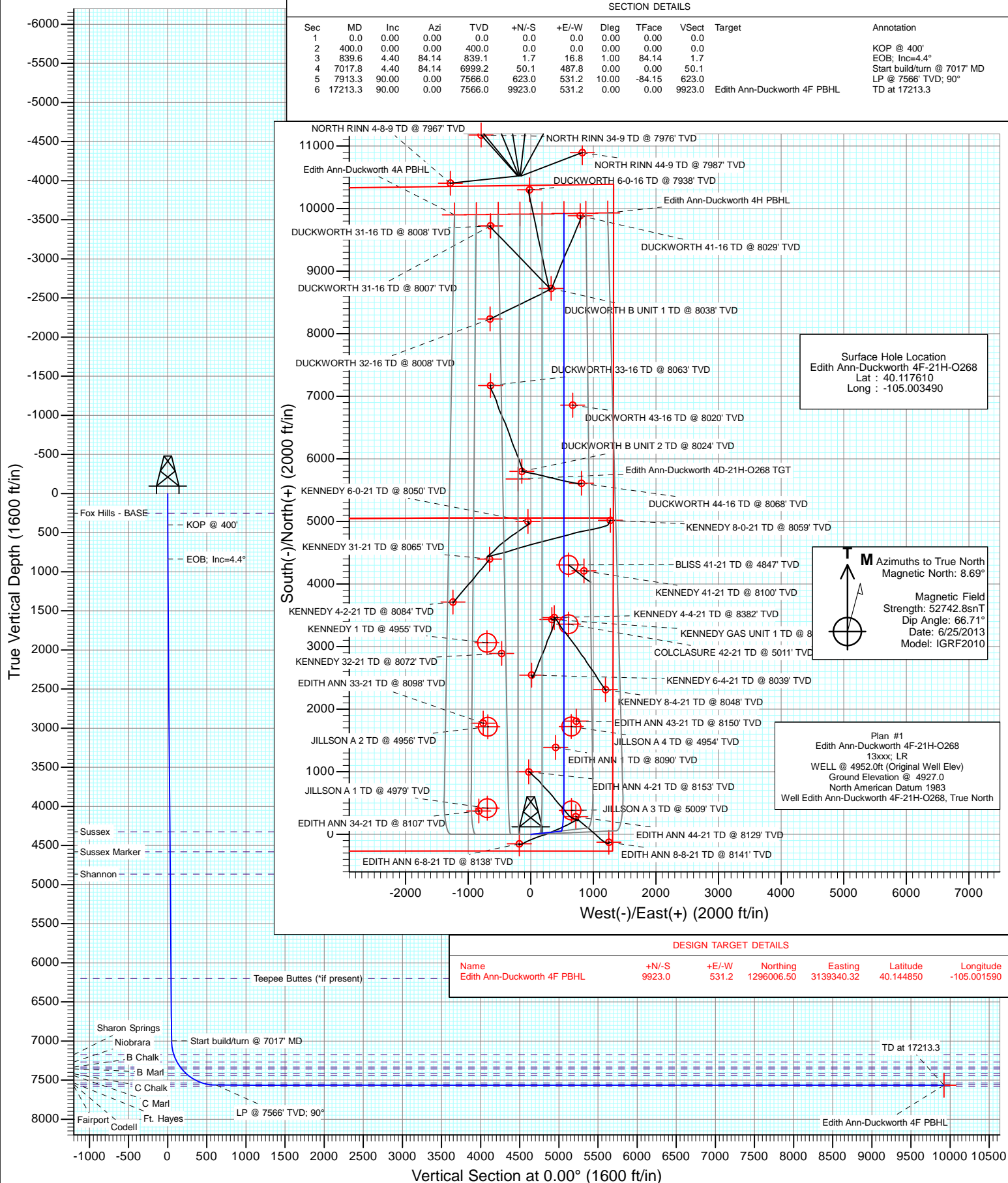




Project: DJ Wattenberg  
Site: S21-T2N-R68W (Edith Ann-Duckworth)  
Well: Edith Ann-Duckworth 4F-21H-O268  
Vellbore: Hz  
Design: Plan #1



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>North Reference:</b>	True
<b>Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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		S21-T2N-R68W (Edith Ann-Duckworth)			
Site Position:		Northing:	1,290,455.50 ft	Latitude:	40.129630
From:	Lat/Long	Easting:	3,138,171.93 ft	Longitude:	-105.005880
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.32 °

Well	Edith Ann-Duckworth 4F-21H-O268					
Well Position	+N/-S	0.0 ft	Northing:	1,286,080.63 ft	Latitude:	40.117610
	+E/-W	0.0 ft	Easting:	3,138,864.73 ft	Longitude:	-105.003490
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,927.0 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>
	IGRF2010	6/25/2013	8.69	66.71	52,743

<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	0.00

<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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
839.6	4.40	84.14	839.1	1.7	16.8	1.00	1.00	0.00	84.14	
7,017.8	4.40	84.14	6,999.2	50.1	487.8	0.00	0.00	0.00	0.00	
7,913.3	90.00	0.00	7,566.0	623.0	531.2	10.00	9.56	-9.40	-84.15	
17,213.3	90.00	0.00	7,566.0	9,923.0	531.2	0.00	0.00	0.00	0.00	Edith Ann-Duckworth

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>North Reference:</b>	True
<b>Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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	
252.0	0.00	0.00	252.0	0.0	0.0	0.0	0.00	0.00	Fox Hills - BASE
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	KOP @ 400'
500.0	1.00	84.14	500.0	0.1	0.9	0.1	1.00	1.00	
600.0	2.00	84.14	600.0	0.4	3.5	0.4	1.00	1.00	
700.0	3.00	84.14	699.9	0.8	7.8	0.8	1.00	1.00	
800.0	4.00	84.14	799.7	1.4	13.9	1.4	1.00	1.00	
839.6	4.40	84.14	839.1	1.7	16.8	1.7	1.00	1.00	EOB; Inc=4.4°
900.0	4.40	84.14	899.4	2.2	21.4	2.2	0.00	0.00	
1,000.0	4.40	84.14	999.1	3.0	29.0	3.0	0.00	0.00	
1,100.0	4.40	84.14	1,098.8	3.8	36.6	3.8	0.00	0.00	
1,200.0	4.40	84.14	1,198.5	4.5	44.2	4.5	0.00	0.00	
1,300.0	4.40	84.14	1,298.2	5.3	51.9	5.3	0.00	0.00	
1,400.0	4.40	84.14	1,397.9	6.1	59.5	6.1	0.00	0.00	
1,500.0	4.40	84.14	1,497.6	6.9	67.1	6.9	0.00	0.00	
1,600.0	4.40	84.14	1,597.3	7.7	74.7	7.7	0.00	0.00	
1,700.0	4.40	84.14	1,697.0	8.5	82.4	8.5	0.00	0.00	
1,800.0	4.40	84.14	1,796.7	9.2	90.0	9.2	0.00	0.00	
1,900.0	4.40	84.14	1,896.4	10.0	97.6	10.0	0.00	0.00	
2,000.0	4.40	84.14	1,996.2	10.8	105.2	10.8	0.00	0.00	
2,100.0	4.40	84.14	2,095.9	11.6	112.9	11.6	0.00	0.00	
2,200.0	4.40	84.14	2,195.6	12.4	120.5	12.4	0.00	0.00	
2,300.0	4.40	84.14	2,295.3	13.2	128.1	13.2	0.00	0.00	
2,400.0	4.40	84.14	2,395.0	13.9	135.7	13.9	0.00	0.00	
2,500.0	4.40	84.14	2,494.7	14.7	143.4	14.7	0.00	0.00	
2,600.0	4.40	84.14	2,594.4	15.5	151.0	15.5	0.00	0.00	
2,700.0	4.40	84.14	2,694.1	16.3	158.6	16.3	0.00	0.00	
2,800.0	4.40	84.14	2,793.8	17.1	166.2	17.1	0.00	0.00	
2,900.0	4.40	84.14	2,893.5	17.9	173.9	17.9	0.00	0.00	
3,000.0	4.40	84.14	2,993.2	18.6	181.5	18.6	0.00	0.00	
3,100.0	4.40	84.14	3,092.9	19.4	189.1	19.4	0.00	0.00	
3,200.0	4.40	84.14	3,192.6	20.2	196.7	20.2	0.00	0.00	
3,300.0	4.40	84.14	3,292.3	21.0	204.4	21.0	0.00	0.00	
3,400.0	4.40	84.14	3,392.0	21.8	212.0	21.8	0.00	0.00	
3,500.0	4.40	84.14	3,491.7	22.6	219.6	22.6	0.00	0.00	
3,600.0	4.40	84.14	3,591.4	23.3	227.2	23.3	0.00	0.00	
3,700.0	4.40	84.14	3,691.2	24.1	234.9	24.1	0.00	0.00	
3,800.0	4.40	84.14	3,790.9	24.9	242.5	24.9	0.00	0.00	
3,900.0	4.40	84.14	3,890.6	25.7	250.1	25.7	0.00	0.00	
4,000.0	4.40	84.14	3,990.3	26.5	257.7	26.5	0.00	0.00	
4,100.0	4.40	84.14	4,090.0	27.3	265.4	27.3	0.00	0.00	
4,200.0	4.40	84.14	4,189.7	28.0	273.0	28.0	0.00	0.00	
4,300.0	4.40	84.14	4,289.4	28.8	280.6	28.8	0.00	0.00	
4,335.7	4.40	84.14	4,325.0	29.1	283.3	29.1	0.00	0.00	Sussex
4,400.0	4.40	84.14	4,389.1	29.6	288.2	29.6	0.00	0.00	
4,500.0	4.40	84.14	4,488.8	30.4	295.9	30.4	0.00	0.00	
4,593.5	4.40	84.14	4,582.0	31.1	303.0	31.1	0.00	0.00	Sussex Marker
4,600.0	4.40	84.14	4,588.5	31.2	303.5	31.2	0.00	0.00	
4,700.0	4.40	84.14	4,688.2	32.0	311.1	32.0	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>North Reference:</b>	True
<b>Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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
4,800.0	4.40	84.14	4,787.9	32.7	318.7	32.7	0.00	0.00	
4,879.3	4.40	84.14	4,867.0	33.4	324.8	33.4	0.00	0.00	Shannon
4,900.0	4.40	84.14	4,887.6	33.5	326.3	33.5	0.00	0.00	
5,000.0	4.40	84.14	4,987.3	34.3	334.0	34.3	0.00	0.00	
5,100.0	4.40	84.14	5,087.0	35.1	341.6	35.1	0.00	0.00	
5,200.0	4.40	84.14	5,186.7	35.9	349.2	35.9	0.00	0.00	
5,300.0	4.40	84.14	5,286.4	36.7	356.8	36.7	0.00	0.00	
5,400.0	4.40	84.14	5,386.2	37.4	364.5	37.4	0.00	0.00	
5,500.0	4.40	84.14	5,485.9	38.2	372.1	38.2	0.00	0.00	
5,600.0	4.40	84.14	5,585.6	39.0	379.7	39.0	0.00	0.00	
5,700.0	4.40	84.14	5,685.3	39.8	387.3	39.8	0.00	0.00	
5,800.0	4.40	84.14	5,785.0	40.6	395.0	40.6	0.00	0.00	
5,900.0	4.40	84.14	5,884.7	41.4	402.6	41.4	0.00	0.00	
6,000.0	4.40	84.14	5,984.4	42.1	410.2	42.1	0.00	0.00	
6,100.0	4.40	84.14	6,084.1	42.9	417.8	42.9	0.00	0.00	
6,200.0	4.40	84.14	6,183.8	43.7	425.5	43.7	0.00	0.00	
6,216.2	4.40	84.14	6,200.0	43.8	426.7	43.8	0.00	0.00	Teepee Buttes (*if present)
6,300.0	4.40	84.14	6,283.5	44.5	433.1	44.5	0.00	0.00	
6,400.0	4.40	84.14	6,383.2	45.3	440.7	45.3	0.00	0.00	
6,500.0	4.40	84.14	6,482.9	46.1	448.3	46.1	0.00	0.00	
6,600.0	4.40	84.14	6,582.6	46.8	456.0	46.8	0.00	0.00	
6,700.0	4.40	84.14	6,682.3	47.6	463.6	47.6	0.00	0.00	
6,800.0	4.40	84.14	6,782.0	48.4	471.2	48.4	0.00	0.00	
6,900.0	4.40	84.14	6,881.7	49.2	478.8	49.2	0.00	0.00	
7,000.0	4.40	84.14	6,981.4	50.0	486.5	50.0	0.00	0.00	
7,017.8	4.40	84.14	6,999.2	50.1	487.8	50.1	0.00	0.00	Start build/turn @ 7017' MD
7,100.0	9.70	26.57	7,080.8	56.6	494.1	56.6	10.00	6.46	
7,197.3	18.89	12.91	7,175.0	79.4	501.3	79.4	10.00	9.45	Sharon Springs
7,200.0	19.16	12.72	7,177.6	80.2	501.5	80.2	10.00	9.72	
7,299.1	28.88	7.97	7,268.0	119.9	508.4	119.9	10.00	9.82	Niobrara
7,300.0	28.97	7.94	7,268.8	120.3	508.4	120.3	10.00	9.87	
7,377.6	36.66	5.90	7,334.0	162.1	513.4	162.1	10.00	9.90	B Chalk
7,400.0	38.88	5.44	7,351.7	175.7	514.8	175.7	10.00	9.92	
7,406.9	39.56	5.31	7,357.0	180.0	515.2	180.0	10.00	9.93	B Marl
7,494.4	48.26	3.91	7,420.0	240.5	520.0	240.5	10.00	9.94	C Chalk
7,500.0	48.82	3.84	7,423.7	244.7	520.3	244.7	10.00	9.95	
7,528.6	51.66	3.47	7,442.0	266.6	521.7	266.6	10.00	9.95	C Marl
7,600.0	58.77	2.66	7,482.7	325.1	524.8	325.1	10.00	9.96	
7,700.0	68.73	1.71	7,526.9	414.6	528.2	414.6	10.00	9.96	
7,726.8	71.41	1.47	7,536.0	439.8	528.9	439.8	10.00	9.97	Ft. Hayes
7,800.0	78.70	0.88	7,554.9	510.5	530.3	510.5	10.00	9.97	
7,805.9	79.30	0.83	7,556.0	516.3	530.4	516.3	10.00	9.97	Codell
7,900.0	88.67	0.10	7,565.8	609.7	531.2	609.7	10.00	9.97	
7,913.3	90.00	0.00	7,566.0	623.0	531.2	623.0	10.00	9.97	LP @ 7566' TVD; 90°
8,000.0	90.00	0.00	7,566.0	709.7	531.2	709.7	0.00	0.00	
8,100.0	90.00	0.00	7,566.0	809.7	531.2	809.7	0.00	0.00	
8,200.0	90.00	0.00	7,566.0	909.7	531.2	909.7	0.00	0.00	
8,300.0	90.00	0.00	7,566.0	1,009.7	531.2	1,009.7	0.00	0.00	
8,400.0	90.00	0.00	7,566.0	1,109.7	531.2	1,109.7	0.00	0.00	
8,500.0	90.00	0.00	7,566.0	1,209.7	531.2	1,209.7	0.00	0.00	
8,600.0	90.00	0.00	7,566.0	1,309.7	531.2	1,309.7	0.00	0.00	
8,700.0	90.00	0.00	7,566.0	1,409.7	531.2	1,409.7	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>North Reference:</b>	True
<b>Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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	0.00	7,566.0	1,509.7	531.2	1,509.7	0.00	0.00	
8,900.0	90.00	0.00	7,566.0	1,609.7	531.2	1,609.7	0.00	0.00	
9,000.0	90.00	0.00	7,566.0	1,709.7	531.2	1,709.7	0.00	0.00	
9,100.0	90.00	0.00	7,566.0	1,809.7	531.2	1,809.7	0.00	0.00	
9,200.0	90.00	0.00	7,566.0	1,909.7	531.2	1,909.7	0.00	0.00	
9,300.0	90.00	0.00	7,566.0	2,009.7	531.2	2,009.7	0.00	0.00	
9,400.0	90.00	0.00	7,566.0	2,109.7	531.2	2,109.7	0.00	0.00	
9,500.0	90.00	0.00	7,566.0	2,209.7	531.2	2,209.7	0.00	0.00	
9,600.0	90.00	0.00	7,566.0	2,309.7	531.2	2,309.7	0.00	0.00	
9,700.0	90.00	0.00	7,566.0	2,409.7	531.2	2,409.7	0.00	0.00	
9,800.0	90.00	0.00	7,566.0	2,509.7	531.2	2,509.7	0.00	0.00	
9,900.0	90.00	0.00	7,566.0	2,609.7	531.2	2,609.7	0.00	0.00	
10,000.0	90.00	0.00	7,566.0	2,709.7	531.2	2,709.7	0.00	0.00	
10,100.0	90.00	0.00	7,566.0	2,809.7	531.2	2,809.7	0.00	0.00	
10,200.0	90.00	0.00	7,566.0	2,909.7	531.2	2,909.7	0.00	0.00	
10,300.0	90.00	0.00	7,566.0	3,009.7	531.2	3,009.7	0.00	0.00	
10,400.0	90.00	0.00	7,566.0	3,109.7	531.2	3,109.7	0.00	0.00	
10,500.0	90.00	0.00	7,566.0	3,209.7	531.2	3,209.7	0.00	0.00	
10,600.0	90.00	0.00	7,566.0	3,309.7	531.2	3,309.7	0.00	0.00	
10,700.0	90.00	0.00	7,566.0	3,409.7	531.2	3,409.7	0.00	0.00	
10,800.0	90.00	0.00	7,566.0	3,509.7	531.2	3,509.7	0.00	0.00	
10,900.0	90.00	0.00	7,566.0	3,609.7	531.2	3,609.7	0.00	0.00	
11,000.0	90.00	0.00	7,566.0	3,709.7	531.2	3,709.7	0.00	0.00	
11,100.0	90.00	0.00	7,566.0	3,809.7	531.2	3,809.7	0.00	0.00	
11,200.0	90.00	0.00	7,566.0	3,909.7	531.2	3,909.7	0.00	0.00	
11,300.0	90.00	0.00	7,566.0	4,009.7	531.2	4,009.7	0.00	0.00	
11,400.0	90.00	0.00	7,566.0	4,109.7	531.2	4,109.7	0.00	0.00	
11,500.0	90.00	0.00	7,566.0	4,209.7	531.2	4,209.7	0.00	0.00	
11,600.0	90.00	0.00	7,566.0	4,309.7	531.2	4,309.7	0.00	0.00	
11,700.0	90.00	0.00	7,566.0	4,409.7	531.2	4,409.7	0.00	0.00	
11,800.0	90.00	0.00	7,566.0	4,509.7	531.2	4,509.7	0.00	0.00	
11,900.0	90.00	0.00	7,566.0	4,609.7	531.2	4,609.7	0.00	0.00	
12,000.0	90.00	0.00	7,566.0	4,709.7	531.2	4,709.7	0.00	0.00	
12,100.0	90.00	0.00	7,566.0	4,809.7	531.2	4,809.7	0.00	0.00	
12,200.0	90.00	0.00	7,566.0	4,909.7	531.2	4,909.7	0.00	0.00	
12,300.0	90.00	0.00	7,566.0	5,009.7	531.2	5,009.7	0.00	0.00	
12,400.0	90.00	0.00	7,566.0	5,109.7	531.2	5,109.7	0.00	0.00	
12,500.0	90.00	0.00	7,566.0	5,209.7	531.2	5,209.7	0.00	0.00	
12,600.0	90.00	0.00	7,566.0	5,309.7	531.2	5,309.7	0.00	0.00	
12,700.0	90.00	0.00	7,566.0	5,409.7	531.2	5,409.7	0.00	0.00	
12,800.0	90.00	0.00	7,566.0	5,509.7	531.2	5,509.7	0.00	0.00	
12,900.0	90.00	0.00	7,566.0	5,609.7	531.2	5,609.7	0.00	0.00	
13,000.0	90.00	0.00	7,566.0	5,709.7	531.2	5,709.7	0.00	0.00	
13,100.0	90.00	0.00	7,566.0	5,809.7	531.2	5,809.7	0.00	0.00	
13,200.0	90.00	0.00	7,566.0	5,909.7	531.2	5,909.7	0.00	0.00	
13,300.0	90.00	0.00	7,566.0	6,009.7	531.2	6,009.7	0.00	0.00	
13,400.0	90.00	0.00	7,566.0	6,109.7	531.2	6,109.7	0.00	0.00	
13,500.0	90.00	0.00	7,566.0	6,209.7	531.2	6,209.7	0.00	0.00	
13,600.0	90.00	0.00	7,566.0	6,309.7	531.2	6,309.7	0.00	0.00	
13,700.0	90.00	0.00	7,566.0	6,409.7	531.2	6,409.7	0.00	0.00	
13,800.0	90.00	0.00	7,566.0	6,509.7	531.2	6,509.7	0.00	0.00	
13,900.0	90.00	0.00	7,566.0	6,609.7	531.2	6,609.7	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>North Reference:</b>	True
<b>Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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	0.00	7,566.0	6,709.7	531.2	6,709.7	0.00	0.00	
14,100.0	90.00	0.00	7,566.0	6,809.7	531.2	6,809.7	0.00	0.00	
14,200.0	90.00	0.00	7,566.0	6,909.7	531.2	6,909.7	0.00	0.00	
14,300.0	90.00	0.00	7,566.0	7,009.7	531.2	7,009.7	0.00	0.00	
14,400.0	90.00	0.00	7,566.0	7,109.7	531.2	7,109.7	0.00	0.00	
14,500.0	90.00	0.00	7,566.0	7,209.7	531.2	7,209.7	0.00	0.00	
14,600.0	90.00	0.00	7,566.0	7,309.7	531.2	7,309.7	0.00	0.00	
14,700.0	90.00	0.00	7,566.0	7,409.7	531.2	7,409.7	0.00	0.00	
14,800.0	90.00	0.00	7,566.0	7,509.7	531.2	7,509.7	0.00	0.00	
14,900.0	90.00	0.00	7,566.0	7,609.7	531.2	7,609.7	0.00	0.00	
15,000.0	90.00	0.00	7,566.0	7,709.7	531.2	7,709.7	0.00	0.00	
15,100.0	90.00	0.00	7,566.0	7,809.7	531.2	7,809.7	0.00	0.00	
15,200.0	90.00	0.00	7,566.0	7,909.7	531.2	7,909.7	0.00	0.00	
15,300.0	90.00	0.00	7,566.0	8,009.7	531.2	8,009.7	0.00	0.00	
15,400.0	90.00	0.00	7,566.0	8,109.7	531.2	8,109.7	0.00	0.00	
15,500.0	90.00	0.00	7,566.0	8,209.7	531.2	8,209.7	0.00	0.00	
15,600.0	90.00	0.00	7,566.0	8,309.7	531.2	8,309.7	0.00	0.00	
15,700.0	90.00	0.00	7,566.0	8,409.7	531.2	8,409.7	0.00	0.00	
15,800.0	90.00	0.00	7,566.0	8,509.7	531.2	8,509.7	0.00	0.00	
15,900.0	90.00	0.00	7,566.0	8,609.7	531.2	8,609.7	0.00	0.00	
16,000.0	90.00	0.00	7,566.0	8,709.7	531.2	8,709.7	0.00	0.00	
16,100.0	90.00	0.00	7,566.0	8,809.7	531.2	8,809.7	0.00	0.00	
16,200.0	90.00	0.00	7,566.0	8,909.7	531.2	8,909.7	0.00	0.00	
16,300.0	90.00	0.00	7,566.0	9,009.7	531.2	9,009.7	0.00	0.00	
16,400.0	90.00	0.00	7,566.0	9,109.7	531.2	9,109.7	0.00	0.00	
16,500.0	90.00	0.00	7,566.0	9,209.7	531.2	9,209.7	0.00	0.00	
16,600.0	90.00	0.00	7,566.0	9,309.7	531.2	9,309.7	0.00	0.00	
16,700.0	90.00	0.00	7,566.0	9,409.7	531.2	9,409.7	0.00	0.00	
16,800.0	90.00	0.00	7,566.0	9,509.7	531.2	9,509.7	0.00	0.00	
16,900.0	90.00	0.00	7,566.0	9,609.7	531.2	9,609.7	0.00	0.00	
17,000.0	90.00	0.00	7,566.0	9,709.7	531.2	9,709.7	0.00	0.00	
17,100.0	90.00	0.00	7,566.0	9,809.7	531.2	9,809.7	0.00	0.00	
17,200.0	90.00	0.00	7,566.0	9,909.7	531.2	9,909.7	0.00	0.00	
17,213.3	90.00	0.00	7,566.0	9,923.0	531.2	9,923.0	0.00	0.00	TD at 17213.3

