	0.00	0.00	
11,200.0	90.00	180.00	6,955.0	-4,213.7	-68.0	4,213.7	0.00	0.00	
11,300.0	90.00	180.00	6,955.0	-4,313.7	-68.0	4,313.7	0.00	0.00	
11,400.0	90.00	180.00	6,955.0	-4,413.7	-68.0	4,413.7	0.00	0.00	
11,500.0	90.00	180.00	6,955.0	-4,513.7	-68.0	4,513.7	0.00	0.00	
11,539.8	90.00	180.00	6,955.0	-4,553.5	-68.0	4,553.5	0.00	0.00	TD at 11539.8

Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Newman 2H-32H-C264 - plan hits target center - Point	0.00	0.00	6,955.0	-4,553.5	-68.0	1,276,596.53	3,257,766.48	40.088966	-104.578715

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site:	S32-T2N-R64W (Newman)	North Reference:	True
Well:	Newman 2H-32H-C264	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
959.4	959.0	Fox Hills - BASE				
4,406.3	4,401.0	Sussex				
4,662.6	4,657.0	Sussex Marker				
4,985.1	4,979.0	Shannon				
6,091.2	6,084.0	Teepee Buttes (*if present)				
6,906.8	6,832.0	Sharon Springs				
6,956.4	6,861.0	Niobrara				
7,182.1	6,945.0	B Chalk				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
450.0	450.0	0.0	0.0	KOP @ 450'	
753.8	753.7	7.8	-2.0	EOB; Inc=3°	
5,703.4	5,696.3	262.2	-66.0	Start Drop -1.00	
6,007.2	6,000.0	270.0	-68.0	EOD; Inc=0°	
6,389.3	6,382.0	270.0	-68.0	Start Build 10.00	
7,289.3	6,955.0	-303.0	-68.0	LP @ 6955' TVD; 90°	
11,539.8	6,955.0	-4,553.5	-68.0	TD at 11539.8	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S32-T2N-R64W (Newman)

Newman 2H-32H-C264

HZ

Plan #1

Anticollision Report

04 April, 2014

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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	11,539.8	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	7,998.3	6,904.0	238.0	203.2	6.827	CC
NEWMAN 2-32 (EXISTING) - EXISTING - ENCANA WE	8,000.0	6,904.0	238.1	203.2	6.822	ES, SF
Newman 2A-32H-C264 - HZ - Plan #1	200.0	198.0	52.6	52.0	89.157	CC, ES
Newman 2A-32H-C264 - HZ - Plan #1	600.0	588.6	78.8	76.8	39.922	SF
Newman 2B-32H-C264 - HZ - Plan #1	234.6	233.6	45.0	44.3	63.209	CC, ES
Newman 2B-32H-C264 - HZ - Plan #1	600.0	592.1	65.1	63.1	32.880	SF
Newman 2C-32H-C264 - HZ - Plan #1	300.0	299.0	37.5	36.5	39.848	CC, ES
Newman 2C-32H-C264 - HZ - Plan #1	600.0	594.3	52.0	50.0	26.218	SF
Newman 2D-32H-C264 - HZ - Plan #1	334.7	333.7	29.9	28.9	28.193	CC, ES
Newman 2D-32H-C264 - HZ - Plan #1	11,540.4	11,707.0	904.4	740.5	5.516	SF
Newman 2E-32H-C264 - HZ - Plan #1	400.0	399.0	22.4	21.1	17.353	CC, ES
Newman 2E-32H-C264 - HZ - Plan #1	11,540.4	11,586.8	674.9	510.1	4.097	SF
Newman 2F-32H-C264 - HZ - Plan #1	438.5	438.5	15.1	13.7	10.583	CC
Newman 2F-32H-C264 - HZ - Plan #1	500.0	499.9	15.2	13.6	9.294	ES
Newman 2F-32H-C264 - HZ - Plan #1	11,540.4	11,783.1	501.3	352.5	3.369	SF
Newman 2G-32H-C264 - HZ - Plan #1	531.1	531.1	7.5	5.7	4.266	CC
Newman 2G-32H-C264 - HZ - Plan #1	600.0	599.9	7.6	5.7	3.839	ES
Newman 2G-32H-C264 - HZ - Plan #1	11,540.4	11,632.0	242.7	89.3	1.583	SF
Newman 2I-32H-C264 - HZ - Plan #1	366.3	367.3	7.6	6.4	6.424	CC
Newman 2I-32H-C264 - HZ - Plan #1	400.0	401.0	7.6	6.3	5.840	ES
Newman 2I-32H-C264 - HZ - Plan #1	11,540.4	11,764.0	315.5	195.2	2.621	SF
Newman 2J-32H-C264 - HZ - Plan #1	332.2	333.2	15.1	14.0	14.296	CC
Newman 2J-32H-C264 - HZ - Plan #1	400.0	400.9	15.3	14.0	11.823	ES
Newman 2J-32H-C264 - HZ - Plan #1	11,540.4	11,644.6	459.3	297.6	2.840	SF
Newman 2K-32H-C264 - HZ - Plan #1	266.3	267.3	22.4	21.6	27.071	CC
Newman 2K-32H-C264 - HZ - Plan #1	300.0	301.0	22.4	21.4	23.701	ES
Newman 2K-32H-C264 - HZ - Plan #1	11,540.4	11,573.7	675.1	510.3	4.097	SF
Newman 2L-32H-C264 - HZ - Plan #1	232.0	233.0	29.9	29.2	42.348	CC
Newman 2L-32H-C264 - HZ - Plan #1	300.0	300.7	30.1	29.2	31.942	ES
Newman 2L-32H-C264 - HZ - Plan #1	11,540.4	11,824.6	926.8	766.5	5.780	SF
RUHL 1 (EXISTING) - EXISTING - ENCANA WELL						Out of range

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
7,100.0	6,924.0	6,873.0	6,873.0	12.6	12.0	39.35	-1,012.0	-306.0	926.0	906.2	19.76	46.864		
7,200.0	6,948.1	6,897.1	6,897.1	13.2	12.0	62.52	-1,012.0	-306.0	832.7	809.3	23.42	35.552		
7,300.0	6,955.0	6,904.0	6,904.0	14.0	12.0	90.00	-1,012.0	-306.0	737.7	711.7	26.05	28.325		
7,400.0	6,955.0	6,904.0	6,904.0	15.0	12.0	90.00	-1,012.0	-306.0	643.9	616.9	27.02	23.834		
7,500.0	6,955.0	6,904.0	6,904.0	16.1	12.0	90.00	-1,012.0	-306.0	552.2	524.1	28.12	19.638		
7,600.0	6,955.0	6,904.0	6,904.0	17.3	12.0	90.00	-1,012.0	-306.0	464.0	434.7	29.33	15.819		
7,700.0	6,955.0	6,904.0	6,904.0	18.6	12.0	90.00	-1,012.0	-306.0	381.6	351.0	30.63	12.459		
7,800.0	6,955.0	6,904.0	6,904.0	20.0	12.0	90.00	-1,012.0	-306.0	309.8	277.8	32.00	9.682		
7,900.0	6,955.0	6,904.0	6,904.0	21.4	12.0	90.00	-1,012.0	-306.0	257.5	224.1	33.43	7.705		
7,998.3	6,955.0	6,904.0	6,904.0	22.9	12.0	90.00	-1,012.0	-306.0	238.0	203.2	34.87	6.827 CC		
8,000.0	6,955.0	6,904.0	6,904.0	22.9	12.0	90.00	-1,012.0	-306.0	238.1	203.2	34.90	6.822 ES, SF		
8,100.0	6,955.0	6,904.0	6,904.0	24.4	12.0	90.00	-1,012.0	-306.0	258.9	222.5	36.40	7.111		
8,200.0	6,955.0	6,904.0	6,904.0	25.9	12.0	90.00	-1,012.0	-306.0	312.0	274.1	37.94	8.223		
8,300.0	6,955.0	6,904.0	6,904.0	27.5	12.0	90.00	-1,012.0	-306.0	384.3	344.8	39.51	9.727		
8,400.0	6,955.0	6,904.0	6,904.0	29.1	12.0	90.00	-1,012.0	-306.0	466.9	425.9	41.10	11.362		
8,500.0	6,955.0	6,904.0	6,904.0	30.7	12.0	90.00	-1,012.0	-306.0	555.3	512.6	42.70	13.005		
8,600.0	6,955.0	6,904.0	6,904.0	32.3	12.0	90.00	-1,012.0	-306.0	647.1	602.8	44.32	14.600		
8,700.0	6,955.0	6,904.0	6,904.0	33.9	12.0	90.00	-1,012.0	-306.0	741.0	695.0	45.95	16.124		
8,800.0	6,955.0	6,904.0	6,904.0	35.6	12.0	90.00	-1,012.0	-306.0	836.3	788.7	47.60	17.569		
8,900.0	6,955.0	6,904.0	6,904.0	37.2	12.0	90.00	-1,012.0	-306.0	932.6	883.3	49.26	18.934		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-89.21	0.7	-52.6	52.6					
100.0	100.0	98.0	98.0	0.1	0.1	-89.21	0.7	-52.6	52.6	52.4	0.24	217.425		
200.0	200.0	198.0	198.0	0.3	0.3	-89.21	0.7	-52.6	52.6	52.0	0.59	89.157 CC, ES		
300.0	300.0	296.2	296.2	0.5	0.5	-88.93	1.0	-54.2	54.2	53.3	0.94	57.932		
400.0	400.0	394.2	394.0	0.6	0.7	-88.18	1.9	-59.1	59.2	57.9	1.28	46.212		
500.0	500.0	491.7	491.2	0.8	0.9	-73.16	3.3	-67.2	67.6	65.9	1.63	41.514		
600.0	600.0	588.6	587.4	1.0	1.1	-73.16	5.3	-78.5	78.8	76.8	1.97	39.922 SF		
700.0	699.9	684.8	682.4	1.2	1.4	-73.85	7.9	-92.9	92.9	90.6	2.33	39.942		
800.0	799.8	780.0	776.0	1.4	1.8	-74.88	11.0	-110.2	109.8	107.1	2.68	40.918		
900.0	899.7	874.0	867.8	1.6	2.2	-75.55	14.5	-130.3	129.9	126.9	3.05	42.645		
1,000.0	999.5	966.8	957.7	1.7	2.6	-75.82	18.6	-153.0	153.2	149.7	3.41	44.902		
1,100.0	1,099.4	1,058.1	1,045.3	1.9	3.1	-75.85	23.0	-178.2	179.5	175.7	3.78	47.538		
1,200.0	1,199.2	1,153.2	1,136.1	2.1	3.6	-75.76	28.0	-206.2	207.7	203.5	4.15	50.064		
1,300.0	1,299.1	1,249.1	1,227.6	2.3	4.2	-75.70	33.0	-234.5	235.9	231.4	4.52	52.151		
1,400.0	1,398.9	1,345.1	1,319.2	2.5	4.7	-75.65	38.0	-262.7	264.1	259.2	4.90	53.906		
1,500.0	1,498.8	1,441.0	1,410.7	2.7	5.2	-75.61	43.1	-291.0	292.4	287.1	5.28	55.403		
1,600.0	1,598.7	1,536.9	1,502.2	2.9	5.8	-75.58	48.1	-319.3	320.6	314.9	5.65	56.694		
1,700.0	1,698.5	1,632.9	1,593.8	3.1	6.3	-75.55	53.1	-347.5	348.8	342.8	6.03	57.818		
1,800.0	1,798.4	1,728.8	1,685.3	3.3	6.9	-75.52	58.1	-375.8	377.1	370.6	6.41	58.806		
1,900.0	1,898.2	1,824.7	1,776.8	3.5	7.4	-75.50	63.2	-404.1	405.3	398.5	6.79	59.681		
2,000.0	1,998.1	1,920.7	1,868.4	3.7	7.9	-75.49	68.2	-432.3	433.5	426.3	7.17	60.461		
2,100.0	2,098.0	2,016.6	1,959.9	3.9	8.5	-75.47	73.2	-460.6	461.7	454.2	7.55	61.161		
2,200.0	2,197.8	2,112.5	2,051.4	4.1	9.0	-75.46	78.2	-488.9	490.0	482.0	7.93	61.792		
2,300.0	2,297.7	2,208.5	2,143.0	4.3	9.6	-75.44	83.2	-517.2	518.2	509.9	8.31	62.364		
2,400.0	2,397.5	2,304.4	2,234.5	4.5	10.1	-75.43	88.3	-545.4	546.4	537.8	8.69	62.884		
2,500.0	2,497.4	2,400.3	2,326.0	4.7	10.7	-75.42	93.3	-573.7	574.7	565.6	9.07	63.360		
2,600.0	2,597.3	2,496.3	2,417.6	4.9	11.2	-75.41	98.3	-602.0	602.9	593.5	9.45	63.797		
2,700.0	2,697.1	2,592.2	2,509.1	5.1	11.8	-75.40	103.3	-630.2	631.1	621.3	9.83	64.200		
2,800.0	2,797.0	2,688.1	2,600.6	5.3	12.3	-75.40	108.3	-658.5	659.4	649.2	10.21	64.572		
2,900.0	2,896.8	2,784.1	2,692.2	5.5	12.9	-75.39	113.4	-686.8	687.6	677.0	10.59	64.916		
3,000.0	2,996.7	2,880.0	2,783.7	5.7	13.4	-75.38	118.4	-715.1	715.8	704.9	10.97	65.237		
3,100.0	3,096.6	2,975.9	2,875.2	5.9	14.0	-75.38	123.4	-743.3	744.1	732.7	11.35	65.535		
3,200.0	3,196.4	3,071.9	2,966.8	6.0	14.5	-75.37	128.4	-771.6	772.3	760.6	11.73	65.814		
3,300.0	3,296.3	3,167.8	3,058.3	6.2	15.0	-75.37	133.4	-799.9	800.5	788.4	12.12	66.075		
3,400.0	3,396.1	3,263.7	3,149.8	6.4	15.6	-75.36	138.5	-828.1	828.8	816.3	12.50	66.320		
3,500.0	3,496.0	3,359.7	3,241.4	6.6	16.1	-75.36	143.5	-856.4	857.0	844.1	12.88	66.550		
3,600.0	3,595.9	3,455.6	3,332.9	6.8	16.7	-75.35	148.5	-884.7	885.2	872.0	13.26	66.766		
3,700.0	3,695.7	3,551.5	3,424.5	7.0	17.2	-75.35	153.5	-912.9	913.5	899.8	13.64	66.970		
3,800.0	3,795.6	3,647.5	3,516.0	7.2	17.8	-75.35	158.5	-941.2	941.7	927.7	14.02	67.164		
3,900.0	3,895.4	3,743.4	3,607.5	7.4	18.3	-75.34	163.6	-969.5	969.9	955.5	14.40	67.346		
4,000.0	3,995.3	3,839.3	3,699.1	7.6	18.9	-75.34	168.6	-997.8	998.1	983.4	14.78	67.519		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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			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	-89.09	0.7	-45.0	45.1					
100.0	100.0	99.0	99.0	0.1	0.1	-89.09	0.7	-45.0	45.0	44.8	0.24	185.269		
200.0	200.0	199.0	199.0	0.3	0.3	-89.09	0.7	-45.0	45.0	44.5	0.59	76.130		
234.6	234.6	233.6	233.6	0.4	0.4	-89.09	0.7	-45.0	45.0	44.3	0.71	63.209 CC, ES		
300.0	300.0	298.2	298.2	0.5	0.5	-89.00	0.8	-45.4	45.4	44.5	0.94	48.380		
400.0	400.0	396.6	396.5	0.6	0.6	-88.31	1.4	-48.7	48.8	47.5	1.29	37.957		
500.0	500.0	494.6	494.3	0.8	0.8	-73.21	2.7	-55.3	55.5	53.8	1.63	33.993		
600.0	600.0	592.1	591.3	1.0	1.1	-73.26	4.7	-65.1	65.1	63.1	1.98	32.880 SF		
700.0	699.9	689.0	687.3	1.2	1.4	-74.09	7.2	-78.0	77.5	75.2	2.33	33.251		
800.0	799.8	785.0	781.9	1.4	1.7	-75.25	10.3	-93.9	92.9	90.2	2.69	34.506		
900.0	899.7	879.9	874.8	1.6	2.0	-75.92	14.0	-112.7	111.4	108.4	3.06	36.454		
1,000.0	999.5	973.6	965.9	1.7	2.5	-76.12	18.3	-134.2	133.1	129.7	3.42	38.886		
1,100.0	1,099.4	1,067.4	1,056.4	1.9	2.9	-76.03	23.0	-158.5	157.8	154.0	3.79	41.605		
1,200.0	1,199.2	1,164.1	1,149.5	2.1	3.4	-75.92	28.1	-184.3	183.2	179.0	4.17	43.945		
1,300.0	1,299.1	1,260.8	1,242.5	2.3	3.9	-75.84	33.2	-210.1	208.6	204.1	4.55	45.886		
1,400.0	1,398.9	1,357.5	1,335.6	2.5	4.4	-75.77	38.2	-235.9	234.0	229.1	4.92	47.519		
1,500.0	1,498.8	1,454.3	1,428.7	2.7	4.9	-75.72	43.3	-261.7	259.4	254.1	5.30	48.913		
1,600.0	1,598.7	1,551.0	1,521.8	2.9	5.4	-75.68	48.4	-287.4	284.8	279.1	5.68	50.114		
1,700.0	1,698.5	1,647.7	1,614.9	3.1	5.9	-75.64	53.5	-313.2	310.2	304.2	6.06	51.161		
1,800.0	1,798.4	1,744.4	1,708.0	3.3	6.4	-75.61	58.5	-339.0	335.6	329.2	6.44	52.081		
1,900.0	1,898.2	1,841.1	1,801.0	3.5	6.8	-75.58	63.6	-364.8	361.1	354.2	6.83	52.895		
2,000.0	1,998.1	1,937.9	1,894.1	3.7	7.3	-75.56	68.7	-390.6	386.5	379.3	7.21	53.622		
2,100.0	2,098.0	2,034.6	1,987.2	3.9	7.8	-75.54	73.7	-416.3	411.9	404.3	7.59	54.273		
2,200.0	2,197.8	2,131.3	2,080.3	4.1	8.3	-75.52	78.8	-442.1	437.3	429.3	7.97	54.861		
2,300.0	2,297.7	2,228.0	2,173.4	4.3	8.8	-75.51	83.9	-467.9	462.7	454.3	8.35	55.394		
2,400.0	2,397.5	2,324.7	2,266.4	4.5	9.3	-75.49	89.0	-493.7	488.1	479.4	8.73	55.879		
2,500.0	2,497.4	2,421.4	2,359.5	4.7	9.9	-75.48	94.0	-519.5	513.5	504.4	9.12	56.322		
2,600.0	2,597.3	2,518.2	2,452.6	4.9	10.4	-75.47	99.1	-545.3	538.9	529.4	9.50	56.729		
2,700.0	2,697.1	2,614.9	2,545.7	5.1	10.9	-75.46	104.2	-571.0	564.3	554.4	9.88	57.104		
2,800.0	2,797.0	2,711.6	2,638.8	5.3	11.4	-75.45	109.2	-596.8	589.7	579.5	10.26	57.451		
2,900.0	2,896.8	2,808.3	2,731.8	5.5	11.9	-75.44	114.3	-622.6	615.1	604.5	10.65	57.772		
3,000.0	2,996.7	2,905.0	2,824.9	5.7	12.4	-75.43	119.4	-648.4	640.5	629.5	11.03	58.070		
3,100.0	3,096.6	3,001.8	2,918.0	5.9	12.9	-75.42	124.4	-674.2	665.9	654.5	11.41	58.348		
3,200.0	3,196.4	3,098.5	3,011.1	6.0	13.4	-75.41	129.5	-699.9	691.3	679.6	11.80	58.608		
3,300.0	3,296.3	3,195.2	3,104.2	6.2	13.9	-75.41	134.6	-725.7	716.8	704.6	12.18	58.851		
3,400.0	3,396.1	3,291.9	3,197.3	6.4	14.4	-75.40	139.7	-751.5	742.2	729.6	12.56	59.079		
3,500.0	3,496.0	3,388.6	3,290.3	6.6	14.9	-75.40	144.7	-777.3	767.6	754.6	12.95	59.294		
3,600.0	3,595.9	3,485.4	3,383.4	6.8	15.4	-75.39	149.8	-803.1	793.0	779.6	13.33	59.495		
3,700.0	3,695.7	3,582.1	3,476.5	7.0	15.9	-75.39	154.9	-828.8	818.4	804.7	13.71	59.686		
3,800.0	3,795.6	3,678.8	3,569.6	7.2	16.4	-75.38	159.9	-854.6	843.8	829.7	14.09	59.866		
3,900.0	3,895.4	3,775.5	3,662.7	7.4	16.9	-75.38	165.0	-880.4	869.2	854.7	14.48	60.036		
4,000.0	3,995.3	3,872.2	3,755.7	7.6	17.4	-75.37	170.1	-906.2	894.6	879.7	14.86	60.197		
4,100.0	4,095.2	3,968.9	3,848.8	7.8	17.9	-75.37	175.1	-932.0	920.0	904.8	15.24	60.350		
4,200.0	4,195.0	4,065.7	3,941.9	8.0	18.4	-75.37	180.2	-957.7	945.4	929.8	15.63	60.496		
4,300.0	4,294.9	4,162.4	4,035.0	8.2	18.9	-75.36	185.3	-983.5	970.8	954.8	16.01	60.634		
