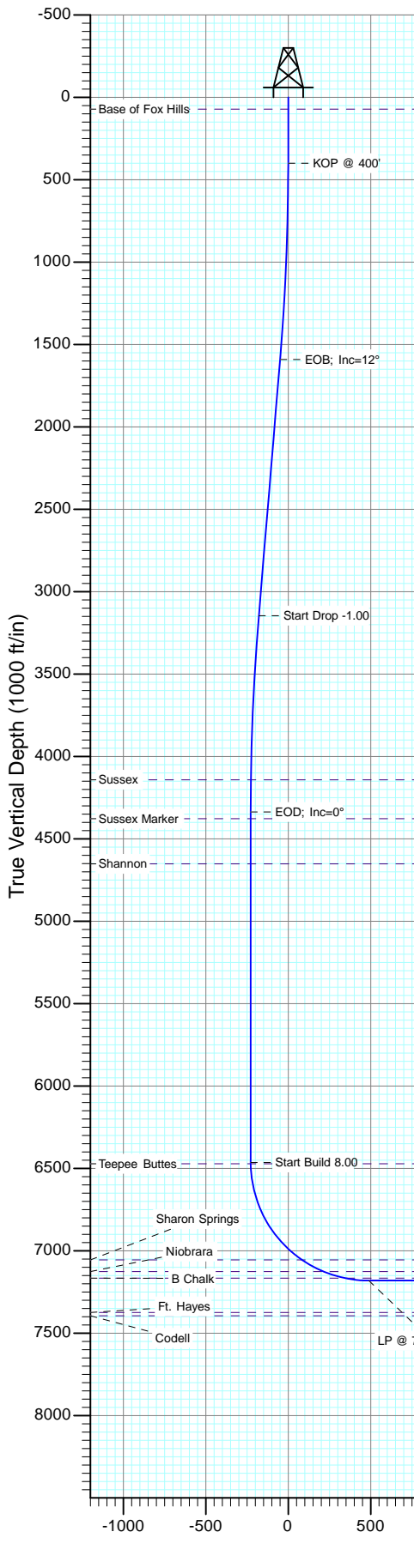
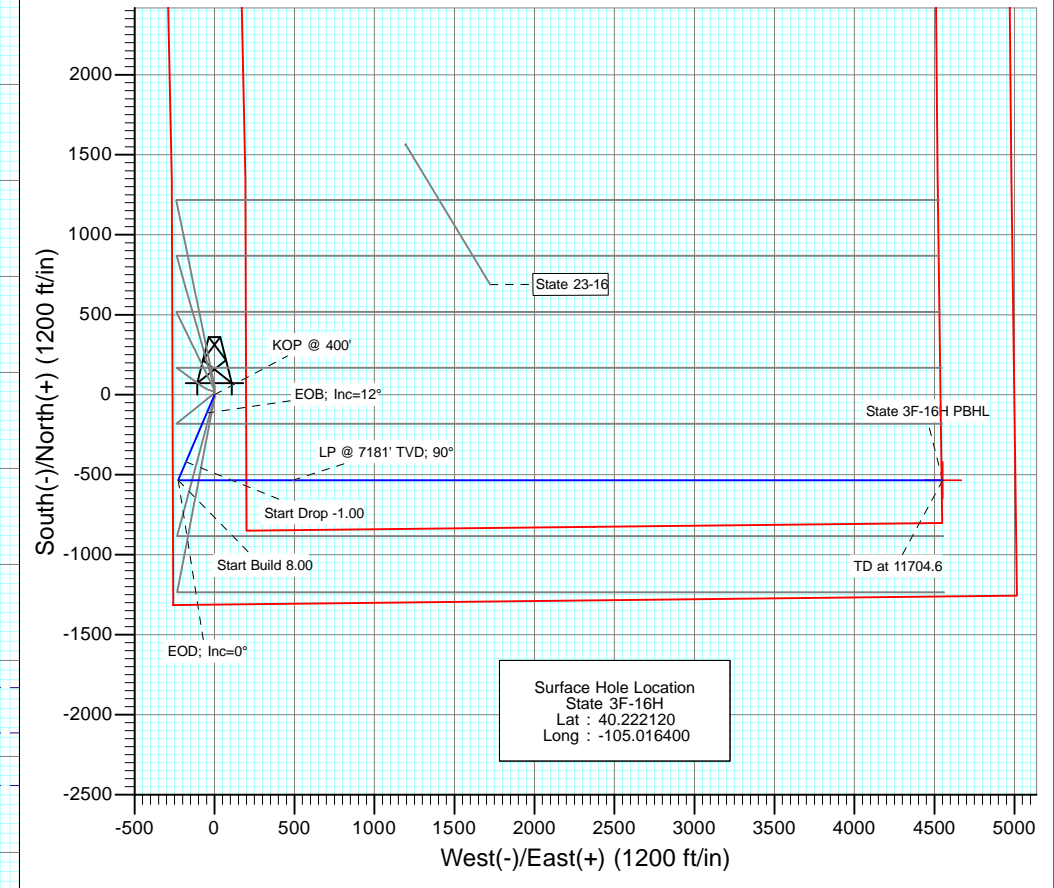




Project: DJ Wattenberg
 Site: S16-T3N-R68W (State)
 Well: State 3F-16H
 Wellbore: Hz
 Design: Plan #1



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	203.00	1591.2	-115.3	-48.9	1.00	203.00	-48.9	
4	3190.0	12.00	203.00	3146.5	-419.6	-178.1	0.00	0.00	-178.1	
5	4390.0	0.00	0.00	4337.7	-534.8	-227.0	1.00	180.00	-227.0	
6	6517.1	0.00	0.00	6464.8	-534.8	-227.0	0.00	0.00	-227.0	
7	7642.1	90.00	90.00	7181.0	-534.8	489.2	8.00	90.00	489.2	
8	11704.6	90.00	90.00	7181.0	-535.1	4551.7	0.00	0.00	4551.7	State 3F-16H PBHL



DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
State 3F-16H PBHL	-535.1	4551.7	1323621.05	3139601.19	40.220650	-105.000100

M Azimuths to True North
 Magnetic North: 8.76°
 Magnetic Field Strength: 52835.8snT
 Dip Angle: 66.81°
 Date: 2/5/2013
 Model: IGRF2010

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
72.0	72.0	Base of Fox Hills
4142.0	4194.2	Sussex
4378.0	4430.3	Sussex Marker
4652.0	4704.3	Shannon
6472.0	6524.3	Teepee Buttes
7055.0	7210.7	Sharon Springs
7126.0	7359.5	Niobrara
7166.0	7495.2	B Chalk

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

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well State 3F-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 3F-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 3F-16H						
Well Position	+N/-S	0.0 ft	Northing:	1,324,131.29 ft	Latitude:	40.222120
	+E/-W	0.0 ft	Easting:	3,135,046.60 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
	IGRF2010	2/5/2013	(°)	(°)	(nT)
			8.76	66.81	52,836