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Edith Ann-Duckworth 4F - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	7,566.0	9,923.0	531.2	1,296,006.50	3,139,340.32	40.144850	-105.001590

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Project:</b>	DJ Wattenberg	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>North Reference:</b>	True
<b>Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 (°)	
252.0	252.0	Fox Hills - BASE				
4,335.7	4,325.0	Sussex				
4,593.5	4,582.0	Sussex Marker				
4,879.3	4,867.0	Shannon				
6,216.2	6,200.0	Teepee Buttes (*if present)				
7,197.3	7,175.0	Sharon Springs				
7,299.1	7,268.0	Niobrara				
7,377.6	7,334.0	B Chalk				
7,406.9	7,357.0	B Marl				
7,494.4	7,420.0	C Chalk				
7,528.6	7,442.0	C Marl				
7,726.8	7,536.0	Ft. Hayes				
7,805.9	7,556.0	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
400.0	400.0	0.0	0.0	KOP @ 400'	
839.6	839.1	1.7	16.8	EOB; Inc=4.4°	
7,017.8	6,999.2	50.1	487.8	Start build/turn @ 7017' MD	
7,913.3	7,566.0	623.0	531.2	LP @ 7566' TVD; 90°	
17,213.3	7,566.0	9,923.0	531.2	TD at 17213.3	

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

**DJ Wattenberg**

**S21-T2N-R68W (Edith Ann-Duckworth)**

**Edith Ann-Duckworth 4F-21H-O268**

**Hz**

**Plan #1**

## **Anticollision Report**

**26 June, 2013**



## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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>	6/26/2013		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.0	17,213.3	Plan #1 (Hz)	Geolink MWD	Geolink MWD	

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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

## Summary

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
S21-T2N-R68W (Edith Ann-Duckworth)						
BLISS 41-21 (EXISTING) - KPK WELL - SURVEYS						Out of range
COLCLASURE 42-21 (EXISTING) - KPK WELL - NO SU						Out of range
DUCKWORTH 31-16 (EXISTING) - ENCANA WELL - SU						Out of range
DUCKWORTH 32-16 (EXISTING) - ENCANA WELL - SU						Out of range
DUCKWORTH 33-16 (EXISTING) - ENCANA WELL - SU						Out of range
DUCKWORTH 41-16 (EXISTING) - ENCANA WELL - SUR	17,174.4	7,645.5	261.9	62.3	1.312	Level 3, CC, ES, SF
DUCKWORTH 43-16 (EXISTING) - ENCANA WELL - NO	14,149.7	7,489.0	139.9	4.1	1.031	Level 2, CC, ES, SF
DUCKWORTH 44-16 (EXISTING) - ENCANA WELL - SU	12,894.1	7,581.4	273.4	159.0	2.389	CC
DUCKWORTH 44-16 (EXISTING) - ENCANA WELL - SU	12,900.0	7,581.5	273.4	158.9	2.388	ES, SF
DUCKWORTH 6-0-16 (EXISTING) - ENCANA WELL - S						Out of range
DUCKWORTH B UNIT 1 (EXISTING) - ENCANA WELL -	16,014.8	7,500.0	204.1	35.8	1.213	Level 2, CC, ES, SF
DUCKWORTH B UNIT 2 (EXISTING) - ENCANA WELL -						Out of range
EDITH ANN 1 (EXISTING) - ENCANA WELL - NO SURV	8,680.0	7,518.0	132.1	90.0	3.141	CC, ES, SF
EDITH ANN 33-21 (EXISTING) - ENCANA WELL - NO S						Out of range
EDITH ANN 34-21 (EXISTING) - ENCANA WELL - NO S						Out of range
EDITH ANN 4-21 (EXISTING) - ENCANA WELL - SURVE						Out of range
EDITH ANN 43-21 (EXISTING) - ENCANA WELL - NO S	9,099.3	7,513.0	197.0	148.2	4.037	CC
EDITH ANN 43-21 (EXISTING) - ENCANA WELL - NO S	9,100.0	7,513.0	197.0	148.2	4.036	ES, SF
EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO S	7,562.4	7,440.2	197.8	170.3	7.207	CC, ES
EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO S	7,600.0	7,460.7	200.4	172.6	7.203	SF
EDITH ANN 6-8-21 (EXISTING) - ENCANA WELL - SUR	3,402.9	3,462.2	30.3	11.4	1.600	CC, ES, SF
EDITH ANN 8-8-21 (EXISTING) - ENCANA WELL - SUR						Out of range
Edith Ann-Duckworth 4A-21H-O268 - Hz - Plan #1	200.0	198.0	50.3	49.7	82.883	CC, ES
Edith Ann-Duckworth 4A-21H-O268 - Hz - Plan #1	600.0	593.6	67.5	65.5	33.832	SF
Edith Ann-Duckworth 4B-21H-O268 - Hz - Plan #1	300.0	299.0	39.2	38.2	40.863	CC, ES
Edith Ann-Duckworth 4B-21H-O268 - Hz - Plan #1	600.0	596.5	50.4	48.4	25.181	SF
Edith Ann-Duckworth 4C-21H-O268 - Hz - Plan #1	400.0	399.0	30.8	29.5	23.533	CC, ES
Edith Ann-Duckworth 4C-21H-O268 - Hz - Plan #1	600.0	597.7	37.7	35.7	18.813	SF
Edith Ann-Duckworth 4D-21H-O268 - Hz - Plan #1	400.0	399.0	19.6	18.3	14.976	CC, ES
Edith Ann-Duckworth 4D-21H-O268 - Hz - Plan #1	600.0	598.6	23.9	21.9	11.928	SF
Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1	400.0	399.0	11.2	9.9	8.558	CC, ES
Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1	17,213.3	17,020.9	413.5	114.3	1.382	Level 3, SF
Edith Ann-Duckworth 4G-21H-O268 - Hz - Plan #1	300.0	300.0	11.2	10.2	11.654	CC, ES
Edith Ann-Duckworth 4G-21H-O268 - Hz - Plan #1	17,213.3	17,076.8	414.0	114.9	1.384	Level 3, SF
Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1	200.0	200.0	19.6	19.0	32.048	CC, ES
Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1	900.0	896.2	40.8	37.8	13.385	SF
JILLSON A 1 (EXISTING) - FOUNDATION WELL - NO S						Out of range
JILLSON A 2 (EXISTING) - FOUNDATION WELL - NO S						Out of range
JILLSON A 3 (EXISTING) - FOUNDATION WELL - NO S	5,075.5	5,009.0	467.8	449.4	25.372	CC, ES
JILLSON A 3 (EXISTING) - FOUNDATION WELL - NO S	5,100.0	5,009.0	468.5	450.0	25.341	SF
JILLSON A 4 (EXISTING) - FOUNDATION WELL - NO S						Out of range
KENNEDY 1 (EXISTING) - MACEY & MERSHON WELL						Out of range
KENNEDY 31-21 (EXISTING) - ENCANA WELL - NO SU	10,736.3	7,520.0	209.6	133.1	2.740	CC, ES, SF
KENNEDY 32-21 (EXISTING) - ENCANA WELL - NO SU						Out of range
KENNEDY 41-21 (EXISTING) - ENCANA WELL - NO SU	11,501.4	7,501.0	319.7	230.1	3.565	CC, ES, SF
KENNEDY 4-2-21 (EXISTING) - ENCANA WELL - SURV						Out of range
KENNEDY 6-0-21 (EXISTING) - ENCANA WELL - SURV						Out of range
KENNEDY 6-4-21 (EXISTING) - ENCANA WELL - SURV						Out of range
KENNEDY 8-0-21 (EXISTING) - ENCANA WELL - SURV						Out of range
KENNEDY 8-4-21 (EXISTING) - ENCANA WELL - SURV						Out of range
KENNEDY GAS UNIT 1 (EXISTING) - ENCANA WELL -	10,724.4	7,500.0	192.0	115.7	2.517	CC, ES, SF
NORTH RINN 33-9 (EXISTING) - ENCANA WELL - PLA						Out of range
NORTH RINN 34-9 (EXISTING) - ENCANA WELL - PLA						Out of range

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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

Summary						
Site Name	Reference Measured Depth	Offset Measured Depth	Distance		Separation Factor	Warning
Offset Well - Wellbore - Design	(ft)	(ft)	Between Centres (ft)	Between Ellipses (ft)		
S21-T2N-R68W (Edith Ann-Duckworth)						
NORTH RINN 43-9 (EXISTING) - ENCANA WELL - PLA						Out of range
NORTH RINN 44-9 (EXISTING) - ENCANA WELL - PLA						Out of range
NORTH RINN 4-4-9 (EXISTING) - ENCANA WELL - PLA						Out of range
NORTH RINN 4-6-9 (EXISTING) - ENCANA WELL - PLA						Out of range
NORTH RINN 4-8-9 (EXISTING) - ENCANA WELL - PLA						Out of range
NORTH RINN 6-6-9 (EXISTING) - ENCANA WELL - PLA						Out of range

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - DUCKWORTH 41-16 (EXISING) - ENCANA WELL - SURVEY													Offset Site Error:	0.0 ft
Survey Program: 88-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		
16,800.0	7,566.0	7,643.7	7,498.9	169.2	25.4	89.75	9,884.1	793.1	456.9	263.8	193.05	2.367		
16,900.0	7,566.0	7,644.2	7,499.4	171.0	25.4	89.86	9,884.1	793.1	379.3	184.5	194.80	1.947		
17,000.0	7,566.0	7,644.7	7,499.8	172.7	25.4	89.96	9,884.1	793.1	314.6	118.1	196.55	1.601		
17,100.0	7,566.0	7,645.1	7,500.3	174.5	25.4	90.07	9,884.1	793.1	272.3	74.0	198.30	1.373	Level 3	
17,174.4	7,566.0	7,645.5	7,500.7	175.8	25.4	90.15	9,884.1	793.1	261.9	62.3	199.60	1.312	Level 3, CC, ES, SF	
17,200.0	7,566.0	7,645.6	7,500.8	176.2	25.4	90.18	9,884.1	793.1	263.2	63.1	200.05	1.315	Level 3	
17,213.3	7,566.0	7,645.7	7,500.9	176.4	25.4	90.19	9,884.1	793.1	264.8	64.5	200.28	1.322	Level 3	

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - DUCKWORTH 43-16 (EXISTING) - ENCANA WELL - NO SUR													Offset Site Error: 0.0 ft
Survey Program: 8020-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
13,700.0	7,566.0	7,489.0	7,489.0	115.2	13.1	90.00	6,859.4	671.0	470.9	343.1	127.87	3.683	
13,800.0	7,566.0	7,489.0	7,489.0	116.9	13.1	90.00	6,859.4	671.0	376.6	247.0	129.62	2.906	
13,900.0	7,566.0	7,489.0	7,489.0	118.7	13.1	90.00	6,859.4	671.0	286.2	154.8	131.36	2.179	
14,000.0	7,566.0	7,489.0	7,489.0	120.4	13.1	90.00	6,859.4	671.0	204.9	71.8	133.11	1.539	
14,100.0	7,566.0	7,489.0	7,489.0	122.1	13.1	90.00	6,859.4	671.0	148.4	13.6	134.85	1.101	Level 2
14,149.7	7,566.0	7,489.0	7,489.0	123.0	13.1	90.00	6,859.4	671.0	139.9	4.1	135.72	1.031	Level 2, CC, ES, SF
14,200.0	7,566.0	7,489.0	7,489.0	123.9	13.1	90.00	6,859.4	671.0	148.6	12.0	136.60	1.088	Level 2
14,300.0	7,566.0	7,489.0	7,489.0	125.6	13.1	90.00	6,859.4	671.0	205.3	67.0	138.34	1.484	Level 3
14,400.0	7,566.0	7,489.0	7,489.0	127.4	13.1	90.00	6,859.4	671.0	286.7	146.6	140.09	2.047	
14,500.0	7,566.0	7,489.0	7,489.0	129.1	13.1	90.00	6,859.4	671.0	377.2	235.4	141.83	2.659	
14,600.0	7,566.0	7,489.0	7,489.0	130.8	13.1	90.00	6,859.4	671.0	471.5	327.9	143.58	3.284	

