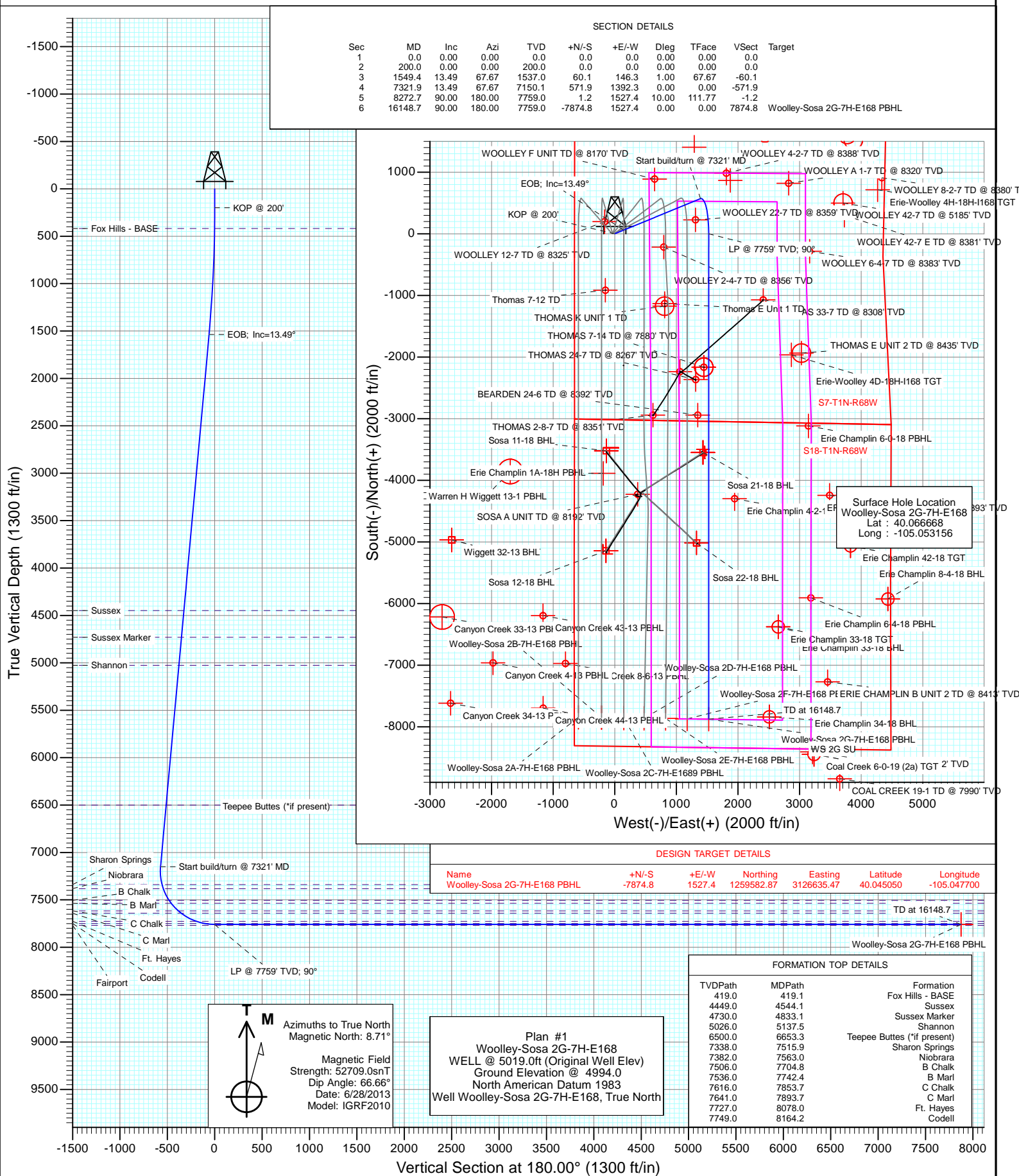




Project: DJ Wattenberg  
Site: S7-T1N-R68W (Woolley-Sosa/Becky)  
Well: Woolley-Sosa 2G-7H-E168  
Wellbore: HZ  
Design: Plan #1



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Sosa 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

<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		S7-T1N-R68W (Woolley-Sosa)			
Site Position:		Northing:	1,265,219.42 ft	Latitude:	40.060530
From:	Lat/Long	Easting:	3,126,139.27 ft	Longitude:	-105.049370
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.29 °

Well	Woolley-Sosa 2G-7H-E168					
Well Position	+N/-S	0.0 ft	Northing:	1,267,449.90 ft	Latitude:	40.066668
	+E/-W	0.0 ft	Easting:	3,125,068.39 ft	Longitude:	-105.053156
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,994.0 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</b>
			(°)	(°)	(nT)
	IGRF2010	6/28/2013	8.71	66.66	52,709

<b>Design</b>	Plan #1			
<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)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	180.00

<b>Plan Sections</b>										
<b>Measured Depth</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical Depth</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Dogleg Rate</b>	<b>Build Rate</b>	<b>Turn Rate</b>	<b>TFO</b>	<b>Target</b>
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,549.4	13.49	67.67	1,537.0	60.1	146.3	1.00	1.00	0.00	67.67	
7,321.9	13.49	67.67	7,150.1	571.9	1,392.3	0.00	0.00	0.00	0.00	
8,272.7	90.00	180.00	7,759.0	1.2	1,527.4	10.00	8.05	11.81	111.77	
16,148.7	90.00	180.00	7,759.0	-7,874.8	1,527.4	0.00	0.00	0.00	0.00	Woolley-Sosa 2G-7H-

