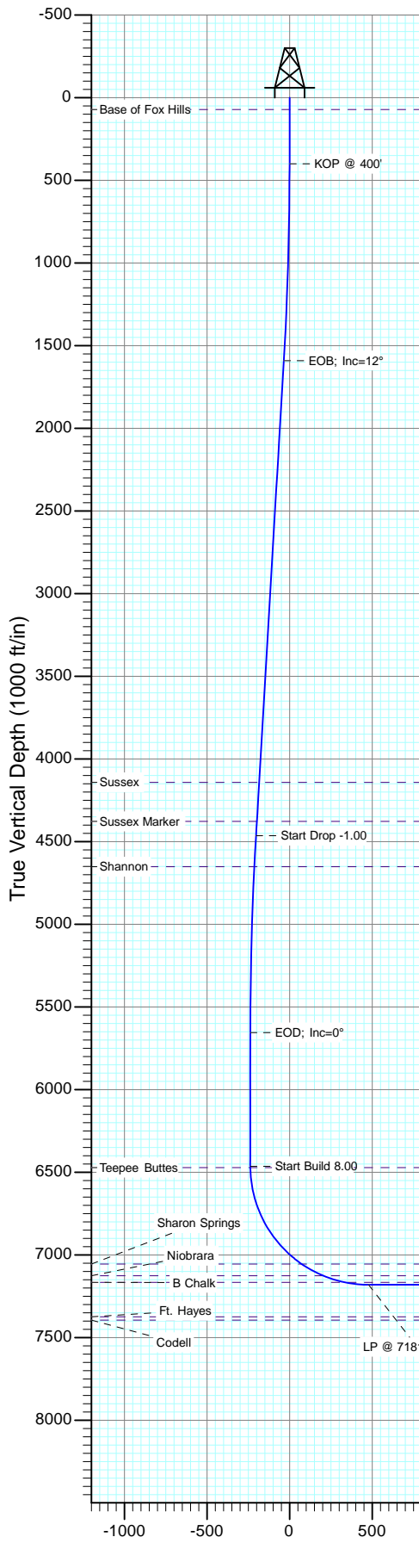
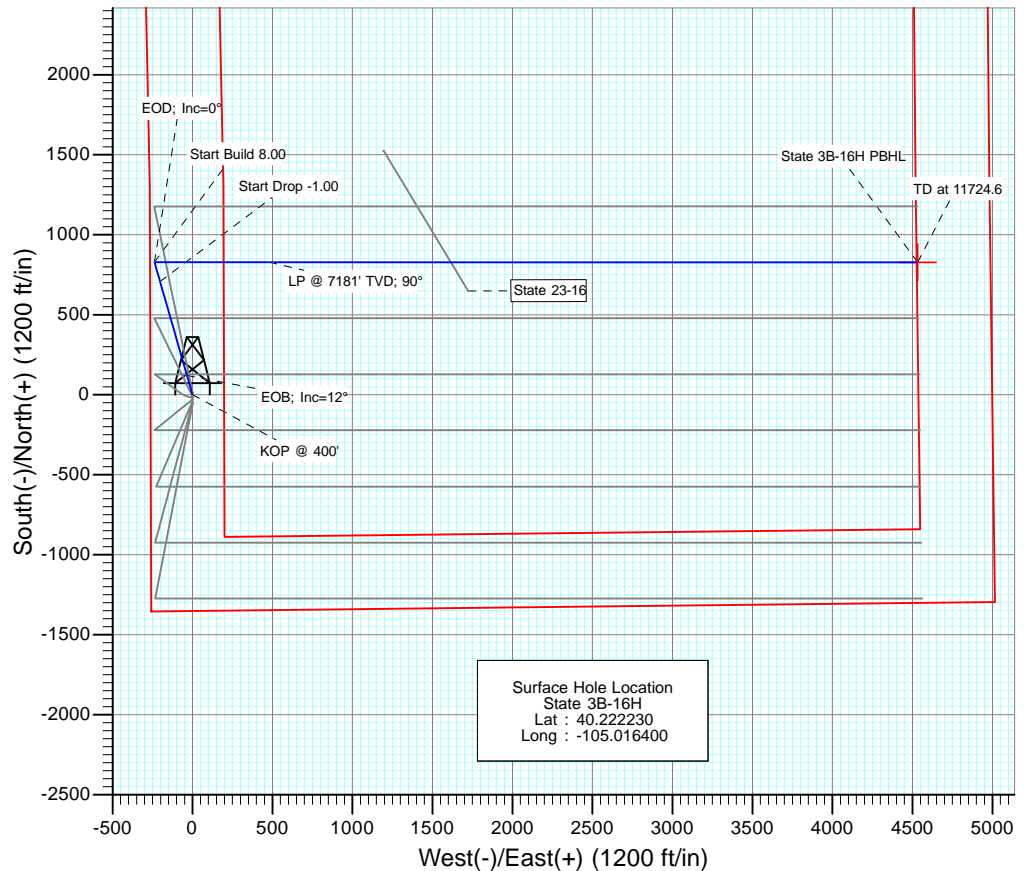




Project: DJ Wattenberg
Site: S16-T3N-R68W (State)
Well: State 3B-16H
Wellbore: Hz
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1600.0	12.00	344.00	1591.2	120.4	-34.5	1.00	344.00	-34.5	
4	4537.0	12.00	344.00	4464.1	707.3	-202.8	0.00	0.00	-202.8	
5	5737.0	0.00	0.00	5655.3	827.7	-237.3	1.00	180.00	-237.3	
6	6546.5	0.00	0.00	6464.8	827.7	-237.3	0.00	0.00	-237.3	
7	7671.5	90.00	90.00	7181.0	827.6	478.9	8.00	90.00	478.9	
8	11724.6	90.00	90.00	7181.0	827.4	4531.9	0.00	0.00	4531.9	State 3B-16H PBHL

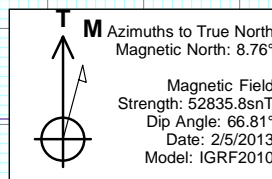


DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
State 3B-16H PBHL	827.4	4531.9	1325023.41	3139573.74	40.224500	-105.000170

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
72.0	72.0	Base of Fox Hills
4142.0	4207.7	Sussex
4378.0	4449.0	Sussex Marker
4652.0	4728.5	Shannon
6472.0	6553.7	Teepee Buttes
7055.0	7240.2	Sharon Springs
7126.0	7389.0	Niobrara
7166.0	7524.7	B Chalk



Plan #1
State 3B-16H
13xxx; LR
WELL @ 5072.0ft (Original Well Elev)
Ground Elevation @ 5059.0
North American Datum 1983
Well State 3B-16H, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3B-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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

Site		S16-T3N-R68W (State)			
Site Position:		Northing:	1,326,575.12 ft	Latitude:	40.228760
From:	Lat/Long	Easting:	3,139,542.66 ft	Longitude:	-105.000250
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.32 °

Well	State 3B-16H					
Well Position	+N/-S	0.0 ft	Northing:	1,324,171.36 ft	Latitude:	40.222230
	+E/-W	0.0 ft	Easting:	3,135,046.39 ft	Longitude:	-105.016400
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,059.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/5/2013	8.76	66.81	52,836