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - DUCKWORTH 44-16 (EXISTING) - ENCANA WELL - SURVE													Offset Site Error:	0.0 ft
Survey Program: 61-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		
12,500.0	7,566.0	7,575.7	7,502.0	94.4	21.5	88.12	5,603.8	804.4	479.6	372.1	107.52	4.461		
12,600.0	7,566.0	7,577.2	7,503.5	96.1	21.5	88.42	5,603.8	804.5	401.5	292.3	109.27	3.675		
12,700.0	7,566.0	7,578.6	7,504.9	97.8	21.5	88.73	5,603.8	804.5	335.3	224.3	111.02	3.020		
12,800.0	7,566.0	7,580.1	7,506.4	99.6	21.5	89.03	5,603.9	804.5	289.1	176.4	112.76	2.564		
12,894.1	7,566.0	7,581.4	7,507.7	101.2	21.5	89.31	5,603.9	804.5	273.4	159.0	114.41	2.389 CC		
12,900.0	7,566.0	7,581.5	7,507.8	101.3	21.5	89.32	5,603.9	804.5	273.4	158.9	114.51	2.388 ES, SF		
13,000.0	7,566.0	7,582.9	7,509.2	103.0	21.5	89.62	5,603.9	804.5	293.1	176.9	116.25	2.522		
13,100.0	7,566.0	7,584.3	7,510.6	104.8	21.5	89.91	5,603.9	804.5	342.2	224.2	117.99	2.900		
13,200.0	7,566.0	7,585.7	7,512.0	106.5	21.5	90.20	5,603.9	804.6	410.2	290.5	119.73	3.426		
13,300.0	7,566.0	7,587.1	7,513.4	108.2	21.5	90.49	5,604.0	804.6	489.3	367.8	121.46	4.029		

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - DUCKWORTH B UNIT 1 (EXISTING) - ENCANA WELL - NO S													Offset Site Error:	0.0 ft
Survey Program: 8038-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		
15,600.0	7,566.0	7,500.0	7,500.0	148.3	13.1	-90.00	8,724.6	327.1	462.3	301.2	161.04	2.871		
15,700.0	7,566.0	7,500.0	7,500.0	150.0	13.1	-90.00	8,724.6	327.1	375.2	212.4	162.79	2.305		
15,800.0	7,566.0	7,500.0	7,500.0	151.8	13.1	-90.00	8,724.6	327.1	296.3	131.7	164.54	1.801		
15,900.0	7,566.0	7,500.0	7,500.0	153.5	13.1	-90.00	8,724.6	327.1	234.1	67.9	166.28	1.408	Level 3	
16,000.0	7,566.0	7,500.0	7,500.0	155.2	13.1	-90.00	8,724.6	327.1	204.6	36.6	168.03	1.218	Level 2	
16,014.8	7,566.0	7,500.0	7,500.0	155.5	13.1	-90.00	8,724.6	327.1	204.1	35.8	168.29	1.213	Level 2, CC, ES, SF	
16,100.0	7,566.0	7,500.0	7,500.0	157.0	13.1	-90.00	8,724.6	327.1	221.1	51.4	169.78	1.302	Level 3	
16,200.0	7,566.0	7,500.0	7,500.0	158.7	13.1	-90.00	8,724.6	327.1	275.6	104.0	171.53	1.607		
16,300.0	7,566.0	7,500.0	7,500.0	160.5	13.1	-90.00	8,724.6	327.1	350.7	177.4	173.28	2.024		
16,400.0	7,566.0	7,500.0	7,500.0	162.2	13.1	-90.00	8,724.6	327.1	435.9	260.9	175.03	2.491		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 1 (EXISTING) - ENCANA WELL - NO SURVEYS													Offset Site Error: 0.0 ft
Survey Program: 8090-Geolink MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
8,200.0	7,566.0	7,518.0	7,518.0	23.6	13.1	-90.00	1,389.8	399.1	497.9	463.1	34.78	14.314	
8,300.0	7,566.0	7,518.0	7,518.0	24.9	13.1	-90.00	1,389.8	399.1	402.3	366.1	36.23	11.104	
8,400.0	7,566.0	7,518.0	7,518.0	26.3	13.1	-90.00	1,389.8	399.1	309.6	271.9	37.72	8.208	
8,500.0	7,566.0	7,518.0	7,518.0	27.7	13.1	-90.00	1,389.8	399.1	223.3	184.0	39.25	5.689	
8,600.0	7,566.0	7,518.0	7,518.0	29.2	13.1	-90.00	1,389.8	399.1	154.4	113.6	40.80	3.786	
8,680.0	7,566.0	7,518.0	7,518.0	30.4	13.1	-90.00	1,389.8	399.1	132.1	90.0	42.06	3.141 CC, ES, SF	
8,700.0	7,566.0	7,518.0	7,518.0	30.7	13.1	-90.00	1,389.8	399.1	133.6	91.2	42.37	3.153	
8,800.0	7,566.0	7,518.0	7,518.0	32.2	13.1	-90.00	1,389.8	399.1	178.4	134.5	43.96	4.059	
8,900.0	7,566.0	7,518.0	7,518.0	33.8	13.1	-90.00	1,389.8	399.1	256.6	211.0	45.57	5.630	
9,000.0	7,566.0	7,518.0	7,518.0	35.3	13.1	-90.00	1,389.8	399.1	346.2	299.0	47.20	7.334	
9,100.0	7,566.0	7,518.0	7,518.0	36.9	13.1	-90.00	1,389.8	399.1	440.3	391.4	48.83	9.015	



## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 43-21 (EXISTING) - ENCANA WELL - NO SURVE													Offset Site Error:	0.0 ft
Survey Program: 8150-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
8,700.0	7,566.0	7,513.0	7,513.0	30.7	13.1	90.00	1,809.1	728.2	445.3	402.9	42.36	10.512		
8,800.0	7,566.0	7,513.0	7,513.0	32.2	13.1	90.00	1,809.1	728.2	358.4	314.4	43.96	8.153		
8,900.0	7,566.0	7,513.0	7,513.0	33.8	13.1	90.00	1,809.1	728.2	280.3	234.7	45.56	6.151		
9,000.0	7,566.0	7,513.0	7,513.0	35.3	13.1	90.00	1,809.1	728.2	220.7	173.5	47.19	4.676		
9,099.3	7,566.0	7,513.0	7,513.0	36.9	13.1	90.00	1,809.1	728.2	197.0	148.2	48.81	4.037 CC		
9,100.0	7,566.0	7,513.0	7,513.0	36.9	13.1	90.00	1,809.1	728.2	197.0	148.2	48.82	4.036 ES, SF		
9,200.0	7,566.0	7,513.0	7,513.0	38.5	13.1	90.00	1,809.1	728.2	221.3	170.8	50.47	4.384		
9,300.0	7,566.0	7,513.0	7,513.0	40.1	13.1	90.00	1,809.1	728.2	281.2	229.1	52.13	5.395		
9,400.0	7,566.0	7,513.0	7,513.0	41.7	13.1	90.00	1,809.1	728.2	359.5	305.7	53.79	6.683		
9,500.0	7,566.0	7,513.0	7,513.0	43.4	13.1	90.00	1,809.1	728.2	446.5	391.0	55.46	8.050		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 44-21 (EXISTING) - ENCANA WELL - NO SURVE													Offset Site Error:	0.0 ft
Survey Program: 8129-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		
4,500.0	4,488.8	4,466.8	4,466.8	9.4	7.8	-24.94	283.1	720.7	494.3	478.4	15.91	31.076		
4,600.0	4,588.5	4,566.5	4,566.5	9.6	8.0	-25.32	283.1	720.7	487.4	471.1	16.27	29.950		
4,700.0	4,688.2	4,666.2	4,666.2	9.9	8.1	-25.71	283.1	720.7	480.5	463.8	16.64	28.874		
4,800.0	4,787.9	4,765.9	4,765.9	10.1	8.3	-26.12	283.1	720.7	473.6	456.6	17.01	27.843		
4,900.0	4,887.6	4,865.6	4,865.6	10.3	8.5	-26.53	283.1	720.7	466.7	449.3	17.38	26.857		
5,000.0	4,987.3	4,965.3	4,965.3	10.5	8.7	-26.96	283.1	720.7	459.8	442.1	17.75	25.911		
5,100.0	5,087.0	5,065.0	5,065.0	10.7	8.8	-27.40	283.1	720.7	453.0	434.9	18.12	25.004		
5,200.0	5,186.7	5,164.7	5,164.7	11.0	9.0	-27.85	283.1	720.7	446.2	427.7	18.49	24.133		
5,300.0	5,286.4	5,264.4	5,264.4	11.2	9.2	-28.32	283.1	720.7	439.5	420.6	18.86	23.297		
5,400.0	5,386.2	5,364.2	5,364.2	11.4	9.4	-28.80	283.1	720.7	432.7	413.5	19.24	22.493		
5,500.0	5,485.9	5,463.9	5,463.9	11.6	9.5	-29.29	283.1	720.7	426.0	406.4	19.61	21.720		
5,600.0	5,585.6	5,563.6	5,563.6	11.8	9.7	-29.80	283.1	720.7	419.3	399.4	19.99	20.976		
5,700.0	5,685.3	5,663.3	5,663.3	12.1	9.9	-30.33	283.1	720.7	412.7	392.3	20.37	20.260		
5,800.0	5,785.0	5,763.0	5,763.0	12.3	10.1	-30.88	283.1	720.7	406.1	385.4	20.75	19.571		
5,900.0	5,884.7	5,862.7	5,862.7	12.5	10.2	-31.44	283.1	720.7	399.5	378.4	21.13	18.907		
6,000.0	5,984.4	5,962.4	5,962.4	12.7	10.4	-32.03	283.1	720.7	393.0	371.5	21.52	18.266		
6,100.0	6,084.1	6,062.1	6,062.1	12.9	10.6	-32.63	283.1	720.7	386.5	364.6	21.90	17.649		
6,200.0	6,183.8	6,161.8	6,161.8	13.2	10.8	-33.25	283.1	720.7	380.1	357.8	22.29	17.053		
6,300.0	6,283.5	6,261.5	6,261.5	13.4	10.9	-33.89	283.1	720.7	373.7	351.0	22.68	16.479		
6,400.0	6,383.2	6,361.2	6,361.2	13.6	11.1	-34.56	283.1	720.7	367.4	344.3	23.07	15.924		
6,500.0	6,482.9	6,460.9	6,460.9	13.8	11.3	-35.25	283.1	720.7	361.1	337.6	23.46	15.389		
6,600.0	6,582.6	6,560.6	6,560.6	14.0	11.5	-35.96	283.1	720.7	354.8	331.0	23.86	14.872		
6,700.0	6,682.3	6,660.3	6,660.3	14.3	11.6	-36.70	283.1	720.7	348.7	324.4	24.26	14.373		
6,800.0	6,782.0	6,760.0	6,760.0	14.5	11.8	-37.47	283.1	720.7	342.5	317.9	24.66	13.891		
6,900.0	6,881.7	6,859.7	6,859.7	14.7	12.0	-38.26	283.1	720.7	336.5	311.4	25.06	13.426		
7,000.0	6,981.4	6,959.4	6,959.4	14.9	12.1	-39.08	283.1	720.7	330.5	305.0	25.47	12.976		
7,100.0	7,080.8	7,058.8	7,058.8	15.1	12.3	18.71	283.1	720.7	320.4	294.8	25.61	12.512		
7,200.0	7,177.6	7,155.6	7,155.6	15.4	12.5	36.05	283.1	720.7	298.7	273.4	25.27	11.822		
7,300.0	7,268.8	7,246.8	7,246.8	15.7	12.6	48.40	283.1	720.7	267.5	242.6	24.84	10.768		
7,400.0	7,351.7	7,329.7	7,329.7	16.1	12.8	63.19	283.1	720.7	232.3	207.1	25.15	9.235		
7,500.0	7,423.7	7,401.7	7,401.7	16.6	12.9	80.21	283.1	720.7	204.1	177.5	26.53	7.693		
7,562.4	7,462.2	7,440.2	7,440.2	17.0	13.0	90.00	283.1	720.7	197.8	170.3	27.44	7.207 CC, ES		
7,600.0	7,482.7	7,460.7	7,460.7	17.2	13.0	94.93	283.1	720.7	200.4	172.6	27.82	7.203 SF		
7,700.0	7,526.9	7,504.9	7,504.9	18.0	13.1	103.08	283.1	720.7	233.2	204.7	28.47	8.190		
7,800.0	7,554.9	7,532.9	7,532.9	18.9	13.1	102.78	283.1	720.7	296.6	267.3	29.31	10.119		
7,900.0	7,565.8	7,543.8	7,543.8	20.0	13.2	92.27	283.1	720.7	377.7	346.9	30.79	12.267		
8,000.0	7,566.0	7,544.0	7,544.0	21.1	13.2	90.00	283.1	720.7	466.9	434.8	32.08	14.553		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - EDITH ANN 6-8-21 (EXISTING) - ENCANA WELL - SURVEYS													Offset Site Error:	0.0 ft
Survey Program: 80-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		
2,100.0	2,095.9	2,235.8	2,217.0	4.2	5.4	-10.02	136.5	558.9	480.8	473.2	7.56	63.583		
2,200.0	2,195.6	2,329.8	2,307.5	4.4	5.9	-9.49	124.7	536.1	446.9	438.9	7.92	56.433		
2,300.0	2,295.3	2,422.1	2,396.3	4.6	6.3	-8.97	113.7	513.5	412.9	404.7	8.27	49.927		
2,400.0	2,395.0	2,523.0	2,493.4	4.8	6.8	-8.54	103.1	488.4	378.9	370.3	8.63	43.887		
2,500.0	2,494.7	2,629.0	2,594.6	5.0	7.4	-8.10	91.8	458.7	342.1	333.0	9.01	37.961		
2,600.0	2,594.4	2,723.1	2,683.7	5.3	7.9	-7.41	80.4	430.7	303.1	293.7	9.38	32.313		
2,700.0	2,694.1	2,813.1	2,768.9	5.5	8.4	-6.47	69.2	404.1	264.4	254.6	9.76	27.100		
2,800.0	2,793.8	2,904.9	2,855.9	5.7	9.0	-5.09	57.4	377.4	226.1	215.9	10.17	22.235		
2,900.0	2,893.5	2,995.3	2,941.8	5.9	9.5	-2.97	45.3	351.8	188.6	177.9	10.63	17.739		
3,000.0	2,993.2	3,088.1	3,030.1	6.1	10.0	-0.37	34.4	325.7	151.8	140.6	11.15	13.615		
3,100.0	3,092.9	3,181.0	3,118.6	6.3	10.5	3.83	23.5	299.2	115.1	103.3	11.84	9.719		
3,200.0	3,192.6	3,273.1	3,206.3	6.6	11.0	11.47	13.1	273.2	79.8	66.8	12.96	6.157		
3,300.0	3,292.3	3,366.0	3,295.0	6.8	11.5	29.41	2.7	247.6	48.1	32.7	15.40	3.125		
3,400.0	3,392.0	3,459.5	3,384.1	7.0	12.1	78.56	-7.2	221.0	30.3	11.4	18.95	1.600		
3,402.9	3,394.9	3,462.2	3,386.7	7.0	12.1	80.45	-7.4	220.2	30.3	11.4	18.94	1.600 CC, ES, SF		
3,500.0	3,491.7	3,552.4	3,472.7	7.2	12.6	129.14	-14.9	194.2	46.7	31.3	15.31	3.047		
3,600.0	3,591.4	3,644.3	3,560.0	7.4	13.1	147.57	-23.2	166.6	80.1	66.5	13.50	5.928		
3,700.0	3,691.2	3,736.2	3,647.2	7.7	13.7	154.87	-31.9	139.1	116.7	103.4	13.25	8.807		
3,800.0	3,790.9	3,827.7	3,734.0	7.9	14.2	158.19	-41.9	111.8	154.7	141.3	13.40	11.546		
3,900.0	3,890.6	3,918.3	3,819.8	8.1	14.7	159.94	-52.6	84.7	193.5	179.9	13.66	14.163		
4,000.0	3,990.3	4,009.5	3,905.9	8.3	15.3	161.26	-63.3	56.7	233.1	219.1	13.96	16.701		
4,100.0	4,090.0	4,097.6	3,989.0	8.5	15.9	161.96	-74.6	29.6	273.2	259.0	14.27	19.153		
4,200.0	4,189.7	4,184.0	4,069.9	8.8	16.4	162.40	-86.5	1.9	314.8	300.2	14.58	21.593		
4,300.0	4,289.4	4,290.1	4,169.7	9.0	17.1	162.87	-100.5	-31.3	355.7	340.7	14.93	23.825		
4,400.0	4,389.1	4,406.8	4,281.5	9.2	17.6	163.19	-113.9	-61.7	391.2	375.9	15.30	25.568		
4,500.0	4,488.8	4,517.0	4,388.8	9.4	18.1	163.19	-125.9	-84.4	421.3	405.6	15.67	26.891		
4,600.0	4,588.5	4,618.0	4,487.4	9.6	18.5	163.19	-136.2	-103.4	449.7	433.7	16.02	28.076		
4,700.0	4,688.2	4,725.3	4,592.5	9.9	18.9	163.25	-146.0	-122.2	476.6	460.2	16.38	29.094		
4,800.0	4,787.9	4,844.5	4,710.2	10.1	19.3	163.49	-153.9	-139.6	499.8	483.0	16.76	29.814		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4A-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-50.3	50.4					
100.0	100.0	98.0	98.0	0.1	0.1	-89.95	0.0	-50.3	50.3	50.1	0.26	194.230		
200.0	200.0	198.0	198.0	0.3	0.3	-89.95	0.0	-50.3	50.3	49.7	0.61	82.883 CC, ES		
300.0	300.0	297.1	297.1	0.5	0.5	-89.95	0.0	-51.2	51.2	50.2	0.96	53.534		
400.0	400.0	396.2	396.2	0.7	0.7	-89.95	0.0	-53.7	53.7	52.4	1.31	41.065		
500.0	500.0	495.1	495.0	0.8	0.8	-174.16	0.1	-57.9	58.9	57.2	1.65	35.704		
600.0	600.0	593.6	593.3	1.0	1.0	-174.36	0.1	-63.9	67.5	65.5	1.99	33.832 SF		
700.0	699.9	691.7	691.0	1.2	1.2	-174.62	0.1	-71.4	79.5	77.2	2.34	34.005		
800.0	799.7	789.0	787.9	1.4	1.5	-174.88	0.1	-80.6	95.0	92.3	2.68	35.434		
900.0	899.4	885.5	883.8	1.6	1.7	-175.12	0.1	-91.3	113.5	110.5	3.02	37.565		
1,000.0	999.1	981.3	978.9	1.8	2.0	-175.29	0.2	-103.5	133.8	130.4	3.36	39.797		
1,100.0	1,098.8	1,076.5	1,073.1	2.0	2.3	-175.40	0.2	-117.3	155.7	152.0	3.70	42.074		
1,200.0	1,198.5	1,170.9	1,166.3	2.2	2.6	-175.46	0.2	-132.4	179.3	175.2	4.04	44.384		
1,300.0	1,298.2	1,264.6	1,258.5	2.4	2.9	-175.50	0.3	-149.0	204.4	200.0	4.38	46.718		
1,400.0	1,397.9	1,357.5	1,349.7	2.6	3.2	-175.52	0.3	-166.9	231.1	226.4	4.71	49.068		
1,500.0	1,497.6	1,453.7	1,443.9	2.9	3.6	-175.53	0.3	-186.1	258.6	253.5	5.05	51.198		
1,600.0	1,597.3	1,549.9	1,538.1	3.1	3.9	-175.54	0.4	-205.4	286.0	280.6	5.39	53.060		
1,700.0	1,697.0	1,646.0	1,632.3	3.3	4.3	-175.55	0.4	-224.6	313.4	307.7	5.73	54.701		
1,800.0	1,796.7	1,742.2	1,726.5	3.5	4.7	-175.56	0.5	-243.9	340.9	334.8	6.07	56.159		
1,900.0	1,896.4	1,838.3	1,820.7	3.7	5.1	-175.56	0.5	-263.1	368.3	361.9	6.41	57.463		
2,000.0	1,996.2	1,934.5	1,915.0	3.9	5.4	-175.57	0.6	-282.4	395.8	389.0	6.75	58.635		
2,100.0	2,095.9	2,030.7	2,009.2	4.2	5.8	-175.57	0.6	-301.6	423.2	416.1	7.09	59.696		
2,200.0	2,195.6	2,126.8	2,103.4	4.4	6.2	-175.58	0.6	-320.9	450.6	443.2	7.43	60.659		
2,300.0	2,295.3	2,223.0	2,197.6	4.6	6.5	-175.58	0.7	-340.1	478.1	470.3	7.77	61.539		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4B-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-39.2	39.2					
100.0	100.0	99.0	99.0	0.1	0.1	-89.95	0.0	-39.2	39.2	38.9	0.26	150.308		
200.0	200.0	199.0	199.0	0.3	0.3	-89.95	0.0	-39.2	39.2	38.5	0.61	64.280		
300.0	300.0	299.0	299.0	0.5	0.5	-89.95	0.0	-39.2	39.2	38.2	0.96	40.863 CC, ES		
400.0	400.0	398.3	398.3	0.7	0.7	-89.95	0.0	-40.0	40.0	38.7	1.31	30.613		
500.0	500.0	497.5	497.5	0.8	0.8	-174.20	0.0	-42.6	43.5	41.8	1.65	26.278		
600.0	600.0	596.5	596.4	1.0	1.0	-174.47	0.0	-46.8	50.4	48.4	2.00	25.181 SF		
700.0	699.9	695.0	694.7	1.2	1.2	-174.81	0.1	-52.8	60.7	58.4	2.35	25.894		
800.0	799.7	792.9	792.3	1.4	1.4	-175.14	0.1	-60.3	74.5	71.8	2.69	27.720		
900.0	899.4	890.0	889.0	1.6	1.6	-175.41	0.1	-69.5	91.4	88.4	3.03	30.157		
1,000.0	999.1	986.6	984.9	1.8	1.9	-175.59	0.1	-80.2	110.1	106.7	3.37	32.636		
1,100.0	1,098.8	1,083.0	1,080.6	2.0	2.1	-175.69	0.1	-92.5	130.3	126.6	3.71	35.091		
1,200.0	1,198.5	1,180.9	1,177.6	2.2	2.4	-175.76	0.2	-105.4	151.1	147.0	4.06	37.225		
1,300.0	1,298.2	1,278.7	1,274.6	2.4	2.7	-175.81	0.2	-118.3	171.8	167.4	4.40	39.026		
1,400.0	1,397.9	1,376.5	1,371.5	2.6	2.9	-175.85	0.2	-131.3	192.5	187.8	4.75	40.566		
1,500.0	1,497.6	1,474.4	1,468.5	2.9	3.2	-175.89	0.2	-144.2	213.2	208.2	5.09	41.898		
1,600.0	1,597.3	1,572.2	1,565.5	3.1	3.5	-175.92	0.3	-157.1	234.0	228.5	5.43	43.061		
1,700.0	1,697.0	1,670.0	1,662.4	3.3	3.7	-175.94	0.3	-170.0	254.7	248.9	5.78	44.087		
1,800.0	1,796.7	1,767.8	1,759.4	3.5	4.0	-175.96	0.3	-182.9	275.4	269.3	6.12	44.997		
1,900.0	1,896.4	1,865.7	1,856.4	3.7	4.3	-175.98	0.3	-195.8	296.2	289.7	6.47	45.810		
2,000.0	1,996.2	1,963.5	1,953.4	3.9	4.6	-175.99	0.3	-208.7	316.9	310.1	6.81	46.541		
2,100.0	2,095.9	2,061.3	2,050.3	4.2	4.9	-176.00	0.4	-221.6	337.6	330.5	7.15	47.202		
2,200.0	2,195.6	2,159.1	2,147.3	4.4	5.1	-176.02	0.4	-234.5	358.3	350.9	7.50	47.803		
2,300.0	2,295.3	2,257.0	2,244.3	4.6	5.4	-176.03	0.4	-247.4	379.1	371.2	7.84	48.351		
2,400.0	2,395.0	2,354.8	2,341.3	4.8	5.7	-176.03	0.4	-260.3	399.8	391.6	8.18	48.852		
2,500.0	2,494.7	2,452.6	2,438.2	5.0	6.0	-176.04	0.5	-273.3	420.5	412.0	8.53	49.314		
2,600.0	2,594.4	2,550.5	2,535.2	5.3	6.3	-176.05	0.5	-286.2	441.3	432.4	8.87	49.740		
2,700.0	2,694.1	2,648.3	2,632.2	5.5	6.5	-176.06	0.5	-299.1	462.0	452.8	9.22	50.133		
2,800.0	2,793.8	2,746.1	2,729.1	5.7	6.8	-176.06	0.5	-312.0	482.7	473.2	9.56	50.499		