Design Plan #1				
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	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	203.00	1,591.2	-115.3	-48.9	1.00	1.00	0.00	203.00	
3,190.0	12.00	203.00	3,146.5	-419.6	-178.1	0.00	0.00	0.00	0.00	
4,390.0	0.00	0.00	4,337.7	-534.8	-227.0	1.00	-1.00	0.00	180.00	
6,517.1	0.00	0.00	6,464.8	-534.8	-227.0	0.00	0.00	0.00	0.00	
7,642.1	90.00	90.00	7,181.0	-534.8	489.2	8.00	8.00	0.00	90.00	
11,704.6	90.00	90.00	7,181.0	-535.1	4,551.7	0.00	0.00	0.00	0.00	State 3F-16H PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3F-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 3F-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	203.00	500.0	-0.8	-0.3	-0.3	1.00	1.00	
600.0	2.00	203.00	600.0	-3.2	-1.4	-1.4	1.00	1.00	
700.0	3.00	203.00	699.9	-7.2	-3.1	-3.1	1.00	1.00	
800.0	4.00	203.00	799.7	-12.8	-5.5	-5.5	1.00	1.00	
900.0	5.00	203.00	899.4	-20.1	-8.5	-8.5	1.00	1.00	
1,000.0	6.00	203.00	998.9	-28.9	-12.3	-12.3	1.00	1.00	
1,100.0	7.00	203.00	1,098.3	-39.3	-16.7	-16.7	1.00	1.00	
1,200.0	8.00	203.00	1,197.4	-51.3	-21.8	-21.8	1.00	1.00	
1,300.0	9.00	203.00	1,296.3	-64.9	-27.6	-27.6	1.00	1.00	
1,400.0	10.00	203.00	1,394.9	-80.1	-34.0	-34.0	1.00	1.00	
1,500.0	11.00	203.00	1,493.3	-96.9	-41.1	-41.1	1.00	1.00	
1,600.0	12.00	203.00	1,591.2	-115.3	-48.9	-48.9	1.00	1.00	EOD; Inc=12°
1,700.0	12.00	203.00	1,689.1	-134.4	-57.0	-57.0	0.00	0.00	
1,800.0	12.00	203.00	1,786.9	-153.5	-65.2	-65.2	0.00	0.00	
1,900.0	12.00	203.00	1,884.7	-172.7	-73.3	-73.3	0.00	0.00	
2,000.0	12.00	203.00	1,982.5	-191.8	-81.4	-81.4	0.00	0.00	
2,100.0	12.00	203.00	2,080.3	-210.9	-89.5	-89.5	0.00	0.00	
2,200.0	12.00	203.00	2,178.1	-230.1	-97.7	-97.7	0.00	0.00	
2,300.0	12.00	203.00	2,275.9	-249.2	-105.8	-105.8	0.00	0.00	
2,400.0	12.00	203.00	2,373.8	-268.4	-113.9	-113.9	0.00	0.00	
2,500.0	12.00	203.00	2,471.6	-287.5	-122.0	-122.0	0.00	0.00	
2,600.0	12.00	203.00	2,569.4	-306.6	-130.2	-130.2	0.00	0.00	
2,700.0	12.00	203.00	2,667.2	-325.8	-138.3	-138.3	0.00	0.00	
2,800.0	12.00	203.00	2,765.0	-344.9	-146.4	-146.4	0.00	0.00	
2,900.0	12.00	203.00	2,862.8	-364.1	-154.5	-154.5	0.00	0.00	
3,000.0	12.00	203.00	2,960.7	-383.2	-162.7	-162.7	0.00	0.00	
3,100.0	12.00	203.00	3,058.5	-402.3	-170.8	-170.8	0.00	0.00	
3,190.0	12.00	203.00	3,146.5	-419.6	-178.1	-178.1	0.00	0.00	Start Drop -1.00
3,200.0	11.90	203.00	3,156.3	-421.5	-178.9	-178.9	1.00	-1.00	
3,300.0	10.90	203.00	3,254.3	-439.7	-186.6	-186.6	1.00	-1.00	
3,400.0	9.90	203.00	3,352.7	-456.3	-193.7	-193.7	1.00	-1.00	
3,500.0	8.90	203.00	3,451.3	-471.3	-200.1	-200.1	1.00	-1.00	
3,600.0	7.90	203.00	3,550.2	-484.7	-205.8	-205.8	1.00	-1.00	
3,700.0	6.90	203.00	3,649.4	-496.6	-210.8	-210.8	1.00	-1.00	
3,800.0	5.90	203.00	3,748.8	-506.9	-215.2	-215.2	1.00	-1.00	
3,900.0	4.90	203.00	3,848.3	-515.5	-218.8	-218.8	1.00	-1.00	
4,000.0	3.90	203.00	3,948.0	-522.6	-221.8	-221.8	1.00	-1.00	
4,100.0	2.90	203.00	4,047.9	-528.0	-224.1	-224.1	1.00	-1.00	
4,194.2	1.96	203.00	4,142.0	-531.7	-225.7	-225.7	1.00	-1.00	Sussex
4,200.0	1.90	203.00	4,147.8	-531.9	-225.8	-225.8	1.00	-1.00	
4,300.0	0.90	203.00	4,247.8	-534.2	-226.7	-226.7	1.00	-1.00	
4,390.0	0.00	0.00	4,337.7	-534.8	-227.0	-227.0	1.00	-1.00	EOD; Inc=0°
4,400.0	0.00	0.00	4,347.7	-534.8	-227.0	-227.0	0.00	0.00	
4,430.3	0.00	0.00	4,378.0	-534.8	-227.0	-227.0	0.00	0.00	Sussex Marker
4,500.0	0.00	0.00	4,447.7	-534.8	-227.0	-227.0	0.00	0.00	
4,600.0	0.00	0.00	4,547.7	-534.8	-227.0	-227.0	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3F-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 3F-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
4,700.0	0.00	0.00	4,647.7	-534.8	-227.0	-227.0	0.00	0.00	
4,704.3	0.00	0.00	4,652.0	-534.8	-227.0	-227.0	0.00	0.00	Shannon
4,800.0	0.00	0.00	4,747.7	-534.8	-227.0	-227.0	0.00	0.00	
4,900.0	0.00	0.00	4,847.7	-534.8	-227.0	-227.0	0.00	0.00	
5,000.0	0.00	0.00	4,947.7	-534.8	-227.0	-227.0	0.00	0.00	
5,100.0	0.00	0.00	5,047.7	-534.8	-227.0	-227.0	0.00	0.00	
5,200.0	0.00	0.00	5,147.7	-534.8	-227.0	-227.0	0.00	0.00	
5,300.0	0.00	0.00	5,247.7	-534.8	-227.0	-227.0	0.00	0.00	
5,400.0	0.00	0.00	5,347.7	-534.8	-227.0	-227.0	0.00	0.00	
5,500.0	0.00	0.00	5,447.7	-534.8	-227.0	-227.0	0.00	0.00	
5,600.0	0.00	0.00	5,547.7	-534.8	-227.0	-227.0	0.00	0.00	
5,700.0	0.00	0.00	5,647.7	-534.8	-227.0	-227.0	0.00	0.00	
5,800.0	0.00	0.00	5,747.7	-534.8	-227.0	-227.0	0.00	0.00	
5,900.0	0.00	0.00	5,847.7	-534.8	-227.0	-227.0	0.00	0.00	
6,000.0	0.00	0.00	5,947.7	-534.8	-227.0	-227.0	0.00	0.00	
6,100.0	0.00	0.00	6,047.7	-534.8	-227.0	-227.0	0.00	0.00	
6,200.0	0.00	0.00	6,147.7	-534.8	-227.0	-227.0	0.00	0.00	
6,300.0	0.00	0.00	6,247.7	-534.8	-227.0	-227.0	0.00	0.00	
6,400.0	0.00	0.00	6,347.7	-534.8	-227.0	-227.0	0.00	0.00	
6,500.0	0.00	0.00	6,447.7	-534.8	-227.0	-227.0	0.00	0.00	
6,517.1	0.00	0.00	6,464.8	-534.8	-227.0	-227.0	0.00	0.00	Start Build 8.00
6,524.3	0.58	90.00	6,472.0	-534.8	-227.0	-227.0	8.00	8.00	Teepee Buttes
6,600.0	6.64	90.00	6,547.6	-534.8	-222.2	-222.2	8.00	8.00	
6,700.0	14.64	90.00	6,645.8	-534.8	-203.8	-203.8	8.00	8.00	
6,800.0	22.64	90.00	6,740.4	-534.8	-171.8	-171.8	8.00	8.00	
6,900.0	30.64	90.00	6,829.8	-534.8	-127.0	-127.0	8.00	8.00	
7,000.0	38.64	90.00	6,912.0	-534.8	-70.3	-70.3	8.00	8.00	
7,100.0	46.64	90.00	6,985.5	-534.8	-2.6	-2.6	8.00	8.00	
7,200.0	54.64	90.00	7,048.9	-534.8	74.7	74.7	8.00	8.00	
7,210.7	55.49	90.00	7,055.0	-534.8	83.5	83.5	8.00	8.00	Sharon Springs
7,300.0	62.64	90.00	7,100.9	-534.8	160.0	160.0	8.00	8.00	
7,359.5	67.40	90.00	7,126.0	-534.8	213.9	213.9	8.00	8.00	Niobrara
7,400.0	70.64	90.00	7,140.5	-534.8	251.7	251.7	8.00	8.00	
7,495.2	78.25	90.00	7,166.0	-534.8	343.4	343.4	8.00	8.00	B Chalk
7,500.0	78.64	90.00	7,167.0	-534.8	348.1	348.1	8.00	8.00	
7,600.0	86.64	90.00	7,179.8	-534.8	447.2	447.2	8.00	8.00	
7,642.1	90.00	90.00	7,181.0	-534.8	489.2	489.2	8.00	8.00	LP @ 7181' TVD; 90°
7,700.0	90.00	90.00	7,181.0	-534.8	547.1	547.1	0.00	0.00	
7,800.0	90.00	90.00	7,181.0	-534.9	647.1	647.1	0.00	0.00	
7,900.0	90.00	90.00	7,181.0	-534.9	747.1	747.1	0.00	0.00	
8,000.0	90.00	90.00	7,181.0	-534.9	847.1	847.1	0.00	0.00	
8,100.0	90.00	90.00	7,181.0	-534.9	947.1	947.1	0.00	0.00	
8,200.0	90.00	90.00	7,181.0	-534.9	1,047.1	1,047.1	0.00	0.00	
8,300.0	90.00	90.00	7,181.0	-534.9	1,147.1	1,147.1	0.00	0.00	
8,400.0	90.00	90.00	7,181.0	-534.9	1,247.1	1,247.1	0.00	0.00	
8,500.0	90.00	90.00	7,181.0	-534.9	1,347.1	1,347.1	0.00	0.00	
8,600.0	90.00	90.00	7,181.0	-534.9	1,447.1	1,447.1	0.00	0.00	
8,700.0	90.00	90.00	7,181.0	-534.9	1,547.1	1,547.1	0.00	0.00	
8,800.0	90.00	90.00	7,181.0	-534.9	1,647.1	1,647.1	0.00	0.00	
8,900.0	90.00	90.00	7,181.0	-534.9	1,747.1	1,747.1	0.00	0.00	
9,000.0	90.00	90.00	7,181.0	-534.9	1,847.1	1,847.1	0.00	0.00	
9,100.0	90.00	90.00	7,181.0	-534.9	1,947.1	1,947.1	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3F-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 3F-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	-534.9	2,047.1	2,047.1	0.00	0.00	
9,300.0	90.00	90.00	7,181.0	-534.9	2,147.1	2,147.1	0.00	0.00	
9,400.0	90.00	90.00	7,181.0	-534.9	2,247.1	2,247.1	0.00	0.00	
9,500.0	90.00	90.00	7,181.0	-534.9	2,347.1	2,347.1	0.00	0.00	
9,600.0	90.00	90.00	7,181.0	-535.0	2,447.1	2,447.1	0.00	0.00	
9,700.0	90.00	90.00	7,181.0	-535.0	2,547.1	2,547.1	0.00	0.00	
9,800.0	90.00	90.00	7,181.0	-535.0	2,647.1	2,647.1	0.00	0.00	
9,900.0	90.00	90.00	7,181.0	-535.0	2,747.1	2,747.1	0.00	0.00	
10,000.0	90.00	90.00	7,181.0	-535.0	2,847.1	2,847.1	0.00	0.00	
10,100.0	90.00	90.00	7,181.0	-535.0	2,947.1	2,947.1	0.00	0.00	
10,200.0	90.00	90.00	7,181.0	-535.0	3,047.1	3,047.1	0.00	0.00	
10,300.0	90.00	90.00	7,181.0	-535.0	3,147.1	3,147.1	0.00	0.00	
10,400.0	90.00	90.00	7,181.0	-535.0	3,247.1	3,247.1	0.00	0.00	
10,500.0	90.00	90.00	7,181.0	-535.0	3,347.1	3,347.1	0.00	0.00	
10,600.0	90.00	90.00	7,181.0	-535.0	3,447.1	3,447.1	0.00	0.00	
10,700.0	90.00	90.00	7,181.0	-535.0	3,547.1	3,547.1	0.00	0.00	
10,800.0	90.00	90.00	7,181.0	-535.0	3,647.1	3,647.1	0.00	0.00	
10,900.0	90.00	90.00	7,181.0	-535.0	3,747.1	3,747.1	0.00	0.00	
11,000.0	90.00	90.00	7,181.0	-535.0	3,847.1	3,847.1	0.00	0.00	
11,100.0	90.00	90.00	7,181.0	-535.0	3,947.1	3,947.1	0.00	0.00	
11,200.0	90.00	90.00	7,181.0	-535.0	4,047.1	4,047.1	0.00	0.00	
11,300.0	90.00	90.00	7,181.0	-535.0	4,147.1	4,147.1	0.00	0.00	
11,400.0	90.00	90.00	7,181.0	-535.1	4,247.1	4,247.1	0.00	0.00	
11,500.0	90.00	90.00	7,181.0	-535.1	4,347.1	4,347.1	0.00	0.00	
11,600.0	90.00	90.00	7,181.0	-535.1	4,447.1	4,447.1	0.00	0.00	
11,700.0	90.00	90.00	7,181.0	-535.1	4,547.1	4,547.1	0.00	0.00	
11,704.6	90.00	90.00	7,181.0	-535.1	4,551.7	4,551.7	0.00	0.00	TD at 11704.6 - State 3F-16H PBHL

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
State 3F-16H PBHL - hit/miss target - Shape - Point	0.00	0.00	7,181.0	-535.1	4,551.7	1,323,621.05	3,139,601.19	40.220650	-105.000100

