



## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site:</b>	Sec.18-T2N-R68W (Williams)	<b>North Reference:</b>	True
<b>Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2 (12/100)		

<b>Project</b>	DJ Wattenberg		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		Sec.18-T2N-R68W (Williams)			
Site Position:		Northing:	1,292,854.08 ft	Latitude:	40.136370
From:	Lat/Long	Easting:	3,127,589.74 ft	Longitude:	-105.043680
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Williams 3A-18H					
Well Position	+N/-S	0.0 ft	Northing:	1,292,245.04 ft	Latitude:	40.134730
	+E/-W	0.0 ft	Easting:	3,125,311.31 ft	Longitude:	-105.051840
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,981.0 ft

<b>Wellbore</b>	Hz				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	3/28/2011	8.98	66.80	53,005

<b>Design</b>	Plan #2 (12/100)				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN		<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	81.77	

<b>Plan Sections</b>										
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	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,520.9	15.63	249.82	3,514.5	-24.4	-66.3	3.00	3.00	0.00	249.82	
6,941.1	15.63	249.82	6,808.2	-342.2	-931.0	0.00	0.00	0.00	0.00	
7,792.5	91.00	79.00	7,387.8	-282.2	-484.4	12.50	8.85	-20.06	-170.43	
12,137.5	91.00	79.00	7,312.0	546.7	3,780.1	0.00	0.00	0.00	0.00	Williams 3A-18H PBH

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<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site:</b>	Sec.18-T2N-R68W (Williams)	<b>North Reference:</b>	True
<b>Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2 (12/100)		

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	Williams 3A-18H Sect Line 987' From SHL - Wil
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	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 3000'
3,100.0	3.00	249.82	3,100.0	-0.9	-2.5	-2.6	3.00	3.00	
3,200.0	6.00	249.82	3,199.6	-3.6	-9.8	-10.2	3.00	3.00	
3,300.0	9.00	249.82	3,298.8	-8.1	-22.1	-23.0	3.00	3.00	
3,400.0	12.00	249.82	3,397.1	-14.4	-39.2	-40.8	3.00	3.00	
3,500.0	15.00	249.82	3,494.3	-22.5	-61.1	-63.7	3.00	3.00	EOB; Inc=15.6°
3,520.9	15.63	249.82	3,514.5	-24.4	-66.3	-69.1	3.00	3.00	
3,600.0	15.63	249.82	3,590.6	-31.7	-86.3	-89.9	0.00	0.00	
3,700.0	15.63	249.82	3,686.9	-41.0	-111.5	-116.3	0.00	0.00	
3,800.0	15.63	249.82	3,783.2	-50.3	-136.8	-142.6	0.00	0.00	
3,900.0	15.63	249.82	3,879.6	-59.6	-162.1	-169.0	0.00	0.00	Sussex
4,000.0	15.63	249.82	3,975.9	-68.9	-187.4	-195.3	0.00	0.00	
4,100.0	15.63	249.82	4,072.2	-78.2	-212.7	-221.7	0.00	0.00	
4,200.0	15.63	249.82	4,168.5	-87.5	-238.0	-248.0	0.00	0.00	
4,264.9	15.63	249.82	4,231.0	-93.5	-254.4	-265.1	0.00	0.00	
4,300.0	15.63	249.82	4,264.8	-96.8	-263.2	-274.4	0.00	0.00	Sussex Marker
4,400.0	15.63	249.82	4,361.1	-106.1	-288.5	-300.7	0.00	0.00	
4,500.0	15.63	249.82	4,457.4	-115.3	-313.8	-327.1	0.00	0.00	
4,531.8	15.63	249.82	4,488.0	-118.3	-321.9	-335.5	0.00	0.00	
4,600.0	15.63	249.82	4,553.7	-124.6	-339.1	-353.4	0.00	0.00	
4,700.0	15.63	249.82	4,650.0	-133.9	-364.4	-379.8	0.00	0.00	Shannon
4,787.2	15.63	249.82	4,734.0	-142.0	-386.4	-402.8	0.00	0.00	