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Sosa 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	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	KOP @ 200'
300.0	1.00	67.67	300.0	0.3	0.8	-0.3	1.00	1.00	
400.0	2.00	67.67	400.0	1.3	3.2	-1.3	1.00	1.00	
419.1	2.19	67.67	419.0	1.6	3.9	-1.6	1.00	1.00	Fox Hills - BASE
500.0	3.00	67.67	499.9	3.0	7.3	-3.0	1.00	1.00	
600.0	4.00	67.67	599.7	5.3	12.9	-5.3	1.00	1.00	
700.0	5.00	67.67	699.4	8.3	20.2	-8.3	1.00	1.00	
800.0	6.00	67.67	798.9	11.9	29.0	-11.9	1.00	1.00	
900.0	7.00	67.67	898.3	16.2	39.5	-16.2	1.00	1.00	
1,000.0	8.00	67.67	997.4	21.2	51.6	-21.2	1.00	1.00	
1,100.0	9.00	67.67	1,096.3	26.8	65.3	-26.8	1.00	1.00	
1,200.0	10.00	67.67	1,194.9	33.1	80.5	-33.1	1.00	1.00	
1,300.0	11.00	67.67	1,293.3	40.0	97.4	-40.0	1.00	1.00	
1,400.0	12.00	67.67	1,391.2	47.6	115.8	-47.6	1.00	1.00	
1,500.0	13.00	67.67	1,488.9	55.8	135.8	-55.8	1.00	1.00	
1,549.4	13.49	67.67	1,537.0	60.1	146.3	-60.1	1.00	1.00	EOB; Inc=13.49°
1,600.0	13.49	67.67	1,586.2	64.6	157.2	-64.6	0.00	0.00	
1,700.0	13.49	67.67	1,683.4	73.4	178.8	-73.4	0.00	0.00	
1,800.0	13.49	67.67	1,780.6	82.3	200.4	-82.3	0.00	0.00	
1,900.0	13.49	67.67	1,877.9	91.2	222.0	-91.2	0.00	0.00	
2,000.0	13.49	67.67	1,975.1	100.0	243.6	-100.0	0.00	0.00	
2,100.0	13.49	67.67	2,072.4	108.9	265.2	-108.9	0.00	0.00	
2,200.0	13.49	67.67	2,169.6	117.8	286.7	-117.8	0.00	0.00	
2,300.0	13.49	67.67	2,266.8	126.6	308.3	-126.6	0.00	0.00	
2,400.0	13.49	67.67	2,364.1	135.5	329.9	-135.5	0.00	0.00	
2,500.0	13.49	67.67	2,461.3	144.4	351.5	-144.4	0.00	0.00	
2,600.0	13.49	67.67	2,558.6	153.2	373.1	-153.2	0.00	0.00	
2,700.0	13.49	67.67	2,655.8	162.1	394.7	-162.1	0.00	0.00	
2,800.0	13.49	67.67	2,753.0	171.0	416.2	-171.0	0.00	0.00	
2,900.0	13.49	67.67	2,850.3	179.8	437.8	-179.8	0.00	0.00	
3,000.0	13.49	67.67	2,947.5	188.7	459.4	-188.7	0.00	0.00	
3,100.0	13.49	67.67	3,044.8	197.6	481.0	-197.6	0.00	0.00	
3,200.0	13.49	67.67	3,142.0	206.4	502.6	-206.4	0.00	0.00	
3,300.0	13.49	67.67	3,239.2	215.3	524.2	-215.3	0.00	0.00	
3,400.0	13.49	67.67	3,336.5	224.2	545.7	-224.2	0.00	0.00	
3,500.0	13.49	67.67	3,433.7	233.0	567.3	-233.0	0.00	0.00	
3,600.0	13.49	67.67	3,531.0	241.9	588.9	-241.9	0.00	0.00	
3,700.0	13.49	67.67	3,628.2	250.8	610.5	-250.8	0.00	0.00	
3,800.0	13.49	67.67	3,725.4	259.6	632.1	-259.6	0.00	0.00	
3,900.0	13.49	67.67	3,822.7	268.5	653.7	-268.5	0.00	0.00	
4,000.0	13.49	67.67	3,919.9	277.4	675.3	-277.4	0.00	0.00	
4,100.0	13.49	67.67	4,017.1	286.2	696.8	-286.2	0.00	0.00	
4,200.0	13.49	67.67	4,114.4	295.1	718.4	-295.1	0.00	0.00	
4,300.0	13.49	67.67	4,211.6	304.0	740.0	-304.0	0.00	0.00	
4,400.0	13.49	67.67	4,308.9	312.8	761.6	-312.8	0.00	0.00	
4,500.0	13.49	67.67	4,406.1	321.7	783.2	-321.7	0.00	0.00	
4,544.1	13.49	67.67	4,449.0	325.6	792.7	-325.6	0.00	0.00	Sussex
4,600.0	13.49	67.67	4,503.3	330.6	804.8	-330.6	0.00	0.00	
4,700.0	13.49	67.67	4,600.6	339.4	826.3	-339.4	0.00	0.00	
4,800.0	13.49	67.67	4,697.8	348.3	847.9	-348.3	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Sosa 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	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
4,833.1	13.49	67.67	4,730.0	351.2	855.1	-351.2	0.00	0.00	Sussex Marker
4,900.0	13.49	67.67	4,795.1	357.2	869.5	-357.2	0.00	0.00	
5,000.0	13.49	67.67	4,892.3	366.0	891.1	-366.0	0.00	0.00	
5,100.0	13.49	67.67	4,989.5	374.9	912.7	-374.9	0.00	0.00	
5,137.5	13.49	67.67	5,026.0	378.2	920.8	-378.2	0.00	0.00	Shannon
5,200.0	13.49	67.67	5,086.8	383.8	934.3	-383.8	0.00	0.00	
5,300.0	13.49	67.67	5,184.0	392.6	955.8	-392.6	0.00	0.00	
5,400.0	13.49	67.67	5,281.3	401.5	977.4	-401.5	0.00	0.00	
5,500.0	13.49	67.67	5,378.5	410.4	999.0	-410.4	0.00	0.00	
5,600.0	13.49	67.67	5,475.7	419.2	1,020.6	-419.2	0.00	0.00	
5,700.0	13.49	67.67	5,573.0	428.1	1,042.2	-428.1	0.00	0.00	
5,800.0	13.49	67.67	5,670.2	436.9	1,063.8	-436.9	0.00	0.00	
5,900.0	13.49	67.67	5,767.5	445.8	1,085.4	-445.8	0.00	0.00	
6,000.0	13.49	67.67	5,864.7	454.7	1,106.9	-454.7	0.00	0.00	
6,100.0	13.49	67.67	5,961.9	463.5	1,128.5	-463.5	0.00	0.00	
6,200.0	13.49	67.67	6,059.2	472.4	1,150.1	-472.4	0.00	0.00	
6,300.0	13.49	67.67	6,156.4	481.3	1,171.7	-481.3	0.00	0.00	
6,400.0	13.49	67.67	6,253.7	490.1	1,193.3	-490.1	0.00	0.00	
6,500.0	13.49	67.67	6,350.9	499.0	1,214.9	-499.0	0.00	0.00	
6,600.0	13.49	67.67	6,448.1	507.9	1,236.4	-507.9	0.00	0.00	
6,653.3	13.49	67.67	6,500.0	512.6	1,248.0	-512.6	0.00	0.00	Teepee Buttes (*if present)
6,700.0	13.49	67.67	6,545.4	516.7	1,258.0	-516.7	0.00	0.00	
6,800.0	13.49	67.67	6,642.6	525.6	1,279.6	-525.6	0.00	0.00	
6,900.0	13.49	67.67	6,739.9	534.5	1,301.2	-534.5	0.00	0.00	
7,000.0	13.49	67.67	6,837.1	543.3	1,322.8	-543.3	0.00	0.00	
7,100.0	13.49	67.67	6,934.3	552.2	1,344.4	-552.2	0.00	0.00	
7,200.0	13.49	67.67	7,031.6	561.1	1,365.9	-561.1	0.00	0.00	
7,300.0	13.49	67.67	7,128.8	569.9	1,387.5	-569.9	0.00	0.00	
7,321.9	13.49	67.67	7,150.1	571.9	1,392.3	-571.9	0.00	0.00	Start build/turn @ 7321' MD
7,400.0	12.80	102.40	7,226.3	573.5	1,409.2	-573.5	10.00	-0.88	
7,500.0	17.78	136.19	7,322.9	560.1	1,430.6	-560.1	10.00	4.97	
7,515.9	18.93	139.67	7,338.0	556.3	1,434.0	-556.3	10.00	7.25	Sharon Springs
7,563.0	22.64	147.85	7,382.0	542.8	1,443.7	-542.8	10.00	7.89	Niobrara
7,600.0	25.78	152.65	7,415.8	529.6	1,451.2	-529.6	10.00	8.48	
7,700.0	34.79	161.37	7,502.1	483.2	1,470.4	-483.2	10.00	9.00	
7,704.8	35.23	161.68	7,506.0	480.6	1,471.3	-480.6	10.00	9.26	B Chalk
7,742.4	38.74	163.94	7,536.0	459.0	1,477.9	-459.0	10.00	9.33	B Marl
7,800.0	44.18	166.80	7,579.2	422.1	1,487.5	-422.1	10.00	9.45	
7,853.7	49.31	169.00	7,616.0	383.8	1,495.7	-383.8	10.00	9.55	C Chalk
7,893.7	53.15	170.42	7,641.0	353.2	1,501.2	-353.2	10.00	9.61	C Marl
7,900.0	53.76	170.64	7,644.8	348.2	1,502.1	-348.2	10.00	9.63	
8,000.0	63.43	173.63	7,696.8	263.7	1,513.6	-263.7	10.00	9.67	
8,078.0	71.01	175.62	7,727.0	192.2	1,520.3	-192.2	10.00	9.72	Ft. Hayes
8,100.0	73.15	176.15	7,733.8	171.3	1,521.8	-171.3	10.00	9.74	
8,164.2	79.41	177.62	7,749.0	109.0	1,525.2	-109.0	10.00	9.75	Codell
8,200.0	82.90	178.42	7,754.5	73.7	1,526.4	-73.7	10.00	9.76	
8,272.7	90.00	180.00	7,759.0	1.2	1,527.4	-1.2	10.00	9.76	LP @ 7759' TVD; 90°
8,300.0	90.00	180.00	7,759.0	-26.1	1,527.4	26.1	0.00	0.00	
8,400.0	90.00	180.00	7,759.0	-126.1	1,527.4	126.1	0.00	0.00	
8,500.0	90.00	180.00	7,759.0	-226.1	1,527.4	226.1	0.00	0.00	
8,600.0	90.00	180.00	7,759.0	-326.1	1,527.4	326.1	0.00	0.00	
8,700.0	90.00	180.00	7,759.0	-426.1	1,527.4	426.1	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Sosa 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
8,800.0	90.00	180.00	7,759.0	-526.1	1,527.4	526.1	0.00	0.00	
8,900.0	90.00	180.00	7,759.0	-626.1	1,527.4	626.1	0.00	0.00	
9,000.0	90.00	180.00	7,759.0	-726.1	1,527.4	726.1	0.00	0.00	
9,100.0	90.00	180.00	7,759.0	-826.1	1,527.4	826.1	0.00	0.00	
9,200.0	90.00	180.00	7,759.0	-926.1	1,527.4	926.1	0.00	0.00	
9,300.0	90.00	180.00	7,759.0	-1,026.1	1,527.4	1,026.1	0.00	0.00	
9,400.0	90.00	180.00	7,759.0	-1,126.1	1,527.4	1,126.1	0.00	0.00	
9,500.0	90.00	180.00	7,759.0	-1,226.1	1,527.4	1,226.1	0.00	0.00	
9,600.0	90.00	180.00	7,759.0	-1,326.1	1,527.4	1,326.1	0.00	0.00	
9,700.0	90.00	180.00	7,759.0	-1,426.1	1,527.4	1,426.1	0.00	0.00	
9,800.0	90.00	180.00	7,759.0	-1,526.1	1,527.4	1,526.1	0.00	0.00	
9,900.0	90.00	180.00	7,759.0	-1,626.1	1,527.4	1,626.1	0.00	0.00	
10,000.0	90.00	180.00	7,759.0	-1,726.1	1,527.4	1,726.1	0.00	0.00	
10,100.0	90.00	180.00	7,759.0	-1,826.1	1,527.4	1,826.1	0.00	0.00	
10,200.0	90.00	180.00	7,759.0	-1,926.1	1,527.4	1,926.1	0.00	0.00	
10,300.0	90.00	180.00	7,759.0	-2,026.1	1,527.4	2,026.1	0.00	0.00	
10,400.0	90.00	180.00	7,759.0	-2,126.1	1,527.4	2,126.1	0.00	0.00	
10,500.0	90.00	180.00	7,759.0	-2,226.1	1,527.4	2,226.1	0.00	0.00	
10,600.0	90.00	180.00	7,759.0	-2,326.1	1,527.4	2,326.1	0.00	0.00	
10,700.0	90.00	180.00	7,759.0	-2,426.1	1,527.4	2,426.1	0.00	0.00	
10,800.0	90.00	180.00	7,759.0	-2,526.1	1,527.4	2,526.1	0.00	0.00	
10,900.0	90.00	180.00	7,759.0	-2,626.1	1,527.4	2,626.1	0.00	0.00	
11,000.0	90.00	180.00	7,759.0	-2,726.1	1,527.4	2,726.1	0.00	0.00	
11,100.0	90.00	180.00	7,759.0	-2,826.1	1,527.4	2,826.1	0.00	0.00	
11,200.0	90.00	180.00	7,759.0	-2,926.1	1,527.4	2,926.1	0.00	0.00	
11,300.0	90.00	180.00	7,759.0	-3,026.1	1,527.4	3,026.1	0.00	0.00	
11,400.0	90.00	180.00	7,759.0	-3,126.1	1,527.4	3,126.1	0.00	0.00	
11,500.0	90.00	180.00	7,759.0	-3,226.1	1,527.4	3,226.1	0.00	0.00	
11,600.0	90.00	180.00	7,759.0	-3,326.1	1,527.4	3,326.1	0.00	0.00	
11,700.0	90.00	180.00	7,759.0	-3,426.1	1,527.4	3,426.1	0.00	0.00	
11,800.0	90.00	180.00	7,759.0	-3,526.1	1,527.4	3,526.1	0.00	0.00	
11,900.0	90.00	180.00	7,759.0	-3,626.1	1,527.4	3,626.1	0.00	0.00	
12,000.0	90.00	180.00	7,759.0	-3,726.1	1,527.4	3,726.1	0.00	0.00	
12,100.0	90.00	180.00	7,759.0	-3,826.1	1,527.4	3,826.1	0.00	0.00	
12,200.0	90.00	180.00	7,759.0	-3,926.1	1,527.4	3,926.1	0.00	0.00	
12,300.0	90.00	180.00	7,759.0	-4,026.1	1,527.4	4,026.1	0.00	0.00	
12,400.0	90.00	180.00	7,759.0	-4,126.1	1,527.4	4,126.1	0.00	0.00	
12,500.0	90.00	180.00	7,759.0	-4,226.1	1,527.4	4,226.1	0.00	0.00	
12,600.0	90.00	180.00	7,759.0	-4,326.1	1,527.4	4,326.1	0.00	0.00	
12,700.0	90.00	180.00	7,759.0	-4,426.1	1,527.4	4,426.1	0.00	0.00	
12,800.0	90.00	180.00	7,759.0	-4,526.1	1,527.4	4,526.1	0.00	0.00	
12,900.0	90.00	180.00	7,759.0	-4,626.1	1,527.4	4,626.1	0.00	0.00	
13,000.0	90.00	180.00	7,759.0	-4,726.1	1,527.4	4,726.1	0.00	0.00	
13,100.0	90.00	180.00	7,759.0	-4,826.1	1,527.4	4,826.1	0.00	0.00	
13,200.0	90.00	180.00	7,759.0	-4,926.1	1,527.4	4,926.1	0.00	0.00	
13,300.0	90.00	180.00	7,759.0	-5,026.1	1,527.4	5,026.1	0.00	0.00	
13,400.0	90.00	180.00	7,759.0	-5,126.1	1,527.4	5,126.1	0.00	0.00	
13,500.0	90.00	180.00	7,759.0	-5,226.1	1,527.4	5,226.1	0.00	0.00	
13,600.0	90.00	180.00	7,759.0	-5,326.1	1,527.4	5,326.1	0.00	0.00	
13,700.0	90.00	180.00	7,759.0	-5,426.1	1,527.4	5,426.1	0.00	0.00	
13,800.0	90.00	180.00	7,759.0	-5,526.1	1,527.4	5,526.1	0.00	0.00	
13,900.0	90.00	180.00	7,759.0	-5,626.1	1,527.4	5,626.1	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Sosa 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	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
14,000.0	90.00	180.00	7,759.0	-5,726.1	1,527.4	5,726.1	0.00	0.00	
14,100.0	90.00	180.00	7,759.0	-5,826.1	1,527.4	5,826.1	0.00	0.00	
14,200.0	90.00	180.00	7,759.0	-5,926.1	1,527.4	5,926.1	0.00	0.00	
14,300.0	90.00	180.00	7,759.0	-6,026.1	1,527.4	6,026.1	0.00	0.00	
14,400.0	90.00	180.00	7,759.0	-6,126.1	1,527.4	6,126.1	0.00	0.00	
14,500.0	90.00	180.00	7,759.0	-6,226.1	1,527.4	6,226.1	0.00	0.00	
14,600.0	90.00	180.00	7,759.0	-6,326.1	1,527.4	6,326.1	0.00	0.00	
14,700.0	90.00	180.00	7,759.0	-6,426.1	1,527.4	6,426.1	0.00	0.00	
14,800.0	90.00	180.00	7,759.0	-6,526.1	1,527.4	6,526.1	0.00	0.00	
14,900.0	90.00	180.00	7,759.0	-6,626.1	1,527.4	6,626.1	0.00	0.00	
15,000.0	90.00	180.00	7,759.0	-6,726.1	1,527.4	6,726.1	0.00	0.00	
15,100.0	90.00	180.00	7,759.0	-6,826.1	1,527.4	6,826.1	0.00	0.00	
15,200.0	90.00	180.00	7,759.0	-6,926.1	1,527.4	6,926.1	0.00	0.00	
15,300.0	90.00	180.00	7,759.0	-7,026.1	1,527.4	7,026.1	0.00	0.00	
15,400.0	90.00	180.00	7,759.0	-7,126.1	1,527.4	7,126.1	0.00	0.00	
15,500.0	90.00	180.00	7,759.0	-7,226.1	1,527.4	7,226.1	0.00	0.00	
15,600.0	90.00	180.00	7,759.0	-7,326.1	1,527.4	7,326.1	0.00	0.00	
15,700.0	90.00	180.00	7,759.0	-7,426.1	1,527.4	7,426.1	0.00	0.00	
15,800.0	90.00	180.00	7,759.0	-7,526.1	1,527.4	7,526.1	0.00	0.00	
15,900.0	90.00	180.00	7,759.0	-7,626.1	1,527.4	7,626.1	0.00	0.00	
16,000.0	90.00	180.00	7,759.0	-7,726.1	1,527.4	7,726.1	0.00	0.00	
16,100.0	90.00	180.00	7,759.0	-7,826.1	1,527.4	7,826.1	0.00	0.00	
16,148.7	90.00	180.00	7,759.0	-7,874.8	1,527.4	7,874.8	0.00	0.00	TD at 16148.7