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well State 3F-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 3F-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				
4,194.2	4,142.0	Sussex				
4,430.3	4,378.0	Sussex Marker				
4,704.3	4,652.0	Shannon				
6,524.3	6,472.0	Teepee Buttes				
7,210.7	7,055.0	Sharon Springs				
7,359.5	7,126.0	Niobrara				
7,495.2	7,166.0	B Chalk				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
400.0	400.0	0.0	0.0	KOP @ 400'	
1,600.0	1,591.2	-115.3	-48.9	EOB; Inc=12°	
3,190.0	3,146.5	-419.6	-178.1	Start Drop -1.00	
4,390.0	4,337.7	-534.8	-227.0	EOD; Inc=0°	
6,517.1	6,464.8	-534.8	-227.0	Start Build 8.00	
7,642.1	7,181.0	-534.8	489.2	LP @ 7181' TVD; 90°	
11,704.6	7,181.0	-535.1	4,551.7	TD at 11704.6	

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S16-T3N-R68W (State)

State 3F-16H

Hz

Plan #1

Anticollision Report

05 February, 2013

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3F-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 3F-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	11,704.6	Plan #1 (Hz)	MWD	Geolink MWD

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Summary						
Offset Well - Wellbore - Design						
S16-T3N-R68W (State)						
State 23-16 - Existing - Existing						Out of range
State 3A-16H - Hz - Plan #1	200.0	200.0	51.0	50.3	78.130	CC, ES
State 3A-16H - Hz - Plan #1	600.0	595.7	67.8	65.7	33.175	SF
State 3B-16H - Hz - Plan #1	400.0	400.0	40.1	38.7	29.663	CC, ES
State 3B-16H - Hz - Plan #1	600.0	598.5	46.6	44.6	22.778	SF
State 3C-16H - Hz - Plan #1	400.0	400.0	29.1	27.8	21.573	CC, ES
State 3C-16H - Hz - Plan #1	700.0	699.3	37.2	34.8	15.540	SF
State 3D-16H - Hz - Plan #1	200.0	200.0	21.9	21.2	33.484	CC
State 3D-16H - Hz - Plan #1	300.0	299.9	22.0	21.0	21.975	ES
State 3D-16H - Hz - Plan #1	600.0	599.1	30.1	28.1	14.494	SF
State 3E-16H - Hz - Plan #1	507.4	507.6	9.8	8.1	5.674	CC, ES
State 3E-16H - Hz - Plan #1	11,704.6	11,902.2	417.9	221.6	2.129	SF
State 3G-16H - Hz - Plan #1	300.0	300.0	10.9	9.9	10.909	CC, ES
State 3G-16H - Hz - Plan #1	11,704.6	11,968.6	414.8	219.0	2.118	SF
State 3H-16H - Hz - Plan #1	200.0	200.0	18.2	17.6	27.904	CC, ES
State 3H-16H - Hz - Plan #1	1,700.0	1,687.9	77.5	70.8	11.567	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3F-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 3F-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													Offset Site Error:	0.0 ft	
S16-T3N-R68W (State) - State 3A-16H - Hz - Plan #1													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)					
0.0	0.0	0.0	0.0	0.0	0.0	0.00	51.0	0.0	51.0						
100.0	100.0	100.0	100.0	0.2	0.2	0.00	51.0	0.0	51.0	50.7	0.30	167.935			
200.0	200.0	200.0	200.0	0.3	0.3	0.00	51.0	0.0	51.0	50.3	0.65	78.130 CC, ES			
300.0	300.0	299.1	299.1	0.5	0.5	-0.19	51.8	-0.2	51.8	50.8	1.00	51.830			
400.0	400.0	398.2	398.2	0.7	0.7	-0.73	54.4	-0.7	54.4	53.0	1.35	40.351			
500.0	500.0	497.1	497.0	0.9	0.9	155.81	58.5	-1.5	59.4	57.7	1.70	35.058			
600.0	600.0	595.7	595.4	1.0	1.1	155.76	64.4	-2.7	67.8	65.7	2.04	33.175 SF			
700.0	699.9	693.8	693.2	1.2	1.3	155.99	71.8	-4.3	79.3	77.0	2.39	33.205			
800.0	799.7	791.2	790.2	1.4	1.5	156.37	80.9	-6.1	94.2	91.4	2.74	34.410			
900.0	899.4	887.9	886.2	1.6	1.7	156.81	91.4	-8.3	112.2	109.2	3.09	36.382			
1,000.0	998.9	983.6	981.1	1.8	2.0	157.23	103.4	-10.8	133.5	130.1	3.43	38.877			
1,100.0	1,098.3	1,078.2	1,074.7	2.1	2.3	157.62	116.8	-13.5	157.9	154.1	3.78	41.738			
1,200.0	1,197.4	1,171.6	1,166.9	2.3	2.6	157.96	131.5	-16.5	185.4	181.3	4.13	44.860			
1,300.0	1,296.3	1,263.6	1,257.5	2.6	2.9	158.24	147.4	-19.8	216.0	211.5	4.48	48.168			
1,400.0	1,394.9	1,354.2	1,346.4	2.9	3.2	158.49	164.5	-23.3	249.6	244.8	4.84	51.609			
1,500.0	1,493.3	1,443.3	1,433.5	3.3	3.6	158.68	182.6	-27.0	286.2	281.0	5.19	55.142			
1,600.0	1,591.2	1,530.6	1,518.7	3.6	3.9	158.84	201.7	-30.9	325.6	320.1	5.54	58.737			
1,700.0	1,689.1	1,616.5	1,602.1	4.0	4.3	159.08	221.7	-35.0	367.2	361.3	5.91	62.128			
1,800.0	1,786.9	1,700.0	1,682.9	4.4	4.7	159.22	242.2	-39.3	410.0	403.7	6.27	65.350			
1,900.0	1,884.7	1,785.0	1,764.8	4.8	5.1	159.29	264.4	-43.8	454.1	447.5	6.64	68.348			
2,000.0	1,982.5	1,873.1	1,849.6	5.2	5.5	159.32	288.2	-48.7	499.1	492.1	7.02	71.075			

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3F-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 3F-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													Offset Site Error:	0.0 ft
S16-T3N-R68W (State) - State 3B-16H - Hz - Plan #1													Offset Well Error:	0.0 ft
Survey Program: 0-MWD														
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	0.00	40.1	0.0	40.1					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	40.1	0.0	40.1	39.8	0.30	131.949		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	40.1	0.0	40.1	39.4	0.65	61.388		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	40.1	0.0	40.1	39.1	1.00	39.999		
400.0	400.0	400.0	400.0	0.7	0.7	0.00	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	157.13	40.9	-0.2	41.7	40.0	1.70	24.552		
600.0	600.0	598.5	598.4	1.0	1.0	157.47	43.4	-0.9	46.6	44.6	2.05	22.778 SF		
700.0	699.9	697.3	697.1	1.2	1.2	157.90	47.5	-2.1	54.8	52.4	2.39	22.880		
800.0	799.7	795.6	795.3	1.4	1.4	158.32	53.2	-3.8	66.2	63.5	2.74	24.137		
900.0	899.4	893.4	892.7	1.6	1.6	158.67	60.5	-5.9	80.9	77.8	3.09	26.148		
1,000.0	998.9	990.3	989.3	1.8	1.8	158.95	69.3	-8.4	98.7	95.3	3.44	28.672		
1,100.0	1,098.3	1,086.3	1,084.7	2.1	2.0	159.16	79.5	-11.3	119.7	115.9	3.79	31.555		
1,200.0	1,197.4	1,181.3	1,178.9	2.3	2.3	159.31	91.2	-14.7	143.9	139.8	4.15	34.689		
1,300.0	1,296.3	1,275.1	1,271.7	2.6	2.6	159.42	104.2	-18.4	171.1	166.6	4.50	38.002		
1,400.0	1,394.9	1,367.5	1,362.9	2.9	2.8	159.48	118.4	-22.5	201.4	196.6	4.86	41.439		
1,500.0	1,493.3	1,458.6	1,452.5	3.3	3.1	159.51	133.8	-26.9	234.7	229.5	5.22	44.959		
1,600.0	1,591.2	1,548.0	1,540.4	3.6	3.5	159.52	150.3	-31.6	270.9	265.3	5.58	48.532		
1,700.0	1,689.1	1,638.0	1,628.5	4.0	3.8	159.61	168.0	-36.7	309.1	303.1	5.96	51.875		
1,800.0	1,786.9	1,730.4	1,718.8	4.4	4.1	159.66	186.5	-42.0	347.5	341.2	6.34	54.799		
1,900.0	1,884.7	1,822.7	1,809.1	4.8	4.5	159.71	204.9	-47.3	386.0	379.2	6.73	57.372		
2,000.0	1,982.5	1,915.0	1,899.4	5.2	4.8	159.74	223.4	-52.6	424.4	417.3	7.11	59.652		
2,100.0	2,080.3	2,007.3	1,989.7	5.6	5.2	159.77	241.8	-57.9	462.8	455.3	7.50	61.685		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3F-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 3F-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													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	0.00	29.1	0.0	29.1						
100.0	100.0	100.0	100.0	0.2	0.2	0.00	29.1	0.0	29.1	28.8	0.30	95.963			
200.0	200.0	200.0	200.0	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.65	44.646			
300.0	300.0	300.0	300.0	0.5	0.5	0.00	29.1	0.0	29.1	28.1	1.00	29.090			
400.0	400.0	400.0	400.0	0.7	0.7	0.00	29.1	0.0	29.1	27.8	1.35	21.573 CC, ES			
500.0	500.0	500.0	500.0	0.9	0.8	157.65	29.1	0.0	29.9	28.2	1.70	17.618			
600.0	600.0	600.0	600.0	1.0	1.0	159.40	29.1	0.0	32.4	30.3	2.05	15.806			
700.0	699.9	699.3	699.3	1.2	1.2	161.10	29.9	-0.4	37.2	34.8	2.40	15.540 SF			
800.0	799.7	798.4	798.3	1.4	1.4	161.93	32.2	-1.5	45.3	42.5	2.75	16.491			
900.0	899.4	897.0	896.9	1.6	1.6	162.11	36.1	-3.4	56.4	53.3	3.09	18.234			
1,000.0	998.9	995.0	994.7	1.8	1.7	161.92	41.4	-6.0	70.7	67.2	3.45	20.514			
1,100.0	1,098.3	1,092.4	1,091.8	2.1	1.9	161.56	48.1	-9.3	88.0	84.2	3.80	23.167			
1,200.0	1,197.4	1,188.8	1,187.8	2.3	2.1	161.13	56.3	-13.3	108.4	104.2	4.16	26.082			
1,300.0	1,296.3	1,284.3	1,282.7	2.6	2.4	160.70	65.8	-17.9	131.8	127.3	4.52	29.179			
1,400.0	1,394.9	1,378.7	1,376.3	2.9	2.6	160.28	76.6	-23.2	158.2	153.3	4.88	32.399			
1,500.0	1,493.3	1,471.9	1,468.5	3.3	2.9	159.89	88.6	-29.0	187.6	182.3	5.26	35.695			
1,600.0	1,591.2	1,563.7	1,559.1	3.6	3.1	159.53	101.8	-35.4	219.8	214.2	5.63	39.034			
1,700.0	1,689.1	1,656.4	1,650.5	4.0	3.4	159.27	116.2	-42.5	253.9	247.9	6.03	42.143			
1,800.0	1,786.9	1,750.4	1,743.0	4.4	3.7	159.06	130.8	-49.6	288.2	281.7	6.43	44.846			
1,900.0	1,884.7	1,844.3	1,835.5	4.8	4.0	158.89	145.5	-56.8	322.4	315.5	6.83	47.212			
2,000.0	1,982.5	1,938.3	1,928.1	5.2	4.3	158.75	160.2	-63.9	356.6	349.4	7.23	49.298			
2,100.0	2,080.3	2,032.2	2,020.6	5.6	4.6	158.64	174.8	-71.1	390.8	383.2	7.64	51.150			
2,200.0	2,178.1	2,126.2	2,113.1	5.9	4.9	158.55	189.5	-78.2	425.0	417.0	8.05	52.802			
2,300.0	2,275.9	2,220.2	2,205.7	6.3	5.2	158.47	204.2	-85.4	459.3	450.8	8.46	54.286			
2,400.0	2,373.8	2,314.1	2,298.2	6.7	5.6	158.40	218.8	-92.5	493.5	484.6	8.87	55.624			