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<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site:</b>	Sec.18-T2N-R68W (Williams)	<b>North Reference:</b>	True
<b>Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2 (12/100)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	15.63	249.82	4,746.3	-143.2	-389.7	-406.2	0.00	0.00	
4,900.0	15.63	249.82	4,842.6	-152.5	-415.0	-432.5	0.00	0.00	
5,000.0	15.63	249.82	4,938.9	-161.8	-440.2	-458.9	0.00	0.00	
5,056.2	15.63	249.82	4,993.0	-167.0	-454.4	-473.7	0.00	0.00	Sharon Springs
5,100.0	15.63	249.82	5,035.2	-171.1	-465.5	-485.2	0.00	0.00	
5,200.0	15.63	249.82	5,131.5	-180.4	-490.8	-511.6	0.00	0.00	
5,300.0	15.63	249.82	5,227.8	-189.7	-516.1	-537.9	0.00	0.00	
5,400.0	15.63	249.82	5,324.1	-199.0	-541.4	-564.3	0.00	0.00	
5,500.0	15.63	249.82	5,420.4	-208.3	-566.7	-590.6	0.00	0.00	
5,600.0	15.63	249.82	5,516.7	-217.6	-591.9	-617.0	0.00	0.00	
5,700.0	15.63	249.82	5,613.0	-226.9	-617.2	-643.3	0.00	0.00	
5,800.0	15.63	249.82	5,709.3	-236.2	-642.5	-669.7	0.00	0.00	
5,900.0	15.63	249.82	5,805.6	-245.4	-667.8	-696.0	0.00	0.00	
6,000.0	15.63	249.82	5,901.9	-254.7	-693.1	-722.4	0.00	0.00	
6,100.0	15.63	249.82	5,998.2	-264.0	-718.4	-748.8	0.00	0.00	
6,200.0	15.63	249.82	6,094.5	-273.3	-743.6	-775.1	0.00	0.00	
6,300.0	15.63	249.82	6,190.8	-282.6	-768.9	-801.5	0.00	0.00	
6,400.0	15.63	249.82	6,287.1	-291.9	-794.2	-827.8	0.00	0.00	
6,500.0	15.63	249.82	6,383.4	-301.2	-819.5	-854.2	0.00	0.00	
6,600.0	15.63	249.82	6,479.7	-310.5	-844.8	-880.5	0.00	0.00	
6,700.0	15.63	249.82	6,576.1	-319.8	-870.1	-906.9	0.00	0.00	
6,800.0	15.63	249.82	6,672.4	-329.1	-895.3	-933.2	0.00	0.00	
6,900.0	15.63	249.82	6,768.7	-338.4	-920.6	-959.6	0.00	0.00	
6,941.1	15.63	249.82	6,808.2	-342.2	-931.0	-970.4	0.00	0.00	Start 12.5° Build @ 6941' MD
7,000.0	8.45	241.48	6,865.8	-347.0	-942.3	-982.3	12.50	-12.18	
7,100.0	5.13	109.02	6,965.5	-352.0	-944.5	-985.2	12.50	-3.32	
7,200.0	17.13	87.41	7,063.4	-352.8	-925.5	-966.5	12.50	12.00	
7,300.0	29.54	83.58	7,155.1	-349.4	-886.1	-927.0	12.50	12.41	
7,400.0	42.01	81.90	7,236.1	-341.9	-828.3	-868.7	12.50	12.46	
7,420.5	44.57	81.65	7,251.0	-339.8	-814.3	-854.6	12.50	12.47	Niobrara
7,500.0	54.48	80.88	7,302.5	-330.6	-754.7	-794.2	12.50	12.48	
7,516.8	56.58	80.74	7,312.0	-328.4	-741.0	-780.4	12.50	12.48	B Bench
7,600.0	66.97	80.14	7,351.3	-316.3	-668.8	-707.2	12.50	12.48	
7,700.0	79.45	79.52	7,380.1	-299.4	-574.8	-611.7	12.50	12.49	
7,792.5	91.00	79.00	7,387.8	-282.2	-484.4	-519.8	12.50	12.49	Landing Pt @ 7387' TVD, 91°
7,800.0	91.00	79.00	7,387.7	-280.8	-477.0	-512.3	0.00	0.00	
7,900.0	91.00	79.00	7,386.0	-261.7	-378.9	-412.4	0.00	0.00	
8,000.0	91.00	79.00	7,384.2	-242.6	-280.7	-312.6	0.00	0.00	
8,100.0	91.00	79.00	7,382.5	-223.6	-182.6	-212.7	0.00	0.00	
8,200.0	91.00	79.00	7,380.7	-204.5	-84.4	-112.8	0.00	0.00	
8,300.0	91.00	79.00	7,379.0	-185.4	13.7	-13.0	0.00	0.00	
8,400.0	91.00	79.00	7,377.2	-166.3	111.9	86.9	0.00	0.00	
8,500.0	91.00	79.00	7,375.5	-147.2	210.0	186.8	0.00	0.00	
8,600.0	91.00	79.00	7,373.7	-128.2	308.2	286.7	0.00	0.00	
8,700.0	91.00	79.00	7,372.0	-109.1	406.3	386.5	0.00	0.00	
8,800.0	91.00	79.00	7,370.2	-90.0	504.5	486.4	0.00	0.00	
8,900.0	91.00	79.00	7,368.5	-70.9	602.6	586.3	0.00	0.00	
9,000.0	91.00	79.00	7,366.8	-51.8	700.8	686.1	0.00	0.00	
9,100.0	91.00	79.00	7,365.0	-32.8	798.9	786.0	0.00	0.00	
9,200.0	91.00	79.00	7,363.3	-13.7	897.1	885.9	0.00	0.00	
9,300.0	91.00	79.00	7,361.5	5.4	995.2	985.7	0.00	0.00	
9,400.0	91.00	79.00	7,359.8	24.5	1,093.4	1,085.6	0.00	0.00	

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<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
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<b>Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2 (12/100)		