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	90.00	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	12.00	344.00	1,591.2	120.4	-34.5	1.00	1.00	0.00	344.00	
4,537.0	12.00	344.00	4,464.1	707.3	-202.8	0.00	0.00	0.00	0.00	
5,737.0	0.00	0.00	5,655.3	827.7	-237.3	1.00	-1.00	0.00	180.00	
6,546.5	0.00	0.00	6,464.8	827.7	-237.3	0.00	0.00	0.00	0.00	
7,671.5	90.00	90.00	7,181.0	827.6	478.9	8.00	8.00	0.00	90.00	
11,724.6	90.00	90.00	7,181.0	827.4	4,531.9	0.00	0.00	0.00	0.00	State 3B-16H PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3B-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
72.0	0.00	0.00	72.0	0.0	0.0	0.0	0.00	0.00	Base of Fox Hills
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
500.0	1.00	344.00	500.0	0.8	-0.2	-0.2	1.00	1.00	
600.0	2.00	344.00	600.0	3.4	-1.0	-1.0	1.00	1.00	
700.0	3.00	344.00	699.9	7.5	-2.2	-2.2	1.00	1.00	
800.0	4.00	344.00	799.7	13.4	-3.8	-3.8	1.00	1.00	
900.0	5.00	344.00	899.4	21.0	-6.0	-6.0	1.00	1.00	
1,000.0	6.00	344.00	998.9	30.2	-8.7	-8.7	1.00	1.00	
1,100.0	7.00	344.00	1,098.3	41.1	-11.8	-11.8	1.00	1.00	
1,200.0	8.00	344.00	1,197.4	53.6	-15.4	-15.4	1.00	1.00	
1,300.0	9.00	344.00	1,296.3	67.8	-19.4	-19.4	1.00	1.00	
1,400.0	10.00	344.00	1,394.9	83.7	-24.0	-24.0	1.00	1.00	
1,500.0	11.00	344.00	1,493.3	101.2	-29.0	-29.0	1.00	1.00	
1,600.0	12.00	344.00	1,591.2	120.4	-34.5	-34.5	1.00	1.00	EOB; Inc=12°
1,700.0	12.00	344.00	1,689.1	140.3	-40.2	-40.2	0.00	0.00	
1,800.0	12.00	344.00	1,786.9	160.3	-46.0	-46.0	0.00	0.00	
1,900.0	12.00	344.00	1,884.7	180.3	-51.7	-51.7	0.00	0.00	
2,000.0	12.00	344.00	1,982.5	200.3	-57.4	-57.4	0.00	0.00	
2,100.0	12.00	344.00	2,080.3	220.3	-63.2	-63.2	0.00	0.00	
2,200.0	12.00	344.00	2,178.1	240.3	-68.9	-68.9	0.00	0.00	
2,300.0	12.00	344.00	2,275.9	260.3	-74.6	-74.6	0.00	0.00	
2,400.0	12.00	344.00	2,373.8	280.2	-80.4	-80.4	0.00	0.00	
2,500.0	12.00	344.00	2,471.6	300.2	-86.1	-86.1	0.00	0.00	
2,600.0	12.00	344.00	2,569.4	320.2	-91.8	-91.8	0.00	0.00	
2,700.0	12.00	344.00	2,667.2	340.2	-97.6	-97.6	0.00	0.00	
2,800.0	12.00	344.00	2,765.0	360.2	-103.3	-103.3	0.00	0.00	
2,900.0	12.00	344.00	2,862.8	380.2	-109.0	-109.0	0.00	0.00	
3,000.0	12.00	344.00	2,960.7	400.2	-114.7	-114.7	0.00	0.00	
3,100.0	12.00	344.00	3,058.5	420.1	-120.5	-120.5	0.00	0.00	
3,200.0	12.00	344.00	3,156.3	440.1	-126.2	-126.2	0.00	0.00	
3,300.0	12.00	344.00	3,254.1	460.1	-131.9	-131.9	0.00	0.00	
3,400.0	12.00	344.00	3,351.9	480.1	-137.7	-137.7	0.00	0.00	
3,500.0	12.00	344.00	3,449.7	500.1	-143.4	-143.4	0.00	0.00	
3,600.0	12.00	344.00	3,547.5	520.1	-149.1	-149.1	0.00	0.00	
3,700.0	12.00	344.00	3,645.4	540.1	-154.9	-154.9	0.00	0.00	
3,800.0	12.00	344.00	3,743.2	560.0	-160.6	-160.6	0.00	0.00	
3,900.0	12.00	344.00	3,841.0	580.0	-166.3	-166.3	0.00	0.00	
4,000.0	12.00	344.00	3,938.8	600.0	-172.1	-172.1	0.00	0.00	
4,100.0	12.00	344.00	4,036.6	620.0	-177.8	-177.8	0.00	0.00	
4,200.0	12.00	344.00	4,134.4	640.0	-183.5	-183.5	0.00	0.00	
4,207.7	12.00	344.00	4,142.0	641.5	-184.0	-184.0	0.00	0.00	Sussex
4,300.0	12.00	344.00	4,232.2	660.0	-189.2	-189.2	0.00	0.00	
4,400.0	12.00	344.00	4,330.1	680.0	-195.0	-195.0	0.00	0.00	
4,449.0	12.00	344.00	4,378.0	689.8	-197.8	-197.8	0.00	0.00	Sussex Marker
4,500.0	12.00	344.00	4,427.9	699.9	-200.7	-200.7	0.00	0.00	
4,537.0	12.00	344.00	4,464.1	707.3	-202.8	-202.8	0.00	0.00	Start Drop -1.00
4,600.0	11.37	344.00	4,525.8	719.6	-206.3	-206.3	1.00	-1.00	
4,700.0	10.37	344.00	4,624.0	737.7	-211.5	-211.5	1.00	-1.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3B-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,728.5	10.09	344.00	4,652.0	742.6	-212.9	-212.9	1.00	-1.00	Shannon
4,800.0	9.37	344.00	4,722.5	754.2	-216.3	-216.3	1.00	-1.00	
4,900.0	8.37	344.00	4,821.3	769.0	-220.5	-220.5	1.00	-1.00	
5,000.0	7.37	344.00	4,920.3	782.2	-224.3	-224.3	1.00	-1.00	
5,100.0	6.37	344.00	5,019.6	793.7	-227.6	-227.6	1.00	-1.00	
5,200.0	5.37	344.00	5,119.1	803.5	-230.4	-230.4	1.00	-1.00	
5,300.0	4.37	344.00	5,218.7	811.7	-232.7	-232.7	1.00	-1.00	
5,400.0	3.37	344.00	5,318.5	818.2	-234.6	-234.6	1.00	-1.00	
5,500.0	2.37	344.00	5,418.4	823.0	-236.0	-236.0	1.00	-1.00	
5,600.0	1.37	344.00	5,518.3	826.1	-236.9	-236.9	1.00	-1.00	EOD; Inc=0°
5,700.0	0.37	344.00	5,618.3	827.6	-237.3	-237.3	1.00	-1.00	
5,737.0	0.00	0.00	5,655.3	827.7	-237.3	-237.3	1.00	-1.00	
5,800.0	0.00	0.00	5,718.3	827.7	-237.3	-237.3	0.00	0.00	
5,900.0	0.00	0.00	5,818.3	827.7	-237.3	-237.3	0.00	0.00	
6,000.0	0.00	0.00	5,918.3	827.7	-237.3	-237.3	0.00	0.00	
6,100.0	0.00	0.00	6,018.3	827.7	-237.3	-237.3	0.00	0.00	
6,200.0	0.00	0.00	6,118.3	827.7	-237.3	-237.3	0.00	0.00	
6,300.0	0.00	0.00	6,218.3	827.7	-237.3	-237.3	0.00	0.00	
6,400.0	0.00	0.00	6,318.3	827.7	-237.3	-237.3	0.00	0.00	Start Build 8.00
6,500.0	0.00	0.00	6,418.3	827.7	-237.3	-237.3	0.00	0.00	
6,546.5	0.00	0.00	6,464.8	827.7	-237.3	-237.3	0.00	0.00	
6,553.7	0.58	90.00	6,472.0	827.7	-237.3	-237.3	8.00	8.00	Teepee Buttes
6,600.0	4.28	90.00	6,518.3	827.7	-235.3	-235.3	8.00	8.00	
6,700.0	12.28	90.00	6,617.1	827.7	-220.9	-220.9	8.00	8.00	
6,800.0	20.28	90.00	6,713.1	827.7	-192.9	-192.9	8.00	8.00	
6,900.0	28.28	90.00	6,804.1	827.7	-151.8	-151.8	8.00	8.00	
7,000.0	36.28	90.00	6,888.6	827.7	-98.5	-98.5	8.00	8.00	
7,100.0	44.28	90.00	6,964.8	827.7	-33.9	-33.9	8.00	8.00	
7,200.0	52.28	90.00	7,031.3	827.7	40.7	40.7	8.00	8.00	
7,240.2	55.49	90.00	7,055.0	827.7	73.1	73.1	8.00	8.00	Sharon Springs
7,300.0	60.28	90.00	7,086.8	827.7	123.8	123.8	8.00	8.00	
7,389.0	67.40	90.00	7,126.0	827.7	203.6	203.6	8.00	8.00	
7,400.0	68.28	90.00	7,130.2	827.7	213.8	213.8	8.00	8.00	Niobrara
7,500.0	76.28	90.00	7,160.6	827.7	309.0	309.0	8.00	8.00	
7,524.7	78.25	90.00	7,166.0	827.7	333.0	333.0	8.00	8.00	
7,600.0	84.28	90.00	7,177.4	827.6	407.5	407.5	8.00	8.00	B Chalk
7,671.5	90.00	90.00	7,181.0	827.6	478.9	478.9	8.00	8.00	
7,700.0	90.00	90.00	7,181.0	827.6	507.4	507.4	0.00	0.00	
7,800.0	90.00	90.00	7,181.0	827.6	607.4	607.4	0.00	0.00	LP @ 7181' TVD; 90°
7,900.0	90.00	90.00	7,181.0	827.6	707.4	707.4	0.00	0.00	
8,000.0	90.00	90.00	7,181.0	827.6	807.4	807.4	0.00	0.00	
8,100.0	90.00	90.00	7,181.0	827.6	907.4	907.4	0.00	0.00	
8,200.0	90.00	90.00	7,181.0	827.6	1,007.4	1,007.4	0.00	0.00	
8,300.0	90.00	90.00	7,181.0	827.6	1,107.4	1,107.4	0.00	0.00	
8,400.0	90.00	90.00	7,181.0	827.6	1,207.4	1,207.4	0.00	0.00	
8,500.0	90.00	90.00	7,181.0	827.6	1,307.4	1,307.4	0.00	0.00	
8,600.0	90.00	90.00	7,181.0	827.6	1,407.4	1,407.4	0.00	0.00	
8,700.0	90.00	90.00	7,181.0	827.6	1,507.4	1,507.4	0.00	0.00	
8,800.0	90.00	90.00	7,181.0	827.6	1,607.4	1,607.4	0.00	0.00	
8,900.0	90.00	90.00	7,181.0	827.6	1,707.4	1,707.4	0.00	0.00	
9,000.0	90.00	90.00	7,181.0	827.5	1,807.4	1,807.4	0.00	0.00	
9,100.0	90.00	90.00	7,181.0	827.5	1,907.4	1,907.4	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3B-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,200.0	90.00	90.00	7,181.0	827.5	2,007.4	2,007.4	0.00	0.00	
9,300.0	90.00	90.00	7,181.0	827.5	2,107.4	2,107.4	0.00	0.00	
9,400.0	90.00	90.00	7,181.0	827.5	2,207.4	2,207.4	0.00	0.00	
9,500.0	90.00	90.00	7,181.0	827.5	2,307.4	2,307.4	0.00	0.00	
9,600.0	90.00	90.00	7,181.0	827.5	2,407.4	2,407.4	0.00	0.00	
9,700.0	90.00	90.00	7,181.0	827.5	2,507.4	2,507.4	0.00	0.00	
9,800.0	90.00	90.00	7,181.0	827.5	2,607.4	2,607.4	0.00	0.00	
9,900.0	90.00	90.00	7,181.0	827.5	2,707.4	2,707.4	0.00	0.00	
10,000.0	90.00	90.00	7,181.0	827.5	2,807.4	2,807.4	0.00	0.00	
10,100.0	90.00	90.00	7,181.0	827.5	2,907.4	2,907.4	0.00	0.00	
10,200.0	90.00	90.00	7,181.0	827.5	3,007.4	3,007.4	0.00	0.00	
10,300.0	90.00	90.00	7,181.0	827.5	3,107.4	3,107.4	0.00	0.00	
10,400.0	90.00	90.00	7,181.0	827.4	3,207.4	3,207.4	0.00	0.00	
10,500.0	90.00	90.00	7,181.0	827.4	3,307.4	3,307.4	0.00	0.00	
10,600.0	90.00	90.00	7,181.0	827.4	3,407.4	3,407.4	0.00	0.00	
10,700.0	90.00	90.00	7,181.0	827.4	3,507.4	3,507.4	0.00	0.00	
10,800.0	90.00	90.00	7,181.0	827.4	3,607.4	3,607.4	0.00	0.00	
10,900.0	90.00	90.00	7,181.0	827.4	3,707.4	3,707.4	0.00	0.00	
11,000.0	90.00	90.00	7,181.0	827.4	3,807.4	3,807.4	0.00	0.00	
11,100.0	90.00	90.00	7,181.0	827.4	3,907.4	3,907.4	0.00	0.00	
11,200.0	90.00	90.00	7,181.0	827.4	4,007.4	4,007.4	0.00	0.00	
11,300.0	90.00	90.00	7,181.0	827.4	4,107.4	4,107.4	0.00	0.00	
11,400.0	90.00	90.00	7,181.0	827.4	4,207.4	4,207.4	0.00	0.00	
11,500.0	90.00	90.00	7,181.0	827.4	4,307.4	4,307.4	0.00	0.00	
11,600.0	90.00	90.00	7,181.0	827.4	4,407.4	4,407.4	0.00	0.00	
11,700.0	90.00	90.00	7,181.0	827.4	4,507.4	4,507.4	0.00	0.00	
11,724.6	90.00	90.00	7,181.0	827.4	4,531.9	4,531.9	0.00	0.00	TD at 11724.6 - State 3B-16H PBHL

Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
State 3B-16H PBHL - plan hits target center - Point	0.00	0.00	7,181.0	827.4	4,531.9	1,325,023.41	3,139,573.74	40.224500	-105.000170

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3B-16H
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site:	S16-T3N-R68W (State)	North Reference:	True
Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
72.0	72.0	Base of Fox Hills				
4,207.7	4,142.0	Sussex				
4,449.0	4,378.0	Sussex Marker				
4,728.5	4,652.0	Shannon				
6,553.7	6,472.0	Teepee Buttes				
7,240.2	7,055.0	Sharon Springs				
7,389.0	7,126.0	Niobrara				
7,524.7	7,166.0	B Chalk				

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'	
1,600.0	1,591.2	120.4	-34.5	EOB; Inc=12°	
4,537.0	4,464.1	707.3	-202.8	Start Drop -1.00	
5,737.0	5,655.3	827.7	-237.3	EOD; Inc=0°	
6,546.5	6,464.8	827.7	-237.3	Start Build 8.00	
7,671.5	7,181.0	827.6	478.9	LP @ 7181' TVD; 90°	
11,724.6	7,181.0	827.4	4,531.9	TD at 11724.6	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S16-T3N-R68W (State)

State 3B-16H

Hz

Plan #1

Anticollision Report

05 February, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	2/5/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,724.6	Plan #1 (Hz)	MWD	Geolink MWD

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S16-T3N-R68W (State)						
State 23-16 - Existing - Existing	8,915.7	7,297.5	179.3	116.9	2.874	CC, ES, SF
State 3A-16H - Hz - Plan #1	200.0	200.0	10.9	10.3	16.742	CC, ES
State 3A-16H - Hz - Plan #1	11,724.6	12,011.3	414.8	219.7	2.126	SF
State 3C-16H - Hz - Plan #1	400.0	400.0	10.9	9.6	8.090	CC, ES
State 3C-16H - Hz - Plan #1	11,724.6	11,909.5	414.8	219.4	2.123	SF
State 3D-16H - Hz - Plan #1	390.3	390.4	17.9	16.6	13.564	CC
State 3D-16H - Hz - Plan #1	400.0	400.0	17.9	16.6	13.225	ES
State 3D-16H - Hz - Plan #1	600.0	599.6	23.0	20.9	11.027	SF
State 3E-16H - Hz - Plan #1	300.0	300.0	29.1	28.1	29.090	CC, ES
State 3E-16H - Hz - Plan #1	600.0	598.7	37.8	35.7	18.386	SF
State 3F-16H - Hz - Plan #1	400.0	400.0	40.1	38.7	29.663	CC, ES
State 3F-16H - Hz - Plan #1	600.0	598.5	46.6	44.6	22.778	SF
State 3G-16H - Hz - Plan #1	300.0	300.0	51.0	50.0	50.907	CC, ES
State 3G-16H - Hz - Plan #1	700.0	695.4	71.9	69.5	30.068	SF
State 3H-16H - Hz - Plan #1	200.0	200.0	58.3	57.6	89.292	CC, ES
State 3H-16H - Hz - Plan #1	700.0	693.1	87.0	84.6	36.448	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S16-T3N-R68W (State) - State 23-16 - Existing - Existing		Offset Site Error:		0.0 ft	
Survey Program: 0-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						
8,500.0	7,181.0	7,297.5	7,182.0	38.5	22.0	90.00	648.2	1,723.1	452.8	400.2	52.59	8.609						
8,600.0	7,181.0	7,297.5	7,182.0	40.7	22.0	90.00	648.2	1,723.1	363.1	308.2	54.93	6.610						
8,700.0	7,181.0	7,297.5	7,182.0	43.0	22.0	90.00	648.2	1,723.1	280.5	223.3	57.29	4.897						
8,800.0	7,181.0	7,297.5	7,182.0	45.3	22.0	90.00	648.2	1,723.1	213.4	153.8	59.65	3.578						
8,900.0	7,181.0	7,297.5	7,182.0	47.6	22.0	90.00	648.2	1,723.1	180.0	118.0	62.03	2.902						
8,915.7	7,181.0	7,297.5	7,182.0	47.9	22.0	90.00	648.2	1,723.1	179.3	116.9	62.41	2.874	CC, ES, SF					
9,000.0	7,181.0	7,297.5	7,182.0	49.9	22.0	90.00	648.2	1,723.1	198.1	133.7	64.42	3.076						
9,100.0	7,181.0	7,297.5	7,182.0	52.2	22.0	90.00	648.2	1,723.1	257.1	190.3	66.82	3.848						
9,200.0	7,181.0	7,297.5	7,182.0	54.6	22.0	90.00	648.2	1,723.1	336.1	266.9	69.22	4.855						
9,300.0	7,181.0	7,297.5	7,182.0	56.9	22.0	90.00	648.2	1,723.1	424.0	352.4	71.63	5.920						