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 3F-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 3F-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													Offset Site Error:	0.0 ft
S16-T3N-R68W (State) - State 3D-16H - Hz - Plan #1													Survey Program:	0-MWD
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	0.00	21.9	0.0	21.9					
100.0	100.0	100.0	100.0	0.2	0.2	0.00	21.9	0.0	21.9	21.6	0.30	71.972		
200.0	200.0	200.0	200.0	0.3	0.3	0.00	21.9	0.0	21.9	21.2	0.65	33.484	CC	
300.0	300.0	299.9	299.9	0.5	0.5	-2.23	22.0	-0.9	22.0	21.0	1.00	21.975	ES	
400.0	400.0	399.8	399.7	0.7	0.7	-8.68	22.5	-3.4	22.7	21.4	1.35	16.783		
500.0	500.0	499.5	499.4	0.9	0.9	139.93	23.2	-7.7	25.1	23.4	1.71	14.657		
600.0	600.0	599.1	598.8	1.0	1.1	132.78	24.3	-13.7	30.1	28.1	2.08	14.494	SF	
700.0	699.9	698.4	697.8	1.2	1.3	127.75	25.6	-21.3	37.6	35.2	2.45	15.342		
800.0	799.7	797.2	796.1	1.4	1.5	125.31	27.8	-30.3	47.8	44.9	2.84	16.844		
900.0	899.4	895.4	893.8	1.6	1.7	125.06	31.4	-40.0	60.6	57.4	3.23	18.774		
1,000.0	998.9	993.0	990.7	1.8	2.0	125.89	36.4	-50.6	76.2	72.5	3.63	20.952		
1,100.0	1,098.3	1,089.9	1,086.7	2.1	2.3	127.19	42.7	-62.0	94.4	90.4	4.06	23.283		
1,200.0	1,197.4	1,185.8	1,181.6	2.3	2.6	128.62	50.3	-74.1	115.4	111.0	4.49	25.707		
1,300.0	1,296.3	1,280.8	1,275.2	2.6	2.9	130.03	59.2	-86.9	139.2	134.3	4.94	28.185		
1,400.0	1,394.9	1,377.0	1,370.0	2.9	3.2	131.40	69.0	-100.5	165.2	159.8	5.41	30.547		
1,500.0	1,493.3	1,473.1	1,464.7	3.3	3.5	132.74	78.8	-114.0	192.4	186.5	5.89	32.662		
1,600.0	1,591.2	1,568.9	1,558.9	3.6	3.8	134.03	88.6	-127.4	220.8	214.4	6.39	34.585		
1,700.0	1,689.1	1,664.4	1,653.0	4.0	4.1	135.34	98.4	-140.8	250.0	243.1	6.89	36.272		
1,800.0	1,786.9	1,759.9	1,747.1	4.4	4.5	136.37	108.1	-154.2	279.2	271.8	7.40	37.730		
1,900.0	1,884.7	1,856.0	1,841.7	4.8	4.8	137.21	117.9	-167.7	308.6	300.6	7.91	38.996		
2,000.0	1,982.5	1,956.3	1,940.7	5.2	5.1	138.06	127.5	-180.9	337.1	328.6	8.42	40.011		
2,100.0	2,080.3	2,057.4	2,040.7	5.6	5.4	138.94	136.1	-192.8	364.3	355.4	8.93	40.805		
2,200.0	2,178.1	2,159.1	2,141.6	5.9	5.7	139.87	143.8	-203.3	390.2	380.8	9.42	41.427		
2,300.0	2,275.9	2,261.5	2,243.3	6.3	5.9	140.84	150.4	-212.4	414.9	405.0	9.90	41.915		
2,400.0	2,373.8	2,364.3	2,345.7	6.7	6.2	141.86	156.0	-220.1	438.3	428.0	10.36	42.298		
2,500.0	2,471.6	2,467.7	2,448.8	7.1	6.4	142.93	160.5	-226.3	460.5	449.7	10.81	42.603		
2,600.0	2,569.4	2,571.5	2,552.5	7.5	6.6	144.05	163.9	-231.1	481.6	470.3	11.24	42.848		

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 3F-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 3F-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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	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		
300.0	300.0	300.0	300.0	0.5	0.5	0.00	10.9	0.0	10.9	9.9	1.00	10.909		
400.0	400.0	400.1	400.1	0.7	0.7	-3.75	10.4	-0.7	10.4	9.0	1.35	7.694		
500.0	500.0	500.2	500.1	0.9	0.9	143.00	8.7	-2.7	9.8	8.1	1.70	5.764		
507.4	507.4	507.6	507.5	0.9	0.9	142.08	8.6	-2.9	9.8	8.1	1.73	5.674	CC, ES	
600.0	600.0	600.2	600.1	1.0	1.0	129.69	6.0	-6.1	10.3	8.3	2.07	5.006		
700.0	699.9	700.2	699.9	1.2	1.2	117.22	2.1	-10.9	12.2	9.7	2.45	4.977		
800.0	799.7	800.1	799.4	1.4	1.4	108.06	-2.8	-16.9	15.3	12.4	2.85	5.360		
900.0	899.4	899.9	898.8	1.6	1.7	102.16	-8.8	-24.4	19.5	16.2	3.28	5.939		
1,000.0	998.9	999.7	997.9	1.8	1.9	98.55	-15.9	-33.2	24.6	20.9	3.73	6.590		
1,100.0	1,098.3	1,099.3	1,096.7	2.1	2.2	96.39	-24.1	-43.3	30.7	26.4	4.23	7.248		
1,200.0	1,197.4	1,198.8	1,195.1	2.3	2.5	95.13	-33.3	-54.7	37.6	32.8	4.76	7.881		
1,300.0	1,296.3	1,298.3	1,293.2	2.6	2.8	94.42	-43.7	-67.4	45.3	39.9	5.34	8.472		
1,400.0	1,394.9	1,397.9	1,391.3	2.9	3.1	94.88	-54.5	-80.9	53.5	47.5	5.96	8.972		
1,500.0	1,493.3	1,497.5	1,489.5	3.3	3.5	96.81	-65.4	-94.3	61.9	55.3	6.62	9.349		
1,600.0	1,591.2	1,597.1	1,587.5	3.6	3.8	99.66	-76.3	-107.7	70.6	63.3	7.32	9.656		
1,700.0	1,689.1	1,696.6	1,685.5	4.0	4.1	102.55	-87.2	-121.2	79.7	71.7	8.02	9.944		
1,800.0	1,786.9	1,796.1	1,783.5	4.4	4.5	104.86	-98.1	-134.6	88.9	80.2	8.71	10.205		
1,900.0	1,884.7	1,895.6	1,881.5	4.8	4.8	106.73	-108.9	-148.0	98.3	88.9	9.41	10.441		
2,000.0	1,982.5	1,995.2	1,979.5	5.2	5.1	108.27	-119.8	-161.5	107.7	97.6	10.11	10.653		
2,100.0	2,080.3	2,094.8	2,077.6	5.6	5.5	109.61	-130.6	-174.8	117.2	106.4	10.80	10.847		
2,200.0	2,178.1	2,194.5	2,176.1	5.9	5.8	111.38	-140.6	-187.2	126.5	115.1	11.46	11.044		
2,300.0	2,275.9	2,294.1	2,274.7	6.3	6.1	113.62	-149.5	-198.1	135.9	123.8	12.07	11.258		
2,400.0	2,373.8	2,393.6	2,373.4	6.7	6.4	116.26	-157.3	-207.8	145.4	132.8	12.63	11.510		
2,500.0	2,471.6	2,492.8	2,472.0	7.1	6.6	119.20	-164.0	-216.1	155.2	142.1	13.13	11.818		
2,600.0	2,569.4	2,591.7	2,570.5	7.5	6.8	122.37	-169.6	-223.0	165.5	151.9	13.56	12.201		
2,700.0	2,667.2	2,690.3	2,668.8	7.9	7.0	125.71	-174.2	-228.6	176.5	162.5	13.92	12.673		
2,800.0	2,765.0	2,788.4	2,766.8	8.3	7.2	129.14	-177.6	-232.9	188.3	174.1	14.21	13.249		
2,900.0	2,862.8	2,886.1	2,864.4	8.7	7.3	132.61	-180.0	-235.8	201.2	186.8	14.43	13.940		
3,000.0	2,960.7	2,983.3	2,961.6	9.1	7.5	136.07	-181.4	-237.5	215.2	200.7	14.59	14.755		
3,100.0	3,058.5	3,080.2	3,058.5	9.5	7.6	139.47	-181.7	-237.9	230.6	215.9	14.70	15.692		
3,200.0	3,156.3	3,178.0	3,156.3	9.9	7.7	142.59	-181.7	-237.9	246.9	232.1	14.80	16.685		
3,300.0	3,254.3	3,276.0	3,254.3	10.3	7.8	145.28	-181.7	-237.9	263.0	248.1	14.92	17.631		
3,400.0	3,352.7	3,374.4	3,352.7	10.6	8.0	147.47	-181.7	-237.9	278.1	263.1	15.06	18.464		
3,500.0	3,451.3	3,473.0	3,451.3	10.9	8.1	149.26	-181.7	-237.9	292.1	276.8	15.23	19.174		
3,600.0	3,550.2	3,571.9	3,550.2	11.2	8.2	150.72	-181.7	-237.9	304.8	289.3	15.43	19.757		
3,700.0	3,649.4	3,671.1	3,649.4	11.5	8.3	151.92	-181.7	-237.9	316.1	300.4	15.64	20.214		
3,800.0	3,748.8	3,770.5	3,748.8	11.8	8.5	152.88	-181.7	-237.9	326.0	310.1	15.86	20.548		
3,900.0	3,848.3	3,870.0	3,848.3	12.0	8.6	153.65	-181.7	-237.9	334.4	318.3	16.11	20.762		
4,000.0	3,948.0	3,969.7	3,948.0	12.2	8.8	154.26	-181.7	-237.9	341.3	324.9	16.36	20.862		
4,100.0	4,047.9	4,069.6	4,047.9	12.4	8.9	154.70	-181.7	-237.9	346.6	330.0	16.62	20.853		
4,200.0	4,147.8	4,169.5	4,147.8	12.5	9.0	155.01	-181.7	-237.9	350.4	333.5	16.90	20.741		
4,300.0	4,247.8	4,269.4	4,247.8	12.6	9.2	155.19	-181.7	-237.9	352.6	335.5	17.18	20.532		
4,400.0	4,347.7	4,369.4	4,347.7	12.7	9.3	-1.76	-181.7	-237.9	353.3	333.0	20.26	17.439		
4,500.0	4,447.7	4,469.4	4,447.7	12.8	9.5	-1.76	-181.7	-237.9	353.3	332.8	20.53	17.208		
4,600.0	4,547.7	4,569.4	4,547.7	12.9	9.6	-1.76	-181.7	-237.9	353.3	332.5	20.81	16.980		
4,700.0	4,647.7	4,669.4	4,647.7	13.0	9.7	-1.76	-181.7	-237.9	353.3	332.2	21.08	16.757		
4,800.0	4,747.7	4,769.4	4,747.7	13.2	9.9	-1.76	-181.7	-237.9	353.3	331.9	21.36	16.538		
4,900.0	4,847.7	4,869.4	4,847.7	13.3	10.0	-1.76	-181.7	-237.9	353.3	331.6	21.64	16.324		
5,000.0	4,947.7	4,969.4	4,947.7	13.4	10.2	-1.76	-181.7	-237.9	353.3	331.4	21.92	16.114		