## 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
9,500.0	91.00	79.00	7,358.0	43.5	1,191.5	1,185.5	0.00	0.00	
9,600.0	91.00	79.00	7,356.3	62.6	1,289.6	1,285.3	0.00	0.00	
9,700.0	91.00	79.00	7,354.5	81.7	1,387.8	1,385.2	0.00	0.00	
9,800.0	91.00	79.00	7,352.8	100.8	1,485.9	1,485.1	0.00	0.00	
9,900.0	91.00	79.00	7,351.0	119.9	1,584.1	1,584.9	0.00	0.00	
10,000.0	91.00	79.00	7,349.3	138.9	1,682.2	1,684.8	0.00	0.00	
10,100.0	91.00	79.00	7,347.6	158.0	1,780.4	1,784.7	0.00	0.00	
10,200.0	91.00	79.00	7,345.8	177.1	1,878.5	1,884.5	0.00	0.00	
10,300.0	91.00	79.00	7,344.1	196.2	1,976.7	1,984.4	0.00	0.00	
10,400.0	91.00	79.00	7,342.3	215.2	2,074.8	2,084.3	0.00	0.00	
10,500.0	91.00	79.00	7,340.6	234.3	2,173.0	2,184.1	0.00	0.00	
10,600.0	91.00	79.00	7,338.8	253.4	2,271.1	2,284.0	0.00	0.00	
10,700.0	91.00	79.00	7,337.1	272.5	2,369.3	2,383.9	0.00	0.00	
10,800.0	91.00	79.00	7,335.3	291.6	2,467.4	2,483.7	0.00	0.00	
10,900.0	91.00	79.00	7,333.6	310.6	2,565.6	2,583.6	0.00	0.00	
11,000.0	91.00	79.00	7,331.9	329.7	2,663.7	2,683.5	0.00	0.00	
11,100.0	91.00	79.00	7,330.1	348.8	2,761.9	2,783.3	0.00	0.00	
11,200.0	91.00	79.00	7,328.4	367.9	2,860.0	2,883.2	0.00	0.00	
11,300.0	91.00	79.00	7,326.6	386.9	2,958.2	2,983.1	0.00	0.00	
11,400.0	91.00	79.00	7,324.9	406.0	3,056.3	3,083.0	0.00	0.00	
11,500.0	91.00	79.00	7,323.1	425.1	3,154.5	3,182.8	0.00	0.00	
11,600.0	91.00	79.00	7,321.4	444.2	3,252.6	3,282.7	0.00	0.00	
11,700.0	91.00	79.00	7,319.6	463.3	3,350.8	3,382.6	0.00	0.00	
11,800.0	91.00	79.00	7,317.9	482.3	3,448.9	3,482.4	0.00	0.00	
11,900.0	91.00	79.00	7,316.1	501.4	3,547.0	3,582.3	0.00	0.00	
12,000.0	91.00	79.00	7,314.4	520.5	3,645.2	3,682.2	0.00	0.00	
12,100.0	91.00	79.00	7,312.7	539.6	3,743.3	3,782.0	0.00	0.00	
12,137.5	91.00	79.00	7,312.0	546.7	3,780.1	3,819.4	0.00	0.00	TD at 12137.5 - Williams 3A-18H PBHL

## Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Williams 3A-18H PBHL - hit/miss target - Shape	0.00	0.30	7,312.0	546.7	3,780.1	1,292,810.85	3,129,088.61	40.136230	-105.038320
Williams 3A-18H Sect Li - plan misses target center by 7362.0ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Polygon	0.00	0.29	-7,362.0	0.0	0.0	1,292,245.04	3,125,311.31	40.134730	-105.051840
Point 1			-7,362.0	500.0	-987.0	1,292,745.12	3,124,324.35		
Point 2			-7,362.0	-500.0	-987.0	1,291,745.12	3,124,324.26		
Williams 3A-18H 460' Fv - plan misses target center by 7362.0ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Polygon	0.00	0.29	-7,362.0	0.0	0.0	1,292,245.04	3,125,311.31	40.134730	-105.051840
Point 1			-7,362.0	500.0	-527.0	1,292,745.08	3,124,784.35		
Point 2			-7,362.0	-500.0	-527.0	1,291,745.08	3,124,784.26		

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site:</b>	Sec.18-T2N-R68W (Williams)	<b>North Reference:</b>	True
<b>Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2 (12/100)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,264.9	4,231.0	Sussex				
4,531.8	4,488.0	Sussex Marker				
4,787.2	4,734.0	Shannon				
5,056.2	4,993.0	Sharon Springs				
7,420.5	7,251.0	Niobrara				
7,516.8	7,312.0	B Bench				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
3,000.0	3,000.0	0.0	0.0	KOP @ 3000'	
3,520.9	3,514.5	-24.4	-66.3	EOB; Inc=15.6°	
6,941.1	6,808.2	-342.2	-931.0	Start 12.5° Build @ 6941' MD	
7,792.5	7,387.8	-282.2	-484.4	Landing Pt @ 7387' TVD, 91°	
12,137.5	7,312.0	546.7	3,780.1	TD at 12137.5	

# **EnCana Oil & Gas (USA) Inc**

**DJ Wattenberg**

**Sec.18-T2N-R68W (Williams)**

**Williams 3A-18H**

**Hz**

**Plan #2 (12/100)**

## **Anticollision Report**

**28 March, 2011**

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #2 (12/100)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0ft	<b>Error Model:</b>	Systematic Ellipse
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 1,000.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b>	3/28/2011		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	12,137.5	Plan #2 (12/100) (Hz)	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						
Sec.18-T2N-R68W (Williams)						
Williams 18-16 (Existing) - DD - DD	11,473.1	7,264.6	633.9	533.6	6.317	CC
Williams 18-16 (Existing) - DD - DD	11,500.0	7,264.1	634.5	533.5	6.282	ES
Williams 18-16 (Existing) - DD - DD	11,600.0	7,262.4	646.5	543.1	6.252	SF
Williams 24-18 (Existing) - DD - DD	9,143.7	7,362.3	600.0	553.9	13.023	CC, ES
Williams 24-18 (Existing) - DD - DD	9,300.0	7,359.5	620.0	570.6	12.534	SF
Williams 33-18 (Existing) - DD - DD	10,677.4	7,337.5	339.2	257.8	4.167	CC, ES
Williams 33-18 (Existing) - DD - DD	10,700.0	7,337.1	340.0	258.1	4.149	SF
Williams 34-18 (Existing) - DD - DD	10,438.7	7,459.9	830.0	753.5	10.839	CC, ES
Williams 34-18 (Existing) - DD - DD	10,700.0	7,455.5	870.2	787.4	10.511	SF
Williams 43-18 (Existing) - DD - DD	12,022.5	7,314.0	449.1	335.4	3.949	CC, ES
Williams 43-18 (Existing) - DD - DD	12,100.0	7,312.7	455.7	340.1	3.943	SF
Williams E Unit #1 - Hz - Hz	3,000.0	3,000.0	35.2	24.7	3.366	CC, ES, SF



# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Sec.18-T2N-R68W (Williams) - Williams 18-16 (Existing) - DD - DD												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 8076-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
10,700.0	7,337.1	7,278.1	7,278.1	69.2	12.7	91.22	-202.3	3,249.0	999.7	917.9	81.81	12.219	
10,800.0	7,335.3	7,276.3	7,276.3	71.6	12.7	91.06	-202.3	3,249.0	924.5	840.3	84.20	10.980	
10,900.0	7,333.6	7,274.6	7,274.6	74.0	12.7	90.90	-202.3	3,249.0	854.5	767.9	86.59	9.868	
11,000.0	7,331.9	7,272.9	7,272.9	76.4	12.7	90.75	-202.3	3,249.0	791.0	702.0	88.99	8.889	
11,100.0	7,330.1	7,271.1	7,271.1	78.8	12.7	90.59	-202.3	3,249.0	735.5	644.2	91.38	8.049	
11,200.0	7,328.4	7,269.4	7,269.4	81.2	12.7	90.43	-202.3	3,249.0	690.2	596.5	93.78	7.360	
11,300.0	7,326.6	7,267.6	7,267.6	83.6	12.7	90.27	-202.3	3,249.0	657.1	560.9	96.19	6.832	
11,400.0	7,324.9	7,265.9	7,265.9	86.0	12.7	90.12	-202.3	3,249.0	638.1	539.5	98.59	6.473	
11,473.1	7,323.6	7,264.6	7,264.6	87.7	12.7	90.00	-202.3	3,249.0	633.9	533.6	100.35	6.317 CC	
11,500.0	7,323.1	7,264.1	7,264.1	88.4	12.7	89.96	-202.3	3,249.0	634.5	533.5	101.00	6.282 ES	
11,600.0	7,321.4	7,262.4	7,262.4	90.8	12.7	89.80	-202.3	3,249.0	646.5	543.1	103.41	6.252 SF	
11,700.0	7,319.6	7,260.6	7,260.6	93.2	12.6	89.64	-202.3	3,249.0	673.3	567.5	105.82	6.363	
11,800.0	7,317.9	7,258.9	7,258.9	95.6	12.6	89.48	-202.3	3,249.0	713.3	605.0	108.23	6.590	
11,900.0	7,316.1	7,257.1	7,257.1	98.0	12.6	89.33	-202.3	3,249.0	764.3	653.6	110.64	6.908	
12,000.0	7,314.4	7,255.4	7,255.4	100.5	12.6	89.17	-202.3	3,249.0	824.3	711.2	113.05	7.291	
12,100.0	7,312.7	7,253.7	7,253.7	102.9	12.6	89.01	-202.3	3,249.0	891.5	776.1	115.46	7.721	
12,137.5	7,312.0	7,253.0	7,253.0	103.8	12.6	88.95	-202.3	3,249.0	918.2	801.9	116.37	7.891	