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3A-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	0.00	10.9	0.0	10.9					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	10.9	0.0	10.9	10.6	0.30	35.986		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	10.9	0.0	10.9	10.3	0.65	16.742 CC, ES		
300.0	300.0	299.8	299.8	0.5	0.5	-0.85	11.8	-0.2	11.8	10.8	1.00	11.763		
400.0	400.0	399.5	399.5	0.7	0.7	-2.79	14.3	-0.7	14.4	13.0	1.35	10.626		
500.0	500.0	499.2	499.1	0.9	0.9	11.70	18.6	-1.6	17.8	16.1	1.70	10.486		
600.0	600.0	598.8	598.5	1.0	1.1	11.04	24.5	-2.8	21.3	19.2	2.05	10.400		
700.0	699.9	698.4	697.7	1.2	1.3	10.88	32.1	-4.4	24.8	22.4	2.40	10.345		
800.0	799.7	797.8	796.7	1.4	1.5	11.02	41.5	-6.3	28.3	25.5	2.75	10.306		
900.0	899.4	897.3	895.5	1.6	1.8	11.36	52.4	-8.5	31.8	28.7	3.10	10.277		
1,000.0	998.9	996.6	994.0	1.8	2.0	11.85	65.1	-11.1	35.3	31.9	3.45	10.253		
1,100.0	1,098.3	1,095.9	1,092.3	2.1	2.3	12.45	79.4	-14.1	38.9	35.1	3.80	10.230		
1,200.0	1,197.4	1,195.2	1,190.2	2.3	2.6	13.12	95.4	-17.3	42.4	38.3	4.16	10.206		
1,300.0	1,296.3	1,294.3	1,287.7	2.6	3.0	13.85	113.0	-21.0	46.0	41.5	4.52	10.178		
1,400.0	1,394.9	1,393.4	1,384.8	2.9	3.4	14.62	132.2	-24.9	49.6	44.7	4.89	10.144		
1,500.0	1,493.3	1,492.5	1,481.6	3.3	3.8	15.42	153.1	-29.2	53.2	48.0	5.27	10.101		
1,600.0	1,591.2	1,591.5	1,577.9	3.6	4.2	16.26	175.6	-33.8	56.9	51.2	5.66	10.047		
1,700.0	1,689.1	1,690.4	1,673.7	4.0	4.6	16.88	199.7	-38.8	61.4	55.3	6.07	10.120		
1,800.0	1,786.9	1,789.1	1,768.8	4.4	5.1	17.09	225.4	-44.0	67.6	61.1	6.47	10.451		
1,900.0	1,884.7	1,888.7	1,864.6	4.8	5.6	17.09	252.3	-49.5	74.8	67.9	6.86	10.894		
2,000.0	1,982.5	1,988.5	1,960.5	5.2	6.1	17.08	279.2	-55.1	82.0	74.7	7.26	11.287		
2,100.0	2,080.3	2,088.2	2,056.3	5.5	6.6	17.08	306.2	-60.6	89.2	81.5	7.67	11.638		
2,200.0	2,178.1	2,188.0	2,152.2	5.9	7.1	17.08	333.1	-66.1	96.4	88.4	8.07	11.953		
2,300.0	2,275.9	2,287.7	2,248.1	6.3	7.6	17.08	360.0	-71.7	103.6	95.2	8.47	12.236		
2,400.0	2,373.8	2,387.4	2,344.0	6.7	8.1	17.08	387.0	-77.2	110.8	102.0	8.87	12.493		
2,500.0	2,471.6	2,487.2	2,439.8	7.1	8.6	17.07	413.9	-82.7	118.1	108.8	9.28	12.727		
2,600.0	2,569.4	2,586.9	2,535.7	7.5	9.1	17.07	440.8	-88.2	125.3	115.6	9.68	12.941		
2,700.0	2,667.2	2,686.7	2,631.6	7.9	9.6	17.07	467.8	-93.8	132.5	122.4	10.09	13.136		
2,800.0	2,765.0	2,786.4	2,727.5	8.3	10.1	17.07	494.7	-99.3	139.7	129.2	10.49	13.317		
2,900.0	2,862.8	2,886.1	2,823.3	8.7	10.6	17.07	521.6	-104.8	146.9	136.0	10.90	13.483		
3,000.0	2,960.7	2,985.9	2,919.2	9.1	11.1	17.07	548.5	-110.4	154.1	142.8	11.30	13.637		
3,100.0	3,058.5	3,085.6	3,015.1	9.5	11.6	17.07	575.5	-115.9	161.3	149.6	11.71	13.780		
3,200.0	3,156.3	3,185.4	3,111.0	9.9	12.1	17.07	602.4	-121.4	168.6	156.4	12.11	13.913		
3,300.0	3,254.1	3,285.1	3,206.9	10.3	12.6	17.06	629.3	-126.9	175.8	163.2	12.52	14.037		
3,400.0	3,351.9	3,384.8	3,302.7	10.7	13.1	17.06	656.3	-132.5	183.0	170.1	12.93	14.153		
3,500.0	3,449.7	3,484.6	3,398.6	11.1	13.7	17.06	683.2	-138.0	190.2	176.9	13.34	14.262		
3,600.0	3,547.5	3,584.3	3,494.5	11.5	14.2	17.06	710.1	-143.5	197.4	183.7	13.74	14.364		
3,700.0	3,645.4	3,684.1	3,590.4	11.9	14.7	17.06	737.1	-149.1	204.6	190.5	14.15	14.460		
3,800.0	3,743.2	3,783.8	3,686.2	12.3	15.2	17.06	764.0	-154.6	211.8	197.3	14.56	14.551		
3,900.0	3,841.0	3,883.5	3,782.1	12.7	15.7	17.06	790.9	-160.1	219.0	204.1	14.97	14.636		
4,000.0	3,938.8	3,983.3	3,878.0	13.1	16.2	17.06	817.8	-165.6	226.3	210.9	15.37	14.717		
4,100.0	4,036.6	4,083.0	3,973.9	13.5	16.7	17.06	844.8	-171.2	233.5	217.7	15.78	14.794		
4,200.0	4,134.4	4,182.8	4,069.7	13.9	17.2	17.06	871.7	-176.7	240.7	224.5	16.19	14.867		
4,300.0	4,232.2	4,282.5	4,165.6	14.3	17.7	17.06	898.6	-182.2	247.9	231.3	16.60	14.936		
4,400.0	4,330.1	4,382.2	4,261.5	14.7	18.2	17.06	925.6	-187.7	255.1	238.1	17.01	15.001		
4,500.0	4,427.9	4,482.0	4,357.4	15.1	18.7	17.06	952.5	-193.3	262.3	244.9	17.41	15.064		
4,600.0	4,525.8	4,585.3	4,456.8	15.5	19.2	17.07	979.9	-198.9	269.4	251.5	17.83	15.108		
4,700.0	4,624.0	4,689.9	4,558.0	15.8	19.7	17.08	1,005.9	-204.2	276.2	258.0	18.23	15.150		
4,800.0	4,722.5	4,794.7	4,659.8	16.2	20.2	17.06	1,030.1	-209.2	283.0	264.4	18.62	15.196		
4,900.0	4,821.3	4,899.5	4,762.2	16.5	20.6	17.02	1,052.5	-213.8	289.7	270.7	19.00	15.246		
5,000.0	4,920.3	5,004.6	4,865.1	16.8	21.0	16.96	1,073.1	-218.0	296.2	276.8	19.36	15.301		
5,100.0	5,019.6	5,109.7	4,968.5	17.0	21.4	16.88	1,091.9	-221.9	302.6	282.9	19.70	15.359		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3A-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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			
5,200.0	5,119.1	5,215.0	5,072.3	17.3	21.7	16.78	1,108.8	-225.4	308.9	288.9	20.03	15.420		
5,300.0	5,218.7	5,320.4	5,176.6	17.5	22.0	16.66	1,123.9	-228.5	315.1	294.7	20.35	15.483		
5,400.0	5,318.5	5,426.0	5,281.3	17.6	22.3	16.53	1,137.1	-231.2	321.1	300.4	20.65	15.548		
5,500.0	5,418.4	5,531.6	5,386.3	17.8	22.5	16.39	1,148.4	-233.5	327.0	306.1	20.94	15.615		
5,600.0	5,518.3	5,637.4	5,491.7	17.9	22.8	16.23	1,157.8	-235.4	332.8	311.6	21.22	15.683		
5,700.0	5,618.3	5,743.3	5,597.3	18.0	22.9	16.05	1,165.4	-237.0	338.5	317.0	21.49	15.751		
5,800.0	5,718.3	5,849.4	5,703.2	18.1	23.1	-0.13	1,171.0	-238.1	343.7	303.3	40.38	8.510		
5,900.0	5,818.3	5,955.6	5,809.3	18.2	23.2	-0.26	1,174.7	-238.9	347.1	306.5	40.62	8.546		
6,000.0	5,918.3	6,061.9	5,915.6	18.3	23.3	-0.32	1,176.5	-239.3	348.8	308.0	40.83	8.544		
6,100.0	6,018.3	6,164.6	6,018.3	18.4	23.4	-0.32	1,176.7	-239.3	349.0	308.0	41.02	8.509		
6,200.0	6,118.3	6,264.6	6,118.3	18.5	23.5	-0.32	1,176.7	-239.3	349.0	307.8	41.20	8.471		