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 3F-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 3F-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													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)					
5,100.0	5,047.7	5,069.4	5,047.7	13.5	10.3	-1.76	-181.7	-237.9	353.3	331.1	22.21	15.908			
5,200.0	5,147.7	5,169.4	5,147.7	13.6	10.5	-1.76	-181.7	-237.9	353.3	330.8	22.49	15.706			
5,300.0	5,247.7	5,269.4	5,247.7	13.7	10.6	-1.76	-181.7	-237.9	353.3	330.5	22.78	15.508			
5,400.0	5,347.7	5,369.4	5,347.7	13.8	10.8	-1.76	-181.7	-237.9	353.3	330.2	23.07	15.314			
5,500.0	5,447.7	5,469.4	5,447.7	14.0	10.9	-1.76	-181.7	-237.9	353.3	329.9	23.36	15.123			
5,600.0	5,547.7	5,569.4	5,547.7	14.1	11.1	-1.76	-181.7	-237.9	353.3	329.6	23.65	14.937			
5,700.0	5,647.7	5,669.4	5,647.7	14.2	11.2	-1.76	-181.7	-237.9	353.3	329.3	23.94	14.754			
5,800.0	5,747.7	5,769.4	5,747.7	14.3	11.4	-1.76	-181.7	-237.9	353.3	329.0	24.24	14.575			
5,900.0	5,847.7	5,869.4	5,847.7	14.5	11.6	-1.76	-181.7	-237.9	353.3	328.8	24.53	14.400			
6,000.0	5,947.7	5,969.4	5,947.7	14.6	11.7	-1.76	-181.7	-237.9	353.3	328.5	24.83	14.227			
6,100.0	6,047.7	6,069.4	6,047.7	14.7	11.9	-1.76	-181.7	-237.9	353.3	328.2	25.13	14.059			
6,200.0	6,147.7	6,169.4	6,147.7	14.8	12.0	-1.76	-181.7	-237.9	353.3	327.9	25.43	13.893			
6,300.0	6,247.7	6,269.4	6,247.7	15.0	12.2	-1.76	-181.7	-237.9	353.3	327.6	25.73	13.731			
6,400.0	6,347.7	6,369.4	6,347.7	15.1	12.3	-1.76	-181.7	-237.9	353.3	327.3	26.03	13.572			
6,500.0	6,447.7	6,469.4	6,447.7	15.2	12.5	-1.76	-181.7	-237.9	353.3	327.0	26.33	13.416			
6,600.0	6,547.6	6,569.2	6,547.6	15.3	12.6	-92.52	-181.7	-237.9	353.5	329.0	24.48	14.441			
6,700.0	6,645.8	6,667.4	6,645.8	15.4	12.8	-95.34	-181.7	-237.9	354.8	329.9	24.88	14.262			
6,800.0	6,740.4	6,767.3	6,745.6	15.4	12.9	-99.77	-181.7	-235.5	358.9	333.6	25.23	14.221			
6,900.0	6,829.8	6,874.4	6,851.3	15.4	13.0	-104.31	-181.7	-218.9	365.5	340.2	25.34	14.422			
7,000.0	6,912.0	6,987.3	6,958.7	15.4	13.0	-108.56	-181.7	-184.6	374.1	348.9	25.20	14.845			
7,100.0	6,985.5	7,106.4	7,064.7	15.5	13.0	-112.40	-181.7	-130.6	383.9	359.0	24.93	15.398			
7,200.0	7,048.9	7,232.1	7,165.3	15.8	13.1	-115.74	-181.7	-55.5	394.0	369.2	24.78	15.895			
7,300.0	7,100.9	7,364.2	7,255.1	16.2	13.4	-118.48	-181.7	41.1	403.3	378.1	25.12	16.052			
7,400.0	7,140.5	7,502.1	7,328.2	17.0	14.3	-120.53	-181.7	157.7	410.8	384.5	26.32	15.612			
7,500.0	7,167.0	7,644.4	7,378.9	18.2	16.0	-121.82	-181.7	290.4	415.9	387.2	28.64	14.520			
7,600.0	7,179.8	7,789.2	7,402.6	19.6	18.3	-122.30	-181.7	433.0	417.8	385.7	32.09	13.018			
7,699.9	7,182.7	7,903.1	7,404.0	21.3	20.4	-122.07	-181.7	547.0	416.8	381.1	35.62	11.700			
7,700.0	7,181.0	7,903.3	7,404.0	21.3	20.4	-122.27	-181.7	547.1	417.7	382.1	35.57	11.742			
7,800.0	7,181.0	8,003.3	7,404.0	23.2	22.4	-122.27	-181.7	647.1	417.7	378.8	38.88	10.744			
7,900.0	7,181.0	8,103.3	7,404.0	25.1	24.4	-122.27	-181.7	747.1	417.7	375.3	42.34	9.866			
8,000.0	7,181.0	8,203.3	7,404.0	27.2	26.6	-122.27	-181.7	847.1	417.7	371.8	45.92	9.096			
8,100.0	7,181.0	8,303.3	7,404.0	29.3	28.8	-122.27	-181.7	947.1	417.7	368.1	49.60	8.421			
8,200.0	7,181.0	8,403.3	7,404.0	31.5	31.0	-122.27	-181.7	1,047.1	417.7	364.3	53.35	7.829			
8,300.0	7,181.0	8,503.3	7,404.0	33.7	33.2	-122.27	-181.7	1,147.1	417.7	360.5	57.17	7.306			
8,400.0	7,181.0	8,603.3	7,404.0	36.0	35.5	-122.27	-181.7	1,247.1	417.7	356.7	61.03	6.844			
8,500.0	7,181.0	8,703.3	7,404.0	38.3	37.9	-122.27	-181.7	1,347.1	417.7	352.8	64.94	6.433			
8,600.0	7,181.0	8,803.3	7,404.0	40.6	40.2	-122.27	-181.7	1,447.1	417.7	348.8	68.87	6.065			
8,700.0	7,181.0	8,903.3	7,404.0	42.9	42.5	-122.27	-181.7	1,547.1	417.7	344.9	72.84	5.735			
8,800.0	7,181.0	9,003.3	7,404.0	45.2	44.9	-122.27	-181.7	1,647.1	417.7	340.9	76.83	5.437			
8,900.0	7,181.0	9,103.3	7,404.0	47.6	47.3	-122.27	-181.7	1,747.1	417.7	336.9	80.84	5.167			
9,000.0	7,181.0	9,203.3	7,404.0	50.0	49.7	-122.27	-181.7	1,847.1	417.7	332.9	84.87	4.922			
9,100.0	7,181.0	9,303.3	7,404.0	52.3	52.0	-122.27	-181.7	1,947.1	417.7	328.8	88.91	4.698			
9,200.0	7,181.0	9,403.3	7,404.0	54.7	54.4	-122.26	-181.7	2,047.1	417.7	324.8	92.97	4.493			
9,300.0	7,181.0	9,503.3	7,404.0	57.1	56.9	-122.26	-181.7	2,147.1	417.7	320.7	97.03	4.305			
9,400.0	7,181.0	9,603.3	7,404.0	59.5	59.3	-122.26	-181.7	2,247.1	417.7	316.6	101.11	4.131			
9,500.0	7,181.0	9,703.3	7,404.0	61.9	61.7	-122.26	-181.7	2,347.1	417.7	312.5	105.20	3.971			
9,600.0	7,181.0	9,803.3	7,404.0	64.3	64.1	-122.26	-181.7	2,447.1	417.8	308.5	109.29	3.822			
9,700.0	7,181.0	9,903.3	7,404.0	66.8	66.5	-122.26	-181.7	2,547.1	417.8	304.4	113.39	3.684			
9,800.0	7,181.0	10,003.3	7,404.0	69.2	69.0	-122.26	-181.7	2,647.1	417.8	300.3	117.50	3.555			
9,900.0	7,181.0	10,103.3	7,404.0	71.6	71.4	-122.26	-181.7	2,747.1	417.8	296.1	121.61	3.435			
10,000.0	7,181.0	10,203.3	7,404.0	74.0	73.8	-122.26	-181.7	2,847.1	417.8	292.0	125.73	3.323			
10,100.0	7,181.0	10,303.3	7,404.0	76.5	76.3	-122.26	-181.7	2,947.1	417.8	287.9	129.86	3.217			