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 8160-MWD													Offset Well Error:	0.0 ft
Reference														
Offset				Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,400.0	7,377.2	7,375.2	7,375.2	19.4	12.8	91.24	-613.4	956.3	955.5	923.2	32.23	29.642		
8,500.0	7,375.5	7,373.5	7,373.5	20.9	12.8	91.07	-613.4	956.3	879.9	846.2	33.71	26.105		
8,600.0	7,373.7	7,371.7	7,371.7	22.6	12.8	90.91	-613.4	956.3	809.6	774.3	35.35	22.903		
8,700.0	7,372.0	7,370.0	7,370.0	24.4	12.8	90.74	-613.4	956.3	746.2	709.1	37.13	20.097		
8,800.0	7,370.2	7,368.3	7,368.3	26.3	12.8	90.57	-613.4	956.3	691.4	652.4	39.02	17.721		
8,900.0	7,368.5	7,366.5	7,366.5	28.3	12.8	90.41	-613.4	956.3	647.6	606.6	40.99	15.798		
9,000.0	7,366.8	7,364.8	7,364.8	30.3	12.8	90.24	-613.4	956.3	617.0	573.9	43.04	14.336		
9,100.0	7,365.0	7,363.0	7,363.0	32.4	12.8	90.07	-613.4	956.3	601.6	556.5	45.14	13.328		
9,143.7	7,364.2	7,362.3	7,362.3	33.3	12.8	90.00	-613.4	956.3	600.0	553.9	46.07	13.023 CC, ES		
9,200.0	7,363.3	7,361.3	7,361.3	34.5	12.8	89.91	-613.4	956.3	602.7	555.4	47.28	12.745		
9,300.0	7,361.5	7,359.5	7,359.5	36.7	12.8	89.74	-613.4	956.3	620.0	570.6	49.47	12.534 SF		
9,400.0	7,359.8	7,357.8	7,357.8	38.9	12.8	89.57	-613.4	956.3	652.5	600.8	51.68	12.624		
9,500.0	7,358.0	7,356.0	7,356.0	41.2	12.8	89.41	-613.4	956.3	697.8	643.9	53.92	12.941		
9,600.0	7,356.3	7,354.3	7,354.3	43.5	12.8	89.24	-613.4	956.3	753.8	697.6	56.19	13.416		
9,700.0	7,354.5	7,352.5	7,352.5	45.7	12.8	89.07	-613.4	956.3	818.2	759.7	58.47	13.994		
9,800.0	7,352.8	7,350.8	7,350.8	48.0	12.8	88.91	-613.4	956.3	889.2	828.4	60.76	14.633		
9,900.0	7,351.0	7,349.1	7,349.1	50.4	12.8	88.74	-613.4	956.3	965.3	902.3	63.07	15.305		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Sec.18-T2N-R68W (Williams) - Williams 33-18 (Existing) - DD - DD		Offset Site Error:		0.0 ft	
Survey Program: 9000-MWD														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
9,800.0	7,352.8	7,352.8	7,352.8	48.0	12.8	-92.58	601.2	2,282.3	940.5	879.8	60.73	15.486					
9,900.0	7,351.0	7,351.0	7,351.0	50.4	12.8	-92.29	601.2	2,282.3	848.1	785.0	63.06	13.449					
10,000.0	7,349.3	7,349.3	7,349.3	52.7	12.8	-92.00	601.2	2,282.3	757.5	692.1	65.39	11.584					
10,100.0	7,347.6	7,347.6	7,347.6	55.0	12.8	-91.70	601.2	2,282.3	669.6	601.8	67.74	9.885					
10,200.0	7,345.8	7,345.8	7,345.8	57.4	12.8	-91.41	601.2	2,282.3	585.6	515.5	70.09	8.355					
10,300.0	7,344.1	7,344.1	7,344.1	59.7	12.8	-91.11	601.2	2,282.3	507.4	434.9	72.45	7.003					
10,400.0	7,342.3	7,342.3	7,342.3	62.1	12.8	-90.82	601.2	2,282.3	438.2	363.4	74.82	5.857					
10,500.0	7,340.6	7,340.6	7,340.6	64.5	12.8	-90.52	601.2	2,282.3	382.8	305.6	77.19	4.959					
10,600.0	7,338.8	7,338.8	7,338.8	66.8	12.8	-90.23	601.2	2,282.3	347.9	268.4	79.56	4.373					
10,677.4	7,337.5	7,337.5	7,337.5	68.7	12.8	-90.00	601.2	2,282.3	339.2	257.8	81.40	4.167 CC, ES					
10,700.0	7,337.1	7,337.1	7,337.1	69.2	12.8	-89.93	601.2	2,282.3	340.0	258.1	81.94	4.149 SF					
10,800.0	7,335.3	7,335.3	7,335.3	71.6	12.8	-89.64	601.2	2,282.3	360.7	276.4	84.32	4.278					
10,900.0	7,333.6	7,333.6	7,333.6	74.0	12.8	-89.34	601.2	2,282.3	405.8	319.0	86.71	4.680					
11,000.0	7,331.9	7,331.9	7,331.9	76.4	12.8	-89.05	601.2	2,282.3	468.1	379.0	89.09	5.254					
11,100.0	7,330.1	7,330.1	7,330.1	78.8	12.8	-88.75	601.2	2,282.3	541.9	450.4	91.48	5.924					
11,200.0	7,328.4	7,328.4	7,328.4	81.2	12.8	-88.46	601.2	2,282.3	623.0	529.2	93.86	6.637					
11,300.0	7,326.6	7,326.6	7,326.6	83.6	12.8	-88.17	601.2	2,282.3	709.0	612.7	96.25	7.366					
11,400.0	7,324.9	7,324.9	7,324.9	86.0	12.8	-87.87	601.2	2,282.3	798.2	699.6	98.64	8.092					
11,500.0	7,323.1	7,323.1	7,323.1	88.4	12.8	-87.58	601.2	2,282.3	889.7	788.7	101.02	8.807					
11,600.0	7,321.4	7,321.4	7,321.4	90.8	12.8	-87.28	601.2	2,282.3	982.9	879.5	103.41	9.505					

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Sec.18-T2N-R68W (Williams) - Williams 34-18 (Existing) - DD - DD		Offset Site Error:		0.0 ft	
Survey Program:												847-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)							
9,900.0	7,351.0	7,469.1	7,320.1	50.4	24.5	90.03	-592.2	2,271.0	989.5	925.5	63.93	15.478					
10,000.0	7,349.3	7,467.4	7,318.4	52.7	24.5	89.92	-592.2	2,271.0	938.8	872.5	66.26	14.169					
10,100.0	7,347.6	7,465.7	7,316.7	55.0	24.5	89.80	-592.2	2,271.0	896.5	827.9	68.60	13.068					
10,200.0	7,345.8	7,464.0	7,315.0	57.4	24.5	89.68	-592.2	2,271.0	863.7	792.7	70.95	12.174					
10,300.0	7,344.1	7,462.3	7,313.3	59.7	24.5	89.56	-592.2	2,271.0	841.5	768.2	73.30	11.481					
10,400.0	7,342.3	7,460.6	7,311.6	62.1	24.5	89.45	-592.2	2,271.0	830.9	755.3	75.66	10.982					
10,438.7	7,341.6	7,459.9	7,311.0	63.0	24.5	89.40	-592.2	2,271.0	830.0	753.5	76.58	10.839	CC, ES				
10,500.0	7,340.6	7,458.9	7,309.9	64.5	24.5	89.33	-592.1	2,271.0	832.3	754.3	78.03	10.666					
10,600.0	7,338.8	7,457.2	7,308.2	66.8	24.5	89.21	-592.1	2,271.0	845.6	765.2	80.41	10.516					
10,700.0	7,337.1	7,455.5	7,306.5	69.2	24.4	89.09	-592.1	2,271.0	870.2	787.4	82.79	10.511	SF				
10,800.0	7,335.3	7,453.8	7,304.8	71.6	24.4	88.98	-592.1	2,271.0	905.3	820.1	85.17	10.629					
10,900.0	7,333.6	7,452.1	7,303.1	74.0	24.4	88.86	-592.1	2,271.0	949.6	862.0	87.56	10.845					