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Woolley-Sosa 2G-7H-E1	0.00	0.00	7,759.0	-7,874.8	1,527.4	1,259,582.87	3,126,635.47	40.045050	-105.047700
- plan hits target center									
- Point									

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>North Reference:</b>	True
<b>Well:</b>	Woolley-Sosa 2G-7H-E168	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
419.1	419.0	Fox Hills - BASE				
4,544.1	4,449.0	Sussex				
4,833.1	4,730.0	Sussex Marker				
5,137.5	5,026.0	Shannon				
6,653.3	6,500.0	Teepee Buttes (*if present)				
7,515.9	7,338.0	Sharon Springs				
7,563.0	7,382.0	Niobrara				
7,704.8	7,506.0	B Chalk				
7,742.4	7,536.0	B Marl				
7,853.7	7,616.0	C Chalk				
7,893.7	7,641.0	C Marl				
8,078.0	7,727.0	Ft. Hayes				
8,164.2	7,749.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200'	
1,549.4	1,537.0	60.1	146.3	EOB; Inc=13.49°	
7,321.9	7,150.1	571.9	1,392.3	Start build/turn @ 7321' MD	
8,272.7	7,759.0	1.2	1,527.4	LP @ 7759' TVD; 90°	
16,148.7	7,759.0	-7,874.8	1,527.4	TD at 16148.7	

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

**DJ Wattenberg**

**S7-T1N-R68W (Woolley-Sosa)**

**Woolley-Sosa 2G-7H-E168**

**HZ**

**Plan #1**

## **Anticollision Report**

**28 June, 2013**



## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1		
<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 500.0ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b>	6/28/2013		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	16,148.7	Plan #1 (HZ)	Geolink MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S7-T1N-R68W (Woolley-Sosa)						
THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEY	10,639.5	7,771.8	213.9	154.6	3.607	CC, ES, SF
THOMAS 2-8-7 (EXISTING) - ENCANA WELL - SURVEY						Out of range
THOMAS 33-7 (EXISTING) - ENCANA WELL - SURVEY						Out of range
Woolley-Sosa 2A-7H-E168 - HZ - Plan #1	200.0	200.0	40.0	39.4	65.481	CC, ES
Woolley-Sosa 2A-7H-E168 - HZ - Plan #1	600.0	596.9	62.2	60.2	30.656	SF
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	200.0	200.0	35.5	34.9	58.132	CC, ES
Woolley-Sosa 2B-7H-E168 - HZ - Plan #1	700.0	697.8	60.0	57.6	24.943	SF
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	200.0	200.0	30.0	29.4	49.111	CC, ES
Woolley-Sosa 2C-7H-E168 - HZ - Plan #1	800.0	800.2	55.2	52.5	20.031	SF
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	200.0	200.0	25.7	25.1	42.088	CC, ES
Woolley-Sosa 2D-7H-E168 - HZ - Plan #1	900.0	901.0	55.8	52.7	17.967	SF
Woolley-Sosa 2E-7H-E168 - HZ - Plan #1	200.0	200.0	10.0	9.4	16.370	CC, ES
Woolley-Sosa 2E-7H-E168 - HZ - Plan #1	400.0	400.0	13.3	12.0	10.152	SF
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	200.0	200.0	7.8	7.2	12.786	CC
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	300.0	300.0	8.1	7.2	8.443	ES
Woolley-Sosa 2F-7H-E168 - HZ - Plan #1	16,148.7	16,087.8	350.0	68.6	1.244	Level 2, SF