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 3F-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 3F-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													Offset Site Error:	0.0 ft
S16-T3N-R68W (State) - State 3E-16H - Hz - Plan #1													Offset Well Error:	0.0 ft
Survey Program: 0-MWD														
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,200.0	7,181.0	10,403.3	7,404.0	78.9	78.7	-122.26	-181.7	3,047.1	417.8	283.8	133.98	3.118		
10,300.0	7,181.0	10,503.3	7,404.0	81.3	81.1	-122.26	-181.7	3,147.1	417.8	279.7	138.11	3.025		
10,400.0	7,181.0	10,603.3	7,404.0	83.8	83.6	-122.26	-181.7	3,247.1	417.8	275.5	142.25	2.937		
10,500.0	7,181.0	10,703.3	7,404.0	86.2	86.0	-122.26	-181.7	3,347.1	417.8	271.4	146.39	2.854		
10,600.0	7,181.0	10,803.3	7,404.0	88.6	88.5	-122.26	-181.7	3,447.1	417.8	267.3	150.53	2.776		
10,700.0	7,181.0	10,903.3	7,404.0	91.1	90.9	-122.26	-181.7	3,547.1	417.8	263.1	154.67	2.701		
10,800.0	7,181.0	11,003.3	7,404.0	93.5	93.4	-122.26	-181.7	3,647.1	417.8	259.0	158.82	2.631		
10,900.0	7,181.0	11,103.3	7,404.0	96.0	95.8	-122.26	-181.7	3,747.1	417.8	254.8	162.96	2.564		
11,000.0	7,181.0	11,203.3	7,404.0	98.4	98.3	-122.26	-181.7	3,847.1	417.8	250.7	167.12	2.500		
11,100.0	7,181.0	11,303.3	7,404.0	100.9	100.7	-122.26	-181.7	3,947.1	417.8	246.5	171.27	2.440		
11,200.0	7,181.0	11,403.3	7,404.0	103.3	103.2	-122.26	-181.7	4,047.1	417.8	242.4	175.42	2.382		
11,300.0	7,181.0	11,503.3	7,404.0	105.8	105.6	-122.26	-181.7	4,147.1	417.8	238.2	179.58	2.327		
11,400.0	7,181.0	11,603.3	7,404.0	108.2	108.1	-122.26	-181.7	4,247.1	417.8	234.1	183.74	2.274		
11,500.0	7,181.0	11,703.3	7,404.0	110.7	110.6	-122.26	-181.7	4,347.1	417.8	229.9	187.90	2.224		
11,600.0	7,181.0	11,803.3	7,404.0	113.1	113.0	-122.26	-181.7	4,447.1	417.8	225.8	192.06	2.176		
11,659.9	7,181.0	11,863.2	7,404.0	114.6	114.5	-122.26	-181.7	4,507.0	417.8	223.3	194.55	2.148		
11,700.0	7,181.0	11,902.2	7,404.0	115.6	115.4	-122.26	-181.7	4,546.1	417.8	221.6	196.20	2.130		
11,704.6	7,181.0	11,902.2	7,404.0	115.7	115.4	-122.26	-181.7	4,546.1	417.9	221.6	196.29	2.129 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3F-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 3F-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				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	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 CC, ES		
400.0	400.0	399.8	399.8	0.7	0.7	-178.90	-11.8	-0.2	11.8	10.4	1.35	8.715		
500.0	500.0	499.6	499.5	0.9	0.9	-20.62	-14.3	-0.9	13.5	11.8	1.70	7.945		
600.0	600.0	599.3	599.2	1.0	1.0	-20.50	-18.5	-2.0	15.3	13.3	2.05	7.468		
700.0	699.9	699.0	698.7	1.2	1.2	-21.19	-24.3	-3.6	17.2	14.8	2.40	7.154		
800.0	799.7	798.7	798.1	1.4	1.4	-22.44	-31.9	-5.6	19.1	16.3	2.75	6.938		
900.0	899.4	898.3	897.3	1.6	1.7	-24.08	-41.1	-8.1	21.1	18.0	3.11	6.787		
1,000.0	998.9	997.9	996.2	1.8	1.9	-25.99	-51.9	-11.0	23.2	19.8	3.48	6.677		
1,100.0	1,098.3	1,097.5	1,094.9	2.1	2.2	-28.07	-64.5	-14.3	25.5	21.6	3.86	6.592		
1,200.0	1,197.4	1,197.1	1,193.4	2.3	2.5	-30.27	-78.6	-18.1	27.8	23.6	4.27	6.520		
1,300.0	1,296.3	1,296.6	1,291.5	2.6	2.8	-32.53	-94.4	-22.4	30.3	25.6	4.70	6.451		
1,400.0	1,394.9	1,396.0	1,389.3	2.9	3.1	-34.80	-111.9	-27.0	33.0	27.8	5.17	6.380		
1,500.0	1,493.3	1,495.4	1,486.8	3.3	3.5	-37.05	-131.0	-32.2	35.8	30.1	5.68	6.300		
1,600.0	1,591.2	1,595.4	1,584.5	3.6	3.9	-39.90	-151.0	-37.5	38.1	31.9	6.26	6.088		
1,700.0	1,689.1	1,695.3	1,682.3	4.0	4.3	-43.27	-171.1	-42.9	39.9	33.0	6.92	5.768		
1,800.0	1,786.9	1,795.3	1,780.1	4.4	4.6	-46.34	-191.2	-48.3	41.8	34.2	7.61	5.492		
1,900.0	1,884.7	1,895.2	1,877.8	4.8	5.0	-49.14	-211.2	-53.7	43.8	35.5	8.34	5.254		
2,000.0	1,982.5	1,995.2	1,975.6	5.2	5.4	-51.69	-231.3	-59.1	45.9	36.8	9.09	5.051		
2,100.0	2,080.3	2,095.2	2,073.4	5.6	5.8	-54.01	-251.4	-64.4	48.1	38.2	9.86	4.878		
2,200.0	2,178.1	2,195.1	2,171.2	5.9	6.2	-56.13	-271.5	-69.8	50.4	39.7	10.65	4.729		
2,300.0	2,275.9	2,295.1	2,268.9	6.3	6.6	-58.06	-291.5	-75.2	52.7	41.2	11.45	4.602		
2,400.0	2,373.8	2,395.0	2,366.7	6.7	7.0	-59.83	-311.6	-80.6	55.1	42.8	12.26	4.493		
2,500.0	2,471.6	2,495.0	2,464.5	7.1	7.4	-61.45	-331.7	-85.9	57.5	44.4	13.07	4.399		
2,600.0	2,569.4	2,594.9	2,562.3	7.5	7.8	-62.94	-351.8	-91.3	60.0	46.1	13.89	4.317		
2,700.0	2,667.2	2,694.9	2,660.0	7.9	8.2	-64.31	-371.8	-96.7	62.5	47.8	14.71	4.246		
2,800.0	2,765.0	2,794.9	2,757.8	8.3	8.6	-65.57	-391.9	-102.1	65.0	49.5	15.53	4.184		
2,900.0	2,862.8	2,894.8	2,855.6	8.7	9.0	-66.74	-412.0	-107.5	67.6	51.2	16.36	4.130		
3,000.0	2,960.7	2,994.8	2,953.4	9.1	9.4	-67.82	-432.1	-112.8	70.2	53.0	17.19	4.082		
3,100.0	3,058.5	3,094.7	3,051.1	9.5	9.8	-68.82	-452.1	-118.2	72.8	54.8	18.01	4.040		
3,200.0	3,156.3	3,194.7	3,148.9	9.9	10.2	-69.75	-472.2	-123.6	75.4	56.6	18.84	4.003		
3,300.0	3,254.3	3,294.6	3,246.7	10.3	10.6	-69.93	-492.3	-129.0	78.4	58.9	19.57	4.007		
3,400.0	3,352.7	3,394.6	3,344.4	10.6	11.0	-68.96	-512.3	-134.4	82.0	61.9	20.16	4.069		
3,500.0	3,451.3	3,494.4	3,442.1	10.9	11.4	-67.00	-532.4	-139.7	86.4	65.8	20.60	4.192		
3,600.0	3,550.2	3,594.2	3,539.7	11.2	11.8	-64.25	-552.4	-145.1	91.5	70.6	20.88	4.382		
3,700.0	3,649.4	3,693.9	3,637.2	11.5	12.2	-60.91	-572.5	-150.5	97.7	76.7	21.00	4.652		
3,800.0	3,748.8	3,793.4	3,734.5	11.8	12.6	-57.20	-592.4	-155.8	105.1	84.1	20.97	5.013		
3,900.0	3,848.3	3,892.7	3,831.6	12.0	13.0	-53.29	-612.4	-161.2	114.0	93.1	20.81	5.476		
4,000.0	3,948.0	3,991.8	3,928.6	12.2	13.4	-49.36	-632.3	-166.5	124.4	103.8	20.55	6.052		
4,100.0	4,047.9	4,090.6	4,025.3	12.4	13.8	-45.56	-652.1	-171.8	136.6	116.3	20.24	6.747		
4,200.0	4,147.8	4,189.2	4,121.7	12.5	14.2	-41.96	-671.9	-177.1	150.5	130.6	19.91	7.560		
4,300.0	4,247.8	4,287.5	4,217.8	12.6	14.6	-38.62	-691.7	-182.4	166.4	146.8	19.59	8.491		
4,400.0	4,347.7	4,385.5	4,313.7	12.7	14.9	-35.44	-711.3	-187.7	184.1	159.1	24.97	7.370		
4,500.0	4,447.7	4,483.3	4,409.3	12.8	15.3	-32.45	-731.0	-192.9	202.8	176.9	25.88	7.836		
4,600.0	4,547.7	4,581.1	4,505.0	12.9	15.7	-29.60	-750.6	-198.2	221.9	195.2	26.70	8.312		
4,700.0	4,647.7	4,680.3	4,602.1	13.0	16.1	-26.91	-770.5	-203.5	241.2	213.7	27.45	8.785		
4,800.0	4,747.7	4,782.6	4,702.5	13.2	16.5	-24.37	-789.5	-208.6	259.4	231.2	28.14	9.218		
4,900.0	4,847.7	4,885.7	4,803.9	13.3	16.9	-21.92	-807.0	-213.3	276.1	247.3	28.75	9.602		
5,000.0	4,947.7	4,989.3	4,906.3	13.4	17.2	-19.52	-822.8	-217.5	291.1	261.8	29.31	9.934		
5,100.0	5,047.7	5,093.5	5,009.5	13.5	17.5	-17.17	-836.9	-221.3	304.5	274.7	29.81	10.216		