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Sec.18-T2N-R68W (Williams) - Williams 43-18 (Existing) - DD - DD												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 9000-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
11,200.0	7,328.4	7,328.4	7,328.4	81.2	12.8	-91.83	965.6	3,581.5	937.0	843.1	93.86	9.983	
11,300.0	7,326.6	7,326.6	7,326.6	83.6	12.8	-91.61	965.6	3,581.5	850.6	754.3	96.27	8.835	
11,400.0	7,324.9	7,324.9	7,324.9	86.0	12.8	-91.39	965.6	3,581.5	767.5	668.8	98.68	7.777	
11,500.0	7,323.1	7,323.1	7,323.1	88.4	12.8	-91.16	965.6	3,581.5	688.9	587.8	101.09	6.814	
11,600.0	7,321.4	7,321.4	7,321.4	90.8	12.8	-90.94	965.6	3,581.5	616.5	513.0	103.51	5.956	
11,700.0	7,319.6	7,319.6	7,319.6	93.2	12.8	-90.72	965.6	3,581.5	552.8	446.9	105.92	5.219	
11,800.0	7,317.9	7,317.9	7,317.9	95.6	12.8	-90.50	965.6	3,581.5	501.1	392.8	108.34	4.626	
11,900.0	7,316.1	7,316.1	7,316.1	98.0	12.8	-90.27	965.6	3,581.5	465.5	354.7	110.75	4.203	
12,000.0	7,314.4	7,314.4	7,314.4	100.5	12.7	-90.05	965.6	3,581.5	449.6	336.5	113.17	3.973	
12,022.5	7,314.0	7,314.0	7,314.0	101.0	12.7	-90.00	965.6	3,581.5	449.1	335.4	113.71	3.949 CC, ES	
12,100.0	7,312.7	7,312.7	7,312.7	102.9	12.7	-89.83	965.6	3,581.5	455.7	340.1	115.59	3.943 SF	
12,137.5	7,312.0	7,312.0	7,312.0	103.8	12.7	-89.74	965.6	3,581.5	463.6	347.1	116.49	3.979	