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4C-21H-O268 - Hz - Plan #1														Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)							
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-30.8	30.8						
100.0	100.0	99.0	99.0	0.1	0.1	-89.95	0.0	-30.8	30.8	30.5	0.26	118.099			
200.0	200.0	199.0	199.0	0.3	0.3	-89.95	0.0	-30.8	30.8	30.2	0.61	50.505			
300.0	300.0	299.0	299.0	0.5	0.5	-89.95	0.0	-30.8	30.8	29.8	0.96	32.106			
400.0	400.0	399.0	399.0	0.7	0.7	-89.95	0.0	-30.8	30.8	29.5	1.31	23.533 CC, ES			
500.0	500.0	498.4	498.4	0.8	0.8	-174.23	0.0	-31.6	32.5	30.8	1.66	19.625			
600.0	600.0	597.7	597.7	1.0	1.0	-174.59	0.1	-34.2	37.7	35.7	2.00	18.813 SF			
700.0	699.9	696.8	696.7	1.2	1.2	-175.00	0.1	-38.4	46.2	43.9	2.35	19.686			
800.0	799.7	796.3	796.0	1.4	1.4	-175.42	0.1	-43.0	56.9	54.2	2.69	21.131			
900.0	899.4	895.5	895.2	1.6	1.6	-175.79	0.2	-47.6	69.1	66.0	3.04	22.710			
1,000.0	999.1	994.8	994.3	1.8	1.7	-176.06	0.2	-52.2	81.3	77.9	3.39	24.000			
1,100.0	1,098.8	1,094.0	1,093.5	2.0	1.9	-176.27	0.2	-56.8	93.6	89.8	3.74	25.050			
1,200.0	1,198.5	1,193.3	1,192.6	2.2	2.1	-176.42	0.3	-61.4	105.8	101.8	4.08	25.923			
1,300.0	1,298.2	1,292.5	1,291.7	2.4	2.3	-176.54	0.3	-66.0	118.1	113.7	4.43	26.658			
1,400.0	1,397.9	1,391.8	1,390.9	2.6	2.5	-176.64	0.4	-70.6	130.4	125.6	4.78	27.287			
1,500.0	1,497.6	1,491.0	1,490.0	2.9	2.7	-176.73	0.4	-75.2	142.6	137.5	5.12	27.831			
1,600.0	1,597.3	1,590.2	1,589.2	3.1	2.9	-176.79	0.4	-79.8	154.9	149.4	5.47	28.306			
1,700.0	1,697.0	1,689.5	1,688.3	3.3	3.1	-176.85	0.5	-84.4	167.2	161.3	5.82	28.724			
1,800.0	1,796.7	1,788.7	1,787.4	3.5	3.3	-176.90	0.5	-89.0	179.4	173.3	6.17	29.095			
1,900.0	1,896.4	1,888.0	1,886.6	3.7	3.4	-176.95	0.6	-93.6	191.7	185.2	6.51	29.427			
2,000.0	1,996.2	1,987.2	1,985.7	3.9	3.6	-176.99	0.6	-98.2	203.9	197.1	6.86	29.725			
2,100.0	2,095.9	2,086.5	2,084.8	4.2	3.8	-177.02	0.6	-102.8	216.2	209.0	7.21	29.995			
2,200.0	2,195.6	2,185.7	2,184.0	4.4	4.0	-177.05	0.7	-107.4	228.5	220.9	7.56	30.239			
2,300.0	2,295.3	2,285.0	2,283.1	4.6	4.2	-177.08	0.7	-112.0	240.7	232.8	7.90	30.462			
2,400.0	2,395.0	2,384.2	2,382.3	4.8	4.4	-177.11	0.8	-116.6	253.0	244.8	8.25	30.667			
2,500.0	2,494.7	2,483.5	2,481.4	5.0	4.6	-177.13	0.8	-121.3	265.3	256.7	8.60	30.855			
2,600.0	2,594.4	2,582.7	2,580.5	5.3	4.8	-177.15	0.8	-125.9	277.5	268.6	8.94	31.028			
2,700.0	2,694.1	2,681.9	2,679.7	5.5	5.0	-177.17	0.9	-130.5	289.8	280.5	9.29	31.188			
2,800.0	2,793.8	2,781.2	2,778.8	5.7	5.2	-177.19	0.9	-135.1	302.1	292.4	9.64	31.337			
2,900.0	2,893.5	2,880.4	2,878.0	5.9	5.3	-177.20	1.0	-139.7	314.3	304.3	9.99	31.476			
3,000.0	2,993.2	2,979.7	2,977.1	6.1	5.5	-177.22	1.0	-144.3	326.6	316.3	10.33	31.605			
3,100.0	3,092.9	3,078.9	3,076.2	6.3	5.7	-177.23	1.0	-148.9	338.9	328.2	10.68	31.726			
3,200.0	3,192.6	3,178.2	3,175.4	6.6	5.9	-177.25	1.1	-153.5	351.1	340.1	11.03	31.839			
3,300.0	3,292.3	3,277.4	3,274.5	6.8	6.1	-177.26	1.1	-158.1	363.4	352.0	11.38	31.945			
3,400.0	3,392.0	3,376.7	3,373.6	7.0	6.3	-177.27	1.1	-162.7	375.6	363.9	11.72	32.045			
3,500.0	3,491.7	3,475.9	3,472.8	7.2	6.5	-177.28	1.2	-167.3	387.9	375.8	12.07	32.139			
3,600.0	3,591.4	3,575.1	3,571.9	7.4	6.7	-177.29	1.2	-171.9	400.2	387.8	12.42	32.228			
3,700.0	3,691.2	3,674.4	3,671.1	7.7	6.9	-177.30	1.3	-176.5	412.4	399.7	12.76	32.312			
3,800.0	3,790.9	3,773.6	3,770.2	7.9	7.1	-177.31	1.3	-181.1	424.7	411.6	13.11	32.392			
3,900.0	3,890.6	3,872.9	3,869.3	8.1	7.3	-177.32	1.3	-185.7	437.0	423.5	13.46	32.467			
4,000.0	3,990.3	3,972.1	3,968.5	8.3	7.4	-177.32	1.4	-190.3	449.2	435.4	13.81	32.539			
4,100.0	4,090.0	4,071.4	4,067.6	8.5	7.6	-177.33	1.4	-194.9	461.5	447.3	14.15	32.607			
4,200.0	4,189.7	4,170.6	4,166.7	8.8	7.8	-177.34	1.5	-199.5	473.8	459.3	14.50	32.672			
4,300.0	4,289.4	4,269.9	4,265.9	9.0	8.0	-177.34	1.5	-204.1	486.0	471.2	14.85	32.734			
4,400.0	4,389.1	4,369.1	4,365.0	9.2	8.2	-177.35	1.5	-208.7	498.3	483.1	15.19	32.793			

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4D-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-89.95	0.0	-19.6	19.6					
100.0	100.0	99.0	99.0	0.1	0.1	-89.95	0.0	-19.6	19.6	19.3	0.26	75.154		
200.0	200.0	199.0	199.0	0.3	0.3	-89.95	0.0	-19.6	19.6	19.0	0.61	32.140		
300.0	300.0	299.0	299.0	0.5	0.5	-89.95	0.0	-19.6	19.6	18.6	0.96	20.431		
400.0	400.0	399.0	399.0	0.7	0.7	-89.95	0.0	-19.6	19.6	18.3	1.31	14.976 CC, ES		
500.0	500.0	499.0	499.0	0.8	0.8	-174.34	0.0	-19.6	20.4	18.8	1.66	12.345		
600.0	600.0	598.6	598.5	1.0	1.0	-174.94	0.0	-20.4	23.9	21.9	2.00	11.928 SF		
700.0	699.9	698.1	698.1	1.2	1.2	-175.58	0.0	-22.8	30.6	28.3	2.35	13.022		
800.0	799.7	797.7	797.7	1.4	1.4	-176.15	0.0	-25.4	39.3	36.6	2.70	14.563		
900.0	899.4	897.2	897.1	1.6	1.5	-176.62	0.0	-27.9	49.4	46.3	3.04	16.217		
1,000.0	999.1	996.7	996.6	1.8	1.7	-176.94	0.0	-30.5	59.6	56.2	3.39	17.568		
1,100.0	1,098.8	1,096.2	1,096.0	2.0	1.9	-177.16	0.1	-33.1	69.8	66.1	3.74	18.669		
1,200.0	1,198.5	1,195.6	1,195.4	2.2	2.1	-177.33	0.1	-35.7	80.1	76.0	4.09	19.583		
1,300.0	1,298.2	1,295.1	1,294.9	2.4	2.2	-177.46	0.1	-38.2	90.3	85.9	4.44	20.354		
1,400.0	1,397.9	1,394.6	1,394.3	2.6	2.4	-177.57	0.1	-40.8	100.5	95.7	4.78	21.012		
1,500.0	1,497.6	1,494.1	1,493.8	2.9	2.6	-177.65	0.1	-43.4	110.7	105.6	5.13	21.582		
1,600.0	1,597.3	1,593.5	1,593.2	3.1	2.8	-177.72	0.1	-46.0	121.0	115.5	5.48	22.079		
1,700.0	1,697.0	1,693.0	1,692.6	3.3	3.0	-177.78	0.1	-48.5	131.2	125.4	5.83	22.517		
1,800.0	1,796.7	1,792.5	1,792.1	3.5	3.1	-177.83	0.1	-51.1	141.4	135.3	6.17	22.906		
1,900.0	1,896.4	1,892.0	1,891.5	3.7	3.3	-177.87	0.1	-53.7	151.7	145.1	6.52	23.253		
2,000.0	1,996.2	1,991.4	1,991.0	3.9	3.5	-177.91	0.1	-56.3	161.9	155.0	6.87	23.565		
2,100.0	2,095.9	2,090.9	2,090.4	4.2	3.7	-177.95	0.1	-58.8	172.1	164.9	7.22	23.847		
2,200.0	2,195.6	2,190.4	2,189.9	4.4	3.9	-177.97	0.1	-61.4	182.4	174.8	7.57	24.103		
2,300.0	2,295.3	2,289.9	2,289.3	4.6	4.0	-178.00	0.1	-64.0	192.6	184.7	7.91	24.337		
2,400.0	2,395.0	2,389.3	2,388.7	4.8	4.2	-178.03	0.2	-66.6	202.8	194.6	8.26	24.551		
2,500.0	2,494.7	2,488.8	2,488.2	5.0	4.4	-178.05	0.2	-69.1	213.1	204.4	8.61	24.747		
2,600.0	2,594.4	2,588.3	2,587.6	5.3	4.6	-178.07	0.2	-71.7	223.3	214.3	8.96	24.929		
2,700.0	2,694.1	2,687.8	2,687.1	5.5	4.7	-178.09	0.2	-74.3	233.5	224.2	9.30	25.097		
2,800.0	2,793.8	2,787.2	2,786.5	5.7	4.9	-178.10	0.2	-76.8	243.8	234.1	9.65	25.252		
2,900.0	2,893.5	2,886.7	2,886.0	5.9	5.1	-178.12	0.2	-79.4	254.0	244.0	10.00	25.397		
3,000.0	2,993.2	2,986.2	2,985.4	6.1	5.3	-178.13	0.2	-82.0	264.2	253.9	10.35	25.532		
3,100.0	3,092.9	3,085.7	3,084.8	6.3	5.5	-178.14	0.2	-84.6	274.4	263.8	10.70	25.659		
3,200.0	3,192.6	3,185.1	3,184.3	6.6	5.6	-178.16	0.2	-87.1	284.7	273.6	11.04	25.777		
3,300.0	3,292.3	3,284.6	3,283.7	6.8	5.8	-178.17	0.2	-89.7	294.9	283.5	11.39	25.889		
3,400.0	3,392.0	3,384.1	3,383.2	7.0	6.0	-178.18	0.2	-92.3	305.1	293.4	11.74	25.993		
3,500.0	3,491.7	3,483.6	3,482.6	7.2	6.2	-178.19	0.2	-94.9	315.4	303.3	12.09	26.092		
3,600.0	3,591.4	3,583.0	3,582.0	7.4	6.4	-178.20	0.2	-97.4	325.6	313.2	12.43	26.185		
3,700.0	3,691.2	3,682.5	3,681.5	7.7	6.5	-178.20	0.2	-100.0	335.8	323.1	12.78	26.273		
3,800.0	3,790.9	3,782.0	3,780.9	7.9	6.7	-178.21	0.3	-102.6	346.1	332.9	13.13	26.356		
3,900.0	3,890.6	3,881.5	3,880.4	8.1	6.9	-178.22	0.3	-105.2	356.3	342.8	13.48	26.435		
4,000.0	3,990.3	3,980.9	3,979.8	8.3	7.1	-178.23	0.3	-107.7	366.5	352.7	13.83	26.511		
4,100.0	4,090.0	4,080.4	4,079.3	8.5	7.3	-178.23	0.3	-110.3	376.8	362.6	14.17	26.582		
4,200.0	4,189.7	4,179.9	4,178.7	8.8	7.4	-178.24	0.3	-112.9	387.0	372.5	14.52	26.650		
4,300.0	4,289.4	4,279.4	4,278.1	9.0	7.6	-178.25	0.3	-115.5	397.2	382.4	14.87	26.715		
4,400.0	4,389.1	4,378.8	4,377.6	9.2	7.8	-178.25	0.3	-118.0	407.5	392.2	15.22	26.777		
4,500.0	4,488.8	4,478.3	4,477.0	9.4	8.0	-178.26	0.3	-120.6	417.7	402.1	15.56	26.836		
4,600.0	4,588.5	4,577.8	4,576.5	9.6	8.2	-178.26	0.3	-123.2	427.9	412.0	15.91	26.892		
4,700.0	4,688.2	4,677.3	4,675.9	9.9	8.3	-178.27	0.3	-125.8	438.2	421.9	16.26	26.946		
4,800.0	4,787.9	4,776.7	4,775.3	10.1	8.5	-178.27	0.3	-128.3	448.4	431.8	16.61	26.998		
4,900.0	4,887.6	4,876.2	4,874.8	10.3	8.7	-178.28	0.3	-130.9	458.6	441.7	16.96	27.048		
5,000.0	4,987.3	4,975.7	4,974.2	10.5	8.9	-178.28	0.3	-133.5	468.8	451.5	17.30	27.096		
5,100.0	5,087.0	5,075.2	5,073.7	10.7	9.1	-178.29	0.4	-136.1	479.1	461.4	17.65	27.141		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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												S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4D-21H-O268 - Hz - Plan #1		Offset Site Error:		0.0 ft			
Survey Program:				0-Geolink MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance												
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation	Warning						
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor							
5,200.0	5,186.7	5,174.6	5,173.1	11.0	9.2	-178.29	0.4	-138.6	489.3	471.3	18.00	27.185							
5,300.0	5,286.4	5,274.1	5,272.6	11.2	9.4	-178.29	0.4	-141.2	499.5	481.2	18.35	27.228							



# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.96	0.0	-11.2	11.2					
100.0	100.0	99.0	99.0	0.1	0.1	-89.96	0.0	-11.2	11.2	10.9	0.26	42.945		
200.0	200.0	199.0	199.0	0.3	0.3	-89.96	0.0	-11.2	11.2	10.6	0.61	18.366		
300.0	300.0	299.0	299.0	0.5	0.5	-89.96	0.0	-11.2	11.2	10.2	0.96	11.675		
400.0	400.0	399.0	399.0	0.7	0.7	-89.96	0.0	-11.2	11.2	9.9	1.31	8.558 CC, ES		
500.0	500.0	499.0	499.0	0.8	0.8	-174.52	0.0	-11.2	12.1	10.4	1.66	7.279		
600.0	600.0	599.0	599.0	1.0	1.0	-175.49	0.0	-11.2	14.7	12.7	2.00	7.315		
700.0	699.9	698.9	698.9	1.2	1.2	-176.52	0.0	-11.2	19.0	16.7	2.35	8.083		
800.0	799.7	798.7	798.7	1.4	1.4	-177.37	0.0	-11.2	25.1	22.4	2.70	9.302		
900.0	899.4	898.4	898.4	1.6	1.5	-177.97	0.0	-11.2	32.6	29.6	3.05	10.709		
1,000.0	999.1	998.1	998.1	1.8	1.7	-178.36	0.0	-11.2	40.3	36.9	3.40	11.866		
1,100.0	1,098.8	1,097.8	1,097.8	2.0	1.9	-178.62	0.0	-11.2	48.0	44.2	3.74	12.808		
1,200.0	1,198.5	1,197.5	1,197.5	2.2	2.0	-178.81	0.0	-11.2	55.6	51.5	4.09	13.590		
1,300.0	1,298.2	1,297.2	1,297.2	2.4	2.2	-178.95	0.0	-11.2	63.3	58.8	4.44	14.250		
1,400.0	1,397.9	1,396.9	1,396.9	2.6	2.4	-179.07	0.0	-11.2	70.9	66.2	4.79	14.813		
1,500.0	1,497.6	1,496.6	1,496.6	2.9	2.6	-179.16	0.0	-11.2	78.6	73.5	5.14	15.300		
1,600.0	1,597.3	1,596.3	1,596.3	3.1	2.7	-179.23	0.0	-11.2	86.3	80.8	5.49	15.726		
1,700.0	1,697.0	1,696.0	1,696.0	3.3	2.9	-179.30	0.0	-11.2	93.9	88.1	5.83	16.100		
1,800.0	1,796.7	1,795.7	1,795.7	3.5	3.1	-179.35	0.0	-11.2	101.6	95.4	6.18	16.433		
1,900.0	1,896.4	1,895.4	1,895.4	3.7	3.3	-179.39	0.0	-11.2	109.3	102.7	6.53	16.730		
2,000.0	1,996.2	1,995.2	1,995.2	3.9	3.4	-179.43	0.0	-11.2	116.9	110.0	6.88	16.997		
2,100.0	2,095.9	2,094.9	2,094.9	4.2	3.6	-179.47	0.0	-11.2	124.6	117.4	7.23	17.238		
2,200.0	2,195.6	2,194.6	2,194.6	4.4	3.8	-179.50	0.0	-11.2	132.3	124.7	7.58	17.457		
2,300.0	2,295.3	2,294.3	2,294.3	4.6	4.0	-179.53	0.0	-11.2	139.9	132.0	7.92	17.657		
2,400.0	2,395.0	2,394.0	2,394.0	4.8	4.1	-179.55	0.0	-11.2	147.6	139.3	8.27	17.840		
2,500.0	2,494.7	2,493.7	2,493.7	5.0	4.3	-179.57	0.0	-11.2	155.2	146.6	8.62	18.008		
2,600.0	2,594.4	2,593.4	2,593.4	5.3	4.5	-179.59	0.0	-11.2	162.9	153.9	8.97	18.163		
2,700.0	2,694.1	2,693.1	2,693.1	5.5	4.7	-179.61	0.0	-11.2	170.6	161.3	9.32	18.306		
2,800.0	2,793.8	2,792.8	2,792.8	5.7	4.8	-179.63	0.0	-11.2	178.2	168.6	9.67	18.440		
2,900.0	2,893.5	2,892.5	2,892.5	5.9	5.0	-179.64	0.0	-11.2	185.9	175.9	10.01	18.563		
3,000.0	2,993.2	2,992.2	2,992.2	6.1	5.2	-179.66	0.0	-11.2	193.6	183.2	10.36	18.679		
3,100.0	3,092.9	3,091.9	3,091.9	6.3	5.4	-179.67	0.0	-11.2	201.2	190.5	10.71	18.787		
3,200.0	3,192.6	3,191.6	3,191.6	6.6	5.5	-179.68	0.0	-11.2	208.9	197.8	11.06	18.888		
3,300.0	3,292.3	3,291.3	3,291.3	6.8	5.7	-179.69	0.0	-11.2	216.6	205.2	11.41	18.983		
3,400.0	3,392.0	3,391.0	3,391.0	7.0	5.9	-179.70	0.0	-11.2	224.2	212.5	11.76	19.073		
3,500.0	3,491.7	3,490.7	3,490.7	7.2	6.0	-179.71	0.0	-11.2	231.9	219.8	12.10	19.157		
3,600.0	3,591.4	3,590.4	3,590.4	7.4	6.2	-179.72	0.0	-11.2	239.6	227.1	12.45	19.237		
3,700.0	3,691.2	3,690.2	3,690.2	7.7	6.4	-179.73	0.0	-11.2	247.2	234.4	12.80	19.312		
3,800.0	3,790.9	3,789.9	3,789.9	7.9	6.6	-179.74	0.0	-11.2	254.9	241.7	13.15	19.383		
3,900.0	3,890.6	3,889.6	3,889.6	8.1	6.7	-179.75	0.0	-11.2	262.6	249.1	13.50	19.451		
4,000.0	3,990.3	3,989.3	3,989.3	8.3	6.9	-179.76	0.0	-11.2	270.2	256.4	13.85	19.515		
4,100.0	4,090.0	4,089.0	4,089.0	8.5	7.1	-179.76	0.0	-11.2	277.9	263.7	14.19	19.576		
4,200.0	4,189.7	4,188.7	4,188.7	8.8	7.3	-179.77	0.0	-11.2	285.5	271.0	14.54	19.634		
4,300.0	4,289.4	4,288.4	4,288.4	9.0	7.4	-179.77	0.0	-11.2	293.2	278.3	14.89	19.690		
4,400.0	4,389.1	4,388.1	4,388.1	9.2	7.6	-179.78	0.0	-11.2	300.9	285.6	15.24	19.743		
4,500.0	4,488.8	4,487.8	4,487.8	9.4	7.8	-179.79	0.0	-11.2	308.5	292.9	15.59	19.793		
4,600.0	4,588.5	4,592.6	4,592.6	9.6	8.0	-179.80	0.0	-10.4	315.5	299.6	15.95	19.786		
4,700.0	4,688.2	4,698.3	4,698.3	9.9	8.2	-179.86	0.0	-7.8	320.6	304.3	16.30	19.666		
4,800.0	4,787.9	4,804.2	4,804.0	10.1	8.3	-179.94	0.0	-3.1	324.0	307.3	16.66	19.440		
4,900.0	4,887.6	4,910.1	4,909.8	10.3	8.5	179.94	0.0	3.5	325.4	308.4	17.02	19.116		
5,000.0	4,987.3	5,010.6	5,010.0	10.5	8.7	179.80	0.0	10.8	325.8	308.5	17.37	18.754		
5,100.0	5,087.0	5,110.6	5,109.7	10.7	8.9	179.67	0.0	18.1	326.2	308.5	17.72	18.407		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
5,200.0	5,186.7	5,210.6	5,209.4	11.0	9.1	179.54	0.0	25.4	326.6	308.6	18.07	18.074		
5,300.0	5,286.4	5,310.6	5,309.2	11.2	9.3	179.41	-0.1	32.7	327.1	308.6	18.42	17.753		
5,400.0	5,386.2	5,410.6	5,408.9	11.4	9.4	179.27	-0.1	40.0	327.5	308.7	18.77	17.444		
5,500.0	5,485.9	5,510.6	5,508.6	11.6	9.6	179.14	-0.1	47.3	327.9	308.8	19.12	17.146		
5,600.0	5,585.6	5,610.6	5,608.4	11.8	9.8	179.01	-0.1	54.6	328.3	308.8	19.47	16.860		
5,700.0	5,685.3	5,710.6	5,708.1	12.1	10.0	178.88	-0.1	61.9	328.7	308.9	19.82	16.583		
5,800.0	5,785.0	5,810.6	5,807.8	12.3	10.2	178.75	-0.1	69.2	329.1	309.0	20.17	16.316		
5,900.0	5,884.7	5,910.6	5,907.6	12.5	10.4	178.62	-0.1	76.5	329.6	309.0	20.52	16.058		
6,000.0	5,984.4	6,010.6	6,007.3	12.7	10.6	178.49	-0.1	83.8	330.0	309.1	20.87	15.809		
6,100.0	6,084.1	6,110.6	6,107.0	12.9	10.8	178.36	-0.1	91.1	330.4	309.2	21.22	15.568		
6,200.0	6,183.8	6,210.6	6,206.7	13.2	11.0	178.23	-0.1	98.4	330.8	309.2	21.57	15.335		
6,300.0	6,283.5	6,310.6	6,306.5	13.4	11.2	178.10	-0.2	105.7	331.2	309.3	21.92	15.109		
6,400.0	6,383.2	6,410.6	6,406.2	13.6	11.4	177.98	-0.2	113.0	331.7	309.4	22.27	14.891		
6,500.0	6,482.9	6,510.6	6,505.9	13.8	11.6	177.85	-0.2	120.3	332.1	309.5	22.62	14.679		
6,600.0	6,582.6	6,610.5	6,605.7	14.0	11.8	177.72	-0.2	127.6	332.5	309.6	22.97	14.474		
6,700.0	6,682.3	6,710.5	6,705.4	14.3	12.0	177.59	-0.2	135.0	333.0	309.6	23.33	14.275		
6,800.0	6,782.0	6,813.5	6,808.1	14.5	12.2	177.65	0.9	142.5	333.3	309.6	23.68	14.074		
6,900.0	6,881.7	6,920.1	6,912.9	14.7	12.4	-179.67	17.3	150.1	331.8	307.8	24.03	13.807		
6,995.0	6,976.5	7,013.2	7,000.7	14.9	12.6	-174.59	47.4	156.6	330.5	306.1	24.43	13.530		
7,000.0	6,981.4	7,017.8	7,004.9	14.9	12.6	-174.27	49.3	156.9	330.5	306.0	24.45	13.517		
7,100.0	7,080.8	7,105.7	7,081.9	15.1	12.9	-110.43	91.0	162.5	333.3	308.3	25.06	13.302		
7,200.0	7,177.6	7,188.7	7,148.1	15.4	13.2	-90.72	140.9	167.4	340.7	314.9	25.90	13.157		
7,300.0	7,268.8	7,268.1	7,204.0	15.7	13.6	-80.66	197.0	171.5	351.4	324.6	26.85	13.088		
7,400.0	7,351.7	7,344.7	7,250.1	16.1	14.1	-73.61	258.0	174.8	363.9	336.2	27.76	13.112		
7,500.0	7,423.7	7,419.1	7,286.7	16.6	14.6	-68.25	322.6	177.5	376.9	348.4	28.51	13.219		
7,600.0	7,482.7	7,491.8	7,314.1	17.2	15.3	-64.15	389.9	179.5	389.2	360.1	29.10	13.376		
7,700.0	7,526.9	7,563.3	7,332.6	18.0	16.0	-61.10	458.9	180.9	399.9	370.3	29.57	13.524		
7,800.0	7,554.9	7,633.8	7,342.3	18.9	16.8	-58.96	528.7	181.6	408.3	378.2	30.04	13.591		
7,900.0	7,565.8	7,714.9	7,344.0	20.0	17.7	-57.72	609.7	181.7	413.4	382.6	30.75	13.441		
8,000.0	7,566.0	7,814.9	7,344.0	21.1	19.0	-57.69	709.7	181.7	413.5	380.7	32.81	12.603		
8,100.0	7,566.0	7,914.9	7,344.0	22.3	20.3	-57.69	809.7	181.7	413.5	378.4	35.10	11.779		
8,200.0	7,566.0	8,014.9	7,344.0	23.6	21.7	-57.69	909.7	181.7	413.5	376.0	37.49	11.029		
8,300.0	7,566.0	8,114.9	7,344.0	24.9	23.2	-57.69	1,009.7	181.7	413.5	373.5	39.96	10.348		
8,400.0	7,566.0	8,214.9	7,344.0	26.3	24.7	-57.69	1,109.7	181.7	413.5	371.0	42.49	9.731		
8,500.0	7,566.0	8,314.9	7,344.0	27.7	26.2	-57.69	1,209.7	181.7	413.5	368.4	45.08	9.173		
8,600.0	7,566.0	8,414.9	7,344.0	29.2	27.7	-57.69	1,309.7	181.7	413.5	365.8	47.71	8.667		
8,700.0	7,566.0	8,514.9	7,344.0	30.7	29.3	-57.69	1,409.7	181.7	413.5	363.1	50.38	8.207		
8,800.0	7,566.0	8,614.9	7,344.0	32.2	30.9	-57.69	1,509.7	181.7	413.5	360.4	53.08	7.790		
8,900.0	7,566.0	8,714.9	7,344.0	33.8	32.5	-57.69	1,609.7	181.7	413.5	357.7	55.81	7.409		
9,000.0	7,566.0	8,814.9	7,344.0	35.3	34.1	-57.69	1,709.7	181.7	413.5	354.9	58.56	7.061		
9,100.0	7,566.0	8,914.9	7,344.0	36.9	35.7	-57.69	1,809.7	181.7	413.5	352.1	61.33	6.741		
9,200.0	7,566.0	9,014.9	7,344.0	38.5	37.4	-57.69	1,909.7	181.7	413.5	349.3	64.12	6.448		
9,300.0	7,566.0	9,114.9	7,344.0	40.1	39.0	-57.69	2,009.7	181.7	413.5	346.5	66.93	6.178		
9,400.0	7,566.0	9,214.9	7,344.0	41.7	40.7	-57.69	2,109.7	181.7	413.5	343.7	69.75	5.928		
9,500.0	7,566.0	9,314.9	7,344.0	43.4	42.4	-57.69	2,209.7	181.7	413.5	340.9	72.58	5.696		
9,600.0	7,566.0	9,414.9	7,344.0	45.0	44.0	-57.69	2,309.7	181.7	413.5	338.0	75.43	5.482		
9,700.0	7,566.0	9,514.9	7,344.0	46.7	45.7	-57.69	2,409.7	181.7	413.5	335.2	78.28	5.282		
9,800.0	7,566.0	9,614.9	7,344.0	48.3	47.4	-57.69	2,509.7	181.7	413.5	332.3	81.14	5.096		
9,900.0	7,566.0	9,714.9	7,344.0	50.0	49.1	-57.69	2,609.7	181.7	413.5	329.5	84.01	4.922		
10,000.0	7,566.0	9,814.9	7,344.0	51.6	50.8	-57.69	2,709.7	181.7	413.5	326.6	86.89	4.759		
10,100.0	7,566.0	9,914.9	7,344.0	53.3	52.5	-57.69	2,809.7	181.7	413.5	323.7	89.77	4.606		
10,200.0	7,566.0	10,014.9	7,344.0	55.0	54.2	-57.69	2,909.7	181.7	413.5	320.8	92.66	4.462		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,300.0	7,566.0	10,114.9	7,344.0	56.7	55.9	-57.69	3,009.7	181.7	413.5	317.9	95.55	4.327		
10,400.0	7,566.0	10,214.9	7,344.0	58.4	57.6	-57.69	3,109.7	181.7	413.5	315.0	98.45	4.200		
10,500.0	7,566.0	10,314.9	7,344.0	60.1	59.3	-57.69	3,209.7	181.7	413.5	312.1	101.35	4.080		
10,600.0	7,566.0	10,414.9	7,344.0	61.8	61.0	-57.69	3,309.7	181.7	413.5	309.2	104.26	3.966		
10,700.0	7,566.0	10,514.9	7,344.0	63.5	62.8	-57.69	3,409.7	181.7	413.5	306.3	107.17	3.858		
10,800.0	7,566.0	10,614.9	7,344.0	65.2	64.5	-57.69	3,509.7	181.7	413.5	303.4	110.08	3.756		
10,900.0	7,566.0	10,714.9	7,344.0	66.9	66.2	-57.69	3,609.7	181.7	413.5	300.5	113.00	3.659		
11,000.0	7,566.0	10,814.9	7,344.0	68.6	67.9	-57.69	3,709.7	181.7	413.5	297.6	115.91	3.567		
11,100.0	7,566.0	10,914.9	7,344.0	70.3	69.6	-57.69	3,809.7	181.7	413.5	294.6	118.84	3.479		
11,200.0	7,566.0	11,014.9	7,344.0	72.0	71.4	-57.69	3,909.7	181.7	413.5	291.7	121.76	3.396		
11,300.0	7,566.0	11,114.9	7,344.0	73.7	73.1	-57.69	4,009.7	181.7	413.5	288.8	124.69	3.316		
11,400.0	7,566.0	11,214.9	7,344.0	75.4	74.8	-57.69	4,109.7	181.7	413.5	285.9	127.62	3.240		
11,500.0	7,566.0	11,314.9	7,344.0	77.1	76.6	-57.69	4,209.7	181.7	413.5	282.9	130.55	3.167		
11,600.0	7,566.0	11,414.9	7,344.0	78.8	78.3	-57.69	4,309.7	181.7	413.5	280.0	133.48	3.098		
11,700.0	7,566.0	11,514.9	7,344.0	80.6	80.0	-57.69	4,409.7	181.7	413.5	277.1	136.41	3.031		
11,800.0	7,566.0	11,614.9	7,344.0	82.3	81.7	-57.69	4,509.7	181.7	413.5	274.1	139.35	2.967		
11,900.0	7,566.0	11,714.9	7,344.0	84.0	83.5	-57.69	4,609.7	181.7	413.5	271.2	142.29	2.906		
12,000.0	7,566.0	11,814.9	7,344.0	85.7	85.2	-57.69	4,709.7	181.7	413.5	268.2	145.22	2.847		
12,100.0	7,566.0	11,914.9	7,344.0	87.5	86.9	-57.69	4,809.7	181.7	413.5	265.3	148.16	2.791		
12,200.0	7,566.0	12,014.9	7,344.0	89.2	88.7	-57.69	4,909.7	181.7	413.5	262.4	151.10	2.736		
12,300.0	7,566.0	12,114.9	7,344.0	90.9	90.4	-57.69	5,009.7	181.7	413.5	259.4	154.05	2.684		
12,400.0	7,566.0	12,214.9	7,344.0	92.6	92.2	-57.69	5,109.7	181.7	413.5	256.5	156.99	2.634		
12,500.0	7,566.0	12,314.9	7,344.0	94.4	93.9	-57.69	5,209.7	181.7	413.5	253.5	159.94	2.585		
12,600.0	7,566.0	12,414.9	7,344.0	96.1	95.6	-57.69	5,309.7	181.7	413.5	250.6	162.88	2.538		
12,700.0	7,566.0	12,514.9	7,344.0	97.8	97.4	-57.69	5,409.7	181.7	413.5	247.6	165.83	2.493		
12,800.0	7,566.0	12,614.9	7,344.0	99.6	99.1	-57.69	5,509.7	181.7	413.5	244.7	168.78	2.450		
12,900.0	7,566.0	12,714.9	7,344.0	101.3	100.9	-57.69	5,609.7	181.7	413.5	241.7	171.72	2.408		
13,000.0	7,566.0	12,814.9	7,344.0	103.0	102.6	-57.69	5,709.7	181.7	413.5	238.8	174.67	2.367		
13,100.0	7,566.0	12,914.9	7,344.0	104.8	104.3	-57.69	5,809.7	181.7	413.5	235.8	177.62	2.328		
13,200.0	7,566.0	13,014.9	7,344.0	106.5	106.1	-57.69	5,909.7	181.7	413.5	232.9	180.57	2.290		
13,300.0	7,566.0	13,114.9	7,344.0	108.2	107.8	-57.69	6,009.7	181.7	413.5	229.9	183.52	2.253		
13,400.0	7,566.0	13,214.9	7,344.0	110.0	109.6	-57.69	6,109.7	181.7	413.5	227.0	186.48	2.217		
13,500.0	7,566.0	13,314.9	7,344.0	111.7	111.3	-57.69	6,209.7	181.7	413.5	224.0	189.43	2.183		
13,600.0	7,566.0	13,414.9	7,344.0	113.4	113.0	-57.69	6,309.7	181.7	413.5	221.1	192.38	2.149		
13,700.0	7,566.0	13,514.9	7,344.0	115.2	114.8	-57.69	6,409.7	181.7	413.5	218.1	195.34	2.117		
13,800.0	7,566.0	13,614.9	7,344.0	116.9	116.5	-57.69	6,509.7	181.7	413.5	215.2	198.29	2.085		
13,900.0	7,566.0	13,714.9	7,344.0	118.7	118.3	-57.69	6,609.7	181.7	413.5	212.2	201.25	2.055		
14,000.0	7,566.0	13,814.9	7,344.0	120.4	120.0	-57.69	6,709.7	181.7	413.5	209.3	204.20	2.025		
14,100.0	7,566.0	13,914.9	7,344.0	122.1	121.8	-57.69	6,809.7	181.7	413.5	206.3	207.16	1.996		
14,200.0	7,566.0	14,014.9	7,344.0	123.9	123.5	-57.69	6,909.7	181.7	413.5	203.4	210.11	1.968		
14,300.0	7,566.0	14,114.9	7,344.0	125.6	125.2	-57.69	7,009.7	181.7	413.5	200.4	213.07	1.941		
14,400.0	7,566.0	14,214.9	7,344.0	127.4	127.0	-57.69	7,109.7	181.7	413.5	197.4	216.03	1.914		
14,500.0	7,566.0	14,314.9	7,344.0	129.1	128.7	-57.69	7,209.7	181.7	413.5	194.5	218.98	1.888		
14,600.0	7,566.0	14,414.9	7,344.0	130.8	130.5	-57.69	7,309.7	181.7	413.5	191.5	221.94	1.863		
14,700.0	7,566.0	14,514.9	7,344.0	132.6	132.2	-57.69	7,409.7	181.7	413.5	188.6	224.90	1.838		
14,800.0	7,566.0	14,614.9	7,344.0	134.3	134.0	-57.69	7,509.7	181.7	413.5	185.6	227.86	1.815		
14,900.0	7,566.0	14,714.9	7,344.0	136.1	135.7	-57.69	7,609.7	181.7	413.5	182.7	230.82	1.791		
15,000.0	7,566.0	14,814.9	7,344.0	137.8	137.5	-57.69	7,709.7	181.7	413.5	179.7	233.78	1.769		
15,100.0	7,566.0	14,914.9	7,344.0	139.6	139.2	-57.69	7,809.7	181.7	413.5	176.7	236.74	1.747		
15,200.0	7,566.0	15,014.9	7,344.0	141.3	141.0	-57.69	7,909.7	181.7	413.5	173.8	239.70	1.725		
15,300.0	7,566.0	15,114.9	7,344.0	143.0	142.7	-57.69	8,009.7	181.7	413.5	170.8	242.66	1.704		
15,400.0	7,566.0	15,214.9	7,344.0	144.8	144.5	-57.69	8,109.7	181.7	413.5	167.9	245.62	1.683		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4E-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
15,500.0	7,566.0	15,314.9	7,344.0	146.5	146.2	-57.69	8,209.7	181.7	413.5	164.9	248.58	1.663		
15,600.0	7,566.0	15,414.9	7,344.0	148.3	148.0	-57.69	8,309.7	181.7	413.5	161.9	251.54	1.644		
15,700.0	7,566.0	15,514.9	7,344.0	150.0	149.7	-57.69	8,409.7	181.7	413.5	159.0	254.50	1.625		
15,800.0	7,566.0	15,614.9	7,344.0	151.8	151.4	-57.69	8,509.7	181.7	413.5	156.0	257.46	1.606		
15,900.0	7,566.0	15,714.9	7,344.0	153.5	153.2	-57.69	8,609.7	181.7	413.5	153.0	260.43	1.588		
16,000.0	7,566.0	15,814.9	7,344.0	155.2	154.9	-57.69	8,709.7	181.7	413.5	150.1	263.39	1.570		
16,100.0	7,566.0	15,914.9	7,344.0	157.0	156.7	-57.69	8,809.7	181.7	413.5	147.1	266.35	1.552		
16,200.0	7,566.0	16,014.9	7,344.0	158.7	158.4	-57.69	8,909.7	181.7	413.5	144.2	269.31	1.535		
16,300.0	7,566.0	16,114.9	7,344.0	160.5	160.2	-57.69	9,009.7	181.7	413.5	141.2	272.28	1.519		
16,400.0	7,566.0	16,214.9	7,344.0	162.2	161.9	-57.69	9,109.7	181.7	413.5	138.2	275.24	1.502		
16,500.0	7,566.0	16,314.9	7,344.0	164.0	163.7	-57.69	9,209.7	181.7	413.5	135.3	278.20	1.486	Level 3	
16,600.0	7,566.0	16,414.9	7,344.0	165.7	165.4	-57.69	9,309.7	181.7	413.5	132.3	281.16	1.471	Level 3	
16,700.0	7,566.0	16,514.9	7,344.0	167.5	167.2	-57.69	9,409.7	181.7	413.5	129.3	284.13	1.455	Level 3	
16,800.0	7,566.0	16,614.9	7,344.0	169.2	168.9	-57.69	9,509.7	181.7	413.5	126.4	287.09	1.440	Level 3	
16,900.0	7,566.0	16,714.9	7,344.0	171.0	170.7	-57.69	9,609.7	181.7	413.5	123.4	290.06	1.425	Level 3	
17,000.0	7,566.0	16,814.9	7,344.0	172.7	172.4	-57.69	9,709.7	181.7	413.5	120.4	293.02	1.411	Level 3	
17,100.0	7,566.0	16,914.9	7,344.0	174.5	174.2	-57.69	9,809.7	181.7	413.5	117.5	295.98	1.397	Level 3	
17,200.0	7,566.0	17,014.9	7,344.0	176.2	175.9	-57.69	9,909.7	181.7	413.5	114.5	298.95	1.383	Level 3	
17,206.0	7,566.0	17,020.9	7,344.0	176.3	176.0	-57.69	9,915.7	181.7	413.5	114.3	299.13	1.382	Level 3	
17,213.3	7,566.0	17,020.9	7,344.0	176.4	176.0	-57.69	9,915.8	181.7	413.5	114.3	299.23	1.382	Level 3, SF	