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 3F-16H
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Reference Site:	S16-T3N-R68W (State)	MD Reference:	WELL @ 5072.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	State 3F-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													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	Warning									
5,200.0	5,147.7	5,198.3	5,113.4	13.6	17.7	179.56	-849.2	-224.6	316.3	286.0	30.27	10.448										
5,300.0	5,247.7	5,303.4	5,218.0	13.7	18.0	-179.93	-859.7	-227.4	326.3	295.6	30.69	10.631										
5,400.0	5,347.7	5,408.9	5,323.1	13.8	18.2	-179.53	-868.4	-229.8	334.5	303.4	31.07	10.767										
5,500.0	5,447.7	5,514.8	5,428.7	14.0	18.4	-179.23	-875.2	-231.6	341.0	309.6	31.41	10.857										
5,600.0	5,547.7	5,620.8	5,534.6	14.1	18.6	-179.02	-880.2	-232.9	345.7	314.0	31.71	10.900										
5,700.0	5,647.7	5,727.0	5,640.8	14.2	18.7	-178.89	-883.2	-233.7	348.6	316.6	31.98	10.898										
5,800.0	5,747.7	5,833.3	5,747.1	14.3	18.8	-178.85	-884.4	-234.0	349.7	317.4	32.23	10.851										
5,900.0	5,847.7	5,934.0	5,847.7	14.5	18.9	-178.85	-884.4	-234.0	349.7	317.2	32.45	10.775										
6,000.0	5,947.7	6,034.0	5,947.7	14.6	19.0	-178.85	-884.4	-234.0	349.7	317.0	32.68	10.701										
6,100.0	6,047.7	6,134.0	6,047.7	14.7	19.1	-178.85	-884.4	-234.0	349.7	316.8	32.91	10.626										
6,200.0	6,147.7	6,234.0	6,147.7	14.8	19.2	-178.85	-884.4	-234.0	349.7	316.5	33.14	10.552										
6,300.0	6,247.7	6,334.0	6,247.7	15.0	19.3	-178.85	-884.4	-234.0	349.7	316.3	33.37	10.478										
6,400.0	6,347.7	6,434.0	6,347.7	15.1	19.4	-178.85	-884.4	-234.0	349.7	316.1	33.61	10.405										
6,500.0	6,447.7	6,534.0	6,447.7	15.2	19.5	-178.85	-884.4	-234.0	349.7	315.8	33.84	10.332										
6,500.0	6,447.8	6,534.0	6,447.8	15.2	19.5	-178.85	-884.4	-234.0	349.7	315.8	33.84	10.332										
6,600.0	6,547.6	6,633.8	6,547.6	15.3	19.6	91.92	-884.4	-234.0	349.8	325.7	24.06	14.539										
6,700.0	6,645.8	6,732.0	6,645.8	15.4	19.7	94.79	-884.4	-234.0	350.9	327.0	23.95	14.654										
6,800.0	6,740.4	6,831.6	6,745.3	15.4	19.8	99.28	-884.4	-231.7	354.7	331.0	23.75	14.933										
6,900.0	6,829.8	6,938.0	6,850.3	15.4	19.8	103.89	-884.4	-215.4	361.2	337.4	23.74	15.213										
7,000.0	6,912.0	7,050.1	6,957.1	15.4	19.8	108.22	-884.4	-181.5	369.6	345.7	23.96	15.430										
7,100.0	6,985.5	7,168.4	7,062.6	15.5	19.8	112.14	-884.4	-128.2	379.4	355.0	24.40	15.547										
7,200.0	7,048.9	7,293.3	7,162.8	15.8	19.9	115.57	-884.4	-53.9	389.5	364.4	25.08	15.531										
7,300.0	7,100.9	7,424.6	7,252.5	16.2	20.0	118.40	-884.4	41.7	399.0	373.0	26.04	15.321										
7,400.0	7,140.5	7,561.8	7,326.0	17.0	20.5	120.56	-884.4	157.2	406.9	379.5	27.42	14.842										
7,500.0	7,167.0	7,703.6	7,377.5	18.2	21.3	121.95	-884.4	289.1	412.3	383.0	29.30	14.072										
7,600.0	7,179.8	7,848.1	7,402.2	19.6	22.6	122.53	-884.5	431.3	414.7	382.9	31.77	13.052										
7,700.0	7,181.0	7,964.0	7,404.0	21.3	24.1	122.53	-884.5	547.1	414.7	379.9	34.80	11.916										
7,800.0	7,181.0	8,064.0	7,404.0	23.2	25.7	122.53	-884.5	647.1	414.7	376.5	38.16	10.866										
7,900.0	7,181.0	8,164.0	7,404.0	25.1	27.4	122.53	-884.5	747.1	414.7	373.0	41.67	9.951										
8,000.0	7,181.0	8,264.0	7,404.0	27.2	29.2	122.53	-884.5	847.1	414.7	369.4	45.30	9.155										
8,100.0	7,181.0	8,364.0	7,404.0	29.3	31.2	122.53	-884.5	947.1	414.7	365.7	49.01	8.461										
8,200.0	7,181.0	8,464.0	7,404.0	31.5	33.2	122.53	-884.5	1,047.1	414.7	361.9	52.79	7.855										
8,300.0	7,181.0	8,564.0	7,404.0	33.7	35.3	122.53	-884.5	1,147.1	414.7	358.1	56.63	7.323										
8,400.0	7,181.0	8,664.0	7,404.0	36.0	37.5	122.53	-884.5	1,247.1	414.7	354.2	60.51	6.853										
8,500.0	7,181.0	8,764.0	7,404.0	38.3	39.6	122.53	-884.5	1,347.1	414.7	350.3	64.43	6.436										
8,600.0	7,181.0	8,864.0	7,404.0	40.6	41.9	122.53	-884.5	1,447.1	414.7	346.3	68.39	6.064										
8,700.0	7,181.0	8,964.0	7,404.0	42.9	44.1	122.53	-884.5	1,547.1	414.7	342.3	72.36	5.731										
8,800.0	7,181.0	9,064.0	7,404.0	45.2	46.4	122.53	-884.6	1,647.1	414.7	338.3	76.36	5.431										
8,900.0	7,181.0	9,164.0	7,404.0	47.6	48.7	122.53	-884.6	1,747.1	414.7	334.3	80.38	5.160										
9,000.0	7,181.0	9,264.0	7,404.0	50.0	51.0	122.53	-884.6	1,847.1	414.7	330.3	84.41	4.913										
9,100.0	7,181.0	9,364.0	7,404.0	52.3	53.4	122.53	-884.6	1,947.1	414.7	326.3	88.45	4.689										
9,200.0	7,181.0	9,464.0	7,404.0	54.7	55.7	122.53	-884.6	2,047.1	414.7	322.2	92.51	4.483										
9,300.0	7,181.0	9,564.0	7,404.0	57.1	58.1	122.53	-884.6	2,147.1	414.7	318.1	96.58	4.294										
9,400.0	7,181.0	9,664.0	7,404.0	59.5	60.4	122.53	-884.6	2,247.1	414.7	314.1	100.65	4.120										
9,500.0	7,181.0	9,764.0	7,404.0	61.9	62.8	122.53	-884.6	2,347.1	414.7	310.0	104.74	3.960										
9,600.0	7,181.0	9,864.0	7,404.0	64.3	65.2	122.53	-884.6	2,447.1	414.7	305.9	108.83	3.811										
9,700.0	7,181.0	9,964.0	7,404.0	66.8	67.6	122.53	-884.6	2,547.1	414.7	301.8	112.93	3.672										
9,800.0	7,181.0	10,064.0	7,404.0	69.2	70.0	122.53	-884.6	2,647.1	414.7	297.7	117.03	3.544										
9,900.0	7,181.0	10,164.0	7,404.0	71.6	72.4	122.53	-884.6	2,747.1	414.7	293.6	121.14	3.424										
10,000.0	7,181.0	10,264.0	7,404.0	74.0	74.8	122.53	-884.7	2,847.1	414.7	289.5	125.25	3.311										
10,100.0	7,181.0	10,364.0	7,404.0	76.5	77.2	122.53	-884.7	2,947.1	414.7	285.4	129.37	3.206										
10,200.0	7,181.0	10,464.0	7,404.0	78.9	79.6	122.53	-884.7	3,047.1	414.7	281.2	133.49	3.107										

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 3F-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 3F-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													Offset Site Error:	0.0 ft
S16-T3N-R68W (State) - State 3G-16H - Hz - Plan #1													Offset Well Error:	0.0 ft
Survey Program: 0-MWD														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
10,300.0	7,181.0	10,564.0	7,404.0	81.3	82.0	122.53	-884.7	3,147.1	414.7	277.1	137.62	3.014		
10,400.0	7,181.0	10,664.0	7,404.0	83.8	84.5	122.53	-884.7	3,247.1	414.7	273.0	141.75	2.926		
10,500.0	7,181.0	10,764.0	7,404.0	86.2	86.9	122.53	-884.7	3,347.1	414.7	268.9	145.88	2.843		
10,600.0	7,181.0	10,864.0	7,404.0	88.6	89.3	122.53	-884.7	3,447.1	414.7	264.7	150.01	2.765		
10,700.0	7,181.0	10,964.0	7,404.0	91.1	91.7	122.53	-884.7	3,547.1	414.7	260.6	154.15	2.691		
10,800.0	7,181.0	11,064.0	7,404.0	93.5	94.2	122.53	-884.7	3,647.1	414.7	256.5	158.28	2.620		
10,900.0	7,181.0	11,164.0	7,404.0	96.0	96.6	122.53	-884.7	3,747.1	414.7	252.3	162.42	2.553		
11,000.0	7,181.0	11,264.0	7,404.0	98.4	99.0	122.53	-884.7	3,847.1	414.7	248.2	166.57	2.490		
11,100.0	7,181.0	11,364.0	7,404.0	100.9	101.5	122.53	-884.7	3,947.1	414.8	244.0	170.71	2.430		
11,200.0	7,181.0	11,464.0	7,404.0	103.3	103.9	122.53	-884.7	4,047.1	414.8	239.9	174.86	2.372		
11,300.0	7,181.0	11,564.0	7,404.0	105.8	106.4	122.52	-884.8	4,147.1	414.8	235.8	179.00	2.317		
11,400.0	7,181.0	11,664.0	7,404.0	108.2	108.8	122.52	-884.8	4,247.1	414.8	231.6	183.15	2.265		
11,500.0	7,181.0	11,764.0	7,404.0	110.7	111.3	122.52	-884.8	4,347.1	414.8	227.5	187.30	2.214		
11,600.0	7,181.0	11,864.0	7,404.0	113.1	113.7	122.52	-884.8	4,447.1	414.8	223.3	191.45	2.166		
11,700.0	7,181.0	11,964.0	7,404.0	115.6	116.1	122.52	-884.8	4,547.1	414.8	219.2	195.61	2.120		
11,704.6	7,181.0	11,968.6	7,404.0	115.7	116.3	122.52	-884.8	4,551.7	414.8	219.0	195.80	2.118 SF		