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Sec.18-T2N-R68W (Williams) - Williams E Unit #1 - Hz - Hz													Offset Site Error:	0.0 ft
Survey Program: 9000-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	5.93	35.0	3.6	35.2					
100.0	100.0	100.0	100.0	0.2	0.2	5.93	35.0	3.6	35.2	34.8	0.33	107.229		
200.0	200.0	200.0	200.0	0.3	0.3	5.93	35.0	3.6	35.2	34.5	0.68	51.955		
300.0	300.0	300.0	300.0	0.5	0.5	5.93	35.0	3.6	35.2	34.1	1.03	34.283		
400.0	400.0	400.0	400.0	0.7	0.7	5.93	35.0	3.6	35.2	33.8	1.37	25.582		
500.0	500.0	500.0	500.0	0.9	0.9	5.93	35.0	3.6	35.2	33.4	1.72	20.403		
600.0	600.0	600.0	600.0	1.0	1.0	5.93	35.0	3.6	35.2	33.1	2.07	16.968		
700.0	700.0	700.0	700.0	1.2	1.2	5.93	35.0	3.6	35.2	32.7	2.42	14.523		
800.0	800.0	800.0	800.0	1.4	1.4	5.93	35.0	3.6	35.2	32.4	2.77	12.694		
900.0	900.0	900.0	900.0	1.5	1.6	5.93	35.0	3.6	35.2	32.0	3.12	11.274		
1,000.0	1,000.0	1,000.0	1,000.0	1.7	1.7	5.93	35.0	3.6	35.2	31.7	3.47	10.140		
1,100.0	1,100.0	1,100.0	1,100.0	1.9	1.9	5.93	35.0	3.6	35.2	31.3	3.82	9.213		
1,200.0	1,200.0	1,200.0	1,200.0	2.1	2.1	5.93	35.0	3.6	35.2	31.0	4.17	8.442		
1,300.0	1,300.0	1,300.0	1,300.0	2.2	2.3	5.93	35.0	3.6	35.2	30.6	4.51	7.789		
1,400.0	1,400.0	1,400.0	1,400.0	2.4	2.4	5.93	35.0	3.6	35.2	30.3	4.86	7.230		
1,500.0	1,500.0	1,500.0	1,500.0	2.6	2.6	5.93	35.0	3.6	35.2	29.9	5.21	6.746		
1,600.0	1,600.0	1,600.0	1,600.0	2.8	2.8	5.93	35.0	3.6	35.2	29.6	5.56	6.323		
1,700.0	1,700.0	1,700.0	1,700.0	2.9	3.0	5.93	35.0	3.6	35.2	29.3	5.91	5.950		
1,800.0	1,800.0	1,800.0	1,800.0	3.1	3.1	5.93	35.0	3.6	35.2	28.9	6.26	5.618		
1,900.0	1,900.0	1,900.0	1,900.0	3.3	3.3	5.93	35.0	3.6	35.2	28.6	6.61	5.322		
2,000.0	2,000.0	2,000.0	2,000.0	3.5	3.5	5.93	35.0	3.6	35.2	28.2	6.96	5.055		
2,100.0	2,100.0	2,100.0	2,100.0	3.6	3.7	5.93	35.0	3.6	35.2	27.9	7.30	4.813		
2,200.0	2,200.0	2,200.0	2,200.0	3.8	3.8	5.93	35.0	3.6	35.2	27.5	7.65	4.594		
2,300.0	2,300.0	2,300.0	2,300.0	4.0	4.0	5.93	35.0	3.6	35.2	27.2	8.00	4.394		
2,400.0	2,400.0	2,400.0	2,400.0	4.2	4.2	5.93	35.0	3.6	35.2	26.8	8.35	4.210		
2,500.0	2,500.0	2,500.0	2,500.0	4.3	4.4	5.93	35.0	3.6	35.2	26.5	8.70	4.041		
2,600.0	2,600.0	2,600.0	2,600.0	4.5	4.5	5.93	35.0	3.6	35.2	26.1	9.05	3.886		
2,700.0	2,700.0	2,700.0	2,700.0	4.7	4.7	5.93	35.0	3.6	35.2	25.8	9.40	3.741		
2,800.0	2,800.0	2,800.0	2,800.0	4.9	4.9	5.93	35.0	3.6	35.2	25.4	9.75	3.607		
2,900.0	2,900.0	2,900.0	2,900.0	5.0	5.1	5.93	35.0	3.6	35.2	25.1	10.10	3.483		
3,000.0	3,000.0	3,000.0	3,000.0	5.2	5.2	5.93	35.0	3.6	35.2	24.7	10.44	3.366 CC, ES, SF		
3,100.0	3,100.0	3,100.0	3,100.0	5.4	5.4	119.78	35.0	3.6	36.4	25.6	10.79	3.372		
3,200.0	3,199.6	3,199.6	3,199.6	5.6	5.6	129.25	35.0	3.6	40.9	29.7	11.13	3.671		
3,300.0	3,298.8	3,298.8	3,298.8	5.8	5.7	140.66	35.0	3.6	50.2	38.7	11.44	4.384		
3,400.0	3,397.1	3,397.1	3,397.1	6.0	5.9	150.57	35.0	3.6	65.3	53.6	11.73	5.572		
3,500.0	3,494.3	3,494.3	3,494.3	6.2	6.1	157.92	35.0	3.6	86.5	74.5	11.98	7.223		
3,600.0	3,590.6	3,590.6	3,590.6	6.5	6.3	163.02	35.0	3.6	111.9	99.6	12.29	9.109		
3,700.0	3,686.9	3,686.9	3,686.9	6.9	6.4	166.28	35.0	3.6	138.0	125.4	12.62	10.932		
3,800.0	3,783.2	3,783.2	3,783.2	7.2	6.6	168.51	35.0	3.6	164.3	151.4	12.96	12.680		
3,900.0	3,879.6	3,879.6	3,879.6	7.6	6.8	170.12	35.0	3.6	190.8	177.5	13.30	14.350		
4,000.0	3,975.9	3,975.9	3,975.9	7.9	6.9	171.34	35.0	3.6	217.4	203.8	13.64	15.944		
4,100.0	4,072.2	4,072.2	4,072.2	8.3	7.1	172.29	35.0	3.6	244.1	230.1	13.98	17.466		
4,200.0	4,168.5	4,168.5	4,168.5	8.7	7.3	173.05	35.0	3.6	270.9	256.5	14.32	18.918		
4,300.0	4,264.8	4,264.8	4,264.8	9.1	7.4	173.68	35.0	3.6	297.6	283.0	14.66	20.305		
4,400.0	4,361.1	4,361.1	4,361.1	9.6	7.6	174.20	35.0	3.6	324.4	309.4	15.00	21.631		
4,500.0	4,457.4	4,457.4	4,457.4	10.0	7.8	174.65	35.0	3.6	351.2	335.9	15.34	22.899		
4,600.0	4,553.7	4,553.7	4,553.7	10.5	7.9	175.03	35.0	3.6	378.1	362.4	15.68	24.113		
4,700.0	4,650.0	4,650.0	4,650.0	10.9	8.1	175.36	35.0	3.6	404.9	388.9	16.02	25.277		
4,800.0	4,746.3	4,746.3	4,746.3	11.4	8.3	175.65	35.0	3.6	431.8	415.4	16.36	26.392		
4,900.0	4,842.6	4,842.6	4,842.6	11.8	8.4	175.90	35.0	3.6	458.7	442.0	16.70	27.463		
5,000.0	4,938.9	4,938.9	4,938.9	12.3	8.6	176.13	35.0	3.6	485.5	468.5	17.04	28.492		
5,100.0	5,035.2	5,035.2	5,035.2	12.7	8.8	176.33	35.0	3.6	512.4	495.0	17.38	29.480		