6,300.0	6,218.3	6,364.6	6,218.3	18.6	23.6	-0.32	1,176.7	-239.3	349.0	307.6	41.39	8.432		
6,400.0	6,318.3	6,464.6	6,318.3	18.7	23.6	-0.32	1,176.7	-239.3	349.0	307.4	41.58	8.394		
6,500.0	6,418.3	6,564.6	6,418.3	18.8	23.7	-0.32	1,176.7	-239.3	349.0	307.2	41.77	8.355		
6,538.8	6,457.1	6,603.4	6,457.1	18.9	23.8	-90.42	1,176.7	-239.3	349.0	324.8	24.16	14.448		
6,600.0	6,518.3	6,664.6	6,518.3	18.9	23.8	-90.65	1,176.7	-239.3	349.0	324.7	24.30	14.365		
6,700.0	6,617.1	6,763.4	6,617.1	19.0	23.9	-92.94	1,176.7	-239.3	349.5	325.4	24.12	14.490		
6,800.0	6,713.1	6,861.1	6,714.8	19.0	24.0	-97.13	1,176.7	-238.8	352.0	328.2	23.79	14.796		
6,900.0	6,804.1	6,965.1	6,818.1	19.0	24.0	-101.83	1,176.7	-227.3	357.3	333.6	23.75	15.049		
7,000.0	6,888.6	7,074.6	6,923.8	19.0	24.0	-106.31	1,176.7	-199.3	365.0	340.9	24.07	15.161		
7,100.0	6,964.8	7,190.0	7,029.2	19.0	24.0	-110.43	1,176.7	-152.7	374.3	349.6	24.67	15.168		
7,200.0	7,031.3	7,311.8	7,130.9	19.2	24.1	-114.10	1,176.7	-85.8	384.4	358.9	25.46	15.099		
7,300.0	7,086.8	7,440.2	7,224.1	19.5	24.1	-117.22	1,176.7	2.2	394.3	368.0	26.32	14.979		
7,400.0	7,130.2	7,574.8	7,303.3	19.9	24.4	-119.69	1,176.7	110.8	403.0	375.6	27.50	14.658		
7,500.0	7,160.6	7,714.7	7,362.7	20.7	24.9	-121.44	1,176.7	237.2	409.7	380.7	28.97	14.144		
7,600.0	7,177.4	7,858.2	7,396.9	21.6	25.8	-122.39	1,176.7	376.3	413.5	382.6	30.91	13.379		
7,700.0	7,181.0	7,989.5	7,404.0	22.9	27.0	-122.57	1,176.7	507.3	414.2	380.7	33.52	12.360		
7,800.0	7,181.0	8,089.5	7,404.0	24.4	28.1	-122.57	1,176.7	607.3	414.3	377.4	36.83	11.247		
7,900.0	7,181.0	8,189.5	7,404.0	26.1	29.4	-122.57	1,176.8	707.3	414.3	374.0	40.31	10.278		
8,000.0	7,181.0	8,289.5	7,404.0	28.0	31.0	-122.57	1,176.8	807.3	414.3	370.4	43.90	9.436		
8,100.0	7,181.0	8,389.5	7,404.0	29.9	32.6	-122.57	1,176.8	907.3	414.3	366.7	47.60	8.704		
8,200.0	7,181.0	8,489.5	7,404.0	32.0	34.4	-122.56	1,176.8	1,007.3	414.3	362.9	51.36	8.066		
8,300.0	7,181.0	8,589.5	7,404.0	34.1	36.3	-122.56	1,176.8	1,107.3	414.3	359.1	55.19	7.508		
8,400.0	7,181.0	8,689.5	7,404.0	36.3	38.3	-122.56	1,176.8	1,207.3	414.3	355.3	59.06	7.015		
8,500.0	7,181.0	8,789.5	7,404.0	38.5	40.4	-122.56	1,176.8	1,307.3	414.4	351.4	62.97	6.580		
8,600.0	7,181.0	8,889.5	7,404.0	40.7	42.5	-122.56	1,176.8	1,407.3	414.4	347.4	66.92	6.192		
8,700.0	7,181.0	8,989.5	7,404.0	43.0	44.6	-122.56	1,176.8	1,507.3	414.4	343.5	70.89	5.845		
8,800.0	7,181.0	9,089.5	7,404.0	45.3	46.8	-122.56	1,176.8	1,607.3	414.4	339.5	74.88	5.534		
8,900.0	7,181.0	9,189.5	7,404.0	47.6	49.0	-122.56	1,176.8	1,707.3	414.4	335.5	78.90	5.253		
9,000.0	7,181.0	9,289.5	7,404.0	49.9	51.3	-122.55	1,176.8	1,807.3	414.4	331.5	82.92	4.998		
9,100.0	7,181.0	9,389.5	7,404.0	52.2	53.6	-122.55	1,176.9	1,907.3	414.4	327.5	86.97	4.765		
9,200.0	7,181.0	9,489.5	7,404.0	54.6	55.8	-122.55	1,176.9	2,007.3	414.4	323.4	91.02	4.553		
9,300.0	7,181.0	9,589.5	7,404.0	56.9	58.2	-122.55	1,176.9	2,107.3	414.5	319.4	95.09	4.359		
9,400.0	7,181.0	9,689.5	7,404.0	59.3	60.5	-122.55	1,176.9	2,207.3	414.5	315.3	99.16	4.180		
9,500.0	7,181.0	9,789.5	7,404.0	61.7	62.8	-122.55	1,176.9	2,307.3	414.5	311.2	103.25	4.014		
9,600.0	7,181.0	9,889.5	7,404.0	64.1	65.2	-122.55	1,176.9	2,407.3	414.5	307.2	107.34	3.861		
9,700.0	7,181.0	9,989.5	7,404.0	66.5	67.5	-122.55	1,176.9	2,507.3	414.5	303.1	111.44	3.720		
9,800.0	7,181.0	10,089.5	7,404.0	68.9	69.9	-122.55	1,176.9	2,607.3	414.5	299.0	115.54	3.588		
9,900.0	7,181.0	10,189.5	7,404.0	71.3	72.2	-122.54	1,176.9	2,707.3	414.5	294.9	119.65	3.465		
10,000.0	7,181.0	10,289.5	7,404.0	73.7	74.6	-122.54	1,176.9	2,807.3	414.5	290.8	123.76	3.349		
10,100.0	7,181.0	10,389.5	7,404.0	76.1	77.0	-122.54	1,176.9	2,907.3	414.6	286.7	127.88	3.242		
10,200.0	7,181.0	10,489.5	7,404.0	78.5	79.4	-122.54	1,176.9	3,007.3	414.6	282.6	132.00	3.141		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3A-16H - Hz - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-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)			
10,300.0	7,181.0	10,589.5	7,404.0	80.9	81.8	-122.54	1,176.9	3,107.3	414.6	278.5	136.13	3.046	
10,400.0	7,181.0	10,689.5	7,404.0	83.4	84.2	-122.54	1,177.0	3,207.3	414.6	274.3	140.26	2.956	
10,500.0	7,181.0	10,789.5	7,404.0	85.8	86.6	-122.54	1,177.0	3,307.3	414.6	270.2	144.39	2.871	
10,600.0	7,181.0	10,889.5	7,404.0	88.2	89.0	-122.54	1,177.0	3,407.3	414.6	266.1	148.52	2.792	
10,700.0	7,181.0	10,989.5	7,404.0	90.7	91.4	-122.54	1,177.0	3,507.3	414.6	262.0	152.66	2.716	
10,800.0	7,181.0	11,089.5	7,404.0	93.1	93.8	-122.53	1,177.0	3,607.3	414.6	257.8	156.80	2.644	
10,900.0	7,181.0	11,189.5	7,404.0	95.5	96.3	-122.53	1,177.0	3,707.3	414.7	253.7	160.94	2.576	
11,000.0	7,181.0	11,289.5	7,404.0	98.0	98.7	-122.53	1,177.0	3,807.3	414.7	249.6	165.08	2.512	
11,100.0	7,181.0	11,389.5	7,404.0	100.4	101.1	-122.53	1,177.0	3,907.3	414.7	245.5	169.23	2.450	
11,200.0	7,181.0	11,489.5	7,404.0	102.8	103.5	-122.53	1,177.0	4,007.3	414.7	241.3	173.38	2.392	
11,300.0	7,181.0	11,589.5	7,404.0	105.3	106.0	-122.53	1,177.0	4,107.3	414.7	237.2	177.53	2.336	
11,400.0	7,181.0	11,689.5	7,404.0	107.7	108.4	-122.53	1,177.0	4,207.3	414.7	233.0	181.68	2.283	
11,500.0	7,181.0	11,789.5	7,404.0	110.2	110.8	-122.53	1,177.0	4,307.3	414.7	228.9	185.83	2.232	
11,600.0	7,181.0	11,889.5	7,404.0	112.6	113.3	-122.53	1,177.1	4,407.3	414.7	224.8	189.98	2.183	
11,700.0	7,181.0	11,989.5	7,404.0	115.1	115.7	-122.52	1,177.1	4,507.3	414.8	220.6	194.14	2.136	
11,709.5	7,181.0	11,999.0	7,404.0	115.3	115.9	-122.52	1,177.1	4,516.8	414.8	220.2	194.53	2.132	
11,724.6	7,181.0	12,011.3	7,404.0	115.7	116.2	-122.52	1,177.1	4,529.1	414.8	219.7	195.10	2.126 SF	