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - THOMAS 24-7 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 1024-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	7,759.0	7,773.3	7,760.8	46.9	14.4	90.75	-2,365.6	1,313.6	488.8	436.7	52.05	9.391		
10,300.0	7,759.0	7,773.0	7,760.5	48.2	14.4	90.66	-2,365.6	1,313.6	401.3	347.6	53.68	7.475		
10,400.0	7,759.0	7,772.7	7,760.1	49.6	14.4	90.57	-2,365.6	1,313.6	321.1	265.8	55.33	5.804		
10,500.0	7,759.0	7,772.3	7,759.8	50.9	14.4	90.48	-2,365.6	1,313.6	255.3	198.4	56.98	4.482		
10,600.0	7,759.0	7,772.0	7,759.4	52.4	14.4	90.38	-2,365.6	1,313.6	217.5	158.8	58.64	3.709		
10,639.5	7,759.0	7,771.8	7,759.3	52.9	14.4	90.35	-2,365.6	1,313.6	213.9	154.6	59.29	3.607	CC, ES, SF	
10,700.0	7,759.0	7,771.6	7,759.1	53.8	14.4	90.29	-2,365.6	1,313.6	222.2	161.9	60.30	3.686		
10,800.0	7,759.0	7,771.3	7,758.8	55.2	14.4	90.20	-2,365.6	1,313.6	267.4	205.4	61.97	4.314		
10,900.0	7,759.0	7,770.9	7,758.4	56.7	14.4	90.11	-2,365.6	1,313.6	337.0	273.4	63.65	5.295		
11,000.0	7,759.0	7,770.6	7,758.1	58.2	14.4	90.02	-2,365.6	1,313.6	419.1	353.8	65.33	6.416		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2A-7H-E168 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.71	0.2	-40.0	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.71	0.2	-40.0	40.0	39.7	0.26	152.789		
200.0	200.0	200.0	200.0	0.3	0.3	-89.71	0.2	-40.0	40.0	39.4	0.61	65.481 CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	-156.94	0.9	-40.6	41.4	40.4	0.96	43.119		
400.0	400.0	398.9	398.9	0.7	0.7	-155.78	2.8	-42.3	45.5	44.2	1.31	34.730		
500.0	499.9	498.1	497.9	0.8	0.8	-154.25	6.0	-45.1	52.5	50.8	1.67	31.478		
600.0	599.7	596.9	596.6	1.0	1.0	-152.68	10.6	-49.0	62.2	60.2	2.03	30.656 SF		
700.0	699.4	695.2	694.6	1.3	1.3	-151.25	16.3	-54.1	74.8	72.4	2.40	31.144		
800.0	798.9	793.0	791.9	1.5	1.5	-150.04	23.3	-60.2	90.2	87.4	2.78	32.385		
900.0	898.3	890.5	888.8	1.7	1.7	-149.06	31.4	-67.3	108.3	105.1	3.18	34.068		
1,000.0	997.4	988.5	986.2	2.0	2.0	-148.62	39.9	-74.7	128.1	124.5	3.58	35.777		
1,100.0	1,096.3	1,086.2	1,083.2	2.3	2.2	-148.62	48.4	-82.0	149.4	145.4	3.99	37.435		
1,200.0	1,194.9	1,183.6	1,180.0	2.7	2.5	-148.89	56.8	-89.4	172.2	167.8	4.41	39.052		
1,300.0	1,293.3	1,280.6	1,276.3	3.0	2.7	-149.34	65.1	-96.7	196.4	191.6	4.83	40.637		
1,400.0	1,391.2	1,377.2	1,372.3	3.4	3.0	-149.88	73.5	-104.0	222.1	216.9	5.26	42.202		
1,500.0	1,488.9	1,473.4	1,467.8	3.8	3.2	-150.49	81.8	-111.3	249.3	243.6	5.70	43.754		
1,600.0	1,586.2	1,569.1	1,563.0	4.2	3.5	-151.17	90.1	-118.5	277.9	271.7	6.14	45.254		
1,700.0	1,683.4	1,664.9	1,658.1	4.7	3.7	-151.80	98.4	-125.7	306.6	300.0	6.59	46.548		
1,800.0	1,780.6	1,760.6	1,753.2	5.1	4.0	-152.33	106.6	-132.9	335.3	328.3	7.03	47.678		
1,900.0	1,877.9	1,856.3	1,848.3	5.5	4.2	-152.77	114.9	-140.2	364.1	356.6	7.48	48.673		
2,000.0	1,975.1	1,952.1	1,943.4	6.0	4.5	-153.15	123.2	-147.4	392.9	385.0	7.93	49.557		
2,100.0	2,072.4	2,047.8	2,038.5	6.4	4.7	-153.48	131.5	-154.6	421.7	413.3	8.38	50.346		
2,200.0	2,169.6	2,143.6	2,133.6	6.8	5.0	-153.76	139.7	-161.8	450.5	441.7	8.82	51.054		
2,300.0	2,266.8	2,239.3	2,228.7	7.3	5.2	-154.01	148.0	-169.1	479.4	470.1	9.27	51.695		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2B-7H-E168 - 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	-79.98	6.2	-35.0	35.5					
100.0	100.0	100.0	100.0	0.1	0.1	-79.98	6.2	-35.0	35.5					
200.0	200.0	200.0	200.0	0.3	0.3	-79.98	6.2	-35.0	35.5	34.9	0.61	58.132 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-148.39	6.2	-35.0	36.3	35.3	0.96	37.756		
400.0	400.0	399.7	399.7	0.7	0.7	-149.23	7.0	-35.2	38.9	37.5	1.31	29.652		
500.0	499.9	499.3	499.2	0.8	0.8	-149.02	9.5	-35.9	43.7	42.0	1.67	26.228		
600.0	599.7	598.7	598.5	1.0	1.0	-148.07	13.7	-37.1	50.7	48.7	2.03	24.998		
700.0	699.4	697.8	697.5	1.3	1.2	-146.75	19.4	-38.8	60.0	57.6	2.41	24.943 SF		
800.0	798.9	796.6	796.0	1.5	1.4	-145.33	26.9	-40.9	71.5	68.7	2.80	25.559		
900.0	898.3	895.6	894.5	1.7	1.6	-144.26	35.4	-43.3	85.1	81.9	3.21	26.537		
1,000.0	997.4	994.4	993.0	2.0	1.9	-144.03	44.0	-45.8	100.1	96.4	3.62	27.613		
1,100.0	1,096.3	1,093.1	1,091.2	2.3	2.1	-144.34	52.5	-48.2	116.4	112.4	4.05	28.750		
1,200.0	1,194.9	1,191.5	1,189.2	2.7	2.3	-144.98	61.0	-50.6	134.2	129.7	4.48	29.938		
1,300.0	1,293.3	1,289.6	1,286.9	3.0	2.5	-145.82	69.5	-53.1	153.5	148.5	4.92	31.171		
1,400.0	1,391.2	1,387.4	1,384.3	3.4	2.7	-146.76	78.0	-55.5	174.1	168.8	5.37	32.446		
1,500.0	1,488.9	1,484.8	1,481.4	3.8	3.0	-147.75	86.4	-57.9	196.3	190.5	5.81	33.763		
1,600.0	1,586.2	1,581.9	1,578.1	4.2	3.2	-148.78	94.9	-60.3	219.8	213.5	6.26	35.087		
1,700.0	1,683.4	1,679.0	1,674.8	4.7	3.4	-149.70	103.3	-62.7	243.5	236.8	6.72	36.251		
1,800.0	1,780.6	1,776.1	1,771.5	5.1	3.6	-150.45	111.7	-65.1	267.3	260.1	7.17	37.276		
1,900.0	1,877.9	1,873.2	1,868.2	5.5	3.9	-151.07	120.1	-67.5	291.1	283.5	7.62	38.183		
2,000.0	1,975.1	1,970.2	1,964.9	6.0	4.1	-151.61	128.5	-69.9	315.0	306.9	8.08	38.992		
2,100.0	2,072.4	2,067.3	2,061.5	6.4	4.3	-152.07	136.9	-72.3	338.8	330.3	8.53	39.718		
2,200.0	2,169.6	2,164.4	2,158.2	6.8	4.6	-152.46	145.3	-74.7	362.7	353.7	8.98	40.372		
2,300.0	2,266.8	2,261.5	2,254.9	7.3	4.8	-152.81	153.7	-77.1	386.6	377.2	9.44	40.965		
2,400.0	2,364.1	2,358.6	2,351.6	7.7	5.0	-153.12	162.2	-79.5	410.5	400.6	9.89	41.504		
2,500.0	2,461.3	2,455.6	2,448.3	8.2	5.2	-153.39	170.6	-81.9	434.4	424.1	10.34	41.998		
2,600.0	2,558.6	2,552.7	2,544.9	8.6	5.5	-153.64	179.0	-84.4	458.3	447.6	10.80	42.450		
2,700.0	2,655.8	2,649.8	2,641.6	9.1	5.7	-153.86	187.4	-86.8	482.3	471.0	11.25	42.867		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2C-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.71	0.2	-30.0	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.71	0.2	-30.0	30.0	29.7	0.26	114.591		
200.0	200.0	200.0	200.0	0.3	0.3	-89.71	0.2	-30.0	30.0	29.4	0.61	49.111 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-158.00	0.2	-30.0	30.8	29.8	0.96	32.092		
400.0	400.0	400.0	400.0	0.7	0.7	-159.68	0.2	-30.0	33.2	31.9	1.31	25.394		
500.0	499.9	500.1	500.1	0.8	0.8	-160.73	1.0	-29.8	37.1	35.4	1.66	22.337		
600.0	599.7	600.2	600.1	1.0	1.0	-160.08	3.5	-29.0	42.0	40.0	2.01	20.843		
700.0	699.4	700.2	700.1	1.3	1.2	-158.30	7.7	-27.8	48.0	45.6	2.38	20.190		
800.0	798.9	800.2	799.9	1.5	1.4	-155.87	13.6	-26.2	55.2	52.5	2.76	20.031 SF		
900.0	898.3	900.0	899.4	1.7	1.6	-153.15	21.1	-24.0	63.7	60.6	3.16	20.171		
1,000.0	997.4	999.5	998.5	2.0	1.8	-150.72	29.9	-21.5	73.6	70.0	3.58	20.563		
1,100.0	1,096.3	1,098.9	1,097.4	2.3	2.0	-149.42	38.6	-19.0	85.1	81.1	4.01	21.205		
1,200.0	1,194.9	1,198.0	1,196.1	2.7	2.3	-148.94	47.4	-16.5	98.1	93.6	4.45	22.023		
1,300.0	1,293.3	1,297.0	1,294.6	3.0	2.5	-149.01	56.2	-14.0	112.6	107.7	4.90	22.972		
1,400.0	1,391.2	1,395.7	1,392.9	3.4	2.7	-149.45	64.9	-11.5	128.5	123.2	5.35	24.027		
1,500.0	1,488.9	1,494.1	1,491.0	3.8	2.9	-150.11	73.6	-9.0	146.0	140.2	5.80	25.172		
1,600.0	1,586.2	1,592.3	1,588.7	4.2	3.2	-150.92	82.3	-6.5	164.7	158.5	6.25	26.361		
1,700.0	1,683.4	1,690.5	1,686.5	4.7	3.4	-151.64	91.0	-4.1	183.7	177.0	6.70	27.408		
1,800.0	1,780.6	1,788.6	1,784.2	5.1	3.6	-152.22	99.7	-1.6	202.8	195.6	7.16	28.322		
1,900.0	1,877.9	1,886.8	1,882.0	5.5	3.8	-152.70	108.3	0.9	221.8	214.2	7.61	29.126		
2,000.0	1,975.1	1,984.9	1,979.7	6.0	4.1	-153.10	117.0	3.4	240.8	232.8	8.07	29.839		
2,100.0	2,072.4	2,083.1	2,077.4	6.4	4.3	-153.44	125.7	5.9	259.9	251.4	8.53	30.476		
2,200.0	2,169.6	2,181.2	2,175.2	6.8	4.5	-153.74	134.4	8.3	279.0	270.0	8.98	31.047		
2,300.0	2,266.8	2,279.4	2,272.9	7.3	4.8	-154.00	143.1	10.8	298.0	288.6	9.44	31.562		
2,400.0	2,364.1	2,377.6	2,370.7	7.7	5.0	-154.23	151.8	13.3	317.1	307.2	9.90	32.029		
2,500.0	2,461.3	2,475.7	2,468.4	8.2	5.2	-154.43	160.4	15.8	336.2	325.8	10.36	32.454		
2,600.0	2,558.6	2,573.9	2,566.1	8.6	5.4	-154.61	169.1	18.2	355.3	344.4	10.82	32.843		
2,700.0	2,655.8	2,672.0	2,663.9	9.1	5.7	-154.78	177.8	20.7	374.3	363.1	11.28	33.201		
2,800.0	2,753.0	2,770.2	2,761.6	9.5	5.9	-154.92	186.5	23.2	393.4	381.7	11.73	33.529		
2,900.0	2,850.3	2,868.3	2,859.4	10.0	6.1	-155.06	195.2	25.7	412.5	400.3	12.19	33.833		
3,000.0	2,947.5	2,966.5	2,957.1	10.4	6.4	-155.18	203.9	28.2	431.6	419.0	12.65	34.115		
3,100.0	3,044.8	3,064.7	3,054.8	10.9	6.6	-155.29	212.5	30.6	450.7	437.6	13.11	34.377		