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

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 9000-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	5,131.5	5,131.5	5,131.5	13.2	8.9	176.52	35.0	3.6	539.3	521.6	17.72	30.431	
5,300.0	5,227.8	5,227.8	5,227.8	13.7	9.1	176.68	35.0	3.6	566.2	548.1	18.06	31.346	
5,400.0	5,324.1	5,324.1	5,324.1	14.2	9.3	176.83	35.0	3.6	593.1	574.7	18.40	32.228	
5,500.0	5,420.4	5,420.4	5,420.4	14.6	9.4	176.97	35.0	3.6	620.0	601.3	18.74	33.078	
5,600.0	5,516.7	5,516.7	5,516.7	15.1	9.6	177.10	35.0	3.6	646.9	627.8	19.08	33.897	
5,700.0	5,613.0	5,613.0	5,613.0	15.6	9.8	177.21	35.0	3.6	673.8	654.4	19.42	34.688	
5,800.0	5,709.3	5,709.3	5,709.3	16.1	10.0	177.32	35.0	3.6	700.7	681.0	19.76	35.453	
5,900.0	5,805.6	5,805.6	5,805.6	16.6	10.1	177.42	35.0	3.6	727.6	707.5	20.11	36.191	
6,000.0	5,901.9	5,901.9	5,901.9	17.1	10.3	177.51	35.0	3.6	754.5	734.1	20.45	36.905	
6,100.0	5,998.2	5,998.2	5,998.2	17.6	10.5	177.60	35.0	3.6	781.5	760.7	20.79	37.595	
6,200.0	6,094.5	6,094.5	6,094.5	18.1	10.6	177.68	35.0	3.6	808.4	787.2	21.13	38.264	
6,300.0	6,190.8	6,190.8	6,190.8	18.6	10.8	177.75	35.0	3.6	835.3	813.8	21.47	38.911	
6,400.0	6,287.1	6,287.1	6,287.1	19.0	11.0	177.82	35.0	3.6	862.2	840.4	21.81	39.538	
6,500.0	6,383.4	6,383.4	6,383.4	19.5	11.1	177.89	35.0	3.6	889.1	867.0	22.15	40.146	
6,600.0	6,479.7	6,479.7	6,479.7	20.0	11.3	177.95	35.0	3.6	916.0	893.6	22.49	40.736	
6,700.0	6,576.1	6,576.1	6,576.1	20.5	11.5	178.01	35.0	3.6	943.0	920.1	22.83	41.308	
6,800.0	6,672.4	6,672.4	6,672.4	21.0	11.6	178.06	35.0	3.6	969.9	946.7	23.17	41.863	
6,900.0	6,768.7	6,768.7	6,768.7	21.5	11.8	178.12	35.0	3.6	996.8	973.3	23.51	42.403	
7,000.0	7,155.1	7,155.1	7,155.1	21.4	12.5	-19.30	35.0	3.6	969.2	946.3	22.93	42.276	
7,400.0	7,236.1	7,236.1	7,236.1	20.6	12.6	-21.44	35.0	3.6	913.3	891.5	21.79	41.907	
7,500.0	7,302.5	7,302.5	7,302.5	19.6	12.7	-27.19	35.0	3.6	841.9	820.5	21.32	39.485	
7,600.0	7,351.3	7,351.3	7,351.3	18.5	12.8	-39.23	35.0	3.6	758.7	735.7	22.97	33.023	
7,700.0	7,380.1	7,380.1	7,380.1	17.5	12.9	-62.73	35.0	3.6	668.1	640.6	27.49	24.307	
7,800.0	7,387.7	7,387.7	7,387.7	16.8	12.9	-92.44	35.0	3.6	575.1	545.7	29.37	19.581	
7,900.0	7,386.0	7,386.0	7,386.0	16.3	12.9	-91.98	35.0	3.6	484.1	455.1	28.98	16.703	
8,000.0	7,384.2	7,384.2	7,384.2	16.2	12.9	-91.52	35.0	3.6	397.4	368.4	28.96	13.722	
8,100.0	7,382.5	7,382.5	7,382.5	16.5	12.9	-91.06	35.0	3.6	318.6	289.3	29.31	10.872	
8,200.0	7,380.7	7,380.7	7,380.7	17.1	12.9	-90.61	35.0	3.6	255.1	225.1	30.00	8.505	
8,300.0	7,379.0	7,379.0	7,379.0	18.2	12.9	-90.15	35.0	3.6	220.6	189.6	31.00	7.117	
8,332.1	7,378.4	7,378.4	7,378.4	18.6	12.9	-90.00	35.0	3.6	218.2	186.8	31.40	6.951	
8,400.0	7,377.2	7,377.2	7,377.2	19.4	12.9	-89.69	35.0	3.6	228.5	196.3	32.25	7.086	
8,500.0	7,375.5	7,375.5	7,375.5	20.9	12.9	-89.23	35.0	3.6	275.3	241.6	33.72	8.164	
8,600.0	7,373.7	7,373.7	7,373.7	22.6	12.9	-88.77	35.0	3.6	345.5	310.1	35.36	9.771	
8,700.0	7,372.0	7,372.0	7,372.0	24.4	12.8	-88.32	35.0	3.6	427.7	390.5	37.13	11.519	
8,800.0	7,370.2	7,370.2	7,370.2	26.3	12.8	-87.86	35.0	3.6	516.2	477.2	39.01	13.233	
8,900.0	7,368.5	7,368.5	7,368.5	28.3	12.8	-87.40	35.0	3.6	608.3	567.3	40.97	14.848	
9,000.0	7,366.8	7,366.8	7,366.8	30.3	12.8	-86.94	35.0	3.6	702.5	659.5	42.99	16.340	
9,100.0	7,365.0	7,365.0	7,365.0	32.4	12.8	-86.49	35.0	3.6	798.2	753.1	45.07	17.708	
9,200.0	7,363.3	7,363.3	7,363.3	34.5	12.8	-86.03	35.0	3.6	894.7	847.6	47.19	18.959	
9,300.0	7,361.5	7,361.5	7,361.5	36.7	12.8	-85.57	35.0	3.6	992.0	942.7	49.35	20.103	

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Williams 3A-18H
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Reference Site:</b>	Sec.18-T2N-R68W (Williams)	<b>MD Reference:</b>	KBE @ 4993.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Williams 3A-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Hz	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #2 (12/100)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KBE @ 4993.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Williams 3A-18H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.29°