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3C-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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	180.00	-10.9	0.0	10.9					
100.0	100.0	100.0	100.0	0.2	0.2	180.00	-10.9	0.0	10.9	10.6	0.30	35.986		
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-10.9	0.0	10.9	10.3	0.65	16.742		
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-10.9	0.0	10.9	9.9	1.00	10.909		
400.0	400.0	400.0	400.0	0.7	0.7	180.00	-10.9	0.0	10.9	9.6	1.35	8.090 CC, ES		
500.0	500.0	500.0	500.0	0.9	0.8	-165.17	-10.9	0.0	11.8	10.1	1.70	6.924		
600.0	600.0	600.0	600.0	1.0	1.0	-167.85	-10.9	0.0	14.3	12.3	2.05	6.989		
700.0	699.9	700.2	700.2	1.2	1.2	-169.74	-10.1	-0.4	17.8	15.4	2.40	7.418		
800.0	799.7	800.4	800.4	1.4	1.4	-170.22	-7.8	-1.5	21.3	18.6	2.75	7.768		
900.0	899.4	900.7	900.6	1.6	1.6	-169.88	-3.8	-3.5	25.0	21.9	3.10	8.061		
1,000.0	998.9	1,001.1	1,000.8	1.8	1.8	-169.03	1.7	-6.2	28.7	25.2	3.45	8.313		
1,100.0	1,098.3	1,101.5	1,100.9	2.1	2.0	-167.85	8.8	-9.6	32.4	28.6	3.80	8.532		
1,200.0	1,197.4	1,202.0	1,200.9	2.3	2.2	-166.46	17.5	-13.9	36.3	32.2	4.16	8.723		
1,300.0	1,296.3	1,302.5	1,300.8	2.6	2.4	-164.92	27.7	-18.9	40.3	35.8	4.54	8.890		
1,400.0	1,394.9	1,403.1	1,400.5	2.9	2.7	-163.29	39.6	-24.6	44.4	39.5	4.92	9.030		
1,500.0	1,493.3	1,503.7	1,500.0	3.3	2.9	-161.60	53.0	-31.2	48.7	43.4	5.33	9.143		
1,600.0	1,591.2	1,604.4	1,599.2	3.6	3.2	-159.87	68.0	-38.5	53.1	47.4	5.76	9.225		
1,700.0	1,689.1	1,704.3	1,697.6	4.0	3.6	-158.34	83.6	-46.1	57.7	51.5	6.21	9.287		
1,800.0	1,786.9	1,804.1	1,796.0	4.4	3.9	-157.04	99.2	-53.7	62.3	55.6	6.68	9.325		
1,900.0	1,884.7	1,904.0	1,894.3	4.8	4.2	-155.91	114.8	-61.3	67.0	59.8	7.16	9.346		
2,000.0	1,982.5	2,003.9	1,992.7	5.2	4.5	-154.93	130.3	-68.9	71.6	64.0	7.66	9.354		
2,100.0	2,080.3	2,103.8	2,091.1	5.5	4.9	-154.08	145.9	-76.5	76.3	68.1	8.16	9.353		
2,200.0	2,178.1	2,203.7	2,189.4	5.9	5.2	-153.32	161.5	-84.1	81.0	72.3	8.67	9.345		
2,300.0	2,275.9	2,303.6	2,287.8	6.3	5.5	-152.64	177.1	-91.7	85.7	76.5	9.18	9.333		
2,400.0	2,373.8	2,403.4	2,386.2	6.7	5.9	-152.03	192.7	-99.3	90.4	80.7	9.70	9.318		
2,500.0	2,471.6	2,503.3	2,484.5	7.1	6.2	-151.49	208.3	-106.9	95.2	84.9	10.23	9.300		
2,600.0	2,569.4	2,603.2	2,582.9	7.5	6.5	-151.00	223.9	-114.5	99.9	89.1	10.76	9.281		
2,700.0	2,667.2	2,703.1	2,681.3	7.9	6.9	-150.55	239.5	-122.1	104.6	93.3	11.30	9.261		
2,800.0	2,765.0	2,803.0	2,779.6	8.3	7.2	-150.14	255.1	-129.7	109.4	97.5	11.84	9.241		
2,900.0	2,862.8	2,902.9	2,878.0	8.7	7.6	-149.76	270.7	-137.3	114.1	101.8	12.38	9.221		
3,000.0	2,960.7	3,002.8	2,976.4	9.1	7.9	-149.42	286.2	-144.9	118.9	106.0	12.92	9.201		
3,100.0	3,058.5	3,102.6	3,074.7	9.5	8.2	-149.10	301.8	-152.5	123.7	110.2	13.47	9.181		
3,200.0	3,156.3	3,202.5	3,173.1	9.9	8.6	-148.80	317.4	-160.1	128.4	114.4	14.02	9.162		
3,300.0	3,254.1	3,302.4	3,271.5	10.3	8.9	-148.53	333.0	-167.7	133.2	118.6	14.57	9.144		
3,400.0	3,351.9	3,402.3	3,369.8	10.7	9.3	-148.27	348.6	-175.4	138.0	122.8	15.12	9.125		
3,500.0	3,449.7	3,502.2	3,468.2	11.1	9.6	-148.03	364.2	-183.0	142.7	127.1	15.67	9.108		
3,600.0	3,547.5	3,602.1	3,566.6	11.5	10.0	-147.81	379.8	-190.6	147.5	131.3	16.23	9.091		
3,700.0	3,645.4	3,701.9	3,664.9	11.9	10.3	-147.60	395.4	-198.2	152.3	135.5	16.78	9.074		
3,800.0	3,743.2	3,800.0	3,761.6	12.3	10.6	-147.51	410.3	-205.4	157.4	140.1	17.31	9.093		
3,900.0	3,841.0	3,898.2	3,858.6	12.7	10.9	-147.81	423.8	-212.0	163.7	146.0	17.76	9.220		
4,000.0	3,938.8	3,995.7	3,955.2	13.1	11.2	-148.46	435.7	-217.9	171.3	153.2	18.12	9.453		
4,100.0	4,036.6	4,093.0	4,051.8	13.5	11.5	-149.40	446.2	-223.0	180.2	161.8	18.42	9.786		
4,200.0	4,134.4	4,190.0	4,148.3	13.9	11.7	-150.56	455.1	-227.3	190.5	171.8	18.65	10.216		
4,300.0	4,232.2	4,286.6	4,244.6	14.3	11.9	-151.89	462.6	-230.9	202.1	183.3	18.82	10.740		
4,400.0	4,330.1	4,382.8	4,340.6	14.7	12.1	-153.34	468.5	-233.8	215.2	196.3	18.95	11.356		
4,500.0	4,427.9	4,478.6	4,436.2	15.1	12.3	-154.85	473.0	-236.0	229.8	210.7	19.06	12.060		
4,600.0	4,525.8	4,573.8	4,531.4	15.5	12.4	-156.39	476.1	-237.5	245.6	226.4	19.14	12.830		
4,700.0	4,624.0	4,668.8	4,626.3	15.8	12.5	-157.83	477.7	-238.3	261.4	242.2	19.23	13.592		
4,800.0	4,722.5	4,765.0	4,722.5	16.2	12.6	-159.15	478.0	-238.5	277.1	257.8	19.34	14.329		
4,900.0	4,821.3	4,863.8	4,821.3	16.5	12.7	-160.28	478.0	-238.5	291.6	272.1	19.48	14.968		
5,000.0	4,920.3	4,962.8	4,920.3	16.8	12.9	-161.19	478.0	-238.5	304.5	284.9	19.66	15.491		
5,100.0	5,019.6	5,062.1	5,019.6	17.0	13.0	-161.92	478.0	-238.5	315.9	296.0	19.87	15.901		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3C-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-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		
5,200.0	5,119.1	5,161.6	5,119.1	17.3	13.1	-162.51	478.0	-238.5	325.6	305.5	20.09	16.205		
5,300.0	5,218.7	5,261.2	5,218.7	17.5	13.2	-162.97	478.0	-238.5	333.7	313.4	20.34	16.408		
5,400.0	5,318.5	5,361.0	5,318.5	17.6	13.3	-163.32	478.0	-238.5	340.2	319.6	20.60	16.514		
5,500.0	5,418.4	5,460.9	5,418.4	17.8	13.5	-163.58	478.0	-238.5	345.0	324.1	20.87	16.529		
5,600.0	5,518.3	5,560.8	5,518.3	17.9	13.6	-163.74	478.0	-238.5	348.1	327.0	21.15	16.457		
5,700.0	5,618.3	5,660.8	5,618.3	18.0	13.7	-163.81	478.0	-238.5	349.6	328.2	21.44	16.302		
5,800.0	5,718.3	5,760.8	5,718.3	18.1	13.8	-179.82	478.0	-238.5	349.7	318.9	30.81	11.350		
5,900.0	5,818.3	5,860.8	5,818.3	18.2	14.0	-179.82	478.0	-238.5	349.7	318.7	31.04	11.265		
6,000.0	5,918.3	5,960.8	5,918.3	18.3	14.1	-179.82	478.0	-238.5	349.7	318.4	31.28	11.180		
6,100.0	6,018.3	6,060.8	6,018.3	18.4	14.2	-179.82	478.0	-238.5	349.7	318.2	31.52	11.096		
6,200.0	6,118.3	6,160.8	6,118.3	18.5	14.3	-179.82	478.0	-238.5	349.7	318.0	31.76	11.012		
6,300.0	6,218.3	6,260.8	6,218.3	18.6	14.5	-179.82	478.0	-238.5	349.7	317.7	32.00	10.928		
6,400.0	6,318.3	6,360.8	6,318.3	18.7	14.6	-179.82	478.0	-238.5	349.7	317.5	32.24	10.846		
6,500.0	6,418.3	6,460.8	6,418.3	18.8	14.7	-179.82	478.0	-238.5	349.7	317.2	32.49	10.764		
6,542.2	6,460.5	6,503.0	6,460.5	18.9	14.8	90.29	478.0	-238.5	349.7	325.5	24.18	14.462		
6,600.0	6,518.3	6,560.8	6,518.3	18.9	14.9	90.51	478.0	-238.5	349.7	325.3	24.39	14.340		
6,700.0	6,617.1	6,659.6	6,617.1	19.0	15.0	92.80	478.0	-238.5	350.1	325.2	24.93	14.044		
6,800.0	6,713.1	6,757.2	6,714.7	19.0	15.1	96.98	478.0	-237.9	352.6	327.0	25.63	13.759		
6,900.0	6,804.1	6,861.2	6,817.9	19.0	15.2	101.68	478.0	-226.5	357.9	331.7	26.12	13.702		
7,000.0	6,888.6	6,970.4	6,923.5	19.0	15.2	106.15	478.0	-198.6	365.4	339.2	26.22	13.936		
7,100.0	6,964.8	7,085.7	7,028.8	19.0	15.2	110.28	478.0	-152.1	374.6	348.7	25.98	14.420		
7,200.0	7,031.3	7,207.4	7,130.4	19.2	15.2	113.97	478.0	-85.3	384.7	359.1	25.59	15.031		
7,300.0	7,086.8	7,335.6	7,223.6	19.5	15.4	117.10	478.0	2.4	394.6	369.2	25.46	15.498		
7,400.0	7,130.2	7,470.0	7,302.8	19.9	15.8	119.59	478.0	110.8	403.4	377.4	26.03	15.496		
7,500.0	7,160.6	7,609.7	7,362.3	20.7	16.8	121.35	477.9	237.0	410.1	382.3	27.79	14.757		
7,600.0	7,177.4	7,753.2	7,396.7	21.6	18.6	122.33	477.9	376.0	414.0	383.1	30.90	13.398		
7,700.0	7,181.0	7,884.9	7,404.0	22.9	20.7	122.52	477.9	507.3	414.8	380.0	34.73	11.941		
7,800.0	7,181.0	7,984.9	7,404.0	24.4	22.5	122.52	477.9	607.3	414.8	376.8	37.95	10.930		
7,900.0	7,181.0	8,084.9	7,404.0	26.1	24.5	122.52	477.9	707.3	414.8	373.4	41.33	10.036		
8,000.0	7,181.0	8,184.9	7,404.0	28.0	26.5	122.52	477.9	807.3	414.8	369.9	44.84	9.249		
8,100.0	7,181.0	8,284.9	7,404.0	29.9	28.6	122.52	477.9	907.3	414.8	366.3	48.46	8.558		
8,200.0	7,181.0	8,384.9	7,404.0	32.0	30.8	122.52	477.9	1,007.3	414.8	362.6	52.17	7.951		
8,300.0	7,181.0	8,484.9	7,404.0	34.1	33.0	122.52	477.9	1,107.3	414.8	358.8	55.94	7.415		
8,400.0	7,181.0	8,584.9	7,404.0	36.3	35.2	122.52	477.9	1,207.3	414.8	355.0	59.76	6.940		
8,500.0	7,181.0	8,684.9	7,404.0	38.5	37.5	122.52	477.9	1,307.3	414.8	351.1	63.63	6.518		
8,600.0	7,181.0	8,784.9	7,404.0	40.7	39.8	122.52	477.9	1,407.3	414.8	347.2	67.54	6.141		
8,700.0	7,181.0	8,884.9	7,404.0	43.0	42.1	122.52	477.9	1,507.3	414.8	343.3	71.48	5.803		
8,800.0	7,181.0	8,984.9	7,404.0	45.3	44.5	122.52	477.8	1,607.3	414.8	339.3	75.44	5.498		
8,900.0	7,181.0	9,084.9	7,404.0	47.6	46.8	122.52	477.8	1,707.3	414.8	335.3	79.43	5.222		
9,000.0	7,181.0	9,184.9	7,404.0	49.9	49.2	122.52	477.8	1,807.3	414.8	331.3	83.43	4.971		
9,100.0	7,181.0	9,284.9	7,404.0	52.2	51.6	122.52	477.8	1,907.3	414.8	327.3	87.45	4.743		
9,200.0	7,181.0	9,384.9	7,404.0	54.6	53.9	122.52	477.8	2,007.3	414.8	323.3	91.48	4.534		
9,300.0	7,181.0	9,484.9	7,404.0	56.9	56.3	122.52	477.8	2,107.3	414.8	319.2	95.53	4.342		
9,400.0	7,181.0	9,584.9	7,404.0	59.3	58.7	122.52	477.8	2,207.3	414.8	315.2	99.59	4.165		
9,500.0	7,181.0	9,684.9	7,404.0	61.7	61.1	122.52	477.8	2,307.3	414.8	311.1	103.66	4.001		
9,600.0	7,181.0	9,784.9	7,404.0	64.1	63.5	122.52	477.8	2,407.3	414.8	307.0	107.73	3.850		
9,700.0	7,181.0	9,884.9	7,404.0	66.5	66.0	122.52	477.8	2,507.3	414.8	302.9	111.82	3.709		
9,800.0	7,181.0	9,984.9	7,404.0	68.9	68.4	122.52	477.8	2,607.3	414.8	298.9	115.91	3.578		
9,900.0	7,181.0	10,084.9	7,404.0	71.3	70.8	122.52	477.8	2,707.3	414.8	294.8	120.00	3.456		
10,000.0	7,181.0	10,184.9	7,404.0	73.7	73.2	122.52	477.8	2,807.3	414.8	290.7	124.10	3.342		
10,100.0	7,181.0	10,284.9	7,404.0	76.1	75.7	122.52	477.8	2,907.3	414.8	286.6	128.21	3.235		
10,200.0	7,181.0	10,384.9	7,404.0	78.5	78.1	122.52	477.7	3,007.3	414.8	282.4	132.32	3.135		