4,400.0	4,394.7	4,259.1	4,128.1	8.4	19.4	-75.36	190.4	-1,009.3	996.2	979.8	16.39	60.766		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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: 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	-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	397.7	397.7	0.6	0.6	-88.91	0.7	-39.1	39.1	37.8	1.29	30.395		
500.0	500.0	496.2	496.0	0.8	0.8	-73.63	1.9	-44.0	44.1	42.5	1.63	26.976		
600.0	600.0	594.3	593.7	1.0	1.0	-73.59	3.8	-52.2	52.0	50.0	1.98	26.218 SF		
700.0	699.9	691.8	690.6	1.2	1.3	-74.44	6.5	-63.5	62.8	60.4	2.34	26.848		
800.0	799.8	788.5	786.2	1.4	1.6	-75.61	9.9	-77.9	76.4	73.7	2.70	28.303		
900.0	899.7	884.4	880.3	1.6	1.9	-76.13	14.0	-95.3	93.3	90.2	3.07	30.404		
1,000.0	999.5	979.9	973.5	1.7	2.3	-76.10	18.8	-115.5	113.2	109.8	3.44	32.927		
1,100.0	1,099.4	1,077.7	1,068.7	1.9	2.7	-75.97	23.9	-137.2	134.1	130.3	3.82	35.143		
1,200.0	1,199.2	1,175.4	1,164.0	2.1	3.1	-75.89	29.0	-158.8	154.9	150.7	4.19	36.946		
1,300.0	1,299.1	1,273.2	1,259.2	2.3	3.5	-75.82	34.1	-180.5	175.8	171.2	4.57	38.439		
1,400.0	1,398.9	1,371.0	1,354.5	2.5	4.0	-75.77	39.2	-202.1	196.7	191.7	4.95	39.694		
1,500.0	1,498.8	1,468.8	1,449.7	2.7	4.4	-75.72	44.3	-223.8	217.5	212.2	5.34	40.764		
1,600.0	1,598.7	1,566.6	1,544.9	2.9	4.8	-75.69	49.4	-245.4	238.4	232.7	5.72	41.687		
1,700.0	1,698.5	1,664.4	1,640.2	3.1	5.2	-75.66	54.5	-267.1	259.3	253.2	6.10	42.490		
1,800.0	1,798.4	1,762.2	1,735.4	3.3	5.7	-75.63	59.6	-288.7	280.2	273.7	6.49	43.195		
1,900.0	1,898.2	1,860.0	1,830.6	3.5	6.1	-75.61	64.7	-310.4	301.0	294.2	6.87	43.819		
2,000.0	1,998.1	1,957.8	1,925.9	3.7	6.5	-75.59	69.8	-332.0	321.9	314.6	7.25	44.376		
2,100.0	2,098.0	2,055.6	2,021.1	3.9	6.9	-75.58	74.9	-353.7	342.8	335.1	7.64	44.875		
2,200.0	2,197.8	2,153.4	2,116.3	4.1	7.4	-75.56	80.0	-375.3	363.6	355.6	8.02	45.325		
2,300.0	2,297.7	2,251.2	2,211.6	4.3	7.8	-75.55	85.1	-396.9	384.5	376.1	8.41	45.732		
2,400.0	2,397.5	2,349.0	2,306.8	4.5	8.2	-75.54	90.2	-418.6	405.4	396.6	8.79	46.103		
2,500.0	2,497.4	2,446.8	2,402.0	4.7	8.7	-75.53	95.3	-440.2	426.2	417.1	9.18	46.443		
2,600.0	2,597.3	2,544.6	2,497.3	4.9	9.1	-75.52	100.4	-461.9	447.1	437.6	9.56	46.754		
2,700.0	2,697.1	2,642.4	2,592.5	5.1	9.5	-75.51	105.5	-483.5	468.0	458.0	9.95	47.041		
2,800.0	2,797.0	2,740.2	2,687.8	5.3	10.0	-75.50	110.6	-505.2	488.9	478.5	10.33	47.306		
2,900.0	2,896.8	2,838.0	2,783.0	5.5	10.4	-75.49	115.7	-526.8	509.7	499.0	10.72	47.551		
3,000.0	2,996.7	2,935.8	2,878.2	5.7	10.8	-75.49	120.8	-548.5	530.6	519.5	11.11	47.779		
3,100.0	3,096.6	3,033.6	2,973.5	5.9	11.3	-75.48	125.9	-570.1	551.5	540.0	11.49	47.992		
3,200.0	3,196.4	3,131.4	3,068.7	6.0	11.7	-75.47	131.0	-591.8	572.3	560.5	11.88	48.190		
3,300.0	3,296.3	3,229.2	3,163.9	6.2	12.1	-75.47	136.1	-613.4	593.2	580.9	12.26	48.376		
3,400.0	3,396.1	3,327.0	3,259.2	6.4	12.5	-75.46	141.2	-635.0	614.1	601.4	12.65	48.550		
3,500.0	3,496.0	3,424.8	3,354.4	6.6	13.0	-75.46	146.3	-656.7	634.9	621.9	13.03	48.713		
3,600.0	3,595.9	3,522.6	3,449.6	6.8	13.4	-75.45	151.4	-678.3	655.8	642.4	13.42	48.868		
3,700.0	3,695.7	3,620.4	3,544.9	7.0	13.8	-75.45	156.5	-700.0	676.7	662.9	13.81	49.013		
3,800.0	3,795.6	3,718.2	3,640.1	7.2	14.3	-75.45	161.6	-721.6	697.6	683.4	14.19	49.150		
3,900.0	3,895.4	3,816.0	3,735.4	7.4	14.7	-75.44	166.7	-743.3	718.4	703.8	14.58	49.280		
4,000.0	3,995.3	3,913.8	3,830.6	7.6	15.1	-75.44	171.8	-764.9	739.3	724.3	14.96	49.403		
4,100.0	4,095.2	4,011.6	3,925.8	7.8	15.6	-75.44	176.9	-786.6	760.2	744.8	15.35	49.520		
4,200.0	4,195.0	4,109.4	4,021.1	8.0	16.0	-75.43	182.0	-808.2	781.0	765.3	15.74	49.631		
4,300.0	4,294.9	4,207.2	4,116.3	8.2	16.4	-75.43	187.1	-829.9	801.9	785.8	16.12	49.737		
4,400.0	4,394.7	4,305.0	4,211.5	8.4	16.9	-75.43	192.2	-851.5	822.8	806.3	16.51	49.837		
4,500.0	4,494.6	4,402.8	4,306.8	8.6	17.3	-75.42	197.3	-873.2	843.6	826.8	16.90	49.933		
4,600.0	4,594.5	4,500.6	4,402.0	8.8	17.7	-75.42	202.4	-894.8	864.5	847.2	17.28	50.025		
4,700.0	4,694.3	4,598.4	4,497.2	9.0	18.2	-75.42	207.5	-916.4	885.4	867.7	17.67	50.112		
4,800.0	4,794.2	4,696.2	4,592.5	9.2	18.6	-75.42	212.6	-938.1	906.3	888.2	18.05	50.196		
4,900.0	4,894.0	4,794.0	4,687.7	9.4	19.0	-75.42	217.7	-959.7	927.1	908.7	18.44	50.276		
5,000.0	4,993.9	4,891.8	4,782.9	9.6	19.5	-75.41	222.8	-981.4	948.0	929.2	18.83	50.353		
5,100.0	5,093.7	4,989.6	4,878.2	9.8	19.9	-75.41	227.9	-1,003.0	968.9	949.7	19.21	50.427		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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							
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	5,193.6	5,087.4	4,973.4	10.0	20.3	-75.41	233.1	-1,024.7	989.7	970.1	19.60	50.498	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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	-89.33	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		
334.7	334.7	333.7	333.7	0.5	0.5	-89.33	0.4	-29.9	29.9	28.9	1.06	28.193 CC, ES		
400.0	400.0	398.5	398.5	0.6	0.6	-89.12	0.5	-30.3	30.3	29.0	1.29	23.534		
500.0	500.0	497.4	497.3	0.8	0.8	-73.81	1.4	-33.6	33.6	31.9	1.64	20.522		
600.0	600.0	596.0	595.7	1.0	1.0	-73.77	3.3	-40.1	39.8	37.8	1.99	20.019		
700.0	699.9	694.1	693.3	1.2	1.2	-74.68	6.1	-49.8	48.8	46.4	2.34	20.830		
800.0	799.8	791.6	789.9	1.4	1.5	-75.86	9.7	-62.6	60.7	58.0	2.71	22.425		
900.0	899.7	888.3	885.1	1.6	1.8	-76.13	14.3	-78.4	75.8	72.7	3.08	24.633		
1,000.0	999.5	986.8	981.9	1.7	2.2	-76.00	19.4	-96.1	92.5	89.1	3.45	26.805		
1,100.0	1,099.4	1,085.4	1,078.7	1.9	2.5	-75.91	24.5	-113.9	109.3	105.4	3.83	28.531		
1,200.0	1,199.2	1,183.9	1,175.5	2.1	2.9	-75.85	29.7	-131.7	126.0	121.8	4.21	29.933		
1,300.0	1,299.1	1,282.5	1,272.4	2.3	3.2	-75.80	34.8	-149.5	142.8	138.2	4.59	31.094		
1,400.0	1,398.9	1,381.1	1,369.2	2.5	3.6	-75.76	39.9	-167.3	159.6	154.6	4.98	32.070		
1,500.0	1,498.8	1,479.7	1,466.0	2.7	3.9	-75.72	45.0	-185.1	176.3	171.0	5.36	32.901		
1,600.0	1,598.7	1,578.3	1,562.9	2.9	4.3	-75.70	50.1	-202.8	193.1	187.3	5.74	33.617		
1,700.0	1,698.5	1,676.9	1,659.7	3.1	4.7	-75.67	55.2	-220.6	209.9	203.7	6.13	34.240		
1,800.0	1,798.4	1,775.4	1,756.5	3.3	5.0	-75.65	60.4	-238.4	226.6	220.1	6.51	34.787		
1,900.0	1,898.2	1,874.0	1,853.4	3.5	5.4	-75.64	65.5	-256.2	243.4	236.5	6.90	35.271		
2,000.0	1,998.1	1,972.6	1,950.2	3.7	5.8	-75.62	70.6	-274.0	260.1	252.9	7.29	35.702		
2,100.0	2,098.0	2,071.2	2,047.0	3.9	6.1	-75.61	75.7	-291.7	276.9	269.2	7.67	36.089		
2,200.0	2,197.8	2,169.8	2,143.9	4.1	6.5	-75.60	80.8	-309.5	293.7	285.6	8.06	36.438		
2,300.0	2,297.7	2,268.4	2,240.7	4.3	6.9	-75.59	86.0	-327.3	310.4	302.0	8.45	36.753		
2,400.0	2,397.5	2,367.0	2,337.5	4.5	7.2	-75.58	91.1	-345.1	327.2	318.4	8.83	37.041		
2,500.0	2,497.4	2,465.5	2,434.4	4.7	7.6	-75.57	96.2	-362.9	344.0	334.7	9.22	37.303		
2,600.0	2,597.3	2,564.1	2,531.2	4.9	8.0	-75.57	101.3	-380.7	360.7	351.1	9.61	37.544		
2,700.0	2,697.1	2,662.7	2,628.0	5.1	8.3	-75.56	106.4	-398.4	377.5	367.5	10.00	37.766		
2,800.0	2,797.0	2,761.3	2,724.8	5.3	8.7	-75.55	111.6	-416.2	394.2	383.9	10.38	37.971		
2,900.0	2,896.8	2,859.9	2,821.7	5.5	9.1	-75.55	116.7	-434.0	411.0	400.2	10.77	38.161		
3,000.0	2,996.7	2,958.5	2,918.5	5.7	9.4	-75.54	121.8	-451.8	427.8	416.6	11.16	38.338		
3,100.0	3,096.6	3,057.1	3,015.3	5.9	9.8	-75.54	126.9	-469.6	444.5	433.0	11.55	38.502		
3,200.0	3,196.4	3,155.6	3,112.2	6.0	10.2	-75.53	132.0	-487.3	461.3	449.4	11.93	38.655		
3,300.0	3,296.3	3,254.2	3,209.0	6.2	10.5	-75.53	137.2	-505.1	478.1	465.7	12.32	38.799		
3,400.0	3,396.1	3,352.8	3,305.8	6.4	10.9	-75.52	142.3	-522.9	494.8	482.1	12.71	38.934		
3,500.0	3,496.0	3,451.4	3,402.7	6.6	11.3	-75.52	147.4	-540.7	511.6	498.5	13.10	39.060		
3,600.0	3,595.9	3,550.0	3,499.5	6.8	11.7	-75.52	152.5	-558.5	528.3	514.9	13.49	39.179		
3,700.0	3,695.7	3,648.6	3,596.3	7.0	12.0	-75.51	157.6	-576.3	545.1	531.2	13.87	39.292		
3,800.0	3,795.6	3,747.1	3,693.2	7.2	12.4	-75.51	162.7	-594.0	561.9	547.6	14.26	39.398		
3,900.0	3,895.4	3,845.7	3,790.0	7.4	12.8	-75.51	167.9	-611.8	578.6	564.0	14.65	39.498		
4,000.0	3,995.3	3,944.3	3,886.8	7.6	13.1	-75.51	173.0	-629.6	595.4	580.4	15.04	39.593		
4,100.0	4,095.2	4,042.9	3,983.7	7.8	13.5	-75.50	178.1	-647.4	612.2	596.7	15.43	39.684		
4,200.0	4,195.0	4,141.5	4,080.5	8.0	13.9	-75.50	183.2	-665.2	628.9	613.1	15.81	39.769		
4,300.0	4,294.9	4,240.1	4,177.3	8.2	14.2	-75.50	188.3	-682.9	645.7	629.5	16.20	39.851		
4,400.0	4,394.7	4,338.7	4,274.2	8.4	14.6	-75.50	193.5	-700.7	662.4	645.9	16.59	39.929		
4,500.0	4,494.6	4,437.2	4,371.0	8.6	15.0	-75.49	198.6	-718.5	679.2	662.2	16.98	40.003		
4,600.0	4,594.5	4,535.8	4,467.8	8.8	15.4	-75.49	203.7	-736.3	696.0	678.6	17.37	40.074		
4,700.0	4,694.3	4,634.4	4,564.7	9.0	15.7	-75.49	208.8	-754.1	712.7	695.0	17.76	40.141		
4,800.0	4,794.2	4,733.0	4,661.5	9.2	16.1	-75.49	213.9	-771.9	729.5	711.4	18.14	40.206		
4,900.0	4,894.0	4,831.6	4,758.3	9.4	16.5	-75.49	219.1	-789.6	746.3	727.7	18.53	40.268		
5,000.0	4,993.9	4,930.2	4,855.2	9.6	16.8	-75.49	224.2	-807.4	763.0	744.1	18.92	40.327		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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: 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)	
5,100.0	5,093.7	5,028.8	4,952.0		9.8	17.2	-75.48	229.3	-825.2	779.8	760.5	19.31	40.384	
5,200.0	5,193.6	5,127.3	5,048.8	10.0	17.6	-75.48	234.4	-843.0	796.5	776.8	19.70	40.439		
5,300.0	5,293.5	5,225.9	5,145.7	10.2	17.9	-75.48	239.5	-860.8	813.3	793.2	20.09	40.491		
5,400.0	5,393.3	5,324.5	5,242.5	10.4	18.3	-75.48	244.6	-878.5	830.1	809.6	20.47	40.542		
5,500.0	5,493.2	5,423.1	5,339.3	10.6	18.7	-75.48	249.8	-896.3	846.8	826.0	20.86	40.590		
5,600.0	5,593.0	5,521.7	5,436.2	10.8	19.1	-75.48	254.9	-914.1	863.6	842.3	21.25	40.637		
5,700.0	5,692.9	5,650.4	5,562.9	11.0	19.5	-75.51	261.1	-935.6	879.1	857.4	21.70	40.521		
5,800.0	5,792.8	5,791.8	5,703.1	11.2	19.8	-75.69	266.1	-953.0	890.4	868.2	22.15	40.190		
5,900.0	5,892.8	5,934.3	5,845.2	11.3	20.1	-75.80	269.2	-963.8	897.3	874.7	22.58	39.742		
6,000.0	5,992.8	6,077.4	5,988.2	11.5	20.3	-75.84	270.3	-967.8	899.8	876.8	22.97	39.177		
6,100.0	6,092.8	6,180.9	6,091.8	11.7	20.4	-89.98	270.4	-967.8	899.8	876.5	23.29	38.632		
6,200.0	6,192.8	6,280.9	6,191.8	11.8	20.4	-89.98	270.4	-967.8	899.8	876.2	23.61	38.108		
6,300.0	6,292.8	6,380.9	6,291.8	12.0	20.5	-89.98	270.4	-967.8	899.8	875.9	23.93	37.597		
6,363.2	6,355.9	6,444.1	6,354.9	12.1	20.6	90.05	270.4	-967.8	899.8	875.7	24.13	37.287		
6,400.0	6,392.8	6,480.9	6,391.8	12.1	20.6	90.03	270.4	-967.8	899.8	875.6	24.25	37.102		
6,500.0	6,492.1	6,580.6	6,491.4	12.2	20.7	90.67	270.0	-967.8	899.9	875.5	24.39	36.894		
6,600.0	6,588.0	6,682.7	6,592.6	12.2	20.8	91.66	257.5	-967.8	900.2	875.9	24.32	37.010		
6,700.0	6,677.8	6,787.8	6,692.8	12.1	20.7	92.62	226.1	-967.8	900.8	876.6	24.17	37.274		
6,800.0	6,758.5	6,896.0	6,788.1	12.0	20.7	93.50	175.3	-967.8	901.5	877.5	24.04	37.501		
6,900.0	6,827.8	7,007.3	6,874.4	12.1	20.7	94.28	105.3	-967.8	902.4	878.3	24.09	37.465		
7,000.0	6,883.5	7,121.3	6,947.1	12.3	20.7	94.93	17.7	-967.8	903.2	878.7	24.45	36.948		
7,100.0	6,924.0	7,237.6	7,001.9	12.6	20.9	95.41	-84.6	-967.8	903.9	878.7	25.20	35.862		
7,200.0	6,948.1	7,355.6	7,035.3	13.2	21.3	95.69	-197.6	-967.8	904.3	877.9	26.42	34.229		
7,300.0	6,955.0	7,472.3	7,045.0	14.0	21.8	95.77	-313.7	-967.8	904.4	876.4	28.05	32.246		
7,400.0	6,955.0	7,572.3	7,045.0	15.0	22.5	95.77	-413.7	-967.8	904.4	874.4	29.98	30.163		
7,500.0	6,955.0	7,672.3	7,045.0	16.1	23.2	95.77	-513.7	-967.8	904.4	872.2	32.17	28.112		
7,600.0	6,955.0	7,772.3	7,045.0	17.3	24.0	95.77	-613.7	-967.8	904.4	869.8	34.57	26.159		
7,700.0	6,955.0	7,872.3	7,045.0	18.6	25.0	95.77	-713.7	-967.8	904.4	867.3	37.15	24.345		
7,800.0	6,955.0	7,972.3	7,045.0	20.0	26.0	95.77	-813.7	-967.8	904.4	864.5	39.86	22.687		
7,900.0	6,955.0	8,072.3	7,045.0	21.4	27.1	95.77	-913.7	-967.8	904.4	861.7	42.69	21.184		
8,000.0	6,955.0	8,172.3	7,045.0	22.9	28.3	95.77	-1,013.7	-967.8	904.4	858.8	45.61	19.828		
8,100.0	6,955.0	8,272.3	7,045.0	24.4	29.5	95.77	-1,113.7	-967.8	904.4	855.8	48.61	18.606		
8,200.0	6,955.0	8,372.3	7,045.0	25.9	30.8	95.77	-1,213.7	-967.8	904.4	852.7	51.67	17.505		
8,300.0	6,955.0	8,472.3	7,045.0	27.5	32.1	95.77	-1,313.7	-967.8	904.4	849.6	54.78	16.511		
8,400.0	6,955.0	8,572.3	7,045.0	29.1	33.5	95.77	-1,413.7	-967.8	904.4	846.5	57.93	15.613		
8,500.0	6,955.0	8,672.3	7,045.0	30.7	34.9	95.77	-1,513.7	-967.8	904.4	843.3	61.12	14.798		
8,600.0	6,955.0	8,772.3	7,045.0	32.3	36.3	95.77	-1,613.7	-967.8	904.4	840.1	64.34	14.057		
8,700.0	6,955.0	8,872.3	7,045.0	33.9	37.8	95.77	-1,713.7	-967.8	904.4	836.8	67.59	13.382		
8,800.0	6,955.0	8,972.3	7,045.0	35.6	39.3	95.77	-1,813.7	-967.8	904.4	833.6	70.86	12.764		
8,900.0	6,955.0	9,072.3	7,045.0	37.2	40.8	95.77	-1,913.7	-967.8	904.4	830.3	74.15	12.197		
9,000.0	6,955.0	9,172.3	7,045.0	38.9	42.3	95.77	-2,013.7	-967.8	904.4	827.0	77.46	11.676		
9,100.0	6,955.0	9,272.3	7,045.0	40.6	43.8	95.77	-2,113.7	-967.8	904.4	823.6	80.78	11.196		
9,200.0	6,955.0	9,372.3	7,045.0	42.2	45.4	95.77	-2,213.7	-967.8	904.4	820.3	84.12	10.752		
9,300.0	6,955.0	9,472.3	7,045.0	43.9	47.0	95.77	-2,313.7	-967.8	904.4	816.9	87.47	10.340		