3,200.0	3,142.0	3,162.8	3,152.6	11.3	6.8	-155.39	221.2	33.1	469.8	456.2	13.57	34.620		
3,300.0	3,239.2	3,261.0	3,250.3	11.8	7.1	-155.48	229.9	35.6	488.9	474.9	14.03	34.848		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2D-7H-E168 - 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	-76.22	6.1	-25.0	25.7					
100.0	100.0	100.0	100.0	0.1	0.1	-76.22	6.1	-25.0	25.7	25.4	0.26	98.205		
200.0	200.0	200.0	200.0	0.3	0.3	-76.22	6.1	-25.0	25.7	25.1	0.61	42.088 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-145.00	6.1	-25.0	26.4	25.5	0.96	27.515		
400.0	400.0	400.0	400.0	0.7	0.7	-147.99	6.1	-25.0	28.6	27.3	1.31	21.828		
500.0	499.9	499.9	499.9	0.8	0.8	-152.07	6.1	-25.0	32.4	30.7	1.66	19.493		
600.0	599.7	600.1	600.1	1.0	1.0	-155.32	6.8	-24.4	37.4	35.4	2.01	18.556		
700.0	699.4	700.3	700.3	1.3	1.2	-156.86	8.9	-22.8	43.0	40.6	2.37	18.134		
800.0	798.9	800.6	800.5	1.5	1.4	-157.21	12.3	-20.0	49.1	46.4	2.73	17.978		
900.0	898.3	901.0	900.7	1.7	1.6	-156.75	17.1	-16.2	55.8	52.7	3.10	17.967 SF		
1,000.0	997.4	1,001.3	1,000.7	2.0	1.8	-155.75	23.2	-11.3	63.0	59.5	3.49	18.028		
1,100.0	1,096.3	1,101.7	1,100.6	2.3	2.0	-154.40	30.8	-5.3	70.8	66.9	3.91	18.118		
1,200.0	1,194.9	1,201.8	1,200.1	2.7	2.2	-152.91	39.6	1.7	79.2	74.9	4.34	18.242		
1,300.0	1,293.3	1,301.3	1,298.9	3.0	2.5	-152.05	48.5	8.9	89.0	84.3	4.79	18.593		
1,400.0	1,391.2	1,400.6	1,397.6	3.4	2.7	-151.83	57.5	16.1	100.4	95.2	5.24	19.160		
1,500.0	1,488.9	1,499.8	1,496.1	3.8	3.0	-152.05	66.4	23.2	113.3	107.6	5.70	19.901		
1,600.0	1,586.2	1,598.8	1,594.4	4.2	3.2	-152.57	75.3	30.4	127.6	121.4	6.15	20.752		
1,700.0	1,683.4	1,697.7	1,692.7	4.7	3.5	-153.05	84.3	37.5	142.0	135.4	6.61	21.504		
1,800.0	1,780.6	1,796.7	1,791.0	5.1	3.7	-153.44	93.2	44.6	156.5	149.4	7.06	22.155		
1,900.0	1,877.9	1,895.6	1,889.2	5.5	4.0	-153.76	102.1	51.7	171.0	163.4	7.52	22.723		
2,000.0	1,975.1	1,994.6	1,987.5	6.0	4.2	-154.03	111.0	58.9	185.4	177.5	7.98	23.223		
2,100.0	2,072.4	2,093.5	2,085.8	6.4	4.5	-154.27	119.9	66.0	199.9	191.5	8.45	23.666		
2,200.0	2,169.6	2,192.4	2,184.1	6.8	4.7	-154.47	128.9	73.1	214.4	205.5	8.91	24.062		
2,300.0	2,266.8	2,291.4	2,282.4	7.3	5.0	-154.65	137.8	80.3	228.9	219.5	9.37	24.417		
2,400.0	2,364.1	2,390.3	2,380.7	7.7	5.3	-154.80	146.7	87.4	243.3	233.5	9.84	24.738		
2,500.0	2,461.3	2,489.3	2,478.9	8.2	5.5	-154.94	155.6	94.5	257.8	247.5	10.30	25.028		
2,600.0	2,558.6	2,588.2	2,577.2	8.6	5.8	-155.06	164.6	101.6	272.3	261.5	10.77	25.293		
2,700.0	2,655.8	2,687.2	2,675.5	9.1	6.0	-155.18	173.5	108.8	286.8	275.6	11.23	25.535		
2,800.0	2,753.0	2,786.1	2,773.8	9.5	6.3	-155.28	182.4	115.9	301.3	289.6	11.70	25.757		
2,900.0	2,850.3	2,885.1	2,872.1	10.0	6.6	-155.37	191.3	123.0	315.7	303.6	12.16	25.962		
3,000.0	2,947.5	2,984.0	2,970.4	10.4	6.8	-155.45	200.2	130.2	330.2	317.6	12.63	26.151		
3,100.0	3,044.8	3,082.9	3,068.6	10.9	7.1	-155.53	209.2	137.3	344.7	331.6	13.09	26.326		
3,200.0	3,142.0	3,181.9	3,166.9	11.3	7.3	-155.60	218.1	144.4	359.2	345.6	13.56	26.489		
3,300.0	3,239.2	3,280.8	3,265.2	11.8	7.6	-155.66	227.0	151.6	373.7	359.7	14.03	26.641		
3,400.0	3,336.5	3,379.8	3,363.5	12.2	7.9	-155.72	235.9	158.7	388.2	373.7	14.49	26.782		
3,500.0	3,433.7	3,478.7	3,461.8	12.7	8.1	-155.78	244.8	165.8	402.7	387.7	14.96	26.915		
3,600.0	3,531.0	3,577.7	3,560.1	13.1	8.4	-155.83	253.8	172.9	417.2	401.7	15.43	27.039		
3,700.0	3,628.2	3,676.6	3,658.3	13.6	8.6	-155.88	262.7	180.1	431.6	415.7	15.90	27.156		
3,800.0	3,725.4	3,775.6	3,756.6	14.0	8.9	-155.92	271.6	187.2	446.1	429.8	16.36	27.266		
3,900.0	3,822.7	3,874.5	3,854.9	14.5	9.2	-155.96	280.5	194.3	460.6	443.8	16.83	27.370		
4,000.0	3,919.9	3,973.4	3,953.2	14.9	9.4	-156.00	289.4	201.5	475.1	457.8	17.30	27.468		
4,100.0	4,017.1	4,072.4	4,051.5	15.4	9.7	-156.04	298.4	208.6	489.6	471.8	17.76	27.560		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2E-7H-E168 - 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	-89.71	0.1	-10.0	10.0					
100.0	100.0	100.0	100.0	0.1	0.1	-89.71	0.1	-10.0	10.0	9.7	0.26	38.197		
200.0	200.0	200.0	200.0	0.3	0.3	-89.71	0.1	-10.0	10.0	9.4	0.61	16.370 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	-159.16	0.1	-10.0	10.8	9.9	0.96	11.262		
400.0	400.0	400.0	400.0	0.7	0.7	-163.17	0.1	-10.0	13.3	12.0	1.31	10.152 SF		
500.0	499.9	499.9	499.9	0.8	0.8	-167.30	0.1	-10.0	17.5	15.9	1.66	10.563		
600.0	599.7	599.7	599.7	1.0	1.0	-170.56	0.1	-10.0	23.5	21.5	2.01	11.720		
700.0	699.4	699.4	699.4	1.3	1.2	-172.91	0.1	-10.0	31.3	28.9	2.35	13.293		
800.0	798.9	798.9	798.9	1.5	1.4	-174.56	0.1	-10.0	40.8	38.1	2.70	15.121		
900.0	898.3	898.3	898.3	1.7	1.5	-175.73	0.1	-10.0	52.1	49.0	3.04	17.117		
1,000.0	997.4	997.4	997.4	2.0	1.7	-176.58	0.1	-10.0	65.1	61.7	3.39	19.229		
1,100.0	1,096.3	1,097.6	1,097.6	2.3	1.9	-177.03	0.6	-9.3	79.1	75.4	3.73	21.202		
1,200.0	1,194.9	1,198.0	1,198.0	2.7	2.0	-177.07	2.1	-7.3	93.1	89.1	4.07	22.861		
1,300.0	1,293.3	1,298.7	1,298.6	3.0	2.2	-176.85	4.7	-3.8	107.3	102.8	4.42	24.275		
1,400.0	1,391.2	1,399.6	1,399.3	3.4	2.4	-176.47	8.5	1.1	121.5	116.7	4.76	25.494		
1,500.0	1,488.9	1,500.7	1,500.1	3.8	2.6	-175.97	13.3	7.4	135.7	130.6	5.11	26.553		
1,600.0	1,586.2	1,602.1	1,601.0	4.2	2.8	-175.39	19.1	15.2	149.9	144.4	5.47	27.409		
1,700.0	1,683.4	1,703.9	1,702.1	4.7	3.1	-174.71	26.1	24.4	162.6	156.7	5.83	27.861		
1,800.0	1,780.6	1,806.1	1,803.4	5.1	3.3	-173.91	34.2	35.1	173.6	167.4	6.21	27.959		
1,900.0	1,877.9	1,908.6	1,904.8	5.5	3.6	-173.00	43.4	47.3	183.1	176.5	6.60	27.755		
2,000.0	1,975.1	2,009.4	2,004.2	6.0	3.9	-172.03	53.4	60.5	191.2	184.2	6.99	27.354		
2,100.0	2,072.4	2,109.0	2,102.5	6.4	4.1	-171.13	63.3	73.6	199.2	191.9	7.39	26.964		
2,200.0	2,169.6	2,208.7	2,200.8	6.8	4.4	-170.30	73.2	86.6	207.3	199.5	7.80	26.593		
2,300.0	2,266.8	2,308.3	2,299.0	7.3	4.7	-169.53	83.2	99.7	215.5	207.3	8.21	26.239		
2,400.0	2,364.1	2,407.9	2,397.3	7.7	5.0	-168.82	93.1	112.8	223.7	215.0	8.63	25.903		
2,500.0	2,461.3	2,507.5	2,495.6	8.2	5.3	-168.16	103.0	125.9	231.9	222.8	9.06	25.582		
2,600.0	2,558.6	2,607.2	2,593.8	8.6	5.7	-167.54	112.9	139.0	240.1	230.6	9.50	25.276		
2,700.0	2,655.8	2,706.8	2,692.1	9.1	6.0	-166.97	122.8	152.1	248.3	238.4	9.94	24.985		
2,800.0	2,753.0	2,806.4	2,790.4	9.5	6.3	-166.43	132.7	165.2	256.6	246.2	10.39	24.708		
2,900.0	2,850.3	2,906.1	2,888.6	10.0	6.6	-165.93	142.7	178.3	264.9	254.1	10.84	24.444		
3,000.0	2,947.5	3,005.7	2,986.9	10.4	6.9	-165.45	152.6	191.4	273.3	262.0	11.29	24.193		
3,100.0	3,044.8	3,105.3	3,085.1	10.9	7.3	-165.01	162.5	204.5	281.6	269.8	11.76	23.954		
3,200.0	3,142.0	3,204.9	3,183.4	11.3	7.6	-164.59	172.4	217.6	290.0	277.7	12.22	23.726		
3,300.0	3,239.2	3,304.6	3,281.7	11.8	7.9	-164.19	182.3	230.7	298.3	285.6	12.69	23.510		
3,400.0	3,336.5	3,404.2	3,379.9	12.2	8.2	-163.82	192.2	243.8	306.7	293.5	13.16	23.303		
3,500.0	3,433.7	3,503.8	3,478.2	12.7	8.6	-163.46	202.2	256.9	315.1	301.5	13.64	23.106		
3,600.0	3,531.0	3,603.5	3,576.5	13.1	8.9	-163.12	212.1	270.0	323.5	309.4	14.12	22.918		
3,700.0	3,628.2	3,703.1	3,674.7	13.6	9.2	-162.80	222.0	283.1	331.9	317.3	14.60	22.739		
3,800.0	3,725.4	3,802.7	3,773.0	14.0	9.5	-162.50	231.9	296.2	340.4	325.3	15.08	22.568		
3,900.0	3,822.7	3,902.3	3,871.3	14.5	9.9	-162.21	241.8	309.3	348.8	333.2	15.57	22.405		
4,000.0	3,919.9	4,002.0	3,969.5	14.9	10.2	-161.94	251.7	322.4	357.2	341.2	16.06	22.249		
4,100.0	4,017.1	4,101.6	4,067.8	15.4	10.5	-161.67	261.7	335.5	365.7	349.1	16.55	22.100		
4,200.0	4,114.4	4,201.2	4,166.1	15.8	10.9	-161.42	271.6	348.6	374.2	357.1	17.04	21.957		
4,300.0	4,211.6	4,300.8	4,264.3	16.3	11.2	-161.18	281.5	361.7	382.6	365.1	17.53	21.821		
4,400.0	4,308.9	4,400.5	4,362.6	16.7	11.5	-160.95	291.4	374.8	391.1	373.1	18.03	21.690		
4,500.0	4,406.1	4,500.1	4,460.8	17.2	11.9	-160.74	301.3	387.9	399.6	381.0	18.53	21.565		
4,600.0	4,503.3	4,599.7	4,559.1	17.6	12.2	-160.52	311.3	401.0	408.1	389.0	19.03	21.444		
4,700.0	4,600.6	4,699.4	4,657.4	18.1	12.5	-160.32	321.2	414.1	416.5	397.0	19.53	21.329		
4,800.0	4,697.8	4,799.0	4,755.6	18.5	12.9	-160.13	331.1	427.2	425.0	405.0	20.03	21.218		
4,900.0	4,795.1	4,898.6	4,853.9	19.0	13.2	-159.94	341.0	440.3	433.5	413.0	20.54	21.112		
5,000.0	4,892.3	4,998.2	4,952.2	19.4	13.5	-159.76	350.9	453.4	442.0	421.0	21.04	21.009		
5,100.0	4,989.5	5,097.9	5,050.4	19.9	13.9	-159.59	360.8	466.5	450.6	429.0	21.55	20.911		