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

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3C-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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	7,181.0	10,484.9	7,404.0	80.9	80.5	122.52	477.7	3,107.3	414.8	278.3	136.44	3.040		
10,400.0	7,181.0	10,584.9	7,404.0	83.4	83.0	122.52	477.7	3,207.3	414.8	274.2	140.55	2.951		
10,500.0	7,181.0	10,684.9	7,404.0	85.8	85.4	122.52	477.7	3,307.3	414.8	270.1	144.68	2.867		
10,600.0	7,181.0	10,784.9	7,404.0	88.2	87.8	122.52	477.7	3,407.3	414.8	266.0	148.80	2.787		
10,700.0	7,181.0	10,884.9	7,404.0	90.7	90.3	122.52	477.7	3,507.3	414.8	261.8	152.93	2.712		
10,800.0	7,181.0	10,984.9	7,404.0	93.1	92.7	122.52	477.7	3,607.3	414.8	257.7	157.06	2.641		
10,900.0	7,181.0	11,084.9	7,404.0	95.5	95.2	122.52	477.7	3,707.3	414.8	253.6	161.19	2.573		
11,000.0	7,181.0	11,184.9	7,404.0	98.0	97.6	122.52	477.7	3,807.3	414.8	249.4	165.33	2.509		
11,100.0	7,181.0	11,284.9	7,404.0	100.4	100.1	122.52	477.7	3,907.3	414.8	245.3	169.47	2.447		
11,200.0	7,181.0	11,384.9	7,404.0	102.8	102.5	122.52	477.7	4,007.3	414.8	241.2	173.61	2.389		
11,300.0	7,181.0	11,484.9	7,404.0	105.3	105.0	122.52	477.7	4,107.3	414.8	237.0	177.75	2.333		
11,400.0	7,181.0	11,584.9	7,404.0	107.7	107.4	122.52	477.7	4,207.3	414.8	232.9	181.89	2.280		
11,500.0	7,181.0	11,684.9	7,404.0	110.2	109.9	122.52	477.7	4,307.3	414.8	228.7	186.03	2.229		
11,600.0	7,181.0	11,784.9	7,404.0	112.6	112.3	122.52	477.6	4,407.3	414.8	224.6	190.18	2.181		
11,700.0	7,181.0	11,884.9	7,404.0	115.1	114.8	122.52	477.6	4,507.3	414.8	220.4	194.33	2.134		
11,724.6	7,181.0	11,909.5	7,404.0	115.7	115.4	122.52	477.6	4,531.9	414.8	219.4	195.35	2.123 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3D-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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	-180.00	-18.2	0.0	18.2					
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-18.2	0.0	18.2	17.9	0.30	59.977		
193.4	193.4	193.4	193.4	0.3	0.3	-180.00	-18.2	0.0	18.2	17.6	0.63	28.921		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-18.2	0.0	18.2	17.6	0.65	27.904		
300.0	300.0	300.0	300.0	0.5	0.5	-177.27	-18.1	-0.9	18.1	17.1	1.00	18.033		
390.3	390.3	390.4	390.3	0.7	0.7	-170.00	-17.7	-3.1	17.9	16.6	1.32	13.564 CC		
400.0	400.0	400.0	400.0	0.7	0.7	-168.95	-17.6	-3.4	17.9	16.6	1.36	13.225 ES		
500.0	500.0	499.9	499.8	0.9	0.9	-141.05	-16.9	-7.7	19.2	17.5	1.72	11.180		
600.0	600.0	599.6	599.3	1.0	1.1	-130.27	-15.8	-13.7	23.0	20.9	2.09	11.027 SF		
700.0	699.9	699.2	698.5	1.2	1.3	-122.67	-14.4	-21.4	29.2	26.8	2.47	11.853		
800.0	799.7	799.0	797.9	1.4	1.5	-117.73	-12.2	-30.4	37.0	34.1	2.87	12.899		
900.0	899.4	898.7	897.1	1.6	1.8	-114.31	-8.5	-40.4	45.3	42.0	3.29	13.786		
1,000.0	998.9	998.4	996.0	1.8	2.0	-111.82	-3.4	-51.2	54.3	50.5	3.74	14.508		
1,100.0	1,098.3	1,098.0	1,094.7	2.1	2.3	-109.93	3.2	-63.0	63.8	59.5	4.23	15.076		
1,200.0	1,197.4	1,197.6	1,193.1	2.3	2.6	-108.44	11.3	-75.7	73.8	69.0	4.76	15.505		
1,300.0	1,296.3	1,297.0	1,291.2	2.6	2.9	-107.24	20.8	-89.2	84.3	79.0	5.33	15.817		
1,400.0	1,394.9	1,396.4	1,389.1	2.9	3.2	-106.82	30.9	-103.2	95.3	89.4	5.93	16.065		
1,500.0	1,493.3	1,495.7	1,486.9	3.3	3.6	-107.36	41.1	-117.1	106.9	100.3	6.57	16.259		
1,600.0	1,591.2	1,595.0	1,584.6	3.6	3.9	-108.58	51.2	-131.1	119.0	111.7	7.24	16.424		
1,700.0	1,689.1	1,694.1	1,682.3	4.0	4.2	-110.02	61.3	-145.0	131.4	123.5	7.92	16.582		
1,800.0	1,786.9	1,793.3	1,780.0	4.4	4.6	-111.22	71.5	-158.9	143.9	135.3	8.61	16.716		
1,900.0	1,884.7	1,892.9	1,878.0	4.8	4.9	-112.30	81.5	-172.7	156.4	147.1	9.29	16.834		
2,000.0	1,982.5	1,992.7	1,976.7	5.2	5.2	-113.74	90.7	-185.4	168.6	158.6	9.95	16.947		
2,100.0	2,080.3	2,092.5	2,075.5	5.5	5.5	-115.52	98.8	-196.6	180.5	169.9	10.58	17.067		
2,200.0	2,178.1	2,192.2	2,174.5	5.9	5.8	-117.59	106.0	-206.4	192.3	181.1	11.17	17.214		
2,300.0	2,275.9	2,291.7	2,273.4	6.3	6.0	-119.90	112.1	-214.9	204.0	192.3	11.72	17.406		
2,400.0	2,373.8	2,391.0	2,372.3	6.7	6.2	-122.40	117.2	-221.9	215.9	203.7	12.23	17.661		
2,500.0	2,471.6	2,490.0	2,471.0	7.1	6.4	-125.07	121.2	-227.5	228.1	215.4	12.68	17.991		
2,600.0	2,569.4	2,588.6	2,569.5	7.5	6.6	-127.86	124.3	-231.7	240.7	227.6	13.07	18.412		
2,700.0	2,667.2	2,686.8	2,667.6	7.9	6.7	-130.74	126.4	-234.5	253.9	240.5	13.41	18.933		
2,800.0	2,765.0	2,784.5	2,765.3	8.3	6.9	-133.68	127.4	-236.0	267.9	254.2	13.69	19.565		
2,900.0	2,862.8	2,882.0	2,862.8	8.7	7.0	-136.63	127.6	-236.2	282.8	268.9	13.93	20.298		
3,000.0	2,960.7	2,979.8	2,960.7	9.1	7.1	-139.35	127.6	-236.2	298.4	284.2	14.16	21.081		
3,100.0	3,058.5	3,077.6	3,058.5	9.5	7.2	-141.80	127.6	-236.2	314.6	300.2	14.37	21.888		
3,200.0	3,156.3	3,175.4	3,156.3	9.9	7.4	-144.00	127.6	-236.2	331.3	316.7	14.59	22.709		
3,300.0	3,254.1	3,273.3	3,254.1	10.3	7.5	-146.00	127.6	-236.2	348.5	333.7	14.81	23.534		
3,400.0	3,351.9	3,371.1	3,351.9	10.7	7.6	-147.81	127.6	-236.2	366.0	351.0	15.03	24.355		
3,500.0	3,449.7	3,468.9	3,449.7	11.1	7.8	-149.45	127.6	-236.2	383.9	368.6	15.25	25.167		
3,600.0	3,547.5	3,566.7	3,547.5	11.5	7.9	-150.95	127.6	-236.2	402.0	386.5	15.48	25.966		
3,700.0	3,645.4	3,664.5	3,645.4	11.9	8.0	-152.32	127.6	-236.2	420.4	404.7	15.72	26.748		
3,800.0	3,743.2	3,762.3	3,743.2	12.3	8.2	-153.58	127.6	-236.2	439.0	423.0	15.96	27.512		
3,900.0	3,841.0	3,860.1	3,841.0	12.7	8.3	-154.73	127.6	-236.2	457.8	441.6	16.20	28.256		
4,000.0	3,938.8	3,958.0	3,938.8	13.1	8.4	-155.79	127.6	-236.2	476.7	460.3	16.45	28.979		
4,100.0	4,036.6	4,055.8	4,036.6	13.5	8.6	-156.77	127.6	-236.2	495.8	479.1	16.71	29.681		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design		S16-T3N-R68W (State) - State 3E-16H - Hz - Plan #1											Offset Site Error: 0.0 ft	
Survey Program: 0-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	-180.00	-29.1	0.0	29.1					
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-29.1	0.0	29.1	28.8	0.30	95.963		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-29.1	0.0	29.1	28.5	0.65	44.646		
300.0	300.0	300.0	300.0	0.5	0.5	-180.00	-29.1	0.0	29.1	28.1	1.00	29.090 CC, ES		
400.0	400.0	399.7	399.7	0.7	0.7	-178.70	-29.7	-0.7	29.7	28.3	1.35	21.990		
500.0	500.0	499.3	499.2	0.9	0.9	-159.63	-31.3	-2.7	32.3	30.6	1.70	18.967		
600.0	600.0	598.7	598.5	1.0	1.0	-156.21	-34.0	-6.0	37.8	35.7	2.05	18.386 SF		
700.0	699.9	697.7	697.4	1.2	1.2	-153.21	-37.8	-10.7	46.2	43.8	2.41	19.180		
800.0	799.7	796.4	795.7	1.4	1.4	-150.90	-42.7	-16.7	57.7	54.9	2.77	20.798		
900.0	899.4	894.4	893.4	1.6	1.7	-149.22	-48.5	-23.9	72.0	68.9	3.14	22.922		
1,000.0	998.9	991.8	990.1	1.8	1.9	-148.02	-55.4	-32.4	89.2	85.7	3.52	25.356		
1,100.0	1,098.3	1,088.4	1,085.9	2.1	2.2	-147.16	-63.2	-42.1	109.3	105.4	3.91	27.972		
1,200.0	1,197.4	1,184.1	1,180.6	2.3	2.4	-146.54	-72.0	-52.9	132.1	127.8	4.31	30.683		
1,300.0	1,296.3	1,278.8	1,274.0	2.6	2.7	-146.07	-81.6	-64.8	157.8	153.0	4.72	33.430		
1,400.0	1,394.9	1,374.3	1,368.1	2.9	3.0	-145.78	-92.0	-77.7	185.7	180.5	5.14	36.096		