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4G-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.04	0.0	11.2	11.2					
100.0	100.0	100.0	100.0	0.1	0.1	90.04	0.0	11.2	11.2	10.9	0.26	42.731		
200.0	200.0	200.0	200.0	0.3	0.3	90.04	0.0	11.2	11.2	10.6	0.61	18.313		
300.0	300.0	300.0	300.0	0.5	0.5	90.04	0.0	11.2	11.2	10.2	0.96	11.654	CC, ES	
400.0	400.0	399.8	399.8	0.7	0.7	90.04	0.0	12.1	12.1	10.7	1.31	9.209		
500.0	500.0	499.6	499.5	0.8	0.8	6.27	0.0	14.7	13.8	12.1	1.66	8.329		
600.0	600.0	599.3	599.1	1.0	1.0	7.21	0.0	19.0	15.6	13.5	2.01	7.756		
700.0	699.9	699.0	698.7	1.2	1.2	8.55	0.0	25.1	17.3	15.0	2.35	7.360		
800.0	799.7	798.6	798.0	1.4	1.4	10.17	0.0	32.9	19.1	16.4	2.70	7.073		
900.0	899.4	898.3	897.2	1.6	1.7	11.82	0.0	42.4	21.3	18.2	3.05	6.960		
1,000.0	999.1	997.8	996.1	1.8	1.9	12.73	0.0	53.6	25.0	21.6	3.41	7.338		
1,100.0	1,098.8	1,097.5	1,094.9	2.0	2.2	13.04	0.0	66.3	30.2	26.4	3.76	8.034		
1,200.0	1,198.5	1,197.3	1,193.9	2.2	2.4	13.22	0.0	79.2	35.6	31.5	4.11	8.651		
1,300.0	1,298.2	1,297.2	1,293.0	2.4	2.7	13.36	0.0	92.1	41.0	36.5	4.47	9.170		
1,400.0	1,397.9	1,397.0	1,392.0	2.6	3.0	13.46	0.0	105.0	46.3	41.5	4.82	9.613		
1,500.0	1,497.6	1,496.9	1,491.0	2.9	3.2	13.54	0.0	117.9	51.7	46.5	5.18	9.994		
1,600.0	1,597.3	1,596.7	1,590.0	3.1	3.5	13.61	0.0	130.8	57.1	51.6	5.53	10.327		
1,700.0	1,697.0	1,696.6	1,689.0	3.3	3.8	13.66	0.0	143.7	62.5	56.6	5.88	10.619		
1,800.0	1,796.7	1,796.5	1,788.1	3.5	4.1	13.71	-0.1	156.7	67.9	61.6	6.24	10.878		
1,900.0	1,896.4	1,896.3	1,887.1	3.7	4.4	13.75	-0.1	169.6	73.2	66.6	6.59	11.109		
2,000.0	1,996.2	1,996.2	1,986.1	3.9	4.6	13.78	-0.1	182.5	78.6	71.7	6.95	11.316		
2,100.0	2,095.9	2,096.0	2,085.1	4.2	4.9	13.81	-0.1	195.4	84.0	76.7	7.30	11.503		
2,200.0	2,195.6	2,195.9	2,184.1	4.4	5.2	13.84	-0.1	208.3	89.4	81.7	7.66	11.672		
2,300.0	2,295.3	2,295.7	2,283.1	4.6	5.5	13.86	-0.1	221.2	94.8	86.8	8.01	11.827		
2,400.0	2,395.0	2,395.6	2,382.2	4.8	5.8	13.88	-0.1	234.1	100.1	91.8	8.37	11.968		
2,500.0	2,494.7	2,495.4	2,481.2	5.0	6.1	13.90	-0.1	247.0	105.5	96.8	8.72	12.098		
2,600.0	2,594.4	2,595.3	2,580.2	5.3	6.3	13.92	-0.1	259.9	110.9	101.8	9.08	12.218		
2,700.0	2,694.1	2,695.2	2,679.2	5.5	6.6	13.93	-0.1	272.8	116.3	106.9	9.43	12.328		
2,800.0	2,793.8	2,795.0	2,778.2	5.7	6.9	13.95	-0.1	285.7	121.7	111.9	9.79	12.431		
2,900.0	2,893.5	2,894.9	2,877.3	5.9	7.2	13.96	-0.1	298.6	127.0	116.9	10.14	12.526		
3,000.0	2,993.2	2,994.7	2,976.3	6.1	7.5	13.97	-0.1	311.5	132.4	121.9	10.50	12.615		
3,100.0	3,092.9	3,094.6	3,075.3	6.3	7.8	13.98	-0.1	324.4	137.8	127.0	10.85	12.698		
3,200.0	3,192.6	3,194.4	3,174.3	6.6	8.0	13.99	-0.1	337.3	143.2	132.0	11.21	12.776		
3,300.0	3,292.3	3,294.3	3,273.3	6.8	8.3	14.00	-0.1	350.2	148.6	137.0	11.56	12.849		
3,400.0	3,392.0	3,394.1	3,372.3	7.0	8.6	14.01	-0.1	363.1	153.9	142.0	11.92	12.917		
3,500.0	3,491.7	3,494.0	3,471.4	7.2	8.9	14.02	-0.1	376.0	159.3	147.1	12.27	12.982		
3,600.0	3,591.4	3,593.8	3,570.4	7.4	9.2	14.03	-0.1	388.9	164.7	152.1	12.63	13.043		
3,700.0	3,691.2	3,693.7	3,669.4	7.7	9.5	14.03	-0.1	401.8	170.1	157.1	12.98	13.100		
3,800.0	3,790.9	3,793.6	3,768.4	7.9	9.8	14.04	-0.1	414.7	175.5	162.1	13.34	13.155		
3,900.0	3,890.6	3,893.4	3,867.4	8.1	10.0	14.05	-0.1	427.6	180.9	167.2	13.69	13.207		
4,000.0	3,990.3	3,993.3	3,966.5	8.3	10.3	14.05	-0.1	440.5	186.2	172.2	14.05	13.256		
4,100.0	4,090.0	4,093.1	4,065.5	8.5	10.6	14.06	-0.1	453.4	191.6	177.2	14.40	13.302		
4,200.0	4,189.7	4,193.0	4,164.5	8.8	10.9	14.06	-0.2	466.3	197.0	182.2	14.76	13.347		
4,300.0	4,289.4	4,292.8	4,263.5	9.0	11.2	14.07	-0.2	479.2	202.4	187.3	15.11	13.389		
4,400.0	4,389.1	4,392.7	4,362.5	9.2	11.5	14.07	-0.2	492.1	207.8	192.3	15.47	13.430		
4,500.0	4,488.8	4,492.5	4,461.5	9.4	11.8	14.08	-0.2	505.0	213.1	197.3	15.83	13.468		
4,600.0	4,588.5	4,592.4	4,560.6	9.6	12.0	14.08	-0.2	517.9	218.5	202.3	16.18	13.505		
4,700.0	4,688.2	4,692.3	4,659.6	9.9	12.3	14.09	-0.2	530.8	223.9	207.4	16.54	13.540		
4,800.0	4,787.9	4,792.1	4,758.6	10.1	12.6	14.09	-0.2	543.7	229.3	212.4	16.89	13.574		
4,900.0	4,887.6	4,892.0	4,857.6	10.3	12.9	14.09	-0.2	556.6	234.7	217.4	17.25	13.606		
5,000.0	4,987.3	4,991.8	4,956.6	10.5	13.2	14.10	-0.2	569.5	240.0	222.4	17.60	13.638		
5,100.0	5,087.0	5,091.7	5,055.7	10.7	13.5	14.10	-0.2	582.4	245.4	227.5	17.96	13.667		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4G-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance			Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)				Between Ellipses (ft)	
5,200.0	5,186.7	5,191.5	5,154.7	11.0	13.8	14.10	-0.2	595.3	250.8	232.5	18.31	13.696		
5,300.0	5,286.4	5,291.4	5,253.7	11.2	14.0	14.11	-0.2	608.2	256.2	237.5	18.67	13.724		
5,400.0	5,386.2	5,391.2	5,352.7	11.4	14.3	14.11	-0.2	621.1	261.6	242.5	19.02	13.750		
5,500.0	5,485.9	5,491.1	5,451.7	11.6	14.6	14.11	-0.2	634.0	266.9	247.6	19.38	13.776		
5,600.0	5,585.6	5,590.9	5,550.7	11.8	14.9	14.11	-0.2	646.9	272.3	252.6	19.73	13.800		
5,700.0	5,685.3	5,690.8	5,649.8	12.1	15.2	14.12	-0.2	659.8	277.7	257.6	20.09	13.824		
5,800.0	5,785.0	5,790.7	5,748.8	12.3	15.5	14.12	-0.2	672.8	283.1	262.6	20.44	13.847		
5,900.0	5,884.7	5,890.5	5,847.8	12.5	15.8	14.12	-0.2	685.7	288.5	267.7	20.80	13.869		
6,000.0	5,984.4	5,990.4	5,946.8	12.7	16.0	14.12	-0.2	698.6	293.8	272.7	21.15	13.891		
6,100.0	6,084.1	6,090.2	6,045.8	12.9	16.3	14.13	-0.2	711.5	299.2	277.7	21.51	13.912		
6,200.0	6,183.8	6,190.1	6,144.9	13.2	16.6	14.13	-0.2	724.4	304.6	282.7	21.86	13.932		
6,300.0	6,283.5	6,289.9	6,243.9	13.4	16.9	14.13	-0.2	737.3	310.0	287.8	22.22	13.951		
6,400.0	6,383.2	6,389.8	6,342.9	13.6	17.2	14.13	-0.2	750.2	315.4	292.8	22.57	13.970		
6,500.0	6,482.9	6,489.6	6,441.9	13.8	17.5	14.13	-0.2	763.1	320.7	297.8	22.93	13.988		
6,600.0	6,582.6	6,589.5	6,540.9	14.0	17.8	14.14	-0.2	776.0	326.1	302.8	23.29	14.006		
6,700.0	6,682.3	6,689.4	6,639.9	14.3	18.0	14.14	-0.3	788.9	331.5	307.9	23.64	14.023		
6,800.0	6,782.0	6,789.2	6,739.0	14.5	18.3	14.14	-0.3	801.8	336.9	312.9	24.00	14.039		
6,900.0	6,881.7	6,894.7	6,843.4	14.7	18.6	13.47	3.8	815.4	341.8	317.4	24.34	14.043		
7,000.0	6,981.4	6,999.1	6,944.5	14.9	18.9	9.89	25.6	828.6	345.0	320.4	24.56	14.045		
7,100.0	7,080.8	7,095.6	7,033.1	15.1	19.2	61.73	61.8	840.1	349.4	324.6	24.78	14.101		
7,200.0	7,177.6	7,187.3	7,110.5	15.4	19.5	69.97	109.7	850.2	356.3	331.3	25.07	14.212		
7,300.0	7,268.8	7,275.1	7,176.7	15.7	19.9	69.54	166.6	858.8	365.2	339.9	25.37	14.399		
7,400.0	7,351.7	7,359.8	7,231.6	16.1	20.3	67.34	230.6	866.0	375.2	349.6	25.62	14.645		
7,500.0	7,423.7	7,441.9	7,275.4	16.6	20.8	64.79	299.8	871.7	385.4	359.5	25.92	14.870		
7,600.0	7,482.7	7,522.1	7,308.3	17.2	21.3	62.40	372.7	876.0	395.0	368.5	26.44	14.940		
7,700.0	7,526.9	7,600.0	7,330.2	18.0	21.9	60.36	447.3	878.8	403.3	375.9	27.41	14.717		
7,800.0	7,554.9	7,678.1	7,342.0	18.9	22.5	58.72	524.5	880.4	409.9	380.9	29.04	14.117		
7,900.0	7,565.8	7,763.5	7,344.0	20.0	23.2	57.60	609.7	880.6	413.9	382.5	31.48	13.149		
8,000.0	7,566.0	7,863.5	7,344.0	21.1	24.2	57.57	709.7	880.6	414.0	380.3	33.74	12.270		
8,100.0	7,566.0	7,963.5	7,344.0	22.3	25.3	57.57	809.7	880.6	414.0	378.0	35.98	11.508		
8,200.0	7,566.0	8,063.5	7,344.0	23.6	26.4	57.57	909.7	880.6	414.0	375.7	38.31	10.807		
8,300.0	7,566.0	8,163.5	7,344.0	24.9	27.6	57.57	1,009.7	880.6	414.0	373.3	40.73	10.165		
8,400.0	7,566.0	8,263.5	7,344.0	26.3	28.9	57.57	1,109.7	880.6	414.0	370.8	43.21	9.581		
8,500.0	7,566.0	8,363.5	7,344.0	27.7	30.2	57.57	1,209.7	880.6	414.0	368.3	45.76	9.048		
8,600.0	7,566.0	8,463.5	7,344.0	29.2	31.5	57.57	1,309.7	880.6	414.0	365.7	48.35	8.563		
8,700.0	7,566.0	8,563.5	7,344.0	30.7	32.9	57.57	1,409.7	880.6	414.0	363.0	50.98	8.121		
8,800.0	7,566.0	8,663.5	7,344.0	32.2	34.3	57.57	1,509.7	880.6	414.0	360.4	53.65	7.717		
8,900.0	7,566.0	8,763.5	7,344.0	33.8	35.8	57.57	1,609.7	880.6	414.0	357.7	56.35	7.347		
9,000.0	7,566.0	8,863.5	7,344.0	35.3	37.3	57.57	1,709.7	880.6	414.0	354.9	59.07	7.009		
9,100.0	7,566.0	8,963.5	7,344.0	36.9	38.8	57.57	1,809.7	880.6	414.0	352.2	61.82	6.697		
9,200.0	7,566.0	9,063.5	7,344.0	38.5	40.3	57.57	1,909.7	880.6	414.0	349.4	64.58	6.410		
9,300.0	7,566.0	9,163.5	7,344.0	40.1	41.8	57.57	2,009.7	880.6	414.0	346.6	67.37	6.145		
9,400.0	7,566.0	9,263.5	7,344.0	41.7	43.4	57.57	2,109.7	880.6	414.0	343.8	70.17	5.900		
9,500.0	7,566.0	9,363.5	7,344.0	43.4	44.9	57.57	2,209.7	880.6	414.0	341.0	72.98	5.673		
9,600.0	7,566.0	9,463.5	7,344.0	45.0	46.5	57.57	2,309.7	880.6	414.0	338.2	75.80	5.462		
9,700.0	7,566.0	9,563.5	7,344.0	46.7	48.1	57.57	2,409.7	880.6	414.0	335.4	78.64	5.265		
9,800.0	7,566.0	9,663.5	7,344.0	48.3	49.7	57.57	2,509.7	880.6	414.0	332.5	81.48	5.081		
9,900.0	7,566.0	9,763.5	7,344.0	50.0	51.3	57.57	2,609.7	880.6	414.0	329.7	84.33	4.909		
10,000.0	7,566.0	9,863.5	7,344.0	51.6	53.0	57.57	2,709.7	880.6	414.0	326.8	87.19	4.748		
10,100.0	7,566.0	9,963.5	7,344.0	53.3	54.6	57.57	2,809.7	880.6	414.0	323.9	90.06	4.597		
10,200.0	7,566.0	10,063.5	7,344.0	55.0	56.2	57.57	2,909.7	880.6	414.0	321.1	92.94	4.455		
10,300.0	7,566.0	10,163.5	7,344.0	56.7	57.9	57.57	3,009.7	880.6	414.0	318.2	95.82	4.321		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4G-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
10,400.0	7,566.0	10,263.5	7,344.0	58.4	59.5	57.57	3,109.7	880.6	414.0	315.3	98.70	4.195		
10,500.0	7,566.0	10,363.5	7,344.0	60.1	61.2	57.57	3,209.7	880.6	414.0	312.4	101.59	4.075		
10,600.0	7,566.0	10,463.5	7,344.0	61.8	62.9	57.57	3,309.7	880.6	414.0	309.5	104.48	3.962		
10,700.0	7,566.0	10,563.5	7,344.0	63.5	64.5	57.57	3,409.7	880.6	414.0	306.6	107.38	3.855		
10,800.0	7,566.0	10,663.5	7,344.0	65.2	66.2	57.57	3,509.7	880.6	414.0	303.7	110.28	3.754		
10,900.0	7,566.0	10,763.5	7,344.0	66.9	67.9	57.57	3,609.7	880.6	414.0	300.8	113.19	3.658		
11,000.0	7,566.0	10,863.5	7,344.0	68.6	69.6	57.57	3,709.7	880.6	414.0	297.9	116.10	3.566		
11,100.0	7,566.0	10,963.5	7,344.0	70.3	71.2	57.57	3,809.7	880.6	414.0	295.0	119.01	3.479		
11,200.0	7,566.0	11,063.5	7,344.0	72.0	72.9	57.57	3,909.7	880.6	414.0	292.1	121.92	3.396		
11,300.0	7,566.0	11,163.5	7,344.0	73.7	74.6	57.57	4,009.7	880.6	414.0	289.2	124.84	3.316		
11,400.0	7,566.0	11,263.5	7,344.0	75.4	76.3	57.57	4,109.7	880.6	414.0	286.2	127.76	3.240		
11,500.0	7,566.0	11,363.5	7,344.0	77.1	78.0	57.57	4,209.7	880.6	414.0	283.3	130.68	3.168		
11,600.0	7,566.0	11,463.5	7,344.0	78.8	79.7	57.57	4,309.7	880.6	414.0	280.4	133.60	3.099		
11,700.0	7,566.0	11,563.5	7,344.0	80.6	81.4	57.57	4,409.7	880.6	414.0	277.5	136.53	3.032		
11,800.0	7,566.0	11,663.5	7,344.0	82.3	83.1	57.57	4,509.7	880.6	414.0	274.5	139.46	2.969		
11,900.0	7,566.0	11,763.5	7,344.0	84.0	84.8	57.57	4,609.7	880.6	414.0	271.6	142.39	2.908		
12,000.0	7,566.0	11,863.5	7,344.0	85.7	86.5	57.57	4,709.7	880.6	414.0	268.7	145.32	2.849		
12,100.0	7,566.0	11,963.5	7,344.0	87.5	88.2	57.57	4,809.7	880.6	414.0	265.8	148.25	2.793		
12,200.0	7,566.0	12,063.5	7,344.0	89.2	89.9	57.57	4,909.7	880.6	414.0	262.8	151.18	2.738		
12,300.0	7,566.0	12,163.5	7,344.0	90.9	91.7	57.57	5,009.7	880.6	414.0	259.9	154.12	2.686		
12,400.0	7,566.0	12,263.5	7,344.0	92.6	93.4	57.57	5,109.7	880.6	414.0	257.0	157.05	2.636		
12,500.0	7,566.0	12,363.5	7,344.0	94.4	95.1	57.57	5,209.7	880.6	414.0	254.0	159.99	2.588		
12,600.0	7,566.0	12,463.5	7,344.0	96.1	96.8	57.57	5,309.7	880.6	414.0	251.1	162.93	2.541		
12,700.0	7,566.0	12,563.5	7,344.0	97.8	98.5	57.57	5,409.7	880.6	414.0	248.1	165.87	2.496		
12,800.0	7,566.0	12,663.5	7,344.0	99.6	100.2	57.57	5,509.7	880.6	414.0	245.2	168.81	2.453		
12,900.0	7,566.0	12,763.5	7,344.0	101.3	102.0	57.57	5,609.7	880.6	414.0	242.3	171.75	2.410		
13,000.0	7,566.0	12,863.5	7,344.0	103.0	103.7	57.57	5,709.7	880.6	414.0	239.3	174.69	2.370		
13,100.0	7,566.0	12,963.5	7,344.0	104.8	105.4	57.57	5,809.7	880.6	414.0	236.4	177.64	2.331		
13,200.0	7,566.0	13,063.5	7,344.0	106.5	107.1	57.57	5,909.7	880.6	414.0	233.4	180.58	2.293		
13,300.0	7,566.0	13,163.5	7,344.0	108.2	108.9	57.57	6,009.7	880.6	414.0	230.5	183.53	2.256		
13,400.0	7,566.0	13,263.5	7,344.0	110.0	110.6	57.57	6,109.7	880.6	414.0	227.5	186.47	2.220		
13,500.0	7,566.0	13,363.5	7,344.0	111.7	112.3	57.57	6,209.7	880.6	414.0	224.6	189.42	2.186		
13,600.0	7,566.0	13,463.5	7,344.0	113.4	114.0	57.57	6,309.7	880.6	414.0	221.6	192.36	2.152		
13,700.0	7,566.0	13,563.5	7,344.0	115.2	115.8	57.57	6,409.7	880.6	414.0	218.7	195.31	2.120		
13,800.0	7,566.0	13,663.5	7,344.0	116.9	117.5	57.57	6,509.7	880.6	414.0	215.7	198.26	2.088		
13,900.0	7,566.0	13,763.5	7,344.0	118.7	119.2	57.57	6,609.7	880.6	414.0	212.8	201.21	2.058		
14,000.0	7,566.0	13,863.5	7,344.0	120.4	121.0	57.57	6,709.7	880.6	414.0	209.8	204.16	2.028		
14,100.0	7,566.0	13,963.5	7,344.0	122.1	122.7	57.57	6,809.7	880.6	414.0	206.9	207.11	1.999		
14,200.0	7,566.0	14,063.5	7,344.0	123.9	124.4	57.57	6,909.7	880.6	414.0	203.9	210.06	1.971		
14,300.0	7,566.0	14,163.5	7,344.0	125.6	126.1	57.57	7,009.7	880.6	414.0	201.0	213.01	1.944		
14,400.0	7,566.0	14,263.5	7,344.0	127.4	127.9	57.57	7,109.7	880.6	414.0	198.0	215.96	1.917		
14,500.0	7,566.0	14,363.5	7,344.0	129.1	129.6	57.57	7,209.7	880.6	414.0	195.1	218.91	1.891		
14,600.0	7,566.0	14,463.5	7,344.0	130.8	131.3	57.57	7,309.7	880.6	414.0	192.1	221.87	1.866		
14,700.0	7,566.0	14,563.5	7,344.0	132.6	133.1	57.57	7,409.7	880.6	414.0	189.2	224.82	1.842		
14,800.0	7,566.0	14,663.5	7,344.0	134.3	134.8	57.57	7,509.7	880.6	414.0	186.2	227.77	1.818		
14,900.0	7,566.0	14,763.5	7,344.0	136.1	136.6	57.57	7,609.7	880.6	414.0	183.3	230.72	1.794		
15,000.0	7,566.0	14,863.5	7,344.0	137.8	138.3	57.57	7,709.7	880.6	414.0	180.3	233.68	1.772		
15,100.0	7,566.0	14,963.5	7,344.0	139.6	140.0	57.57	7,809.7	880.6	414.0	177.4	236.63	1.750		
15,200.0	7,566.0	15,063.5	7,344.0	141.3	141.8	57.57	7,909.7	880.6	414.0	174.4	239.59	1.728		
15,300.0	7,566.0	15,163.5	7,344.0	143.0	143.5	57.57	8,009.7	880.6	414.0	171.5	242.54	1.707		
15,400.0	7,566.0	15,263.5	7,344.0	144.8	145.2	57.57	8,109.7	880.6	414.0	168.5	245.50	1.686		
15,500.0	7,566.0	15,363.5	7,344.0	146.5	147.0	57.57	8,209.7	880.6	414.0	165.5	248.45	1.666		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4G-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Separation Factor		
15,600.0	7,566.0	15,463.5	7,344.0	148.3	148.7	57.57	8,309.7	880.6	414.0	162.6	251.41	1.647		
15,700.0	7,566.0	15,563.5	7,344.0	150.0	150.5	57.57	8,409.7	880.6	414.0	159.6	254.37	1.628		
15,800.0	7,566.0	15,663.5	7,344.0	151.8	152.2	57.57	8,509.7	880.6	414.0	156.7	257.32	1.609		
15,900.0	7,566.0	15,763.5	7,344.0	153.5	153.9	57.57	8,609.7	880.6	414.0	153.7	260.28	1.591		
16,000.0	7,566.0	15,863.5	7,344.0	155.2	155.7	57.57	8,709.7	880.6	414.0	150.8	263.24	1.573		
16,100.0	7,566.0	15,963.5	7,344.0	157.0	157.4	57.57	8,809.7	880.6	414.0	147.8	266.19	1.555		
16,200.0	7,566.0	16,063.5	7,344.0	158.7	159.2	57.57	8,909.7	880.6	414.0	144.9	269.15	1.538		
16,300.0	7,566.0	16,163.5	7,344.0	160.5	160.9	57.57	9,009.7	880.6	414.0	141.9	272.11	1.521		
16,400.0	7,566.0	16,263.5	7,344.0	162.2	162.6	57.57	9,109.7	880.6	414.0	138.9	275.07	1.505		
16,500.0	7,566.0	16,363.5	7,344.0	164.0	164.4	57.57	9,209.7	880.6	414.0	136.0	278.03	1.489 Level 3		
16,600.0	7,566.0	16,463.5	7,344.0	165.7	166.1	57.57	9,309.7	880.6	414.0	133.0	280.98	1.473 Level 3		
16,700.0	7,566.0	16,563.5	7,344.0	167.5	167.9	57.57	9,409.7	880.6	414.0	130.1	283.94	1.458 Level 3		
16,800.0	7,566.0	16,663.5	7,344.0	169.2	169.6	57.57	9,509.7	880.6	414.0	127.1	286.90	1.443 Level 3		
16,900.0	7,566.0	16,763.5	7,344.0	171.0	171.3	57.57	9,609.7	880.6	414.0	124.1	289.86	1.428 Level 3		
17,000.0	7,566.0	16,863.5	7,344.0	172.7	173.1	57.57	9,709.7	880.6	414.0	121.2	292.82	1.414 Level 3		
17,100.0	7,566.0	16,963.5	7,344.0	174.5	174.8	57.57	9,809.7	880.6	414.0	118.2	295.78	1.400 Level 3		
17,200.0	7,566.0	17,063.5	7,344.0	176.2	176.6	57.57	9,909.7	880.6	414.0	115.3	298.74	1.386 Level 3		
17,213.3	7,566.0	17,076.8	7,344.0	176.4	176.8	57.57	9,923.0	880.6	414.0	114.9	299.13	1.384 Level 3, SF		



# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-Geolink MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.05	0.0	19.6	19.6					
100.0	100.0	100.0	100.0	0.1	0.1	90.05	0.0	19.6	19.6	19.3	0.26	74.778		
200.0	200.0	200.0	200.0	0.3	0.3	90.05	0.0	19.6	19.6	19.0	0.61	32.048 CC, ES		
300.0	300.0	299.6	299.6	0.5	0.5	90.05	0.0	20.4	20.4	19.5	0.96	21.293		
400.0	400.0	399.2	399.2	0.7	0.7	90.05	0.0	23.0	23.1	21.7	1.31	17.547		
500.0	500.0	498.7	498.6	0.8	0.8	6.10	0.0	27.4	26.5	24.9	1.66	16.023		
600.0	600.0	598.2	597.9	1.0	1.0	6.58	0.0	33.4	30.0	28.0	2.00	14.977		
700.0	699.9	697.6	697.0	1.2	1.3	7.27	0.0	41.2	33.5	31.1	2.35	14.243		
800.0	799.7	796.9	795.8	1.4	1.5	8.10	0.0	50.6	37.0	34.3	2.70	13.702		
900.0	899.4	896.2	894.5	1.6	1.7	8.97	0.0	61.8	40.8	37.8	3.05	13.385 SF		
1,000.0	999.1	995.3	992.7	1.8	2.0	9.58	0.0	74.7	46.2	42.8	3.40	13.601		
1,100.0	1,098.8	1,094.2	1,090.5	2.0	2.3	9.92	-0.1	89.2	53.4	49.6	3.75	14.236		
1,200.0	1,198.5	1,192.8	1,187.8	2.2	2.6	10.07	-0.1	105.4	62.2	58.1	4.10	15.181		
1,300.0	1,298.2	1,292.2	1,285.7	2.4	3.0	10.12	-0.1	122.6	72.1	67.6	4.45	16.193		
1,400.0	1,397.9	1,391.7	1,383.7	2.6	3.3	10.16	-0.1	139.9	81.9	77.1	4.80	17.056		
1,500.0	1,497.6	1,491.2	1,481.7	2.9	3.6	10.19	-0.1	157.2	91.7	86.6	5.15	17.802		
1,600.0	1,597.3	1,590.8	1,579.7	3.1	4.0	10.22	-0.1	174.5	101.6	96.1	5.50	18.452		
1,700.0	1,697.0	1,690.3	1,677.7	3.3	4.3	10.24	-0.1	191.8	111.4	105.6	5.86	19.025		
1,800.0	1,796.7	1,789.8	1,775.8	3.5	4.7	10.25	-0.1	209.0	121.2	115.0	6.21	19.532		
1,900.0	1,896.4	1,889.3	1,873.8	3.7	5.0	10.27	-0.1	226.3	131.1	124.5	6.56	19.985		
2,000.0	1,996.2	1,988.8	1,971.8	3.9	5.4	10.28	-0.1	243.6	140.9	134.0	6.91	20.391		
2,100.0	2,095.9	2,088.3	2,069.8	4.2	5.7	10.29	-0.1	260.9	150.8	143.5	7.26	20.759		
2,200.0	2,195.6	2,187.8	2,167.8	4.4	6.0	10.30	-0.2	278.2	160.6	153.0	7.61	21.092		
2,300.0	2,295.3	2,287.4	2,265.8	4.6	6.4	10.31	-0.2	295.4	170.4	162.5	7.97	21.396		
2,400.0	2,395.0	2,386.9	2,363.8	4.8	6.7	10.32	-0.2	312.7	180.3	172.0	8.32	21.674		
2,500.0	2,494.7	2,486.4	2,461.8	5.0	7.1	10.32	-0.2	330.0	190.1	181.4	8.67	21.929		
2,600.0	2,594.4	2,585.9	2,559.8	5.3	7.4	10.33	-0.2	347.3	200.0	190.9	9.02	22.165		
2,700.0	2,694.1	2,685.4	2,657.8	5.5	7.8	10.33	-0.2	364.6	209.8	200.4	9.37	22.383		
2,800.0	2,793.8	2,784.9	2,755.8	5.7	8.1	10.34	-0.2	381.9	219.6	209.9	9.72	22.585		
2,900.0	2,893.5	2,884.4	2,853.8	5.9	8.5	10.34	-0.2	399.1	229.5	219.4	10.08	22.773		
3,000.0	2,993.2	2,984.0	2,951.8	6.1	8.8	10.35	-0.2	416.4	239.3	228.9	10.43	22.948		
3,100.0	3,092.9	3,083.5	3,049.8	6.3	9.2	10.35	-0.2	433.7	249.1	238.4	10.78	23.112		
3,200.0	3,192.6	3,183.0	3,147.8	6.6	9.5	10.35	-0.2	451.0	259.0	247.8	11.13	23.266		
3,300.0	3,292.3	3,282.5	3,245.8	6.8	9.9	10.36	-0.3	468.3	268.8	257.3	11.48	23.410		
3,400.0	3,392.0	3,382.0	3,343.8	7.0	10.2	10.36	-0.3	485.5	278.7	266.8	11.83	23.545		
3,500.0	3,491.7	3,481.5	3,441.8	7.2	10.6	10.36	-0.3	502.8	288.5	276.3	12.19	23.673		
3,600.0	3,591.4	3,581.0	3,539.8	7.4	10.9	10.37	-0.3	520.1	298.3	285.8	12.54	23.793		
3,700.0	3,691.2	3,680.6	3,637.8	7.7	11.3	10.37	-0.3	537.4	308.2	295.3	12.89	23.907		
3,800.0	3,790.9	3,780.1	3,735.8	7.9	11.6	10.37	-0.3	554.7	318.0	304.8	13.24	24.015		
3,900.0	3,890.6	3,879.6	3,833.8	8.1	12.0	10.37	-0.3	572.0	327.8	314.2	13.59	24.117		
4,000.0	3,990.3	3,979.1	3,931.8	8.3	12.3	10.38	-0.3	589.2	337.7	323.7	13.95	24.214		
4,100.0	4,090.0	4,078.6	4,029.8	8.5	12.7	10.38	-0.3	606.5	347.5	333.2	14.30	24.307		
4,200.0	4,189.7	4,178.1	4,127.8	8.8	13.0	10.38	-0.3	623.8	357.4	342.7	14.65	24.395		
4,300.0	4,289.4	4,277.7	4,225.8	9.0	13.4	10.38	-0.3	641.1	367.2	352.2	15.00	24.478		
4,400.0	4,389.1	4,377.2	4,323.8	9.2	13.7	10.38	-0.4	658.4	377.0	361.7	15.35	24.558		
4,500.0	4,488.8	4,476.7	4,421.8	9.4	14.1	10.38	-0.4	675.6	386.9	371.2	15.70	24.635		
4,600.0	4,588.5	4,576.2	4,519.8	9.6	14.4	10.39	-0.4	692.9	396.7	380.7	16.06	24.708		
4,700.0	4,688.2	4,675.7	4,617.8	9.9	14.8	10.39	-0.4	710.2	406.5	390.1	16.41	24.777		
4,800.0	4,787.9	4,775.2	4,715.8	10.1	15.1	10.39	-0.4	727.5	416.4	399.6	16.76	24.844		
4,900.0	4,887.6	4,874.7	4,813.8	10.3	15.5	10.39	-0.4	744.8	426.2	409.1	17.11	24.909		
5,000.0	4,987.3	4,974.3	4,911.8	10.5	15.9	10.39	-0.4	762.0	436.1	418.6	17.46	24.970		
5,100.0	5,087.0	5,073.8	5,009.8	10.7	16.2	10.39	-0.4	779.3	445.9	428.1	17.82	25.029		