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 Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2E-7H-E168 - 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					
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor				
5,200.0	5,086.8	5,197.5	5,148.7	20.3	14.2	-159.43	370.8	479.6	459.1	437.0	22.05	20.816				
5,300.0	5,184.0	5,297.1	5,247.0	20.8	14.5	-159.27	380.7	492.7	467.6	445.0	22.56	20.725				
5,400.0	5,281.3	5,396.8	5,345.2	21.2	14.9	-159.11	390.6	505.8	476.1	453.0	23.07	20.637				
5,500.0	5,378.5	5,496.4	5,443.5	21.7	15.2	-158.96	400.5	518.9	484.6	461.0	23.58	20.552				
5,600.0	5,475.7	5,596.0	5,541.8	22.1	15.5	-158.82	410.4	532.0	493.2	469.1	24.09	20.470				



# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2F-7H-E168 - 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	-39.52	6.0	-5.0	7.8					
100.0	100.0	100.0	100.0	0.1	0.1	-39.52	6.0	-5.0	7.8	7.5	0.26	29.833		
200.0	200.0	200.0	200.0	0.3	0.3	-39.52	6.0	-5.0	7.8	7.2	0.61	12.786 CC		
300.0	300.0	300.0	300.0	0.5	0.5	-113.08	6.0	-5.0	8.1	7.2	0.96	8.443 ES		
400.0	400.0	400.0	400.0	0.7	0.7	-123.14	6.4	-4.2	9.0	7.7	1.31	6.861		
500.0	499.9	500.1	500.1	0.8	0.8	-130.57	7.7	-1.9	10.3	8.6	1.67	6.144		
600.0	599.7	600.2	600.1	1.0	1.0	-135.72	9.7	2.0	11.8	9.8	2.04	5.788		
700.0	699.4	700.3	700.0	1.3	1.2	-139.13	12.6	7.4	13.5	11.1	2.41	5.599		
800.0	798.9	800.5	799.9	1.5	1.4	-141.27	16.3	14.3	15.4	12.6	2.80	5.492		
900.0	898.3	900.7	899.6	1.7	1.7	-142.51	20.8	22.8	17.4	14.2	3.20	5.425		
1,000.0	997.4	1,000.9	999.2	2.0	1.9	-143.09	26.1	32.8	19.5	15.8	3.62	5.376		
1,100.0	1,096.3	1,101.1	1,098.5	2.3	2.2	-143.19	32.3	44.4	21.7	17.6	4.06	5.333		
1,200.0	1,194.9	1,201.4	1,197.7	2.7	2.5	-142.96	39.2	57.5	24.0	19.4	4.53	5.287		
1,300.0	1,293.3	1,301.7	1,296.6	3.0	2.8	-142.47	47.0	72.2	26.4	21.3	5.04	5.236		
1,400.0	1,391.2	1,402.0	1,395.2	3.4	3.1	-141.80	55.6	88.3	28.9	23.3	5.59	5.177		
1,500.0	1,488.9	1,501.9	1,493.3	3.8	3.5	-142.20	64.5	105.1	32.2	26.1	6.12	5.271		
1,600.0	1,586.2	1,601.8	1,591.4	4.2	3.9	-143.96	73.4	121.9	36.8	30.2	6.60	5.578		
1,700.0	1,683.4	1,701.7	1,689.5	4.7	4.2	-145.52	82.4	138.7	41.6	34.5	7.07	5.878		
1,800.0	1,780.6	1,801.6	1,787.5	5.1	4.6	-146.76	91.3	155.5	46.3	38.8	7.54	6.144		
1,900.0	1,877.9	1,901.5	1,885.6	5.5	4.9	-147.76	100.2	172.2	51.1	43.1	8.01	6.380		
2,000.0	1,975.1	2,001.4	1,983.6	6.0	5.3	-148.59	109.1	189.0	55.9	47.5	8.49	6.592		
2,100.0	2,072.4	2,101.2	2,081.7	6.4	5.7	-149.29	118.0	205.8	60.8	51.8	8.96	6.783		
2,200.0	2,169.6	2,201.1	2,179.7	6.8	6.1	-149.89	127.0	222.6	65.6	56.2	9.43	6.956		
2,300.0	2,266.8	2,301.0	2,277.8	7.3	6.4	-150.40	135.9	239.4	70.4	60.5	9.90	7.112		
2,400.0	2,364.1	2,400.9	2,375.9	7.7	6.8	-150.85	144.8	256.2	75.3	64.9	10.37	7.255		
2,500.0	2,461.3	2,500.8	2,473.9	8.2	7.2	-151.25	153.7	272.9	80.1	69.3	10.85	7.385		
2,600.0	2,558.6	2,600.6	2,572.0	8.6	7.5	-151.60	162.6	289.7	84.9	73.6	11.32	7.505		
2,700.0	2,655.8	2,700.5	2,670.0	9.1	7.9	-151.91	171.6	306.5	89.8	78.0	11.79	7.615		
2,800.0	2,753.0	2,800.4	2,768.1	9.5	8.3	-152.19	180.5	323.3	94.6	82.4	12.26	7.717		
2,900.0	2,850.3	2,900.3	2,866.1	10.0	8.7	-152.44	189.4	340.1	99.5	86.8	12.74	7.812		
3,000.0	2,947.5	3,000.2	2,964.2	10.4	9.0	-152.67	198.3	356.8	104.4	91.1	13.21	7.900		
3,100.0	3,044.8	3,100.1	3,062.3	10.9	9.4	-152.88	207.2	373.6	109.2	95.5	13.68	7.982		
3,200.0	3,142.0	3,199.9	3,160.3	11.3	9.8	-153.07	216.1	390.4	114.1	99.9	14.16	8.058		
3,300.0	3,239.2	3,299.8	3,258.4	11.8	10.2	-153.24	225.1	407.2	118.9	104.3	14.63	8.130		
3,400.0	3,336.5	3,399.7	3,356.4	12.2	10.5	-153.41	234.0	424.0	123.8	108.7	15.10	8.197		
3,500.0	3,433.7	3,499.6	3,454.5	12.7	10.9	-153.56	242.9	440.8	128.6	113.1	15.57	8.260		
3,600.0	3,531.0	3,599.5	3,552.5	13.1	11.3	-153.69	251.8	457.5	133.5	117.5	16.05	8.320		
3,700.0	3,628.2	3,699.3	3,650.6	13.6	11.7	-153.82	260.7	474.3	138.4	121.8	16.52	8.376		
3,800.0	3,725.4	3,799.2	3,748.6	14.0	12.1	-153.94	269.7	491.1	143.2	126.2	16.99	8.429		
3,900.0	3,822.7	3,899.1	3,846.7	14.5	12.4	-154.06	278.6	507.9	148.1	130.6	17.47	8.479		
4,000.0	3,919.9	3,999.0	3,944.8	14.9	12.8	-154.16	287.5	524.7	153.0	135.0	17.94	8.526		
4,100.0	4,017.1	4,098.9	4,042.8	15.4	13.2	-154.26	296.4	541.4	157.8	139.4	18.41	8.571		
4,200.0	4,114.4	4,198.7	4,140.9	15.8	13.6	-154.35	305.3	558.2	162.7	143.8	18.89	8.614		
4,300.0	4,211.6	4,298.6	4,238.9	16.3	13.9	-154.44	314.3	575.0	167.6	148.2	19.36	8.655		
4,400.0	4,308.9	4,398.5	4,337.0	16.7	14.3	-154.52	323.2	591.8	172.4	152.6	19.83	8.693		
4,500.0	4,406.1	4,498.4	4,435.0	17.2	14.7	-154.60	332.1	608.6	177.3	157.0	20.31	8.730		
4,600.0	4,503.3	4,598.3	4,533.1	17.6	15.1	-154.67	341.0	625.4	182.2	161.4	20.78	8.766		
4,700.0	4,600.6	4,698.2	4,631.2	18.1	15.4	-154.74	349.9	642.1	187.0	165.8	21.25	8.799		
4,800.0	4,697.8	4,798.0	4,729.2	18.5	15.8	-154.81	358.8	658.9	191.9	170.2	21.73	8.832		
4,900.0	4,795.1	4,897.9	4,827.3	19.0	16.2	-154.87	367.8	675.7	196.8	174.6	22.20	8.863		
5,000.0	4,892.3	4,997.8	4,925.3	19.4	16.6	-154.93	376.7	692.5	201.6	178.9	22.67	8.892		
5,100.0	4,989.5	5,097.7	5,023.4	19.9	17.0	-154.99	385.6	709.3	206.5	183.3	23.15	8.921		