9,400.0	6,955.0	9,572.3	7,045.0	45.6	48.5	95.77	-2,413.7	-967.8	904.4	813.6	90.83	9.958		
9,500.0	6,955.0	9,672.3	7,045.0	47.3	50.1	95.77	-2,513.7	-967.8	904.4	810.2	94.20	9.601		
9,600.0	6,955.0	9,772.3	7,045.0	49.0	51.7	95.77	-2,613.7	-967.8	904.4	806.8	97.57	9.269		
9,700.0	6,955.0	9,872.3	7,045.0	50.7	53.4	95.77	-2,713.7	-967.8	904.4	803.4	100.96	8.958		
9,800.0	6,955.0	9,972.3	7,045.0	52.4	55.0	95.77	-2,813.7	-967.8	904.4	800.0	104.35	8.667		
9,900.0	6,955.0	10,072.3	7,045.0	54.1	56.6	95.77	-2,913.7	-967.8	904.4	796.7	107.75	8.393		
10,000.0	6,955.0	10,172.3	7,045.0	55.8	58.3	95.77	-3,013.7	-967.8	904.4	793.2	111.15	8.136		
10,100.0	6,955.0	10,272.3	7,045.0	57.5	59.9	95.77	-3,113.7	-967.8	904.4	789.8	114.56	7.894		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		
10,200.0	6,955.0	10,372.3	7,045.0	59.3	61.6	95.77	-3,213.7	-967.8	904.4	786.4	117.98	7.666		
10,300.0	6,955.0	10,472.3	7,045.0	61.0	63.2	95.77	-3,313.7	-967.8	904.4	783.0	121.40	7.450		
10,400.0	6,955.0	10,572.3	7,045.0	62.7	64.9	95.77	-3,413.7	-967.8	904.4	779.6	124.82	7.246		
10,500.0	6,955.0	10,672.3	7,045.0	64.4	66.5	95.77	-3,513.7	-967.8	904.4	776.2	128.25	7.052		
10,600.0	6,955.0	10,772.3	7,045.0	66.1	68.2	95.77	-3,613.7	-967.8	904.4	772.7	131.68	6.868		
10,700.0	6,955.0	10,872.3	7,045.0	67.9	69.9	95.77	-3,713.7	-967.8	904.4	769.3	135.11	6.694		
10,800.0	6,955.0	10,972.3	7,045.0	69.6	71.6	95.77	-3,813.7	-967.8	904.4	765.9	138.54	6.528		
10,900.0	6,955.0	11,072.3	7,045.0	71.3	73.2	95.77	-3,913.7	-967.8	904.4	762.4	141.98	6.370		
11,000.0	6,955.0	11,172.3	7,045.0	73.0	74.9	95.77	-4,013.7	-967.8	904.4	759.0	145.42	6.219		
11,100.0	6,955.0	11,272.3	7,045.0	74.8	76.6	95.77	-4,113.7	-967.8	904.4	755.5	148.87	6.075		
11,200.0	6,955.0	11,372.3	7,045.0	76.5	78.3	95.77	-4,213.7	-967.8	904.4	752.1	152.31	5.938		
11,300.0	6,955.0	11,472.3	7,045.0	78.2	80.0	95.77	-4,313.7	-967.8	904.4	748.6	155.76	5.806		
11,400.0	6,955.0	11,572.3	7,045.0	80.0	81.7	95.77	-4,413.7	-967.8	904.4	745.2	159.21	5.681		
11,500.0	6,955.0	11,672.3	7,045.0	81.7	83.4	95.77	-4,513.7	-967.8	904.4	741.7	162.66	5.560		
11,529.7	6,955.0	11,702.0	7,045.0	82.2	83.9	95.77	-4,543.4	-967.8	904.4	740.7	163.69	5.525		
11,540.4	6,955.0	11,707.0	7,045.0	82.4	84.0	95.77	-4,548.4	-967.8	904.4	740.5	163.96	5.516 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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			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	-89.13	0.3	-22.4	22.4					
100.0	100.0	99.0	99.0	0.1	0.1	-89.13	0.3	-22.4	22.4	22.1	0.24	92.058		
200.0	200.0	199.0	199.0	0.3	0.3	-89.13	0.3	-22.4	22.4	21.8	0.59	37.828		
300.0	300.0	299.0	299.0	0.5	0.5	-89.13	0.3	-22.4	22.4	21.4	0.94	23.792		
400.0	400.0	399.0	399.0	0.6	0.6	-89.13	0.3	-22.4	22.4	21.1	1.29	17.353 CC, ES		
500.0	500.0	498.6	498.6	0.8	0.8	-74.80	0.6	-23.2	23.1	21.5	1.64	14.117		
600.0	600.0	598.2	598.2	1.0	1.0	-76.65	1.5	-25.6	25.1	23.1	1.99	12.636		
700.0	699.9	697.7	697.6	1.2	1.2	-80.27	3.1	-29.6	28.4	26.1	2.34	12.118		
800.0	799.8	797.1	796.8	1.4	1.4	-84.41	5.2	-35.3	33.1	30.4	2.71	12.234		
900.0	899.7	896.4	895.7	1.6	1.6	-86.55	7.9	-42.5	39.5	36.4	3.08	12.808		
1,000.0	999.5	995.4	994.3	1.7	1.8	-86.96	11.2	-51.3	47.3	43.8	3.46	13.670		
1,100.0	1,099.4	1,094.2	1,092.5	1.9	2.0	-86.33	15.1	-61.7	56.6	52.7	3.84	14.729		
1,200.0	1,199.2	1,192.7	1,190.2	2.1	2.3	-85.14	19.6	-73.6	67.3	63.1	4.22	15.937		
1,300.0	1,299.1	1,290.8	1,287.3	2.3	2.6	-83.69	24.6	-87.1	79.6	75.0	4.61	17.268		
1,400.0	1,398.9	1,389.3	1,384.4	2.5	2.9	-82.20	30.2	-101.9	93.2	88.2	5.00	18.663		
1,500.0	1,498.8	1,488.3	1,482.1	2.7	3.2	-81.04	35.8	-117.0	107.1	101.7	5.38	19.894		
1,600.0	1,598.7	1,587.3	1,579.8	2.9	3.5	-80.14	41.5	-132.1	121.0	115.2	5.77	20.966		
1,700.0	1,698.5	1,686.3	1,677.5	3.1	3.8	-79.43	47.1	-147.3	134.9	128.7	6.16	21.906		
1,800.0	1,798.4	1,785.4	1,775.2	3.3	4.1	-78.85	52.8	-162.4	148.8	142.2	6.54	22.736		
1,900.0	1,898.2	1,884.4	1,872.9	3.5	4.5	-78.37	58.5	-177.5	162.7	155.8	6.93	23.475		
2,000.0	1,998.1	1,983.4	1,970.6	3.7	4.8	-77.97	64.1	-192.6	176.6	169.3	7.32	24.136		
2,100.0	2,098.0	2,082.4	2,068.3	3.9	5.1	-77.63	69.8	-207.7	190.6	182.9	7.71	24.732		
2,200.0	2,197.8	2,181.4	2,166.0	4.1	5.4	-77.33	75.4	-222.8	204.5	196.4	8.09	25.270		
2,300.0	2,297.7	2,280.4	2,263.7	4.3	5.7	-77.07	81.1	-237.9	218.5	210.0	8.48	25.760		
2,400.0	2,397.5	2,379.5	2,361.4	4.5	6.1	-76.84	86.8	-253.0	232.4	223.6	8.87	26.207		
2,500.0	2,497.4	2,478.5	2,459.1	4.7	6.4	-76.64	92.4	-268.1	246.4	237.2	9.26	26.617		
2,600.0	2,597.3	2,577.5	2,556.7	4.9	6.7	-76.46	98.1	-283.2	260.4	250.7	9.65	26.994		
2,700.0	2,697.1	2,676.5	2,654.4	5.1	7.1	-76.29	103.7	-298.3	274.3	264.3	10.03	27.341		
2,800.0	2,797.0	2,775.5	2,752.1	5.3	7.4	-76.15	109.4	-313.4	288.3	277.9	10.42	27.663		
2,900.0	2,896.8	2,874.5	2,849.8	5.5	7.7	-76.01	115.1	-328.5	302.3	291.5	10.81	27.962		
3,000.0	2,996.7	2,973.6	2,947.5	5.7	8.0	-75.89	120.7	-343.6	316.3	305.1	11.20	28.240		
3,100.0	3,096.6	3,072.6	3,045.2	5.9	8.4	-75.78	126.4	-358.7	330.2	318.6	11.59	28.499		
3,200.0	3,196.4	3,171.6	3,142.9	6.0	8.7	-75.68	132.0	-373.8	344.2	332.2	11.98	28.742		
3,300.0	3,296.3	3,270.6	3,240.6	6.2	9.0	-75.59	137.7	-388.9	358.2	345.8	12.36	28.969		
3,400.0	3,396.1	3,369.6	3,338.3	6.4	9.4	-75.50	143.4	-404.0	372.2	359.4	12.75	29.182		
3,500.0	3,496.0	3,468.6	3,436.0	6.6	9.7	-75.42	149.0	-419.1	386.1	373.0	13.14	29.383		
3,600.0	3,595.9	3,567.7	3,533.7	6.8	10.0	-75.34	154.7	-434.2	400.1	386.6	13.53	29.572		
3,700.0	3,695.7	3,666.7	3,631.4	7.0	10.4	-75.27	160.3	-449.3	414.1	400.2	13.92	29.751		
3,800.0	3,795.6	3,765.7	3,729.1	7.2	10.7	-75.21	166.0	-464.4	428.1	413.8	14.31	29.920		
3,900.0	3,895.4	3,864.7	3,826.8	7.4	11.0	-75.15	171.7	-479.5	442.1	427.4	14.70	30.080		
4,000.0	3,995.3	3,963.7	3,924.5	7.6	11.3	-75.09	177.3	-494.6	456.0	440.9	15.08	30.232		
4,100.0	4,095.2	4,062.7	4,022.2	7.8	11.7	-75.04	183.0	-509.7	470.0	454.5	15.47	30.376		
4,200.0	4,195.0	4,161.8	4,119.9	8.0	12.0	-74.98	188.6	-524.8	484.0	468.1	15.86	30.513		
4,300.0	4,294.9	4,260.8	4,217.6	8.2	12.3	-74.94	194.3	-539.9	498.0	481.7	16.25	30.644		
4,400.0	4,394.7	4,359.8	4,315.2	8.4	12.7	-74.89	200.0	-555.0	512.0	495.3	16.64	30.768		
4,500.0	4,494.6	4,458.8	4,412.9	8.6	13.0	-74.85	205.6	-570.1	525.9	508.9	17.03	30.887		
4,600.0	4,594.5	4,557.8	4,510.6	8.8	13.3	-74.81	211.3	-585.3	539.9	522.5	17.42	31.000		
4,700.0	4,694.3	4,656.8	4,608.3	9.0	13.7	-74.77	216.9	-600.4	553.9	536.1	17.81	31.108		
4,800.0	4,794.2	4,755.9	4,706.0	9.2	14.0	-74.73	222.6	-615.5	567.9	549.7	18.19	31.212		
4,900.0	4,894.0	4,854.9	4,803.7	9.4	14.3	-74.70	228.3	-630.6	581.9	563.3	18.58	31.312		
5,000.0	4,993.9	4,953.9	4,901.4	9.6	14.7	-74.66	233.9	-645.7	595.9	576.9	18.97	31.407		
5,100.0	5,093.7	5,052.9	4,999.1	9.8	15.0	-74.63	239.6	-660.8	609.8	590.5	19.36	31.499		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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: 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	5,193.6	5,155.4	5,100.3	10.0	15.3	-74.60	245.4	-676.3	623.7	604.0	19.76	31.573		
5,300.0	5,293.5	5,266.1	5,209.7	10.2	15.7	-74.62	251.1	-691.6	636.3	616.1	20.17	31.552		
5,400.0	5,393.3	5,377.3	5,320.0	10.4	16.0	-74.70	256.1	-705.0	647.0	626.4	20.58	31.441		
5,500.0	5,493.2	5,488.8	5,430.8	10.6	16.2	-74.85	260.4	-716.3	655.9	634.9	20.99	31.244		
5,600.0	5,593.0	5,600.6	5,542.2	10.8	16.5	-75.05	263.9	-725.7	662.9	641.5	21.41	30.968		
5,700.0	5,692.9	5,712.7	5,654.0	11.0	16.7	-75.32	266.7	-733.1	668.2	646.4	21.82	30.617		
5,800.0	5,792.8	5,824.9	5,766.1	11.2	16.9	-75.60	268.7	-738.4	671.8	649.6	22.22	30.230		
5,900.0	5,892.8	5,937.2	5,878.4	11.3	17.0	-75.77	269.9	-741.7	674.0	651.5	22.59	29.834		
6,000.0	5,992.8	6,049.6	5,990.7	11.5	17.2	-75.83	270.3	-742.9	674.9	651.9	22.93	29.426		
6,100.0	6,092.8	6,150.7	6,091.8	11.7	17.3	-89.97	270.3	-742.9	674.9	651.6	23.26	29.020		
6,200.0	6,192.8	6,250.7	6,191.8	11.8	17.4	-89.97	270.3	-742.9	674.9	651.3	23.58	28.627		
6,300.0	6,292.8	6,350.7	6,291.8	12.0	17.5	-89.97	270.3	-742.9	674.9	651.0	23.90	28.243		
6,400.0	6,392.8	6,450.7	6,391.8	12.1	17.6	90.03	270.2	-742.9	674.9	650.7	24.21	27.871		
6,500.0	6,492.1	6,550.7	6,491.1	12.2	17.6	90.03	259.7	-742.9	674.9	650.5	24.34	27.725		
6,600.0	6,588.0	6,650.8	6,587.2	12.2	17.6	90.03	232.0	-742.9	674.9	650.6	24.29	27.785		
6,700.0	6,677.8	6,750.8	6,676.9	12.1	17.6	90.02	188.0	-742.9	674.9	650.7	24.15	27.950		
6,800.0	6,758.5	6,850.9	6,757.6	12.0	17.5	90.02	129.2	-742.9	674.9	650.8	24.03	28.079		
6,900.0	6,827.8	6,950.9	6,826.9	12.1	17.5	90.02	57.2	-742.9	674.9	650.8	24.10	28.007		
7,000.0	6,883.5	7,051.0	6,882.7	12.3	17.7	90.01	-25.7	-742.9	674.9	650.4	24.47	27.584		
7,100.0	6,924.0	7,151.0	6,923.1	12.6	17.9	90.01	-117.1	-742.9	674.9	649.6	25.24	26.738		
7,200.0	6,948.1	7,251.0	6,947.1	13.2	18.3	90.00	-214.0	-742.9	674.9	648.4	26.45	25.513		
7,300.0	6,955.0	7,351.0	6,954.0	14.0	18.9	90.00	-313.7	-742.9	674.9	646.8	28.07	24.045		
7,400.0	6,955.0	7,451.0	6,954.0	15.0	19.6	90.00	-413.7	-742.9	674.9	644.9	30.02	22.482		
7,500.0	6,955.0	7,551.0	6,954.0	16.1	20.5	90.00	-513.7	-742.9	674.9	642.7	32.22	20.946		
7,600.0	6,955.0	7,651.0	6,954.0	17.3	21.5	90.00	-613.7	-742.9	674.9	640.2	34.64	19.484		
7,700.0	6,955.0	7,751.0	6,954.0	18.6	22.5	90.00	-713.7	-742.9	674.9	637.6	37.23	18.128		
7,800.0	6,955.0	7,851.0	6,954.0	20.0	23.6	90.00	-813.7	-742.9	674.9	634.9	39.96	16.888		
7,900.0	6,955.0	7,951.0	6,954.0	21.4	24.9	90.00	-913.7	-742.9	674.9	632.1	42.81	15.766		
8,000.0	6,955.0	8,051.0	6,954.0	22.9	26.1	90.00	-1,013.7	-742.9	674.9	629.1	45.74	14.753		
8,100.0	6,955.0	8,151.0	6,954.0	24.4	27.5	90.00	-1,113.7	-742.9	674.9	626.1	48.76	13.841		
8,200.0	6,955.0	8,251.0	6,954.0	25.9	28.8	90.00	-1,213.7	-742.9	674.9	623.0	51.83	13.020		
8,300.0	6,955.0	8,351.0	6,954.0	27.5	30.2	90.00	-1,313.7	-742.9	674.9	619.9	54.96	12.279		
8,400.0	6,955.0	8,451.0	6,954.0	29.1	31.7	90.00	-1,413.7	-742.9	674.9	616.7	58.13	11.609		
8,500.0	6,955.0	8,551.0	6,954.0	30.7	33.2	90.00	-1,513.7	-742.9	674.9	613.5	61.34	11.002		
8,600.0	6,955.0	8,651.0	6,954.0	32.3	34.7	90.00	-1,613.7	-742.9	674.9	610.3	64.58	10.450		
8,700.0	6,955.0	8,751.0	6,954.0	33.9	36.2	90.00	-1,713.7	-742.9	674.9	607.0	67.85	9.947		
8,800.0	6,955.0	8,851.0	6,954.0	35.6	37.7	90.00	-1,813.7	-742.9	674.9	603.7	71.13	9.487		
8,900.0	6,955.0	8,951.0	6,954.0	37.2	39.3	90.00	-1,913.7	-742.9	674.9	600.4	74.44	9.066		
9,000.0	6,955.0	9,051.0	6,954.0	38.9	40.9	90.00	-2,013.7	-742.9	674.9	597.1	77.77	8.678		
9,100.0	6,955.0	9,151.0	6,954.0	40.6	42.5	90.00	-2,113.7	-742.9	674.9	593.8	81.11	8.320		
9,200.0	6,955.0	9,251.0	6,954.0	42.2	44.1	90.00	-2,213.7	-742.9	674.9	590.4	84.47	7.990		
9,300.0	6,955.0	9,351.0	6,954.0	43.9	45.7	90.00	-2,313.7	-742.9	674.9	587.0	87.83	7.683		
9,400.0	6,955.0	9,451.0	6,954.0	45.6	47.3	90.00	-2,413.7	-742.9	674.9	583.7	91.21	7.399		
9,500.0	6,955.0	9,551.0	6,954.0	47.3	49.0	90.00	-2,513.7	-742.9	674.9	580.3	94.60	7.134		
9,600.0	6,955.0	9,651.0	6,954.0	49.0	50.6	90.00	-2,613.7	-742.9	674.9	576.9	97.99	6.887		
9,700.0	6,955.0	9,751.0	6,954.0	50.7	52.3	90.00	-2,713.7	-742.9	674.9	573.5	101.40	6.656		
9,800.0	6,955.0	9,851.0	6,954.0	52.4	53.9	90.00	-2,813.7	-742.9	674.9	570.1	104.81	6.439		
9,900.0	6,955.0	9,951.0	6,954.0	54.1	55.6	90.00	-2,913.7	-742.9	674.9	566.6	108.23	6.236		
10,000.0	6,955.0	10,051.0	6,954.0	55.8	57.2	90.00	-3,013.7	-742.9	674.9	563.2	111.65	6.045		
10,100.0	6,955.0	10,151.0	6,954.0	57.5	58.9	90.00	-3,113.7	-742.9	674.9	559.8	115.08	5.865		
10,200.0	6,955.0	10,251.0	6,954.0	59.3	60.6	90.00	-3,213.7	-742.8	674.9	556.4	118.51	5.695		
10,300.0	6,955.0	10,351.0	6,954.0	61.0	62.3	90.00	-3,313.7	-742.8	674.9	552.9	121.94	5.534		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
10,400.0	6,955.0	10,451.0	6,954.0	62.7	64.0	90.00	-3,413.7	-742.8	674.9	549.5	125.38	5.382		
10,500.0	6,955.0	10,551.0	6,954.0	64.4	65.6	90.00	-3,513.7	-742.8	674.9	546.0	128.83	5.238		
10,600.0	6,955.0	10,651.0	6,954.0	66.1	67.3	90.00	-3,613.7	-742.8	674.9	542.6	132.28	5.102		
10,700.0	6,955.0	10,751.0	6,954.0	67.9	69.0	90.00	-3,713.7	-742.8	674.9	539.1	135.73	4.972		
10,800.0	6,955.0	10,851.0	6,954.0	69.6	70.7	90.00	-3,813.7	-742.8	674.9	535.7	139.18	4.849		
10,900.0	6,955.0	10,951.0	6,954.0	71.3	72.4	90.00	-3,913.7	-742.8	674.9	532.2	142.64	4.731		
11,000.0	6,955.0	11,051.0	6,954.0	73.0	74.1	90.00	-4,013.7	-742.8	674.9	528.8	146.09	4.619		
11,100.0	6,955.0	11,151.0	6,954.0	74.8	75.8	90.00	-4,113.7	-742.8	674.9	525.3	149.56	4.512		
11,200.0	6,955.0	11,251.0	6,954.0	76.5	77.6	90.00	-4,213.7	-742.8	674.9	521.8	153.02	4.410		
11,300.0	6,955.0	11,351.0	6,954.0	78.2	79.3	90.00	-4,313.7	-742.8	674.9	518.4	156.48	4.313		
11,400.0	6,955.0	11,451.0	6,954.0	80.0	81.0	90.00	-4,413.7	-742.8	674.9	514.9	159.95	4.219		
11,500.0	6,955.0	11,551.0	6,954.0	81.7	82.7	90.00	-4,513.7	-742.8	674.9	511.4	163.42	4.130		
11,530.2	6,955.0	11,581.2	6,954.0	82.2	83.2	90.00	-4,543.9	-742.8	674.9	510.4	164.47	4.103		