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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										S21-T2N-R68W (Edith Ann-Duckworth) - Edith Ann-Duckworth 4H-21H-O268 - Hz - Plan #1					Offset Site Error:		0.0 ft	
Survey Program: 0-Geolink MWD															Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre +N/-S		Centre +E/-W	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning				
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)		(ft)	(ft)	(ft)							
5,200.0	5,186.7	5,173.3	5,107.8	11.0	16.6	10.39	-0.4		796.6	455.7	437.6	18.17	25.086					
5,300.0	5,286.4	5,272.8	5,205.9	11.2	16.9	10.39	-0.4		813.9	465.6	447.1	18.52	25.141					
5,400.0	5,386.2	5,372.3	5,303.9	11.4	17.3	10.40	-0.4		831.2	475.4	456.5	18.87	25.194					
5,500.0	5,485.9	5,471.8	5,401.9	11.6	17.6	10.40	-0.5		848.5	485.3	466.0	19.22	25.244					
5,600.0	5,585.6	5,571.3	5,499.9	11.8	18.0	10.40	-0.5		865.7	495.1	475.5	19.57	25.293					

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 S21-T2N-R68W (Edith Ann-Duckworth) - JILLSON A 3 (EXISTING) - FOUNDATION WELL - NO SURVE													Offset Site Error:	0.0 ft
Survey Program: 5009-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		
4,600.0	4,588.5	4,561.5	4,561.5	9.6	8.0	-39.48	382.5	651.6	494.6	478.0	16.65	29.714		
4,700.0	4,688.2	4,661.2	4,661.2	9.9	8.1	-40.05	382.5	651.6	488.7	471.7	17.03	28.696		
4,800.0	4,787.9	4,760.9	4,760.9	10.1	8.3	-40.64	382.5	651.6	482.9	465.5	17.42	27.724		
4,900.0	4,887.6	4,860.6	4,860.6	10.3	8.5	-41.24	382.5	651.6	477.1	459.3	17.81	26.794		
5,000.0	4,987.3	4,960.3	4,960.3	10.5	8.7	-41.85	382.5	651.6	471.4	453.2	18.19	25.906		
5,075.5	5,062.6	5,009.0	5,009.0	10.7	8.7	-42.15	382.5	651.6	467.8	449.4	18.44	25.372	CC, ES	
5,100.0	5,087.0	5,009.0	5,009.0	10.7	8.7	-42.15	382.5	651.6	468.5	450.0	18.49	25.341	SF	
5,200.0	5,186.7	5,009.0	5,009.0	11.0	8.7	-42.15	382.5	651.6	484.1	465.4	18.68	25.912		

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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		S21-T2N-R68W (Edith Ann-Duckworth) - KENNEDY 31-21 (EXISTING) - ENCANA WELL - NO SURVE										Offset Site Error:		0.0 ft			
Survey Program:		8065-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
10,300.0	7,566.0	7,520.0	7,520.0	56.7	13.1	-90.00	3,446.1	321.6	484.1	415.1	69.01	7.015					
10,400.0	7,566.0	7,520.0	7,520.0	58.4	13.1	-90.00	3,446.1	321.6	396.3	325.6	70.72	5.605					
10,500.0	7,566.0	7,520.0	7,520.0	60.1	13.1	-90.00	3,446.1	321.6	315.9	243.5	72.43	4.362					
10,600.0	7,566.0	7,520.0	7,520.0	61.8	13.1	-90.00	3,446.1	321.6	250.1	175.9	74.14	3.372					
10,700.0	7,566.0	7,520.0	7,520.0	63.5	13.1	-90.00	3,446.1	321.6	212.7	136.9	75.86	2.804					
10,736.3	7,566.0	7,520.0	7,520.0	64.1	13.1	-90.00	3,446.1	321.6	209.6	133.1	76.49	2.740	CC, ES, SF				
10,800.0	7,566.0	7,520.0	7,520.0	65.2	13.1	-90.00	3,446.1	321.6	219.0	141.4	77.58	2.823					
10,900.0	7,566.0	7,520.0	7,520.0	66.9	13.1	-90.00	3,446.1	321.6	265.9	186.6	79.30	3.353					
11,000.0	7,566.0	7,520.0	7,520.0	68.6	13.1	-90.00	3,446.1	321.6	336.8	255.8	81.03	4.156					
11,100.0	7,566.0	7,520.0	7,520.0	70.3	13.1	-90.00	3,446.1	321.6	419.7	336.9	82.75	5.072					

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 Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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													S21-T2N-R68W (Edith Ann-Duckworth) - KENNEDY 41-21 (EXISTING) - ENCANA WELL - NO SURVE		Offset Site Error:		0.0 ft
Survey Program:													8100-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)							
11,200.0	7,566.0	7,501.0	7,501.0	72.0	13.1	90.00	4,211.1	850.9	439.4	354.9	84.47	5.202					
11,300.0	7,566.0	7,501.0	7,501.0	73.7	13.1	90.00	4,211.1	850.9	377.9	291.7	86.20	4.384					
11,400.0	7,566.0	7,501.0	7,501.0	75.4	13.1	90.00	4,211.1	850.9	335.4	247.5	87.93	3.815					
11,500.0	7,566.0	7,501.0	7,501.0	77.1	13.1	90.00	4,211.1	850.9	319.7	230.1	89.65	3.566					
11,501.4	7,566.0	7,501.0	7,501.0	77.2	13.1	90.00	4,211.1	850.9	319.7	230.1	89.68	3.565 CC, ES, SF					
11,600.0	7,566.0	7,501.0	7,501.0	78.8	13.1	90.00	4,211.1	850.9	334.6	243.2	91.39	3.661					
11,700.0	7,566.0	7,501.0	7,501.0	80.6	13.1	90.00	4,211.1	850.9	376.4	283.3	93.12	4.042					
11,800.0	7,566.0	7,501.0	7,501.0	82.3	13.1	90.00	4,211.1	850.9	437.5	342.6	94.85	4.612					

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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													S21-T2N-R68W (Edith Ann-Duckworth) - KENNEDY GAS UNIT 1 (EXISTING) - ENCANA WELL - NO S		Offset Site Error:	0.0 ft
Survey Program: 8138-Geolink MWD													Offset Well Error:	0.0 ft		
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
10,300.0	7,566.0	7,500.0	7,500.0	56.7	13.1	-90.00	3,434.1	339.2	465.8	396.8	69.00	6.750				
10,400.0	7,566.0	7,500.0	7,500.0	58.4	13.1	-90.00	3,434.1	339.2	376.9	306.2	70.71	5.331				
10,500.0	7,566.0	7,500.0	7,500.0	60.1	13.1	-90.00	3,434.1	339.2	295.3	222.9	72.42	4.077				
10,600.0	7,566.0	7,500.0	7,500.0	61.8	13.1	-90.00	3,434.1	339.2	228.7	154.6	74.14	3.085				
10,700.0	7,566.0	7,500.0	7,500.0	63.5	13.1	-90.00	3,434.1	339.2	193.5	117.7	75.85	2.551				
10,724.4	7,566.0	7,500.0	7,500.0	63.9	13.1	-90.00	3,434.1	339.2	192.0	115.7	76.27	2.517	CC, ES, SF			
10,800.0	7,566.0	7,500.0	7,500.0	65.2	13.1	-90.00	3,434.1	339.2	206.3	128.8	77.57	2.660				
10,900.0	7,566.0	7,500.0	7,500.0	66.9	13.1	-90.00	3,434.1	339.2	260.2	180.9	79.29	3.281				
11,000.0	7,566.0	7,500.0	7,500.0	68.6	13.1	-90.00	3,434.1	339.2	335.9	254.9	81.02	4.146				
11,100.0	7,566.0	7,500.0	7,500.0	70.3	13.1	-90.00	3,434.1	339.2	421.8	339.1	82.74	5.098				

# Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Edith Ann-Duckworth 4F-21H-O268
<b>Project:</b>	DJ Wattenberg	<b>TVD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Reference Site:</b>	S21-T2N-R68W (Edith Ann-Duckworth)	<b>MD Reference:</b>	WELL @ 4952.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Edith Ann-Duckworth 4F-21H-O268	<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 @ 4952.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Edith Ann-Duckworth 4F-21H-O268

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.32°