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 Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
5,200.0	5,086.8	5,197.6	5,121.4	20.3	17.3	-155.04	394.5	726.0	211.4	187.7	23.62	8.948		
5,300.0	5,184.0	5,297.4	5,219.5	20.8	17.7	-155.10	403.4	742.8	216.2	192.1	24.09	8.974		
5,400.0	5,281.3	5,397.3	5,317.6	21.2	18.1	-155.15	412.4	759.6	221.1	196.5	24.57	8.999		
5,500.0	5,378.5	5,497.2	5,415.6	21.7	18.5	-155.19	421.3	776.4	226.0	200.9	25.04	9.023		
5,600.0	5,475.7	5,597.1	5,513.7	22.1	18.9	-155.24	430.2	793.2	230.8	205.3	25.51	9.047		
5,700.0	5,573.0	5,697.0	5,611.7	22.6	19.2	-155.28	439.1	810.0	235.7	209.7	25.99	9.069		
5,800.0	5,670.2	5,796.8	5,709.8	23.0	19.6	-155.32	448.0	826.7	240.6	214.1	26.46	9.091		
5,900.0	5,767.5	5,896.7	5,807.8	23.5	20.0	-155.36	457.0	843.5	245.4	218.5	26.94	9.112		
6,000.0	5,864.7	5,996.6	5,905.9	23.9	20.4	-155.40	465.9	860.3	250.3	222.9	27.41	9.132		
6,100.0	5,961.9	6,096.5	6,003.9	24.4	20.7	-155.44	474.8	877.1	255.2	227.3	27.88	9.152		
6,200.0	6,059.2	6,196.4	6,102.0	24.8	21.1	-155.48	483.7	893.9	260.0	231.7	28.36	9.170		
6,300.0	6,156.4	6,296.3	6,200.1	25.3	21.5	-155.51	492.6	910.7	264.9	236.1	28.83	9.189		
6,400.0	6,253.7	6,396.1	6,298.1	25.7	21.9	-155.54	501.5	927.4	269.8	240.5	29.30	9.206		
6,500.0	6,350.9	6,496.0	6,396.2	26.2	22.3	-155.58	510.5	944.2	274.6	244.9	29.78	9.223		
6,600.0	6,448.1	6,595.9	6,494.2	26.6	22.6	-155.61	519.4	961.0	279.5	249.3	30.25	9.240		
6,700.0	6,545.4	6,695.8	6,592.3	27.1	23.0	-155.64	528.3	977.8	284.4	253.7	30.72	9.256		
6,800.0	6,642.6	6,795.7	6,690.3	27.5	23.4	-155.67	537.2	994.6	289.3	258.1	31.20	9.272		
6,900.0	6,739.9	6,895.5	6,788.4	28.0	23.8	-155.69	546.1	1,011.3	294.1	262.5	31.67	9.287		
7,000.0	6,837.1	6,995.4	6,886.5	28.4	24.1	-155.72	555.1	1,028.1	299.0	266.8	32.15	9.301		
7,100.0	6,934.3	7,095.3	6,984.5	28.9	24.5	-155.75	564.0	1,044.9	303.9	271.2	32.62	9.316		
7,200.0	7,031.6	7,195.2	7,082.6	29.3	24.9	-155.77	572.9	1,061.7	308.7	275.6	33.09	9.329		
7,300.0	7,128.8	7,295.8	7,181.4	29.8	25.3	-156.03	580.6	1,078.6	313.6	280.1	33.42	9.382		
7,400.0	7,226.3	7,396.2	7,280.1	30.2	25.5	-167.88	574.1	1,095.5	318.3	285.7	32.51	9.788		
7,500.0	7,322.9	7,494.8	7,374.3	30.5	25.6	-132.88	550.8	1,111.6	323.2	291.9	31.33	10.318		
7,600.0	7,415.8	7,591.7	7,461.9	30.7	25.6	-115.38	512.3	1,126.6	328.3	298.2	30.18	10.879		
7,700.0	7,502.1	7,687.1	7,540.6	30.8	25.6	-105.84	460.3	1,140.1	333.3	304.1	29.24	11.401		
7,800.0	7,579.2	7,781.2	7,608.9	30.8	25.5	-99.90	396.8	1,151.8	338.0	309.4	28.57	11.830		
7,900.0	7,644.8	7,874.3	7,665.4	30.8	25.4	-95.90	323.7	1,161.4	342.1	313.9	28.19	12.137		
8,000.0	7,696.8	7,966.4	7,709.2	30.8	25.3	-93.15	243.0	1,168.9	345.5	317.5	28.05	12.317		
8,100.0	7,733.8	8,057.9	7,739.5	30.8	25.3	-91.34	157.0	1,174.1	348.0	319.9	28.12	12.379		
8,200.0	7,754.5	8,150.0	7,756.0	30.8	25.3	-90.30	66.5	1,176.9	349.5	321.2	28.34	12.335		
8,300.0	7,759.0	8,242.7	7,759.0	30.9	25.4	-90.00	-26.1	1,177.5	350.0	321.2	28.75	12.174		
8,400.0	7,759.0	8,342.7	7,759.0	31.1	25.6	-90.00	-126.1	1,177.5	350.0	320.4	29.52	11.855		
8,500.0	7,759.0	8,442.7	7,759.0	31.3	26.0	-90.00	-226.1	1,177.5	350.0	319.3	30.67	11.409		
8,600.0	7,759.0	8,542.7	7,759.0	31.7	26.4	-90.00	-326.1	1,177.5	350.0	317.8	32.17	10.879		
8,700.0	7,759.0	8,642.7	7,759.0	32.1	26.9	-90.00	-426.1	1,177.5	350.0	316.0	33.96	10.304		
8,800.0	7,759.0	8,742.7	7,759.0	32.6	27.6	-90.00	-526.1	1,177.5	350.0	314.0	36.01	9.719		
8,900.0	7,759.0	8,842.7	7,759.0	33.3	28.3	-90.00	-626.1	1,177.5	350.0	311.7	38.27	9.145		
9,000.0	7,759.0	8,942.7	7,759.0	33.9	29.2	-90.00	-726.1	1,177.5	350.0	309.3	40.71	8.597		
9,100.0	7,759.0	9,042.7	7,759.0	34.7	30.1	-90.00	-826.1	1,177.5	350.0	306.7	43.29	8.084		
9,200.0	7,759.0	9,142.7	7,759.0	35.6	31.1	-90.00	-926.1	1,177.5	350.0	304.0	46.00	7.608		
9,300.0	7,759.0	9,242.7	7,759.0	36.5	32.1	-90.00	-1,026.1	1,177.5	350.0	301.2	48.81	7.170		
9,400.0	7,759.0	9,342.7	7,759.0	37.4	33.2	-90.00	-1,126.1	1,177.5	350.0	298.3	51.70	6.769		
9,500.0	7,759.0	9,442.7	7,759.0	38.4	34.4	-90.00	-1,226.1	1,177.5	350.0	295.3	54.67	6.402		
9,600.0	7,759.0	9,542.7	7,759.0	39.5	35.6	-90.00	-1,326.1	1,177.5	350.0	292.3	57.70	6.066		
9,700.0	7,759.0	9,642.7	7,759.0	40.6	36.9	-90.00	-1,426.1	1,177.5	350.0	289.2	60.77	5.758		
9,800.0	7,759.0	9,742.7	7,759.0	41.8	38.1	-90.00	-1,526.1	1,177.5	350.0	286.1	63.90	5.477		
9,900.0	7,759.0	9,842.7	7,759.0	43.0	39.5	-90.00	-1,626.1	1,177.5	350.0	282.9	67.06	5.219		
10,000.0	7,759.0	9,942.7	7,759.0	44.3	40.8	-90.00	-1,726.1	1,177.5	350.0	279.7	70.25	4.981		
10,100.0	7,759.0	10,042.7	7,759.0	45.5	42.2	-90.00	-1,826.1	1,177.5	350.0	276.5	73.48	4.763		
10,200.0	7,759.0	10,142.7	7,759.0	46.9	43.7	-90.00	-1,926.1	1,177.5	350.0	273.2	76.73	4.561		
10,300.0	7,759.0	10,242.7	7,759.0	48.2	45.1	-90.00	-2,026.1	1,177.5	350.0	270.0	80.00	4.375		