11,540.4	6,955.0	11,586.8	6,954.0	82.4	83.3	90.00	-4,549.5	-742.8	674.9	510.1	164.74	4.097 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		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	-88.76	0.3	-15.1	15.1					
100.0	100.0	100.0	100.0	0.1	0.1	-88.76	0.3	-15.1	15.1	14.9	0.24	61.836		
200.0	200.0	200.0	200.0	0.3	0.3	-88.76	0.3	-15.1	15.1	14.5	0.59	25.462		
300.0	300.0	300.0	300.0	0.5	0.5	-88.76	0.3	-15.1	15.1	14.2	0.94	16.032		
400.0	400.0	400.0	400.0	0.6	0.6	-88.76	0.3	-15.1	15.1	13.8	1.29	11.699		
438.5	438.5	438.5	438.5	0.7	0.7	-74.86	0.3	-15.1	15.1	13.7	1.43	10.583 CC		
500.0	500.0	499.9	499.9	0.8	0.8	-75.04	0.4	-15.3	15.2	13.6	1.64	9.294 ES		
600.0	600.0	599.6	599.6	1.0	1.0	-78.12	1.3	-16.8	16.4	14.4	1.99	8.220		
700.0	699.9	699.3	699.3	1.2	1.2	-83.14	2.9	-19.9	18.7	16.4	2.35	7.975		
800.0	799.8	799.0	798.8	1.4	1.4	-88.16	5.4	-24.5	22.5	19.7	2.71	8.276		
900.0	899.7	898.5	898.1	1.6	1.6	-89.76	8.6	-30.6	27.6	24.5	3.09	8.934		
1,000.0	999.5	997.9	997.1	1.7	1.8	-88.86	12.7	-38.2	34.0	30.5	3.47	9.806		
1,100.0	1,099.4	1,097.1	1,095.7	1.9	2.0	-86.70	17.6	-47.3	41.8	37.9	3.85	10.840		
1,200.0	1,199.2	1,196.6	1,194.5	2.1	2.2	-84.40	23.0	-57.4	50.5	46.2	4.24	11.914		
1,300.0	1,299.1	1,296.2	1,293.5	2.3	2.5	-82.75	28.5	-67.6	59.3	54.7	4.62	12.825		
1,400.0	1,398.9	1,395.8	1,392.4	2.5	2.7	-81.54	34.0	-77.8	68.1	63.1	5.01	13.600		
1,500.0	1,498.8	1,495.4	1,491.3	2.7	3.0	-80.60	39.5	-88.0	77.0	71.6	5.40	14.268		
1,600.0	1,598.7	1,595.0	1,590.2	2.9	3.2	-79.86	44.9	-98.2	85.9	80.1	5.78	14.848		
1,700.0	1,698.5	1,694.6	1,689.2	3.1	3.5	-79.25	50.4	-108.3	94.8	88.6	6.17	15.356		
1,800.0	1,798.4	1,794.2	1,788.1	3.3	3.8	-78.75	55.9	-118.5	103.7	97.1	6.56	15.804		
1,900.0	1,898.2	1,893.8	1,887.0	3.5	4.0	-78.33	61.3	-128.7	112.6	105.7	6.95	16.203		
2,000.0	1,998.1	1,993.4	1,985.9	3.7	4.3	-77.97	66.8	-138.9	121.5	114.2	7.34	16.560		
2,100.0	2,098.0	2,093.0	2,084.9	3.9	4.5	-77.66	72.3	-149.1	130.4	122.7	7.73	16.881		
2,200.0	2,197.8	2,192.6	2,183.8	4.1	4.8	-77.39	77.7	-159.3	139.4	131.3	8.12	17.172		
2,300.0	2,297.7	2,292.2	2,282.7	4.3	5.1	-77.16	83.2	-169.5	148.3	139.8	8.51	17.435		
2,400.0	2,397.5	2,391.8	2,381.6	4.5	5.3	-76.94	88.7	-179.7	157.2	148.3	8.90	17.676		
2,500.0	2,497.4	2,491.4	2,480.6	4.7	5.6	-76.76	94.2	-189.8	166.2	156.9	9.28	17.897		
2,600.0	2,597.3	2,591.0	2,579.5	4.9	5.9	-76.59	99.6	-200.0	175.1	165.4	9.67	18.100		
2,700.0	2,697.1	2,690.6	2,678.4	5.1	6.1	-76.43	105.1	-210.2	184.0	174.0	10.06	18.287		
2,800.0	2,797.0	2,790.2	2,777.3	5.3	6.4	-76.30	110.6	-220.4	193.0	182.5	10.45	18.460		
2,900.0	2,896.8	2,889.8	2,876.3	5.5	6.6	-76.17	116.0	-230.6	201.9	191.1	10.84	18.621		
3,000.0	2,996.7	2,989.4	2,975.2	5.7	6.9	-76.05	121.5	-240.8	210.8	199.6	11.23	18.770		
3,100.0	3,096.6	3,089.0	3,074.1	5.9	7.2	-75.95	127.0	-251.0	219.8	208.2	11.62	18.910		
3,200.0	3,196.4	3,188.6	3,173.0	6.0	7.4	-75.85	132.5	-261.2	228.7	216.7	12.01	19.040		
3,300.0	3,296.3	3,288.2	3,272.0	6.2	7.7	-75.76	137.9	-271.3	237.7	225.3	12.40	19.162		
3,400.0	3,396.1	3,387.8	3,370.9	6.4	8.0	-75.68	143.4	-281.5	246.6	233.8	12.79	19.277		
3,500.0	3,496.0	3,487.4	3,469.8	6.6	8.2	-75.60	148.9	-291.7	255.5	242.4	13.18	19.385		
3,600.0	3,595.9	3,587.0	3,568.8	6.8	8.5	-75.53	154.3	-301.9	264.5	250.9	13.57	19.487		
3,700.0	3,695.7	3,686.6	3,667.7	7.0	8.8	-75.46	159.8	-312.1	273.4	259.5	13.96	19.583		
3,800.0	3,795.6	3,786.2	3,766.6	7.2	9.0	-75.39	165.3	-322.3	282.4	268.0	14.35	19.673		
3,900.0	3,895.4	3,885.8	3,865.5	7.4	9.3	-75.33	170.7	-332.5	291.3	276.6	14.74	19.759		
4,000.0	3,995.3	3,985.4	3,964.5	7.6	9.6	-75.28	176.2	-342.7	300.3	285.1	15.13	19.841		
4,100.0	4,095.2	4,085.0	4,063.4	7.8	9.8	-75.23	181.7	-352.8	309.2	293.7	15.52	19.918		
4,200.0	4,195.0	4,184.6	4,162.3	8.0	10.1	-75.18	187.2	-363.0	318.1	302.2	15.91	19.992		
4,300.0	4,294.9	4,284.1	4,261.2	8.2	10.4	-75.13	192.6	-373.2	327.1	310.8	16.30	20.062		
4,400.0	4,394.7	4,383.7	4,360.2	8.4	10.6	-75.08	198.1	-383.4	336.0	319.3	16.69	20.129		
4,500.0	4,494.6	4,483.3	4,459.1	8.6	10.9	-75.04	203.6	-393.6	345.0	327.9	17.08	20.193		
4,600.0	4,594.5	4,582.9	4,558.0	8.8	11.2	-75.00	209.0	-403.8	353.9	336.5	17.47	20.254		
4,700.0	4,694.3	4,682.5	4,656.9	9.0	11.4	-74.96	214.5	-414.0	362.9	345.0	17.87	20.312		
4,800.0	4,794.2	4,782.1	4,755.9	9.2	11.7	-74.93	220.0	-424.2	371.8	353.6	18.26	20.367		
4,900.0	4,894.0	4,881.7	4,854.8	9.4	12.0	-74.89	225.5	-434.3	380.8	362.1	18.65	20.421		
5,000.0	4,993.9	4,981.3	4,953.7	9.6	12.2	-74.86	230.9	-444.5	389.7	370.7	19.04	20.472		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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)				
5,100.0	5,093.7	5,080.9	5,052.6		9.8	12.5	-74.83	236.4	-454.7	398.7	379.2	19.43	20.521	
5,200.0	5,193.6	5,180.5	5,151.6	10.0	12.8		-74.80	241.9	-464.9	407.6	387.8	19.82	20.568	
5,300.0	5,293.5	5,280.1	5,250.5	10.2	13.0		-74.77	247.3	-475.1	416.5	396.3	20.21	20.614	
5,400.0	5,393.3	5,380.8	5,350.4	10.4	13.3		-74.74	252.9	-485.4	425.5	404.9	20.60	20.655	
5,500.0	5,493.2	5,487.6	5,456.7	10.6	13.5		-74.79	258.1	-495.2	433.3	412.3	21.00	20.634	
5,600.0	5,593.0	5,594.6	5,563.3	10.8	13.8		-74.96	262.4	-503.2	439.6	418.2	21.41	20.534	
5,700.0	5,692.9	5,701.8	5,670.3	11.0	14.0		-75.24	265.8	-509.5	444.1	422.3	21.81	20.360	
5,800.0	5,792.8	5,809.1	5,777.5	11.2	14.2		-75.56	268.3	-514.1	447.3	425.1	22.20	20.144	
5,900.0	5,892.8	5,916.5	5,884.8	11.3	14.3		-75.75	269.8	-516.9	449.2	426.6	22.56	19.907	
6,000.0	5,992.8	6,024.0	5,992.2	11.5	14.5		-75.82	270.3	-517.9	449.9	427.0	22.90	19.648	
6,100.0	6,092.8	6,124.5	6,092.8	11.7	14.6		-89.96	270.3	-517.9	449.9	426.7	23.22	19.378	
6,200.0	6,192.8	6,224.5	6,192.8	11.8	14.7		-89.96	270.3	-517.9	449.9	426.4	23.54	19.114	
6,300.0	6,292.8	6,324.5	6,292.8	12.0	14.9		-89.96	270.3	-517.9	449.9	426.0	23.86	18.858	
6,363.2	6,355.9	6,387.7	6,355.9	12.1	14.9		90.09	270.3	-517.9	449.9	425.8	24.06	18.702	
6,400.0	6,392.8	6,424.5	6,392.8	12.1	15.0		90.05	270.3	-517.9	449.9	425.7	24.18	18.609	
6,416.3	6,409.0	6,440.8	6,409.0	12.1	15.0		90.12	270.3	-517.9	449.9	425.7	24.21	18.584	
6,500.0	6,492.1	6,523.8	6,492.1	12.2	15.1		91.37	270.3	-517.9	450.0	425.7	24.31	18.512	
6,600.0	6,588.0	6,619.8	6,588.0	12.2	15.2		94.58	270.3	-517.9	451.6	427.3	24.23	18.634	
6,700.0	6,677.8	6,721.4	6,689.3	12.1	15.3		98.98	263.8	-517.9	456.4	432.4	24.01	19.012	
6,800.0	6,758.5	6,832.8	6,797.2	12.0	15.3		103.31	236.4	-517.9	464.2	440.4	23.74	19.550	
6,900.0	6,827.8	6,954.7	6,906.6	12.1	15.3		107.36	183.3	-517.9	473.9	450.4	23.54	20.135	
7,000.0	6,883.5	7,088.5	7,010.8	12.3	15.2		110.95	99.9	-517.9	484.2	460.7	23.51	20.590	
7,100.0	6,924.0	7,234.5	7,099.1	12.6	15.4		113.80	-15.9	-517.9	493.3	469.4	23.84	20.692	
7,200.0	6,948.1	7,390.8	7,158.0	13.2	15.9		115.62	-160.1	-517.9	499.4	474.7	24.71	20.210	
7,300.0	6,955.0	7,545.8	7,176.0	14.0	16.9		116.16	-313.7	-517.9	501.3	475.1	26.19	19.138	
7,400.0	6,955.0	7,645.8	7,176.0	15.0	17.7		116.16	-413.7	-517.9	501.3	473.3	27.95	17.937	
7,500.0	6,955.0	7,745.8	7,176.0	16.1	18.6		116.16	-513.7	-517.9	501.3	471.3	29.92	16.754	
7,600.0	6,955.0	7,845.8	7,176.0	17.3	19.7		116.16	-613.7	-517.9	501.3	469.2	32.08	15.625	
7,700.0	6,955.0	7,945.8	7,176.0	18.6	20.8		116.16	-713.7	-517.9	501.3	466.9	34.40	14.573	
7,800.0	6,955.0	8,045.8	7,176.0	20.0	22.1		116.16	-813.7	-517.9	501.3	464.4	36.84	13.607	
7,900.0	6,955.0	8,145.8	7,176.0	21.4	23.4		116.16	-913.7	-517.9	501.3	461.9	39.38	12.729	
8,000.0	6,955.0	8,245.8	7,176.0	22.9	24.7		116.16	-1,013.7	-517.9	501.3	459.2	42.00	11.933	
8,100.0	6,955.0	8,345.8	7,176.0	24.4	26.1		116.16	-1,113.7	-517.9	501.3	456.6	44.70	11.214	
8,200.0	6,955.0	8,445.8	7,176.0	25.9	27.6		116.16	-1,213.7	-517.9	501.3	453.8	47.45	10.564	
8,300.0	6,955.0	8,545.8	7,176.0	27.5	29.0		116.16	-1,313.7	-517.9	501.3	451.0	50.25	9.976	
8,400.0	6,955.0	8,645.8	7,176.0	29.1	30.6		116.16	-1,413.7	-517.9	501.3	448.2	53.08	9.443	
8,500.0	6,955.0	8,745.8	7,176.0	30.7	32.1		116.16	-1,513.7	-517.9	501.3	445.3	55.96	8.958	
8,600.0	6,955.0	8,845.8	7,176.0	32.3	33.6		116.16	-1,613.7	-517.9	501.3	442.4	58.86	8.517	
8,700.0	6,955.0	8,945.8	7,176.0	33.9	35.2		116.16	-1,713.7	-517.9	501.3	439.5	61.78	8.113	
8,800.0	6,955.0	9,045.8	7,176.0	35.6	36.8		116.16	-1,813.7	-517.9	501.3	436.5	64.73	7.744	
8,900.0	6,955.0	9,145.8	7,176.0	37.2	38.4		116.16	-1,913.7	-517.9	501.3	433.6	67.69	7.405	
9,000.0	6,955.0	9,245.8	7,176.0	38.9	40.0		116.16	-2,013.7	-517.9	501.3	430.6	70.67	7.092	
9,100.0	6,955.0	9,345.8	7,176.0	40.6	41.6		116.16	-2,113.7	-517.9	501.3	427.6	73.67	6.804	
9,200.0	6,955.0	9,445.8	7,176.0	42.2	43.3		116.16	-2,213.7	-517.9	501.3	424.6	76.68	6.537	
9,300.0	6,955.0	9,545.8	7,176.0	43.9	44.9		116.16	-2,313.7	-517.9	501.3	421.6	79.70	6.289	
9,400.0	6,955.0	9,645.8	7,176.0	45.6	46.6		116.16	-2,413.7	-517.9	501.3	418.5	82.73	6.059	
9,500.0	6,955.0	9,745.8	7,176.0	47.3	48.2		116.16	-2,513.7	-517.9	501.3	415.5	85.77	5.844	
9,600.0	6,955.0	9,845.8	7,176.0	49.0	49.9		116.16	-2,613.7	-517.9	501.3	412.4	88.81	5.644	
9,700.0	6,955.0	9,945.8	7,176.0	50.7	51.6		116.16	-2,713.7	-517.9	501.3	409.4	91.87	5.456	
9,800.0	6,955.0	10,045.8	7,176.0	52.4	53.3		116.16	-2,813.7	-517.9	501.3	406.3	94.93	5.280	
9,900.0	6,955.0	10,145.8	7,176.0	54.1	54.9		116.16	-2,913.7	-517.9	501.3	403.3	97.99	5.115	
10,000.0	6,955.0	10,245.8	7,176.0	55.8	56.6		116.16	-3,013.7	-517.9	501.3	400.2	101.07	4.960	

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,100.0	6,955.0	10,345.8	7,176.0	57.5	58.3	116.16	-3,113.7	-517.9	501.3	397.1	104.14	4.813		
10,200.0	6,955.0	10,445.8	7,176.0	59.3	60.0	116.16	-3,213.7	-517.9	501.3	394.0	107.22	4.675		
10,300.0	6,955.0	10,545.8	7,176.0	61.0	61.7	116.16	-3,313.7	-517.9	501.3	390.9	110.31	4.544		
10,400.0	6,955.0	10,645.8	7,176.0	62.7	63.4	116.16	-3,413.7	-517.9	501.3	387.9	113.40	4.420		
10,500.0	6,955.0	10,745.8	7,176.0	64.4	65.1	116.16	-3,513.7	-517.9	501.3	384.8	116.49	4.303		
10,600.0	6,955.0	10,845.8	7,176.0	66.1	66.8	116.16	-3,613.7	-517.9	501.3	381.7	119.59	4.192		
10,700.0	6,955.0	10,945.8	7,176.0	67.9	68.5	116.16	-3,713.7	-517.9	501.3	378.6	122.68	4.086		
10,800.0	6,955.0	11,045.8	7,176.0	69.6	70.2	116.16	-3,813.7	-517.9	501.3	375.5	125.78	3.985		
10,900.0	6,955.0	11,145.8	7,176.0	71.3	72.0	116.16	-3,913.7	-517.9	501.3	372.4	128.89	3.889		
11,000.0	6,955.0	11,245.8	7,176.0	73.0	73.7	116.16	-4,013.7	-517.9	501.3	369.3	131.99	3.798		
11,100.0	6,955.0	11,345.8	7,176.0	74.8	75.4	116.16	-4,113.7	-517.9	501.3	366.1	135.10	3.710		
11,200.0	6,955.0	11,445.8	7,176.0	76.5	77.1	116.16	-4,213.7	-517.9	501.2	363.0	138.21	3.627		
11,300.0	6,955.0	11,545.8	7,176.0	78.2	78.8	116.16	-4,313.7	-517.9	501.2	359.9	141.33	3.547		
11,400.0	6,955.0	11,645.8	7,176.0	80.0	80.6	116.16	-4,413.7	-517.9	501.2	356.8	144.44	3.470		
11,500.0	6,955.0	11,745.8	7,176.0	81.7	82.3	116.16	-4,513.7	-517.9	501.2	353.7	147.56	3.397		
11,530.8	6,955.0	11,776.6	7,176.0	82.2	82.8	116.16	-4,544.5	-517.9	501.2	352.7	148.52	3.375		
11,540.4	6,955.0	11,783.1	7,176.0	82.4	82.9	116.16	-4,550.9	-517.9	501.3	352.5	148.77	3.369 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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				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	-87.62	0.3	-7.6	7.6					
100.0	100.0	100.0	100.0	0.1	0.1	-87.62	0.3	-7.6	7.6	7.3	0.24	30.937		
200.0	200.0	200.0	200.0	0.3	0.3	-87.62	0.3	-7.6	7.6	7.0	0.59	12.739		
300.0	300.0	300.0	300.0	0.5	0.5	-87.62	0.3	-7.6	7.6	6.6	0.94	8.021		
400.0	400.0	400.0	400.0	0.6	0.6	-87.62	0.3	-7.6	7.6	6.3	1.29	5.853		
500.0	500.0	500.0	500.0	0.8	0.8	-75.08	0.3	-7.6	7.5	5.9	1.64	4.572		
531.1	531.1	531.1	531.1	0.9	0.9	-77.21	0.4	-7.6	7.5	5.7	1.75	4.266 CC		
600.0	600.0	599.9	599.9	1.0	1.0	-82.54	1.0	-8.1	7.6	5.7	1.99	3.839 ES		
700.0	699.9	699.8	699.8	1.2	1.2	-90.52	3.1	-9.6	8.6	6.2	2.35	3.653		
800.0	799.8	799.8	799.6	1.4	1.4	-96.11	6.6	-12.2	10.3	7.6	2.72	3.792		
900.0	899.7	899.7	899.4	1.6	1.5	-93.66	11.5	-15.8	12.6	9.5	3.09	4.065		
1,000.0	999.5	999.7	999.1	1.7	1.7	-90.19	16.7	-19.7	15.1	11.6	3.48	4.331		
1,100.0	1,099.4	1,099.6	1,098.9	1.9	1.9	-87.70	22.0	-23.6	17.6	13.7	3.86	4.551		
1,200.0	1,199.2	1,199.6	1,198.6	2.1	2.1	-85.84	27.2	-27.5	20.1	15.9	4.25	4.736		
1,300.0	1,299.1	1,299.6	1,298.4	2.3	2.3	-84.39	32.5	-31.4	22.7	18.0	4.63	4.892		
1,400.0	1,398.9	1,399.5	1,398.1	2.5	2.5	-83.24	37.7	-35.3	25.2	20.2	5.02	5.026		
1,500.0	1,498.8	1,499.5	1,497.9	2.7	2.7	-82.31	43.0	-39.2	27.8	22.4	5.41	5.141		
1,600.0	1,598.7	1,599.5	1,597.6	2.9	3.0	-81.53	48.3	-43.1	30.4	24.6	5.80	5.241		
1,700.0	1,698.5	1,699.4	1,697.4	3.1	3.2	-80.87	53.5	-47.0	33.0	26.8	6.19	5.330		
1,800.0	1,798.4	1,799.4	1,797.1	3.3	3.4	-80.31	58.8	-50.9	35.6	29.0	6.58	5.408		
1,900.0	1,898.2	1,899.4	1,896.9	3.5	3.6	-79.83	64.0	-54.8	38.2	31.2	6.97	5.478		
2,000.0	1,998.1	1,999.3	1,996.7	3.7	3.8	-79.40	69.3	-58.7	40.7	33.4	7.36	5.540		
2,100.0	2,098.0	2,099.3	2,096.4	3.9	4.0	-79.03	74.5	-62.6	43.3	35.6	7.75	5.597		
2,200.0	2,197.8	2,199.3	2,196.2	4.1	4.2	-78.70	79.8	-66.5	45.9	37.8	8.14	5.648		
2,300.0	2,297.7	2,299.2	2,295.9	4.3	4.4	-78.41	85.0	-70.4	48.5	40.0	8.53	5.694		