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3F-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 3F-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													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	-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			
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 CC, ES			
300.0	300.0	299.7	299.7	0.5	0.5	-179.51	-19.1	-0.2	19.1	18.1	1.00	19.040			
400.0	400.0	399.3	399.3	0.7	0.7	-178.27	-21.6	-0.7	21.6	20.3	1.35	16.014			
500.0	500.0	498.8	498.7	0.9	0.9	-20.41	-25.9	-1.5	25.1	23.4	1.70	14.792			
600.0	600.0	598.3	598.0	1.0	1.1	-20.48	-31.8	-2.6	28.7	26.6	2.05	14.013			
700.0	699.9	697.7	697.1	1.2	1.3	-21.16	-39.4	-4.1	32.3	29.9	2.40	13.489			
800.0	799.7	797.1	796.0	1.4	1.5	-22.26	-48.7	-5.9	36.1	33.3	2.75	13.120			
900.0	899.4	896.3	894.6	1.6	1.8	-23.65	-59.7	-8.0	39.9	36.8	3.11	12.850			
1,000.0	998.9	995.5	993.0	1.8	2.0	-25.26	-72.4	-10.4	43.9	40.4	3.47	12.642			
1,100.0	1,098.3	1,094.7	1,091.0	2.1	2.3	-26.99	-86.7	-13.1	48.0	44.2	3.85	12.471			
1,200.0	1,197.4	1,193.7	1,188.8	2.3	2.6	-28.83	-102.6	-16.2	52.3	48.1	4.25	12.318			
1,300.0	1,296.3	1,292.7	1,286.1	2.6	3.0	-30.71	-120.2	-19.6	56.8	52.1	4.67	12.168			
1,400.0	1,394.9	1,391.6	1,383.1	2.9	3.4	-32.62	-139.5	-23.2	61.5	56.4	5.12	12.009			
1,500.0	1,493.3	1,490.5	1,479.6	3.3	3.8	-34.53	-160.3	-27.2	66.4	60.8	5.61	11.834			
1,600.0	1,591.2	1,589.2	1,575.6	3.6	4.2	-36.43	-182.8	-31.5	71.5	65.3	6.14	11.640			
1,700.0	1,689.1	1,687.9	1,671.2	4.0	4.6	-37.93	-206.9	-36.2	77.5	70.8	6.70	11.567 SF			
1,800.0	1,786.9	1,787.5	1,767.4	4.4	5.1	-38.90	-232.2	-41.0	84.6	77.3	7.27	11.632			
1,900.0	1,884.7	1,887.2	1,863.7	4.8	5.5	-39.72	-257.5	-45.9	91.6	83.8	7.85	11.674			
2,000.0	1,982.5	1,986.9	1,960.1	5.2	6.0	-40.42	-282.9	-50.7	98.7	90.3	8.44	11.698			
2,100.0	2,080.3	2,086.7	2,056.4	5.6	6.5	-41.03	-308.2	-55.6	105.8	96.8	9.03	11.710			
2,200.0	2,178.1	2,186.4	2,152.8	5.9	7.0	-41.56	-333.6	-60.4	112.9	103.3	9.64	11.713			
2,300.0	2,275.9	2,286.2	2,249.1	6.3	7.4	-42.03	-359.0	-65.3	120.0	109.8	10.25	11.710			
2,400.0	2,373.8	2,385.9	2,345.5	6.7	7.9	-42.45	-384.3	-70.2	127.1	116.3	10.86	11.703			
2,500.0	2,471.6	2,485.6	2,441.8	7.1	8.4	-42.82	-409.7	-75.0	134.2	122.8	11.48	11.694			
2,600.0	2,569.4	2,585.4	2,538.1	7.5	8.9	-43.15	-435.0	-79.9	141.4	129.3	12.10	11.682			
2,700.0	2,667.2	2,685.1	2,634.5	7.9	9.3	-43.45	-460.4	-84.7	148.5	135.8	12.73	11.669			
2,800.0	2,765.0	2,784.9	2,730.8	8.3	9.8	-43.73	-485.7	-89.6	155.6	142.3	13.35	11.655			
2,900.0	2,862.8	2,884.6	2,827.2	8.7	10.3	-43.98	-511.1	-94.5	162.8	148.8	13.98	11.641			
3,000.0	2,960.7	2,984.4	2,923.5	9.1	10.8	-44.21	-536.4	-99.3	169.9	155.3	14.61	11.627			
3,100.0	3,058.5	3,084.1	3,019.9	9.5	11.3	-44.42	-561.8	-104.2	177.1	161.8	15.25	11.613			
3,200.0	3,156.3	3,183.8	3,116.2	9.9	11.7	-44.61	-587.1	-109.0	184.2	168.3	15.88	11.599			
3,300.0	3,254.3	3,283.5	3,212.5	10.3	12.2	-44.63	-612.5	-113.9	192.1	175.6	16.47	11.666			
3,400.0	3,352.7	3,383.1	3,308.7	10.6	12.7	-44.31	-637.8	-118.8	201.2	184.3	16.97	11.860			
3,500.0	3,451.3	3,482.5	3,404.7	10.9	13.2	-43.70	-663.1	-123.6	211.6	194.2	17.39	12.170			
3,600.0	3,550.2	3,581.8	3,500.6	11.2	13.6	-42.85	-688.3	-128.4	223.3	205.6	17.73	12.593			
3,700.0	3,649.4	3,680.8	3,596.3	11.5	14.1	-41.82	-713.5	-133.3	236.4	218.4	18.01	13.124			
3,800.0	3,748.8	3,779.6	3,691.7	11.8	14.6	-40.65	-738.6	-138.1	250.8	232.6	18.23	13.760			
3,900.0	3,848.3	3,878.2	3,786.9	12.0	15.1	-39.39	-763.6	-142.9	266.6	248.3	18.39	14.501			
4,000.0	3,948.0	3,976.4	3,881.8	12.2	15.6	-38.07	-788.6	-147.7	284.0	265.5	18.51	15.343			
4,100.0	4,047.9	4,074.4	3,976.4	12.4	16.0	-36.72	-813.5	-152.4	302.9	284.3	18.60	16.286			
4,200.0	4,147.8	4,171.9	4,070.6	12.5	16.5	-35.36	-838.3	-157.2	323.3	304.7	18.66	17.326			
4,300.0	4,247.8	4,269.1	4,164.5	12.6	17.0	-34.03	-863.0	-161.9	345.4	326.7	18.71	18.460			
4,400.0	4,347.7	4,365.9	4,258.0	12.7	17.4	170.29	-887.6	-166.6	369.0	341.0	28.01	13.174			
4,500.0	4,447.7	4,462.5	4,351.3	12.8	17.9	171.61	-912.2	-171.3	393.4	364.7	28.77	13.674			
4,600.0	4,547.7	4,559.1	4,444.6	12.9	18.4	172.77	-936.7	-176.0	418.1	388.5	29.51	14.166			
4,700.0	4,647.7	4,655.6	4,537.9	13.0	18.8	173.81	-961.3	-180.7	442.8	412.6	30.23	14.650			
4,800.0	4,747.7	4,752.2	4,631.2	13.2	19.3	174.74	-985.8	-185.5	467.7	436.8	30.92	15.123			
4,900.0	4,847.7	4,848.8	4,724.5	13.3	19.8	175.57	-1,010.4	-190.2	492.7	461.1	31.61	15.586			

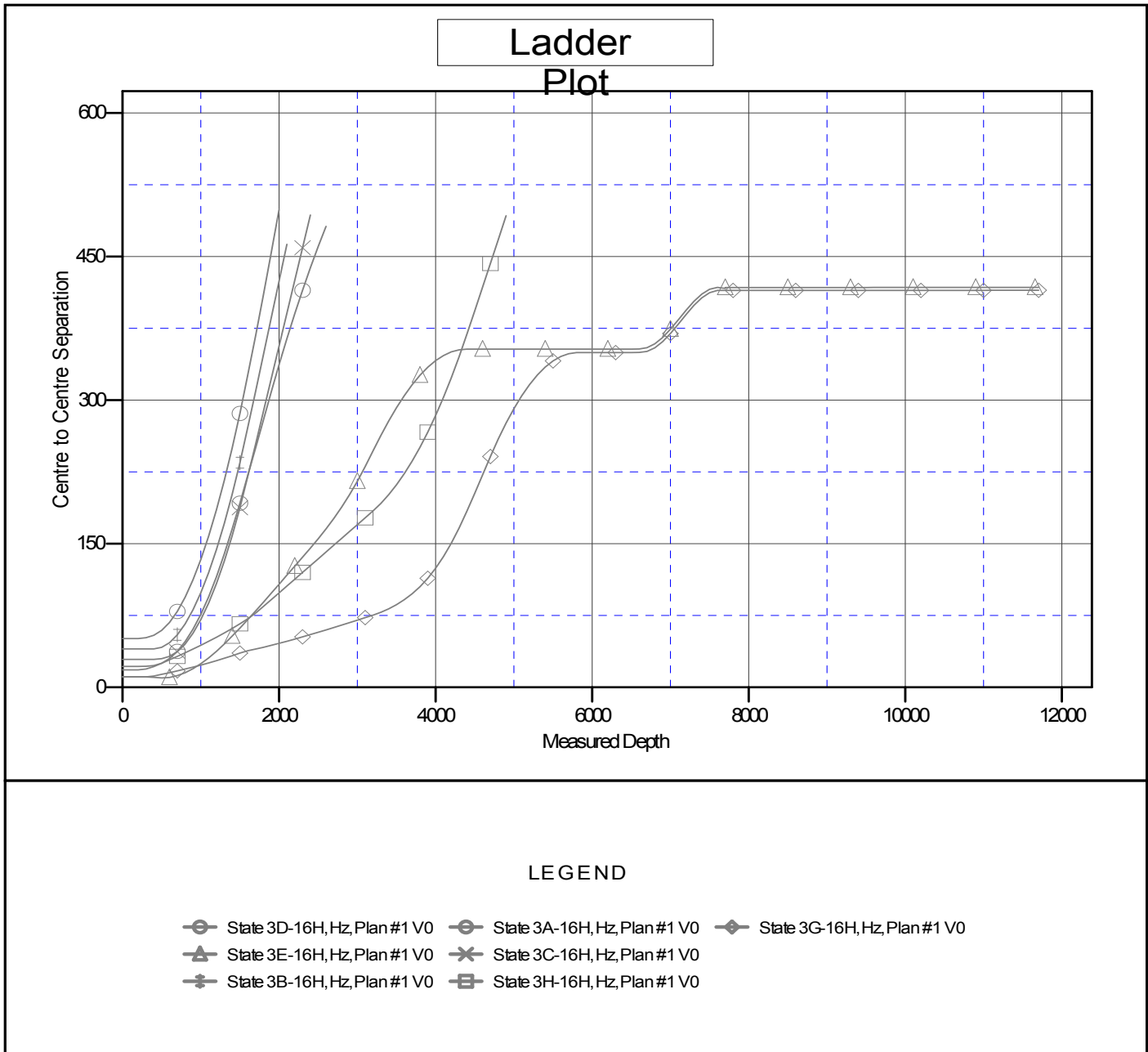
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State 3F-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 3F-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 3F-16H
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.31°



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