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 Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2F-7H-E168 - 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)				
10,400.0	7,759.0	10,342.7	7,759.0	49.6	46.6	90.00	-2,126.1	1,177.5	350.0	266.7	83.29	4.202		
10,500.0	7,759.0	10,442.7	7,759.0	50.9	48.1	90.00	-2,226.1	1,177.5	350.0	263.4	86.59	4.041		
10,600.0	7,759.0	10,542.7	7,759.0	52.4	49.6	90.00	-2,326.1	1,177.5	350.0	260.0	89.91	3.892		
10,700.0	7,759.0	10,642.7	7,759.0	53.8	51.1	90.00	-2,426.1	1,177.5	350.0	256.7	93.25	3.753		
10,800.0	7,759.0	10,742.7	7,759.0	55.2	52.6	90.00	-2,526.1	1,177.5	350.0	253.4	96.60	3.623		
10,900.0	7,759.0	10,842.7	7,759.0	56.7	54.2	90.00	-2,626.1	1,177.5	350.0	250.0	99.96	3.501		
11,000.0	7,759.0	10,942.7	7,759.0	58.2	55.7	90.00	-2,726.1	1,177.5	350.0	246.6	103.33	3.387		
11,100.0	7,759.0	11,042.7	7,759.0	59.7	57.3	90.00	-2,826.1	1,177.5	350.0	243.3	106.70	3.280		
11,200.0	7,759.0	11,142.7	7,759.0	61.2	58.9	90.00	-2,926.1	1,177.5	350.0	239.9	110.09	3.179		
11,300.0	7,759.0	11,242.7	7,759.0	62.7	60.5	90.00	-3,026.1	1,177.5	350.0	236.5	113.48	3.084		
11,400.0	7,759.0	11,342.7	7,759.0	64.3	62.1	90.00	-3,126.1	1,177.5	350.0	233.1	116.88	2.994		
11,500.0	7,759.0	11,442.7	7,759.0	65.8	63.7	90.00	-3,226.1	1,177.5	350.0	229.7	120.29	2.909		
11,600.0	7,759.0	11,542.7	7,759.0	67.4	65.3	90.00	-3,326.1	1,177.5	350.0	226.3	123.70	2.829		
11,700.0	7,759.0	11,642.7	7,759.0	69.0	66.9	90.00	-3,426.1	1,177.5	350.0	222.8	127.12	2.753		
11,800.0	7,759.0	11,742.7	7,759.0	70.5	68.5	90.00	-3,526.1	1,177.5	350.0	219.4	130.54	2.681		
11,900.0	7,759.0	11,842.7	7,759.0	72.1	70.2	90.00	-3,626.1	1,177.5	350.0	216.0	133.97	2.612		
12,000.0	7,759.0	11,942.7	7,759.0	73.7	71.8	90.00	-3,726.1	1,177.5	350.0	212.6	137.40	2.547		
12,100.0	7,759.0	12,042.7	7,759.0	75.3	73.5	90.00	-3,826.1	1,177.5	350.0	209.1	140.83	2.485		
12,200.0	7,759.0	12,142.7	7,759.0	76.9	75.1	90.00	-3,926.1	1,177.5	350.0	205.7	144.27	2.426		
12,300.0	7,759.0	12,242.7	7,759.0	78.5	76.8	90.00	-4,026.1	1,177.5	350.0	202.3	147.71	2.369		
12,400.0	7,759.0	12,342.7	7,759.0	80.2	78.4	90.00	-4,126.1	1,177.5	350.0	198.8	151.15	2.315		
12,500.0	7,759.0	12,442.7	7,759.0	81.8	80.1	90.00	-4,226.1	1,177.5	350.0	195.4	154.60	2.264		
12,600.0	7,759.0	12,542.7	7,759.0	83.4	81.7	90.00	-4,326.1	1,177.5	350.0	191.9	158.05	2.214		
12,700.0	7,759.0	12,642.7	7,759.0	85.1	83.4	90.00	-4,426.1	1,177.5	350.0	188.5	161.50	2.167		
12,800.0	7,759.0	12,742.7	7,759.0	86.7	85.1	90.00	-4,526.1	1,177.5	350.0	185.0	164.96	2.122		
12,900.0	7,759.0	12,842.7	7,759.0	88.3	86.8	90.00	-4,626.1	1,177.5	350.0	181.5	168.42	2.078		
13,000.0	7,759.0	12,942.7	7,759.0	90.0	88.5	90.00	-4,726.1	1,177.5	350.0	178.1	171.88	2.036		
13,100.0	7,759.0	13,042.7	7,759.0	91.6	90.1	90.00	-4,826.1	1,177.5	350.0	174.6	175.34	1.996		
13,200.0	7,759.0	13,142.7	7,759.0	93.3	91.8	90.00	-4,926.1	1,177.5	350.0	171.2	178.80	1.957		
13,300.0	7,759.0	13,242.7	7,759.0	95.0	93.5	90.00	-5,026.1	1,177.5	350.0	167.7	182.26	1.920		
13,400.0	7,759.0	13,342.7	7,759.0	96.6	95.2	90.00	-5,126.1	1,177.5	350.0	164.2	185.73	1.884		
13,500.0	7,759.0	13,442.7	7,759.0	98.3	96.9	90.00	-5,226.1	1,177.5	350.0	160.8	189.20	1.850		
13,600.0	7,759.0	13,542.7	7,759.0	100.0	98.6	90.00	-5,326.1	1,177.5	350.0	157.3	192.67	1.816		
13,700.0	7,759.0	13,642.7	7,759.0	101.6	100.3	90.00	-5,426.1	1,177.5	350.0	153.8	196.14	1.784		
13,800.0	7,759.0	13,742.7	7,759.0	103.3	102.0	90.00	-5,526.1	1,177.5	350.0	150.4	199.61	1.753		
13,900.0	7,759.0	13,842.7	7,759.0	105.0	103.7	90.00	-5,626.1	1,177.5	350.0	146.9	203.08	1.723		
14,000.0	7,759.0	13,942.7	7,759.0	106.7	105.4	90.00	-5,726.1	1,177.5	350.0	143.4	206.56	1.694		
14,100.0	7,759.0	14,042.7	7,759.0	108.3	107.1	90.00	-5,826.1	1,177.5	350.0	139.9	210.03	1.666		
14,200.0	7,759.0	14,142.7	7,759.0	110.0	108.8	90.00	-5,926.1	1,177.5	350.0	136.5	213.51	1.639		
14,300.0	7,759.0	14,242.7	7,759.0	111.7	110.5	90.00	-6,026.1	1,177.5	350.0	133.0	216.99	1.613		
14,400.0	7,759.0	14,342.7	7,759.0	113.4	112.2	90.00	-6,126.1	1,177.5	350.0	129.5	220.46	1.587		
14,500.0	7,759.0	14,442.7	7,759.0	115.1	113.9	90.00	-6,226.1	1,177.5	350.0	126.0	223.94	1.563		
14,600.0	7,759.0	14,542.7	7,759.0	116.8	115.6	90.00	-6,326.1	1,177.5	350.0	122.5	227.42	1.539		
14,700.0	7,759.0	14,642.7	7,759.0	118.5	117.3	90.00	-6,426.1	1,177.5	350.0	119.1	230.90	1.516		
14,800.0	7,759.0	14,742.7	7,759.0	120.2	119.1	90.00	-6,526.1	1,177.5	350.0	115.6	234.39	1.493 Level 3		
14,900.0	7,759.0	14,842.7	7,759.0	121.9	120.8	90.00	-6,626.1	1,177.5	350.0	112.1	237.87	1.471 Level 3		
15,000.0	7,759.0	14,942.7	7,759.0	123.6	122.5	90.00	-6,726.1	1,177.5	350.0	108.6	241.35	1.450 Level 3		
15,100.0	7,759.0	15,042.7	7,759.0	125.3	124.2	90.00	-6,826.1	1,177.5	350.0	105.1	244.84	1.429 Level 3		
15,200.0	7,759.0	15,142.7	7,759.0	127.0	125.9	90.00	-6,926.1	1,177.5	350.0	101.6	248.32	1.409 Level 3		
15,300.0	7,759.0	15,242.7	7,759.0	128.7	127.6	90.00	-7,026.1	1,177.5	350.0	98.2	251.81	1.390 Level 3		
15,400.0	7,759.0	15,342.7	7,759.0	130.4	129.4	90.00	-7,126.1	1,177.5	350.0	94.7	255.29	1.371 Level 3		
15,500.0	7,759.0	15,442.7	7,759.0	132.1	131.1	90.00	-7,226.1	1,177.5	350.0	91.2	258.78	1.352 Level 3		

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 Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												S7-T1N-R68W (Woolley-Sosa) - Woolley-Sosa 2F-7H-E168 - HZ - Plan #1		Offset Site Error:		0.0 ft	
Survey Program:												0-Geolink MWD		Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance										
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)							
15,600.0	7,759.0	15,542.7	7,759.0	133.8	132.8	90.00	-7,326.1	1,177.5	350.0	87.7	262.27	1.334	Level 3				
15,700.0	7,759.0	15,642.7	7,759.0	135.5	134.5	90.00	-7,426.1	1,177.5	350.0	84.2	265.76	1.317	Level 3				
15,800.0	7,759.0	15,742.7	7,759.0	137.2	136.3	90.00	-7,526.1	1,177.5	350.0	80.7	269.24	1.300	Level 3				
15,900.0	7,759.0	15,842.7	7,759.0	138.9	138.0	90.00	-7,626.1	1,177.5	350.0	77.2	272.73	1.283	Level 3				
16,000.0	7,759.0	15,942.7	7,759.0	140.6	139.7	90.00	-7,726.1	1,177.5	350.0	73.7	276.22	1.267	Level 3				
16,100.0	7,759.0	16,042.7	7,759.0	142.4	141.4	90.00	-7,826.1	1,177.5	350.0	70.3	279.71	1.251	Level 3				
16,125.6	7,759.0	16,068.3	7,759.0	142.8	141.9	90.00	-7,851.7	1,177.5	350.0	69.4	280.61	1.247	Level 2				
16,148.7	7,759.0	16,087.8	7,759.0	143.2	142.2	90.00	-7,871.2	1,177.5	350.0	68.6	281.35	1.244	Level 2, SF				

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Woolley-Sosa 2G-7H-E168
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Reference Site:</b>	S7-T1N-R68W (Woolley-Sosa)	<b>MD Reference:</b>	WELL @ 5019.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Woolley-Sosa 2G-7H-E168	<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>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 5019.0ft (Original Well Elev)  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Woolley-Sosa 2G-7H-E168  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.29°