2,400.0	2,397.5	2,399.2	2,395.7	4.5	4.6	-78.14	90.3	-74.3	51.1	42.2	8.92	5.737		
2,500.0	2,497.4	2,499.2	2,495.4	4.7	4.8	-77.90	95.6	-78.2	53.7	44.4	9.31	5.776		
2,600.0	2,597.3	2,599.1	2,595.2	4.9	5.0	-77.68	100.8	-82.1	56.4	46.7	9.70	5.811		
2,700.0	2,697.1	2,699.1	2,694.9	5.1	5.2	-77.49	106.1	-86.0	59.0	48.9	10.09	5.844		
2,800.0	2,797.0	2,799.1	2,794.7	5.3	5.4	-77.30	111.3	-89.9	61.6	51.1	10.48	5.875		
2,900.0	2,896.8	2,899.0	2,894.4	5.5	5.6	-77.14	116.6	-93.8	64.2	53.3	10.87	5.904		
3,000.0	2,996.7	2,999.0	2,994.2	5.7	5.8	-76.98	121.8	-97.7	66.8	55.5	11.26	5.930		
3,100.0	3,096.6	3,099.0	3,093.9	5.9	6.0	-76.84	127.1	-101.6	69.4	57.7	11.65	5.955		
3,200.0	3,196.4	3,198.9	3,193.7	6.0	6.3	-76.71	132.3	-105.5	72.0	59.9	12.04	5.978		
3,300.0	3,296.3	3,298.9	3,293.4	6.2	6.5	-76.59	137.6	-109.5	74.6	62.2	12.43	6.000		
3,400.0	3,396.1	3,398.9	3,393.2	6.4	6.7	-76.47	142.9	-113.4	77.2	64.4	12.82	6.020		
3,500.0	3,496.0	3,498.8	3,492.9	6.6	6.9	-76.37	148.1	-117.3	79.8	66.6	13.21	6.039		
3,600.0	3,595.9	3,598.8	3,592.7	6.8	7.1	-76.27	153.4	-121.2	82.4	68.8	13.60	6.058		
3,700.0	3,695.7	3,698.8	3,692.4	7.0	7.3	-76.17	158.6	-125.1	85.0	71.0	14.00	6.075		
3,800.0	3,795.6	3,798.7	3,792.2	7.2	7.5	-76.09	163.9	-129.0	87.6	73.2	14.39	6.091		
3,900.0	3,895.4	3,898.7	3,891.9	7.4	7.7	-76.00	169.1	-132.9	90.2	75.5	14.78	6.106		
4,000.0	3,995.3	3,998.7	3,991.7	7.6	7.9	-75.92	174.4	-136.8	92.8	77.7	15.17	6.121		
4,100.0	4,095.2	4,098.6	4,091.4	7.8	8.1	-75.85	179.6	-140.7	95.5	79.9	15.56	6.134		
4,200.0	4,195.0	4,198.6	4,191.2	8.0	8.3	-75.78	184.9	-144.6	98.1	82.1	15.95	6.148		
4,300.0	4,294.9	4,298.5	4,290.9	8.2	8.5	-75.71	190.2	-148.5	100.7	84.3	16.34	6.160		
4,400.0	4,394.7	4,398.5	4,390.7	8.4	8.8	-75.65	195.4	-152.4	103.3	86.5	16.73	6.172		
4,500.0	4,494.6	4,498.5	4,490.4	8.6	9.0	-75.59	200.7	-156.3	105.9	88.8	17.12	6.183		
4,600.0	4,594.5	4,598.4	4,590.2	8.8	9.2	-75.53	205.9	-160.2	108.5	91.0	17.52	6.194		
4,700.0	4,694.3	4,698.4	4,689.9	9.0	9.4	-75.48	211.2	-164.1	111.1	93.2	17.91	6.205		
4,800.0	4,794.2	4,798.4	4,789.7	9.2	9.6	-75.43	216.4	-168.0	113.7	95.4	18.30	6.215		
4,900.0	4,894.0	4,898.3	4,889.4	9.4	9.8	-75.38	221.7	-171.9	116.3	97.6	18.69	6.224		
5,000.0	4,993.9	4,998.3	4,989.2	9.6	10.0	-75.33	226.9	-175.8	118.9	99.9	19.08	6.233		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		
5,100.0	5,093.7	5,098.3	5,088.9		9.8	10.2	-75.28	232.2	-179.7	121.5	102.1	19.47	6.242	
5,200.0	5,193.6	5,198.2	5,188.7	10.0	10.4	-75.24	237.5	-183.6	124.2	104.3	19.86	6.251		
5,300.0	5,293.5	5,298.2	5,288.4	10.2	10.6	-75.20	242.7	-187.5	126.8	106.5	20.25	6.259		
5,400.0	5,393.3	5,398.2	5,388.2	10.4	10.8	-75.16	248.0	-191.4	129.4	108.7	20.64	6.267		
5,500.0	5,493.2	5,498.1	5,488.0	10.6	11.0	-75.12	253.2	-195.3	132.0	110.9	21.04	6.274		
5,600.0	5,593.0	5,598.1	5,587.7	10.8	11.3	-75.08	258.5	-199.2	134.6	113.2	21.43	6.281		
5,700.0	5,692.9	5,699.0	5,688.4	11.0	11.5	-75.16	263.5	-202.9	137.0	115.2	21.82	6.278		
5,800.0	5,792.8	5,800.5	5,789.7	11.2	11.6	-75.48	267.2	-205.7	138.6	116.4	22.20	6.244		
5,900.0	5,892.8	5,901.9	5,891.2	11.3	11.8	-75.67	269.5	-207.3	139.6	117.0	22.55	6.191		
6,000.0	5,992.8	6,003.4	5,992.7	11.5	12.0	-75.74	270.3	-208.0	140.0	117.1	22.87	6.120		
6,100.0	6,092.8	6,103.5	6,092.8	11.7	12.1	-89.87	270.3	-208.0	140.0	116.8	23.19	6.036		
6,200.0	6,192.8	6,203.5	6,192.8	11.8	12.3	-89.87	270.3	-208.0	140.0	116.4	23.51	5.954		
6,300.0	6,292.8	6,303.5	6,292.8	12.0	12.4	-89.87	270.3	-208.0	140.0	116.1	23.83	5.874		
6,363.2	6,356.0	6,366.7	6,356.0	12.1	12.5	90.28	270.3	-208.0	140.0	115.9	24.02	5.825		
6,400.0	6,392.8	6,403.5	6,392.8	12.1	12.6	90.17	270.3	-208.0	140.0	115.8	24.15	5.796		
6,500.0	6,492.1	6,503.1	6,492.3	12.2	12.7	94.29	270.0	-208.0	140.4	116.1	24.23	5.794		
6,600.0	6,588.0	6,604.7	6,593.1	12.2	12.8	100.50	257.6	-208.2	142.6	118.6	24.03	5.935		
6,700.0	6,677.8	6,709.3	6,692.8	12.1	12.8	106.21	226.5	-208.7	146.7	123.0	23.71	6.189		
6,800.0	6,758.5	6,817.0	6,787.8	12.0	12.7	111.16	176.1	-209.6	152.1	128.8	23.34	6.517		
6,900.0	6,827.8	6,927.8	6,873.9	12.1	12.6	115.17	106.7	-210.8	158.1	135.1	23.04	6.862		
7,000.0	6,883.5	7,041.4	6,946.7	12.3	12.8	118.18	19.8	-212.4	164.1	141.1	22.95	7.147		
7,100.0	6,924.0	7,157.4	7,001.9	12.6	13.1	120.18	-82.1	-214.2	169.3	146.0	23.22	7.289		
7,200.0	6,948.1	7,275.2	7,035.7	13.2	13.7	121.17	-194.6	-216.1	173.2	149.3	23.98	7.224		
7,300.0	6,955.0	7,392.3	7,046.0	14.0	14.6	121.21	-311.0	-218.2	175.6	150.4	25.28	6.947		
7,400.0	6,955.0	7,492.3	7,046.0	15.0	15.5	120.91	-411.0	-220.0	177.1	150.1	27.00	6.560		
7,500.0	6,955.0	7,592.2	7,046.0	16.1	16.6	120.62	-511.0	-221.7	178.7	149.7	28.95	6.172		
7,600.0	6,955.0	7,692.2	7,046.0	17.3	17.8	120.34	-610.9	-223.5	180.2	149.1	31.08	5.796		
7,700.0	6,955.0	7,792.2	7,046.0	18.6	19.0	120.06	-710.9	-225.2	181.7	148.3	33.38	5.443		
7,800.0	6,955.0	7,892.2	7,046.0	20.0	20.4	119.78	-810.9	-227.0	183.2	147.4	35.81	5.117		
7,900.0	6,955.0	7,992.2	7,046.0	21.4	21.8	119.51	-910.8	-228.8	184.8	146.4	38.34	4.819		
8,000.0	6,955.0	8,092.2	7,046.0	22.9	23.2	119.24	-1,010.8	-230.5	186.3	145.3	40.97	4.547		
8,100.0	6,955.0	8,192.1	7,046.0	24.4	24.7	118.98	-1,110.8	-232.3	187.8	144.2	43.68	4.301		
8,200.0	6,955.0	8,292.1	7,046.0	25.9	26.2	118.72	-1,210.7	-234.1	189.4	142.9	46.45	4.077		
8,300.0	6,955.0	8,392.1	7,046.0	27.5	27.8	118.47	-1,310.7	-235.8	190.9	141.6	49.28	3.874		
8,400.0	6,955.0	8,492.1	7,046.0	29.1	29.4	118.22	-1,410.7	-237.6	192.5	140.3	52.16	3.690		
8,500.0	6,955.0	8,592.1	7,046.0	30.7	30.9	117.97	-1,510.7	-239.3	194.0	138.9	55.09	3.522		
8,600.0	6,955.0	8,692.1	7,046.0	32.3	32.6	117.73	-1,610.6	-241.1	195.6	137.5	58.05	3.369		
8,700.0	6,955.0	8,792.0	7,046.0	33.9	34.2	117.49	-1,710.6	-242.9	197.2	136.1	61.05	3.229		
8,800.0	6,955.0	8,892.0	7,046.0	35.6	35.8	117.26	-1,810.6	-244.6	198.7	134.6	64.08	3.101		
8,900.0	6,955.0	8,992.0	7,046.0	37.2	37.5	117.03	-1,910.5	-246.4	200.3	133.1	67.14	2.983		
9,000.0	6,955.0	9,092.0	7,046.0	38.9	39.1	116.80	-2,010.5	-248.1	201.9	131.6	70.22	2.874		
9,100.0	6,955.0	9,192.0	7,046.0	40.6	40.8	116.58	-2,110.5	-249.9	203.4	130.1	73.33	2.774		
9,200.0	6,955.0	9,292.0	7,046.0	42.2	42.4	116.36	-2,210.4	-251.7	205.0	128.5	76.46	2.681		
9,300.0	6,955.0	9,392.0	7,046.0	43.9	44.1	116.14	-2,310.4	-253.4	206.6	127.0	79.61	2.595		
9,400.0	6,955.0	9,491.9	7,046.0	45.6	45.8	115.92	-2,410.4	-255.2	208.2	125.4	82.78	2.515		
9,500.0	6,955.0	9,591.9	7,046.0	47.3	47.5	115.71	-2,510.3	-257.0	209.8	123.8	85.96	2.440		
9,600.0	6,955.0	9,691.9	7,046.0	49.0	49.2	115.51	-2,610.3	-258.7	211.3	122.2	89.16	2.371		
9,700.0	6,955.0	9,791.9	7,046.0	50.7	50.9	115.30	-2,710.3	-260.5	212.9	120.6	92.37	2.305		
9,800.0	6,955.0	9,891.9	7,046.0	52.4	52.6	115.10	-2,810.3	-262.2	214.5	118.9	95.60	2.244		
9,900.0	6,955.0	9,991.9	7,046.0	54.1	54.3	114.90	-2,910.2	-264.0	216.1	117.3	98.84	2.187		
10,000.0	6,955.0	10,091.8	7,046.0	55.8	56.0	114.71	-3,010.2	-265.8	217.7	115.6	102.09	2.133		
10,100.0	6,955.0	10,191.8	7,046.0	57.5	57.7	114.52	-3,110.2	-267.5	219.3	114.0	105.35	2.082		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		
10,200.0	6,955.0	10,291.8	7,046.0	59.3	59.4	114.33	-3,210.1	-269.3	220.9	112.3	108.63	2.034		
10,300.0	6,955.0	10,391.8	7,046.0	61.0	61.1	114.14	-3,310.1	-271.1	222.5	110.6	111.91	1.989		
10,400.0	6,955.0	10,491.8	7,046.0	62.7	62.8	113.95	-3,410.1	-272.8	224.2	109.0	115.21	1.946		
10,500.0	6,955.0	10,591.8	7,046.0	64.4	64.6	113.77	-3,510.0	-274.6	225.8	107.3	118.51	1.905		
10,600.0	6,955.0	10,691.8	7,046.0	66.1	66.3	113.59	-3,610.0	-276.3	227.4	105.6	121.82	1.867		
10,700.0	6,955.0	10,791.7	7,046.0	67.9	68.0	113.42	-3,710.0	-278.1	229.0	103.9	125.14	1.830		
10,800.0	6,955.0	10,891.7	7,046.0	69.6	69.7	113.24	-3,809.9	-279.9	230.6	102.1	128.47	1.795		
10,900.0	6,955.0	10,991.7	7,046.0	71.3	71.5	113.07	-3,909.9	-281.6	232.2	100.4	131.80	1.762		
11,000.0	6,955.0	11,091.7	7,046.0	73.0	73.2	112.90	-4,009.9	-283.4	233.9	98.7	135.15	1.730		
11,100.0	6,955.0	11,191.7	7,046.0	74.8	74.9	112.74	-4,109.8	-285.1	235.5	97.0	138.50	1.700		
11,200.0	6,955.0	11,291.7	7,046.0	76.5	76.6	112.57	-4,209.8	-286.9	237.1	95.3	141.85	1.672		
11,300.0	6,955.0	11,391.6	7,046.0	78.2	78.4	112.41	-4,309.8	-288.7	238.7	93.5	145.21	1.644		
11,400.0	6,955.0	11,491.6	7,046.0	80.0	80.1	112.25	-4,409.8	-290.4	240.4	91.8	148.58	1.618		
11,500.0	6,955.0	11,591.6	7,046.0	81.7	81.8	112.09	-4,509.7	-292.2	242.0	90.0	151.95	1.593		
11,540.4	6,955.0	11,632.0	7,046.0	82.4	82.5	112.03	-4,550.1	-292.9	242.7	89.3	153.32	1.583 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	1.0	1.0	0.0	0.0	90.10	0.0	7.6	7.6					
100.0	100.0	101.0	101.0	0.1	0.1	90.10	0.0	7.6	7.6	7.3	0.25	30.691		
200.0	200.0	201.0	201.0	0.3	0.3	90.10	0.0	7.6	7.6	7.0	0.60	12.691		
300.0	300.0	301.0	301.0	0.5	0.5	90.10	0.0	7.6	7.6	6.6	0.94	7.999		
366.3	366.3	367.3	367.3	0.6	0.6	90.10	0.0	7.6	7.6	6.4	1.18	6.424 CC		
400.0	400.0	401.0	401.0	0.6	0.6	90.09	0.0	7.6	7.6	6.3	1.29	5.840 ES		
500.0	500.0	500.9	500.9	0.8	0.8	100.19	0.8	8.0	8.1	6.4	1.64	4.905		
600.0	600.0	600.8	600.8	1.0	1.0	97.30	3.1	9.3	9.8	7.8	2.00	4.916		
700.0	699.9	700.7	700.5	1.2	1.2	96.89	6.9	11.4	12.8	10.5	2.36	5.439		
800.0	799.8	800.5	800.2	1.4	1.4	98.14	11.9	14.2	16.8	14.1	2.73	6.170		
900.0	899.7	900.4	900.0	1.6	1.6	99.37	17.0	17.0	20.9	17.8	3.10	6.748		
1,000.0	999.5	1,000.4	999.7	1.7	1.8	100.19	22.1	19.8	25.1	21.6	3.48	7.195		
1,100.0	1,099.4	1,100.3	1,099.5	1.9	2.0	100.78	27.3	22.7	29.2	25.3	3.86	7.551		
1,200.0	1,199.2	1,200.2	1,199.2	2.1	2.2	101.23	32.4	25.5	33.3	29.1	4.25	7.840		
1,300.0	1,299.1	1,300.1	1,298.9	2.3	2.4	101.57	37.5	28.3	37.4	32.8	4.63	8.078		
1,400.0	1,398.9	1,400.0	1,398.7	2.5	2.6	101.85	42.6	31.2	41.6	36.5	5.02	8.279		
1,500.0	1,498.8	1,499.9	1,498.4	2.7	2.8	102.08	47.7	34.0	45.7	40.3	5.41	8.450		
1,600.0	1,598.7	1,599.8	1,598.2	2.9	3.0	102.27	52.8	36.9	49.8	44.0	5.79	8.597		
1,700.0	1,698.5	1,699.8	1,697.9	3.1	3.2	102.43	57.9	39.7	53.9	47.8	6.18	8.725		
1,800.0	1,798.4	1,799.7	1,797.7	3.3	3.4	102.56	63.1	42.5	58.1	51.5	6.57	8.837		
1,900.0	1,898.2	1,899.6	1,897.4	3.5	3.6	102.68	68.2	45.4	62.2	55.2	6.96	8.936		
2,000.0	1,998.1	1,999.5	1,997.1	3.7	3.8	102.79	73.3	48.2	66.3	59.0	7.35	9.025		
2,100.0	2,098.0	2,099.4	2,096.9	3.9	4.0	102.88	78.4	51.0	70.5	62.7	7.74	9.104		
2,200.0	2,197.8	2,199.3	2,196.6	4.1	4.2	102.96	83.5	53.9	74.6	66.5	8.13	9.175		
2,300.0	2,297.7	2,299.3	2,296.4	4.3	4.4	103.04	88.6	56.7	78.7	70.2	8.52	9.240		
2,400.0	2,397.5	2,399.2	2,396.1	4.5	4.6	103.10	93.8	59.5	82.9	74.0	8.91	9.299		
2,500.0	2,497.4	2,499.1	2,495.9	4.7	4.8	103.16	98.9	62.4	87.0	77.7	9.30	9.353		
2,600.0	2,597.3	2,599.0	2,595.6	4.9	5.0	103.22	104.0	65.2	91.1	81.4	9.69	9.402		
2,700.0	2,697.1	2,698.9	2,695.3	5.1	5.2	103.27	109.1	68.1	95.3	85.2	10.08	9.447		
2,800.0	2,797.0	2,798.8	2,795.1	5.3	5.4	103.31	114.2	70.9	99.4	88.9	10.47	9.489		
2,900.0	2,896.8	2,898.7	2,894.8	5.5	5.6	103.35	119.3	73.7	103.5	92.7	10.87	9.528		
3,000.0	2,996.7	2,998.7	2,994.6	5.7	5.8	103.39	124.5	76.6	107.7	96.4	11.26	9.564		
3,100.0	3,096.6	3,098.6	3,094.3	5.9	6.0	103.43	129.6	79.4	111.8	100.1	11.65	9.598		
3,200.0	3,196.4	3,198.5	3,194.1	6.0	6.2	103.46	134.7	82.2	115.9	103.9	12.04	9.629		
3,300.0	3,296.3	3,298.4	3,293.8	6.2	6.4	103.49	139.8	85.1	120.0	107.6	12.43	9.658		
3,400.0	3,396.1	3,398.3	3,393.6	6.4	6.6	103.52	144.9	87.9	124.2	111.4	12.82	9.686		
3,500.0	3,496.0	3,498.2	3,493.3	6.6	6.8	103.55	150.0	90.7	128.3	115.1	13.21	9.712		
3,600.0	3,595.9	3,598.1	3,593.0	6.8	7.0	103.57	155.1	93.6	132.4	118.8	13.60	9.736		
3,700.0	3,695.7	3,698.1	3,692.8	7.0	7.2	103.60	160.3	96.4	136.6	122.6	14.00	9.759		
3,800.0	3,795.6	3,798.0	3,792.5	7.2	7.4	103.62	165.4	99.3	140.7	126.3	14.39	9.781		
3,900.0	3,895.4	3,897.9	3,892.3	7.4	7.6	103.64	170.5	102.1	144.8	130.1	14.78	9.801		
4,000.0	3,995.3	3,997.8	3,992.0	7.6	7.8	103.66	175.6	104.9	149.0	133.8	15.17	9.821		
4,100.0	4,095.2	4,097.7	4,091.8	7.8	8.0	103.68	180.7	107.8	153.1	137.5	15.56	9.839		
4,200.0	4,195.0	4,197.6	4,191.5	8.0	8.2	103.70	185.8	110.6	157.2	141.3	15.95	9.856		
4,300.0	4,294.9	4,297.5	4,291.2	8.2	8.4	103.72	191.0	113.4	161.4	145.0	16.34	9.873		
4,400.0	4,394.7	4,397.5	4,391.0	8.4	8.6	103.73	196.1	116.3	165.5	148.8	16.74	9.889		
4,500.0	4,494.6	4,497.4	4,490.7	8.6	8.8	103.75	201.2	119.1	169.6	152.5	17.13	9.904		
4,600.0	4,594.5	4,597.3	4,590.5	8.8	9.0	103.76	206.3	121.9	173.8	156.2	17.52	9.919		
4,700.0	4,694.3	4,697.2	4,690.2	9.0	9.2	103.78	211.4	124.8	177.9	160.0	17.91	9.932		
4,800.0	4,794.2	4,797.1	4,790.0	9.2	9.4	103.79	216.5	127.6	182.0	163.7	18.30	9.946		
4,900.0	4,894.0	4,897.0	4,889.7	9.4	9.6	103.80	221.7	130.5	186.2	167.5	18.69	9.958		
5,000.0	4,993.9	4,996.9	4,989.4	9.6	9.8	103.81	226.8	133.3	190.3	171.2	19.09	9.970		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		
5,100.0	5,093.7	5,096.9	5,089.2	9.8	10.0	103.83	231.9	136.1	194.4	175.0	19.48	9.982		
5,200.0	5,193.6	5,196.8	5,188.9	10.0	10.2	103.84	237.0	139.0	198.6	178.7	19.87	9.993		
5,300.0	5,293.5	5,296.7	5,288.7	10.2	10.4	103.85	242.1	141.8	202.7	182.4	20.26	10.004		
5,400.0	5,393.3	5,396.6	5,388.4	10.4	10.6	103.86	247.2	144.6	206.8	186.2	20.65	10.014		