1,500.0	1,493.3	1,469.9	1,462.2	3.3	3.4	-145.79	-102.5	-90.6	215.0	209.4	5.58	38.532		
1,600.0	1,591.2	1,565.0	1,555.9	3.6	3.7	-145.98	-112.9	-103.4	245.8	239.7	6.03	40.780		
1,700.0	1,689.1	1,659.9	1,649.4	4.0	4.0	-146.38	-123.3	-116.2	277.2	270.7	6.49	42.729		
1,800.0	1,786.9	1,754.9	1,742.9	4.4	4.3	-146.70	-133.6	-129.0	308.6	301.7	6.95	44.399		
1,900.0	1,884.7	1,849.8	1,836.4	4.8	4.6	-146.95	-144.0	-141.8	340.1	332.6	7.42	45.843		
2,000.0	1,982.5	1,944.7	1,929.8	5.2	5.0	-147.17	-154.4	-154.6	371.5	363.6	7.89	47.102		
2,100.0	2,080.3	2,039.6	2,023.3	5.5	5.3	-147.35	-164.7	-167.5	403.0	394.6	8.36	48.209		
2,200.0	2,178.1	2,139.4	2,121.7	5.9	5.6	-147.55	-175.3	-180.5	434.0	425.2	8.84	49.115		
2,300.0	2,275.9	2,241.4	2,222.5	6.3	5.9	-147.87	-185.0	-192.5	463.7	454.4	9.31	49.811		
2,400.0	2,373.8	2,344.1	2,324.3	6.7	6.2	-148.27	-193.6	-203.1	492.0	482.3	9.77	50.343		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3F-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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	
0.0	0.0	0.0	0.0	0.0	0.0	-180.00	-40.1	0.0	40.1					
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-40.1	0.0	40.1	39.8	0.30	131.949		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-40.1	0.0	40.1	39.4	0.65	61.388		
300.0	300.0	300.0	300.0	0.5	0.5	-180.00	-40.1	0.0	40.1	39.1	1.00	39.999		
400.0	400.0	400.0	400.0	0.7	0.7	-180.00	-40.1	0.0	40.1	38.7	1.35	29.663 CC, ES		
500.0	500.0	499.3	499.3	0.9	0.8	-163.86	-40.9	-0.3	41.7	40.0	1.70	24.552		
600.0	600.0	598.5	598.5	1.0	1.0	-163.50	-43.2	-1.3	46.6	44.6	2.05	22.778 SF		
700.0	699.9	697.4	697.2	1.2	1.2	-163.05	-47.2	-3.0	54.8	52.4	2.39	22.881		
800.0	799.7	795.7	795.4	1.4	1.4	-162.59	-52.6	-5.3	66.2	63.5	2.74	24.139		
900.0	899.4	893.5	892.9	1.6	1.6	-162.19	-59.6	-8.3	80.9	77.8	3.09	26.152		
1,000.0	998.9	990.5	989.4	1.8	1.8	-161.85	-68.1	-11.9	98.7	95.3	3.44	28.679		
1,100.0	1,098.3	1,086.5	1,084.9	2.1	2.0	-161.56	-77.9	-16.1	119.8	116.0	3.79	31.563		
1,200.0	1,197.4	1,181.5	1,179.1	2.3	2.3	-161.33	-89.1	-20.8	143.9	139.8	4.15	34.700		
1,300.0	1,296.3	1,275.3	1,271.9	2.6	2.6	-161.12	-101.5	-26.1	171.2	166.7	4.50	38.017		
1,400.0	1,394.9	1,367.8	1,363.2	2.9	2.8	-160.95	-115.1	-31.9	201.5	196.6	4.86	41.457		
1,500.0	1,493.3	1,458.8	1,452.8	3.3	3.1	-160.79	-129.9	-38.1	234.8	229.5	5.22	44.982		
1,600.0	1,591.2	1,548.4	1,540.7	3.6	3.5	-160.64	-145.6	-44.8	271.0	265.4	5.58	48.561		
1,700.0	1,689.1	1,638.4	1,628.8	4.0	3.8	-160.59	-162.7	-52.0	309.2	303.2	5.96	51.905		
1,800.0	1,786.9	1,730.7	1,719.1	4.4	4.1	-160.53	-180.3	-59.5	347.6	341.3	6.34	54.828		
1,900.0	1,884.7	1,823.0	1,809.4	4.8	4.5	-160.49	-198.0	-67.0	386.0	379.3	6.73	57.401		
2,000.0	1,982.5	1,915.3	1,899.7	5.2	4.8	-160.46	-215.7	-74.5	424.5	417.4	7.11	59.681		
2,100.0	2,080.3	2,007.7	1,990.0	5.5	5.2	-160.43	-233.3	-82.0	462.9	455.4	7.50	61.713		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3G-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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	180.00	-51.0	0.0	51.0					
100.0	100.0	100.0	100.0	0.2	0.2	180.00	-51.0	0.0	51.0	50.7	0.30	167.935		
200.0	200.0	200.0	200.0	0.3	0.3	180.00	-51.0	0.0	51.0	50.3	0.65	78.130		
300.0	300.0	300.0	300.0	0.5	0.5	180.00	-51.0	0.0	51.0	50.0	1.00	50.907 CC, ES		
400.0	400.0	399.1	399.1	0.7	0.7	-179.75	-51.8	-0.2	51.8	50.5	1.35	38.415		
500.0	500.0	498.2	498.1	0.9	0.9	-163.32	-54.3	-0.9	55.2	53.5	1.70	32.520		
600.0	600.0	597.0	596.8	1.0	1.0	-163.01	-58.4	-2.0	61.9	59.8	2.04	30.269		
700.0	699.9	695.4	695.1	1.2	1.2	-162.83	-64.2	-3.5	71.9	69.5	2.39	30.068 SF		
800.0	799.7	793.2	792.6	1.4	1.4	-162.75	-71.5	-5.5	85.2	82.5	2.74	31.129		
900.0	899.4	890.2	889.2	1.6	1.7	-162.74	-80.3	-7.9	101.8	98.7	3.08	33.018		
1,000.0	998.9	986.4	984.8	1.8	1.9	-162.77	-90.7	-10.6	121.7	118.2	3.43	35.475		
1,100.0	1,098.3	1,081.6	1,079.2	2.1	2.1	-162.80	-102.4	-13.8	144.7	141.0	3.78	38.334		
1,200.0	1,197.4	1,175.6	1,172.2	2.3	2.4	-162.84	-115.5	-17.3	171.0	166.9	4.12	41.485		
1,300.0	1,296.3	1,268.3	1,263.7	2.6	2.7	-162.88	-129.8	-21.1	200.3	195.9	4.47	44.850		
1,400.0	1,394.9	1,359.5	1,353.5	2.9	3.0	-162.90	-145.4	-25.3	232.8	227.9	4.81	48.372		
1,500.0	1,493.3	1,449.2	1,441.5	3.3	3.3	-162.92	-162.0	-29.7	268.2	263.0	5.16	52.010		
1,600.0	1,591.2	1,539.2	1,529.6	3.6	3.7	-162.93	-179.8	-34.5	306.4	300.9	5.50	55.680		
1,700.0	1,689.1	1,631.2	1,619.6	4.0	4.0	-163.07	-198.3	-39.5	345.7	339.8	5.87	58.918		
1,800.0	1,786.9	1,723.2	1,709.5	4.4	4.4	-163.18	-216.8	-44.4	384.9	378.7	6.23	61.765		
1,900.0	1,884.7	1,815.1	1,799.5	4.8	4.7	-163.27	-235.2	-49.4	424.2	417.6	6.60	64.284		
2,000.0	1,982.5	1,907.1	1,889.5	5.2	5.1	-163.35	-253.7	-54.3	463.4	456.5	6.97	66.529		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S16-T3N-R68W (State) - State 3H-16H - Hz - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-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	-180.00	-58.3	0.0	58.3					
100.0	100.0	100.0	100.0	0.2	0.2	-180.00	-58.3	0.0	58.3	58.0	0.30	191.926		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-58.3	0.0	58.3	57.6	0.65	89.292 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	-179.84	-59.1	-0.2	59.1	58.1	1.00	59.129		
400.0	400.0	397.9	397.9	0.7	0.7	-179.40	-61.6	-0.6	61.7	60.3	1.35	45.780		
500.0	500.0	496.7	496.6	0.9	0.9	-162.95	-65.8	-1.4	66.8	65.1	1.69	39.400		
600.0	600.0	595.2	594.8	1.0	1.1	-162.73	-71.7	-2.6	75.2	73.2	2.04	36.849		
700.0	699.9	693.1	692.5	1.2	1.3	-162.69	-79.1	-4.0	87.0	84.6	2.39	36.448 SF		
800.0	799.7	790.4	789.3	1.4	1.5	-162.78	-88.1	-5.7	102.1	99.4	2.73	37.372		
900.0	899.4	886.8	885.2	1.6	1.7	-162.94	-98.7	-7.7	120.5	117.4	3.08	39.168		
1,000.0	998.9	982.3	979.9	1.8	2.0	-163.11	-110.7	-10.0	142.1	138.7	3.42	41.565		
1,100.0	1,098.3	1,076.7	1,073.2	2.1	2.3	-163.29	-124.0	-12.6	167.0	163.2	3.76	44.390		
1,200.0	1,197.4	1,169.8	1,165.1	2.3	2.6	-163.45	-138.7	-15.4	195.0	190.9	4.10	47.528		
1,300.0	1,296.3	1,261.5	1,255.4	2.6	2.9	-163.60	-154.6	-18.5	226.1	221.7	4.44	50.900		
1,400.0	1,394.9	1,351.7	1,343.9	2.9	3.2	-163.72	-171.6	-21.7	260.3	255.5	4.78	54.448		
1,500.0	1,493.3	1,440.3	1,430.6	3.3	3.5	-163.82	-189.6	-25.2	297.5	292.4	5.12	58.129		
1,600.0	1,591.2	1,527.1	1,515.3	3.6	3.9	-163.90	-208.6	-28.8	337.6	332.2	5.45	61.911		
1,700.0	1,689.1	1,612.5	1,598.3	4.0	4.3	-164.05	-228.4	-32.6	379.9	374.1	5.80	65.492		
1,800.0	1,786.9	1,700.0	1,682.9	4.4	4.7	-164.13	-250.0	-36.7	423.4	417.3	6.15	68.824		
1,900.0	1,884.7	1,786.2	1,766.2	4.8	5.1	-164.18	-271.9	-41.0	467.6	461.1	6.50	71.914		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3B-16H
Project:	DJ Wattenberg	TVD Reference:	WELL @ 5072.0ft (Original Well Elev)
Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3B-16H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5072.0ft (Original Well Elev)

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: State 3B-16H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.31°