5,500.0	5,493.2	5,496.5	5,488.2	10.6	10.8	103.87	252.3	147.5	211.0	189.9	21.05	10.024		
5,600.0	5,593.0	5,596.4	5,587.9	10.8	11.0	103.88	257.5	150.3	215.1	193.7	21.44	10.034		
5,700.0	5,692.9	5,696.8	5,688.1	11.0	11.2	103.90	262.6	153.1	219.2	197.4	21.83	10.042		
5,800.0	5,792.8	5,798.6	5,789.8	11.2	11.4	104.03	266.6	155.4	222.5	200.3	22.20	10.022		
5,900.0	5,892.8	5,900.6	5,891.7	11.3	11.6	104.11	269.1	156.8	224.5	202.0	22.55	9.957		
6,000.0	5,992.8	6,002.5	5,993.6	11.5	11.7	104.14	270.0	157.3	225.3	202.4	22.87	9.849		
6,100.0	6,092.8	6,102.6	6,093.8	11.7	11.9	90.00	270.0	157.3	225.3	202.1	23.19	9.714		
6,200.0	6,192.8	6,202.6	6,193.8	11.8	12.0	90.00	270.0	157.3	225.3	201.7	23.51	9.582		
6,300.0	6,292.8	6,302.6	6,293.8	12.0	12.2	90.00	270.0	157.3	225.3	201.4	23.83	9.453		
6,365.1	6,357.8	6,367.7	6,358.8	12.1	12.3	-90.10	270.0	157.3	225.3	201.2	24.04	9.371		
6,400.0	6,392.8	6,402.6	6,393.8	12.1	12.4	-90.02	270.0	157.3	225.3	201.1	24.15	9.328		
6,419.5	6,412.3	6,422.1	6,413.3	12.1	12.4	-90.20	270.0	157.3	225.3	201.1	24.19	9.312		
6,500.0	6,492.1	6,501.9	6,493.1	12.2	12.5	-92.66	270.0	157.3	225.5	201.2	24.34	9.264		
6,600.0	6,588.0	6,597.9	6,589.0	12.2	12.7	-99.02	270.0	157.3	228.5	204.1	24.35	9.384		
6,700.0	6,677.8	6,699.5	6,690.3	12.1	12.8	-107.44	263.5	157.3	237.9	213.8	24.06	9.886		
6,800.0	6,758.5	6,810.8	6,798.0	12.0	12.8	-115.23	236.1	157.3	252.4	228.9	23.48	10.748		
6,900.0	6,827.8	6,932.6	6,907.4	12.1	12.7	-121.93	183.1	157.3	269.8	247.1	22.73	11.871		
7,000.0	6,883.5	7,066.3	7,011.6	12.3	12.6	-127.36	99.8	157.3	287.5	265.5	22.02	13.058		
7,100.0	6,924.0	7,212.2	7,099.9	12.6	12.8	-131.35	-15.8	157.3	302.6	280.9	21.64	13.980		
7,200.0	6,948.1	7,368.4	7,158.9	13.2	13.5	-133.75	-160.0	157.3	312.5	290.6	21.95	14.240		
7,300.0	6,955.0	7,523.6	7,177.0	14.0	14.6	-134.45	-313.7	157.3	315.6	292.5	23.10	13.660		
7,400.0	6,955.0	7,623.6	7,177.0	15.0	15.5	-134.45	-413.7	157.3	315.6	291.1	24.50	12.880		
7,500.0	6,955.0	7,723.6	7,177.0	16.1	16.6	-134.45	-513.7	157.3	315.6	289.5	26.07	12.107		
7,600.0	6,955.0	7,823.6	7,177.0	17.3	17.8	-134.45	-613.7	157.3	315.6	287.8	27.77	11.363		
7,700.0	6,955.0	7,923.6	7,177.0	18.6	19.0	-134.45	-713.7	157.3	315.6	286.0	29.59	10.664		
7,800.0	6,955.0	8,023.6	7,177.0	20.0	20.4	-134.45	-813.7	157.3	315.6	284.0	31.51	10.015		
7,900.0	6,955.0	8,123.6	7,177.0	21.4	21.8	-134.45	-913.7	157.2	315.6	282.1	33.51	9.417		
8,000.0	6,955.0	8,223.6	7,177.0	22.9	23.2	-134.45	-1,013.7	157.2	315.6	280.0	35.57	8.871		
8,100.0	6,955.0	8,323.6	7,177.0	24.4	24.7	-134.45	-1,113.7	157.2	315.6	277.9	37.69	8.372		
8,200.0	6,955.0	8,423.6	7,177.0	25.9	26.2	-134.45	-1,213.7	157.2	315.6	275.7	39.86	7.917		
8,300.0	6,955.0	8,523.6	7,177.0	27.5	27.8	-134.45	-1,313.7	157.2	315.6	273.5	42.06	7.502		
8,400.0	6,955.0	8,623.6	7,177.0	29.1	29.4	-134.46	-1,413.7	157.2	315.6	271.3	44.30	7.123		
8,500.0	6,955.0	8,723.6	7,177.0	30.7	30.9	-134.46	-1,513.7	157.2	315.6	269.0	46.57	6.776		
8,600.0	6,955.0	8,823.6	7,177.0	32.3	32.6	-134.46	-1,613.7	157.2	315.6	266.7	48.86	6.458		
8,700.0	6,955.0	8,923.6	7,177.0	33.9	34.2	-134.46	-1,713.7	157.2	315.6	264.4	51.17	6.166		
8,800.0	6,955.0	9,023.6	7,177.0	35.6	35.8	-134.46	-1,813.7	157.2	315.6	262.0	53.51	5.898		
8,900.0	6,955.0	9,123.6	7,177.0	37.2	37.5	-134.46	-1,913.7	157.2	315.6	259.7	55.85	5.650		
9,000.0	6,955.0	9,223.6	7,177.0	38.9	39.1	-134.46	-2,013.7	157.2	315.6	257.3	58.22	5.420		
9,100.0	6,955.0	9,323.6	7,177.0	40.6	40.8	-134.46	-2,113.7	157.2	315.6	255.0	60.59	5.208		
9,200.0	6,955.0	9,423.6	7,177.0	42.2	42.4	-134.46	-2,213.7	157.2	315.6	252.6	62.98	5.011		
9,300.0	6,955.0	9,523.6	7,177.0	43.9	44.1	-134.46	-2,313.7	157.2	315.6	250.2	65.37	4.827		
9,400.0	6,955.0	9,623.6	7,177.0	45.6	45.8	-134.46	-2,413.7	157.2	315.6	247.8	67.78	4.656		
9,500.0	6,955.0	9,723.6	7,177.0	47.3	47.5	-134.46	-2,513.7	157.2	315.6	245.4	70.19	4.496		
9,600.0	6,955.0	9,823.6	7,177.0	49.0	49.2	-134.46	-2,613.7	157.2	315.6	242.9	72.61	4.346		
9,700.0	6,955.0	9,923.6	7,177.0	50.7	50.9	-134.46	-2,713.7	157.2	315.6	240.5	75.04	4.205		
9,800.0	6,955.0	10,023.6	7,177.0	52.4	52.6	-134.46	-2,813.7	157.2	315.6	238.1	77.47	4.073		
9,900.0	6,955.0	10,123.6	7,177.0	54.1	54.3	-134.46	-2,913.7	157.2	315.6	235.6	79.91	3.949		
10,000.0	6,955.0	10,223.6	7,177.0	55.8	56.0	-134.46	-3,013.7	157.2	315.6	233.2	82.35	3.832		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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			
10,100.0	6,955.0	10,323.6	7,177.0	57.5	57.7	-134.46	-3,113.7	157.2	315.6	230.8	84.80	3.721		
10,200.0	6,955.0	10,423.6	7,177.0	59.3	59.4	-134.46	-3,213.7	157.2	315.6	228.3	87.25	3.617		
10,300.0	6,955.0	10,523.6	7,177.0	61.0	61.1	-134.46	-3,313.7	157.2	315.6	225.8	89.71	3.518		
10,400.0	6,955.0	10,623.6	7,177.0	62.7	62.8	-134.46	-3,413.7	157.2	315.6	223.4	92.17	3.424		
10,500.0	6,955.0	10,723.6	7,177.0	64.4	64.6	-134.46	-3,513.7	157.2	315.5	220.9	94.63	3.335		
10,600.0	6,955.0	10,823.6	7,177.0	66.1	66.3	-134.46	-3,613.7	157.2	315.5	218.5	97.09	3.250		
10,700.0	6,955.0	10,923.6	7,177.0	67.9	68.0	-134.46	-3,713.7	157.2	315.5	216.0	99.56	3.169		
10,800.0	6,955.0	11,023.6	7,177.0	69.6	69.7	-134.46	-3,813.7	157.2	315.5	213.5	102.03	3.093		
10,900.0	6,955.0	11,123.6	7,177.0	71.3	71.5	-134.46	-3,913.7	157.2	315.5	211.0	104.50	3.020		
11,000.0	6,955.0	11,223.6	7,177.0	73.0	73.2	-134.46	-4,013.7	157.2	315.5	208.6	106.98	2.950		
11,100.0	6,955.0	11,323.6	7,177.0	74.8	74.9	-134.46	-4,113.7	157.2	315.5	206.1	109.45	2.883		
11,200.0	6,955.0	11,423.6	7,177.0	76.5	76.6	-134.46	-4,213.7	157.2	315.5	203.6	111.93	2.819		
11,300.0	6,955.0	11,523.6	7,177.0	78.2	78.4	-134.46	-4,313.7	157.2	315.5	201.1	114.41	2.758		
11,400.0	6,955.0	11,623.6	7,177.0	80.0	80.1	-134.46	-4,413.7	157.2	315.5	198.7	116.89	2.699		
11,500.0	6,955.0	11,723.6	7,177.0	81.7	81.8	-134.46	-4,513.7	157.2	315.5	196.2	119.37	2.643		
11,540.4	6,955.0	11,764.0	7,177.0	82.4	82.5	-134.46	-4,554.1	157.2	315.5	195.2	120.38	2.621 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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		
0.0	0.0	1.0	1.0	0.0	0.0	90.10	0.0	15.1	15.1					
100.0	100.0	101.0	101.0	0.1	0.1	90.10	0.0	15.1	15.1	14.9	0.25	61.383		
200.0	200.0	201.0	201.0	0.3	0.3	90.10	0.0	15.1	15.1	14.5	0.60	25.381		
300.0	300.0	301.0	301.0	0.5	0.5	90.10	0.0	15.1	15.1	14.2	0.94	15.998		
332.2	332.2	333.2	333.2	0.5	0.5	90.10	0.0	15.1	15.1	14.0	1.06	14.296 CC		
400.0	400.0	400.9	400.9	0.6	0.6	89.59	0.1	15.3	15.3	14.0	1.29	11.823 ES		
500.0	500.0	500.6	500.6	0.8	0.8	100.92	1.1	16.7	16.8	15.1	1.64	10.220		
600.0	600.0	600.3	600.2	1.0	1.0	100.33	3.2	19.5	20.0	18.1	1.99	10.053		
700.0	699.9	700.0	699.8	1.2	1.2	101.69	6.3	23.7	25.1	22.7	2.35	10.665		
800.0	799.8	799.2	798.8	1.4	1.4	103.53	10.4	29.3	31.9	29.2	2.72	11.730		
900.0	899.7	898.6	897.8	1.6	1.6	103.75	15.4	36.1	40.1	37.0	3.10	12.950		
1,000.0	999.5	998.3	997.1	1.7	1.8	103.69	20.6	43.2	48.5	45.0	3.47	13.956		
1,100.0	1,099.4	1,097.9	1,096.3	1.9	2.0	103.65	25.9	50.3	56.9	53.0	3.86	14.755		
1,200.0	1,199.2	1,197.6	1,195.6	2.1	2.3	103.62	31.1	57.4	65.3	61.0	4.24	15.403		
1,300.0	1,299.1	1,297.2	1,294.8	2.3	2.5	103.60	36.3	64.5	73.7	69.1	4.62	15.939		
1,400.0	1,398.9	1,396.8	1,394.1	2.5	2.7	103.58	41.5	71.5	82.1	77.1	5.01	16.389		
1,500.0	1,498.8	1,496.5	1,493.3	2.7	2.9	103.56	46.7	78.6	90.5	85.1	5.40	16.772		
1,600.0	1,598.7	1,596.1	1,592.6	2.9	3.2	103.55	51.9	85.7	98.9	93.1	5.78	17.101		
1,700.0	1,698.5	1,695.8	1,691.9	3.1	3.4	103.54	57.1	92.8	107.3	101.1	6.17	17.388		
1,800.0	1,798.4	1,795.4	1,791.1	3.3	3.6	103.53	62.3	99.9	115.7	109.1	6.56	17.639		
1,900.0	1,898.2	1,895.1	1,890.4	3.5	3.9	103.53	67.5	107.0	124.1	117.1	6.95	17.862		
2,000.0	1,998.1	1,994.7	1,989.6	3.7	4.1	103.52	72.7	114.1	132.5	125.2	7.34	18.060		
2,100.0	2,098.0	2,094.4	2,088.9	3.9	4.3	103.51	78.0	121.1	140.9	133.2	7.73	18.237		
2,200.0	2,197.8	2,194.0	2,188.1	4.1	4.5	103.51	83.2	128.2	149.3	141.2	8.12	18.397		
2,300.0	2,297.7	2,293.7	2,287.4	4.3	4.8	103.50	88.4	135.3	157.7	149.2	8.50	18.542		
2,400.0	2,397.5	2,393.3	2,386.7	4.5	5.0	103.50	93.6	142.4	166.1	157.2	8.89	18.673		
2,500.0	2,497.4	2,493.0	2,485.9	4.7	5.2	103.49	98.8	149.5	174.5	165.2	9.28	18.794		
2,600.0	2,597.3	2,592.6	2,585.2	4.9	5.5	103.49	104.0	156.6	182.9	173.2	9.67	18.904		
2,700.0	2,697.1	2,692.3	2,684.4	5.1	5.7	103.49	109.2	163.6	191.3	181.2	10.07	19.006		
2,800.0	2,797.0	2,791.9	2,783.7	5.3	5.9	103.49	114.4	170.7	199.7	189.2	10.46	19.099		
2,900.0	2,896.8	2,891.5	2,882.9	5.5	6.2	103.48	119.6	177.8	208.1	197.3	10.85	19.186		
3,000.0	2,996.7	2,991.2	2,982.2	5.7	6.4	103.48	124.9	184.9	216.5	205.3	11.24	19.267		
3,100.0	3,096.6	3,090.8	3,081.5	5.9	6.6	103.48	130.1	192.0	224.9	213.3	11.63	19.342		
3,200.0	3,196.4	3,190.5	3,180.7	6.0	6.9	103.48	135.3	199.1	233.3	221.3	12.02	19.412		
3,300.0	3,296.3	3,290.1	3,280.0	6.2	7.1	103.47	140.5	206.1	241.7	229.3	12.41	19.478		
3,400.0	3,396.1	3,389.8	3,379.2	6.4	7.3	103.47	145.7	213.2	250.1	237.3	12.80	19.540		
3,500.0	3,496.0	3,489.4	3,478.5	6.6	7.5	103.47	150.9	220.3	258.5	245.3	13.19	19.597		
3,600.0	3,595.9	3,589.1	3,577.8	6.8	7.8	103.47	156.1	227.4	266.9	253.3	13.58	19.652		
3,700.0	3,695.7	3,688.7	3,677.0	7.0	8.0	103.47	161.3	234.5	275.3	261.3	13.97	19.703		
3,800.0	3,795.6	3,788.4	3,776.3	7.2	8.2	103.47	166.5	241.6	283.7	269.3	14.36	19.752		
3,900.0	3,895.4	3,888.0	3,875.5	7.4	8.5	103.46	171.7	248.7	292.1	277.3	14.75	19.797		
4,000.0	3,995.3	3,987.7	3,974.8	7.6	8.7	103.46	177.0	255.7	300.5	285.4	15.15	19.841		
4,100.0	4,095.2	4,087.3	4,074.0	7.8	8.9	103.46	182.2	262.8	308.9	293.4	15.54	19.882		
4,200.0	4,195.0	4,187.0	4,173.3	8.0	9.2	103.46	187.4	269.9	317.3	301.4	15.93	19.921		
4,300.0	4,294.9	4,286.6	4,272.6	8.2	9.4	103.46	192.6	277.0	325.7	309.4	16.32	19.958		
4,400.0	4,394.7	4,386.2	4,371.8	8.4	9.6	103.46	197.8	284.1	334.1	317.4	16.71	19.994		
4,500.0	4,494.6	4,485.9	4,471.1	8.6	9.9	103.46	203.0	291.2	342.5	325.4	17.10	20.028		
4,600.0	4,594.5	4,585.5	4,570.3	8.8	10.1	103.46	208.2	298.2	350.9	333.4	17.49	20.060		
4,700.0	4,694.3	4,685.2	4,669.6	9.0	10.3	103.46	213.4	305.3	359.3	341.4	17.88	20.091		
4,800.0	4,794.2	4,784.8	4,768.8	9.2	10.6	103.46	218.6	312.4	367.7	349.4	18.28	20.120		
4,900.0	4,894.0	4,884.5	4,868.1	9.4	10.8	103.45	223.9	319.5	376.1	357.4	18.67	20.149		
5,000.0	4,993.9	4,984.1	4,967.4	9.6	11.0	103.45	229.1	326.6	384.5	365.5	19.06	20.176		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor			
5,100.0	5,093.7	5,083.8	5,066.6		9.8	11.3	103.45	234.3	333.7	392.9	373.5	19.45	20.202		
5,200.0	5,193.6	5,183.4	5,165.9	10.0	11.5	103.45	239.5	340.8	401.3	381.5	19.84	20.226			
5,300.0	5,293.5	5,283.1	5,265.1	10.2	11.7	103.45	244.7	347.8	409.7	389.5	20.23	20.250			
5,400.0	5,393.3	5,382.7	5,364.4	10.4	11.9	103.45	249.9	354.9	418.1	397.5	20.62	20.273			
5,500.0	5,493.2	5,482.4	5,463.6	10.6	12.2	103.45	255.1	362.0	426.5	405.5	21.02	20.296			
5,600.0	5,593.0	5,586.5	5,567.4	10.8	12.4	103.49	260.3	369.0	434.6	413.1	21.41	20.295			
5,700.0	5,692.9	5,692.9	5,673.6	11.0	12.6	103.66	264.5	374.7	441.2	419.4	21.81	20.229			
5,800.0	5,792.8	5,799.4	5,780.0	11.2	12.8	103.92	267.5	378.8	446.1	423.9	22.19	20.101			
5,900.0	5,892.8	5,906.1	5,886.6	11.3	13.0	104.08	269.3	381.3	449.1	426.6	22.55	19.915			
6,000.0	5,992.8	6,012.8	5,993.3	11.5	13.1	104.14	270.0	382.2	450.2	427.3	22.88	19.673			
6,100.0	6,092.8	6,113.2	6,093.8	11.7	13.3	90.00	270.0	382.2	450.2	427.0	23.20	19.402			
6,200.0	6,192.8	6,213.2	6,193.8	11.8	13.4	90.00	270.0	382.2	450.2	426.7	23.52	19.139			
6,300.0	6,292.8	6,313.2	6,293.8	12.0	13.6	90.00	270.0	382.2	450.2	426.4	23.84	18.881			
6,365.5	6,358.2	6,378.7	6,359.2	12.1	13.6	-90.05	270.0	382.2	450.2	426.2	24.05	18.719			
6,400.0	6,392.8	6,413.2	6,393.8	12.1	13.7	-90.01	270.0	382.2	450.2	426.0	24.16	18.632			
6,500.0	6,492.1	6,512.9	6,493.4	12.2	13.8	-91.30	269.6	382.2	450.3	426.0	24.33	18.508			
6,600.0	6,588.0	6,614.9	6,594.5	12.2	13.9	-93.27	257.2	382.2	451.0	426.7	24.30	18.562			
6,700.0	6,677.8	6,719.9	6,694.6	12.1	13.9	-95.17	225.8	382.2	452.1	427.9	24.14	18.727			
6,800.0	6,758.5	6,828.1	6,789.9	12.0	13.8	-96.93	175.0	382.2	453.6	429.6	23.98	18.913			
6,900.0	6,827.8	6,939.3	6,876.2	12.1	13.7	-98.48	105.2	382.2	455.2	431.3	23.96	18.999			
7,000.0	6,883.5	7,053.2	6,948.9	12.3	13.8	-99.75	17.7	382.2	456.9	432.6	24.23	18.857			
7,100.0	6,924.0	7,169.5	7,003.8	12.6	14.1	-100.69	-84.6	382.2	458.2	433.3	24.92	18.386			
7,200.0	6,948.1	7,287.5	7,037.2	13.2	14.7	-101.26	-197.5	382.2	459.0	433.0	26.09	17.594			
7,300.0	6,955.0	7,404.2	7,047.0	14.0	15.5	-101.43	-313.7	382.2	459.3	431.6	27.72	16.572			
7,400.0	6,955.0	7,504.2	7,047.0	15.0	16.4	-101.43	-413.7	382.2	459.3	429.7	29.61	15.509			
7,500.0	6,955.0	7,604.2	7,047.0	16.1	17.4	-101.43	-513.7	382.2	459.3	427.5	31.77	14.456			
7,600.0	6,955.0	7,704.2	7,047.0	17.3	18.6	-101.43	-613.7	382.2	459.3	425.2	34.14	13.453			
7,700.0	6,955.0	7,804.2	7,047.0	18.6	19.8	-101.43	-713.7	382.2	459.3	422.6	36.68	12.521			
7,800.0	6,955.0	7,904.2	7,047.0	20.0	21.1	-101.43	-813.7	382.2	459.3	419.9	39.36	11.670			
7,900.0	6,955.0	8,004.2	7,047.0	21.4	22.4	-101.43	-913.7	382.2	459.3	417.2	42.14	10.898			
8,000.0	6,955.0	8,104.2	7,047.0	22.9	23.8	-101.43	-1,013.7	382.2	459.3	414.3	45.02	10.202			
8,100.0	6,955.0	8,204.2	7,047.0	24.4	25.3	-101.43	-1,113.7	382.2	459.3	411.3	47.97	9.574			
8,200.0	6,955.0	8,304.2	7,047.0	25.9	26.8	-101.43	-1,213.7	382.2	459.3	408.3	50.99	9.008			
8,300.0	6,955.0	8,404.2	7,047.0	27.5	28.3	-101.43	-1,313.7	382.2	459.3	405.3	54.05	8.498			
8,400.0	6,955.0	8,504.2	7,047.0	29.1	29.8	-101.43	-1,413.7	382.2	459.3	402.1	57.16	8.036			
8,500.0	6,955.0	8,604.2	7,047.0	30.7	31.4	-101.43	-1,513.7	382.2	459.3	399.0	60.30	7.617			
8,600.0	6,955.0	8,704.2	7,047.0	32.3	33.0	-101.43	-1,613.7	382.2	459.3	395.8	63.47	7.236			
8,700.0	6,955.0	8,804.2	7,047.0	33.9	34.6	-101.43	-1,713.7	382.2	459.3	392.6	66.67	6.889			
8,800.0	6,955.0	8,904.2	7,047.0	35.6	36.2	-101.43	-1,813.7	382.2	459.3	389.4	69.89	6.571			
8,900.0	6,955.0	9,004.2	7,047.0	37.2	37.8	-101.43	-1,913.7	382.2	459.3	386.2	73.14	6.280			
9,000.0	6,955.0	9,104.2	7,047.0	38.9	39.5	-101.43	-2,013.7	382.2	459.3	382.9	76.40	6.012			
9,100.0	6,955.0	9,204.2	7,047.0	40.6	41.1	-101.43	-2,113.7	382.2	459.3	379.6	79.67	5.765			
9,200.0	6,955.0	9,304.2	7,047.0	42.2	42.8	-101.43	-2,213.7	382.2	459.3	376.3	82.96	5.536			
9,300.0	6,955.0	9,404.2	7,047.0	43.9	44.4	-101.43	-2,313.7	382.2	459.3	373.0	86.26	5.325			
9,400.0	6,955.0	9,504.2	7,047.0	45.6	46.1	-101.43	-2,413.7	382.2	459.3	369.7	89.57	5.128			
9,500.0	6,955.0	9,604.2	7,047.0	47.3	47.8	-101.43	-2,513.7	382.2	459.3	366.4	92.89	4.945			
9,600.0	6,955.0	9,704.2	7,047.0	49.0	49.5	-101.43	-2,613.7	382.2	459.3	363.1	96.22	4.774			
9,700.0	6,955.0	9,804.2	7,047.0	50.7	51.1	-101.43	-2,713.7	382.2	459.3	359.7	99.55	4.614			
9,800.0	6,955.0	9,904.2	7,047.0	52.4	52.8	-101.43	-2,813.7	382.2	459.3	356.4	102.90	4.464			
9,900.0	6,955.0	10,004.2	7,047.0	54.1	54.5	-101.43	-2,913.7	382.2	459.3	353.1	106.24	4.323			
10,000.0	6,955.0	10,104.2	7,047.0	55.8	56.2	-101.43	-3,013.7	382.2	459.3	349.7	109.60	4.191			
10,100.0	6,955.0	10,204.2	7,047.0	57.5	57.9	-101.43	-3,113.7	382.2	459.3	346.3	112.96	4.066			

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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	
10,200.0	6,955.0	10,304.2	7,047.0	59.3	59.6	-101.43	-3,213.7	382.2	459.3	343.0	116.32	3.948	
10,300.0	6,955.0	10,404.2	7,047.0	61.0	61.3	-101.43	-3,313.7	382.2	459.3	339.6	119.69	3.837	
10,400.0	6,955.0	10,504.2	7,047.0	62.7	63.1	-101.43	-3,413.7	382.2	459.3	336.2	123.06	3.732	
10,500.0	6,955.0	10,604.2	7,047.0	64.4	64.8	-101.43	-3,513.7	382.2	459.3	332.9	126.44	3.633	
10,600.0	6,955.0	10,704.2	7,047.0	66.1	66.5	-101.43	-3,613.7	382.2	459.3	329.5	129.82	3.538	
10,700.0	6,955.0	10,804.2	7,047.0	67.9	68.2	-101.43	-3,713.7	382.2	459.3	326.1	133.20	3.448	
10,800.0	6,955.0	10,904.2	7,047.0	69.6	69.9	-101.43	-3,813.7	382.2	459.3	322.7	136.58	3.363	
10,900.0	6,955.0	11,004.2	7,047.0	71.3	71.6	-101.43	-3,913.7	382.2	459.3	319.3	139.97	3.281	
11,000.0	6,955.0	11,104.2	7,047.0	73.0	73.4	-101.43	-4,013.7	382.2	459.3	315.9	143.36	3.204	
11,100.0	6,955.0	11,204.2	7,047.0	74.8	75.1	-101.43	-4,113.7	382.2	459.3	312.5	146.76	3.130	
11,200.0	6,955.0	11,304.2	7,047.0	76.5	76.8	-101.43	-4,213.7	382.2	459.3	309.1	150.15	3.059	
11,300.0	6,955.0	11,404.2	7,047.0	78.2	78.5	-101.43	-4,313.7	382.2	459.3	305.7	153.55	2.991	
11,400.0	6,955.0	11,504.2	7,047.0	80.0	80.3	-101.43	-4,413.7	382.2	459.3	302.3	156.95	2.926	
11,500.0	6,955.0	11,604.2	7,047.0	81.7	82.0	-101.43	-4,513.7	382.2	459.3	298.9	160.35	2.864	
11,540.4	6,955.0	11,644.6	7,047.0	82.4	82.7	-101.43	-4,554.1	382.2	459.3	297.6	161.72	2.840 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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 2K-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	1.0	1.0	0.0	0.0	90.10	0.0	22.4	22.4					
100.0	100.0	101.0	101.0	0.1	0.1	90.10	0.0	22.4	22.4	22.1	0.25	90.938		
200.0	200.0	201.0	201.0	0.3	0.3	90.10	0.0	22.4	22.4	21.8	0.60	37.602		
266.3	266.3	267.3	267.3	0.4	0.4	90.10	0.0	22.4	22.4	21.6	0.83	27.071 CC		
300.0	300.0	301.0	301.0	0.5	0.5	90.10	0.0	22.4	22.4	21.4	0.94	23.701 ES		
400.0	400.0	400.6	400.6	0.6	0.6	89.18	0.3	23.2	23.2	21.9	1.29	17.933		
500.0	500.0	500.2	500.2	0.8	0.8	101.40	1.4	25.6	25.7	24.0	1.64	15.624		
600.0	600.0	599.7	599.5	1.0	1.0	101.50	3.2	29.5	30.0	28.0	1.99	15.073		
700.0	699.9	698.9	698.6	1.2	1.2	103.19	5.8	35.0	36.4	34.0	2.35	15.487		
800.0	799.8	797.9	797.3	1.4	1.4	105.37	9.0	42.0	44.7	42.0	2.72	16.472		
900.0	899.7	896.7	895.6	1.6	1.6	106.31	13.0	50.6	54.7	51.6	3.09	17.720		
1,000.0	999.5	995.1	993.4	1.7	1.9	106.28	17.6	60.6	66.2	62.7	3.46	19.117		
1,100.0	1,099.4	1,093.8	1,091.3	1.9	2.1	105.77	22.9	72.0	79.0	75.2	3.84	20.560		
1,200.0	1,199.2	1,192.9	1,189.6	2.1	2.4	105.35	28.2	83.6	92.0	87.8	4.23	21.769		
1,300.0	1,299.1	1,292.1	1,287.9	2.3	2.7	105.04	33.6	95.2	105.0	100.3	4.61	22.771		
1,400.0	1,398.9	1,391.2	1,386.3	2.5	2.9	104.79	38.9	106.8	117.9	112.9	4.99	23.615		
1,500.0	1,498.8	1,490.4	1,484.6	2.7	3.2	104.60	44.3	118.4	130.9	125.5	5.38	24.334		
1,600.0	1,598.7	1,589.5	1,582.9	2.9	3.5	104.44	49.6	130.0	143.9	138.1	5.77	24.954		
1,700.0	1,698.5	1,688.7	1,681.2	3.1	3.8	104.30	55.0	141.6	156.9	150.7	6.15	25.495		
1,800.0	1,798.4	1,787.8	1,779.6	3.3	4.0	104.19	60.3	153.2	169.8	163.3	6.54	25.969		
1,900.0	1,898.2	1,887.0	1,877.9	3.5	4.3	104.09	65.7	164.8	182.8	175.9	6.93	26.390		
2,000.0	1,998.1	1,986.2	1,976.2	3.7	4.6	104.01	71.1	176.4	195.8	188.5	7.32	26.765		
2,100.0	2,098.0	2,085.3	2,074.5	3.9	4.9	103.93	76.4	188.0	208.8	201.1	7.70	27.101		
2,200.0	2,197.8	2,184.5	2,172.9	4.1	5.2	103.87	81.8	199.5	221.8	213.7	8.09	27.404		
2,300.0	2,297.7	2,283.6	2,271.2	4.3	5.4	103.81	87.1	211.1	234.7	226.3	8.48	27.678		
2,400.0	2,397.5	2,382.8	2,369.5	4.5	5.7	103.76	92.5	222.7	247.7	238.8	8.87	27.929		
2,500.0	2,497.4	2,481.9	2,467.9	4.7	6.0	103.71	97.8	234.3	260.7	251.4	9.26	28.157		
2,600.0	2,597.3	2,581.1	2,566.2	4.9	6.3	103.67	103.2	245.9	273.7	264.0	9.65	28.367		
2,700.0	2,697.1	2,680.2	2,664.5	5.1	6.6	103.63	108.5	257.5	286.7	276.6	10.04	28.560		
2,800.0	2,797.0	2,779.4	2,762.8	5.3	6.8	103.59	113.9	269.1	299.6	289.2	10.43	28.739		
2,900.0	2,896.8	2,878.5	2,861.2	5.5	7.1	103.56	119.2	280.7	312.6	301.8	10.82	28.905		
3,000.0	2,996.7	2,977.7	2,959.5	5.7	7.4	103.53	124.6	292.3	325.6	314.4	11.21	29.058		
3,100.0	3,096.6	3,076.8	3,057.8	5.9	7.7	103.50	129.9	303.9	338.6	327.0	11.59	29.202		
3,200.0	3,196.4	3,176.0	3,156.2	6.0	8.0	103.48	135.3	315.5	351.6	339.6	11.98	29.335		
3,300.0	3,296.3	3,275.2	3,254.5	6.2	8.3	103.45	140.7	327.1	364.6	352.2	12.37	29.461		
3,400.0	3,396.1	3,374.3	3,352.8	6.4	8.5	103.43	146.0	338.7	377.5	364.8	12.76	29.578		
3,500.0	3,496.0	3,473.5	3,451.1	6.6	8.8	103.41	151.4	350.3	390.5	377.4	13.15	29.689		
3,600.0	3,595.9	3,572.6	3,549.5	6.8	9.1	103.39	156.7	361.9	403.5	390.0	13.54	29.793		
3,700.0	3,695.7	3,671.8	3,647.8	7.0	9.4	103.37	162.1	373.5	416.5	402.5	13.93	29.891		
3,800.0	3,795.6	3,770.9	3,746.1	7.2	9.7	103.36	167.4	385.1	429.5	415.1	14.32	29.983		
3,900.0	3,895.4	3,870.1	3,844.4	7.4	9.9	103.34	172.8	396.7	442.4	427.7	14.71	30.071		
4,000.0	3,995.3	3,969.2	3,942.8	7.6	10.2	103.33	178.1	408.3	455.4	440.3	15.10	30.154		
4,100.0	4,095.2	4,068.4	4,041.1	7.8	10.5	103.31	183.5	419.9	468.4	452.9	15.49	30.233		
4,200.0	4,195.0	4,167.5	4,139.4	8.0	10.8	103.30	188.8	431.5	481.4	465.5	15.88	30.308		
4,300.0	4,294.9	4,266.7	4,237.8	8.2	11.1	103.29	194.2	443.1	494.4	478.1	16.27	30.379		
4,400.0	4,394.7	4,365.8	4,336.1	8.4	11.4	103.27	199.5	454.7	507.4	490.7	16.66	30.447		
4,500.0	4,494.6	4,465.0	4,434.4	8.6	11.6	103.26	204.9	466.2	520.3	503.3	17.05	30.512		
4,600.0	4,594.5	4,564.2	4,532.7	8.8	11.9	103.25	210.2	477.8	533.3	515.9	17.44	30.573		
4,700.0	4,694.3	4,663.3	4,631.1	9.0	12.2	103.24	215.6	489.4	546.3	528.5	17.83	30.632		
4,800.0	4,794.2	4,762.5	4,729.4	9.2	12.5	103.23	221.0	501.0	559.3	541.1	18.22	30.689		
4,900.0	4,894.0	4,861.6	4,827.7	9.4	12.8	103.22	226.3	512.6	572.3	553.6	18.61	30.743		
5,000.0	4,993.9	4,960.8	4,926.0	9.6	13.1	103.21	231.7	524.2	585.2	566.2	19.00	30.795		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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 2K-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)				
5,100.0	5,093.7	5,059.9	5,024.4		9.8	13.3	103.20	237.0	535.8	598.2	578.8	19.39	30.845	
5,200.0	5,193.6	5,159.1	5,122.7	10.0	13.6	103.20	103.20	242.4	547.4	611.2	591.4	19.79	30.892	
5,300.0	5,293.5	5,258.2	5,221.0	10.2	13.9	103.19	103.19	247.7	559.0	624.2	604.0	20.18	30.938	
5,400.0	5,393.3	5,363.9	5,325.9	10.4	14.2	103.19	103.19	253.3	571.0	636.9	616.3	20.58	30.953	
5,500.0	5,493.2	5,474.6	5,436.0	10.6	14.5	103.27	103.27	258.3	581.9	648.0	627.0	20.98	30.878	
5,600.0	5,593.0	5,585.7	5,546.6	10.8	14.7	103.42	103.42	262.4	590.9	657.3	635.9	21.39	30.725	
5,700.0	5,692.9	5,697.1	5,657.7	11.0	14.9	103.64	103.64	265.7	597.9	664.9	643.1	21.80	30.498	
5,800.0	5,792.8	5,808.8	5,769.3	11.2	15.1	103.91	103.91	268.0	603.0	670.5	648.3	22.20	30.207	
5,900.0	5,892.8	5,920.6	5,881.1	11.3	15.3	104.08	104.08	269.4	606.1	673.9	651.4	22.57	29.863	
6,000.0	5,992.8	6,032.6	5,993.0	11.5	15.4	104.14	104.14	270.0	607.2	675.2	652.3	22.91	29.467	
6,100.0	6,092.8	6,133.4	6,093.8	11.7	15.5	90.00	90.00	270.0	607.2	675.2	651.9	23.23	29.062	
6,200.0	6,192.8	6,233.4	6,193.8	11.8	15.7	90.00	90.00	270.0	607.2	675.2	651.6	23.55	28.667	
6,300.0	6,292.8	6,333.4	6,293.8	12.0	15.8	90.00	90.00	270.0	607.2	675.2	651.3	23.87	28.282	
6,400.0	6,392.8	6,433.4	6,393.8	12.1	15.9	-90.00	-90.00	269.9	607.2	675.2	651.0	24.19	27.912	
6,500.0	6,492.1	6,533.3	6,493.1	12.2	15.9	-90.00	-90.00	259.3	607.2	675.2	650.9	24.32	27.766	
6,600.0	6,588.0	6,633.3	6,589.0	12.2	15.9	-90.00	-90.00	231.7	607.2	675.2	650.9	24.26	27.825	
6,700.0	6,677.8	6,733.3	6,678.7	12.1	15.9	-90.00	-90.00	187.8	607.2	675.2	651.1	24.12	27.990	
6,800.0	6,758.5	6,833.3	6,759.5	12.0	15.8	-90.00	-90.00	129.0	607.2	675.2	651.2	24.01	28.120	
6,900.0	6,827.8	6,933.3	6,828.7	12.1	15.8	-90.00	-90.00	57.0	607.2	675.2	651.1	24.07	28.047	
7,000.0	6,883.5	7,033.3	6,884.5	12.3	16.0	-90.00	-90.00	-25.8	607.2	675.2	650.7	24.44	27.623	
7,100.0	6,924.0	7,133.3	6,925.0	12.6	16.3	-90.00	-90.00	-117.1	607.2	675.2	650.0	25.22	26.775	
7,200.0	6,948.1	7,233.3	6,949.1	13.2	16.7	-90.00	-90.00	-214.0	607.2	675.2	648.7	26.43	25.548	
7,300.0	6,955.0	7,333.3	6,956.0	14.0	17.4	-90.00	-90.00	-313.7	607.2	675.2	647.1	28.04	24.080	
7,400.0	6,955.0	7,433.3	6,956.0	15.0	18.2	-90.00	-90.00	-413.7	607.2	675.2	645.2	29.99	22.516	
7,500.0	6,955.0	7,533.3	6,956.0	16.1	19.1	-90.00	-90.00	-513.7	607.2	675.2	643.0	32.19	20.975	
7,600.0	6,955.0	7,633.3	6,956.0	17.3	20.1	-90.00	-90.00	-613.7	607.2	675.2	640.6	34.61	19.509	
7,700.0	6,955.0	7,733.3	6,956.0	18.6	21.2	-90.00	-90.00	-713.7	607.2	675.2	638.0	37.20	18.149	
7,800.0	6,955.0	7,833.3	6,956.0	20.0	22.4	-90.00	-90.00	-813.7	607.2	675.2	635.2	39.93	16.907	
7,900.0	6,955.0	7,933.3	6,956.0	21.4	23.7	-90.00	-90.00	-913.7	607.2	675.2	632.4	42.78	15.782	
8,000.0	6,955.0	8,033.3	6,956.0	22.9	25.1	-90.00	-90.00	-1,013.7	607.2	675.2	629.4	45.72	14.768	
8,100.0	6,955.0	8,133.3	6,956.0	24.4	26.4	-90.00	-90.00	-1,113.7	607.2	675.2	626.4	48.73	13.854	
8,200.0	6,955.0	8,233.3	6,956.0	25.9	27.9	-90.00	-90.00	-1,213.7	607.2	675.2	623.4	51.81	13.032	
8,300.0	6,955.0	8,333.3	6,956.0	27.5	29.3	-90.00	-90.00	-1,313.7	607.2	675.2	620.2	54.94	12.289	
8,400.0	6,955.0	8,433.3	6,956.0	29.1	30.8	-90.00	-90.00	-1,413.7	607.2	675.2	617.1	58.11	11.619	
8,500.0	6,955.0	8,533.3	6,956.0	30.7	32.3	-90.00	-90.00	-1,513.7	607.2	675.2	613.8	61.32	11.011	
8,600.0	6,955.0	8,633.3	6,956.0	32.3	33.9	-90.00	-90.00	-1,613.7	607.2	675.2	610.6	64.56	10.458	
8,700.0	6,955.0	8,733.3	6,956.0	33.9	35.4	-90.00	-90.00	-1,713.7	607.2	675.2	607.3	67.82	9.955	
8,800.0	6,955.0	8,833.3	6,956.0	35.6	37.0	-90.00	-90.00	-1,813.7	607.2	675.2	604.0	71.11	9.494	
8,900.0	6,955.0	8,933.3	6,956.0	37.2	38.6	-90.00	-90.00	-1,913.7	607.2	675.2	600.7	74.42	9.072	
9,000.0	6,955.0	9,033.3	6,956.0	38.9	40.2	-90.00	-90.00	-2,013.7	607.2	675.2	597.4	77.75	8.684	
9,100.0	6,955.0	9,133.3	6,956.0	40.6	41.8	-90.00	-90.00	-2,113.7	607.2	675.2	594.1	81.09	8.326	
9,200.0	6,955.0	9,233.3	6,956.0	42.2	43.4	-90.00	-90.00	-2,213.7	607.2	675.2	590.7	84.45	7.995	
9,300.0	6,955.0	9,333.3	6,956.0	43.9	45.1	-90.00	-90.00	-2,313.7	607.2	675.2	587.3	87.81	7.688	
9,400.0	6,955.0	9,433.3	6,956.0	45.6	46.7	-90.00	-90.00	-2,413.7	607.2	675.2	584.0	91.19	7.404	
9,500.0	6,955.0	9,533.3	6,956.0	47.3	48.4	-90.00	-90.00	-2,513.7	607.2	675.2	580.6	94.58	7.138	
9,600.0	6,955.0	9,633.3	6,956.0	49.0	50.0	-90.00	-90.00	-2,613.7	607.2	675.1	577.2	97.98	6.891	
9,700.0	6,955.0	9,733.3	6,956.0	50.7	51.7	-90.00	-90.00	-2,713.7	607.2	675.1	573.8	101.38	6.660	
9,800.0	6,955.0	9,833.3	6,956.0	52.4	53.4	-90.00	-90.00	-2,813.7	607.2	675.1	570.4	104.79	6.443	
9,900.0	6,955.0	9,933.3	6,956.0	54.1	55.1	-90.00	-90.00	-2,913.7	607.2	675.1	566.9	108.21	6.239	
10,000.0	6,955.0	10,033.3	6,956.0	55.8	56.7	-90.00	-90.00	-3,013.7	607.2	675.1	563.5	111.63	6.048	
10,100.0	6,955.0	10,133.3	6,956.0	57.5	58.4	-90.00	-90.00	-3,113.7	607.2	675.1	560.1	115.06	5.868	
10,200.0	6,955.0	10,233.3	6,956.0	59.3	60.1	-90.00	-90.00	-3,213.7	607.2	675.1	556.7	118.49	5.698	

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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 2K-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	6,955.0	10,333.3	6,956.0	61.0	61.8	-90.00	-3,313.7	607.2	675.1	553.2	121.93	5.537		
10,400.0	6,955.0	10,433.3	6,956.0	62.7	63.5	-90.00	-3,413.7	607.2	675.1	549.8	125.37	5.385		
10,500.0	6,955.0	10,533.3	6,956.0	64.4	65.2	-90.00	-3,513.7	607.1	675.1	546.3	128.81	5.241		
10,600.0	6,955.0	10,633.3	6,956.0	66.1	66.9	-90.00	-3,613.7	607.1	675.1	542.9	132.26	5.105		
10,700.0	6,955.0	10,733.3	6,956.0	67.9	68.6	-90.00	-3,713.7	607.1	675.1	539.4	135.71	4.975		
10,800.0	6,955.0	10,833.3	6,956.0	69.6	70.3	-90.00	-3,813.7	607.1	675.1	536.0	139.16	4.851		
10,900.0	6,955.0	10,933.3	6,956.0	71.3	72.0	-90.00	-3,913.7	607.1	675.1	532.5	142.62	4.734		
11,000.0	6,955.0	11,033.3	6,956.0	73.0	73.8	-90.00	-4,013.7	607.1	675.1	529.1	146.08	4.622		
11,100.0	6,955.0	11,133.3	6,956.0	74.8	75.5	-90.00	-4,113.7	607.1	675.1	525.6	149.54	4.515		
11,200.0	6,955.0	11,233.3	6,956.0	76.5	77.2	-90.00	-4,213.7	607.1	675.1	522.1	153.00	4.413		
11,300.0	6,955.0	11,333.3	6,956.0	78.2	78.9	-90.00	-4,313.7	607.1	675.1	518.7	156.47	4.315		
11,400.0	6,955.0	11,433.3	6,956.0	80.0	80.6	-90.00	-4,413.7	607.1	675.1	515.2	159.93	4.221		
11,500.0	6,955.0	11,533.3	6,956.0	81.7	82.3	-90.00	-4,513.7	607.1	675.1	511.7	163.40	4.132		
11,540.4	6,955.0	11,573.7	6,956.0	82.4	83.0	-90.00	-4,554.1	607.1	675.1	510.3	164.81	4.097 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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	1.0	1.0	0.0	0.0	90.70	-0.4	29.9	29.9					
100.0	100.0	101.0	101.0	0.1	0.1	90.70	-0.4	29.9	29.9	29.7	0.25	121.638		
200.0	200.0	201.0	201.0	0.3	0.3	90.70	-0.4	29.9	29.9	29.3	0.60	50.296		
232.0	232.0	233.0	233.0	0.4	0.4	90.70	-0.4	29.9	29.9	29.2	0.71	42.348	CC	
300.0	300.0	300.7	300.7	0.5	0.5	90.56	-0.3	30.1	30.1	29.2	0.94	31.942	ES	
400.0	400.0	400.0	400.0	0.6	0.6	89.53	0.3	31.8	31.8	30.5	1.29	24.617		
500.0	500.0	499.6	499.5	0.8	0.8	102.23	1.4	35.1	35.2	33.5	1.64	21.445		
600.0	600.0	598.8	598.6	1.0	1.0	102.46	3.0	40.0	40.6	38.6	1.99	20.367		
700.0	699.9	697.8	697.4	1.2	1.2	104.03	5.2	46.5	48.0	45.6	2.35	20.438		
800.0	799.8	796.5	795.7	1.4	1.4	106.10	7.9	54.6	57.5	54.7	2.71	21.192		
900.0	899.7	894.9	893.5	1.6	1.7	107.27	11.2	64.3	68.6	65.6	3.08	22.286		
1,000.0	999.5	992.9	990.8	1.7	1.9	107.65	15.0	75.5	81.4	78.0	3.45	23.578		
1,100.0	1,099.4	1,090.4	1,087.4	1.9	2.2	107.55	19.3	88.2	95.8	92.0	3.83	25.007		
1,200.0	1,199.2	1,187.5	1,183.3	2.1	2.5	107.14	24.0	102.5	111.7	107.5	4.21	26.535		
1,300.0	1,299.1	1,284.5	1,278.9	2.3	2.8	106.57	29.3	118.2	129.1	124.5	4.59	28.135		
1,400.0	1,398.9	1,382.9	1,375.7	2.5	3.2	106.06	34.9	134.6	147.1	142.1	4.97	29.569		
1,500.0	1,498.8	1,481.3	1,472.6	2.7	3.5	105.66	40.4	151.0	165.0	159.6	5.36	30.796		
1,600.0	1,598.7	1,579.6	1,569.4	2.9	3.8	105.34	45.9	167.4	182.9	177.2	5.74	31.856		
1,700.0	1,698.5	1,678.0	1,666.3	3.1	4.2	105.07	51.4	183.8	200.9	194.7	6.13	32.781		
1,800.0	1,798.4	1,776.4	1,763.1	3.3	4.5	104.85	57.0	200.2	218.8	212.3	6.51	33.595		
1,900.0	1,898.2	1,874.7	1,859.9	3.5	4.8	104.66	62.5	216.6	236.8	229.9	6.90	34.317		
2,000.0	1,998.1	1,973.1	1,956.8	3.7	5.2	104.50	68.0	233.0	254.7	247.4	7.29	34.962		
2,100.0	2,098.0	2,071.5	2,053.6	3.9	5.5	104.36	73.5	249.5	272.7	265.0	7.67	35.540		
2,200.0	2,197.8	2,169.9	2,150.4	4.1	5.9	104.24	79.0	265.9	290.6	282.6	8.06	36.063		
2,300.0	2,297.7	2,268.2	2,247.3	4.3	6.2	104.13	84.6	282.3	308.6	300.1	8.45	36.537		
2,400.0	2,397.5	2,366.6	2,344.1	4.5	6.6	104.03	90.1	298.7	326.5	317.7	8.83	36.969		
2,500.0	2,497.4	2,465.0	2,440.9	4.7	6.9	103.94	95.6	315.1	344.5	335.3	9.22	37.364		
2,600.0	2,597.3	2,563.4	2,537.8	4.9	7.3	103.87	101.1	331.5	362.5	352.9	9.61	37.727		
2,700.0	2,697.1	2,661.7	2,634.6	5.1	7.6	103.80	106.7	347.9	380.4	370.4	10.00	38.061		
2,800.0	2,797.0	2,760.1	2,731.5	5.3	8.0	103.73	112.2	364.3	398.4	388.0	10.38	38.371		
2,900.0	2,896.8	2,858.5	2,828.3	5.5	8.3	103.67	117.7	380.7	416.3	405.6	10.77	38.657		
3,000.0	2,996.7	2,956.9	2,925.1	5.7	8.7	103.62	123.2	397.2	434.3	423.1	11.16	38.924		
3,100.0	3,096.6	3,055.2	3,022.0	5.9	9.0	103.57	128.8	413.6	452.3	440.7	11.55	39.173		
3,200.0	3,196.4	3,153.6	3,118.8	6.0	9.4	103.52	134.3	430.0	470.2	458.3	11.93	39.405		
3,300.0	3,296.3	3,252.0	3,215.6	6.2	9.7	103.48	139.8	446.4	488.2	475.9	12.32	39.622		
3,400.0	3,396.1	3,350.3	3,312.5	6.4	10.1	103.44	145.3	462.8	506.2	493.4	12.71	39.826		
3,500.0	3,496.0	3,448.7	3,409.3	6.6	10.4	103.40	150.9	479.2	524.1	511.0	13.10	40.018		
3,600.0	3,595.9	3,547.1	3,506.2	6.8	10.8	103.37	156.4	495.6	542.1	528.6	13.48	40.199		
3,700.0	3,695.7	3,645.5	3,603.0	7.0	11.1	103.34	161.9	512.0	560.0	546.2	13.87	40.369		
3,800.0	3,795.6	3,743.8	3,699.8	7.2	11.5	103.31	167.4	528.4	578.0	563.7	14.26	40.530		
3,900.0	3,895.4	3,842.2	3,796.7	7.4	11.8	103.28	172.9	544.9	596.0	581.3	14.65	40.683		
4,000.0	3,995.3	3,940.6	3,893.5	7.6	12.2	103.25	178.5	561.3	613.9	598.9	15.04	40.828		
4,100.0	4,095.2	4,039.0	3,990.3	7.8	12.5	103.23	184.0	577.7	631.9	616.5	15.43	40.965		
4,200.0	4,195.0	4,137.3	4,087.2	8.0	12.9	103.20	189.5	594.1	649.9	634.0	15.81	41.095		
4,300.0	4,294.9	4,235.7	4,184.0	8.2	13.2	103.18	195.0	610.5	667.8	651.6	16.20	41.219		
4,400.0	4,394.7	4,334.1	4,280.9	8.4	13.6	103.16	200.6	626.9	685.8	669.2	16.59	41.338		
4,500.0	4,494.6	4,432.4	4,377.7	8.6	13.9	103.14	206.1	643.3	703.8	686.8	16.98	41.451		
4,600.0	4,594.5	4,530.8	4,474.5	8.8	14.3	103.12	211.6	659.7	721.7	704.4	17.37	41.558		
4,700.0	4,694.3	4,629.2	4,571.4	9.0	14.6	103.10	217.1	676.1	739.7	721.9	17.75	41.661		
4,800.0	4,794.2	4,727.6	4,668.2	9.2	15.0	103.09	222.7	692.6	757.6	739.5	18.14	41.760		
4,900.0	4,894.0	4,825.9	4,765.0	9.4	15.3	103.07	228.2	709.0	775.6	757.1	18.53	41.854		
5,000.0	4,993.9	4,924.3	4,861.9	9.6	15.7	103.05	233.7	725.4	793.6	774.7	18.92	41.945		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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							
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	5,093.7	5,022.7	4,958.7	9.8	16.0	103.04	239.2	741.8	811.5	792.2	19.31	42.032		
5,200.0	5,193.6	5,131.5	5,065.9	10.0	16.4	103.03	245.2	759.5	829.1	809.4	19.71	42.054		
5,300.0	5,293.5	5,246.2	5,179.2	10.2	16.7	103.07	250.8	776.1	844.9	824.8	20.13	41.967		
5,400.0	5,393.3	5,361.5	5,293.5	10.4	17.1	103.16	255.7	790.7	858.8	838.2	20.55	41.790		
5,500.0	5,493.2	5,477.4	5,408.7	10.6	17.3	103.29	259.9	803.1	870.8	849.8	20.97	41.529		
5,600.0	5,593.0	5,593.8	5,524.6	10.8	17.6	103.46	263.3	813.4	880.9	859.5	21.39	41.187		
5,700.0	5,692.9	5,710.6	5,641.0	11.0	17.8	103.68	266.0	821.5	889.0	867.2	21.81	40.772		
5,800.0	5,792.8	5,827.6	5,757.9	11.2	18.0	103.94	268.0	827.3	895.1	872.9	22.22	40.290		
5,900.0	5,892.8	5,945.0	5,875.2	11.3	18.2	104.10	269.2	830.8	898.8	876.2	22.60	39.770		
6,000.0	5,992.8	6,062.4	5,992.7	11.5	18.3	104.16	269.6	832.1	900.1	877.2	22.96	39.211		
6,100.0	6,092.8	6,163.5	6,093.8	11.7	18.4	90.02	269.6	832.1	900.1	876.9	23.28	38.670		
6,200.0	6,192.8	6,263.5	6,193.8	11.8	18.5	90.02	269.6	832.1	900.1	876.5	23.60	38.146		
6,300.0	6,292.8	6,363.5	6,293.8	12.0	18.6	90.02	269.6	832.1	900.1	876.2	23.92	37.635		
6,400.0	6,392.8	6,463.5	6,393.8	12.1	18.7	-89.98	269.6	832.1	900.1	875.9	24.24	37.139		
6,422.7	6,415.4	6,486.2	6,416.4	12.1	18.7	-90.04	269.6	832.1	900.1	875.8	24.28	37.069		
6,500.0	6,492.1	6,562.8	6,493.1	12.2	18.8	-90.64	269.6	832.1	900.2	875.8	24.40	36.890		
6,600.0	6,588.0	6,658.8	6,589.0	12.2	18.9	-92.25	269.6	832.1	900.9	876.5	24.40	36.930		
6,700.0	6,677.8	6,760.3	6,690.2	12.1	19.0	-94.47	263.1	832.1	903.4	879.1	24.27	37.226		
6,800.0	6,758.5	6,871.6	6,797.9	12.0	19.0	-96.70	235.8	832.1	907.3	883.2	24.10	37.639		
6,900.0	6,827.8	6,993.3	6,907.2	12.1	18.9	-98.84	182.9	832.1	912.3	888.2	24.03	37.964		
7,000.0	6,883.5	7,126.9	7,011.3	12.3	18.9	-100.80	99.7	832.1	917.6	893.4	24.20	37.922		
7,100.0	6,924.0	7,272.6	7,099.6	12.6	19.0	-102.41	-15.8	832.1	922.5	897.7	24.78	37.231		
7,200.0	6,948.1	7,428.7	7,158.7	13.2	19.4	-103.47	-159.8	832.1	925.8	899.9	25.95	35.680		
7,300.0	6,955.0	7,584.2	7,177.0	14.0	20.2	-103.79	-313.7	832.1	926.9	899.2	27.69	33.468		
7,400.0	6,955.0	7,684.2	7,177.0	15.0	20.9	-103.79	-413.7	832.1	926.9	897.3	29.58	31.338		
7,500.0	6,955.0	7,784.2	7,177.0	16.1	21.7	-103.79	-513.7	832.1	926.9	895.2	31.70	29.234		
7,600.0	6,955.0	7,884.2	7,177.0	17.3	22.6	-103.79	-613.7	832.1	926.9	892.8	34.04	27.226		
7,700.0	6,955.0	7,984.2	7,177.0	18.6	23.6	-103.79	-713.7	832.1	926.9	890.3	36.55	25.359		
7,800.0	6,955.0	8,084.2	7,177.0	20.0	24.7	-103.79	-813.7	832.1	926.9	887.7	39.19	23.649		
7,900.0	6,955.0	8,184.2	7,177.0	21.4	25.8	-103.79	-913.7	832.1	926.9	884.9	41.95	22.096		
8,000.0	6,955.0	8,284.2	7,177.0	22.9	27.1	-103.79	-1,013.7	832.1	926.9	882.1	44.79	20.693		
8,100.0	6,955.0	8,384.2	7,177.0	24.4	28.3	-103.79	-1,113.7	832.1	926.9	879.1	47.71	19.427		
8,200.0	6,955.0	8,484.2	7,177.0	25.9	29.7	-103.79	-1,213.7	832.1	926.8	876.2	50.69	18.286		
8,300.0	6,955.0	8,584.2	7,177.0	27.5	31.1	-103.79	-1,313.7	832.1	926.8	873.1	53.72	17.254		
8,400.0	6,955.0	8,684.2	7,177.0	29.1	32.5	-103.79	-1,413.7	832.1	926.8	870.1	56.79	16.320		
8,500.0	6,955.0	8,784.2	7,177.0	30.7	33.9	-103.79	-1,513.7	832.1	926.8	866.9	59.90	15.473		
8,600.0	6,955.0	8,884.2	7,177.0	32.3	35.4	-103.79	-1,613.7	832.1	926.8	863.8	63.04	14.702		
8,700.0	6,955.0	8,984.2	7,177.0	33.9	36.9	-103.79	-1,713.7	832.1	926.8	860.6	66.21	13.999		
8,800.0	6,955.0	9,084.2	7,177.0	35.6	38.4	-103.79	-1,813.7	832.1	926.8	857.4	69.40	13.356		
8,900.0	6,955.0	9,184.2	7,177.0	37.2	39.9	-103.79	-1,913.7	832.1	926.8	854.2	72.61	12.765		
9,000.0	6,955.0	9,284.2	7,177.0	38.9	41.5	-103.79	-2,013.7	832.1	926.8	851.0	75.83	12.222		
9,100.0	6,955.0	9,384.2	7,177.0	40.6	43.1	-103.79	-2,113.7	832.1	926.8	847.8	79.08	11.721		
9,200.0	6,955.0	9,484.2	7,177.0	42.2	44.7	-103.79	-2,213.7	832.1	926.8	844.5	82.33	11.257		
9,300.0	6,955.0	9,584.2	7,177.0	43.9	46.2	-103.79	-2,313.7	832.1	926.8	841.2	85.60	10.828		
9,400.0	6,955.0	9,684.2	7,177.0	45.6	47.9	-103.79	-2,413.7	832.1	926.8	838.0	88.88	10.428		
9,500.0	6,955.0	9,784.2	7,177.0	47.3	49.5	-103.79	-2,513.7	832.1	926.8	834.7	92.16	10.056		
9,600.0	6,955.0	9,884.2	7,177.0	49.0	51.1	-103.79	-2,613.7	832.1	926.8	831.4	95.46	9.709		
9,700.0	6,955.0	9,984.2	7,177.0	50.7	52.7	-103.79	-2,713.7	832.1	926.8	828.1	98.76	9.384		
9,800.0	6,955.0	10,084.2	7,177.0	52.4	54.4	-103.79	-2,813.7	832.1	926.8	824.8	102.07	9.080		
9,900.0	6,955.0	10,184.2	7,177.0	54.1	56.0	-103.79	-2,913.7	832.1	926.8	821.4	105.39	8.794		
10,000.0	6,955.0	10,284.2	7,177.0	55.8	57.7	-103.79	-3,013.7	832.1	926.8	818.1	108.71	8.526		
10,100.0	6,955.0	10,384.2	7,177.0	57.5	59.3	-103.79	-3,113.7	832.1	926.8	814.8	112.04	8.272		

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 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
10,200.0	6,955.0	10,484.2	7,177.0	59.3	61.0	-103.79	-3,213.7	832.1	926.8	811.5	115.37	8.033	
10,300.0	6,955.0	10,584.2	7,177.0	61.0	62.7	-103.79	-3,313.7	832.1	926.8	808.1	118.71	7.808	
10,400.0	6,955.0	10,684.2	7,177.0	62.7	64.4	-103.79	-3,413.7	832.1	926.8	804.8	122.05	7.594	
10,500.0	6,955.0	10,784.2	7,177.0	64.4	66.0	-103.79	-3,513.7	832.1	926.8	801.4	125.39	7.391	
10,600.0	6,955.0	10,884.2	7,177.0	66.1	67.7	-103.79	-3,613.7	832.1	926.8	798.1	128.74	7.199	
10,700.0	6,955.0	10,984.2	7,177.0	67.9	69.4	-103.80	-3,713.7	832.1	926.8	794.7	132.09	7.017	
10,800.0	6,955.0	11,084.2	7,177.0	69.6	71.1	-103.80	-3,813.7	832.1	926.8	791.4	135.44	6.843	
10,900.0	6,955.0	11,184.2	7,177.0	71.3	72.8	-103.80	-3,913.7	832.1	926.8	788.0	138.80	6.677	
11,000.0	6,955.0	11,284.2	7,177.0	73.0	74.5	-103.80	-4,013.7	832.1	926.8	784.7	142.16	6.520	
11,100.0	6,955.0	11,384.2	7,177.0	74.8	76.2	-103.80	-4,113.7	832.1	926.8	781.3	145.52	6.369	
11,200.0	6,955.0	11,484.2	7,177.0	76.5	77.9	-103.80	-4,213.7	832.1	926.8	777.9	148.88	6.225	
11,300.0	6,955.0	11,584.2	7,177.0	78.2	79.6	-103.80	-4,313.7	832.1	926.8	774.6	152.25	6.088	
11,400.0	6,955.0	11,684.2	7,177.0	80.0	81.3	-103.80	-4,413.7	832.1	926.8	771.2	155.62	5.956	
11,500.0	6,955.0	11,784.2	7,177.0	81.7	83.0	-103.80	-4,513.7	832.1	926.8	767.8	158.98	5.830	
11,540.4	6,955.0	11,824.6	7,177.0	82.4	83.7	-103.80	-4,554.1	832.1	926.8	766.5	160.35	5.780 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Newman 2H-32H-C264
Project:	DJ Wattenberg	TVD Reference:	WELL @ 4984.0ft (Original Well Elev)
Reference Site:	S32-T2N-R64W (Newman)	MD Reference:	WELL @ 4984.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Newman 2H-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 @ 4984.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Newman 2H-32H-C264
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.60°

